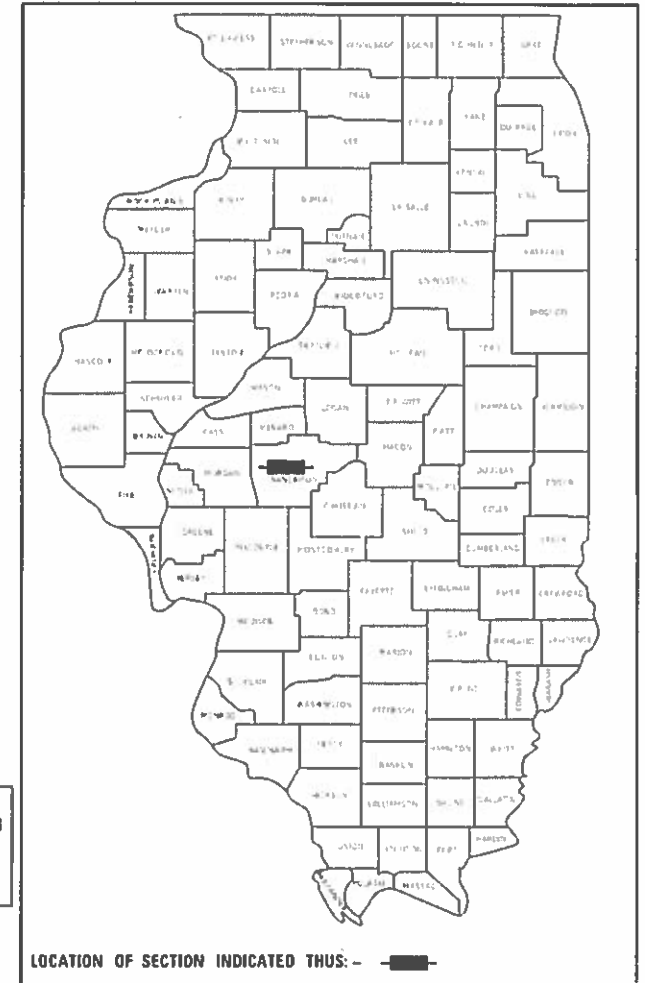


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FAI RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3)I,P	SANGAMON	138	1
ILLINOIS CONTRACT NO.				

\* 138 + 2 = 140 TOTAL SHEETS

D-96-024-15



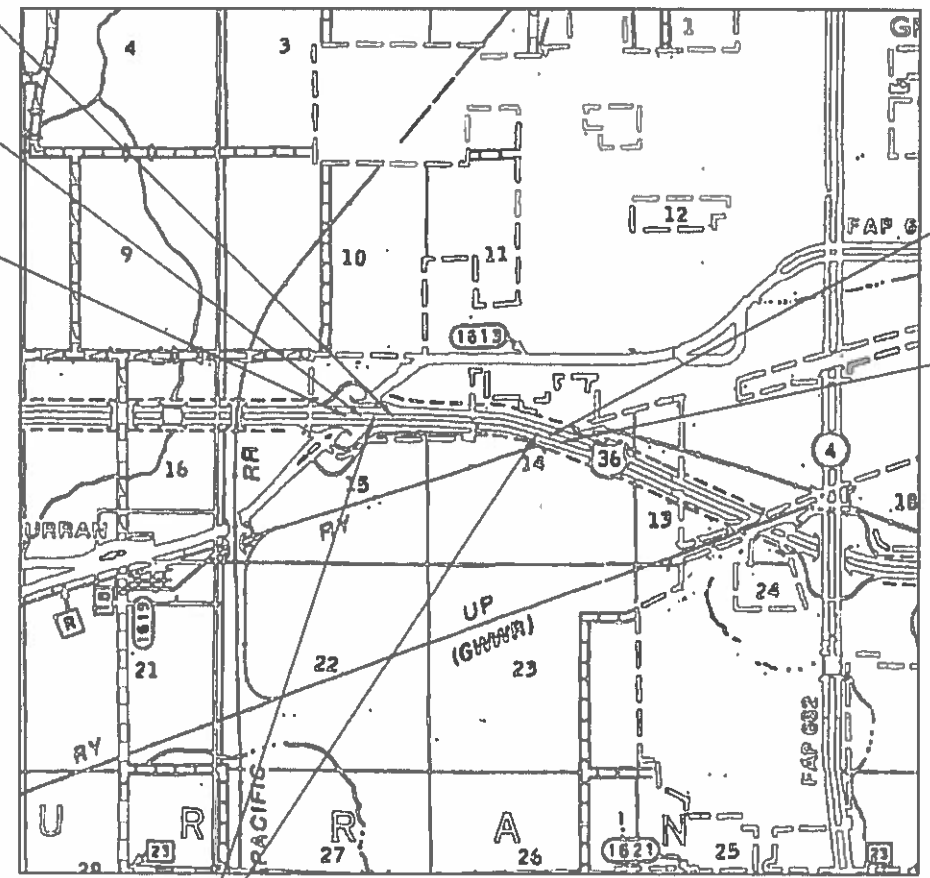
LOCATION OF SECTION INDICATED THUS: - [black rectangle] -

# PROPOSED HIGHWAY PLANS

FAI 72 (I-72)  
SECTION (84-9-3)I,P  
PROJECT NHPP-ZMDR(822)  
BRIDGE NEW DECK  
SANGAMON COUNTY

C-96-024-15

R 6 W | R 5 W



STA. EQ.  
STA. 1379+00.21 BK =  
STA. 379+01.88 AH

STA. 1368+34.01 TO 1370+66.01 EB  
STA. 1369+35.55 TO 1371+67.55 WB  
SN 084-0148 WB  
SN 084-0149 EB  
FAI 72 OVER WABASH AVE.

BEGIN SECTION  
(84-9-3)I,P  
STA. 1366+68.00

STA. 422+98.91 TO 425+22.91 EB  
STA. 424+14.79 TO 426+38.79 WB  
SN 084-0127 EB  
SN 084-0128 WB  
FAI 72 OVER N&S RR

END SECTION  
(84-9-3)I,P  
STA. 428+14.00

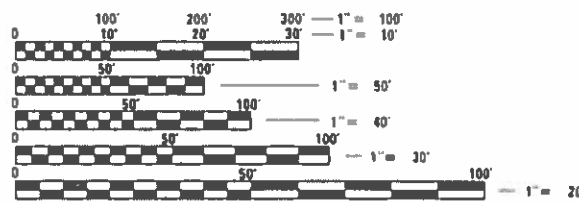
OMISSION:  
STA. 1373+33.00 TO  
STA. 421+24.00

FAI 72  
PRINCIPAL ARTERIAL/INTERSTATE  
ADT (2017) 22,500  
SU (2017) 570  
MU (2017) 3,580  
PV (2017) 16,350

NET LENGTH OF FAI 72 = 1,355.00 FT = 0.257 MILES  
TOTAL LENGTH OF PROJECT = 6,144.33 FT = 1.164 MILES

INDEX OF SHEETS  
SEE SHEET NO. 2

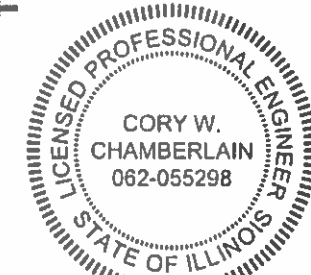
HIGHWAY STANDARDS  
SEE SHEET NO. 2



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 : JAY WAVERING, P.E. (217) 785-9046  
TEAM LEADER: VICTOR YOUNG (217) 524-0472  
CONTRACT NO. 72H51



Cory W. Chamberlain  
DATE: 11/30/2021  
LICENSE EXP. 1-31-2020

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED January 31, 2020

[Signature] REGIONAL ENGINEER

[Signature] ENGINEER OF DESIGN AND ENVIRONMENT

[Signature] DIRECTOR OF HIGHWAY PROJECT IMPLEMENTATION

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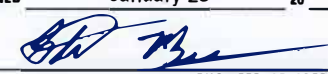
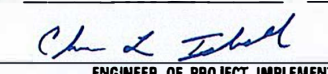

**INDEX OF SHEETS**

1	COVER SHEET
2	INDEX OF SHEETS AND HIGHWAY STANDARDS
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11	TYPICAL SECTIONS
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19	ALIGNMENT, TIES, AND BENCHMARKS
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24 - 27	PLAN SHEETS
28 - 32	HMA RAMP DETAILS
33 - 50	MAINTENANCE OF TRAFFIC
51	PAVEMENT MARKING DETAILS
52	INLET DRAIN DETAILS
* 53 - 96	SN 084-0148/0149 (WABASH) REPAIR PLANS
** 97 - 138	SN 084-0127/0128 (NSRR) REPAIR PLANS

\* INCLUDES SHEET 78A  
 \*\* INCLUDES SHEET 118A

**HIGHWAY STANDARDS**

000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
420001-09	PAVEMENT JOINTS
420401-13	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB
420701-03	PAVEMENT WELDED WIRE REINFORCEMENT
482011-03	HMA SHOULDER STRIPS/SHOULDERS WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
515001-04	NAME PLATE FOR BRIDGES
542401-03	METAL FLARED END SECTION FOR PIPE CULVERTS
602306-03	INLET, TYPE B
602601-06	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
604001-05	FRAME AND LIDS, TYPE 1
610001-08	SHOULDER INLET WITH CURB
630001-12	STEEL PLATE BEAM GUARDRAIL
630301-09	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631031-16	TRAFFIC BARRIER TERMINAL, TYPE 6
642001-02	SHOULDER RUMBLE STRIPS, 16 IN.
701101-05	OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5 M) TO 24' (600 MM) FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 M) AWAY
701400-09	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701402-12	LANE CLOSURE, FREEWAY/EXPRESSWAY, WITH BARRIER
701406-12	LANE CLOSURE, FREEWAY/EXPRESSWAY, DAY OPERATIONS ONLY
701411-09	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS > 45 MPH
701422-10	LANE CLOSURE, MULTILANE, FOR SPEEDS > 45 MPH TO 55 MPH
701426-09	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS > 45 MPH
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
725001-01	OBJECT AND TERMINAL MARKERS
781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS DISTRICT 6</b>	
EXAMINED	January 29 20 20
	
ENGINEER OF OPERATIONS	
EXAMINED	January 27 20 20
	
ENGINEER OF PROJECT IMPLEMENTATION	
EXAMINED	January 28 20 20
	
ENGINEER OF PROGRAM DEVELOPMENT	

REV. - MS

**GENERAL NOTES**

1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
2. ENGLISH UNITS OF MEASUREMENT SHALL GOVERN OVER AND SUPERCEDE ANY METRIC UNITS SHOWN IN THIS CONTRACT. WHERE INCLUDED, METRIC UNITS ARE FOR INFORMATION ONLY.
3. THE THICKNESS OF HMA MIXTURES SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OF BASE ON WHICH THE HMA MIXTURE IS PLACED.
4. THE ENGINEER WILL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS HMA LIFTS.
5. WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL MONUMENTS UNTIL AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR REESTABLISH ANY SECTION OR SUBSECTION MONUMENTS DESTROYED BY HIS/HER OPERATIONS.
6. THE CONTRACTOR SHALL NOTIFY THE DISTRICT 6 BUREAU OF OPERATIONS AT (217) 785-5312 21 DAYS PRIOR TO IMPLEMENTING ANY TRAFFIC CONTROL. ALL TEMPORARY PAVEMENT MARKING WILL BE PLACED IN SUCH A MANNER SO AS NOT TO INTERFERE WITH THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
7. THE GRADING AND SHAPING OF DITCHES SHALL BE DONE IN SUCH A MANNER TO ESTABLISH POSITIVE FLOW BETWEEN DRAINAGE STRUCTURES OR BETWEEN THE EXISTING ELEVATION AT THE UPSTREAM END OF THE GRADING TO THE DOWNSTREAM DRAINAGE STRUCTURE.
8. FOR STABILIZATION, ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR (4) SANDBAGS PER BARRICADE.
9. GUARDRAIL REMOVAL WILL INCLUDE THE REMOVAL OF ANY CONCRETE ENCASEMENTS OF THE POSTS AND ANY ADDITIONAL RAILING LOCATED AT THE BOTTOM OF THE POSTS.
10. ANY REFERENCES OR CALL-OUTS IN THESE PLANS TO "BITUMINOUS CONCRETE" SHALL BE INTERPRETED TO MEAN "HOT-MIX ASPHALT".
11. PINNING TEMPORARY CONCRETE BARRIER SHALL BE INCLUDED IN THE COST OF TEMPORARY CONCRETE BARRIER.

**COMMITMENTS**

1. THERE ARE NO COMMITMENTS AT THIS TIME.

**APPLICATION RATES**

AGGREGATE WEDGE SHOULDERS	1.60 TONS/CU YD
AGGREGATE ( SURFACE/BASE/SUBBASE/BACKFILL)	1.80 TONS/CU YD
BITUMINOUS MATERIALS ( TACK COAT)	0.05 LB/SQ FT (MILLED HMA, AGED HMA)
BITUMINOUS MATERIALS ( TACK COAT)	0.025 LB/SQ FT (FOG COAT BETWEEN HMA LIFTS)
HOT-MIX ASPHALT ( SURFACE/BINDER/BASE)	112 LBS/SQ YD/IN
RIPRAP	1.50 TONS/CU YD
NITROGEN FERTILIZER NUTRIENT	90 LBS/ACRE
PHOSPHORUS FERTILIZER NUTRIENT	90 LBS/ACRE
POTASSIUM FERTILIZER NUTRIENT	90 LBS/ACRE

**MIXTURE REQUIREMENTS**

LOCATIONS	I-72	I-72 SHOULDERS
MIXTURE USE(S):	HMA SURFACE	HMA SHLD ( 2" TOP LIFT)
PG:	SBS PG 70-22	PG 64-22
DESIGN AIR VOIDS:	4.0% @ N90	4.0% @ N50
MIXTURE COMPOSITION (GRADATION MIXTURE)	IL 9.5	IL 9.5
FRICTION AGGREGATE:	MIX "D"	MIX "C"
QUALITY MANAGEMENT	QC/QA	QC/QA
SUBLOT SIZE	N/A	N/A



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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES**

SCALE: SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3)I,P	SANGAMON	138	3
ILLINOIS FED. AID PROJECT			CONTRACT NO. 72H51	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				FEDERAL FUNDS		
				90% FED / 10% STATE		
				6-00213-0000		
				ROADWAY	BRIDGE	BRIDGE
				0005	0013	0013
				IL-72	084-0127	084-0148
					084-0128	084-0149
21400100	GRADING AND SHAPING DITCHES	FOOT	1890	1890		
28100101	STONE RIPRAP, CLASS A1	SQ YD	22	22		
28100207	STONE RIPRAP, CLASS A4	TON	740	740		
28100225	STONE RIPRAP, CLASS B3	TON	1727		1727	
28200200	FILTER FABRIC	SQ YD	1134	1134		
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	1141	1141		
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	3617	3617		
40600990	TEMPORARY RAMP	SQ YD	1443	1443		
40604164	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N90	TON	282	282		
42000060	WELDED WIRE REINFORCEMENT	SQ YD	836	836		
42000080	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB	SQ YD	1460	1460		
44000100	PAVEMENT REMOVAL	SQ YD	925	925		
44004250	PAVED SHOULDER REMOVAL	SQ YD	1026	1026		

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no. 184001036



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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

SCALE: SHEET NO. 1 OF 7 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3)I,P	SANGAMON	138	4
CONTRACT NO. 72H51				
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				FEDERAL FUNDS		
				90% FED / 10% STATE		
				6-00213-0000		
				ROADWAY	BRIDGE	BRIDGE
				0005	0013	0013
IL-72	084-0127	084-0148				
	084-0128	084-0149				
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	122	122		
48203100	HOT-MIX ASPHALT SHOULDERS	TON	162	162		
50102400	CONCRETE REMOVAL	CU YD	127.4		78.3	49.1
50104650	SLOPE WALL REMOVAL	SQ YD	2581		2581	
50104701	REMOVAL OF EXISTING CONCRETE DECK NO. 1	EACH	2		2	
50104702	REMOVAL OF EXISTING CONCRETE DECK NO. 2	EACH	2			2
50105220	PIPE CULVERT REMOVAL	FOOT	199	199		
50157300	PROTECTIVE SHIELD	SQ YD	2268		784	1484
50200100	STRUCTURE EXCAVATION	CU YD	291		183	108
50300225	CONCRETE STRUCTURES	CU YD	283.8		172.3	111.5
50300255	CONCRETE SUPERSTRUCTURE	CU YD	1456.8		641.9	814.9
50300300	PROTECTIVE COAT	SQ YD	5984		2950	3034
50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	543.5		270.9	272.6
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	10580		4970	5610

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no. 184001036



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PLOT DATE = 1/31/2020	CHECKED -	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

SCALE: SHEET NO. 2 OF 7 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3)I,P	SANGAMON	138	5
CONTRACT NO. 72H51				
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				FEDERAL FUNDS		
				90% FED / 10% STATE		
				6-00213-0000		
				ROADWAY	BRIDGE	BRIDGE
				0005	0013	0013
				IL-72	084-0127	084-0148
					084-0128	084-0149
50500505	STUD SHEAR CONNECTORS	EACH	10212		9492	720
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	620030		262700	357330
50800515	BAR SPLICERS	EACH	4316		2026	2290
51500100	NAME PLATES	EACH	4		2	2
52000110	PREFORMED JOINT STRIP SEAL	FOOT	506		262	244
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	38		14	24
52100030	ELASTOMERIC BEARING ASSEMBLY, TYPE III	EACH	14		14	
52100505	ANCHOR BOLTS, 5/8"	EACH	192		112	80
52200010	TEMPORARY SHEET PILING	SQ FT	1726		434	1292
54213447	END SECTIONS 12"	EACH	12	12		
58600101	GRANULAR BACKFILL FOR STRUCTURES	CU YD	124		124	
58700300	CONCRETE SEALER	SQ FT	2611		1298	1313
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	98		98	

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no. 184001036



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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

SCALE: SHEET NO. 3 OF 7 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3)I,P	SANGAMON	138	6
CONTRACT NO. 72H51				
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				FEDERAL FUNDS		
				90% FED / 10% STATE		
				6-00213-0000		
				ROADWAY	BRIDGE	BRIDGE
				0005	0013	0013
IL-72	084-0127	084-0148				
	084-0128	084-0149				
59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	5	5		
60100945	PIPE DRAINS 12"	FOOT	432	432		
60240215	INLETS, TYPE B, TYPE 1 FRAME, CLOSED LID	EACH	3	3		
60500060	REMOVING INLETS	EACH	4	4		
61000225	TYPE F INLET BOX, STANDARD 610001	EACH	6	6		
61000335	TYPE G INLET BOX, STANDARD 610001	EACH	6	6		
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	1962.5	1962.5		
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	8	8		
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	8	8		
63200310	GUARDRAIL REMOVAL	FOOT	2721	2721		
64200116	SHOULDER RUMBLE STRIPS, 16 INCH	FOOT	4883	4883		
66201120	CONCRETE SHOULDER CURB	FOOT	628	628		
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	12	2	5	5
67100100	MOBILIZATION	L SUM	1	0.2	0.4	0.4

\* SPECIALTY ITEM

design firm  
no. 184001036



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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET NO. 4 OF 7 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3)I,P	SANGAMON	138	7
CONTRACT NO. 72H51				
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				FEDERAL FUNDS		
				90% FED / 10% STATE		
				6-00213-0000		
				ROADWAY	BRIDGE	BRIDGE
				0005	0013	0013
				1L-72	084-0127	084-0148
					084-0128	084-0149
70100320	TRAFFIC CONTROL AND PROTECTION, STANDARD 701422	L SUM	1			1
70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	EACH	3			3
70100700	TRAFFIC CONTROL AND PROTECTION, STANDARD 701406	L SUM	1	1		
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	480	480		
70300100	SHORT TERM PAVEMENT MARKING	FOOT	792	792		
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	258	258		
70400100	TEMPORARY CONCRETE BARRIER	FOOT	2500		1250	1250
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	2350		1175	1175
70600260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	4		2	2
70600332	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	4		2	2
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	8	8		
* 78009005	MODIFIED URETHANE PAVEMENT MARKING - LINE 5"	FOOT	9552	9552		
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	32	32		

\* SPECIALTY ITEM



CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				FEDERAL FUNDS		
				90% FED / 10% STATE		
				6-00213-0000		
				ROADWAY	BRIDGE	BRIDGE
				0005	0013	0013
				IL-72	084-0127	084-0148
					084-0128	084-0149
* 78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	32	32		
* 78200010	BARRIER WALL REFLECTORS, TYPE B	EACH	64	64		
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	32	32		
X0327980	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	1622	1622		
X2503000	MAINTENANCE MOWING	ACRE	32	32		
X4404400	PAVEMENT REMOVAL (SPECIAL)	SQ YD	132	132		
X5030250	BRIDGE DECK GROOVING (LONGITUDINAL)	SQ YD	3056		1506	1550
X7010208	TRAFFIC CONTROL AND PROTECTION, STANDARD 701402 (SPECIAL)	EACH	4		2	2
X7200201	WIDTH RESTRICTION SIGNING	L SUM	1		0.5	0.5
* X7830072	GROOVING FOR RECESSED PAVEMENT MARKING 6"	FOOT	6232	6232		
Z0001495	BRIDGE APPROACH SHOULDER REMOVAL	SQ YD	145	145		
Z0004552	APPROACH SLAB REMOVAL	SQ YD	486	486		
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	632		89	543
Z0012755	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ FT	4		4	

\* SPECIALTY ITEM



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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

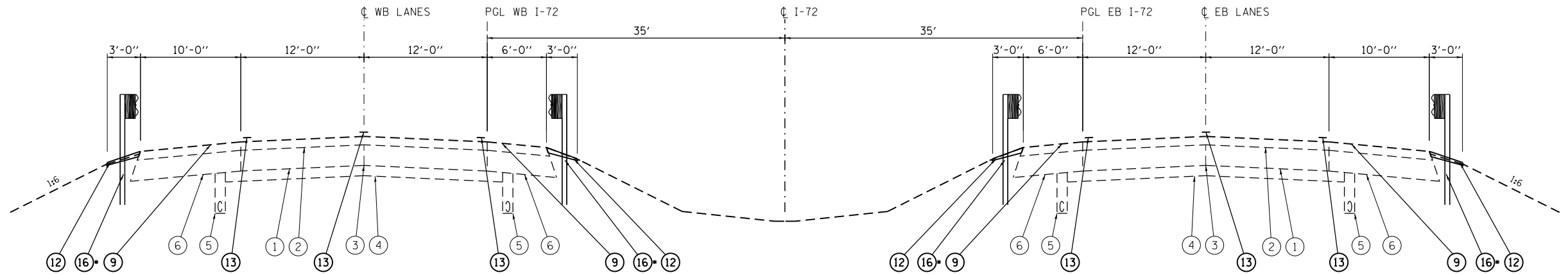
SCALE: SHEET NO. 6 OF 7 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3)I,P	SANGAMON	138	9
CONTRACT NO. 72H51				
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				FEDERAL FUNDS		
				90% FED / 10% STATE		
				6-00213-0000		
				ROADWAY	BRIDGE	BRIDGE
				0005	0013	0013
				IL-72	084-0127	084-0148
					084-0128	084-0149
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	0.2	0.4	0.4
Z0029090	DIAMOND GRINDING (BRIDGE SECTION)	SQ YD	5838		2912	2926
Z0031301	JACKING AND CRIBBING, LOCATION NO. 1	L SUM	1		1	
Z0031302	JACKING AND CRIBBING, LOCATION NO. 2	L SUM	1			1
Z0041500	PLUG EXISTING CULVERTS	EACH	2	2		
Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	806		806	
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1		1	
Z0065796	RIPRAP SLURRY	SQ YD	3072		3072	
Z0073500	TEMPORARY SUPPORT SYSTEM	L SUM	1			1
∅ Z0076600	TRAINEES	HOUR	2500	2500		
∅ Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	2500	2500		

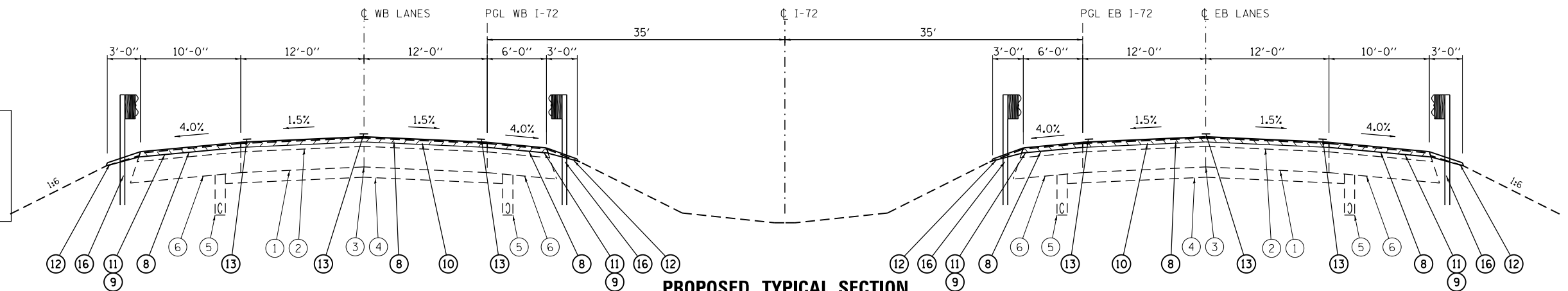
∅ 0042

REV. - MS



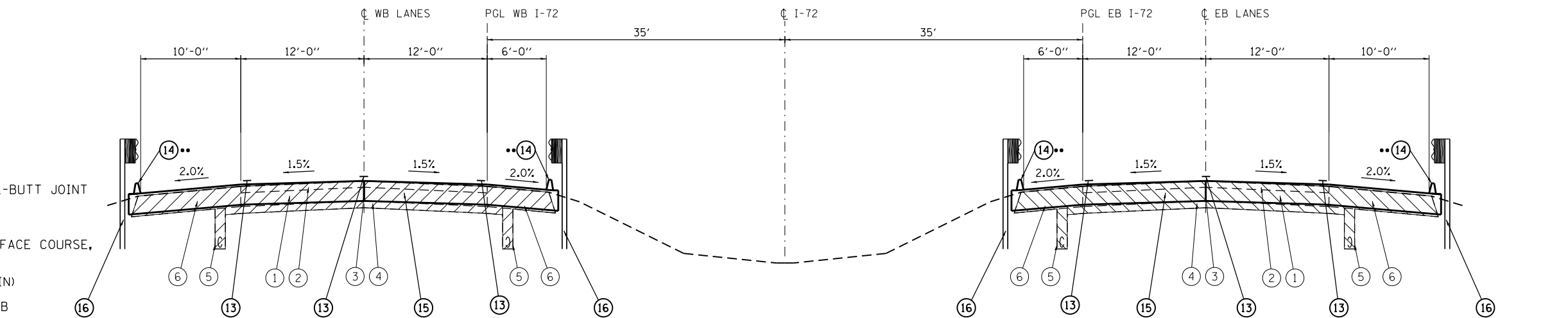
**PROPOSED TYPICAL SECTION**

STA. 1364+65.00 TO STA. 1366+68.00 EB  
 STA. 1373+33.00 TO STA. 1375+28.00 WB  
 STA. 419+38.00 TO STA. 421+24.00 EB  
 STA. 428+14.00 TO STA. 430+02.00 WB



**PROPOSED TYPICAL SECTION**

STA. 1366+68.00 TO STA. 1367+65.00 EB STA. 1371+30.71 TO STA. 1372+32.00 EB  
 STA. 1367+71.00 TO STA. 1368+70.85 WB STA. 1372+36.57 TO STA. 1373+33.00 WB  
 STA. 421+24.00 TO STA. 422+27.20 EB STA. 425+91.18 TO STA. 426+98.00 EB  
 STA. 422+41.00 TO STA. 423+48.02 WB STA. 427+12.00 TO STA. 428+14.00 WB



**PROPOSED TYPICAL SECTION**

STA. 1367+65.00 TO STA. 1368+04.75 EB STA. 1370+95.28 TO STA. 1371+30.71 EB  
 STA. 1368+70.85 TO STA. 1369+06.28 WB STA. 1371+96.81 TO STA. 1372+36.57 WB  
 STA. 422+27.20 TO STA. 422+70.45 EB STA. 425+52.86 TO STA. 425+91.18 EB  
 STA. 423+48.02 TO STA. 423+86.34 WB STA. 426+68.75 TO STA. 427+12.00 WB

**OMISSIONS**

EB OMISSIONS:  
 1368+04.75 TO 1370+95.28  
 422+70.45 TO 425+52.86  
 WB OMISSIONS:  
 1369+06.28 TO 1371+96.81  
 423+86.34 TO 426+68.75

**LEGEND**

- ① EX CRCP PAVEMENT 8"
- ② EX BITUMINOUS CONCRETE 3 3/4" & VAR.
- ③ EX LONGITUDINAL JOINT
- ④ EX STABILIZED SUBBASE 4"
- ⑤ EX UNDERDRAIN
- ⑥ EX BITUMINOUS SHOULDER, 11 3/4"
- ⑦ NOT USED
- ⑧ PR HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT
- ⑨ RUMBLE STRIPS STD 642001
- ⑩ PR POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL9.5, MIX "D", N90, (2" MIN)
- ⑪ PR HOT-MIX ASPHALT SHOULDERS (2" MIN)
- ⑫ PR AGGREGATE WEDGE SHOULDER, TYPE B
- ⑬ PR PAVEMENT MARKING, LINE 5"
- ⑭ PR CONCRETE SHOULDER CURB
- ⑮ PR PAVEMENT CONNECTOR (PCC)
- ⑯ PR STEEL PLATE BEAM GUARDRAIL

TO BE REMOVED

STATION EQUATIONS  
 STA. 1379+00.21 BK. = STA. 379+01.88 AH.

• SEE REMOVAL AND PLAN SHEETS FOR LOCATION.  
 •• SEE STANDARD 610001, DETAIL B.

REMOVAL SCHEDULE								
STATION	TO	STATION	LENGTH (FT)	44000100	40600982	Z0004552	Z0001495	X4404400
				PAVEMENT REMOVAL SQ YD	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT SQ YD	APPROACH SLAB REMOVAL SQ YD	BRIDGE APPROACH SHOULDER REMOVAL SQ YD	PAVEMENT REMOVAL (SPECIAL) SQ YD
<b>EB I-72</b>								
1366+68.00	TO	1367+65.00	97		432			
1367+78.40	TO	1367+84.30	6					16
1367+65.00	TO	1368+27.20	62	117				
1368+14.90	TO	1368+34.50	20			54		
1370+41.70 RT	TO	1370+59.20 RT	18				19	
1370+65.50	TO	1370+84.00	19			51		
1370+72.60	TO	1371+30.70	58	107				
1370+84.70 LT	TO	1371+00.80 LT	16				54	
1371+16.00	TO	1371+22.30	6					17
1371+30.70	TO	1372+32.00	101		451			
421+24.00	TO	422+27.20	103		459			
422+40.70	TO	422+47.00	6					17
422+27.20	TO	422+95.60	68	127				
422+80.40	TO	423+00.50	20			67		
425+22.90	TO	425+42.70	20			70		
425+27.80	TO	425+91.20	63	114				
425+77.00	TO	425+83.30	6					17
425+91.20	TO	426+98.00	107		475			
<b>WB I-72</b>								
1367+71.00	TO	1368+70.90	100		444			
1368+80.70	TO	1368+86.40	6					15
1368+70.90	TO	1369+28.40	58	107				
1369+16.80	TO	1369+36.00	19			56		
1371+90.50 LT	TO	1372+06.70 LT	16				18	
1371+67.10	TO	1371+87.20	20			55		
1371+74.60	TO	1372+36.60	62	117				
1371+47.30 RT	TO	1371+65.10 RT	18				54	
1372+17.50	TO	1372+23.40	6					16
1372+36.60	TO	1373+33.00	96		428			
<b>WB I-72 (CONTINUED)</b>								
422+41.00	TO	423+48.00	107		475			
423+56.40	TO	423+62.70	6					17
423+48.00	TO	424+11.00	63	111				
423+96.20	TO	424+16.30	20			67		
426+38.70	TO	426+58.60	20			66		
426+44.00	TO	427+12.00	68	125				
426+92.70	TO	426+99.00	6					17
427+12.00	TO	428+14.00	102		453			
<b>TOTALS =</b>				925	* 3617	486	145	132

TRAFFIC CONTROL SCHEDULE										
LOCATION	STATION	TO	STATION	LENGTH (FT)	70600260	70600332	44004250	70400100	70400200	
					IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3 EACH	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3 EACH	PAVED SHOULDER REMOVAL SQ YD	TEMPORARY CONCRETE BARRIER FOOT	RELOCATE TEMPORARY CONCRETE BARRIER FOOT	
<b>EB STAGE I</b>	1367+65.00 LT	TO	1368+60.40 LT	95			64			
	1368+70.90 RT	TO	1369+17.80 RT	47			52			
	1370+84.70 LT	TO	1371+30.70 LT	46			31			
	1371+47.30 RT	TO	1372+36.60 RT	89			99			
	422+27.20 LT	TO	423+27.40 LT	100			67			
	423+48.00 RT	TO	424+00.00 RT	52			58			
	425+42.20 LT	TO	425+91.20 LT	49			33			
	426+12.60 RT	TO	427+12.00 RT	99			110			
	<b>WB STAGE II</b>	1367+65.00 RT	TO	1368+11.50 RT	47			52		
		1368+70.90 LT	TO	1369+60.40 LT	90			60		
		1370+41.70 RT	TO	1371+30.70 RT	89			99		
		1371+90.50 LT	TO	1372+36.60 LT	46			31		
		422+27.20 RT	TO	422+78.20 RT	51			57		
		423+48.00 LT	TO	424+47.70 LT	100			66		
424+90.70 RT	TO	425+91.20 RT	101			112				
426+60.00 LT	TO	427+12.00 LT	52			35				
<b>STAGE I</b>										
<b>EB STAGE I</b>	1365+15.50 L/R	TO	1371+39.80 L/R	624	1			625.0		
	419+78.50 L/R	TO	426+02.20 L/R	624	1			625.0		
<b>WB STAGE I</b>	1368+61.80 L/R	TO	1374+86.20 L/R	624	1			625.0		
	423+37.00 L/R	TO	429+61.40 L/R	624	1			625.0		
<b>STAGE II</b>										
<b>EB STAGE II</b>	1365+52.90 L/R	TO	1371+39.80 L/R	587		1			587.5	
	420+15.40 L/R	TO	426+02.20	587		1			587.5	
<b>WB STAGE II</b>	1368+61.80 L/R	TO	1374+48.80 L/R	587		1			587.5	
	423+37.00 L/R	TO	429+24.00 L/R	587		1			587.5	
<b>TOTALS =</b>					4	4	1,026	2,500.0	2,350.0	



USER NAME = gjameson	DESIGNED -	REVISED
FILE NAME = D672H51_sht.schedules.dwg	CHECKED -	REVISED
PLOT SCALE = 0.1667 ' / in.	DRAWN -	REVISED
PLOT DATE = 1/31/2020	CHECKED -	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES**

SCALE: SHEET NO. 1 OF 7 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3)I,P	SANGAMON	138	12
CONTRACT NO. 72H51				
ILLINOIS FED. AID PROJECT				

PAVING SCHEDULE													
LOCATION	STATION	TO	STATION	LENGTH ( FT )	40600290 BITUMINOUS MATERIALS ( TACK COAT )  POUND	40604164 POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N90  TON	42000060 WELDED WIRE REINFORCEMENT  SQ YD	42000080 PAVEMENT CONNECTOR ( PCC ) FOR BRIDGE APPROACH SLAB  SQ YD	66201120 CONCRETE SHOULDER CURB  FOOT	48203100 HOT-MIX ASPHALT SHOULDERS  TON	64200116 SHOULDER RUMBLE STRIPS, 16 INCH  FOOT	48102100 AGGREGATE WEDGE SHOULDER, TYPE B  TON	40600990 TEMPORARY RAMP  SQ YD
I-72 EB													
	1364+30.00 RT	TO	1367+65.00 RT	335							335		
	1364+65.00 RT	TO	1368+39.20 RT	374								11	
	1366+68.00 RT	TO	1367+65.00 RT	97	49					12			
	1365+40.00 LT	TO	1367+65.00 LT	225							225		
	1364+65.00 LT	TO	1367+96.00 LT	331								10	
	1366+68.00 LT	TO	1367+65.00 LT	97	29					7			
	1366+68.00	TO	1367+65.00	97	58	34							
	1367+15.00	TO	1367+65.00	50									222
	1367+65.00 RT	TO	1367+80.00 RT	15			100	175	15				
	1367+65.00 LT	TO	1368+25.20 LT	60					60				
	1370+70.50 RT	TO	1371+30.70 RT	60			100	175	60				
	1371+15.70 LT	TO	1371+30.70 LT	15					15				
	1371+30.70	TO	1372+32.00	101	61	35							
	1371+30.71	TO	1371+60.71	30									133
	1370+56.70 RT	TO	1372+32.00 RT	175								5	
	1371+30.70 RT	TO	1372+32.00 RT	101	51					13			
	1371+30.70 RT	TO	1374+65.00 RT	334							334		
	1371+00.70 LT	TO	1372+32.00 LT	131								4	
	1371+30.70 LT	TO	1372+32.00 LT	101	30					8			
	1371+30.70 LT	TO	1372+91.00 LT	160							160		
	418+90.00 RT	TO	422+27.20 RT	337							337		
	419+38.00 RT	TO	422+62.20 RT	324								10	
	421+24.00 RT	TO	422+27.20 RT	103	52					13			
	419+38.00 LT	TO	423+13.80 LT	376								11	
	420+00.00 LT	TO	422+27.20 LT	227							227		
	421+24.00 LT	TO	422+27.20 LT	103	31					8			
	421+24.00	TO	422+27.20	103	62	36							
	421+97.20	TO	422+47.20	50									222
	422+27.20 RT	TO	422+42.20 RT	15			109	190	15				
	422+27.20 LT	TO	422+93.80 LT	67					67				
	425+24.60 RT	TO	425+91.20 RT	67			109	190	67				
	425+76.20 LT	TO	425+91.20 LT	15					15				
	425+91.20	TO	426+98.00	107	64	37							
	425+91.18	TO	426+21.18	30									133
	425+04.60 RT	TO	426+98.00 RT	193								6	
	425+91.20 RT	TO	426+98.00 RT	107	54					13			
	425+91.20 RT	TO	429+53.00 RT	362							362		
	425+56.20 LT	TO	426+98.00 LT	142								4	
	425+91.20 LT	TO	426+98.00 LT	107	32					8			
	425+91.20 LT	TO	429+61.00 LT	370							370		

PAVING SCHEDULE													
LOCATION	STATION	TO	STATION	LENGTH ( FT )	40600290 BITUMINOUS MATERIALS ( TACK COAT ) POUND	40604164 POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N90 TON	42000060 WELDED WIRE REINFORCEMENT SQ YD	42000080 PAVEMENT CONNECTOR ( PCC ) FOR BRIDGE APPROACH SLAB SQ YD	66201120 CONCRETE SHOULDER CURB FOOT	48203100 HOT-MIX ASPHALT SHOULDERS TON	64200116 SHOULDER RUMBLE STRIPS, 16 INCH FOOT	48102100 AGGREGATE WEDGE SHOULDER, TYPE B TON	40600990 TEMPORARY RAMP SQ YD
I-72 WB (CONTINUED)													
	1365+43.00 LT	TO	1368+70.90 LT	328							328		
	1367+71.00 LT	TO	1368+70.90 LT	100	50					12			
	1367+71.00 LT	TO	1368+96.80 LT	126								4	
	1367+16.00 RT	TO	1368+70.90 RT	155							155		
	1367+71.00 RT	TO	1369+45.00 RT	174								5	
	1367+71.00 RT	TO	1368+70.90 RT	100	30					7			
	1367+71.00	TO	1368+70.90	100	60	35							
	1368+40.85	TO	1368+70.85	30									133
	1368+70.80 RT	TO	1368+85.80 RT	15			100	175	15				
	1368+70.80 LT	TO	1369+31.00 LT	60					60				
	1371+76.40 RT	TO	1372+36.60 RT	60			100	175	60				
	1372+21.60 LT	TO	1372+36.60 LT	15					15				
	1372+36.60	TO	1373+33.00	96	58	33							
	1372+56.57	TO	1373+06.57	50									222
	1372+05.60 LT	TO	1375+28.00 LT	322								10	
	1372+36.60 LT	TO	1373+33.00 LT	96	48					12			
	1372+36.60 LT	TO	1375+70.00 LT	333							333		
	1371+60.40 RT	TO	1375+28.00 RT	368								11	
	1372+36.60 RT	TO	1373+33.00 RT	96	29					7			
	1372+36.60 RT	TO	1374+60.00 RT	223							223		
WB I-72													
	419+88.00 LT	TO	423+48.00 LT	360							360		
	422+41.00 LT	TO	424+34.60 LT	194								6	
	422+41.00 LT	TO	423+48.00 LT	107	54					13			
	419+80.00 RT	TO	423+48.00 RT	368							368		
	422+41.00 RT	TO	423+48.00 RT	107	32					8			
	422+41.00 RT	TO	423+83.00 RT	142								4	
	422+41.00	TO	423+48.00	107	64	37							
	423+18.02	TO	423+68.02	50									222
	423+48.00 RT	TO	423+63.00 RT	15			109	190	15				
	423+48.00 LT	TO	424+14.60 LT	67					67				
	426+45.40 RT	TO	427+12.00 RT	67			109	190	67				
	426+97.00 LT	TO	427+12.00 LT	15					15				
	427+12.00	TO	427+47.00	35									156
	427+12.00	TO	428+14.00	102	61	35							
	427+12.00 LT	TO	428+14.00 LT	102	51					13			
	426+12.00 LT	TO	430+50.00 LT	438							438		
	426+77.00 LT	TO	430+02.00 LT	325								10	
	426+12.00 RT	TO	429+40.00 RT	328							328		
	426+25.40 RT	TO	430+02.00 RT	377								11	
	427+12.00 RT	TO	428+14.00 RT	102	31					8			
TOTALS =					1,141	282	836	1,460	628	162	4,883	122	* 1443

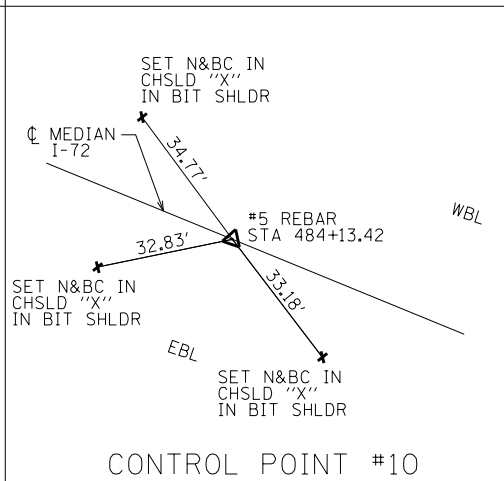
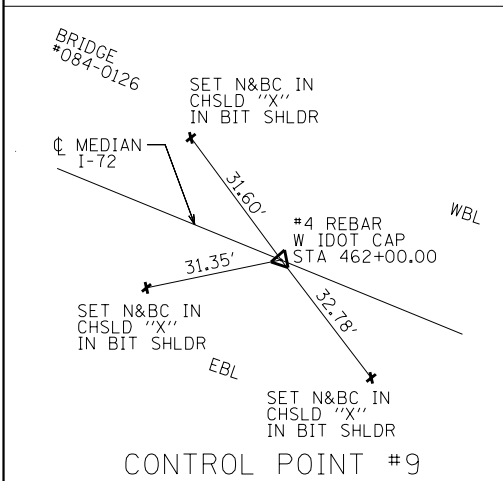
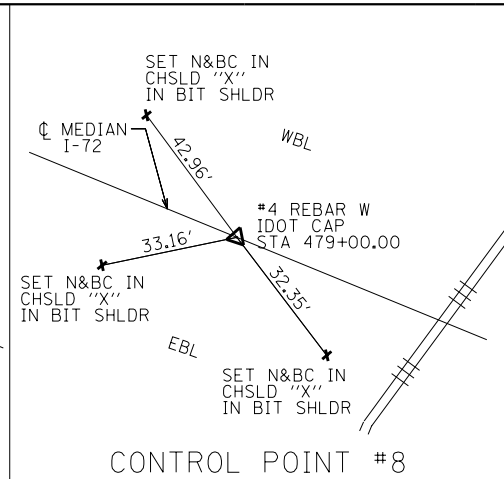
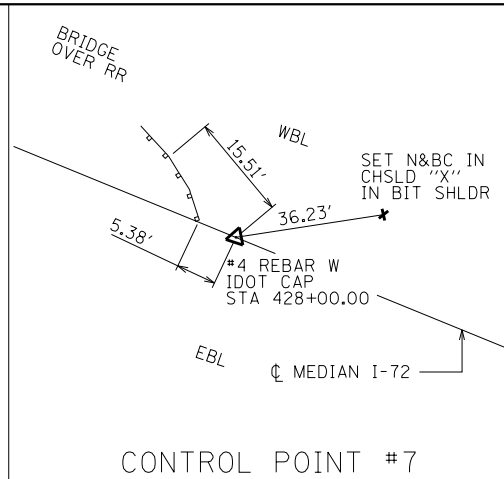
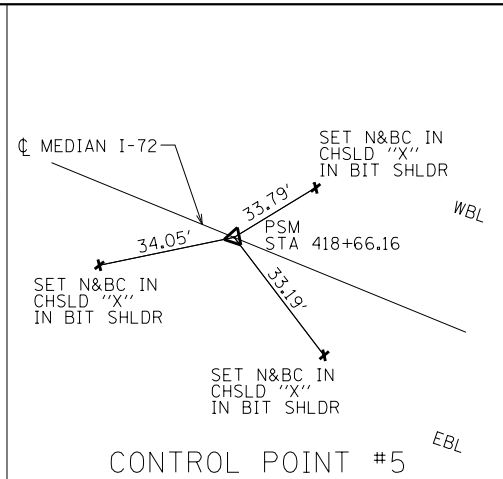
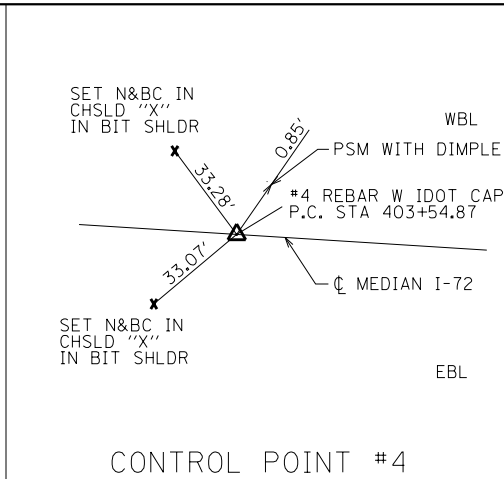
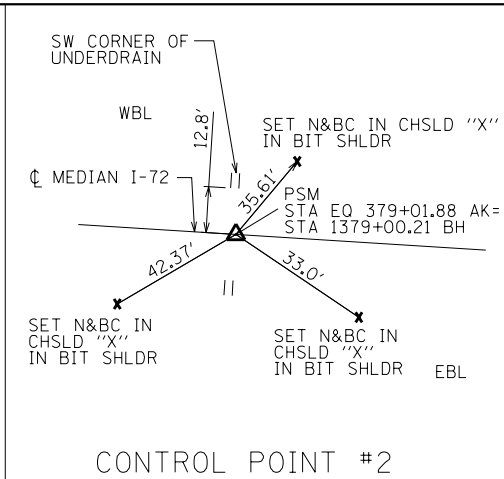
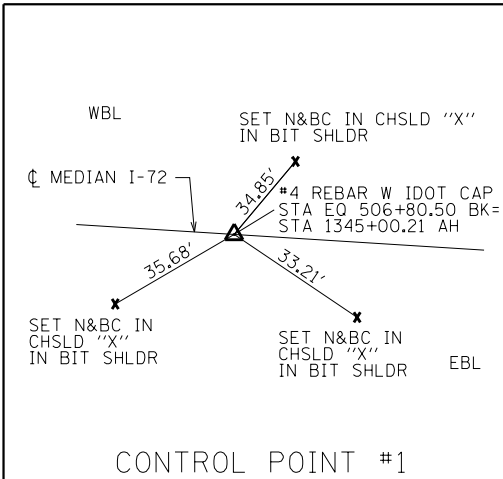
PAVEMENT MARKING SCHEDULE												
LOCATION	STATION	TO	STATION	LENGTH (FT)	78009005 MODIFIED URETHANE PAVEMENT MARKING - LINE 5"		X7830072 GROOVING FOR RECESSED PAVEMENT MARKING 6"	78100100 RAISED REFLECTIVE PAVEMENT MARKER	78300200 RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	X0327980 PAVEMENT MARKING REMOVAL - WATER BLASTING	70300100 SHORT TERM PAVEMENT MARKING	70300150 SHORT TERM PAVEMENT MARKING REMOVAL
					WHITE (FT)	YELLOW (FT)	FOOT	EACH	EACH	SO FT	FOOT	SO FT
<b>I-72 EB MAINLINE</b>												
	1364+30.00 RT	TO	1367+65.00 RT	335	335		335				16	5
	1364+30.00 CL	TO	1367+65.00 CL	335	90		90	2	2		32	11
	1364+30.00 LT	TO	1367+65.00 LT	335		335	335				16	5
	1367+65.00 RT	TO	1371+30.70 RT	366	366						16	5
	1367+65.00 CL	TO	1371+30.70 CL	366	100			3	3		36	12
	1367+65.00 LT	TO	1371+30.70 LT	366		366					16	5
	1371+30.70 RT	TO	1374+65.00 RT	334	335		335				16	5
	1371+30.70 CL	TO	1374+65.00 CL	334	90		90	3	3		32	11
	1371+30.70 LT	TO	1374+65.00 LT	334		335	335				16	5
	418+90.00 RT	TO	422+27.20 RT	337	338		338				16	5
	418+90.00 CL	TO	422+27.20 CL	337	90		90	2	2		32	11
	418+90.00 LT	TO	422+27.20 LT	337		338	338				16	5
	422+27.20 RT	TO	425+91.20 RT	364	364						16	5
	422+27.20 CL	TO	425+91.20 CL	364	100			3	3		36	12
	422+27.20 LT	TO	425+91.20 LT	364		364					16	5
	425+91.20 RT	TO	429+61.00 RT	370	370		370				16	5
	425+91.20 CL	TO	429+61.00 CL	370	100		100	3	3		36	12
	425+91.20 LT	TO	429+61.00 LT	370		370	370				16	5
<b>STAGE I</b>												
	1349+36.00 CL	TO	1359+36.00 CL							83		
	1364+36.00 RT	TO	1374+93.30 RT							353		
	418+98.50 RT	TO	428+56.00 RT							319		
<b>STAGE II</b>												
	493+49.40 CL	TO	503+49.40 LT							83		
	1346+69.10 CL	TO	1349+36.00 CL							23		
	380+65.50 CL	TO	381+58.80 LT							10		

PAVEMENT MARKING SCHEDULE												
LOCATION	STATION	TO	STATION	LENGTH (FT)	78009005 MODIFIED URETHANE PAVEMENT MARKING - LINE 5"		X7830072 GROOVING FOR RECESSED PAVEMENT MARKING 6"	78100100 RAISED REFLECTIVE PAVEMENT MARKER	78300200 RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	X0327980 PAVEMENT MARKING REMOVAL - WATER BLASTING	70300100 SHORT TERM PAVEMENT MARKING	70300150 SHORT TERM PAVEMENT MARKING REMOVAL
					WHITE (FT)	YELLOW (FT)	FOOT	EACH	EACH	SO FT	FOOT	SO FT
<b>I-72 WB MAINLINE</b>												
	1365+43.00 RT	TO	1368+70.90 RT	328		328	328				16	5
	1365+43.00 CL	TO	1368+70.90 CL	328	90		90	2	2		32	11
	1365+43.00 LT	TO	1368+70.90 LT	328	328		328				16	5
	1368+70.90 RT	TO	1372+36.60 RT	366		366					16	5
	1368+70.90 CL	TO	1372+36.60 CL	366	100			4	4		36	12
	1368+70.90 LT	TO	1372+36.60 LT	366	366						16	5
	1372+36.60 RT	TO	1375+70.00 RT	333		334	334				16	5
	1372+36.60 CL	TO	1375+70.00 CL	333	90		90	2	2		32	11
	1372+36.60 LT	TO	1375+70.00 LT	333	334		334				16	5
	419+80.00 RT	TO	423+48.00 RT	368		368	368				16	5
	419+80.00 CL	TO	423+48.00 CL	368	100		100	3	3		36	12
	419+80.00 LT	TO	423+48.00 LT	368	368		368				16	5
	423+48.00 RT	TO	427+12.00 RT	364		364					16	5
	423+48.00 CL	TO	427+12.00 CL	364	100			3	3		36	11
	423+48.00 LT	TO	427+12.00 LT	364	364						16	5
	427+12.00 RT	TO	430+50.00 RT	338		338	338				16	5
	427+12.00 CL	TO	430+50.00 CL	338	90		90	2	2		32	12
	427+12.00 LT	TO	430+50.00 LT	338	338		338				16	5
	STAGE I											
	1366+08.10 LT		1375+65.60 LT							319		
	420+83.20 LT		430+40.70 LT							319		
	435+40.70 CL		445+40.70 CL							83		
	STAGE II											
	394+43.00 CL		396+49.40 CL							20		
	434+27.00 CL		435+40.70 CL							10		
	<b>TOTALS =</b>				<b>5,346</b>	<b>4,206</b>	<b>6,232</b>	<b>32</b>	<b>32</b>	<b>1,622</b>	<b>792</b>	<b>258</b>



GUARDRAIL SCHEDULE												
LOCATION	STATION			STATION		63100167	72501000	78200005	78200010	63100085	63000001	63200310
						TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	TERMINAL MARKER - DIRECT APPLIED	GUARDRAIL REFLECTORS, TYPE A	BARRIER WALL REFLECTORS, TYPE B	TRAFFIC BARRIER TERMINAL, TYPE 6	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	GUARDRAIL REMOVAL
						EACH	EACH	EACH	EACH	EACH	FOOT	FOOT
FAI-72 EB	1364+84.09	OUTSIDE	TO	1365+34.09	OUTSIDE	1	1					
	1365+34.09	OUTSIDE	TO	1367+59.09	OUTSIDE			4			225.0	
	1367+59.09	OUTSIDE	TO	1367+98.49	OUTSIDE					1		
	1364+82.10	OUTSIDE	TO	1368+05.10	OUTSIDE							323.0
	1368+19.45	OUTSIDE	TO	1370+80.45	OUTSIDE				8			
	1364+77.30	MEDIAN	TO	1365+27.30	MEDIAN	1	1					
	1365+27.30	MEDIAN	TO	1368+02.30	MEDIAN			4			275.0	
	1368+02.30	MEDIAN	TO	1368+41.69	MEDIAN					1		
	1364+71.10	MEDIAN	TO	1368+47.00	MEDIAN							375.9
	1368+19.45	MEDIAN	TO	1370+80.45	MEDIAN				8			
	419+48.03	OUTSIDE	TO	419+98.03	OUTSIDE	1	1					
	419+98.03	OUTSIDE	TO	422+23.03	OUTSIDE			4			225.0	
	422+23.03	OUTSIDE	TO	422+62.43	OUTSIDE					1		
	419+43.00	OUTSIDE	TO	422+66.10	OUTSIDE							323.1
	422+86.98	OUTSIDE	TO	425+36.22	OUTSIDE				8			
	419+59.84	MEDIAN	TO	420+09.84	MEDIAN	1	1					
	420+09.84	MEDIAN	TO	422+72.34	MEDIAN			4			262.5	
	422+72.34	MEDIAN	TO	423+11.74	MEDIAN					1		
	419+51.10	MEDIAN	TO	423+14.50	MEDIAN							363.4
	422+86.98	MEDIAN	TO	425+36.22	MEDIAN				8			
FAI-72 WB	1372+03.07	OUTSIDE	TO	1372+42.47	OUTSIDE					1		
	1372+42.47	OUTSIDE	TO	1374+67.47	OUTSIDE			4			225.0	
	1374+67.47	OUTSIDE	TO	1375+17.47	OUTSIDE	1	1					
	1371+96.90	OUTSIDE	TO	1375+20.00	OUTSIDE							323.1
	1369+21.11	OUTSIDE	TO	1371+82.11	OUTSIDE				8			
	1371+59.86	MEDIAN	TO	1371+99.26	MEDIAN					1		
	1371+99.26	MEDIAN	TO	1374+61.76	MEDIAN			4			262.5	
	1374+61.76	MEDIAN	TO	1375+11.76	MEDIAN	1	1					
	1371+54.90	MEDIAN	TO	1374+81.20	MEDIAN							326.3
	1369+21.11	MEDIAN	TO	1371+82.11	MEDIAN				8			
	427+16.18	OUTSIDE	TO	427+16.18	OUTSIDE					1		
	427+16.18	OUTSIDE	TO	429+41.18	OUTSIDE			4			225.0	
	429+41.18	OUTSIDE	TO	429+91.18	OUTSIDE	1	1					
	426+73.60	OUTSIDE	TO	429+96.70	OUTSIDE							323.1
	424+03.00	OUTSIDE	TO	426+52.23	OUTSIDE				8			
	426+27.47	MEDIAN	TO	426+66.87	MEDIAN					1		
	426+66.87	MEDIAN	TO	429+29.37	MEDIAN			4			262.5	
	429+29.37	MEDIAN	TO	429+79.37	MEDIAN	1	1					
	426+24.30	MEDIAN	TO	429+87.30	MEDIAN							363.0
	424+03.00	MEDIAN	TO	426+52.23	MEDIAN				8			
TOTALS =						8	8	32	64	8	1,963	2,721

DRAINAGE SCHEDULE																	
LOCATION	STATION	TO	STATION	21400100 GRADING AND SHAPING DITCHES	28100101 STONE RIPRAP, CLASS A1	28100207 STONE RIPRAP, CLASS A4	28200200 FILTER FABRIC	50105220 PIPE CULVERT REMOVAL	54213447 END SECTIONS 12"	60100945 PIPE DRAINS 12"	60240215 INLETS, TYPE B, TYPE 1 FRAME, CLOSED LID	60500060 REMOVING INLETS	61000335 TYPE G INLET BOX, STANDARD 610001	61000225 TYPE F INLET BOX, STANDARD 610001	Z0041500 PLUG EXISTING CULVERTS		
				FOOT	SQ YD	TON	SQ YD	FOOT	EACH	FOOT	EACH	EACH	EACH	EACH	EACH		
<b>EB I-72</b>																	
	1371+23.20	RT		100		75	113		1	14	1		1	1			
	1370+70.00	RT			2		2										
	1371+15.00	LT			2		2										
	1372+06.15	CL				20	30		1	91							
	422+42.00	RT			2		2										
	422+34.00	RT		100		65	98		1	14			1	1			
	422+34.00	CL		120		27	41		1	23							
	422+94.00	LT			2		2										
	425+83.70	RT		100		83	124		1	14	1		1	1			
	425+25.00	RT			2		2										
	425+76.00	LT			2		2										
	426+74.30	LT							1	97							
<b>WB I-72</b>																	
	1371+76.00	LT			2		2										
	1372+28.40	CL		150					1	23							
	1372+28.40	LT		100		291	438		1	14			1	1			
	422+66.61	RT							1	91							
	423+63.00	RT			2		2										
	424+15.00	LT			2		2										
	423+55.50	RT		100		95	142		1	14	1		1	1			
	426+45.00	RT			2		2										
	426+74.34	CL				26	39										
	427+05.20	CL		100		58	87		1	14			1	1			
	427+05.20	LT		100					1	23							
	426+97.00	LT			2		2										
<b>WABASH AVE. STRUCTURES, EAST ABUTMENT</b>																	
	1370+54.64	RT										1			2		
	1370+54.64	RT	TO	1370+95.91	RT			55									
	1370+95.91	RT										1					
	1370+95.91	RT	TO	1371+62.56	LT			91									
	1371+62.56	LT										1					
	1371+62.56	LT	TO	1372+02.10	LT			53									
	1372+02.10	LT										1					
<b>N&amp;S RR STRUCTURES</b>																	
	422+30.00	RT	TO	425+95.00	LT	460											
	423+00.00	RT	TO	426+55.00	LT	460											
				<b>TOTALS =</b>		<b>1,890</b>	<b>22</b>	<b>740</b>	<b>1,134</b>	<b>199</b>	<b>12</b>	<b>432</b>	<b>3</b>	<b>4</b>	<b>6</b>	<b>6</b>	<b>2</b>

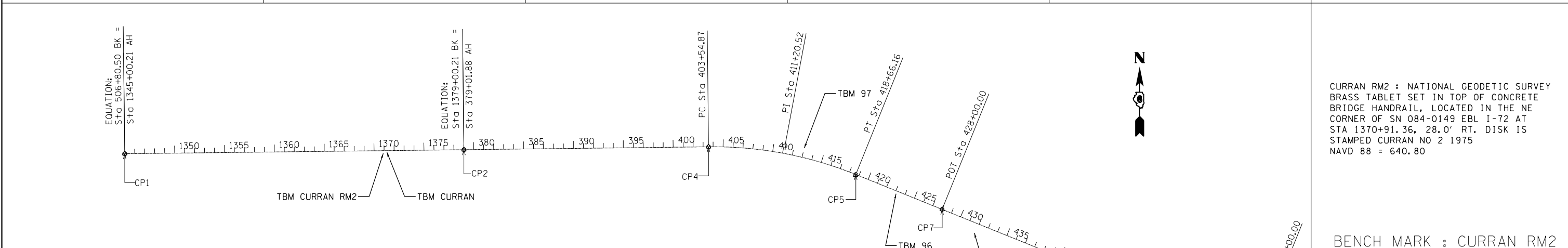


TBM B : SET CHSLD "□" ON TOP OF THE NORTH CONC. SIGN STRUCTURE FOUNDATION (SIGN MARKED IL 4 VET PKWY, CHATHAM, 1 MILE) LOCATED SOUTH OF EBL I-72/US36 AT STA 431+87.5, 98.0' RT NAVD 88 = 627.48

BM 96: CHSLD "□" IN TOP NW CORNER OF THE NW WINGWALL (MEDIAN EDGE) OF THE EBL BRIDGE OF I-72/US 36 OVER NS RR TRACK STA 423+13, 28.0' RT NAVD 88 = 640.96

BM 97 : CHSLD "□" ON THE TOP OF THE SOUTH 1/2 OF THE SOUTH CONC. SIGN STRUCTURE FOUNDATION (LOAMI, WABASH AVE 1/2 MI) NORTH OF WBL OF US 36 STA 413+00.5, 96.5' LT NAVD 88 = 618.989

CURRAN: NATIONAL GEODETIC SURVEY MARKER, BRASS TABLET SET IN CONCRETE STAMPED "CURRAN 1975" STA 1371+26.99, 13.9' RT NAVD 88 = 637.219



ALIGNMENT COORDINATES - CL FAI 72

CL FAI 72	STATION	N	E
POT	506+80.50 BK 1345+00.21 AH	1,123,764.114	2,411,009.982
POT	1379+00.21 BK 379+01.88 AH	1,123,804.382	2,414,409.744
PC	403+54.87	1,123,833.434	2,416,862.562
PI	411+20.52	1,123,842.502	2,417,628.159
PT	418+66.16	1,123,555.916	2,418,338.151
POT	428+00.00	1,123,206.376	2,419,204.107
POT	462+00.00	1,121,933.743	2,422,356.948
POT	479+00.00	1,121,297.427	2,423,933.369
POT	484+13.42	1,121,105.250	2,424,409.470

CONTROL POINT COORDINATES

CONTROL POINTS	STATION	N	E
1	506+80.50 BK 1345+00.21 AH	1,123,764.114	2,411,009.982
2	1379+00.21 BK 379+01.88 AH	1,123,804.382	2,414,409.744
4	403+54.87	1,123,833.434	2,416,862.562
5	418+66.16	1,123,555.916	2,418,338.151
7	428+00.00	1,123,206.376	2,419,204.107
9	462+00.00	1,121,933.743	2,422,356.948
8	479+00.00	1,121,297.427	2,423,933.369
10	484+13.42	1,121,105.250	2,424,409.470

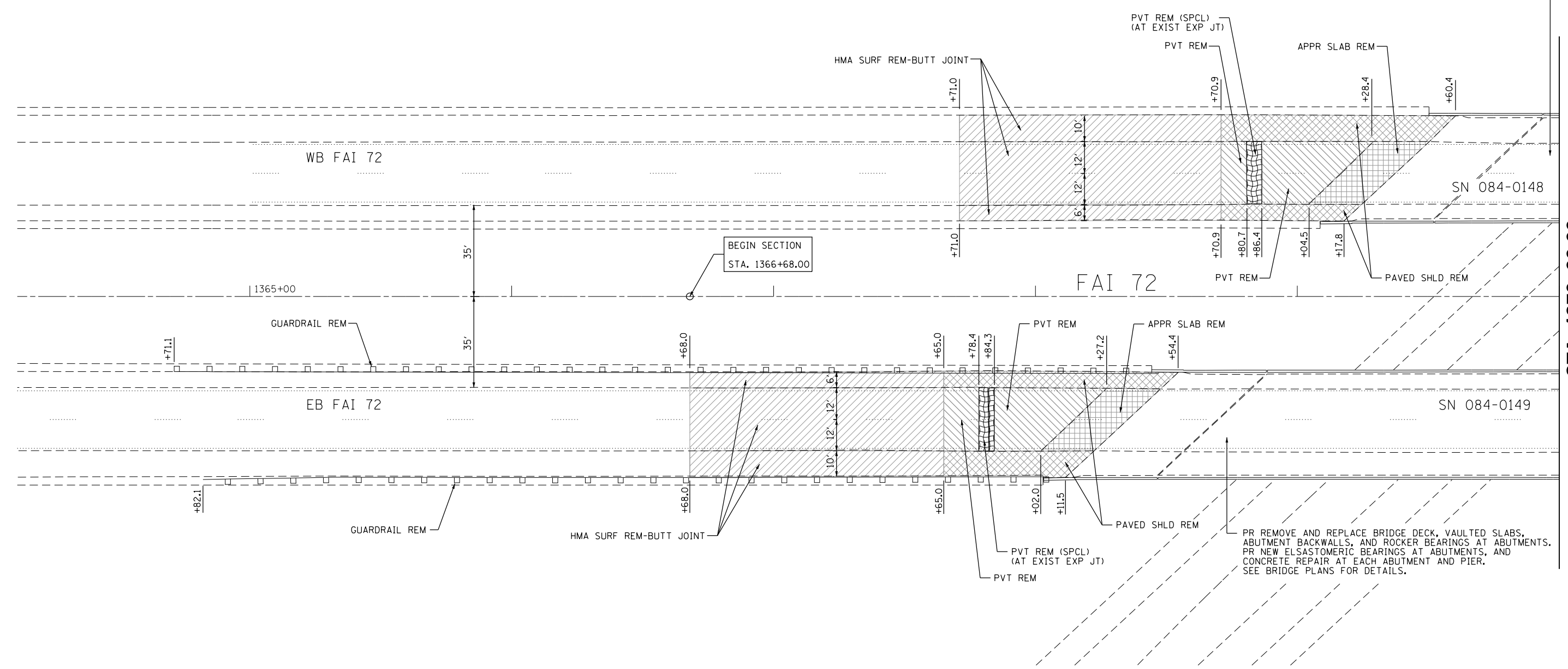
EXIST. CURVE 3116  
 PI STA. = 411+20.52  
 $\Delta = 22^\circ 39' 36''$  (RT)  
 $D = 1^\circ 29' 58''$   
 $R = 3,821.31'$   
 $T = 765.65'$   
 $L = 1,511.29'$   
 $E = 75.95'$   
 $e = \text{-----}$   
 $T.R. = \text{-----}$   
 $S.E. RUN = \text{-----}$   
 $P.C. STA. = 403+54.87$   
 $P.T. STA. = 418+66.16$

CURRAN RM2 : NATIONAL GEODETIC SURVEY BRASS TABLET SET IN TOP OF CONCRETE BRIDGE HANDRAIL, LOCATED IN THE NE CORNER OF SN 084-0149 EBL I-72 AT STA 1370+91.36, 28.0' RT. DISK IS STAMPED CURRAN NO 2 1975 NAVD 88 = 640.80

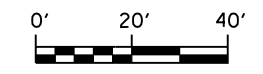
BENCH MARK : CURRAN RM2



PR REMOVE AND REPLACE BRIDGE DECK, VAULTED SLABS, ABUTMENT BACKWALLS, AND ROCKER BEARINGS AT ABUTMENTS. PR NEW ELASTOMERIC BEARINGS AT ABUTMENTS, AND CONCRETE REPAIR AT EACH ABUTMENT AND PIER. SEE BRIDGE PLANS FOR DETAILS.



STA. 1370+00.00

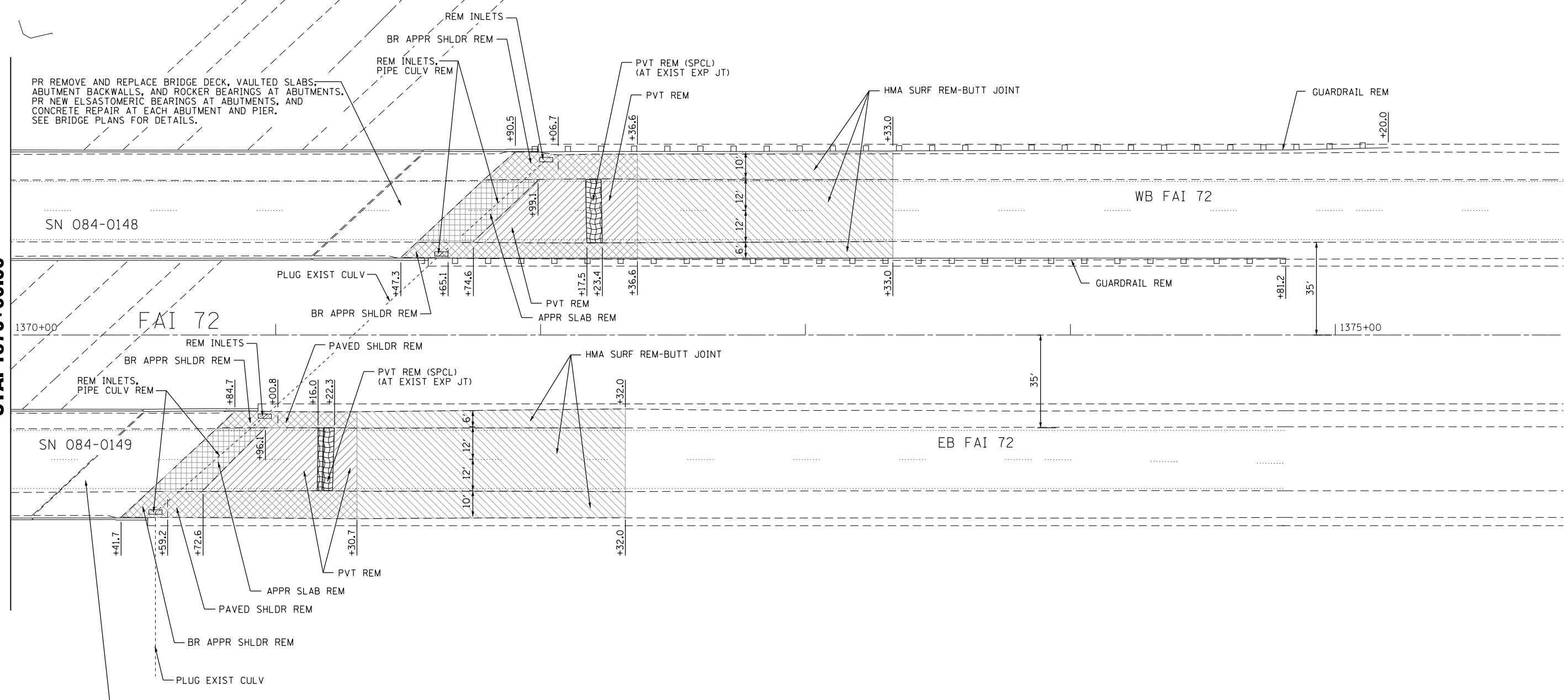


design firm no. 184001036   engineers • planners • land surveyors	USER NAME = gjameson FILE NAME = D672H51-sht-rem_1.dgn PLOT SCALE = 40,0000' / in. PLOT DATE = 1/31/2020	DESIGNED - CHECKED - DRAWN - CHECKED -	REVISED REVISED REVISED REVISED	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>REMOVAL PLAN</b> <b>SN 084-0148 WB &amp; SN 084-0149 EB</b> <b>FAI 72 OVER WABASH AVE.</b>	F.A.I. RTE. = 72 SECTION = (84-9-3)I,P COUNTY = SANGAMON TOTAL SHEETS = 138 SHEET NO. = 20 CONTRACT NO. = 72H51	SCALE: 1" = 20' SHEET NO. 1 OF 4 SHEETS STA. 1364+30.00 TO STA. 1370+00.00 ILLINOIS FED. AID PROJECT
	PR REMOVE AND REPLACE BRIDGE DECK, VAULTED SLABS, ABUTMENT BACKWALLS, AND ROCKER BEARINGS AT ABUTMENTS. PR NEW ELASTOMERIC BEARINGS AT ABUTMENTS, AND CONCRETE REPAIR AT EACH ABUTMENT AND PIER. SEE BRIDGE PLANS FOR DETAILS.						



PR REMOVE AND REPLACE BRIDGE DECK, VAULTED SLABS, ABUTMENT BACKWALLS, AND ROCKER BEARINGS AT ABUTMENTS. PR NEW ELSASTOMERIC BEARINGS AT ABUTMENTS, AND CONCRETE REPAIR AT EACH ABUTMENT AND PIER. SEE BRIDGE PLANS FOR DETAILS.

STA. 1370+00.00



PR REMOVE AND REPLACE BRIDGE DECK, VAULTED SLABS, ABUTMENT BACKWALLS, AND ROCKER BEARINGS AT ABUTMENTS. PR NEW ELSASTOMERIC BEARINGS AT ABUTMENTS, AND CONCRETE REPAIR AT EACH ABUTMENT AND PIER. SEE BRIDGE PLANS FOR DETAILS.



USER NAME = gjameson	DESIGNED -	REVISED
FILE NAME = D672H51-sht-rem_2.dgn	CHECKED -	REVISED
PLOT SCALE = 40.0000' / in.	DRAWN -	REVISED
PLOT DATE = 1/31/2020	CHECKED -	REVISED

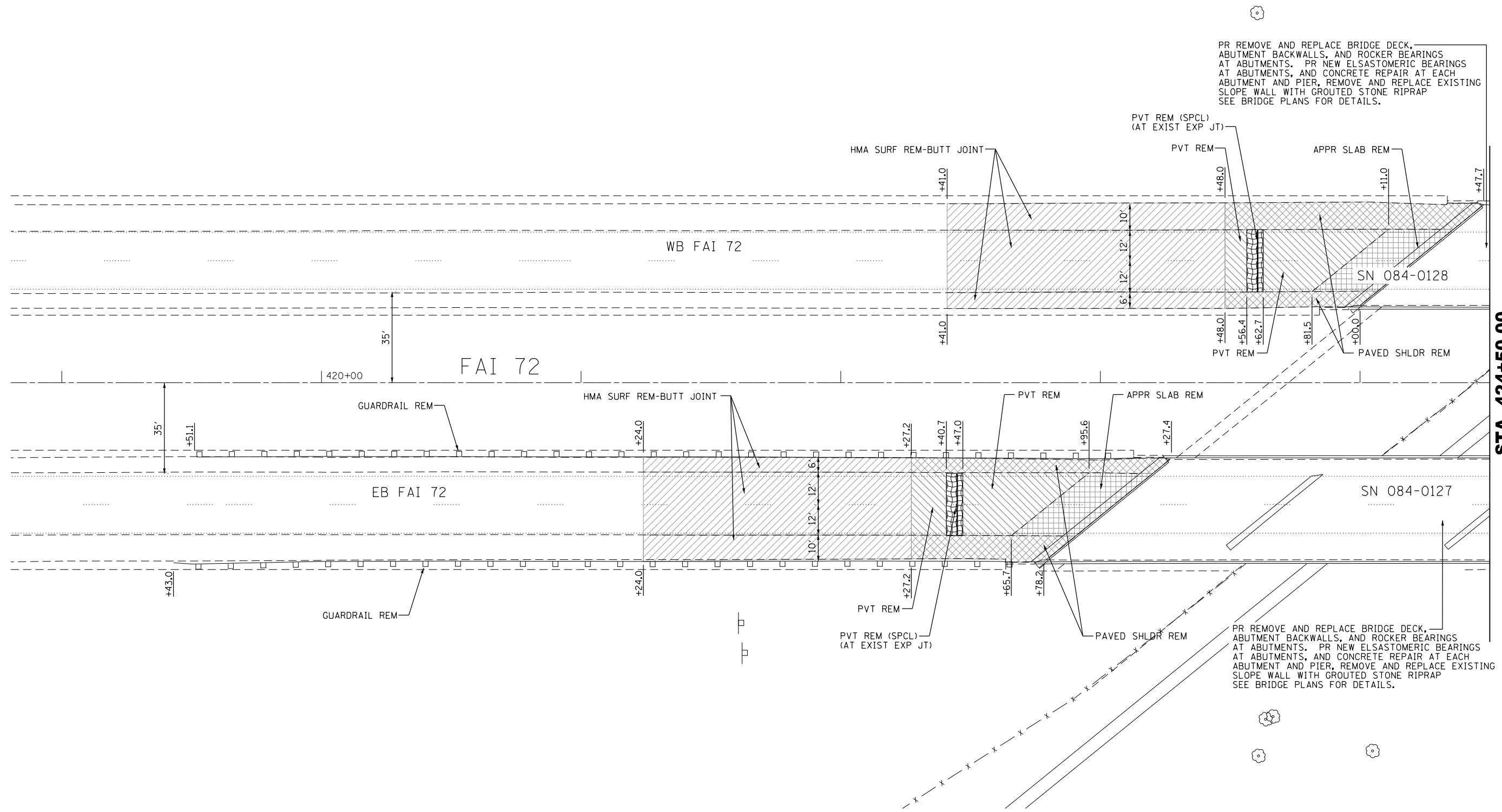
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**REMOVAL PLAN  
SN 084-0148 WB & SN 084-0149 EB  
FAI 72 OVER WABASH AVE.**

SCALE: 1" = 20'    SHEET NO. 2 OF 4 SHEETS    STA. 1370+00.00 TO STA. 1375+70.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3)I,P	SANGAMON	138	21
CONTRACT NO. 72H51				

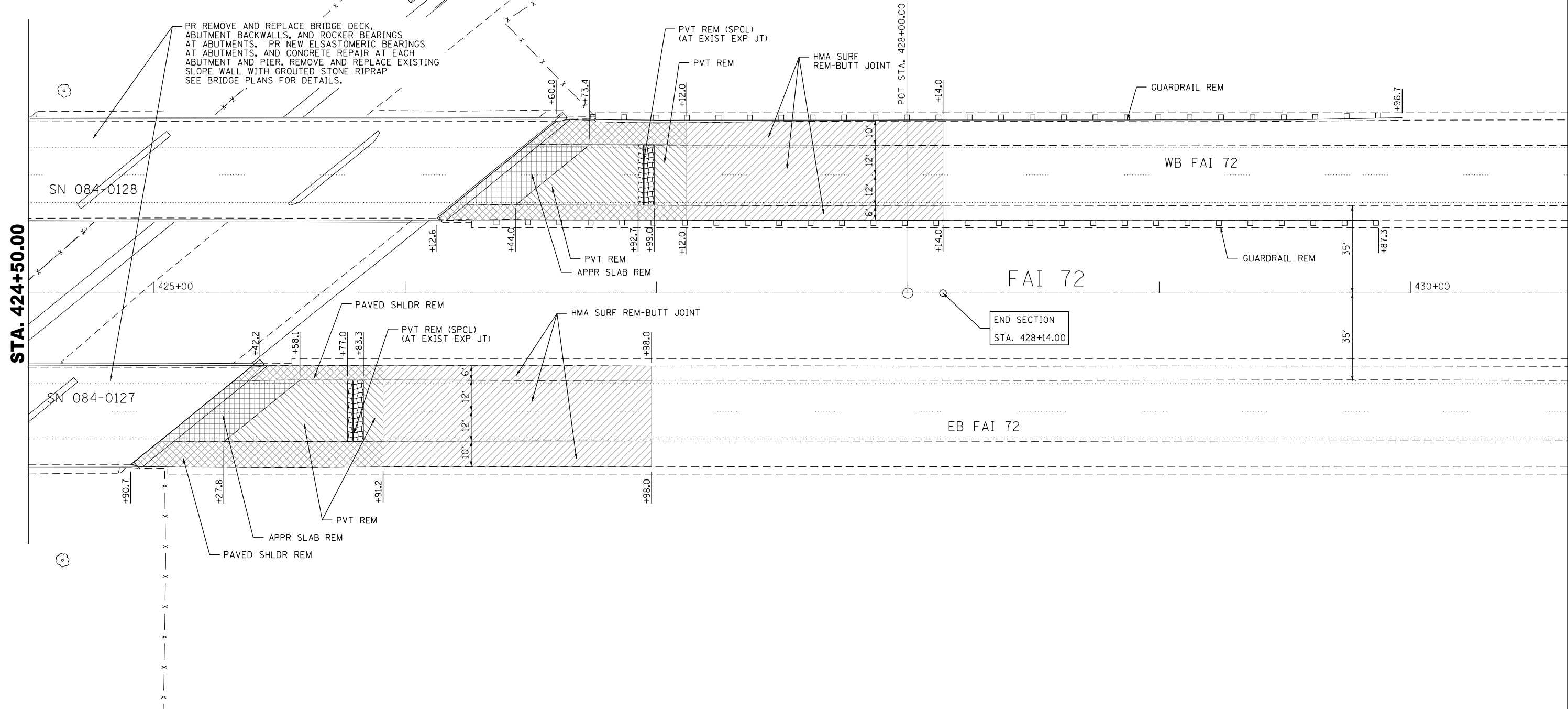
ILLINOIS FED. AID PROJECT



STA. 424+50.00



design firm no. 184001036   engineers + planners + land surveyors	USER NAME = gjameson FILE NAME = D672H51-sht-rem_3.dgn PLOT SCALE = 40,0000' / in. PLOT DATE = 1/31/2020	DESIGNED - CHECKED - DRAWN - CHECKED -	REVISED REVISED REVISED REVISED	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>REMOVAL PLAN</b> <b>SN 084-0127 EB &amp; SN 084-0128 WB</b> <b>FAI 72 OVER N&amp;S RR</b>			F.A.I. RTE. 72	SECTION (84-9-3)I,P	COUNTY SANGAMON	TOTAL SHEETS 138	SHEET NO. 22
	SCALE: 1" = 20'    SHEET NO. 3 OF 4 SHEETS    STA. 418+90.00 TO STA. 424+50.00					CONTRACT NO. 72H51 ILLINOIS FED. AID PROJECT						



STA. 424+50.00

END SECTION  
STA. 428+14.00



USER NAME = gjameson	DESIGNED -	REVISED -
FILE NAME = D672H51-sht-rem_4.dgn	CHECKED -	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 1/31/2020	CHECKED -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

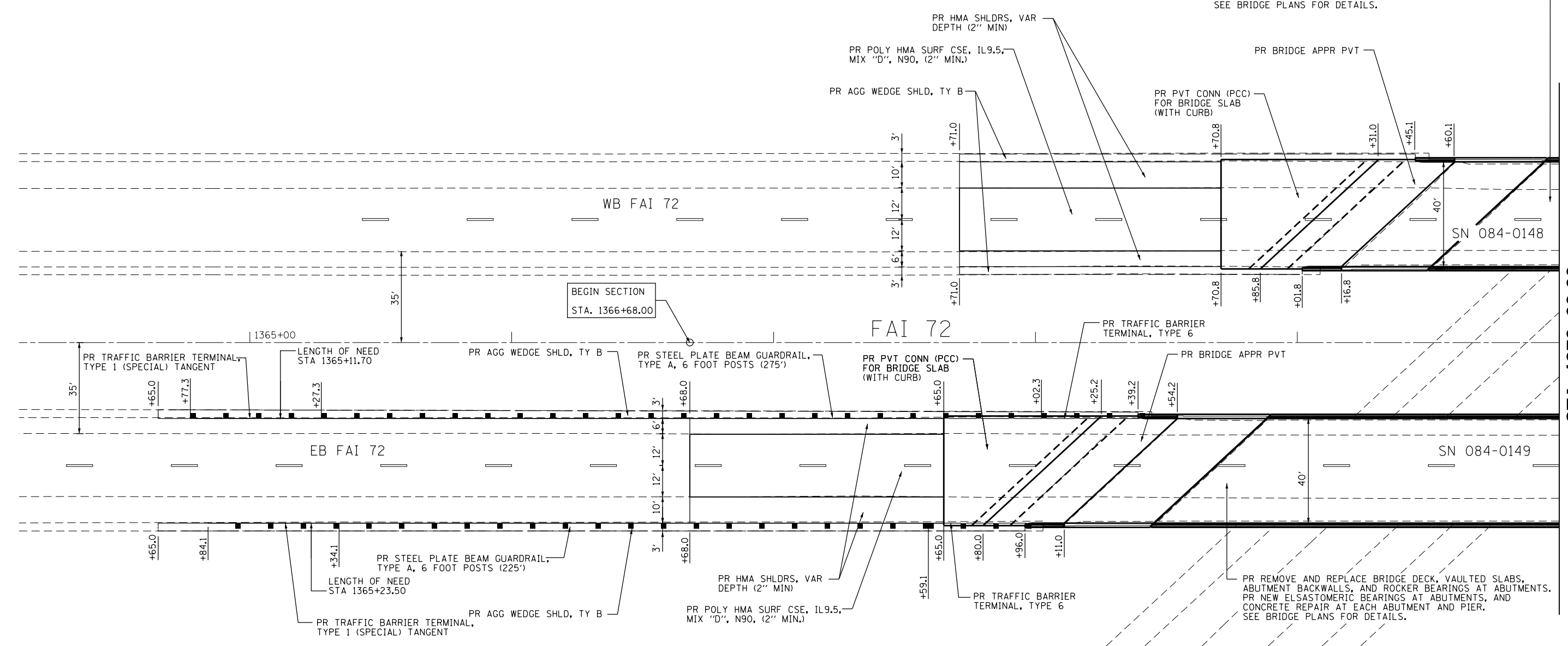
**REMOVAL PLAN**  
**SN 084-0127 EB & SN 084-0128 WB**  
**FAI 72 OVER N&S RR**

SCALE: 1" = 20' SHEET NO. 4 OF 4 SHEETS STA. 424+50.00 TO STA. 430+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3)I,P	SANGAMON	138	23
				CONTRACT NO. 72H51
ILLINOIS FED. AID PROJECT				

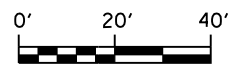


PR REMOVE AND REPLACE BRIDGE DECK, VAULTED SLABS, ABUTMENT BACKWALLS, AND ROCKER BEARINGS AT ABUTMENTS. PR NEW ELASTOMERIC BEARINGS AT ABUTMENTS, AND CONCRETE REPAIR AT EACH ABUTMENT AND PIER. SEE BRIDGE PLANS FOR DETAILS.



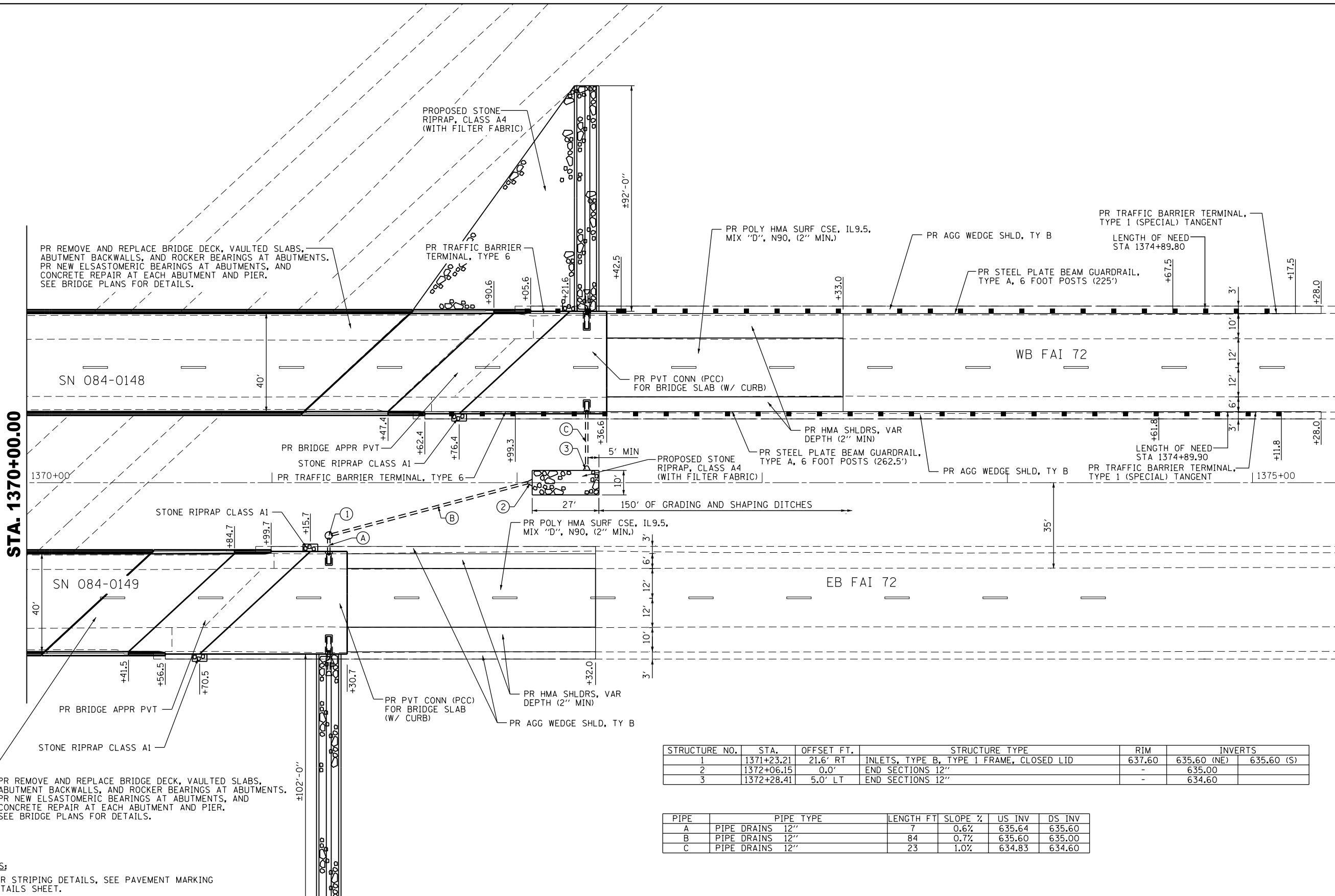
STA. 1370+00.00

**NOTES:**  
1. FOR STRIPING DETAILS, SEE PAVEMENT MARKING DETAILS SHEET.



design firm no. 184001036   engineers • planners • land surveyors	USER NAME = gjameson FILE NAME = D672H51-sht-plan.1.dgn PLOT SCALE = 40,0000' / in. PLOT DATE = 1/31/2020	DESIGNED - CHECKED - DRAWN - CHECKED -	REVISED REVISED REVISED REVISED	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED PLAN</b> <b>SN 084-0148 WB &amp; SN 084-0149 EB</b> <b>FAI 72 OVER WABASH AVE.</b>	F.A.I. RTE. = 72 SECTION = (84-9-3)I,P COUNTY = SANGAMON TOTAL SHEETS = 138 SHEET NO. = 24 CONTRACT NO. = 72H51	SCALE: 1" = 20' SHEET NO. 1 OF 4 SHEETS STA. 1364+30.00 TO STA. 1370+00.00 ILLINOIS FED. AID PROJECT





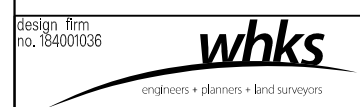
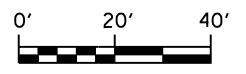
PR REMOVE AND REPLACE BRIDGE DECK, VAULTED SLABS, ABUTMENT BACKWALLS, AND ROCKER BEARINGS AT ABUTMENTS. PR NEW ELASTOMERIC BEARINGS AT ABUTMENTS, AND CONCRETE REPAIR AT EACH ABUTMENT AND PIER. SEE BRIDGE PLANS FOR DETAILS.

PR REMOVE AND REPLACE BRIDGE DECK, VAULTED SLABS, ABUTMENT BACKWALLS, AND ROCKER BEARINGS AT ABUTMENTS. PR NEW ELASTOMERIC BEARINGS AT ABUTMENTS, AND CONCRETE REPAIR AT EACH ABUTMENT AND PIER. SEE BRIDGE PLANS FOR DETAILS.

- NOTES:**
1. FOR STRIPING DETAILS, SEE PAVEMENT MARKING DETAILS SHEET.
  2. RIPRAP LAYOUT TO BE DETERMINED IN THE FIELD.
  3. SEE INLET DRAIN DETAILS FOR MORE INFORMATION.

STRUCTURE NO.	STA.	OFFSET FT.	STRUCTURE TYPE	RIM	INVERTS	
1	1371+23.21	21.6' RT	INLETS, TYPE B, TYPE 1 FRAME, CLOSED LID	637.60	635.60 (NE)	635.60 (S)
2	1372+06.15	0.0'	END SECTIONS 12"	-	635.00	
3	1372+28.41	5.0' LT	END SECTIONS 12"	-	634.60	

PIPE	PIPE TYPE	LENGTH FT	SLOPE %	US INV	DS INV
A	PIPE DRAINS 12"	7	0.6%	635.64	635.60
B	PIPE DRAINS 12"	84	0.7%	635.60	635.00
C	PIPE DRAINS 12"	23	1.0%	634.83	634.60



USER NAME = gjameson	DESIGNED -	REVISED -
FILE NAME = D672H51-sht-plan_2.dgn	CHECKED -	REVISED -
PLOT SCALE = 40,0000' / in.	DRAWN -	REVISED -
PLOT DATE = 1/31/2020	CHECKED -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED PLAN  
SN 084-0148 WB & SN 084-0149 EB  
FAI 72 OVER WABASH AVE.**

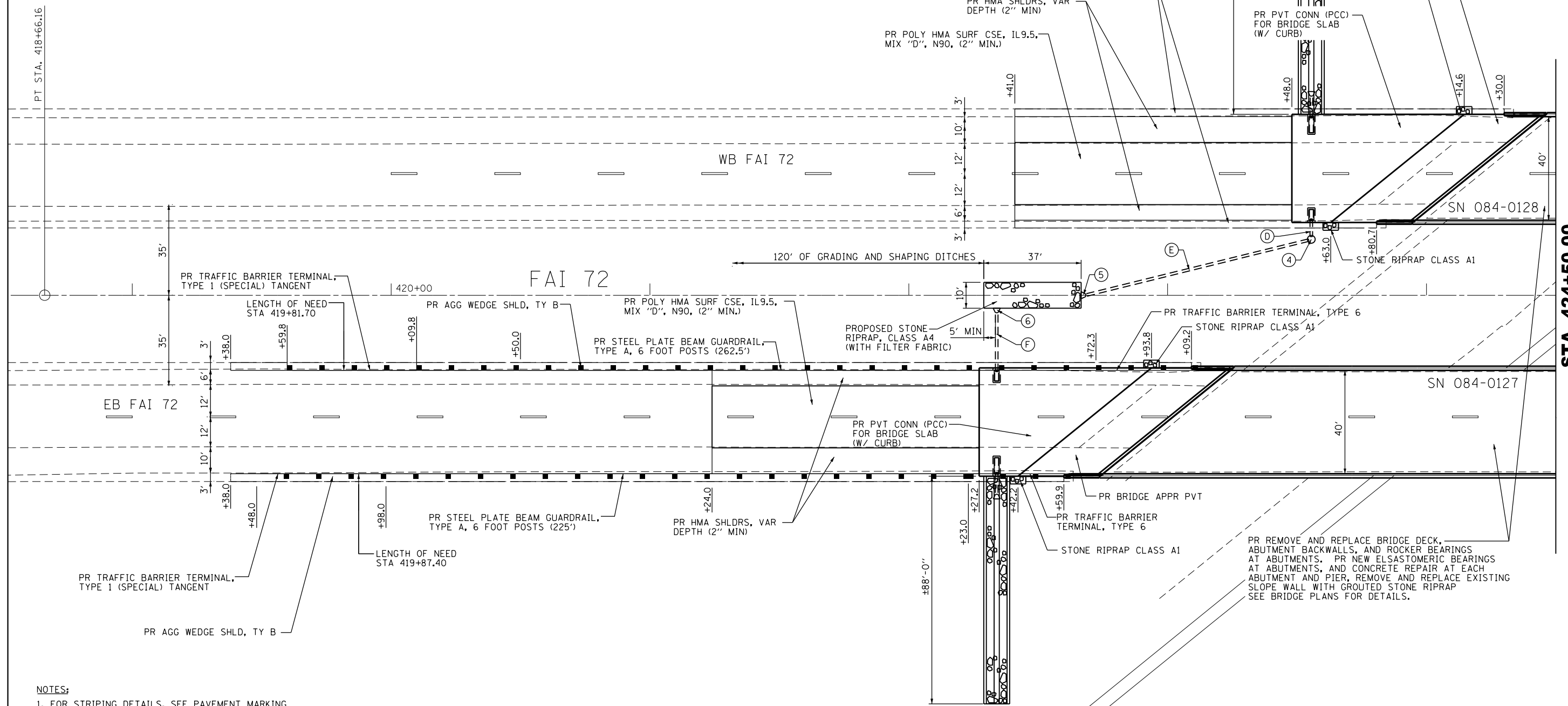
SCALE: 1" = 20'    SHEET NO. 2 OF 4 SHEETS    STA. 1370+00.00 TO STA. 1375+70.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3)I,P	SANGAMON	138	25
CONTRACT NO. 72H51				
ILLINOIS FED. AID PROJECT				



STRUCTURE NO.	STA.	OFFSET FT.	STRUCTURE TYPE	RIM	INVERTS	
4	423+55.00	21.6' LT	INLETS, TYPE B, TYPE 1 FRAME, CLOSED LID	638.25	636.25	636.25
5	422+66.61	0.0'	END SECTIONS 12"	-	635.80	
6	422+33.97	5.0' RT	END SECTIONS 12"	-	635.60	

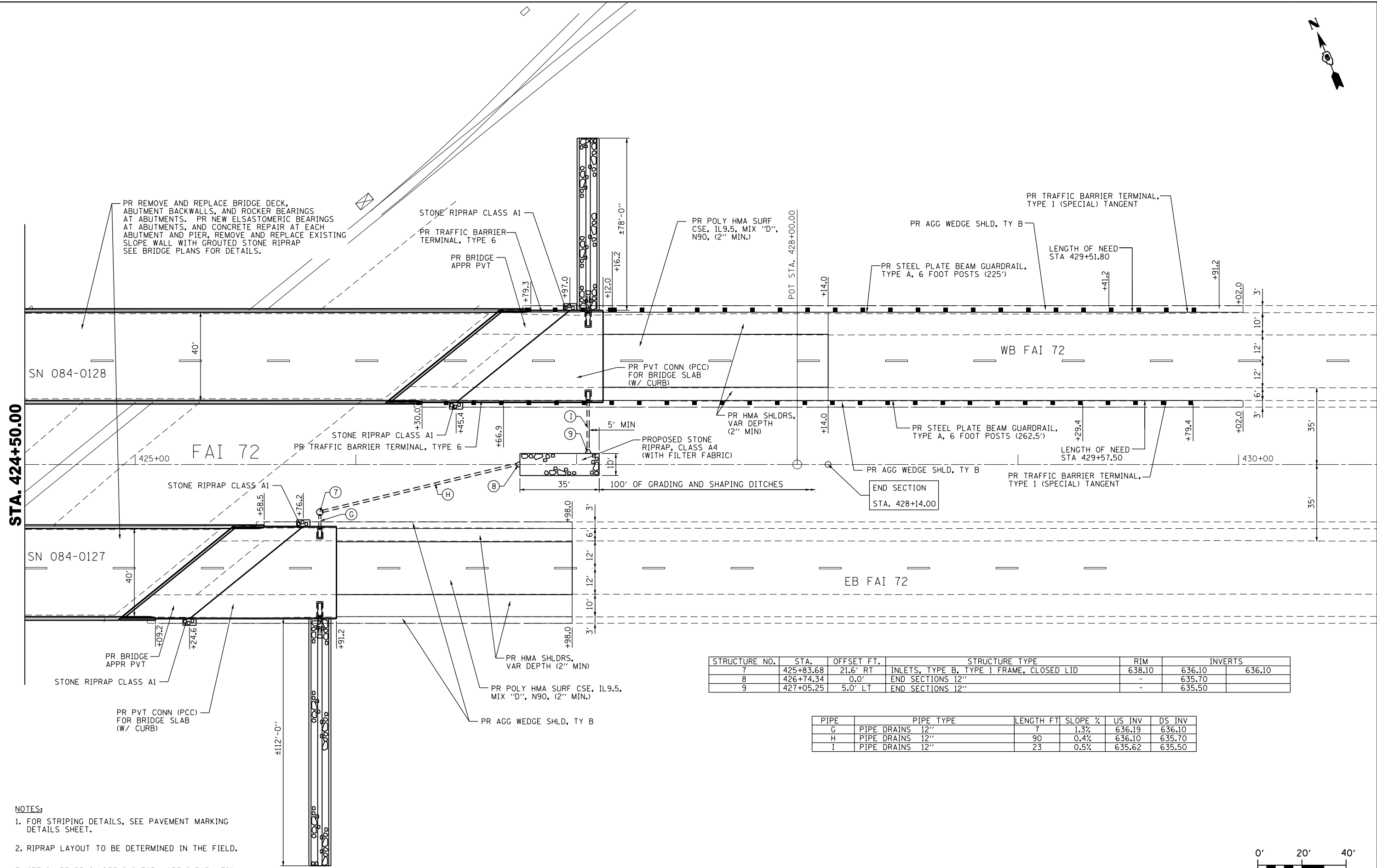
PIPE	PIPE TYPE	LENGTH FT	SLOPE %	US INV	DS INV
D	PIPE DRAINS 12"	7	0.7%	636.30	636.25
E	PIPE DRAINS 12"	84	0.5%	636.25	635.80
F	PIPE DRAINS 12"	23	1.0%	635.84	635.60



- NOTES:**
- FOR STRIPING DETAILS, SEE PAVEMENT MARKING DETAILS SHEET.
  - RIPRAP LAYOUT TO BE DETERMINED IN THE FIELD.
  - SEE INLET DRAIN DETAILS FOR MORE INFORMATION.



design firm no. 184001036  engineers + planners + land surveyors	USER NAME = gjameson FILE NAME = D672H51-shr-plan_3.dgn PLOT SCALE = 40,0000' / in. PLOT DATE = 1/31/2020	DESIGNED - CHECKED - DRAWN - CHECKED -	REVISED REVISED REVISED REVISED	<b>STATE OF ILLINOIS          DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED PLAN          SN 084-0127 EB &amp; SN 084-0128 WB          FAI 72 OVER N&amp;S RR</b>	F.A.I. RTE. = 72 SECTION = (84-9-3)I,P COUNTY = SANGAMON TOTAL SHEETS = 138 SHEET NO. = 26 CONTRACT NO. = 72H51	SCALE: 1" = 20' SHEET NO. 3 OF 4 SHEETS STA. 418+90.00 TO STA. 424+50.00 ILLINOIS FED. AID PROJECT
--	--	---	--	--	---	--	---



STA. 424+50.00

STA. 424+50.00


- NOTES:**
- FOR STRIPING DETAILS, SEE PAVEMENT MARKING DETAILS SHEET.
  - RIPRAP LAYOUT TO BE DETERMINED IN THE FIELD.
  - SEE INLET DRAIN DETAILS FOR MORE INFORMATION.

