

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	107B-2	JOHNSON	67	1
		ILLINOIS	CONTRACT NO. 78681	

**TRAFFIC DATA**

IL 146  
FUNCTIONAL CLASSIFICATION  
MINOR ARTERIAL

2017 ADT=6,900

2041 ADT=8,760

SU=3.6%

MU=5.1%

**TOWNSHIPS**

VIENNA

**PROPOSED  
HIGHWAY PLANS**

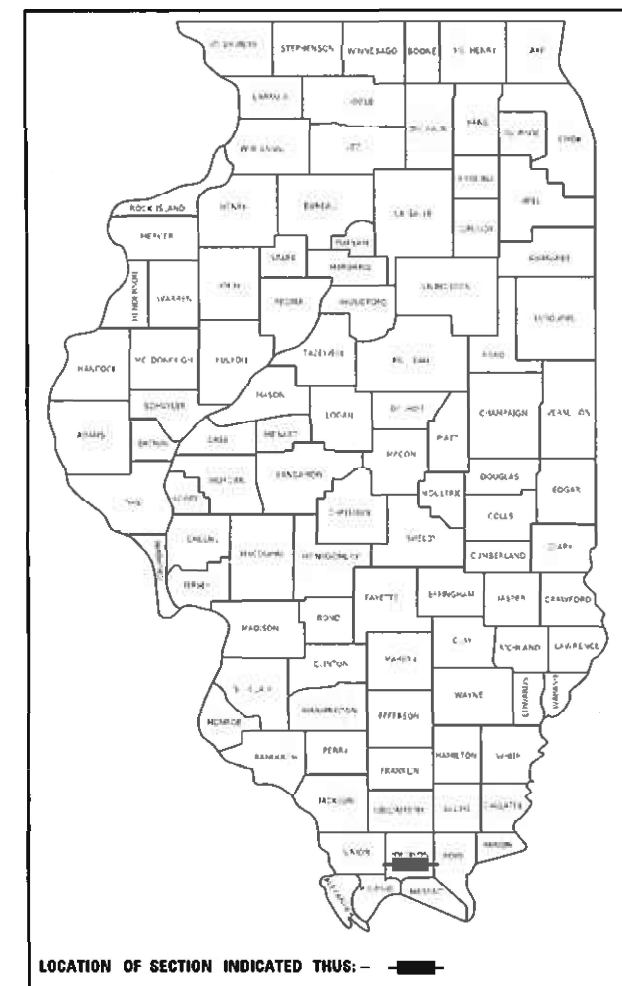
FAP ROUTE 885 (IL 146)

SECTION 107B-2

PROJECT STP-RQAK(334)

STRUCTURE REPLACEMENT OVER LITTLE CACHE CREEK  
JOHNSON COUNTY

D-99-072-18



DESIGN DESIGNATION : N /A

COORDINATE SYSTEM : ILLINOIS COORDINATE SYSTEM - EAST ZONE

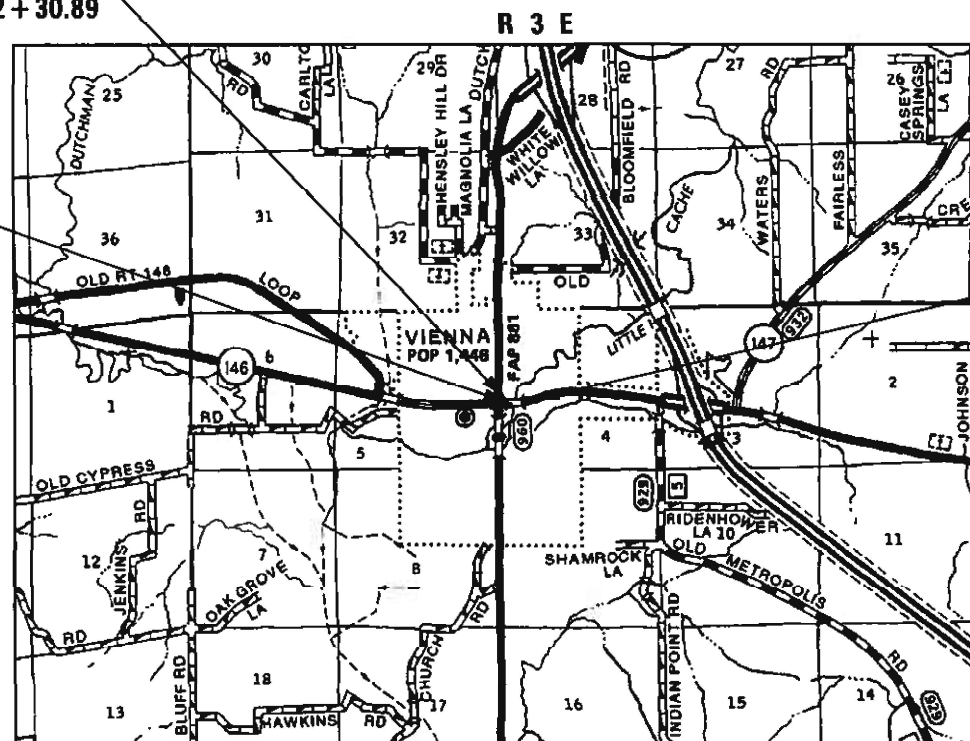
C-99-106-18

POSTED SPEED : 40 MPH

BEGIN  
STA. 32 + 30.89

END  
STA. 36 + 51.00

EXISTING STRUCTURE SN 044-0053  
STRUCTURE STA 33 + 39.00  
PROPOSED SN 044-0063  
IL 146 OVER LITTLE CACHE CREEK  
THREE SPAN RC SLAB BRIDGE  
115'-0" BK TO BK INTEGRAL ABUTS.  
42'-10" OUT TO OUT DECK, 20° SKEW



**LOCATION MAP**  
(NOT TO SCALE)

**EFK Moen**  
Civil Engineering Design

J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123  
OR 311



SIGNATURE: *Shelley Dintelman*

DATE SIGNED: 1/18/2021

LICENSE EXPIRES: 11 /30 /2021

THE SEAL SHOWN ABOVE IS VALID FOR THE  
FOLLOWING SHEETS IN THESE PLANS WHICH  
WERE PREPARED UNDER MY DIRECT SUPERVISION;  
SHEETS 1-25 AND 52-67

GROSS LENGTH = 420.11 FT. = 0.080 MILES

NET LENGTH = 420.11 FT. = 0.080 MILES

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED Jan 20 20 21  
*Keith Roberts*  
REGION FIVE ENGINEER

March 19, 2021  
*Scott A. Etk*  
ENGINEER OF DESIGN AND ENVIRONMENT

March 19, 2021  
*James J. G...*  
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

**PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS**

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**EFK Moen**  
Civil Engineering Design

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SIGNATURE SHEET

SCALE: N.T.S. SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	107B-2	JOHNSON	67	2
ILLINOIS FED. AID PROJECT				

Prepared By: Charles Steir  
DISTRICT STUDIES & PLANS ENGINEER

Examined By: Nancy Lee  
DISTRICT LAND ACQUISITION ENGINEER

Examined By: Carrie Nelson  
DISTRICT PROGRAM DEVELOPMENT ENGINEER

Examined By: Kevin Kelly  
DISTRICT OPERATIONS ENGINEER

Examined By: [Signature]  
DISTRICT PROJECT IMPLEMENTATION ENGINEER

Examined By: Douglas J. Melnick  
DISTRICT CONSTRUCTION ENGINEER

Examined By: [Signature]  
DISTRICT MATERIALS ENGINEER

**INDEX OF SHEETS**

1	COVER SHEET
2	SIGNATURE SHEET
3	INDEX OF SHEETS, HIGHWAY STANDARDS, GENERAL NOTES, COMMITMENTS, AND MIXTURE REQUIREMENTS
4-10	SUMMARY OF QUANTITIES
11	TYPICAL SECTIONS
12-15	SCHEDULE OF QUANTITIES
16-17	ALIGNMENT, TIES, AND BENCHMARKS
18-19	PLAN & PROFILE SHEETS
20	FIELD ENTRANCE DETAIL
21-23	STAGING PLANS
24	EROSION CONTROL PLAN
25	REMOVALS
26-51	STRUCTURE PLANS
52-58	DETAILS
59-67	CROSS SECTIONS

**HIGHWAY STANDARDS**

000001-08	701001-02
001001-02	701006-05
001006	701011-04
280001-07	701201-05
420401-13	701301-04
515001-04	701311-03
542301-03	701321-18
602402-03	701901-08
604036-03	704001-08
610001-09	720001-01
630001-12	720006-04
630201-07	725001-01
630301-09	780001-05
631031-17	781001-04
635001-02	782006-01
643001-02	BLR 21-9
353001-05	482001-02

**COMMITMENTS**

TREES THREE (3) INCHES OR GREATER IN DIAMETER AT BREAST HEIGHT SHALL NOT BE CLEARED FROM APRIL 1 THROUGH SEPTEMBER 30 OF ANY GIVEN YEAR

**GENERAL NOTES**

- FACTORS USED FOR ESTIMATING PLAN QUANTITIES ARE AS FOLLOWS AND SHALL NOT BE USED FOR THE BASIS OF FINAL QUANTITIES:  
  

ALL HOT MIX ASPHALT	2.016 TONS/CU YD
ALL AGGREGATE	2.05 TONS/CU YD
- CONNECTING OF NEW OR EXISTING STORM SEWER TO NEW OR EXISTING INLETS OR MANHOLES SHALL BE MADE IN A MANNER WHICH RESULTS IN A NEAT AND WATERTIGHT JOINT. WHEN PLACED THROUGH THE WALL OF AN INLET OR MANHOLE, STORM SEWER PIPE SHALL BE PLACED OR CUT FLUSH WITH THE FACE OF THE WALL AND DRESSED WITH MORTAR TO PROVIDE A SMOOTH ROUNDED OR BEVELED EDGE. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICES OF THE STORM SEWERS OR STRUCTURES INVOLVED.

**HMA MIXTURE REQUIREMENT TABLE:**

LOCATION (S):	IL ROUTE 146	IL ROUTE 146	IL ROUTE 146	IL ROUTE 146
MIXTURE USE (S):	HOT-MIX ASPHALT SURFACE COURSE	HOT-MIX ASPHALT BINDER COURSE	HOT-MIX ASPHALT SHOULDERS (TOP LIFT)	HOT-MIX ASPHALT SHOULDERS (LOWER LIFT)
AB / PG:	PG64 - 22	PG64 - 22	PG64 - 22	PG64 - 22
ABR % (MAX):	SEE SPECIAL PROVISION	SEE SPECIAL PROVISION	SEE SPECIAL PROVISION	SEE SPECIAL PROVISION
DESIGN AIR VOIDS:	4.0% @ N70	4.0% @ N70	4.0% @ N30	4.0% @ N30
MIXTURE COMPOSITION: (GRADATION MIXTURE)	IL - 9.5mm	IL - 19.0mm	IL - 9.5L	IL - 19.0L
FRICTION AGGREGATE:	MIX "C"	NONE	NONE	NONE
MIXTURE WEIGHT:	112 LB / SQ YD / IN	112 LB / SQ YD / IN	112 LB / SQ YD / IN	112 LB / SQ YD / IN
QUALITY MANAGEMENT PROGRAM:	QCQA	QCQA	QCQA	QCQA

REV. - MS

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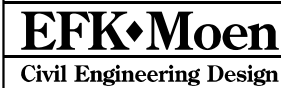
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>INDEX OF SHEETS, GENERAL NOTES, HIGHWAY STANDARDS, AND COMMITMENTS</b>		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		885	1078-2	JOHNSON	67	3
SCALE: N/A		SHEET 1 OF 1 SHEETS		STA.	TO STA.	
				ILLINOIS FED. AID PROJECT		

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	80% FEDERAL 20% STATE	
				BRIDGE	
				0010	RURAL
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	20	20	
20200100	EARTH EXCAVATION	CU YD	390	390	
20300100	CHANNEL EXCAVATION	CU YD	1950	1950	
20400800	FURNISHED EXCAVATION	CU YD	1260	1260	
20800150	TRENCH BACKFILL	CU YD	2	2	
25000210	SEEDING, CLASS 2A	ACRE	0.5	0.5	
25000350	SEEDING, CLASS 7	ACRE	0.5	0.5	
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	45	45	
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	45	45	
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	45	45	
25100115	MULCH, METHOD 2	ACRE	0.5	0.5	
25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	492	492	
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	50	50	
28000305	TEMPORARY DITCH CHECKS	FOOT	18	18	

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DATE - 1/18/2021	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

SCALE: N.T.S. SHEET 1 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	1078-2	JOHNSON	67	4
			CONTRACT NO. 78681	
			ILLINOIS FED. AID PROJECT	



CODE NO.	ITEM	UNIT	TOTAL QUANTITY	80% FEDERAL 20% STATE	
				BRIDGE	
				0010	RURAL
28000400	PERIMETER EROSION BARRIER	FOOT	1108	1108	
28000500	INLET AND PIPE PROTECTION	EACH	1	1	
28100107	STONE RIPRAP, CLASS A4	SQ YD	25	25	
28100111	STONE RIPRAP, CLASS A6	SQ YD	1181	1181	
28200200	FILTER FABRIC	SQ YD	1206	1206	
35650300	BASE COURSE WIDENING 8"	SQ YD	169	169	
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	120	120	
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	525	525	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	273	273	
40600990	TEMPORARY RAMP	SQ YD	52	52	
40603085	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	TON	82.3	82.3	
40604052	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N70	TON	70.6	70.6	
42000080	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB	SQ YD	205	205	
42001300	PROTECTIVE COAT	SQ YD	904	904	

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DATE - 1/18/2021	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

SCALE: N.T.S. SHEET 2 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	1078-2	JOHNSON	67	5
			CONTRACT NO. 78681	
		ILLINOIS	FED. AID PROJECT	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	80% FEDERAL 20% STATE	
				BRIDGE	
				0004	RURAL
44000100	PAVEMENT REMOVAL	SQ YD	300	300	
44000152	HOT-MIX ASPHALT SURFACE REMOVAL, 3/4"	SQ YD	585	585	
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	6	6	
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	638	638	
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	1	
50200100	STRUCTURE EXCAVATION	CU YD	190	190	
50200300	COFFERDAM EXCAVATION	CU YD	15.8	15.8	
50201121	COFFERDAM (TYPE 2)(LOCATION-1)	EACH	1	1	
50201122	COFFERDAM (TYPE 2)(LOCATION-2)	EACH	1	1	
50300100	FLOOR DRAINS	EACH	7	7	
50300225	CONCRETE STRUCTURES	CU YD	232.9	232.9	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	315.3	315.3	
50300260	BRIDGE DECK GROOVING	SQ YD	730	730	
50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	117.5	117.5	

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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

SCALE: N.T.S.    SHEET 3 OF 7 SHEETS    STA.    TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	1078-2	JOHNSON	67	6
			CONTRACT NO. 78681	
			ILLINOIS FED. AID PROJECT	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	80% FEDERAL 20% STATE
				BRIDGE
				RURAL
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	184770	184770
50800515	BAR SPLICERS	EACH	876	876
51202100	FURNISHING STEEL PILES HP14X117	FOOT	2438	2438
51202305	DRIVING PILES	FOOT	2438	2438
51204100	TEST PILE STEEL HP14X117	EACH	2	2
51204650	PILE SHOES	EACH	48	48
51500100	NAME PLATES	EACH	1	1
52200010	TEMPORARY SHEET PILING	SQ FT	353	353
52200020	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	161	161
54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH	1	1
550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	27	27
550A0410	STORM SEWERS, CLASS A, TYPE 2 24"	FOOT	39	39
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	60	60
60221700	MANHOLES, TYPE A, 5' DIAMETER, TYPE 8 GRATE	EACH	1	1

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

SCALE: N.T.S. SHEET 4 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	1078-2	JOHNSON	67	7
			CONTRACT NO. 78681	
		ILLINOIS	FED. AID PROJECT	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	80% FEDERAL 20% STATE	
				BRIDGE	
				0004	RURAL
6100050	CONCRETE THRUST BLOCKS	EACH	1	1	
6100335	TYPE G INLET BOX, STANDARD 610001	EACH	1	1	
* 6300001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	200	200	
* 6310085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4	
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	3	3	
63200310	GUARDRAIL REMOVAL	FOOT	362	362	
64300240	IMPACT ATTENUATORS (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	1	1	
66201120	CONCRETE SHOULDER CURB	FOOT	39	39	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	14	14	
67100100	MOBILIZATION	L SUM	1	1	
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1	
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1	
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	5	5	
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1	

\* SPECIALTY ITEM

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

SCALE: N.T.S. SHEET 5 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	107B-2	JOHNSON	67	8
			CONTRACT NO. 78681	
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	80% FEDERAL 20% STATE	
				BRIDGE	
				0004	RURAL
70106700	TEMPORARY RUMBLE STRIPS	EACH	3	3	
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	28	28	
70300100	SHORT TERM PAVEMENT MARKING	FOOT	148	148	
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	50	50	
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	2672	2672	
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	27	27	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	413	413	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	413	413	
70600250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	1	1	
70600251	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	1	1	
70600350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	1	1	
70600352	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	1	1	
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4	
* 78009004	MODIFIED URETHANE PAVEMENT MARKING-LINE 4"	FOOT	1373	1373	

\* SPECIALTY ITEM

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

SCALE: N.T.S. SHEET 6 OF 7 SHEETS STA. TO STA.

F.A.P. RTE. 885	SECTION 1078-2	COUNTY JOHNSON	TOTAL SHEETS 67	SHEET NO. 9
			CONTRACT NO. 78681	
		ILLINOIS FED. AID PROJECT		

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	80% FEDERAL 20% STATE	
				BRIDGE	
				0004	RURAL
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	4	4	
* 78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	16	16	
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	6	6	
78300201	PAVEMENT MARKING REMOVAL - GRINDING	SQ FT	224	224	
58600101	GRANULAR BACKFILL FOR STRUCTURES	CU YD	102	102	
X7011800	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1	1	
X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	945	945	
X7040125	PINNING TEMPORARY CONCRETE BARRIER	EACH	24	24	
Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	24	24	
Z0033700	LONGITUDINAL JOINT SEALANT	FOOT	525	525	
Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	151	151	
∅ Z0076600	TRAINEES	HOUR	500	500	
∅ Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500	500	

∅ 0042

\* SPECIALTY ITEM

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**STATE OF ILLINOIS  
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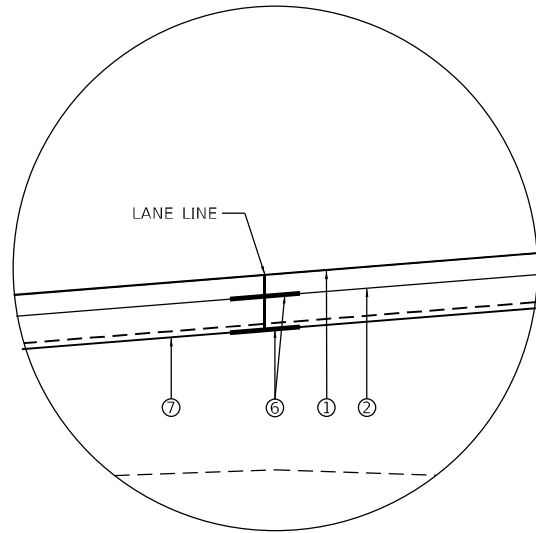
**SUMMARY OF QUANTITIES**

SCALE: N.T.S. SHEET 7 OF 7 SHEETS STA. TO STA.

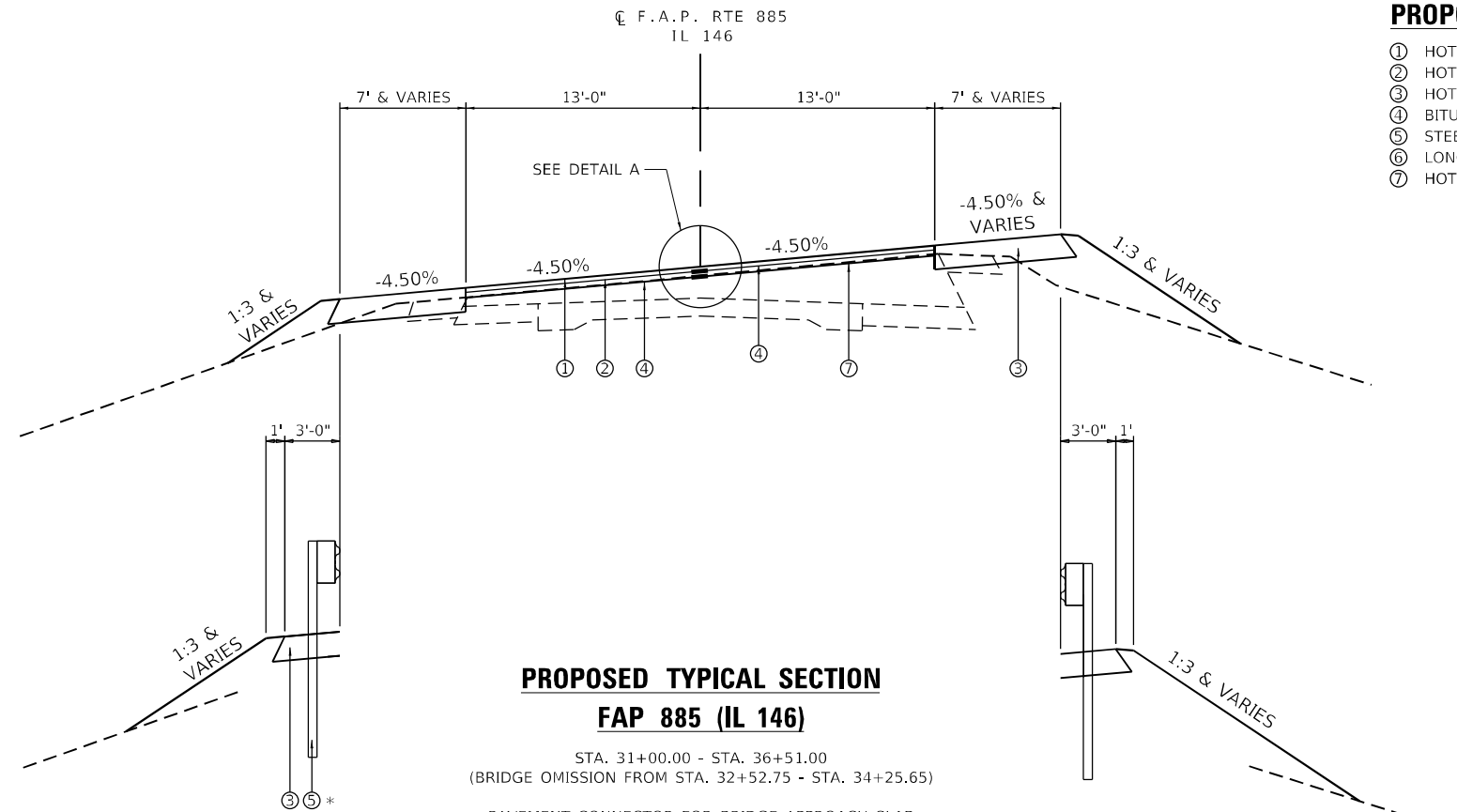
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			CONTRACT NO. 78681	
ILLINOIS FED. AID PROJECT				



\* GUARDRAIL, TRAFFIC BARRIER TERMINALS & IMPACT ATTENUATOR  
 STA. 31+23.93 TO STA. 32+74.37  
 STA. 34+18.27 TO STA. 36+31.64  
 STA. 32+14.36 TO STA. 32+60.83  
 STA. 34+02.72 TO STA. 35+01.40



**DETAIL A**



**PROPOSED TYPICAL SECTION  
 FAP 885 (IL 146)**

STA. 31+00.00 - STA. 36+51.00  
 (BRIDGE OMISSION FROM STA. 32+52.75 - STA. 34+25.65)  
 PAVEMENT CONNECTOR FOR BRIDGE APPROACH SLAB  
 FROM STA. 32+30.89 - STA. 32+52.75 & STA. 34+25.65 - STA. 34+48.67  
 (SEE STANDARD 420401 FOR ADDITIONAL DETAILS OF  
 PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB)

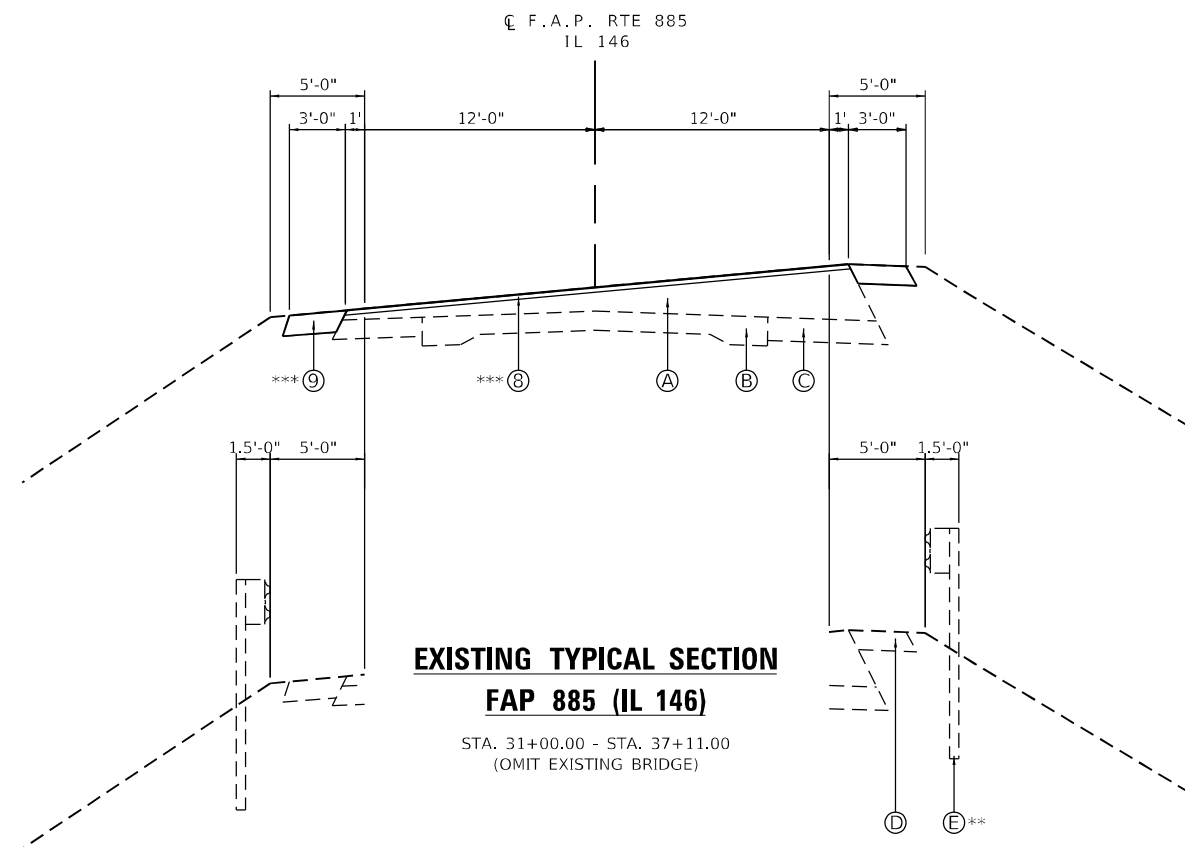
**PROPOSED**

- ① HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N70, 1 1/2"
- ② HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70, 2 1/4"
- ③ HOT-MIX ASPHALT SHOULDER, 8"
- ④ BITUMINOUS MATERIAL (TACK COAT)
- ⑤ STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS
- ⑥ LONGITUDINAL JOINT SEALANT
- ⑦ HOT-MIX ASPHALT SURFACE REMOVAL, 3/4"

SUPERELEVATION TRANSITION (RT SHOULDER)	
STATION	RT SHLDR (%)
32+07.01	-4.0%
32+45.78	4.5%
SEE 044-0053 PLANS	
34+17.42	4.5%
35+13.27	-4.0%

\*\* EX GUARDRAIL & TRAFFIC BARRIER TERMINALS  
 STA. 32+29 - STA. 32+94 (LT)  
 STA. 32+17 - STA. 32+83 (RT)  
 STA. 33+96 - STA. 35+88 (LT)  
 STA. 33+82 - STA. 34+35 (RT)

+++ HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT  
 AND AGGREGATE WEDGE SHOULDER, TYPE B  
 STA. 36+51 - STA. 37+11



**EXISTING TYPICAL SECTION  
 FAP 885 (IL 146)**

STA. 31+00.00 - STA. 37+11.00  
 (OMIT EXISTING BRIDGE)

**EXISTING**

- Ⓐ BITUMINOUS OVERLAY, 3" MIN AND VARIES
- Ⓑ PCC 9"- 6"- 9" PAVEMENT
- Ⓒ HMA BASE COURSE WIDENING, 9"
- Ⓓ AGGREGATE SHOULDERS, TYPE A, 6"
- Ⓔ GUARDRAIL

**PROPOSED**

- Ⓑ HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT
- Ⓓ AGGREGATE WEDGE SHOULDER, TYPE B

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PLOT DATE = 1/18/2021	DATE - 1/18/2021	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**TYPICAL SECTIONS**

SCALE: N.T.S. SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	1078-2	JOHNSON	67	11
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				

EROSION CONTROL SCHEDULE						
LOCATION				HVY DUTY EROSION CTRL BLANKET (SQ YD)	TEMPORARY DITCH CHECKS (FOOT)	PERIMETER EROSION BARRIER (FOOT)
ROADWAY	STATION	STATION	LT/RT			
IL 146	31+50.00	32+00.00	LT	56.7		
IL 146	32+00.00	32+50.00	LT	141.3		
IL 146	32+50.00	32+88.62	LT	151.7		
IL 146	34+18.08	34+50.00	LT	50.2		
IL 146	33+95.03	34+50.00	RT	91.4		
IL 146	35+85.20		LT		17.2	
IL 146	30+94.87	32+92.08	LT			227.4
IL 146	34+11.56	37+16.00	LT			316.3
IL 146	31+33.14	31+79.98	RT			71.9
IL 146	32+00.99	32+68.50	RT			76.7
IL 146	33+79.78	37+16.00	RT			415.4
SUB TOTAL				491.3	17.2	1107.7
TOTALS				492	18	1108

CHANNEL EXCAVATION			
LOCATION			
STATION	TO	STATION	(CU YD)
32+52.75	TO	34+25.65	1,950
TOTALS			1,950

TREE REMOVAL SCHEDULE		
LOCATION		
STATION	OFFSET	(UNIT)
33+75.86	43.3' LT	20
TOTALS		20

EARTHWORK SCHEDULE										
LOCATION			EARTH EXCAVATION (CU YD)	AVERAGE SHRINKAGE FACTOR %	EARTH EXCAVATION (ADJUSTED) (CU YD)	EMBANKMENT (CU YD)	EARTHWORK BALANCE		FURNISHED EXCAVATION (CU YD)	REMARKS
STATION	TO	STATION					EXCAVATION REQUIRED TO COMPLETE (CU YD)	EXCESS EXCAVATION (CU YD)		
30+50.00	TO	37+00.00	390	18.0	315	1575	1,260	0	1,260	
TOTALS			390						1,260	

SEEDING SCHEDULE									
LOCATION			SEEDING CLASS 2A (ACRE)	SEEDING CLASS 7 (ACRE)	NITROGEN FERT NUTR (POUND)	PHOSPHORUS FERT NUTR (POUND)	POTASSIUM FERT NUTR (POUND)	MULCH METHOD 2 (ACRE)	TEMPORARY EROS CTRL SEEDING (POUND)
STATION	STATION	STATION							
LEFT SIDE	31+00.00	37+11.00	0.16	0.16	25	25	25	0.16	50.0
RIGHT SIDE	31+38.14	37+11.00	0.20	0.20	20	20	20	0.20	
TOTALS			0.36	0.36	45.0	45.0	45.0	0.36	50.0
			0.5	0.5	45	45	45	0.5	50

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PLOT DATE = 1/18/2021	DATE - 1/18/2021	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES			
SCALE: N/A	SHEET 1 OF 4 SHEETS	STA.	TO STA.

F.A.P. RTE. 885	SECTION 1078-2	COUNTY JOHNSON	TOTAL SHEETS 67	SHEET NO. 12
			CONTRACT NO. 78681	
		ILLINOIS FED. AID PROJECT		

DRAINAGE STRUCTURE SCHEDULE																
LOCATION						TRENCH BACKFILL (CU YD)	INLET AND PIPE PROTECT (EACH)	STONE RIPRAP CL A4 (SQ YD)	FILTER FABRIC (SQ YD)	PRC FLAR END SEC 24" (EACH)	STORM SEWERS CL A TY 2, 12" (FOOT)	STORM SEWERS CL A TY 2, 24" (FOOT)	MANHOLES TY A 5' DIAM TY 8 GRATE (EACH)	CONCRETE THRUST BLOCKS (EACH)	TY G INLET BOX STANDARD 610001 (EACH)	CONCRETE SHLDR CURB (FOOT)
ROADWAY	LOCATION	OFFSET	LOCATION	OFFSET	LT/RT											
IL 146	32+25.00	20	32+25.00	25	LT	1.1										
IL 146	32+25.00	45.5			LT		1									
IL 146	32+60.84	50.92	32+60.84	50.92	LT		25	25								
IL 146	32+63.85	51.44			LT				1							
IL 146	32+25.00	19.1	32+25.00	43.5	LT					26.8						
IL 146	32+27.02	45.7	32+63.85	51.44	LT						38.7					
IL 146	32+25.00	45.5			LT							1.0				
IL 146	32+25.00	45.5			LT								1			
IL 146	32+25.00	19.1			LT									1		
IL 146	32+20.00	19.58	32+59.29	19.7	LT											39.0
SUBTOTALS						1.1	1	25	25	1	26.8	38.7	1.0	1	1	39.0
TOTALS						2	1	25	25	1	27	39	1	1	1	39

PAVEMENT SCHEDULE																
LOCATION						HMA SURF REMOVAL BUTT JT (SQ YD)	TEMPORARY RAMP (SQ YD)	HMA BC IL-19.0 N70 (TON)	HMA SC IL-9.5 MIX "C" N70 (TON)	BITUMINOUS MATERIALS TACK COAT (POUND)	HMA SURFACE REMOVAL 3/4" (SQ YD)	PVT CON PCC BR APP SL (SQ YD)	PAVEMENT REMOVAL (SQ YD)	HMA SHLDR 8" (SQ YD)	LONGITUDINAL JOINT SEALANT (FOOT)	BASE COURSE WIDENING 8" (SQ YD)
ROADWAY	STATION	OFFSET	TO	STATION	OFFSET											
IL 146	31+56.36	13.3' RT		32+27.03	13.4' RT	98.7										
IL 146	36+51.00	0		37+11.00	0	173.6										
IL 146	34+48.67	0.6' RT		34+48.67	19.7' LT		11.3									
IL 146	36+51.00	0		36+51.00	13' LT		7.2									
IL 146	34+48.67	0.6' RT		34+48.67	20.8' RT		11.3									
IL 146	36+51.00	0		36+51.00	13' RT		7.2									
IL 146	37+11.00	13.1' LT		37+11.00	13' RT		14.5									
IL 146	34+48.67	0		36+51.00	0			74.9		268	584.5					
IL 146	36+51.00	0		36+81.00	0			7.3								
IL 146	34+48.67	0		36+81.00	0				56.6							
IL 146	36+81.00	0		37+11.00	0				5.6							
IL 146	34+48.67	0		36+51.00	0					133						
IL 146	36+51.00	0		37+11.00	0					79						
MAIN ST	31+56.36	0		32+27.03	0											
IL 146	32+30.89	20.2' LT		32+30.89	21.3' RT											
IL 146	32+59.46	20.2' LT		32+45.78	21.3' RT						99.8					
IL 146	34+33.56	19.7' LT		34+17.42	20.8' RT											
IL 146	34+48.67	19.7' LT		34+48.67	20.8' RT						104.7					
IL 146	32+30.89	13.3' RT		32+48.41	13.19' RT			8.3	45							
IL 146	32+30.89	13' LT		32+57.04	12.9' LT							63.4				
IL 146	34+20.35	13.4' RT		34+48.67	13.34' RT							67.9				
IL 146	34+30.97	13.29' LT		34+48.67	13' LT											
IL 146	31+00.00	13' LT		32+74.38	20.53' RT								143.1			
IL 146	31+38.12	13.3' RT		31+69.35	17.31' RT								12.0			
IL 146	32+07.01	24.27' RT		32+60.92	23.82' RT								31.8			
IL 146	34+18.08	23.17' LT		36+51.00	12.96' LT								231.4			
IL 146	34+02.64	23.46' RT		36+51.00	12.99' RT								218.9			
IL 146	34+48.67	0		37+11.00	0										262.3	
IL 146	34+48.67	0		37+11.00	0										262.3	
IL 146	31+38.23	17.5' RT		31+69.64	17.5' RT								12.8			12.8
IL 146	32+13.79	17.5' RT		32+71.34	17.5' RT								24.9			24.9
IL 146	33+96.84	17.6' RT		36+18.00	18.50' RT								131.0			131.0
SUBTOTALS						272.3	51.5	82.3	70.6	525.0	584.5	204.5	299.9	637.2	524.6	168.7
TOTALS						273	52	82.3	70.6	525	585	205	300	638	525	169

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PLOT DATE = 1/18/2021	CHECKED - SLD	REVISED -
	DATE - 1/18/2021	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES			
SCALE: N/A	SHEET 2 OF 4 SHEETS	STA.	TO STA.

F.A.P. RTE. 885	SECTION 1078-2	COUNTY JOHNSON	TOTAL SHEETS 67	SHEET NO. 13
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				

GUARDRAIL SCHEDULE											
LOCATION					SPBGR TY A 6 FT POSTS (FOOT)	TRAF BAR TERM T6 (EACH)	TRAF BAR T1 SPL TAN (EACH)	GUARDRAIL REMOVAL (FOOT)	IMP ATTN FRD NAR TL2 (EACH)	TERMINAL MARKER DIRECT APPLIED (EACH)	GUARDRAIL REFL TY A (EACH)
ROADWAY	STATION	OFFSET	STATION	OFFSET							
IL 146	31+23.93	21' LT	32+74.37	20.7' LT	62.5	1	1			1	4
IL 146	34+18.27	19.7' LT	36+31.64	21' LT	125.0	1	1			1	4
IL 146	34+02.72	20' RT	35+01.40	21' RT	12.5	1	1			1	4
IL 146	32+14.36	21.3' RT	32+60.83	20.3' RT		1			1	1	4
IL 146	32+29.00	17.7' LT	32+93.00	17.6' LT			63.5				
IL 146	32+18.00	21.2' RT	32+81.00	17.8' RT			63.9				
IL 146	34+02.00	17.2' LT	35+88.00	17.7' LT			184.5				
IL 146	33+86.00	18.2' RT	34+35.00	19.4' RT			49.4				
SUBTOTALS					200	4	3	361.3	1	4	16
TOTALS					200	4	3	362	1	4	16

AGGREGATE SCHEDULE							
LOCATION						AGG SURF COURSE TY B (TON)	AGG WEDGE SHLDR TY B (TON)
ROADWAY	STATION	OFFSET	TO	STATION	OFFSET		
IL 146	35+32.38	24.1' RT				119.6	
IL 146	36+51.00	13.1' LT		37+11.00	13.3' LT		2.6
IL 146	36+51.00	13' RT		37+11.00	13' RT		2.6
SUBTOTALS						119.6	5.2
TOTALS						120	6

TEMPORARY BARRIER AND TEMPORARY RUMBLE STRIPS SCHEDULE													
LOCATION					TEMP CONC BARRIER (FOOT)	REL TEMP CONC BARRIER (FOOT)	IMP ATTN TEMP NRD TL3 (EACH)	IMP ATTN TEMP NRN TL3 (EACH)	IMP ATTN REL NRD TL3 (EACH)	IMP ATTN REL NRN TL3 (EACH)	PIN TEMP CONC BARRIER (EACH)	TEMP RUMBLE STRIPS (EACH)	NOTES
ROADWAY	STATION	OFFSET	STATION	OFFSET									
IL 146	32+05.91	2.7' RT	36+17.88	7.8' LT	413					12		STAGE 1	
IL 146	32+05.84	5' LT	36+18.25	7.1' RT		413				12		STAGE 2	
IL 146	35+80.36	5.6' LT					1					STAGE 1	
IL 146	32+05.91	2.7' RT					1					STAGE 1	
IL 146	36+05.85	5.7' RT						1				STAGE 2	
IL 146	32+10.81	5' LT							1			STAGE 2	
IL 146	46+90.84	12.9' LT									1	STAGE 1/2	
IL 146	51+90.84	12.9' LT									1	STAGE 1/2	
IL 146	56+90.84	12.9' LT									1	STAGE 1/2	
TOTALS					413	413	1	1	1	1	24	3	
PAY ITEM TOTALS					413	413	1	1	1	1	24	3	

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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES**

SCALE: N/A      SHEET 3 OF 4 SHEETS      STA.      TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	1078-2	JOHNSON	67	14
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				

RAISED REFLECTIVE PAVEMENT MARKER SCHEDULE							
LOCATION					RAISED REFLECTIVE PAVEMENT MARKER (EACH)	RAISED REFLECTIVE PVMT MRK REMOVAL (EACH)	NOTES
ROADWAY	STATION	OFFSET	STATION	OFFSET			
IL 146	34+25.65	0	37+11.00	0	4		1 PER 80'
IL 146	32+30.89	0	37+11.00	0		6	
PAY ITEM TOTALS					4	6	

PAVEMENT MARKING SCHEDULE												
LOCATION					PAVEMENT MARKING REMOVAL GRINDING (SQ FT)	SHORT TERM PAVEMENT MARKING (FOOT)	SHORT TERM PAVEMENT MARKING REMOVAL (SQ FT)	TEMPORARY PAVEMENT MARKING LINE 4" (FOOT)	TEMPORARY PAVEMENT MARKING LINE 24" (FOOT)	MODIFIED URETHANE PAVEMENT MARKING LINE 4" (FOOT)	TEMPORARY PAVEMENT MARKING REMOVAL (SQ FT)	NOTES
ROADWAY	STATION	OFFSET	STATION	OFFSET								
IL 146	31+35.52	12.9' LT	32+30.89	13.1' LT	31.7							EDGE LINE
IL 146	31+42.88	13.25' RT	36+07.22	12.9' RT	155.3							EDGE LINE
IL 146	30+52.00	CL	32+30.89	CL	13.4							SKIP-DASH
IL 146	37+11.00	CL	39+90.84	CL	23.3							SKIP-DASH
IL 146	32+30.89	CL	37+11.00	CL		48	16.0					CENTERLINE (SKIP-DASH)
IL 146	32+30.89	12' LT	37+11.00	12' LT		50	16.7					EDGE LINE (45 DEGREE ANGLE)
IL 146	32+30.89	12' RT	37+11.00	12' RT		50	16.7					EDGE LINE (45 DEGREE ANGLE)
IL 146	30+84.27	13' LT	39+22.91	12.9' LT				842		280.7		STAGE 1
IL 146	31+42.88	13.3' RT	36+07.22	12.9' RT				467		155.7		STAGE 1
IL 146	30+82.60	13.3' RT	38+69.70	13' RT				790		263.3		STAGE 2
IL 146	31+35.52	12.9' LT	37+11.00	12' LT				573		191.0		STAGE 2
IL 146	30+52.00	CL	30+52.00	13.85' RT					14	28.0		STAGE 1/2
IL 146	39+90.84	CL	39+90.84	12.93' LT					13	26.0		STAGE 1/2
IL 146	30+52.00	CL	39+90.84	CL						230.0		SKIP-DASH
IL 146	31+35.52	12' LT	37+11.00	12' LT						573.0		EDGE LINE
IL 146	31+42.88	12' RT	37+11.00	12' RT						570.0		EDGE LINE
SUBTOTALS					223.7	148	49.4	2672.0	27.0	1373.0	944.7	
TOTALS					224	148	50	2672	27	1373	945	

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PLOT DATE = 1/18/2021	DATE - 1/18/2021	REVISED -

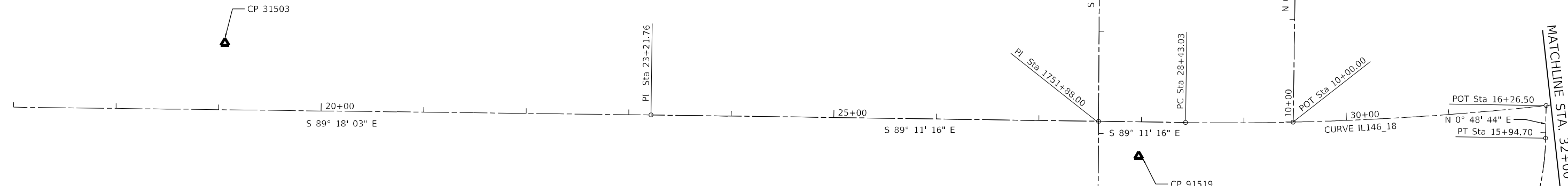
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES			
SCALE: N/A	SHEET 4 OF 4 SHEETS	STA.	TO STA.

