

INDIANA
DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT ID: xxxx
CONTRACT NO: xxxx

SHERMAN-MINTON BRIDGE AND APPROACH SPANS

I-64 OVER OHIO RIVER AND WEST WATER STREET, AND SHAWNEE GOLF COURSE
FLOYD AND JEFFERSON COUNTIES

PREPARED FOR:


NORTH STAR PAINTING

3526 McCARTNEY ROAD
YOUNGSTOWN, OHIO 44505

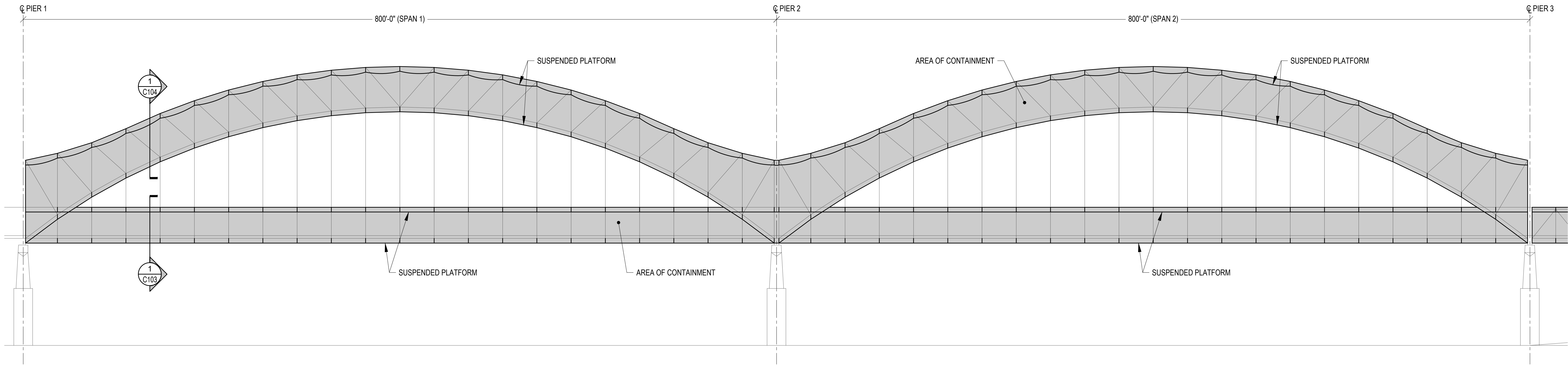
CONCEPTUAL ABRASIVE BLASTING PLANS

0	ISSUED FOR PERMIT	xxx	xxx	xx/xx/xx
Mark	Description	By	Approved	Date
REVISIONS				

DRAWING LIST	
DWG NO.	DESCRIPTION
C001	TITLE SHEET
C102	ELEVATION
C103	SPANS 1 AND 2 SECTION
C104	SPANS 1 AND 2 SECTION
C105	SPANS A, B AND C SECTION
C202	ELEVATION
C203	SPANS 1-27 SECTION

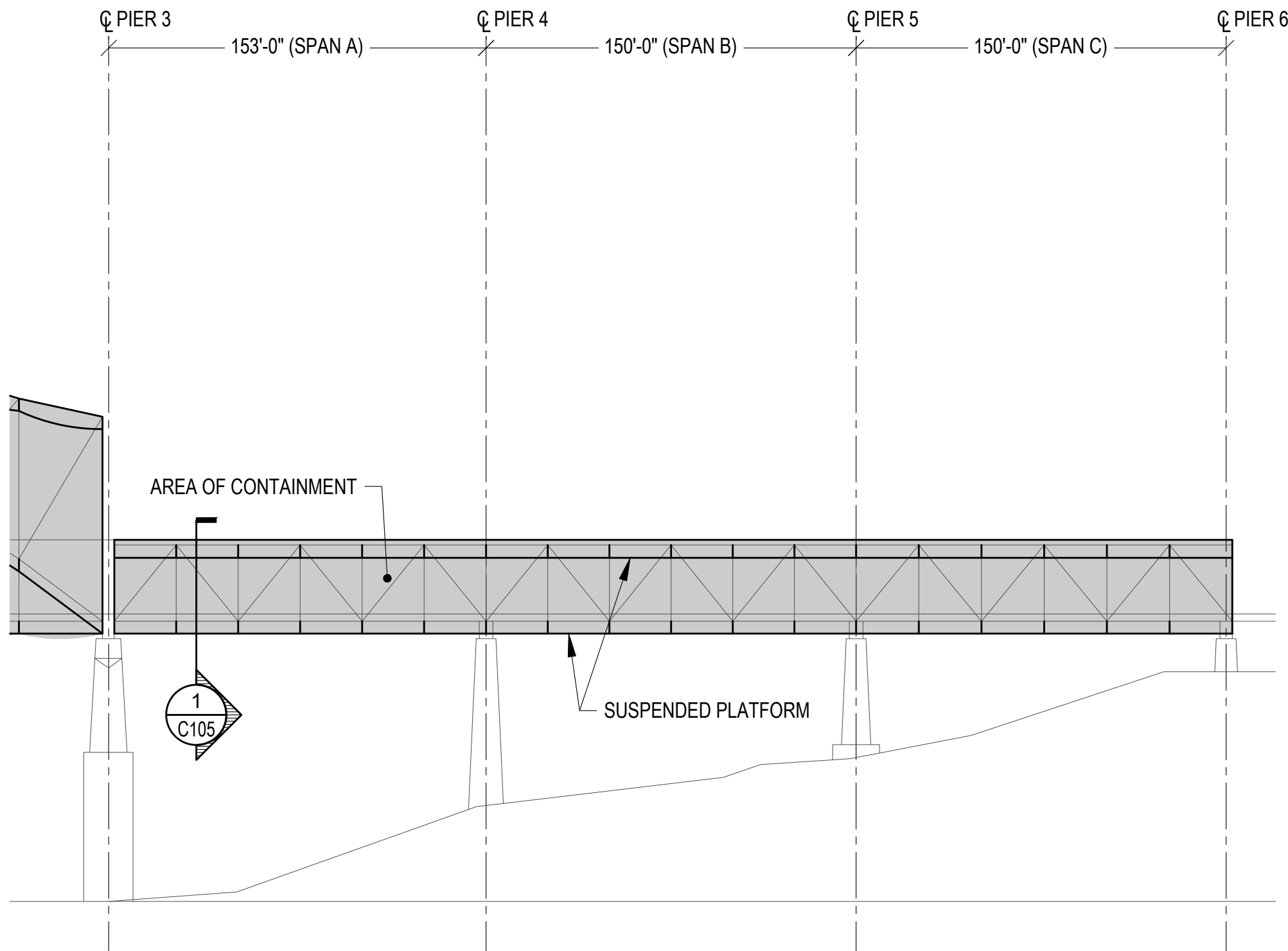
<div><div>PROVIDENCE ENGINEERING CORP 10 Eisenhower Boulevard, Lancaster, PA 17603 Phone: 717-509-7000 PEC Job No: 202086</div></div>			
NORTH STAR PAINTING 3526 McCARTNEY ROAD YOUNGSTOWN, OHIO 44505			
SHERMAN-MINTON BRIDGE AND APPROACH SPANS I-64 OVER OHIO RIVER AND WEST WATER STREET, AND SHAWNEE GOLF COURSE FLOYD AND JEFFERSON COUNTIES, INDIANA			
TITLE SHEET			
DRAWN BY:	KDL	DATE:	xx/xx/xx
DESIGNED BY:	TEB	SCALE:	AS NOTED
DRAWING NO.:			C001

PRELIMINARY
NOT FOR CONSTRUCTION
FOR REVIEW ONLY
11/11/2020



ELEVATION - SPANS 1 AND 2

SCALE: 1"=50'-0"



ELEVATION - SPANS A, B AND C

SCALE: 1"=50'-0"

0	ISSUED FOR PERMIT	xxx	xxx	xx/xx/xx
Mark	Description	By	Approved	Date
REVISIONS				

PROVIDENCE
ENGINEERING CORP
10 Eisenhower Boulevard, Lancaster, PA 17603
Phone: 717-509-7000
PEC Job No: 202086

NORTH STAR PAINTING
3526 McCARTNEY ROAD
YOUNGSTOWN, OHIO 44505

SHERMAN-MINTON BRIDGE
I-64 OVER OHIO RIVER
FLOYD COUNTY, OHIO

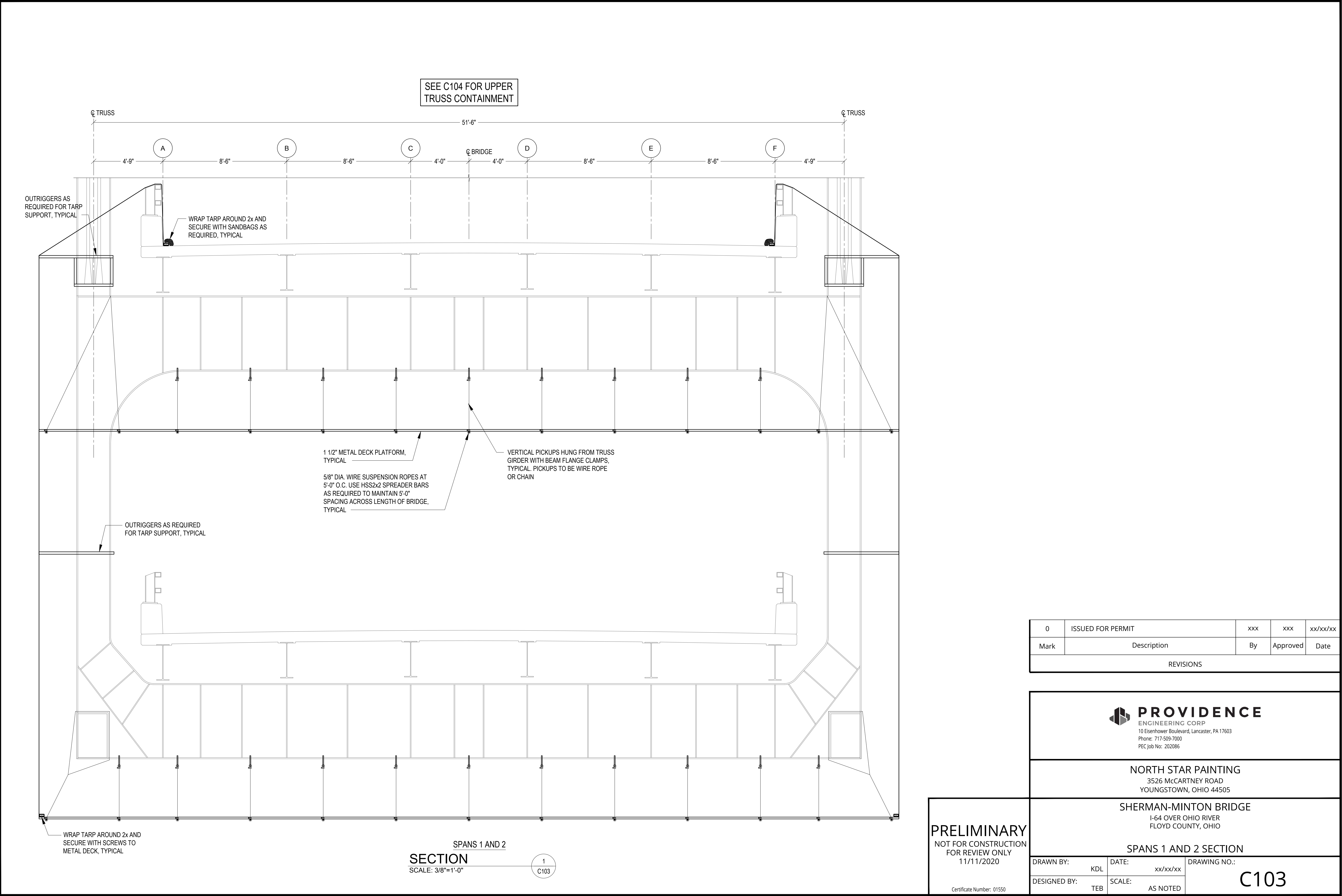
ELEVATION

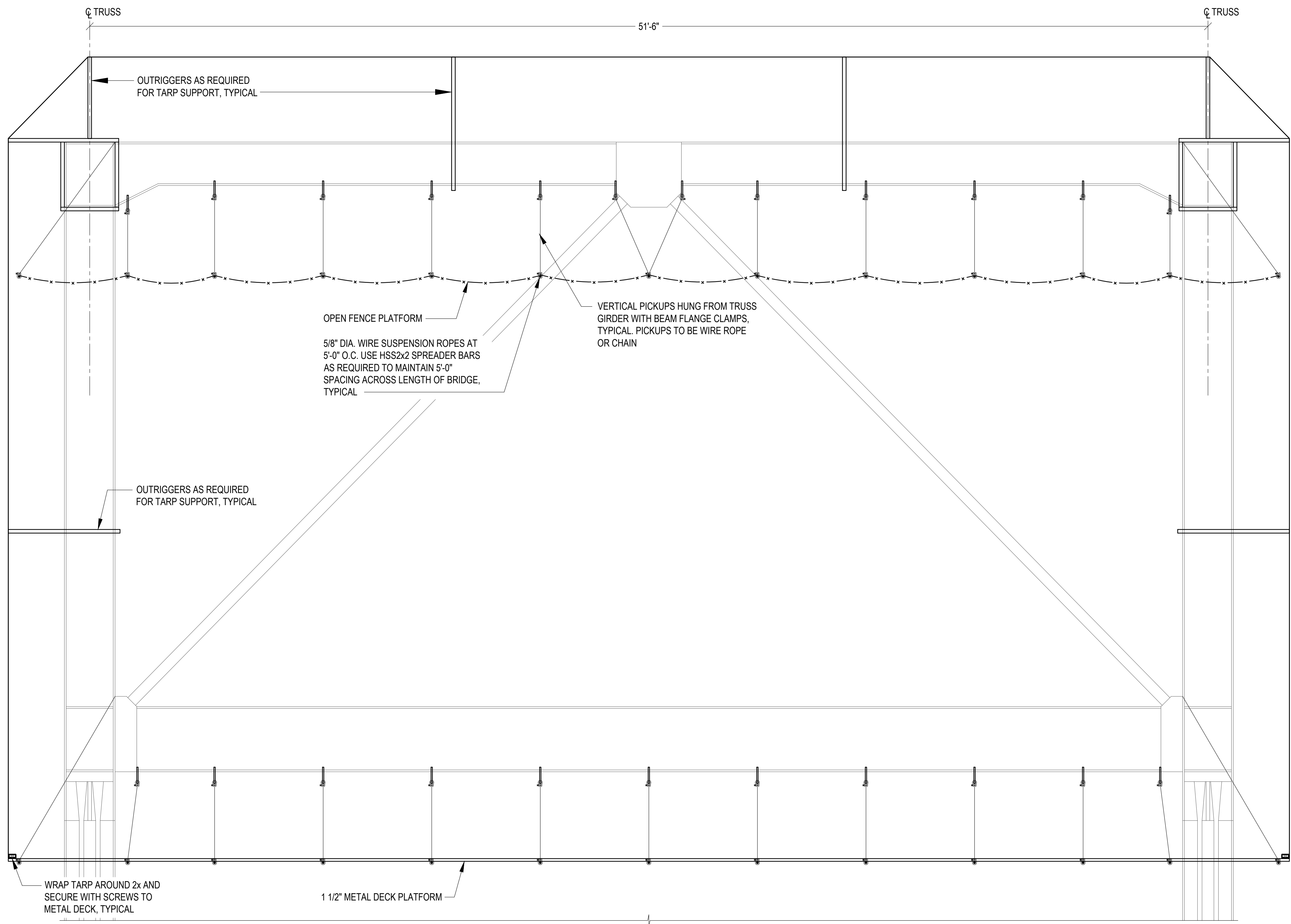
DRAWN BY:	KDL	DATE:	xx/xx/xx	DRAWING NO.:
DESIGNED BY:	TEB	SCALE:	AS NOTED	

C102

PRELIMINARY
NOT FOR CONSTRUCTION
FOR REVIEW ONLY
11/11/2020

Certificate Number: 01550






SEE C103 FOR LOWER
TRUSS CONTAINMENT

SPANS 1 AND 2
SECTION
SCALE: 3/8"=1'-0"

1
C104

0	ISSUED FOR PERMIT	xxx	xxx	xx/xx/xx
Mark	Description	By	Approved	Date
REVISIONS				

 **PROVIDENCE**
ENGINEERING CORP
10 Eisenhower Boulevard, Lancaster, PA 17603
Phone: 717-509-7000
PEC Job No: 202086

NORTH STAR PAINTING
3526 McCARTNEY ROAD
YOUNGSTOWN, OHIO 44505

SHERMAN-MINTON BRIDGE
I-64 OVER OHIO RIVER
FLOYD COUNTY, OHIO

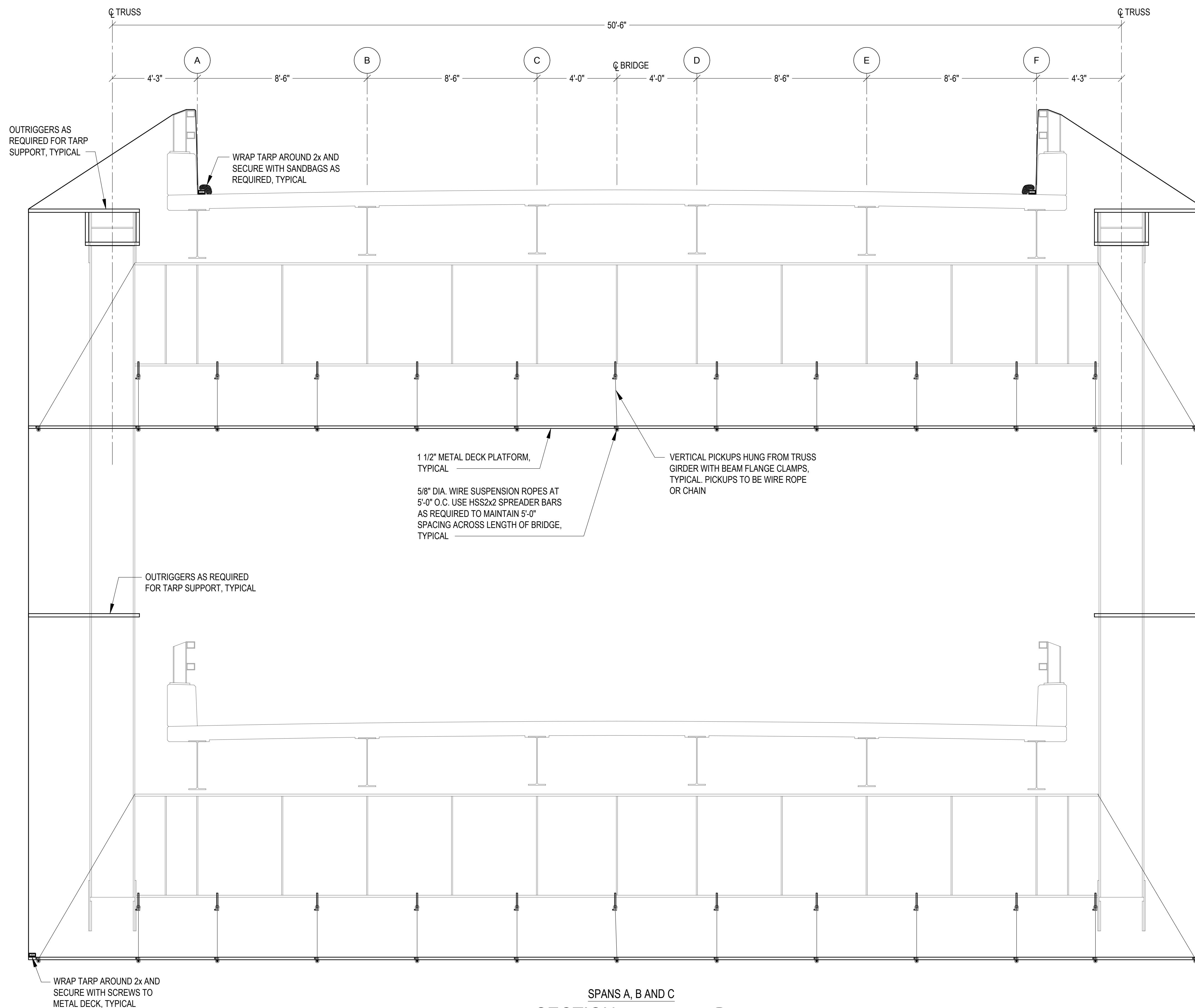
SPANS 1 AND 2 SECTION

DRAWN BY:	KDL	DATE:	xx/xx/xx	DRAWING NO.:
DESIGNED BY:	TEB	SCALE:	AS NOTED	

C104

PRELIMINARY
NOT FOR CONSTRUCTION
FOR REVIEW ONLY
11/11/2020


Certificate Number: 01550



SECTION
SCALE: 3/8"=1'-0"

1
C105

0	ISSUED FOR PERMIT	xxx	xxx	xx/xx/xx
Mark	Description	By	Approved	Date
REVISIONS				

 **PROVIDENCE**
ENGINEERING CORP
10 Eisenhower Boulevard, Lancaster, PA 17603
Phone: 717-509-7000
PEC Job No: 202086

NORTH STAR PAINTING
3526 McCARTNEY ROAD
YOUNGSTOWN, OHIO 44505

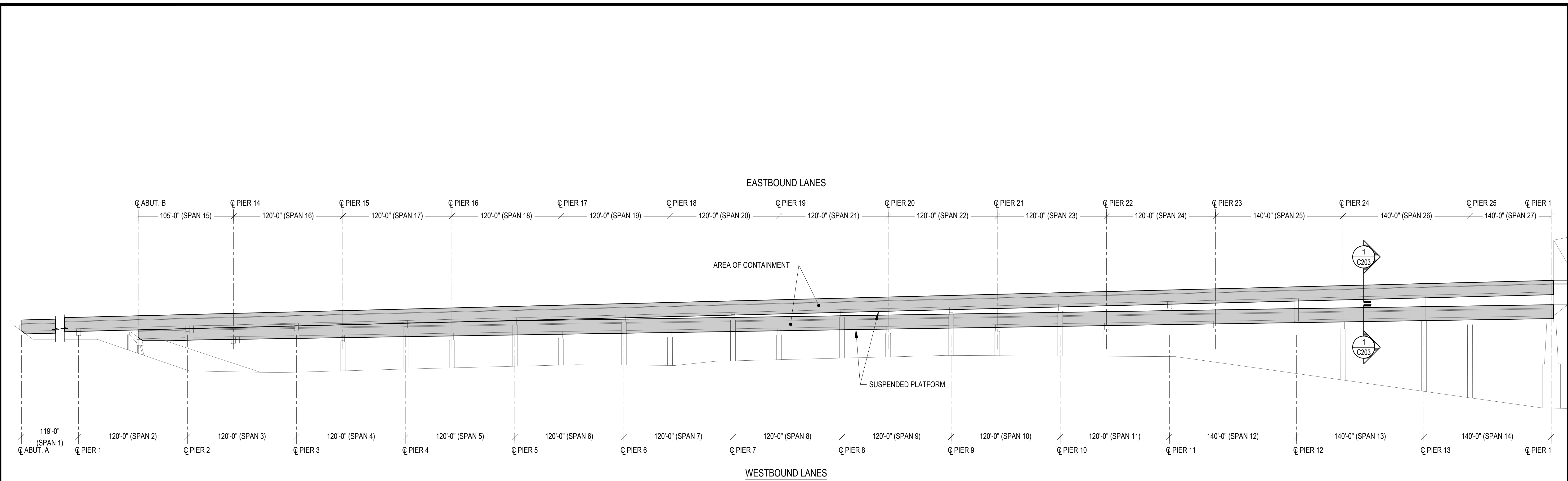
SHERMAN-MINTON BRIDGE
I-64 OVER OHIO RIVER
FLOYD COUNTY, OHIO

SPANS A, B AND C SECTION


DRAWN BY:	KDL	DATE:	xx/xx/xx	DRAWING NO.:
DESIGNED BY:	TEB	SCALE:	AS NOTED	C105

PRELIMINARY
NOT FOR CONSTRUCTION
FOR REVIEW ONLY
11/11/2020

Certificate Number: 01550



0	ISSUED FOR PERMIT	xxx	xxx	xx/xx/xx
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REVISIONS				



PROVIDENCE
ENGINEERING CORP
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Phone: 717-509-7000
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YOUNGSTOWN, OHIO 44505

SHERMAN-MINTON BRIDGE APPROACH SPANS
I-64 OVER SHAWNEE GOLF COURSE
JEFFERSON COUNTY, INDIANA

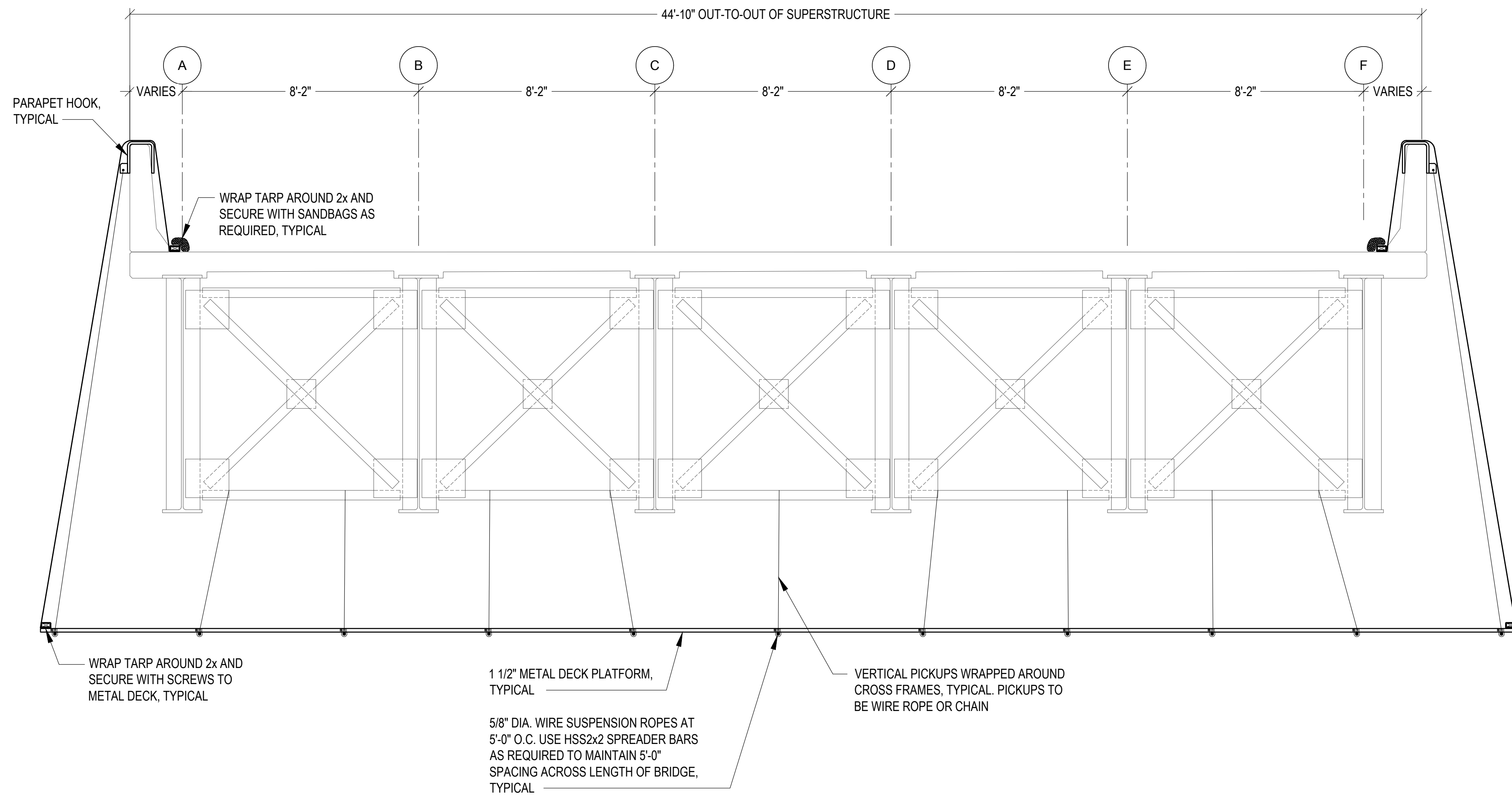
ELEVATION

DRAWN BY: KDL
DESIGNED BY: TEB

DATE: xx/xx/xx
SCALE: AS NOTED

DRAWING NO.:
C202

PRELIMINARY
NOT FOR CONSTRUCTION
FOR REVIEW ONLY
11/11/2020



SECTION
SCALE: 3/8"=1'-0"

1
C203

0	ISSUED FOR PERMIT	xxx	xxx	xx/xx/xx
Mark	Description	By	Approved	Date
REVISIONS				

 **PROVIDENCE**
ENGINEERING CORP
10 Eisenhower Boulevard, Lancaster, PA 17603
Phone: 717-509-7000
PEC Job No: 202086

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3526 McCARTNEY ROAD
YOUNGSTOWN, OHIO 44505

SHERMAN-MINTON BRIDGE APPROACH SPANS
I-64 OVER SHAWNEE GOLF COURSE
JEFFERSON COUNTY, INDIANA

SPANS 1-27 SECTION

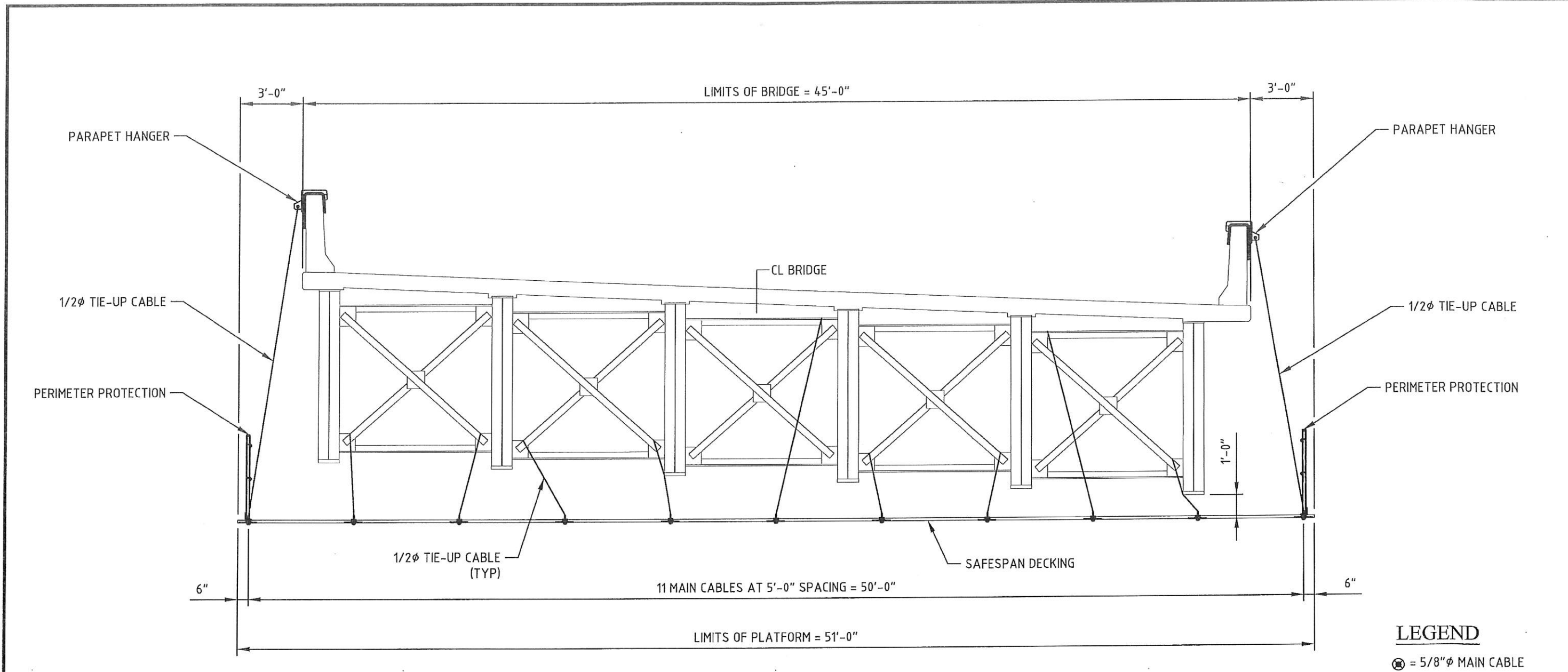
DRAWN BY:	KDL	DATE:	xx/xx/xx	DRAWING NO.:
DESIGNED BY:	TEB	SCALE:	AS NOTED	

C203

PRELIMINARY
NOT FOR CONSTRUCTION
FOR REVIEW ONLY
11/11/2020

Z:\PROJECT\2020-Jobs\0255020-Sherman Minton Bridge\Drawings\Sketches\11-10-20-Preliminary Cross-Sections\300-01 Cross Section - Dave.dwg

PRELIMINARY-NOT FOR CONSTRUCTION-NOT FOR SUBMITTAL



LEGEND
⊗ = 5/8"φ MAIN CABLE

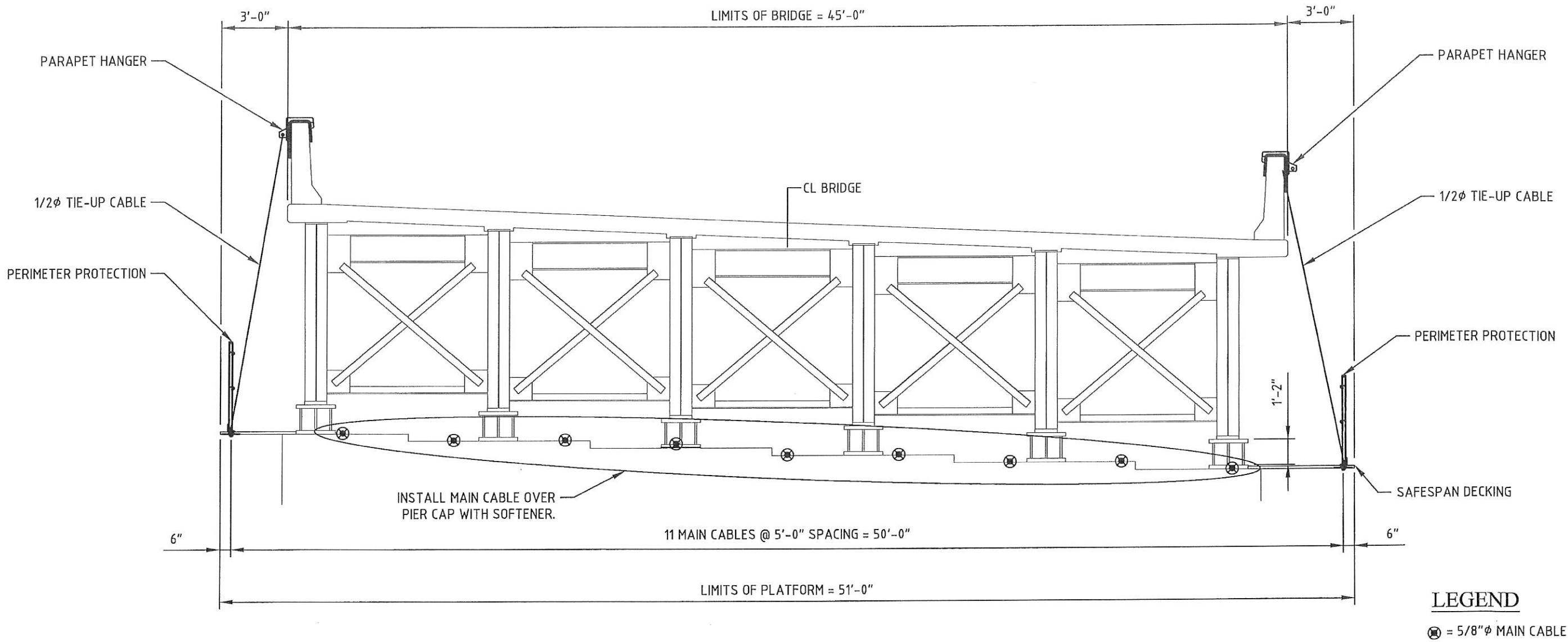
CROSS-SECTION -
SPANS 1-9 (UPPER ROADWAY)
SPANS 16-24 (LOWER ROADWAY)

- NOTES:**
- 1. PRELIMINARY DESIGN SHOWN. LAYOUT MAY VARY UPON FINAL DESIGN.
 - 2. 25 PSF MAXIMUM DESIGN LIVE LOAD
 - 3. 5'-0" MAXIMUM MAIN CABLE SPACING
 - 4. 25'-0" MAXIMUM SPACING BETWEEN TIE-UPS
 - 5. 24" MAXIMUM SAG / 18" INSTALL SAG
 - 6. INSTALL SOFTENER WHEREVER CABLE COMES IN CONTACT WITH EXPOSED CONCRETE OR STEEL.

SAFESPAN, INC. IS THE MANUFACTURER OF A UNIQUE PROPRIETARY AND PATENTED MULTI-SPAN PLATFORM SYSTEM. U.S. PATENTS #5,730,248, 5,921,346, 6,003,634, 6,135,240, 6,138,793, 6,227,331, 6,264,002, 6,302,237, 6,386,319, & 6,523,644. AUSTRALIAN PATENT #720,795. OTHER INTERNATIONAL AND U.S. PATENTS PENDING. ANY ATTEMPT AT SYSTEM DUPLICATION IS A VIOLATION AND IS SUBJECT TO PENALTY UNDER LAW.	REV.	DATE	BY	REVISION DESCRIPTION	SAFESPAN <small>"Support you can build on"™</small>  © COPYRIGHT 2020 SAFESPAN, INC.	DESIGNED BY: D.E.P.	CHECKED BY: A.W.T.	SAFESPAN PLATFORM SYSTEMS, INC.	
						DRAWN BY: D.S.K	CHECKED BY: D.E.P.	SHERMAN MINTON BRIDGE	
						DATE: 11-11-20	SCALE: NO SCALE	TYPICAL CROSS-SECTION	
						S.S. PROJECT No: 02550201000	OWNERS PROJECT No:	JOB No. : 0255020	DWG. No. : 300-01

Z:\PROJECT\2020-Jobs\0255020-Sherman Minton Bridge\Drawings\Sketches\11-10-20-Preliminary Cross-Sections\300-01 CROSS SECTION - Dave.dwg

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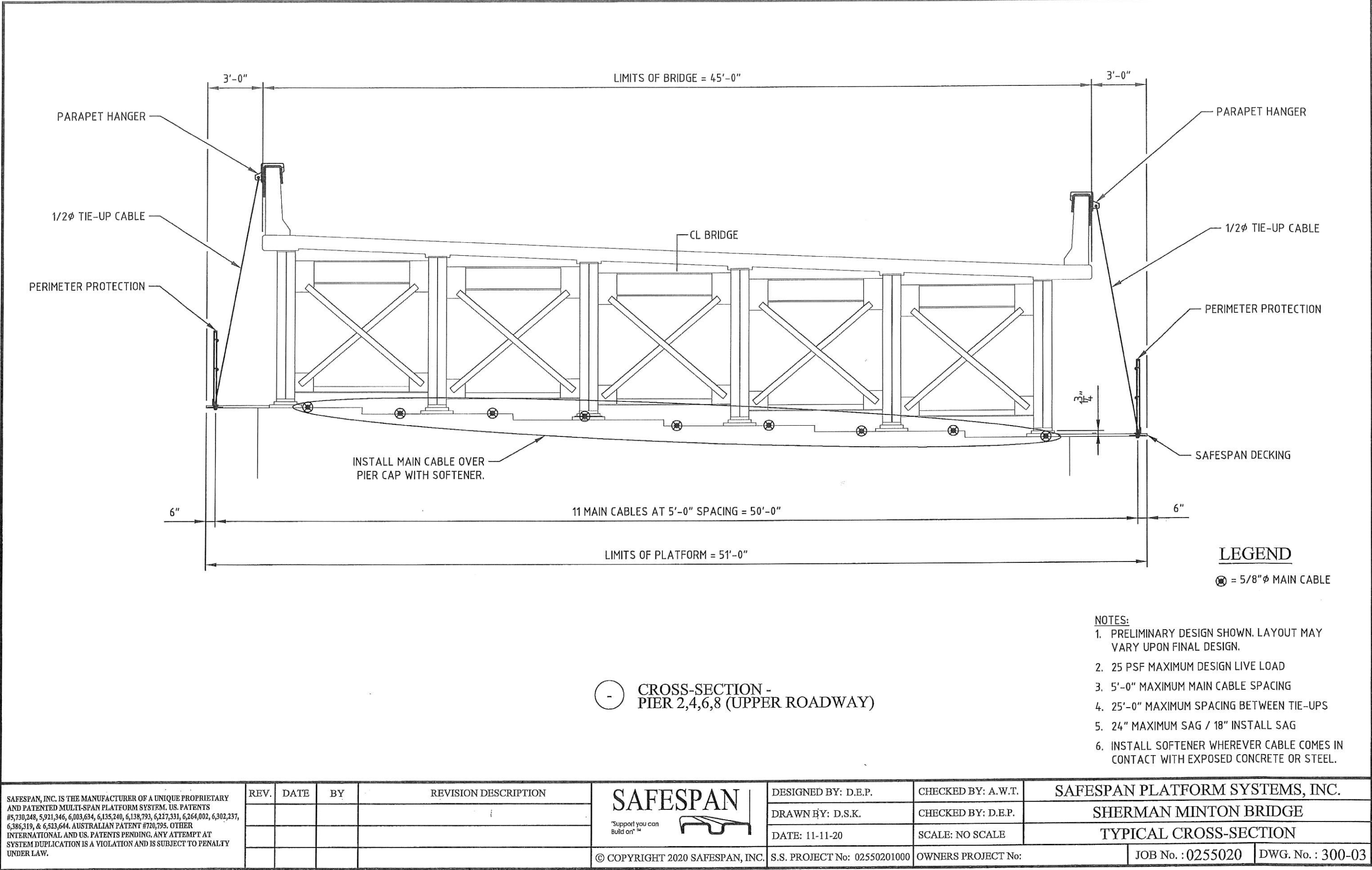


CROSS-SECTION -
PIER 1,3,5,7,9 (UPPER ROADWAY)
PIER 16,18,20,22 (LOWER ROADWAY)

- NOTES:**
1. PRELIMINARY DESIGN SHOWN. LAYOUT MAY VARY UPON FINAL DESIGN.
 2. 25 PSF MAXIMUM DESIGN LIVE LOAD
 3. 5'-0" MAXIMUM MAIN CABLE SPACING
 4. 25'-0" MAXIMUM SPACING BETWEEN TIE-UPS
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						DRAWN BY: D.S.K	CHECKED BY: D.E.P.	SHERMAN MINTON BRIDGE	
						DATE: 11-11-20	SCALE: NO SCALE	TYPICAL CROSS-SECTION	
						S.S. PROJECT No: 02550201000	OWNERS PROJECT No:	JOB No. : 0255020	DWG. No. : 300-02

PRELIMINARY-NOT FOR CONSTRUCTION-NOT FOR SUBMITTAL

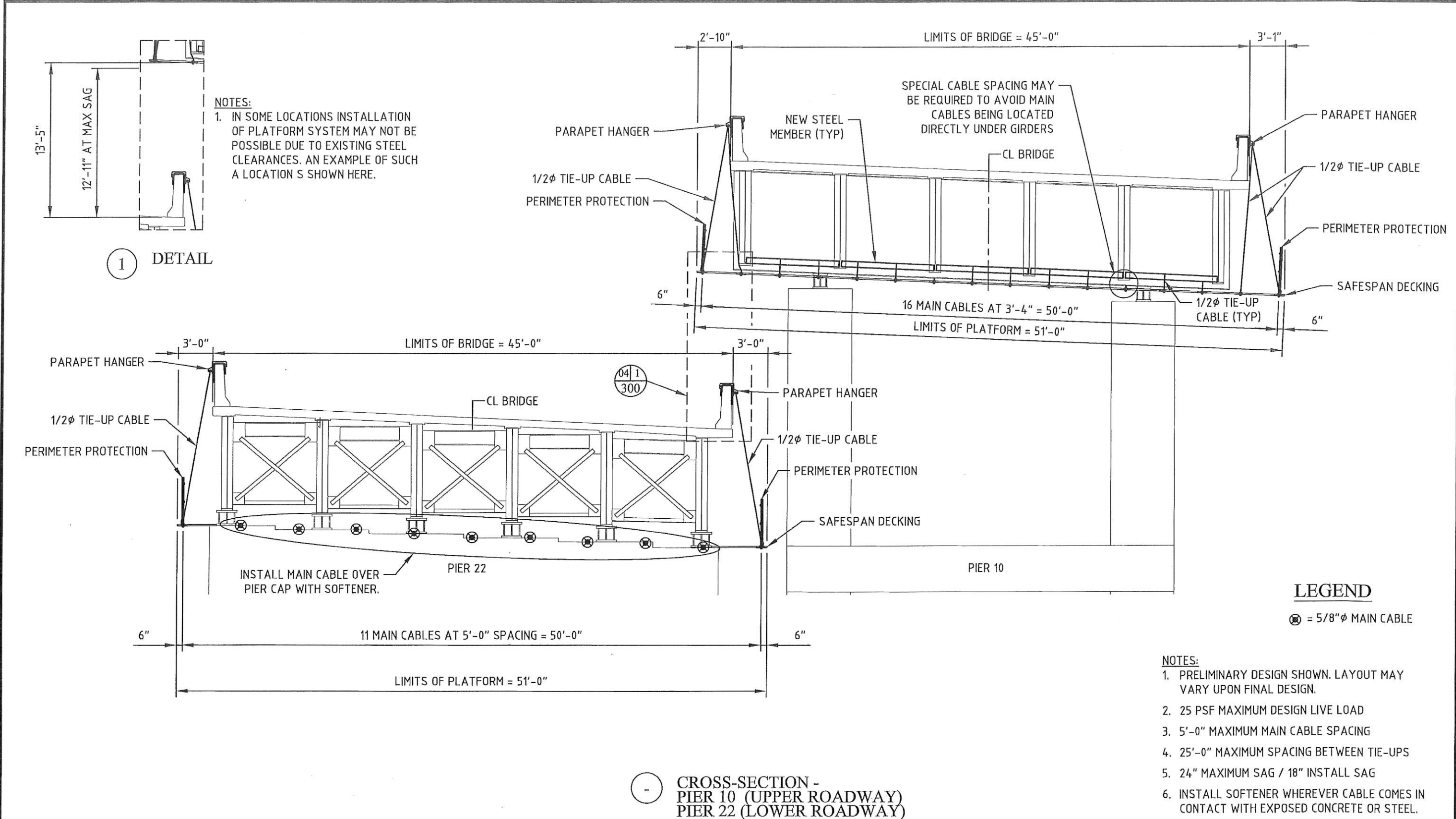


Z:\PROJECT\2020-Jobs\0255020-Sherman Minton Bridge\Drawings\Sketches\11-10-20-Preliminary Cross-Sections\300-01 CROSS SECTION - Dave.dwg

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						DRAWN BY: D.S.K.	CHECKED BY: D.E.P.	SHERMAN MINTON BRIDGE	
						DATE: 11-11-20	SCALE: NO SCALE	TYPICAL CROSS-SECTION	
						S.S. PROJECT No: 02550201000	OWNERS PROJECT No:	JOB No. : 0255020	DWG. No. : 300-03

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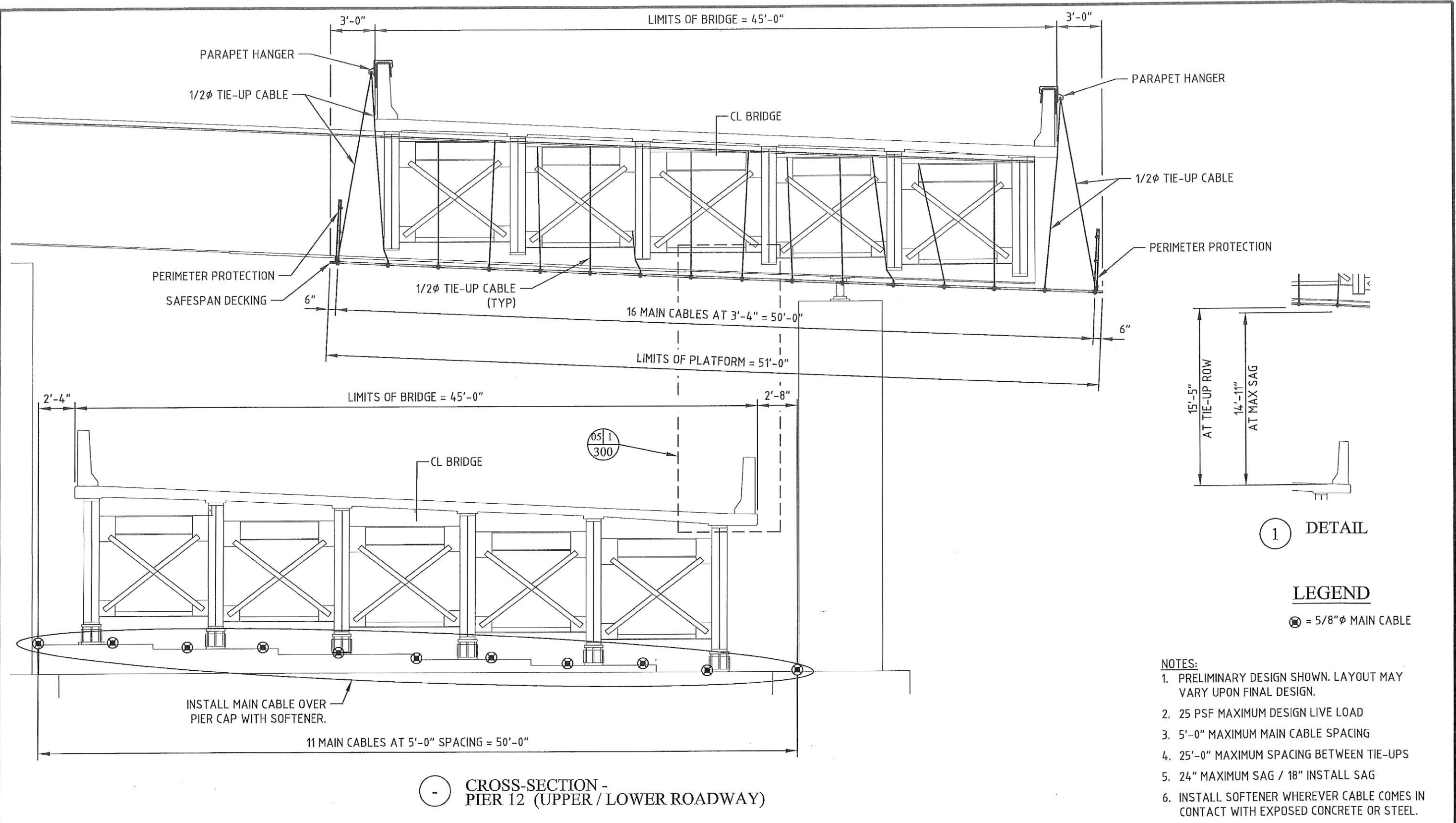
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						DRAWN BY: D.S.K.	CHECKED BY: D.E.P.	SHERMAN MINTON BRIDGE	
						DATE: 11-11-20	SCALE: NO SCALE	TYPICAL CROSS-SECTION	
						S.S. PROJECT No: 02550201000	OWNERS PROJECT No:	JOB No. : 0255020	DWG. No. : 300-04

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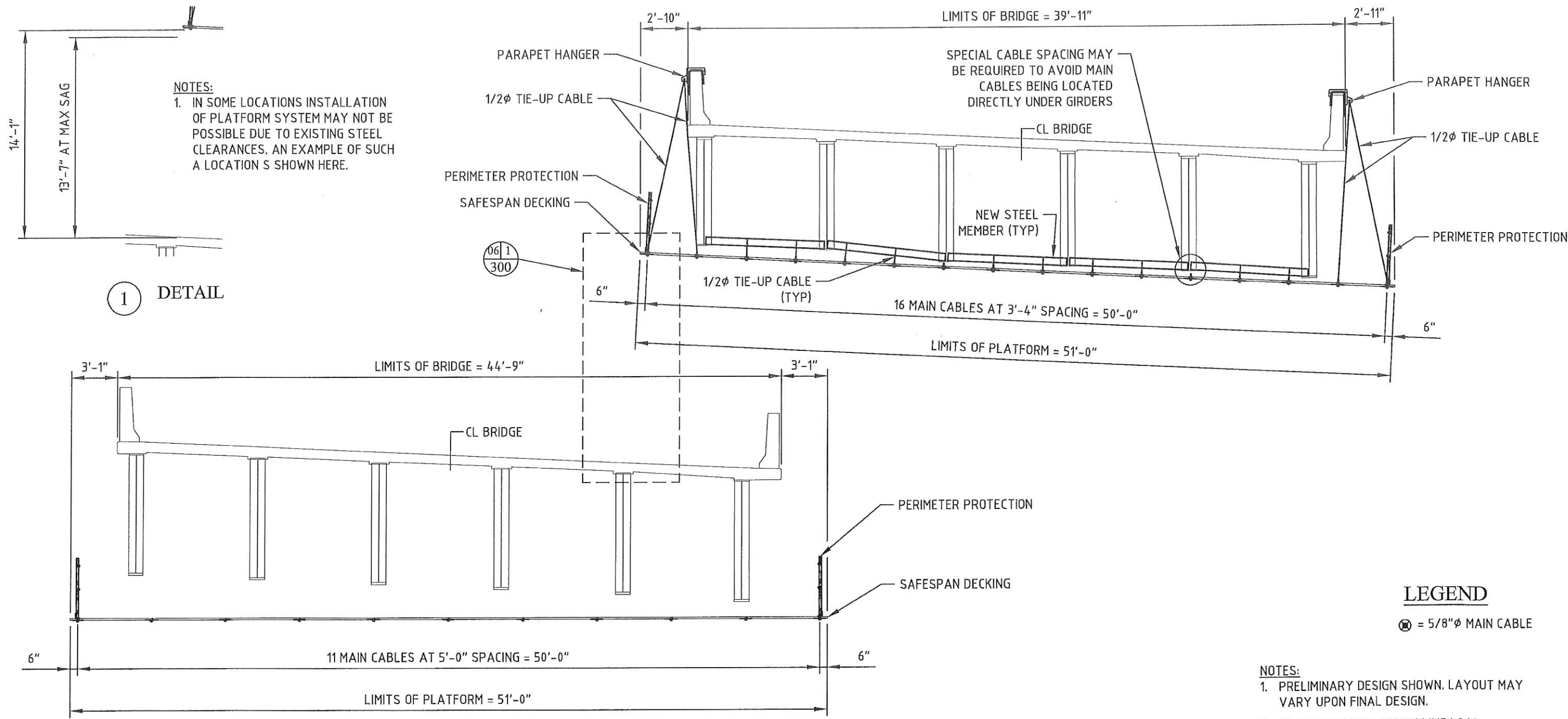


CROSS-SECTION - PIER 12 (UPPER / LOWER ROADWAY)

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						DRAWN BY: D.S.K.	CHECKED BY: D.E.P.	SHERMAN MINTON BRIDGE	
						DATE: 11-11-20	SCALE: NO SCALE	TYPICAL CROSS-SECTION	
						S.S. PROJECT No: 02550201000	OWNERS PROJECT No:	JOB No. : 0255020	DWG. No. : 300-05

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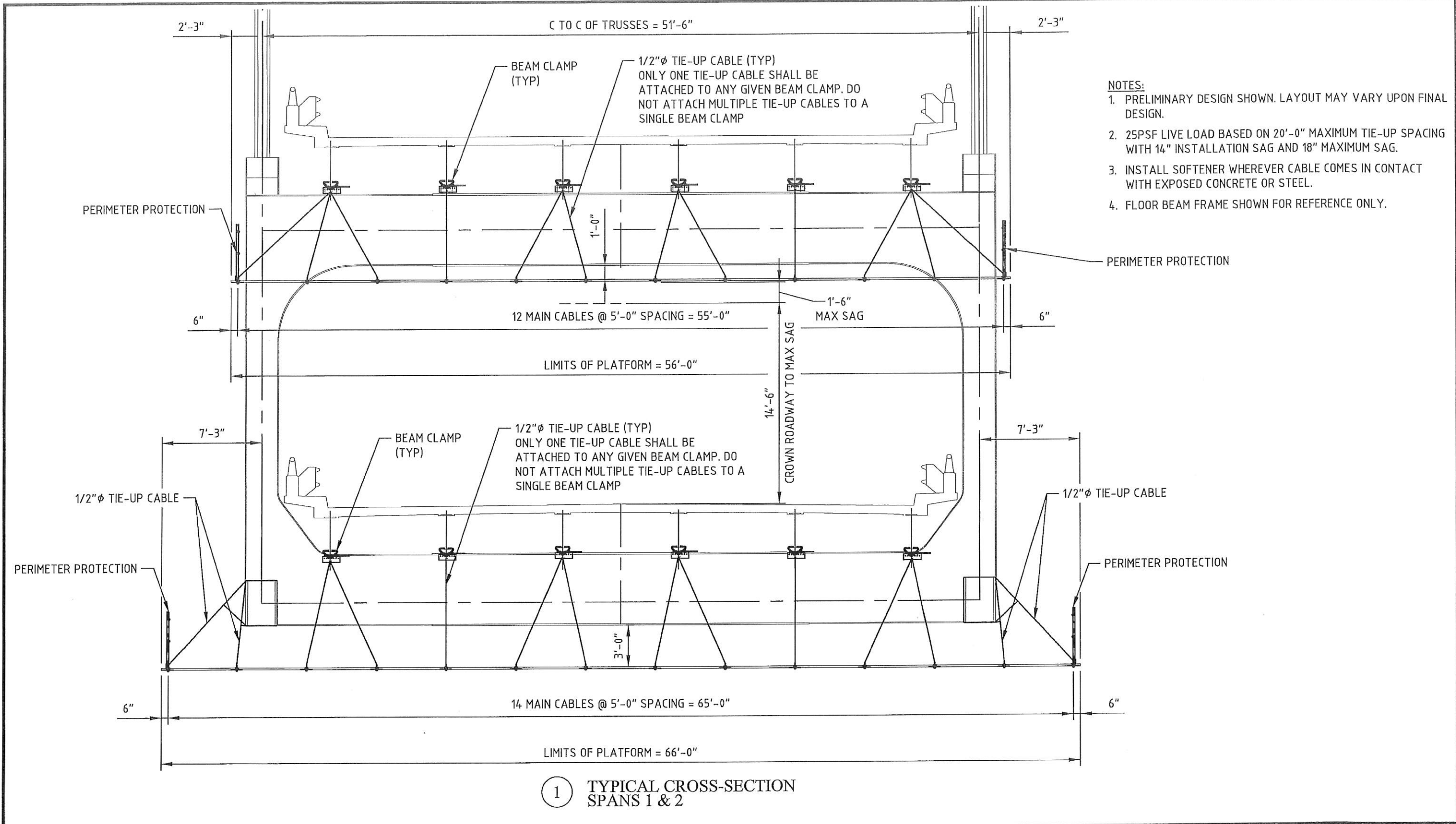
CROSS-SECTION -
SPAN 11 (UPPER ROADWAY)
SPAN 24 (LOWER ROADWAY)

- NOTES:
- 1. PRELIMINARY DESIGN SHOWN. LAYOUT MAY VARY UPON FINAL DESIGN.
 - 2. 25 PSF MAXIMUM DESIGN LIVE LOAD
 - 3. 5'-0" MAXIMUM MAIN CABLE SPACING
 - 4. 25'-0" MAXIMUM SPACING BETWEEN TIE-UPS
 - 5. 24" MAXIMUM SAG / 18" INSTALL SAG
 - 6. INSTALL SOFTENER WHEREVER CABLE COMES IN CONTACT WITH EXPOSED CONCRETE OR STEEL.

