01-16-2026 LETTING ITEM 075

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	1
	ILLINOIS	CONTRACT NO. 70H59		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED
HIGHWAY PLANS

FAI - 74 (I-74)
SECTION D5 BRIDGE PAINTING 2026-1
PROJECT NHPP - 081L(393)
BRIDGE PAINTING
CHAMPAIGN COUNTY

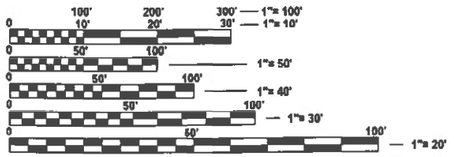
C-95-003-26

FOR INDEX OF SHEETS, SEE SHEET NO. 2
FOR SUMMARY OF QUANTITIES, SEE SHEET NOS. 4 - 6

CURRENT TRAFFIC DATA

LOC. #1	LOC. #2	LOC. #3	
22,800 (I-74)	22,800 (I-74)	22,800 (I-74)	
225 (TR 10)	275 (CR 200E)	525 (CR 250E)	
(2025)	(2025)	(2025)	
LOC. #4	**LOC. #5**	**LOC. #6**	**LOC. #7**
41,900 (I-74)	48,900 (I-74)	48,900 (I-74)	41,900 (I-74)
27,900 (Prospect Ave)	17,000 (Neil St)	9,650 (Lincoln Ave)	17,900 (US 45)
(2025)	(2025)	(2025)	(2025)

LOC. #1: S.N. 010-0207 - TR 10 / CR 0E over I-74 - 2.5 mi W of Mahomet @ m.p. 166.15
LOC. #2: S.N. 010-0208 - Turkey Farm Rd / CR 200E over I-74 - 1.7 mi W of IL 47 @ m.p. 170.11
LOC. #3: S.N. 010-0209 - Crowley Rd / CR 250E over I-74 - 1.0 mi W of Mahomet @ m.p. 170.88
LOC. #4: S.N. 010-0186 - Prospect Ave / FAP 804 over I-74 - 1.6 mi E of I-57 @ m.p. 180.58
LOC. #5: S.N. 010-0132 - Neil St / FAP 802 over I-74 - 2.4 mi E of I-57 @ m.p. 181.33
LOC. #6: S.N. 010-0158 - Lincoln Ave / FAU 7177 over I-74 - 1.3 mi W of US 45 @ m.p. 182.62
LOC. #7: S.N. 010-0024 - I-74 over US 45 / FAP 800 / Cunningham Ave - N of Urbana @ m.p. 183.89



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER: JASON STULTS
SQUAD LEADER: GREG EAGLIN
DESIGNER: JASON LEE
PHONE: (217)465-4181

CONTRACT NO. 70H59

FOR LOCATION MAP, SEE SHEET 3

D-95-016-25



LOCATION OF SECTION INDICATED THUS: -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED 8/6 20 2025
Kenneth A. Leonetti JR
REGIONAL ENGINEER

October 3 20 25
ENGINEER OF DESIGN AND ENVIRONMENT

October 3 20 25
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	INDEX OF SHEETS, HIGHWAY STANDARDS, & GENERAL NOTES
3	LOCATION MAP LOCATIONS - CHAMPAIGN COUNTY
4-6	SUMMARY OF QUANTITIES
7	TRAFFIC CONTROL SUMMARY
8-11	DESCRIPTIONS OF WORK FOR LOCATIONS 1-7
12-15	LOCATION #1 STRUCTURE DETAILS
16-19	LOCATION #2 STRUCTURE DETAILS
20-23	LOCATION #3 STRUCTURE DETAILS
24-34	LOCATION #4 STRUCTURE DETAILS
35-44	LOCATION #5 STRUCTURE DETAILS
45-52	LOCATION #6 STRUCTURE DETAILS
53-63	LOCATION #7 STRUCTURE DETAILS
64	DETAIL FOR TEMPORARY RUMBLE STRIPS
65-66	WIDTH RESTRICTION SIGNAGE DETAILS

HIGHWAY STANDARDS

STANDARD NO.	DESCRIPTION
000001-09	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 m) AWAY
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701101-05	OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 m) AWAY
701400-12	APPROACH TO LANE CLOSURE, FREEWAY / EXPRESSWAY
701401-13	LANE CLOSURE, FREEWAY / EXPRESSWAY
701402-12	LANE CLOSURE, FREEWAY / EXPRESSWAY, WITH BARRIER
701428-01	TRAFFIC CONTROL SETUP AND REMOVAL FREEWAY / EXPRESSWAY
701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-11	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

GENERAL NOTES

G.N.-100A
ELECTRONIC FILES AND/OR ELECTRONIC SURVEY INFORMATION INCLUDING CADD FILES WILL NOT BE AVAILABLE TO THE CONTRACTOR

G.N.-501A
THE EXISTING STRUCTURAL STEEL COATING CONTAINS LEAD. THE CONTRACTOR SHALL FOLLOW THE GUIDE BRIDGE SPECIAL PROVISIONS FOR "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES" TO DEAL WITH THE PRESENCE OF LEAD ON THIS PROJECT.

G.N. 506 (SPL.)
ALL FINAL SURFACES OF THE BEAMS SHALL BE PAINTED GRAY (MUNSELL COLOR STANDARD - 5B 7/1) EXCEPT THE EXTERIOR SURFACES OF THE EXTERIOR BEAMS WHICH SHALL BE PAINTED INTERSTATE GREEN (MUNSELL COLOR STANDARD 7.5G 4/8) AS SPECIFIED UNDER THE DESCRIPTION FOR EACH STRUCTURE.

ONLY STRUCTURAL STEEL AND OTHER DESIGNATED SURFACES SHALL BE PAINTED. ALL OTHER SURFACES SHALL BE PROTECTED FROM CONTRACTORS BLASTING AND PAINTING OPERATIONS. ANY AREAS DAMAGED BY BLASTING OR OVERSPRAY WILL BE REMOVED OR REPAIRED AT THE CONTRACTOR'S EXPENSE AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

CARE SHALL BE TAKEN NOT TO DAMAGE RUBBER BEARING OR JOINT COMPONENTS DURING BLASTING AND CLEANING OPERATIONS. ANY DAMAGE TO THESE COMPONENTS SHALL BE REPAIRED AT CONTRACTORS EXPENSE.

THE SSPC-QP1 AND QP2 PAINTING CONTRACTOR CERTIFICATIONS WILL BE REQUIRED FOR THIS CONTRACT.

ALL TRASH AND PAINTING DEBRIS, EXCLUDING WASTE BARRELS OR ROLL-OFF DUMPSTERS, SHALL BE REMOVED BEFORE BEGINNING WORK AT ANOTHER LOCATION.

2 YEAR PAINT WARRANTY REQUIRED FOR ALL STRUCTURES

TRAFFIC CONTROL & PROTECTION STANDARD 701428: THIS STANDARD IS TO BE USED WHEN THE ADT IS GREATER THAN 25,000. SEE LOCATIONS 4, 5 & 6

COMMITMENTS
THERE ARE NO COMMITMENTS ON THIS PROJECTS

MODEL: Index [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d10933581D570f59-sht-GenNotes.dgn

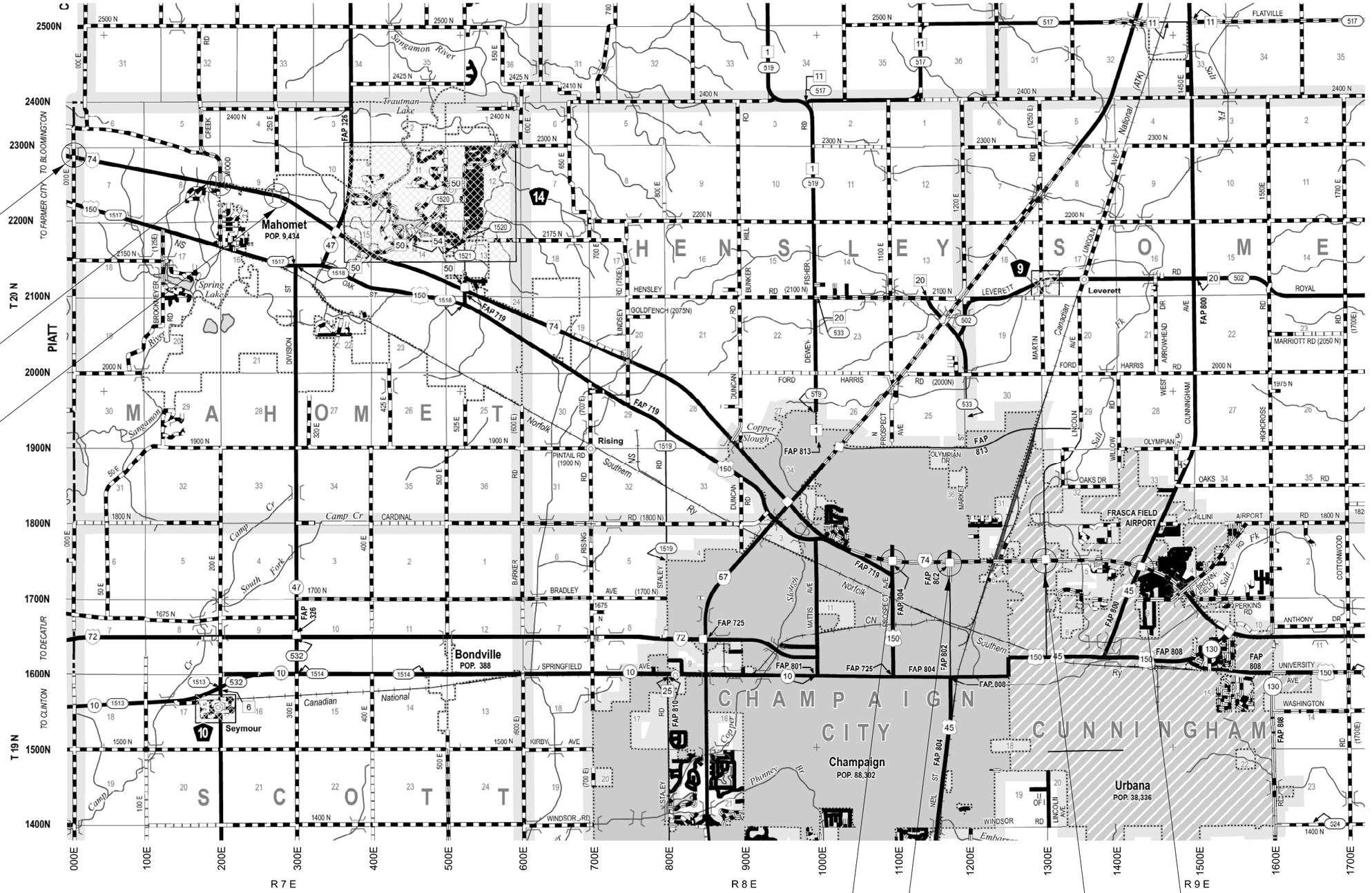
USER NAME = Steven.Wood	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 10/28/2025	DATE -	REVISED -	

INDEX OF SHEETS, HIGHWAY STANDARDS & GENERAL NOTES

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	2
		CONTRACT NO. 70H59		
	ILLINOIS FED. AID PROJECT			

CHAMPAIGN COUNTY



TOWNSHIPS
MAHOMET
CHAMPAIGN CITY
CUNNINGHAM

SCALE FOR MAIN MAP

0 1 2 3 4 5 Miles
0 5,000 10,000 15,000 20,000 25,000 Feet
0 1 2 3 4 5 6 7 8 Kilometers

MODEL: Location Map [Sheet]
FILE NAME: c:\pw_work\pwidot\projects\d1093358\D570H59-sht-LocMap.dgn

USER NAME = Justin.Cearlock	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 3/31/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LOCATION MAP
CHAMPAIGN COUNTY

SCALE: | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	3
		CONTRACT NO. 70H59		
		ILLINOIS	FED. AID PROJECT	

SUMMARY OF QUANTITIES

LOCATION OF WORK:	LOC. #1	LOC. #2	LOC. #3	LOC. #4	LOC. #5	LOC. #6	LOC. #7
	FAI 74	FAI 74	FAI 74	FAI 74	FAI 74	FAI 74	FAI 74
	S.N.	S.N.	S.N.	S.N.	S.N.	S.N.	S.N.
	010-0207	010-0208	010-0209	010-0186	010-0132	010-0158	010-0024
COUNTY:	CHAMPAIGN	CHAMPAIGN	CHAMPAIGN	CHAMPAIGN	CHAMPAIGN	CHAMPAIGN	CHAMPAIGN
	RURAL	RURAL	RURAL	URBAN	URBAN	URBAN	URBAN
FUNDING BREAKOUT:	90% FEDERAL	90% FEDERAL	90% FEDERAL	90% FEDERAL	90% FEDERAL	90% FEDERAL	90% FEDERAL
	10% STATE	10% STATE	10% STATE	10% STATE	10% STATE	10% STATE	10% STATE
CONSTRUCTION TYPE CODE:	0047	0047	0047	0047	0047	0047	0047

	CODE NO.		ITEM	UNIT	TOTAL QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY
	67100100		MOBILIZATION	L SUM	1.00	0.14	0.14	0.14	0.15	0.15	0.14	0.14
	70100207		TRAFFIC CONTROL AND PROTECTION, STANDARD 701402	EACH	12.0	4.0	4.0	4.0				
	70102630		TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1.00				0.34	0.33	0.33	
	70102631		TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	EACH	4.0							4.0
	70102640		TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1.0							1.0
	70106700		TEMPORARY RUMBLE STRIPS	EACH	16.0	6.0	4.0	6.0				
	70107025		CHANGEABLE MESSAGE SIGN	CAL DA	42.0	7.0		7.0	7.0		7.0	14.0
	70200100		NIGHTTIME WORK ZONE LIGHTING	L SUM	1.00				0.34	0.33	0.33	
	70400100		TEMPORARY CONCRETE BARRIER	FOOT	2550.0	600.0	600.0	600.0				750.0
	70400200		RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	2550.0	600.0	600.0	600.0				750.0
	70600240		IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2	EACH	2.0							2.0
	70600250		IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	6.0	2.0	2.0	2.0				
* DENOTES SPECIALTY ITEM												

MODEL: Summary of Quantities [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1093358\D570H59-sht-SOQ.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 7/16/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET 1 OF 3 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	4
		CONTRACT NO. 70H59		
	ILLINOIS FED. AID PROJECT			

SUMMARY OF QUANTITIES

LOCATION OF WORK:	LOC. #1	LOC. #2	LOC. #3	LOC. #4	LOC. #5	LOC. #6	LOC. #7
	FAI 74	FAI 74	FAI 74	FAI 74	FAI 74	FAI 74	FAI 74
	S.N.	S.N.	S.N.	S.N.	S.N.	S.N.	S.N.
	010-0207	010-0208	010-0209	010-0186	010-0132	010-0158	010-0024
COUNTY:	CHAMPAIGN	CHAMPAIGN	CHAMPAIGN	CHAMPAIGN	CHAMPAIGN	CHAMPAIGN	CHAMPAIGN
	RURAL	RURAL	RURAL	URBAN	URBAN	URBAN	URBAN
FUNDING BREAKOUT:	90% FEDERAL	90% FEDERAL	90% FEDERAL	90% FEDERAL	90% FEDERAL	90% FEDERAL	90% FEDERAL
	10% STATE	10% STATE	10% STATE	10% STATE	10% STATE	10% STATE	10% STATE
CONSTRUCTION TYPE CODE:	0047	0047	0047	0047	0047	0047	0047

	CODE NO.		ITEM	UNIT	TOTAL QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY
	70600340		IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 2	EACH	2.0							2.0
	70600350		IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	6.0	2.0	2.0	2.0				
	X5067501		BRIDGE CLEANING AND PAINTING WARRANTY NUMBER 1	L SUM	1.0	1.0						
	X5067502		BRIDGE CLEANING AND PAINTING WARRANTY NUMBER 2	L SUM	1.0		1.0					
	X5067503		BRIDGE CLEANING AND PAINTING WARRANTY NUMBER 3	L SUM	1.0			1.0				
	X5067504		BRIDGE CLEANING AND PAINTING WARRANTY NUMBER 4	L SUM	1.0				1.0			
	X5067505		BRIDGE CLEANING AND PAINTING WARRANTY NUMBER 5	L SUM	1.0					1.0		
	X5067506		BRIDGE CLEANING AND PAINTING WARRANTY NUMBER 6	L SUM	1.0						1.0	
	X5067507		BRIDGE CLEANING AND PAINTING WARRANTY NUMBER 7	L SUM	1.0							1.0
	X7010206		TRAFFIC CONTROL AND PROTECTION, STANDARD 701401 (SPECIAL)	EACH	12.0				4.0	4.0	4.0	
	X7200201		WIDTH RESTRICTION SIGNING	L SUM	1.0							1.0
	Z0007101		CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 1	L SUM	1.0	1.0						
* DENOTES SPECIALTY ITEM												

MODEL: Summary of Quantities-1 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1093358\D570H59-sht-SOQ.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 7/16/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET 2 OF 3 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	5
		CONTRACT NO. 70H59		
	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

LOCATION OF WORK:	LOC. #1	LOC. #2	LOC. #3	LOC. #4	LOC. #5	LOC. #6	LOC. #7
	FAI 74	FAI 74	FAI 74	FAI 74	FAI 74	FAI 74	FAI 74
	S.N.	S.N.	S.N.	S.N.	S.N.	S.N.	S.N.
	010-0207	010-0208	010-0209	010-0186	010-0132	010-0158	010-0024
COUNTY:	CHAMPAIGN	CHAMPAIGN	CHAMPAIGN	CHAMPAIGN	CHAMPAIGN	CHAMPAIGN	CHAMPAIGN
	RURAL	RURAL	RURAL	URBAN	URBAN	URBAN	URBAN
FUNDING BREAKOUT:	90% FEDERAL	90% FEDERAL	90% FEDERAL	90% FEDERAL	90% FEDERAL	90% FEDERAL	90% FEDERAL
	10% STATE	10% STATE	10% STATE	10% STATE	10% STATE	10% STATE	10% STATE
CONSTRUCTION TYPE CODE:	0047	0047	0047	0047	0047	0047	0047

	CODE NO.		ITEM	UNIT	TOTAL QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY
	Z0007102		CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 2	L SUM	1.0		1.0					
	Z0007103		CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 3	L SUM	1.0			1.0				
	Z0007104		CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 4	L SUM	1.0				1.0			
	Z0007105		CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 5	L SUM	1.0					1.0		
	Z0007106		CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 6	L SUM	1.0						1.0	
	Z0007107		CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 7	L SUM	1.0							1.0
	Z0010501		CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1.0	1.0						
	Z0010502		CLEANING AND PAINTING STEEL BRIDGE NO. 2	L SUM	1.0		1.0					
	Z0010503		CLEANING AND PAINTING STEEL BRIDGE NO. 3	L SUM	1.0			1.0				
	Z0010504		CLEANING AND PAINTING STEEL BRIDGE NO. 4	L SUM	1.0				1.0			
	Z0010505		CLEANING AND PAINTING STEEL BRIDGE NO. 5	L SUM	1.0					1.0		
	Z0010506		CLEANING AND PAINTING STEEL BRIDGE NO. 6	L SUM	1.0						1.0	
	Z0010507		CLEANING AND PAINTING STEEL BRIDGE NO. 7	L SUM	1.0							1.0
* DENOTES SPECIALTY ITEM												

MODEL: Summary of Quantities-2 [Sheet]
FILE NAME: c:\pw_work\dot\steven.wood@illinois.gov\d10933581\D570H59-sht-SOQ.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 7/16/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET 3 OF 3 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	6
		CONTRACT NO. 70H59		
	ILLINOIS FED. AID PROJECT			

TRAFFIC CONTROL SUMMARY

Location	Structure	Direction	Lane	70102631 TC&P Std. 701601 Each	70102640 TC&P Std. 701801 L Sum	X7010206 TC&P Std. 701401 Spl ** Each	70102630 TC&P Std. 701601 *** L Sum	70200100 NIGHT WORK ZONE LGHTG L Sum	70100207 TC&P Std. 701402 Each	no pay item TC&P Std. 701400 not measured for payment included w/ 701401 & 701402	no pay item TC&P Std. 701428 not measured for payment included w/ 701400 & 701401	70400100 Temp Conc Barrier Foot	70400200 Relocate Temp Conc Barrier Foot	70600250 Impact Atten Test Level 3 Each	70600350 Relocate Imp Att, TL 3 Each	70600240 Impact Atten Test Level 2 Each	70600340 Relocate Imp Att, TL 2 Each	X7200201 Width Restrict Signing L SUM	70107025 Changeable Message Sign Cal Day	70106700 Temp Rumble Strip * Each
# 1	010-0207	EB	DL	-	-	-	-	-	1.0	on I-74 EB	-	300	-	1.0	-	-	-	-	7 day advance notice	4.0
		EB	PL	-	-	-	-	-	1.0		-	-	300	-	1.0	-	-	-		
	010-0207	WB	DL	-	-	-	-	-	1.0	on I-74 WB	-	300	-	1.0	-	-	-	-	0 - covered by 010-0209	* 2.0
		WB	PL	-	-	-	-	-	1.0		-	-	300	-	1.0	-	-	-		
# 2	010-0208	EB	DL	-	-	-	-	-	1.0	on I-74 EB	-	300	-	1.0	-	-	-	-	0 - covered by 010-0207	^ 2.0
		EB	PL	-	-	-	-	-	1.0		-	-	300	-	1.0	-	-	-		
	010-0208	WB	DL	-	-	-	-	-	1.0	on I-74 WB	-	300	-	1.0	-	-	-	-	0 - covered by 010-0209	* 2.0
		WB	PL	-	-	-	-	-	1.0		-	-	300	-	1.0	-	-	-		
# 3	010-0209	EB	DL	-	-	-	-	-	1.0	on I-74 EB	-	300	-	1.0	-	-	-	-	0 - covered by 010-0207	* 2.0
		EB	PL	-	-	-	-	-	1.0		-	-	300	-	1.0	-	-	-		
	010-0209	WB	DL	-	-	-	-	-	1.0	on I-74 WB	-	300	-	1.0	-	-	-	-	7 day advance notice	4.0
		WB	PL	-	-	-	-	-	1.0		-	-	300	-	1.0	-	-	-		
# 4 **	010-0186	EB	DL	-	-	1.0	0.34	0.34	-	on I-74 EB	required	-	-	-	-	-	-	-	7 day advance notice	-
		EB	PL	-	-	1.0			-		required	-	-	-	-	-	-	-		
	010-0186	WB	DL	-	-	1.0			-	on I-74 WB	required	-	-	-	-	-	-	-	0 - covered by 010-0158	-
		WB	PL	-	-	1.0			-		required	-	-	-	-	-	-	-		
# 5 **	010-0132	EB	DL	-	-	1.0	0.33	0.33	-	on I-74 EB	required	-	-	-	-	-	-	-	0 - covered by 010-0186	-
		EB	PL	-	-	1.0			-		required	-	-	-	-	-	-	-		
	010-0132	WB	DL	-	-	1.0			-	on I-74 WB	required	-	-	-	-	-	-	-	0 - covered by 010-0158	-
		WB	PL	-	-	1.0			-		required	-	-	-	-	-	-	-		
# 6 **	010-0158	EB	DL	-	-	1.0	0.33	0.33	-	on I-74 EB	required	-	-	-	-	-	-	-	0 - covered by 010-0186	-
		EB	PL	-	-	1.0			-		required	-	-	-	-	-	-	-		
	010-0158	WB	DL	-	-	1.0			-	on I-74 WB	required	-	-	-	-	-	-	-	7 day advance notice	-
		WB	PL	-	-	1.0			-		required	-	-	-	-	-	-	-		
# 7	010-0024	NB	DL	1.0	1.0	-	-	-	-	-	-	375	-	-	-	1.0	-	0.25	7 day advance notice	-
		NB	PL	1.0	-	-	-	-	-		-	-	375	-	-	-	1.0	0.25		
	010-0024	SB	DL	1.0	-	-	-	-	-	-	-	375	-	-	-	1.0	-	0.25	7 day advance notice	-
		SB	PL	1.0	-	-	-	-	-		-	-	375	-	-	-	1.0	0.25		
		TOTALS		4.0	1.0	12.0	1.0	1.0	12.0	-	-	2550.0	2550.0	6.0	6.0	2.0	2.0	1.0	42.0	16.0

* For consecutive overheads along I-74, the 1 mile rumble strips may be used as the advanced rumble strips at the next bridge - to be determined by the engineer.

** At locations #4, #5, & #6 - I-74 lane closures will only be allowed during non-peak hours of 8:30 pm to 6:00 am utilizing TC&P Std 701401 with a Truck Mounted Attenuator (TMA) for worker protection per Article 1106.02(g) of the Standard Specifications. All lanes shall be open with no restrictions 6:00 am to 8:30 pm.

*** At locations #4, #5, & #6, the Contractor may elect to stage equipment on top of the overheads utilizing TC&P Std 701601 (L Sum). As below on I-74, lane closures on top (Prospect, Neil & Lincoln) will only be allowed during non-peak hours of 8:30 pm to 6:00 am or as directed by the Engineer.

MODEL: Traffic Control Summary [Sheet]
FILE NAME: c:\pw_work\dot\projects\d1093358\D570H59-sht-TCS.dgn

USER NAME = Justin.Cearlock	DESIGNED -	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 4/3/2025	DATE -	REVISED -	

TRAFFIC CONTROL SUMMARY

SCALE: | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	7
		CONTRACT NO. 70H59		
		ILLINOIS FED. AID PROJECT		

LOCATION #1

DESCRIPTION: TR 10 / CR 0 E over I-74 - 2.5 mi. W of Mahomet @ m.p. 168.15
COUNTY: CHAMPAIGN
ROUTE: F.A.I. 74
MARKED ROUTE: I-74
SECTION: 10-4-1HB
STRUCTURE NO.: 010-0207
TYPE OF STRUCTURE: 2 SPAN CONTINUOUS STEEL - MULTI-BEAM
4 BEAM LINES - EACH BEAM LENGTH = 184.57'
44" PLATE GIRDERS

CLEANING AND PAINTING OF THE EXISTING STRUCTURAL STEEL SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS FOR "CLEANING AND PAINTING EXISTING STEEL STRUCTURES." ALL BEAMS, BEARINGS AND OTHER STRUCTURAL STEEL SHALL BE CLEANED PER NEAR WHITE BLASTNG SSPC-SP10.

THE DESIGNATED AREAS CLEANED PER NEAR WHITE BLAST CLEANING SSPC-SP10 SHALL BE PAINTED ACCORDING TO THE REQUIREMENTS OF PAINT SYSTEM 1 OZ/E/U. THE COLOR OF THE FINAL FINISH COAT FOR ALL INTERIOR STEEL SURFACES SHALL BE GREY, MUNSELL NO. 5B 7/1. THE COLOR OF THE FINAL FINISH COAT FOR ALL EXTERIOR SURFACES AND THE BOTTOM FLANGE OF THE FASCIA BEAMS SHALL BE INTERSTATE GREEN (MUNSELL COLOR STANDARD 7.5G 4/8).

A MINIMUM OF THREE (3) HIGH VOLUME AIR MONITORS WILL BE REQUIRED TO MONITOR AIR QUALITY DURING DUST PRODUCING OPERATIONS AT THIS SITE. SEE SPECIAL PROVISIONS FOR "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES".

THE EXISTING STRUCTURAL STEEL COATING CONTAINS LEAD. THE CONTRACTOR SHALL FOLLOW THE GUIDE BRIDGE SPECIAL PROVISIONS FOR "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES" TO DEAL WITH THE PRESENCE OF LEAD ON THIS PROJECT.

NOTE: DECK DRAINS WITHIN THE PAINTING LIMITS DESCRIBED ABOVE ARE TO BE PAINTED AT NO ADDITIONAL COST.

TWO (2) YEAR PAINT WARRANTY REQUIRED FOR THIS STRUCTURE

LOCATION #2

DESCRIPTION: Turkey Farm Rd / CR 200E over I-74 - 1.7 mi. W of IL 47 @ m.p. 170.11
COUNTY: CHAMPAIGN
ROUTE: F.A.I. 74
MARKED ROUTE: I-74
SECTION: 10-4-1HB-1
STRUCTURE NO.: 010-0208
TYPE OF STRUCTURE: 2 SPAN CONTINUOUS STEEL - MULTI-BEAM
4 BEAM LINES - EACH BEAM LENGTH = 184.57'
48" PLATE GIRDERS

CLEANING AND PAINTING OF THE EXISTING STRUCTURAL STEEL SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS FOR "CLEANING AND PAINTING EXISTING STEEL STRUCTURES." ALL BEAMS, BEARINGS AND OTHER STRUCTURAL STEEL SHALL BE CLEANED PER NEAR WHITE BLASTNG SSPC-SP10.

THE DESIGNATED AREAS CLEANED PER NEAR WHITE BLAST CLEANING SSPC-SP10 SHALL BE PAINTED ACCORDING TO THE REQUIREMENTS OF PAINT SYSTEM 1 OZ/E/U. THE COLOR OF THE FINAL FINISH COAT FOR ALL INTERIOR STEEL SURFACES SHALL BE GREY, MUNSELL NO. 5B 7/1. THE COLOR OF THE FINAL FINISH COAT FOR ALL EXTERIOR SURFACES AND THE BOTTOM FLANGE OF THE FASCIA BEAMS SHALL BE INTERSTATE GREEN (MUNSELL COLOR STANDARD 7.5G 4/8).

A MINIMUM OF THREE (3) HIGH VOLUME AIR MONITORS WILL BE REQUIRED TO MONITOR AIR QUALITY DURING DUST PRODUCING OPERATIONS AT THIS SITE. SEE SPECIAL PROVISIONS FOR "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES".

THE EXISTING STRUCTURAL STEEL COATING CONTAINS LEAD. THE CONTRACTOR SHALL FOLLOW THE GUIDE BRIDGE SPECIAL PROVISIONS FOR "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES" TO DEAL WITH THE PRESENCE OF LEAD ON THIS PROJECT.

NOTE: DECK DRAINS WITHIN THE PAINTING LIMITS DESCRIBED ABOVE ARE TO BE PAINTED AT NO ADDITIONAL COST.

TWO (2) YEAR PAINT WARRANTY REQUIRED FOR THIS STRUCTURE

MODEL: Loc 1 and 2 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1093358\D5770H59-sht-DescrWork.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/24/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DESCRIPTIONS OF WORK
LOCATIONS #1 & #2

SCALE: | SHEET 1 OF 4 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	8
		CONTRACT NO. 70H59		
	ILLINOIS	FED. AID PROJECT		

LOCATION #3

DESCRIPTION: Crowley Rd / CR 250E over I-74 - 1.0 mi. W of Mahomet @ m.p. 170.88
COUNTY: CHAMPAIGN
ROUTE: F.A.I. 74
MARKED ROUTE: I-74
SECTION: 10-4-1HB-2
STRUCTURE NO.: 010-0209
TYPE OF STRUCTURE: 2 SPAN CONTINUOUS STEEL - MULTI-BEAM
4 BEAM LINES - EACH BEAM LENGTH = 187.17'
44" PLATE GIRDERS

CLEANING AND PAINTING OF THE EXISTING STRUCTURAL STEEL SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS FOR "CLEANING AND PAINTING EXISTING STEEL STRUCTURES." ALL BEAMS, BEARINGS AND OTHER STRUCTURAL STEEL SHALL BE CLEANED PER NEAR WHITE BLASTNG SSPC-SP10.

THE DESIGNATED AREAS CLEANED PER NEAR WHITE BLAST CLEANING SSPC-SP10 SHALL BE PAINTED ACCORDING TO THE REQUIREMENTS OF PAINT SYSTEM 1 OZ/E/U. THE COLOR OF THE FINAL FINISH COAT FOR ALL INTERIOR STEEL SURFACES SHALL BE GREY, MUNSELL NO. 5B 7/1. THE COLOR OF THE FINAL FINISH COAT FOR ALL EXTERIOR SURFACES AND THE BOTTOM FLANGE OF THE FASCIA BEAMS SHALL BE INTERSTATE GREEN (MUNSELL COLOR STANDARD 7.5G 4/8).

A MINIMUM OF THREE (3) HIGH VOLUME AIR MONITORS WILL BE REQUIRED TO MONITOR AIR QUALITY DURING DUST PRODUCING OPERATIONS AT THIS SITE. SEE SPECIAL PROVISIONS FOR "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES".

THE EXISTING STRUCTURAL STEEL COATING CONTAINS LEAD. THE CONTRACTOR SHALL FOLLOW THE GUIDE BRIDGE SPECIAL PROVISIONS FOR "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES" TO DEAL WITH THE PRESENCE OF LEAD ON THIS PROJECT.

NOTE: DECK DRAINS WITHIN THE PAINTING LIMITS DESCRIBED ABOVE ARE TO BE PAINTED AT NO ADDITIONAL COST.

TWO (2) YEAR PAINT WARRANTY REQUIRED FOR THIS STRUCTURE

LOCATION #4

DESCRIPTION: Prospect Ave / FAP 804 / FAU 7197 over I-74 - 1.6 mi. E of I-57 @ m.p. 180.58
COUNTY: CHAMPAIGN
ROUTE: F.A.I. 74
MARKED ROUTE: I-74
SECTION: 14-HB
STRUCTURE NO.: 010-0186
TYPE OF STRUCTURE: 4 SPAN CONTINUOUS STEEL - MULTI-BEAM
15 BEAM LINES TOTAL
12 BEAM LINES - W30x108 - EACH BEAM LENGTH = 187.17'
3 BEAM LINES - W30x116 - LENGTH VARIES - 186.57', 186.78', 187.01'

CLEANING AND PAINTING OF THE EXISTING STRUCTURAL STEEL SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS FOR "CLEANING AND PAINTING EXISTING STEEL STRUCTURES." ALL BEAMS, BEARINGS AND OTHER STRUCTURAL STEEL SHALL BE CLEANED PER NEAR WHITE BLASTNG SSPC-SP10.

THE DESIGNATED AREAS CLEANED PER NEAR WHITE BLAST CLEANING SSPC-SP10 SHALL BE PAINTED ACCORDING TO THE REQUIREMENTS OF PAINT SYSTEM 1 OZ/E/U. THE COLOR OF THE FINAL FINISH COAT FOR ALL INTERIOR STEEL SURFACES SHALL BE GREY, MUNSELL NO. 5B 7/1. THE COLOR OF THE FINAL FINISH COAT FOR ALL EXTERIOR SURFACES AND THE BOTTOM FLANGE OF THE FASCIA BEAMS SHALL BE INTERSTATE GREEN (MUNSELL COLOR STANDARD 7.5G 4/8).

A MINIMUM OF FOUR (4) HIGH VOLUME AIR MONITORS WILL BE REQUIRED TO MONITOR AIR QUALITY DURING DUST PRODUCING OPERATIONS AT THIS SITE. SEE SPECIAL PROVISIONS FOR "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES".

THE EXISTING STRUCTURAL STEEL COATING CONTAINS LEAD. THE CONTRACTOR SHALL FOLLOW THE GUIDE BRIDGE SPECIAL PROVISIONS FOR "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES" TO DEAL WITH THE PRESENCE OF LEAD ON THIS PROJECT.

NOTE: DECK DRAINS WITHIN THE PAINTING LIMITS DESCRIBED ABOVE ARE TO BE PAINTED AT NO ADDITIONAL COST.

TWO (2) YEAR PAINT WARRANTY REQUIRED FOR THIS STRUCTURE

MODEL: Loc 3 and 4 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1093358\D570H59-sht-DescrWork.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 6/24/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DESCRIPTIONS OF WORK
LOCATIONS #3 & #4

SCALE: | SHEET 2 OF 4 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	9
		CONTRACT NO. 70H59		
	ILLINOIS	FED. AID PROJECT		

LOCATION #5

DESCRIPTION: Neil St / FAP 802 / FAU 7166 over I-74 - 2.4 mi. E of I-57 @ m.p. 181.33
COUNTY: CHAMPAIGN
ROUTE: F.A.I. 74
MARKED ROUTE: I-74
SECTION: 14-HB-1
STRUCTURE NO.: 010-0132
TYPE OF STRUCTURE: 4 SPAN MULTI-BEAM - PIN & LINKS
18 BEAM LINES - EACH BEAM LENGTH = 209.33'
SIZES VARY - W33x152, W33x130, W18x64

CLEANING AND PAINTING OF THE EXISTING STRUCTURAL STEEL SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS FOR "CLEANING AND PAINTING EXISTING STEEL STRUCTURES." ALL BEAMS, BEARINGS AND OTHER STRUCTURAL STEEL SHALL BE CLEANED PER NEAR WHITE BLASTNG SSPC-SP10.

THE DESIGNATED AREAS CLEANED PER NEAR WHITE BLAST CLEANING SSPC-SP10 SHALL BE PAINTED ACCORDING TO THE REQUIREMENTS OF PAINT SYSTEM 1 OZ/E/U. THE COLOR OF THE FINAL FINISH COAT FOR ALL INTERIOR STEEL SURFACES SHALL BE GREY, MUNSELL NO. 5B 7/1. THE COLOR OF THE FINAL FINISH COAT FOR ALL EXTERIOR SURFACES AND THE BOTTOM FLANGE OF THE FASCIA BEAMS SHALL BE INTERSTATE GREEN (MUNSELL COLOR STANDARD 7.5G 4/8).

A MINIMUM OF FOUR (4) HIGH VOLUME AIR MONITORS WILL BE REQUIRED TO MONITOR AIR QUALITY DURING DUST PRODUCING OPERATIONS AT THIS SITE. SEE SPECIAL PROVISIONS FOR "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES".

THE EXISTING STRUCTURAL STEEL COATING CONTAINS LEAD. THE CONTRACTOR SHALL FOLLOW THE GUIDE BRIDGE SPECIAL PROVISIONS FOR "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES" TO DEAL WITH THE PRESENCE OF LEAD ON THIS PROJECT.

NOTE: DECK DRAINS WITHIN THE PAINTING LIMITS DESCRIBED ABOVE ARE TO BE PAINTED AT NO ADDITIONAL COST.

NOTE: THE ENDS OF THE 3" DIAMETER STAINLESS STEEL PINS (ONLY) SHALL BE COVERED AND NOT PAINTED. THE HEX NUTS AND LINK PLATES SHALL BE PAINTED.

TWO (2) YEAR PAINT WARRANTY REQUIRED FOR THIS STRUCTURE

LOCATION #6

DESCRIPTION: Lincoln Ave / FAU 7177 over I-74 - 1.3 mi. W of US 45 @ m.p. 182.62
COUNTY: CHAMPAIGN
ROUTE: F.A.I. 74
MARKED ROUTE: I-74
SECTION: 14-HB-3
STRUCTURE NO.: 010-0158
TYPE OF STRUCTURE: 4 SPAN CONTINUOUS STEEL - MULTI-BEAM
15 BEAM LINES TOTAL
12 BEAM LINES - W30x108 - EACH BEAM LENGTH = 186.42'
3 BEAM LINES - W30x116 - LENGTH VARIES - 186.42', 186.42', 186.47'

CLEANING AND PAINTING OF THE EXISTING STRUCTURAL STEEL SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS FOR "CLEANING AND PAINTING EXISTING STEEL STRUCTURES." ALL BEAMS, BEARINGS AND OTHER STRUCTURAL STEEL SHALL BE CLEANED PER NEAR WHITE BLASTNG SSPC-SP10.

THE DESIGNATED AREAS CLEANED PER NEAR WHITE BLAST CLEANING SSPC-SP10 SHALL BE PAINTED ACCORDING TO THE REQUIREMENTS OF PAINT SYSTEM 1 OZ/E/U. THE COLOR OF THE FINAL FINISH COAT FOR ALL INTERIOR STEEL SURFACES SHALL BE GREY, MUNSELL NO. 5B 7/1. THE COLOR OF THE FINAL FINISH COAT FOR ALL EXTERIOR SURFACES AND THE BOTTOM FLANGE OF THE FASCIA BEAMS SHALL BE INTERSTATE GREEN (MUNSELL COLOR STANDARD 7.5G 4/8).

A MINIMUM OF FOUR (4) HIGH VOLUME AIR MONITORS WILL BE REQUIRED TO MONITOR AIR QUALITY DURING DUST PRODUCING OPERATIONS AT THIS SITE. SEE SPECIAL PROVISIONS FOR "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES".

THE EXISTING STRUCTURAL STEEL COATING CONTAINS LEAD. THE CONTRACTOR SHALL FOLLOW THE GUIDE BRIDGE SPECIAL PROVISIONS FOR "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES" TO DEAL WITH THE PRESENCE OF LEAD ON THIS PROJECT.

NOTE: DECK DRAINS WITHIN THE PAINTING LIMITS DESCRIBED ABOVE ARE TO BE PAINTED AT NO ADDITIONAL COST.

TWO (2) YEAR PAINT WARRANTY REQUIRED FOR THIS STRUCTURE

MODEL: Loc 5 and 6 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1093358\D570H59-sht-DescrWork.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 6/24/2025	DATE -	REVISED -	

DESCRIPTIONS OF WORK
LOCATIONS #5 & #6

SCALE: | SHEET 3 OF 4 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	10
		CONTRACT NO. 70H59		
	ILLINOIS	FED. AID PROJECT		

LOCATION #7

DESCRIPTION: I-74 over US 45 / FAP 800 / Cunningham Ave - N of Urbana @ m.p. 183.89
COUNTY: CHAMPAIGN
ROUTE: F.A.I. 74
MARKED ROUTE: I-74
SECTION: 14-HB-4
STRUCTURE NO.: 010-0024
TYPE OF STRUCTURE: 4 SPAN CONTINUOUS STEEL - MULTI-BEAM
16 BEAM LINES TOTAL
16 BEAM LINES - W30x108 - EACH BEAM LENGTH = 184.0'

CLEANING AND PAINTING OF THE EXISTING STRUCTURAL STEEL SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS FOR "CLEANING AND PAINTING EXISTING STEEL STRUCTURES." ALL BEAMS, BEARINGS AND OTHER STRUCTURAL STEEL SHALL BE CLEANED PER NEAR WHITE BLASTNG SSPC-SP10.

THE DESIGNATED AREAS CLEANED PER NEAR WHITE BLAST CLEANING SSPC-SP10 SHALL BE PAINTED ACCORDING TO THE REQUIREMENTS OF PAINT SYSTEM 1 OZ/E/U. THE COLOR OF THE FINAL FINISH COAT FOR ALL INTERIOR STEEL SURFACES SHALL BE GREY, MUNSELL NO. 5B 7/1. THE COLOR OF THE FINAL FINISH COAT FOR ALL EXTERIOR SURFACES AND THE BOTTOM FLANGE OF THE FASCIA BEAMS SHALL BE INTERSTATE GREEN (MUNSELL COLOR STANDARD 7.5G 4/8).

A MINIMUM OF FOUR (4) HIGH VOLUME AIR MONITORS WILL BE REQUIRED TO MONITOR AIR QUALITY DURING DUST PRODUCING OPERATIONS AT THIS SITE. SEE SPECIAL PROVISIONS FOR "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES".

THE EXISTING STRUCTURAL STEEL COATING CONTAINS LEAD. THE CONTRACTOR SHALL FOLLOW THE GUIDE BRIDGE SPECIAL PROVISIONS FOR "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES" TO DEAL WITH THE PRESENCE OF LEAD ON THIS PROJECT.

NOTE: DECK DRAINS WITHIN THE PAINTING LIMITS DESCRIBED ABOVE ARE TO BE PAINTED AT NO ADDITIONAL COST.

TWO (2) YEAR PAINT WARRANTY REQUIRED FOR THIS STRUCTURE

MODEL: Loc 7 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1093358\D570H59-sht-DescrWork.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 6/24/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DESCRIPTIONS OF WORK
LOCATION #7

SCALE: | SHEET 4 OF 4 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	11
		CONTRACT NO. 70H59		
	ILLINOIS	FED. AID PROJECT		

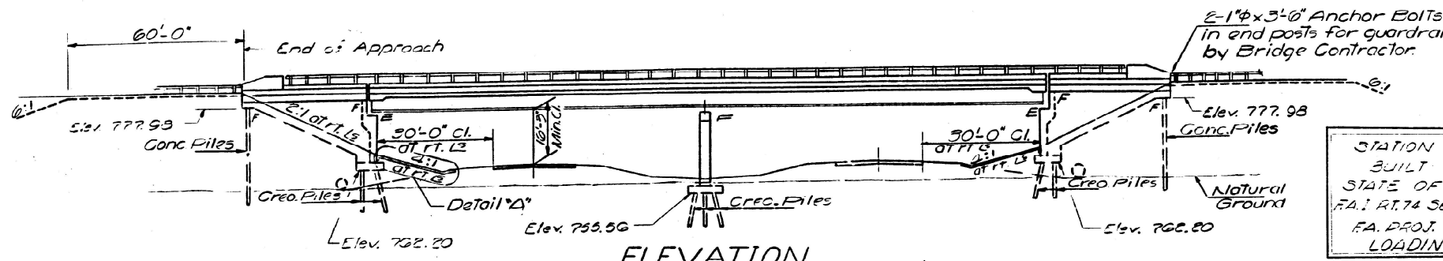
B.M.1: 109- D.D. Spike in East side of pole.
40' Lt. Sta. 1384+43 Elev. 799.92

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

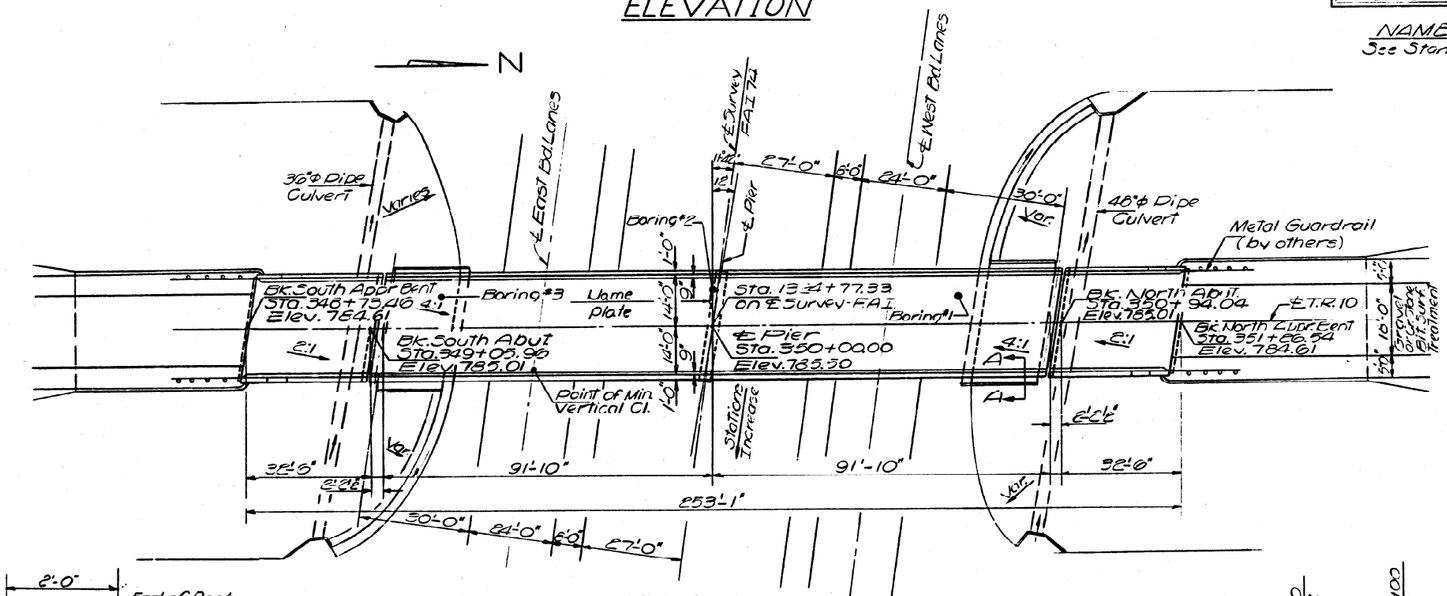
AS-BUILT PLANS FOR S.N. 010-0207
FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	74-10-4-1HB	PIATT CHAMPAIGN	47	1
FED. ROAD DIST. NO. 7	PLANNING	FED. AID PROJECT: I-74-5(80)170		

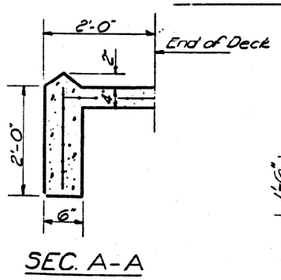
SHEET NO. 1
14 SHEETS



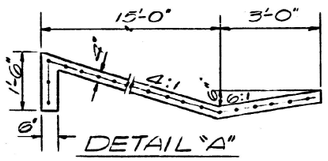
ELEVATION



PLAN



SEC. A-A



DETAIL "A"

E-1"ϕx3'-0" Anchor Bolts in end posts for guardrail by Bridge Contractor.

STATION 1324+77.33
BUILT 19G BY
STATE OF ILLINOIS
F.A.I. RT. 74 SEC. 74,10-6-1HB
F.A. PROJ. I-74-5(80)
LOADING HS 15

NAME PLATE
See Standard 2113-1

GENERAL NOTES

All reinforcement bars shall be lapped 24 diameters unless otherwise shown.

The exposed surfaces of the expansion guard shall be given two shop coats of red lead paint, the contact surfaces shall be given one coat of red lead paint. Anchor studs shall not be painted.

Except as otherwise provided, all structural steel shall receive one shop coat of red lead paint and two field coats of paint. See Special Provisions for field paint.

Field welding of construction accessories will not be permitted in the bottom of flange of beams or girders nor on the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.

Anchor bolts shall be set before bolting cross frames over supports.

Slope wall shall be reinforced with welded wire fabric 6"x 6" mesh, weighing 58# per 100 sq. ft.

Concrete piles at abutments shall be driven in holes precored through the embankment in accordance with Article 513.09(c) of the Standard Specications.

The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.

The contractor shall drive one concrete test pile in a permanent location at the South Approach Bent and one timber test pile each in permanent locations at the Pier and North Abutment as directed by the Engineer before ordering the remainder of piles.

Rivets 3/4" ϕ, open holes 7/8" ϕ, unless otherwise noted.

The concrete rail section above the mandatory construction joint at the top of the slab shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Handrail Concrete.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Furnishing & Erecting Precast Prestressed Conc. I Bm (36")	Lin. Ft.	2G1		2G1
Class A Exc. for Str. Fds.	Cu. Yds.		188	188
Class X Concrete	Cu. Yds.	245.1	230.0	475.1
Aluminum Railing	Lin. Ft.	4G4		4G4
Stud Shear Connectors	Each	1416		1416
Reinforcement Bars	Lbs.	56,440	19,170	75610
Creosoted Piles (20.1633)	Lin. Ft.		1985	1985
Test Piles (Timber)	Each		6	6
Concrete Piles	Lin. Ft.		605	605
Test Piles (Concrete)	Each		1	1
Name Plates	Each		1	1
Slope Wall 4"	Sq. Yds.		139	139
Protective Coat	Sq. Yds.	1310		1310
Preformed Jt. Sealer	Lin. Ft.	65		65
Structural Steel	Lbs.	136,140		136,140

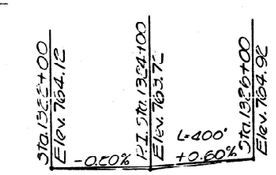
DESIGN STRESSES
FIELD UNITS

fc = 1200 psi Deck Slab
fc = 1400 psi Parapet, Curb & Sub.
fs = 20000 psi Reinf.
Vc = 75 psi Ftgs.
n = 10

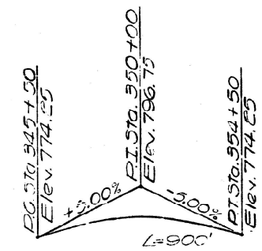
PRECAST PRESTRESSED UNITS

f'c = 5000 psi
f'ci = 4000 psi
fs = 248000 psi Strands
fsi = 173,600 psi Strands
Allowable ℄ Defl. = L/800 Composite

LOADING H 15-44



PROFILE-F.A.I. 74



PROFILE-T.R. 10



LOCATION SKETCH

DESIGNED	Suresh T Desai
CHECKED	
DRAWN	J.D. Zink S.D.
CHECKED	

EXAMINED Oct. 8 1968
PASSED
APPROVED

PROJECT I-74-5(80)170
GENERAL PLAN & ELEVATION
T.R. 10 OVER
F.A.I. ROUTE 74
SECTION 74,10-4-1HB
PIATT & CHAMPAIGN COUNTIES
STATION 1324+77.33

USER NAME = Steven.Wood	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/5/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #1 S.N. 010-0207

SCALE: | SHEET 1 OF 4 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	12
		CONTRACT NO. 70H59		
	ILLINOIS	FED. AID PROJECT		

MODEL: Sheet 1 [Sheet]
FILE NAME: c:\pw_work\pwdot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 1.dgn

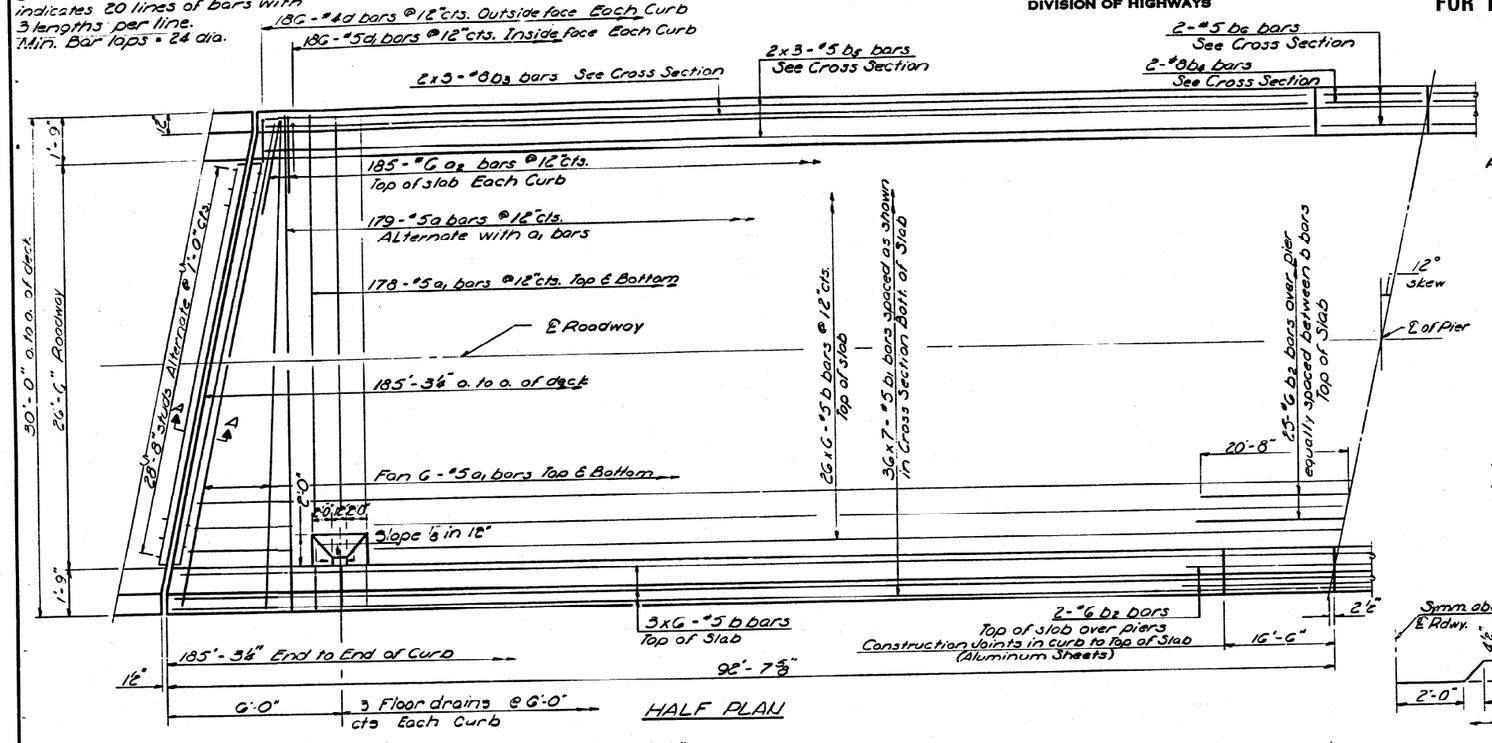
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	74-10-6.1HB	Piatt Champaign	47	10
FED. ROAD DIST. NO. 9	ILLINOIS	FED. AID PROJECT		

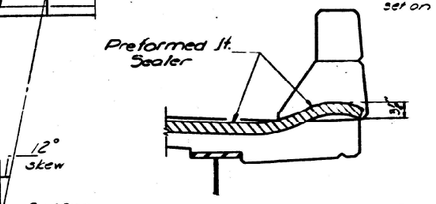
SHEET NO. 2
14 SHEETS

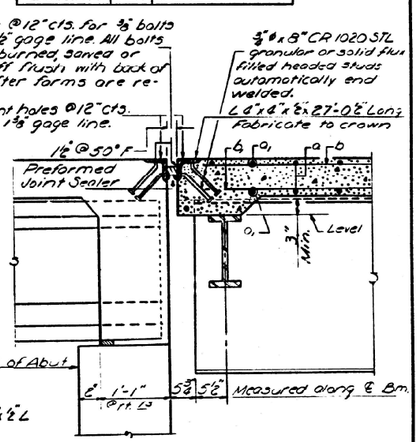
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

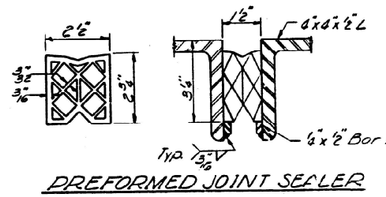
AS-BUILT PLANS FOR S.N. 010-0207
FOR INFORMATION ONLY

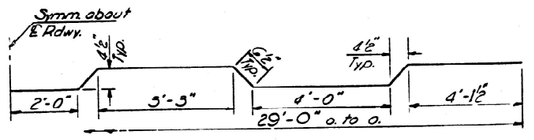
Note:
Bars indicated thus 20 x 3 - #5 etc.
indicates 20 lines of bars with
3 lengths per line.
Min. Bar laps = 24 dia.