F.A.P. RTE. 885	SECTION 1078-2	COUNTY JOHNSON	TOTAL SHEETS 67	SHEET NO. 15
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				

BENCHMARKS		
NAME	ELEVATION	DESCRIPTION
BM 1200A	397.259	CUT SQUARE ON THE TOP OF CENTER PIER FOUNDATION OF SN 044-0048, LOCATED IN THE MEDIAN OF IL 146
USGS 405	404.041	NGS MONUMENT - N.W. CORNER OF JOHNSON COUNTY COURTHOUSE YARD - SEE NGS DESC.
BM 4406	374.126	CUT SQUARE ON THE EAST SIDE OF HEADWALL FOR A 15' CONCRETE PIPE CULVERT, ~100' N. OF GHOLSON FINANCIAL SERVICES; 32.6' E. OF US 45 CL

USGS 405 PID H80437. A PIPE CAP SET INTO TOP OF 3-1/2 INCH METAL PIPE DRIVEN INTO GROUND STAMPED "406 1915 USGS", PROJECTING 25 CENTIMETERS. AT VIENNA, JOHNSON COUNTY AT THE COUNTY COURTHOUSE AND IN THE NORTHWEST CORNER OF THE COURTHOUSE YARD AND 9 FEET WEST OF A CANNON. ELEVATION = 404.04



EXIST. CURVE IL146\_18  
 PI STA. = 33+24.97  
 $\Delta$  = 19° 01' 45" (LT)  
 D = 1° 59' 33"  
 R = 2,875.46'  
 T = 481.94'  
 L = 955.00'  
 E = 40.11'  
 e = 4.5%  
 T.R. = \_\_\_\_\_  
 S.E. RUN = \_\_\_\_\_  
 P.C. STA. = 28+43.03  
 P.T. STA. = 37+98.03

CONTROL POINTS						
POINT NUMBER	NORTHING	EASTING	ELEVATION	STATION	OFFSET	DESCRIPTION
IL 146						
31503	273,128.1060	820,808.5950	387.47	19+05.33	65.35' LT	IRON PIN & IDOT CAP
31504	273,083.8750	822,351.3360	372.08	34+48.33	21.78' RT	IRON PIN & IDOT CAP
91519	273,017.3320	821,699.6820	369.65	27+97.77	33.60' RT	IRON PIN & IDOT CAP
91523	273,507.7160	823,424.6910	368.20	45+98.60	66.67' LT	IRON PIN & IDOT CAP

COORDINATE TABLE			
STATION	OFFSET	NORTHING	EASTING
IL 146			
P.I. 23+21.76	0.00	273,057.6766	821,224.1972
P.C. 28+43.03	0.00	273,050.2879	821,745.4118
P.I. 33+24.97	40.11' RT	273,043.4566	822,227.3015
P.T. 37+98.03	0.00	273,194.1183	822,685.0847
EAST MAIN ST			
POT 10+00.00	0.00	272,724.7183	821,658.2111
P.C. 10+66.24	0.00	272,724.4302	821,724.4474
P.I. 11+90.64	21.59' RT	272,723.8891	821,848.8490
P.T. 13+05.17	0.00	272,802.3946	821,945.3527
P.C. 13+87.11	0.00	272,854.1023	822,008.9150
P.I. 14+98.05	24.63' RT	272,924.1132	822,094.9768
P.T. 15+94.70	0.00	273,035.0442	822,096.5493
POT 16+26.50	0.00	273,066.8484	822,097.0002
US 45			
POT 1748+75.00	0.00	273,364.4832	821,662.1590
P.I. 1751+88.00	0.00	273,051.4897	821,660.6324
POT 1755+13.38	0.00	272,726.1183	821,658.2172
EAST DRIVE			
POT 10+00.00	0.00	273,050.72	821,850.3857
POT 12+00.00	0.00	273,250.6960	821,853.2206
PROP FIELD ENTRANCE			
POT 10+00.00	0.00	273,122.84	822,429.28
P.C. 10+43.68	0.00	273,080.3276	822,439.3046
P.I. 10+79.32	14.95' LT	273,045.64	822,447.49
P.T. 10+99.29	0.00	273,038.09	822,412.66
POT 10+00.00	0.00	273,017.70	822,313.71

EXIST. CURVE EMAIN\_3  
 PI STA. = 11+90.64  
 $\Delta$  = 39° 22' 39" (LT)  
 D = 16° 28' 50"  
 R = 347.66'  
 T = 124.40'  
 L = 238.93'  
 E = 21.59'  
 e = \_\_\_\_\_  
 T.R. = \_\_\_\_\_  
 S.E. RUN = \_\_\_\_\_  
 P.C. STA. = 10+66.24  
 P.T. STA. = 13+05.17

EXIST. CURVE EMAIN\_6  
 PI STA. = 14+98.05  
 $\Delta$  = 50° 03' 35" (LT)  
 D = 24° 06' 54"  
 R = 237.59'  
 T = 110.94'  
 L = 207.59'  
 E = 24.63'  
 e = \_\_\_\_\_  
 T.R. = \_\_\_\_\_  
 S.E. RUN = \_\_\_\_\_  
 P.C. STA. = 13+87.11  
 P.T. STA. = 15+94.70



MODEL: D:\efk\p\100311\_10\_IL\_146\_Vienna\DCM\Design\Drawings\Sheet15.dwg  
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**EFK Moen**  
Civil Engineering Design

USER NAME = zWaters	DESIGNED - JRD	REVISED -
PLOT SCALE = 100,000' / in.	DRAWN - SJF	REVISED -
PLOT DATE = 1/18/2021	CHECKED - SLD	REVISED -
	DATE - 1/18/2021	REVISED -

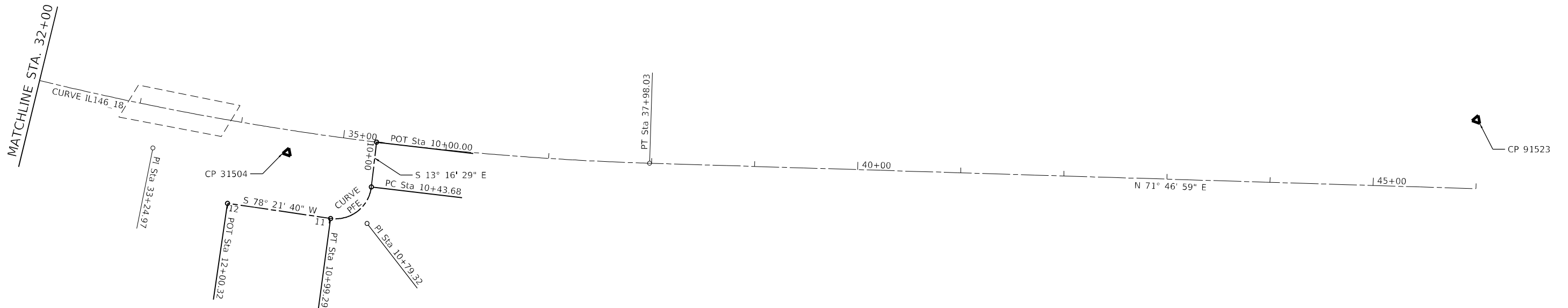
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ALIGNMENT, TIES AND BENCHMARKS

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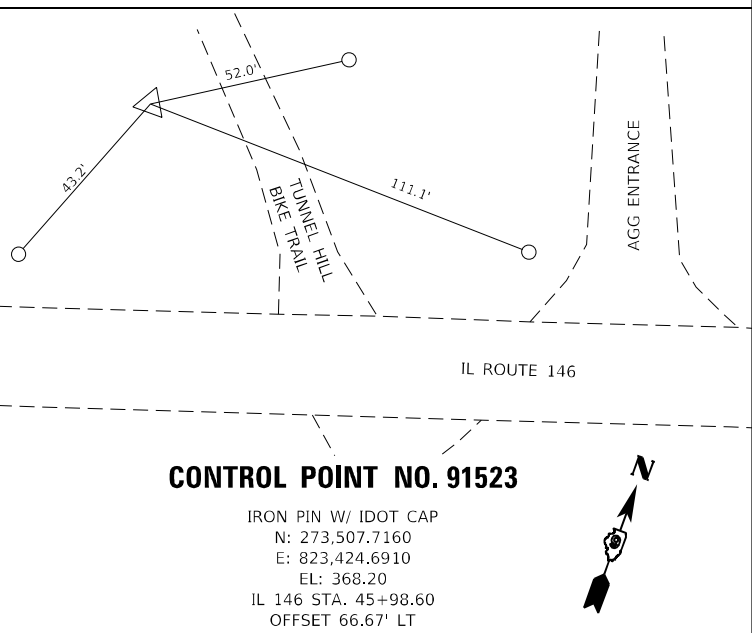
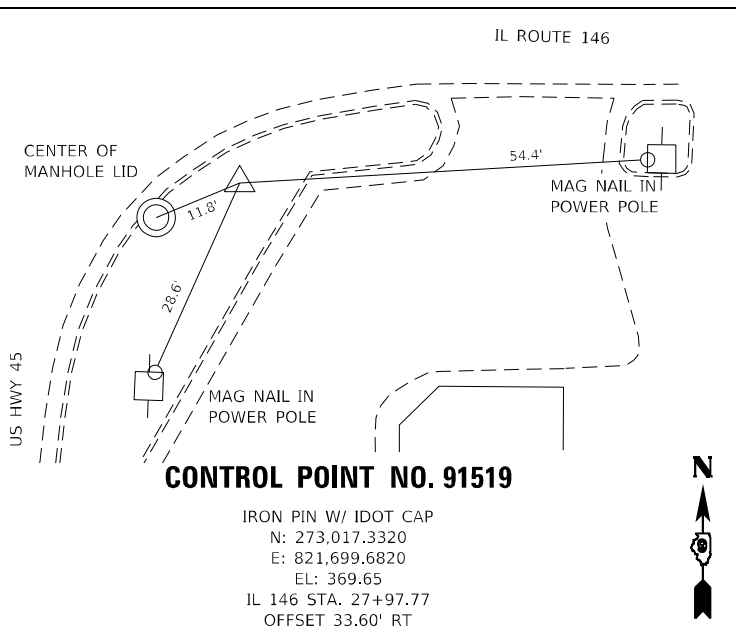
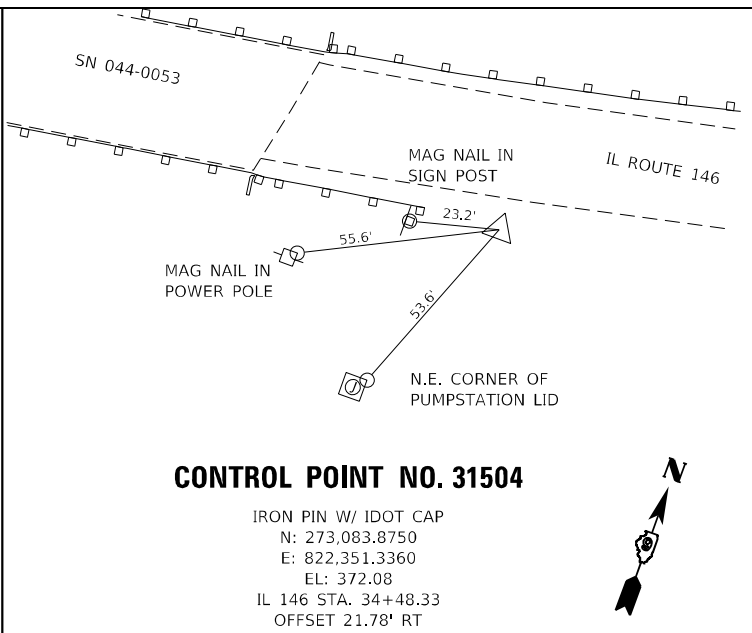
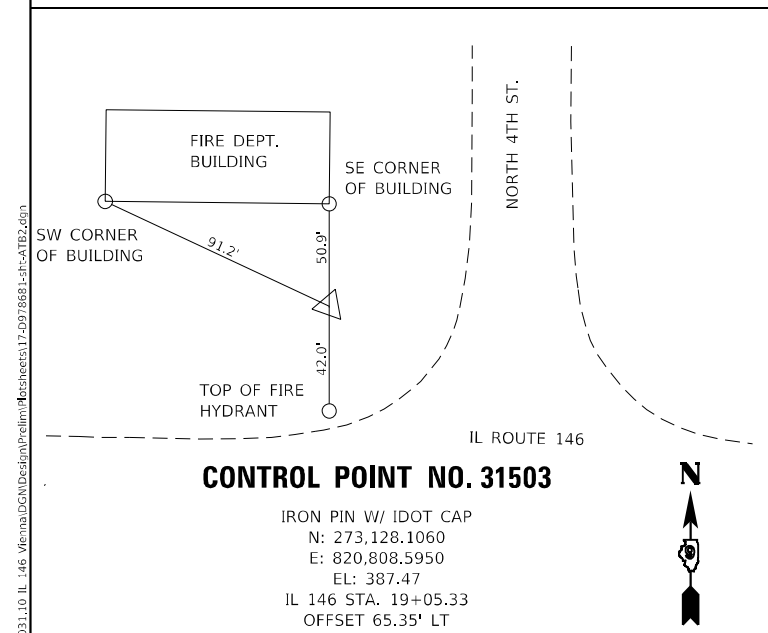
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	1078-2	JOHNSON	67	16
ILLINOIS FED. AID PROJECT			CONTRACT NO. 78681	





EXIST. CURVE IL146\_18  
 PI STA. = 33+24.97  
 $\Delta = 19^\circ 01' 45"$  (LT)  
 $D = 1^\circ 59' 33"$   
 $R = 2,875.46'$   
 $T = 481.94'$   
 $L = 955.00'$   
 $E = 40.11'$   
 $e = 4.5\%$   
 $T.R. = \underline{\hspace{1cm}}$   
 $S.E. RUN = \underline{\hspace{1cm}}$   
 $P.C. STA. = 28+43.03$   
 $P.T. STA. = 37+98.03$

PROP. CURVE PFE  
 PI STA. = 10+79.32  
 $\Delta = 91^\circ 01' 50"$  (RT)  
 $D = 163^\circ 42' 08"$   
 $R = 35.00'$   
 $T = 35.64'$   
 $L = 55.61'$   
 $E = 14.95'$   
 $e = \underline{\hspace{1cm}}$   
 $T.R. = \underline{\hspace{1cm}}$   
 $S.E. RUN = \underline{\hspace{1cm}}$   
 $P.C. STA. = 10+43.68$   
 $P.T. STA. = 10+99.29$



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**EFK Moen**  
 Civil Engineering Design

USER NAME = zWaters	DESIGNED - JRD	REVISED -
PLOT SCALE = 100,0000' / in.	DRAWN - SJF	REVISED -
PLOT DATE = 1/18/2021	CHECKED - SLD	REVISED -
	DATE - 1/18/2021	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

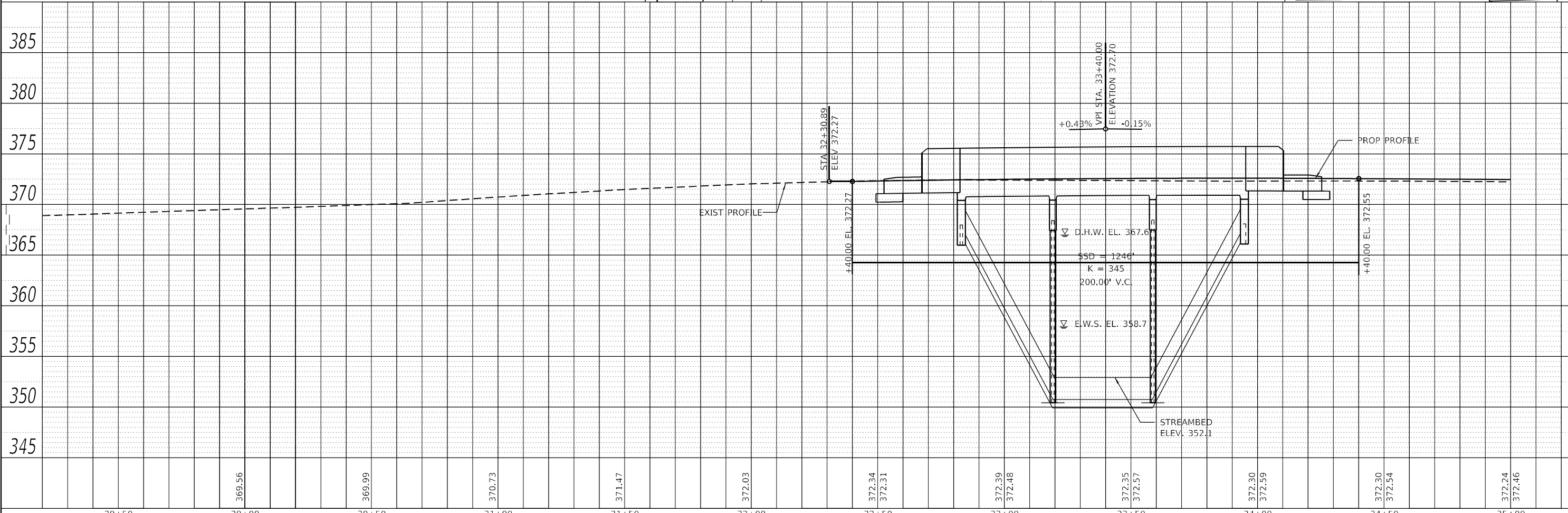
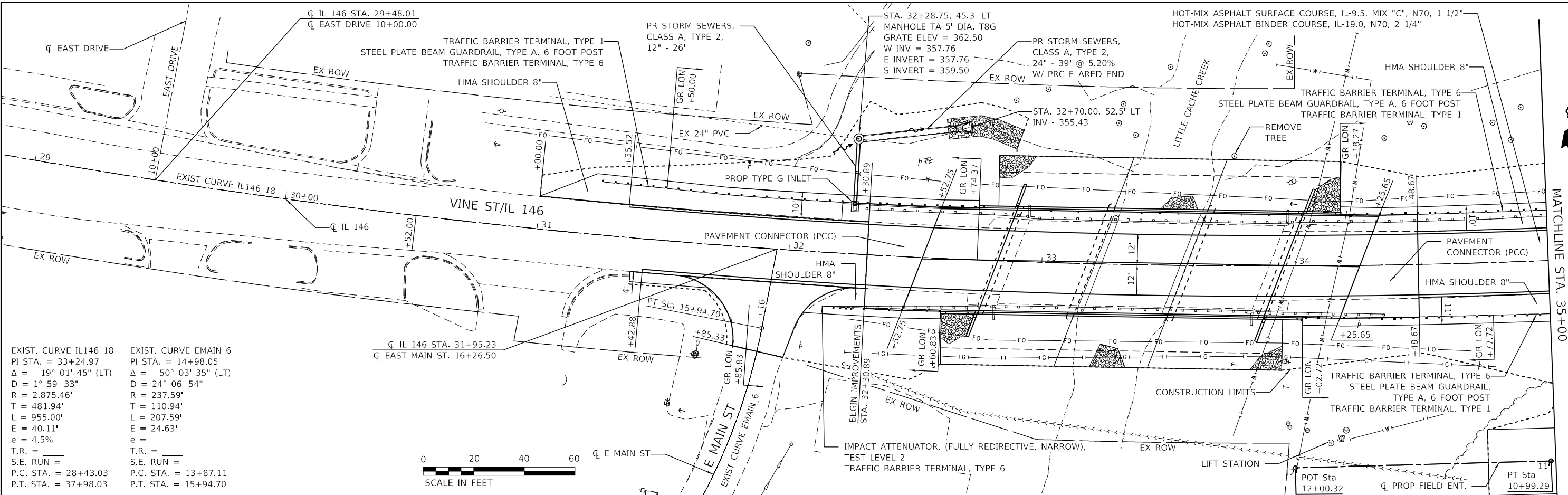
**ALIGNMENT, TIES AND BENCHMARKS**

SCALE: N.T.S. SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	1078-2	JOHNSON	67	17
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	DATE
	PLOTTED	
	ALIGNED	
	CHECKED	
	FILE NAME	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES	
	CHECKED	
	STRUCTURE	
	NOTARIS	
	NO.	



**EFK Moen**  
 Civil Engineering Design

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PLOT DATE = 1/18/2021	DATE - 1/18/2021	REVISED -

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

<b>PLAN &amp; PROFILE</b>	
SCALE: 1"=20'	SHEET 1 OF 2 SHEETS
STA. 29+00	TO STA. 35+00

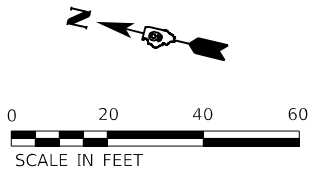
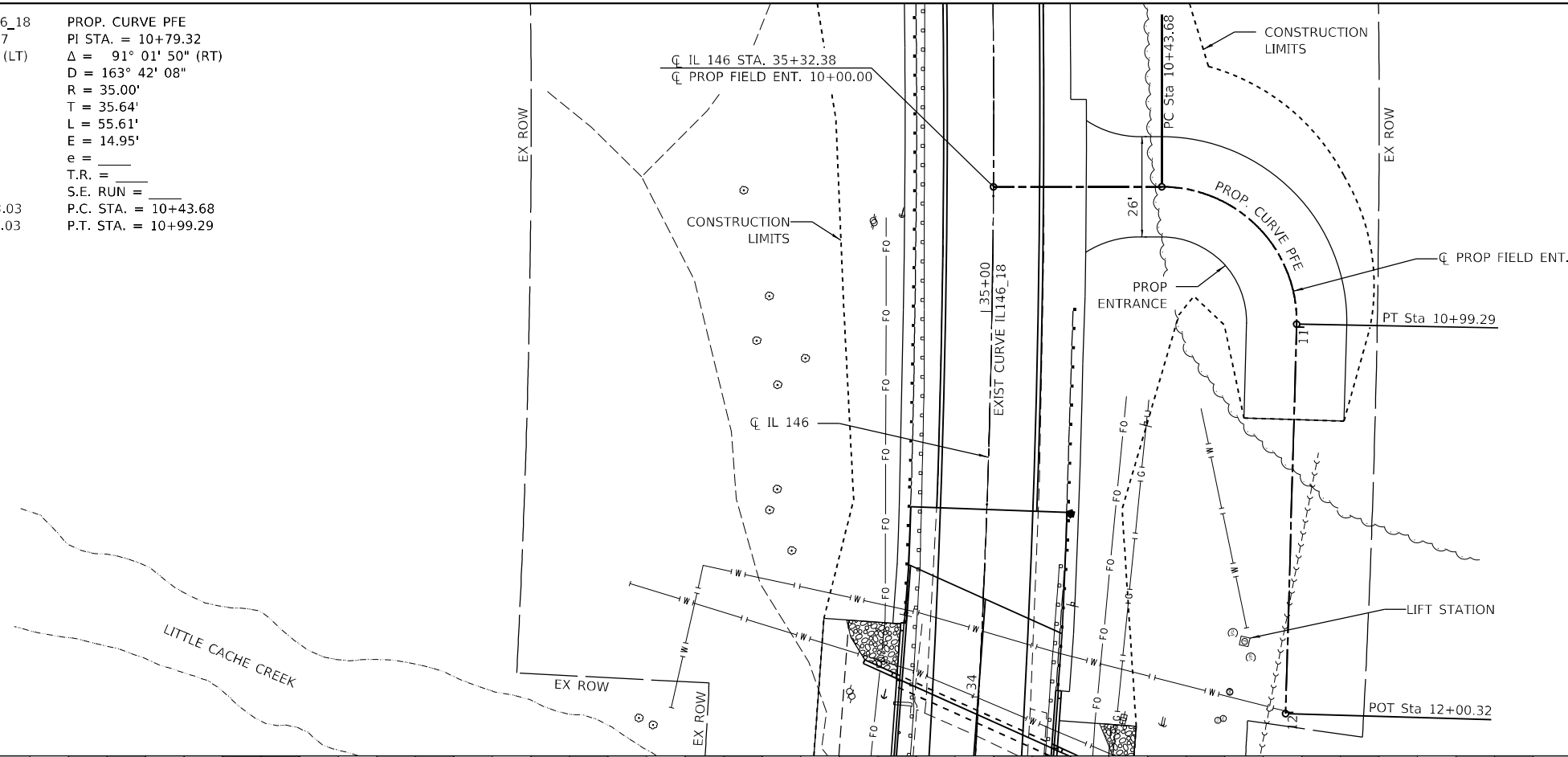
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CONTRACT NO. 78681			ILLINOIS FED. AID PROJECT	



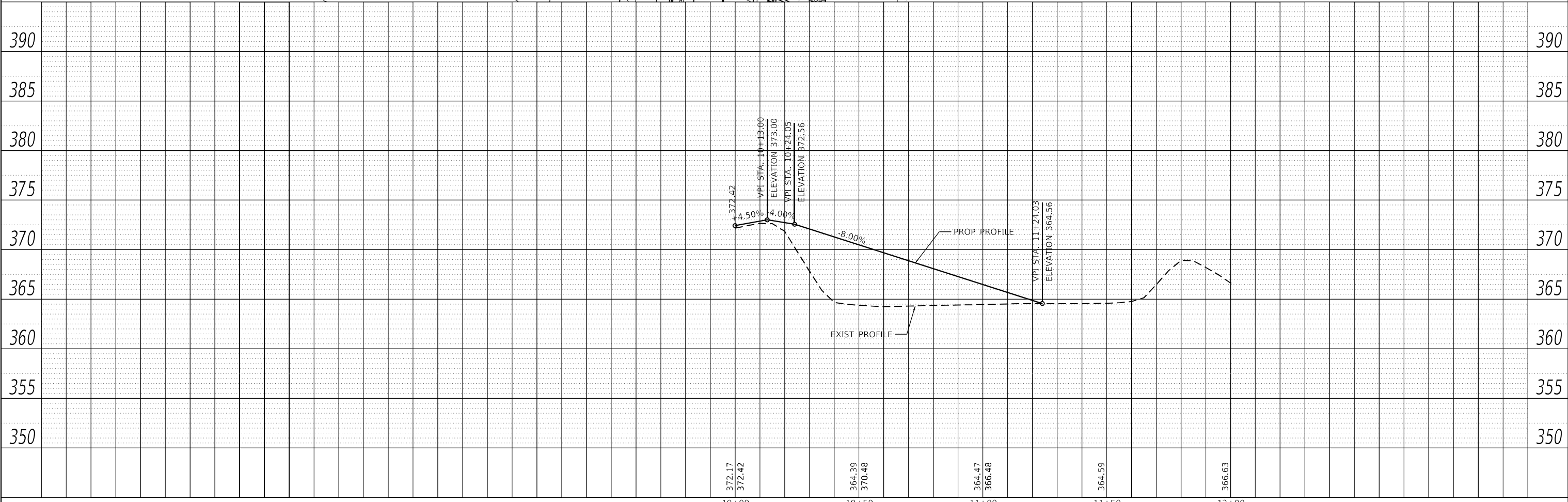
EXIST. CURVE IL146\_18  
 PI STA. = 33+24.97  
 $\Delta = 19^\circ 01' 45''$  (LT)  
 $D = 1^\circ 59' 33''$   
 $R = 2,875.46'$   
 $T = 481.94'$   
 $L = 955.00'$   
 $E = 40.11'$   
 $e = 4.5\%$   
 T.R. = \_\_\_\_\_  
 S.E. RUN = \_\_\_\_\_  
 P.C. STA. = 28+43.03  
 P.T. STA. = 37+98.03

PROP. CURVE PFE  
 PI STA. = 10+79.32  
 $\Delta = 91^\circ 01' 50''$  (RT)  
 $D = 163^\circ 42' 08''$   
 $R = 35.00'$   
 $T = 35.64'$   
 $L = 55.61'$   
 $E = 14.95'$   
 $e =$  \_\_\_\_\_  
 T.R. = \_\_\_\_\_  
 S.E. RUN = \_\_\_\_\_  
 P.C. STA. = 10+43.68  
 P.T. STA. = 10+99.29

PLAN	SURVEYED	DATE
	PLOTTED	
	ALIGNED	
	CHECKED	
	FILE NAME	
	NO.	



PROFILE	SURVEYED	DATE
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	CHECKED	
	NOTARIUS	
	CURVED	
	NO.	



**EFK Moen**  
 Civil Engineering Design

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PLOT DATE = 1/18/2021	DATE - 1/18/2021	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**DETAIL  
 FIELD ENTRANCE**

SCALE: 1" = 20'    SHEET 1 OF 1 SHEETS    STA. 10+00 TO STA. 12+00

F.A.P. RTE. 885	SECTION 1078-2	COUNTY JOHNSON	TOTAL SHEETS 67	SHEET NO. 20
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				

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### SUGGESTED SEQUENCE OF CONSTRUCTION ON BRIDGE DECKS

**TRAFFIC CONTROL AND PROTECTION PLAN PRESTAGE:**

1. SET UP TRAFFIC CONTROL ACCORDING TO IDOT HIGHWAY STANDARD 701201.
2. CONSTRUCT BASE COURSE WIDENING ALONG THE RIGHT SIDE OF IL ROUTE 146 AND THE IMPROVEMENTS TO MAIN ST. ACCORDING TO THE ATTACHED STAGE 1 CONSTRUCTION PLAN.

**TRAFFIC CONTROL AND PROTECTION PLAN STAGE 1:**

1. SET UP TRAFFIC CONTROL ACCORDING TO THE STAGE 1 CONSTRUCTION PLAN AND IDOT HIGHWAY STANDARD 701321.
2. CONSTRUCT IMPROVEMENTS ALONG THE LEFT SIDE OF IL ROUTE 146 AS SHOWN ON THE STAGE 1 CONSTRUCTION PLAN.
3. PLACE THE BINDER COURSE ALONG THE LEFT SIDE OF IL ROUTE 146, EAST OF THE BRIDGE.

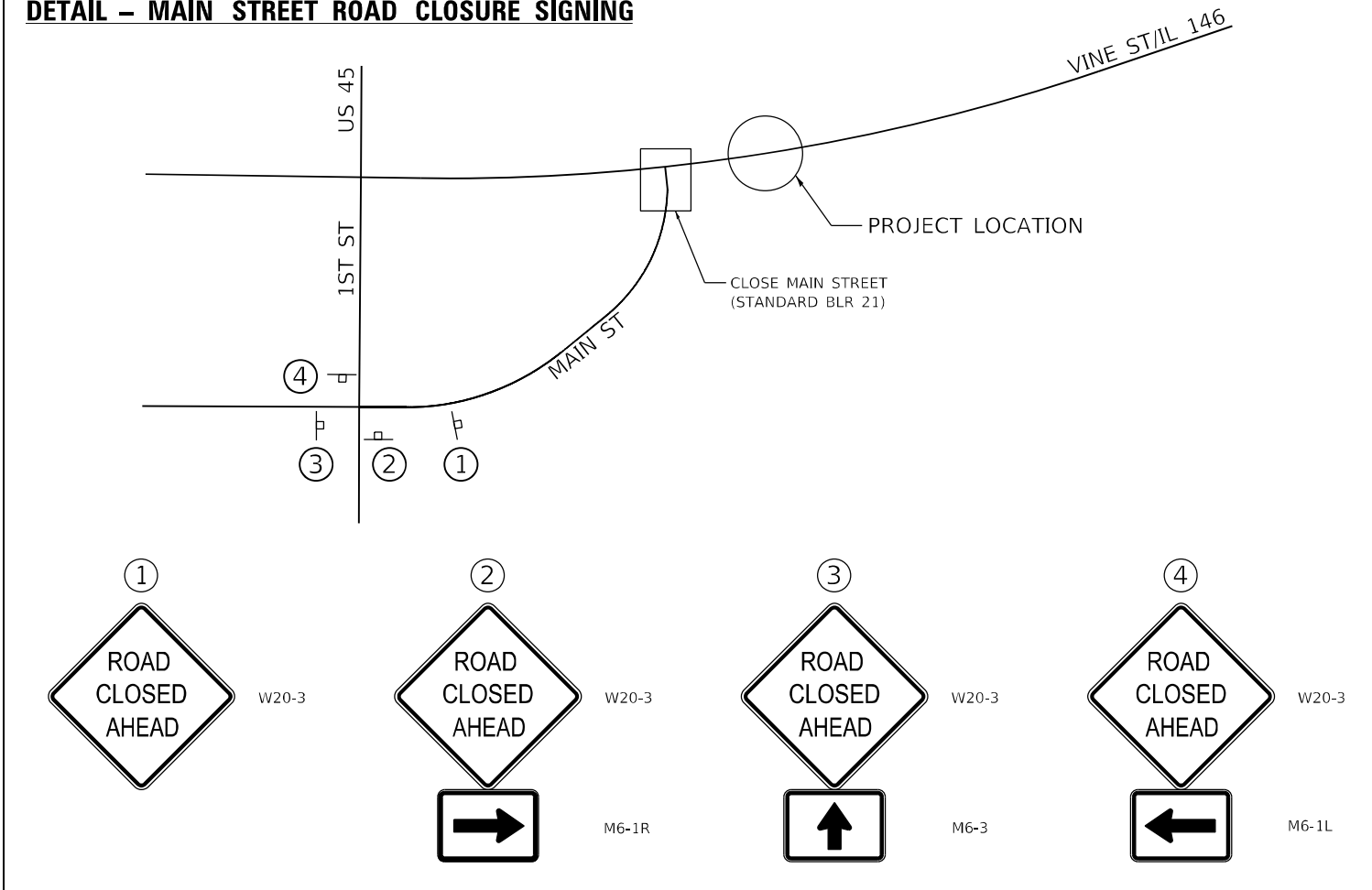
**TRAFFIC CONTROL AND PROTECTION PLAN STAGE 2:**

1. SET UP TRAFFIC CONTROL ACCORDING TO THE STAGE 2 CONSTRUCTION PLAN AND IDOT HIGHWAY STANDARD 701321.
2. CONSTRUCT IMPROVEMENTS ALONG THE RIGHT SIDE OF IL ROUTE 146 AS SHOWN ON THE STAGE 1 CONSTRUCTION PLAN.
3. PLACE THE BINDER COURSE ALONG THE RIGHT SIDE OF IL ROUTE 146, EAST OF THE BRIDGE.

**TRAFFIC CONTROL AND PROTECTION PLAN STAGE 3 (UNDER TRAFFIC):**

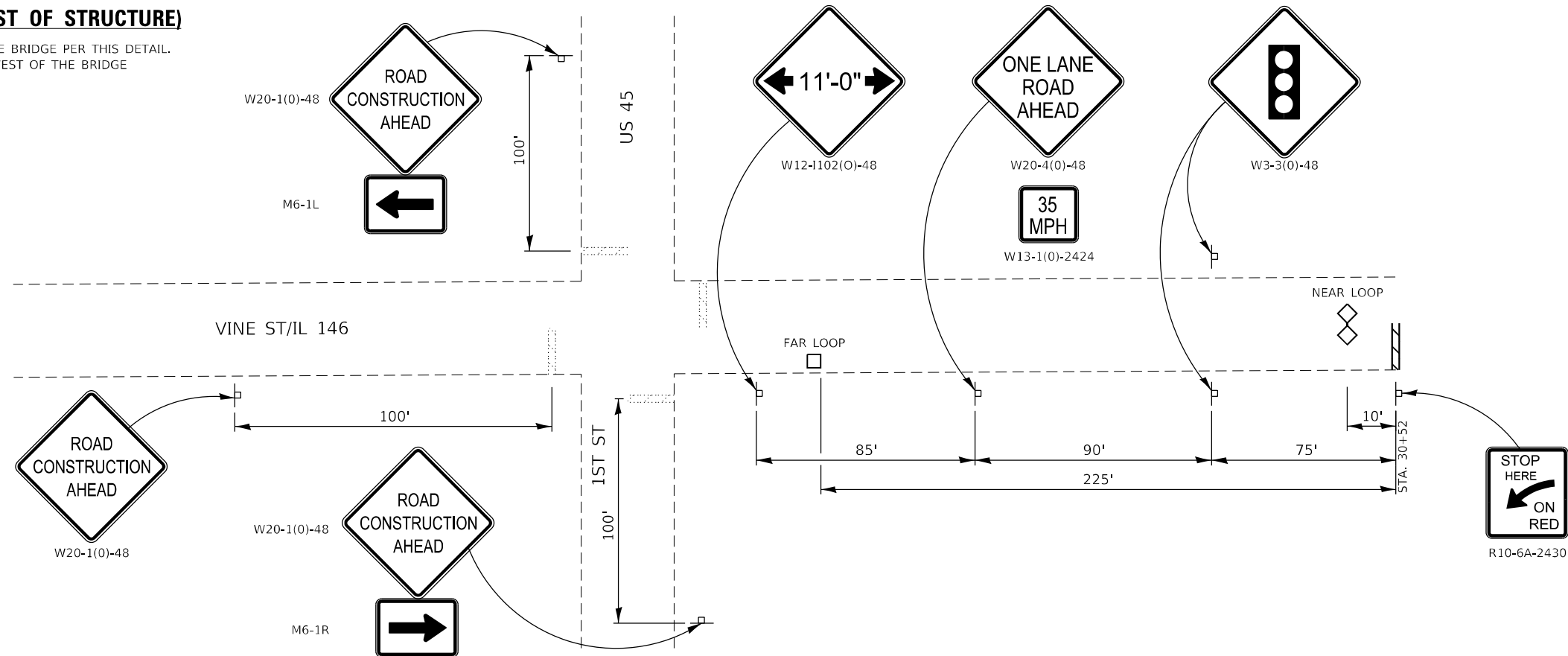
1. PLACE THE SURFACE COURSE ALONG IL ROUTE 146.
2. INSTALL THE PERMANENT PAVEMENT MARKING ALONG IL ROUTE 146.

