

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1;12CR-1	JEFFERSON	50	1
		ILLINOIS	CONTRACT NO. 78495	

FOR INDEX OF SHEETS, SEE SHEET NO. 3

FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 4-7

TRAFFIC DATA

2026 ADT = 3,190
 2046 ADT = 3,900
 PV% = 87.69%
 SU% = 8.08%
 MU% = 4.23%

TOWNSHIP

CASNER

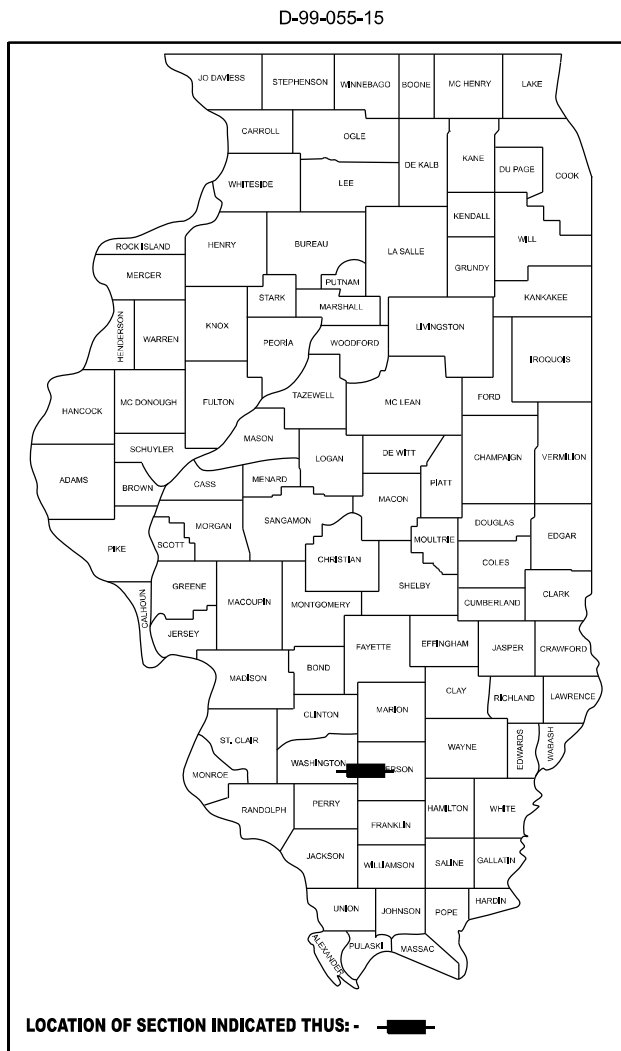
**PROPOSED
HIGHWAY PLANS**

FAP ROUTE 821 (IL 15)
 SECTION 11CR-1;12CR-1
 PROJECT STP-XQ8C(545)
 CULVERT REPLACEMENT
 JEFFERSON COUNTY

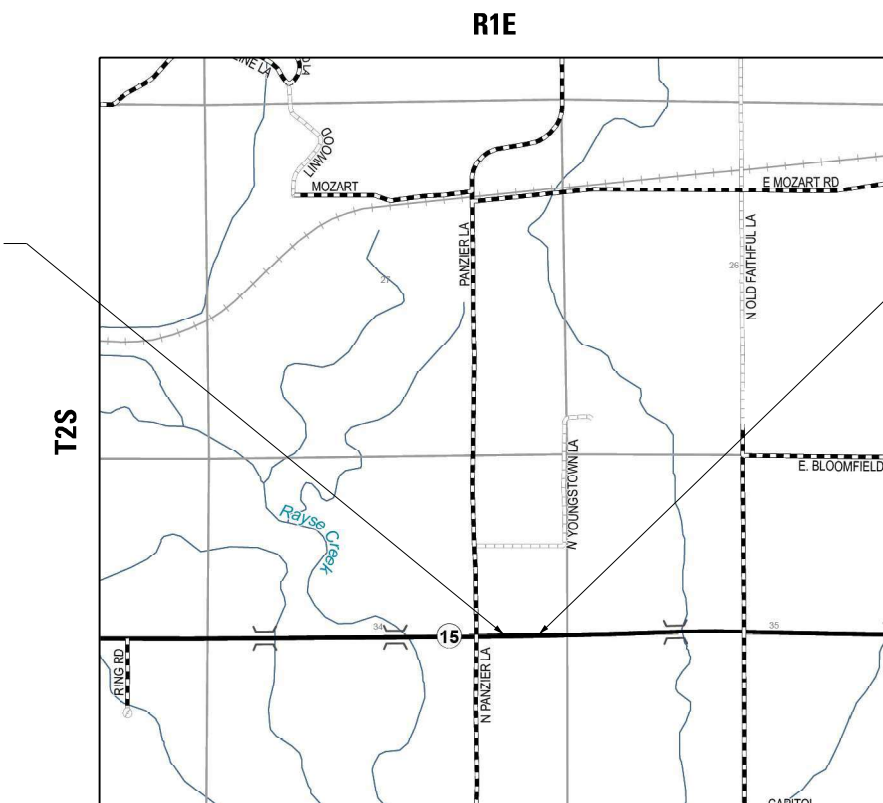
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COORDINATE SYSTEM : ESPG: 102671 NAD 1983 STATE
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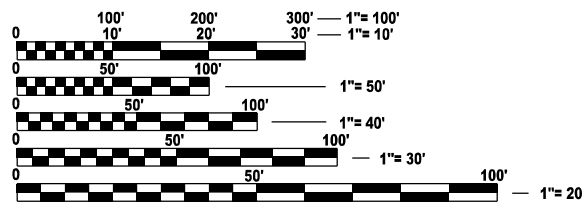
POSTED SPEED : 55 MPH



SN 041-7065 (EX)
 SN 041-7102 (PR)
 IL 15 (FAP 821) OVER DITCH
 7' S X 6' R CULVERT
 20° SKEW, LT AHEAD
 IMPROVEMENT BEGINS STA. 935+05.62
 IMPROVEMENT ENDS STA. 935+50.09



SN 041-7066 (EX)
 SN 041-7103 (PR)
 IL 15 (FAP 821) OVER DITCH
 7' S X 6' R CULVERT
 40° SKEW, RT AHEAD
 IMPROVEMENT BEGINS STA. 941+87.00
 IMPROVEMENT ENDS STA. 942+61.72



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

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



Branden Billhartz 1/23/26
 BRANDEN A. BILLHARTZ, P.E. EXPIRATION DATE
 LICENSE NO. 062-077615 11-30-2027
 SEAL COVERS SHEETS: 1-19, 24-35, 41-46, 48-50

SCALE: 1" = 2300'
 GROSS LENGTH = 883.97 FT. = 0.167 MILE
 NET LENGTH = 380.43 FT. = 0.072 MILE

PROJECT ENGINEER: BRANDY MAES
 PROJECT MANAGER: TWM

CONTRACT NO. 78495

PLANS PREPARED BY:

 4940 Old Collinsville Road
 Swansea, Illinois 62226
 Tel: 618.624.4488
 www.twm-inc.com
 Illinois Professional Design Firm
 No. 184-001220
 License Expires: 4/30/2027
 ILLINOIS - MISSOURI - TENNESSEE

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SUBMITTED Jan 12 20 26
Lora S. Remsing
 REGION FIVE ENGINEER

March 20 20 26
Scott A. Etkin
 ENGINEER OF DESIGN AND ENVIRONMENT

March 20 20 26
John J. Perry
 DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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

GENERAL NOTES

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

ALL AGGREGATE: 2.05 TONS/CU. YD.

RIPRAP: 1.50 TONS/CU. YD.

ROCK FILL: 1.50 TONS/ CU. YD.

- THE QUANTITY OF SHORT TERM PAVEMENT MARKING SHOWN IN THE PLANS IS BASED ON ONE APPLICATION FOR THE PCC PAVEMENT.
- AT ALL LOCATIONS WHERE THE PROPOSED CONCRETE PAVEMENT JOINS AN EXISTING HOT-MIX ASPHALT OR CONCRETE PAVEMENT, A FULL DEPTH SAWED JOINT SHALL BE CONSTRUCTED. THE COST OF THIS JOINT WILL BE INCLUDED IN THE COST OF THE TYPE OF PAVEMENT BEING CONSTRUCTED.
- REMOVAL OF ABANDONED UTILITIES SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

COMMITMENTS

COMMITMENTS FOR THIS PROJECT ARE AS FOLLOWS:

- TREES GREATER THAN OR EQUAL TO 3" IN DIAMETER AT BREAST HEIGHT SHALL NOT BE CLEARED FROM APRIL 1ST AND SEPTEMBER 30TH OF ANY GIVEN YEAR.

INDEX OF SHEETS

1	COVER SHEET
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HIGHWAY STANDARDS

000001-09	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420001-11	PAVEMENT JOINTS
420701-03	PAVEMENT WELDED WIRE REINFORCEMENT
483001-06	PCC SHOULDERS
666001-01	RIGHT OF WAY MARKERS
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701011-04	OFF-ROAD MOVING OPERATIONS 2L, 2W, DAY ONLY
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701316-14	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR
701901-11	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
780001-05	TYPICAL PAVEMENT MARKINGS
862001-01	UNINTERRUPTABLE POWER SUPPLY
BLR 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

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REV - MS



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	DRAWN - BAB	REVISED -
PLOT SCALE = 40.000' / in.	CHECKED -	REVISED -
PLOT DATE = 1/23/2026	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

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

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1;12CR-1	JEFFERSON	50	3
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				

CODE NO.	PAY ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				JEFFERSON	JEFFERSON
				80% FEDERAL / 20% STATE	80% FEDERAL / 20% STATE
				SN 041-7102 (PR)	SN 041-7103 (PR)
				0004	0004
RURAL	RURAL				
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	30		30
20200100	EARTH EXCAVATION	CU YD	1146	452	694
20400800	FURNISHED EXCAVATION	CU YD	51		51
20700220	POROUS GRANULAR EMBANKMENT	CU YD	945	310	635
25000210	SEEDING, CLASS 2A	ACRE	0.38	0.14	0.24
25000350	SEEDING, CLASS 7	ACRE	0.38	0.14	0.24
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	34	13	21
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	34	13	21
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	34	13	21
25000700	AGRICULTURAL GROUND LIMESTONE	TON	1	0.3	0.7
25100630	EROSION CONTROL BLANKET	SQ YD	1833	698	1135
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	76	29	47
28000305	TEMPORARY DITCH CHECKS	FOOT	127	46	81
28000400	PERIMETER EROSION BARRIER	FOOT	518	263	255

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USER NAME = bbillhartz
 PLOT SCALE = 40,000' / in.
 PLOT DATE = 1/23/2026

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 DATE -

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 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
 SCALE: SHEET 1 OF 4 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1;12CR-1	JEFFERSON	50	4
CONTRACT NO. 78495				
ILLINOIS			FED. AID PROJECT	

CODE NO.	PAY ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				JEFFERSON	JEFFERSON
				80% FEDERAL / 20% STATE	80% FEDERAL / 20% STATE
				SN 041-7102 (PR)	SN 041-7103 (PR)
				0004	0004
RURAL	RURAL				
28100107	STONE RIPRAP, CLASS A4	SQ YD	118	32	86
28200200	FILTER FABRIC	SQ YD	118	32	86
42000060	WELDED WIRE REINFORCEMENT	SQ YD	291	109	182
42000500	PORTLAND CEMENT CONCRETE PAVEMENT 10"	SQ YD	291	109	182
44000100	PAVEMENT REMOVAL	SQ YD	291	109	182
44004250	PAVED SHOULDER REMOVAL	SQ YD	61	24	37
48300500	PORTLAND CEMENT CONCRETE SHOULDERS 10"	SQ YD	106	40	66
50100300	REMOVAL OF EXISTING STRUCTURES NO. 1	EACH	1	1	
50100400	REMOVAL OF EXISTING STRUCTURES NO. 2	EACH	1		1
50200450	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR STRUCTURES	CU YD	247	93	154
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	3810	1540	2270
54003000	CONCRETE BOX CULVERTS	CU YD	46.7	18.2	28.5
54010706	PRECAST CONCRETE BOX CULVERTS 7' X 6'	FOOT	170	63	107
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	70	70	

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 PLOT SCALE = 40,000' / in.
 PLOT DATE = 1/23/2026

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
 SCALE: SHEET 2 OF 4 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1;12CR-1	JEFFERSON	50	5
CONTRACT NO. 78495				
ILLINOIS			FED. AID PROJECT	

CODE NO.	PAY ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				JEFFERSON	JEFFERSON
				80% FEDERAL / 20% STATE	80% FEDERAL / 20% STATE
				SN 041-7102 (PR)	SN 041-7103 (PR)
				0004	0004
RURAL	RURAL				
66600105	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	16	8	8
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	3	3
67100100	MOBILIZATION	L SUM	1	0.5	0.5
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	0.5	0.5
70106700	TEMPORARY RUMBLE STRIPS	EACH	6	3	3
70107005	PAVEMENT MARKING BLACKOUT TAPE, 5"	FOOT	1918	738	1180
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	68	34	34
70300100	SHORT TERM PAVEMENT MARKING	FOOT	24	12	12
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	807	311	496
70300221	TEMPORARY PAVEMENT MARKING - LINE 4"- PAINT	FOOT	443	144	299
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	443	144	299
* 86200300	UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1	0.5	0.5
X3000001	RRPM PROTECTION	EACH	14	7	7
X5810103	MEMBRANE WATERPROOFING SYSTEM FOR BURIED STRUCTURES	SQ YD	70	70	

* SPECIALTY ITEM

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ILLINOIS DESIGN FIRM LICENSE NO: 184-001220
 PLOT SCALE = 40,000' / in.
 PLOT DATE = 1/23/2026

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1;12CR-1	JEFFERSON	50	6
CONTRACT NO. 78495				
ILLINOIS			FED. AID PROJECT	

CHANGEABLE MESSAGE SIGN (CMS) SCHEDULE	
LOCATION (1 - CMS EB IL 15) (1 - CMS WB IL 15)	CHANGEABLE MESSAGE SIGN
	CAL DAY
IL 15 SN 041-7102	
2 WEEKS BEFORE CLOSURE	28
DURING CLOSURE	6
SUBTOTAL:	34
IL 15 SN 041-7103	
2 WEEKS BEFORE CLOSURE	28
DURING CLOSURE	6
SUB TOTAL	34
PAY TOTAL:	68

FURNISHING AND ERECTING ROW MARKERS SCHEDULE	
LOCATION	FURNISHING AND ERECTING ROW MARKERS
	EACH
IL 15 - SN 041-7102	8
IL 15 - SN 041-7103	8
PAY TOTAL:	16

PAVEMENT MARKING SCHEDULE												
LOCATION					SHORT TERM PAVEMENT MARKING	SHORT TERM PAVEMENT MARKING REMOVAL	TEMPORARY PAVEMENT MARKING - LINE 4" -PAINT		PAINT PAVEMENT MARKING - LINE 4"		PAVEMENT MARKING BLACKOUT TAPE, 5"	RRPM PROTECTION
					FOOT	SQ FT	FOOT	FOOT	FOOT	FOOT	FOOT	EACH
IL 15 - SN 041-7102												
934+27.62	TO	940+17.83	CENTERLINE	SKIP-DASH		61.5					147.6	7
934+27.62	TO	940+17.83	CENTERLINE	SOLID		245.9					590.2	
935+05.62	TO	935+54.10	EDGE LINE, LT	SOLID	4	1.3		48.5		48.5		
935+05.62	TO	935+50.09	CENTERLINE	SKIP-DASH			11.1		11.1			
935+05.62	TO	935+50.09	CENTERLINE	SOLID	4	1.3		44.5		44.5		
935+05.62	TO	935+46.09	EDGE LINE, RT	SOLID	4	1.3		40.5		40.5		
SUB-TOTAL:					12	311.4	55.6	89	55.6	89	737.8	7
IL 15 - SN 041-7103												
940+17.83	TO	946+08.00	CENTERLINE	DOUBLE		491.8					1180.3	7
941+73.89	TO	942+48.61	EDGE LINE, LT	SOLID	4	1.3		74.7		74.7		
941+87.00	TO	942+61.72	CENTERLINE	DOUBLE	4	1.3	149.4		149.4			
942+00.11	TO	942+74.82	EDGE LINE, RT	SOLID	4	1.3		74.7		74.7		
SUB-TOTAL:					12	495.8	149.4	149.4	149.4	149.4	1180.3	7
PAY TOTAL:					24	807	205	238	205	238	1918	14
							443		443			

PAVEMENT SCHEDULE						
LOCATION				WELDED WIRE REINFORCEMENT	PCC PAVEMENT, 10"	PCC SHOULDERS, 10"
STATION	TO	STATION	LT/RT	SQ YD	SQ YD	SQ YD
IL 15 - SN 041-7102						
935+05.62	TO	935+55.55	LT			21.9
935+05.62	TO	935+50.09	LT/RT	108.7	108.7	
935+05.62	TO	935+46.09	RT			17.7
SUB-TOTAL:				108.7	108.7	39.6
IL 15 - SN 041-7103						
941+69.18	TO	942+48.61	LT			33.2
941+87.00	TO	942+61.72	LT/RT	182.6	182.6	
942+00.11	TO	942+79.59	LT			33.2
SUB-TOTAL:				182.6	182.6	66.4
PAY TOTAL:				291	291	106

SEEDING SCHEDULE									
LOCATION				SEEDING, CLASS 2A	SEEDING, CLASS 7	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	AGRICULTURAL GROUND Limestone
STATION	TO	STATION	LT/RT	ACRE	ACRE	POUND	POUND	POUND	TON
IL 15 - SN 041-7102									
934+50.62	TO	936+10.55	LT	0.10	0.10	9.0	9.0	9.0	0.2
934+50.62	TO	935+99.63	RT	0.04	0.04	4.0	4.0	4.0	0.1
SUB TOTAL:				0.14	0.14	13.00	13.00	13.00	0.30
IL 15 - SN 041-7103									
941+14.09	TO	942+98.84	LT	0.15	0.15	13.7	13.7	13.7	0.3
941+84.72	TO	943+34.59	RT	0.08	0.08	7.6	7.6	7.6	0.2
SUB TOTAL:				0.24	0.24	21.30	21.30	21.30	0.50
PAY TOTAL:				0.38	0.38	34	34	34	1

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TWM, INC.
 www.twm-inc.com
 IL DESIGN FIRM
 LICENSE NO: 184-001220
 USER NAME = bbillhartz
 PLOT SCALE = 40,000' / in.
 PLOT DATE = 1/23/2026

