

DESIGN DATA

DESIGN SPECIFICATION: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 7TH EDITION WITH 2016 INTERIMS

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.17
OPERATING RATING FACTOR: RF = 1.70
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS

STRUCTURE IS DESIGNED FOR A WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

MATERIAL PROPERTIES

CONCRETE MASONRY:
SUPERSTRUCTURE (HPC) f'c = 4,000 psi
SUBSTRUCTURE f'c = 4,000 psi
C-I-P CONCRETE PILING f'c = 3,500 psi
45W-INCH PRESTRESSED GIRDERS f'c = 8,000 psi
BAR STEEL REINFORCEMENT fy = 60,000 psi
STAINLESS STEEL BAR REINFORCEMENT fy = 60,000 psi
STEEL PILING SHELL fy = 45,000 psi
PRESTRESSING STRANDS ULTIMATE TENSILE STRENGTH = 270,000 psi

FOUNDATION DATA

ABUTMENTS AND PIER SHALL BE SUPPORTED ON 14" CAST-IN-PLACE CONCRETE PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 240 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES ACCEPTANCE METHOD. DRIVE PILING TO PLAN LENGTH UNLESS THE REQUIRED BEARING IS OBTAINED AT A SHORTER LENGTH. IF THE REQUIRED BEARING IS NOT OBTAINED WHEN THE PILE IS DRIVEN TO PLAN LENGTH, CONTACT THE BUREAU OF STRUCTURES.

THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING THE MODIFIED GATES ACCEPTANCE METHOD TO DETERMINE DRIVEN PILE CAPACITY.

ESTIMATED PILE LENGTHS:
SOUTH ABUTMENT: 75 FEET
PIER: 80 FEET
NORTH ABUTMENT: 85 FEET

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION

2. TYPICAL SECTIONS

3. QUANTITIES & NOTES

4. SUBSURFACE EXPLORATION

5. SOUTH ABUTMENT

6. SOUTH ABUTMENT DETAILS (1 OF 2)

7. SOUTH ABUTMENT DETAILS (2 OF 2)

8. NORTH ABUTMENT

9. NORTH ABUTMENT DETAILS (1 OF 2)

10. NORTH ABUTMENT DETAILS (2 OF 2)

11. PIER

12. PIER DETAILS

13. PIER BARRIER WALL DETAILS

14. PIER PRECAST ALTERNATE & LIGHTING DETAILS

15. 45W" PRESTRESSED GIRDER

16. 45W" PRESTRESSED GIRDER DETAILS
17. STEEL DIAPHRAGM

~~18. FRAMING PLAN & PRECAST DECK PANEL LAYOUT~~

19. SUPERSTRUCTURE

20. SUPERSTRUCTURE CROSS SECTION

21. SUPERSTRUCTURE DETAILS

~~22. PRECAST DECK PANEL DETAILS~~

23. STRUCTURAL APPROACH SLAB

24. SINGLE SLOPE PARAPET 42SS (MODIFIED)

25. AESTHETIC DETAILS

26. SLOPE PAVING DETAILS

27. ALTERNATE CONSTRUCTION JOINT DETAIL
- STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489

CONSULTANT:
ED McCRIGHT (414) 272-2426

TRAFFIC DATA

CTH E

A.D.T. = 3,510 (2005)
A.D.T. = 10,150 (2030)
R.D.S. = 50 M.P.H.

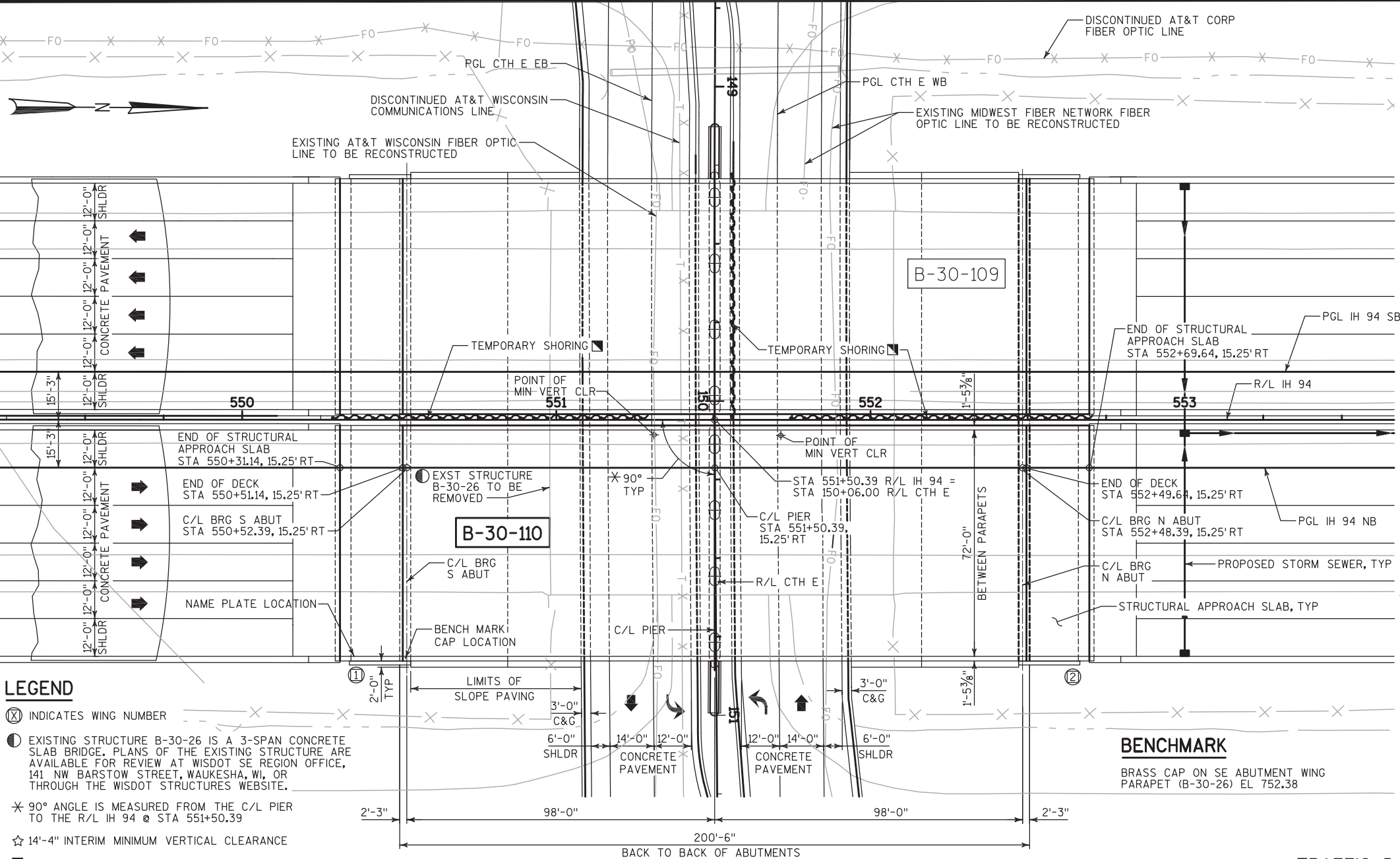
IH 94

A.D.T. = 77,070 (2005)
A.D.T. = 112,500 (2035)
R.D.S. = 70 M.P.H.



	8/8/18	REMOVE PRECAST DECK PANELS	PMF																												
NO.	DATE	REVISION	BY																												
ch2m STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION ACCEPTED <u>William C. Dreher, INC</u> 4/17/18 CHIEF STRUCTURES DESIGN ENGINEER DATE STRUCTURE B-30-110 IH 94 WB / IH 41 NB OVER CTH E <tr><td colspan="2">COUNTY</td><td colspan="2">TOWN/CITY/VILLAGE</td></tr> <tr><td colspan="2">KENOSHA</td><td colspan="2">SOMERS</td></tr> <tr><td colspan="4">DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS</td></tr> <tr><td colspan="2">DESIGNED BY</td><td>DESIGNED CK'D.</td><td>SGM</td></tr> <tr><td colspan="2">KES</td><td>DRAWN BY</td><td>TEK</td></tr> <tr><td colspan="2"></td><td>PLANS CK'D.</td><td>SGM</td></tr> <tr><td colspan="3">GENERAL PLAN & ELEVATION</td><td>SHEET 1 OF 27</td></tr>				COUNTY		TOWN/CITY/VILLAGE		KENOSHA		SOMERS		DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS				DESIGNED BY		DESIGNED CK'D.	SGM	KES		DRAWN BY	TEK			PLANS CK'D.	SGM	GENERAL PLAN & ELEVATION			SHEET 1 OF 27
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		PLANS CK'D.	SGM																												
GENERAL PLAN & ELEVATION			SHEET 1 OF 27																												

PLOT DATE: Aug 08, 2018



LEGEND

- ⊗ INDICATES WING NUMBER
- EXISTING STRUCTURE B-30-26 IS A 3-SPAN CONCRETE SLAB BRIDGE. PLANS OF THE EXISTING STRUCTURE ARE AVAILABLE FOR REVIEW AT WISDOT SE REGION OFFICE, 141 NW BARSTOW STREET, WAUKESHA, WI, OR THROUGH THE WISDOT STRUCTURES WEBSITE.
- * 90° ANGLE IS MEASURED FROM THE C/L PIER TO THE R/L IH 94 @ STA 551+50.39
- ☆ 14'-4" INTERIM MINIMUM VERTICAL CLEARANCE
- GAP THE TEMPORARY SHORING INSTALLATION TO AVOID IMPACTING UNDERGROUND UTILITY CROSSINGS. CONTACT THE UTILITY COMPANY 7 DAYS IN ADVANCE TO COORDINATE LOCATIONS AND ANY EXCAVATION NEAR THEIR FACILITIES.

