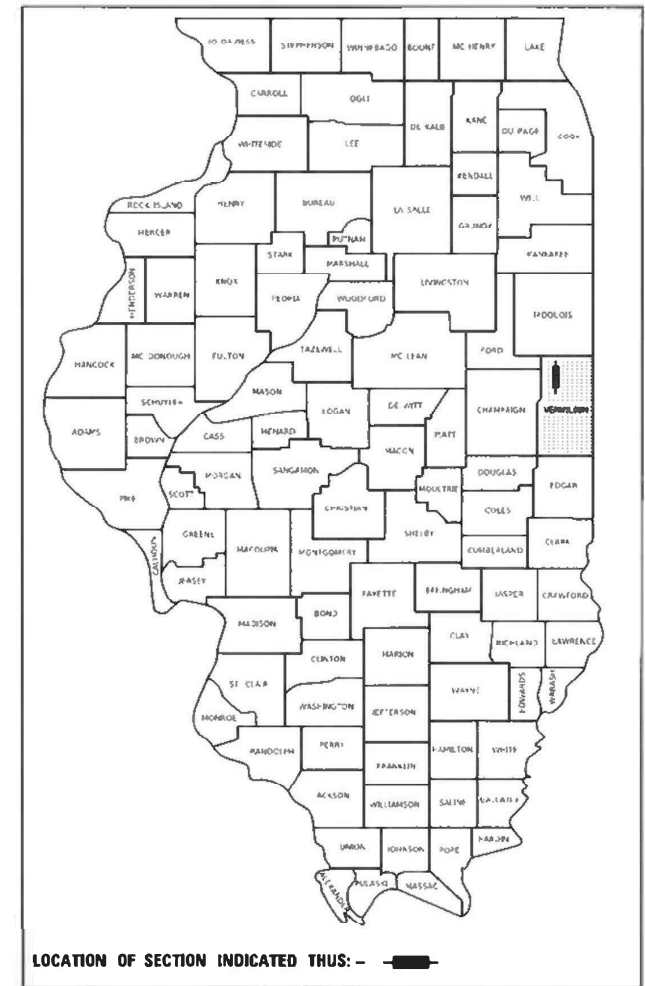


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122VB)BR	VERMILION	29	1
		ILLINOIS	CONTRACT NO. 70G07	

D-95-026-22



PROPOSED HIGHWAY PLANS

F.A.P. ROUTE 840 (IL 49)
SECTION (122VB)BR
PROJECT: N/A
PIER/BRIDGE DECK REPAIRS
VERMILION

C-95-047-22
OVER UP RR 1.8 MI N of US 136

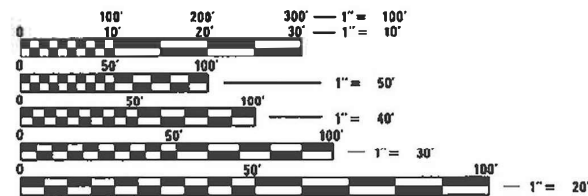
FOR INDEX OF SHEETS, SEE SHEET NO. 2

FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 3-4

CURRENT TRAFFIC DATA

2022 ADT	1,400
2032 ADT	1,450
2042 AM DHV	100
2042 PM DHV	130
PU + PC%	73.9
SU%	10.0
MU%	16.1

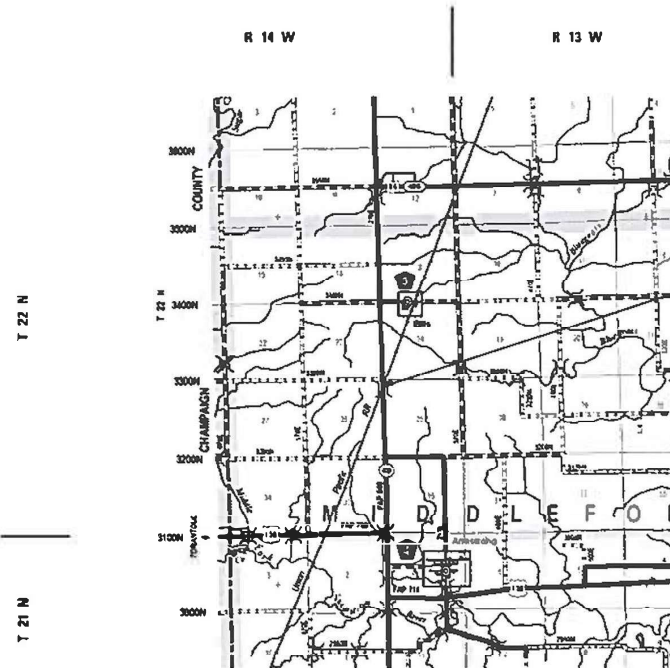
DESIGN DESIGNATION
MINOR ARTERIAL



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 EXCAVATORS
1-800-892-0123
OR 811

PROJECT ENGINEER: TIM BRANDENBURG
PROJECT MANAGER: JEFF M. SHERER
DISTRICT PHONE (217) 465-4181
CONTRACT NO. 70G07



EXISTING S.N. 092-0101
IL 49 OVER UP RR
STA. 858+18 @ IL 49
PIER REPAIR/ BRIDGE DECK REPAIRS

GROSS LENGTH = 362.00 FT. = 0.069 MILE
NET LENGTH = 362.00 FT. = 0.069 MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED 12/2 2022
Kenneth A. Barnett
REGIONAL ENGINEER

February 3, 2023
Steph M. Shaw
ENGINEER OF DESIGN AND ENVIRONMENT

February 3, 2023
Steph M. Shaw
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

<u>SHEET NO.</u>	<u>ITEM</u>
1	COVER SHEET
2	INDEX OF SHEETS/ HIGHWAY STANDARDS
2	GENERAL NOTES
3-4	SUMMARY OF QUANTITIES
5-8	STAGING DETAILS
9	DETAIL OF TEMPORARY CONCRETE BARRIER
10-25	092-0101 REPAIR PLANS
26-29	WIDTH RESTRICTION SIGN DETAIL

LIST OF STANDARDS

<u>STANDARD NO.</u>	<u>DESCRIPTION</u>
000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
701001-02	OFF RD OPERATIONS, 2L, 2W, 15' FROM PAVEMENT EDGE
701006-05	OFF RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701011-04	OFF RD MOVING OPERATION, 2L, 2W, DAY ONLY
701201-05	LANE CLOSURE, 2L 2W, DAY ONLY FOR SPEEDS 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATION
701321-18	LANE CLOSURE, 2L 2W - BRIDGE REPAIR + BARRIER
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
780001-05	TYPICAL PAVEMENT MARKINGS

GENERAL NOTES

G.N.-100A

ELECTRONIC FILES AND/OR ELECTRONIC SURVEY INFORMATION INCLUDING CADD FILES WILL NOT BE AVAILABLE TO THE CONTRACTOR.

G.N.-105.09A

ALL ELEVATIONS SHOWN IN THE PLANS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988. (NAVD 88)

THERE ARE NO COMMITMENTS ASSOCIATED WITH THIS PROJECT

MODEL: \\MODELS\MAMES
 FILE: \\mames\pub\lib\c-22\benlley.com\PHWDOT\Documents\DOT Offices\Burling. S\Projects\0570G07\CaddData\Structures\70G07-ctb\IndexGeneralNotes.dgn

USER NAME = Jeff.Sherer	DESIGNED - JMS	REVISED -
	DRAWN - JMS	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 1/13/2023	DATE - 11152022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**INDEX OF SHEETS/GENERAL NOTES
S.N. 092-0101**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122VB)BR	VERMILION	29	2
			CONTRACT NO. 70G07	
		ILLINOIS	FED. AID PROJECT	

CONSTRUCTION CODE
VERMILION
STRUCTURE
IMPROVEMENT
F.A.P. 840
S.N. 092-0101
STA. 858+22.89
100% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0047 RURAL
50102400	CONCRETE REMOVAL	CU YD	26.1	26.1
50300255	CONCRETE SUPERSTRUCTURE	CU YD	26.1	26.1
50300300	PROTECTIVE COAT	SQ YD	63.0	63.0
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	9,480.0	9,480.0
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	4,420.0	4,420.0
50800515	BAR SPLICERS	EACH	40.0	40.0
52000025	PREFORMED JOINT STRIP SEAL "	FOOT	204.0	204.0
52100540	ANCHOR BOLTS, 1 1/2"	EACH	8.0	8.0
67100100	MOBILIZATION	L SUM	1.0	1.0
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1.0	1.0
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1.0	1.0
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1.0	1.0
70400100	TEMPORARY CONCRETE BARRIER	FOOT	837.5	837.5
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	837.5	837.5
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2.0	2.0

MODEL: \\MODELS\MAME5
 FILE: \\mame5\pub\lib\c-22\benitey.com\PHWDOT\Documents\DOT Offices\Baird - S\Projects\0570607\CADD\BairdStructures\70G07-rl-500.dgn

USER NAME = Jeff.Sherer	DESIGNED - JMS	REVISED - _____
DRAWN - JMS	CHECKED - _____	REVISED - _____
PLOT SCALE = 40.0000 ' / in.	DATE - 11152022	REVISED - _____
PLOT DATE = 12/2/2022		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: NONE SHEET 1 OF 2 SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122VB)BR	PIATT	25	3
CONTRACT NO. 70G07			ILLINOIS FED. AID PROJECT	

CONSTRUCTION CODE
VERMILION
STRUCTURE
IMPROVEMENT
F.A.P. 840
S.N. 092-0101
STA. 858+22.89
100% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0047 RURAL
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2.0	2.0
X7200201	WIDTH RESTRICTION SIGNING	L SUM	1.0	1.0
Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	2.0	2.0
Z0001903	STRUCTURAL STEEL REMOVAL	POUND	8,860.0	8,860.0
Z0001905	STRUCTURAL STEEL REPAIR	POUND	1,600.0	1,600.0
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	186.0	186.0
Z0013798	CONSTRUCTION LAYOUT	L SUM	1.0	1.0
Z0073200	TEMPORARY SHORING AND CRIBBING	EACH	9.0	9.0

SPECIALTY ITEM (NONE)

MODEL: \\MODELF\MAME5
 FILE: \\mame5\pub\lib\22\beniteley.com\PHWDOT\Documents\DOT Offices\Bentley - S\Projects\0570607\CADD\Bentley Structures\70G07-410-500.dgn

USER NAME = Jeff.Sherer	DESIGNED - JMS	REVISED - _____
DRAWN - JMS	REVISIONS - _____	
PLOT SCALE = 40.0000 ' / in.	CHECKED - _____	REVISED - _____
PLOT DATE = 12/2/2022	DATE - 11152022	REVISED - _____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

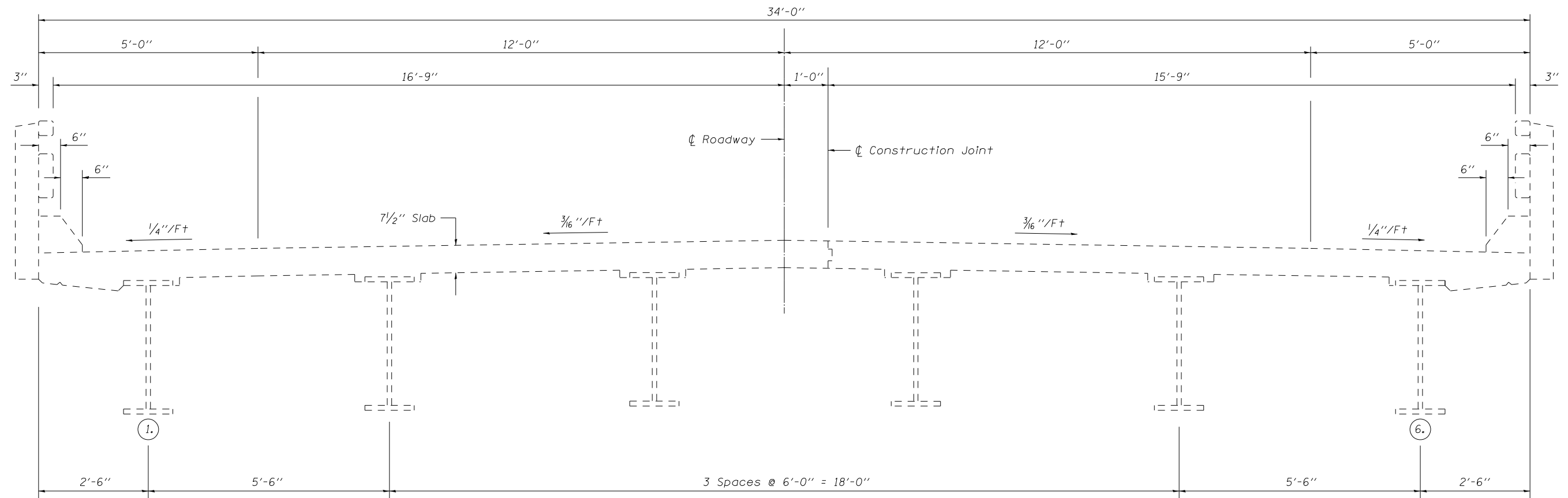
SUMMARY OF QUANTITIES

SCALE: NONE SHEET 2 OF 2 SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122VB)BR	PIATT	25	4
			CONTRACT NO. 70G07	
			ILLINOIS FED. AID PROJECT	

EXISTING DECK CROSS SECTION (LOOKING NORTH)

S.N. 092-0101



MODEL: \\MODELMAME\...
 FILE: \\MODELMAME\...

USER NAME = Jeff.Sherer	DESIGNED - JMS	REVISED -
	DRAWN - JMS	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 1/13/2023	DATE - 04112022	REVISED -

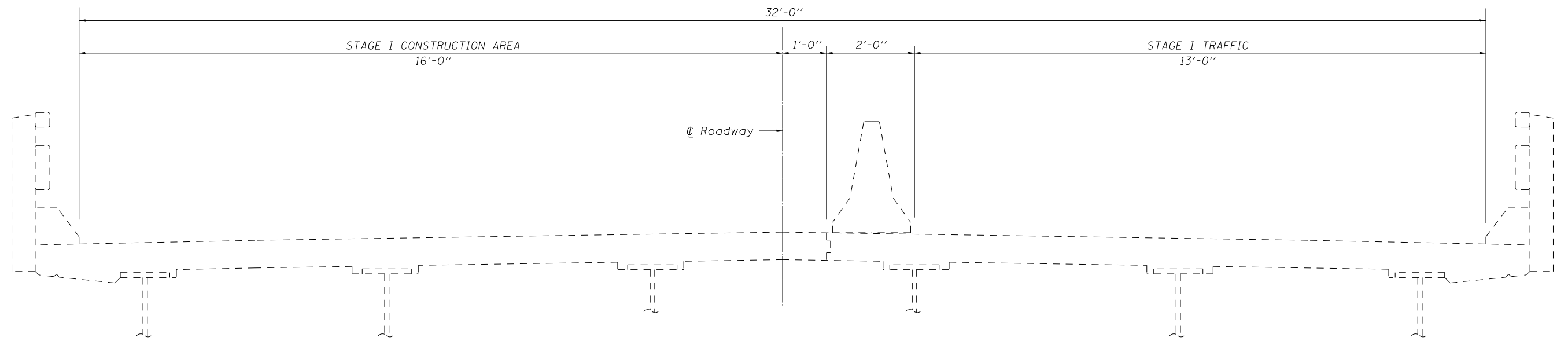
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EXISTING TYPICAL SECTION
S.N. 092-0101**

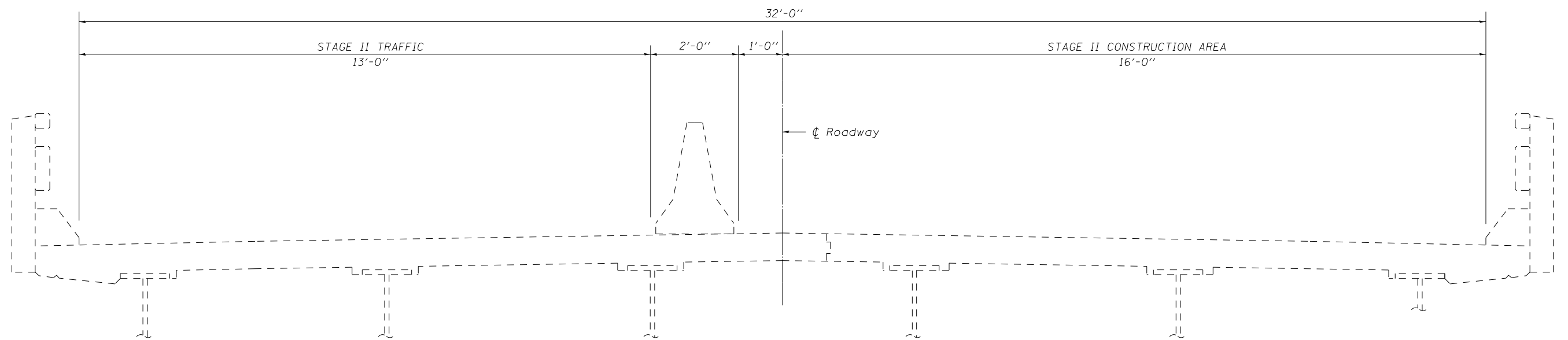
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE. 840	SECTION (122VB)BR	COUNTY VERMILION	TOTAL SHEETS 29	SHEET NO. 5
CONTRACT NO. 70G07				
ILLINOIS FED. AID PROJECT				

STAGE I CONSTRUCTION DETAIL (LOOKING NORTH)



STAGE II CONSTRUCTION DETAIL (LOOKING NORTH)



MODEL: \\MODELMAME\...
 FILE: \\MODELMAME\...

