

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	D5 BRIDGE PAINTING 2019-1	DEWITT	19	1
CONTRACT NO. 70D23				

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

PROPOSED HIGHWAY PLANS

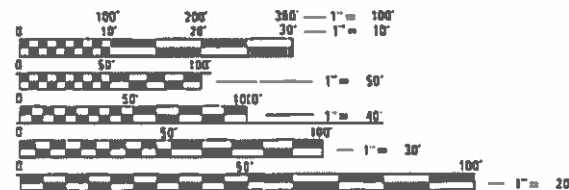
F.A.I. ROUTE 74 (I-74)
SECTION D5 BRIDGE PAINTING 2019-1
PROJECT NHPP-XUJN(924)
BRIDGE PAINTING
DEWITT COUNTY

C-95-061-18

CURRENT ADT	
LOC. #1 & #2	LOC. #3 & #4
ADT (2018) I-74 22,200US 150 1750	I-74 22,200FAS 2495 700
TRAFFIC DATA LOCATIONS	
LOC. #1	= S.N. 020-0026 - FAI 74(EB) OVER US 150 & NORFOLK SOUTHERN
LOC. #2	= S.N. 020-0027 - FAI 74(WB) OVER US 150 & NORFOLK SOUTHERN
LOC. #3	= S.N. 020-0028 - FAI 74(EB) OVER F.A.S 2495 (CH22)
LOC. #4	= S.N. 020-0029 - FAI 74(WB) OVER F.A.S. 2495 (CH22)



FOR LOCATION MAPS, SEE SHEETS 3-5



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
PROJECT MANAGER: MICHAEL A. LeROY

(217) 465-4181
CONTRACT NO. 70D23

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED June 27 2018
Paul A. LeRoy
REGIONAL ENGINEER

Aug 17 2018
Michael A. LeRoy
ENGINEER OF DESIGN AND ENVIRONMENT

Aug 20 2018
Paul A. LeRoy
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
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2	INDEX OF SHEETS, HIGHWAY STANDARDS, & GENERAL NOTES
3-5	DESCRIPTIONS & MAPS FOR LOCATIONS 1-4
6	SUMMARY OF QUANTITIES
7-13	LOCATION #1 & #2 STRUCTURE DETAILS
14-19	LOCATION #3 & #4 STRUCTURE DETAILS

HIGHWAY STANDARDS

<u>STANDARD NO.</u>	<u>DESCRIPTION</u>
000001-06	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
701201-04	LANE CLOSURE, 2L,2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
701316-12	LANE CLOSURE, 2L,2W, BRIDGE REPAIR, FOR SPEEDS ≥ 45 MPH
701426-09	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATIONS FOR SPEEDS >45 MPH
701901-07	TRAFFIC CONTROL DEVICES

GENERAL NOTES

G.N.-100
ENGLISH UNITS OF MEASURE SHALL GOVERN OVER AND SUPERSEDE ANY METRIC UNITS SHOWN IN THIS CONTRACT. WHERE INCLUDED, METRIC UNITS ARE FOR INFORMATION ONLY.

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

GN 105.07C
EXISTING STATE-OWNED AND MAINTAINED UNDERGROUND UTILITY FACILITIES EXIST WITHIN THE ROW. THE DEPARTMENT IS NOT A MEMBER OF JULIE AND DOES NOT LOCATE IT'S OWN FACILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE AT THEIR OWN EXPENSE FOR SECURING AN APPROVED LOCATING FIRM TO LOCATE ALL EXISTING IDOT UNDERGROUND FACILITIES PRIOR TO COMMENCING ANY EXCAVATION, PER THE REQUIREMENTS OF ARTICLE 803 OF THE STANDARD SPECIFICATIONS. UTILITY LOCATES MAY ALSO BE REQUIRED OUTSIDE THE PROJECT LIMITS, SUCH AS FOR TRAFFIC CONTROL SIGNING AND OTHER ITEMS. THE CONTRACTOR MAY OBTAIN, ON REQUEST, PLANS OF EXISTING ELECTRICAL FACILITIES FROM THE DEPARTMENT. FOR FURTHER INFORMATION, THE CONTRACTOR MAY CONTACT THE DISTRICT TRAFFIC OPERATIONS ENGINEER, GARY SIMS, AT 217-251-4859.

THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR LOCATING AND PROVIDING PROTECTION FOR FACILITIES DURING ALL PHASES OF CONSTRUCTION. IF, AT ANY TIME, THE FACILITIES ARE DAMAGED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DEPARTMENT AND MAKE ALL NECESSARY ARRANGEMENTS FOR REPAIR TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE INCLUDED IN THE CONTRACT BID PRICE AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

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 WITH EITHER INTERSTATE GREEN (MUNSELL COLOR STANDARD 7.5G 4/8) OR REDDISH BROWN (MUNSELL COLOR STANDARD 2.5YR 3/4) 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 STRUCTURES NO.1, NO. 2, NO.3, AND NO. 4

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**INDEX OF SHEETS, HIGHWAY STANDARDS,
& GENERAL NOTES**

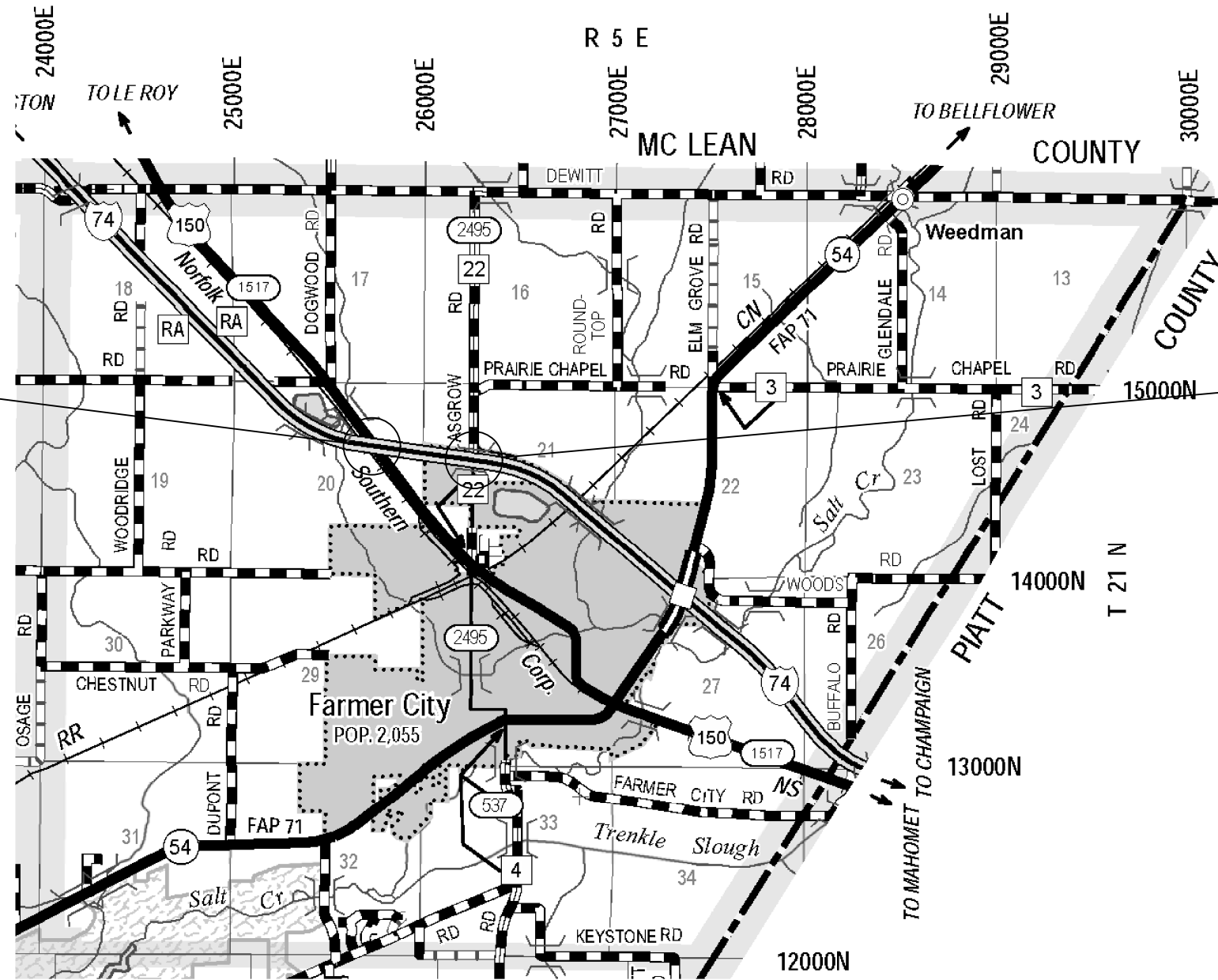
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	*	DEWITT	19	2
* D5 BRIDGE PAINTING 2019-1			CONTRACT NO. 70D23	
ILLINOIS FED. AID PROJECT				

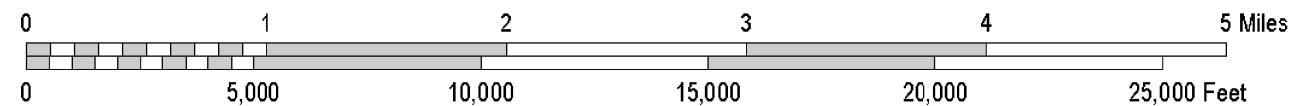


LOCATIONS 1 & 2
 S.N. 020-0026 (EB)
 S.N. 020-0027 (WB)

LOCATIONS 3 & 4
 S.N. 020-0028 (EB)
 S.N. 020-0029 (WB)



SCALE FOR MAIN MAP



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 PROJECT: \\PROJECT
 OFFICE: \\OFFICE
 DATE: \\DATE

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	DRAWN -	REVISED -
PLOT SCALE = 40,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 6/27/2018	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

LOCATION MAP

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	*	DEWITT	19	3
* D5 BRIDGE PAINTING 2019-1 CONTRACT NO. 70D23				
ILLINOIS FED. AID PROJECT				

LOCATION #1

DESCRIPTION: FAI 74 (EB) OVER US 150 & NORFOLK SOUTHERN, M.P. 157.2
 COUNTY: DEWITT
 ROUTE: F.A.I. 74
 MARKED ROUTE: I-74
 SECTION: 20-IHVB
 STRUCTURE NO.: 020-0026
 TYPE OF STRUCTURE: STEEL 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 GRAY, MUNSELL NO. 5B 7/1. THE COLOR OF THE FINAL FINISH COAT FOR ALL EXTERIOR AND 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.

TWO (2) YEAR PAINT WARRANTY REQUIRED FOR THIS STRUCTURE

NOTE: DECK DRAINS TO BE PAINTED AT NO ADDITIONAL COST.

LOCATION #2

DESCRIPTION: FAI 74 (WB) OVER US 150 & NORFOLK SOUTHERN, M.P. 157.2
 COUNTY: DEWITT
 ROUTE: F.A.I. 74
 MARKED ROUTE: I-74
 SECTION: 20-IHVB
 STRUCTURE NO.: 020-0027
 TYPE OF STRUCTURE: STEEL 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 GRAY, MUNSELL NO. 5B 7/1. THE COLOR OF THE FINAL FINISH COAT FOR ALL EXTERIOR AND 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.

TWO (2) YEAR PAINT WARRANTY REQUIRED FOR THIS STRUCTURE

NOTE: DECK DRAINS TO BE PAINTED AT NO ADDITIONAL COST.

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PLOT DATE = 6/27/2018	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

LOCATION #1 & #2 DESCRIPTION

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	*	DEWITT	19	4
* D5 BRIDGE PAINTING 2019-1			CONTRACT NO. 70D23	
		ILLINOIS	FED. AID PROJECT	

LOCATION #3

DESCRIPTION: FAI 74 (EB) OVER FAS 2495, m.p. 157.7 – NORTH OF FARMER CITY.
 COUNTY: DEWITT
 ROUTE: F.A.I. 74
 MARKED ROUTE: I-74
 SECTION: 20-IHB
 STRUCTURE NO.: 020-0028
 TYPE OF STRUCTURE: CONTINUOUS STEEL

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 GRAY, MUNSELL NO. 5B 7/1. THE COLOR OF THE FINAL FINISH COAT FOR ALL EXTERIOR AND BOTTOM FLANGE OF THE FASCIA BEAMS SHALL BE INTERSTATE GREEN (MUNSELL COLOR STANDARD 7.5G 4/8).

A MINIMUM OF TWO (2) 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.

TWO (2) YEAR PAINT WARRANTY REQUIRED FOR THIS STRUCTURE

NOTE: DECK DRAINS TO BE PAINTED AT NO ADDITIONAL COST.

LOCATION #4

DESCRIPTION: FAI 74 (WB) OVER FAS 2495, M.P. 157.7 – NORTH OF FARMER CITY.
 COUNTY: DEWITT
 ROUTE: F.A.I. 74
 MARKED ROUTE: I-74
 SECTION: 20-IHB
 STRUCTURE NO.: 020-0029
 TYPE OF STRUCTURE: CONTINUOUS STEEL

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 GRAY, MUNSELL NO. 5B 7/1. THE COLOR OF THE FINAL FINISH COAT FOR ALL EXTERIOR AND BOTTOM FLANGE OF THE FASCIA BEAMS SHALL BE INTERSTATE GREEN (MUNSELL COLOR STANDARD 7.5G 4/8).

A MINIMUM OF TWO (2) 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.

TWO (2) YEAR PAINT WARRANTY REQUIRED FOR THIS STRUCTURE

NOTE: DECK DRAINS TO BE PAINTED AT NO ADDITIONAL COST.