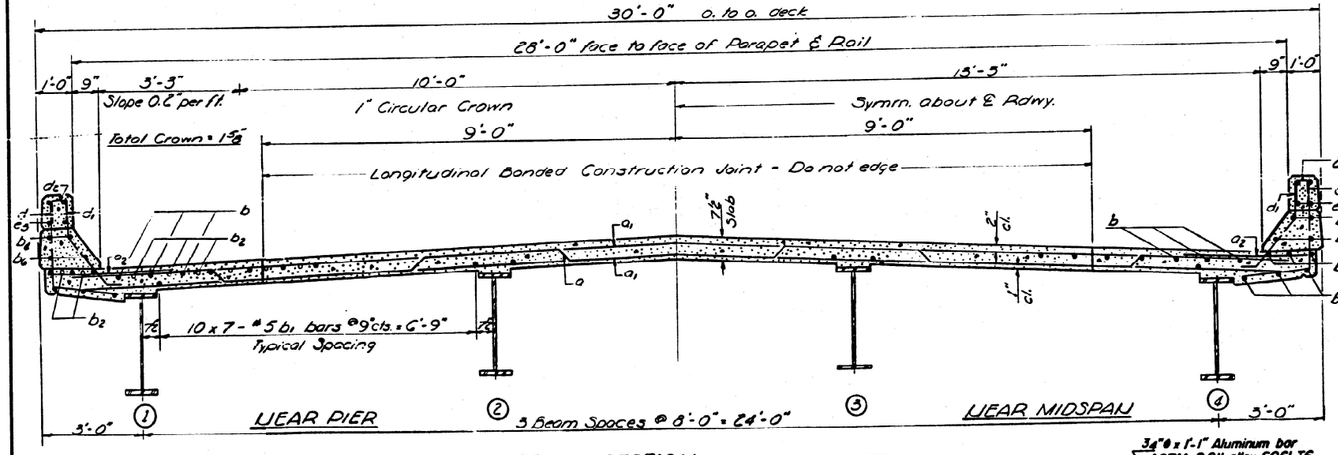


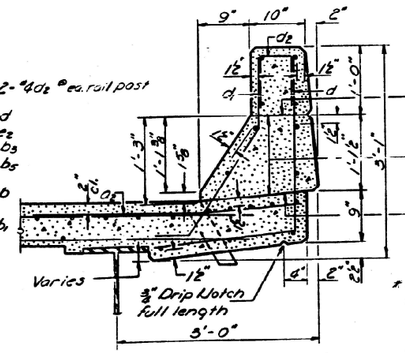




BILL OF MATERIAL

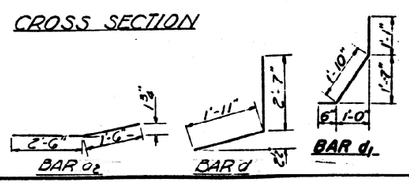
Bar No.	Size	Length	Shape
a	179	#5	30'-0"
a1	380	#5	29'-0"
a2	570	#6	6'-0"
b	192	#5	31'-10"
b1	252	#5	27'-6"
b2	29	#6	41'-4"
b3	24	#8	26'-8"
b4	8	#8	16'-3"
b5	24	#5	26'-3"
b6	8	#5	16'-3"
d	372	#4	6'-6"
d1	372	#5	3'-5"
Class X Concrete	Cu. Yds.		155.7
Reinforcement Bars	Lbs.		40,010
* Structural Steel	Lbs.		154,210
Stud Shear Connectors	Ea.		1416

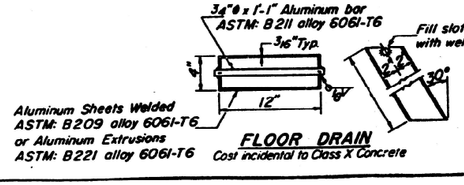




* Includes weight of bearing assemblies with lead plates and anchor bolts, expansion devices.

The lengths and quantities of longitudinal reinforcement and Class X Concrete in parapets are not included in above quantities. See Sheet # 6





DESIGNED	Suresh T Desai
CHECKED	H. Adams
DRAWN	J.P Zink
CHECKED	

EXAMINED — OCT 8 1969
PASSED
APPROVED

MAIN-SPAN - SUPERSTRUCTURE
F.A.I. RT. 74 SECTION 74.10-6.1HB
PIATT & CHAMPAIGN COUNTIES
STATION 1324 + 77.33

USER NAME = Steven.Wood	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/5/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #1 S.N. 010-0207

SCALE: | SHEET 2 OF 4 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	13
		CONTRACT NO. 70H59		
	ILLINOIS	FED. AID PROJECT		

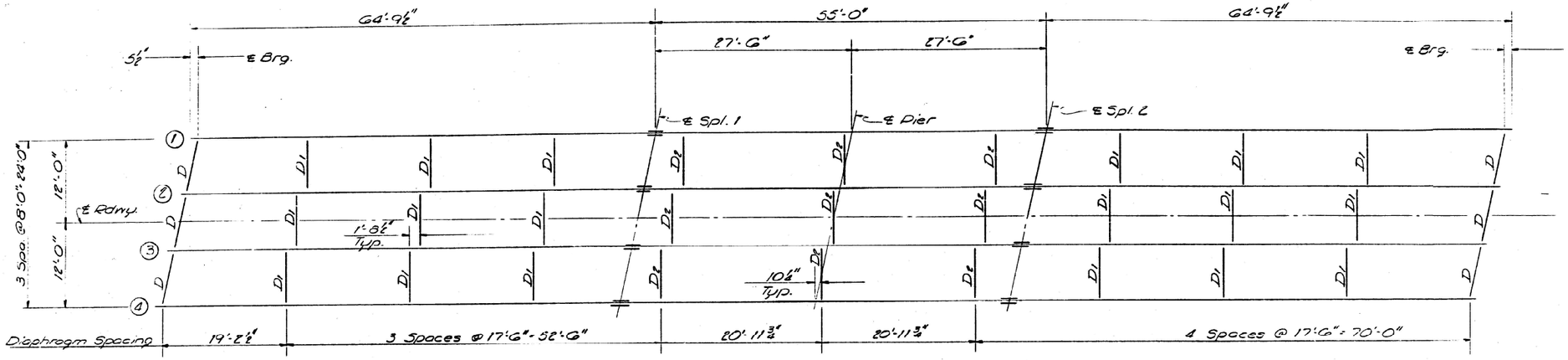
MODEL: Sheet 2 [Sheet]
FILE NAME: c:\pw_work\pwlot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 1.dgn

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

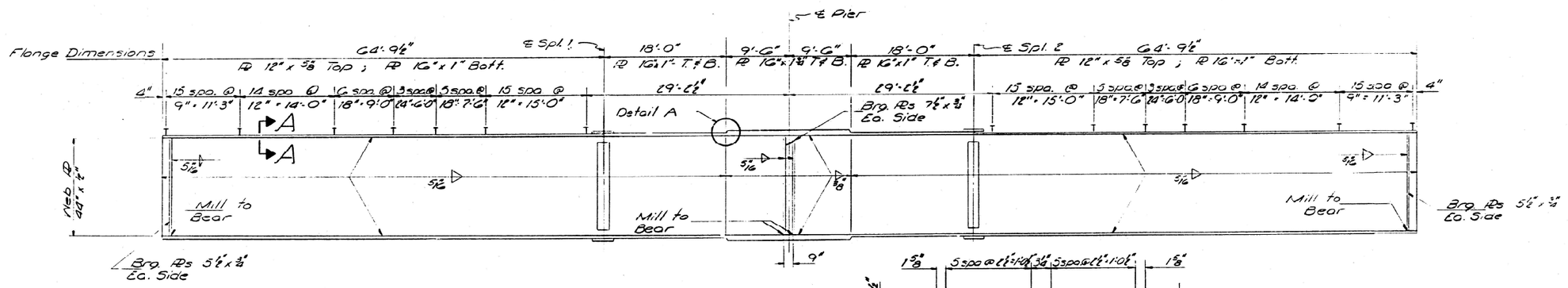
AS-BUILT PLANS FOR S.N. 010-0207
FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	74-10-4-1HB	Piatt Champaign	47	16
FED. ROAD DIST. NO. 9	ILLINOIS	FED. AID PROJECT		

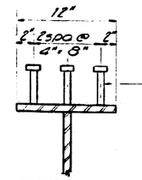
SHEET NO. 8
14 SHEETS



FRAMING PLAN



GIRDER-ELEVATION

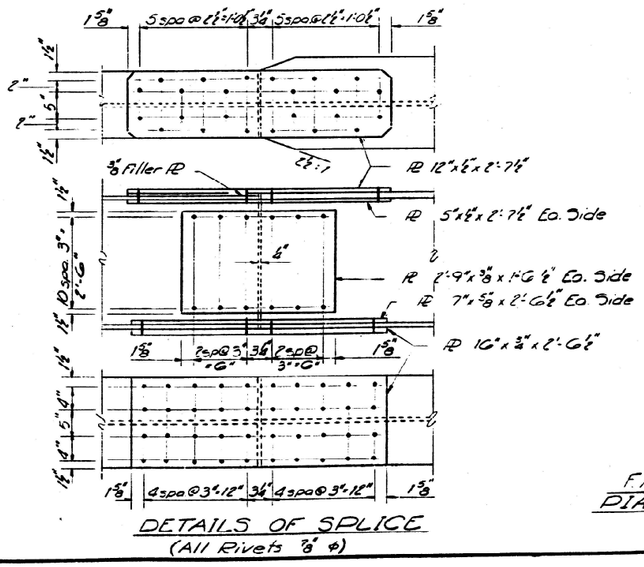


SEC. A-A

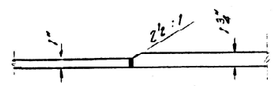
354 Studs per girder

TOP OF WEB ELEVATIONS

	Girder 1	Girder 2	Girder 3	Girder 4
℄ Brg S. Abut.	784.23	784.34	784.34	784.23
℄ Splice 1	784.63	784.74	784.74	784.63
℄ Pier	784.63	784.74	784.74	784.63
℄ Splice 2	784.63	784.74	784.74	784.63
℄ Brg N. Abut.	784.23	784.34	784.34	784.23



DETAILS OF SPLICE
(All Rivets ⅞" ϕ)



DETAIL "A"

STRUCTURAL STEEL
F.A.I RT. 74 SEC. 74-10-4-1HB
PIATT & CHAMPAIGN COUNTIES
STA. 1324 + 77.33

DESIGNED	Suresh T. Desai	
CHECKED		
S.D. DRAWN	J. Schneller	
CHECKED		

EXAMINED — 19
PASSED Zoe Bauman — DIRECTOR OF HIGHWAYS
APPROVED — CHIEF ENGINEER

USER NAME = Steven.Wood	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 6/5/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #1 S.N. 010-0207

SCALE: | SHEET 3 OF 4 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	14
		CONTRACT NO. 70H59		
	ILLINOIS	FED. AID PROJECT		

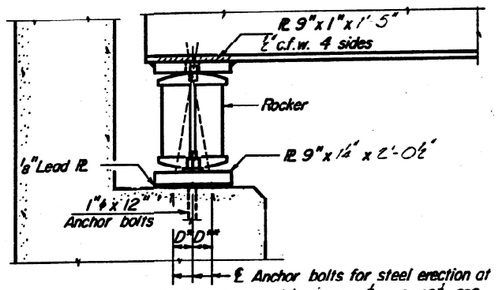
MODEL: Sheet 3 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 1.dgn

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

AS-BUILT PLANS FOR S.N. 010-0207
FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	74-10-4-1HB	Piatt Champaign	47	17

SHEET NO. 9
14 SHEETS

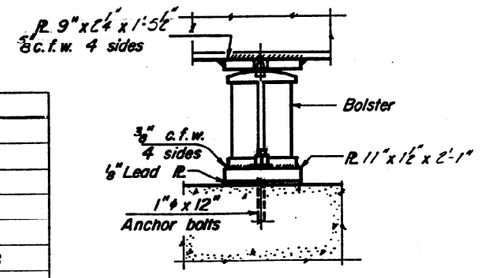


SECTION

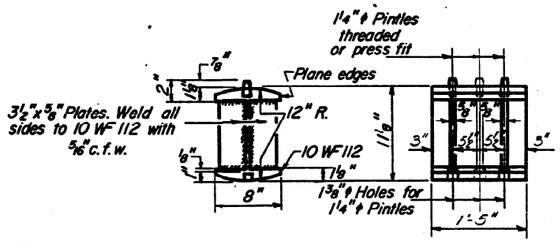
STRESS TABLE

MAX. MOMENTS - FT. KIPS		
Steel	-4L	Pier
D.L.	492.1	-1,137.5
Composite		
S.D.C.	248.2	-300.2
L.L.+Imp.	766.8	-761.1
TOTAL	1,507.1	-2,199.8

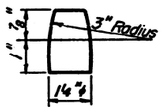
SHEARS - KIPS				
	Abut.	-2L	-4L	Pier
S.D.L.	13.99	6.77	-0.47	22.19
L.L.+Imp.	42.52	31.13	20.35	45.19
TOTAL	56.51	37.90	19.88	67.38



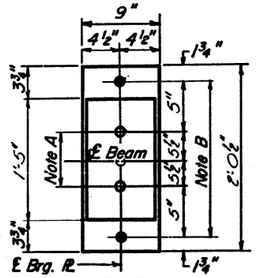
ELEVATION



ROCKER



PINTLE

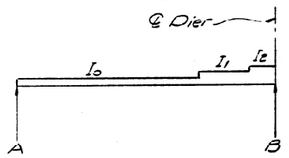


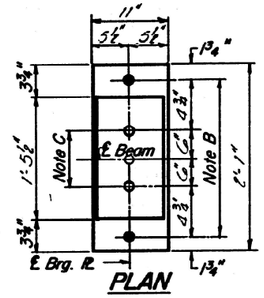
PLAN

AT ABUTMENT

I STEEL:
I_o = 14,568 in⁴
I_1 = 19,757 in⁴
I_2 = 32,658 in⁴
$I_{comp.}$ = 39,634 in⁴

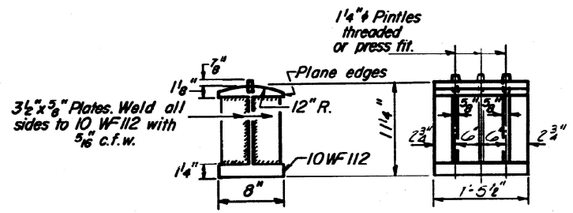
STEEL GIRDER PROPERTIES





PLAN

AT PIER



BOLSTER

NOTE A
1⅜"ϕ Holes - 1" deep in top PL for pintles. Thread or press fit pintles into bottom PL.

NOTE B
1½"ϕ Holes for 1"ϕ anchor bolts. 2½" x 2½" x ⅝" PL. Washers under nut.

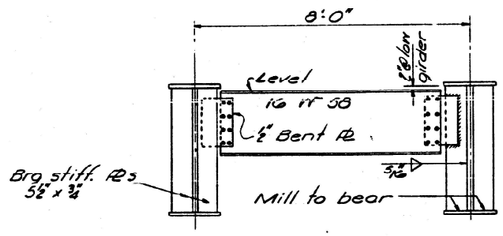
NOTE C
1⅜"ϕ Holes 1" deep in top PL only for 1¼"ϕ pintles.

NOTES ON SETTING OF ANCHOR BOLTS AT EXP. BRGS.

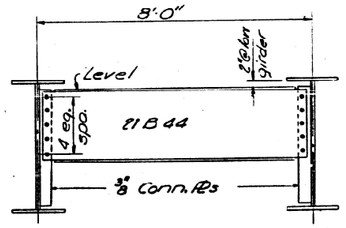
a) D* (Side of brg. away from fixed brg.)
D* = ⅛" per each 100' of expansion for every 15° fall below the normal temp. of 50°F.
D** (Side of brg. toward fixed brg.)
D** = ⅛" per each 100' of expansion for every 15° rise above the normal temp. of 50°F.

b) After beams have been erected and dimensions D* or D** determined, holes shall be drilled and anchor bolts shall be grouted in place. All fixed anchor bolts may be built into the masonry.

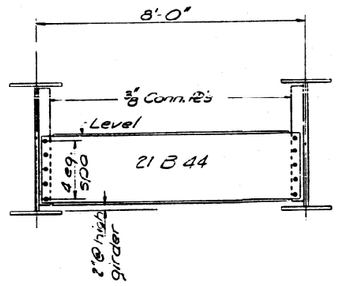
BEARING ASSEMBLY DETAILS



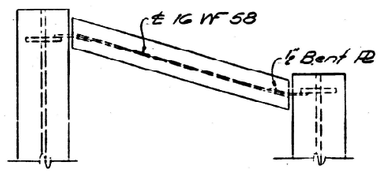
DIAPHRAGM D
6 Req'd.



DIAPHRAGM D1
16 Req'd.



DIAPHRAGM D2
9 Req'd



DIAPHRAGM D
6 Req'd.

DESIGNED	Suresh T Desai
CHECKED	
DRAWN	J. Schneller P.G. Barnett S.D.
CHECKED	

EXAMINED 19
PASSED
APPROVED

I-2-B 9-1-65

BEARINGS & DIAPHRAGMS
FA I RT. 74 SEC. 74,10-4-1HB
PIATT & CHAMPAIGN COUNTIES
STA. 1324+77.33

MODEL: Sheet 4 [Sheet]
FILE NAME: c:\pw_work\pwlofts\steven.wood@illinois.gov\d10940\D570H59-sht-Loc 1.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/5/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #1 S.N. 010-0207

SCALE: | SHEET 4 OF 4 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	15
		CONTRACT NO. 70H59		
	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

AS-BUILT PLANS FOR S.N. 010-0208
FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	10-4-1HB-1	CHAMPAIGN	38	10
FED. ROAD DIST. NO. 7	ILLINOIS	FED. A.I.D PROJECT-		

SHEET NO. 1
14 SHEETS

GENERAL NOTES

All reinforcement bars shall be lapped 24 diameters unless otherwise shown.

Field connections shall be bolted using high strength bolts. Bolts $\frac{7}{8}$"ø, open holes $\frac{15}{16}$"ø, unless otherwise noted.

The concrete rail section above the mandatory construction joint at the top of the slab shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Handrail Concrete.

Except as otherwise provided, all structural steel shall receive one shop coat of red lead paint and two field coats of paint. See Special Provisions for field paint.

Field welding of construction accessories will not be permitted in the bottom of flange of beams or girders nor on the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.

Anchor bolts shall be set before bolting cross frames over supports.

Slope wall shall be reinforced with welded wire fabric 6"x 6" mesh, weighing 58# per 100 sq.ft.

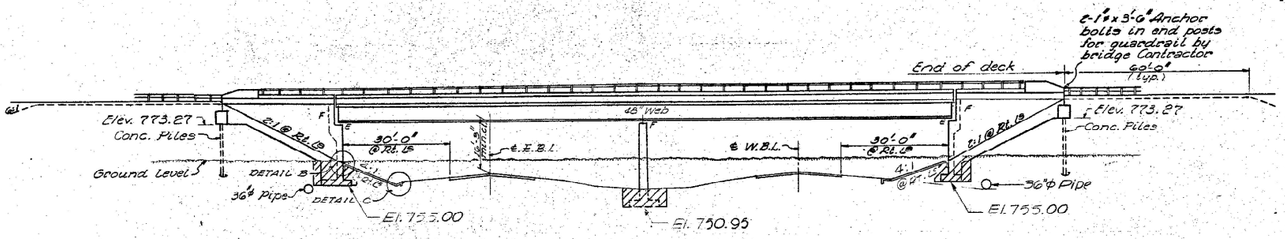
Class A Excavation for structures includes excavation for slope wall.

The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.

The Contractor shall drive one Concrete test pile in a permanent location at the North Approach Bent as directed by the Engineer before ordering the remainder of piles.

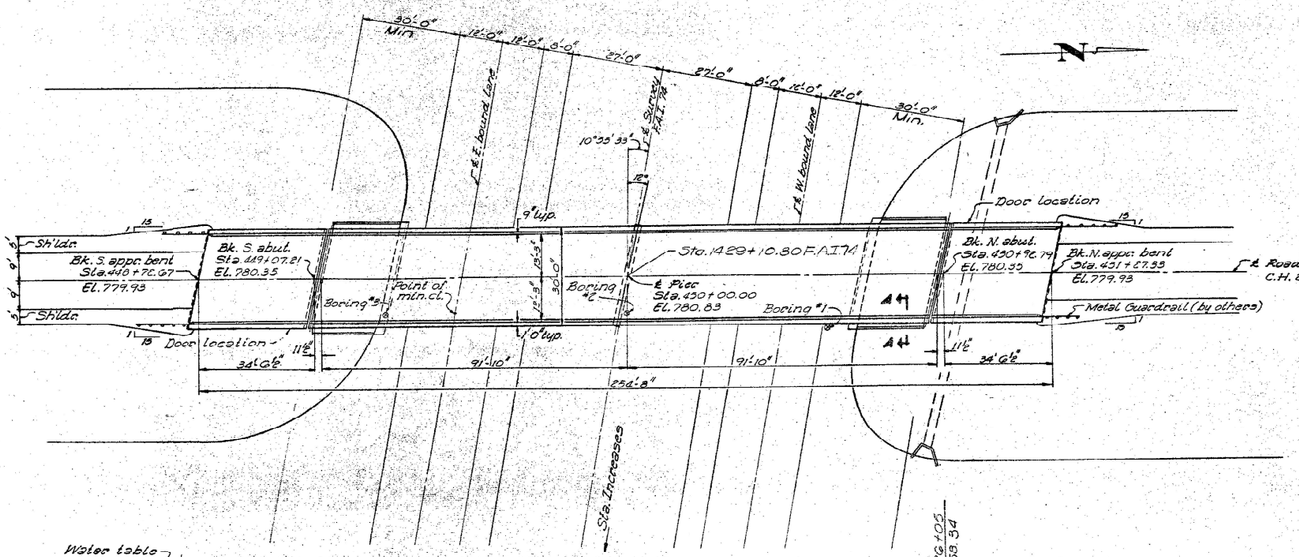
STA. 1429+10.80
BUILT 19 BY
STATE OF ILLINOIS
F.A.I. RT 74 SEC. 10-4-1HB-1
F.A. PROJ. I-74-5(81)
LOADING H915

NAME PLATE
See Std. 2113-1

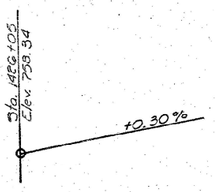


ELEVATION

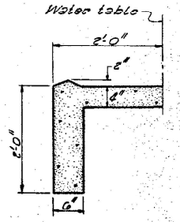
Note: Hatched area indicates Class A Excavation for Structures.



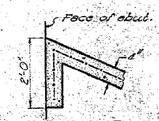
PLAN



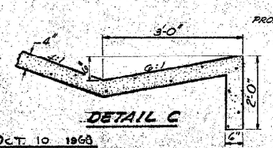
PROFILE-F.A.I. 74



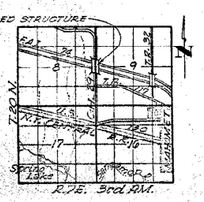
SEC. A-A



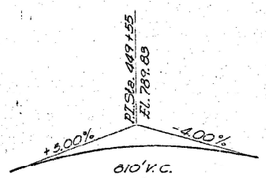
DETAIL B



DETAIL C



LOCATION PLAN



PROFILE - CH. 29

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Class A Excavation for Struct.	Cu.Yds			270
Class X Concrete	Cu.Yds	237.6	237.0	484.6
Structural Steel	Lbs.	145,270		145 270
Aluminum Railing	Lin.Ft.	467		467
Reinforcement Bars	Lbs.	55 550	18170	76 720
Concrete Piles	Lin.Ft.		290	290
Test pile (Concrete)	Each		1	1
Name Plates	Each		1	1
Slope Wall 4"	Sq.Yds			190
Protective Coat	Sq.Yds	940		940
Preformed Joint Sealer	Lin.Ft.	61		61
Stud Shear Connectors	Each	1221		1221
Furnishing and Erecting Pre-cast Prestressed I Beams 30"	Lin.Ft.	267		267

PRECAST PRESTRESSED UNITS

$f'c$ = 5,000 psi.
$f'ci$ = 4,000 psi.
fs = 248,000 psi. Strands
fsi = 173,600 psi. Strands

DESIGN STRESSES FIELD UNITS

fc = 1,600 psi. (Deck Slab) 1,400 psi. (Parapet, Curb & Sub.)
fs = 20,000 psi. (Reinf.)
fs = 20,000 psi. (Struct.)
Uc = 75 psi. (Footings)
n = 10
Allowable $\ell \Delta$ $\frac{L}{1000}$ non-composite
Allowable $\ell \Delta$ $\frac{L}{800}$ composite

LOADING H S15-44

DESIGNED	[illegible]
CHECKED	[illegible]
DRAWN	
CHECKED	[illegible]

EXAMINED Oct. 10 1968
PASSED
APPROVED
ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
ENGINEER OF DESIGN
CHIEF HIGHWAY ENGINEER

GENERAL PLAN & ELEVATION
PROJECT I-74-5 (81) 171
F.A.I. ROUTE 74
SECTION 10-4-1HB-1
STA. 1429+10.80 (F.A.I. ROUTE 74)
STA. 450+00 (C.H. ROUTE 29)
CHAMPAIGN COUNTY

MODEL: Sheet 1 [Sheet]
FILE NAME: c:\pw_work\pwdot\steven.wood@illinois.gov\d1094040\D570H59-alt-Loc 2.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 6/5/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #2 S.N. 010-0208

SCALE: | SHEET 1 OF 4 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	16
		CONTRACT NO. 70H59		
		ILLINOIS FED. AID PROJECT		

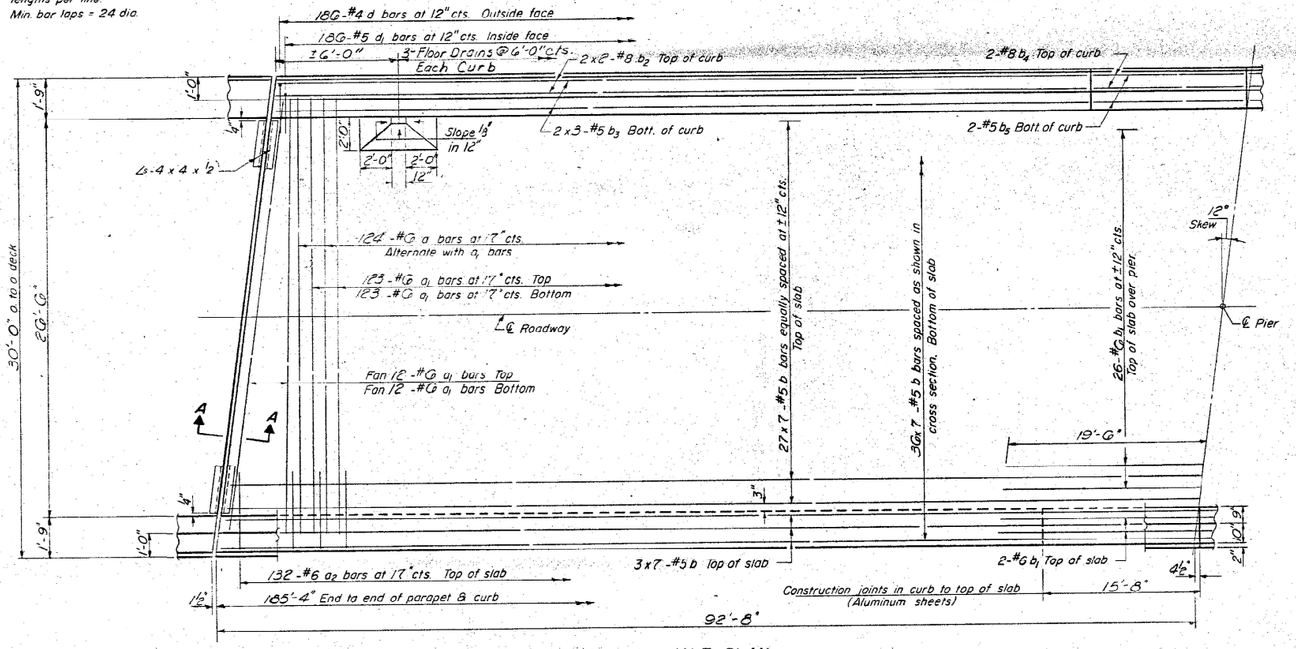
AS-BUILT PLANS FOR S.N. 010-0208
FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

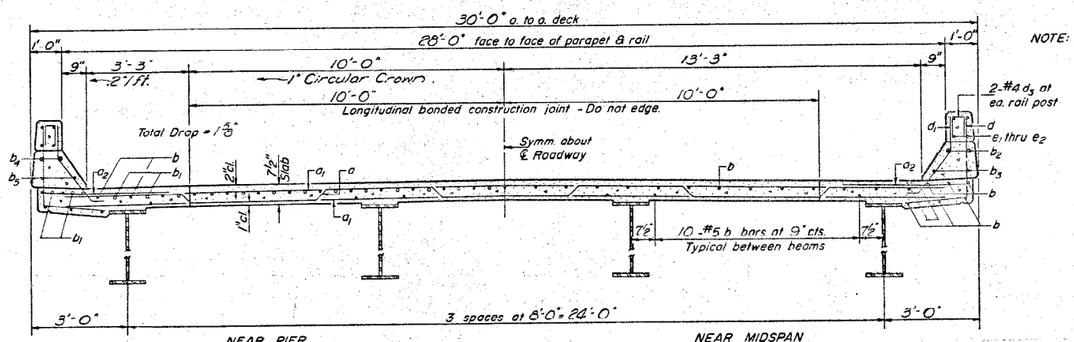
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	10-4-1118.1	Champaign	38	12
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 3
14 SHEETS

NOTE:
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
Min. bar laps = 24 dia.

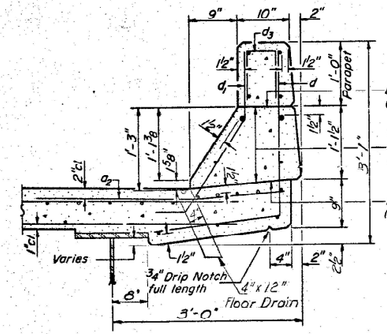


HALF PLAN



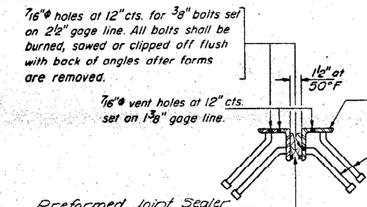
CROSS SECTION

NOTE: For placement of bars d_3 and e_1 thru e_2 see sheet #10

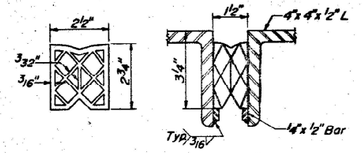


CURB SECTION

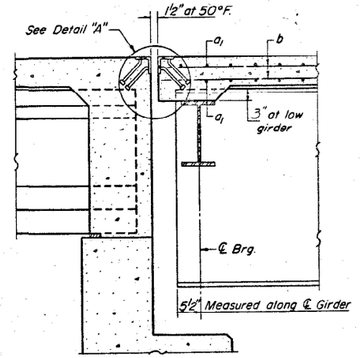
Cost of Aluminum Sheets and Drains incidental to Class X Concrete.



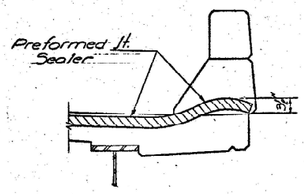
DETAIL "A"



PREFORMED JOINT SEALER



SECTION A-A



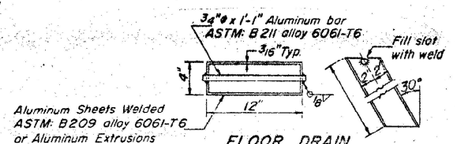
JOINT SEALER AT CURB

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	124	#6	29'-9"	
a1	294	#6	28'-0"	
a2	264	#6	4'-0"	
b	483	#5	27'-9"	
b1	30	#6	39'-0"	
b2	16	#8	39'-6"	
b3	24	#5	20'-6"	
b4	8	#8	15'-5"	
b5	8	#5	15'-5"	
d	372	#4	4'-6"	J
d1	372	#5	3'-3"	J
Reinforcement Bars			Lbs.	40450
Class X Concrete			Cu. Yds.	156.7
* Structural Steel			Lbs.	14280
Preformed Jt. Sealer			Lin. Ft.	61

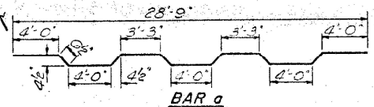
*Weight of bearing assemblies with lead plates and anchor bolts are included as Structural Steel. Est. Wt. = 4200#

Parapet Reinforcement and Class X Concrete are billed on sheet # 10

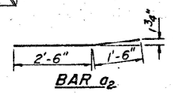


Aluminum Sheets Welded ASTM: B209 alloy 6061-T6 or Aluminum Extrusions ASTM: B221 alloy 6061-T6

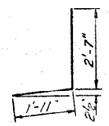
FLOOR DRAIN
Cost incidental to Class X Concrete



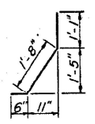
BAR a



BAR a_2



BAR d



BAR d_1

DESIGNED	James Pence	EXAMINED	Oct 10 1968
CHECKED	R. H. Nielsen	PASSED	
DRAWN	jacobs JP	APPROVED	
CHECKED	RHN		

S-4-L (≡15°) 4-22-68

MAIN SUPERSTRUCTURE
F.A.I. RT. 74 SEC. 10-4-1118.1
CHAMPAIGN COUNTY
STA. 1429 + 10.60

Revised by Br. office 9/13/13

USER NAME = Steven.Wood	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/5/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #2 S.N. 010-0208

SCALE: | SHEET 2 OF 4 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	17
		CONTRACT NO. 70H59		
	ILLINOIS	FED. AID PROJECT		

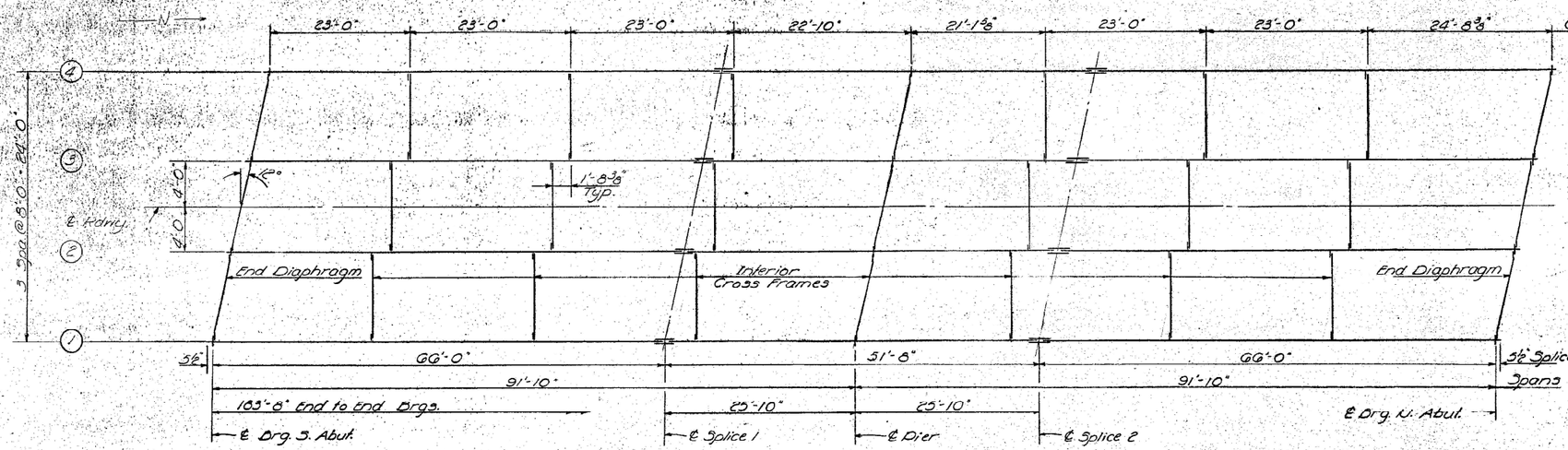
MODEL: Sheet 2 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 2.dgn

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

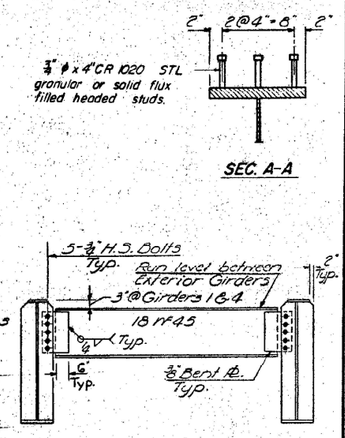
AS–BUILT PLANS FOR S.N. 010–0208
FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	10-4-1HB-1	Champaign	38	13
HWY. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 4
14 SHEETS

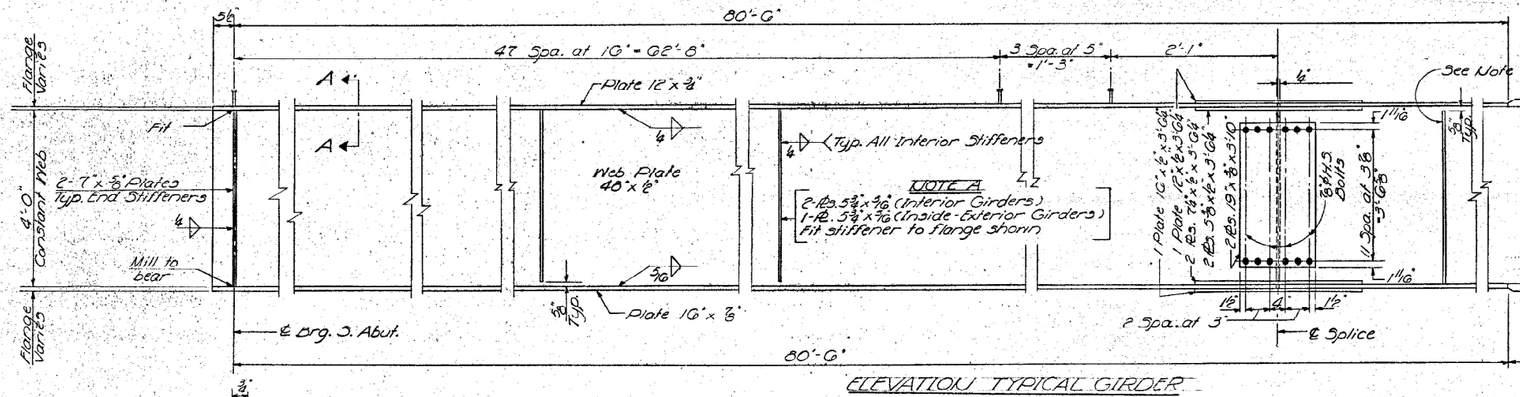


FRAMING PLAN

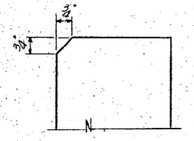


SEC. A-A

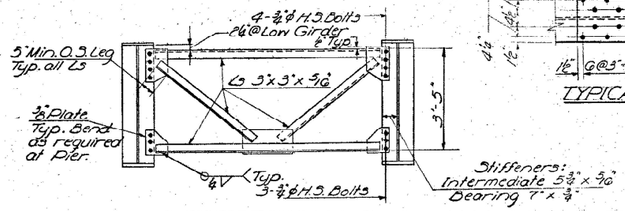
END DIAPHRAGM



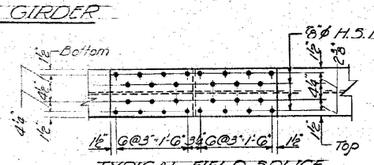
ELEVATION TYPICAL GIRDER



STIFFENER CUT
(All Stiffeners Top & Bott.)



INTERIOR CROSS FRAME
21 Required



TYPICAL FIELD SPLICE

ELEVATIONS TOP OF WEB P.S.

Girder / Location	1 & 4	2 & 3
℄ Brg. So. Abut.	779.531	779.652
℄ Splice 1	779.956	780.077
℄ Pier	779.956	780.077
℄ Splice 2	779.956	780.077
℄ Brg No. Abut.	779.531	779.652

DESIGNED	James M. Price	
CHECKED	Sam E. Marvin	
DRAWN	jacobs	
CHECKED	SFM	

EXAMINED — Oct. 10 1968 — Chief Engineer, Division of Bridges and Traffic Structures
PASSED — W. E. Bauman — Engineer of Design
APPROVED — V. T. Staff — Chief Highway Engineer

STRUCTURAL STEEL
F.A.I. RT. 74 SEC. 10-4-1HB-1
CHAMPAIGN COUNTY
STA. 1429 + 10.80

MODEL: Sheet 3 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d0194040\D570H59-sht-Loc 2.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/5/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #2 S.N. 010-0208

SCALE: | SHEET 3 OF 4 SHEETS | STA. | TO STA.

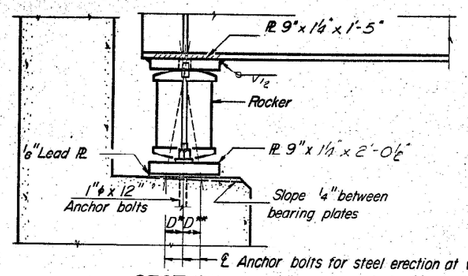
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	18
		CONTRACT NO. 70H59		
	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

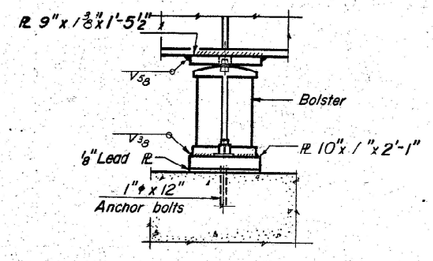
AS-BUILT PLANS FOR S.N. 010-0208
FOR INFORMATION ONLY

SECTION NO.	ADDITION	JURISDICTION	TOTAL SHEETS	SHEET NO.
F.A.I. 74	10-4-1148-1	Champaign	38	14
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT:		

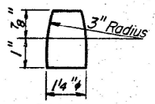
SHEET NO. 5
14 SHEETS



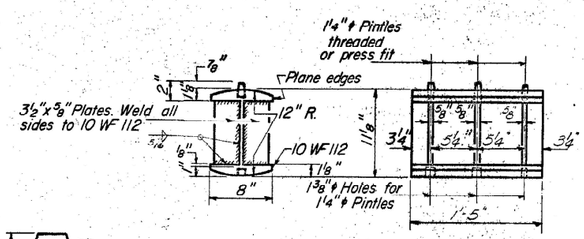
SECTION



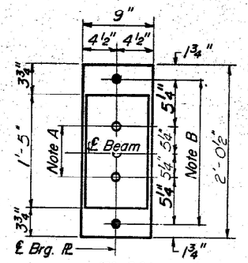
ELEVATION



PINTLE



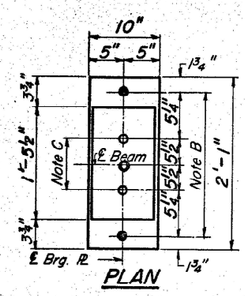
ROCKER



PLAN

AT ABUTMENT

NOTE A
1⅜"ϕ Holes – 1" deep in top ℘ for pintles. Thread or press fit pintles into bottom ℘.

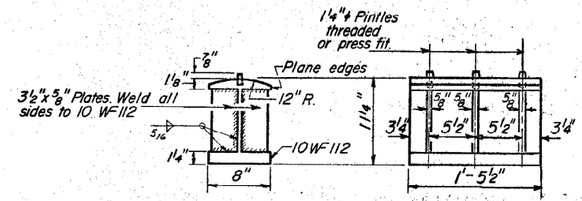


PLAN

AT PIER 1

NOTE B
1½"ϕ Holes for 1"ϕ anchor bolts. 2½"x 2½"x ⅝" ℘. Washers under nut.

NOTE C
1⅜"ϕ Holes 1" deep in top ℘ only for 1¼"ϕ pintles.



BOLSTER

NOTES ON SETTING OF ANCHOR BOLTS AT EXP. BRGS.

a) D* (Side of brg. away from fixed brg.)
D* = 1/8" per each 100' of expansion for every 15° fall below the normal temp. of 50°F.
D** (Side of brg. toward fixed brg.)
D** = 1/8" per each 100' of expansion for every 15° rise above the normal temp. of 50°F.

b) After beams have been erected and dimensions D* or D** determined, holes shall be drilled and anchor bolts shall be grouted in place. All fixed anchor bolts may be built into the masonry.

BEARING ASSEMBLY DETAILS

TABLE OF MOMENTS, SHEARS & REACTIONS – INTERIOR BEAMS

Moments				Reactions	
	.4 Span 1		Pier	Abut.	Pier
	Steel Section				
D. L.	319.3	D. L.	1302.0	45.8	157.0
	Composite Section				
S.D.L.	249.2				
L.L.	627.0	L.L.	474.0	34.7	33.4
Imp.	145.4	Imp.	109.1	8.0	12.3
Total	1541.4	Total	2000.3	88.5	202.7

Shear				
	Abut.	1/4	1/2	3/4
S.D.L.	13.9	5.0	3.9	12.9
L.L.	34.7	23.3	18.4	35.8
Imp.	8.0	5.3	4.2	6.6
Total	56.6	33.6	26.5	48.3

Moments are in Ft.- Kips
Reactions and Shears are in Kips

PROPERTIES

Steel Section	
I_S	17366 in.⁴
S_{TS}	659 in.³
S_{BS}	807 in.³
Composite Section	
I_C	43046 in.⁴
S_{TC}	2500 in.³
S_{BC}	1092 in.³

DESIGNED	James M. Pence	EXAMINED	Oct 10 1965
CHECKED	James F. Malcolm	PASSED	W.E. Bamman
DRAWN	P.G. Barnett J.R. Boice	APPROVED	V.E. Smith
CHECKED	SFM		

I-2-B 9-1-65

BEARING DETAILS
F.A.I. RT. 74 – SEC. 10-4-1148-1
CHAMPAIGN COUNTY
STA. 1429+10.60

USER NAME = Steven.Wood	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	AS-BUILT PLANS LOCATION #2 S.N. 010-0208		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN -	REVISED -				74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	19
	CHECKED -	REVISED -						CONTRACT NO. 70H59		
PLOT DATE = 6/5/2025	DATE -	REVISED -		SCALE:	SHEET 4 OF 4 SHEETS STA. TO STA.			ILLINOIS FED. AID PROJECT		

MODEL: Sheet 4 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 2.dgn

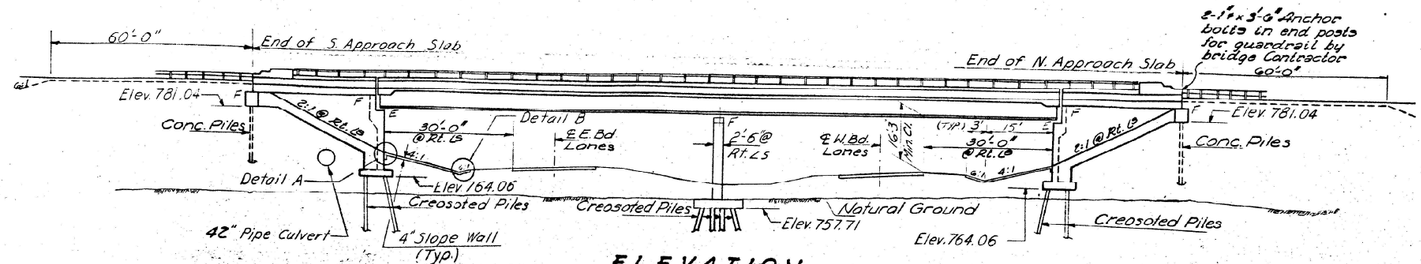
B.M.: "D" K.K. Spike in Pole 187'Lt
Sta. 1469+31 Elev. 757.61

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

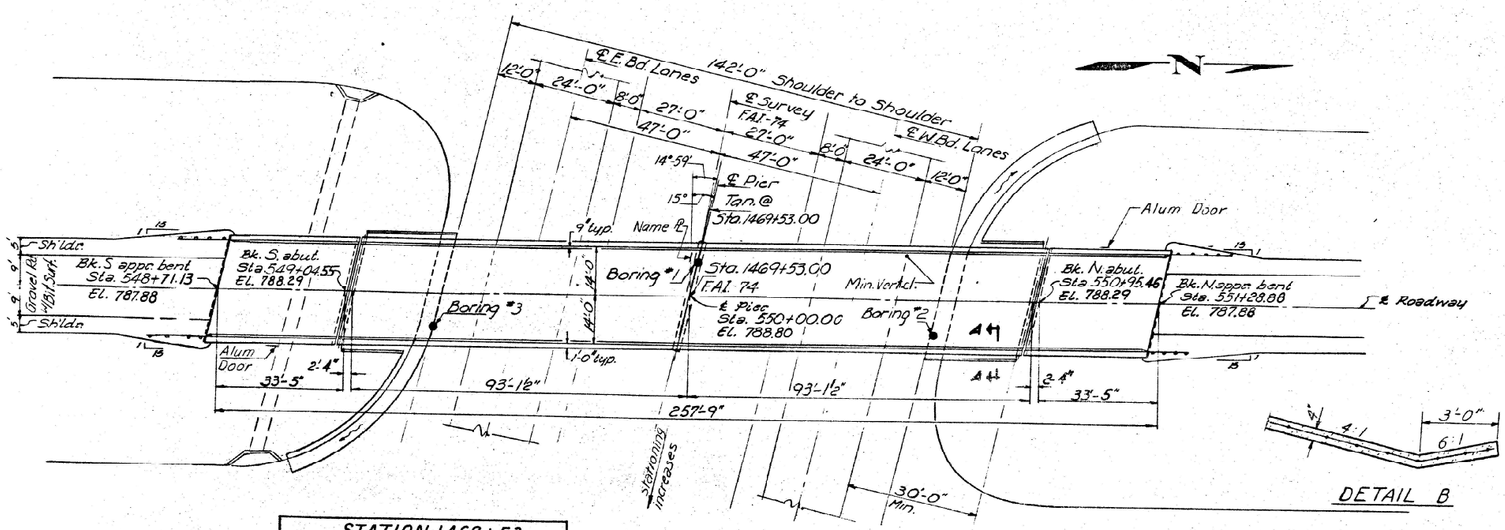
AS-BUILT PLANS FOR S.N. 010-0209
FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	10-4-1 HB-2	Champaign	42	9
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74-5(68)172		

SHEETS NO. 1 OF SHEETS



ELEVATION



DETAIL B

GENERAL NOTES

All reinforcement bars shall be lapped 24 diameters unless otherwise shown.

Rivets ¾" ϕ, open holes 13/16" ϕ, unless otherwise noted.

Except as otherwise provided, all structural steel shall receive one shop coat of red lead paint and two field coats of paint. See Special Provisions for field paint.

Anchor bolts shall be set before riveting diaphragms over supports.

Slope wall shall be reinforced with welded wire fabric 6"x 6" mesh, weighing 58# per 100 sq. ft.

Concrete piles at abutments shall be driven in holes precored through the embankment in accordance with Article 513.09(c) of the Standard Specifications.

An alternate strand pattern using Extra High Strength Prestressing strand (270 k.s.i.) is permitted.

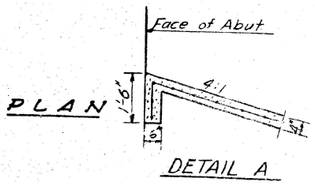
The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.

The concrete rail section above the mandatory construction joint at the top of the slab shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Handrail Concrete.

The Contractor shall drive one concrete test pile at the N. Appr. in a permanent location, and two timber test piles in the vicinity of Pier ℄ S. Abut. as directed by the Engineer before ordering the remainder of piles.

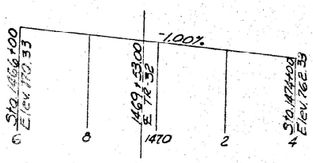
STATION 1469+53
BUILT 19 BY
STATE OF ILLINOIS
F.A.I. RT. 74 SEC. 10-4-1HB-2
F.A. PROJ. I-74-5(68)
LOADING HS15

NAME PLATE
(See Std 2113-1)



PLAN

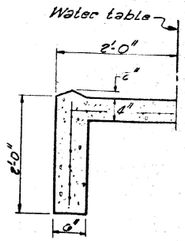
DETAIL A



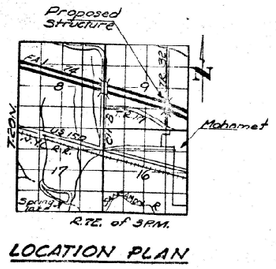
PROFILE OF F.A.I 74

F.A.I-74
℄ CURVE DATA
P.I. Sta. 1474+66.82
Δ = 22°57'08" Rt.
R = 3,819.72'
T = 775.47'
L = 1,530.15'
E = 77.92'
D = 1°30'
SE = 0.042%

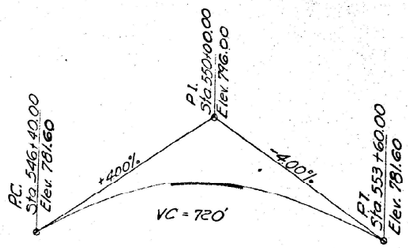
Note:
For Bill of Material
see sheet #2.



SEC. A-A



LOCATION PLAN



PROFILE TR-32

PRECAST PRESTRESSED UNITS
f'c = 5,000 psi.
f'ci = 4,000 psi.
fs = 248,000 psi. Strands (7/16)
fsi = 173,400 psi. Strands (7/16)

DESIGN STRESSES FIELD UNITS
fc = 1,200 psi. (Deck Slab) 1,400 psi. (Facepal, Curb & Sub.)
fs = 20,000 psi. (Reinf.)
fs = 20,000 psi. (Struct.)
Vc = 75 psi. (Footings)
n = 10
Allowable ℄ d = L/1000 Non Comp.