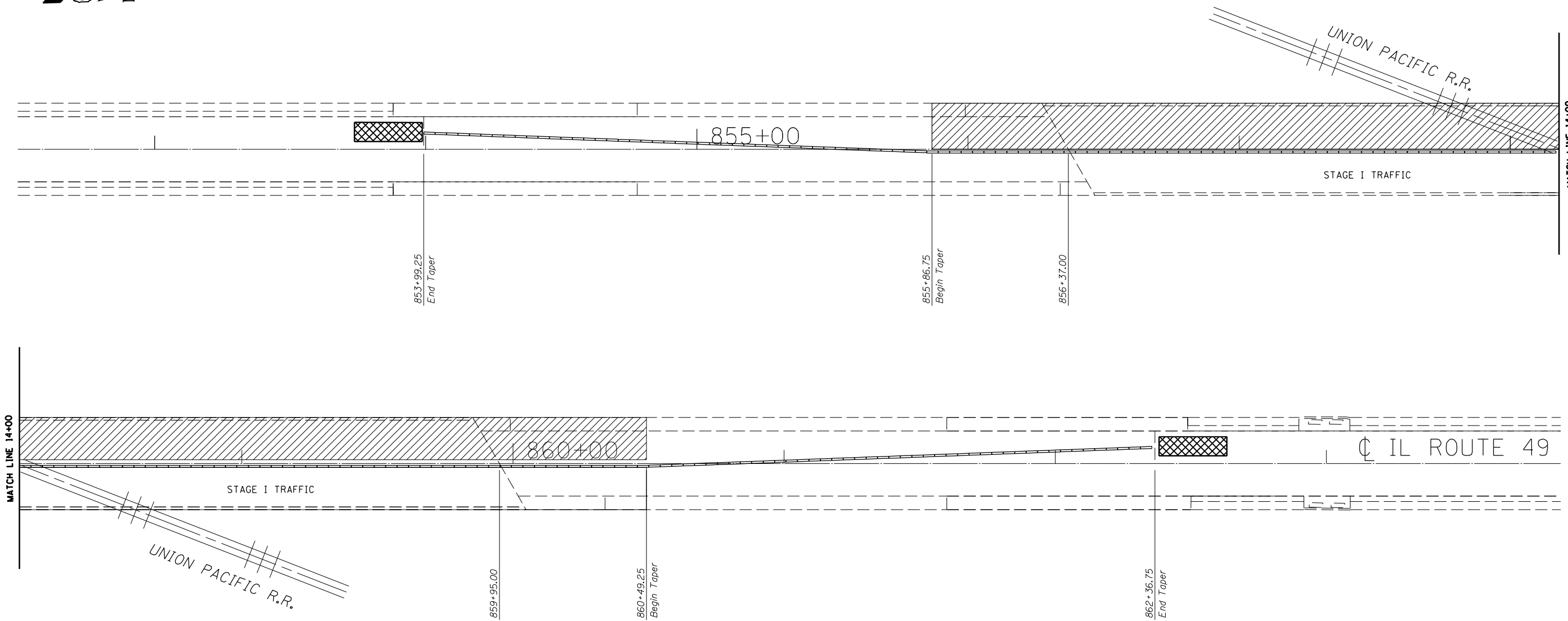
USER NAME = Jeff.Sherer	DESIGNED - JMS	REVISED -
DRAWN - JMS	CHECKED -	REVISED -
PLOT SCALE = 40.0000 ' / in.	DATE - 04112022	REVISED -
PLOT DATE = 1/13/2023		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL STAGING DETAIL			
S.N. 092-0101			
SCALE: NONE	SHEET 1	OF 1 SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122VB)BR	VERMILION	29	6
ILLINOIS FED. AID PROJECT			CONTRACT NO. 70G07	

STAGE I TEMPORARY CONCRETE BARRIER LAYOUT



PLAN NOTES:

ALL STAGING DETAILS SHALL BE IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION STANDARD 701321 AND PAID FOR AT THE CONTRACT UNIT PRICE PER EACH LOCATION.

ALL WORK WITHOUT TEMPORARY CONCRETE BARRIER IN PLACE SHALL BE IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION STANDARDS 701201, 701301 AND 701311.

FOR ADDITIONAL DETAILS ASSOCIATED WITH TEMPORARY CONCRETE BARRIER, SEE HIGHWAY STANDARD 704001.

EXISTING OR TEMPORARY PAVEMENT MARKINGS SHALL BE ON BOTH SIDES OF THE OPEN LANE FROM STOP BAR TO STOP BAR. PAVEMENT MARKINGS THAT CONFLICT WITH STAGED TRAFFIC MARKINGS SHALL BE REMOVED. THIS WORK SHALL BE INCLUDED IN THE COST FOR TRAFFIC CONTROL AND PROTECTION STANDARD 701321.

REFLECTORS SHALL BE ATTACHED TO GUARDRAIL AND BARRIER WALL AT 25 FOOT CENTERS. COST INCLUDED WITH TRAFFIC CONTROL AND PROTECTION STANDARD 701321.

PRIOR TO ROUTING TRAFFIC ONTO SHOULDERS, THE CONTRACTOR SHALL SECURE ANY GRATES ON SHOULDER INLETS AS DIRECTED BY ENGINEER. THIS WORK SHALL BE PAID FOR ACCORDING TO ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

THE EXISTING TYPE A GUTTER SHALL BE FILLED WITH HOT-MIX ASPHALT FOR STAGE TRAFFIC. UPON COMPLETION OF STAGED CONSTRUCTION THE HMA SHALL BE REMOVED AND ANY DAMAGED TYPE A GUTTER SHALL BE REMOVED AND REPLACED. COST OF REMOVAL INCLUDED WITH HMA SHOULDERS 8".

70400100 TEMPORARY CONCRETE BARRIER

	STATION	TO	STATION	LENGTH
TAPER RT	853+99.25		855+86.75	187.5
RT	855+86.75		860+49.25	462.5
TAPER RT	860+49.25		862+36.75	187.5

SUB-TOTAL = 837.5

- TEMPORARY CONCRETE BARRIER
- PROPOSED WORK AREA
- IMPACT ATTENUATOR, TEMPORARY, NON-REDIRECTIVE TEST LEVEL 3

BILL OF MATERIALS

ITEM	UNIT	TOTAL
TEMPORARY CONCRETE BARRIER	FOOT	837.5
IMPACT ATTENUATOR TEMPORARY NON-REDIRECTIVE TEST LEVEL 3	EACH	2.0

MODEL: \\MODELS\MAME\FILE: \\MODELS\MAME\Public\2023\2023\11\13\2023\DOT\Office\Bentley\3\Projects\0570607\CADD\Bentley\Structures\70G07-41b-Structure\Plan.dgn

USER NAME = Jeff.Sherer	DESIGNED - JMS	REVISED -
PLOT SCALE = 40.0000 ' / in.	DRAWN - JMS	REVISED -
PLOT DATE = 1/13/2023	CHECKED -	REVISED -
	DATE - 04112022	REVISED -

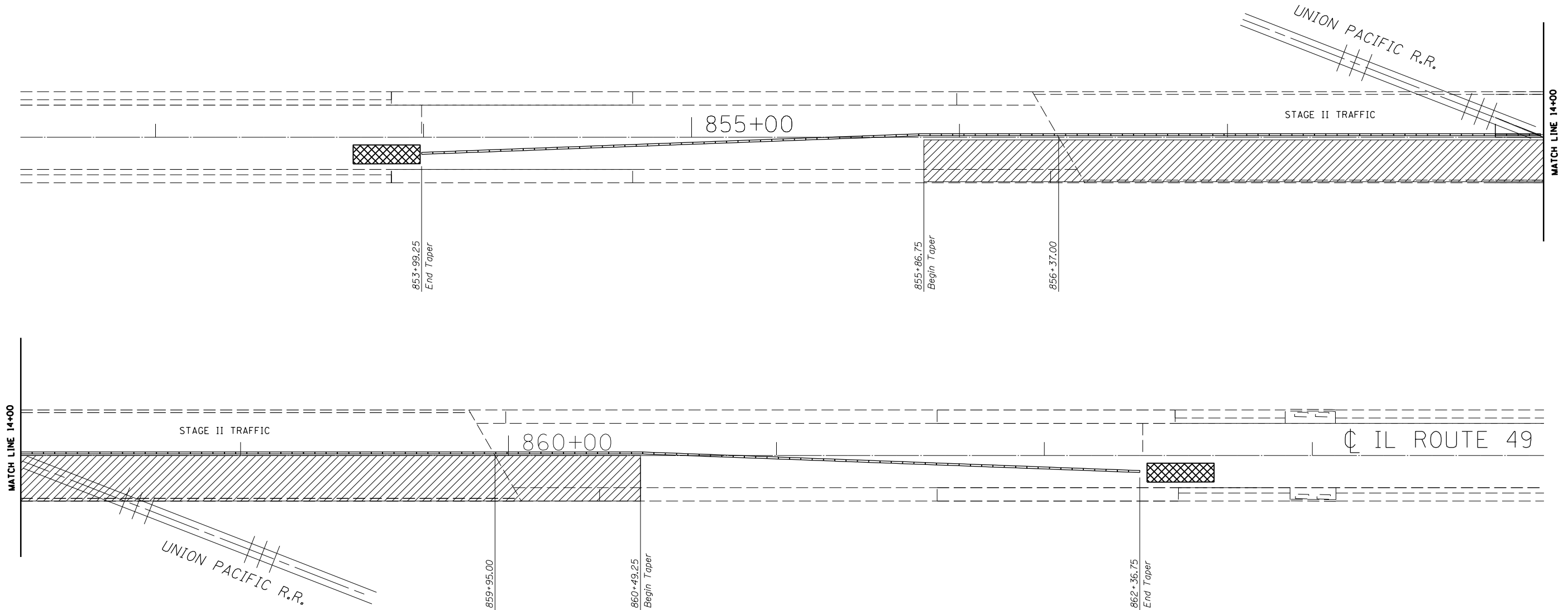
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TYPICAL STAGING DETAIL CONCRETE BARRIER
S.N. 092-0101**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122VB)BR	VERMILION	29	7
			CONTRACT NO. 70G07	
ILLINOIS FED. AID PROJECT				

STAGE II TEMPORARY CONCRETE BARRIER LAYOUT



PLAN NOTES:

ALL STAGING DETAILS SHALL BE IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION STANDARD 701321 AND PAID FOR AT THE CONTRACT UNIT PRICE PER EACH LOCATION.

ALL WORK WITHOUT TEMPORARY CONCRETE BARRIER IN PLACE SHALL BE IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION STANDARDS 701201, 701301 AND 701311.

FOR ADDITIONAL DETAILS ASSOCIATED WITH TEMPORARY CONCRETE BARRIER, SEE HIGHWAY STANDARD 704001.

EXISTING OR TEMPORARY PAVEMENT MARKINGS SHALL BE ON BOTH SIDES OF THE OPEN LANE FROM STOP BAR TO STOP BAR. PAVEMENT MARKINGS THAT CONFLICT WITH STAGED TRAFFIC MARKINGS SHALL BE REMOVED. THIS WORK SHALL BE INCLUDED IN THE COST FOR TRAFFIC CONTROL AND PROTECTION STANDARD 701321.

REFLECTORS SHALL BE ATTACHED TO GUARDRAIL AND BARRIER WALL AT 25 FOOT CENTERS. COST INCLUDED WITH TRAFFIC CONTROL AND PROTECTION STANDARD 701321.

PRIOR TO ROUTING TRAFFIC ONTO SHOULDERS, THE CONTRACTOR SHALL SECURE ANY GRATES ON SHOULDER INLETS AS DIRECTED BY ENGINEER. THIS WORK SHALL BE PAID FOR ACCORDING TO ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

THE EXISTING TYPE A GUTTER SHALL BE FILLED WITH HOT-MIX ASPHALT FOR STAGE TRAFFIC. UPON COMPLETION OF STAGED CONSTRUCTION THE HMA SHALL BE REMOVED AND ANY DAMAGED TYPE A GUTTER SHALL BE REMOVED AND REPLACED. COST OF REMOVAL INCLUDED WITH HMA SHOULDERS 8".

70400200 RELOCATE TEMPORARY CONCRETE BARRIER

	<u>STATION</u>	<u>TO</u>	<u>STATION</u>	<u>LENGTH</u>
TAPER RT	853+99.25		RT 855+86.75	187.5
	RT 855+86.75		RT 860+49.25	462.5
TAPER RT	860+49.25		RT 862+36.75	187.5
SUB-TOTAL =				837.5

- TEMPORARY CONCRETE BARRIER
- PROPOSED WORK AREA
- IMPACT ATTENUATOR, TEMPORARY, NON-REDIRECTIVE TEST LEVEL 3

BILL OF MATERIALS

ITEM	UNIT	TOTAL
TEMPORARY CONCRETE BARRIER	FOOT	837.5
IMPACT ATTENUATOR TEMPORARY NON-REDIRECTIVE TEST LEVEL 3	EACH	2.0

MODEL: \\MODELS\MAME\... PROJECTS\DOT\Office\Bentley\... STRUCTURE\Bentley\... FILE NAME: ...

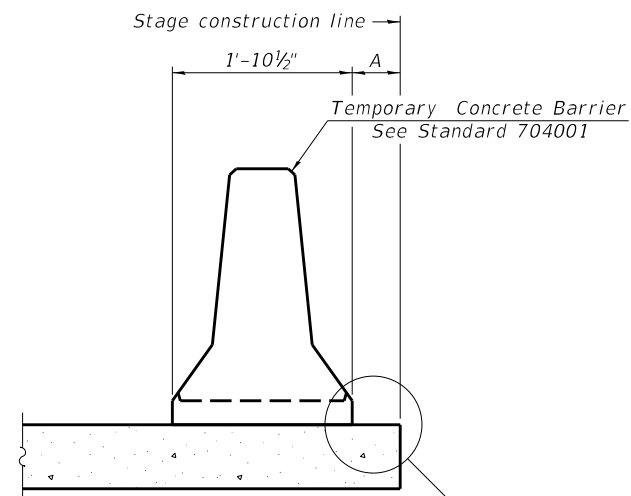
USER NAME = Jeff.Sherer	DESIGNED - JMS	REVISED -
	DRAWN - JMS	REVISED -
PLOT SCALE = 40,0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 1/13/2023	DATE - 04112022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TYPICAL STAGING DETAIL CONCRETE BARRIER
S.N. 092-0101**

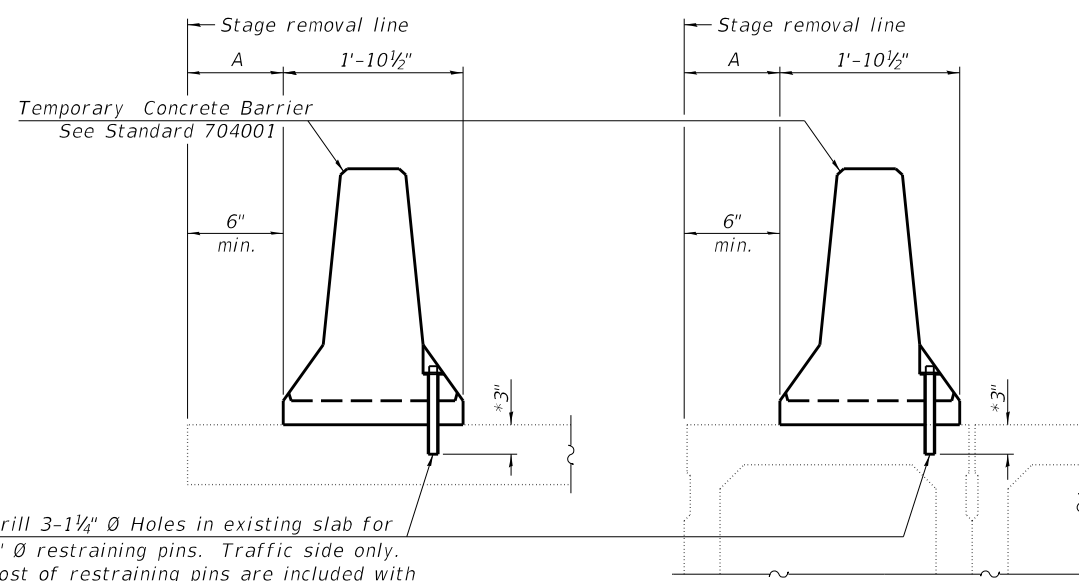
SCALE: NONE SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122VB)BR	VERMILION	29	8
CONTRACT NO. 70G07			ILLINOIS FED. AID PROJECT	



When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM

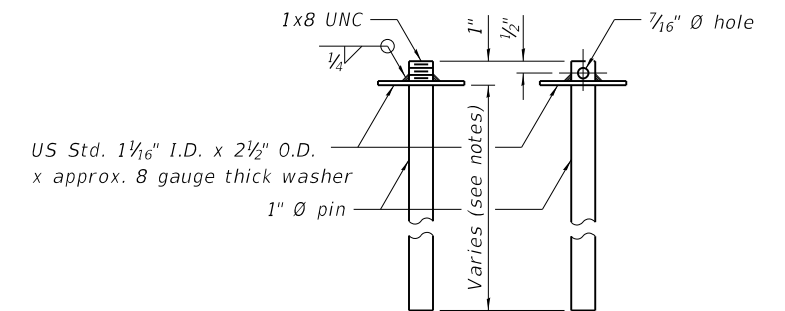


Drill 3-1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

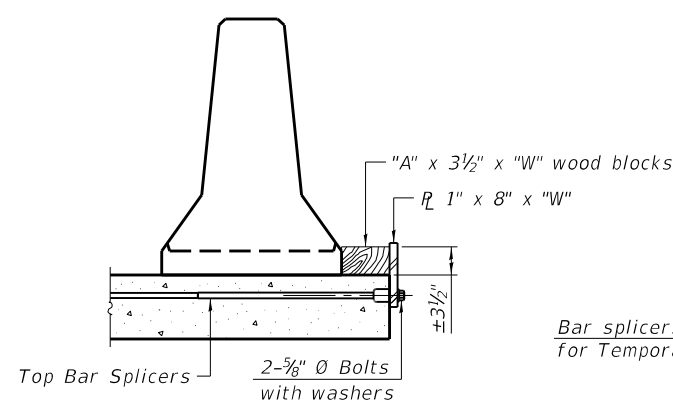
EXISTING SLAB

EXISTING DECK BEAM

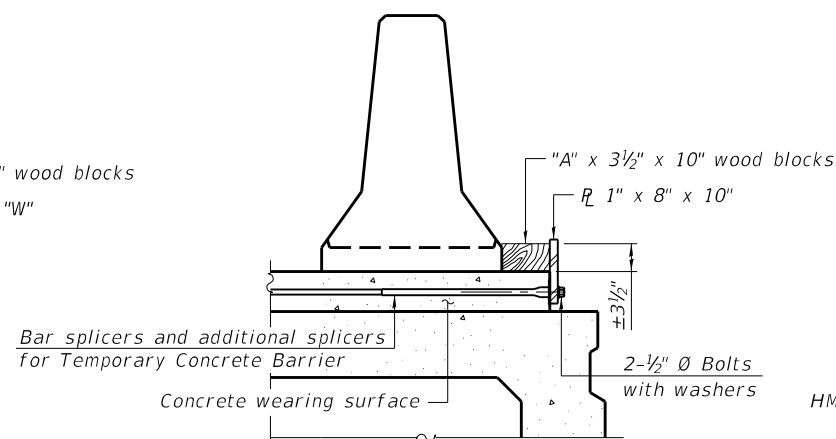
SECTIONS THRU SLAB OR DECK BEAM



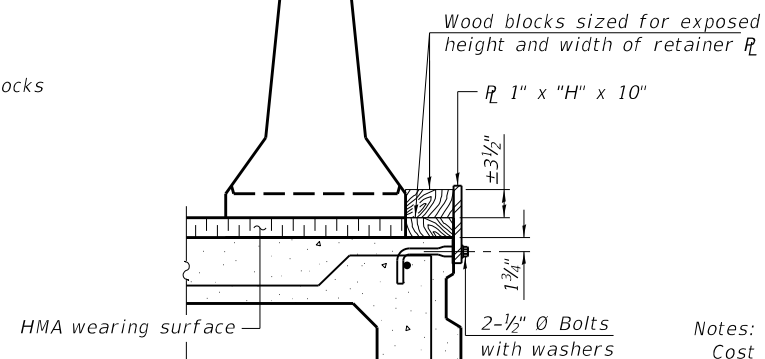
RESTRAINING PIN



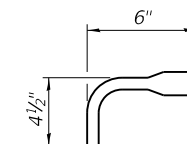
DETAIL I



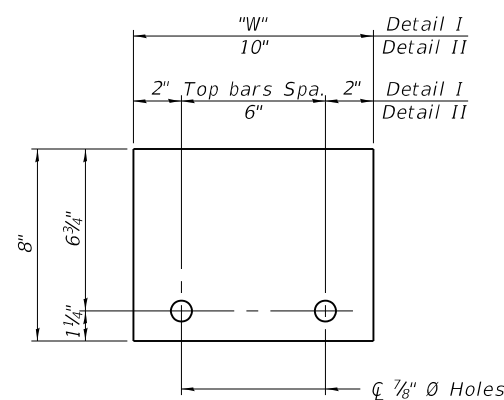
DETAIL II



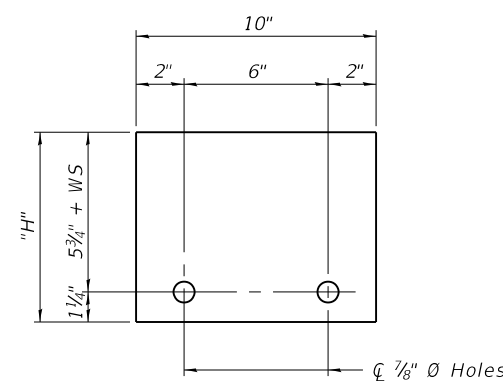
DETAIL III



BAR SPLICER FOR #4 BAR - DETAIL III



STEEL RETAINER R 1" x 8" x "W"
(Detail I and II)