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						DRAWN BY: D.S.K.	CHECKED BY: D.E.P.	SHERMAN MINTON BRIDGE	
						DATE: 11-11-20	SCALE: NO SCALE	TYPICAL CROSS-SECTION	
						S.S. PROJECT No: 02550201000	OWNERS PROJECT No:	JOB No. : 0255020	DWG. No. : 300-06

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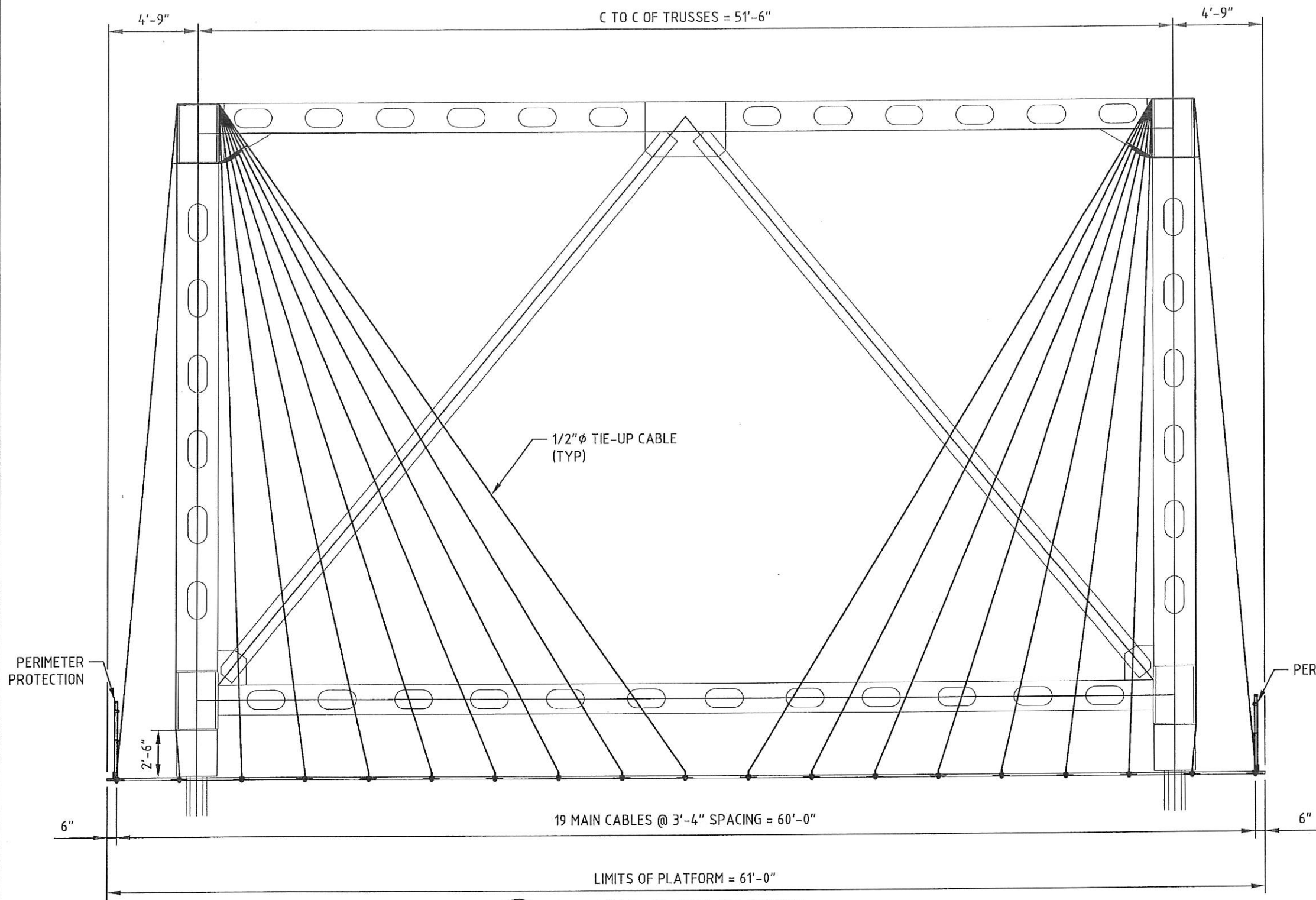
PRELIMINARY-NOT FOR CONSTRUCTION-NOT FOR SUBMITTAL



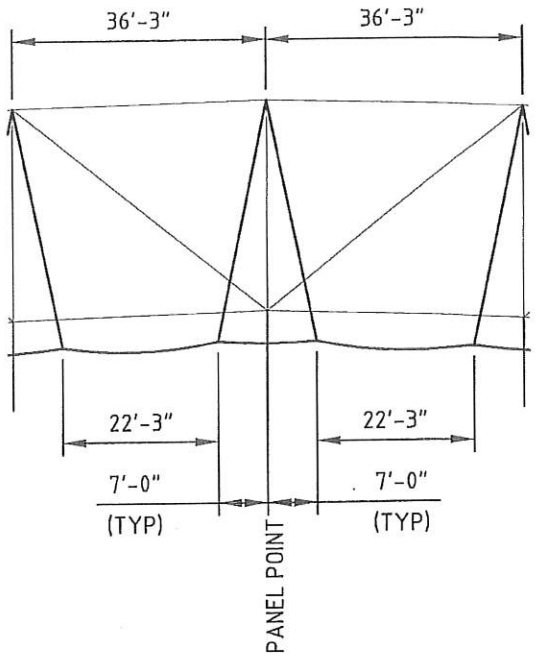
SAFESPAN, INC. IS THE MANUFACTURER OF A UNIQUE PROPRIETARY AND PATENTED MULTI-SPAN PLATFORM SYSTEM. US. PATENTS #5,730,248, 5,921,346, 6,003,634, 6,135,240, 6,138,793, 6,227,331, 6,264,002, 6,302,237, 6,386,319, & 6,523,644. AUSTRALIAN PATENT #720,795. OTHER INTERNATIONAL AND US. PATENTS PENDING. ANY ATTEMPT AT SYSTEM DUPLICATION IS A VIOLATION AND IS SUBJECT TO PENALTY UNDER LAW.	REV.	DATE	BY	REVISION DESCRIPTION	SAFESPAN "Support you can Build on" © COPYRIGHT 2020 SAFESPAN, INC.	DESIGNED BY: D.E.P.	CHECKED BY: A.W.T.	SAFESPAN PLATFORM SYSTEMS, INC.	
						DRAWN BY: A.W.T.	CHECKED BY: D.E.P.	SHERMAN MINTON BRIDGE	
						DATE: 11-11-20	SCALE: NO SCALE	TYPICAL CROSS-SECTION	
						S.S. PROJECT No: 02550201000	OWNERS PROJECT No:	JOB No. : 0255020	DWG. No. : 300-07

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PRELIMINARY-NOT FOR CONSTRUCTION-NOT FOR SUBMITTAL



○ TYPICAL CROSS-SECTION ABOVE ROADWAY PLATFORM



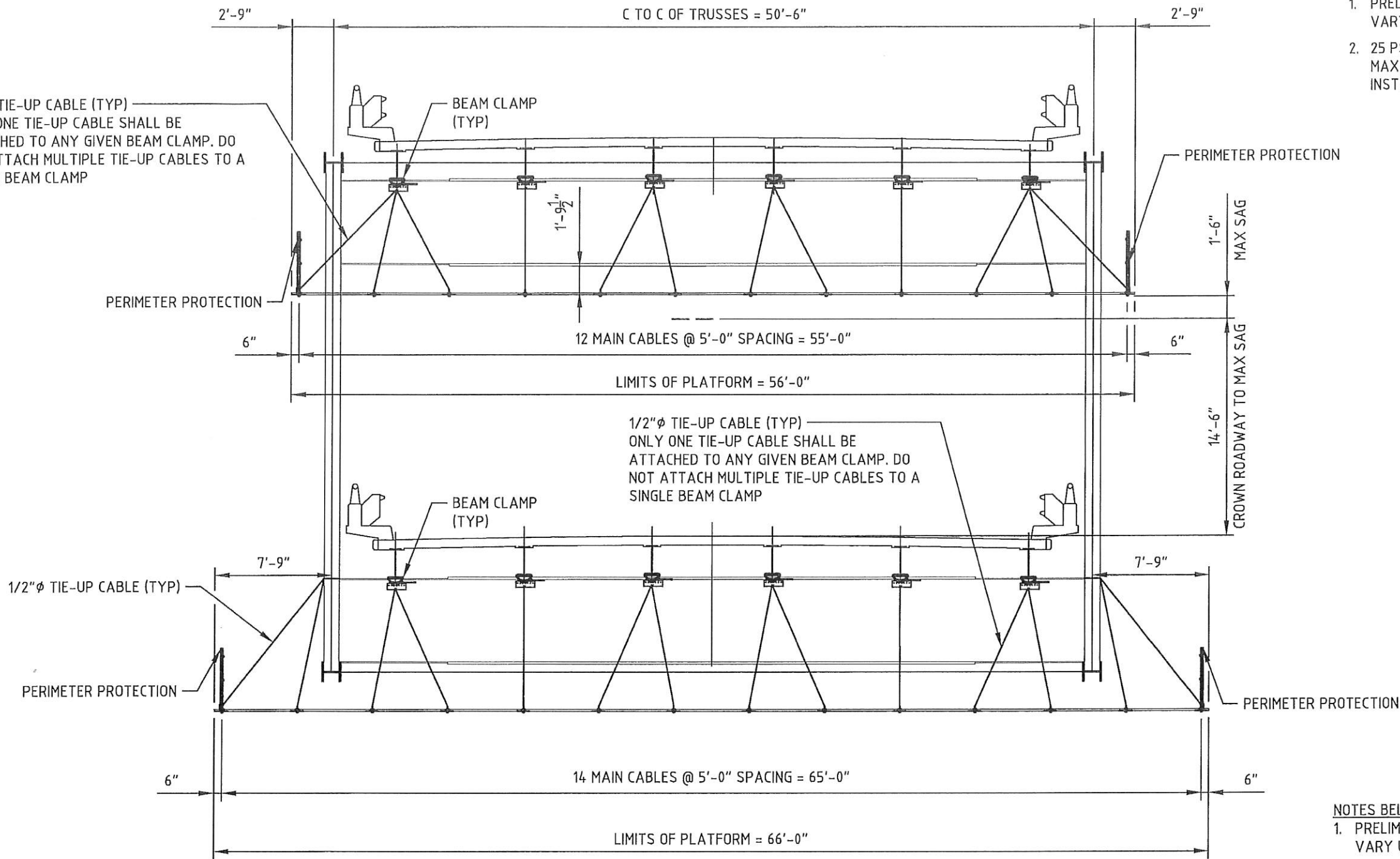
② ELEVATION PLATFORM

- NOTES:
1. PRELIMINARY DESIGN SHOWN. LAYOUT MAY VARY UPON FINAL DESIGN.
 2. 25 PSF MAXIMUM DESIGN LOAD.
 3. INSTALL SOFTENER WHEREVER CABLE COMES IN CONTACT WITH EXPOSED CONCRETE OR STEEL.

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						DRAWN BY: A.W.T.	CHECKED BY: D.E.P.	SHERMAN MINTON BRIDGE	
						DATE: 11-11-20	SCALE: NO SCALE	TYPICAL CROSS-SECTION ABOVE ROADWAY PLATFORM	
						S.S. PROJECT No: 02550201000	OWNERS PROJECT No:	JOB No. : 0255020	DWG. No. : 300-08
© COPYRIGHT 2020 SAFESPAN, INC.									

PRELIMINARY-NOT FOR CONSTRUCTION-NOT FOR SUBMITTAL

1/2"φ TIE-UP CABLE (TYP)
ONLY ONE TIE-UP CABLE SHALL BE
ATTACHED TO ANY GIVEN BEAM CLAMP. DO
NOT ATTACH MULTIPLE TIE-UP CABLES TO A
SINGLE BEAM CLAMP



- NOTES BELOW UPPER ROADWAY:
- 1. PRELIMINARY DESIGN SHOWN. LAYOUT MAY VARY UPON FINAL DESIGN.
 - 2. 25 PSF LIVE LOAD BASED ON 20'-0" MAXIMUM TIE-UP SPACING WITH 14" INSTALLATION SAG AND 18" MAXIMUM SAG.

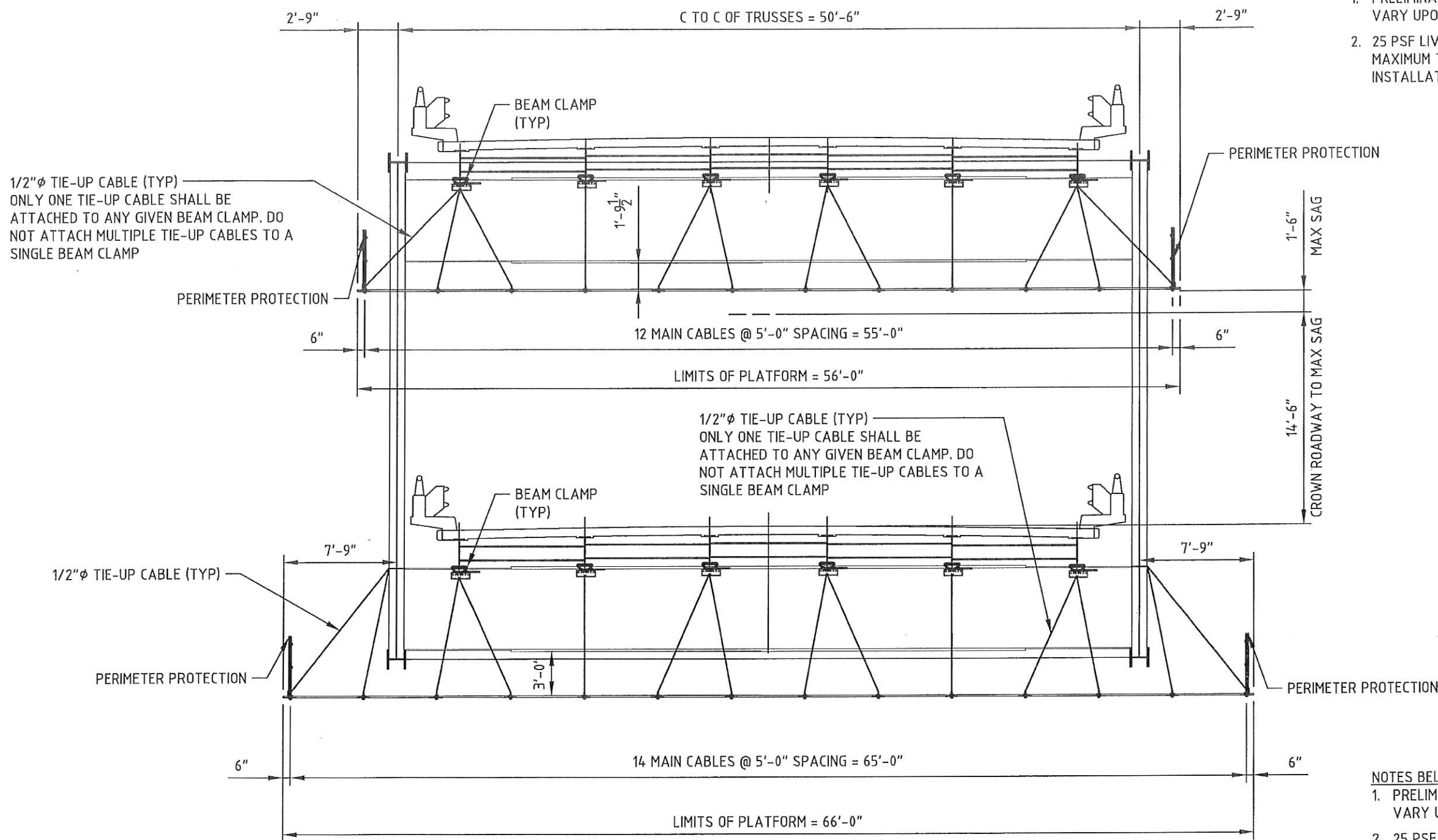
CROSS-SECTION
FLOOR BEAMS 1,3,5,7,9,7'

- NOTES BELOW LOWER ROADWAY:
- 1. PRELIMINARY DESIGN SHOWN. LAYOUT MAY VARY UPON FINAL DESIGN.
 - 2. 25 PSF MAXIMUM DESIGN LIVE LOAD
 - 3. 5'-0" MAXIMUM MAIN CABLE SPACING
 - 4. 25'-0" MAXIMUM SPACING BETWEEN TIE-UPS
 - 5. 24" MAXIMUM SAG / 18" INSTALL SAG
 - 6. INSTALL SOFTENER WHEREVER CABLE COMES IN CONTACT WITH EXPOSED CONCRETE OR STEEL.

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						DRAWN BY: B.D.C.	CHECKED BY: D.E.P.	SHERMAN MINTON BRIDGE	
						DATE: 11-11-20	SCALE: NO SCALE	CROSS-SECTION	
						S.S. PROJECT No: 02550201000	OWNERS PROJECT No:	JOB No. : 0255020	DWG. No. : 300-10

Z:\PROJECT\2020-Jobs\0255020-Sherman Minton Bridge\Drawings\Sketches\11-10-20-Preliminary Cross-Sections\Spans A, B, C.dwg

PRELIMINARY-NOT FOR CONSTRUCTION-NOT FOR SUBMITTAL



- NOTES BELOW UPPER ROADWAY:
- 1. PRELIMINARY DESIGN SHOWN. LAYOUT MAY VARY UPON FINAL DESIGN.
 - 2. 25 PSF LIVE LOAD BASED ON 20'-0" MAXIMUM TIE-UP SPACING WITH 14" INSTALLATION SAG AND 18" MAXIMUM SAG.

- NOTES BELOW LOWER ROADWAY:
- 1. PRELIMINARY DESIGN SHOWN. LAYOUT MAY VARY UPON FINAL DESIGN.
 - 2. 25 PSF MAXIMUM DESIGN LIVE LOAD
 - 3. 5'-0" MAXIMUM MAIN CABLE SPACING
 - 4. 25'-0" MAXIMUM SPACING BETWEEN TIE-UPS
 - 5. 24" MAXIMUM SAG / 18" INSTALL SAG
 - 6. INSTALL SOFTENER WHEREVER CABLE COMES IN CONTACT WITH EXPOSED CONCRETE OR STEEL.

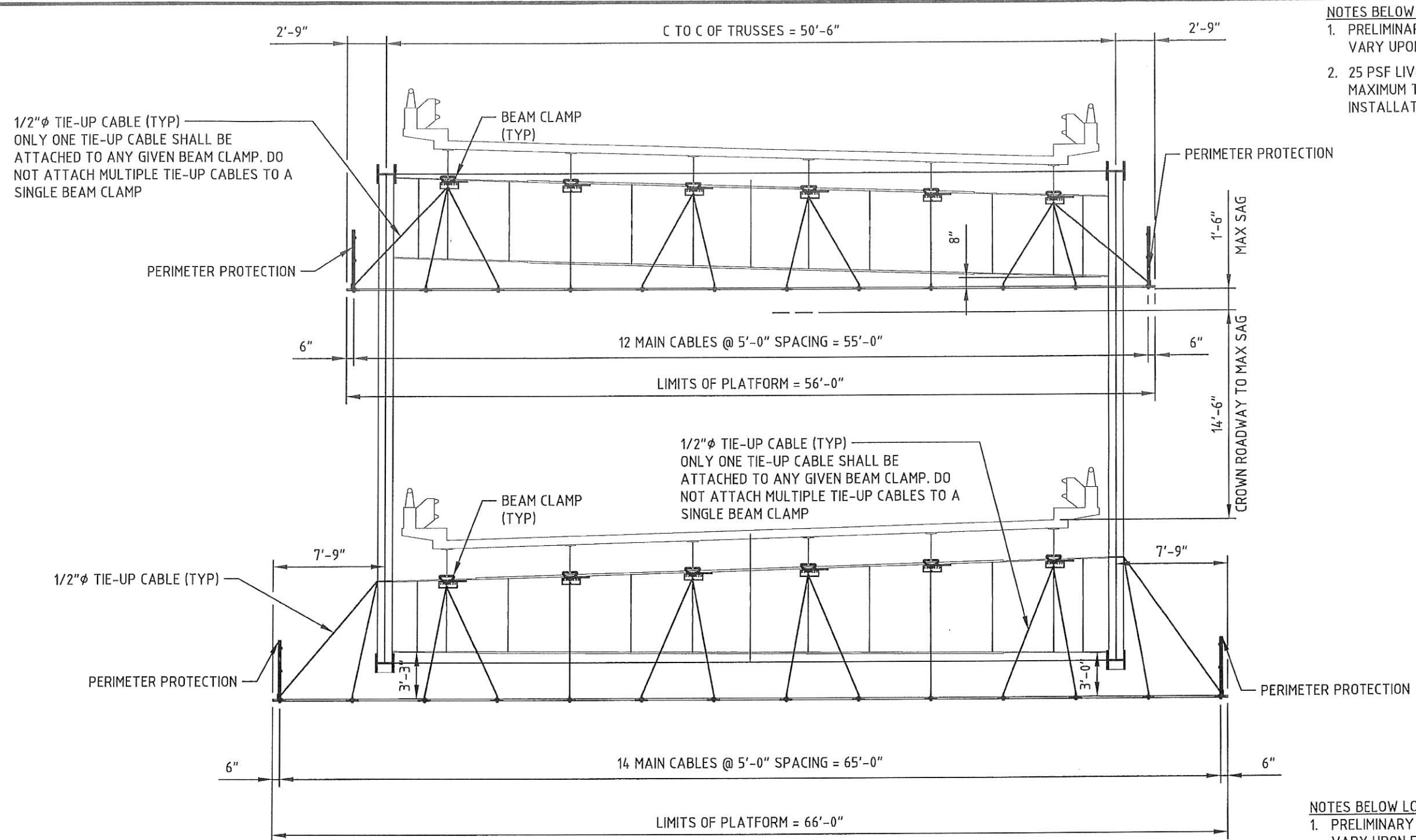
CROSS-SECTION FLOOR BEAMS 2,4,6,8,8'

SAFESPAN, INC. IS THE MANUFACTURER OF A UNIQUE PROPRIETARY AND PATENTED MULTI-SPAN PLATFORM SYSTEM. US. PATENTS #5,730,248, 5,921,346, 6,003,634, 6,135,240, 6,138,793, 6,227,331, 6,264,002, 6,302,237, 6,386,319, & 6,523,644. AUSTRALIAN PATENT #720,795. OTHER INTERNATIONAL AND US. PATENTS PENDING. ANY ATTEMPT AT SYSTEM DUPLICATION IS A VIOLATION AND IS SUBJECT TO PENALTY UNDER LAW.	REV.	DATE	BY	REVISION DESCRIPTION	<div>SAFESPAN</div> <div><small>"Support you can Build on"™</small></div> <div>© COPYRIGHT 2020 SAFESPAN, INC.</div>	DESIGNED BY: D.E.P.	CHECKED BY: A.W.T.	SAFESPAN PLATFORM SYSTEMS, INC.	
						DRAWN BY: B.D.C.	CHECKED BY: D.E.P.	SHERMAN MINTON BRIDGE	
						DATE: 11-11-20	SCALE: NO SCALE	CROSS-SECTION	
						S.S. PROJECT No: 02550201000	OWNERS PROJECT No:	JOB No. : 0255020	DWG. No. : 300-11

Z:\PROJECT\2020-Jobs\0255020-Sherman Minton Bridge\Drawings\Sketches\11-10-20-Preliminary Cross-Sections\Spans A, B, C.dwg

Z:\PROJECT\2020-Jobs\0255020-Sherman Minton Bridge\Drawings\Sketches\11-10-20-Preliminary Cross-Sections\Spans A, B, C.dwg

PRELIMINARY-NOT FOR CONSTRUCTION-NOT FOR SUBMITTAL



- NOTES BELOW UPPER ROADWAY:
- 1. PRELIMINARY DESIGN SHOWN. LAYOUT MAY VARY UPON FINAL DESIGN.
 - 2. 25 PSF LIVE LOAD BASED ON 20'-0" MAXIMUM TIE-UP SPACING WITH 14" INSTALLATION SAG AND 18" MAXIMUM SAG.

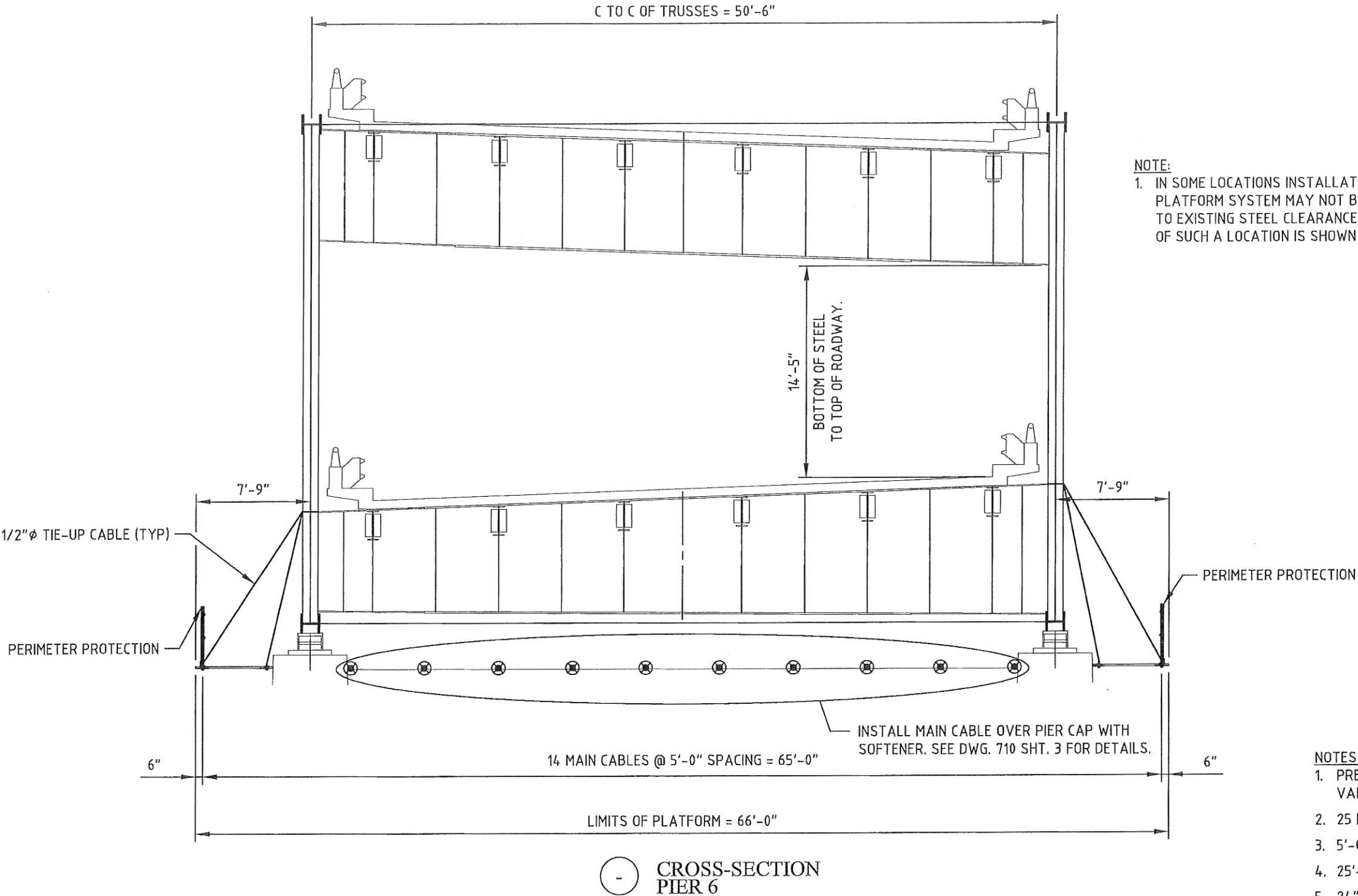
- NOTES BELOW LOWER ROADWAY:
- 1. PRELIMINARY DESIGN SHOWN. LAYOUT MAY VARY UPON FINAL DESIGN.
 - 2. 25 PSF MAXIMUM DESIGN LIVE LOAD
 - 3. 5'-0" MAXIMUM MAIN CABLE SPACING
 - 4. 25'-0" MAXIMUM SPACING BETWEEN TIE-UPS
 - 5. 24" MAXIMUM SAG / 18" INSTALL SAG
 - 6. INSTALL SOFTENER WHEREVER CABLE COMES IN CONTACT WITH EXPOSED CONCRETE OR STEEL.

CROSS-SECTION
SPAN C

SAFESPAN, INC. IS THE MANUFACTURER OF A UNIQUE PROPRIETARY AND PATENTED MULTI-SPAN PLATFORM SYSTEM. US. PATENTS #5,730,248, 5,921,346, 6,003,634, 6,135,240, 6,138,793, 6,227,331, 6,264,002, 6,302,237, 6,386,319, & 6,523,644. AUSTRALIAN PATENT #720,795. OTHER INTERNATIONAL AND US. PATENTS PENDING. ANY ATTEMPT AT SYSTEM DUPLICATION IS A VIOLATION AND IS SUBJECT TO PENALTY UNDER LAW.	REV.	DATE	BY	REVISION DESCRIPTION	<div>SAFESPAN</div> <div>"Support you can Build on"™</div> <div>© COPYRIGHT 2020 SAFESPAN, INC.</div>	DESIGNED BY: D.E.P.	CHECKED BY: A.W.T.	SAFESPAN PLATFORM SYSTEMS, INC.	
						DRAWN BY: B.D.C.	CHECKED BY: D.E.P.	SHERMAN MINTON BRIDGE	
						DATE: 11-11-20	SCALE: NO SCALE	CROSS-SECTION	
						S.S. PROJECT No: 02550201000	OWNERS PROJECT No:	JOB No. : 0255020	DWG. No. : 300-12

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PRELIMINARY-NOT FOR CONSTRUCTION-NOT FOR SUBMITTAL



NOTE:
1. IN SOME LOCATIONS INSTALLATION OF PLATFORM SYSTEM MAY NOT BE POSSIBLE DUE TO EXISTING STEEL CLEARANCES. AN EXAMPLE OF SUCH A LOCATION IS SHOWN HERE.

LEGEND

\otimes = 5/8" ϕ MAIN CABLE

- NOTES BELOW LOWER ROADWAY:
1. PRELIMINARY DESIGN SHOWN. LAYOUT MAY VARY UPON FINAL DESIGN.
 2. 25 PSF MAXIMUM DESIGN LIVE LOAD
 3. 5'-0" MAXIMUM MAIN CABLE SPACING
 4. 25'-0" MAXIMUM SPACING BETWEEN TIE-UPS
 5. 24" MAXIMUM SAG / 18" INSTALL SAG
 6. INSTALL SOFTENER WHEREVER CABLE COMES IN CONTACT WITH EXPOSED CONCRETE OR STEEL.

SAFESPAN, INC. IS THE MANUFACTURER OF A UNIQUE PROPRIETARY AND PATENTED MULTI-SPAN PLATFORM SYSTEM. US. PATENTS #5,730,248, 5,921,346, 6,003,634, 6,135,240, 6,138,793, 6,227,331, 6,264,002, 6,302,237, 6,386,319, & 6,523,644. AUSTRALIAN PATENT #720,795. OTHER INTERNATIONAL AND U.S. PATENTS PENDING. ANY ATTEMPT AT SYSTEM DUPLICATION IS A VIOLATION AND IS SUBJECT TO PENALTY UNDER LAW.	REV.	DATE	BY	REVISION DESCRIPTION	SAFESPAN "Support you can Build on" SM © COPYRIGHT 2020 SAFESPAN, INC.	DESIGNED BY: D.E.P.	CHECKED BY: A.W.T.	SAFESPAN PLATFORM SYSTEMS, INC.	
						DRAWN BY: B.D.C.	CHECKED BY: D.E.P.	SHERMAN MINTON BRIDGE	
						DATE: 11-11-20	SCALE: NO SCALE	CROSS-SECTION	
						S.S. PROJECT No: 02550201000	OWNERS PROJECT No:	JOB No. : 0255020	DWG. No. : 300-13

Roadway/MOT



VOLUME 2

Appendix | ROADWAY AND MOT

See the Roll Plots provided separately in Tubes 1 through 5, also included for electronic submittal on USB.

Sherman Minton Bridge

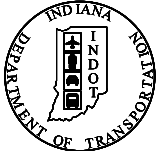


VOLUME 2

PROJECT	DESIGNATION
1702255, 1592187	1702255, 1592187
CONTRACT	BRIDGE FILE
B-40719	I64-123-04691 E

STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
I64-123-04691 E SHERMAN MINTON BRIDGE	STEEL TIED ARCH TRUSS & CONTINUOUS STEEL THRU TRUSS	5 SPANS: 800'-0", 800'-0", 153'-0", 150'-0", 150'-0" SKEW: NONE	OHIO RIVER AND W. WATER ST.	89+96.50

INDIANA DEPARTMENT OF TRANSPORTATION



BRIDGE REHABILITATION PLANS FOR SPANS OVER 20 FEET

ROUTE: INTERSTATE 64 AT: RP 123+61

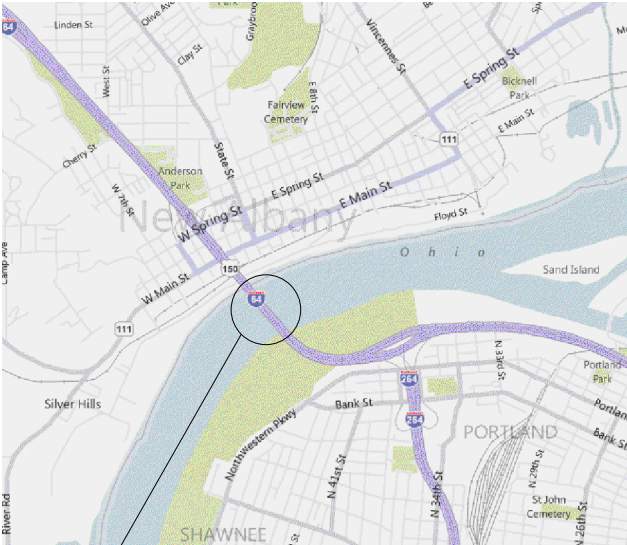
PROJECT NO. 1702255, 1592187 P.E.

No Additional Right-of-Way
Required For This Project

R/W

1702255, 1592187 CONST.

Bridge Maintenance and Repairs for Interstate 64, Spans 1, 2, A, B, & C
over the Ohio River and W. Water St. in Section 2,
T-3-S, R-6-E, New Albany Township, Floyd County, Indiana



SCALE 1" = 2000'

STRUCTURE NO. I64-123-04691 E NEW ALBANY TOWNSHIP
FLOYD COUNTY

LOCATION MAP

TRAFFIC DATA

A.A.D.T.	(2018)	45,200 V.P.D. (EB)	44,800 V.P.D. (WB)
A.A.D.T.	(2031)	45,490 V.P.D. (EB)	42,500 V.P.D. (WB)
D.H.V	(2031)	4,090 V.P.H. (EB)	3,830 V.P.H. (WB)
DIRECTIONAL DISTRIBUTION	50.3 % EB		
TRUCKS	11 % A.A.D.T. 6 % D.H.V.		

DESIGN DATA

DESIGN SPEED	55 M.P.H.
PROJECT DESIGN CRITERIA	3R (FREEWAY)
FUNCTIONAL CLASSIFICATION	PRINCIPAL ARTERIAL
RURAL/URBAN	URBAN
TERRAIN	LEVEL
ACCESS CONTROL	FULL



PROJECT LOCATION SHOWN BY
JOHNSON COUNTY

LATITUDE: 38°16'44" N LONGITUDE: 85°49'20" W

BRIDGE LENGTH: 0.389 MI.
ROADWAY LENGTH: 0.000 MI.
TOTAL LENGTH: 0.389 MI.
MAX. GRADE: -0.90 %

RFE PLANS - NOT FOR CONSTRUCTION

Jacobs
501 North Broadway
St. Louis, Missouri 63102-2121
Telephone: 314.335.4000

kokosing
CONSTRUCTION COMPANY, INC.

PLANS
PREPARED BY: Jacobs Engineering Group Inc 314-335-4237
PHONE NUMBER
CERTIFIED BY: _____ DATE
APPROVED
FOR LETTING: _____ DATE
INDIANA DEPARTMENT OF TRANSPORTATION

INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS
TO BE USED WITH THESE PLANS

BRIDGE FILE	
I64-123-04691 E	
DESIGNATION	
1702255, 1592187	
SHEETS	
SURVEY BOOK	1 of 24
CONTRACT	PROJECT
B-40719	1702255, 1592187

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2	INDEX
3	GENERAL PLAN AND ELEVATION
4	GENERAL NOTES
5	TYPICAL SECTION F3 Thru F19 SPANS 1 & 2
6	TYPICAL SECTION SPANS A, B, & C
7	UPPER DECK FRAMING PLAN SPANS 1 & 2
8	LOWER DECK FRAMING PLAN SPANS 1 & 2
9	UPPER DECK FRAMING PLAN SPANS A, B & C
10	LOWER DECK FRAMING PLAN SPANS A, B & C
11	FLOORBEAM / FLOORFRAME REPAIRS SPANS 1 & 2 (F0, F11, F22)
12	FLOORFRAME REPAIRS SPANS 1 & 2 (F3, F7, F15, F19)
13	FLOORBEAM REPAIRS SPANS A, B, & C (0, 2, 4, 6, 8, 8', 6', 4', 2', 0')
14	STEEL REPAIR CONCEPT DETAILS - 1
15	STEEL REPAIR CONCEPT DETAILS - 2
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17	STEEL REPAIR CONCEPT DETAILS - 4
18	BEARING REPLACEMENT DETAILS
19	SLAB STAGE CONSTRUCTION DETAILS
20	SLAB DETAILS
21	INSPECTION ACCESS REPAIRS
22	TOP CHORD INSPECTION ACCESS
23	HANGER CONNECTIONS
24	TEMPORARY JACKING SYSTEM

DATE	REVISION

Jacobs

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St. Louis, Missouri 63102-2121
Telephone: 314.335.4000

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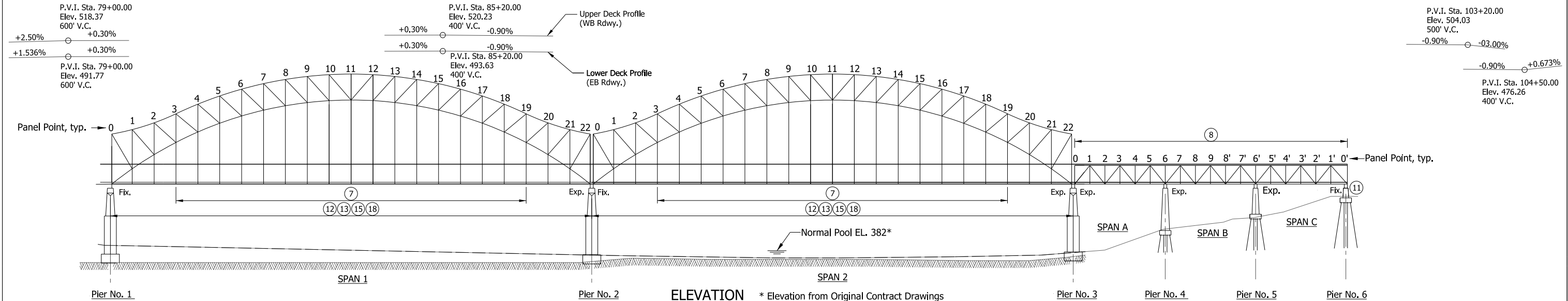
CONSTRUCTION COMPANY, INC.

RECOMMENDED FOR APPROVAL _____	
DESIGN ENGINEER _____ DATE _____	
DESIGNED: LER _____	DRAWN: EAK _____
CHECKED: _____	CHECKED: _____

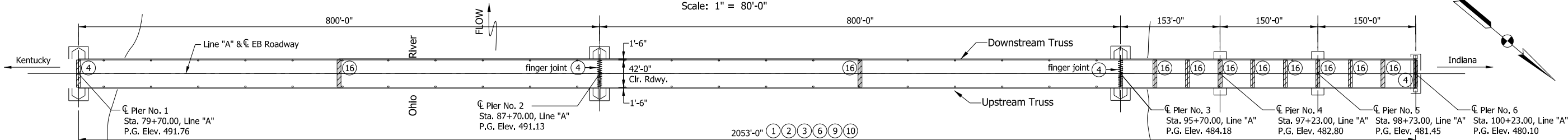
INDIANA
DEPARTMENT OF TRANSPORTATION

INDEX

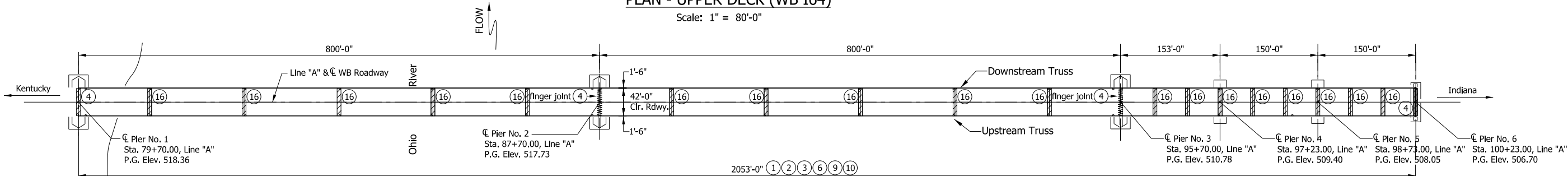
HORIZONTAL SCALE	BRIDGE FILE
NONE	I64-123-04691 E
VERTICAL SCALE	DESIGNATION
NONE	1702255, 1592187
SURVEY BOOK	SHEETS
.	2 OF 24
CONTRACT	PROJECT
B-40719	1702255, 1592187



ELEVATION
Scale: 1" = 80'-0"
* Elevation from Original Contract Drawings



PLAN - UPPER DECK (WB I64)
Scale: 1" = 80'-0"



PLAN - LOWER DECK (EB I64)
Scale: 1" = 80'-0"

- LEGEND**
- ① Remove and replace the upper and lower bridge decks and railing.
 - ② Surface seal new decks.
 - ③ Clean and paint all steel elements.
 - ④ Replace bridge deck expansion joints.
 - ⑤ Repair stringer ends at existing expansion joints.
 - ⑥ Repair floorbeams and floorframes at existing expansion joints.
 - ⑦ Remove and replace existing hanger cables.
 - ⑧ Remediate Gusset plate pack rust. See Lower Deck Framing Plan Spans A, B and C.
 - ⑨ Remove and replace existing bridge deck drainage system in kind.
 - ⑩ Remove and replace existing bridge lighting system.
 - ⑪ Epoxy Injection of cracking in Pier 6 Cap.

- ⑫ Repair Inspection Walk on Lateral Bracing and Tie Girders and inspection catwalk.
- ⑬ Provide a new inspection walk designed for fall protection along both upstream and downstream top chords complete with posts, cable railing, attachment hardware and connections. Provide an access ladder to the top chord at Pier 1, Pier 2 and Pier 3 on the downstream side of truss complete with platforms, attachment hardware and connections. Provide a fall protected inspection walk across the end portal to access the upstream truss.
- ⑭ Repair notch in top portion of the as-built diaphragm plate removal cut-line and/or on surface of floorframe flange. Typical tie girder T1 thru T21 upstream and downstream Spans 1 and 2. See Note 1.

- ⑮ Tie Girder: Remediate drill shavings from exterior surface of the web below the bottom edge of new splice plates installed on the web at the following locations:
- | Span 1 | Span 2 |
|------------|------------|
| T5 US | T2-T3 DS |
| T5-T6 US | T4-T5 DS |
| T8-T9 US | T9-T10 US |
| T10-T11 US | T12-T13 DS |
| T15-T16 DS | T14-T15 US |
| T21-L22 US | T18-T19 US |
| | T18-T19 DS |
| | T19-T20 US |
| | T19-T20 DS |
| | T21-L22 DS |
- 6.5 ft. from T3 for 6 Inches
18 ft from T5 for 2 ft
3rd and 4th perforations, 6 Inches of shavings
10 ft from T12 for 5 ft
full length
10 ft from T19 for 1 ft
4 ft from T19 for 1 ft
3rd perforation T19 for 1 ft
6 ft from T19 for 1 ft
10 ft. from L22 for 2 ft

- ⑯ Install link slab.
- ⑰ Perform Impact Treatment of stringer cover plate terminations.
- ⑱ Floorframe flange stiffener repairs.
- ⑲ Clean the stringer end bearing pack rust and apply penetrating sealer.

- NOTES**
1. For Typical Sections, See Sheet 5 & 6.
 2. See Framing Plans on Sheet 7 - 10 for Floor System Steel repairs.

STEEL THROUGH ARCH TRUSS & DECK TRUSS BI-LEVEL BRIDGE
5 SPANS: 2 @ 800', 153', 2 @ 150'
42'-0" CLEAR ROADWAY; SKEW: NONE
I-64 OVER OHIO RIVER AND W. WATER ST.
FLOYD COUNTY

DATE	REVISION

Jacobs
501 North Broadway
St. Louis, Missouri 63102-2121
Telephone: 314.335.4000

kokosing
CONSTRUCTION COMPANY, INC.

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: LER	DRAWN: EAK	
CHECKED:	CHECKED:	

INDIANA DEPARTMENT OF TRANSPORTATION
GENERAL PLAN & ELEVATION

HORIZONTAL SCALE	BRIDGE FILE
VERTICAL SCALE	164-123-04691 E
	DESIGNATION
	1702255, 1592187
SURVEY BOOK	SHEETS
	3 OF 24
CONTRACT	PROJECT
B-40719	1702255, 1592187

GENERAL NOTES:

SPECIFICATIONS

All work shall be in accordance with INDOT Standard Specifications (2020), Unique Special Provisions, and SMCP Project Technical Provisions.

STEEL REPAIRS

The scope and nature of repairs shown in the plans are based on inspection reports and other RID documents, and are provided for preliminary bidding purposes only. They are intended to capture the common types of repairs with the understanding that repairs other / different than what is schematically shown may be required.

Final repair details, limits, and quantities will be established following hands-on inspections and load ratings.

All structural steel shall be ASTM A709 Grade 50 unless noted otherwise.

High strength bolts shall be ASTM F3125 Grade A325.

Clean and paint all structural steel in accordance with Attachment 14-8: USP Painting Bridge Steel.

Paint color shall be SAE-AMS-STD-595 FS 17178, Aluminum/Silver.

TIE GIRDER SHAVINGS

Remove drill shavings at locations along tie girder indicated on General Plan and Elevation sheet.

The exposed drilled shavings shall be removed by blast cleaning and the area treated with a rust penetrating sealer. The seams between the bolted plates shall be caulked prior to application of coating system.

This work shall be included under other items. No direct quantity is provide.

FINGER PLATE EXPANSION JOINT REPLACEMENT

Replace the existing finger plate expansion joints at Piers 2 and 3.

Finger plate expansion joints shall be in accordance with Attachment 14-2: USP Finger Expansion Joints.

Refer to existing plans for joint dimensions.

JOINT REPLACEMENT

Replace joints at Piers 1 and 6 with compression seals.

Compression seals shall be in preformed compression joints by DS Brown or equivalent.

NAVIGATION CLEARANCE GAUGE

Install vertical clearance gauge(s) on the Sherman Minton Bridge. The vertical clearance gauges shall conform to the USCG requirements, Attachment 14-10: USP Paint Navigation Clearance Gauge, and as listed in 33 CFR Part 118. The Design-Build Contractor shall be responsible for any temporary clearance gauges that may be required during construction. This Work shall be completed no later than June 30, 2021.

MOT / LAYOUT PLANS

See Roadway Plans for MOT and Layout Sheets.

DATE


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Telephone: 314.335.4000

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DESIGN ENGINEER

DATE

DESIGNED: LER

DRAWN: EAK

CHECKED:

CHECKED:

INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

HORIZONTAL SCALE

BRIDGE FILE

NONE

I64-123-04691 E

VERTICAL SCALE

DESIGNATION

NONE

1702255, 1592187

SURVEY BOOK

SHEETS

4

OF

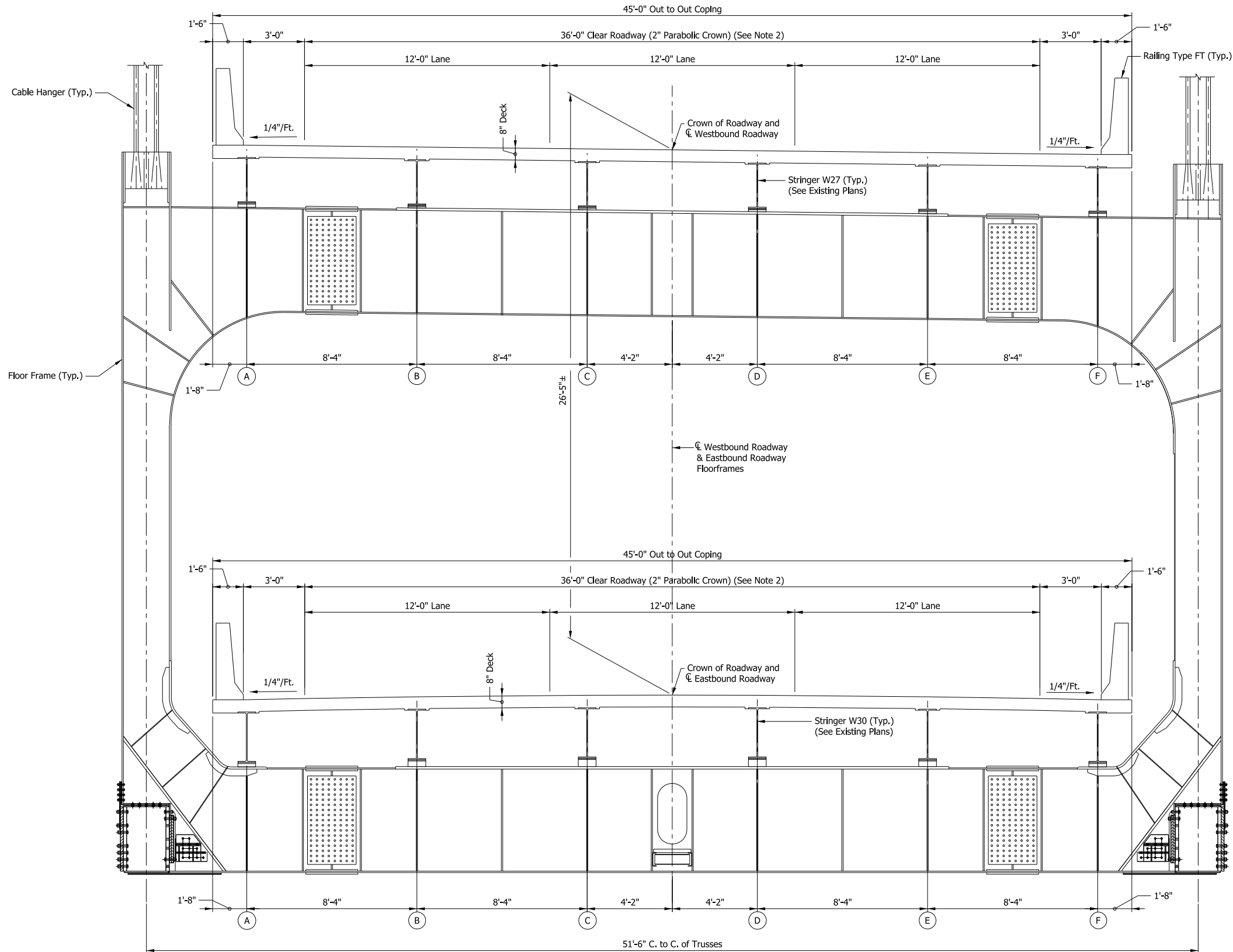
24

CONTRACT

PROJECT

B-40719

1702255, 1592187



SPAN 1 AND 2 TYPICAL SECTION
(LOOKING WEST)

NOTES:

1. Profile Grade to apply at Crown of Roadway.
2. For Superelevated Deck at Pire 1, see Existing Plans.
3. Railing Type FT shall conform to Standard Drawing E 706-BRSF.

DATE	REVISION

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St. Louis, Missouri 63102-2121
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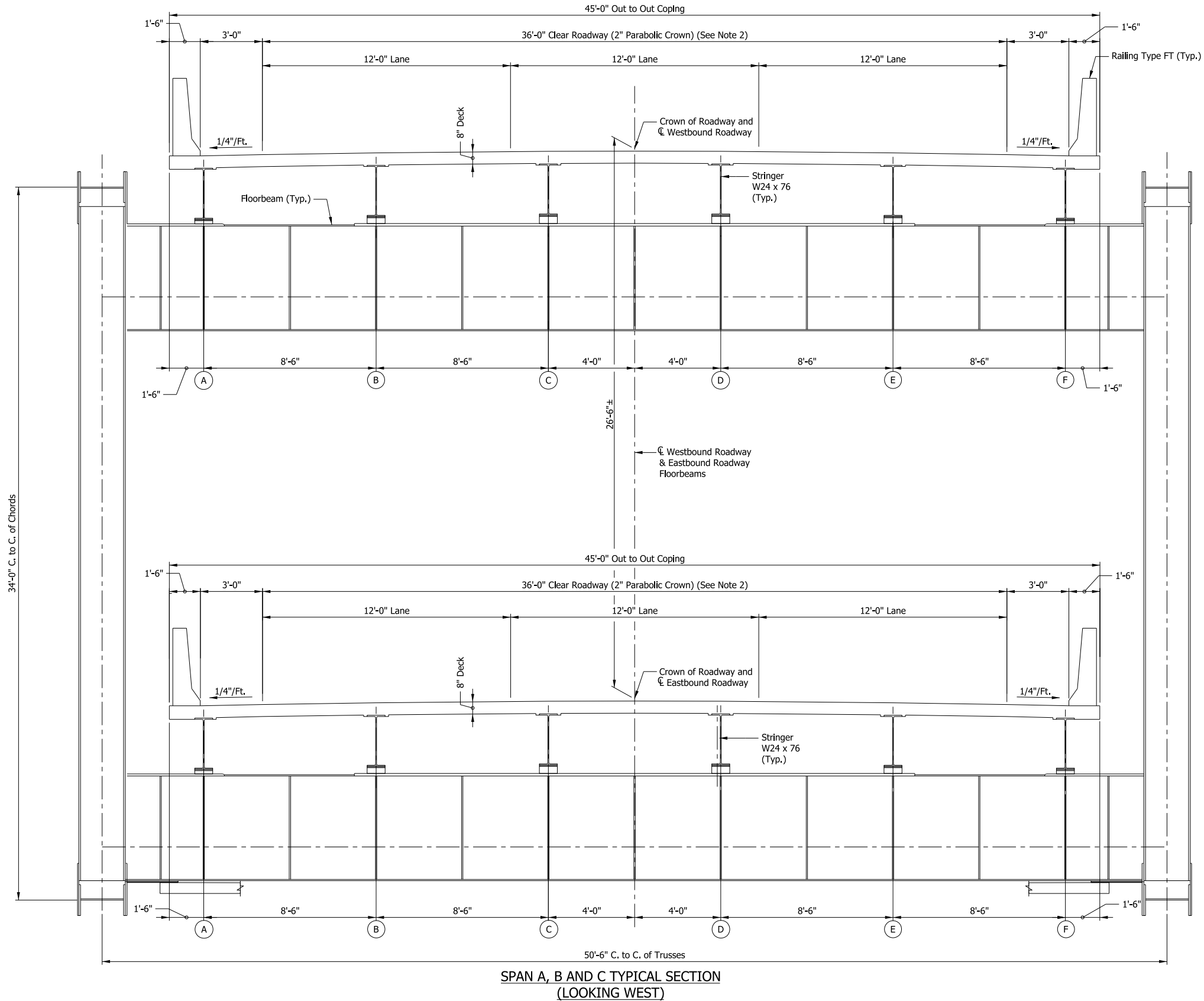
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RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
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CHECKED:	CHECKED:	

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TYPICAL SECTION F3 thru F19
SPANS 1 & 2

HORIZONTAL SCALE	BRIDGE FILE
VERTICAL SCALE	DESIGNATION
	1702255, 1592187
SURVEY BOOK	SHEETS
	5 OF 24
CONTRACT	PROJECT
B-40719	1702255, 1592187



SPAN A, B AND C TYPICAL SECTION
(LOOKING WEST)

- NOTES:**
1. Profile Grade to apply at Crown of Roadway.
 2. For Superelevated Deck at Pire 1, see Existing Plans.
 3. Railing Type FT shall conform to Standard Drawing E 706-BRSF.

DATE	REVISION

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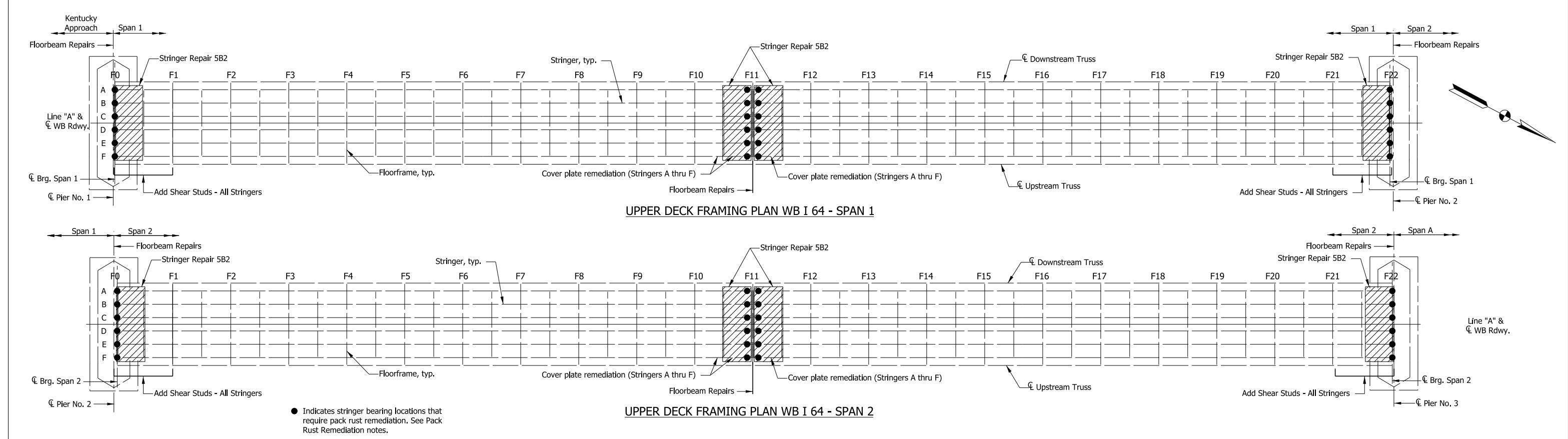
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DESIGNED: <u>LER</u>	DRAWN: <u>EAK</u>
CHECKED: _____	CHECKED: _____

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DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION
SPANS A, B & C

HORIZONTAL SCALE	BRIDGE FILE
VERTICAL SCALE	164-123-04691 E
	DESIGNATION
	1702255, 1592187
SURVEY BOOK	SHEETS
	6 OF 24
CONTRACT	PROJECT
B-40719	1702255, 1592187

\$FILES



Pack Rust Remediation

Stringer Bearing Pack Rust: Remove pack rust and apply alkaline penetrating sealer at locations indicated.

Stringer Diaphragm Pack Rust (F0 & F22): Unbolt channel diaphragm, clean pack rust, and reinstall diaphragm with new bolts.

Stringer Diaphragm Pack Rust (F11): Remove pack rust and apply alkaline penetrating sealer.

Stringer Cover Plate Remediation

Perform impact treatment on welded stringer cover plates at locations indicated.

Perform impact treatment on the toe of the fillet welds at the tapered portion of the cover plate and the cover plate termination.

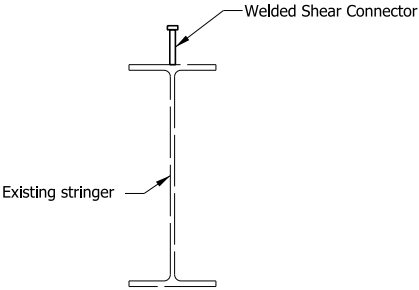
The impact treatment method shall be either air hammer peening or ultrasonic impact treatment.

If air hammer peening is used set the hammer air pressure to 40 psi and use at least 6 passes of the hammer. Use a peening tip on the chisel. The depth of indentation shall be approximately 1/32 inch. Lightly grind the peened surface to remove any lap marks.

If ultrasonic impact treatment is used follow all manufacturer's recommendations. Provide a treatment with amplitudes of 20-50 microns at a frequency of 27-55 kHz.

Notes

1. Remove and replace, one at a time, all bearing connection bolts that are broken, missing or where the width across the flats of the head or nut, measured after abrasive blasting and cleaning, is less than 75% of the original dimension.
2. For locations of Floorbeam / Floorframe repairs, see Floorbeam / Floorframe Repairs Sheets.
3. For detail of Stringer Repair - 5B2, see Steel Repair Concept Details Sheets.



DETAIL AT SHEAR CONNECTOR
Shear studs shall only be provided where shown.

DATE	REVISION

Jacobs
501 North Broadway
St. Louis, Missouri 63102-2121
Telephone: 314.335.4000

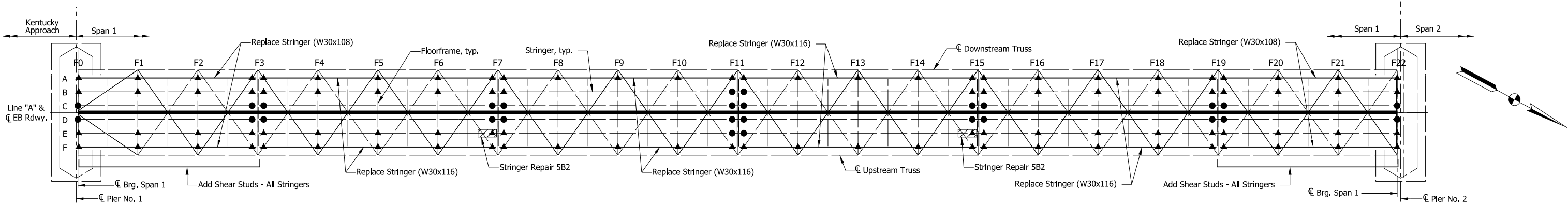
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CONSTRUCTION COMPANY, INC.

RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: LER	DRAWN: EAK	
CHECKED: _____	CHECKED: _____	

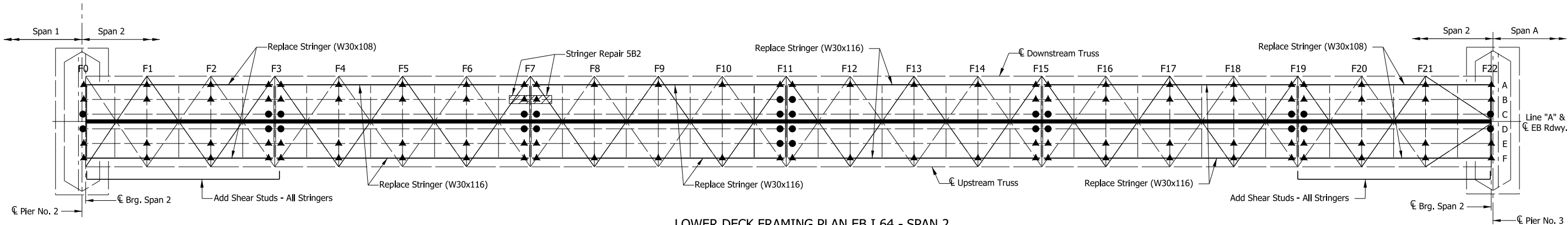
INDIANA
DEPARTMENT OF TRANSPORTATION

UPPER DECK FRAMING PLAN
SPANS 1 & 2

HORIZONTAL SCALE 1" = 30'-0"	BRIDGE FILE I64-123-04691 E
VERTICAL SCALE 1" = 30'-0"	DESIGNATION 1702255, 1592187
SURVEY BOOK .	SHEETS 7 OF 24
CONTRACT B-40719	PROJECT 1702255, 1592187



LOWER DECK FRAMING PLAN EB I 64 - SPAN 1



LOWER DECK FRAMING PLAN EB I 64 - SPAN 2

- Indicates stringer bearing locations that require pack rust remediation. See Pack Rust Remediation notes.
- ▲ Stringer bearing to be replaced with sliding bearing.

Pack Rust Remediation

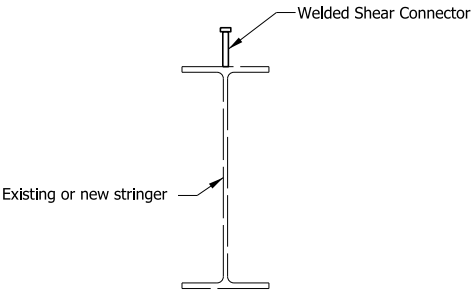
Stringer Bearing Pack Rust: Remove pack rust and apply alkaline penetrating sealer at locations indicated.

Stringer Diaphragm Pack Rust (F0 & F22): Unbolt channel diaphragm, clean pack rust, and reinstall diaphragm with new bolts.

Stringer Diaphragm Pack Rust (F3, F7, F11, F15, F19): Remove pack rust and apply alkaline penetrating sealer.

Notes

1. Remove and replace, one at a time, all bearing connection bolts that are broken, missing or where the width across the flats of the head or nut, measured after abrasive blasting and cleaning, is less than 75% of the original dimension.
2. For locations of Floorbeam / Floorframe repairs, see Floorbeam / Floorframe Repairs Sheets.
3. For detail of Stringer Repair - 5B2, see Steel Repair Concept Details Sheets.
4. For detail of Sliding Bearing, see Bearing Replacement Sheet.
5. Replace exterior stringers as show. See existing plans for plan lengths. Reuse existing diaphragms. Reinstall with new bolts.