LOADING HS15-44
Note: Allow 25 psf for future wearing surface

DESIGNED Wen-mo Chin
CHECKED [illegible]
DRAWN R.P.S. J.M.
CHECKED [illegible]

EXAMINED April 18 1968
PASSED
APPROVED
D5 Engineer Bridge and Traffic Structures
M. E. Baumann Engineer of Design
Chief Bridge Engineer

GENERAL PLAN & ELEVATION
TR 32 OVER FAI. RT. 74
PROJ. I-74-5 (68) 172
FA.I. RT 74 SEC. 10-4-1HB-2
CHAMPAIGN COUNTY
STA. 1469+53

USER NAME = Steven.Wood	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 6/5/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #3 S.N. 010-0209

SCALE: | SHEET 1 OF 4 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	20
		CONTRACT NO. 70H59		
	ILLINOIS	FED. AID PROJECT		

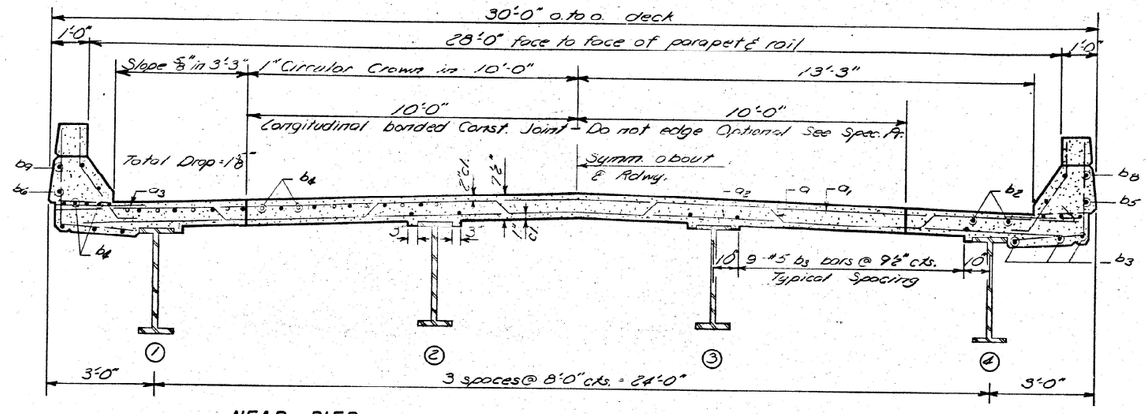
MODEL: Sheet 1 [Sheet]
FILE NAME: c:\pw_work\pwdot\steven.wood@illinois.gov\d0194040\D570H59-sht-Loc 3.dgn

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

AS-BUILT PLANS FOR S.N. 010-0209
FOR INFORMATION ONLY

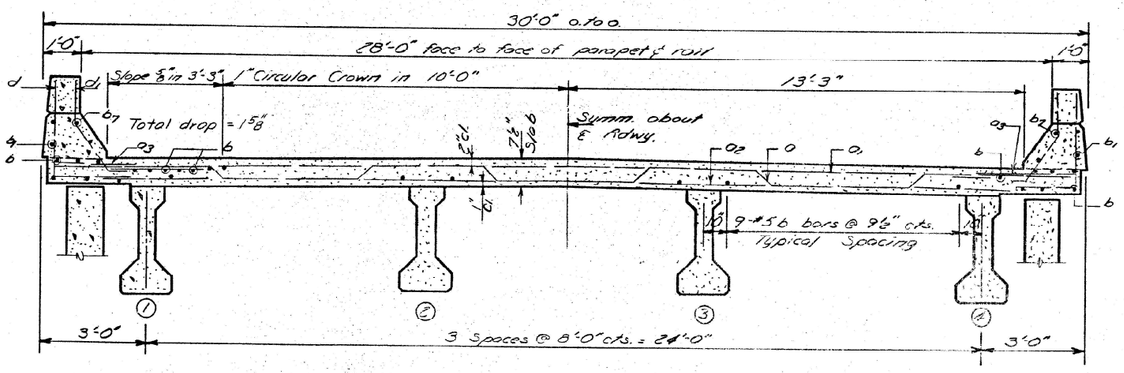
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	10-4-1 HB-2	Champaign	42	12
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 4
13 SHEETS



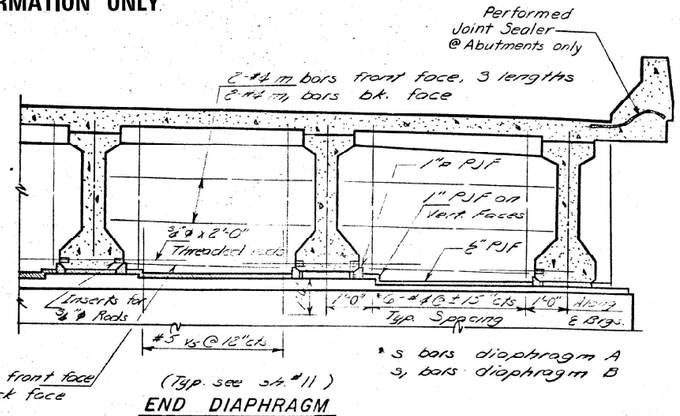
NEAR PIER NEAR MIDSPAN

AT MAIN SPAN



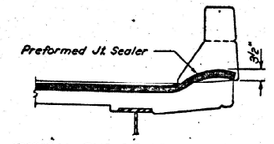
AT APPROACH SPAN

TYPICAL CROSS SECTION

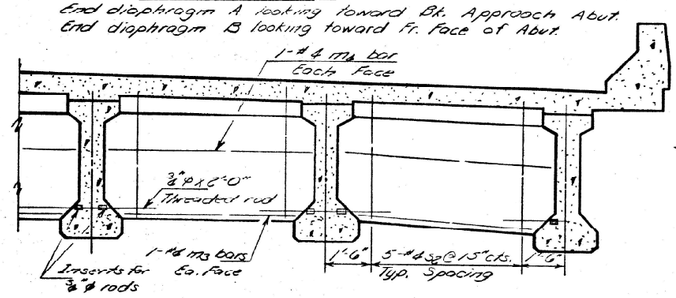


END DIAPHRAGM

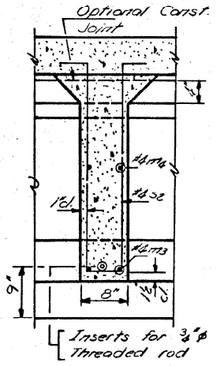
End diaphragm A looking toward Bk. Approach Abut.
End diaphragm B looking toward Fr. face of Abut.



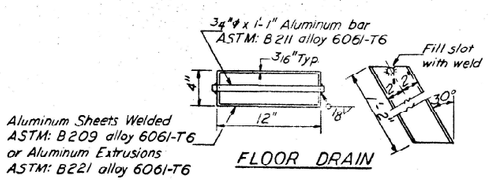
TYPICAL END OF SEALER TREATMENT



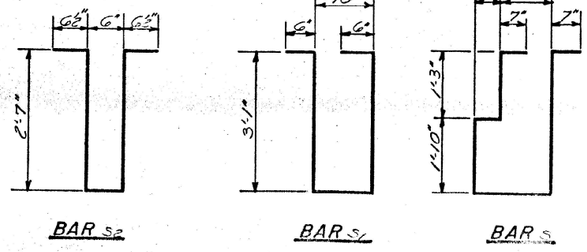
INTERIOR DIAPHRAGMS



SEC. AT INT. DIAPHRAGM



FLOOR DRAIN



BAR S2 BAR S1 BAR S

DESIGNED	Wen-mo Chen
CHECKED	K.L. Lyman Kad
	R.P.S
DRAWN	D. Derringer
CHECKED	K.L. Lyman Kad

EXAMINED — APRIL 18 1968 — ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES
PASSED — ENGINEER OF DESIGN
APPROVED — CHIEF HIGHWAY ENGINEER

SUPERSTRUCTURE
F.A.I. RT. 74 SEC. 10-4-1HB-2
CHAMPAIGN COUNTY
STA. 1469+53

MODEL: Sheet 2 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 3.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 6/5/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #3 S.N. 010-0209

SCALE: | SHEET 2 OF 4 SHEETS | STA. | TO STA.

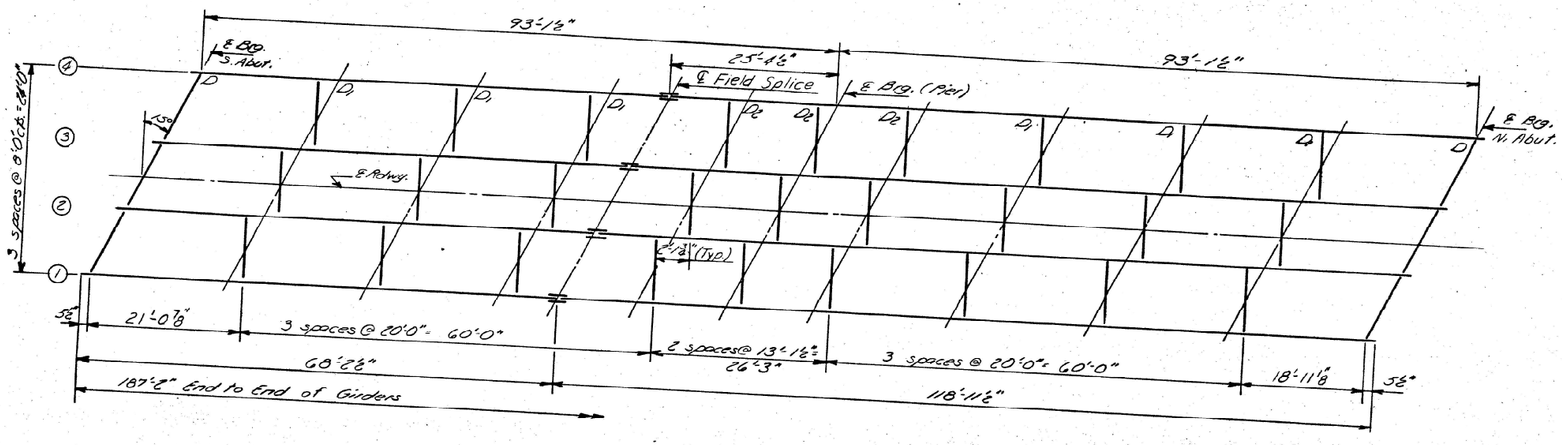
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	21
		CONTRACT NO. 70H59		
	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

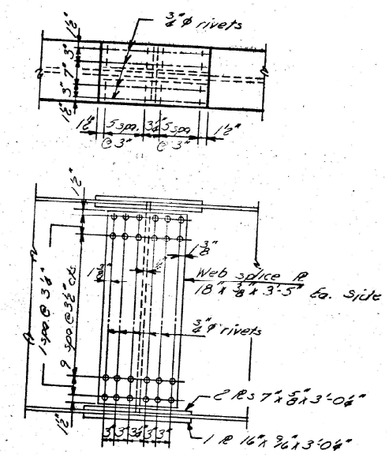
AS-BUILT PLANS FOR S.N. 010-0209
FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	10-4-1 HB-2	Champaign	42	15
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

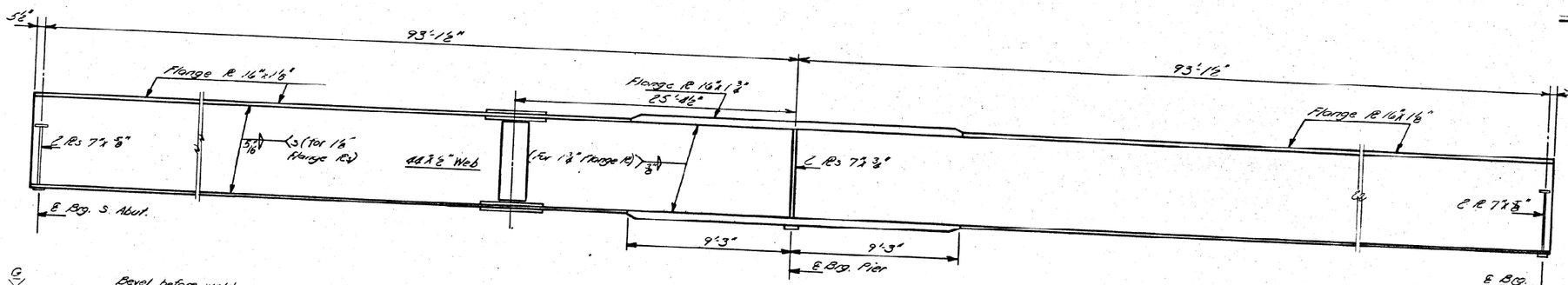
SHEET NO. 7
13 SHEETS



PLAN

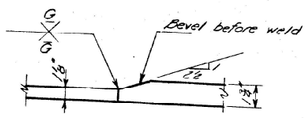


DETAIL OF SPLICES

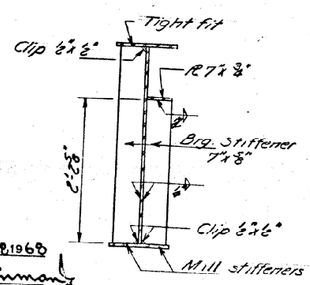


ELEVATION

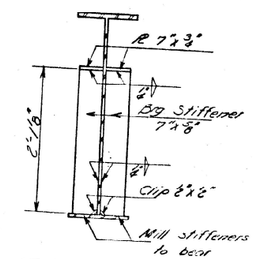
SEC. AT PIER



SHOP FLANGE SPLICES

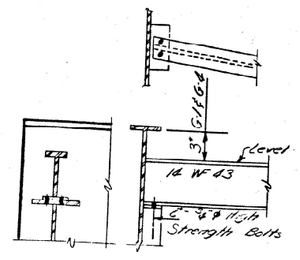


AT EXTERIOR GIRDER

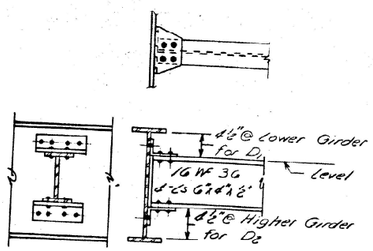


AT INTERIOR GIRDER

SECTION AT ABUTMENTS



DIAPHRAGM - D
6 - Required



DIAPRHRAGM D_1 & D_2
D_1 - 18 Required
D_2 - 9 Required

Note: See Sh. #8 for other details. Full penetration butt weld may be used to make Web Splice at Shop if plate can not be furnished in full length.

DESIGNED	Wen-mo Chen	
CHECKED	[illegible]	
DRAWN	APS D. Derringer	
CHECKED	[illegible]	

EXAMINED — APRIL 18, 1969 — ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED — ENGINEER OF DESIGN
APPROVED — CHIEF HIGHWAY ENGINEER

STRUCTURAL STEEL
F.A.I. RT. 74 SEC. 10-4-1HB-2
CHAMPAIGN COUNTY
STA 1469+33

MODEL: Sheet 3 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 3.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/5/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #3 S.N. 010-0209

SCALE: | SHEET 3 OF 4 SHEETS | STA. | TO STA.

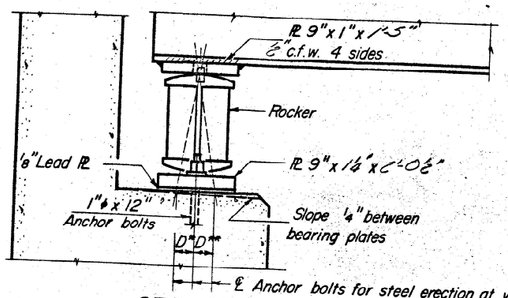
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	22
		CONTRACT NO. 70H59		
	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

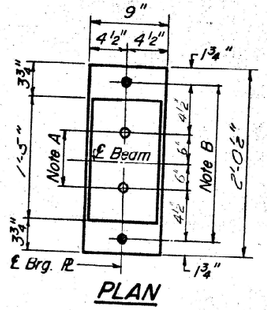
AS-BUILT PLANS FOR S.N. 010-0209
FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	10-4-1 HB-2	Champaign	42	16
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT:		

SHEET NO. 8
15 SHEETS



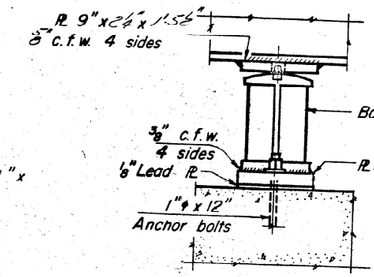
SECTION



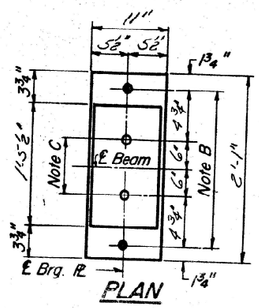
PLAN

AT ABUTMENT

NOTE A
1 3/8"ϕ Holes - 1" deep in top PL for pintles. Thread or press fit pintles into bottom PL.



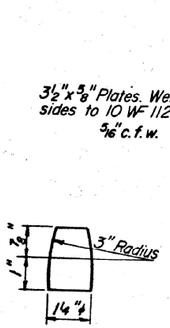
ELEVATION



PLAN

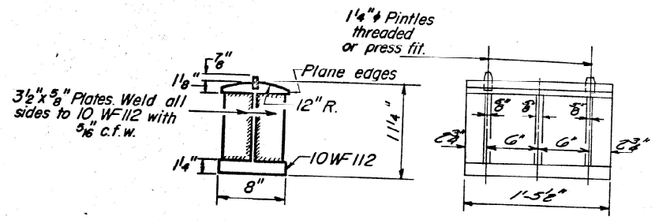
AT PIER

NOTE C
1 3/8"ϕ Holes 1" deep in top PL only for 1 1/4"ϕ pintles.



PINTLE

ROCKER



BOLSTER

NOTES ON SETTING OF ANCHOR BOLTS AT EXP. BRGS.

a) D* (Side of brg. away from fixed brg.)
D* = 1/8" per each 100' of expansion for every 15° fall below the normal temp. of 50°F.
D** (Side of brg. toward fixed brg.)
D** = 1/8" per each 100' of expansion for every 15° rise above the normal temp. of 50°F.

b) After beams have been erected and dimensions D* or D** determined, holes shall be drilled and anchor bolts shall be grouted in place. All fixed anchor bolts may be built into the masonry.

Note B
1 1/8"ϕ Holes for 1"ϕ anchor bolts. 6"x 6"x 5/16" PL. Washers under nut.

GIRDER ELEV. (TOP OF WEB)

	℄ Brg. N. Abut.	℄ Brg. Pier	℄ Field Splice	℄ Brg. S. Abut.
Girders 1 & 4	787.45	787.79	787.87	787.45
Girders 2 & 3	787.58	787.91	788.00	787.58

TABLE OF MOMENTS & REACTIONS

	Moments in Ft. Kips		Reactions in Kips	
	@ 0.4 Span	@ Pier	@ Abut.	@ Pier
Dead Load	760.8	-1558.0	45.8	158.1
Live Load	606.9	-598.5	34.5	55.4
Imp.	139.6	-137.7	7.0	12.7
Total	1507.3	-2294.2	87.3	226.2

DESIGNED W-H-mo Chem
CHECKED -H-H-y mcKee
R.P.S. O'Derringer
DRAWN P.G. Barnett
CHECKED -H-H-y mcKee

EXAMINED — APRIL 18 1968 — ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES
PASSED — ENGINEER OF DESIGN
APPROVED — CHIEF HIGHWAY ENGINEER

I-2-B 9-1-65

BEARING DETAILS
F.A.I RT. 74 SEC. 10-4-1HB-2
CHAMPAIGN COUNTY
STA. 1469+53

MODEL: Sheet 4 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 3.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/5/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #3 S.N. 010-0209

SCALE: | SHEET 4 OF 4 SHEETS | STA. | TO STA.

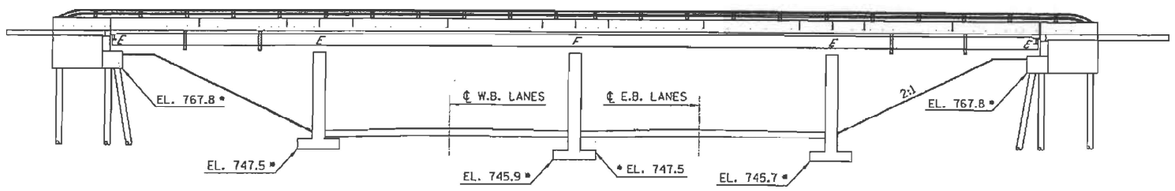
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	23
		CONTRACT NO. 70H59		
	ILLINOIS	FED. AID PROJECT		

STRUCTURE NO. 010-0186 BUILT AS FA RTE. 39, SEC. 14-HB IN 1956 AT STATION 146+59.20. A FOUR CONTINUOUS SPANS, 2 @ 41'-5", 2 @ 51'-9", WITH W30 STEEL BEAMS AND A 7½" REINFORCED CONCRETE DECK, SUPPORTED ON OPEN ABUTMENTS AND CONCRETE HAMMER HEAD PIERS. IN 1992 WAS RECONSTRUCTED AS FAI 74, SECTION (14HB)BRK AT STATION 10+00. THE DECK WAS REPLACED AND WIDENED BY PLACING THREE W30 BEAMS ON THE EAST SIDE OF THE STRUCTURE. THE EXISTING ABUTMENTS AND PIERS WERE WIDENED TO SUPPORT THE NEW 7½" DECK GEOMETRY, AN OUT TO OUT WIDTH OF 89'-6¾" AT THE NORTH ABUTMENT. THE OUT TO OUT WIDTH TAPPERS TO 83'-9⅞" AT THE SOUTH ABUTMENT. IN 2004 THE VARIABLE WIDTH CONCRETE MEDIAN DIVIDING NORTH AND SOUTH BOUND TRAFFIC WAS REMOVED AND RELOCATED. TURN LANES WERE ESTABLISHED ACROSS THE STRUCTURE ALLOWING FOR SIGNALIZATION OF THE ENTRANCE AND EXIT RAMPS TO I-74. A 5'-0" SIDEWALK WAS PLACED ON THE WEST SIDE OF THE STRUCTURE.

WORK SHALL BE COMPLETED WITH STAGE CONSTRUCTION.

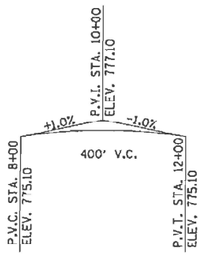
GENERAL PLAN & ELEVATION
S.N. 010-0186

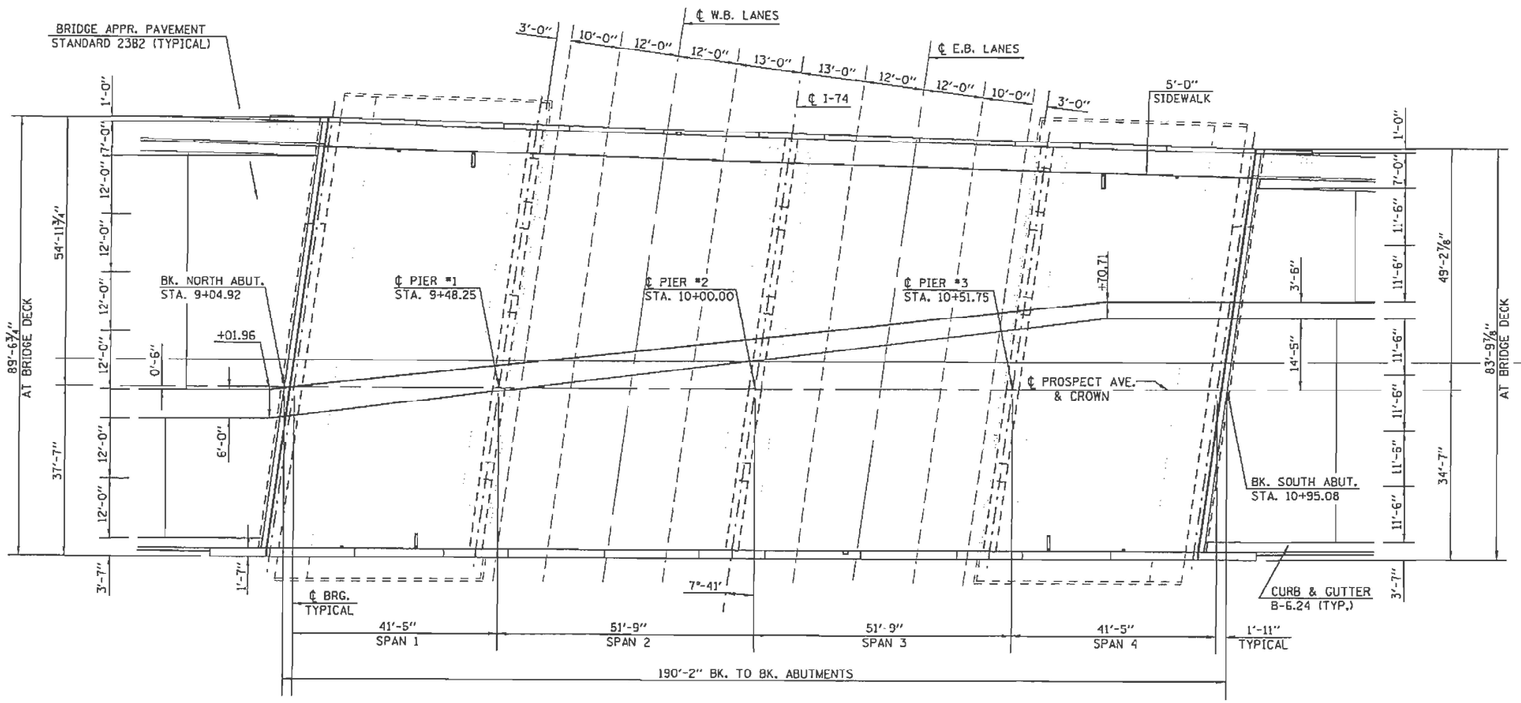
FOR INFORMATION ONLY



* ELEVATIONS TAKEN FROM AS-BUILT PLANS AND ARE SHOWN FOR PERSPECTIVE ONLY.

ELEVATION





PLAN VIEW

LICENSED STRUCTURAL ENGINEER
DAVID CARL PUZEY
081-005470
SPRINGFIELD
ILLINOIS
STATE OF ILLINOIS

David Carl Puzey 1/18/19
Expires 11/30/20

USER NAME = shawferes	DESIGNED - ESS	REVISED -	
	DRAWN - ESS	REVISED -	
PLOT SCALE = 40.0000 ' / In.	CHECKED - TJB	REVISED -	
PLOT DATE = 12/6/2018	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
S. N. 010-0186

SCALE: | SHEET 1 OF 38 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-HB)BOR	CHAMPAIGN	66	20
		CONTRACT NO. 70D15		
	ILLINOIS FED. AID PROJECT			

MODEL: $FODELWAVES
FILE NAME: P:\PDF\D0F\D0F1TCC Bridges.dgn.PWD0TDocuments\D0T Offices\District 9\Projects\D570D15\CADD\Structures\D570D15_sht_bridge plans.sgn

MODEL: Sheet 1 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1094d401d570f59-sht-loc-4.dgn

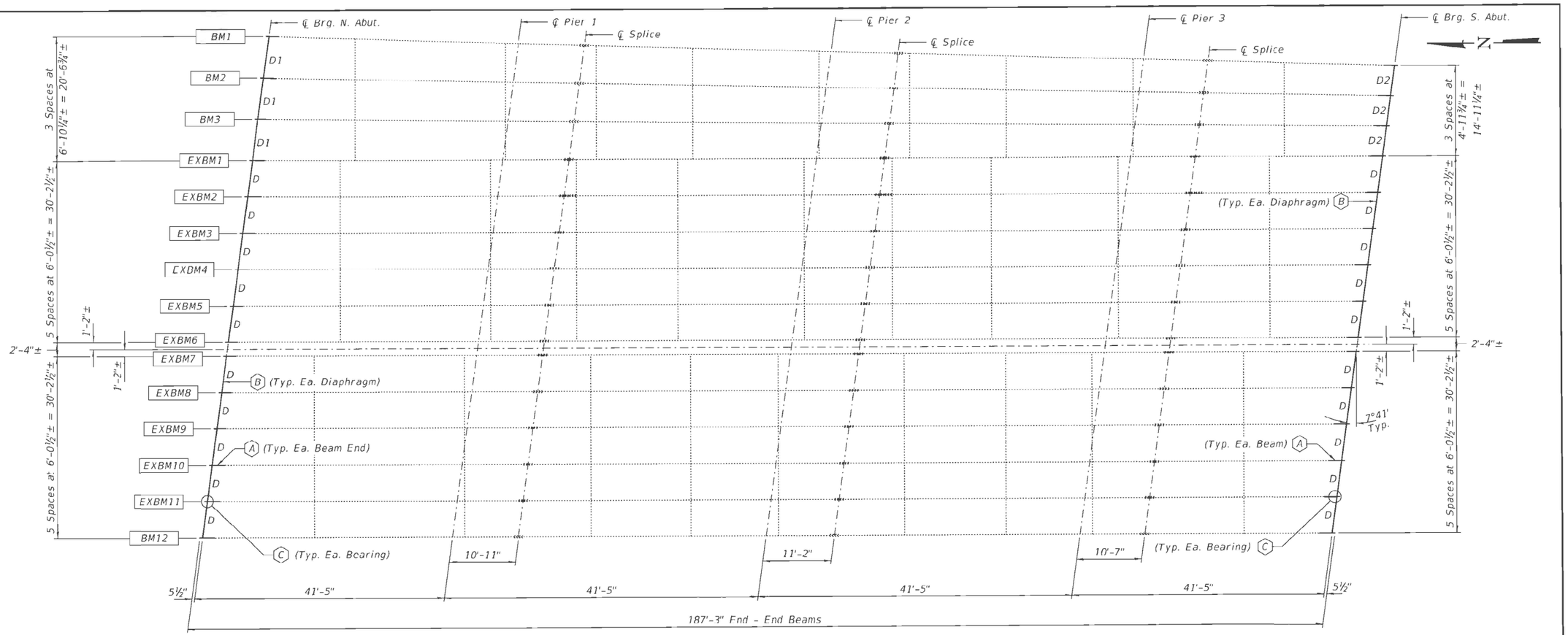
USER NAME = Steven.Wood	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 6/5/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #4 S.N. 010-0186

SCALE: | SHEET 1 OF 11 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	24
		CONTRACT NO. 70H59		
	ILLINOIS FED. AID PROJECT			



PLAN

(A) - Repair all the Beam Ends at the Abutments. See Beam End Repair Schedule for Repair location.

(B) - Remove and replace all diaphragms at the Abutments.

(C) - Remove and replace all Bearings at the Abutments.

NOTES

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Structural Steel Repair.

Fasteners shall be high strength bolts. Bolts ¾"Ø, open holes $^{13}/_{16}$"Ø, unless otherwise noted.

Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

Diaphragm connection holes shall be $^{13}/_{16}$"Ø for ¾"Ø bolts. Two hardened washers shall be required at diaphragm connections.

All new structural steel and bearing assembly shall be hot-dip galvanized. See Special Provisions for "Hot Dip Galvanizing for Structural Steel".

All attached utilities shall be relocated away from repair locations. Cost included with Structural Steel Repair.

BEAM END REPAIR SCHEDULE

BEAM NO.	N. ABUT.	S. ABUT.
BM1	Repair "A"	Repair "A"
BM2	Repair "D"	Repair "B"
BM3	Repair "B"	Repair "B"
EXBM1	Repair "C"	Repair "C"
EXBM2	Repair "C"	Repair "C"
EXBM3	Repair "C"	Repair "D"
EXBM4	Repair "D"	Repair "C"
EXBM5	Repair "D"	Repair "D"
EXBM6	Repair "D"	Repair "D"
EXBM7	Repair "D"	Repair "D"
EXBM8	Repair "D"	Repair "D"
EXBM9	Repair "D"	Repair "C"
EXBM10	Repair "C"	Repair "C"
EXBM11	Repair "C"	Repair "C"
BM12	Repair "C"	Repair "C"

Note:
See sheet 19 and 20 of 38 for Repair "A", Repair "B", Repair "C" and Repair "D" details.

AS-BUILT PLANS FOR S.N. 010-0186
FOR INFORMATION ONLY

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	8600
Structural Steel Removal	Pound	7210
Furnishing & Erecting Structural Steel	Pound	11630
Elastomeric Bearing Assembly, Type 1	Each	30
Jack and Remove Existing Bearings	Each	30
Anchor Bolts, 1" Ø	Each	60

EXPIRES 11-30-2020

DESIGNED - SMR	EXAMINED	DATE - JANUARY 18, 2019	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
CHECKED - JSB	ENGINEER OF STRUCTURAL SERVICES		
DRAWN - daburdell	PASSED	REVISED -	REPAIR DETAILS SN 010-0186
CHECKED - SMR	ENGINEER OF BRIDGES AND STRUCTURES	REVISED -	SHEET NO. 18 OF 38 SHEETS

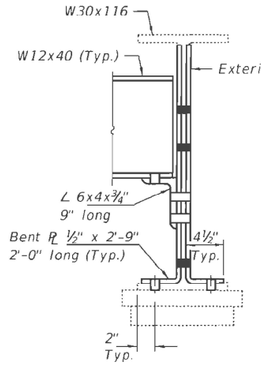
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-HB)BDR	CHAMPAIGN	66	37
		CONTRACT NO. 70D15		
	ILLINOIS FED. AID PROJECT			

MODEL: Sheet 2 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 4.dgn

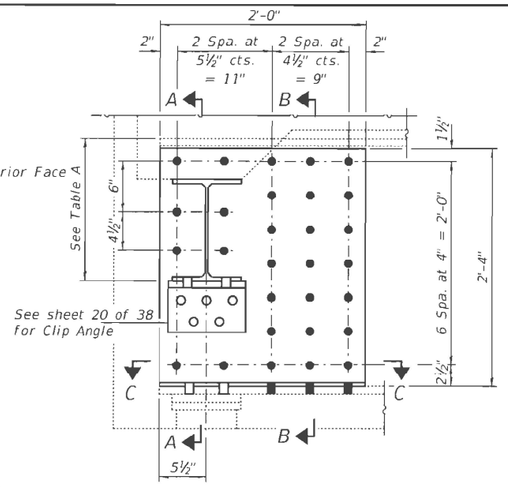
USER NAME = Steven.Wood	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	AS-BUILT PLANS LOCATION #4 S.N. 010-0186
	CHECKED -	REVISED -	SCALE: SHEET 2 OF 11 SHEETS STA. TO STA.
PLOT DATE = 6/5/2025	DATE -	REVISED -	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	25
		CONTRACT NO. 70H59		
	ILLINOIS FED. AID PROJECT			

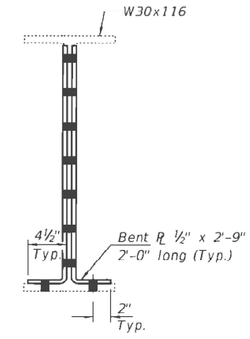
AS–BUILT PLANS FOR S.N. 010–0186
FOR INFORMATION ONLY



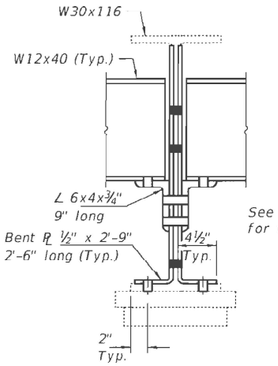
SECTION A-A



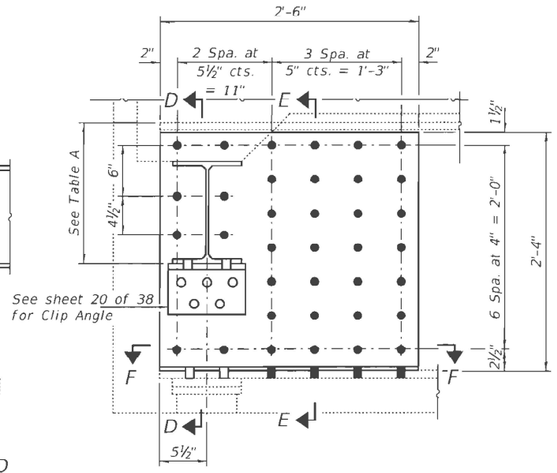
REPAIR A



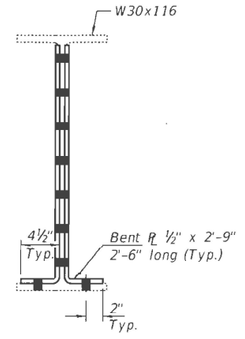
SECTION B-B



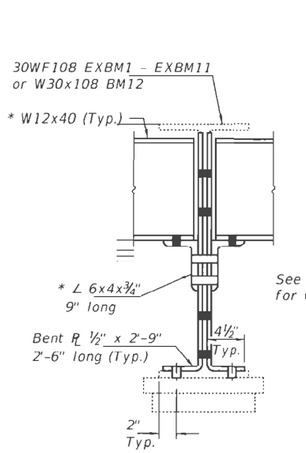
SECTION D-D



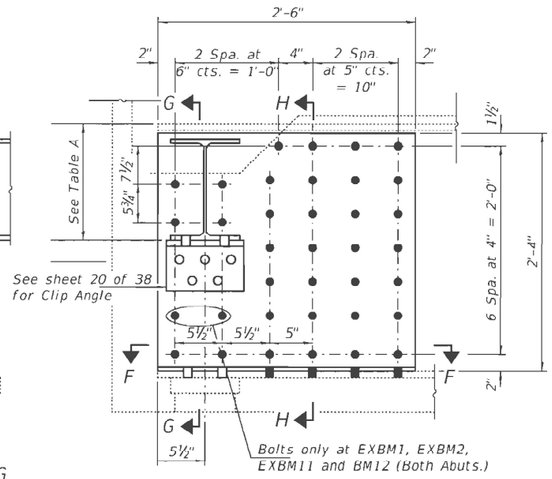
REPAIR B



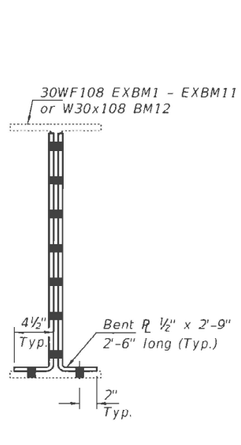
SECTION E-E



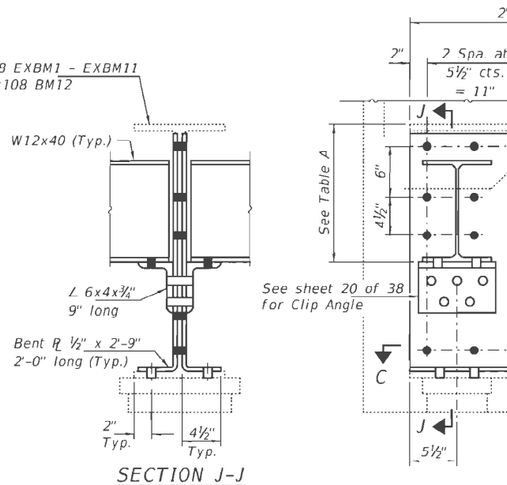
SECTION G-G



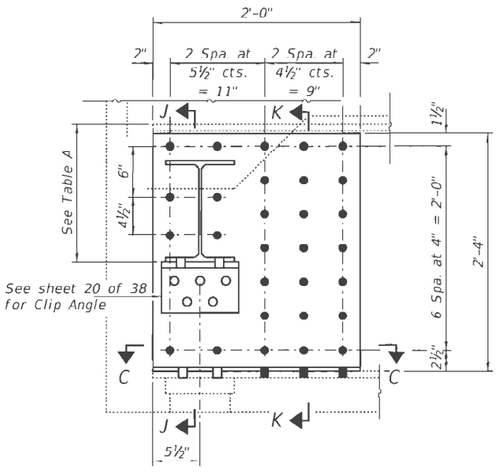
REPAIR C



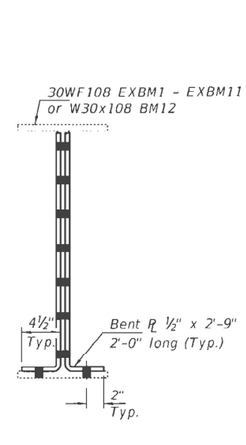
SECTION H-H



SECTION J-J

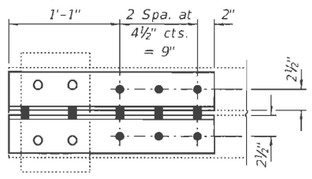


REPAIR D

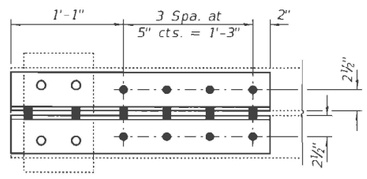


SECTION K-K

* Omit on exterior face of outside beams.



SECTION C-C



SECTION F-F

TABLE A

Beam No.	N. Abut.	S. Abut.
BM1	1'-4½"	1'-5⅜"
BM2	1'-4½"	1'-5"
BM3	1'-5¾"	1'-6"
EXBM1	1'-2 15/16"	1'-2 15/16"
EXBM2	1'-2 13/16"	1'-2 13/16"
EXBM3	1'-3 9/16"	1'-3 9/16"
EXBM4	1'-4 3/16"	1'-4 3/16"
EXBM5	1'-4 13/16"	1'-4 13/16"
EXBM6	1'-5 5/16"	1'-5 5/16"
EXBM7	1'-5 5/16"	1'-5 5/16"
EXBM8	1'-4 13/16"	1'-4 13/16"
EXBM9	1'-4 3/16"	1'-4 3/16"
EXBM10	1'-3 9/16"	1'-3 9/16"
EXBM11	1'-2 15/16"	1'-2 13/16"
BM12	1'-1 1/16"	1'-1¾"

Notes:
Remove existing clip angles using the air-arc method and grind smooth all remaining weld material. Removal included with Structural Steel Repair.
See sheet 20 of 38 for Diaphragm Details, Clip Angle Details and Bill of Material.

BOLT HOLE LEGEND

○ - Field drill using new steel as template.
● - Shop drill holes in new steel.

DESIGNED - SMR	EXAMINED	DATE - JANUARY 18, 2019	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
CHECKED - JSB	PASSED	REVISED -	REPAIR DETAILS SN 010-0186
DRAWN - daburdell	ENGINEER OF STRUCTURAL SERVICES	REVISED -	SHEET NO. 19 OF 38 SHEETS
CHECKED - SMR	ENGINEER OF BRIDGES AND STRUCTURES		

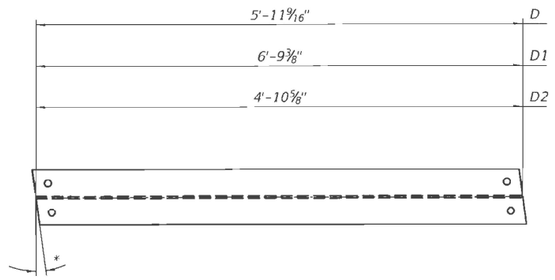
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-HB)BDR	CHAMPAIGN	66	38
		CONTRACT NO. 70D15		
		ILLINOIS FED. AID PROJECT		

USER NAME = Steven.Wood	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	AS-BUILT PLANS LOCATION #4 S.N. 010-0186
	CHECKED -	REVISED -	SCALE: SHEET 3 OF 11 SHEETS STA. TO STA.
PLOT DATE = 6/5/2025	DATE -	REVISED -	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	26
		CONTRACT NO. 70H59		
		ILLINOIS FED. AID PROJECT		

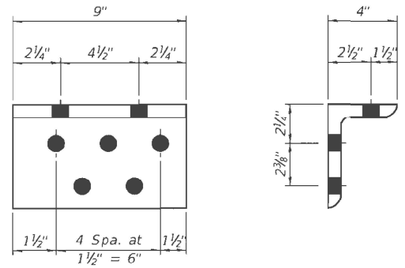
MODEL: Sheet 3 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov:d1094040\D570H59-alt-Loc 4.dgn

AS–BUILT PLANS FOR S.N. 010–0186
FOR INFORMATION ONLY



* 7°41' - D
7°41' - D1 & D2 at EXBM1
7°06' - D1 & D2 at BM3
6°31' - D1 & D2 at BM2
5°57' - D2 at BM1
5°51' - D1 at BM1

DIAPHRAGMS
W12x40
(D - 20 Required)
(D1 - 3 Required)
(D2 - 3 Required)



CLIP ANGLE
∠ 6x4x¾" - 9" long
(52 Required)

* Includes all steel work needed to repair beam ends as shown on sheet 19 of 38.

** Includes removal of all diaphragms and clip angles to be replaced.

*** Includes all new diaphragms and clip angles and H.S. bolts.

BOLT HOLE LEGEND
○ - Field drill using new steel as template.
● - Shop drill holes in new steel.

BILL OF MATERIAL

	Item	Unit	Total
*	Structural Steel Repair	Pound	8600
**	Structural Steel Removal	Pound	1210
***	Furnishing & Erecting Structural Steel	Pound	7280

DESIGNED - SMR	EXAMINED	DATE - JANUARY 18, 2019	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REPAIR DETAILS SN 010-0186
CHECKED - JSB	ENGINEER OF STRUCTURAL SERVICES	REVISED -		SHEET NO. 20 OF 38 SHEETS
DRAWN - daburdell	PASSED	REVISED -		
CHECKED - SMR	ENGINEER OF BRIDGES AND STRUCTURES			

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-HB)BDR	CHAMPAIGN	66	39
		CONTRACT NO. 70D15		
	ILLINOIS FED. AID PROJECT			

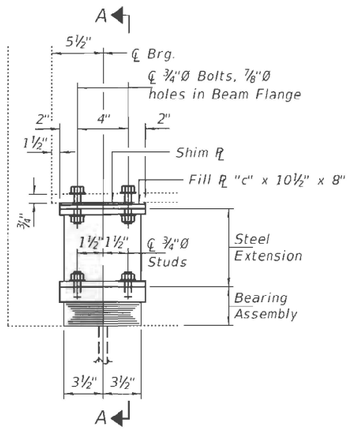
MODEL: Sheet 4 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1094040\D570459sht-Loc 4.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 6/5/2025	DATE -	REVISED -	

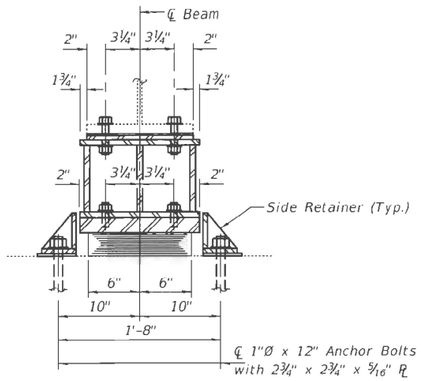
AS-BUILT PLANS
LOCATION #4 S.N. 010-0186
SCALE: | SHEET 4 OF 11 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	27
		CONTRACT NO. 70H59		
	ILLINOIS FED. AID PROJECT			

AS–BUILT PLANS FOR S.N. 010–0186
FOR INFORMATION ONLY

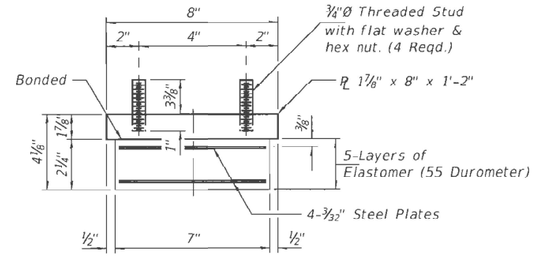


ELEVATION AT ABUTMENT



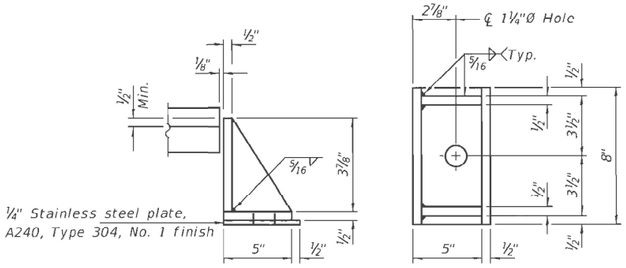
SECTION A-A

TYPE I ELASTOMERIC EXP. BRG.



BEARING ASSEMBLY

Note:
Shim plates shall not be placed under Bearing Assembly.



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

BEAM REACTIONS

R℄	(K)	15.4
R℄	(K)	33.8
Imp.	(K)	9.8
R (Total)	(K)	59.0

Notes:

Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.

New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.

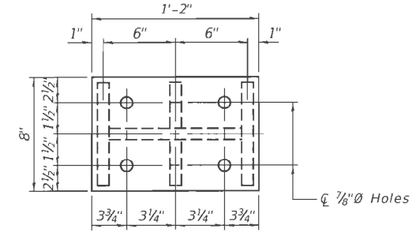
Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Adjustment must account for deck heave due to pack rust (if present).

Min. jack capacity = 28 Tons.

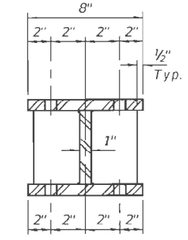
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

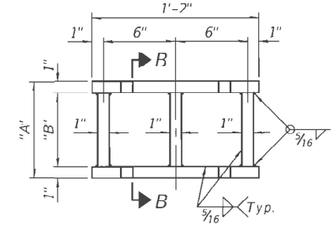
Cost of Side retainers and Stainless Steel plates shall be included in the cost of Elastomeric Bearing Assembly, Type I.



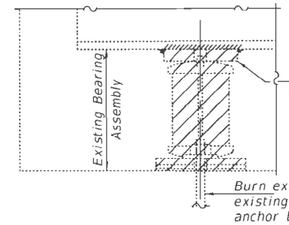
PLAN TOP AND BOTTOM PLATE



SECETION B-B



STEEL EXTENSION DETAIL



EXISTING BEARING REMOVAL DETAIL

Cost Included with Jack and Remove Existing Bearings.

NORTH ABUTMENT

Beam No.	"A"	"B"	"C"
BM1	9	7	0.125
BM2	9	7	0.375
BM3	9	7	0.125
EXBM1	9	7	0.875
EXBM2	9	7	0.75
EXBM3	10	8	0.875
EXBM4	10	8	0.125
EXBM5	10	8	0.625
EXBM6	10	8	0.125
EXBM7	10	8	0.125
EXBM8	11	9	0.125
EXBM9	10	8	0.25
EXBM10	10	8	0.625
EXBM11	9	7	0.875
BM12	9	7	0.375

SOUTH ABUTMENT

Beam No.	"A"	"B"	"C"
BM1	9	7	0.875
BM2	9	7	0.125
BM3	9	7	0.125
EXBM1	9	7	0.875
EXBM2	10	8	0
EXBM3	10	8	0.625
EXBM4	10	8	0.375
EXBM5	12	10	0
EXBM6	10	8	0.625
EXBM7	11	9	0.125
EXBM8	12	10	0.375
EXBM9	11	9	0.375
EXBM10	11	9	0.125
EXBM11	10	8	0.375
BM12	9	7	0.625

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	30
Jack and Remove Existing Bearings	Each	30
Furnishing and Erecting Structural Steel	Pound	4360
Anchor Bolts, 1"Ø	Each	60

TYI/REPS 5-17-2018

DESIGNED - SMR	EXAMINED	DATE - JANUARY 18, 2019	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
CHECKED - JSB	ENGINEER OF STRUCTURAL SERVICES		
DRAWN - daburdell	PASSED	REVISED -	BEARING DETAILS - ABUTMENTS SN 010-0186
CHECKED - SMR	ENGINEER OF BRIDGES AND STRUCTURES	REVISED -	SHEET NO. 21 OF 38 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-HB)BDR	CHAMPAIGN	66	40
		CONTRACT NO. 70D15		
		ILLINOIS	FED. AID PROJECT	

MODEL: Sheet 5 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 4.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	AS-BUILT PLANS LOCATION #4 S.N. 010-0186
	CHECKED -	REVISED -	
PLOT DATE = 6/5/2025	DATE -	REVISED -	SCALE: SHEET 5 OF 11 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	28
		CONTRACT NO. 70H59		
		ILLINOIS	FED. AID PROJECT	

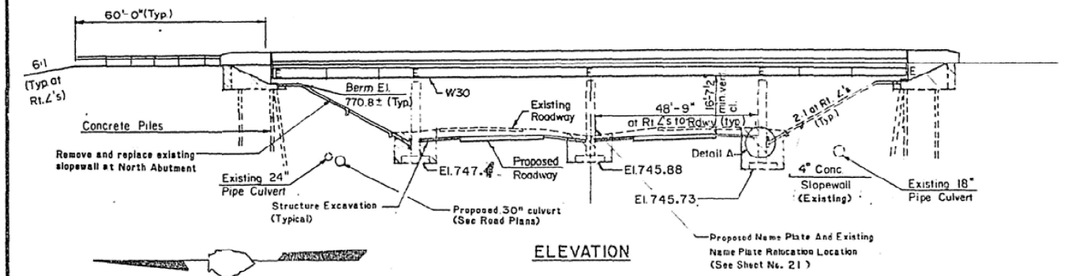
B.M. #21: "□" in Headwall, 78' Rt
Sta. 1145+96 Elev. 754.61

Exist. Structure: Four Span continuous bridge, Steel W30 beams with conc. deck supported on conc. open abuts. & conc. hammer head piers. 65'-8" O. to O. of parapets; 190'-2" Bk. to Bk. of abutments with metal handrails. Structure No. 010-0186 built as F.A. Rte. 39, Section 14-HB in 1956 at Sta. 146+59.20.

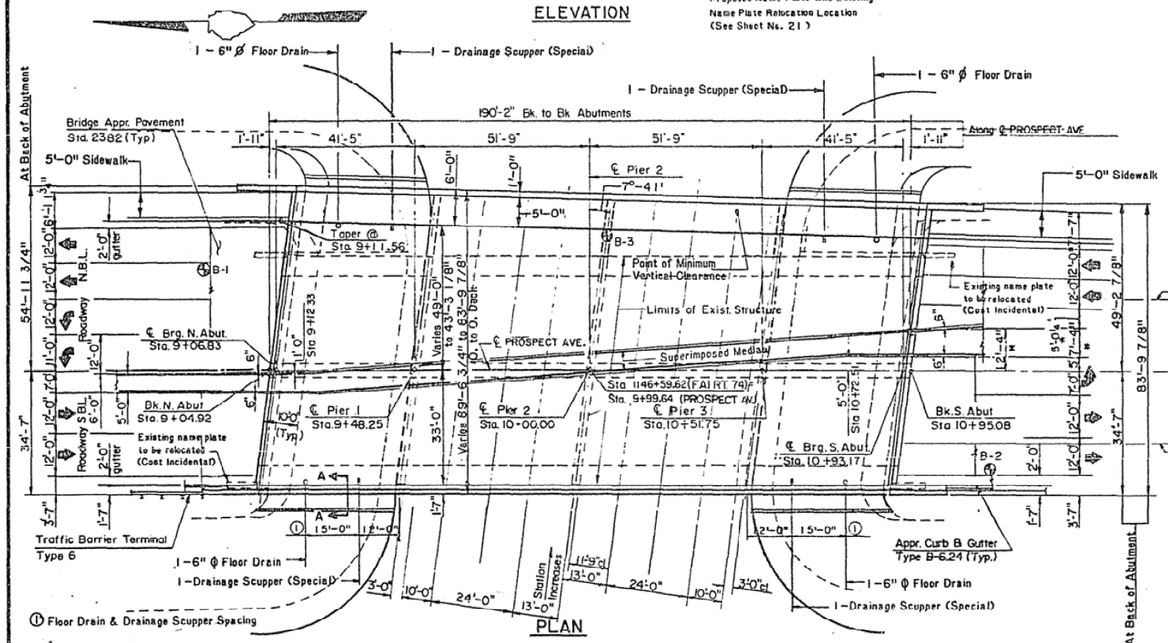
AS-BUILT PLANS FOR S.N. 010-0186
FOR INFORMATION ONLY

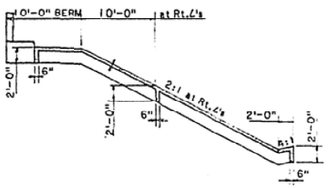
Sheet No. 1 of 27 Sheets

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
F.A.I. 74	(14-HB) BRK	CHAMPAIGN	254	14
FED ROAD DIST NO?	ILLINOIS	PROJECT		



ELEVATION

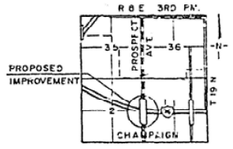




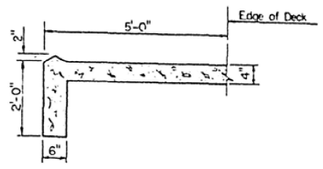
TYPICAL SECTION THRU PROPOSED SLOPEWALL

STATION 9+99.64
BUILT 198_ BY
STATE OF ILLINOIS
F.A.I. RT. 74 SEC. (14-HB)BRK
F.A. PROJ. ACIR-74-3(12W)
LOADING HS20
STR. NO. 010-0186

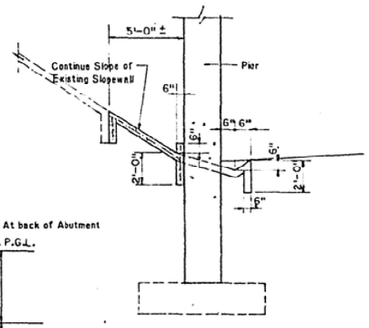
NAME PLATE
STD. 2113



LOCATION SKETCH



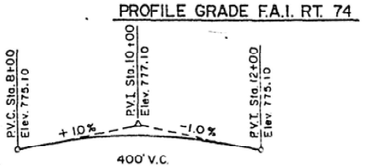
SECTION A-A



DETAIL A



PROFILE GRADE F.A.I. RT. 74



PROFILE GRADE PROSPECT AVE.
(23' LT. & 23' RT.)