STEEL RETAINER R 1" x "H" x 10"
(Detail III)

Notes:
 Cost of retainer assembly is included with Temporary Concrete Barrier. A retainer assembly shall be located at the approximate C of each temporary concrete barrier.
 The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.
 When the 'A' dimension is less than 1 1/2', the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

Detail I - Installation for a new bridge deck or bridge slab.
Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.
Detail III - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

RAILING CRITERIA

NCHRP 350 Test Level	3
Railing Weight (pcf)	440

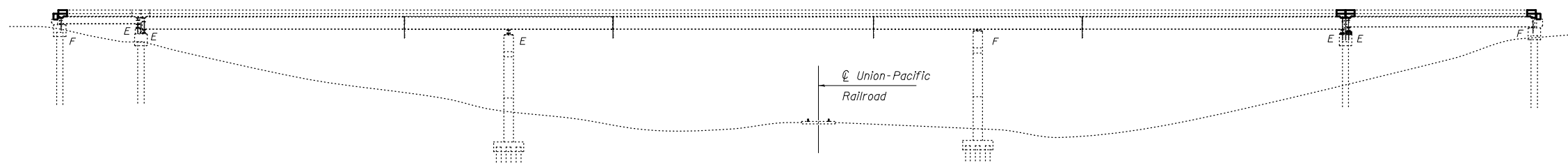
R-27 10-12-2021

S.N. 092-0101 was built in 1941 as SBI 49, Section 122 VB at Station 858+18.23 in Vermilion County. It was reconstructed in 1980 as FA Route 840, Section 122VBR at Station 858+18.00. In 2008 the structure received new expansion joints and structural concrete repairs as FAP 840, Section (121,122)RS-3 and received Day Labor repairs in 2016 with DL 17FS04 consisting of new joints and steel repairs.

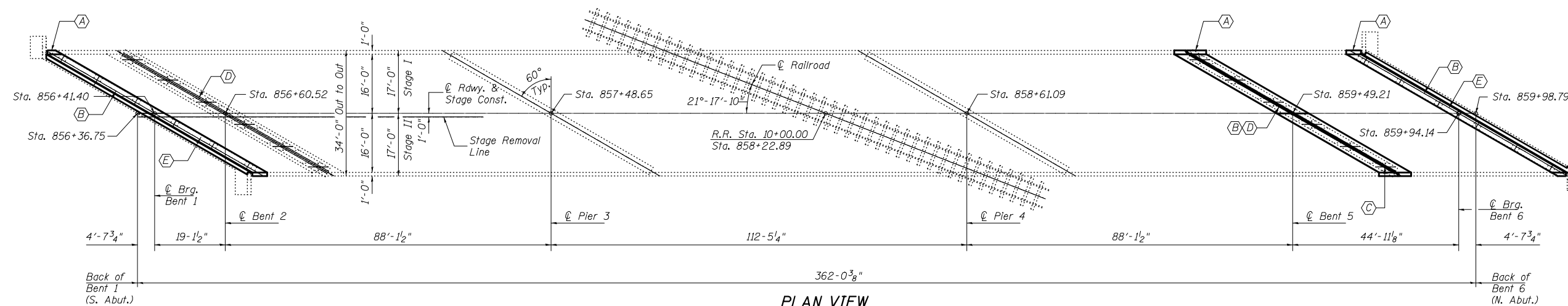
The structure has a back-to-back abutment length of 362'-0³/₈", out-to-out width of 34'-0", bridge rdwy. width of 32'-0", and an approach rdwy. width of 32'-0".

See proposed improvements on this sheet.

Work shall be completed under staged construction.



ELEVATION VIEW



PLAN VIEW

- (A) - Remove existing Silicone Exp. Jt. and install Preformed Joint Strip Seal
- (B) - Remove and Replace Select Diaphragms at Bent(s) 1, 5, 6
- (C) - Remove and Replace Bearings at Bent 5
- (D) - Perform Structural Repair of Concrete (Depth Less than or Equal to 5") at Bent(s) 2 and 5
- (E) - Strengthen beam ends at bents 1 & 5

GENERAL NOTES

All structural steel shall be AASHTO M 270 Grade 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 3/4"φ, open holes 13/16"φ, unless otherwise noted.

Diaphragm connection holes shall be 15/16"φ for 3/4"φ bolts. Two hardened washers shall be required at diaphragm connections.

Reinforcement bars designated (E) shall be epoxy coated.

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

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

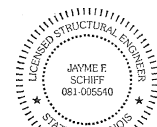
Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the GBSP "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

Existing reinforcement shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged with during concrete removal shall be replaced with an approved bar splicer 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.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Removal	Cu. Yd.	26.1
Concrete Superstructure	Cu. Yd.	26.1
Protective Coat	Sq. Yd.	63.0
Furnishing & Erecting Structural Steel	Pound	9,480.0
Reinforcement Bars Epoxy Coated	Pound	4,420.0
Bar Splicers	Each	40.0
Preformed Joint Strip Seal	Foot	204.0
Jack and Remove Existing Bearing	Each	2.0
Structural Steel Removal	Pound	8,860.0
Structural Repair of Concrete (Depth Less than or Equal to 5")	Sq Ft	186.0
Structural Steel Repair	Pound	1,600.0
Anchor Bolts, 1 1/2" Diameter	Each	8.0
Temporary Shoring and Cribbing	Each	9.0



EXPIRES 11-30-2024

Jayme F. Schiff

MODEL: I:\MODELS\M16M15
FILE NAME: STEELS

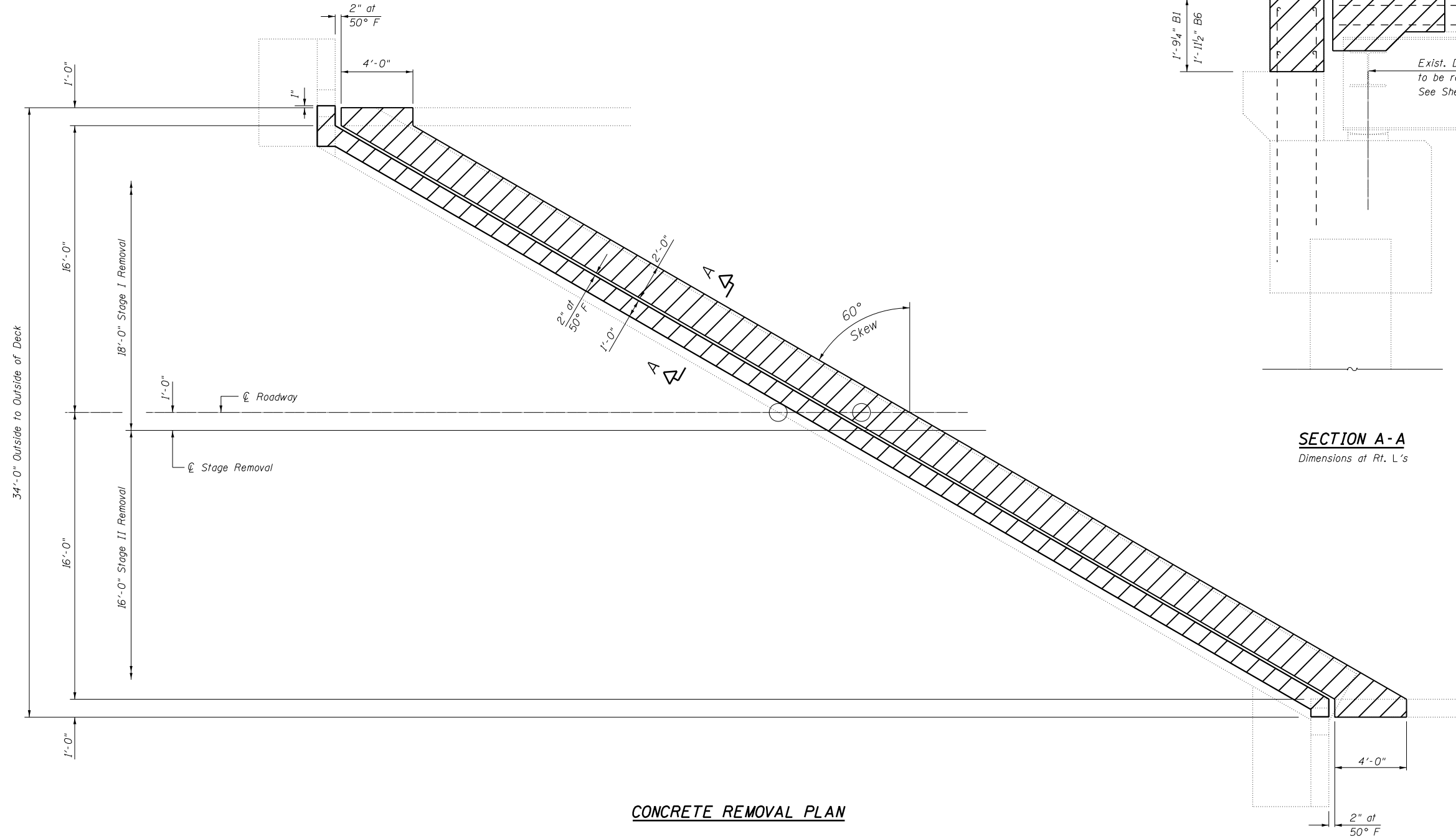
USER NAME = \$USERS	DESIGNED - JMS	REVISED -
	DRAWN - JMS	REVISED -
PLOT SCALE = \$SCALES	CHECKED -	REVISED -
PLOT DATE = \$DATES	DATE - 04112022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

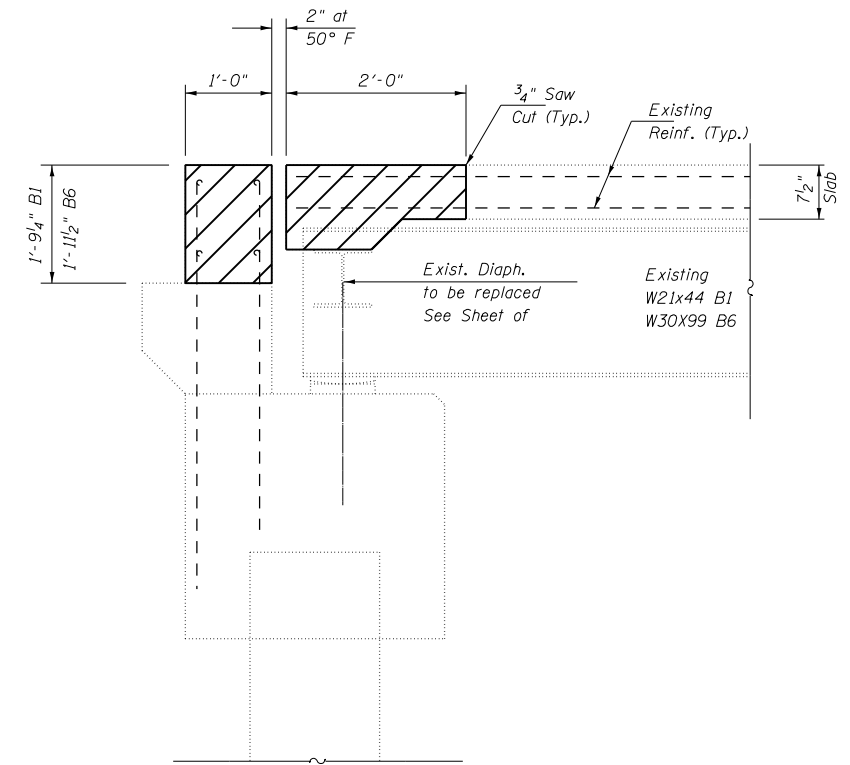
GENERAL PLAN & ELEVATION S.N. 092-0101
ILLINOIS ROUTE 49 OVER THE UNION-PACIFIC RAILROAD

SCALE: NONE SHEET 1 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122VB)BR	VERMILION	29	10
CONTRACT NO. 70G07				
ILLINOIS FED. AID PROJECT				



CONCRETE REMOVAL PLAN



SECTION A-A
Dimensions at Rt. L's

NOTE:
Bent 1 shown, Bent 6 similar.

BILL OF MATERIAL

Item	Unit	Total
Concrete Removal	Cu Yd	17.4

MODEL: \\MODELS\MAME\...
 FILE: \\MODELS\MAME\...

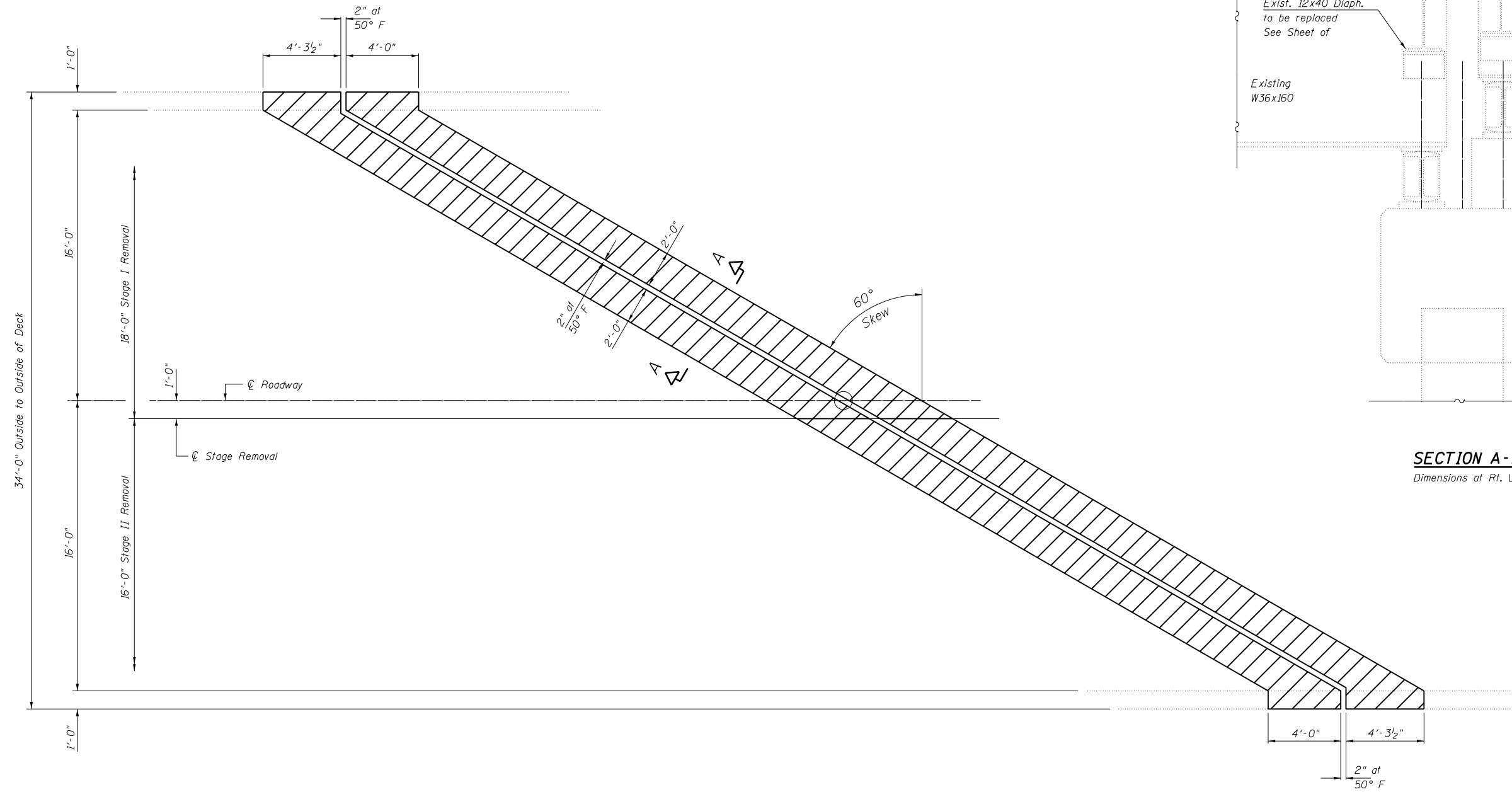
USER NAME = Jeff.Sherer	DESIGNED - JMS	REVISED -
DRAWN - JMS	REVISIONS -	
PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 1/17/2023	DATE - 04112022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

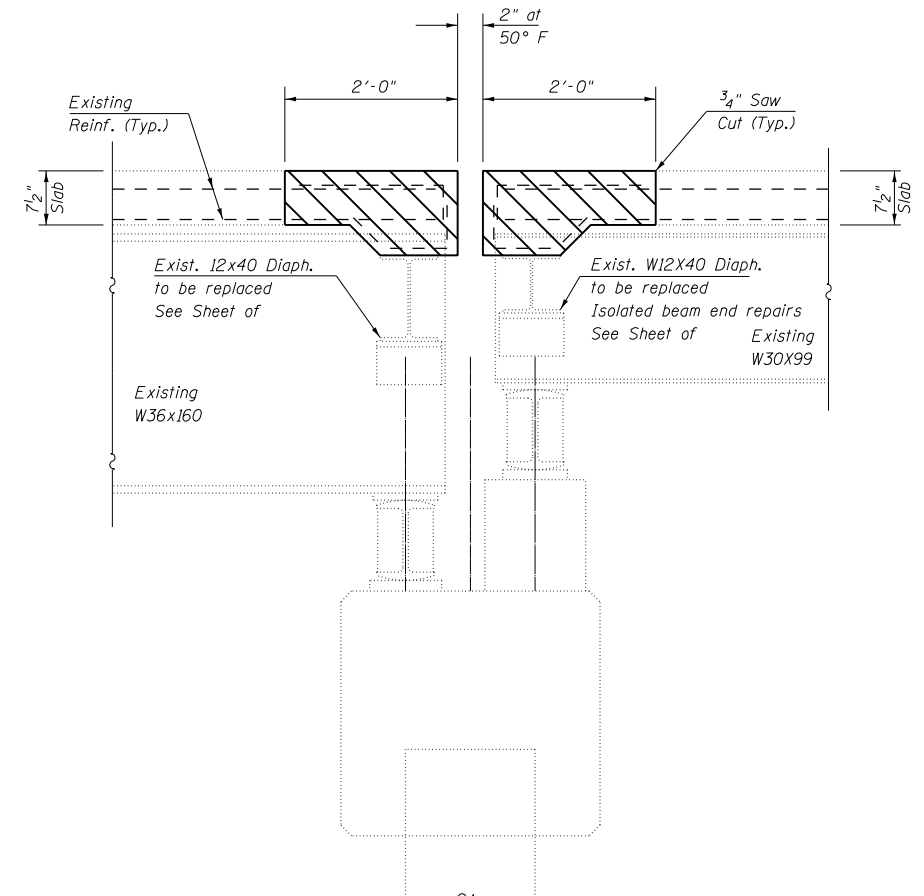
**BENT 1 & 6 REMOVAL DETAILS
S.N. 092-0101**

SCALE: NONE SHEET 2 OF 7 SHEETS STA. TO STA.