### DETAIL – MAIN STREET ROAD CLOSURE SIGNING



### DETAIL – STANDARD 701321 (WEST OF STRUCTURE)

STANDARD 701321 SHALL BE MODIFIED WEST OF THE BRIDGE PER THIS DETAIL. NO TEMPORARY RUMBLE STRIPS SHALL BE PLACED WEST OF THE BRIDGE



MODEL Path: \\... \100311.0 IL 146 Vine St/IL 146 - Main St Design Prelim\Revised\1-18-2021\stage notes.dgn  
FILE NAME: Z:\100311.0 IL 146 Vine St/IL 146 - Main St Design Prelim\Revised\1-18-2021\stage notes.dgn

**EFK Moen**  
Civil Engineering Design

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PLOT SCALE = 40,0000 * / in.	CHECKED - SLD	REVISED -
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

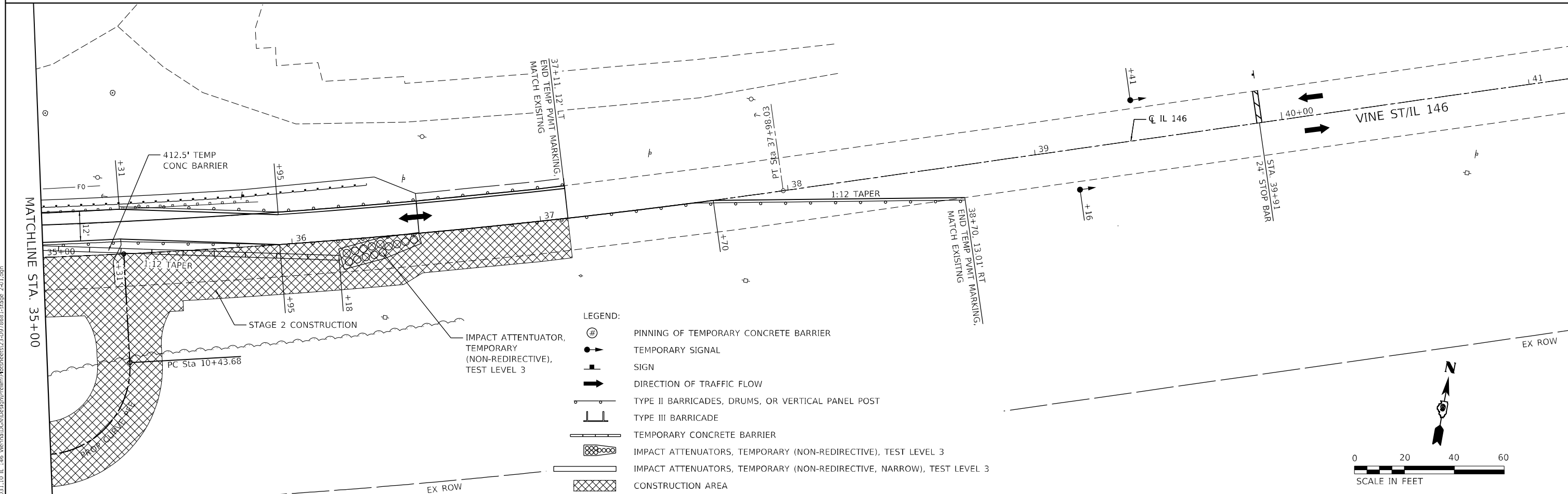
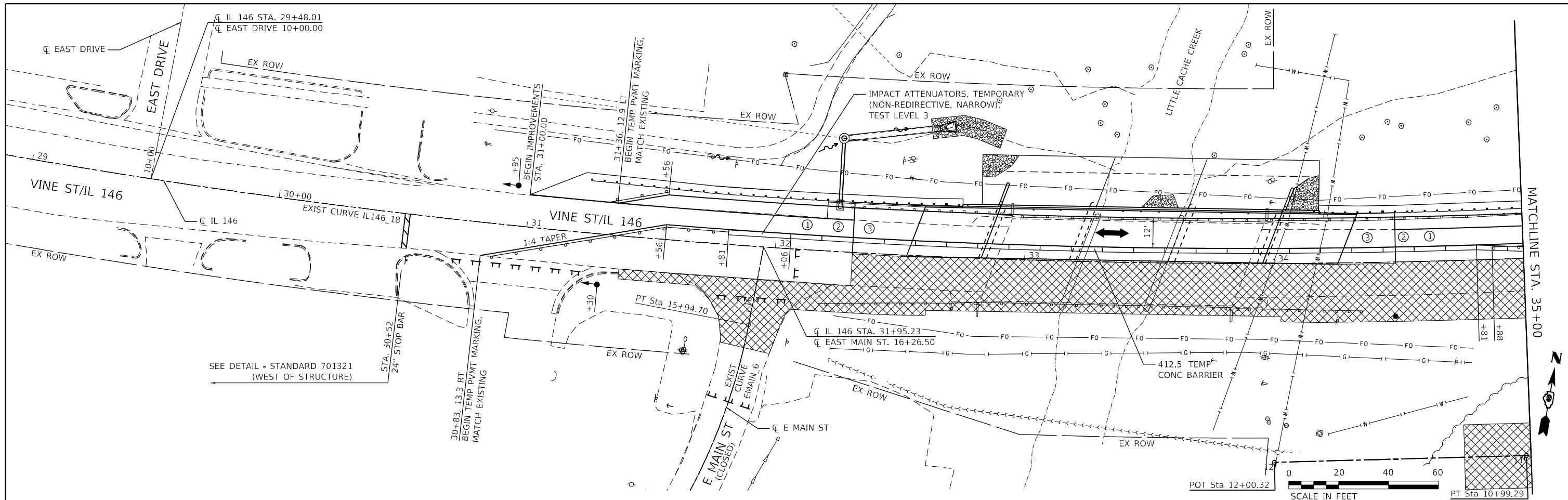
TRAFFIC CONTROL AND PROTECTION PLAN  
NOTES AND DETAILS

SCALE: N/A SHEET 1 OF 3 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	1078-2	JOHNSON	67	21
CONTRACT NO. 78681			ILLINOIS FED. AID PROJECT	







- LEGEND:
- PINNING OF TEMPORARY CONCRETE BARRIER
  - TEMPORARY SIGNAL
  - DIRECTION OF TRAFFIC FLOW
  - TYPE II BARRICADES, DRUMS, OR VERTICAL PANEL POST
  - TYPE III BARRICADE
  - TEMPORARY CONCRETE BARRIER
  - IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3
  - IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE, NARROW), TEST LEVEL 3
  - CONSTRUCTION AREA

**EFK Moen**  
Civil Engineering Design

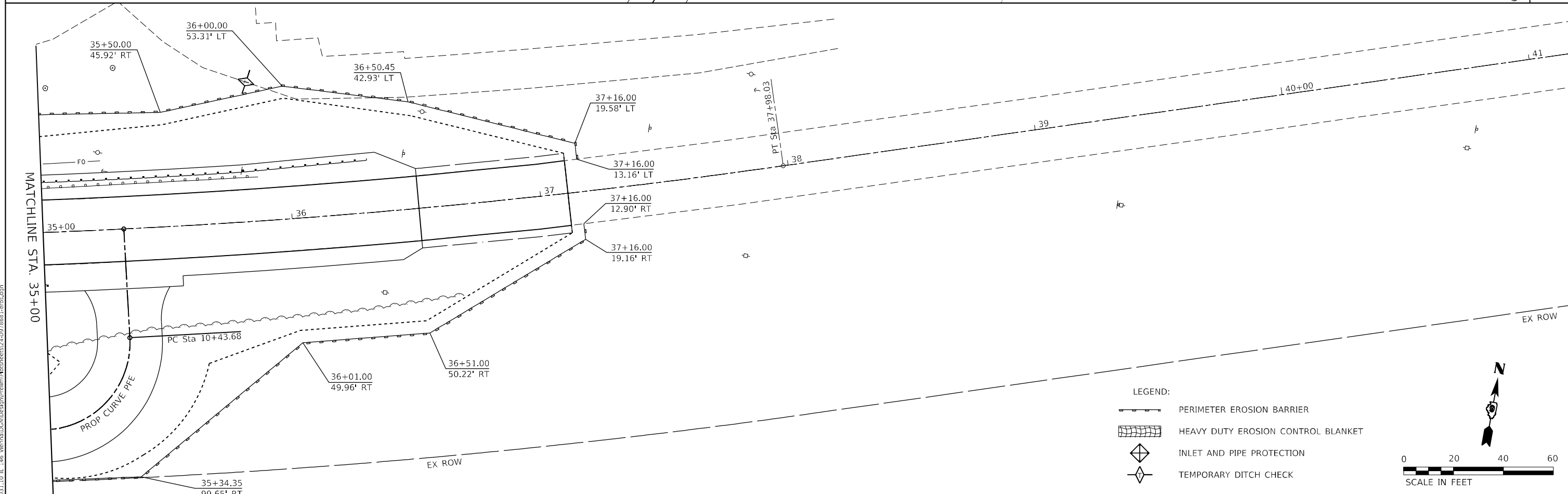
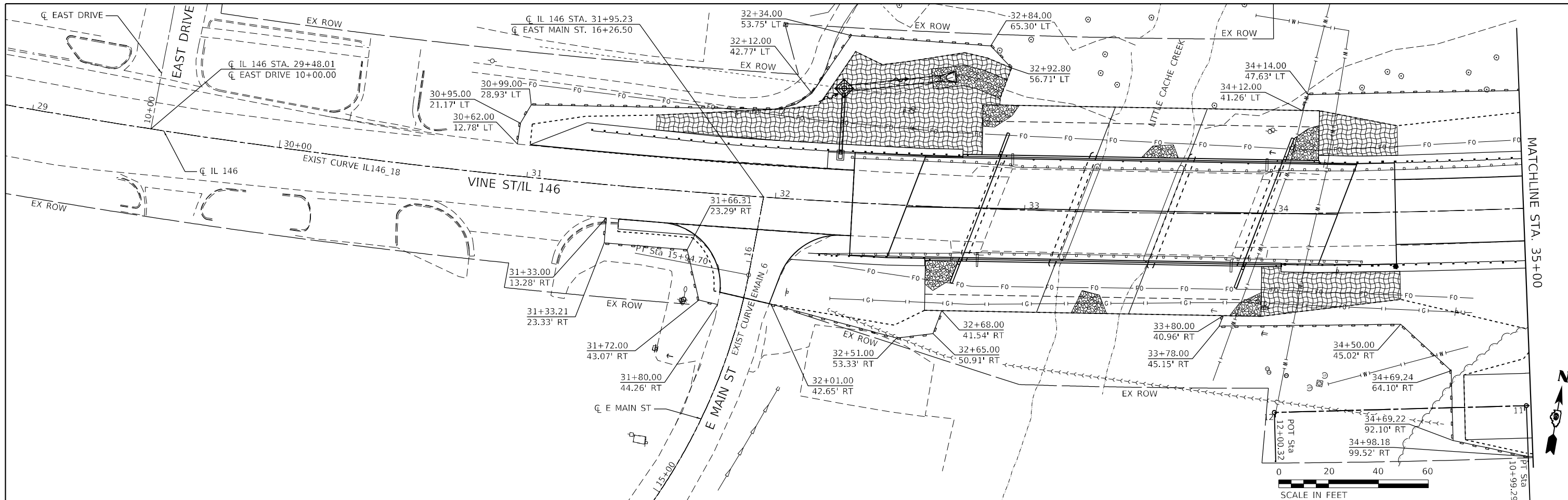
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	DATE - 1/18/2021	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

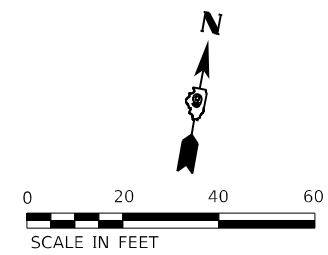
**TRAFFIC CONTROL AND PROTECTION PLAN  
STAGE 2**

SCALE: 1"=20' SHEET 3 OF 3 SHEETS STA. 29+00.00 TO STA. 41+00.00

F.A.P. RTE. 885	SECTION 1078-2	COUNTY JOHNSON	TOTAL SHEETS 67	SHEET NO. 23
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				



- LEGEND:
- PERIMETER EROSION BARRIER
  - HEAVY DUTY EROSION CONTROL BLANKET
  - INLET AND PIPE PROTECTION
  - TEMPORARY DITCH CHECK



MODEL: Default  
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 DATE: 1/18/2021

**EFK Moen**  
Civil Engineering Design

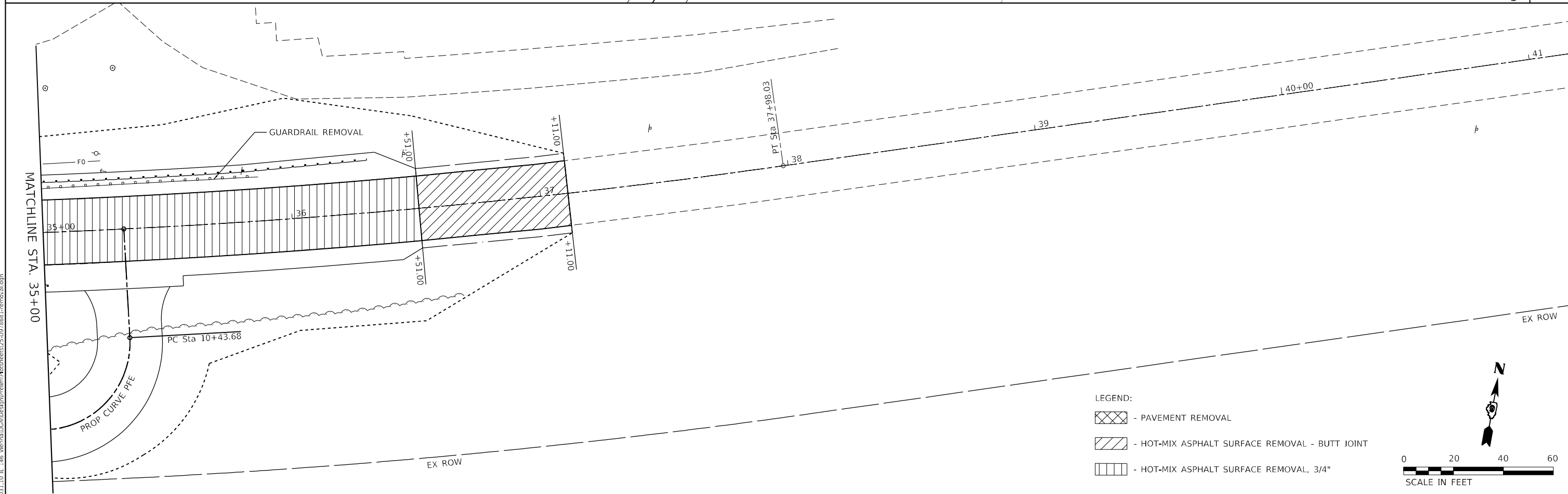
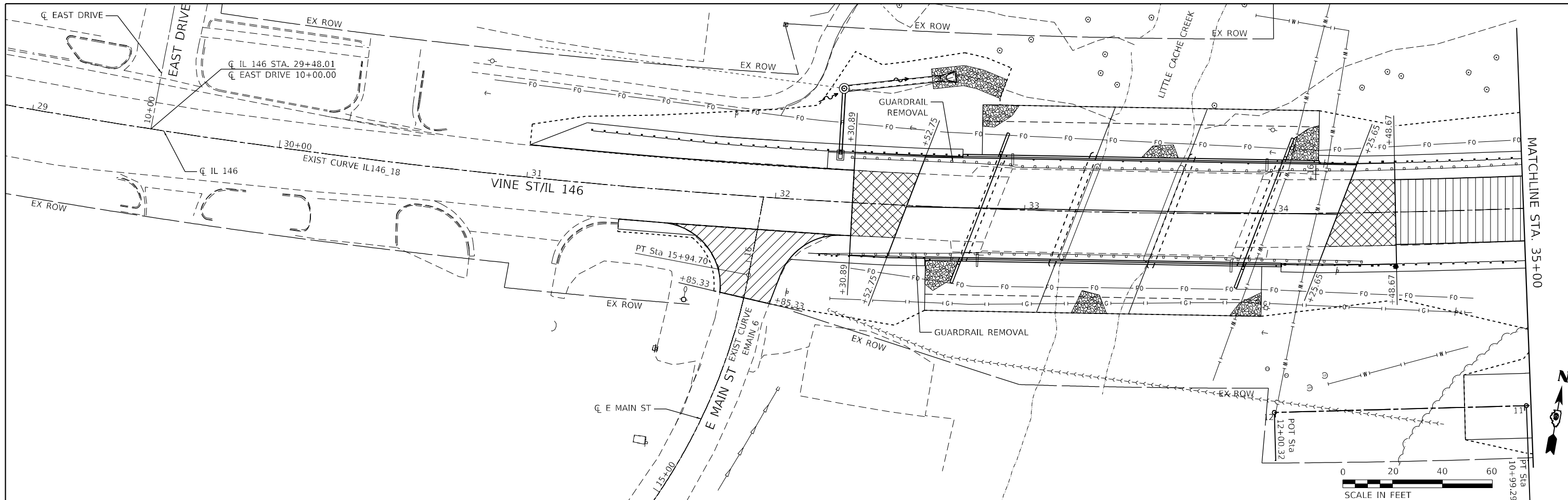
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PLOT DATE = 1/18/2021	CHECKED - SLD	REVISED -
	DATE - 1/18/2021	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EROSION CONTROL**

SCALE: 1"=20'      SHEET 1 OF 1 SHEETS      STA. 29+00.00 TO STA. 41+00.00

F.A.P. RTE. 885	SECTION 1078-2	COUNTY JOHNSON	TOTAL SHEETS 67	SHEET NO. 24
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				



MODEL: Default  
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**EFK Moen**  
 Civil Engineering Design

USER NAME = zWaters	DESIGNED - SJF	REVISED -
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PLOT DATE = 1/18/2021	CHECKED - SLD	REVISED -
	DATE - 1/18/2021	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

- LEGEND:
- PAVEMENT REMOVAL
  - HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT
  - HOT-MIX ASPHALT SURFACE REMOVAL, 3/4"

SCALE: 1"=20'      SHEET 1 OF 1 SHEETS      STA. 29+00.00 TO STA. 41+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	1078-2	JOHNSON	67	25
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				

Benchmark: R105 reset disk located on Northeast wingwall of SN 044-0053. NGS Monument; Elev. 371.61.

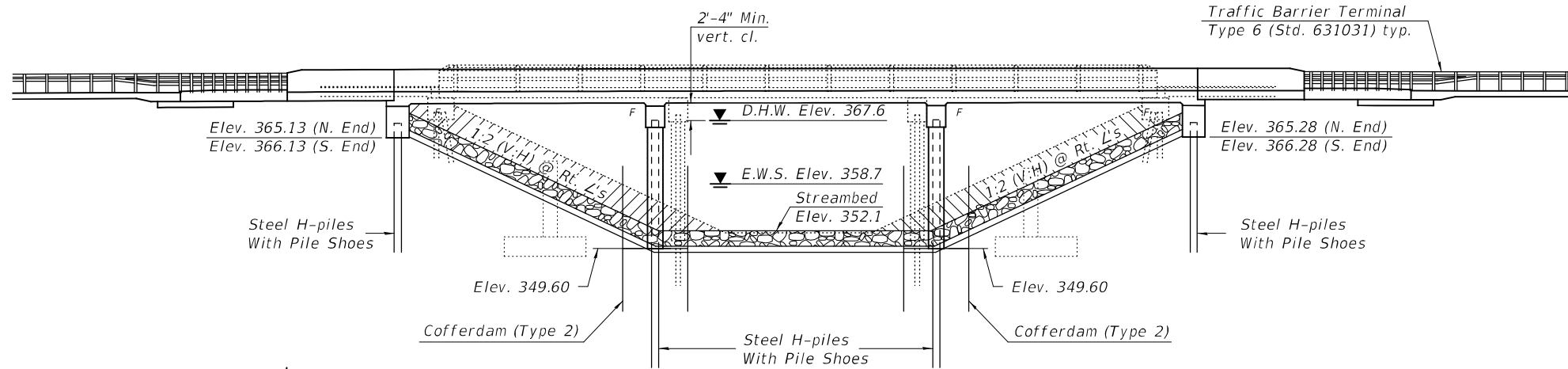
Existing Structure: Structure No. 044-0053 was originally constructed in 1981 as F.A. 885, Section 110BC-1. The structure is a three span deck beam bridge with 1 3/4" bituminous concrete surface and waterproofing membrane system on pile bent abutments and pile bent piers. In 2002, 1" of the bituminous concrete surface was removed and replaced. In 2007, stone riprap was placed at the north end of Pier 1. In 2016, tie rods were placed between beam 3 in span 3 due to a broken keyway. Existing structure will be removed and replaced. Traffic is to be maintained utilizing stage construction.

No Salvage

**DESIGN SPECIFICATIONS**  
2017 AASHTO LRFD Bridge Design Specifications, 8th Edition

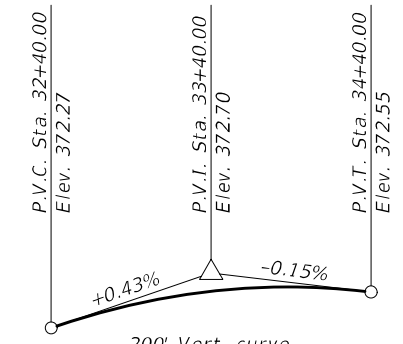
**DESIGN STRESSES**  
FIELD UNITS

$f'_c = 3,500$  psi  
 $f'_c = 4,000$  psi (Superstructure Concrete)  
 $f_y = 60,000$  psi (Reinforcement)  
 $f_y = 50,000$  psi (M270 Grade 50 for steel H-piles)



Note: Hatched areas indicate limits of channel excavation. See roadway plans.

**ELEVATION**



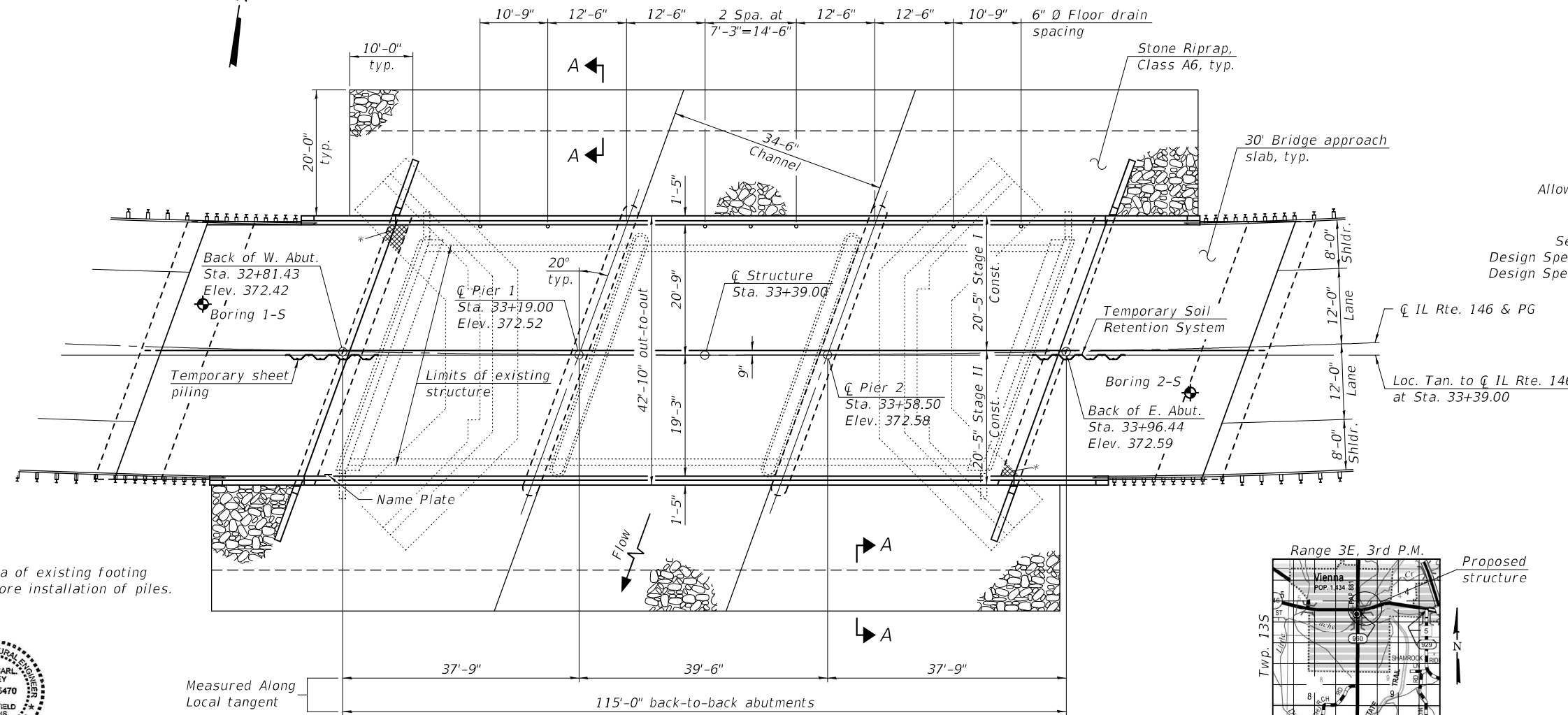
**PROFILE GRADE**  
(Along  $\bar{C}$  IL Rte. 146)

**LOADING HL-93**

Allow 50#/sq. ft. for future wearing surface.

**SEISMIC DATA**

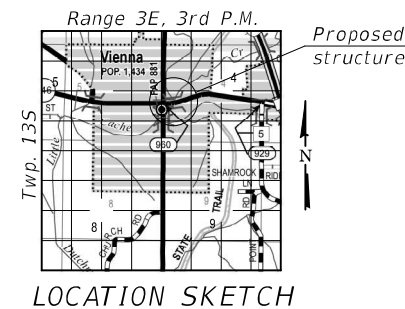
Seismic Performance Zone (SPZ) = 3  
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.497g  
Design Spectral Acceleration at 0.2 sec. (SDS) = 1.144g  
Soil Site Class = D



\* Cross-hatched area of existing footing to be removed before installation of piles.



EXPIRES 11-30-2022



**GENERAL PLAN & ELEVATION**  
**ILLINOIS ROUTE 146 OVER**  
**LITTLE CACHE CREEK**  
**F.A.P. RTE. 885 - SEC. 107B-2**  
**JOHNSON COUNTY**  
**STATION 33+39.00**  
**STRUCTURE NO. 044-0063**

MODEL: 0440063-78681-001  
FILE NAME: p:\w\lanroom\dot\illinois\gov\p\w\dot\Documents\DOT Offices\Bureau of Bridges and Structures\Projects\0440063\CADD Plans\0440063-78681.dgn

DESIGNED - ZACHARY T. BULVA	EXAMINED - <i>Jay F. Schif</i>	DATE - MARCH 11, 2021
CHECKED - RYAN P. NEGANGARD	PASSED - <i>David Carl Puzey</i>	REVISOR -
DRAWN - DENNIS A. POP	ENGINEER OF BRIDGE DESIGN	REVISOR -
CHECKED - Z.T.B. / R.P.N. / G.R.A.	ENGINEER OF BRIDGES AND STRUCTURES	

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

SHEET 1 OF 26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	107B-2	JOHNSON	67	26
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				

**WATERWAY INFORMATION**

Drainage Area = 27.6 sq. mi.		Existing Overtopping Elev. 368.8 at Sta. 28+68 Proposed Overtopping Elev. 368.8 at Sta. 28+68							
Flood Event	Flood Freq. Year	Discharge C.F.S.	Opening Ft <sup>2</sup>		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
	10	4,820	683	714	366.7	1.5	1.5	368.7	368.2
Existing Overtopping	35	6,450	734	-	367.3	1.2	-	368.5	-
Design	50	7,110	760	784	367.6	2.0	1.4	369.6	368.9
	100	8,090	777	799	367.8	2.2	1.5	370.1	369.3
Scour Design Check Maximum Calculated	200	9,080	813	831	368.2	2.6	2.1	370.7	370.3
	500	10,600	849	862	368.6	2.9	2.2	371.6	370.8

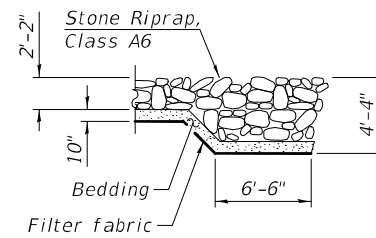
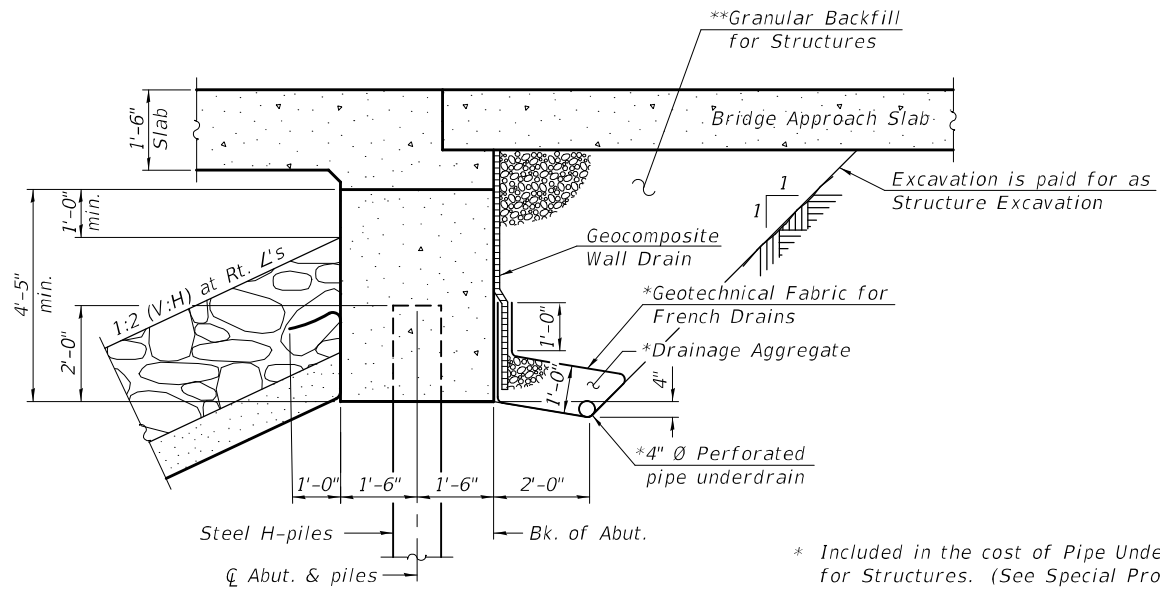
10 Year velocity through exist. bridge = 7.1 ft./sec.  
10 Year velocity through proposed bridge = 6.8 ft./sec.

**DESIGN SCOUR ELEVATION TABLE**

Event / Limit State	Design Scour Elevations (ft.)				
	W. Abut.	Pier 1	Pier 2	E. Abut.	Item 113
Q100	365.13	339.6	338.9	365.28	5
Q200	365.13	339.6	338.9	365.28	
Design	365.13	339.6	338.9	365.28	
Check	365.13	339.6	338.9	365.28	

**CURVE DATA**

P.I. Sta. = 33+24.97  
 $\Delta = 19^{\circ}01'45''$  Lt.  
 $D = 1^{\circ}59'33''$   
 $R = 2,875.46$   
 $T = 481.94'$   
 $L = 955.00'$   
 $E = 40.11'$   
 P.C. Sta. = 28+43.03  
 P.T. Sta. = 37+98.03  
 $S.E. = 4.5\%$



**SECTION A-A**

**SECTION THRU ABUTMENT**  
(Horiz. dim. @ Rt. L's)

Note:  
All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

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

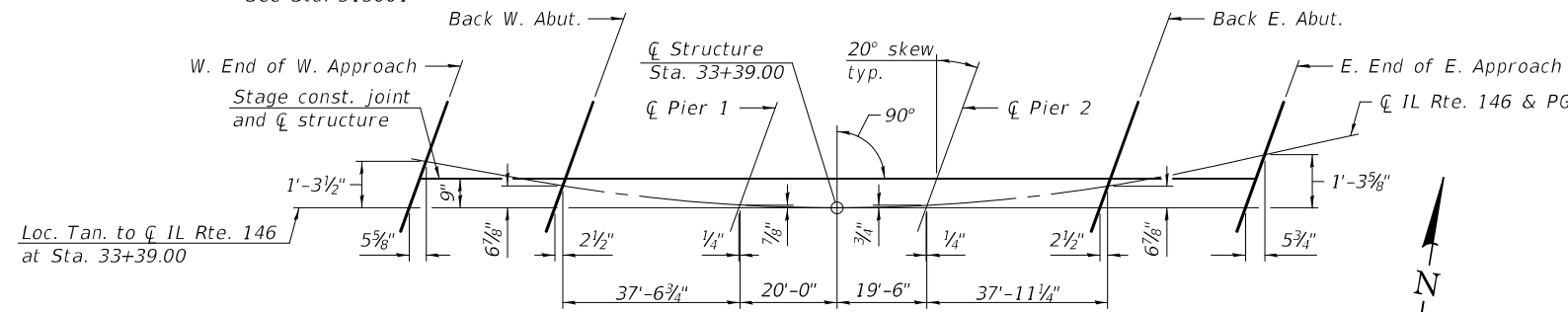
\*\* Granular Backfill for Structures shall follow Std. Spec. 586 except the Coarse Aggregate shall be Grade CA 7, CA 11, or CA 14. Granular backfill behind the abutments shall be compacted according to Article 205.06 of the Standard Specifications.

**GENERAL NOTES**

- Reinforcement bars designated (E) shall be epoxy coated.
- The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
- Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- Slipforming of the parapets is not allowed.
- The Contractor shall make allowance for the deflection of forms, shrinkage and settlement of falsework, in addition to allowance for dead load deflection. Forms for deck slab shall be removed prior to placement of bridge approach slab.
- The Contractor is advised that the existing PPC Deck Beam are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the beams when developing construction procedures for removal and replacement of the superstructure.

STATION 33+39.00  
 BUILT 20 BY  
 STATE OF ILLINOIS  
 F.A.P. RTE. 885 - SEC. 107B-2  
 LOADING HL-93  
 STRUCTURE NO. 044-0063

**NAME PLATES**  
See Std. 515001



**OFFSET SKETCH**

**INDEX OF SHEETS**

- 1 - General Plan & Elevation
- 2 - General Data
- 3 - Stage Construction Details
- 4 - Temporary Concrete Barrier
- 5-6 - Top of Slab Elevations
- 7-8 - Top of Approach Slab Elevations
- 9-10 - Superstructure
- 11-12 - Superstructure Details
- 13 - West Approach Slab
- 14 - West Approach Slab Details
- 15 - East Approach Slab
- 16 - East Approach Slab Details
- 17 - West Abutment
- 18 - East Abutment
- 19 - Abutments Details
- 20 - Pier 1
- 21 - Pier 2
- 22 - Pier Details
- 23 - HP Pile Details
- 24 - Bar Splicer Assembly Details
- 25-26 - Soil Boring Logs

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A6	Sq. Yd.		1181	1181
Filter Fabric	Sq. Yd.		1181	1181
Protective Coat	Sq. Yd.	904		904
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		190	190
Cofferdam Excavation	Cu. Yd.		15.8	15.8
Cofferdam (Type 2) (Location - 1)	Each		1	1
Cofferdam (Type 2) (Location - 2)	Each		1	1
Floor Drains	Each	7		7
Concrete Structures	Cu. Yd.		232.9	232.9
Concrete Superstructure	Cu. Yd.	315.3		315.3
Concrete Superstructure (Approach Slab)	Cu. Yd.	117.5		117.5
Bridge Deck Grooving	Sq. Yd.	730		730
Reinforcement Bars, Epoxy Coated	Pound	162,550	22,220	184,770
Bar Splicers	Each	682	194	876
Furnishing Steel Piles HP14x117	Foot		2438	2438
Driving Piles	Foot		2438	2438
Test Pile Steel HP14x117	Each		2	2
Pile Shoes	Each		48	48
Name Plates	Each	1		1
Temporary Sheet Piling	Sq. Ft.		353	353
Temporary Soil Retention System	Sq. Ft.		161	161
Geocomposite Wall Drain	Sq. Yd.		60	60
Granular Backfill for Structures	Cu. Yd.		102	102
Asbestos Bearing Pad Removal	Each	24		24
Pipe Underdrains for Structures 4"	Foot		151	151

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DESIGNED - ZACHARY T. BULVA	EXAMINED -
CHECKED - RYAN P. NEGANGARD	PASSED -
DRAWN - DENNIS A. POP	
CHECKED - Z.T.B. / R.P.N. / G.R.A.	

DATE - MARCH 11, 2021  
 ENGINEER OF BRIDGES AND STRUCTURES

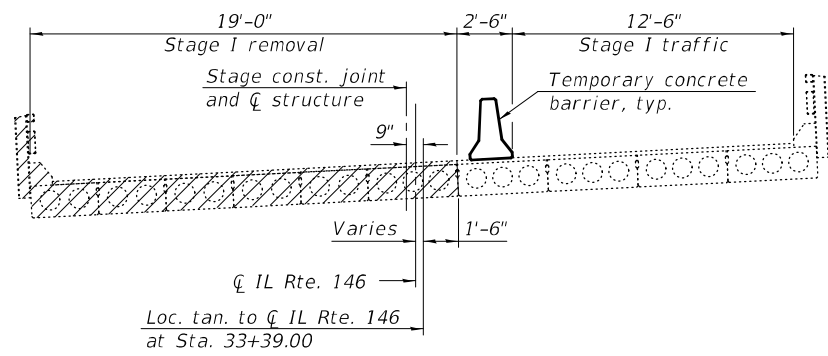
REVISER -	REVISION -
REVISER -	REVISION -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

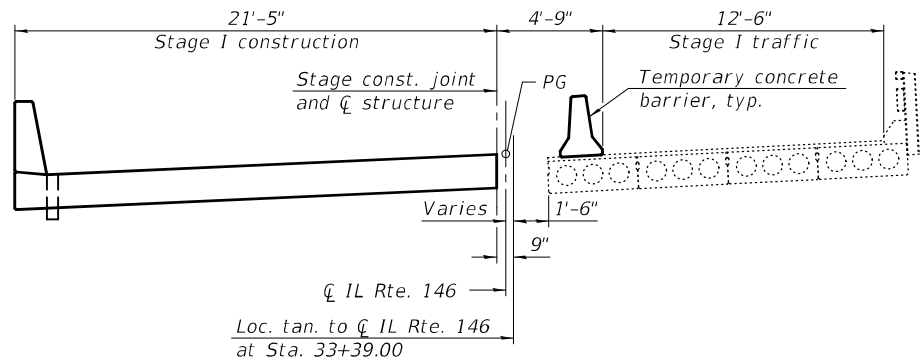
GENERAL DATA  
 STRUCTURE NO. 044-0063

SHEET 2 OF 26 SHEETS

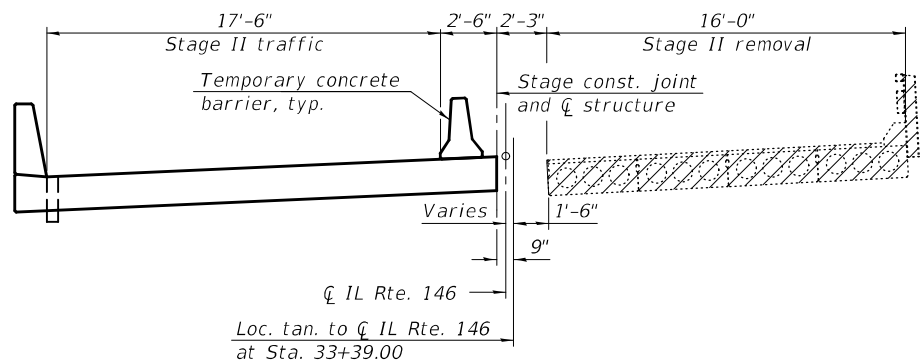
F.A.P. RTE. 885	SECTION 107B-2	COUNTY JOHNSON	TOTAL SHEETS 67	SHEET NO. 27
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				



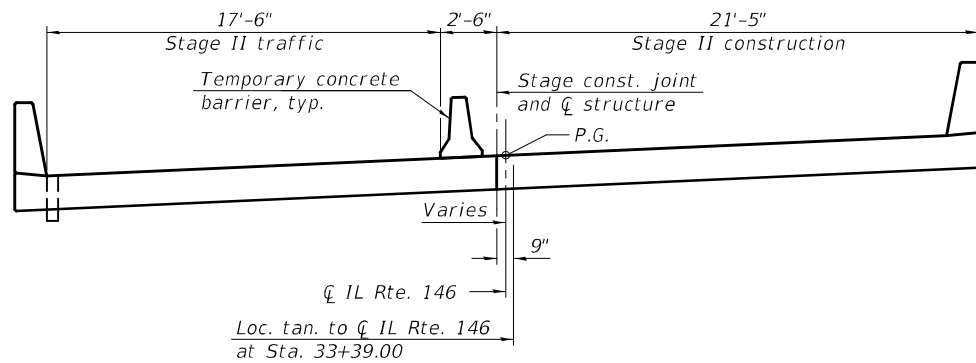
**STAGE I REMOVAL**  
(Looking East)



**STAGE I CONSTRUCTION**  
(Looking East)

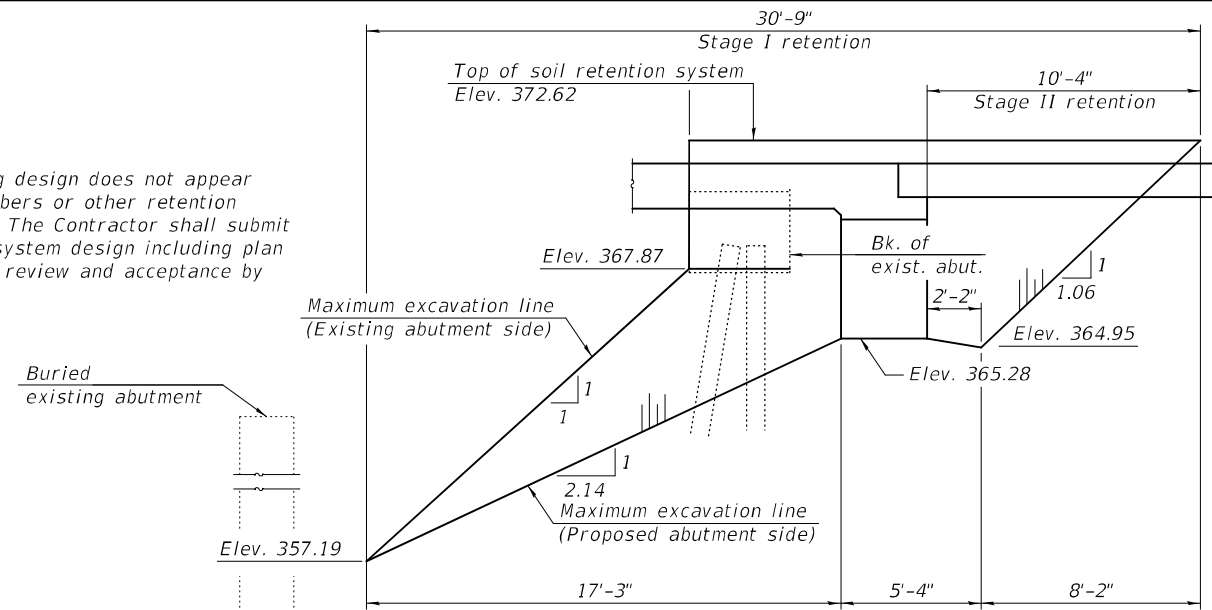


**STAGE II REMOVAL**  
(Looking East)

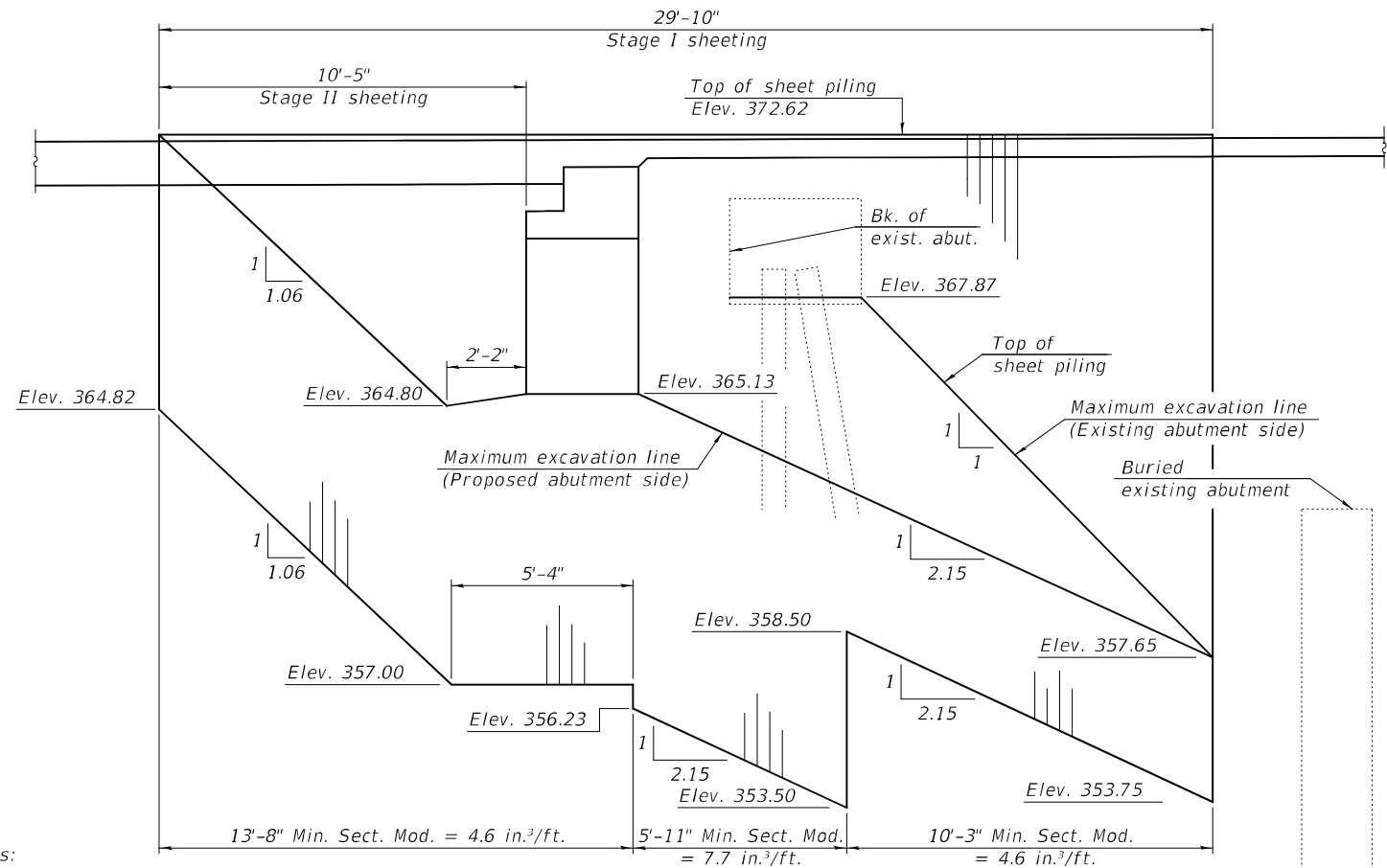


**STAGE II CONSTRUCTION**  
(Looking East)

Note:  
A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.



**EAST ABUTMENT**  
**TEMPORARY SOIL RETENTION SYSTEM**  
(Looking North)



**WEST ABUTMENT**  
**TEMPORARY SHEET PILING**  
(Looking North)

Notes:  
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.  
The Contractor shall connect the first sheet to the existing abutment wall to ensure stability of sheets driven to the top of the existing footing. This connection shall be reviewed and accepted by the Engineer and included in the cost for Temporary Sheet Piling.  
For quantity of Temporary Concrete Barrier, see Roadway Plans.

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DESIGNED - ZACHARY T. BULVA	EXAMINED - <i>Joanne F. [Signature]</i>	DATE - MARCH 11, 2021
CHECKED - RYAN P. NEGANGARD	PASSED - <i>Carl [Signature]</i>	REVISOR -
DRAWN - DENNIS A. POP	ENGINEER OF BRIDGES AND STRUCTURES	REVISOR -
CHECKED - Z.T.B. / R.P.N. / G.R.A.		