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PLOT SCALE = 40,0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 6/27/2018	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

LOCATION #3 & #4 DESCRIPTION

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	*	DEWITT	19	5
* D5 BRIDGE PAINTING 2019-1			CONTRACT NO. 70D23	
ILLINOIS			FED. AID PROJECT	

SUMMARY OF QUANTITIES

LOCATION OF WORK:	LOC. #1	LOC. #2	LOC. #3	LOC. #4
	F.A.I. 74	F.A.I. 74	F.A.I. 74	F.A.I. 74
	S.N. 020-0026	S.N. 020-0027	S.N. 020-0028	S.N. 020-0029
	DEWITT CO.	DEWITT CO.	DEWITT CO.	DEWITT CO.
	RURAL	RURAL	RURAL	RURAL
	20 % STATE	20 % STATE	20 % STATE	20 % STATE
	80 % federal	80 % federal	80 % federal	80 % federal
CONSTRUCTION TYPE CODE:	0047	0047	0047	0047

CODE NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY
67100100	MOBILIZATION	L.SUM	1.0	0.25	0.25	0.25	0.25
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L.SUM	1.0	0.25	0.25	0.25	0.25
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
Z0007101	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 1	L.SUM	1.0	1.0			
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
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

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PLOT DATE = 6/28/2018	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

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

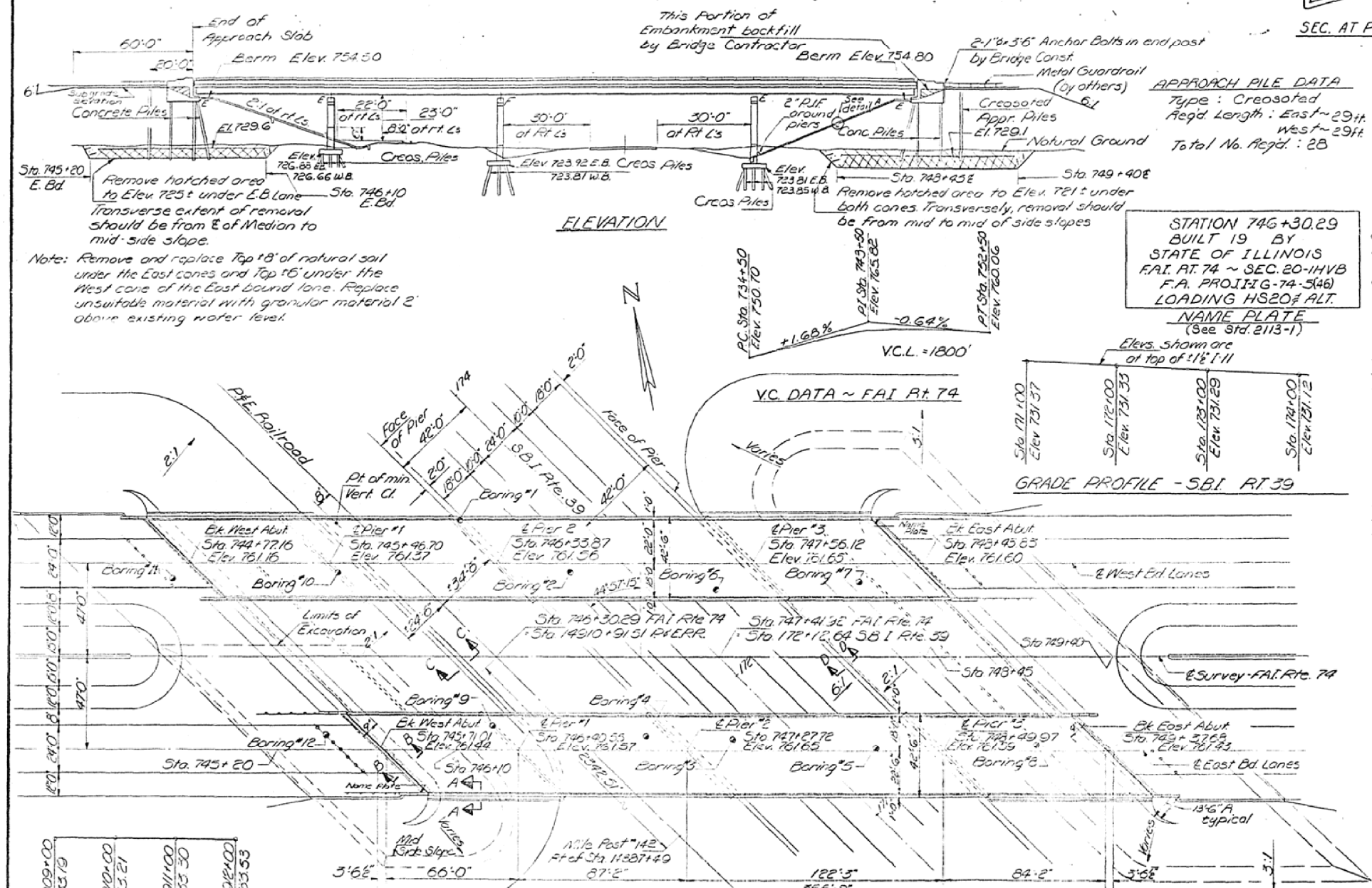
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	*	DEWITT	19	6
* D5 BRIDGE PAINTING 2019-1			CONTRACT NO. 70D23	
ILLINOIS FED. AID PROJECT				

FOR INFORMATION ONLY S.N. 020-0026 (EB) & S.N. 020-0027 (WB)

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	20-1	DEWITT	38	5

B.M. RR Spike in S.E. Face, Power Pole on East Side
US 150 1200'S of E. FA 1, Rte 74 Elev 752.20



GENERAL NOTES

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.

Diaphragm connections may be adapted to shop welding subject to approval by the Engineer. Rivets 3/4" open holes 1 1/4" unless otherwise noted. All reinforcement bars shall be lapped 2d diameters unless otherwise shown.

Slope Wall shall be reinforced with welded wire fabric 6"x6" mesh, weighing 58# per 100 Sq Ft. Anchor bolts shall be set before riveting diaphragms over supports. 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.

Expansion guards are included in the quantity of Structural Steel. Estimated weight 6360 Lbs.

The Contractor shall drive two untreated test piles one in the vicinity of Pier 1 of the W.B. Structure and one near Pier 3 of the E.B. Str.; One concrete test pile in a permanent location at the East Abutment W.B. Str. and one of the West Abut. E.B. Str., as directed by the Engineer before ordering the remainder of piles. Contact piles shall be driven in holes pre-cored through the embankment in accordance with Art. 513.09(c) of the Standard Specifications.

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.

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

Field welding of construction accessories to the bottom flanges or for a distance of one fourth of the span each way from pier supports on the flanges of beams or girdles will not be permitted. Field welding in other areas will be permitted only when approved by the engineer.

TOTAL BILL OF MATERIAL

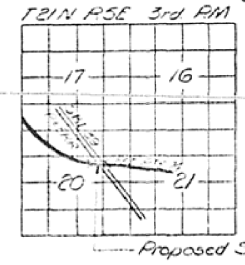
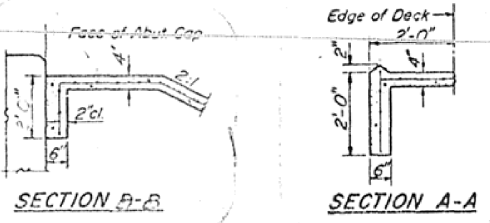
Item	Unit	Super	Sub	Total
Class A Excavation for Structures	Cu Yds			750
Class X Concrete	Cu Yds	9154	8226	17380
Structural Steel	Lbs	1033360		1033360
Aluminum Paving	Lin Ft			1449
Reinforcement Bars	Lbs	235710	98190	333900
Cresotated Piles (16 to 20 Ft.)	Lin Ft		643	643
Cresotated Piles (20 1/2 to 30 1/2)	Lin Ft		5364	5364
Test Pile Timber	Each		2	2
Name Plates	Each		2	2
Slope Wall (4')	Sq Yds			2840
Protective Coat	Sq Yds			3740
Bridge Seat Sealant	Lbs			4000
Concrete Piles	Lin Ft		3146	3146
Test Pile Concrete	Ea		2	2
Stud Shear Connectors	Ea	2483		2483

+ Includes excavation for slope with 2.25% applied at each abutment.

Note: 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.

DESIGN STRESSES

f_c = 1500 psi ~ Deck Slab
 f_c = 1400 psi ~ Sub, Curb & Pav.
 f_s = 20,000 psi ~ Reinf.
 f_v = 20,000 psi ~ Struct
 v = 75 psi ~ Ft's
 n = 10
 Allowable Fat. W.S. 25% by Ft.
 Allowable E.A. 5100 for Non Comp.
 4100 for Comp.
 LOADING HS20-44 & 41' on 11'0"



PROJ. 74-5(46)159
 GENERAL PLAN & ELEVATION
 OVER P.E. RR AND SBI RTE 39
 FA 1 RTE 74 SECTION 20-1HVB
 DEWITT COUNTY
 STATION 746+30.29

DESIGNED Sam F. Macdonald
 CHECKED A. J. Haganat
 DRAWN R. Ferraro
 CHECKED A. J. Haganat

EXAMINED [Signature]
 PASSED
 APPROVED

April 4 1968

Rev 8/22/65 SYK

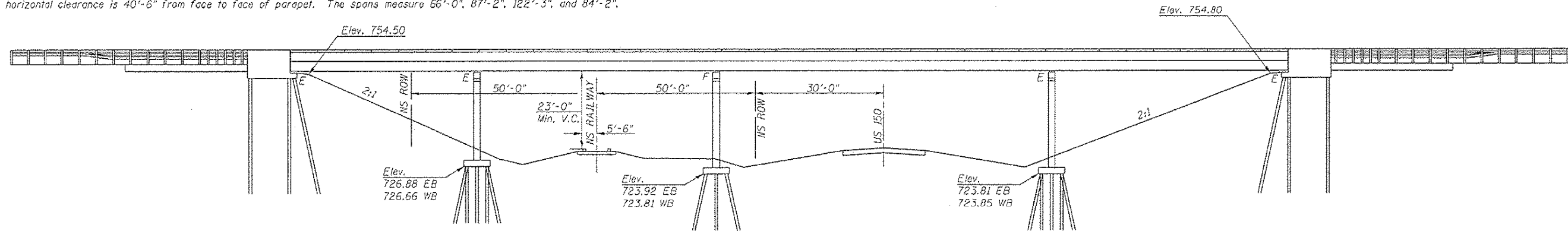
USER NAME = leroyma	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	AS-BUILT PLANS (FOR INFORMATION ONLY) S.N. 020-0026 (EB) & S.N. 020-0027 (WB)	F.A.I. RTE. 74	SECTION	COUNTY DEWITT	TOTAL SHEETS 19	SHEET NO. 7
PLOT SCALE = 40,0000' / in.	CHECKED -	REVISED -	SCALE:	SHEET 1 OF 7 SHEETS STA. TO STA.	* D5 BRIDGE PAINTING 2019-1	ILLINOIS	FED. AID PROJECT	CONTRACT NO. 70D23	
PLOT DATE = 6/27/2018	DATE -	REVISED -							

FOR INFORMATION ONLY S.N. 020-0026 (EB) & S.N. 020-0027 (WB)

The existing structures were built in 1970 as Route FAI-74, Section 20-1HVB at Sta. 746+30.29 in Dewitt County. The structures carry I-74 over US 150 and Norfolk Southern Railway northwest of Farmer City. In 1975 a waterproofing membrane and HMA wearing surface was placed under Section D5 Bridge Deck Waterproofing 1975-3, Contract 29686. In 2004 the HMA wearing surface was removed and replaced with Section 74(3RS-2, 4-1-RS-1), Contract 70027.

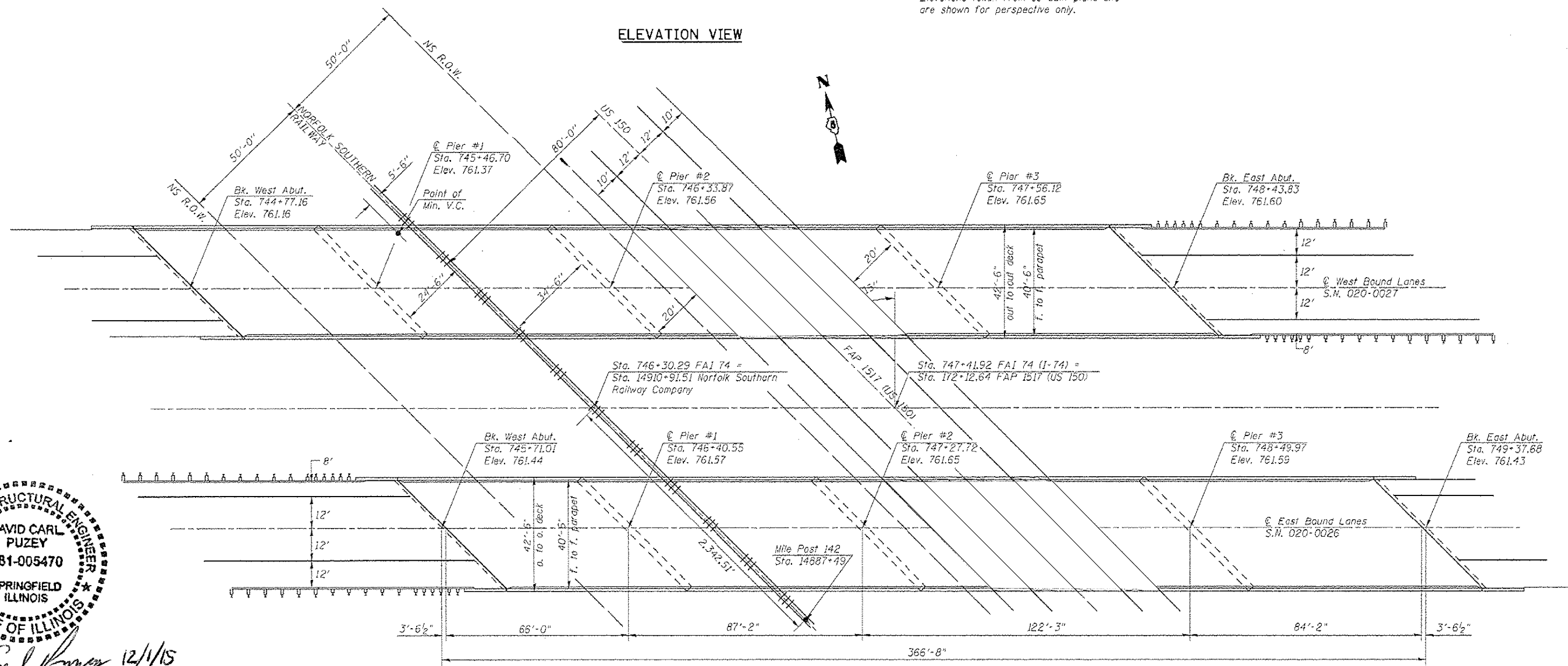
The superstructure consists of seven 44" steel plate girders supporting a 7¹/₂" R.C. deck and 1³/₄" HMA wearing surface with waterproofing membrane system. The substructure consists of concrete pile supported stub abutments and timber pile supported piers. The structures measure 366'-8" bk. to bk. abutments and 42'-6" out to out of deck. The horizontal clearance is 40'-6" from face to face of parapet. The spans measure 66'-0", 87'-2", 122'-3", and 84'-2".

NOTE:
See Next Sheet for the Proposed Work, Bill of Material, and General Notes.



Elevations taken from as-built plans and are shown for perspective only.