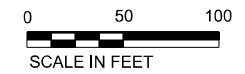
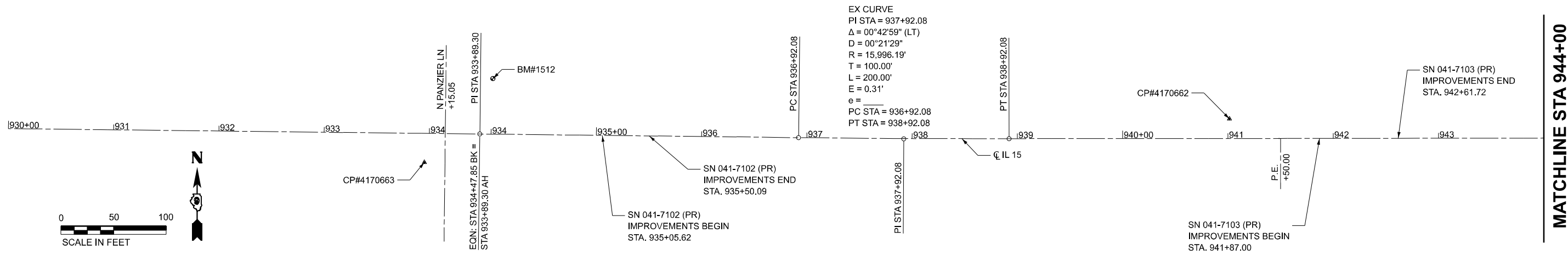
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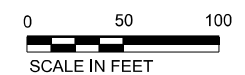
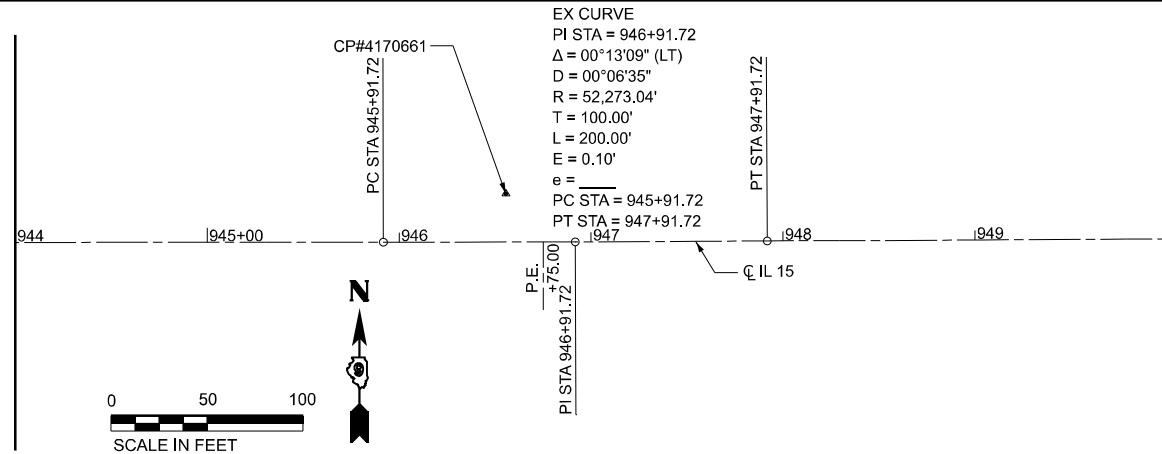
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES
 SCALE: SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1;12CR-1	JEFFERSON	50	9
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				



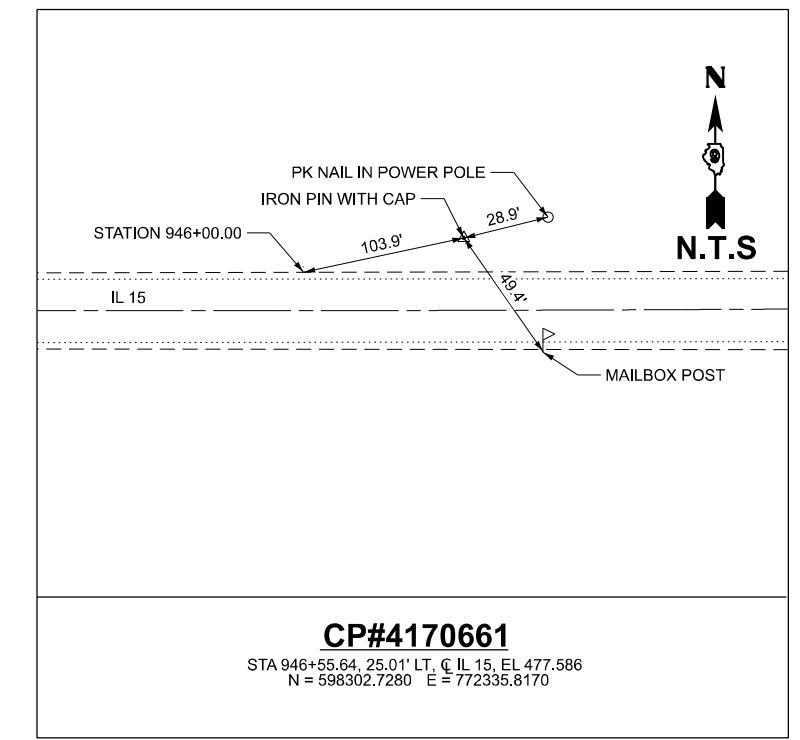
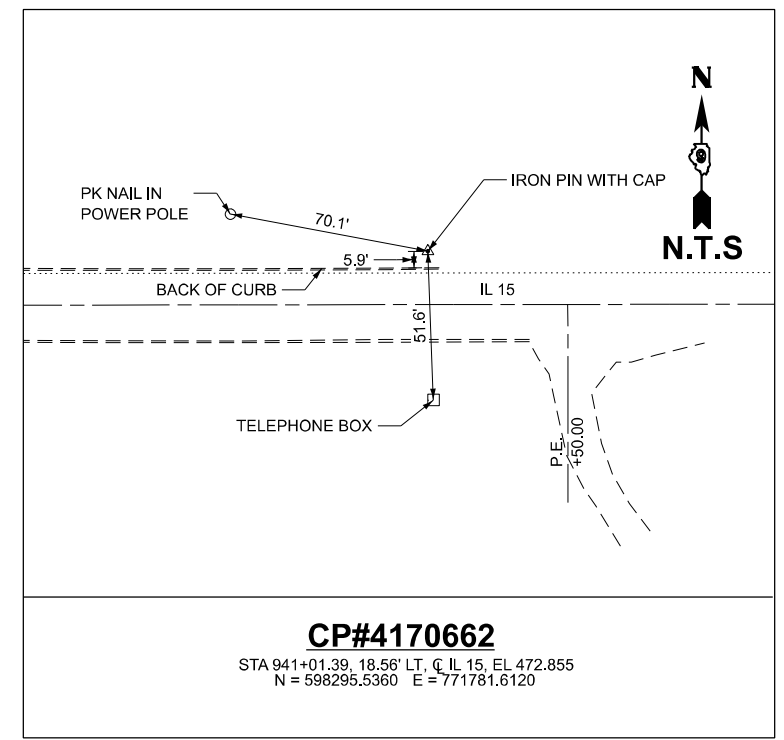
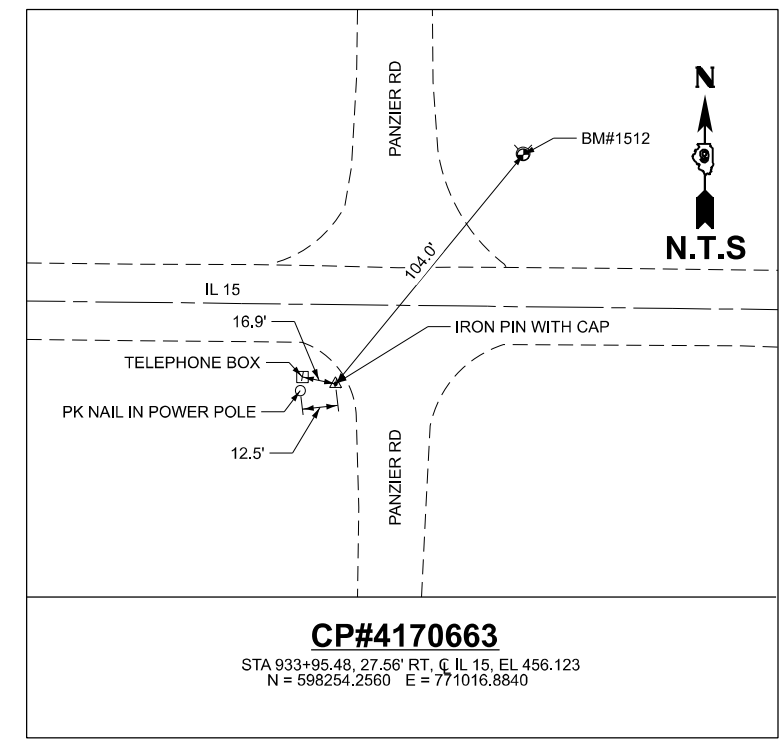
MATCHLINE STA 944+00



CENTERLINE CONTROL POINTS IL 15

POINT	STATION	NORTHING	EASTING
EQN: STA.	934+47.85 (BK) 933+89.30 (AH)	430710.127	723468.276
PC	936+92.08	598277.766	771372.321
PI	937+92.08	598276.627	771472.316
PT	938+92.08	598276.739	771572.317
PC	945+91.72	598277.519	772271.960
PI	946+91.72	598277.630	772371.960
PT	947+91.72	598278.125	772471.959

BENCHMARK NAVD 88
 BM1512 - CHIS. "X" ON S. BOLT OF A FIRE HYDRANT IN NE QUAD OF CR 379 E (PANZIER LN) AND IL 15, STA 934+01.20, 53' RT, EL 459.319



MODEL: D:\p4\11... FILE NAME: P:\2024\240186\E - IL 15 Cultures (R)\11\4 CAD - DIV\11\4.7 Tran\CAD_Sheets\078495-11-03-24.dgn



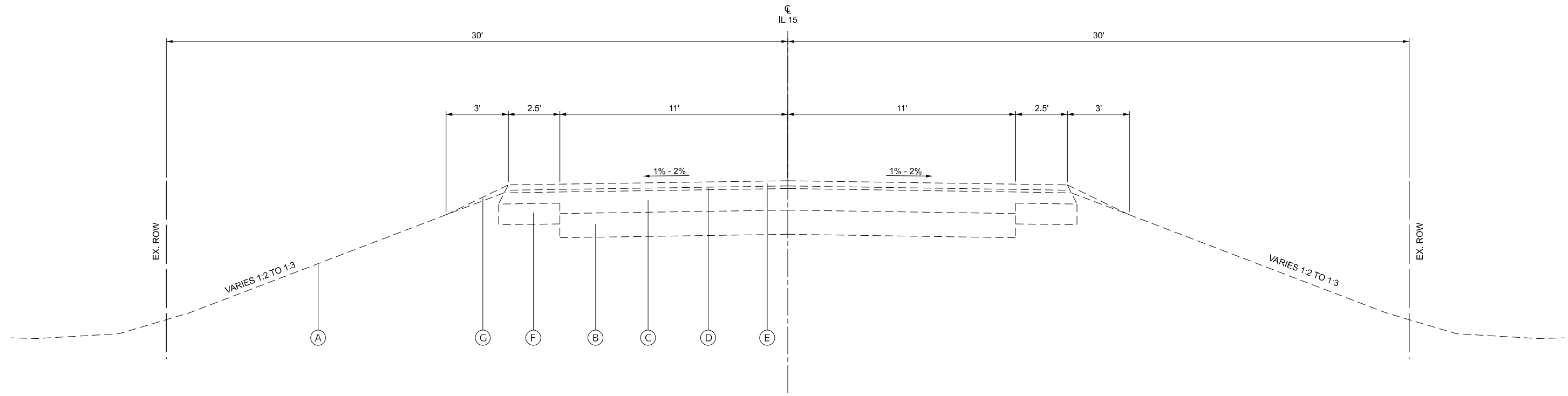
USER NAME = bblilhartz	DESIGNED - TBP	REVISED -
PLOT SCALE = 100,000 * 1/4"	DRAWN - BAB	REVISED -
PLOT DATE = 1/23/2026	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ALIGNMENT, TIES & BENCHMARKS
 PR SN 041-7102 & PR SN 041-7103**

SCALE: 1"=50' SHEET 1 OF 1 SHEETS STA. 930+00.00 TO STA. 950+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1;12CR-1	JEFFERSON	50	10
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				



EXISTING TYPICAL SECTION
STA. 934 + 50.62 TO STA. 936 + 10.55

TYPICAL SECTION LEGEND

- | | |
|-------------------------------------|--|
| (A) EX. EMBANKMENT | (1) PR. PCC PAVEMENT, 10" |
| (B) EX. PCC PAVEMENT, 7" | (2) PR. PCC SHOULDERS, 10" |
| (C) EX. HMA PAVEMENT, 7" | (3) PR. EARTHWORK |
| (D) EX. LEVELING BINDER 3/4" | (4) PR. PAINT PAVEMENT MARKING LINE, 4" |
| (E) EX. HMA SURFACE COURSE, 1 1/2" | (5) PR. #6 TIE BARS @ 36" CTRS., 30" |
| (F) EX. HMA SHOULDERS | (6) PR. POROUS GRANULAR EMBANKMENT (SEE STRUCTURE PLANS) |
| (G) EX. AGGREGATE SHOULDERS, TYPE B | (7) PR. WELDED WIRE FABRIC |

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TWM, INC.
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 IL DESIGN FIRM
 LICENSE NO:
 184-001220

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DRAWN -	BAB
CHECKED -	
DATE -	

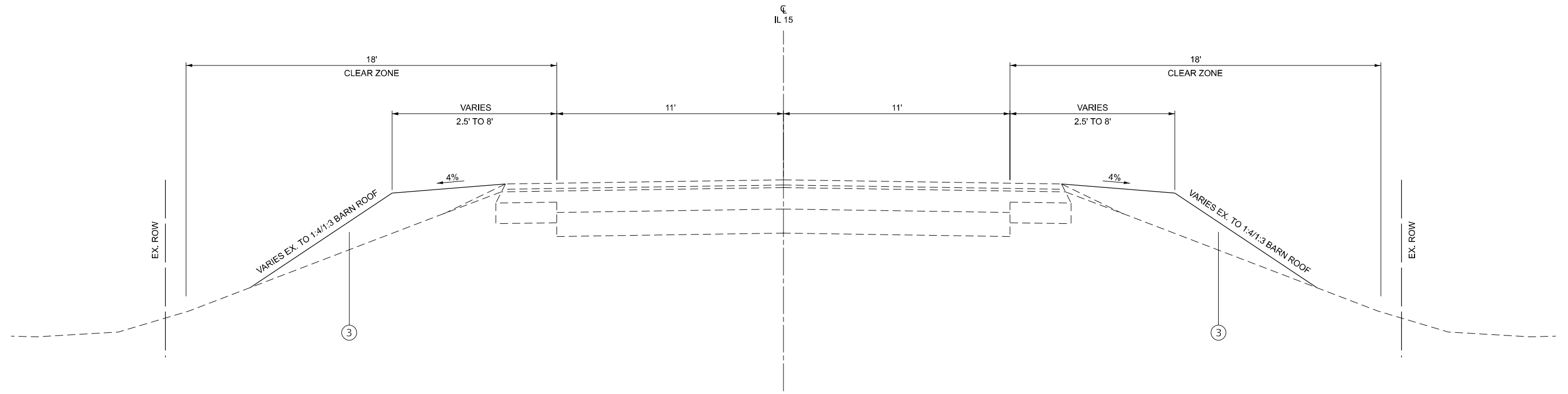
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING TYPICAL SECTION
IL 15 - PR. SN 041-7102

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1;12CR-1	JEFFERSON	50	11
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				



PROPOSED TYPICAL SECTION
STA. 934 + 50.62 TO STA 935 + 05.62

TYPICAL SECTION LEGEND

- | | |
|-------------------------------------|--|
| (A) EX. EMBANKMENT | (1) PR. PCC PAVEMENT, 10" |
| (B) EX. PCC PAVEMENT, 7" | (2) PR. PCC SHOULDERS, 10" |
| (C) EX. HMA PAVEMENT, 7" | (3) PR. EARTHWORK |
| (D) EX. LEVELING BINDER 3/4" | (4) PR. PAINT PAVEMENT MARKING LINE, 4" |
| (E) EX. HMA SURFACE COURSE, 1 1/2" | (5) PR. #6 TIE BARS @ 36" CTRS., 30" |
| (F) EX. HMA SHOULDERS | (6) PR. POROUS GRANULAR EMBANKMENT (SEE STRUCTURE PLANS) |
| (G) EX. AGGREGATE SHOULDERS, TYPE B | (7) PR. WELDED WIRE FABRIC |

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 IL DESIGN FIRM
 LICENSE NO:
 184-001220

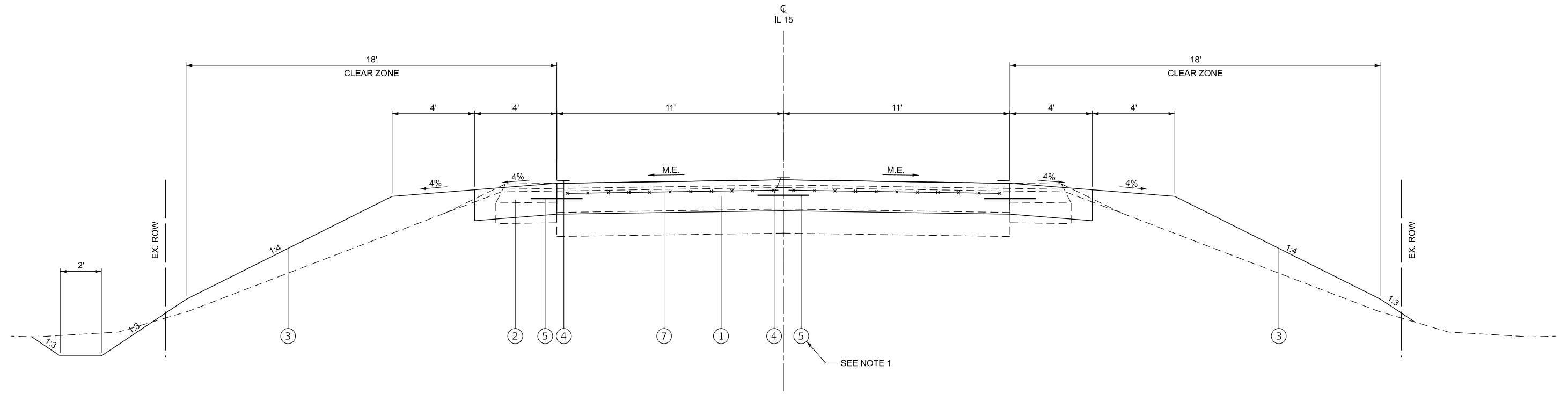
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 DRAWN - BAB
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED TYPICAL SECTION
IL 15 - PR. SN 041-7102
 SCALE: N.T.S. SHEET 1 OF 4 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1;12CR-1	JEFFERSON	50	12
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				



PROPOSED TYPICAL SECTION
STA. 935 + 05.62 RT TO STA. 935 + 44.63 RT
STA. 935 + 05.62 LT TO STA. 935 + 55.55 LT

NOTES:

1. THE COST OF THE #6 TIES BARS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER SQUARE YARD FOR PCC PAVEMENT, 10".