F.A.P. RTE. 840	SECTION (122VB)BR	COUNTY VERMILION	TOTAL SHEETS 29	SHEET NO. 11
CONTRACT NO. 70G07				
ILLINOIS FED. AID PROJECT				



CONCRETE REMOVAL PLAN



SECTION A-A
Dimensions at Rt. L's

BILL OF MATERIAL

Item	Unit	Total
Concrete Removal	Cu Yd	8.8

MODEL: \\MODELS\MAME\...
 FILE: \\MODELS\MAME\...

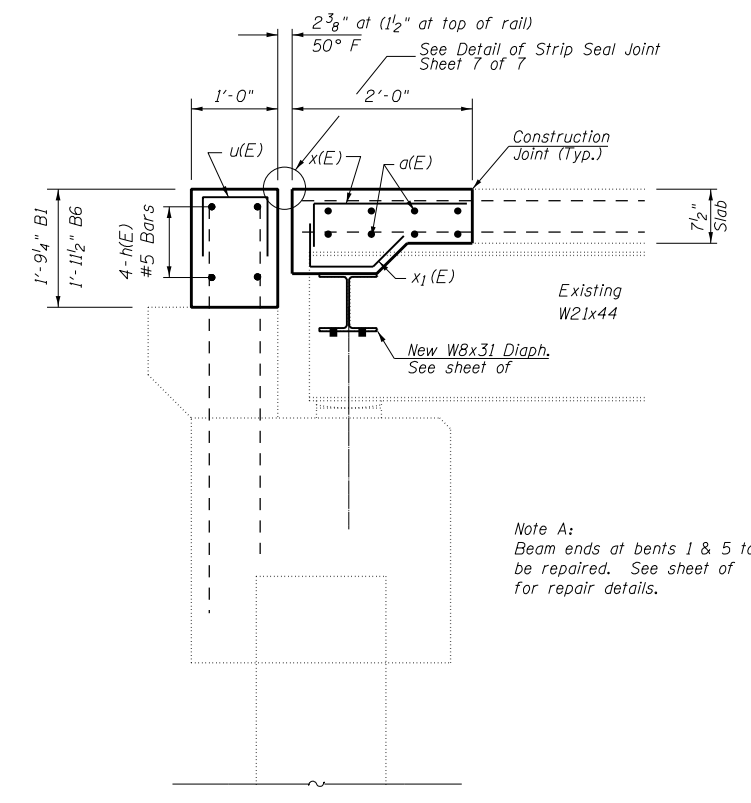
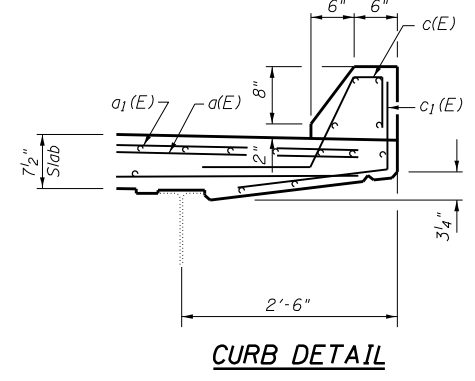
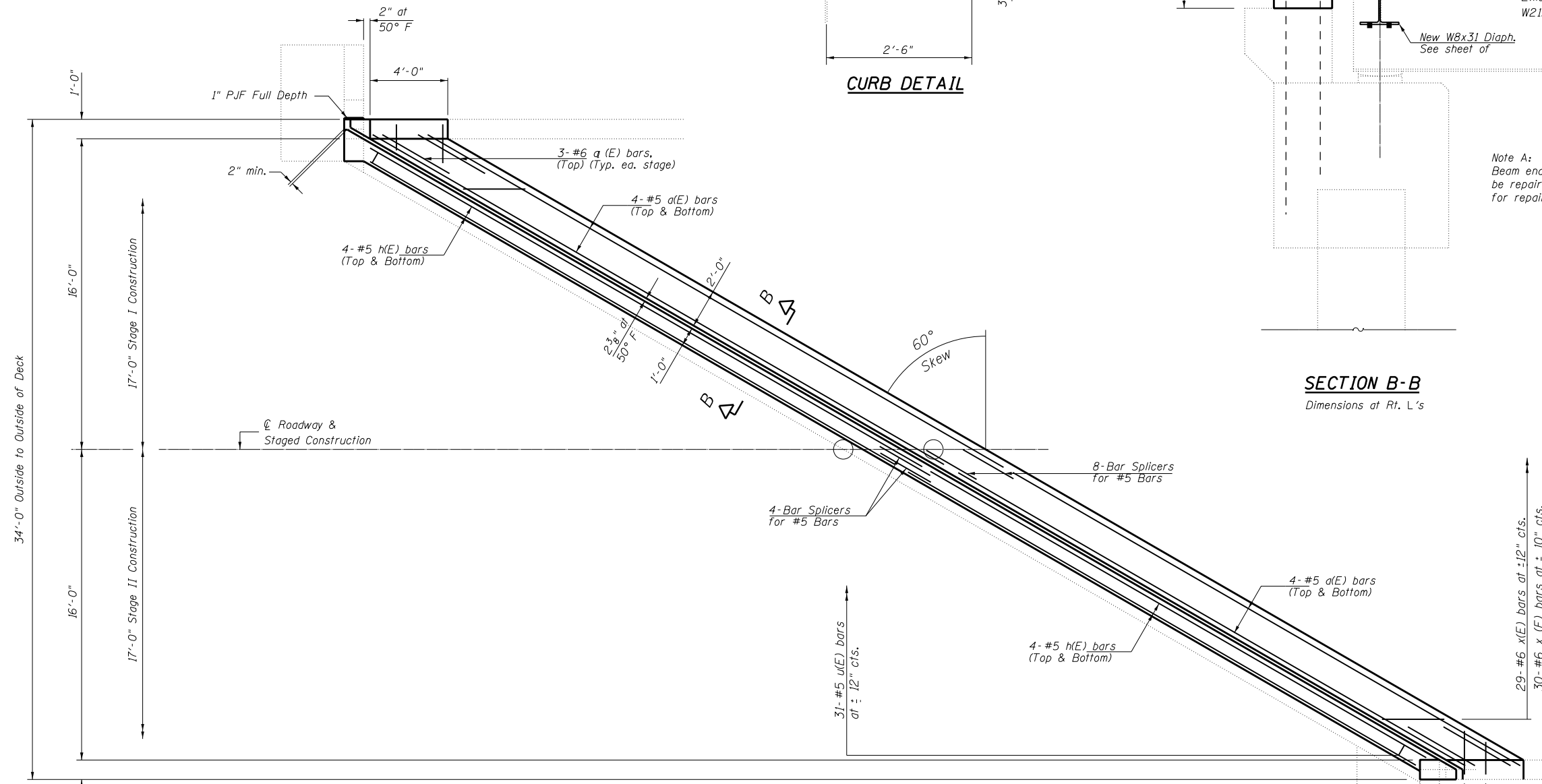
USER NAME = Jeff.Sherer	DESIGNED - JMS	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - JMS	REVISED -
PLOT DATE = 1/13/2023	CHECKED -	REVISED -
	DATE - 04112022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BENT 5 REMOVAL DETAILS
S.N. 092-0101**

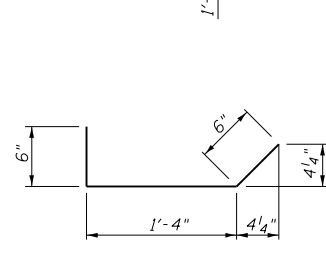
SCALE: NONE SHEET 3 OF 7 SHEETS STA. TO STA.

F.A.P. RTE. 840	SECTION (122VB)BR	COUNTY VERMILION	TOTAL SHEETS 29	SHEET NO. 12
CONTRACT NO. 70G07				
ILLINOIS FED. AID PROJECT				

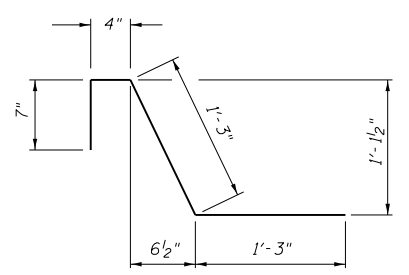


Note A:
Beam ends at bents 1 & 5 to be repaired. See sheet of for repair details.

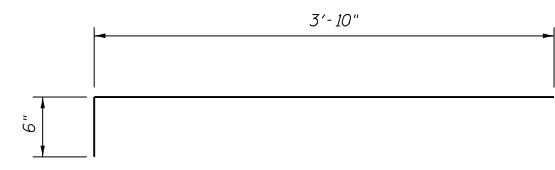
SECTION B-B
Dimensions at Rt. L's



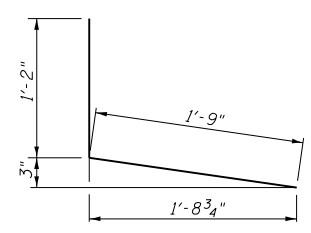
BAR x₁(E)



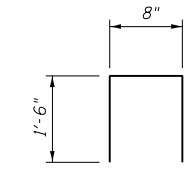
BAR c(E)



BAR x(E)



BAR c₁(E)



BAR u(E)

CONCRETE REPLACEMENT PLAN

NOTES

Bent 1 shown, Bent 6 similar.
Bent 1 shown, Bent 6 similar.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape	
a(E)	32	#5	33'-4"	—	
a ₁ (E)	12	#6	4'-0"	—	
c(E)	14	#5	3'-5"	└	
c ₁ (E)	14	#5	2'-11"	└	
x(E)	58	#6	4'-4"	└	
x ₁ (E)	60	#6	2'-4"	└	
h(E)	16	#5	30'-6"	—	
u(E)	62	#5	3'-8"	□	
Reinforcement Bars, Epoxy Coated				Pound	2,555.0
Bar Splicers				Each	24.0
Concrete Superstructures				Cu Yd	17.4

MODEL: \\MODELMAME\...
 FILE: \\MODELMAME\...
 PROJECT: 0570603\CADD\BentStructures\70603-6B-StructurePlans.dgn

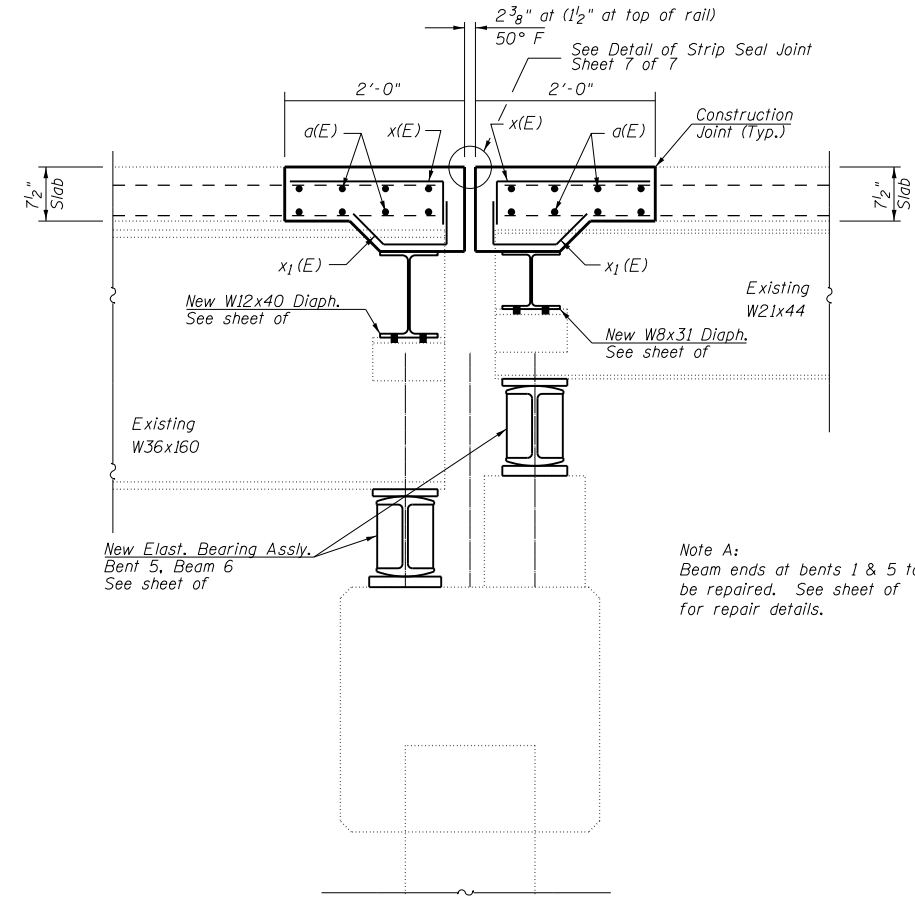
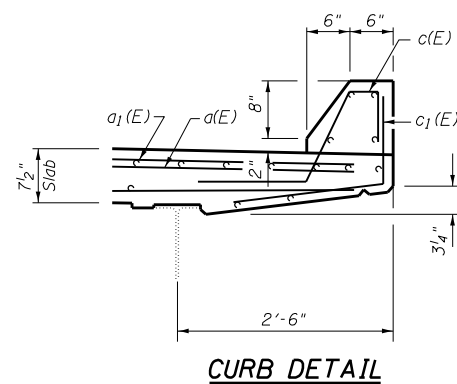
USER NAME = Jeff.Sherer	DESIGNED - JMS	REVISED -
DRAWN - JMS	REVISIONS -	
PLOT SCALE = 40.0000' / in.	CHECKED -	REVISIONS -
PLOT DATE = 1/17/2023	DATE - 04/11/2022	REVISIONS -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

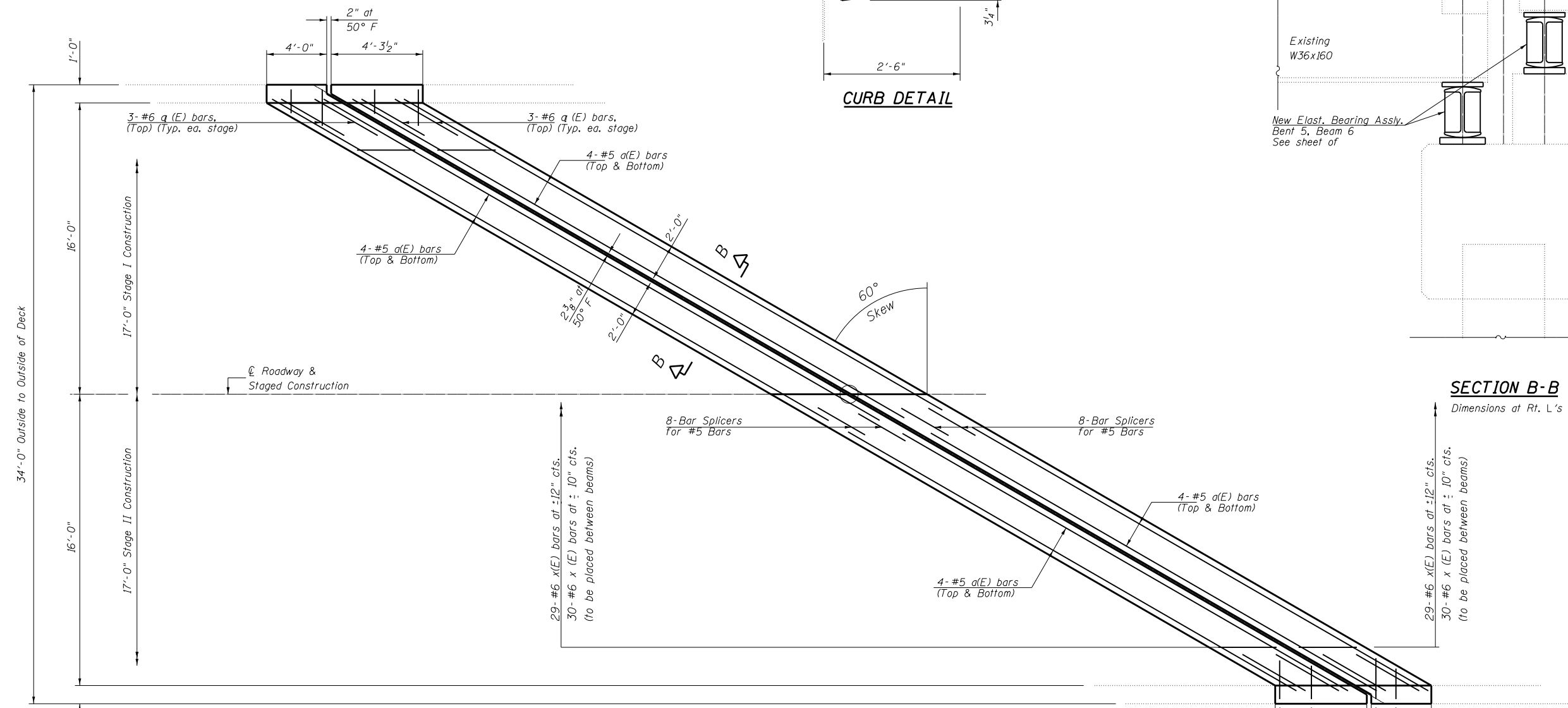
**BENT 1 & 6 REPLACEMENT DETAILS
S.N. 092-0101**

SCALE: NONE SHEET 4 OF 7 SHEETS STA. TO STA.