ELEVATION VIEW



PLAN VIEW



David Carl Puzey 12/1/15
Expires 11/30/16

USER NAME = leroyma	DESIGNED -	REVISED -
PLOT SCALE = 40,0000' / in.	DRAWN -	REVISED -
PLOT DATE = 6/27/2018	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

AS-BUILT PLANS (FOR INFORMATION ONLY)	
S.N. 020-0026 (EB) & S.N. 020-0027 (WB)	
SCALE:	STATION TO STATION
SHEET 2 OF 7 SHEETS	

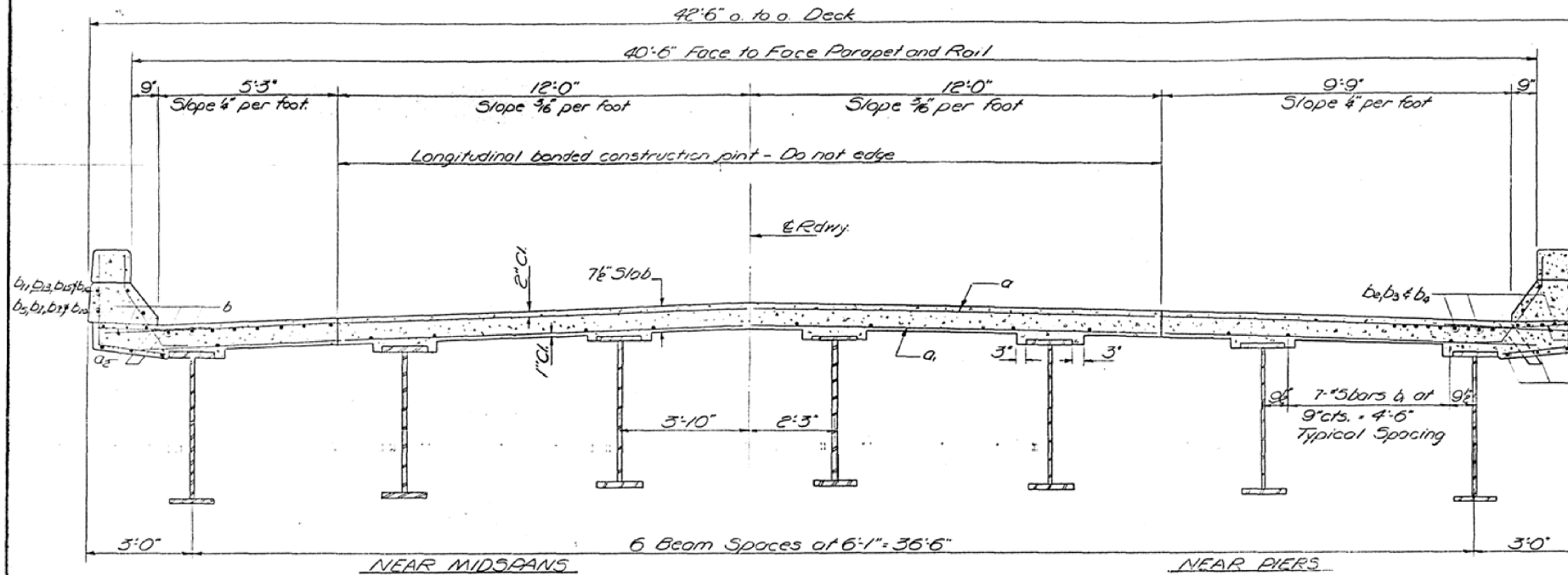
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	*	DEWITT	19	8
* D5 BRIDGE PAINTING 2019-1		CONTRACT NO. 70D23		
ILLINOIS FED. AID PROJECT				

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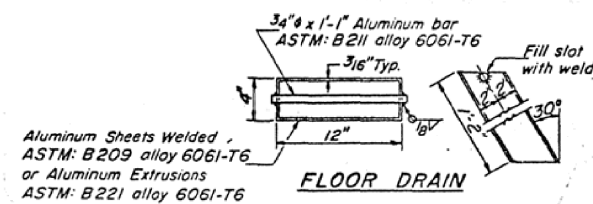
FOR INFORMATION ONLY S.N. 020-0026 (EB) & S.N. 020-0027 (WB)

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

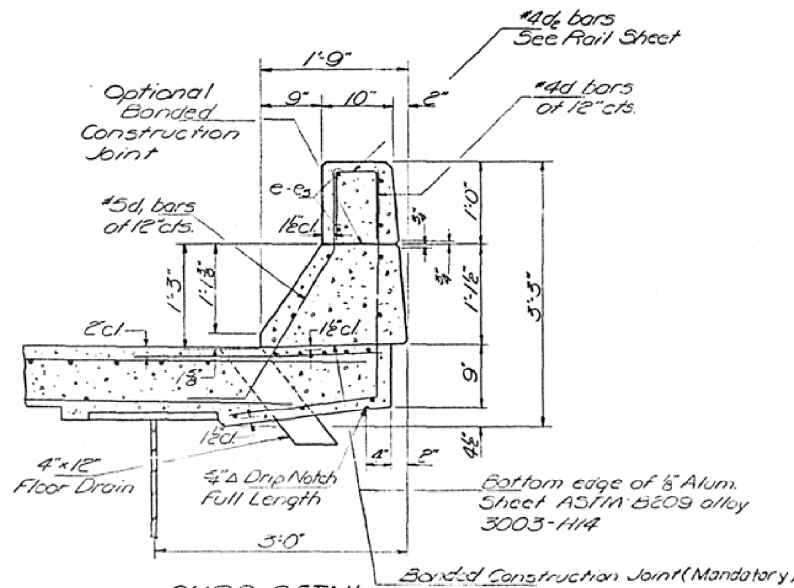
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 3
74	20-1 HWB	DEWITT	38	3	18 SHEETS
ILLINOIS		FED. AID PROJECT			



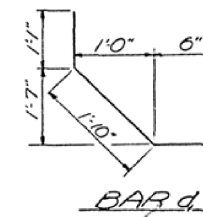
CROSS SECTION
Looking East on East Bound Structure
Looking West on West Bound Structure



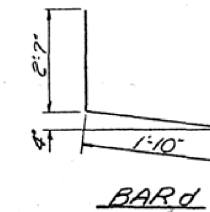
Aluminum Sheets Welded,
ASTM: B 209 alloy 6061-T6
or Aluminum Extrusions
ASTM: B 221 alloy 6061-T6



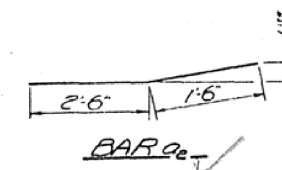
CURB DETAIL
Cost of Aluminum Drains and Sheets
shall be incidental to Class X Concrete



BAR d



BAR d



BAR g

BILL OF MATERIAL
TWO SUPERSTRUCTURES

Bar	No.	Size	Length	Shape
a	966	#6	41'-9"	
a	966	#6	40'-6"	
a	968	#6	4'-0"	
b	1080	#5	31'-3"	
b	1036	#5	34'-0"	
b	84	#6	23'-0"	
b	84	#6	41'-3"	
b	84	#6	41'-0"	
b	16	#5	29'-0"	
b	16	#5	9'-0"	
b	10	#5	31'-3"	
b	32	#5	16'-3"	
b	24	#5	30'-6"	
b	16	#5	35'-0"	
b	16	#8	29'-9"	
b	16	#8	9'-0"	
b	16	#8	31'-9"	
b	32	#8	16'-3"	
b	24	#8	31'-0"	
b	16	#8	35'-3"	
c	1448	#4	4'-3"	
d	1448	#5	3'-5"	

Class X Concrete	Cu Kts	8656
Reinforcement Bars	Lbs	231460
Structural Steel	Lbs	1023360
Stud Shear Conn.	Ea.	8688

* Weight of bearing assemblies with lead plates & anchor bolts are included as structural steel. Est. Weight = 23,510*

The lengths and quantities of longitudinal reinforcement & Class X Concrete in parapets are not included in above quantities. See Sheet #7

SLAB DETAILS
FAIRIE 74 SEC. 20-1 HWB
DEWITT COUNTY
STA 745+50.29

DESIGNED S. F. Madonia	APRIL 4, 1968
CHECKED A. Y. M. M. M.	EXAMINED [Signature]
DRAWN R. Ferrarino	PASSED [Signature]
CHECKED A. Y. M. M. M.	APPROVED [Signature]

MODEL: 44061.MXMT
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USER NAME = leroyma	DESIGNED -	REVISED -
PLOT SCALE = 40.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 6/27/2018	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS (FOR INFORMATION ONLY)
S.N. 020-0026 (EB) & S.N. 020-0027 (WB)

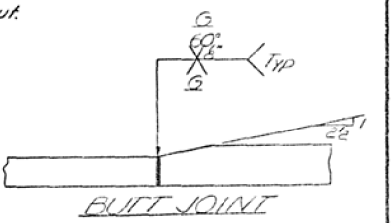
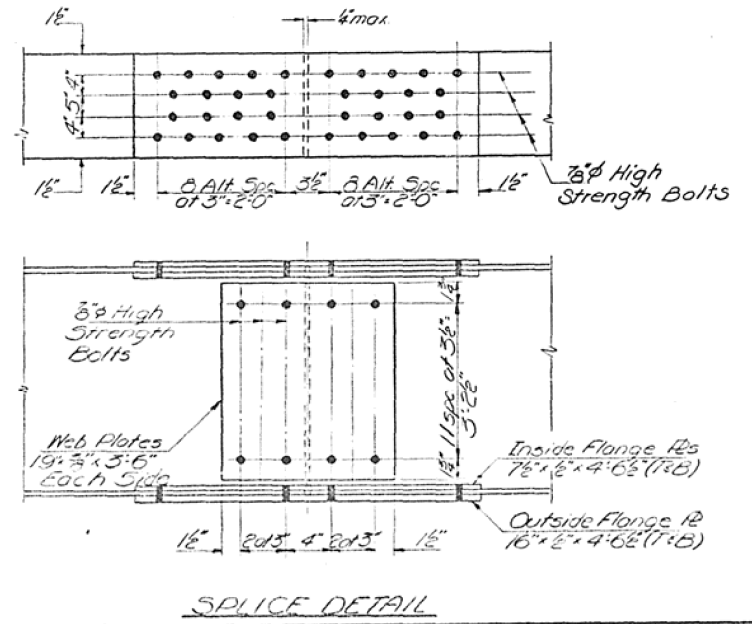
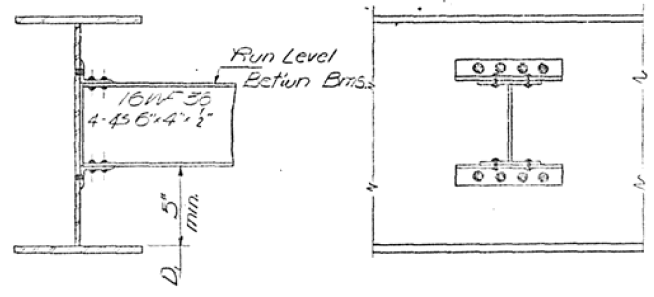
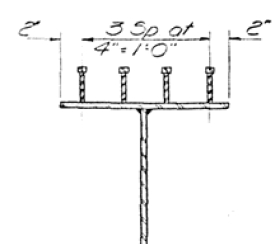
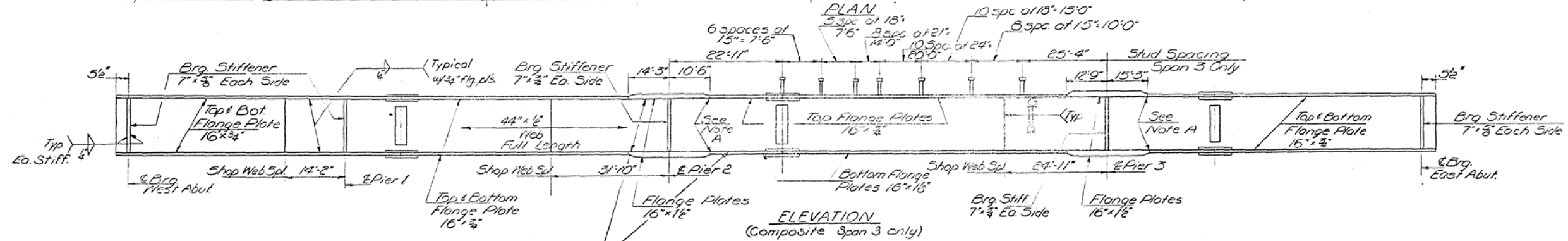
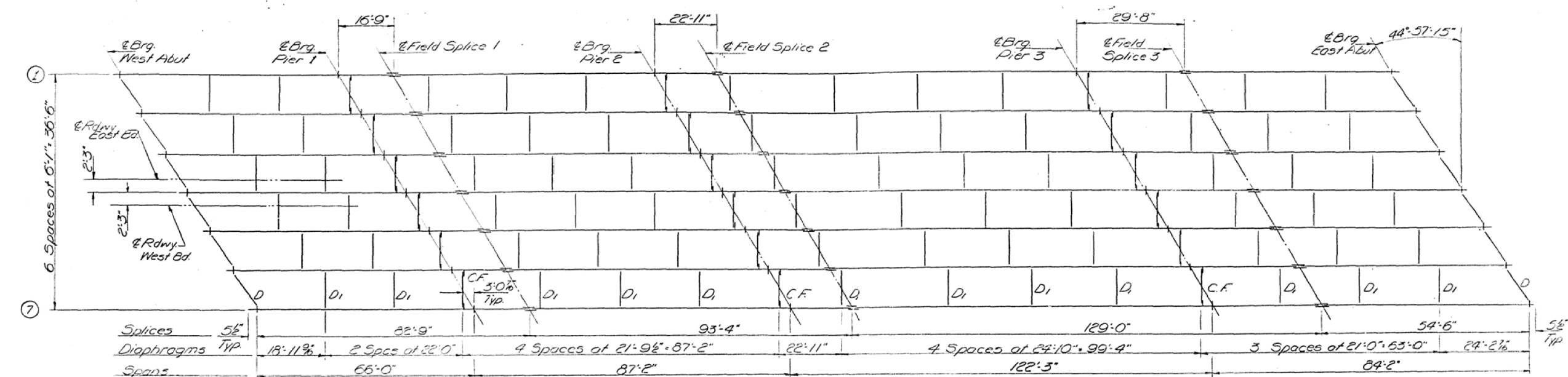
SCALE: SHEET 3 OF 7 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74		DEWITT	19	9
* D5 BRIDGE PAINTING 2019-1		CONTRACT NO. 70D23		
ILLINOIS		FED. AID PROJECT		

FOR INFORMATION ONLY S.N. 020-0026 (EB) & S.N. 020-0027 (WB)

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 8
74	D&W	DEWITT	38	13	13 SHEETS
FED. ROAD DIST. NO. 7					



DESIGNED	S.F. Madonia	EXAMINED	APRIL 4 2018
CHECKED	A.Y. Wharney	PASSED	
DRAWN	R. FERRANDO	APPROVED	
CHECKED	A.Y. Wharney		

STRUCTURAL STEEL
FALGOUTE 24 - SEC 201116
DE WITT COUNTY
STA. 746+30.29

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USER NAME	= leroyma	DESIGNED	-	REVISED	-
PLOT SCALE	= 40.0000 1/ in.	DRAWN	-	REVISED	-
PLOT DATE	= 6/27/2018	CHECKED	-	REVISED	-
		DATE	-	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