TYPICAL SECTION LEGEND

(A) EX. EMBANKMENT	(1) PR. PCC PAVEMENT, 10"
(B) EX. PCC PAVEMENT, 7"	(2) PR. PCC SHOULDERS, 10"
(C) EX. HMA PAVEMENT, 7"	(3) PR. EARTHWORK
(D) EX. LEVELING BINDER 3/4"	(4) PR. PAINT PAVEMENT MARKING LINE, 4"
(E) EX. HMA SURFACE COURSE, 1 1/2"	(5) PR. #6 TIE BARS @ 36" CTRS., 30"
(F) EX. HMA SHOULDERS	(6) PR. POROUS GRANULAR EMBANKMENT (SEE STRUCTURE PLANS)
(G) EX. AGGREGATE SHOULDERS, TYPE B	(7) PR. WELDED WIRE FABRIC

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 IL DESIGN FIRM
 LICENSE NO: 184-001220

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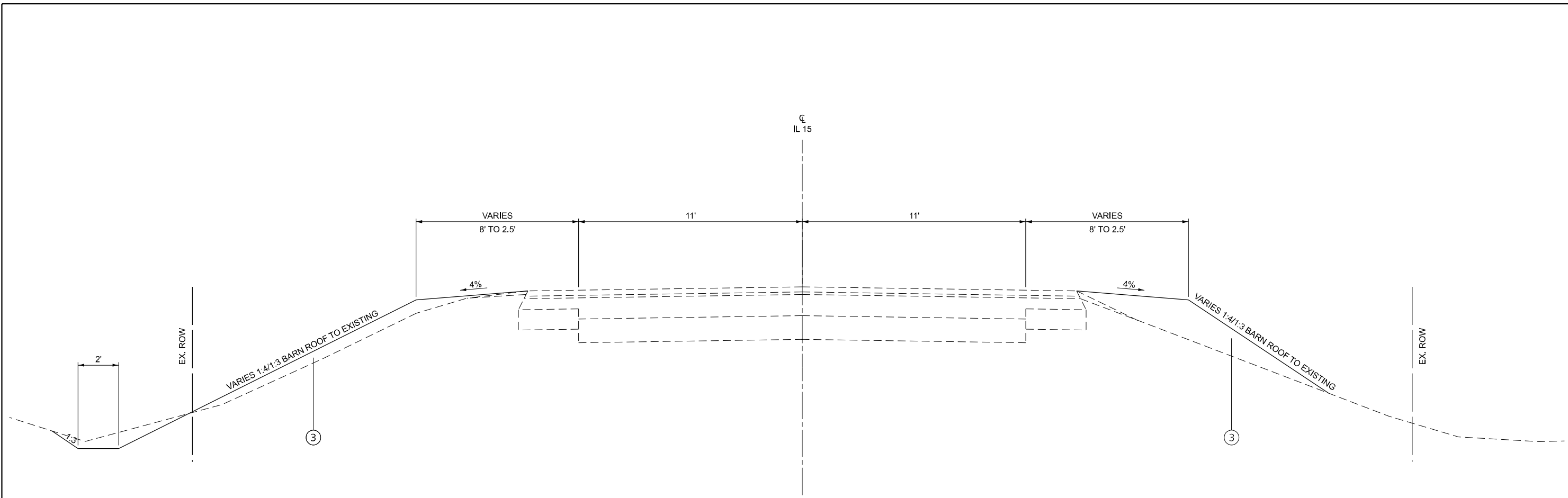
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED TYPICAL SECTION
IL 15 - PR. SN 041-7102

SCALE: N.T.S. SHEET 2 OF 4 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1;12CR-1	JEFFERSON	50	13
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				



PROPOSED TYPICAL SECTION
 STA. 935 + 44.63 RT TO STA. 935 + 99.63 RT
 STA. 935 + 55.55 LT TO STA. 936 + 10.55 LT

TYPICAL SECTION LEGEND

- | | |
|-------------------------------------|--|
| (A) EX. EMBANKMENT | (1) PR. PCC PAVEMENT, 10" |
| (B) EX. PCC PAVEMENT, 7" | (2) PR. PCC SHOULDERS, 10" |
| (C) EX. HMA PAVEMENT, 7" | (3) PR. EARTHWORK |
| (D) EX. LEVELING BINDER 3/4" | (4) PR. PAINT PAVEMENT MARKING LINE, 4" |
| (E) EX. HMA SURFACE COURSE, 1 1/2" | (5) PR. #6 TIE BARS @ 36" CTRS., 30" |
| (F) EX. HMA SHOULDERS | (6) PR. POROUS GRANULAR EMBANKMENT (SEE STRUCTURE PLANS) |
| (G) EX. AGGREGATE SHOULDERS, TYPE B | (7) PR. WELDED WIRE FABRIC |

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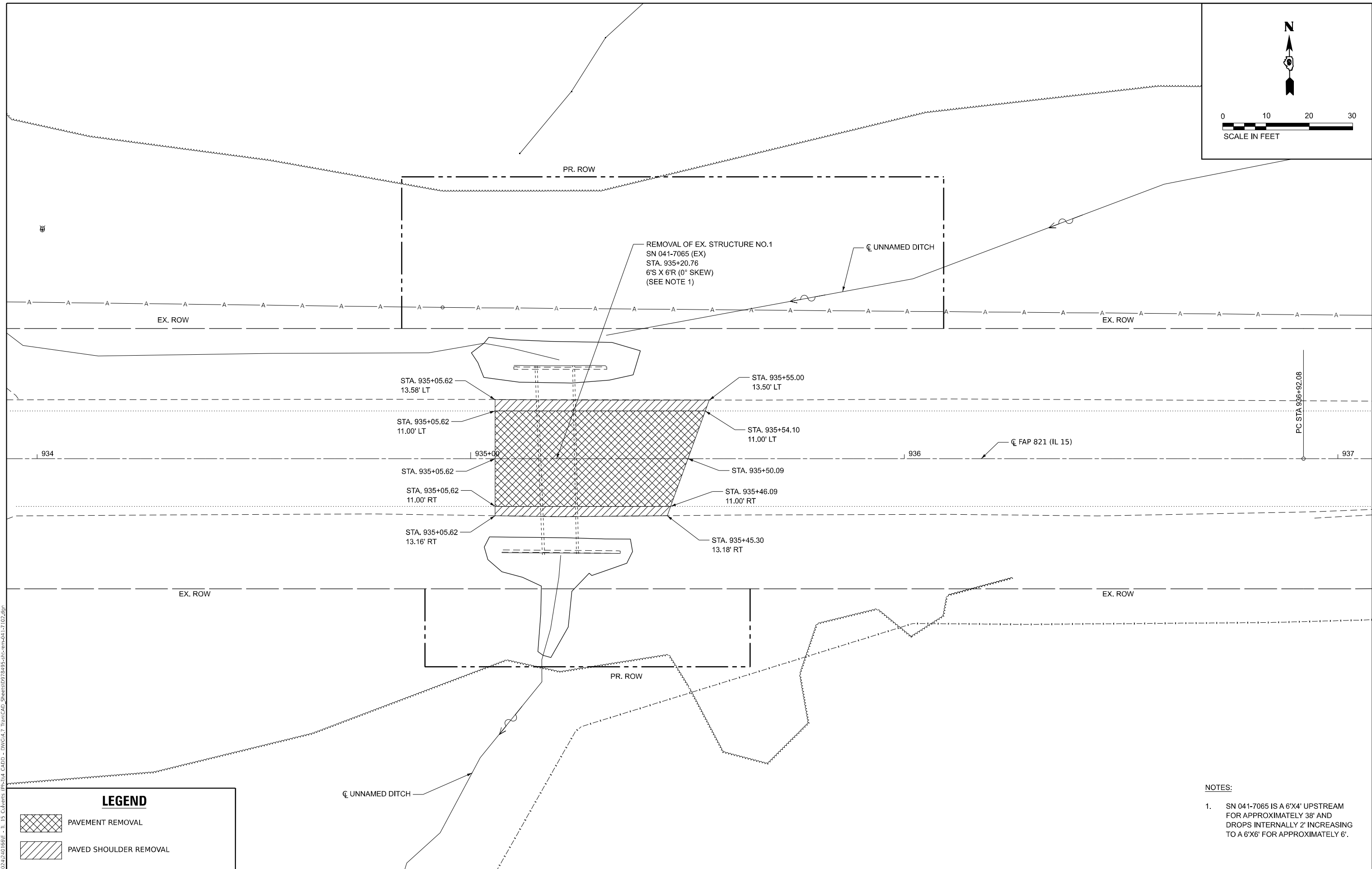
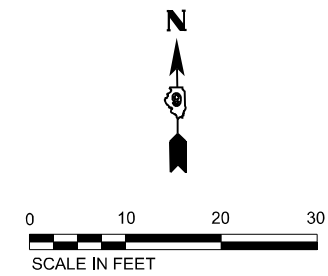
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED TYPICAL SECTION
IL 15 - PR. SN 041-7102
 SCALE: N.T.S. SHEET 3 OF 4 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1;12CR-1	JEFFERSON	50	14
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				



REMOVAL OF EX. STRUCTURE NO.1
 SN 041-7065 (EX)
 STA. 935+20.76
 6'S X 6'R (0° SKEW)
 (SEE NOTE 1)

UNNAMED DITCH

EX. ROW

EX. ROW

STA. 935+05.62
13.58' LT

STA. 935+55.00
13.50' LT

STA. 935+05.62
11.00' LT

STA. 935+54.10
11.00' LT

STA. 935+05.62

STA. 935+50.09

STA. 935+05.62
11.00' RT

STA. 935+46.09
11.00' RT

STA. 935+05.62
13.16' RT

STA. 935+45.30
13.18' RT

EX. ROW

EX. ROW

PR. ROW

UNNAMED DITCH

- NOTES:**
- SN 041-7065 IS A 6'X4' UPSTREAM FOR APPROXIMATELY 38' AND DROPS INTERNALLY 2' INCREASING TO A 6'X6' FOR APPROXIMATELY 6'.

LEGEND	
	PAVEMENT REMOVAL
	PAVED SHOULDER REMOVAL

MODEL: Dwg.dwg
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 IL DESIGN FIRM
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 DATE -

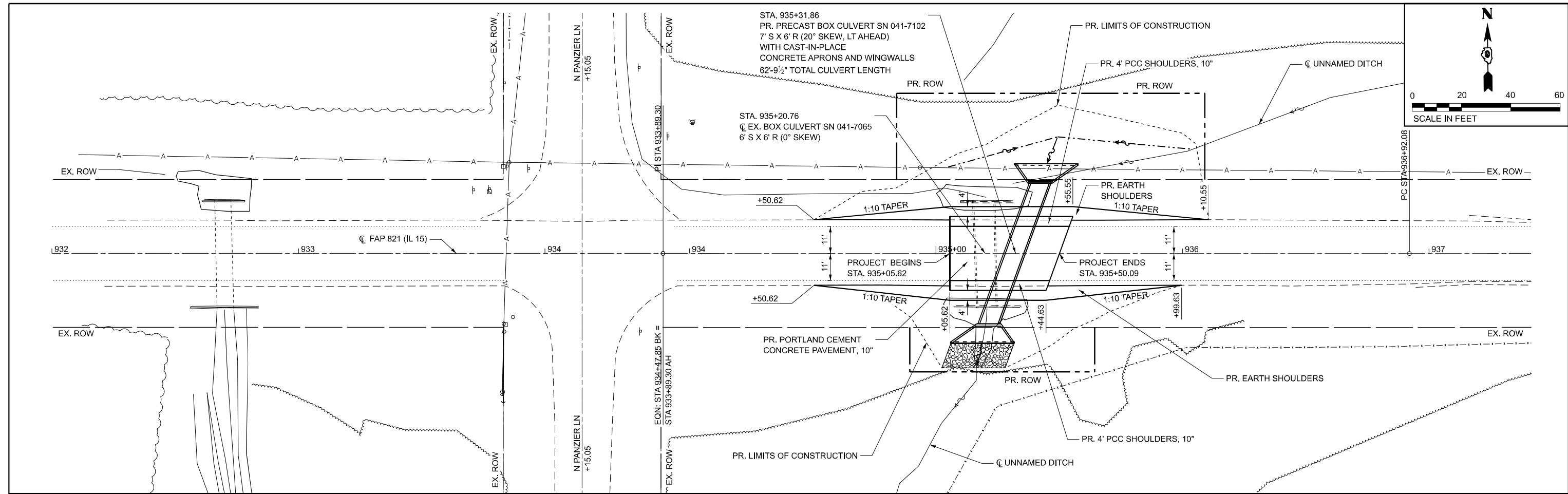
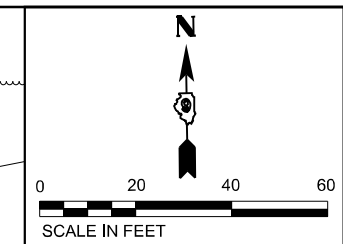
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

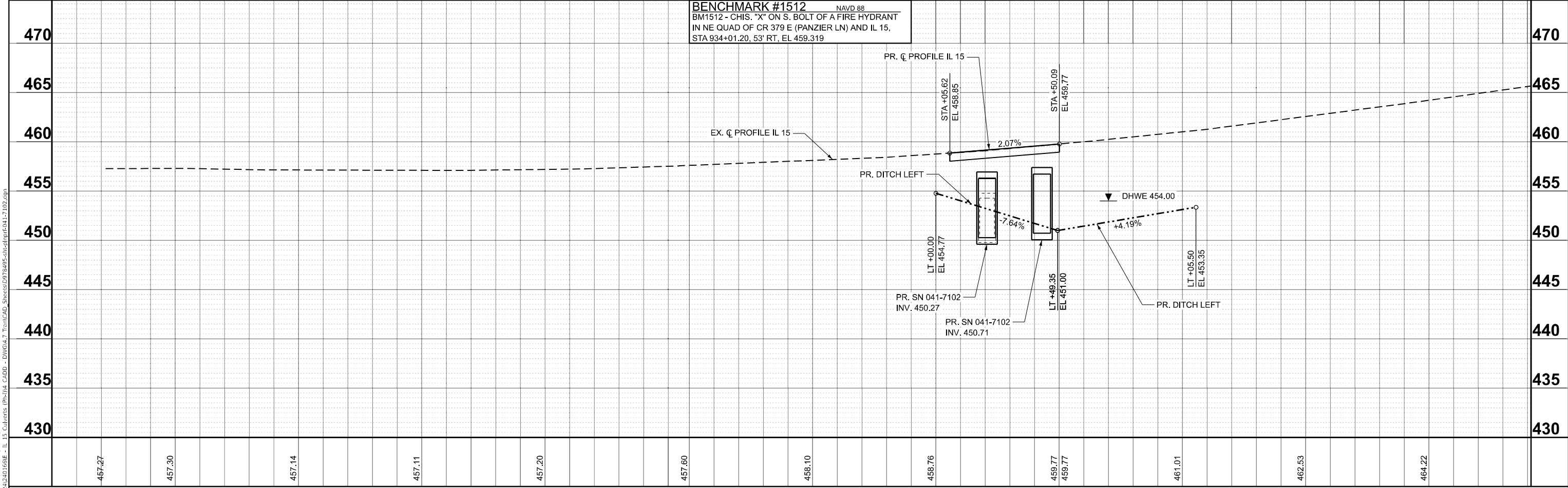
**REMOVAL PLAN
 IL 15 - PR. SN 041-7102**

SCALE: 1"=10'
 SHEET 1 OF 1 SHEETS
 STA. 934+00.00 TO STA. 937+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1;12CR-1	JEFFERSON	50	16
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				



BENCHMARK #1512 NAVD 88
 BM1512 - CHIS. "X" ON S. BOLT OF A FIRE HYDRANT
 IN NE QUAD OF CR 379 E (PANZIER LN) AND IL 15.
 STA 934+01.20, 53' RT, EL 459.319



932+00	457.27	932+50	457.30	933+00	457.14	933+50	457.11	934+00	457.20	934+00	457.60	934+50	458.10	935+00	458.76	935+50	459.77	936+00	461.01	936+50	462.53	937+00	464.22
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TWM
 ENGINEERING
 GEOSPATIAL SERVICES

TWM, INC.
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 IL DESIGN FIRM
 LICENSE NO: 184-001220

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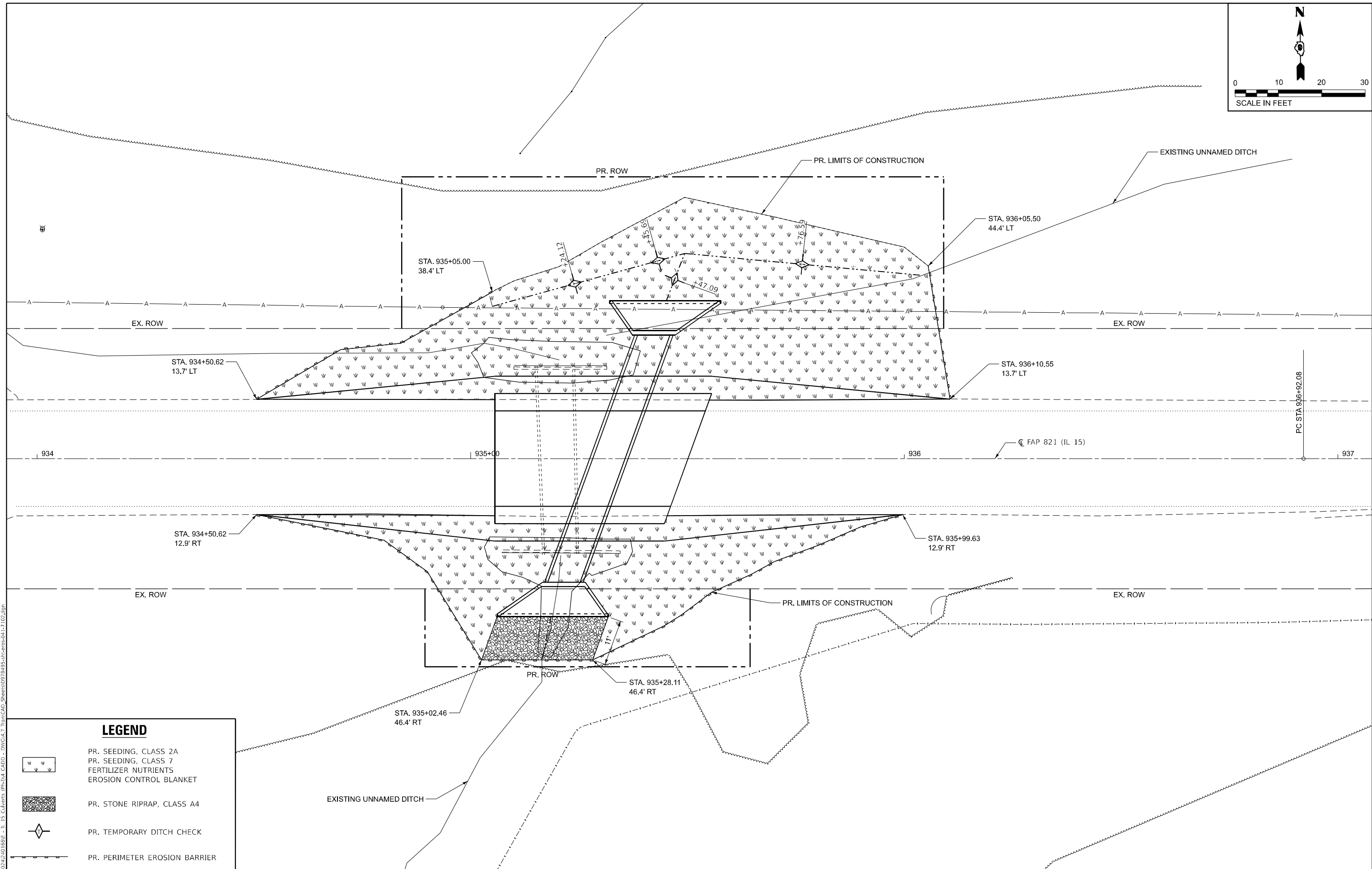
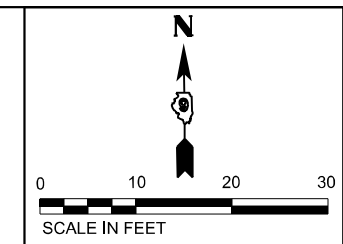
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PLAN AND PROFILE
 IL 15 - PR. SN 041-7102**








SCALE: 1"=20' SHEET 1 OF 1 SHEETS STA. 932+00.00 TO STA. 937+41.45 R2

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1; 12CR-1	JEFFERSON	50	17
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				

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 USER: bbillhartz
 DATE: 1/23/2026



LEGEND

-  PR. SEEDING, CLASS 2A
-  PR. SEEDING, CLASS 7
-  FERTILIZER NUTRIENTS
-  EROSION CONTROL BLANKET
-  PR. STONE RIPRAP, CLASS A4
-  PR. TEMPORARY DITCH CHECK
-  PR. PERIMETER EROSION BARRIER