DETAIL AT SHEAR CONNECTOR

Shear studs shall only be provided where shown.

DATE	REVISION

Jacobs

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St. Louis, Missouri 63102-2121
Telephone: 314.335.4000

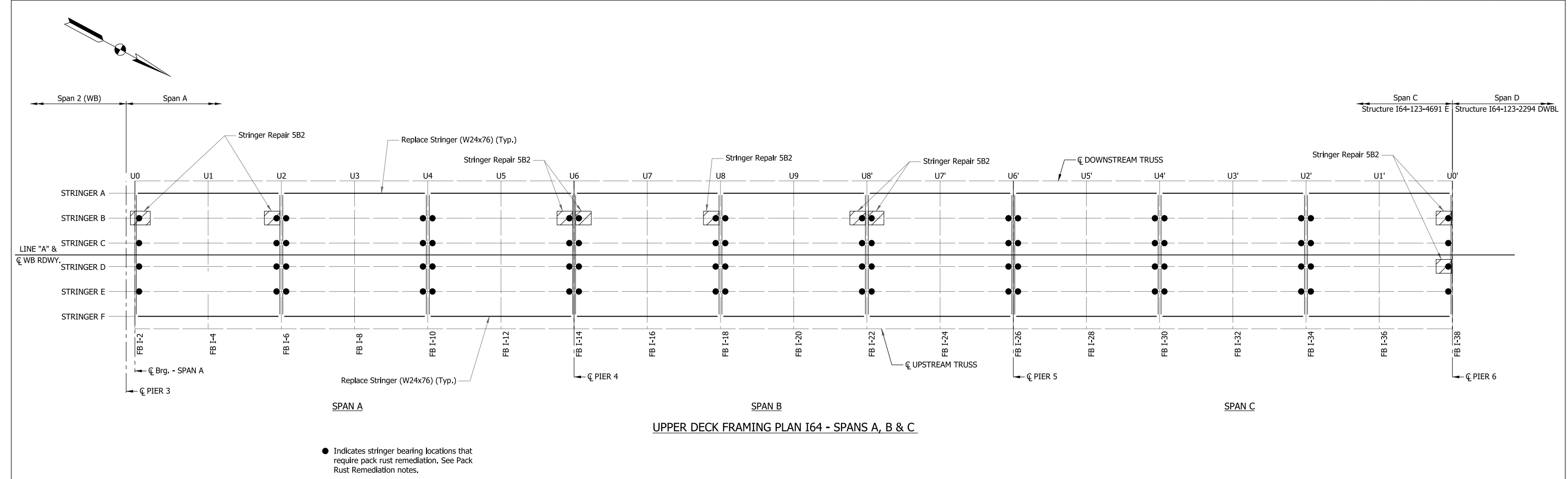
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CONSTRUCTION COMPANY, INC.

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: LER	DRAWN: EAK	
CHECKED:	CHECKED:	

INDIANA DEPARTMENT OF TRANSPORTATION
LOWER DECK FRAMING PLAN SPANS 1 & 2

HORIZONTAL SCALE 1" = 30'-0"	BRIDGE FILE I64-123-04691 E
VERTICAL SCALE 1" = 30'-0"	DESIGNATION 1702255, 1592187
SURVEY BOOK 	SHEETS 8 OF 24
CONTRACT B-40719	PROJECT 1702255, 1592187



Pack Rust Remediation

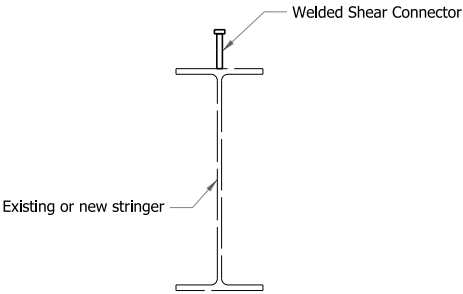
Stringer Bearing Pack Rust: Remove pack rust and apply alkaline penetrating sealer at locations indicated.

Stringer Diaphragm Pack Rust (U0 & U0'): Unbolt channel diaphragm, clean pack rust, and reinstall diaphragm with new bolts.

Stringer Diaphragm Pack Rust (U2, U4, U6, U8, U8', U6', U4', U2'): Remove pack rust and apply alkaline penetrating sealer.


Notes

- Remove and replace, one at a time, all bearing connection bolts that are broken, missing or where the width across the flats of the head or nut, measured after abrasive blasting and cleaning, is less than 75% of the original dimension.
- For locations of Floorbeam / Floorframe repairs, see Floorbeam Repairs Sheet.
- For detail of Stringer Repair - 5B2, see Steel Repair Concept Details Sheets.
- Replace exterior stringers as show. See existing plans for plan lengths. Reuse existing diaphragms. Reinstall with new bolts. Clean pack rust on stringer bearing plates and reinstall with new bearing connection bolts.



DETAIL AT SHEAR CONNECTOR

Shear studs shall be provided throughout the stringer spans.

SFILES	DATE		REVISION		<div><div>Jacobs</div><div>501 North Broadway St. Louis, Missouri 63102-2121 Telephone: 314.335.4000</div></div> <div><div>kokosing</div><div>CONSTRUCTION COMPANY, INC.</div></div> <div></div>	RECOMMENDED FOR APPROVAL _____		DESIGN ENGINEER _____		DATE _____		INDIANA DEPARTMENT OF TRANSPORTATION				HORIZONTAL SCALE		BRIDGE FILE	
														NTS		I64-123-04691 E			
														VERTICAL SCALE		DESIGNATION			
														NTS		1702255, 1592187			
														SURVEY BOOK		SHEETS			
														9		OF 24			
												CONTRACT		PROJECT					
												B-40719		1702255, 1592187					



Pack Rust Remediation

Stringer Bearing Pack Rust: Remove pack rust and apply alkaline penetrating sealer at locations indicated.

Stringer Diaphragm Pack Rust (L0 & L0'): Unbolt channel diaphragm, clean pack rust, and reinstall diaphragm with new bolts.

Stringer Diaphragm Pack Rust (L2, L4, L6, L8, L8', L6', L4', L2'): Remove pack rust and apply alkaline penetrating sealer.

Lower Chord Gusset Plate Pack Rust: Remove pack rust and apply alkaline penetrating sealer at all gusset plates on lower chord.

Notes

1. Remove and replace, one at a time, all bearing connection bolts that are broken, missing or where the width across the flats of the head or nut, measured after abrasive blasting and cleaning, is less than 75% of the original dimension.
2. For locations of Floorbeam / Floorframe repairs, see Floorbeam Repairs Sheet.
3. For detail of Stringer Repair - 5B2, see Steel Repair Concept Details Sheets.
4. Replace exterior stringers as show. See existing plans for panel lengths. Reuse existing diaphragms. Reinstall with new bolts. Clean pack rust on stringer bearing plates and reinstall with new bearing connection bolts.



Shear studs shall be provided throughout the stringer spans.

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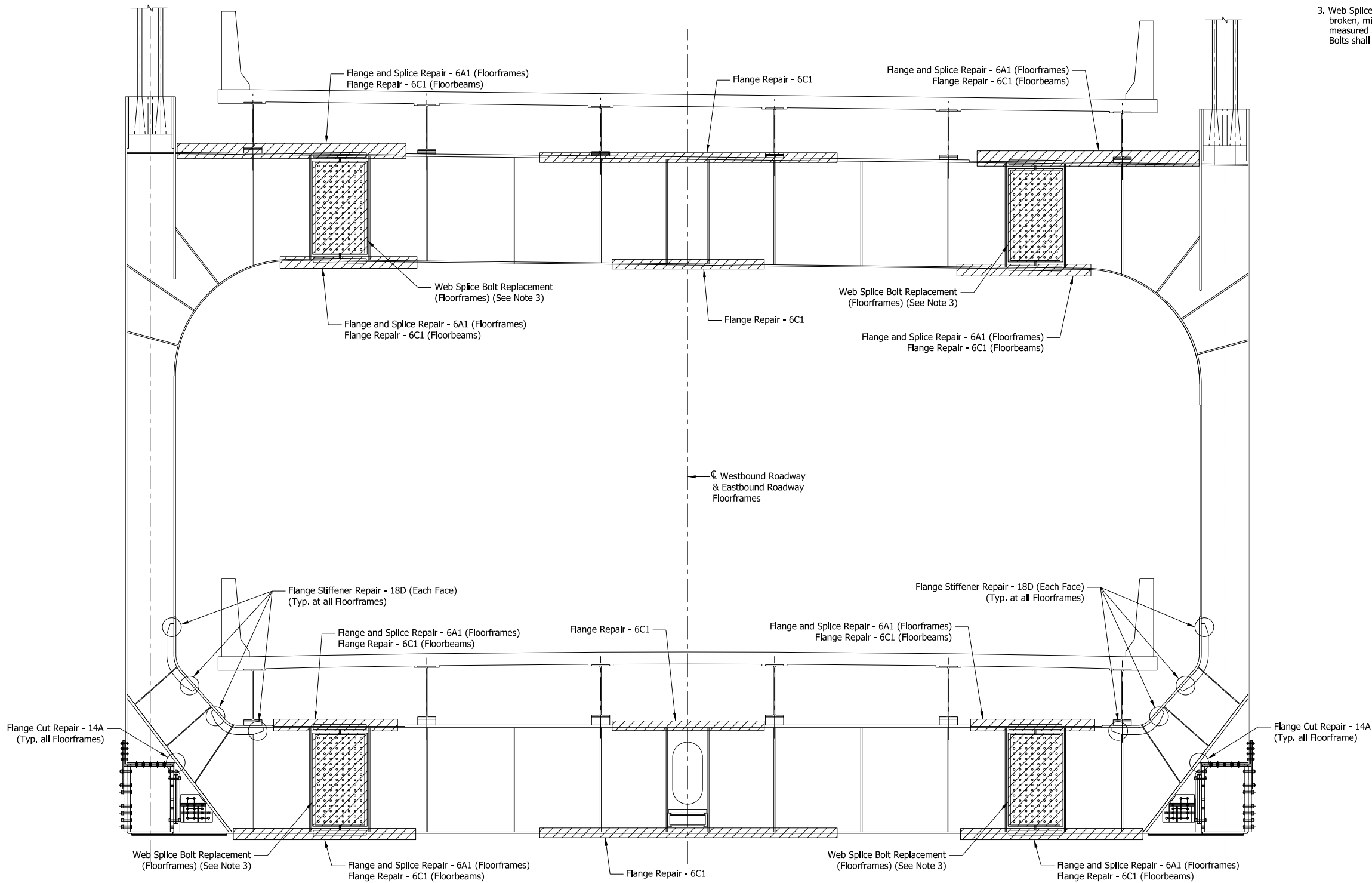
INDIANA
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LOWER DECK FRAMING PLAN
SPANS A, B & C

HORIZONTAL SCALE		BRIDGE FILE	
NTS		I64-123-04691 E	
VERTICAL SCALE		DESIGNATION	
NTS		1702255, 1592187	
SURVEY BOOK		SHEETS	
.		10	OF 24
CONTRACT		PROJECT	
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- NOTES**
1. Extent and locations of flange repairs shown schematically based on inspection reports and other RID documents for bidding purposes. Actual limits will be established following hands-on inspections and load rating.
 2. For repair details 6A1, 6C1, 14A, and 18D, see Steel Repair Concept Details Sheets.
 3. Web Splice Bolt Replacement: Remove and replace all bolts that are broken, missing, or where the width accross flats of the head or nut, measured after abrasive blasting and cleaning, is less than 75%. Bolts shall be replaced one at a time.



SPAN 1 AND 2 TYPICAL SECTION
FLOORBEAMS/FLOORFRAMES F0, F11, F22 - STEEL REPAIRS

Looking Upstation
Repairs at Floorframe F11 shown, Repairs at Floorbeams at F0 and F22 similar.

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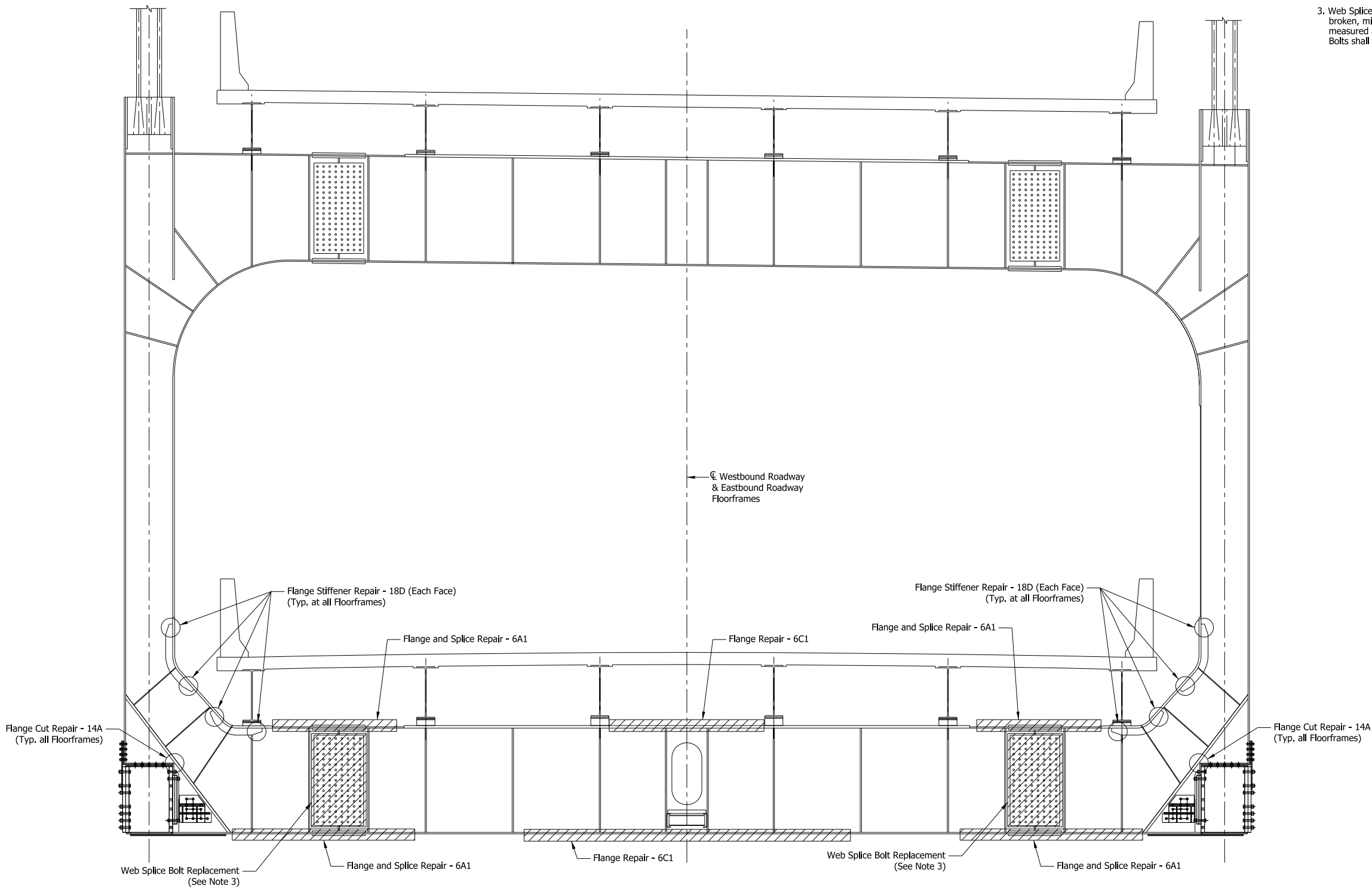
FLOORBEAM / FLOORFRAME REPAIRS
SPANS 1 & 2 (F0, F11, F22)

HORIZONTAL SCALE	BRIDGE FILE	
VERTICAL SCALE	I64-123-04691 E	
SURVEY BOOK		SHEETS
CONTRACT		PROJECT
B-40719		1702255, 1592187

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NOTES

1. Extent and locations of flange repairs shown schematically based on inspection reports and other RID documents for bidding purposes. Actual limits will be established following hands-on inspections and load rating.
2. For repair details 6A1, 6C1, 14A, and 18D, see Steel Repair Concept Details Sheets.
3. Web Splice Bolt Replacement: Remove and replace all bolts that are broken, missing, or where the width accross flats of the head or nut, measured after abrasive blasting and cleaning, is less that 75%. Bolts shall be replaced one at a time.



SPANS 1 AND 2 TYPICAL SECTION
FLOORFRAMES F3, F7, F15, F19 - STEEL REPAIRS
Looking Upstation

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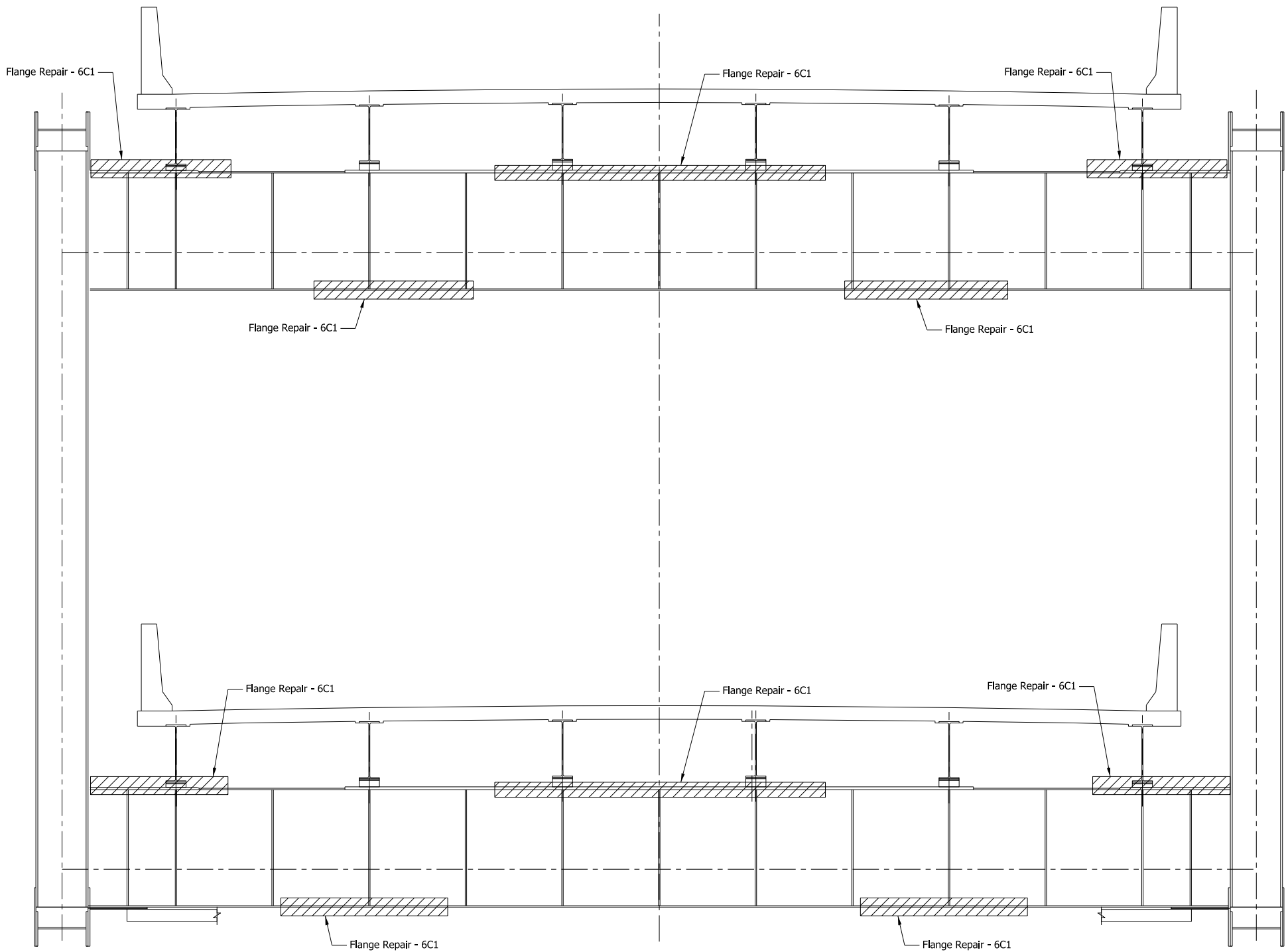
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FLOORFRAME REPAIRS
SPANS 1 & 2 (F3, F7, F15, F19)

HORIZONTAL SCALE	BRIDGE FILE	
VERTICAL SCALE	I64-123-04691 E	
	DESIGNATION	
	1702255, 1592187	
SURVEY BOOK	SHEETS	
	12	OF 24
CONTRACT	PROJECT	
B-40719	1702255, 1592187	

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- NOTES
1. Extent and locations of flange repairs shown schematically based on inspection reports and other RID documents for bidding purposes. Actual limits will be established following hands-on inspections and load rating.
 2. For repair detail 6C1, see Steel Repair Concept Details Sheets.



SPANS A, B & C TYPICAL SECTION
FLOORBEAMS 0, 2, 4, 6, 8, 8', 6', 4', 2', 0' - STEEL REPAIRS
Looking Upstation

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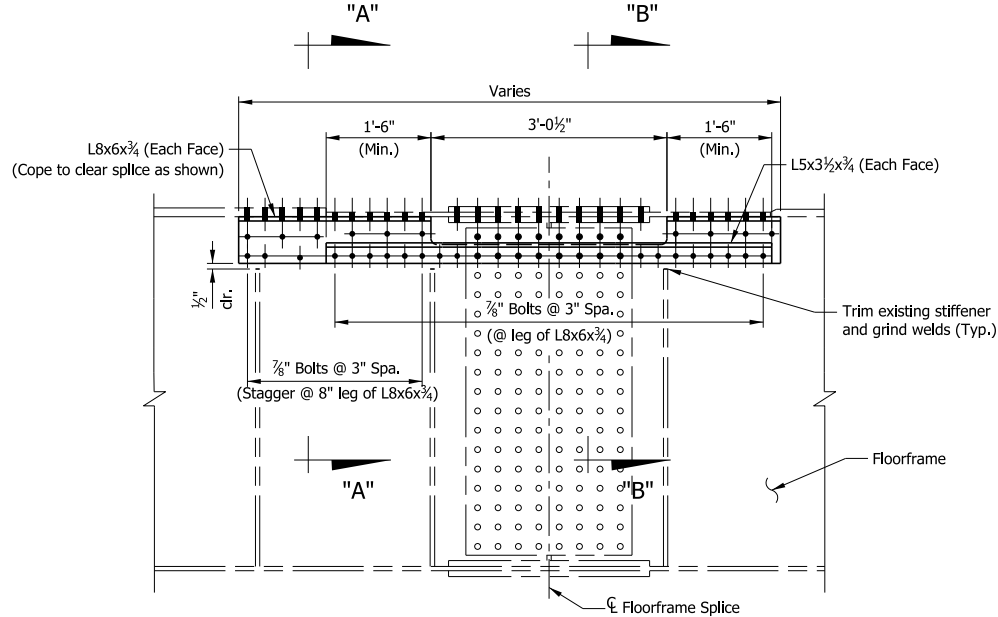
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FLOORBEAM REPAIRS
SPANS A, B & C (0, 2, 4, 6, 8, 8', 6', 4', 2', 0')

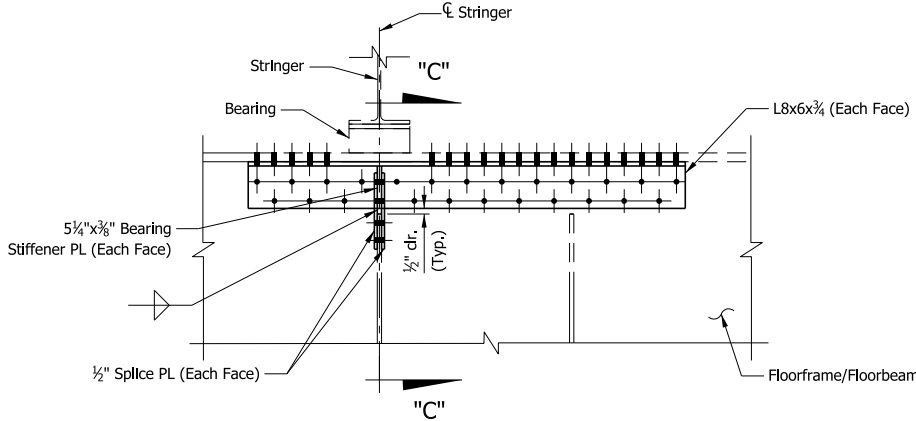
HORIZONTAL SCALE	BRIDGE FILE
VERTICAL SCALE	I64-123-04691 E
	DESIGNATION
	1702255, 1592187
SURVEY BOOK	SHEETS
	13 OF 24
CONTRACT	PROJECT
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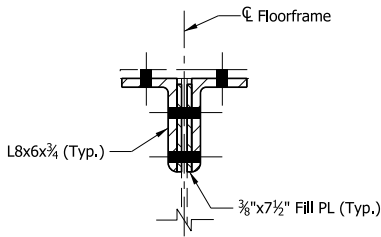
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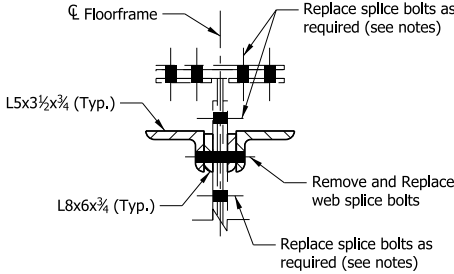
FLANGE / SPLICE REPAIR - 6A1
Top flange repair shown. Bottom flange repair similar.



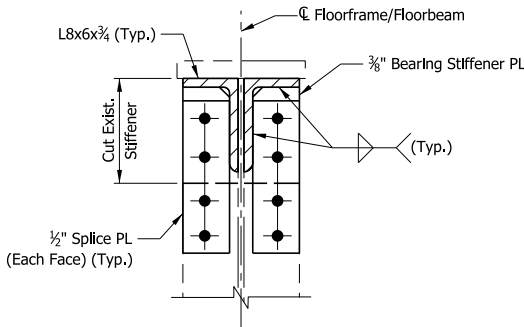
BEARING STIFFENER REPAIR - 6A2
Stiffener repair shown at location of top flange repair. Bottom flange repair similar.



SECTION A-A



SECTION B-B



SECTION C-C
Stringer and Bearing not shown.

NOTES

1. Suggested Flange/Splice Repair Sequence assumes this work is to be completed in conjunction with the corresponding staged deck replacement with the deck above the repair location removed. Repairs at other locations on the floorframe may not be performed at the same time.
2. Remove and replace flange and web splice bolts that are broken, missing, or where the width across the flats of the head or nut, measured after abrasive blasting and cleaning, is less than 75%. Bolts shall be replaced one at a time.
3. Bolts shall be 7/8 inch diameter and in accordance with F3125 Grade A325. Holes shall be 15/16" diameter.

NOTES

Suggested Flange/Splice Repair Sequence:

1. Blast clean the repair area.
2. Replace web or flange splice bolts as required except as noted below (see Notes).
3. Field cut and remove portions of stiffeners overlapping repair. Remove existing welds by grinding.
4. Remove entire row of web splice bolts overlapping repair.
5. Install L8x6x3/4 angles and bolt to flange and web as shown.
6. Install L5x3.5x3/4 angles and complete bolting through web and web splice.

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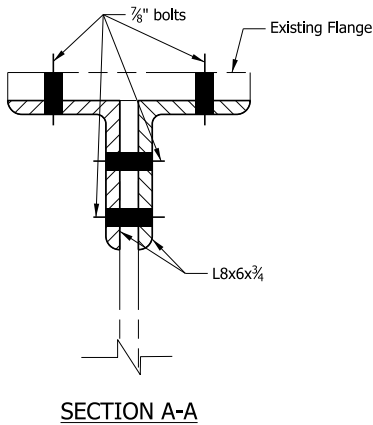
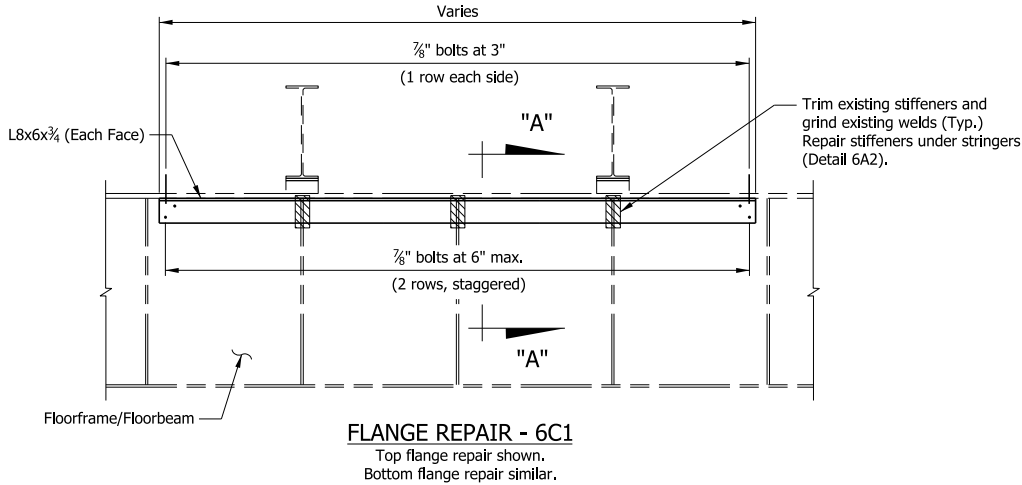
RECOMMENDED FOR APPROVAL _____	
DESIGN ENGINEER _____ DATE _____	
DESIGNED: <u>LER</u>	DRAWN: <u>EAK</u>
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STEEL REPAIR CONCEPT DETAILS - 1

HORIZONTAL SCALE	BRIDGE FILE
VERTICAL SCALE	I64-123-04691 E
	DESIGNATION
	1702255, 1592187
SURVEY BOOK	SHEETS
	14 OF 24
CONTRACT	PROJECT
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- Notes:
1. Suggested Flange Repair Sequence assumes this work is to be completed in conjunction with the corresponding staged deck replacement with the deck above the repair location removed. Repairs at other locations on the floorframe may not be performed at the same time.
 2. Bolts shall be 7/8 inch diameter and in accordance with F3125 Grade A325. Holes shall be 15/16" diameter.

Suggested Flange Repair Sequence:

1. Blast clean the repair area.
2. Field cut and remove portions of stiffeners overlapping repair. Remove existing welds by grinding.
3. Install L8x6x3/4 angles and bolt to flange and web as shown.

DATE	REVISION

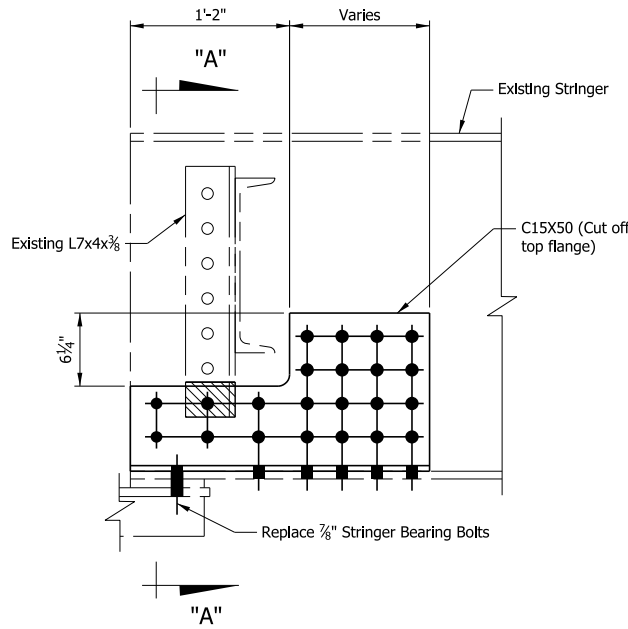
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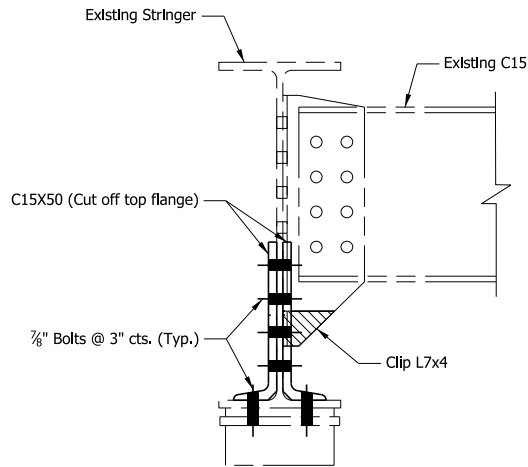
INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE		BRIDGE FILE	
	VERTICAL SCALE		DESIGNATION	
STEEL REPAIR CONCEPT DETAILS - 2	SURVEY BOOK		SHEETS	
	CONTRACT		PROJECT	
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HORIZONTAL SCALE		BRIDGE FILE	
VERTICAL SCALE		DESIGNATION	
SURVEY BOOK		SHEETS	
CONTRACT		PROJECT	
B-40719		1702255, 1592187	



STRINGER REPAIR - 5B2

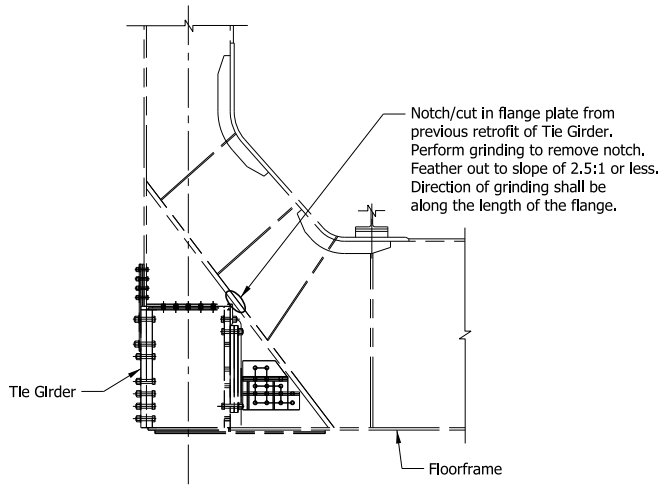
Note:
Detail for tpical location shown. Other locations similar.



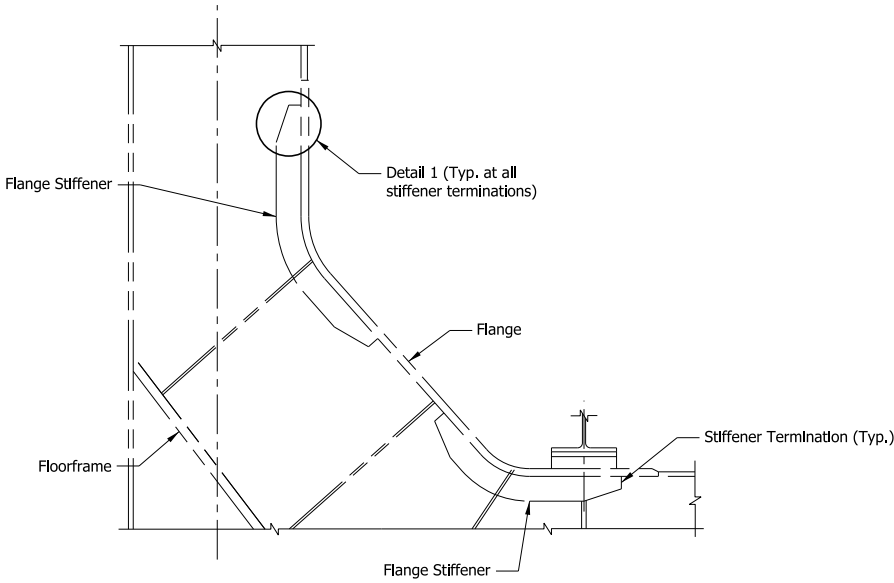
SECTION A-A

Notes:
1. Bolts shall be 7/8 inch diameter and in accordance with F3125 Grade A325. Holes shall be 15/16" diameter.

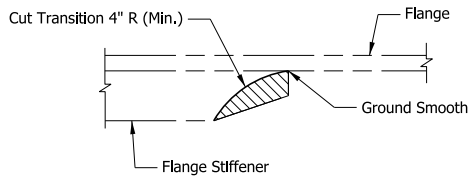
SHEET \$	DATE	REVISION			<div><div>Jacobs</div><div>501 North Broadway St. Louis, Missouri 63102-2121 Telephone: 314.335.4000</div></div> <div><div>kokosing</div><div>CONSTRUCTION COMPANY, INC.</div></div>		RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____		INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE		BRIDGE FILE					
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											VERTICAL SCALE		DESIGNATION					
											1702255, 1592187							
											SURVEY BOOK		SHEETS					
											16		OF 24					
											DESIGNED: LER				DRAWN: EAK			
											CHECKED: _____		CHECKED: _____		STEEL REPAIR CONCEPT DETAILS - 3			
								CONTRACT		PROJECT								
				B-40719				1702255, 1592187										



FLANGE CUT REPAIR - 14A



FLANGE STIFFENER REPAIR - 18D



DETAIL - 1

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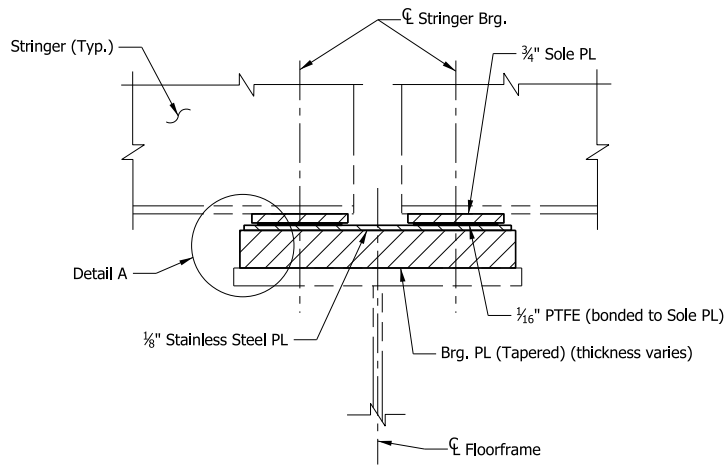
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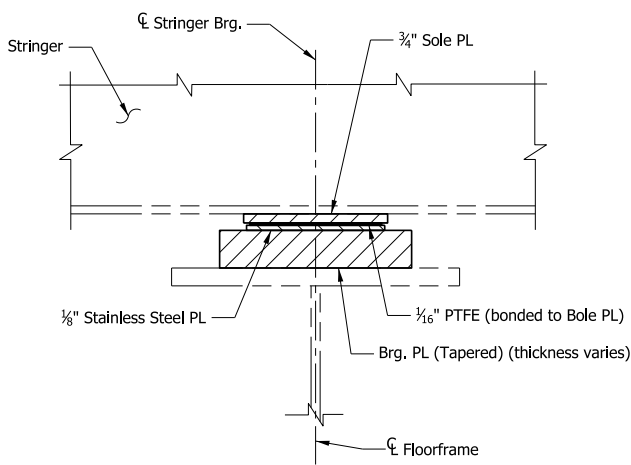
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STEEL REPAIR CONCEPT DETAILS - 4

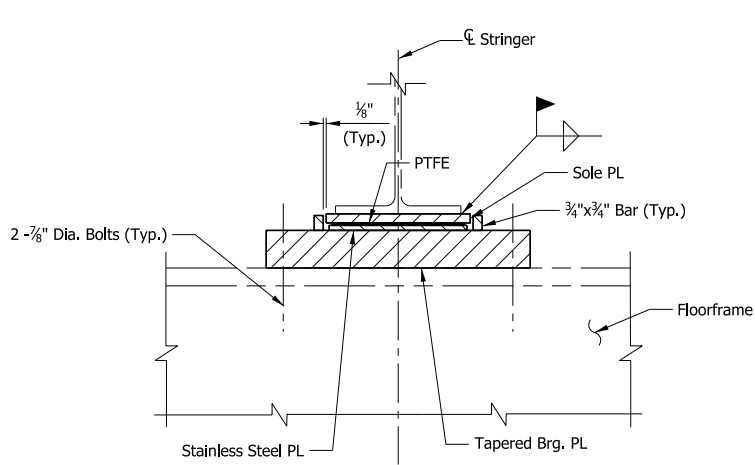
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VERTICAL SCALE	I64-123-04691 E		
SURVEY BOOK		SHEETS	
CONTRACT		PROJECT	
B-40719		1702255, 1592187	



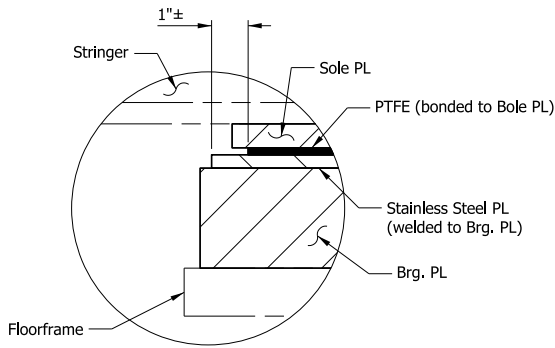
SLIDING BEARING - TYPE 1



SLIDING BEARING - TYPE 2



ELEVATION - SLIDING BEARING



DETAIL A

- Notes:
1. Remove existing stringer bearing plate. Grind welds smooth at top flange of floorframe.
 2. Thickness of Tapered Bearing PL varies by location.
 3. Bolts shall be 7/8 inch diameter and in accordance with F3125 Grade A325. Holes shall be 15/16" diameter.

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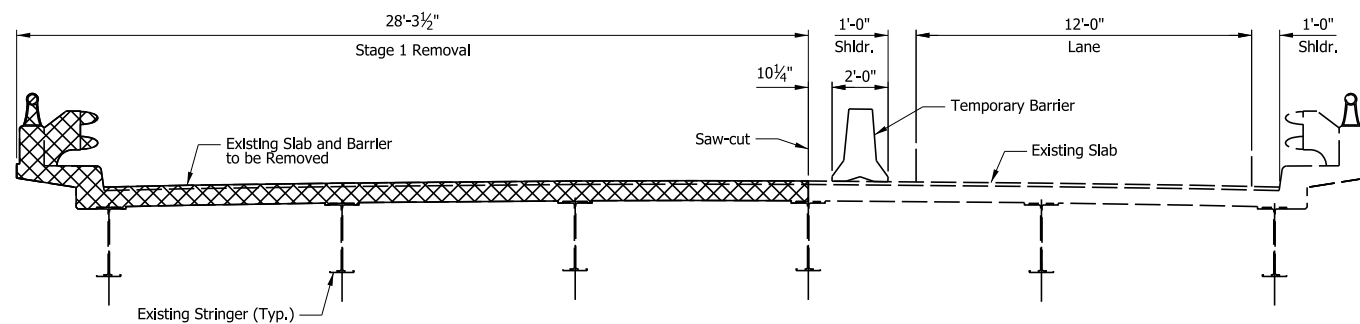
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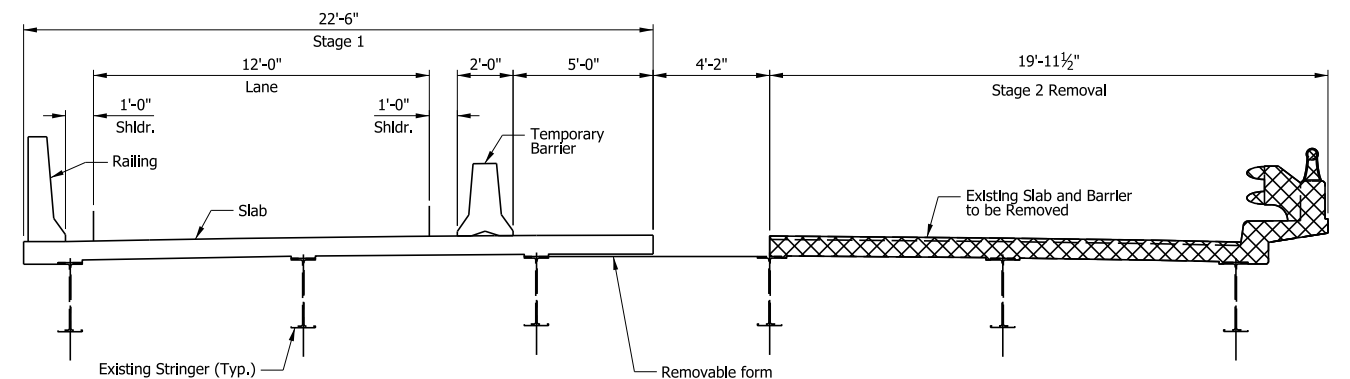
INDIANA DEPARTMENT OF TRANSPORTATION
BEARING REPLACEMENT

HORIZONTAL SCALE	BRIDGE FILE
VERTICAL SCALE	I64-123-04691 E
	DESIGNATION
	1702255, 1592187
SURVEY BOOK	SHEETS
	18 OF 24
CONTRACT	PROJECT
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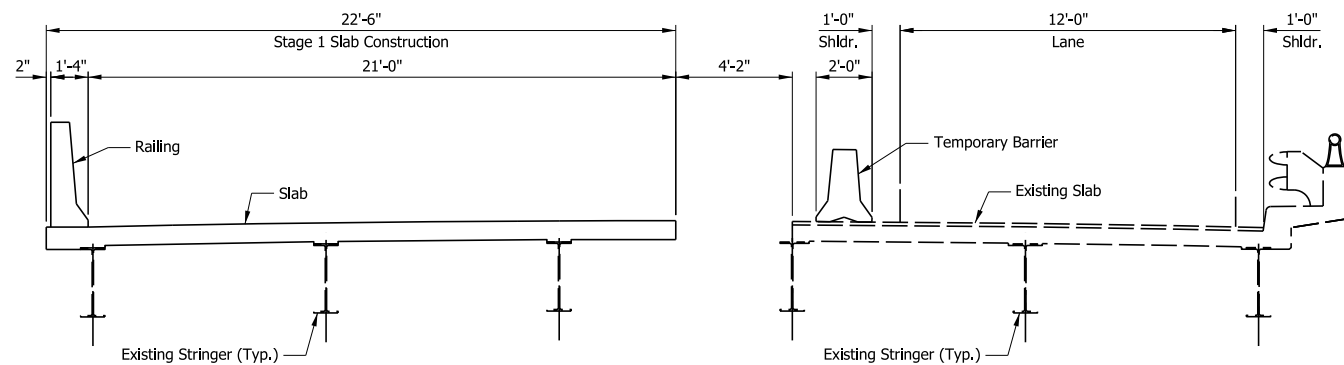
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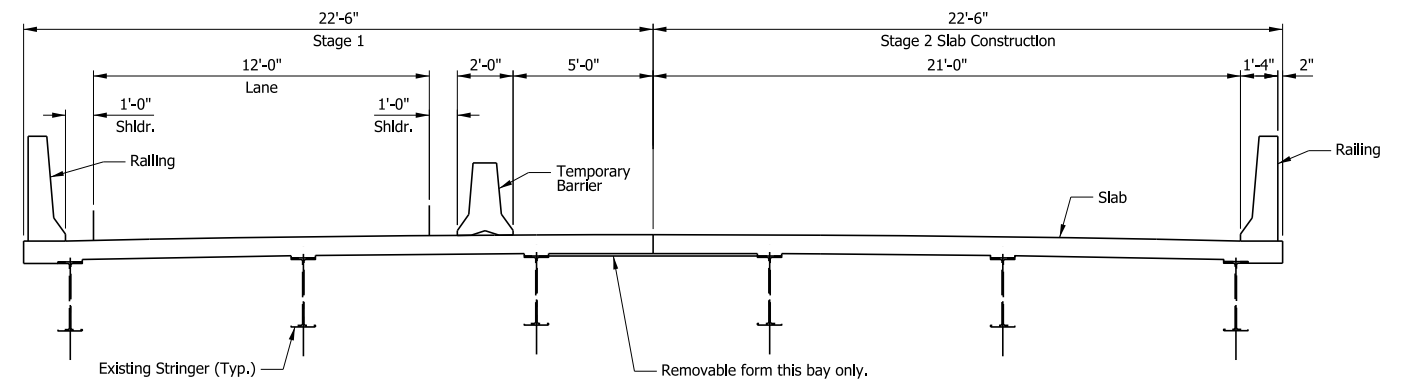
STAGE 1 - REMOVAL
(LOOKING EAST)



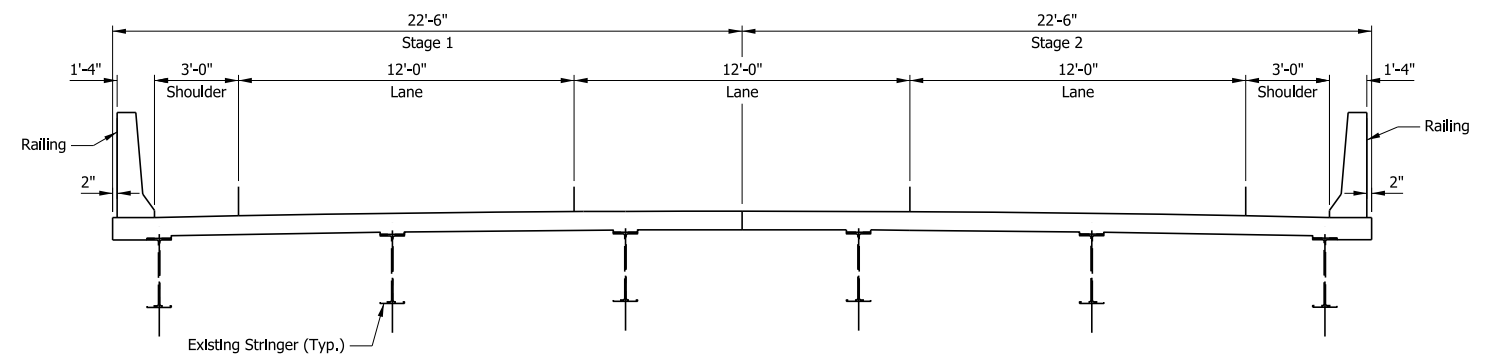
STAGE 2 - REMOVAL
(LOOKING EAST)



STAGE 1 - CONSTRUCTION
(LOOKING EAST)



STAGE 2 - CONSTRUCTION
(LOOKING EAST)



FINAL
(LOOKING EAST)

Note:
Stages 1 and 2 shown for lower deck. Stages 3 and 4 similar for upper deck.

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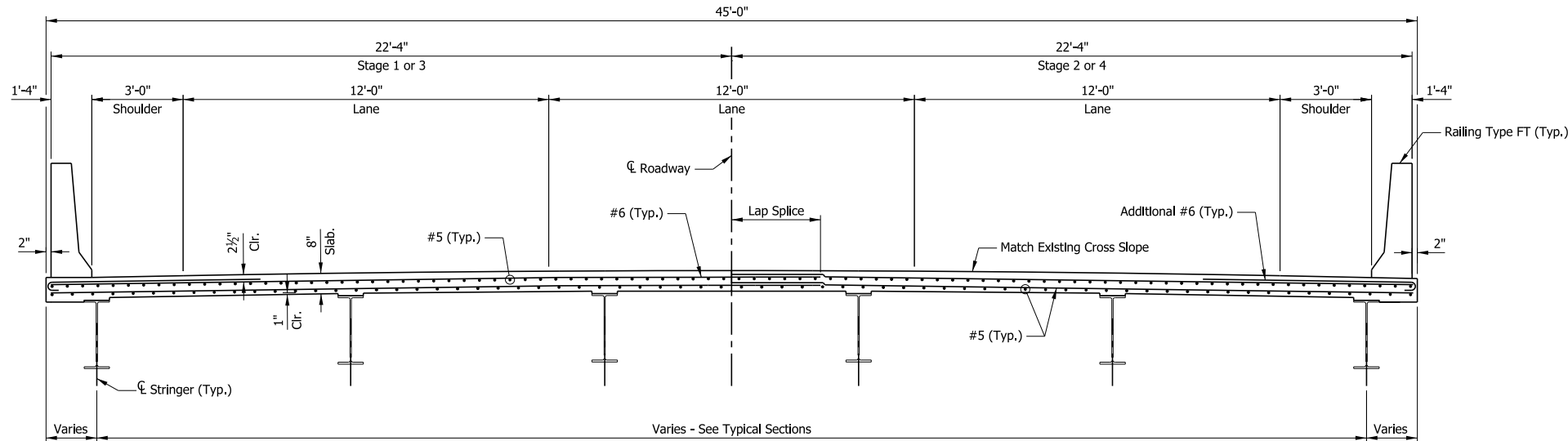
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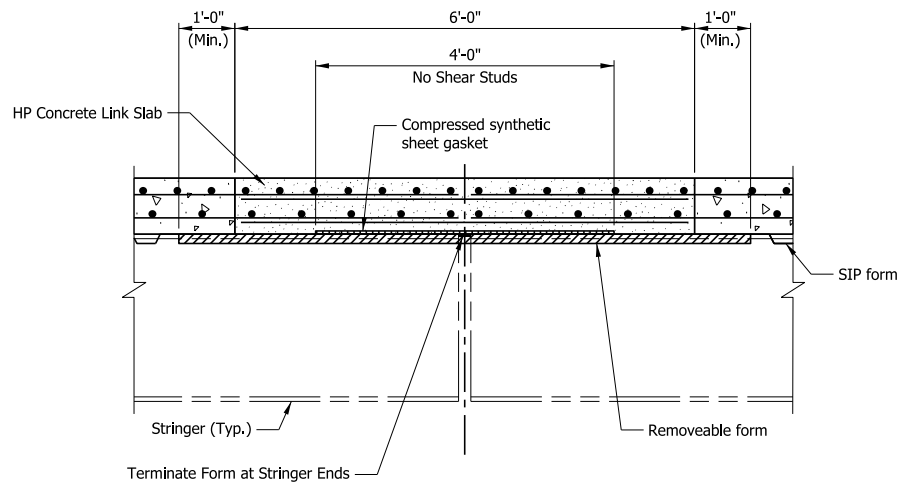
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SLAB STAGE CONSTRUCTION DETAILS

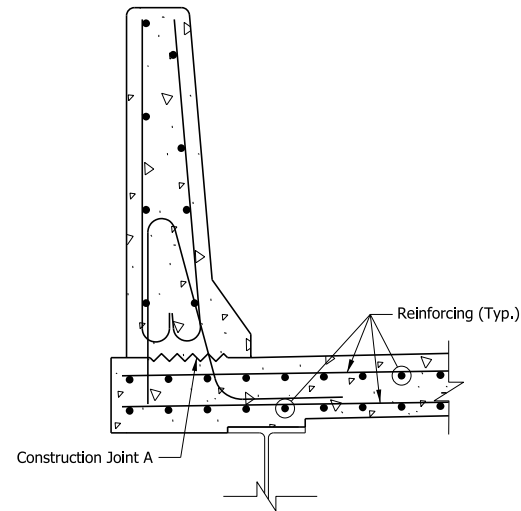
HORIZONTAL SCALE		BRIDGE FILE	
		I64-123-04691 E	
VERTICAL SCALE		DESIGNATION	
		1702255, 1592187	
SURVEY BOOK		SHEETS	
		19	24
CONTRACT		PROJECT	
B-40719		1702255, 1592187	



TYPICAL SECTION
(LOOKING EAST)



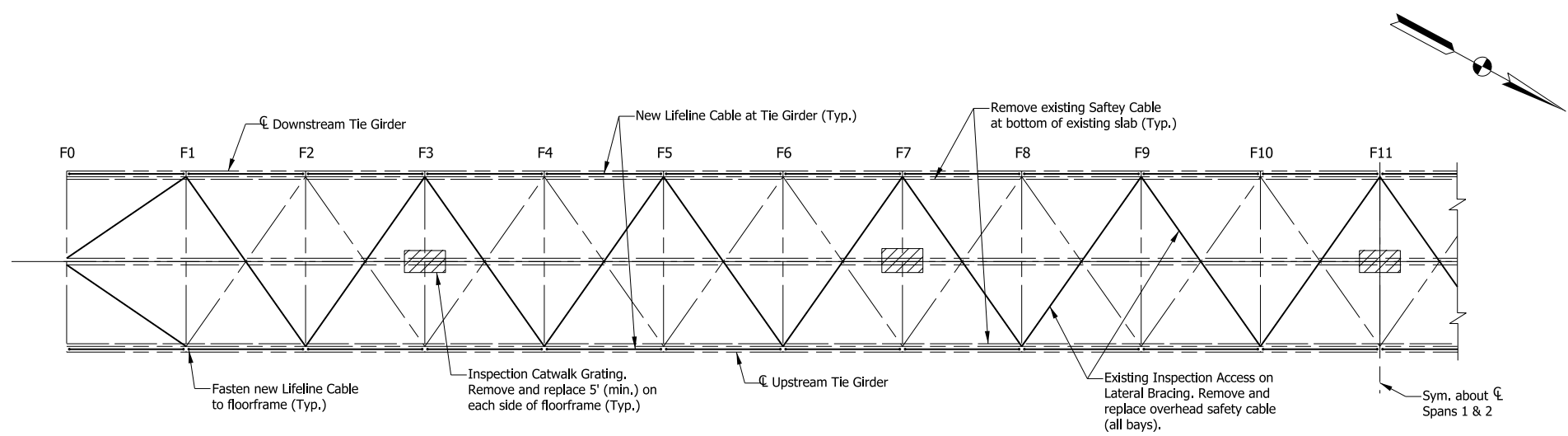
LINK SLAB DETAIL



DETAIL AT RAILING

- Notes:
- Deck concrete shall be Class C, with $f'_c = 4$ ksi.
 - Link Slab HP concrete shall be Modified Class C. The standard mix shall be modified to include fiber reinforcement as specified in Attachment 14-3: USP Link Slabs.
 - Reinforcing steel shall be Grade 60, and epoxy coated.
 - All exposed roadway surfaces, concrete railing, and outside copings shall be sealed from drip bead to drip bead.
 - Stay-in-place metal forms shall be in accordance with INDOT Specifications Section 702.
 - Decks shall be constructed with longitudinal grooving in accordance with Attachment 14-1: USP Longitudinal Grooving.
 - New barrier delineators shall be placed at a 40-foot maximum spacing on all bridges.

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PART PLAN - BOTTOM LATTERALS
Showing inspection access repairs.

Notes:
Inspect and repair inspection walk on lateral bracing tie girders, and catwalk.

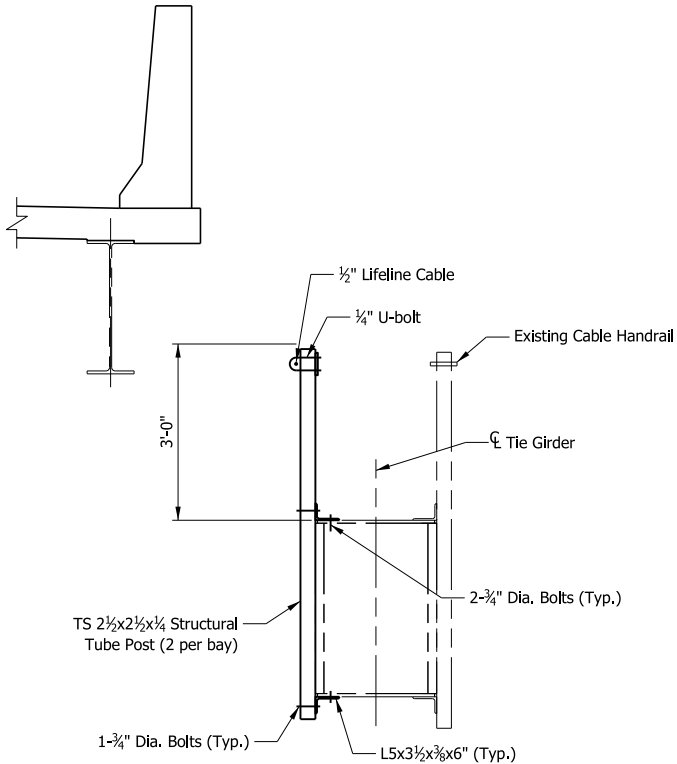
New and/or replaced inspection walkways shall support a minimum working load of 50 psf. This would include the walkway grating, grating supports, and any attachments to the floorframes.

All handrails shall meet current OSHA standards for handrails.

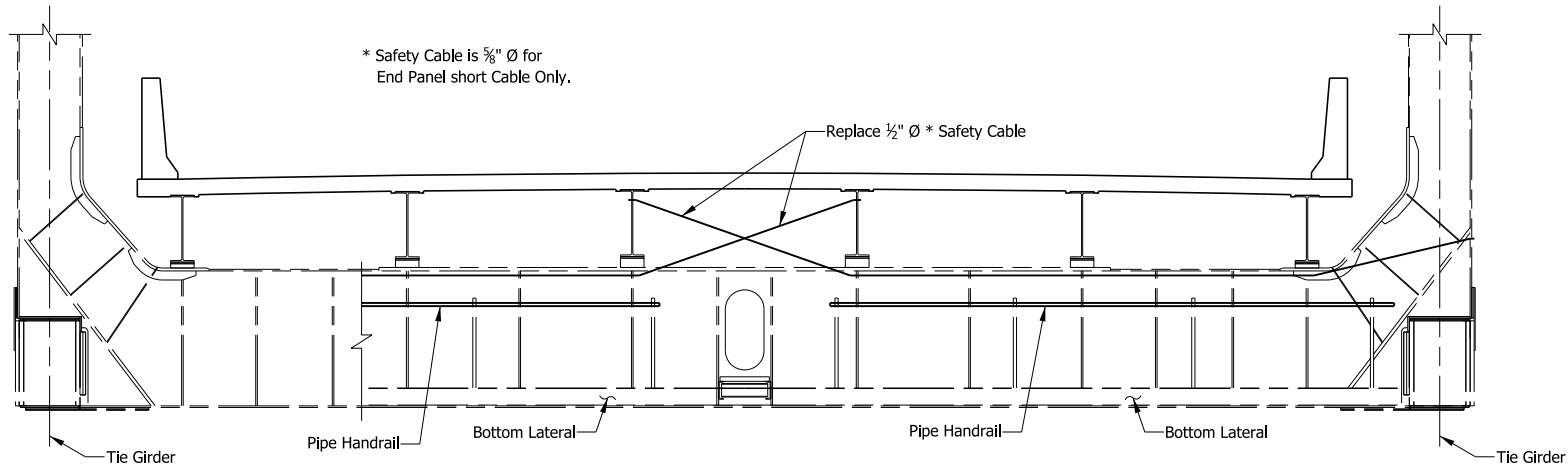
Cables used for fall-arrest throughout the structure shall be inspected and replaced in kind if any part of the cable has more than 10% loss in the measured diameter of the cable.

New cables shall be galvanized or stainless steel.

For details of the existing cable lifeline at the lower lateral bracing (to be replaced), see RID 14-107.