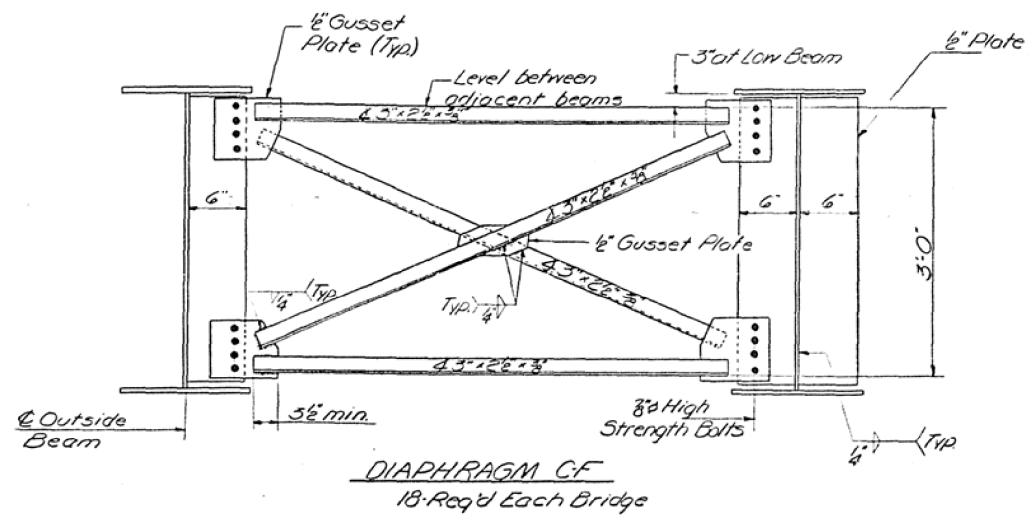
AS-BUILT PLANS (FOR INFORMATION ONLY)			
S.N. 020-0026 (EB) & S.N. 020-0027 (WB)			
SCALE:	SHEET 4	OF 7 SHEETS	STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	*	DEWITT	19	10
* D5 BRIDGE PAINTING 2019-1			CONTRACT NO. 70D23	
ILLINOIS FED. AID PROJECT				

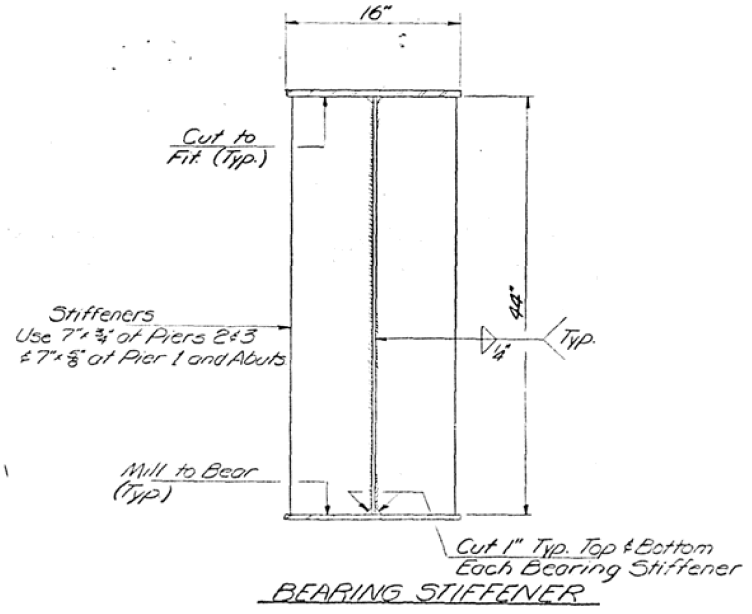
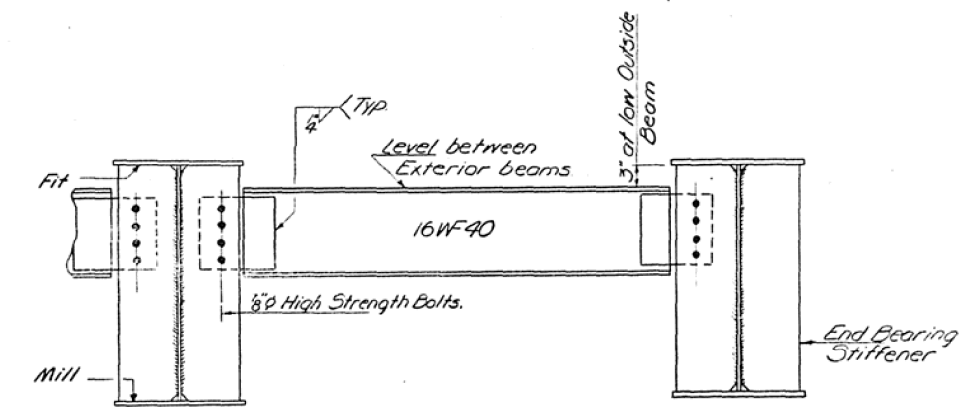
FOR INFORMATION ONLY S.N. 020-0026 (EB) & S.N. 020-0027 (WB)

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 9 18 SHEETS
A.A. I 74	10-1 HVB	DeWitt	38	14	
FED. ROAD DIST. NO. 7					



DIAPHRAGM C-F
18-Req'd Each Bridge



BEARING STIFFENER

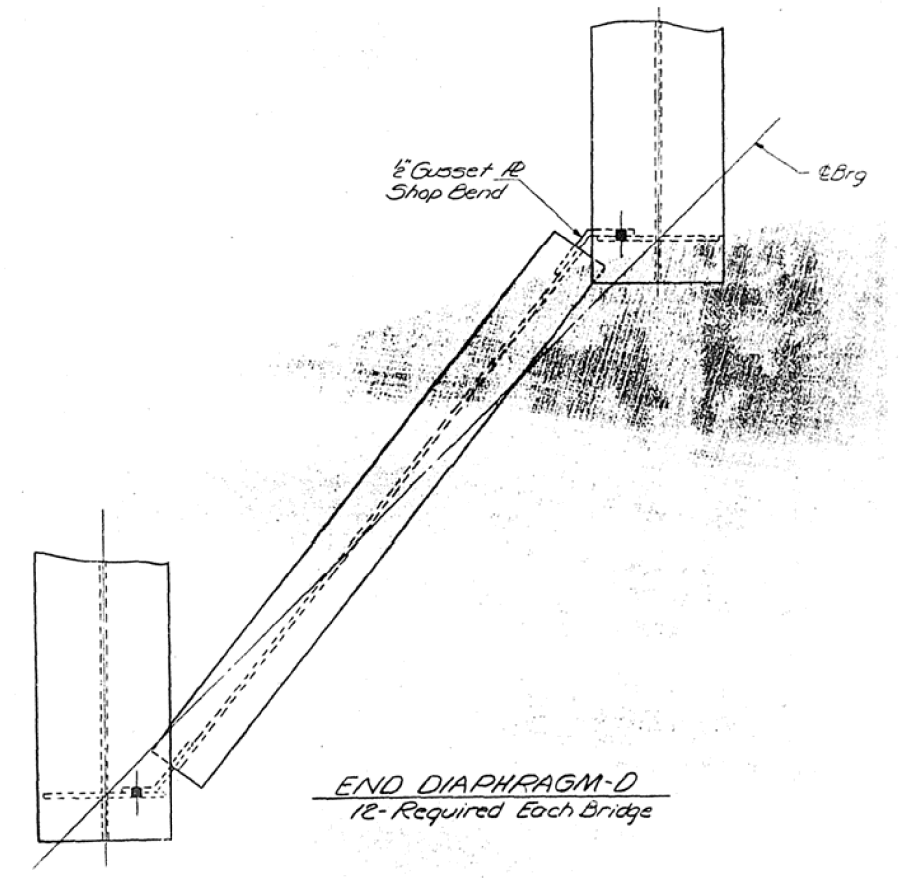
THEORETICAL TOP OF WEB ELEVATIONS

EAST BOUND LANE

Stn	EBrg WA	EPier 1	ESp 1	EPier 2	ESp 2	EPier 3	ESp 3	EBrg EA
1	760.44	760.52	760.54	760.58	760.60	760.32	760.50	760.43
2	760.57	760.65	760.67	760.71	760.73	760.63	760.63	760.36
3	760.68	760.76	760.75	760.82	760.84	760.75	760.74	760.67
4	760.72	760.80	760.82	760.86	760.88	760.80	760.78	760.71
5	760.61	760.69	760.71	760.75	760.77	760.69	760.67	760.60
6	760.49	760.57	760.59	760.63	760.65	760.57	760.55	760.48
7	760.35	760.43	760.45	760.49	760.51	760.43	760.41	760.34

WEST BOUND LANE

Stn	WBrg WA	WPier 1	WSp 1	WPier 2	WSp 2	WPier 3	WSp 3	WBrg EA
1	760.04	760.21	760.25	760.53	760.42	760.47	760.48	760.48
2	760.19	760.36	760.40	760.53	760.57	760.62	760.63	760.63
3	760.32	760.49	760.53	760.66	760.70	760.75	760.76	760.76
4	760.43	760.60	760.64	760.77	760.81	760.86	760.87	760.87
5	760.40	760.57	760.61	760.74	760.78	760.83	760.84	760.84
6	760.50	760.47	760.51	760.64	760.68	760.73	760.74	760.74
7	760.17	760.34	760.38	760.51	760.55	760.60	760.61	760.61



END DIAPHRAGM-D
12-Required Each Bridge

DESIGNED **S.F. Modonia**
 CHECKED **A.Y. Mhanna**
 DRAWN **R. Ferrando**
 CHECKED **A.Y. Mhanna**

APRIL 4 1968

EXAMINED **[Signature]**
 PASSED
 APPROVED

STRUCTURAL DETAILS
 FAI RTE 74 ~ SEC. 20-1 HVB
 DE WITT COUNTY
 STA. 746 + 30.29

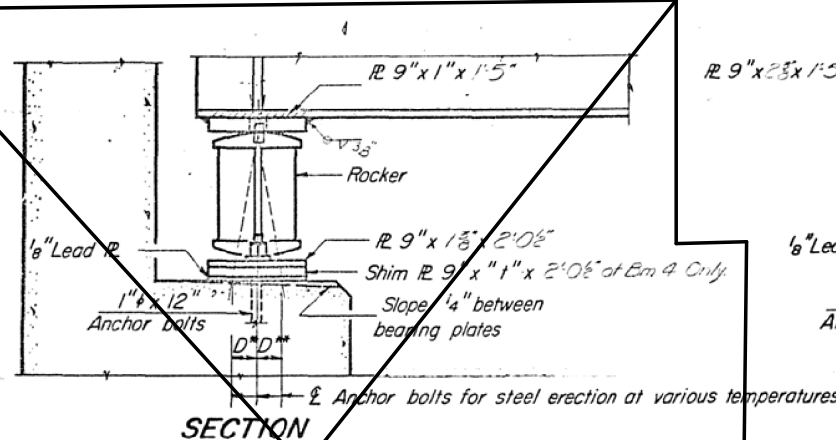
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FOR INFORMATION ONLY S.N. 020-0026 (EB) & S.N. 020-0027 (WB)

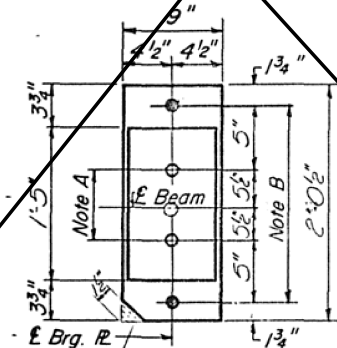
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
20-1	DEWITT	DEWITT	38	15
SHEET NO. 10 18 SHEETS				

SEE SHEET 13 FOR ABUTMENT BEARINGS

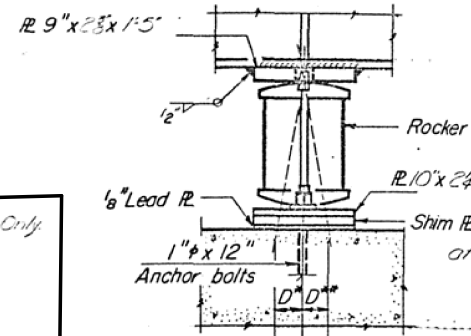


SECTION

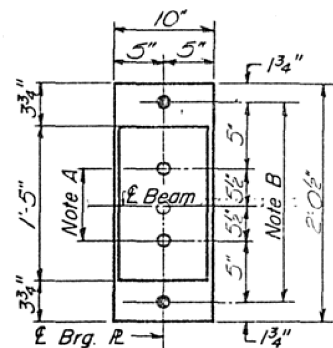


PLAN AT ABUTMENTS

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

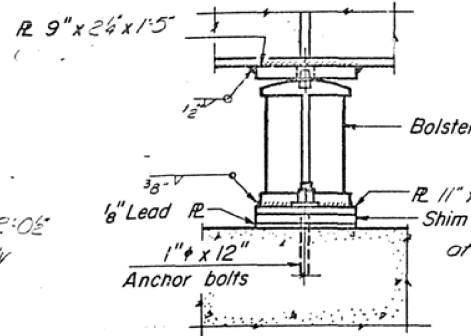


ELEVATION

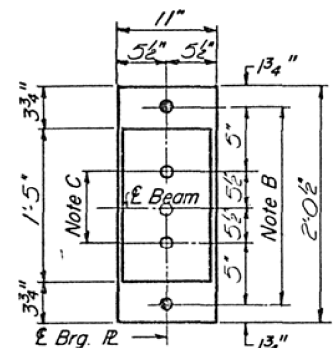


PLAN AT PIERS 1 & 3

NOTE B
1 1/2 inch Holes for 1 inch anchor bolts. 2 1/2 x 2 1/2 x 5/16 inch R. Washers under nut.

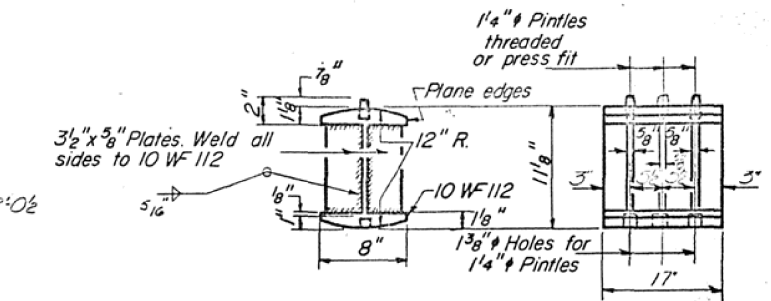


ELEVATION

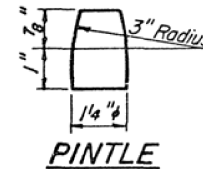


PLAN AT PIER 2

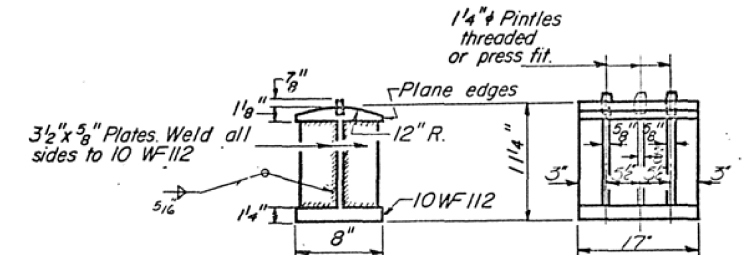
NOTE C
1 3/8 inch Holes 1 inch deep in top R. only for 1 1/4 inch pintles.