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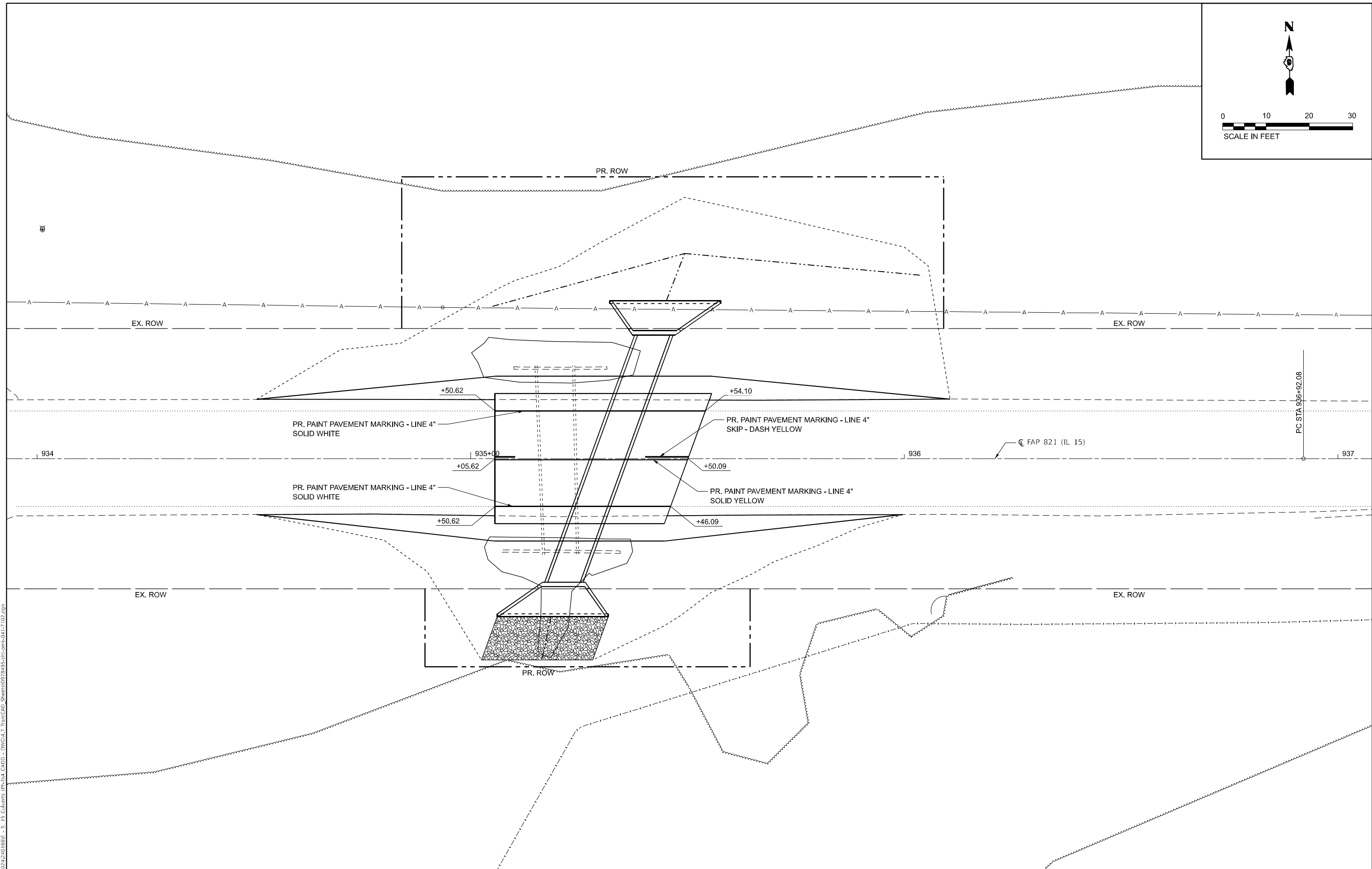
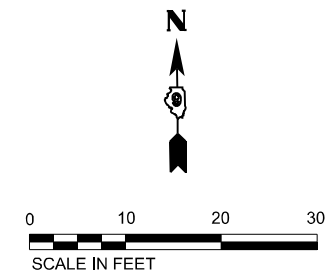
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL PLAN
IL 15 - PR. SN 041-7102

SCALE: 1"=10' SHEET 1 OF 1 SHEETS STA. 934+00.00 TO STA. 937+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1;12CR-1	JEFFERSON	50	18
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING PLAN
IL 15 - PR. SN 041-7102

SCALE: 1"=10' SHEET 1 OF 1 SHEETS STA. 934+00.00 TO STA. 937+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1;12CR-1	JEFFERSON	50	19
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				

Benchmark: Chiseled "X" on south bolt of a fire hydrant in NE quad of CR 379 E (Panzler Ln.) and IL 15, Sta. 934+04.20, 53' Rt., Elev. 459.319

Existing Structure: S.N. 041-7065 is a single cell concrete box culvert 44'-0" out-to-out of headwalls. The culvert is 6'x4' for 38' upstream, then drops internally 2' increasing to 6'x6' for 6' downstream. The culvert has 90° wingwalls and no skew.

Traffic Control: Weekend road closure will be used to remove existing structure and to install the precast concrete box culvert. Traffic will be open during construction of the end sections.

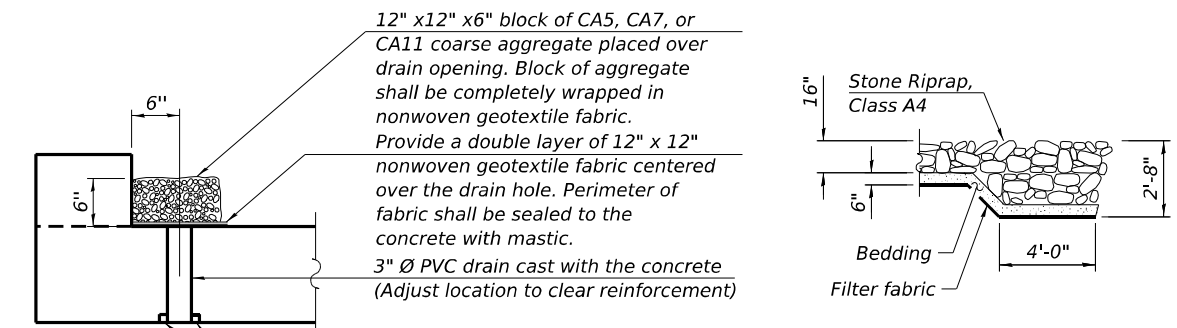
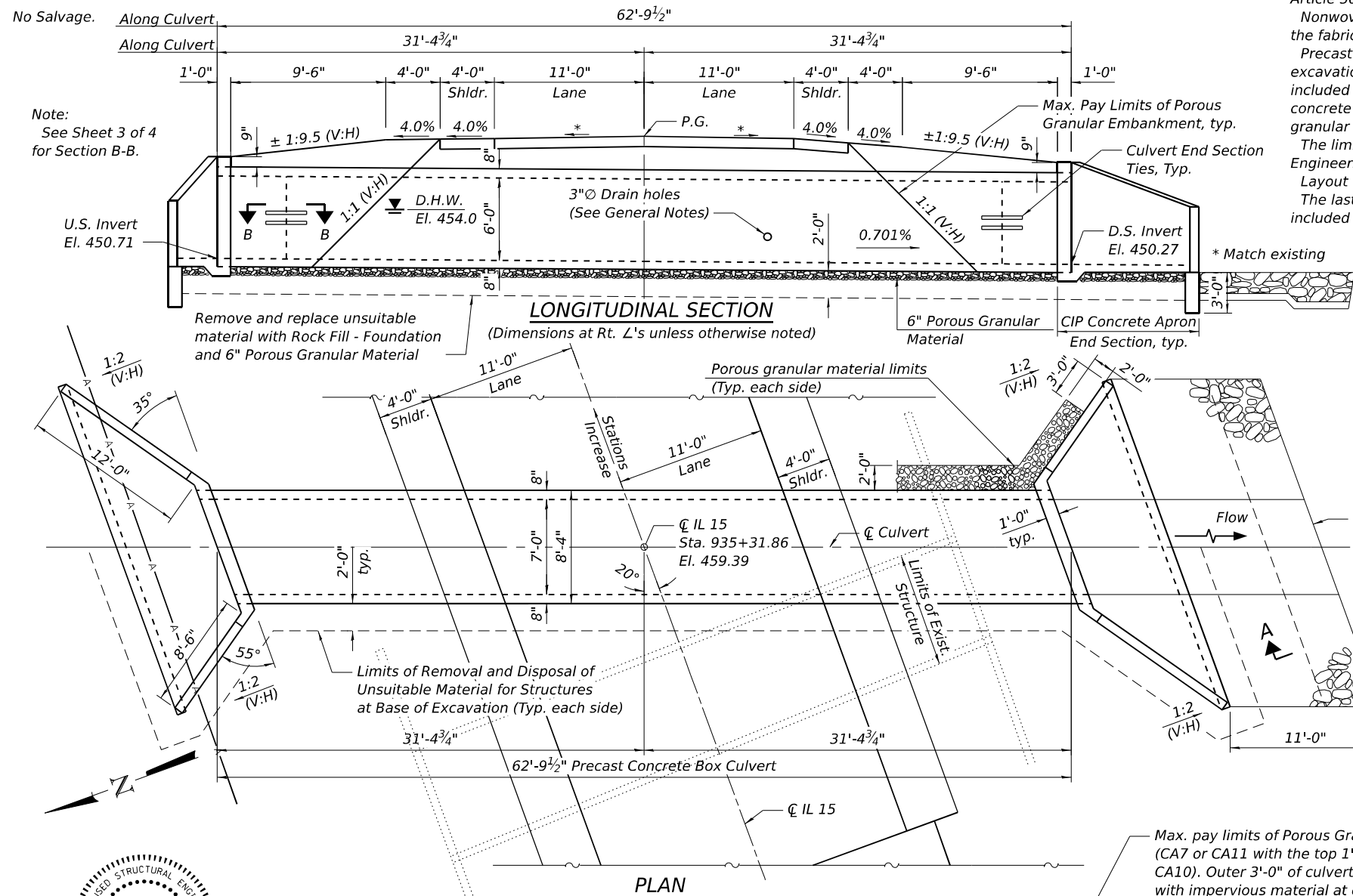
No Salvage.

INDEX OF SHEETS

1. General Plan and Elevation
2. Stage Construction Details
- 3-4. Apron End Section Details

GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated.
 The design fill height for this box is 1.8' min. and 2.3' max. The precast box culvert sections shall conform to the requirements of ASTM C 1577
 Drain holes shall be provided on exterior culvert walls for each precast box segment with a clear rise greater than 3 ft. The drain hole shall be located within 1/3 of the clear rise of the box culvert, shall not intercept the haunch, and shall conform to the requirements of Article 503.11 of the Standard Specification.
 Nonwoven geotextile fabric shall conform to the requirements of Art. 1080.01 of the Standard Specifications. The minimum weight of the fabric shall be 6 ounces per square yard.
 Precast concrete box culverts and box culvert end sections shall be backfilled with Porous Granular Embankment in the required excavation areas on the sides of the box culvert from the top of the box culvert to the bottom of the box culvert. This area of PGE is included in the Porous Granular Embankment pay item. The 6-inch thick layer of porous granular material required under the precast concrete box culvert, according to Section 540.06 of the standard specifications, shall also apply to the end sections. Cost of this porous granular material will not be paid for separately but shall be included in the unit price of the work for which it is required.
 The limits and quantities of removal and disposal of unsuitable material shown may be modified by the district Geotechnical and Field Engineers for variable subsurface conditions encountered in the field.
 Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
 The last two precast barrel sections at each end shall be tied together using culvert ties as shown on culvert tie details sheet. Cost included in precast concrete box culverts of the size specified in the plans.



DESIGN STRESSES
PRECAST UNITS
 $f_c = 5,000 \text{ psi}$
 $f_y = 65,000 \text{ psi}$ (Welded Wire Reinforcement)
FIELD UNITS
 $f_c = 3,500 \text{ psi}$
 $f_y = 60,000 \text{ psi}$ (Reinforcement)

DESIGN SPECIFICATIONS

2024 AASHTO LRFD Bridge Design Specifications, 10th Edition

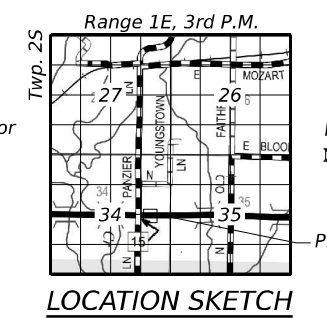
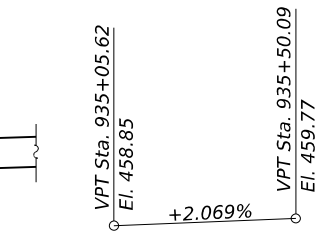
LOADING HL-93

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

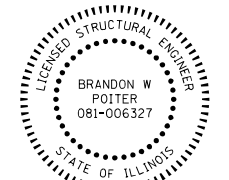
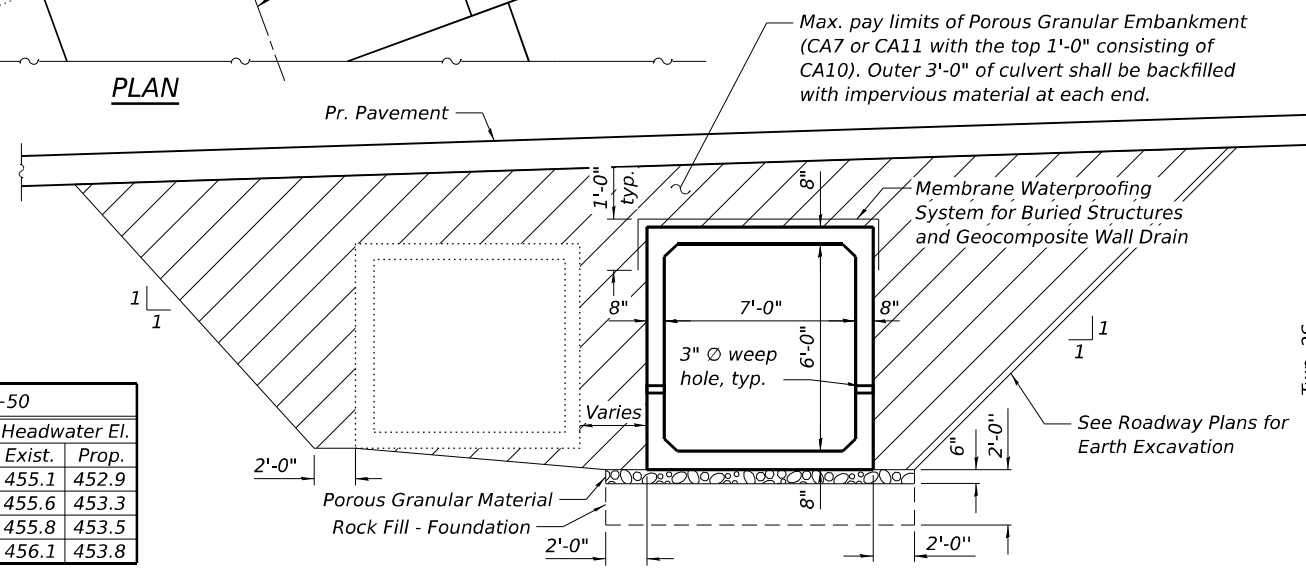
TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Porous Granular Embankment	Cu. Yd.	310
Stone Riprap, Class A4	Sq. Yd.	32
Filter Fabric	Sq. Yd.	32
Removal of Existing Structures No. 1	Each	1
Removal and Disposal of Unsuitable Material for Structures	Cu. Yd.	93
Reinforcement Bars, Epoxy Coated	Pound	1,540
Concrete Box Culverts	Cu. Yd.	18.2
Precast Concrete Box Culverts 7'x6'	Foot	63
Geocomposite Wall Drain	Sq. Yd.	70
Membrane Waterproofing System for Buried Structures	Sq. Yd.	70
Rock Fill Foundation	Ton	167

PROFILE GRADE
(Along CL IL 15)



SECTION THRU BARREL



DATE: 03/23/2026
 EXPIRES: 11/30/2026

WATERWAY INFORMATION

Drainage Area = 0.1 sq. mi. Overtopping Elev. = 457.2 @ Sta. 931+50

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10	55	24	42	453.8	1.3	0	455.1	452.9
Base	50	72	24	42	454.0	1.6	0	455.6	453.3
Max. Calc.	100	79	24	42	454.1	1.7	0	455.8	453.5
	500	93	24	42	454.3	1.8	0	456.1	453.8

10 Yr. Outlet Velocity through Exist. Structure = 8.6 ft/s
 10 Yr. Outlet Velocity through Prop. Structure = 7.7 ft/s

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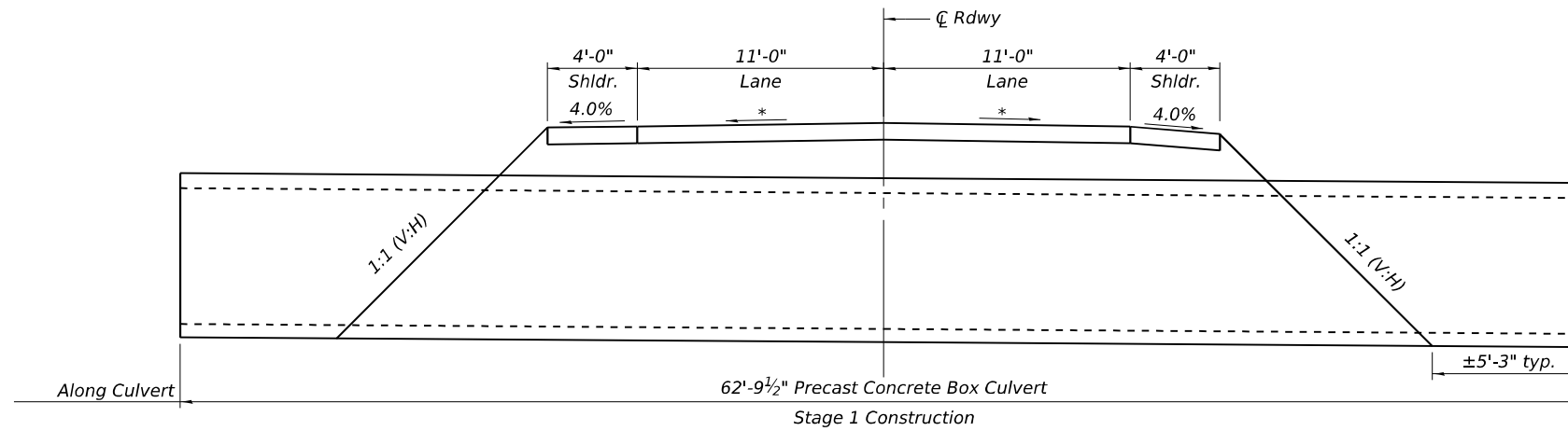


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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

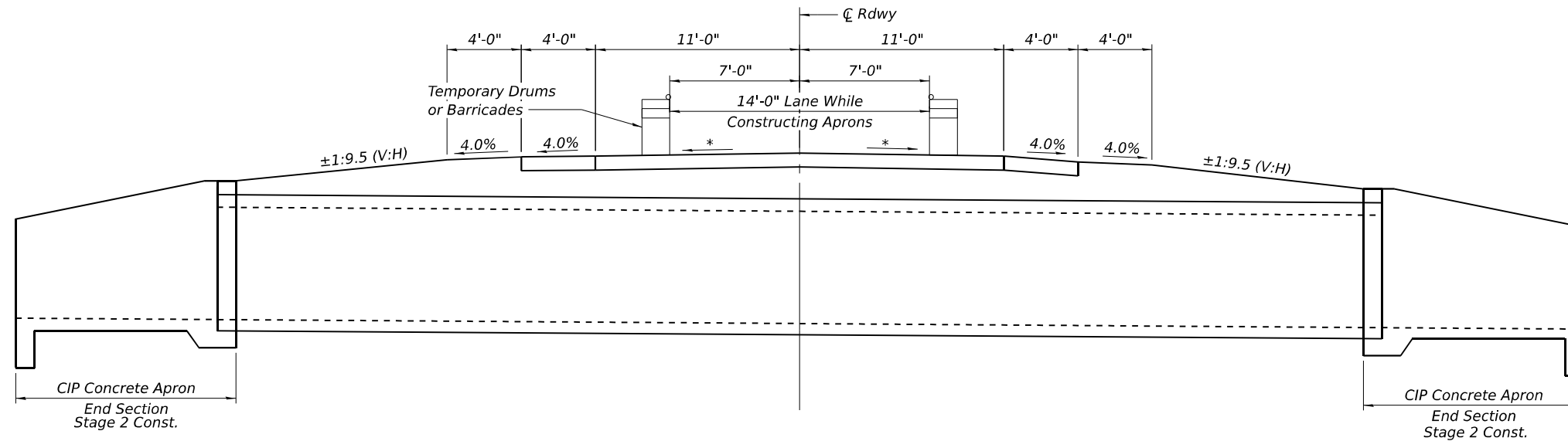
GENERAL PLAN & ELEVATION
 STRUCTURE NO. 041-7102
 SHEET 1 OF 4 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1; 12CR-1	JEFFERSON	50	20
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				