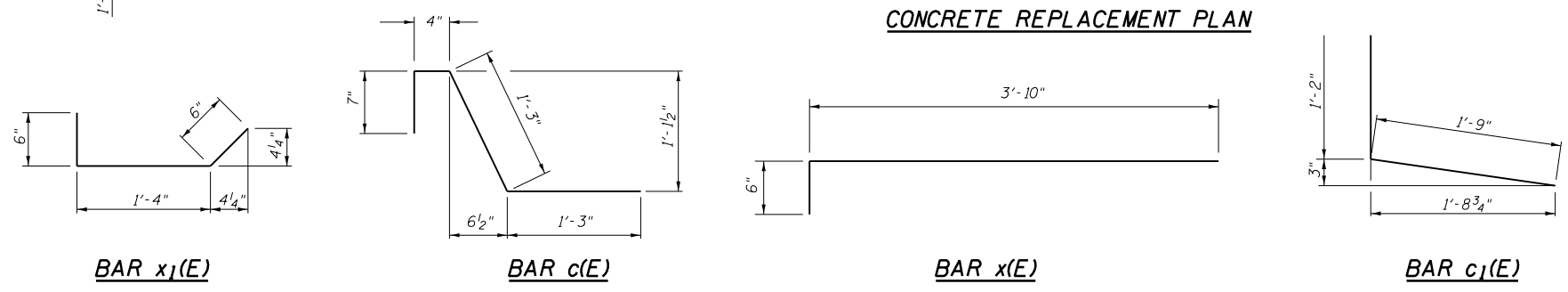
F.A.P. RTE. 840	SECTION (122VB)BR	COUNTY VERMILION	TOTAL SHEETS 29	SHEET NO. 13
CONTRACT NO. 70G07			ILLINOIS FED. AID PROJECT	



Note A:
Beam ends at bents 1 & 5 to be repaired. See sheet of for repair details.



SECTION B-B
Dimensions at Rt. L's



3- #5 c(E) bars
3- #5 c(E) bars (Typ. ea. stage)
(See Curb Detail)

4'-3 1/2" 4'-0" 2" at 50° F

3- #5 c(E) bars
3- #5 c(E) bars (Typ. ea. stage)
(See Curb Detail)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	32	#5	33'-4"	—
a1(E)	12	#6	4'-0"	—
c(E)	14	#5	3'-5"	└
c1(E)	14	#5	2'-11"	└
x(E)	58	#6	4'-4"	└
x1(E)	60	#6	2'-4"	└
Reinforcement Bars, Epoxy Coated		Pound	1,870.0	
Bar Splicers		Each	16.0	
Concrete Superstructures		Cu Yd	8.8	

MODEL: \\MODELMAME\...
 FILE: \\MODELMAME\...

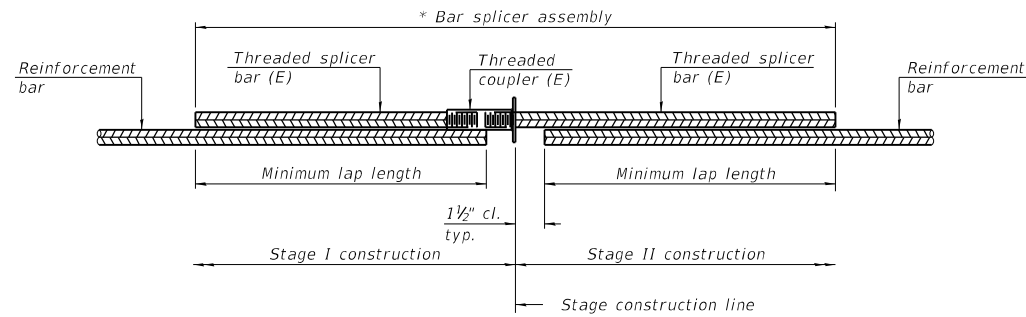
USER NAME = Jeff.Sherer	DESIGNED - JMS	REVISED -
DRAWN - JMS	REVISIONS -	
PLOT SCALE = 40.0000' / in.	CHECKED -	REVISIONS -
PLOT DATE = 1/13/2023	DATE - 04112022	REVISIONS -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BENT 5 REPLACEMENT DETAILS
S.N. 092-0101**

SCALE: NONE SHEET 5 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122VB)BR	VERMILION	29	14
			CONTRACT NO. 70G07	
		ILLINOIS	FED. AID PROJECT	

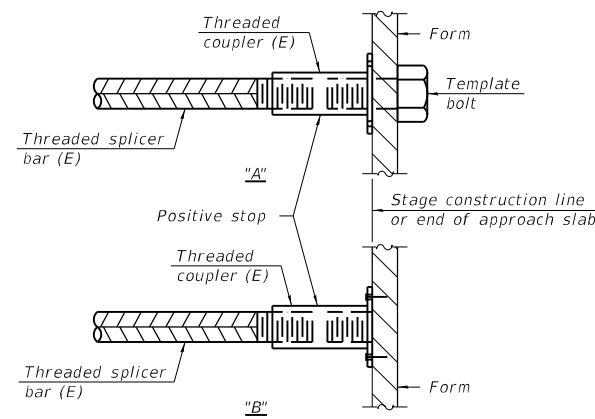


STANDARD BAR SPLICER ASSEMBLY PLAN
(All components shall be provided from one supplier)

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

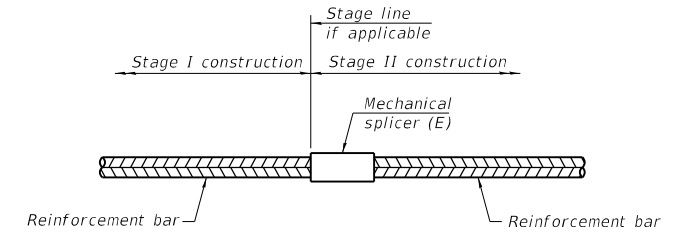
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Bent 1 Hatch	#5	4	3'-6"
Bent 1 Deck	#5	8	3'-6"
Bent 5	#5	16	3'-6"
Bent 6 Deck	#5	8	3'-6"
Bent 6 Hatch	#5	4	3'-6"



INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
 (E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required

Notes:
 Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
 All reinforcement shall be lapped and tied to the splicer bars.
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1

1-1-2020

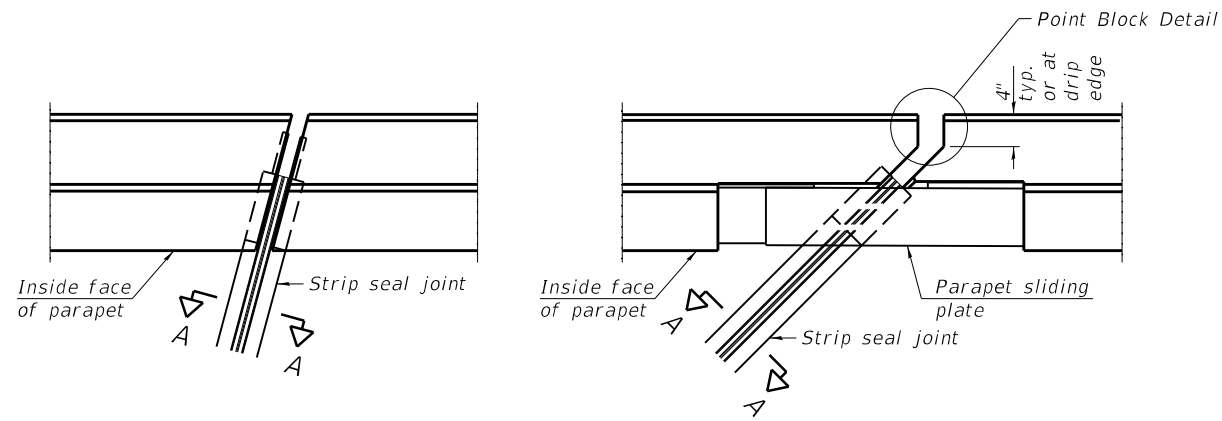
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
 STRUCTURE NO. 092-0101**

SCALE: NONE SHEET 6 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122 VB)BR	VERMILION	29	15
ILLINOIS FED. AID PROJECT			CONTRACT NO. 70G07	

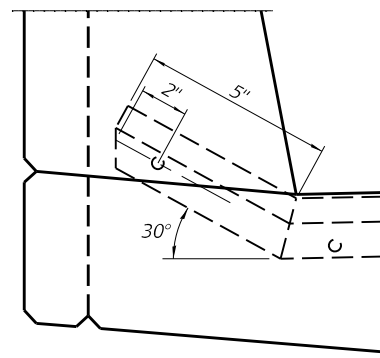
MODEL: \\MODELM\MMFS
 FILE: \\mats\pub\lib\c-2\benlley.com\PHWDOT\Documents\DOT Offices\Burling. S\Projects\0570607\CADD\Bridges\Structures\70G07-15-StructurePlans.dgn



FOR SKEWS ≤ 30°

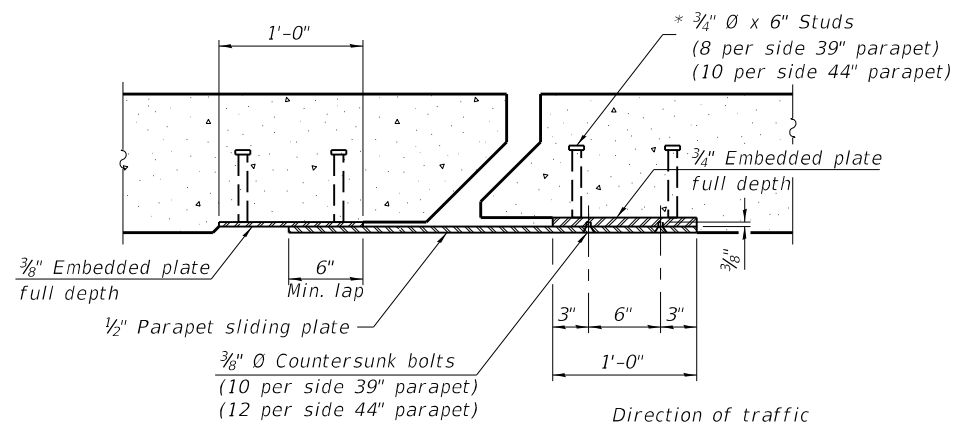
FOR SKEWS > 30°

PLAN AT PARAPET



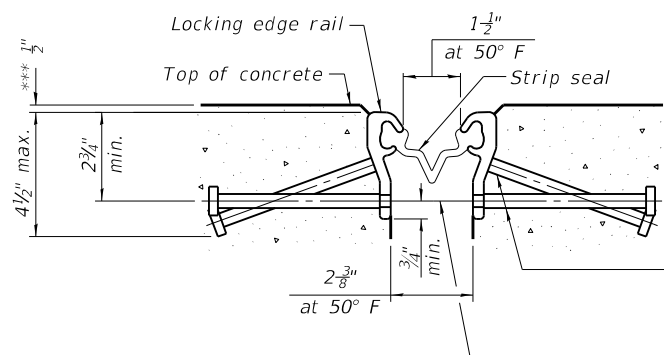
SECTION AT CURB

(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)



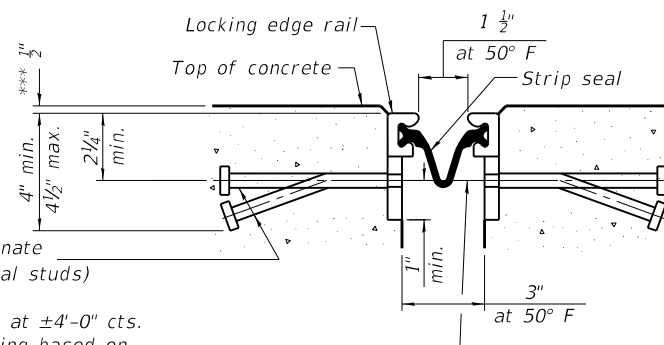
SECTION B-B

3



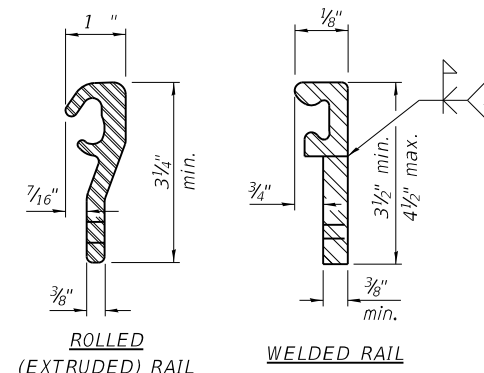
SHOWING ROLLED RAIL JOINT

* 5/8" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)
 3/8" Ø threaded rods in 7/16" Ø holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.



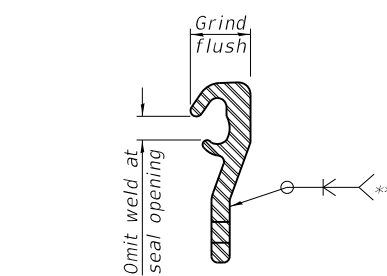
SHOWING WELDED RAIL JOINT

*** Prior to Diamond Grinding



LOCKING EDGE RAILS

** Back gouge not required if complete joint penetration is verified by mock-up.



LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	204.0

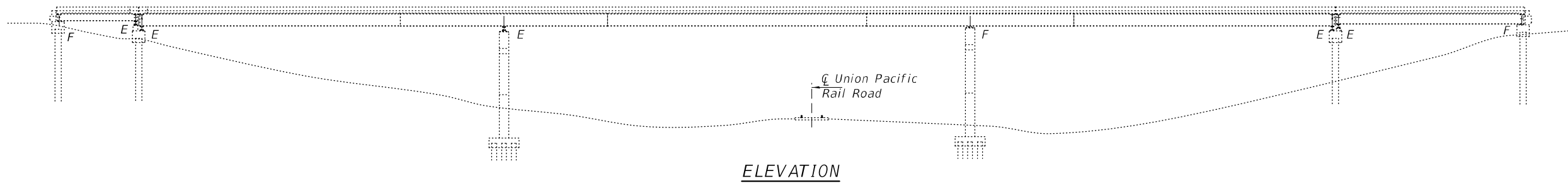
FILE NAME =	USER NAME = Jeff.Sherer	DESIGNED - JMS	REVISED -
PROJECT =	PROJECT =	CHECKED -	REVISED -
PLOT SCALE = 40.0000' / in.	DATE = 070620	DATE = 070620	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

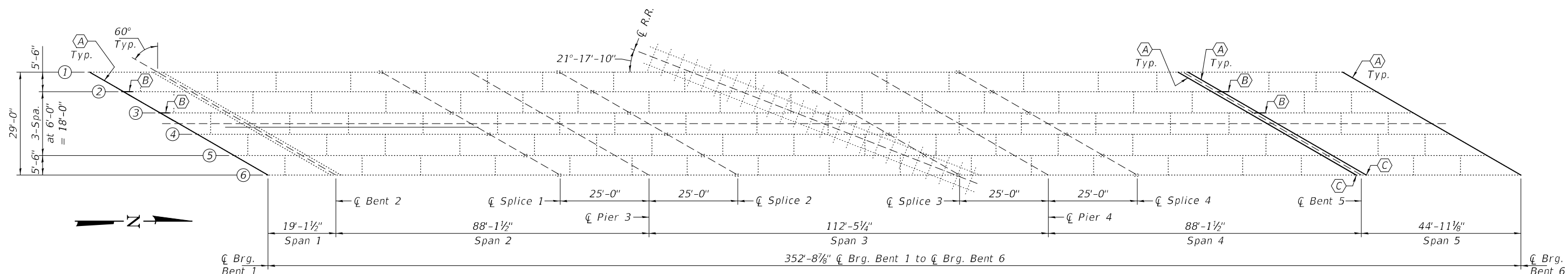
**DETAIL OF STRIP SEAL JOINT
S.N. 092-0101**

SCALE: NONE SHEET NO. 7 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122VB)BR	VERMILION	29	16
CONTRACT NO. 70G07				
ILLINOIS FED. AID PROJECT				