ROCKER
At abuts & piers 1 & 3



PINTLE



BOLSTER
At pier 2

GIRDER PROPERTIES*

Steel Section	
Is	18,339 in ⁴
Srs	7197 in ³
Ssc	899 in ³
Composite Section	
Ic	39710 in ⁴
Sic	37182 in ³
Ssc	1128.1 in ³

*In Span 3 only.

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

STRESS TABLE

	Moments - Int. Beams							Reactions - Int. Beams				
	4Sp1	Pier 1	5Sp2	Pier 2	5Sp3	Pier 3	6Sp4	W Nut	Pier 1	Pier 2	Pier 3	E Abut
DL	267.9	367.8	130.5	879.4	553.3	980.3	282.8	20.53	60.55	83.22	94.62	21.57
SDL	84.4	133.9	58.2	250.9	222.7	289.8	108.4	6.65	20.92	28.67	31.09	7.59
LL	410.3	383.1	431.6	581.6	760.7	602.2	534.7	32.69	42.86	51.87	52.83	34.05
Imp	107.3	95.2	101.6	127.3	153.3	132.9	125.4	8.54	10.60	11.35	11.65	8.14
Total	869.9	980.0	721.9	1839.2	1690.5	2003.2	1041.3	68.11	134.75	180.11	190.19	71.35

Moments are Ft Kips
Reactions are in Kips

	Shears in Span 3				
	Pier 2	4 Point	6 Point	8 Point	Pier 3
SDL	15.81	7.75	3	3.40	16.49
LL	37.31	28.03	16.72	27.53	37.33
Imp	7.54	5.67	3.58	5.57	7.55
Total	60.66	41.45	19.3	41.50	61.37

Shears are in Kips.

GIRDER PROPERTIES

Non Composite Steel Section	
Span 1 & 4	Pier 2 & 3
Is	15,530 in ⁴
Srs	685 in ³
	1210 in ³

BEARINGS
FAL RTE 74 - SEC 20+HWB
DEWITT COUNTY
STA. 746+30.29

DESIGNED S.F. Madonia	EXAMINED April 4, 1968
CHECKED A.H. Khayat	PASSED
DRAWN P.G. Barnett	APPROVED
CHECKED A.H. Khayat	

I-2-8 9-1-65

USER NAME = leroyma	DESIGNED -	REVISED -
PLOT SCALE = 40,0000' / in.	DRAWN -	REVISED -
PLOT DATE = 6/27/2018	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS (FOR INFORMATION ONLY)
S.N. 020-0026 (EB) & S.N. 020-0027 (WB)

SCALE: SHEET 6 OF 7 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74		DEWITT	19	12
* D5 BRIDGE PAINTING 2019-1			CONTRACT NO. 70D23	
ILLINOIS FED. AID PROJECT				

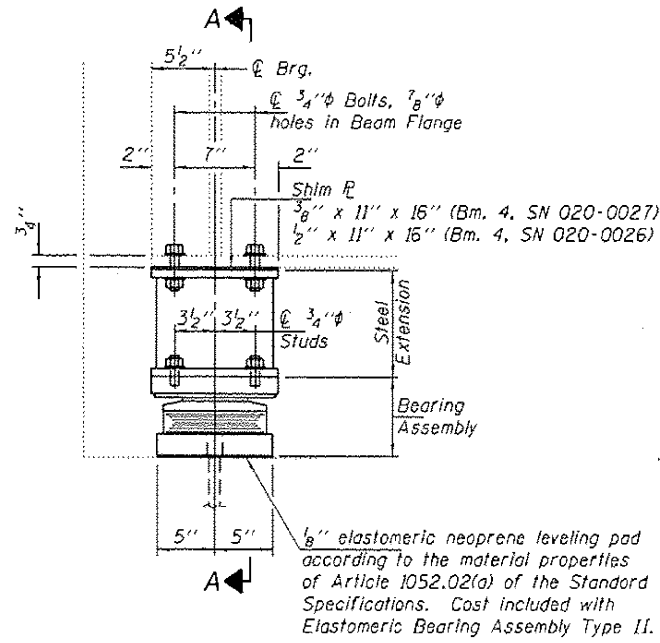
FOR INFORMATION ONLY S.N. 020-0026 (EB) & S.N. 020-0027 (WB)

BEAM REACTIONS

	W. Abut.	E. Abut.
RR (K)	27.4	29.1
Rt (K)	33.0	34.0
Imp. (K)	8.6	8.1
R (Total) (K)	69.0	71.2

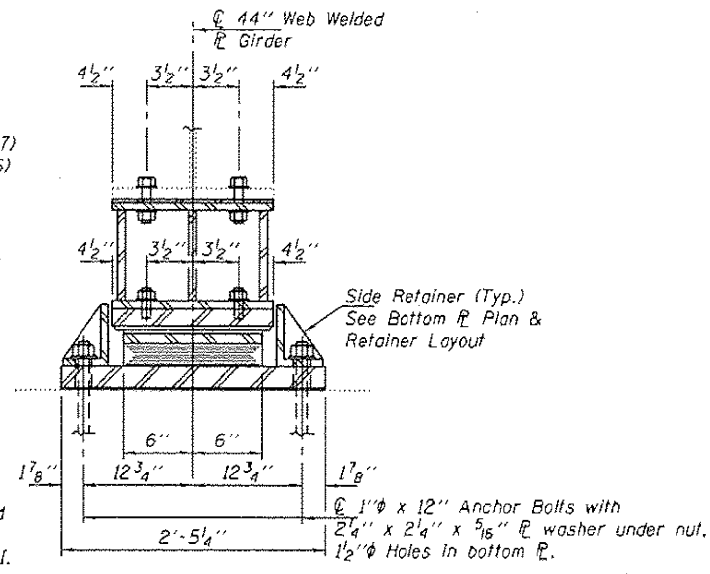
Notes:

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 = 40 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 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 521.05 of the Standard Specifications.
 Side retainers shall be included in the cost of Elastomeric Bearing Assembly, Type II.
 The 1/8" 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 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

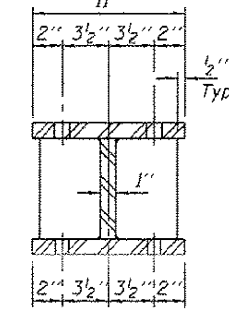


ELEVATION AT ABUTMENT

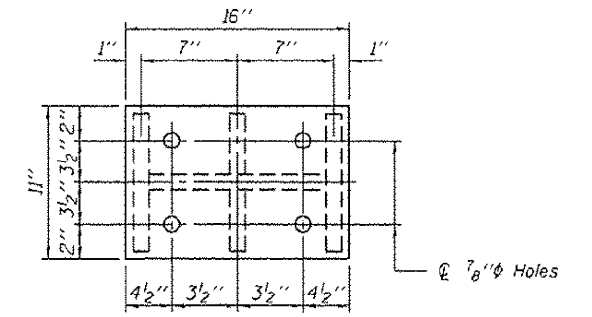
TYPE II TFE ELASTOMERIC EXP. BRG.



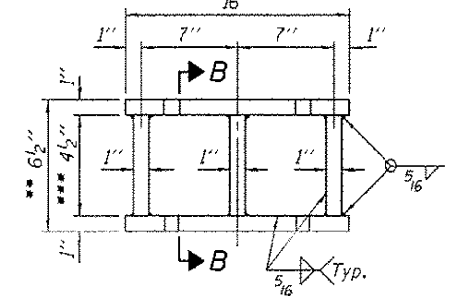
SECTION A-A



SECTION B-B

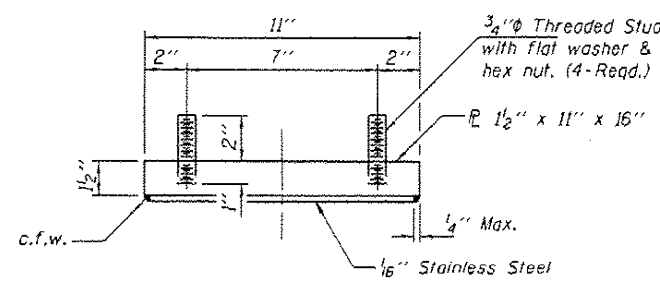


PLAN TOP AND BOTTOM PLATE

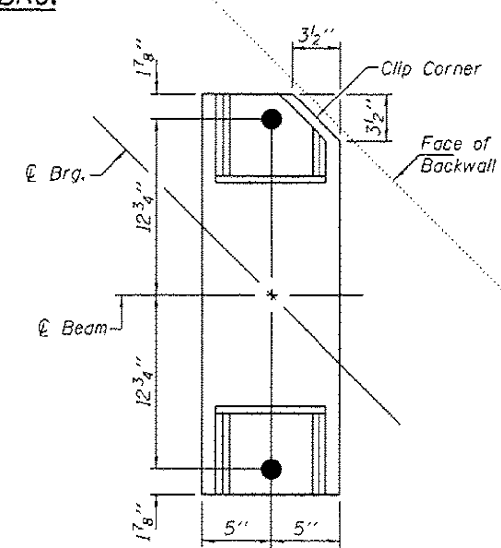


STEEL EXTENSION DETAIL

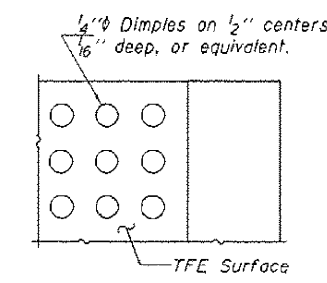
** 5 3/4" Beam 4 W. Abut. EB Str. No. 020-0026
 *** 3 3/4" Beam 4 W. Abut. EB Str. No. 020-0026



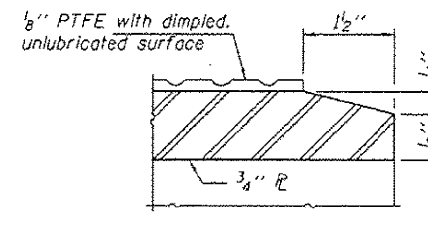
TOP BEARING ASSEMBLY



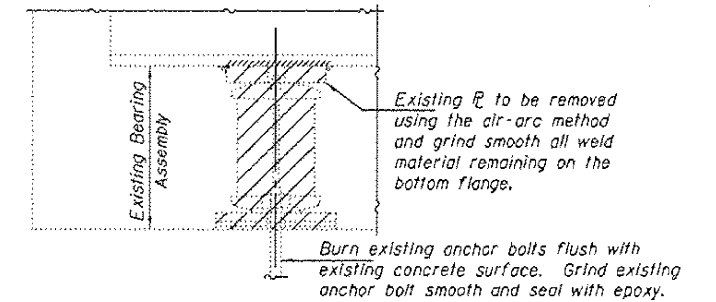
BOTTOM R PLAN & RETAINER LAYOUT



PLAN-PTFE SURFACE

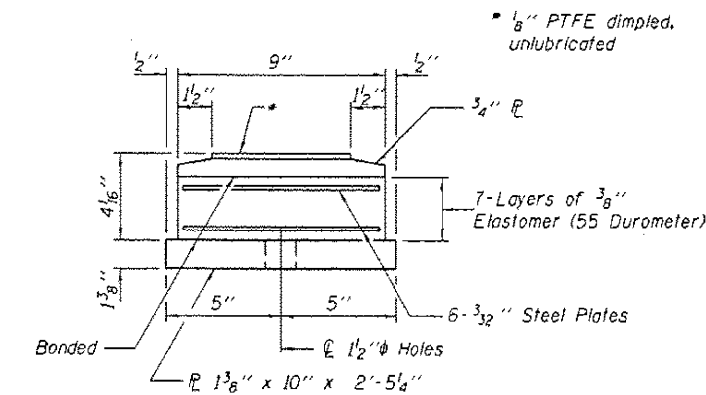


SECTION THRU PTFE

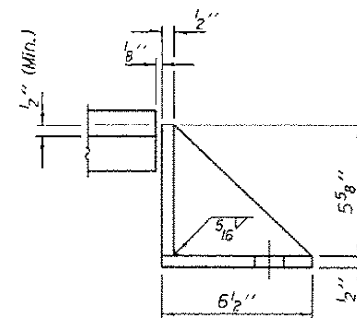


EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.

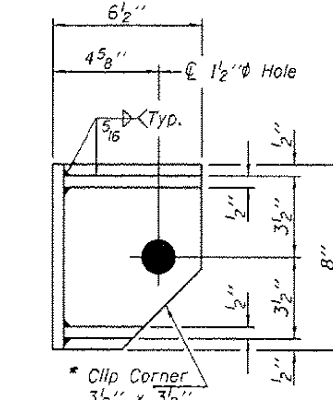


BOTTOM BEARING ASSEMBLY



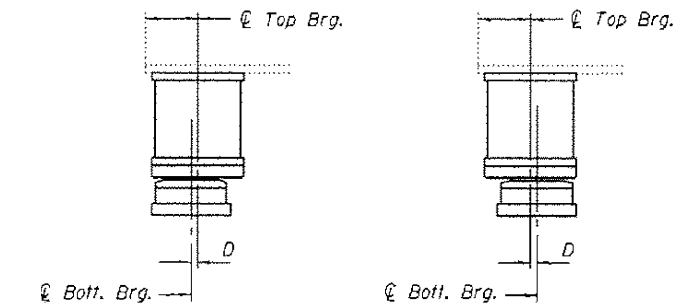
SIDE RETAINER

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



SETTING ANCHOR BOLTS AT EXP. BRG.

D = 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.



BELOW 50° F.