CURVE DATA

R/L IH 94 - CURVE 1

PI = STA. 545+34.37
Δ = 0°11'28"
D = 0°01'00"
T = 573.25
L = 1146.50
E = 0.48
R = 343786.68
PC = STA 539+61.12
PC = STA 551+07.62

R/L CTH E - CURVE E1

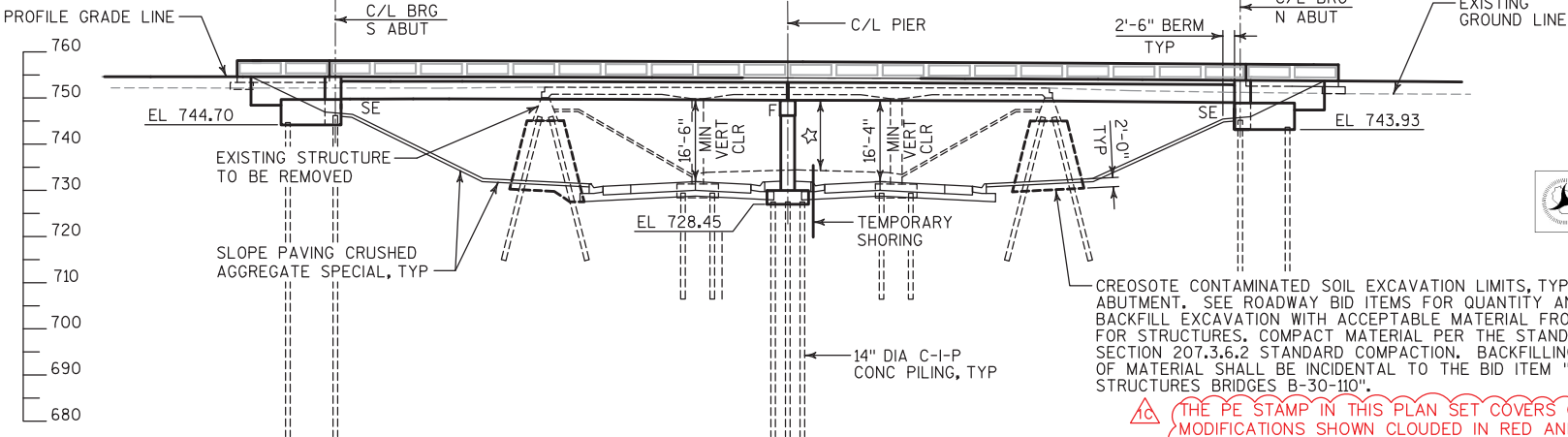
PI = STA. 148+59.16
Δ = 1°48'30"
D = 0°28'39"
T = 189.39
L = 378.74
E = 1.49
R = 12000.00
PC = STA 146+69.78
PC = STA 150+48.52

PLAN

(2 SPAN 45W" PRESTRESSED GIRDERS)

ELEVATION

(LOOKING WEST)



CREOSOTE CONTAMINATED SOIL EXCAVATION LIMITS, TYP @ EACH ABUTMENT. SEE ROADWAY BID ITEMS FOR QUANTITY AND PAYMENT. BACKFILL EXCAVATION WITH ACCEPTABLE MATERIAL FROM EXCAVATION FOR STRUCTURES. COMPACT MATERIAL PER THE STANDARD SPECIFICATIONS SECTION 207.3.6.2 STANDARD COMPACTION. BACKFILLING AND COMPACTION OF MATERIAL SHALL BE INCIDENTAL TO THE BID ITEM "EXCAVATION FOR STRUCTURES BRIDGES B-30-110".

THE PE STAMP IN THIS PLAN SET COVERS ONLY THE MODIFICATIONS SHOWN CLOUDED IN RED AND SIGNIFIED BY 1C, WHICH MODIFY THE ORIGINAL BRIDGE PLANS TO UTILIZE A TRADITIONAL FULL-DEPTH, CAST-IN-PLACE CONCRETE DECK. THE DECK REINFORCEMENT IS DESIGNED PER CURRENT WISCONSIN DOT BRIDGE MANUAL.

PLOT SCALE:



10	8/8/18	REMOVE PRECAST DECK PANELS	PMF
NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-30-110

DRAWN BY	PLANS CK'D
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SHEET 2 OF 27

TYPICAL SECTIONS



PLOT DATE: Aug 08, 2018

PLOT SCALE:

TOTAL ESTIMATED QUANTITIES

STATE PROJECT NUMBER

1030-23-72

BID ITEM NO.	BID ITEMS ☆	UNIT	SOUTH APPROACH SLAB	SOUTH ABUTMENT	PIER	NORTH ABUTMENT	NORTH APPROACH SLAB	SUPER	TOTAL
203.0200.048	REMOVING OLD STRUCTURE STATION 551+50	LS	-----	-----	-----	-----	-----	-----	1
203.0210.S.018	ABATEMENT OF ASBESTOS CONTAINING MATERIAL B-30-26	LS	-----	-----	-----	-----	-----	-----	1
206.1000.027	EXCAVATION FOR STRUCTURES BRIDGES B-30-26	LS	-----	-----	-----	-----	-----	-----	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	-----	245	-----	245	-----	-----	490
305.0125	BASE DENSE AGGREGATE DENSE 1 1/4-INCH	CY	145	-----	-----	-----	145	-----	290
502.0100	CONCRETE MASONRY BRIDGES	CY	22	65	152	65	22	-----	326
502.3200	PROTECTIVE SURFACE TREATMENT	SY	170	-----	-----	-----	170	1,590	1,930
502.3210	PIGMENTED SURFACE SEALER	SY	15	-----	-----	-----	15	150	180
503.0146	PRESTRESSED GIRDER TYPE I 45W-INCH	LF	-----	-----	-----	-----	-----	1,771	1,771
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	-----	-----	4,020	-----	-----	-----	4,020
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	15,990	5,550	24,740	5,550	15,990	87,210	155,030
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	-----	-----	-----	-----	-----	31,420	31,420
505.0800.S	BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES	LB	-----	-----	-----	-----	-----	2,590	2,590
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	-----	9	18	9	-----	-----	36
506.4000.047	STEEL DIAPHRAGMS B-30-110	EACH	-----	-----	-----	-----	-----	32	32
511.1200.001	TEMPORARY SHORING B-30-110	SF	-----	1,300	560	1,220	-----	-----	3,080
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	-----	16	-----	16	-----	-----	32
517.1010.S.454	CONCRETE STAINING B-30-110	SF	105	410	2,085	410	105	2,335	5,450
517.1050.S.011	ARCHITECTURAL SURFACE TREATMENT B-30-110	SF	-----	16	-----	16	-----	-----	32
550.0600	PILE REDRIVING	EACH	-----	3	6	3	-----	-----	12
550.2148	PIILING CIP CONCRETE 14X0.50-INCH	LF	-----	910	1,920	940	-----	-----	3,770
612.0206	PIPE UNDERDRAIN UNPERFORATED 6-INCH	LF	-----	20	-----	20	-----	-----	40
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	-----	85	-----	85	-----	-----	170
SPV.0035.400	HPC MASONRY SRUCTURES	CY	74	-----	-----	-----	74	479	627
SPV.0035.400	HPC MASONRY STRUCTURES	CY	-----	-----	-----	-----	-----	142	142
SPV.0165.401	LONGITUDINAL GROOVING BRIDGE DECK	SF	1,380	-----	-----	-----	1,380	13,700	19,460
SPV.0165.462	PARTIAL DEPTH PRECAST PRESTRESSED CONCRETE DECK PANELS B-30-110	SF	-----	-----	-----	-----	-----	9,710	9,710
SPV.0180.400	SLOPE PAVING CRUSHED AGGREGATE SPECIAL	SY	-----	505	-----	505	-----	-----	1,010
NON-BID ITEMS									
	PREFORMED JOINT FILLER	SIZE							1/2" & 3/4"
	NON-BITUMINOUS JOINT FILLER	SIZE							1/2" & 3/4"
	CORK FILLER	SIZE							3/4"
	PRECAST PIER DOLUMNS								
	GROUTED BAR COUPLERS								

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED. BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH SLOPE PAVING CRUSHED AGGREGATE SPECIAL TO THE EXTENT SHOWN ON THE GENERAL PLAN SHEET AND THE SLOPE PAVING DETAILS SHEET.

REMOVE PILING TO A MINIMUM OF 2'-0" BELOW FINISHED GRADE.

THE HAUNCH CONCRETE QUANTITY IS BASED ON AN AVERAGE DEPTH OF 2¾", WHICH IS THE MAXIMUM HAUNCH QUANTITY FOR WHICH THE CONTRACTOR WILL BE PAID.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.