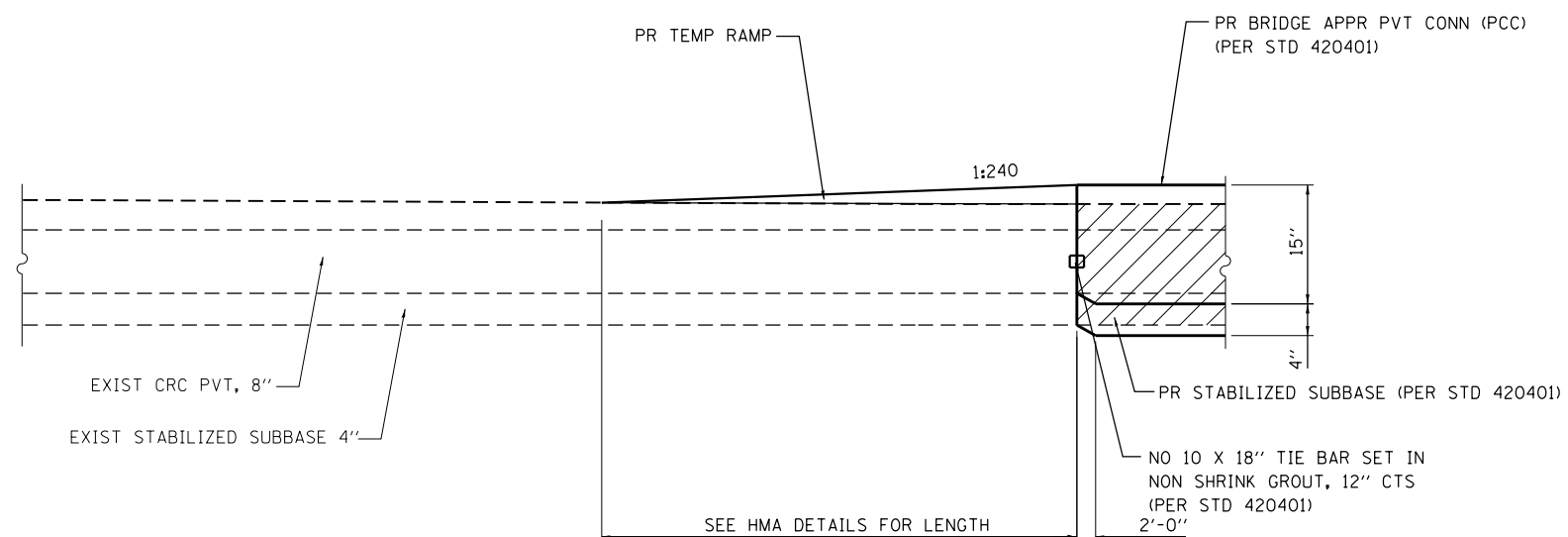
STRUCTURE NO.	STA.	OFFSET FT.	STRUCTURE TYPE	RIM	INVERTS	
7	425+83.68	21.6' RT	INLETS, TYPE B, TYPE I FRAME, CLOSED LID	638.10	636.10	636.10
8	426+74.34	0.0'	END SECTIONS 12"	-	635.70	
9	427+05.25	5.0' LT	END SECTIONS 12"	-	635.50	

PIPE	PIPE TYPE	LENGTH FT	SLOPE %	US INV	DS INV
G	PIPE DRAINS 12"	7	1.3%	636.19	636.10
H	PIPE DRAINS 12"	90	0.4%	636.10	635.70
I	PIPE DRAINS 12"	23	0.5%	635.62	635.50

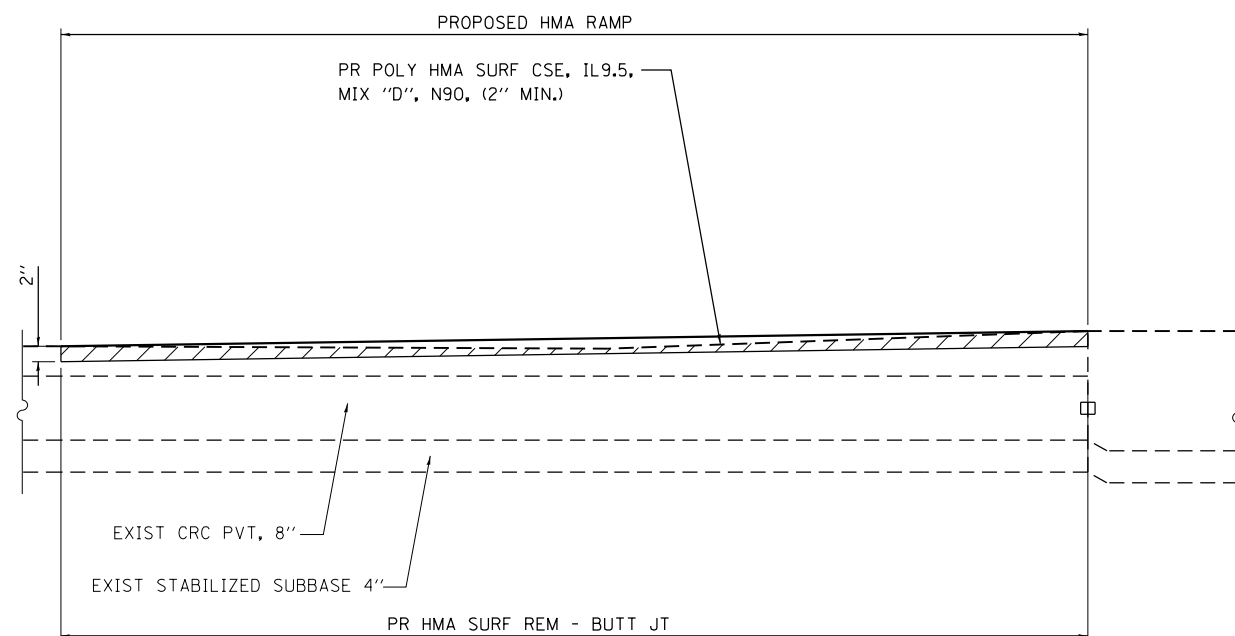


**LEGEND**

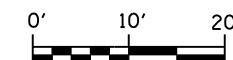
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**STAGE I & II**

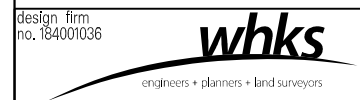
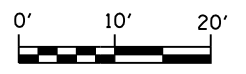
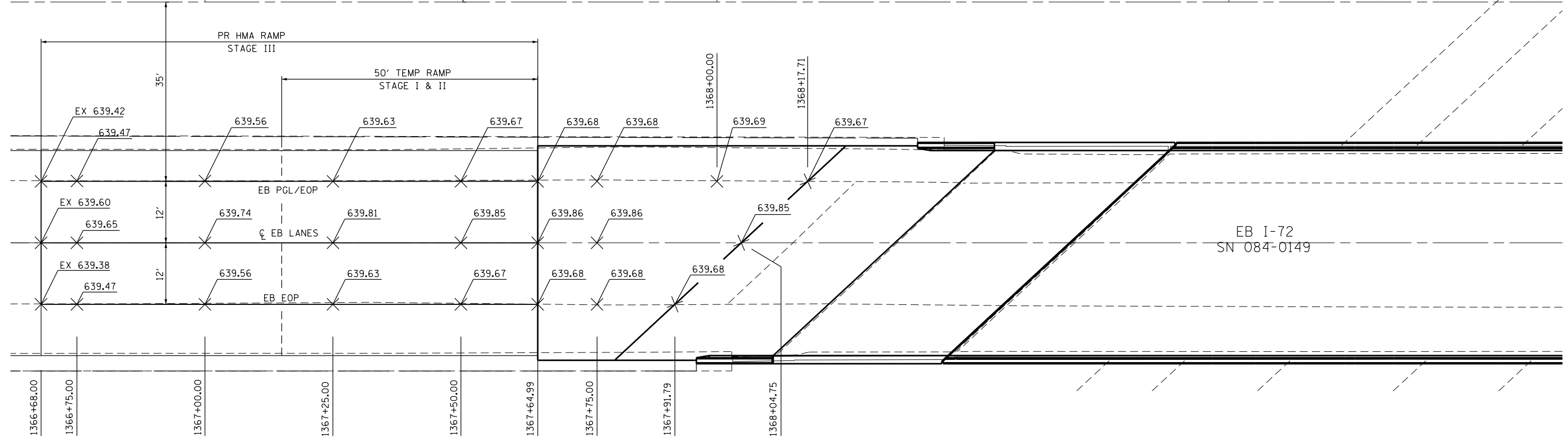
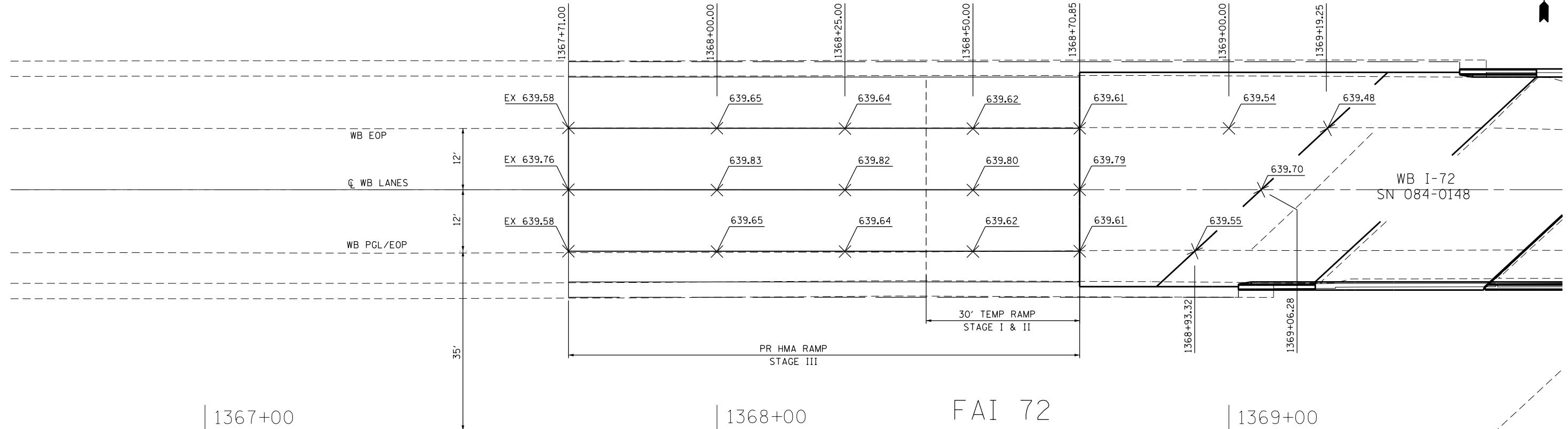


**STAGE III**



USER NAME = gjameson	DESIGNED -	REVISED
FILE NAME = D672H51-Shr-Bt Jt Detail	CHECKED -	REVISED
PLOT SCALE = 20.0004' / in.	DRAWN -	REVISED
PLOT DATE = 1/31/2020	CHECKED -	REVISED

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3)I,P	SANGAMON	138	28
				CONTRACT NO. 72H51
ILLINOIS FED. AID PROJECT				



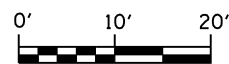
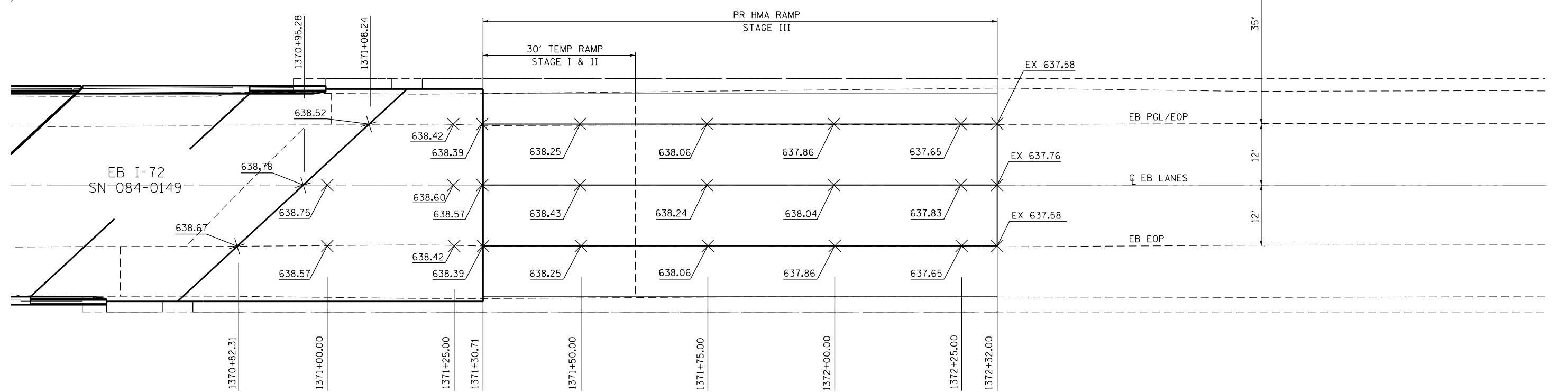
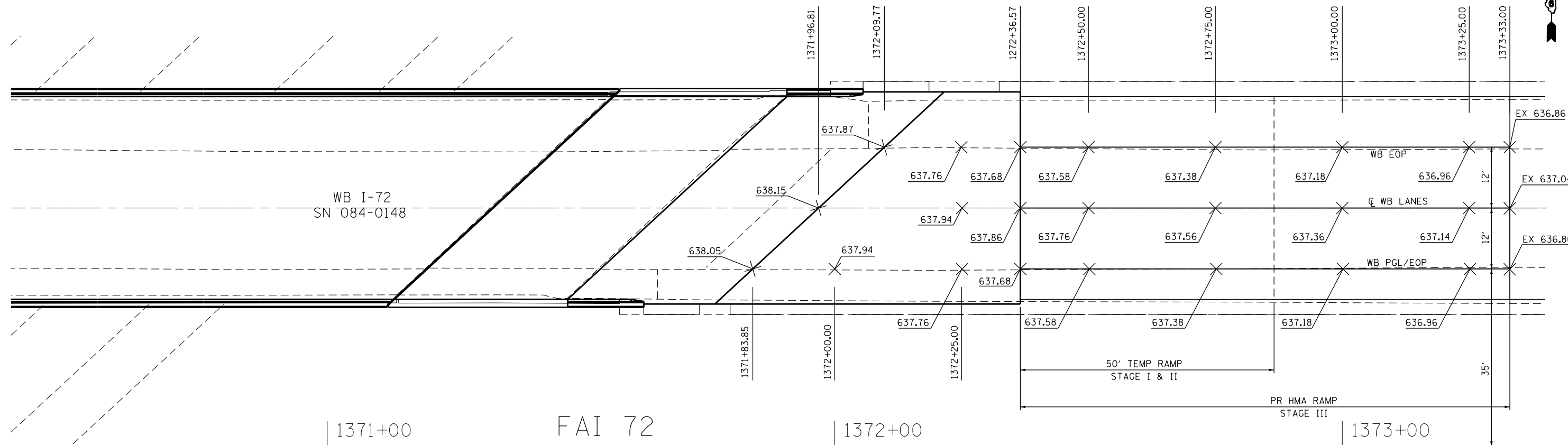
USER NAME = gjameson	DESIGNED -	REVISOR -
FILE NAME = D672H51-Sht-Bt Jt Detail	CHECKED -	REVISION -
PLOT SCALE = 20.0004' / in.	DRAWN -	REVISION -
PLOT DATE = 1/31/2020	CHECKED -	REVISION -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**HMA RAMP DETAILS**

SCALE: 1" = 10'    SHEET NO. 2 OF 5 SHEETS    STA. 1370+82.25 TO STA. 1373+33.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3)I,P	SANGAMON	138	29
CONTRACT NO. 72H51				
ILLINOIS FED. AID PROJECT				



Design firm  
no. 184001036  
**whks**  
engineers • planners • land surveyors

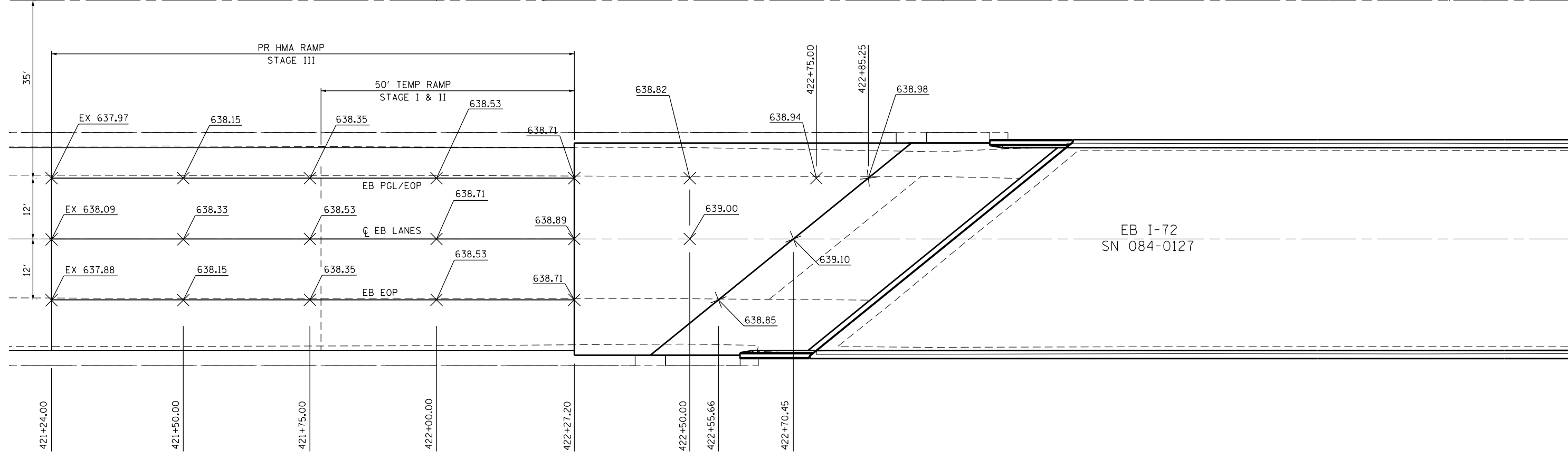
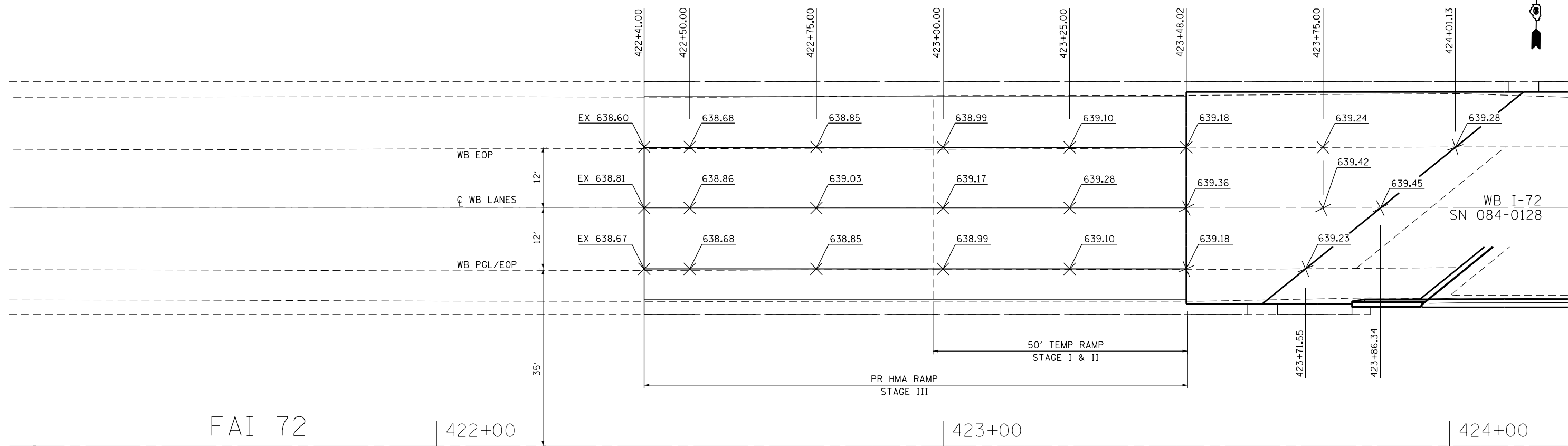
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PLOT SCALE = 20.0004' / in.	DRAWN -	REVISED
PLOT DATE = 1/31/2020	CHECKED -	REVISED

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**HMA RAMP DETAILS**

SCALE: 1" = 10' SHEET NO. 3 OF 5 SHEETS STA. 1370+82.55 TO STA. 1372+33.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3)I,P	SANGAMON	138	30
CONTRACT NO. 72H51				
ILLINOIS FED. AID PROJECT				



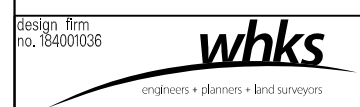
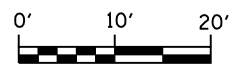
FAI 72

422+00

423+00

424+00

EB I-72  
SN 084-0127



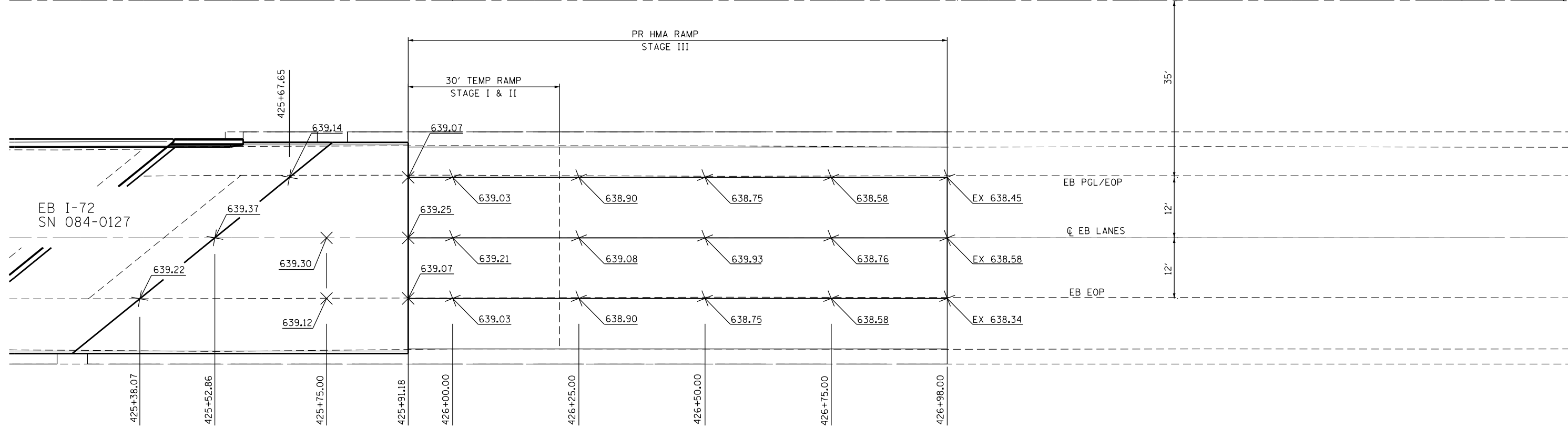
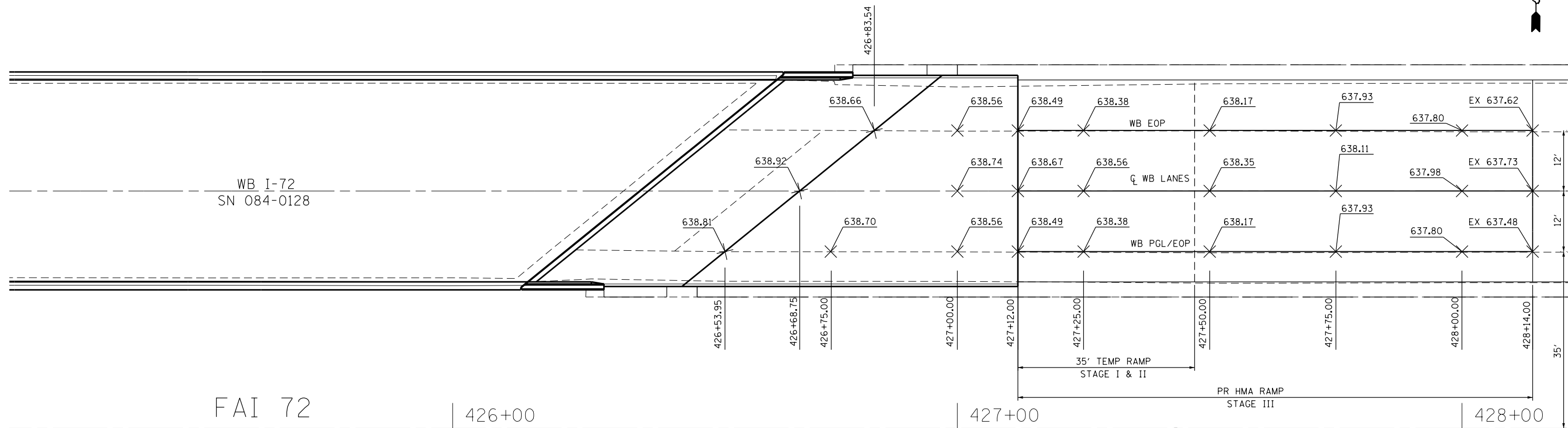
USER NAME = gjameson	DESIGNED -	REVISED
FILE NAME = D672H51-Sht-Bt Jt Detail	CHECKED -	REVISED
PLOT SCALE = 20.0000' / in.	DRAWN -	REVISED
PLOT DATE = 1/31/2020	CHECKED -	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**HMA RAMP DETAILS**

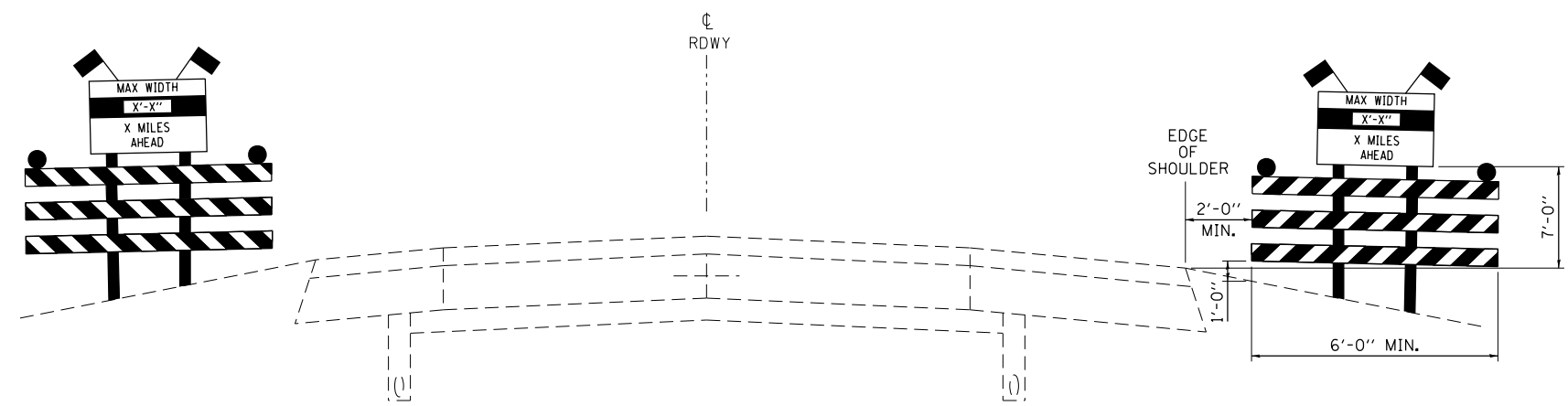
SCALE: 1" = 10' SHEET NO. 4 OF 5 SHEETS STA. 421+24.00 TO STA. 424+01.13

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3)I,P	SANGAMON	138	31
CONTRACT NO. 72H51				
ILLINOIS FED. AID PROJECT				

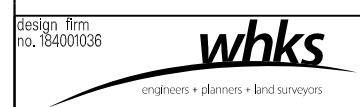
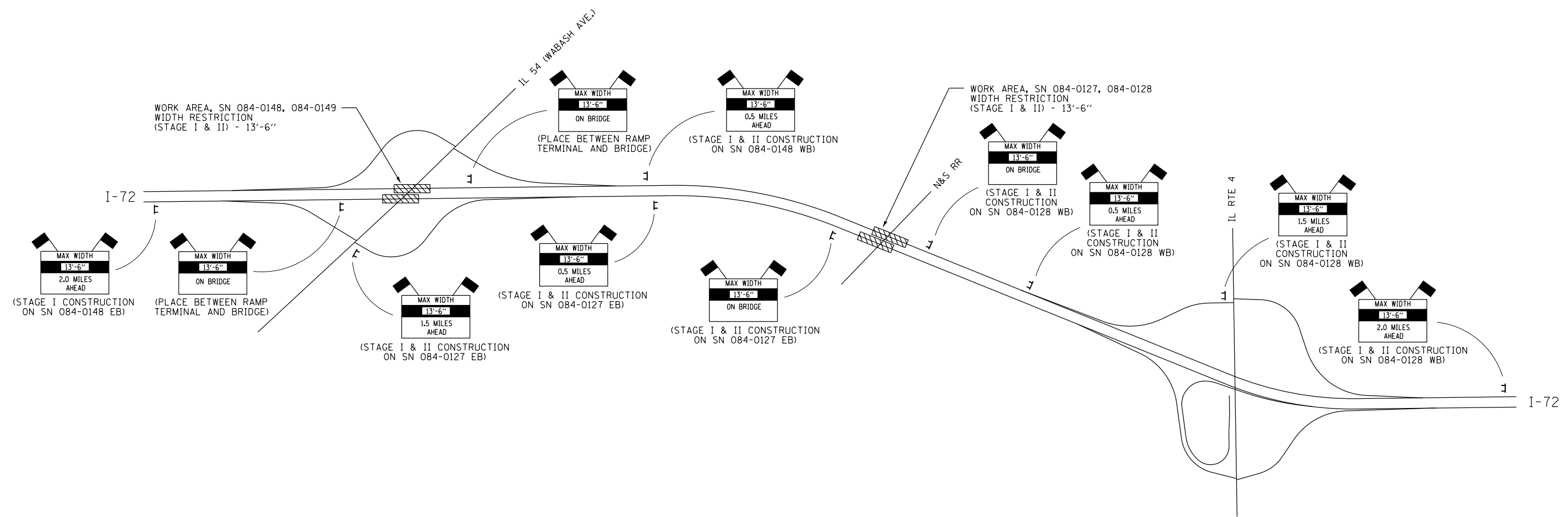


Design firm no. 184001036  engineers + planners + land surveyors	USER NAME = gjameson FILE NAME = D672H51-Sht-Bt Jt Det PLOT SCALE = 20.0000' / in. PLOT DATE = 1/31/2020	DESIGNED - CHECKED - DRAWN - CHECKED -	REVISED - REVISED - REVISED - REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>HMA RAMP DETAILS</b>			F.A.I. RTE. = 72 SECTION = (84-9-3)I,P COUNTY = SANGAMON TOTAL SHEETS = 138 SHEET NO. = 32 CONTRACT NO. = 72H51
					SCALE: 1" = 10' SHEET NO. 5 OF 5 SHEETS STA. 425+37.99 TO STA. 428+14.00	ILLINOIS FED. AID PROJECT		





TYPICAL APPLICATION



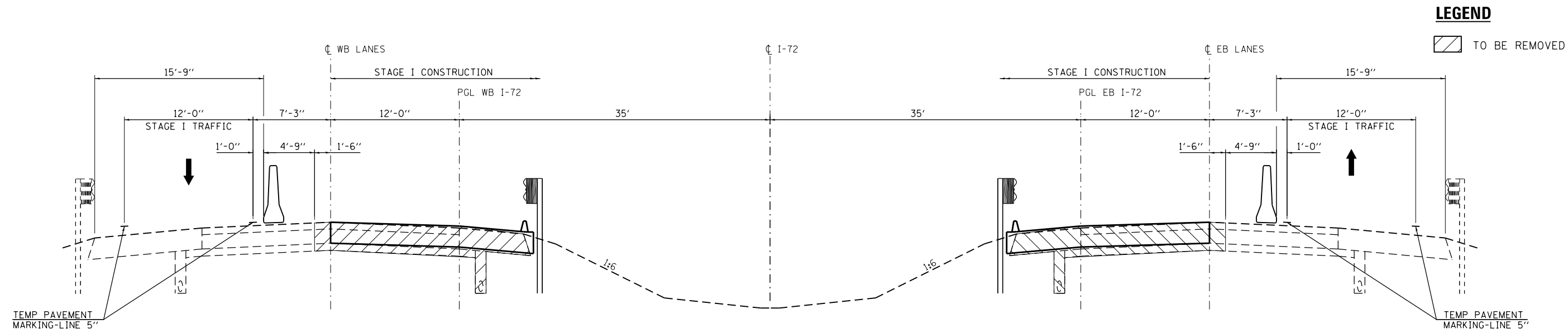
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FILE NAME = D672H51_sht.width restr	CHECKED -	REVISED
PLOT SCALE = 12.0000' / in.	DRAWN -	REVISED
PLOT DATE = 1/31/2020	CHECKED -	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC PLAN  
WIDTH RESTRICTION SIGNING DETAILS

SCALE: NTS    SHEET NO. 1 OF 3 SHEETS    STA.    TO STA.

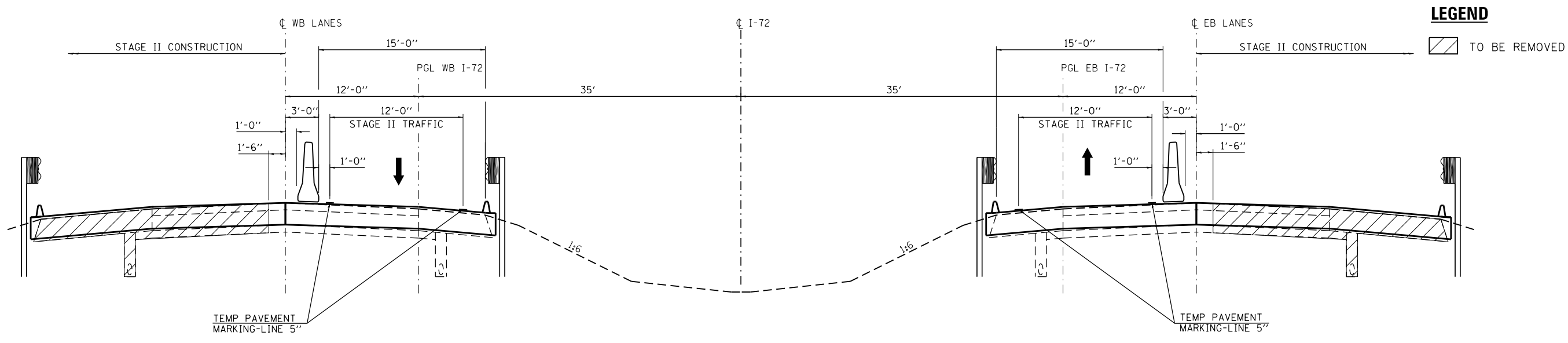
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3)I,P	SANGAMON	138	33
CONTRACT NO. 72H51				
ILLINOIS FED. AID PROJECT				



**SN 084-0148 WB**

**SN 084-0149 EB**

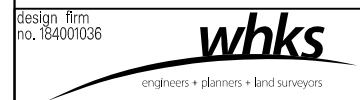
**STAGE I TYPICAL SECTION**  
(LOOKING EAST)



**SN 084-0148 WB**

**SN 084-0149 EB**

**STAGE II TYPICAL SECTION**  
(LOOKING EAST)



USER NAME = gjameson	DESIGNED -	REVISED -
FILE NAME = D672H51-sht-traffic	CHECKED -	REVISED -
PLOT SCALE = 10.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 1/31/2020	CHECKED -	REVISED -

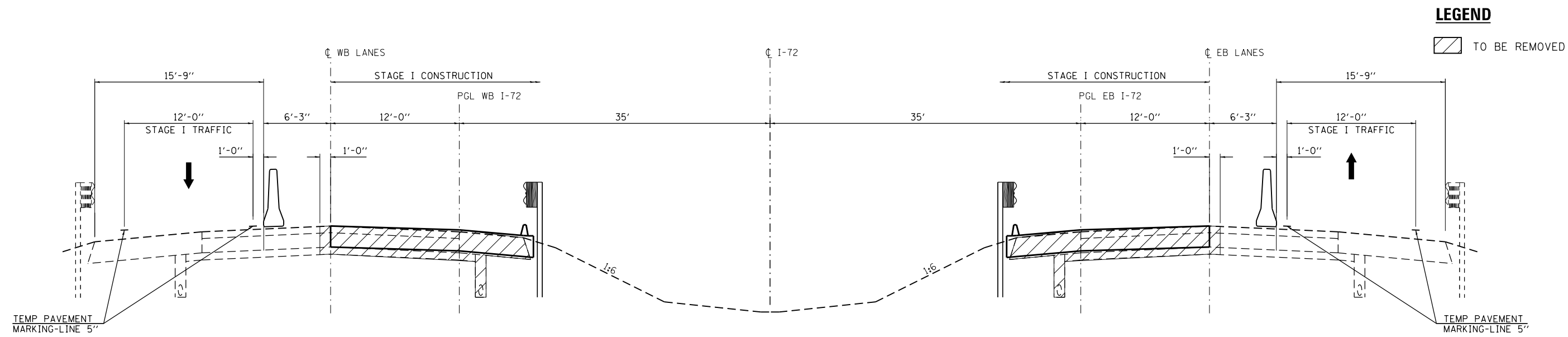
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**STAGE I AND STAGE II MAINTENANCE OF TRAFFIC PLAN  
SN 084-0148 WB & SN 084-0149 EB  
FAI 72 OVER WABASH AVE.**

SCALE: NTS    SHEET NO. 2 OF 3 SHEETS    STA.    TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3)I,P	SANGAMON	138	34
CONTRACT NO. 72H51				

ILLINOIS FED. AID PROJECT



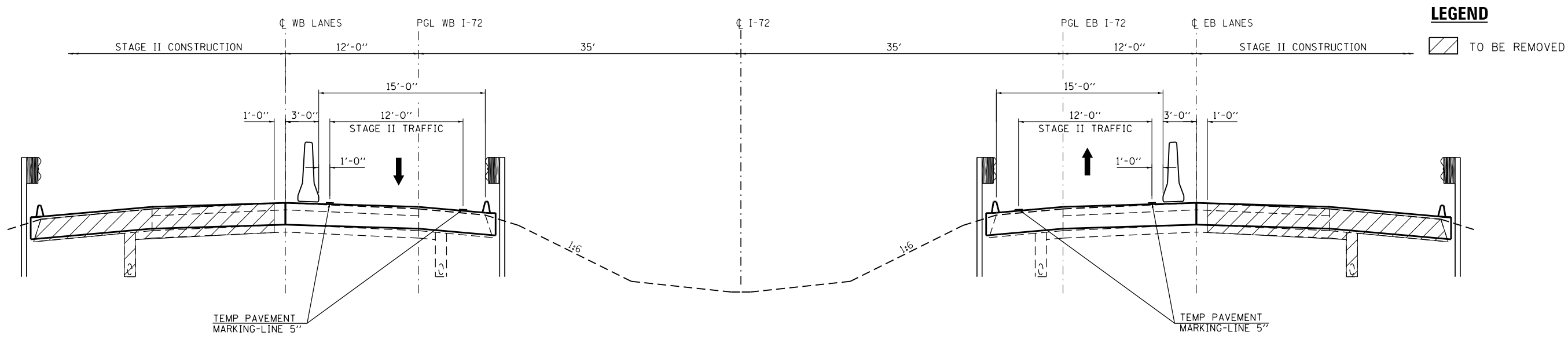
**LEGEND**

TO BE REMOVED

**SN 084-0128 WB**

**SN 084-0127 EB**

**STAGE I TYPICAL SECTION**  
(LOOKING EAST)



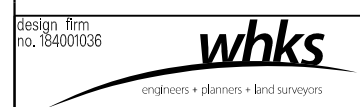
**LEGEND**

TO BE REMOVED

**SN 084-0128 WB**

**SN 084-0127 EB**

**STAGE II TYPICAL SECTION**  
(LOOKING EAST)



USER NAME = gjameson	DESIGNED -	REVISED -
FILE NAME = D672H51-sht-traf contrb	CHECKED -	REVISED -
PLOT SCALE = 10.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 1/31/2020	CHECKED -	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**










**STAGE I & STAGE II MAINTENANCE OF TRAFFIC**  
**SN 084-0127 EB & SN 084-0128 WB**  
**FAI 72 OVER NORFOLK SOUTHERN RAILROAD**

SCALE: NTS    SHEET NO. 3 OF 3 SHEETS    STA.    TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3)I,P	SANGAMON	138	35
CONTRACT NO. 72H51				

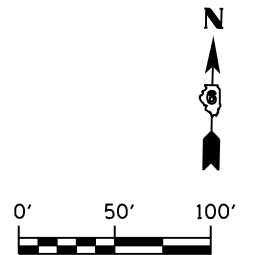
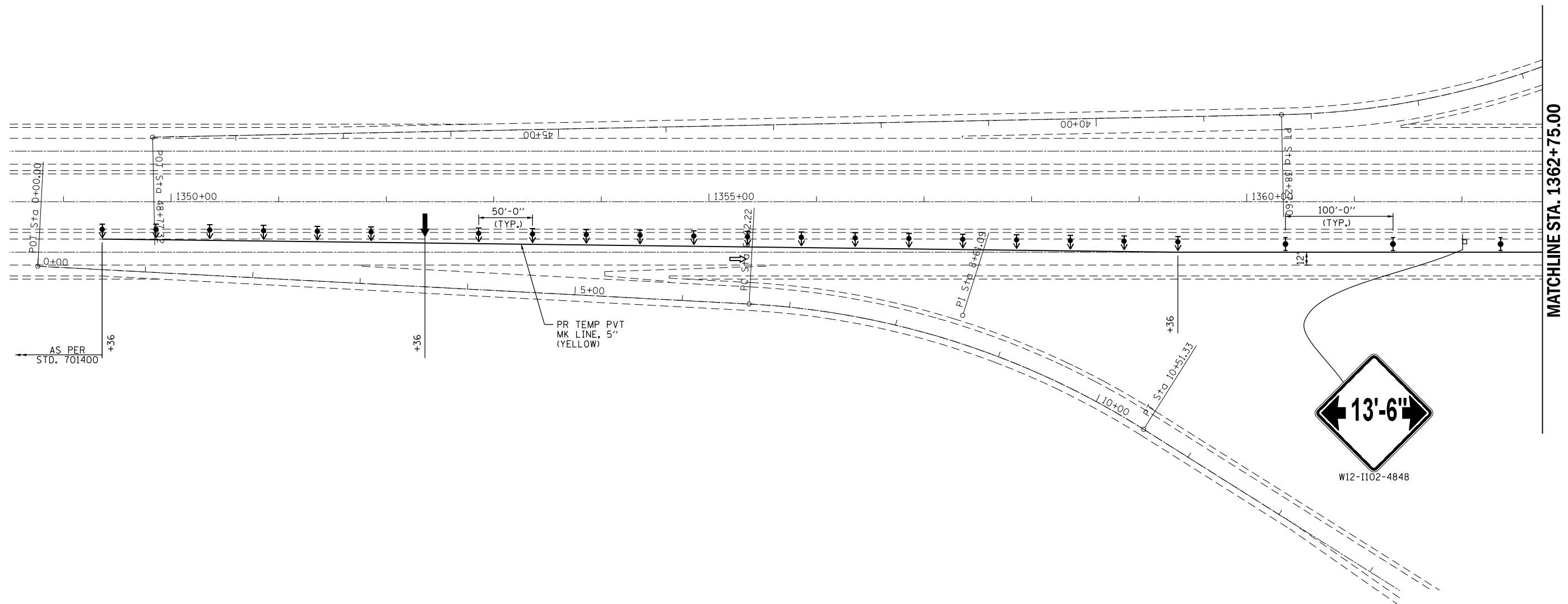
ILLINOIS FED. AID PROJECT

**SYMBOLS**

-  ARROW BOARD
-  WORK AREA
-  SIGN
-  DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
-  TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
-  TEMPORARY CONCRETE BARRIER
-  MONODIRECTIONAL GUARDRAIL/BARRIER WALL REFLECTOR
-  IMPACT ATTENUATOR
-  DRUMS WITH STEADY BRINING MONODIRECTIONAL LIGHT










**TRAFFIC CONTROL STAGE I**

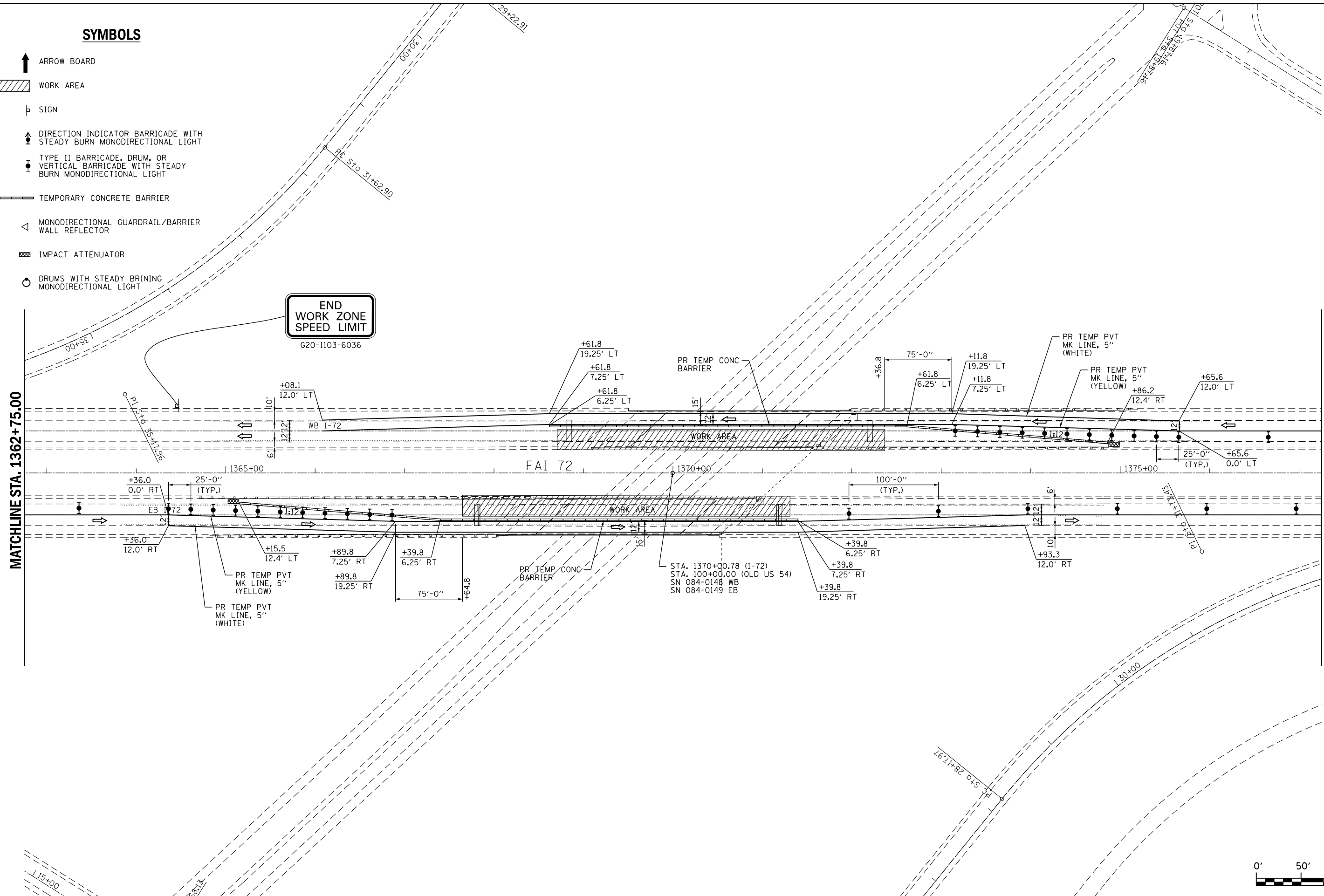
1. INSTALL TRAFFIC CONTROL FOR STAGE I AND SHIFT TRAFFIC AS SHOWN AND USING THE APPLICABLE PORTIONS OF THE HIGHWAY STANDARDS USED.
2. HIGHWAY STANDARDS USED: 701400, 701402.
3. TRAFFIC CONTROL FOR STAGE I PAID FOR AS: PER EACH FOR TRAFFIC CONTROL AND PROTECTION, STANDARD 701402. SPECIAL WHICH SHALL INCLUDE THE INSTALLATION AND CORRESPONDING REMOVAL OF TEMPORARY PAVEMENT MARKING AS INDICATED IN THE STAGE CONSTRUCTION DETAILS.
4. IMPLEMENTATION OF TRAFFIC CONTROL FOR STAGE I AND SUBSEQUENT RELOCATION TO STAGE II SHALL BE CONSIDERED ONE APPLICATION OF THE STANDARD.
5. TRAFFIC CONTROL DETAILS (SIGNS, PAVEMENT MARKINGS, ETC.) NOT SHOWN IN THESE STAGE CONSTRUCTION DETAILS SHALL BE AS PER THE HIGHWAY STANDARDS LISTED IN NOTE #2.
6. OFFSETS TAKEN FROM CENTERLINES OF EASTBOUND AND WESTBOUND LANES.



design firm no. 184001036   engineers • planners • land surveyors	USER NAME = gjameson	DESIGNED -	REVISED	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>STAGE CONSTRUCTION DETAILS STAGE I</b>			F.A.I. RTE. 72	SECTION (84-9-3)I,P	COUNTY SANGAMON	TOTAL SHEETS 138	SHEET NO. 36
	FILE NAME = D672H51-sht-traf contr	CHECKED -	REVISED		REVISED	SCALE: 1" = 50'	SHEET NO. 1 OF 7 SHEETS	STA. TO STA.	CONTRACT NO. 72H51		ILLINOIS FED. AID PROJECT	
	PLOT SCALE = 100,0000 ' / in.	DRAWN -	REVISED									
	PLOT DATE = 1/31/2020	CHECKED -	REVISED									

**SYMBOLS**

-  ARROW BOARD
-  WORK AREA
-  SIGN
-  DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
-  TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
-  TEMPORARY CONCRETE BARRIER
-  MONODIRECTIONAL GUARDRAIL/BARRIER WALL REFLECTOR
-  IMPACT ATTENUATOR
-  DRUMS WITH STEADY BRINING MONODIRECTIONAL LIGHT



design firm  
no. 184001036  
**whks**  
engineers + planners + land surveyors

USER NAME = gjameson	DESIGNED -	REVISED
FILE NAME = D672H51-sht-traf contr	CHECKED -	REVISED
PLOT SCALE = 100.0000 "/in.	DRAWN -	REVISED
PLOT DATE = 1/31/2020	CHECKED -	REVISED

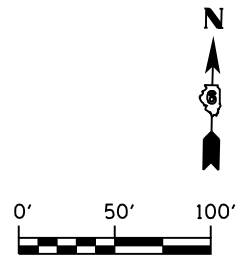
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**STAGE CONSTRUCTION DETAILS  
STAGE I - SN 084-0148 WB & SN 084-0149 EB  
FAI 72 OVER WABASH AVE.**










SCALE: 1" = 50' SHEET NO. 2 OF 7 SHEETS STA. TO STA.

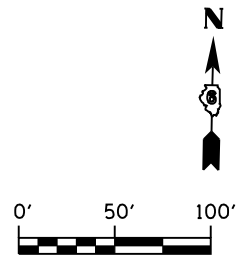
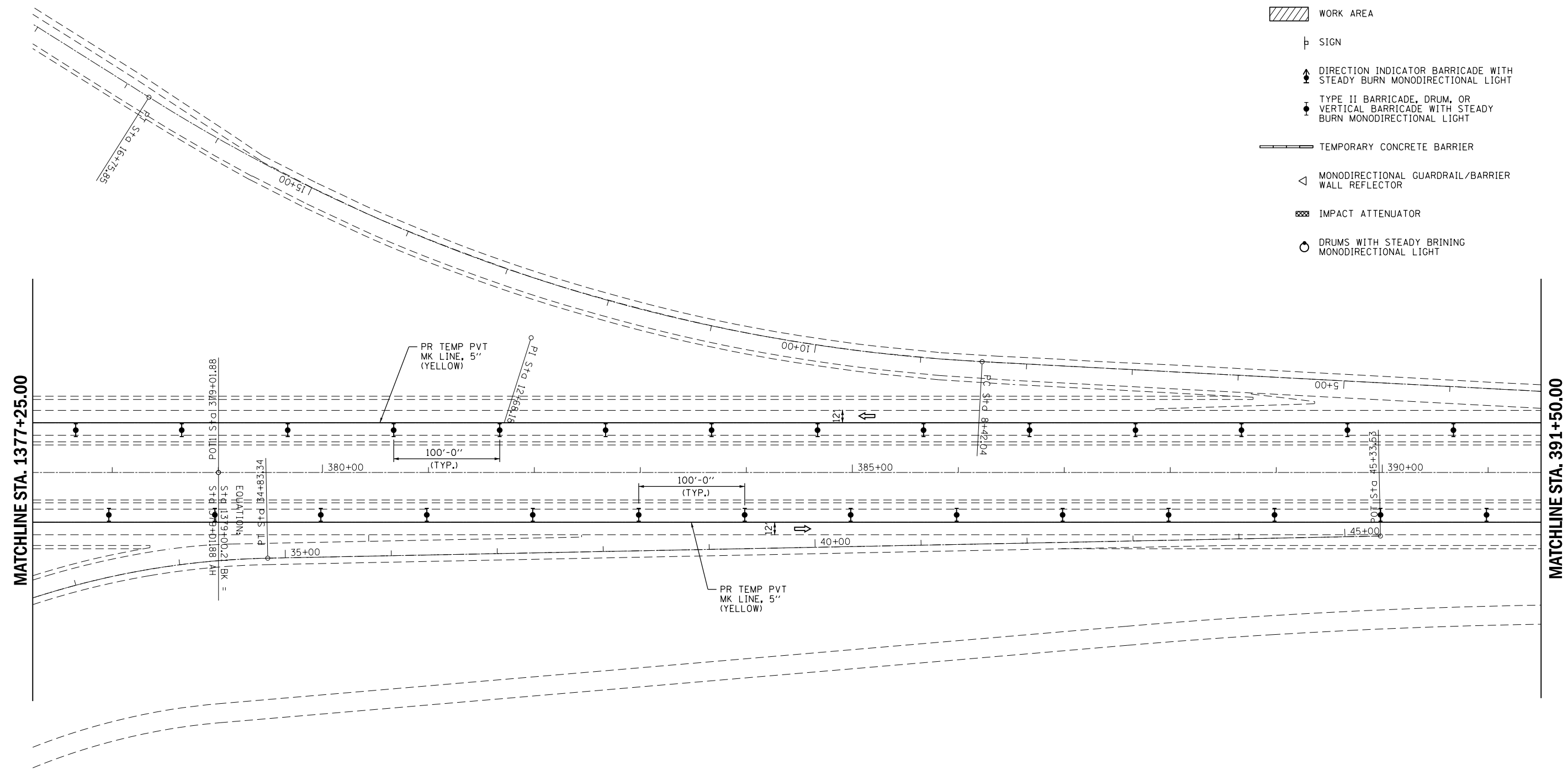
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3)I,P	SANGAMON	138	37
CONTRACT NO. 72H51				

ILLINOIS FED. AID PROJECT












**SYMBOLS**

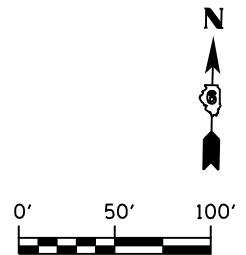
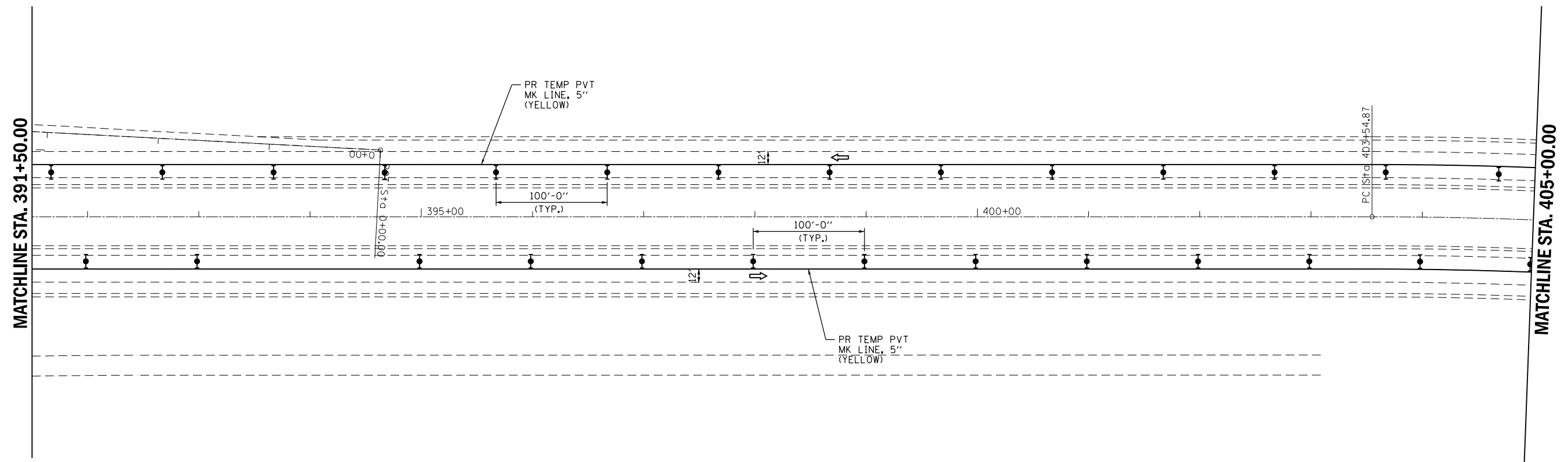
-  ARROW BOARD
-  WORK AREA
-  SIGN
-  DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
-  TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
-  TEMPORARY CONCRETE BARRIER
-  MONODIRECTIONAL GUARDRAIL/BARRIER WALL REFLECTOR
-  IMPACT ATTENUATOR
-  DRUMS WITH STEADY BRINING MONODIRECTIONAL LIGHT



design firm no. 184001036  	USER NAME = gjameson	DESIGNED -	REVISED	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>STAGE CONSTRUCTION DETAILS STAGE I</b>			F.A.I. RTE. = 72	SECTION = (84-9-3)I,P	COUNTY = SANGAMON	TOTAL SHEETS = 138	SHEET NO. = 38
	FILE NAME = D672H51-sht-traf contr	CHECKED -	REVISED		SCALE: 1" = 50'	SHEET NO. 3 OF 7 SHEETS	STA.	TO STA.	CONTRACT NO. 72H51		ILLINOIS FED. AID PROJECT	
	PLOT SCALE = 100.0000' / in.	DRAWN -	REVISED									
	PLOT DATE = 1/31/2020	CHECKED -	REVISED									

**SYMBOLS**










-  ARROW BOARD
-  WORK AREA
-  SIGN
-  DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
-  TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
-  TEMPORARY CONCRETE BARRIER
-  MONODIRECTIONAL GUARDRAIL/BARRIER WALL REFLECTOR
-  IMPACT ATTENUATOR
-  DRUMS WITH STEADY BRNING MONODIRECTIONAL LIGHT

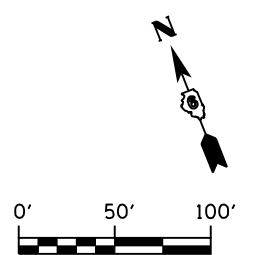
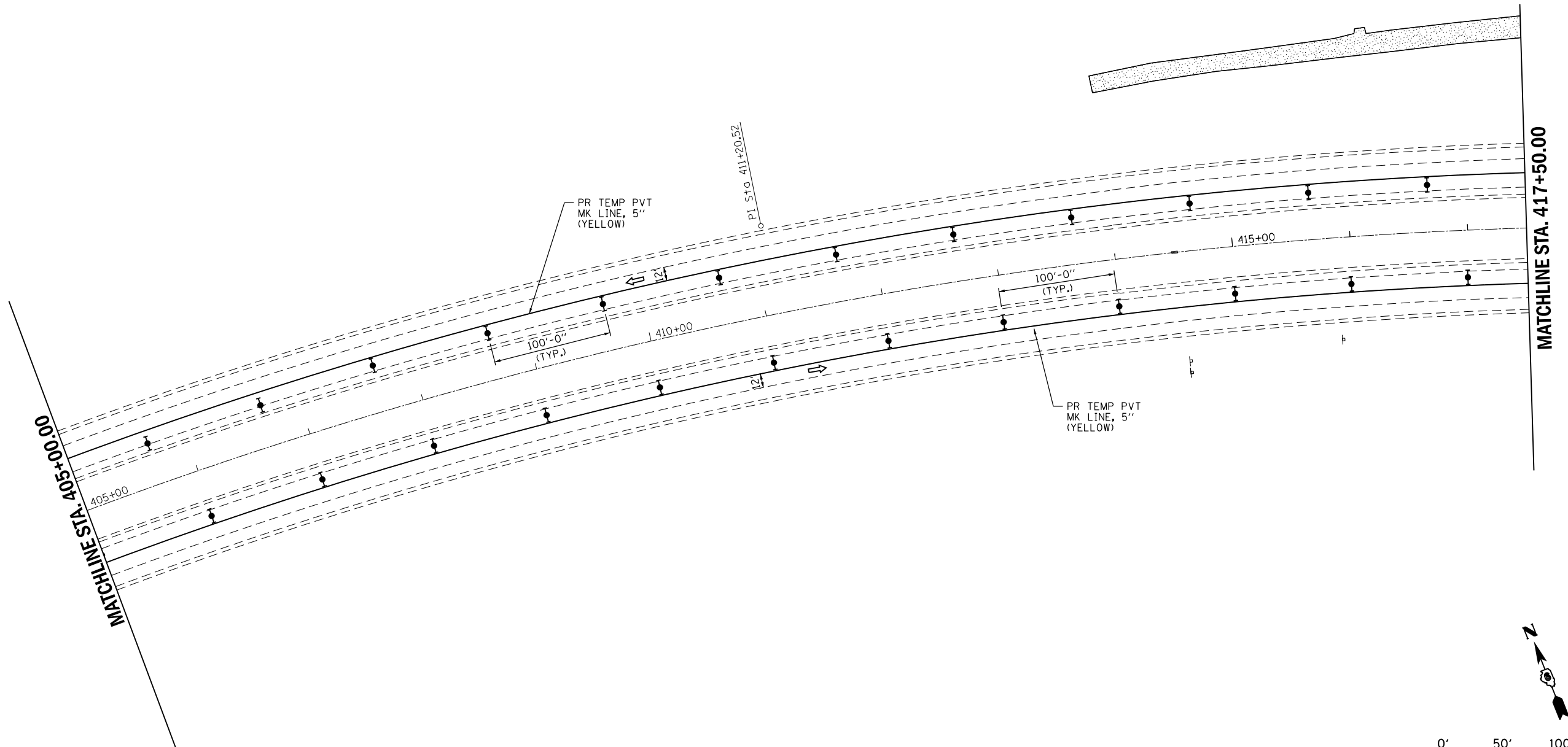


USER NAME = gjameson	DESIGNED -	REVISED
FILE NAME = D672H51-sht-traf contr	CHECKED -	REVISED
PLOT SCALE = 100.0000 "/ in.	DRAWN -	REVISED
PLOT DATE = 1/31/2020	CHECKED -	REVISED

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3)I,P	SANGAMON	138	39
CONTRACT NO. 72H51				
ILLINOIS FED. AID PROJECT				

**SYMBOLS**

-  ARROW BOARD
-  WORK AREA
-  SIGN
-  DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
-  TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
-  TEMPORARY CONCRETE BARRIER
-  MONODIRECTIONAL GUARDRAIL/BARRIER WALL REFLECTOR
-  IMPACT ATTENUATOR
-  DRUMS WITH STEADY BRINING MONODIRECTIONAL LIGHT












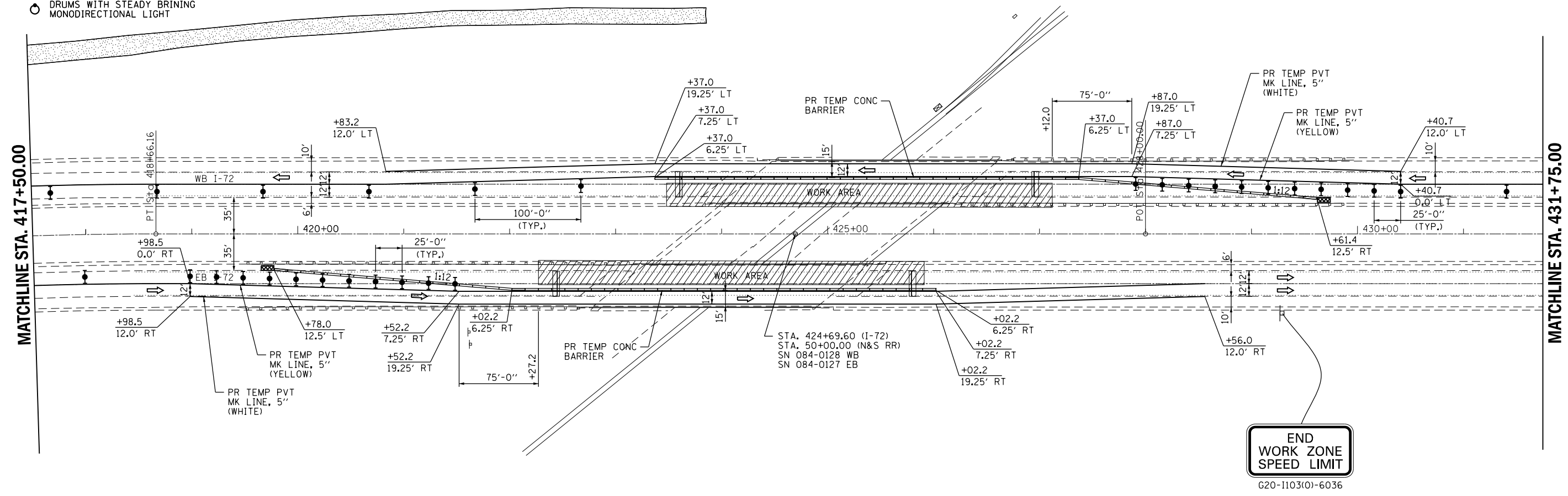
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PLOT SCALE = 100.0000' / in.	DRAWN -	REVISED
PLOT DATE = 1/31/2020	CHECKED -	REVISED

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3)I,P	SANGAMON	138	40
CONTRACT NO. 72H51				



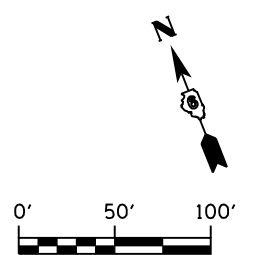
# SYMBOLS

-  ARROW BOARD
-  WORK AREA
-  SIGN
-  DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
-  TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
-  TEMPORARY CONCRETE BARRIER
-  MONODIRECTIONAL GUARDRAIL/BARRIER WALL REFLECTOR
-  IMPACT ATTENUATOR
-  DRUMS WITH STEADY BRINING MONODIRECTIONAL LIGHT












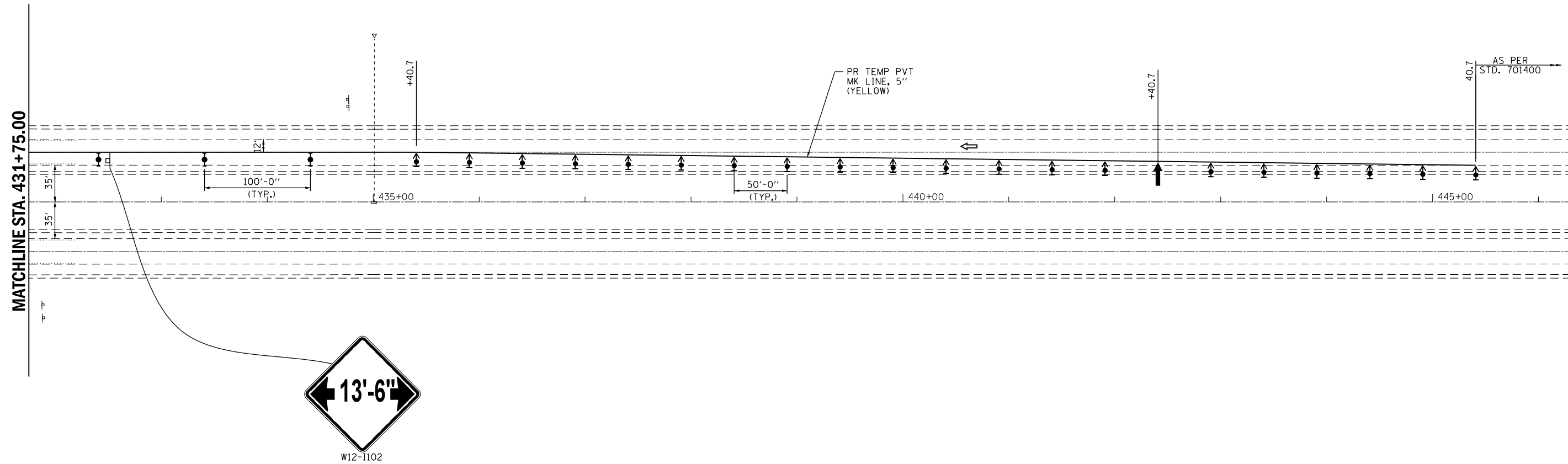
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PLOT SCALE = 100.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 1/31/2020	CHECKED -	REVISED -

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3)I,P	SANGAMON	138	41
CONTRACT NO. 72H51				
ILLINOIS FED. AID PROJECT				



**SYMBOLS**










-  ARROW BOARD
-  WORK AREA
-  SIGN
-  DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
-  TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
-  TEMPORARY CONCRETE BARRIER
-  MONODIRECTIONAL GUARDRAIL/BARRIER WALL REFLECTOR
-  IMPACT ATTENUATOR
-  DRUMS WITH STEADY BRINING MONODIRECTIONAL LIGHT



USER NAME = gjameson	DESIGNED -	REVISED
FILE NAME = D672H51-sht-traf contr	CHECKED -	REVISED
PLOT SCALE = 100.0000 ' / in.	DRAWN -	REVISED
PLOT DATE = 1/31/2020	CHECKED -	REVISED

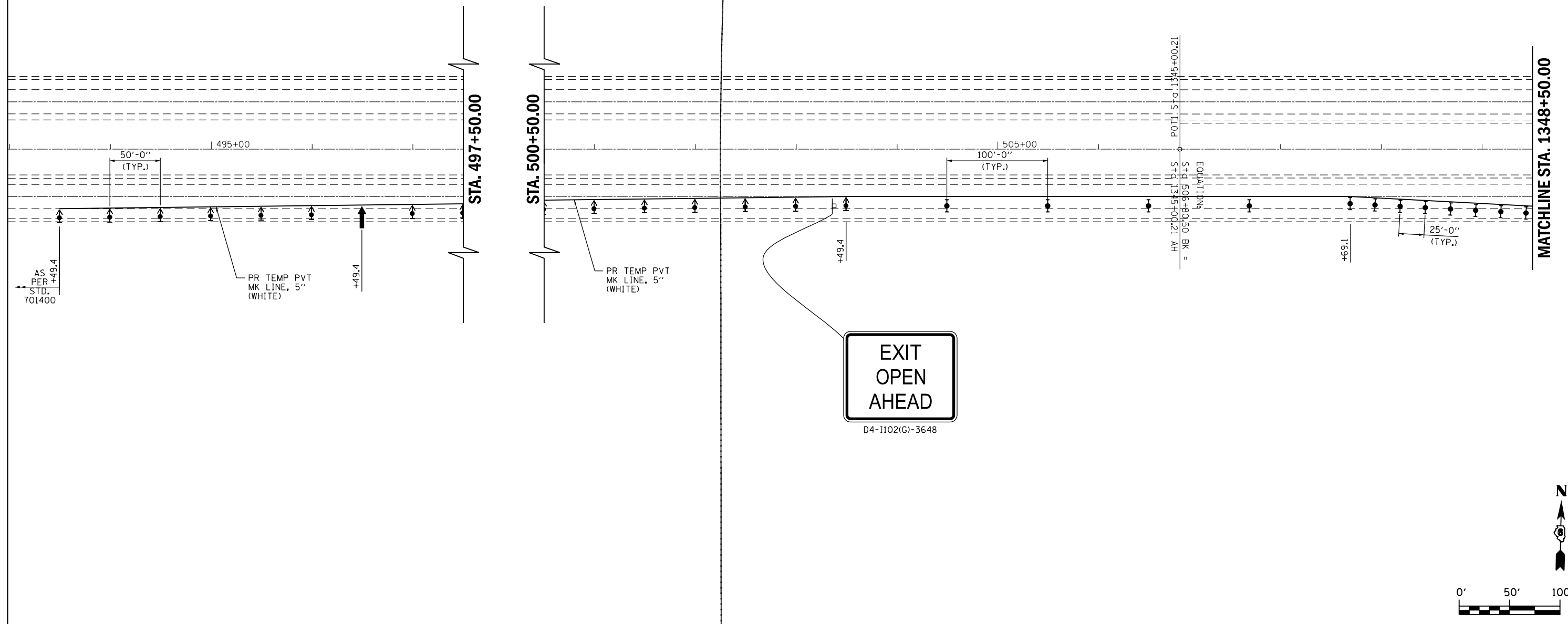
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3)I,P	SANGAMON	138	42
CONTRACT NO. 72H51				
ILLINOIS FED. AID PROJECT				

**SYMBOLS**

-  ARROW BOARD
-  WORK AREA
-  SIGN
-  DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
-  TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
-  TEMPORARY CONCRETE BARRIER
-  MONODIRECTIONAL GUARDRAIL/BARRIER WALL REFLECTOR
-  IMPACT ATTENUATOR
-  DRUMS WITH STEADY BRING MONODIRECTIONAL LIGHT

**TRAFFIC CONTROL STAGE II**

1. INSTALL TRAFFIC CONTROL FOR STAGE II AND SHIFT TRAFFIC AS SHOWN AND USING THE APPLICABLE PORTIONS OF THE HIGHWAY STANDARDS USED.
2. HIGHWAY STANDARDS USED: 701400, 701402 AND 701411.
3. TRAFFIC CONTROL FOR STAGE II PAID FOR AS: PER EACH FOR TRAFFIC CONTROL AND PROTECTION, STANDARD 701402. SPECIAL WHICH SHALL INCLUDE THE INSTALLATION AND CORRESPONDING REMOVAL OF TEMPORARY PAVEMENT MARKING AS INDICATED IN THE STAGE CONSTRUCTION DETAILS.
4. IMPLEMENTATION OF TRAFFIC CONTROL FOR STAGE I AND SUBSEQUENT RELOCATION TO STAGE II SHALL BE CONSIDERED ONE APPLICATION OF THE STANDARD.
5. TRAFFIC CONTROL DETAILS (SIGNS, PAVEMENT MARKINGS, ETC.) NOT SHOWN IN THESE STAGE CONSTRUCTION DETAILS SHALL BE AS PER THE HIGHWAY STANDARDS LISTED IN NOTE #2.
6. OFFSETS TAKEN FROM CENTERLINES OF EASTBOUND AND WESTBOUND LANES.



design firm  
no. 184001036



engineers + planners + land surveyors

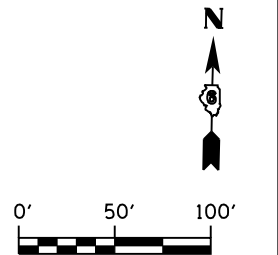
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FILE NAME = D672H51-sht-traffic control	CHECKED -	REVISED
PLOT SCALE = 100.0000' / in.	DRAWN -	REVISED
PLOT DATE = 1/31/2020	CHECKED -	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**










**STAGE CONSTRUCTION DETAILS  
STAGE II**

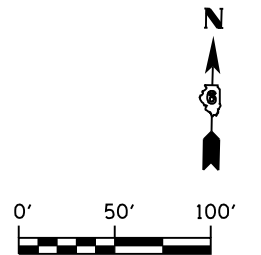
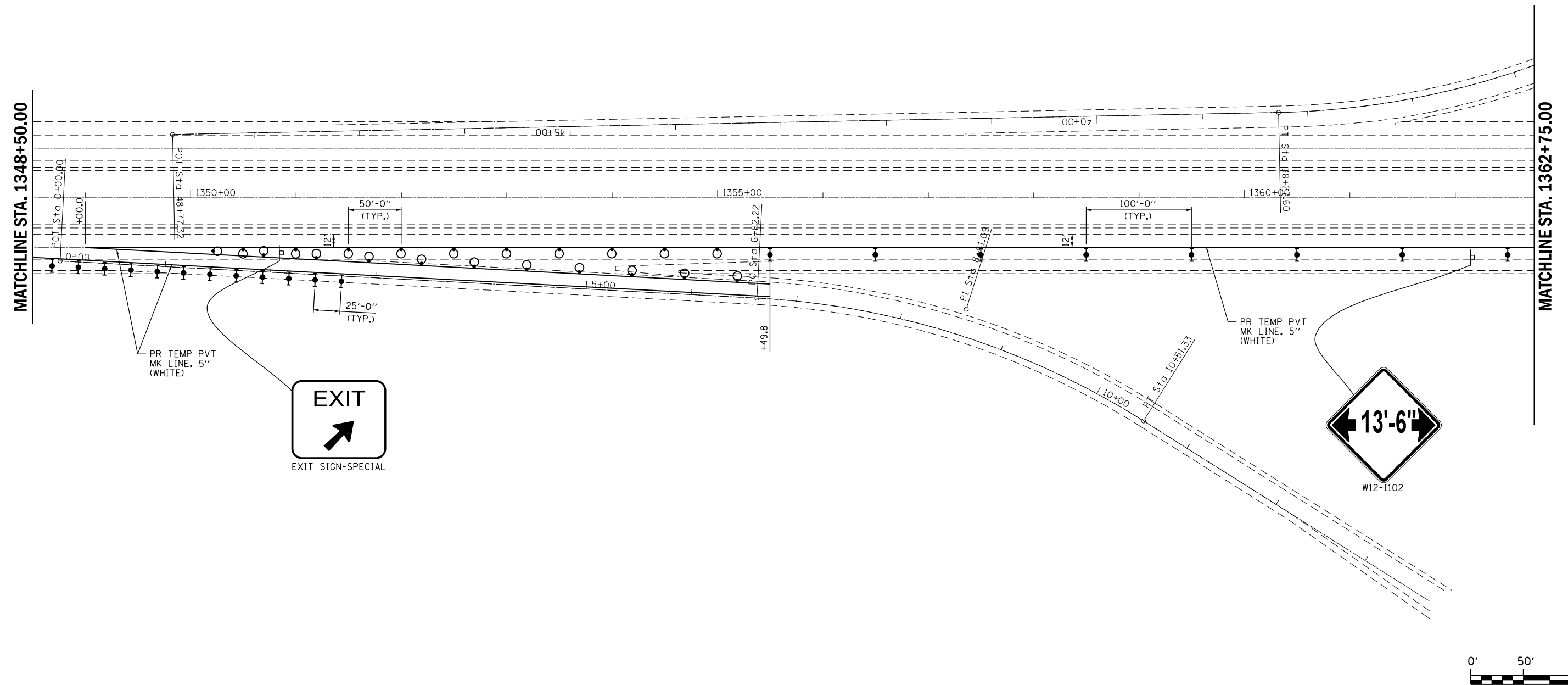
SCALE: 1" = 50'    SHEET NO. 1 OF 8 SHEETS    STA.    TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3)I,P	SANGAMON	138	43
CONTRACT NO. 72H51				
ILLINOIS FED. AID PROJECT				








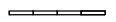



**SYMBOLS**

-  ARROW BOARD
-  WORK AREA
-  SIGN
-  DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
-  TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
-  TEMPORARY CONCRETE BARRIER
-  MONODIRECTIONAL GUARDRAIL/BARRIER WALL REFLECTOR
-  IMPACT ATTENUATOR
-  DRUMS WITH STEADY BRINING MONODIRECTIONAL LIGHT



design firm no. 184001036  	USER NAME = gjameson	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>STAGE CONSTRUCTION DETAILS STAGE II</b>	F.A.I. RTE. 72	SECTION (84-9-3)I,P	COUNTY SANGAMON	TOTAL SHEETS 138	SHEET NO. 44
	FILE NAME = D672H51-sht-traf contrb	CHECKED -	REVISED -			SCALE: 1" = 50'	SHEET NO. 2 OF 8 SHEETS	STA. TO STA.	CONTRACT NO. 72H51	
	PLOT SCALE = 100.0000 "/ in.	DRAWN -	REVISED -							
	PLOT DATE = 1/31/2020	CHECKED -	REVISED -							

**SYMBOLS**

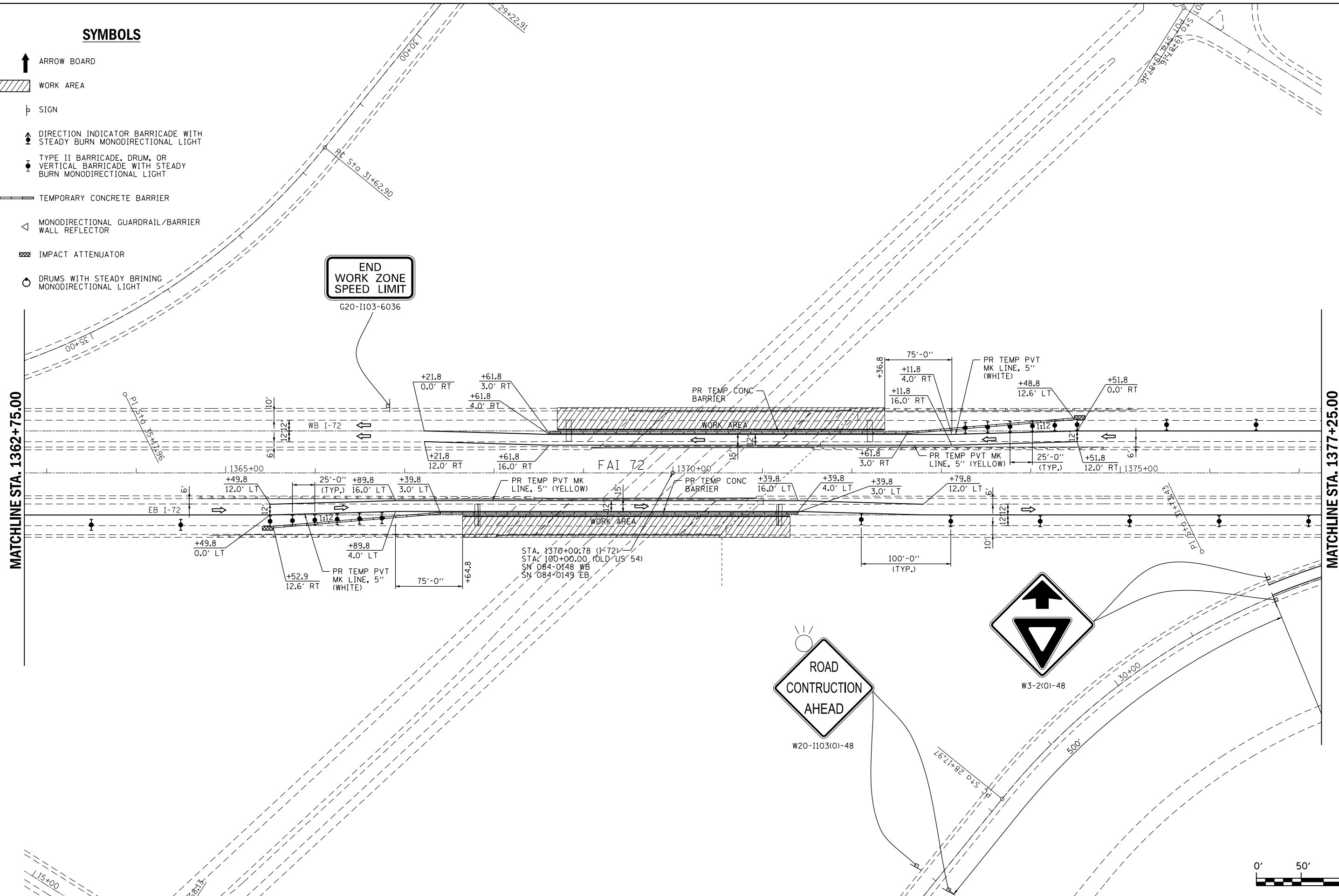
-  ARROW BOARD
-  WORK AREA
-  SIGN
-  DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
-  TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
-  TEMPORARY CONCRETE BARRIER
-  MONODIRECTIONAL GUARDRAIL/BARRIER WALL REFLECTOR
-  IMPACT ATTENUATOR
-  DRUMS WITH STEADY BRINING MONODIRECTIONAL LIGHT

**END  
WORK ZONE  
SPEED LIMIT**

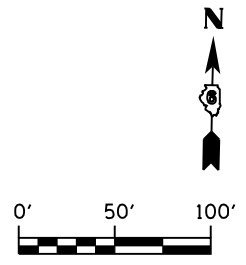
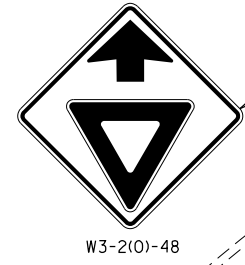
G20-I103-6036

MATCHLINE STA. 1362+75.00

MATCHLINE STA. 1377+25.00



STA. 1378+00.78 (I-72)  
STA. 100+00.00 (OLD US 54)  
SN 084-0148 WB  
SN 084-0149 EB



design firm  
no. 184001036  
**whks**  
engineers + planners + land surveyors

USER NAME = gjameson	DESIGNED -	REVISED -
FILE NAME = D672H51-sht-traf contr	CHECKED -	REVISED -
PLOT SCALE = 100.0000 "/>		
PLOT DATE = 1/31/2020	CHECKED -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**










**STAGE II - SN 084-0148 WB & SN 084-0149 EB  
FAI 72 OVER WABASH AVE.**

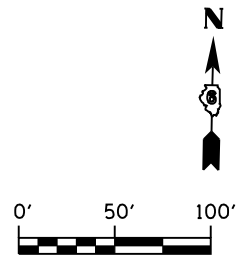
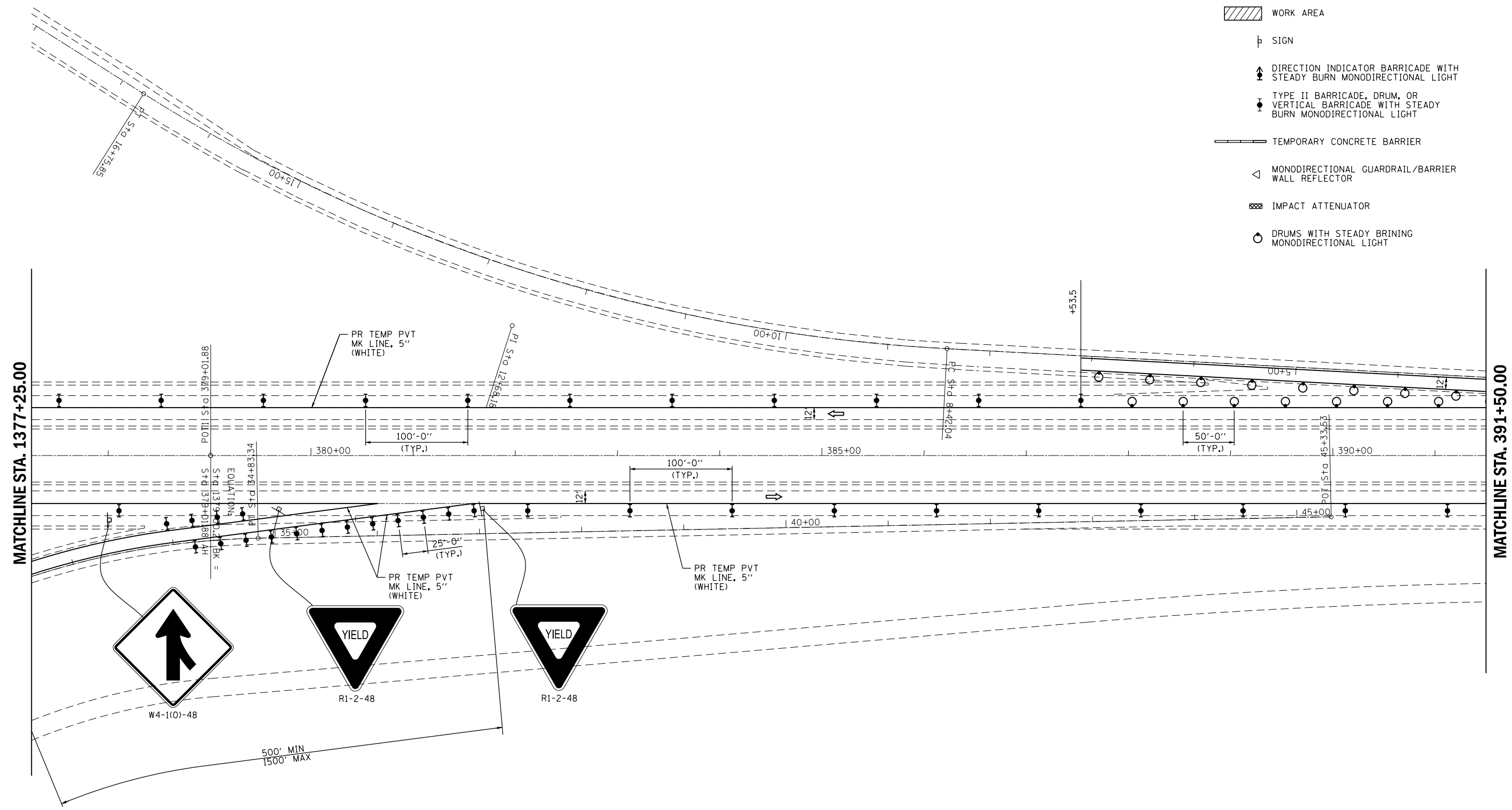
SCALE: 1" = 50' SHEET NO. 3 OF 8 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3)I,P	SANGAMON	138	45
CONTRACT NO. 72H51				

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






**SYMBOLS**

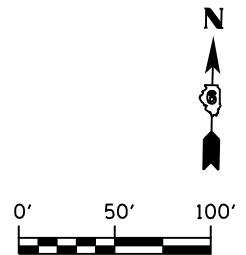
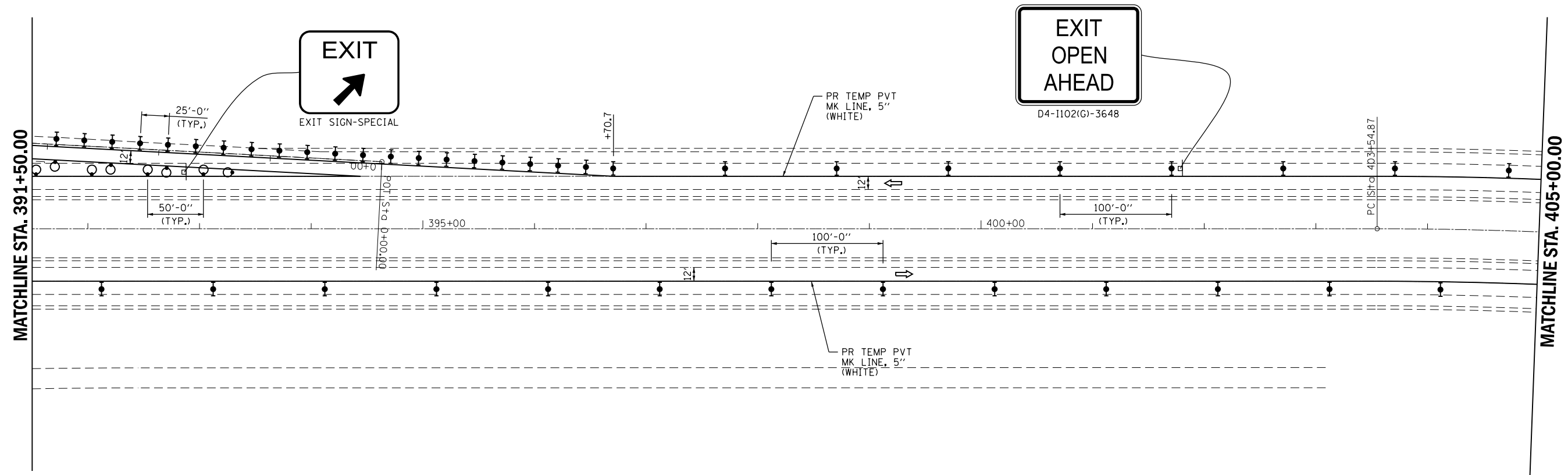
-  ARROW BOARD
-  WORK AREA
-  SIGN
-  DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
-  TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
-  TEMPORARY CONCRETE BARRIER
-  MONODIRECTIONAL GUARDRAIL/BARRIER WALL REFLECTOR
-  IMPACT ATTENUATOR
-  DRUMS WITH STEADY BRINING MONODIRECTIONAL LIGHT



design firm no. 184001036  	USER NAME = gjameson	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>STAGE CONSTRUCTION DETAILS STAGE II</b>			F.A.I. RTE. = 72	SECTION = (84-9-3)I,P	COUNTY = SANGAMON	TOTAL SHEETS = 138	SHEET NO. = 46
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PLOT SCALE = 100.0000' / in.	DRAWN -	REVISED -					ILLINOIS FED. AID PROJECT					
PLOT DATE = 1/31/2020	CHECKED -	REVISED -										

**SYMBOLS**

-  ARROW BOARD
-  WORK AREA
-  SIGN
-  DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
-  TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
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-  MONODIRECTIONAL GUARDRAIL/BARRIER WALL REFLECTOR
-  IMPACT ATTENUATOR
-  DRUMS WITH STEADY BRINING MONODIRECTIONAL LIGHT



USER NAME = gjameson	DESIGNED -	REVISED
FILE NAME = D672H51-sht-traf contr	CHECKED -	REVISED
PLOT SCALE = 100.0000 ' / in.	DRAWN -	REVISED
PLOT DATE = 1/31/2020	CHECKED -	REVISED










**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

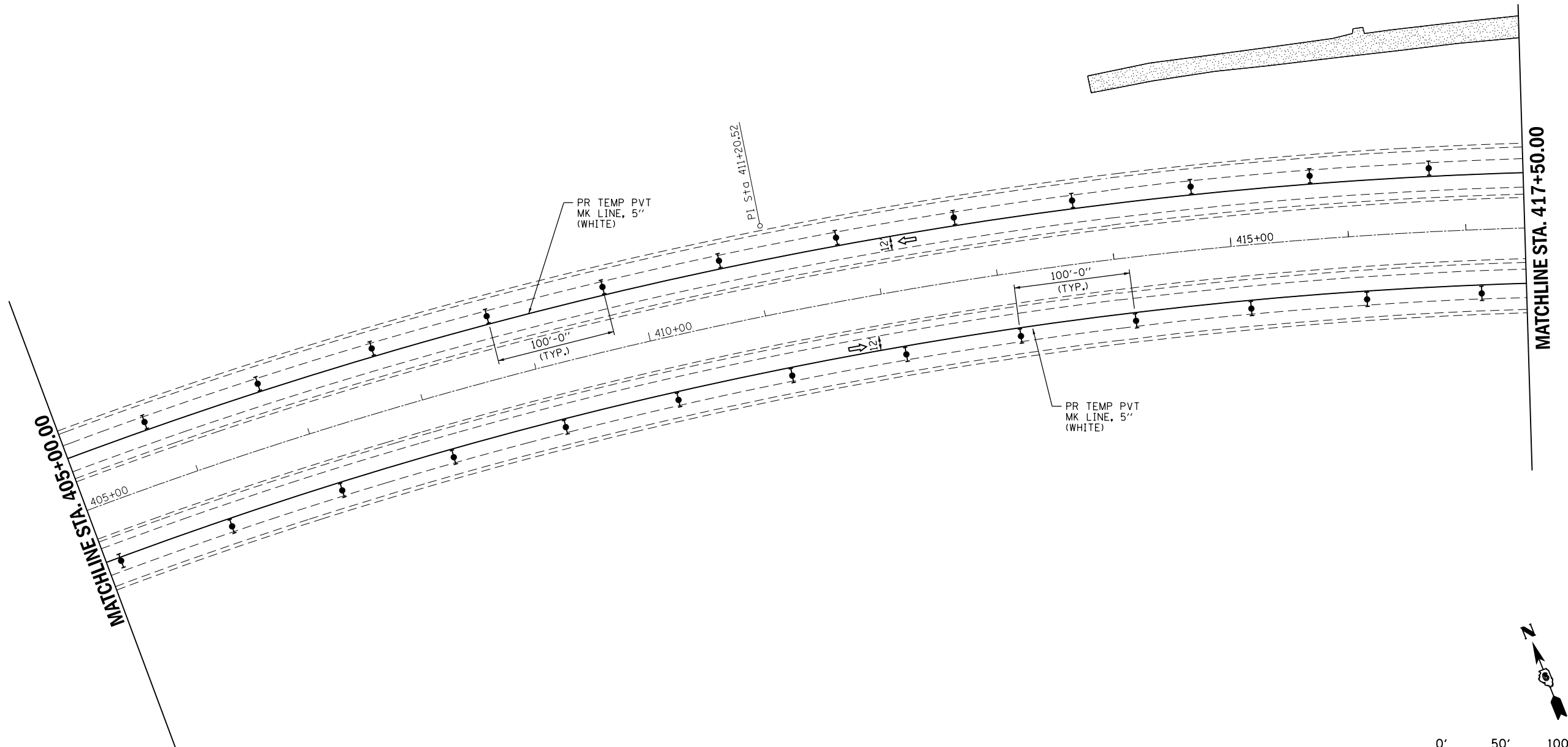
**STAGE CONSTRUCTION DETAILS  
STAGE II**

SCALE: 1" = 50' SHEET NO. 5 OF 7 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3)I,P	SANGAMON	138	47
CONTRACT NO. 72H51				
ILLINOIS FED. AID PROJECT				

**SYMBOLS**

-  ARROW BOARD
-  WORK AREA
-  SIGN
-  DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
-  TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
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-  MONODIRECTIONAL GUARDRAIL/BARRIER WALL REFLECTOR
-  IMPACT ATTENUATOR
-  DRUMS WITH STEADY BRINING MONODIRECTIONAL LIGHT












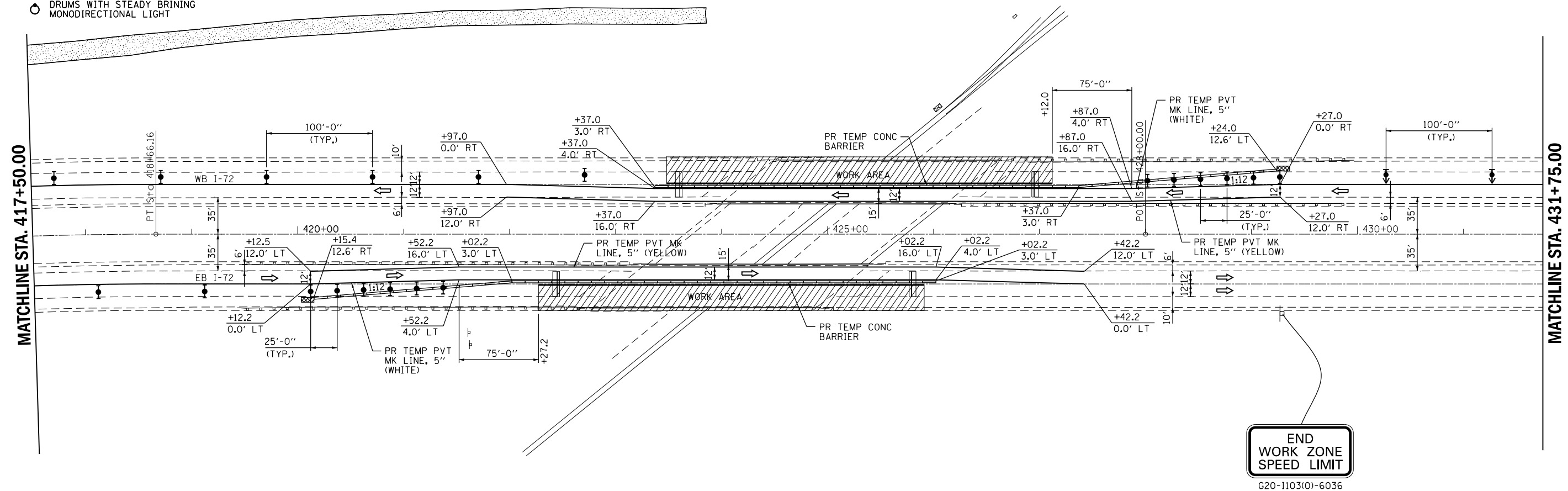
USER NAME = gjameson	DESIGNED -	REVISED -
FILE NAME = D672H51-sht-traf contr	CHECKED -	REVISED -
PLOT SCALE = 100.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 1/31/2020	CHECKED -	REVISED -

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3)I,P	SANGAMON	138	48
CONTRACT NO. 72H51			ILLINOIS FED. AID PROJECT	

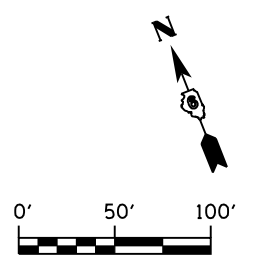


# SYMBOLS

-  ARROW BOARD
-  WORK AREA
-  SIGN
-  DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
-  TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
-  TEMPORARY CONCRETE BARRIER
-  MONODIRECTIONAL GUARDRAIL/BARRIER WALL REFLECTOR
-  IMPACT ATTENUATOR
-  DRUMS WITH STEADY BRINING MONODIRECTIONAL LIGHT












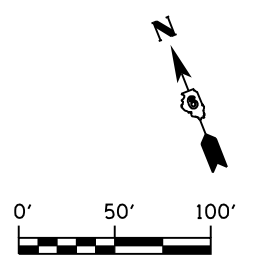
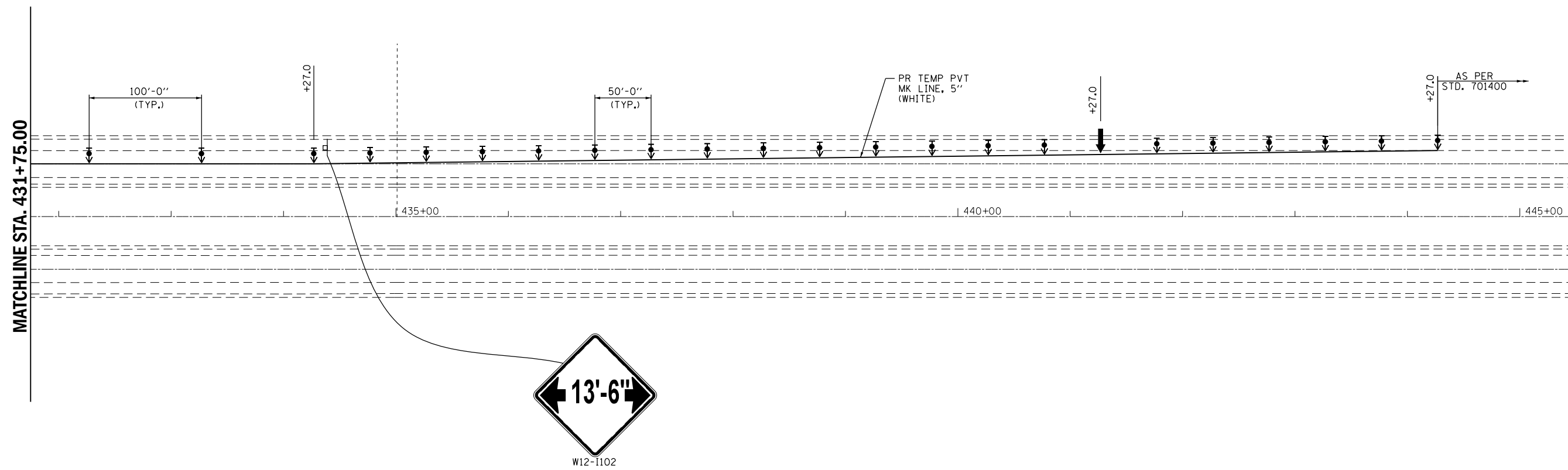
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 WORK ZONE  
 SPEED LIMIT  
 G20-1103(0)-6036



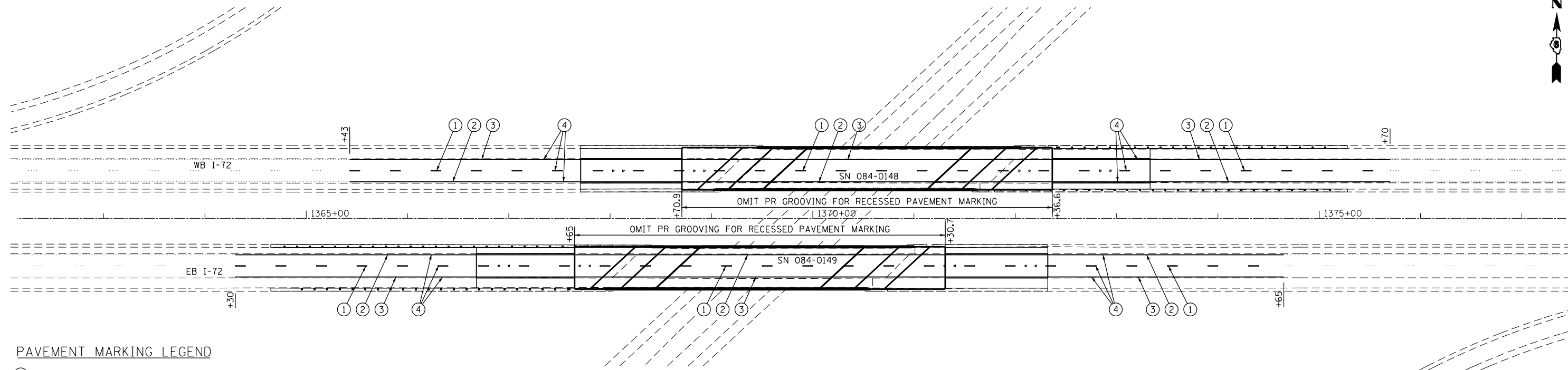
design firm no. 184001036  engineers • planners • land surveyors	USER NAME = gjameson	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>STAGE CONSTRUCTION DETAILS</b> <b>STAGE II - SN 084-0127 EB &amp; SN 084-0128 WB</b> <b>FAI 72 OVER N&amp;S RR</b>	F.A.I. RTE. 72	SECTION (84-9-3)I,P	COUNTY SANGAMON	TOTAL SHEETS 138	SHEET NO. 49
	FILE NAME = D672H51-sht-traf contr	CHECKED -	REVISED -			SCALE: 1" = 50'	SHEET NO. 7 OF 8 SHEETS	STA. TO STA.	CONTRACT NO. 72H51	
	PLOT SCALE = 100.0000' / in.	DRAWN -	REVISED -							
	PLOT DATE = 1/31/2020	CHECKED -	REVISED -							

**SYMBOLS**

-  ARROW BOARD
-  WORK AREA
-  SIGN
-  DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
-  TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
-  TEMPORARY CONCRETE BARRIER
-  MONODIRECTIONAL GUARDRAIL/BARRIER WALL REFLECTOR
-  IMPACT ATTENUATOR
-  DRUMS WITH STEADY BRNING MONODIRECTIONAL LIGHT



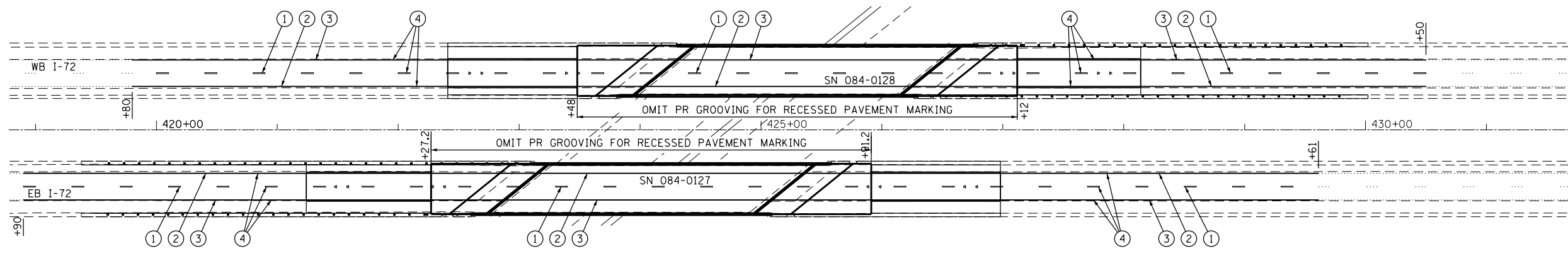
design firm no. 184001036   engineers + planners + land surveyors	USER NAME = gjameson	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>STAGE CONSTRUCTION DETAILS STAGE II</b>	F.A.I. RTE. = 72	SECTION = (84-9-3)I,P	COUNTY = SANGAMON	TOTAL SHEETS = 138	SHEET NO. = 50	
	FILE NAME = D672H51-sht-traffic control	CHECKED -	REVISED -			SCALE: 1" = 50'	SHEET NO. 8 OF 8 SHEETS	STA. TO STA.	CONTRACT NO. 72H51		
PLOT SCALE = 100,0000' / in.	DRAWN -	REVISED -									
PLOT DATE = 1/31/2020	CHECKED -	REVISED -	ILLINOIS FED. AID PROJECT								



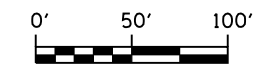
**PAVEMENT MARKING LEGEND**

- ① PR MODIFIED URETHANE PAVEMENT MARKING - LINE 5" (30' SKIP, 10' DASH WHITE)
- ② PR MODIFIED URETHANE PAVEMENT MARKING - LINE 5" (SOLID YELLOW)
- ③ PR MODIFIED URETHANE PAVEMENT MARKING - LINE 5" (SOLID WHITE)
- ④ PR GROOVING FOR RECESSED PAVEMENT MARKING 6"
- ◁ PR RAISED REFLECTIVE PAVEMENT MARKER, WHITE (SEE STANDARD 781001-03)

WABASH AVE. STRUCTURES



N&S RR STRUCTURES



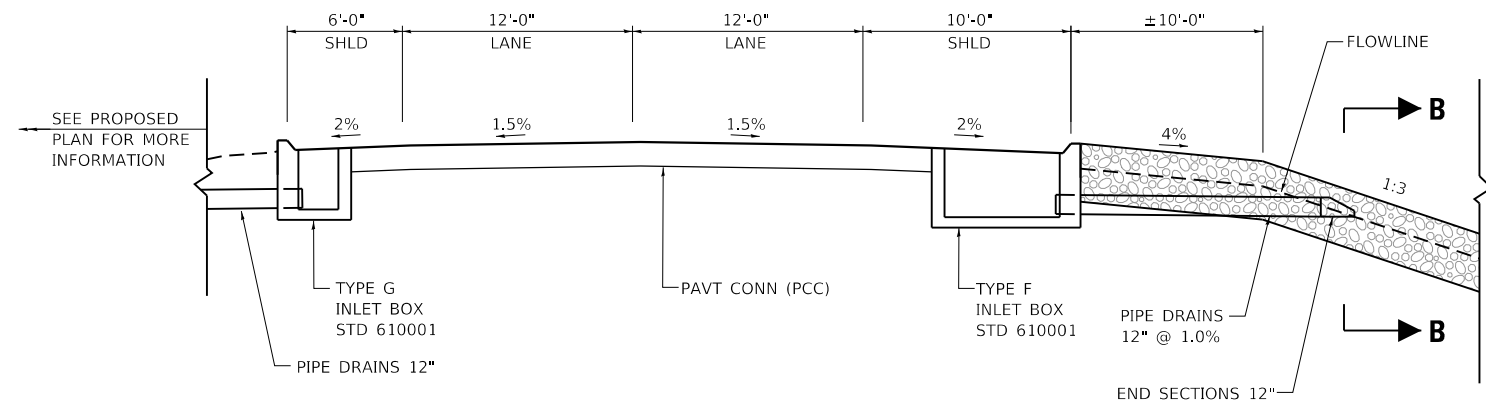
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FILE NAME = D672H51-sht-striping.dgn	CHECKED -	REVISED -
PLOT SCALE = 100.0000 "/>	DRAWN -	REVISED -
PLOT DATE = 1/31/2020	CHECKED -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

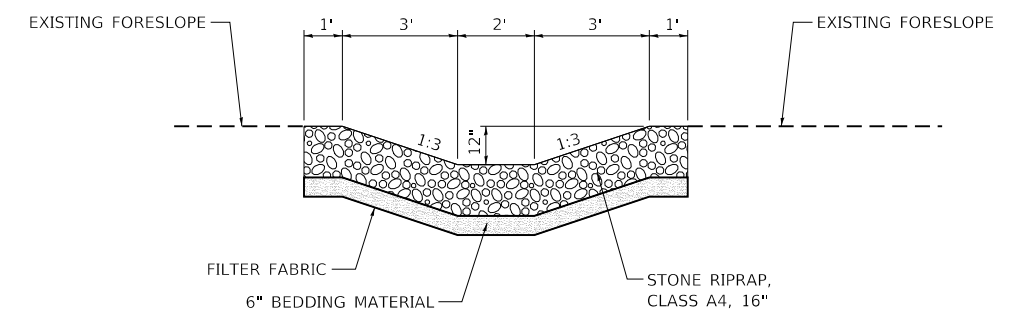
**PAVEMENT MARKING DETAILS**

SCALE: 1" = 50' SHEET NO. 1 OF 1 SHEETS STA. TO STA.

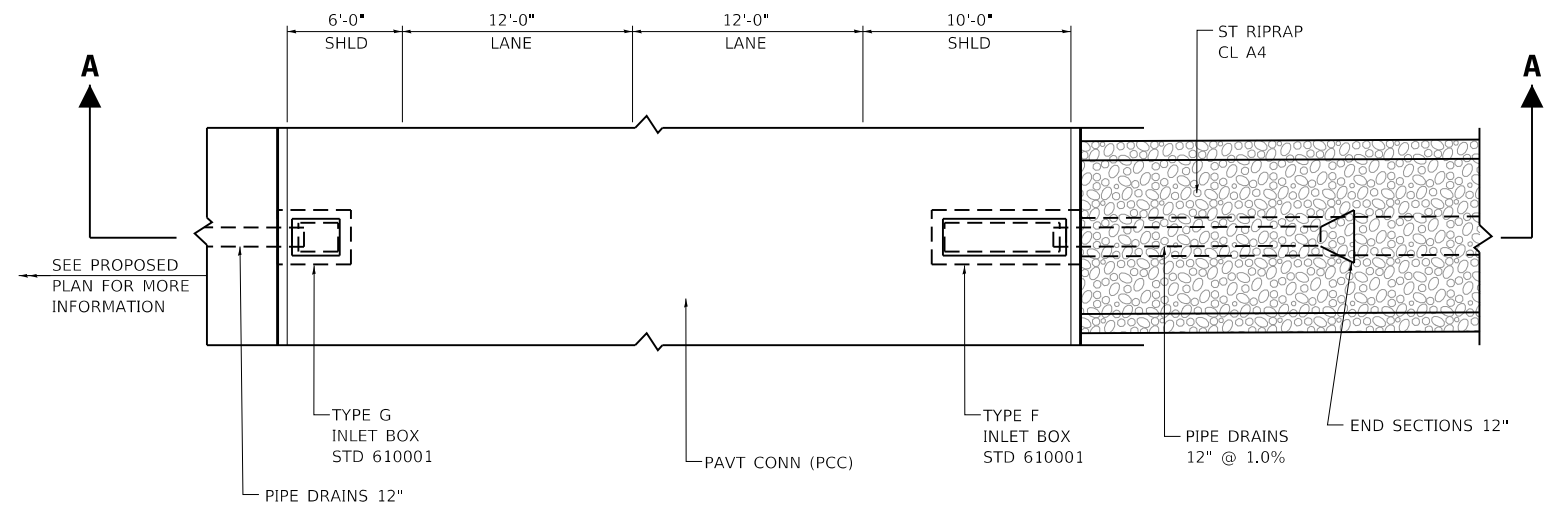
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3)I,P	SANGAMON	138	51
CONTRACT NO. 72H51				
ILLINOIS FED. AID PROJECT				



**SECTION A-A**  
EB LANES LOOKING EAST  
WB LANES LOOKING WEST



**SECTION B-B**



**PLAN**

**NOTE:**  
SEE STD 610001 FOR DETAILS NOT SHOWN.

USER NAME = gjameson	DESIGNED -	REVISED
FILE NAME = D672H51_sht_SWALE_DET	CHECKED -	REVISED
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PLOT DATE = 1/31/2020	CHECKED -	REVISED

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3)I,P	SANGAMON	138	52
CONTRACT NO. 72H51				
ILLINOIS FED. AID PROJECT				



**GENERAL NOTES**

- Fasteners shall be ASTM A325 Type I, mechanically galvanized bolts. Bolts 3/4" φ, holes 13/16" φ, unless otherwise noted.
- No field welding is permitted except as specified in the contract documents.
- 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 surfaces 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.  
As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Any cracks that cannot be removed by grinding 1/4" deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.
- If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.
- 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.
- Concrete sealer shall be applied to the designated areas of the abutments.
- The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
- The concrete for bridge decks finished according to Article 503.16(a) of the Standard Specifications shall be placed and compacted parallel to the skew in uniform increments along centerline of bridge. The machine used for finishing shall be set parallel to the skew for striking off and screeding the concrete.
- Slipforming of the parapets is not allowed.
- All new structural steel shall only be shop painted with inorganic zinc rich primer per AASHTO M300, Type I.
- Existing structural steel shall only be cleaned and painted as required by the Special Provisions for Cleaning and Painting Contact Surface Areas of Existing Steel Structures.
- Cost of cutting existing or proposed reinforcement to fit in field as detailed herein will not be measured for payment but is included in the cost of the associated work.

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.		49.1	49.1
Removal of Existing Concrete Deck No. 2	Each	2		2
Protective Shield	Sq. Yd.	1,484		1,484
Structure Excavation	Cu. Yd.		108	108
Concrete Structures	Cu. Yd.	111.5		111.5
Concrete Superstructure	Cu. Yd.	814.9		814.9
Concrete Superstructure (Approach Slab)	Cu. Yd.	272.6		272.6
Protective Coat	Sq. Yd.	3,034		3,034
Furnishing and Erecting Structural Steel	Pound	5,610		5,610
Stud Shear Connectors	Each	720		720
Reinforcement Bars, Epoxy Coated	Pound	339,110	18,220	357,330
Bar Splicers	Each	2,098	192	2,290
Name Plates	Each	2		2
Preformed Joint Strip Seal	Foot	244		244
Elastomeric Bearing Assembly, Type I	Each	24		24
Anchor Bolts, 5/8"	Each	80		80
Concrete Sealer	Sq. Ft.		1,313	1,313
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	1,550		1,550
Structural Repair of Concrete (Depth equal to or less than 5 inches)	Sq. Ft.		543	543
Temporary Sheet Piling	Sq. Ft.		1,292	1,292
Diamond Grinding (Bridge Section)	Sq. Yd.	2,926		2,926
Jacking and Cribbing, Location No. 2	L. Sum	1		1
Temporary Support System	L. Sum	1		1

**LOADING HS20-44 & ALT. (New Const.)**  
Allow 50#/sq. ft. for future wearing surface.

**DESIGN SPECIFICATIONS (New Const.)**  
2002 AASHTO Standard Specification for Highway Bridges

**DESIGN STRESSES**

**FIELD UNITS (New Construction)**

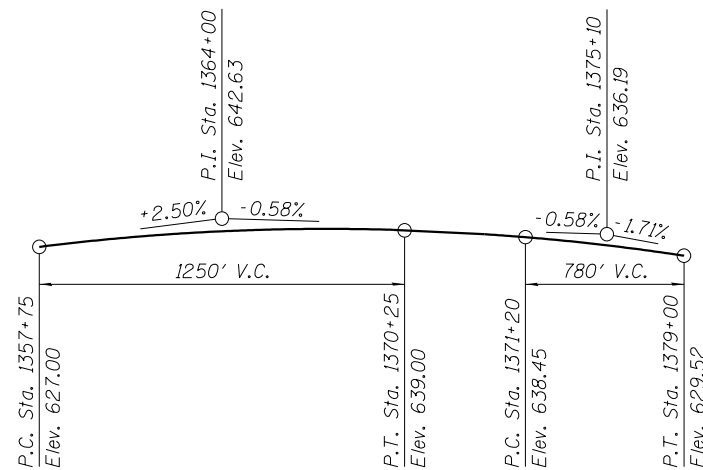
f'c = 3,500 psi  
fy = 60,000 psi (Reinforcement)  
fy = 36,000 psi (Structural Steel)

**FIELD UNITS (Exist. Construction)**

f'c = 3,500 psi (Substructure)  
fy = 40,000 psi (Reinforcement)  
fy = 36,000 psi (Structural Steel)

**SEISMIC DATA**

Seismic Performance Category (SPC) = A  
Horizontal Bedrock Acceleration Coefficient (A) = 0.048g  
Site Coefficient (S) = 1.2



**\* E.B. & W.B. PROFILE GRADE**

(Along median edge of pavement.)  
(The profile grade shows the final elevations after grinding.)



**WABASH AVE. PROFILE GRADE**

\* The profile grade data shown is only applicable to the E.B. portion of the project from station 1367+65.00 to 1371+30.70 and the W.B. portion of the project from station 1368+70.80 to 1372+36.60. See roadway plans for profile grade data outside these limits.

STATION 1370+00.78  
REBUILT 20 BY  
STATE OF ILLINOIS  
F.A.I. RT. 72 SEC. (84-9-3) I, P  
LOADING HS20-44 & ALT.  
STRUCTURE NO. 084-0148

STATION 1370+00.78  
REBUILT 20 BY  
STATE OF ILLINOIS  
F.A.I. RT. 72 SEC. (84-9-3) I, P  
LOADING HS20-44 & ALT.  
STRUCTURE NO. 084-0149

**NAME PLATE**

See Std. 515001  
Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.

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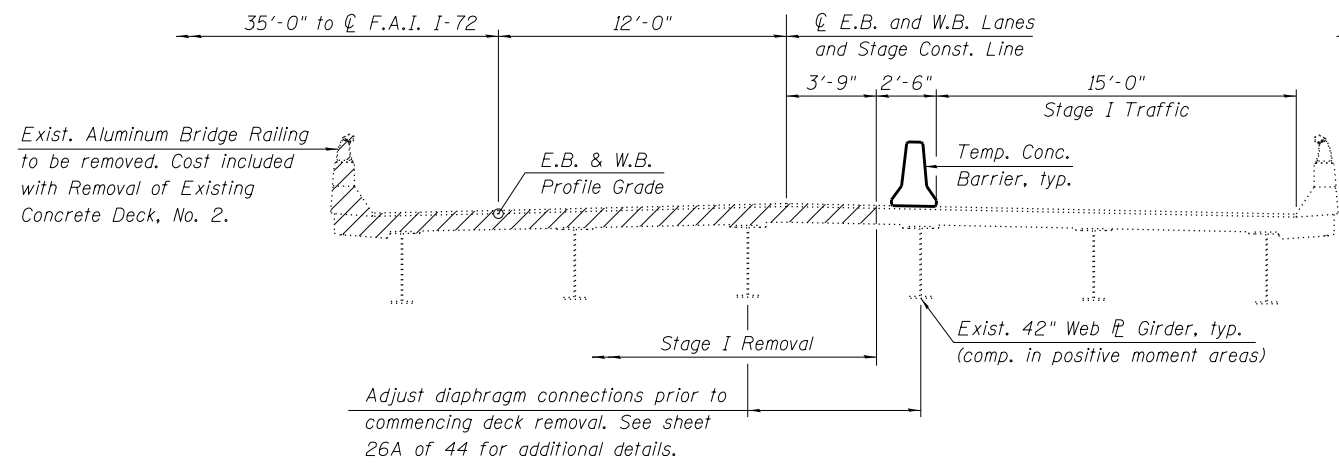
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	PLOT DATE = 1/30/2020	CHECKED - TJZ	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GENERAL DATA**  
**STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)**

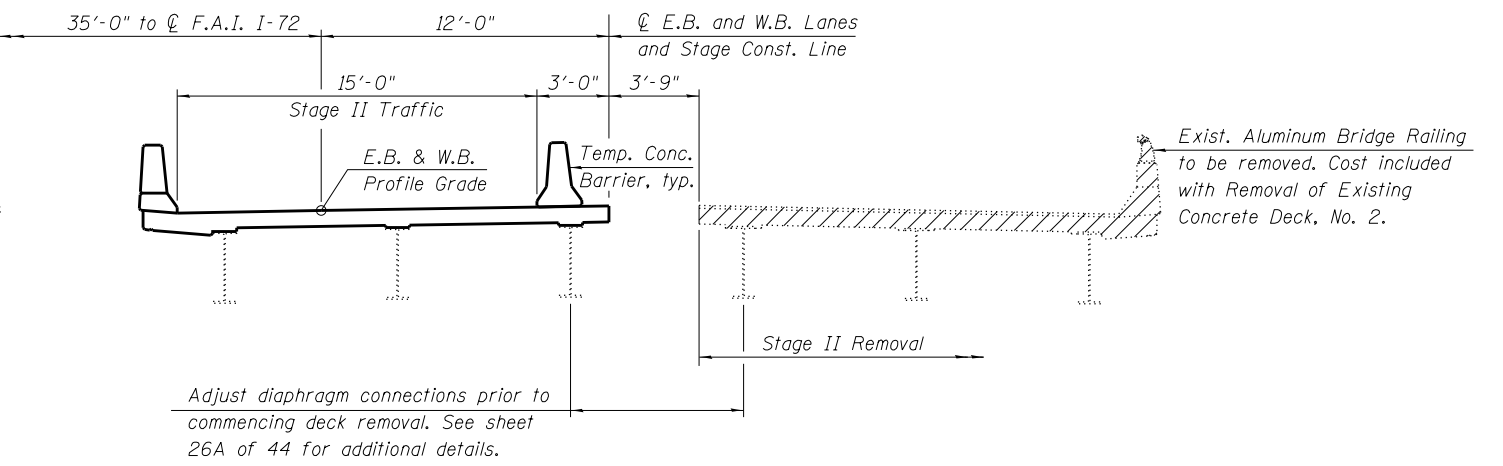
SHEET NO. 2 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	54
			CONTRACT NO. 72H51	
ILLINOIS FED. AID PROJECT				



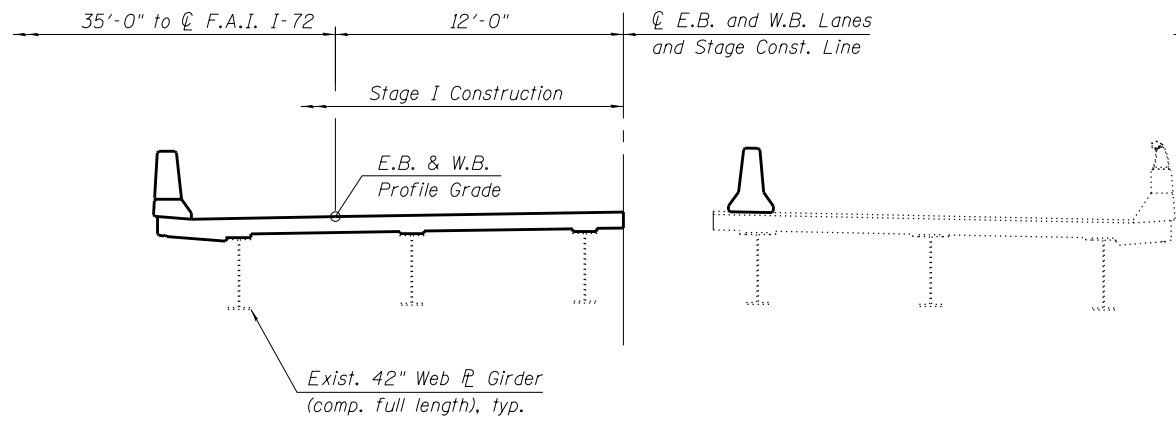
**STAGE I REMOVAL**

Adjust diaphragm connections prior to commencing deck removal. See sheet 26A of 44 for additional details.