ABOVE 50° F.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type II	Each	28
Jack and Remove Existing Bearings	Each	28
Furnishing and Erecting Structural Steel	Pound	4350
Anchor Bolts 1"φ	Each	56

TYII/REPS 12-03-2008

USER NAME	DESIGNED	REVISED
= leroyma	-	-
PLOT SCALE = 40,0000' / in.	CHECKED	REVISIED
PLOT DATE = 6/27/2018	DATE	REVISIED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS (FOR INFORMATION ONLY)
 S.N. 020-0026 (EB) & S.N. 020-0027 (WB)

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

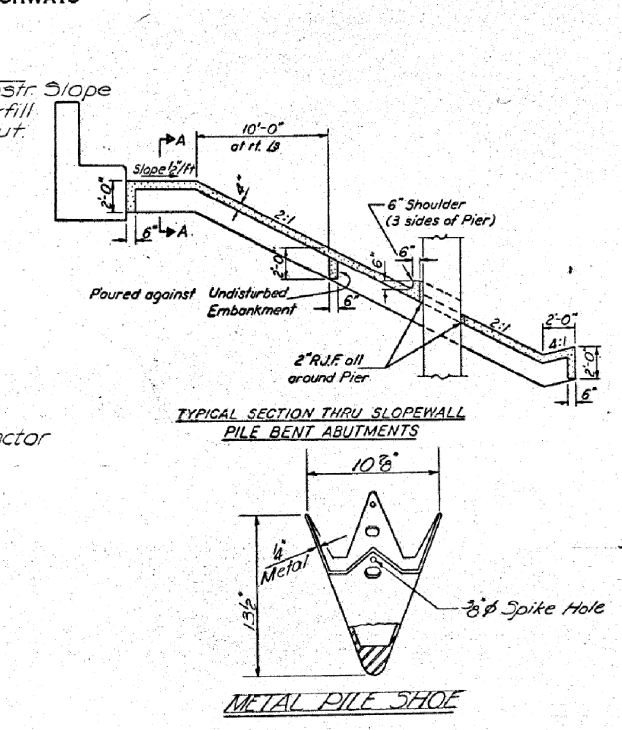
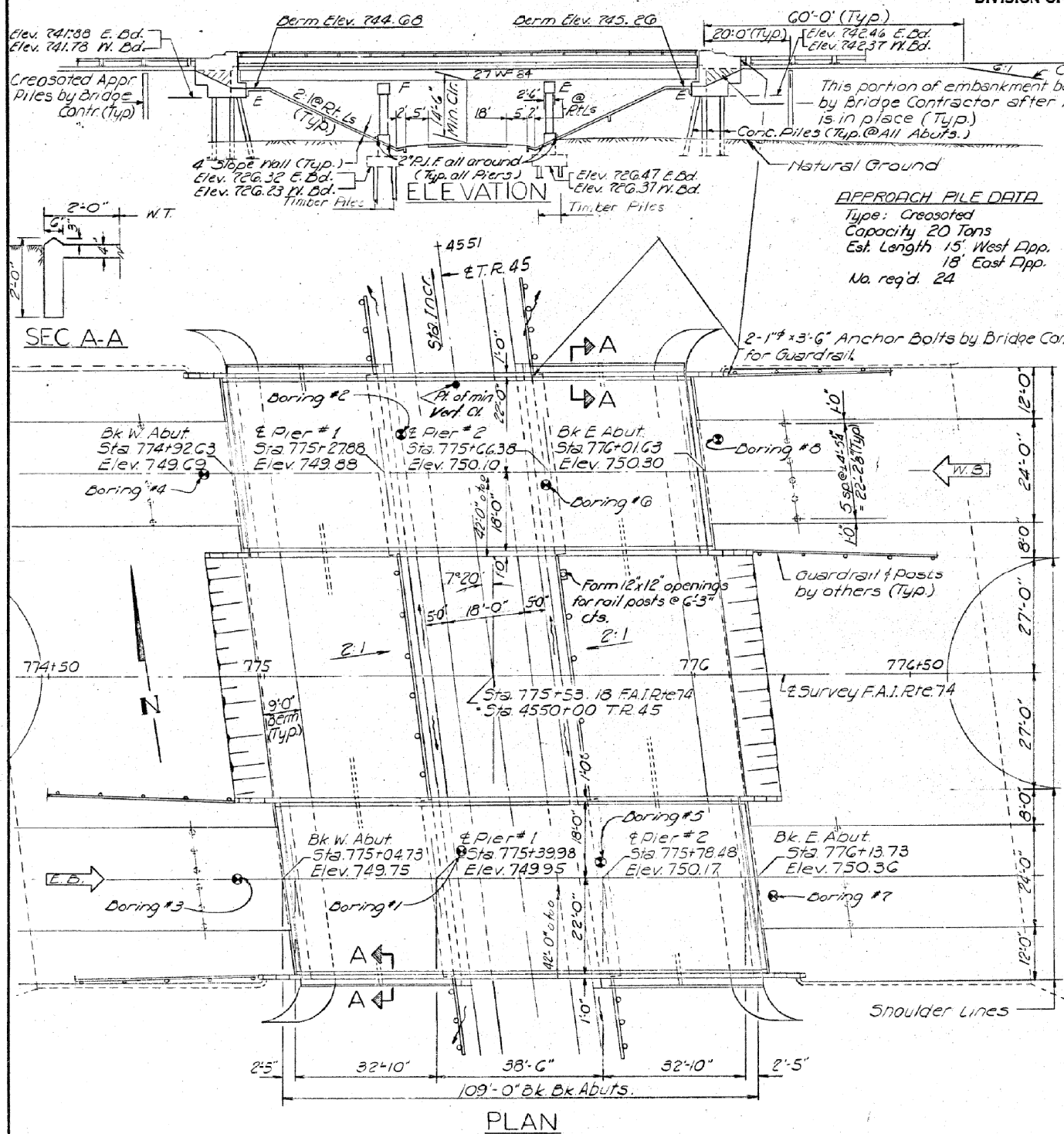
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	*	DEWITT	19	13
* D5 BRIDGE PAINTING 2019-1		CONTRACT NO. 70D23		
ILLINOIS FED. AID PROJECT				

FOR INFORMATION ONLY S.N. 020-0028 (EB) & S.N. 020-0029 (WB)

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.S.L. R.A.S. 74	20-1HB-1	DeWitt	30	6
SHEET NO. 15 SHEETS				
FED. ROAD DIST. NO. 7				
ILLINOIS FED. AID PROJECT: I-74-5(84) 157				

B.M. R.R. Spike in west face power pole on east side T.R. 45, 872' north of E.F.A.I. 74 Elev. 73262

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



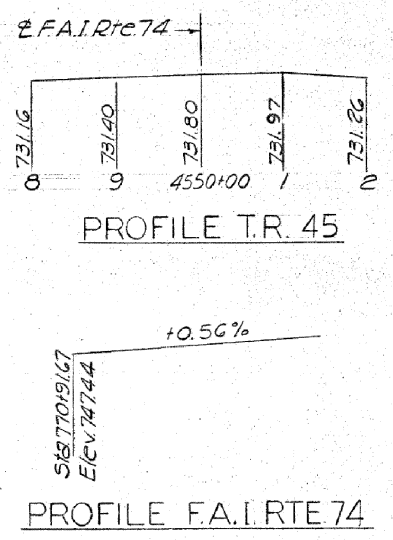
GENERAL NOTES

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.
Slope wall shall be reinforced with welded wire fabric 6"x6" mesh, weighing 38# per 100 Sq. Yds.
All reinforcement bars shall be lapped 24 diameters unless otherwise shown.
Rivets 3/8" Open Holes 1/2" unless otherwise noted.
Anchor bolts shall be set before fastening diaphragms over supports.

Except as otherwise provided all structural steel shall receive one shop coat of red lead paint and two field coats of Aluminum paint.

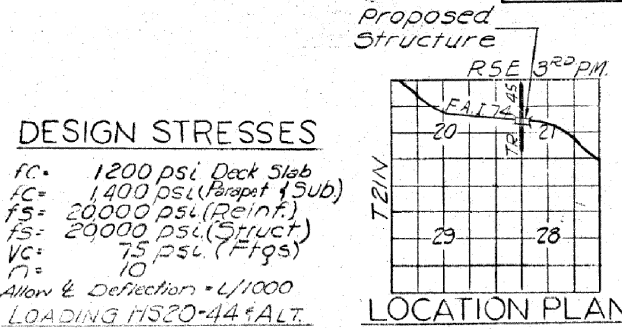
The Contractor shall drive two concrete test piles in permanent locations one at East Abut. W. Bd. Lanes and one at West Abut. E. Bd. Lanes; also drive one timber test pile in the vicinity of Pier 1 W. Bd. Lanes as directed by the Engineer before ordering the remainder of piles.
Concrete piles at abutments shall be driven in holes prepared thru the embankment in accordance with Article 513.03(c) of the Standard Specifications.

Diaphragm connections may be adapted to shop welding subject to approval by the Engineer.
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.



TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Class A Excavation for Structures	Cu. Yds.			274
Class X Concrete	Cu. Yds.	272.7	355.8	628.5
Structural Steel	Lbs.	152,050		152,050
Aluminum Railing	Lin. Ft.	423		423
Reinforcement Bars	Lbs.	67,030	37,510	104,540
Creosoted Piles (20.1' to 38')	Lin. Ft.		1744	1744
Creosoted Piles (Up to 20')	Each		336	336
Concrete Piles	Lin. Ft.		2131	2131
Test Piles (Concrete)	Each		2	2
Name Plates	Each		2	2
Slope Wall 4"	Sq. Yds.			1520
Metal Shoes	Each		64	64
Protective Coat	Sq. Yds.			1138
Test Piles (Timber)	Each		1	1
Preformed Joint Sealer	Lin. Ft.	168		168



GENERAL PLAN ELEVATION
PROJ. I-74-5(84)
F.A.I. RTE. 74 OVER TWP. RD. 45
F.A.I. RTE. 74 SEC. 20-1HB-1
DEWITT COUNTY
STA. 775+53.18

DESIGNED: Dennis M. Ponce
CHECKED: [Signature]
DRAWN: F.M. Jacobs
CHECKED: SFM

EXAMINED: [Signature]
PASSED: [Signature]
APPROVED: Richard H. Gortnerman

STATION 775+53.18
BUILT 19 BY
STATE OF ILLINOIS
F.A.I. RTE. 74 SEC. 20-1HB-1
F.A. PROJ. I-74-5(84)
LOADING H520 & ALT.
NAME PLATE
See S&T 212-1

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USER NAME = leroyma	DESIGNED -	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 6/27/2018	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS (FOR INFORMATION ONLY)
S.N. 020-0028 (EB) & S.N. 020-0029 (WB)

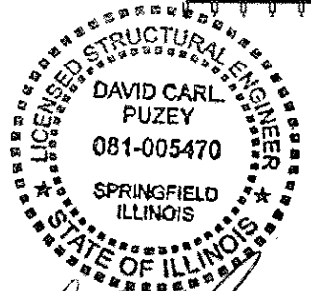
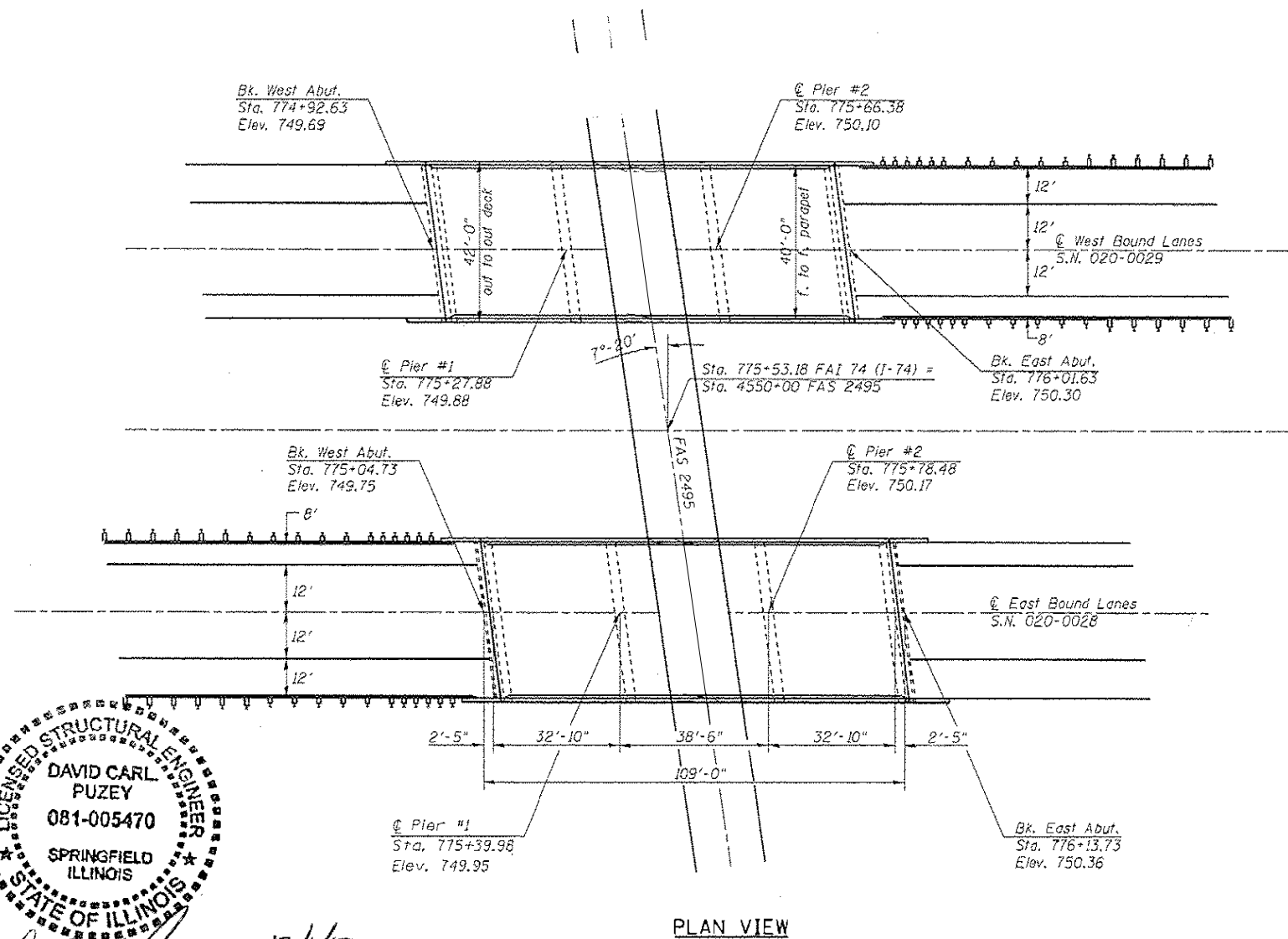
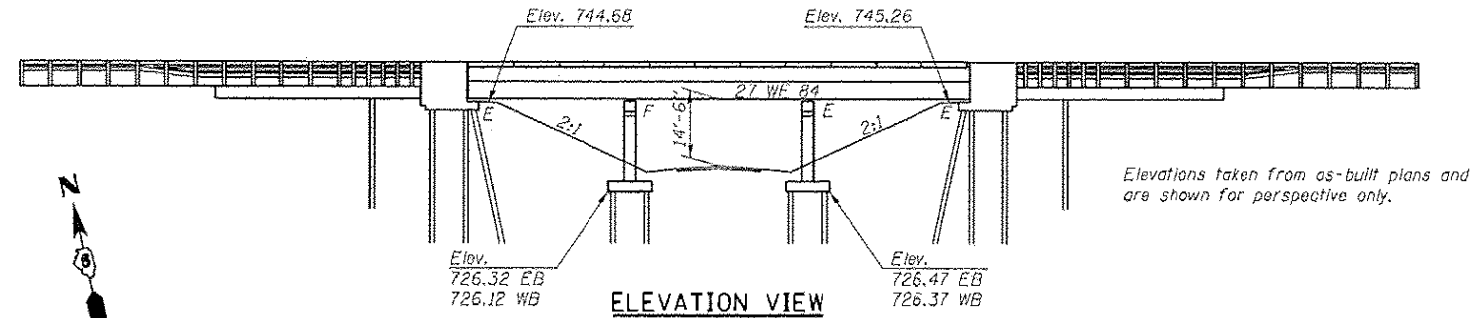
SCALE: SHEET 1 OF 6 SHEETS STA. TO STA.