STAGE 1 CONSTRUCTION
 (Dimensions at Rt. L's unless otherwise noted)

* Match existing



STAGE 2 CONSTRUCTION
 (Dimensions at Rt. L's unless otherwise noted)

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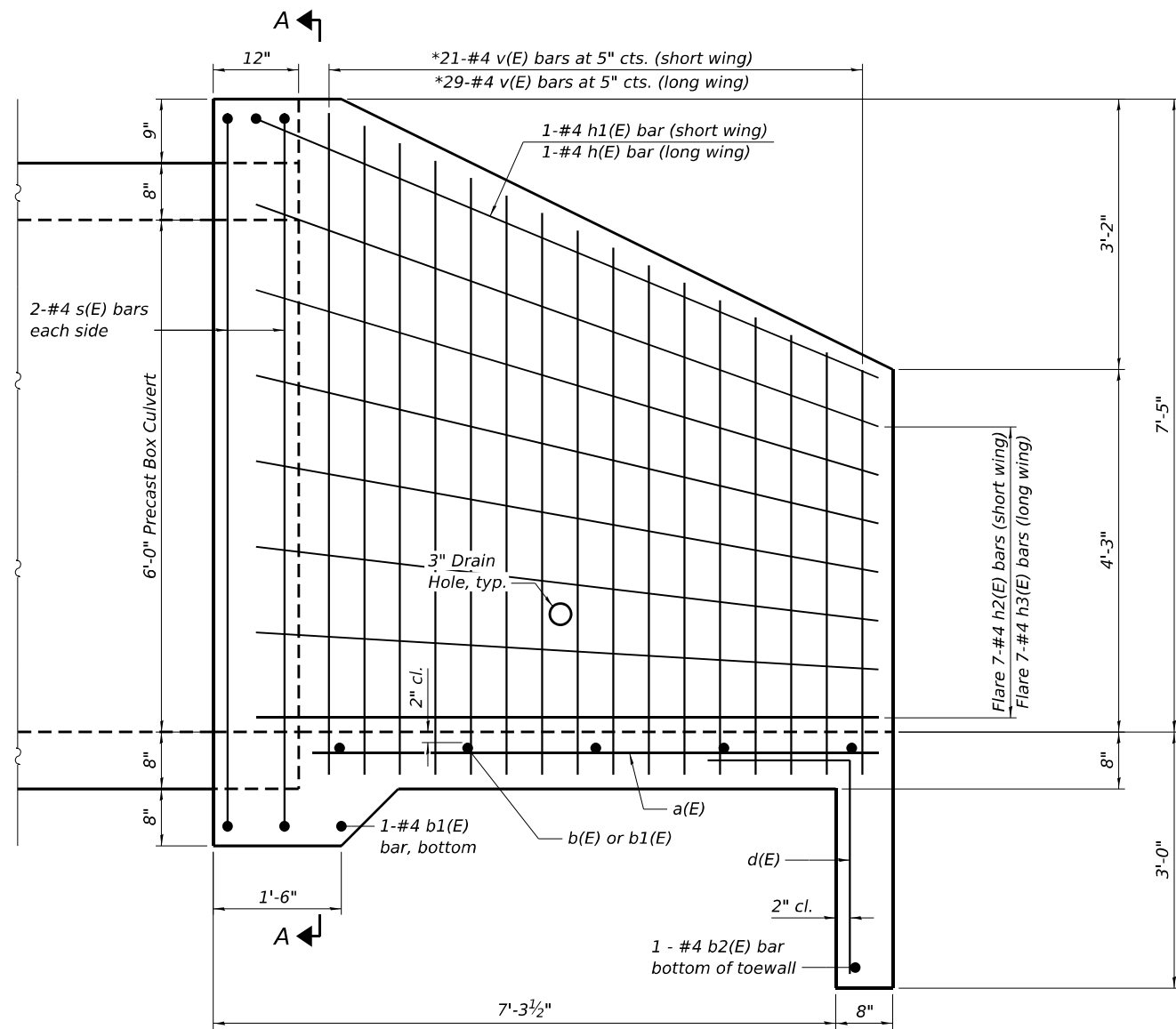
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	CHECKED - JBE	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

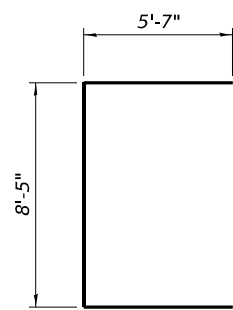
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 STRUCTURE NO. 041-7102**

SHEET 2 OF 4 SHEETS

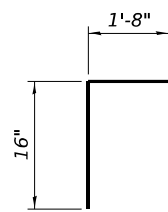
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CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				



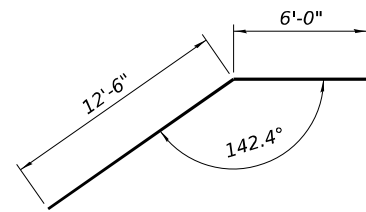
HALF SIDE ELEVATION
(Dimensions at Rt. \angle 's)



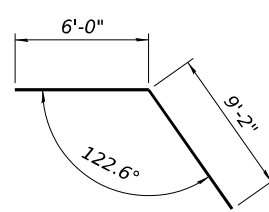
BAR s(E)



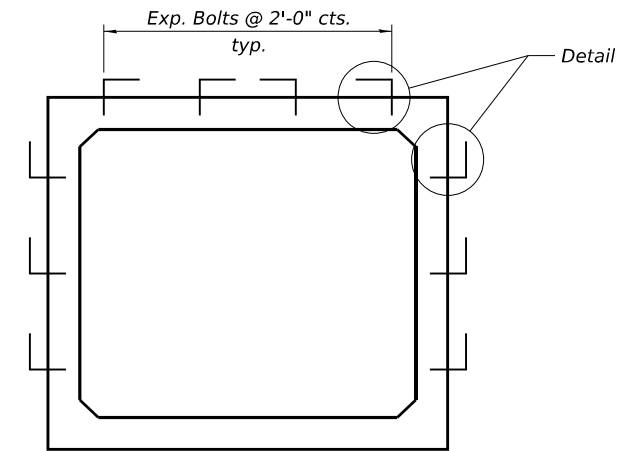
BAR d(E)



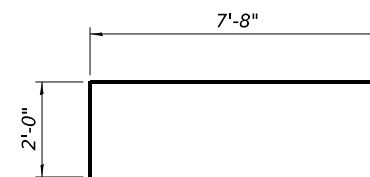
BAR h(E)



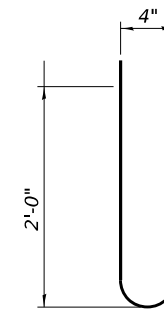
BAR h1(E)



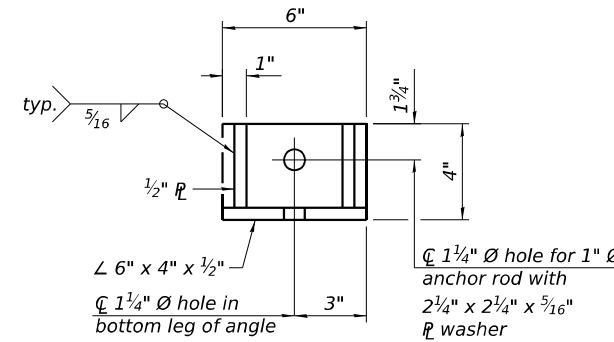
SECTION A-A



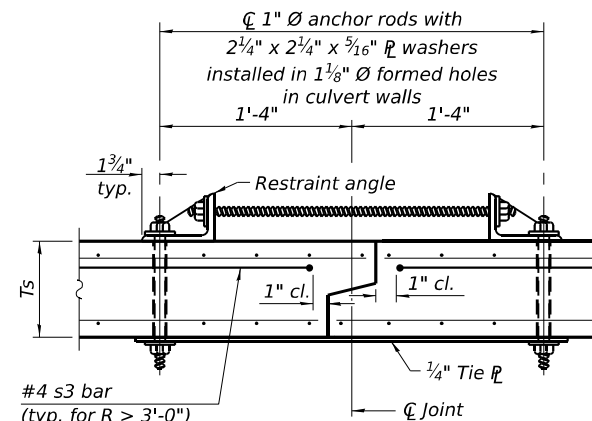
BAR v(E)



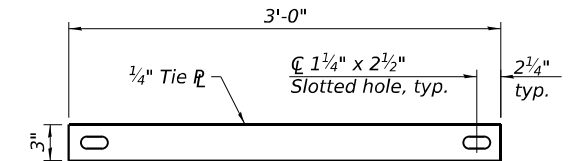
BAR s3



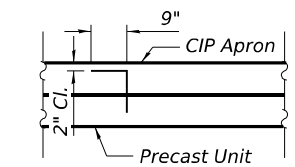
RESTRAINT ANGLE DETAIL



SECTION B-B
(Showing culvert tie details)



TIE PLATE DETAIL



DETAIL A

Notes:

1" \varnothing anchor rods for the culvert ties shall conform to the requirements of ASTM F1554, Grade 105. Structural steel for the tie plate and restraint angle shall conform to the requirements of Article 1006.04 of the Standard Specifications. All components of the culvert tie detail shall be galvanized according to the requirements of AASHTO M 111 or M 232 as applicable. 2 1/4" x 2 1/2" x 1/16" plate washers shall be provided under each nut required for the anchor rods. Anchor rods connecting precast sections shall be brought to a snug tight condition followed by an additional 1/2 turn on one of the nuts for anchor rods installed in the walls. Match marks shall be provided on the bolt and nut to verify relative rotation between the bolt and the nut. Holes in the walls for the culvert tie assembly may be drilled using core bits in lieu of using formed holes.

The cast-in-place apron end section shall be tied to the precast barrel at each end using expansion bolts spaced at 2'-0" centers as shown in Section A-A. Expansion bolts shall be 3/4" diameter hooked bolts. The hooks shall be as shown in Detail A and shall be bent in the field as needed. Cost included in precast concrete box culverts of the size specified in the plans. Reinforcement bars shall conform to the requirements of ASTM A 706.

BILL OF MATERIAL - 2 APRONS

Bar	No.	Size	Length	Shape
a(E)	48	#4	6'-7"	—
b(E)	4	#4	20'-1"	—
b1(E)	12	#4	12'-0"	—
b2(E)	2	#4	25'-4"	—
d(E)	52	#4	4'-4"	└
h(E)	2	#4	18'-6"	└
h1(E)	2	#4	15'-2"	└
h2(E)	14	#4	12'-5"	—
h3(E)	14	#4	8'-11"	—
s(E)	8	#4	19'-7"	└
v(E)	100	#4	9'-8"	└
Concrete Box Culverts			Cu. Yd.	18.2
Reinforcement Bars, Epoxy Coated			Pound	1,540

*Cut or bend to fit

Note:
Exposed edges shall be beveled 3/4"

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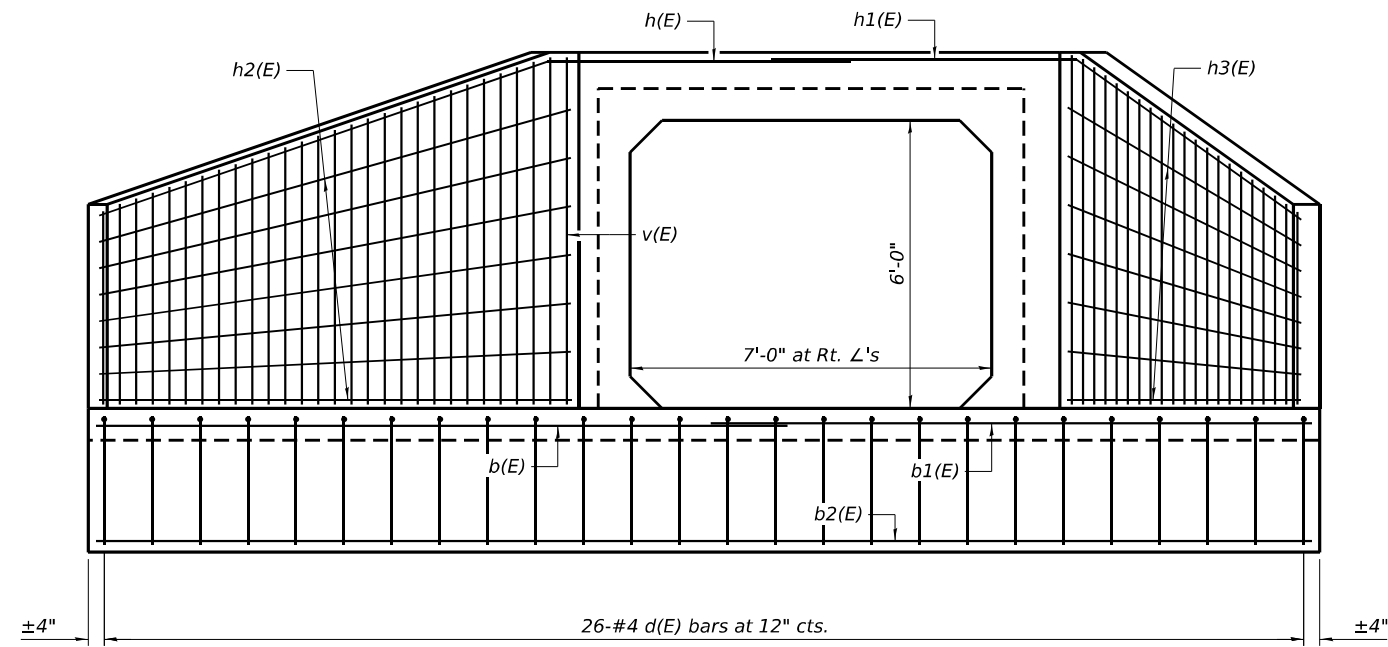
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

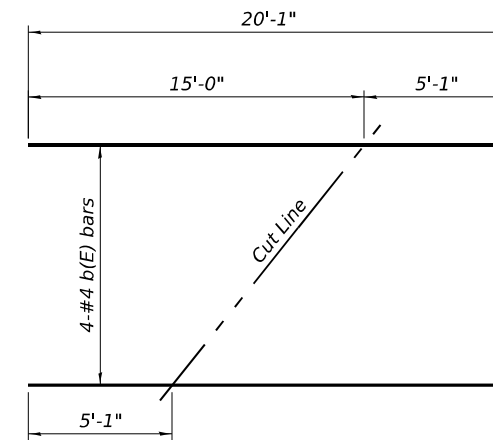
APRON END SECTION DETAILS
STRUCTURE NO. 041-7102

SHEET 3 OF 4 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1; 12CR-1	JEFFERSON	50	22
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				

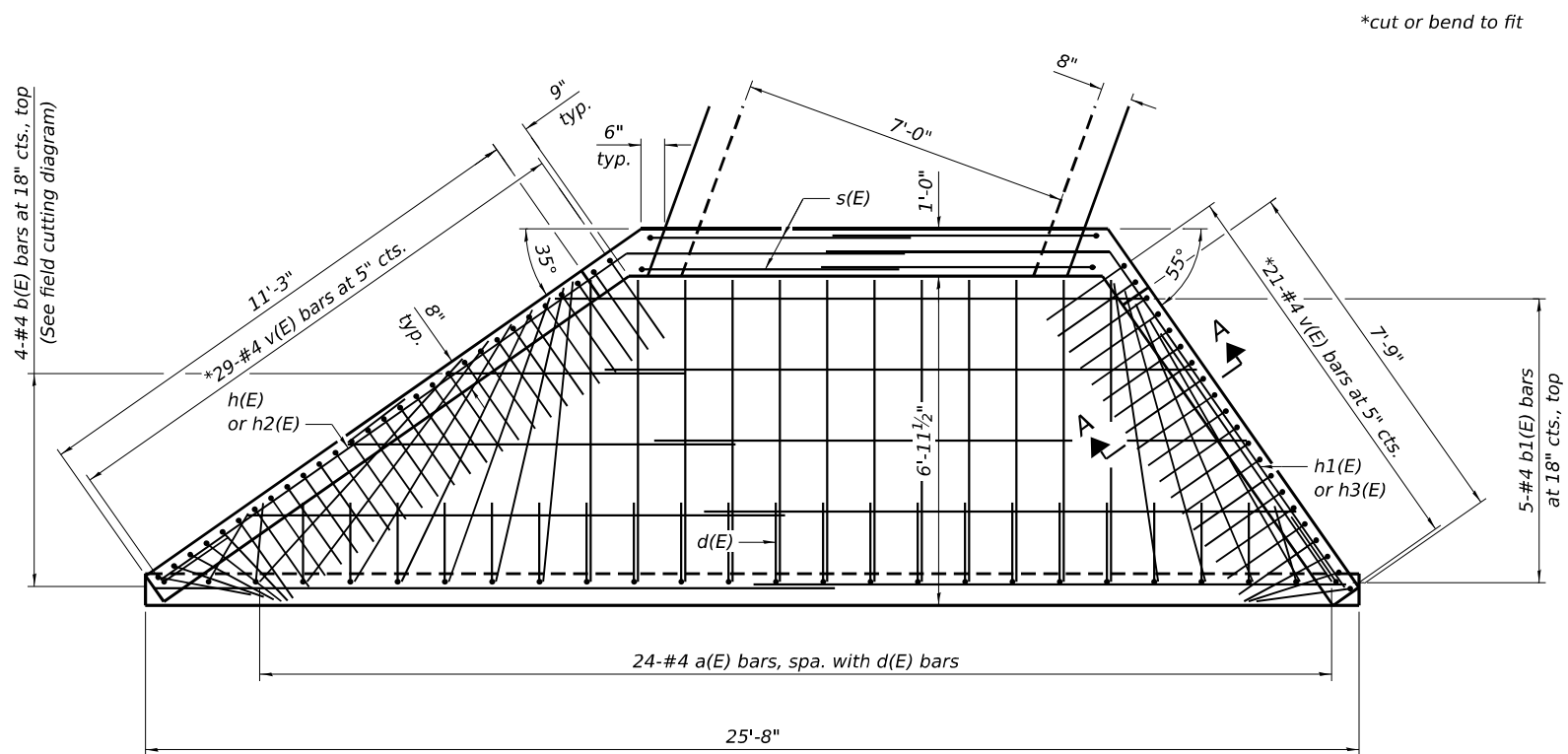


ELEVATION



FIELD CUTTING DIAGRAM

Order b(E) bars full length. Cut as shown and use remainder of bars in opposite apron end section.