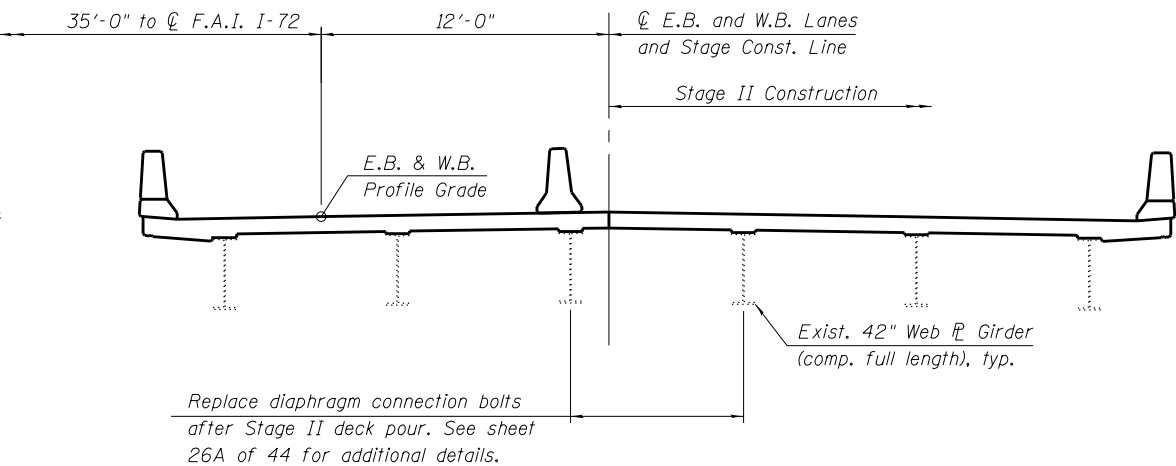


**STAGE II REMOVAL**

Adjust diaphragm connections prior to commencing deck removal. See sheet 26A of 44 for additional details.



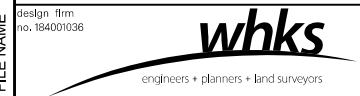
**STAGE I CONSTRUCTION**



**STAGE II CONSTRUCTION**

- Notes:
1. Hatched area indicates Removal of Existing Concrete Deck No. 2 with the unit of measurement of each including both the bridge and vaulted spans.
  2. For details of Temporary Concrete Barrier, see sheet 6 of 44.
  3. For quantity of Temporary Concrete Barrier, see Roadway Plans.
  4. Staging details for W.B. Bridge (S.N. 084-0148) are looking west and for E.B. Bridge (S.N. 084-0149) are looking east.

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USER NAME = dheberling	DESIGNED - BRD	REVISED
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PLOT DATE = 1/30/2020	CHECKED - TJZ	REVISED

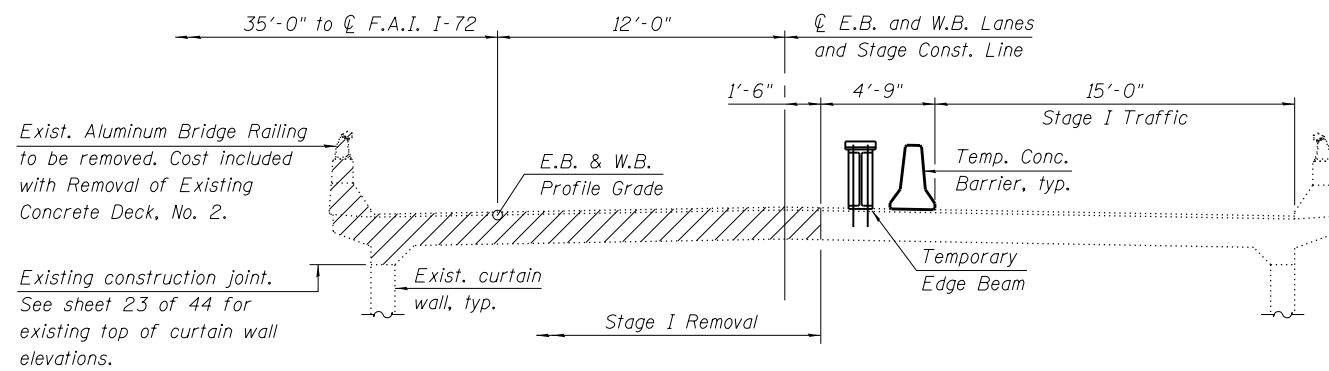
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**STAGE CONSTRUCTION DETAILS - BRIDGE SPANS  
STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)**

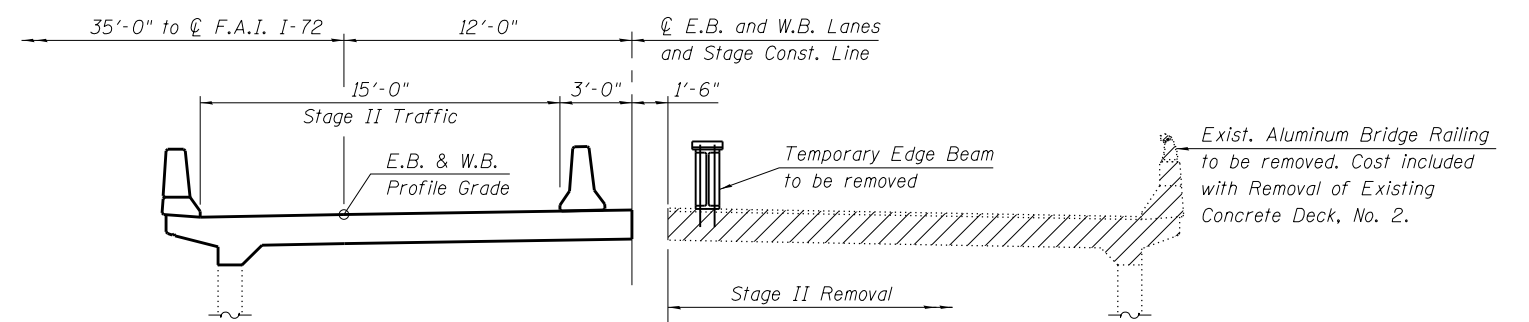
SHEET NO. 3 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	55
CONTRACT NO. 72H51				

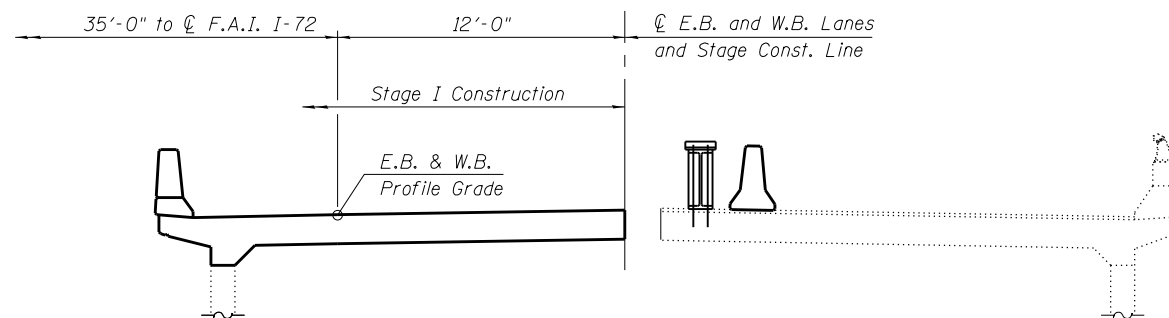
ILLINOIS FED. AID PROJECT



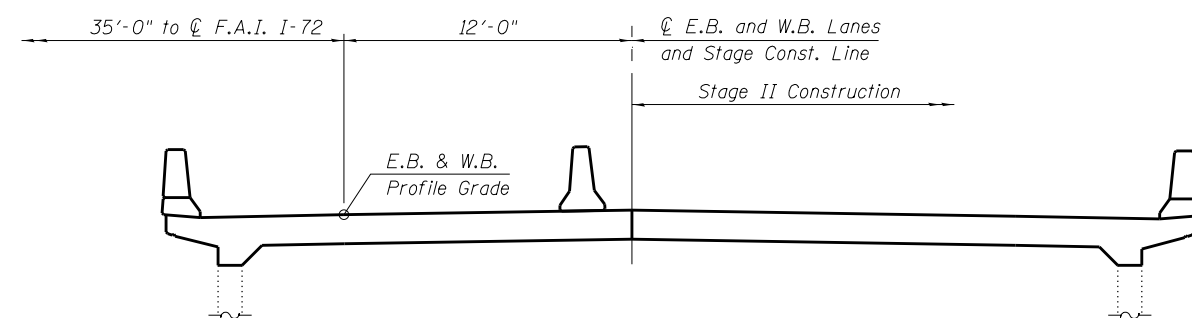
**STAGE I REMOVAL**



**STAGE II REMOVAL**



**STAGE I CONSTRUCTION**



**STAGE II CONSTRUCTION**

**Notes:**

1. Hatched area indicates Removal of Existing Concrete Deck No. 2 with the unit of measurement of each including both the bridge and vaulted spans.
2. For details of Temporary Concrete Barrier, see sheet 6 of 44.
3. For quantity of Temporary Concrete Barrier, see Roadway Plans.
4. For details of Temporary Edge Beam, see sheet 5 of 44.
5. Staging details for W.B. Bridge (S.N. 084-0148) are looking west and for E.B. Bridge (S.N. 084-0149) are looking east.

FILE NAME = L:\Jobs\IDOT\_D-6\7818 PTB 167-027\7818.03\CADD\CADD Sheets\0840148-0149-72H51\_12-9-19.dgn

Design firm  
no. 184001036



USER NAME = dheberling	DESIGNED - BRD	REVISED
MODEL = 0840148_49-72B54-004	CHECKED - TJZ	REVISED
PLOT SCALE = 0:2" / in.	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - TJZ	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

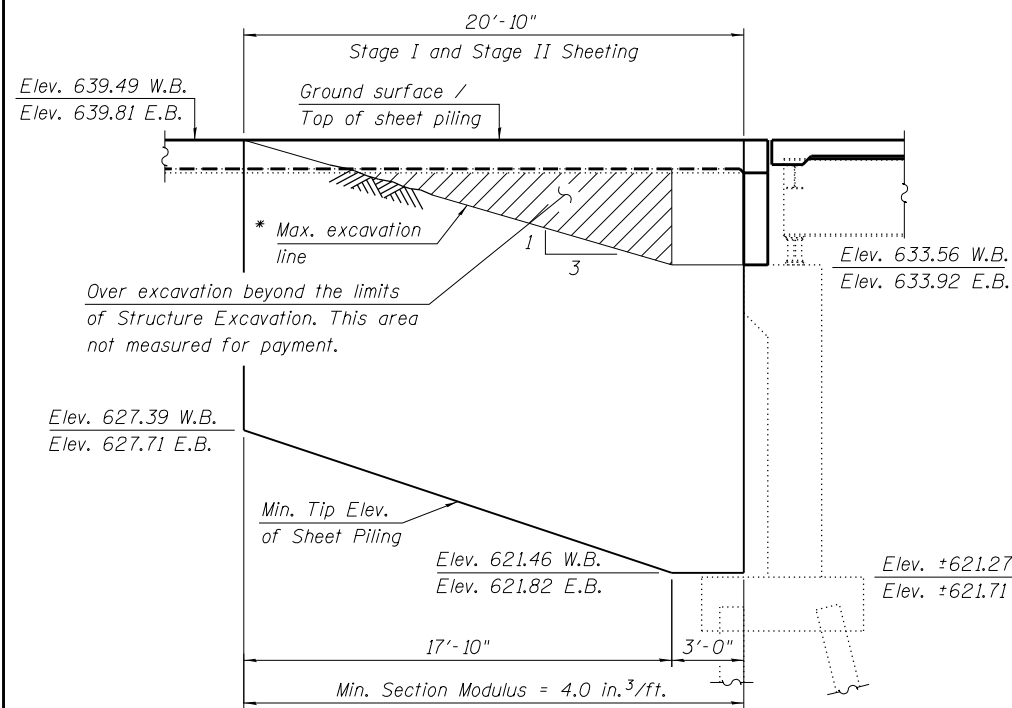
**STAGE CONSTRUCTION DETAILS - VAULTED SPANS  
STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)**

SHEET NO. 4 OF 44 SHEETS

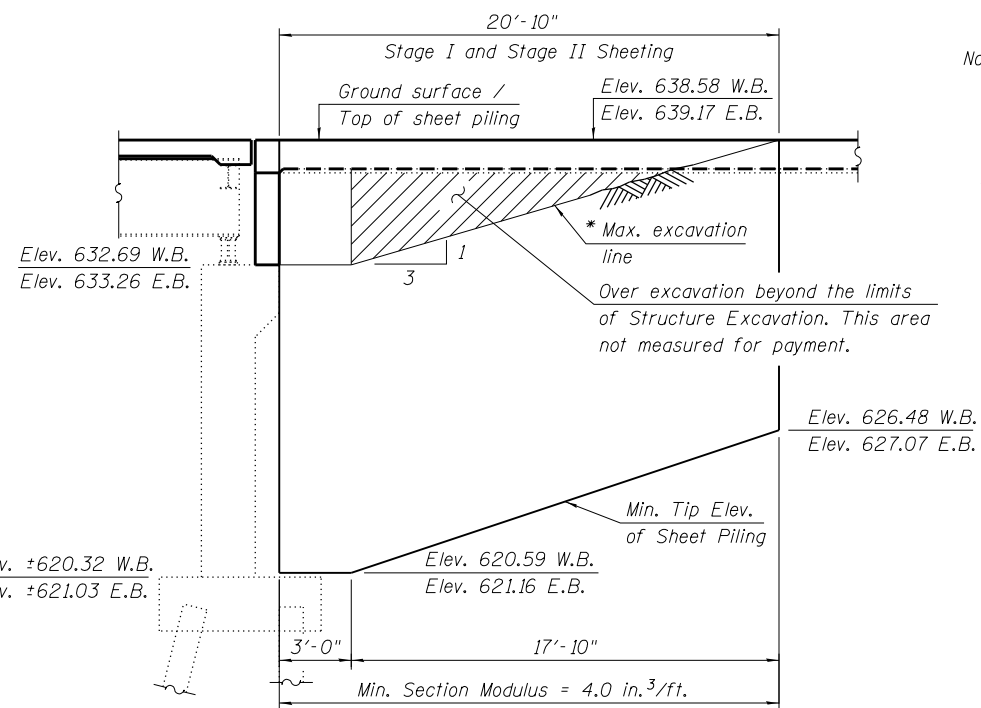
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	56
				CONTRACT NO. 72H51

ILLINOIS FED. AID PROJECT





**TEMPORARY SHEET PILING AT ABUTMENT #1**  
(Dimensions are along  $\perp$  roadway.)



**TEMPORARY SHEET PILING AT ABUTMENT #2**  
(Dimensions are along  $\perp$  roadway.)

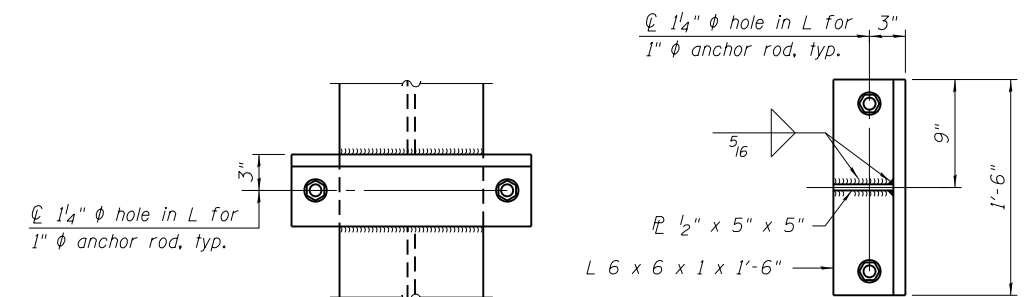
\* All excavation behind the abutments shall be backfilled according to Article 502.10 with sand conforming to Article 1003.01 of the Standard Specifications and shall include required shaping to the profile of the bottom of the vaulted slab. This work will not be measured for payment but shall be included in the cost of the associated work.

Notes:

1. If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.
2. The temporary sheet piling design assumes soil properties with a minimum  $N = 4$  bpf within the embedment depth. Contractor shall field verify soil properties within the embedment depth of the sheet piling. The Bureau of Bridge and Structures shall be contacted for further disposition if the soil properties are less than the minimum design assumptions. Cost included with Temporary Sheet Piling.
3. See sheets 31 and 32 of 44 for additional structure excavation details.

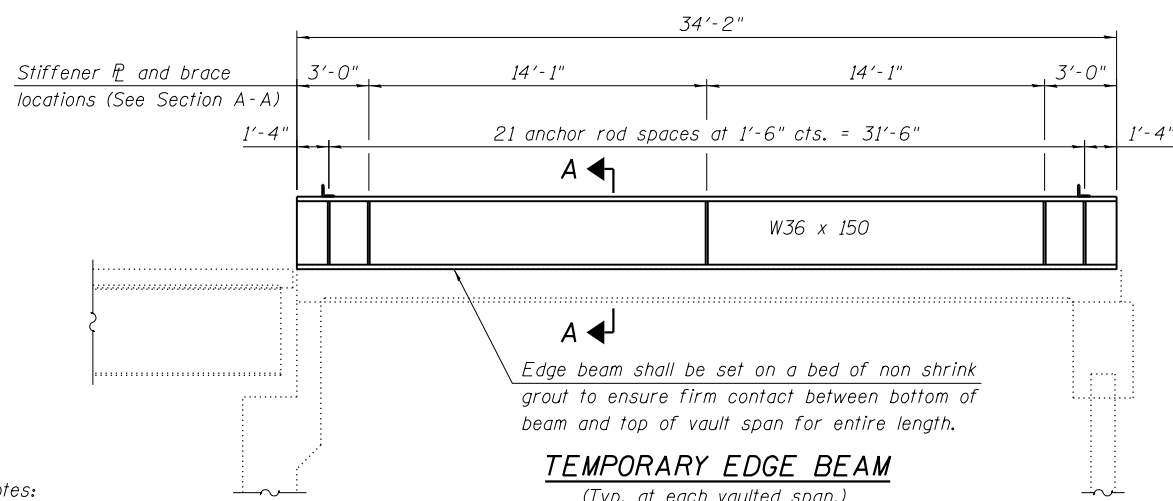
**BILL OF MATERIAL**

Item	Unit	Total
Temporary Sheet Piling	Sq. Ft.	1,292
Temporary Support System	L. Sum	1
Structure Excavation	Cu. Yd.	108



**SECTION B-B**

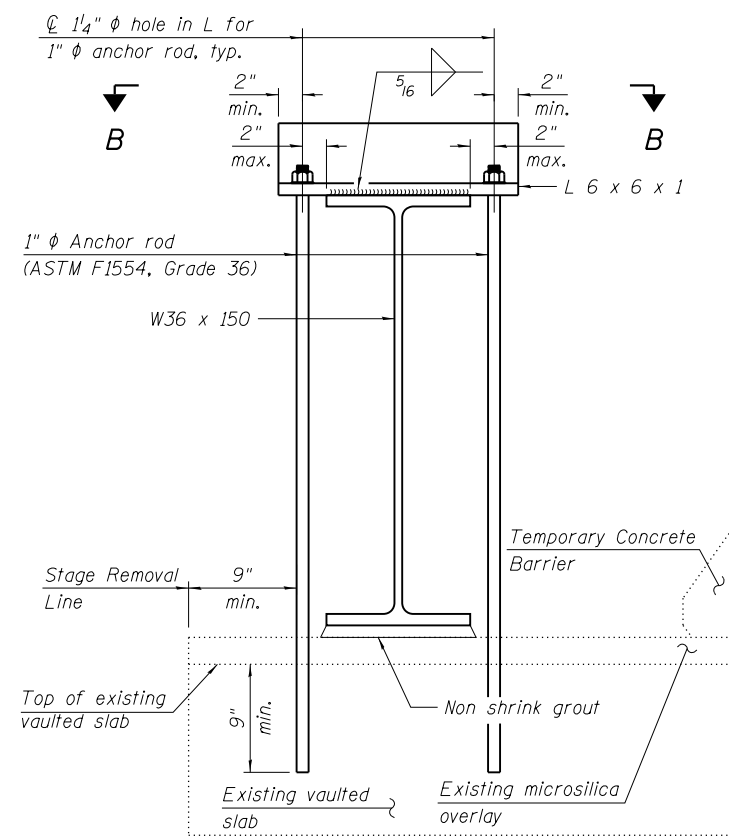
**SECTION C-C**



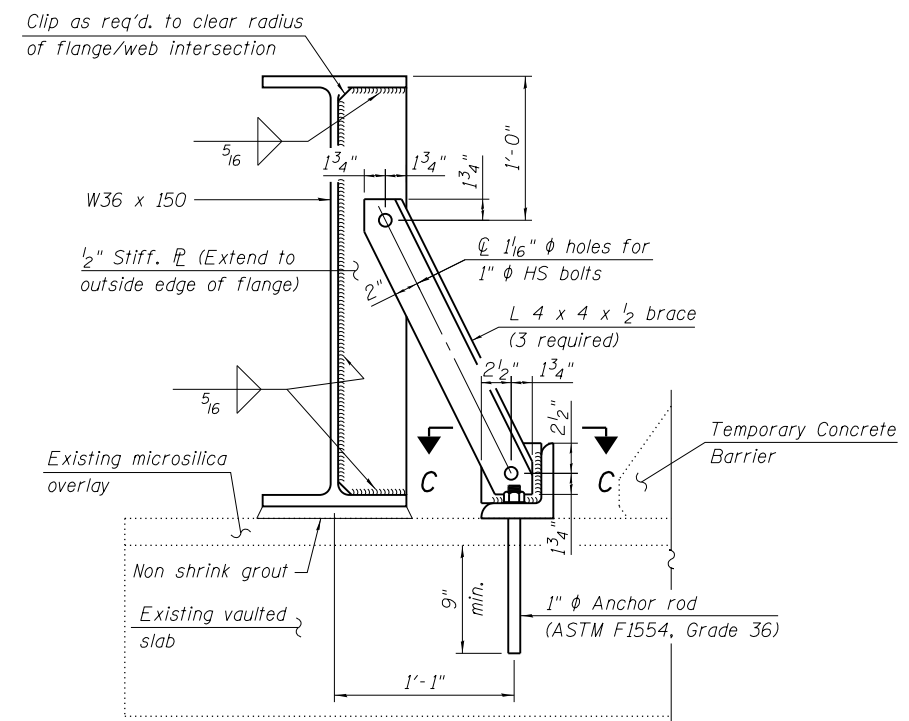
**TEMPORARY EDGE BEAM**  
(Typ. at each vaulted span.)

Notes:

1. The temporary edge beam, plates, and angles shall conform to the minimum material requirements for AASHTO M270 Gr. 36.
2. Anchor rods shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor rods may be used in lieu of ASTM F1554.
3. Drill and grout anchor rods in existing concrete vaulted slab according to Article 584 of the Standard Specifications. In addition, the chemical adhesive system chosen by the Contractor shall be capable of developing an allowable sustained tensile capacity of 12.5 kips per anchor rod for the configuration shown and/or manufacturer's installation specifications. Cost included with Temporary Support System.
4. One hardened washer shall be required for each oversized hole in angle. All connections shall be snug tight.
5. Non-shrink grout shall be according to Section 1024 of the Standard Specifications and achieve a minimum comprehensive strength of 3500 psi prior to saw cutting the stage construction line.
6. All costs associated with temporary edge beam, plates, angles, non-shrink grout, and anchor rods is included with Temporary Support System. See Special Provisions.



**SECTION A-A**  
(At anchor rod bracket)



**SECTION A-A**  
(At brace)

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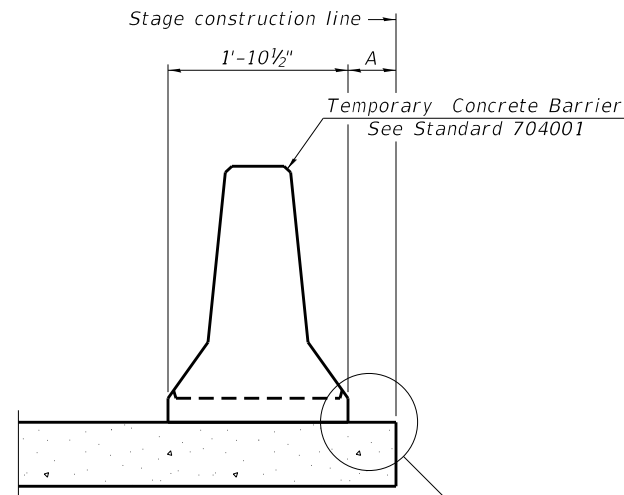
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PLOT DATE = 1/30/2020	CHECKED - TJZ	REVISOR	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY SHEET PILING AND EDGE BEAM DETAILS  
STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)**

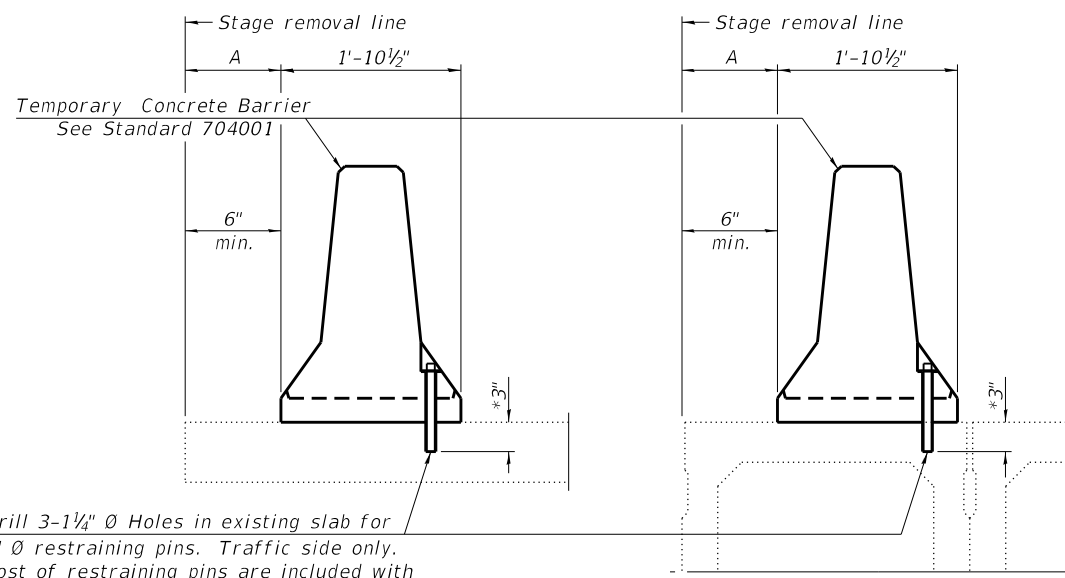
SHEET NO. 5 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	57
CONTRACT NO. 72H51				
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



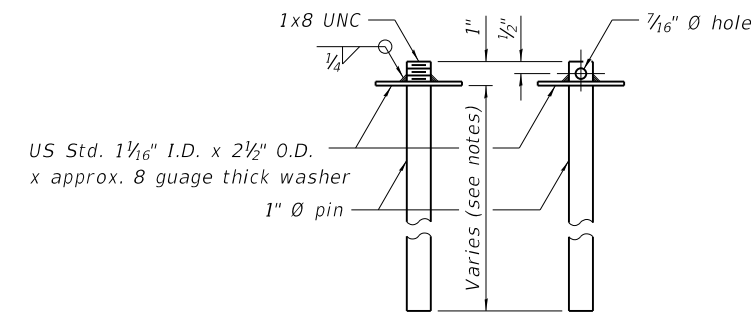
Drill 3-1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

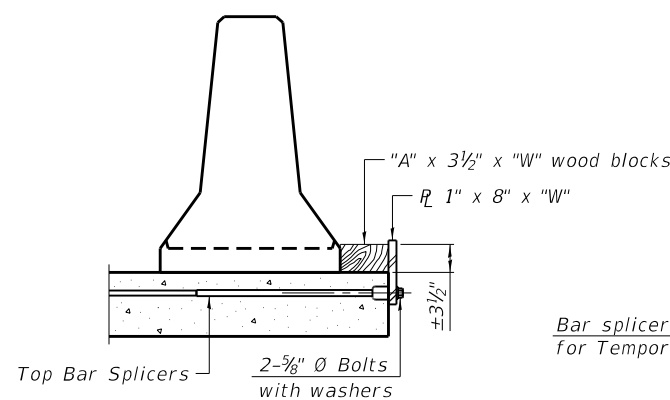
\* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

EXISTING DECK BEAM

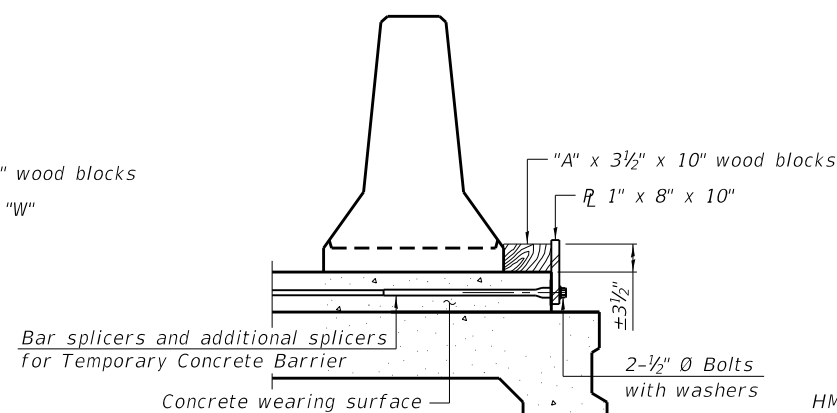
SECTIONS THRU SLAB OR DECK BEAM



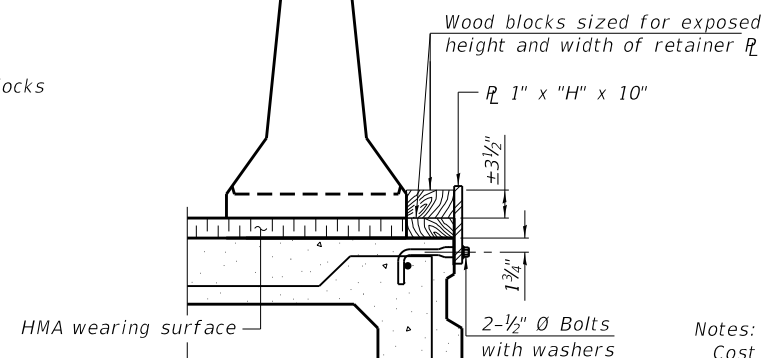
RESTRAINING PIN



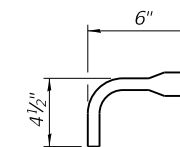
DETAIL I



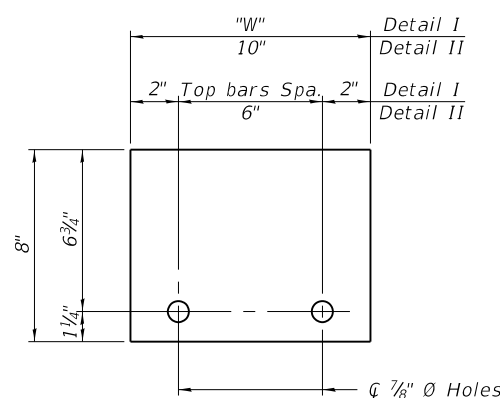
DETAIL II



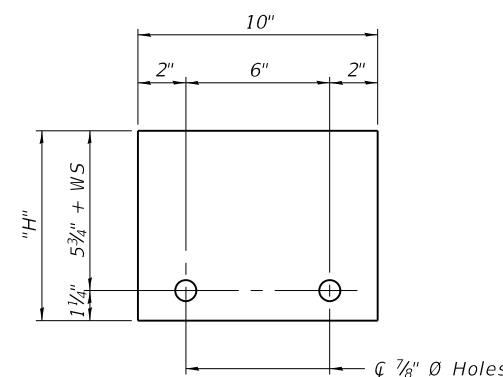
DETAIL III



BAR SPLICER FOR #4 BAR - DETAIL III



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



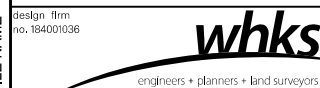
STEEL RETAINER R 1" x "H" x 10"  
(Detail III)

Notes:  
 Cost of retainer assembly is included with Temporary Concrete Barrier.  
 A retainer assembly shall be located at the approximate  $\bar{c}$  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.

FILE NAME = L:\Jobs\DOT\_D-617818 PTB 167-02717818.03\CADD\CADD Sheets\0840148-0149-72H51\_12-9-19.dgn

R-27 2-17-2017



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PLOT SCALE = 0:2" = 1"	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - T.JZ	REVISED

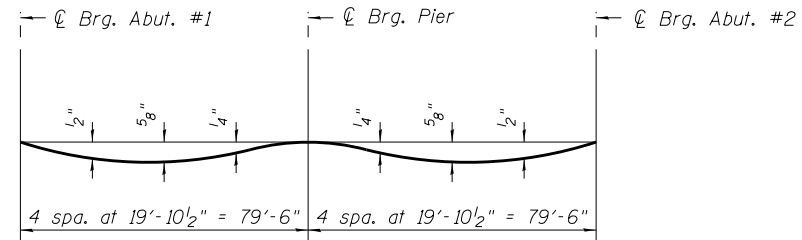
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION  
STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)

SHEET NO. 6 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	58
				CONTRACT NO. 72H51

ILLINOIS FED. AID PROJECT

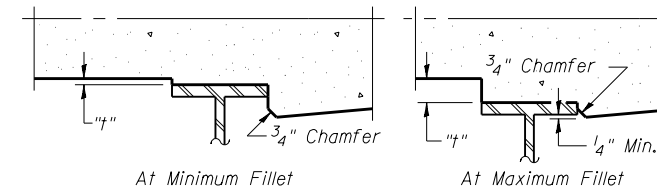


**DEAD LOAD DEFLECTION DIAGRAM**

(Includes weight of concrete only.)

Note:

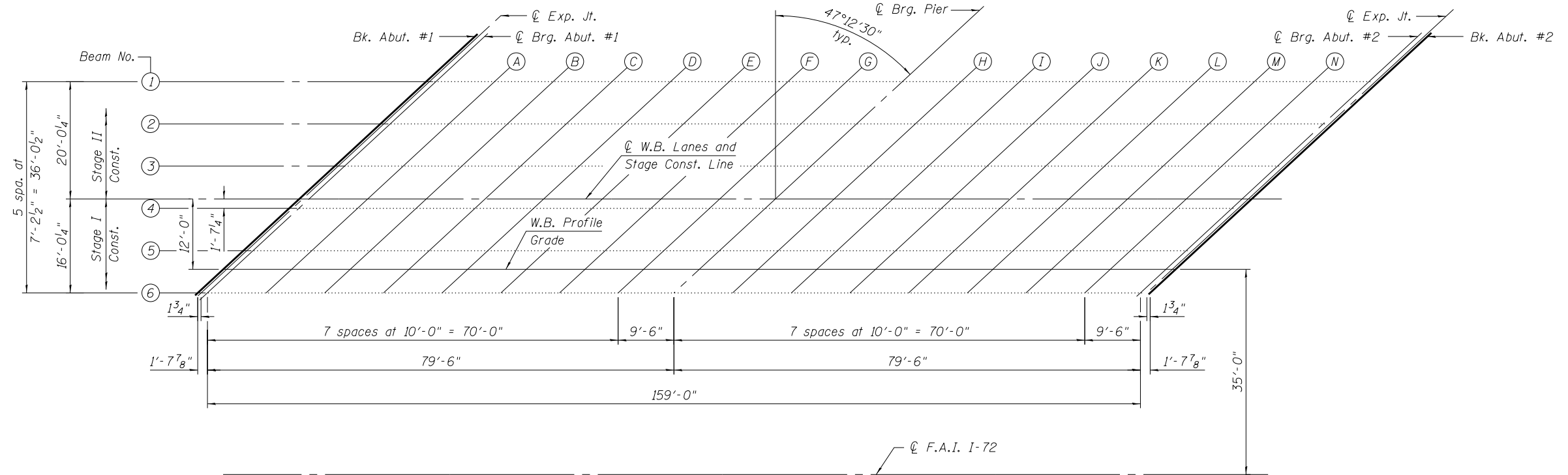
The above deflections are not to be used in the field if the Engineer is working from the grade elevations adjusted for dead load deflections and grinding as shown on sheets 8 and 9 of 44.



To determine "t": Elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection and Grinding" shown on sheets 8 and 9 of 44, minus 8/4" slab thickness, equals the fillet heights "t" above top flange of beams.

The slab is to be ground after curing to achieve smoothness, but the slab is not to be ground to elevations below the "Theoretical Grade Elevations" shown on sheets 8 and 9 of 44. For grinding the deck, see Special Provisions.

**FILLET HEIGHTS**



**W.B. PLAN**

FILE NAME = L:\Jobs\IDOT\_D-6\7818 PTB 167-02\7818.03\CADD\CADD Sheets\0840148-0149-72H51\_12-9-19.dgn

Design firm  
no. 184001036



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PLOT SCALE = 0:2" = 1" / in.	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - TJZ	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

W.B. TOP OF SLAB ELEVATIONS LOCATION PLAN  
STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)

SHEET NO. 7 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	59
CONTRACT NO. 72H51				

ILLINOIS FED. AID PROJECT

(Sheet 1 of 3)

**GIRDER 1**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. Abut. #1	1369+92.02	-32.02	639.01	639.03
⊕ Expansion Joint	1369+92.17	-32.02	639.01	639.03
⊕ Brg. Abut. #1	1369+93.68	-32.02	639.00	639.02
A	1370+03.68	-32.02	638.95	639.00
B	1370+13.68	-32.02	638.90	638.96
C	1370+23.68	-32.02	638.84	638.91
D	1370+33.68	-32.02	638.78	638.85
E	1370+43.68	-32.02	638.72	638.78
F	1370+53.68	-32.02	638.67	638.71
G	1370+63.68	-32.02	638.61	638.63
⊕ Brg. Pier	1370+73.18	-32.02	638.55	638.57
H	1370+83.18	-32.02	638.50	638.52
I	1370+93.18	-32.02	638.44	638.48
J	1371+03.18	-32.02	638.38	638.44
K	1371+13.18	-32.02	638.32	638.39
L	1371+23.18	-32.02	638.26	638.33
M	1371+33.18	-32.02	638.21	638.27
N	1371+43.18	-32.02	638.14	638.19
⊕ Brg. Abut. #2	1371+52.68	-32.02	638.09	638.11
⊕ Expansion Joint	1371+54.19	-32.02	638.08	638.10
Bk. Abut. #2	1371+54.33	-32.02	638.08	638.10

**GIRDER 2**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. Abut. #1	1369+84.23	-24.81	639.20	639.22
⊕ Expansion Joint	1369+84.38	-24.81	639.20	639.22
⊕ Brg. Abut. #1	1369+85.89	-24.81	639.19	639.21
A	1369+95.89	-24.81	639.14	639.19
B	1370+05.89	-24.81	639.09	639.15
C	1370+15.89	-24.81	639.03	639.11
D	1370+25.89	-24.81	638.98	639.05
E	1370+35.89	-24.81	638.92	638.98
F	1370+45.89	-24.81	638.86	638.90
G	1370+55.89	-24.81	638.80	638.83
⊕ Brg. Pier	1370+65.39	-24.81	638.75	638.77
H	1370+75.39	-24.81	638.69	638.72
I	1370+85.39	-24.81	638.63	638.67
J	1370+95.39	-24.81	638.57	638.63
K	1371+05.39	-24.81	638.52	638.58
L	1371+15.39	-24.81	638.46	638.53
M	1371+25.39	-24.81	638.40	638.46
N	1371+35.39	-24.81	638.34	638.39
⊕ Brg. Abut. #2	1371+44.89	-24.81	638.28	638.30
⊕ Expansion Joint	1371+46.40	-24.81	638.27	638.29
Bk. Abut. #2	1371+46.55	-24.81	638.27	638.29

**GIRDER 3**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. Abut. #1	1369+76.45	-17.60	639.35	639.37
⊕ Expansion Joint	1369+76.59	-17.60	639.35	639.37
⊕ Brg. Abut. #1	1369+78.10	-17.60	639.35	639.37
A	1369+88.10	-17.60	639.30	639.34
B	1369+98.10	-17.60	639.25	639.31
C	1370+08.10	-17.60	639.19	639.27
D	1370+18.10	-17.60	639.14	639.21
E	1370+28.10	-17.60	639.08	639.14
F	1370+38.10	-17.60	639.02	639.06
G	1370+48.10	-17.60	638.97	638.99
⊕ Brg. Pier	1370+57.60	-17.60	638.91	638.93
H	1370+67.60	-17.60	638.85	638.88
I	1370+77.60	-17.60	638.79	638.84
J	1370+87.60	-17.60	638.74	638.79
K	1370+97.60	-17.60	638.68	638.75
L	1371+07.60	-17.60	638.62	638.69
M	1371+17.60	-17.60	638.56	638.62
N	1371+27.60	-17.60	638.51	638.55
⊕ Brg. Abut. #2	1371+37.10	-17.60	638.45	638.47
⊕ Expansion Joint	1371+38.61	-17.60	638.44	638.46
Bk. Abut. #2	1371+38.76	-17.60	638.44	638.46

**⊕ W.B. LANES AND STAGE CONSTRUCTION LINE**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. Abut. #1	1369+70.39	-12.00	639.47	639.49
⊕ Expansion Joint	1369+70.54	-12.00	639.47	639.49
⊕ Brg. Abut. #1	1369+72.05	-12.00	639.46	639.48
A	1369+82.05	-12.00	639.41	639.46
B	1369+92.05	-12.00	639.37	639.43
C	1370+02.05	-12.00	639.31	639.39
D	1370+12.05	-12.00	639.26	639.33
E	1370+22.05	-12.00	639.20	639.26
F	1370+32.05	-12.00	639.15	639.19
G	1370+42.05	-12.00	639.09	639.12
⊕ Brg. Pier	1370+51.55	-12.00	639.03	639.05
H	1370+61.55	-12.00	638.98	639.00
I	1370+71.55	-12.00	638.92	638.96
J	1370+81.55	-12.00	638.86	638.92
K	1370+91.55	-12.00	638.80	638.87
L	1371+01.55	-12.00	638.74	638.81
M	1371+11.55	-12.00	638.68	638.75
N	1371+21.55	-12.00	638.63	638.67
⊕ Brg. Abut. #2	1371+31.05	-12.00	638.57	638.59
⊕ Expansion Joint	1371+32.56	-12.00	638.56	638.58
Bk. Abut. #2	1371+32.71	-12.00	638.56	638.58

(Sheet 2 of 3)

FILE NAME = L:\Jobs\DOT\_D-6\7818 PTB 167-027\7818.03\CADD\CADD Sheets\0840148-0149-72H51\_12-9-19.dgn

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**W.B. TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)**

SHEET NO. 8 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	60
CONTRACT NO. 72H51				

ILLINOIS FED. AID PROJECT

**GIRDER 4**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. Abut. #1	1369+68.66	-10.40	639.45	639.47
⊕ Expansion Joint	1369+68.81	-10.40	639.45	639.47
⊕ Brg. Abut. #1	1369+70.32	-10.40	639.44	639.46
A	1369+80.32	-10.40	639.40	639.44
B	1369+90.32	-10.40	639.35	639.41
C	1370+00.32	-10.40	639.30	639.37
D	1370+10.32	-10.40	639.25	639.31
E	1370+20.32	-10.40	639.19	639.25
F	1370+30.32	-10.40	639.13	639.17
G	1370+40.32	-10.40	639.07	639.10
⊕ Brg. Pier	1370+49.82	-10.40	639.02	639.04
H	1370+59.82	-10.40	638.96	638.99
I	1370+69.82	-10.40	638.90	638.94
J	1370+79.82	-10.40	638.84	638.90
K	1370+89.82	-10.40	638.79	638.85
L	1370+99.82	-10.40	638.73	638.80
M	1371+09.82	-10.40	638.67	638.73
N	1371+19.82	-10.40	638.61	638.66
⊕ Brg. Abut. #2	1371+29.32	-10.40	638.56	638.58
⊕ Expansion Joint	1371+30.83	-10.40	638.55	638.57
Bk. Abut. #2	1371+30.97	-10.40	638.55	638.57

**GIRDER 5**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. Abut. #1	1369+60.87	-3.19	639.37	639.39
⊕ Expansion Joint	1369+61.02	-3.19	639.37	639.39
⊕ Brg. Abut. #1	1369+62.53	-3.19	639.36	639.38
A	1369+72.53	-3.19	639.32	639.37
B	1369+82.53	-3.19	639.27	639.34
C	1369+92.53	-3.19	639.23	639.30
D	1370+02.53	-3.19	639.17	639.24
E	1370+12.53	-3.19	639.12	639.18
F	1370+22.53	-3.19	639.06	639.10
G	1370+32.53	-3.19	639.01	639.03
⊕ Brg. Pier	1370+42.03	-3.19	638.95	638.97
H	1370+52.03	-3.19	638.89	638.92
I	1370+62.03	-3.19	638.83	638.88
J	1370+72.03	-3.19	638.78	638.83
K	1370+82.03	-3.19	638.72	638.79
L	1370+92.03	-3.19	638.66	638.73
M	1371+02.03	-3.19	638.60	638.66
N	1371+12.03	-3.19	638.54	638.59
⊕ Brg. Abut. #2	1371+21.53	-3.19	638.49	638.51
⊕ Expansion Joint	1371+23.04	-3.19	638.48	638.50
Bk. Abut. #2	1371+23.19	-3.19	638.48	638.50

**W.B. PROFILE GRADE LINE**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. Abut. #1	1369+57.43	0.00	639.34	639.36
⊕ Expansion Joint	1369+57.58	0.00	639.34	639.36
⊕ Brg. Abut. #1	1369+59.09	0.00	639.33	639.35
A	1369+69.09	0.00	639.29	639.33
B	1369+79.09	0.00	639.24	639.30
C	1369+89.09	0.00	639.19	639.26
D	1369+99.09	0.00	639.14	639.21
E	1370+09.09	0.00	639.09	639.15
F	1370+19.09	0.00	639.03	639.07
G	1370+29.09	0.00	638.98	639.00
⊕ Brg. Pier	1370+38.59	0.00	638.92	638.94
H	1370+48.59	0.00	638.86	638.89
I	1370+58.59	0.00	638.80	638.85
J	1370+68.59	0.00	638.75	638.80
K	1370+78.59	0.00	638.69	638.76
L	1370+88.59	0.00	638.63	638.70
M	1370+98.59	0.00	638.57	638.64
N	1371+08.59	0.00	638.51	638.56
⊕ Brg. Abut. #2	1371+18.09	0.00	638.46	638.48
⊕ Expansion Joint	1371+19.60	0.00	638.45	638.47
Bk. Abut. #2	1371+19.75	0.00	638.45	638.47

**GIRDER 6**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. Abut. #1	1369+53.09	4.02	639.27	639.29
⊕ Expansion Joint	1369+53.23	4.02	639.27	639.29
⊕ Brg. Abut. #1	1369+54.74	4.02	639.26	639.28
A	1369+64.74	4.02	639.22	639.27
B	1369+74.74	4.02	639.18	639.24
C	1369+84.74	4.02	639.13	639.20
D	1369+94.74	4.02	639.08	639.15
E	1370+04.74	4.02	639.03	639.08
F	1370+14.74	4.02	638.97	639.01
G	1370+24.74	4.02	638.92	638.94
⊕ Brg. Pier	1370+34.24	4.02	638.86	638.88
H	1370+44.24	4.02	638.80	638.83
I	1370+54.24	4.02	638.75	638.79
J	1370+64.24	4.02	638.69	638.74
K	1370+74.24	4.02	638.63	638.70
L	1370+84.24	4.02	638.57	638.64
M	1370+94.24	4.02	638.51	638.58
N	1371+04.24	4.02	638.46	638.50
⊕ Brg. Abut. #2	1371+13.74	4.02	638.40	638.42
⊕ Expansion Joint	1371+15.25	4.02	638.39	638.41
Bk. Abut. #2	1371+15.40	4.02	638.39	638.41

(Sheet 3 of 3)

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PLOT DATE = 1/30/2020	CHECKED - TJZ	REVISED

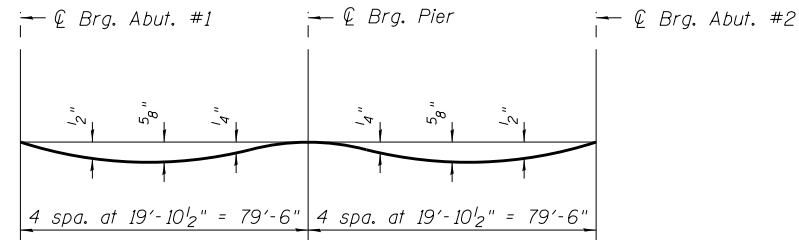
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**W.B. TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)**

SHEET NO. 9 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	61
CONTRACT NO. 72H51				

ILLINOIS FED. AID PROJECT

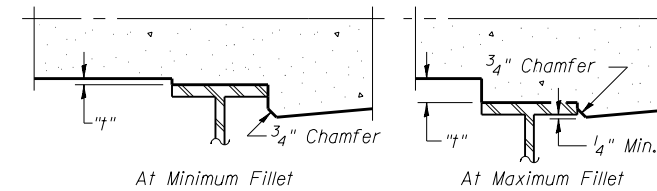


**DEAD LOAD DEFLECTION DIAGRAM**

(Includes weight of concrete only.)

Note:

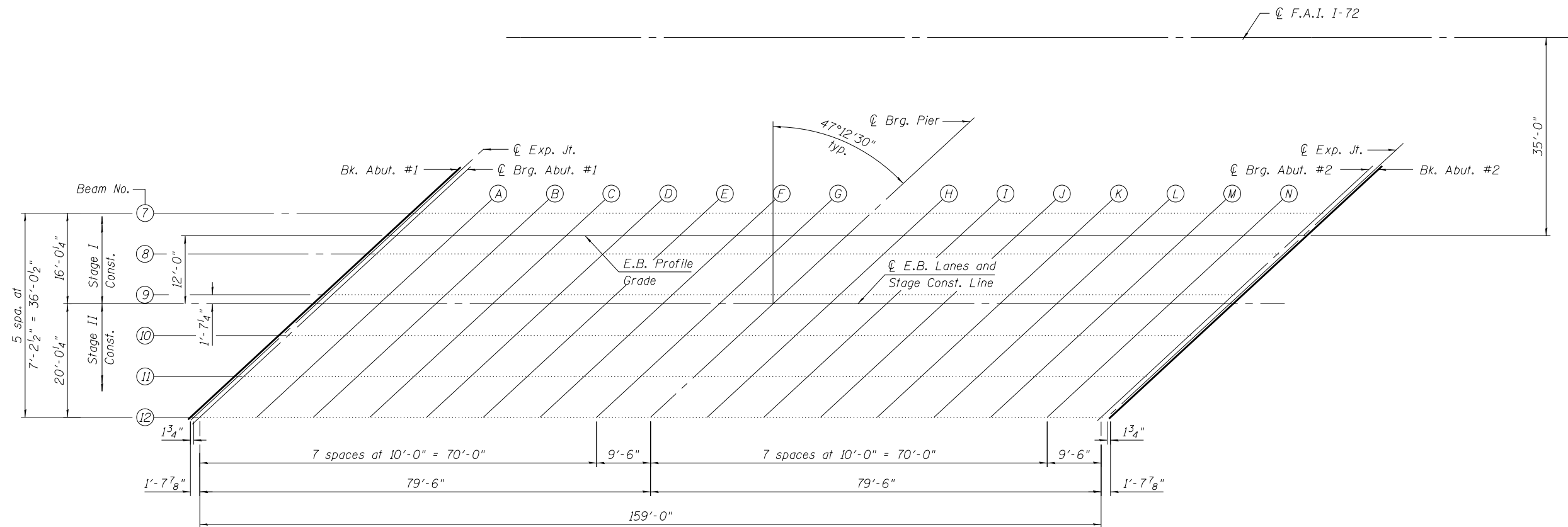
The above deflections are not to be used in the field if the Engineer is working from the grade elevations adjusted for dead load deflections and grinding as shown on sheets 11 and 12 of 44.



To determine "t": Elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection and Grinding" shown on sheets 11 and 12 of 44, minus 8 1/4" slab thickness, equals the fillet heights "t" above top flange of beams.

The slab is to be ground after curing to achieve smoothness, but the slab is not to be ground to elevations below the "Theoretical Grade Elevations" shown on sheets 11 and 12 of 44. For grinding the deck, see Special Provisions.

**FILLET HEIGHTS**



**E.B. PLAN**

FILE NAME = L:\Jobs\IDOT\_D-6\7818 PTB 167-02\71818.03\CADD\CADD Sheets\0840148-01\49-72H51\_12-9-19.dgn

Design firm  
no. 184001036



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PLOT DATE = 1/30/2020	CHECKED - TJZ	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

(Sheet 1 of 3)

E.B. TOP OF SLAB ELEVATIONS LOCATION PLAN  
STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)

SHEET NO. 10 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	62
CONTRACT NO. 72H51				

ILLINOIS FED. AID PROJECT

**GIRDER 7**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. Abut. #1	1368+86.16	-4.02	639.49	639.51
☉ Expansion Joint	1368+86.30	-4.02	639.48	639.51
☉ Brg. Abut. #1	1368+87.82	-4.02	639.48	639.50
A	1368+97.82	-4.02	639.46	639.50
B	1369+07.82	-4.02	639.43	639.49
C	1369+17.82	-4.02	639.40	639.47
D	1369+27.82	-4.02	639.36	639.43
E	1369+37.82	-4.02	639.33	639.39
F	1369+47.82	-4.02	639.29	639.33
G	1369+57.82	-4.02	639.25	639.28
☉ Brg. Pier	1369+67.32	-4.02	639.21	639.23
H	1369+77.32	-4.02	639.17	639.19
I	1369+87.32	-4.02	639.12	639.16
J	1369+97.32	-4.02	639.07	639.13
K	1370+07.32	-4.02	639.02	639.08
L	1370+17.32	-4.02	638.96	639.03
M	1370+27.32	-4.02	638.90	638.97
N	1370+37.32	-4.02	638.84	638.89
☉ Brg. Abut. #2	1370+46.82	-4.02	638.79	638.81
☉ Expansion Joint	1370+48.33	-4.02	638.78	638.80
Bk. Abut. #2	1370+48.48	-4.02	638.78	638.80

**E.B. PROFILE GRADE LINE**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. Abut. #1	1368+81.81	0.00	639.58	639.60
☉ Expansion Joint	1368+81.96	0.00	639.58	639.60
☉ Brg. Abut. #1	1368+83.47	0.00	639.58	639.60
A	1368+93.47	0.00	639.55	639.60
B	1369+03.47	0.00	639.52	639.59
C	1369+13.47	0.00	639.49	639.57
D	1369+23.47	0.00	639.46	639.53
E	1369+33.47	0.00	639.43	639.48
F	1369+43.47	0.00	639.39	639.43
G	1369+53.47	0.00	639.35	639.38
☉ Brg. Pier	1369+62.97	0.00	639.31	639.33
H	1369+72.97	0.00	639.27	639.30
I	1369+82.97	0.00	639.22	639.26
J	1369+92.97	0.00	639.17	639.23
K	1370+02.97	0.00	639.12	639.19
L	1370+12.97	0.00	639.07	639.14
M	1370+22.97	0.00	639.01	639.07
N	1370+32.97	0.00	638.95	639.00
☉ Brg. Abut. #2	1370+42.47	0.00	638.90	638.92
☉ Expansion Joint	1370+43.98	0.00	638.89	638.91
Bk. Abut. #2	1370+44.13	0.00	638.89	638.91

**GIRDER 8**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. Abut. #1	1368+78.37	3.19	639.64	639.66
☉ Expansion Joint	1368+78.51	3.19	639.64	639.66
☉ Brg. Abut. #1	1368+80.03	3.19	639.63	639.65
A	1368+90.03	3.19	639.61	639.65
B	1369+00.03	3.19	639.58	639.65
C	1369+10.03	3.19	639.55	639.63
D	1369+20.03	3.19	639.52	639.59
E	1369+30.03	3.19	639.49	639.55
F	1369+40.03	3.19	639.45	639.50
G	1369+50.03	3.19	639.42	639.44
☉ Brg. Pier	1369+59.53	3.19	639.38	639.40
H	1369+69.53	3.19	639.33	639.36
I	1369+79.53	3.19	639.29	639.33
J	1369+89.53	3.19	639.24	639.30
K	1369+99.53	3.19	639.19	639.26
L	1370+09.53	3.19	639.14	639.21
M	1370+19.53	3.19	639.08	639.14
N	1370+29.53	3.19	639.02	639.07
☉ Brg. Abut. #2	1370+39.03	3.19	638.97	638.99
☉ Expansion Joint	1370+40.54	3.19	638.96	638.98
Bk. Abut. #2	1370+40.69	3.19	638.96	638.98

**GIRDER 9**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. Abut. #1	1368+70.59	10.40	639.77	639.79
☉ Expansion Joint	1368+70.73	10.40	639.77	639.79
☉ Brg. Abut. #1	1368+72.24	10.40	639.76	639.78
A	1368+82.24	10.40	639.74	639.79
B	1368+92.24	10.40	639.72	639.78
C	1369+02.24	10.40	639.69	639.76
D	1369+12.24	10.40	639.66	639.73
E	1369+22.24	10.40	639.63	639.69
F	1369+32.24	10.40	639.60	639.64
G	1369+42.24	10.40	639.56	639.59
☉ Brg. Pier	1369+51.74	10.40	639.52	639.54
H	1369+61.74	10.40	639.48	639.51
I	1369+71.74	10.40	639.44	639.48
J	1369+81.74	10.40	639.39	639.45
K	1369+91.74	10.40	639.34	639.41
L	1370+01.74	10.40	639.29	639.36
M	1370+11.74	10.40	639.24	639.30
N	1370+21.74	10.40	639.18	639.23
☉ Brg. Abut. #2	1370+31.24	10.40	639.13	639.15
☉ Expansion Joint	1370+32.75	10.40	639.12	639.14
Bk. Abut. #2	1370+32.90	10.40	639.12	639.14

(Sheet 2 of 3)

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**E.B. TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)**

SHEET NO. 11 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	63
CONTRACT NO. 72H51				

ILLINOIS FED. AID PROJECT

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Design firm  
no. 184001036



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PLOT SCALE = 0:2" = 1" / in.	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - TJZ	REVISED

☉ E.B. LANES AND STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. Abut. #1	1368+68.85	12.00	639.79	639.81
☉ Expansion Joint	1368+68.99	12.00	639.79	639.81
☉ Brg. Abut. #1	1368+70.51	12.00	639.79	639.81
A	1368+80.51	12.00	639.77	639.81
B	1368+90.51	12.00	639.75	639.81
C	1369+00.51	12.00	639.72	639.79
D	1369+10.51	12.00	639.69	639.76
E	1369+20.51	12.00	639.66	639.72
F	1369+30.51	12.00	639.63	639.67
G	1369+40.51	12.00	639.59	639.62
☉ Brg. Pier	1369+50.01	12.00	639.55	639.57
H	1369+60.01	12.00	639.51	639.54
I	1369+70.01	12.00	639.47	639.51
J	1369+80.01	12.00	639.42	639.48
K	1369+90.01	12.00	639.38	639.44
L	1370+00.01	12.00	639.32	639.40
M	1370+10.01	12.00	639.27	639.33
N	1370+20.01	12.00	639.22	639.26
☉ Brg. Abut. #2	1370+29.51	12.00	639.16	639.18
☉ Expansion Joint	1370+31.02	12.00	639.15	639.17
Bk. Abut. #2	1370+31.17	12.00	639.15	639.17

GIRDER 10

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. Abut. #1	1368+62.80	17.60	639.72	639.74
☉ Expansion Joint	1368+62.94	17.60	639.72	639.74
☉ Brg. Abut. #1	1368+64.46	17.60	639.71	639.73
A	1368+74.46	17.60	639.69	639.74
B	1368+84.46	17.60	639.67	639.74
C	1368+94.46	17.60	639.65	639.72
D	1369+04.46	17.60	639.62	639.69
E	1369+14.46	17.60	639.59	639.65
F	1369+24.46	17.60	639.56	639.60
G	1369+34.46	17.60	639.52	639.55
☉ Brg. Pier	1369+43.96	17.60	639.49	639.51
H	1369+53.96	17.60	639.45	639.48
I	1369+63.96	17.60	639.41	639.45
J	1369+73.96	17.60	639.36	639.42
K	1369+83.96	17.60	639.32	639.39
L	1369+93.96	17.60	639.27	639.34
M	1370+03.96	17.60	639.22	639.28
N	1370+13.96	17.60	639.16	639.21
☉ Brg. Abut. #2	1370+23.46	17.60	639.11	639.13
☉ Expansion Joint	1370+24.97	17.60	639.10	639.12
Bk. Abut. #2	1370+25.12	17.60	639.10	639.12

GIRDER 11

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. Abut. #1	1368+55.01	24.81	639.61	639.63
☉ Expansion Joint	1368+55.16	24.81	639.61	639.63
☉ Brg. Abut. #1	1368+56.67	24.81	639.61	639.63
A	1368+66.67	24.81	639.59	639.64
B	1368+76.67	24.81	639.57	639.64
C	1368+86.67	24.81	639.55	639.62
D	1368+96.67	24.81	639.53	639.59
E	1369+06.67	24.81	639.50	639.55
F	1369+16.67	24.81	639.47	639.51
G	1369+26.67	24.81	639.43	639.46
☉ Brg. Pier	1369+36.17	24.81	639.40	639.42
H	1369+46.17	24.81	639.36	639.39
I	1369+56.17	24.81	639.32	639.37
J	1369+66.17	24.81	639.28	639.34
K	1369+76.17	24.81	639.24	639.31
L	1369+86.17	24.81	639.19	639.26
M	1369+96.17	24.81	639.14	639.20
N	1370+06.17	24.81	639.09	639.13
☉ Brg. Abut. #2	1370+15.67	24.81	639.04	639.06
☉ Expansion Joint	1370+17.18	24.81	639.03	639.05
Bk. Abut. #2	1370+17.33	24.81	639.03	639.05

GIRDER 12

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. Abut. #1	1368+47.23	32.02	639.48	639.50
☉ Expansion Joint	1368+47.37	32.02	639.48	639.50
☉ Brg. Abut. #1	1368+48.88	32.02	639.47	639.49
A	1368+58.88	32.02	639.46	639.50
B	1368+68.88	32.02	639.44	639.50
C	1368+78.88	32.02	639.42	639.49
D	1368+88.88	32.02	639.40	639.46
E	1368+98.88	32.02	639.37	639.43
F	1369+08.88	32.02	639.34	639.38
G	1369+18.88	32.02	639.31	639.34
☉ Brg. Pier	1369+28.38	32.02	639.28	639.30
H	1369+38.38	32.02	639.24	639.27
I	1369+48.38	32.02	639.21	639.25
J	1369+58.38	32.02	639.17	639.22
K	1369+68.38	32.02	639.12	639.19
L	1369+78.38	32.02	639.08	639.15
M	1369+88.38	32.02	639.03	639.09
N	1369+98.38	32.02	638.98	639.02
☉ Brg. Abut. #2	1370+07.88	32.02	638.93	638.95
☉ Expansion Joint	1370+09.39	32.02	638.92	638.94
Bk. Abut. #2	1370+09.54	32.02	638.92	638.94

(Sheet 3 of 3)

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

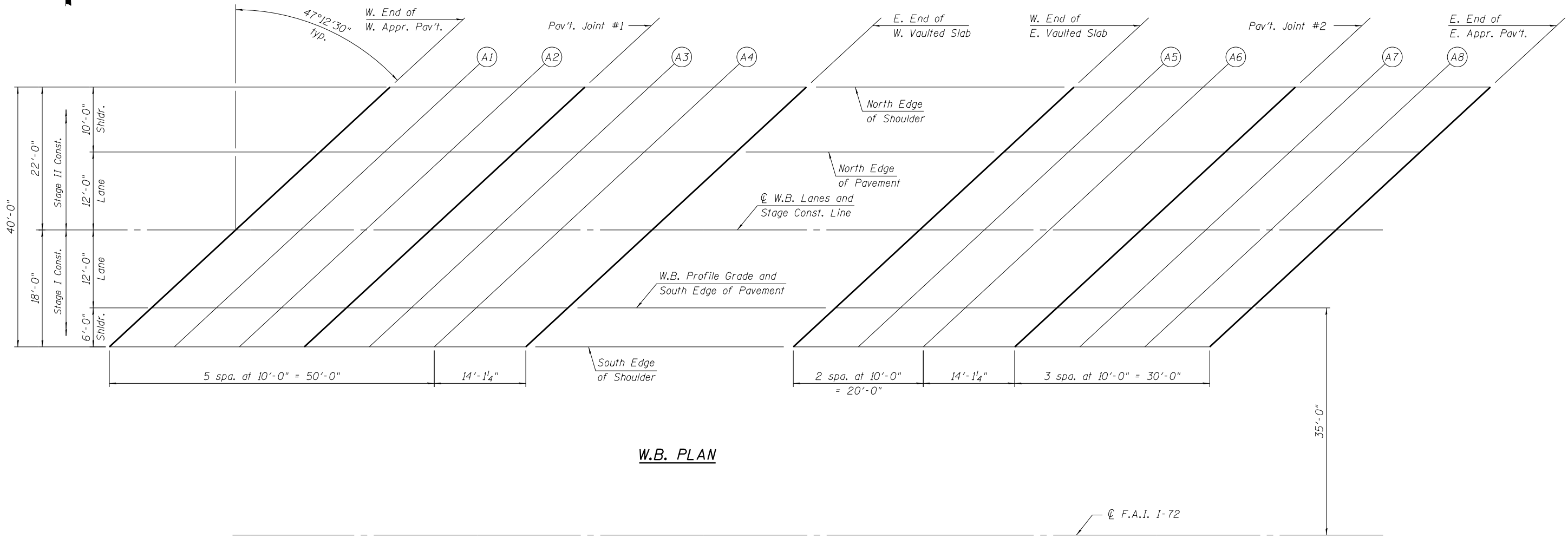
E.B. TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)

SHEET NO. 12 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	64
CONTRACT NO. 72H51				

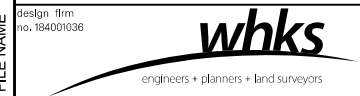
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**W.B. PLAN**

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**W.B. TOP OF APPROACH AND VAULTED SLAB ELEVATIONS  
STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)**

(Sheet 1 of 2)

SHEET NO. 13 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	65
CONTRACT NO. 72H51				
ILLINOIS FED. AID PROJECT				

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Elevation Adjusted for Grinding
W. End of W. Appr. Pav't.	1369+30.05	-34.00	639.23	639.25
A1	1369+40.05	-34.00	639.20	639.22
A2	1369+50.05	-34.00	639.16	639.18
Pav't. Joint #1	1369+60.05	-34.00	639.12	639.14
A3	1369+70.05	-34.00	639.07	639.09
A4	1369+80.05	-34.00	639.03	639.05
E. End of W. Vaulted Slab	1369+94.16	-34.00	638.96	638.98
W. End of E. Vaulted Slab	1371+56.47	-34.00	638.02	638.04
A5	1371+66.47	-34.00	637.96	637.98
A6	1371+76.47	-34.00	637.89	637.91
Pav't. Joint #2	1371+90.58	-34.00	637.80	637.82
A7	1372+00.58	-34.00	637.73	637.75
A8	1372+10.58	-34.00	637.66	637.68
E. End of E. Appr. Pav't.	1372+20.58	-34.00	637.59	637.61

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Elevation Adjusted for Grinding
W. End of W. Appr. Pav't.	1369+19.25	-24.00	639.48	639.50
A1	1369+29.25	-24.00	639.44	639.46
A2	1369+39.25	-24.00	639.41	639.43
Pav't. Joint #1	1369+49.25	-24.00	639.37	639.39
A3	1369+59.25	-24.00	639.33	639.35
A4	1369+69.25	-24.00	639.29	639.31
E. End of W. Vaulted Slab	1369+83.36	-24.00	639.22	639.24
W. End of E. Vaulted Slab	1371+45.67	-24.00	638.30	638.32
A5	1371+55.67	-24.00	638.23	638.25
A6	1371+65.67	-24.00	638.17	638.19
Pav't. Joint #2	1371+79.78	-24.00	638.08	638.10
A7	1371+89.78	-24.00	638.01	638.03
A8	1371+99.78	-24.00	637.94	637.96
E. End of E. Appr. Pav't.	1372+09.78	-24.00	637.87	637.89

☉ W.B. LANES AND STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Elevation Adjusted for Grinding
W. End of W. Appr. Pav't.	1369+06.29	-12.00	639.70	639.72
A1	1369+16.29	-12.00	639.67	639.69
A2	1369+26.29	-12.00	639.64	639.66
Pav't. Joint #1	1369+36.29	-12.00	639.61	639.63
A3	1369+46.29	-12.00	639.57	639.59
A4	1369+56.29	-12.00	639.53	639.55
E. End of W. Vaulted Slab	1369+70.39	-12.00	639.47	639.49
W. End of E. Vaulted Slab	1371+32.71	-12.00	638.56	638.58
A5	1371+42.71	-12.00	638.50	638.52
A6	1371+52.71	-12.00	638.44	638.46
Pav't. Joint #2	1371+66.81	-12.00	638.35	638.37
A7	1371+76.81	-12.00	638.28	638.30
A8	1371+86.81	-12.00	638.22	638.24
E. End of E. Appr. Pav't.	1371+96.81	-12.00	638.15	638.17

W.B. PROFILE GRADE AND SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Elevation Adjusted for Grinding
W. End of W. Appr. Pav't.	1368+93.32	0.00	639.55	639.57
A1	1369+03.32	0.00	639.52	639.54
A2	1369+13.32	0.00	639.49	639.51
Pav't. Joint #1	1369+23.32	0.00	639.46	639.48
A3	1369+33.32	0.00	639.43	639.45
A4	1369+43.32	0.00	639.39	639.41
E. End of W. Vaulted Slab	1369+57.43	0.00	639.34	639.36
W. End of E. Vaulted Slab	1371+19.75	0.00	638.45	638.47
A5	1371+29.75	0.00	638.39	638.41
A6	1371+39.75	0.00	638.33	638.35
Pav't. Joint #2	1371+53.85	0.00	638.25	638.27
A7	1371+63.85	0.00	638.18	638.20
A8	1371+73.85	0.00	638.12	638.14
E. End of E. Appr. Pav't.	1371+83.85	0.00	638.05	638.07

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Elevation Adjusted for Grinding
W. End of W. Appr. Pav't.	1368+86.84	6.00	639.44	639.46
A1	1368+96.84	6.00	639.42	639.44
A2	1369+06.84	6.00	639.39	639.41
Pav't. Joint #1	1369+16.84	6.00	639.36	639.38
A3	1369+26.84	6.00	639.33	639.35
A4	1369+36.84	6.00	639.29	639.31
E. End of W. Vaulted Slab	1369+50.95	6.00	639.24	639.26
W. End of E. Vaulted Slab	1371+13.26	6.00	638.36	638.38
A5	1371+23.26	6.00	638.31	638.33
A6	1371+33.26	6.00	638.25	638.27
Pav't. Joint #2	1371+47.37	6.00	638.16	638.18
A7	1371+57.37	6.00	638.10	638.12
A8	1371+67.37	6.00	638.03	638.05
E. End of E. Appr. Pav't.	1371+77.37	6.00	637.97	637.99

(Sheet 2 of 2)

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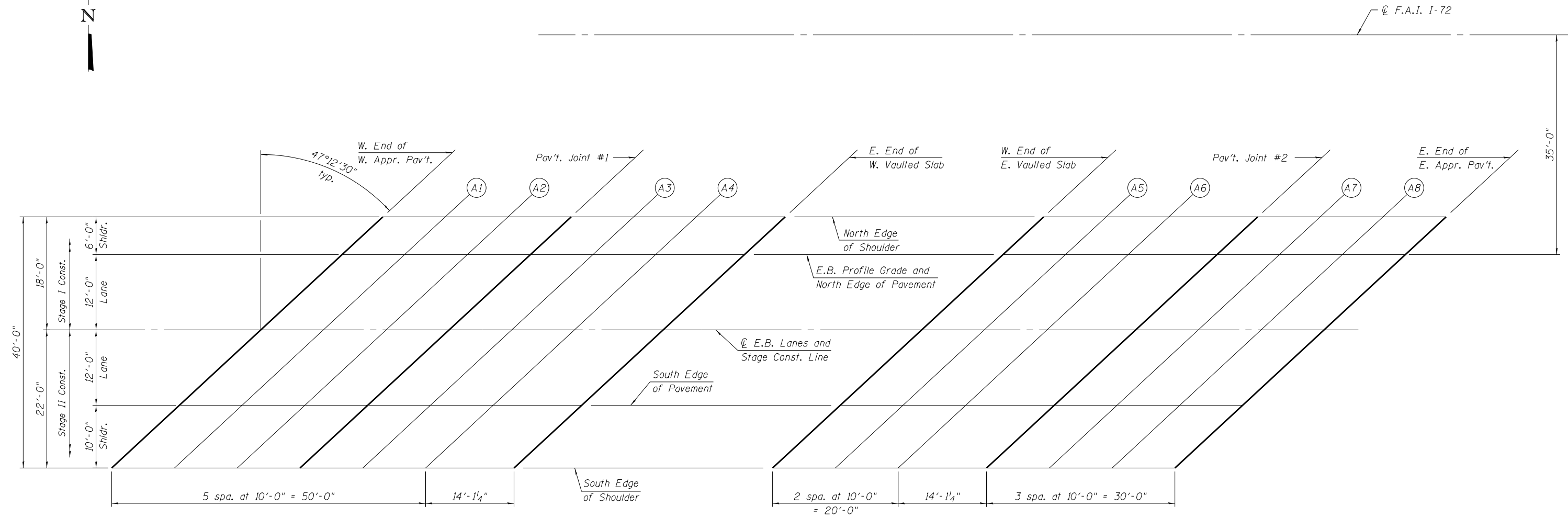
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

W.B. TOP OF APPROACH AND VAULTED SLAB ELEVATIONS  
STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)

SHEET NO. 14 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	66
CONTRACT NO. 72H51			ILLINOIS FED. AID PROJECT	



**E.B. PLAN**

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

(Sheet 1 of 2)

**E.B. TOP OF APPROACH AND VAULTED SLAB ELEVATIONS  
STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)**

SHEET NO. 15 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	67
CONTRACT NO. 72H51				
ILLINOIS FED. AID PROJECT				

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Elevation Adjusted for Grinding
W. End of W. Appr. Pav't.	1368+24.19	-6.00	639.54	639.56
A1	1368+34.19	-6.00	639.53	639.55
A2	1368+44.19	-6.00	639.52	639.54
Pav't. Joint #1	1368+54.19	-6.00	639.51	639.53
A3	1368+64.19	-6.00	639.49	639.51
A4	1368+74.19	-6.00	639.47	639.49
E. End of W. Vaulted Slab	1368+88.30	-6.00	639.44	639.46
W. End of E. Vaulted Slab	1370+50.61	-6.00	638.73	638.75
A5	1370+60.61	-6.00	638.67	638.69
A6	1370+70.61	-6.00	638.61	638.63
Pav't. Joint #2	1370+84.72	-6.00	638.53	638.55
A7	1370+94.72	-6.00	638.47	638.49
A8	1371+04.72	-6.00	638.41	638.43
E. End of E. Appr. Pav't.	1371+14.72	-6.00	638.36	638.38

E.B. PROFILE GRADE AND NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Elevation Adjusted for Grinding
W. End of W. Appr. Pav't.	1368+17.71	0.00	639.67	639.69
A1	1368+27.71	0.00	639.67	639.69
A2	1368+37.71	0.00	639.66	639.68
Pav't. Joint #1	1368+47.71	0.00	639.64	639.66
A3	1368+57.71	0.00	639.63	639.65
A4	1368+67.71	0.00	639.61	639.63
E. End of W. Vaulted Slab	1368+81.81	0.00	639.58	639.60
W. End of E. Vaulted Slab	1370+44.13	0.00	638.89	638.91
A5	1370+54.13	0.00	638.83	638.85
A6	1370+64.13	0.00	638.77	638.79
Pav't. Joint #2	1370+78.24	0.00	638.69	638.71
A7	1370+88.24	0.00	638.63	638.65
A8	1370+98.24	0.00	638.58	638.60
E. End of E. Appr. Pav't.	1371+08.24	0.00	638.52	638.54

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Location	Station	Offset	Theoretical Grade Elevations	Theoretical Elevation Adjusted for Grinding
W. End of W. Appr. Pav't.	1368+04.75	12.00	639.87	639.89
A1	1368+14.75	12.00	639.86	639.88
A2	1368+24.75	12.00	639.86	639.88
Pav't. Joint #1	1368+34.75	12.00	639.85	639.87
A3	1368+44.75	12.00	639.83	639.85
A4	1368+54.75	12.00	639.82	639.84
E. End of W. Vaulted Slab	1368+68.85	12.00	639.79	639.81
W. End of E. Vaulted Slab	1370+31.17	12.00	639.15	639.17
A5	1370+41.17	12.00	639.09	639.11
A6	1370+51.17	12.00	639.04	639.06
Pav't. Joint #2	1370+65.27	12.00	638.96	638.98
A7	1370+75.27	12.00	638.90	638.92
A8	1370+85.27	12.00	638.84	638.86
E. End of E. Appr. Pav't.	1370+95.27	12.00	638.78	638.80

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Elevation Adjusted for Grinding
W. End of W. Appr. Pav't.	1367+91.78	24.00	639.68	639.70
A1	1368+01.78	24.00	639.68	639.70
A2	1368+11.78	24.00	639.68	639.70
Pav't. Joint #1	1368+21.78	24.00	639.67	639.69
A3	1368+31.78	24.00	639.66	639.68
A4	1368+41.78	24.00	639.65	639.67
E. End of W. Vaulted Slab	1368+55.89	24.00	639.63	639.65
W. End of E. Vaulted Slab	1370+18.20	24.00	639.04	639.06
A5	1370+28.20	24.00	638.98	639.00
A6	1370+38.20	24.00	638.92	638.94
Pav't. Joint #2	1370+52.31	24.00	638.84	638.86
A7	1370+62.31	24.00	638.78	638.80
A8	1370+72.31	24.00	638.73	638.75
E. End of E. Appr. Pav't.	1370+82.31	24.00	638.67	638.69

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Elevation Adjusted for Grinding
W. End of W. Appr. Pav't.	1367+80.98	34.00	639.47	639.49
A1	1367+90.98	34.00	639.48	639.50
A2	1368+00.98	34.00	639.47	639.49
Pav't. Joint #1	1368+10.98	34.00	639.47	639.49
A3	1368+20.98	34.00	639.46	639.48
A4	1368+30.98	34.00	639.45	639.47
E. End of W. Vaulted Slab	1368+45.09	34.00	639.44	639.46
W. End of E. Vaulted Slab	1370+07.40	34.00	638.89	638.91
A5	1370+17.40	34.00	638.84	638.86
A6	1370+27.40	34.00	638.78	638.80
Pav't. Joint #2	1370+41.51	34.00	638.70	638.72
A7	1370+51.51	34.00	638.64	638.66
A8	1370+61.51	34.00	638.58	638.60
E. End of E. Appr. Pav't.	1370+71.51	34.00	638.52	638.54

(Sheet 2 of 2)

FILE NAME = L:\Jobs\DOT\_D-6\7818 PTB 167-02\7818\03\CADD\CADD Sheets\0840148-0149-72H51\_12-9-19.dgn



USER NAME = dheberling	DESIGNED - BRD	REVISED
MODEL = 0840148_49-72B54-016	CHECKED - TJZ	REVISED
PLOT SCALE = 0:2" = 1' in.	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - TJZ	REVISED

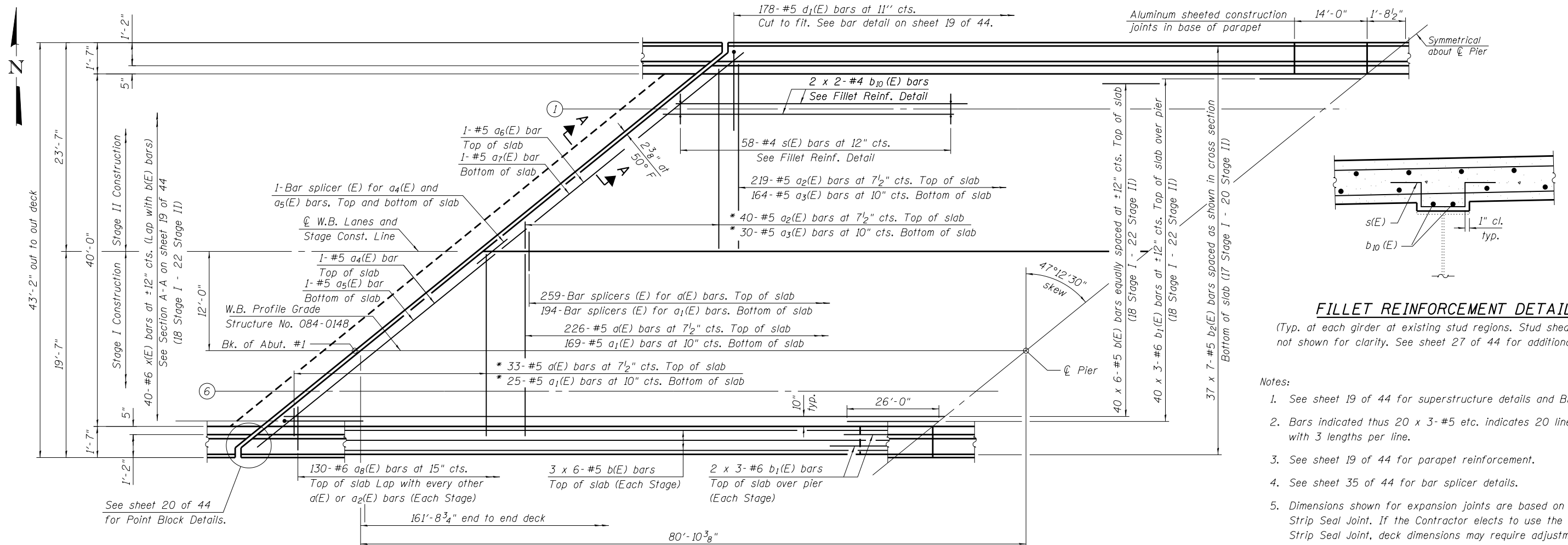
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

E.B. TOP OF APPROACH AND VAULTED SLAB ELEVATIONS  
STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)

SHEET NO. 16 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	68
CONTRACT NO. 72H51				

ILLINOIS FED. AID PROJECT



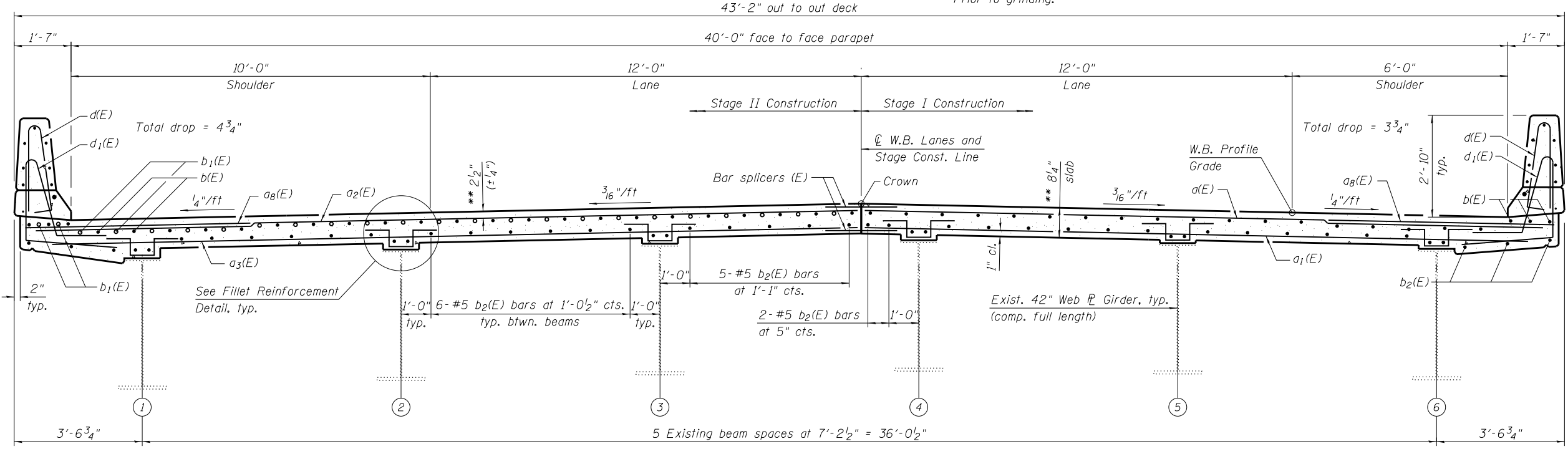
**PARTIAL PLAN**

\* Order a(E), a<sub>1</sub>(E), a<sub>2</sub>(E), and a<sub>3</sub>(E) bars full length.  
 Cut to fit skew and use remainder of bars in opposite end.  
 \*\* Prior to grinding.

**FILLET REINFORCEMENT DETAIL**

(Typ. at each girder at existing stud regions. Stud shear connectors not shown for clarity. See sheet 27 of 44 for additional details.)

- Notes:
1. See sheet 19 of 44 for superstructure details and Bill of Material.
  2. Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
  3. See sheet 19 of 44 for parapet reinforcement.
  4. See sheet 35 of 44 for bar splicer details.
  5. Dimensions shown for expansion joints are based on a Rolled Rail Strip Seal Joint. If the Contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustments to satisfy the details on sheet 20 of 44.



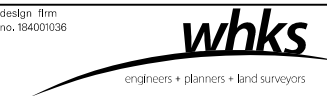
**CROSS SECTION**

(Looking East)

**MINIMUM BAR LAP**

- #4 bar = 2'-1"
- #5 bar = 2'-7"
- #6 bar = 3'-1"

FILE NAME = L:\Jobs\IDOT\_D-6\7818 PTB 167-02\71818.03\CADD\CADD Sheets\0840148-0149-72H51\_12-9-19.dgn



USER NAME = dheberling	DESIGNED - BRD	REVISED
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PLOT SCALE = 0:2" = 1" / in.	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - TJZ	REVISED

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

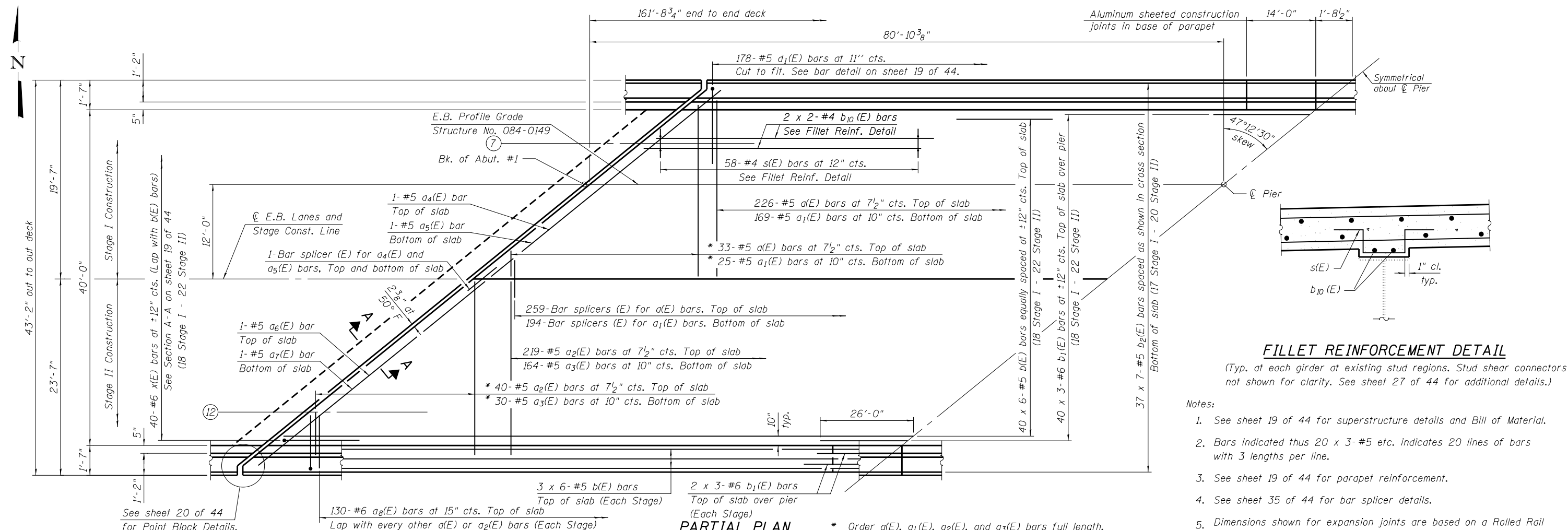
**W.B. SUPERSTRUCTURE DETAILS**  
**STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)**

SHEET NO. 17 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	69
CONTRACT NO. 72H51				

ILLINOIS FED. AID PROJECT

(Sheet 1 of 3)

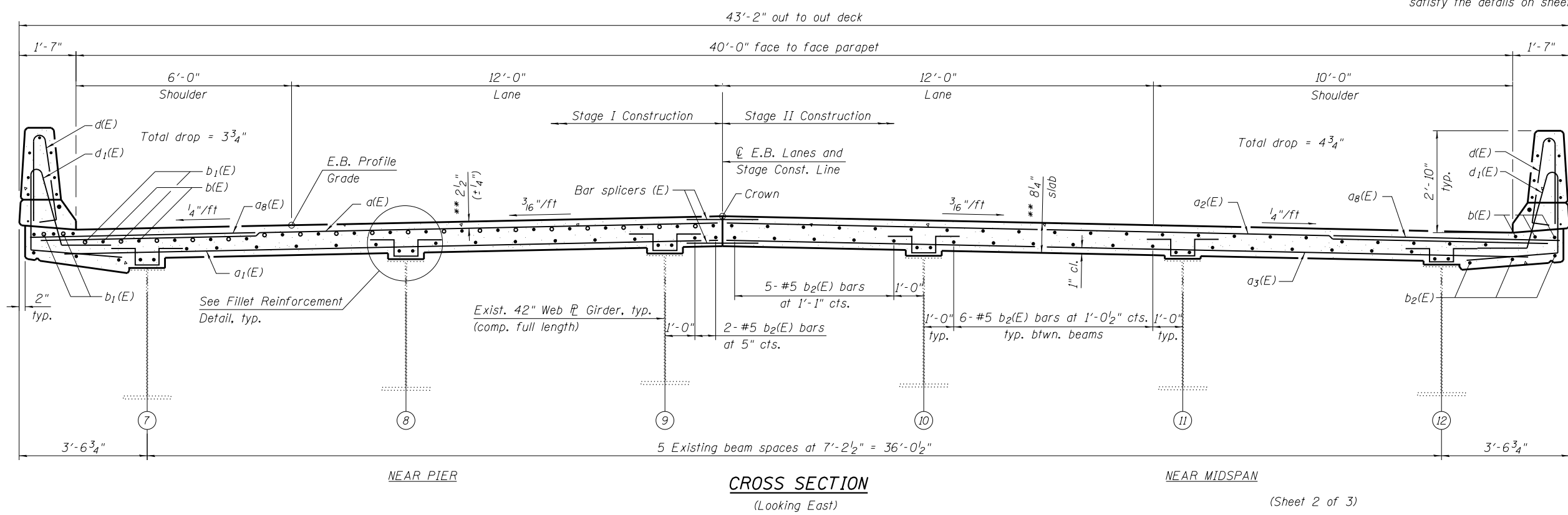


**FILLET REINFORCEMENT DETAIL**

(Typ. at each girder at existing stud regions. Stud shear connectors not shown for clarity. See sheet 27 of 44 for additional details.)

**Notes:**

1. See sheet 19 of 44 for superstructure details and Bill of Material.
2. Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
3. See sheet 19 of 44 for parapet reinforcement.
4. See sheet 35 of 44 for bar splicer details.
5. Dimensions shown for expansion joints are based on a Rolled Rail Strip Seal Joint. If the Contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustments to satisfy the details on sheet 20 of 44.



**MINIMUM BAR LAP**

- #4 bar = 2'-1"
- #5 bar = 2'-7"
- #6 bar = 3'-1"

FILE NAME = L:\Jobs\DOT\_D-6\7818 PTB 167-02\7818\03\CADD\CADD Sheets\0840148-0149-72H51\_12-9-19.dgn

Design firm  
no. 184001036

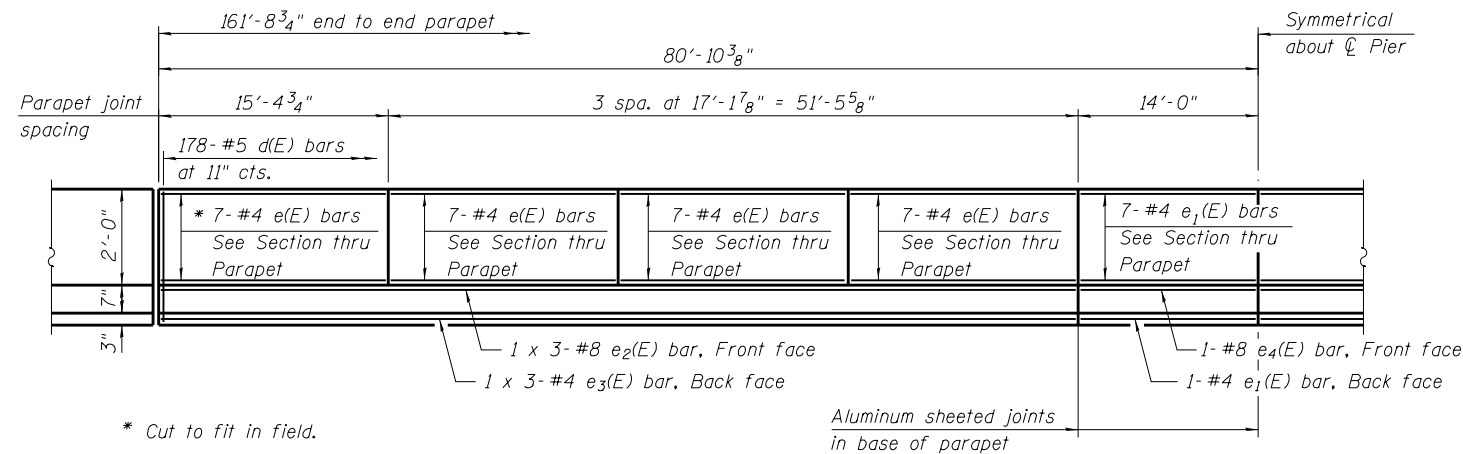


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PLOT DATE = 1/30/2020	CHECKED - TJZ	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**E.B. SUPERSTRUCTURE DETAILS  
STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	70
CONTRACT NO. 72H51				



**INSIDE ELEVATION OF PARAPET**

**MINIMUM BAR LAP**

(Parapet)  
 #4 bar = 2'-0"  
 #8 bar = 5'-2"

**BILL OF MATERIAL  
 W.B. SUPERSTRUCTURE**

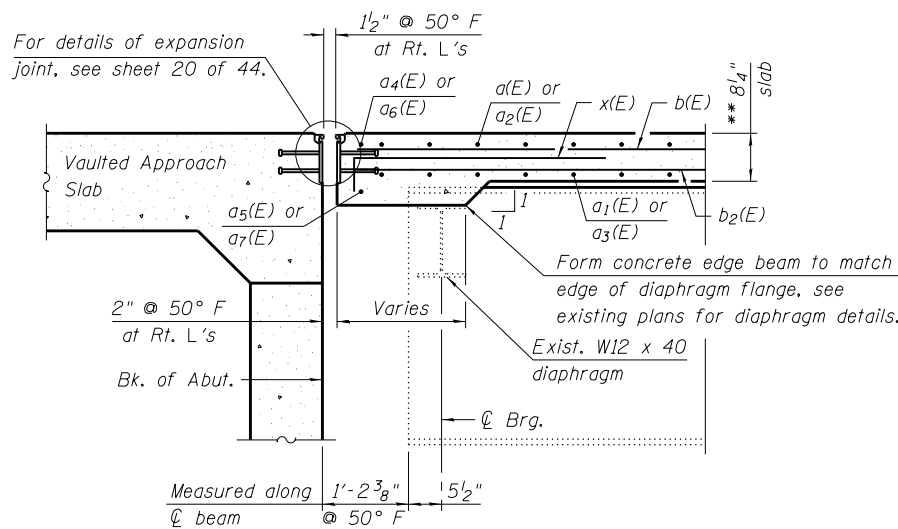
Bar	No.	Size	Length	Shape
a(E)	259	#5	19'-1"	—
a <sub>1</sub> (E)	194	#5	18'-8"	—
a <sub>2</sub> (E)	259	#5	23'-1"	—
a <sub>3</sub> (E)	194	#5	22'-8"	—
a <sub>4</sub> (E)	2	#5	28'-1"	—
a <sub>5</sub> (E)	2	#5	27'-6"	—
a <sub>6</sub> (E)	2	#5	34'-0"	—
a <sub>7</sub> (E)	2	#5	33'-4"	—
a <sub>8</sub> (E)	260	#6	6'-6"	—
b(E)	276	#5	29'-1"	—
b <sub>1</sub> (E)	132	#6	19'-5"	—
b <sub>2</sub> (E)	259	#5	25'-4"	—
b <sub>10</sub> (E)	48	#4	29'-7"	—
d(E)	356	#5	5'-7"	⌋
d <sub>1</sub> (E)	356	#5	8'-4"	⌋
e(E)	112	#4	16'-10"	—
e <sub>1</sub> (E)	32	#4	13'-8"	—
e <sub>2</sub> (E)	12	#8	25'-9"	—
e <sub>3</sub> (E)	12	#4	24'-2"	—
e <sub>4</sub> (E)	4	#8	13'-8"	—
s(E)	696	#4	3'-0"	⌋
x(E)	80	#6	4'-2"	—
Concrete Superstructure			Cu. Yd.	230.0
Reinforcement Bars, Epoxy Coated			Pound	52,350
Bar Splicers			Each	457

**BILL OF MATERIAL  
 E.B. SUPERSTRUCTURE**

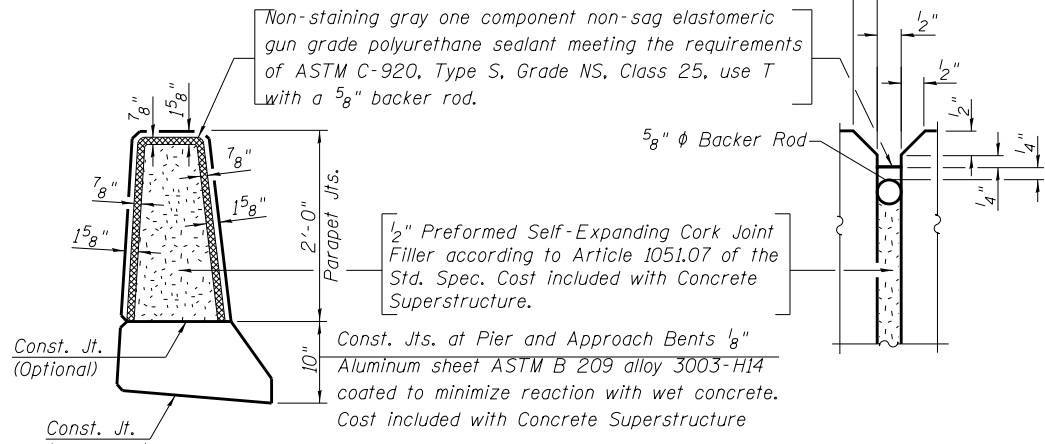
Bar	No.	Size	Length	Shape
a(E)	259	#5	19'-1"	—
a <sub>1</sub> (E)	194	#5	18'-8"	—
a <sub>2</sub> (E)	259	#5	23'-1"	—
a <sub>3</sub> (E)	194	#5	22'-8"	—
a <sub>4</sub> (E)	2	#5	28'-1"	—
a <sub>5</sub> (E)	2	#5	27'-6"	—
a <sub>6</sub> (E)	2	#5	34'-0"	—
a <sub>7</sub> (E)	2	#5	33'-4"	—
a <sub>8</sub> (E)	260	#6	6'-6"	—
b(E)	276	#5	29'-1"	—
b <sub>1</sub> (E)	132	#6	19'-5"	—
b <sub>2</sub> (E)	259	#5	25'-4"	—
b <sub>10</sub> (E)	48	#4	29'-7"	—
d(E)	356	#5	5'-7"	⌋
d <sub>1</sub> (E)	356	#5	8'-4"	⌋
e(E)	112	#4	16'-10"	—
e <sub>1</sub> (E)	32	#4	13'-8"	—
e <sub>2</sub> (E)	12	#8	25'-9"	—
e <sub>3</sub> (E)	12	#4	24'-2"	—
e <sub>4</sub> (E)	4	#8	13'-8"	—
s(E)	696	#4	3'-0"	⌋
x(E)	80	#6	4'-2"	—
Concrete Superstructure			Cu. Yd.	234.8
Reinforcement Bars, Epoxy Coated			Pound	52,350
Bar Splicers			Each	457

**Notes:**

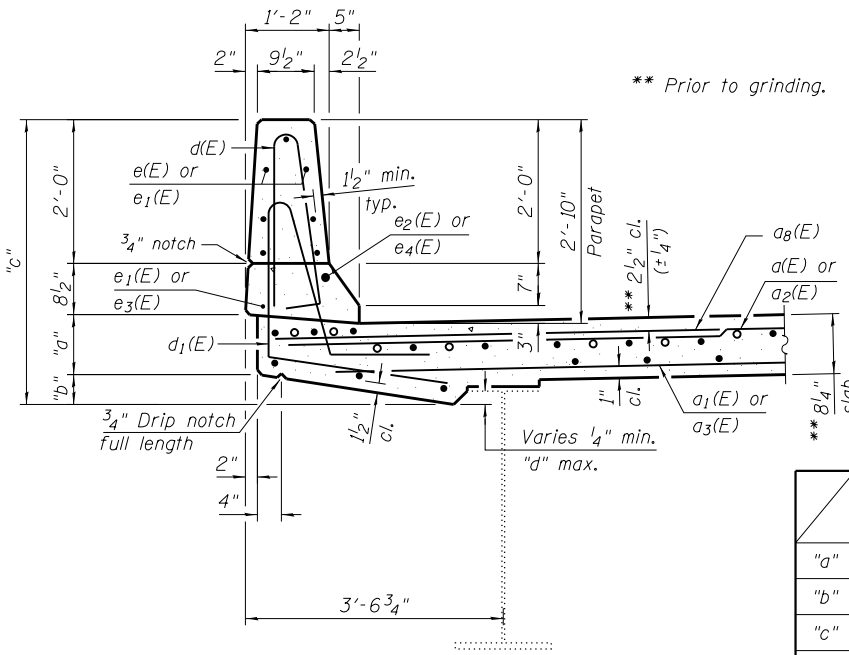
1. Bars indicated thus 1 x 3-#8 etc. indicates 1 line of bars with 3 lengths per line.
2. Dimensions shown for expansion joints are based on a Rolled Rail Strip Seal Joint. If the Contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustments to satisfy the details on sheet 20 of 44.



**SECTION A-A**



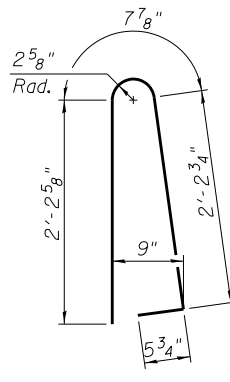
**PARAPET JOINT DETAILS**



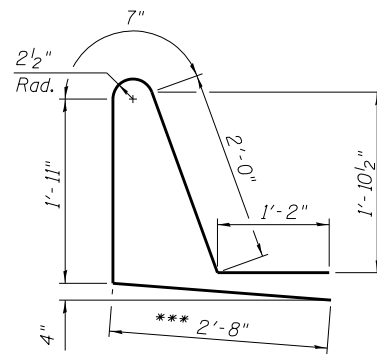
**SECTION THRU PARAPET**

**TABLE OF DIMENSIONS**

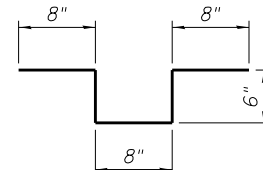
	084-0148 (W.B.)		084-0149 (E.B.)	
	Girder 1	Girder 6	Girder 7	Girder 12
"a"	9 1/2"	9 1/2"	9 1/2"	10"
"b"	4 1/4"	4"	4 1/2"	5"
"c"	3'-10 1/4"	3'-10"	3'-10 1/2"	3'-11 1/2"
"d"	1 3/4"	1 1/2"	2 1/4"	2 7/8"



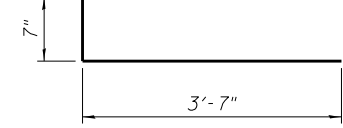
**BAR d(E)**



**BAR d<sub>1</sub>(E)**



**BAR s(E)**



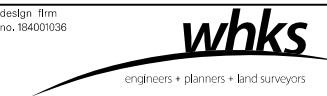
**BAR x(E)**

\*\*\* Bar sized for 12" wide flange. Cut to fit at the 16" wide flange locations.

(See sheet 27 of 44 for additional details.)

(Sheet 3 of 3)

FILE NAME = L:\Jobs\DOT\_D-6\7818 PTB 167-027\7818\03\CADD\CADD Sheets\0840148-0149-72H51\_12-9-19.dgn



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PLOT SCALE = 0:2" = 1"	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - TJZ	REVISED

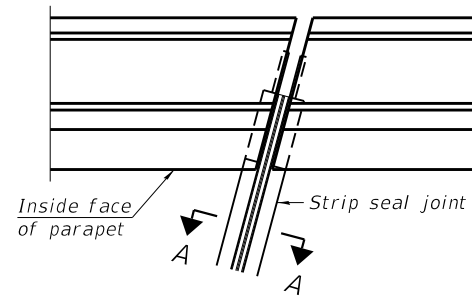
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE DETAILS  
 STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)**

SHEET NO. 19 OF 44 SHEETS

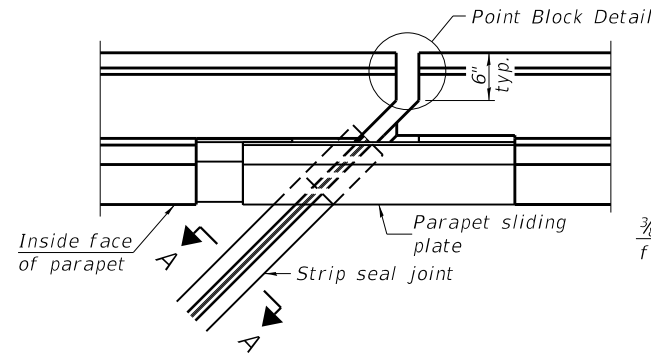
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	71
CONTRACT NO. 72H51				

ILLINOIS FED. AID PROJECT

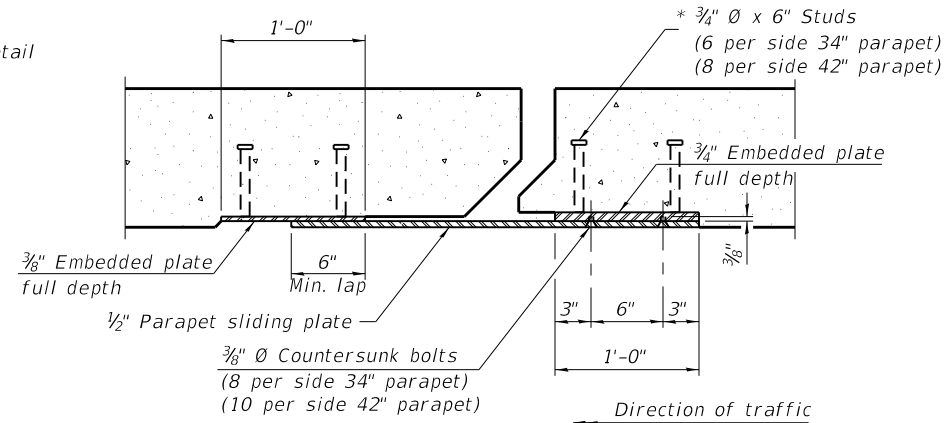


FOR SKEWS  $\leq 30^\circ$

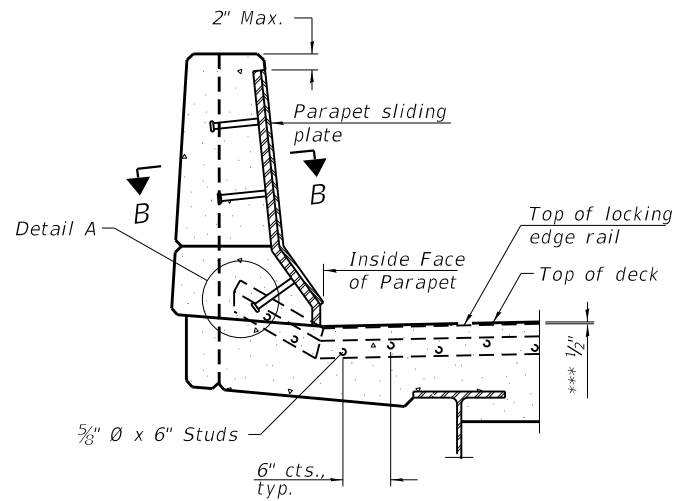
PLAN AT PARAPET



FOR SKEWS  $> 30^\circ$

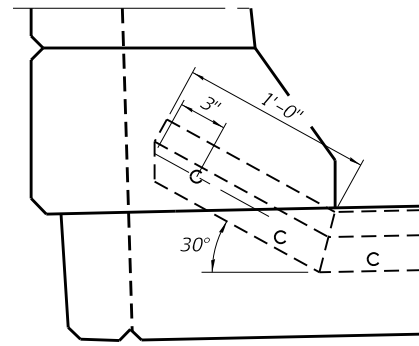


SECTION B-B

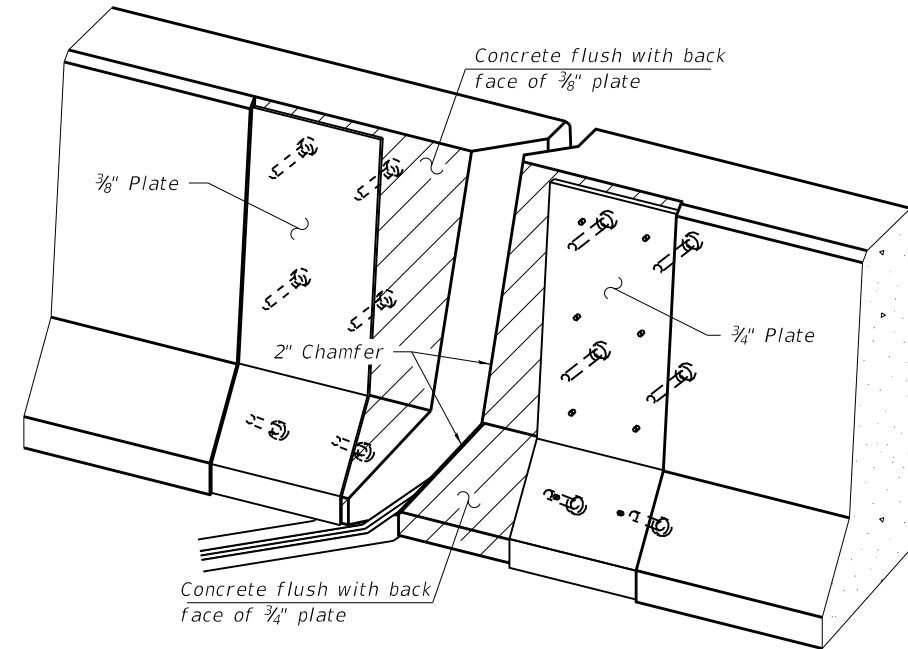


ELEVATION AT PARAPET

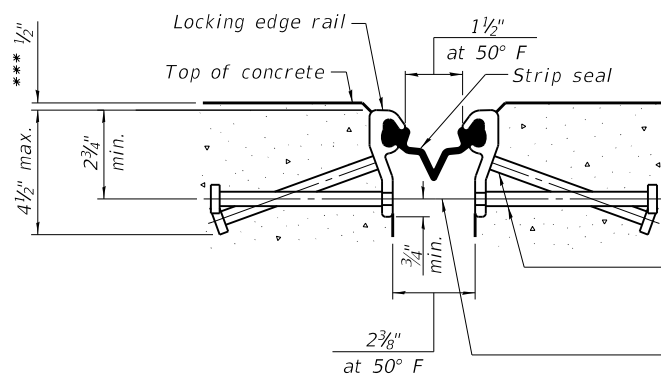
(Skews  $> 30^\circ$  shown. Skews  $\leq 30^\circ$  similar except as shown in plan view.)



DETAIL A

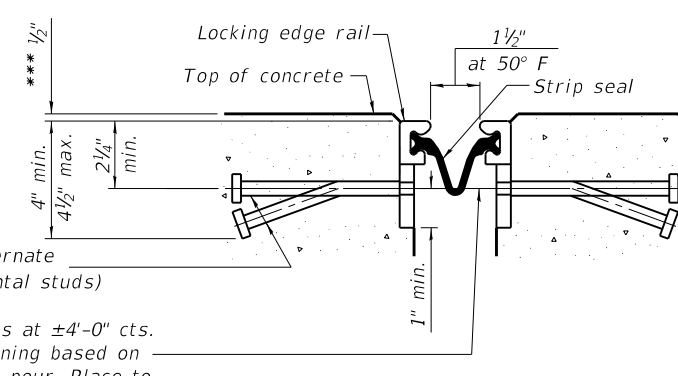


TRIMETRIC VIEW  
(Showing embedded plates only)



SHOWING ROLLED RAIL JOINT

\*\*\* Prior to grinding.



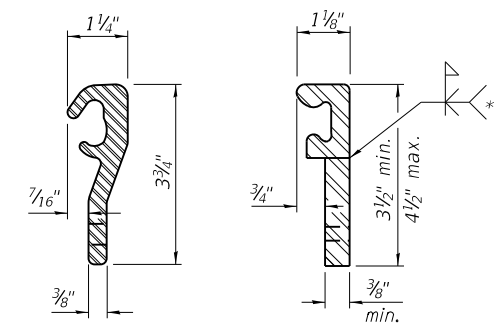
SHOWING WELDED RAIL JOINT

\*  $5/8"$   $\phi$  x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

$3/8"$   $\phi$  threaded rods in  $7/16"$   $\phi$  holes at  $\pm 4"$  - 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.