ELEVATION



FRAMING PLAN

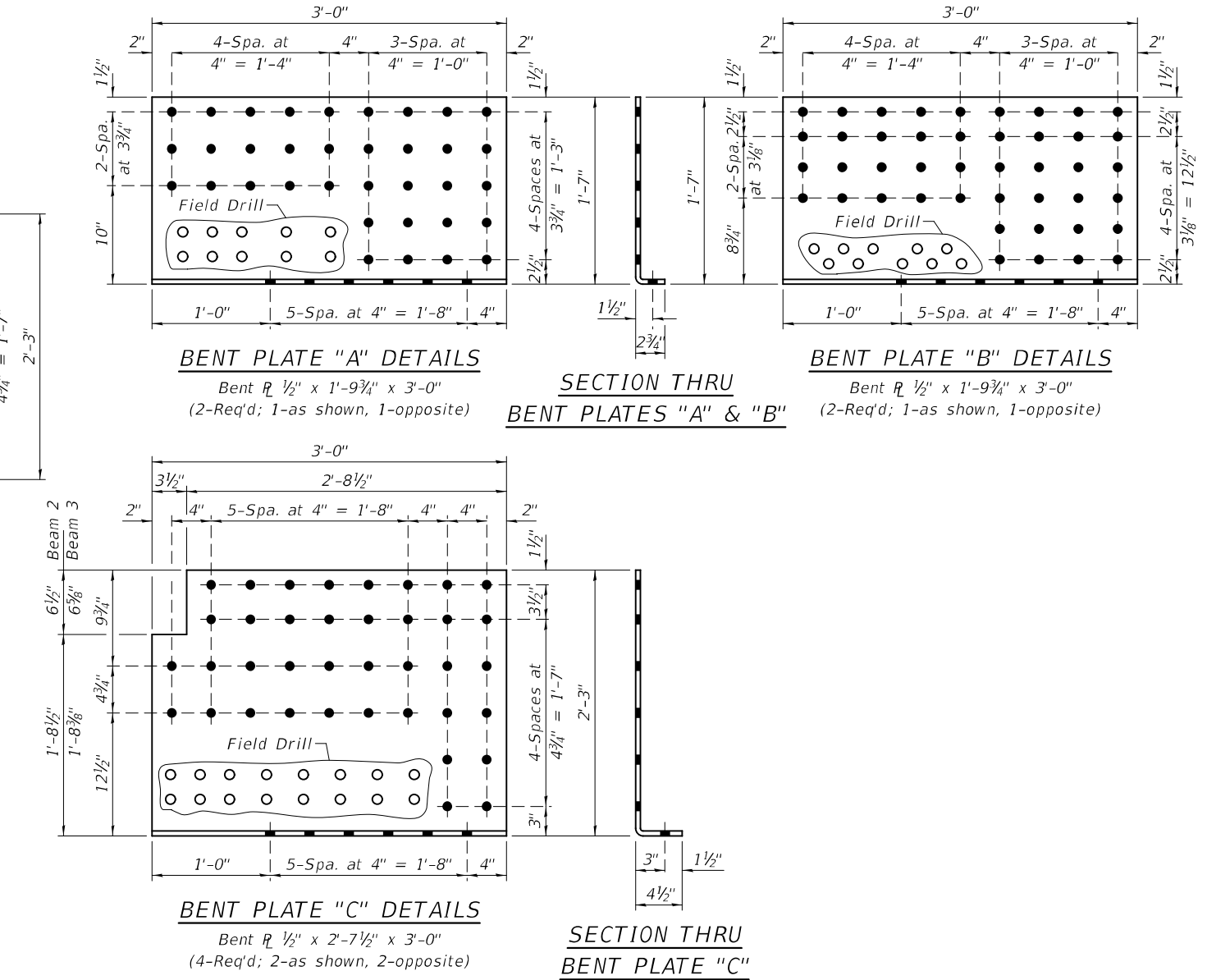
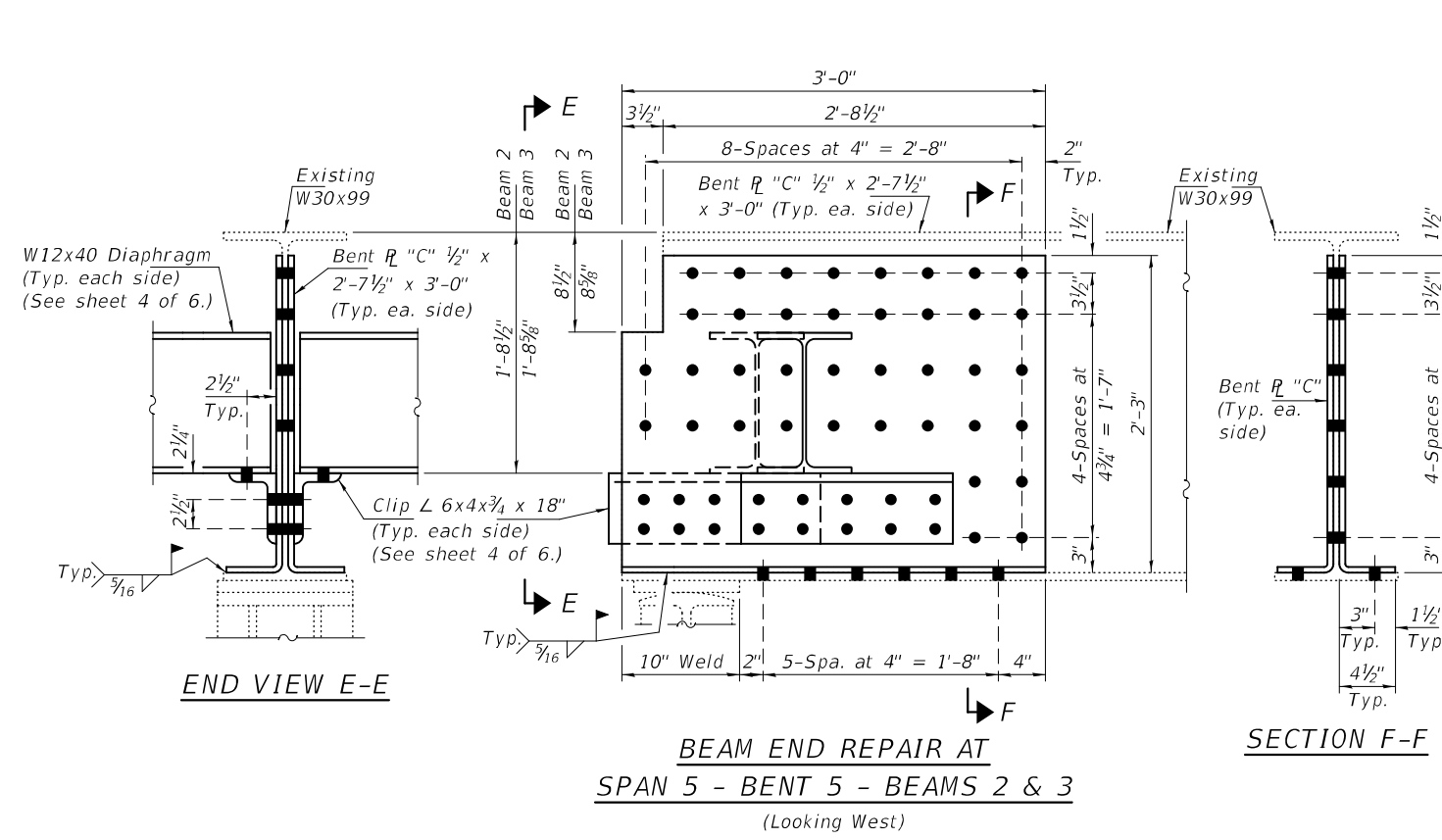
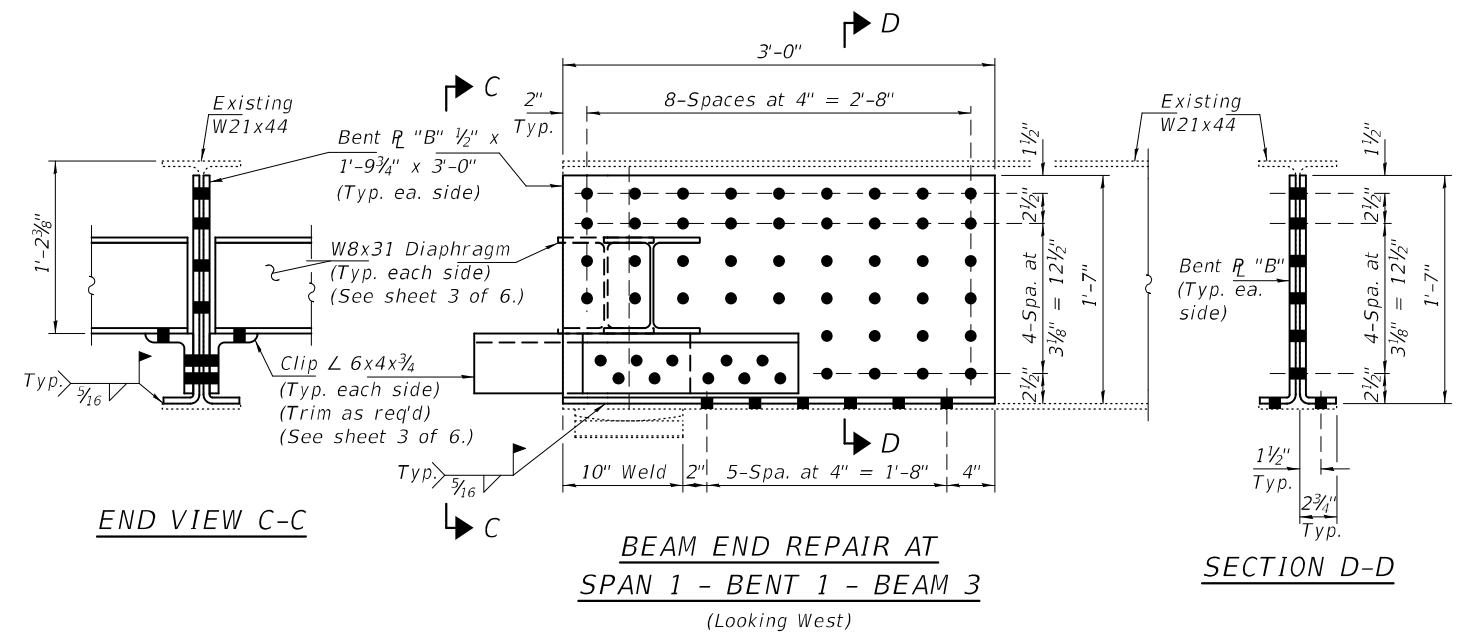
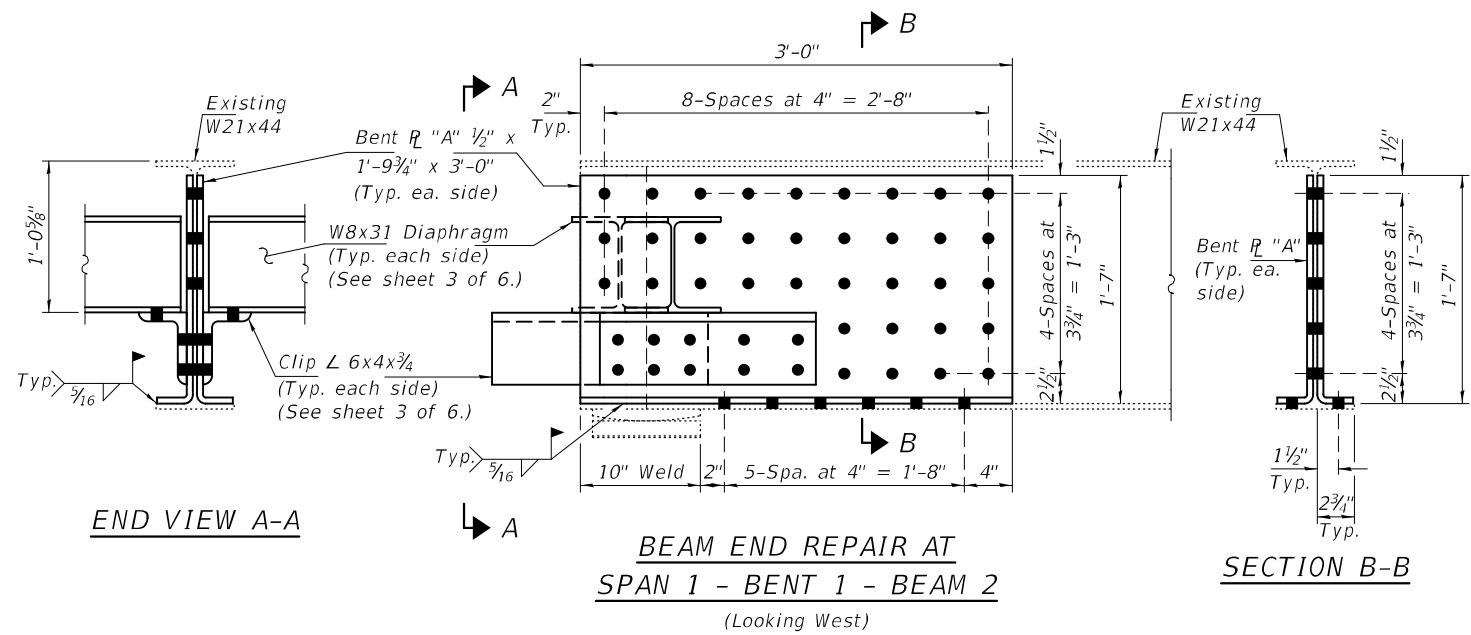
- (A) - Existing Diaphragm to be Removed & Replaced. (20-Locations)
- (B) - Existing Beam to be Strengthened.
- (C) - Existing Bearing Assembly to be Removed & Replaced. (2-Locations)

NOTES

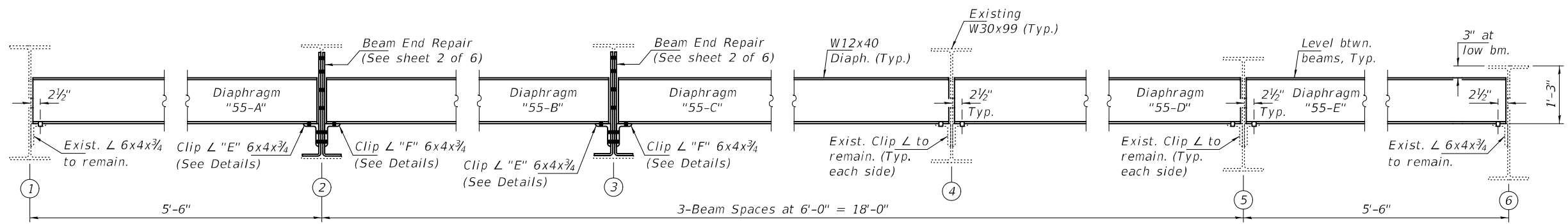
All new structural steel and bearing assemblies shall be hot dip galvanized according to Special Provision "Hot Dip Galvanizing for Structural Steel".
 Strengthening steel shall be included in the Structural Steel Repair quantity.
 All other steel repairs are included in the Structural Steel Removal and Furnishing & Erecting Structural Steel quantities.

BILL OF MATERIAL

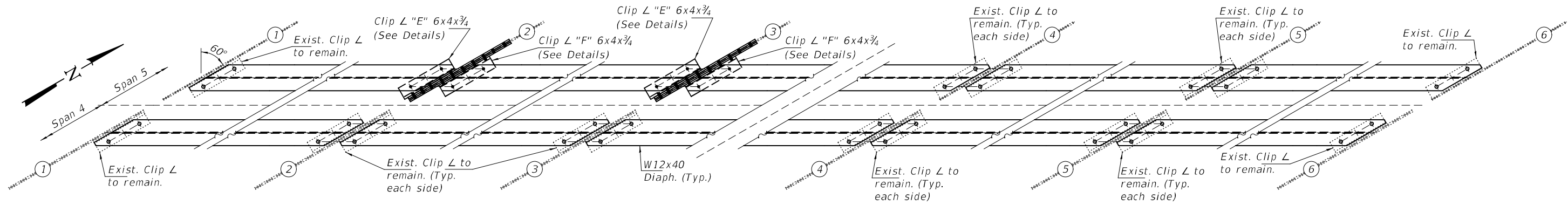
ITEM	UNIT	QUANTITY
Structural Steel Removal	Pound	8860
Structural Steel Repair	Pound	1600
Furnishing & Erecting Structural Steel	Pound	9480
Jack & Remove Existing Bearing	Each	2
Anchor Bolts, 1 1/2"Ø	Each	8



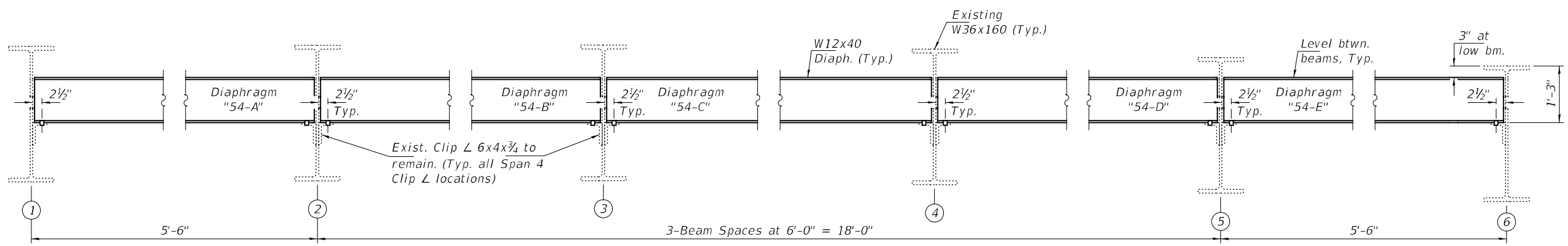
DESIGNED - SMR	PASSED	 ENGINEER OF BRIDGES AND STRUCTURES	DATE - JANUARY 20, 2023	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BEAM END REPAIRS SN 092-0101	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - CCC			REVISD -			840	(122VB)BR	VERMILION	29	18
DRAWN - STEFFEN			REVISD -			CONTRACT NO. 70G07				
CHECKED - SMR CCC						ILLINOIS FED. AID PROJECT				



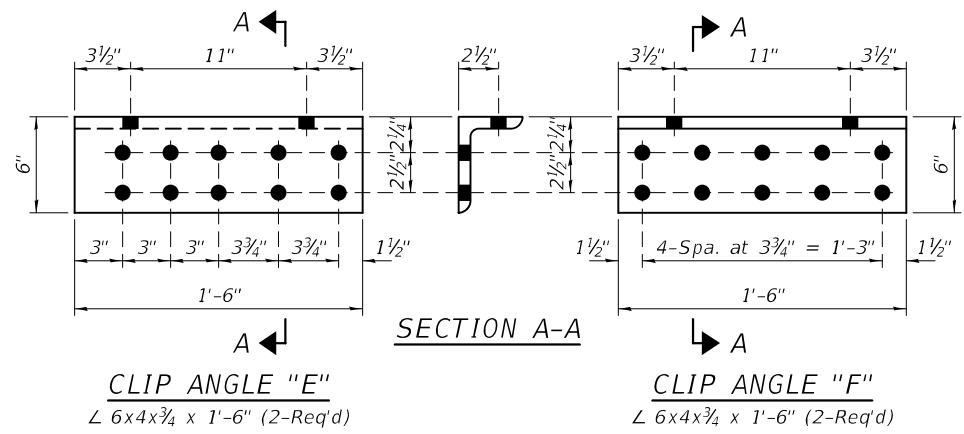
BENT 5 - SPAN 5 DIAPHRAGM REPLACEMENT - ELEVATION
(Looking North)



BENT 5 DIAPHRAGM REPLACEMENT - PLAN VIEW

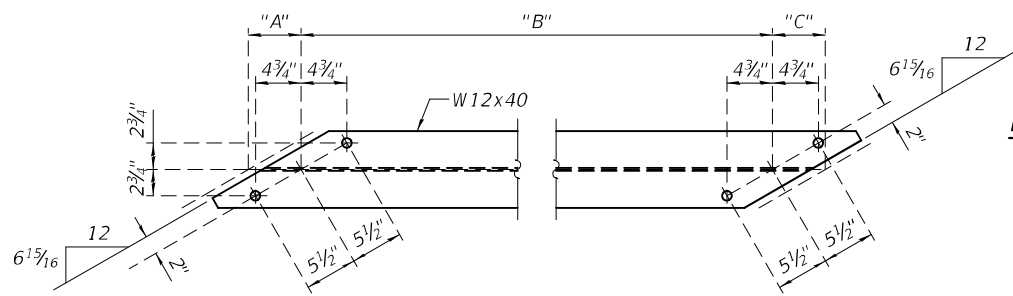


BENT 5 - SPAN 4 DIAPHRAGM REPLACEMENT - ELEVATION
(Looking North)