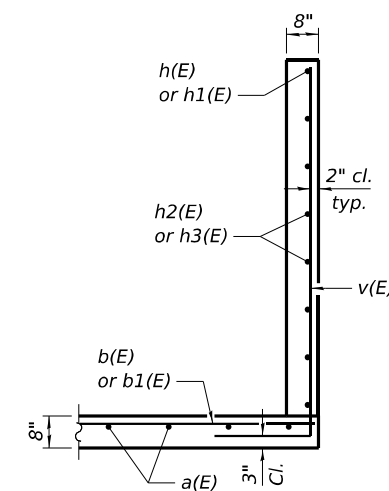


PLAN

*cut or bend to fit

MINIMUM BAR LAP

#4 bar = 1'-8"



SECTION A-A

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PLOT DATE = 1/26/2026	DRAWN - MJH	REVISED -
	CHECKED - JBE	REVISED -

**STATE OF ILLINOIS
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**APRON END SECTION DETAILS
STRUCTURE NO. 041-7102**

SHEET 4 OF 4 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1; 12CR-1	JEFFERSON	50	23
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				

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

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

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 IL DESIGN FIRM
 LICENSE NO: 184-001220

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 DATE -

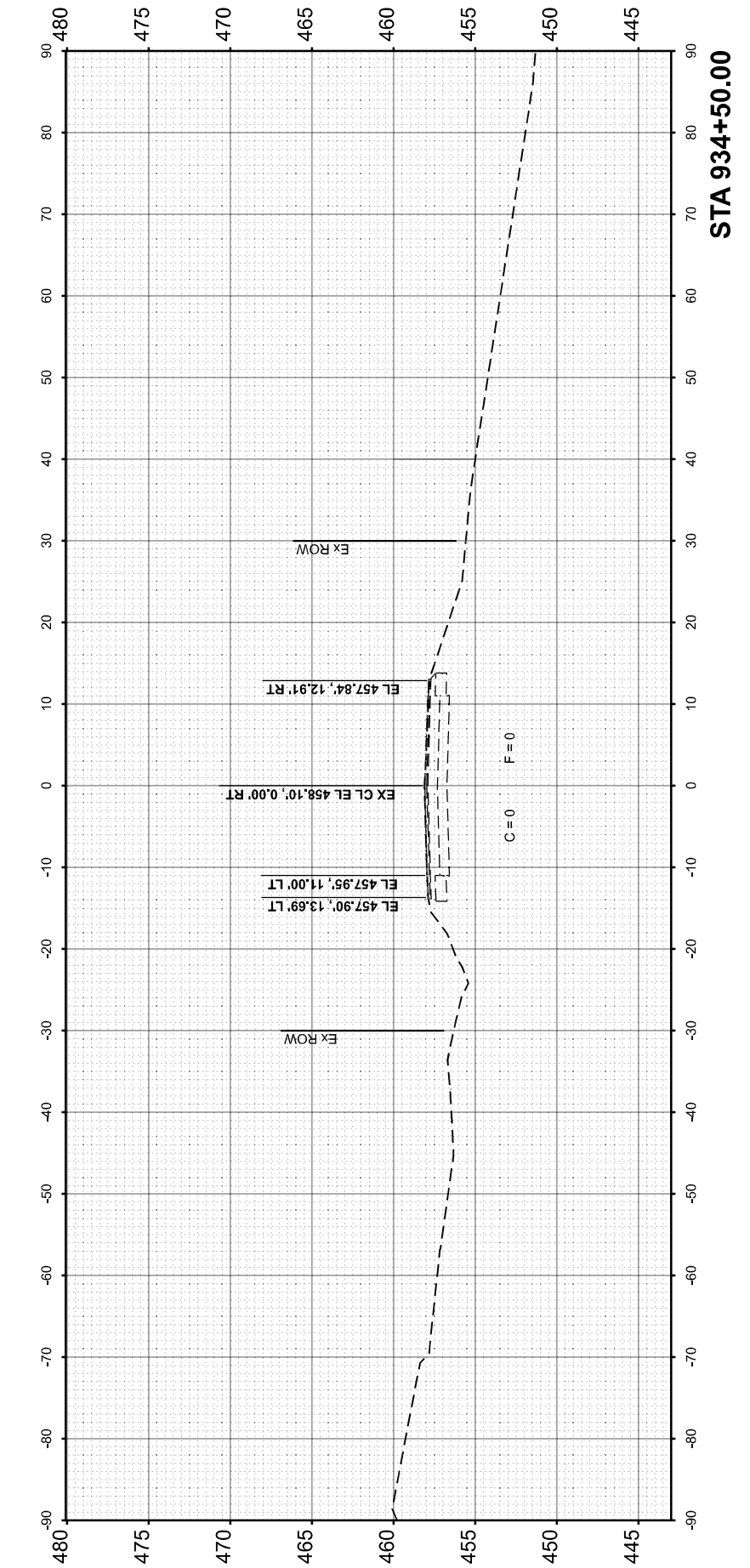
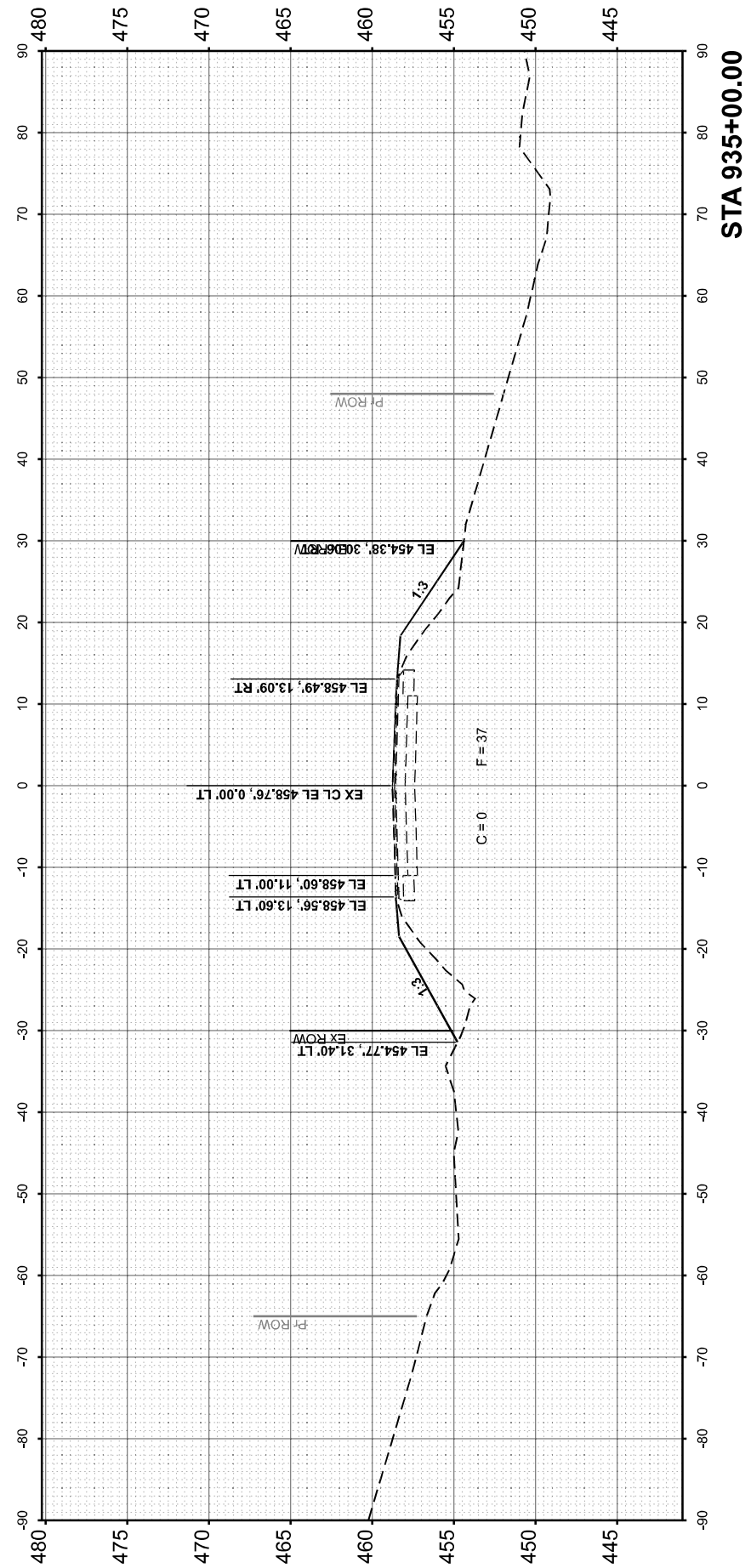
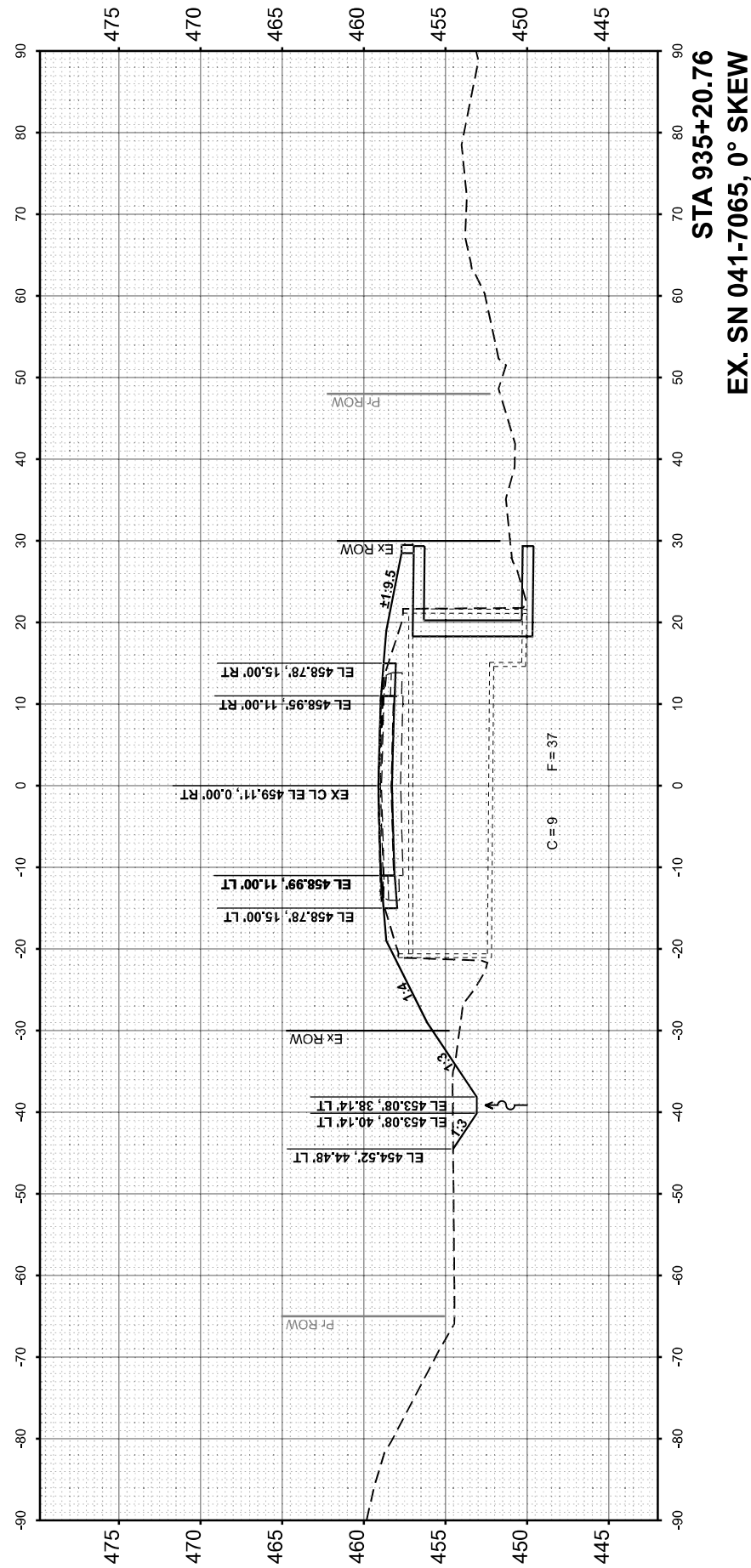
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS
 IL 15 - PR. SN 041-7102**

SCALE: 1"=10' SHEET 1 OF 3 SHEETS STA. 934+50.00 R2 TO STA. 935+20.76 R2

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1; 12CR-1	JEFFERSON	50	24
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				



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

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

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 LICENSE NO: 184-001220

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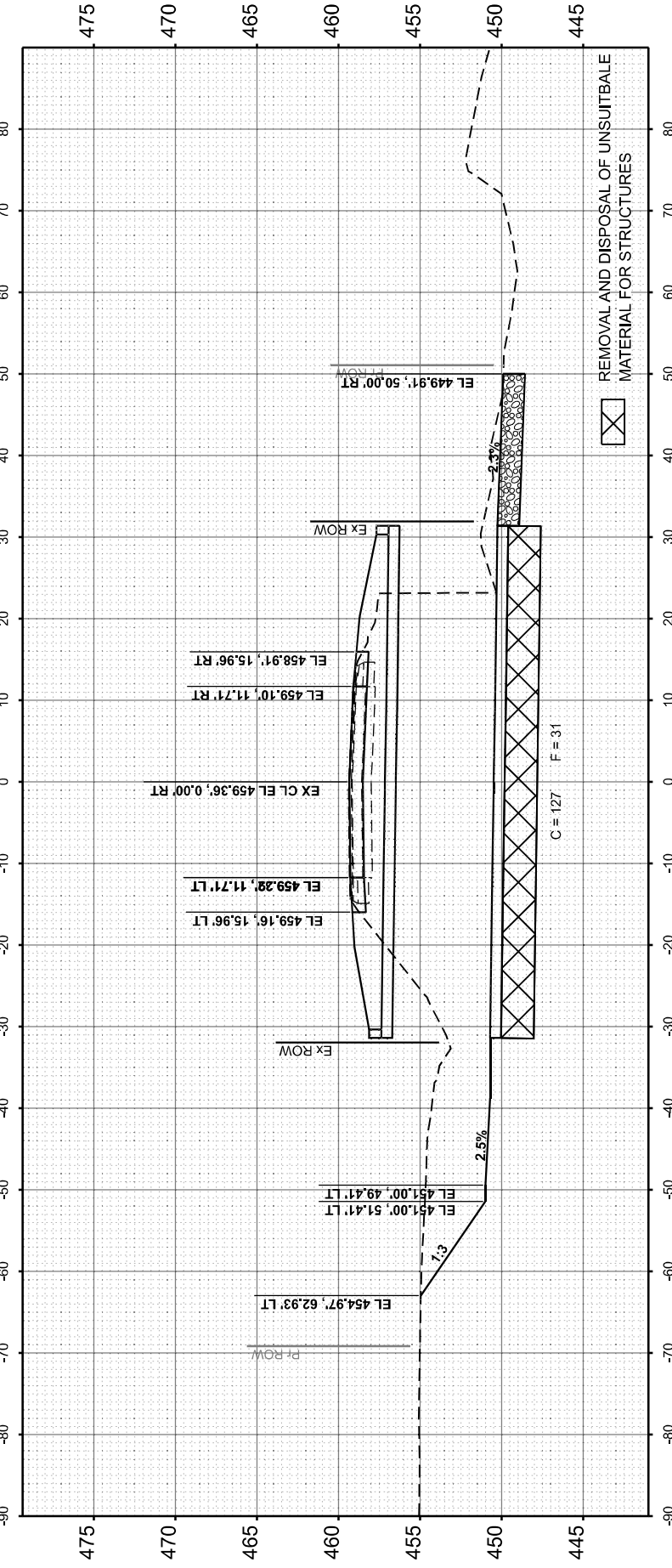
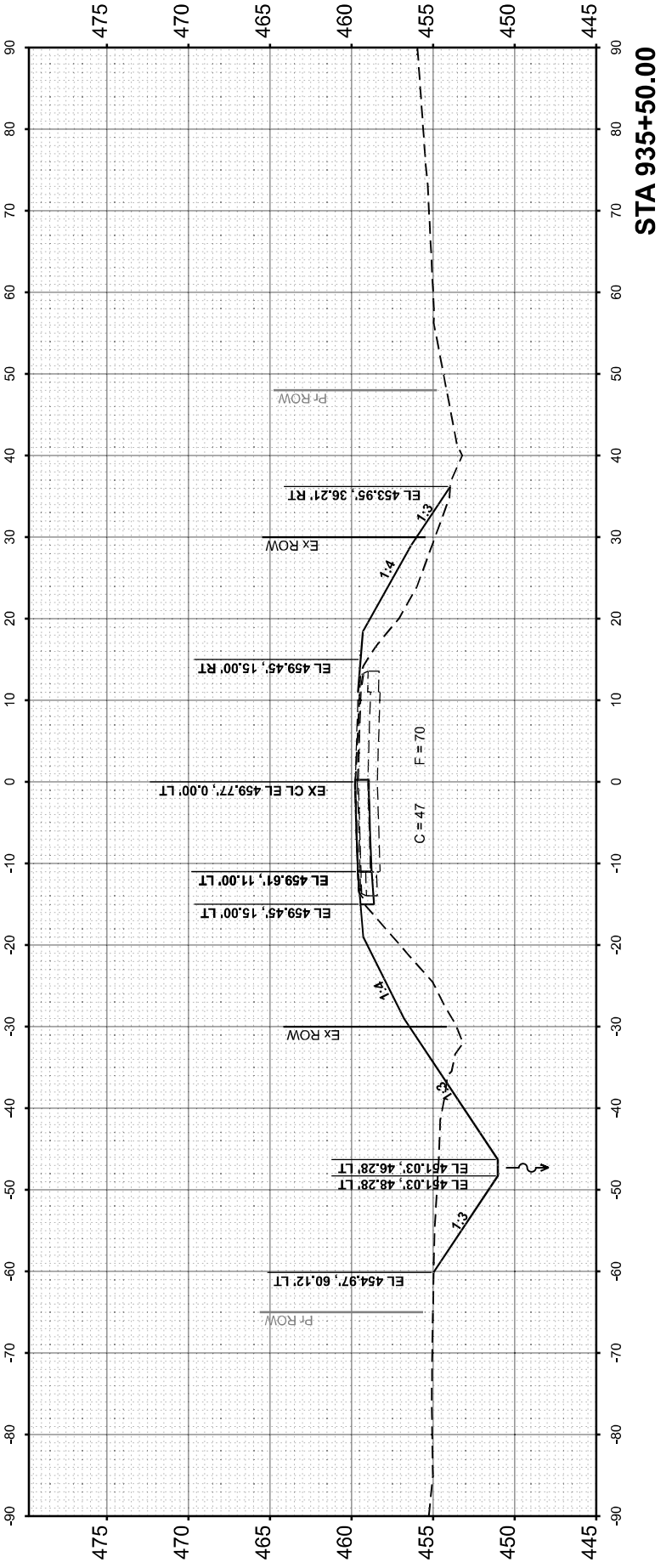
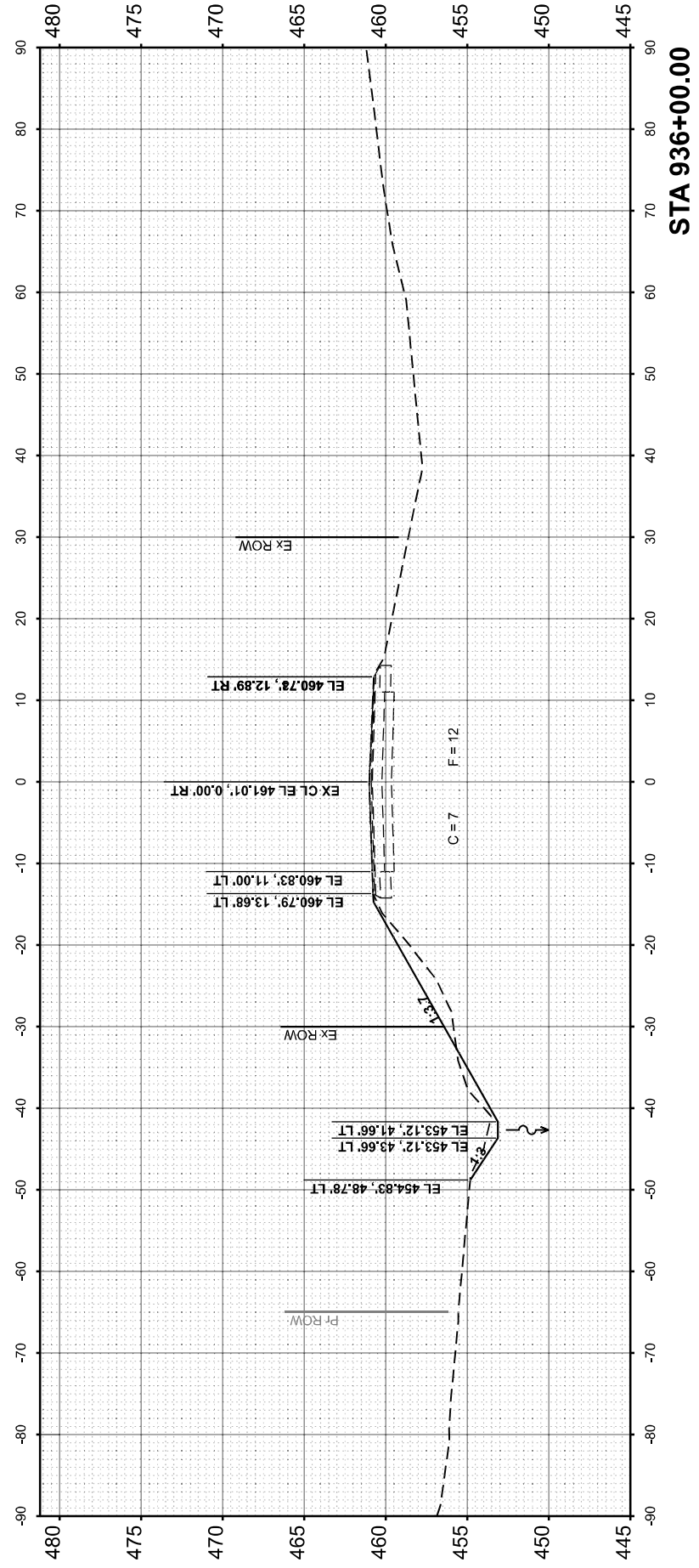
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 DRAWN - BAR
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 DATE -