SECTION A-A

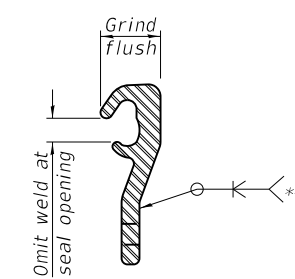
\* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



ROLLED (EXTRUDED) RAIL  
WELDED RAIL

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	244

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of  $1/4"$ . The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the  $4 1/2"$  maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

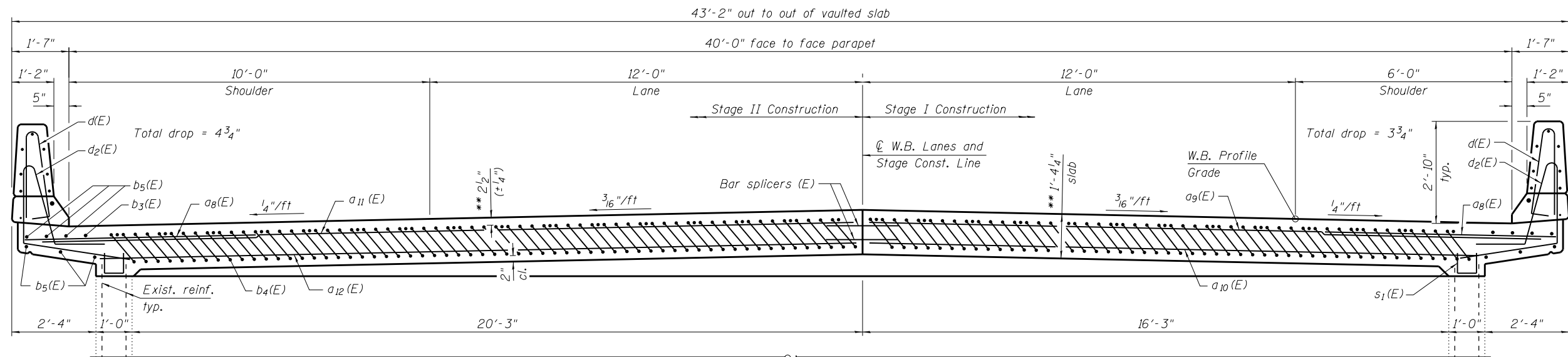
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

The Maximum space between locking edge rail segments shall be  $3/16"$  and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

Cost of parapet sliding plates, embedded plates, and anchorage studs included with Preformed Joint Strip Seal.

34" F-shape barrier shown, 42" F-shape similar as noted. The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.



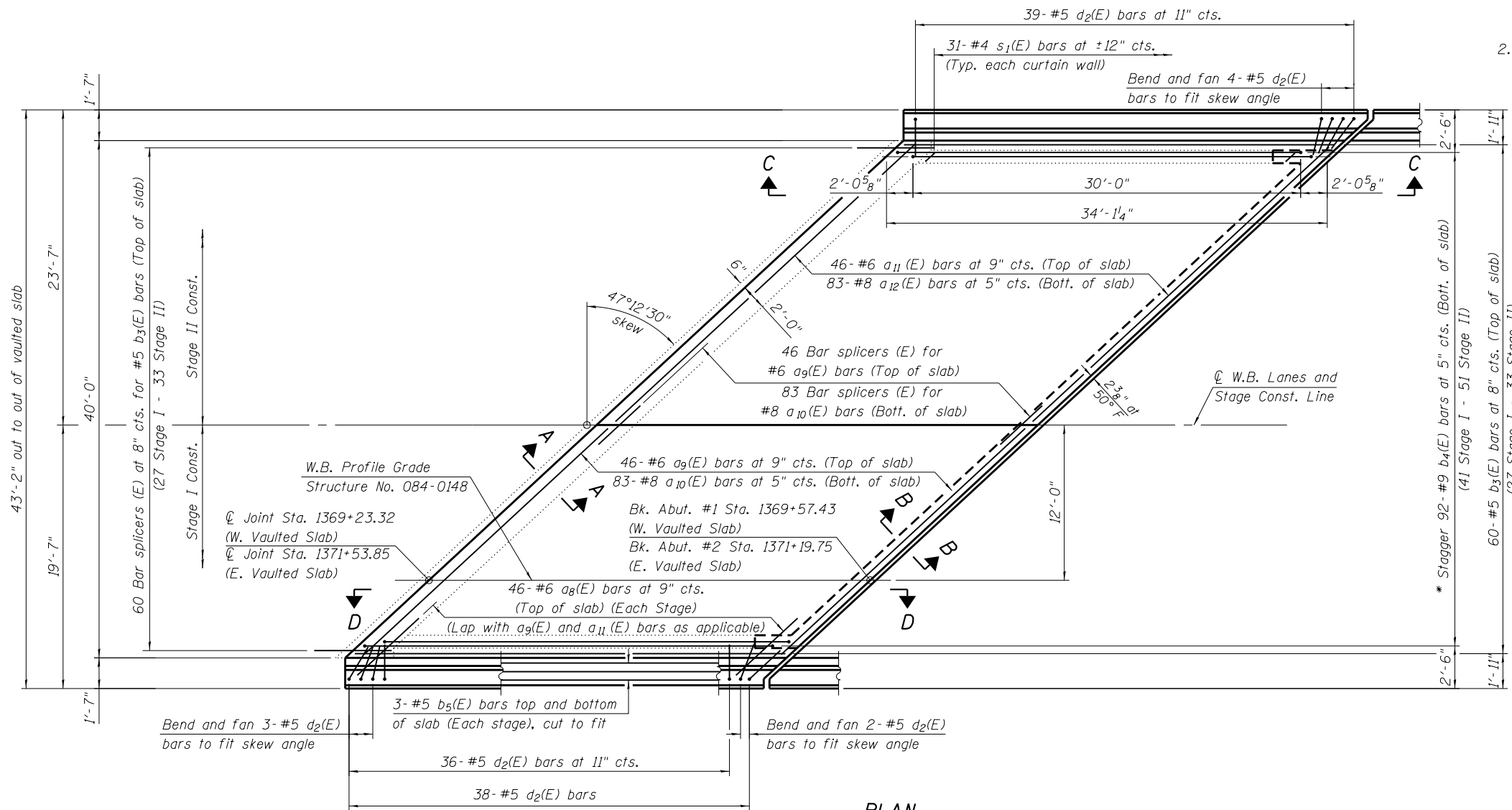


**CROSS SECTION**  
(W.B. Looking East)

Notes:

- Existing reinforcement in the vaulted abutment and the approach bent extending into the vaulted slab shall be cleaned, straightened, and incorporated into the new construction. Cost included with Concrete Removal.
- See sheet 23 of 44 for Sections A-A & B-B and View C-C & D-D.  $a_8(E)$  thru  $a_{12}(E)$  bar spacings are measured along  $\phi$  of roadway.

\* Tilt #9  $b_4(E)$  bars as required to maintain clearance.  
\*\* Prior to grinding.



**PLAN**

(West vaulted slab shown, East vaulted slab similar.)

(Sheet 1 of 3)

FILE NAME = L:\Jobs\DOT\_D-6\7818 PTB 167-027\7818.03\CADD\CADD Sheets\0840148-0149-72H51\_12-9-19.dgn

Design firm  
no. 184001036



USER NAME = dheberling	DESIGNED - BRD	REVISED
MODEL = 0840148_49-72B54-021	CHECKED - TJZ	REVISED
PLOT SCALE = 0:2" = 1/4"	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - TJZ	REVISED

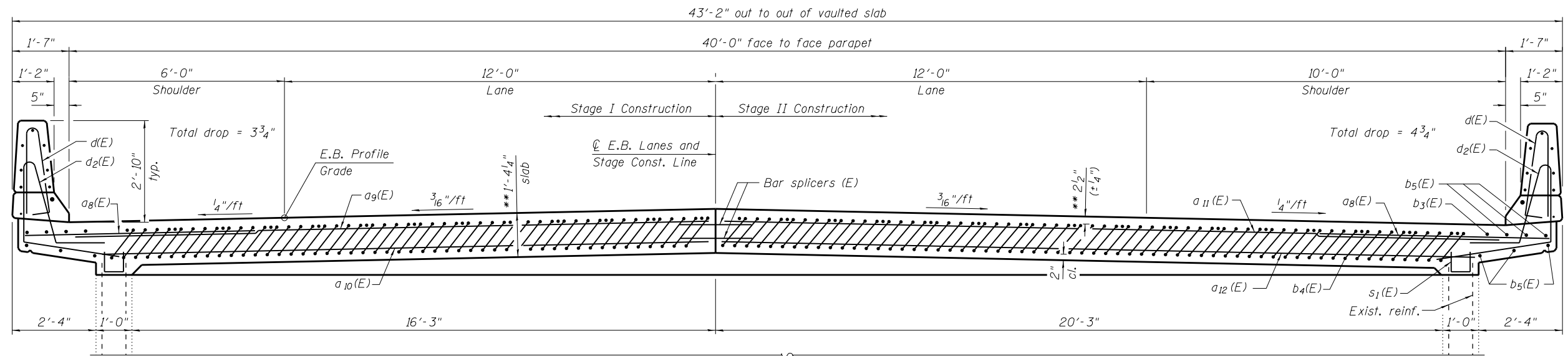
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**W.B. VAULTED ABUTMENT APPROACH SPAN DETAILS**  
**STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)**

SHEET NO. 21 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	73
CONTRACT NO. 72H51				

ILLINOIS FED. AID PROJECT

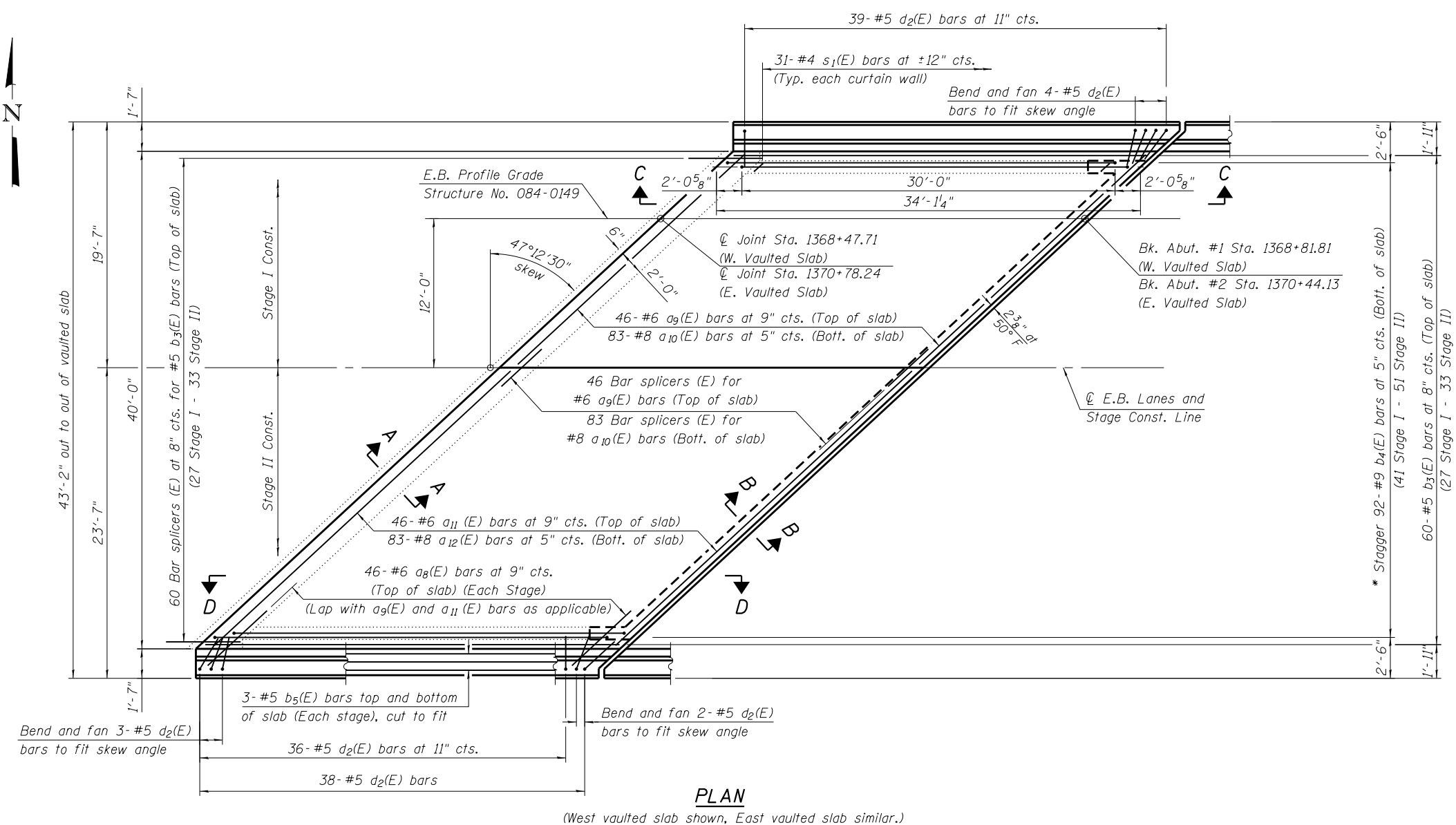


**CROSS SECTION**  
(E.B. Looking East)

Notes:

- Existing reinforcement in the vaulted abutment and the approach bent extending into the vaulted slab shall be cleaned, straightened, and incorporated into the new construction. Cost included with Concrete Removal.
- See sheet 23 of 44 for Sections A-A & B-B and View C-C & D-D.  $a_8(E)$  thru  $a_{12}(E)$  bar spacings are measured along  $\text{CL}$  of roadway.

\* Tilt #9  $b_4(E)$  bars as required to maintain clearance.  
\*\* Prior to grinding.

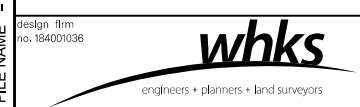


**PLAN**

(West vaulted slab shown, East vaulted slab similar.)

(Sheet 2 of 3)

FILE NAME = L:\Jobs\IDOT\_D-6\7818 PTB 167-027\7818.03\CADD\CADD Sheets\0840148-0149-72H51\_12-9-19.dgn



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PLOT SCALE = 0:2" = 1'	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - TJZ	REVISED

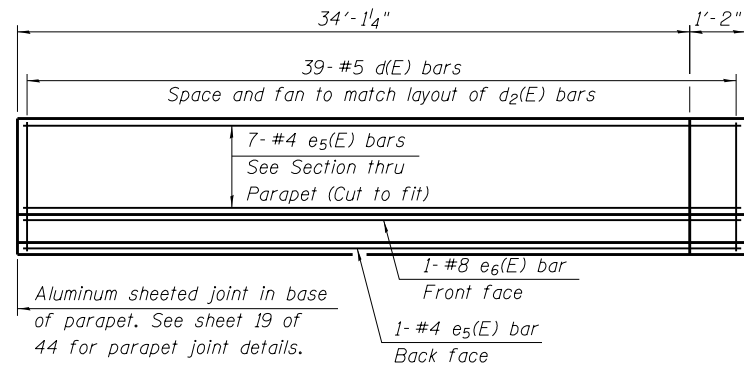
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**E.B. VAULTED ABUTMENT APPROACH SPAN DETAILS**  
**STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)**

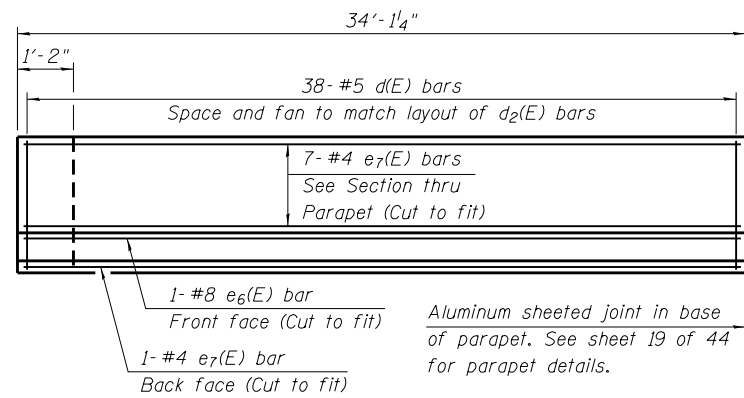
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	74
CONTRACT NO. 72H51				

SHEET NO. 22 OF 44 SHEETS

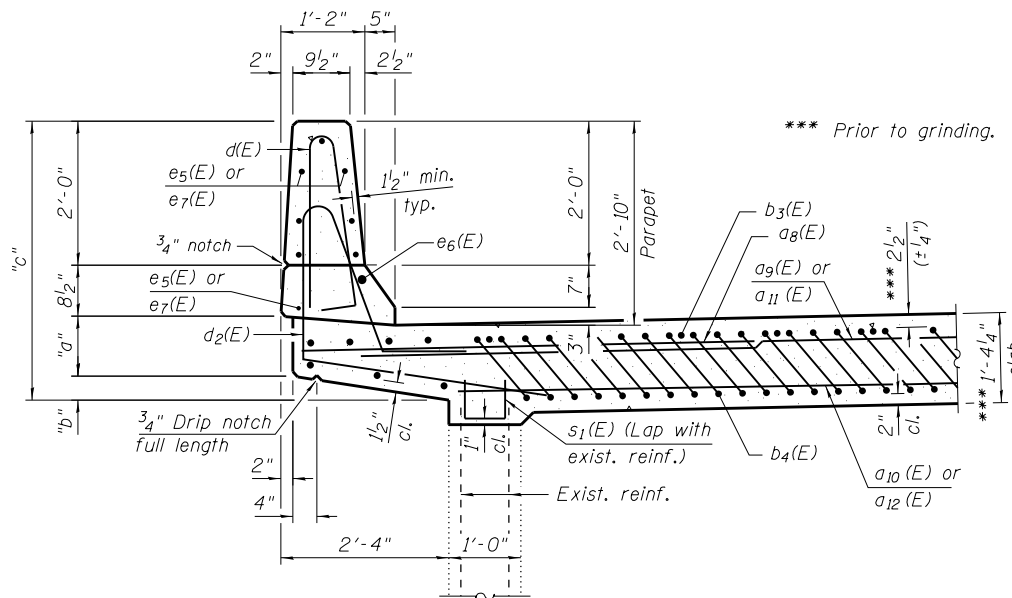
ILLINOIS FED. AID PROJECT



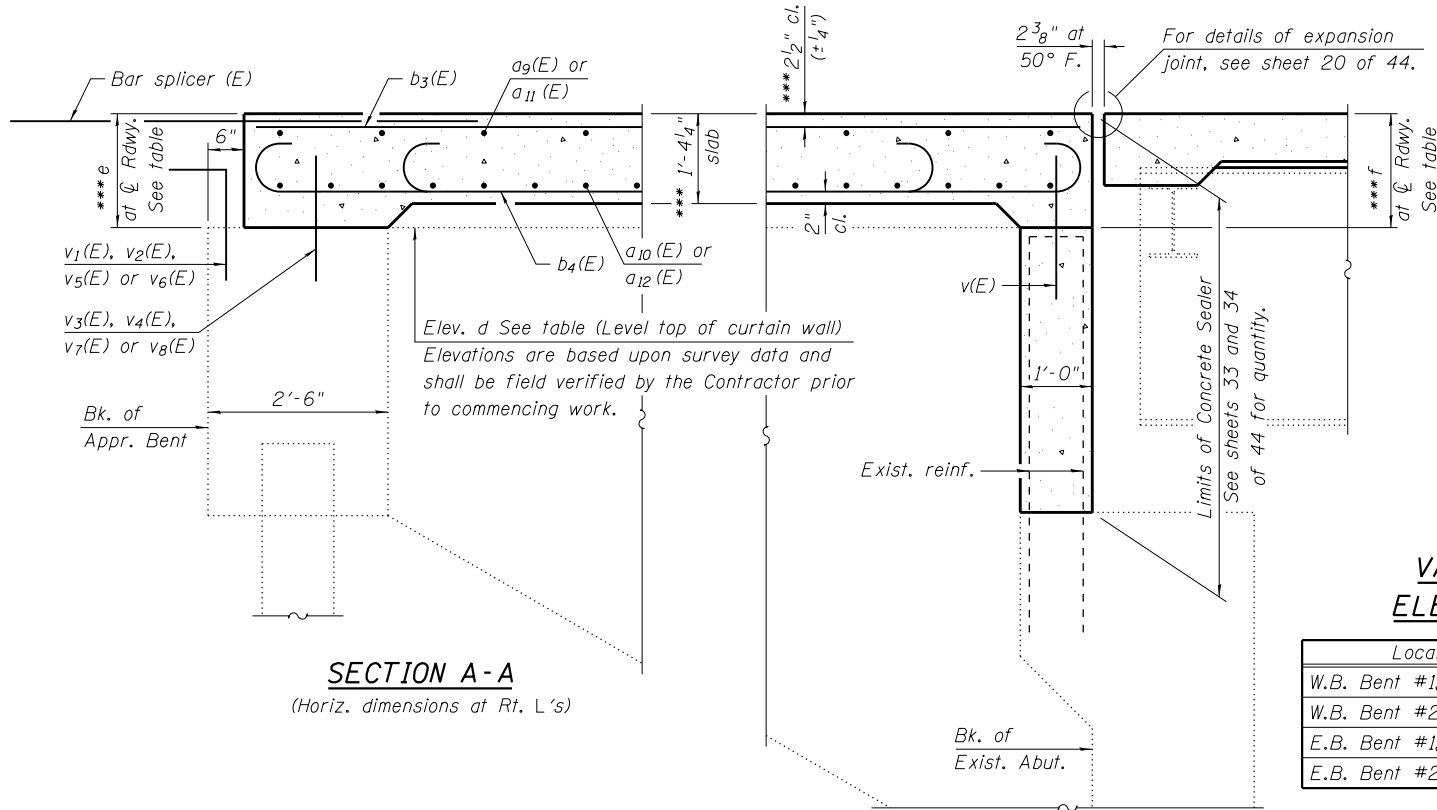
**VIEW C-C**  
(Inside face of Parapet)



**VIEW D-D**  
(Inside face of Parapet)



**SECTION THRU PARAPET**



**SECTION A-A**  
(Horiz. dimensions at Rt. L's)

**SECTION B-B**  
(Horiz. dimensions at Rt. L's)

**VAULTED SLAB TABLE OF ELEVATIONS AND DIMENSIONS**

Location	d	e	f
W.B. Bent #1, Abut. #1	637.23	2'-4 7/8"	2'-3 1/8"
W.B. Bent #2, Abut. #2	636.28	2'-1 1/8"	2'-3 5/8"
E.B. Bent #1, Abut. #1	637.67	2'-2 3/8"	2'-1 5/8"
E.B. Bent #2, Abut. #2	636.98	2'-0"	2'-2 1/4"

**Notes:**

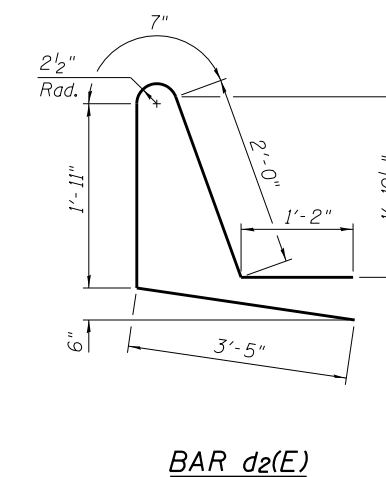
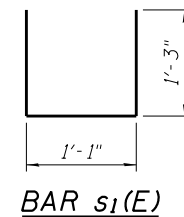
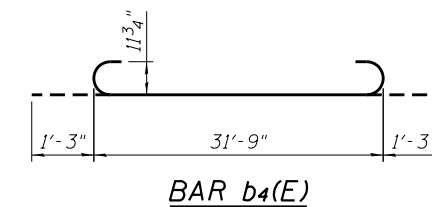
- Existing reinforcement in the vaulted abutment and the approach bent extending into the vaulted slab shall be cleaned, straightened, and incorporated into the new construction. Cost included with Concrete Removal.
- For bar d(E) details see sheet 19 of 44.
- For v(E) thru v<sub>8</sub>(E) bar details see sheets 33 and 34 of 44.
- For additional parapet details see sheets 19 and 20 of 44.
- For bar splicer details see sheet 35 of 44.

**FOUR VAULTED SLABS BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a <sub>8</sub> (E)	368	#6	6'-6"	—
a <sub>9</sub> (E)	184	#6	28'-1"	—
a <sub>10</sub> (E)	332	#8	24'-11"	—
a <sub>11</sub> (E)	184	#6	33'-11"	—
a <sub>12</sub> (E)	332	#8	30'-10"	—
b <sub>3</sub> (E)	240	#5	33'-10"	—
b <sub>4</sub> (E)	368	#9	34'-3"	⌋
b <sub>5</sub> (E)	48	#5	34'-11"	—
d(E)	308	#5	5'-7"	⌋
d <sub>2</sub> (E)	308	#5	9'-1"	⌋
e <sub>5</sub> (E)	32	#4	35'-0"	—
e <sub>6</sub> (E)	8	#8	34'-4"	—
e <sub>7</sub> (E)	32	#4	33'-4"	—
s <sub>1</sub> (E)	248	#4	3'-7"	⌋
Concrete Superstructure		Cu. Yd.		336.8
Reinforcement Bars, Epoxy Coated		Pound		130,720
Bar Splicers		Each		756

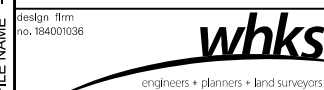
**TABLE OF DIMENSIONS**

	084-0148 (W.B.)		084-0149 (E.B.)	
	North	South	North	South
"a"	9 1/2"	9 1/2"	9 1/2"	10"
"b"	3 1/8"	3"	3 3/8"	3 3/4"
"c"	3'-9 1/8"	3'-9"	3'-9 3/8"	3'-10 1/4"



(Sheet 3 of 3)

FILE NAME = L:\Jobs\DOT\_D-617818 PTB 167-0271818.03\CADD\CADD Sheets\0840148-0149-72H51\_12-9-19.dgn



USER NAME = dheberling	DESIGNED - BRD	REVISED
MODEL = 0840148_49-72B54-023	CHECKED - TJZ	REVISED
PLOT SCALE = 0:2" = 1/4"	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - TJZ	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

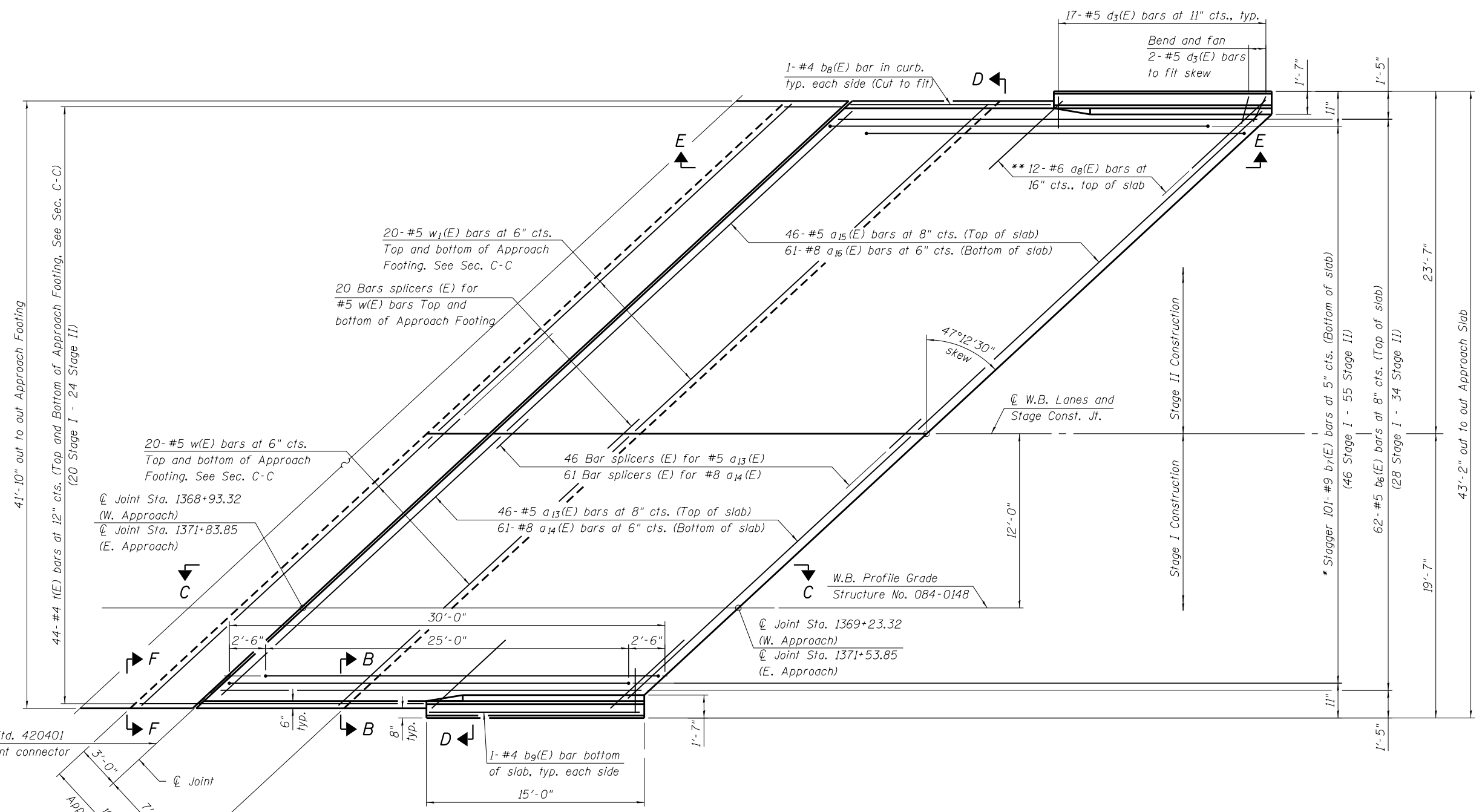
VAULTED ABUTMENT APPROACH SPAN DETAILS  
STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)

SHEET NO. 23 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	75
				CONTRACT NO. 72H51

ILLINOIS FED. AID PROJECT

FILE NAME = L:\Jobs\DOT\_D-6\7818 PTB 167-027\7818.03\CADD\CADD Sheets\0840148-0149-72H51\_12-9-19.dgn



**PLAN**

(West approach slab shown, east approach slab similar.)

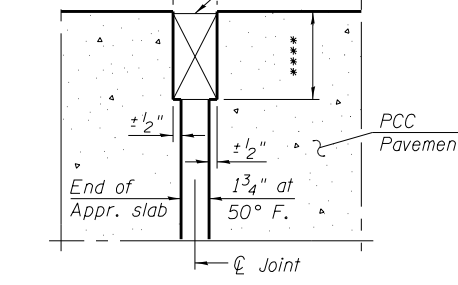
- \* Tilt #9 b7(E) bars as required to maintain clearance.
- \*\* Lap with a13(E) and a15(E) bars as applicable, typ. each parapet.
- \*\*\* See Special Provision "Preformed Pavement Joint Seal." Recess shown is prior to grinding.
- \*\*\*\* Per manufacturer recommendation.

**Notes:**

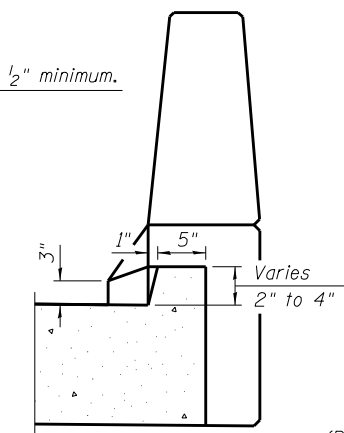
1. See sheet 26 of 44 for Sections C-C & D-D and View E-E. a13(E) thru a16(E) bar spacings measured along  $\phi$  Rdwy.
2. The joint opening shall be determined per Article 520.04 except that on jointless structures, the distance described as the bridge length between the nearest fixed bearings each way from the joint shall be taken as half the bridge length plus the approach slab length. The minimum dimension shall be 1/2" for installation purposes.

2 3/4" at 50° F  
See Notes.

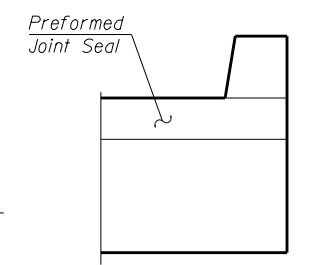
\*\*\* Expansion joint. Recess 1/2" minimum.  
Run out to out of curb.



**DETAIL A**

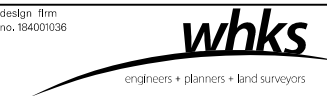


**VIEW B-B**



**VIEW F-F**

(Pavement connector curb only applicable to east end of both the E.B. and W.B. structures.)



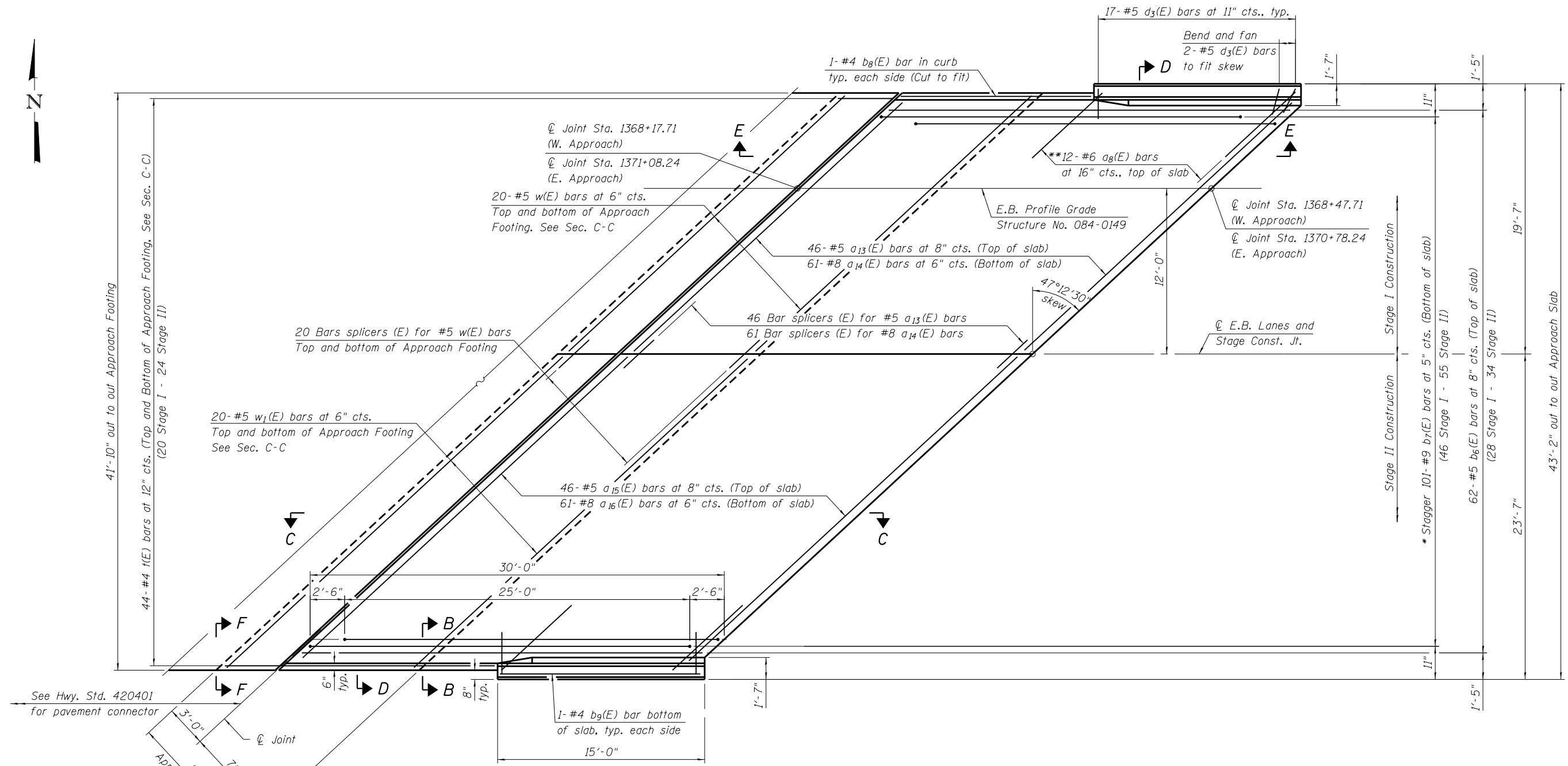
DESIGN FIRM no. 184001036	USER NAME = dheberling	DESIGNED - BRD	REVISED
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	PLOT SCALE = 0:2" = 1'-0"	DRAWN - DLH	REVISED
	PLOT DATE = 1/30/2020	CHECKED - TJZ	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**W.B. BRIDGE APPROACH SLAB DETAILS  
STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)**

SHEET NO. 24 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	76
CONTRACT NO. 72H51				
ILLINOIS FED. AID PROJECT				



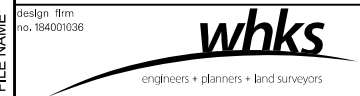
**PLAN**

(West approach slab shown, east approach slab similar.)  
 \* Tilt #9 b<sub>7</sub>(E) bars as required to maintain clearance.  
 \*\* Lap with a<sub>13</sub>(E) and a<sub>15</sub>(E) bars as applicable, typ. each parapet.

Note:  
 1. Work this sheet with sheet 24 of 44.

(Sheet 2 of 3)

FILE NAME = L:\Jobs\IDOT\_D-6\7818 PTB 167-02\71818.03\CADD\CADD Sheets\0840148-0149-72H51\_12-9-19.dgn



USER NAME = dheberling	DESIGNED - BRD	REVISED
MODEL = 0840148_49-72B54-025	CHECKED - TJZ	REVISED
PLOT SCALE = 0:2" = 1" / in.	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - TJZ	REVISED

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**E.B. BRIDGE APPROACH SLAB DETAILS  
 STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)**

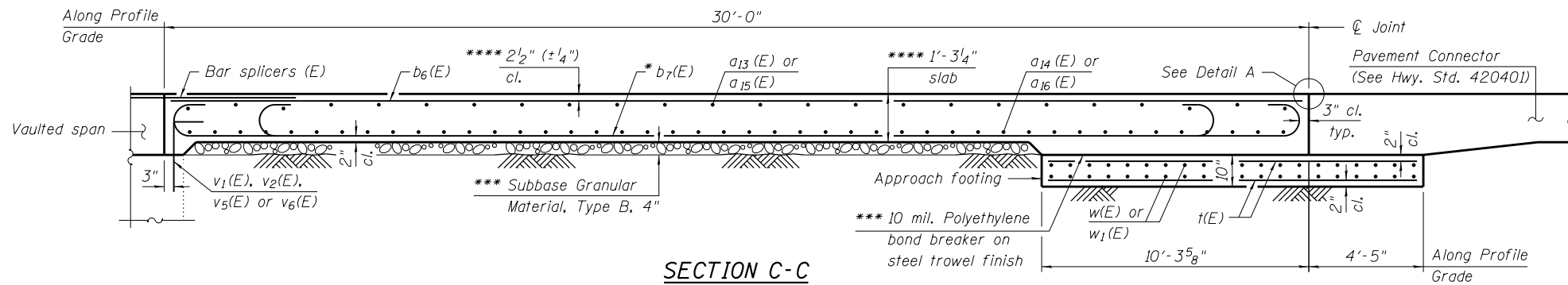
SHEET NO. 25 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	77
CONTRACT NO. 72H51				

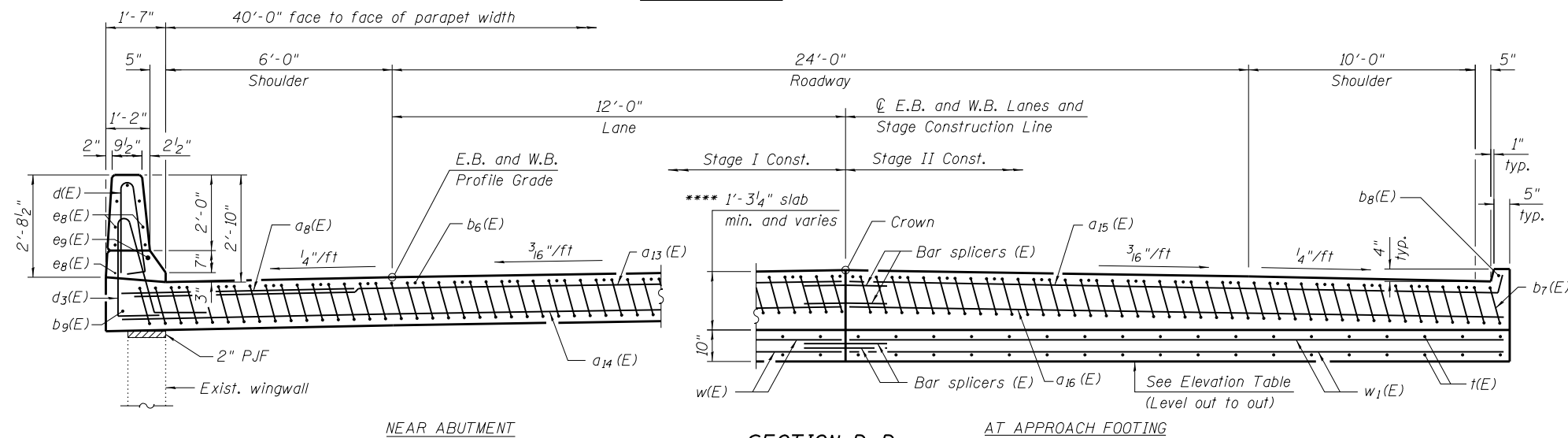
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Notes:

1. See sheets 24 of 44 for Detail A.
2. Approach slab concrete shall be paid for as Concrete Superstructure (Approach Slab) and parapet concrete shall be paid for as Concrete Superstructure.
3. Approach footing concrete shall be paid for as Concrete Structures.
4. Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
5. For  $v_1(E)$ ,  $v_2(E)$ ,  $v_5(E)$  or  $v_6(E)$  bar details, see sheet 33 and 34 of 44.
6. The approach footing maximum applied service bearing pressure ( $Q_{max}$ ) = 2.0 ksf.
7. For bar splicer details, see sheet 35 of 44.
8. Cost of excavation for approach footing included with Concrete Structures.
9. For additional parapet details, see sheet 19 of 44.
10. Cost of 2" Preformed Joint Filler included with Concrete Superstructures.

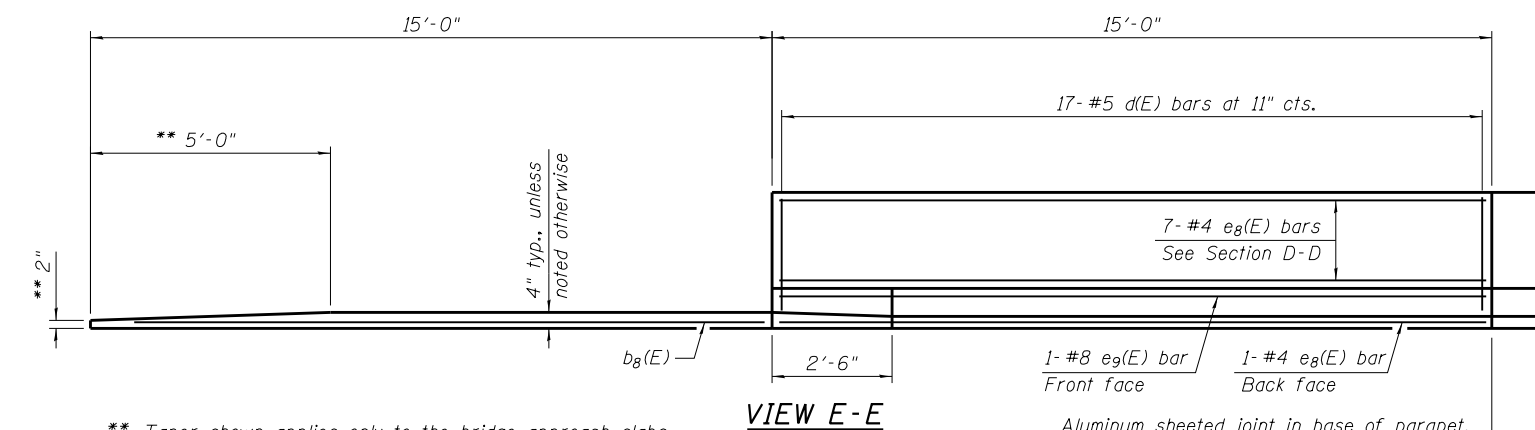


SECTION C-C



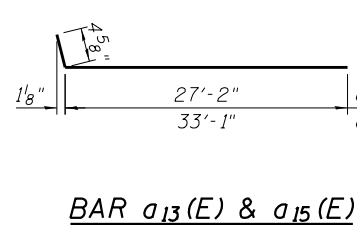
SECTION D-D

(See plan for dimensions not shown.)

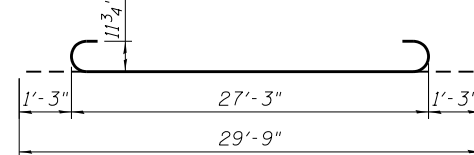


VIEW E-E

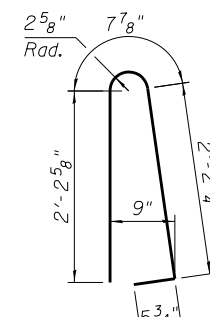
\*\* Taper shown applies only to the bridge approach slabs at the west end of both the EB and WB structures.



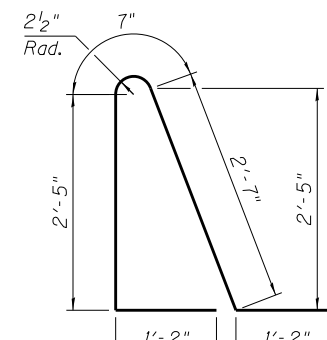
BAR  $a_{13}(E)$  &  $a_{15}(E)$



BAR  $b_7(E)$



BAR  $d(E)$



BAR  $d_3(E)$

APPROACH FOOTING ELEVATION TABLE

Location	Elevation
W.B. West Approach Footing	637.02
W.B. East Approach Footing	635.37
E.B. West Approach Footing	637.26
E.B. East Approach Footing	636.14

FOUR APPROACHES  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$a_8(E)$	96	#6	6'-6"	—
$a_{13}(E)$	184	#5	27'-7"	—
$a_{14}(E)$	244	#8	27'-4"	—
$a_{15}(E)$	184	#5	33'-6"	—
$a_{16}(E)$	244	#8	33'-3"	—
$b_6(E)$	248	#5	29'-8"	—
$b_7(E)$	404	#9	29'-9"	—
$b_8(E)$	8	#4	15'-4"	—
$b_9(E)$	8	#4	14'-9"	—
$d(E)$	136	#5	5'-7"	—
$d_3(E)$	136	#5	7'-11"	—
$e_8(E)$	64	#4	14'-8"	—
$e_9(E)$	8	#8	14'-8"	—
$t(E)$	352	#4	14'-4"	—
$w(E)$	160	#5	27'-5"	—
$w_1(E)$	160	#5	33'-4"	—
Concrete Superstructure		Cu. Yd.	13.3	
Concrete Superstructure (Approach Slab)		Cu. Yd.	272.6	
Concrete Structures		Cu. Yd.	76.1	
Reinforcement Bars, Epoxy Coated		Pound	117,200	
Bar Splicers		Each	588	

(Sheet 3 of 3)

FILE NAME = L:\Jobs\IDOT\_D-617818\_PTB 167-02717818.03\CADD\CADD Sheets\0840148-0149-72H51\_12-9-19.dgn



DESIGN FIRM	USER NAME = dheberling	DESIGNED - BRD	REVISED
MODEL = 0840148_49-72B54-026	CHECKED - TJZ	REVISED	
PLOT SCALE = 0:2" = 1' in.	DRAWN - DLH	REVISED	
PLOT DATE = 1/30/2020	CHECKED - TJZ	REVISED	

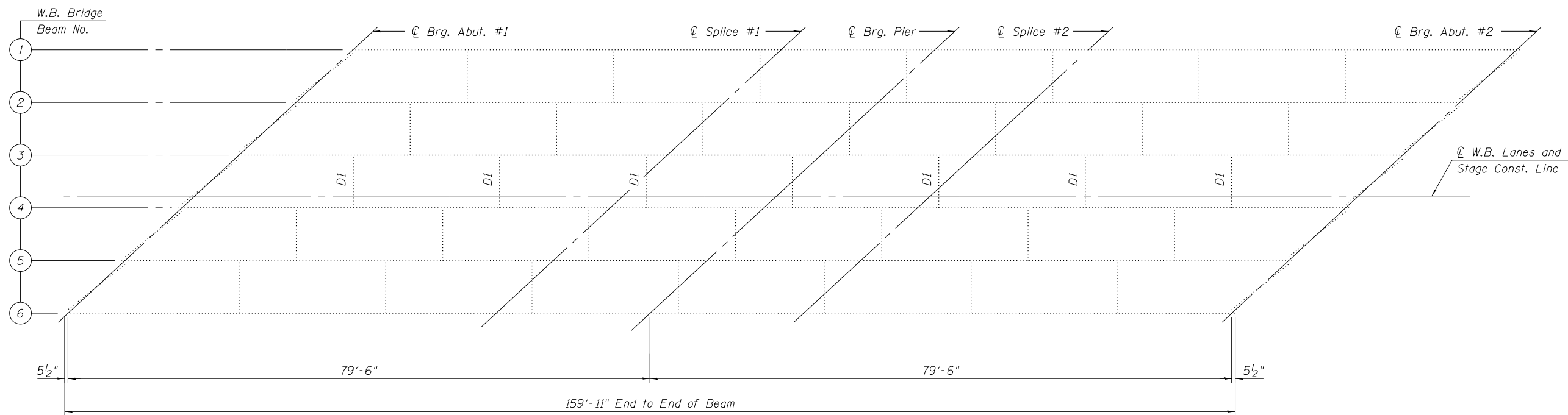
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS  
STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)

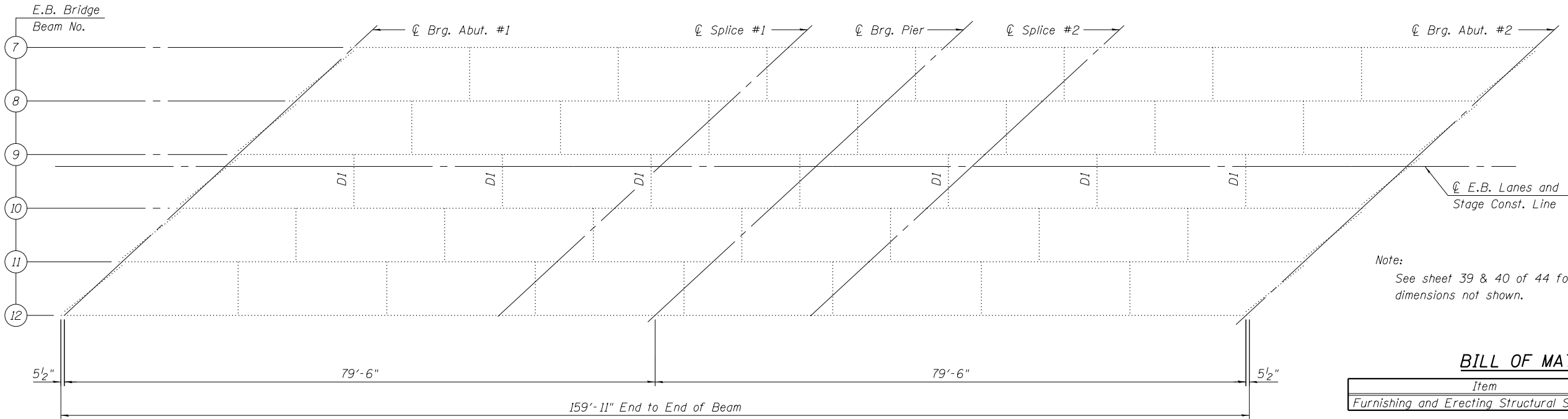
SHEET NO. 26 OF 44 SHEETS

F.A.I. RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	78
CONTRACT NO. 72H51				

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**FRAMING PLAN**

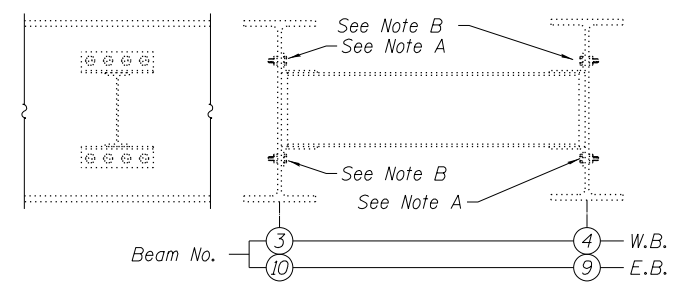


**FRAMING PLAN**

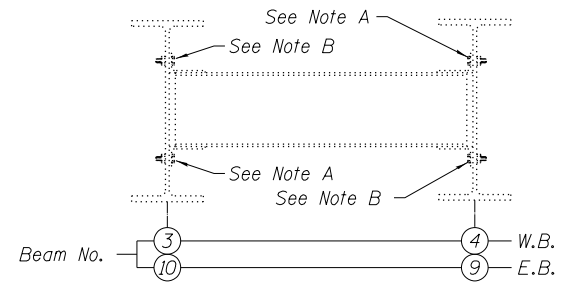
Note:  
See sheet 39 & 40 of 44 for additional details and dimensions not shown.

**BILL OF MATERIAL**

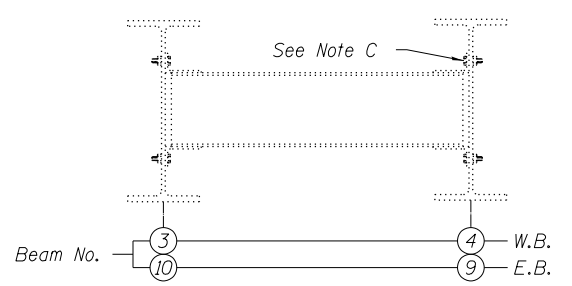
Item	Unit	Total
Furnishing and Erecting Structural Steel	Pound	150



**DIAPHRAGM DI CONNECTION DETAILS FOR STAGE I DECK REMOVAL**



**DIAPHRAGM DI CONNECTION DETAILS FOR STAGE II DECK REMOVAL**



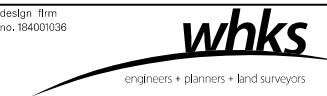
**DIAPHRAGM DI CONNECTION DETAILS AFTER STAGE II DECK POUR**

Note A: Loosen or adjust existing bolts to a finger tight condition with faying surfaces still in close contact. Cost included with Removal of Existing Concrete Deck, No. 2.

Note B: Loosen existing bolts approximately 1/4". Cost included with Removal of Existing Concrete Deck, No. 2.

Note C: Replace existing bolts one at a time at each corner of the diaphragm connection with new 3/4" φ H.S. bolts and two hardened washers for each bolt. Cost included with Furnishing and Erecting Structural Steel.

FILE NAME = L:\Jobs\DOT\_D-6\7818 PTB 167-027\7818.03\CADD\CADD Sheets\0840148-01-49-72H51\_12-9-19.dgn



USER NAME = dheberling	DESIGNED - CEH	REVISED
MODEL = 0840148_49-72B54-026A	CHECKED - BRD	REVISED
PLOT SCALE = 0:2" = 1" / in.	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - CEH	REVISED

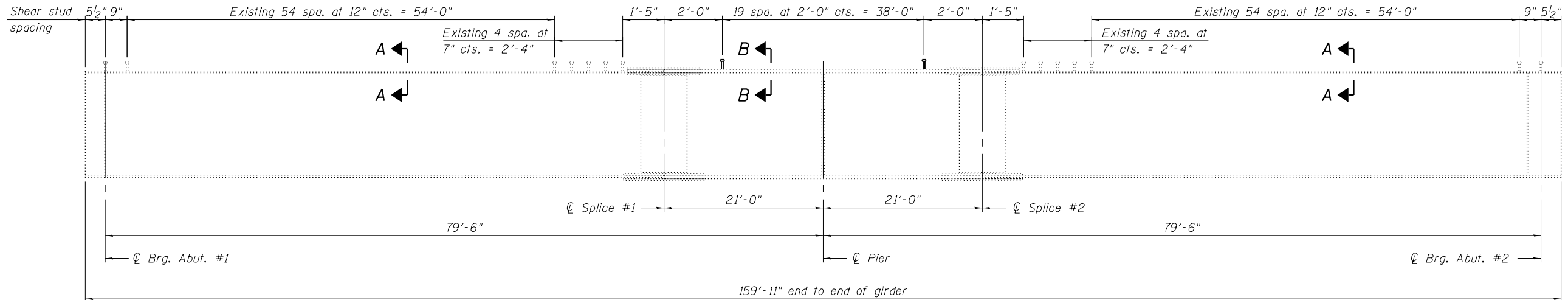
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**STRUCTURAL STEEL DETAILS  
STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)**

SHEET NO. 26A OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	78A
				CONTRACT NO. 72H51

ILLINOIS FED. AID PROJECT



**GIRDER ELEVATION**

**Notes:**

- For Existing Framing Plan & Details see sheets 39 and 40 of 44.
- Existing shear studs that are damaged by the deck removal procedure shall be supplemented with new studs. Spacing between damaged existing and supplemental new stud shall be approximately 3 inches center to center (longitudinal along the girder). Cost included with Removal of Existing Concrete Deck.
- Contractor shall verify that the height of the s(E) bar provides the minimum required embedment above the bottom of the deck for the fillet heights determined in the field prior to ordering the reinforcement and adjust the bar height as needed. To accommodate the top mat of deck reinforcement bars, the s(E) bars located within 32 ft of the end of the girders may be tilted towards the abutment with the other s(E) bars tilted towards the piers. s(E) bars should not be tilted more than 45 degrees from vertical.

	0.4 Sp. 1 or 0.6 Sp. 2	Pier
$I_s$	13,681	25,417
$I_c(n)$	37,810	-
$I_c(3n)$	27,597	-
$I_c(cr)$	-	30,033
$S_s$	740	1,130
$S_c(n)$	1,016	-
$S_c(3n)$	940	-
$S_c(cr)$	-	1,196
$Z$	-	-
$\phi$	0.94	1.04
$M\phi$	363	889
$s\phi$	0.48	0.48
$M_s\phi$	198	421
$M_L$	597	555
$M_I$	146	136
$^5_3 [M_L + I]$	1,238	1,152
$M_o$	2,339	3,201
$M_u$	-	-
$f_s \phi$ non-comp	5.9	9.4
$f_s \phi$ (comp)	2.5	4.2
$f_s ^5_3 [M_L + M_I]$	14.6	11.6
$f_s$ (Overload)	23.0	25.2
$f_s$ (Total)	29.9	32.8
VR	62.6	61.1

$I_s, S_s$ : Non-composite moment of inertia and section modulus of the steel section used for computing  $f_s$  (Total and Overload) due to non-composite dead loads (in.<sup>4</sup> and in.<sup>3</sup>).

$I_c(n), S_c(n)$ : Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing  $f_s$  (Total and Overload) due to short-term composite live loads (in.<sup>4</sup> and in.<sup>3</sup>).

$I_c(3n), S_c(3n)$ : Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing  $f_s$  (Total and Overload) due to long-term composite (superimposed) dead loads (in.<sup>4</sup> and in.<sup>3</sup>).

$Z$ : Plastic Section Modulus of the steel section in non-composite areas (in.<sup>3</sup>).

$I_c(cr), S_c(cr)$ : Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing  $f_s$  (Total and Overload) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (in.<sup>4</sup> and in.<sup>3</sup>).

$\phi$ : Un-factored non-composite dead load (kips/ft.).

$M\phi$ : Un-factored moment due to non-composite dead load (kip-ft.).

$s\phi$ : Un-factored long-term composite (superimposed) dead load (kips/ft.).

$M_s\phi$ : Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).

$M_L$ : Un-factored live load moment (kip-ft.).

$M_I$ : Un-factored moment due to impact (kip-ft.).

$M_o$ : Factored design moment (kip-ft.).

$1.3 [M\phi + M_s\phi + \frac{5}{3} (M_L + M_I)]$

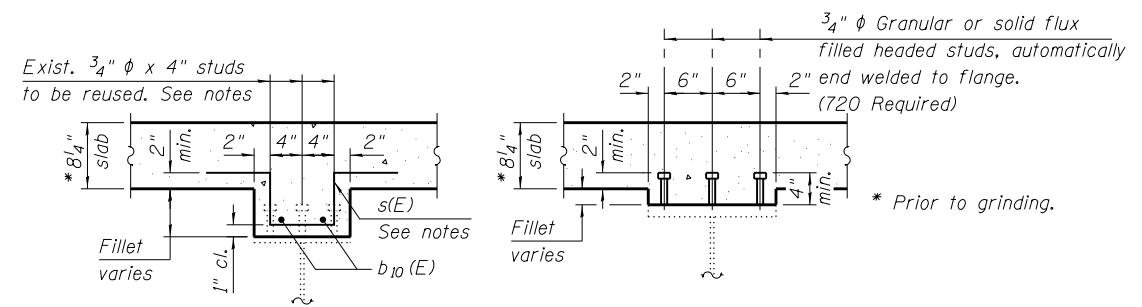
$M_u$ : Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).

$f_s$  (Overload): Sum of stresses as computed from the moments below (ksi).

$f_s$  (Total): Sum of stresses as computed from the moments below on non-compact section (ksi).

$1.3 [M\phi + M_s\phi + \frac{5}{3} (M_L + M_I)]$

VR: Maximum  $\frac{1}{4}$  impact shear range within the composite portion of the span for stud shear connector design (kips).



**SECTION A-A**

**SECTION B-B**

	Abut.	Pier
$R\phi$	41.1	149.3
$R_L$	45.0	58.7
$R_I$	11.0	14.4
$R_{Total}$	97.1	222.4

**BILL OF MATERIAL**

Item	Unit	Total
Stud Shear Connectors	Each	720

\* Compact section  
 \*\* Braced non-compact and partially braced section

FILE NAME = L:\Jobs\DOT\_D-617818\_PTB-167-027\71818\_03\CADD\CADD Sheets\0840148-0149-72H51\_12-9-19.dgn

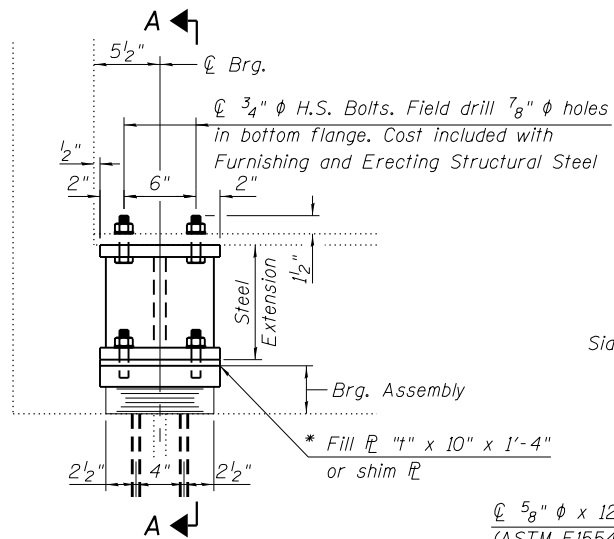


**JACK AND REMOVE EXISTING BEARINGS PROCEDURE**

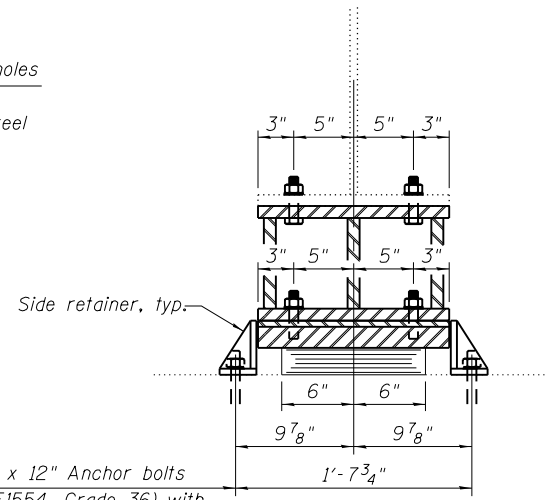
1. The Contractor shall submit for approval by the Engineer, plans for jacking and removing existing bearings prior to commencing any related work. See Jacking and Cribbing Special Provisions.
2. Jacking and removing existing bearings shall be done in stages after existing deck removal is completed and shall be coordinated with abutment concrete repairs (See sheets 29 and 30 of 44).
3. The Maximum Dead Load Reaction with deck removed (per bearing) at each abutment is 6 kips. Minimum jack capacity is 9 kips.
4. The existing abutment seats shall be repaired as applicable, new bearings shall be in place and the jacks shall be lowered prior to forming and pouring the new deck.

**Notes:**

1. Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
2. Anchor bolts for side retainers may be installed in holes drilled before or after members are in place.
3. Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
4. Side retainers and other steel members required for the elastomeric bearing assembly, except steel bearing extension, fill plates, and bolts in bottom flange shall be included in the cost of Elastomeric Bearing Assembly, Type I. Steel bearing extensions, fill plates, and bolts in bottom flange are included in the quantity for Furnishing and Erecting Structural Steel.
5. Two 1/8" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details. Cost included with Furnishing and Erecting Structural Steel.

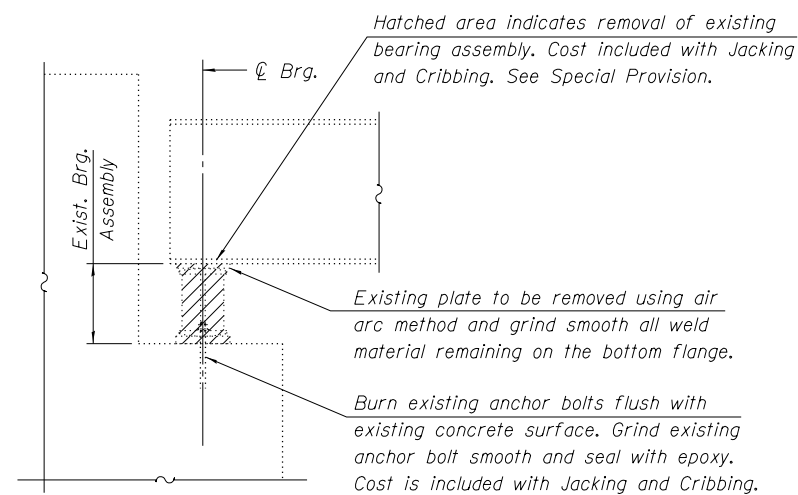


**ELEVATION AT ABUT.**



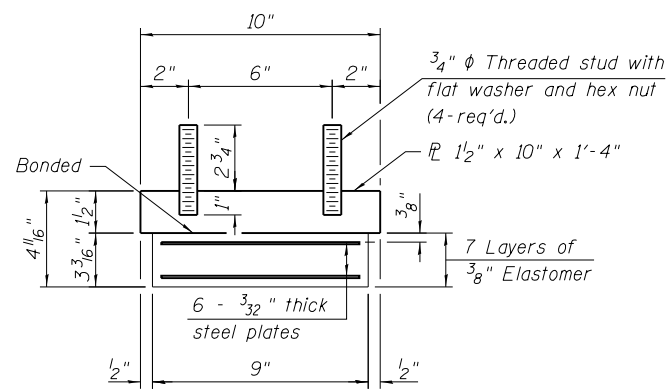
**SECTION A-A**

(Interior girder shown. Side retainer to be omitted on exterior side of fascia girder.)



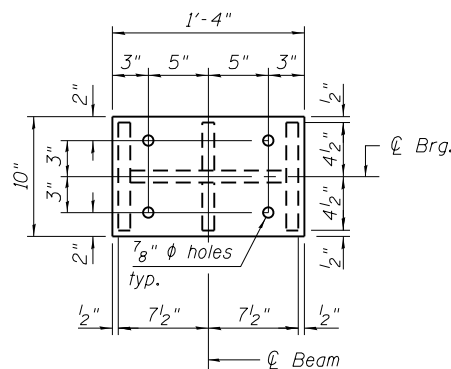
**EXISTING BEARING ASSEMBLY REMOVAL DETAIL**

**TYPE I ELASTOMERIC EXP. BRG.**

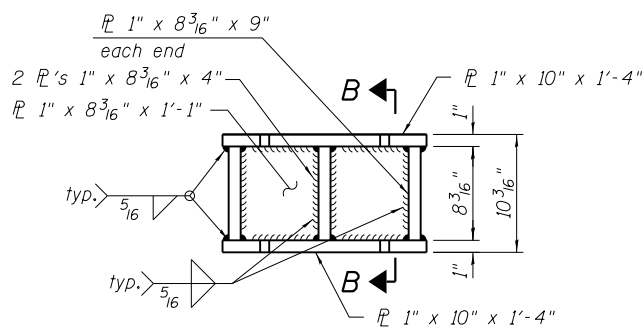


**BEARING ASSEMBLY**

Shim plates shall not be placed under Bearing Assembly.



**STEEL BEARING EXTENSION**

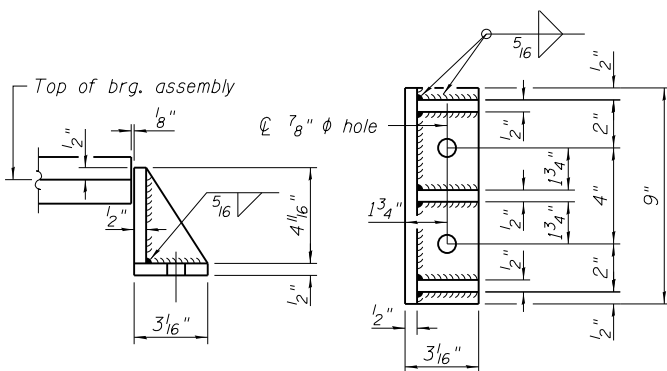


**SECTION B-B**

**\* TABLE OF "I" DIMENSIONS**

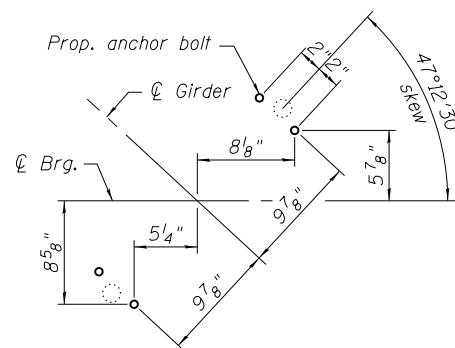
Beam No.	084-0148 (WB)		Beam No.	084-0149 (EB)	
	Abut. #1	Abut. #2		Abut. #1	Abut. #2
1	-	5/16"	7	1/4"	3/8"
2	3/4"	3/4"	8	1/16"	7/8"
3	15/16"	1/4"	9	3/4"	7/8"
4	1"	1/4"	10	7/16"	8"
5	3/4"	1/4"	11	1/4"	5/8"
6	1/16"	1/2"	12	13/16"	9/16"

\* The fill  $\varnothing$  thicknesses shown above are based on survey data to match the height of the existing bearing assemblies. Prior to ordering any material, the Contractor shall field verify all existing bearing heights and required fill plate thicknesses. The Contractor may adjust the height of the steel extensions in lieu of providing the above fill plates.



**SIDE RETAINER**

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates. (40 req'd. See Section A-A)



**ANCHOR BOLT LAYOUT**

(Interior girder shown. Exterior girder similar except as noted in Section A-A.)  
 (Shown for information only. It is recommended that the Contractor set the side retainers in place and use the holes in the side retainers to locate the anchor bolts on the abutment.)

**BILL OF MATERIAL**

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	24
Anchor Bolts, 5/8"	Each	80
Jacking and Cribbing, Location No. 2	L. Sum	1
Furnishing and Erecting Structural Steel	Pound	5,460

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DESIGN FIRM no. 184001036	USER NAME = dheberling	DESIGNED - BRD	REVISED
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	PLOT DATE = 1/30/2020	CHECKED - TJZ	REVISED

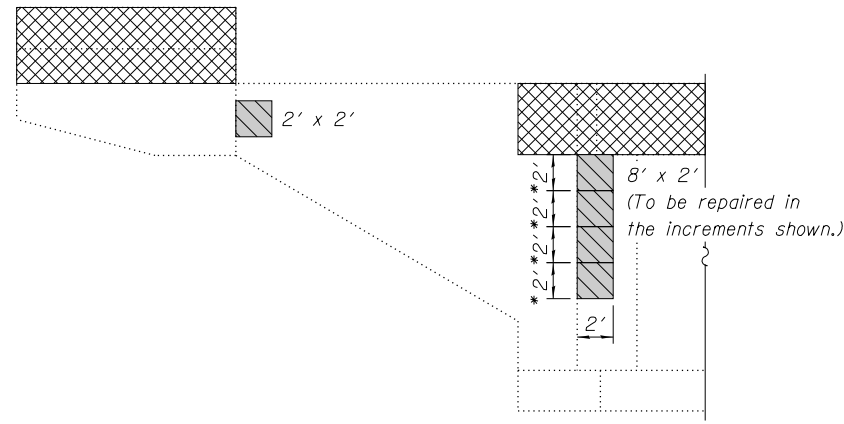
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BEARING DETAILS  
STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)**

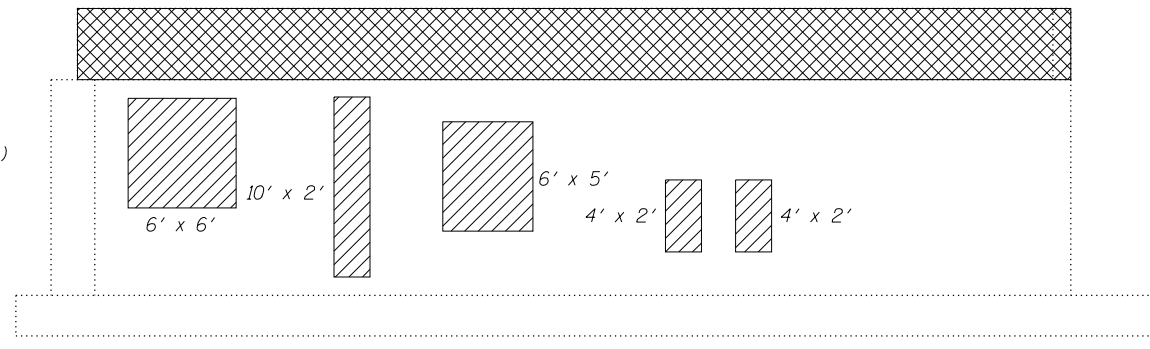
SHEET NO. 28 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	80
				CONTRACT NO. 72H51
ILLINOIS FED. AID PROJECT				

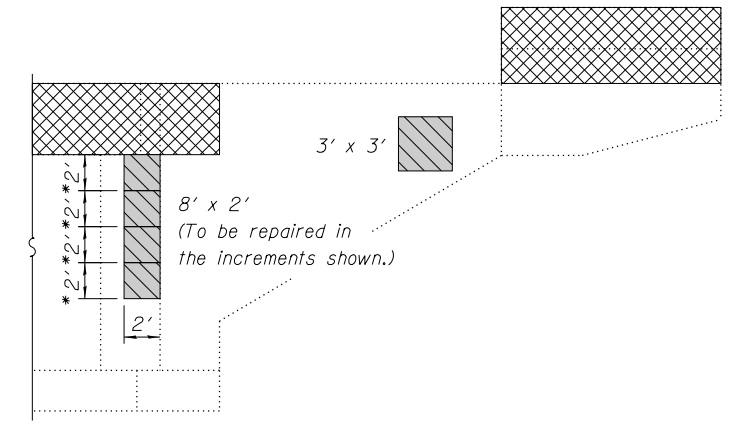
\* To maintain integrity of the of the curtain wall connections, these repairs shall be completed prior to commencing Concrete Removal detailed on Sheets 31 and 32 of 44 and removal of the existing adjacent vaulted abutment approach span. In addition, the repairs shall be completed in successive increments when detailed with one increment completed and the required strength obtained prior to commencing work for the next increment. Jacking and cribbing shall be required for the adjacent girder prior to commencing concrete removal for the top 2 ft of the repair. See sheet 28 of 44 for additional jacking and cribbing details.



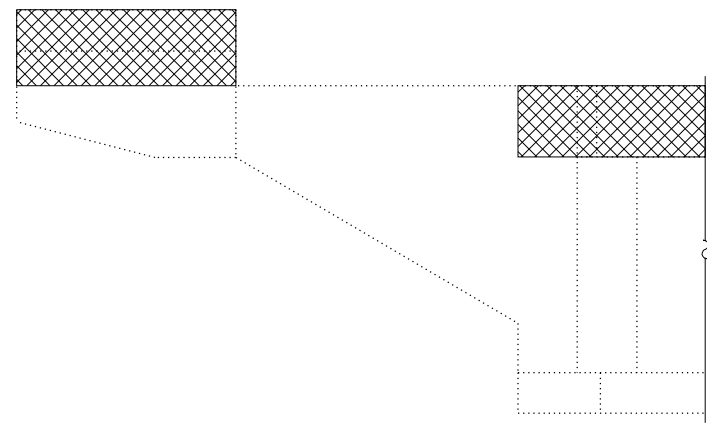
SIDE ELEVATION - SOUTH FACE



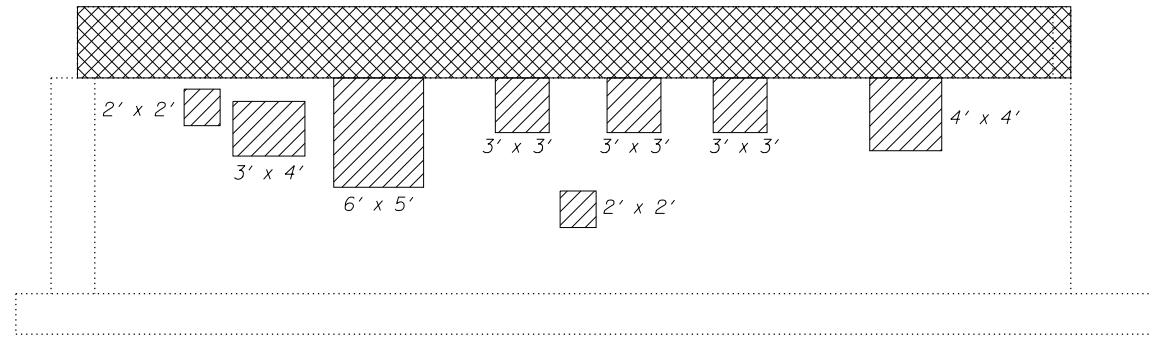
W.B. ABUTMENT #1 ELEVATION  
(Looking West)



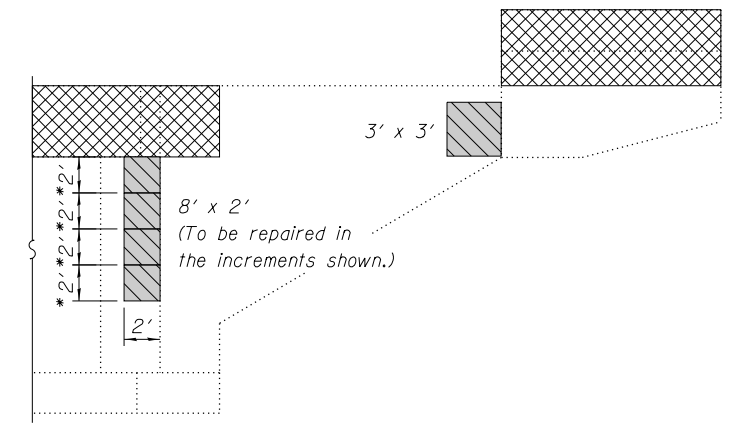
SIDE ELEVATION - NORTH FACE



SIDE ELEVATION - NORTH FACE



W.B. ABUTMENT #2 ELEVATION  
(Looking East)



SIDE ELEVATION - SOUTH FACE

LEGEND

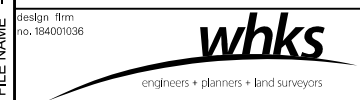
- Structural Repair of Concrete (Depth equal to or less than 5 inches).
- Structural Repair of Concrete (Depth equal to or less than 5 inches) prior to concrete removal.
- Limits of concrete removal. See sheets 31 and 32 of 44 for additional details.

TWO ABUTMENTS BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete (Depth equal to or less than 5 inches)	Sq. Ft.	265

(Sheet 1 of 2)

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USER NAME = dheberling	DESIGNED - BRD	REVISED
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PLOT SCALE = 0:2" = 1'	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - TJZ	REVISED

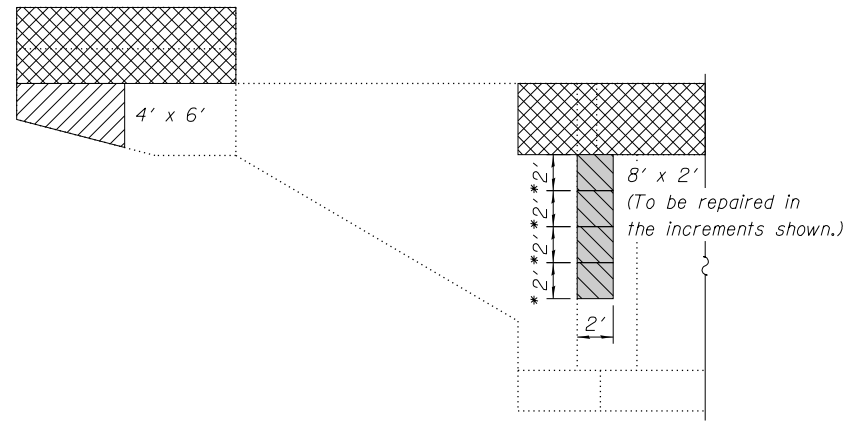
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUBSTRUCTURE REPAIR DETAILS  
STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)**

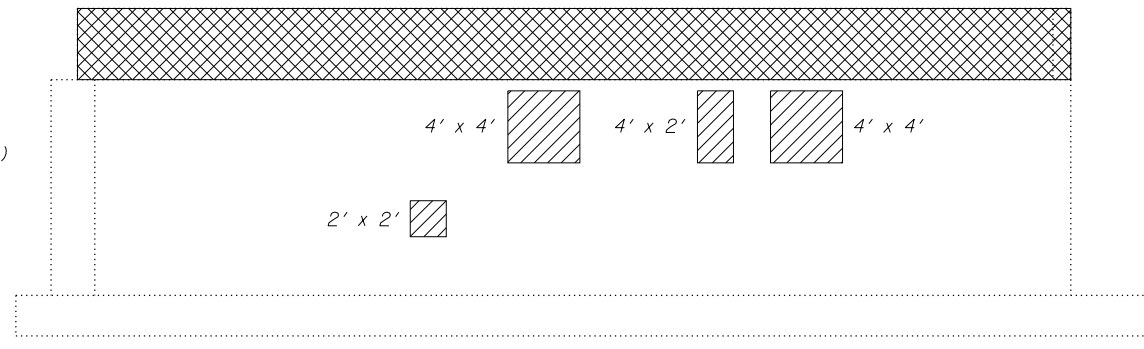
SHEET NO. 29 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	81
CONTRACT NO. 72H51			ILLINOIS FED. AID PROJECT	

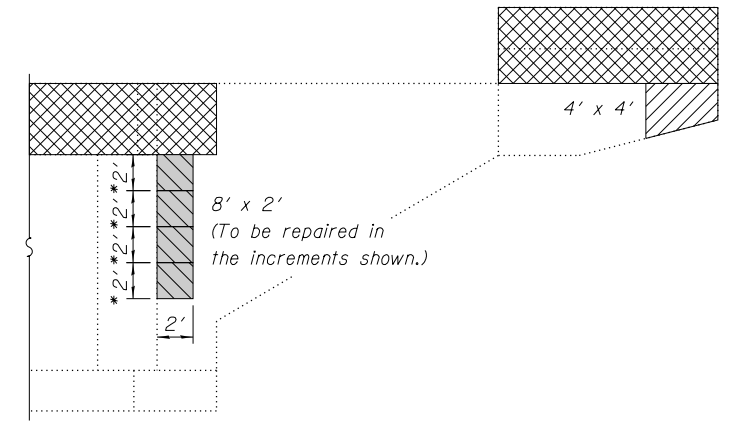
\* To maintain integrity of the of the curtain wall connections, these repairs shall be completed prior to commencing Concrete Removal detailed on Sheets 31 and 32 of 44 and removal of the existing adjacent vaulted abutment approach span. In addition, the repairs shall be completed in successive increments when detailed with one increment completed and the required strength obtained prior to commencing work for the next increment. Jacking and cribbing shall be required for the adjacent girder prior to commencing concrete removal for the top 2 ft of the repair. See sheet 28 of 44 for additional jacking and cribbing details.



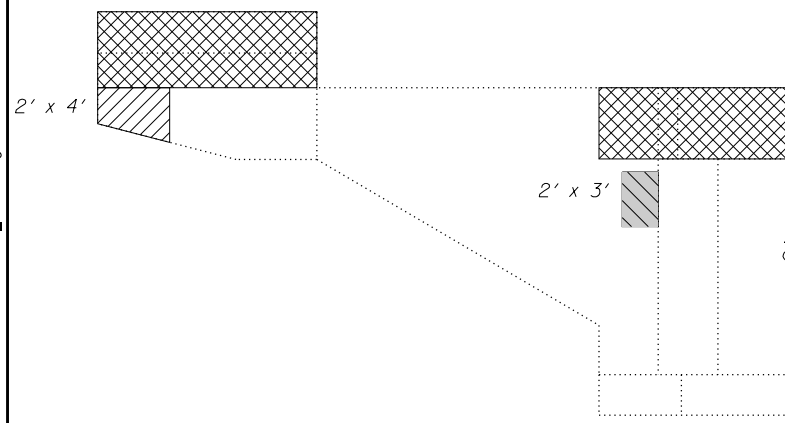
**SIDE ELEVATION - SOUTH FACE**



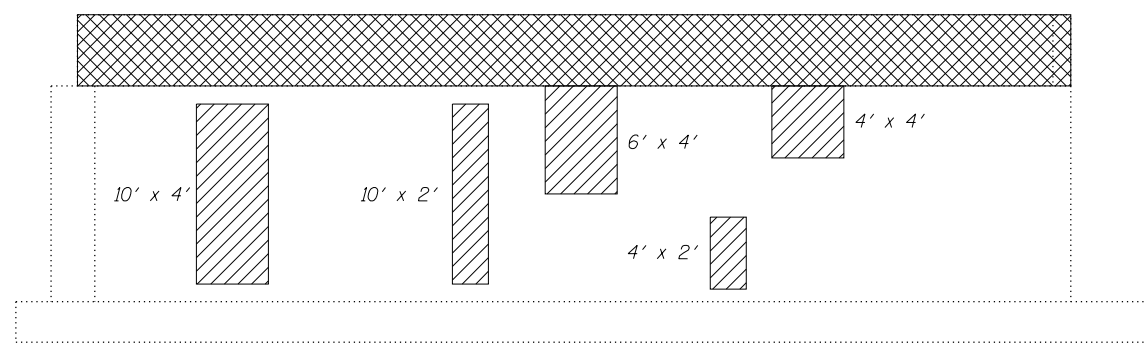
**E.B. ABUTMENT #1 ELEVATION**  
(Looking West)



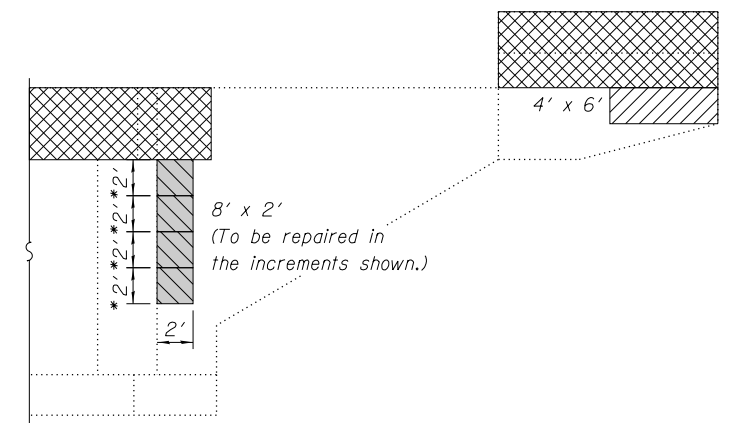
**SIDE ELEVATION - NORTH FACE**



**SIDE ELEVATION - NORTH FACE**



**E.B. ABUTMENT #2 ELEVATION**  
(Looking East)



**SIDE ELEVATION - SOUTH FACE**

**LEGEND**

- Structural Repair of Concrete (Depth equal to or less than 5 inches).
- Structural Repair of Concrete (Depth equal to or less than 5 inches) prior to concrete removal.
- Limits of concrete removal. See sheets 31 and 32 of 44 for additional details.

**TWO ABUTMENTS BILL OF MATERIAL**

Item	Unit	Total
Structural Repair of Concrete (Depth equal to or less than 5 inches)	Sq. Ft.	278

(Sheet 2 of 2)

FILE NAME = L:\Jobs\DOT\_D-6\7818 PTB 167-027\7818.03\CADD\CADD Sheets\0840148-0149-72H51\_12-9-19.dgn

Design firm  
no. 184001036



USER NAME = dheberling	DESIGNED - BRD	REVISED
MODEL = 0840148_49-72B54-030	CHECKED - T.JZ	REVISED
PLOT SCALE = 0:2" = 1'	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - T.JZ	REVISED

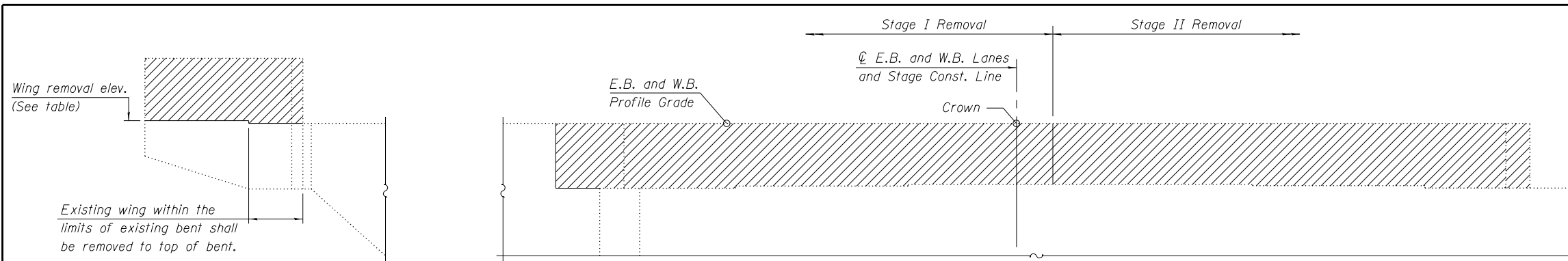
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUBSTRUCTURE REPAIR DETAILS  
STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)**

SHEET NO. 30 OF 44 SHEETS

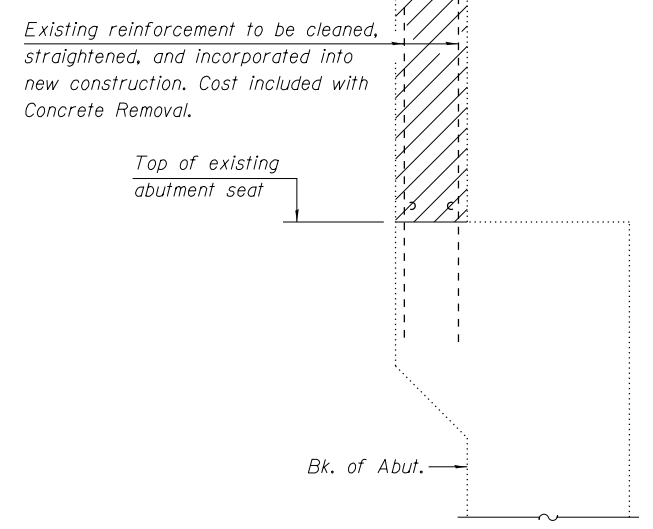
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	82
				CONTRACT NO. 72H51

ILLINOIS FED. AID PROJECT

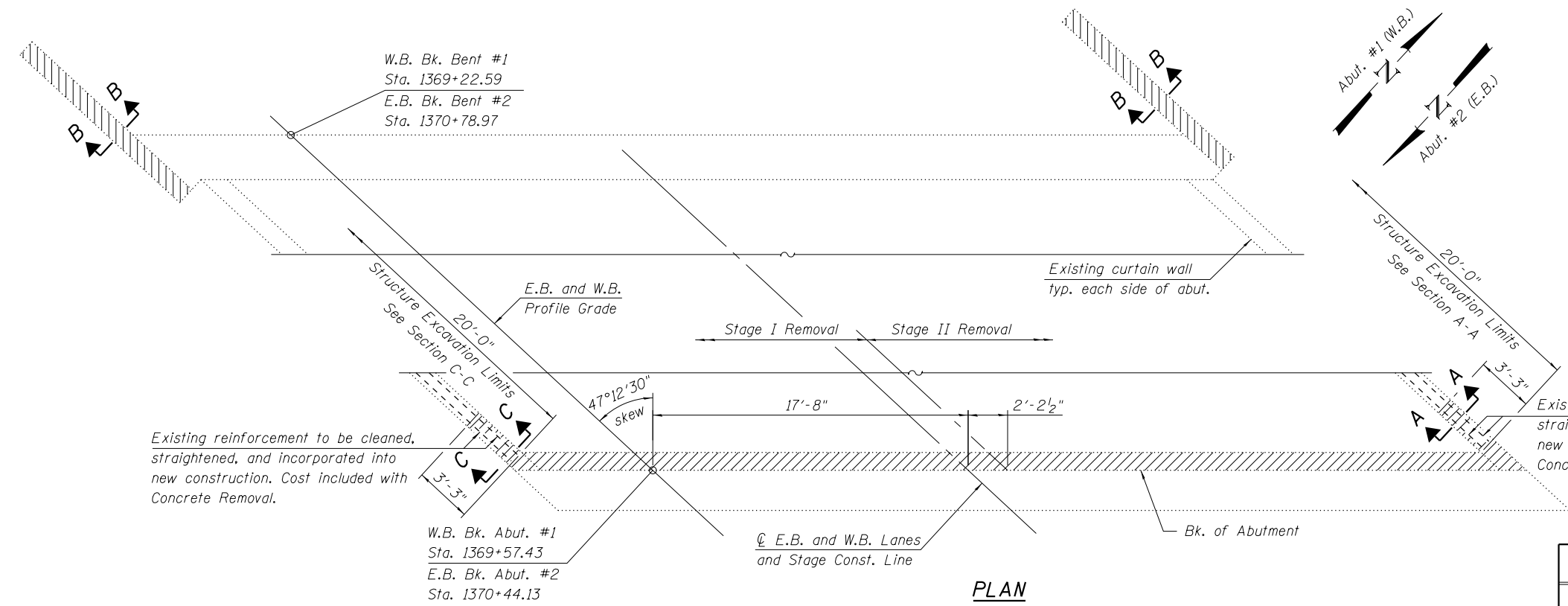


**WING ELEVATION**  
(Typ. each wing)

**W.B. ABUTMENT #1 ELEVATION**  
**E.B. ABUTMENT #2 ELEVATION**



**SECTION THRU ABUTMENT**



**PLAN**

**TWO ABUTMENTS BILL OF MATERIAL**

Item	Unit	Total
Concrete Removal	Cu. Yd.	24.6

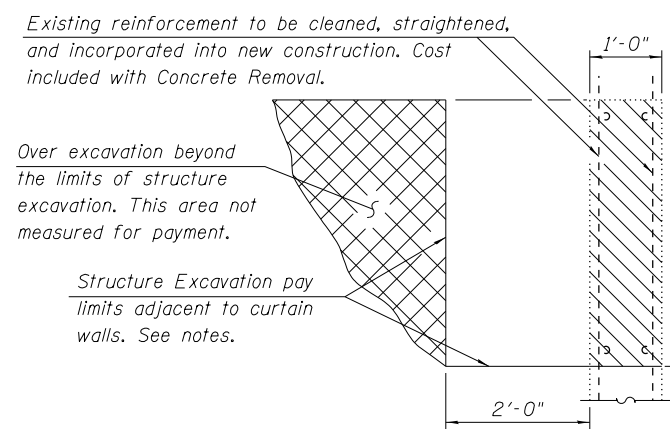
**WINGWALL REMOVAL ELEVATION TABLE**

Location		* Est. Top of Exist. Wingwall Elevation	Wingwall Removal Elevation
W.B. Bent #1	N. Wing	+641.41	637.70
	S. Wing	+641.65	637.94
E.B. Bent #2	N. Wing	+640.85	637.05
	S. Wing	+641.01	637.22

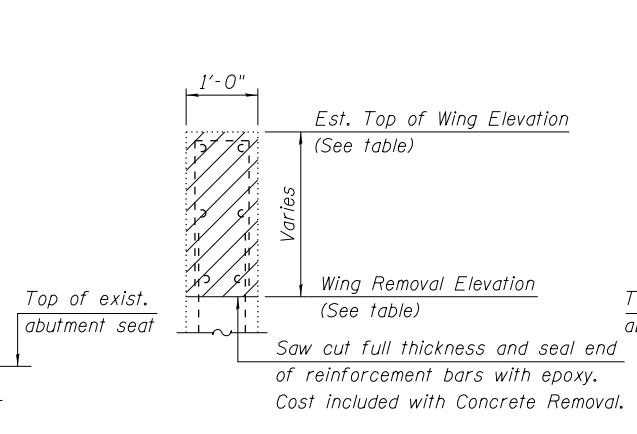
\* Elevations determined from existing survey data and are subject to field verification during construction.

**Notes:**

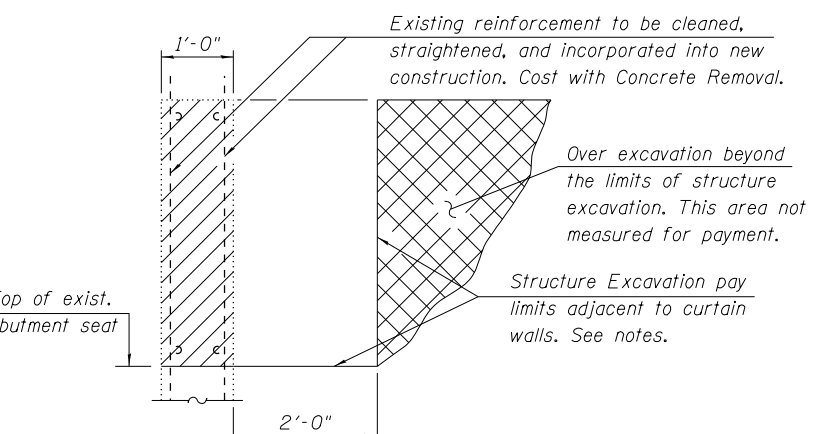
- See sheets 41 thru 44 of 44 for additional existing abutment details and dimensions not shown.
- Hatched area indicates concrete removal.
- Structure Excavation shall be completed for the limits shown adjacent to the curtain walls prior to commencing concrete removal at the abutment. See Sheet 5 of 44 for abutment backfill requirements.
- Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.



**SECTION A-A**



**SECTION B-B**



**SECTION C-C**

(Sheet 1 of 2)

FILE NAME = L:\Jobs\DOT\_D-67818 PTB 167-027\7818\03\CADD\CADD Sheets\0840148-0149-72H51\_12-9-19.dgn



DESIGN FIRM	USER NAME = dheberling	DESIGNED - BRD	REVISED
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PLOT DATE = 1/30/2020	CHECKED - TJZ	REVISED	REVISED

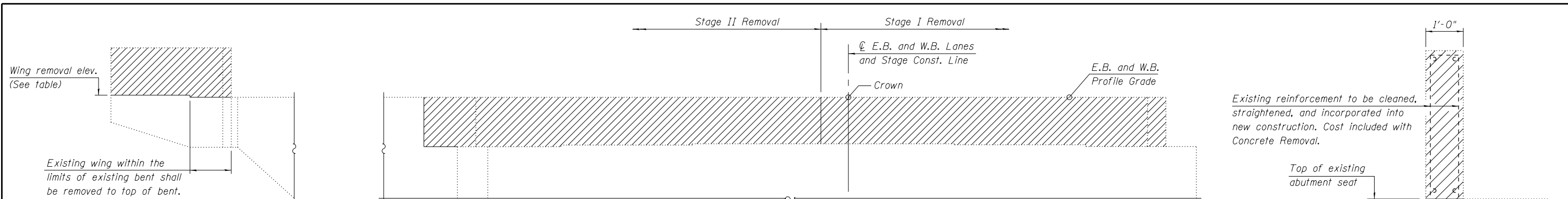
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**ABUTMENT REMOVAL DETAILS**  
**STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)**

SHEET NO. 31 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	83
				CONTRACT NO. 72H51

ILLINOIS FED. AID PROJECT



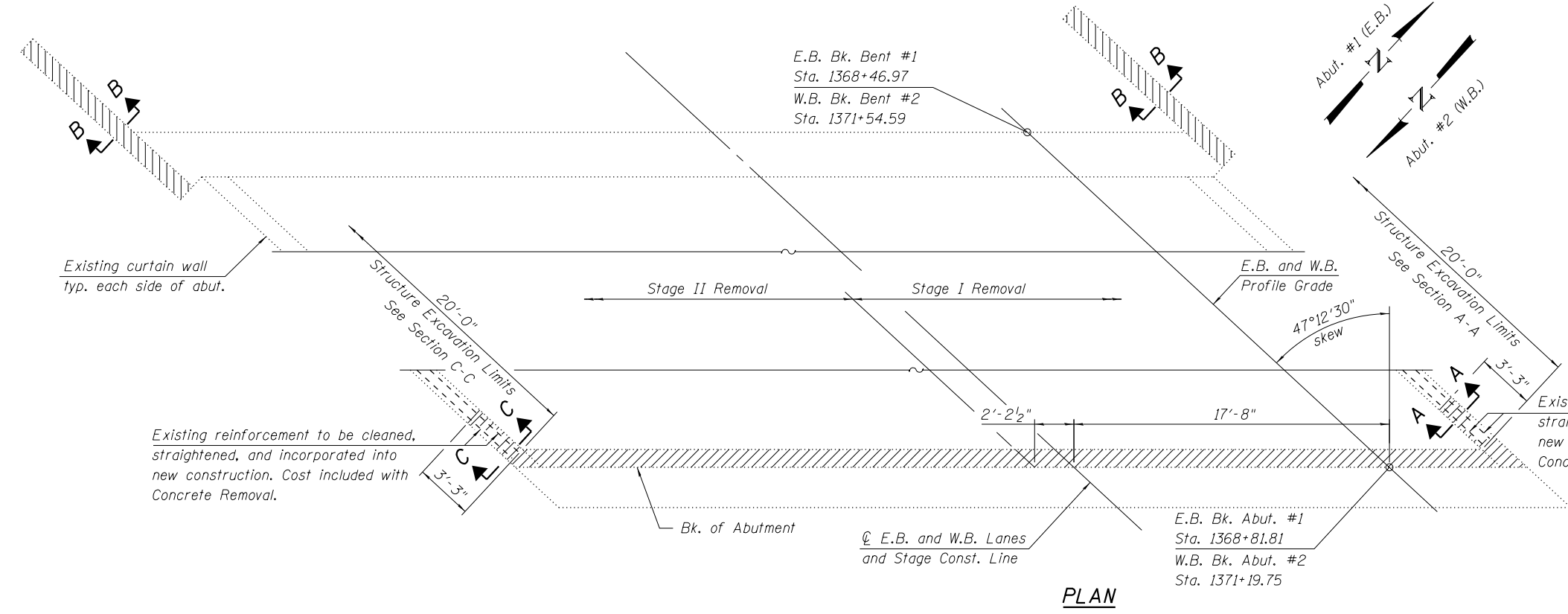
**WING ELEVATION**  
(Typ. each wing)

**W.B. ABUTMENT #2 ELEVATION**  
**E.B. ABUTMENT #1 ELEVATION**

Existing reinforcement to be cleaned, straightened, and incorporated into new construction. Cost included with Concrete Removal.

Top of existing abutment seat

**SECTION THRU ABUTMENT**



**PLAN**

**TWO ABUTMENTS BILL OF MATERIAL**

Item	Unit	Total
Concrete Removal	Cu. Yd.	24.5

Existing reinforcement to be cleaned, straightened, and incorporated into new construction. Cost included with Concrete Removal.

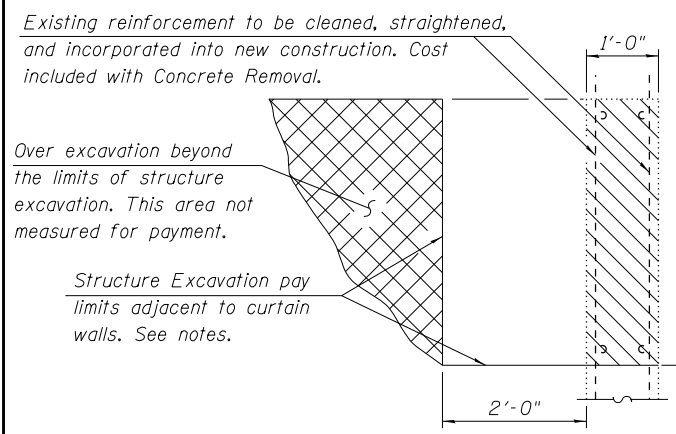
**WINGWALL REMOVAL ELEVATION TABLE**

Location	* Est. Top of Exist. Wingwall Elevation	Wingwall Removal Elevation
E.B. Abut. #1	N. Wing	+641.81
	S. Wing	+641.76
W.B. Abut. #2	N. Wing	+640.10
	S. Wing	+640.47

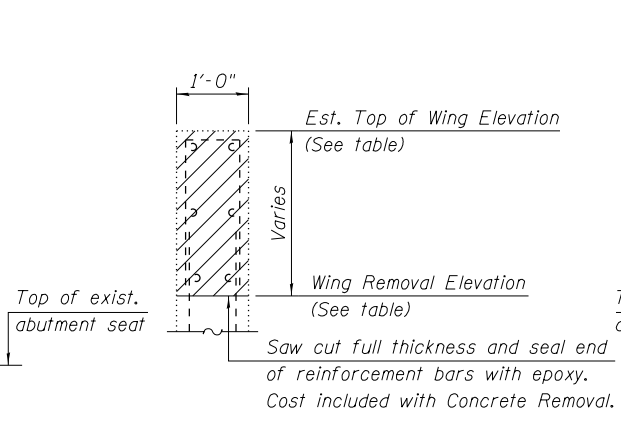
\* Elevations determined from existing survey data and are subject to field verification during construction.

Notes:

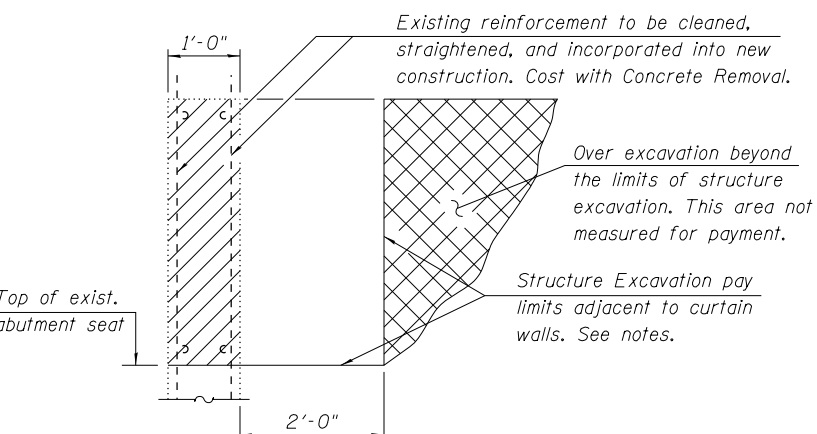
- See sheets 41 thru 44 of 44 for additional existing abutment details and dimensions not shown.
- Hatched area indicates concrete removal.
- Structure Excavation shall be completed for the limits shown adjacent to the curtain walls prior to commencing concrete removal at the abutment. See Sheet 5 of 44 for abutment backfill requirements.
- Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.



**SECTION A-A**



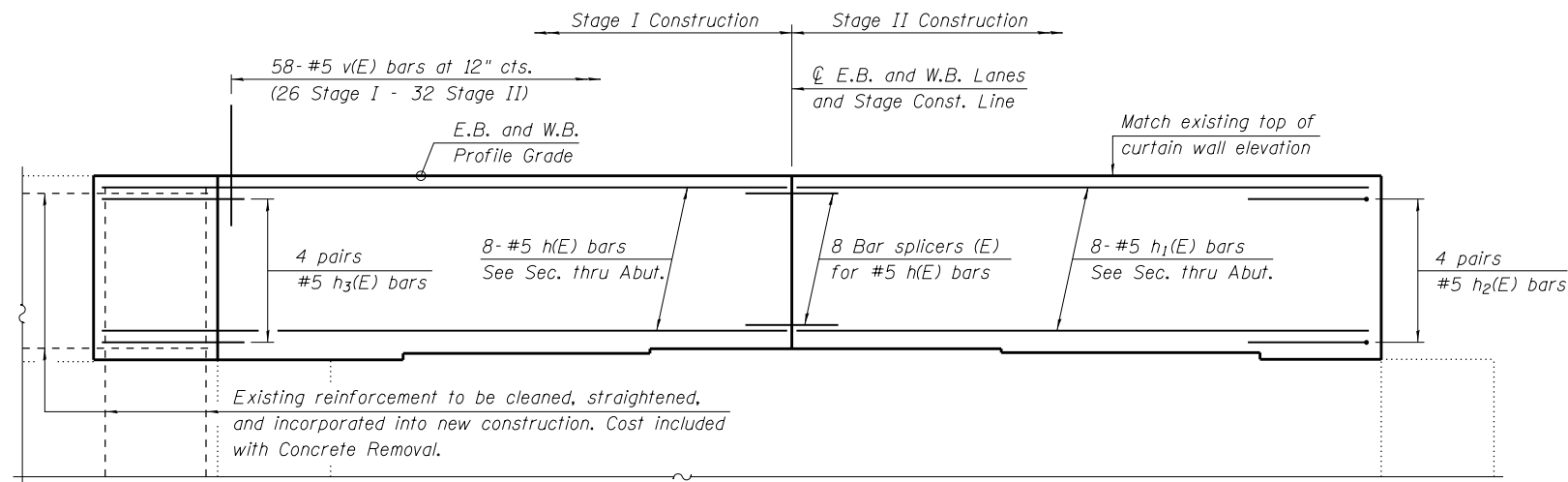
**SECTION B-B**



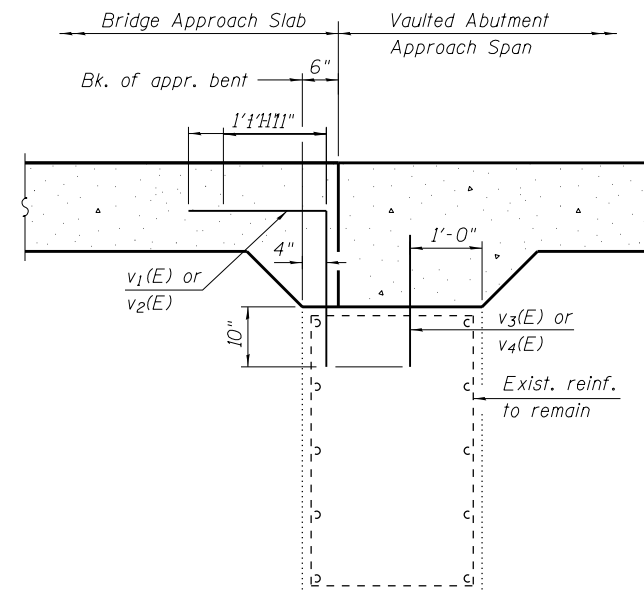
**SECTION C-C**

(Sheet 2 of 2)

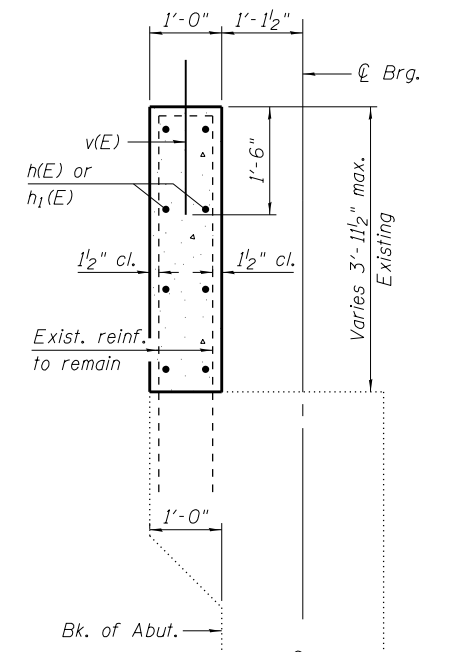
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**W.B. ABUTMENT #1 ELEVATION**  
**E.B. ABUTMENT #2 ELEVATION**



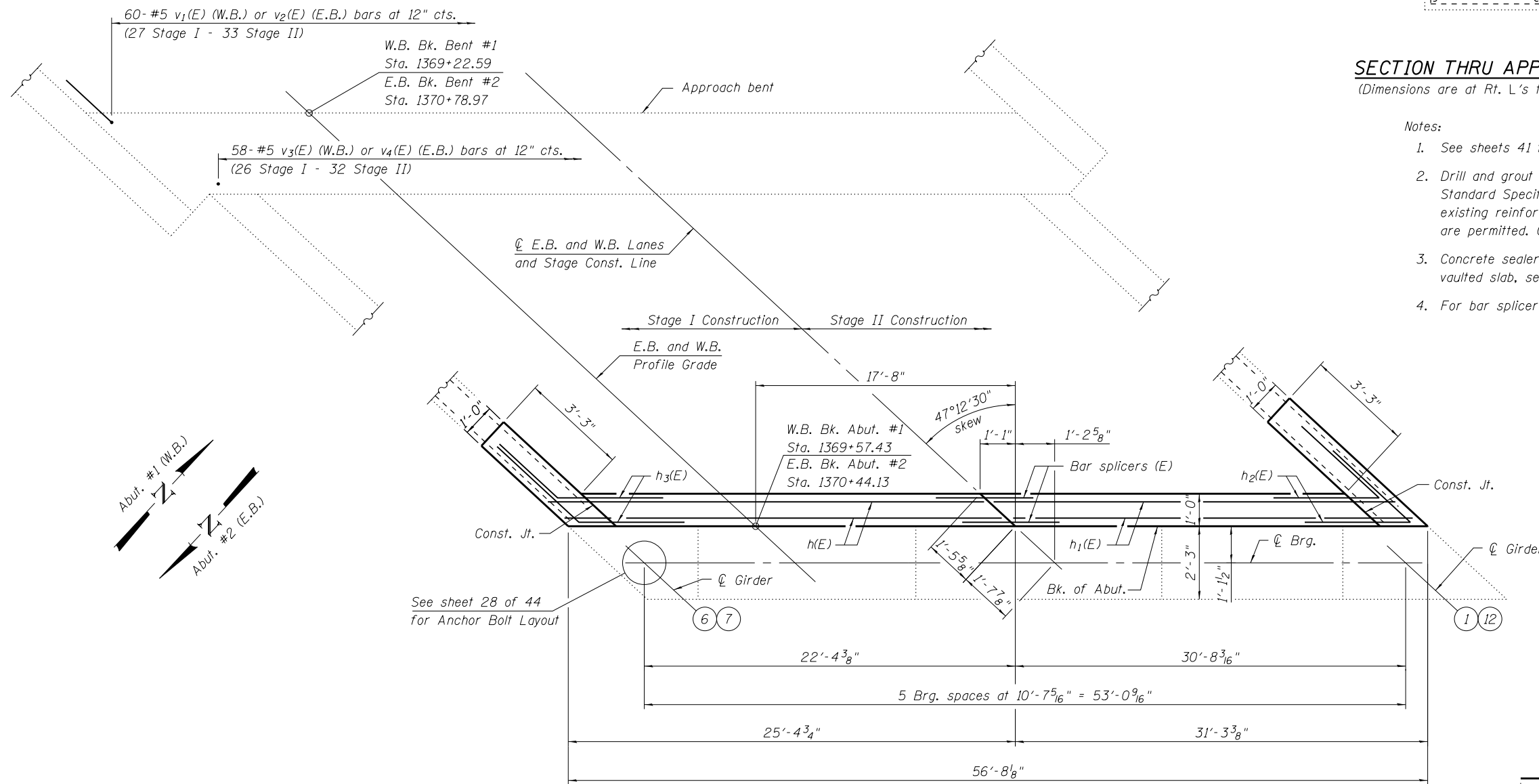
**SECTION THRU APPROACH BENT**  
 (Dimensions are at Rt. L's to the Appr. Bent)



**SECTION THRU ABUTMENT**  
 (Dimensions are at Rt. L's to the Abut.)

**Notes:**

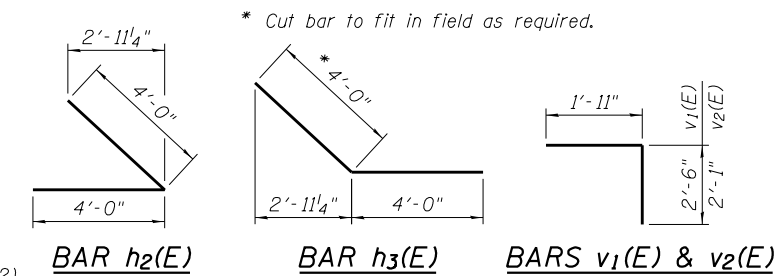
1. See sheets 41 thru 44 of 44 for additional existing abutment details.
2. Drill and grout v<sub>1</sub>(E) thru v<sub>4</sub>(E) bars according to Article 584 of the Standard Specifications. Contractor shall make efforts to locate and miss existing reinforcement bars. Minor adjustments in proposed bar locations are permitted. Cost included with Reinforcement Bars, Epoxy Coated.
3. Concrete sealer shall be applied to the front faces of the proposed backwall and vaulted slab, see sheet 23 of 44 for limits.
4. For bar splicer details, see sheet 35 of 44.