SECTION - INSPECTION ACCESS
AT TIE GIRDER



TYPICAL SECTION - LOWER DECK

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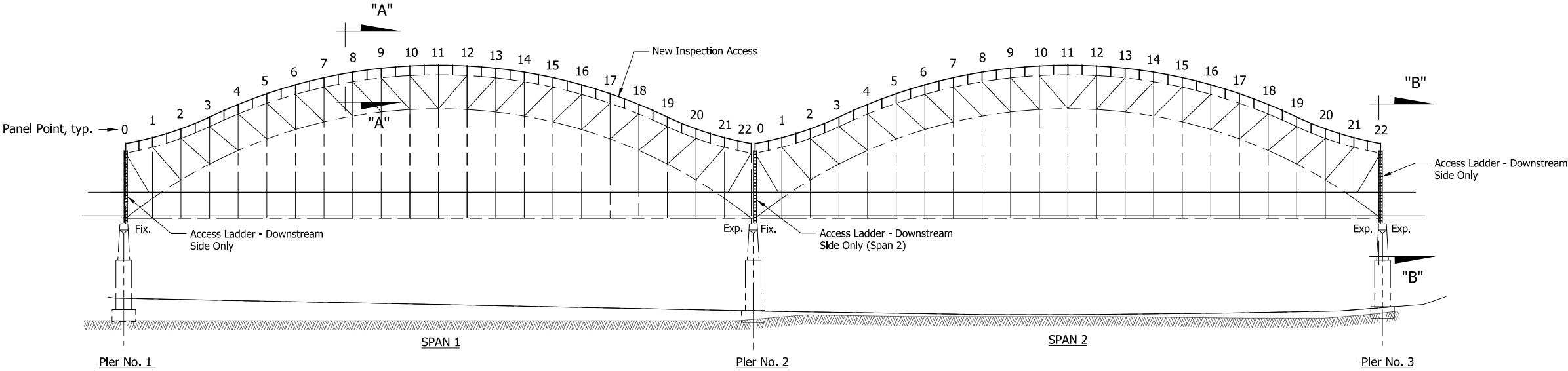
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INDIANA
DEPARTMENT OF TRANSPORTATION

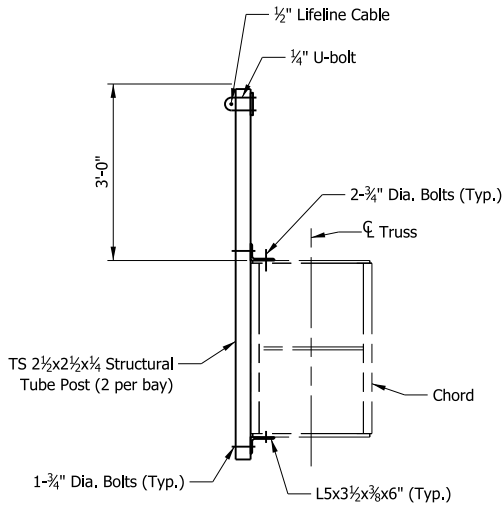
INSPECTION ACCESS REPAIRS

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	I64-123-04691 E
VERTICAL SCALE	DESIGNATION
1" = 30'-0"	1702255, 1592187
SURVEY BOOK	SHEETS
	21 OF 24
CONTRACT	PROJECT
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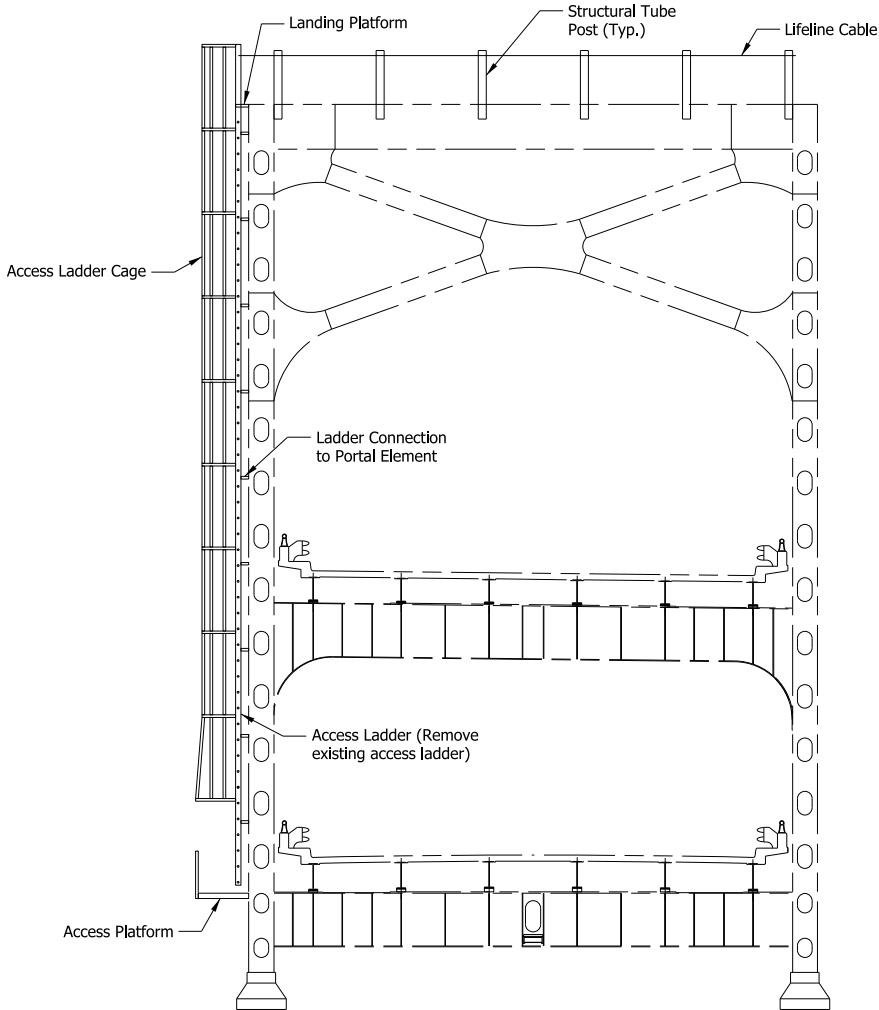
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ELEVATION



SECTION A-A
Upstream Chord shown
Downstream Chord similar



SECTION B-B

Notes:

Hatches, ladders, platforms, gratings, handrails, and hardware shall be ASTM A709, Grade 36 or 50, and galvanized in accordance with ASTM A123 or A153 as applicable and painted to match colors of the attached components.

Cables and other inspection access components shall be made of galvanized or stainless steel.

All access ladders shall be rated to meet minimum OSHA requirements, including OSHA 1910.27 and 2926.1053, and ANSI A14.3 requirements. The access ladders shall be provided with a fall protection system per OSHA requirements. The Design-Build Contractor is especially directed to Title 29 Code of Federal Regulations, Subpart M, Fall Protection, 1926.501, 1926.502, and 1926.503; as well as the OSHA Publication 3146, "Fall Protection in Construction."

All access ladders shall be painted to match the color of the existing bridge.

All ladders shall have a security device at the ladder entry point. The security device shall be a metal gate affixed to the cage to prevent unauthorized entry into the ladder cage. The gate, when closed, shall cover the access entry form by the cage around the access ladder. The gate shall be hinged at the attachment point on the backside of the access cage and rotate around that hinge to a position allowing access. When the gate is open and swung back, the rungs of the access ladder are accessible, and the ladder can be descended. When the gate is open and swung back, a positive locking mechanism shall prevent the gate from inadvertent closure. When the gate is closed and locked, the ladder rungs are blocked, and the ladder cannot be accessed. The door is secured by a padlock that locks the handle on the gate to a hasp bolted to the ladder frame.

All material for the security devices shall be ASTM A 709 Grade 36, galvanized (Paint fraying surfaces between unpainted weathering steel and galvanized steel with 1 coat of inorganic zinl prime coat). Stainless steel my be substituted upon approval of the Engineer. Aluminum is not allowed.

Alternative security devices shall be approved by IFA.

The security devices shall be provided with lockable hasp and a weatherproof padlock. All padlocks shall be keyed alike.

FILES

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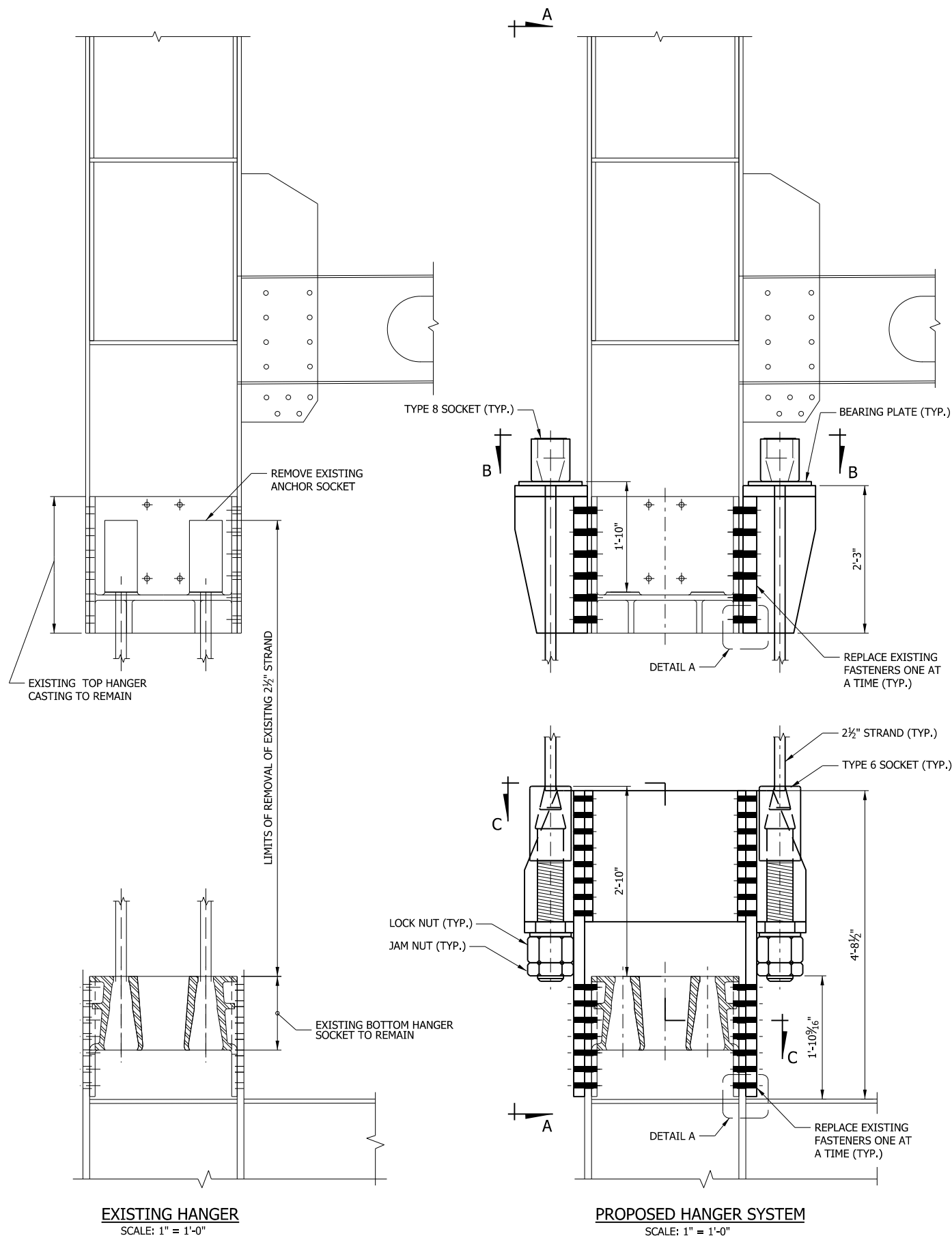
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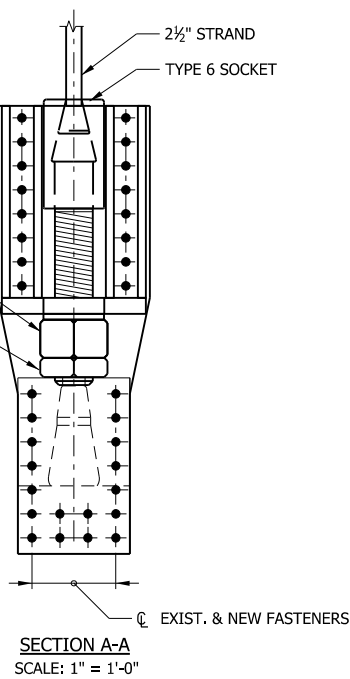
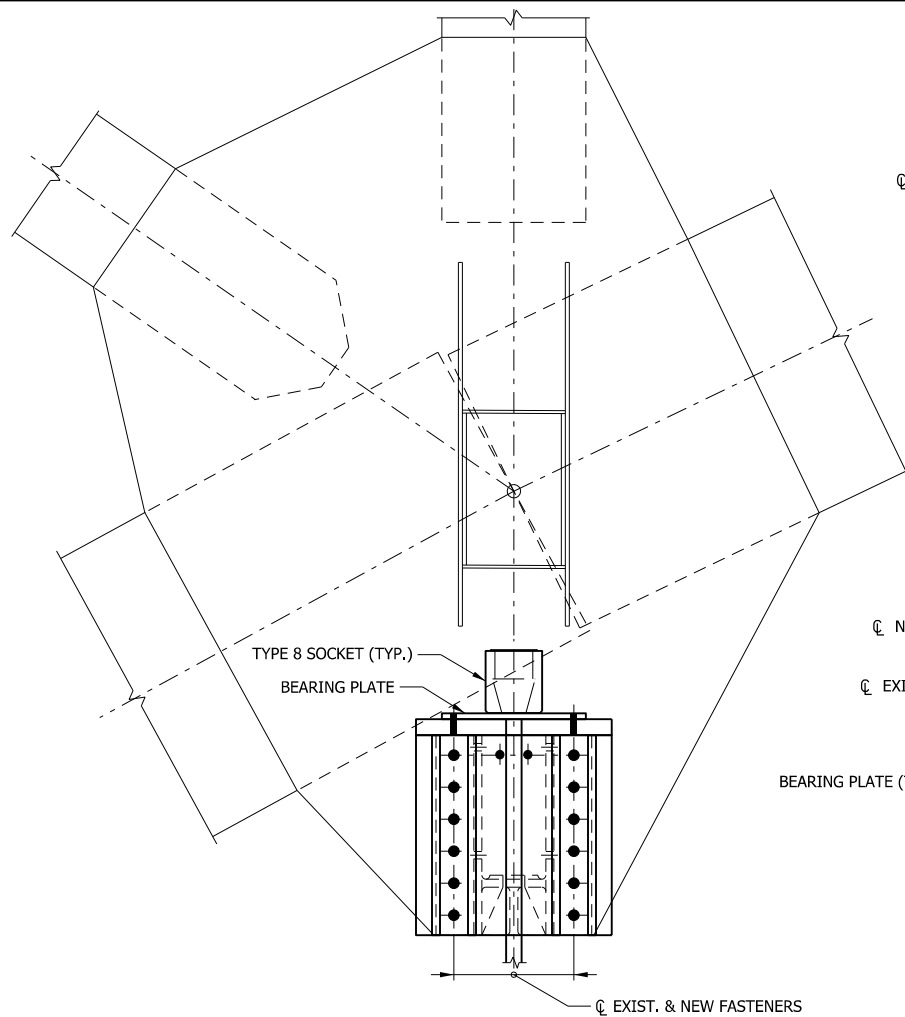
TOP CHORD INSPECTION ACCESS

HORIZONTAL SCALE	BRIDGE FILE
VERTICAL SCALE	DESIGNATION
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B-40719	1702255, 1592187

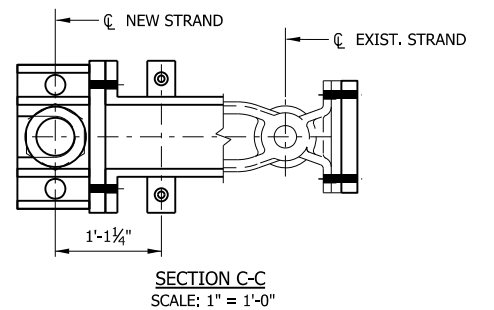
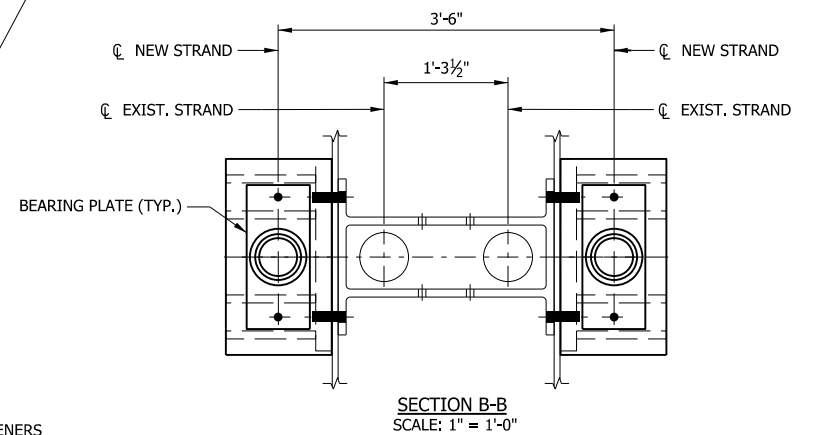
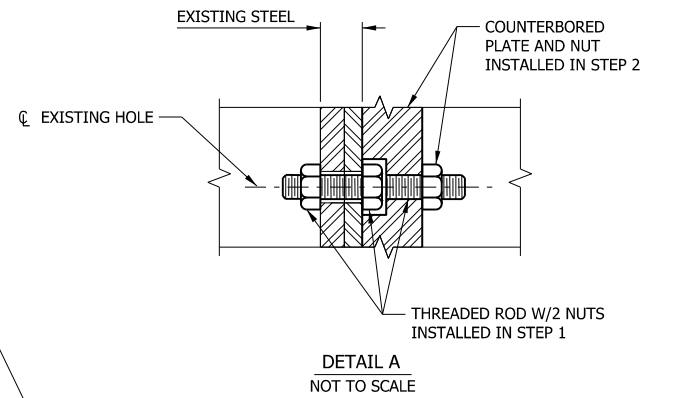


EXISTING HANGER
SCALE: 1" = 1'-0"

PROPOSED HANGER SYSTEM
SCALE: 1" = 1'-0"



SECTION A-A
SCALE: 1" = 1'-0"



SFLES

DATE	REVISION

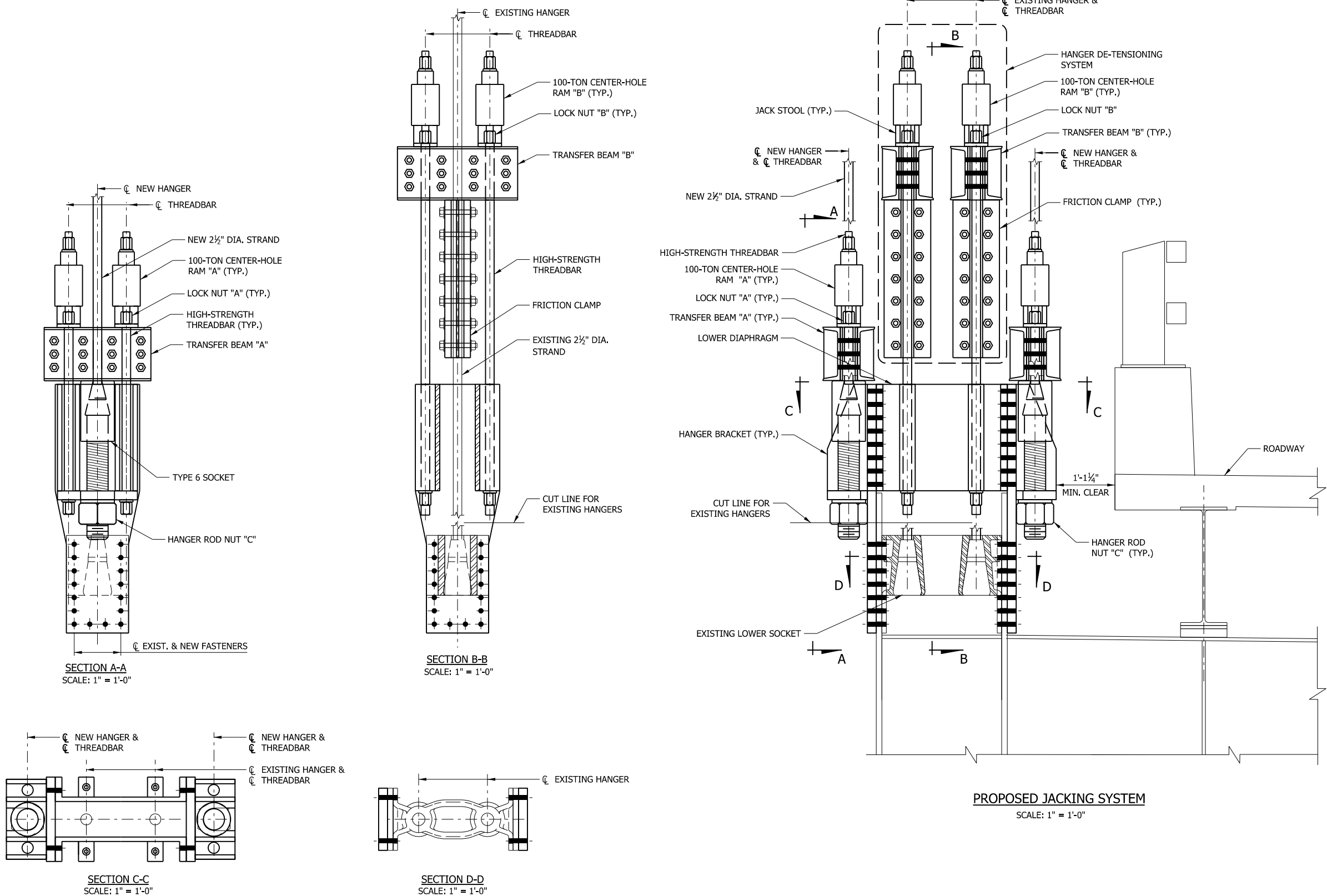


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HANGER CONNECTIONS

HORIZONTAL SCALE	BRIDGE FILE
VERTICAL SCALE	I64-123-04691 E
SURVEY BOOK	DESIGNATION
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SFILES



SUSPENDER REPLACEMENT PROCEDURES:

- 1.INSTALL ALL STRUCTURAL LIFTING DEVICES AS SHOWN.
- 2.INSTALL ELEVATION MONITORING DEVICES (SUCH AS STRING LINE) AND RECORD ELEVATION OF WORK LOCATION (CALL THIS ELEVATION "0") RELATIVE TO THE ADJACENT PANEL POINTS.
- 3.TO REMOVE ALL SLACK FROM THE NEW HANGERS, APPLY HYDRAULIC PRESSURE TO THE 4-100 TON CENTER HOLE RAMS "A" UNTIL FLOOR BEAM RAISES 1/8" OR HYDRAULIC PRESSURE REACHES 500 psi, WHICHEVER COMES FIRST, AND TIGHTEN LOCK NUT "A" UNDER THE RAM. TIGHTEN HANGER ROD NUTS "C".
- 4.INSTALL HANGER DE-TENSIONING SYSTEM AS SHOWN.
- 5.EXTEND THE 4 - 100 TON RAMS "B" TO 2-1/2" EXTENSION AND TIGHTEN LOCK NUTS "B".
- 6.APPLY HYDRAULIC PRESSURE TO THE 4 - 100 TON RAMS "B" UNTIL THE RAM EXTENDS 1/8" AND RE -TIGHTEN LOCK NUTS "B".
- 7.CHECK TENSION IN BOTTOM PORTION OF EXISTING HANGERS (BETWEEN FRICTION CLAMP AND LOWER SOCKET). IF HANGERS ARE STILL TIGHT, REPEAT STEP 6 AS NECESSARY TO DE-TENSION BOTTOM PORTION OF HANGER, ALL THE WHILE MONITORING THE ELEVATION OF THE FLOORBEAM. IF MAXIMUM ELEVATION CHANGE IS REACHED AND THE HANGERS ARE STILL TIGHT, REPORT TO THE ENGINEER FOR FURTHER DIRECTION.
- 8.ONCE TENSION IS RELIEVED, CUT EXISTING HANGERS WHERE SHOWN.
- 9.RE-APPLY HYDRAULIC PRESSURE TO THE 4 - 100 TON RAMS "B" UNTIL THE LOCK NUTS "B" CAN BE LOOSENED. SLOWLY RELEASE HYDRAULIC PRESSURE UNTIL THE LOCK NUTS ENGAGE.
- 10.CONTINUE REPEATING STEP 9 UNTIL THE HANGER IS COMPLETELY DE-TENSIONED, ALL THE WHILE MONITORING THE ELEVATION OF THE FLOORBEAM. IF THE MAXIMUM ELEVATION CHANGE IS REACHED, APPLY HYDRAULIC PRESSURE TO THE 4-100 TON CENTER-HOLE RAMS "A" UNTIL THE FLOORBEAM RETURNS TO ELEVATION "0"AND TIGHTEN HANGER ROD NUTS "C". FLOORBEAM ELEVATION IS SIMULTANEOUSLY ADJUSTED BY RE-APPLYING HYDRAULIC PRESSURE TO THE 4-100 TON CENTER-HOLE RAMS AND TIGHTENING HANGER ROD NUT "C", THEN RELEASING PRESSURE ON THE 4 - 100 TON RAMS "B" UNTIL HANGERS ARE LOOSE AND FLOORBEAM IS AT ELEVATION "0".
- 11.REMOVE THE DE -TENSIONING DEVICES AS NECESSARY TO REMOVE BOTH EXISTING HANGERS.
- 12.VERIFY THAT THE FLOORBEAM IS AT ELEVATION "0" WITH ALL THE LOAD REMOVED FROM THE TEMPORARY SUPPORT SYSTEM. FLOORBEAM ELEVATION IS ADJUSTED BY RE-APPLYING HYDRAULIC PRESSURE TO THE 4-100 TON CENTER-HOLE RAMS "A" AND TIGHTENING HANGER ROD NUT "C" UNTIL THE FLOORBEAM IS AT ELEVATION "0".
- 13.INSTALL ALL JAM NUTS AND BEARING PLATE BOLTS.
- 14.REMOVE ALL STRUCTURAL LIFT DEVICES.

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TEMPORARY JACKING SYSTEM

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Kentucky Approach Bridges

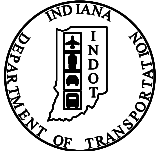


VOLUME 2

PROJECT	DESIGNATION
1702260, 1702254	1702260, 1702254
CONTRACT	BRIDGE FILE
B-40259	056B00161N

STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
056B00161N	STEEL MULTI-SPAN GIRDER BRIDGE	EB 13 SPANS; 1 @ 105'-0", 9 @ 120'-0", 3 @ 140'-0" WB 14 SPANS; 1 @ 119'-0", 10 @ 120'-0", 3 @ 140'-0"	KENTUCKY APPROACH TO BRIDGE OVER OHIO RIVER	62+31

INDIANA DEPARTMENT OF TRANSPORTATION



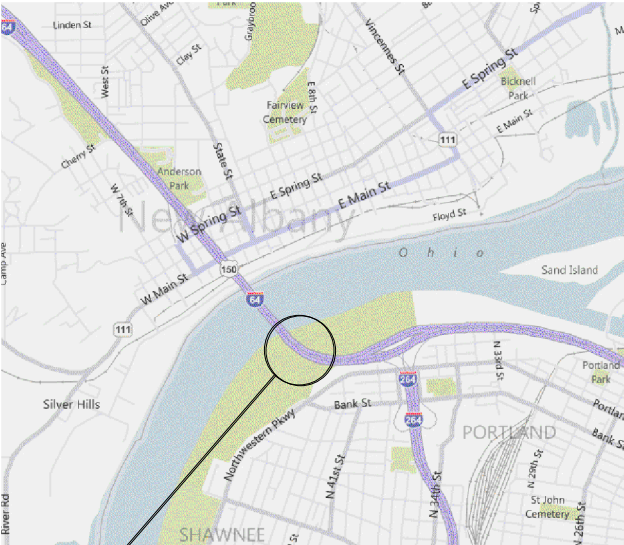
BRIDGE REHABILITATION PLANS FOR SPANS OVER 20 FEET

ROUTE: INTERSTATE 64 AT: RP 79+70
PROJECT NO. 1702260, 1702254 P.E.

No Additional Right-of-Way
Required For This Project

R/W
1702260, 1702254 CONST.

Bridge Maintenance and Repairs for Interstate 64,
Kentucky Approach to Bridge over the Ohio River
in Jefferson County, Kentucky



SCALE 1" = 2000'

STRUCTURE NO. 056B00161N
JEFFERSON COUNTY, KENTUCKY

LOCATION MAP

TRAFFIC DATA

A.A.D.T.	(2018)	45,200	V.P.D. (EB)	44,800	V.P.D. (WB)
A.A.D.T.	(2031)	45,490	V.P.D. (EB)	42,500	V.P.D. (WB)
D.H.V	(2031)	4,090	V.P.H. (EB)	3,830	V.P.H. (WB)
DIRECTIONAL DISTRIBUTION				50.3%	(EB)
TRUCKS				11 %	A.A.D.T.
				6 %	D.H.V.

DESIGN DATA

DESIGN SPEED	55 M.P.H.
PROJECT DESIGN CRITERIA	3R (FREEWAY)
FUNCTIONAL CLASSIFICATION	PRINCIPAL ARTERIAL
RURAL/URBAN	URBAN
TERRAIN	LEVEL
ACCESS CONTROL	FULL



PROJECT LOCATION SHOWN BY

LATITUDE: 38°16'38" N LONGITUDE: 85°49'05" W

BRIDGE LENGTH:	0.641	MI.
ROADWAY LENGTH:	0.000	MI.
TOTAL LENGTH:	0.641	MI.
MAX. GRADE:	-0.90	%

RFE PLANS - NOT FOR CONSTRUCTION

Jacobs
501 North Broadway
St. Louis, Missouri 63102-2121
Telephone: 314.335.4000

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CONSTRUCTION COMPANY, INC.

PLANS PREPARED BY:	Jacobs Engineering Group Inc	314-335-4237 PHONE NUMBER
CERTIFIED BY:		DATE
APPROVED FOR LETTING:	INDIANA DEPARTMENT OF TRANSPORTATION	DATE

INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS
TO BE USED WITH THESE PLANS

	BRIDGE FILE		
	I64-123-04691 E		
	DESIGNATION		
	1702255, 1592187		
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2	INDEX SHEET
3	GENERAL NOTES
4	GENERAL PLAN & ELEVATION (1 of 4)
5	GENERAL PLAN & ELEVATION (2 of 4)
6	GENERAL PLAN & ELEVATION (3 of 4)
7	GENERAL PLAN & ELEVATION (4 of 4)
8	TYPICAL SECTIONS (1 of 5)
9	TYPICAL SECTIONS (2 of 5)
10	TYPICAL SECTIONS (3 of 5)
11	TYPICAL SECTIONS (4 of 5)
12	TYPICAL SECTIONS (5 of 5)
13	ABUTMENT MODIFICATIONS
14	TYPICAL PIER CONCRETE REPAIRS
15	FRAMING PLAN SPAN 15
16	FRAMING PLAN SPANS 16 AND 17
17	FRAMING PLAN SPANS 18 AND 19
18	FRAMING PLAN SPANS 20 AND 21
19	FRAMING PLAN SPANS 22 AND 23
20	FRAMING PLAN SPANS 24 AND 25
21	FRAMING PLAN SPANS 26 AND 27
22	FRAMING PLAN SPANS 1 AND 2
23	FRAMING PLAN SPANS 3 AND 4
24	FRAMING PLAN SPANS 5 AND 6
25	FRAMING PLAN SPANS 7 AND 8
26	FRAMING PLAN SPANS 9 AND 10
27	FRAMING PLAN SPANS 11 AND 12
28	FRAMING PLAN SPANS 13 AND 14
29	BEARING REPLACEMENT
30	LONGITUDINAL RESTRAINERS
31	STEEL REPAIR CONCEPT DETAILS - 1
32	STEEL REPAIR CONCEPT DETAILS - 2
33	STEEL REPAIR CONCEPT DETAILS - 3
34	SLAB DETAILS
35	SLAB STAGE CONSTRUCTION DETAILS

DATE	REVISION

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DEPARTMENT OF TRANSPORTATION

INDEX SHEET

HORIZONTAL SCALE	BRIDGE FILE	
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GENERAL NOTES:

SPECIFICATIONS

All work shall be in accordance with INDOT Standard Specifications (2020), Unique Special Provisions, and SMCP Project Technical Provisions.

STEEL REPAIRS

The scope and nature of repairs shown in the plans are based on inspection reports and other RID documents, and are provided for preliminary bidding purposes only. They are intended to capture the common types of repairs with the understanding that repairs other / different than what is schematically shown may be required.

Final repair details, limits, and quantities will be established following hands-on inspections and load ratings.

All structural steel shall be ASTM A709 Grade 50 unless noted otherwise.

High strength bolts shall be ASTM F3125 Grade A325.

Clean and paint all structural steel in accordance with Attachment 14-8: USP Painting Bridge Steel.

Paint color shall be SAE-AMS-STD-595 FS 17178, Aluminum/Silver.

All existing cross frames that remain in place under existing joints shall be cleaned and pack rust remediated with an alkaline penetrating sealer before painting

EXPANSION JOINT REPLACEMENT

Replace joints at indicated locations.

Strip seal expansion joints (Type SS) shall be in accordance with INDOT Standard Specifications Section 724.

SUBSTRUCTURE CONCRETE REPAIR

Provide satisfactory protective shielding below all repair areas. Determine the extent of the repair areas in the presence of an IFA Representative. Outline the edge of the designated repair areas with a 1-inch sawcut depth.

Within the outlined repair areas, remove the deteriorated concrete to a depth of 1-inch behind the first mat of reinforcement bars to sound concrete. Allow uncovered or exposed reinforcement bars to have a 1-inch clearance all around. If concrete is unsound at a depth of 1-inch behind the reinforcement bars, do not remove any additional concrete without the approval of IFA's Representative.

Square-out/bevel the edge of the repair areas to key in construction. Use hand tools for removing deteriorated concrete. Use pneumatic hammers, if required, not exceeding an impact rating of 30 foot-pounds. If deteriorated concrete extends beyond the initially outlined repair area, enlarge area as directed by IFA's Representative.

After the removal operations are complete, clean all remaining debris and loose materials from the repair areas by abrasive blasting. Abrasive blast exposed reinforcement bars to SSPC-SP10. Epoxy coat the exposed reinforcement bars. Splice any damaged or heavily corroded reinforcement bars at 50% or more section loss in accordance with the AASHTO LRFD Bridge Design Specifications. If enough splice length is not available, drill new dowel holes and place dowel bars as directed. Use a pachometer to locate existing reinforcement when drilling dowel holes to avoid drilling thru existing bars.

Repair any concrete damaged during the operations to the satisfaction of IFA's Representative at no additional cost to IFA.

Install galvanic anodes in accordance with Attachment 14-5: USP Galvanic Anode.

Set forms to provide minimum concrete cover of 2 inches. If enough concrete cover on the existing reinforcement bars is not available, haunch the repair outward.

Just prior to placing concrete, air-blast all repair areas with oil-free compressed air to protect against any contaminant detrimental to the bond of the new concrete. Apply epoxy bonding compound to the repair area. While the epoxy bonding compound is still tacky, place repair concrete with No. 8 Coarse aggregate. Do not place concrete if the compound is no longer tacky or if the compound has hardened. Recoat any compound that is no longer tacky. Wire brush or abrasive blast any compound that has hardened and recoat repair area.

Surface seal new concrete.

MOT / LAYOUT PLANS

See roadway plans for MOT and Layout Sheets.

DATE

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Telephone: 314.335.4000

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DATE

DESIGNED: LER

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DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

HORIZONTAL SCALE

BRIDGE FILE

NONE

I64-123-04691 E

VERTICAL SCALE

DESIGNATION

NONE

1702255, 1592187

SURVEY BOOK

SHEETS

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OF

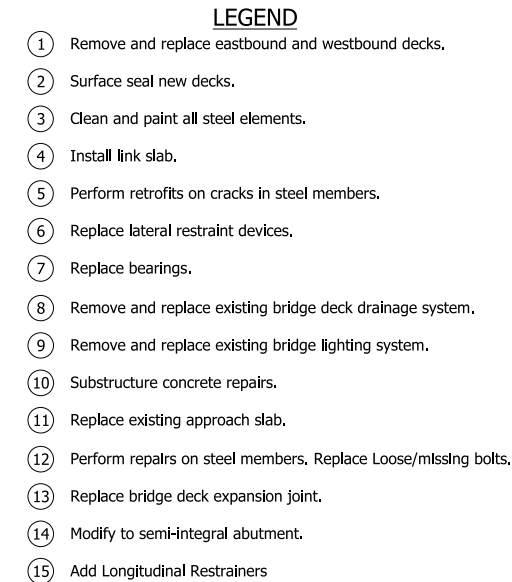
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CONTRACT

PROJECT

B-40719


1702255, 1592187



The plan view shows the bridge structure with spans 3 through 20. Key features include:

- Spans:** Span 3 (120'-0" Pier to Pier), Span 4 (120'-0" Pier to Pier), Span 5 (120'-0" Pier to Pier), Span 6 (120'-0" Pier to Pier), Span 7 (120'-0" Pier to Pier), Span 16 (120'-0" Pier to Pier), Span 17 (120'-0" Pier to Pier), Span 18 (120'-0" Pier to Pier), Span 19 (120'-0" Pier to Pier), and Span 20 (120'-0" Pier to Pier).
- Piers:**
 - Pier No. 3: Sta. 65+90.00, W.B. L., P.G. Elev. 485.49
 - Pier No. 4: Sta. 67+10.00, W.B. L., P.G. Elev. 488.49
 - Pier No. 5: Sta. 68+30.00, W.B. L., P.G. Elev. 491.49
 - Pier No. 6: Sta. 69+50.00, W.B. L., P.G. Elev. 494.49
 - Pier No. 15: Sta. 65+90.00, E.B. L., P.G. Elev. 471.53
 - Pier No. 16: Sta. 67+10.00, E.B. L., P.G. Elev. 473.37
 - Pier No. 17: Sta. 68+30.00, E.B. L., P.G. Elev. 475.21
 - Pier No. 18: Sta. 69+50.00, E.B. L., P.G. Elev. 477.86
- Dimensions:**
 - 44'-10" Out to Out (Upper Rdwy.)
 - 42'-0" Clear Rdwy.
 - 44'-10" Out to Out (Lower Rdwy.)
 - 42'-0" Clear Rdwy.
 - R=1555.54'
 - R=1828.59'
- Stationing:** Sta. 65+90.00, Sta. 67+10.00, Sta. 68+30.00, Sta. 69+50.00.
- Scale:** 1" = 20'-0"

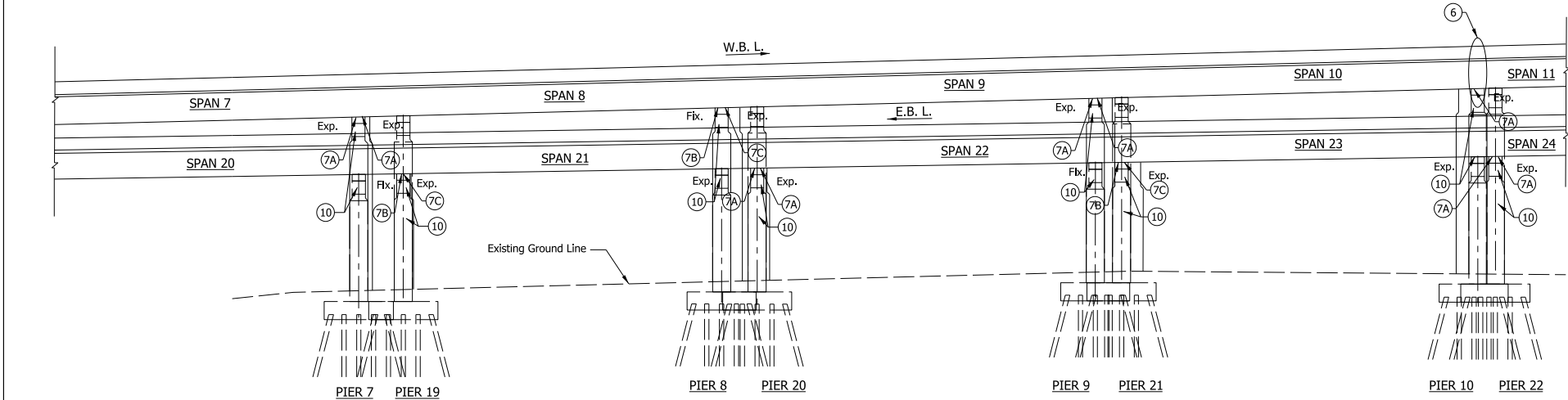
STEEL MULTI-SPAN GIRDER BRIDGE
EB BRIDGE - 13 SPANS: 1@105'-0";9@120'-0";3@140'-0"
WB BRIDGE - 14 SPANS: 1@119'-0";10@120'-0";3@140'-0"
42'-0" CLEAR ROADWAY; SKEW: VARIES
I-64 OVER SHAWNEE GOLF COURSE JEFFERSON COUNTY

DATE	REVISION	<div><div>Jacobs</div><div>501 North Broadway St. Louis, Missouri 63102-2121 Telephone: 314.335.4000</div></div> <div><div>kokosing</div><div>CONSTRUCTION COMPANY, INC.</div></div> <div></div>	RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____		INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE	BRIDGE FILE
								I64-123-04691 E
							VERTICAL SCALE	DESIGNATION
								1702255, 1592187
			DESIGNED: _____ LER		DRAWN: _____ EAK		SURVEY BOOK	SHEETS
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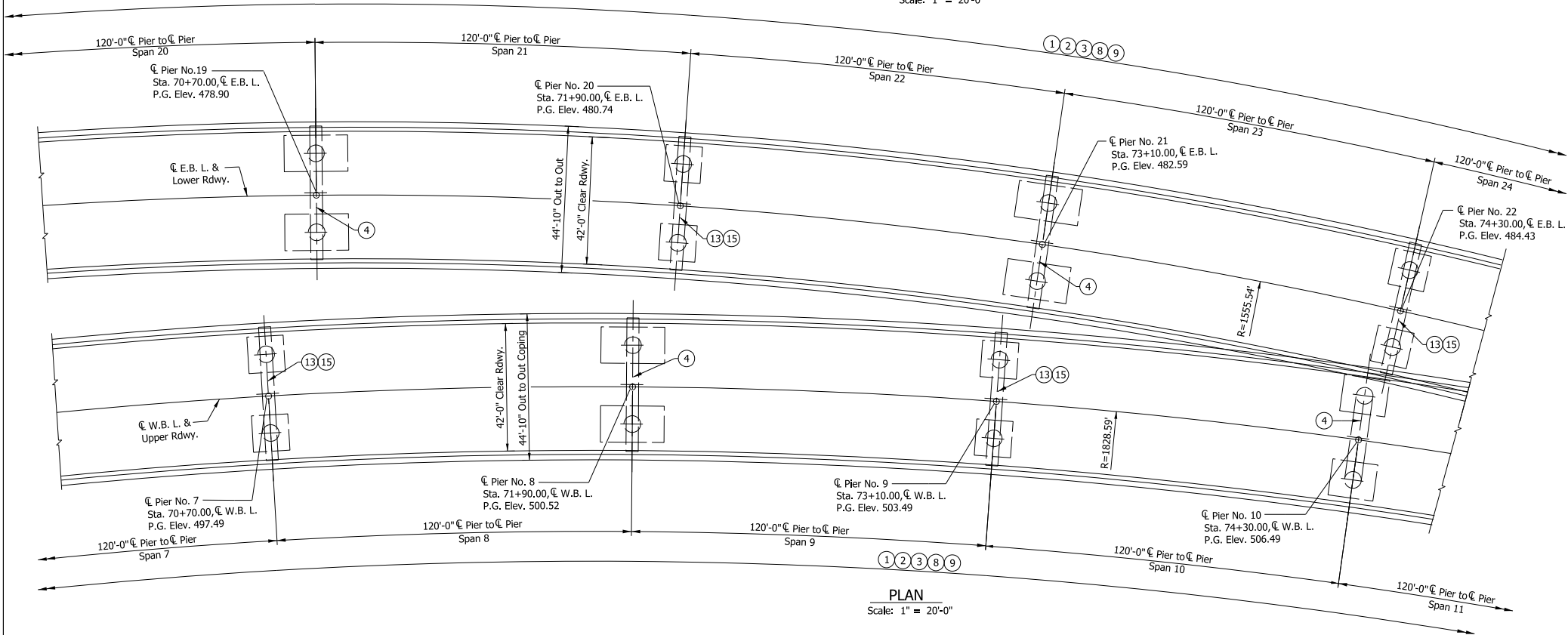
GENERAL PLAN & ELEVATION (2 of 4)	
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LEGEND

- 1 Remove and replace eastbound and westbound decks.
- 2 Surface seal new decks.
- 3 Clean and paint all steel elements.
- 4 Install link slab.
- 5 Perform retrofits on cracks in steel members.
- 6 Replace lateral restraint devices.
- 7 Replace bearings.
- 8 Remove and replace existing bridge deck drainage system.
- 9 Remove and replace existing bridge lighting system.
- 10 Substructure concrete repairs.
- 11 Replace existing approach slab.
- 12 Perform repairs on steel members. Replace Loose/missing bolts.
- 13 Replace bridge deck expansion joint.
- 14 Modify to semi-Integral abutment.
- 15 Add Longitudinal Restrainers



ELEVATION
Scale: 1" = 20'-0"



PLAN
Scale: 1" = 20'-0"

NOTES

- 1. For Typical Sections, See Sheets 8 - 12.
- 2. See Framing Plans on Sheet 15 - 28 for Steel Repairs.

STEEL MULTI-SPAN GIRDER BRIDGE
EB BRIDGE - 13 SPANS: 1@105'-0";9@120'-0";3@140'-0"
WB BRIDGE - 14 SPANS: 1@115'-0";10@120'-0";3@140'-0"
42'-0" CLEAR ROADWAY; SKEW: VARIES
I-64 OVER SHAWNEE GOLF COURSE JEFFERSON COUNTY

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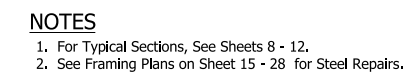
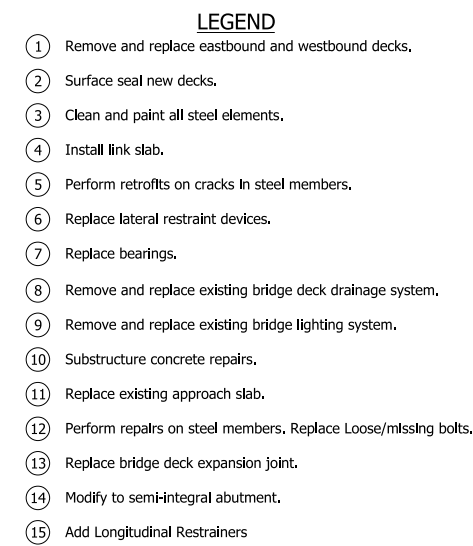
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GENERAL PLAN & ELEVATION
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HORIZONTAL SCALE		BRIDGE FILE	
1"=20'-0"		I64-123-04691 E	
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<p>STEEL MULTI-SPAN GIRDER BRIDGE</p> <p>EB BRIDGE - 13 SPANS: 1@105'-0";9@120'-0";3@140'-0"</p> <p>WB BRIDGE - 14 SPANS: 1@119'-0";10@120'-0";3@140'-0"</p> <p>42'-0" CLEAR ROADWAY; SKEW: VARIES</p> <p>I-64 OVER SHAWNEE GOLF COURSE JEFFERSON COUNTY</p>
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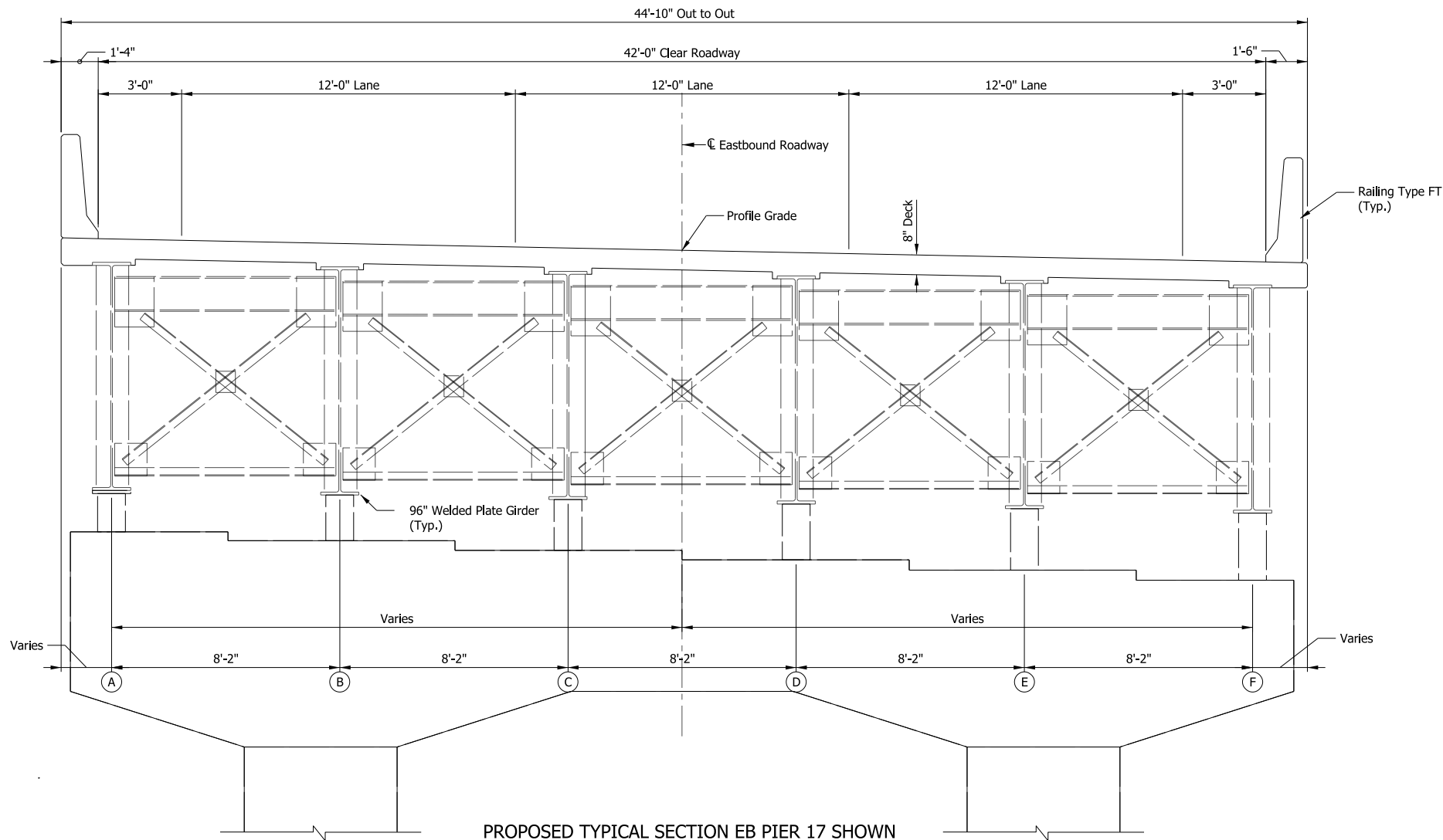
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GENERAL PLAN & ELEVATION
(4 of 4)

HORIZONTAL SCALE		BRIDGE FILE	
1"=20'-0		164-123-04691 E	
VERTICAL SCALE		DESIGNATION	
1"=20'-0		1702255, 1592187	
SURVEY BOOK		SHEETS	
.		7	OF 35
CONTRACT		PROJECT	
B-40719		1702255, 1592187	

NOTES

1. Railing Type FT shall conform to Standard Drawing E706-BRSF.



PROPOSED TYPICAL SECTION EB PIER 17 SHOWN
EB PIERS 15, 16, 18-22 SIMILAR
EB PIER 14 SIMILAR WITH TIERED CAP
WB PIERS 1-9 SIMILAR
(LOOKING WEST)

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DESIGNED: LER	DRAWN: EAK	
CHECKED:	CHECKED:	

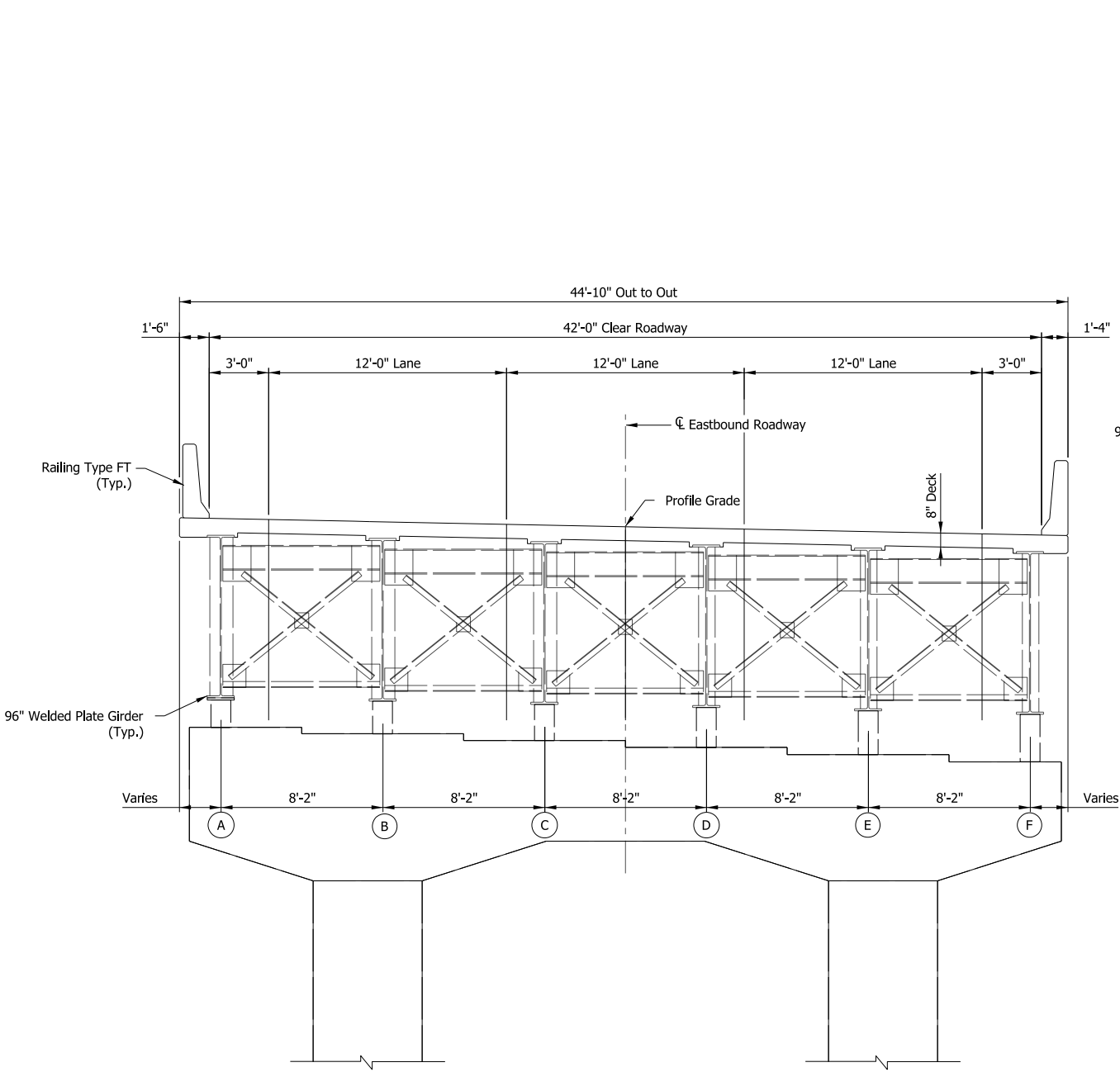
INDIANA DEPARTMENT OF TRANSPORTATION
TYPICAL SECTIONS (1 of 5)

HORIZONTAL SCALE 3/8" = 1'-0"	BRIDGE FILE I64-123-04691 E
VERTICAL SCALE 3/8" = 1'-0"	DESIGNATION 1702255, 1592187
SURVEY BOOK 	SHEETS 8 OF 35
CONTRACT B-40719	PROJECT 1702255, 1592187

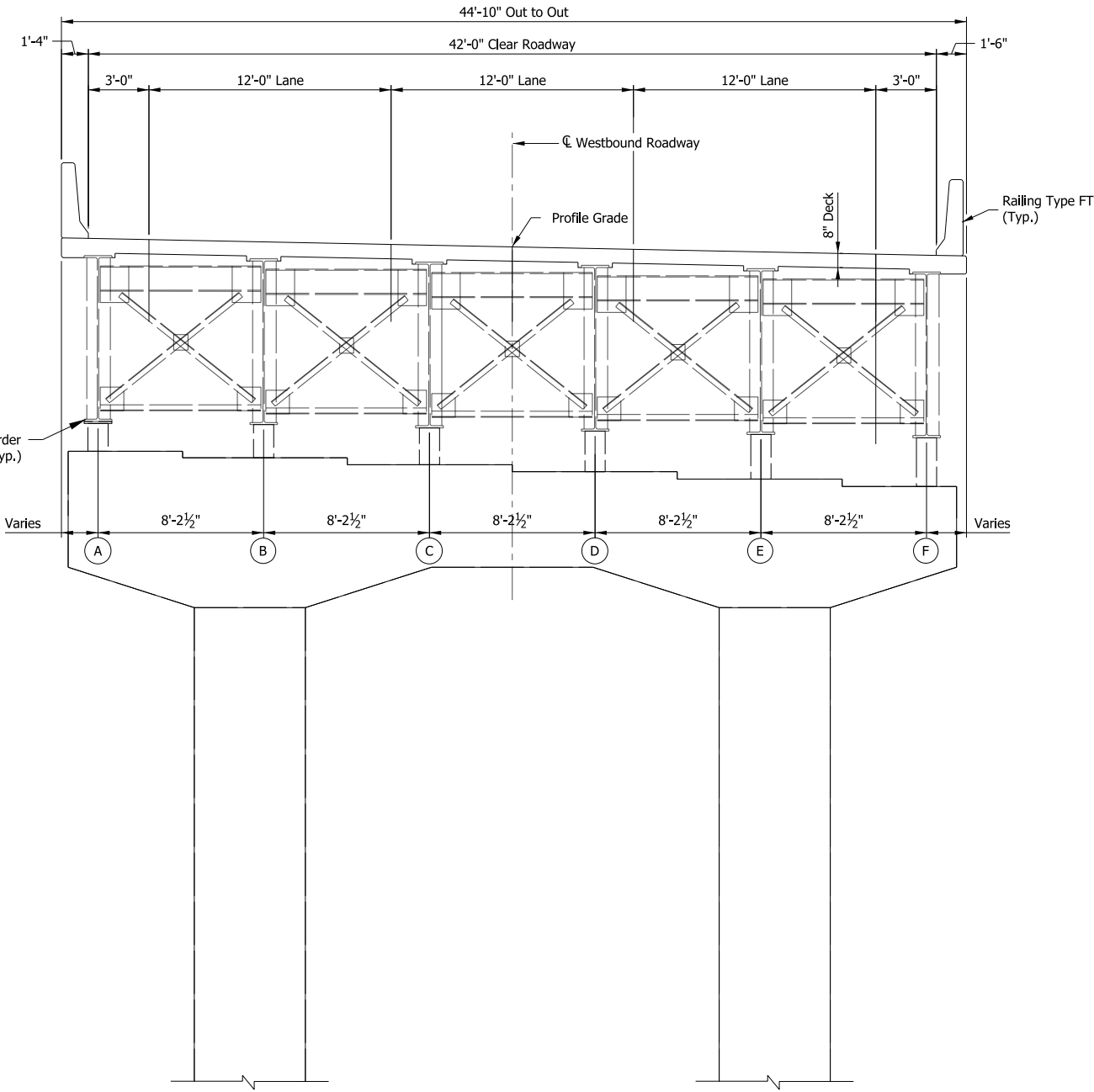
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NOTE:

1. Railing Type FT shall conform to Standard Drawing E706-BRSF.



PROPOSED TYPICAL SECTION EB PIER 17
(LOOKING WEST)



PROPOSED TYPICAL SECTION WB PIER 5
(LOOKING WEST)

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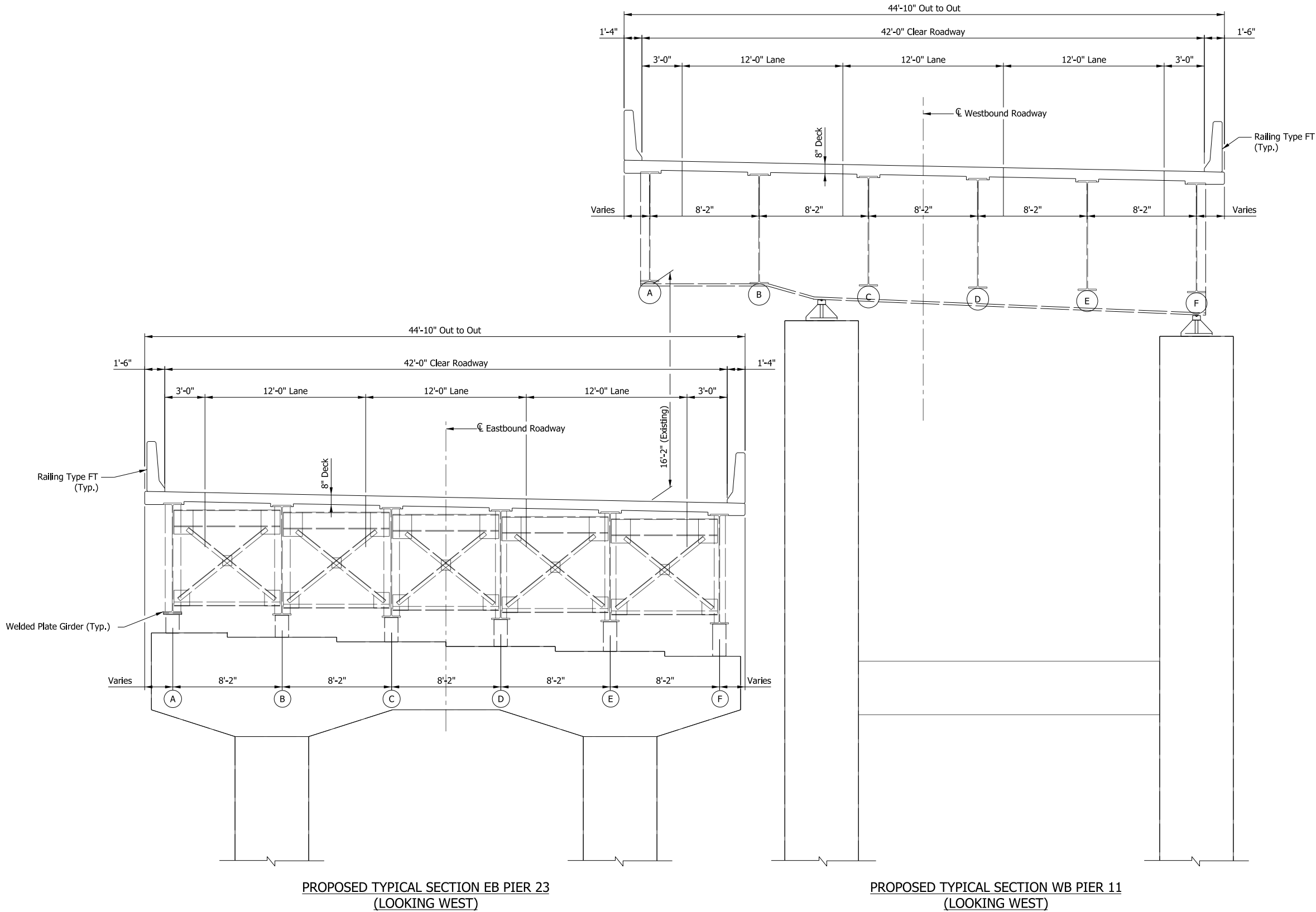
INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
(2 of 5)