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 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS
 IL 15 - PR. SN 041-7102**
 SCALE: 1"=10'
 SHEET 2 OF 3 SHEETS
 STA. 935+31.86 R2 TO STA. 936+00.00 R2

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1; 12CR-1	JEFFERSON	50	25
				CONTRACT NO. 78495
ILLINOIS FED. AID PROJECT				



**STA 935+31.86
 PR. SN 041-7102, 20° SKEW LT AHEAD**

FINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

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LICENSE NO:
184-001220

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PLOT DATE	=	1/23/2026

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DRAWN	-	BAR
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DATE	-	

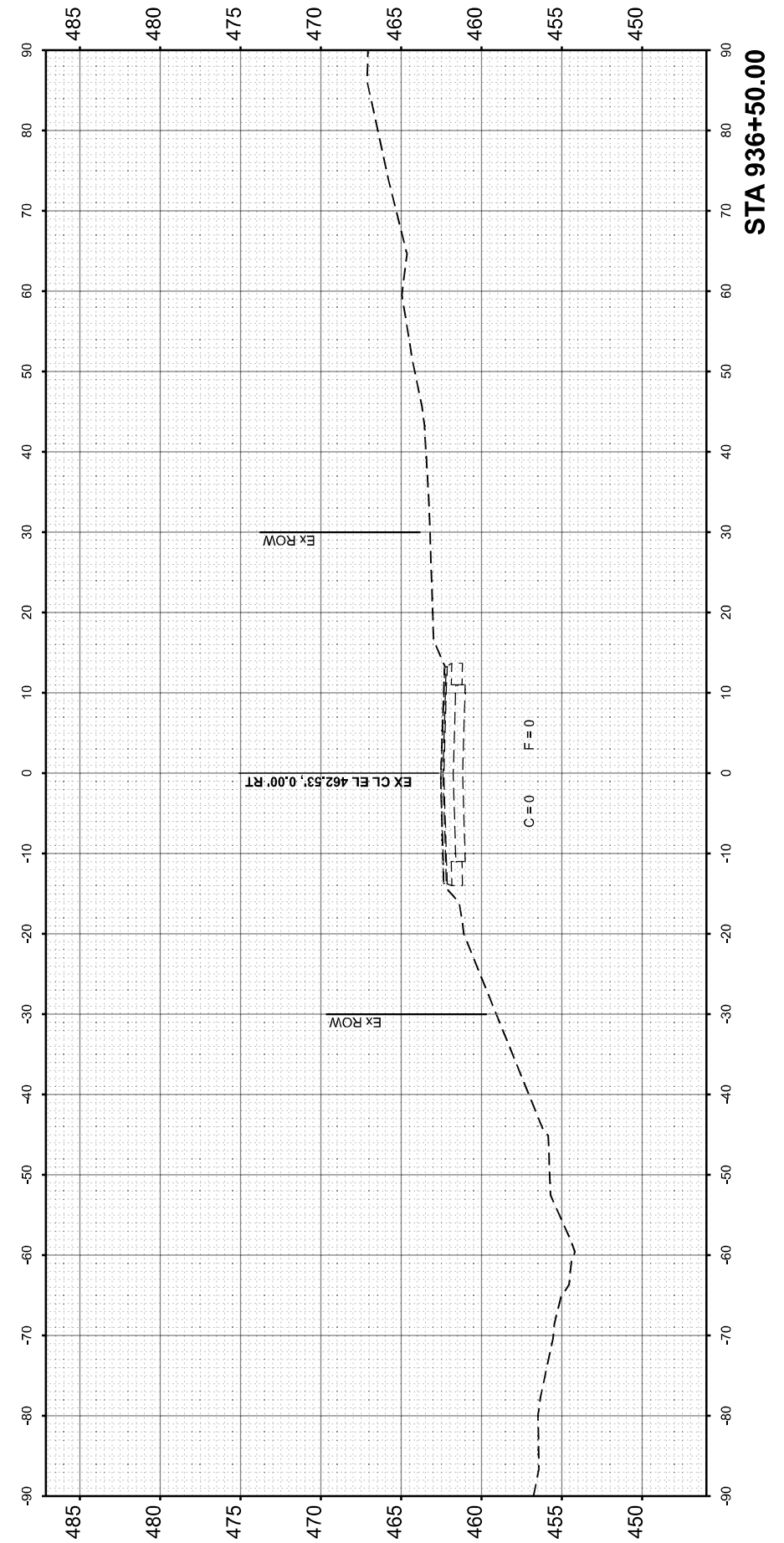
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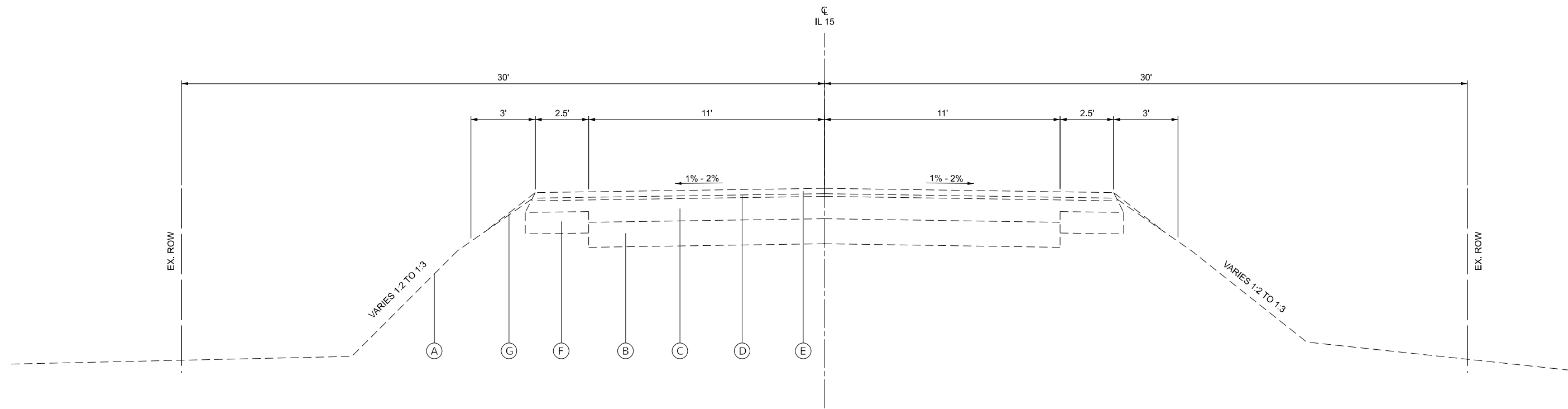
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS
IL 15 - PR. SN 041-7102**

SCALE: 1"=10' SHEET 3 OF 3 SHEETS STA. 936+50.00 R2 TO STA. 936+50.00 R2

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1; 12CR-1	JEFFERSON	50	26
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				





EXISTING TYPICAL SECTION
STA. 941 + 14.09 TO STA. 943 + 34.59

TYPICAL SECTION LEGEND

- | | |
|-------------------------------------|--|
| (A) EX. EMBANKMENT | (1) PR. PCC PAVEMENT, 10" |
| (B) EX. PCC PAVEMENT, 7" | (2) PR. PCC SHOULDERS, 10" |
| (C) EX. HMA PAVEMENT, 7" | (3) PR. EARTHWORK |
| (D) EX. LEVELING BINDER 3/4" | (4) PR. PAINT PAVEMENT MARKING LINE, 4" |
| (E) EX. HMA SURFACE COURSE, 1 1/2" | (5) PR. #6 TIE BARS @ 36" CTRS., 30" |
| (F) EX. HMA SHOULDERS | (6) PR. POROUS GRANULAR EMBANKMENT (SEE STRUCTURE PLANS) |
| (G) EX. AGGREGATE SHOULDERS, TYPE B | (7) PR. WELDED WIRE FABRIC |

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 LICENSE NO:
 184-001220

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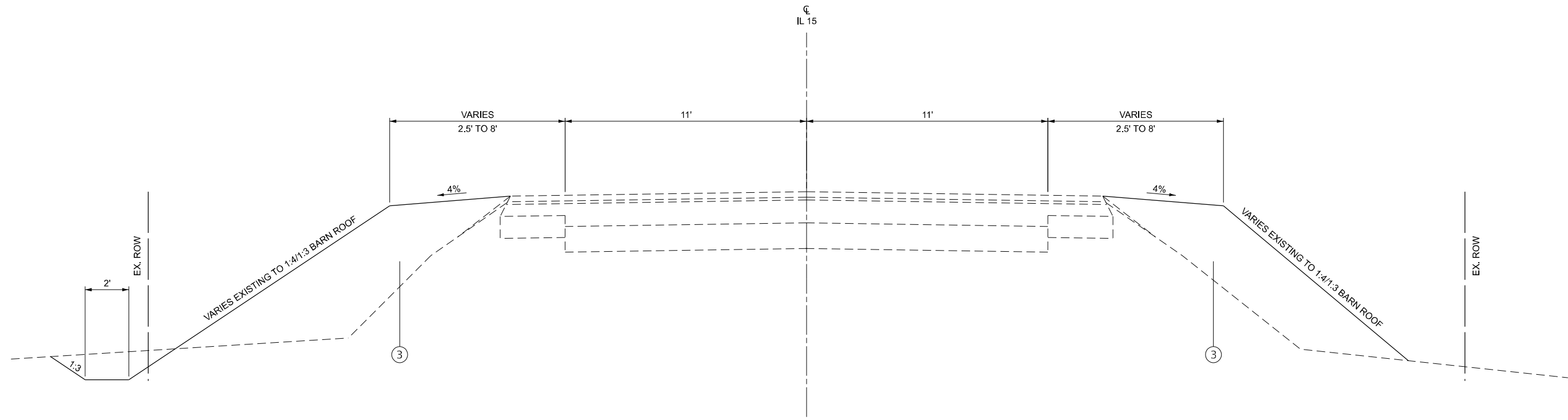
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING TYPICAL SECTION
IL 15 - PR. SN 041-7103

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1;12CR-1	JEFFERSON	50	27
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				



PROPOSED TYPICAL SECTION
STA. 941+84.72 RT TO STA. 942+04.83 RT
STA. 941+14.09 LT TO STA. 941+69.18 LT

TYPICAL SECTION LEGEND

- | | |
|-------------------------------------|--|
| (A) EX. EMBANKMENT | (1) PR. PCC PAVEMENT, 10" |
| (B) EX. PCC PAVEMENT, 7" | (2) PR. PCC SHOULDERS, 10" |
| (C) EX. HMA PAVEMENT, 7" | (3) PR. EARTHWORK |
| (D) EX. LEVELING BINDER 3/4" | (4) PR. PAINT PAVEMENT MARKING LINE, 4" |
| (E) EX. HMA SURFACE COURSE, 1 1/2" | (5) PR. #6 TIE BARS @ 36" CTRS., 30" |
| (F) EX. HMA SHOULDERS | (6) PR. POROUS GRANULAR EMBANKMENT (SEE STRUCTURE PLANS) |
| (G) EX. AGGREGATE SHOULDERS, TYPE B | (7) PR. WELDED WIRE FABRIC |

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 184-001220

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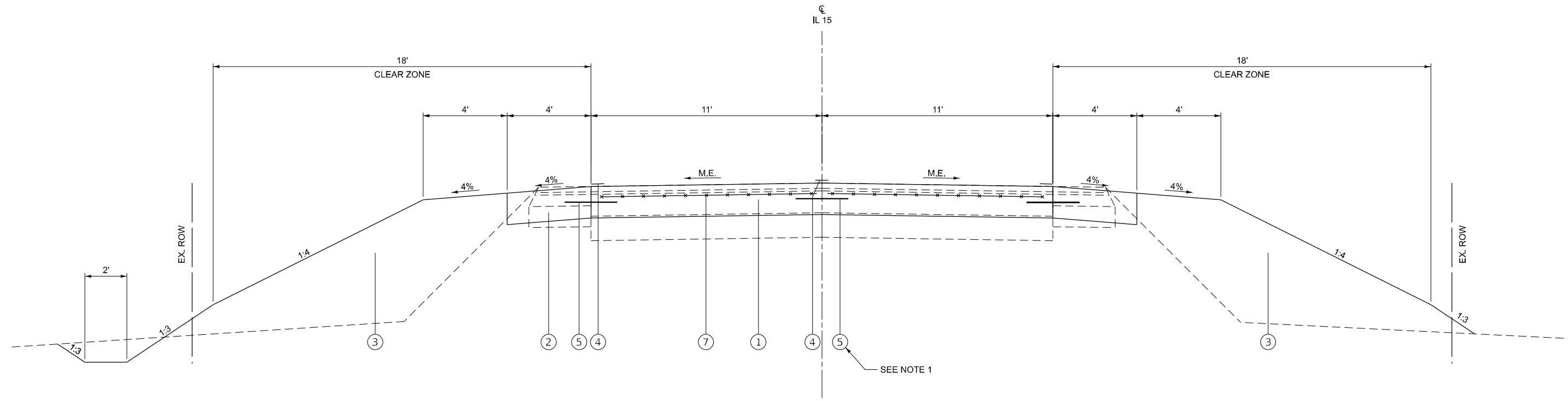
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED TYPICAL SECTION
IL 15 - PR. SN 041-7103

SCALE: N.T.S. SHEET 1 OF 4 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1;12CR-1	JEFFERSON	50	28
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				



PROPOSED TYPICAL SECTION
STA. 941+04.83 RT TO STA. 942+79.59 RT
STA. 941+69.18 LT TO STA. 942+43.84 LT

NOTES:

1. THE COST OF THE #6 TIE BARS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER SQUARE YARD FOR PCC PAVEMENT, 10".

TYPICAL SECTION LEGEND

- | | |
|-------------------------------------|--|
| (A) EX. EMBANKMENT | (1) PR. PCC PAVEMENT, 10" |
| (B) EX. PCC PAVEMENT, 7" | (2) PR. PCC SHOULDERS, 10" |
| (C) EX. HMA PAVEMENT, 7" | (3) PR. EARTHWORK |
| (D) EX. LEVELING BINDER 3/4" | (4) PR. PAINT PAVEMENT MARKING LINE, 4" |
| (E) EX. HMA SURFACE COURSE, 1 1/2" | (5) PR. #6 TIE BARS @ 36" CTRS., 30" |
| (F) EX. HMA SHOULDERS | (6) PR. POROUS GRANULAR EMBANKMENT (SEE STRUCTURE PLANS) |
| (G) EX. AGGREGATE SHOULDERS, TYPE B | (7) PR. WELDED WIRE FABRIC |

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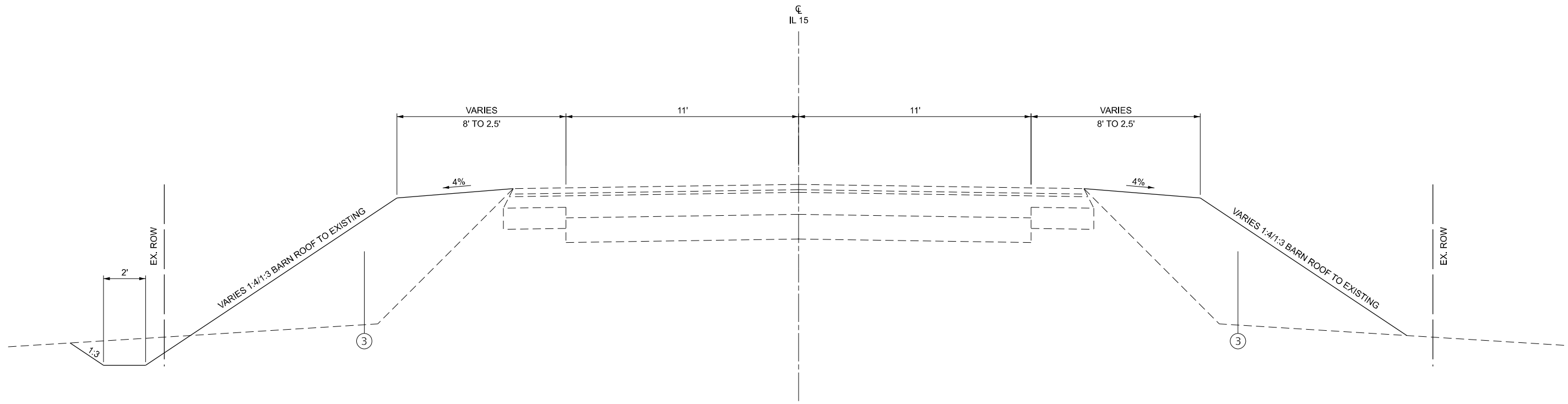
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED TYPICAL SECTION
IL 15 - PR. SN 041-7103

SCALE: N.T.S. SHEET 2 OF 4 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1;12CR-1	JEFFERSON	50	29
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				



PROPOSED TYPICAL SECTION
 STA. 942 + 79.59 RT TO STA. 943 + 34.59 RT
 STA. 942 + 43.84 LT TO STA. 942 + 98.84 LT

TYPICAL SECTION LEGEND

- | | |
|-------------------------------------|--|
| (A) EX. EMBANKMENT | (1) PR. PCC PAVEMENT, 10" |
| (B) EX. PCC PAVEMENT, 7" | (2) PR. PCC SHOULDERS, 10" |
| (C) EX. HMA PAVEMENT, 7" | (3) PR. EARTHWORK |
| (D) EX. LEVELING BINDER 3/4" | (4) PR. PAINT PAVEMENT MARKING LINE, 4" |
| (E) EX. HMA SURFACE COURSE, 1 1/2" | (5) PR. #6 TIE BARS @ 36" CTRS., 30" |
| (F) EX. HMA SHOULDERS | (6) PR. POROUS GRANULAR EMBANKMENT (SEE STRUCTURE PLANS) |
| (G) EX. AGGREGATE SHOULDERS, TYPE B | (7) PR. WELDED WIRE FABRIC |

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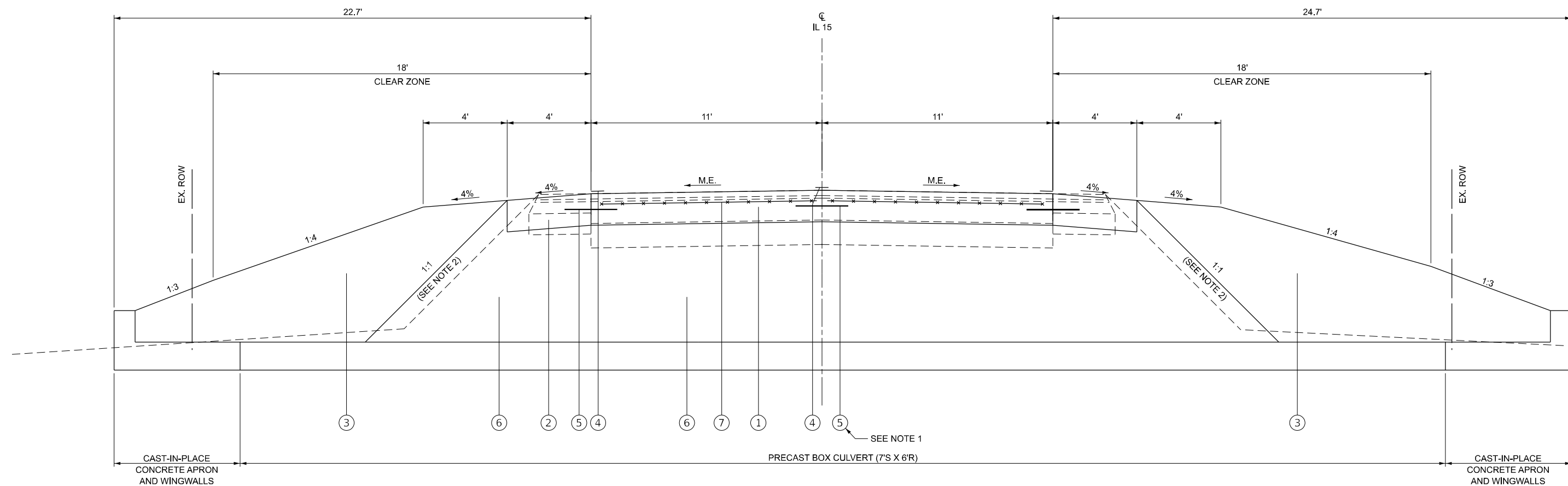
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 CHECKED -
 DATE -

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 REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED TYPICAL SECTION
IL 15 - PR. SN 041-7103
 SCALE: N.T.S. SHEET 3 OF 4 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1;12CR-1	JEFFERSON	50	30
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				



PROPOSED CULVERT SECTION
STA. 942 + 30.92
(SN 041-7103)
DIMENSIONS AT RT ANGLE TO ROADWAY

NOTES:

1. THE COST OF THE #6 TIES BARS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER SQUARE YARD FOR PCC PAVEMENT, 10".
2. STAGE CONSTRUCTION. SEE STRUCTURE PLANS.