* At back of Abutment
Lt. P.G.L.
23'-0"
23'-0"
Rt. P.G.L.

DESIGN STRESSES
NEW CONSTRUCTION
f'c = 3500 psi
Fy = 60,000 psi (Rebars)
Fy = 36,000 psi (M-183)

Loading HS20-44
Allow 25 #/a' for future W.S.
Design Specs-1983 AASHTO Specs. and 1984, 1985, 1986, 1987 and 1988 interims.

JAMES K. CUNARD NUMBER 4655 REGISTERED PROFESSIONAL ENGINEER STATE OF ILLINOIS

GENERAL NOTES

1 FASTENERS SHALL BE HIGH STRENGTH BOLTS. BOLTS 3/4" Ø, OPEN HOLES 15/16" Ø, UNLESS OTHERWISE NOTED.

2 CALCULATED WEIGHT OF STRUCTURAL STEEL = 304,230 POUND

3 BRIDGE SEAT SEALER SHALL BE APPLIED TO ALL ABUTMENT SEAT AREAS. ESTIMATED QUANTITY 952 SQ/FT.

4 SLOPE WALL SHALL BE REINFORCED WITH WELDED WIRE FABRIC, 6" x 6" - W4.0 x W4.0, WEIGHING 58 LBS. PER 100 SQ. FT.

5 LAYOUT OF SLOPE WALLS MAY BE VARIED IN THE FIELD TO SUIT GROUND CONDITIONS AS DIRECTED BY THE ENGINEER.

6 PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF THE WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

7 EXPANSION BOLTS SHALL CONSIST OF APPROVED EXPANSION ANCHORS, PROVIDING MINIMUM CERTIFIED PROOF LOAD = 4,080 LBS., AND 3/4" Ø x 18" HOOKED BOLTS.

8 FIELD WELDING OF CONSTRUCTION ACCESSORIES WILL NOT BE PERMITTED TO THE BOTTOM FLANGE OF BEAMS OR GIRDERS NOR TO THE TOP FLANGE FOR A DISTANCE EQUAL TO ONE-FOURTH THE SPAN LENGTH EACH WAY FROM THE PIER SUPPORTS. FIELD WELDING IN OTHER AREAS WILL BE PERMITTED ONLY WHEN APPROVED BY THE ENGINEER.

9 ANCHOR BOLTS SHALL BE SET BEFORE BOLTING DIAPHRAGMS OVER SUPPORTS.

10 THE MAIN LOAD CARRYING MEMBER COMPONENTS SUBJECT TO TENSILE STRESS SHALL CONFORM TO THE SUPPLEMENTAL REQUIREMENTS FOR NOTCH TOUGHNESS ZONE 2. THESE COMPONENTS ARE THE WIDE FLANGE BEAMS AND ALL SPLICE PLATE MATERIAL OF THE WIDE FLANGE BEAMS.

11 REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31, M-42 OR M-53 GRADE 60.

12 BEARING SEAT SURFACES SHALL BE CONSTRUCTED OR ADJUSTED TO THE DESIGNATED ELEVATIONS WITHIN A TOLERANCE OF 1/8 INCH. ADJUSTMENT SHALL BE MADE EITHER BY GRINDING THE SURFACE OR BY SHIMMING THE BEARING. TWO 1/8" ADJUSTING SHIMS, OF THE DIMENSIONS OF THE BOTTOM BEARING PLATE, SHALL BE PROVIDED FOR EACH BEARING IN ADDITION TO ALL OTHER PLATES OR SHIMS.

13 THE EMBANKMENT CONFIGURATION SHOWN SHALL BE THE MINIMUM EMBANKMENT THAT MUST BE CONSTRUCTED PRIOR TO CONSTRUCTION OF THE ABUTMENTS.

14 THE CONTRACTOR SHALL DRIVE 1-12" CONCRETE TEST PILE IN A PERMANENT LOCATION AT NORTH ABUTMENT AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINDER OF PILES.

15 SEE SHEET 2 FOR BRIDGE QUANTITIES.

16 SEE PROPOSAL FOR BORING DATA.

17 FINISH COAT OF PAINT SHALL BE AS FOLLOWS
EXTERIOR FACE OF EXTERIOR EXTERIOR BEAMS: INTERSTATE GREEN 7.5G 4/8
INTERIOR FACE OF EXTERIOR BEAMS AND ALL INTERIOR BEAMS: LIGHT GREY 10Y 7/1

18 THE THREE COAT LEAD AND CHROMATE FREE ALKYD PAINT SYSTEM SHALL BE USED FOR SHOP AND FIELD PAINTING OF NEW AND EXISTING STRUCTURAL STEEL.

19 ALL CONTACT SURFACE AREAS OF NEW AND EXISTING STRUCTURAL STEEL SHALL BE FREE OF PAINT OR LACQUER.

20 THE CONTRACTOR WILL BE REQUIRED TO MARK ON TOP OF THE CONCRETE DECK THE LOCATIONS OF THE TOP FLANGE OF ALL THE STEEL BEAMS OR GIRDERS, PRIOR TO ANY REMOVAL OF THE BRIDGE CONCRETE DECK. SAW CUTTING DIRECTLY OVER THE TOP OF THE BEAM OR GIRDER FLANGES IS NOT PERMITTED.

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
James J. Rathburn
Engineer of Bridges and Structures

GENERAL PLAN AND ELEVATION

REVISIONS		
No.	DATE	REMARKS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

F.A.I. 74 SEC.(14HB)BRK
CHAMPAIGN S.N. 010-0186 COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY: DATE 5-31-89
CHECKED BY: DATE 5-31-89
DGN
PROJECT NO. 3400-3
SHEET NO.

PROSPECT AVENUE STRUCTURE

Prospect Bridge

USER NAME = Steven.Wood	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	AS-BUILT PLANS LOCATION #4 S.N. 010-0186	
	DRAWN -	REVISED -			
	CHECKED -	REVISED -			
PLOT DATE = 6/5/2025	DATE -	REVISED -		SCALE:	SHEET 6 OF 11 SHEETS STA. TO STA.

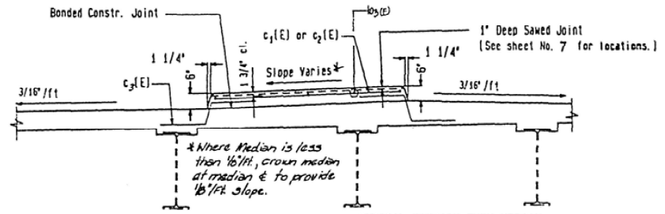
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	29
		CONTRACT NO. 70H59		
		ILLINOIS FED. AID PROJECT		

MODEL: Sheet 6 [Sheet]
FILE NAME: c:\pw_work\pw\dot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 4.dgn

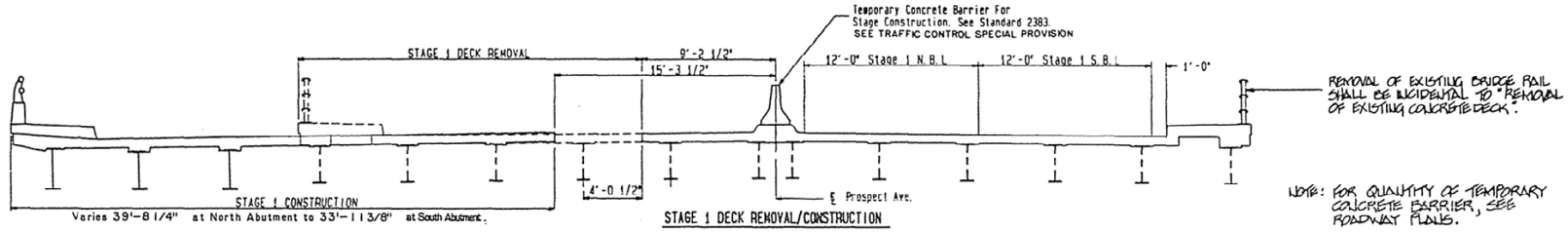
Sheet NO. 8 of 27 Sheets

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	(14-HB) BRK	CHAMPAIGN	254	153
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

AS-BUILT PLANS FOR S.N. 010-0186
FOR INFORMATION ONLY



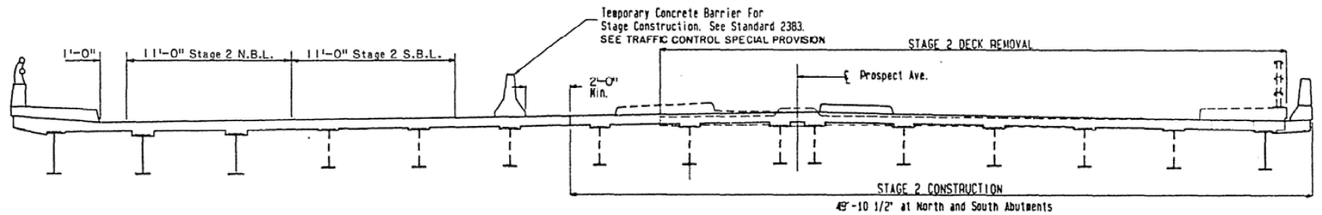
TYPICAL SECTION THRU MEDIAN



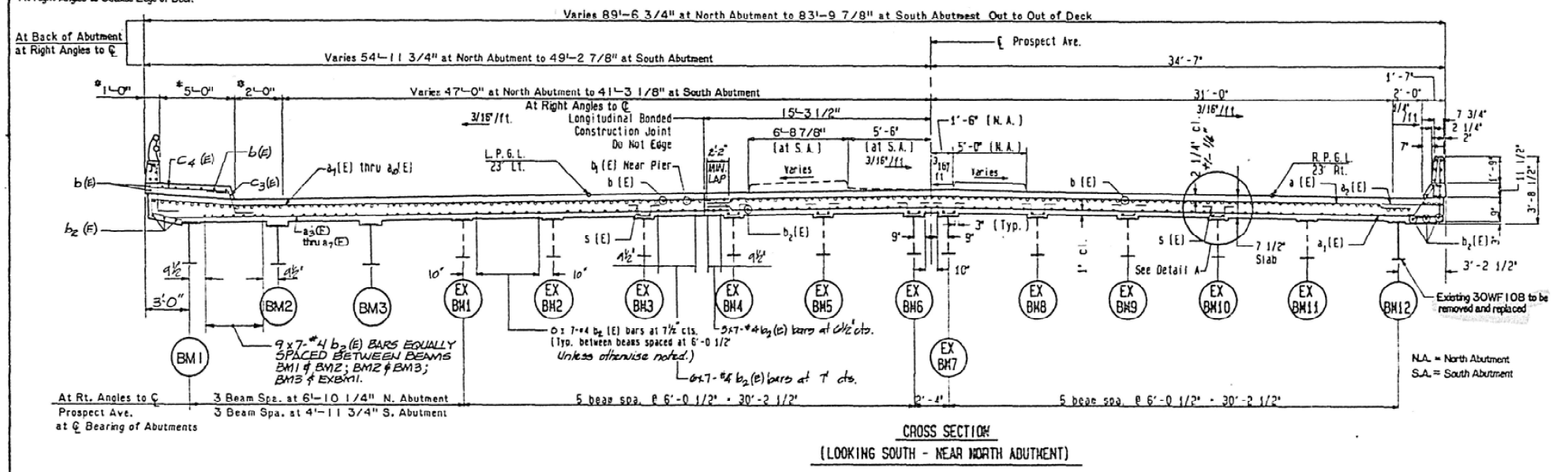
REMOVAL OF EXISTING BRIDGE RAIL SHALL BE INCIDENTAL TO "REMOVAL OF EXISTING CONCRETE DECK".

NOTE: FOR QUANTITY OF TEMPORARY CONCRETE BARRIER, SEE ROADWAY PLANS.

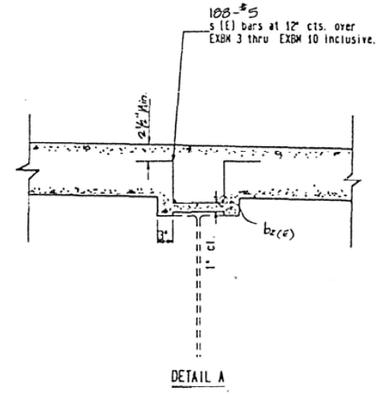
STAGE 1 DECK REMOVAL/CONSTRUCTION



STAGE 2 DECK REMOVAL/CONSTRUCTION



CROSS SECTION
(LOOKING SOUTH - NEAR NORTH ABUTMENT)



SEE SHEET 7 FOR NOTES
WORK THIS SHEET WITH SHEETS NO. 7 & 9 THRU 12

SUPERSTRUCTURE DETAILS

REVISIONS			STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	DRAWN BY / DATE: RAS 2/27
NO.	DATE	APPROVED		CHECKED BY / DATE: JLC 3/27
			F.A.I. 74 SEC. (14-HB)BRK	STORE NUMBER
			S.N. 010-0186	PROJECT NO. 3400-3
			CHAMPAIGN COUNTY	SHEET NO.
			HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS DECATUR, ILLINOIS	

PROSPECT AVENUE STRUCTURE

MODEL: Sheet 7 [Sheet]
FILE NAME: c:\pw_work\pwdot\steven.wood@illinois.gov\d1094040\D5T0H59-sht-Loc 4.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/5/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #4 S.N. 010-0186

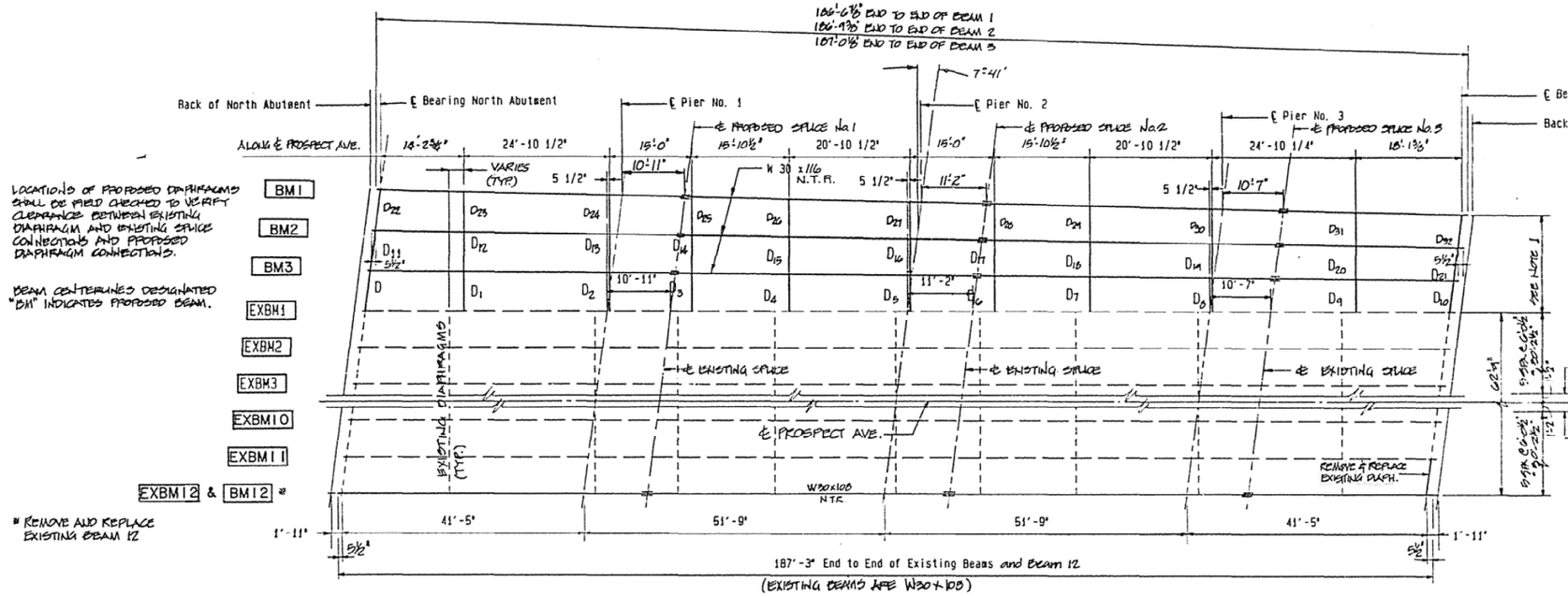
SCALE: | SHEET 7 OF 11 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	30
		CONTRACT NO. 70H59		
	ILLINOIS	FED. AID PROJECT		

AS-BUILT PLANS FOR S.N. 010-0186
FOR INFORMATION ONLY

Sheet No. 13 of 27 Sheets

DISTRICT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	04-4ED BRK	CHAMPAIGN	254	158
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		



NOTE 1:
℄ Bearing North Abutment
3 Spa. at 6'-10 1/4"± = 20'-6 3/4"±
℄ Pier No. 1
3 Spa. at 6'-5 1/4"± = 19'-3 3/4"±
℄ Pier No. 2
3 Spa. at 5'-11"± = 17'-9"±
℄ Pier No. 3
3 Spa. at 5'-4 3/4"± = 16'-2 1/4"±
℄ Bearing South Abutment
3 Spa. at 4'-11 3/4"± = 14'-11 1/4"±

Above spacing at right angles ℄ Prospect Avenue.

ELEVATIONS AT TOP OF BM1, BM2, BM3 & BM12

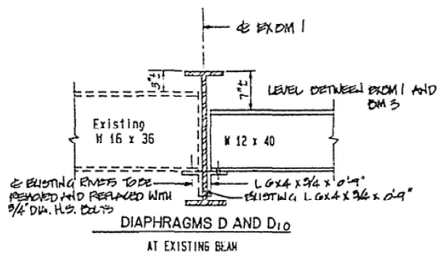
	BM1	BM2	BM3	BM12
N. Abut. Brg.	774.91	774.91	774.91	*
Pier # 1 Brg.	775.49	774.91	775.31	*
℄ Splice #1	774.91	774.91	775.29	*
Pier # 2 Brg.	775.02	775.11	775.08	*
℄ Splice #2	775.03	775.00	775.09	*
Pier # 3 Brg.	774.95	774.92	775.01	*
℄ Splice #3	774.95	774.90	774.91	*
S. Abut. Brg.	774.93	774.89	774.97	*

Contractor to Field Verify Existing Diaphragm and Splice Locations Prior to Ordering Structural Steel.

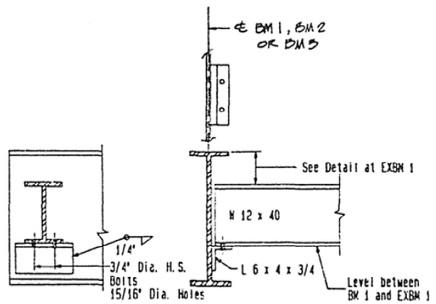
* SET PROPOSED BM12 TO EXISTING TOP OF STEEL ELEVATIONS

FRAMING PLAN

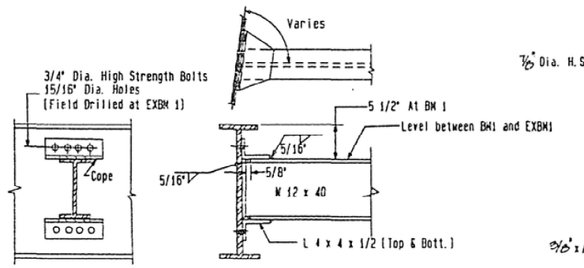
Diaphragms D, D10, D11, D21, D22 and D32 shall be erected on a skew to ℄ BM. All interior diaphragms shall be erected at right angles to EXBM1.



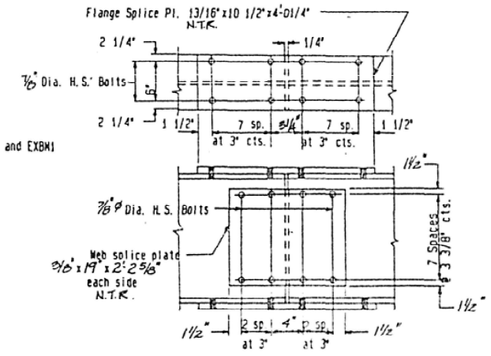
DIAPHRAGMS D AND D_{10}
AT EXISTING BEAM



DIAPHRAGMS D_{11}, D_{21}, D_{22} AND D_{32}
AT PROPOSED BEAM



DIAPHRAGMS D_1 THRU D_9, D_{12} THRU D_{20} AND D_{23} THRU D_{31}



SPLICE
12 Required
(3 per Beam)

Note: Two hardened washers shall be required over all 15/16" Dia. holes. All contact surfaces of joints shall be free of paint or lacquer. Bevel diaphragm connections to accomodate beam skews.

STRUCTURAL STEEL DETAILS

REVISIONS		
No.	DATE	REMARKS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

F.A.I. 74 SEC. (14-HB)BRK
S.N. 010-0186
CHAMPAIGN COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

FILE NAME 1/50
APPROVED
PROJECT NO. 3400-3
SHEET NO.

1-2-D 6-30-80

PROSPECT AVENUE STRUCTURE

MODEL: Sheet 8 [Sheet]
FILE NAME: c:\pw_work\dot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 4.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 6/5/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #4 S.N. 010-0186

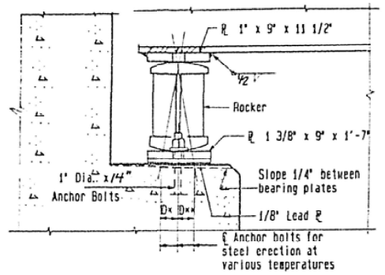
SCALE: | SHEET 8 OF 11 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	31
		CONTRACT NO. 70H59		
	ILLINOIS	FED. AID PROJECT		

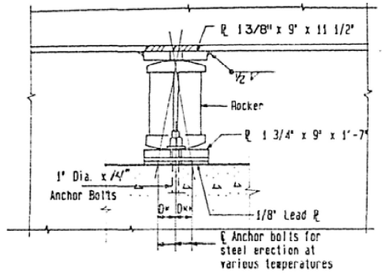
AS–BUILT PLANS FOR S.N. 010–0186
FOR INFORMATION ONLY

Sheet No. 14 of 27 Sheets

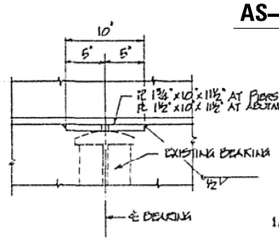
DISTRICT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	(14-HD) BRK	CHAMPAIGN	254	159
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		



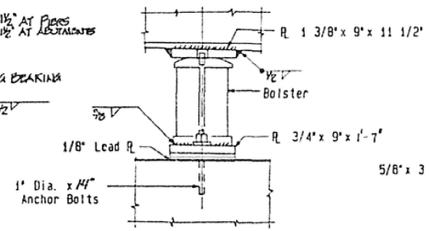
ELEVATION
AT NORTH AND SOUTH ABUTMENTS



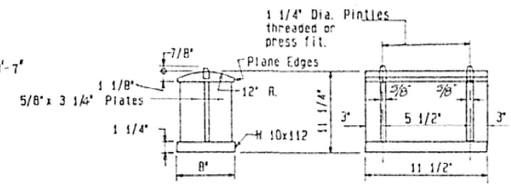
ELEVATION
AT PIERS 1 AND 3



ELEVATION AT ABUTMENTS
AND PIERS
BM12

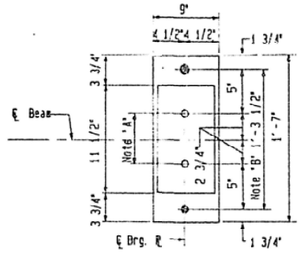


ELEVATION
AT PIER 2



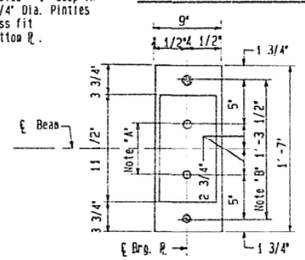
BOLSTER

Note "A"
1 3/8" Dia. Holes - 1" deep in top ℄ for 1 1/4" Dia. Pintles
Thread or press fit pintles in bottom ℄.

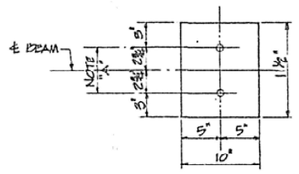


PLAN
AT ABUTMENTS
BM1, BM2 & BM3

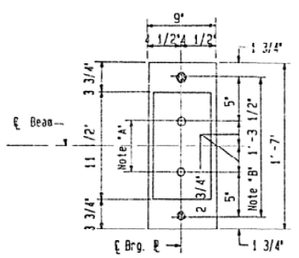
Note "B"
1 1/2" Dia. Holes for 1" Dia. Anchor Bolts - 5/16" x 2 1/2" x 2 1/2" ℄ Washers under nut.



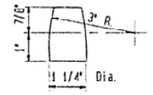
PLAN
AT PIERS 1 AND 3
BM1, BM2 & BM3



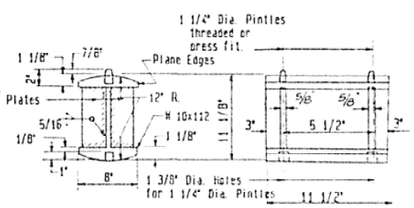
PLAN AT ABUTMENTS
AND PIERS
BM12



PLAN
AT PIER 2
BM1, BM2 & BM3



PINTLE



ROCKER

NOTE: PROVIDE 2- 3/8" x 9" x 1'-7" SHIM PLATES (1 PER EACH BM1 BEARING.)

NOTES FOR SETTING OF ANCHOR BOLTS AT EXPANSION BEARINGS

a.) Dx (Side of brg. away from fixed brg.)
Dx = 1/8" per each 100° of expansion for every 15 deg. fall below the normal temp of 50° F.

Dxx (Side of brg. toward fixed brg.)
Dxx = 1/8" per each 100° of expansion for every 15 deg. rise above the normal temp. of 50 deg. F.

b.) After Beams have been erected and dimensions Dx & Dxx determined, holes shall be drilled and anchor bolts shall be installed as shown on Sheet #24. All fixed anchor bolts may be built into the masonry.

INTERIOR BEAM MOMENT TABLE

	0.4 Span 1	Pier 1	0.5 Span 2	Pier 2	0.5 Span 3	Pier 3	0.6 Span 4
Is (in⁴)	4430	4430	4430	4430	4430	4430	4430
Ss (in³)	329	329	329	329	329	329	329
Z (in³)	——	——	——	——	——	——	——
f (k/i)	*	*	*	*	*	*	*
MR ('K)	191	213	105	209	102	191	120
MA ('K)	233	154	224	150	205	156	181
M (app) ('K)	61	59	65	52	60	45	53
5/3 [MA + I] ('K)	370	340	402	337	442	335	370
Ma ('K)	509	791	701	775	701	604	691
Mu ('K)	——	——	——	——	——	——	——
fs @ D (k.s.i.)	6.34	7.71	5.76	7.02	5.72	6.50	5.65
fs 5/3 (L + I) (k.s.i.)	10.24	14.44	17.58	14.12	16.12	12.22	14.22
fs (Overload) (k.s.i.)	22.58	22.21	21.52	21.76	19.84	19.45	17.67
fs (Total) (k.s.i.)	28.55	28.89	27.10	28.26	25.74	25.84	23.23

* VARIES FROM 1.03 K/' AT NORTH ABUTMENT TO 0.84 K/' AT SOUTH ABUTMENT

INTERIOR BEAM REACTION TABLE

	N. ABUT.	PIER 1	PIER 2	PIER 3	S. ABUT.
DR (K)	154	502.5	483	459.6	132
DL (K)	53.6	161.2	341.2	260	51.4
Imp. (K)	4.8	11.9	11.4	11.0	4.1
R (Total) (K)	59.0	185.6	484	444.6	537

Is and Ss are the moment of inertia and section modulus of the steel section used in computing f_s (Total and Overload).

Z is the plastic section modulus used to determine the Fully Plastic Moments in the non-composite areas.
Ma (Applied Moment) = 1.3[MR + Ms℄ + 5/3 [MA + I]]
Mu is the Full Plastic Moment Capacity for Compact, Braced section.
fs(Overload) is the sum of the stresses due to MR + Ms℄ + 5/3 [MA + I]
fs (Total) is the sum of the stresses due to 1.3[MR + Ms℄ + 5/3 [MA + I]]

1-2-6 12-1-83

STRUCTURAL STEEL DETAILS

REVISIONS			STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	DESIGNED BY / DATE RAS 1/87
NO.	DATE	APPROVED		CHECKED BY / DATE JKL 3/89
1				CODE NUMBER
2			F.A.I. 74 SEC. (14-HD)BRK	
3			S.N. 010-0186	PROJECT NO.
4			CHAMPAIGN COUNTY	3400-3
5			HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS DECATUR, ILLINOIS	SHEET NO.
6				
7				
8				
9				
10				

PROSPECT AVENUE STRUCTURE

USER NAME = Steven.Wood	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	AS-BUILT PLANS LOCATION #4 S.N. 010-0186						
	DRAWN -	REVISED -			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CHECKED -	REVISED -			74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	32
PLOT DATE = 6/5/2025	DATE -	REVISED -		SCALE: SHEET 9 OF 11 SHEETS STA. TO STA.			CONTRACT NO. 70H59		
							ILLINOIS	FED. AID PROJECT	

MODEL: Sheet 9 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d0194040\D570H59-sht-Loc 4.dgn

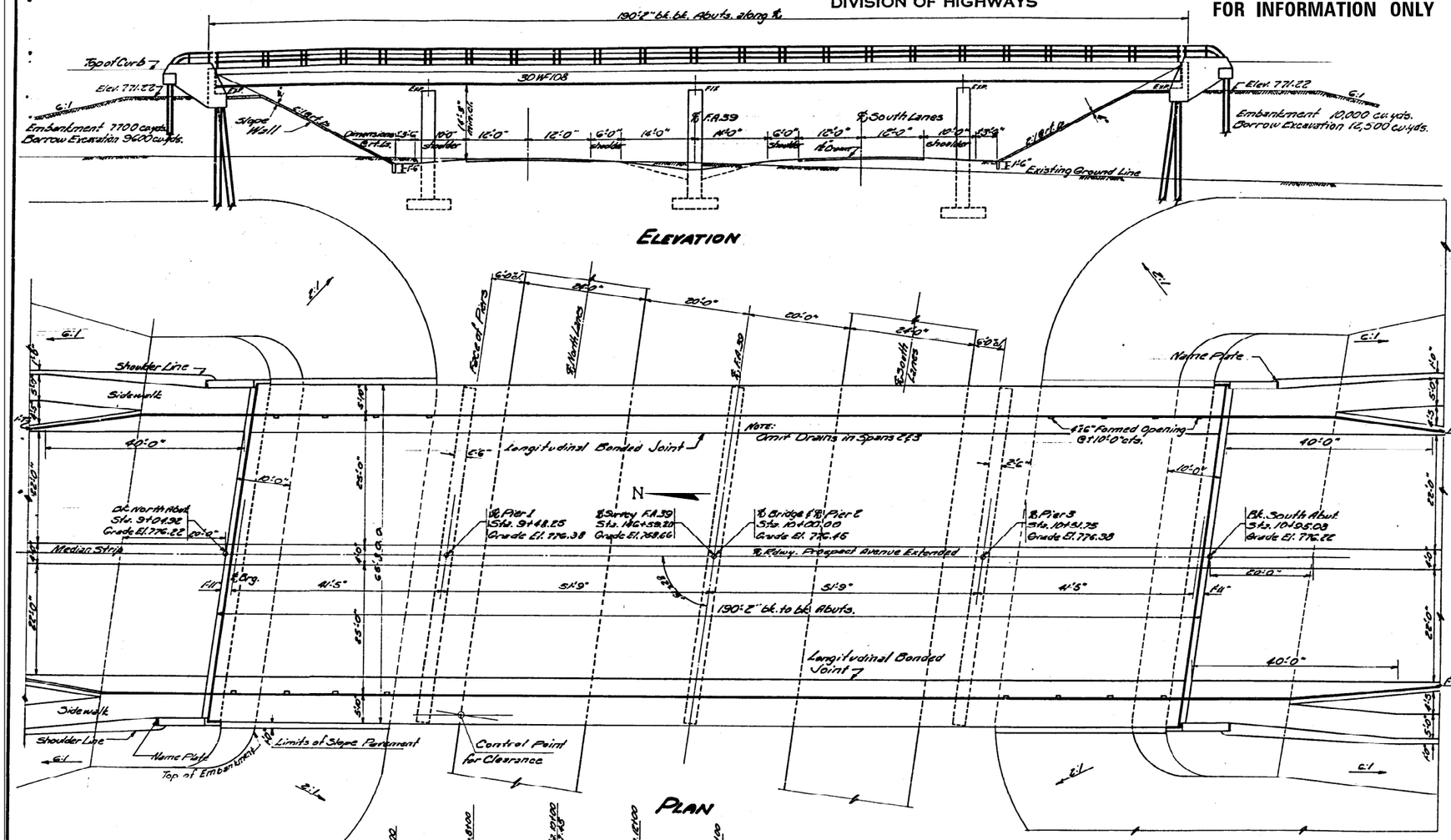
BM N.F.B.C in T.P. 75'Lt. Sta. NG+80
Elev. 757.84
Existing Structure: None

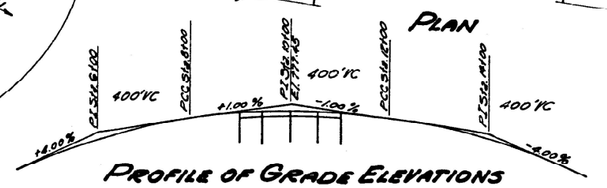
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

AS-BUILT PLANS FOR S.N. 010-0186
FOR INFORMATION ONLY

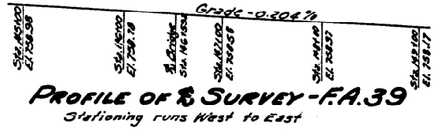
ROUTE NO.	SECTION	COUNTY	TOT. SHEETS	SHEET NO.
F.A.I. 74 / F.A. 39	14 HB / 14 NF	CHAMPAIGN	14 / 6	8 / 3
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	F.I-106(11)	

SHEET NO. 1
7 SHEETS





PROFILE OF GRADE ELEVATIONS
PROSPECT AVENUE EXTENDED

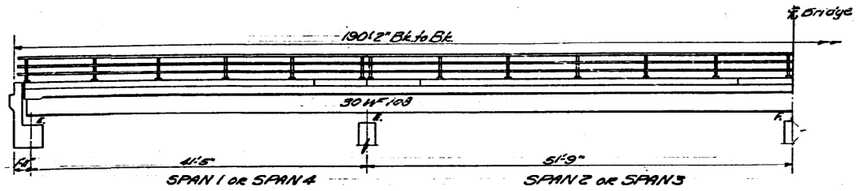


STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

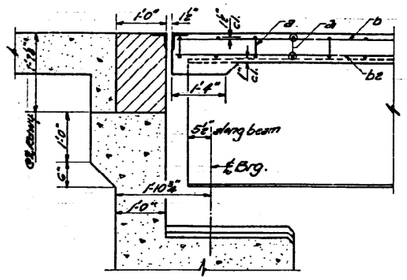
AS-BUILT PLANS FOR S.N. 010-0186
FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
A.A.L. F.A. 39	V4HB V4HF	CHAMPAIGN	14 6	9 4
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT: FI-106(11)		

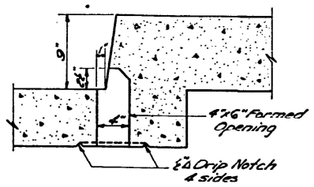
SHEET NO. 2
7 SHEETS



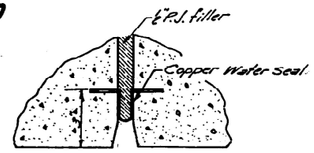
HALF ELEVATION



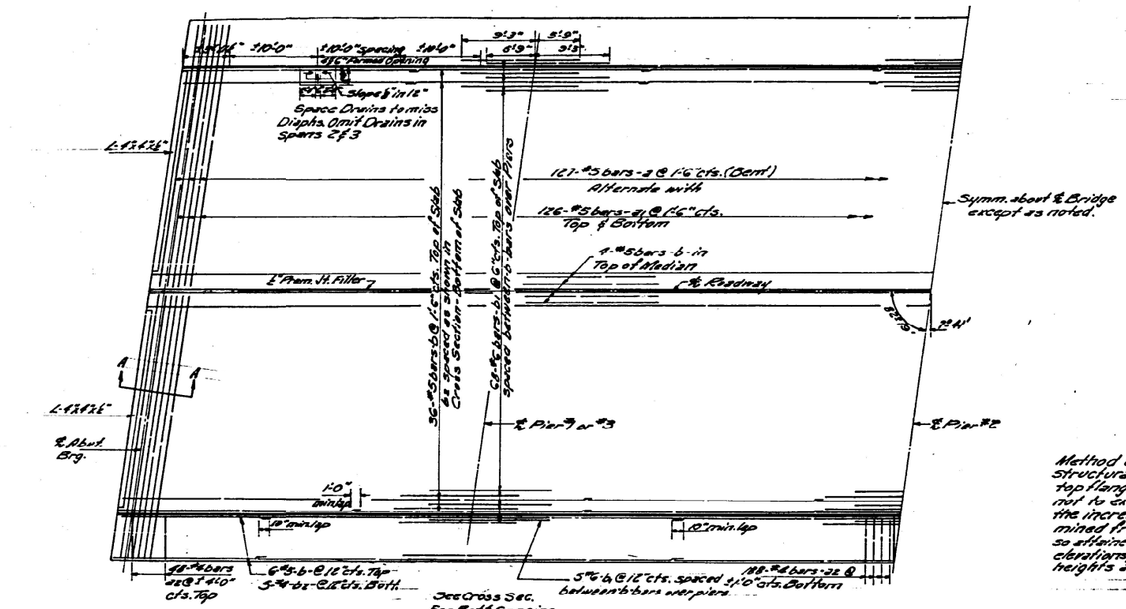
SECTION A-A
G.R.I. &



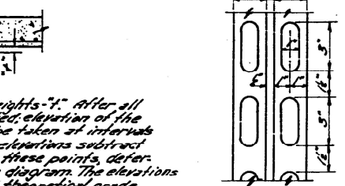
DRAIN DETAIL



SEC. @ SEPARATION JOINT
Showing placement of copper water seal.



HALF PLAN



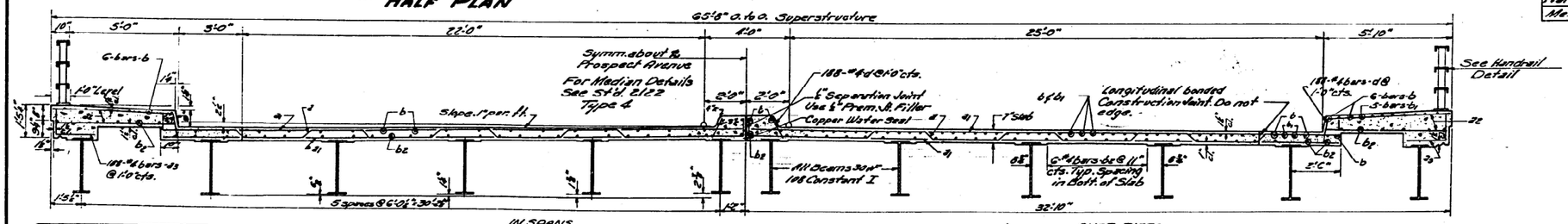
Method of Determining Fillet Heights "f" After all Structural Steel has been erected, elevation of the top flanges of the beams shall be taken at intervals not to exceed 10ft. From these elevations subtract the increment of deflection for these points, determined from the D.L. Deflection diagram. The elevations so attained subtracted from the theoretical grade elevations, minus fiber thickness, equals the fillet heights above top of beam.

FILLET DETAILS

COPPER SEAL DETAIL

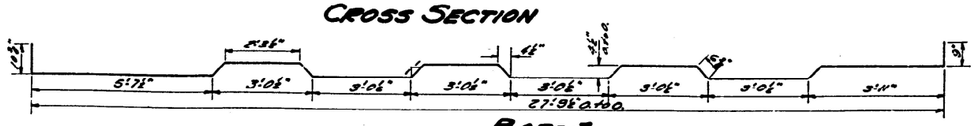
SUPERSTRUCTURE-BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	254	#5	30'-6"	
a1	504	#5	27'-6"	
a2	672	#4	5'-3"	
a3	376	#4	2'-9"	L
b	364	#5	27'-9"	
b1	234	#6	13'-0"	
b2	448	#4	27'-9"	
d	132	#6	1'-0"	
Class 'A' Concrete			Cu. Yds.	328.0
Reinforcement Bars			Lbs.	49420
Structural Steel			Lbs.	309590
Name Plates			Each	Two
Metal Handrail			Lin. Ft.	412



CROSS SECTION

DESIGNED	M. Fernandez	
CHECKED	Harry P. Hollow	
DRAWN	W. P. Sampson Jr. E. P. Rish	
CHECKED	H.P.H.	
EXAMINED		Nov. 23 1955
PASSED		
APPROVED		



BAR-d



BAR-B3

SUPERSTRUCTURE
GRADE SEPARATION
PROSPECT AVE. EXT. OVER F.A. 39
F.A. RT. 39 (U.S. RT. 150) SEC. 14-1BF
CHAMPAIGN COUNTY
STA. 146+59.20

MODEL: Sheet 11 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 4.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/5/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #4 S.N. 010-0186
SCALE: | SHEET 11 OF 11 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	34
		CONTRACT NO. 70H59		
		ILLINOIS	FED. AID PROJECT	

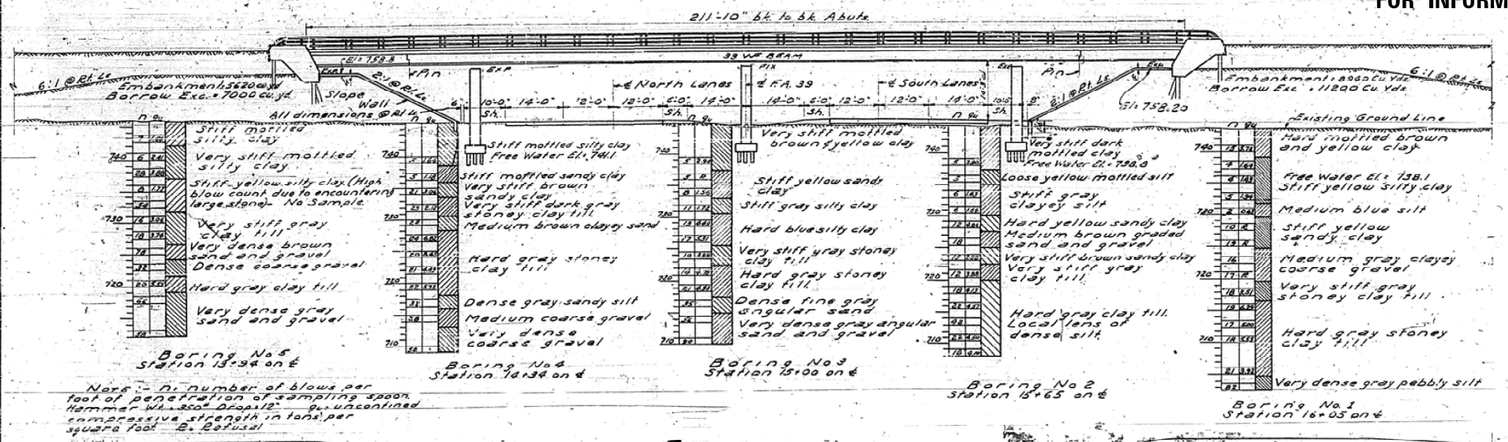
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

AS-BUILT PLANS FOR S.N. 010-0132
FOR INFORMATION ONLY

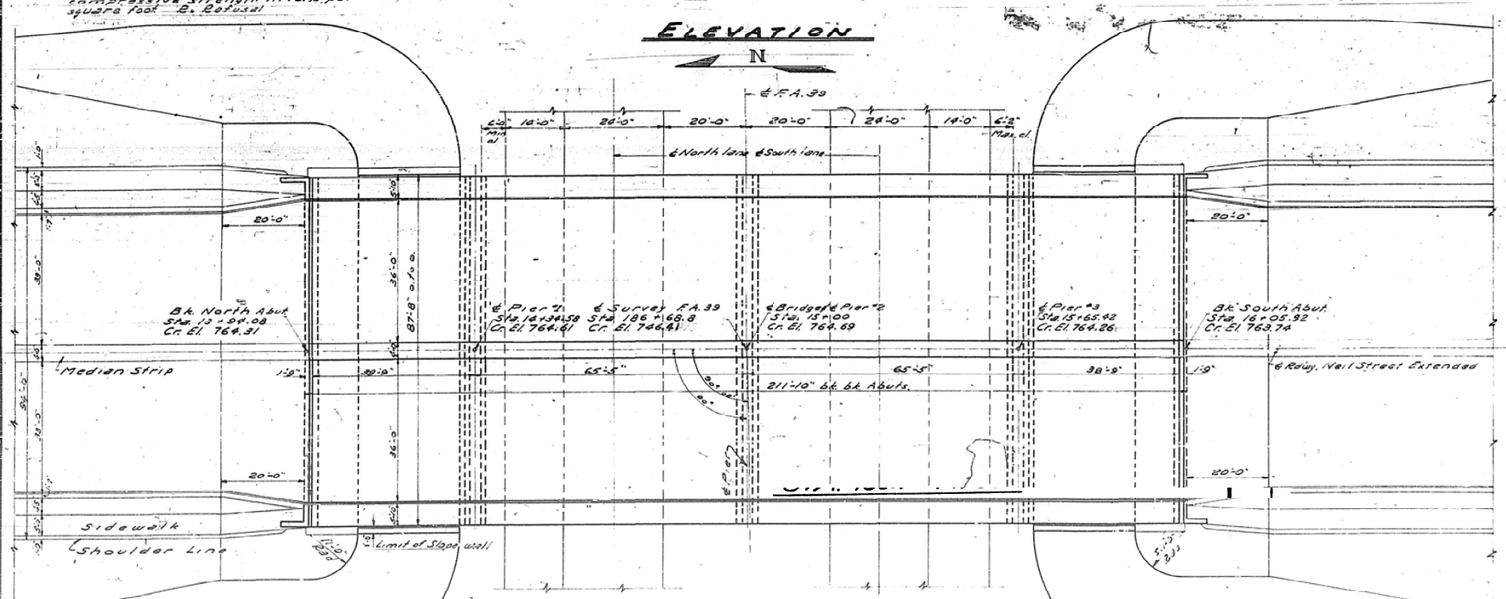
ROAD DIST. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 39	14-HB-1	Champaign	15	6
	14-HF-1		7	3
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT -		

SHEET NO. 1
6 SHEETS

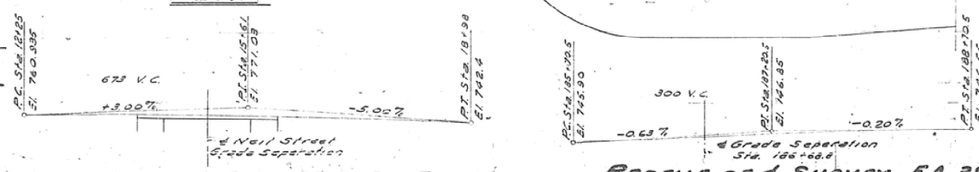
B.M. N. & B.C.W. Side 30' Gum
Sta. 11+51.5 Lt. 186.46 El. 768.88
Existing Structure :- None



ELEVATION



PLAN



PROFILE OF GRADE ELEV. NEIL ST. EXT.

PROFILE OF ℄ SURVEY F.A. 39

LOADING - H20-S16-44

COMPUTED	George J. Bucher	
CHECKED	Robert A. Rouse	
DRAWN	E. Rash	
CHECKED	JSK	

EXAMINED Dec. 7, 1953
V. M. Romine
ENGINEER OF BRIDGES

PASSED E. Hunt
ENGINEER OF ROADS

APPROVED A. M. Buckhorn
CHIEF HIGHWAY ENGINEER

GENERAL NOTES

Class X Concrete shall be used throughout except in wing walls. Class A concrete shall be used in wing walls. The concrete floor also shall be finished in accordance with Art. 503.18 (a) of the Std. Specs.

Rivets are open holes in unless noted. Field connections riveted unless noted. All rollers, rockers, bearing plates, lead plates, pintles and anchor bolts shall be fabricated and set in accordance with Art. 16 of the Std. Specs. (at Wt. = 1.31 lb.) These items are included in the payment as structural steel.

Steel bolts shall be set before placing the reinforcing over supports. The roadway expansion plate shall be fabricated and erected to fit the crown of roadway. The finished surface of expansion guards shall be given two shop coats of red lead paint. All surfaces inaccessible after erection, and Anchor Bolts, shall not be painted. Expansion guards are included for payment as structural steel.

Expansion guards shall be fabricated and erected in accordance with Art. 508.03 of the Std. Specs. except as otherwise provided. All structural steel shall receive one shop coat of red lead paint and two field coats of aluminum paint. See Articles 711.10 to 711.15 inclusive, of the Standard Specifications. All paint shall be furnished and applied by the contractor involved.

The Contractor shall drive 3 timber test piles as directed by the Engineer before ordering remainder of piles, and shall drive one concrete test pile in a permanent location before ordering remainder of piles.

Class A concrete shall be used in piers.

Slope wall shall be reinforced with welded wire fabric 6"x6" mesh, 4 wires weighing 58 lbs/100 sq. ft.

Name Plates shall be in accordance with the details shown on Standard 2113 and located as shown on the plans.

STATION 186+68.8
BUILT 195 BY
STATE OF ILLINOIS
F.A. Rt. 39 (U.S. Rt. 150) Sec. 14-HB-1
PROJ UI-106(12)
LOADING H20-S16

DESIGN STRESSES

f'c = 1400 p.s.i. (Super)
f'c = 800 p.s.i. (Sub)
fs = 20000 p.s.i. (Reinf.)
fs = 18000 p.s.i. (Struct)
n = 10

NAME PLATE

See Std. 2113

BILL OF MATERIAL - SEC. 14HB-1

ITEM		Super.	Sub	Total
Class A Concrete			282.6	282.6
Class X Concrete	Cu. Yd.	458.9	100.2	559.1
Handrail Concrete	Cu. Yd.		15.5	15.5
Reinforcement Bars	Lb.	71000	35460	106460
Structural Steel	Lb.	611300		611300
Metal Handrail	Lin. Ft.	457		457
Name Plates	Ea.	Two		Two
Class A Excavation for Struct.	Cu. Yd.			230
Borrow Excavation	Cu. Yd.			18200
Creosoted Piles	Lin. Ft.		2530	2530
Test Piles (Timber)	Ea.		3	3
Concrete Piles	Lin. Ft.		825	825
Test Piles (Concrete)	Ea.		One	One
Slope Wall (6")	Sq. Yd.			740

BILL OF MATERIAL - SEC. 14HF-1

Structural Steel	Lb.	611300		611300
Metal Handrail	Lin. Ft.	457		457

GENERAL PLAN & ELEVATION
GRADE SEPERATION
NEIL STREET EXT. OVER F.A. 39
F.A. RT. 39 (U.S. RT. 150) SEC. 14-HB-F-1
PROJ UI-106(12)
CHAMPAIGN COUNTY
STATION 186+68.8

USER NAME = Steven.Wood	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 6/5/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #5 S.N. 010-0132

SCALE: | SHEET 1 OF 10 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	35
		CONTRACT NO. 70H59		
		ILLINOIS	FED. AID PROJECT	

MODEL: Sheet 1 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 5.dgn

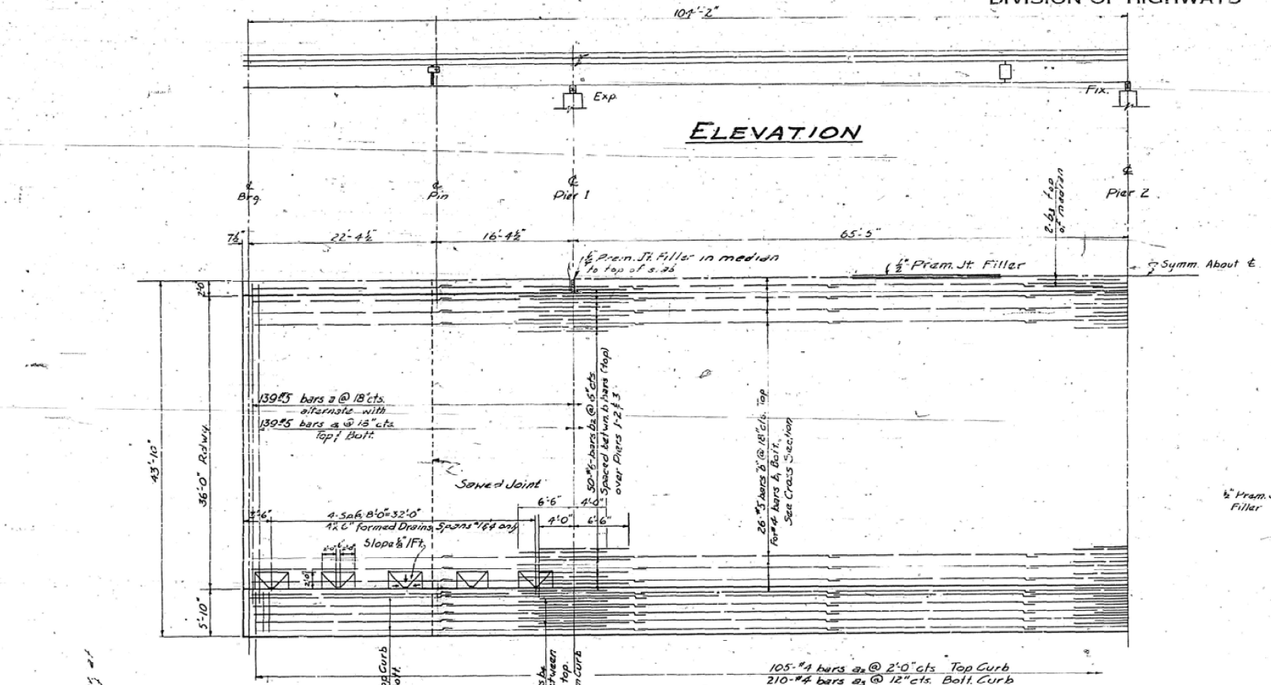
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

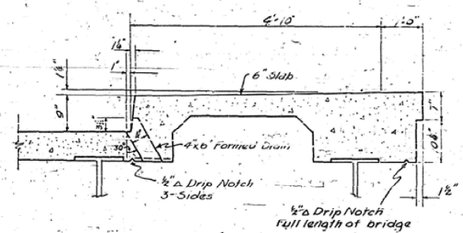
AS-BUILT PLANS FOR S.N. 010-0132
FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S.	14-HB-1	Champaign	15	7
F.A. 39	14-HF-1		7	4
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

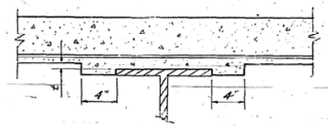
SHEET NO. 2
8 SHEETS

ELEVATION

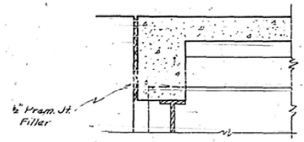




FLOOR DRAIN & CURB DETAILS



FILLET DETAILS

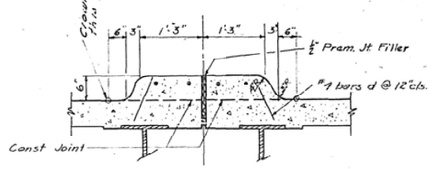


SECTION THRU CURB @ ABUTMENT

Note: METHOD OF DETERMINING FILLET HEIGHTS ~ "L"
After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals not to exceed 10 ft. From these elevations subtract the increment of deflection for these points determined from the D.L. deflection diagram. The elevations so attained subtracted from the theoretical grade elevations, minus floor thickness, equals the fillet heights above top of beam.