F.A.I. RTE. 74	SECTION	COUNTY DEWITT	TOTAL SHEETS 19	SHEET NO. 14
* D5 BRIDGE PAINTING 2019-1			CONTRACT NO. 70D23	
ILLINOIS FED. AID PROJECT				

FOR INFORMATION ONLY S.N. 020-0028 (EB) & S.N. 020-0029 (WB)

The existing structures were built in 1970 as Route FA1-74, Section 20-1HB-1st Sta. 775+53.18 in Dewitt County. The structures carry I-74 over FAS 2495 North of Farmer City. In 1975 a waterproofing membrane and HMA wearing surface was placed under Section D5 Bridge Deck Waterproofing 1975-3, Contract 29686. In 1990 the abutment joints were reconstructed as Section D5 Bridge Repair 1989-2, Contract 90084. In 2004 the HMA wearing surface was removed and replaced with Section 74(3RS-2, 4-1-RS-1), Contract 70027.

The superstructure consists of six 27" rolled steel beams supporting a 8" R.C. deck and 1 3/4" HMA wearing surface with waterproofing membrane system. The substructure consists of concrete pile supported stub abutments and timber pile supported piers. The structures measure 109'-0" bk. to bk. abutments and 42'-0" out to out of deck. The horizontal clearance is 38'-6" from face to face of hub guard. The spans measure 32'-10", 38'-6", and 32'-10".



David Carl Puzey 12/1/15
Expires 11/30/16

PROPOSED WORK

1. Remove Existing Waterproofing Membrane System and H.M.A. Wearing Surface.
2. Mill Existing H.M.A. Wearing Surface at Milling Transition Locations at ends of Structures.
3. Perform Bridge Deck Scarification on Bridge Deck and Approach Slabs.
4. Partial Removal of Deck Ends, Parapets, and Removal of Hatch Block.
5. Removal of Existing Joints.
6. Perform Full-Depth Patching.
7. Place New Floor Drains in Deck.
8. Replace Existing Bearings with Elastomeric Bearings at Abutments.
9. Place Reinforcement Bars, Locking Edge Rail, and Studs.
10. Pour Deck Ends and Hatch Block.
11. Insert Rubber Strip Seal into Locking Edge Rails.
12. Pour Parapet Ends.
13. Place Latex Concrete Overlay on Bridge Deck and Approach Slabs.
14. Place HMA Overlay on Approach Pavements and Milling Transition.

BILL OF MATERIALS

ITEM	UNIT	TOTAL
HOT-MIX ASPHALT SURFACE REMOVAL (DECK)	SQ YD	436.0
HOT-MIX ASPHALT SURFACE REMOVAL (ASBESTOS)	SQ YD	436.0
BRIDGE DECK SCARIFICATION, 3/4"	SQ YD	1,316.0
BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/2"	SQ YD	1,316.0
BRIDGE DECK GROOVING	SQ YD	1,302.0
PROTECTIVE COAT	SQ YD	66.0
JACK AND REMOVE EXISTING BEARINGS	EACH	24.0
ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	24.0
ANCHOR BOLTS, 1"	EACH	48.0
PUBLISHING AND PRETECTING STRUCTURAL STEEL	POUND	1,090.0
DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	20.0
DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	5.0
CONCRETE REMOVAL	CU YD	25.8
PROTECTIVE SHIELD	SQ YD	170.0
BAR SPLICERS	EACH	40.0
REINFORCEMENT BARS, EPOXY COATED	POUND	2,620.0
CONCRETE SUPERSTRUCTURE	CU YD	25.8
PREFORMED JOINT STRIP SEAL	FOOT	177.6
FLOOR DRAINS	EACH	16.0
POLYMERIZED LEVELING BINDER (MACHINE METHOD), NIOS	TON	126.0
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", NIOS	TON	126.0
HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	3,201.0
VERTICAL ADJUSTMENT OF GUARDRAIL	FOOT	725.0
STRUCTURAL REPAIR OF CONCRETE (DEPTH < or = 5 INCHES)	SQ FT	71.0
STRUCTURAL STEEL REMOVAL	POUND	2,410.0
STRUCTURAL STEEL REPAIR	POUND	190.0

GENERAL NOTES

The deck ends and hatch blocks shall have its final surface tined according to Article 420.09 (e) (1) of the Standard Specifications. Cost to be included with concrete superstructure.

Plan dimensions and details relative to the 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 the 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 work. However, the Contractor will be paid for the quantity actually furnished at the unit price for the work.

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

Reinforcement bars designated (E) shall be epoxy coated.

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surface in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

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".

Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

Joint openings shall be adjusted according to article 520.04 of the Std. Specs. when the deck is poured at an ambient temperature other than 50° F.

Existing S.N. 020-0029 (W.B.) has been determined through testing to involve asbestos in the HMA Wearing Surface and/or Waterproofing Membrane. Recurring Special Provision, Check Sheet No. 7, Asbestos Waterproofing Membrane and Asbestos Hot-Mix Asphalt Surface Removal shall be used for the removal and disposal of this material.

*20-1(W)WB, NB-1, VB-1, B, B-111

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PLOT DATE = 6/27/2018	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

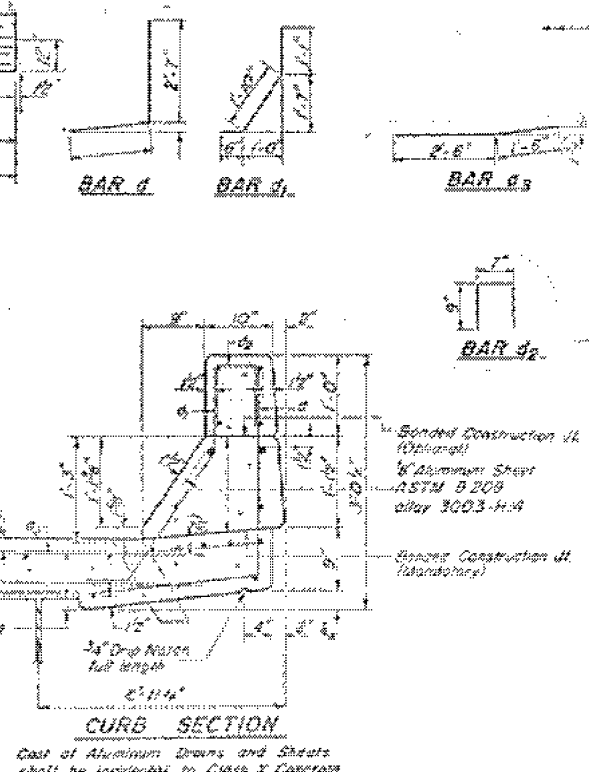
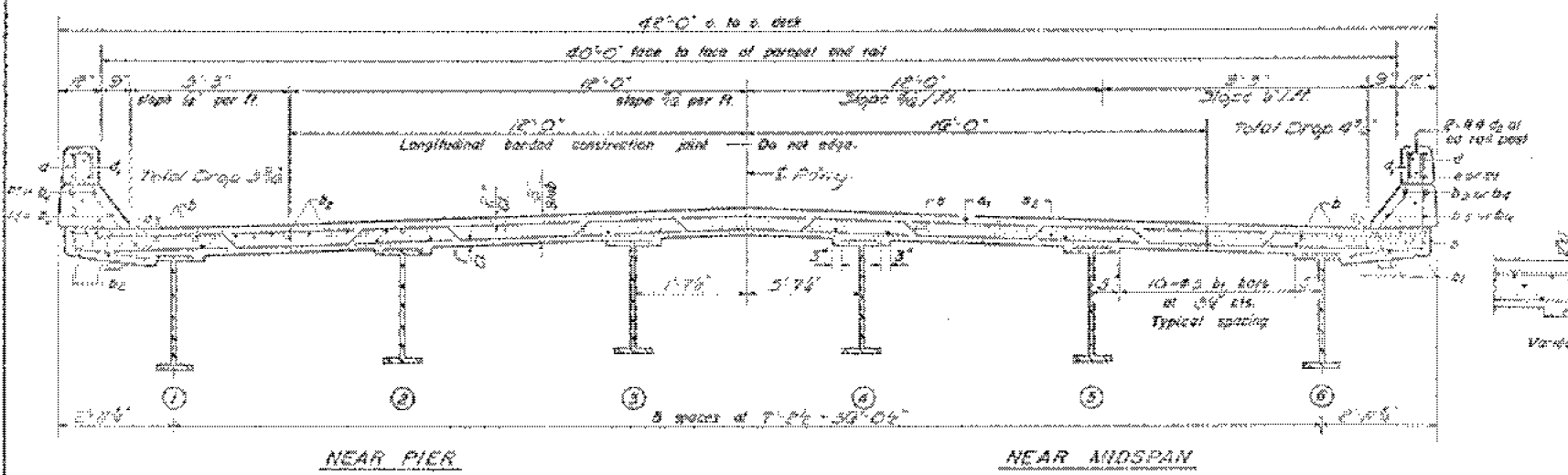
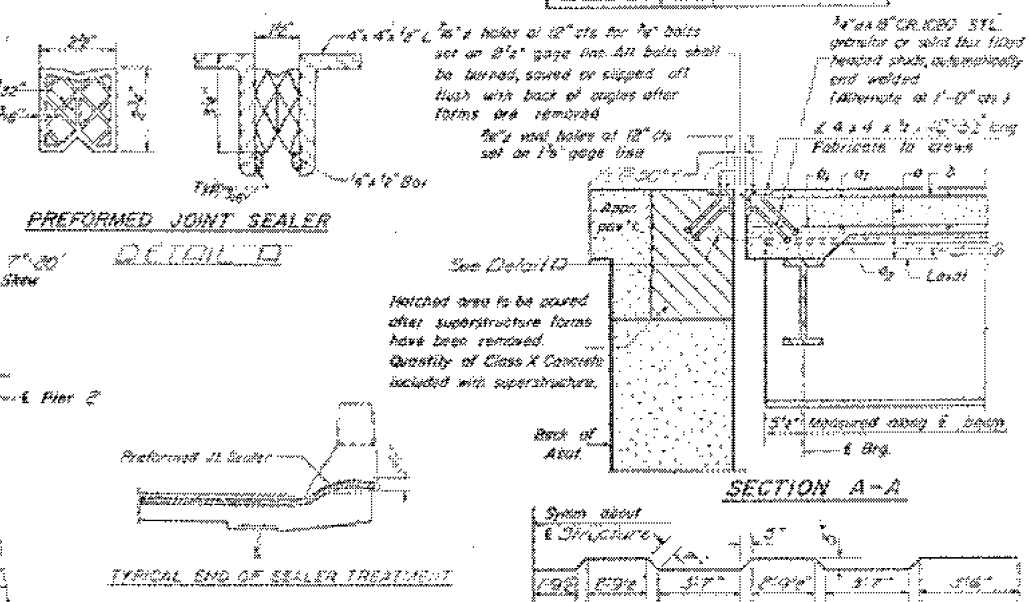
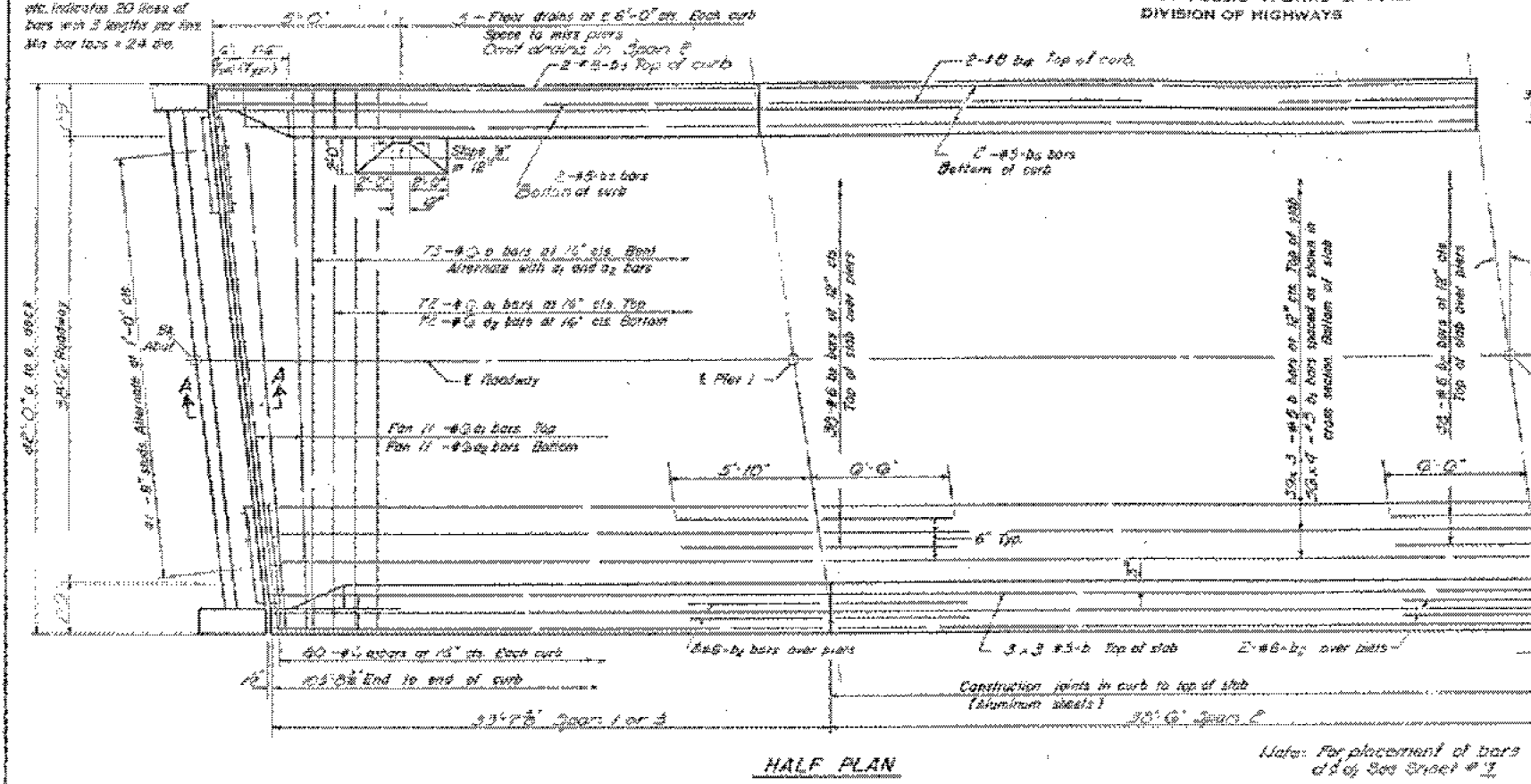
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		74	*	DEWITT	19	15
SCALE: SHEET 2 OF 6 SHEETS STA. TO STA.		* D5 BRIDGE PAINTING 2019-1		CONTRACT NO. 70D23		
		ILLINOIS		FED. AID PROJECT		

FOR INFORMATION ONLY S.N. 020-0028 (EB) & S.N. 020-0029 (WB)

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

PROJECT NO.	SECTION	DATE	BY	CHECKED	DATE
74	20-028	De Witt	30	75	

Note:
Bars indicated that 20x3-#5 etc. indicates 20' length of bars with 3 lengths per line. Min bar laps = 24 dia.