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

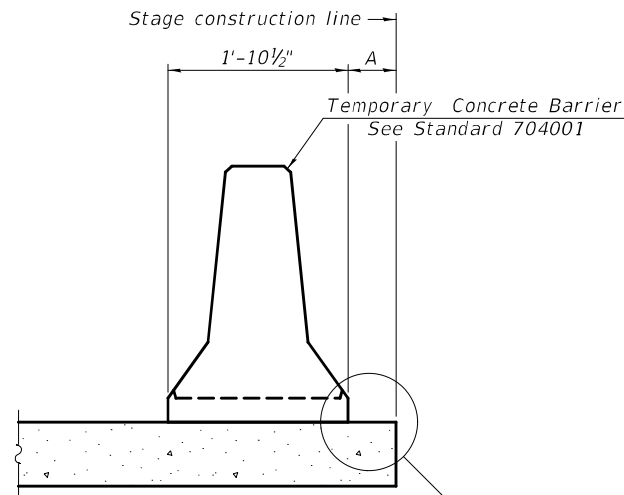
**STAGE CONSTRUCTION DETAILS**  
**STRUCTURE NO. 044-0063**

SHEET 3 OF 26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	107B-2	JOHNSON	67	28
CONTRACT NO. 78681				

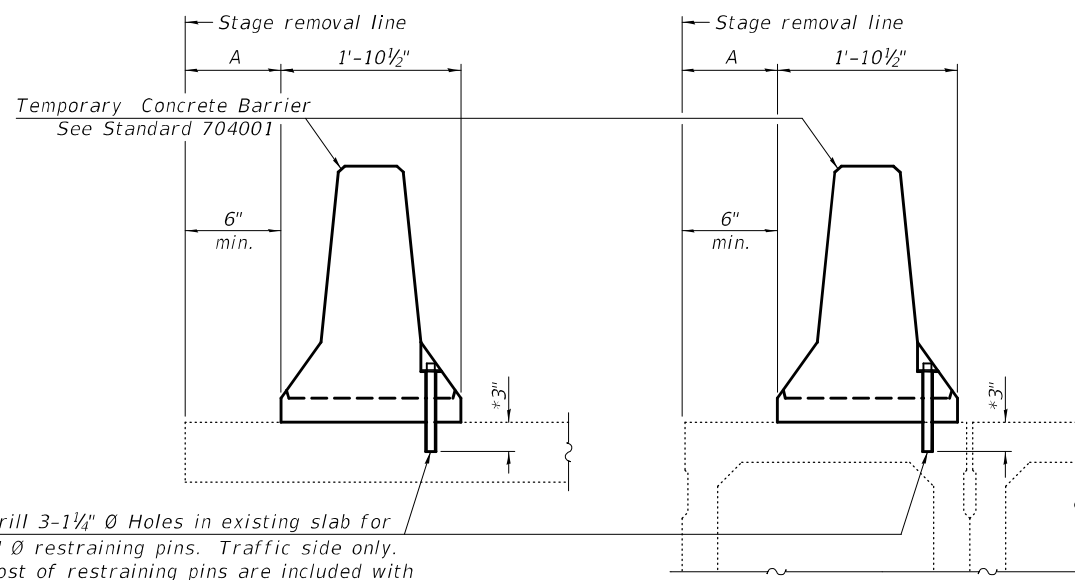
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When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM

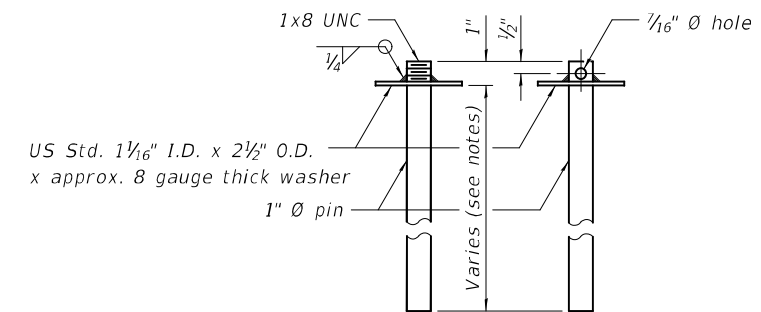


Drill 3-1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

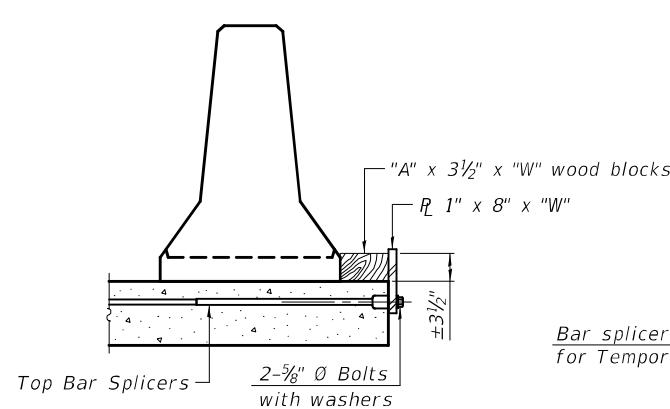
\* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

EXISTING DECK BEAM

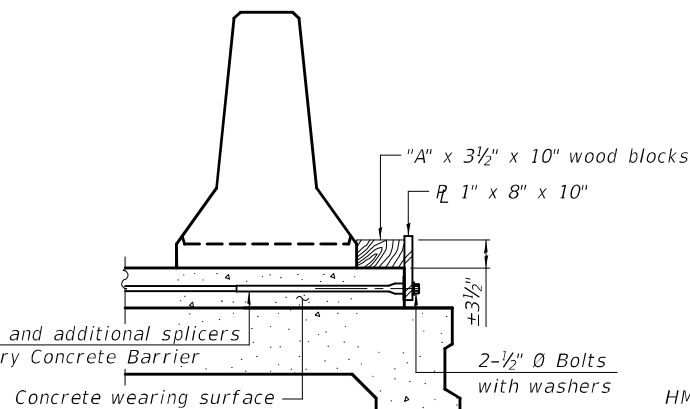


RESTRAINING PIN

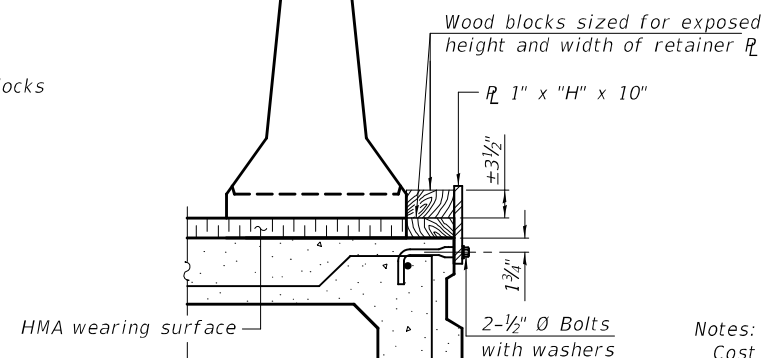
SECTIONS THRU SLAB OR DECK BEAM



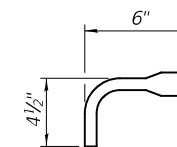
DETAIL I



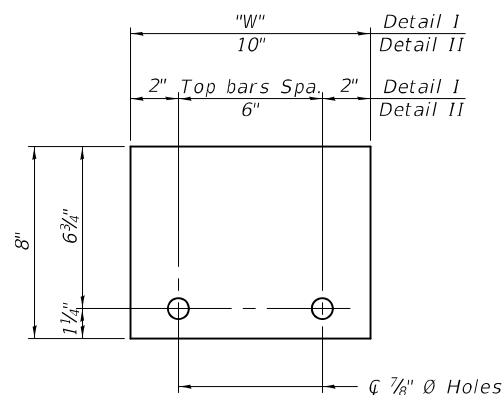
DETAIL II



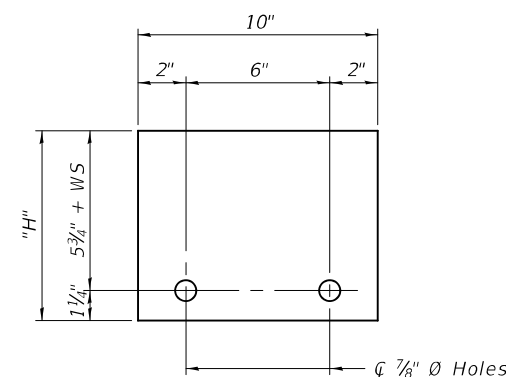
DETAIL III



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

DESIGNED - ZACHARY T. BULVA	EXAMINED - <i>Joanne F. J. [Signature]</i>
CHECKED - RYAN P. NEGANGARD	PASSED - <i>Carl [Signature]</i>
DRAWN - DENNIS A. POP	
CHECKED - Z.T.B. / R.P.N. / G.R.A.	

DATE - MARCH 11, 2021
REVISIONS
REVISIONS

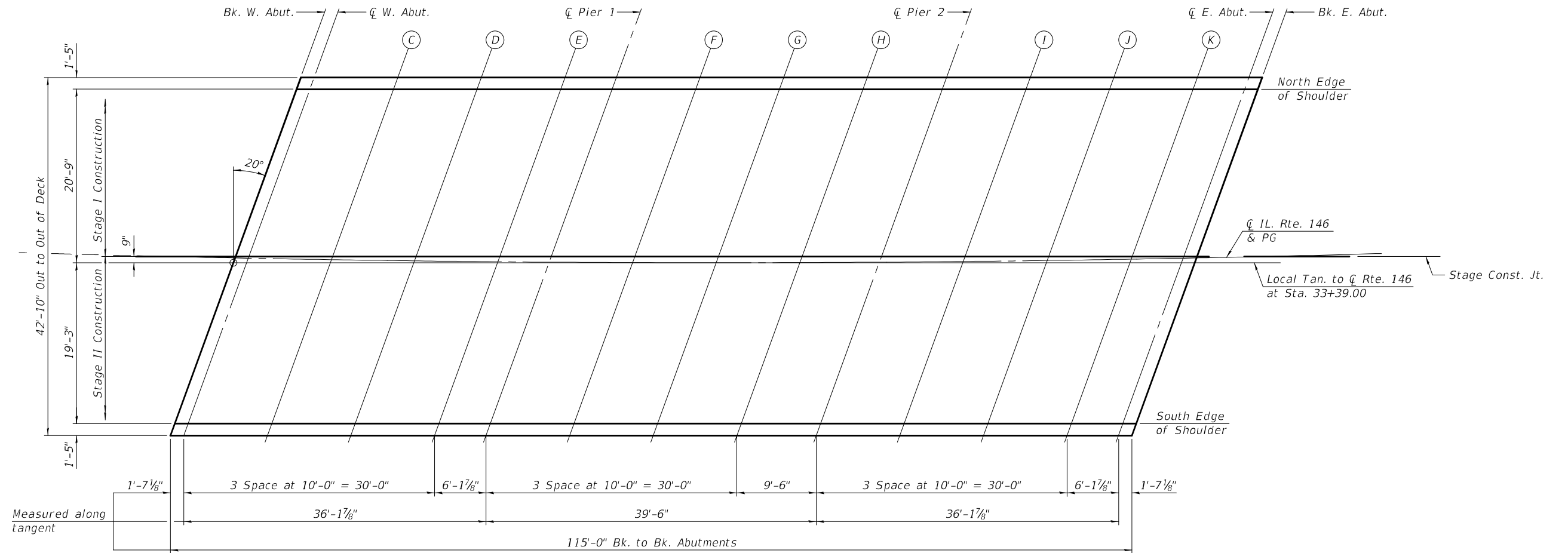
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION  
 STRUCTURE NO. 044-0063

SHEET 4 OF 26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	107B-2	JOHNSON	67	29
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				

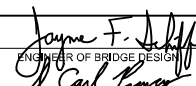
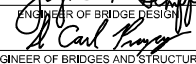
Note:  
The Dead Load Deflections are negligible. The  
Dead Load Deflection Diagram is not shown.



PLAN

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DESIGNED -	ZACHARY T. BULVA
CHECKED -	RYAN P. NEGANGARD
DRAWN -	DENNIS A. POP
CHECKED -	Z.T.B. / R.P.N. / G.R.A.

EXAMINED	 <small>ENGINEER OF BRIDGE DESIGN</small>	DATE -	MARCH 11, 2021
PASSED		 <small>ENGINEER OF BRIDGES AND STRUCTURES</small>	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 044-0063**

SHEET 5 OF 26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	107B-2	JOHNSON	67	30
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
Bk. W. Abut.	32+88.42	-20.31	371.53
☒ W. Abut.	32+90.02	-20.34	371.53
C	33+00.09	-20.49	371.55
D	33+10.17	-20.61	371.57
E	33+20.24	-20.69	371.59
☒ Pier 1	33+26.44	-20.72	371.60
F	33+36.51	-20.75	371.62
G	33+46.58	-20.74	371.63
H	33+56.65	-20.70	371.64
☒ Pier 2	33+66.22	-20.62	371.65
I	33+76.29	-20.51	371.66
J	33+86.36	-20.36	371.67
K	33+96.43	-20.18	371.68
☒ E. Abut.	34+02.63	-20.05	371.68
Bk. E. Abut.	34+04.24	-20.02	371.68

STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations
Bk. W. Abut.	32+81.49	-0.17	372.42
☒ W. Abut.	32+83.09	-0.21	372.42
C	32+93.09	-0.38	372.44
D	33+03.09	-0.53	372.46
E	33+13.09	-0.63	372.48
☒ Pier 1	33+19.24	-0.68	372.49
F	33+29.24	-0.73	372.51
G	33+39.25	-0.75	372.52
H	33+49.25	-0.73	372.53
☒ Pier 2	33+58.75	-0.68	372.55
I	33+68.75	-0.60	372.56
J	33+78.75	-0.48	372.57
K	33+88.75	-0.32	372.57
☒ E. Abut.	33+94.91	-0.21	372.58
Bk. E. Abut.	33+96.50	-0.18	372.58

☒ IL. RTE. 146 & PG

Location	Station	Offset	Theoretical Grade Elevations
Bk. W. Abut.	32+81.43	0.00	372.42
☒ W. Abut.	32+83.02	0.00	372.43
C	32+93.02	0.00	372.46
D	33+03.02	0.00	372.48
E	33+13.02	0.00	372.51
☒ Pier 1	33+19.00	0.00	372.52
F	33+29.00	0.00	372.54
G	33+39.00	0.00	372.55
H	33+49.00	0.00	372.57
☒ Pier 2	33+58.50	0.00	372.58
I	33+68.50	0.00	372.58
J	33+78.50	0.00	372.59
K	33+88.50	0.00	372.59
☒ E. Abut.	33+94.83	0.00	372.59
Bk. E. Abut.	33+96.44	0.00	372.59

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
Bk. W. Abut.	32+74.66	19.97	373.30
☒ W. Abut.	32+76.24	19.94	373.30
C	32+86.17	19.74	373.33
D	32+96.10	19.57	373.35
E	33+06.04	19.44	373.37
☒ Pier 1	33+12.15	19.38	373.38
F	33+22.08	19.30	373.39
G	33+32.01	19.26	373.41
H	33+41.95	19.25	373.42
☒ Pier 2	33+51.38	19.28	373.44
I	33+61.32	19.34	373.45
J	33+71.25	19.43	373.46
K	33+81.18	19.56	373.47
☒ E. Abut.	33+87.29	19.66	373.47
Bk. E. Abut.	33+88.88	19.69	373.47

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DESIGNED -	ZACHARY T. BULVA
CHECKED -	RYAN P. NEGANGARD
DRAWN -	DENNIS A. POP
CHECKED -	Z.T.B. / R.P.N. / G.R.A.

EXAMINED	
PASSED	

DATE -	MARCH 11, 2021
REVISED -	
REVISED -	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 044-0063

SHEET 6 OF 26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	107B-2	JOHNSON	67	31
ILLINOIS			FED. AID PROJECT	

CONTRACT NO. 78681

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Slab	32+59.29	-19.65	371.46
A	32+69.35	-19.91	371.49
B	32+79.42	-20.14	371.51
E. End of W. Appr. Slab	32+89.49	-20.33	371.53

STAGE CONSTRUCTION LINE

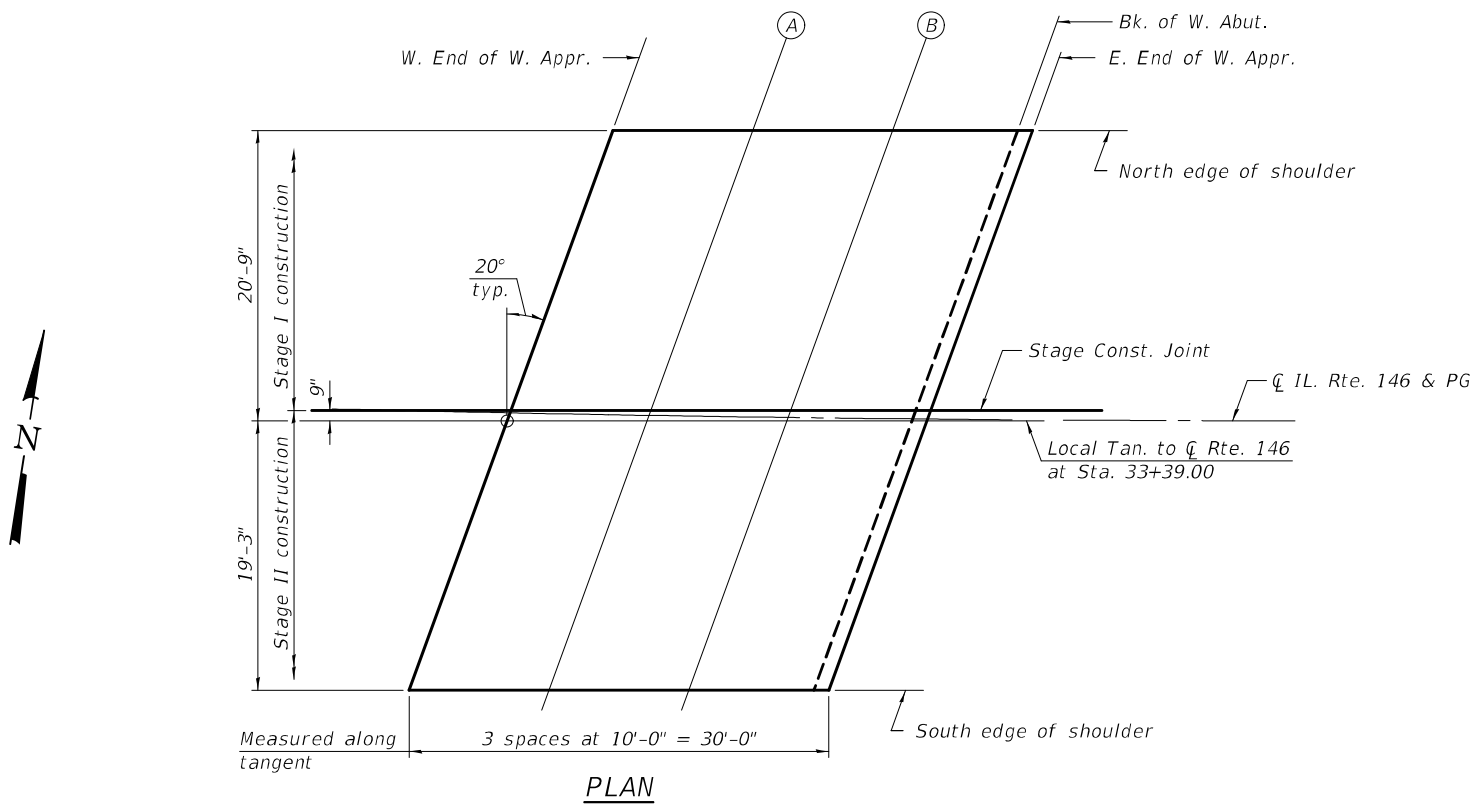
Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Slab	32+52.56	0.55	372.35
A	32+62.56	0.27	372.37
B	32+72.56	0.02	372.40
E. End of W. Appr. Slab	32+82.55	-0.20	372.42

CL IL. RTE. 146 & PG

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Slab	32+52.75	0.00	372.32
A	32+62.75	0.00	372.36
B	32+72.75	0.00	372.40
E. End of W. Appr. Slab	32+82.49	0.00	372.43

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Slab	32+45.94	20.77	373.23
A	32+55.86	20.46	373.26
B	32+65.79	20.19	373.28
E. End of W. Appr. Slab	32+75.72	19.95	373.30



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DESIGNED -	ZACHARY T. BULVA
CHECKED -	RYAN P. NEGANGARD
DRAWN -	DENNIS A. POP
CHECKED -	Z.T.B. / R.P.N. / G.R.A.

EXAMINED	<i>James F. [Signature]</i>	DATE -	MARCH 11, 2021
PASSED	<i>Carl [Signature]</i>	REVISED -	
	ENGINEER OF BRIDGES AND STRUCTURES	REVISED -	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TOP OF WEST APPROACH SLAB ELEVATIONS  
STRUCTURE NO. 044-0063**

SHEET 7 OF 26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	107B-2	JOHNSON	67	32
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Slab	34+03.17	-20.04	371.68
L	34+13.24	-19.80	371.69
M	34+23.30	-19.52	371.69
E. End of E. Appr. Slab	34+33.36	-19.21	371.69

STAGE CONSTRUCTION LINE

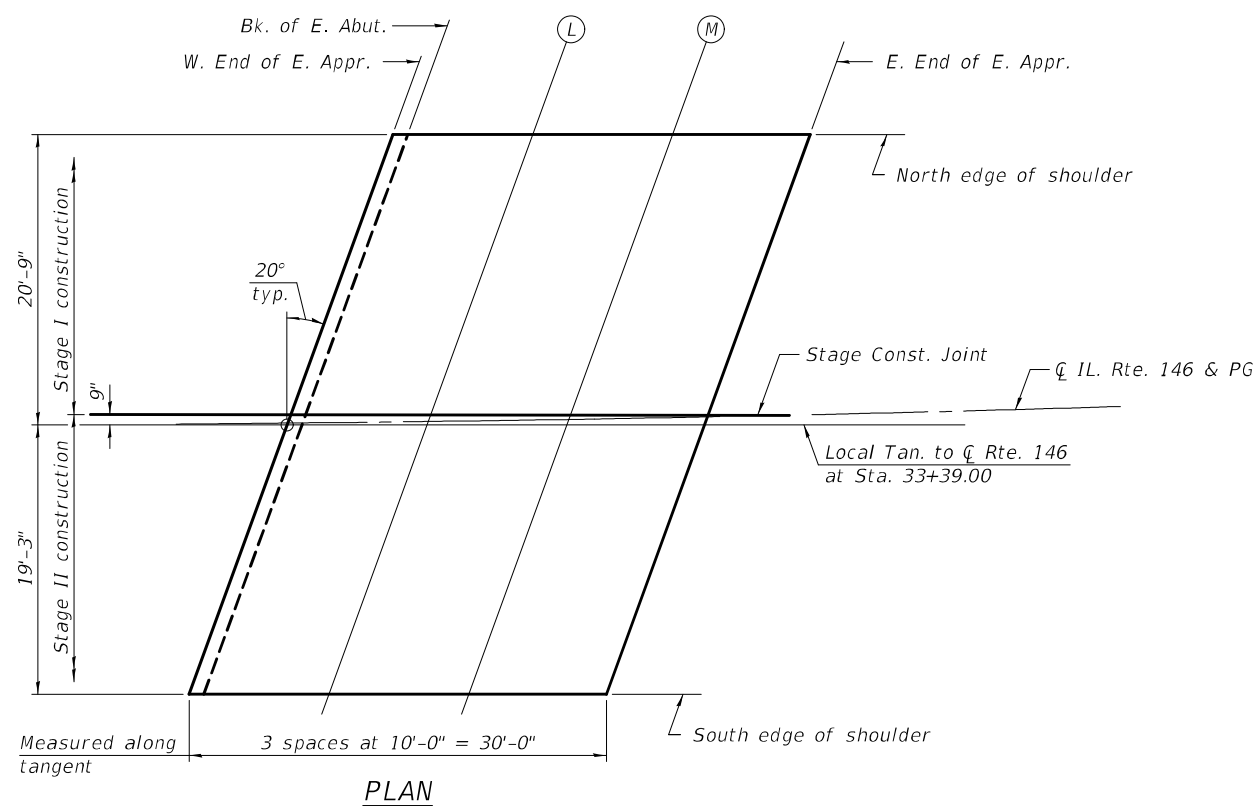
Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Slab	33+95.44	-0.20	372.58
L	34+05.44	0.02	372.59
M	34+15.44	0.27	372.59
E. End of E. Appr. Slab	34+25.43	0.55	372.59

CL IL. RTE. 146 & PG

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Slab	33+95.37	0.00	372.59
L	34+05.37	0.00	372.58
M	34+15.37	0.00	372.58
E. End of E. Appr. Slab	34+25.65	0.00	372.57

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Slab	33+87.82	19.67	373.47
L	33+97.75	19.85	373.48
M	34+07.68	20.08	373.49
E. End of E. Appr. Slab	34+17.61	20.33	373.49



MODEL: 0440063-78681-008  
FILE NAME: p:\work\lanroom\dot.illinois.gov\pwwdot\Documents\DOT Offices\Bureau of Bridges and Structures\Projects\0440063\0440063-78681.dgn

DESIGNED -	ZACHARY T. BULVA
CHECKED -	RYAN P. NEGANGARD
DRAWN -	DENNIS A. POP
CHECKED -	Z.T.B. / R.P.N. / G.R.A.

EXAMINED	<i>Jaime F. J...</i>	DATE -	MARCH 11, 2021
PASSED	<i>Carl...</i>	REVISED -	
	ENGINEER OF BRIDGES AND STRUCTURES	REVISED -	

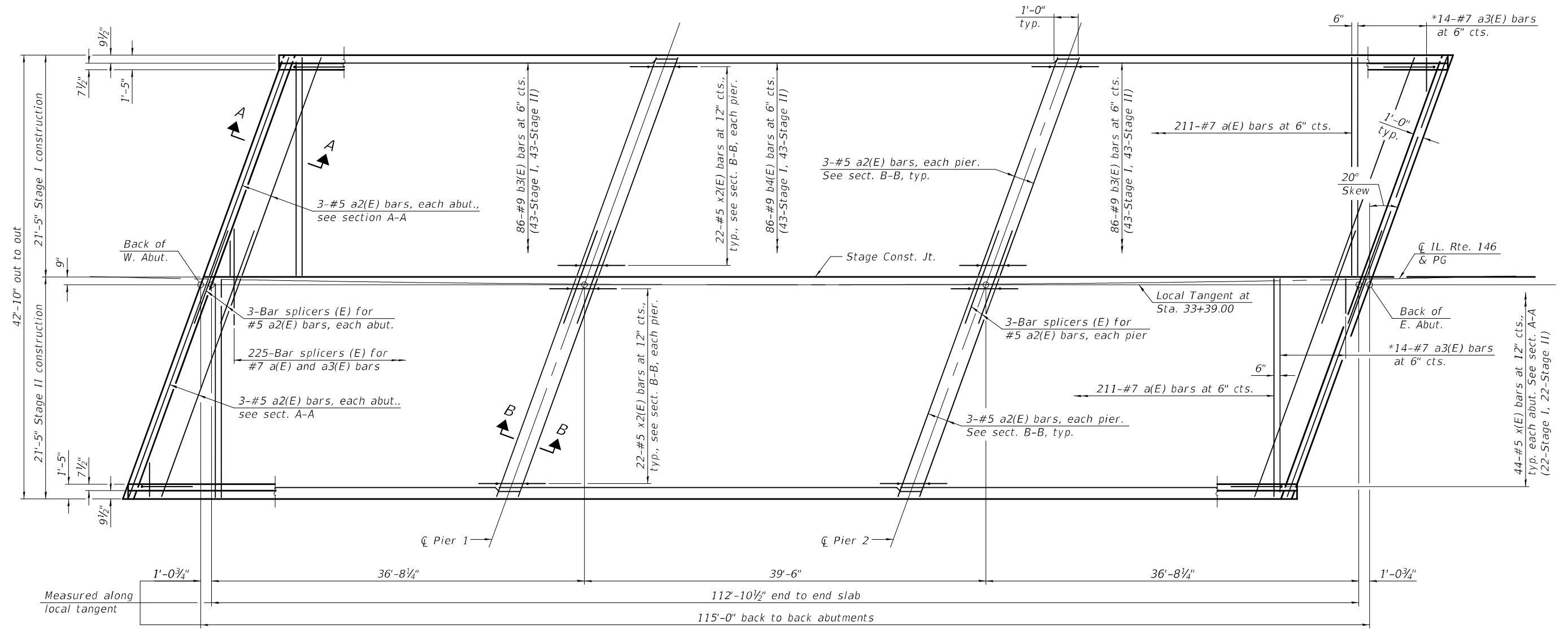
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TOP OF EAST APPROACH SLAB ELEVATIONS  
STRUCTURE NO. 044-0063**

SHEET 8 OF 26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	107B-2	JOHNSON	67	33
CONTRACT NO. 78681				
		ILLINOIS	FED. AID PROJECT	

MODEL: 0440063-78681-009  
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**PLAN**  
 (Showing bottom reinforcement)

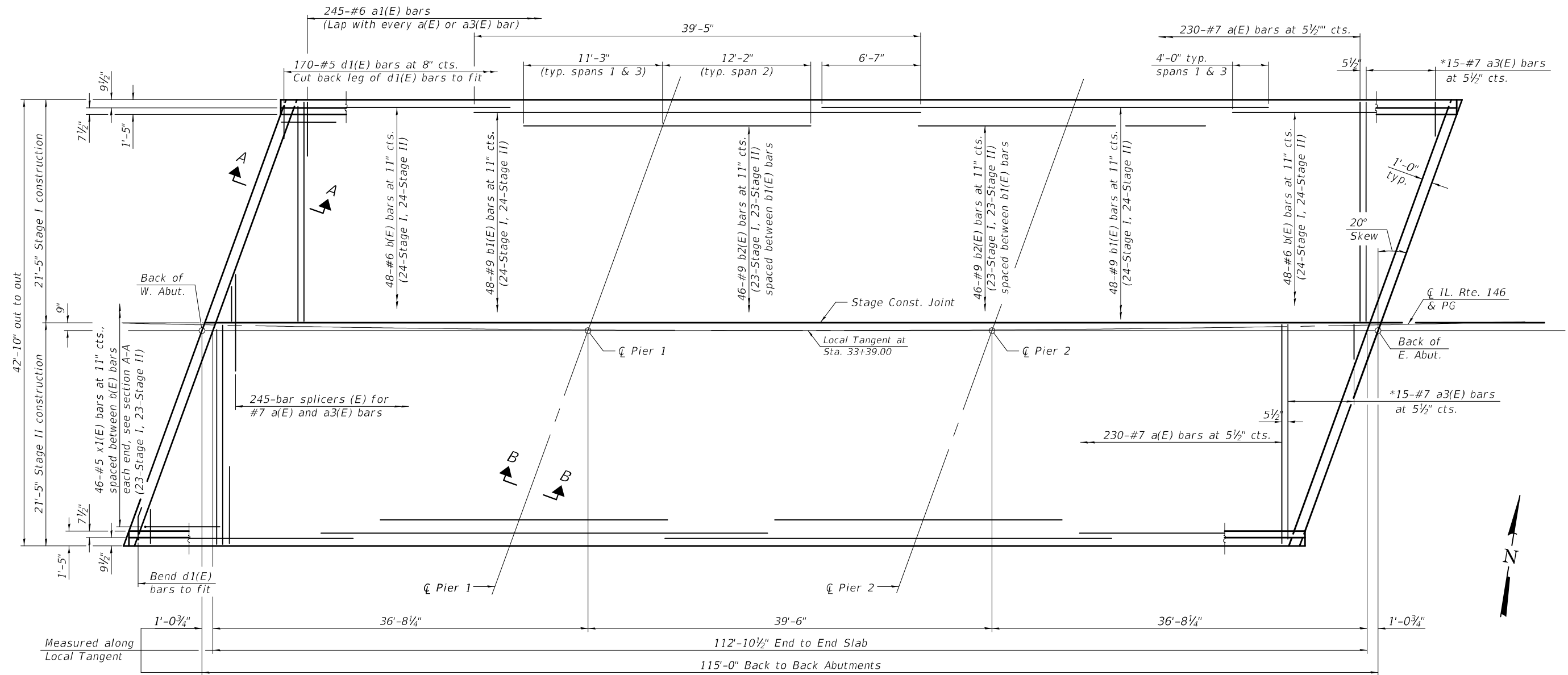
Notes:  
 See sheets 11 and 12 of 26 for superstructure details and Bill of Material.  
 See sheet 12 of 26 for sections A-A and B-B.

\* See sheet 12 of 26 for field cutting diagram.



DESIGNED - ZACHARY T. BULVA	EXAMINED - <i>Jaime F. J. [Signature]</i>	DATE - MARCH 11, 2021	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUPERSTRUCTURE STRUCTURE NO. 044-0063</b>	F.A.P. RTE. 885	SECTION 107B-2	COUNTY JOHNSON	TOTAL SHEETS 67	SHEET NO. 34	
CHECKED - RYAN P. NEGANGARD	PASSED - <i>Carl [Signature]</i>	REVISED -			CONTRACT NO. 78681					
DRAWN - DENNIS A. POP	ENGINEER OF BRIDGES AND STRUCTURES	REVISED -			SHEET 9 OF 26 SHEETS					
CHECKED - Z.T.B. / R.P.N. / G.R.A.					ILLINOIS FED. AID PROJECT					

MODEL: 0440063-78681-010  
 FILE NAME: p:\w\lanroom\dot\illinois\gov\p\w\dot\Documents\DOT Offices\Bridges and Structures\Projects\0440063\CADD Plans\0440063-78681.dgn



**PLAN**  
 (Showing Top Reinforcement)

Notes:  
 See sheets 11 and 12 of 26 for superstructure details and Bill of Material.  
 See sheet 12 of 26 for sections A-A and B-B.

\* See sheet 12 of 26 for field cutting diagram.

DESIGNED -	ZACHARY T. BULVA
CHECKED -	RYAN P. NEGANGARD
DRAWN -	DENNIS A. POP
CHECKED -	Z.T.B. / R.P.N. / G.R.A.

EXAMINED  
 PASSED  
 ENGINEER OF BRIDGE DESIGN  
 ENGINEER OF BRIDGES AND STRUCTURES

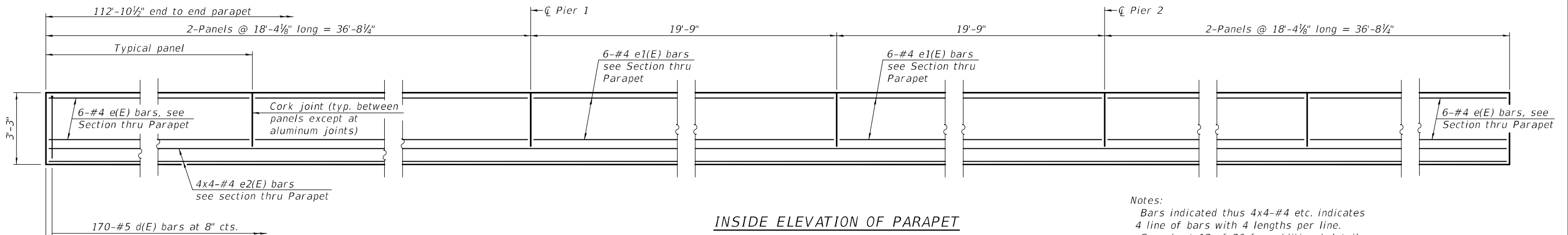
DATE -	MARCH 11, 2021
REVISED -	
REVISED -	

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

**SUPERSTRUCTURE**  
**STRUCTURE NO. 044-0063**

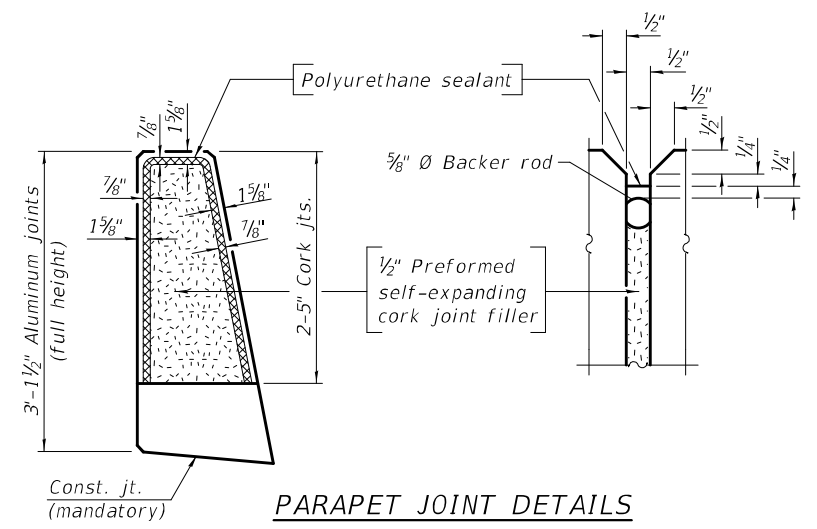
SHEET 10 OF 26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	107B-2	JOHNSON	67	35
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				



**INSIDE ELEVATION OF PARAPET**

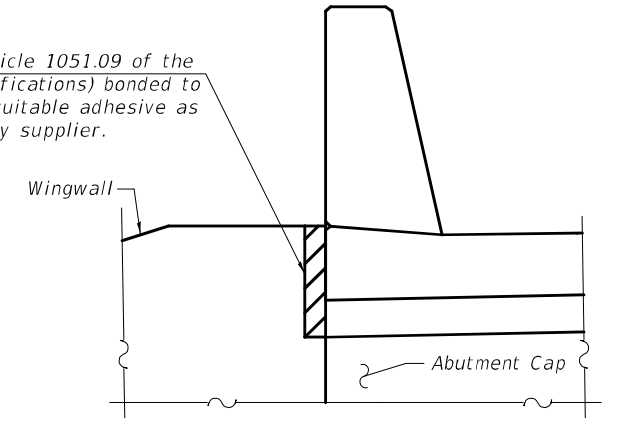
Notes:  
 Bars indicated thus 4x4-#4 etc. indicates 4 line of bars with 4 lengths per line.  
 See sheet 12 of 26 for additional details and Bill of Material.



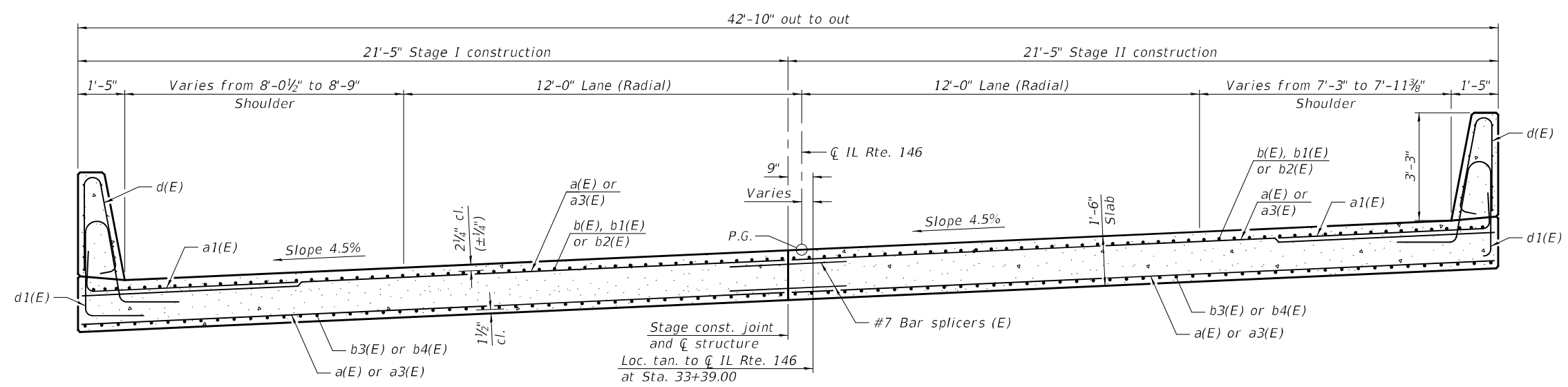
**PARAPET JOINT DETAILS**

**MINIMUM BAR LAP**  
 #4 bar = 2'-5"

2" PJF (per Article 1051.09 of the Standard Specifications) bonded to wingwall with suitable adhesive as recommended by supplier.



**2" PJF DETAIL**



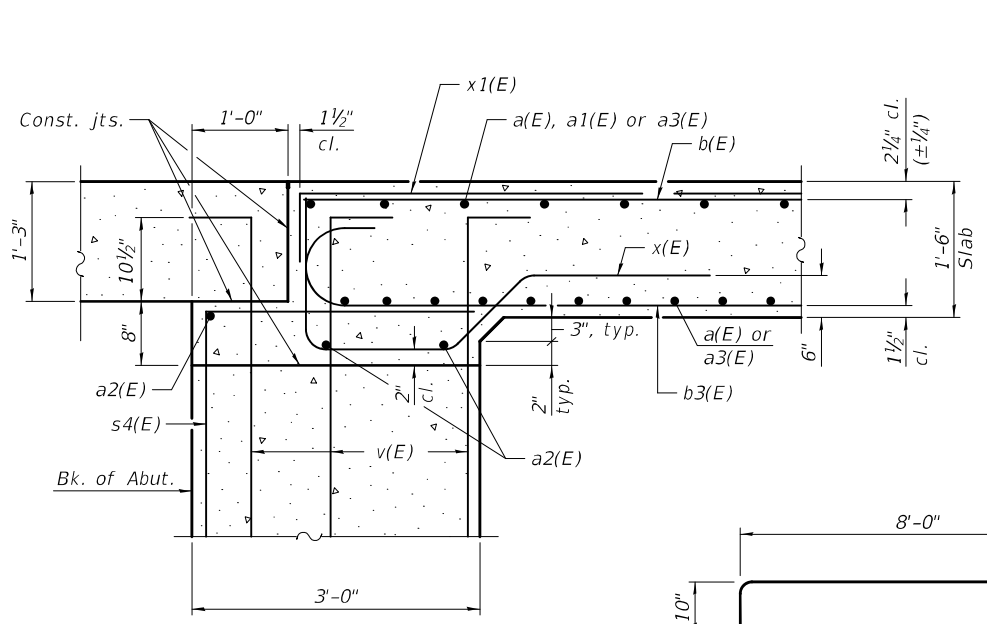
**CROSS SECTION**  
 (Looking East)

MODEL: 0440063-78681-011  
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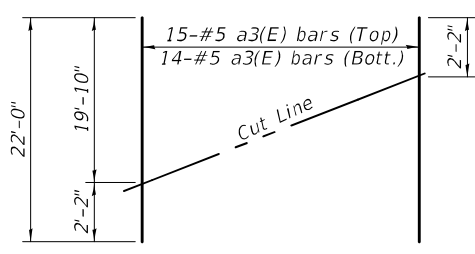
DESIGNED - ZACHARY T. BULVA	EXAMINED - <i>Joanne F. Joffe</i>	DATE - MARCH 11, 2021	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUPERSTRUCTURE DETAILS STRUCTURE NO. 044-0063</b>	F.A.P. RTE. 885	SECTION 107B-2	COUNTY JOHNSON	TOTAL SHEETS 67	SHEET NO. 36	
CHECKED - RYAN P. NEGANGARD	PASSED - <i>Carl Ringer</i>	REVISER -			CONTRACT NO. 78681					
DRAWN - DENNIS A. POP	ENGINEER OF BRIDGE DESIGN	REVISER -			ILLINOIS FED. AID PROJECT					
CHECKED - Z.T.B. / R.P.N. / G.R.A.	ENGINEER OF BRIDGES AND STRUCTURES				SHEET 11 OF 26 SHEETS					



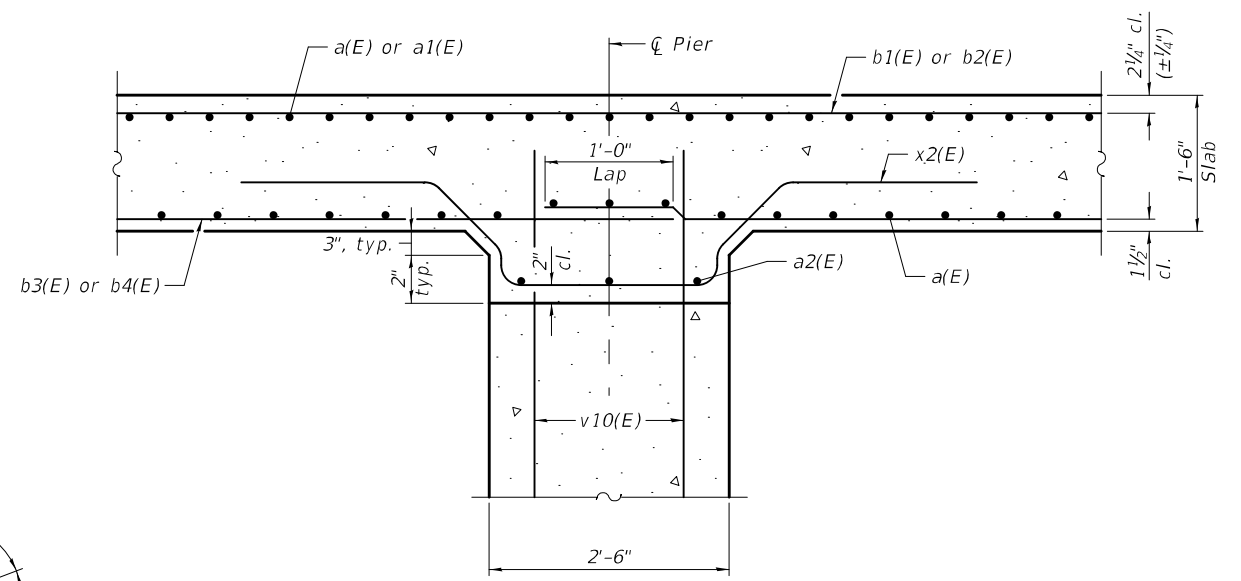
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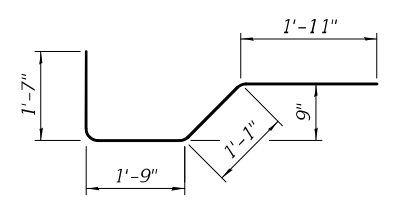
**SECTION A-A**  
 Horizontal dimensions at Rt. Δ's to abutments.