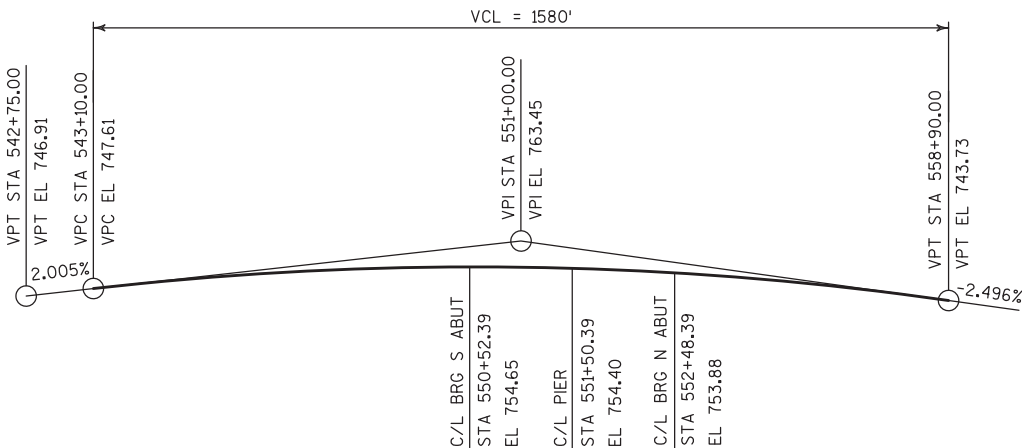
COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), KENOSHA COUNTY ZONE, NAD 1983(97). ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

2-WAY TRAFFIC ON I-94 WILL BE MAINTAINED ON THE EXISTING I-94 SOUTHBOUND LANES AND BRIDGE (B-30-25) OVER CTH E DURING REMOVAL OF THE EXISTING I-94 NORTHBOUND STRUCTURE (B-30-26) AND THE CONSTRUCTION OF THE REPLACEMENT I-94 NORTHBOUND STRUCTURE (B-30-110).

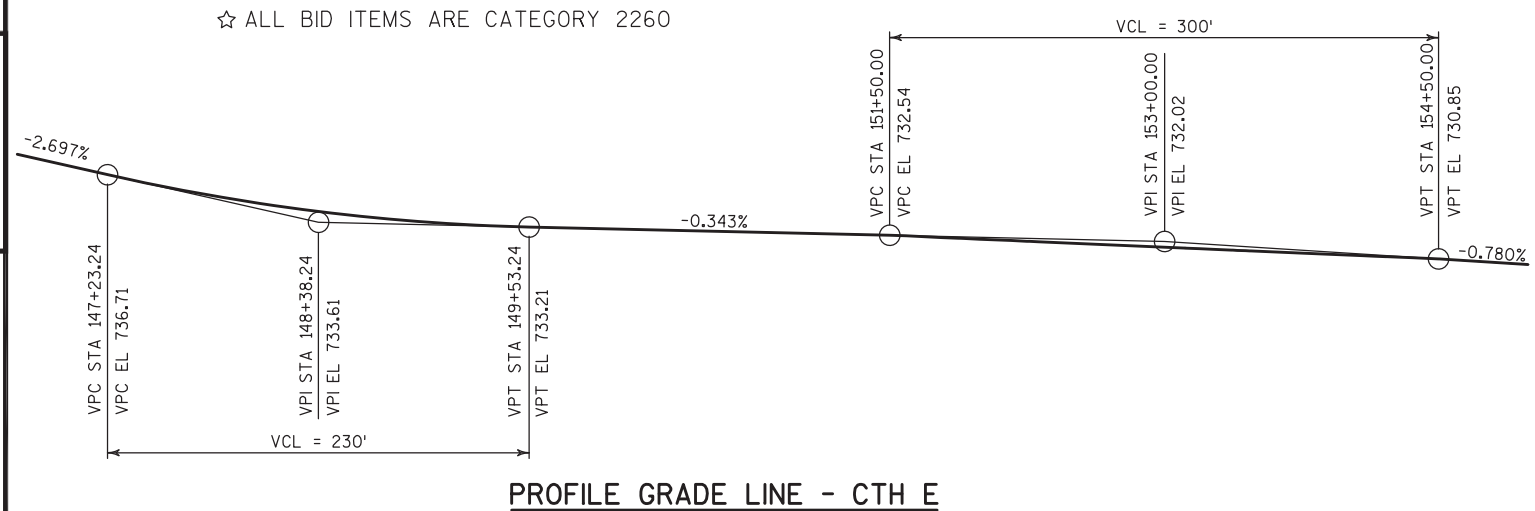
1-WAY TRAFFIC ON CTH E WB WILL BE MAINTAINED DURING CONSTRUCTION OF B-30-110. INTERIM CLEARANCE DURING CONSTRUCTION OF B-30-110 AFTER GIRDER ERECTION IS 14'-4".

THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATIONS AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE. UTILITIES LABELED AS PROPOSED MAY BE INSTALLED BY OTHERS PRIOR TO THIS CONTRACT.

PRECAST PIER NON-BID ITEMS (PRECAST PIER COLUMNS & GROUTED BAR COUPLERS) ARE FOR INFORMATIONAL PURPOSES ONLY. IF THE CONTRACTOR ELECTS TO UTILIZE PRECAST PIER COLUMNS, THE NON-BID ITEM SPECIAL PROVISIONS WITHIN THIS CONTRACT SHALL GOVERN THE WORK. PAYMENT FOR THE PRECAST PIER SHALL BE BASED ON THE QUANTITIES AND PRICES BID FOR THE ITEMS LISTED IN THE "TOTAL ESTIMATED QUANTITIES" FOR THE CAST-IN-PLACE PIER.



PROFILE GRADE LINE - IH 94 NB & SB



REVISION QUANTITIES FOR INFORMATIONAL PURPOSES ONLY.

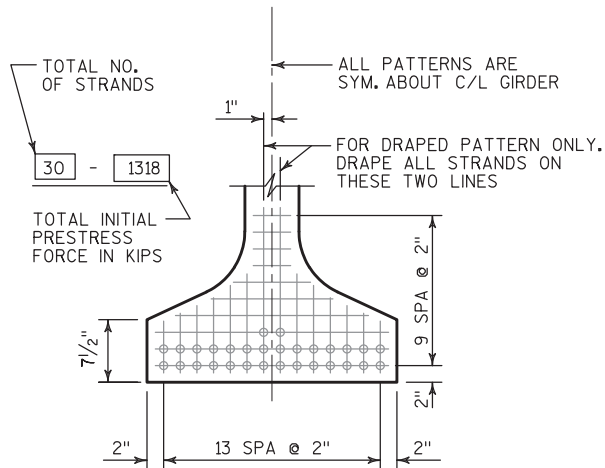
THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE "45W" PRESTRESSED GIRDER DETAILS" SHEET.

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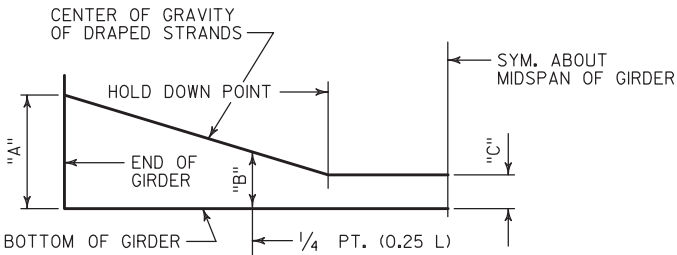
1C	8/8/18	REMOVE PRECAST DECK PANELS	PMF
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-30-110			
DRAWN BY		PLANS CK'D	
QUANTITIES & NOTES			SHEET 3 OF 27

PLOT DATE: Aug 08, 2018

PLOT SCALE:



TYPICAL STRAND PATTERN - SPANS 1 & 2
0.6" DIA STRANDS



DRAPED STRAND PROFILE

THEORETICAL CAMBER (IN) *	
SPAN	5/10 PT
1	3"
2	3"

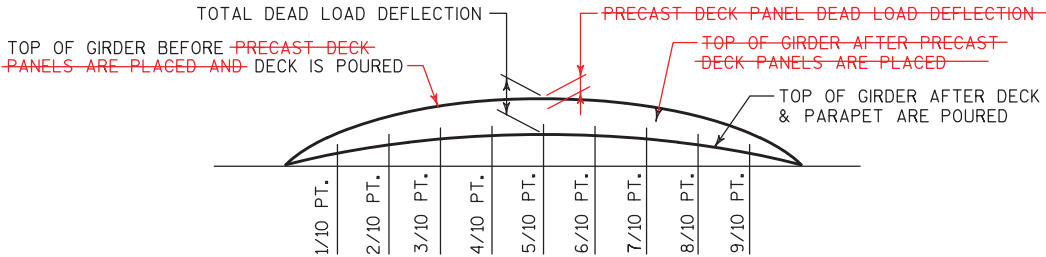
* THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T', USE ACTUAL GIRDER SHOTS.

THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.