**PLAN**

**TWO ABUTMENTS**  
**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	16	#5	25'-1"	—
h <sub>1</sub> (E)	16	#5	30'-11"	—
h <sub>2</sub> (E)	16	#5	8'-0"	—
h <sub>3</sub> (E)	16	#5	8'-0"	—
v(E)	116	#5	2'-11"	—
v <sub>1</sub> (E)	60	#5	4'-5"	—
v <sub>2</sub> (E)	60	#5	4'-0"	—
v <sub>3</sub> (E)	58	#5	2'-6"	—
v <sub>4</sub> (E)	58	#5	2'-1"	—
Concrete Structures		Cu. Yd.	17.7	
Reinforcement Bars, Epoxy Coated		Pound	2,360	
Bar Splicers		Each	16	
Concrete Sealer		Sq. Ft.	657	



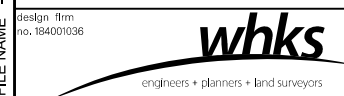
(Sheet 1 of 2)

**BAR h<sub>2</sub>(E)**

**BAR h<sub>3</sub>(E)**

**BARS v<sub>1</sub>(E) & v<sub>2</sub>(E)**

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PLOT DATE = 1/30/2020	CHECKED - TJZ	REVISIONS	

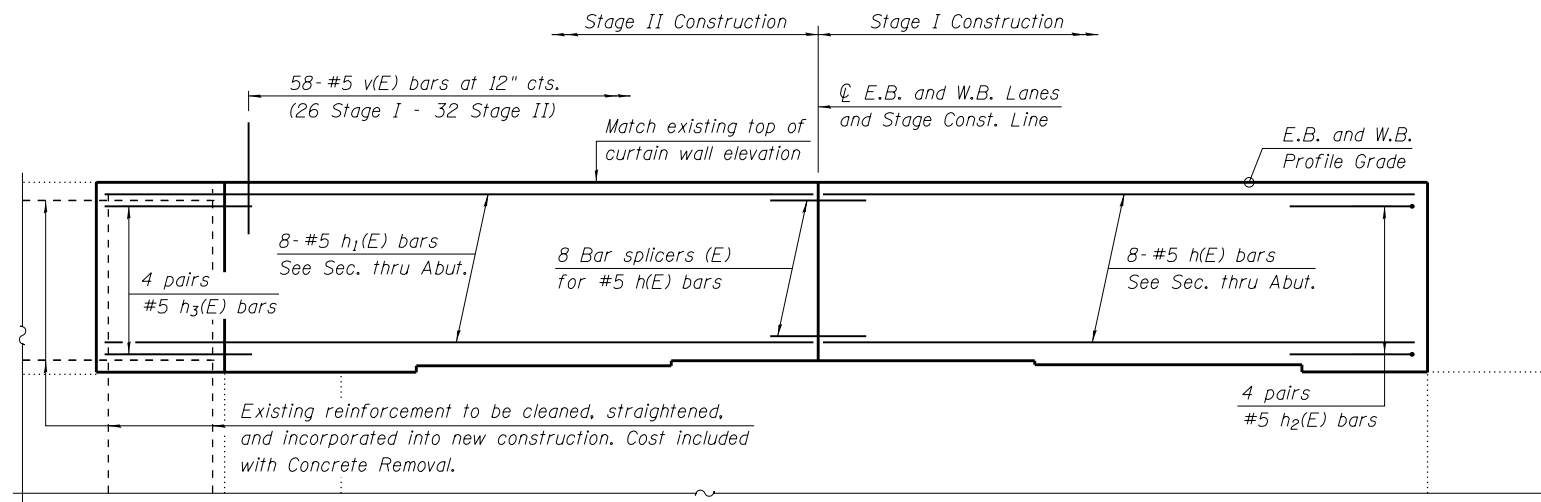
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**ABUTMENT CONSTRUCTION DETAILS**  
**STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)**

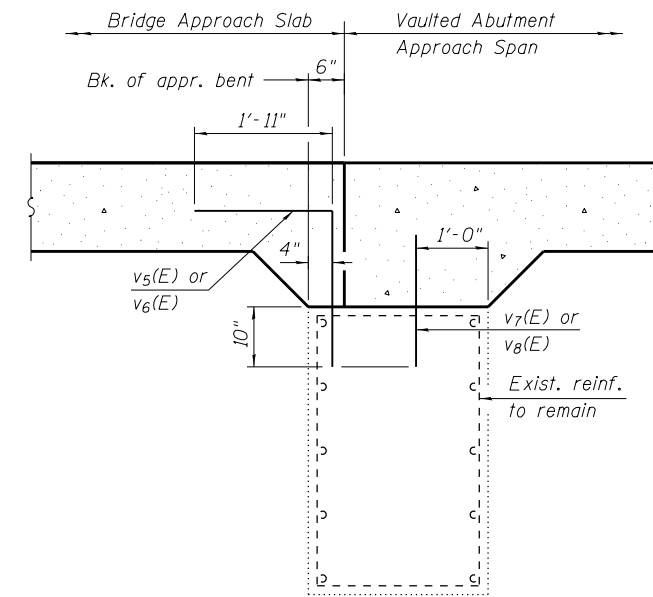
SHEET NO. 33 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	85
CONTRACT NO. 72H51				

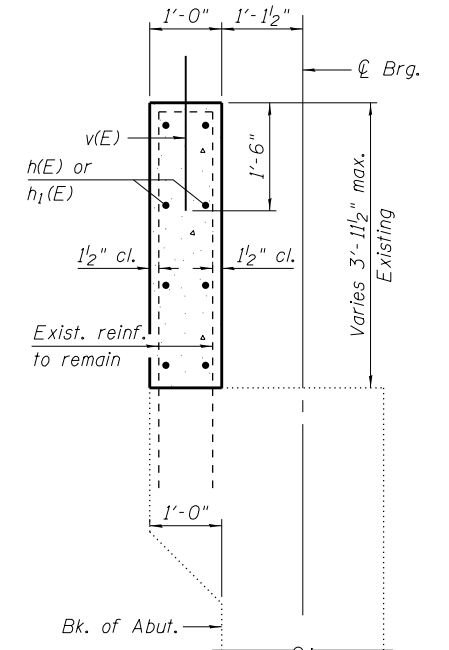
ILLINOIS FED. AID PROJECT



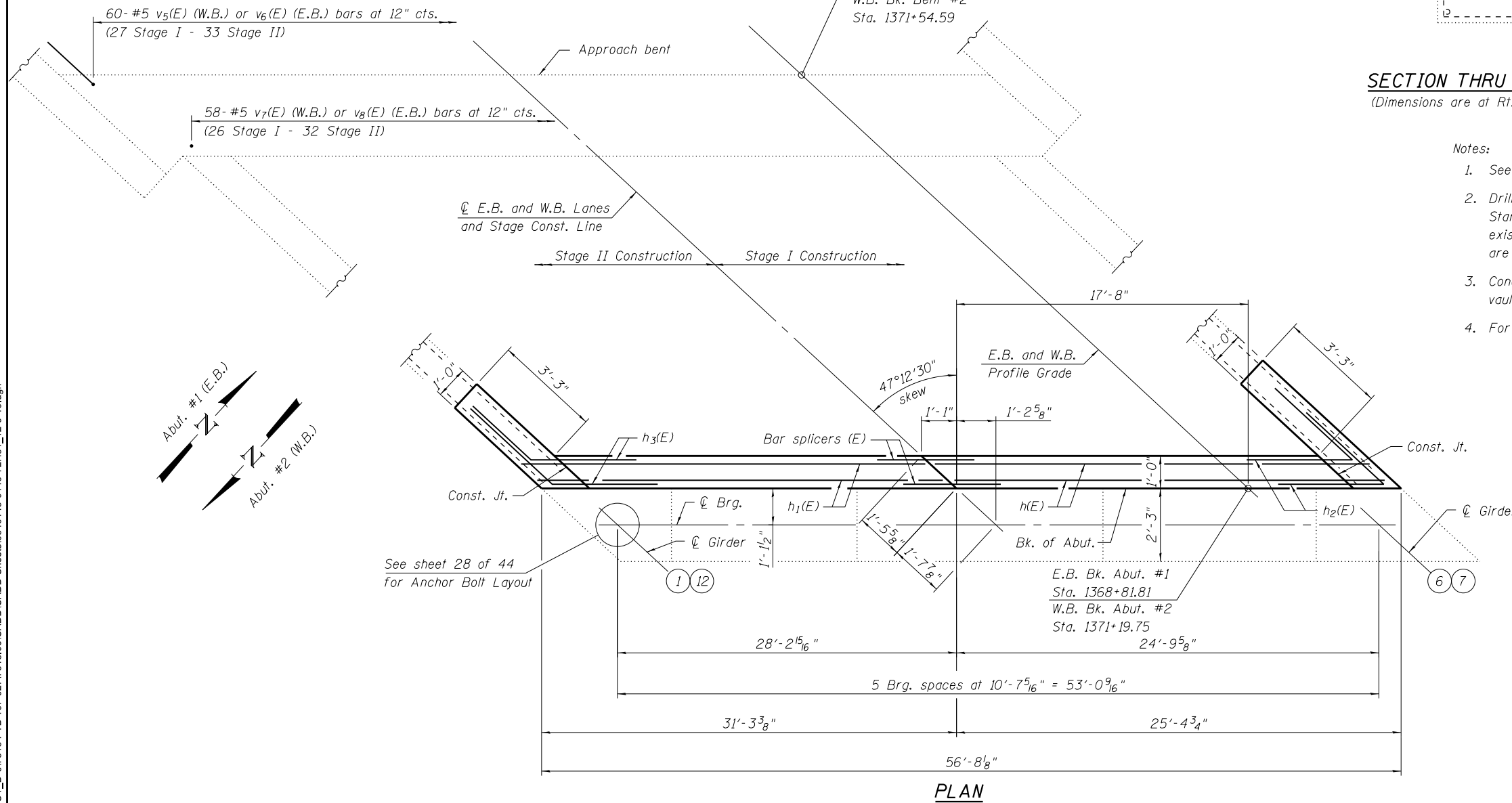
**W.B. ABUTMENT #2 ELEVATION**  
**E.B. ABUTMENT #1 ELEVATION**



**SECTION THRU APPROACH BENT**  
(Dimensions are at Rt. L's to the Appr. Bent)



**SECTION THRU ABUTMENT**  
(Dimensions are at Rt. L's to the Abut.)



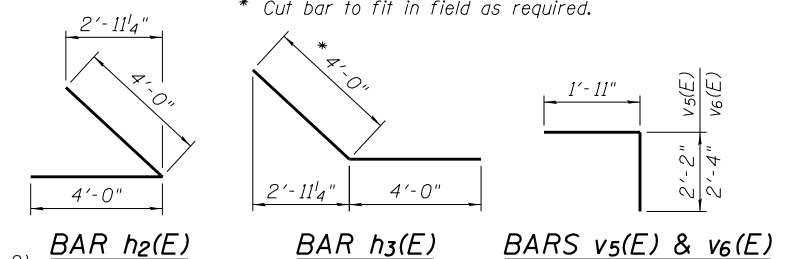
**PLAN**

**Notes:**

- See sheets 41 thru 44 of 44 for additional existing abutment details.
- Drill and grout v5(E) thru v8(E) bars according to Article 584 of the Standard Specifications. Contractor shall make efforts to locate and miss existing reinforcement bars. Minor adjustments in proposed bar locations are permitted. Cost included with Reinforcement Bars, Epoxy Coated.
- Concrete sealer shall be applied to the front faces of the proposed backwall and vaulted slab, see sheet 23 of 44 for limits.
- For bar splicer details, see sheet 35 of 44.

**TWO ABUTMENTS**  
**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	16	#5	25'-1"	—
h1(E)	16	#5	30'-11"	—
h2(E)	16	#5	8'-0"	—
h3(E)	16	#5	8'-0"	—
v(E)	116	#5	2'-11"	—
v5(E)	60	#5	4'-1"	—
v6(E)	60	#5	4'-3'	—
v7(E)	58	#5	2'-2"	—
v8(E)	58	#5	2'-4"	—
Concrete Structures		Cu. Yd.	17.7	
Reinforcement Bars, Epoxy Coated		Pound	2,350	
Bar Splicers		Each	16	
Concrete Sealer		Sq. Ft.	656	



(Sheet 2 of 2)

FILE NAME = L:\Jobs\DOT\_D-67818 PTB 167-0271818.03\CADD\CADD Sheets\0840148-0149-72H51\_12-9-19.dgn



DESIGN FIRM	USER NAME = dheberling	DESIGNED - BRD	REVISED
MODEL = 0840148_49-72B54-034	CHECKED - TJZ	REVISED	REVISED
PLOT SCALE = 0:2" = 1' / in.	DRAWN - DLH	REVISED	REVISED
PLOT DATE = 1/30/2020	CHECKED - TJZ	REVISED	REVISED

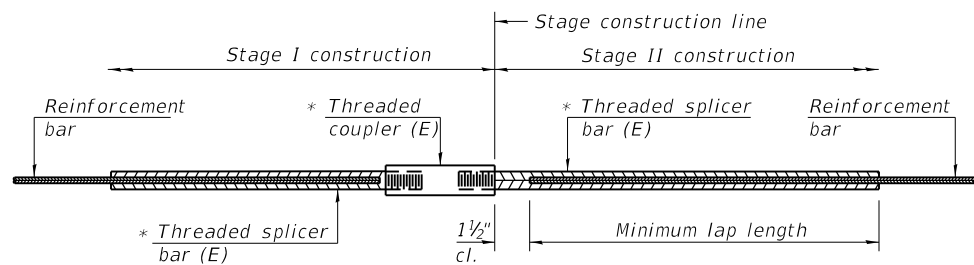
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**ABUTMENT CONSTRUCTION DETAILS**  
**STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)**

SHEET NO. 34 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	86
				CONTRACT NO. 72H51

ILLINOIS FED. AID PROJECT

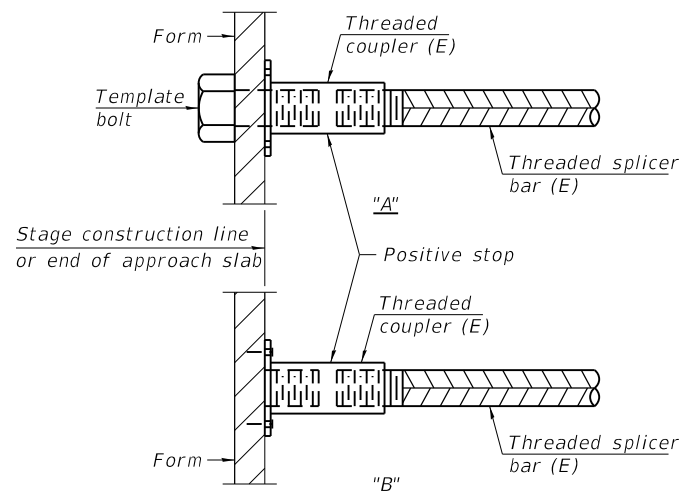


**STANDARD BAR SPLICER ASSEMBLY**

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

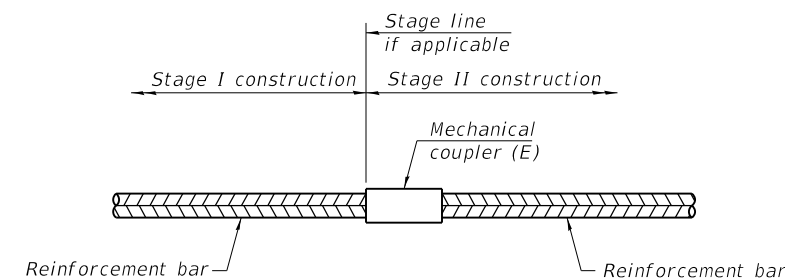
\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Bridge Decks	#5	914	2'-7"
Vaulted Spans	#6	184	3'-6"
Vaulted Spans	#8	332	6'-9"
Approach Slab	#5	184	2'-11"
Approach Slab	#8	244	5'-5"
Approach Footing	#5	160	2'-7"
Abutment	#5	32	3'-3"



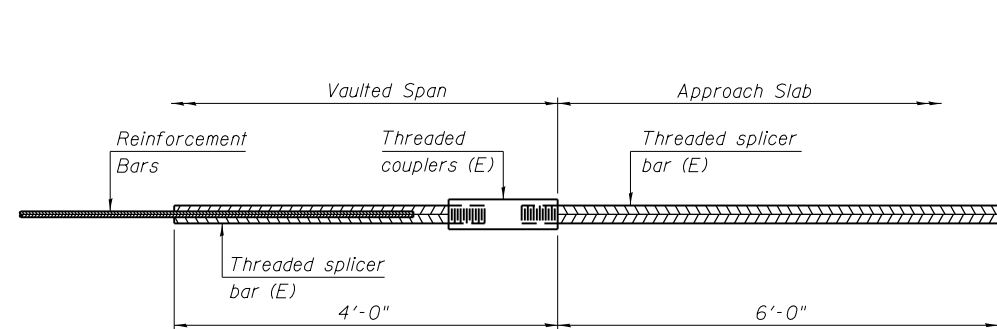
**INSTALLATION AND SETTING METHODS**

"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.



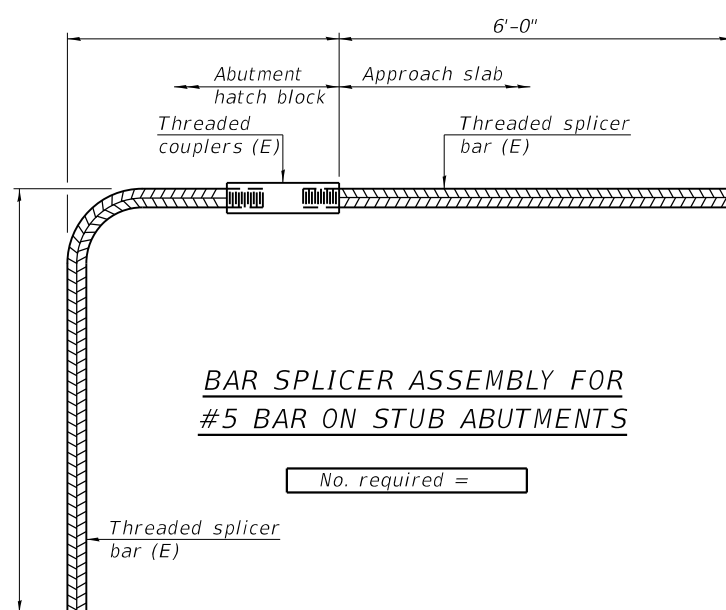
**STANDARD MECHANICAL SPLICER**

Location	Bar size	No. assemblies required



**BAR SPLICER ASSEMBLY FOR #5 BAR ON VAULTED ABUTMENTS**

No. required = 240



**BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS**

No. 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.

FILE NAME = L:\Jobs\IDOT\_D-6\7818 PTB 167-027\7818.03\CADD\CADD Sheets\0840148-01\49-72H51\_12-9-19.dgn

Design firm  
no. 184001036



USER NAME = dheberling	DESIGNED - BRD	REVISED
MODEL = 0840148_49-72B54-035	CHECKED - TJZ	REVISED
PLOT SCALE = 0:2" = 1" / in.	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - TJZ	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)

SHEET NO. 35 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	87
CONTRACT NO. 72H51				

ILLINOIS FED. AID PROJECT



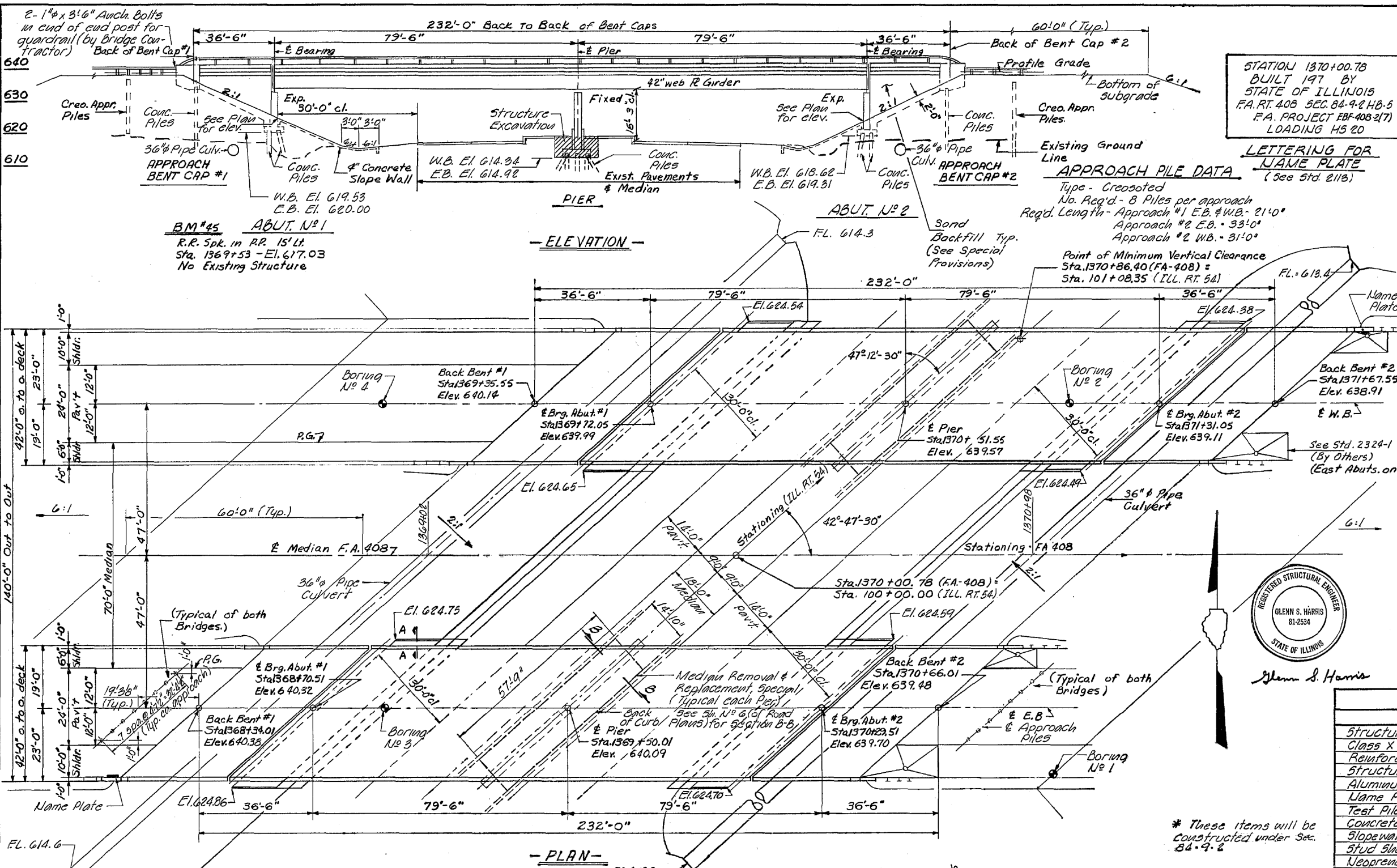
**-GENERAL NOTES-**

- All reinforcing bars shall be lapped 24 diameter unless otherwise noted.
- Fasteners shall be high strength bolts. Bolts 3/4" open holes 1/2" unless otherwise noted.
- Calculated weight of structural steel = 388,740 lb.
- The basic lead silico chromate paint system shall be used for shop and field painting of structural steel.
- Field welding of Construction Accessories will not be permitted to the bottom flange of beam 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.
- Anchor bolts shall be set before bolting diaphragms over supports.
- The Contractor shall drive one concrete test pile in a permanent location at Bents #1 & #2 and at pier of W.B. Structure and Abuts. #1 & #2 of E.B. Structure as directed by the Engineer before ordering the remainder of piles.
- The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutment.
- 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.
- Protective Coat shall not be applied to surfaces which Coal Tar Interlayer is applied.
- Sloped wall shall be reinforced with Welded Wire Fabric, 6"x6" mesh, weighing 58#/100 sq. ft.

STATION 1370+00.78  
BUILT 197 BY  
STATE OF ILLINOIS  
F.A. RT. 408 SEC. 84-9-2 HB-5  
F.A. PROJECT EB-408(7)  
LOADING H5 20

**LETTERING FOR NAME PLATE**  
(See Std. 2118)

**APPROACH PILE DATA**  
Type - Creosoted  
No. Req'd - 8 Piles per approach  
Req'd. Length - Approach #1 E.B. #WB - 21'0"  
Approach #2 E.B. #WB - 33'0"  
Approach #2 WB - 31'0"



Glenn S. Harris

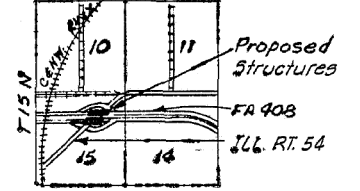
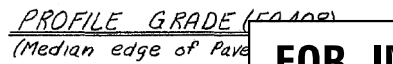
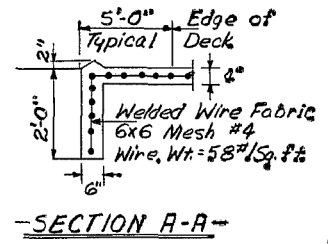
**TOTAL BILL OF MATERIAL**

Item	Unit	Superstr.	Substr.	Total
Structure Excavation	Cu.Yds.		210	210
Class X Concrete	Cu.Yds.	691.5	923.6	1615.1
Reinforcement Bars	Lbs.	172,130	80,270	252,400
Structural Steel	L.S.	L.S.		L.S.
Aluminum Railing	Lin.Ft.	988		988
Name Plates	Ea.	2		2
Test Piles (Concrete)	Ea.		5	5
Concrete Piles	Lin.Ft.		5830	5830
Sloped wall 4"	Sq.Yds.		1270	1270
Stud Shear Connectors	Ea.	4320		4320
Neoprene Expansion Joint (2")	Lin.Ft.	250		250
Protective Coat	Sq.Yds.	369		369
Coal Tar Interlayer Protective Coat	Sq.Yds.	1950		1950
Bituminous Concrete Surface Course - Class I	Tons	163.7		163.7
Creosoted Piles (20' to 38')	Lin.Ft.		848	848
Median Removal & Replacement, Spec.	Sq.Yds.		190	190
Sand Backfill	Cu.Yds.		1200	1200

**DESIGN LOADING**  
Live HS-20-44ASHO 1969 Spec. & 1971 Interim  
Dead Load includes 25#/Sq. Ft. of Roadway for  
Future Wearing Surface plus 25#/Sq. Ft. for  
Initial Waterproofing.

**DESIGN STRESSES**  
fc = 1400 p.s.i. Substructure, Curbs, Parapets. & Appr. Slab  
fc = 1200 p.s.i. Superstructure Slab  
vc = 75 p.s.i. Footings  
fs = 20,000 p.s.i. Reinforcing Steel  
fs = 20,000 p.s.i. Structural Steel  
n = 10

**LIVE LOAD DEFLECTION**  
4/1200 for composite construction



**FOR INFORMATION ONLY**

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ABBREVIATED EXISTING PLANS  
STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)

REVISIONS

NO.	DATE	INITIALS
1	3/23/20	GSH
2	3/23/20	GSH
3		
4		
5		
6		
7		
8		
9		
10		

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FA 408 over ILL. RT. 54  
FA 408 Sec. 84-9-2 HB-5  
Sta. 1370+00.78 (FA 408) Sangamon County

HOMER L. CHASTAIN & ASSOCIATES  
CONSULTING ENGINEERS  
DECATUR, ILLINOIS

DRAWN BY: GSH  
CHECKED BY: GSH  
BOOK NUMBER: 2385-2  
PROJECT NO.: 2385-2  
SHEET NO.: 9

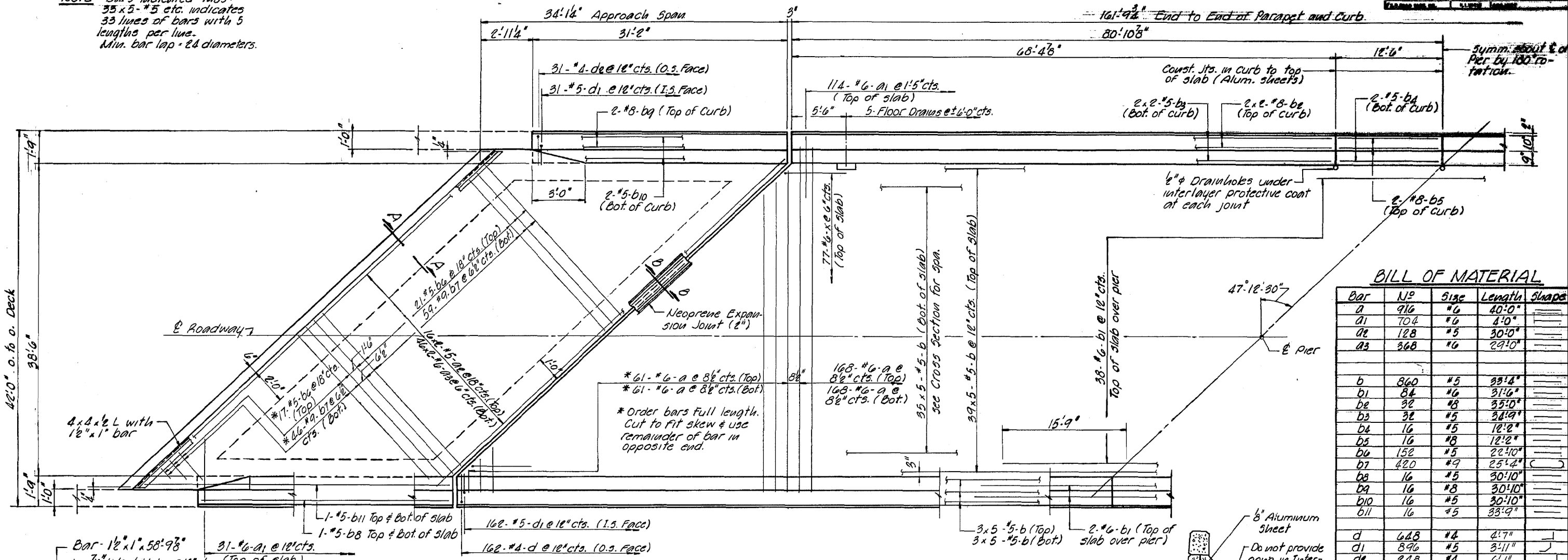
F.A.I. RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	88
			CONTRACT NO. 72H51	

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PLOT SCALE = 0:2" = 1'	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - TJZ	REVISED

NOTE: Bars indicated thus:  
 35 x 5 - #5 etc. indicates  
 35 lines of bars with 5  
 lengths per line.  
 Min. bar lap = 2d diameters.



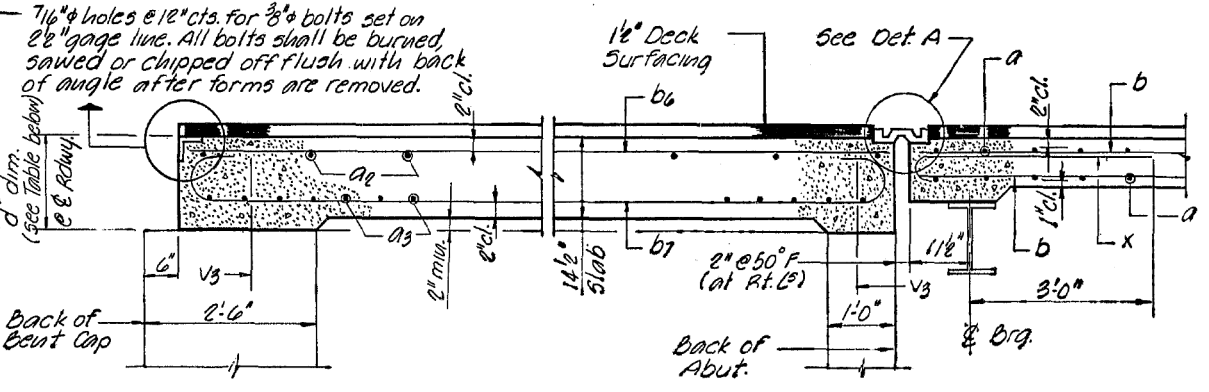
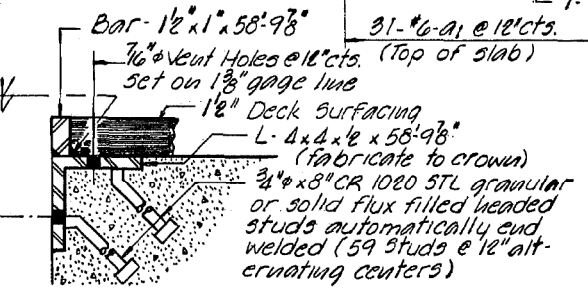
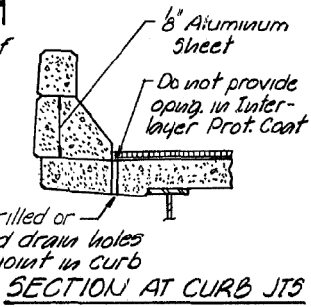
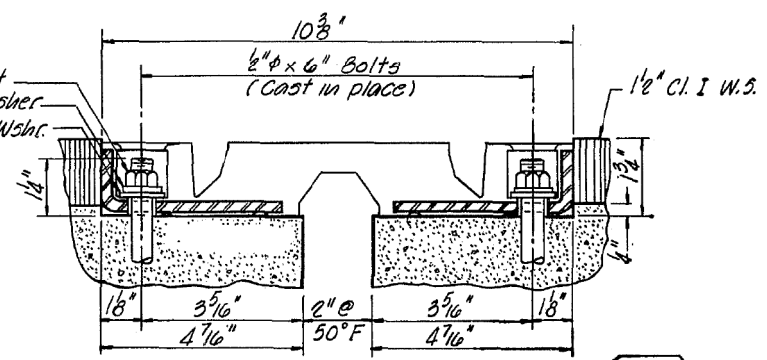
### BILL OF MATERIAL

Bar	No	Size	Length	Shape
a	916	#6	40'-0"	
a1	704	#6	4'-0"	
a2	128	#5	30'-0"	
a3	368	#6	29'-0"	
b	860	#5	33'-4"	
b1	84	#6	31'-6"	
b2	32	#8	35'-0"	
b3	32	#5	34'-9"	
b4	16	#5	12'-2"	
b5	16	#8	12'-2"	
b6	152	#5	22'-10"	
b7	420	#9	25'-4"	
b8	16	#5	30'-10"	
b9	16	#8	30'-10"	
b10	16	#5	30'-10"	
b11	16	#5	33'-9"	
d	648	#4	4'-7"	
d1	896	#5	3'-11"	
d2	248	#4	6'-1"	
x	308	#6	4'-6"	

Class X Concrete	CU. YDS.	662.5
Reinforcing Bars	lbs.	169,480
Structural Steel	L.S.	L.S.

- HALF PLAN -



Location	'd'
Beat #1 - W.B.	2'-3 1/2"
" #2 - W.B.	1'-11 3/8"
" #1 - E.B.	2'-0 1/2"
" #2 - E.B.	1'-10"

### CONCRETE DECK - W.B. & E.B. STRUCT.

REVISIONS	NO.	DATE	INITIALS

DESIGNED BY: BAH  
 CHECKED BY: GSH  
 PROJECT NO. 2385-2  
 SHEET NO. 14

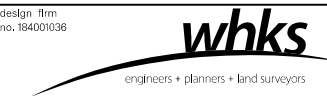
FOR INFORMATION ONLY

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

ABBREVIATED EXISTING PLANS  
 STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)

F.A.I. RTE. SECTION COUNTY TOTAL SHEETS SHEET NO.  
 72 (84-9-3) I, P SANGAMON 138 89  
 CONTRACT NO. 72H51

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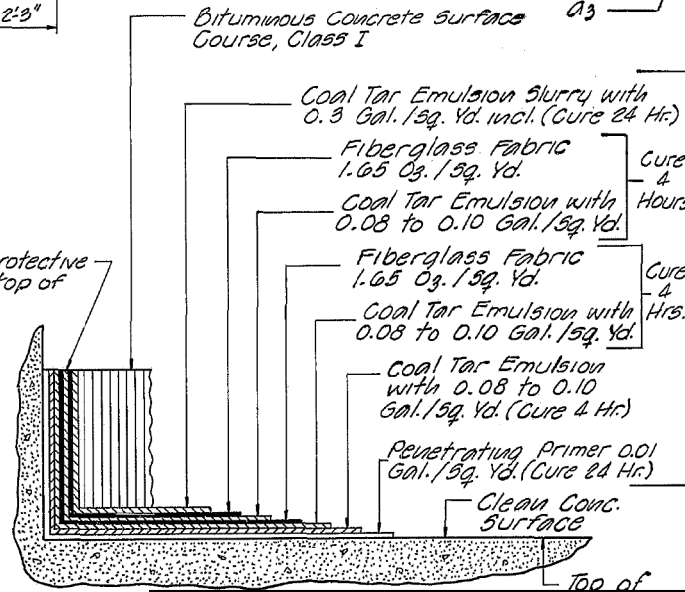
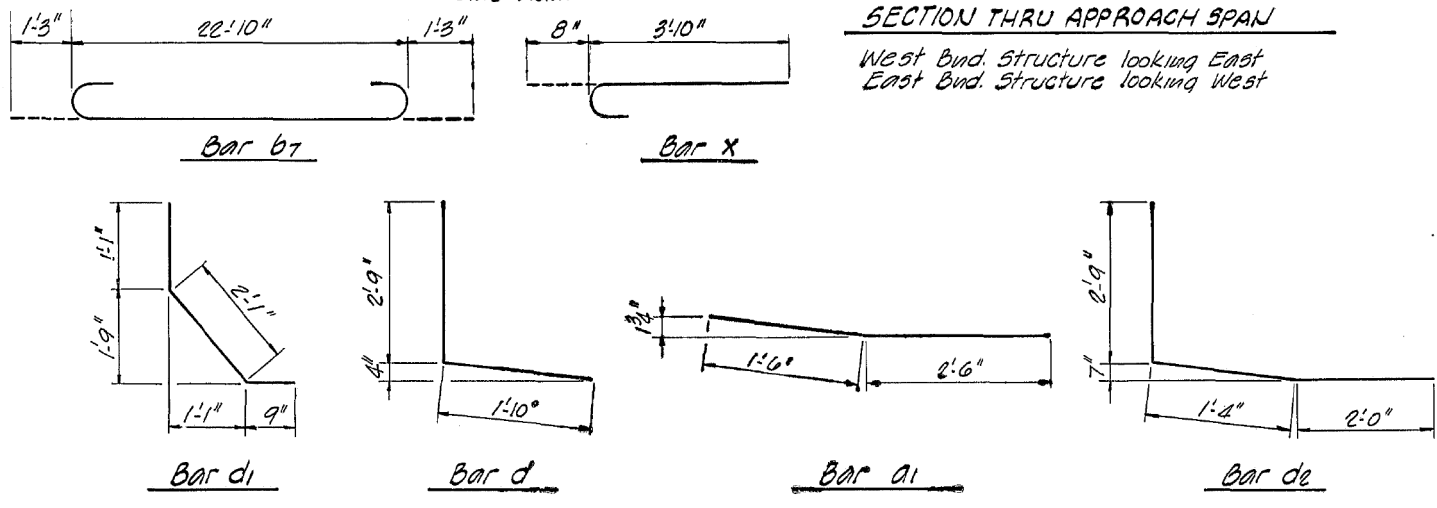
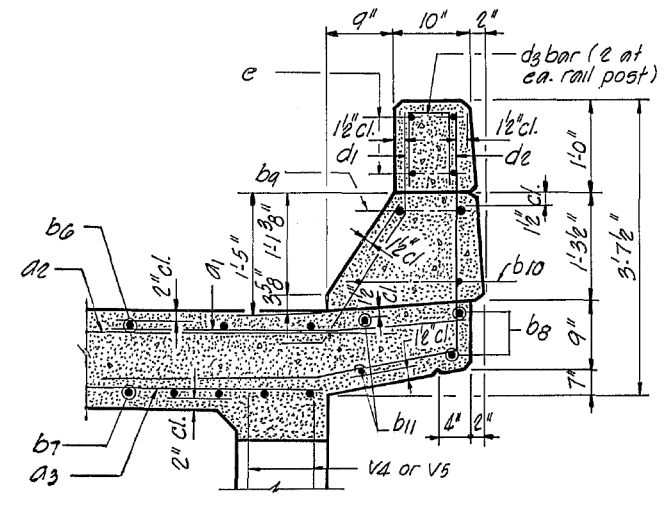
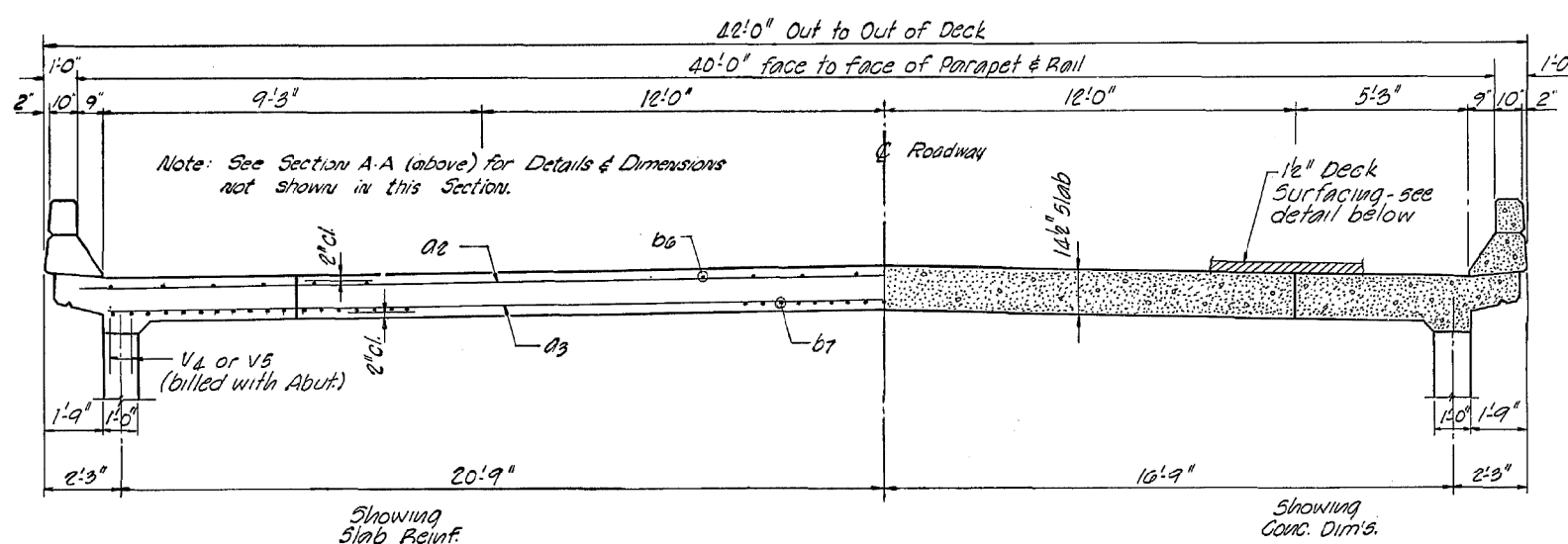
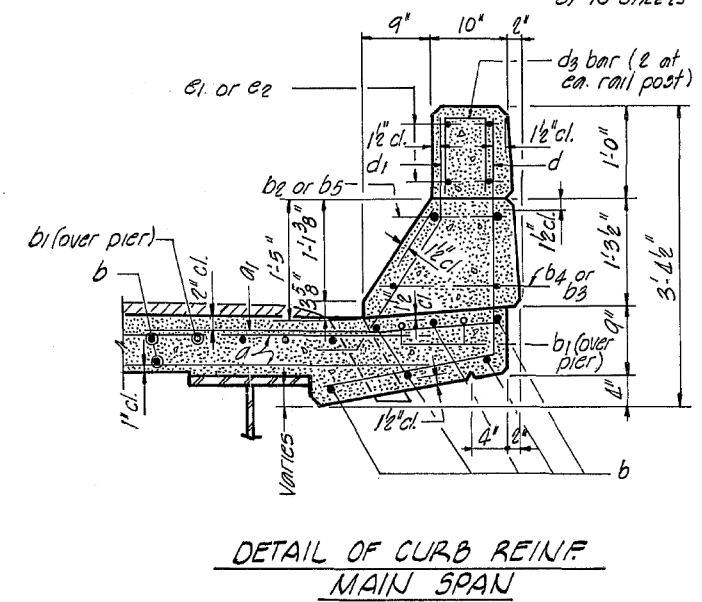
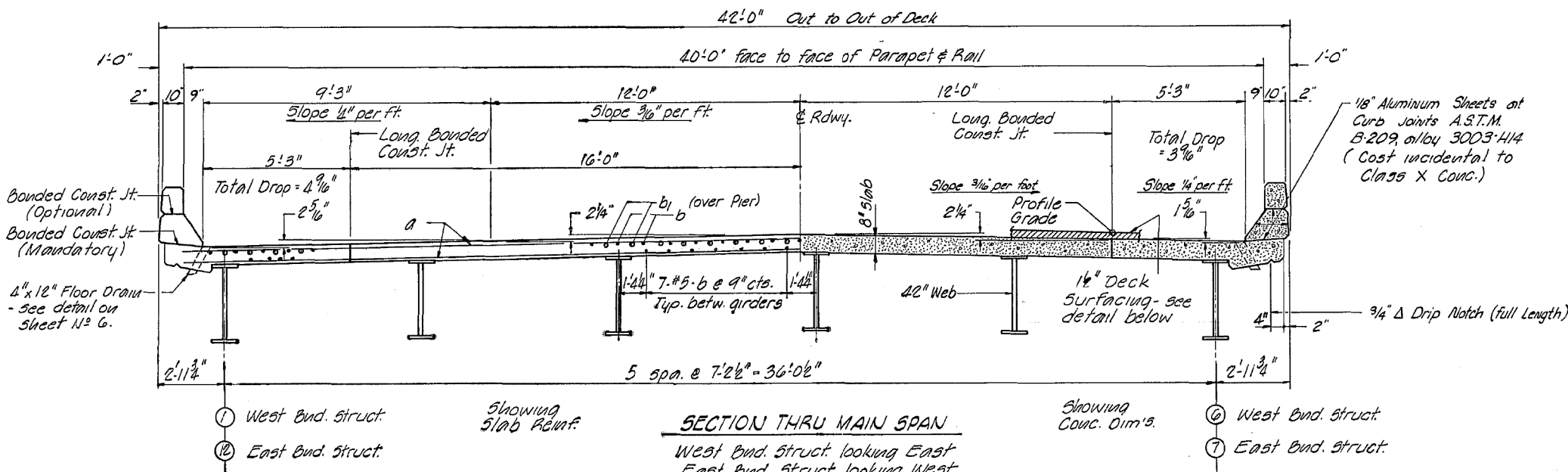


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PLOT SCALE = 0:2" = 1'	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - TJZ	REVISED

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-408	84-9-2 HB-5	SANGAMON	35	15
F. I. D. ROAD DIST. NO.	ILLINOIS PROJECT			

Sheet No. 7  
of 18 Sheets

Note:  
All edges shall have 3/4" chamfers  
unless otherwise noted.



CONCRETE DECK

REVISIONS

NO.	DATE	INITIALS

DRAWN BY DATE  
REB 6-72

CHECKED BY DATE  
GSH 7-72

ROOM NUMBER

PROJECT NO.  
2385-2

SHEET NO.  
15

FA. 408 OVER ILL. RT. 54  
FA. 408 SECTION 84-9-2 HB-5 PROJ.  
STA. 1370+00.78 (FA. 408) SANGAMON CO.

HOMER L. CHASTAIN & ASSOCIATES  
CONSULTING ENGINEERS  
DECATUR, ILLINOIS

FILE NAME = L:\Jobs\DOT\_D-6\7818 PTB 167-027\7818.03\CADD\CADD Sheets\0840148-0149-72H51\_12-9-19.dgn



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PLOT DATE = 1/30/2020	CHECKED - TJZ	REVISED

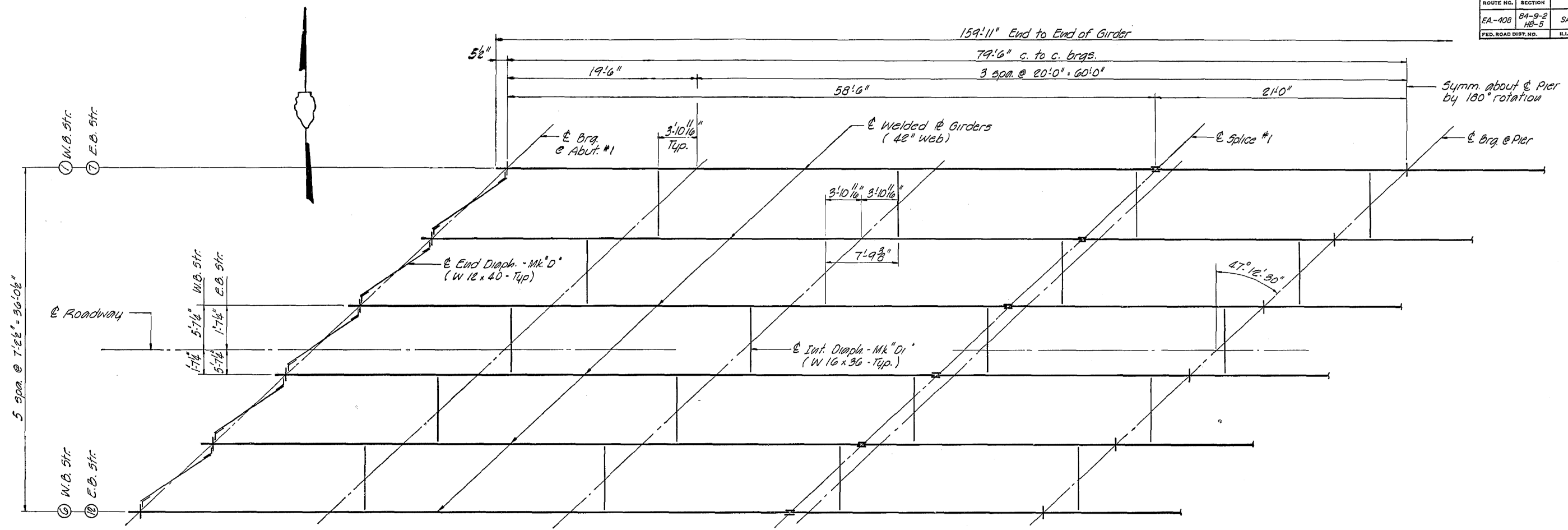
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FOR INFORMATION ONLY

ABBREVIATED EXISTING PLANS  
STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)

SHEET NO. 38 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	90
CONTRACT NO. 72H51				ILLINOIS FED. AID PROJECT

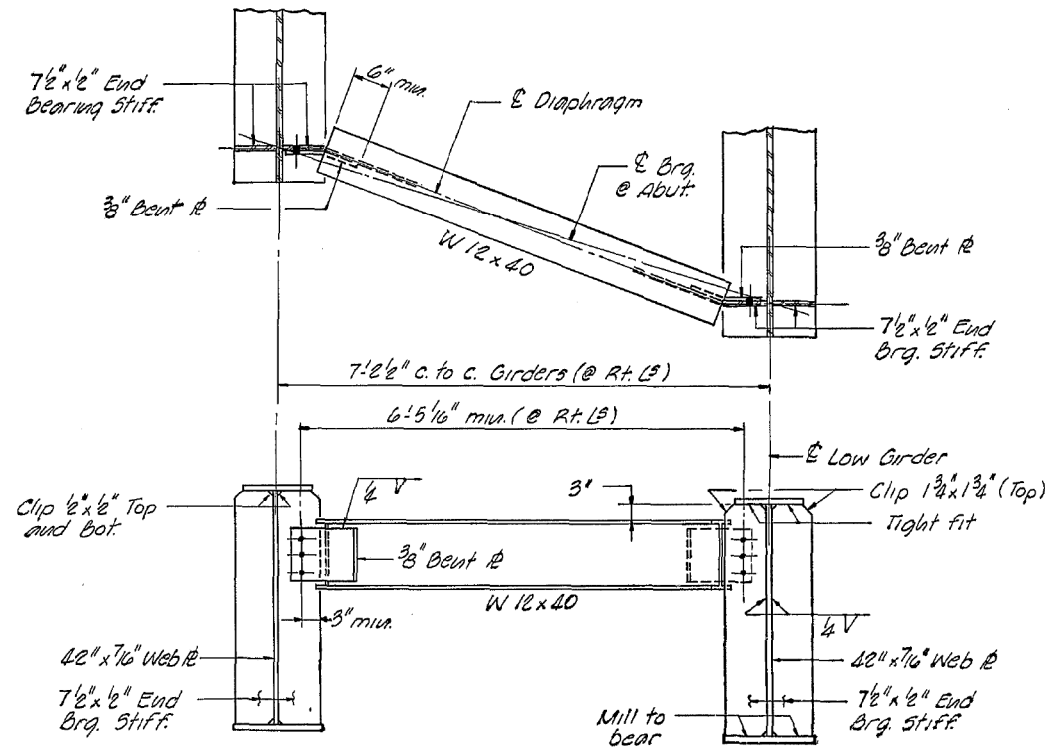


- HALF FRAMING PLAN -

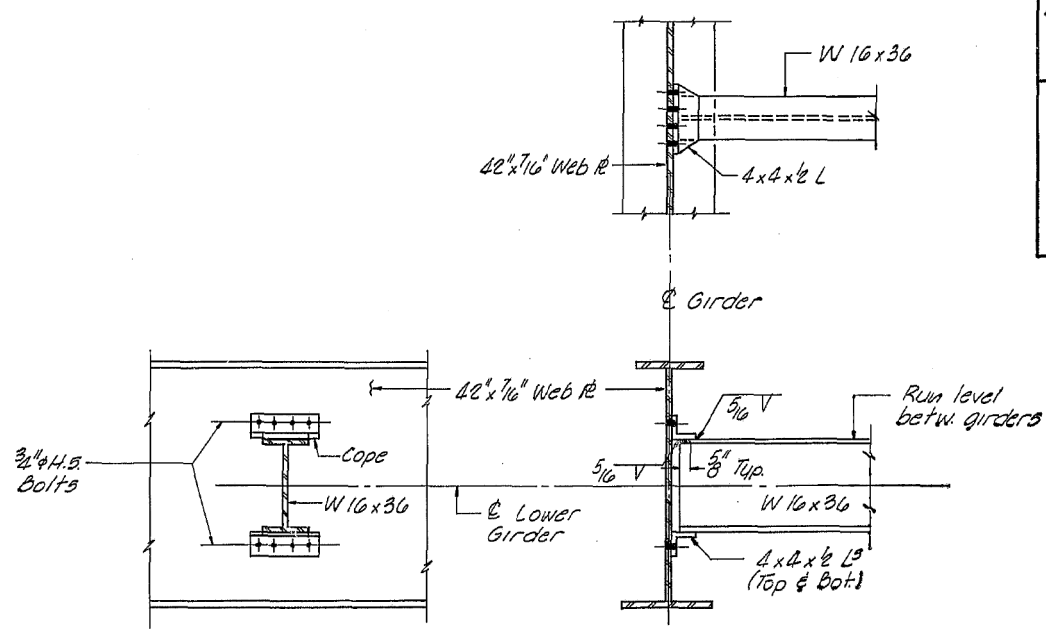
TOP OF WEB ELEVATIONS \*

Struct	Br.	Br. Abut. #1	Splice #1	Br. Pier	Splice #2	Br. Abut. #2
West Bound	1	638.58	638.24	638.12	638.00	637.66
	2	638.76	638.42	638.30	638.18	637.85
	3	638.92	638.58	638.46	638.34	638.00
	4	639.02	638.68	638.56	638.44	638.10
	5	638.94	638.60	638.48	638.36	638.02
	6	638.84	638.50	638.38	638.26	637.92
East Bound	7	639.05	638.80	638.71	638.62	638.36
	8	639.20	638.95	638.86	638.77	638.51
	9	639.33	639.08	638.99	638.90	638.64
	10	639.29	639.03	638.94	638.85	638.60
	11	639.18	638.93	638.84	638.75	638.49
	12	639.05	638.79	638.70	638.61	638.35

\* For fabrication only



END DIAPHRAGM-MK D  
10 Req'd. per Structure



INTERIOR DIAPHRAGM-MK D  
35 Req'd. per Structure

**W.B. & E.B. STRUCT. STRUCTURAL STEEL DETAILS**

REVISIONS	NO.	DATE	INITIALS
1	11/27/20	REB	REB
2			
3			
4			
5			
6			
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9			
10			

FA. 408 OVER ILL. RT. 54  
SEC. 84-9-2 HE-5 PROJ.  
STA. 1370+00.78 (FA. 408) SANGAMON CO.

**HOMER L. CHASTAIN & ASSOCIATES**  
CONSULTING ENGINEERS  
DECATUR, ILLINOIS

DRAWN BY DATE: REB 6/72  
CHECKED BY DATE: GSH 7/72  
PROJECT NO.: 2385-2  
SHEET NO.: 17

FOR INFORMATION ONLY

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ABBREVIATED EXISTING PLANS  
STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	91
			CONTRACT NO. 72H51	

SHEET NO. 39 OF 44 SHEETS

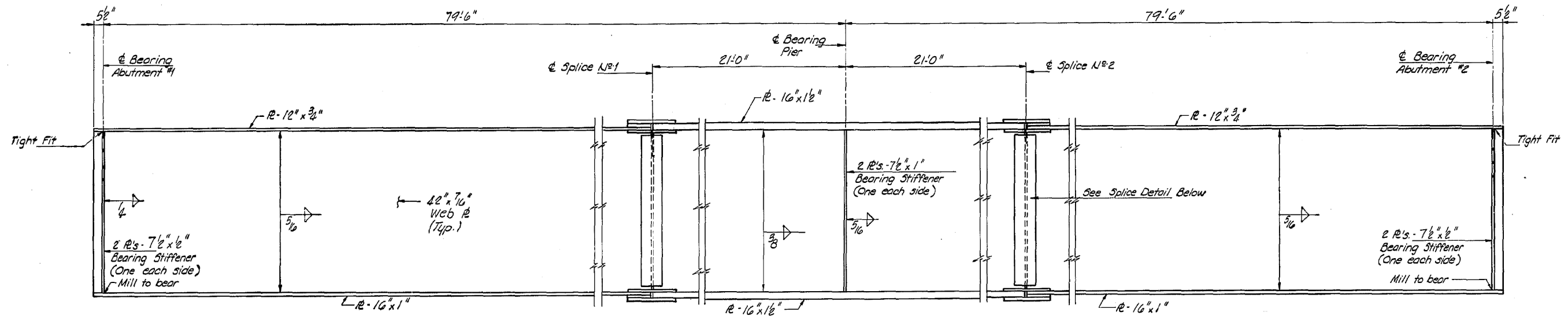
ILLINOIS FED. AID PROJECT

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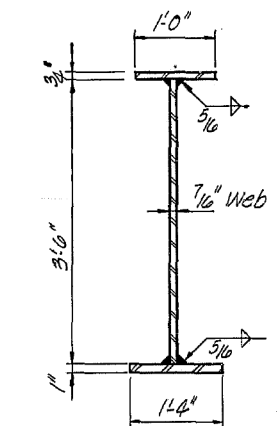
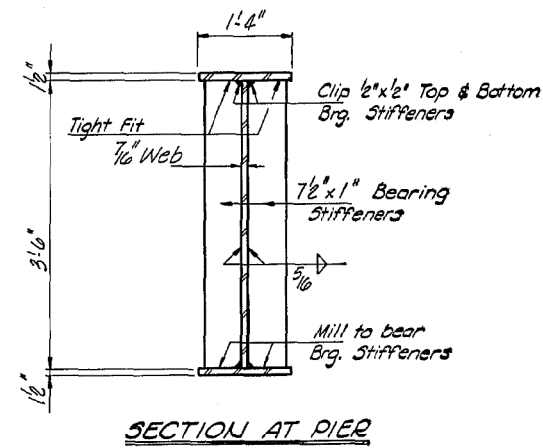
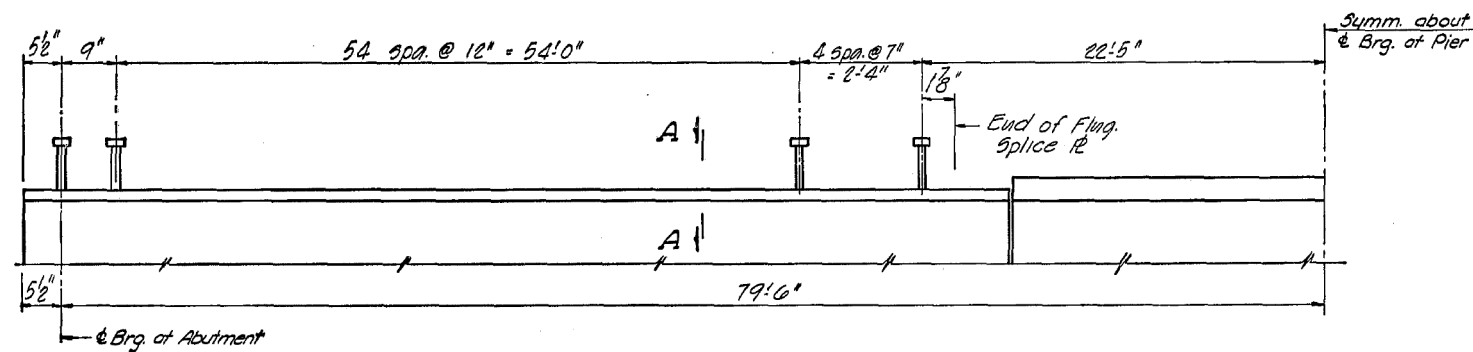


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PLOT DATE = 1/30/2020	CHECKED - TJZ	REVISED	

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-408	84-9-2 HB-5	SANGAMON	35	18
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

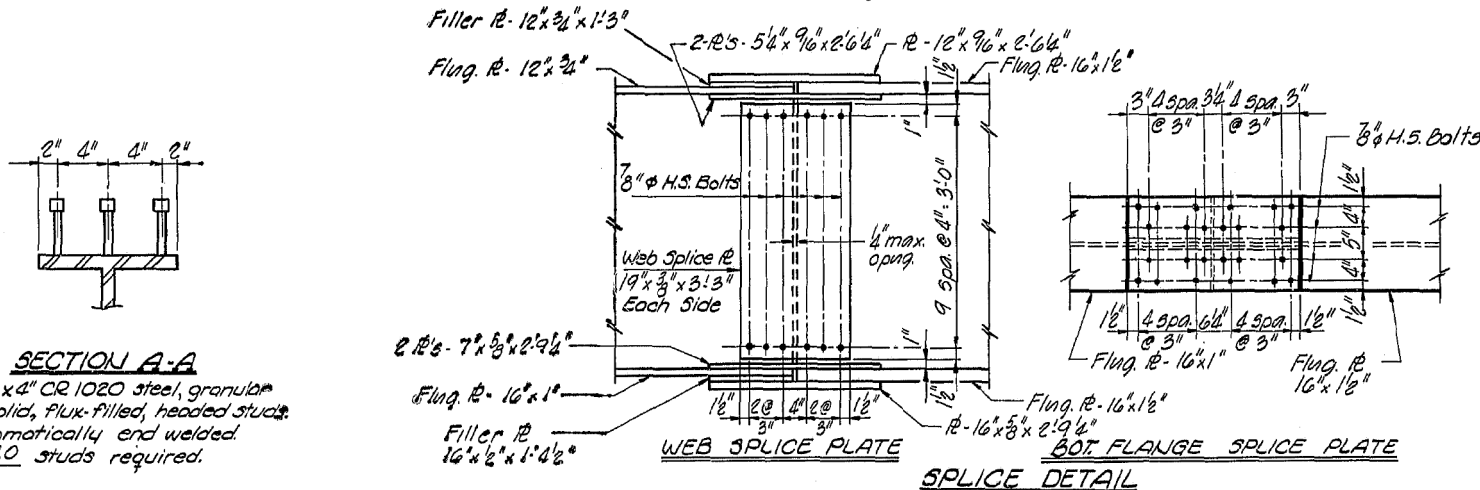


GIRDER ELEVATION



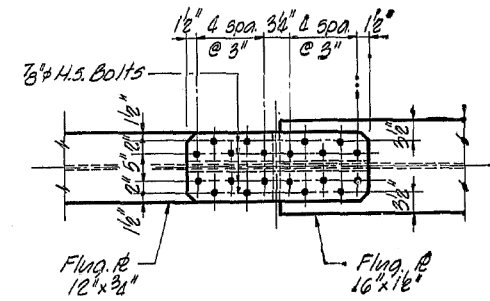
TYPICAL GIRDER SECTION  
(Except From Splice to Pier)

SHEAR CONNECTOR ELEVATION  
(360 stud shear connectors req'd. ea. girder)



SECTION A-A

3/4" φ x 4" CR 1020 steel, granular or solid, flux-filled, headed studs. Automatically end welded. 4320 studs required.



WB. & E.B. STRUCT.  
STRUCTURAL STEEL

REVISIONS			DRAWN BY	DATE
1	DATE	INITIALS	RES	6-72
2			GSH	7-72
3				
4				
5				
6				
7				
8				
9				
10				

PROJECT NO. 2385-2  
 SHEET NO. 18

FOR INFORMATION ONLY

ABBREVIATED EXISTING PLANS  
STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	92
				CONTRACT NO. 72H51

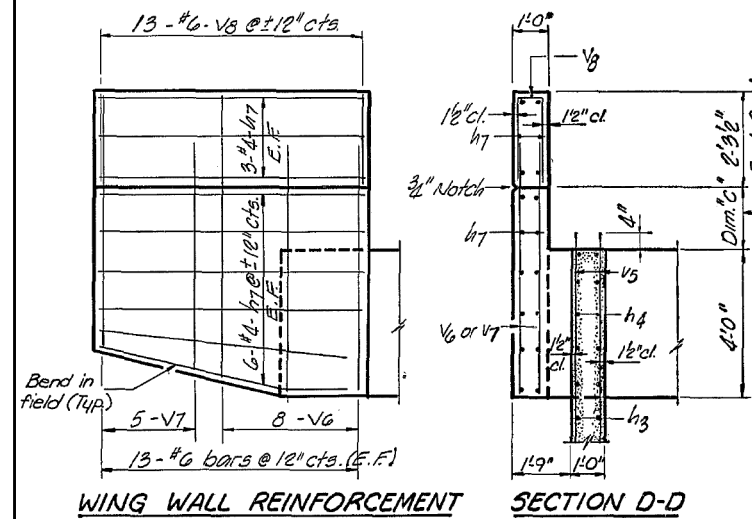
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

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PLOT SCALE = 0:2" / 1"	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - TJZ	REVISED



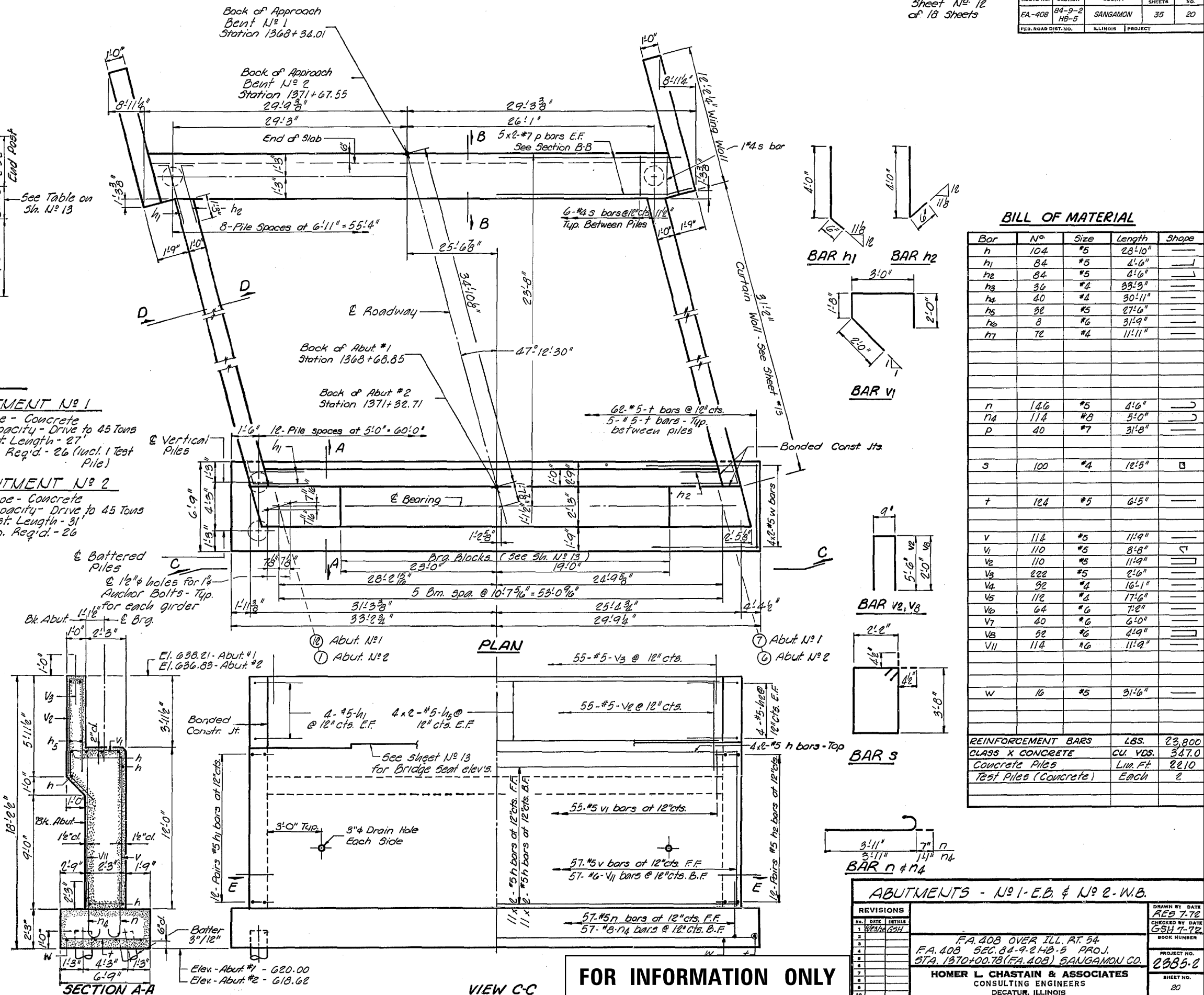
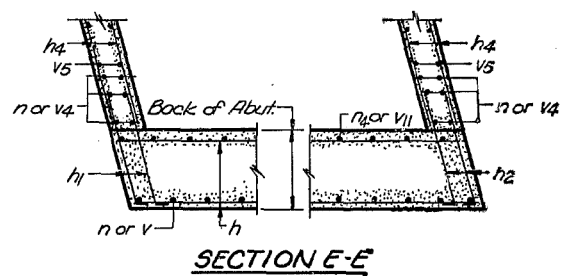
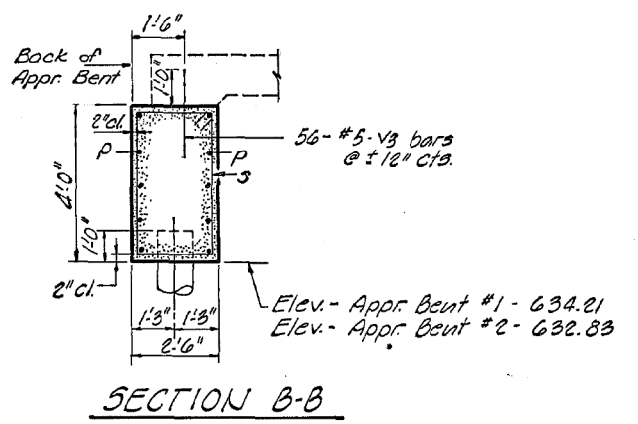
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-408	84-9-2	SANGAMON	35	20
FED. ROAD DIST. NO.		ILLINOIS PROJECT		



**PILE DATA**

- APPR. BENT N° 1**  
Type - Concrete  
Capacity - Drive to 45 Tons  
Est. Length - 41'  
No. Req'd - 9
- ABUTMENT N° 1**  
Type - Concrete  
Capacity - Drive to 45 Tons  
Est. Length - 27'  
No. Req'd - 26 (incl. 1 Test Pile)
- APPR. BENT N° 2**  
Type - Concrete  
Capacity - Drive to 45 Tons  
Est. Length - 45'  
No. Req'd - 9 (incl. 1 Test Pile)
- ABUTMENT N° 2**  
Type - Concrete  
Capacity - Drive to 45 Tons  
Est. Length - 31'  
No. Req'd - 26



**BILL OF MATERIAL**

Bar	N°	Size	Length	Shape
h	104	#5	28'-10"	—
h1	84	#5	4'-6"	—
h2	84	#5	4'-6"	—
h3	36	#4	33'-9"	—
h4	40	#4	30'-11"	—
h5	32	#5	27'-0"	—
h6	8	#6	31'-9"	—
h7	72	#4	11'-11"	—
n	146	#5	4'-6"	—
n4	114	#3	5'-0"	—
p	40	#7	31'-6"	—
s	100	#4	12'-5"	□
t	124	#5	6'-5"	—
v	114	#5	11'-9"	—
v1	110	#5	8'-8"	—
v2	110	#5	11'-9"	—
v3	222	#5	2'-0"	—
v4	32	#4	16'-1"	—
v5	112	#4	17'-6"	—
v6	64	#6	7'-2"	—
v7	40	#6	6'-0"	—
v8	32	#6	4'-9"	—
v11	114	#6	11'-9"	—
w	16	#5	31'-6"	—

REINFORCEMENT BARS	LBS.	23,800
CLASS X CONCRETE	CU. YDS.	347.0
Concrete Piles	LIQ. FT.	2210
Test Piles (Concrete)	EACH	2

**ABUTMENTS - N° 1 - E.B. & N° 2 - W.B.**

NO.	DATE	INITIALS
1	2/21/20	GSH
2		
3		
4		
5		
6		
7		
8		
9		
10		

FA. 408 OVER ILL. RT. 54  
SEC. 84-9-2 HD-5 PROJ.  
STA. 1370+00.78 (FA. 408) SANGAMON CO.

**HOMER L. CHASTAIN & ASSOCIATES**  
CONSULTING ENGINEERS  
DECATUR, ILLINOIS

PROJECT NO. 0885-2  
SHEET NO. 20

**FOR INFORMATION ONLY**

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ABBREVIATED EXISTING PLANS  
STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)

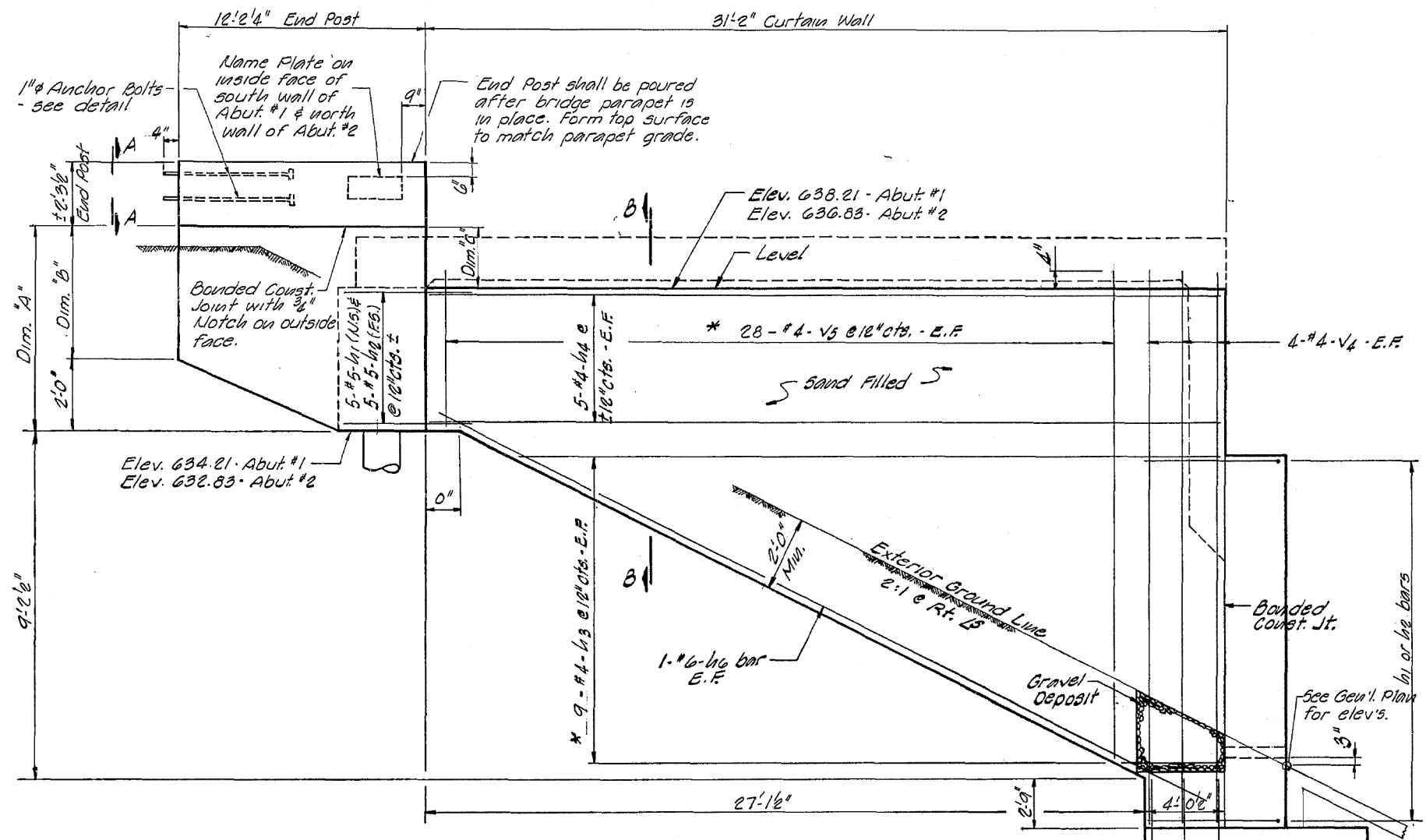
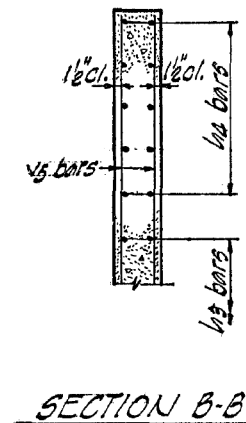
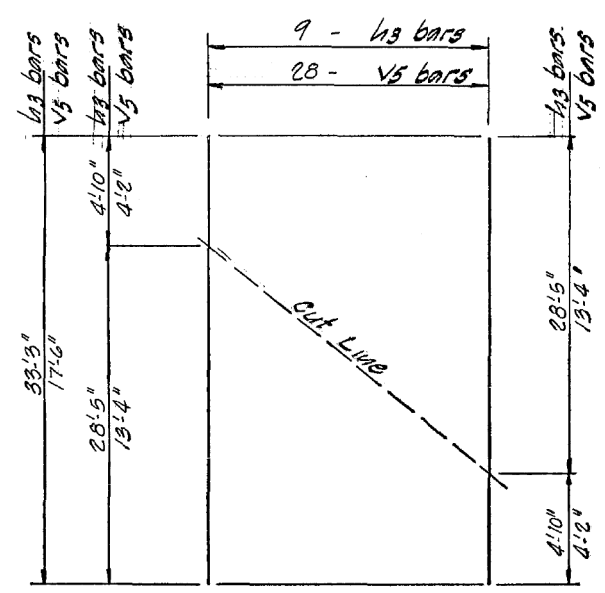
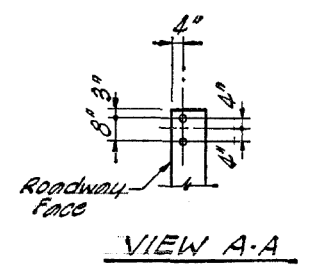
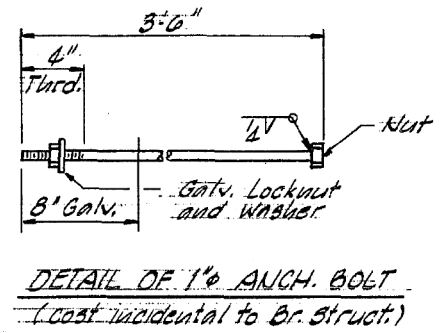
F.A.I. RTE. 72 SECTION (84-9-3) I, P COUNTY SANGAMON TOTAL SHEETS 138 SHEET NO. 93 CONTRACT NO. 72H51 ILLINOIS FED. AID PROJECT

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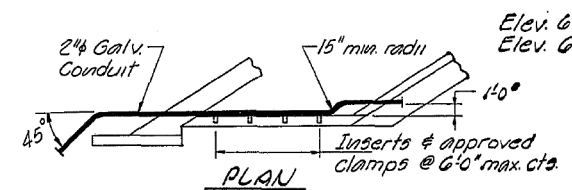
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PLOT SCALE = 0:2" = 1'	REVIS	REVIS	REVIS	
	REVIS	REVIS	REVIS	

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-408	BA-9-2 HB-5	SANGAMON	35	21
FED. ROAD DIST. NO.		ILLINOIS	PROJECT	

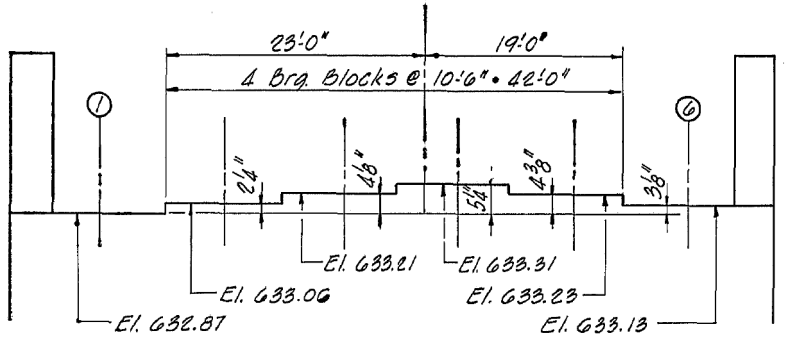
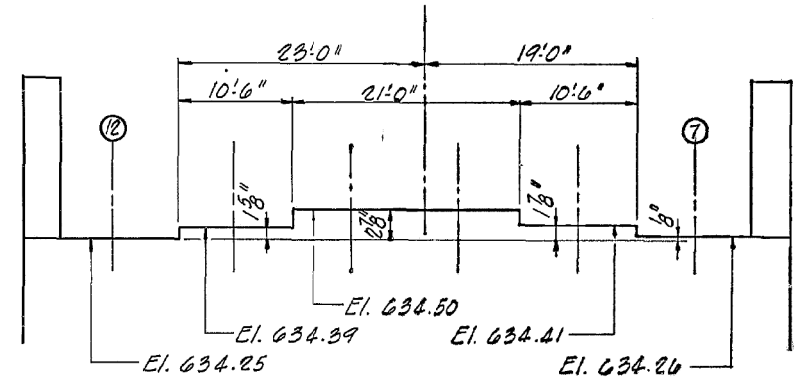


WING WALL DIMENSIONS

Location	A	B	C
No. Wall - Abut. #1	5'10 1/8"	3'10 1/8"	1'10 1/8"
So. Wall - Abut. #1	5'9 3/8"	3'9 3/8"	1'9 3/8"
No. Wall - Abut. #2	5'6 1/8"	3'6 1/8"	1'6 1/8"
So. Wall - Abut. #2	5'10 1/2"	3'10 1/2"	1'10 1/2"



NOTE:  
2" Galv. Conduit shall be Sch. 40 pipe. Extend to clear end of wing wall and terminate at a point outside of the shoulder. Thread and cap each end. Cost Incidental.



ABUTMENTS - NO 1 - E.B. & NO 2 - W.B.

REVISIONS			DRAWN BY DATE
NO.	DATE	INITIALS	RES 7-72
1		Blesha GSH	CHECKED BY DATE
2			GSH 7-72
3			BOOK NUMBER
4			PROJECT NO.
5			2385-2
6			SHEET NO.
7			21
8			
9			
10			

FA. 408 OVER ILL. RT. 54  
SEC. 84-9-2 HB-5 PROJ.  
STA. 1570+00.75 (FA. 408) SANGAMON CO.

HOMER L. CHASTAIN & ASSOCIATES  
CONSULTING ENGINEERS  
DECATUR, ILLINOIS

FOR INFORMATION ONLY

ABBREVIATED EXISTING PLANS  
STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	94
CONTRACT NO. 72H51				

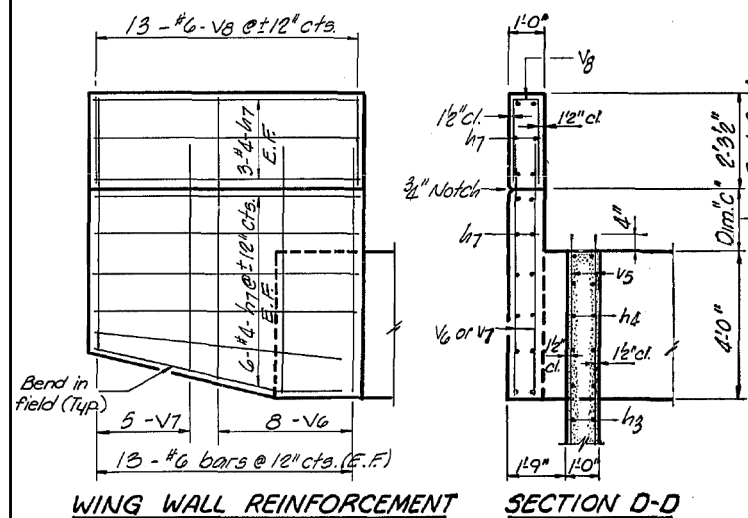
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PLOT SCALE = 0:2" = 1"	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - TJZ	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-408	84-9-2 HB-5	SANGAMON	35	22
FED. ROAD DIST. NO.	ILLINOIS PROJECT			



WING WALL REINFORCEMENT SECTION D-D

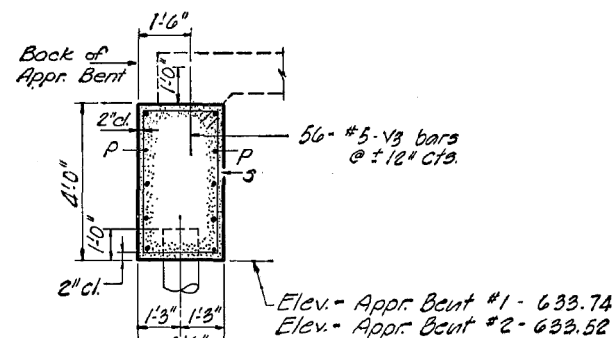
PILE DATA

**APPR. BENT NO 1**  
Type - Concrete  
Capacity - Drive to 45 Tons  
Est. Length - 41'  
No. Req'd - 9 (incl. 1 Test Pile)

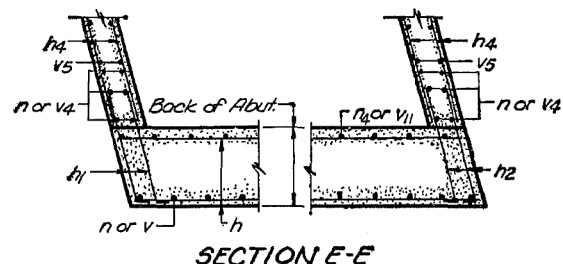
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Type - Concrete  
Capacity - Drive to 45 Tons  
Est. Length - 26'  
No. Req'd - 26

**APPR. BENT NO 2**  
Type - Concrete  
Capacity - Drive to 45 Tons  
Est. Length - 44'  
No. Req'd - 9

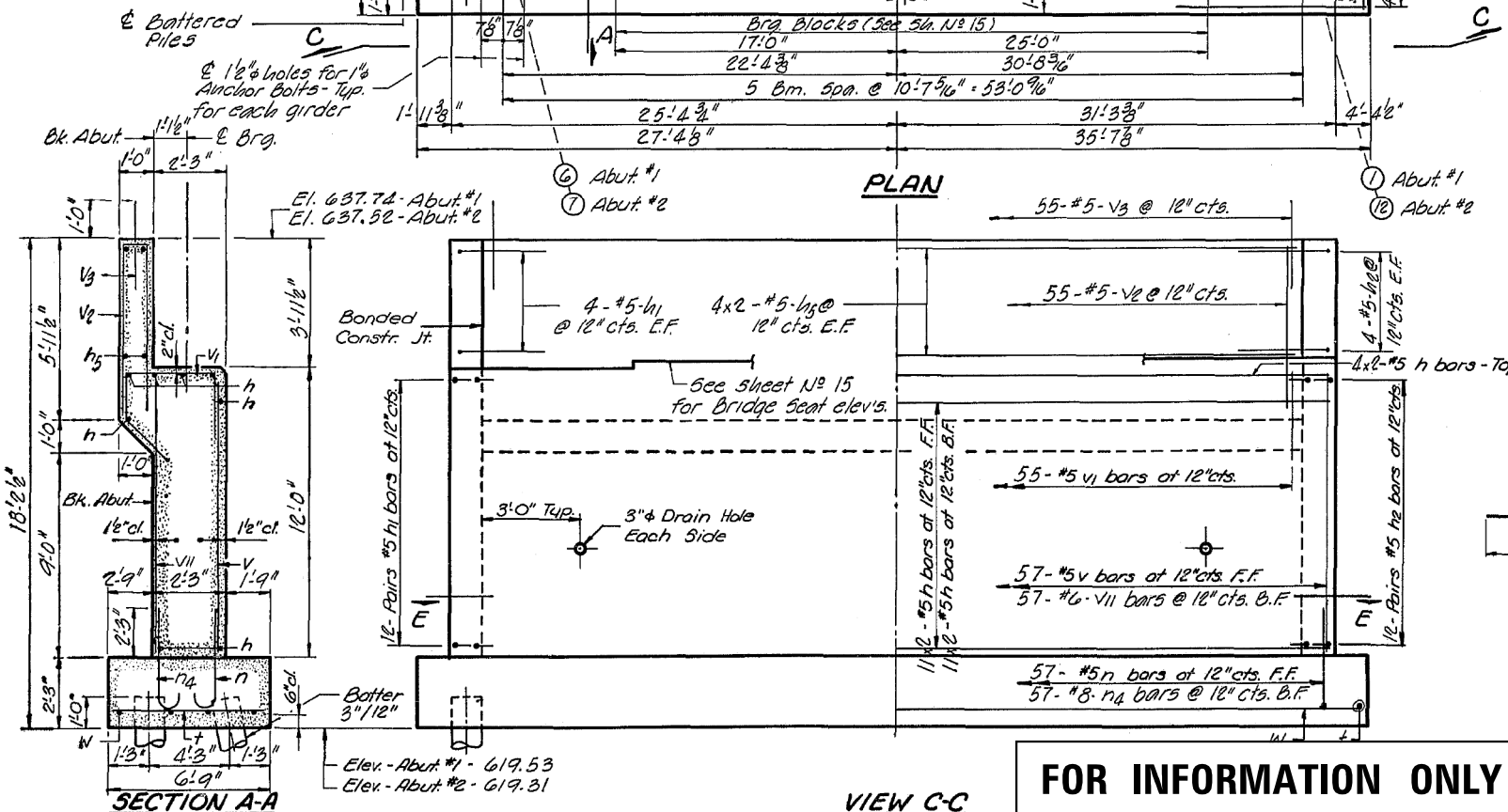
**ABUTMENT NO 2**  
Type - Concrete  
Capacity - Drive to 45 Tons  
Est. Length - 29'  
No. Req'd - 26 (incl. 1 Test Pile)



SECTION B-B



SECTION E-E



PLAN

SECTION A-A

VIEW C-C

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	104	#5	28'-10"	—
h1	84	#5	4'-6"	—
h2	84	#5	4'-6"	—
h3	36	#4	53'-3"	—
h4	40	#4	30'-11"	—
h5	32	#5	27'-6"	—
h6	8	#6	31'-9"	—
h7	72	#4	11'-11"	—
n	146	#5	4'-6"	—
n4	114	#8	5'-0"	—
p	40	#7	31'-8"	—
s	100	#4	12'-5"	—
t	124	#5	6'-5"	—
v	114	#5	11'-9"	—
v1	110	#5	8'-3"	—
v2	110	#5	11'-9"	—
v3	222	#5	2'-6"	—
v4	32	#4	16'-1"	—
v5	112	#4	17'-6"	—
v6	64	#6	7'-2"	—
v7	40	#6	6'-0"	—
v8	52	#6	4'-9"	—
v11	114	#6	11'-9"	—
w	16	#5	31'-6"	—
REINFORCEMENT BARS	LBS.	23,800		
CLASS X CONCRETE	CU. YDS.	345.5		
Concrete Piles	Lin. Ft.	2125		
Test Piles (Concrete)	Each	2		

BAR S

BAR n & n4

ABUTMENTS- NO 1-W.B. & NO 2-E.B.

REVISIONS	DATE	INITIALS	DESCRIPTION
1	05/12/20	DLH	REVISED
2			
3			
4			
5			
6			
7			
8			
9			
10			

DRAWN BY DATE: RES 7/22  
 CHECKED BY DATE: GSH 7-22  
 BOOK NUMBER:  
 PROJECT NO.: 2385-2  
 SHEET NO.: 22  
 F.A. 408 OVER ILL. RT. 54  
 SEC. 84-9-2 HB-5 PROJ.  
 STA. 1370+00 TO 1370+80 (FA 408) SANGAMON CO.  
 HOMER L. CHASTAIN & ASSOCIATES  
 CONSULTING ENGINEERS  
 DECATUR, ILLINOIS

FOR INFORMATION ONLY

ABBREVIATED EXISTING PLANS  
STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	95
				CONTRACT NO. 72H51

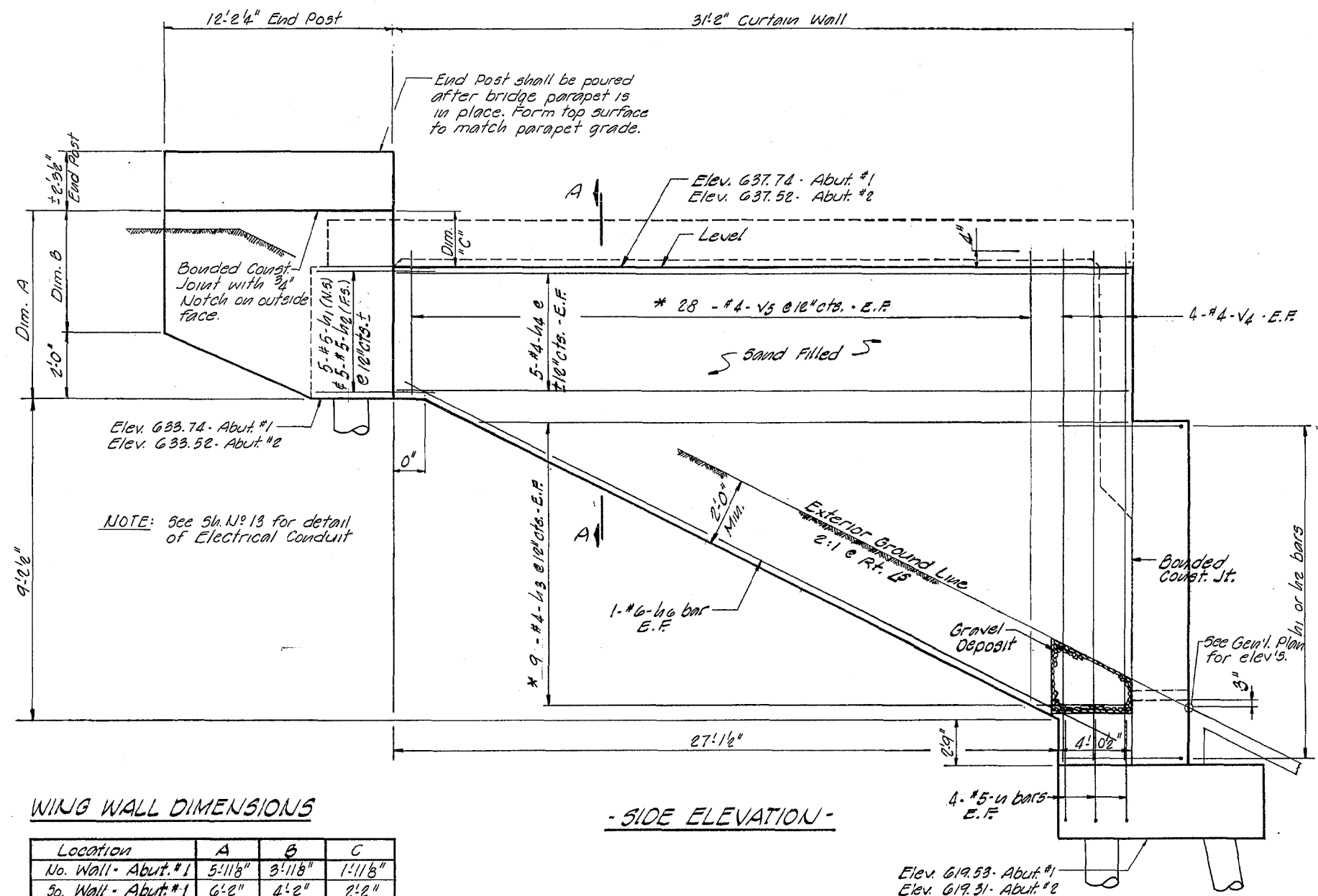
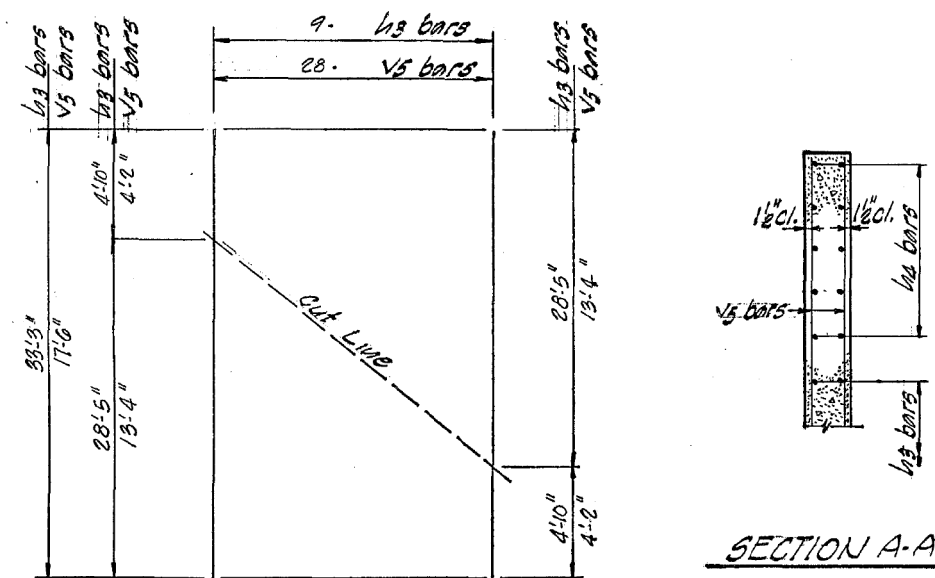
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PLOT SCALE = 0:2" = 1'	REVISED		REVISED	
	REVISED		REVISED	



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 Design firm no. 184001036

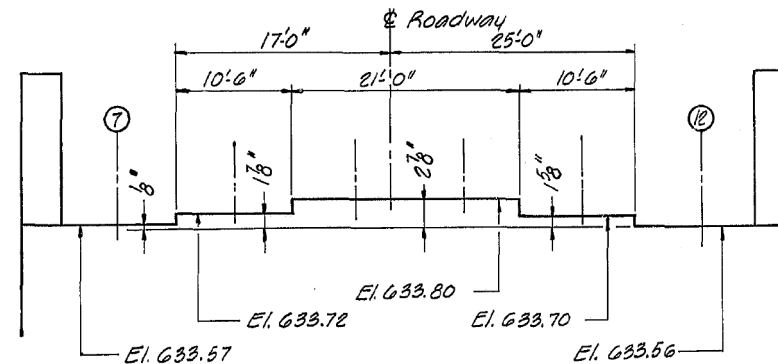
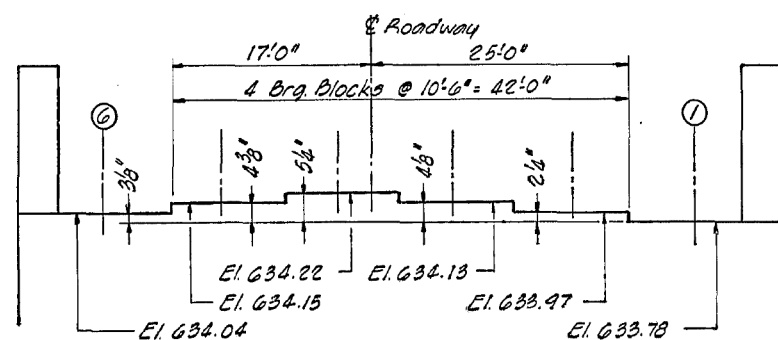


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-408	84-9-2 H8-5	SANGAMON	35	23
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		



WING WALL DIMENSIONS

Location	A	B	C
No. Wall - Abut. #1	5'-11 1/8"	3'-11 1/8"	1'-11 1/8"
So. Wall - Abut. #1	6'-2"	4'-2"	2'-2"
No. Wall - Abut. #2	5'-6 3/4"	3'-6 3/4"	1'-6 3/4"
So. Wall - Abut. #2	5'-8 3/8"	3'-8 3/8"	1'-8 3/8"



**ABUTMENTS - No 1 - W.B. & No 2 - E.B.**

<b>REVISIONS</b> NO. DATE INITIAL 1 8/24/2020 GSH		DRAWN BY DATE RES 7/2
F.A. 408 OVER ILL. RT. 54 SEC. 84-9-2 HB-5 PROJ. STA. 1370+00 TO 1370+00 (FA 408) SANGAMON CO.		CHECKED BY DATE GSH 7-72
<b>HOMER L. CHASTAIN &amp; ASSOCIATES</b> CONSULTING ENGINEERS DECATUR, ILLINOIS		PROJECT NO. 2385-2
		SHEET NO. 23

**FOR INFORMATION ONLY**

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ABBREVIATED EXISTING PLANS  
STRUCTURE NO. 084-0148 (WB), 084-0149 (EB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	96
				CONTRACT NO. 72H51

USER NAME = dheberling	DESIGNED - BRD	REVISED
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PLOT SCALE = 0.2" = 1'	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - TJZ	REVISED

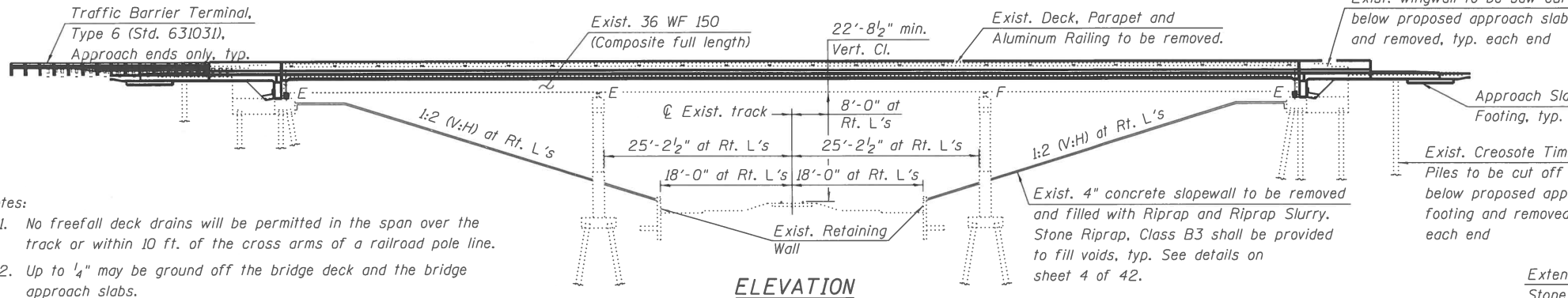
Bench Mark: Chiseled "□" in top NW corner of the NW wingwall (median edge) of the E.B. bridge of I-72/US 36 over N.S. R.R. track. Station 423+13; 28' Rt.; NAVD '88 = 640.96.

Existing Structure: S.N. 084-0127 & S.N. 084-0128 was built in 1969 as F.A.P 196, Section 1,VB. Each structure consists of a 3 span reinforced concrete deck on continuous WF steel beams supported by 2 reinforced concrete stub abutments and 2 reinforced concrete multiple column piers all founded on steel piles. The deck was patched in 1985 and 1998. The 1998 repair also consisted of a microsilica overlay and expansion joint repair. The structural steel was cleaned and painted in 2001. 224'-0" back-to-back abutments and 42'-0" out-to-out of deck. Concrete deck to be removed and replaced using stage construction.

Salvage: Portions of the existing aluminum railing shall be salvaged. See sheet 3 of 42 for additional details.

**INDEX OF SHEETS**

1. General Plan & Elevation	16. WB Superstructure Details
2. General Data	17. EB Superstructure Details
3. Stage Construction Details	18. Superstructure Details
4. Temporary Sheet Piling and Slope Wall Details	19. Modified Preformed Joint Strip Seal
5. Temporary Concrete Barrier for Stage Construction	20. WB Bridge Approach Slab Details
6. WB Top of Slab Elevation Location Plan	21. EB Bridge Approach Slab Details
7.-9. WB Top of Slab Elevations	22. Bridge Approach Slab Details
10. EB Top of Slab Elevation Location Plan	22A. Structural Steel Details
11.-13. EB Top of Slab Elevations	23. Structural Steel Details
14. WB Top of Approach Slab Elevations	24. East Abutment Bearing Details
15. EB Top of Approach Slab Elevations	25. West Abutment Bearing Details
	26.-27. Abutment Concrete Removal Details
	28. Abutment Repair Details
	29.-30. Abutment Construction Details
	31. Pier Strengthening and Repair Details
	32. Bar Splicer Assembly and Mechanical Splicer Details
	33.-42. Existing Plans (For Information Only)

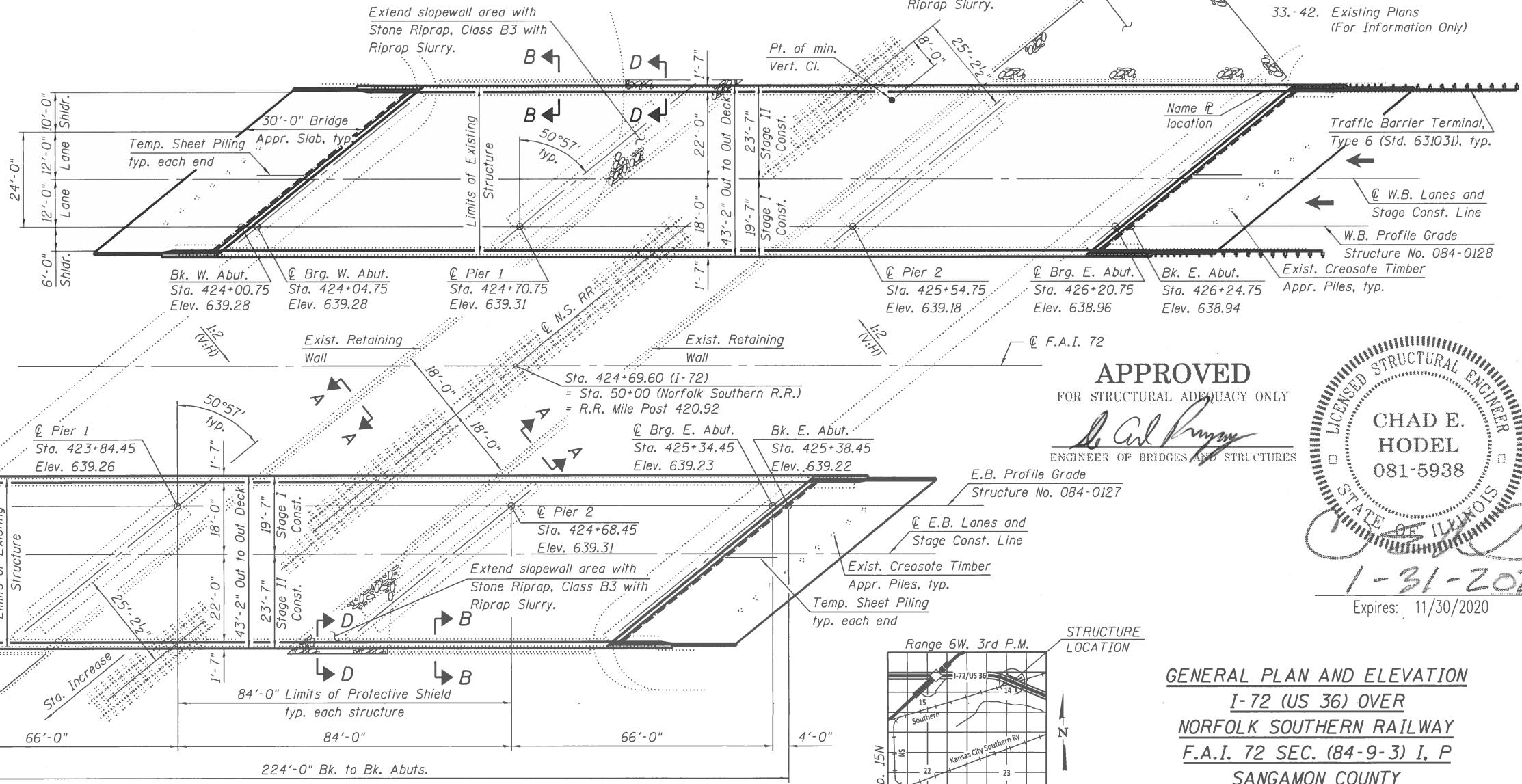


**Notes:**

- No freefall deck drains will be permitted in the span over the track or within 10 ft. of the cross arms of a railroad pole line.
- Up to 1/4" may be ground off the bridge deck and the bridge approach slabs.

**SCOPE OF WORK**

- Remove and replace existing concrete deck at each bridge.
- Make each new deck composite full length.
- Remove and replace existing bridge approach slabs.
- Remove and replace existing abutment backwalls.
- Remove and replace rocker bearings at the abutments with elastomeric bearings.
- Repair concrete at abutments and piers as required.
- Modify and repair existing slope wall with Stone Riprap and Riprap Slurry.
- Strengthen the cantilever portions of the pier caps prior to establishing the Stage I Traffic lane.



**APPROVED**  
FOR STRUCTURAL ADEQUACY ONLY

*Chad E. Hodel*  
ENGINEER OF BRIDGES AND STRUCTURES



**GENERAL PLAN AND ELEVATION**  
**I-72 (US 36) OVER**  
**NORFOLK SOUTHERN RAILWAY**  
**F.A.I. 72 SEC. (84-9-3) I, P**  
**SANGAMON COUNTY**  
**STATION 424+69.60**  
**STRUCTURE NO. 084-0127 (E.B.) & 0128 (W.B.)**

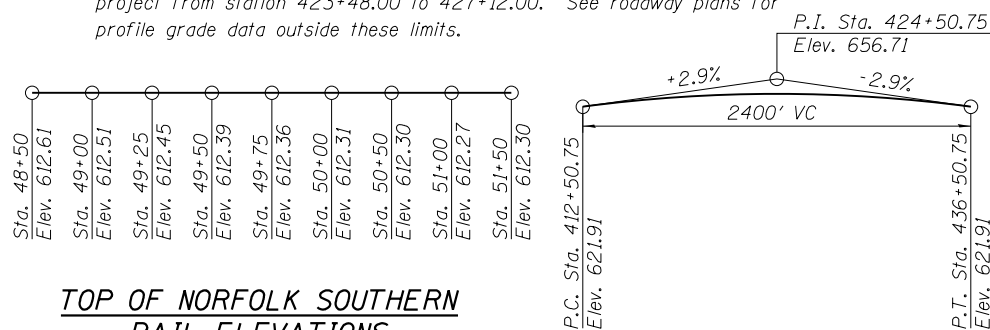
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<p>design firm no. 184001036</p> <p>engineers + planners + land surveyors</p>	USER NAME = dheberling	DESIGNED - BRD	REVISED	<p><b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b></p>	F.A.I. RTE. = 72	SECTION = (84-9-3) I, P	COUNTY = SANGAMON	TOTAL SHEETS = 138	SHEET NO. = 97	
	MODEL = 0840127_28-72H51-001	CHECKED - SBC	REVISED		SHEET NO. 1 OF 42 SHEETS	CONTRACT NO. 72H51		ILLINOIS FED. AID PROJECT		
	PLOT SCALE = 0:2.00000" = 1/ in.	DRAWN - DLH	REVISED							
	PLOT DATE = 1/31/2020	CHECKED - SBC	REVISED							

**GENERAL NOTES**

- Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts 3/4" φ, holes 13/16" φ, unless otherwise noted.
- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars designated (E) shall be epoxy coated.
- The Contractor shall test the existing welds by non-destructive methods within 2' of the end of the existing cover plates for cracks after removal of the existing concrete deck. Dye penetrant (PT), magnetic particle (MT), or other approved testing method shall be performed by qualified personnel approved by the Engineer. If cracks are found, report them to the Bureau of Bridges and Structures for disposition. The cost of testing is included in Removal of Existing Concrete Deck. The cost of crack repair, if necessary, will be paid for according to Article 109.04 of the Standard Specifications.  
*As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Any cracks that cannot be removed by grinding 1/4" deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.*
- 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 surfaces 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.  
*As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Any cracks that cannot be removed by grinding 1/4" deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.*
- If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.
- 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.
- Concrete Sealer shall be applied to the designated areas of the abutments.
- The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
- Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- The concrete for bridge decks finished according to Article 503.16(a) of the Standard Specifications shall be placed and compacted parallel to the skew in uniform increments along centerline of bridge. The machine used for finishing shall be set parallel to the skew for striking off and screeding the concrete.
- Slipforming of the parapets is not allowed.
- All new structural steel shall only be shop painted with inorganic zinc rich primer per AASHTO M300, Type I.
- Existing structural steel shall only be cleaned and painted as required by the Special Provision for Cleaning and Painting Contact Surface Areas of Existing Steel Structures.
- Cost of cutting existing or proposed reinforcement to fit in field as detailed herein will not be measured for payment but is included in the cost of the associated work.

\*\* The profile grade data shown is only applicable to the E.B. portion of the project from station 422+27.20 to 425+91.20 and the W.B. portion of the project from station 423+48.00 to 427+12.00. See roadway plans for profile grade data outside these limits.