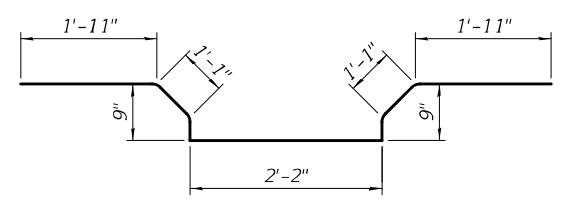
**FIELD CUTTING DIAGRAM**  
 Order a3(E) bars full length. Cut as shown and use remainder of bars in opposite end of deck.



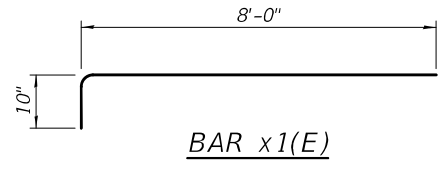
**SECTION B-B**  
 Horizontal dimensions at Rt. Δ's to pier.



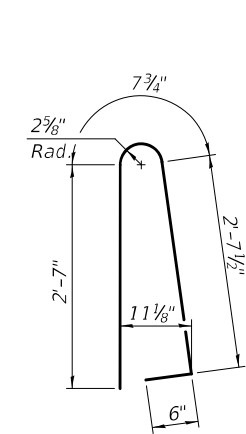
**BAR x(E)**



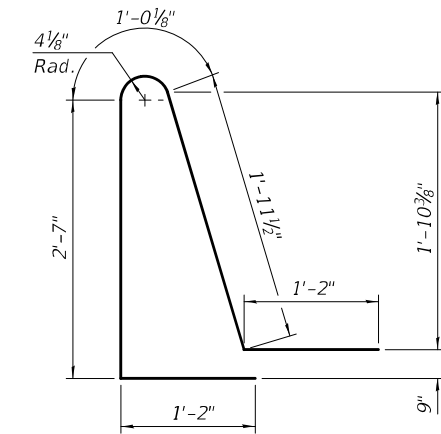
**BAR x2(E)**



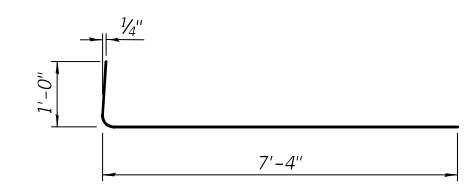
**BAR x1(E)**



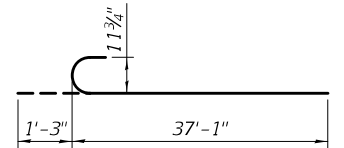
**BAR d(E)**



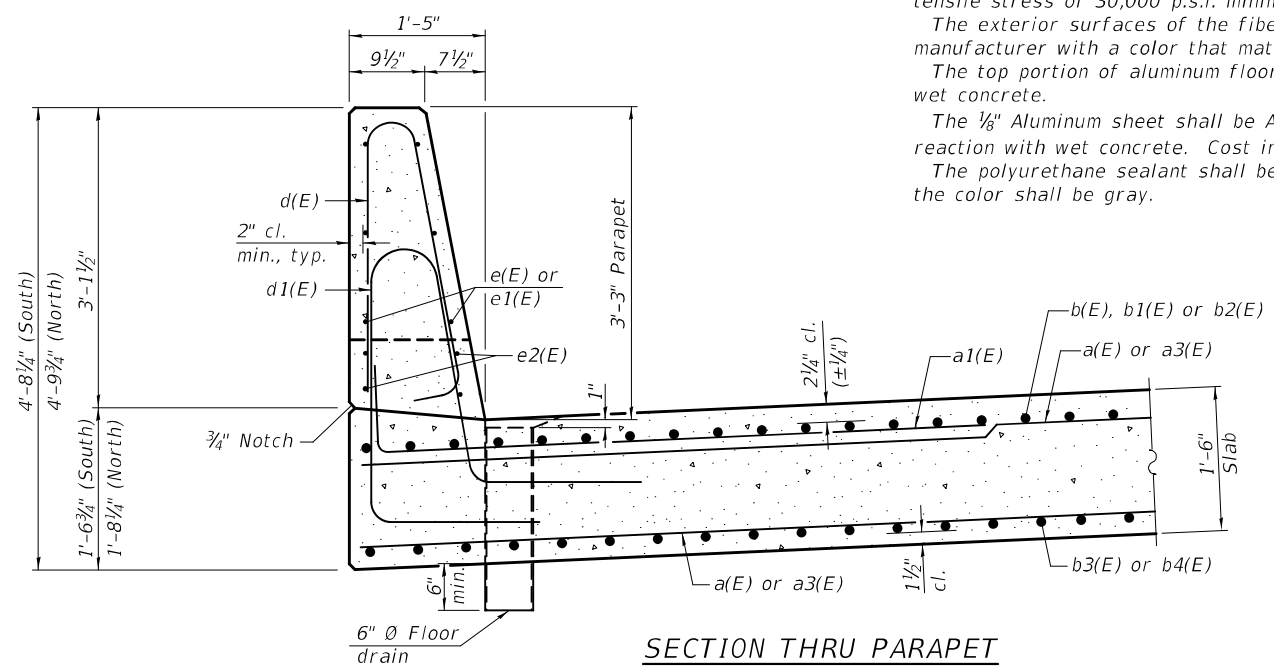
**BAR d1(E)**



**BAR a1(E)**

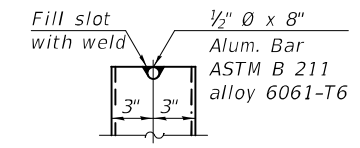


**BAR b3(E)**

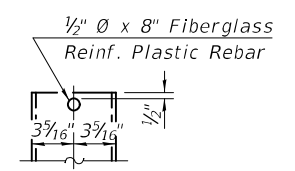


**SECTION THRU PARAPET**

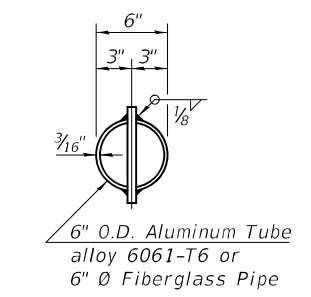
**Notes:**  
 Fiberglass pipe shall conform to ASTM D2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.  
 The exterior surfaces of the fiberglass floor drains shall be pigmented by the manufacturer with a color that matches the concrete.  
 The top portion of aluminum floor drains shall be coated to minimize reaction with wet concrete.  
 The 1/8" Aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.  
 The polyurethane sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.



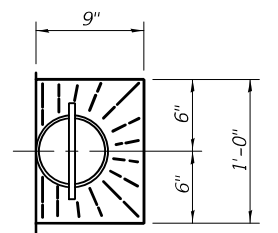
**ALUMINUM TUBE**



**FIBERGLASS PIPE**



**TOP PLAN**  
 (Showing Aluminum Tube)



**TOP PLAN**

**SUPERSTRUCTURE BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	882	#7	21'-1"	—
a1(E)	490	#6	8'-4"	—
a2(E)	24	#5	22'-5"	—
a3(E)	58	#7	22'-0"	—
b(E)	96	#6	24'-3"	—
b1(E)	96	#9	39'-5"	—
b2(E)	92	#9	23'-5"	—
b3(E)	172	#9	38'-4"	—
b4(E)	86	#9	40'-6"	—
d(E)	340	#5	6'-5"	—
d1(E)	340	#5	7'-11"	—
e(E)	48	#4	18'-0"	—
e1(E)	24	#4	19'-5"	—
e2(E)	32	#4	30'-0"	—
x(E)	88	#5	6'-4"	—
x1(E)	92	#5	8'-10"	—
x2(E)	88	#5	8'-2"	—
Reinforcement Bars, Epoxy Coated		Pound		114,050
Concrete Superstructure		Cu. Yd.		307.5

DESIGNED - ZACHARY T. BULVA  
 CHECKED - RYAN P. NEGANGARD  
 DRAWN - DENNIS A. POP  
 CHECKED - Z.T.B. / R.P.N. / G.R.A.

EXAMINED  
 PASSED  
 ENGINEER OF BRIDGE DESIGN  
 ENGINEER OF BRIDGES AND STRUCTURES

DATE - MARCH 11, 2021  
 REVISED -  
 REVISED -

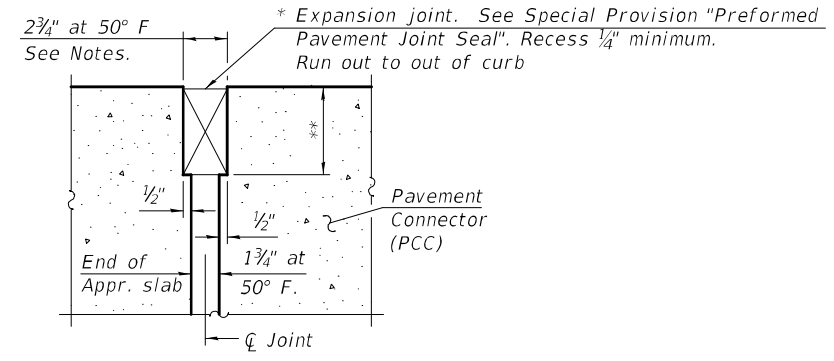
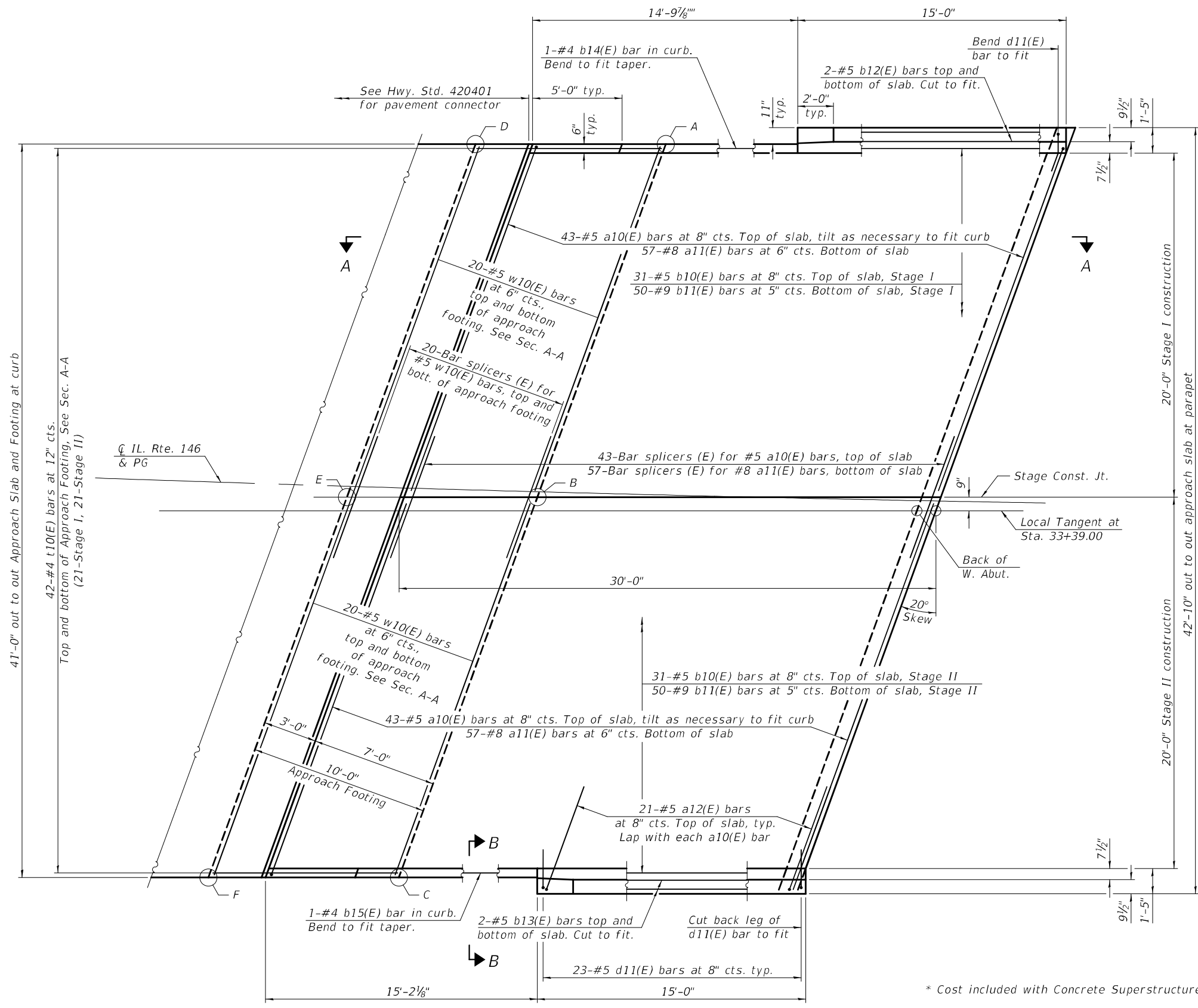
**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE DETAILS STRUCTURE NO. 044-0063**

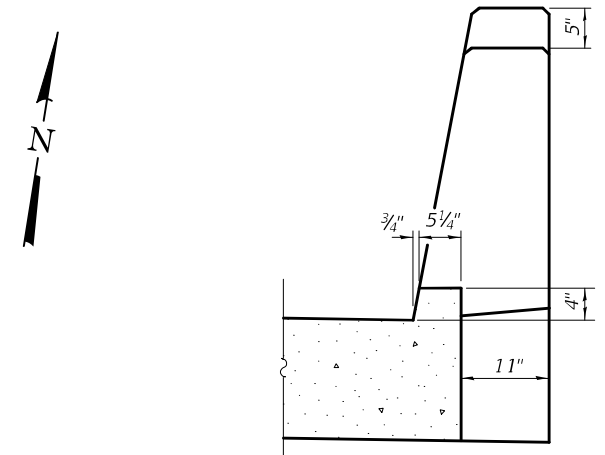
SHEET 12 OF 26 SHEETS

F.A.P. R.T.E. SECTION COUNTY TOTAL SHEETS SHEET NO.  
 885 107B-2 JOHNSON 67 37  
 CONTRACT NO. 78681  
 ILLINOIS FED. AID PROJECT

MODEL: 0440063-78681-013  
 FILE NAME: p:\lanroom\dot\illinois\gov\p\w\dot\Documents\DOT Offices\Bureau of Bridges and Structures\Projects\0440063\CADD Plans\0440063-78681.dgn



DETAIL A  
 (@ Rt. L's)



VIEW B-B

TOP AND BOTTOM ELEVATIONS  
 FOR APPROACH FOOTING

Point	West Approach	
	Top	Bottom
A	370.21	369.38
B	371.12	370.28
C	372.02	371.19
D	370.18	369.35
E	371.09	370.25
F	371.99	371.16

\* Cost included with Concrete Superstructure (Approach Slab).

\*\* Per manufacturer recommendations

PLAN

(Sheet 1 of 2)

DESIGNED - ZACHARY T. BULVA	EXAMINED -
CHECKED - RYAN P. NEGANGARD	PASSED -
DRAWN - DENNIS A. POP	
CHECKED - Z.T.B. / R.P.N. / G.R.A.	

DATE - MARCH 11, 2021  
 ENGINEER OF BRIDGES AND STRUCTURES  
 (Signature)

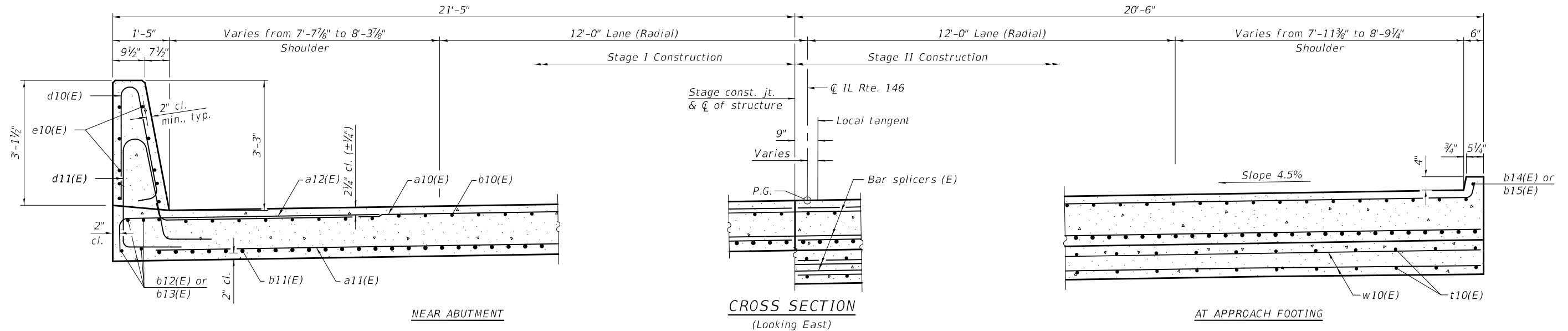
REVISER -	REVISION -
REVISER -	REVISION -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

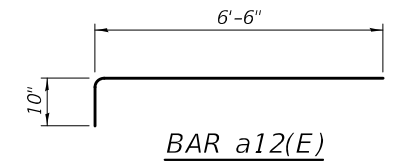
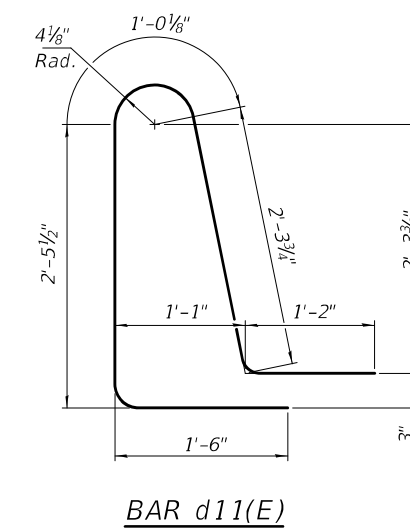
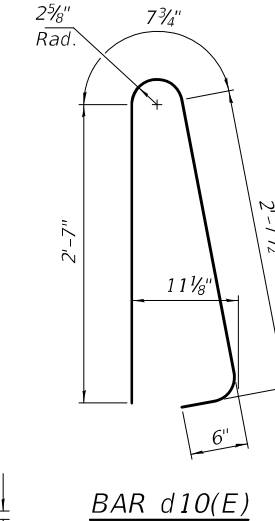
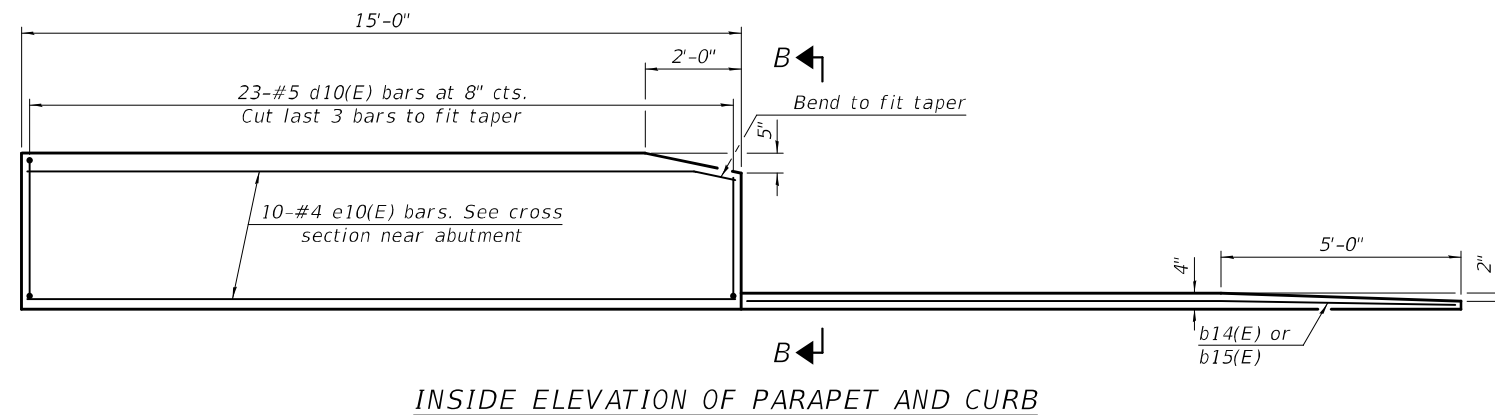
WEST APPROACH SLAB  
 STRUCTURE NO. 044-0063

SHEET 13 OF 26 SHEETS

F.A.P. RTE. 885	SECTION 107B-2	COUNTY JOHNSON	TOTAL SHEETS 67	SHEET NO. 38
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				

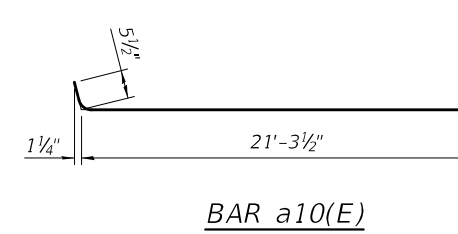
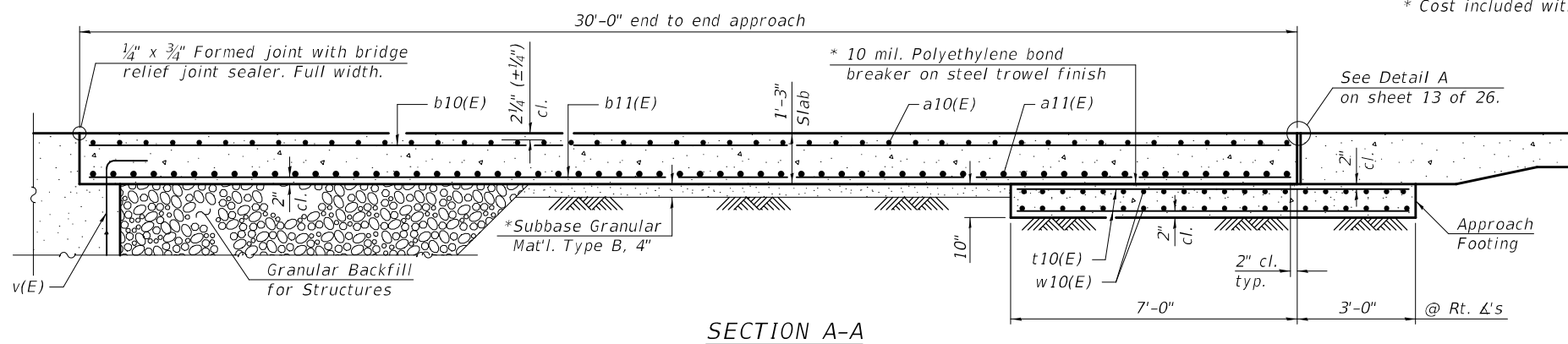


**Notes:**  
 The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications. However, since this detail is for jointless structures, the length of bridge used to calculate the adjustment shall be equal to half the total bridge length plus the length of the bridge approach slab.  
 Parapet concrete shall be paid for as Concrete Superstructure.  
 Approach slab shall be paid for as Concrete Superstructure (Approach Slab).  
 Approach footing concrete shall be paid for as Concrete Structures.  
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.  
 Cost of excavation for approach footing included with Concrete Structures.  
 For Granular Backfill for Structures and drainage treatment details, see sheet 2 of 26.  
 For view B-B see sheet 13 of 26.



**WEST APPROACH  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a10(E)	86	#5	21'-9"	U
a11(E)	114	#8	21'-6"	U
a12(E)	42	#5	7'-4"	U
b10(E)	62	#5	29'-8"	—
b11(E)	100	#9	29'-8"	—
b12(E)	4	#5	15'-0"	—
b13(E)	4	#5	14'-5"	—
b14(E)	1	#4	14'-7"	—
b15(E)	1	#4	14'-9"	—
d10(E)	46	#5	6'-5"	U
d11(E)	46	#5	8'-6"	U
e10(E)	20	#4	14'-8"	—
t10(E)	84	#4	10'-4"	—
w10(E)	80	#5	21'-6"	—
Concrete Superstructure		Cu. Yd.	3.9	
Concrete Superstructure (Approach Slab)		Cu. Yd.	58.8	
Concrete Structures		Cu. Yd.	13.5	
Reinforcement Bars, Epoxy Coated		Pound	24,250	



(Sheet 2 of 2)

MODEL: 0440063-78681-014  
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DESIGNED - ZACHARY T. BULVA  
 CHECKED - RYAN P. NEGANGARD  
 DRAWN - DENNIS A. POP  
 CHECKED - Z.T.B. / R.P.N. / G.R.A.

EXAMINED  
 PASSED  
  
 ENGINEER OF BRIDGE DESIGN  
  
 ENGINEER OF BRIDGES AND STRUCTURES

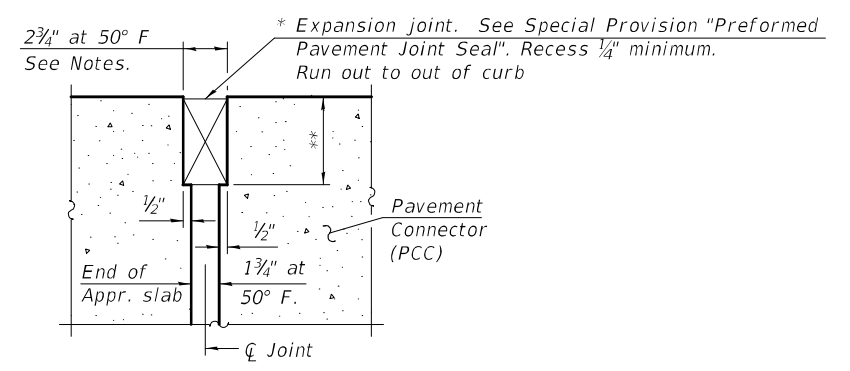
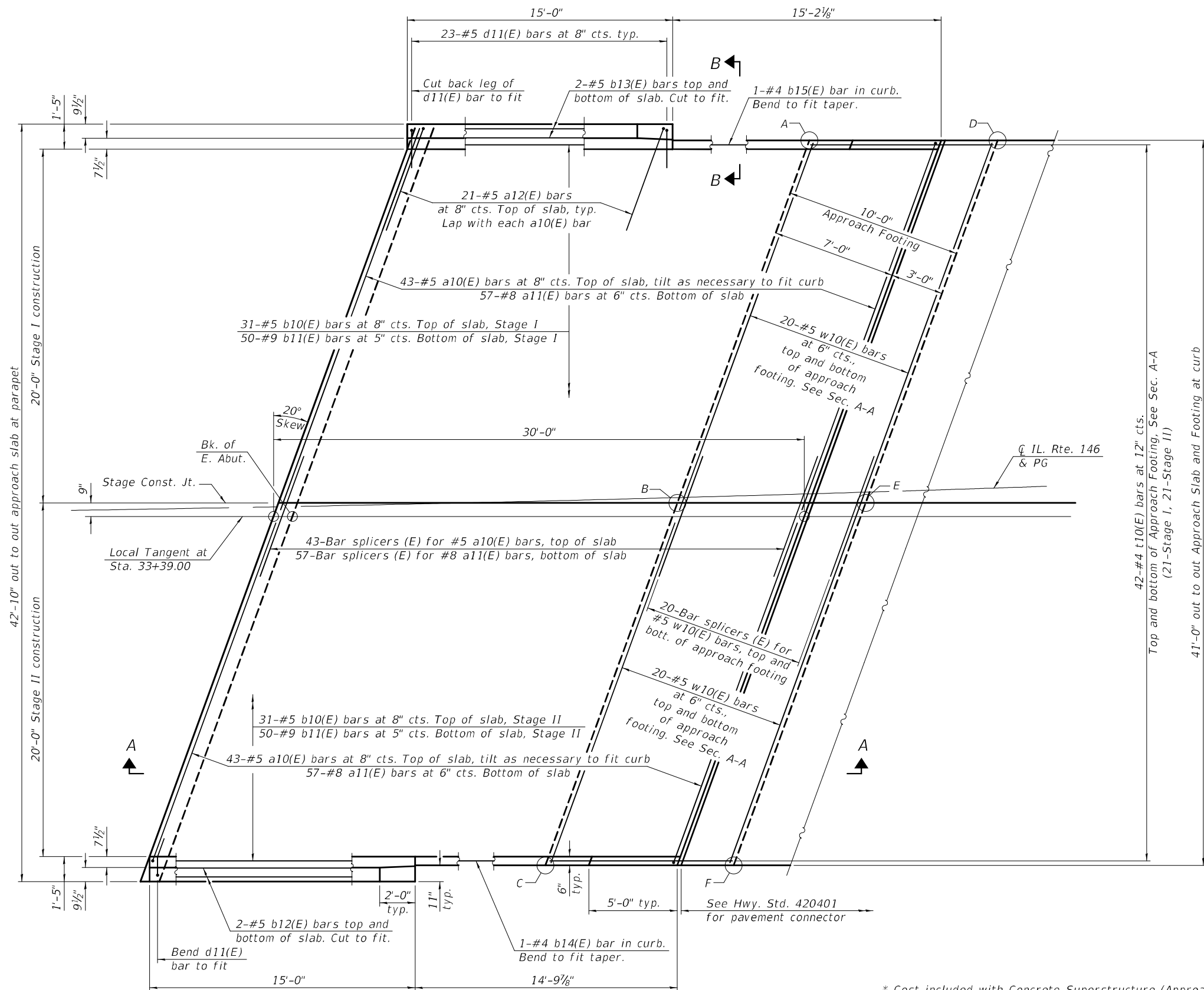
DATE - MARCH 11, 2021  
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

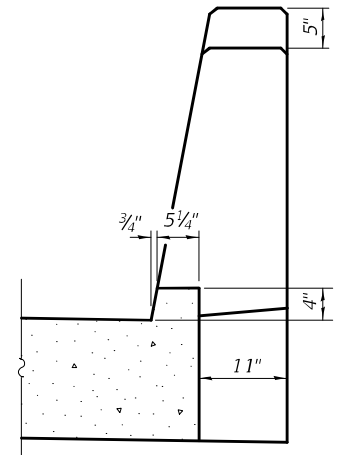
**WEST APPROACH SLAB DETAILS  
STRUCTURE NO. 044-0063**

SHEET 14 OF 26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	107B-2	JOHNSON	67	39
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				



DETAIL A  
(@ Rt. L's)



VIEW B-B

TOP AND BOTTOM ELEVATIONS  
FOR APPROACH FOOTING

Point	East Approach	
	Top	Bottom
A	370.42	369.59
B	371.34	370.51
C	372.26	371.43
D	370.42	369.59
E	371.34	370.51
F	372.26	371.43

\* Cost included with Concrete Superstructure (Approach Slab).

\*\* Per manufacturer recommendations

PLAN

(Sheet 1 of 2)

MODEL: 0440063-78681-015  
FILE NAME: p:\work\lanroom\dot.illinois.gov\PWIDOT\Documents\DOT Offices\Bureau of Bridges and Structures\Projects\0440063\CADD Plans\0440063-78681.dgn

DESIGNED - ZACHARY T. BULVA  
CHECKED - RYAN P. NEANGANGARD  
DRAWN - DENNIS A. POP  
CHECKED - Z.T.B. / R.P.N. / G.R.A.

EXAMINED  
PASSED  
ENGINEER OF BRIDGES AND STRUCTURES  
*Joanne F. [Signature]*  
ENGINEER OF BRIDGES AND STRUCTURES  
*Carl [Signature]*

DATE - MARCH 11, 2021  
REVISED -  
REVISED -

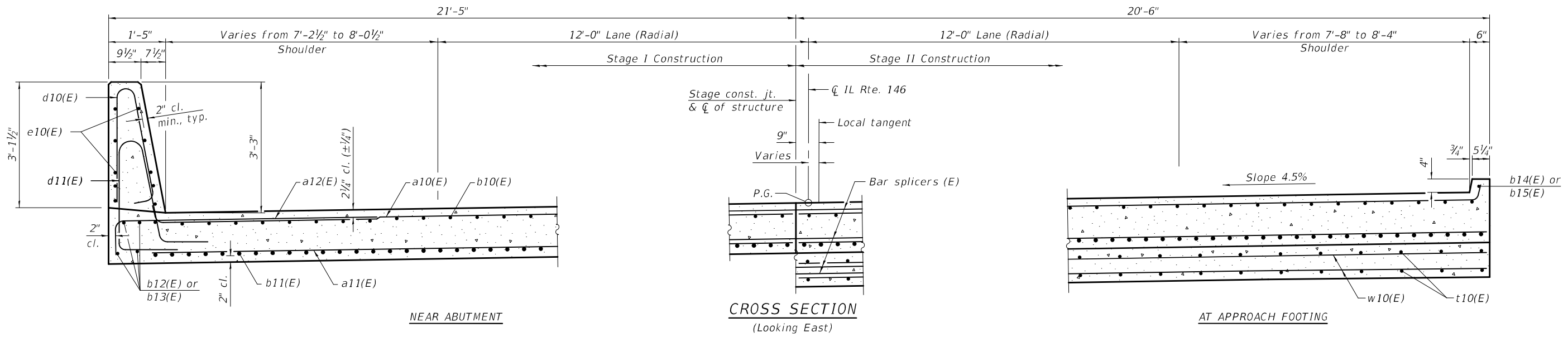
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EAST APPROACH SLAB  
STRUCTURE NO. 044-0063

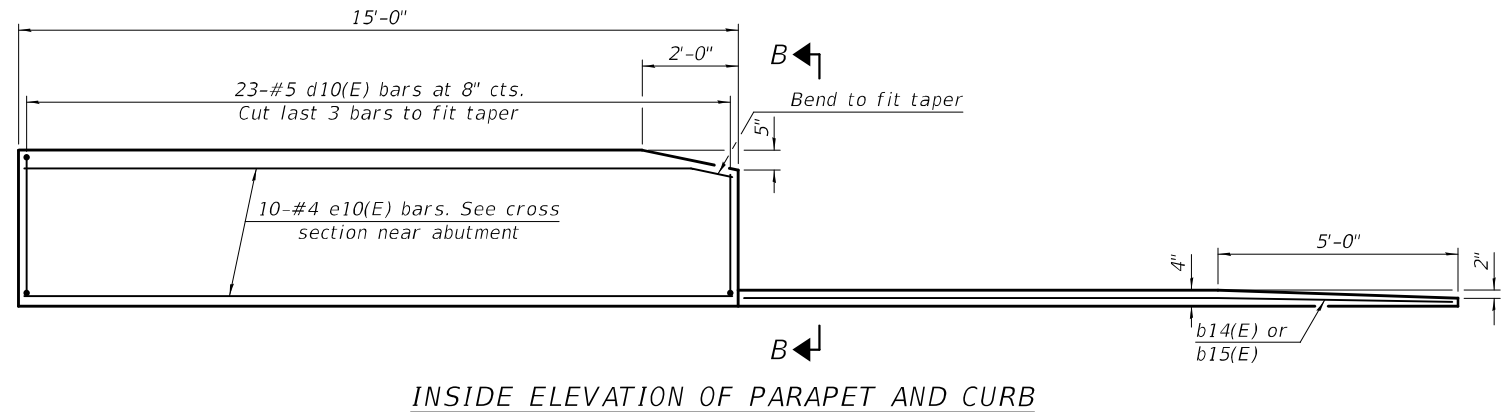
SHEET 15 OF 26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	107B-2	JOHNSON	67	40
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				

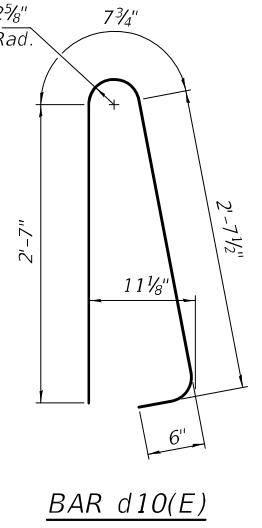
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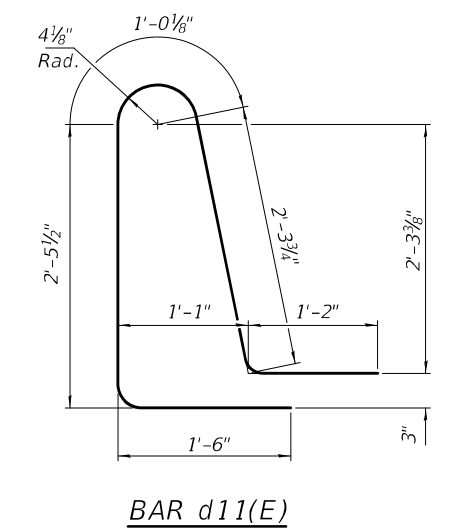
**Notes:**  
 The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications. However, since this detail is for jointless structures, the length of bridge used to calculate the adjustment shall be equal to half the total bridge length plus the length of the bridge approach slab.  
 Parapet concrete shall be paid for as Concrete Superstructure.  
 Approach slab shall be paid for as Concrete Superstructure (Approach Slab).  
 Approach footing concrete shall be paid for as Concrete Structures.  
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.  
 Cost of excavation for approach footing included with Concrete Structures.  
 For Granular Backfill for Structures and drainage treatment details, see sheet 2 of 26.  
 For view B-B see sheet 15 of 26.



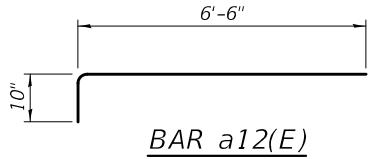
**INSIDE ELEVATION OF PARAPET AND CURB**



**BAR d10(E)**



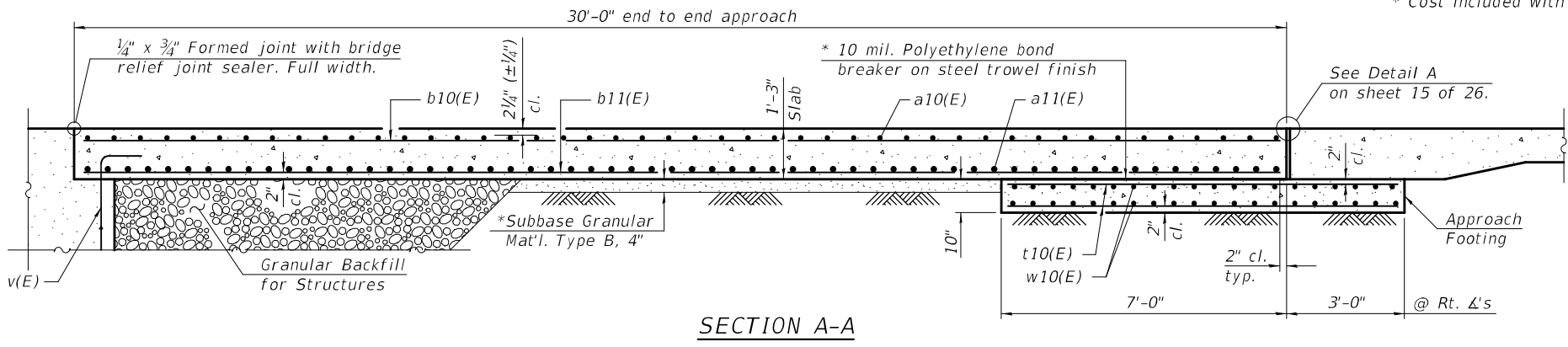
**BAR d11(E)**



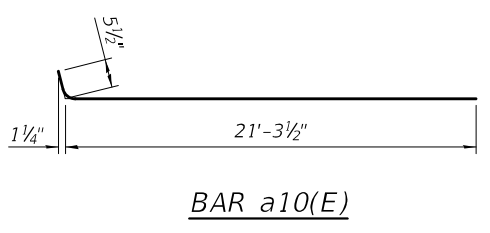
**BAR a12(E)**

**EAST APPROACH BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a10(E)	86	#5	21'-9"	U
a11(E)	114	#8	21'-6"	U
a12(E)	42	#5	7'-4"	U
b10(E)	62	#5	29'-8"	U
b11(E)	100	#9	29'-8"	U
b12(E)	4	#5	15'-0"	U
b13(E)	4	#5	14'-5"	U
b14(E)	1	#4	14'-7"	U
b15(E)	1	#4	14'-9"	U
d10(E)	46	#5	6'-5"	A
d11(E)	46	#5	8'-6"	A
e10(E)	20	#4	14'-8"	U
t10(E)	84	#4	10'-4"	U
w10(E)	80	#5	21'-6"	U
Concrete Superstructure		Cu. Yd.	3.9	
Concrete Superstructure (Approach Slab)		Cu. Yd.	58.7	
Concrete Structures		Cu. Yd.	13.5	
Reinforcement Bars, Epoxy Coated		Pound	24,250	



**SECTION A-A**



**BAR a10(E)**

(Sheet 2 of 2)

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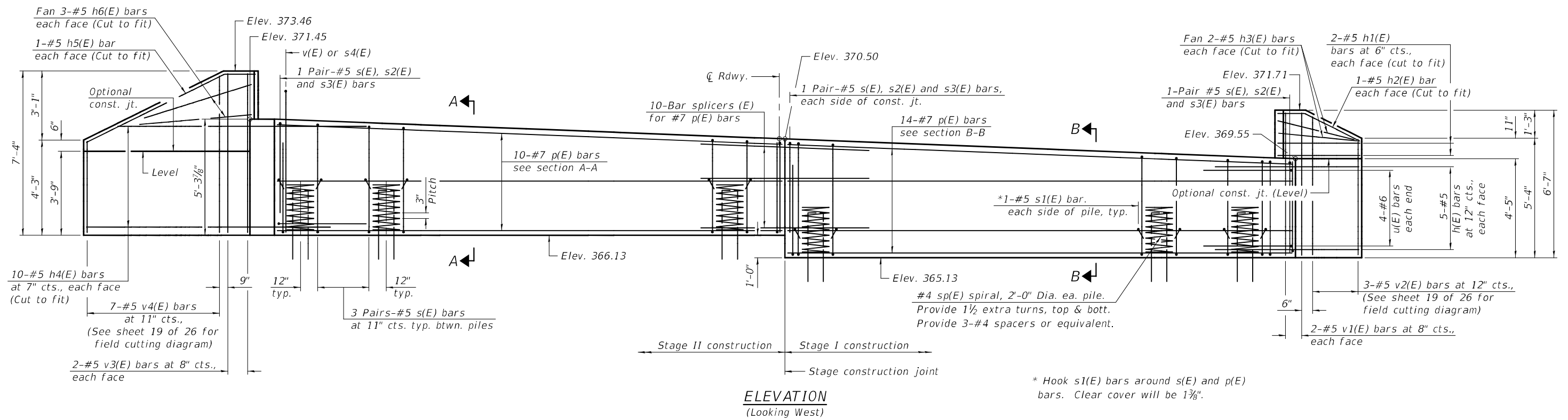
DESIGNED - ZACHARY T. BULVA	EXAMINED - <i>Joanne F. [Signature]</i>	DATE - MARCH 11, 2021
CHECKED - RYAN P. NEGANGARD	PASSED - <i>Carl [Signature]</i>	REVISOR -
DRAWN - DENNIS A. POP	ENGINEER OF BRIDGES AND STRUCTURES	REVISOR -
CHECKED - Z.T.B. / R.P.N. / G.R.A.		