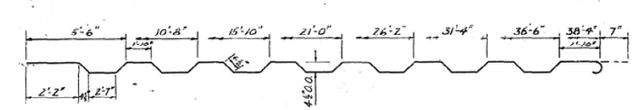
BILL OF MATERIAL, SUPERSTRUCTURE

BAR	NO	SIZE	LENGTH	SHAPE
a	278	#5	41'-3"	
a_1	556	#5	38'-3"	
a_2	210	#4	7'-6"	
a_3	420	#6	5'-6"	
b	358	#5	24'-3"	
b_1	864	#4	24'-0"	
b_2	378	#6	10'-6"	
b_3	64	#4	12'-2"	
d	420	#4	0'-10"	
Class X Concrete			Cu. Yd.	458.9
Reinforcement Bars			Lb.	71,000
Structural Steel			Lb.	611,340

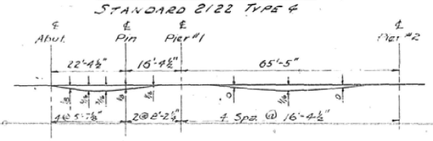


MEDIAN DETAIL
STANDARD 8122 TYPE 4

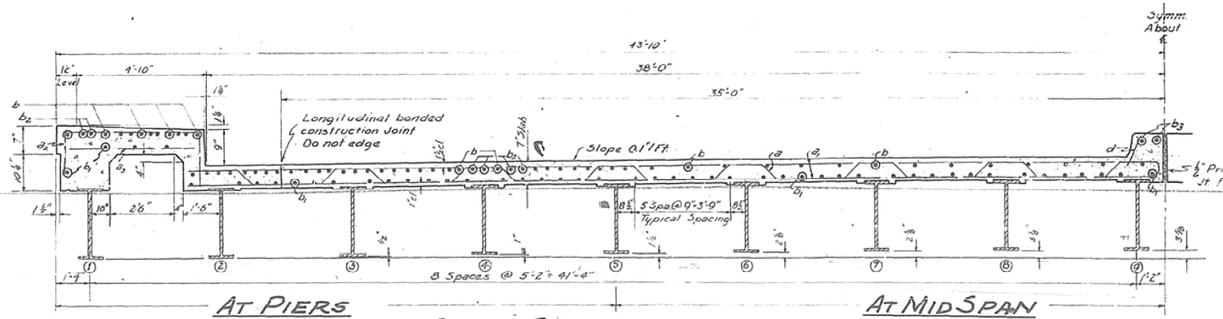
BAR a1



BAR a



DEAD LOAD DEFLECTION DIAGRAM



AT PIERS — CROSS SECTION — AT MID SPAN

DESIGNED	Gregg T. Hruska	EXAMINED	Dec. 7 19 54 V. W. Romine, ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
CHECKED	Robert A. Havard	PASSED	E. J. Schunk, ENGINEER OF DESIGN
DRAWN	R. E. Peck J. P. Brown	APPROVED	M. M. Bateman, CHIEF HIGHWAY ENGINEER
CHECKED	R.A.K.		

SUPERSTRUCTURE
FA 39 SEC. 14-HB-F-1
CHAMPAIGN COUNTY
STATION 186+68.8

MODEL: Sheet 2 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 5.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 6/5/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #5 S.N. 010-0132

SCALE: | SHEET 2 OF 10 SHEETS | STA. | TO STA.

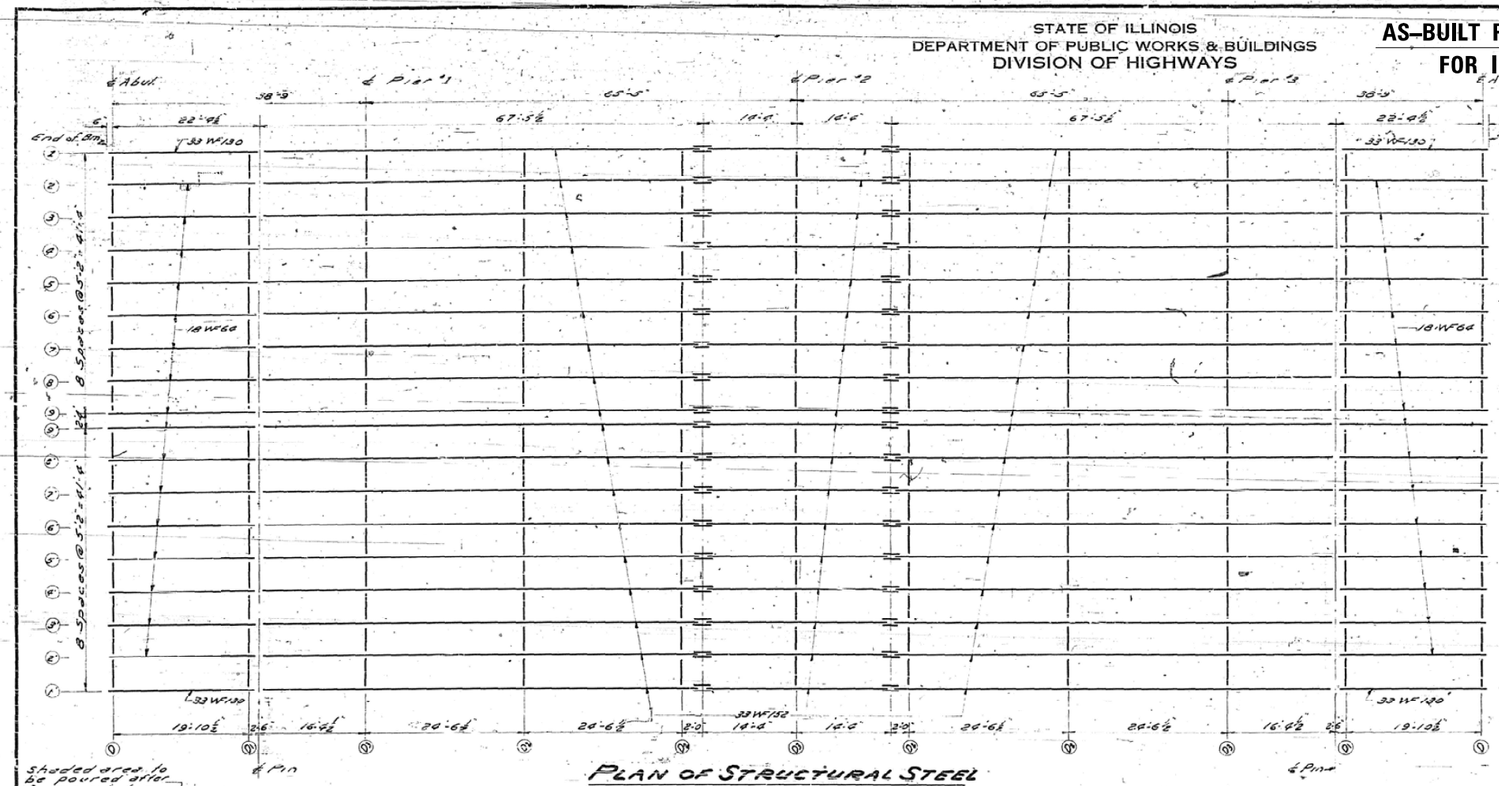
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	36
		CONTRACT NO. 70H59		
	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

AS-BUILT PLANS FOR S.N. 010-0132
FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S. R. I. F. A. 39	18-NB-1 18-HF-1	Champaign	15 7	8 5
FED. ROAD DIST. No. 7	ILLINOIS	FED. AID PROJECT:		

SHEET NO. 3
8 SHEETS



STRUCTURAL STEEL
F.A. RT. 39 SEC. 18-HB-F-1
CHAMPAIGN COUNTY
STATION 186+68.8

USER NAME = Steven.Wood	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/5/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #5 S.N. 010-0132

SCALE: | SHEET 3 OF 10 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	37
		CONTRACT NO. 70H59		
	ILLINOIS	FED. AID PROJECT		

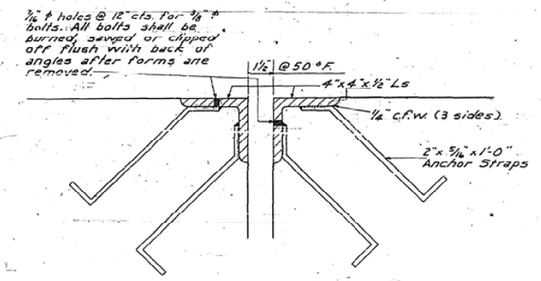
MODEL: Sheet 3 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 5.dgn

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

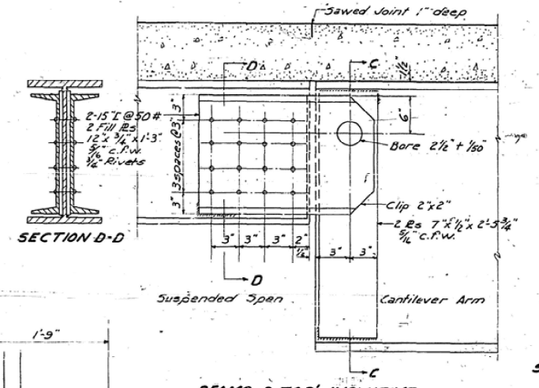
AS-BUILT PLANS FOR S.N. 010-0132
FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 39	14-HB-1 14-HF-1	Champaign	43 7	9 6
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 4
8 SHEETS

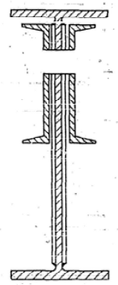


SECTION A-A

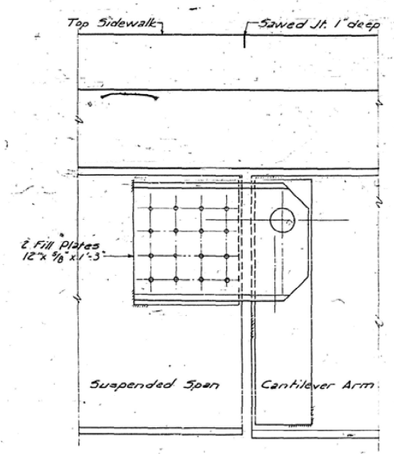


SECTION D-D

BEAMS 2 TO 2' INCLUSIVE

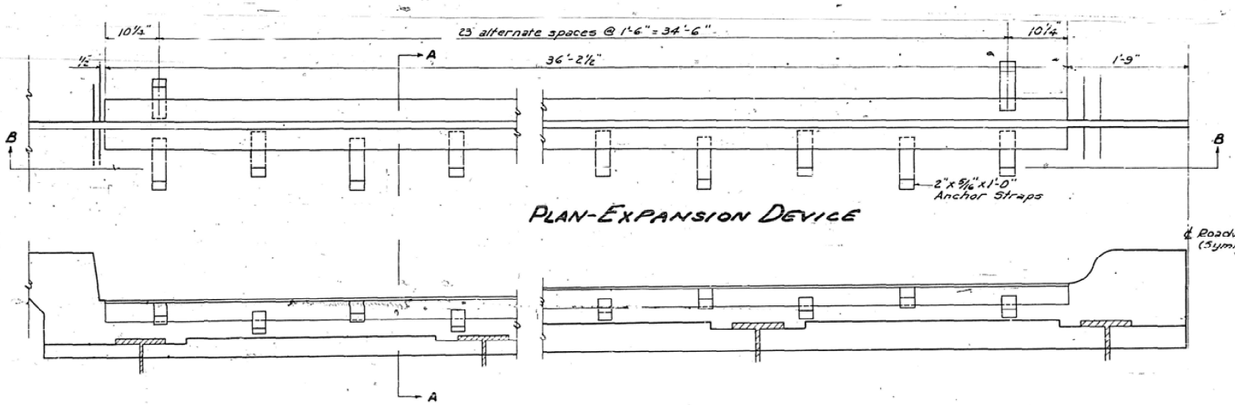


SECTION C-C



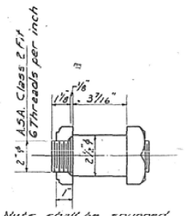
BEAMS 1 & 1'
For dimensions not shown see Details of Beams 2 to 2'

DETAILS @ PIN



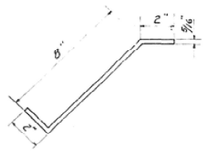
PLAN-EXPANSION DEVICE

SECTION B-B

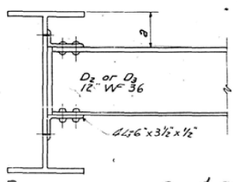


Nuts shall be snugged up finger tight and threads burred.

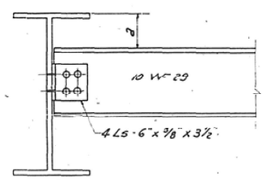
PIN DETAIL



ANCHOR STRAP



DIAPHRAGMS D_2 & D_3



DIAPHRAGM D_1

TABLE OF "a" DIMENSIONS

@ DIAPHRAGM D_1									
Beam	1	2	3	4	5	6	7	8	9
a	2½"	2½"	3"	3½"	4"	4⅝"	5⅛"	5⅝"	6⅛"
@ DIAPHRAGM D_2									
Beam	1	2	3	4	5	6	7	8	9
a	6"	6"	6½"	7"	7½"	8⅛"	8⅝"	9⅛"	9⅝"
@ SUPPORTS DIAPHRAGM D_3									
Beam	1	2	3	4	5	6	7	8	9
a	10½"	10¾"	10¾"	11¼"	11¾"	12⅜"	12⅞"	13⅜"	13⅞"

"a" dimension for Beams 1 to 2' same as above

DESIGNED	Gene Muchow	
CHECKED	Edward A Kowert	
DRAWN	J. Gonci	
CHECKED	TEAK	
EXAMINED	V. W. Rodine	Dec. 7 19 58
PASSED		
APPROVED		

EXPANSION DEVICE & PIN DETAILS
F.A. RT. 39-SEC. 14HB-F-1
CHAMPAIGN COUNTY
STATION 1867+68.8

USER NAME = Steven.Wood	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 6/5/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #5 S.N. 010-0132

SCALE: | SHEET 4 OF 10 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	38
		CONTRACT NO. 70H59		
	ILLINOIS FED. AID PROJECT			

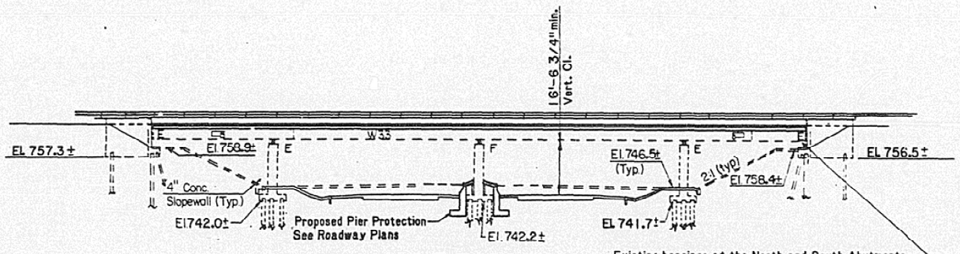
MODEL: Sheet 4 [Sheet]
FILE NAME: c:\pw_work\pwdot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 5.dgn

John CLARK - Homer CHASTAIN
422-8544

B.M. "P" Chiseled "U" on W. Corner of Light Pole Base (Conc.)
60.3' Lt. Sta. 12+19 (Neil St.)
El. 760.05

AS-BUILT PLANS FOR S.N. 010-0132
FOR INFORMATION ONLY

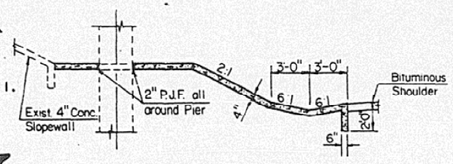
Sheet No. 1 of 21 Sheets	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FAI 74	(14HB-1) BRK	CHAMPAIGN	219	130
	FED. ROAD DIST. NO.	ILLINOIS	PROJECT		



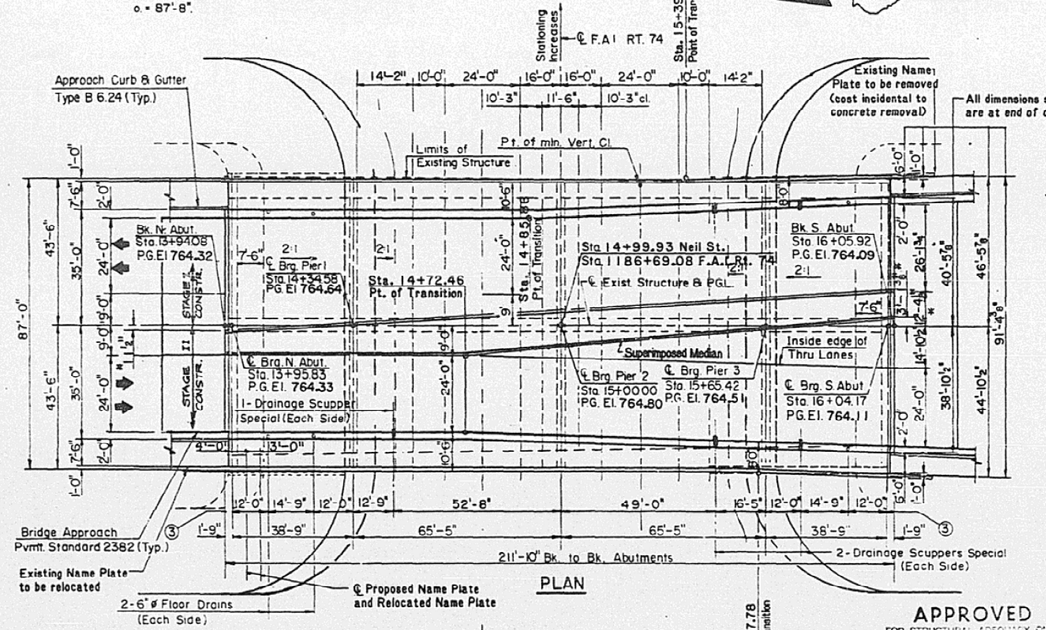
ELEVATION

Existing Structure: Structure No. 010-0132 built as Sec. 14-HB-1 in 1956 at Sta. 186 + 68.8. Four continuous spans, 38'-9"; 65'-5"; 65'-5"; 38'-9", with wide flange steel beams, reinforced concrete deck, and bituminous overlay which was added in 1979. Structure has pile bent abutments and triple hammerhead piers with footings on piles. Length bk. to bk. abuts. = 211'-10". Width o. to o. = 87'-8".

Existing bearings at the North and South Abutments are to be removed and replaced with elastomeric bearings. (See sheet 15) This work shall be paid for at the contract unit price for Jack Existing Superstructure And Elastomeric Bearing Assembly, Type 1.



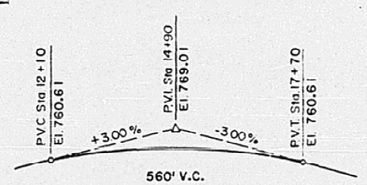
SLOPEWALL DETAIL



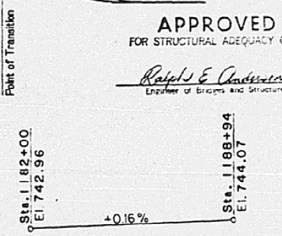
PLAN

③ Drainage Scupper and Floor Drain spacing.

*Dimensions indicated thus are at face of curb at end of deck.

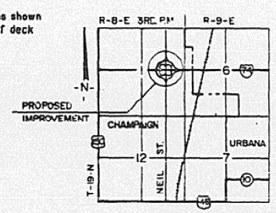


PROFILE GRADE NEIL STREET



PROFILE GRADE F.A.I. RT 74

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson
Engineer of Bridges and Structures



LOCATION SKETCH

* PROTECTIVE COAT AREAS ARE DECK, FACE AND TOP OF PARAPETS AND WINGWALLS.

79.37
70

STATION 15+00.00
REBUILT 19__ BY
STATE OF ILLINOIS
F.A.I. RT. 74 SEC. (14HB-1)BRK
LOADING HS20
STR. NO. 010-0132
PROJ. FAP-74-6(132)

NAME PLATE
STD. 2113
EXISTING NAME PLATE TO BE CLEANED AND RELOCATED. COST INCIDENTAL TO NAME PLATE

DESIGN STRESSES
(New Construction)
f'c = 3500 psi
Fy = 60,000 psi (rebars)
Fs = 20,000 psi (Structural Steel)
n = 9.0
Loading: HS-20-44
Design Specifications: 1983 AASHTO Specs. and 1984, 1985, 1986 and 1987 Interim Specs.
Allow 25#/sf for future wearing surface

JAMES K. CLINARD NUMBER 4655 REGISTERED STRUCTURAL ENGINEER
STATE OF ILLINOIS
2-4-91
Exp 11-30

GENERAL NOTES

1. THE THREE COAT LEAD AND CHROMATE FREE ALKYD PAINT SYSTEM SHALL BE USED FOR SHOP AND FIELD PAINTING OF NEW AND DAMAGED EXISTING STRUCTURAL STEEL. THE COLOR OF THE FINAL FINISH COAT COAT SHALL BE MUNSEL NO. 10Y 7/1 LIGHT GREY.
2. FIELD WELDING OF CONSTRUCTION ACCESSORIES WILL NOT BE PERMITTED TO THE BOTTOM FLANGE OF BEAMS OR GIRDERS NOR TO THE TOP FLANGE FOR A DISTANCE EQUAL TO ONE-FOURTH THE SPAN LENGTH EACH WAY FROM THE PIER SUPPORTS. FIELD WELDING IN OTHER AREAS WILL BE PERMITTED ONLY WHEN APPROVED BY THE ENGINEER.
3. REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31, M-42 OR M-53 GRADE 60.
4. SLOPE WALL SHALL BE REINFORCED WITH WELDED WIRE FABRIC, 6" x 6" – W4.0 x W4.0, WEIGHING 58 LBS. PER 100 SQ. FT.
5. PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF THE WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.
6. EXPANSION BOLTS SHALL CONSIST OF APPROVED EXPANSION ANCHORS, PROVIDING MINIMUM CERTIFIED PROOF LOAD 4,080 LBS., AND 3/4" ϕ x 18" HOOKED BOLTS.
7. BRIDGE SEAT SEALER = 413 SQ. FT.
8. FOR BRIDGE REPAIR NOTES SEE SHEET 11.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER-STRUCTURE	SUB-STRUCTURE	TOTAL
CONCRETE REMOVAL	CU. YD.	8.6	6.3	14.9
REMOVAL OF EXISTING CONCRETE DECK	LUMP SUM	1	—	1
FLOOR DRAINS	EACH	6	—	6
PREFORMED JOINT SEAL, 4"	LIN. FT.	182	—	182
PREFORMED JOINT SEAL, 1 1/4"	LIN. FT.	180	—	180
CLASS X CONCRETE SUPERSTRUCTURE	CU. YD.	643.2	—	643.2
* PROTECTIVE COAT	SQ. YD.	2237	—	2237
ELASTOMERIC BEARING ASSEMBLY, TYPE 1	EACH	36	—	36
CLASS X CONCRETE	CU. YD.	—	15.3	15.3
FURNISHING & ERECTING STRUCTURAL STEEL	POUND	50,110	—	50,110
ALUMINUM RAILING, TYPE L	LIN. FT.	474	—	474
REINFORCEMENT BARS	POUND	—	700	700
REINFORCEMENT BARS (EPOXY COATED)	POUND	122,970	2090	125,060
CONCRETE PILES	LIN. FT.	—	16	16
NAME PLATES	EACH	1	—	1
BRIDGE SEAT SEALER	LUMP SUM		1	1
SLOPEWALL, 4"	SQ. YD.	—	402	402
DRAINAGE SCUPPERS, SPECIAL	EACH	6	—	6
EXPANSION BOLTS 3/4" x 18"	EACH	—	13	13
STRUCTURE EXCAVATION	CU. YD.	—	14	14
JACKING EXISTING SUPERSTRUCTURE	LUMP SUM	1	—	1
PIN REPLACEMENT	EACH	36	—	36
DETECTOR LOOP, SPECIAL	LIN. FT.	132	—	132
JUNCTION BOX, SPECIAL	EACH	2	—	2
BEAM STRAIGHTENING	L. SUM	1	—	1

GENERAL PLAN AND ELEVATION

REVISIONS			STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	DRAWN BY RDS	DATE
NO.	DATE	DETAILS		CHECKED BY JEL	5-91
			F.A.I. 74 SEC. (14HB-1)BRK	BRIDGE DESIGNATION	
			CHAMPAIGN COUNTY S.N. 010-0132	PROJECT NO. 3400-4	
			HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS	SHEET NO.	

(14HB-1)BRK NEIL

MODEL: Sheet 5 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 5.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/5/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #5 S.N. 010-0132

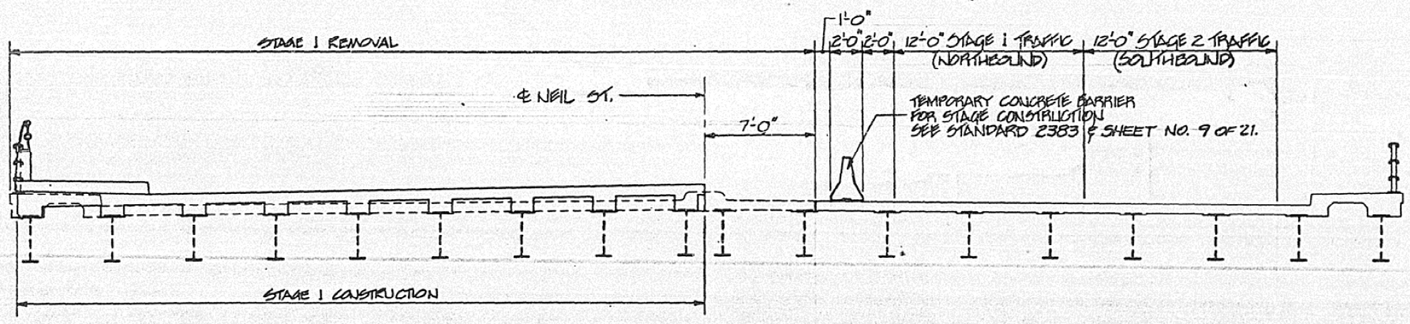
SCALE: | SHEET 5 OF 10 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	39
			CONTRACT NO. 70H59	
		ILLINOIS	FED. AID PROJECT	

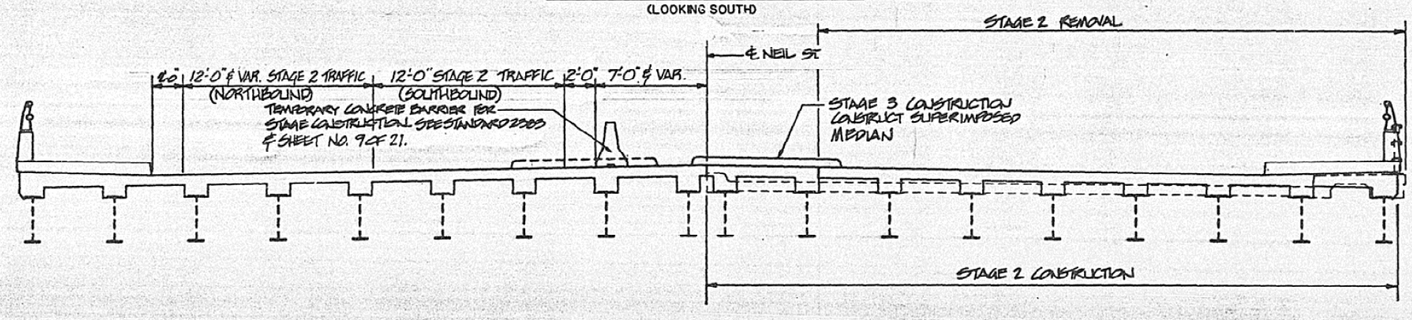
Sheet No. 6 of 21 Sheets

SHEET NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	(1488-1) BRK	CHAMPAIGN	219	155
F.A.I. ROAD SYST. NO.	S.N. 010-0132	PROJECT		

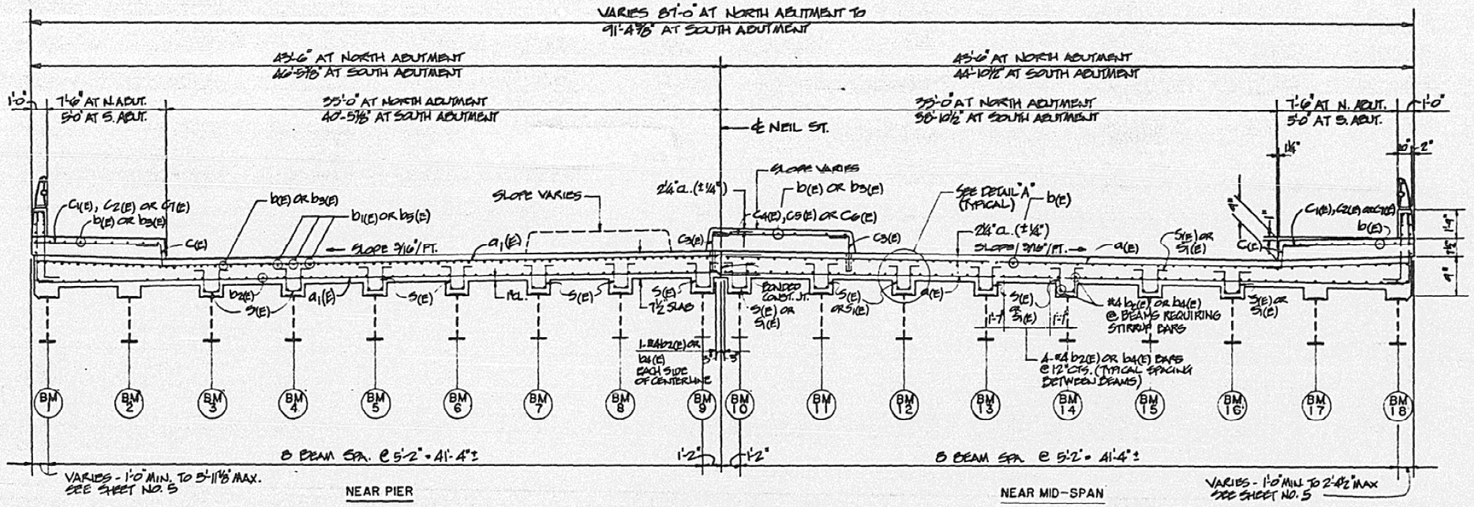
AS–BUILT PLANS FOR S.N. 010–0132
FOR INFORMATION ONLY



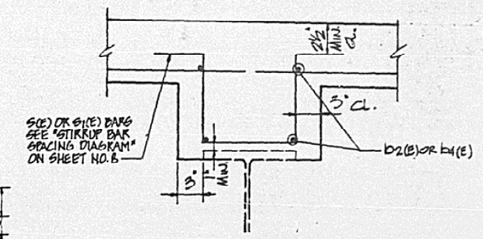
STAGE 1 DECK REMOVAL/CONSTRUCTION
(LOOKING SOUTH)



STAGE 2 DECK REMOVAL/CONSTRUCTION
(LOOKING SOUTH)



CROSS SECTION
(LOOKING SOUTH)



DETAIL "A"

WORK THIS SHEET WITH SHEETS NO. 5, 7 & 8

SUPERSTRUCTURE DETAILS

REVISIONS		
NO.	DATE	DETAILS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

DRAWN BY: GW JAN 1996
CHECKED BY:
LOC. SCALE:
PROJECT NO. 3400-4
SHEET NO.

F.A.I. 74 SEC. (1488-1)BRK
S.N. 010-0132
CHAMPAIGN COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS

MODEL: Sheet 6 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 5.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/5/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #5 S.N. 010-0132

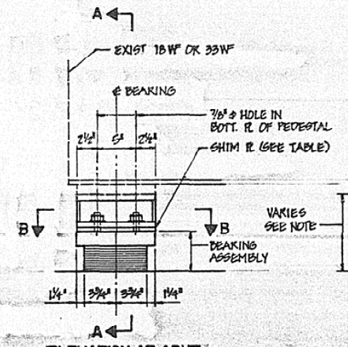
SCALE: | SHEET 6 OF 10 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	40
		CONTRACT NO. 70H59		
	ILLINOIS	FED. AID PROJECT		

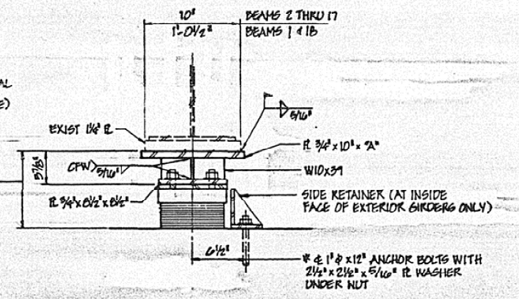
Sheet No. 15 of 21 Sheets

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	(14HB-1) BRK	CHAMPAIGN	219	144
FED ROAD DIST NO.	ILLINOIS	PROJECT		

A = 1'-1½" @ BM1 & BM18
A = 11" @ BM2 THRU BM17



ELEVATION AT ABUT.



SECTION A–A

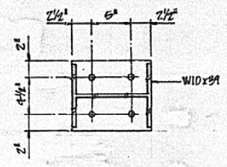
SEE SHEET #16 FOR ANCHOR BOLT INSTALLATION

TYPE I ELASTOMERIC EXP. BRG.

SHIM PLATE TABLE

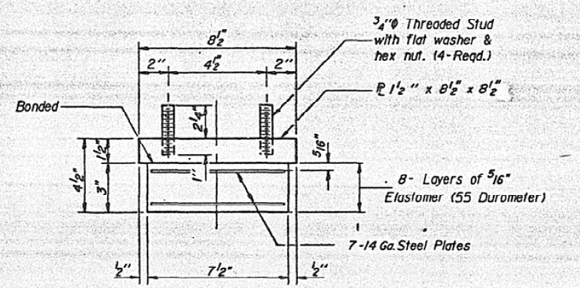
BEAM	THICKNESS
1 OR 18	—
2 OR 17	—
3 OR 16	½"
4 OR 15	—
5 OR 14	½"
6 OR 13	—
7 OR 12	½"
8 OR 11	—
9 OR 10	½"

NOTE: SHIM PLATES SHOWN IN TABLE HAVE BEEN TAKEN FROM EXIST. PLANS. CONTRACTOR SHALL FIELD MEASURE EACH EXISTING BEARING PRIOR TO REMOVAL AND PROVIDE SHIM PLATES AS REQUIRED.



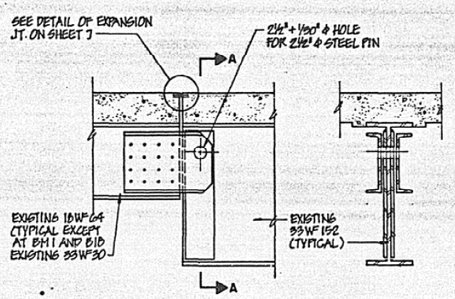
SECTION B–B

AS–BUILT PLANS FOR S.N. 010–0132
FOR INFORMATION ONLY



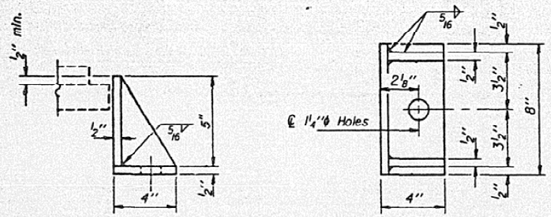
BEARING ASSEMBLY

Note: Shim plates shall not be placed under Bearing Assembly.



ELEVATION SECTION A–A

EXISTING PIN JOINT DETAIL



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates. (4 Required)

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	36

PIN & TYPE I ELASTOMERIC BEARING DETAILS

REVISIONS			STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	DRAWN BY DATE
NO.	DATE	APPROVED		CHECKED BY DATE JEC 5-83
1			F.A.I. 74 SEC. (14HB-1)BRK	DGNE DIVISION
2			S.N. 010-0132	PROJECT NO. 3400-4
3			CHAMPAIGN COUNTY	
4			HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS	SHEET NO.
5				
6				
7				
8				
9				
10				

I-2-EI 12-1-83

MODEL: Sheet 7 [Sheet]
FILE NAME: c:\pw_work\pwlofts\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 5.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/5/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #5 S.N. 010-0132

SCALE: | SHEET 7 OF 10 SHEETS | STA. | TO STA.

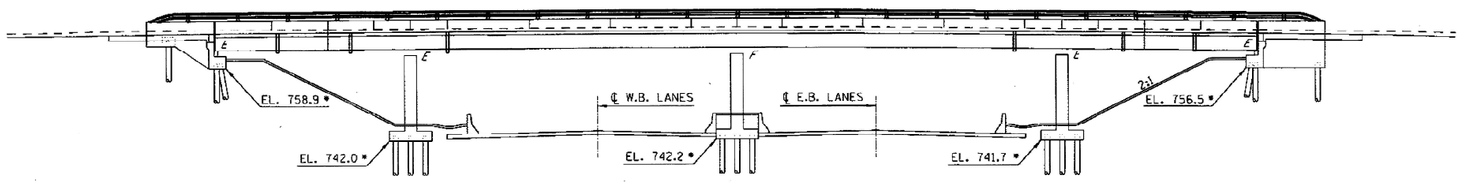
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	41
		CONTRACT NO. 70H59		
	ILLINOIS	FED. AID PROJECT		

GENERAL PLAN & ELEVATION
S.N. 010–0132

FOR INFORMATION ONLY

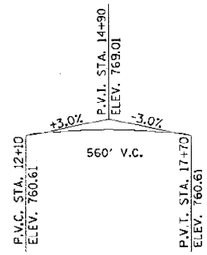
STRUCTURE NO. 010 0132 BUILT AS SEC. 14 HB 1 IN 1956 AT STATION 196+68.80. A FOUR CONTINUOUS SPANS, 2 @ 38'-9", 2 @ 65'-5", WITH WIDE FLANGE STEEL BEAMS AND TWO PIN AND LINK JOINTS SPANS 1 AND 4 AND A 7½" REINFORCED CONCRETE DECK. THE STRUCTURE HAS PILE BENT ABUTMENTS AND TRIPLE HAMMERHEAD PIERS WITH FOOTINGS ON PILES. IN 1992 THE DECK WAS REPLACED AND WIDENED. AN OUT TO OUT WIDTH OF 87'-0" IS CONSTANT OVER SPANS 1 & 2 THEN ROUGHLY 40' INTO SPAN 3 THE OUT TO OUT WIDTH TAPPERS TO 91'-4⅜" AT THE SOUTH ABUTMENT. A VARIABLE WIDTH CONCRETE MEDIAN DIVIDES NORTH AND SOUTH BOUND TRAFFIC. TURN LANES WERE ESTABLISHED ACROSS THE STRUCTURE ALLOWING FOR SIGNALIZATION OF THE ENTRANCE AND EXIT RAMPS TO I-74. VARIABLE WIDTH SIDEWALKS CARRIES FOOT TRAFFIC ACROSS THE STRUCTURE.

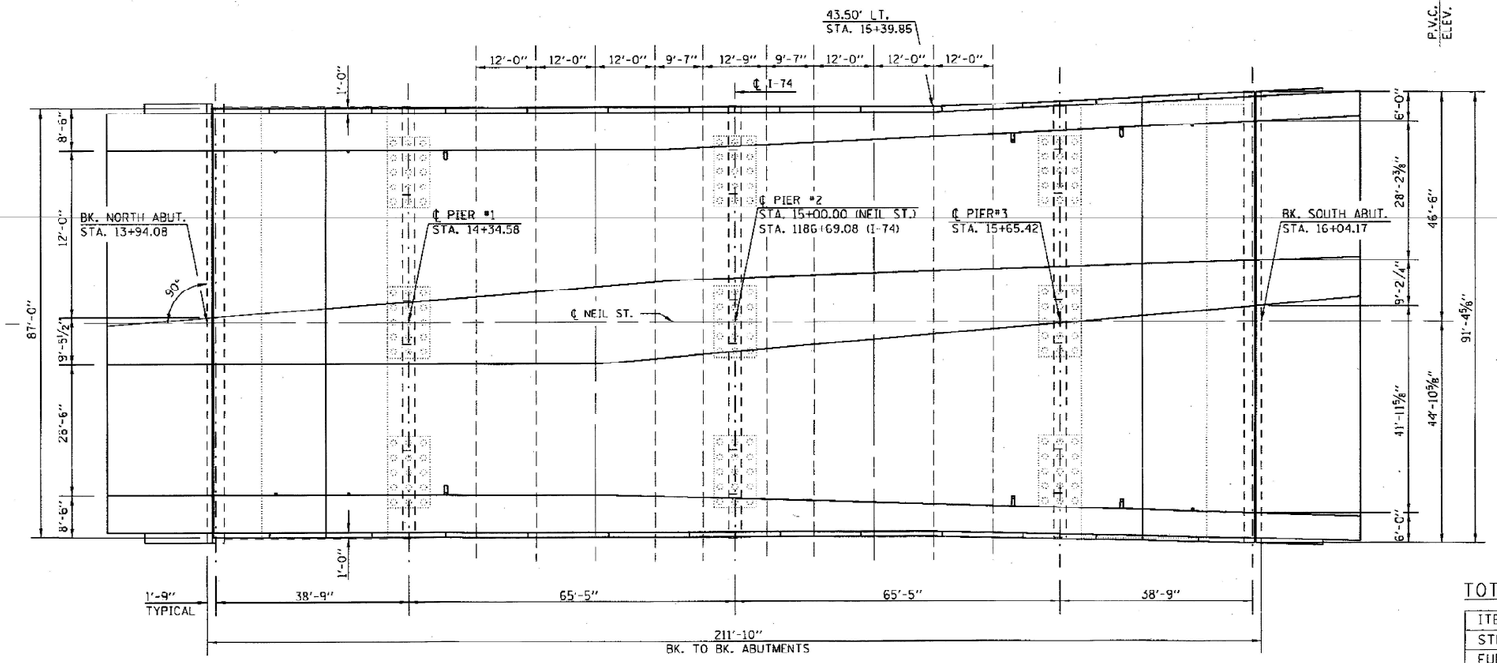
WORK SHALL BE COMPLETED WITH STAGE CONSTRUCTION.



ELEVATION

* ELEVATIONS TAKEN FROM AS-BUILT PLANS AND ARE SHOWN FOR PERSPECTIVE ONLY.





PLAN VIEW

TOTAL BILL OF MATERIALS

ITEM	UNIT	TOTAL
STRUCTURAL STEEL REMOVAL	POUND	1,040.0
FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	4,240.0
STRUCTURAL STEEL REPAIR	POUND	1,630.0
STRUCTURAL REPAIR OF CONCRETE (DEPTH = TO OR < THAN 5 INCHES)	SQ FT	97.0
REINFORCMENT BARS, EPOXY COATED	POUNDS	70.0
PROTECTIVE COAT	SQ YD	11.0

LICENSED STRUCTURAL ENGINEER
DAVID CARL PUZEY
081-006470
SPRINGFIELD ILLINOIS
STATE OF ILLINOIS

David Carl Puzey 3/20/18
Expires 11/30/18

MODEL: SHOWN NAMES
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 5.dgn

USER NAME = shawlores	DESIGNED - ESS	REVISED -
	DRAWN - ESS	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - TJB	REVISED -
PLOT DATE = 3/20/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
NEIL ST - S.N. 010-0132

SCALE: | SHEET 1 OF 10 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
802	(14-HB-1)BRR	CHAMPAIGN	13	4
		CONTRACT NO. 70D09		
	ILLINOIS FED. AID PROJECT			

MODEL: Sheet 8 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 5.dgn

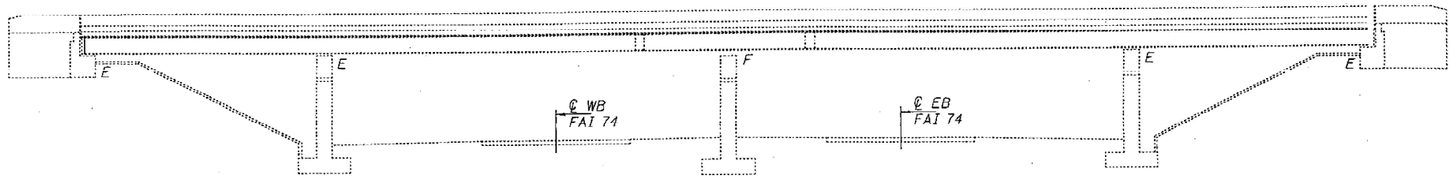
USER NAME = Steven.Wood	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/5/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

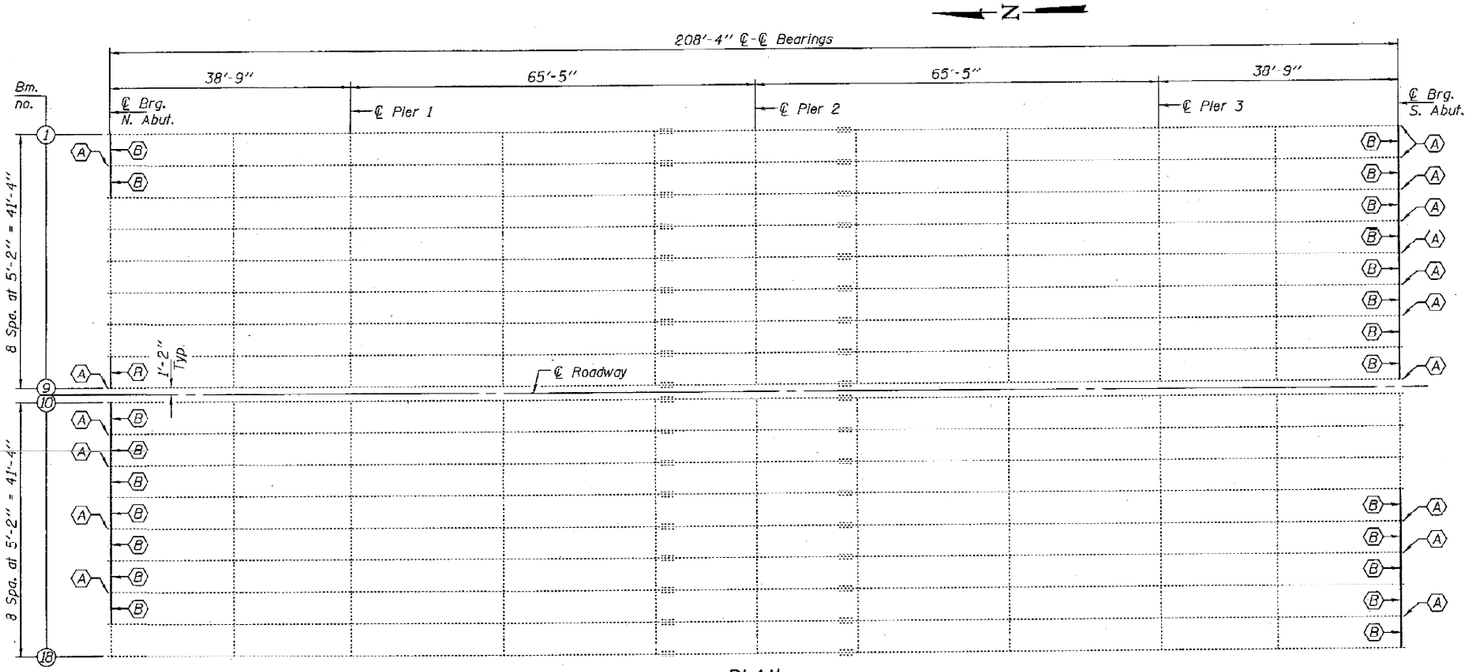
AS-BUILT PLANS
LOCATION #5 S.N. 010-0132

SCALE: | SHEET 8 OF 10 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	42
		CONTRACT NO. 70H59		
	ILLINOIS FED. AID PROJECT			



ELEVATION



PLAN

⟨A⟩ - Repair Beam End

⟨B⟩ - Remove & Replace Diaphragm & Side Clip L's

NOTES

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Fasteners shall be high strength bolts. Bolts $\frac{3}{4}$"ϕ, open holes $\frac{13}{16}$"ϕ, unless otherwise noted.

Diaphragm connection holes shall be $\frac{15}{16}$"ϕ for $\frac{3}{4}$"ϕ bolts. Two hardened washers shall be required at diaphragm connections.

Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Furnishing and Erecting Structural Steel.

Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the GBSP "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

All structural steel shall be shop painted with the inorganic zinc rich primer per AASHTO M300, Type 1. Cost included with Furnishing & Erecting Structural Steel and Structural Steel Repair.

AS-BUILT PLANS FOR S.N. 010-0132

FOR INFORMATION ONLY

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Steel Removal	Pound	4040
Structural Steel Repair	Pound	1630
Furnishing & Erecting Structural Steel	Pound	4240

Note:
Diaphragms and Side Clip L's are included with Furnishing & Erecting Structural Steel. All other steel is included with Structural Steel Repair.

DESIGNED SMR	EXAMINED [signature] ENGINEER OF STRUCTURAL SERVICES	DATE MARCH 16, 2018	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
CHECKED RPN	PASSED [signature] ENGINEER OF BRIDGES AND STRUCTURES	REVISED	
DRAWN baliva		REVISED	
CHECKED SMR RPN			

PLAN AND ELEVATION
FAP 802 (NEIL ST.) OVER FAI 74
SN 010-0132
SHEET NO. 1 OF 2 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
802	(14-HB-1)BRR	CHAMPAIGN	13	8
		CONTRACT NO. 70D09		
		ILLINOIS FED. AID PROJECT		

USER NAME = Steven.Wood	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/5/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

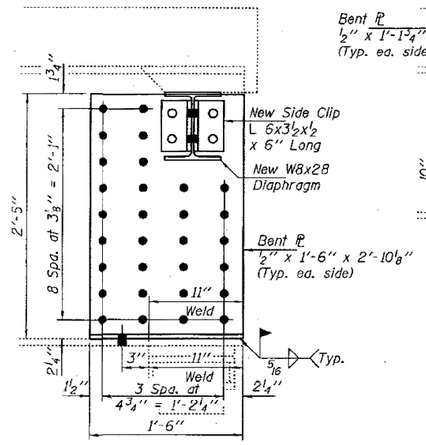
AS-BUILT PLANS
LOCATION #5 S.N. 010-0132

SCALE: SHEET 9 OF 10 SHEETS STA. TO STA.

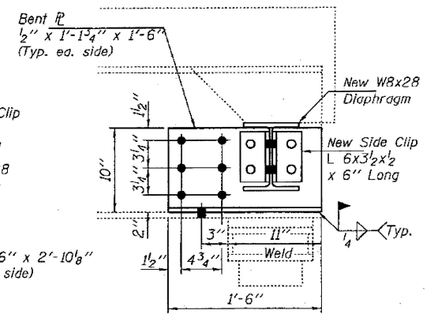
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	43
		CONTRACT NO. 70H59		
		ILLINOIS FED. AID PROJECT		

MODEL: Sheet 9 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 5.dgn

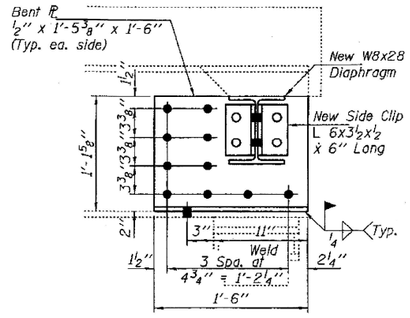
AS–BUILT PLANS FOR S.N. 010–0132
FOR INFORMATION ONLY



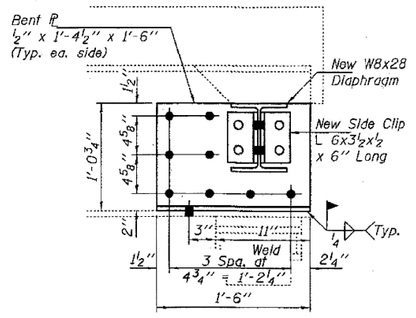
REPAIR A
AT BEAM 1S



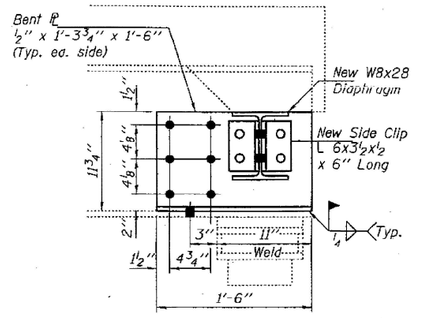
REPAIR A AT
BEAMS 9N, 9S, & 11N



REPAIR "A" AT
BEAMS 2N, 2S, 3S, 16N & 17S

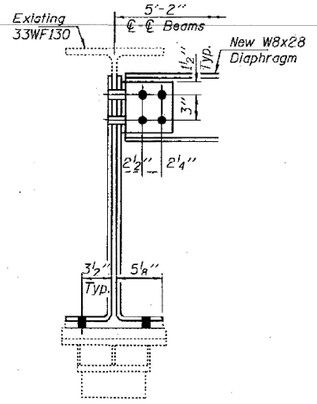


REPAIR A AT
BEAMS 4S, 5S, 14N, 14S & 15S

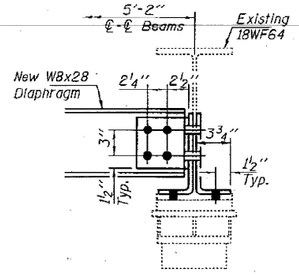


REPAIR A AT
BEAMS 6S, 7S, & 12N

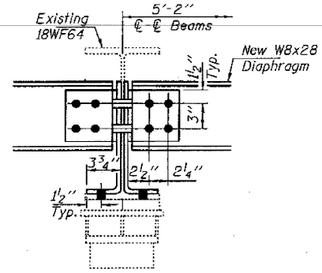
○ - Use holes in existing steel as template
● - Use holes in new steel as template



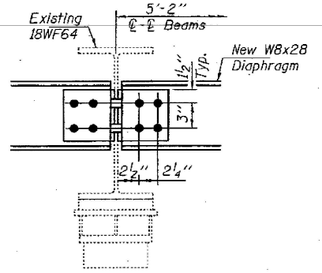
REPAIR B
AT BEAM 1S



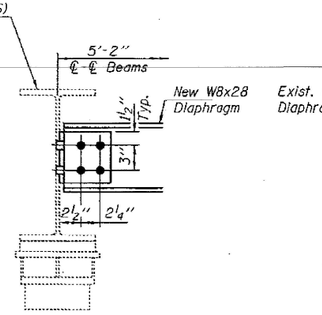
REPAIR B AT
BEAM 9N & 9S



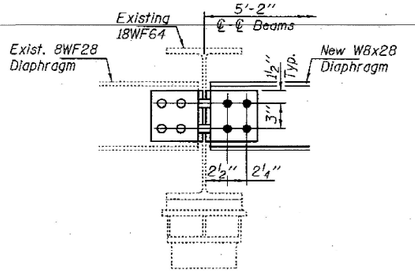
REPAIR B AT
BEAMS 2N, 2S, 3S, 4S, 5S, 6S,
7S, 11N, 12N, 14N, 14S, 15S & 16N



REPAIR B AT
BEAMS 8S,
13N, 15N & 16S



REPAIR B AT
BEAMS 1N, 10N & 18S



REPAIR B AT
BEAMS 3N, 8N, 13S & 17N

DESIGNED SMR	EXAMINED	DATE MARCH 16, 2018	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REPAIR DETAILS SN 010–0132	
CHECKED RPN	ENGINEER OF STRUCTURAL SERVICES	REVISED			
DRAWN baliva	PASSED	REVISED		SHEET NO. 2 OF 2 SHEETS	
CHECKED SMR RPN	ENGINEER OF BRIDGES AND STRUCTURES	REVISED			

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
802	04-HB-1)BRR	CHAMPAIGN	13	9
		CONTRACT NO. 70D09		
	ILLINOIS FED. AID PROJECT			

MODEL: Sheet 10 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 5.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	AS-BUILT PLANS LOCATION #5 S.N. 010-0132	
	DRAWN -	REVISED -			
	CHECKED -	REVISED -			
PLOT DATE = 6/5/2025	DATE -	REVISED -		SCALE: SHEET 10 OF 10 SHEETS STA. TO STA.	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	44
		CONTRACT NO. 70H59		
	ILLINOIS FED. AID PROJECT			

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS
F.A.I.74	(14HB-3) BRK	Cchampaign	166
FED ROAD DIST NO?	ILLINOIS	PROJECT	

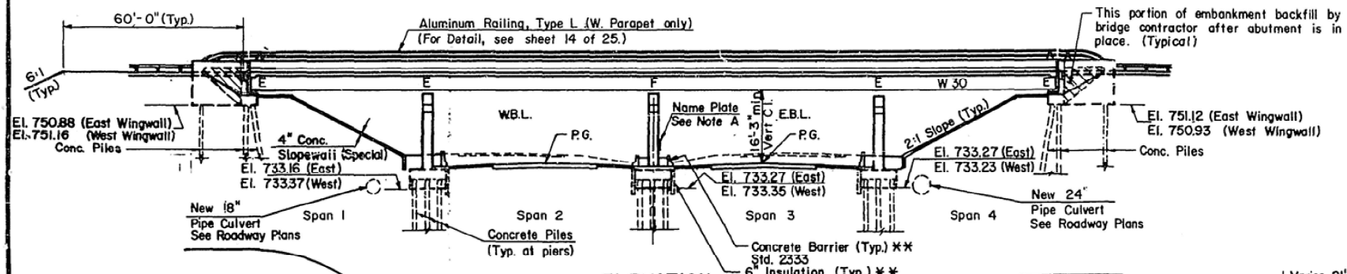
SHEET 1 OF 25

B.M. ≠ 45: Chiseled "□" on Headwall 66' Pt.
Sta. 1253+46 Elev. 740.59

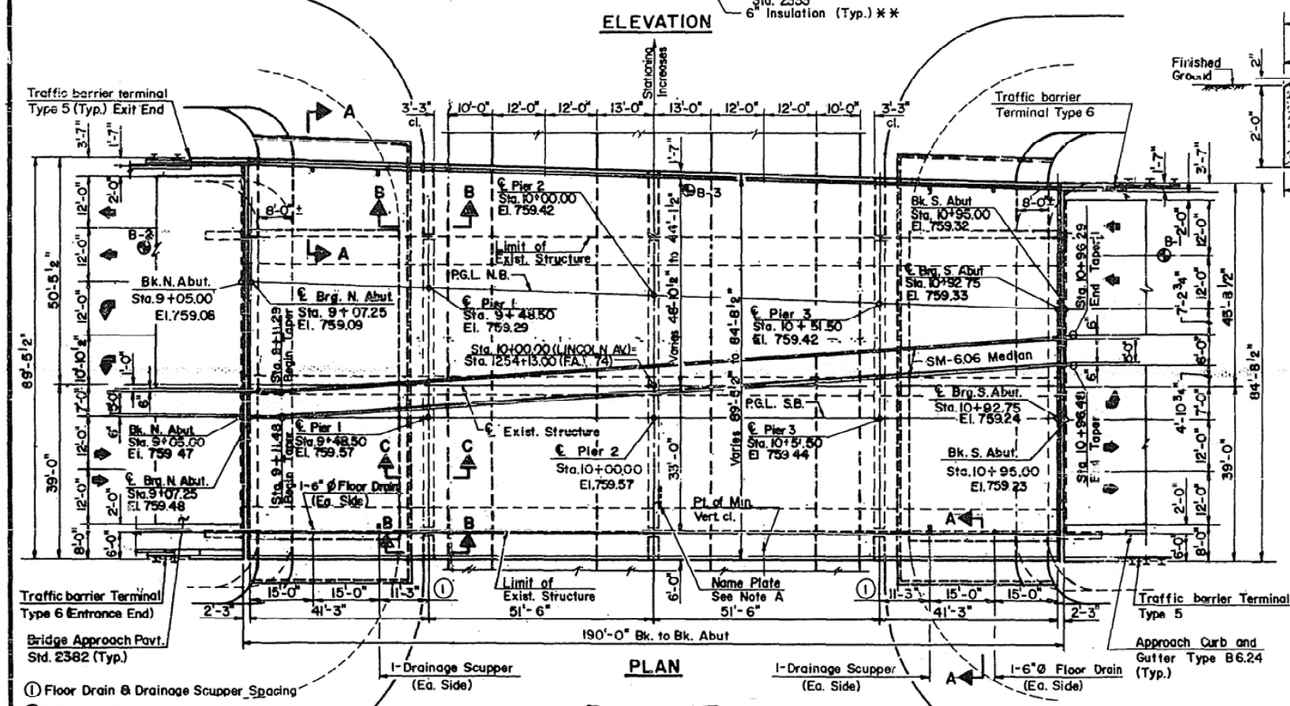
Exist. Structure: Four Span continuous bridge, Steel W30 bms. w/conc. deck supported on conc. open abuts. & conc. hammer head piers. Width = 65'-8" o. to o. of parapet; 189'-0" bk. to bk. of abuts. w/metal handrails.
Structure No. 010-0158 built as Section 14HB-3 in 1956 at Sta. 254+13.