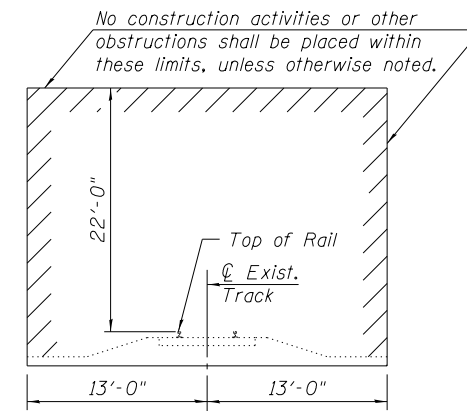


**TOP OF NORFOLK SOUTHERN RAIL ELEVATIONS**

**\*\* E.B. & W.B. I-72 PROFILE GRADE**  
(Along median edge of pavement.)  
(The profile grade shows the final elevations after grinding.)

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class B3	Ton		1,727	1,727
Concrete Removal	Cu. Yd.		78.3	78.3
Removal of Existing Concrete Deck No. 1	Each	2		2
Protective Shield	Sq. Yd.	784		784
Structure Excavation	Cu. Yd.		183	183
Concrete Structures	Cu. Yd.		172.3	172.3
Concrete Superstructure	Cu. Yd.	641.9		641.9
Concrete Superstructure (Approach Slab)	Cu. Yd.	270.9		270.9
Protective Coat	Sq. Yd.	2,950		2,950
Furnishing and Erecting Structural Steel	Pound	4,970		4,970
Stud Shear Connectors	Each	9,492		9,492
Reinforcement Bars, Epoxy Coated	Pound	237,280	25,420	262,700
Bar Splicers	Each	1,546	480	2,026
Name Plates	Each	2		2
Preformed Joint Strip Seal	Foot	262		262
Elastomeric Bearing Assembly, Type I	Each	14		14
Elastomeric Bearing Assembly, Type III	Each	14		14
Anchor Bolts, 5/8"	Each	112		112
Concrete Sealer	Sq. Ft.		1,298	1,298
Geocomposite Wall Drain	Sq. Yd.		98	98
Riprap Slurry	Sq. Yd.		3,072	3,072
Slope Wall Removal	Sq. Yd.		2,581	2,581
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	1,506		1,506
Granular Backfill for Structures	Cu. Yd.		124	124
Structural Repair of Concrete (Depth equal to or less than 5 inches)	Sq. Ft.		89	89
Structural Repair of Concrete (Depth greater than 5 inches)	Sq. Ft.		4	4
Temporary Sheet Piling	Sq. Ft.		434	434
Diamond Grinding (Bridge Section)	Sq. Yd.	2,912		2,912
Jacking and Cribbing, Location No. 1	L. Sum	1		1
Pipe Underdrains for Structures 4"	Foot		806	806



**CONSTRUCTION CLEARANCE DIAGRAM**

(Horiz. dimensions @ Rt. L's to C track.)  
(2013 Norfolk Southern Public Projects Manual)

**LOADING HS20-44 & ALT. (New Const.)**

Allow 25#/sq. ft. for future wearing surface.

**DESIGN SPECIFICATIONS (New Const.)**

2002 AASHTO Standard Specification for Highway Bridges

**DESIGN STRESSES**

**FIELD UNITS (New Construction)**

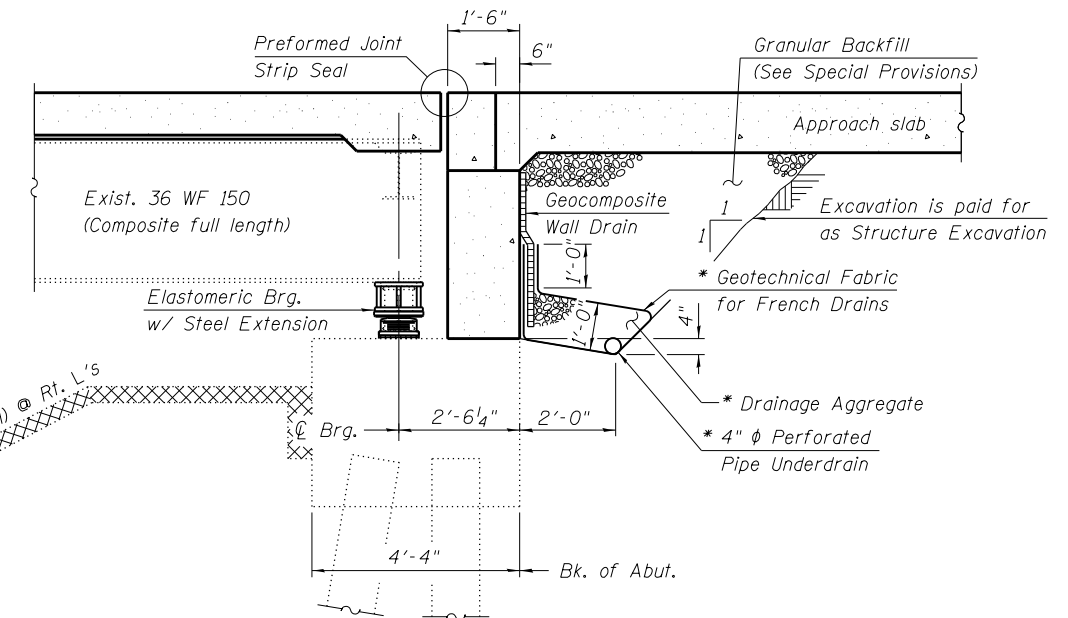
f'c = 3,500 psi  
fy = 60,000 psi (Reinforcement)  
fy = 36,000 psi (Structural Steel)

**FIELD UNITS (Exist. Construction)**

f'c = 3,500 psi (Substructure)  
fy = 40,000 psi (Reinforcement)  
fy = 36,000 psi (Structural Steel)

**SEISMIC DATA**

Seismic Performance Category (SPC) = A  
Horizontal Bedrock Acceleration Coefficient (A) = 0.048g  
Site Coefficient (S) = 1.2



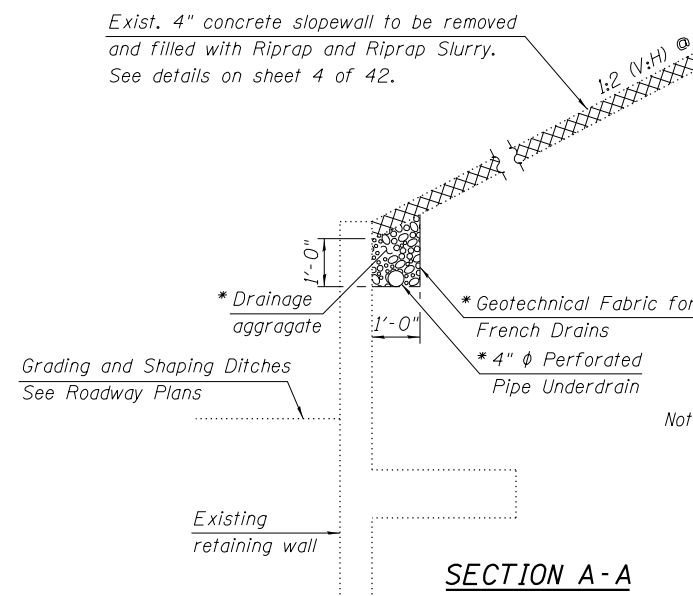
**SECTION THRU ABUTMENT**

(Horiz. dim. @ Rt. L's)

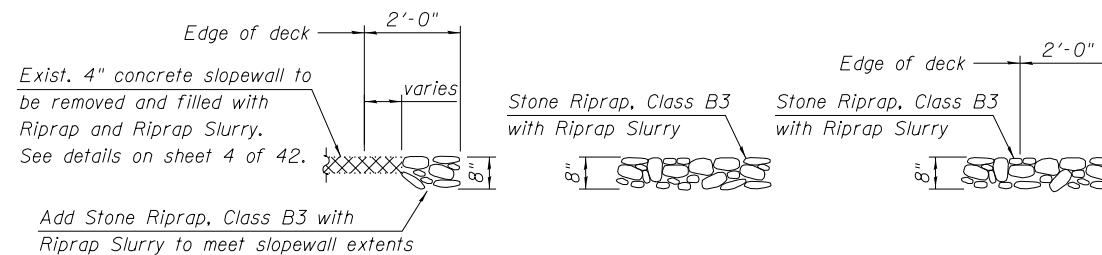
\* Included in the cost of Pipe Underdrains for Structures. (See Special Provisions)

Note:

All drainage system components shall extend parallel to the abutment back wall or retaining wall until they intersect the wingwalls or 2'-0" from the end of the retaining wall. The abutment pipe shall extend thru the abutment wingwall until intersecting the side slopes. The retaining wall pipe shall extend until intersecting the side slopes and drain into ditch. All pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 60110).



**SECTION A-A**



**SECTION B-B**

**SECTION C-C**

**SECTION D-D**

STATION 424+69.60 REBUILT 20 BY STATE OF ILLINOIS F.A.I. RT. 72 SEC. (84-9-3) I, P LOADING HS20-44 & ALT. STRUCTURE NO. 084-0127	STATION 424+69.60 REBUILT 20 BY STATE OF ILLINOIS F.A.I. RT. 72 SEC. (84-9-3) I, P LOADING HS20-44 & ALT. STRUCTURE NO. 084-0128
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**NAME PLATE**

See Std. 515001

Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.

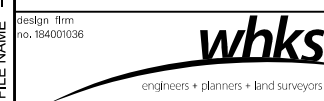
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GENERAL DATA  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)

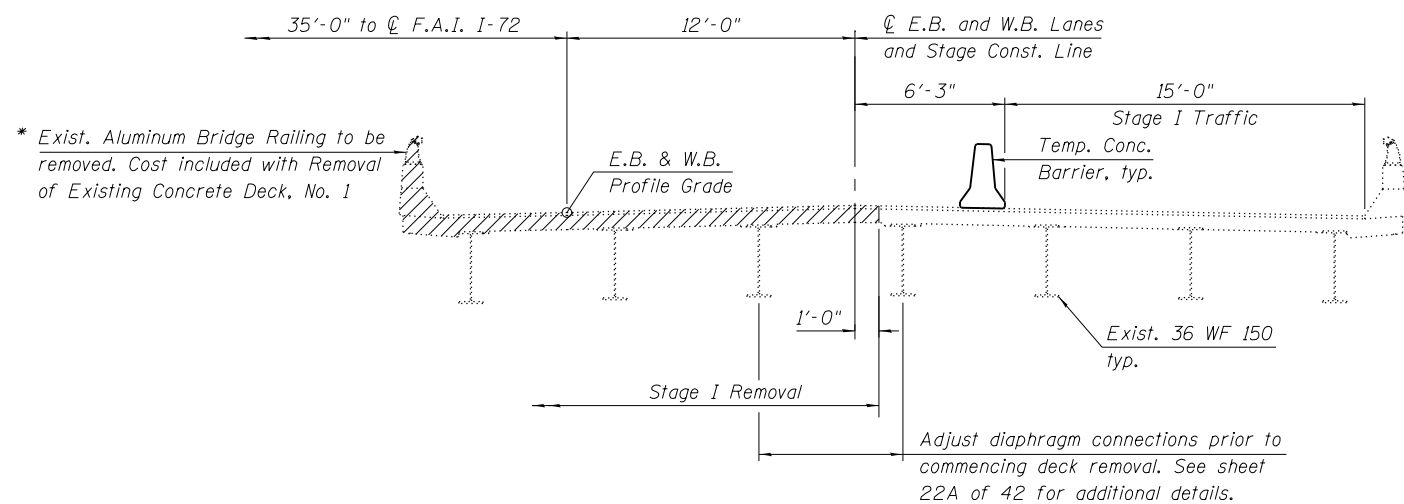
SHEET NO. 2 OF 42 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	98
			CONTRACT NO. 72H51	
ILLINOIS FED. AID PROJECT				

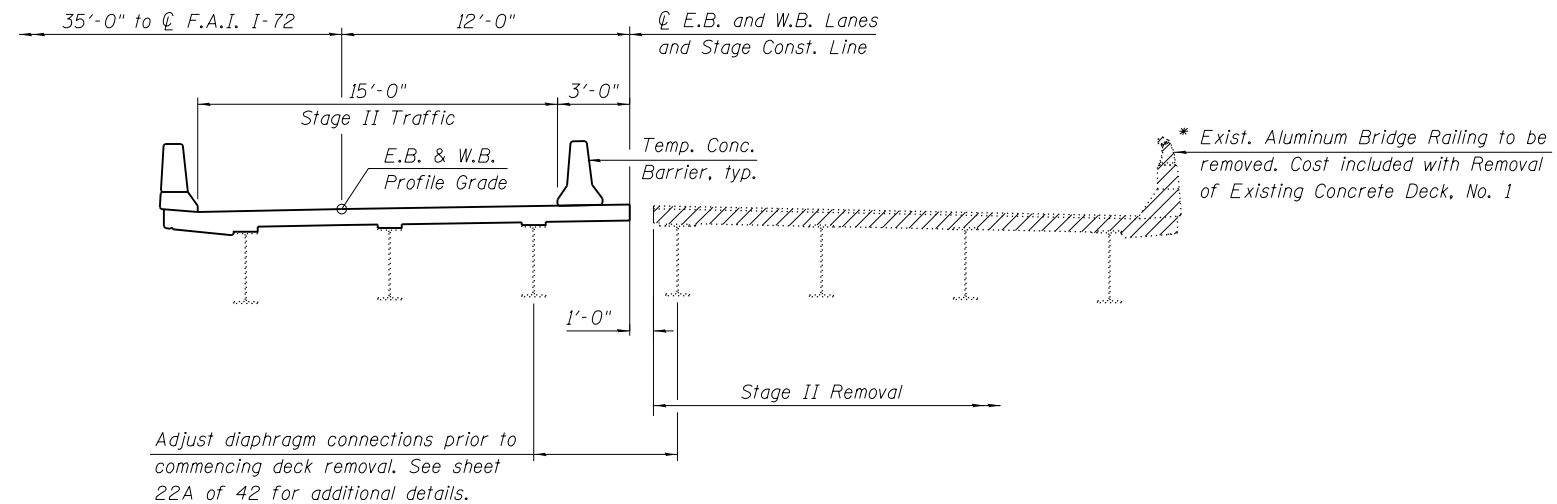
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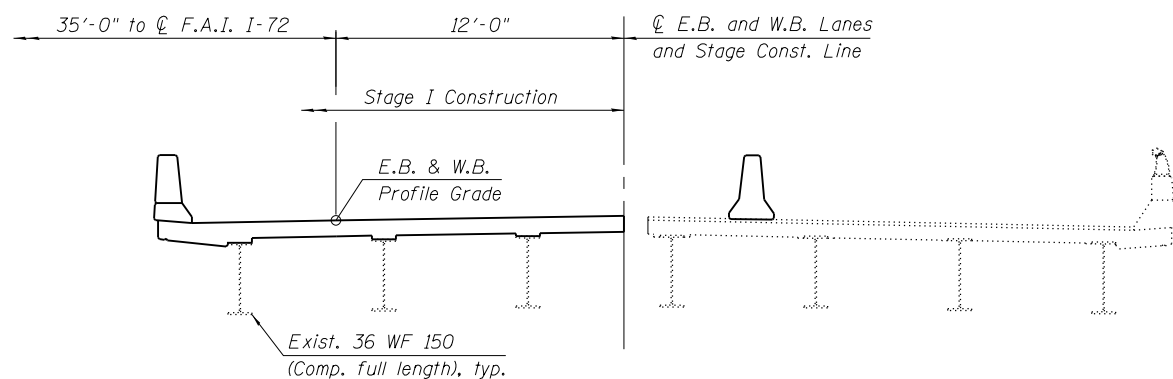


**STAGE I REMOVAL**

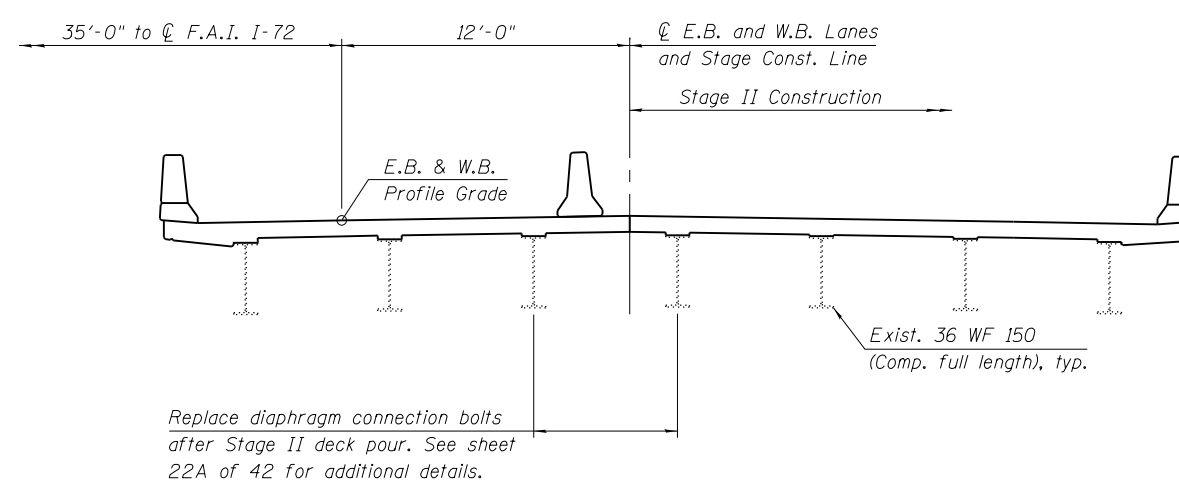


**STAGE II REMOVAL**

\* Approximately 15 existing aluminum rail posts in good condition shall be carefully removed by the Contractor for future use by IDOT. The Contractor shall set aside the brackets in a location where they will not be damaged until removed from the project site by IDOT personnel. The Engineer shall determine which brackets will be salvaged. Cost included with Removal of Existing Concrete Deck, No. 1.



**STAGE I CONSTRUCTION**



**STAGE II CONSTRUCTION**

Notes:

1. Hatched area indicates Removal of Existing Concrete Deck, No. 1.
2. For details of Temporary Concrete Barrier, see sheet 5 of 42.
3. For quantities of Temporary Concrete Barrier, see Roadway Plans.
4. Staging details for the E.B. Bridge (084-0127) are looking east and for the W.B. Bridge (084-0128) are looking west.
5. Construction loads shall not be applied to the Stage I deck overhang between the Stage Construction Line and adjacent interior girder without approval from the Engineer.

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Design firm  
no. 184001036



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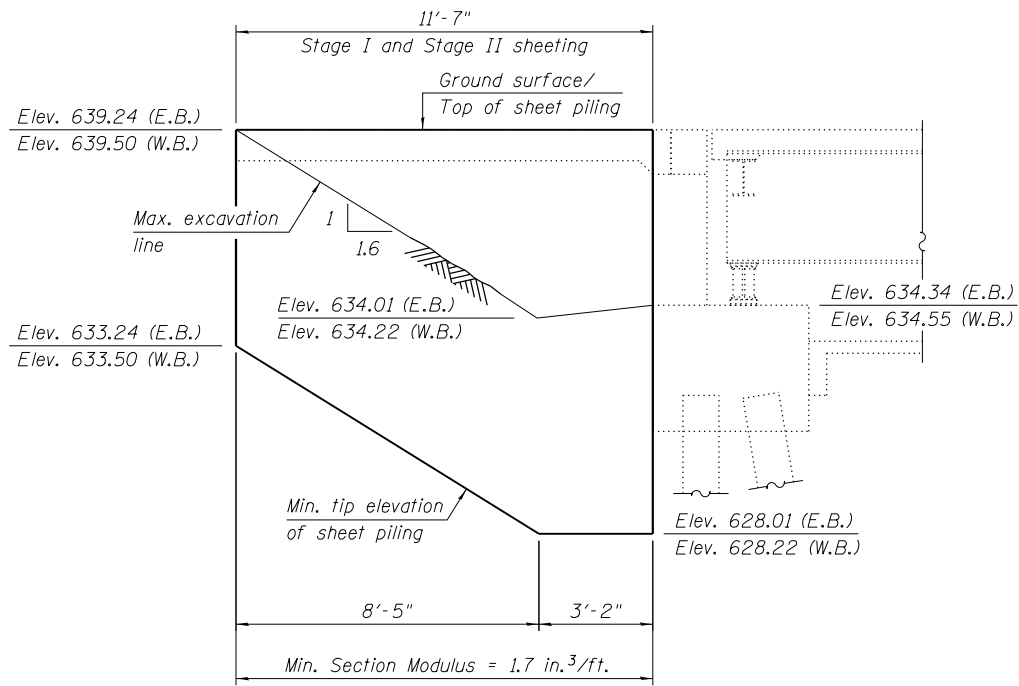
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)

SHEET NO. 3 OF 42 SHEETS

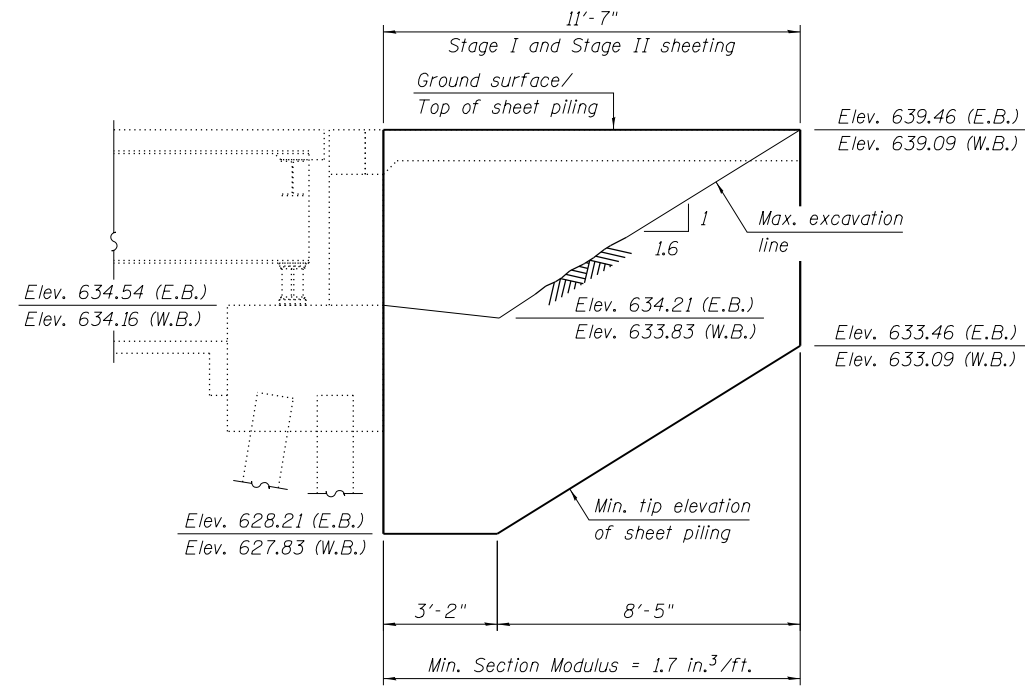
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	99
CONTRACT NO. 72H51				

ILLINOIS FED. AID PROJECT



**TEMPORARY SHEET PILING AT WEST ABUTMENTS**

(Dimensions are parallel to  $\phi$  roadway.)

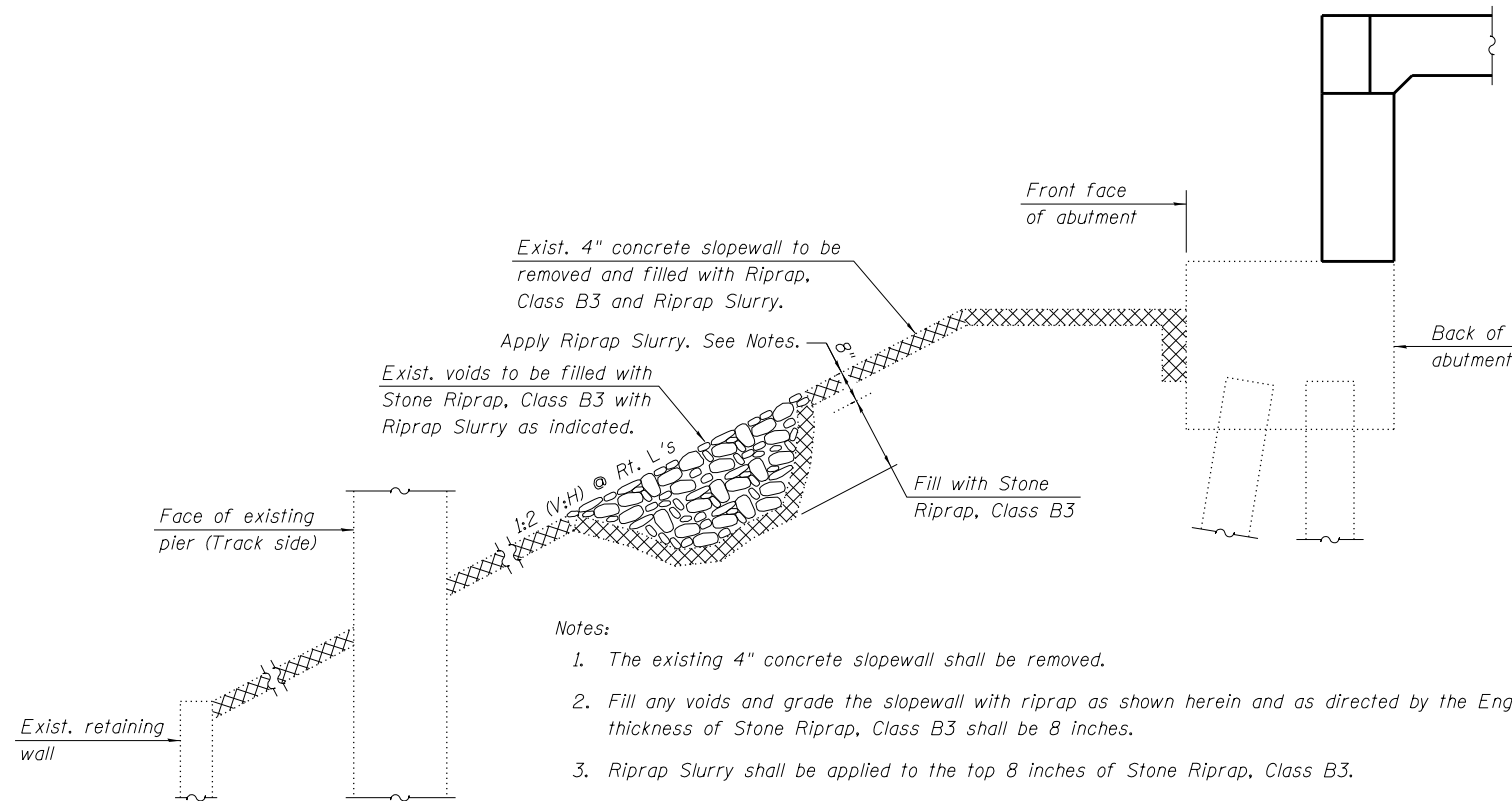


**TEMPORARY SHEET PILING AT EAST ABUTMENTS**

(Dimensions are parallel to  $\phi$  roadway.)

**Notes:**

1. If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.
2. The temporary sheet piling design assumes soil properties with a minimum  $Q_u = 1.0$  tsf within the embedment depth. Contractor shall field verify soil properties within the embedment depth of the sheet piling. The Bureau of Bridge and Structures shall be contacted for further disposition if the soil properties are less than the minimum design assumptions. Cost included with Temporary Sheet Piling.



**Notes:**

1. The existing 4" concrete slopewall shall be removed.
2. Fill any voids and grade the slopewall with riprap as shown herein and as directed by the Engineer. The minimum thickness of Stone Riprap, Class B3 shall be 8 inches.
3. Riprap Slurry shall be applied to the top 8 inches of Stone Riprap, Class B3.
4. A quantity of 600 tons of Stone Riprap, Class B3 has been estimated to fill voids in the existing slopewalls. The required quantity may vary and the Resident Engineer shall adjust the riprap quantity as required to suit the field conditions. Such variations shall not be cause for additional compensation for a change in scope of work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

**TYPICAL SECTION THRU EXISTING CONCRETE SLOPEWALL**

**BILL OF MATERIAL**

Item	Unit	Total
Temporary Sheet Piling	Sq. Ft.	434
Slope Wall Removal	Sq. Yd.	2,581
Stone Riprap, Class B3	Tons	1,727
Riprap Slurry	Sq. Yd.	3,072

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Design firm  
no. 184001036



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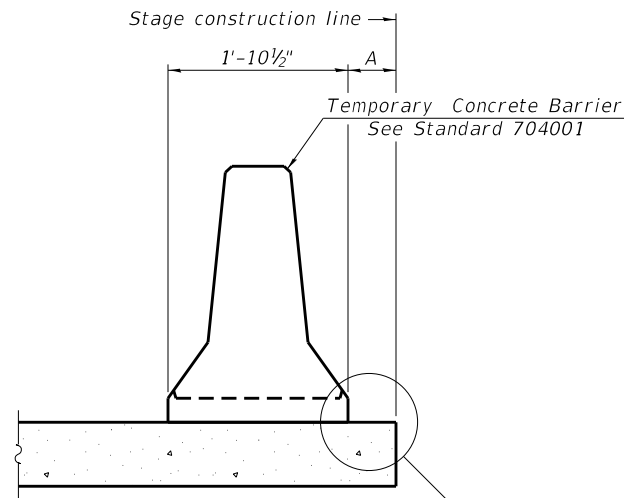
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY SHEET PILING AND SLOPEWALL DETAILS  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)**

SHEET NO. 4 OF 42 SHEETS

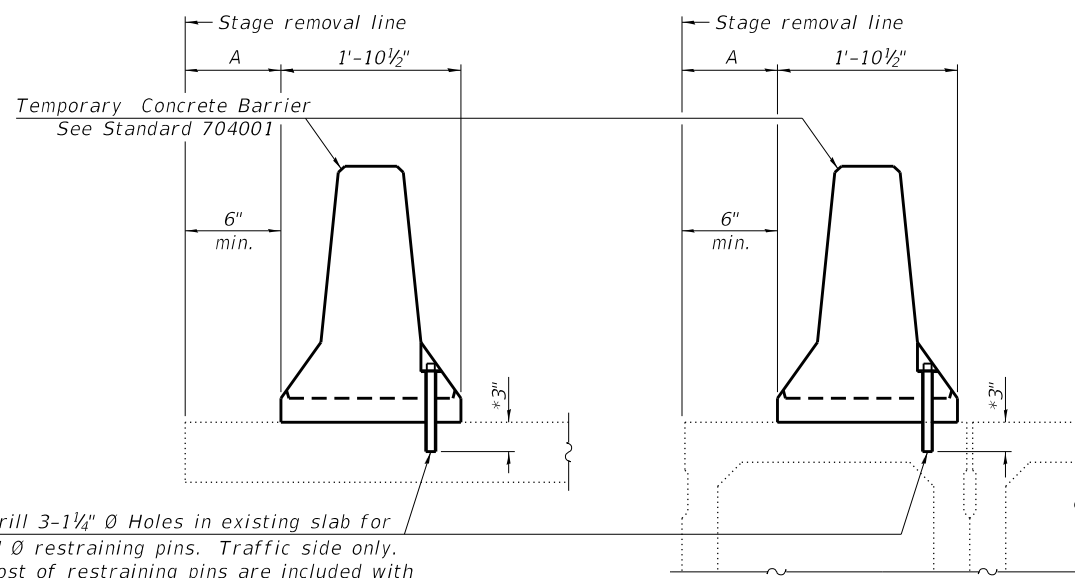
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	100
CONTRACT NO. 72H51				

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

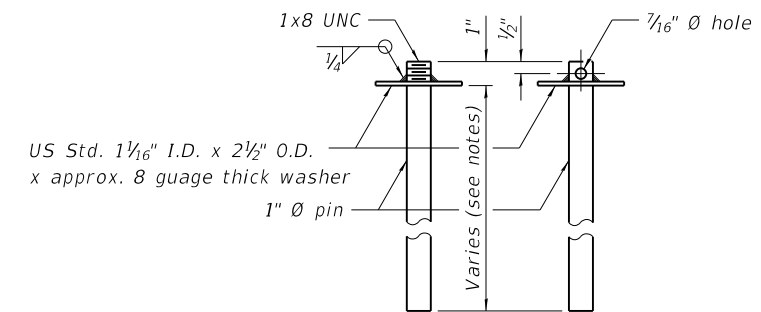


Drill 3-1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

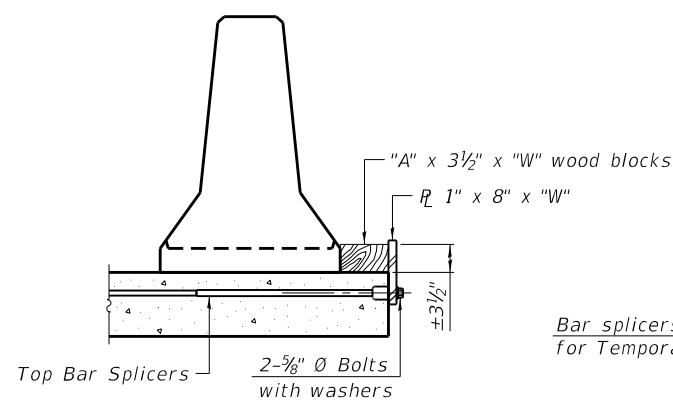
\* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

EXISTING DECK BEAM

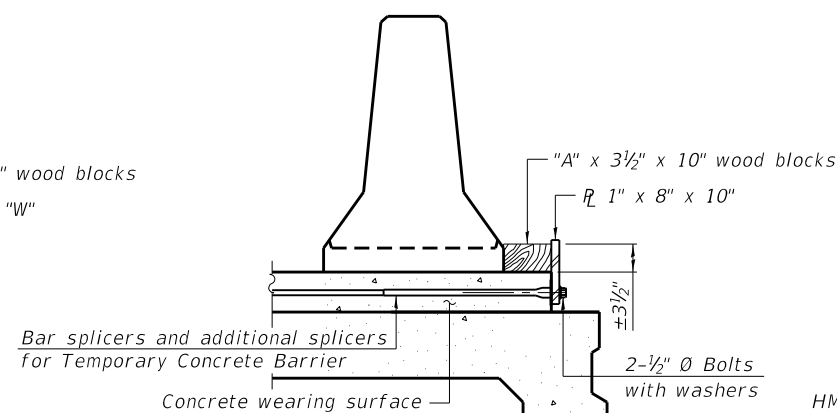


RESTRAINING PIN

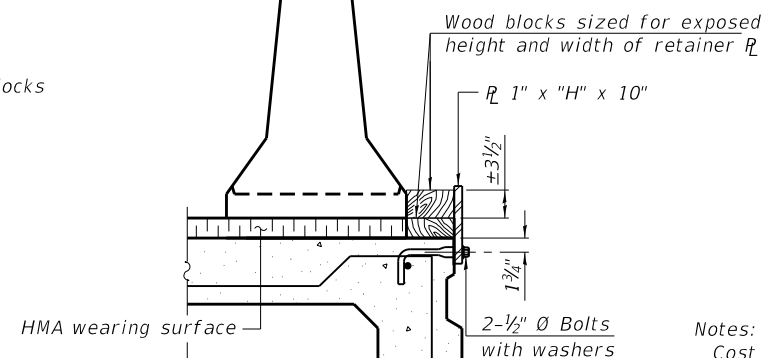
SECTIONS THRU SLAB OR DECK BEAM



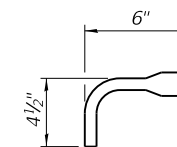
DETAIL I



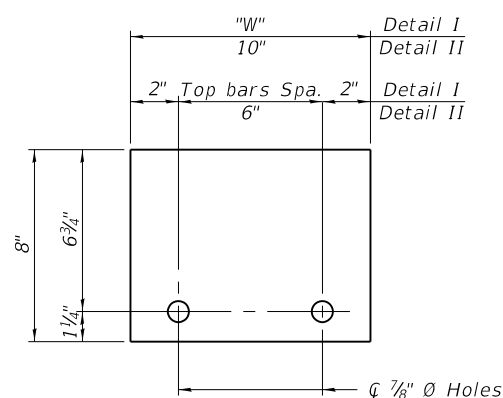
DETAIL II



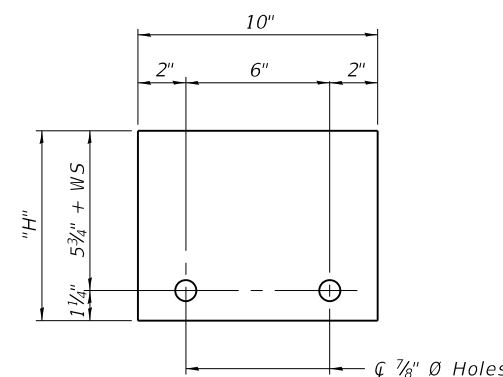
DETAIL III



BAR SPLICER FOR #4 BAR - DETAIL III



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



STEEL RETAINER 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  $\bar{C}$  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.

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R-27 2-17-2017



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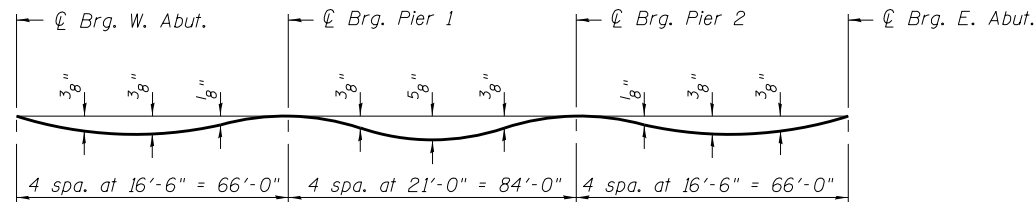
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)

SHEET NO. 5 OF 42 SHEETS

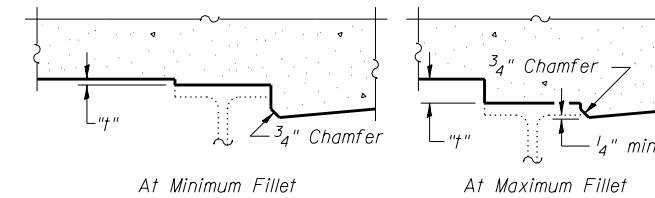
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	101
				CONTRACT NO. 72H51

ILLINOIS FED. AID PROJECT



**DEAD LOAD DEFLECTION DIAGRAM**  
(Includes weight of concrete only.)

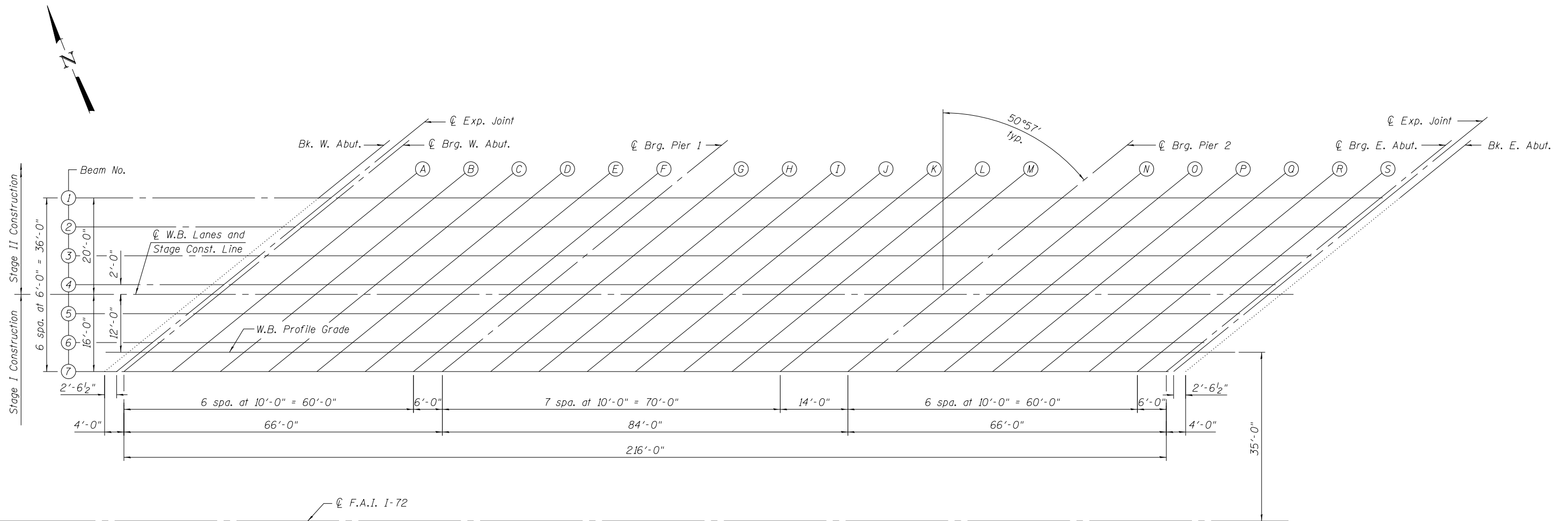
Note:  
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections and grinding as shown on sheets 7 thru 9 of 42.



To determine "t": Elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection and Grinding" shown on sheets 7 thru 9 of 42, minus 8/4" slab thickness, equals the fillet heights "t" above top flange of beams.

The slab is to be ground after curing to achieve smoothness, but the slab is not to be ground to elevations below the "Theoretical Grade Elevations" shown on sheets 7 thru 9 of 42. For grinding the deck, see Special Provisions.

**FILLET HEIGHTS**



**W.B. PLAN**

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Design firm  
no. 184001036



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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

(Sheet 1 of 4)

W.B. TOP OF SLAB ELEVATION LOCATION PLAN  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)

SHEET NO. 6 OF 42 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	102
CONTRACT NO. 72H51				

ILLINOIS FED. AID PROJECT

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**BEAM 1**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	424+40.19	-32.00	639.14	639.16
⊕ Exp. Joint	424+42.73	-32.00	639.14	639.16
⊕ Brg. W. Abut.	424+44.19	-32.00	639.14	639.16
A	424+54.19	-32.00	639.14	639.18
B	424+64.19	-32.00	639.14	639.19
C	424+74.19	-32.00	639.14	639.19
D	424+84.19	-32.00	639.13	639.18
E	424+94.19	-32.00	639.12	639.15
F	425+04.19	-32.00	639.11	639.13
⊕ Brg. Pier 1	425+10.19	-32.00	639.10	639.12
G	425+20.19	-32.00	639.09	639.12
H	425+30.19	-32.00	639.07	639.11
I	425+40.19	-32.00	639.05	639.11
J	425+50.19	-32.00	639.02	639.09
K	425+60.19	-32.00	639.00	639.06
L	425+70.19	-32.00	638.97	639.02
M	425+80.19	-32.00	638.94	638.98
⊕ Brg. Pier 2	425+94.19	-32.00	638.89	638.92
N	426+04.19	-32.00	638.86	638.89
O	426+14.19	-32.00	638.82	638.86
P	426+24.19	-32.00	638.78	638.83
Q	426+34.19	-32.00	638.74	638.79
R	426+44.19	-32.00	638.69	638.74
S	426+54.19	-32.00	638.64	638.68
⊕ Brg. E. Abut.	426+60.19	-32.00	638.61	638.63
⊕ Exp. Joint	426+61.66	-32.00	638.61	638.63
Bk. E. Abut.	426+64.19	-32.00	638.59	638.61

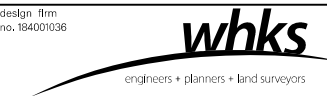
**BEAM 2**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	424+32.79	-26.00	639.26	639.29
⊕ Exp. Joint	424+35.34	-26.00	639.27	639.29
⊕ Brg. W. Abut.	424+36.79	-26.00	639.27	639.29
A	424+46.79	-26.00	639.27	639.31
B	424+56.79	-26.00	639.27	639.32
C	424+66.79	-26.00	639.27	639.32
D	424+76.79	-26.00	639.26	639.31
E	424+86.79	-26.00	639.25	639.29
F	424+96.79	-26.00	639.24	639.27
⊕ Brg. Pier 1	425+02.79	-26.00	639.24	639.26
G	425+12.79	-26.00	639.22	639.25
H	425+22.79	-26.00	639.21	639.25
I	425+32.79	-26.00	639.19	639.25
J	425+42.79	-26.00	639.17	639.23
K	425+52.79	-26.00	639.14	639.21
L	425+62.79	-26.00	639.12	639.17
M	425+72.79	-26.00	639.09	639.12
⊕ Brg. Pier 2	425+86.79	-26.00	639.04	639.07
N	425+96.79	-26.00	639.01	639.04
O	426+06.79	-26.00	638.97	639.01
P	426+16.79	-26.00	638.94	638.99
Q	426+26.79	-26.00	638.89	638.95
R	426+36.79	-26.00	638.85	638.90
S	426+46.79	-26.00	638.80	638.84
⊕ Brg. E. Abut.	426+52.79	-26.00	638.78	638.80
⊕ Exp. Joint	426+54.26	-26.00	638.77	638.79
Bk. E. Abut.	426+56.79	-26.00	638.76	638.78

**BEAM 3**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	424+25.40	-20.00	639.36	639.39
⊕ Exp. Joint	424+27.94	-20.00	639.37	639.39
⊕ Brg. W. Abut.	424+29.40	-20.00	639.37	639.39
A	424+39.40	-20.00	639.37	639.41
B	424+49.40	-20.00	639.37	639.43
C	424+59.40	-20.00	639.37	639.43
D	424+69.40	-20.00	639.37	639.42
E	424+79.40	-20.00	639.36	639.40
F	424+89.40	-20.00	639.35	639.38
⊕ Brg. Pier 1	424+95.40	-20.00	639.35	639.37
G	425+05.40	-20.00	639.34	639.37
H	425+15.40	-20.00	639.32	639.37
I	425+25.40	-20.00	639.31	639.37
J	425+35.40	-20.00	639.29	639.35
K	425+45.40	-20.00	639.26	639.33
L	425+55.40	-20.00	639.24	639.29
M	425+65.40	-20.00	639.21	639.25
⊕ Brg. Pier 2	425+79.40	-20.00	639.17	639.19
N	425+89.40	-20.00	639.14	639.17
O	425+99.40	-20.00	639.11	639.15
P	426+09.40	-20.00	639.07	639.12
Q	426+19.40	-20.00	639.03	639.08
R	426+29.40	-20.00	638.99	639.04
S	426+39.40	-20.00	638.94	638.98
⊕ Brg. E. Abut.	426+45.40	-20.00	638.91	638.94
⊕ Exp. Joint	426+46.87	-20.00	638.91	638.93
Bk. E. Abut.	426+49.40	-20.00	638.90	638.92

(Sheet 2 of 4)



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MODEL = 0840127_28-72H51-007	CHECKED - SBC	REVISED
PLOT SCALE = 0:2,00000' : 1 in.	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - SBC	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**W.B. TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)**

SHEET NO. 7 OF 42 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	103
CONTRACT NO. 72H51				
ILLINOIS FED. AID PROJECT				



**BEAM 4**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	424+18.00	-14.00	639.45	639.47
⊕ Exp. Joint	424+20.55	-14.00	639.46	639.48
⊕ Brg. W. Abut.	424+22.00	-14.00	639.46	639.48
A	424+32.00	-14.00	639.46	639.50
B	424+42.00	-14.00	639.47	639.52
C	424+52.00	-14.00	639.47	639.52
D	424+62.00	-14.00	639.46	639.51
E	424+72.00	-14.00	639.46	639.49
F	424+82.00	-14.00	639.45	639.48
⊕ Brg. Pier 1	424+88.00	-14.00	639.45	639.47
G	424+98.00	-14.00	639.44	639.47
H	425+08.00	-14.00	639.43	639.47
I	425+18.00	-14.00	639.41	639.47
J	425+28.00	-14.00	639.39	639.46
K	425+38.00	-14.00	639.37	639.44
L	425+48.00	-14.00	639.35	639.41
M	425+58.00	-14.00	639.33	639.36
⊕ Brg. Pier 2	425+72.00	-14.00	639.29	639.31
N	425+82.00	-14.00	639.26	639.28
O	425+92.00	-14.00	639.23	639.26
P	426+02.00	-14.00	639.19	639.24
Q	426+12.00	-14.00	639.15	639.21
R	426+22.00	-14.00	639.11	639.16
S	426+32.00	-14.00	639.07	639.10
⊕ Brg. E. Abut.	426+38.00	-14.00	639.04	639.06
⊕ Exp. Joint	426+39.47	-14.00	639.04	639.06
Bk. E. Abut.	426+42.00	-14.00	639.02	639.05

**⊕ W.B. LANES AND STAGE CONSTRUCTION LINE**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	424+15.54	-12.00	639.48	639.50
⊕ Exp. Joint	424+18.08	-12.00	639.48	639.51
⊕ Brg. W. Abut.	424+19.54	-12.00	639.49	639.51
A	424+29.54	-12.00	639.49	639.53
B	424+39.54	-12.00	639.50	639.55
C	424+49.54	-12.00	639.50	639.55
D	424+59.54	-12.00	639.50	639.54
E	424+69.54	-12.00	639.49	639.53
F	424+79.54	-12.00	639.49	639.51
⊕ Brg. Pier 1	424+85.54	-12.00	639.48	639.50
G	424+95.54	-12.00	639.47	639.50
H	425+05.54	-12.00	639.46	639.51
I	425+15.54	-12.00	639.45	639.51
J	425+25.54	-12.00	639.43	639.50
K	425+35.54	-12.00	639.41	639.48
L	425+45.54	-12.00	639.39	639.44
M	425+55.54	-12.00	639.36	639.40
⊕ Brg. Pier 2	425+69.54	-12.00	639.33	639.35
N	425+79.54	-12.00	639.30	639.32
O	425+89.54	-12.00	639.26	639.30
P	425+99.54	-12.00	639.23	639.28
Q	426+09.54	-12.00	639.19	639.25
R	426+19.54	-12.00	639.15	639.20
S	426+29.54	-12.00	639.11	639.14
⊕ Brg. E. Abut.	426+35.54	-12.00	639.08	639.11
⊕ Exp. Joint	426+37.00	-12.00	639.08	639.10
Bk. E. Abut.	426+39.54	-12.00	639.07	639.09

**BEAM 5**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	424+10.61	-8.00	639.42	639.44
⊕ Exp. Joint	424+13.15	-8.00	639.42	639.44
⊕ Brg. W. Abut.	424+14.61	-8.00	639.42	639.44
A	424+24.61	-8.00	639.43	639.47
B	424+34.61	-8.00	639.43	639.48
C	424+44.61	-8.00	639.43	639.49
D	424+54.61	-8.00	639.43	639.48
E	424+64.61	-8.00	639.43	639.47
F	424+74.61	-8.00	639.43	639.45
⊕ Brg. Pier 1	424+80.61	-8.00	639.42	639.45
G	424+90.61	-8.00	639.42	639.45
H	425+00.61	-8.00	639.40	639.45
I	425+10.61	-8.00	639.39	639.45
J	425+20.61	-8.00	639.38	639.44
K	425+30.61	-8.00	639.36	639.42
L	425+40.61	-8.00	639.34	639.39
M	425+50.61	-8.00	639.31	639.35
⊕ Brg. Pier 2	425+64.61	-8.00	639.28	639.30
N	425+74.61	-8.00	639.25	639.28
O	425+84.61	-8.00	639.22	639.26
P	425+94.61	-8.00	639.18	639.24
Q	426+04.61	-8.00	639.15	639.20
R	426+14.61	-8.00	639.11	639.16
S	426+24.61	-8.00	639.07	639.10
⊕ Brg. E. Abut.	426+30.61	-8.00	639.04	639.06
⊕ Exp. Joint	426+32.07	-8.00	639.04	639.06
Bk. E. Abut.	426+34.61	-8.00	639.03	639.05

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Design firm  
no. 184001036



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PLOT DATE = 1/30/2020	CHECKED - SBC	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

(Sheet 3 of 4)

**W.B. TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)**

SHEET NO. 8 OF 42 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	104
CONTRACT NO. 72H51				
ILLINOIS FED. AID PROJECT				

**BEAM 6**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	424+03.21	-2.00	639.31	639.33
⊕ Exp. Joint	424+05.75	-2.00	639.32	639.34
⊕ Brg. W. Abut.	424+07.21	-2.00	639.32	639.34
A	424+17.21	-2.00	639.33	639.37
B	424+27.21	-2.00	639.33	639.39
C	424+37.21	-2.00	639.34	639.39
D	424+47.21	-2.00	639.34	639.39
E	424+57.21	-2.00	639.34	639.37
F	424+67.21	-2.00	639.34	639.36
⊕ Brg. Pier 1	424+73.21	-2.00	639.34	639.36
G	424+83.21	-2.00	639.33	639.36
H	424+93.21	-2.00	639.32	639.37
I	425+03.21	-2.00	639.31	639.37
J	425+13.21	-2.00	639.29	639.36
K	425+23.21	-2.00	639.28	639.34
L	425+33.21	-2.00	639.26	639.31
M	425+43.21	-2.00	639.24	639.27
⊕ Brg. Pier 2	425+57.21	-2.00	639.20	639.23
N	425+67.21	-2.00	639.18	639.20
O	425+77.21	-2.00	639.15	639.19
P	425+87.21	-2.00	639.12	639.17
Q	425+97.21	-2.00	639.08	639.14
R	426+07.21	-2.00	639.05	639.09
S	426+17.21	-2.00	639.01	639.04
⊕ Brg. E. Abut.	426+23.21	-2.00	638.98	639.00
⊕ Exp. Joint	426+24.68	-2.00	638.98	639.00
Bk. E. Abut.	426+27.21	-2.00	638.96	638.99

**W.B. PROFILE GRADE LINE**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	424+00.74	0.00	639.28	639.30
⊕ Exp. Joint	424+03.29	0.00	639.28	639.30
⊕ Brg. W. Abut.	424+04.74	0.00	639.28	639.31
A	424+14.74	0.00	639.29	639.33
B	424+24.74	0.00	639.30	639.35
C	424+34.74	0.00	639.31	639.36
D	424+44.74	0.00	639.31	639.36
E	424+54.74	0.00	639.31	639.34
F	424+64.74	0.00	639.31	639.33
⊕ Brg. Pier 1	424+70.74	0.00	639.31	639.33
G	424+80.74	0.00	639.30	639.33
H	424+90.74	0.00	639.29	639.34
I	425+00.74	0.00	639.28	639.34
J	425+10.74	0.00	639.27	639.34
K	425+20.74	0.00	639.25	639.32
L	425+30.74	0.00	639.23	639.29
M	425+40.74	0.00	639.21	639.25
⊕ Brg. Pier 2	425+54.74	0.00	639.18	639.20
N	425+64.74	0.00	639.15	639.18
O	425+74.74	0.00	639.12	639.16
P	425+84.74	0.00	639.09	639.14
Q	425+94.74	0.00	639.06	639.11
R	426+04.74	0.00	639.02	639.07
S	426+14.74	0.00	638.99	639.02
⊕ Brg. E. Abut.	426+20.74	0.00	638.96	638.98
⊕ Exp. Joint	426+22.21	0.00	638.95	638.98
Bk. E. Abut.	426+24.74	0.00	638.94	638.97

**BEAM 7**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	423+95.81	4.00	639.19	639.21
⊕ Exp. Joint	423+98.36	4.00	639.19	639.21
⊕ Brg. W. Abut.	423+99.81	4.00	639.20	639.22
A	424+09.81	4.00	639.21	639.25
B	424+19.81	4.00	639.22	639.27
C	424+29.81	4.00	639.22	639.28
D	424+39.81	4.00	639.23	639.27
E	424+49.81	4.00	639.23	639.26
F	424+59.81	4.00	639.23	639.25
⊕ Brg. Pier 1	424+65.81	4.00	639.22	639.24
G	424+75.81	4.00	639.22	639.25
H	424+85.81	4.00	639.21	639.26
I	424+95.81	4.00	639.20	639.26
J	425+05.81	4.00	639.19	639.26
K	425+15.81	4.00	639.18	639.24
L	425+25.81	4.00	639.16	639.21
M	425+35.81	4.00	639.14	639.18
⊕ Brg. Pier 2	425+49.81	4.00	639.11	639.13
N	425+59.81	4.00	639.08	639.11
O	425+69.81	4.00	639.06	639.09
P	425+79.81	4.00	639.03	639.08
Q	425+89.81	4.00	638.99	639.05
R	425+99.81	4.00	638.96	639.01
S	426+09.81	4.00	638.92	638.95
⊕ Brg. E. Abut.	426+15.81	4.00	638.90	638.92
⊕ Exp. Joint	426+17.28	4.00	638.89	638.91
Bk. E. Abut.	426+19.81	4.00	638.88	638.90

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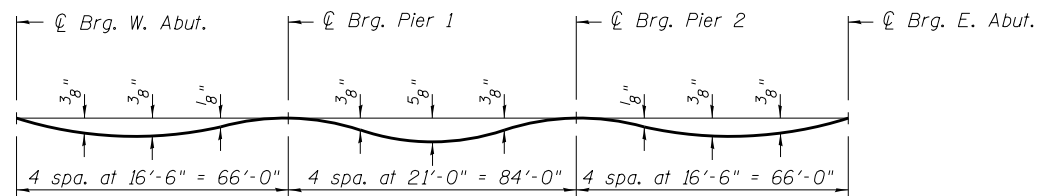
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

(Sheet 4 of 4)

**W.B. TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)**

SHEET NO. 9 OF 42 SHEETS

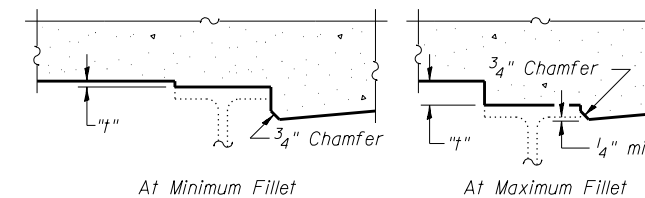
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	105
CONTRACT NO. 72H51				
ILLINOIS FED. AID PROJECT				



**DEAD LOAD DEFLECTION DIAGRAM**  
(Includes weight of concrete only.)

Note:

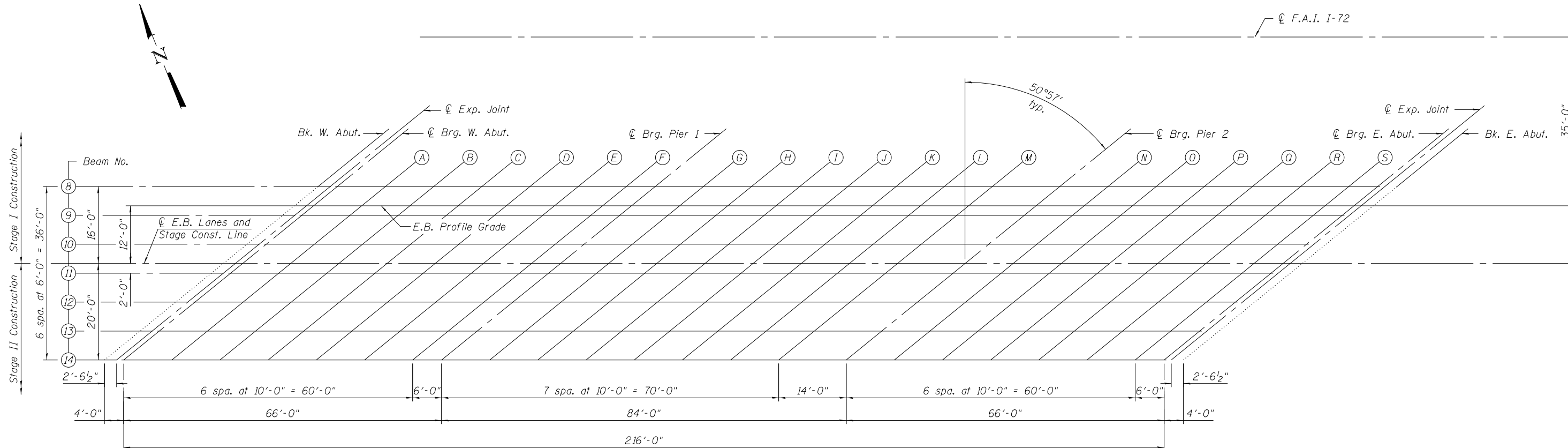
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections and grinding as shown on sheets 11 thru 13 of 42.



To determine "t": Elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection and Grinding" shown on sheets 11 thru 13 of 42, minus 8/4" deck thickness, equals the fillet heights "t" above top flange of beams.

The slab is to be ground after curing to achieve smoothness, but the slab is not to be ground to elevations below the "Theoretical Grade Elevations" shown on sheets 11 thru 13 of 42. For grinding the deck, see Special Provisions.

**FILLET HEIGHTS**



**E.B. PLAN**

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PLOT DATE = 1/30/2020	CHECKED - SBC	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

(Sheet 1 of 4)

**E.B. ELEVATION LOCATION PLAN  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)**

SHEET NO. 10 OF 42 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	106
CONTRACT NO. 72H51				

ILLINOIS FED. AID PROJECT

**BEAM 8**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	423+19.39	-4.00	639.02	639.04
⊕ Exp. Joint	423+21.92	-4.00	639.03	639.05
⊕ Brg. W. Abut.	423+23.39	-4.00	639.03	639.05
A	423+33.39	-4.00	639.06	639.10
B	423+43.39	-4.00	639.09	639.14
C	423+53.39	-4.00	639.11	639.17
D	423+63.39	-4.00	639.13	639.18
E	423+73.39	-4.00	639.15	639.19
F	423+83.39	-4.00	639.17	639.19
⊕ Brg. Pier 1	423+89.39	-4.00	639.18	639.20
G	423+99.39	-4.00	639.19	639.22
H	424+09.39	-4.00	639.21	639.25
I	424+19.39	-4.00	639.21	639.28
J	424+29.39	-4.00	639.22	639.29
K	424+39.39	-4.00	639.23	639.29
L	424+49.39	-4.00	639.23	639.28
M	424+59.39	-4.00	639.23	639.26
⊕ Brg. Pier 2	424+73.39	-4.00	639.22	639.24
N	424+83.39	-4.00	639.21	639.24
O	424+93.39	-4.00	639.20	639.24
P	425+03.39	-4.00	639.19	639.24
Q	425+13.39	-4.00	639.18	639.23
R	425+23.39	-4.00	639.16	639.21
S	425+33.39	-4.00	639.14	639.18
⊕ Brg. E. Abut.	425+39.39	-4.00	639.13	639.15
⊕ Exp. Joint	425+40.84	-4.00	639.13	639.15
Bk. E. Abut.	425+43.39	-4.00	639.12	639.14

**E.B. PROFILE GRADE LINE**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	423+14.45	0.00	639.09	639.11
⊕ Exp. Joint	423+16.99	0.00	639.09	639.11
⊕ Brg. W. Abut.	423+18.45	0.00	639.10	639.12
A	423+28.45	0.00	639.13	639.17
B	423+38.45	0.00	639.16	639.21
C	423+48.45	0.00	639.18	639.24
D	423+58.45	0.00	639.21	639.25
E	423+68.45	0.00	639.23	639.26
F	423+78.45	0.00	639.25	639.27
⊕ Brg. Pier 1	423+84.45	0.00	639.26	639.28
G	423+94.45	0.00	639.27	639.30
H	424+04.45	0.00	639.28	639.33
I	424+14.45	0.00	639.29	639.36
J	424+24.45	0.00	639.30	639.37
K	424+34.45	0.00	639.31	639.37
L	424+44.45	0.00	639.31	639.36
M	424+54.45	0.00	639.31	639.35
⊕ Brg. Pier 2	424+68.45	0.00	639.31	639.33
N	424+78.45	0.00	639.30	639.33
O	424+88.45	0.00	639.29	639.33
P	424+98.45	0.00	639.28	639.33
Q	425+08.45	0.00	639.27	639.33
R	425+18.45	0.00	639.25	639.30
S	425+28.45	0.00	639.24	639.27
⊕ Brg. E. Abut.	425+34.45	0.00	639.23	639.25
⊕ Exp. Joint	425+35.91	0.00	639.22	639.24
Bk. E. Abut.	425+38.45	0.00	639.22	639.24

**BEAM 9**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	423+11.99	2.00	639.11	639.13
⊕ Exp. Joint	423+14.52	2.00	639.12	639.14
⊕ Brg. W. Abut.	423+15.99	2.00	639.12	639.14
A	423+25.99	2.00	639.15	639.19
B	423+35.99	2.00	639.18	639.23
C	423+45.99	2.00	639.21	639.26
D	423+55.99	2.00	639.23	639.28
E	423+65.99	2.00	639.25	639.29
F	423+75.99	2.00	639.27	639.30
⊕ Brg. Pier 1	423+81.99	2.00	639.28	639.30
G	423+91.99	2.00	639.30	639.33
H	424+01.99	2.00	639.31	639.36
I	424+11.99	2.00	639.32	639.38
J	424+21.99	2.00	639.33	639.40
K	424+31.99	2.00	639.34	639.40
L	424+41.99	2.00	639.34	639.39
M	424+51.99	2.00	639.34	639.38
⊕ Brg. Pier 2	424+65.99	2.00	639.34	639.36
N	424+75.99	2.00	639.33	639.36
O	424+85.99	2.00	639.33	639.37
P	424+95.99	2.00	639.32	639.37
Q	425+05.99	2.00	639.30	639.36
R	425+15.99	2.00	639.29	639.34
S	425+25.99	2.00	639.27	639.31
⊕ Brg. E. Abut.	425+31.99	2.00	639.26	639.28
⊕ Exp. Joint	425+33.45	2.00	639.26	639.28
Bk. E. Abut.	425+35.99	2.00	639.25	639.27

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Design firm  
no. 184001036



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PLOT DATE = 1/30/2020	CHECKED - SBC	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

(Sheet 2 of 4)

**E.B. TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)**

SHEET NO. 11 OF 42 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	107
CONTRACT NO. 72H51				
ILLINOIS FED. AID PROJECT				

**BEAM 10**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	423+04.59	8.00	639.18	639.20
⊕ Exp. Joint	423+07.13	8.00	639.19	639.21
⊕ Brg. W. Abut.	423+08.59	8.00	639.19	639.21
A	423+18.59	8.00	639.22	639.26
B	423+28.59	8.00	639.25	639.31
C	423+38.59	8.00	639.28	639.34
D	423+48.59	8.00	639.31	639.36
E	423+58.59	8.00	639.33	639.37
F	423+68.59	8.00	639.35	639.38
⊕ Brg. Pier 1	423+74.59	8.00	639.36	639.39
G	423+84.59	8.00	639.38	639.41
H	423+94.59	8.00	639.40	639.44
I	424+04.59	8.00	639.41	639.47
J	424+14.59	8.00	639.42	639.49
K	424+24.59	8.00	639.43	639.49
L	424+34.59	8.00	639.43	639.49
M	424+44.59	8.00	639.43	639.47
⊕ Brg. Pier 2	424+58.59	8.00	639.43	639.46
N	424+68.59	8.00	639.43	639.46
O	424+78.59	8.00	639.43	639.47
P	424+88.59	8.00	639.42	639.47
Q	424+98.59	8.00	639.41	639.46
R	425+08.59	8.00	639.39	639.44
S	425+18.59	8.00	639.38	639.41
⊕ Brg. E. Abut.	425+24.59	8.00	639.37	639.39
⊕ Exp. Joint	425+26.05	8.00	639.37	639.39
Bk. E. Abut.	425+28.59	8.00	639.36	639.38

**⊕ E.B. LANES AND STAGE CONSTRUCTION LINE**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	422+99.66	12.00	639.22	639.24
⊕ Exp. Joint	423+02.20	12.00	639.23	639.25
⊕ Brg. W. Abut.	423+03.66	12.00	639.24	639.26
A	423+13.66	12.00	639.27	639.31
B	423+23.66	12.00	639.30	639.36
C	423+33.66	12.00	639.33	639.39
D	423+43.66	12.00	639.36	639.41
E	423+53.66	12.00	639.38	639.42
F	423+63.66	12.00	639.41	639.43
⊕ Brg. Pier 1	423+69.66	12.00	639.42	639.44
G	423+79.66	12.00	639.44	639.47
H	423+89.66	12.00	639.45	639.50
I	423+99.66	12.00	639.47	639.53
J	424+09.66	12.00	639.48	639.55
K	424+19.66	12.00	639.49	639.55
L	424+29.66	12.00	639.49	639.55
M	424+39.66	12.00	639.50	639.53
⊕ Brg. Pier 2	424+53.66	12.00	639.50	639.52
N	424+63.66	12.00	639.50	639.52
O	424+73.66	12.00	639.49	639.53
P	424+83.66	12.00	639.48	639.54
Q	424+93.66	12.00	639.48	639.53
R	425+03.66	12.00	639.46	639.51
S	425+13.66	12.00	639.45	639.48
⊕ Brg. E. Abut.	425+19.66	12.00	639.44	639.46
⊕ Exp. Joint	425+21.12	12.00	639.44	639.46
Bk. E. Abut.	425+23.66	12.00	639.43	639.45

**BEAM 11**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	422+97.20	14.00	639.18	639.20
⊕ Exp. Joint	422+99.73	14.00	639.19	639.21
⊕ Brg. W. Abut.	423+01.20	14.00	639.20	639.22
A	423+11.20	14.00	639.23	639.27
B	423+21.20	14.00	639.26	639.32
C	423+31.20	14.00	639.29	639.35
D	423+41.20	14.00	639.32	639.37
E	423+51.20	14.00	639.35	639.38
F	423+61.20	14.00	639.37	639.39
⊕ Brg. Pier 1	423+67.20	14.00	639.38	639.40
G	423+77.20	14.00	639.40	639.43
H	423+87.20	14.00	639.42	639.46
I	423+97.20	14.00	639.43	639.49
J	424+07.20	14.00	639.44	639.51
K	424+17.20	14.00	639.45	639.52
L	424+27.20	14.00	639.46	639.51
M	424+37.20	14.00	639.46	639.50
⊕ Brg. Pier 2	424+51.20	14.00	639.47	639.49
N	424+61.20	14.00	639.46	639.49
O	424+71.20	14.00	639.46	639.50
P	424+81.20	14.00	639.46	639.51
Q	424+91.20	14.00	639.45	639.50
R	425+01.20	14.00	639.44	639.48
S	425+11.20	14.00	639.42	639.46
⊕ Brg. E. Abut.	425+17.20	14.00	639.41	639.43
⊕ Exp. Joint	425+18.65	14.00	639.41	639.43
Bk. E. Abut.	425+21.20	14.00	639.41	639.43

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**E.B. TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)**

SHEET NO. 12 OF 42 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	108
CONTRACT NO. 72H51				
ILLINOIS FED. AID PROJECT				

(Sheet 3 of 4)

**BEAM 12**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	422+89.80	20.00	639.06	639.08
⊙ Exp. Joint	422+92.33	20.00	639.07	639.09
⊙ Brg. W. Abut.	422+93.80	20.00	639.07	639.10
A	423+03.80	20.00	639.11	639.15
B	423+13.80	20.00	639.15	639.20
C	423+23.80	20.00	639.18	639.23
D	423+33.80	20.00	639.21	639.25
E	423+43.80	20.00	639.23	639.27
F	423+53.80	20.00	639.26	639.28
⊙ Brg. Pier 1	423+59.80	20.00	639.27	639.29
G	423+69.80	20.00	639.29	639.32
H	423+79.80	20.00	639.31	639.36
I	423+89.80	20.00	639.33	639.39
J	423+99.80	20.00	639.34	639.41
K	424+09.80	20.00	639.35	639.42
L	424+19.80	20.00	639.36	639.41
M	424+29.80	20.00	639.37	639.40
⊙ Brg. Pier 2	424+43.80	20.00	639.37	639.39
N	424+53.80	20.00	639.37	639.40
O	424+63.80	20.00	639.37	639.41
P	424+73.80	20.00	639.37	639.42
Q	424+83.80	20.00	639.36	639.41
R	424+93.80	20.00	639.35	639.40
S	425+03.80	20.00	639.34	639.37
⊙ Brg. E. Abut.	425+09.80	20.00	639.33	639.35
⊙ Exp. Joint	425+11.26	20.00	639.33	639.35
Bk. E. Abut.	425+13.80	20.00	639.32	639.35

**BEAM 13**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	422+82.41	26.00	638.93	638.95
⊙ Exp. Joint	422+84.94	26.00	638.94	638.96
⊙ Brg. W. Abut.	422+86.41	26.00	638.94	638.96
A	422+96.41	26.00	638.98	639.02
B	423+06.41	26.00	639.02	639.07
C	423+16.41	26.00	639.05	639.10
D	423+26.41	26.00	639.08	639.13
E	423+36.41	26.00	639.11	639.14
F	423+46.41	26.00	639.14	639.16
⊙ Brg. Pier 1	423+52.41	26.00	639.15	639.17
G	423+62.41	26.00	639.17	639.20
H	423+72.41	26.00	639.19	639.24
I	423+82.41	26.00	639.21	639.27
J	423+92.41	26.00	639.23	639.30
K	424+02.41	26.00	639.24	639.31
L	424+12.41	26.00	639.25	639.30
M	424+22.41	26.00	639.26	639.30
⊙ Brg. Pier 2	424+36.41	26.00	639.27	639.29
N	424+46.41	26.00	639.27	639.29
O	424+56.41	26.00	639.27	639.31
P	424+66.41	26.00	639.27	639.32
Q	424+76.41	26.00	639.26	639.32
R	424+86.41	26.00	639.25	639.30
S	424+96.41	26.00	639.24	639.28
⊙ Brg. E. Abut.	425+02.41	26.00	639.24	639.26
⊙ Exp. Joint	425+03.86	26.00	639.23	639.26
Bk. E. Abut.	425+06.41	26.00	639.23	639.25

**BEAM 14**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	422+75.01	32.00	638.77	638.79
⊙ Exp. Joint	422+77.54	32.00	638.78	638.80
⊙ Brg. W. Abut.	422+79.01	32.00	638.79	638.81
A	422+89.01	32.00	638.83	638.87
B	422+99.01	32.00	638.87	638.92
C	423+09.01	32.00	638.90	638.96
D	423+19.01	32.00	638.93	638.98
E	423+29.01	32.00	638.96	639.00
F	423+39.01	32.00	638.99	639.02
⊙ Brg. Pier 1	423+45.01	32.00	639.01	639.03
G	423+55.01	32.00	639.03	639.06
H	423+65.01	32.00	639.05	639.10
I	423+75.01	32.00	639.07	639.14
J	423+85.01	32.00	639.09	639.16
K	423+95.01	32.00	639.11	639.17
L	424+05.01	32.00	639.12	639.17
M	424+15.01	32.00	639.13	639.16
⊙ Brg. Pier 2	424+29.01	32.00	639.14	639.16
N	424+39.01	32.00	639.14	639.17
O	424+49.01	32.00	639.14	639.18
P	424+59.01	32.00	639.14	639.19
Q	424+69.01	32.00	639.14	639.19
R	424+79.01	32.00	639.13	639.18
S	424+89.01	32.00	639.13	639.16
⊙ Brg. E. Abut.	424+95.01	32.00	639.12	639.14
⊙ Exp. Joint	424+96.47	32.00	639.12	639.14
Bk. E. Abut.	424+99.01	32.00	639.12	639.14

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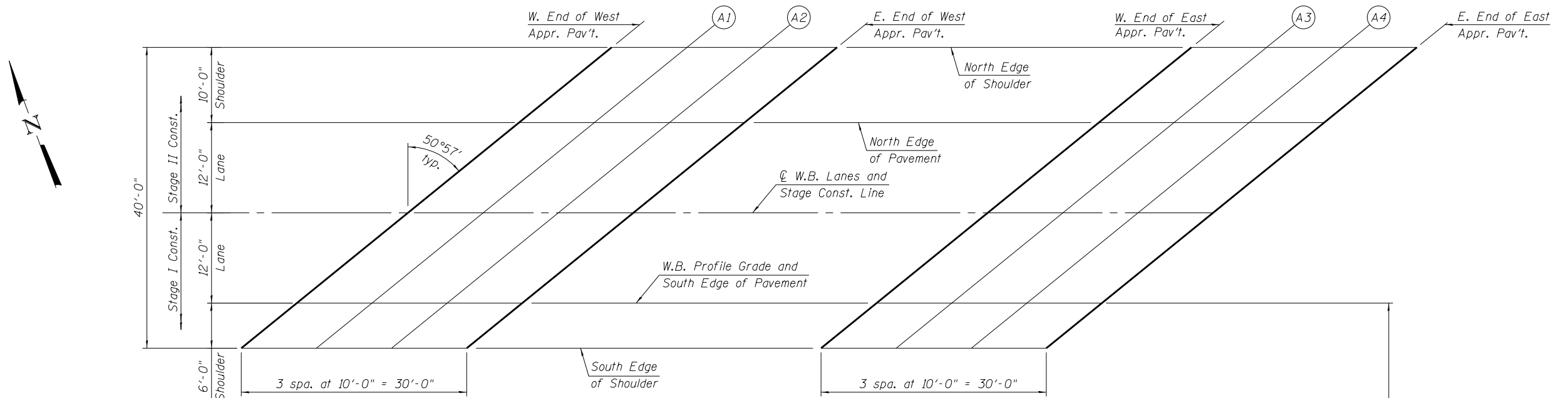
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

(Sheet 4 of 4)

**E.B. TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)**

SHEET NO. 13 OF 42 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	109
			CONTRACT NO. 72H51	
ILLINOIS FED. AID PROJECT				



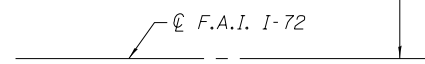
**W.B. APPROACH PLAN**

**NORTH EDGE OF SHOULDER**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Pav't.	424+13.45	-34.00	639.08	639.11
A1	424+23.45	-34.00	639.09	639.11
A2	424+33.45	-34.00	639.10	639.12
E. End W. Appr. Pav't.	424+43.45	-34.00	639.10	639.12
W. End E. Appr. Pav't.	426+65.85	-34.00	638.54	638.56
A3	426+75.85	-34.00	638.49	638.51
A4	426+85.85	-34.00	638.43	638.45
E. End E. Appr. Pav't.	426+95.85	-34.00	638.38	638.40

**NORTH EDGE OF PAVEMENT**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Pav't.	424+01.12	-24.00	639.28	639.30
A1	424+11.12	-24.00	639.29	639.31
A2	424+21.12	-24.00	639.30	639.32
E. End W. Appr. Pav't.	424+31.12	-24.00	639.31	639.33
W. End E. Appr. Pav't.	426+53.53	-24.00	638.81	638.83
A3	426+63.53	-24.00	638.76	638.78
A4	426+73.53	-24.00	638.71	638.73
E. End E. Appr. Pav't.	426+83.53	-24.00	638.66	638.68



**Q W.B. LANES AND STAGE CONSTRUCTION LINE**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Pav't.	423+86.33	-12.00	639.45	639.47
A1	423+96.33	-12.00	639.46	639.48
A2	424+06.33	-12.00	639.47	639.49
E. End W. Appr. Pav't.	424+16.33	-12.00	639.48	639.50
W. End E. Appr. Pav't.	426+38.73	-12.00	639.07	639.09
A3	426+48.73	-12.00	639.02	639.04
A4	426+58.73	-12.00	638.97	639.00
E. End E. Appr. Pav't.	426+68.73	-12.00	638.92	638.94

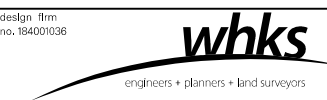
**W.B. PROFILE GRADE AND SOUTH EDGE OF PAVEMENT**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Pav't.	423+71.55	0.00	639.23	639.26
A1	423+81.55	0.00	639.25	639.27
A2	423+91.55	0.00	639.27	639.29
E. End W. Appr. Pav't.	424+01.55	0.00	639.28	639.30
W. End E. Appr. Pav't.	426+23.95	0.00	638.95	638.97
A3	426+33.95	0.00	638.90	638.93
A4	426+43.95	0.00	638.86	638.88
E. End E. Appr. Pav't.	426+53.95	0.00	638.81	638.83

**SOUTH EDGE OF SHOULDER**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Pav't.	423+64.14	6.00	639.09	639.12
A1	423+74.14	6.00	639.11	639.13
A2	423+84.14	6.00	639.13	639.15
E. End W. Appr. Pav't.	423+94.14	6.00	639.15	639.17
W. End E. Appr. Pav't.	426+16.55	6.00	638.85	638.87
A3	426+26.55	6.00	638.81	638.83
A4	426+36.55	6.00	638.77	638.79
E. End E. Appr. Pav't.	426+46.55	6.00	638.72	638.74

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**W.B. TOP OF APPROACH SLAB ELEVATIONS  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)**

SHEET NO. 14 OF 42 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	110
CONTRACT NO. 72H51				
ILLINOIS FED. AID PROJECT				

**NORTH EDGE OF SHOULDER**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Pav't.	422+92.64	-6.00	638.88	638.90
A1	423+02.64	-6.00	638.92	638.94
A2	423+12.64	-6.00	638.95	638.98
E. End W. Appr. Pav't.	423+22.64	-6.00	638.99	639.01
W. End E. Appr. Pav't.	425+45.05	-6.00	639.08	639.10
A3	425+55.05	-6.00	639.05	639.07
A4	425+65.05	-6.00	639.03	639.05
E. End E. Appr. Pav't.	425+75.05	-6.00	639.00	639.02

**E.B. PROFILE GRADE AND NORTH EDGE OF PAVEMENT**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Pav't.	422+85.25	0.00	638.98	639.00
A1	422+95.25	0.00	639.02	639.04
A2	423+05.25	0.00	639.05	639.08
E. End W. Appr. Pav't.	423+15.25	0.00	639.09	639.11
W. End E. Appr. Pav't.	425+37.65	0.00	639.22	639.24
A3	425+47.65	0.00	639.20	639.22
A4	425+57.65	0.00	639.17	639.19
E. End E. Appr. Pav't.	425+67.65	0.00	639.14	639.17

**☉ E.B. LANES AND STAGE CONSTRUCTION LINE**

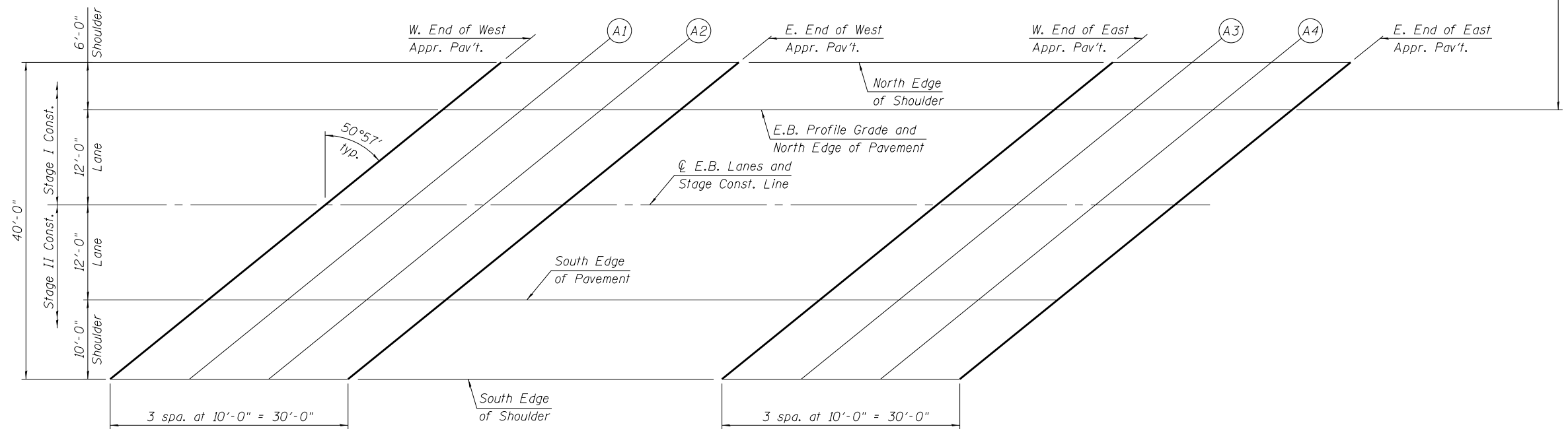
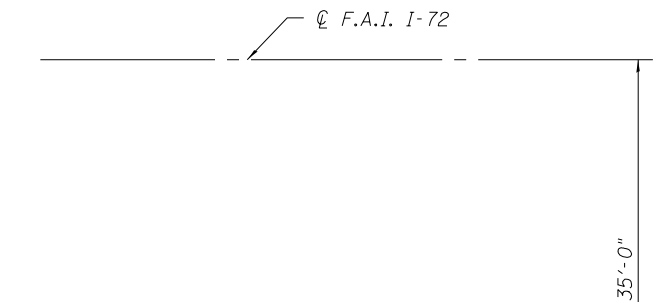
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Pav't.	422+70.46	12.00	639.10	639.13
A1	422+80.46	12.00	639.15	639.17
A2	422+90.46	12.00	639.19	639.21
E. End W. Appr. Pav't.	423+00.46	12.00	639.22	639.25
W. End E. Appr. Pav't.	425+22.86	12.00	639.43	639.46
A3	425+32.86	12.00	639.42	639.44
A4	425+42.86	12.00	639.39	639.42
E. End E. Appr. Pav't.	425+52.86	12.00	639.37	639.39

**SOUTH EDGE OF PAVEMENT**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Pav't.	422+55.66	24.00	638.85	638.87
A1	422+65.66	24.00	638.90	638.92
A2	422+75.66	24.00	638.94	638.96
E. End W. Appr. Pav't.	422+85.66	24.00	638.98	639.00
W. End E. Appr. Pav't.	425+08.07	24.00	639.27	639.29
A3	425+18.07	24.00	639.26	639.28
A4	425+28.07	24.00	639.24	639.26
E. End E. Appr. Pav't.	425+38.07	24.00	639.22	639.24

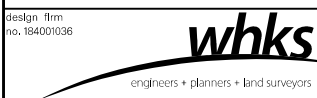
**SOUTH EDGE OF SHOULDER**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Pav't.	422+43.34	34.00	638.58	638.60
A1	422+53.34	34.00	638.63	638.65
A2	422+63.34	34.00	638.68	638.70
E. End W. Appr. Pav't.	422+73.34	34.00	638.72	638.74
W. End E. Appr. Pav't.	424+95.74	34.00	639.08	639.10
A3	425+05.74	34.00	639.07	639.09
A4	425+15.74	34.00	639.05	639.07
E. End E. Appr. Pav't.	425+25.74	34.00	639.03	639.05



**E.B. APPROACH PLAN**

FILE NAME = L:\Jobs\DOT\_D-6\7818 PTB 167-02\7818.02\CADD\CADD Sheets\0840127&0128-72H51\_12-9-19.dgn



USER NAME = dheberling	DESIGNED - BRD	REVISED
MODEL = 0840127_28-72H51-015	CHECKED - SBC	REVISED
PLOT SCALE = 0:2.000000' : 1 in.	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - SBC	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

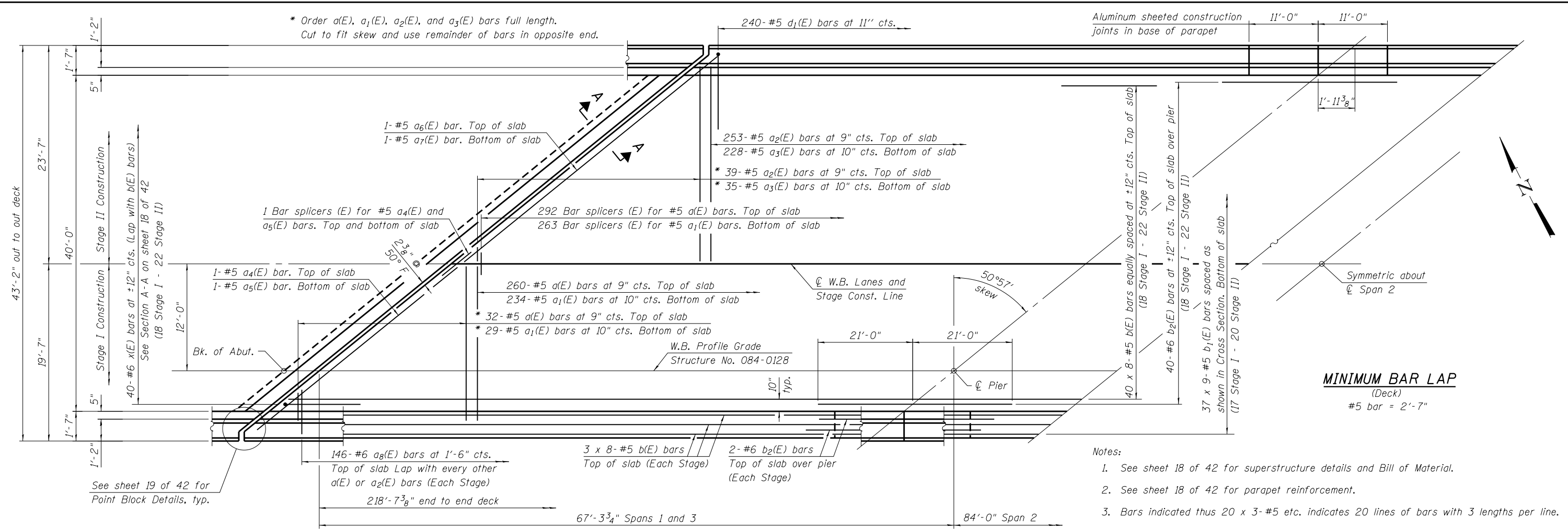
**E.B. TOP OF APPROACH SLAB ELEVATIONS  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)**

SHEET NO. 15 OF 42 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	111
CONTRACT NO. 72H51				

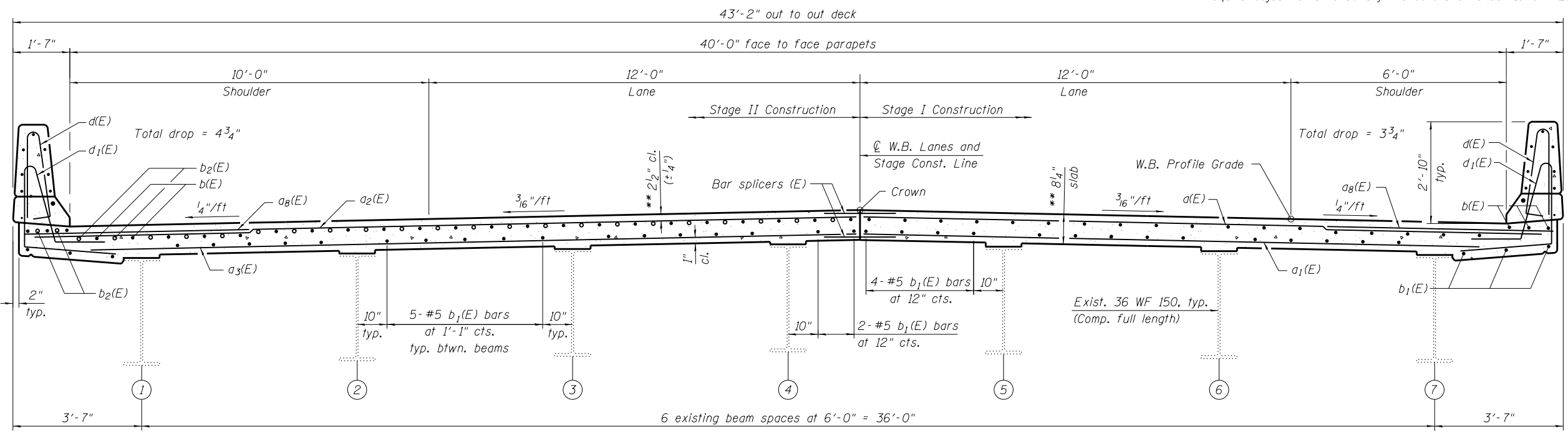
ILLINOIS FED. AID PROJECT





**PARTIAL PLAN**

- Notes:
1. See sheet 18 of 42 for superstructure details and Bill of Material.
  2. See sheet 18 of 42 for parapet reinforcement.
  3. Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
  4. See sheet 32 of 42 for bar splicer details.
  5. Dimensions shown for expansion joints are based on a Rolled Rail Strip Seal Joint. If the Contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustments to satisfy the details on sheet 19 of 42.



**CROSS SECTION**  
(Looking East)

\*\* Prior to grinding.

(Sheet 1 of 3)

FILE NAME = L:\Jobs\IDOT\_D-6\7818 PTB 167-027\7818.02\CADD\CADD Sheets\0840127&0128-72H51\_12-9-19.dgn



DESIGN FIRM no. 184001036	USER NAME = dheberling	DESIGNED - BRD	REVISED
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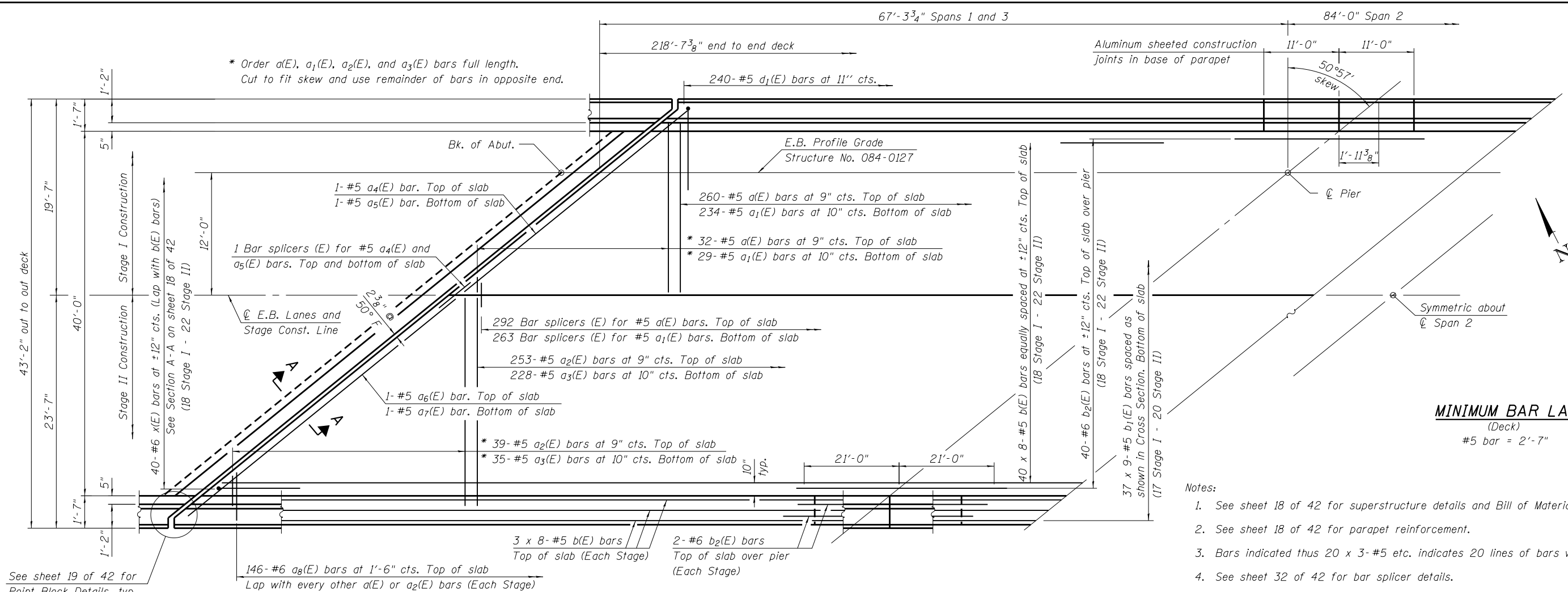
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**W.B. SUPERSTRUCTURE DETAILS  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)**

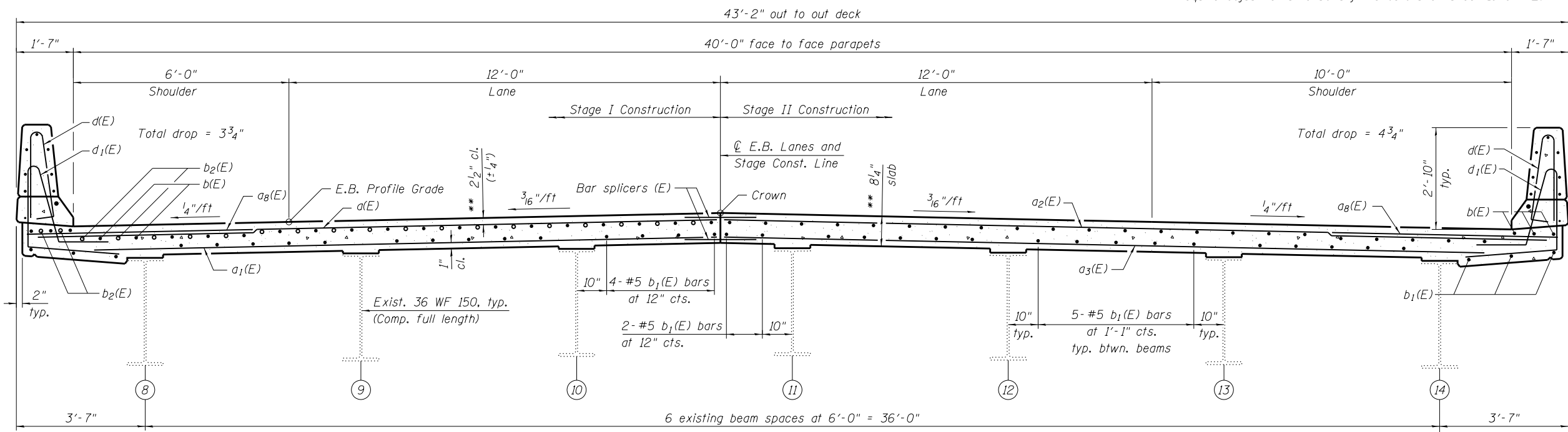
SHEET NO. 16 OF 42 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	112
CONTRACT NO. 72H51				

ILLINOIS FED. AID PROJECT



**PARTIAL PLAN**



**CROSS SECTION**  
(Looking East)

(Sheet 2 of 3)

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

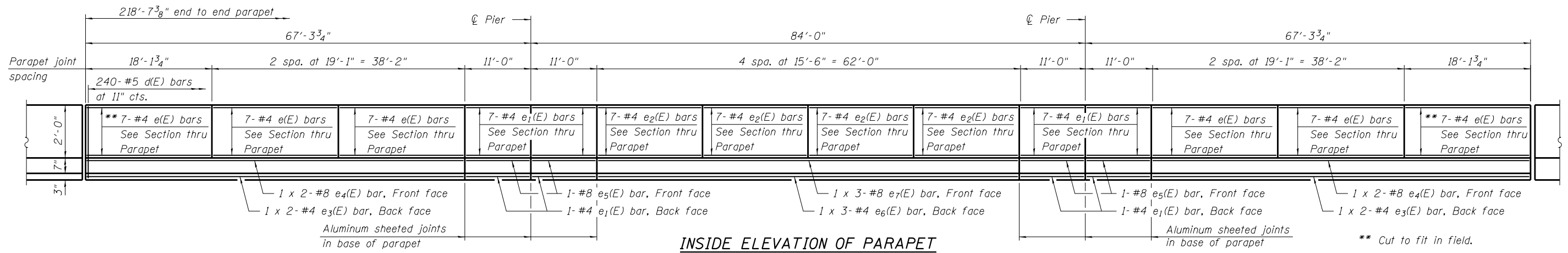
E.B. SUPERSTRUCTURE DETAILS  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)

SHEET NO. 17 OF 42 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	113
CONTRACT NO. 72H51				

ILLINOIS FED. AID PROJECT

USER NAME = dheberling	DESIGNED - BRD	REVISED
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PLOT SCALE = 0:2.000000" = 1" / in.	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - SBC	REVISED



**MINIMUM BAR LAP**

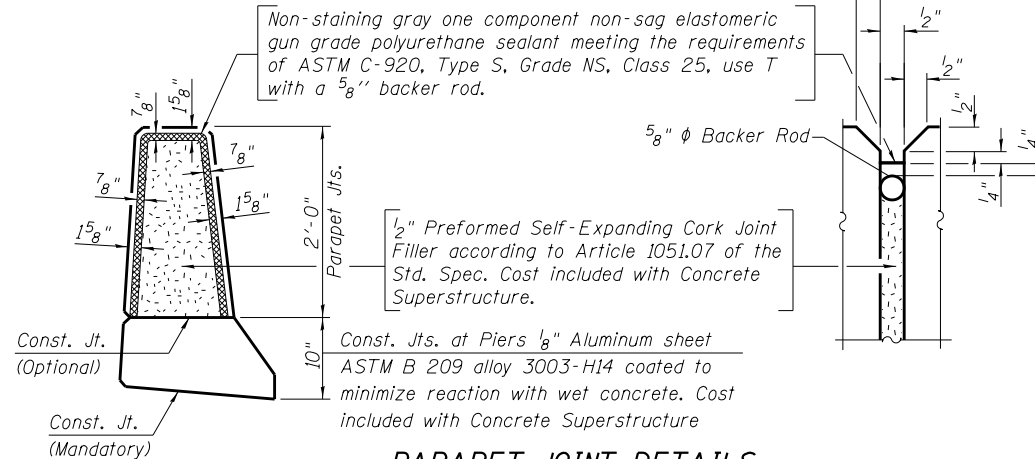
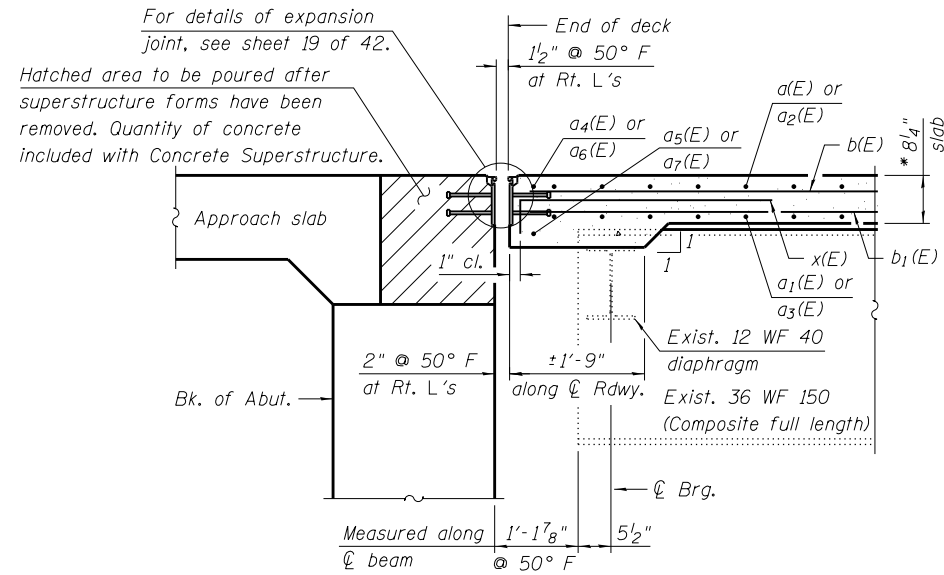
(Parapet)  
 #4 bar = 2'-0"  
 #8 bar = 5'-2"

**BILL OF MATERIAL  
 E.B. SUPERSTRUCTURE**

Bar	No.	Size	Length	Shape
a(E)	292	#5	19'-1"	—
a <sub>1</sub> (E)	263	#5	18'-8"	—
a <sub>2</sub> (E)	292	#5	23'-1"	—
a <sub>3</sub> (E)	263	#5	22'-8"	—
a <sub>4</sub> (E)	2	#5	30'-2"	—
a <sub>5</sub> (E)	2	#5	29'-7"	—
a <sub>6</sub> (E)	2	#5	36'-6"	—
a <sub>7</sub> (E)	2	#5	35'-11"	—
a <sub>8</sub> (E)	292	#6	6'-6"	—
b(E)	368	#5	29'-7"	—
b <sub>1</sub> (E)	333	#5	26'-7"	—
b <sub>2</sub> (E)	88	#6	42'-0"	—
d(E)	480	#5	5'-7"	⏏
d <sub>1</sub> (E)	480	#5	8'-4"	⏏
e(E)	84	#4	18'-11"	—
e <sub>1</sub> (E)	64	#4	10'-8"	—
e <sub>2</sub> (E)	56	#4	15'-2"	—
e <sub>3</sub> (E)	8	#4	29'-7"	—
e <sub>4</sub> (E)	8	#8	31'-2"	—
e <sub>5</sub> (E)	8	#8	10'-8"	—
e <sub>6</sub> (E)	6	#4	21'-11"	—
e <sub>7</sub> (E)	6	#8	24'-0"	—
x(E)	80	#6	4'-2"	⏏
Concrete Superstructure		Cu. Yd.	313.6	
Reinforcement Bars, Epoxy Coated		Pound	64,530	
Bar Splicers		Each	559	

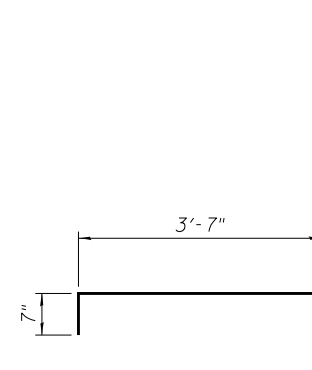
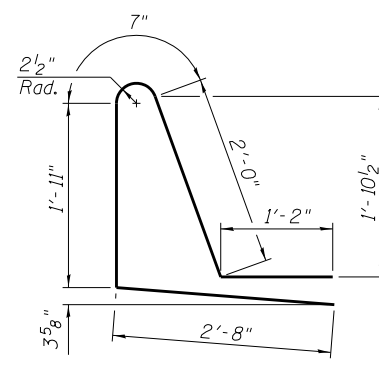
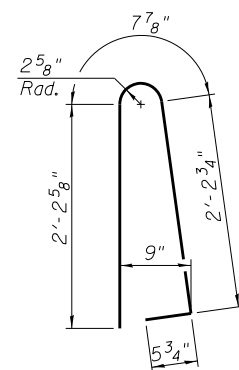
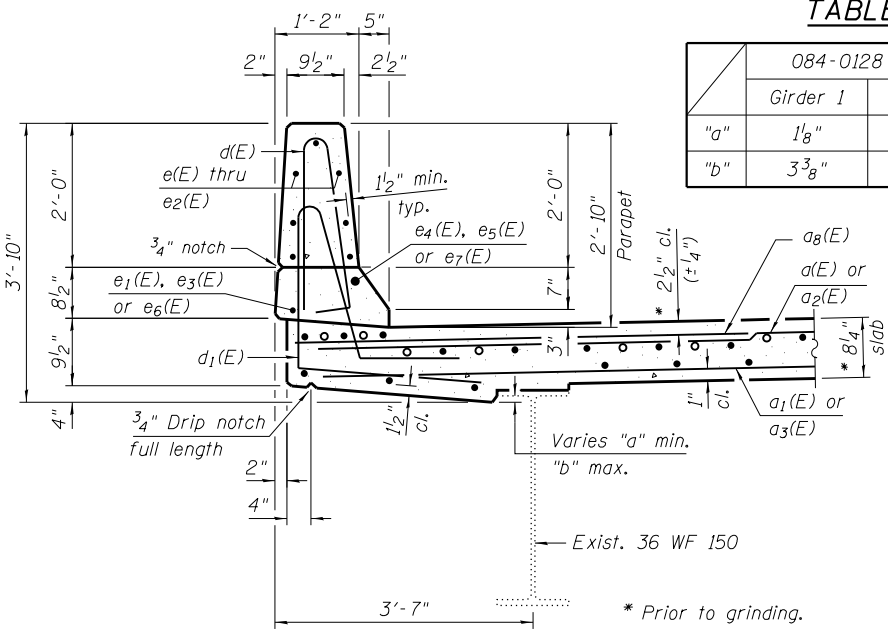
**BILL OF MATERIAL  
 W.B. SUPERSTRUCTURE**

Bar	No.	Size	Length	Shape
a(E)	292	#5	19'-1"	—
a <sub>1</sub> (E)	263	#5	18'-8"	—
a <sub>2</sub> (E)	292	#5	23'-1"	—
a <sub>3</sub> (E)	263	#5	22'-8"	—
a <sub>4</sub> (E)	2	#5	30'-2"	—
a <sub>5</sub> (E)	2	#5	29'-7"	—
a <sub>6</sub> (E)	2	#5	36'-6"	—
a <sub>7</sub> (E)	2	#5	35'-11"	—
a <sub>8</sub> (E)	292	#6	6'-6"	—
b(E)	368	#5	29'-7"	—
b <sub>1</sub> (E)	333	#5	26'-7"	—
b <sub>2</sub> (E)	88	#6	42'-0"	—
d(E)	480	#5	5'-7"	⏏
d <sub>1</sub> (E)	480	#5	8'-4"	⏏
e(E)	84	#4	18'-11"	—
e <sub>1</sub> (E)	64	#4	10'-8"	—
e <sub>2</sub> (E)	56	#4	15'-2"	—
e <sub>3</sub> (E)	8	#4	29'-7"	—
e <sub>4</sub> (E)	8	#8	31'-2"	—
e <sub>5</sub> (E)	8	#8	10'-8"	—
e <sub>6</sub> (E)	6	#4	21'-11"	—
e <sub>7</sub> (E)	6	#8	24'-0"	—
x(E)	80	#6	4'-2"	⏏
Concrete Superstructure		Cu. Yd.	313.6	
Reinforcement Bars, Epoxy Coated		Pound	64,530	
Bar Splicers		Each	559	



**TABLE OF DIMENSIONS**

	084-0128 (W.B.)		084-0127 (E.B.)	
	Girder 1	Girder 7	Girder 8	Girder 14
"a"	1 <sup>1</sup> / <sub>8</sub> "	3 <sup>3</sup> / <sub>8</sub> "	1"	1"
"b"	3 <sup>3</sup> / <sub>8</sub> "	2 <sup>7</sup> / <sub>8</sub> "	3 <sup>3</sup> / <sub>8</sub> "	3 <sup>1</sup> / <sub>2</sub> "



**Notes:**

- Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.
- Dimensions shown for expansion joints are based on a Rolled Rail Strip Seal Joint. If the Contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustments to satisfy the details on sheet 19 of 42.

(Sheet 3 of 3)

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS  
 STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)

SHEET NO. 18 OF 42 SHEETS

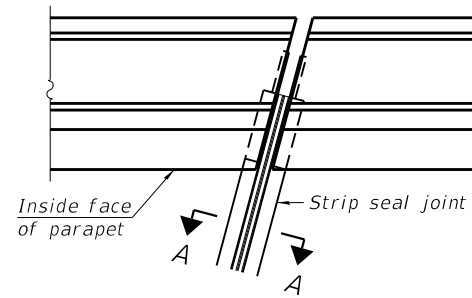
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	114
CONTRACT NO. 72H51				

ILLINOIS FED. AID PROJECT

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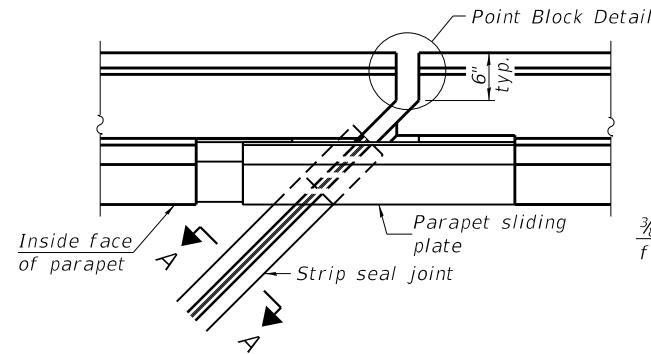


DESIGN FIRM no. 184001036	USER NAME = dheberling	DESIGNED - BRD	REVISED
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	PLOT SCALE = 0:2.00000' = 1 in.	DRAWN - DLH	REVISED
	PLOT DATE = 1/30/2020	CHECKED - SBC	REVISED

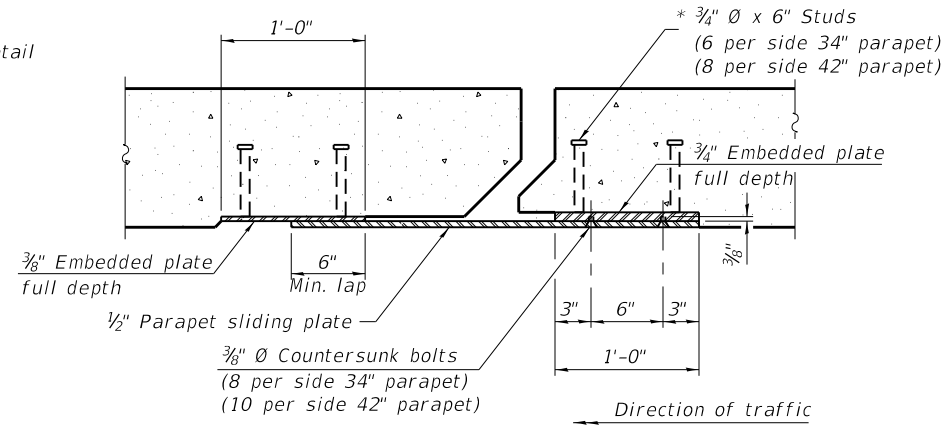


FOR SKEWS  $\leq 30^\circ$

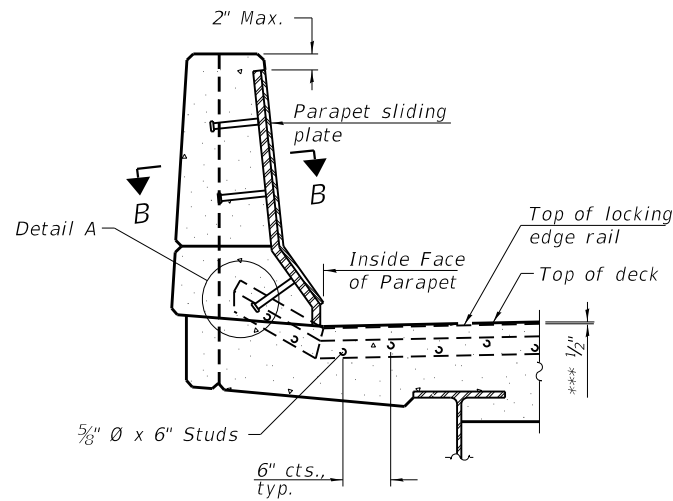
PLAN AT PARAPET



FOR SKEWS  $> 30^\circ$

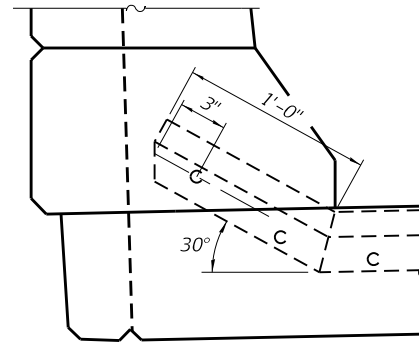


SECTION B-B

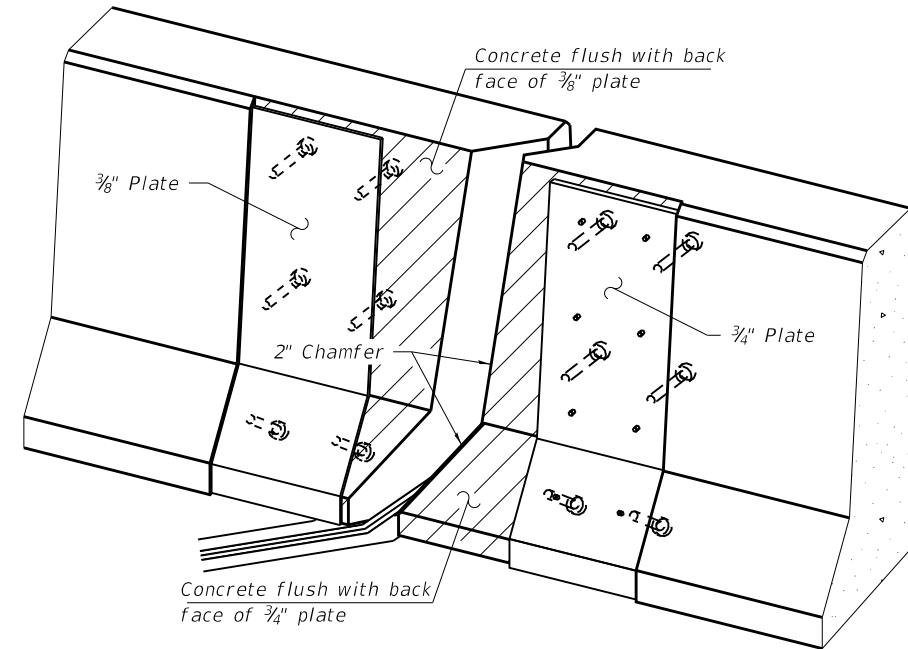


ELEVATION AT PARAPET

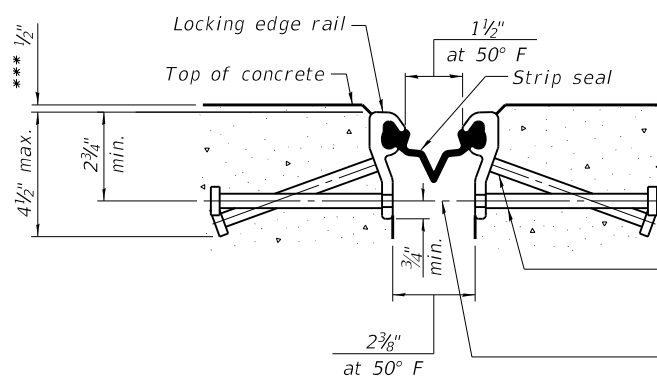
(Skews  $> 30^\circ$  shown. Skews  $\leq 30^\circ$  similar except as shown in plan view.)