**STATE OF ILLINOIS  
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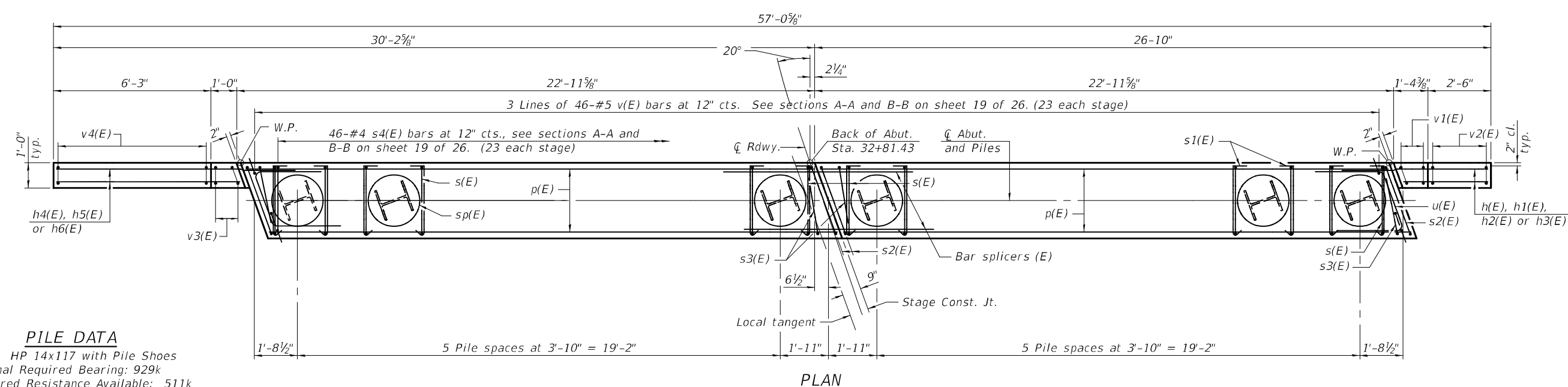
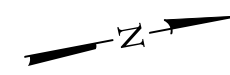
**EAST APPROACH SLAB DETAILS  
 STRUCTURE NO. 044-0063**

SHEET 16 OF 26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	107B-2	JOHNSON	67	41
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				



Note:  
See sheet 19 of 26 for additional  
abutment details, notes and Bill of  
Material.



**PILE DATA**

Type: HP 14x117 with Pile Shoes  
Nominal Required Bearing: 929k  
Factored Resistance Available: 511k  
Est. Length: 44'  
No. Production Piles: 11  
No. Test Piles: 1

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CHECKED -	RYAN P. NEGANGARD
DRAWN -	DENNIS A. POP
CHECKED -	Z.T.B. / R.P.N. / G.R.A.

EXAMINED	 ENGINEER OF BRIDGE DESIGN
PASSED	

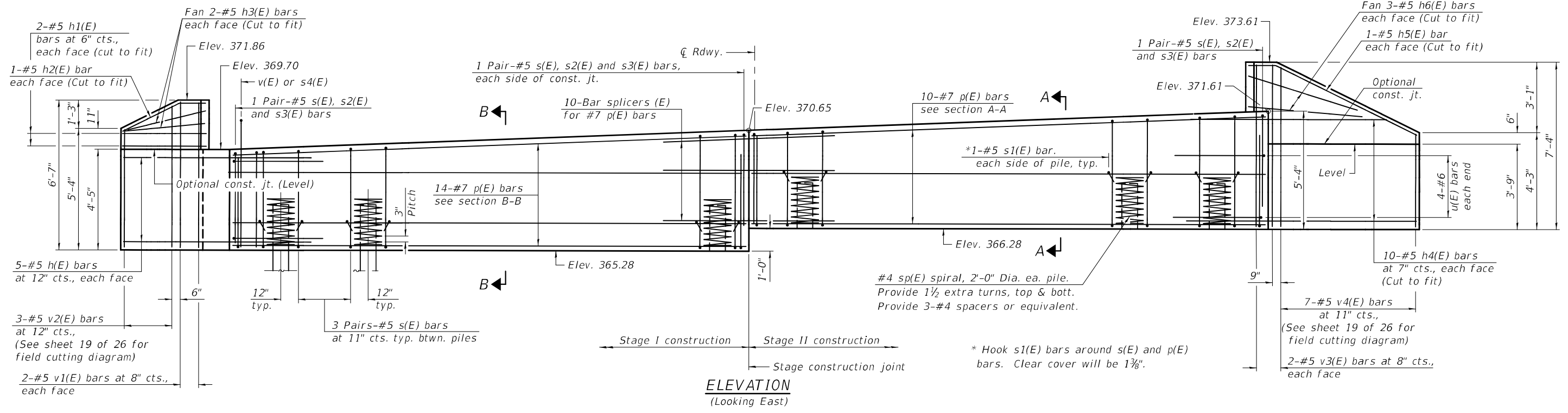
DATE -	MARCH 11, 2021
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REVISED -	

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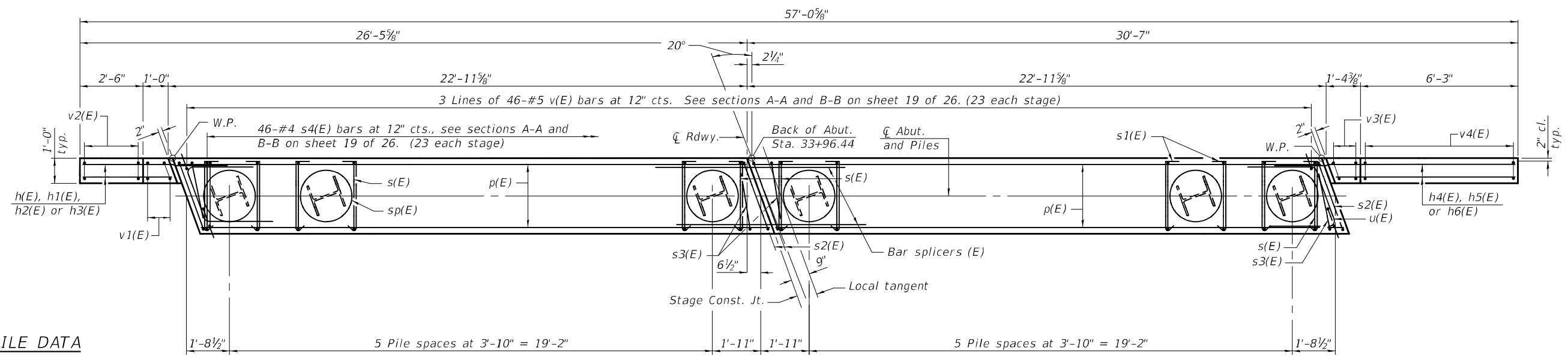
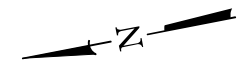
**WEST ABUTMENT  
STRUCTURE NO. 044-0063**

SHEET 17 OF 26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	107B-2	JOHNSON	67	42
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				



Note:  
See sheet 19 of 26 for additional abutment details, notes and Bill of Material.



**PILE DATA**

Type: HP 14x117 with Pile shoes  
 Nominal Required Bearing: 929k  
 Factored Resistance Available: 511k  
 Est. Length: 58'  
 No. Production Piles: 12  
 No. Test Piles: 0

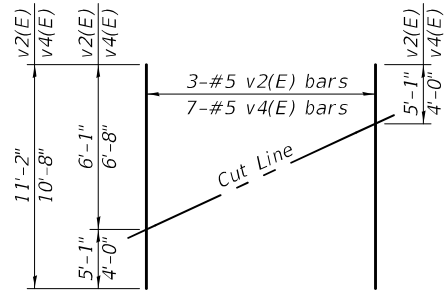
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EAST ABUTMENT  
STRUCTURE NO. 044-0063**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	107B-2	JOHNSON	67	43
CONTRACT NO. 78681				

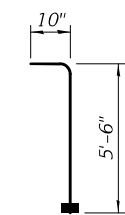
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DESIGNED - ZACHARY T. BULVA	EXAMINED - <i>Joanne F. Jaffe</i>	DATE - MARCH 11, 2021
CHECKED - RYAN P. NEGANGARD	PASSED - <i>Carl Perry</i>	REVISER -
DRAWN - DENNIS A. POP	ENGINEER OF BRIDGES AND STRUCTURES	REVISER -
CHECKED - Z.T.B. / R.P.N. / G.R.A.		

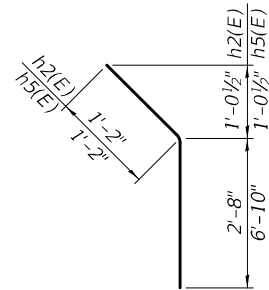


**FIELD CUTTING DIAGRAM**

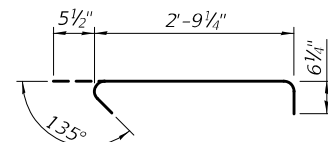
Order v2(E) and v4(E) bars full length. Cut as shown and use remainder of bars in opposite face.



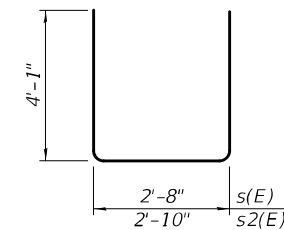
**BAR v(E)**  
(Headed)



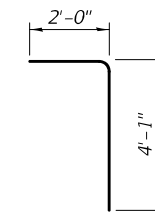
**BAR h2(E) & h5(E)**



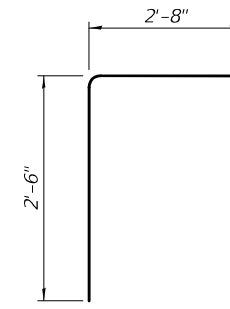
**BAR s1(E)**



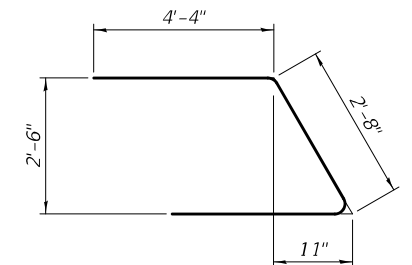
**BARS s(E) & s2(E)**



**\*\*BAR s3(E)**  
\*\* Pairs of s3(E) bars lap in vertical face.



**BAR s4(E)**



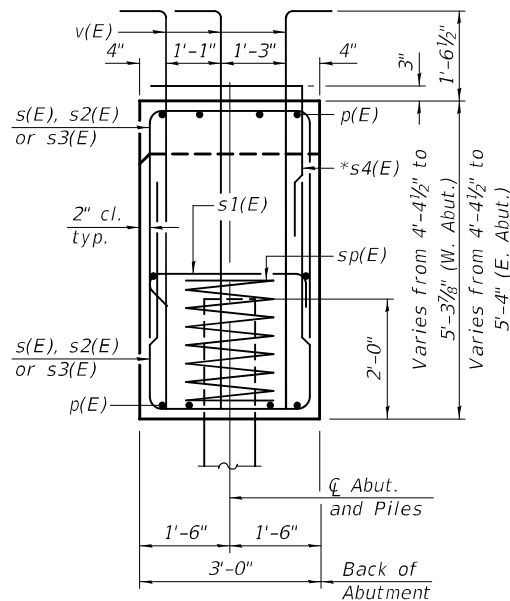
**BAR u(E)**

**WEST ABUTMENT  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	10	#5	7'-5"	—
h1(E)	4	#5	3'-6"	—
h2(E)	2	#5	3'-10"	—
h3(E)	4	#5	3'-8"	—
h4(E)	20	#5	11'-2"	—
h5(E)	2	#5	8'-0"	—
h6(E)	6	#5	4'-10"	—
p(E)	24	#7	22'-6"	—
s(E)	68	#5	10'-10"	U
s1(E)	24	#5	3'-9"	U
s2(E)	8	#5	11'-0"	U
s3(E)	8	#5	6'-1"	U
s4(E)	46	#4	5'-2"	L
‡ sp(E)	12	#4	2'-0"	W
u(E)	8	#6	11'-4"	U
v(E)	138	#5	6'-4"	U
v1(E)	4	#5	6'-3"	—
v2(E)	3	#5	11'-2"	—
v3(E)	4	#5	7'-0"	—
v4(E)	7	#5	10'-8"	—
Structure Excavation	Cu. Yd.	96.0		
Concrete Structures	Cu. Yd.	25.7		
Reinforcement Bars, Epoxy Coated	Pound	4,430		
Furnishing Steel Piles HP14x117	Foot	484		
Driving Piles	Foot	484		
Pile Shoes	Each	12		
Test Pile Steel HP14x117	Each	1		

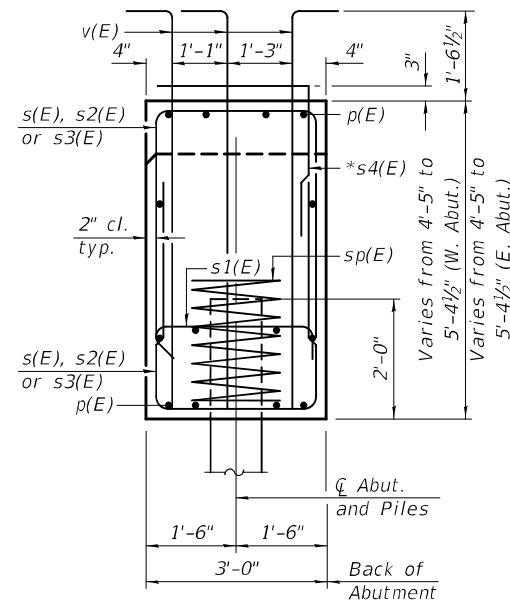
**EAST ABUTMENT  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	10	#5	7'-5"	—
h1(E)	4	#5	3'-6"	—
h2(E)	2	#5	3'-10"	—
h3(E)	4	#5	3'-8"	—
h4(E)	20	#5	11'-2"	—
h5(E)	2	#5	8'-0"	—
h6(E)	6	#5	4'-10"	—
p(E)	24	#7	22'-6"	—
s(E)	68	#5	10'-10"	U
s1(E)	24	#5	3'-9"	U
s2(E)	8	#5	11'-0"	U
s3(E)	8	#5	6'-1"	U
s4(E)	46	#4	5'-2"	L
‡ sp(E)	12	#4	2'-0"	W
u(E)	8	#6	11'-4"	U
v(E)	138	#5	6'-4"	U
v1(E)	4	#5	6'-3"	—
v2(E)	3	#5	11'-2"	—
v3(E)	4	#5	7'-0"	—
v4(E)	7	#5	10'-8"	—
Structure Excavation	Cu. Yd.	94.0		
Concrete Structures	Cu. Yd.	26.0		
Reinforcement Bars, Epoxy Coated	Pound	4,430		
Furnishing Steel Piles HP14x117	Foot	696		
Driving Piles	Foot	696		
Pile Shoes	Each	12		



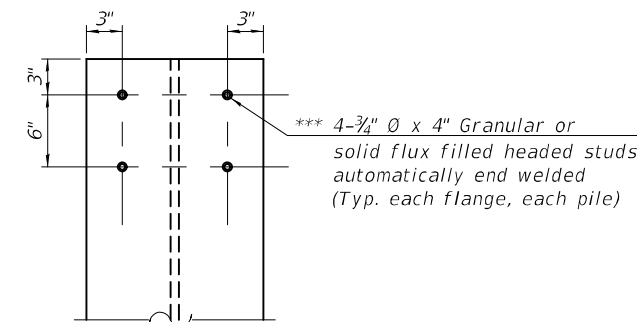
**SECTION A-A**

Dimensions at right angles to abutment.



**SECTION B-B**

Dimensions at right angles to abutment.



**SEISMIC PILE DETAIL**

\*\*\* Typical each flange, each pile.  
Cost included with Furnishing Piles.

\* For s4(E) bars see section A-A on sheet 12 of 26.

Notes:  
Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.  
For details of piles see sheet 23 of 26.

‡ Length is height of spiral.

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DESIGNED -	ZACHARY T. BULVA
CHECKED -	RYAN P. NEGANGARD
DRAWN -	DENNIS A. POP
CHECKED -	Z.T.B. / R.P.N. / G.R.A.

EXAMINED	<i>Joanne F. DeLoe</i>
PASSED	<i>Carl Rupp</i>

DATE -	MARCH 11, 2021
REVISED -	
REVISED -	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

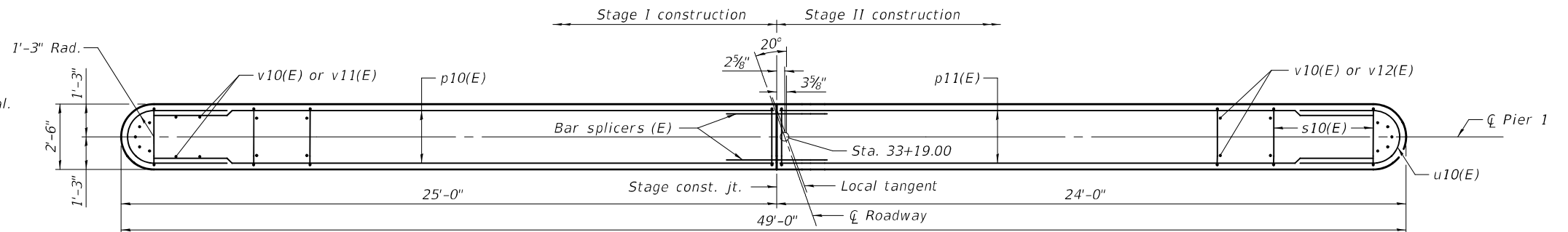
**ABUTMENT DETAILS  
STRUCTURE NO. 044-0063**

SHEET 19 OF 26 SHEETS

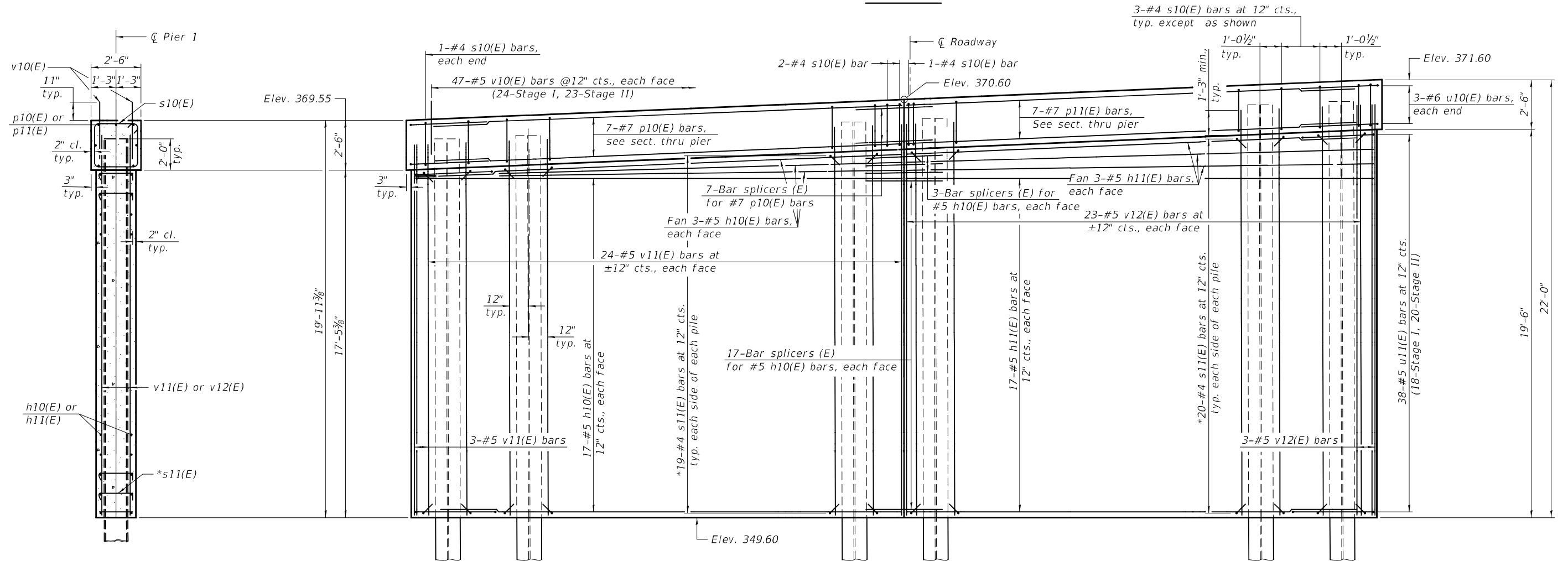
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	107B-2	JOHNSON	67	44
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				



Notes:  
 See sheet 22 of 26 for additional pier details and Bill of Material.  
 For details of piles, see sheet 23 of 26.  
 For bar splicer details, see sheet 24 of 26.



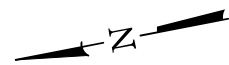
**TOP PLAN**



**ELEVATION**  
(Looking East)

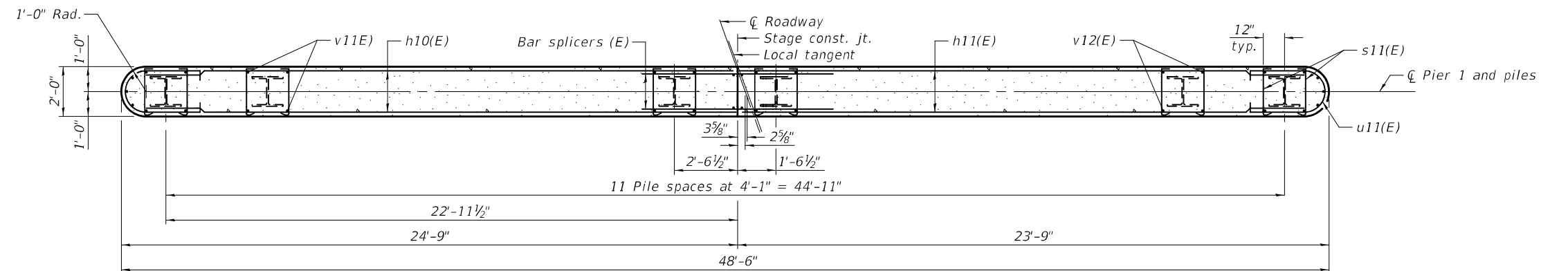
**SECTION THRU PIER**

\* Hook s11(E) bar around h10(E) or h11(E) & v11(E) or v12(E) bars. Clear cover around s11(E) bar will be 1 1/2".



**PILE DATA**

Type: HP 14x117 with Pile Shoes  
 Nominal Required Bearing: 929k  
 Factored Resistance Available: 505k  
 Est. Length: 48'  
 No. Production Piles: 12  
 No. Test Piles: 0



**SECTION THRU WALL**

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CHECKED -	RYAN P. NEGANGARD
DRAWN -	DENNIS A. POP
CHECKED -	Z.T.B. / R.P.N. / G.R.A.

EXAMINED  
 PASSED  
  
 ENGINEER OF BRIDGE DESIGN  
  
 ENGINEER OF BRIDGES AND STRUCTURES

DATE -	MARCH 11, 2021
REVISED -	
REVISED -	

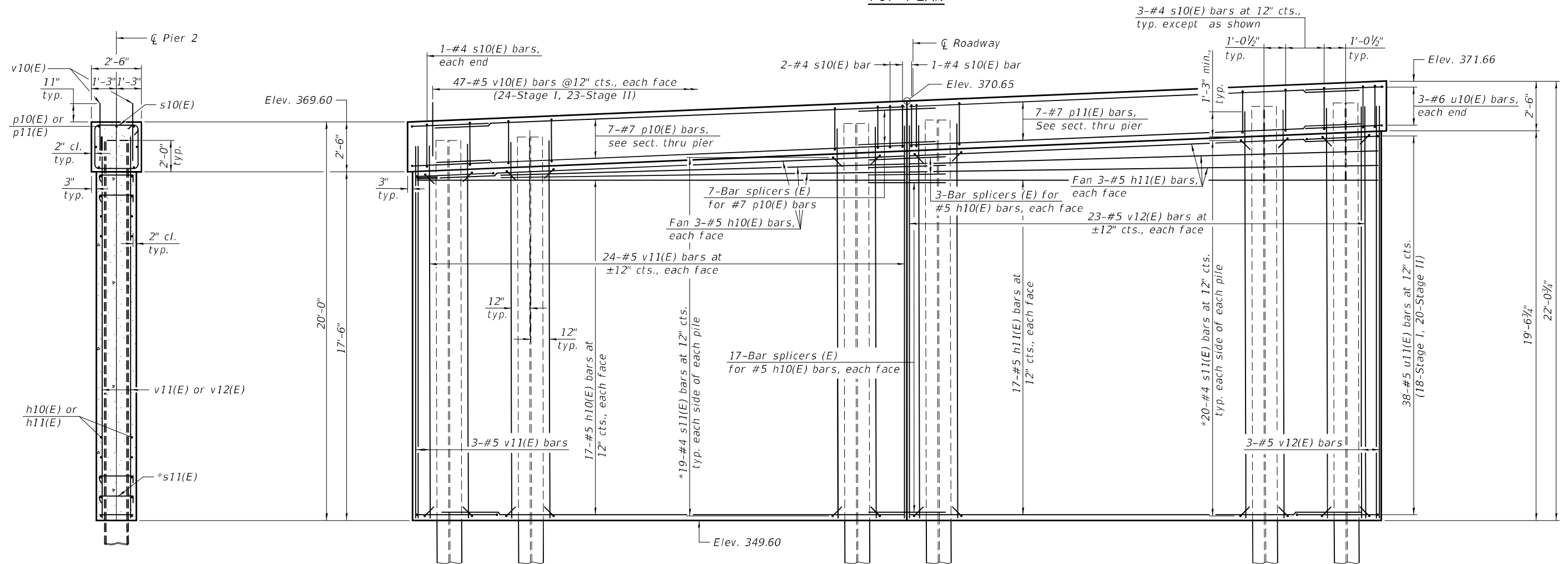
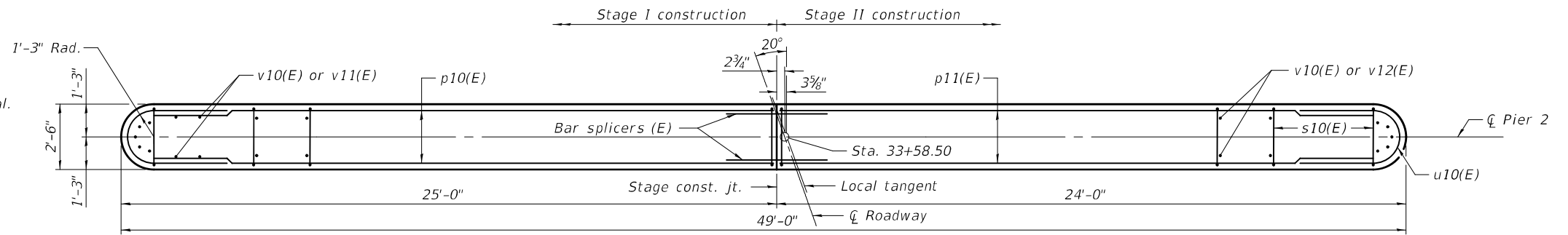
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**PIER NO. 1**  
**STRUCTURE NO. 044-0063**

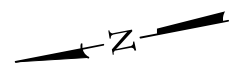
SHEET 20 OF 26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	107B-2	JOHNSON	67	45
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				

Notes:  
 See sheet 22 of 26 for additional pier details and Bill of Material.  
 For details of piles, see sheet 23 of 26.  
 For bar splicer details, see sheet 24 of 26.

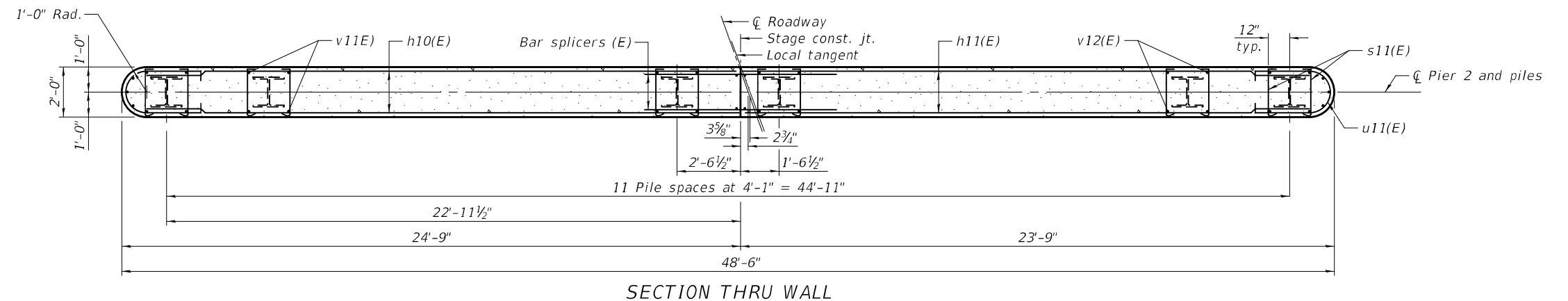


\* Hook s11(E) bar around h10(E) or h11(E) & v11(E) or v12(E) bars. Clear cover around s11(E) bar will be 1 1/2".



**PILE DATA**

Type: HP 14x117 with Pile Shoes  
 Nominal Required Bearing: 929k  
 Factored Resistance Available: 501k  
 Est. Length: 62'  
 No. Production Piles: 11  
 No. Test Piles: 1



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DESIGNED - ZACHARY T. BULVA	EXAMINED - <i>Jaime F. Joffe</i>	DATE - MARCH 11, 2021
CHECKED - RYAN P. NEGANGARD	PASSED - <i>Carl Kreyer</i>	
DRAWN - DENNIS A. POP		
CHECKED - Z.T.B. / R.P.N. / G.R.A.	ENGINEER OF BRIDGES AND STRUCTURES	

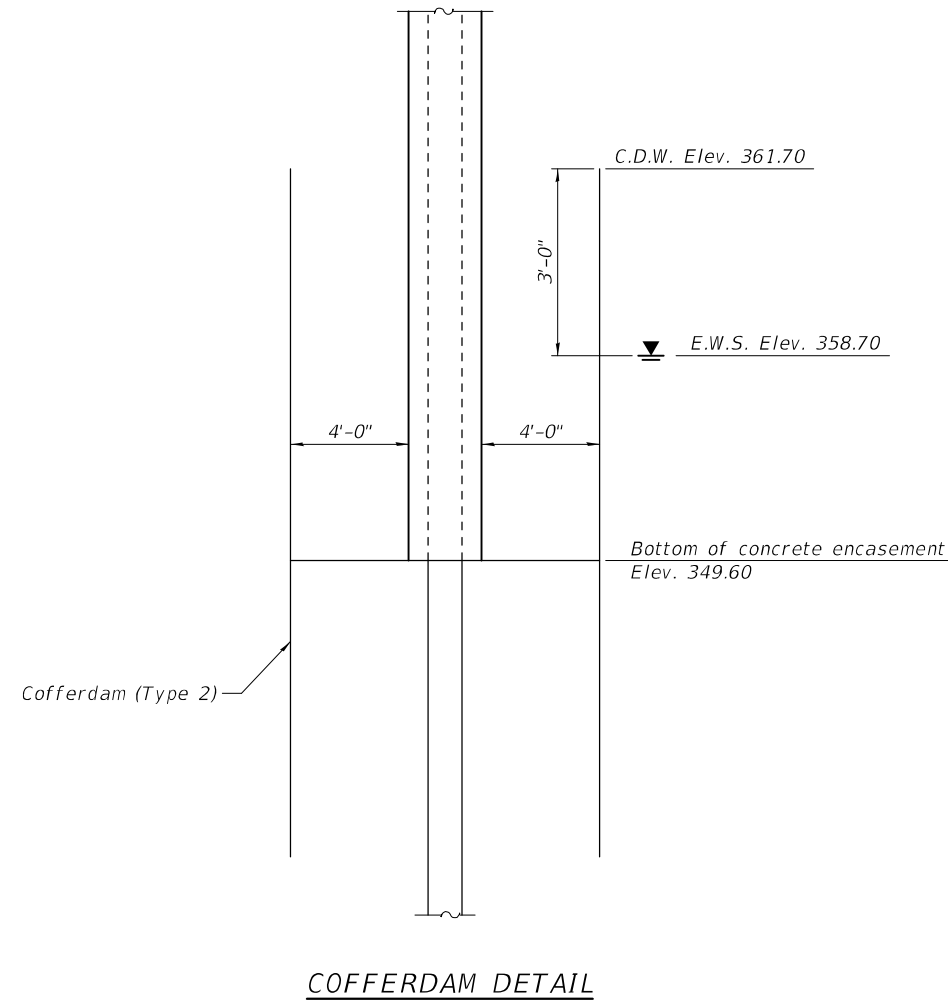
STATE OF ILLINOIS  
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PIER NO. 2  
 STRUCTURE NO. 044-0063

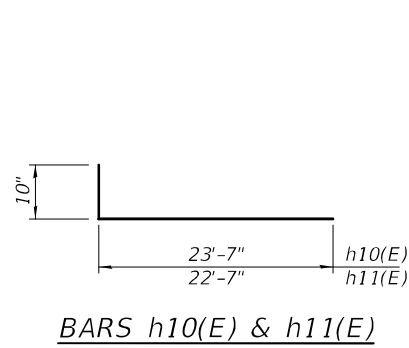
SHEET 21 OF 26 SHEETS

F.A.P. RTE. 885	SECTION 107B-2	COUNTY JOHNSON	TOTAL SHEETS 67	SHEET NO. 46
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				

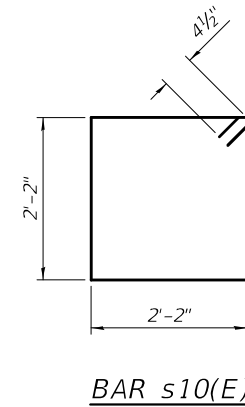
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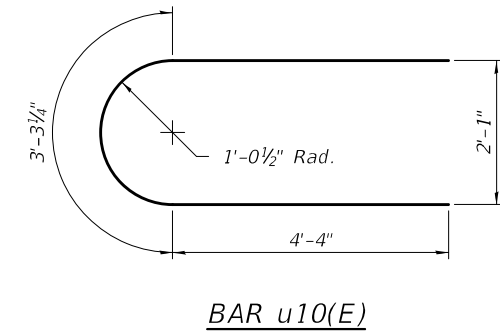
**COFFERDAM DETAIL**



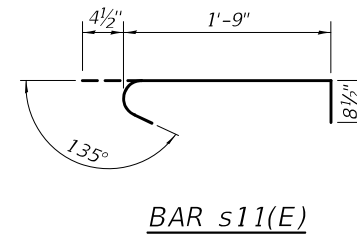
**BARS h10(E) & h11(E)**



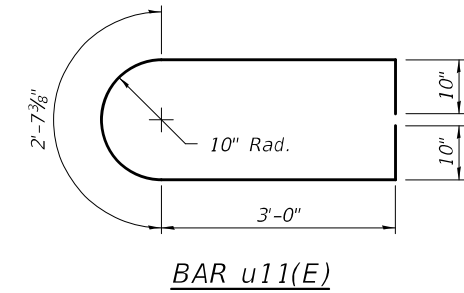
**BAR s10(E)**



**BAR u10(E)**



**BAR s11(E)**



**BAR u11(E)**

**PIER 1  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h10(E)	40	#5	24'-5"	└─
h11(E)	40	#5	23'-5"	└─
p10(E)	7	#7	23'-7"	──
p11(E)	7	#7	22'-7"	──
s10(E)	35	#4	9'-5"	┌┐
s11(E)	468	#4	2'-10"	┌┐
u10(E)	6	#6	12'-0"	┌┐
u11(E)	38	#5	10'-4"	┌┐
v10(E)	94	#5	3'-0"	──
v11(E)	51	#5	19'-8"	──
v12(E)	49	#5	20'-8"	──
Cofferdam Excavation			Cu. Yd.	7.3
Concrete Structures			Cu. Yd.	77.0
Reinforcement Bars, Epoxy Coated			Pound	6,680
Furnishing Steel Piles HP 14x117			Foot	576
Driving Piles			Foot	576
Pile Shoes			Each	12
Cofferdam (Type 2) (Location - 1)			Each	1

**PIER 2  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h10(E)	40	#5	24'-5"	└─
h11(E)	40	#5	23'-5"	└─
p10(E)	7	#7	23'-7"	──
p11(E)	7	#7	22'-7"	──
s10(E)	35	#4	9'-5"	┌┐
s11(E)	468	#4	2'-10"	┌┐
u10(E)	6	#6	12'-0"	┌┐
u11(E)	38	#5	10'-4"	┌┐
v10(E)	94	#5	3'-0"	──
v11(E)	51	#5	19'-8"	──
v12(E)	49	#5	20'-8"	──
Cofferdam Excavation			Cu. Yd.	8.5
Concrete Structures			Cu. Yd.	77.2
Reinforcement Bars, Epoxy Coated			Pound	6,680
Furnishing Steel Piles HP 14x117			Foot	682
Driving Piles			Foot	682
Test Pile Steel, HP14x117			Each	1
Pile Shoes			Each	12
Cofferdam (Type 2) (Location - 2)			Each	1

DESIGNED -	ZACHARY T. BULVA
CHECKED -	RYAN P. NEGANGARD
DRAWN -	DENNIS A. POP
CHECKED -	Z.T.B. / R.P.N. / G.R.A.

EXAMINED	<i>Jaime F. Jaffe</i> ENGINEER OF BRIDGE DESIGN
PASSED	<i>Carl Pinner</i> ENGINEER OF BRIDGES AND STRUCTURES

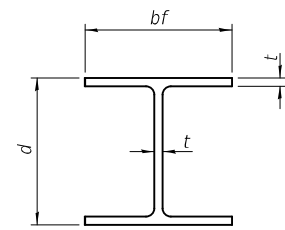
DATE -	MARCH 11, 2021
REVISED -	
REVISED -	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PIER DETAILS  
STRUCTURE NO. 044-0063**

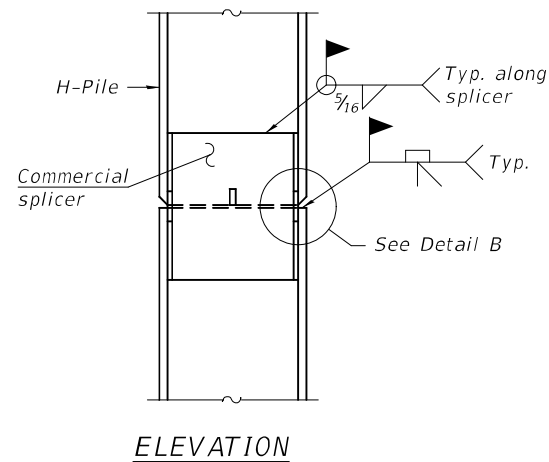
SHEET 22 OF 26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	107B-2	JOHNSON	67	47
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				

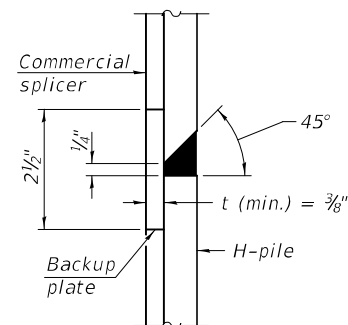


**STEEL PILE TABLE**

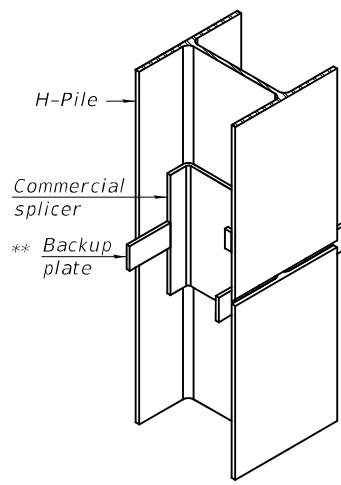
Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	1 3/16"	30"
x102	14"	14 3/4"	1 1/16"	30"
x89	13 3/8"	14 3/4"	5/8"	30"
x73	13 3/8"	14 3/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1 1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 1/8"	7/16"	24"
HP 8x36	8"	8 1/8"	7/16"	18"



**ELEVATION**

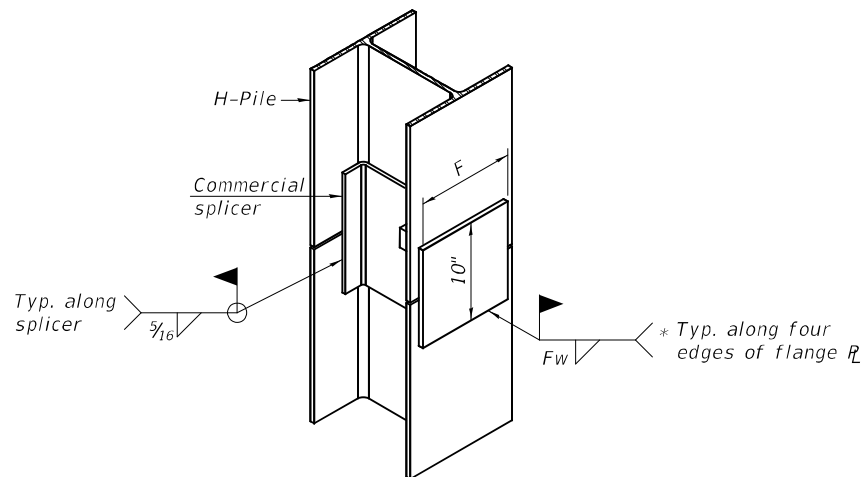


**DETAIL "B"**



**ISOMETRIC VIEW**

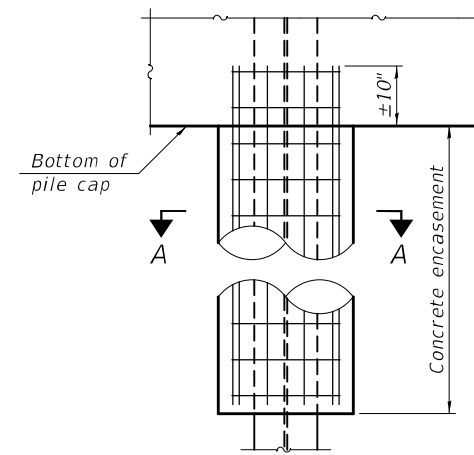
**WELDED COMMERCIAL SPLICE**



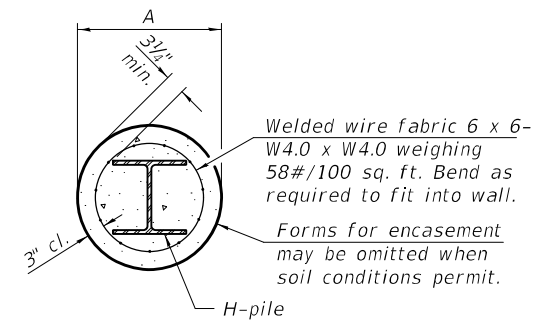
**ISOMETRIC VIEW**

**WELDED COMMERCIAL SPLICE ALTERNATE**

- \* Interrupt welds 1/4" from end of web and/or each flange.
- \*\* Remove portions of backup plates that extend outside the flanges.
- \*\*\* Weld size per pile shoe manufacturer (5/16" min.).

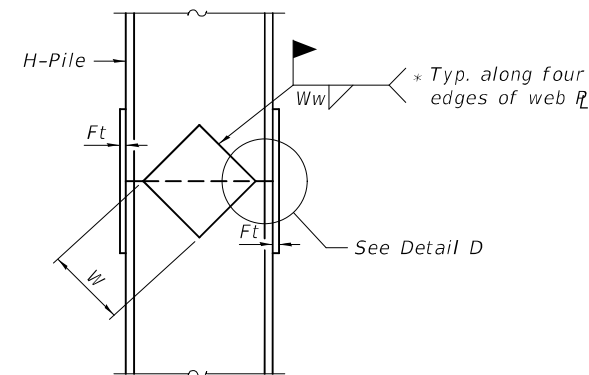


**ELEVATION**

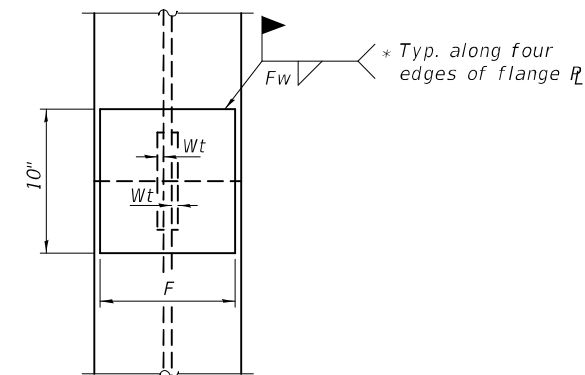


**SECTION A-A**

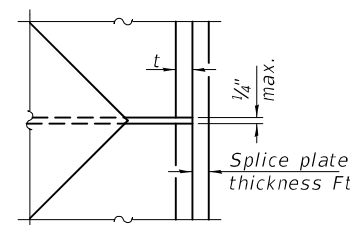
**INDIVIDUAL PILE CONCRETE ENCASUREMENT**  
(when specified)



**ELEVATION**



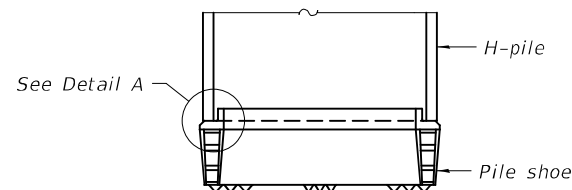
**END VIEW**



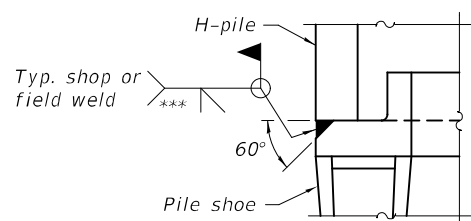
**DETAIL D**

**WELDED PLATE FIELD SPLICE**

Designation	F	Ft	Fw	W	Wt	Ww
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	1 1/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	1 1/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	1 1/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"



**ELEVATION**



**DETAIL A**

**SHOE ATTACHMENT**

Note:  
The steel H-piles shall be according to AASHTO M270 Grade 50.