Note A: Exist. name plate to be salvaged, cleaned and mounted next to new name plate. Both name plates are to be located near center line of west column, ± 4'-0" above crown elevation of roadway. Cost incidental to Name Plates.

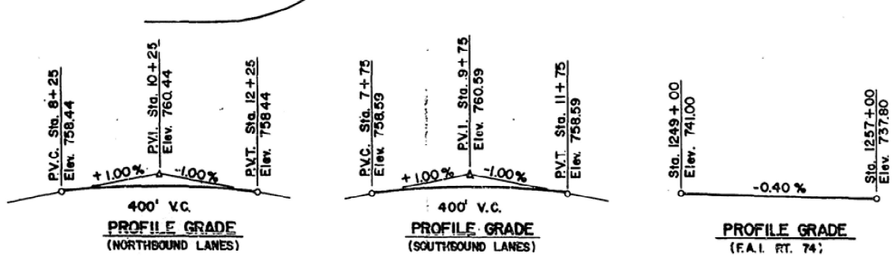
AS-BUILT PLANS FOR S.N. 010-0158
FOR INFORMATION ONLY

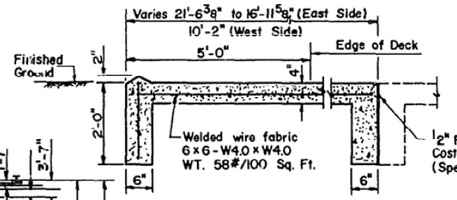


ELEVATION

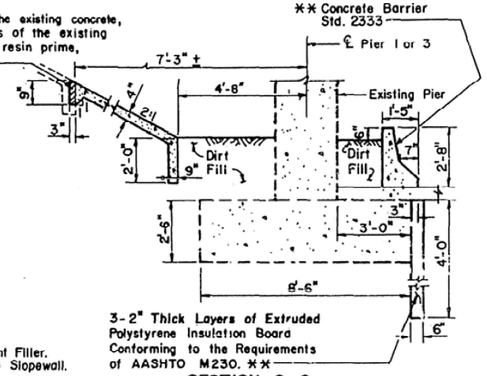


PLAN





SECTION A-A



SECTION C-C

DESIGN STRESSES
NEW CONSTRUCTION

f'c = 3,500 psi
Fy = 60,000 psi (Rebars)
Fy = 36,000 psi (M-183)

Loading HS 20-44
Allow 25 ℔/ft² for future W.S.
Design Specifications - 1983 AASHTO & 1984 - 1988 Interim Specifications.

STATION 1254+13
BUILT 19℄ BY
STATE OF ILLINOIS
F.A.I. RTE. 74 SEC. (14HB-3)BRK
F.A. PROJ. ACIR-74-4(124)
LOADING HS 20
STR. NO. 010-0158

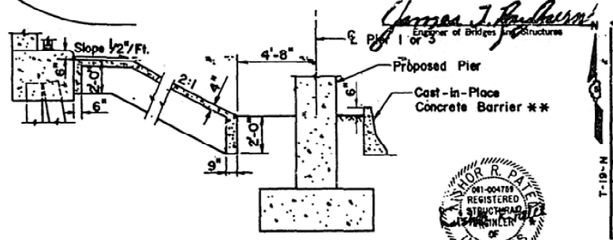
NAME PLATE
(Standard 2113)

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
James J. Ryburn
Engineer of Bridges and Structures

TOTAL BILL OF MATERIAL

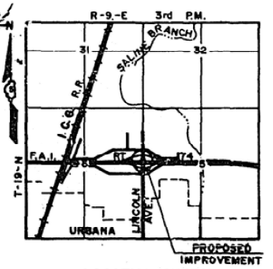
ITEM	UNIT	SUPER STRUCT.	SUB STRUCT.	TOTAL
CONCRETE REMOVAL	CU. YD.	—	24.1	24.1
EXPANSION BOLTS ¾ INCH x 12 INCH	EACH	—	56	56
REMOVAL OF EXISTING CONCRETE DECK	EACH	1	—	1
STRUCTURE EXCAVATION	CU. YD.	—	379.0	379.0
FLOOR DRAINS	EACH	4	—	4
PREFORMED JOINT SEAL 4"	LIN. FT.	175	—	175
CLASS X CONCRETE SUPERSTRUCTURE	CU. YD.	(501.6)	12.0	(513.6)
PROTECTIVE COAT ***	SQ. YD.	1,820	—	1,920
CLASS X CONCRETE	CU. YD.	—	146.0	146.0
FURNISHING AND ERECTING STRUCTURAL STEEL	L. SUM	1	—	1
REINFORCEMENT BARS	POUND	—	13,190	13,190
REINFORCEMENT BARS, EPOXY COATED	POUND	(132,356)	5,110	(137,466)
FURNISHING CONCRETE PILES	LIN. FT.	—	1,518	1,518
DRIVING CONCRETE PILES	LIN. FT.	—	1,518	1,518
TEST PILE CONCRETE	EACH	—	3	3
NAME PLATES	EACH	—	1	1
BRIDGE SEAT SEALER	L. SUM	—	1	1
SLOPEWALL (SPECIAL)	SQ. YD.	—	292.5	292.5
DRAINAGE SCUPPERS	EACH	4	—	4
EPOXY CRACK SEALING *	LIN. FT.	—	29	29
EPOXY MORTAR REPAIR *	CU. FT.	—	0.6	0.6
CLEANING AND PAINTING STEEL BRIDGE	L. SUM	1	—	1
ALUMINUM RAILING, TYPE L	LIN. FT.	205	—	205
STUD SHEAR CONNECTORS	EACH	7686	—	7686

* SEE SPECIAL PROVISIONS
*** QUANTITY INCLUDES BRIDGE DECK SURFACES



SECTION B-B
SLOPEWALL DETAIL

ANTHONY R. PAPE
081-004789
REGISTERED
STRUCTURAL
ENGINEER OF
ILLINOIS



LOCATION SKETCH

Note: For General Notes, see sheet 2 of 25.
** Pay Items for Concrete Barrier and Insulation are included in roadway plans. See Special Provisions.

(AS REVISED 5-31-90 SDK)

WELLS ENGINEERS, INC.

GENERAL PLAN
LINCOLN AVENUE
OVER F.A.I. ROUTE 74
F.A.I. ROUTE 74 SEC. (14HB-3)BRK
STA. 1254+13.00
CHAMPAIGN COUNTY
STRUCTURE NO. 010-0158

DATE: 3-27-89	DRAWN BY: GLH	JOB NO. 660671
DESIGNED BY: KRP	CHECKED BY: SDK	SHEET NO. (1A)

MODEL: Sheet 1 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 6.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/5/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #6 S.N. 010-0158

SCALE: | SHEET 1 OF 8 SHEETS | STA. | TO STA.

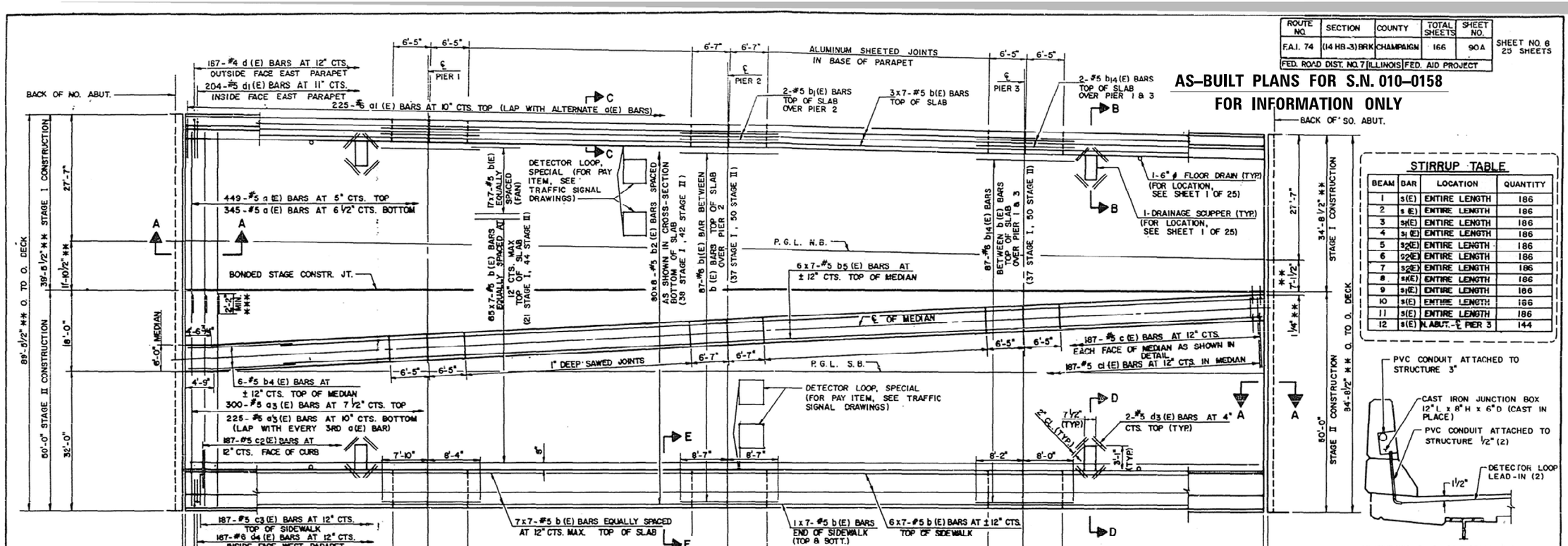
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	45
		CONTRACT NO. 70H59		
	ILLINOIS	FED. AID PROJECT		

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	(14 HB-3) BRK	CHAMPAIGN	166	90A
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 8 25 SHEETS

AS-BUILT PLANS FOR S.N. 010-0158

FOR INFORMATION ONLY



STIRRUP TABLE

BEAM	BAR	LOCATION	QUANTITY
1	s(E)	ENTIRE LENGTH	186
2	s (E)	ENTIRE LENGTH	186
3	s3(E)	ENTIRE LENGTH	186
4	s3 (E)	ENTIRE LENGTH	186
5	s2(E)	ENTIRE LENGTH	186
6	s2(E)	ENTIRE LENGTH	186
7	s2(E)	ENTIRE LENGTH	186
8	s(E)	ENTIRE LENGTH	186
9	s(E)	ENTIRE LENGTH	186
10	s(E)	ENTIRE LENGTH	186
11	s(E)	ENTIRE LENGTH	186
12	s(E)	N. ABUT. - ℄ PIER 3	144

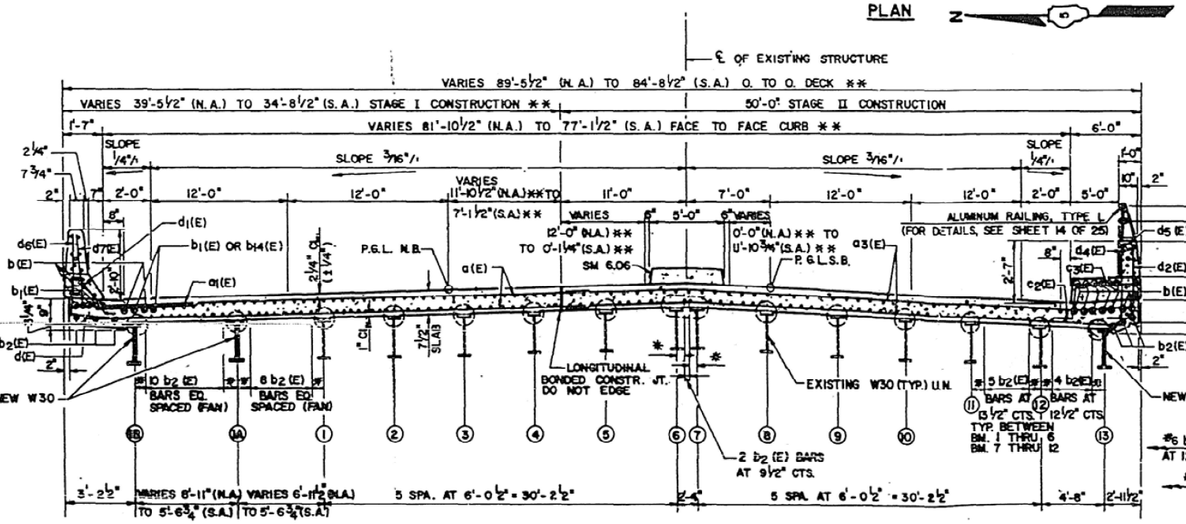
SECTION C-C (AS SHOWN)

SECTION E-E (OPP. HAND & SIMILAR)

JUNCTION BOX DETAIL

(FOR PAY ITEMS FOR PVC CONDUIT ATTACHED TO STRUCTURE 3", PVC CONDUIT ATTACHED TO STRUCTURE ½" AND CAST IRON JUNCTION BOX, SEE TRAFFIC SIGNAL DRAWINGS.)

PLAN



NEAR PIER — CROSS SECTION (LOOKING SOUTH) — NEAR MIDSPAN

* 9¼" MIN. AT RT. ∠'s TO BEAM.

** MEASURED ALONG BACK OF ABUTMENT.

*** LAPPED BARS AT THIS LOCATION SHALL BE TIED WITH DOUBLE THE NUMBER OF TIES NORMALLY USED.

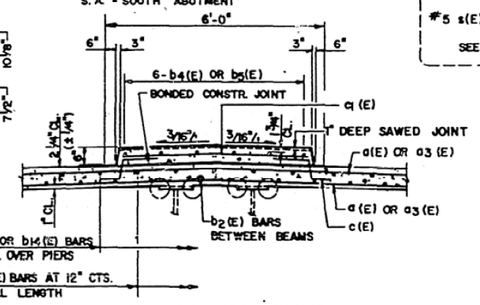
SEE SHEET 8 OF 25 FOR SUPERSTRUCTURE DETAILS, BILL OF MATERIAL, AND SECTION A-A & B-B.

SEE SHEET 7 OF 25 FOR SUPERSTRUCTURE DETAILS, AND SECTION D-D.

REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.

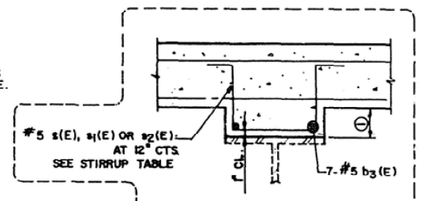
BARS INDICATED THUS 20 x 3-#5 ETC. INDICATES 20 LINES OF BARS WITH 3 LENGTHS PER LINE.

N.A. = NORTH ABUTMENT
S.A. = SOUTH ABUTMENT



SUPERIMPOSED MEDIAN

(SM - 6.06)



FILLET DETAIL

(FOR DIMENSION ① GREATER THAN 3") BEAM 1 THRU BEAM 12

(AS REVISED 5-31-90 SDK)

WELLS ENGINEERS, INC.

DECK PLAN & CROSS-SECTION
LINCOLN AVENUE
OVER F.A.I. ROUTE 74
F.A.I. ROUTE 74 SEC. (14 HB-3) BRK
STA. 1254+13.00
CHAMPAIGN COUNTY
STRUCTURE NO. 010-0158

DATE: 3-27-89	DRAWN BY: GLH	JOB NO. 660371
DESIGNED BY: FMA	CHECKED BY: SPK	SHEET NO. 8A

MODEL: Sheet 2 [Sheet]
FILE NAME: c:\pw_work\dot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 6.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/5/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #6 S.N. 010-0158

SCALE: | SHEET 2 OF 8 SHEETS | STA. | TO STA.

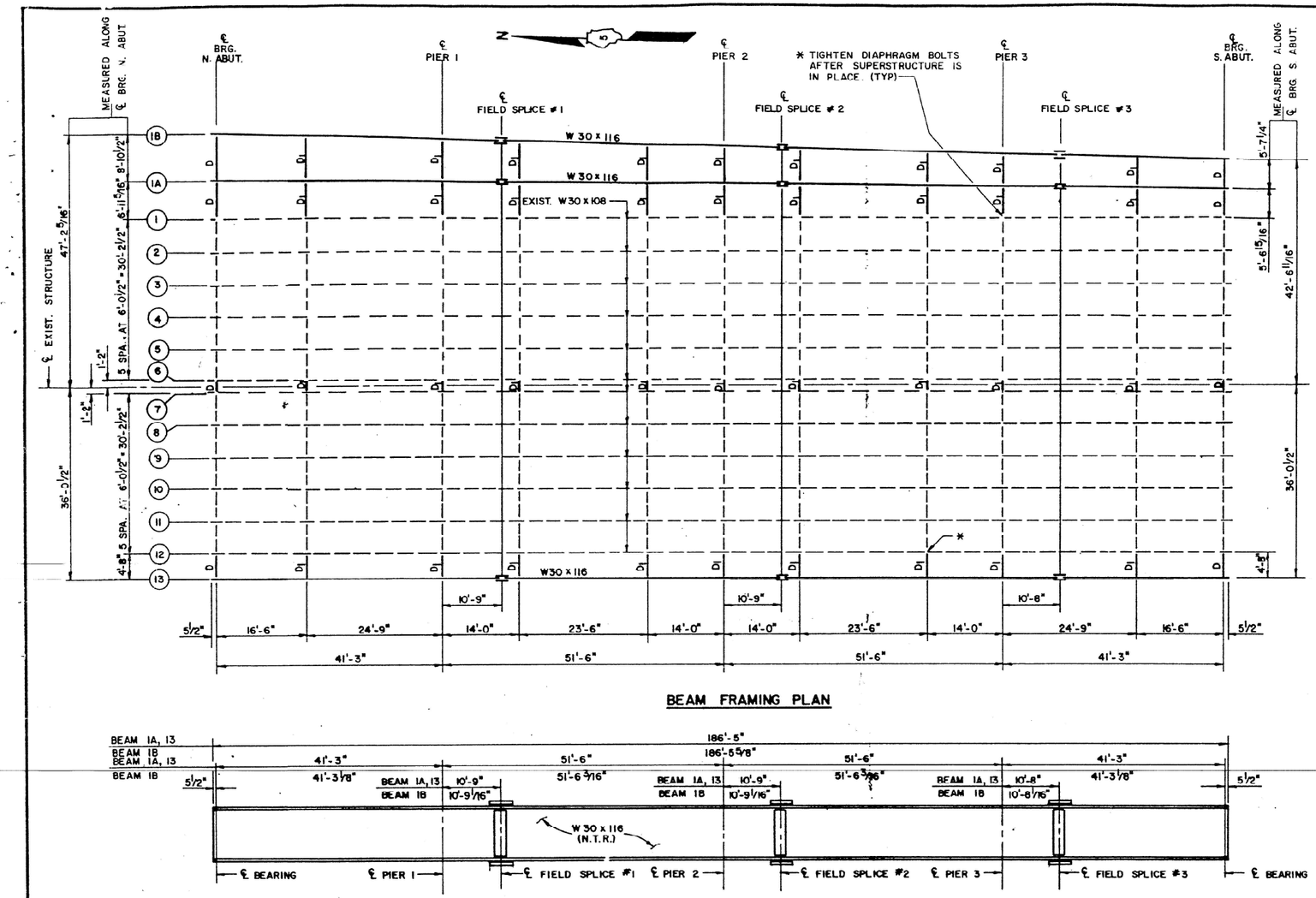
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	46
		CONTRACT NO. 70H59		
		ILLINOIS	FED. AID PROJECT	

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	(14 HB-3) BRK	CHAMPAIGN	166	93A
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 9
25 SHEETS

AS-BUILT PLANS FOR S.N. 010-0158

FOR INFORMATION ONLY



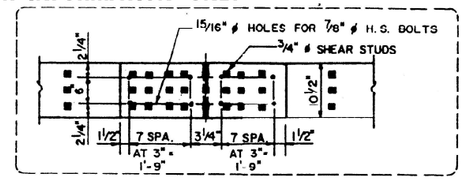
BEAM FRAMING PLAN

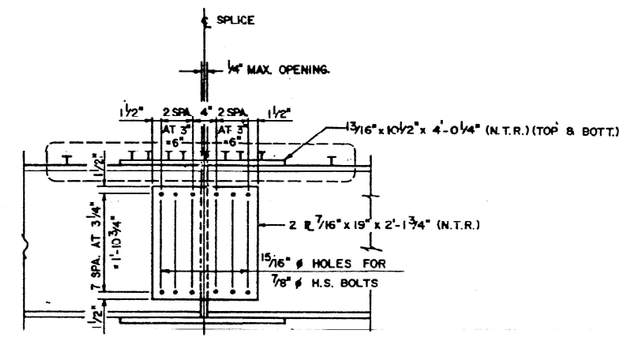
BEAM ELEVATION

BEAMS 1A, 1B & 13 ONLY

TOP OF BEAM ELEVATIONS (FOR FABRICATION ONLY)

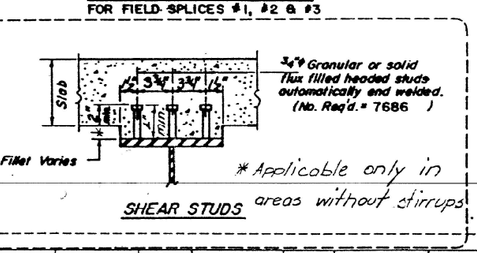
BEAM	℄ BEARING NORTH ABUTMENT	℄ PIER 1	℄ FIELD SPLICE #1	℄ PIER 2	℄ FIELD SPLICE #2	℄ PIER 3	℄ FIELD SPLICE #3	℄ BEARING SOUTH ABUTMENT
1B	758.04	758.14	758.17	758.25	758.27	758.25	758.25	758.28
1A	758.18	758.27	758.29	758.36	758.36	758.36	758.35	758.37
13	758.32	758.35	758.36	758.34	758.34	758.21	758.18	758.09





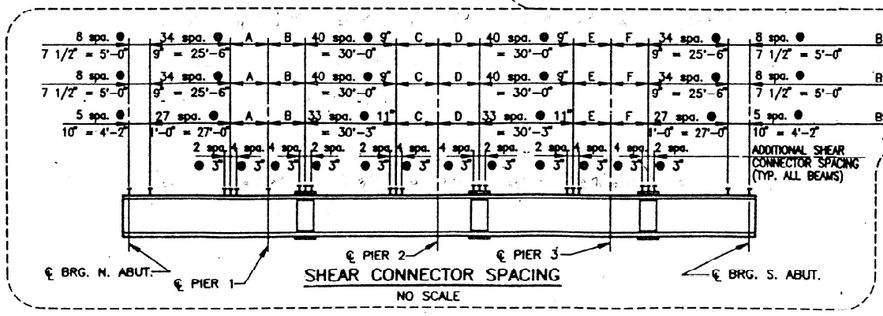
FIELD SPLICE

FOR FIELD SPLICES #1, #2 & #3



SHEAR STUDS

	A	B	C	D	E	F
BEAMS 1A & 13	10'-9"	10'-9"	10'-9"	10'-9"	10'-9"	10'-9"
BEAM 1B	10'-9 1/8"	10'-9"	10'-9 3/16"	10'-9"	10'-9 3/16"	10'-9 1/8"
BEAMS 1 - 12	10'-1"	10'-8"	10'-7"	10'-7"	10'-8"	10'-1"



SHEAR CONNECTOR SPACING

NO SCALE

(AS REVISED 5-31-90 SDK)

WELLS ENGINEERS, INC.

BEAM FRAMING PLAN & ELEVATION
LINCOLN AVENUE
OVER F.A.I. ROUTE 74
F.A.I. ROUTE 74 SEC. (14 HB-3) BRK
STA: 1254+13.00
CHAMPAIGN COUNTY
STRUCTURE NO. 010-0158

DATE: 3-27-89	DRAWN BY: M.I.L.	JOB NO. 860871
DESIGNED BY: FM	CHECKED BY: SPK	SHEET NO. 9A

MODEL: Sheet 3 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 6.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/5/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #6 S.N. 010-0158

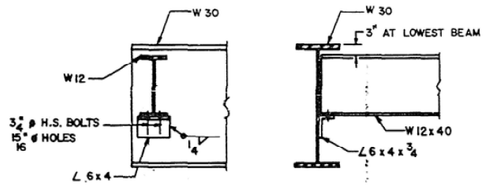
SCALE: | SHEET 3 OF 8 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	47
		CONTRACT NO. 70H59		
	ILLINOIS	FED. AID PROJECT		

AS–BUILT PLANS FOR S.N. 010–0158
FOR INFORMATION ONLY

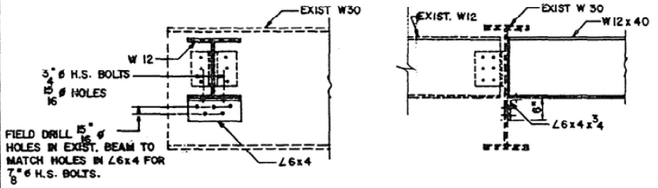
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	(14 HB-3) BRK	CHAMPAIGN	156	94A
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 10 25 SHEETS



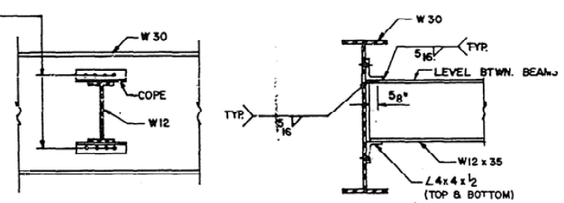
END DIAPHRAGM - D
CONNECTION TO BEAMS 1A, 1B, & 13

NOTE: USE HARDENED WASHERS OVER EACH HOLE.

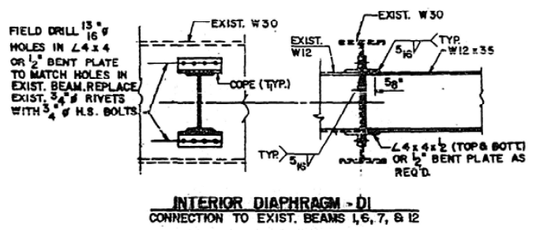


END DIAPHRAGM - D
CONNECTION TO EXIST. BEAMS 1, 6, 7, & 12

15/16" ø HOLES FOR 3/4" ø H.S. BOLTS.



INTERIOR DIAPHRAGM - DI
CONNECTION TO BEAMS 1A, 1B, & 13



INTERIOR DIAPHRAGM - DI
CONNECTION TO EXIST. BEAMS 1, 6, 7, & 12

INTERIOR BEAM MOMENT TABLE (W30 x 108)								
ITEM		0.4 SPAN 1	PIER 1	0.5 SPAN 2	PIER 2	0.5 SPAN 3	PIER 3	0.6 SPAN 4
Is	(in4)	4470	4470	4470	4470	4470	4470	4470
Ic n=27	(in4)	9826		9826		9826		9826
Ic n=9	(in4)	13636		13636		13636		13636
Ss	(in3)	299	299	299	299	299	299	299
Sc n=27	(in3)	428		428		428		428
Sc n=9	(in3)	478		478		478		478
Z			346		346		346	
ℓ	(k/l)	0.84	0.84	0.84	0.84	0.84	0.84	0.84
M ℓ	('k)	98.7	182.0	93.7	187.5	93.7	182.0	98.7
S ℓ	(k/l)	0.24	0.24	0.24	0.24	0.24	0.24	0.24
M S ℓ	('k)	32.1	42.3	35.4	46.0	35.4	42.3	32.1
M L	('k)	222.8	122.1	257.1	133.7	257.1	122.1	222.8
M Imp	('k)	66.8	35.7	72.8	37.8	72.8	35.7	66.8
5/3 (ML + I)	('k)	482.7	263.0	549.8	285.8	549.8	263.0	482.7
Ma	('k)	797.6	633.5	882.6	675.1	882.6	633.5	797.6
Mu	('k)		951.5		951.5		951.5	
fs ℓ (non-comp)	(k.s.i.)	4.0	7.3	3.8	7.5	3.8	7.3	4.0
fs ℓ (comp)	(k.s.i.)	0.9	1.7	1.0	1.9	1.0	1.7	0.9
fs 5/3(L + I)	(k.s.i.)	12.1	10.6	13.8	11.5	13.8	10.6	12.1
fs (overload)	(k.s.i.)	17.0	19.6	18.6	20.9	18.6	19.6	17.0
fs (total)	(k.s.i.)	22.1	25.4	24.2	27.1	24.1	25.4	22.1
VR	(K)	42.0		34.4		34.4		42.0

INTERIOR BEAM MOMENT TABLE (W30 x 116)								
ITEM		0.4 SPAN 1	PIER 1	0.5 SPAN 2	PIER 2	0.5 SPAN 3	PIER 3	0.6 SPAN 4
Is	(in4)	4930	4930	4930	4930	4930	4930	4930
Ic n=27	(in4)	10319		10018		9695		9420
Ic n=9	(in4)	13503		13227		12916		12639
Ss	(in3)	329	329	329	329	329	329	329
Sc n=27	(in3)	451		446		441		436
Sc n=9	(in3)	485		482		478		475
Z			378		378		378	
ℓ	(k/l)	← VARIES FROM 0.90 k/l to 0.68 k/l →						
M ℓ	('k)	105.0	185.0	91.2	176.3	85.1	157.4	80.6
S ℓ	(k/l)	← VARIES FROM 0.29 k/l to 0.23 k/l →						
M S ℓ	('k)	38.3	50.0	39.1	50.8	35.5	43.9	30.4
M L	('k)	290.4	153.8	308.5	153.8	280.1	127.6	221.0
M Imp	('k)	87.1	44.9	87.3	43.5	79.3	37.3	66.3
5/3 (ML + I)	('k)	629.2	331.2	659.7	328.8	599.0	274.8	478.8
Ma	('k)	1004.3	736.0	1027.0	722.7	935.5	580.2	949.3
Mu	('k)		1134.0		1134.0		1134.0	
fs ℓ (non-comp)	(k.s.i.)	3.8	6.8	3.3	6.4	3.1	5.7	2.9
fs ℓ (comp)	(k.s.i.)	1.0	1.8	1.1	1.9	1.0	1.6	0.8
fs 5/3(L + I)	(k.s.i.)	15.6	12.1	16.4	12.0	15.0	10.0	12.1
fs (overload)	(k.s.i.)	20.4	20.7	20.8	20.3	19.1	17.3	15.8
fs (total)	(k.s.i.)	26.5	26.9	27.1	26.4	24.9	22.5	20.5
VR	(K)	55.0		44.1		38.2		42.0

INTERIOR GIRDER REACTION TABLE (W30 x 108)						
		N. ABUT.	PIER 1	PIER 2	PIER 3	S. ABUT.
R ℓ	(K)	16.8	55.4	56.0	55.4	16.8
R L	(K)	29.6	36.4	36.5	36.4	29.6
R I	(K)	8.5	8.4	8.0	8.4	8.5
R TOTAL	(K)	54.9	100.2	100.5	100.2	54.9

INTERIOR GIRDER REACTION TABLE (W30 x 116)						
		N. ABUT.	PIER 1	PIER 2	PIER 3	S. ABUT.
R ℓ	(K)	18.4	58.0	54.4	49.7	14.3
R L	(K)	29.5	36.4	36.6	36.5	29.5
R I	(K)	8.9	8.4	8.0	8.4	8.9
R TOTAL	(K)	56.8	102.8	99.0	94.6	52.7

NOTES

Is AND Ss ARE THE MOMENT OF INERTIA AND SECTION MODULUS OF THE STEEL SECTION USED IN COMPUTING fs (TOTAL AND OVERLOAD).

Ic AND Sc ARE THE MOMENT OF INERTIA AND SECTION MODULUS OF THE COMPOSITE SECTION USED IN COMPUTING fs (TOTAL AND OVERLOAD).

VR IS THE MAXIMUM LIVE LOAD + IMPACT SHEAR RANGE IN SPAN.

Ma (APPLIED MOMENT) = 1.3 [M ℓ + MS ℓ + 5/3(M L + I)].

THE FULLY PLASTIC MOMENT CAPACITY (Mu) IS COMPUTED ACCORDING TO AASHTO 10.50.1.1.

fs (TOTAL) IS THE SUM OF THE STRESSES DUE TO 1.3 [M ℓ + MS ℓ + 5/3(M L + I)].

fs (OVERLOAD) IS THE SUM OF THE STRESSES DUE TO [M ℓ + MS ℓ + 5/3(M L + I)].

M ℓ – MOMENT DUE TO DEAD LOADS ON NON–COMPOSITE SECTION.

M S ℓ – MOMENT DUE TO DEAD LOADS ON COMPOSITE SECTION.

M L – MOMENT DUE TO LIVE LOAD ON NON–COMPOSITE OR COMPOSITE SECTION.

I – LIVE LOAD IMPACT.

Z – PLASTIC SECTION MODULUS USED TO DETERMINE THE FULLY PLASTIC MOMENTS IN THE NON–COMPOSITE AREAS.

(AS REVISED 5–31–90 SDK)

WELLS ENGINEERS, INC.

BEAM FRAMING DETAILS
LINCOLN AVENUE
OVER F.A.I. ROUTE 74
F.A.I. ROUTE 74 SEC. (14 HB-3)BRK
STA. 1254+13.00
CHAMPAIGN COUNTY
STRUCTURE NO. 010-0158

DATE: 1-29-88	DRAWN BY: M.L.L.	JOB NO. 88087
DESIGNED BY: FMJ	CHECKED BY: SPK	SHEET NO. 10A

MODEL: Sheet 4 [Sheet]
FILE NAME: c:\pw_work\pwilot\steven.wood@illinois.gov\d0194040\D570H59-sht-Loc 6.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/5/2025	DATE -	REVISED -

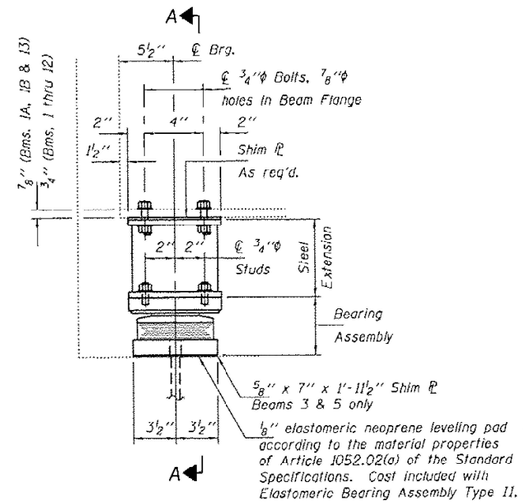
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #6 S.N. 010-0158

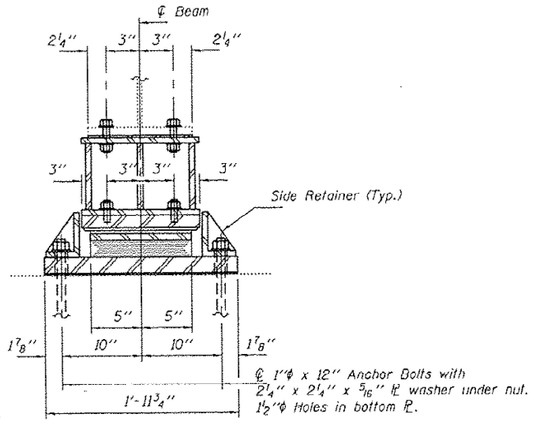
SCALE: | SHEET 4 OF 8 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	48
		CONTRACT NO. 70H59		
		ILLINOIS	FED. AID PROJECT	

AS-BUILT PLANS FOR S.N. 010-0158
FOR INFORMATION ONLY



ELEVATION AT ABUTMENT



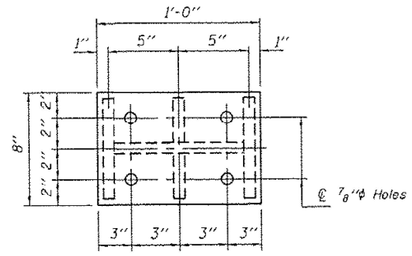
SECTION A-A

TYPE II TFE ELASTOMERIC EXP. BRG.

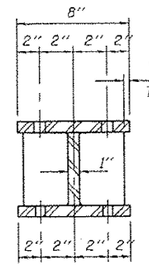
BEAM REACTIONS

		N. Abut.	S. Abut.
RD	(K)	18.4	14.3
RL	(K)	29.5	29.5
Imp.	(K)	8.9	8.9
R (Total)	(K)	56.8	52.7

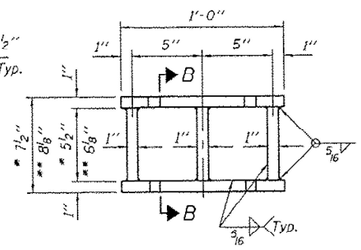
Notes:
Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.
New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.
Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions.
Min. jack capacity = 30 Tons.
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.
Anchor bolts for Type II bearings shall be placed in holes drilled through the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
Side retainers shall be included in the cost of Elastomeric Bearing Assembly, Type II.
The ⅛" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.
Bonding of ⅛" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.



PLAN TOP AND BOTTOM PLATE

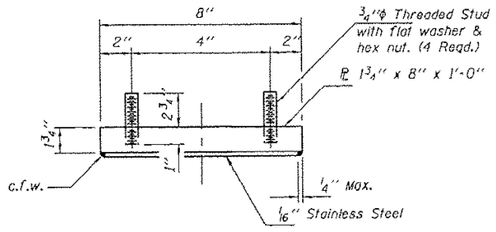


SECTION B-B

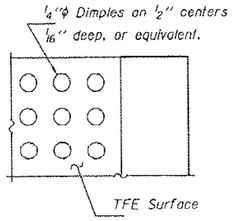


STEEL EXTENSION DETAIL

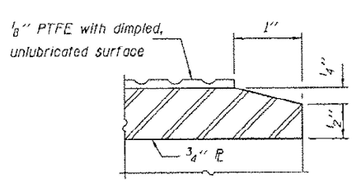
* = Beams 1A, 1B & 13 (No. Req'd. = 6)
** = Beams 1 thru 12 (No. Req'd. = 24)



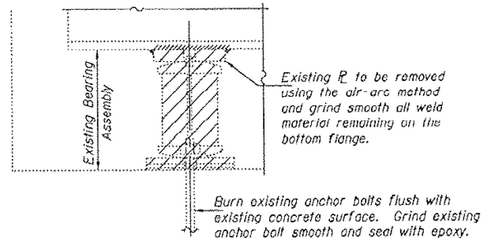
TOP BEARING ASSEMBLY



PLAN-PTFE SURFACE

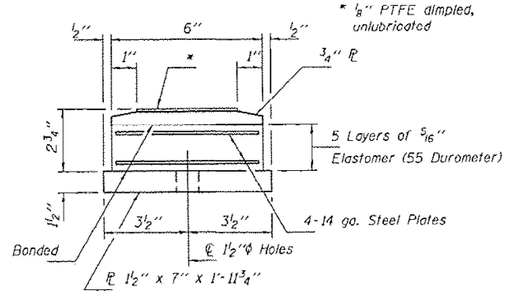


SECTION THRU PTFE

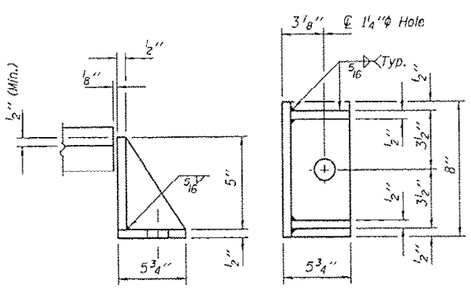


EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.

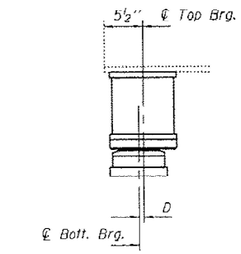


BOTTOM BEARING ASSEMBLY

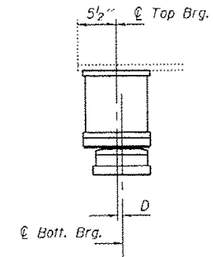


SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



BELOW 50° F.
(Move bott. brg. away from fixed brg.)



ABOVE 50° F.
(Move bott. brg. toward fixed brg.)

SETTING ANCHOR BOLTS AT EXP. BRG.

D = ⅛" per each 100° of expansion for every 15° temp. change from the normal temp. of 50°F.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type II	Each	30
Jack and Remove Existing Bearings	Each	30
Furnishing and Erecting Structural Steel	Pound	3510
Anchor Bolts 1"ϕ	Each	60

TYII/REPS 12-03-2008

DESIGNED CCC	PASSED	DATE - MARCH 31, 2016	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
CHECKED SMR	D. Carl Perry ENGINEER OF BRIDGES AND STRUCTURES	REVISED	ELASTOMERIC BEARING TYPE II DETAILS NORTH & SOUTH ABUTMENTS SN 010-0158
DRAWN J Schneller		REVISED	SHEET NO. 2 OF 2 SHEETS
CHECKED CCC SMR			

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7177	(14HB-3)I	CHAMPAIGN	19	9
		CONTRACT NO. 70843		
		ILLINOIS FED. AID PROJECT		

USER NAME = Steven.Wood	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	AS-BUILT PLANS LOCATION #6 S.N. 010-0158	
	DRAWN -	REVISED -			
	CHECKED -	REVISED -			
PLOT DATE = 6/5/2025	DATE -	REVISED -		SCALE: SHEET 5 OF 8 SHEETS STA. TO STA.	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	49
		CONTRACT NO. 70H59		
		ILLINOIS FED. AID PROJECT		

MODEL: Sheet 5 [Sheet]
FILE NAME: c:\pw_work\pwlot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 6.dgn

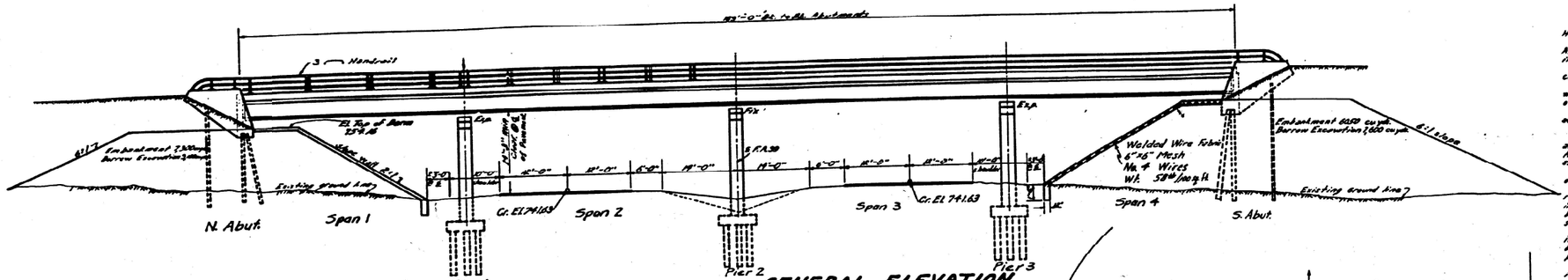
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

AS-BUILT PLANS FOR S.N. 010-0158
FOR INFORMATION ONLY

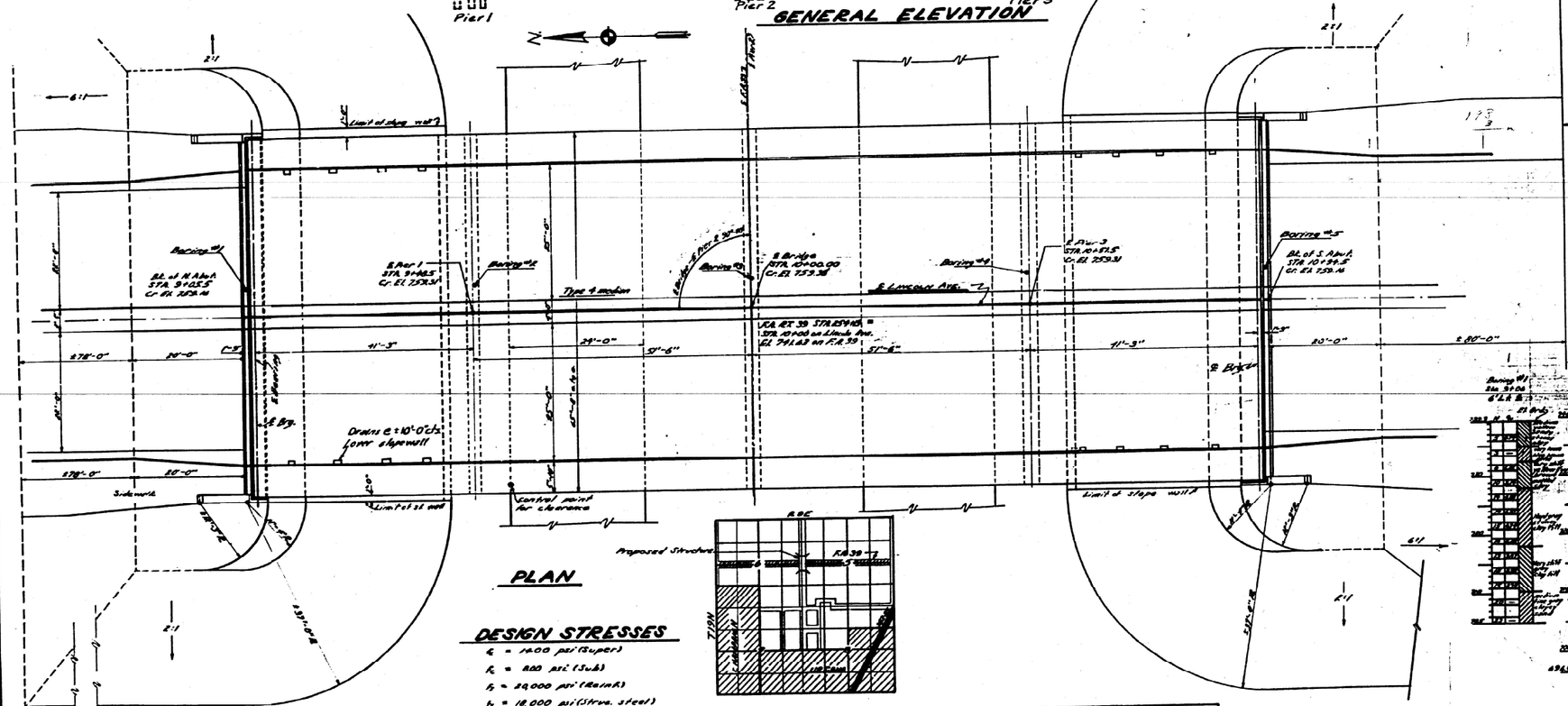
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	14-HB-3	Champaign	14	8
F.A. 39	14-HF-3		7	3
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 1
7 SHEETS

AM-N f SC in W. Root of tree
105' RT of Sta. 257+50 EL 739.57
No existing structure



GENERAL ELEVATION

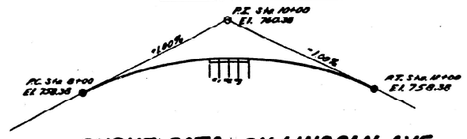


PLAN

DESIGN STRESSES

f_c = 1400 psi (Super)
f_c = 800 psi (Sub)
f_s = 20,000 psi (Reinf.)
f_y = 18,000 psi (Struc. steel)

LOCATION SKETCH



CURVE DATA ON LINCOLN AVE.

STATION 234+13
BUILT 195 BY
STATE OF ILLINOIS
F.A.RT.39 SEC.19HB-3
F.A. PROJ. UI-106(14)
LOADING H20-S16

NAME PLATE
REFER STA 2113

H-20-S-16-44

DESIGNED	V.R. Santi	
CHECKED	M.G. Correll	
DRAWN	V.R. Santi	STULTS
CHECKED	M.G. Peter	

DEC. 5 1955

EXAMINED M.K. Ramirez
PASSED E.T. Stuntz
APPROVED H.B. Bartholomew

GENERAL NOTES

Class X Concrete shall be used throughout except as noted. Handrail Concrete shall be used on Abutment Wings.

The Concrete floor slab shall be finished in accordance with Art. 503.18(a) of the Std. Specs. The floor slab shall be poured in one continuous operation between joints.

Rivets 7/8" ϕ Open shop @ 3" except as noted. Field connections riveted except as noted.

All girder splices shall be sub punched ¾" ϕ and reamed to size while shop assembled. Leave assembled for inspection by the State of Illinois.

Expansion guard shall be fabricated and erected in accordance with Art. 511.18(a) of the Std. Specs.

Welding shall comply with Art. 505.4 (b) of the Std. Specs.

All rockers, bolsters, bearing plates, and plates and anchor bolts shall be fabricated and set in accordance with Art. 512.17 of the Std. Specs. and are included for payment as structural steel.

Anchor bolts shall be set before bolting diaphragms, over piers.

Except as otherwise provided, all structural steel shall receive one shop coat of red lead paint after the inspection by the State of Illinois. All structural steel shall be given two field coats of aluminum paint. All paint shall be furnished and applied by the contractor involved.

The contractor shall drive 5 Test Piles (Concrete) in approximate locations and 3 Test Piles (Timber) as directed by the Engineer before casting or ordering remainder of piles. Conc. test piles shall be driven before ambank is placed. Before superstructure is placed, construct ambankments in accordance with Art. 502.18 of Std. Specs.

Concrete piles at the abuts. shall be driven through precored holes in the ambankment. The void space outside of the piles shall be filled with compacted sand. Cost to be incidental.

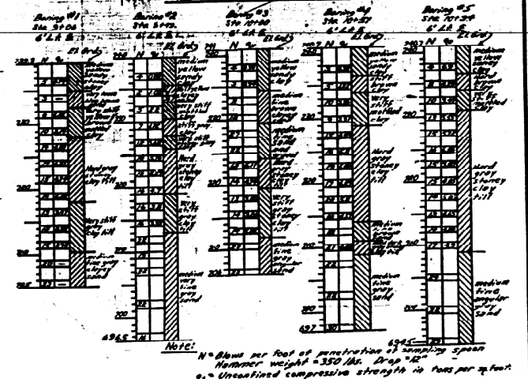
Name Plates shall be in accordance with the details shown on Standard 2113 and located as shown on the Plans.

Test piles (Concrete) shall be driven in a permanent location in the abutments.

TOTAL BILL OF MATERIAL

ITEM	UNIT	Spec. 14-HB-3 STR.	Total	Spec. 14-HF-3
Class X Concrete	cu.yds.	321.0	79.0	400.0
Handrail Concrete	cu.yds.		12.3	12.3
Reinforcement Bars	lbs.	58,470	30,840	89,310
Structural Steel	lbs.	305,720		305,720
Metal Handrail	lin.ft.	411.2		411.2
Borrow Excavation	cu.yds.			16,700
Class A Excavation for Structure	cu.yds.		270	270
Concrete Piles (Abut)	lin.ft.		720	720
Test Piles (Concrete)	Each		2	2
Concrete Piles (Lining)	lin.ft.		104	104
Creosoted Timber Piles	lin.ft.		1680	1680
Test Piles (Timber)	Each		3	3
Slope Wall (12")	sq.yds.			730
Name Plates	Each		2	2
Class A Conc.	cu.yds.		534.9	534.9

BORING DATA



N = Blows per foot of penetration of sampling spoon. Hammer weight = 350 lbs. Drop = 12"
q_u = Unconfined compressive strength in tons per sq. foot.

GENERAL PLAN AND ELEVATION
GRADE SEPARATION
LINCOLN AVE. OVER F.A. RT. 39
PROJ. NO. UI-106(14)
F.A. RT. 39 (US 150) SEC. 14-HB-F-3
CHAMPAIGN COUNTY
STATION 234+13

MODEL: Sheet 6 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 6.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 6/5/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #6 S.N. 010-0158

SCALE: | SHEET 6 OF 8 SHEETS | STA. | TO STA.