THEORETICAL GIRDER CAMBER

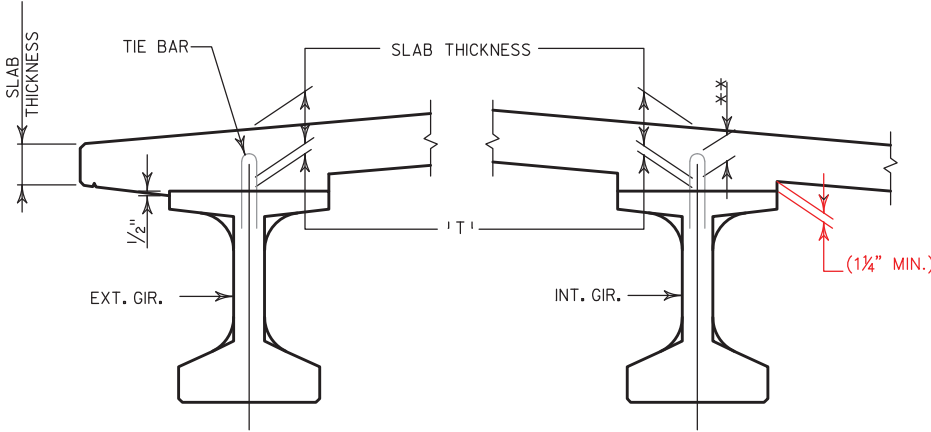
(CAMBER IS SYMMETRIC ABOUT THE MID-POINT OF BEAM)



DEAD LOAD DEFLECTION DIAGRAM

DEAD LOAD DEFLECTION TABLE

SPAN	GIRDER LOCATION	DEFLECTION TYPE	DEAD LOAD DEFLECTION									
			1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	10/10
1 & 2	EXTERIOR	PRECAST DECK PANEL	3/16"	3/8"	1/2"	5/8"	1 1/16"	5/8"	1/2"	3/8"	3/16"	3/16"
1 & 2	INTERIOR	PRECAST DECK PANEL	1/8"	3/16"	1/4"	5/16"	3/8"	3/8"	1/4"	3/16"	1/8"	1/8"
1 & 2	EXTERIOR	TOTAL	1/2"	1"	1 1/16"	1 1/16"	1 3/4"	1 1/16"	1 1/16"	1"	1/2"	1/2"
1 & 2	INTERIOR	TOTAL	5/8"	1 1/8"	1 1/2"	1 3/4"	1 7/8"	1 3/4"	1 1/2"	1 1/8"	5/8"	5/8"



DECK HAUNCH DETAIL

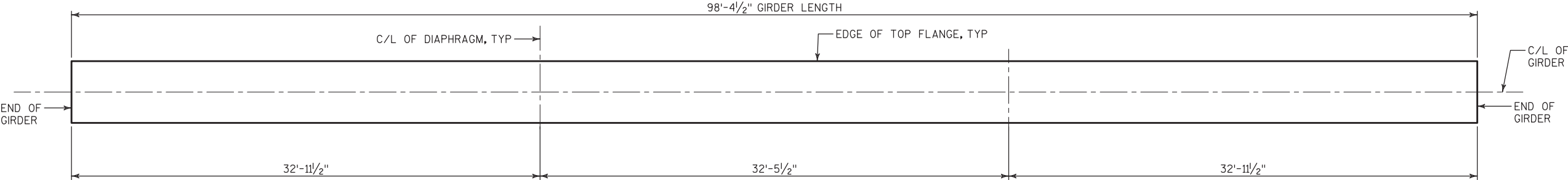
IF 1 1/4" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR. THE PLAN DECK THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN 1/2" OR, ** IF 3" MINIMUM DECK EMBEDMENT OF THE TIE BAR ABOVE THE PRECAST DECK PANEL CANNOT BE OBTAINED.

TO DETERMINE 'T', ELEVATION OF TOP OF GIRDERS AT C/L OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

- TOP OF DECK ELEVATION AT FINAL GRADE
- TOP OF GIRDER ELEVATION
- + DEAD LOAD DEFLECTION
- DECK THICKNESS
- PRECAST DECK PANEL THICKNESS
- = HAUNCH HEIGHT 'T'

NOTE: AN AVERAGE HAUNCH 'T' OF 2 3/4" WAS USED TO COMPUTE THE QUANTITY "HPC MASONRY STRUCTURES". A 1" THICKNESS OF GROUT BEDDING THE FULL WIDTH OF INTERIOR GIRDERS & PARTIAL WIDTH OF EXTERIOR GIRDERS WAS SUBTRACTED FROM THE "HPC MASONRY STRUCTURES" VOLUME.

8/8/18

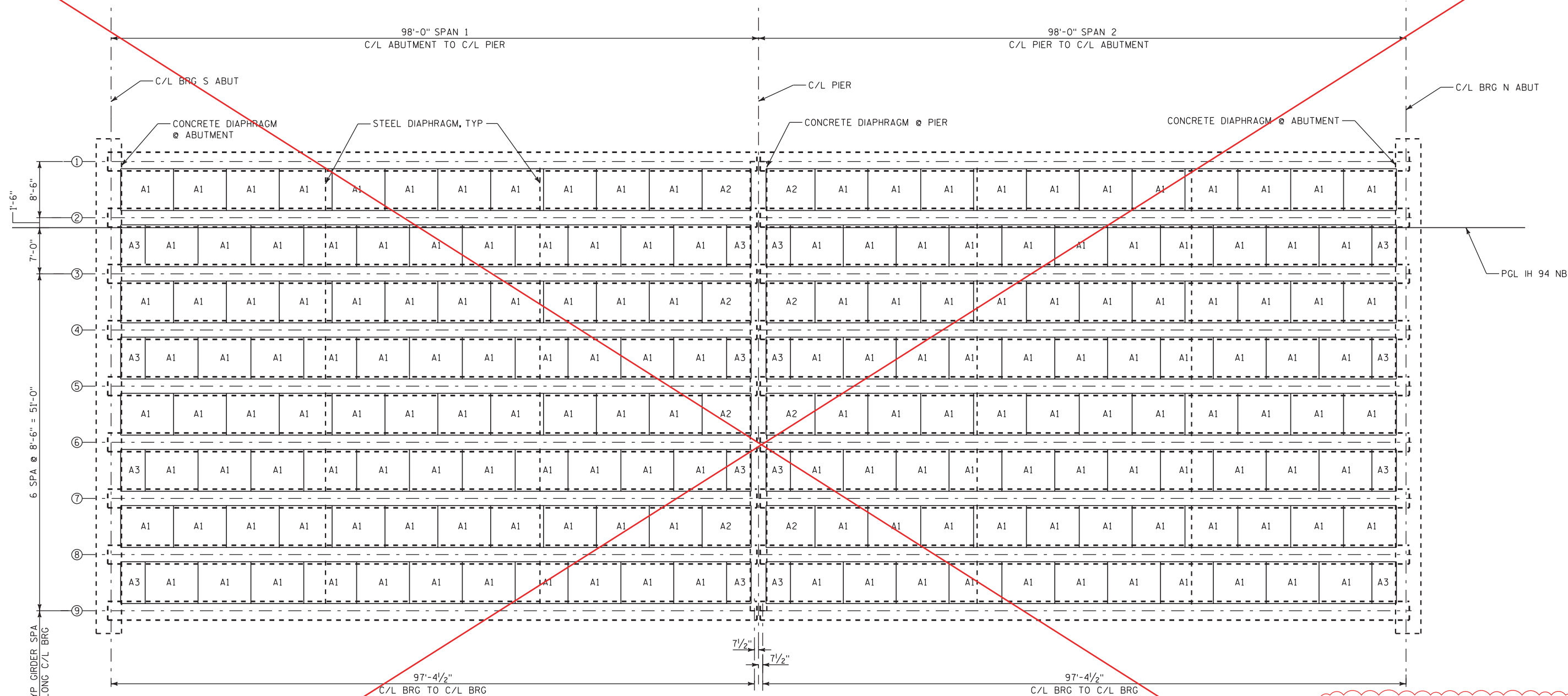


STEEL DIAPHRAGM SPACING

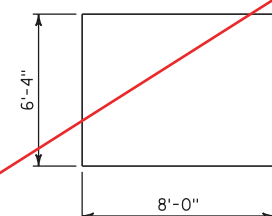
NO.	8/8/18	REMOVE PRECAST DECK PANELS	PMF
DATE	8/8/18	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-30-110			
DRAWN BY		PLANS CK'D	
45W PRESTRESSED GIRDER DETAILS			SHEET 16 OF 27