F-HP 1-1-2020

DESIGNED - ZACHARY T. BULVA	EXAMINED
CHECKED - RYAN P. NEGANGARD	PASSED
DRAWN - DENNIS A. POP	
CHECKED - Z.T.B. / R.P.N. / G.R.A.	

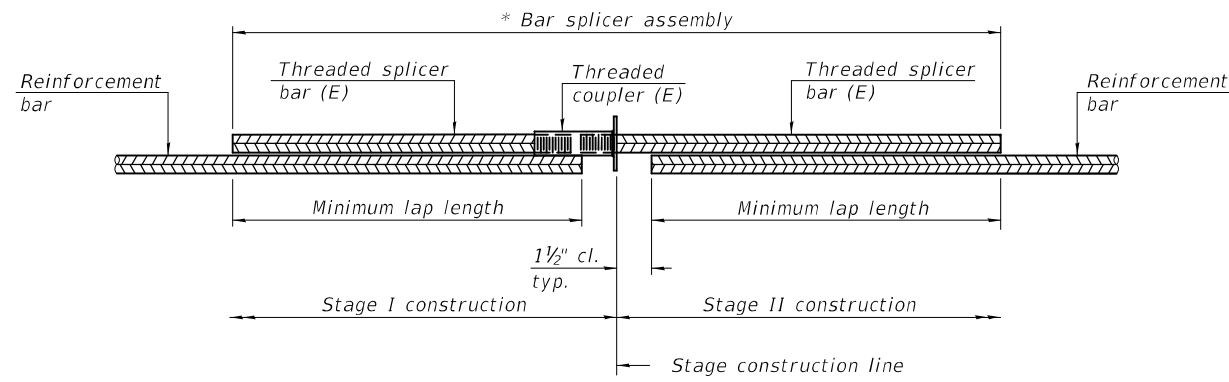
DATE - MARCH 11, 2021	ENGINEER OF BRIDGE DESIGN
REVISOR	ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

HP PILE DETAILS  
STRUCTURE NO. 044-0063

SHEET 23 OF 26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	107B-2	JOHNSON	67	48
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				

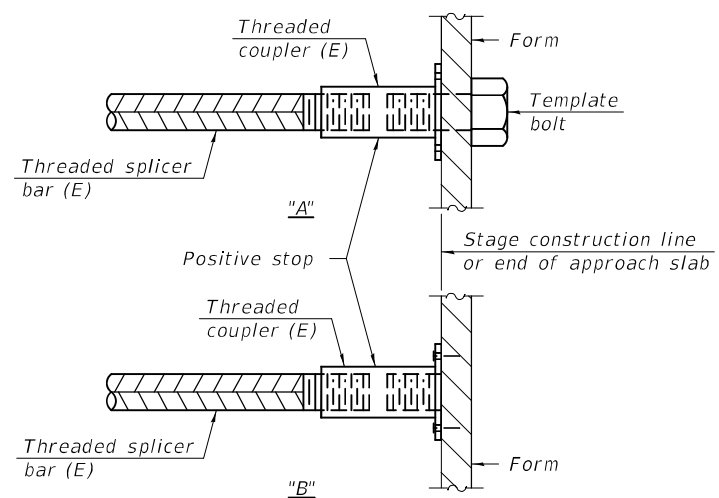


**STANDARD BAR SPLICER ASSEMBLY PLAN**  
 (All components shall be provided from one supplier)

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

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

Location	Bar size	No. assemblies required	Minimum lap length
Slab	#7	470	5'-10"
Slab over Abutments	#5	6	3'-0"
Slab over Piers	#5	6	3'-0"
Approach Slab Top	#5	86	3'-4"
Approach Slab Bottom	#8	114	4'-9"
Approach Slab Footing	#5	80	3'-2"
Abutment Caps	#7	20	6'-3"
Pier Caps	#7	14	5'-0"
Pier Walls	#5	80	3'-7"

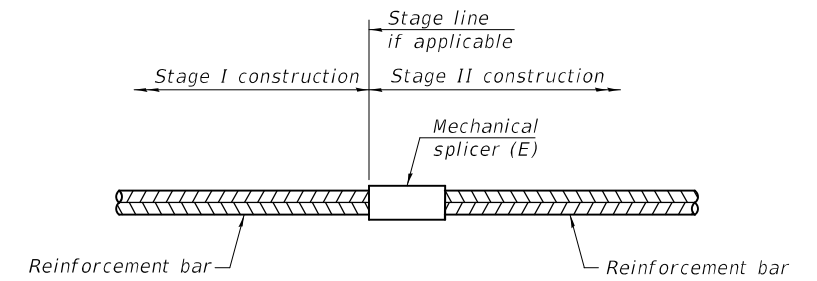


**INSTALLATION AND SETTING METHODS**

"A" : Set bar splicer assembly by means of a template bolt.

"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E) : Indicates epoxy coating.



**STANDARD MECHANICAL SPLICER**

Location	Bar size	No. assemblies required

**Notes:**

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

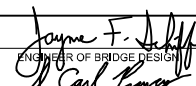

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

MODEL: 0440063-78681-024  
 FILE NAME: p:\w\lanroom\dot\illinois\gov\p\w\dot\Documents\DOT Offices\Bureau of Bridges and Structures\Projects\0440063\0440063-78681.dgn

BSD-1

1-1-2020

DESIGNED -	ZACHARY T. BULVA
CHECKED -	RYAN P. NEGANGARD
DRAWN -	DENNIS A. POP
CHECKED -	Z.T.B. / R.P.N. / G.R.A.

EXAMINED		DATE -	MARCH 11, 2021
PASSED		REVISED -	
	ENGINEER OF BRIDGES AND STRUCTURES	REVISED -	

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
 STRUCTURE NO. 044-0063

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	107B-2	JOHNSON	67	49
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				

SHEET 24 OF 26 SHEETS

Page 1 of 2

**Illinois Department of Transportation**  
Division of Highways  
District Nine Materials

## SOIL BORING LOG

Date 6/6/18

ROUTE FAP 885 DESCRIPTION FAP 885 (IL 146) over Little Cache Creek LOGGED BY L Estel

SECTION 110-BC-1 LOCATION 0.1 mi. East of US 45, SEC. 4, TWP. 13 S, RNG. 3 E, 3rd PM,

COUNTY Johnson DRILLING METHOD 2" OD Sampler HAMMER TYPE 140#

STRUCT. NO.	Station	DEPTH	BLOW	UCS	MOIST	Surface Water Elev.	Stream Bed Elev.	DEPTH	BLOW	UCS	MOIST
044-0053	33+39.00	H	S	Qu	T	ft	ft	H	S	Qu	T
BORING NO.	Station	Offset	Ground Surface Elev.								
1-S	32+59	7.0 ft LL	371.9								
Asphalt (18")	370.4										
Stiff, moist, brown and grey, Silty Clay Loam A-4	367.9										
Soft, very moist to wet, grey, Silty Loam A-4	365.4										
Soft, very moist, grey, Silty Clay Loam A-4	362.9										
Medium, moist, grey, Silty Clay Loam A-4	360.4										
Stiff, moist, grey, Silty Clay Loam A-4	357.9										
Medium, very moist, grey, Silty Clay Loam A-4	355.4										
Stiff, moist to very moist, grey, Silty Clay Loam A-4	352.9										
Medium, very moist, brown, Silty Clay A-6											

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, form 137 (Rev. 8-99)

Page 2 of 2

**Illinois Department of Transportation**  
Division of Highways  
District Nine Materials

## SOIL BORING LOG

Date 6/6/18

ROUTE FAP 885 DESCRIPTION FAP 885 (IL 146) over Little Cache Creek LOGGED BY L Estel

SECTION 110-BC-1 LOCATION 0.1 mi. East of US 45, SEC. 4, TWP. 13 S, RNG. 3 E, 3rd PM,

COUNTY Johnson DRILLING METHOD 2" OD Sampler HAMMER TYPE 140#

STRUCT. NO.	Station	DEPTH	BLOW	UCS	MOIST	Surface Water Elev.	Stream Bed Elev.	DEPTH	BLOW	UCS	MOIST
044-0053	33+39.00	H	S	Qu	T	ft	ft	H	S	Qu	T
BORING NO.	Station	Offset	Ground Surface Elev.								
1-S	32+59	7.0 ft LL	371.9								
Clay Shale	327.4										
Bottom of hole = 44.1 feet											
Free water observed at 25.0 feet											
Elevation referenced to BM R105 = 371.6 feet											
To convert "N" values to "N60", multiply by 1.5.											
End of Boring											

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, form 137 (Rev. 8-99)

MODEL: 0440063-78681-025  
FILE NAME: p:\lanroom\dot\illinois\gov\p\p\DOT\Documents\DOT Offices\Bureau of Bridges and Structures\Projects\0440063\CADD Plans\0440063-78681.dgn

DESIGNED - ZACHARY T. BULVA	EXAMINED - <i>Joanne F. J. [Signature]</i>	DATE - MARCH 11, 2021
CHECKED - RYAN P. NEGANGARD	PASSED - <i>Carl [Signature]</i>	REVISED -
DRAWN - DENNIS A. POP	ENGINEER OF BRIDGES AND STRUCTURES	REVISED -
CHECKED - Z.T.B. / R.P.N. / G.R.A.		


**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SOIL BORING LOGS  
STRUCTURE NO. 044-0063**

SHEET 25 OF 26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	107B-2	JOHNSON	67	50
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				

Page 1 of 2



## SOIL BORING LOG

Date 6/13/18

ROUTE FAP 885 DESCRIPTION FAP 885 (IL 146) over Little Cache Creek LOGGED BY L Estel


SECTION 110-BC-1 LOCATION 0.1 mi. East of US 45, SEC. 4, TWP. 13 S, RNG. 3 E, 3rd PM,

COUNTY Johnson DRILLING METHOD 2" OD Sampler HAMMER TYPE 140#

STRUCT. NO.	Station	D	B	U	M	Description	D	B	U	M
<u>044-0053</u>	<u>33+39.00</u>					Surface Water Elev. _____ ft				
						Stream Bed Elev. _____ ft				
						Groundwater Elev.:				
						First Encounter <u>347.2</u> ft				
						Upon Completion _____ ft				
						After _____ Hrs. _____ ft				
		(ft)	(/6")	(tsf)	(%)		(ft)	(/6")	(tsf)	(%)
	<u>25" Asphalt</u>									
	<u>370.7</u>					Medium, moist, brown, Silt A-4 (continued)				
						<u>351.2</u>				
						Medium, very moist, brown, Silty Clay Loam A-6				
						<u>348.7</u>				
						Soft, very moist, grey, Silty Clay A-6				
						<u>347.2</u>				
						Loose, wet grey, Fine Sand				
						<u>345.7</u>				
						Soft, very moist to wet, grey, Silty Clay A-6 with rotten wood				
						<u>343.7</u>				
						Soft to medium, very moist, grey Clay A7-6				
						<u>330.7</u>				
						Very soft, wet, grey, Silt Loam A-4				
						<u>311.2</u>				
						Soft, very moist, grey, Clay A7-6				
						<u>338.7</u>				
						Stiff, moist, brown mottled grey, Silt Loam to Silty Clay Loam A-4				
						<u>356.2</u>				
						Soft, very moist, grey, Silty Clay A-6				
						<u>333.7</u>				
						Medium, moist, brown, Silt A-4				
						<u>320.7</u>				
						Medium, very moist, grey, Silty Clay to Silty Clay Loam A-6				
						<u>340.7</u>				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, form 137 (Rev. 8-99)

Page 2 of 2



## SOIL BORING LOG

Date 6/13/18

ROUTE FAP 885 DESCRIPTION FAP 885 (IL 146) over Little Cache Creek LOGGED BY L Estel

SECTION 110-BC-1 LOCATION 0.1 mi. East of US 45, SEC. 4, TWP. 13 S, RNG. 3 E, 3rd PM,

COUNTY Johnson DRILLING METHOD 2" OD Sampler HAMMER TYPE 140#

STRUCT. NO.	Station	D	B	U	M	Description	D	B	U	M
<u>044-0053</u>	<u>33+39.00</u>					Surface Water Elev. _____ ft				
						Stream Bed Elev. _____ ft				
						Groundwater Elev.:				
						First Encounter <u>347.2</u> ft				
						Upon Completion _____ ft				
						After _____ Hrs. _____ ft				
		(ft)	(/6")	(tsf)	(%)		(ft)	(/6")	(tsf)	(%)
						Medium, very moist, grey, Silty Clay to Silty Clay Loam A-6 (continued)				
						<u>328.7</u>				
						Soft, very moist to wet, grey, Silty Clay Loam A-4 with Sand layers				
						<u>320.2</u>				
						Very loose, wet, grey, Sand and Gravel				
						<u>320.2</u>				
						59% Sand 13% Silt 3% Clay 25% Gravel				
						Hard, dry, grey, Clay Shale				
						Auger refusal				
						<u>318.2</u>				
						Cored 54.2 to 59.2 feet				
						68% Recovery; 23% RQD				
						Very dense, dry, grey and dark grey, laminated Sandstone and Shale turning to Sandstone at 58.0 feet				
						<u>313.2</u>				
						Bottom of hole = 59.2 feet				
						Free water observed at 25.5 feet				
						Elevation referenced to BM at NE wingwall = 371.6 feet				
						To convert "N" values to "N60", multiply by 1.5.				
						End of Boring				
						<u>-65</u>				
						<u>-70</u>				
						<u>-75</u>				
						<u>-80</u>				

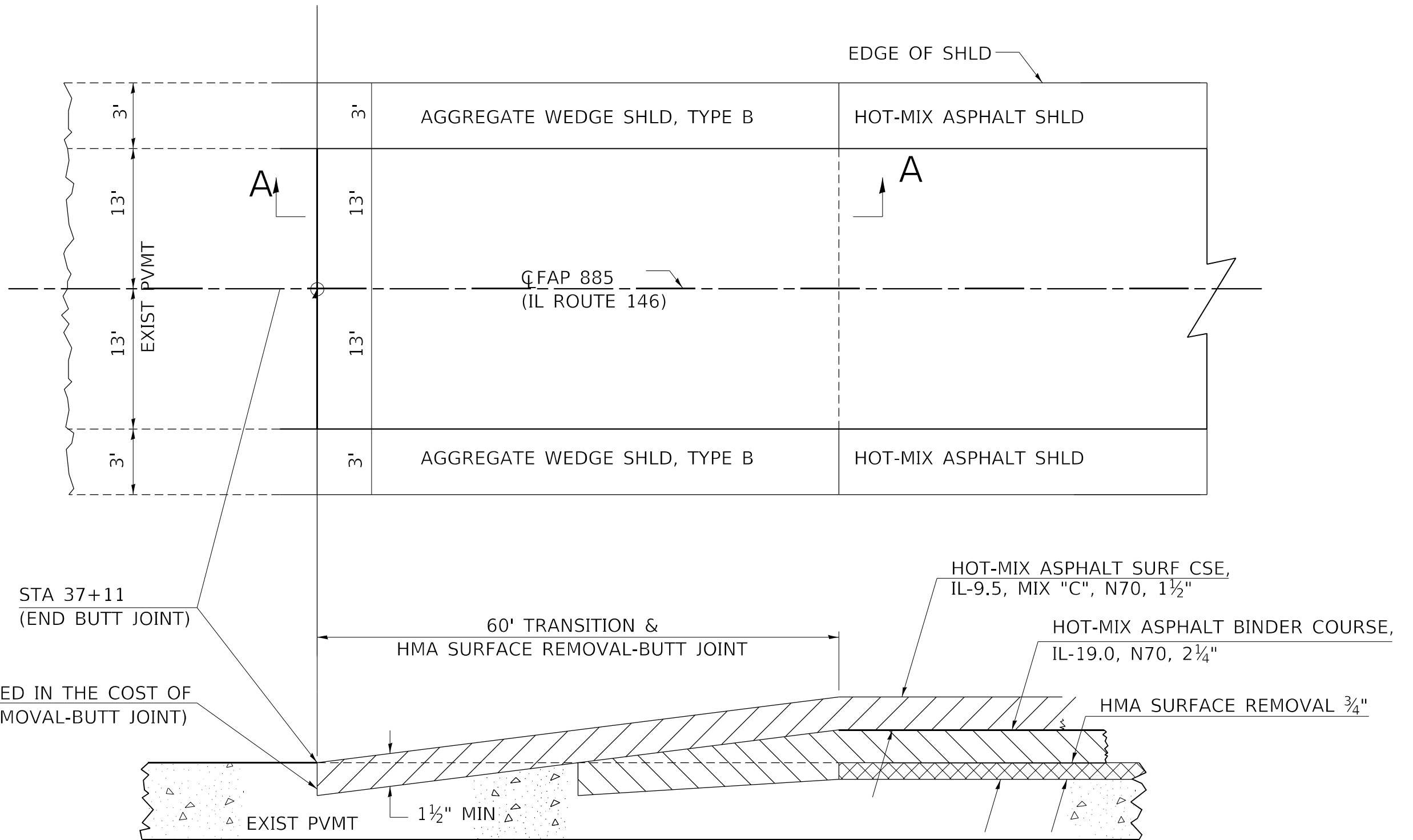
The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, form 137 (Rev. 8-99)

MODEL: 0440063-78681-026  
FILE NAME: p:\lanroom\dot\illinois\gov\p\p\DOT\Documents\DOT Offices\Bureau of Bridges and Structures\Projects\0440063\CADD Plans\0440063-78681.dgn

DESIGNED - ZACHARY T. BULVA	EXAMINED - 	DATE - MARCH 11, 2021	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SOIL BORING LOGS STRUCTURE NO. 044-0063</b>	F.A.P. RTE. - 885	SECTION - 107B-2	COUNTY - JOHNSON	TOTAL SHEETS - 67	SHEET NO. - 51	
CHECKED - RYAN P. NEGANGARD	PASSED - 	REVISED -			SHEET 26 OF 26 SHEETS					
DRAWN - DENNIS A. POP	ENGINEER OF BRIDGES AND STRUCTURES	REVISED -			ILLINOIS FED. AID PROJECT					
CHECKED - Z.T.B. / R.P.N. / G.R.A.					CONTRACT NO. 78681					

3/11/2021 10:11:55 AM

# BUTT JOINT WITH MILLING



## SECTION A-A

REVISIONS	
DRAWN	03-09-17
REVISED	02-18-20
REVISED	
REVISED	

STD. 9-118

MODEL: Default  
FILE NAME: Z:\200311\_10\_IL\_146\_Vfenna\DCM\Design\Pre\m\Revised\52-5B-0976681-Detail.dgn

USER NAME = zWaters	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 10,0000 * / in.	CHECKED -	REVISED -
PLOT DATE = 1/18/2021	DATE - 1/18/2021	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DETAILS

SCALE: N.T.S. SHEET 1 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	1078-2	JOHNSON	67	52
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				



# RURAL SIDE APPROACH DETAILS

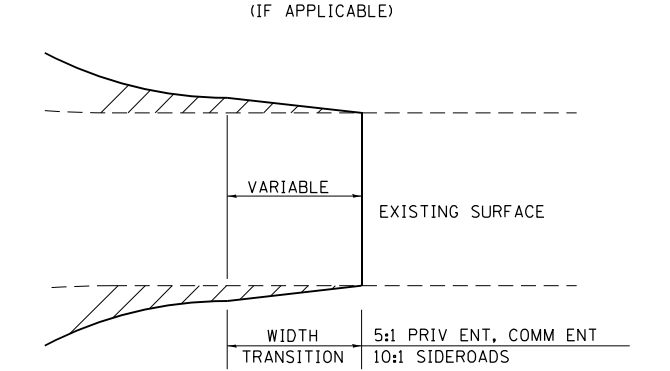
## PRIVATE AND COMMERCIAL ENTRANCES

## SIDEROADS

## SIDEROAD DIMENSIONS (MIN.)

ADT	A (FT)	B (FT)
0 TO 250	18'	2'
250 TO 400	20'	2'
GREATER THAN 400	22'	4'

## WIDTH TRANSITION DETAIL TO EXISTING

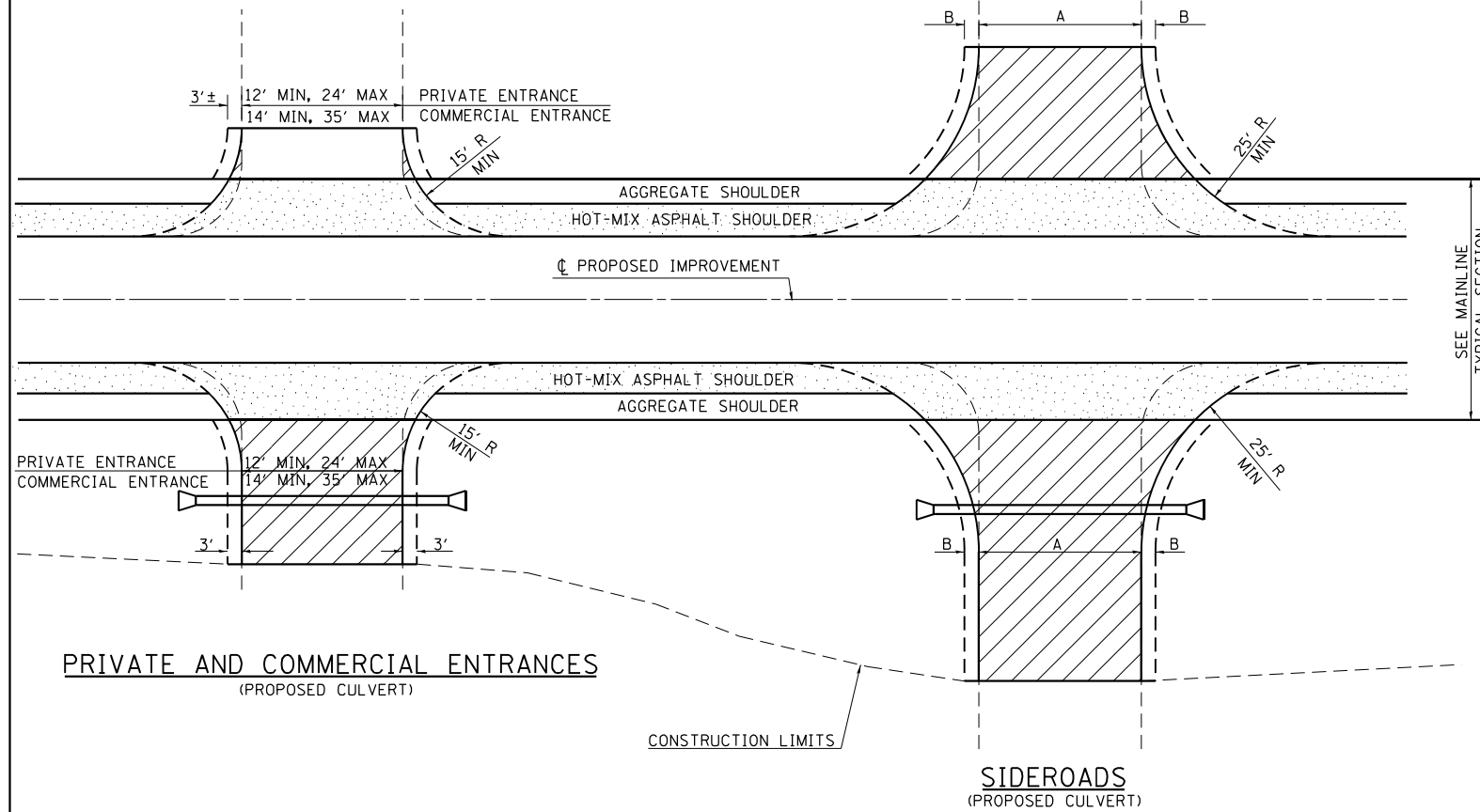
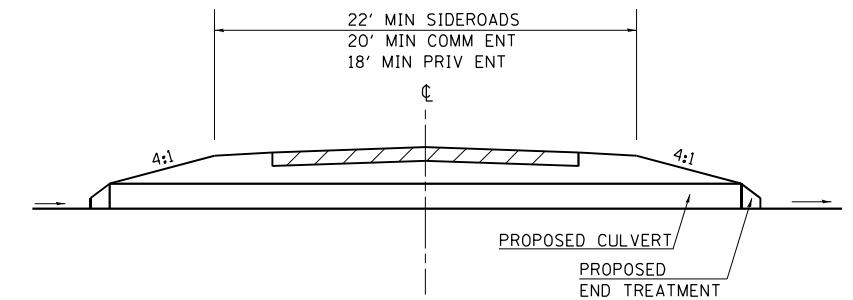


## FIELD ENTRANCE TREATMENT

CONSTRUCT MAINLINE HOT-MIX ASPHALT AND AGGREGATE SHOULDERS THROUGH FIELD ENTRANCES.

IF A PIPE IS REQUIRED, PROVIDE A 22' WIDE EARTH EMBANKMENT WITH 15' RADII AT THE INTERSECTION.

## DETAIL FOR CALCULATING CULVERT LENGTH



## LEGEND

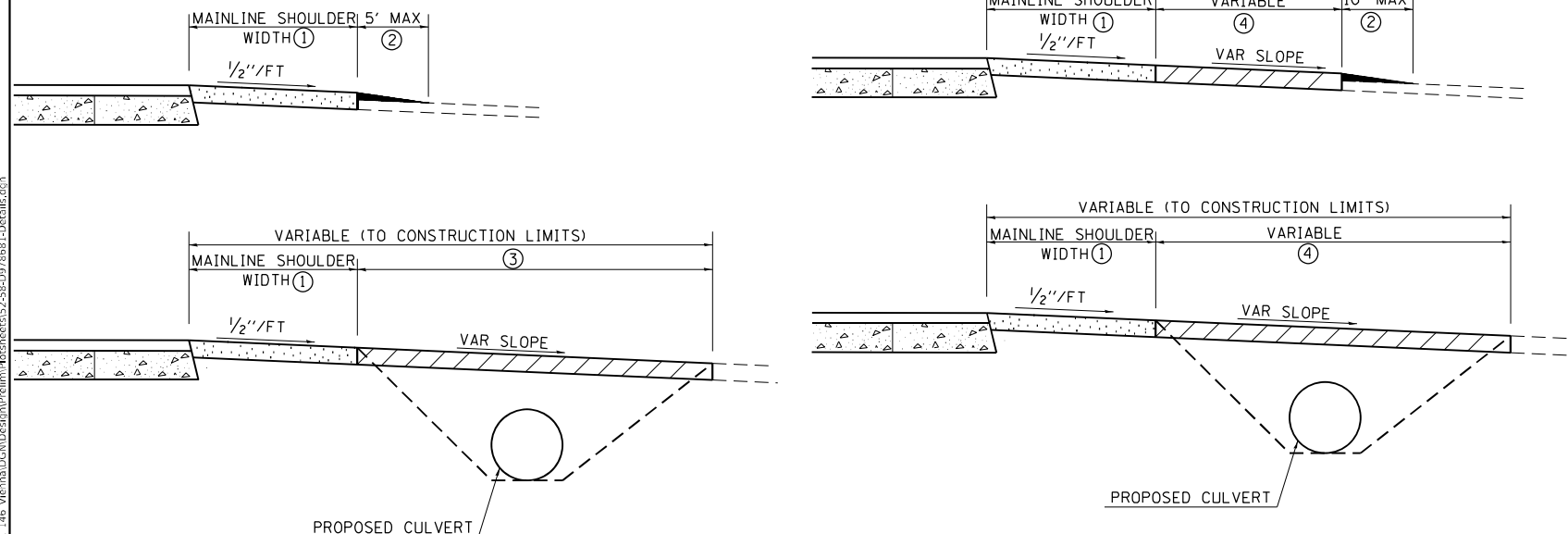
- ① CONSTRUCT HOT-MIX ASPHALT SHOULDER "FULL SHOULDER WIDTH" THROUGH ENTRANCE/INTERSECTION UNLESS OTHERWISE SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- ② IF REQUIRED, AGGREGATE TAPER FOR EXISTING GRAVEL SURFACE; HOT-MIX ASPHALT TAPER FOR EXISTING HIGHER TYPE SURFACES.
- ③ 6" AGGREGATE SURFACE COURSE FOR EXISTING GRAVEL SURFACE; 2" HOT-MIX ASPHALT RESURFACING ON 4" AGGREGATE BASE COURSE FOR EXISTING HOT-MIX ASPHALT SURFACE; PCC DRIVEWAY PAVEMENT (6" - PE; 7" - CE) FOR EXISTING CONCRETE SURFACE.
- ④ 3" MINIMUM HOT-MIX ASPHALT RESURFACING ON 8" MINIMUM AGGREGATE BASE COURSE FOR EXISTING GRAVEL SURFACE OR OIL & CHIP SURFACE; MATCH EXISTING FOR EXISTING HIGHER TYPE SURFACES.

## GENERAL NOTES

1. ENTRANCE LOCATIONS ARE TO COMPLY WITH IDOT'S POLICY "ACCESS TO STATE HIGHWAYS".
2. IN GENERAL, RELOCATED PRIVATE ENTRANCES ARE TO HAVE A 16' WIDE SURFACE WITH 3' WIDE SHOULDERS (22' WIDE EMBANKMENT).
3. SEE PLANS FOR PROPOSED PROFILE GRADES AT ENTRANCES/SIDEROADS. THE DESIRABLE MAXIMUM PROFILE GRADE FOR ENTRANCES ARE 12% FOR PE; 10% FOR CE.
4. ENTRANCE PIPE CULVERTS ARE TO BE A MINIMUM 15" DIAMETER AND NORMALLY REPLACED IN KIND; SIDEROAD PIPE CULVERTS ARE GENERALLY TO BE CONCRETE (18" MINIMUM DIAMETER).
5. THE INTERSECTION RADII OF SIDEROADS CONSTRUCTED TO FULL POLICY STANDARDS SHOULD COMPLY WITH THAT NOTED IN THE BUREAU OF LOCAL ROADS ADMINISTRATIVE POLICIES MANUAL (5-8-13).

## PRIVATE AND COMMERCIAL ENTRANCES

## SIDEROADS



REVISIONS	
DRAWN	3-15-91
REVISED	10-02-91
REVISED	5-15-92
REVISED	1-20-00
REVISED	01-11-07
REVISED	5-7-08
REVISED	5-17-13

STD. 9-83

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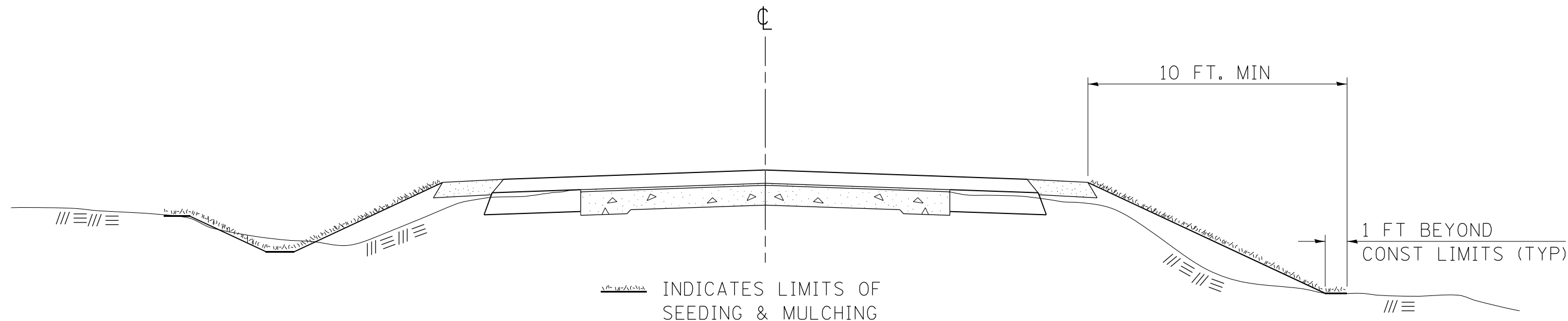
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PLOT DATE = 1/18/2021	CHECKED -	REVISED -
	DATE = 1/18/2021	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SCALE: N.T.S.		SHEET 2 OF 7 SHEETS		STA. TO STA.	
F.A.P. RTE.		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885		1078-2	JOHNSON	67	53
		CONTRACT NO. 78681			

ILLINOIS	FED. AID PROJECT
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# SEEDING & MULCHING



## GENERAL NOTES

IN GENERAL, ALL EARTH SURFACES DISTURBED DURING CONSTRUCTION OPERATIONS SHALL BE SEEDED AND MULCHED UPON COMPLETION OF ALL GRADING OPERATIONS.

ON DETOUR ROADS, SLOPES SHALL BE SEEDED IMMEDIATELY UPON COMPLETION OF ANY GIVEN STAGE GRADING. TEMPORARY SEEDING SHALL BE CLASS 7.

FERTILIZER NUTRIENTS SHALL BE APPLIED TO ALL SEEDED AREAS. LIMESTONE SHALL BE APPLIED TO ALL AREAS OF FINAL SEEDING.

THE RATES OF APPLICATION OF FERTILIZER, MULCH AND LIMESTONE SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS FOR ROAD AND BRIDGE CONSTRUCTION.

SECTIONS 250 AND 251 OF THE STANDARD SPECIFICATIONS SHALL GOVERN THIS WORK EXCEPT AS SPECIFIED HEREIN OR AS NOTED IN THE SPECIAL PROVISIONS.

### REVISIONS

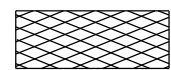
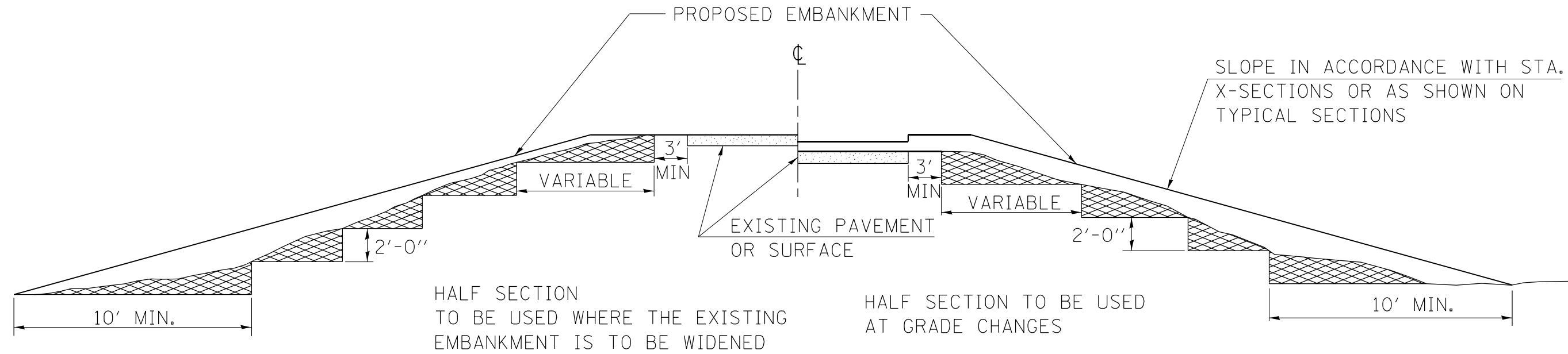
REDRAWN	2-15-89
REVISED	8-15-94
REVISED	6-3-99
REVISED	3-27-08
REVISED	5-16-13

STD. 9-12

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PLOT SCALE = 10,0000 * / in.	CHECKED -	REVISED -		SCALE: N.T.S.    SHEET 3 OF 7 SHEETS    STA.    TO STA.				CONTRACT NO. 78681				
PLOT DATE = 1/18/2021	DATE - 1/18/2021	REVISED -		ILLINOIS FED. AID PROJECT								

# TYPICAL CROSS SECTION SHOWING STEP CONSTRUCTION ON EXISTING FILL



MATERIAL TO BE REMOVED AND REPLACED IN THE EMBANKMENT IN ACCORDANCE WITH ART. 205.04 OF THE STANDARD SPECIFICATION. COST TO BE INCLUDED IN THE VARIOUS ITEMS OF EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED BECAUSE OF THIS WORK.

REVISIONS	
REDRAWN	2-15-89
REVISED	8-15-94
CHECKED	6-3-99
RESIZED	5-7-08
REVIEWED	5-17-13

STD. 9-16

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	DATE - 1/18/2021	REVISED -

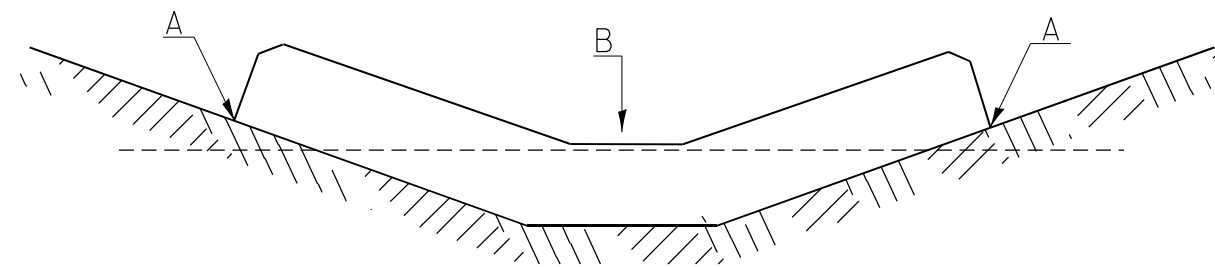
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

DETAILS			
SCALE: N.T.S.	SHEET 4 OF 7 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	1078-2	JOHNSON	67	55
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				

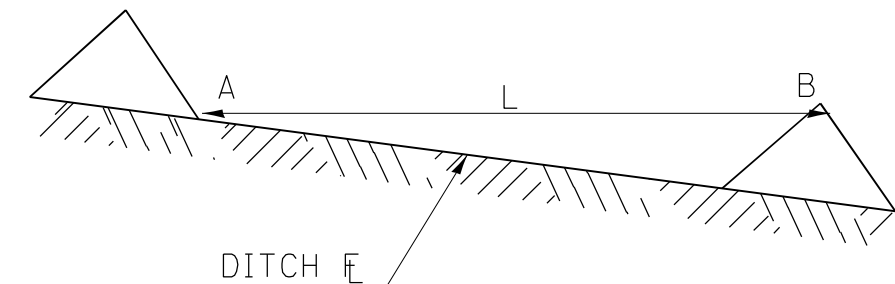
# TEMPORARY DITCH CHECKS

## PLACEMENT OF TEMPORARY DITCH CHECK IN DRAINAGE WAY



POINTS A SHOULD BE HIGHER THAN POINT B

## SPACING BETWEEN TEMPORARY DITCH CHECKS



L = THE DISTANCE SUCH THAT POINTS A AND B ARE OF EQUAL ELEVATION

B = THE LOW POINT IN CENTER OF CHECK

### REVISIONS

DRAWN	9-01-99
REVISED	10-3-01
RESIZED	5-8-08
REVISED	05-04-10
REVIEWED	5-17-13

STD. 9-108

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

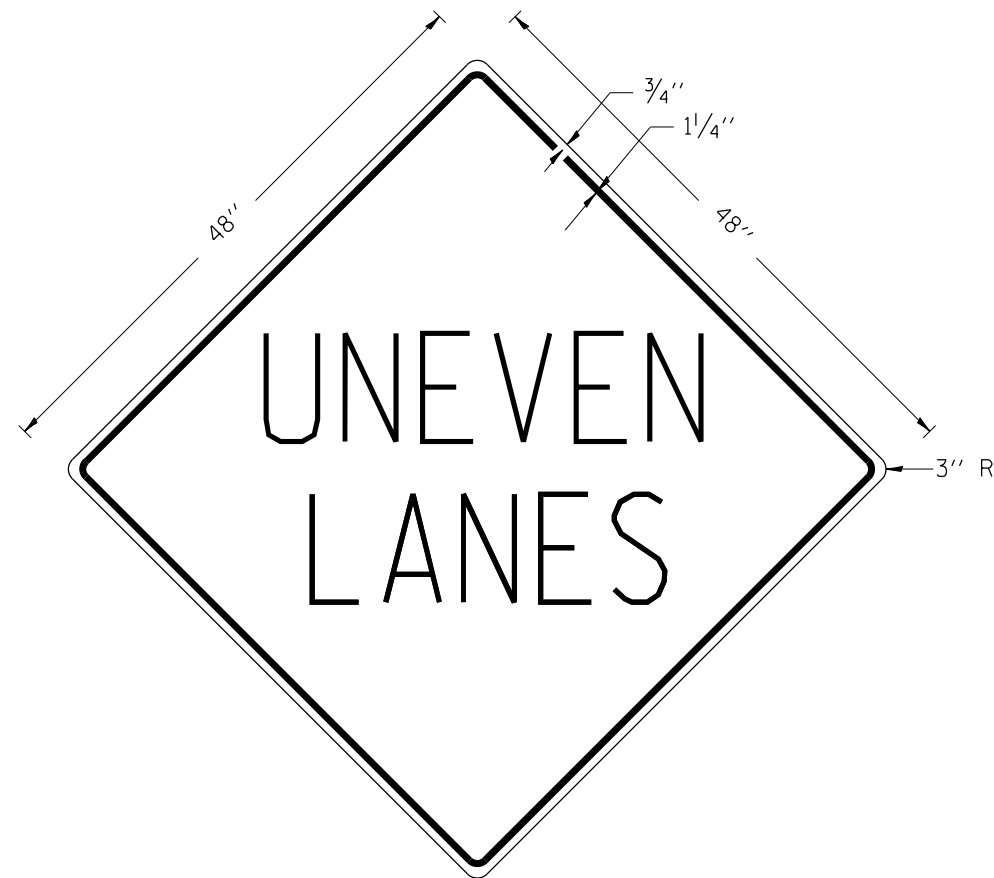
**DETAILS**

SCALE: N.T.S. SHEET 5 OF 7 SHEETS STA. TO STA.

F.A.P. RTE. 885	SECTION 1078-2	COUNTY JOHNSON	TOTAL SHEETS 67	SHEET NO. 56
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				

# UNEVEN LANES SIGN

W8-11 (48'' × 48'')



**COLORS:**

LEGEND AND BORDER - BLACK NON-REFLECTORIZED  
 BACKGROUND - ORANGE REFLECTORIZED

**NOTE:** PRIOR TO ALLOWING TRAFFIC ON ANY PORTION OF THE ROADWAY THAT HAS BEEN COLDMILLED OR BEFORE RESURFACING OPERATIONS BEGIN, THE CONTRACTOR SHALL HAVE ERECTED "UNEVEN PAVEMENT" SIGNS THAT CONFORM TO THE ABOVE DETAILS. A MINIMUM OF ONE SIGN AT EACH END OF THE IMPROVEMENT WILL BE REQUIRED. THE CONTRACTOR SHALL MAINTAIN THE "UNEVEN PAVEMENT" SIGNS UNTIL THE RESURFACING OPERATIONS ARE COMPLETED.

IF AT ANY TIME THE SIGNS ARE IN PLACE BUT NOT APPLICABLE, THEY SHALL BE TURNED FROM THE VIEW OF MOTORISTS OR COVERED AS DIRECTED BY THE ENGINEER.

THE COST OF FURNISHING, ERECTING, MAINTAINING, AND REMOVING THE REQUIRED SIGNS SHALL BE INCLUDED IN THE CONTRACT.