DETAIL A

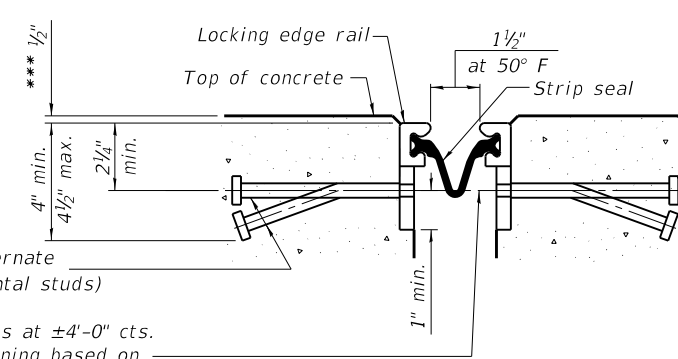


TRIMETRIC VIEW  
(Showing embedded plates only)



SHOWING ROLLED RAIL JOINT

\*\*\* Prior to grinding.



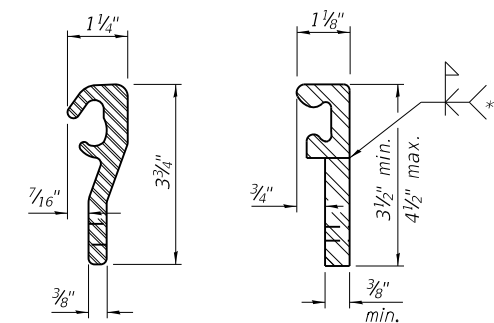
SHOWING WELDED RAIL JOINT

\*  $5/8$ "  $\phi$  x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

$3/8$ "  $\phi$  threaded rods in  $7/16$ "  $\phi$  holes at  $\pm 4$ "-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.

SECTION A-A

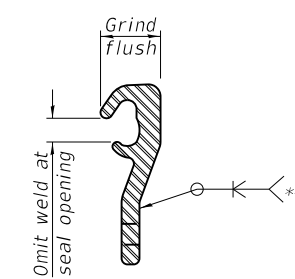
\* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



ROLLED (EXTRUDED) RAIL  
WELDED RAIL

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	262

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of  $1/4$ ". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the  $4 1/2$ " maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

The Maximum space between locking edge rail segments shall be  $3/16$ " and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

Cost of parapet sliding plates, embedded plates, and anchorage studs included with Preformed Joint Strip Seal.

34" F-shape barrier shown, 42" F-shape similar as noted. The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.

FILE NAME = L:\Jobs\DOT\_D-617818\_PTB 167-02717818.02\CADD\CADD Sheets\0840127&0128-72H51\_12-9-19.dgn

Design firm no. 184001036



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MODEL = 0840127_28-72H51-019	CHECKED - SBC	REVISED
PLOT SCALE = 0:2.00000":1"	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - SBC	REVISED

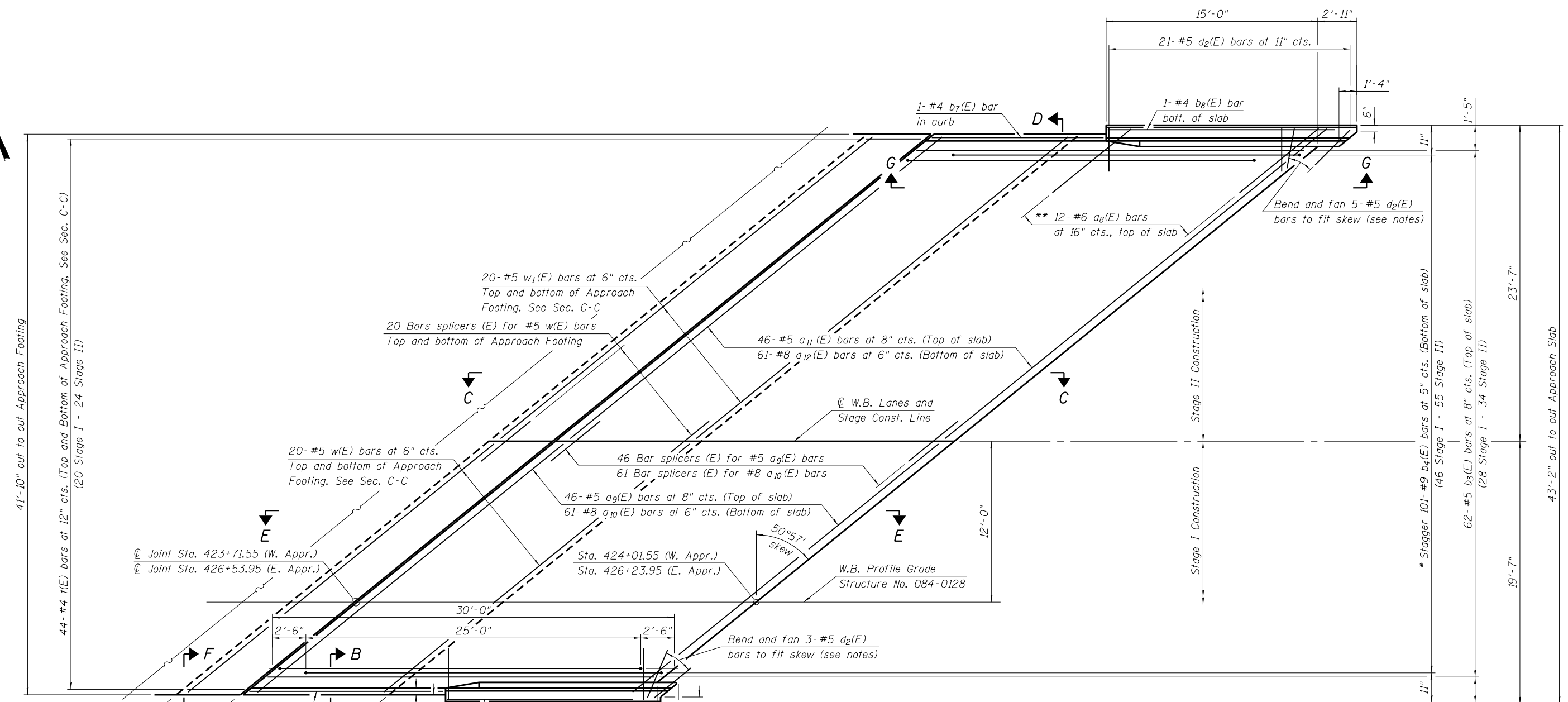
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

MODIFIED PREFORMED JOINT STRIP SEAL  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)

SHEET NO. 19 OF 42 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	115
				CONTRACT NO. 72H51

ILLINOIS FED. AID PROJECT



**PLAN**

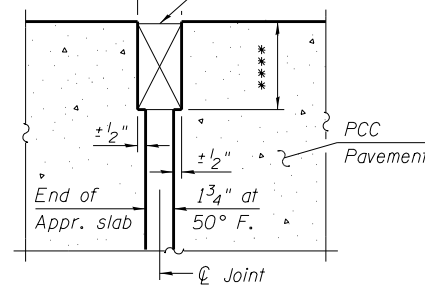
(West approach slab shown, East approach slab similar.)

- \* Tilt #9 b<sub>4</sub>(E) bars as required to maintain clearance.
- \*\* Lap with a<sub>9</sub>(E) and a<sub>11</sub>(E) bars as applicable, typ. each parapet.
- \*\*\* See Special Provision "Preformed Pavement Joint Seal." Recess shown is prior to grinding.
- \*\*\*\* Per manufacturer recommendation.

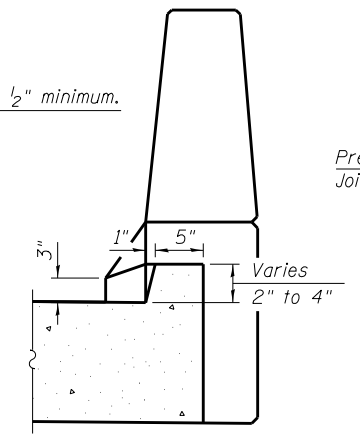
**Notes:**

1. See sheet 22 of 42 for Sections C-C & D-D and View E-E. a<sub>8</sub>(E) thru a<sub>12</sub>(E) bar spacings measured along  $\bar{C}$  Rdwy.
2. The joint opening shall be determined per Article 520.04 except that on jointless structures, the distance described as the bridge length between the nearest fixed bearings each way from the joint shall be taken as half the bridge length plus the approach slab length. The minimum dimension shall be 1 1/2" for installation purposes.
3. For additional parapet details not shown, see sheets 18, 19, and 22 of 42.
4. Position 2-d<sub>2</sub>(E) bars at each parapet to be cast in the hatched block of the abutment. See sheets 29 and 30 of 42 for details.

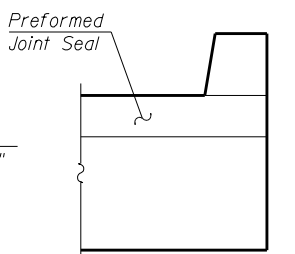
2 3/4" at 50° F  
See Notes. \*\*\* Expansion joint. Recess 1/2" minimum. Run out to out of curb.



**DETAIL A**



**VIEW B-B**



**VIEW F-F**

(Sheet 1 of 3)

FILE NAME = L:\Jobs\IDOT\_D-617818 PTB 167-02171818.02\CADD\CADD Sheets\0840127&0128-72H51\_12-9-19.dgn



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PLOT DATE = 1/30/2020	CHECKED - SBC	CHECKED - SBC	REVISED

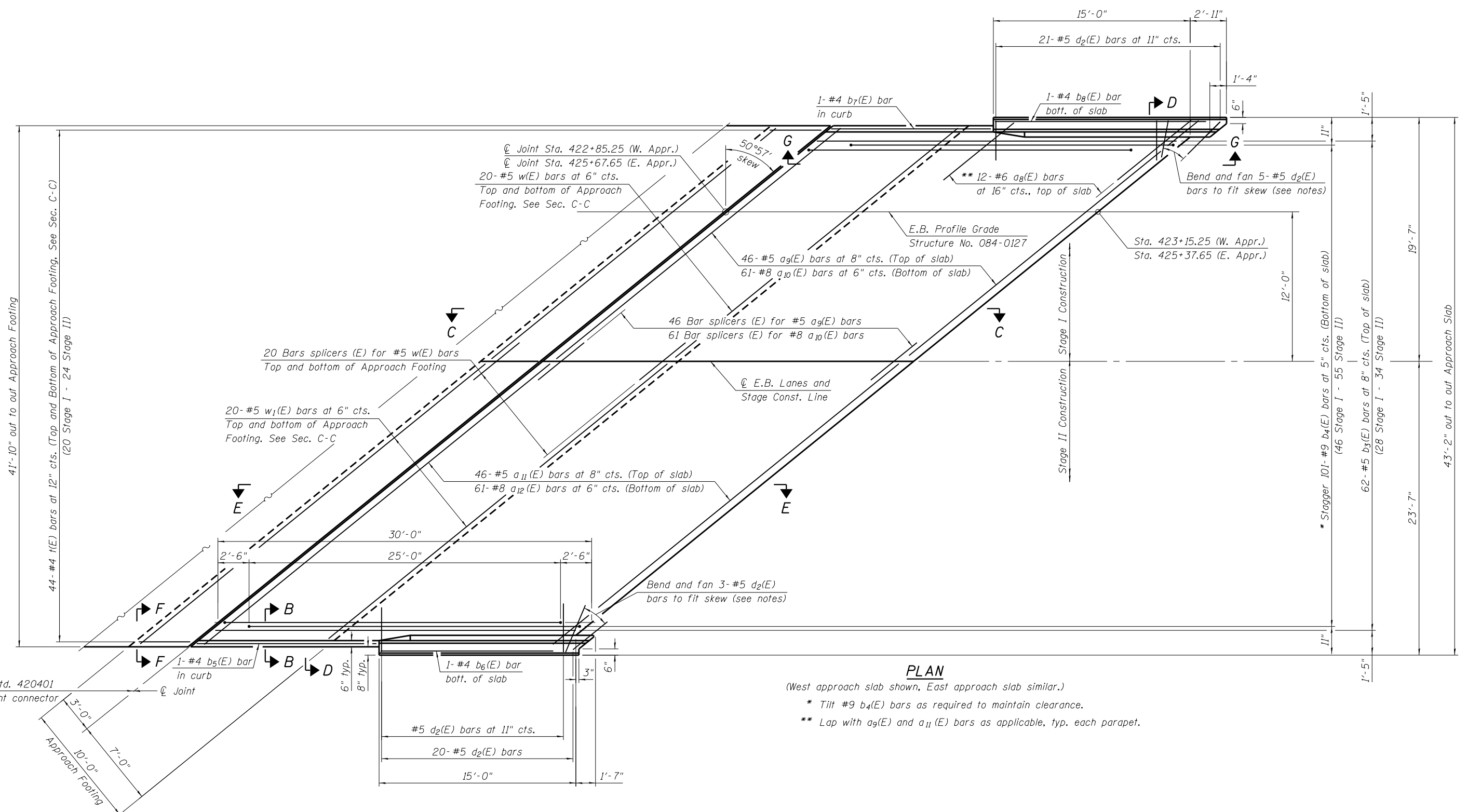
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**W.B. BRIDGE APPROACH SLAB DETAILS  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)**

SHEET NO. 20 OF 42 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	116
CONTRACT NO. 72H51				

ILLINOIS FED. AID PROJECT



**PLAN**

(West approach slab shown, East approach slab similar.)

\* Tilt #9 b4(E) bars as required to maintain clearance.

\*\* Lap with a9(E) and a11(E) bars as applicable, typ. each parapet.

Note:  
1. Work this sheet with sheet 20 of 42.

FILE NAME = L:\Jobs\DOT\_D-6\7818 PTB 167-027\7818.02\CADD\CADD Sheets\0840127&0128-72H51\_12-9-19.dgn



DESIGN FIRM no. 184001036	USER NAME = dheberling	DESIGNED - BRD	REVISED
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	PLOT SCALE = 0:2.000000' : 1 in.	DRAWN - DLH	REVISED
	PLOT DATE = 1/30/2020	CHECKED - SBC	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

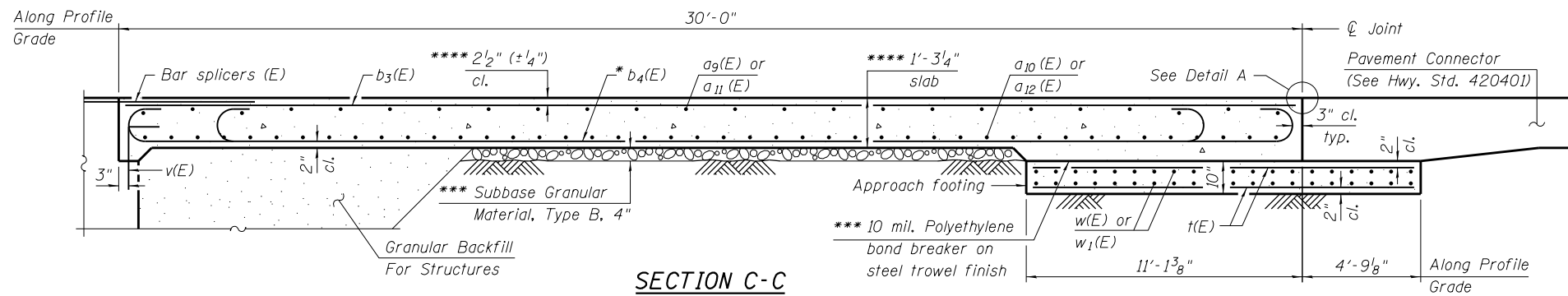
**E.B. BRIDGE APPROACH SLAB DETAILS  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)**

SHEET NO. 21 OF 42 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	117
CONTRACT NO. 72H51				

ILLINOIS FED. AID PROJECT

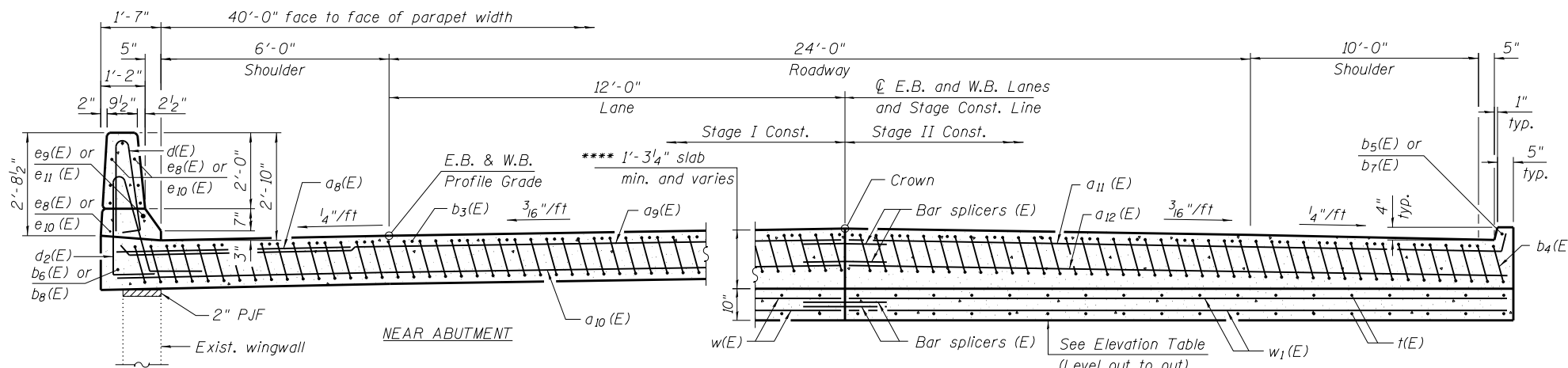
(Sheet 2 of 3)



Notes:

1. See sheets 20 of 42 for Detail A.
2. Approach slab concrete shall be paid for as Concrete Superstructure (Approach Slab) and parapet concrete shall be paid for as Concrete Superstructure.
3. Approach footing concrete shall be paid for as Concrete Structures.
4. Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
5. For v(E) bar details, see sheets 29 and 30 of 42.
6. The approach footing maximum applied service bearing pressure ( $Q_{max}$ ) = 2.0 ksf.
7. For bar splicer details, see sheet 32 of 42.
8. Cost of excavation for approach footing included with Concrete Structures.
9. For Granular Backfill for Structures and drainage treatment details, see sheet 2 of 42.
10. For additional parapet details, see sheets 18 and 19 of 42.
11. Cost of 2" Preformed Joint Filler is included with Concrete Superstructure.

- \* Tilt #9  $b_4(E)$  bars as required to maintain clearance.
- \*\*\* Cost included with Concrete Superstructure (Approach Slab).
- \*\*\*\* Prior to grinding.



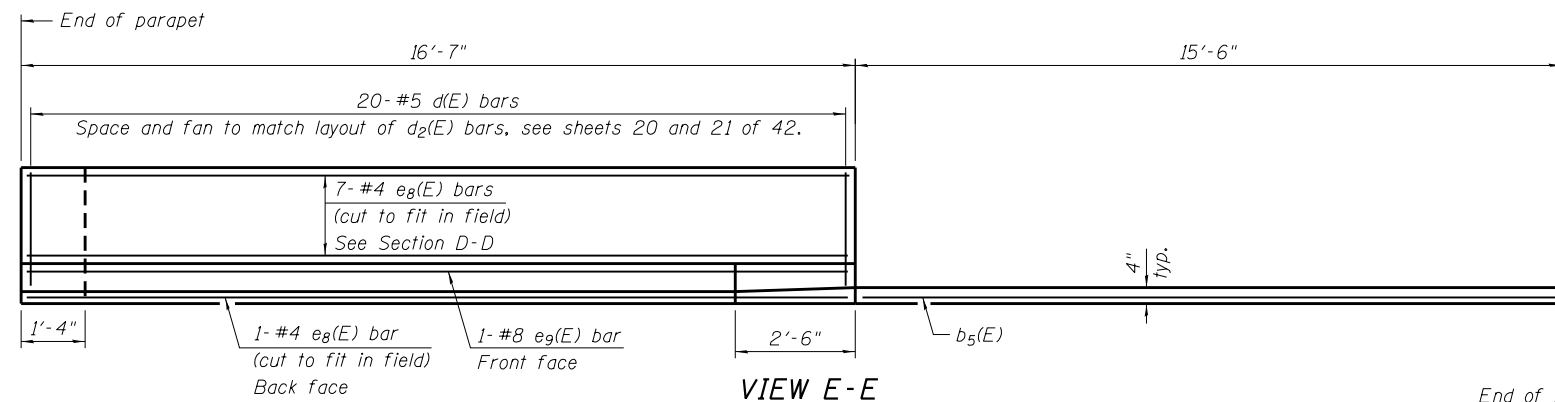
**SECTION D-D**

(See plan for dimensions not shown.)

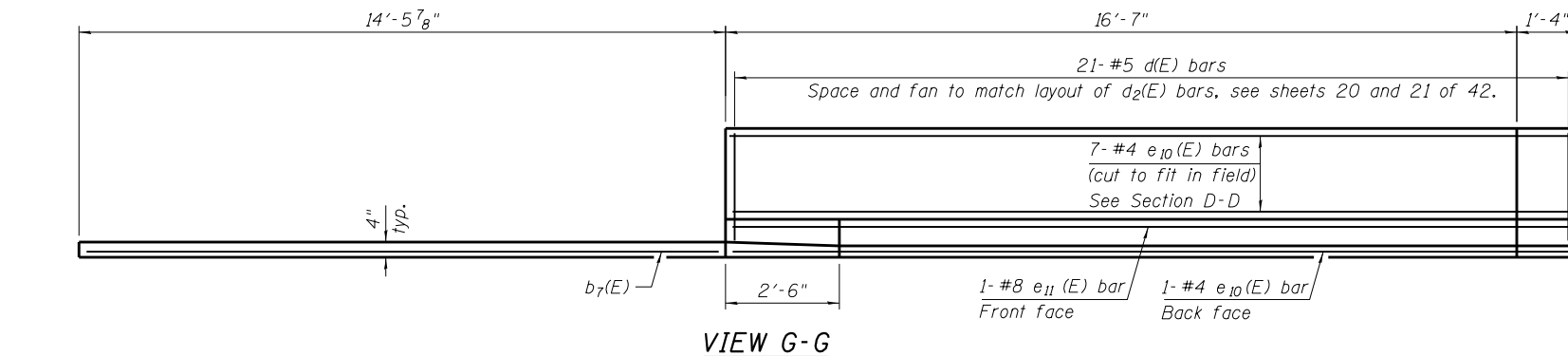
AT APPROACH FOOTING

**APPROACH FOOTING ELEVATION TABLE**

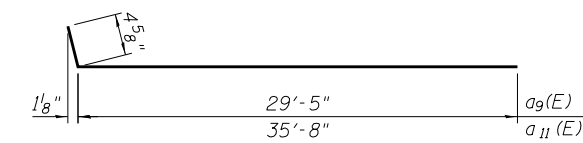
Location	Elevation
W.B. West Approach Footing	636.90
W.B. East Approach Footing	636.18
E.B. West Approach Footing	636.39
E.B. East Approach Footing	636.81



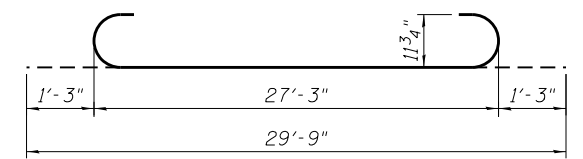
**VIEW E-E**



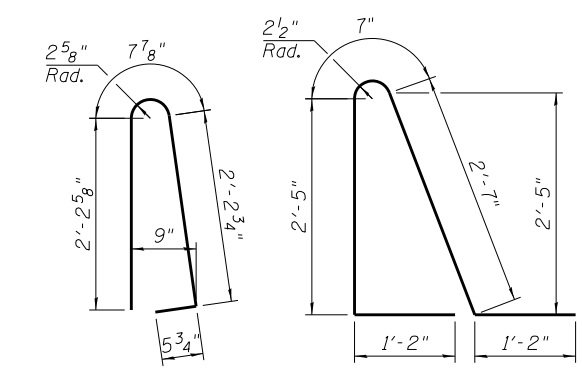
**VIEW G-G**



**BAR  $a_9(E)$  &  $a_{11}(E)$**



**BAR  $b_4(E)$**



**BAR  $d(E)$**

**BAR  $d_2(E)$**

**FOUR APPROACHES  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
$a_8(E)$	96	#6	6'-6"	—
$a_9(E)$	184	#5	29'-10"	—
$a_{10}(E)$	244	#8	29'-6"	—
$a_{11}(E)$	184	#5	36'-1"	—
$a_{12}(E)$	244	#8	35'-10"	—
$b_3(E)$	248	#5	29'-8"	—
$b_4(E)$	404	#9	29'-9"	—
$b_5(E)$	4	#4	15'-6"	—
$b_6(E)$	4	#4	13'-4"	—
$b_7(E)$	4	#4	13'-10"	—
$b_8(E)$	4	#4	16'-0"	—
$d(E)$	164	#5	5'-7"	—
$d_2(E)$	164	#5	7'-11"	—
$e_8(E)$	32	#4	15'-7"	—
$e_9(E)$	4	#8	15'-9"	—
$e_{10}(E)$	32	#4	17'-7"	—
$e_{11}(E)$	4	#8	16'-9"	—
$t(E)$	352	#4	15'-4"	—
$w(E)$	160	#5	29'-6"	—
$w_1(E)$	160	#5	35'-10"	—
Concrete Structures		Cu. Yd.	82.0	
Concrete Superstructure		Cu. Yd.	14.7	
Concrete Superstructure (Approach Slab)		Cu. Yd.	270.9	
Reinforcement Bars, Epoxy Coated		Pound	122,730	
Bar Splicers		Each	588	

(Sheet 3 of 3)

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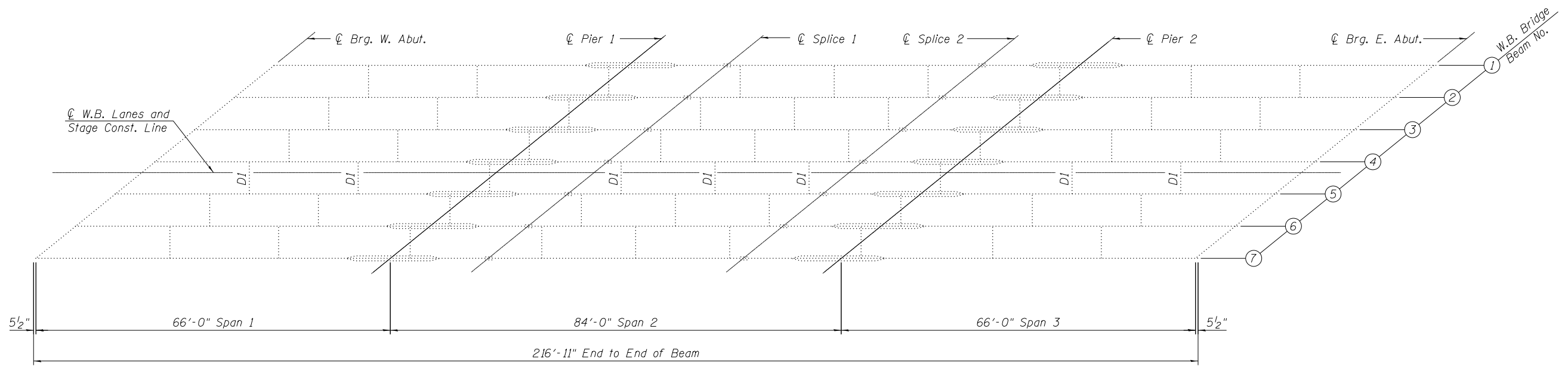
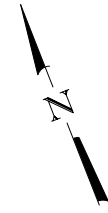
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MODEL = 0840127_28-72H51-022	CHECKED - SBC	REVISOR	REVISED
PLOT SCALE = 0:2.00000' = 1"	DRAWN - DLH	REVISOR	REVISED
PLOT DATE = 1/30/2020	CHECKED - SBC	REVISOR	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

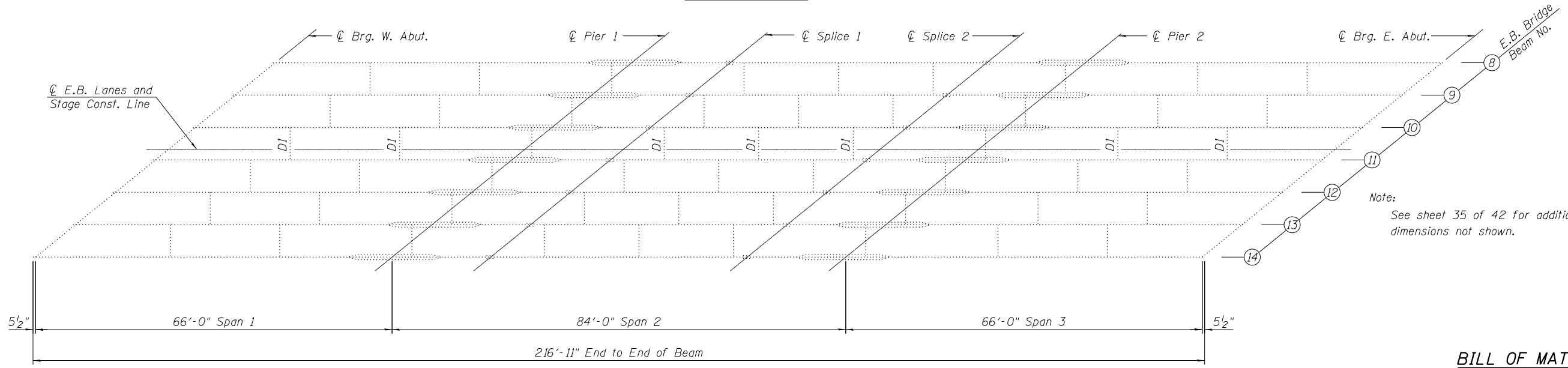
**BRIDGE APPROACH SLAB DETAILS  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)**

SHEET NO. 22 OF 42 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	118
CONTRACT NO. 72H51			ILLINOIS FED. AID PROJECT	



**FRAMING PLAN**

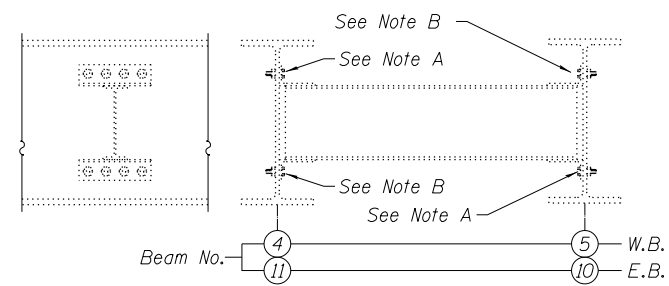


**FRAMING PLAN**

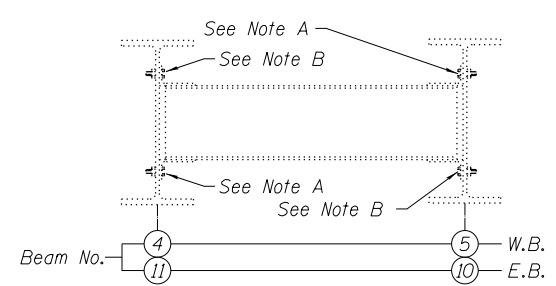
Note:  
See sheet 35 of 42 for additional steel framing details and dimensions not shown.

**BILL OF MATERIAL**

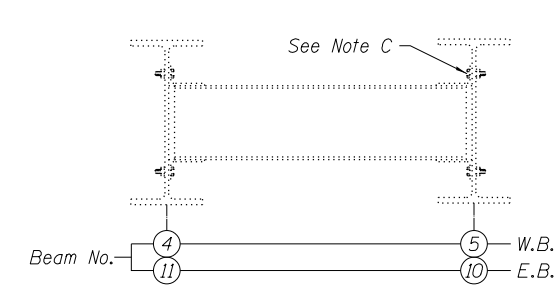
Item	Unit	Total
Furnishing and Erecting Structural Steel	Pound	170



**DIAPHRAGM DI CONNECTION DETAILS FOR STAGE I DECK REMOVAL**



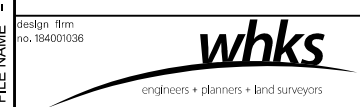
**DIAPHRAGM DI CONNECTION DETAILS FOR STAGE II DECK REMOVAL**



**DIAPHRAGM DI CONNECTION DETAILS AFTER STAGE II DECK POUR**

- Note A: Loosen or adjust existing bolts to a finger tight condition with faying surfaces still in close contact. Cost included with Removal of Existing Concrete Deck, No. 1.
- Note B: Loosen existing bolts approximately 1/4". Cost included with Removal of Existing Concrete Deck, No. 1.
- Note C: Replace existing bolts one at a time at each corner of the diaphragm connection with new 3/4" φ H.S. bolts and two hardened washers for each bolt. Cost included with Furnishing and Erecting Structural Steel.

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DESIGN FIRM no. 184001036	USER NAME = dheberling	DESIGNED - CEH	REVISED
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	PLOT SCALE = 0:2.00000' = 1 in.	DRAWN - DLH	REVISED
	PLOT DATE = 1/30/2020	CHECKED - CEH	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

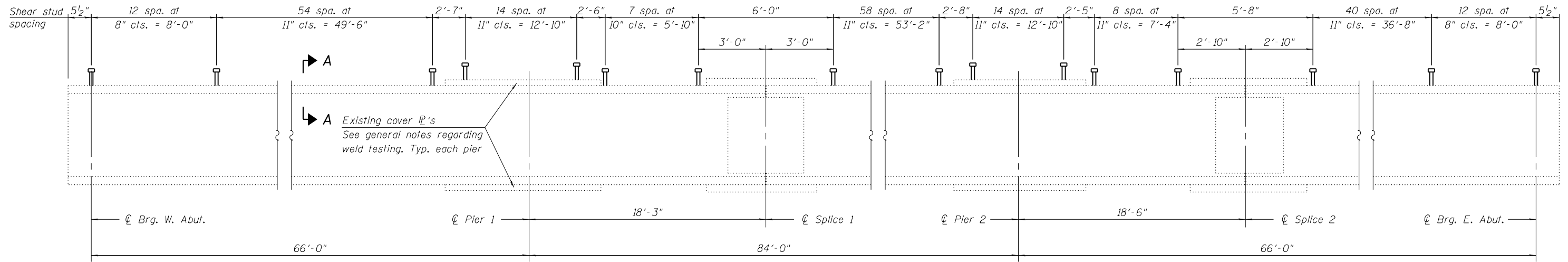
**STRUCTURAL STEEL DETAILS  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)**

SHEET NO. 22A OF 42 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	118A
CONTRACT NO. 72H51				

ILLINOIS FED. AID PROJECT





**BEAM ELEVATION**  
(Exist. 36 WF 150)

Note:  
For Existing Framing Plan & Details see sheet 35 of 42.

INTERIOR BEAM MOMENT TABLE				
		0.4 Sp. 1 or 0.6 Sp. 3	Pier	0.5 Sp. 2
$I_s$	(in <sup>4</sup> )	9040	12684	9040
$I_c(n)$	(in <sup>4</sup> )	23758	-	23758
$I_c(3n)$	(in <sup>4</sup> )	17066	-	17066
$I_c(cr)$	(in <sup>3</sup> )	-	15695	-
$S_s$	(in <sup>3</sup> )	504	687	504
$S_c(n)$	(in <sup>3</sup> )	747	-	747
$S_c(3n)$	(in <sup>3</sup> )	667	-	667
$S_c(cr)$	(in <sup>3</sup> )	-	756	-
$Z$	(in <sup>3</sup> )	-	-	-
$\phi$	(k/')	0.82	0.86	0.82
$M\phi$	('k)	232	494	232
$s\phi$	(k/')	0.27	0.27	0.27
$M_s\phi$	('k)	78	162	78
$M_L$	('k)	398	372	409
$M_I$	('k)	104	93	98
$^5_3[M_L + M_I]$	('k)	838	775	846
$M_a$	('k)	1491	1860	1503
$M_u$	('k)	-	-	-
$f_s \phi$ non-comp	(ksi)	5.5	8.6	5.5
$f_s \phi$ (comp)	(ksi)	1.4	2.6	1.4
$f_s ^5_3 [M_L + M_I]$	(ksi)	13.5	12.3	13.6
$f_s$ (Overload)	(ksi)	20.4	23.5	20.5
$f_s$ (Total)	(ksi)	26.5	30.6	26.7
VR	(k)	52.0	54.7	38.4

$I_s, S_s$ : Non-composite moment of inertia and section modulus of the steel section used for computing  $f_s$  (Total and Overload) due to non-composite dead loads (in<sup>4</sup> and in<sup>3</sup>).

$I_c(n), S_c(n)$ : Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing  $f_s$  (Total and Overload) due to short-term composite live loads (in<sup>4</sup> and in<sup>3</sup>).

$I_c(3n), S_c(3n)$ : Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing  $f_s$  (Total and Overload) due to long-term composite (superimposed) dead loads (in<sup>4</sup> and in<sup>3</sup>).

$Z$ : Plastic Section Modulus of the steel section in non-composite areas (in<sup>3</sup>).

$I_c(cr), S_c(cr)$ : Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing  $f_s$  (Total and Overload) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (in<sup>4</sup> and in<sup>3</sup>).

$\phi$ : Un-factored non-composite dead load (kips/ft.).

$M\phi$ : Un-factored moment due to non-composite dead load (kip-ft.).

$s\phi$ : Un-factored long-term composite (superimposed) dead load (kips/ft.).

$M_s\phi$ : Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).

$M_L$ : Un-factored live load moment (kip-ft.).

$M_I$ : Un-factored moment due to impact (kip-ft.).

$M_a$ : Factored design moment (kip-ft.).  
 $1.3 [M\phi + M_s\phi + \frac{5}{3} (M_L + M_I)]$

$M_u$ : Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).

$f_s$  (Overload): Sum of stresses as computed from the moments below (ksi).  
 $M\phi + M_s\phi + \frac{5}{3} (M_L + M_I)$

$f_s$  (Total): Sum of stresses as computed from the moments below on non-compact section (ksi).  
 $1.3 [M\phi + M_s\phi + \frac{5}{3} (M_L + M_I)]$

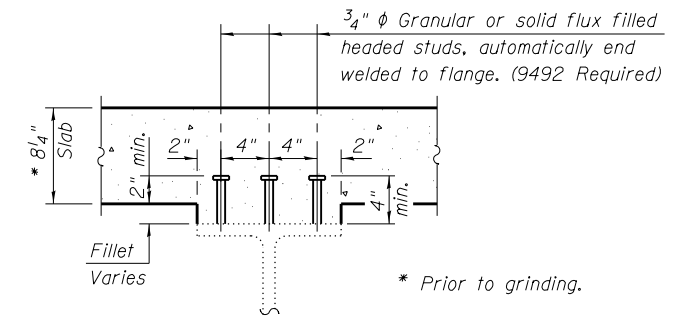
VR: Maximum  $\phi$  + impact shear range within the composite portion of the span for stud shear connector design (kips).

EXTERIOR BEAM MOMENT TABLE				
		0.4 Sp. 1 or 0.6 Sp. 3	Pier	0.5 Sp. 2
$I_s$	(in <sup>4</sup> )	9040	12684	9040
$I_c(n)$	(in <sup>4</sup> )	24174	-	24174
$I_c(3n)$	(in <sup>4</sup> )	17436	-	17436
$I_c(cr)$	(in <sup>3</sup> )	-	16189	-
$S_s$	(in <sup>3</sup> )	504	687	504
$S_c(n)$	(in <sup>3</sup> )	751	-	751
$S_c(3n)$	(in <sup>3</sup> )	672	-	672
$S_c(cr)$	(in <sup>3</sup> )	-	765	-
$Z$	(in <sup>3</sup> )	-	-	-
$\phi$	(k/')	0.94	0.98	0.94
$M\phi$	('k)	268	562	270
$s\phi$	(k/')	0.27	0.27	0.27
$M_s\phi$	('k)	78	161	79
$M_L$	('k)	402	371	411
$M_I$	('k)	105	93	98.4
$^5_3[M_L + M_I]$	('k)	845	772	849
$M_a$	('k)	1547	1945	1557
$M_u$	('k)	-	-	-
$f_s \phi$ non-comp	(ksi)	6.4	9.8	6.4
$f_s \phi$ (comp)	(ksi)	1.4	2.5	1.4
$f_s ^5_3 [M_L + M_I]$	(ksi)	13.5	12.1	13.6
$f_s$ (Overload)	(ksi)	21.3	24.5	21.4
$f_s$ (Total)	(ksi)	27.6	31.8	27.8
VR	(k)	47.1	48.1	38.4

EXTERIOR BEAM REACTION TABLE			
	Abut.	Pier	
$R\phi$	(k)	29.9	102.6
$R_L$	(k)	32.4	45.4
$R_I$	(k)	8.5	11.3
$R_{Total}$	(k)	70.8	159.3

INTERIOR BEAM REACTION TABLE			
	Abut.	Pier	
$R\phi$	(k)	27.0	92.3
$R_L$	(k)	36.3	45.4
$R_I$	(k)	9.5	11.3
$R_{Total}$	(k)	72.8	149

\* Compact section  
\*\* Braced non-compact and partially braced section



**SECTION A-A**

**BILL OF MATERIAL**

Item	Unit	Total
Stud Shear Connectors	Each	9,492

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USER NAME = dheberling	DESIGNED - BRD	REVISED
MODEL = 0840127_28-72H51-023	CHECKED - SBC	REVISED
PLOT SCALE = 0:2.000000" = 1 in.	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - SBC	REVISED

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**STRUCTURAL STEEL DETAILS**  
**STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)**

SHEET NO. 23 OF 42 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	119
CONTRACT NO. 72H51				

ILLINOIS FED. AID PROJECT

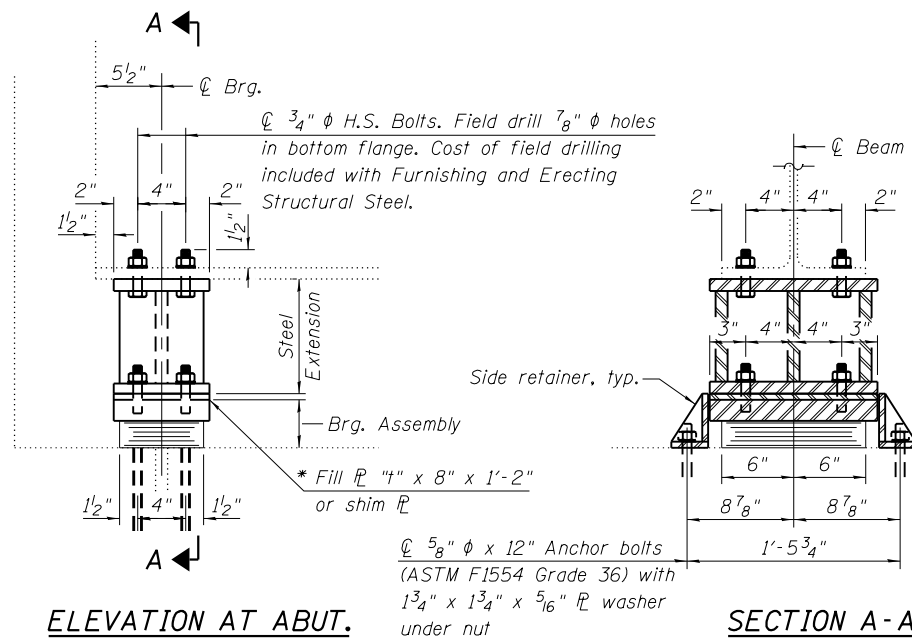
\* TABLE OF "I" DIMENSIONS

Beam No.	084-0128 (WB)	Beam No.	084-0127 (EB)
1	1 1/16"	8	1 1/16"
2	1 5/8"	9	-
3	1 3/4"	10	1 1/16"
4	1 13/16"	11	1 5/8"
5	1 5/16"	12	5/8"
6	1 1/8"	13	1 3/8"
7	1 1/16"	14	1 5/16"

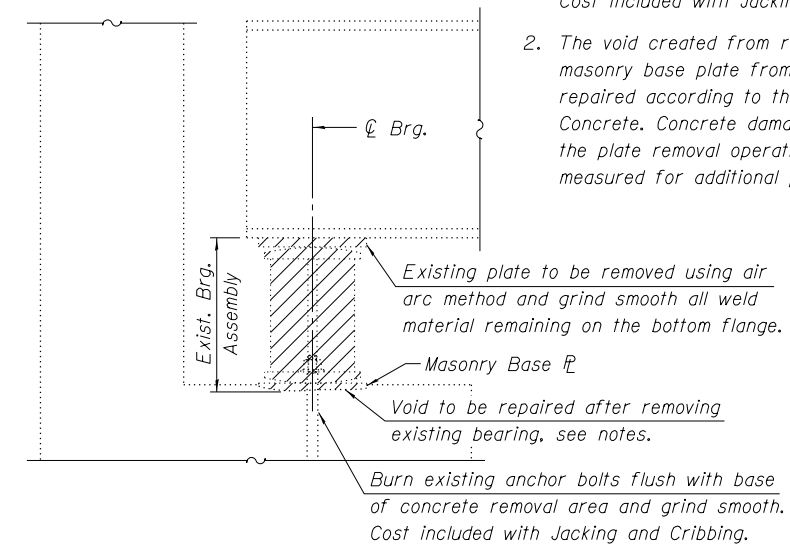
\* The fill plate thicknesses shown above are based on survey data to match the height of the existing bearing assemblies. Prior to ordering any material, the Contractor shall field verify all existing bearing heights and required fill plate thicknesses. The Contractor may adjust the height of the steel extensions in lieu of providing the above fill plates.

Notes:

- Hatched area indicates removal of existing bearing assembly. Cost included with Jacking and Cribbing. See Special Provision.
- The void created from removing the existing 1 3/8" x 9" x 1'-8 1/2" masonry base plate from the existing abutment seat shall be repaired according to the requirements for Structural Repair of Concrete. Concrete damage adjacent to the existing plate, caused by the plate removal operations and requiring repair will not be measured for additional payment.



**TYPE I ELASTOMERIC EXP. BRG.**



**EXISTING BEARING ASSEMBLY REMOVAL DETAIL**

**JACK AND REMOVE EXISTING BEARINGS PROCEDURE**

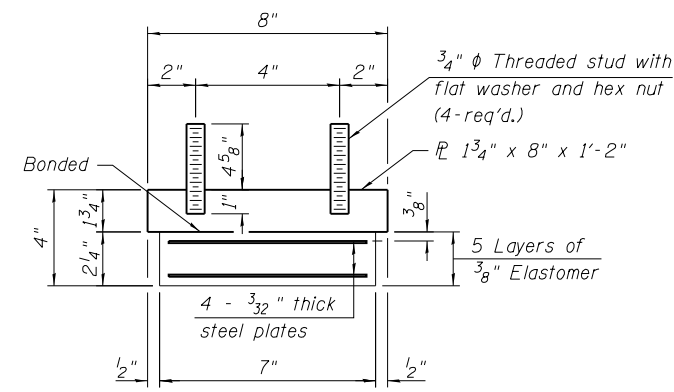
- The Contractor shall submit for approval by the Engineer, plans for jacking and removing existing bearings prior to commencing any related work. See Jacking and Cribbing Special Provisions.
- Jacking and removing existing bearings shall be done in stages after existing deck removal is completed.
- The Maximum Dead Load Reaction with deck removed (per bearing) at each abutment is 4.5 kips. Minimum jack capacity is 7 kips.
- The existing abutment seats shall be repaired, the new bearings shall be in place, and the jacks shall be lowered prior to forming and pouring the new deck.

Notes:

- Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
- Any damage to the concrete repair area adjacent to the proposed bearing caused from drilling anchor bolts shall be repaired by the Contractor to the satisfaction of the Engineer at no additional cost to the Department.
- Side retainers and other steel members required for the elastomeric bearing assembly, except steel bearing extension, fill plates, and bolts in bottom flange shall be included in the cost of Elastomeric Bearing Assembly, Type I. Steel bearing extensions, fill plates, and bolts in bottom flange are included in the quantity for Furnishing and Erecting Structural Steel.
- Two 1/8" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details. Cost included with Furnishing and Erecting Structural Steel.

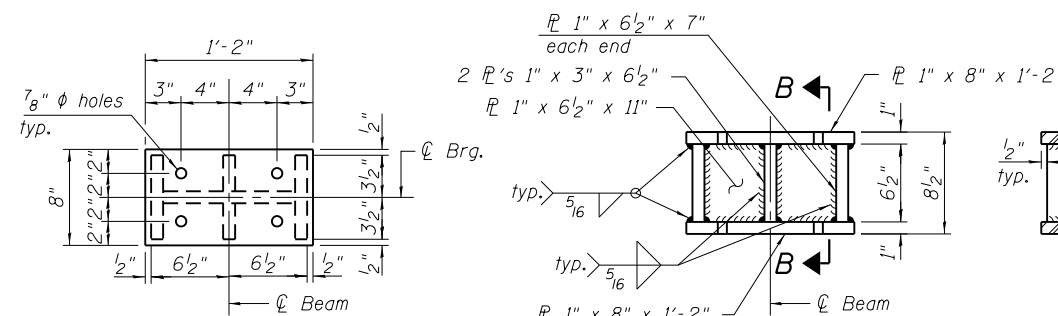
**BILL OF MATERIAL**

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	14
Anchor Bolts, 5/8"	Each	56
Jacking and Cribbing, Location No. 1	L.Sum	0.5
Furnishing and Erecting Structural Steel	Pound	2,410
Structural Repair of Concrete (Depth Equal to or less than 5 inches)	Sq. Ft.	18.0



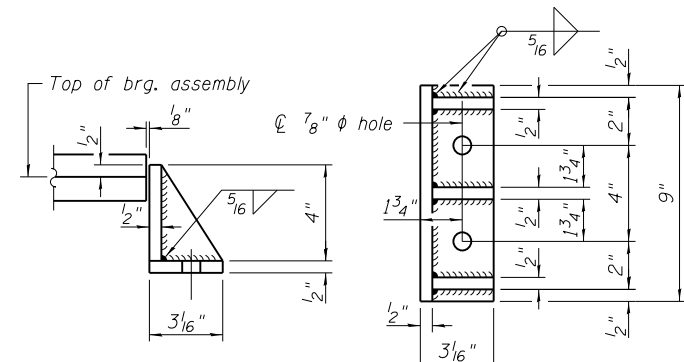
**BEARING ASSEMBLY**

Shim plates shall not be placed under Bearing Assembly.



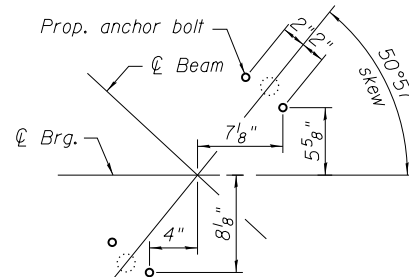
**STEEL BEARING EXTENSION**

**SECTION B-B**



**SIDE RETAINER**

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates. (28 required)



**ANCHOR BOLT LAYOUT**

(Shown for information only. It is recommended that the Contractor set the side retainers in place and use the holes in the side retainers to locate the anchor bolts on the abutment.)

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT BEARING DETAILS  
 STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)

SHEET NO. 24 OF 42 SHEETS

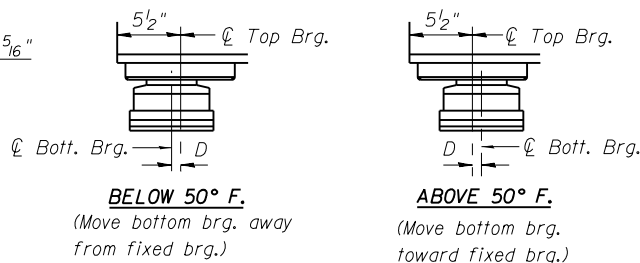
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	120
				CONTRACT NO. 72H51

ILLINOIS FED. AID PROJECT

**\* TABLE OF "t" DIMENSIONS**

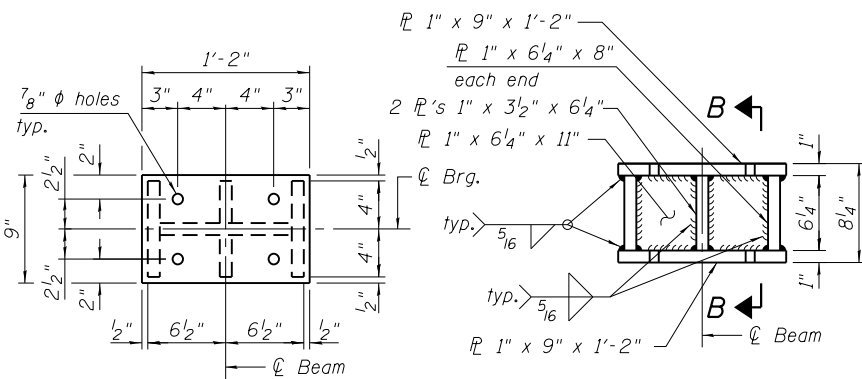
Beam No.	084-0128 (WB)	Beam No.	084-0127 (EB)
1	3/8"	8	3/16"
2	3/4"	9	-
3	7/8"	10	3/8"
4	5/8"	11	1/4"
5	1/4"	12	1/8"
6	1/8"	13	1/16"
7	3/8"	14	1/4"

\* The fill plate thicknesses shown above are based on survey data to match the height of the existing bearing assemblies. Prior to ordering any material, the Contractor shall field verify all existing bearing heights and required fill plate thicknesses. The Contractor may adjust the height of the steel extensions in lieu of providing the above fill plates.

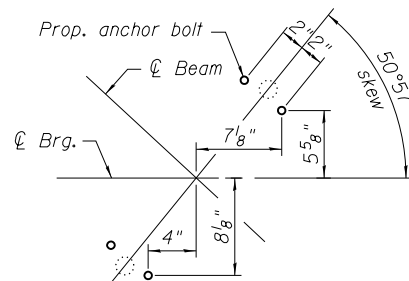
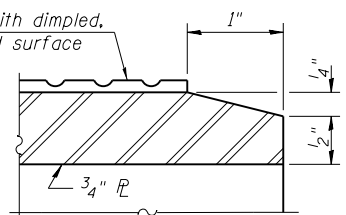
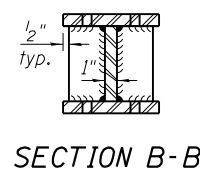


**SETTING ANCHOR BOLTS AT EXP. BRG.**

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



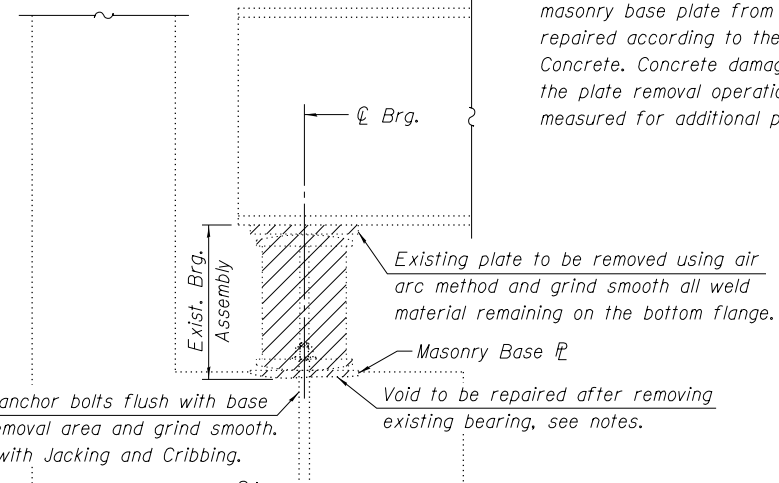
**STEEL BEARING EXTENSION**



(Shown for information only. It is recommended that the Contractor set the bottom plate in place and use the holes in the bottom plate to locate the anchor bolts on the abutment.)

Notes:

- Hatched area indicates removal of existing bearing assembly. Cost included with Jacking and Cribbing. See Special Provision.
- The void created from removing the existing 13/8" x 9" x 1'-8 1/2" masonry base plate from the existing abutment seat shall be repaired according to the requirements for Structural Repair of Concrete. Concrete damage adjacent to the existing plate, caused by the plate removal operations and requiring repair will not be measured for additional payment.



**JACK AND REMOVE EXISTING BEARINGS PROCEDURE**

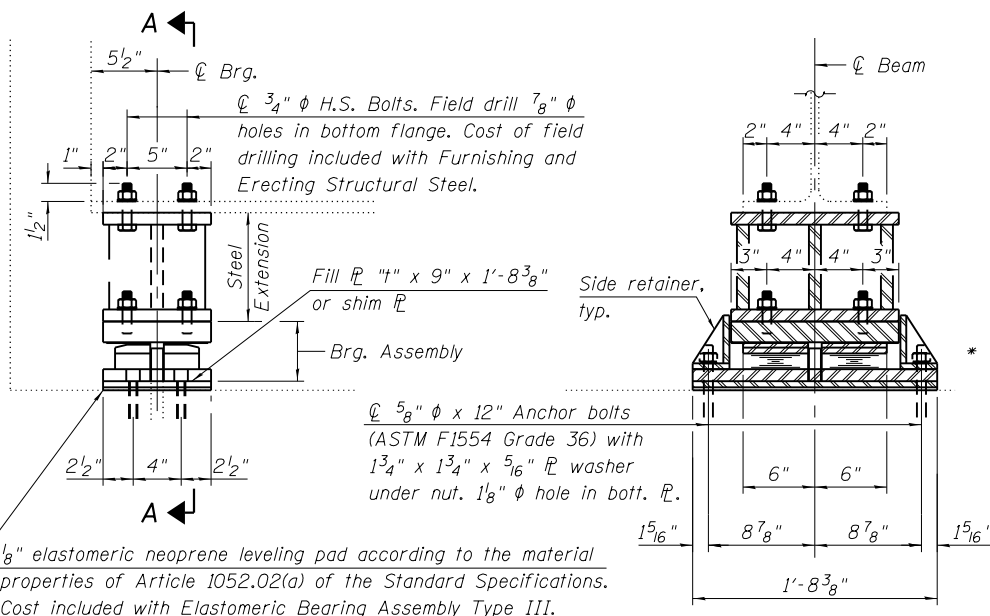
- The Contractor shall submit for approval by the Engineer, plans for jacking and removing existing bearings prior to commencing any related work. See Jacking and Cribbing Special Provisions.
- Jacking and removing existing bearings shall be done in stages after existing deck removal is completed.
- The Maximum Dead Load Reaction with deck removed (per bearing) at each abutment is 4.5 kips. Minimum jack capacity is 7 kips.
- The existing abutment seats shall be repaired, the new bearings shall be in place, and the jacks shall be lowered prior to forming and pouring the new deck.

Notes:

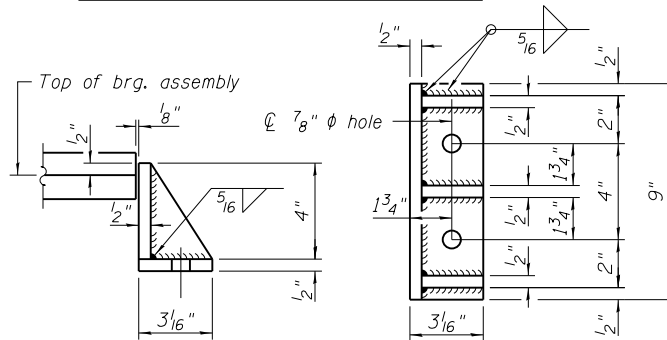
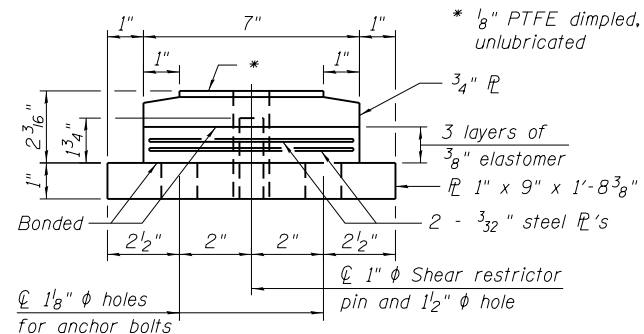
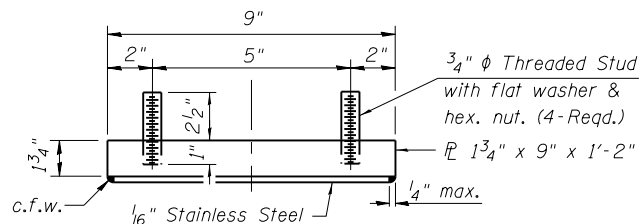
- Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
- Any damage to the concrete repair area adjacent to the proposed bearing caused from drilling anchor bolts shall be repaired by the Contractor to the satisfaction of the Engineer at no additional cost to the Department.
- Side retainers and other steel members required for the elastomeric bearing assembly, except steel bearing extension, bottom flange bolts, and fill plates, shall be included in the cost of Elastomeric Bearing Assembly, Type III. Steel bearing extensions, bottom flange bolts, and fill plates are included in the quantity for Furnishing and Erecting Structural Steel.
- 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.
- Two 1/8" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details. Cost included with Furnishing and Erecting Structural Steel.

**BILL OF MATERIAL**

Item	Unit	Total
Elastomeric Bearing Assembly, Type III	Each	14
Anchor Bolts, 3/8"	Each	56
Jacking and Cribbing, Location No. 1	L. Sum	0.5
Furnishing and Erecting Structural Steel	Pound	2,390
Structural Repair of Concrete (Depth Equal to or less than 5 inches)	Sq. Ft.	18.0



**TYPE III ELASTOMERIC EXP. BRG.**



Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates. (28 required)

FILE NAME = L:\Jobs\DOT\_D-6\7818 PTB 167-027\7818.02\CADD\CADD Sheets\0840127&0128-72H51\_12-9-19.dgn



USER NAME = dheberling	DESIGNED - BRD	REVISED
MODEL = 0840127_28-72H51-025	CHECKED - SBC	REVISED
PLOT SCALE = 0:2.000000'"/in.	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - SBC	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

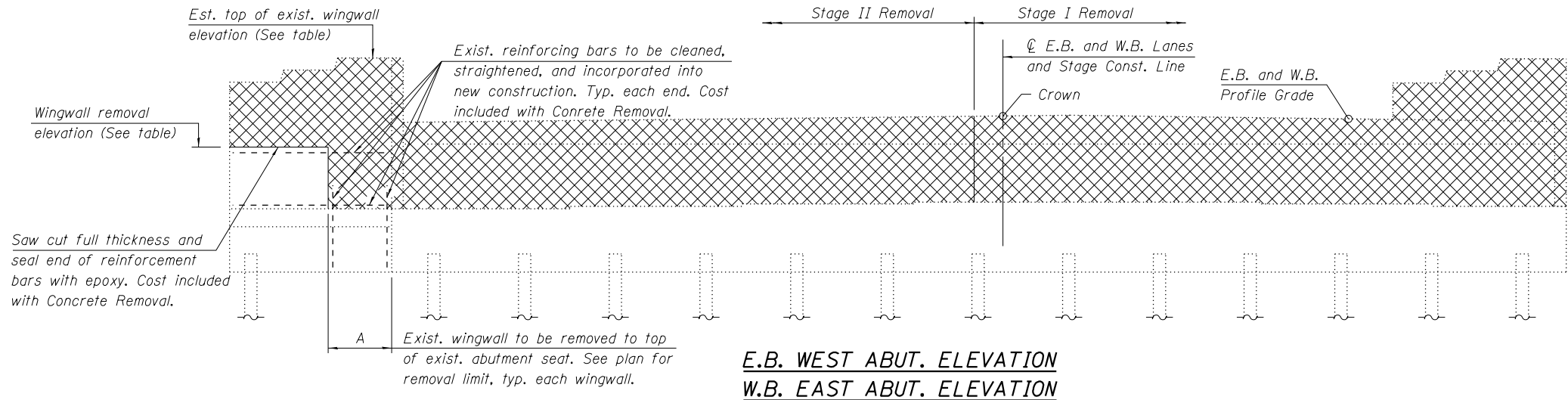
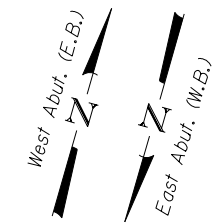
**WEST ABUTMENT BEARING DETAILS  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)**

SHEET NO. 25 OF 42 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	121
				CONTRACT NO. 72H51

ILLINOIS FED. AID PROJECT

FILE NAME = L:\Jobs\IDOT\_D-6\7818 PTB 167-02\7818.02\CADD\CADD Sheets\0840127&0128-72H51\_12-9-19.dgn

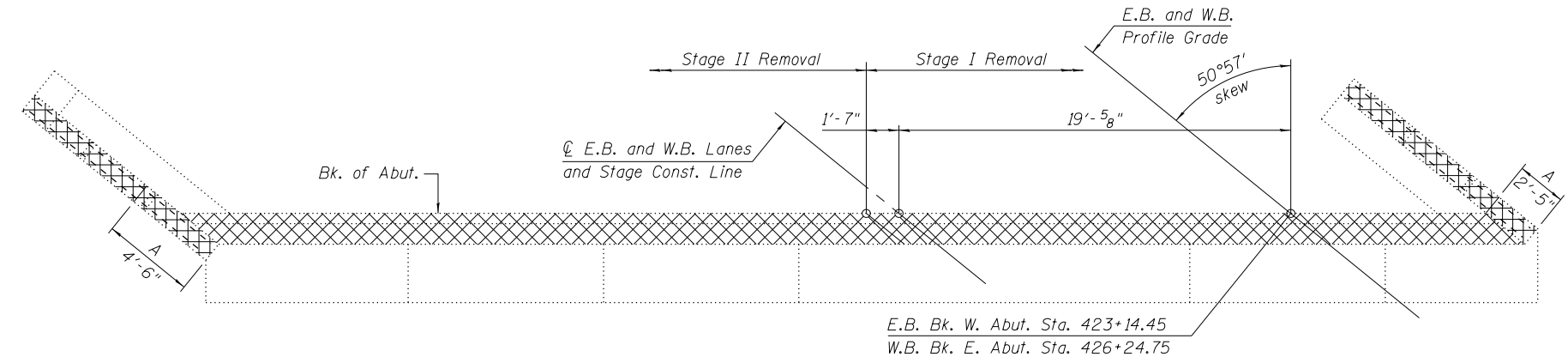


Saw cut full thickness and seal end of reinforcement bars with epoxy. Cost included with Concrete Removal.

Est. top of exist. wingwall elevation (See table)

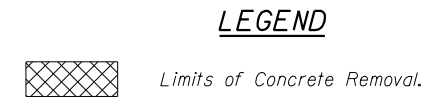
Exist. reinforcing bars to be cleaned, straightened, and incorporated into new construction. Typ. each end. Cost included with Concrete Removal.

**E.B. WEST ABUT. ELEVATION**  
**W.B. EAST ABUT. ELEVATION**

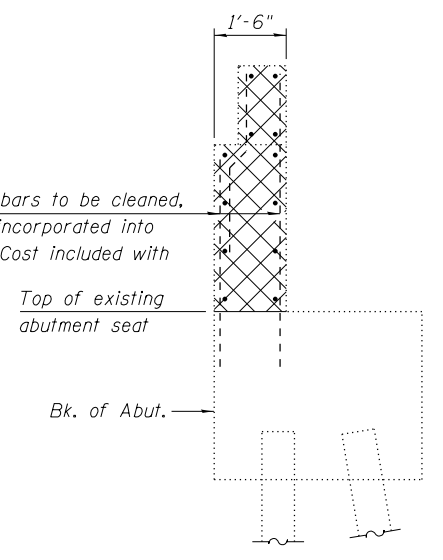


**PLAN**

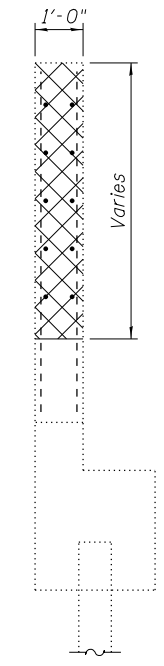
E.B. Bk. W. Abut. Sta. 423+14.45  
W.B. Bk. E. Abut. Sta. 426+24.75



Exist. reinforcing bars to be cleaned, straightened, and incorporated into new construction. Cost included with Concrete Removal.



**SECTION THRU ABUTMENT**



**SECTION THRU WINGWALL**

**WINGWALL REMOVAL ELEVATION TABLE**

Location		* Est. Top of Existing Wingwall Elevation	Wingwall Removal Elevation
E.B. (084-0127)	N.W. Wing	±642.34	637.52
	S.W. Wing	±642.10	637.24
W.B. (084-0128)	N.E. Wing	±641.83	637.05
	S.E. Wing	±642.18	637.37

\* Elevations determined from existing survey data and are subject to field verification during construction.

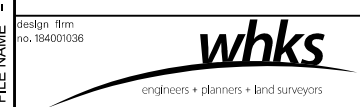
**TWO ABUTMENTS BILL OF MATERIAL**

Item	Unit	Total
Concrete Removal	Cu. Yd.	39.1

Notes:

- See sheets 37 thru 40 of 42 for additional details and dimensions not shown.
- Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.

(Sheet 1 of 2)



USER NAME = dheberling	DESIGNED - BRD	REVISED
MODEL = 0840127_28-72H51-026	CHECKED - SBC	REVISED
PLOT SCALE = 0:2.00000' = 1 in.	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - SBC	REVISED

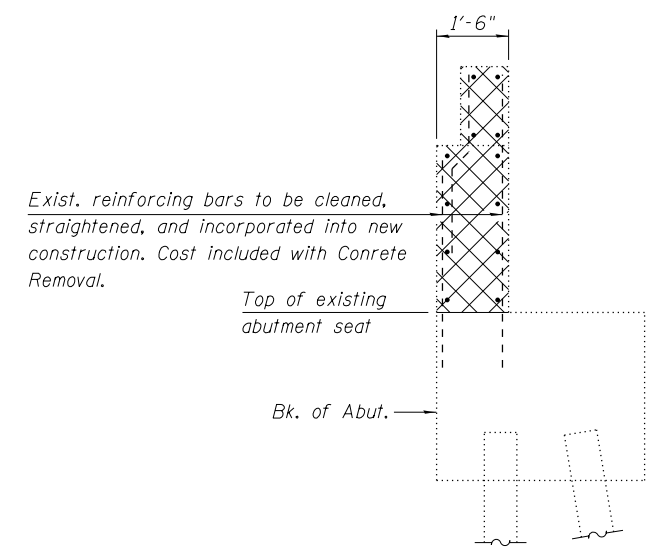
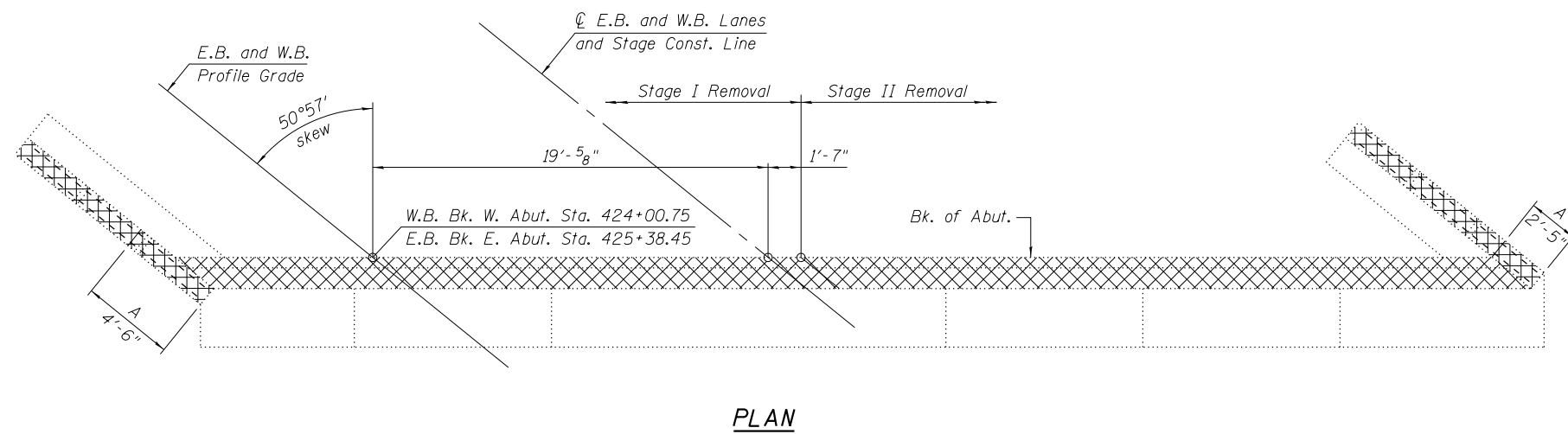
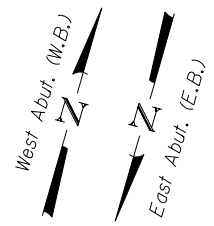
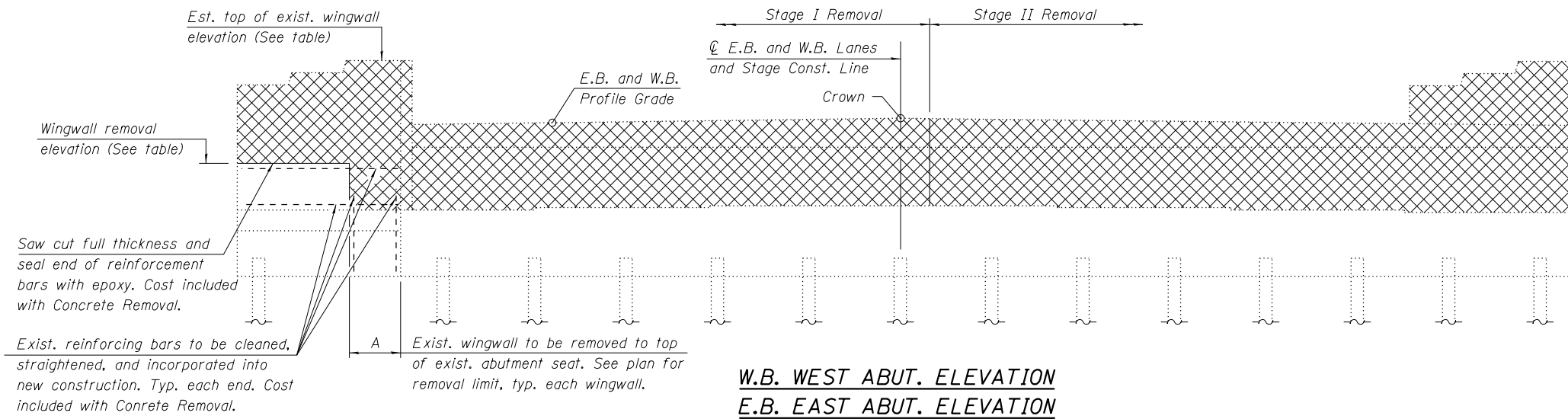
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**ABUTMENT CONCRETE REMOVAL DETAILS**  
**STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)**

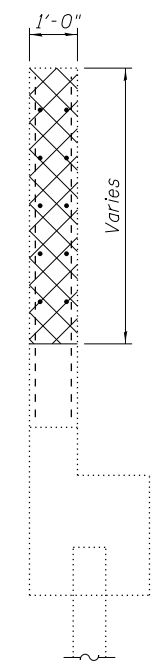
SHEET NO. 26 OF 42 SHEETS

F.A.I. RTE. 72	SECTION (84-9-3) I, P	COUNTY SANGAMON	TOTAL SHEETS 138	SHEET NO. 122
CONTRACT NO. 72H51				
ILLINOIS FED. AID PROJECT				

FILE NAME = L:\Jobs\DOT\_D-6\7818 PTB 167-02\7818.02\CADD\CADD Sheets\0840127&0128-72H51\_12-9-19.dgn



SECTION THRU ABUTMENT



SECTION THRU WINGWALL

**LEGEND**

Limits of Concrete Removal.

**WINGWALL REMOVAL ELEVATION TABLE**

Location		* Est. Top of Existing Wingwall Elevation	Wingwall Removal Elevation
E.B. (084-0127)	N.E. Wing	±642.55	637.61
	S.E. Wing	±642.43	637.63
W.B. (084-0128)	N.W. Wing	±642.42	637.66
	S.W. Wing	±642.45	637.69

\* Elevations determined from existing survey data and are subject to field verification during construction.

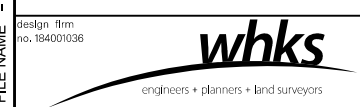
**TWO ABUTMENTS BILL OF MATERIAL**

Item	Unit	Total
Concrete Removal	Cu. Yd.	39.2

Notes:

- See sheets 37 thru 40 of 42 for additional details and dimensions not shown.
- Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.

(Sheet 2 of 2)



USER NAME = dheberling	DESIGNED - BRD	REVISED
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PLOT DATE = 1/30/2020	CHECKED - SBC	REVISED

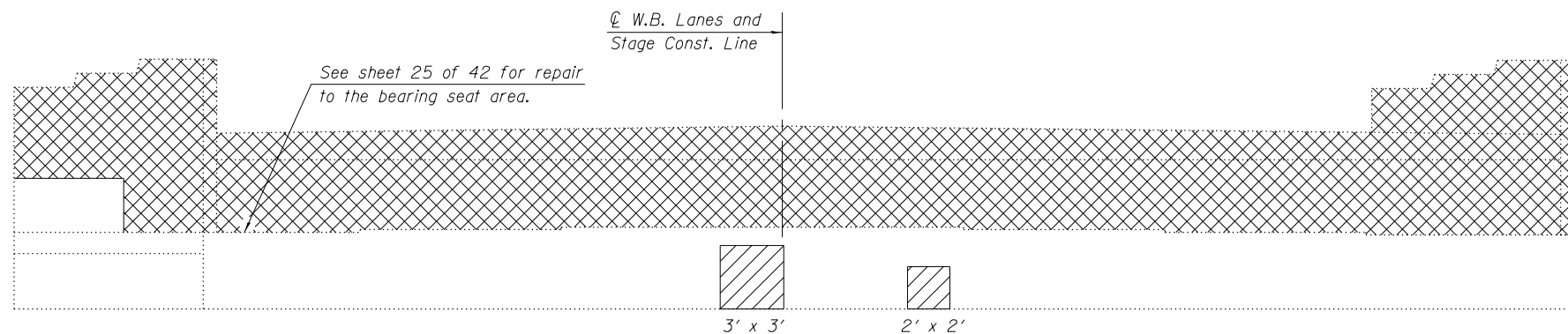
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ABUTMENT CONCRETE REMOVAL DETAILS  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)**

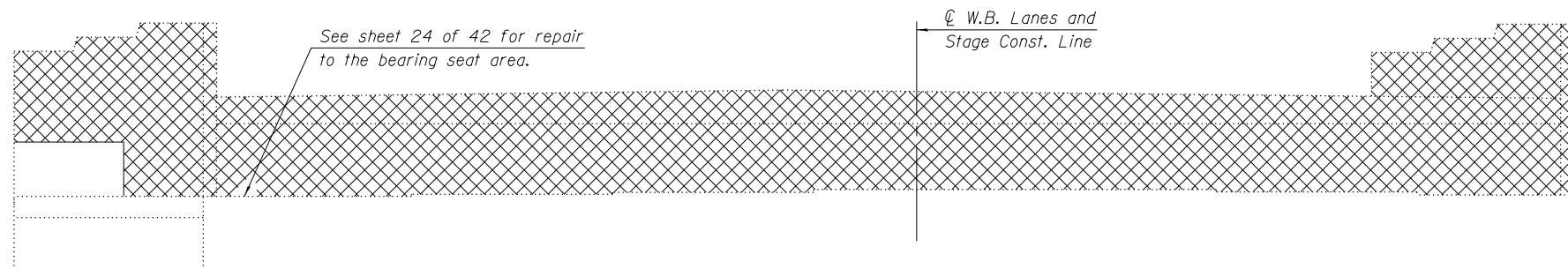
SHEET NO. 27 OF 42 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	123
CONTRACT NO. 72H51				

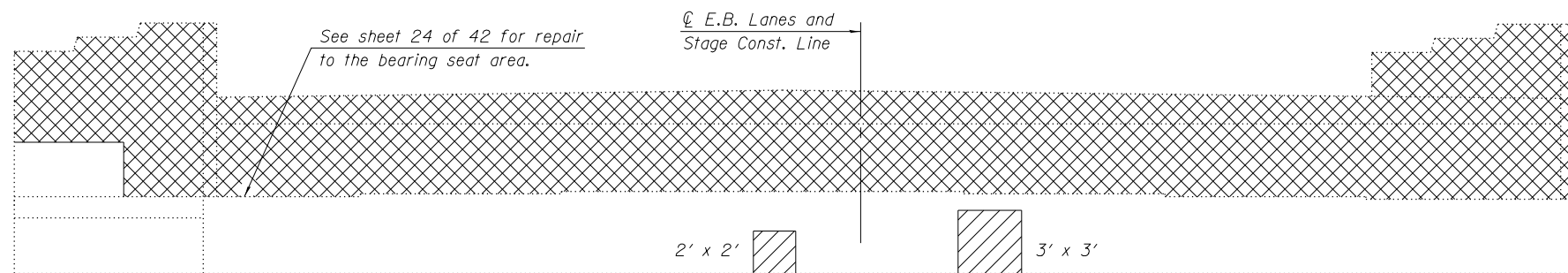
ILLINOIS FED. AID PROJECT



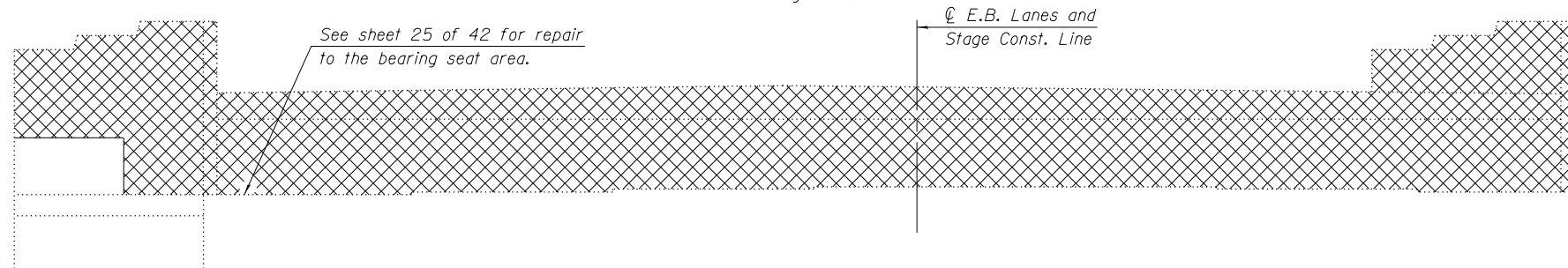
**W.B. WEST ABUTMENT ELEVATION**  
(Looking West)



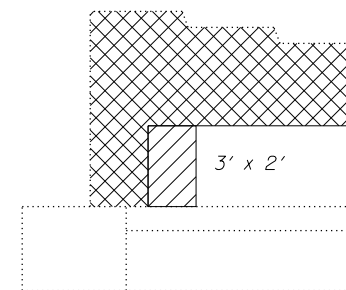
**W.B. EAST ABUTMENT ELEVATION**  
(Looking East)



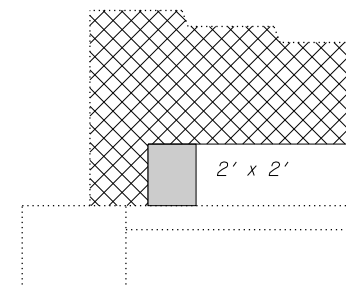
**E.B. EAST ABUTMENT ELEVATION**  
(Looking East)



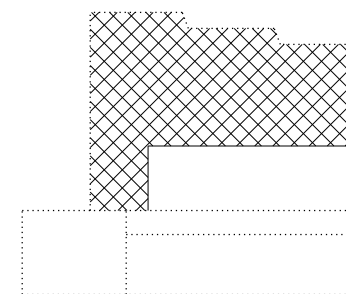
**E.B. WEST ABUTMENT ELEVATION**  
(Looking West)



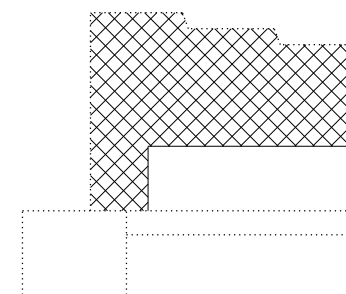
**NORTH WINGWALL ELEVATION**  
(Looking South)



**SOUTH WINGWALL ELEVATION**  
(Looking North)



**SOUTH WINGWALL ELEVATION**  
(Looking North)



**NORTH WINGWALL ELEVATION**  
(Looking South)

**LEGEND**

- Structural Repair of Concrete (Depth equal to or less than 5 inches).
- Structural Repair of Concrete (Depth greater than 5 inches).
- Limits of Concrete Removal. See sheets 26 and 27 of 42 for additional details.

**CONCRETE REPAIR BILL OF MATERIAL**

Item	Unit	Total
Structural Repair of Concrete (Depth equal to or less than 5 inches)	Sq. Ft.	32
Structural Repair of Concrete (Depth greater than 5 inches)	Sq. Ft.	4

FILE NAME = L:\Jobs\DOT\_D-6\7818 PTB 167-02\7818.02\CADD\CADD Sheets\0840127&0128-72H51\_12-9-19.dgn

Design firm  
no. 184001036



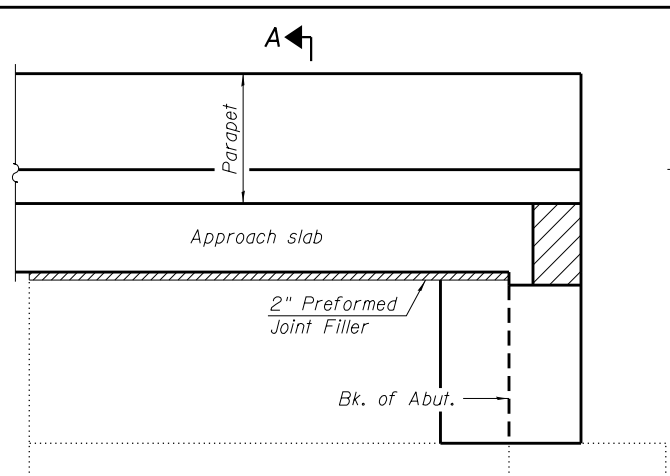
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PLOT DATE = 1/30/2020	CHECKED - SBC	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

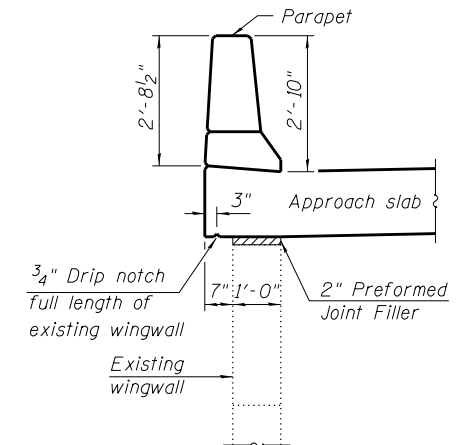
**ABUTMENT REPAIR DETAILS  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)**

SHEET NO. 28 OF 42 SHEETS

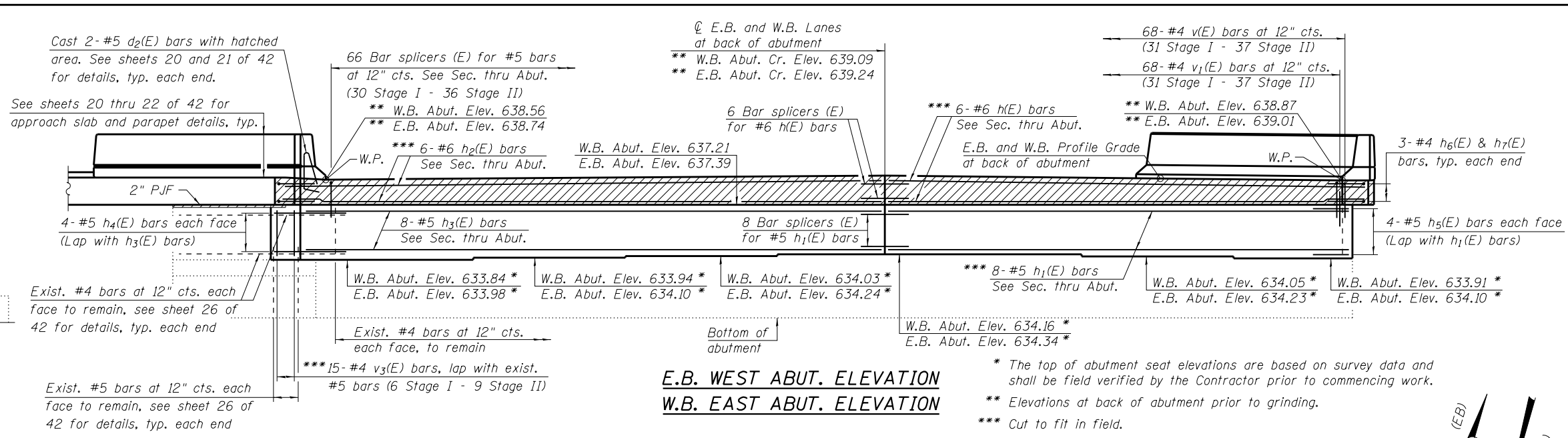
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	124
CONTRACT NO. 72H51				
ILLINOIS FED. AID PROJECT				



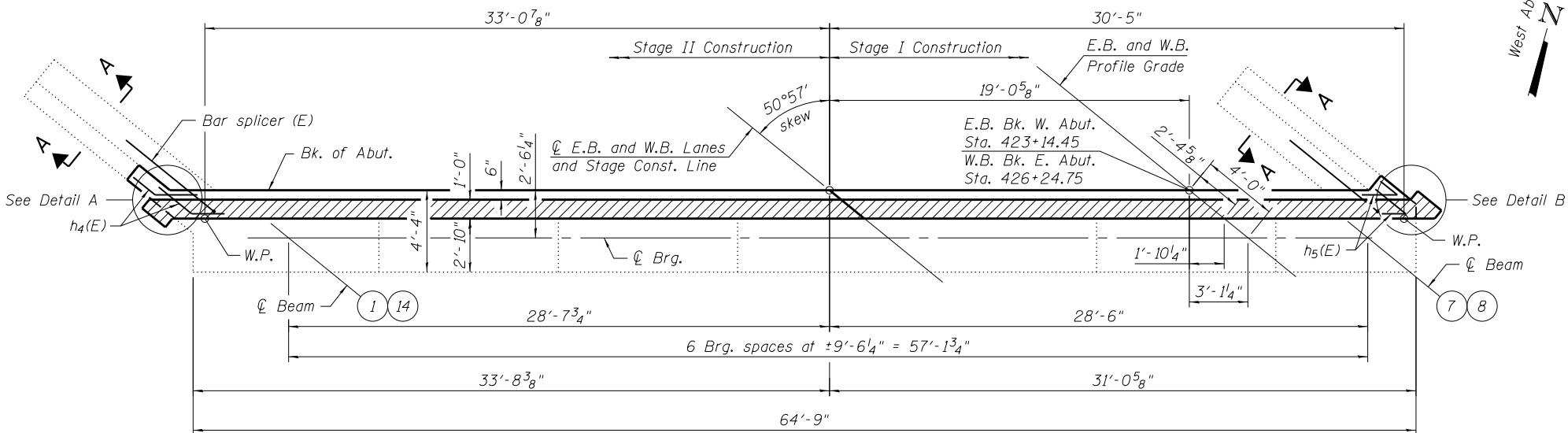
TYPICAL WINGWALL ELEVATION



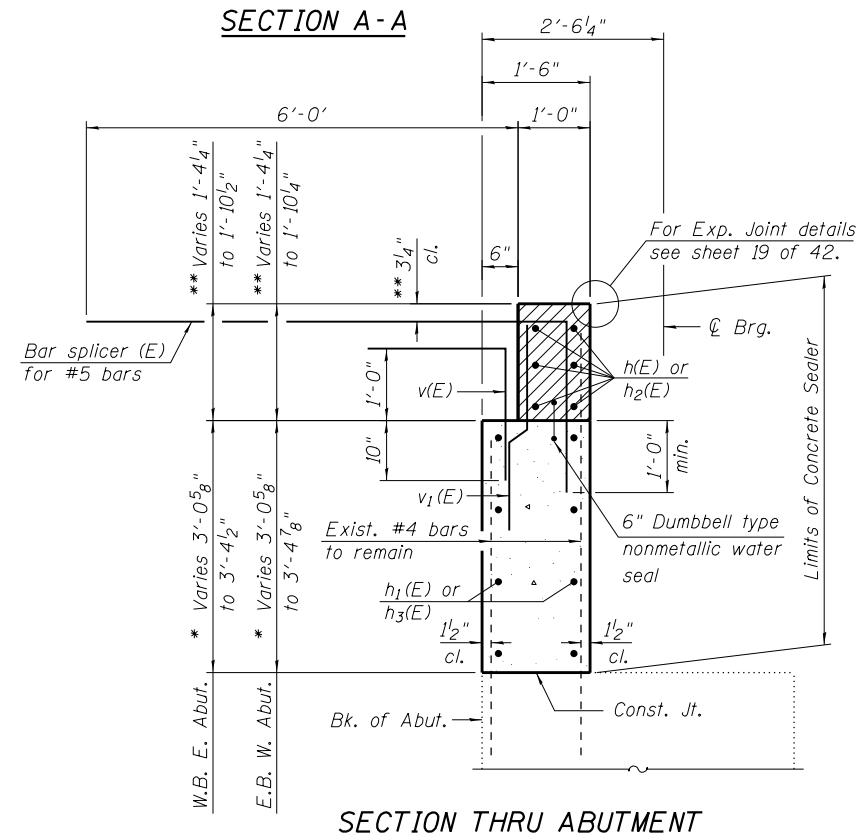
SECTION A-A



E.B. WEST ABUT. ELEVATION  
W.B. EAST ABUT. ELEVATION

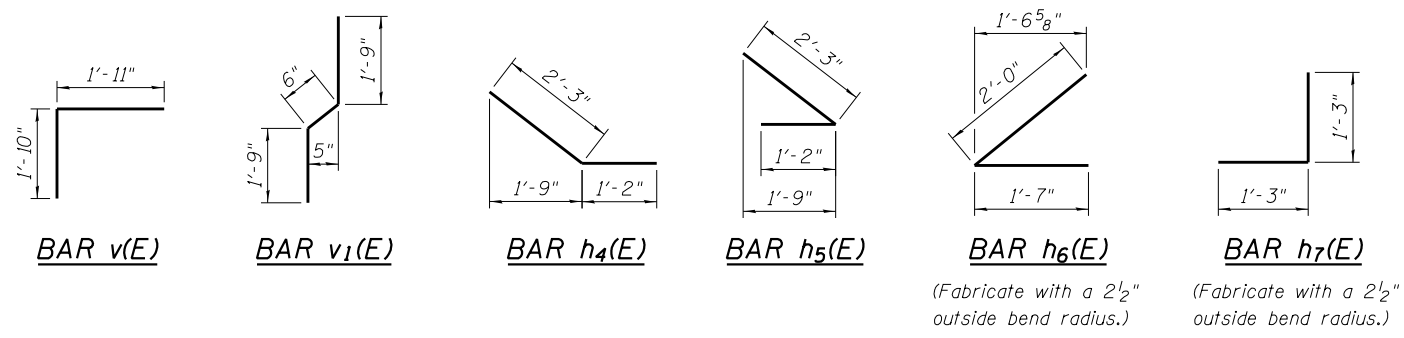


PLAN



SECTION THRU ABUTMENT

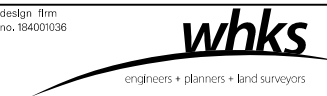
- Notes:
- Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructures.
  - See sheets 20 thru 22 of 42 for approach slab, parapet details, and bill of material.
  - For details of bar splicers, see sheet 32 of 42.
  - See sheets 24 and 25 of 42 for anchor bolt layout.
  - See sheet 30 of 42 for Details A and B.



TWO ABUTMENTS  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	12	#6	30'-8"	—
h1(E)	16	#5	29'-10"	—
h2(E)	12	#6	37'-0"	—
h3(E)	16	#5	36'-2"	—
h4(E)	16	#5	3'-5"	—
h5(E)	16	#5	3'-5"	—
h6(E)	12	#4	3'-7"	—
h7(E)	12	#4	2'-6"	—
v(E)	136	#4	3'-9"	—
v1(E)	136	#4	4'-0"	—
v3(E)	30	#4	3'-0"	—
Structure Excavation			Cu. Yd.	77
Concrete Structures			Cu. Yd.	24.2
Reinforcement Bars, Epoxy Coated			Pound	3,250
Bar Splicers			Each	160
Concrete Sealer			Sq. Ft.	649

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DESIGN FIRM no. 184001036	USER NAME = dheberling	DESIGNED - BRD	REVISED
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	PLOT SCALE = 0:2.00000' = 1/4"	DRAWN - DLH	REVISED
	PLOT DATE = 1/30/2020	CHECKED - SBC	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

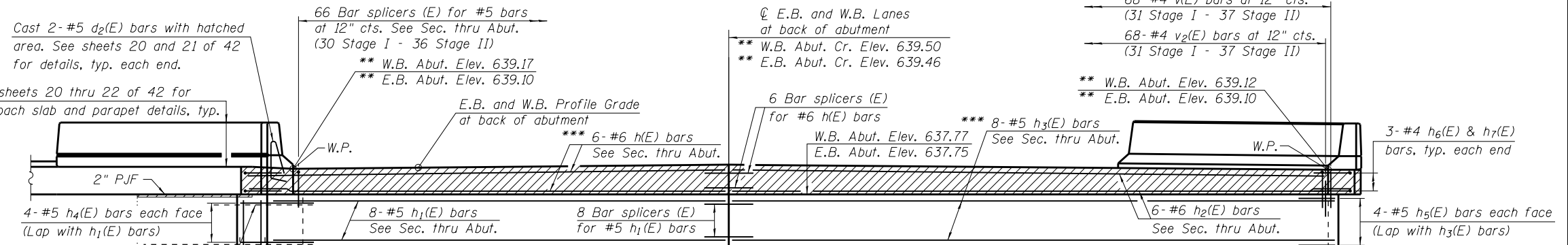
ABUTMENT CONSTRUCTION DETAILS  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)

SHEET NO. 29 OF 42 SHEETS

F.A.I. RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	125
CONTRACT NO. 72H51				

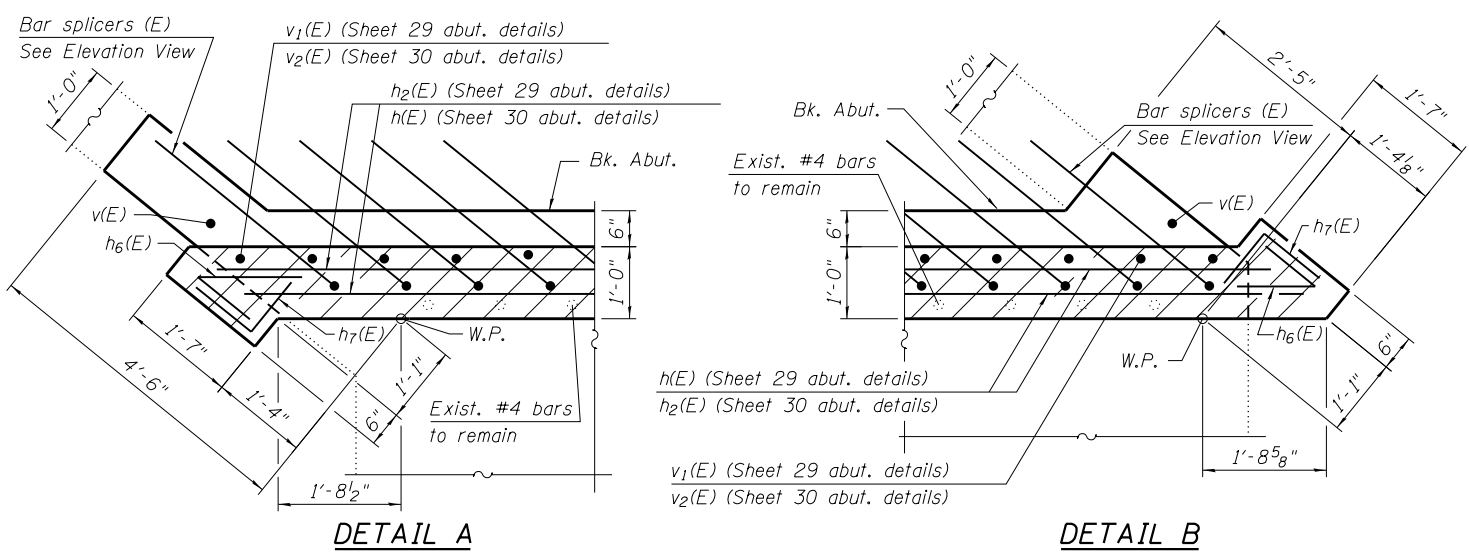
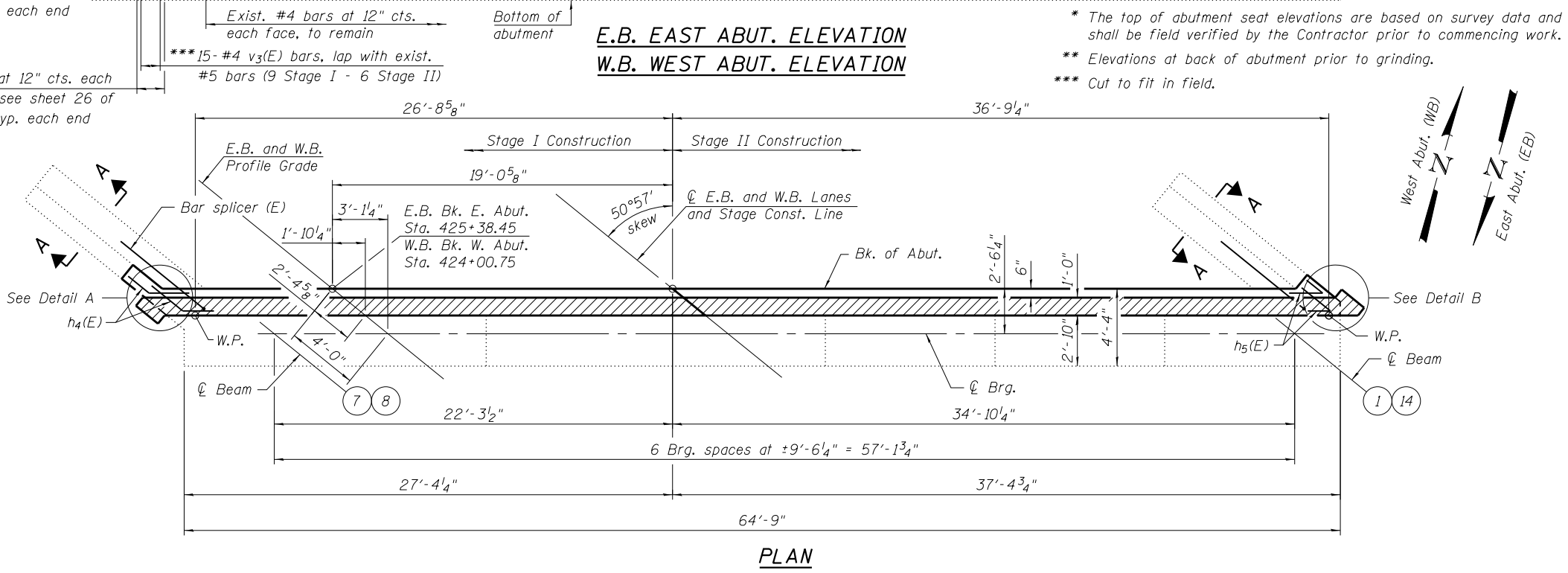
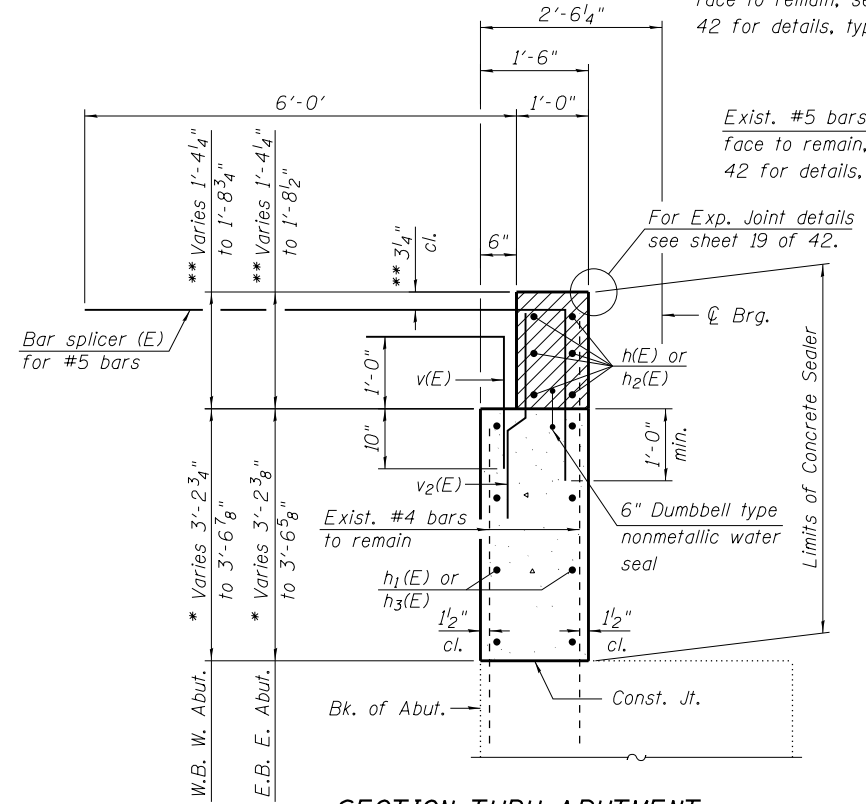
ILLINOIS FED. AID PROJECT

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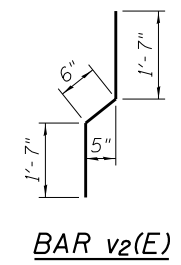
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E.B. Abut. Elev. 634.31 *	E.B. Abut. Elev. 634.50 *	E.B. Abut. Elev. 634.55 *	E.B. Abut. Elev. 634.44 *	E.B. Abut. Elev. 634.33 *	E.B. Abut. Elev. 634.20 *

\* The top of abutment seat elevations are based on survey data and shall be field verified by the Contractor prior to commencing work.  
 \*\* Elevations at back of abutment prior to grinding.  
 \*\*\* Cut to fit in field.



**Notes:**

- Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructures.
- See sheets 20 thru 22 of 42 for approach slab, parapet details, and bill of material.
- For details of bar splicers, see sheet 32 of 42.
- See sheets 24 and 25 of 42 for anchor bolt layout.
- See sheet 29 of 42 for Typical Wingwall Elevation, Section A-A, and bar bend details not shown.



**TWO ABUTMENTS**  
**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	12	#6	30'-8"	—
h1(E)	16	#5	29'-10"	—
h2(E)	12	#6	37'-0"	—
h3(E)	16	#5	36'-2"	—
h4(E)	16	#5	3'-5"	—
h5(E)	16	#5	3'-5"	—
h6(E)	12	#4	3'-7"	—
h7(E)	12	#4	2'-6"	—
v(E)	136	#4	3'-9"	—
v2(E)	136	#4	3'-8"	—
v3(E)	30	#4	3'-0"	—
Structure Excavation			Cu. Yd.	77
Concrete Structures			Cu. Yd.	25.4
Reinforcement Bars, Epoxy Coated			Pound	3,220
Bar Splicers			Each	160
Concrete Sealer			Sq. Ft.	649



USER NAME = dheberling	DESIGNED - BRD	REVISED
MODEL = 0840127_28-72H51-030	CHECKED - SBC	REVISED
PLOT SCALE = 0:2.000000" = 1/4"	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - SBC	REVISED

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**ABUTMENT CONSTRUCTION DETAILS**  
**STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)**

SHEET NO. 30 OF 42 SHEETS

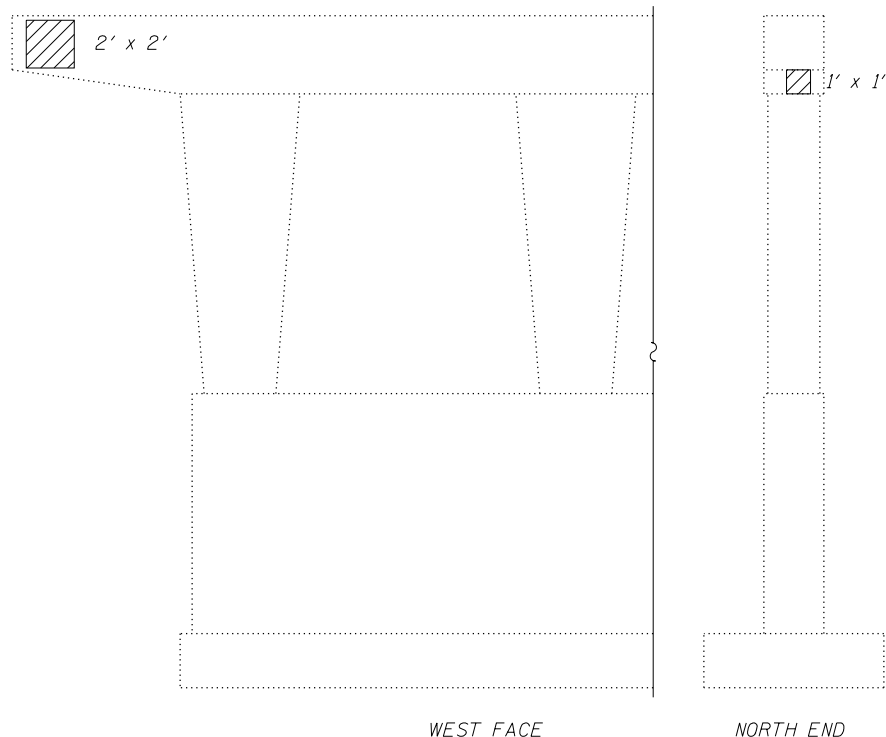
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	126

CONTRACT NO. 72H51

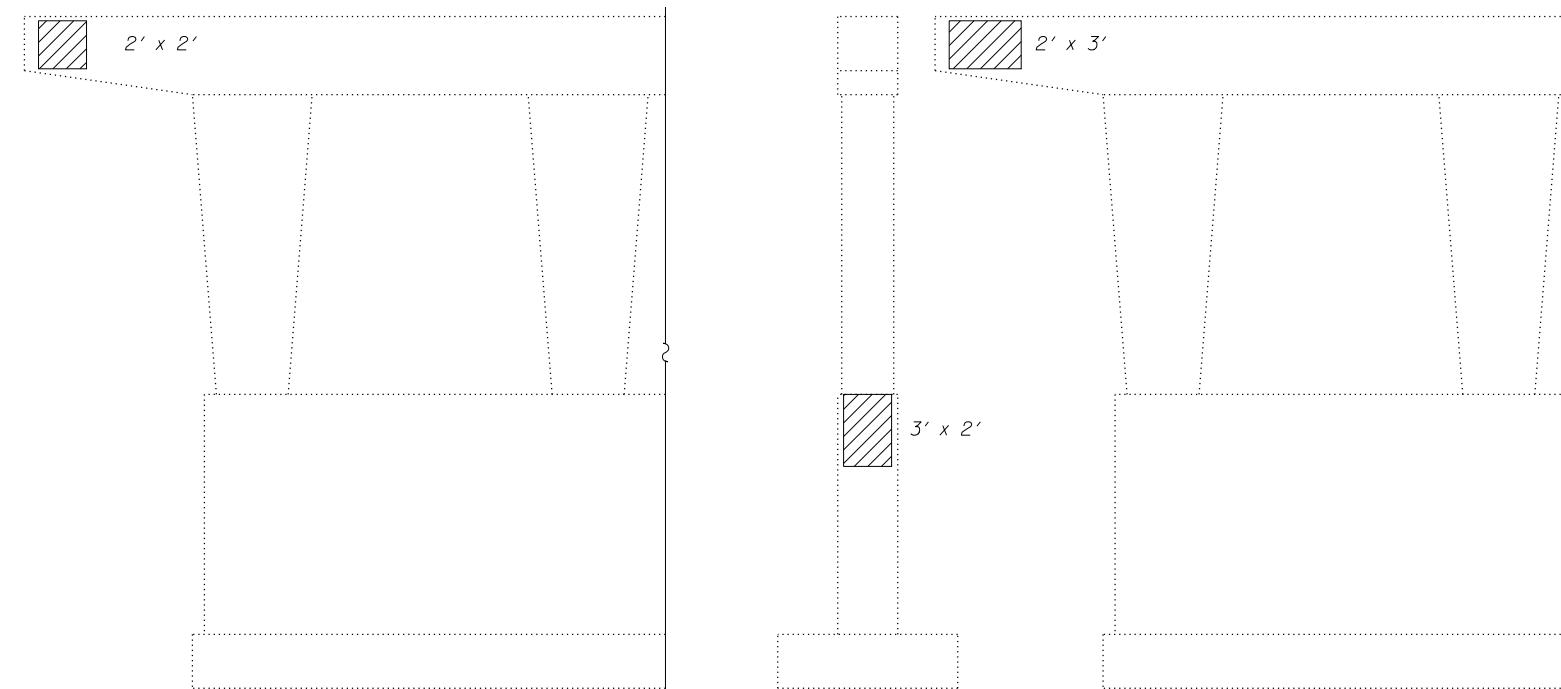
ILLINOIS FED. AID PROJECT



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**E.B. PIER 1**



**W.B. PIER 1**

**PIER REPAIR DETAILS**

**W.B. PIER 2**

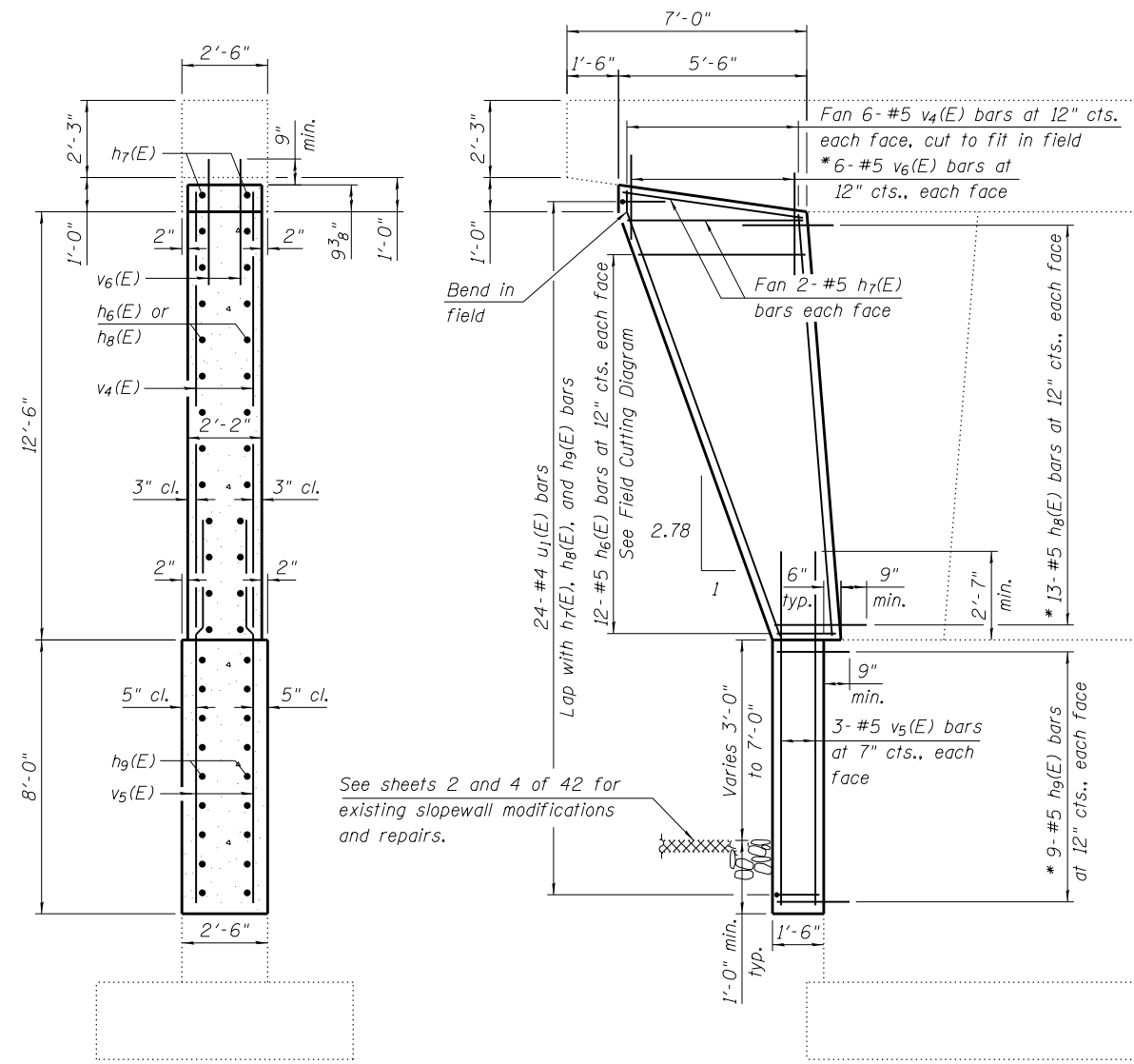
**PIER REPAIR DETAILS**

**THREE PIERS REPAIR  
BILL OF MATERIAL**

Item	Unit	Total
Structural Repair of Concrete (Depth equal to or less than 5 inches)	Sq. Ft.	21

**LEGEND**

Limits of Structural Repair of Concrete  
(Depth equal to or less than 5 inches)



**END VIEW**

**PIER STRENGTHENING DETAILS**

**ELEVATION**

(Typical at each end of each pier.)