STATE PROJECT NUMBER

1030-23-72

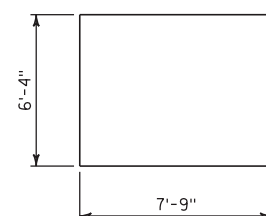


FRAMING PLAN



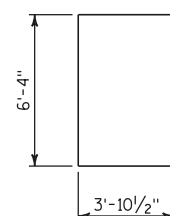
PANEL A1

TOTAL = 176 PANELS



PANEL A2

TOTAL = 8 PANELS



PANEL A3

TOTAL = 16 PANELS



8/8/18

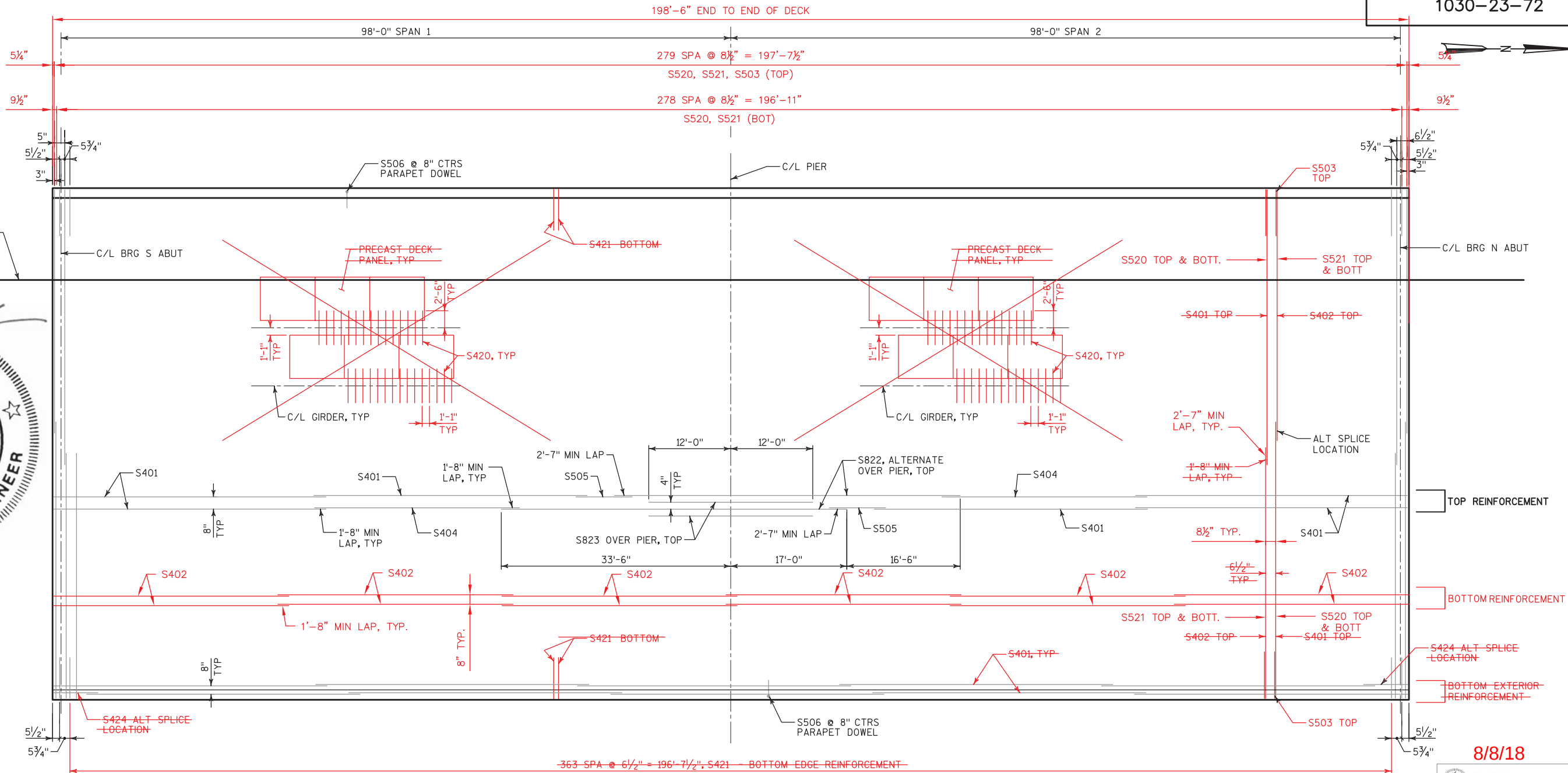
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NO.	DATE	REVISION	BY
8/8/18		REMOVE PRECAST DECK PANELS	PMF
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-30-110			
DRAWN BY	TEK	PLANS CK'D.	SGM
FRAMING PLAN & PRECAST DECK PANEL LAYOUT			SHEET 18 OF 27
			496



STATE PROJECT NUMBER

1030-23-72



PLAN



TOP OF DECK ELEVATIONS

	S ABUT	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	PIER 1	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	N ABUT
W FLOW LINE	754.41	754.39	754.38	754.36	754.34	754.32	754.29	754.26	754.23	754.20	754.16	754.12	754.08	754.03	753.99	753.94	753.88	753.83	753.77	753.71	753.64
GIRDER 1	754.45	754.43	754.42	754.40	754.38	754.36	754.33	754.30	754.27	754.24	754.20	754.16	754.12	754.07	754.03	753.98	753.92	753.87	753.81	753.75	753.68
GIRDER 2	754.62	754.60	754.59	754.57	754.55	754.53	754.50	754.47	754.44	754.41	754.37	754.33	754.29	754.24	754.20	754.15	754.09	754.04	753.98	753.92	753.85
GIRDER 3	754.79	754.77	754.76	754.74	754.72	754.70	754.67	754.64	754.61	754.58	754.54	754.50	754.46	754.41	754.37	754.32	754.26	754.21	754.15	754.09	754.02
GIRDER 4	754.96	754.94	754.93	754.91	754.89	754.87	754.84	754.81	754.78	754.75	754.71	754.67	754.63	754.58	754.54	754.49	754.43	754.38	754.32	754.26	754.19
GIR. 5/CROWN	755.13	755.11	755.10	755.08	755.06	755.04	755.01	754.98	754.95	754.92	754.88	754.84	754.80	754.75	754.71	754.66	754.60	754.55	754.49	754.43	754.36
GIRDER 6	754.96	754.94	754.93	754.91	754.89	754.87	754.84	754.81	754.78	754.75	754.71	754.67	754.63	754.58	754.54	754.49	754.43	754.38	754.32	754.26	754.19
GIRDER 7	754.79	754.77	754.76	754.74	754.72	754.70	754.67	754.64	754.61	754.58	754.54	754.50	754.46	754.41	754.37	754.32	754.26	754.21	754.15	754.09	754.02
GIRDER 8	754.62	754.60	754.59	754.57	754.55	754.53	754.50	754.47	754.44	754.41	754.37	754.33	754.29	754.24	754.20	754.15	754.09	754.04	753.98	753.92	753.85
GIRDER 9	754.45	754.43	754.42	754.40	754.38	754.36	754.33	754.30	754.27	754.24	754.20	754.16	754.12	754.07	754.03	753.98	753.92	753.87	753.81	753.75	753.68
E FLOW LINE	754.41	754.39	754.38	754.36	754.34	754.32	754.29	754.26	754.23	754.20	754.16	754.12	754.08	754.03	753.99	753.94	753.88	753.83	753.77	753.71	753.64

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1C	8/8/18	REMOVE PRECAST DECK PANELS	PMF
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-30-110			
DRAWN BY		PLANS CK'D	
SUPERSTRUCTURE			SHEET 19 OF 27

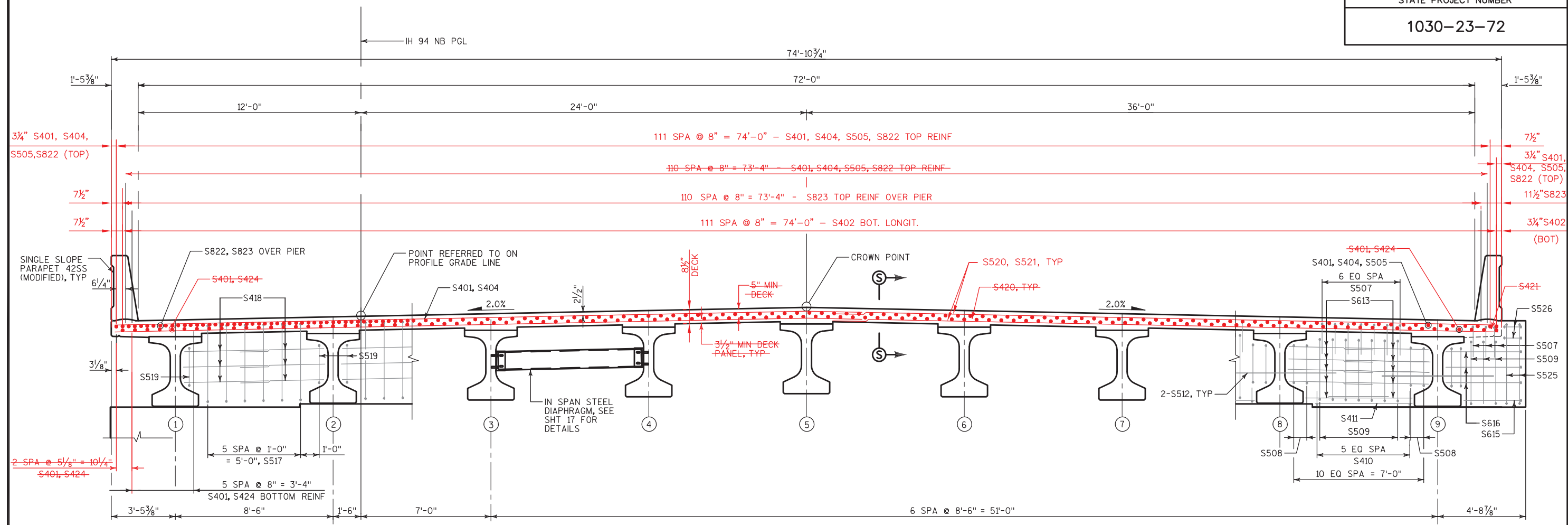
PLOT DATE: Aug 08, 2018

PLOT SCALE:

10

STATE PROJECT NUMBER

1030-23-72



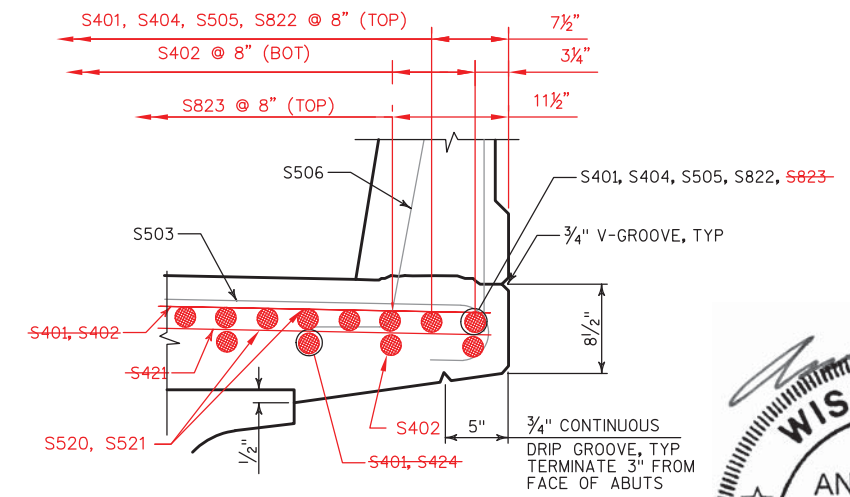
CONC DIAPH AT PIER

CROSS SECTION THRU ROADWAY

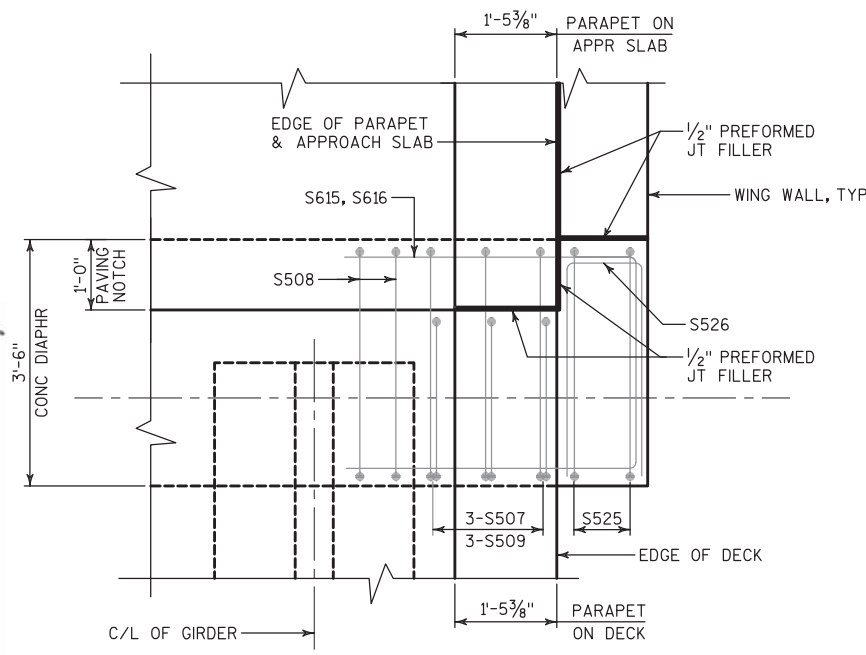
(LOOKING NORTH)

CONC DIAPH AT ABUTMENT

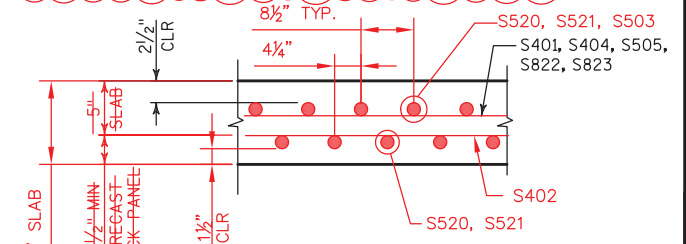
THE PE STAMP IN THIS PLAN SET COVERS ONLY THE MODIFICATIONS SHOWN CLOUDED IN RED AND SIGNIFIED BY 1C, WHICH MODIFY THE ORIGINAL BRIDGE PLANS TO UTILIZE A TRADITIONAL FULL-DEPTH, CAST-IN-PLACE CONCRETE DECK. THE DECK REINFORCEMENT IS DESIGNED PER CURRENT WISCONSIN DOT BRIDGE MANUAL.



EDGE OF DECK DETAIL
EAST EDGE OF DECK AT PIER SHOWN



PARTIAL PLAN AT ABUTMENT



SECTION S-S



8/8/18



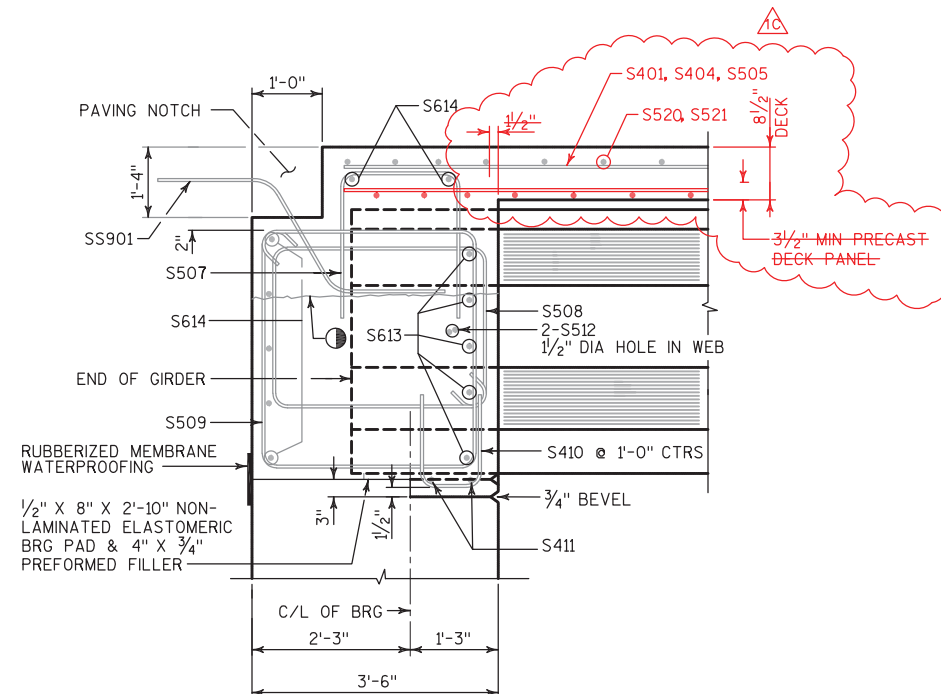
NO.	8/8/18	REMOVE PRECAST DECK PANELS	PMF
DATE		REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-30-110			
DRAWN BY		PLANS CK'D	
SUPERSTRUCTURE CROSS SECTION		SHEET 20 OF 27	

PLOT DATE: Aug 08, 2018

PLOT SCALE:

BILL OF BARS

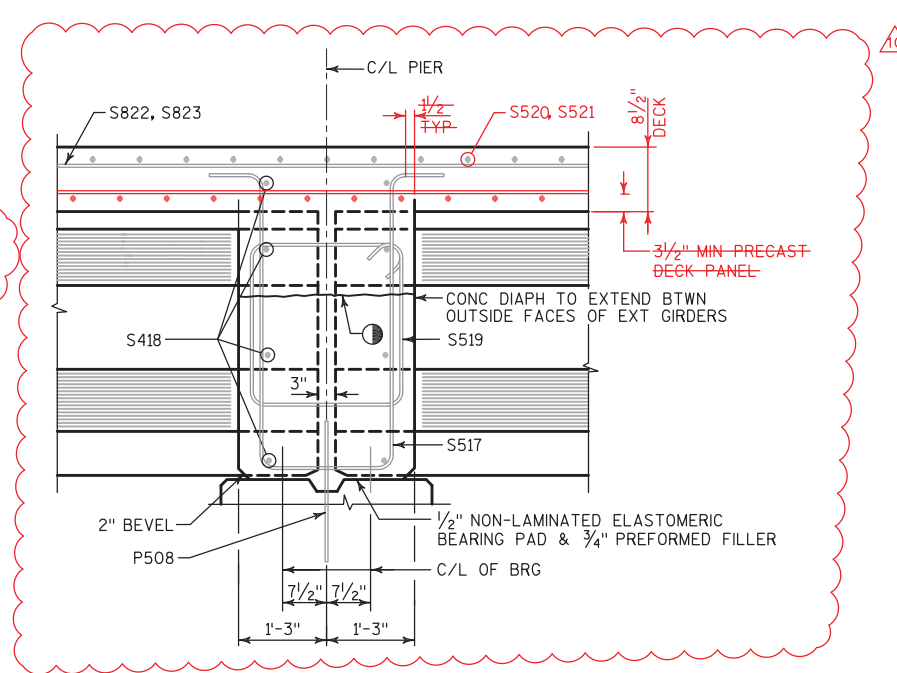
BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
S401	X	339	40'-0"			SLAB LONGIT - TOP
S402	X	672	34'-5"			SLAB LONGIT - BOTT
S503	X	560	5'-5"	X		SLAB OVERHANG TRANSVERSE - TOP
S404	X	113	29'-2"			SLAB LONGITUDINAL - TOP
S505	X	113	8'-6"			SLAB LONGITUDINAL - TOP
S506	X	580	4'-5"	X		PARAPET DOWEL
S507	X	124	6'-3"	X		ABUT DIAPH VERTICAL
S508	X	72	11'-2"	X		ABUT DIAPH VERTICAL
S509	X	124	12'-10"	X		ABUT DIAPH STIRRUP
S410	X	96	3'-10"	X		ABUT DIAPH VERTICAL
S411	X	32	5'-2"			ABUT DIAPH HORIZONTAL
S512	X	36	6'-0"			ABUT DIAPH HORIZONTAL @ GIRS
S613	X	160	5'-2"			ABUT DIAPH HORIZ FF
S614	X	28	38'-6"			ABUT DIAPH HORIZ BF
S615	X	4	9'-1"	X		ABUT DIAPH HORIZ OUTSIDE
S616	X	12	10'-9"	X		ABUT DIAPH HORIZ OUTSIDE
S517	X	48	11'-9"	X		PIER DIAPH STIRRUP
S418	X	96	4'-8"			PIER DIAPH HORIZ
S519	X	16	9'-6"	X		PIER DIAPH STIRRUP
S520	X	559	40'-0"			SLAB TRANSVERSE - TOP & BOTTOM
S521	X	559	37'-4"			SLAB TRANSVERSE - TOP & BOTTOM
S822	X	113	50'-8"			SLAB LONGIT OVER PIER - TOP
S823	X	111	24'-0"			SLAB LONGIT OVER PIER - TOP
S424	X	16	6'-10"			SLAB LONGIT AT ENDS - BOTTOM
S525	X	4	15'-2"	X		ABUT DIAPH VERTICAL OUTSIDE
S526	X	4	7'-0"	X		ABUT DIAPH HORIZ OUTSIDE
SS901		152	5'-0"			SUPER DIAPHRAGM @ ABUT TO APPROACH SLAB