HORIZONTAL SCALE	BRIDGE FILE
1/4"=1'-0"	I64-123-04691 E
VERTICAL SCALE	DESIGNATION
1/4"=1'-0"	1702255, 1592187
SURVEY BOOK	SHEETS
	9 OF 35
CONTRACT	PROJECT
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NOTES

1. Railing Type FT shall conform to Standard Drawing E706-BRSF.



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DESIGNED: LER	DRAWN: EAK	
CHECKED:	CHECKED:	

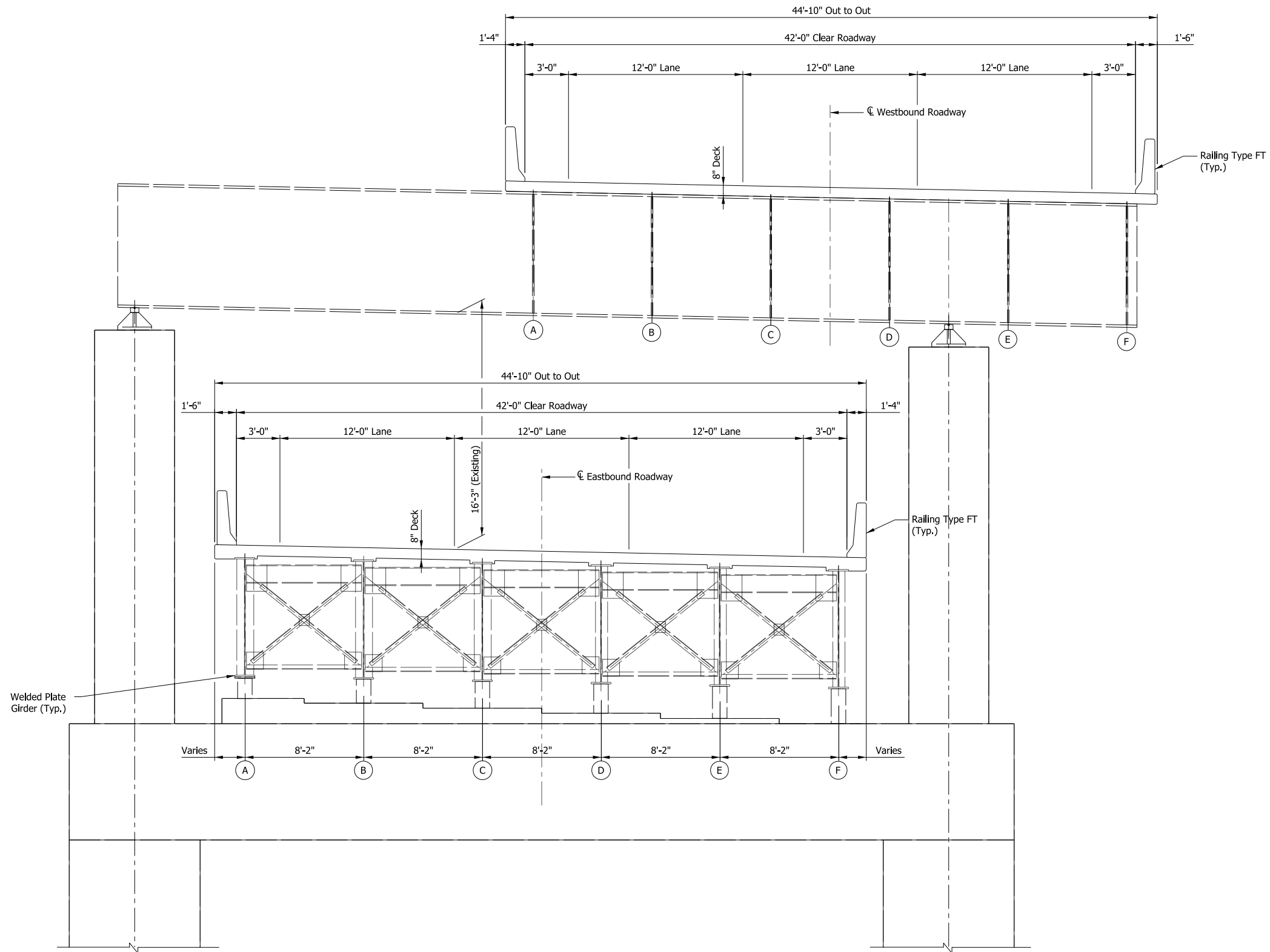
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TYPICAL SECTIONS
(3 of 5)

HORIZONTAL SCALE	BRIDGE FILE
1/4"=1'-0"	I64-123-04691 E
VERTICAL SCALE	DESIGNATION
1/4"=1'-0"	1702255, 1592187
SURVEY BOOK	SHEETS
	10 OF 35
CONTRACT	PROJECT
B-40719	1702255, 1592187

NOTES

1. Railing Type FT shall conform to Standard Drawing E706-BRSF.



PROPOSED TYPICAL SECTION PIER 12
(LOOKING WEST)

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DESIGN ENGINEER DATE

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CHECKED: _____	CHECKED: _____

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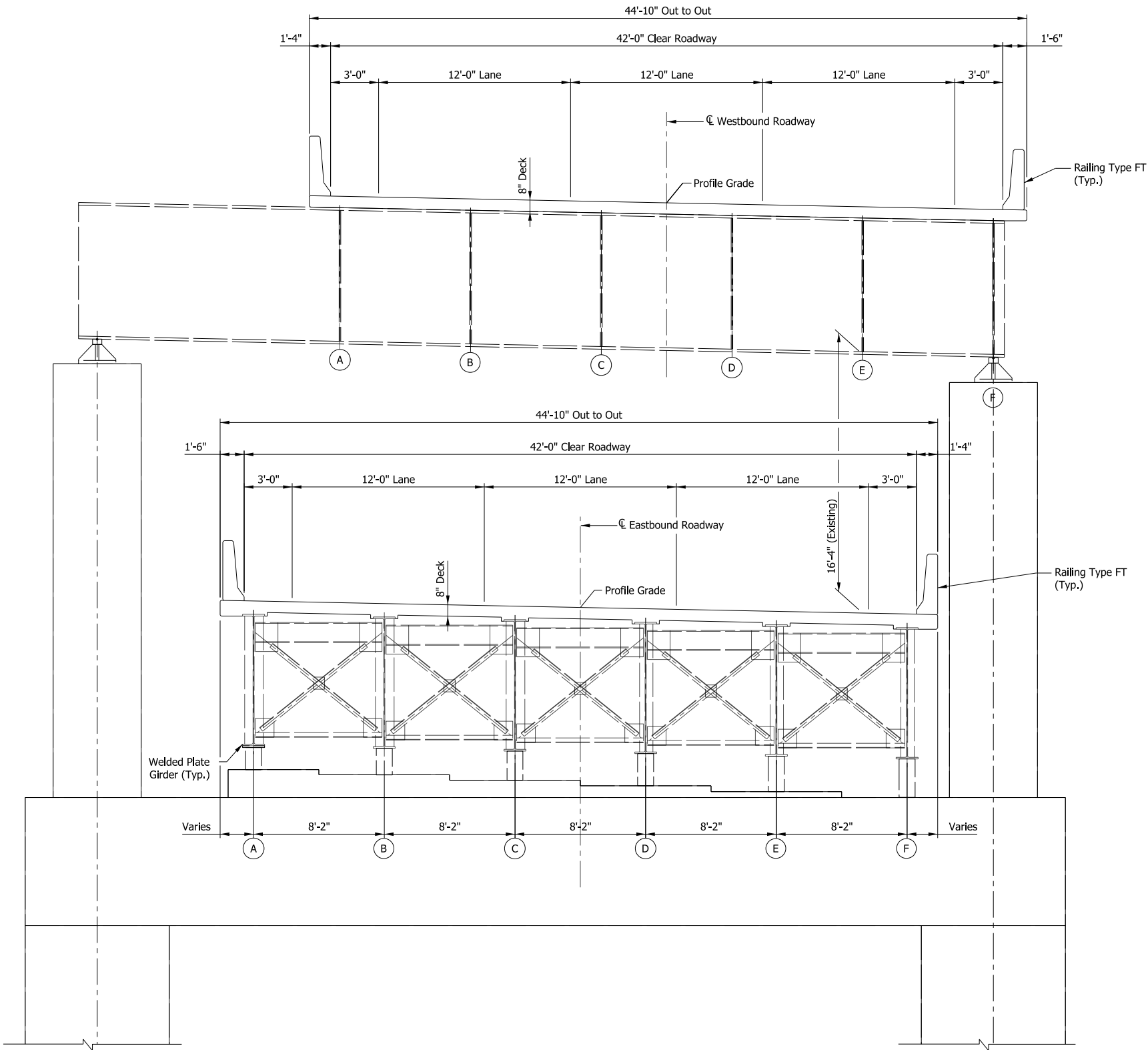
TYPICAL SECTIONS
(4 of 5)

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VERTICAL SCALE		DESIGNATION	
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SURVEY BOOK		SHEETS	
.		11	OF 35
CONTRACT		PROJECT	
B-40719		1702255, 1592187	

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NOTES

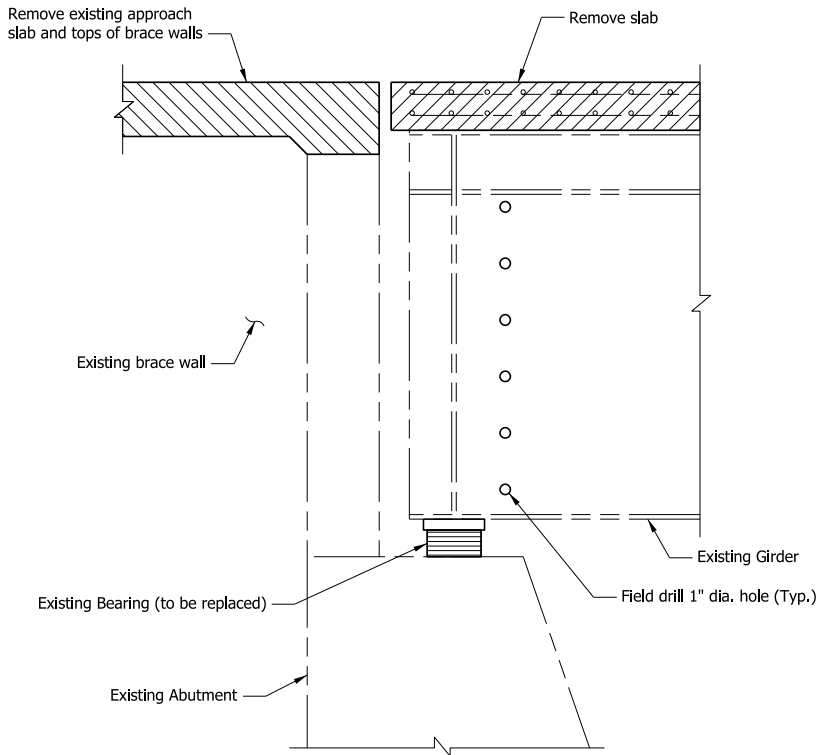
1. Railing Type FT shall conform to Standard Drawing E706-BRSF.



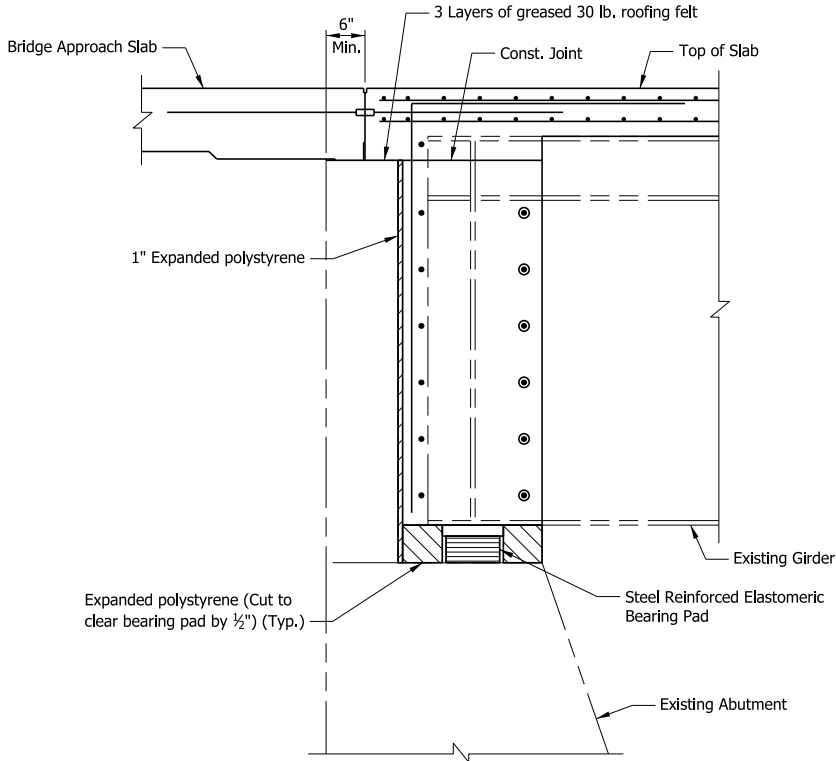
PROPOSED TYPICAL SECTION PIER 13
(LOOKING WEST)

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												1/4"=1'-0"				I64-123-04691 E			
												VERTICAL SCALE				DESIGNATION			
												1/4"=1'-0"				1702255, 1592187			
												SURVEY BOOK				SHEETS			
												.				12 OF 35			
												CONTRACT				PROJECT			
												B-40719				1702255, 1592187			
												TYPICAL SECTIONS (5 of 5)							

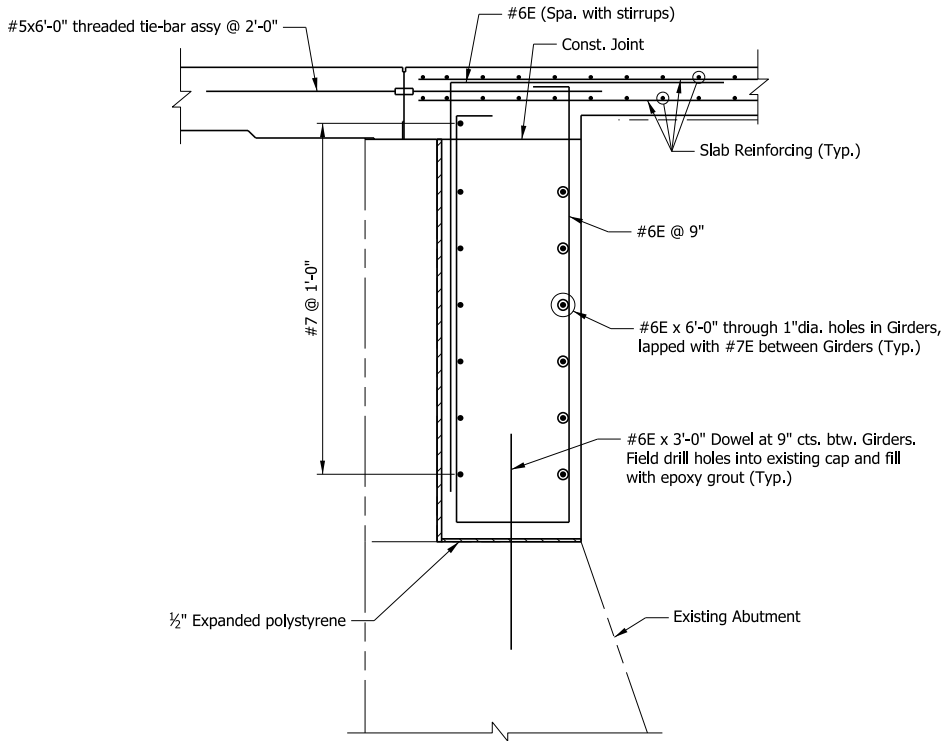
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ABUTMENT MODIFICATION - REMOVALS



ABUTMENT MODIFICATION
Section at Girder



ABUTMENT MODIFICATION
Section between Girders

Abutment Modification Notes:

1. Remove existing approach slab and portion of backwall.
2. Perform bearing replacement. Provide temporary support for existing girders. Remove existing cross frames at girder ends.
3. Drill holes into existing cap and install new reinforcing dowel bars for diaphragm in epoxy grout. Contractor shall take precautions to prevent cutting of existing reinforcing bars in cap when drilling.
4. Install reinforcing steel in diaphragm and slab. Pour concrete from bearing elevation to construction joint below bottom of slab.
5. Pour new slab.
6. Install new approach slab per INDOT Standard Details.

Approach Slab Notes:

Replace the existing approach slabs and construct the terminal joint in accordance with INDOT Recurring Special Provision 503-R-692d. The RCBA shall follow INDOT standards except for the following changes.

1. The thickness of the slab shall be 17 inches (Min.).
2. Longitudinal steel in the bottom mat shall be a minimum of 8# reinforcing steel bars at 6 inches on center.
3. The top mat shall be a minimum of #5 reinforcing steel bars at 12 inches in each direction.
4. The length of the approach slab shall be 25'-0".
5. Approach slabs shall be constructed with longitudinal grooving in accordance with Attachment 14-1 : USP Longitudinal Grooving.

Notes:

1. Concrete shall be Class C, with f'c = 4 ksi.
2. Reinforcing steel shall be Grade 60 and epoxy coated.
3. Coordinate abutment modifications with staged deck reconstruction.

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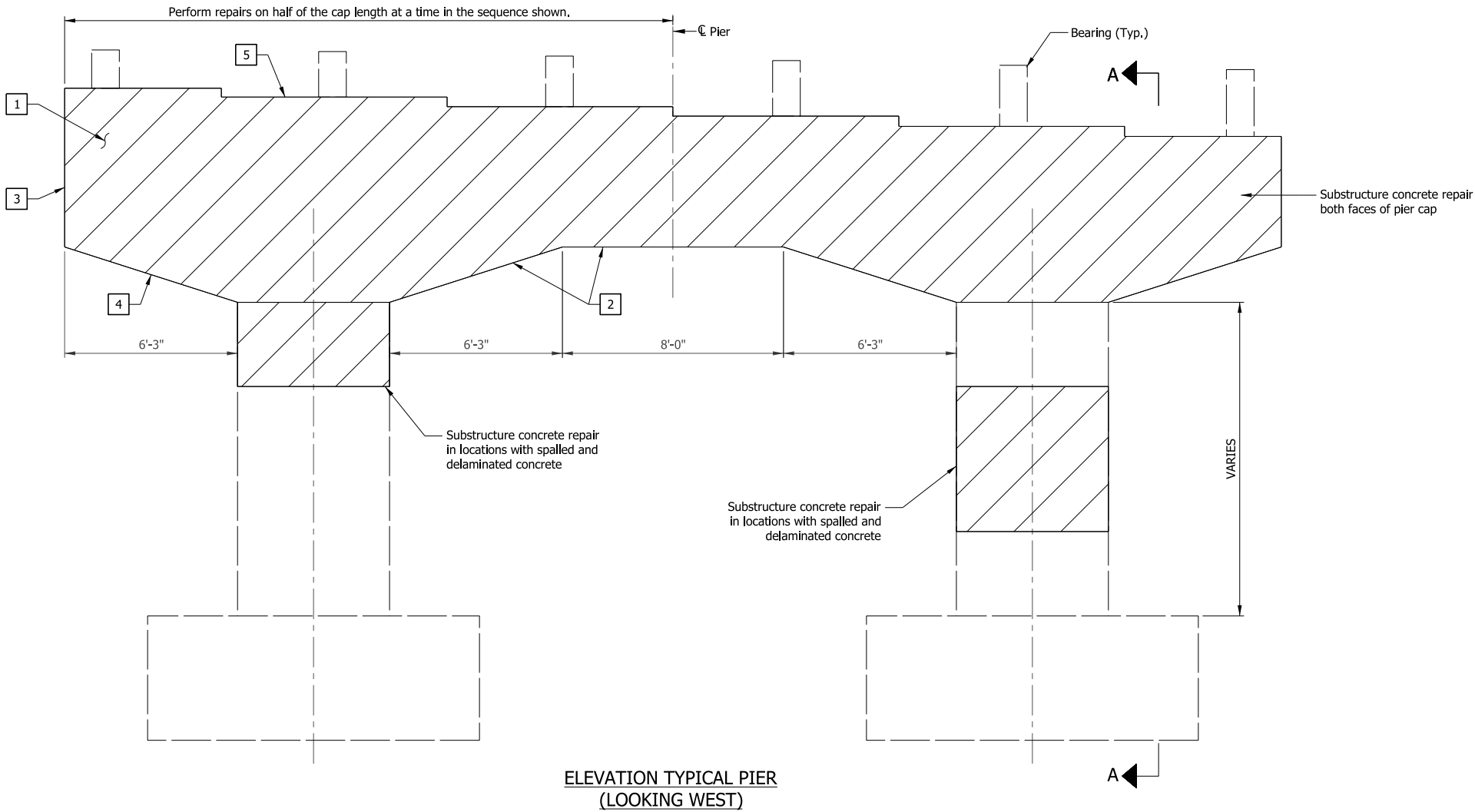
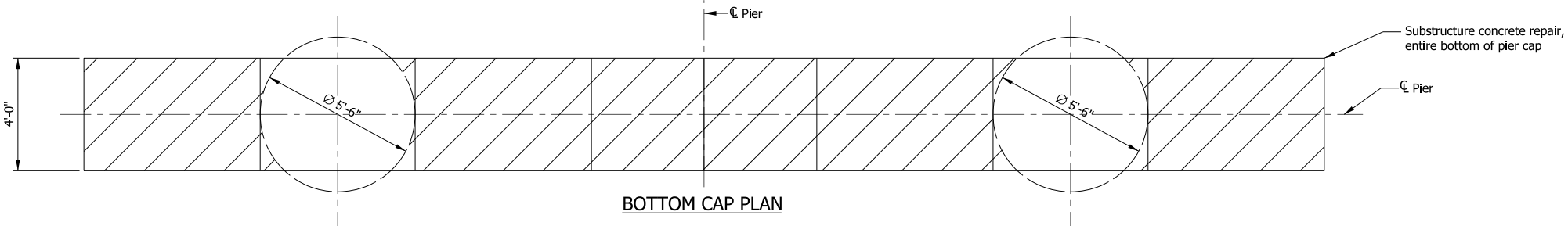
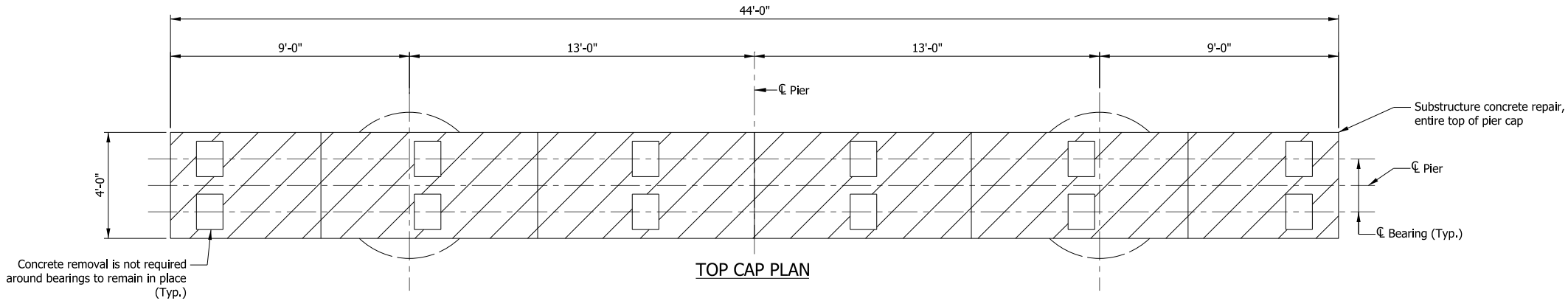
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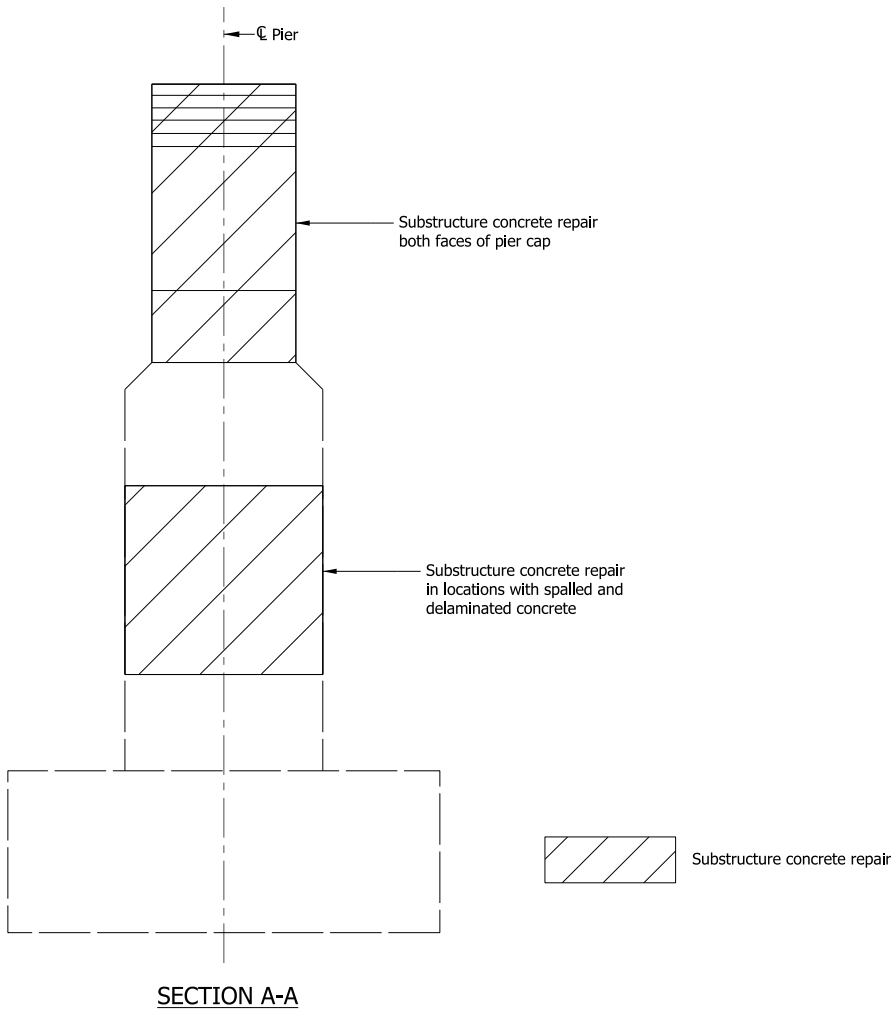
INDIANA DEPARTMENT OF TRANSPORTATION	
ABUTMENT MODIFICATIONS	

HORIZONTAL SCALE 3/8" = 1'-0"		BRIDGE FILE I64-123-04691 E	
VERTICAL SCALE 3/8" = 1'-0"		DESIGNATION 1702255, 1592187	
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- Pier Cap Concrete Repair Sequences**
- Working half the pier length at a time, perform concrete repairs in the following sequence:
1. Front and back faces of cap (one at a time).
 2. Bottom of cap inside of columns.
 3. End face of cap.
 4. Bottom of cap, outside of columns.
 5. Top face of cap, between bearings.
 6. Top of cap, under bearings
 7. Repeat Steps 1 to 6 for second half of cap length.
- Notes:
1. See Substructure Repair notes on General Notes Sheet.
 2. Work may alternate between the left and right halves of the cap. For example, Step 1 may be performed for the left half of the cap and then the right before moving to Step 2.
 3. The sequence of repairs may be reordered from the suggested sequence shown.
 4. Contractor shall identify, remove and replace all areas of unsound concrete on all surfaces of the pier columns including cross struts where present. The pier column concrete repairs will be paid for under the Patching Allowance.



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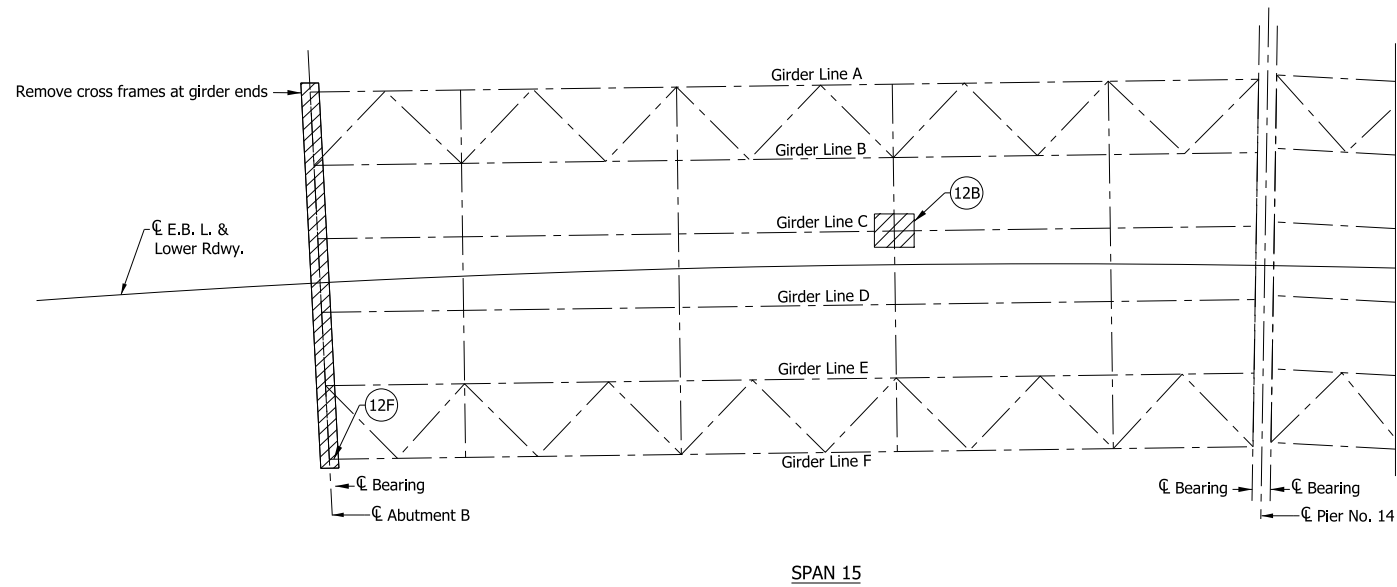
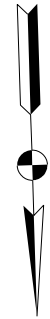
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DESIGNED: LER	DRAWN: EAK	
CHECKED:	CHECKED:	

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TYPICAL PIER CONCRETE REPAIRS

HORIZONTAL SCALE	BRIDGE FILE
3/8" = 1'-0"	I64-123-04691 E
VERTICAL SCALE	DESIGNATION
3/8" = 1'-0"	1702255, 1592187
SURVEY BOOK	SHEETS
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SPAN 15

FRAMING PLAN
LOWER ROADWAY

LEGEND

- 12A3 Web Repair - 12A3
- 12B Replace missing bolts
- 12C Replace Cross Frame
- 12E Bearing Stiffener Repair - 12E
- 12F Flange Repair - 12F
- 12H Knee Joint Repair - 12H

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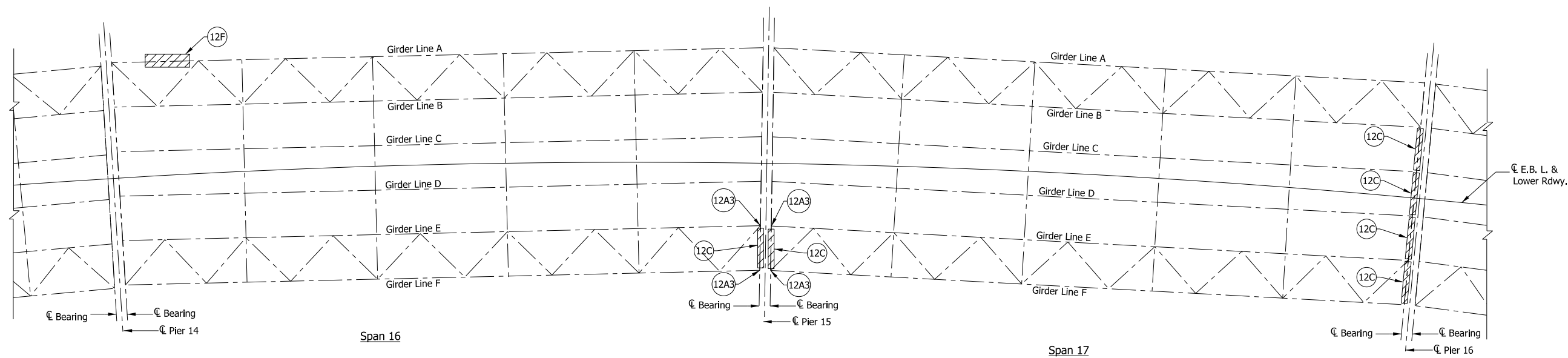
CONSTRUCTION COMPANY, INC.

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DESIGNED: LER _____	DRAWN: EAK _____
CHECKED: _____	CHECKED: _____

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FRAMING PLAN
SPAN 15

HORIZONTAL SCALE	BRIDGE FILE	
	I64-123-04691 E	
VERTICAL SCALE	DESIGNATION	
	1702255, 1592187	
SURVEY BOOK	SHEETS	
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FRAMING PLAN
LOWER ROADWAY

LEGEND

- 12A3 Web Repair - 12A3
- 12B Replace missing bolts
- 12C Replace Cross Frame
- 12E Bearing Stiffener Repair - 12E
- 12F Flange Repair - 12F
- 12H Knee Joint Repair - 12H

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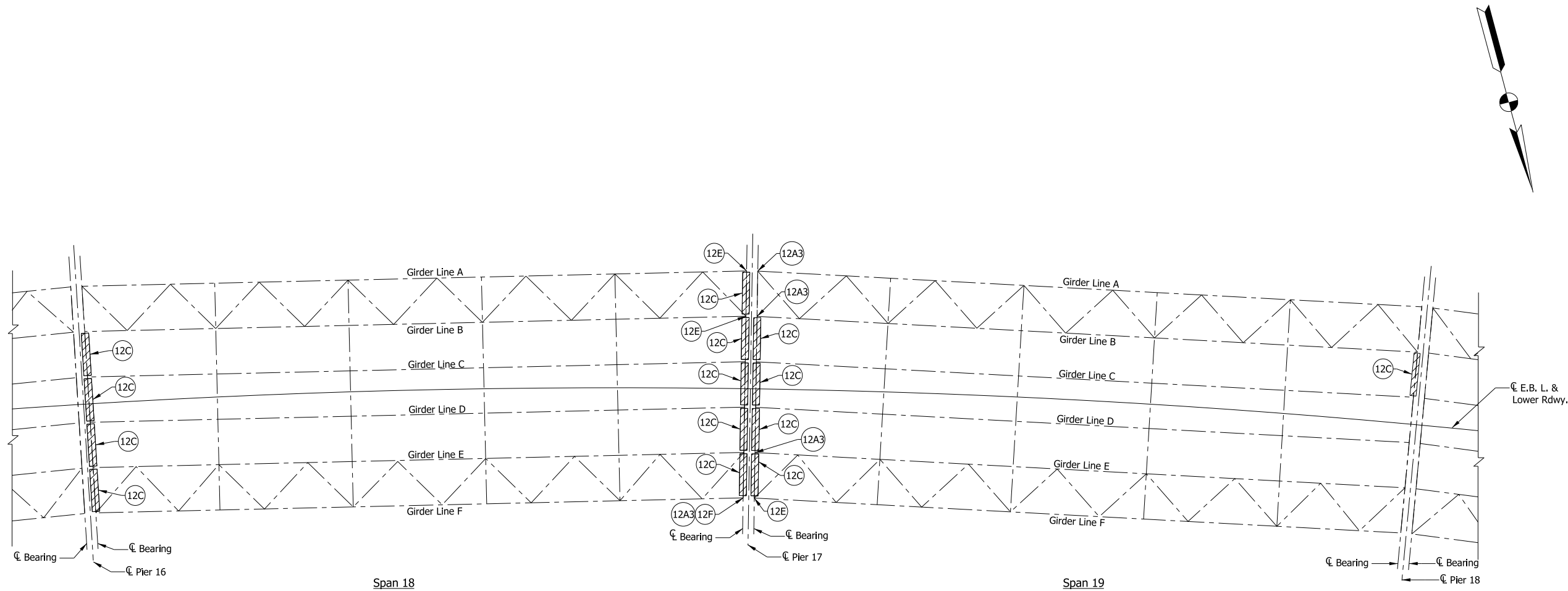
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DESIGN ENGINEER _____ DATE _____	
DESIGNED: LER _____	DRAWN: EAK _____
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FRAMING PLAN
SPANS 16 AND 17

HORIZONTAL SCALE	BRIDGE FILE	
	I64-123-04691 E	
VERTICAL SCALE	DESIGNATION	
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CONTRACT	PROJECT	
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FRAMING PLAN
LOWER ROADWAY

LEGEND

- 12A3 Web Repair - 12A3
- 12B Replace missing bolts
- 12C Replace Cross Frame
- 12E Bearing Stiffener Repair - 12E
- 12F Flange Repair - 12F
- 12H Knee Joint Repair - 12H

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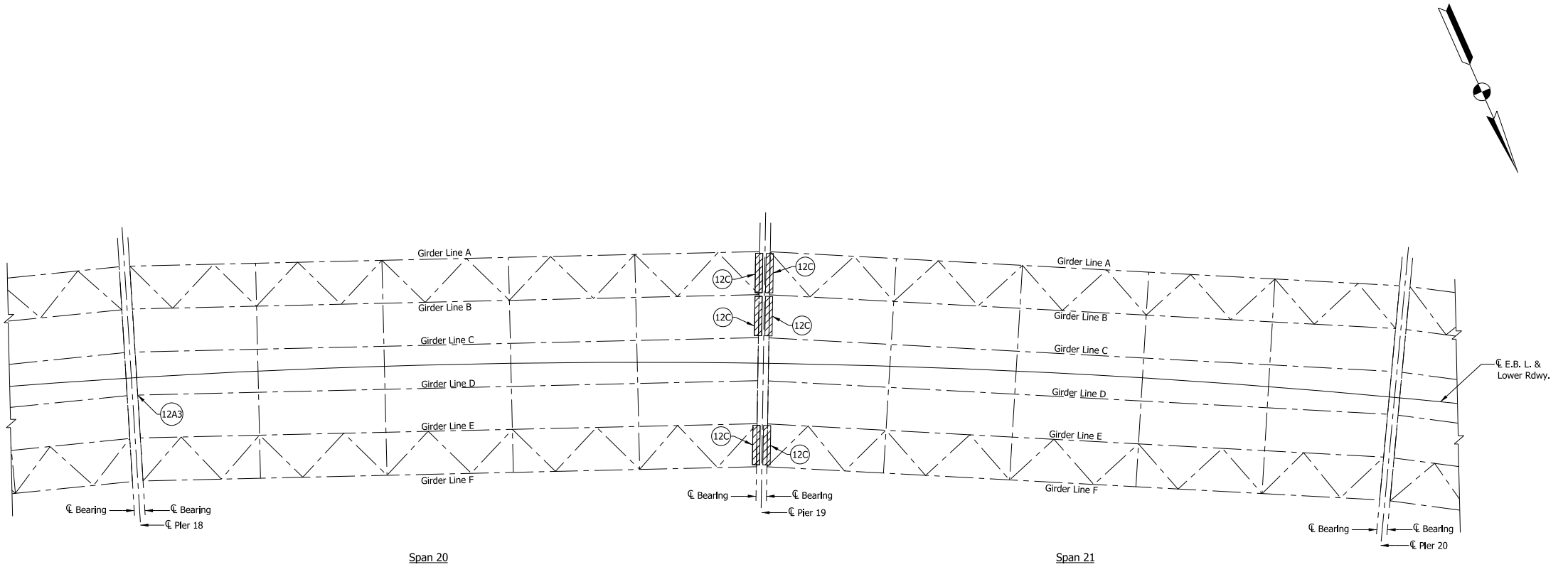
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DESIGNED: LER _____	DRAWN: EAK _____
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FRAMING PLAN
SPANS 18 AND 19

HORIZONTAL SCALE	BRIDGE FILE	
	I64-123-04691 E	
VERTICAL SCALE	DESIGNATION	
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SURVEY BOOK	SHEETS	
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CONTRACT	PROJECT	
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FRAMING PLAN
LOWER ROADWAY

LEGEND

- 12A3 Web Repair - 12A3
- 12B Replace missing bolts
- 12C Replace Cross Frame
- 12E Bearing Stiffener Repair - 12E
- 12F Flange Repair - 12F
- 12H Knee Joint Repair - 12H

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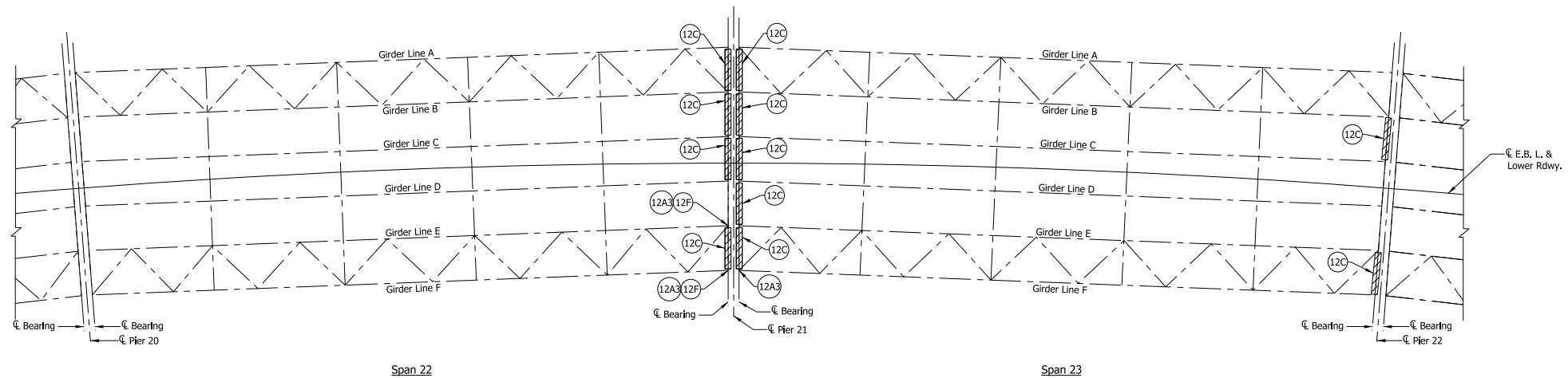
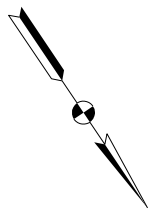
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FRAMING PLAN
SPANS 20 AND 21

HORIZONTAL SCALE	BRIDGE FILE
VERTICAL SCALE	I64-123-04691 E
	DESIGNATION
	1702255, 1592187
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FRAMING PLAN
LOWER ROADWAY

LEGEND

- 12A3 Web Repair - 12A3
- 12B Replace missing bolts
- 12C Replace Cross Frame
- 12E Bearing Stiffener Repair - 12E
- 12F Flange Repair - 12F
- 12H Knee Joint Repair - 12H

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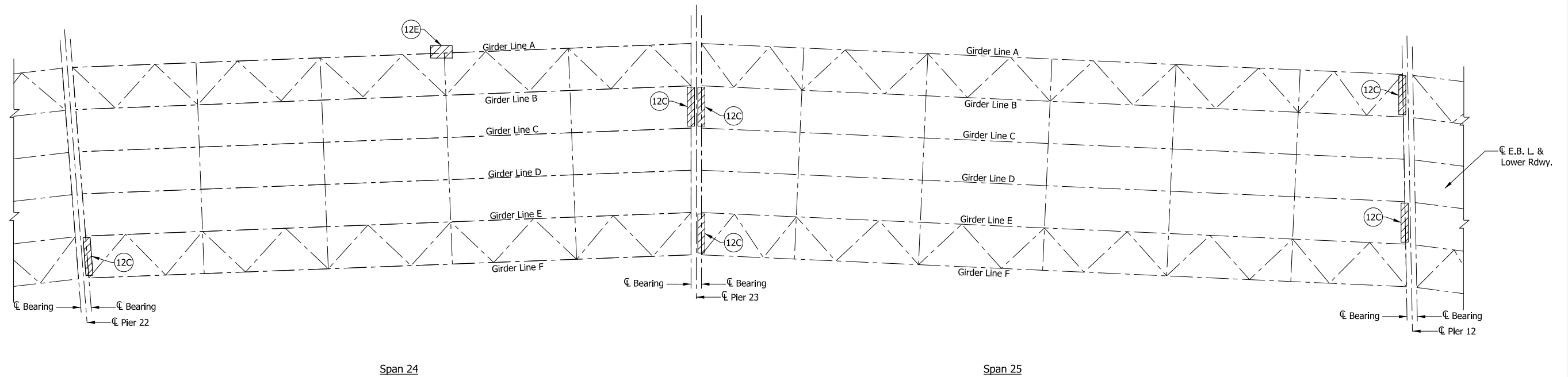
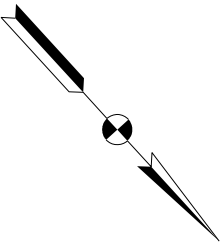
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DESIGNED: LER	DRAWN: EAK	
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FRAMING PLAN
SPANS 22 AND 23

HORIZONTAL SCALE	BRIDGE FILE
VERTICAL SCALE	164-123-04691 E
SURVEY BOOK	DESIGNATION
CONTRACT	1702255, 1592187
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	19 OF 35
	PROJECT
	1702255, 1592187



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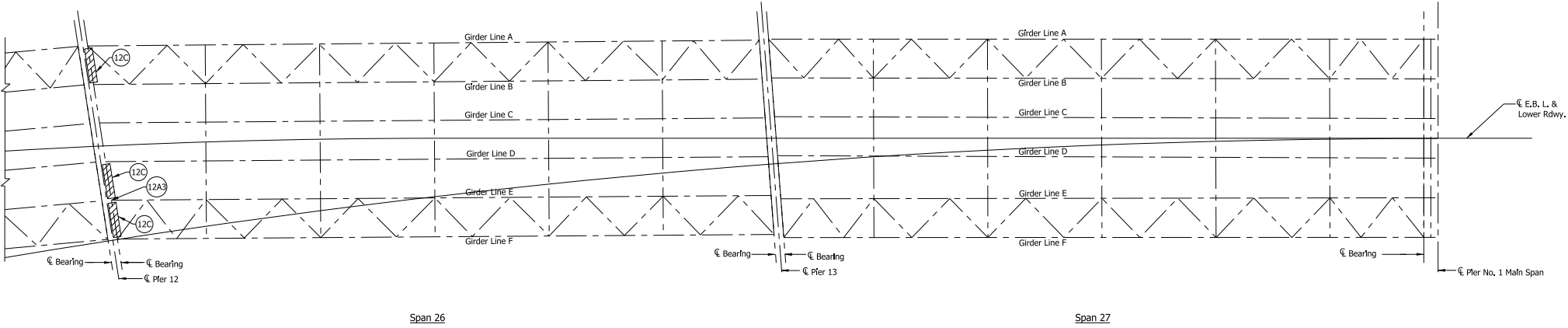
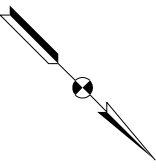
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DESIGN ENGINEER _____ DATE _____	
DESIGNED: LER _____	DRAWN: EAK _____
CHECKED: _____	CHECKED: _____

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FRAMING PLAN
SPANS 24 AND 25

HORIZONTAL SCALE	BRIDGE FILE	
	I64-123-04691 E	
VERTICAL SCALE	DESIGNATION	
	1702255, 1592187	
SURVEY BOOK	SHEETS	
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CONTRACT	PROJECT	
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FRAMING PLAN
LOWER ROADWAY

LEGEND

- 12A3 Web Repair - 12A3
- 12B Replace missing bolts
- 12C Replace Cross Frame
- 12E Bearing Stiffener Repair - 12E
- 12F Flange Repair - 12F
- 12H Knee Joint Repair - 12H

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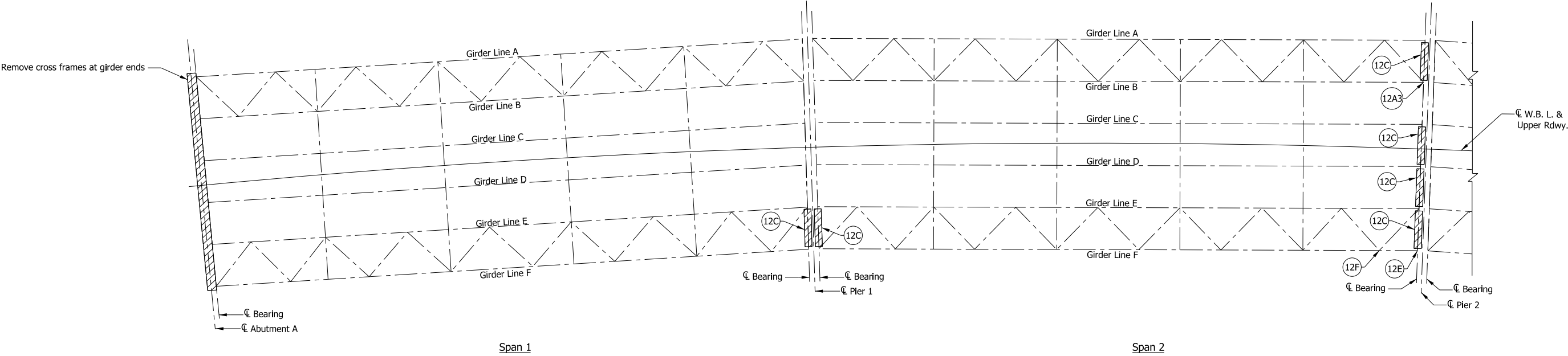
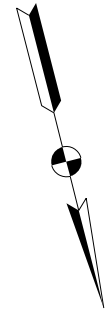
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CHECKED: _____		CHECKED: _____	

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FRAMING PLAN
SPANS 26 AND 27

HORIZONTAL SCALE	BRIDGE FILE
VERTICAL SCALE	164-123-04691 E
	DESIGNATION
	1702255, 1592187
SURVEY BOOK	SHEETS
	21 OF 35
CONTRACT	PROJECT
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FRAMING PLAN
UPPER ROADWAY

LEGEND

- 12A3 Web Repair - 12A3
- 12B Replace missing bolts
- 12C Replace Cross Frame
- 12E Bearing Stiffener Repair - 12E
- 12F Flange Repair - 12F
- 12H Knee Joint Repair - 12H

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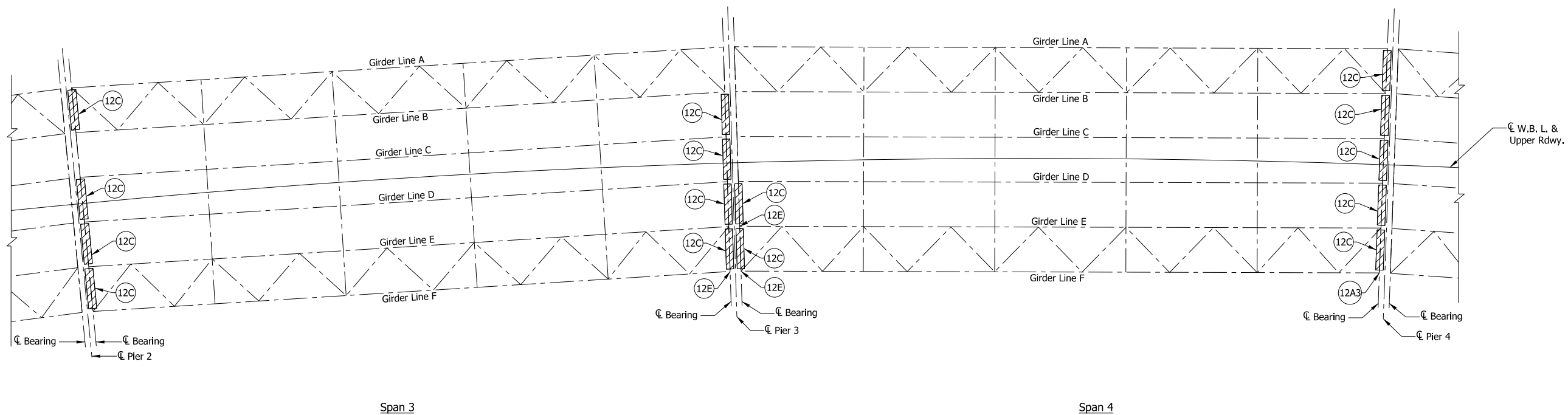
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DESIGN ENGINEER	DATE
DESIGNED: LER	DRAWN: EAK
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FRAMING PLAN
SPANS 1 AND 2

HORIZONTAL SCALE	BRIDGE FILE	
3/32" = 1'-0"	I64-123-04691 E	
VERTICAL SCALE	DESIGNATION	
	1702255, 1592187	
SURVEY BOOK	SHEETS	
.	22	OF 35
CONTRACT	PROJECT	
B-40719	1702255, 1592187	



FRAMING PLAN
UPPER ROADWAY

LEGEND

- 12A3 Web Repair - 12A3
- 12B Replace missing bolts
- 12C Replace Cross Frame
- 12E Bearing Stiffener Repair - 12E
- 12F Flange Repair - 12F
- 12H Knee Joint Repair - 12H

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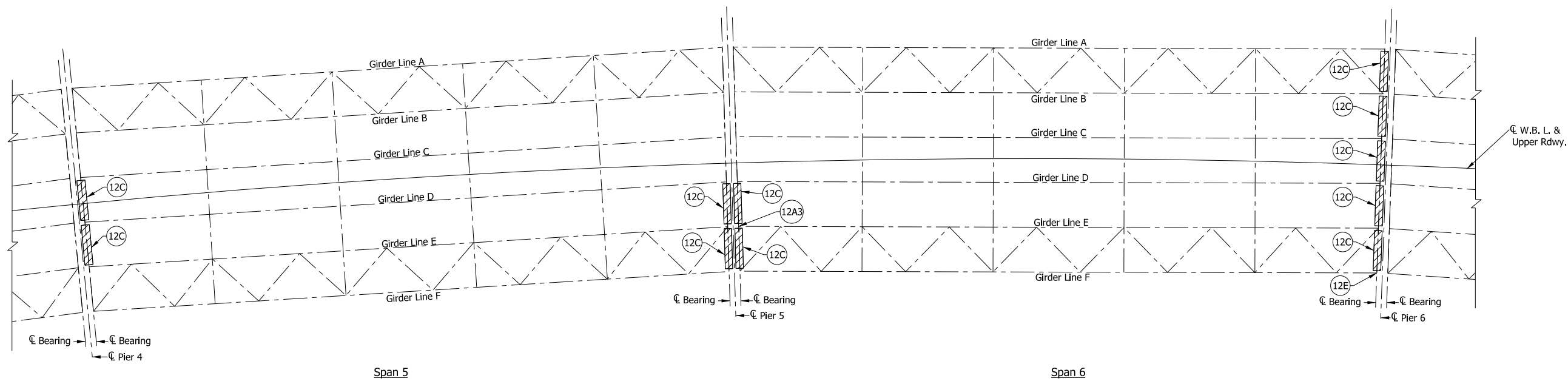
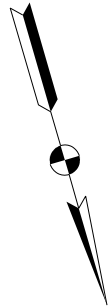
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DESIGN ENGINEER _____ DATE _____	
DESIGNED: LER _____	DRAWN: EAK _____
CHECKED: _____	CHECKED: _____

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FRAMING PLAN
SPANS 3 AND 4

HORIZONTAL SCALE	BRIDGE FILE	
	I64-123-04691 E	
VERTICAL SCALE	DESIGNATION	
	1702255, 1592187	
SURVEY BOOK	SHEETS	
	23	OF 35
CONTRACT	PROJECT	
B-40719	1702255, 1592187	



FRAMING PLAN
UPPER ROADWAY

LEGEND

- 12A3 Web Repair - 12A3
- 12B Replace missing bolts
- 12C Replace Cross Frame
- 12E Bearing Stiffener Repair - 12E
- 12F Flange Repair - 12F
- 12H Knee Joint Repair - 12H

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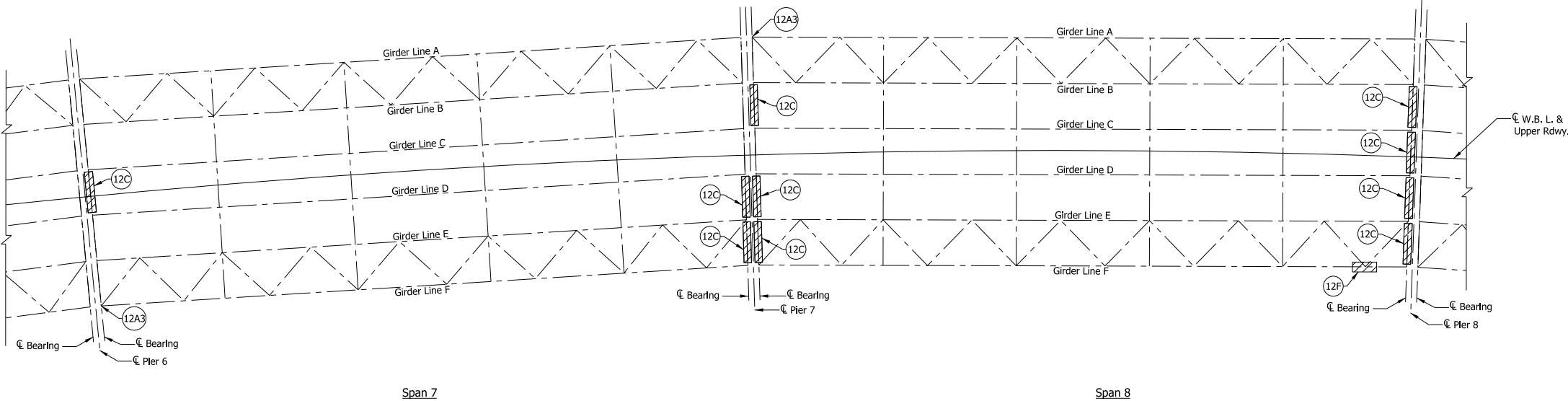
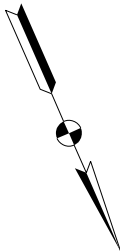
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DESIGNED: LER _____	DRAWN: EAK _____
CHECKED: _____	CHECKED: _____

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FRAMING PLAN
SPANS 5 AND 6


HORIZONTAL SCALE	BRIDGE FILE	
	I64-123-04691 E	
VERTICAL SCALE	DESIGNATION	
	1702255, 1592187	
SURVEY BOOK	SHEETS	
	24	OF 35
CONTRACT	PROJECT	
B-40719	1702255, 1592187	

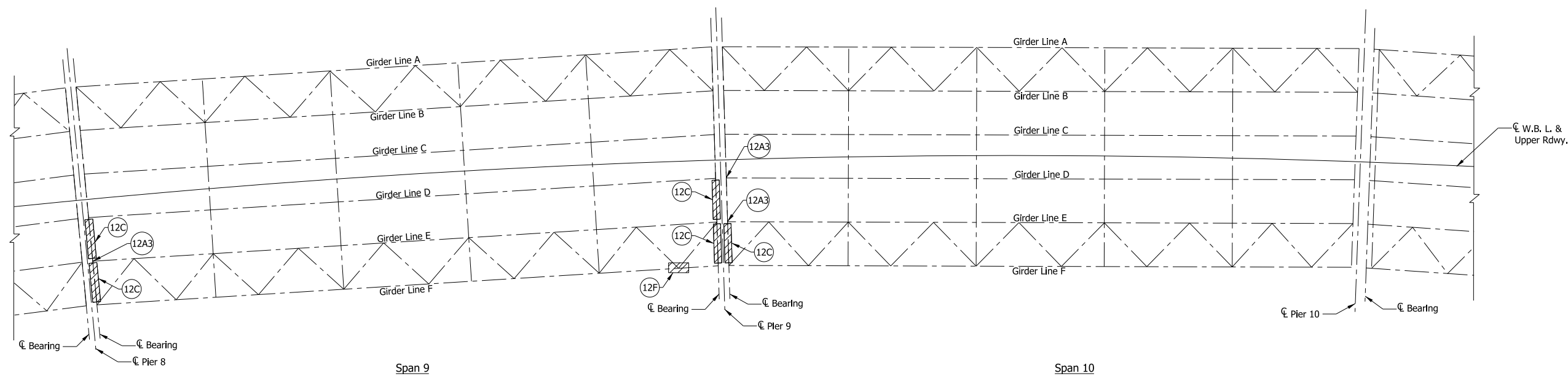
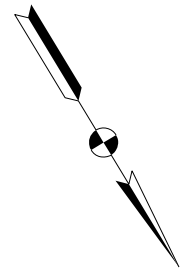


FRAMING PLAN
UPPER ROADWAY

LEGEND

- 12A3 Web Repair - 12A3
- 12B Replace missing bolts
- 12C Replace Cross Frame
- 12E Bearing Stiffener Repair - 12E
- 12F Flange Repair - 12F
- 12H Knee Joint Repair - 12H

DATE	REVISION		<div><div>Jacobs</div><div>501 North Broadway St. Louis, Missouri 63102-2121 Telephone: 314.335.4000</div></div> <div><div>kokosing</div><div>CONSTRUCTION COMPANY, INC.</div><div></div></div>	RECOMMENDED FOR APPROVAL _____		INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE		BRIDGE FILE				
				DESIGN ENGINEER _____		DATE _____		VERTICAL SCALE		I64-123-04691 E				
										DESIGNATION				
										1702255, 1592187				
			DESIGNED: LER		DRAWN: EAK		FRAMING PLAN SPANS 7 AND 8		SURVEY BOOK		SHEETS			
									25		OF		35	
			CHECKED: _____		CHECKED: _____				CONTRACT		PROJECT			
									B-40719		1702255, 1592187			



FRAMING PLAN
UPPER ROADWAY

LEGEND

- 12A3 Web Repair - 12A3
- 12B Replace missing bolts
- 12C Replace Cross Frame
- 12E Bearing Stiffener Repair - 12E
- 12F Flange Repair - 12F
- 12H Knee Joint Repair - 12H

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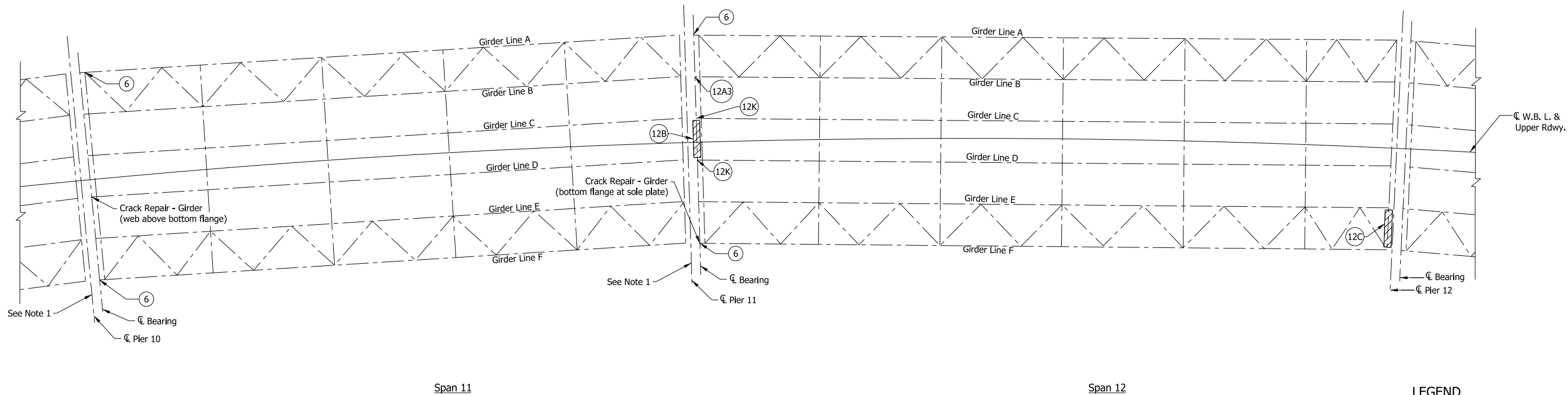
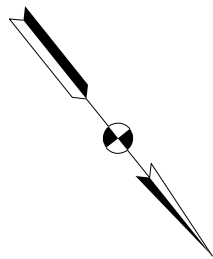
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INDIANA
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN
SPANS 9 AND 10

HORIZONTAL SCALE	BRIDGE FILE
VERTICAL SCALE	I64-123-04691 E
	DESIGNATION
	1702255, 1592187
SURVEY BOOK	SHEETS
	26 OF 35
CONTRACT	PROJECT
B-40719	1702255, 1592187



NOTES:

1. Extent and nature of section loss at the webs and flanges of the transverse box girders shall be confirmed by hands-on inspection. The noted deterioration and preliminary load rating provided in the RID documents suggests a repair will not be needed. The members should be blast cleaned, inspected, and repainted.
2. Bearing Pack Rust Remediation: clean pack rust and apply alkaline penetrating sealer before painting.