CLIP ANGLE "E"
L 6x4x3/4 x 1'-6" (2-Req'd)

CLIP ANGLE "F"
L 6x4x3/4 x 1'-6" (2-Req'd)



DIAPHRAGM DETAILS
(See Tables for Dims. "A", "B" & "C")

BENT 5 - SPAN 4 DIAPHRAGM DIMENSIONS

W12x40 DIAPHRAGM	DIMENSION		
	"A"	"B"	"C"
54-A	5 5/8"	10'-0 3/4"	5 5/8"
54-B	5 5/8"	11'-0 3/4"	5 5/8"
54-C	5 5/8"	11'-0 3/4"	5 5/8"
54-D	5 5/8"	10'-0 3/4"	5 5/8"
54-E	5 5/8"	10'-0 3/4"	5 5/8"

BENT 5 - SPAN 5 DIAPHRAGM DIMENSIONS

W12x40 DIAPHRAGM	DIMENSION		
	"A"	"B"	"C"
55-A	5 1/2"	10'-0"	6 1/2"
55-B	6 1/2"	10'-11"	6 1/2"
55-C	6 1/2"	11'-0"	5 1/2"
55-D	5 1/2"	11'-1"	5 1/2"
55-E	5 1/2"	10'-1"	5 1/2"

DESIGNED - SMR
CHECKED - CCC
DRAWN - STEFFEN
CHECKED - SMR CCC

PASSED
Jaime F. Joffe
ENGINEER OF BRIDGES AND STRUCTURES

DATE - JANUARY 20, 2023
REVISED -
REVISED -

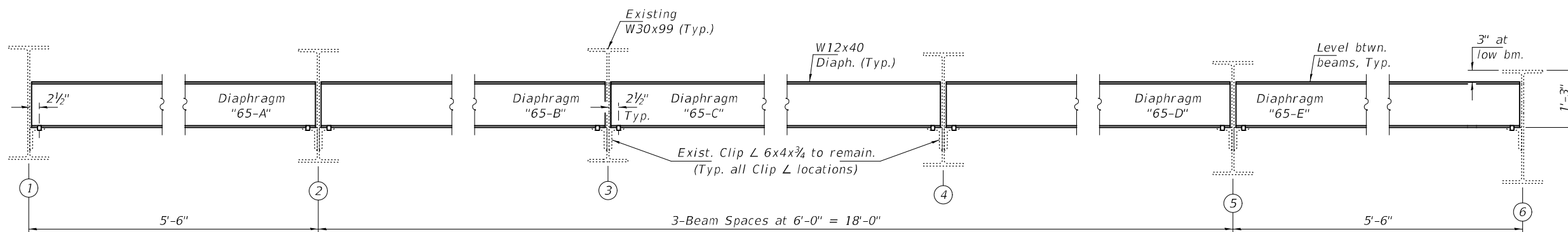
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIAPHRAGM REPLACEMENT DETAILS AT BENT 5
SN 092-0101

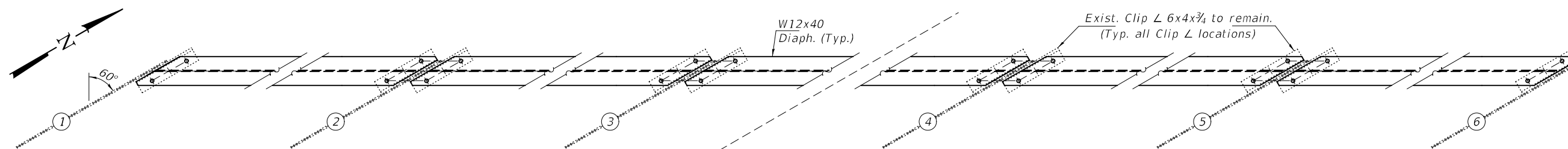
SHEET NO. 4 OF 6 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122VB)BR	VERMILION	29	20
CONTRACT NO. 70G07				

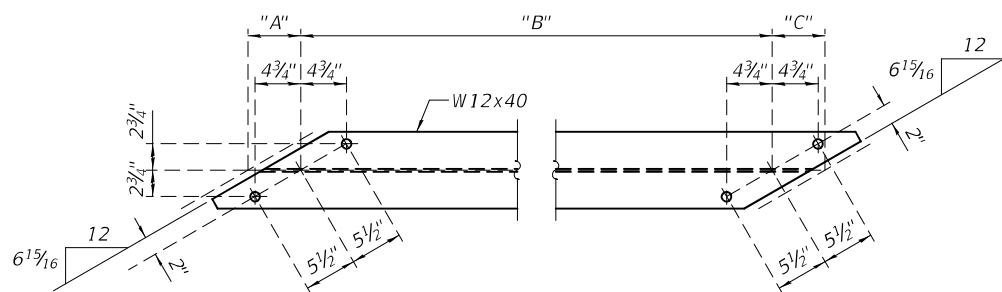
ILLINOIS FED. AID PROJECT



BENT 6 - DIAPHRAGM REPLACEMENT - ELEVATION
(Looking North)



BENT 6 DIAPHRAGM REPLACEMENT - PLAN VIEW



DIAPHRAGM DETAILS

W12x40 DIAPHRAGM	DIMENSION		
	"A"	"B"	"C"
65-A	5 1/2"	10'-1"	5 1/2"
65-B	5 1/2"	11'-1"	5 1/2"
65-C	5 1/2"	10'-1"	5 1/2"
65-D	5 1/2"	10'-1"	5 1/2"
65-E	5 1/2"	10'-1"	5 1/2"

DESIGNED - SMR
CHECKED - CCC
DRAWN - STEFFEN
CHECKED - SMR CCC

PASSED

Jaime F. Steffen
ENGINEER OF BRIDGES AND STRUCTURES

DATE - JANUARY 20, 2023

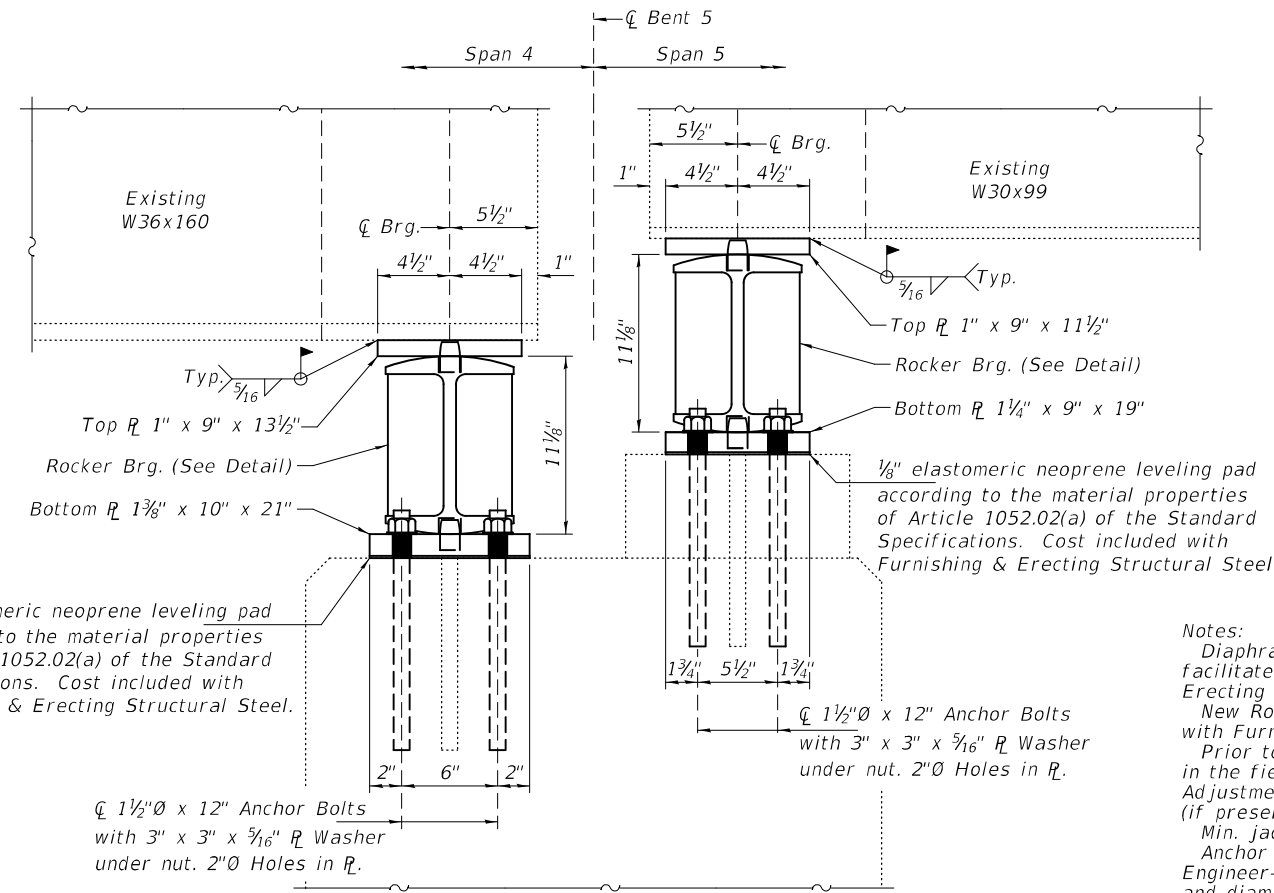
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIAPHRAGM REPLACEMENT DETAILS AT BENT 6
SN 092-0101

SHEET NO. 5 OF 6 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122VB)BR	VERMILION	29	21
CONTRACT NO. 70G07				
ILLINOIS FED. AID PROJECT				



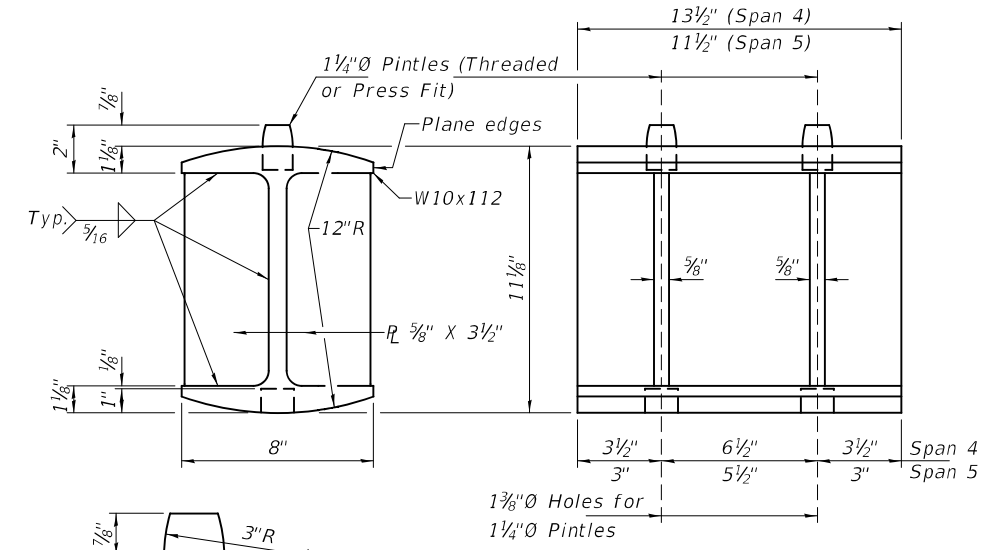
BEAM 6 AT BENT 5 ELEVATION
(Looking West)

BEAM REACTIONS FOR SPAN 4

R _D	(K)	30.7
R _L	(K)	37.9
Imp.	(K)	9.0
R (Total)	(K)	77.6

BEAM REACTIONS FOR SPAN 5

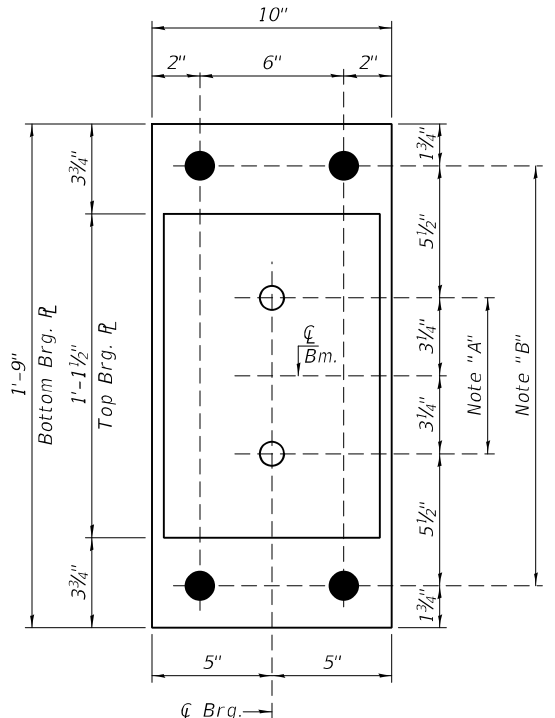
R _D	(K)	19.4
R _L	(K)	30.9
Imp.	(K)	9.2
R (Total)	(K)	59.5



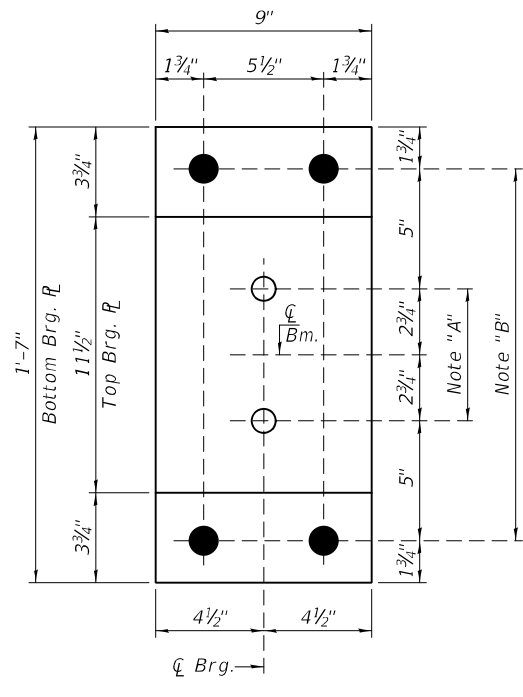
ROCKER DETAIL

PINTLE

Notes:
 Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.
 New Rocker, Top R, Bottom R and Pintles 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 = 41 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 (F_y=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.



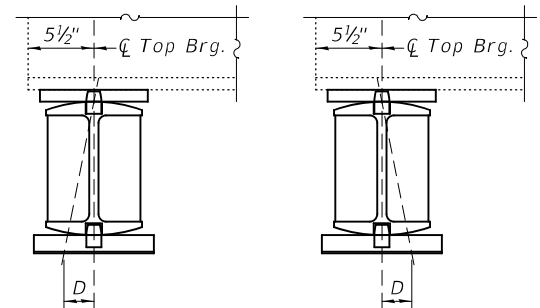
BEARING PLAN - SPAN 4
 Top R 1" x 9" x 1-1 1/2" (1-Req'd)
 Bottom R 1 3/8" x 10" x 1-9" (1-Req'd)



BEARING PLAN - SPAN 5
 Top R 1" x 9" x 11 1/2" (1-Req'd)
 Bottom R 1 1/4" x 9" x 1-7" (1-Req'd)

Note "A":
 1 3/8"Ø Holes, 1" deep in Top R for 1 1/4"Ø Pintles. Thread or Press fit Pintles into Bottom R.

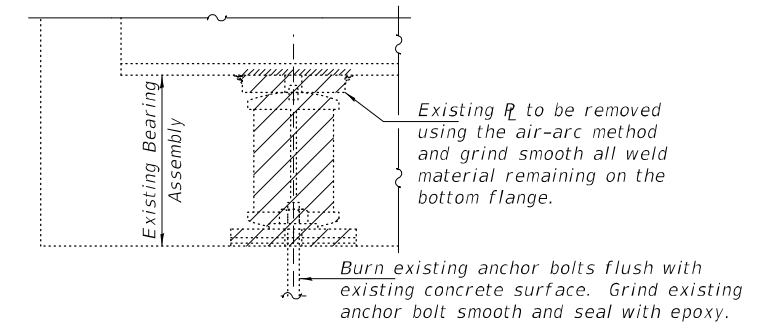
Note "B":
 2"Ø Holes for 1 1/2"Ø Anchor Bolts.
 3" x 3" x 5/16" R Washers under nuts.



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.
 (Move bott. brg. away from fixed brg.)

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

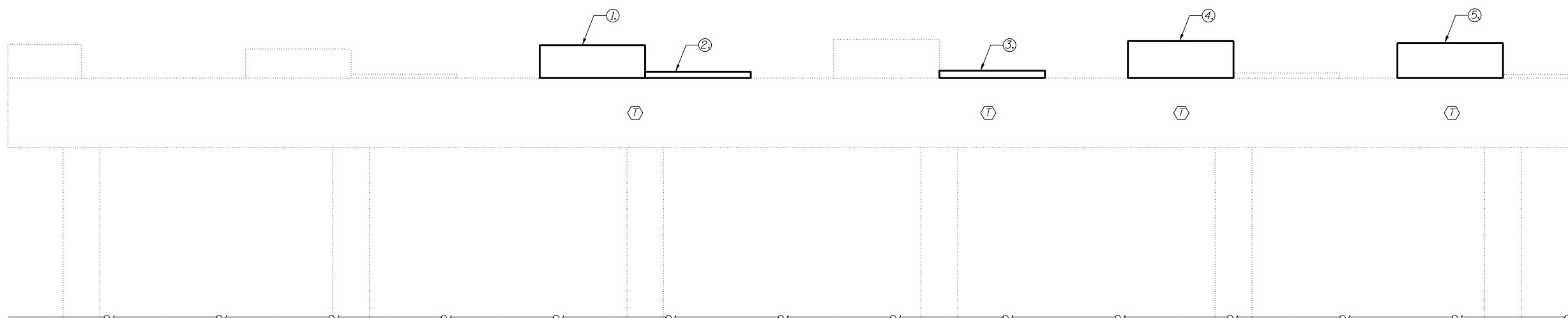


EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.