BAR a

BILL OF MATERIAL

Bar No	Size	Length	Quantity
a	10	41.2	
b	10	40.4	
c	10	39.9	
d	10	39.9	
e	10	39.9	
f	10	39.9	
g	10	39.9	
h	10	39.9	
i	10	39.9	
j	10	39.9	
k	10	39.9	
l	10	39.9	
m	10	39.9	
n	10	39.9	
o	10	39.9	
p	10	39.9	
q	10	39.9	
r	10	39.9	
s	10	39.9	
t	10	39.9	
u	10	39.9	
v	10	39.9	
w	10	39.9	
x	10	39.9	
y	10	39.9	
z	10	39.9	

DESIGNED BY: [Signature]
DRAWN BY: [Signature]
CHECKED BY: [Signature]
DATE: 6/27/2018

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILT PLANS (FOR INFORMATION ONLY)
S.N. 020-0028 (EB) & S.N. 020-0029 (WB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	*	DEWITT	19	16
SCALE:		SHEET 3 OF 6 SHEETS		STA. TO STA.
PLOT SCALE = 40,0000' / in.		ILLINOIS		FED. AID PROJECT

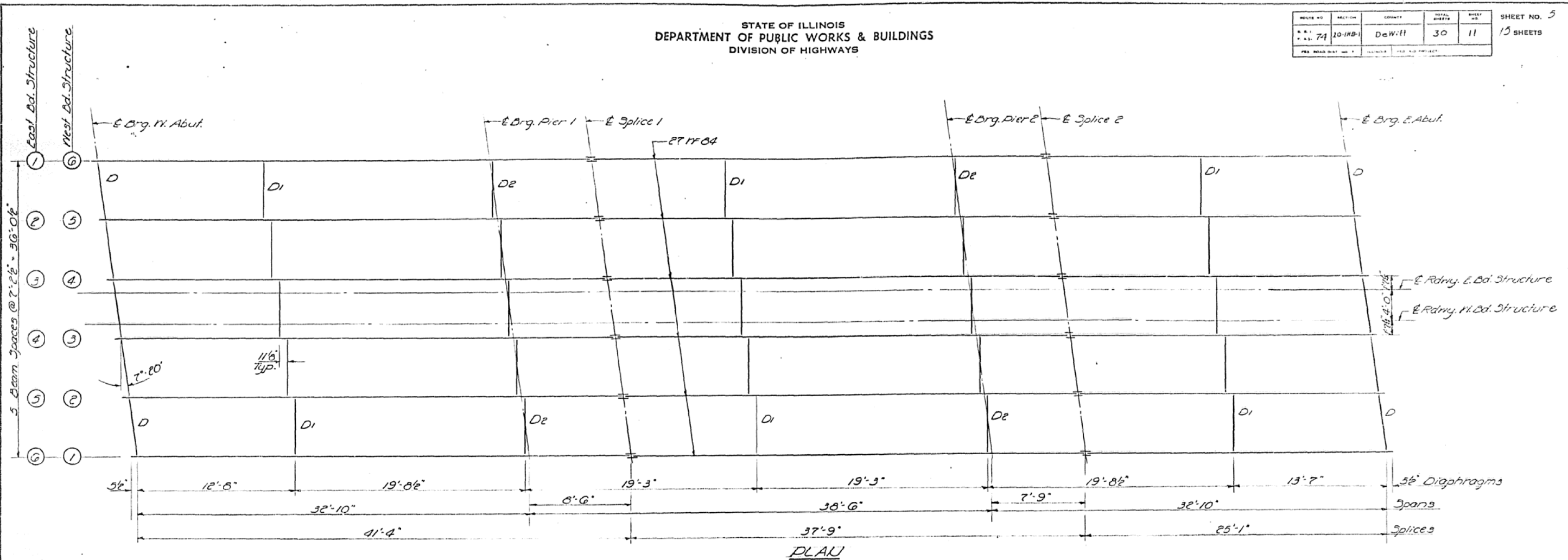
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FOR INFORMATION ONLY S.N. 020-0028 (EB) & S.N. 020-0029 (WB)

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

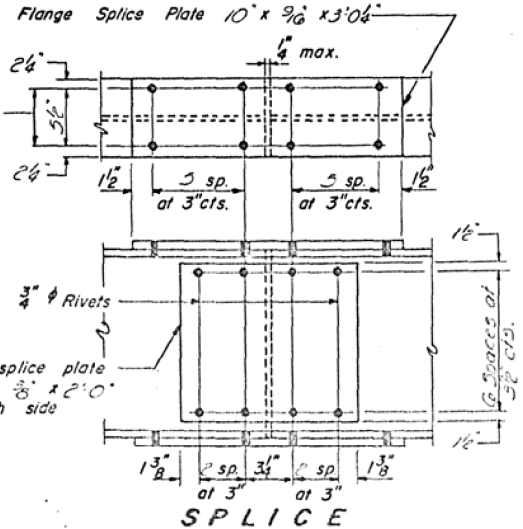
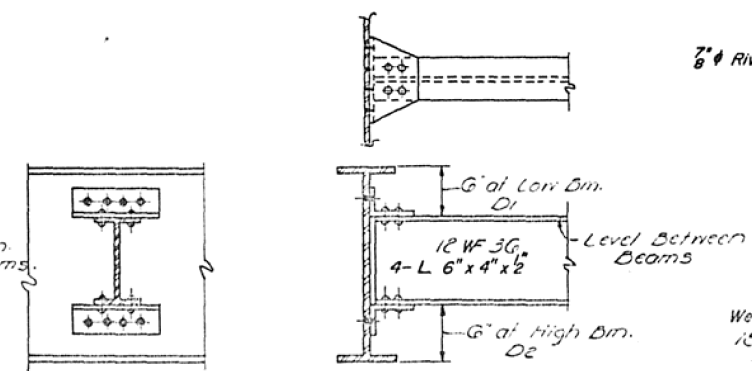
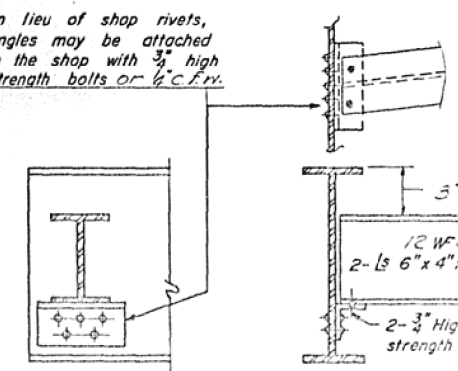
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	20-118-1	DeWitt	30	11

15 SHEETS



PLAN

In lieu of shop rivets, angles may be attached in the shop with 3/4" high strength bolts or 1/2" C.F.R.



ELEVATION TOP OF NY EAST BOUND STRUCTURE

	1	2	3	4	5	6
E Brg. W. Abut.	748.72	748.93	749.05	749.09	748.88	748.73
E Pier 1	748.97	749.11	749.23	749.17	749.06	748.91
E Splice 1	749.02	749.16	749.28	749.22	749.11	748.96
E Pier 2	749.19	749.33	749.45	749.39	749.28	749.13
E Splice 2	749.23	749.37	749.49	749.43	749.32	749.17
E Brg. E. Abut.	749.37	749.51	749.63	749.57	749.46	749.31

WEST BOUND STRUCTURE

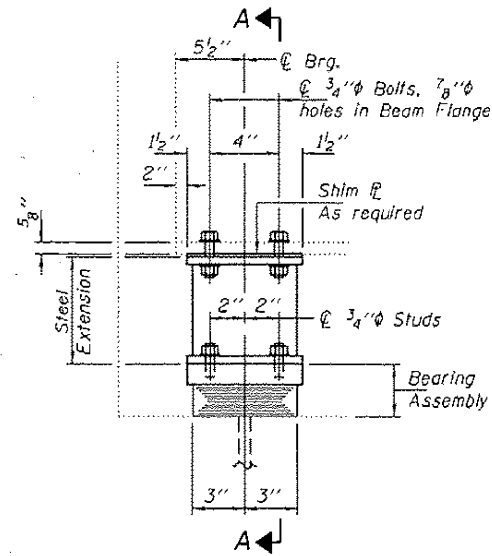
	6	5	4	3	2	1
E Brg. W. Abut.	748.63	748.79	748.91	748.97	748.87	748.72
E Pier 1	748.82	748.98	749.10	749.16	749.06	748.91
E Splice 1	748.87	749.01	749.13	749.07	748.96	748.81
E Pier 2	749.04	749.18	749.30	749.24	749.13	748.98
E Splice 2	749.09	749.23	749.35	749.29	749.18	749.03
E Brg. E. Abut.	749.22	749.36	749.48	749.42	749.31	749.16

DESIGNED: [Signature]
CHECKED: [Signature]
DRAWN: J. Schneller
CHECKED: S.F.M.
EXAMINED: [Signature]
PASSED: [Signature]
APPROVED: [Signature]

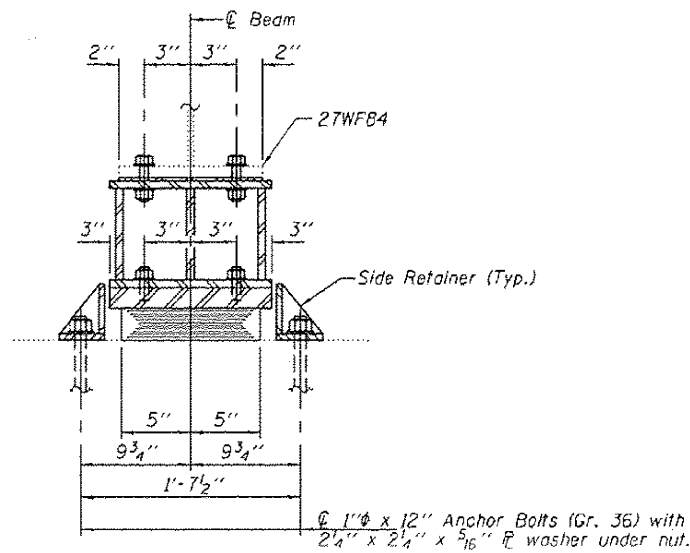
STRUCTURAL STEEL
EAST BOUND SEC 20 118-1
DEWITT COUNTY
STA. 745+53.18

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FOR INFORMATION ONLY S.N. 020-0028 (EB) & S.N. 020-0029 (WB)

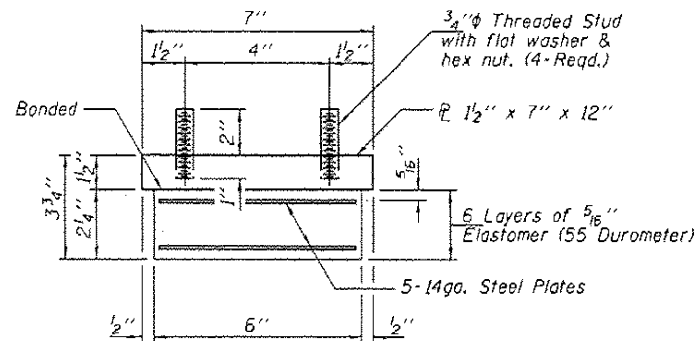


ELEVATION AT ABUTMENT



SECTION A-A

TYPE I ELASTOMERIC EXP. BRG.



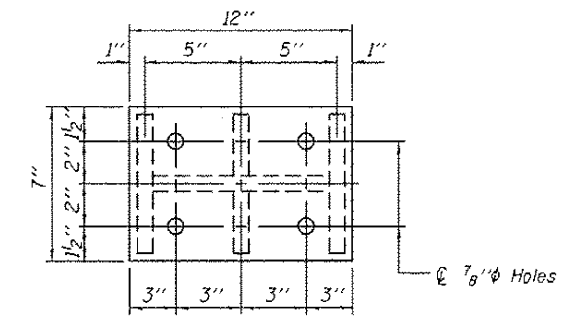
BEARING ASSEMBLY

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

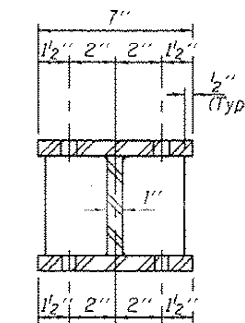
BEAM REACTIONS

RP	(K)	14.5
RL	(K)	31.5
Imp.	(K)	9.5
R (Total)	(K)	55.5

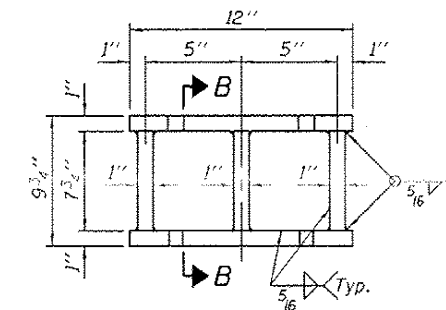
Notes:
Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.
New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.
Prior to ordering any material, the 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 grades 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.
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 I.



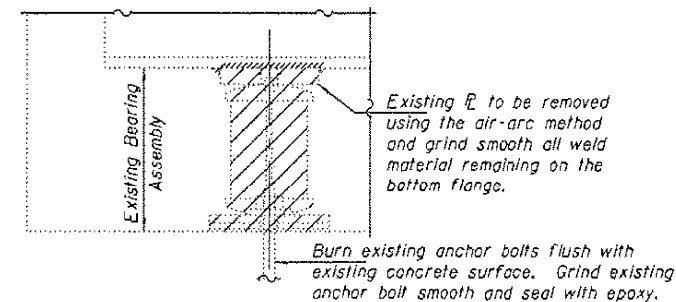
PLAN TOP AND BOTTOM PLATE



SECTION B-B

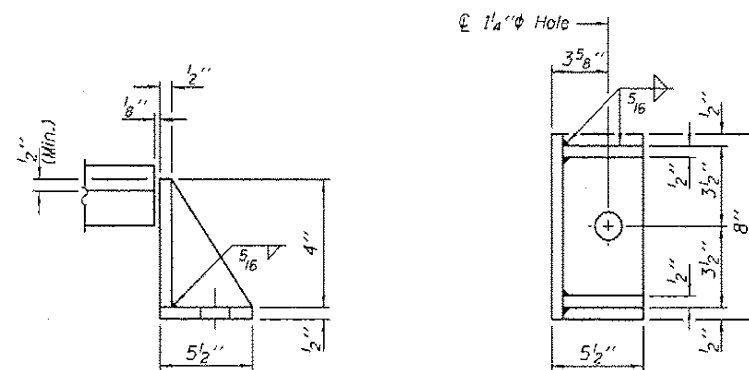


STEEL EXTENSION DETAIL



EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.



SIDE RETAINER

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

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	24
Jack and Remove Existing Bearings	Each	24
Furnishing and Erecting Structural Steel	Pound	2570
Anchor Bolts 1"φ	Each	48

TYI/REPS 12-03-2008

USER NAME = leroyma	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 6/27/2018	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**AS-BUILT PLANS (FOR INFORMATION ONLY)
S.N. 020-0028 (EB) & S.N. 020-0029 (WB)**

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	*	DEWITT	19	19
* D5 BRIDGE PAINTING 2019-1		CONTRACT NO. 70D23		
ILLINOIS FED. AID PROJECT				