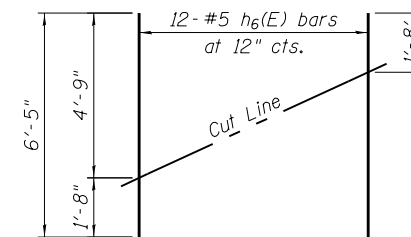
\* Drill and grout #5 bars according to Article 584 of the Standard Specifications into 9" min. deep drilled holes with 4" min. clear cover in the existing pier. Contractor shall make efforts to locate and miss existing reinforcement bars. Minor adjustments in proposed bar locations are permitted. Cost included with Reinforcement Bars, Epoxy Coated.

**Notes:**

1. Pier strengthening shall be completed prior to establishing the Stage I Traffic lane shown on sheet 3 of 42.
2. See sheet 41 of 42 for details and dimensions not shown.
3. Concrete repairs for the pier caps shall not commence until adjacent pier strengthening is complete.

**FOUR PIERS STRENGTHENING  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h6(E)	96	#5	6'-5"	—
h7(E)	32	#5	5'-2"	—
h8(E)	208	#5	2'-7"	—
h9(E)	144	#5	2'-1"	—
u1(E)	192	#4	3'-10"	⊔
v4(E)	96	#5	13'-9"	—
v5(E)	48	#5	10'-7"	—
v6(E)	96	#5	3'-6"	—
Structure Excavation			Cu. Yd.	29
Concrete Structures			Cu. Yd.	40.7
Reinforcement Bars, Epoxy Coated			Pound	4,440



**FIELD CUTTING DIAGRAM**

Order h6(E) full length. Cut as shown and use remainder of bars in opposite face.

**BAR u1(E)**

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

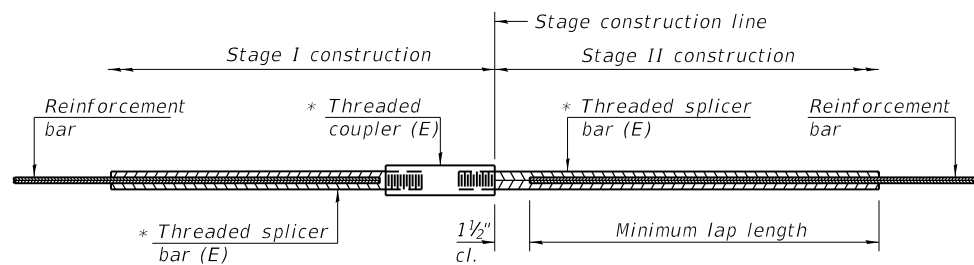
**PIER STRENGTHENING AND REPAIR DETAILS  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)**

SHEET NO. 31 OF 42 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	127
				CONTRACT NO. 72H51

ILLINOIS FED. AID PROJECT

USER NAME = dheberling	DESIGNED - BRD	REVISED
MODEL = 0840127_28-72H51-031	CHECKED - SBC	REVISED
PLOT SCALE = 0:2,000000' : 1 in.	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - SBC	REVISED

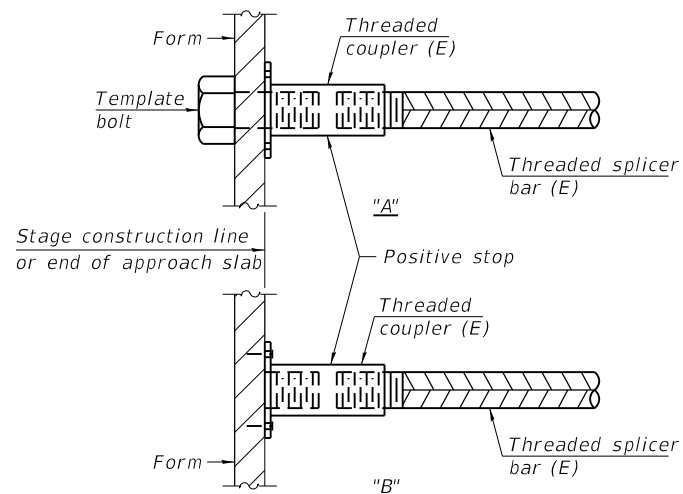


**STANDARD BAR SPLICER ASSEMBLY**

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

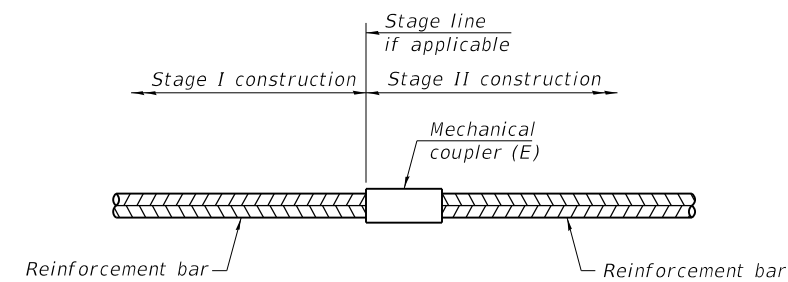
\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Bridge Decks	#5	1,118	2'-7"
Approach Slab	#5	184	2'-11"
Approach Slab	#8	244	5'-5"
Approach Footing	#5	160	2'-7"
Abutment	#5	32	3'-3"
Abutment	#6	24	3'-10"



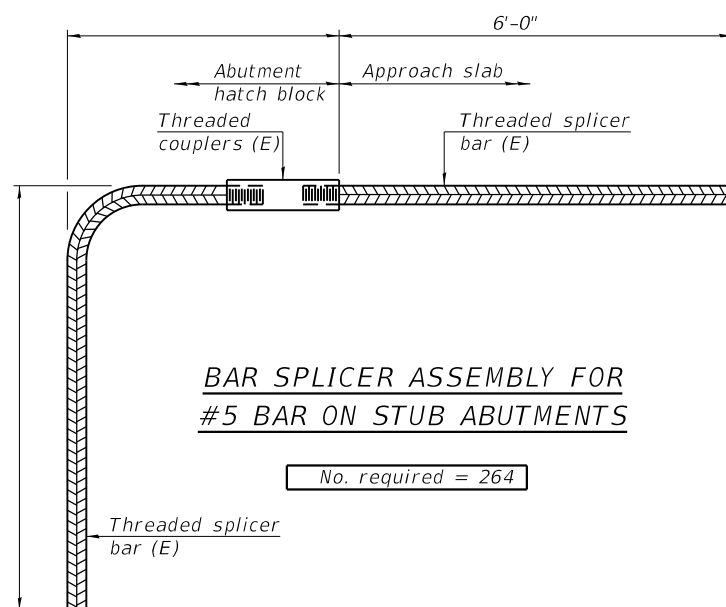
**INSTALLATION AND SETTING METHODS**

"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



**BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS**

No. required = 264

**Notes:**

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

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BSD-1

2-17-2017

Design firm  
no. 184001036



USER NAME = dheberling	DESIGNED - BRD	REVISED
MODEL = 0840127_28-72H51-032	CHECKED - SBC	REVISED
PLOT SCALE = 0:2,000000' : 1 in.	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - SBC	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)

SHEET NO. 32 OF 42 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	128
CONTRACT NO. 72H51				

ILLINOIS FED. AID PROJECT

B.M. # 6A R.R. Spike in tel. pole 134' Rt  
Sta. 422.59 Elev. 614.01

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. /
196	IVB	SANGAMON	50	8	16 SHEETS

FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT- FG-277(10)

**GENERAL NOTES**

Coarse aggregate to be used in parapet handrails and end post must be free of chert, flint, limonite, lignite and soft sandstone.  
The concrete floor slab shall be finished in accordance with Art. 5119 of the Standard Specifications.  
Slope Wall shall be reinforced with welded wire fabric 6"x6" mesh, weighing 58# per 100 Sq. Ft.  
All reinforcement bars shall be lapped 20 diameters unless otherwise shown.  
All structural steel shall conform to A.S.T.M. Designation A-36

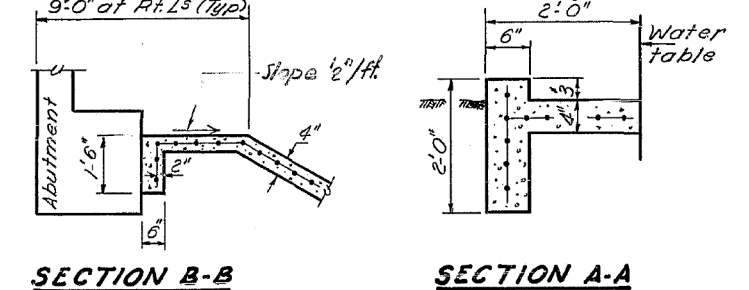
Anchor bolts shall be set before fastening diaphragm over supports. Rivets 3/4" Open Holes 1 1/16" unless otherwise noted.  
Exposed surfaces of the expansion devices, inaccessible after erection, shall receive two shop coats of red lead paint. All other surfaces shall be given one shop coat of red lead paint. Anchor studs shall not be painted.  
Expansion devices are included in the quantity of structural steel. Estimated Wt. = 7600 Lbs.  
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 4 steel test piles (Alt. A) one each at W. Abut. So. Bridge, E. Abut. No. Bridge, Pier 1 No. Bridge, and Pier 2 So. Bridge, all in permanent locations as directed by the engineer before ordering the remaining piles.  
For drilled piles and pile load test (Alt. B) see special provisions. Permanent forms will not be permitted in forming the concrete floor.

FIELD WELDING OF CONSTRUCTION ACCESSORIES TO THE BOTTOM FLANGES OR FOR A DISTANCE OF 1/4 OF THE SPAN EACH WAY FROM PIER SUPPORTS ON THE TOP FLANGES OF BEAMS OR GIRDERS WILL NOT BE PERMITTED. FIELD WELDING IN OTHER AREAS WILL BE PERMITTED ONLY WHEN APPROVED BY THE ENGINEER.

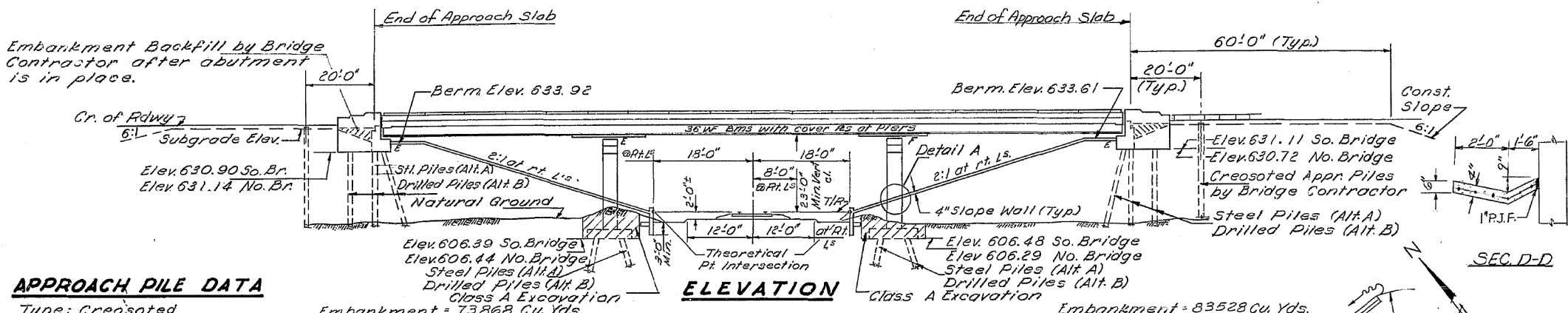
**TOTAL BILL OF MATERIAL**

Item	Unit	Super	Sub	Total
Class A Excav. For Structures	Cu. Yds.		400	400
Class X Concrete	Cu. Yds.	567.5	830.7	1398.2
Protective Coat	Sq. Yds.	1170		1170
Structural Steel	Lbs.	540420		540420
Aluminum Handrail	Lin. Ft.	876		876
Reinforcement Bars	Lbs.	157950	80060	238010
Creosoted Piles (20.1' to 38')	Lin. Ft.		864	864
Bridge Seat Sealant	L. S.			1
Steel Piles (8BP36) (Alt. A)	Lin. Ft.		6692	6692
Test Piles Steel (8BP36) (Alt. A)	Each			4
Name Plates	Each			2
Slope Wall (4")	Sq. Yds.			2500
Drilled Piles (Alt. B)	Lin. Ft.		6164	6164
Pile Load Test (Alt. B)	Each			1

Note: Protective Coat includes application on inside vertical face, top and exposed end of the abutment wings.  
Sub-structure includes retaining wall.  
Bridge Seat Sealant is at abutments only 9'-0" at Rt. Ls (Typ)



**GENERAL PLAN & ELEVATION**  
PROJ. FG-277 (10)  
F.A. RT. 196 OVER N.E.W. RWY  
SANGAMON COUNTY  
STATION 424+68.85

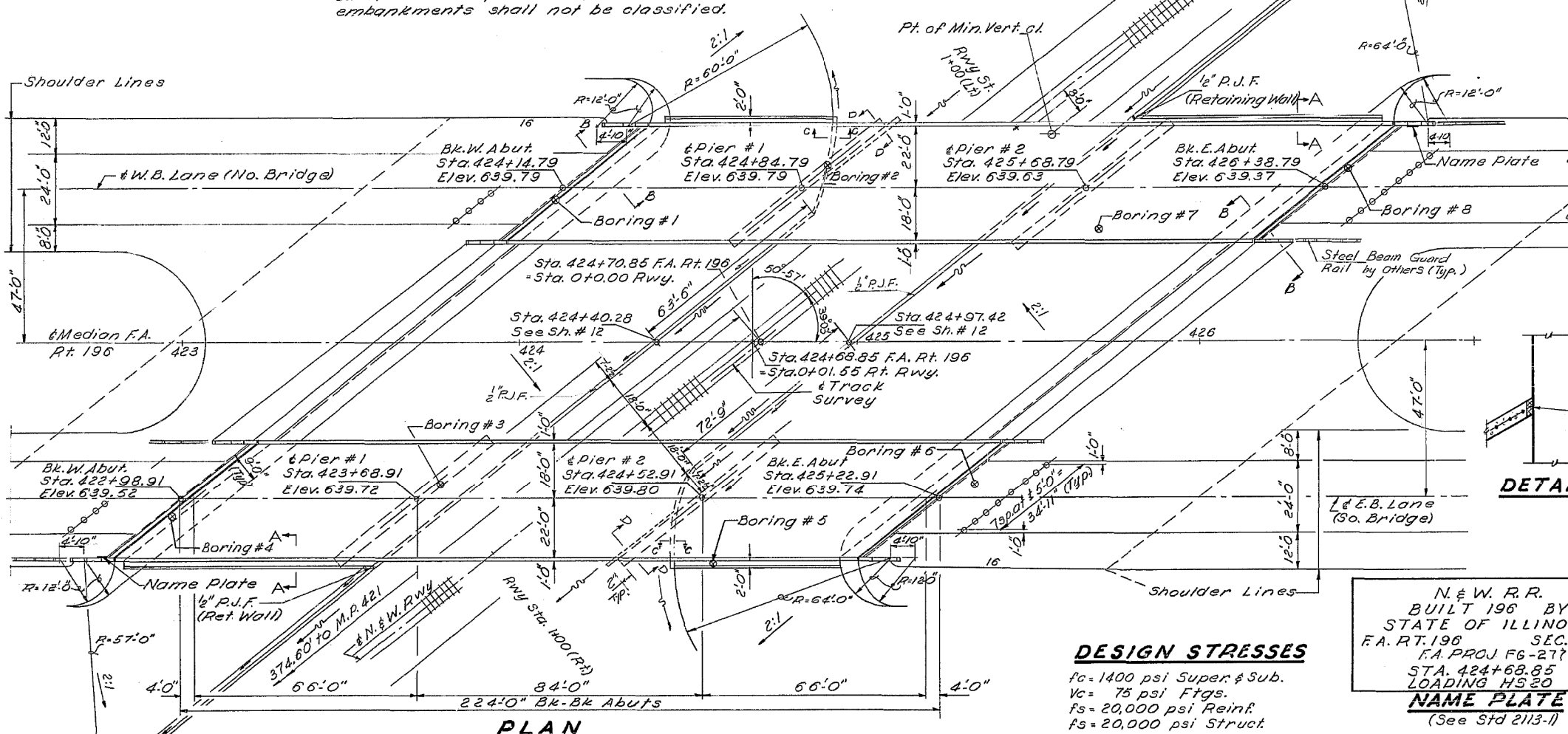


**APPROACH PILE DATA**

Type: Creosoted  
Req'd Length: 27'-0"  
No. Req'd: 32

Embankment = 73868 Cu. Yds.

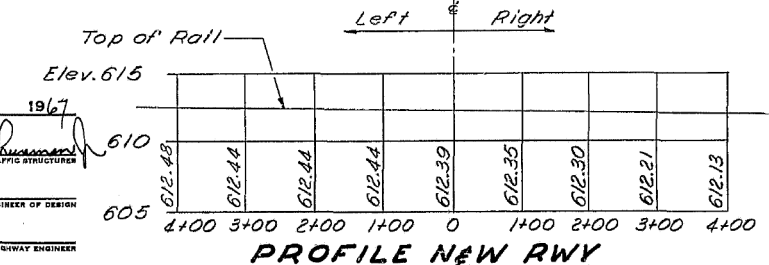
Note: Excavations for portions of structures in the embankments shall not be classified.



Note: For Retaining Wall Details see Sh. #12

DESIGNED: Stanley S. Lin  
CHECKED: J. Engen  
DRAWN: J. Kessler  
CHECKED: S.E.

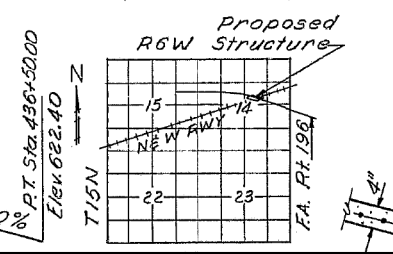
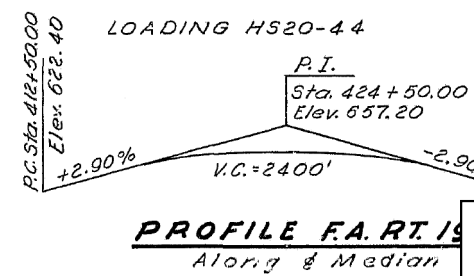
EXAMINED: [Signature]  
PASSED: [Signature]  
APPROVED: [Signature]



**DESIGN STRESSES**

$f_c = 1400$  psi Super & Sub.  
 $f_v = 75$  psi Ftgs.  
 $f_s = 20,000$  psi Reinf.  
 $f_s = 20,000$  psi Struct.  
 $n = 10$   
 $\delta$  Deflection =  $\frac{1}{1000}$

N.E.W. R.R.  
BUILT 196 BY  
STATE OF ILLINOIS  
F.A. RT. 196 SEC. IVB  
F.A. PROJ. FG-277 (10)  
STA. 424+68.85  
LOADING HS20  
NAME PLATE  
(See Std 2113-1)



**FOR INFORMATION ONLY**

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	129

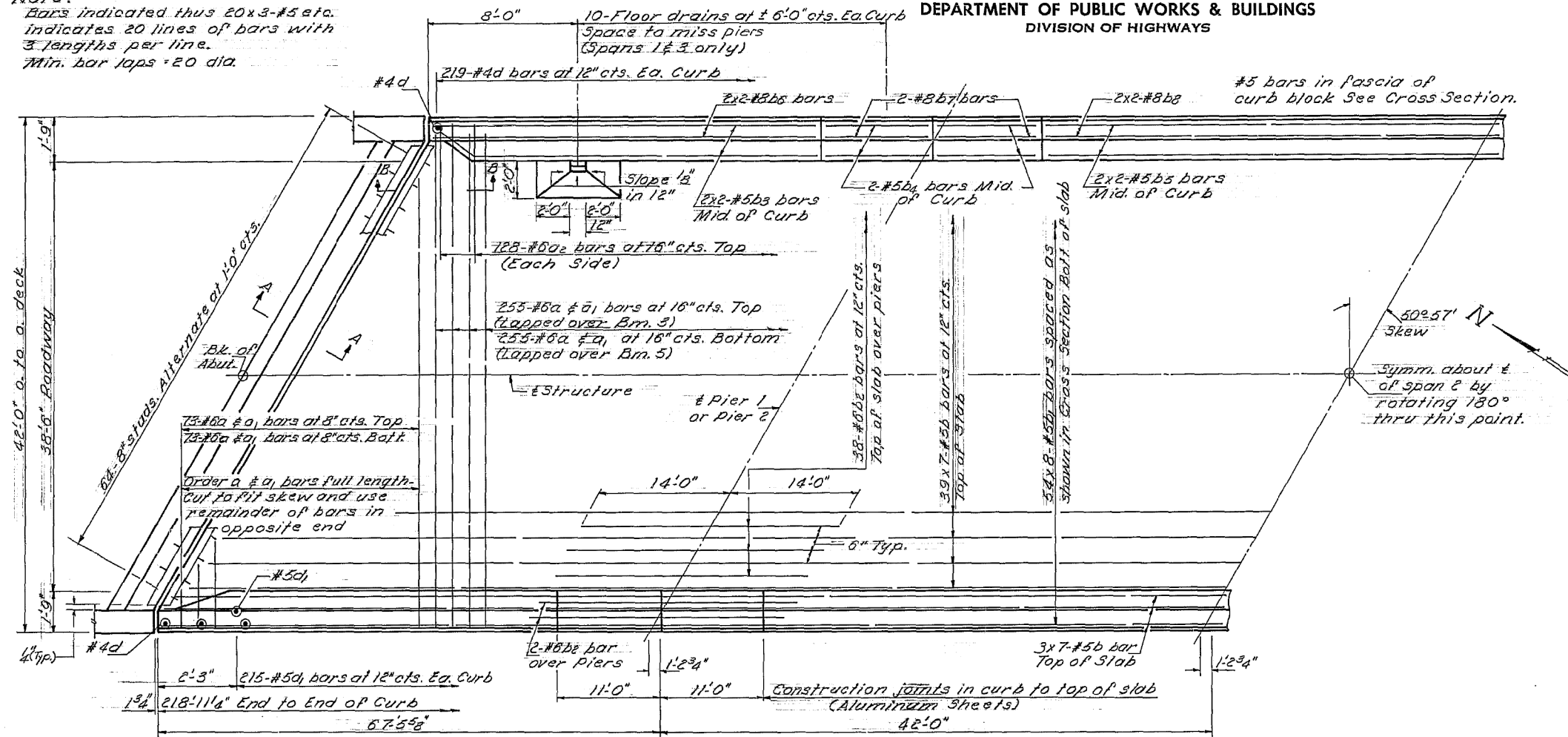
CONTRACT NO. 72H51

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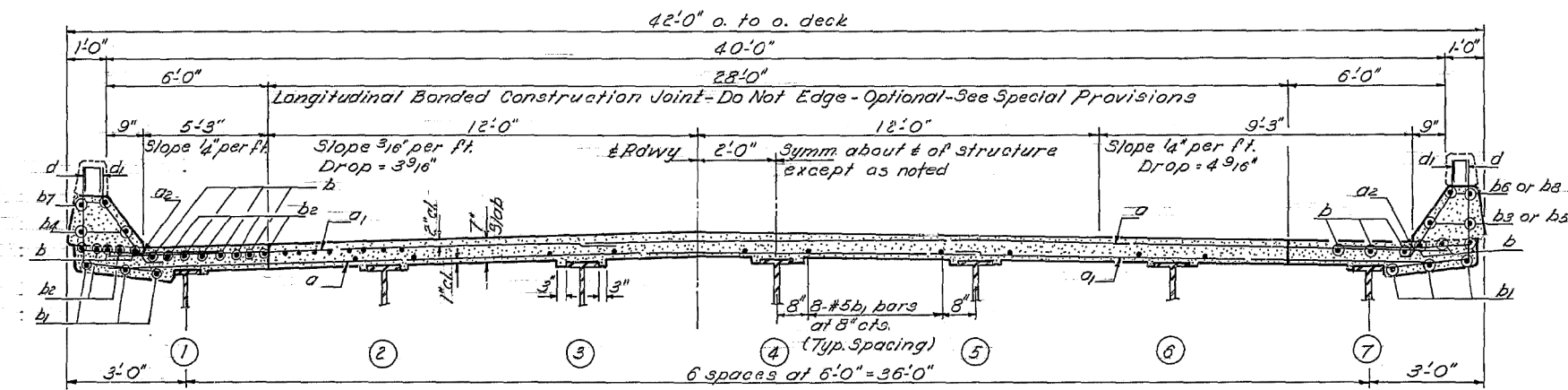


USER NAME = dheberling	DESIGNED - BRD	REVISED
MODEL = 0840127_28-72H51-033	CHECKED - SBC	REVISED
PLOT SCALE = 0:2.00000" = 1"	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - SBC	REVISED

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



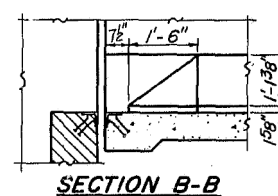
HALF PLAN



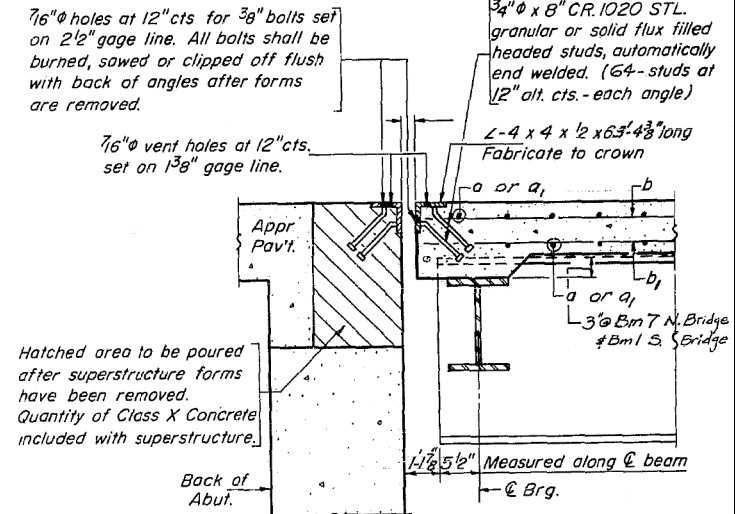
CROSS SECTION

North Bridge Looking West  
South Bridge Looking East

DESIGNED	S. Lin	EXAMINED	19
CHECKED	John W. Clark Jr.	PASSED	ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
DRAWN	J. Kessler	APPROVED	ENGINEER OF DESIGN
CHECKED	John W. Clark Jr.		CHIEF HIGHWAY ENGINEER



SECTION B-B



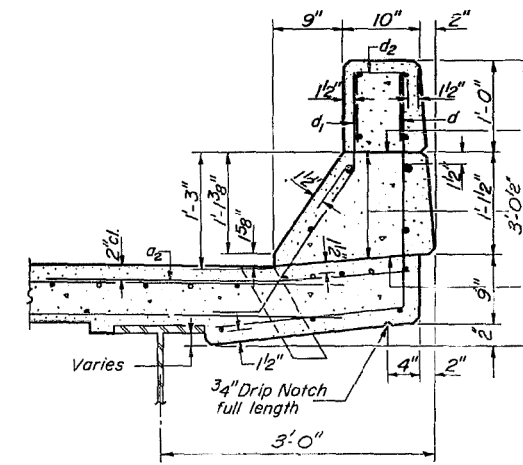
SECTION A-A

TWO BRIDGES  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	1312	#6	27'-9"	
a <sub>1</sub>	1312	#6	16'-0"	
a <sub>2</sub>	512	#6	4'-0"	
b	630	#5	32'-2"	
b <sub>1</sub>	864	#5	28'-4"	
b <sub>2</sub>	168	#6	28'-0"	
b <sub>3</sub>	32	#5	28'-8"	
b <sub>4</sub>	32	#5	10'-9"	
b <sub>5</sub>	16	#5	31'-5"	
b <sub>6</sub>	32	#8	29'-7"	
b <sub>7</sub>	32	#8	10'-9"	
b <sub>8</sub>	16	#8	31'-11"	
d	876	#4	4'-7"	
d <sub>1</sub>	860	#5	3'-5"	
Reinforcement Bars				Lbs. 155380
Structural Steel				Lbs. 540820
Class X Concrete				Cu. Yds. 539.1

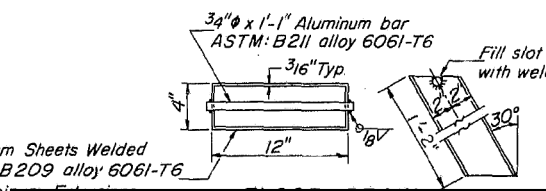
\* Weight of bearing assemblies with shim plates, lead plates, and anchor bolts are included as structural steel.  
Est. Wt. = 17,220 Lbs.

The lengths and quantities of reinforcement bars and Class X Concrete in parapets are not included in the above quantities. See sheet #7



CURB SECTION

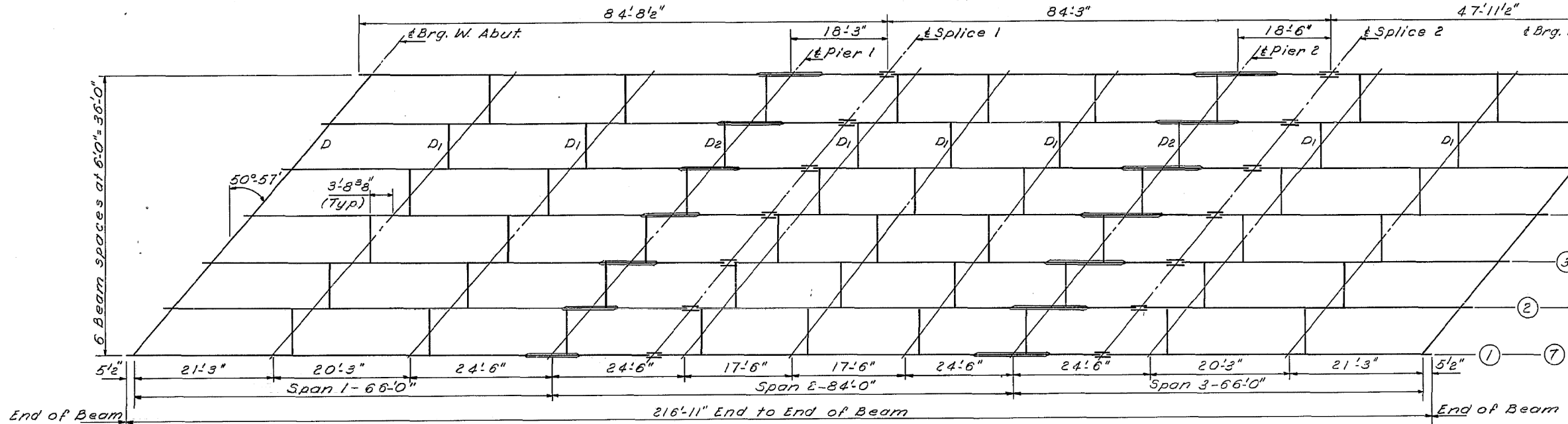
Cost of Aluminum Drains and Sheets shall be incidental to Class X Concrete



Aluminum Sheets Welded  
ASTM: B209 alloy 6061-T6  
or Alumi  
ASTM: B

FOR INFORMATION ONLY

SUPERSTRUCTURE  
NORTH & SOUTH BRIDGES  
F.A. RT. 196 SEC. IVB  
SANGAMON COUNTY  
STATION 424+68.85



**VALUE OF "t"**

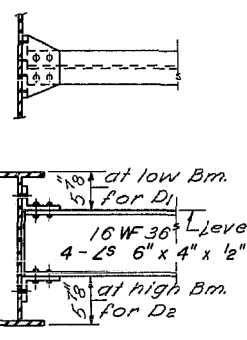
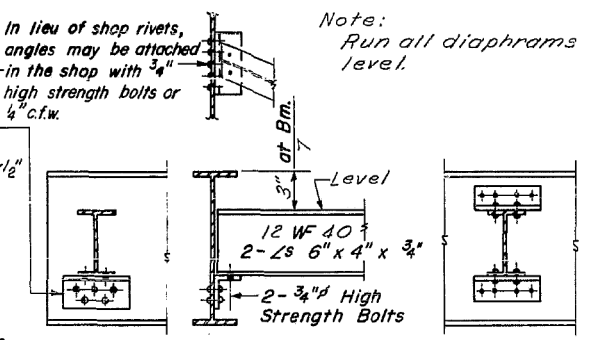
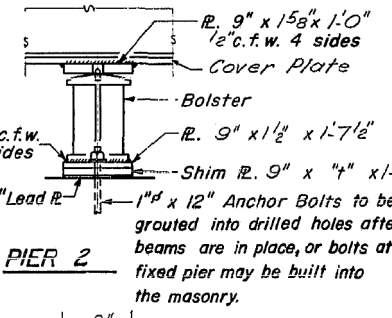
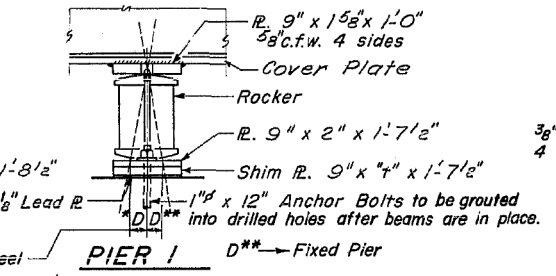
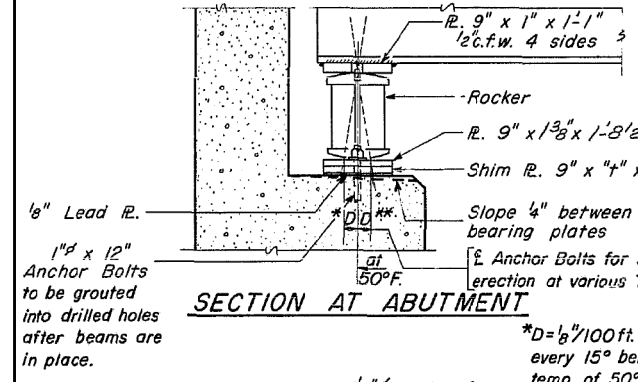
North Bridge

Location	Bm. 1	Bm. 2	Bm. 3	Bm. 4	Bm. 5	Bm. 6	Bm. 7
± Brg. W. Abut.	9' 1/8"	3' 8"	5' 1/8"	3' 4"	1' 2"	9' 1/8"	0"
± Brg. Pier 1	9' 1/8"	3' 8"	5' 1/8"	3' 4"	1' 2"	9' 1/8"	0"
± Brg. Pier 2	9' 1/8"	3' 8"	5' 1/8"	3' 4"	1' 2"	9' 1/8"	0"
± Brg. E. Abut.	9' 1/8"	3' 8"	5' 1/8"	3' 4"	1' 2"	9' 1/8"	0"

South Bridge

Location	Bm. 1	Bm. 2	Bm. 3	Bm. 4	Bm. 5	Bm. 6	Bm. 7
± Brg. W. Abut.	1' 1/8"	0"	1' 1/8"	9' 1/8"	1' 4"	5' 1/8"	0"
± Brg. Pier 1	1' 1/8"	0"	1' 1/8"	9' 1/8"	1' 4"	5' 1/8"	0"
± Brg. Pier 2	1' 1/8"	0"	1' 1/8"	9' 1/8"	1' 4"	5' 1/8"	0"
± Brg. E. Abut.	1' 1/8"	0"	1' 1/8"	9' 1/8"	1' 4"	5' 1/8"	0"

**PLAN**  
All beams are 36 W F 150 with cover plates  
(11" x 12" x 17'-0") at Piers 1 & 2



**STRESS TABLE**

Table of Moments & Reactions - Int. Bms.

	Moments				Reactions		
	4 Sp. 1	Pier 1/2	5 Sp. 2	W/E Abut. Pier 1/2			
D.L.	257	557	262	21.9	77.9		
L.L.	430	402	430	36.4	48.1		
Imp.	112	101	103	9.5	15.8		
Total	799	1060	795	67.8	141.8		

Bridge is symm. about # span 2.  
Moments are in ft kips.  
Reactions are in kips.

**\* ELEVATION TOP OF WF**

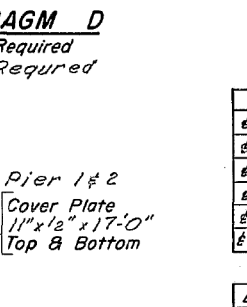
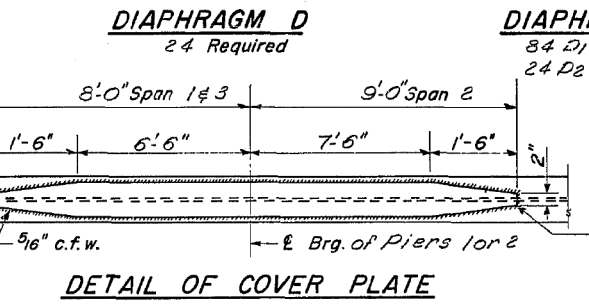
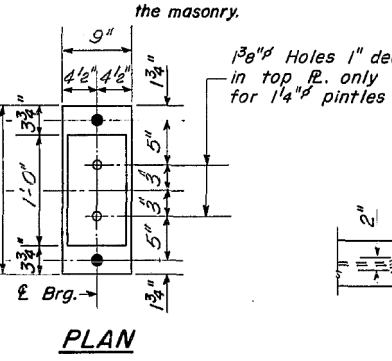
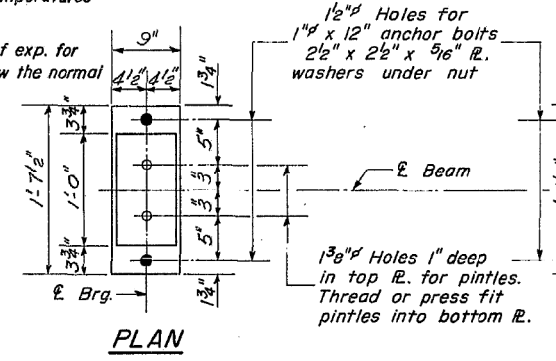
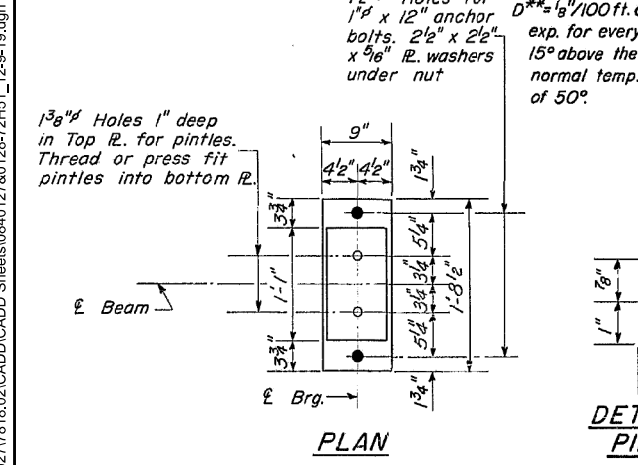
North Bridge

Location	Bm. 1	Bm. 2	Bm. 3	Bm. 4	Bm. 5	Bm. 6	Bm. 7
± Brg. W. Abut.	638.94	638.06	639.16	639.20	639.07	638.94	638.77
± Brg. Pier 1	638.88	639.00	639.10	639.14	639.01	638.88	638.71
± Splice 1	638.86	638.98	639.08	639.12	638.99	638.86	638.69
± Brg. Pier 2	638.70	638.82	638.92	638.96	638.83	638.70	638.53
± Splice 2	638.65	638.77	638.87	638.91	638.78	638.65	638.48
± Brg. E. Abut.	638.52	638.64	638.74	638.78	638.65	638.52	638.35

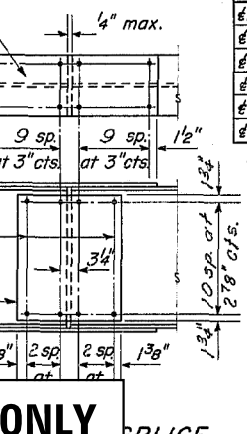
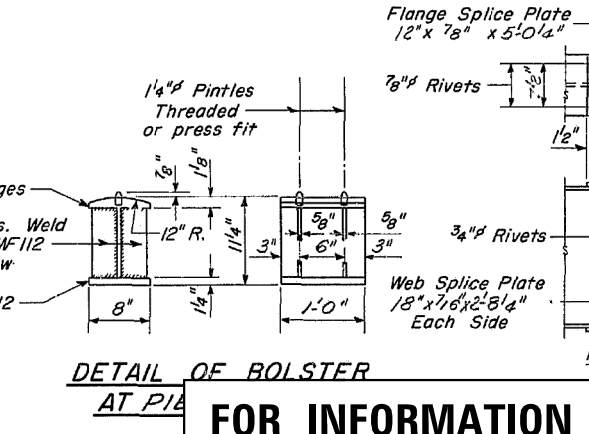
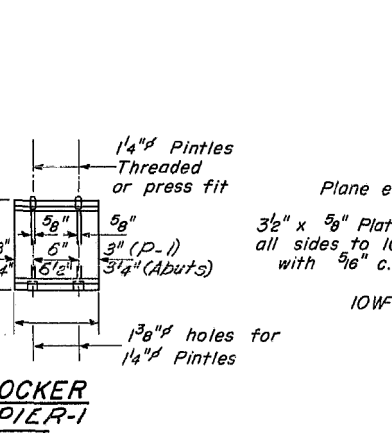
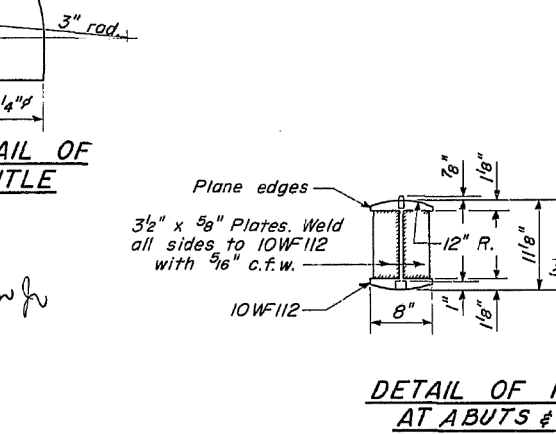
South Bridge

Location	Bm. 1	Bm. 2	Bm. 3	Bm. 4	Bm. 5	Bm. 6	Bm. 7
± Brg. W. Abut.	638.53	638.68	638.81	638.94	638.90	638.79	638.66
± Brg. Pier 1	638.66	638.81	638.94	639.07	639.03	638.92	638.79
± Splice 1	638.69	638.84	638.97	639.10	639.06	638.95	638.82
± Brg. Pier 2	638.72	638.87	639.00	639.13	639.09	638.98	638.85
± Splice 2	638.73	638.88	639.01	639.14	639.10	638.99	638.86
± Brg. E. Abut.	638.74	638.89	639.02	639.15	639.11	639.00	638.87

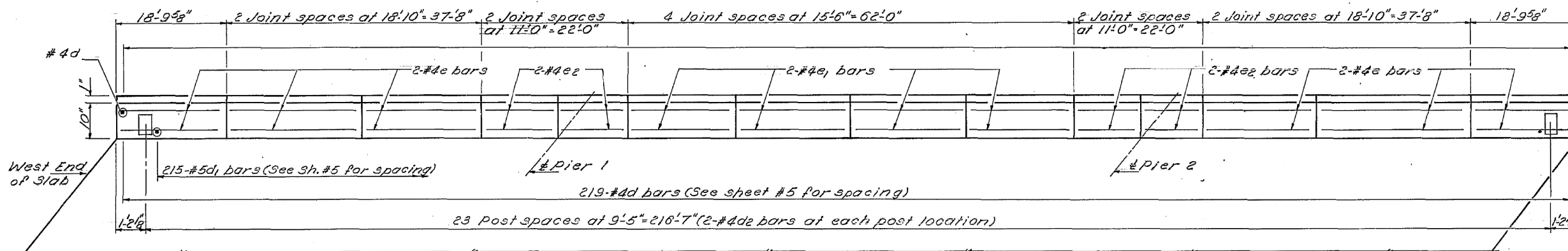
\*For fabrication only



DESIGNED: Stanley S. ...  
CHECKED: J. Engen  
DRAWN: W.A. Sauseman Jr.  
APPROVED: ...

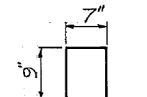


**STRUCTURAL STEEL**  
**NORTH & SOUTH BRIDGES**  
**F.A. RT. 196 SEC. 1VB**  
**SANGAMON COUNTY**  
**STATION 424+68.65**

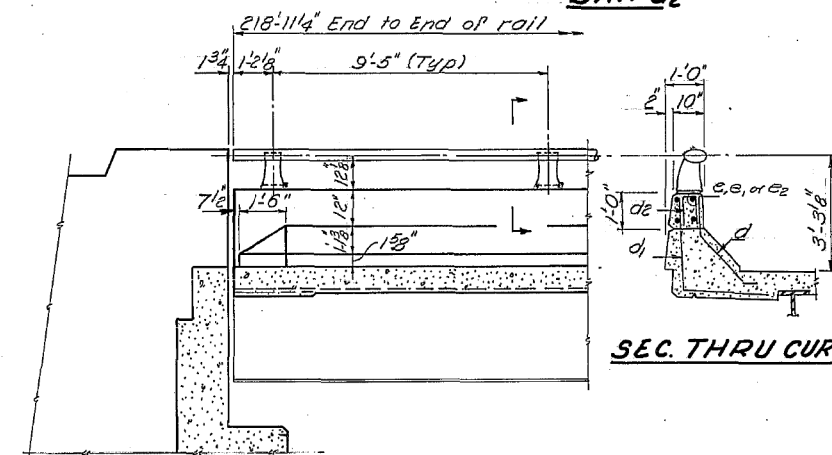


**HALF PLAN**

(North Parapet shown, South Parapet similar by rotation through 180°)

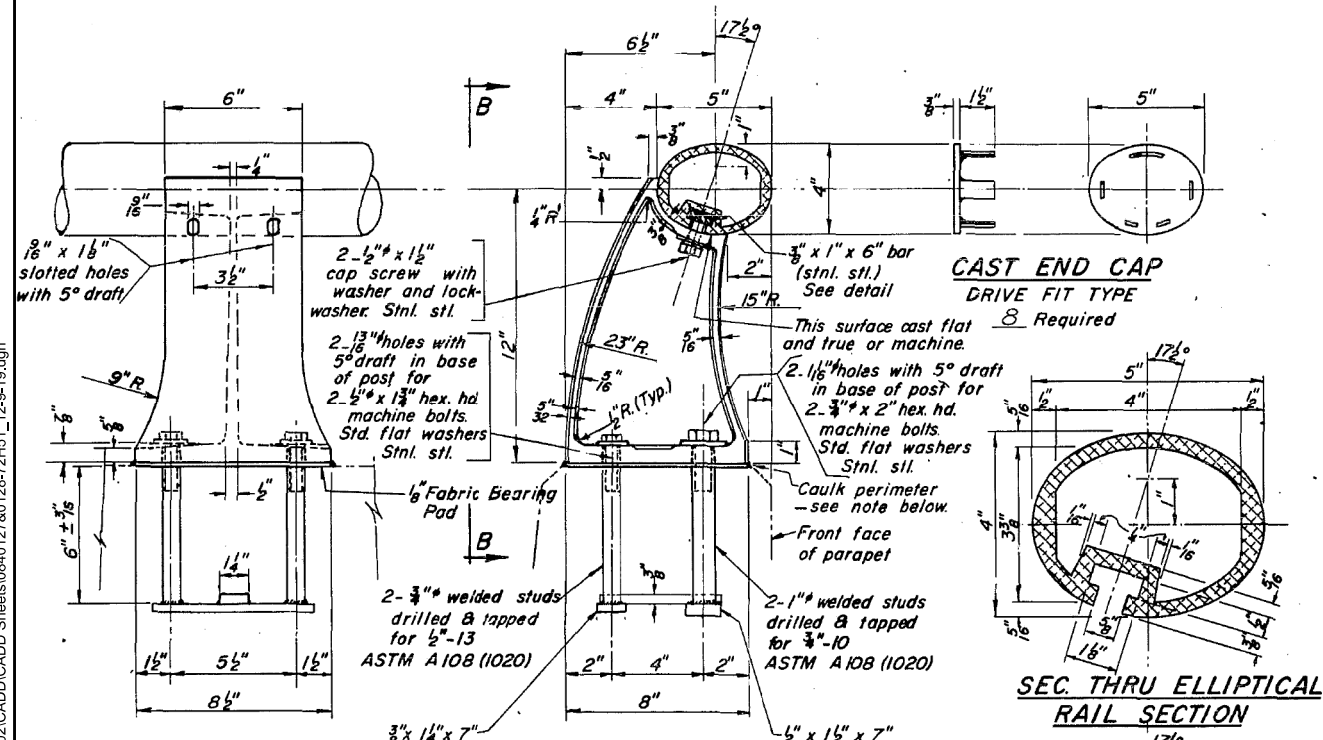


BAR d2

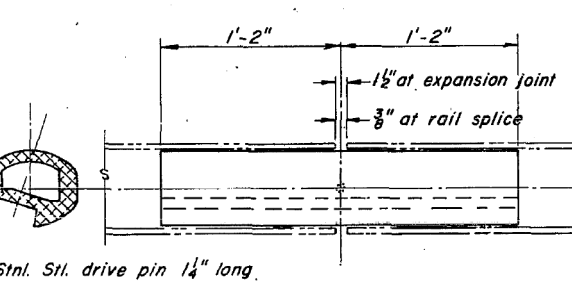


INSIDE VIEW AT ABUTMENT

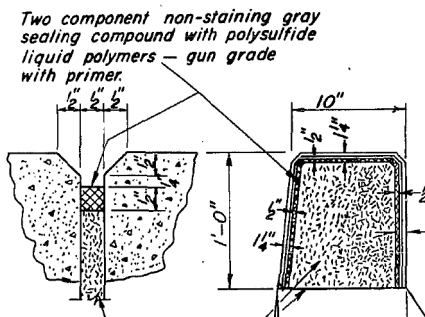
SEC. THRU CURB



RAIL POST DETAILS



RAIL SPLICE



PARAPET JOINT DETAIL

NOTES:

All Posts shall be normal to parapet.  
All Aluminum Alloy Extruded Rail shall conform to ASTM specification B-221 alloy 6061-T6 and shall be supplied in modular lengths of 30 feet, except at the end of bridge or over open joints in bridge deck where the rail shall be attached to a minimum of 2 posts. If the rail is on a horizontal curve of 2300 foot radius or less, the modular lengths may be reduced but shall be attached to a minimum of 2 posts.  
All joints in rail shall be spliced per detail.  
See Special Provisions for following Material Specifications:  
Cast Aluminum Alloy Bridge Post—Alloy A344-T4.  
Stainless Steel Bars, Cap Screws, Washers and Lockwashers.  
Fabric Bearing Pad.  
METHOD OF MEASUREMENT: Aluminum handrail shall be measured in lineal feet. The length paid for shall be the over all length along the top longitudinal railing member thru all posts and gaps.  
BASIS OF PAYMENT: Aluminum handrail shall be paid for at the contract unit price per lineal foot for ALUMINUM HANDRAIL, measured as specified, which price shall be payment in full for all materials, fabrication, transportation, and erection.  
Cost of rail splice, end caps, and hardware to be incidental to item ALUMINUM HANDRAIL.  
Provide 1 - 1/8" and 2 - 1/16" Aluminum Shims for 25 % of the Posts. Rail element shall be parallel to Grade—high spots shall be ground, and low spots shimmed.

**TWO BRIDGES  
PARAPETS & RAILS  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape		
e	96	#4	18'-6"	—		
e1	64	#4	15'-3"	—		
e2	64	#4	10'-9"	—		
e3	192	#4	2'-1"	—		
				Class X Concrete	Cu. Yds.	28.4
				Reinforcement Bars	Lbs	2570
				Aluminum Handrail	Lin. Ft.	876

**ALUMINUM HANDRAIL  
NORTH & SOUTH BRIDGES  
F.A. RT 196 SEC. IVB  
SANGAMON COUNTY  
STATION 424+68.85**

**FOR INFORMATION ONLY**

EXISTING PLANS  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)

SHEET NO. 36 OF 42 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	132

CONTRACT NO. 72H51  
ILLINOIS FED. AID PROJECT

FILE NAME = L:\Jobs\DOT\_D-6\7818 PTB 167-027\7818.02\CADD\CADD Sheets\0840127&0128-72H51\_12-9-19.dgn

DESIGNED	S Lin	19
CHECKED	John W. Clark	EXAMINED
DRAWN	Wm. M. Best	PASSED
CHECKED	John W. Clark	APPROVED

DESIGNER OF BRIDGE AND TRAFFIC STRUCTURES  
ENGINEER OF DESIGN  
CHIEF HIGHWAY ENGINEER

Note:  
Seal perimeter of base of post to parapet with two component non-staining gray sealing compound with polysulfide liquid polymers—gun grade with primer. Fabric Bearing Pad shall have same dimensions as base of post.

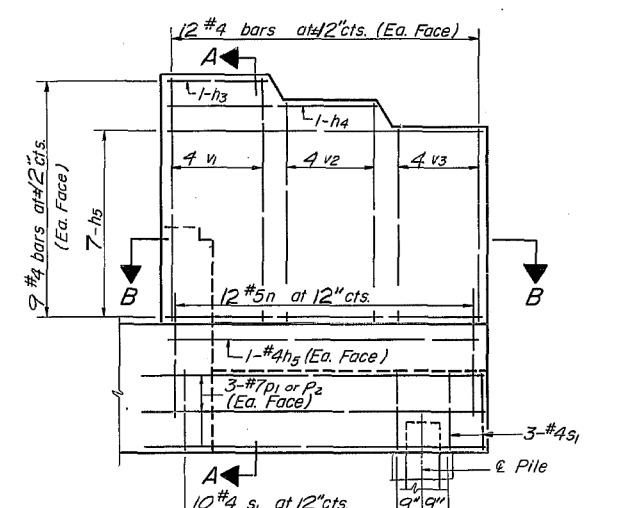
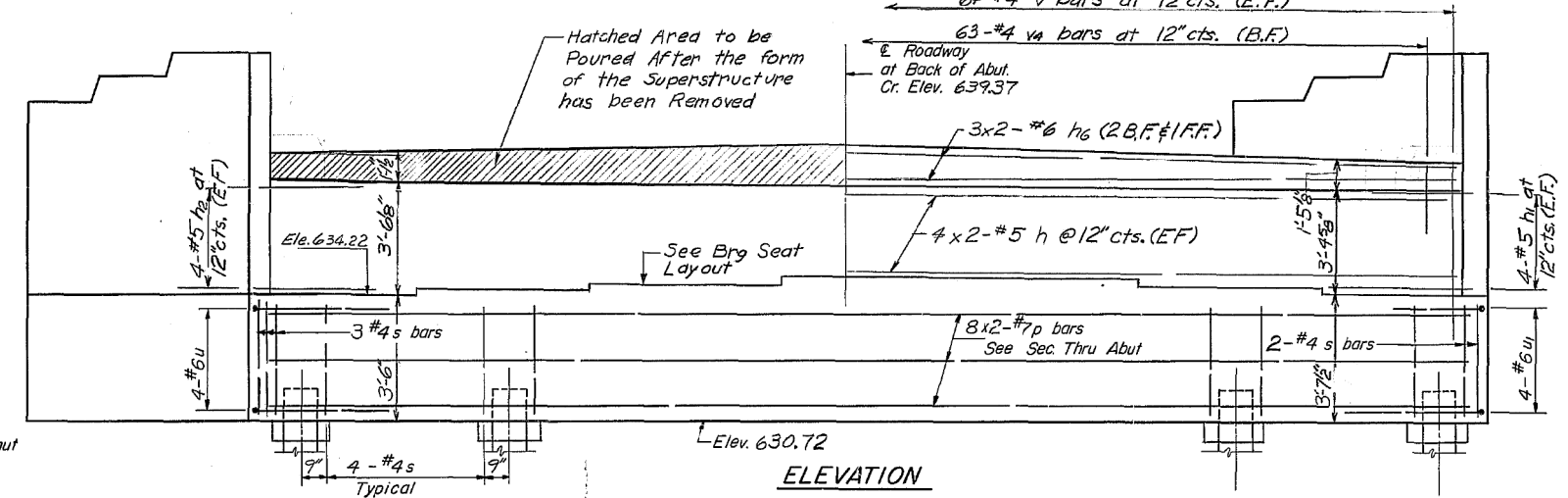
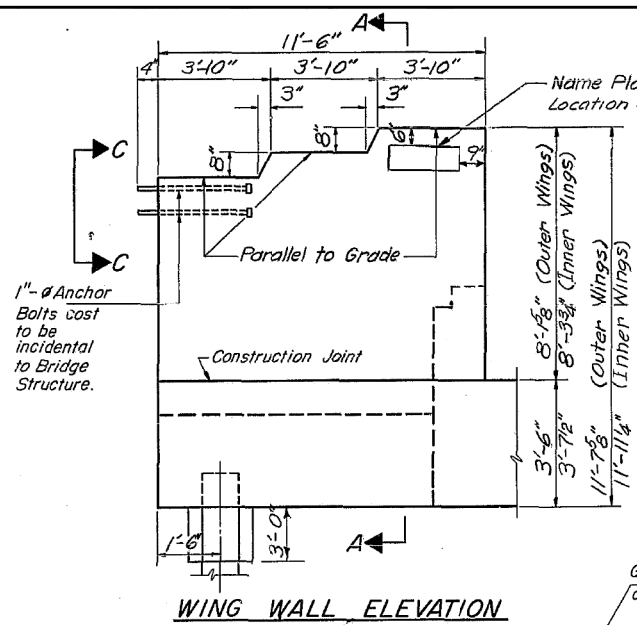
R-17 1-18-68



USER NAME = dheberling	DESIGNED - BRD	REVISED
MODEL = 0840127_28-72H51-036	CHECKED - SBC	REVISED
PLOT SCALE = 0:2,00000 : 1 in.	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - SBC	REVISED

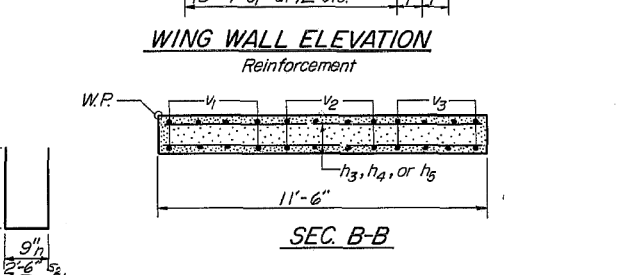
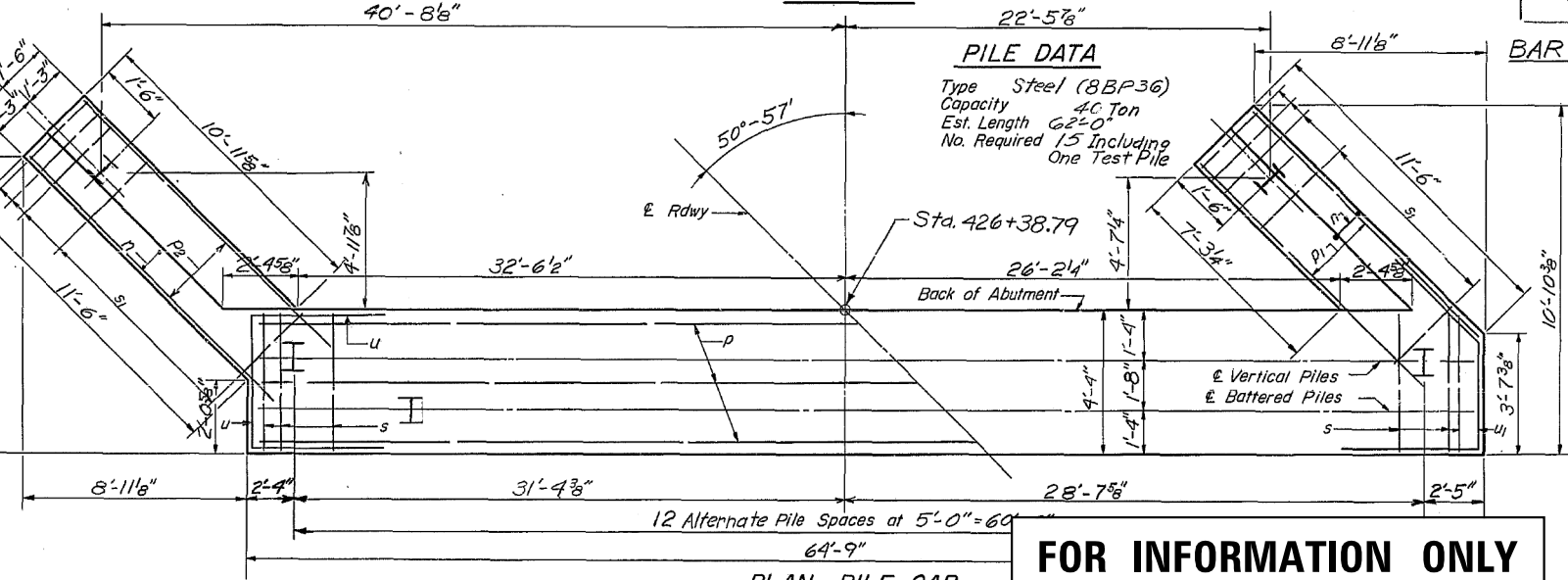
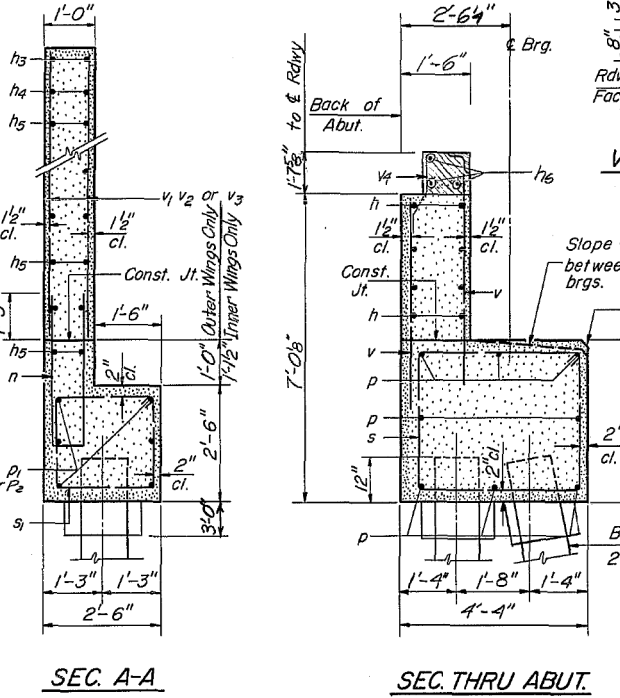
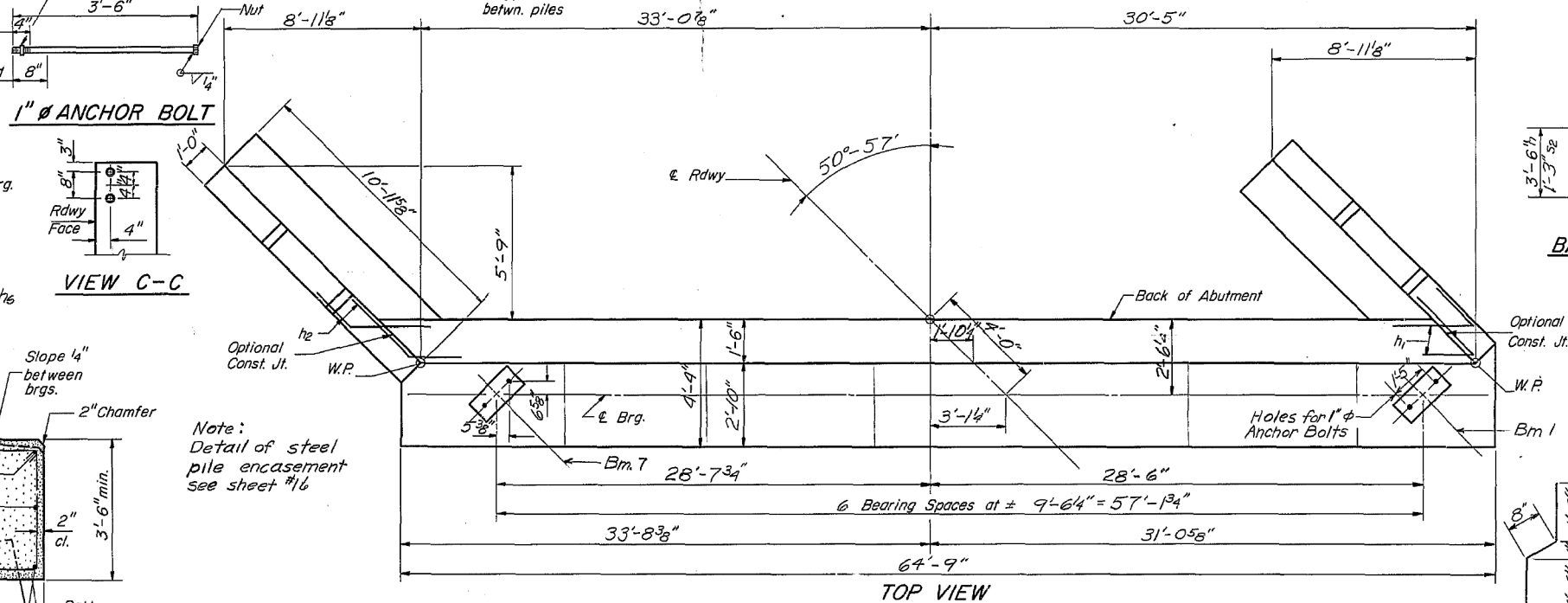
STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
196	IVB	SANGAMON	50	15
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		SHEET NO. 8
				16 SHEETS



BEARING SEAT ELEVATION

Bm. 1	Bm. 2	Bm. 3	Bm. 4	Bm. 5	Bm. 6	Bm. 7
634.35	634.48	634.58	634.58	634.48	634.35	634.22



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	16	#5	32'-4"	—
h1	8	#5	3'-5"	—
h2	8	#5	3'-5"	—
h3	4	#4	3'-7"	—
h4	4	#4	7'-5"	—
h5	32	#4	11'-3"	—
h6	6	#6	32'-5"	—
h7	6	#5	19'-6"	—
n	24	#5	7'-9"	—
p	16	#7	33'-0"	—
p1	6	#7	11'-3"	—
p2	6	#7	12'-6"	—
s	53	#4	15'-2"	—
s1	26	#4	9'-6"	—
s2	38	#4	5'-0"	—
u	4	#6	9'-11"	—
u1	4	#6	9'-4"	—
v	128	#4	6'-3"	—
v1	16	#4	8'-0"	—
v2	16	#4	7'-4"	—
v3	16	#4	6'-8"	—
v4	63	#4	3'-8"	—
Class X Concrete		Cu. Yds.	61.9	
Reinforcement Bars		Lbs.	4720	
Steel Piles (BB-36) At A		Lin. Ft.	868	
Test Piles Steel (BBP36) At A		Ea.	1	
Name Plate		Ea.	1	

DESIGNED Stanley S. Lin  
CHECKED J. Engey  
DRAWN S.G. Ferchow  
J.R. Boice  
MAY 9 1967  
EXAMINED Carl E. Thummarh  
PASSED  
APPROVED  
CHIEF HIGHWAY ENGINEER

PILE DATA  
Type Steel (8BP36)  
Capacity 40 Ton  
Est. Length 62'-0"  
No. Required 15 Including One Test Pile

FOR INFORMATION ONLY

NORTH BRIDGE E. ABUT.  
FA RT 196 SEC. IVB  
SANGAMON COUNTY  
STA. 424+68.85

A-9-L (35°-60°) 2-1-66



USER NAME = dheberling	DESIGNED - BRD	REVISED
MODEL = 0840127_28-72H51-037	CHECKED - SBC	REVISED
PLOT SCALE = 0:2.00000 "/>		

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	133
				CONTRACT NO. 72H51

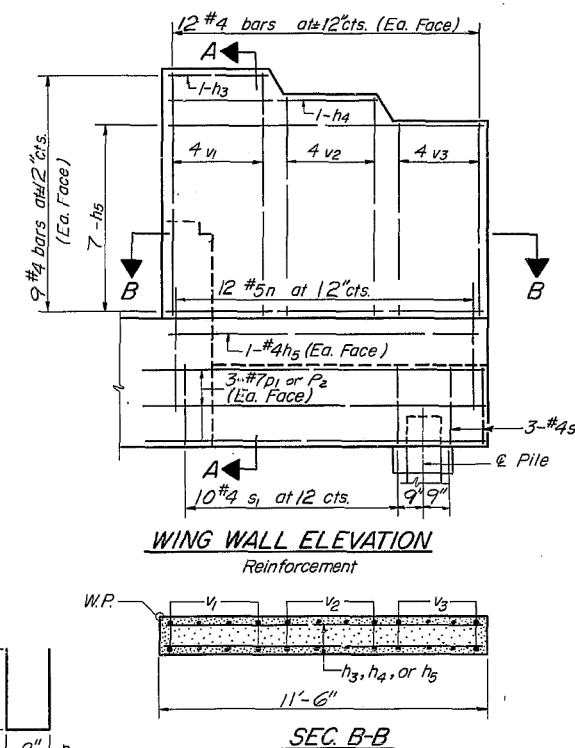
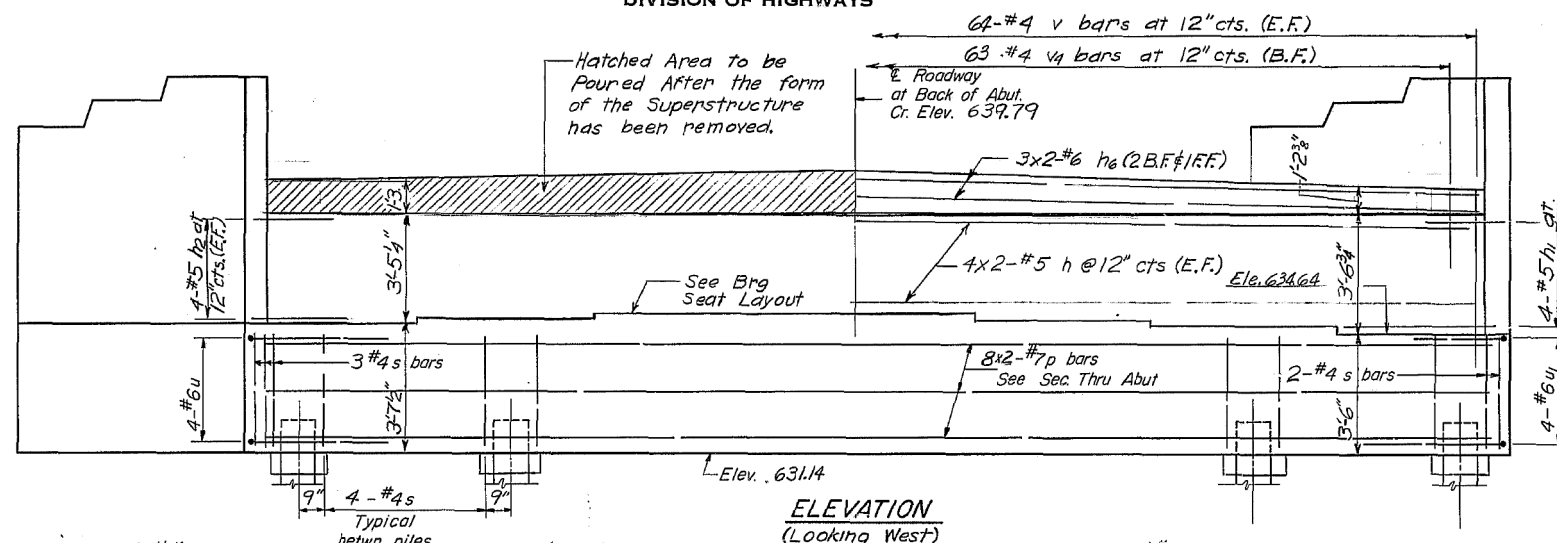
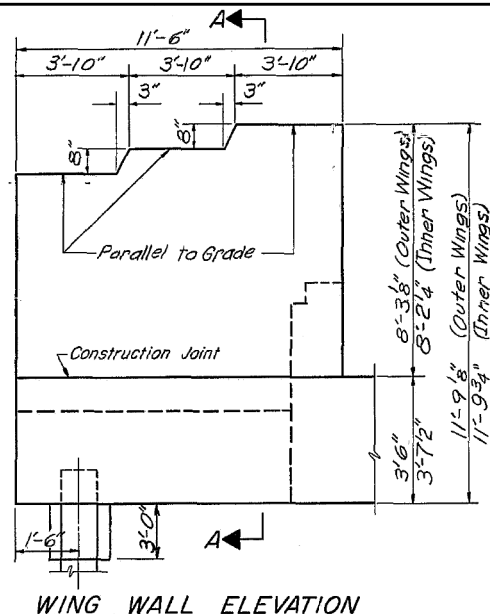
SHEET NO. 37 OF 42 SHEETS

ILLINOIS FED. AID PROJECT

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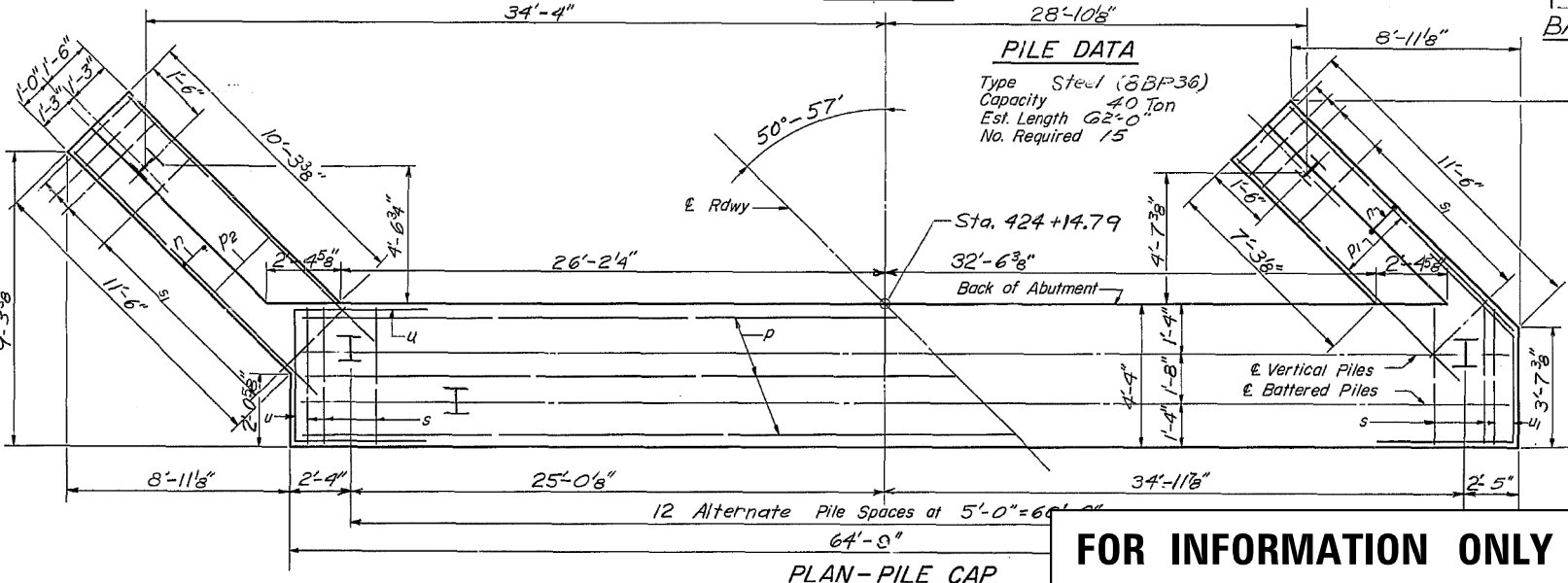
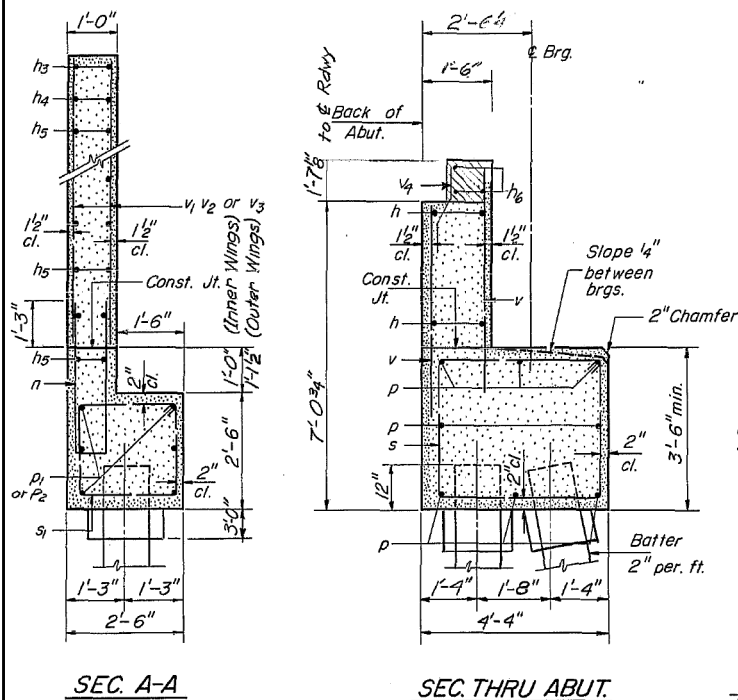
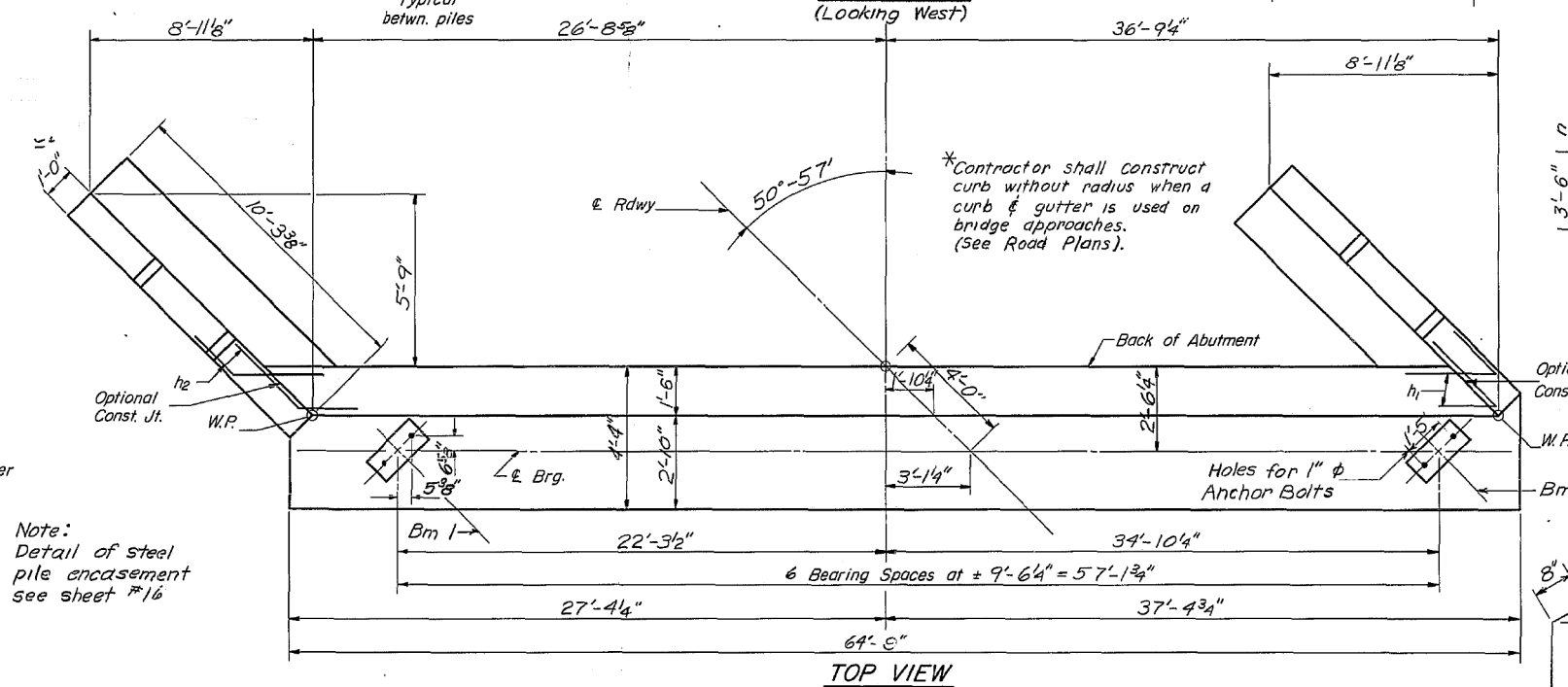
STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 7
196	1VB	SANGAMON	50	16	16 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT			



BEARING SEAT ELEVATION

Bm. 1	Bm. 2	Bm. 3	Bm. 4	Bm. 5	Bm. 6	Bm. 7
634.77	634.90	635.00	635.00	634.90	634.77	634.64



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	16	#5	32'-4"	—
h1	8	#5	3'-5"	┘
h2	8	#5	3'-5"	┘
h3	4	#4	3'-7"	—
h4	4	#4	7'-5"	—
h5	32	#4	11'-3"	—
h6	6	#6	32'-5"	—
h7	6	#5	19'-6"	—
n	24	#5	7'-9"	U
p	16	#7	33'-0"	—
p1	6	#7	11'-3"	—
p2	6	#7	12'-6"	—
s	53	#4	15'-2"	—
s1	26	#4	9'-6"	—
s2	38	#4	5'-0"	—
u	4	#6	9'-11"	—
u1	4	#6	9'-4"	—
v	128	#4	6'-3"	—
v1	16	#4	8'-0"	—
v2	16	#4	7'-4"	—
v3	16	#4	6'-8"	—
v4	63	#4	3'-8"	—
Class X Concrete			Cu. Yds.	61.9
Reinforcement Bars			Lbs.	4720
Steel Piles (8BP36) Alt. A			Lin. Ft.	930

DESIGNED *Stanley S. Linn*  
CHECKED *J. Engler*  
DRAWN *S.G. Ferchow*  
J.R. Boice  
CHECKED *S. E.*

EXAMINED *May 9 1967*  
*Carl E. Thumm*  
PASSED  
APPROVED  
CHIEF HIGHWAY ENGINEER

A-9-L (35°-60°) 2-1-66



USER NAME = dheberling	DESIGNED - BRD	REVISED
MODEL = 0840127_28-72H51-038	CHECKED - SBC	REVISED
PLOT SCALE = 0:2.000000" = 1 in.	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - SBC	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FOR INFORMATION ONLY

EXISTING PLANS  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	134
CONTRACT NO. 72H51				

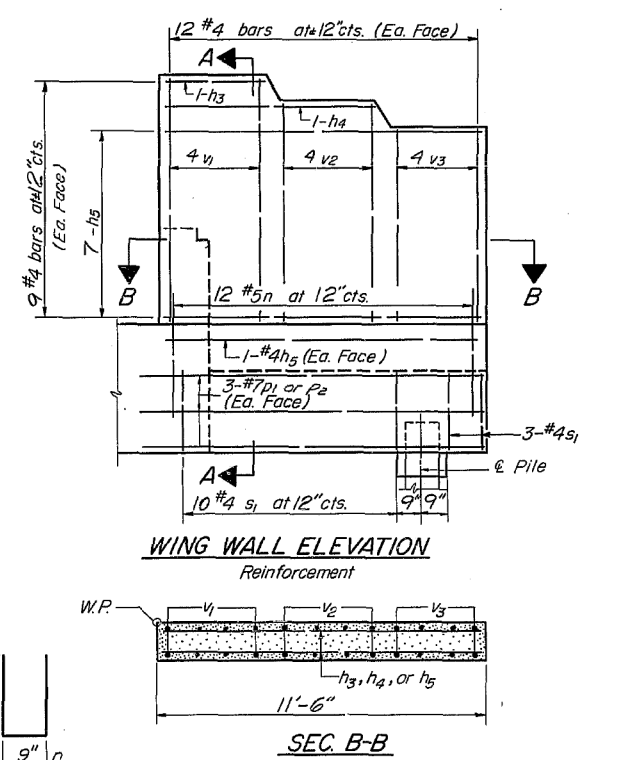
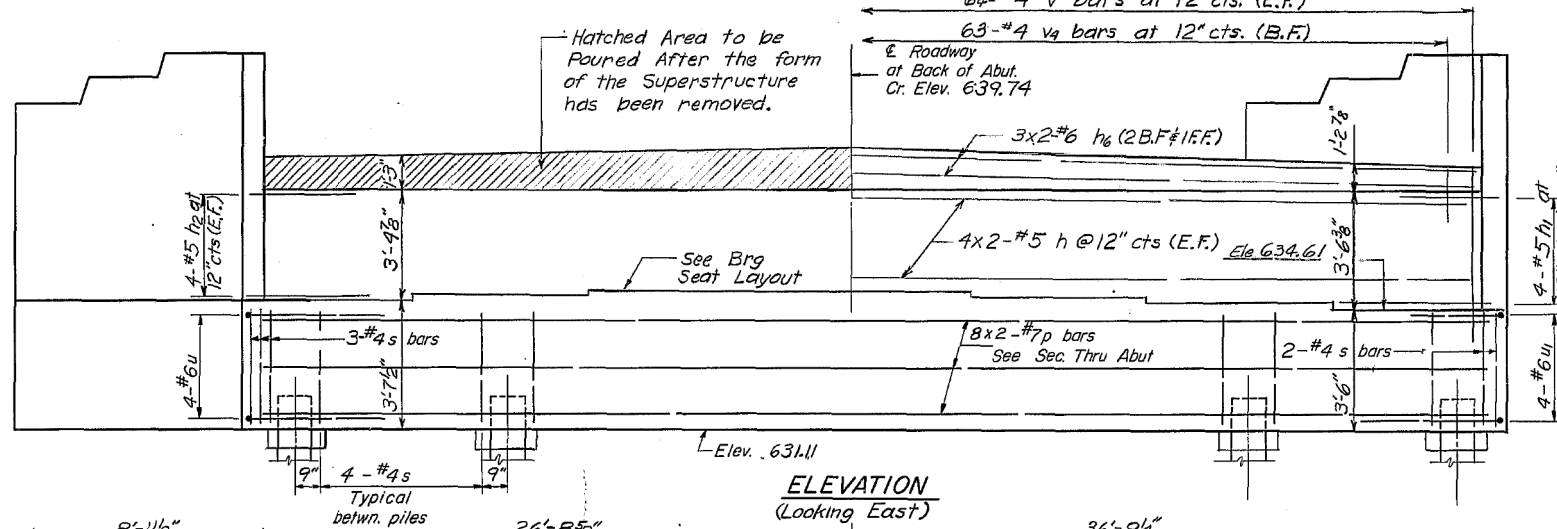
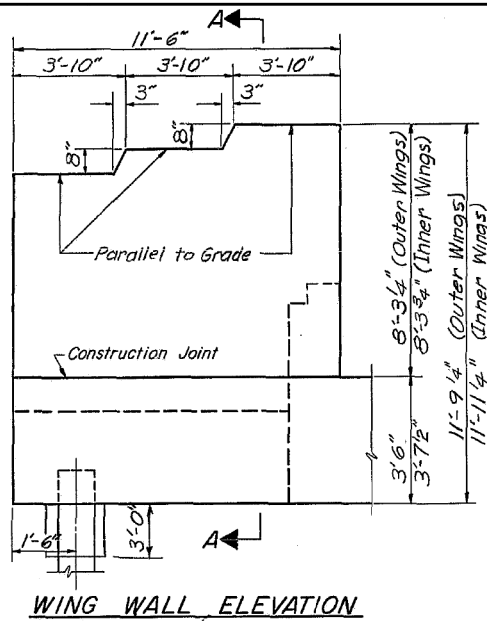
NORTH BRIDGE WEST ABUT.  
FA RT 196 SEC. 1VB  
SANGAMON COUNTY  
STA. 424+68.85

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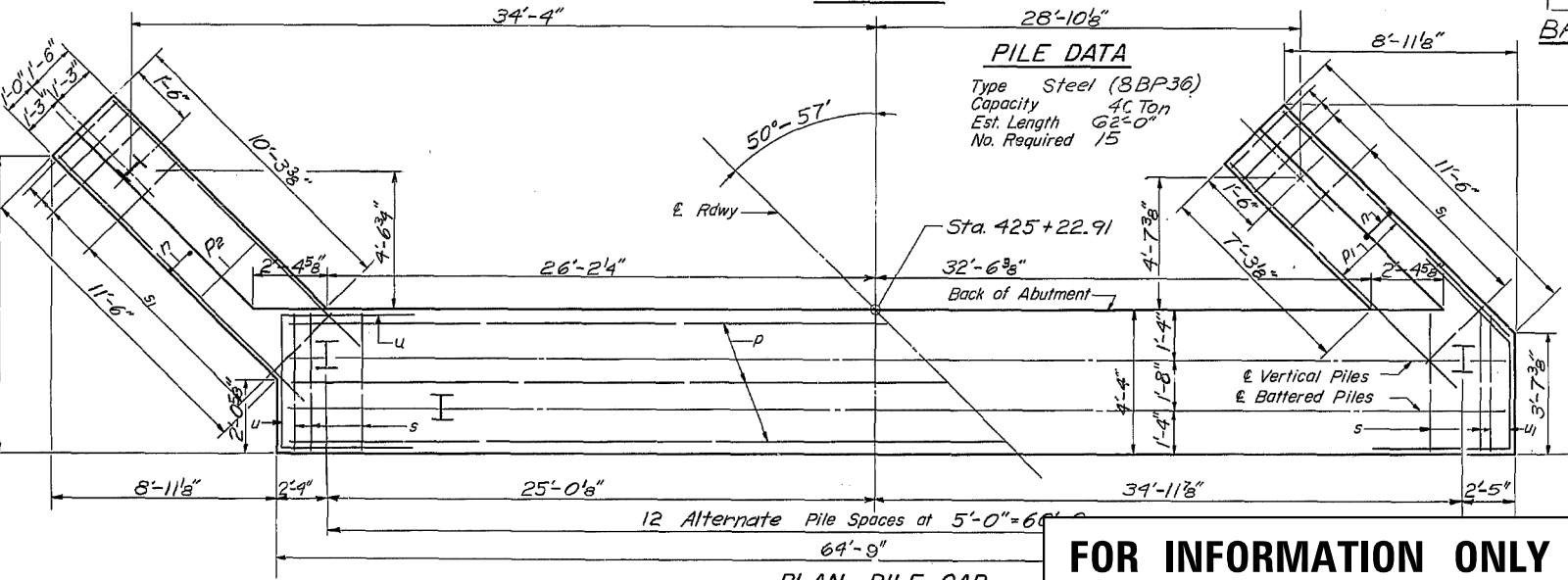
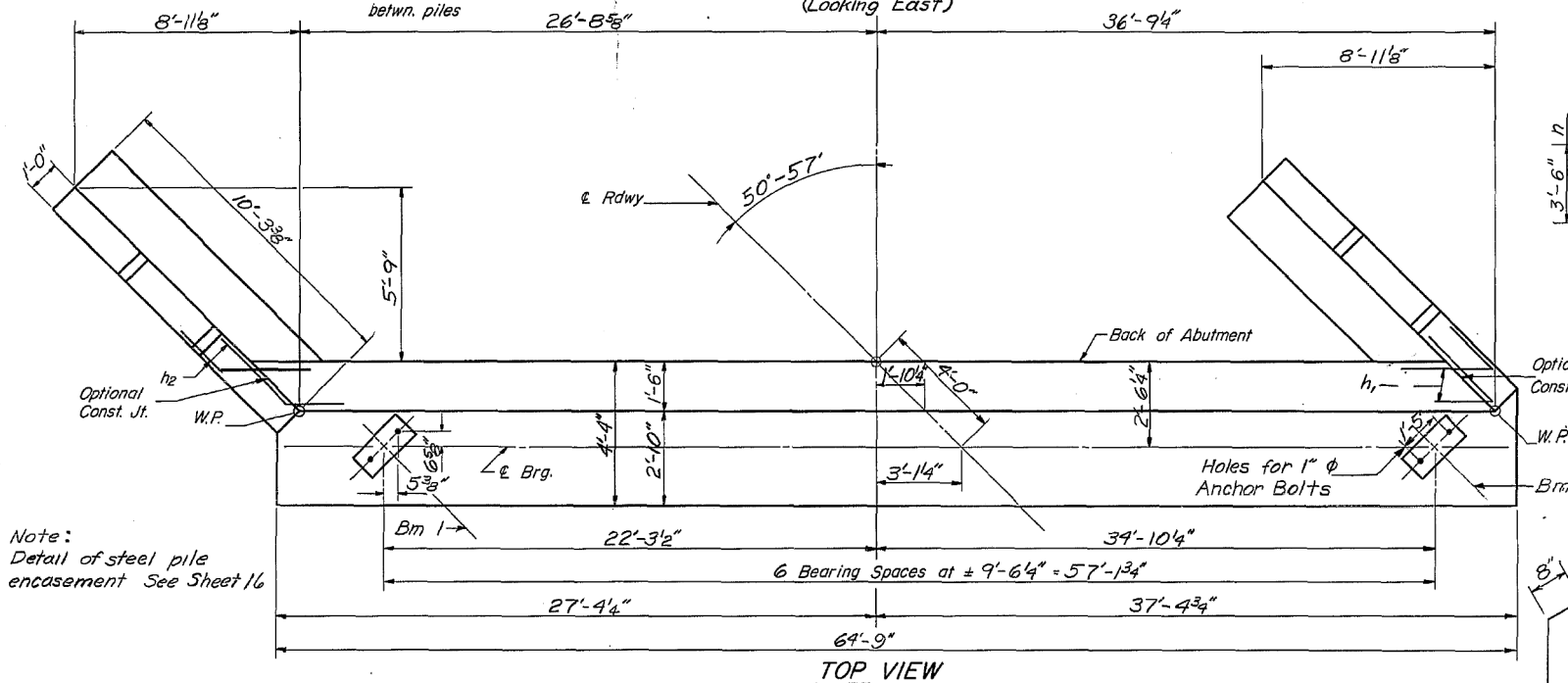
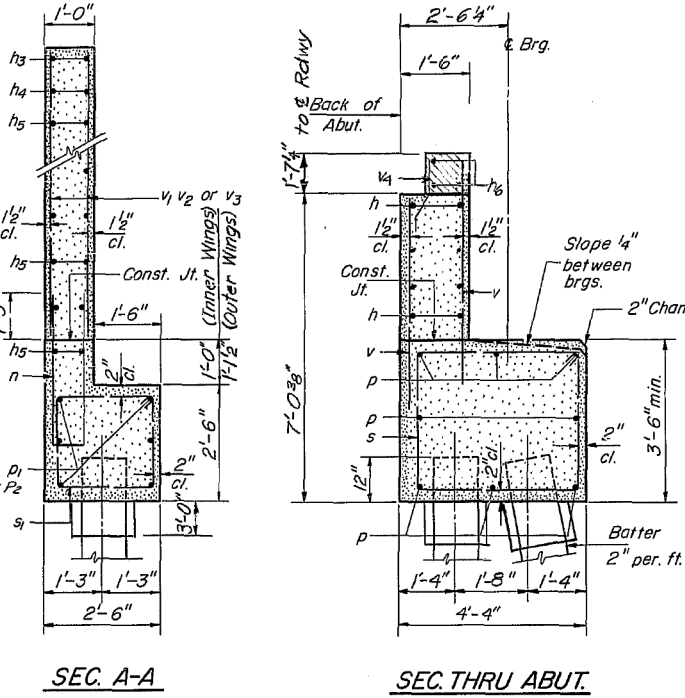
STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 10 16 SHEETS
196	IVB	SANGAMON	50	17	
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					



**BEARING SEAT ELEVATION**

Bm. 1	Bm. 2	Bm. 3	Bm. 4	Bm. 5	Bm. 6	Bm. 7
634.74	634.87	634.97	634.97	634.87	634.74	634.61



**PILE DATA**

Type	Steel (8BP36)
Capacity	40 Ton
Est. Length	62'-0"
No. Required	15

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h	16	#5	32'-4"	
h1	8	#5	3'-5"	
h2	8	#5	3'-5"	
h3	4	#4	3'-7"	
h4	4	#4	7'-5"	
h5	32	#4	11'-3"	
h6	6	#6	32'-5"	
h7	6	#5	19'-6"	
n	24	#5	7'-9"	U
p	16	#7	39'-0"	
p1	6	#7	11'-3"	
p2	6	#7	12'-6"	
s	53	#4	15'-2"	
s1	26	#4	9'-6"	
s2	38	#4	5'-0"	
u	4	#6	9'-11"	
u1	4	#6	9'-4"	
v	128	#4	6'-3"	
v1	16	#4	8'-0"	
v2	16	#4	7'-4"	
v3	16	#4	6'-8"	
v4	63	#4	3'-8"	
Class X Concrete				Cu. Yds. 61.9
Reinforcement Bars				Lbs. 4720
Steel Piles (8BP36) Alt. A				Lin. Ft. 930

SOUTH BRIDGE EAST ABUT.  
FA RT 196 SEC. IVB  
SANGAMON COUNTY  
STA. 424 + 68.85

**FOR INFORMATION ONLY**

DESIGNED Stanley S. Levin  
CHECKED S. Enger  
DRAWN S.G. Ferchow, J.R. Bolce  
CHECKED S.E.  
EXAMINED May 9 1967  
PASSED  
APPROVED  
CHIEF HIGHWAY ENGINEER

A-9-L (35°-60°) 2-1-66



USER NAME = dheberling	DESIGNED - BRD	REVISIONS
MODEL = 0840127_28-72H51-039	CHECKED - SBC	REVISIONS
PLOT SCALE = 0:2.00000" = 1 in.	DRAWN - DLH	REVISIONS
PLOT DATE = 1/30/2020	CHECKED - SBC	REVISIONS

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)

SHEET NO. 39 OF 42 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	135
CONTRACT NO. 72H51				

ILLINOIS FED. AID PROJECT



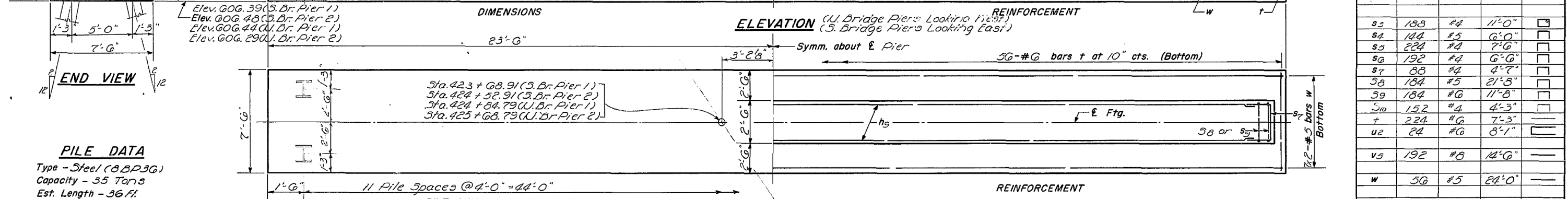
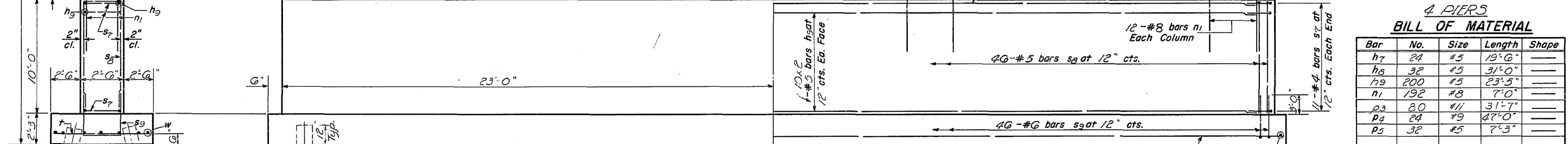
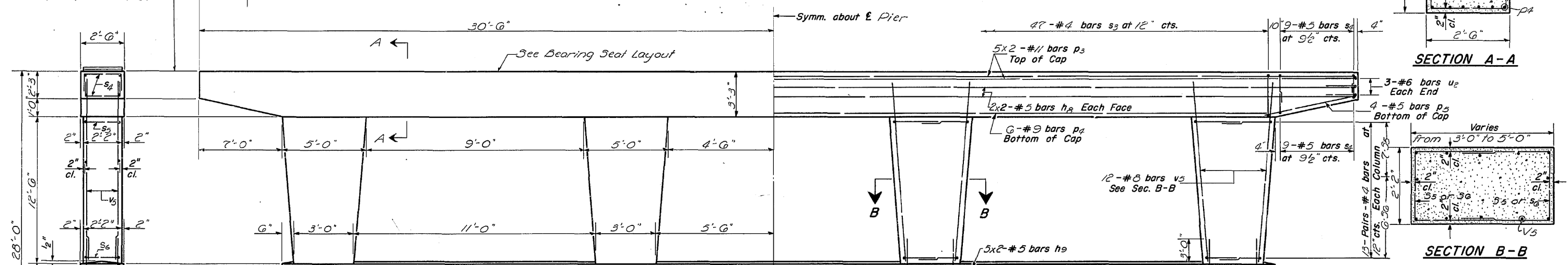
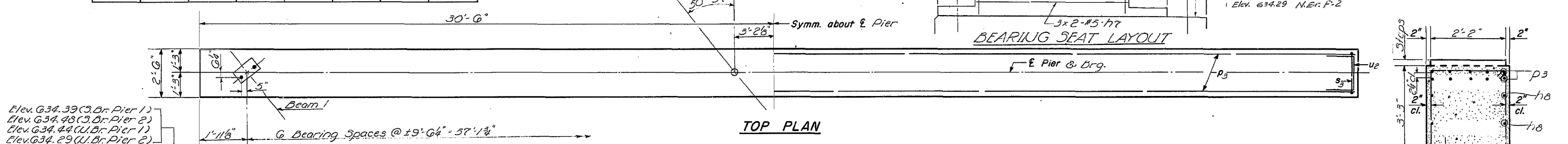
**BEARING SEAT ELEVATION**

	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5	Beam 6	Beam 7
So. Br. P.1	634.52	634.65	634.75	634.75	634.65	634.52	634.39
So. Br. P.2	634.61	634.74	634.84	634.84	634.74	634.61	634.48
N. Br. P.1	634.57	634.70	634.80	634.80	634.70	634.57	634.44
N. Br. P.2	634.42	634.55	634.65	634.65	634.55	634.42	634.29

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
196	1VB	SANGAMON	50	19

SHEET NO. 19  
16 SHEETS



**PILE DATA**  
 Type - Steel (8BP3G)  
 Capacity - 35 Tons  
 Est. Length - 36 Ft.  
 Lbs. Required:  
 22-S. Br. Pier 1 - 21-N. Br. Pier 1  
 21-S. Br. Pier 2 - 22-N. Br. Pier 2  
 Test Piles - 2 (1 Ea. at S. Br. Pier 2 and N. Br. Pier 1)

DESIGNED	Stanley S. Lee	EXAMINED	Carle J. ...
CHECKED	S. Enger	PASSED	
DRAWN	W. A. Sausman Jr.	APPROVED	
CHECKED	S. E.		

**A & B DIMENSIONS**

Bar	A	B
s4	2'-2"	1'-11"
s5	1'-10"	2'-10"
s6	1'-10"	2'-4"
s7	2'-1"	1'-3"
s8	2'-2"	9'-9"
s9	2'-2"	4'-9"
s10	1'-9"	1'-3"

**4 PIERS  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h7	24	#5	19'-6"	—
h8	32	#5	31'-0"	—
h9	200	#5	23'-5"	—
n1	192	#8	7'-0"	—
p3	80	#11	31'-7"	—
p4	24	#9	47'-0"	—
p5	32	#5	7'-3"	—
s3	188	#4	11'-0"	□
s4	144	#5	6'-0"	□
s5	224	#4	7'-6"	□
s6	192	#4	6'-6"	□
s7	88	#4	4'-7"	□
s8	184	#5	21'-8"	□
s9	184	#6	11'-8"	□
s10	152	#4	4'-3"	□
t	224	#6	7'-3"	—
u2	24	#6	8'-1"	□
v5	192	#8	14'-6"	—
w	56	#5	24'-0"	—

Class X Concrete Cu.Yds. 427G  
 Reinforcement Bars Lbs. 51380  
 Steel Piles (8BP3G) Lin.Ft. 309G  
 Test Pile 5H. 8BP3G Ea. 2

Note:  
 Space reinforcement in cap to miss anchor bolts.  
 Min. bar laps = 20 dia. unless otherwise noted.  
 All edges shall have standard 3/4" chamfers except as noted.  
 Fully with cap.

**FOR INFORMATION ONLY**

**PIERS  
NORTH & SOUTH BRIDGES  
I.A. RT. 196 - SEC. 1VB  
SANGAMON COUNTY  
STA. 424 + 68.85**

P-6 7-2-62  
 whks  
 engineers + planners + land surveyors

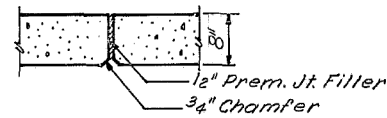
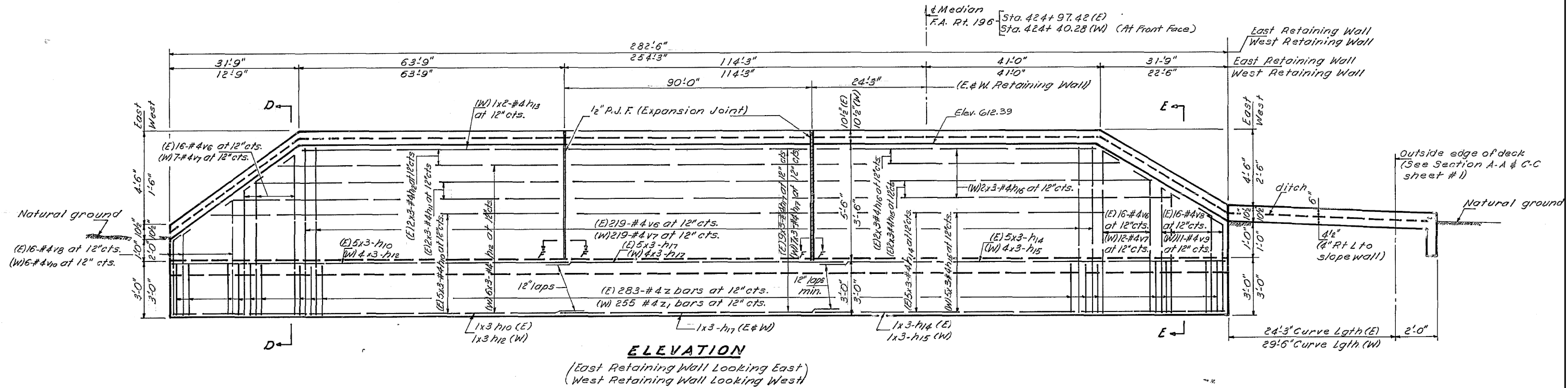
USER NAME = dheberling	DESIGNED - BRD	REVISED
MODEL = 0840127_28-72H51-041	CHECKED - SBC	REVISED
PLOT SCALE = 0:2.00000" = 1 in.	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - SBC	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

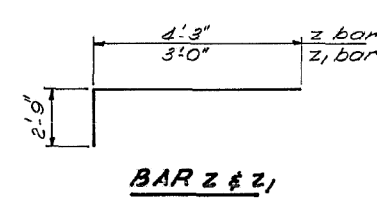
EXISTING PLANS  
 STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)  
 SHEET NO. 41 OF 42 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	137

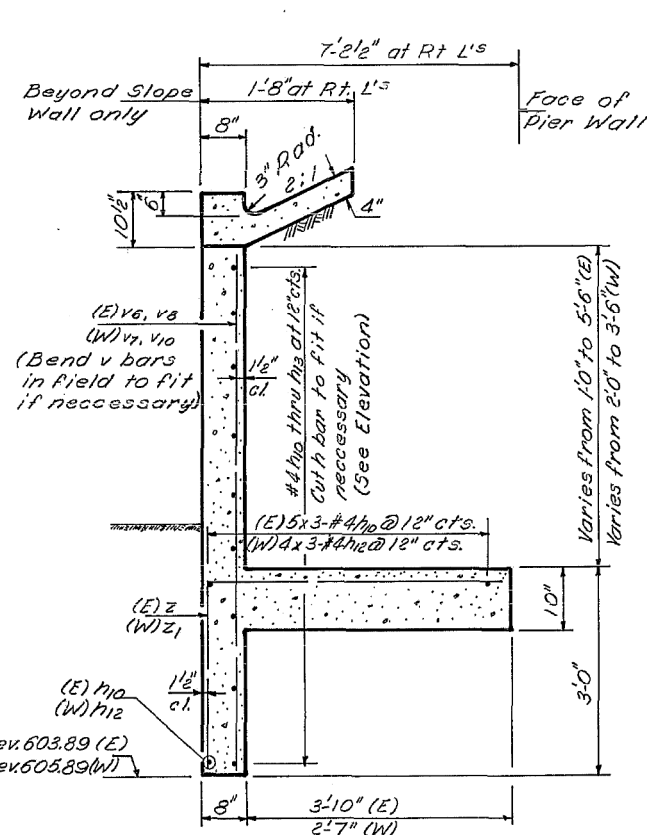
CONTRACT NO. 72H51  
 ILLINOIS FED. AID PROJECT



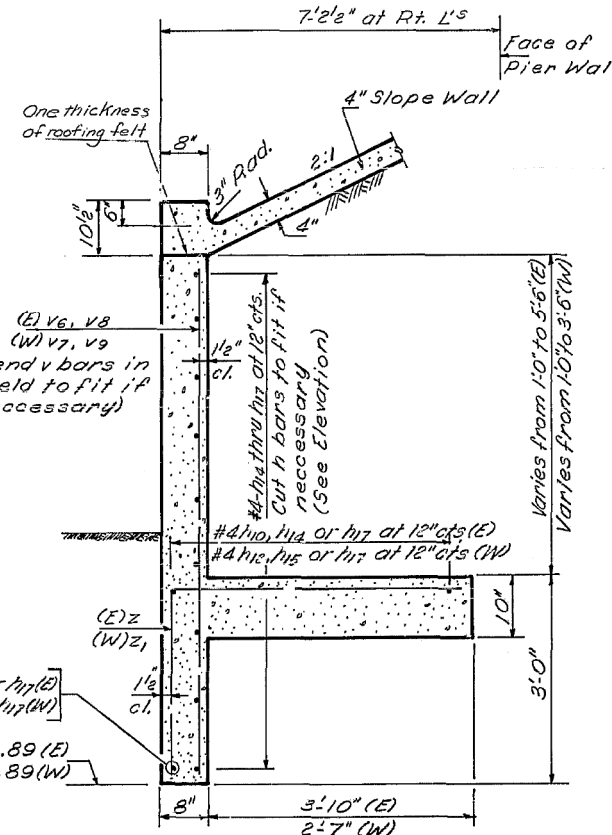
SECTION F-F



BAR Z & Z1



SECTION D-D



SECTION E-E

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h10	33	#4	33'-0"	---
h11	6	#4	29'-0"	---
h12	39	#4	26'-0"	---
h13	2	#4	33'-0"	---
h14	33	#4	33'-3"	---
h15	36	#4	30'-3"	---
h16	12	#4	26'-5"	---
h17	81	#4	31'-0"	---
v6	251	#4	8'-3"	---
v7	238	#4	6'-3"	---
v8	32	#4	6'-0"	---
v9	11	#4	5'-0"	---
v10	6	#4	5'-6"	---
z	283	#4	7'-0"	---
z1	255	#4	5'-9"	---
Class X Concrete Cu.Yds				155.5
Reinforcement Bar Lbs.				9300

EAST & WEST  
RETAINING WALL DETAILS  
F.A. RT. 196 SEC. 1VB  
SANGAMON COUNTY  
STATION 424+68.85

FOR INFORMATION ONLY

EXISTING PLANS  
STRUCTURE NO. 084-0127 (EB), 084-0128 (WB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-9-3) I, P	SANGAMON	138	138
CONTRACT NO.			72H51	
ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

USER NAME = dheberling	DESIGNED - BRD	REVISED
MODEL = 0840127_28-72H51-042	CHECKED - SBC	REVISED
PLOT SCALE = 0:2.00000' = 1 in.	DRAWN - DLH	REVISED
PLOT DATE = 1/30/2020	CHECKED - SBC	REVISED

SHEET NO. 42 OF 42 SHEETS

DESIGNED *Stanley S. Lee*  
CHECKED *J. Engler*  
DRAWN *J. Kessler*  
CHECKED *J. E.*  
EXAMINED *Paul E. T. Schuman*  
PASSED  
APPROVED  
ENGINEER OF DESIGN  
CHIEF HIGHWAY ENGINEER