CRACK REPAIR NOTES:

1. Establish crack location and geometry by hands-on inspection. Locate end of crack using magnetic particle testing (MT) conducted by certified ASNT NDT Level II MT technician.
2. Perform crack arrest hole (or plating if required) as required by Engineer.
3. NDT technician shall verify that the end of the crack was captured by the hole.
4. Flame cutting or plasma cutting shall not be permitted. Any notches or gouges shall be repaired to the satisfaction of the Engineer.

LEGEND

- 6 Replace lateral restraint devices.
- 12A3 Web Repair - 12A3
- 12B Replace missing bolts
- 12C Replace Cross Frame
- 12E Bearing Stiffener Repair - 12E
- 12F Flange Repair - 12F
- 12H Knee Joint Repair - 12H
- 12K Bearing Pack Rust Remediation - 12K

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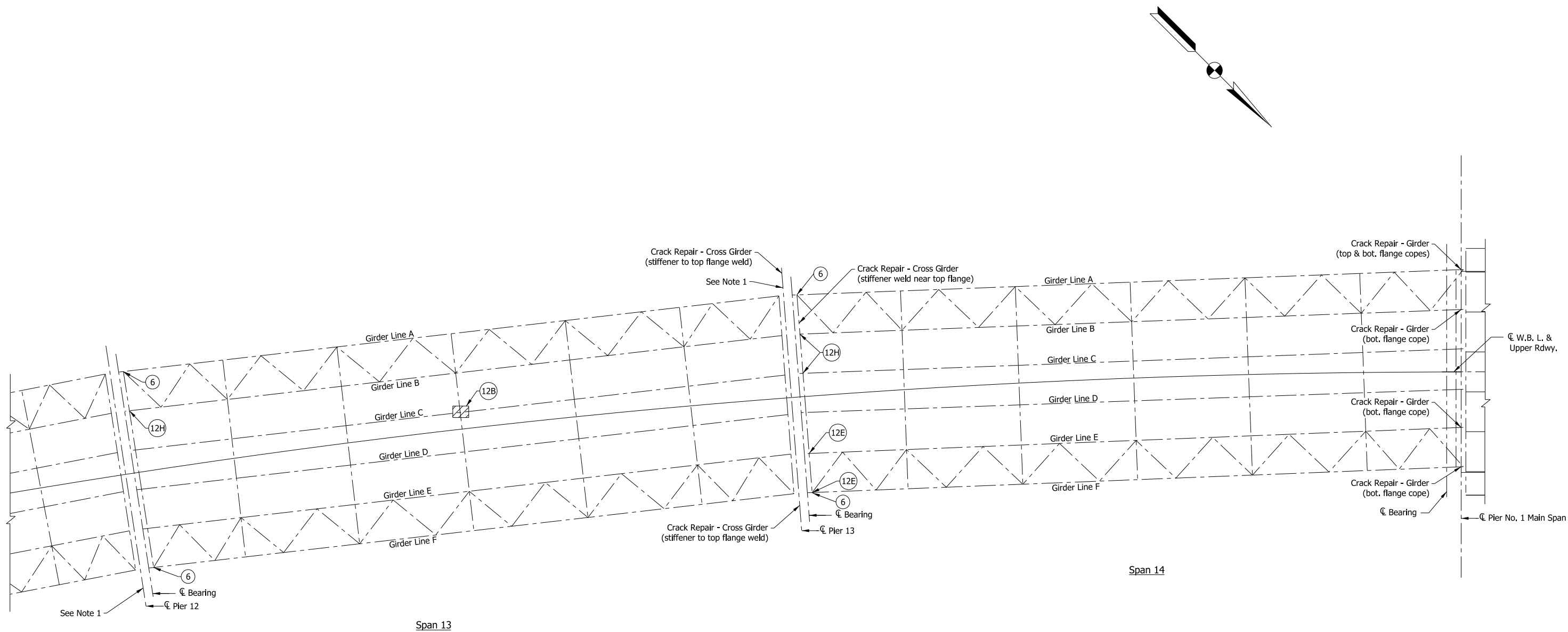
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CHECKED:	CHECKED:	

INDIANA
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FRAMING PLAN
SPANS 11 AND 12

HORIZONTAL SCALE	BRIDGE FILE
	I64-123-04691 E
VERTICAL SCALE	DESIGNATION
	1702255, 1592187
SURVEY BOOK	SHEETS
	27 OF 35
CONTRACT	PROJECT
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FRAMING PLAN
UPPER ROADWAY

NOTES:


1. Extent and nature of section loss at the webs and flanges of the transverse box girders shall be confirmed by hands on inspection. The noted deterioration and preliminary load rating provided in the RID documents suggests a repair will not be needed. The members should be blast cleaned, inspected, and repainted.

CRACK REPAIR NOTES:

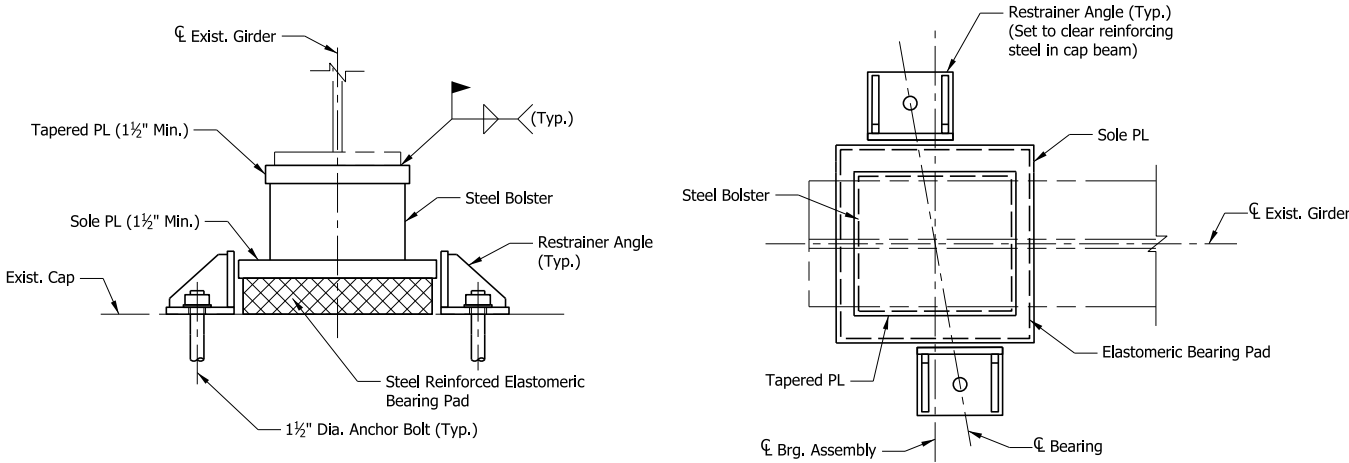
1. Establish crack location and geometry by hands-on inspection. Locate end of crack using magnetic particle testing (MT) conducted by certified ASNT NDT Level II MT technician.
2. Perform crack arrest hole (or plating if required) as required by Engineer.
3. NDT technician shall verify that the end of the crack was captured by the hole.
4. Flame cutting or plasma cutting shall not be permitted. Any notches or gouges shall be repaired to the satisfaction of the Engineer.

LEGEND

- 6 Replace lateral restraint devices.
- 12A3 Web Repair - 12A3
- 12B Replace missing bolts
- 12C Replace Cross Frame
- 12E Bearing Stiffener Repair - 12E
- 12F Flange Repair - 12F
- 12H Knee Joint Repair - 12H

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																	I64-123-04691 E			
													VERTICAL SCALE				DESIGNATION			
																	1702255, 1592187			
													SURVEY BOOK				SHEETS			
													28				OF 35			
								DESIGNED: LER		DRAWN: EAK		FRAMING PLAN SPANS 13 AND 14				CONTRACT		PROJECT		
								CHECKED:		CHECKED:						B-40719		1702255, 1592187		

\$FILES

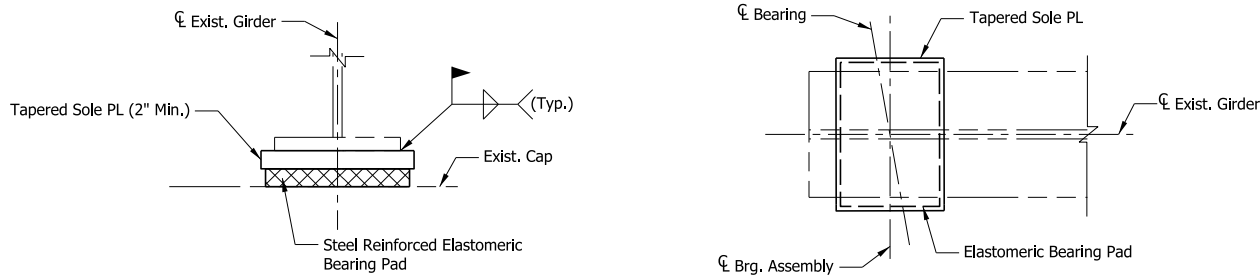


SECTION

PLAN

EXPANSION BEARING REPLACEMENT - 7A

- Notes:
1. Refer to INDOT Standard Drawing E726-BEBP-04 for details of bearing pad and restrainer angles.
 2. Anchor bolts and nuts shall be galvanized.

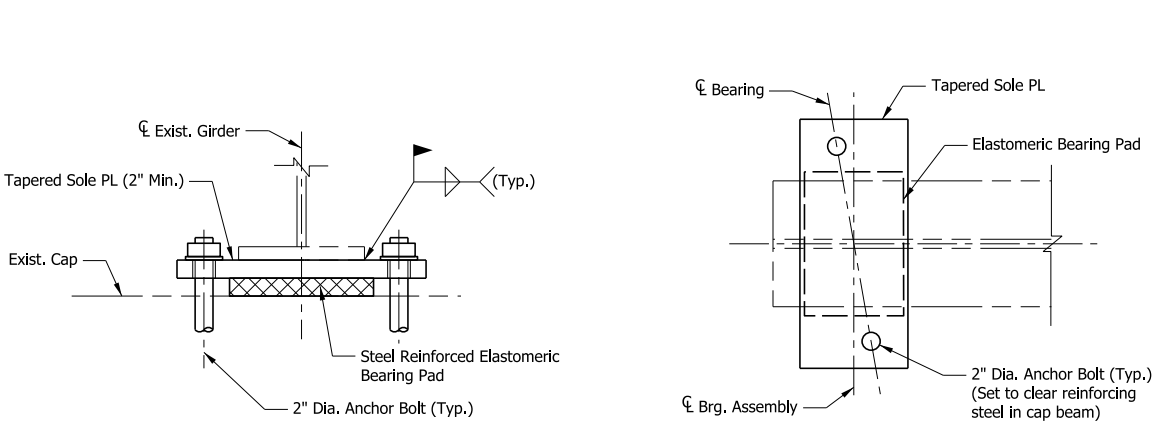


SECTION

PLAN

FIXED BEARING REPLACEMENT - 7C

- Notes:
1. Anchor bolts and nuts shall be galvanized.
 2. The elastomeric bearing pad shall consist of 2 internal layers of 1/2" elastomer alternating with 1/8" steel shim plates.

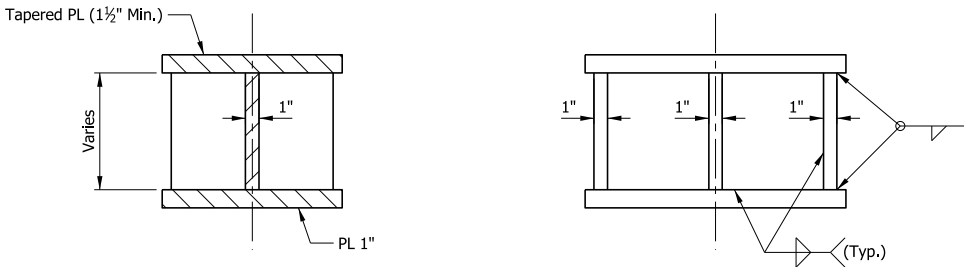


SECTION

PLAN

FIXED BEARING REPLACEMENT - 7B

- Notes:
1. Anchor bolts and nuts shall be galvanized.
 2. The elastomeric bearing pad shall consist of 2 internal layers of 1/2" elastomer alternating with 1/8" steel shim plates.
 3. Provide steel bolster at fixed bearings on Pier 23.



SECTION

ELEVATION

STEEL BOLSTER DETAILS

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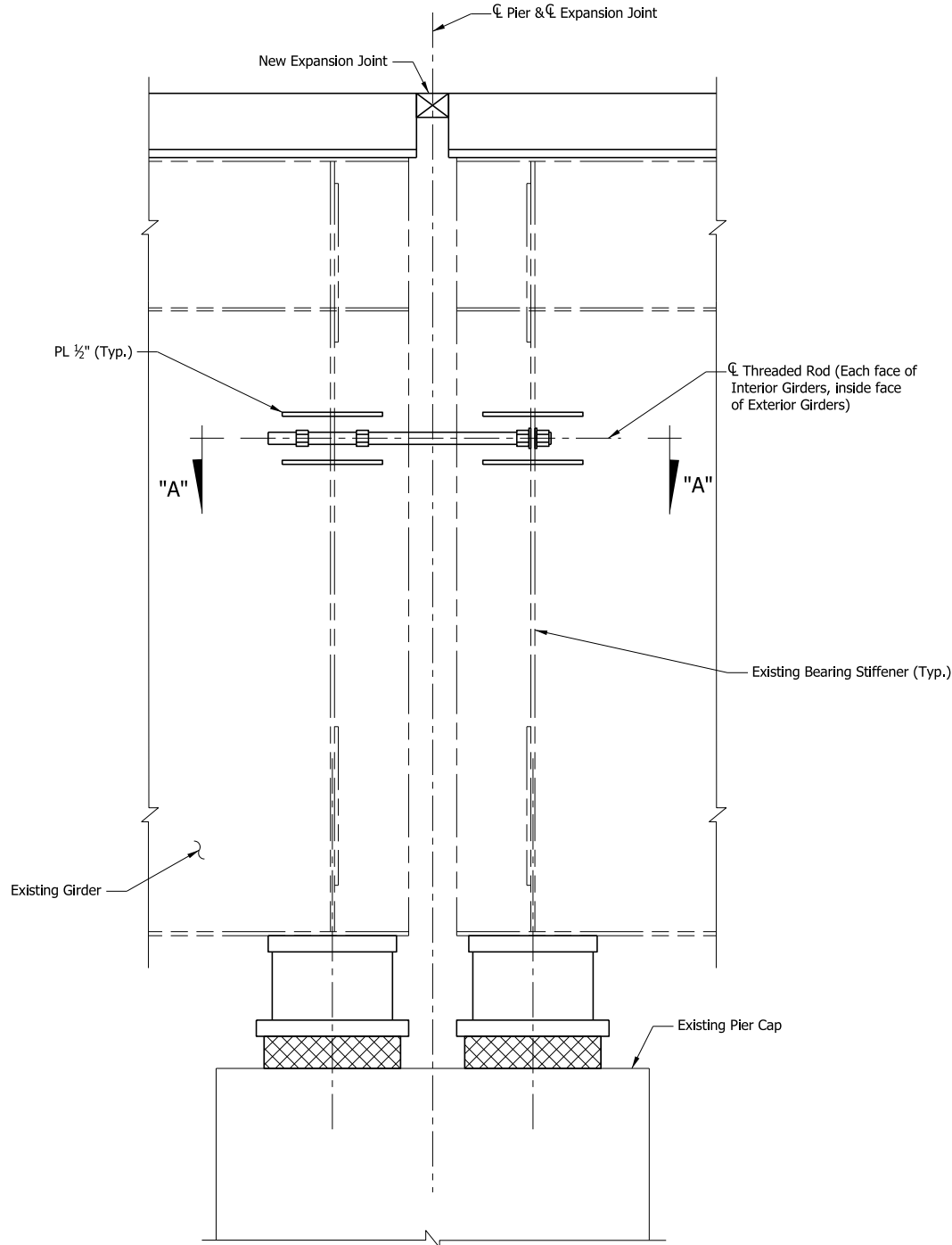
CONSTRUCTION COMPANY, INC.

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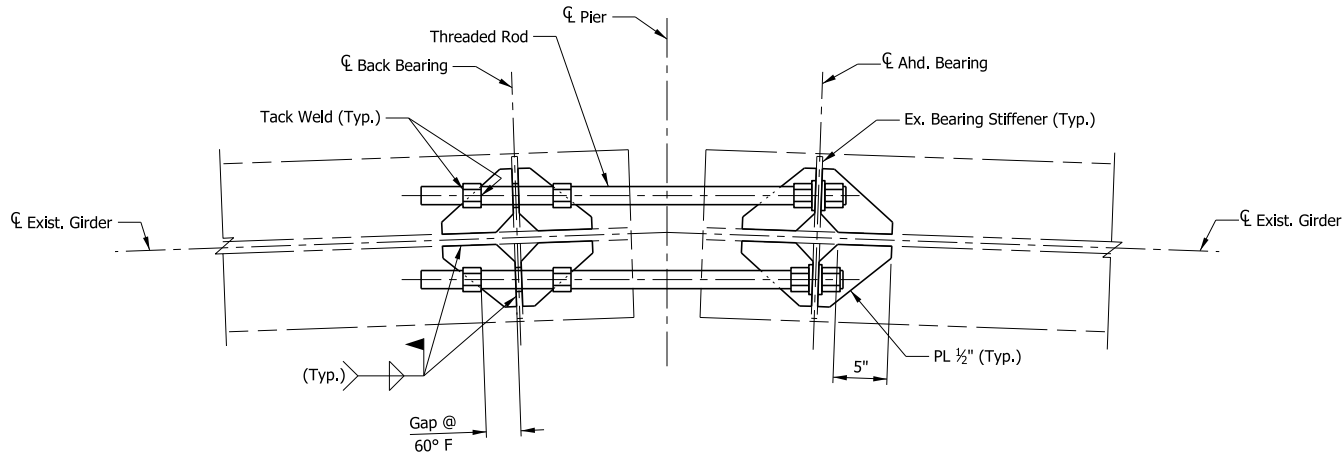
INDIANA DEPARTMENT OF TRANSPORTATION
BEARING REPLACEMENT

HORIZONTAL SCALE 3/8" = 1'-0"	BRIDGE FILE I64-123-04691 E
VERTICAL SCALE 3/8" = 1'-0"	DESIGNATION 1702255, 1592187
SURVEY BOOK .	SHEETS 29 OF 35
CONTRACT B-40719	PROJECT 1702255, 1592187

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ELEVATION



SECTION A-A

- Notes:
1. Threaded rods shall be ASTM A722 Grade 150.
 2. Field drill holes in existing bearing stiffeners to accommodate threaded rods.
 3. Coordinate location of longitudinal restrainer with web repair details.

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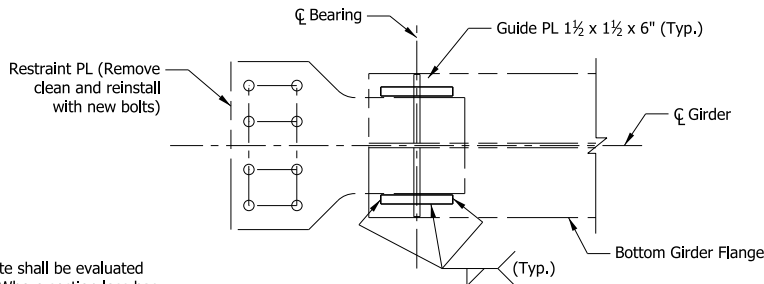
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: LER	DRAWN: EAK	
CHECKED:	CHECKED:	

INDIANA DEPARTMENT OF TRANSPORTATION
LONGITUDINAL RESTRAINERS

HORIZONTAL SCALE 3/8" = 1'-0"	BRIDGE FILE I64-123-04691 E
VERTICAL SCALE 3/8" = 1'-0"	DESIGNATION 1702255, 1592187
SURVEY BOOK .	SHEETS 30 OF 35
CONTRACT B-40719	PROJECT 1702255, 1592187

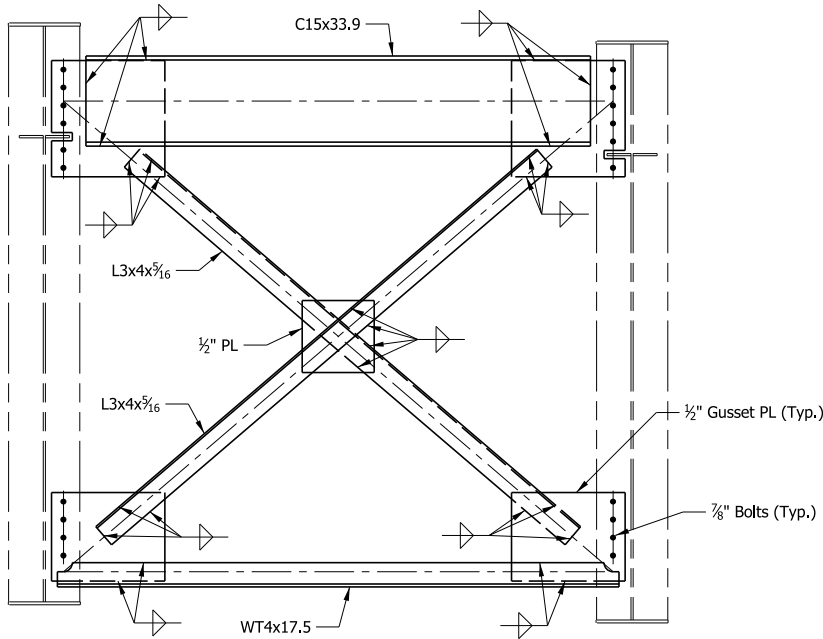
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Note:
The restraint plate shall be evaluated for section loss. Where section loss has occurred that would impact the original capacity of the lateral restraint system, the plate shall be replaced.



LATERAL RESTRAINT REPAIR - 6

- Lateral Restraint Repair Notes:
1. Unbolt and remove existing restraint plate, Remove existing guide plates and grind welds smooth.
 2. Clean flanges and restraint plate.
 3. Reinstall restraint plate with new bolts.
 4. Weld new guide plates to girder flange.



CROSS FRAME REPLACEMENT - 12C

Note: Refer to existing plans for dimensions.

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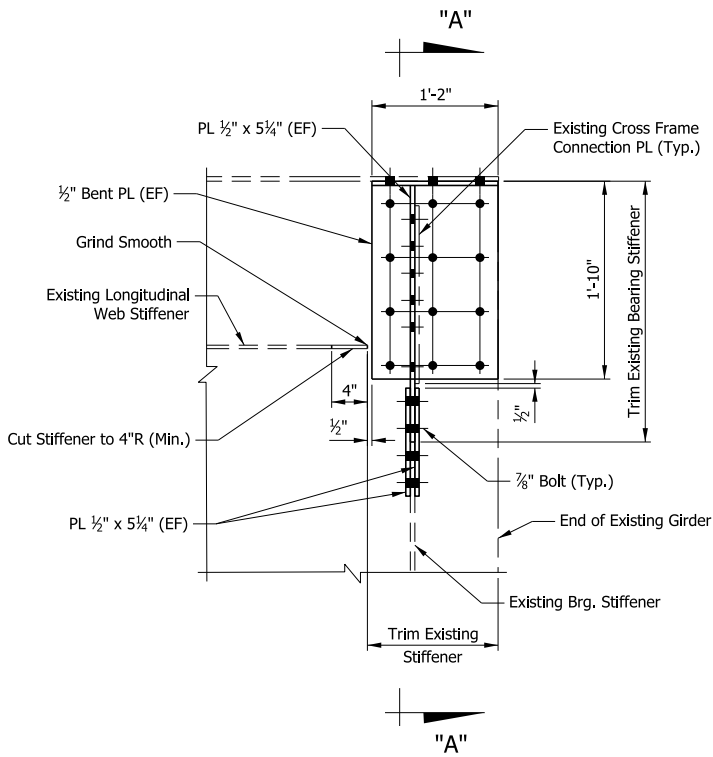
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CONSTRUCTION COMPANY, INC.

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DESIGNED: LER	DRAWN: EAK	
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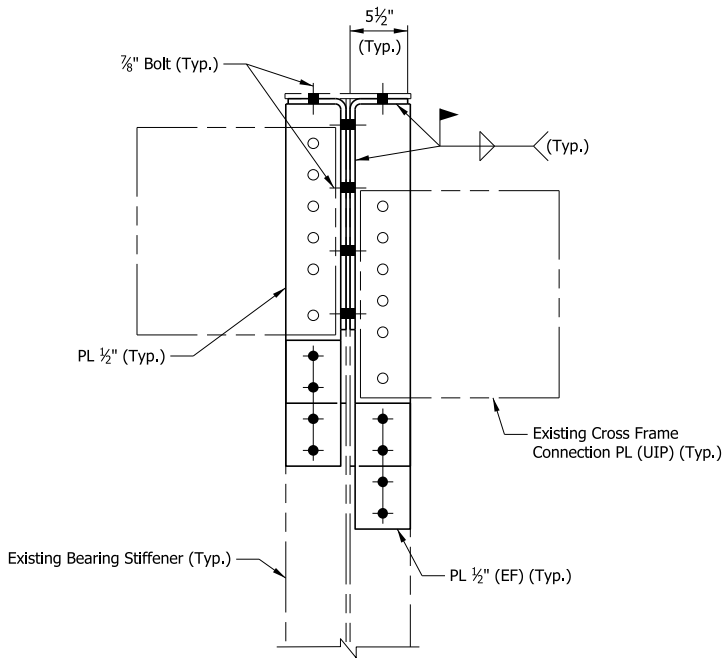
INDIANA
DEPARTMENT OF TRANSPORTATION

STEEL REPAIR CONCEPT DETAILS - 1

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3/8" = 1'-0"	I64-123-04691 E
VERTICAL SCALE	DESIGNATION
3/8" = 1'-0"	1702255, 1592187
SURVEY BOOK	SHEETS
	31 OF 35
CONTRACT	PROJECT
B-40719	1702255, 1592187

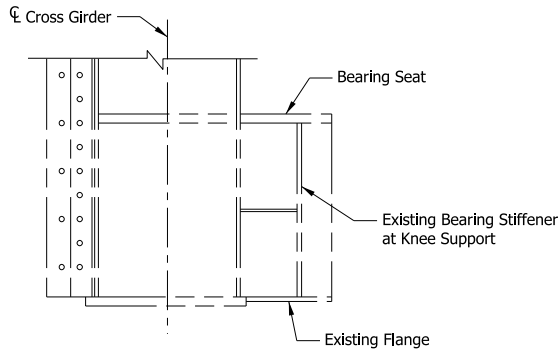


ELEVATION



VIEW A-A

WEB REPAIR - 12A3



KNEE SUPPORT - 12H

Notes:

1. Some deterioration and bent plates noted on bottom flanges. Extent and nature of section loss to be confirmed during hands-on inspection. No repairs assumed for preaward phase.
2. Blast clean area and repaint.

Web Repair Sequence:

1. Blast clean repair area.
2. Remove cross frame connection PL bolts at bearing stiffener on each side of web.
3. Cut and remove existing bearing stiffener within limits shown. Grind out existing welds.
4. Cut and remove existing longitudinal web stiffener within limits shown. Grind out existing welds. Cut 4" transition radius at new end of stiffener.
5. Install bent PL's on each side of web.
6. Repair bearing stiffener.
7. Reconnect cross frames to the bearing stiffener with new bolts.

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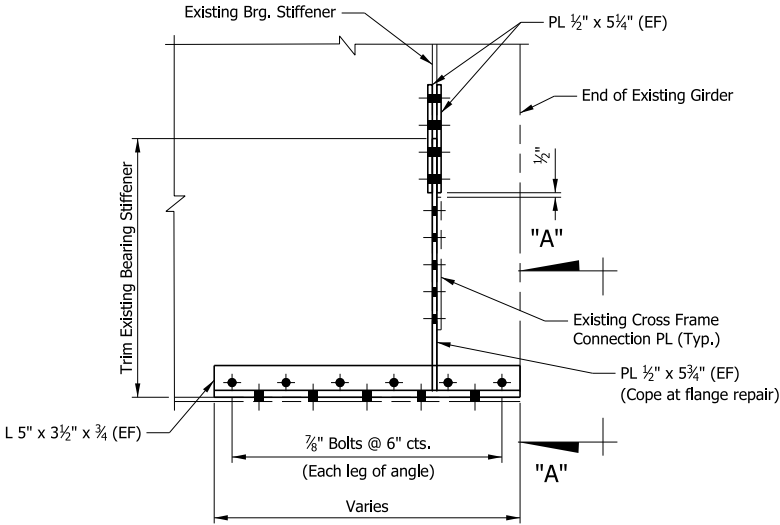
CONSTRUCTION COMPANY, INC.

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: LER	DRAWN: EAK	
CHECKED:	CHECKED:	

INDIANA DEPARTMENT OF TRANSPORTATION
STEEL REPAIR CONCEPT DETAILS - 2

HORIZONTAL SCALE 3/8" = 1'-0"	BRIDGE FILE I64-123-04691 E
VERTICAL SCALE 3/8" = 1'-0"	DESIGNATION 1702255, 1592187
SURVEY BOOK .	SHEETS 32 OF 35
CONTRACT B-40719	PROJECT 1702255, 1592187

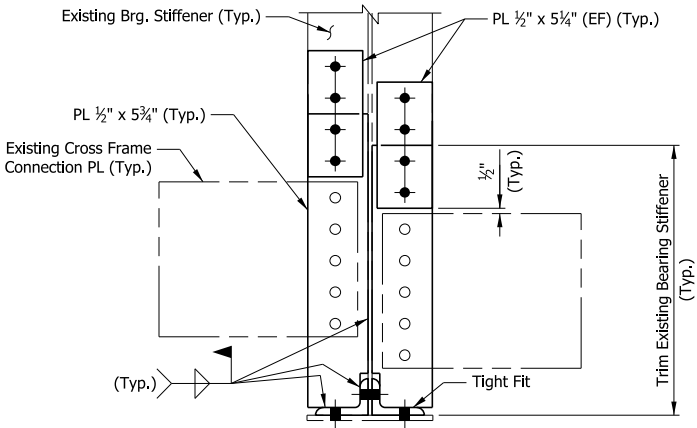
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FLANGE REPAIR - 12F

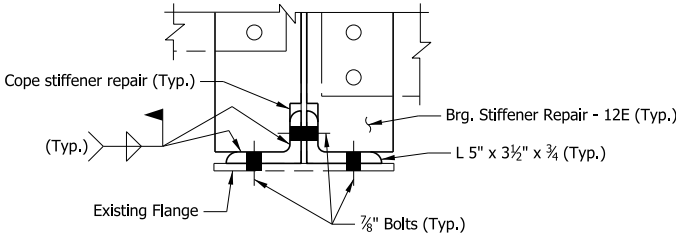
Note:
Repair at girder end shown. Repair similar at other locations.
Refer to Bearing Stiffener Repair - 12E for details not shown.

Coordinate flange bolt layout with bearing detail.



BEARING STIFFENER REPAIR - 12E

Note: Stiffener repair shown at location with flange repair.
Similar where no flange repair is required.



VIEW A-A

Bearing Stiffener/Flange Repair Sequence:

1. Blast clean repair area.
2. Remove cross frame connection PL bolts at bearing stiffener on each side of the web.
3. Cut and remove existing bearing stiffener within limits shown. Grind out existing welds.
4. Perform flange repair.
5. Repair bearing stiffener.
6. Reconnect cross frames to the bearing stiffener with new bolts.

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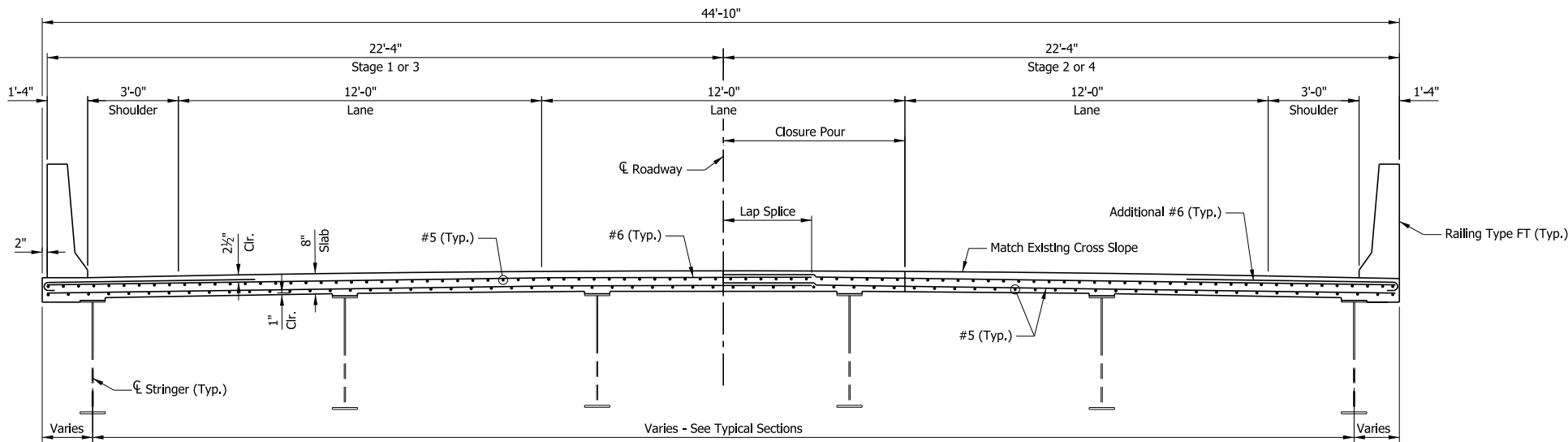
CONSTRUCTION COMPANY, INC.

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DESIGNED: LER	DRAWN: EAK	
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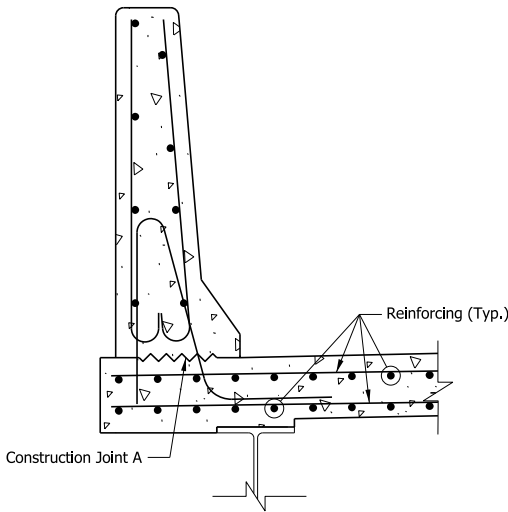
INDIANA
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STEEL REPAIR CONCEPT DETAILS - 3

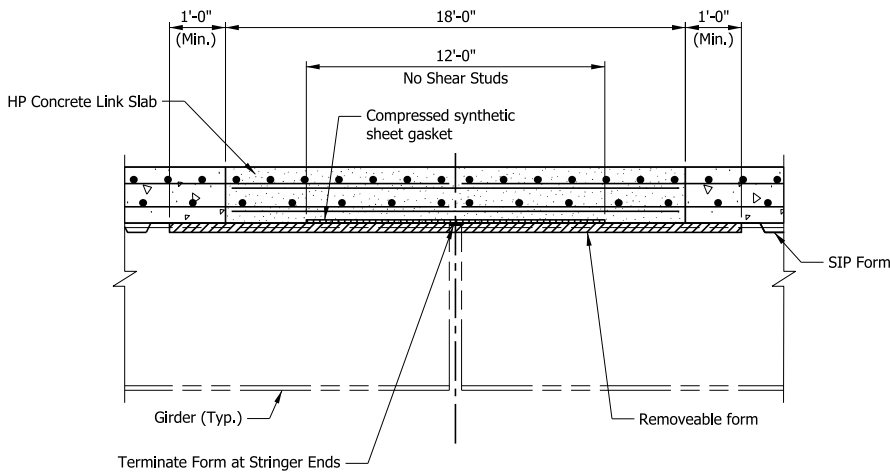
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3/8" = 1'-0"	I64-123-04691 E
VERTICAL SCALE	DESIGNATION
3/8" = 1'-0"	1702255, 1592187
SURVEY BOOK	SHEETS
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TYPICAL SECTION
(LOOKING EAST)



DETAIL AT RAILING



LINK SLAB DETAIL

- Notes:
- Deck concrete shall be Class C, with $f'c = 4$ ksi.
 - Link Slab HP concrete shall be Modified Class C. The standard mix shall be modified to include fiber reinforcement as specified in Attachment 14-3: USP Link Slabs.
 - Reinforcing steel shall be Grade 60, and epoxy coated.
 - All exposed roadway surfaces, concrete railing, and outside copings shall be sealed from drip bead to drip bead.
 - Stay-in-place metal forms shall be in accordance with INDOT Specifications Section 702.
 - Decks shall be constructed with longitudinal grooving in accordance with Attachment 14-1: USP Longitudinal Grooving.
 - New barrier delineators shall be placed at a 40-foot maximum spacing on all bridges.
 - Reuse existing shear connectors. Additional shear connections may be required to meet current design standards or where the connectors are deteriorated and/or damaged.

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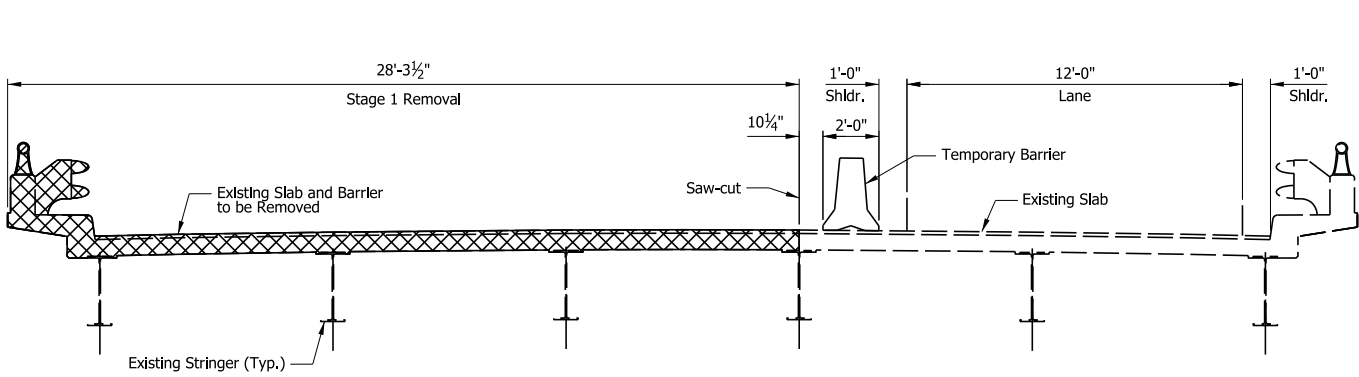
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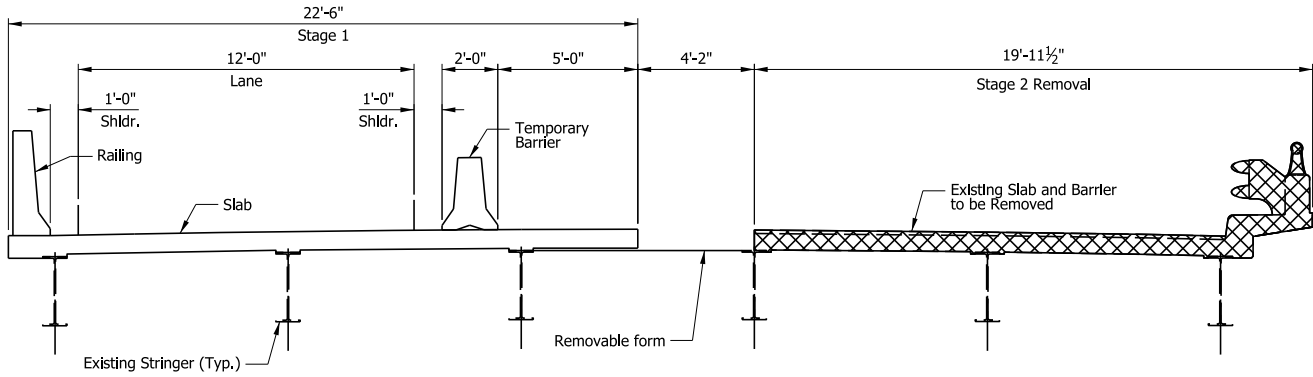
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: LER	DRAWN: EAK	
CHECKED:	CHECKED:	

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SLAB DETAILS

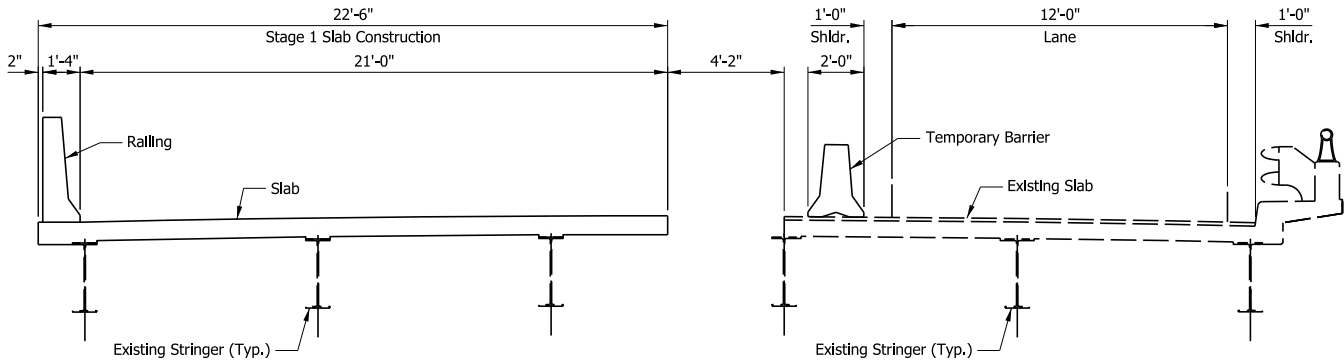
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VERTICAL SCALE	DESIGNATION
SURVEY BOOK	SHEETS
CONTRACT	PROJECT
B-40719	1702255, 1592187



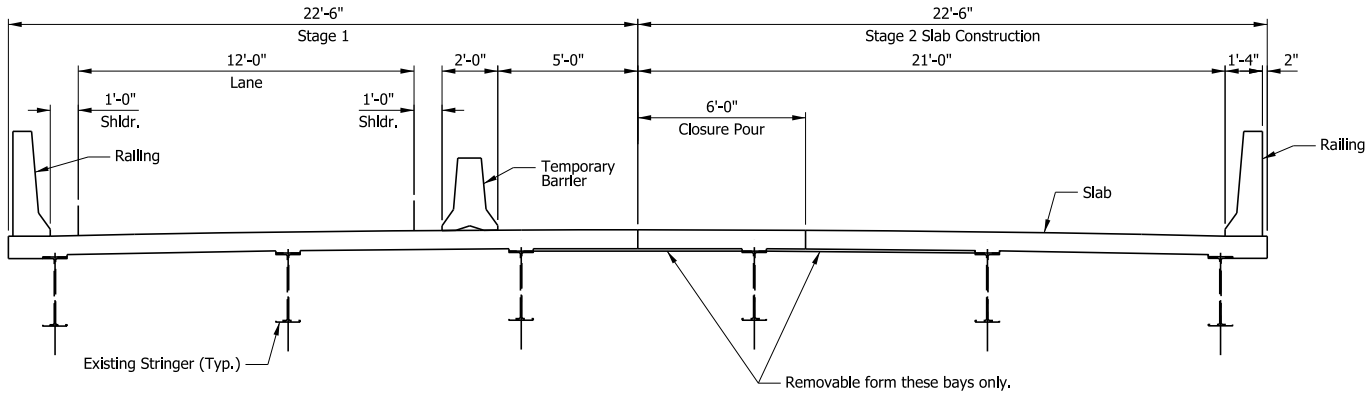
STAGE 1 - REMOVAL
(LOOKING EAST)



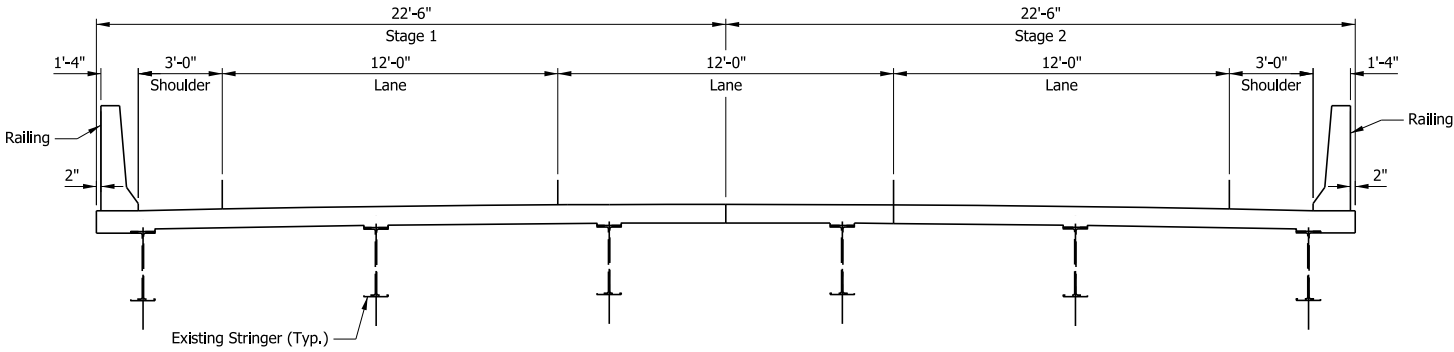
STAGE 2 - REMOVAL
(LOOKING EAST)



STAGE 1 - CONSTRUCTION
(LOOKING EAST)



STAGE 2 - CONSTRUCTION
(LOOKING EAST)



FINAL
(LOOKING EAST)

Note:
Stages 1 and 2 shown for lower deck, Stages 3 and 4 similar for upper deck.

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SLAB STAGE CONSTRUCTION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
	I64-123-04691 E
VERTICAL SCALE	DESIGNATION
	1702255, 1592187
SURVEY BOOK	SHEETS
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CONTRACT	PROJECT
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Indiana Approach Bridges

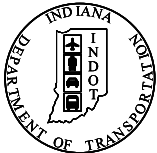


VOLUME 2

PROJECT	DESIGNATION
1702257	1702257
CONTRACT	BRIDGE FILE
B-40719	I64-123-02264 DWBL

STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
I64-123-02264 DWBL	CONTINUOUS STEEL GIRDER BRIDGE	9 SPANS: 85'-0"; 82'-0";60'-0"; 75'-0"; 75'-1; 75'-11"; 44'-9"; 78'-6"; 75'-0" SKEW: VARIES	SR 111 (MAIN STREET) AND NORFOLK SOUTHERN RAILROAD	100+23.00

INDIANA DEPARTMENT OF TRANSPORTATION



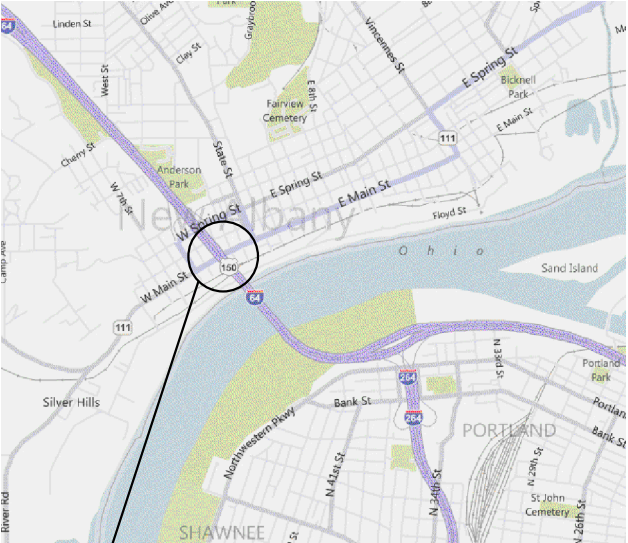
BRIDGE REHABILITATION PLANS FOR SPANS OVER 20 FEET

ROUTE: INTERSTATE 64 AT: RP 123+75
PROJECT NO. 1702257 P.E.

No Additional Right-of-Way
Required For This Project

R/W
1702257 CONST.

Bridge Maintenance and Repairs for Interstate 64 WB, Spans D, E, F, G, H, J, K, L & M
over the SR 111 (Main Street) and Norfolk Southern Railroad in Section 2,
T-3-S, R-6-E, New Albany Township, Floyd County, Indiana



SCALE 1" = 2000'

STRUCTURE NO. I64-123-02294 DWBL — NEW ALBANY TOWNSHIP
FLOYD COUNTY

LOCATION MAP

TRAFFIC DATA

A.A.D.T.	(2018)	45,200	V.P.D. (EB)	44,800	V.P.D. (WB)
A.A.D.T.	(2031)	45,490	V.P.D. (EB)	42,500	V.P.D. (WB)
D.H.V	(2031)	4,090	V.P.H. (EB)	3,830	V.P.H. (WB)
DIRECTIONAL DISTRIBUTION	50.3 % EB				
TRUCKS	11 % A.A.D.T. 6 % D.H.V.				

DESIGN DATA

DESIGN SPEED	55 M.P.H.
PROJECT DESIGN CRITERIA	3R (FREEWAY)
FUNCTIONAL CLASSIFICATION	PRINCIPAL ARTERIAL
RURAL/URBAN	URBAN
TERRAIN	LEVEL
ACCESS CONTROL	FULL



PROJECT LOCATION SHOWN BY —

LATITUDE: 38°16'55" N LONGITUDE: 85°49'32" W

BRIDGE LENGTH: 0.124 MI.
ROADWAY LENGTH: 0.000 MI.
TOTAL LENGTH: 0.124 MI.
MAX. GRADE: -0.90 %

RFE PLANS - NOT FOR CONSTRUCTION

Jacobs
501 North Broadway
St. Louis, Missouri 63102-2121
Telephone: 314.335.4000

kokosing
CONSTRUCTION COMPANY, INC.

PLANS
PREPARED BY: Jacobs Engineering Group Inc 314-335-4237
PHONE NUMBER

CERTIFIED BY: _____ DATE

APPROVED
FOR LETTING: _____ DATE
INDIANA DEPARTMENT OF TRANSPORTATION

INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS
TO BE USED WITH THESE PLANS.

BRIDGE FILE	
I64-123-02294 DWBL	
DESIGNATION	
1702257	
SURVEY BOOK	SHEETS
1	of 13
CONTRACT	PROJECT
B-40719	1702257

INDEX	
SHEET NO.	SHEET TITLE
1	KEYMAP
2	INDEX SHEET
3	GENERAL NOTES
4	GENERAL PLAN & ELEVATION (1 of 2)
5	GENERAL PLAN & ELEVATION (2 of 2)
6	TYPICAL SECTIONS (1 of 2)
7	TYPICAL SECTIONS (2 of 2)
8	ABUTMENT MODIFICATION DETAILS
9	FRAMING PLAN (SPANS D, E & F)
10	FRAMING PLAN (SPANS G, H & J)
11	FRAMING PLAN (SPANS K, L & M)
12	STEEL REPAIR CONCEPT DETAILS
13	BEARING REPLACEMENT DETAILS

GENERAL NOTES:

SPECIFICATIONS

All work shall be in accordance with INDOT Standard Specifications (2020), Unique Special Provisions, and SMCP Project Technical Provisions.

STEEL REPAIRS

The scope and nature of repairs shown in the plans are based on inspection reports and other RID documents, and are provided for preliminary bidding purposes only. They are intended to capture the common types of repairs with the understanding that repairs other / different than what is schematically shown may be required.

Final repair details, limits, and quantities will be established following hands-on inspections and load ratings.

All structural steel shall be ASTM A709 Grade 50 unless noted otherwise.

High strength bolts shall be ASTM F3125 Grade A325.

Clean and paint all structural steel in accordance with Attachment 14-9: USP 619-B-314-201201.

The existing paint system is a 3-coat system consisting of a base coat of metallizing, with an intermediate sealer and a polyurethane topcoat. Design-Build Contractor qualified personal shall inspect the coating system and provide IFA with a recommended coating preservation plan for the bridge with consideration of the repair work to be performed.

Determine and then match existing paint color using color samples from the approved paint supplier.

EXPANSION JOINT REPLACEMENT

Replace joints at indicated locations.

Strip seal expansion joints (Type SS) shall be in accordance with INDOT Standard Specifications Section 724.

Finger plate expansion joints shall be in accordance with Attachment 14-2: USP Finger Expansion Joints.

SUBSTRUCTURE CONCRETE REPAIR

Provide satisfactory protective shielding below all repair areas. Determine the extent of the repair areas in the presence of an IFA Representative. Outline the edge of the designated repair areas with a 1-inch sawcut depth.

Within the outlined repair areas, remove the deteriorated concrete to a depth of 1-inch behind the first mat of reinforcement bars to sound concrete. Allow uncovered or exposed reinforcement bars to have a 1-inch clearance all around. If concrete is unsound at a depth of 1-inch behind the reinforcement bars, do not remove any additional concrete without the approval of IFA's Representative.

Square-out/bevel the edge of the repair areas to key in construction. Use hand tools for removing deteriorated concrete. Use pneumatic hammers, if required, not exceeding an impact rating of 30 foot-pounds. If deteriorated concrete extends beyond the initially outlined repair area, enlarge area as directed by IFA's Representative.

After the removal operations are complete, clean all remaining debris and loose materials from the repair areas by abrasive blasting. Abrasive blast exposed reinforcement bars to SSPC-SP10. Epoxy coat the exposed reinforcement bars. Splice any damaged or heavily corroded reinforcement bars at 50% or more section loss in accordance with the AASHTO LRFD Bridge Design Specifications. If enough splice length is not available, drill new dowel holes and place dowel bars as directed. Use a pachometer to locate existing reinforcement when drilling dowel holes to avoid drilling thru existing bars.

Repair any concrete damaged during the operations to the satisfaction of IFA's Representative at no additional cost to IFA.

Install galvanic anodes in accordance with Attachment 14-5: USP Galvanic Anode.

Set forms to provide minimum concrete cover of 2 inches. If enough concrete cover on the existing reinforcement bars is not available, haunch the repair outward.

Just prior to placing concrete, air-blast all repair areas with oil-free compressed air to protect against any contaminant detrimental to the bond of the new concrete. Apply epoxy bonding compound to the repair area. While the epoxy bonding compound is still tacky, place repair concrete with No. 8 Coarse aggregate. Do not place concrete if the compound is no longer tacky or if the compound has hardened. Recoat any compound that is no longer tacky. Wire brush or abrasive blast any compound that has hardened and recoat repair area.

Surface seal new concrete.

BRIDGE DECK OVERLAY

Existing Bridge Deck:

The existing deck consists of an 6½" structural slab with 1½" integral wearing surface. The cover to the top mat of reinforcing was detailed to be 2½".

The slab was designed to accommodate a future wearing surface of 35 psf.

Remove 1½" of the cover concrete and any unsound concrete by hydrodemolition.

Recoat damaged epoxy coated reinforcing steel prior to placing overlay.

Perform full depth repairs as required.

Partial depth repairs may be prepared and cast with the overlay.

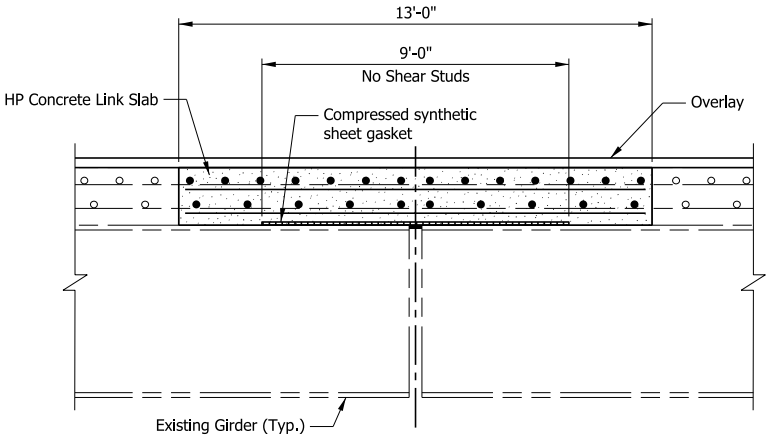
The bridge deck overlay shall be a Latex Modified Portland Cement Concrete (LMC) Overlay, Latex Modified Concrete Very Early Strength (LMC-VE), or Silica Fume Modified Concrete Overlay.

Place overlay to match existing vertical profile.

The location of the overlay construction joints shall be staggered from the longitudinal bridge deck construction joints by at least 1 foot. The existing construction joints are located at the lane lines. Refer to the existing rehab joints.

MOT / LAYOUT PLANS

See Roadway Plans for MOT and Layout Sheets.



LINK SLAB DETAIL

Notes:

- 1. Link Slab HP concrete shall be Modified Class C. The standard mix shall be modified to include fiber reinforcement as specfied in Attachment 14-3: USP Link Slabs.
- 2. Reinforcing steel shall be Grade 60, and epoxy coated.

\$FILES

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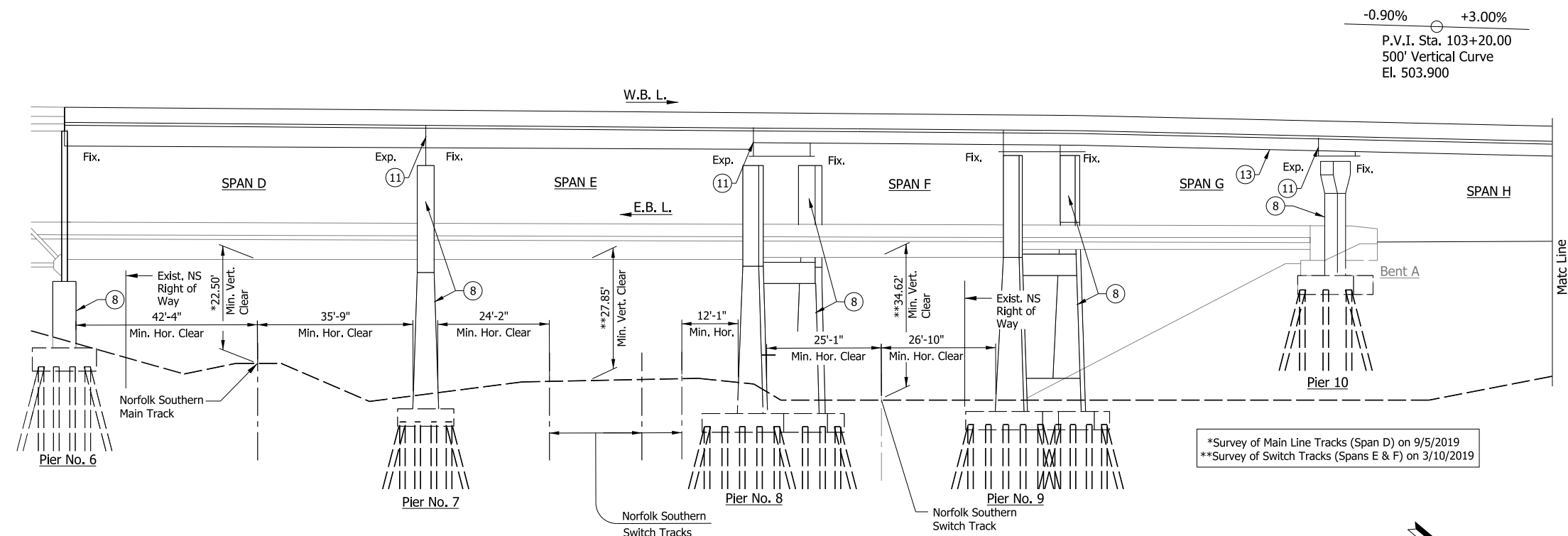
CONSTRUCTION COMPANY, INC.