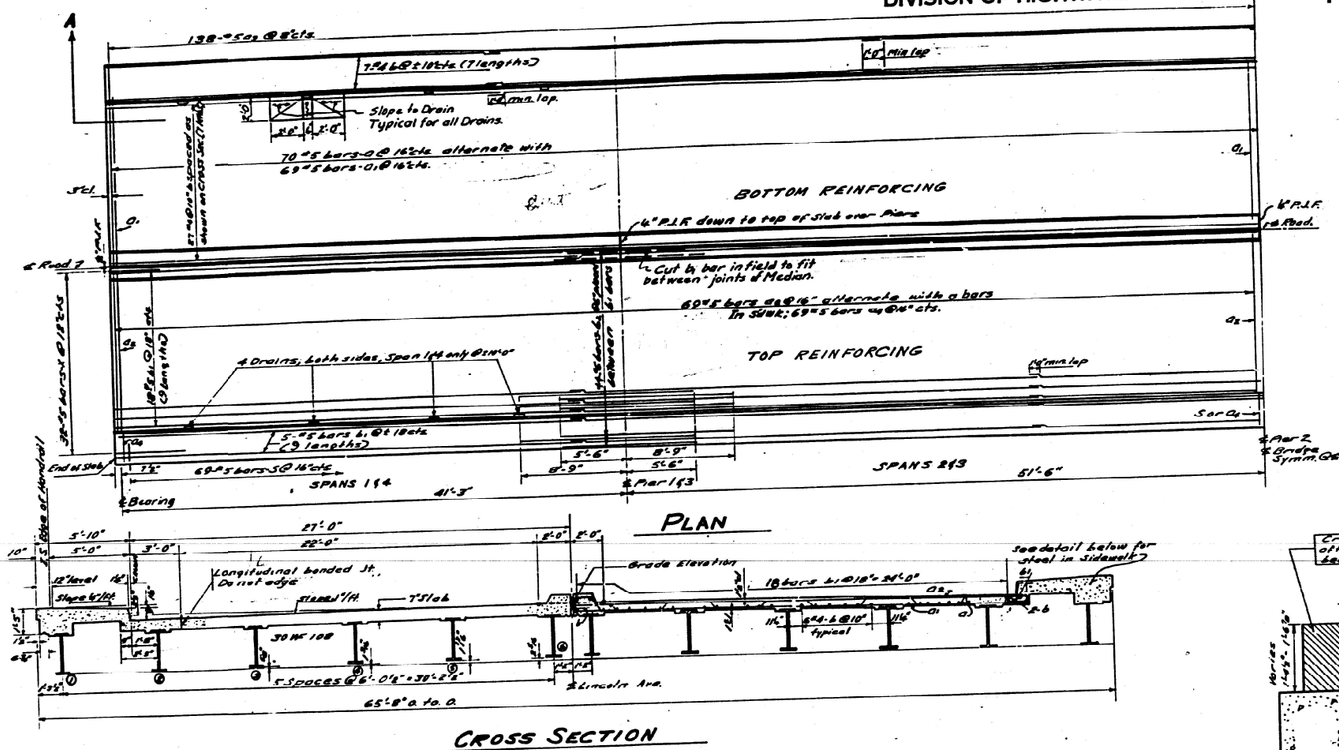
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	50
		CONTRACT NO. 70H59		
	ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

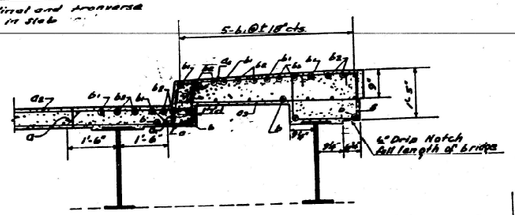
AS-BUILT PLANS FOR S.N. 010-0158
FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74 / F.A. 39	14-112-3 / 14-HF-3	Champaign	14 / 7	9 / 4
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

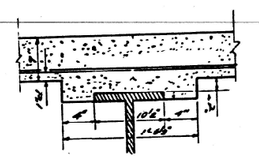
SHEET NO. 2
7 SHEETS



CROSS SECTION
Showing longitudinal and transverse steel only in Slab

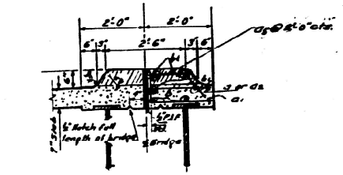


DETAIL OF SIDEWALK

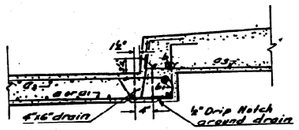


METHOD OF DETERMINING FILLET HEIGHTS - C"

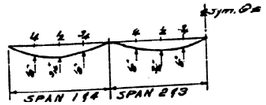
After all Structural Steel has been erected, elevations of the top flanges of the beams shall be taken at intervals not to exceed 10'-0. From these elevations subtract the increment of deflection for these points, determined from the D.L. deflection diagram. The elevations obtained as directed from this diagram, the elevations as attained subtracted from the theoretical grade elevations, minus floor thickness, equals the fillet heights above top of beam.



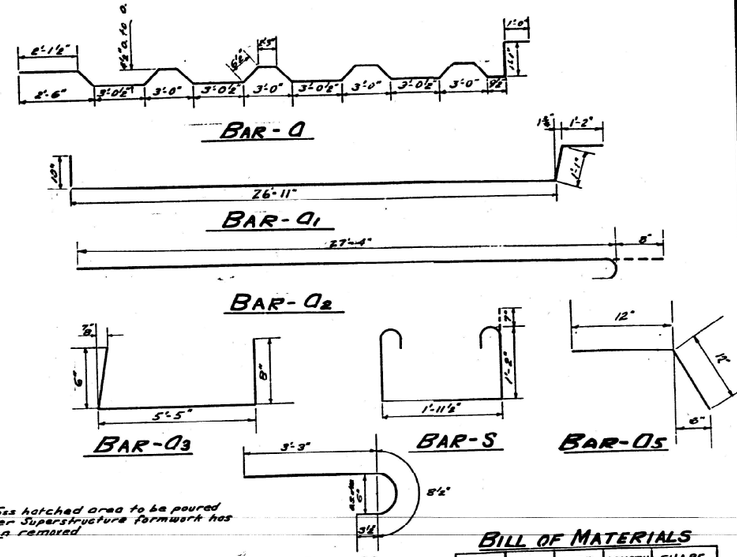
DETAIL OF MEDIAN STRIP
Type 4 Standard 2122

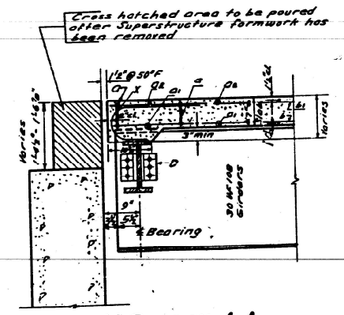


DETAIL OF DRAIN



D.L. DEFLECTION DIAGRAM





SECTION A-A
Showing Steel in Slab

BILL OF MATERIALS

BAR	No.	SIZE	LENGTH	SHAPE
Q	280	#5	31'-0"	
Q1	276	#5	30'-0"	
Q2	276	#5	28'-0"	
Q3	552	#5	6'-7"	
Q4	276	#5	5'-5"	
Q5	186	#5	8'-0"	
b	462	#6	28'-0"	
b1	450	#5	28'-0"	
b2	264	#6	14'-3"	
S	276	#5	5'-8"	
X	128	#5	4'-3"	
Class X Concrete			Cu Yds	321.0
Reinforcement Bars			Lbs	58,470
Structural Steel			Lbs	305,720

DESIGNED	V.R. Santi
CHECKED	M.G. Carrel
DRAWN	V.R. Santi / J. Sandoval
CHECKED	M.G. Peter

DEC. 5 1955

EXAMINED
PASSED
APPROVED

SUPERSTRUCTURE
GRADE SEPARATION
LINCOLN AVE. OVER F.A. 39
F.A. Rt. 39 SEC. 14-HB-F-3
CHAMPAIGN COUNTY
STATION 254+13

MODEL: Sheet 7 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 6.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/5/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #6 S.N. 010-0158

SCALE: | SHEET 7 OF 8 SHEETS | STA. | TO STA.

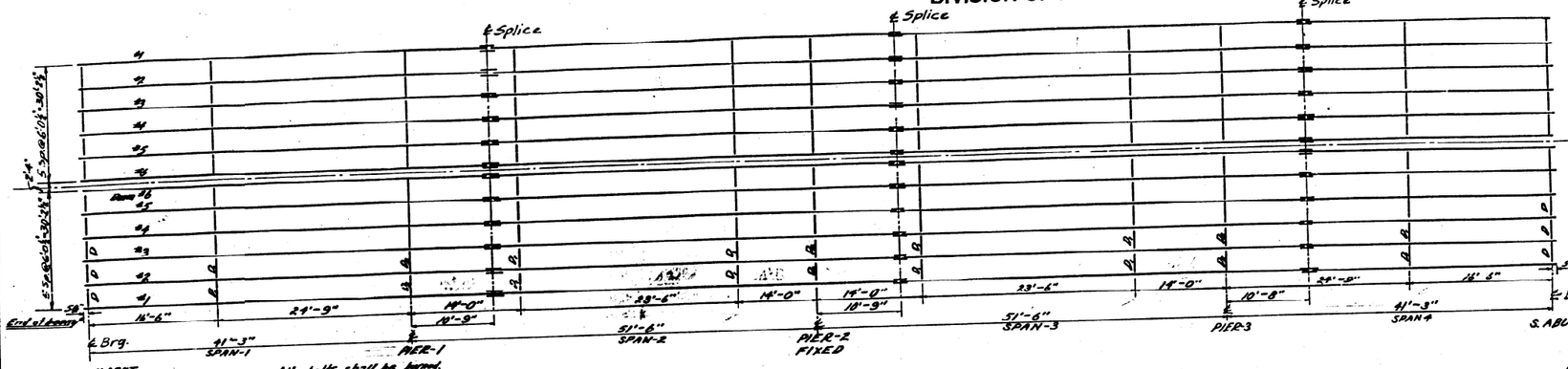
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	51
		CONTRACT NO. 70H59		
	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

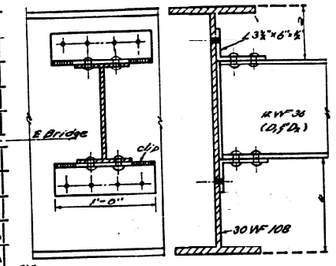
AS-BUILT PLANS FOR S.N. 010-0158
FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 39	14-NB-3 14-NF-3	Champaign	14 7	10 5
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 3
7 SHEETS



STRUCTURAL STEEL LAYOUT
All Girders 30" WF -108 #

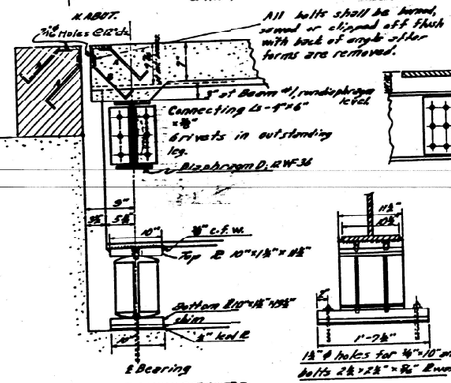


BEAM #	D. dist. "a"	D. dist. "b"
1	5⅛"	7⅛"
2	5⅛"	7⅛"
3	6⅛"	6⅛"
4	6⅞"	6⅛"
5	7⅝"	5⅛"
6	7⅛"	5⅛"

TYPICAL CONNECTION FOR DIAPHRAGMS D, $F D_2$

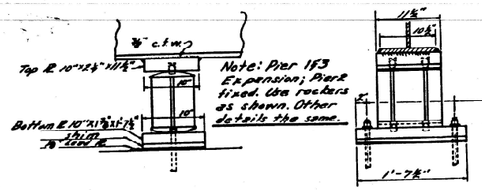
ELEVATION TOP OF BEAMS

Location	#6	#5	#4	#3	#2&1
℄ Brg. N. Abut.	258.394	258.50	258.73	258.90	258.35
Bent	258.68	258.68	258.59	258.54	258.49
Splice #1	258.72	258.68	258.63	258.58	258.53
Pier-2	258.75	258.71	258.66	258.61	258.56
Splice #2	258.76	258.72	258.67	258.62	258.57
Pier-3	258.689	258.644	258.594	258.544	258.494
Splice #3	258.67	258.63	258.58	258.53	258.48
℄ Brg. S. Abut.	258.54	258.50	258.45	258.40	258.35

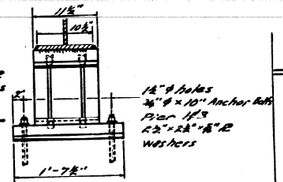


AT ABUTMENTS

1¾" ϕ holes for ¾"x10" anchor bolts 2½"x2½"x⅝" Washers

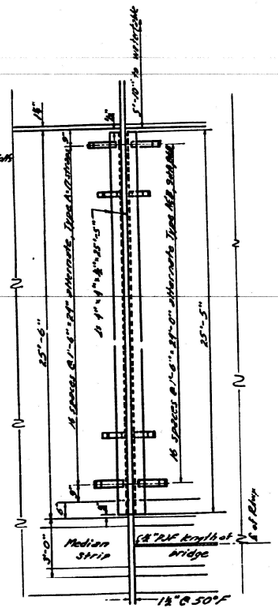


Note: Pier 1&3 Expansion; Pier 2 fixed. Use rockers as shown. Other details the same.

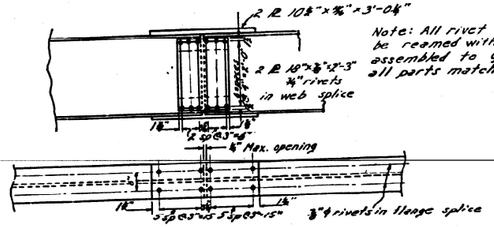


1¾" ϕ holes ⅜" ϕ x 10" Anchor Bolts Pier 1&3 2½"x2½"x⅝" ℝ washers

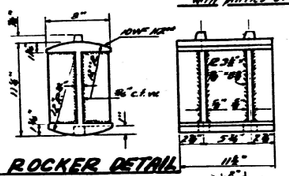
PIER 1&3



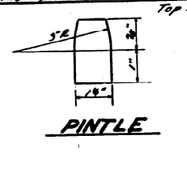
PLAN EXPANSION GUARD



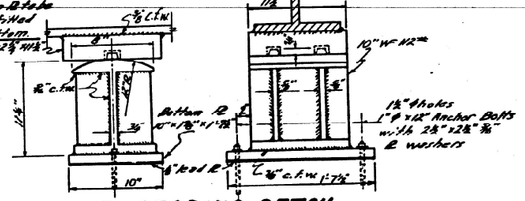
TYPICAL BEAM SPLICE



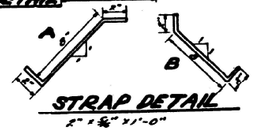
ROCKER DETAIL



PINTLE



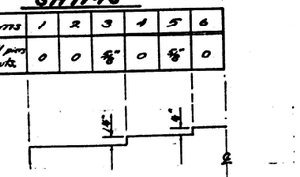
FIXED BEARING DETAIL @ PIER-2



STRAP DETAIL
2" = ⅝" x 1'-0"

SHIMS

Beams	1	2	3	4	5	6
At all pers and abuts.	0	0	⅝"	0	⅝"	0



DETAIL BRIDGE SEAT STEPS

STRUCTURAL STEEL GRADE SEPARATION LINCOLN AVE. OVER F.A. 39
F.A. RT. 39 SEC. 14-NB-F-3
CchampaIGN COUNTY
STA. 254+13

DESIGNED	V.K. Senti	
CHECKED	M.G. Carrel	
DRAWN	V.K. Senti	STULTS
CHECKED	M.G. Peter	

Dec. 5 1955

EXAMINED
PASSED
APPROVED

MODEL: Sheet 8 [Sheet]
FILE NAME: c:\pw_work\pwdot\steven.wood@illinois.gov\d1094040\D570H59-alt-Loc 6.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/5/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #6 S.N. 010-0158

SCALE: | SHEET 8 OF 8 SHEETS | STA. | TO STA.

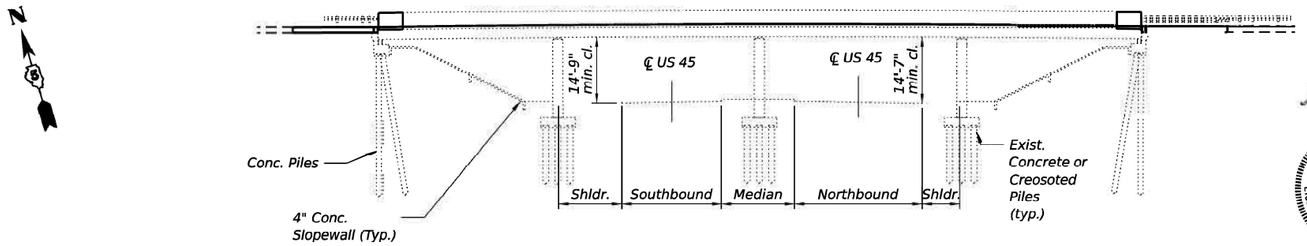
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	52
		CONTRACT NO. 70H59		
	ILLINOIS	FED. AID PROJECT		

B.M. #58 Chiseled in W. Abutment I320+60-40' Rt. Elev. = 743.81. The Benchmark is from the 1992 plans. Verify with the latest survey. Information in the plan, elevation and profile views are also from the 1992 plans.

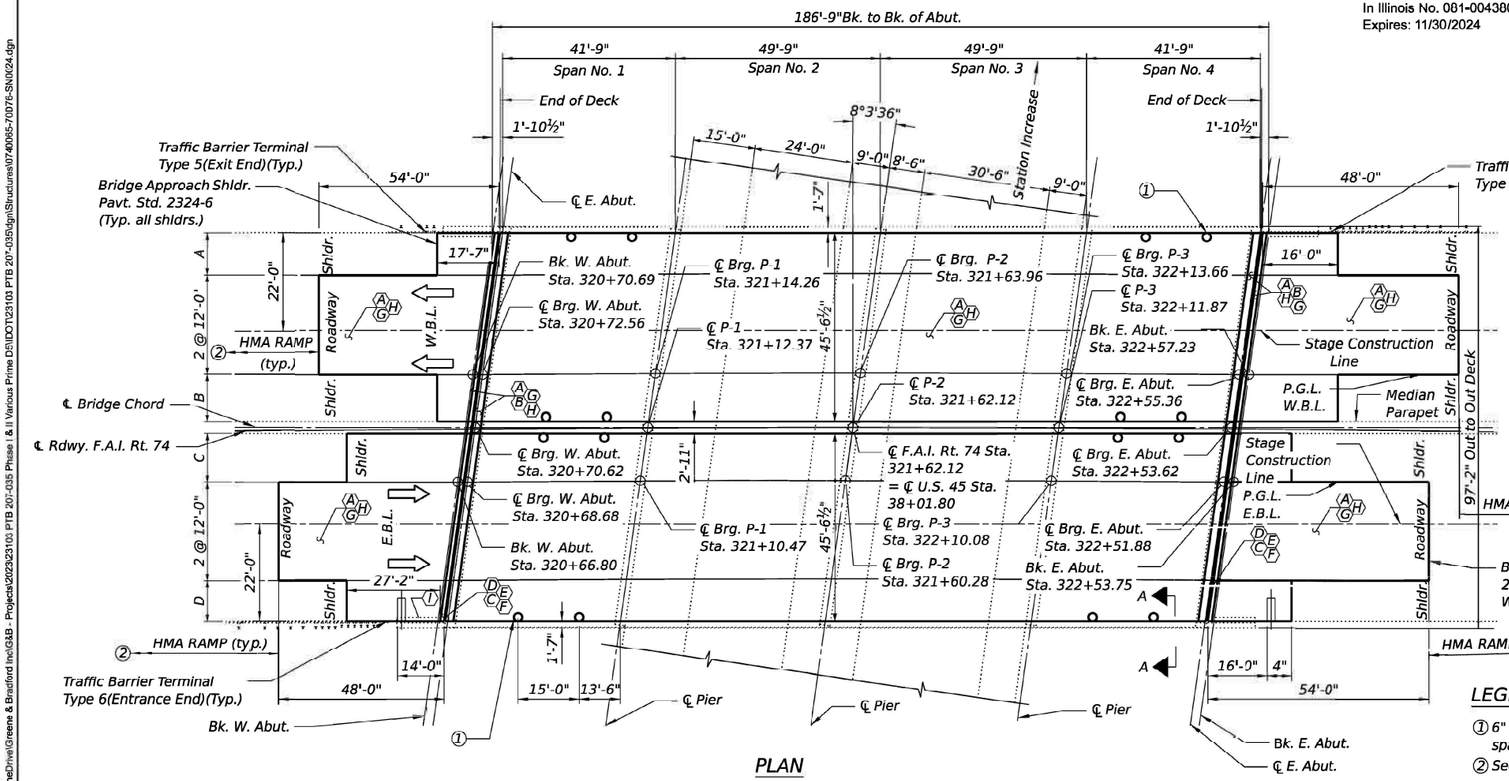
The bridge was originally built in 1956 under F.A. RT. 39, Section 14-HB-F-4 at Sta. 321 + 64.64 with four continuous spans, 41'-9", 49'-9", 49'-9", and 41'-9". The superstructure comprised 30" wide flange steel beams and a reinforced concrete deck. Originally, the bridge carried two 12-foot lanes in each direction separated by a four-foot wide median. In addition, there were acceleration and deceleration lanes on each side. The structure has pile-bent abutments and triple hammerhead piers with footings on piles. The abutments' back-to-back length of the bridge is 186'-9". Original out-out deck width was 88'-0". In 1992, major rehabilitation/reconstruction was carried out. All abutments, piers, and slopewalls were repaired or reconstructed. To provide 14.5 ft clearance for Rt. 45 traffic below, the concrete deck was removed and rebuilt at a higher level. The reconstructed deck provides two 12-ft lanes in each direction separated by a 26-ft wide paved median with a concrete barrier in the middle. Ten-foot-wide outer shoulders are also provided on the exterior sides. The total out-to-out deck was thus increased to 97'-2". There was no change in number of spans. In 1979, a waterproofing system and hma overlay was applied to the deck. In 2004, six beams damaged by impact were partially replaced. In 2012, three different impact-damaged beams were straightened.

Work shall be completed with stage construction.

AS–BUILT PLANS FOR S.N. 010–0024
FOR INFORMATION ONLY



ELEVATION
(LOOKING NORTH)



PLAN

INDEX OF SHEETS

Sheet No.	Description
1.	General Plan and Elevation
2.	General Data
3.	Deck Patching Sheet
4.	Structural Repair of Concrete
5-6.	Existing and Proposed Cross Sections
7-8.	Stage Construction Details
9.	Temporary Concrete Barrier
10.	Framing Plan
11.	Diapharm Details
12.	Beam Repair Details
13.	Abutment Bearing Replacement Details
14-15.	Abutment Joint Replacement Details
16.	Preformed Joint Strip Seal Details
17.	Bar Splicer Assembly and Mechanical Splicer Details

M. Choudhry

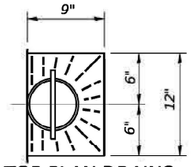
STATE OF ILLINOIS
MAHBOOB A CHOUDHRY
NUMBER 081-004380
LICENSED STRUCTURAL ENGINEER

Dated 09/11/2024

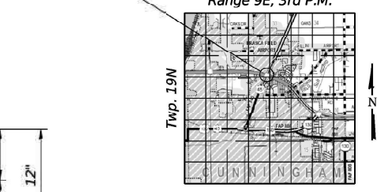
Mahboob A Choudhry
Licensed Structural Engineer
In Illinois No. 081-004380
Expires: 11/30/2024

SCOPE OF WORK:

- (A) Complete bridge scarification ¾".
- (B) Complete deck patching, removal of deck ends and hatch blocks.
- (C) Complete steel beam repairs and end diaphragm replacements.
- (D) Replace bearings at abutments.
- (E) Cast deck ends and hatch blocks.
- (F) Place preformed joint strip seal.
- (G) Place bridge deck latex concrete overlay 2½".
- (H) Complete diamond grinding and bridge deck grooving.
- (I) Stone Riprap, Class A3 and Filter Fabric: Southwest Abutment Corner at top of slopewall near weep hole drain.



TOP PLAN DRAINS
(Detail 1)



LOCATION SKETCH

TABLE OF DIMENSIONS

	A	B	C	D
Bk. OF W.A.	10'-2½"	11'-4¼"	11'-8¾"	9'-9¾"
℄ P-2	9'-9¾"	11'-8¾"	11'-4¼"	10'-2¼"
Bk. OF E.A.	10'-2½"	11'-4¼"	11'-8¾"	9'-9¾"

LEGEND

① 6" ∅ Floor Drains (Typ. at each parapet, spans 1 and 4 only, See Detail 1)
② See Roadway drawings for HMA Ramp Details

GENERAL PLAN & ELEVATION
F.A.I. RTE. 74 OVER U.S. RTE. 45
SECTION (14HB)BR
STA. 321+62.12
S.N. 010-0024

MODEL: 001-GPE
FILE NAME: C:\OneDrive\Greene & Bradford Inc\G&B - Projects\2023\23103 PTB 207-035 Phase I & II Various Prime D5\IDOT\23103 PTB 207-035\dgn\Structures\0740065-70076-SN0024.dgn

GREENE & BRADFORD, INC. OF SPRINGFIELD	USER NAME = BenjaminBell	DESIGNED - MAC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
CONSULTING ENGINEERS 3801 CONSTITUTION DRIVE SPRINGFIELD, ILLINOIS 62711 PROFESSIONAL DESIGN FIRM NO. 184.001179 (217) 793-4044, 793-8317 (F)		CHECKED - KAS	REVISED -	
	PLOT SCALE =	DRAWN - SKC	REVISED -	
9/11/2024 9:02:49 AM	PLOT DATE = 9/11/2024	CHECKED - KAS	REVISED -	

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 010-0024
SHEET 1 OF 17 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14HB)BR, (14B) BR-1	CHAMPAIGN	90	68
		CONTRACT NO. 70D76		
	ILLINOIS FED. AID PROJECT			

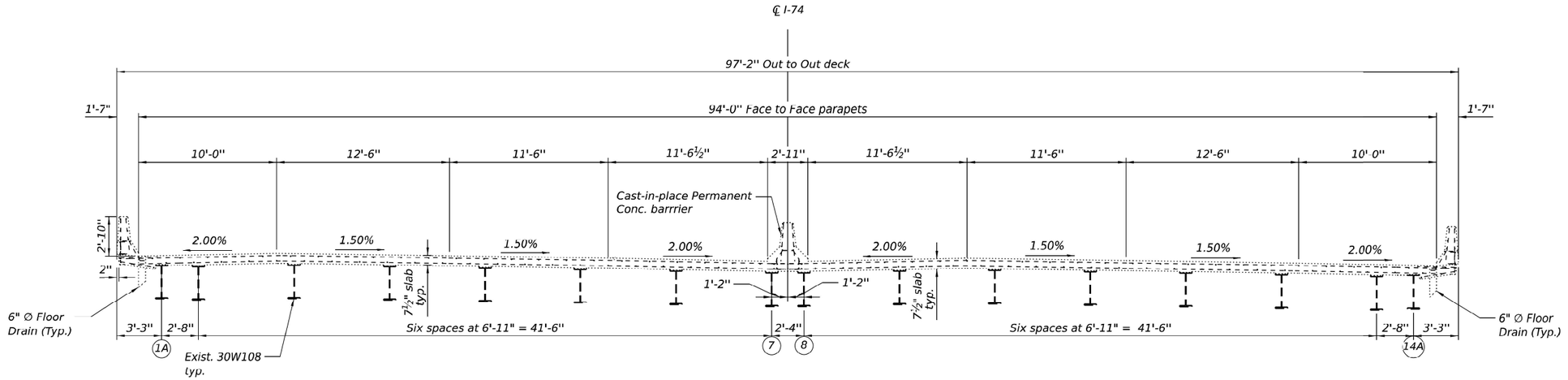
MODEL: Sheet 1 [Sheet]
FILE NAME: c:\pw_work\pwlot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 7.dgn

	USER NAME = Steven.Wood	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN -	REVISED -	
		CHECKED -	REVISED -	
	PLOT DATE = 6/5/2025	DATE -	REVISED -	

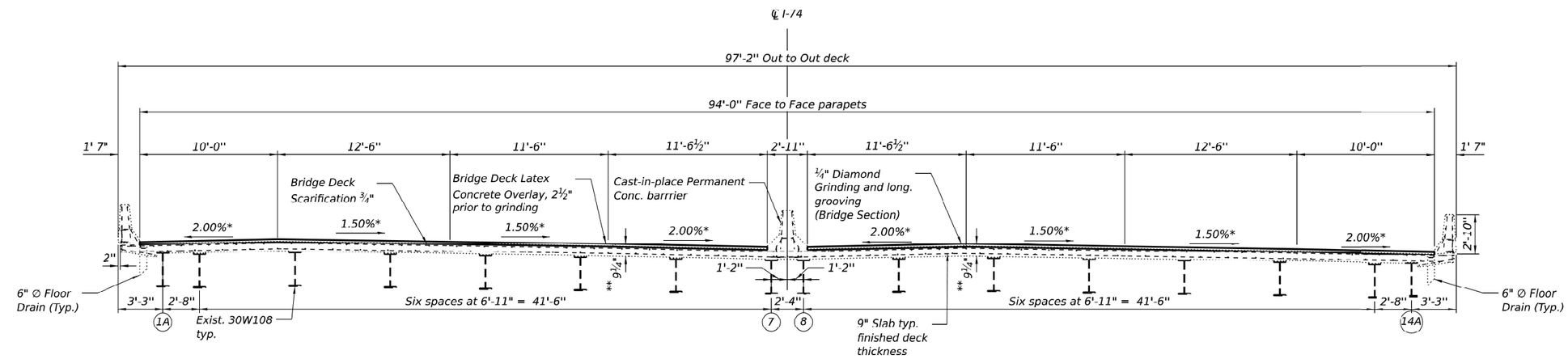
AS-BUILT PLANS
LOCATION #7 S.N. 010-0024
SCALE: SHEET 1 OF 11 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	53
		CONTRACT NO. 70H59		
	ILLINOIS FED. AID PROJECT			

AS–BUILT PLANS FOR S.N. 010–0024
FOR INFORMATION ONLY



EXISTING DECK CROSS SECTION
(Looking East)



PROPOSED DECK CROSS SECTION
(Looking East)

** Prior to grinding
* Match Existing

003-Cross_Sections
FILE NAME: C:\OneDrive\Greene & Bradford Inc\G&B - Projects\2023\23103 PTB 207-035 Phase I & II Various Prime D5\IDOT\23103 PTB 207-035\dgn\Structures\0740065-70D76-SN0024.dgn

GREENE & BRADFORD, INC. OF SPRINGFIELD	USER NAME = SauravKC	DESIGNED - MAC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING AND PROPOSED DECK CROSS SECTIONS STRUCTURE NO. 010-0024
		CHECKED - KAS	REVISED -		
	PLOT SCALE =	DRAWN - SKC	REVISED -		
	PLOT DATE = 10/2/2024	CHECKED - KAS	REVISED -		SHEET 5 OF 17 SHEETS

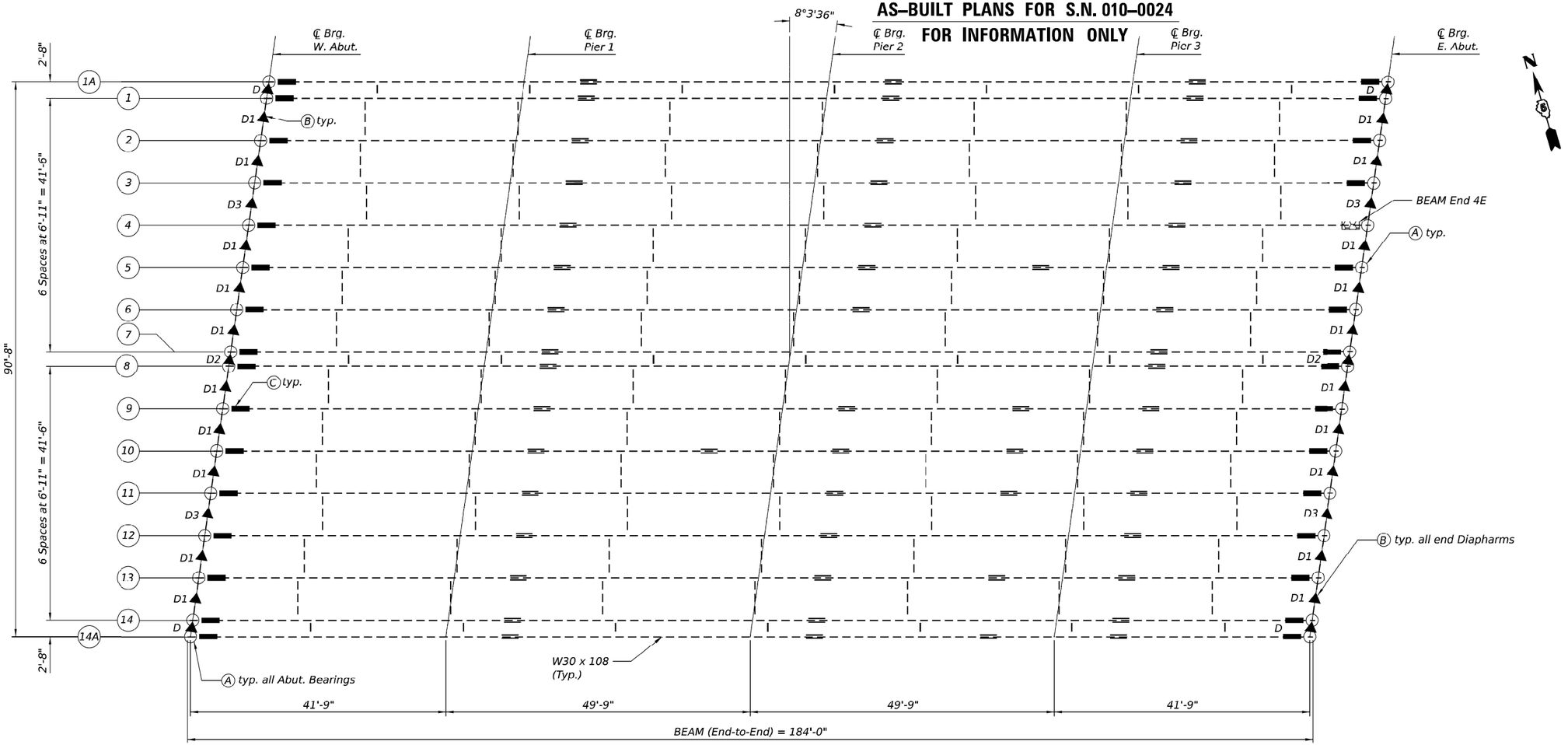
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14HB) BR, (14B) HB-1	CHAMPAIGN	90	72
		CONTRACT NO. 70D76		
		ILLINOIS FED. AID PROJECT		

MODEL: Sheet 2 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 7.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	AS-BUILT PLANS LOCATION #7 S.N. 010-0024	
	DRAWN -	REVISED -			
	CHECKED -	REVISED -			
PLOT DATE = 6/5/2025	DATE -	REVISED -		SCALE: SHEET 2 OF 11 SHEETS STA. TO STA.	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	54
		CONTRACT NO. 70H59		
		ILLINOIS FED. AID PROJECT		

AS–BUILT PLANS FOR S.N. 010–0024
FOR INFORMATION ONLY



FRAMING PLAN

Notes:

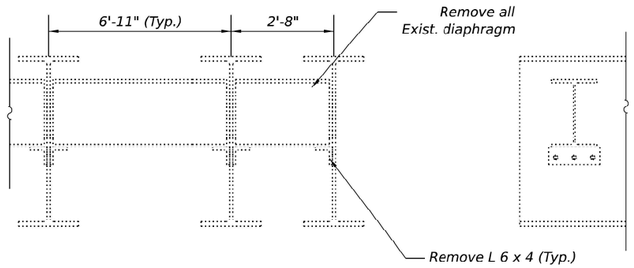
All new diaphragms shall be W 12 x 40.

Upon completion of the beam repairs and placement of new Concrete Superstructure, the Engineer in the field shall check to see that the top flange is tight against the existing portion of the slab. If not, the Contractor shall inject epoxy between the existing concrete deck and the top flange of the beam. See Special Provision "Epoxy Injection". Locations shown in the plan are estimates. Actual locations and extent of repair shall be determined by the Engineer and shall be documented on As-Buil plans.

See Sheet 11 of 17 for diaphragm Details.

See Sheet 12 of 17 for Beam Repair Details.

Remove conduit and junction box attached to the facia beam and abutment in the SE quadrant. Cost included with Structural Steel Repair



EXISTING DIAPHRAGM REMOVAL (Typ.)

KEY

- ○ (A) Remove and replace all Abutment Bearings - See Sheet 13 of 17
- ▲ (B) Remove and replace all End Diaphragms - See Sheet 11 of 17
- ▬ (C) Repair Beam End (Typ. U.N.O.) - See Sheet 12 of 17
- ▩ (D) Repair Beam End 4E - See Sheet 12 of 17

Notes:
The Contractor shall obtain dimensions for the existing diaphragms and connection angles for use in the fabrication of the proposed replacement diaphragms, except as must be adjusted for new beam web repair plates.

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Removal	Pounds	17100
Furnishing and Erecting Structural Steel	Pounds	27000

MODEL: 008-Framing_Plan
FILE NAME: C:\OneDrive\Greene & Bradford Inc\G&B - Projects\2023\23103 PTB 207-035 Phase I & II Various Prime D5\IDOT\23103 PTB 207-035\dgn\Structures\0740065-70D76-SN0024.cgn
9/8/2024 2:11:36 PM

GREENE & BRADFORD, INC. OF SPRINGFIELD
CONSULTING ENGINEERS
3501 CONSTITUTION DRIVE
SPRINGFIELD, ILLINOIS 62711
PROFESSIONAL DESIGN FIRM NO. 184-001179
PROFESSIONAL LAND SURVEYING FIRM NO. 184-001194
(217) 789-9444, 789-9237 (F)

USER NAME = SauravKC	DESIGNED - MAC	REVISED -	
	CHECKED - KAS	REVISED -	
PLOT SCALE =	DRAWN - SKC	REVISED -	
PLOT DATE = 9/8/2024	CHECKED - KAS	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN
SN 010-0024
SHEET 10 OF 17 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14HB) BR, (14B) BR-1	CHAMPAIGN	90	77
		CONTRACT NO. 70D76		
		ILLINOIS	FED. AID PROJECT	

MODEL: Sheet 3 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 7.dgn

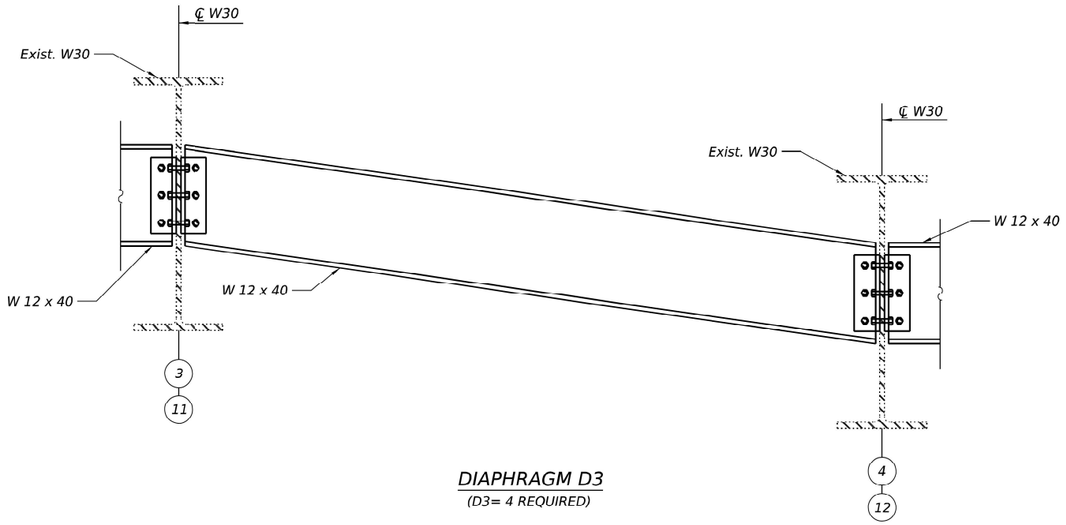
USER NAME = Steven.Wood	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 6/5/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

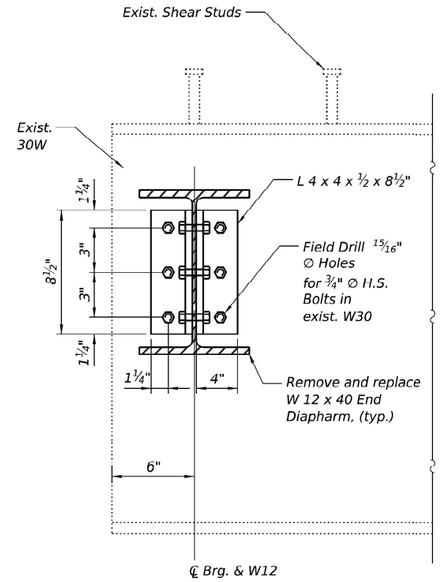
AS-BUILT PLANS
LOCATION #7 S.N. 010-0024
SCALE: SHEET 3 OF 11 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	55
		CONTRACT NO. 70H59		
		ILLINOIS	FED. AID PROJECT	

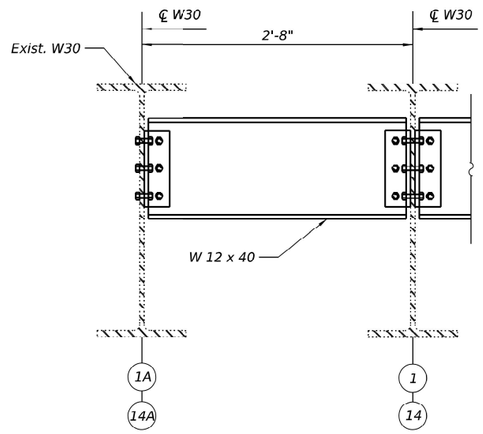
AS–BUILT PLANS FOR S.N. 010–0024
FOR INFORMATION ONLY



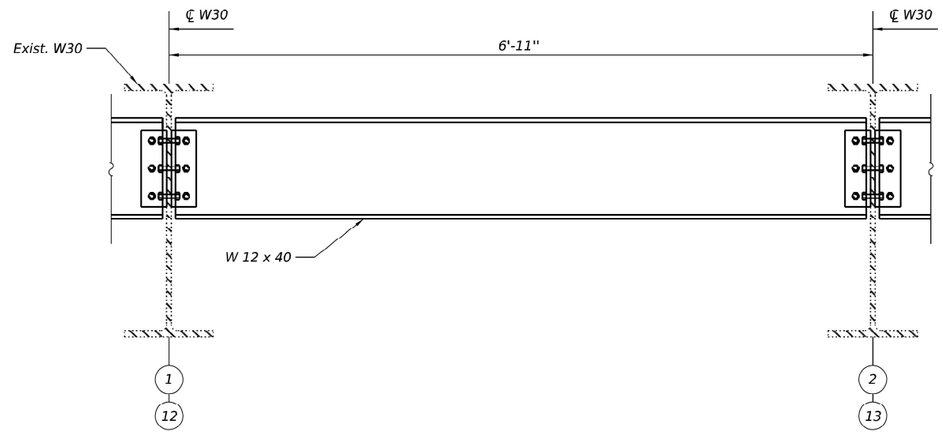
DIAPHRAGM D3
(D3= 4 REQUIRED)



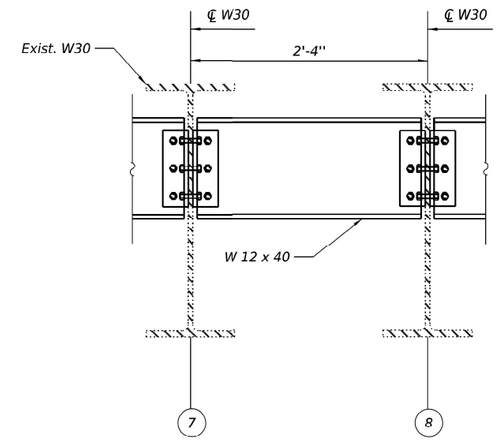
TYP. DOUBLE ANGLE CONNECTION



DIAPHRAGM D
(D = 4 REQUIRED)



DIAPHRAGM D1
(D1 = 20 REQUIRED)



DIAPHRAGM D2
(D2 = 2 REQUIRED)

MODEL: 009-Structural Steel Details
FILE NAME: C:\OneDrive\Greene & Bradford Inc\G&B - Projects\2023\23103 PTB 207-035 Phase I & II Various Prime D5\DCT\23103 PTB 207-035\dgn\Structures\0740065-70D76-SN0024.dgn

GREENE & BRADFORD, INC. OF SPRINGFIELD	USER NAME = SauravKC	DESIGNED - MAC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DIAPHRAGM DETAILS STRUCTURE NO. 010-0024
		CHECKED - KAS	REVISED -		
	PLOT SCALE =	DRAWN - SKC	REVISED -		
	PLOT DATE = 9/8/2024	CHECKED - KAS	REVISED -		SHEET 11 OF 17 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14HB) BR, (14B) BR-1	CHAMPAIGN	90	78
		CONTRACT NO. 70D76		
		ILLINOIS	FED. AID PROJECT	

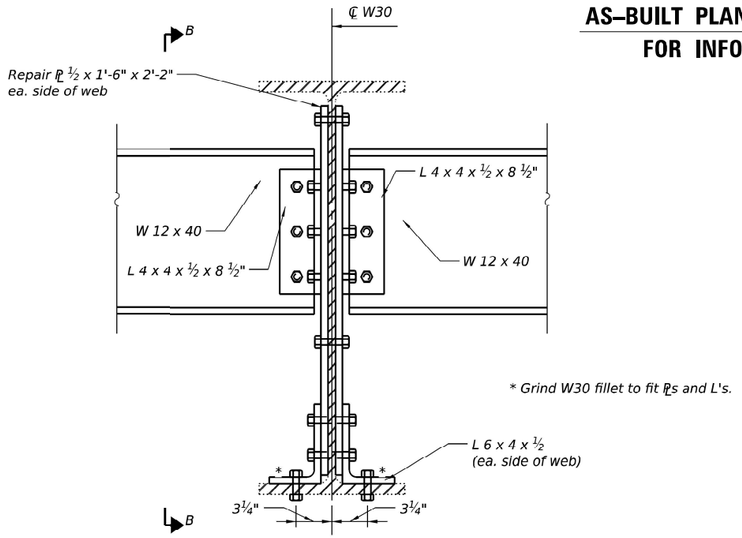
9/8/2024 2:11:37 PM

MODEL: Sheet 4 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 7.dgn

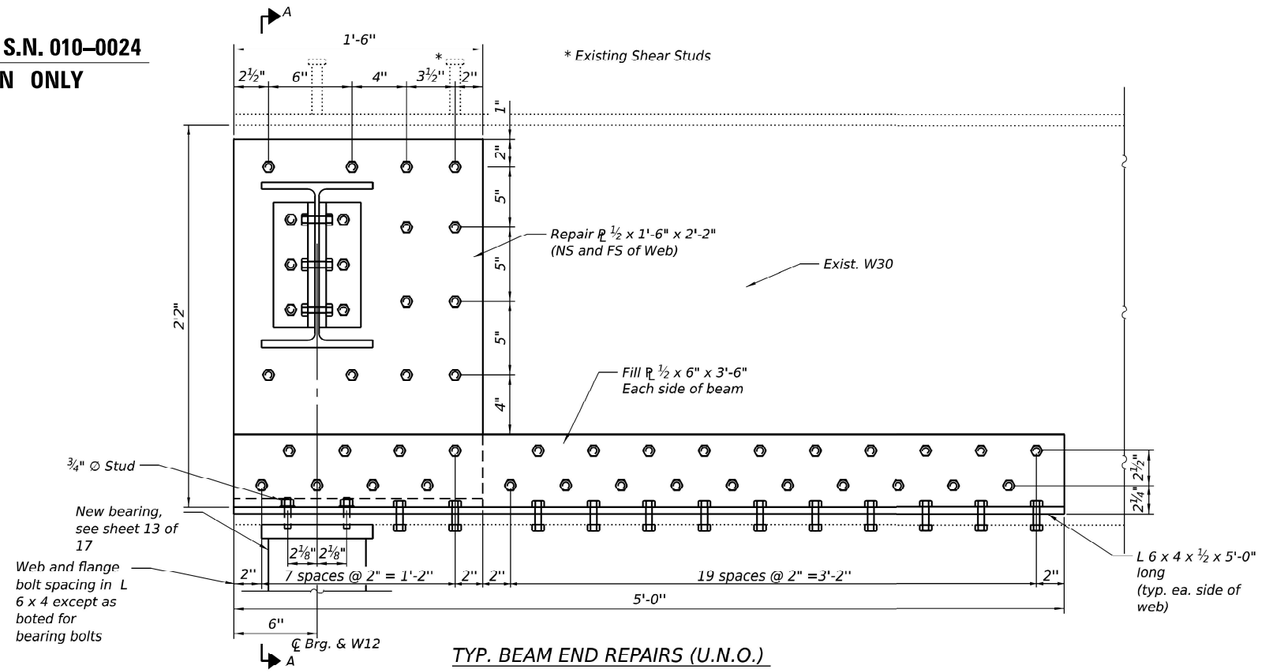
USER NAME = Steven.Wood	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	AS-BUILT PLANS LOCATION #7 S.N. 010-0024	
	DRAWN -	REVISED -			
	CHECKED -	REVISED -			
PLOT DATE = 6/5/2025	DATE -	REVISED -		SCALE:	SHEET 4 OF 11 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	56
		CONTRACT NO. 70H59		
		ILLINOIS	FED. AID PROJECT	

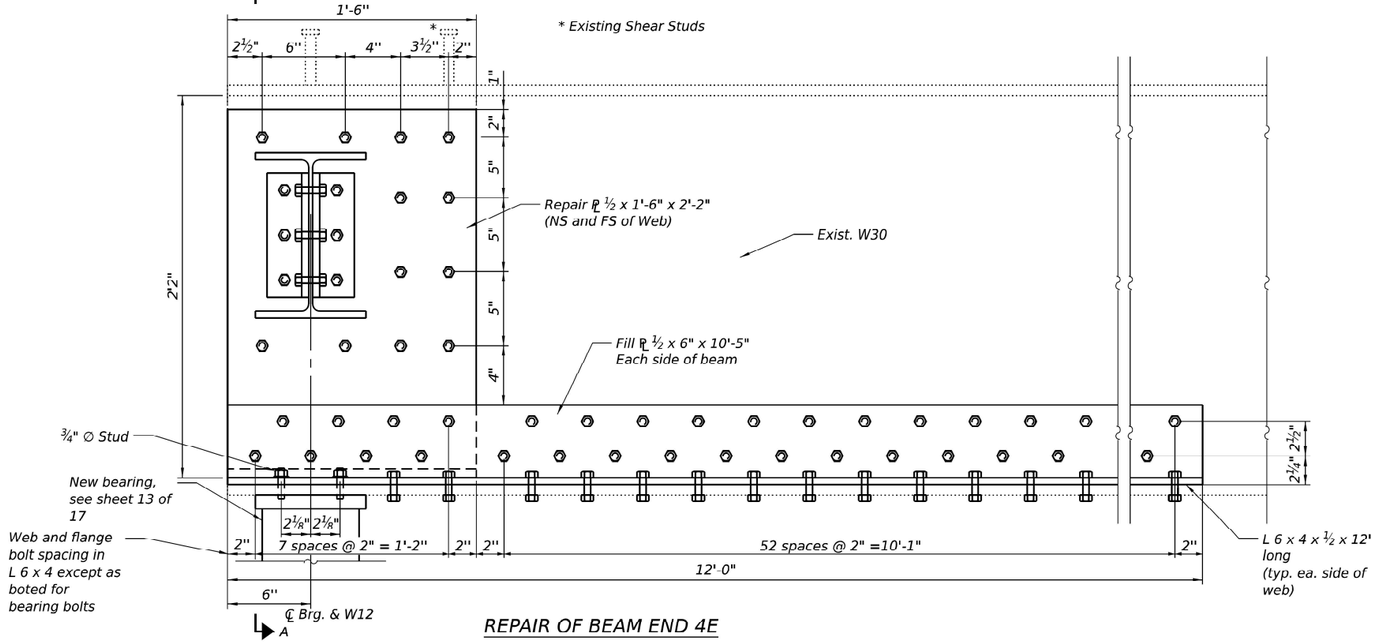
AS–BUILT PLANS FOR S.N. 010–0024
FOR INFORMATION ONLY



SECTION A-A



TYP. BEAM END REPAIRS (U.N.O.)



REPAIR OF BEAM END 4E

MODEL: 010-Diaphram replacement and beam end repair
FILE NAME: C:\OneDrive\Greene & Bradford Inc\G&B - Projects\2023\23103 PTB 207-035 Phase I & II Various Prime D5\IDOT\23103 PTB 207-035\dgn\Structures\0740065-70D76-SN0024.cgn

9/8/2024 2:11:37 PM

GREENE & BRADFORD, INC. OF SPRINGFIELD	USER NAME = SauravKC	DESIGNED - MAC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BEAM REPAIR DETAILS STRUCTURE NO. 010-0024
		CHECKED - KAS	REVISED -		
	PLOT SCALE =	DRAWN - SKC	REVISED -		
	PLOT DATE = 9/8/2024	CHECKED - KAS	REVISED -		SHEET 12 OF 17 SHEETS

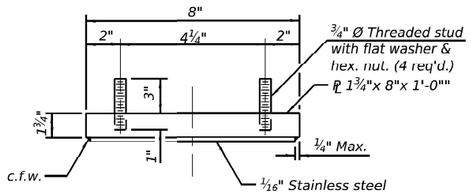
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14HB) BR, (14B) BR-1	CHAMPAIGN	90	79
		CONTRACT NO. 70D76		
		ILLINOIS FED. AID PROJECT		

MODEL: Sheet 5 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 7.dgn

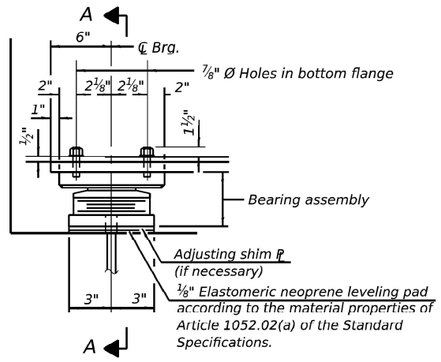
USER NAME = Steven.Wood	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	AS-BUILT PLANS LOCATION #7 S.N. 010-0024	
	DRAWN -	REVISED -			
	CHECKED -	REVISED -			
PLOT DATE = 6/5/2025	DATE -	REVISED -		SCALE: SHEET 5 OF 11 SHEETS STA. TO STA.	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	57
		CONTRACT NO. 70H59		
		ILLINOIS FED. AID PROJECT		

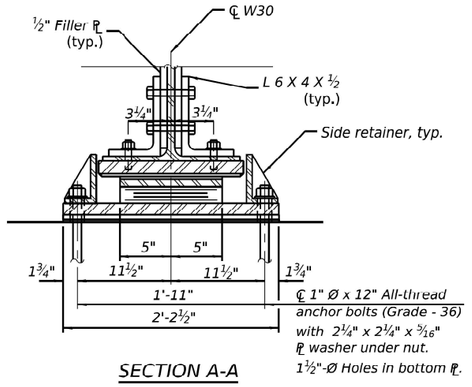
AS–BUILT PLANS FOR S.N. 010–0024
FOR INFORMATION ONLY



TOP BEARING ASSEMBLY



ELEVATION AT ABUT.



SECTION A-A

REACTION TABLE - EXISTING INTERIOR BEAM

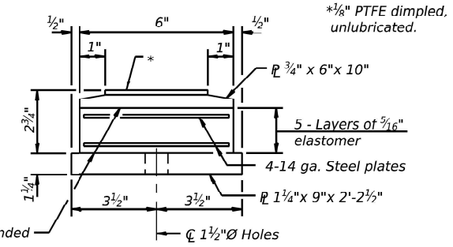
		W. Abut. or E. Abut.	Pier 1 or Pier 3	Pier 2
R_{DL}	(K)	16.40	52.95	51.28
R_{LL}	(K)	38.20	46.33	46.35
IMP.	(K)	11.20	13.57	13.25
R_{TOTAL}	(K)	65.80	112.85	110.88

REACTION TABLE - NEW BEAM 1A - 14A

		W. Abut. or E. Abut.	Pier 1 or Pier 3	Pier 2
R_{DL}	(K)	18.93	61.11	59.18
R_{LL}	(K)	33.18	41.30	41.29
IMP.	(K)	9.72	12.10	11.81
R_{TOTAL}	(K)	61.83	114.51	112.28

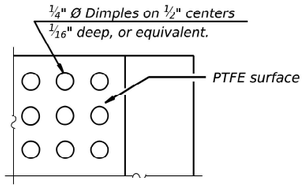
Reaction Tables taken from 1989 drawing set Sheet 10 of 25
Design Specification: AASTHO 1983 Standard Specification for Highway Bridges,1984 thru 1988 Interims

TYPE II ELASTOMERIC EXP. BRG.