BILL OF MATERIAL

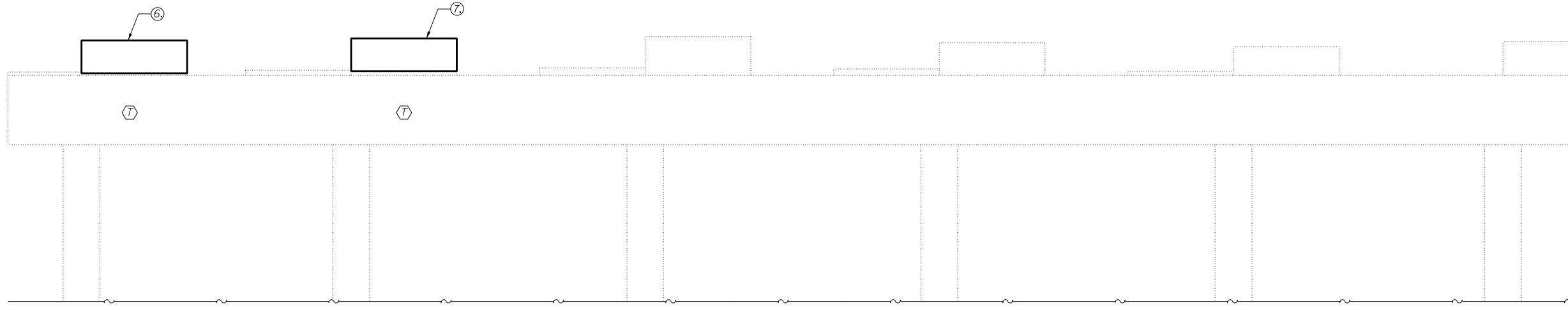
Item	Unit	Total
Jack and Remove Existing Bearings	Each	2
Furnishing and Erecting Structural Steel	Pound	520
Anchor Bolts 1 1/2"Ø	Each	8



BENT 2 (LOOKING NORTH)

Ⓣ Temporary Shoring & Cribbing

REACTIONS	
Bent 2, Span 1	Bent 2, Span 2
DL = 7.6K	DL = 30.4K
LL = 21.8K	LL = 38.1K
IM = 6.5K	IM = 9.0K
Tot = 35.9K	Tot = 77.5K



BENT 2 (LOOKING SOUTH)

Ⓣ Temporary Shoring & Cribbing

MODEL: \\MODELMAME\...
 FILE: \\MODELMAME\...

USER NAME = Jeff.Sherer	DESIGNED - JMS	REVISED -
	DRAWN - JMS	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 1/13/2023	DATE - 04112022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STRUCTURAL REPAIR OF CONCRETE
S.N. 091-0101**

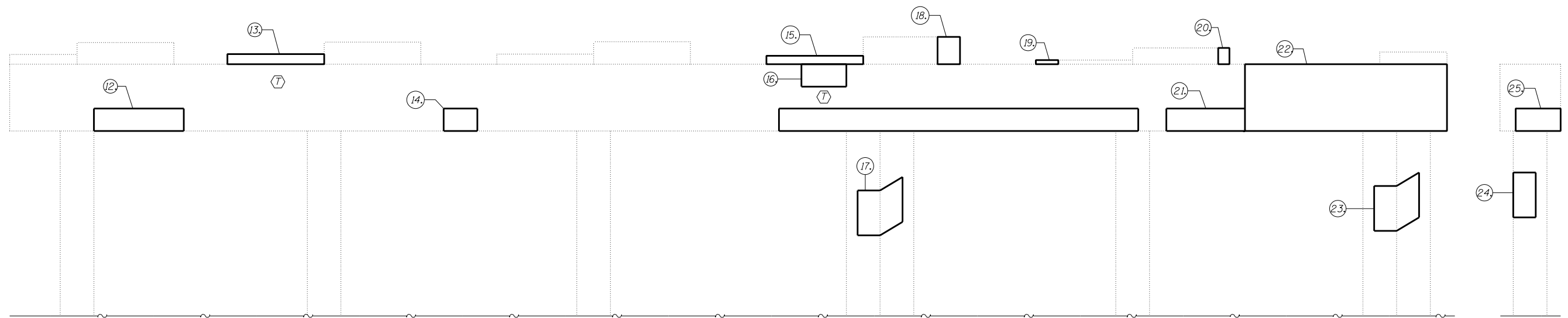
SCALE: NONE SHEET 1 OF 4 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122VB)BR	VERMILION	29	23
			CONTRACT NO. 70G07	
ILLINOIS FED. AID PROJECT				



BENT 5 (BOTTOM OF PIER)

REACTIONS	
Bent 5, Span 4	Bent 5, Span 5
DL = 30.7K	DL = 19.4K
LL = 37.9K	LL = 30.9K
IM = 9.0K	IM = 9.2K
Tot = 77.6K	Tot = 59.5K



BENT 5 (LOOKING NORTH)

Ⓣ Temporary Shoring & Cribbing

MODEL: S:\MODELS\BENT5.DWG
FILE NAME: p:\illinois\pwworking\benli\com\pwworking\DOT\Office\Bent5\Bent5\Structures\70G07\Bent5\StructurePlans.dwg

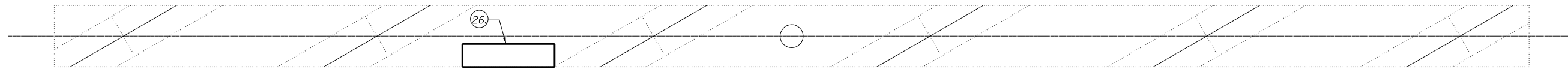
USER NAME = Jeff.Sherer	DESIGNED - JMS	REVISED -
	DRAWN - JMS	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 1/13/2023	DATE - 04/11/2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

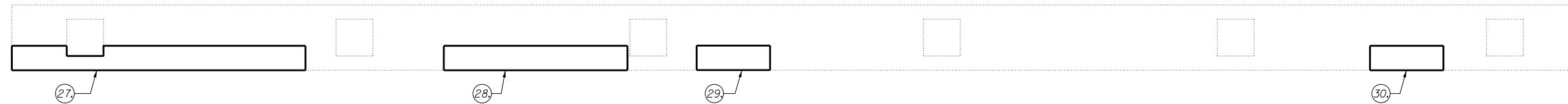
**STRUCTURAL REPAIR OF CONCRETE
S.N. 092-0101**

SCALE: NONE SHEET 2 OF 4 SHEETS STA. TO STA.

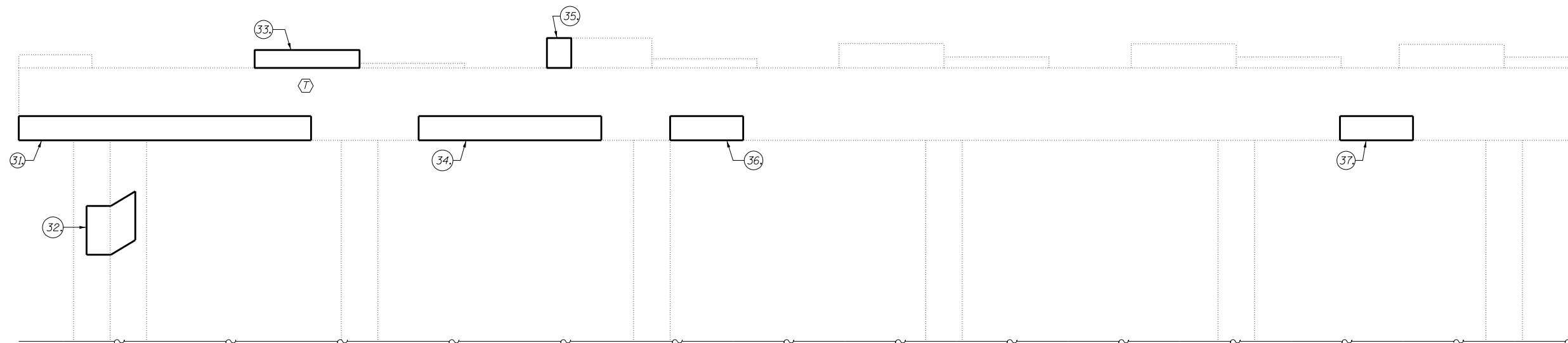
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122VB)BR	VERMILION	29	24
ILLINOIS FED. AID PROJECT			CONTRACT NO. 70G07	



BENT 5 (TOP OF PIER)



BENT 5 (BOTTOM OF PIER)



BENT 5 (LOOKING SOUTH)

⬠ Temporary Shoring & Cribbing

MODEL: \\MODELS\MAME\...
 FILE: \\MODELS\MAME\...

USER NAME = Jeff.Sherer	DESIGNED - JMS	REVISED -
	DRAWN - JMS	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 1/13/2023	DATE - 04112022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STRUCTURAL REPAIR OF CONCRETE
S.N. 092-0101**

SCALE: NONE SHEET 3 OF 4 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122VB)BR	VERMILION	29	25
CONTRACT NO. 70G07			ILLINOIS FED. AID PROJECT	

PATCH NO.	SIZE		STRUCTURAL REPAIR OF CONCRETE $\leq 5''$ SQ FT
	LENGTH (FT)	WIDTH (FT)	
1	4.31	1.34	5.8
2	4.31	0.26	1.1
3	4.31	0.3	1.3
4	4.31	1.51	6.5
5	4.31	1.42	6.1
6	4.31	1.42	6.1
7	4.31	1.51	6.5
8	4	1	4.0
9	1	1	1.0
10	16	1	16.0
11	12.5	1	12.5
12	4	1	4.0
13	4.31	0.45	1.9
14	1.5	1	1.5
15	4.31	0.38	1.6
16	2	1	2.0
17	2	2	4.0
SUB-TOTAL =			82.0

PATCH NO.	SIZE		STRUCTURAL REPAIR OF CONCRETE $\leq 5''$ SQ FT
	LENGTH (FT)	WIDTH (FT)	
18	1.22	1	1.22
19	1	0.19	0.19
20	0.73	0.5	0.37
21	3.5	1	3.5
22	9	3	27
23	2	2	4
24	2	1	2
25	2	1	2
26	4	1	4
27	12	1	12
28	7.5	1	7.5
29	3	1	3
30	3	1	3
31	12	1	12
32	2	2	4
33	4.31	0.73	3.1463
34	7.5	1	7.5
SUB-TOTAL =			96.4

PATCH NO.	SIZE		STRUCTURAL REPAIR OF CONCRETE $\leq 5''$ SQ FT
	LENGTH (FT)	WIDTH (FT)	
35	1.22	1	1.22
36	3	1	3
37	3	1	3
SUB-TOTAL =			7.2
TOTAL =			185.7
USE =			186.0

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete (Depth Equal or Less Than 5")	Sq Ft	186.0

MODEL: \\MODELMAME\...
 FILE: \\MODELMAME\...

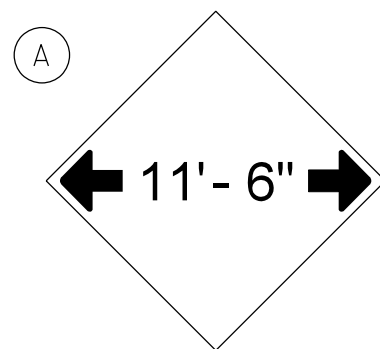
USER NAME = Jeff.Sherer	DESIGNED - JMS	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - JMS	REVISED -
PLOT DATE = 1/13/2023	CHECKED -	REVISED -
	DATE - 04112022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

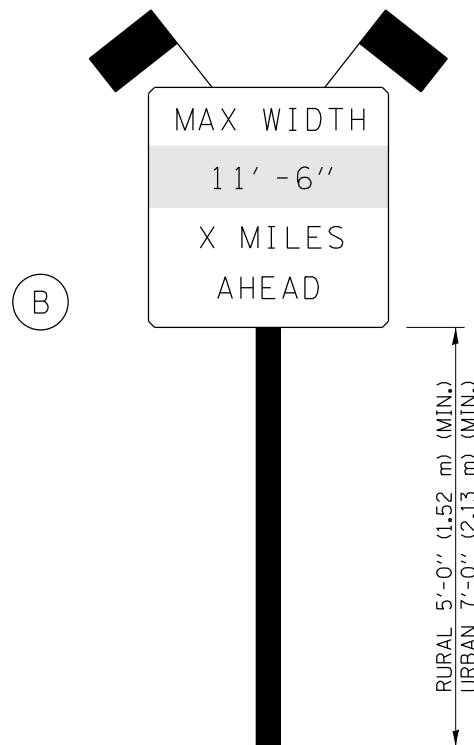
**SCHEDULE OF STRUCTURAL REPAIR OF CONCRETE
S.N. 092-0101**

SCALE: NONE SHEET 4 OF 4 SHEETS STA. TO STA.

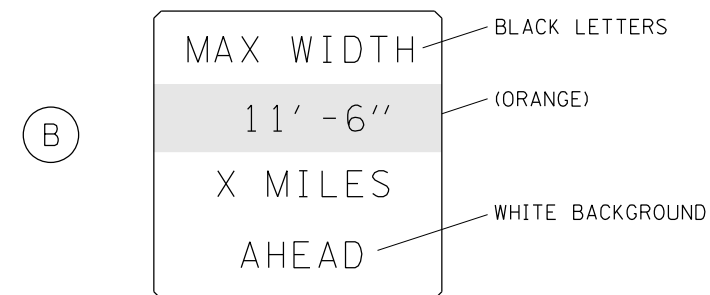
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122VB)BR	VERMILION	29	26
			CONTRACT NO. 70G07	
ILLINOIS FED. AID PROJECT				



W12-2(O)-48"x48"(1200x1200)



SIGN PANEL, TYPE II



W12-I103(O)-48"x48"(1200x1200)
"D" LETTERS/NUMBERS

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.

GENERAL NOTES

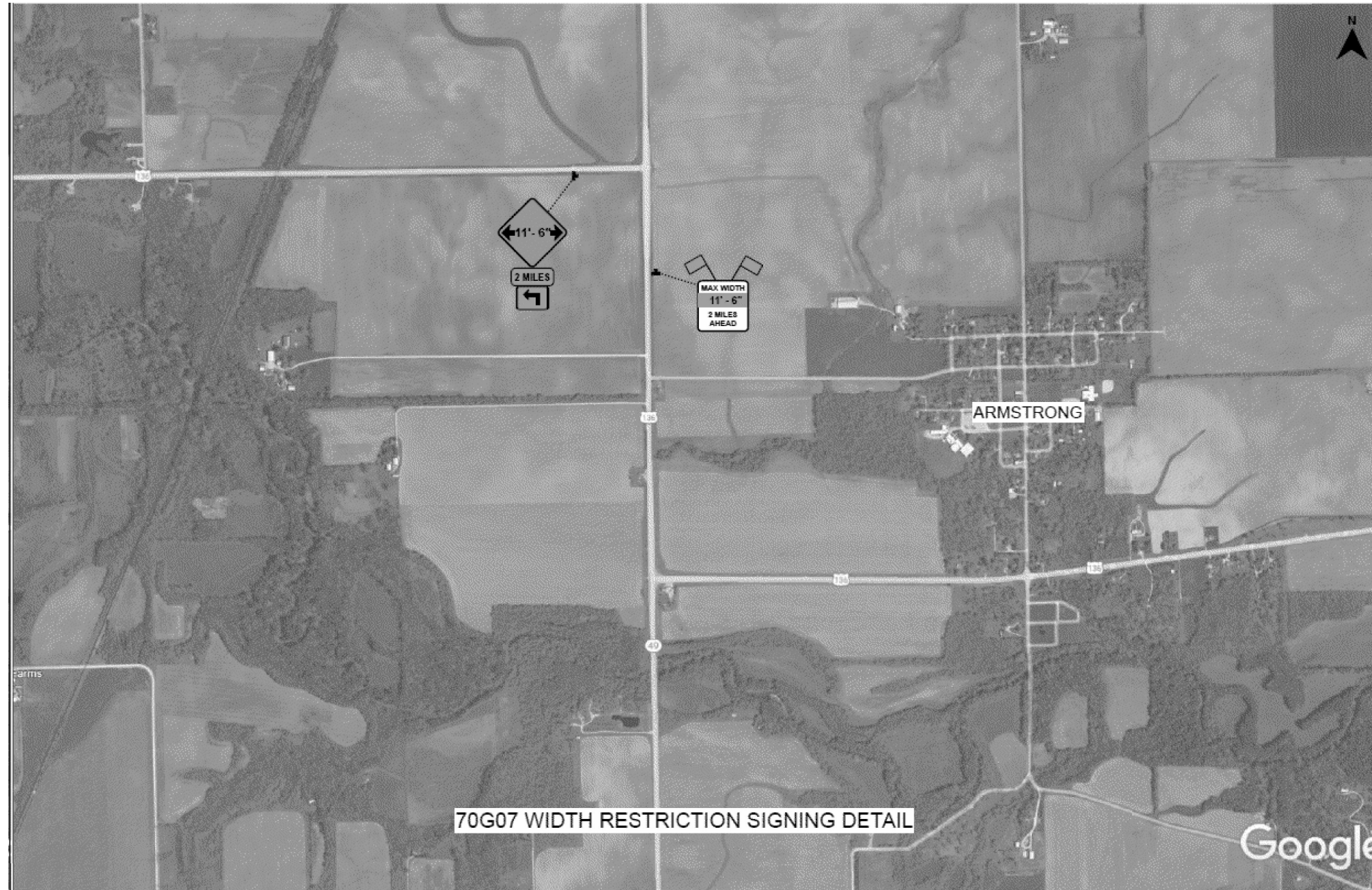
1. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED AND MAINTAINED BY THE CONTRACTOR.
2. ALL (B) SIGNS SHALL HAVE FLAGS INSTALLED UNLESS OTHERWISE DIRECTED.
3. LOCATIONS OF TRAFFIC CONTROL DEVICES MAY BE ADJUSTED BY THE ENGINEER.
4. ALL TRAFFIC CONTROL SHOWN ON THIS SHEET SHALL BE PAID FOR AT 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: \\MODELS\MAMES FILE: MAMES: public\benhufy.com\PHWDOT\Documents\DOT Offices\Bentley 5\Projects\0570607\CADD\Bentley Structures\70607-48-StructurePlans.dgn

DISTRICT 5 DETAIL NO. X7200201

USER NAME = Jeff.Sherer		DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WIDTH RESTRICTION SIGNING			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
DRAWN -		REVISOR -	REVISOR -					840	(122VB)BR	VERMILION	29	27	
PLOT SCALE = 40,0000 ' / in.		CHECKED -	REVISOR -		SCALE: N.T.S.			SHEET 1 OF 3 SHEETS		STA.	TO STA.	CONTRACT NO. 70G07	
PLOT DATE = 1/13/2023		DATE -	REVISOR -		ILLINOIS FED. AID PROJECT								



70G07 WIDTH RESTRICTION SIGNING DETAIL

FILE NAME =	USER NAME = Jeff.Sherer	DESIGNED - JMS	REVISED -
px:\idot-pw.bentley.com\PIDOT\Documents\IDOT Offices\District 5\Projects\0570G07\CDRAWN\Structures\70G07-sh1-StructurePlans		REVIS	REVISED -
	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 1/13/2023	DATE - 11182022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**LOCATIONS OF WIDTH RESTRICTION SIGNING
S.N. 092-0101**

SCALE: NONE SHEET NO. 3 OF 3 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122VB)BR	VERMILION	29	29
ILLINOIS FED. AID PROJECT			CONTRACT NO. 70G07	