REVISIONS

DRAWN	2-15-89
REVISED	4-06-93
REDESIGNED	7-23-04
RESIZED	5-08-08
REVIEWED	5-17-13

STD. 9-41

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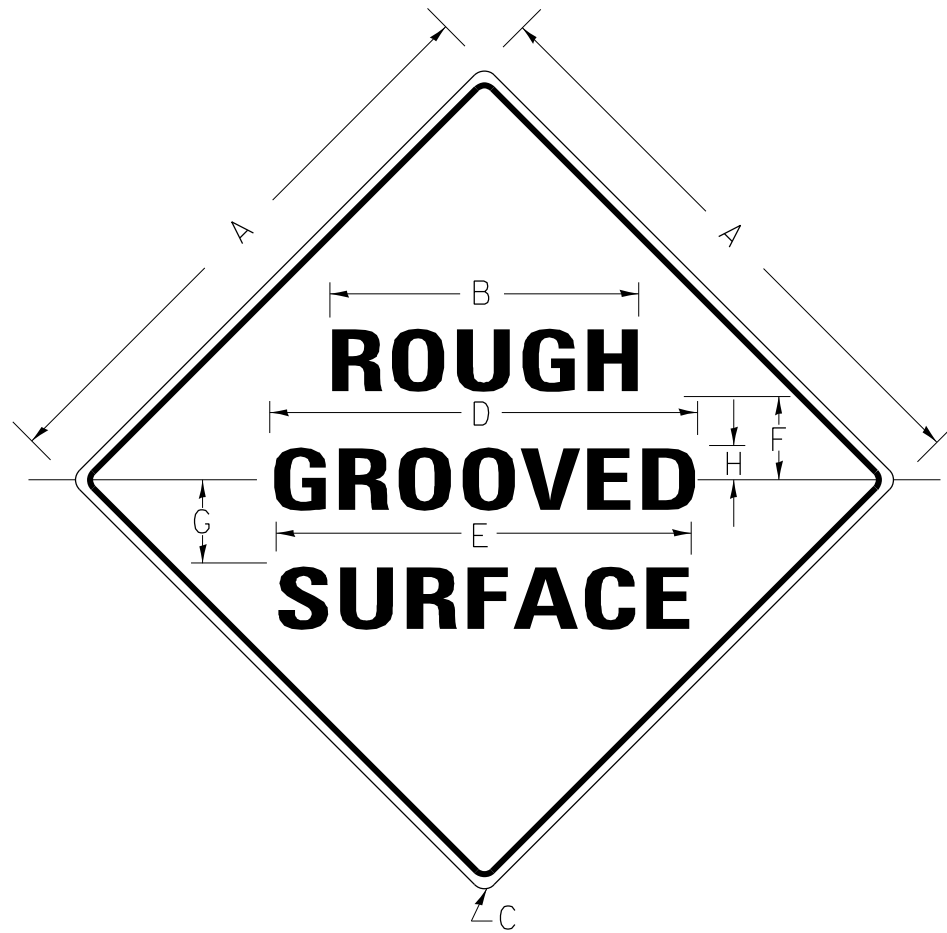
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**DETAILS**

SCALE: N.T.S. SHEET 6 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	1078-2	JOHNSON	67	57
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				

# ILLINOIS STANDARD



## COLORS:

LEGEND AND BORDER- BLACK NON-REFLECTORIZED  
 BACKGROUND- ORANGE REFLECTORIZED

SIGN SIZE	DIMENSIONS							
	A	B	C	D	E	F	G	H
48X48	48.0	24.1	3.0	34.0	33.0	6.0	13.0	3.5

SIGN SIZE	SERIES LINES			MAR- GIN	BOR- DER	BLANK STD.
	1	2	3			
48X48	7C	7C	7C	0.8	1.2	B4-48D

ALL DIMENSIONS IN INCHES

## NOTES:

PRIOR TO ALLOWING TRAFFIC ON ANY PORTION OF THE ROADWAY THAT HAS BEEN COLDMILLED, THE CONTRACTOR SHALL HAVE ERECTED "ROUGH GROOVED SURFACE" SIGNS THAT CONFORM TO THE ABOVE DETAILS. A MINIMUM OF ONE SIGN AT EACH END OF THE IMPROVEMENT WILL BE REQUIRED. THE CONTRACTOR SHALL MAINTAIN THE "ROUGH GROOVED SURFACE" SIGNS UNTIL THE COLDMILLED SURFACE IS COVERED WITH LEVELING BINDER OR SURFACE COURSE.

IF AT ANY TIME THE SIGNS ARE IN PLACE BUT NOT APPLICABLE, THEY SHALL BE TURNED FROM THE VIEW OF MOTORISTS OR COVERED AS DIRECTED BY THE ENGINEER.

THE COST OF FURNISHING, ERECTING, MAINTAINING, AND REMOVING THE REQUIRED SIGNS SHALL BE INCLUDED IN THE CONTRACT.

## REVISIONS

REDRAWN	2-15-89
REVISED	4-6-93
REVISED	3-27-08
REVIEWED	5-17-13

STD. 9-39

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PLOT DATE = 1/18/2021	DATE - 1/18/2021	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**DETAILS**

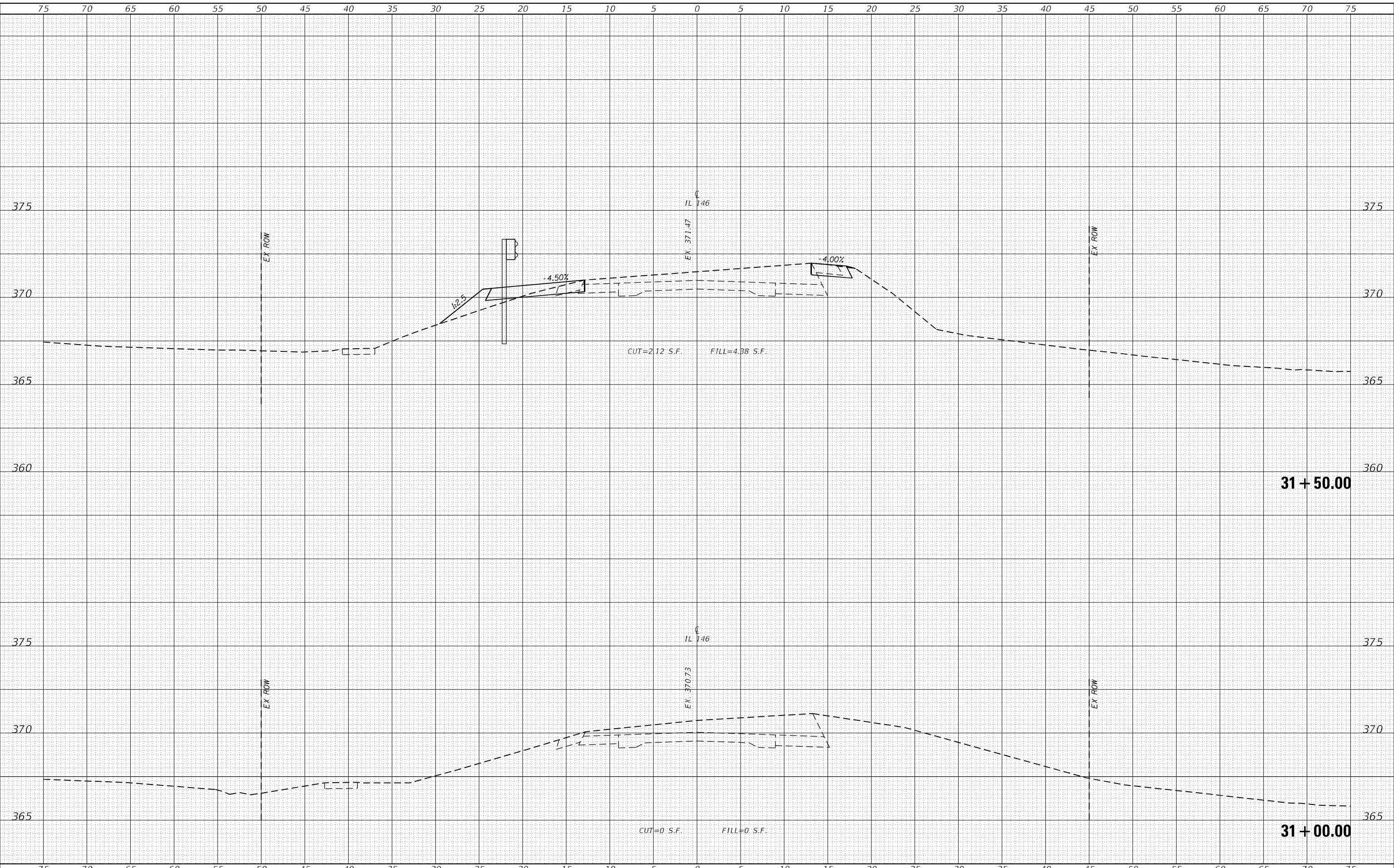
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	1078-2	JOHNSON	67	58
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				

BY	DATE

ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED

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**EFK Moen**  
Civil Engineering Design

USER NAME = zWaters	DESIGNED - SJF	REvised -
	DRAWN - SJF	REvised -
	CHECKED - SLD	REvised -
	DATE - 1/18/2021	REvised -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

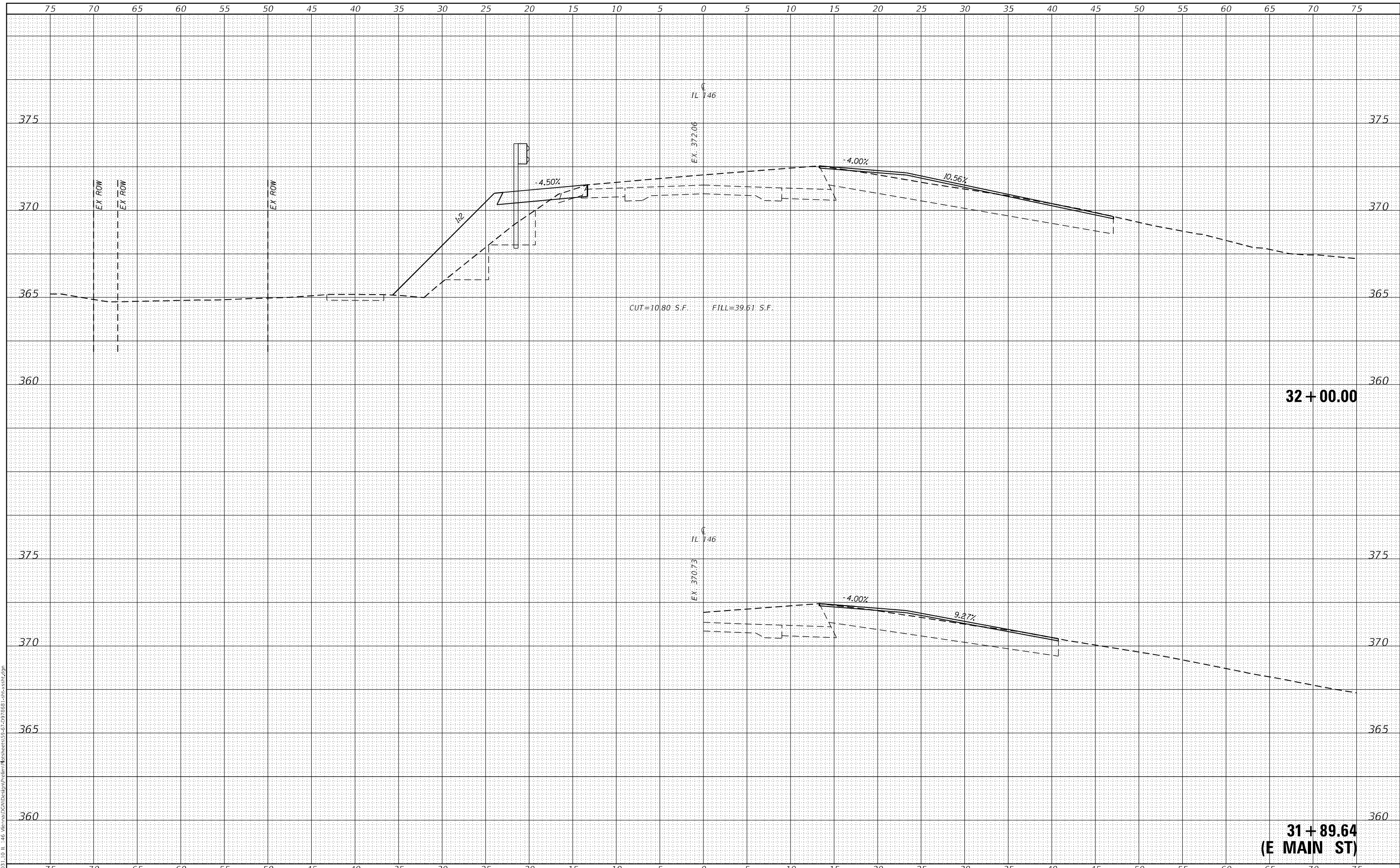
SCALE: 5'H:2.5'V		SHEET 1 OF 9 SHEETS	STA. 31+00.00 TO STA. 31+50.00
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F.A.P. RTE. 885	SECTION 1078-2	COUNTY JOHNSON	TOTAL SHEETS 67	SHEET NO. 59
ILLINOIS FED. AID PROJECT			CONTRACT NO. 78681	

FINAL SURVEY NO.	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
AREAS CHECKED	TEMPLATE		
	AREAS CHECKED		

ORIGINAL SURVEY NO.	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
AREAS CHECKED	TEMPLATE		
	AREAS CHECKED		

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Civil Engineering Design

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	DRAWN - SJF	REVISED -
PLOT SCALE = 10,0000' / in.	CHECKED - SLD	REVISED -
PLOT DATE = 1/18/2021	DATE - 1/18/2021	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS  
IL 146

SCALE: 5'H:2.5'V SHEET 2 OF 9 SHEETS STA. 32+00.00 TO STA. 32+00.00

F.A.P. RTE. 885	SECTION 1078-2	COUNTY JOHNSON	TOTAL SHEETS 67	SHEET NO. 60
			CONTRACT NO. 78681	
ILLINOIS FED. AID PROJECT				

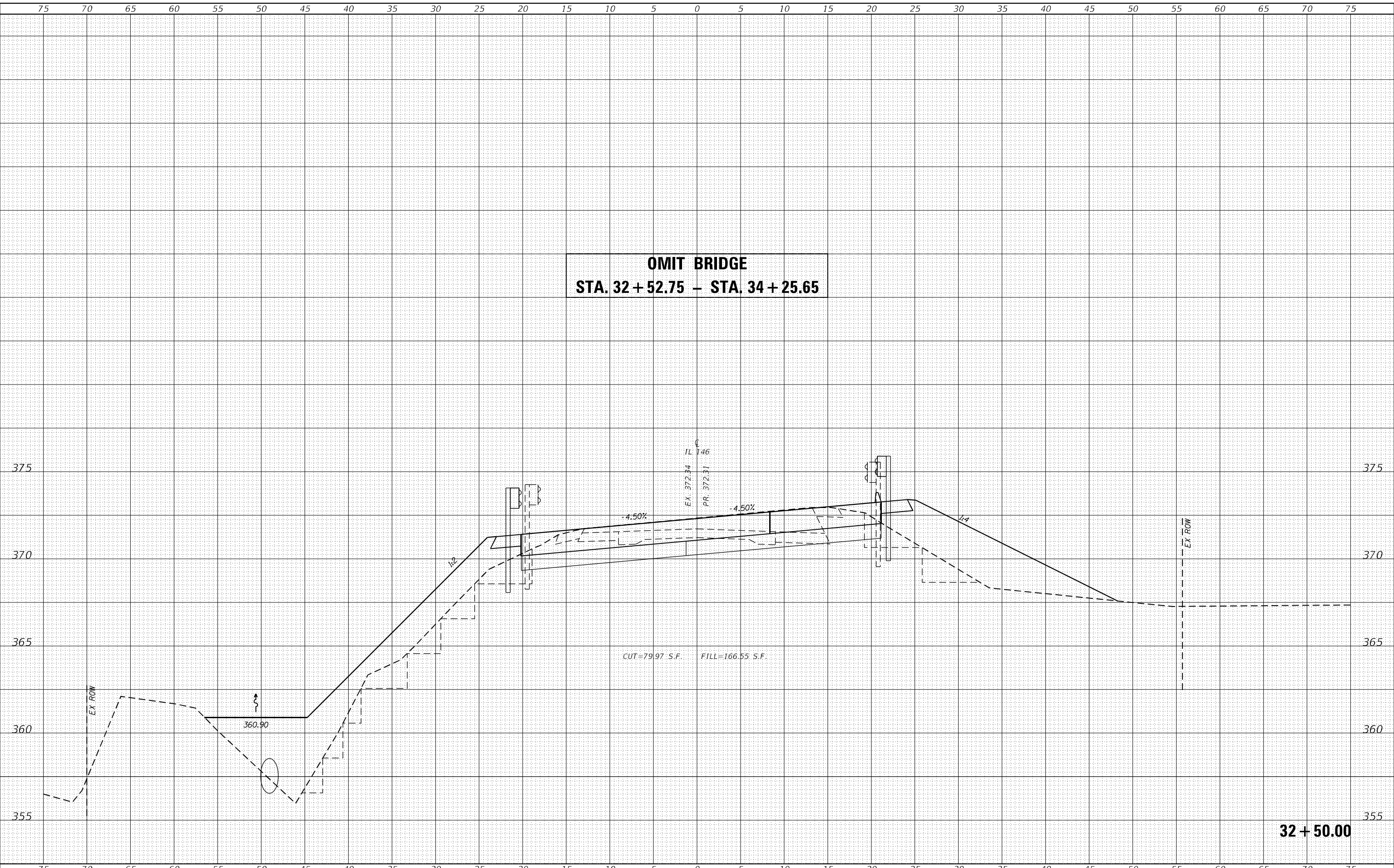


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NOTE BOOK	PLOTTED	
AREAS CHECKED	TEMPLATE	
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ORIGINAL SURVEY NO.	SURVEYED	DATE
NOTE BOOK	PLOTTED	
AREAS CHECKED	TEMPLATE	
	AREAS CHECKED	

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 USER NAME = zWaters

**OMIT BRIDGE**  
**STA. 32 + 52.75 - STA. 34 + 25.65**



**EFK Moen**  
 Civil Engineering Design

DESIGNED -	SJF	REVISIED -	
DRAWN -	SJF	REVISIED -	
CHECKED -	SLD	REVISIED -	
DATE -	1/18/2021	REVISIED -	

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

**CROSS SECTIONS**  
**IL 146**

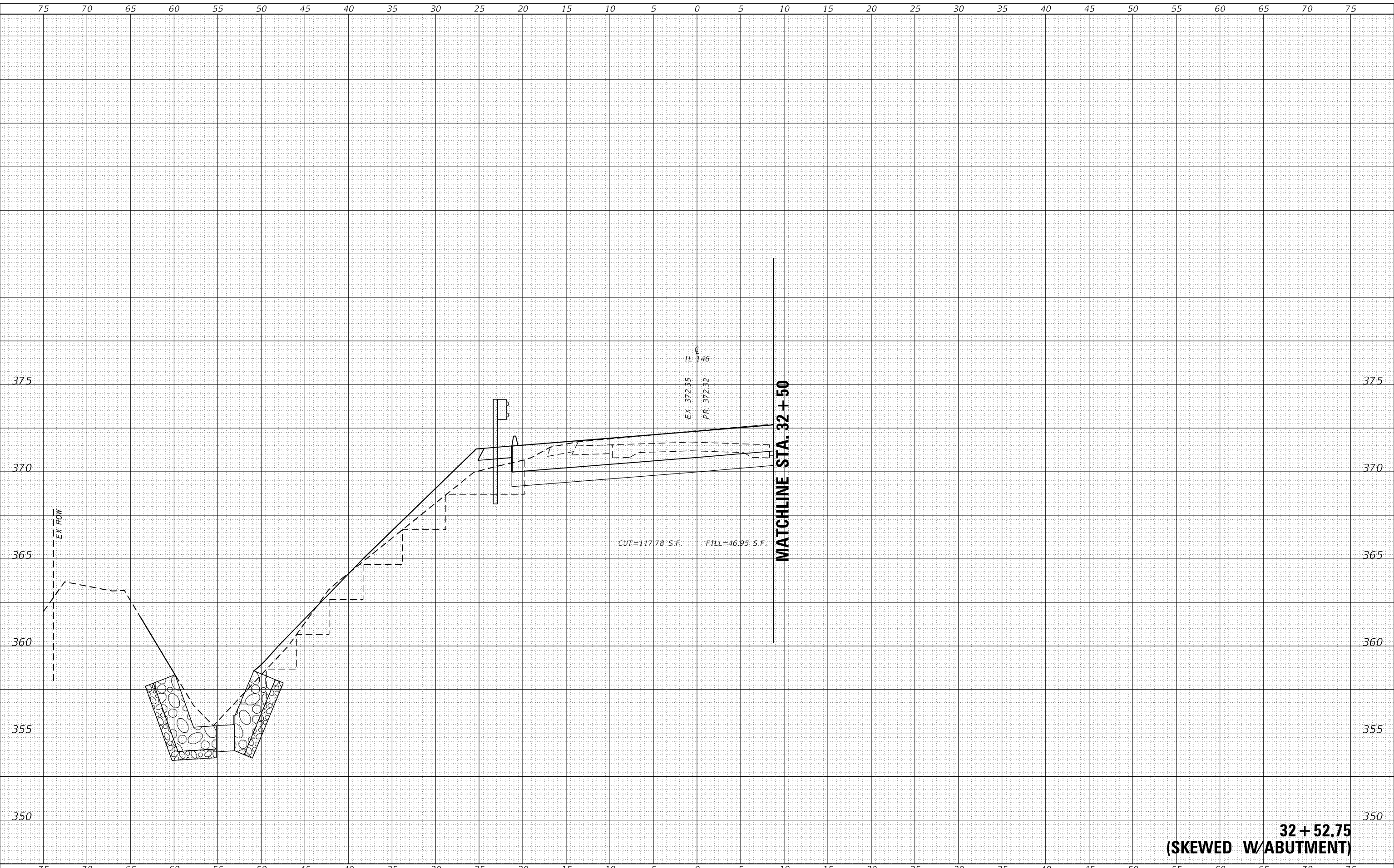
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	1078-2	JOHNSON	67	61
CONTRACT NO. 78681				
ILLINOIS FED. AID PROJECT				

FINAL SURVEY NO.	SURVEYED	DATE
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AREAS CHECKED	TEMPLATE	
	AREAS CHECKED	

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**32 + 52.75**  
**(SKEWED W/ABUTMENT)**

**EFK Moen**  
 Civil Engineering Design

USER NAME = zWaters	DESIGNED - SJF	REVISED -
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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS  
 IL 146

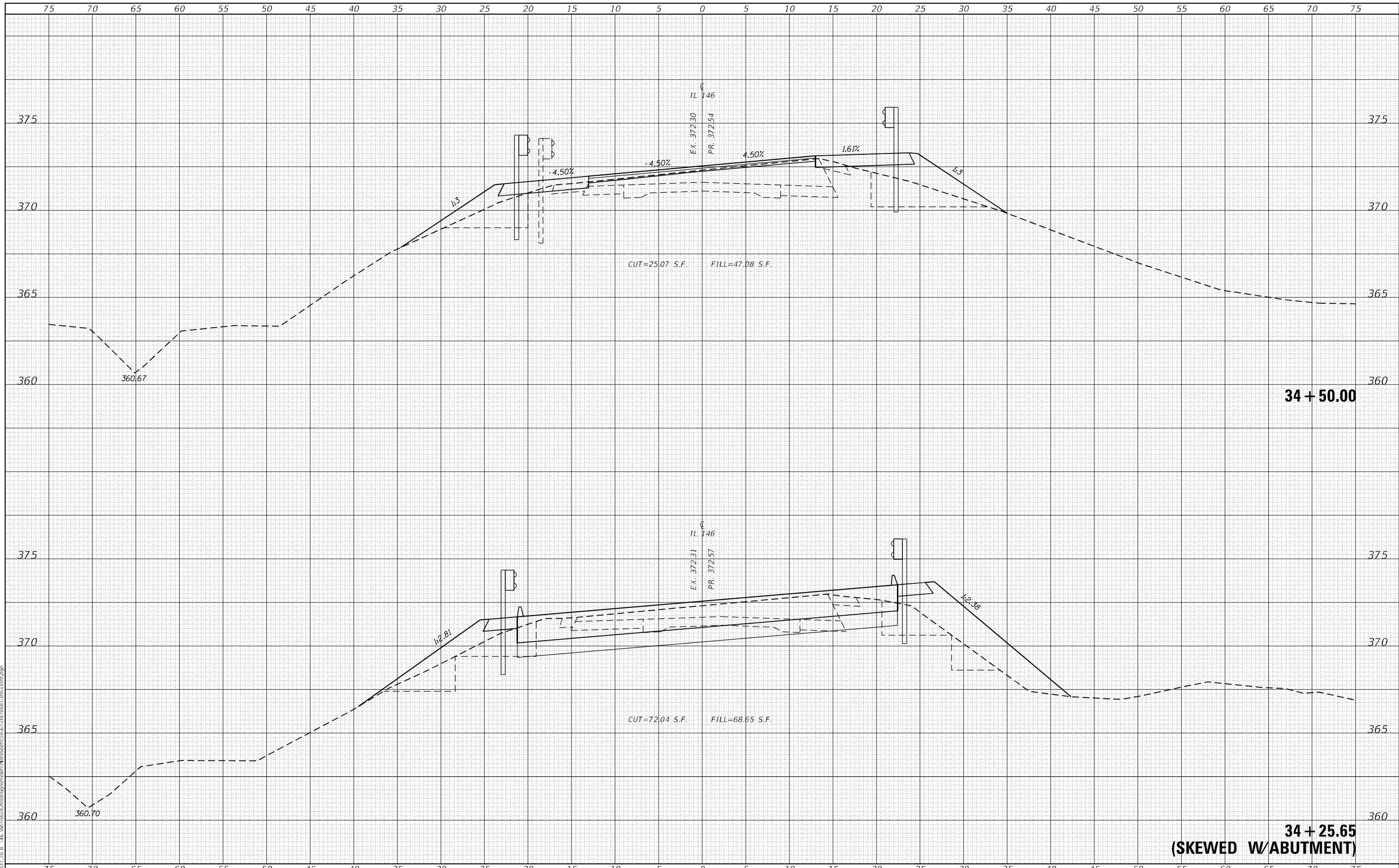
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	1078-2	JOHNSON	67	62
			CONTRACT NO. 78681	
ILLINOIS FED. AID PROJECT				

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS CHECKED	
FINAL SURVEY	
NOTE BOOK	
NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS CHECKED	
ORIGINAL SURVEY	
NOTE BOOK	
NO.	

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**EFK Moen**  
Civil Engineering Design

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	DRAWN - SJF	REvised -
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS  
IL 146

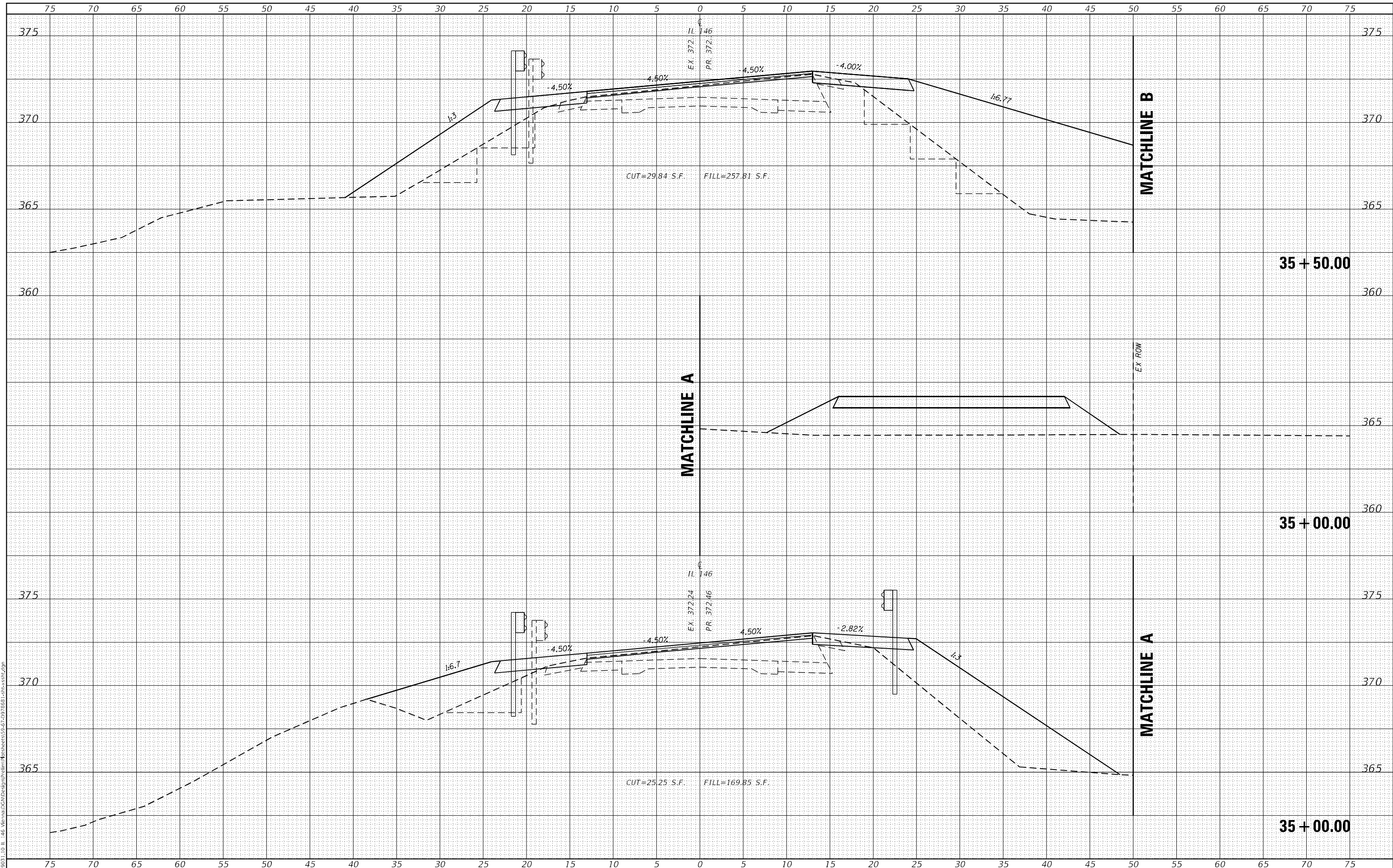
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	1078-2	JOHNSON	67	63
			CONTRACT NO. 78681	
ILLINOIS FED. AID PROJECT				

FINAL SURVEY NO.	SURVEYED	DATE
NOTE BOOK NO.	PLOTTED	
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	AREAS CHECKED	

ORIGINAL SURVEY NO.	SURVEYED	DATE
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**EFK Moen**  
Civil Engineering Design

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

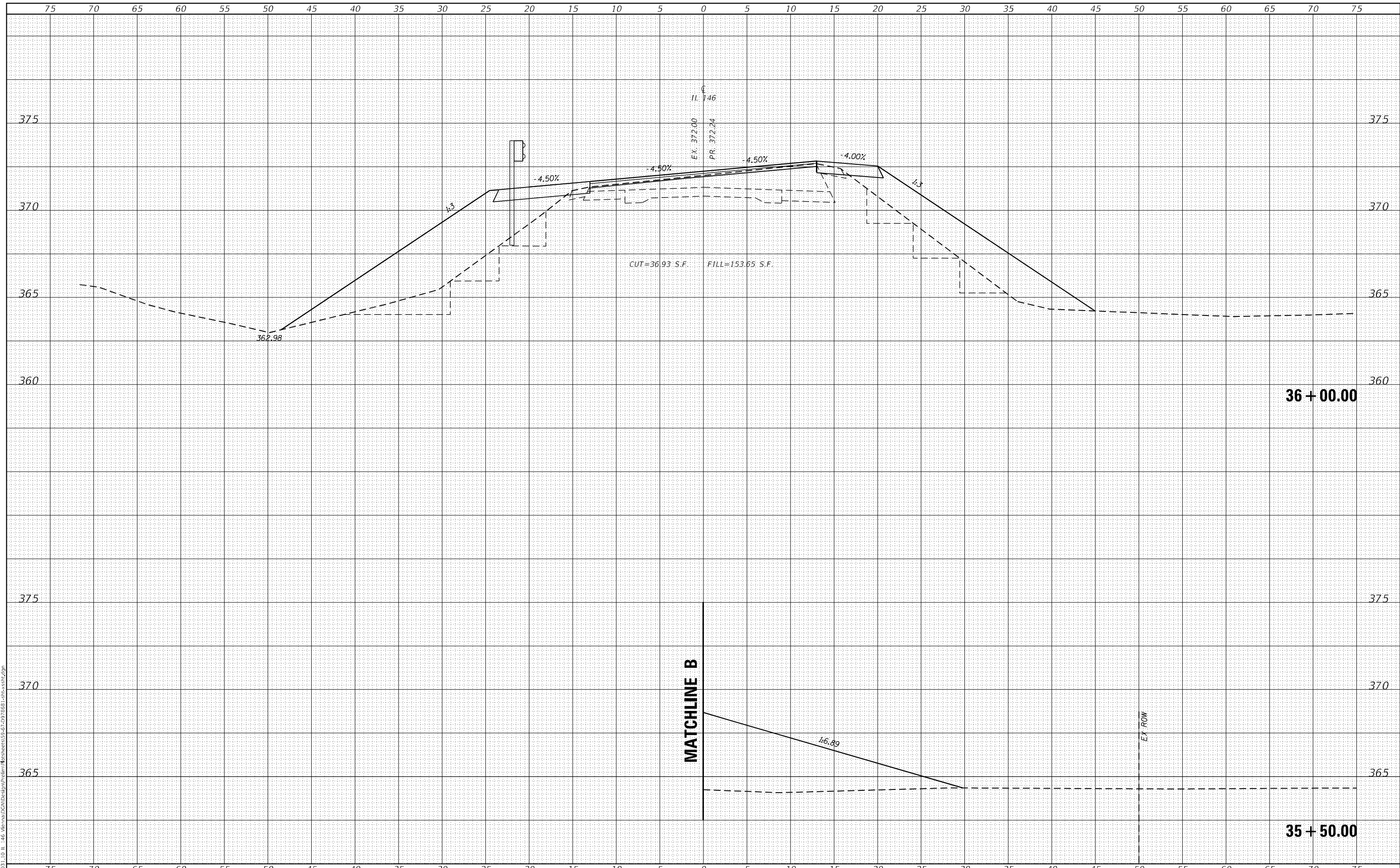
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**IL 146**  
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F.A.P. RTE. 885	SECTION 1078-2	COUNTY JOHNSON	TOTAL SHEETS 67	SHEET NO. 64
CONTRACT NO. 78681			ILLINOIS FED. AID PROJECT	

FINAL SURVEY NO.	SURVEYED	DATE
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AREAS CHECKED	TEMPLATE	
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ORIGINAL SURVEY NO.	SURVEYED	DATE
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**EFK Moen**  
 Civil Engineering Design

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PLOT DATE = 1/18/2021	DATE - 1/18/2021	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS  
 IL 146

SCALE: 5'H:2.5'V SHEET 7 OF 9 SHEETS STA. 35+00.00 TO STA. 35+50.00

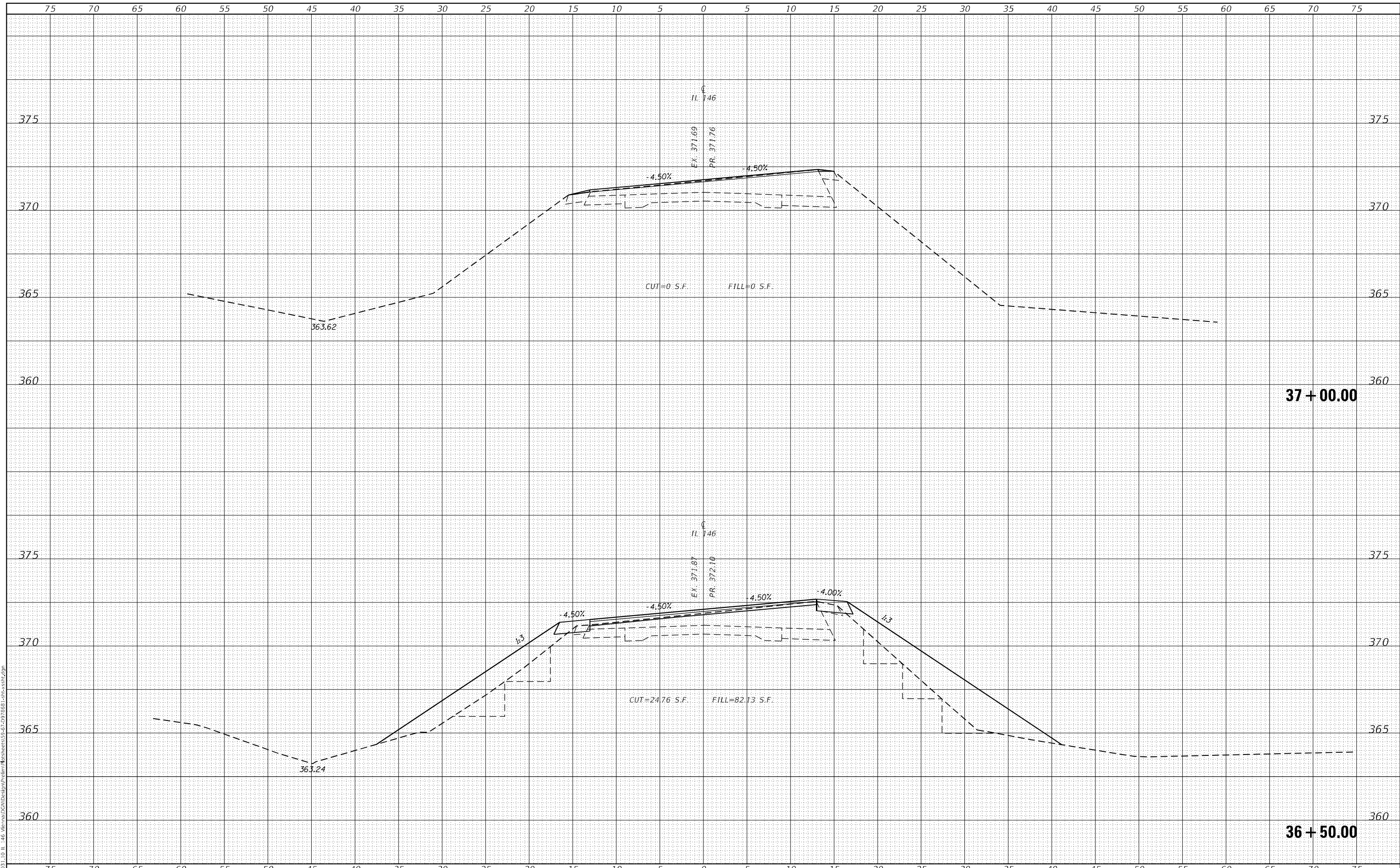
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			CONTRACT NO. 78681	
ILLINOIS FED. AID PROJECT				



FINAL SURVEY NO.	SURVEYED	DATE
NOTE BOOK	PLOTTED	BY
AREAS CHECKED	TEMPLATE	
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NOTE BOOK	PLOTTED	BY
AREAS CHECKED	TEMPLATE	
	AREAS CHECKED	

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**EFK Moen**  
Civil Engineering Design

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PLOT DATE = 1/18/2021	DATE - 1/18/2021	REVISIED -

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

**CROSS SECTIONS**  
**IL 146**

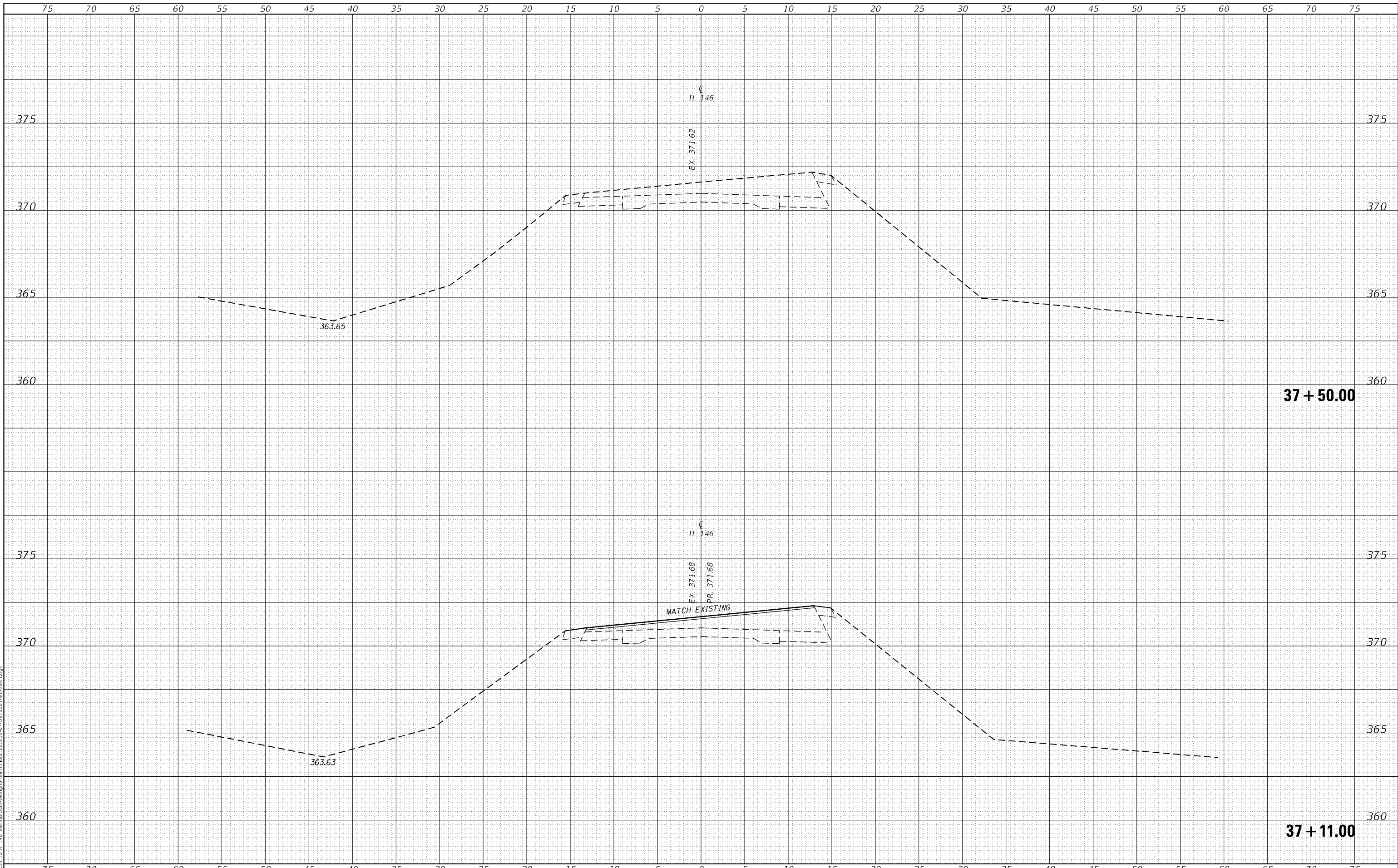
SCALE: 5'H:2.5'V SHEET 8 OF 9 SHEETS STA. 36+00.00 TO STA. 36+50.00

F.A.P. RTE. 885	SECTION 1078-2	COUNTY JOHNSON	TOTAL SHEETS 67	SHEET NO. 66
			CONTRACT NO. 78681	
ILLINOIS FED. AID PROJECT				

FINAL SURVEY NO.	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
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ORIGINAL SURVEY NO.	SURVEYED	BY	DATE
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**EFK Moen**  
Civil Engineering Design

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS  
IL 146

SCALE: 5'H:2.5'V SHEET 9 OF 9 SHEETS STA. 37+00.00 TO STA. 37+50.00

F.A.P. RTE. 885	SECTION 1078-2	COUNTY JOHNSON	TOTAL SHEETS 67	SHEET NO. 67
			CONTRACT NO. 78681	
ILLINOIS FED. AID PROJECT				