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DESIGNED: LER _____		DRAWN: EAK _____	
CHECKED: _____		CHECKED: _____	

INDIANA
DEPARTMENT OF TRANSPORTATION

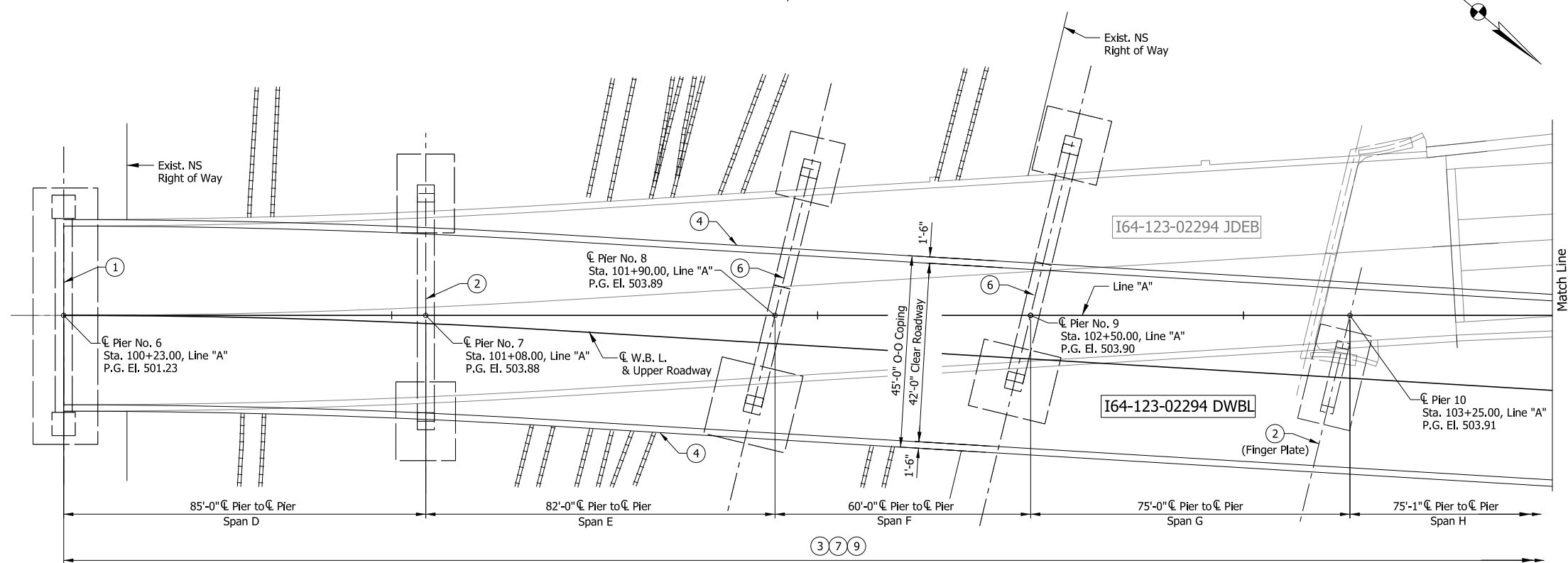
GENERAL NOTES

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NONE		I64-123-02294 DWBL	
VERTICAL SCALE		DESIGNATION	
NONE		1702257	
SURVEY BOOK		SHEETS	
.		3	OF 13
CONTRACT		PROJECT	
B-40719		1702257	



ELEVATION

Scale: $1/16" = 1'-0"$



PLAN

Scale: $1/16" = 1'-0"$

LEGEND

- ① Remove existing Expansion Joint Sealing System and replace with new expansion Joint.
- ② Remove existing Structural Expansion Joint, Class SS and replace with new expansion Joint.
- ③ Mill and overlay existing Bridge Deck.
- ④ Surface Seal existing concrete from face of bridge barrier around underside of the deck to the edge of existing beam.
- ⑤ Replace existing bearings.
- ⑥ Install link slab.
- ⑦ Replace existing drainage components in kind.
- ⑧ Perform Patching Concrete Structures on substructure.
- ⑨ Replace lighting components.
- ⑩ Clean and paint steel elements as required.
- ⑪ Retrofit beam end.
- ⑫ Remove and replace existing approach pavement with reinforced concrete bridge approach and terminal joint.
- ⑬ Repair existing cut in girder bottom flange.
- ⑭ Eliminate joint and modify to semi integral end bent.
- ⑮ Retrofit backer bar at butt joint locations.

RAILROAD REQUIRED PLAN NOTES

1. All Work on, over, under, or adjacent to Norfolk Southern right-of-way shall be done in accordance with the Norfolk Southern "Special Provisions for the Protection of Railway Interest".
2. "One Call" services do not locate buried railroad signal and communications lines. The contractor shall contact the railroad's representative two (2) days in advance of those places where excavation, pile driving, or heavy loads may damage railroad underground lines on railroad property. Upon request from the contractor or agency, railroad signal forces will locate and paint mark or flag railroad underground signal, communication, and power lines in the area to be disturbed for the contractor. The contractor shall avoid excavation or other disturbance of these lines which are critical to the safety of the railroad and the public. If disturbance or excavation is required near a buried railroad signal, communication, or power line, the line shall be potholed manually with careful hand excavation by the contractor and protected by the contractor during the course of the disturbance under the supervision and direction of a railroad signal representative.
3. The quantity and character of the drainage flow within Norfolk Southern right-of-way shall not be altered.
4. For Projects exceeding 30 days of construction, Contractor shall provide the flagman a small work area with a desk/counter and chair within the field/site trailer, including the use of bathroom facilities, where the flagman can check in/out with the Project, as well as to the flagman's home terminal. The work area should provide access to two (2) electrical outlets for recharging radio(s), and a laptop computer; and have the ability to print off needed documentation and orders as needed at the field/site trailer. This should aid in maximizing the flagman's time and efficiency on the Project.
5. The Contractor shall submit construction submittals in accordance with the Public Project Manual.
6. Existing substandard clearances shall not be further reduced for the temporary construction condition without written permission from Norfolk Southern.
7. The following criteria shall govern the use of falsework and formwork above or adjacent to operated tracks: a minimum vertical clearance of 22'-0" above the top of highest rail shall be maintained at all times, a minimum horizontal clearance of 14'-0" from centerline of track shall be maintained at all times.

NOTES

1. For Typical Sections, See Sheets 6 & 7.
2. See Framing Plans on Sheets 9, 10 & 11.

CONTINUOUS STEEL GIRDER BRIDGE
9 SPANS: 85'-0", 82'-0", 60'-0", 75'-0", 75'-1", 75'-11", 44'-9" 78'-6" 75'-0"
42'-0" CLEAR ROADWAY; SKEW: VARIES
I-64 WB OVER SR 111 (MAIN ST.) AND NORFOLK SOUTHERN RR
FLOYD COUNTY

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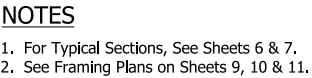
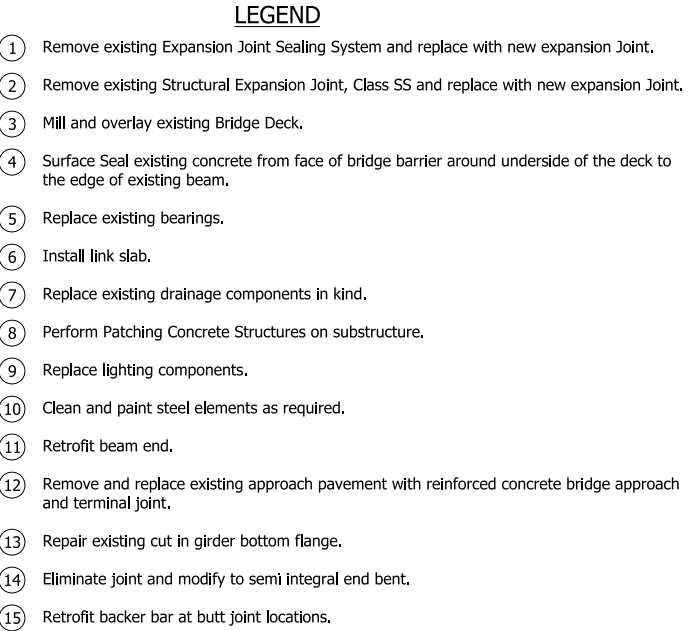
RECOMMENDED FOR APPROVAL		
	DESIGN ENGINEER	DATE
DESIGNED: LER	DRAWN: EAK	
CHECKED:	CHECKED:	

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GENERAL PLAN & ELEVATION
(1 of 2)

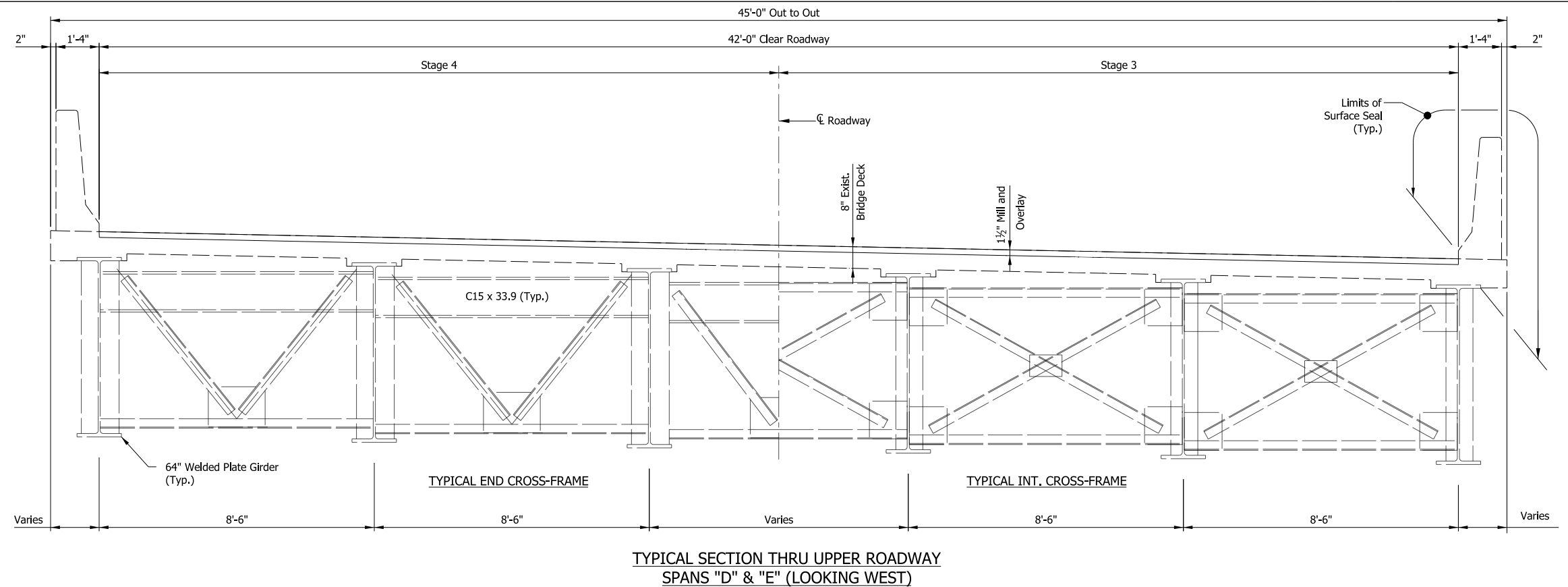
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VERTICAL SCALE	DESIGNATION		
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SURVEY BOOK	SHEETS		
	4	OF	13
CONTRACT	PROJECT		
B-40719	1702257		

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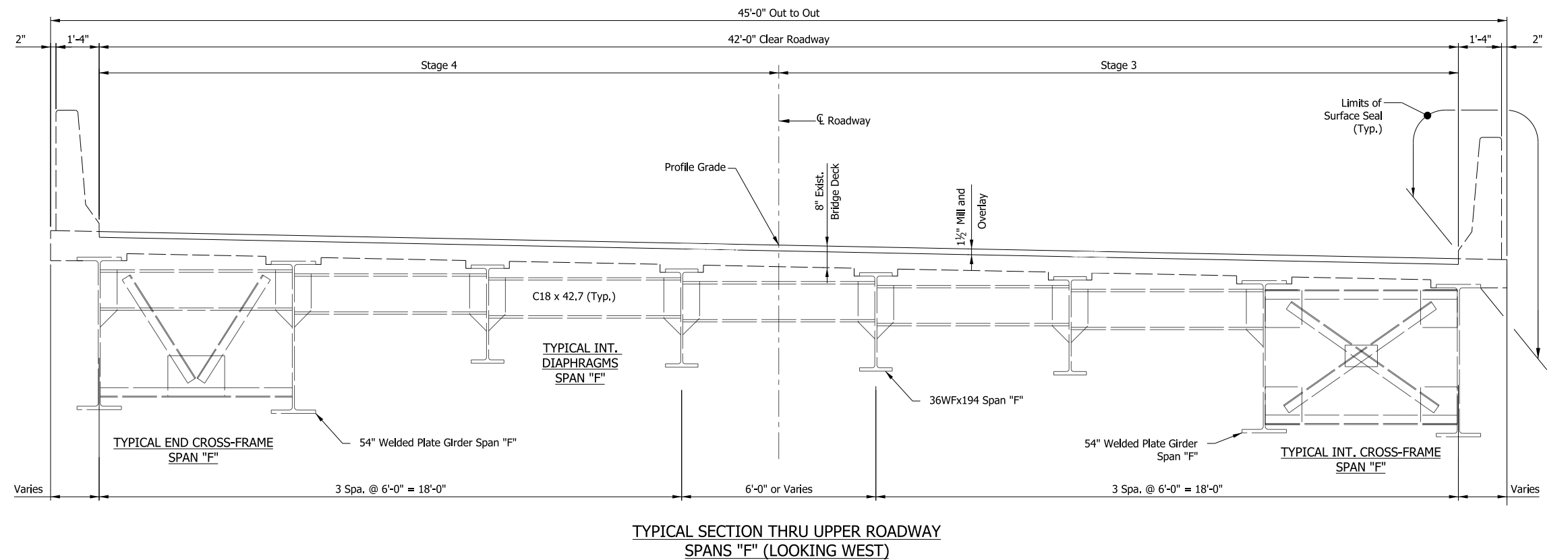


CONTINUOUS STEEL GIRDER BRIDGE
9 SPANS: 85'-0", 82'-0", 60'-0", 75'-0", 75'-1", 75'-11", 44'-9" 78'-6" 75'-0"
42'-0" CLEAR ROADWAY; SKEW: VARIES
I-64 WB OVER SR 111 (MAIN ST.) AND NORFOLK SOUTHERN RR
FLOYD COUNTY

SHEETS	DATE	REVISION	<div><div>Jacobs</div><div>501 North Broadway St. Louis, Missouri 63102-2121 Telephone: 314.335.4000</div></div> <div><div>kokosing</div><div>CONSTRUCTION COMPANY, INC.</div></div> <div></div>	RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE	BRIDGE FILE
						VERTICAL SCALE	164-123-02294 DWBL DESIGNATION 1702257



Notes:
1. See General Notes Sheet for Overlay notes.



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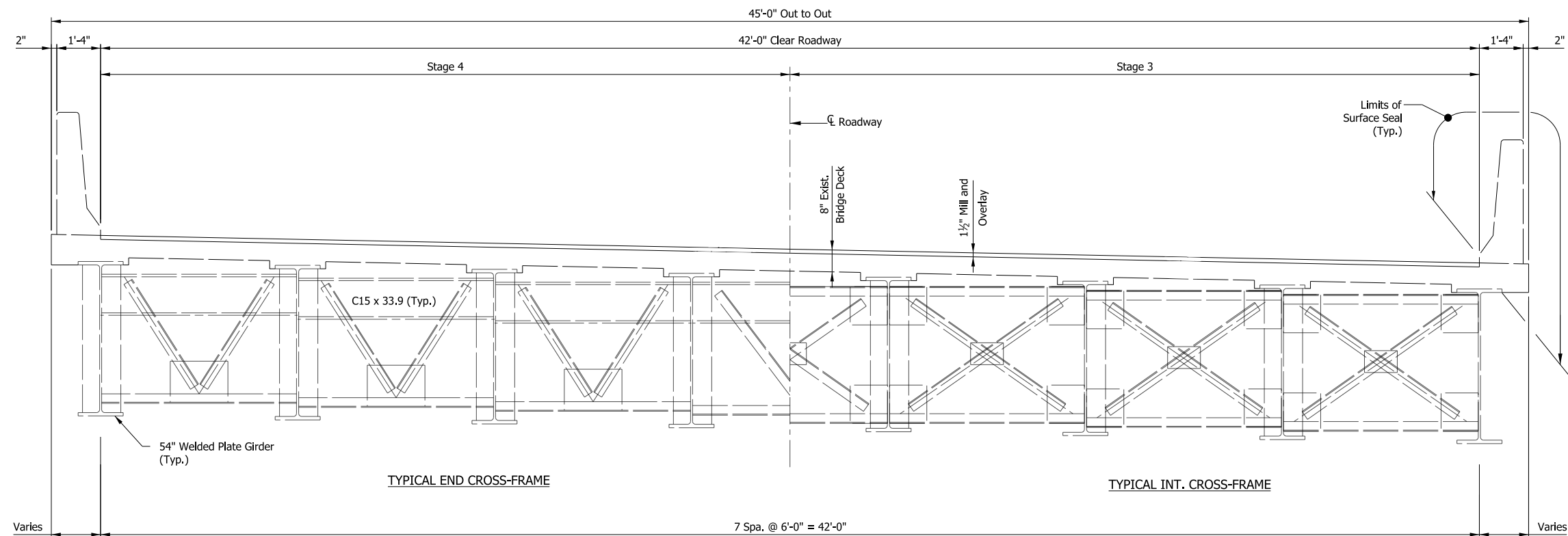
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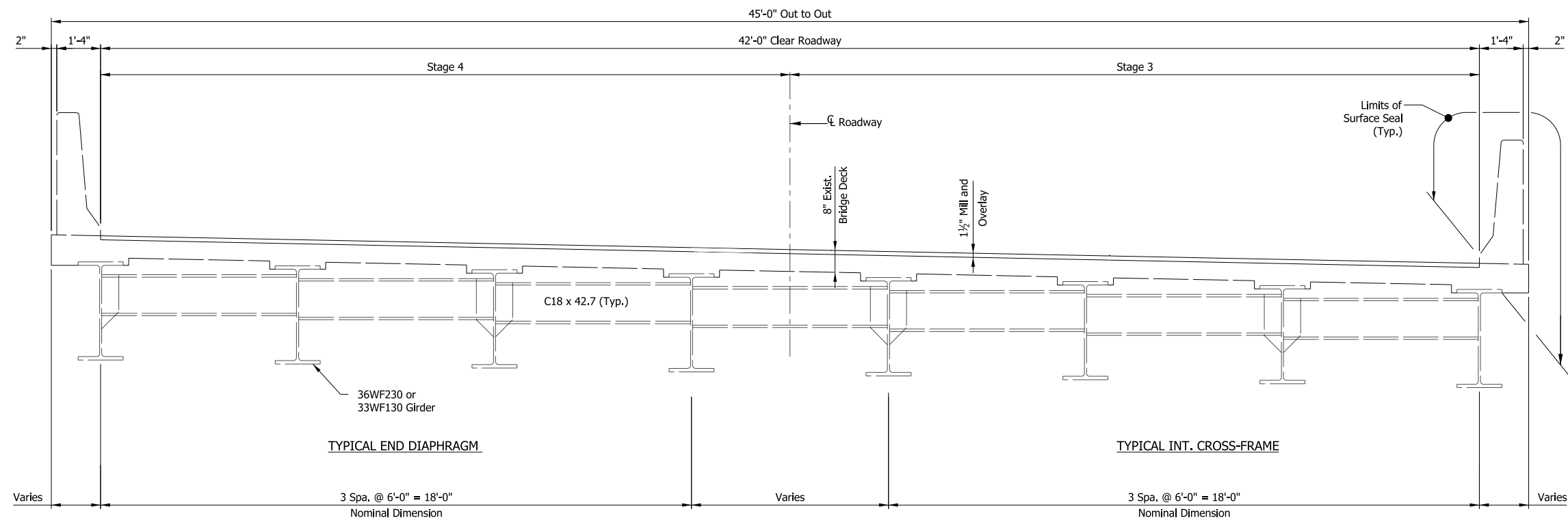
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TYPICAL SECTIONS
(1 of 2)

HORIZONTAL SCALE	BRIDGE FILE
VERTICAL SCALE	164-123-02294 DWBL
SURVEY BOOK	DESIGNATION
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	1702257



TYPICAL SECTION THRU UPPER ROADWAY
SPANS "G" (LOOKING WEST)



TYPICAL SECTION THRU UPPER ROADWAY
SPANS "H" THRU "M" (LOOKING WEST)

Notes:
1. See General Notes Sheet for Overlay notes.

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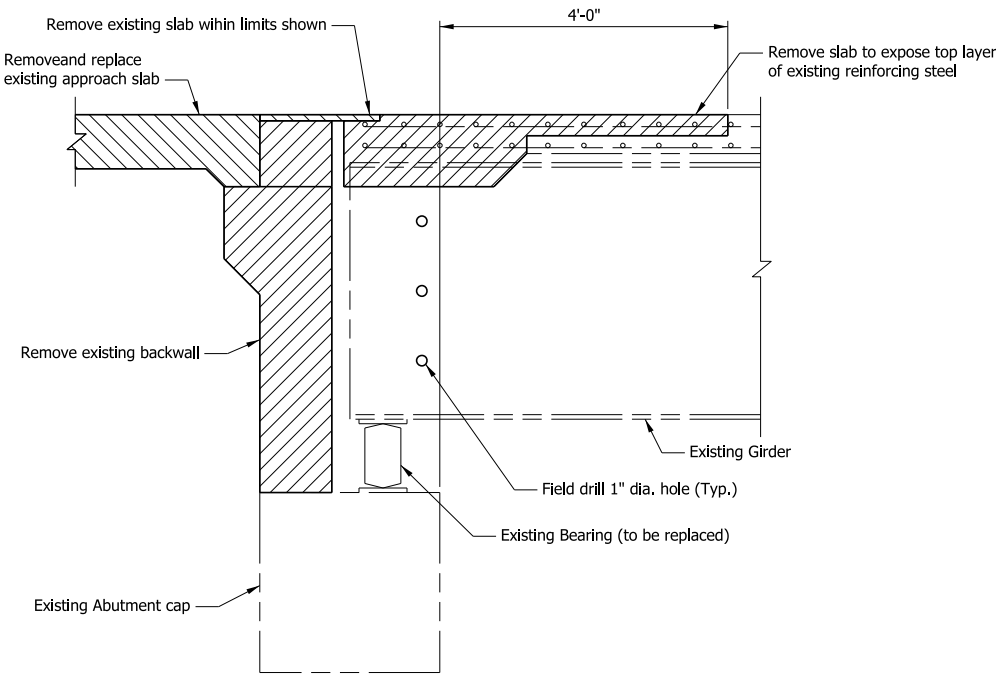
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DEPARTMENT OF TRANSPORTATION

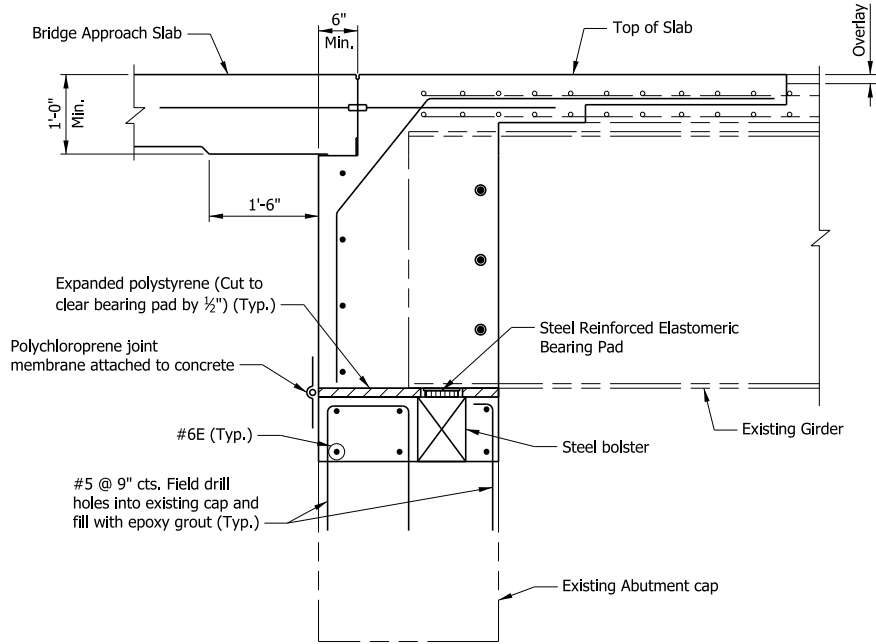
TYPICAL SECTIONS
(2 of 2)

HORIZONTAL SCALE	BRIDGE FILE
VERTICAL SCALE	164-123-02294 DWBL
SURVEY BOOK	DESIGNATION
CONTRACT	1702257
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	PROJECT
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ABUTMENT MODIFICATION - REMOVALS



ABUTMENT MODIFICATION
Section at Girder

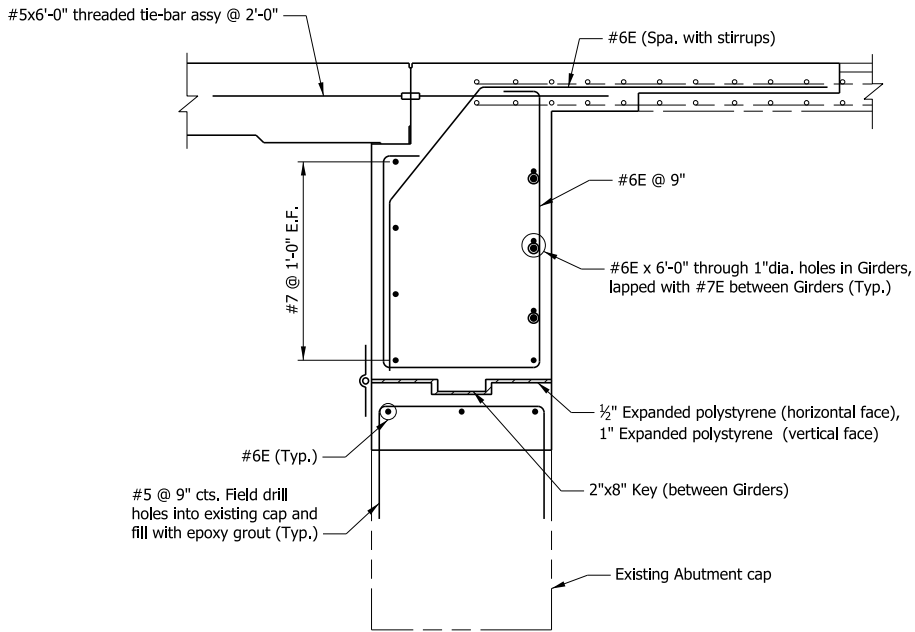
Approach Slab Notes:

Reinforced concrete approach slabs shall be removed and replaced to per INDOT IDM and in accordance with the following requirements.

1. New approach slab thickness shall be 12 inches and connected to existing pavement ledges using horizontal tie reinforcing bars in accordance with the Project Standards.
2. Approach slabs shall match the width of the bridge superstructure.
3. Approach slabs shall be constructed with longitudinal grooving in accordance with Attachment 14-1 : USP Longitudinal Grooving.
4. Approach slabs shall not be offset longitudinally at the terminal joint.
5. Terminal joints and/or sleeper slabs shall be designed and constructed in accordance with INDOT Design Memo 19-10.
6. Control joints shall be placed in all new approach slabs at lane lines, spaced no greater than 16 feet apart laterally. Control joints shall be identical to the upper 1.25-inch portion of the Type I-A joint.

Abutment Modification Notes:

1. Remove existing approach slab and backwall.
2. Perform bearing replacement. Provide temporary support for existing girders. Remove existing cross frames at girder ends.
3. Drill holes into existing cap and install new reinforcing bars for diaphragm in epoxy grout. Contractor shall take precautions to prevent cutting of existing reinforcing bars in cap when drilling.
4. Pour concrete up to elevation of new bearing.
5. Install reinforcing steel in diaphragm and slab. Pour concrete from bearing elevation to top of slab.
6. Install new approach slab per INDOT Standard Details.



ABUTMENT MODIFICATION
Section between Girders

Notes:

1. Concrete shall be Class C, with f'c = 4 ksi.
2. Reinforcing steel shall be Grade 60 and epoxy coated.
3. Coordinate abutment modifications with staged deck overlay work.

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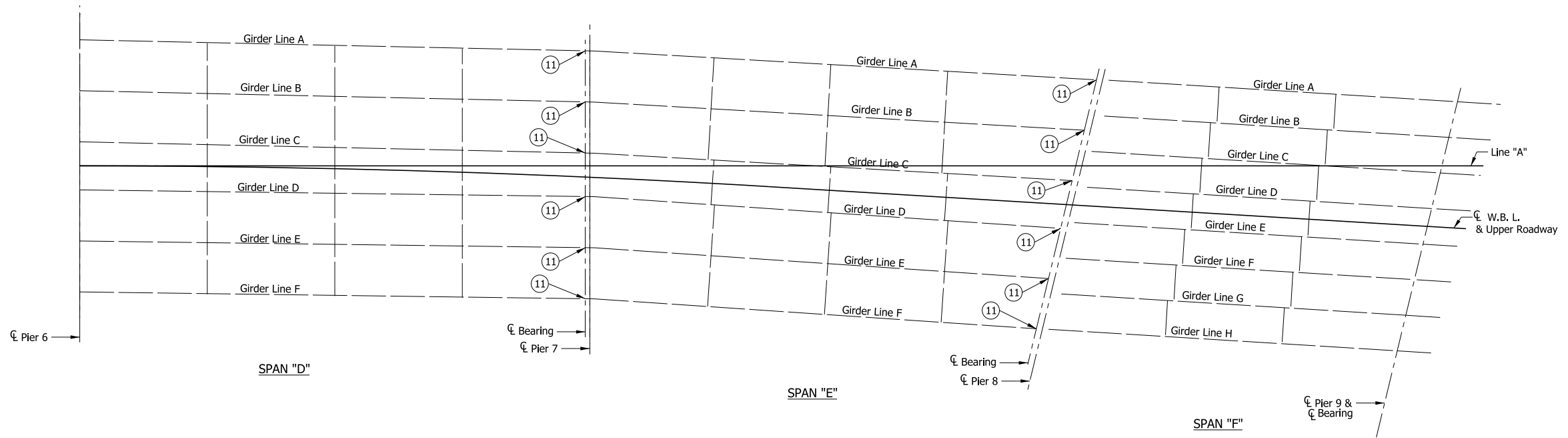
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CHECKED:	CHECKED:	

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ABUTMENT MODIFICATION DETAILS

HORIZONTAL SCALE	BRIDGE FILE		
3/8" = 1'-0"	I64-123-02294 DWBL		
VERTICAL SCALE	DESIGNATION		
3/8" = 1'-0"	1702257		
SURVEY BOOK	SHEETS		
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FRAMING PLAN
UPPER ROADWAY

LEGEND
⑪ Girder End Repair - 11

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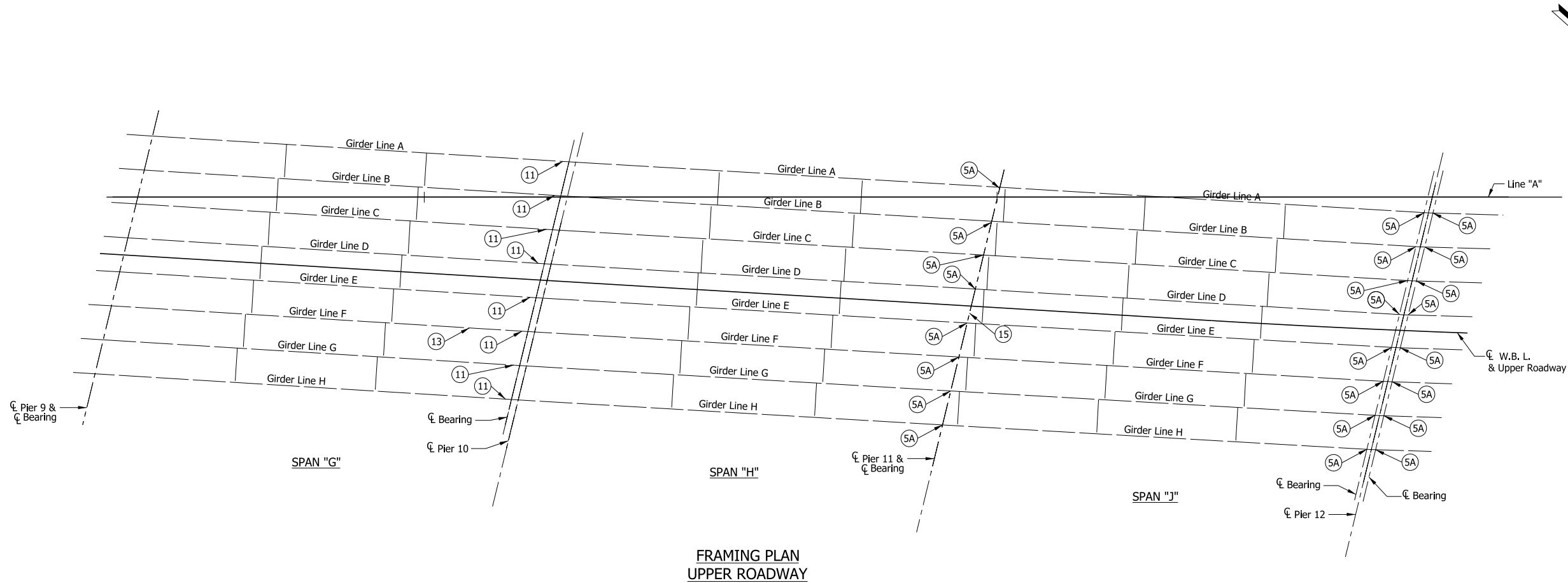
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DESIGN ENGINEER	DATE
DESIGNED: LER	DRAWN: EAK
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FRAMING PLAN
(Spans D, E & F)

HORIZONTAL SCALE	BRIDGE FILE	
VERTICAL SCALE	164-123-02294 DWBL	
DESIGNATION		
1702257		
SURVEY BOOK	SHEETS	
CONTRACT	9	OF 13
B-40719	PROJECT	
1702257		

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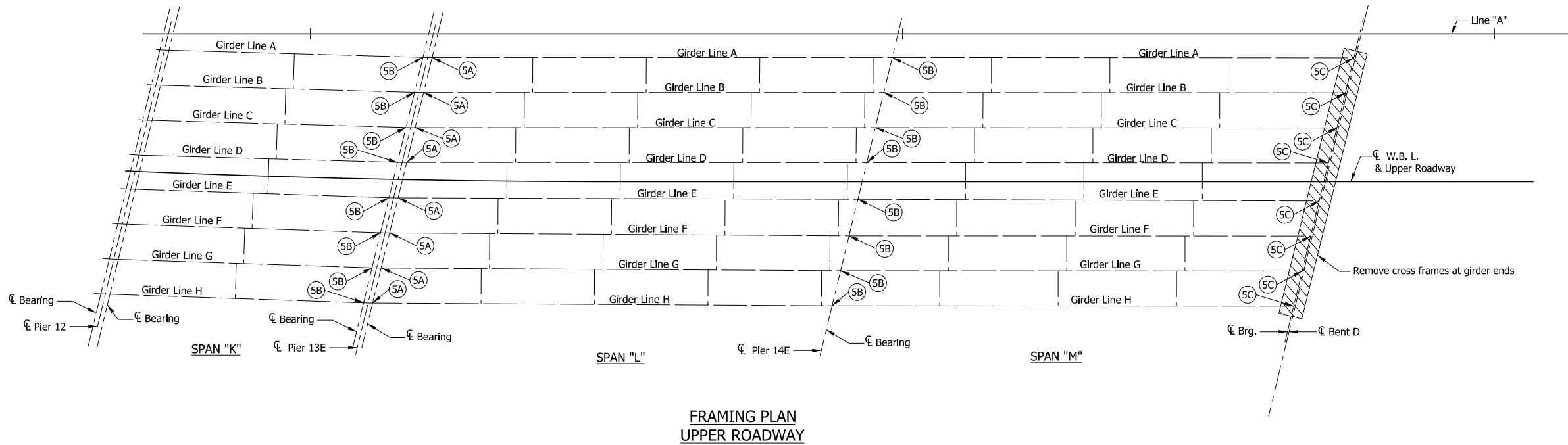
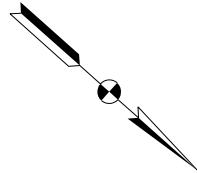


Girder Flange Cut Repair - 13:

- 1. Perform grinding to remove cut at flange.
- 2. Feather out to slope of 2.5:1 or less.
- 3. Direction of grinding shall be along the length of the flange.

LEGEND

- 5A Expansion Bearing Replacement - 5A
- 5B Fixed Bearing Replacement - 5B
- 5C Expansion Bearing Replacement - 5C
- 11 Girder End Repair - 11
- 13 Girder Flange Cut Repair - 13. See Notes.
- 15 Pier 11 Backer Bars - 15



LEGEND

- 5A Expansion Bearing Replacement - 5A
- 5B Fixed Bearing Replacement - 5B
- 5C Expansion Bearing Replacement - 5C

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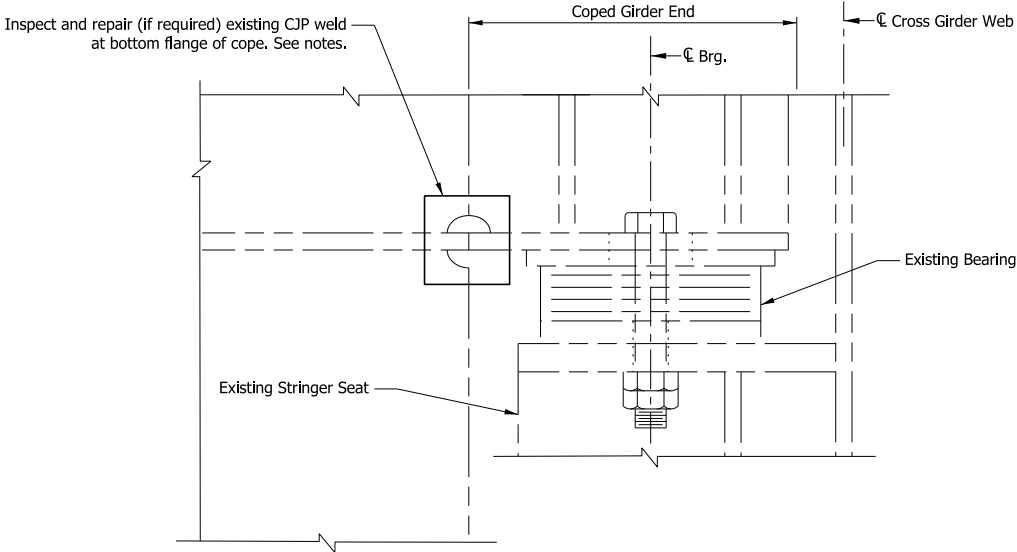
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: LER	DRAWN: EAK	
CHECKED:	CHECKED:	

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DEPARTMENT OF TRANSPORTATION

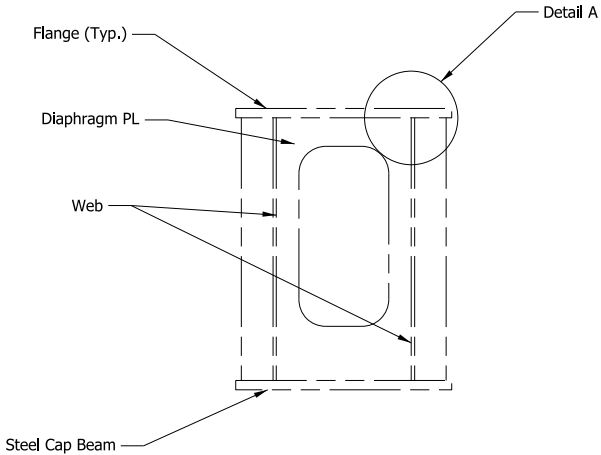
FRAMING PLAN
(Spans K, L & M)

HORIZONTAL SCALE	BRIDGE FILE		
	I64-123-02294 DWBL		
VERTICAL SCALE	DESIGNATION		
	1702257		
SURVEY BOOK	SHEETS		
	11	OF	13
CONTRACT	PROJECT		
B-40719	1702257		

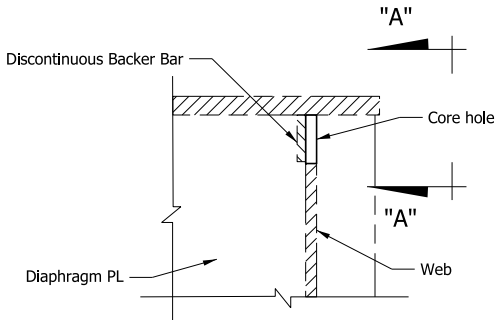
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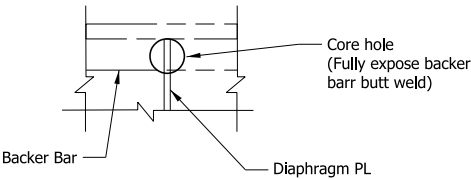
GIRDER END REPAIR - 11



PIER 11 BACKER BARS - 15



DETAIL A



SECTION A-A

NOTES:

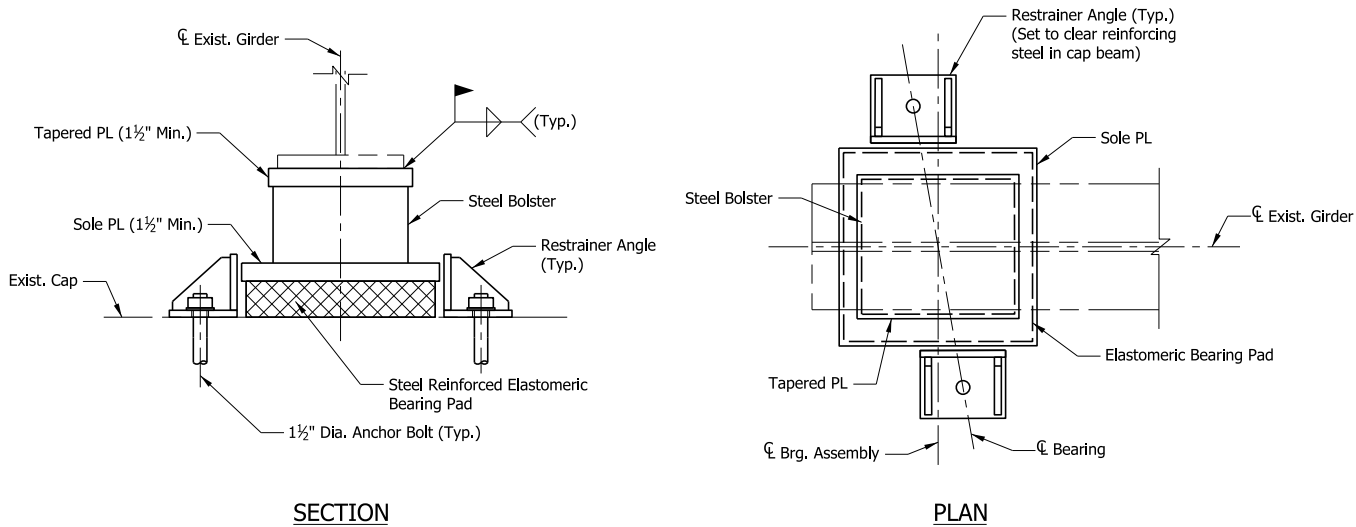
- 1. Inspect existing CJP weld at coped bottom flange by either UT or PAUT.
- 2. Weld testing shall be performed by inspector with at least NDT Level II UT certification.
- 3. All welds that are rejected shall be removed and repaired or a retrofit of the coped flanged performed.

COPED FLANGE WELD REPAIR:

- 1. The existing CJP welds shall be repaired in sections and/or temporarily supported as directed by the Engineer.
- 2. Excavate a v-notch to three quarters of the flange thickness along the weld using air arc gouging or grinding techniques, Fill the notch with weld metal, Repeat on the opposite side of the flange.
- 3. Preform UT or PAUT testing on the repaired welds,

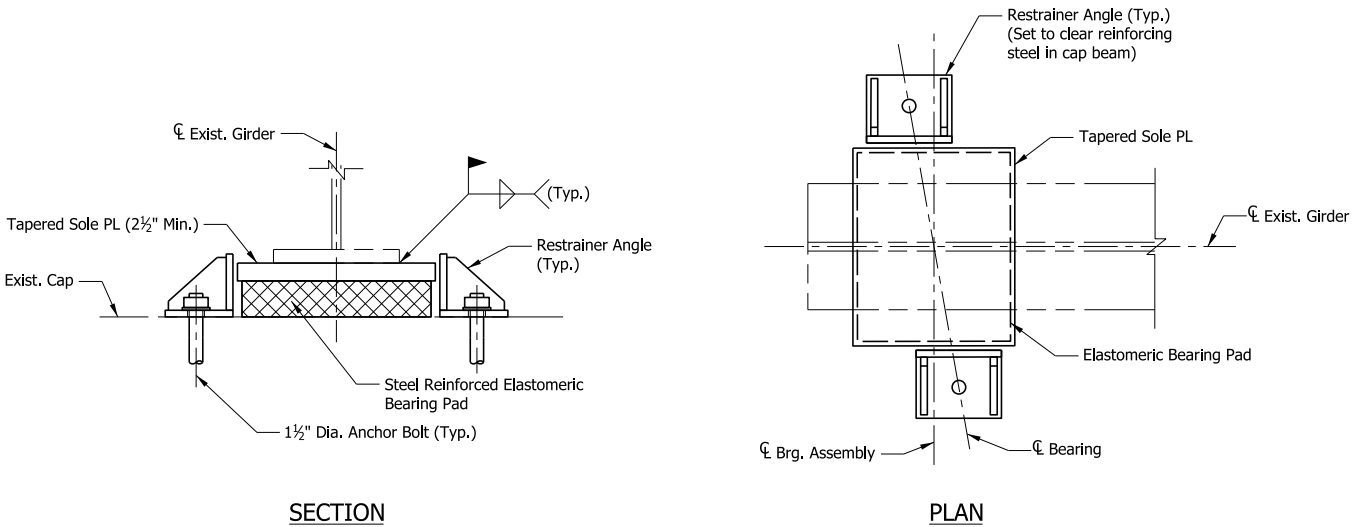
PIER 11 BACKER BARS RETROFIT:

- 1. Retrofit existing baker rod butt joint at the known location on the west end of Pier 11 cap beam on the north web plate.
- 2. Retrofit core holes shall fully expose the backer bar butt weld and shall be covered with a rodent screen.
- 3. Inspect backer bar at all intersections with interior diaphragm plates for hidden butt joints and perform retrofit as required. If butt welds can not be visibly detected after cleaning, a hole shall be cored in the diaphragm plate adjacent to the backer bar to provide visual access.



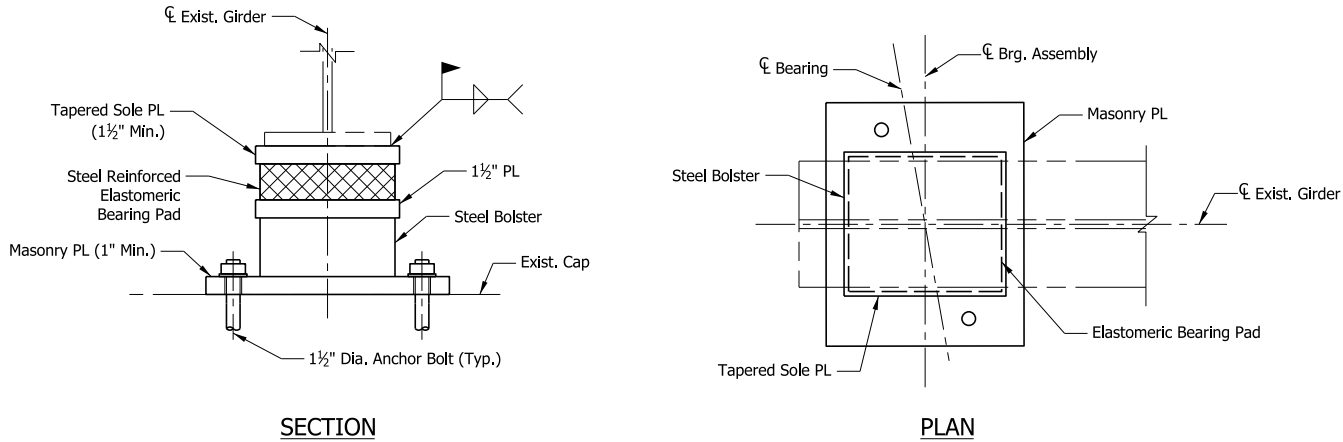
EXPANSION BEARING REPLACEMENT - 5A

- Notes:
1. Refer to INDOT Standard Drawing E726-BEBP-04 for details of bearing pad and restrainer angles.
 2. Anchor bolts and nuts shall be galvanized.
 3. The restrainer shall be bolted or welded to the cross girder at Pier 11 and the bolster height decreased to accommodate the flange splice plates.



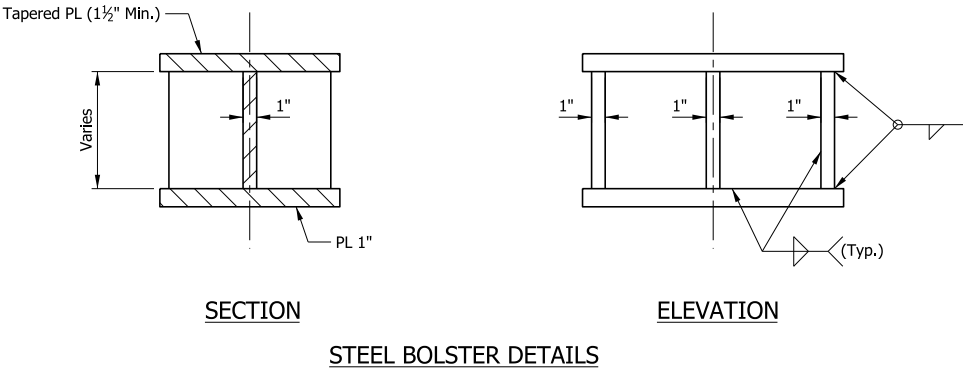
FIXED BEARING REPLACEMENT - 5B

- Notes:
1. Refer to INDOT Standard Drawing E726-BEBP-04 for details of bearing pad and restrainer angles.
 2. Anchor bolts and nuts shall be galvanized.



EXPANSION BEARING REPLACEMENT - 5C

- Notes:
1. Refer to INDOT Standard Drawing E726-BEBP-04 for details of bearing pad.
 2. Anchor bolts and nuts shall be galvanized.



STEEL BOLSTER DETAILS

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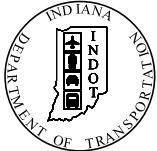
BEARING REPLACEMENT DETAILS

HORIZONTAL SCALE	BRIDGE FILE
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VERTICAL SCALE	DESIGNATION
3/8" = 1'-0"	1702257
SURVEY BOOK	SHEETS
.	13 OF 13
CONTRACT	PROJECT
B-40719	1702257

PROJECT	DESIGNATION
1702258	1702258
CONTRACT	BRIDGE FILE
B-40719	I64-123-02294 DEBL

STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
I64-123-02294 DEBL	CONTINUOUS STEEL GIRDER BRIDGE	3 SPANS: 1 @ 44'-9"; 1 @ 78'-5"; 1 @ 44'-9" SKEW: 76°24'00" RT	SR 111 (MAIN ST.)	104+75.00

INDIANA DEPARTMENT
OF TRANSPORTATION



BRIDGE REHABILITATION PLANS

FOR SPANS OVER 20 FEET

ROUTE: INTERSTATE 64 AT: RP 123+75

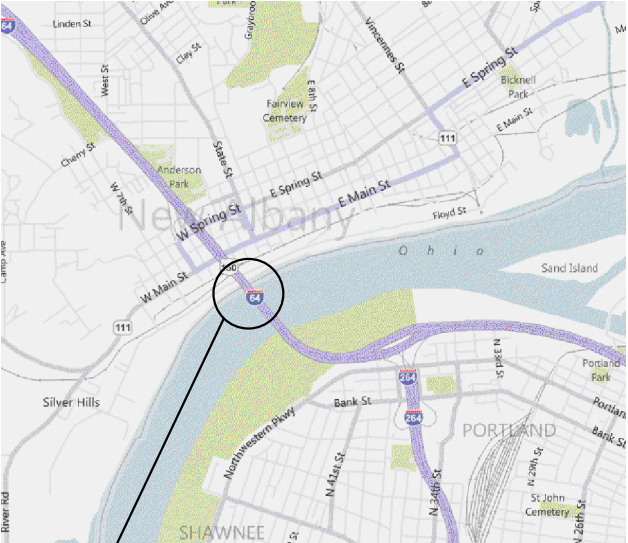
PROJECT NO. 1702258 P.E.

No Additional Right-of-Way
Required For This Project

R/W

1702258 CONST.

Bridge Maintenance and Repairs for Interstate 64 EB, Spans K, L, & M
over the Sr 111 (Main Street) in Section 2,
T-3-S, R-6-E, New Albany Township, Floyd County, Indiana



SCALE 1" = 2000'

STRUCTURE NO. I64-123-02294 DEBL

NEW ALBANY TOWNSHIP
FLOYD COUNTY

LOCATION MAP

TRAFFIC DATA

A.A.D.T.	(2018)	45,200	V.P.D. (EB)	44,800	V.P.D. (WB)
A.A.D.T.	(2031)	45,490	V.P.D. (EB)	42,500	V.P.D. (WB)
D.H.V	(2031)	4,090	V.P.H. (EB)	3,830	V.P.H. (WB)
DIRECTIONAL DISTRIBUTION	50.3 % EB				
TRUCKS	11 % A.A.D.T. 6 % D.H.V.				

DESIGN DATA

DESIGN SPEED	55 M.P.H.
PROJECT DESIGN CRITERIA	3R (FREEWAY)
FUNCTIONAL CLASSIFICATION	PRINCIPAL ARTERIAL
RURAL/URBAN	URBAN
TERRAIN	LEVEL
ACCESS CONTROL	FULL



PROJECT LOCATION SHOWN BY

LATITUDE: 38°16'56" N LONGITUDE: 85°49'33" W

BRIDGE LENGTH: 0.032 MI.

ROADWAY LENGTH: 0.000 MI.

TOTAL LENGTH: 0.032 MI.

MAX. GRADE: -0.90 %

RFE PLANS - NOT FOR CONSTRUCTION

Jacobs

501 North Broadway
St. Louis, Missouri 63102-2121
Telephone: 314.335.4000

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CONSTRUCTION COMPANY, INC.

PLANS
PREPARED BY: Jacobs Engineering Group Inc 314-335-4237
PHONE NUMBER

CERTIFIED BY: DATE

APPROVED
FOR LETTING: INDIANA DEPARTMENT OF TRANSPORTATION DATE

INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS
TO BE USED WITH THESE PLANS.

BRIDGE FILE	
I64-123-02294 DEBL	
DESIGNATION	
1702258	
SURVEY BOOK	SHEETS
1	of 8
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B-40719	1702258

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SHEET NO.	SHEET TITLE
1	KEYMAP
2	INDEX SHEET
3	GENERAL NOTES
4	GENERAL PLAN & ELEVATION
5	TYPICAL SECTION
6	ABUTMENT MODIFICATION DETAILS
7	FRAMING PLAN (SPANS K, L & M)
8	BEARING REPLACEMENT DETAILS

\$FILES

DATE	REVISION

Jacobs
501 North Broadway
St. Louis, Missouri 63102-2121
Telephone: 314.335.4000

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CONSTRUCTION COMPANY, INC.

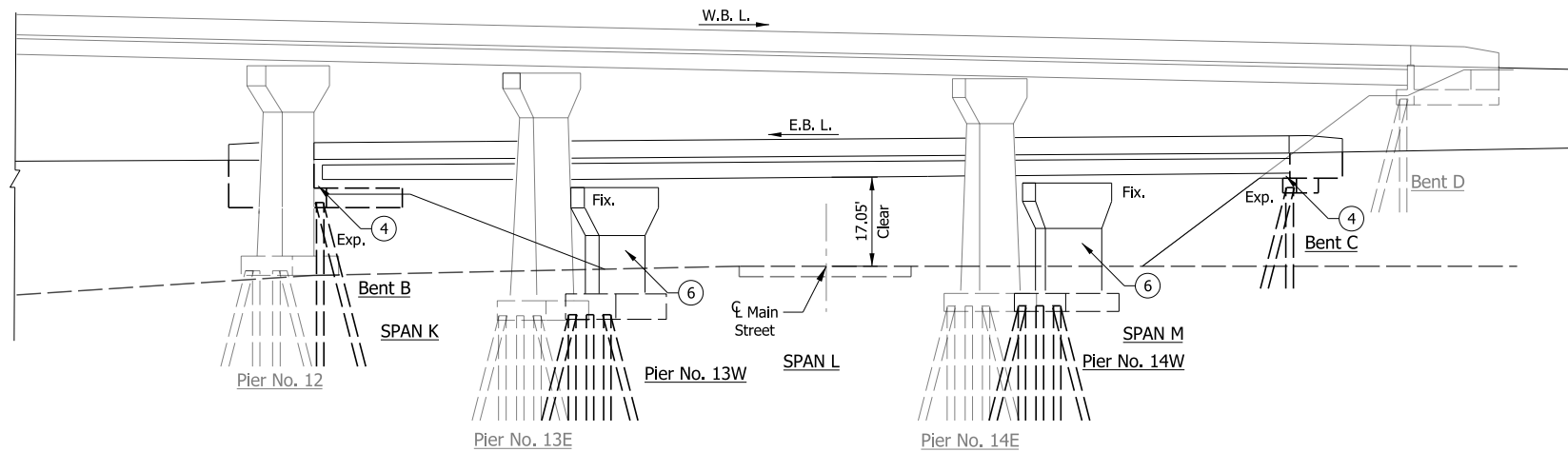
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DESIGNED: LER _____		DRAWN: EAK _____			
CHECKED: _____		CHECKED: _____			

INDIANA
DEPARTMENT OF TRANSPORTATION

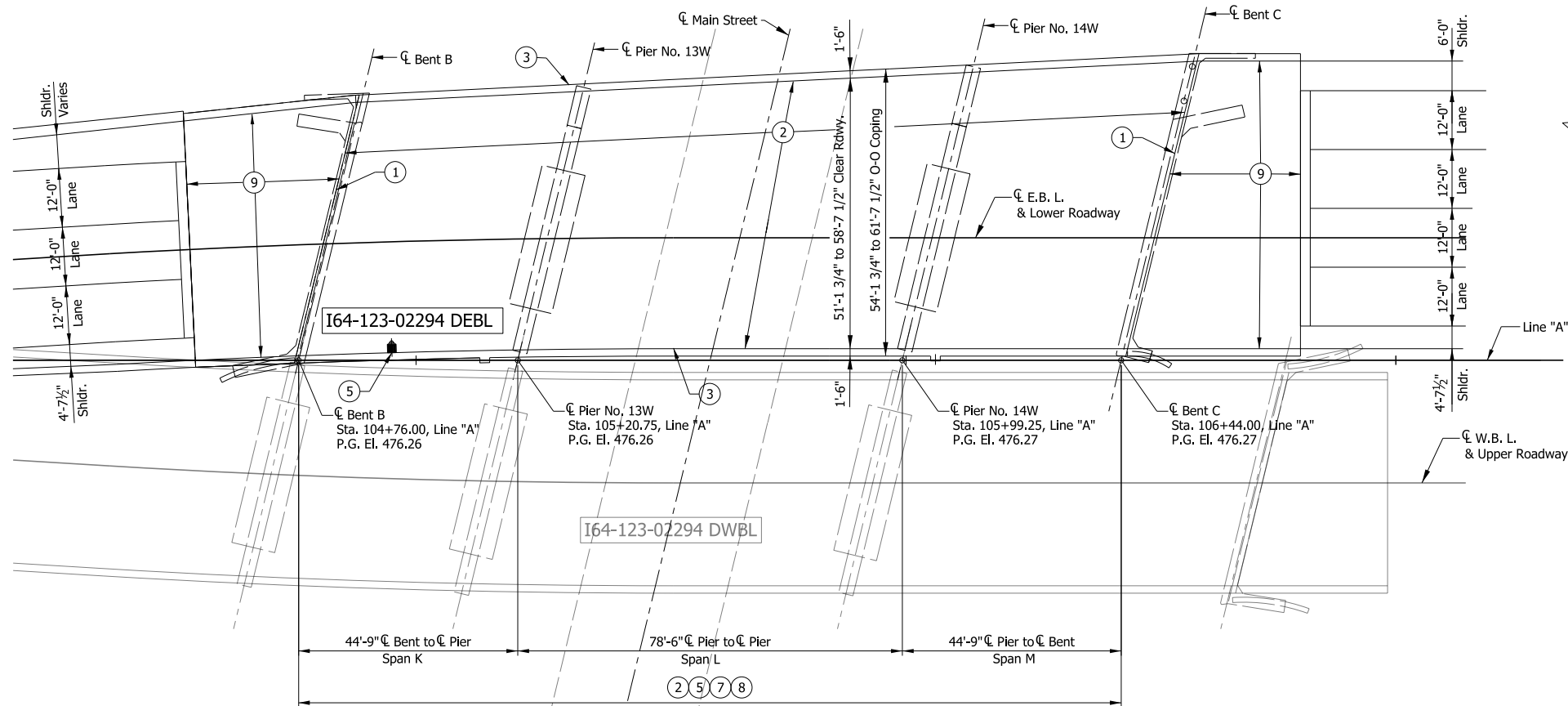
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VERTICAL SCALE		DESIGNATION	
NONE		1702258	
SURVEY BOOK		SHEETS	
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-0.90% +0.673%
P.V.I. Sta. 104+50.00
400' Vertical Curve
El. 476.255



ELEVATION
Scale: 1/16" = 1'-0"



PLAN
Scale: 1/16" = 1'-0"

- LEGEND**
- 1 Eliminate joint and modify to semi-integral end bent.
 - 2 Mill and overlay existing Bridge Deck.
 - 3 Surface Seal existing concrete from face of the bridge barrier around the underside of the deck to the edge of existing girder.
 - 4 Replace existing Expansion Bearings.
 - 5 Replace existing drainage components in kind.
 - 6 Perform Patching Concrete Structures on substructure
 - 7 Replace lighting components.
 - 8 Clean and paint steel elements as required.
 - 9 Remove and replace existing approach pavement with reinforced concrete bridge approach and terminal joint.