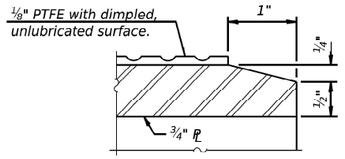


*⅛" PTFE dimpled, unlubricated.

BOTTOM BEARING ASSEMBLY

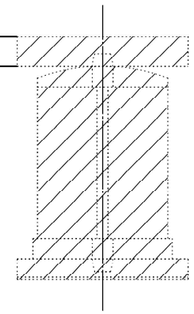


PLAN-PTFE SURFACE



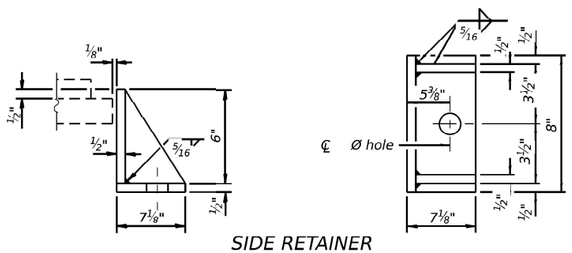
SECTION THRU PTFE

Existing ℄ to be removed using the air-arc method and grind smooth all weld material remaining on the bottom flange



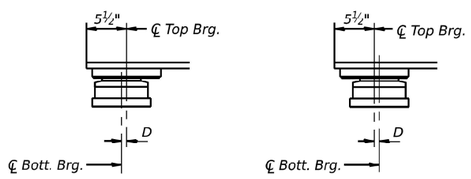
EXISTING BEARING REMOVAL DETAILS

Cost included with Jack and Remove Existing Bearings



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



BELOW 50°F. ABOVE 50°F.

D=⅛" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

EXPANSION BEARING ORIENTATION

The above diagrams are for informational purposes only to show the amount of expected offset "D" for the current temperature in the field.

Notes:

Side retainers and leveling pad required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.

The ⅛" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of ⅛" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

Anchor bolts and side retainers at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.

Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Adjustment must account for deck heave due to pack rust (if present).

Min. Jack capacity = 26 Tons Min.

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s)

All new steel extensions, bearing plates (Type I only), side retainers, anchor bolts, nuts, and washers shall be hot-dipped galvanized. See Special Provisions for "Hot Dip Galvanizing for Structural Steel". Mask surface of plate to be bonded to elastomer and paint masked surface.

Two ⅛" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type II	Each	32
Anchor Bolts 1"	Each	64
Jack and Remove Existing Bearings	Each	32

I-2E-2 5/15/2023

GREENE & BRADFORD, INC. OF SPRINGFIELD	USER NAME = SauravKC	DESIGNED - MAC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		CHECKED - KAS	REVISED -	
	PLOT SCALE =	DRAWN - SKC	REVISED -	
	PLOT DATE = 9/8/2024	CHECKED - KAS	REVISED -	

ABUTMENT BEARING REPLACEMENT DETAIL
STRUCTURE NO. 010-0024
SHEET 13 OF 17 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14HB) BR, (14B) BR-1	CHAMPAIGN	90	80
		CONTRACT NO. 70D76		
		ILLINOIS	FED. AID PROJECT	

	USER NAME = Steven.Wood	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN -	REVISED -	
		CHECKED -	REVISED -	
	PLOT DATE = 6/5/2025	DATE -	REVISED -	

AS-BUILT PLANS
LOCATION #7 S.N. 010-0024
SCALE: SHEET 6 OF 11 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	58
		CONTRACT NO. 70H59		
		ILLINOIS	FED. AID PROJECT	

MODEL: Sheet 6 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 7.dgn

FILE NAME: C:\Civil\Civil\Greene & Bradford Inc\GB3 - Projects\2022\123103 PTB 207-035 Phase I & II Various Prime DSI\IDOT\23\03 PTB 207-035\dgn\Structures\07400605-70D76-SN0024.cgn
011-Abutment Bearing

B.M. # 58 Chiseled in W. Abutment
1320+60 - 40' Rt.
Elev. = 743.81

AS-BUILT PLANS FOR S.N. 010-0024
FOR INFORMATION ONLY

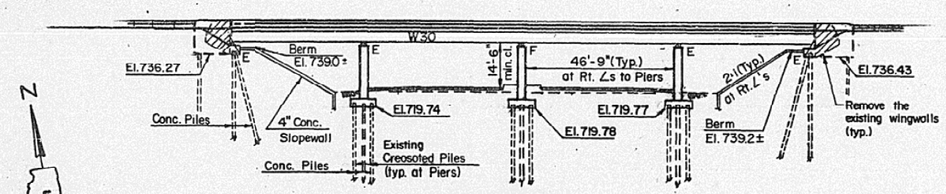
Exist. Structure: Structure No. 010-0024 built as Sec. 14-HB-4 in 1956 at Sta. 321+64.64. Four continuous spans, 41'-9"; 49'-9"; 49'-9"; 41'-9", with wide flange steel beams, reinforced concrete deck and bituminous overlay which was added in 1979. Structure has pile bent abutments and triple hammerhead piers with footings on piles. Length bk. to bk. abuts. = 186'-9". Width o. to o. = 88'-0". The existing deck and wingwalls shall be removed. The rest of the existing superstructure and the existing substructure shall remain in place and be incorporated into new construction.

The superstructure shall be raised by 5"± to provide 14'-6" minimum vertical clearance and widened to provide 45'-8½" horizontal clearance.

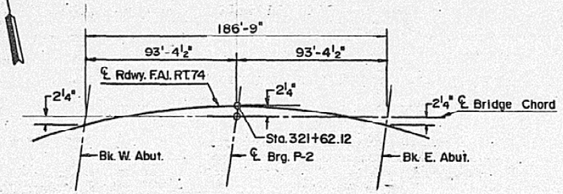
Traffic shall be maintained using stage construction.

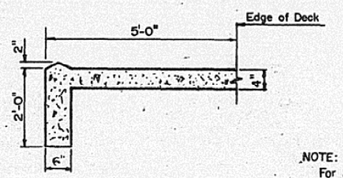
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. RT. 74	(14HB-4) BRK	CHAMPAIGN	200	#9
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO. 1 of SHEETS 25



ELEVATION

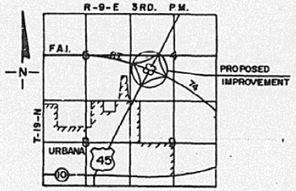




LAYOUT PLAN

SECTION A-A
(through slopewall)

NOTE:
For Slopwall Elevation and Details See Sheet No. 2.



LOCATION MAP

TOTAL BILL OF MATERIAL

	ITEMS	UNIT	SUPER	SUB	TOTAL
*	Concrete Removal	C. Y.	-	34.8	34.8
*	Removal of Existing Concrete Deck	Each	1	-	1
	Expansion Bolts 3/4 Inch Φ	Each	-	1096	1096
*	Structure Excavation	C. Y.	-	335.0	335.0
	Floor Drains	Each	16	-	16
	Preformed Joint Seal, 4 Inch	L. F.	198	-	198
	Class X Concrete, Superstructure	C. Y.	572.4	-	572.4
	Protective Coat **	S. Y.	2,170	-	2,170
	Elastomeric Bearing Assembly, Type I	Each	-	32	32
	Elastomeric Bearing Assembly, Type II	Each	-	32	32
	Class X Concrete	C. Y.	-	192.2	192.2
*	Furnishing and Erecting Structural Steel	L. S.	1	-	1
	Cleaning and Painting Steel Bridge	L. S.	1	-	1
*	Protective Shield	S. Y.	1,745	-	1,745
	Reinforcement Bars	Lbs	-	14,980	14,980
	Reinforcement Bars, Epoxy Coated	Lbs.	141,710	4,790	146,500
	Furnishing Concrete Piles	L. F.	-	876	876
	Driving Concrete Piles	L. F.	-	876	876
	Test Pile Concrete	Each	-	2	2
	Name Plates	Each	1	-	1
***	Bridge Seat Sealer	L. S.	-	1	1
	Jacking Existing Superstructure	L. S.	1	-	1
*	Removal of Existing Bearings	Each	-	70	70
*	Slope Wall, 4 inch	S. Y.	-	100	100
	Stud Shear Connectors	Each	8,448	-	8,448
*	Temporary Sheet Piling	S. F.	-	2,908	2,908

** Quantity includes bridge deck surface.

TABLE OF DIMENSIONS

	A	B	C	D
Bk. of W.A.	10'-2⅛"	11'-4¼"	11'-8¾"	9'-9¾"
℄ P-2	9'-9¾"	11'-8¾"	11'-4¼"	10'-2⅛"
Bk. of E.A.	10'-2⅛"	11'-4¼"	11'-8¾"	9'-9¾"

* See Special Provisions.

*** Applied to seat area of abutments. Est. Quantity 550 sq. ft.

DESIGN CRITERIA (NEW CONSTRUCTION)

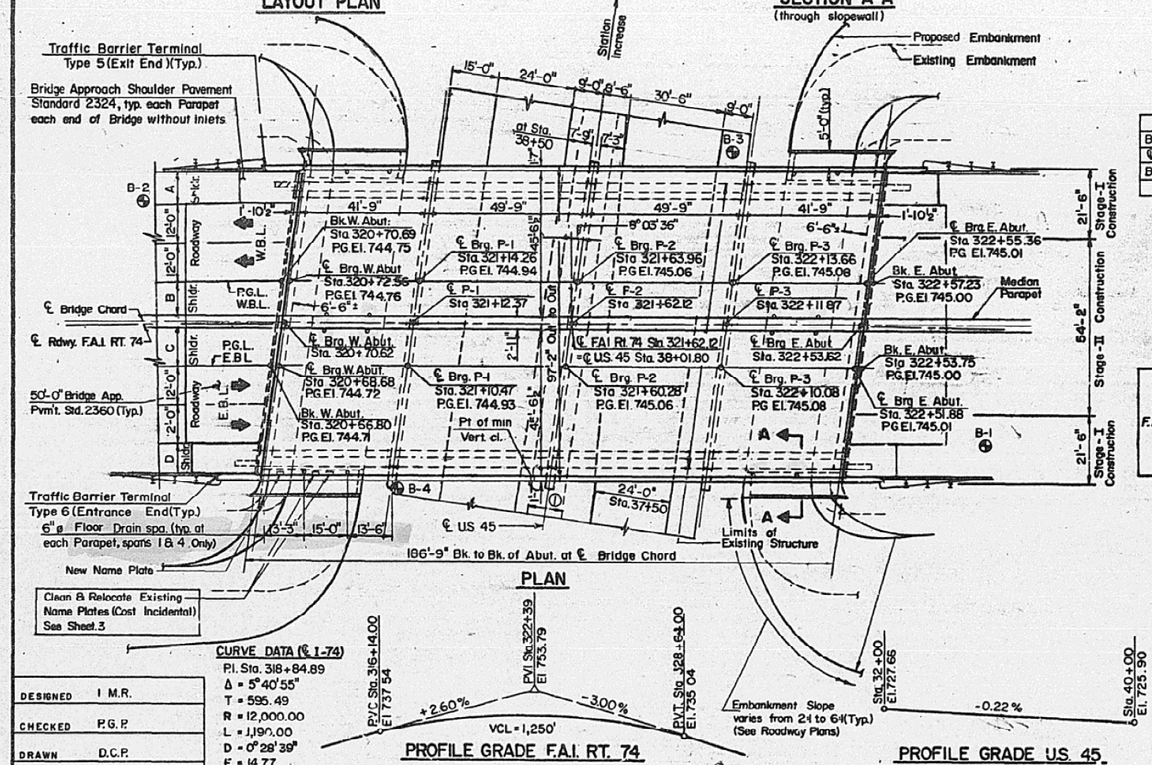
DESIGN SPECIFICATION:
A.A.S.H.T.O. 1983 Standard Specifications for Highway Bridges, 1984 thru 1988 Interims
AASHTO 1983 Seismic Design Guide Lines

LOADING:
Live Load - HS 20-44 & Alternate.
Allo. 25 p.s.f. for future surface.

DESIGN STRESSES:
Concrete
f'c = 3500psi - Superstructure
fc = 1400psi - Substructure (without earth pressure)

REINFORCING STEEL
fy = 60,000psi - Grade 60

STRUCTURAL STEEL
fs = 20,000psi (New)
fs = 18,000 psi (Existing Steel)



CURVE DATA (℄ I-74)
PI. Sta. 318+84.89
Δ = 5° 40' 55"
T = 595.49
R = 12,000.00
L = 1,190.00
D = 0° 28' 39"
E = 14.77
S.E. = 0.0156 Ft./Ft.

DESIGNED	I. M. R.
CHECKED	P. G. P.
DRAWN	D. C. P.
CHECKED	P. G. P.

STATION 321+62.12
REBUILT 198_ BY
STATE OF ILLINOIS
F.A.I. RT. 74 SEC. (14 HB-4) BRK
F.A. PROJ. FIR-74-6(131)184
LOADING HS20 & ALT.
STR. NO. 010-0024

NAME PLATE
(SEE STANDARD 2113)

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson
Engineer of Bridges and Structures

LEGEND:
Soil Borings Location

① Exist 11'-0" raised median to remain in place. Var width Prop. median to be established using pav't. markings.

REVISIONS	
NAME	DATE

P.G. ENGINEERING ASSOCIATES, INC.
600 WEST JACKSON BLVD.
CHICAGO ILLINOIS, 60606

GENERAL PLAN & ELEVATION

F.A.I. RT. 74 OVER U.S. 45
SECTION (14 HB-4) BRK
CHAMPAIGN COUNTY
STA. 321 + 62.12

SCALE: VERT. HORIZ. S.N. 010 - 0024
DATE

(CHAMPAIGN CO.) PLAN

MODEL: Sheet 7 [Sheet]
FILE NAME: c:\pw_work\pwroot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 7.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	AS-BUILT PLANS LOCATION #7 S.N. 010-0024	
	DRAWN -	REVISED -			
	CHECKED -	REVISED -			
PLOT DATE = 6/5/2025	DATE -	REVISED -		SCALE: SHEET 7 OF 11 SHEETS STA. TO STA.	

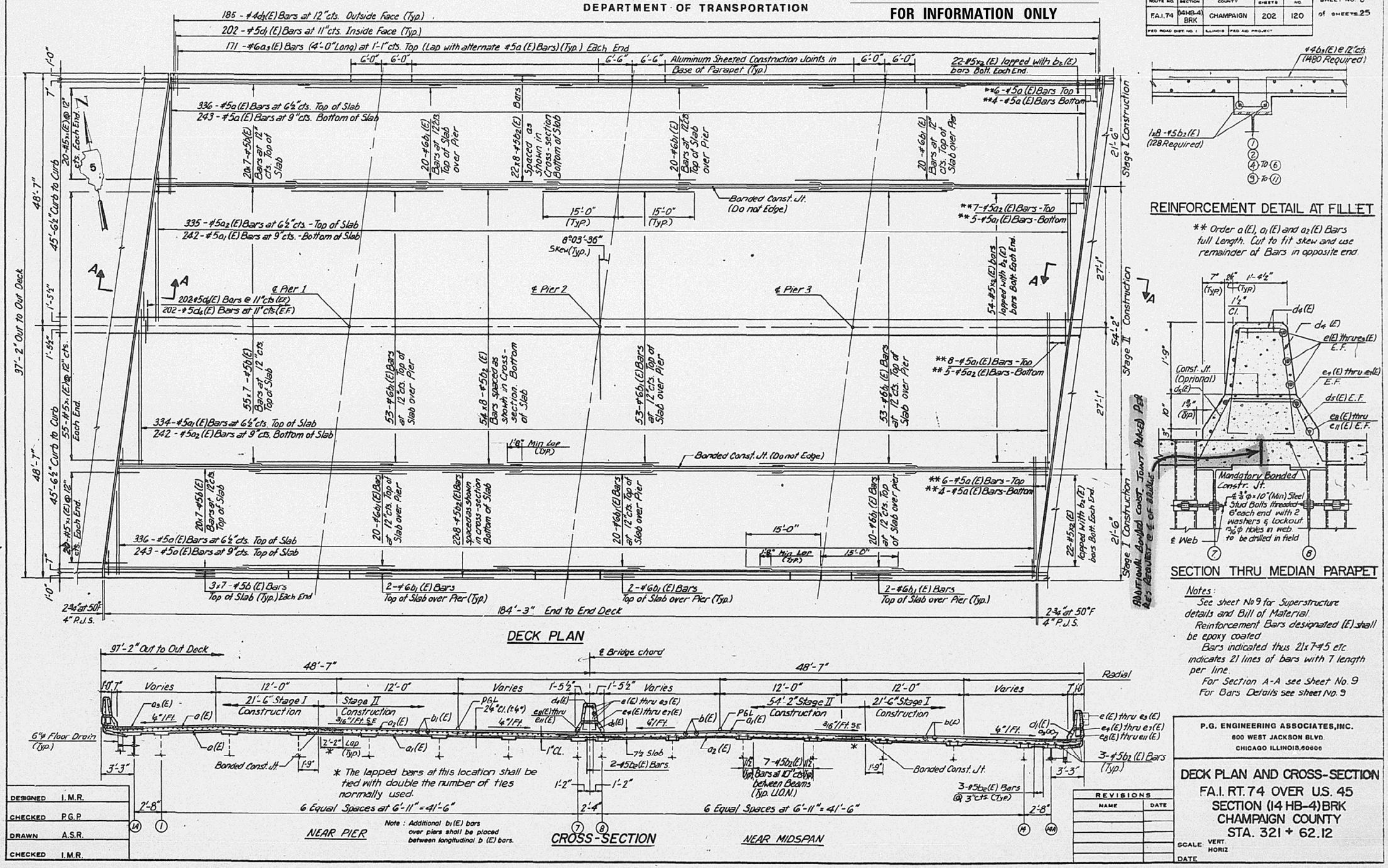
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	59
		CONTRACT NO. 70H59		
	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS FOR S.N. 010-0024
FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	(14HB-4) BRK	CHAMPAIGN	202	120
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SHEET NO. 8 of SHEETS 25



DECK PLAN

REINFORCEMENT DETAIL AT FILLET

** Order a(E), a1(E) and a2(E) Bars full Length. Cut to fit skew and use remainder of Bars in opposite end.

SECTION THRU MEDIAN PARAPET

Notes:
See sheet No 9 for Superstructure details and Bill of Material.
Reinforcement Bars designated (E) shall be epoxy coated.
Bars indicated thus 21x7-#5 etc. indicates 21 lines of bars with 7 length per line.
For Section A-A see Sheet No. 9
For Bars Details see sheet No. 9

P.G. ENGINEERING ASSOCIATES, INC.
800 WEST JACKSON BLVD.
CHICAGO ILLINOIS, 60606

DESIGNED I.M.R.
CHECKED P.G.P
DRAWN A.S.R.
CHECKED I.M.R.

REVISIONS

NAME	DATE

DECK PLAN AND CROSS-SECTION
FA.I. RT. 74 OVER U.S. 45
SECTION (14 HB-4) BRK
CHAMPAIGN COUNTY
STA. 321 + 62.12

SCALE: VERT.
HORIZ.
DATE

MODEL: Sheet 8 [Sheet]
FILE NAME: c:\pw_work\pwdot\steven.wood@illinois.gov\d1094040\D57OH59-sht-Loc 7.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/5/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #7 S.N. 010-0024

SCALE: | SHEET 8 OF 11 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	60
		CONTRACT NO. 70H59		
		ILLINOIS FED. AID PROJECT		

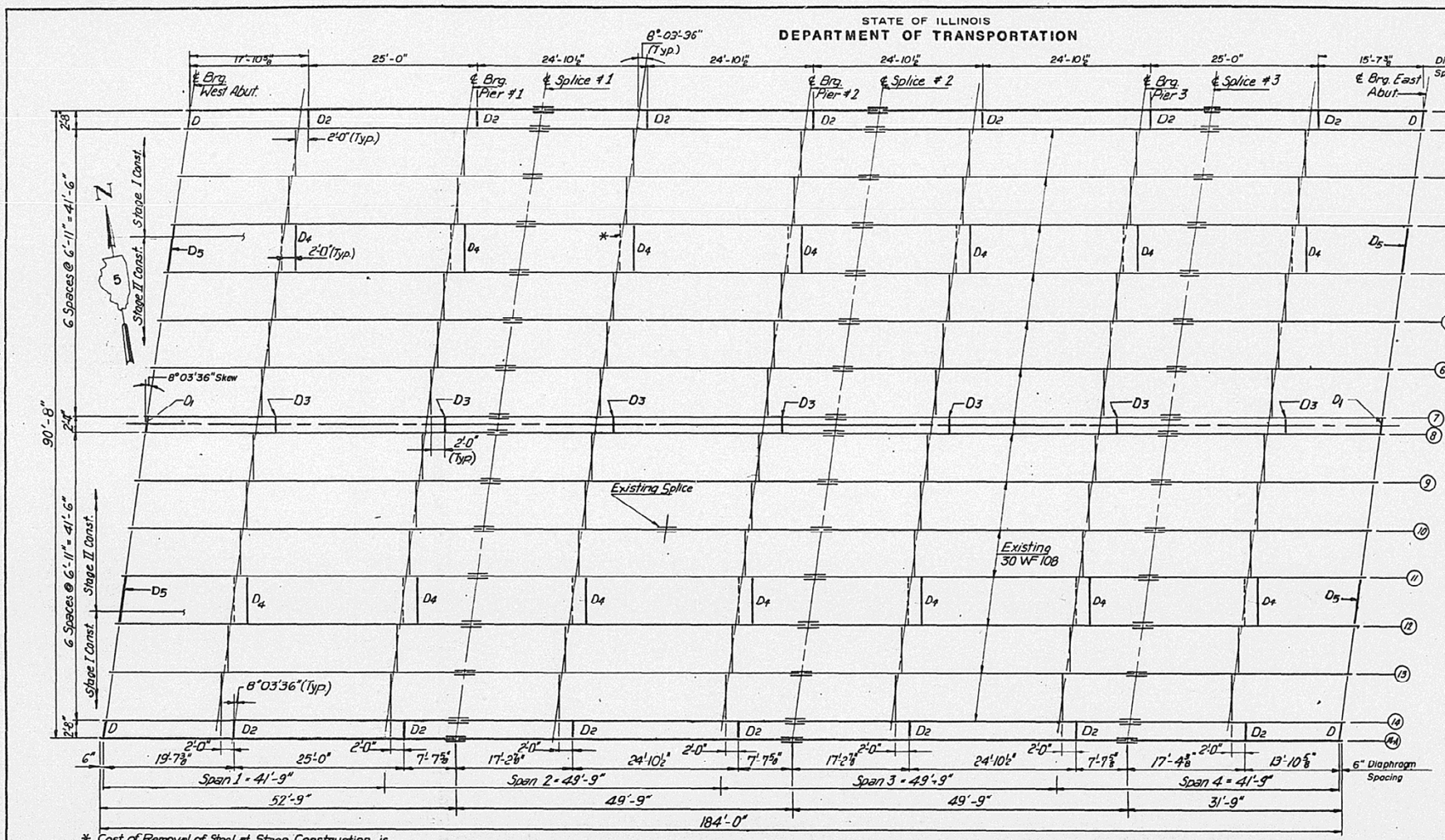
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	(14HB-4) BRK	CHAMPAIGN	202	122
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SHEET NO. 10 of SHEETS 25

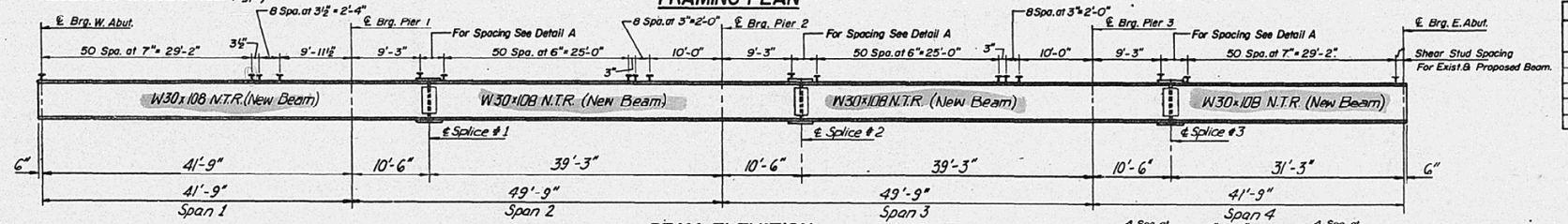
AS–BUILT PLANS FOR S.N. 010–0024

FOR INFORMATION ONLY



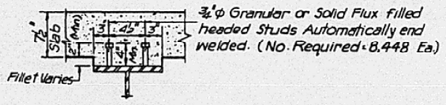
* Cost of Removal of Steel at Stage Construction is Incidental to Structural Steel (Typ.)

FRAMING PLAN

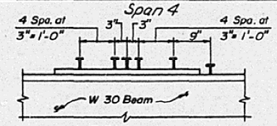


BEAM ELEVATION

(N.T.R. Indicates Notch Toughness Requirement)



SHEAR STUDS



DETAIL A

MOMENT TABLE - EXISTING INTERIOR BEAM

		0.4 SPAN 1 OR 0.6 SPAN 4	PIER 1 OR PIER 3	0.5 SPAN 2 OR 0.5 SPAN 3	PIER 2
I_s	(IN^4)	4461	4461	4461	4461
I_c	(IN^4)	12781	-	12781	-
S_s	(IN^3)	299.20	299.20	299.20	299.20
S_c	(IN^3)	456	-	456	-
w_D	(K/Ft)	0.79	1.04	0.79	1.04
$M_{@}$	(Ft.K)	98.14	216.35	80.54	208.00
f_s Non Comp.	(KSI.)	3.94	8.68	3.23	8.34
s_D	(K/Ft)	0.25	-	0.25	-
$M_{s@}$	(Ft.K)	33.28	-	27.31	-
M_{ℓ}	(Ft.K)	258.69		256.18	
$M_{IMP.}$	(Ft.K)	77.61		73.27	
Total	(Ft.K)	369.58		356.76	
f_s Comp.	(KSI.)	9.82		9.46	
f_s TOTAL	(KSI)	13.76		12.69	
VR	(K.)	48.9	-	49.7	-

REACTION TABLE - EXISTING INTERIOR BEAM

		W. ABUT. OR E. ABUT.	PIER 1 OR PIER 3	PIER 2
$R_{@}$	(K)	16.40	52.95	51.28
R_{ℓ}	(K)	38.20	46.33	46.35
IMP.	(K)	11.20	13.57	13.25
R_{TOTAL}	(K)	65.80	112.85	110.88

MOMENT TABLE - NEW BEAM 1A-14A

		0.4 SPAN 1 OR 0.6 SPAN 4	PIER 1 OR PIER 3	0.5 SPAN 2 OR 0.5 SPAN 3	PIER 2
I_s	(IN^4)	4410	4410	4410	4410
I_c	(IN^4)	9940	-	9940	-
S_s	(IN^3)	299	299	299	299
S_c	(IN^3)	418.67	-	418.67	-
w_D	(K/Ft)				
$M_{@}$	(Ft.K)	118.04	250.25	96.88	239.40
f_s Non-Comp.	(KSI)	4.74	10.04	3.89	9.61
s_D	(K/Ft)		-		-
$M_{s@}$	(Ft.K)	33.28	-	27.31	-
M_{ℓ}	(Ft.K)	257.50	178.36	254.94	185.13
$M_{IMP.}$	(Ft.K)	77.20	52.28	72.91	52.95
Total	(Ft.K)	367.98	230.64	355.16	238.08
f_s Comp.	(KSI)	10.67	9.26	10.29	9.56
f_s Total	(KSI)	15.41	19.30	14.18	19.17
VR	(K)	48.7	-	49.5	-

REACTION TABLE - NEW BEAM 1A-14A

		W. ABUT. OR E. ABUT.	PIER 1 OR PIER 3	PIER 2
$R_{@}$	(K)	18.93	61.11	59.18
R_{ℓ}	(K)	33.18	41.30	41.29
IMP.	(K)	9.72	12.10	11.81
R_{TOTAL}	(K)	61.83	114.51	112.28

DESIGNED	I.M.R.
CHECKED	P.G.P.
DRAWN	A.S.R.
CHECKED	I.M.R.

REVISIONS	
NAME	DATE

P.G. ENGINEERING ASSOCIATES, INC.
600 WEST JACKSON BLVD.
CHICAGO ILLINOIS, 60606

STRUCTURAL STEEL FRAMING PLAN
F.A.I. RT. 74 OVER U.S. 45
SECTION (14 HB-4) BRK
CHAMPAIGN COUNTY
STA. 321 + 62.12

SCALE: VERT. HORIZ.
DATE

MODEL: Sheet 9 [Sheet]
FILE NAME: c:\pw_work\pwidot\steven.wood@illinois.gov\d10940401D570H59-sht-Loc 7.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	AS-BUILT PLANS LOCATION #7 S.N. 010-0024	
	DRAWN -	REVISED -			
	CHECKED -	REVISED -			
PLOT DATE = 6/5/2025	DATE -	REVISED -		SCALE:	SHEET 9 OF 11 SHEETS STA. TO STA.

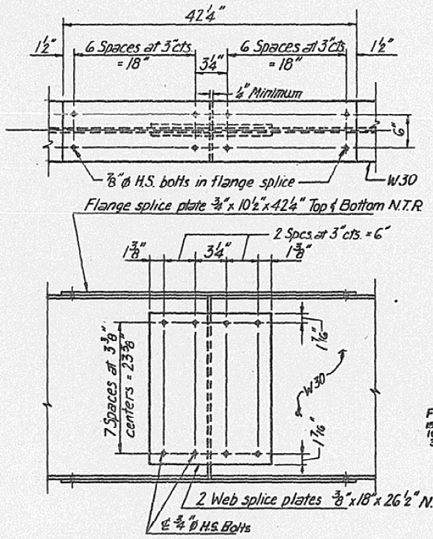
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	61
		CONTRACT NO. 70H59		
		ILLINOIS	FED. AID PROJECT	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

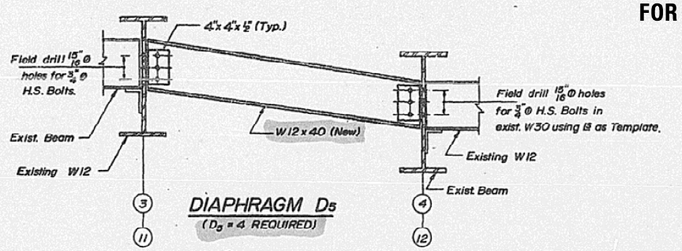
AS-BUILT PLANS FOR S.N. 010-0024
FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	(14HB-4) BRK	CHAMPAIGN	202	123
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

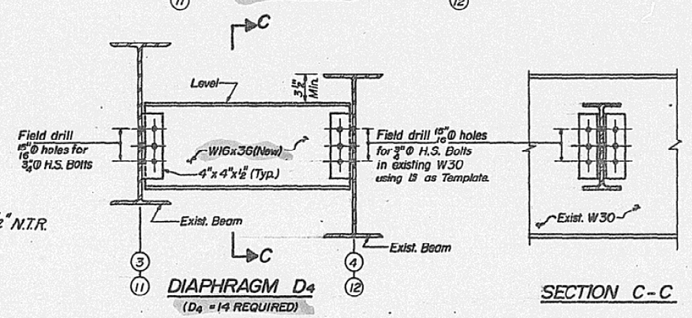
SHEET NO. 11 of SHEETS 25



FIELD SPLICE NO. 1
(SPLICE NO. 2 & 3 SIMILAR)



DIAPHRAGM D5
(D_5 = 4 REQUIRED)



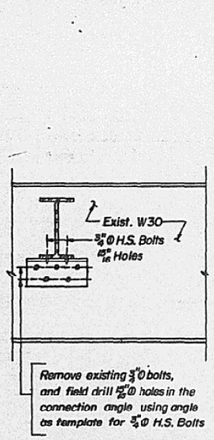
DIAPHRAGM D4
(D_4 = 14 REQUIRED)

SECTION C-C

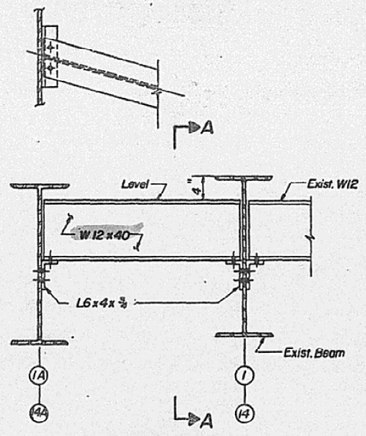
TOP OF BEAM ELEVATIONS

LOCATION / BEAM NO.	℄ Brg. W. Abut.	℄ Pier No. 1	℄ Splice # 1	℄ Pier No. 2	℄ Splice # 2	℄ Pier No. 3	℄ Splice # 3	℄ Brg. E. Abut.
12	744.310	744.440	744.473	744.545	744.564	744.546	744.541	744.519
1	744.13	744.20	–	744.27	–	744.34	–	744.41
2	744.19	744.24	–	744.33	–	744.40	–	744.47
3	744.25	744.32	–	744.39	–	744.46	–	744.53
4	743.60	743.67	–	743.74	–	743.81	–	743.88
5	743.65	743.72	–	743.79	–	743.86	–	743.93
6	743.71	743.78	–	743.85	–	743.92	–	743.99
7	743.76	743.83	–	743.90	–	743.97	–	744.04
8	743.80	743.87	–	743.94	–	744.01	–	744.08
9	743.75	743.82	–	743.89	–	743.96	–	744.03
10	743.69	743.76	–	743.83	–	743.90	–	743.97
11	743.64	743.71	–	743.78	–	743.85	–	743.92
12	743.64	743.71	–	743.78	–	743.85	–	743.92
13	743.58	743.65	–	743.72	–	743.79	–	743.86
14	743.52	743.59	–	743.66	–	743.73	–	743.80
14A	743.492	743.639	743.676	743.769	743.794	743.803	743.805	743.808

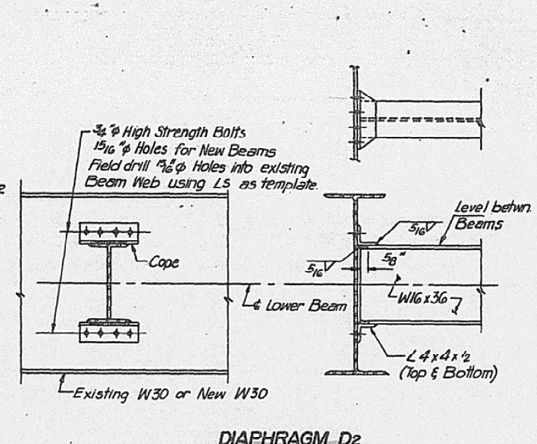
NOTES:
Top of Steel Elevations for beams 1A & 14A are for fabrication only.
Top of Steel Elevations for beams 1 to 14 are for "Jacking Existing Structures" only.



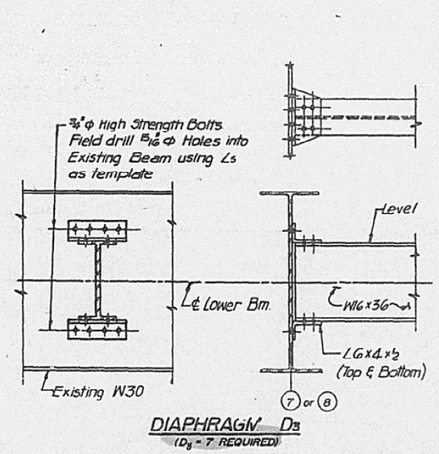
SECTION A-A
(SECTION B-B SIMILAR)



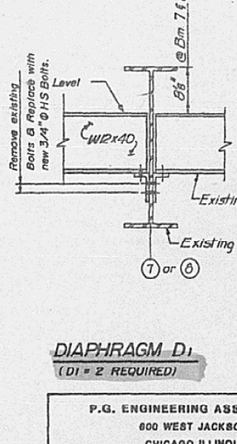
DIAPHRAGM D
(D=4 REQUIRED)



DIAPHRAGM D2
(D_2 = 14 REQUIRED)



DIAPHRAGM D3
(D_3 = 7 REQUIRED)



DIAPHRAGM D1
(D1 = 2 REQUIRED)

NOTES:
Hardened washers shall be required over all 15/16"ø holes for diaphragm connections.
Cost of field drilling the holes into existing beam web for diaphragms shall not be paid for separated, but incidental to Furnishing and Erecting Structural Steel.

DESIGNED	I. M. R.
CHECKED	P. G. P.
DRAWN	D. C. P.
CHECKED	I. M. R.

REVISIONS	
NAME	DATE

P.G. ENGINEERING ASSOCIATES, INC.
800 WEST JACKSON BLVD.
CHICAGO ILLINOIS, 60606

STRUCTURAL STEEL DETAILS
F.A.I. RT. 74 OVER U.S. 45
SECTION (14 HB-4) BRK
CHAMPAIGN COUNTY
STA. 321 + 62.12

SCALE: VERT.
HORIZ
DATE

MODEL: Sheet 10 [Sheet]
FILE NAME: c:\pw_work\pwdot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 7.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 6/5/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #7 S.N. 010-0024

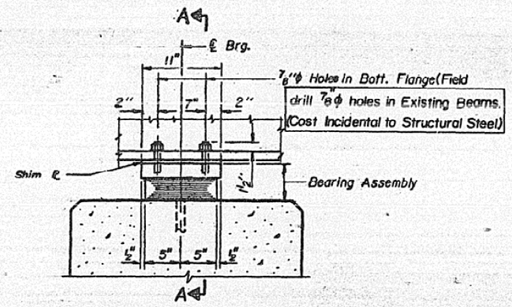
SCALE: | SHEET 10 OF 11 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	62
		CONTRACT NO. 70H59		
	ILLINOIS	FED. AID PROJECT		

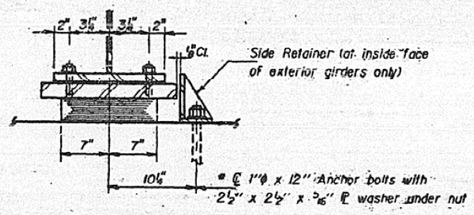
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS FOR S.N. 010-0024
FOR INFORMATION ONLY

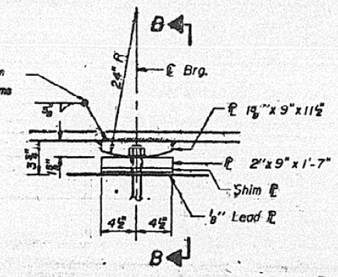
					SHEET NO. 12
F.A.I. 74	04HB-4 BRK	CHAMPAIGN	202	124	of SHEETS 25



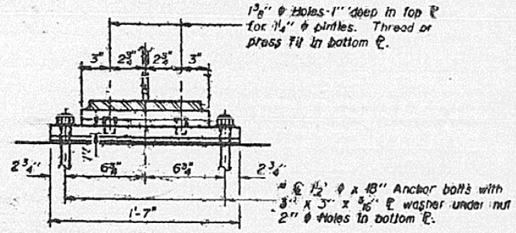
ELEVATION AT PIER



SECTION A-A

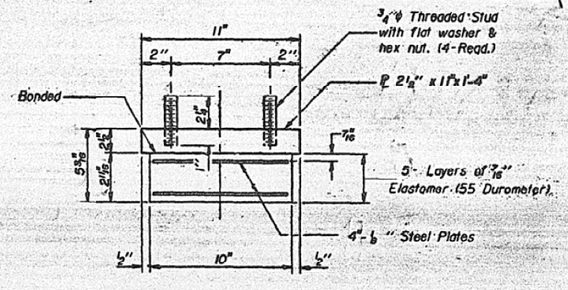


ELEVATION AT PIER



SECTION B-B

TYPE I ELASTOMERIC EXP. BRG.
AT PIER 1 & PIER 3 (No. Required: At Pier 1=16, At Pier 3=16)

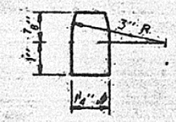


BEARING ASSEMBLY

Note: Shim plates shall not be placed under Bearing Assembly.

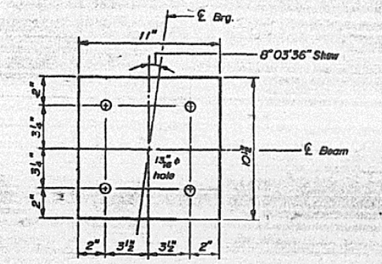
NOTES:

After existing bearings are removed and proposed beams are erected holes at expansion bearings shall be drilled and anchor bolts grouted in place.
Anchor bolts at fixed bearings may be built into the masonry.
See sheet 114 for Anchor Bolt installation.

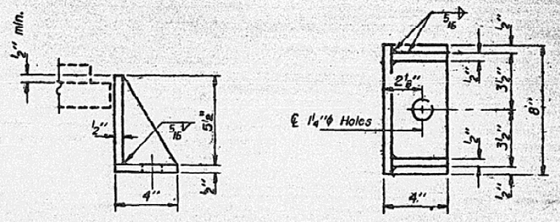


PINTLE

FIXED BEARING AT PIER 2
(No Required = 16)

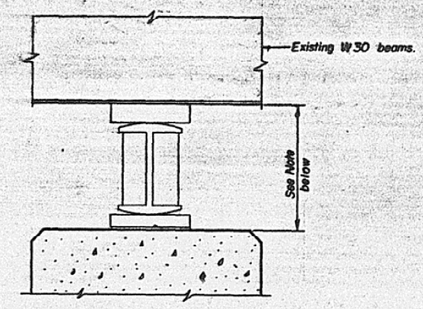


SHIM PLATE
(At Piers 1 & 3)



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.
(No. Required = 8)



ELEVATION - EXISTING BEARINGS AT PIERS
(At Pier 1&3 Shown, At Pier 2 Similar)

NOTE:

Remove existing bearings at Piers including top plate welded to the bottom flange of existing beams.

The welds on the existing top plate shall be removed by Arc Gouging and/or grinding. Care shall be taken to avoid damage to the bottom flange of the beam and the top plate. Any unavoidable gouges in the flange shall be ground smooth.

After the removal of existing welds on the top plate, the weld area shall be cleaned by Method B in accordance with the Special Provision for Cleaning and Painting Existing Steel Structures.

REQUIRED SHIM PLATE THICKNESS

BEAM NO.	3	5	7	8	9	10	11	12	14-A
AT PIER 1	-	5/8"	5/8"	-	1/8"	5/8"	-	-	5/8"
AT PIER 2	-	5/8"	5/8"	-	1/8"	1/8"	1/8"	1/2"	-
AT PIER 3	-	5/8"	5/8"	-	1/8"	5/8"	-	-	-

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	32
Removal of Existing Bearings	Each	42

DESIGNED	I. M.R.
CHECKED	P.G.P.
DRAWN	D.C.P.
CHECKED	P.G.P.

I-2-E1 12-1-83

P.G. ENGINEERING ASSOCIATES, INC.
600 WEST JACKSON BLVD.
CHICAGO ILLINOIS, 60606

BEARING DETAILS - I
F.A.I. RT. 74 OVER U.S. 45
SECTION (14 HB-4) BRK
CHAMPAIGN COUNTY
STA. 321 + 62.12

SCALE: VERT.
HORIZ.
DATE

REVISIONS	
NAME	DATE

MODEL: Sheet 11 [Sheet]
FILE NAME: c:\pw_work\dot\steven.wood@illinois.gov\d1094040\D570H59-sht-Loc 7.dgn

USER NAME = Steven.Wood	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 6/5/2025	DATE -	REVISED -

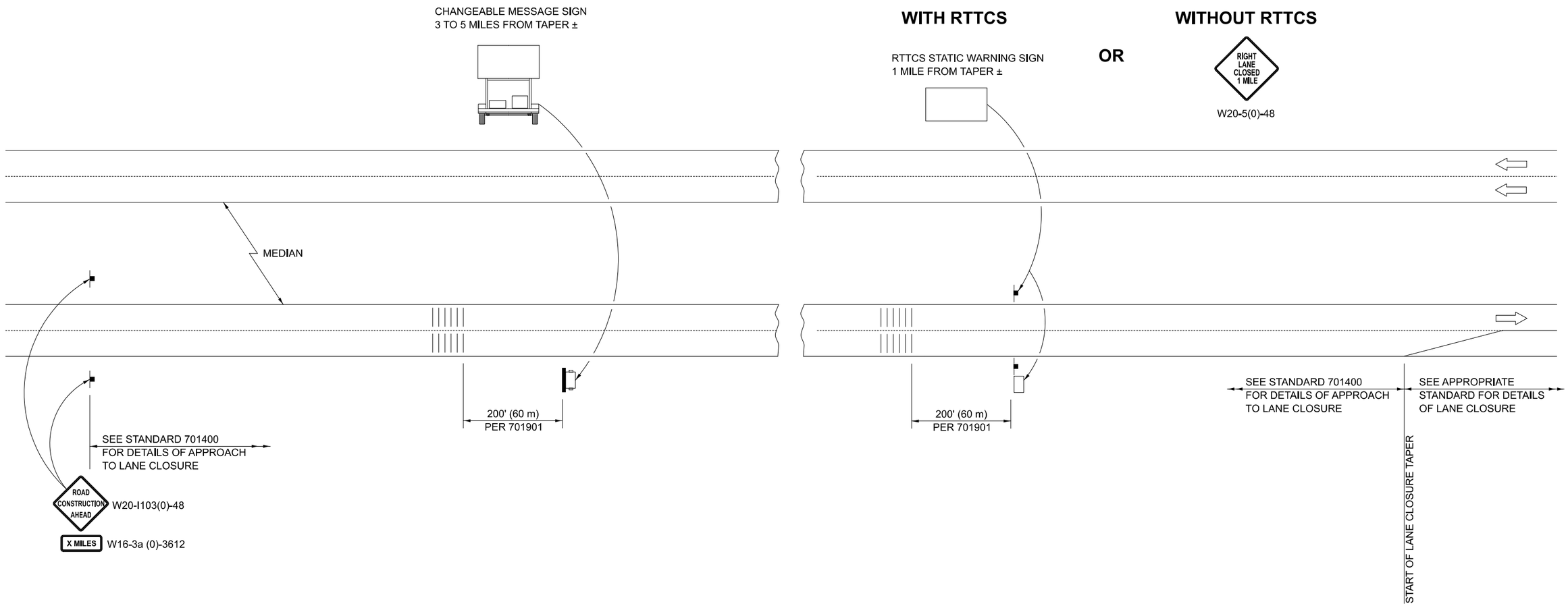
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS
LOCATION #7 S.N. 010-0024

SCALE: | SHEET 11 OF 11 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	63
		CONTRACT NO. 70H59		
	ILLINOIS	FED. AID PROJECT		

DETAIL FOR TEMPORARY RUMBLE STRIPS



SYMBOLS

- SIGN
- TEMPORARY RUMBLE STRIPS
- CHANGEABLE MESSAGE SIGN
- RTTCS STATIC WARNING SIGN

GENERAL NOTES

REMOVE THE TEMPORARY RUMBLE STRIPS PRIOR TO THE REMOVAL OF THE ADVANCED WARNING SIGNS.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

SEE HIGHWAY STANDARD 701901 FOR TEMPORARY RUMBLE STRIP INSTALLATION.

FOR CONSECUTIVE OVERHEADS ALONG I-74, THE 1 MILE RUMBLE STRIPS MAY BE USED AS THE ADVANCED RUMBLE STRIPS AT THE NEXT BRIDGE - TO BE DETERMINED BY THE ENGINEER.

MODEL: 70106700 [Sheet]
FILE NAME: c:\pw_work\pwidot\projects\d1093358\D570H59-Sht-Detail_70106700.dgn

USER NAME = Justin.Cearlock	DESIGNED -	REVISED -	03/25
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 4/3/2025	DATE -	REVISED -	

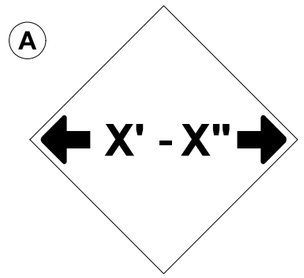
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAIL FOR TEMPORARY RUMBLE STRIPS

SCALE: | SHEET 1 OF 1 SHEETS | STA. | TO STA.

DISTRICT 5 DETAIL NO. 70106700

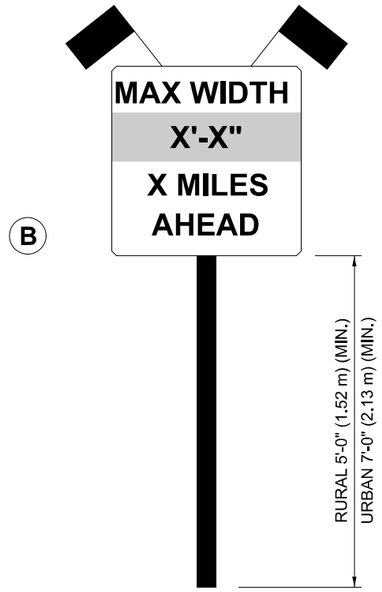
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	64
		CONTRACT NO. 70H59		
	ILLINOIS	FED. AID PROJECT		



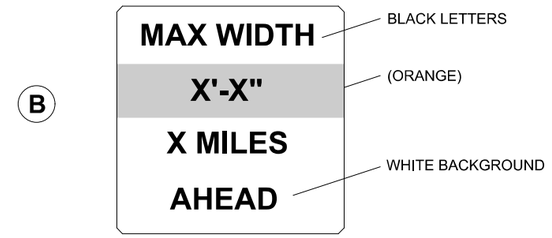
W12-2(0)-48"x48"(1200x1200)

SIGN (A) 2 SIGNS - W12-2(O)-48"x48"(1200x1200) ARE TO BE PLACED AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER.

SIGN (B) 2 SIGNS - (SIGN PANEL, TYPE II) AS SHOWN ARE TO BE PLACED AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER.



SIGN PANEL, TYPE II



W12-I103(O)-48"x48"(1200x1200)
"D" LETTERS/NUMBERS

GENERAL NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED AND MAINTAINED BY THE CONTRACTOR.

2. ALL (B) SIGNS SHALL HAVE FLAGS INSTALLED UNLESS OTHERWISE DIRECTED.

3. LOCATIONS OF TRAFFIC CONTROL DEVICES MAY BE ADJUSTED BY THE ENGINEER.

4. ALL TRAFFIC CONTROL SHOWN ON THIS SHEET SHALL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR WIDTH RESTRICTION SIGNING.

5. ALL SIGNS SHALL BE POST MOUNTED UNLESS OTHERWISE DIRECTED.

6. ALL SIGNS SHOWN ORANGE (O) SHALL BE FLUORESCENT ORANGE.

7. ALL SIGNS SHOWN SHALL CONSIST OF THE CURRENT RETROREFLECTIVE SHEETING REQUIREMENTS AS OUTLINED IN SECTION 1106.01 OF THE STANDARD SPECIFICATIONS BOOK.

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

MODEL: X7020201 [Sheet]
FILE NAME: c:\pw_work\pwidot\projects\d1093358\D570H59-Sht-Detail_X7200201.dgn

USER NAME = Justin.Cearlock	DESIGNED -	REVISED -	05/08
	DRAWN -	REVISED -	10/08 KJT
	CHECKED -	REVISED -	07/09 KJT
PLOT DATE = 3/31/2025	DATE -	REVISED -	03/11 KJT

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

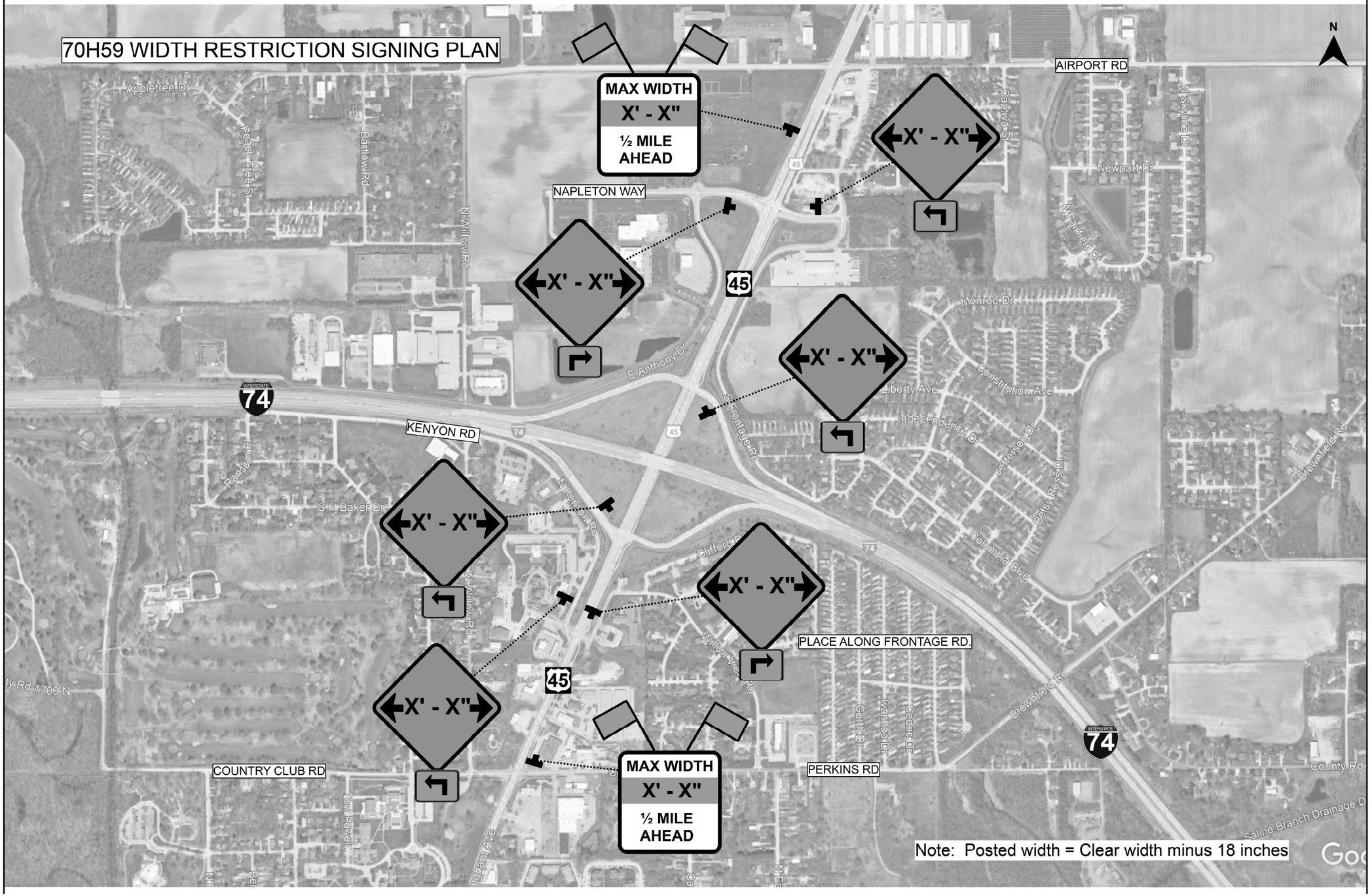
WIDTH RESTRICTION SIGNING

SCALE: | SHEET 1 OF 1 SHEETS | STA. | TO STA.

DISTRICT 5 DETAIL NO. X7200201

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	65
		CONTRACT NO. 70H59		
	ILLINOIS	FED. AID PROJECT		

70H59 WIDTH RESTRICTION SIGNING PLAN



N

MODEL: Width Restriction Signage Detail [Sheet]
FILE NAME: c:\pw_work\pwidot\projects\d1093358\D570H59-sht-Detail_WR_Sign.dgn

USER NAME = Justin.Cearlock	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 3/31/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WIDTH RESTRICTION SIGNAGE DETAIL
LOCATION #7 S.N. 010-0024

SCALE: | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2026-1	CHAMPAIGN	66	66
		CONTRACT NO. 70H59		
	ILLINOIS	FED. AID PROJECT		