AT ABUTMENTS

PART LONGIT SECTION

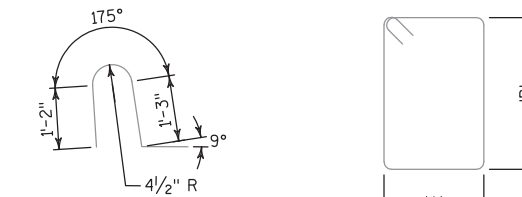
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AT PIER DIAPHRAGM

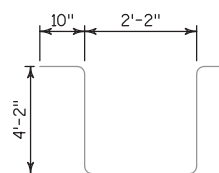
LEGEND

- OPTIONAL CONSTRUCTION JOINT 1'-2" BELOW TOP OF GIRDER. IF USED, DECK POUR MUST BE WITHIN 2 WEEKS FROM THE TIME OF THE DIAPHRAGM POUR



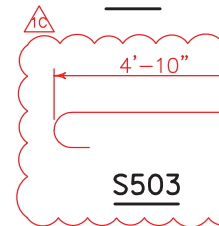
S506

BAR MARK	DIM. 'A'	DIM. 'B'
S508	3'-1"	2'-2"
S509	3'-1"	3'-0"
S519	2'-2"	2'-3"
S525	3'-1"	4'-2"

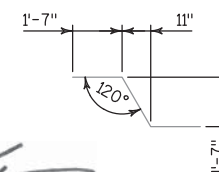


S517

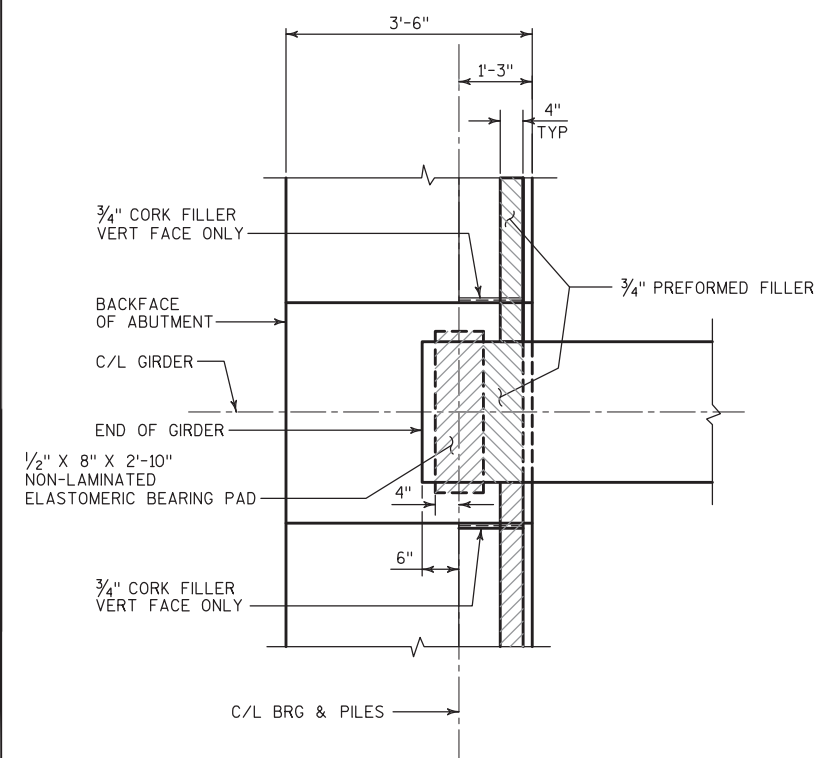
BAR MARK	DIM. 'A'	DIM. 'B'
S507	2'-2"	2'-2"
S410	1'-0"	1'-6"
S615	3'-1"	3'-2"
S616	3'-1"	4'-0"
S526	11"	3'-2"