NOTES

1. For Typical Sections, See Sheet 5.
2. For Framing Plan, See Sheet 7.

CONTINUOUS STEEL GIRDER BRIDGE
3 SPANS: 44'-9", 78'-6" & 44'-9"
51'-1 3/4" TO 58'-7 1/2" CLEAR ROADWAY; SKEW: 76° 24' 00"
I-64 OVER MAIN STREET
FLOYD COUNTY

DATE	REVISION

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St. Louis, Missouri 63102-2121
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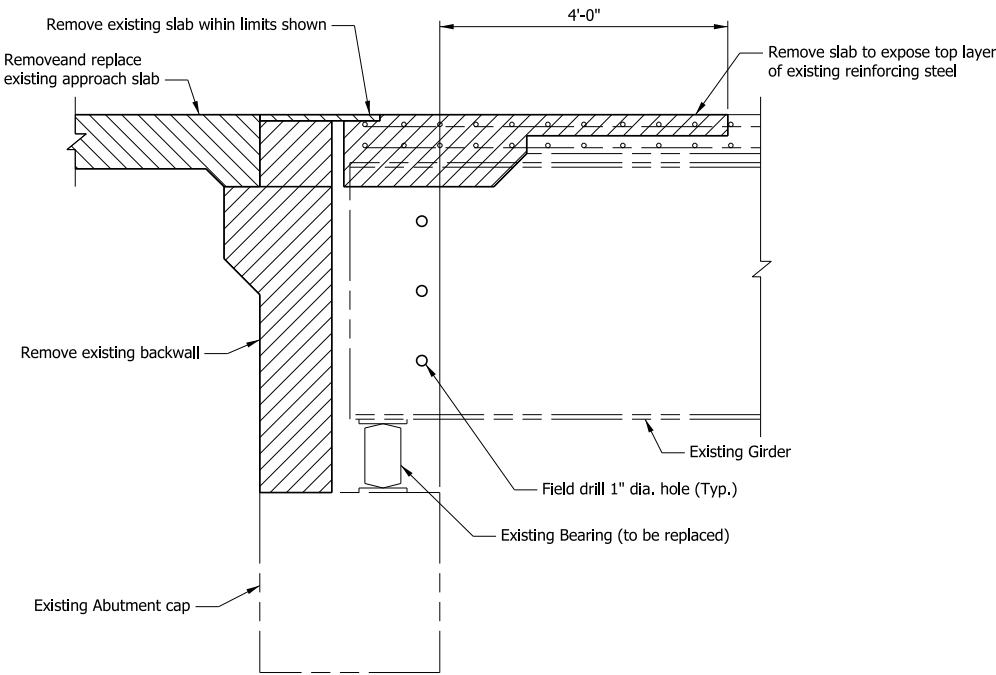
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DESIGNED: LER	DRAWN: EAK	
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DEPARTMENT OF TRANSPORTATION

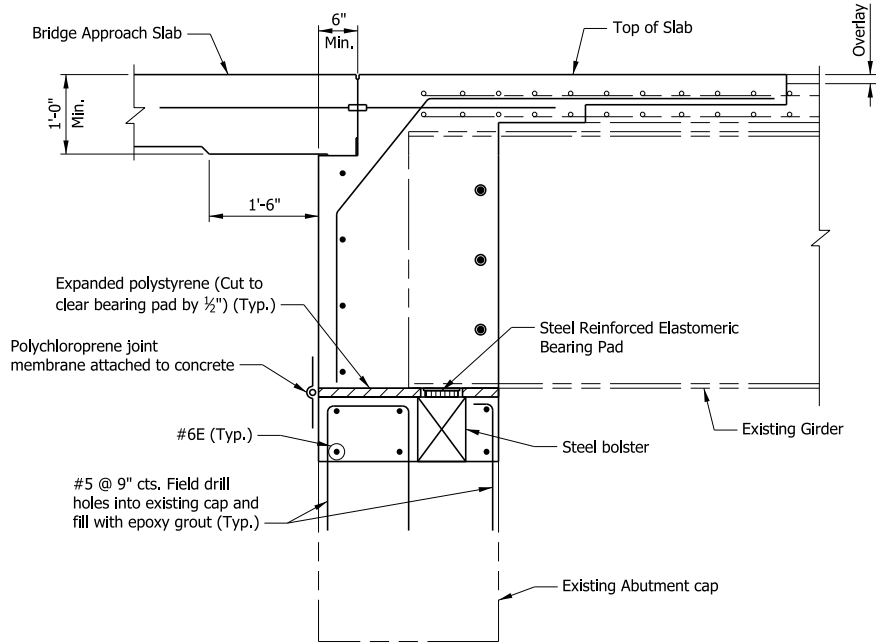
GENERAL PLAN & ELEVATION

HORIZONTAL SCALE	BRIDGE FILE
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ABUTMENT MODIFICATION - REMOVALS



ABUTMENT MODIFICATION
Section at Girder

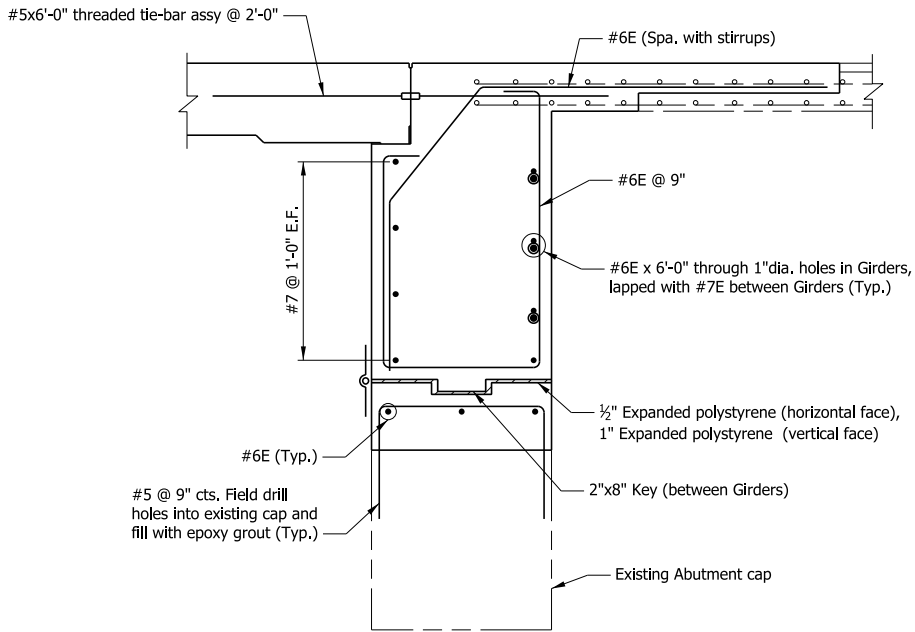
Approach Slab Notes:

Reinforced concrete approach slabs shall be removed and replaced to per INDOT IDM and in accordance with the following requirements.

1. New approach slab thickness shall be 12 inches and connected to existing pavement ledges using horizontal tie reinforcing bars in accordance with the Project Standards.
2. Approach slabs shall match the width of the bridge superstructure.
3. Approach slabs shall be constructed with longitudinal grooving in accordance with Attachment 14-1 : USP Longitudinal Grooving.
4. Approach slabs shall not be offset longitudinally at the terminal joint.
5. Terminal joints and/or sleeper slabs shall be designed and constructed in accordance with INDOT Design Memo 19-10.
6. Control joints shall be placed in all new approach slabs at lane lines, spaced no greater than 16 feet apart laterally. Control joints shall be identical to the upper 1.25-inch portion of the Type I-A joint.

Abutment Modification Notes:

1. Remove existing approach slab and backwall.
2. Perform bearing replacement. Provide temporary support for existing girders. Remove existing cross frames at girder ends.
3. Drill holes into existing cap and install new reinforcing bars for diaphragm in epoxy grout. Contractor shall take precautions to prevent cutting of existing reinforcing bars in cap when drilling.
4. Pour concrete up to elevation of new bearing.
5. Install reinforcing steel in diaphragm and slab. Pour concrete from bearing elevation to top of slab.
6. Install new approach slab per INDOT Standard Details.



ABUTMENT MODIFICATION
Section between Girders

Notes:

1. Concrete shall be Class C, with f'c = 4 ksi.
2. Reinforcing steel shall be Grade 60 and epoxy coated.
3. Coordinate abutment modifications with staged deck overlay work.

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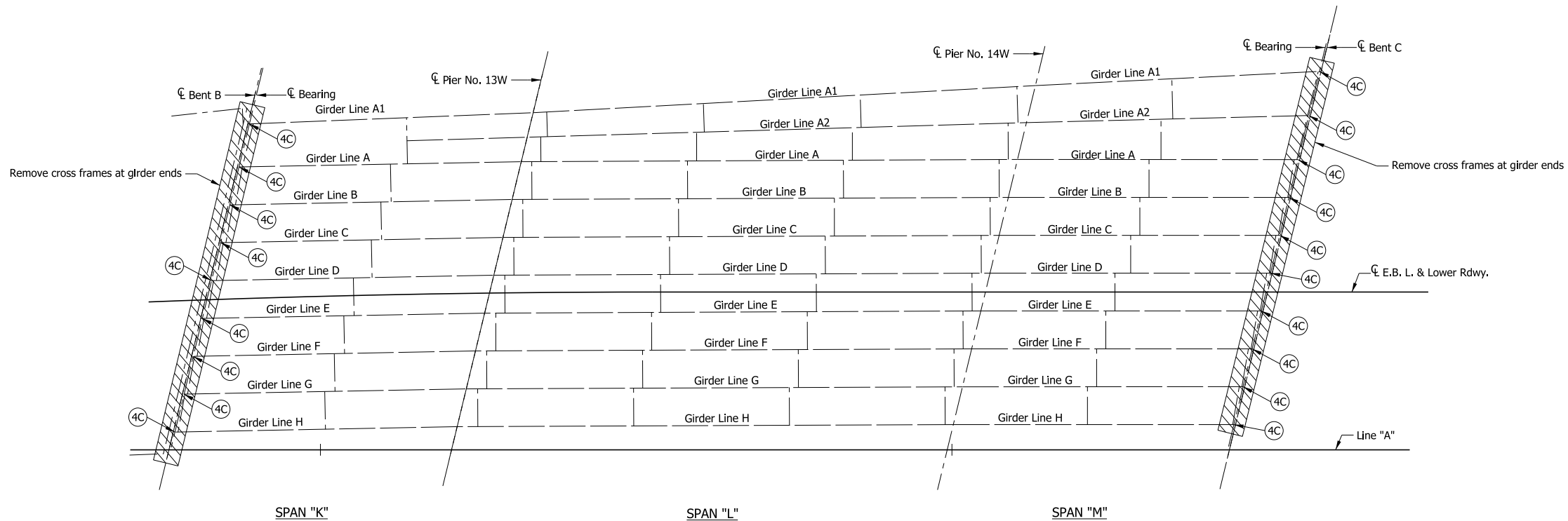
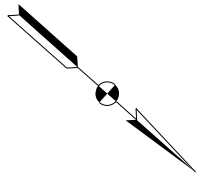
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CONSTRUCTION COMPANY, INC.

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CHECKED:	CHECKED:	

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DEPARTMENT OF TRANSPORTATION

ABUTMENT MODIFICATION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
3/8" = 1'-0"	I64-123-02294 DEBL
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FRAMING PLAN
LOWER ROADWAY

LEGEND

4C Expansion Bearing Replacement - 4C

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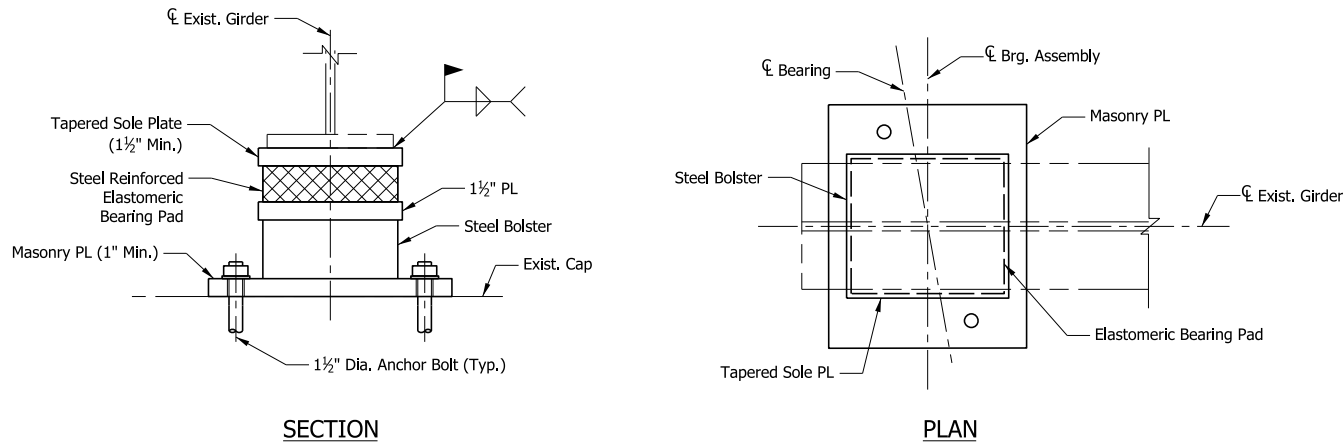
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CHECKED:	CHECKED:	

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FRAMING PLAN
(Spans K, L & M)

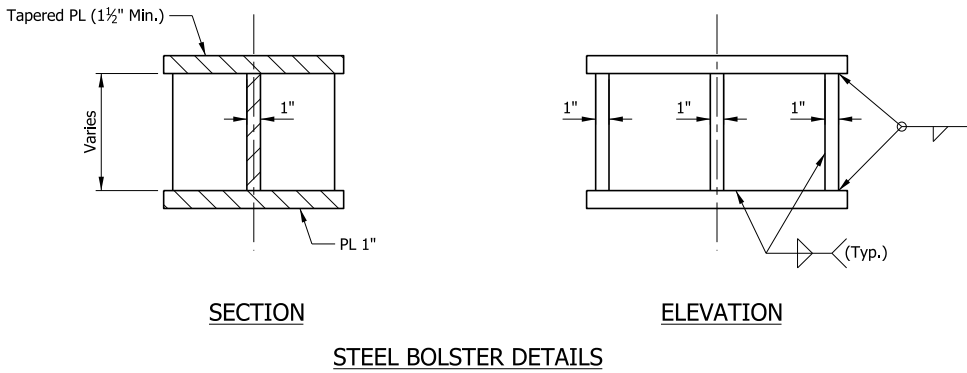
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	I64-123-02294 DEBL	
VERTICAL SCALE	DESIGNATION	
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EXPANSION BEARING REPLACEMENT - 4C

- Notes:
- 1. Refer to INDOT Standard Drawing E726-BEBP-04 for details of bearing pad.
 - 2. Anchor bolts and nuts shall be galvanized.



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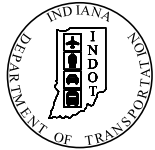
INDIANA DEPARTMENT OF TRANSPORTATION	
BEARING REPLACEMENT DETAILS	

HORIZONTAL SCALE 3/8" = 1'-0"		BRIDGE FILE I64-123-02294 DEBL	
VERTICAL SCALE 3/8" = 1'-0"		DESIGNATION 1702258	
SURVEY BOOK .		SHEETS 8 OF 8	
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PROJECT	DESIGNATION
1702259	1702259
CONTRACT	BRIDGE FILE
B-40719	I64-123-02294 JDEB

STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
I64-123-02294 JDEB	CONTINUOUS STEEL GIRDER BRIDGE	4 SPANS: 85'-0", 82'-0", 60'-0", 67'-0" SKEW: VARIES	NORFOLK SOUTHERN RAILROAD	100+23.00

INDIANA DEPARTMENT OF TRANSPORTATION



BRIDGE REHABILITATION PLANS FOR SPANS OVER 20 FEET

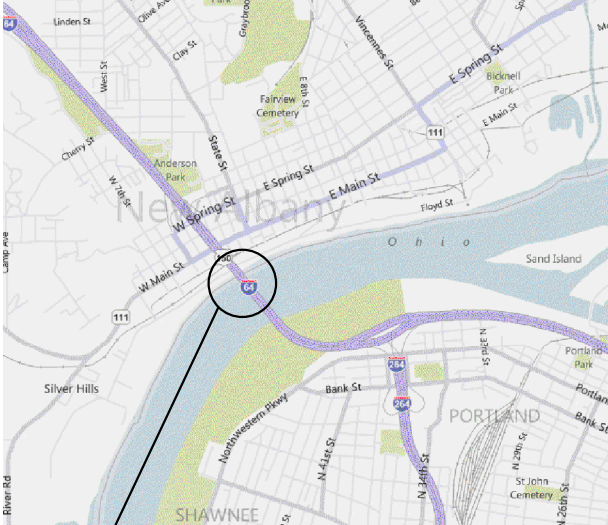
ROUTE: INTERSTATE 64 AT: RP 123+78

PROJECT NO. 1702259 P.E.

No Additional Right-of-Way
Required For This Project R/W

1702259 CONST.

Bridge Maintenance and Repairs for Interstate 64 EB, Spans D, E, F & G
over Norfolk Southern Railroad. in Section 2,
T-3-S, R-6-E, New Albany Township, Floyd County, Indiana



SCALE 1" = 2000'

STRUCTURE NO. I64-123-02294 JDEB
NEW ALBANY TOWNSHIP
FLOYD COUNTY

LOCATION MAP

TRAFFIC DATA

A.A.D.T.	(2018)	45,200	V.P.D. (EB)	44,800	V.P.D. (WB)
A.A.D.T.	(2031)	45,490	V.P.D. (EB)	42,500	V.P.D. (WB)
D.H.V.	(2031)	4,090	V.P.H. (EB)	3,830	V.P.H. (WB)
DIRECTIONAL DISTRIBUTION				50.3 %	EB
TRUCKS				11 %	A.A.D.T.
				6 %	D.H.V.

DESIGN DATA

DESIGN SPEED	55 M.P.H.
PROJECT DESIGN CRITERIA	3R (FREEWAY)
FUNCTIONAL CLASSIFICATION	PRINCIPAL ARTERIAL
RURAL/URBAN	URBAN
TERRAIN	LEVEL
ACCESS CONTROL	FULL



PROJECT LOCATION SHOWN BY

LATITUDE: 38°16'53" N LONGITUDE: 85°49'31" W

BRIDGE LENGTH: 0.056 MI.
ROADWAY LENGTH: 0.000 MI.
TOTAL LENGTH: 0.056 MI.
MAX. GRADE: -0.90 %

RFE PLANS - NOT FOR CONSTRUCTION

Jacobs
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St. Louis, Missouri 63102-2121
Telephone: 314.335.4000

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CONSTRUCTION COMPANY, INC.

PLANS PREPARED BY: Jacobs Engineering Group Inc 314-335-4237
PHONE NUMBER
CERTIFIED BY: _____ DATE
APPROVED FOR LETTING: _____ DATE
INDIANA DEPARTMENT OF TRANSPORTATION

INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS
TO BE USED WITH THESE PLANS.

BRIDGE FILE	
I64-123-02294 JDEB	
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4	GENERAL PLAN & ELEVATION
5	TYPICAL SECTIONS
6	ABUTMENT MODIFICATION DETAILS
7	FRAMING PLAN SPANS D, E, F & G)
8	BEARING REPLACEMENT DETAILS
9	LONGITUDINAL RESTRAINERS

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CONSTRUCTION COMPANY, INC.

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DESIGN ENGINEER _____ DATE _____	
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CHECKED: _____	CHECKED: _____

INDIANA
DEPARTMENT OF TRANSPORTATION

INDEX SHEET

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VERTICAL SCALE	DESIGNATION
NONE	1702258
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GENERAL NOTES:

SPECIFICATIONS

All work shall be in accordance with INDOT Standard Specifications (2020), Unique Special Provisions, and SMCP Project Technical Provisions.

STEEL REPAIRS

The scope and nature of repairs shown in the plans are based on inspection reports and other RID documents, and are provided for preliminary bidding purposes only. They are intended to capture the common types of repairs with the understanding that repairs other / different than what is schematically shown may be required.

Final repair details, limits, and quantities will be established following hands-on inspections and load ratings.

All structural steel shall be ASTM A709 Grade 50 unless noted otherwise.

High strength bolts shall be ASTM F3125 Grade A325.

Clean and paint all structural steel in accordance with Attachment 14-9: USP 619-B-314-201201.

The existing paint system is a 3-coat system consisting of a base coat of metallizing, with an intermediate sealer and a polyurethane topcoat. Design-Build Contractor qualified personal shall inspect the coating system and provide IFA with a recommended coating preservation plan for the bridge with consideration of the repair work to be performed.

Determine and then match existing paint color using color samples from the approved paint supplier.

EXPANSION JOINT REPLACEMENT

Replace joints at indicated locations.

Strip seal exapansion joints (Type SS) shall be in accordance with INDOT Standard Specifications Section 724.

SUBSTRUCTURE CONCRETE REPAIR

Provide satisfactory protective shielding below all repair areas. Determine the extent of the repair areas in the presence of an IFA Representative. Outline the edge of the designated repair areas with a 1-inch sawcut depth.

Within the outlined repair areas, remove the deteriorated concrete to a depth of 1-inch behind the first mat of reinforcement bars to sound concrete. Allow uncovered or exposed reinforcement bars to have a 1-inch clearance all around. If concrete is unsound at a depth of 1-inch behind the reinforcement bars, do not remove any additional concrete without the approval of IFA's Representative.

Square-out/bevel the edge of the repair areas to key in construction. Use hand tools for removing deteriorated concrete. Use pneumatic hammers, if required, not exceeding an impact rating of 30 foot-pounds. If deteriorated concrete extends beyond the initially outlined repair area, enlarge area as directed by IFA's Representative.

After the removal operations are complete, clean all remaining debris and loose materials from the repair areas by abrasive blasting. Abrasive blast exposed reinforcement bars to SSPC-SP10. Epoxy coat the exposed reinforcement bars. Splice any damaged or heavily corroded reinforcement bars at 50% or more section loss in accordance with the AASHTO LRFD Bridge Design Specifications. If enough splice length is not available, drill new dowel holes and place dowel bars as directed. Use a pachometer to locate existing reinforcement when drilling dowel holes to avoid drilling thru existing bars.

Repair any concrete damaged during the operations to the satisfaction of IFA's Representative at no additional cost to IFA.

Install galvanic anodes in accordance with Attachment 14-5: USP Galvanic Anode.

Set forms to provide minimum concrete cover of 2 inches. If enough concrete cover on the existing reinforcement bars is not available, haunch the repair outward.

Just prior to placing concrete, air-blast all repair areas with oil-free compressed air to protect against any contaminant detrimental to the bond of the new concrete. Apply epoxy bonding compound to the repair area. While the epoxy bonding compound is still tacky, place repair concrete with No. 8 Coarse aggregate. Do not place concrete if the compound is no longer tacky or if the compound has hardened. Recoat any compound that is no longer tacky. Wire brush or abrasive blast any compound that has hardened and recoat repair area.

Surface seal new concrete.

BRIDGE DECK OVERLAY

Existing Bridge Deck:

The existing deck consists of an 6½" structural slab with 1½" integral wearing surface. The cover to the top mat of reinforcing was detailed to be 2½".

The slab was designed to accommodate a future wearing surface of 35 psf.

Remove 1½" of the cover concrete and any unsound concrete by hydrodemolition.

Recoat damaged epoxy coated reinforcing steel prior to placing overlay.

Perform full depth repairs as required.

Partial depth repairs may be prepared and cast with the overlay.

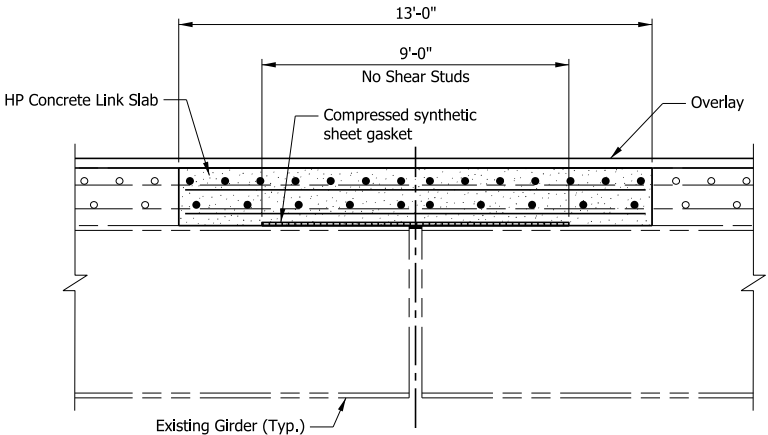
The bridge deck overlay shall be a Latex Modified Portland Cement Concrete (LMC) Overlay, Latex Modified Concrete Very Early Strength (LMC-VE), or Silica Fume Modified Concrete Overlay.

Place overlay to match existing vertical profile.

The location of the overlay construction joints shall be staggered from the longitudinal bridge deck construction joints by at least 1 foot. The existing construction joints are located at the lane lines. Refer to the existing rehab joints.

MOT / LAYOUT PLANS

See Roadway Plan for MOT and Layout Sheets.



LINK SLAB DETAIL

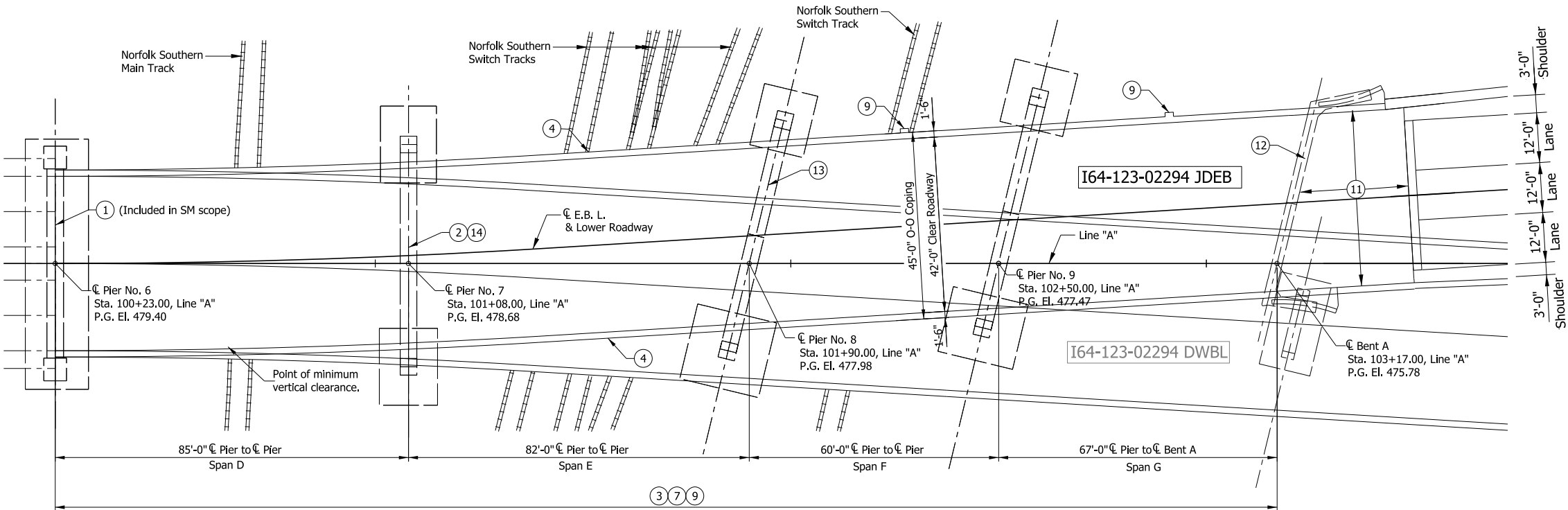
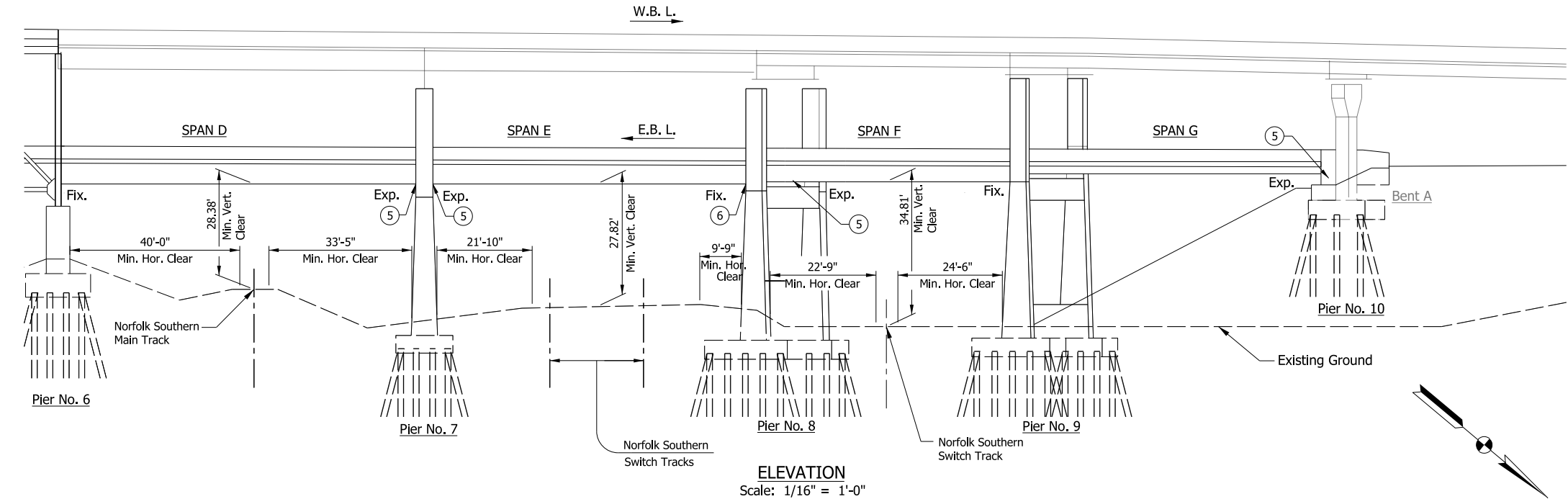
Notes:

1. Link Slab HP concrete shall be Modified Class C. The standard mix shall be modified to include fiber reinforcement as specified in Attachment 14-3: USP Link Slabs.
2. Reinforcing steel shall be Grade 60, and epoxy coated.

SFILES	DATE		REVISION		<div><div>Jacobs</div><div>501 North Broadway St. Louis, Missouri 63102-2121 Telephone: 314.335.4000</div></div> <div><div>kokosing</div><div>CONSTRUCTION COMPANY, INC.</div></div>		RECOMMENDED FOR APPROVAL		DESIGN ENGINEER		DATE		INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE		BRIDGE FILE				
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														VERTICAL SCALE		DESIGNATION					
														NONE		1702258					
														SURVEY BOOK		SHEETS					
														.		3		OF	9		
														CONTRACT		PROJECT					
														B-40719		1702258					

LEGEND

- 1 Remove existing Expansion Joint Sealing System and replace with new expansion joint.
- 2 Remove existing Structural Expansion Joint, Class SS and replace with new expansion joint.
- 3 Mill and overlay existing Bridge Deck.
- 4 Surface Seal existing concrete from face of bridge barrier around the underside of deck to the edge of existing girder.
- 5 Replace existing Expansion Bearings.
- 7 Replace existing drainage components in kind.
- 9 Replace lighting components.
- 10 Clean and paint steel elements as required.
- 11 Remove and replace existing approach pavement with reinforced concrete bridge approach and terminal joint.
- 12 Eliminate joint and modify to semi integral end bent.
- 13 Install link slab.
- 14 Add Longitudinal Restrainers.



- NOTES
- 1. For Typical Sections, See Sheet 5.
 - 2. Substructure repair included in Structure I64-123-02294 DWBL.

CONTINUOUS STEEL GIRDER BRIDGE
4 SPANS: 85'-0", 82'-0", 60'-0", 67'-0"
42'-0" CLEAR ROADWAY; SKEW: VARIES
I-64 EB OVER NORFOLK SOUTHERN RR
FLOYD COUNTY

DATE	REVISION

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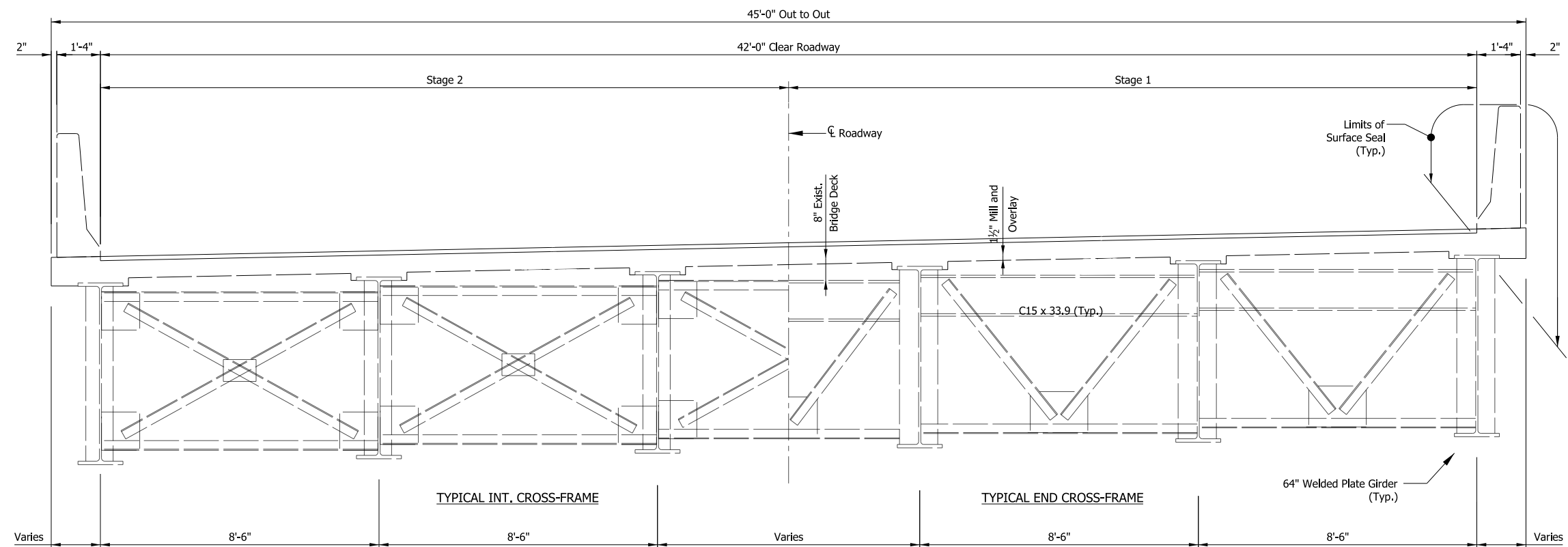
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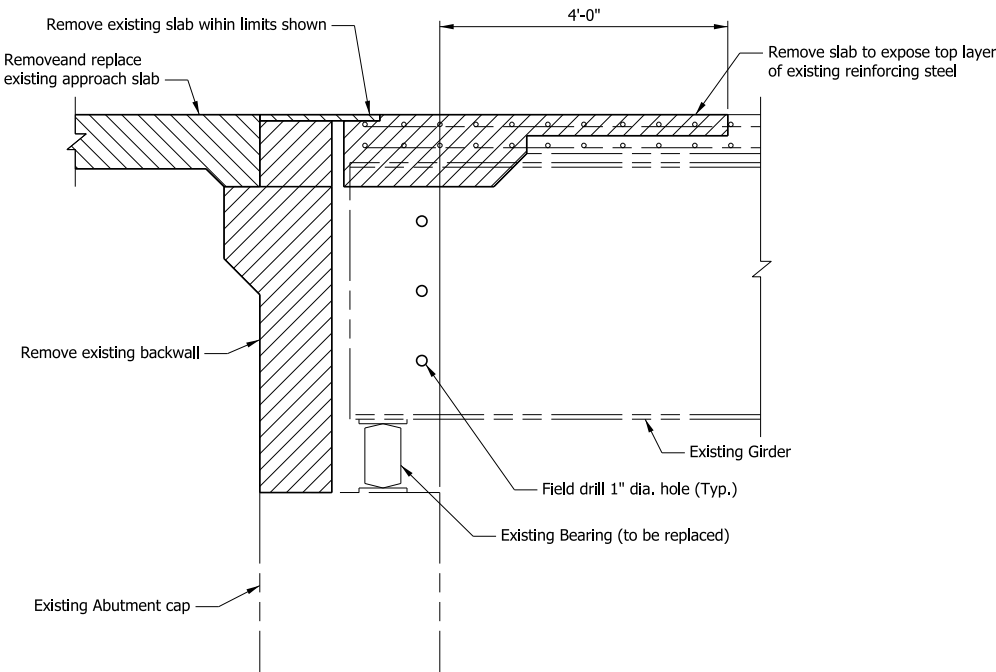
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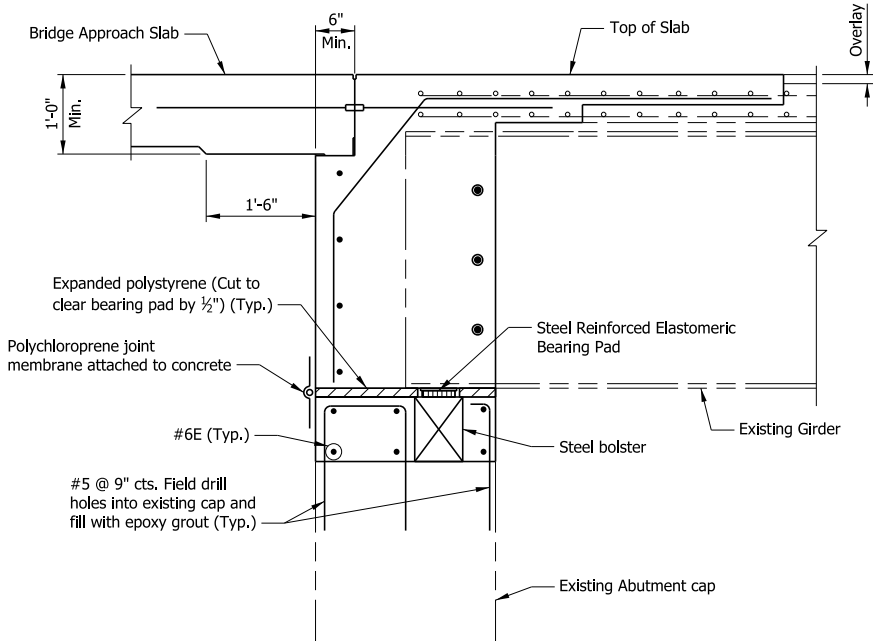
INDIANA DEPARTMENT OF TRANSPORTATION
GENERAL PLAN & ELEVATION

HORIZONTAL SCALE	BRIDGE FILE
VERTICAL SCALE	DESIGNATION
SURVEY BOOK	SHEETS
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ABUTMENT MODIFICATION - REMOVALS



ABUTMENT MODIFICATION
Section at Girder

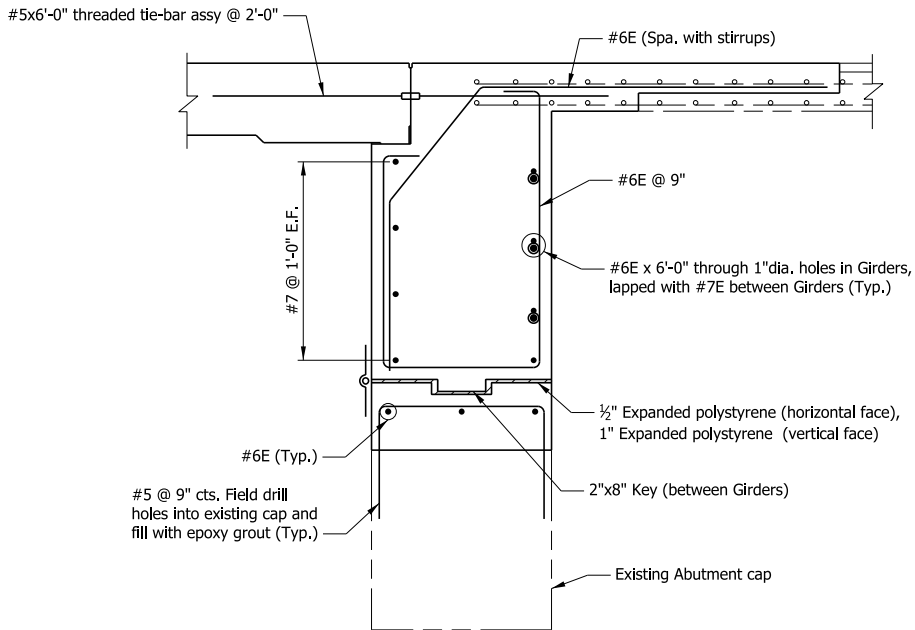
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1. New approach slab thickness shall be 12 inches and connected to existing pavement ledges using horizontal tie reinforcing bars in accordance with the Project Standards.
2. Approach slabs shall match the width of the bridge superstructure.
3. Approach slabs shall be constructed with longitudinal grooving in accordance with Attachment 14-1 : USP Longitudinal Grooving.
4. Approach slabs shall not be offset longitudinally at the terminal joint.
5. Terminal joints and/or sleeper slabs shall be designed and constructed in accordance with INDOT Design Memo 19-10.
6. Control joints shall be placed in all new approach slabs at lane lines, spaced no greater than 16 feet apart laterally. Control joints shall be identical to the upper 1.25-inch portion of the Type I-A joint.

Abutment Modification Notes:

1. Remove existing approach slab and backwall.
2. Perform bearing replacement. Provide temporary support for existing girders. Remove existing cross frames at girder ends.
3. Drill holes into existing cap and install new reinforcing bars for diaphragm in epoxy grout. Contractor shall take precautions to prevent cutting of existing reinforcing bars in cap when drilling.
4. Pour concrete up to elevation of new bearing.
5. Install reinforcing steel in diaphragm and slab. Pour concrete from bearing elevation to top of slab.
6. Install new approach slab per INDOT Standard Details.



ABUTMENT MODIFICATION
Section between Girders

Notes:

1. Concrete shall be Class C, with f'c = 4 ksi.
2. Reinforcing steel shall be Grade 60 and epoxy coated.
3. Coordinate abutment modifications with staged deck overlay work.

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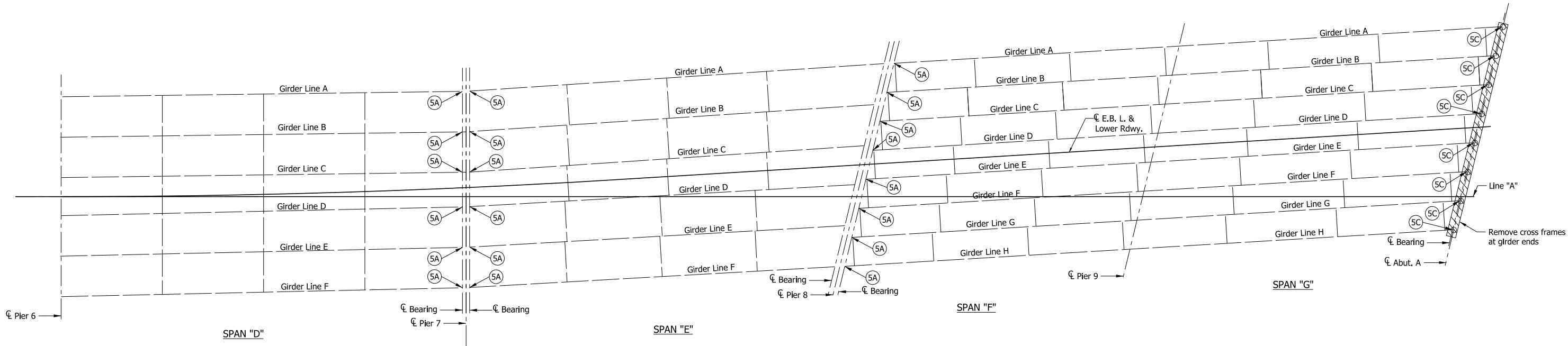
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DESIGNED: LER	DRAWN: EAK	
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ABUTMENT MODIFICATION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
3/8" = 1'-0"	I64-123-02294 JDEB
VERTICAL SCALE	DESIGNATION
3/8" = 1'-0"	1702258
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FRAMING PLAN
LOWER ROADWAY

LEGEND

- 5A Expansion Bearing Replacement - 5A
- 5C Expansion Bearing Replacement - 5C

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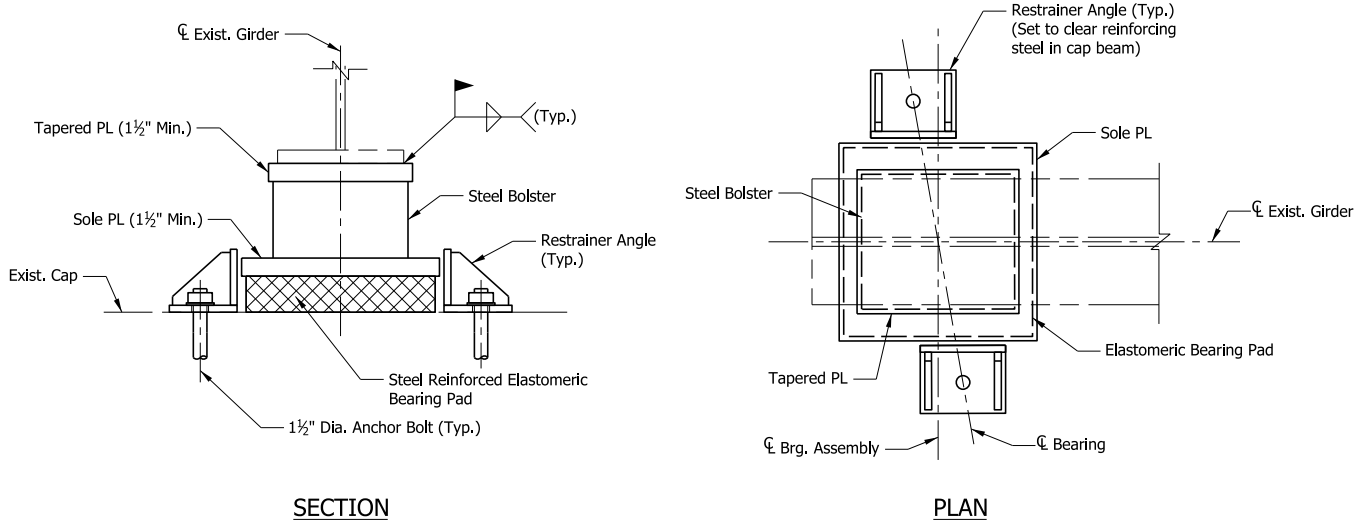
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RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: LER	DRAWN: EAK	
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INDIANA DEPARTMENT OF TRANSPORTATION
FRAMING PLAN SPANS D, E, F & G

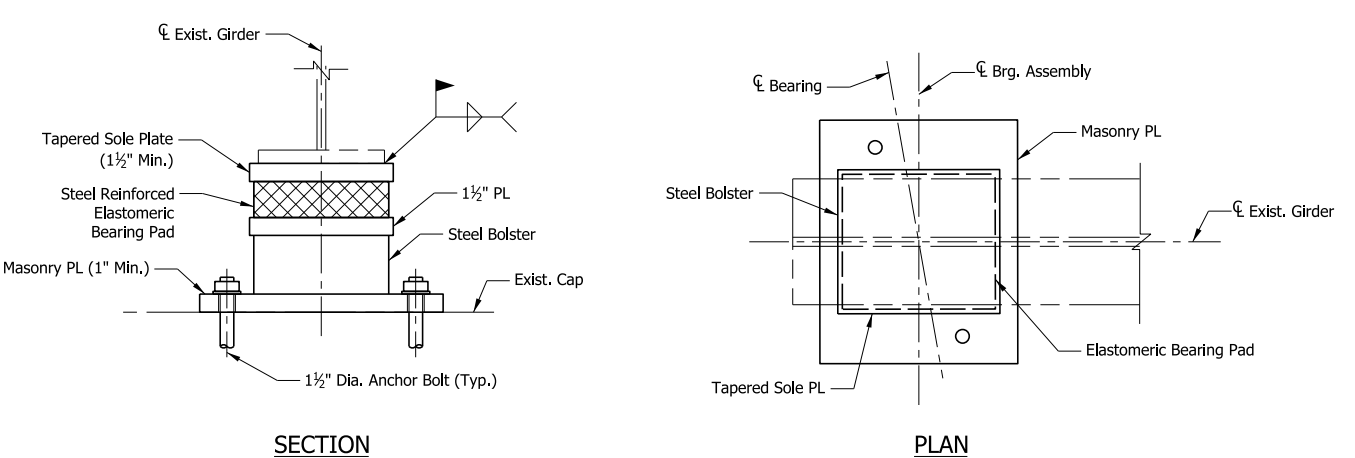
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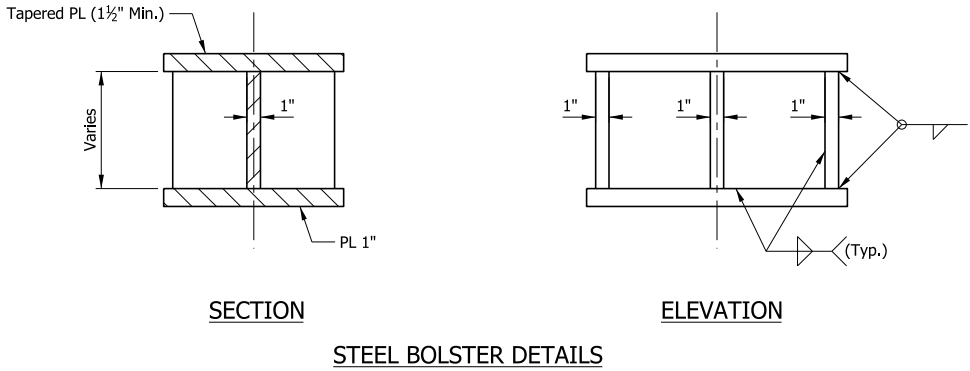
EXPANSION BEARING REPLACEMENT - 5A

- Notes:
1. Refer to INDOT Standard Drawing E726-BEBP-04 for details of bearing pad and restrainer angles.
 2. Anchor bolts and nuts shall be galvanized.



EXPANSION BEARING REPLACEMENT - 5C

- Notes:
1. Refer to INDOT Standard Drawing E726-BEBP-04 for details of bearing pad.
 2. Anchor bolts and nuts shall be galvanized.



STEEL BOLSTER DETAILS

DATE	REVISION

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Telephone: 314.335.4000

kokosing

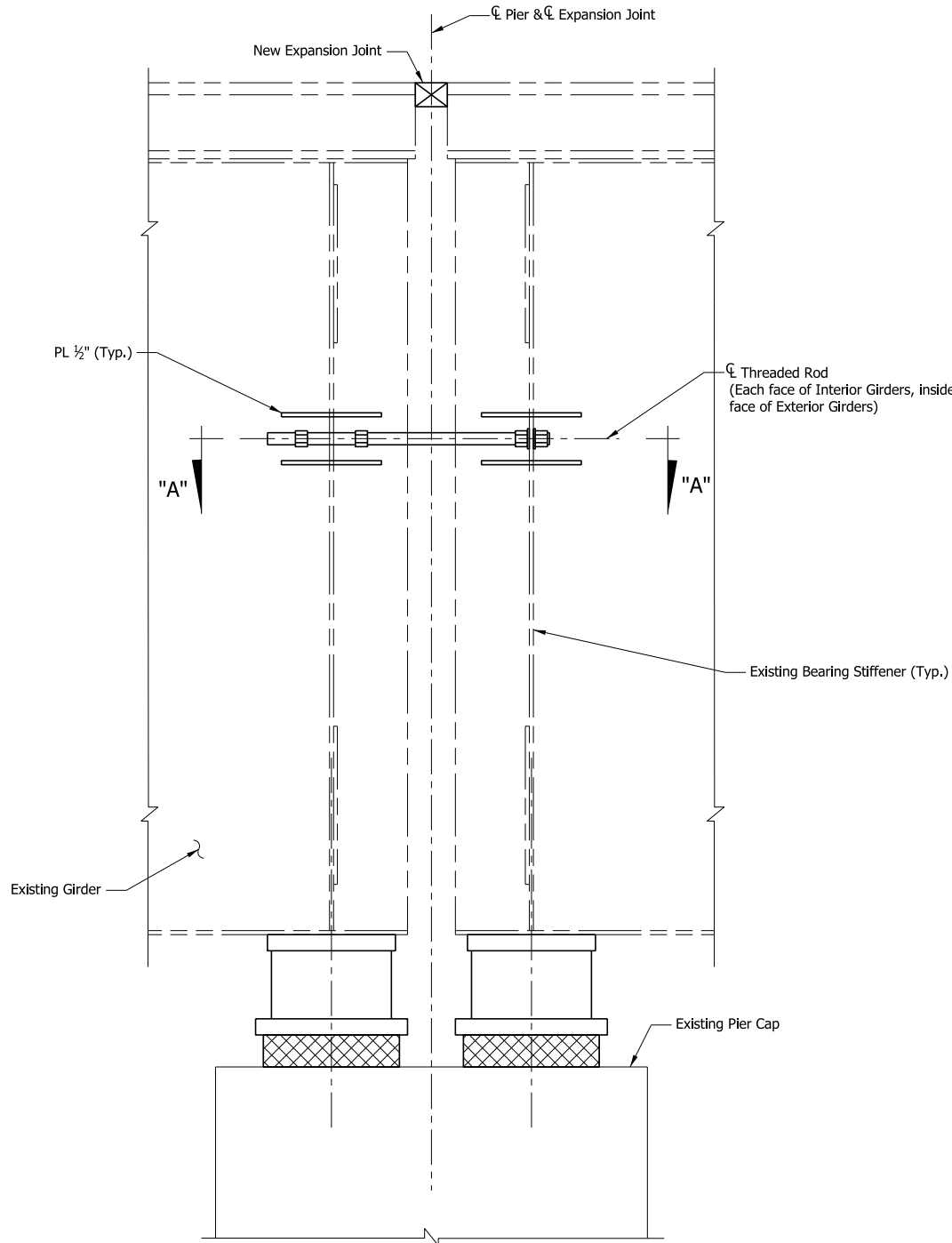
CONSTRUCTION COMPANY, INC.

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: LER	DRAWN: EAK	
CHECKED:	CHECKED:	

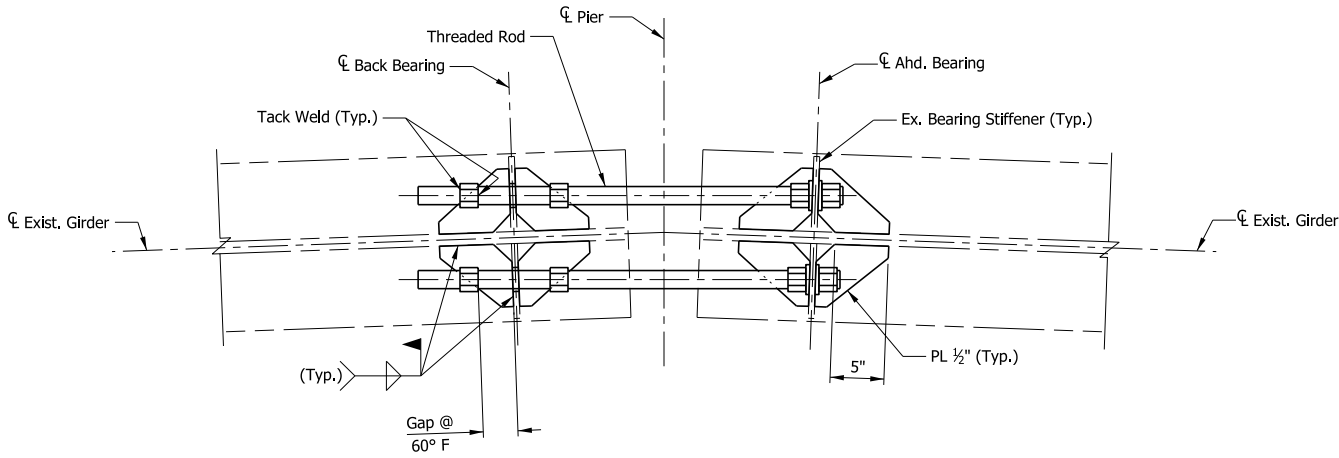
INDIANA DEPARTMENT OF TRANSPORTATION
BEARING REPLACEMENT DETAILS

HORIZONTAL SCALE 3/8" = 1'-0"	BRIDGE FILE I64-123-02294 JDEB
VERTICAL SCALE 3/8" = 1'-0"	DESIGNATION 1702258
SURVEY BOOK .	SHEETS 8 OF 9
CONTRACT B-40719	PROJECT 1702258

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ELEVATION



SECTION A-A

- Notes:
1. Threaded rods shall be ASTM A722 Grade 150.
 2. Field drill holes in existing bearing stiffeners to accommodate threaded rods.
 3. Coordinate location of longitudinal restrainer with web repair details.

DATE	REVISION

Jacobs

501 North Broadway
St. Louis, Missouri 63102-2121
Telephone: 314.335.4000

kokosing

CONSTRUCTION COMPANY, INC.

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: LER	DRAWN: EAK	
CHECKED:	CHECKED:	

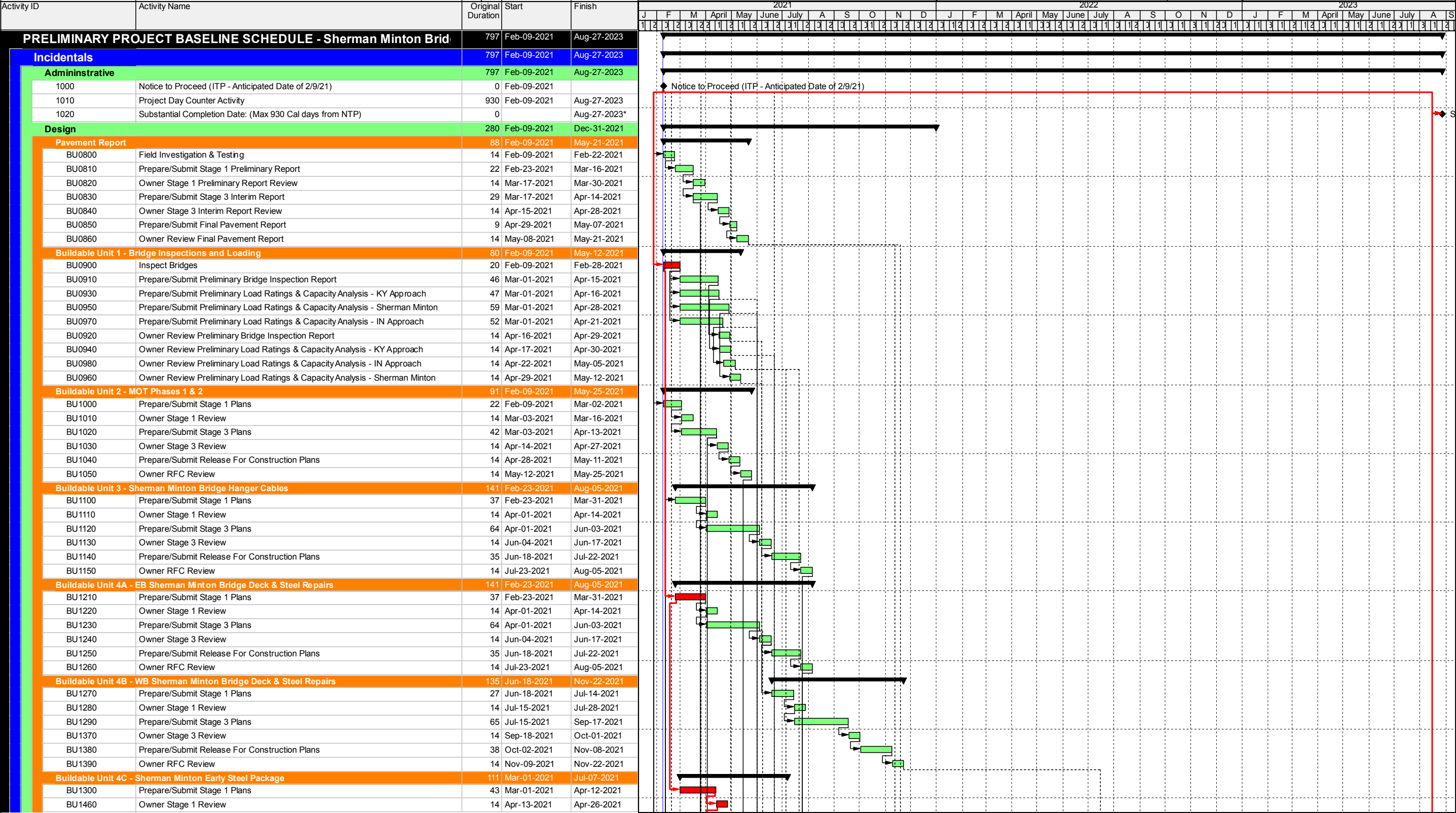
INDIANA DEPARTMENT OF TRANSPORTATION
LONGITUDINAL RESTRAINERS

HORIZONTAL SCALE 3/8" = 1'-0"	BRIDGE FILE I64-123-02294 JDEB
VERTICAL SCALE 3/8" = 1'-0"	DESIGNATION 1702258
SURVEY BOOK .	SHEETS 9 OF 9
CONTRACT B-40719	PROJECT 1702258

Preliminary Project Baseline Schedule



VOLUME 2



Actual Work

Remaining Work

Critical Remaining Work

◆

◆ Milestone

➤





➤ Summary

PRELIMINARY PROJECT BASELINE SCHEDULE -
Sherman Minton Bridge




PRELIMINARY PROJECT BASELINE SCHEDULE - Sherman Minton Bridge		Page 2 of 6
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[illegible]




 Actual Work
 Remaining Work
 Critical Remaining Work
 Milestone
 Summary

PRELIMINARY PROJECT BASELINE SCHEDULE - Sherman Minton Bridge



<div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 20px; height: 10px; background-color: blue; margin-right: 5px;"></div> Actual Work </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 20px; height: 10px; background-color: lightgreen; margin-right: 5px;"></div> Remaining Work </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 20px; height: 10px; background-color: red; margin-right: 5px;"></div> Critical Remaining Work </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="display: flex; align-items: center; margin-right: 5px;"> <div style="width: 0; height: 0; border-left: 5px solid transparent; border-right: 5px solid transparent; border-bottom: 10px solid black; margin-right: 5px;"></div> ◆ Milestone </div> </div> <div style="display: flex; align-items: center;"> <div style="width: 30px; height: 10px; background-color: black; margin-right: 5px;"></div> Summary </div>	<h2 style="margin: 0;">PRELIMINARY PROJECT BASELINE SCHEDULE - Sherman Minton Bridge</h2>	
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Activity ID	Activity Name	Original Duration	Start	Finish	2021												2022												2023																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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