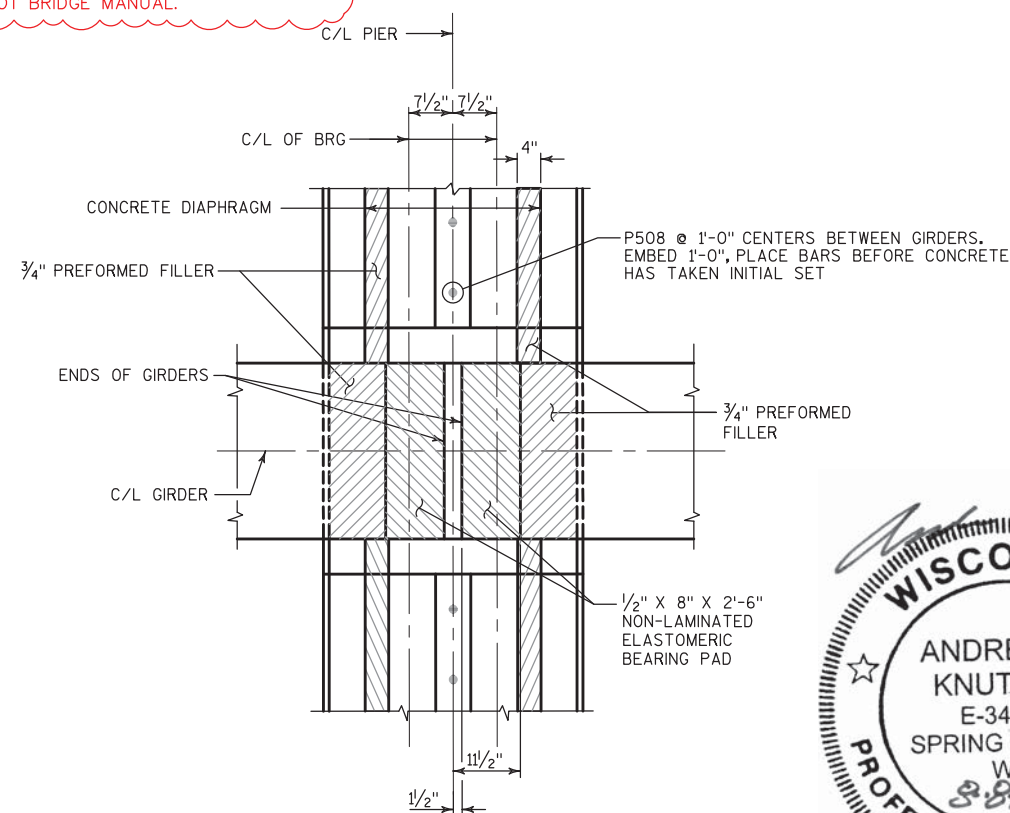
S503



SS901



BEARING PAD DETAIL @ ABUTMENTS



BEARING PAD DETAIL @ PIER

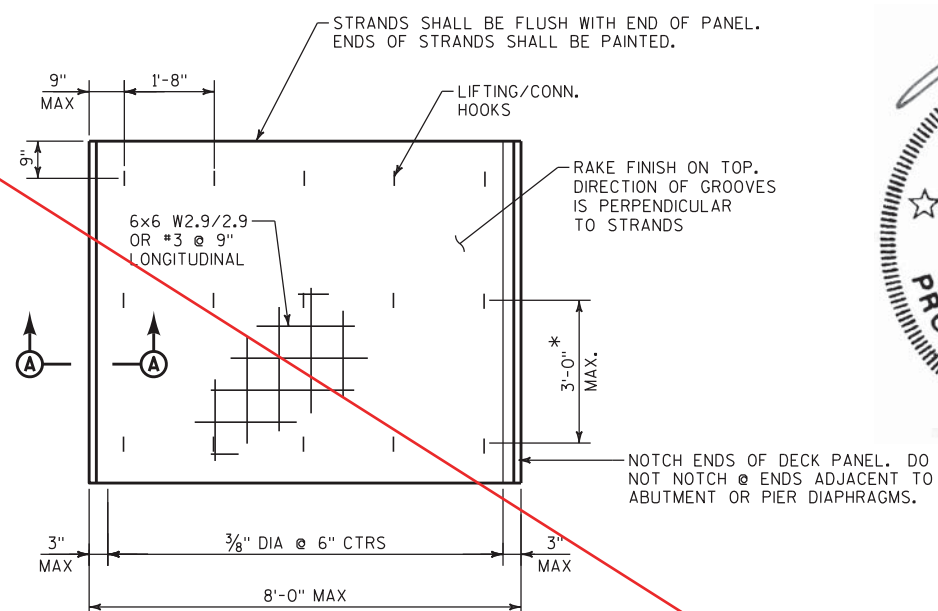
8/8/18



1C	8/8/18	REMOVE PRECAST DECK PANELS	PMF
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-30-110			
DRAWN BY		PLANS CK'D	
SUPERSTRUCTURE DETAILS		SHEET 21 OF 27	

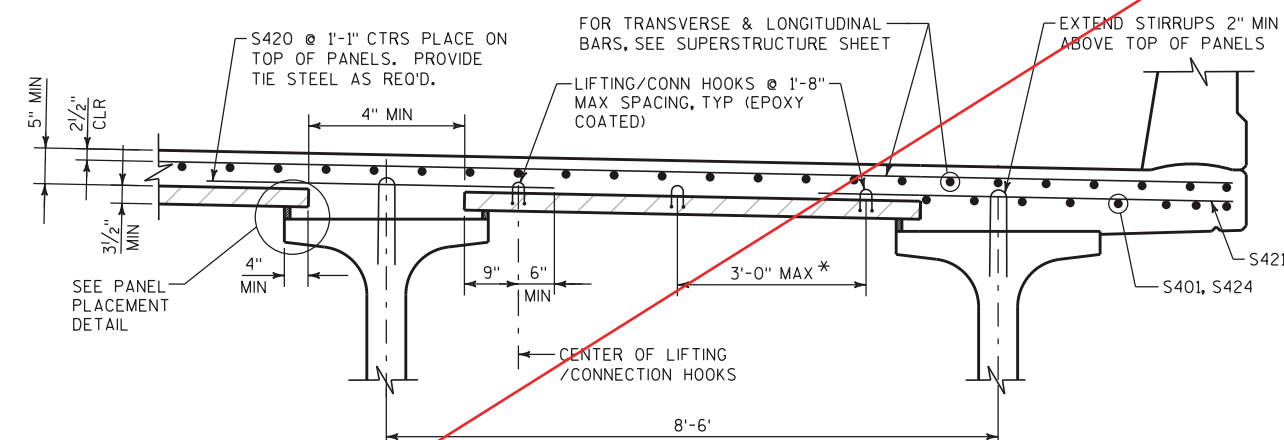
PLOT DATE: Aug 08, 2018

PLOT SCALE:

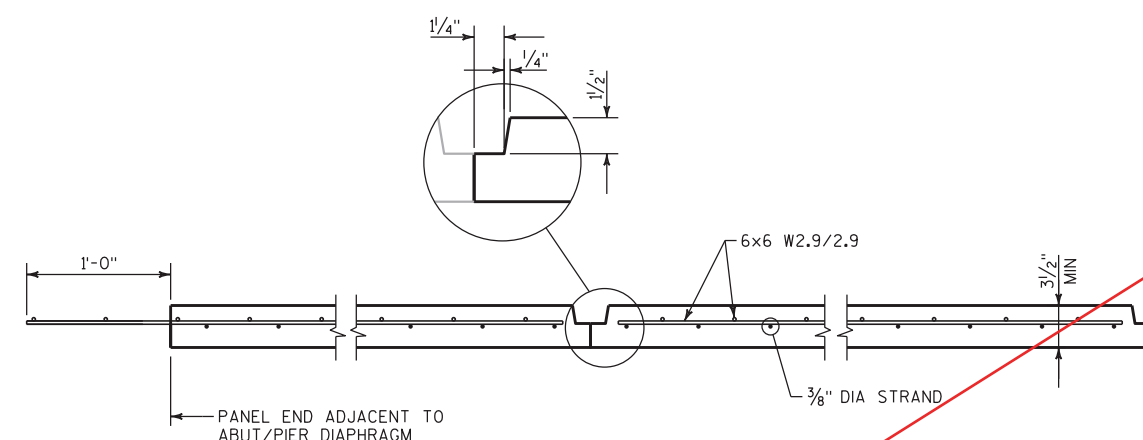


DECK PANEL

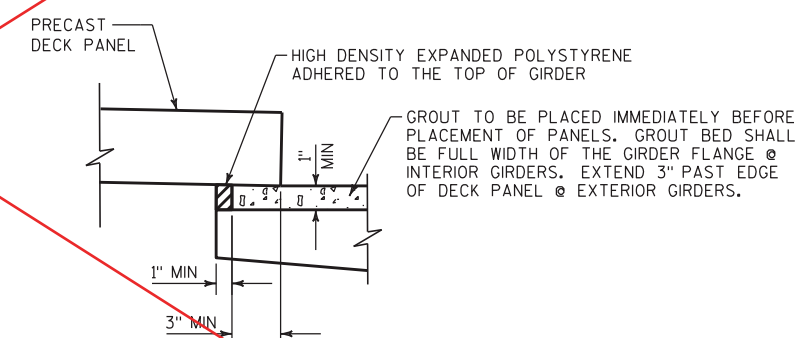
*3'-0" MAX. SPACING BETWEEN ADJACENT ROWS.



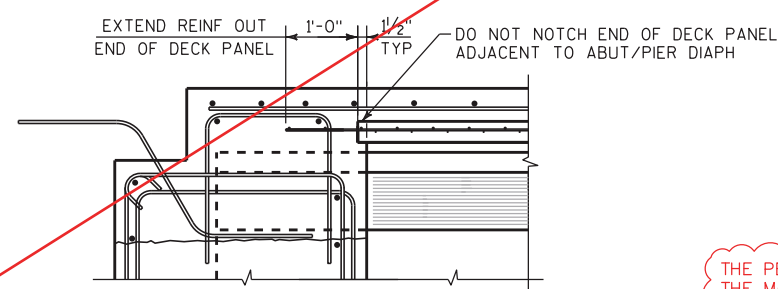
TRANSVERSE SECTION THRU SLAB ON GIRDERS WITH DECK PANELS



DECK PANEL SECTION SHOWING END NOTCH



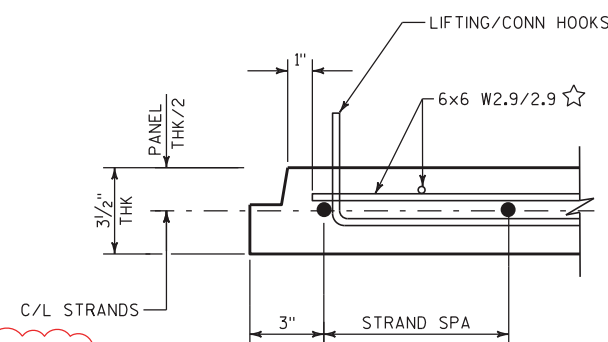
PANEL PLACEMENT DETAIL



PART SECTION @ ABUT DIAPHRAGM

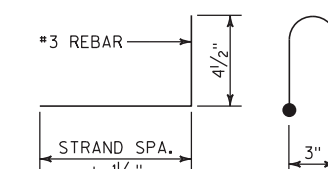
(PIER DIAPHRAGM SIMILIAR)

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PART SECTION A-A

☆ BARS IN WWF WHICH ARE PARALLEL TO THE STRANDS MUST BE A MINIMUM OF 1" CLEAR FROM THE STRANDS.



LIFTING/CONN. HOOK DETAIL

DESIGN DATA

INITIAL PRESTRESS FORCE / STRAND = 14.51 KIPS

CONCRETE FOR DECK PANELS

f'c = 6,000 psi

f'ci = 4,400 psi

NOTES

ALL REINFORCEMENT SHALL BE EPOXY COATED EXCEPT FOR PRESTRESSING STRANDS.

THE TOP SURFACE OF THE PRECAST DECK PANELS SHALL BE KEPT FREE OF ANY CONTAMINANTS OR BOND BREAKING SUBSTANCES SUCH AS OIL.

MEMBRANE CURING COMPOUND SHALL NOT BE USED ON THE TOP OR THE SIDE OF THE PRECAST DECK PANELS.

8/8/18



1C	8/8/18	REMOVE PRECAST DECK PANELS	PMF
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-30-110			
DRAWN BY		TEK	PLANS CK'D. SGM
PRECAST DECK PANEL DETAILS		SHEET 22 OF 27	
		500	