TYPICAL SECTION LEGEND

<p>(A) EX. EMBANKMENT</p> <p>(B) EX. PCC PAVEMENT, 7"</p> <p>(C) EX. HMA PAVEMENT, 7"</p> <p>(D) EX. LEVELING BINDER 3/4"</p> <p>(E) EX. HMA SURFACE COURSE, 1 1/2"</p> <p>(F) EX. HMA SHOULDERS</p> <p>(G) EX. AGGREGATE SHOULDERS, TYPE B</p>	<p>(1) PR. PCC PAVEMENT, 10"</p> <p>(2) PR. PCC SHOULDERS, 10"</p> <p>(3) PR. EARTHWORK</p> <p>(4) PR. PAINT PAVEMENT MARKING LINE, 4"</p> <p>(5) PR. #6 TIE BARS @ 36" CTRS., 30"</p> <p>(6) PR. POROUS GRANULAR EMBANKMENT (SEE STRUCTURE PLANS)</p> <p>(7) PR. WELDED WIRE FABRIC</p>
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 DRAWN - BAB
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 PLOT DATE = 1/23/2026
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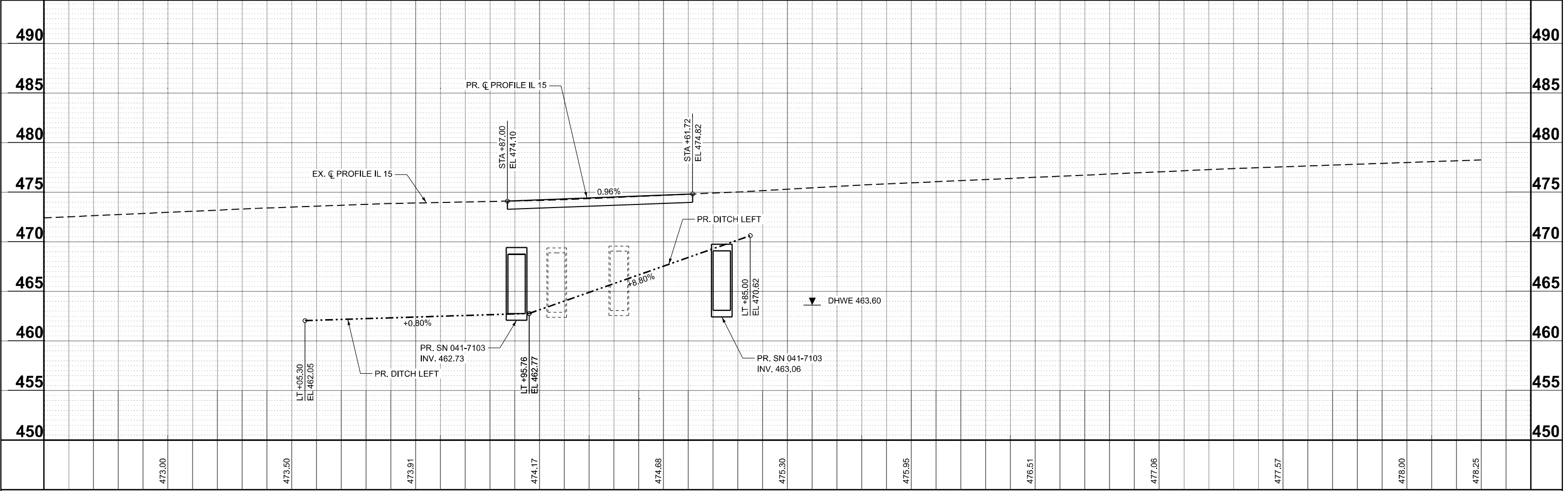
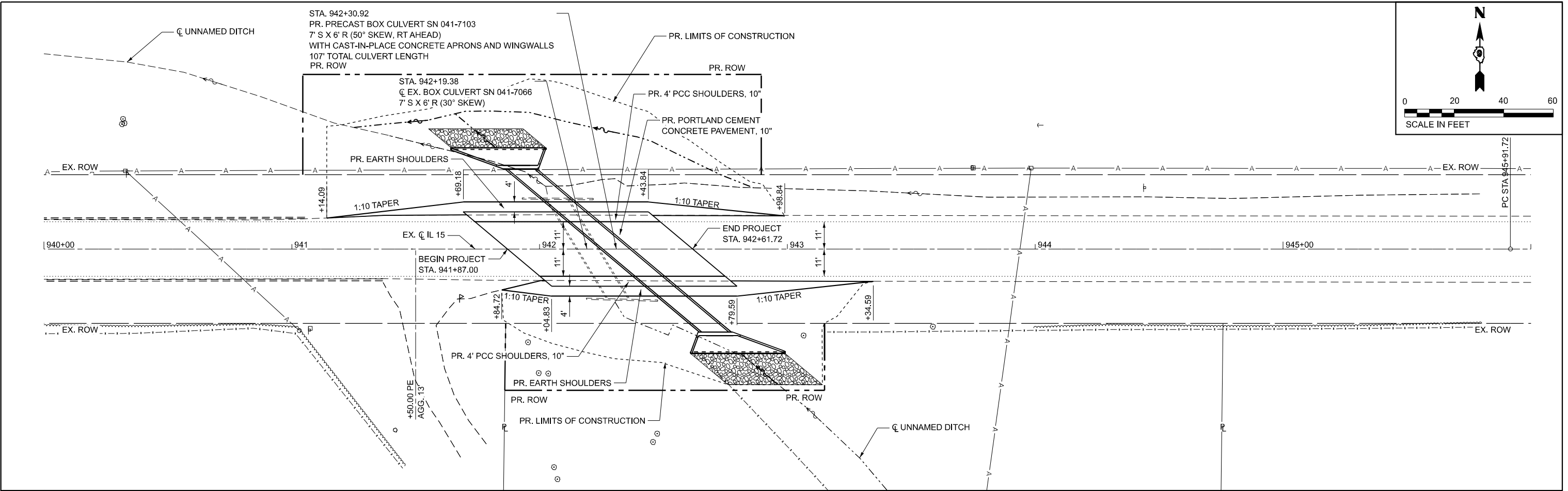
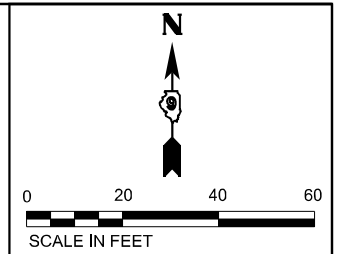
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 DRAWN - BAB
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 DATE -
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 REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED TYPICAL SECTION
IL 15 - PR. SN 041-7103

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1;12CR-1	JEFFERSON	50	31
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				



940+00	940+50	941+00	941+50	942+00	942+50	943+00	943+50	944+00	944+50	945+00	945+50	946+00
	473.00	473.50	473.91	474.17	474.68	475.30	475.95	476.51	477.06	477.57	478.00	478.25

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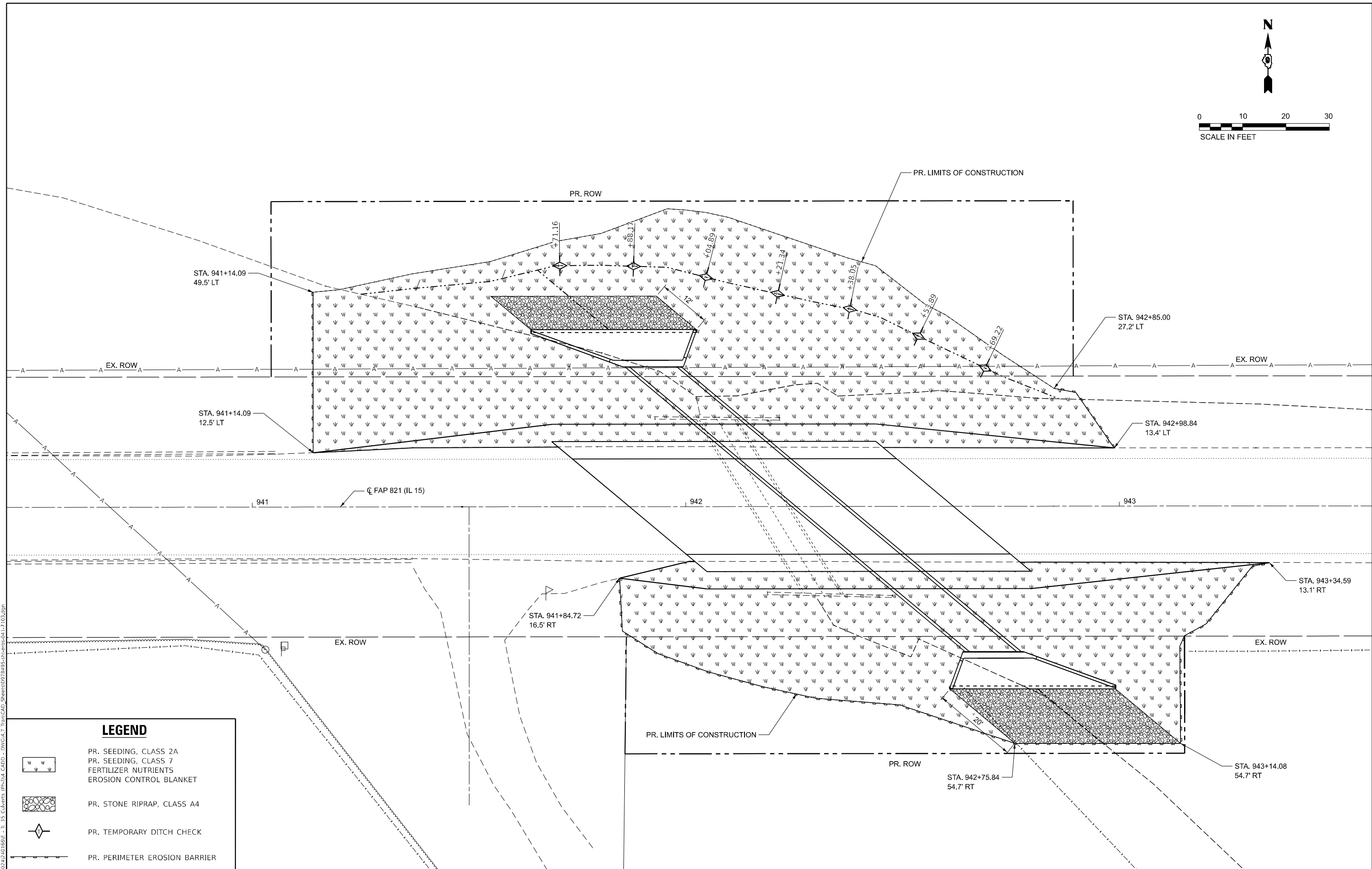
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 WWW.TWM-INC.COM
 IL DESIGN FIRM
 LICENSE NO: 184-001220
 USER NAME = bbillhartz
 PLOT SCALE = 0.16666633" / in.
 PLOT DATE = 1/23/2026

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






STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
IL 15 - PR. SN 041-7103
 SCALE: 1"=20' SHEET 1 OF 1 SHEETS STA. 939+00.00 R2 TO STA. 946+00.00 R2

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1; 12CR-1	JEFFERSON	50	33
CONTRACT NO. 78495			ILLINOIS FED. AID PROJECT	



LEGEND

-  PR. SEEDING, CLASS 2A
-  PR. SEEDING, CLASS 7
-  FERTILIZER NUTRIENTS
-  EROSION CONTROL BLANKET
-  PR. STONE RIPRAP, CLASS A4
-  PR. TEMPORARY DITCH CHECK
-  PR. PERIMETER EROSION BARRIER

MODEL: D:\p\h\... FILE NAME: P:\2024\201666E - IL 15 Cultures (R)\114 CAD - DIV\4.7 Tran\CAD_Sheets\078495-rc-041-1103.dgn



TWM, INC.
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IL DESIGN FIRM
LICENSE NO:
184-001220

USER NAME =	bbillhartz
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PLOT DATE =	1/23/2026

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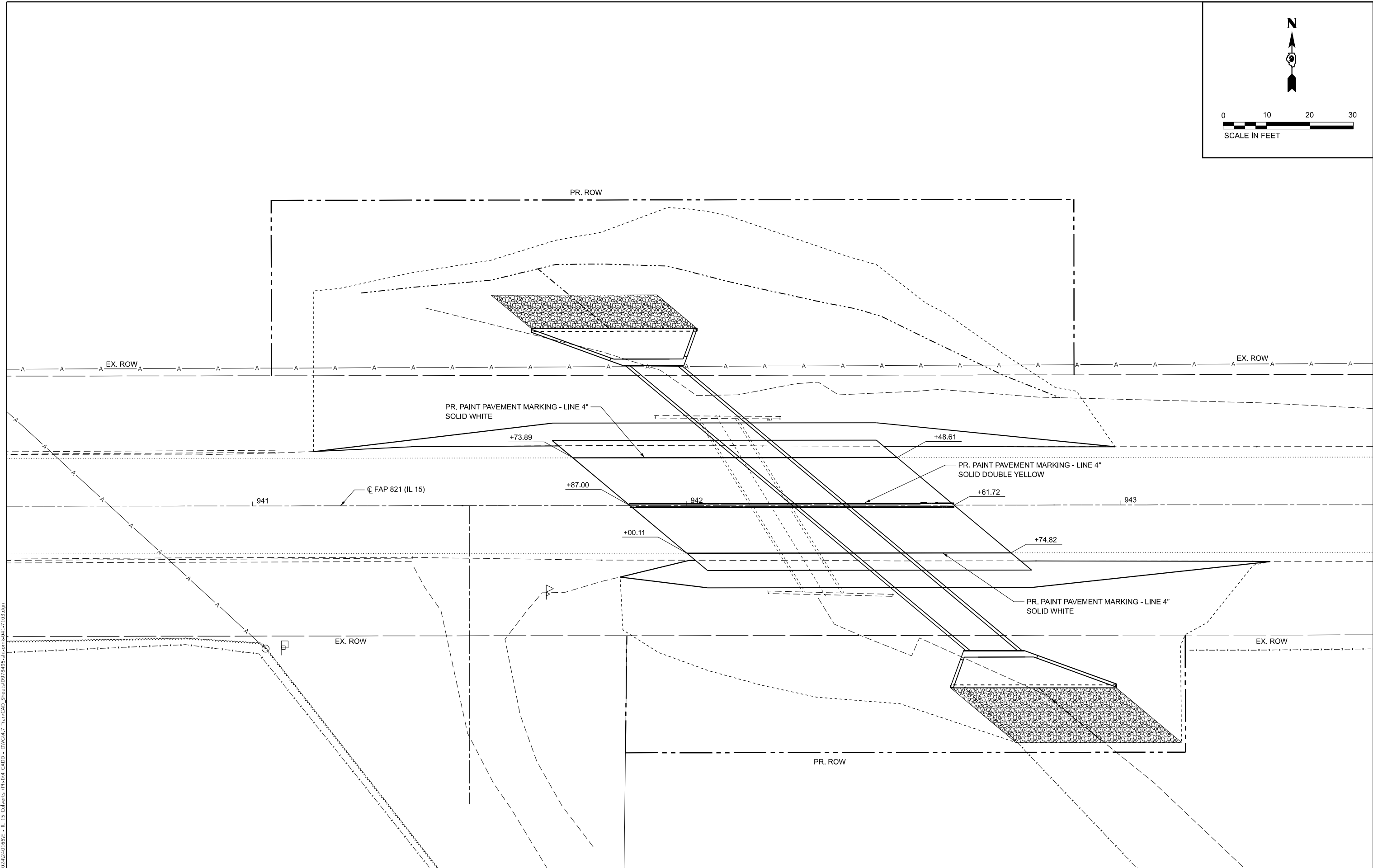
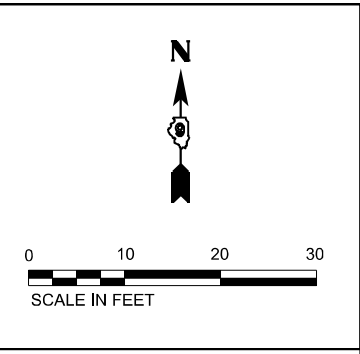
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REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EROSION CONTROL PLAN
IL 15 - PR. SN 041-7103**

SCALE: 1"=10' SHEET 1 OF 1 SHEETS STA. 940+50.00 TO STA. 943+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1;12CR-1	JEFFERSON	50	34
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				



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PLOT SCALE =	20,000' / in.	DATE -		REVISED -	
PLOT DATE =	1/23/2026				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING PLAN
IL 15 - PR. SN 041-7103

SCALE: 1"=10' SHEET 1 OF 1 SHEETS STA. 940+50.00 TO STA. 943+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1;12CR-1	JEFFERSON	50	35
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				

Benchmark: To be determined during construction.

Existing Structure: S.N. 041-7066 is a single cell concrete box culvert (7'x6') 49'-0" out-to-out of headwalls. The culvert has 90° wingwalls on upstream and downstream ends. The structure is skewed 30° from roadway.

Traffic Control: Weekend road closure will be used to remove existing structure and to install the precast concrete box culvert. Traffic will be open during construction of the end sections.

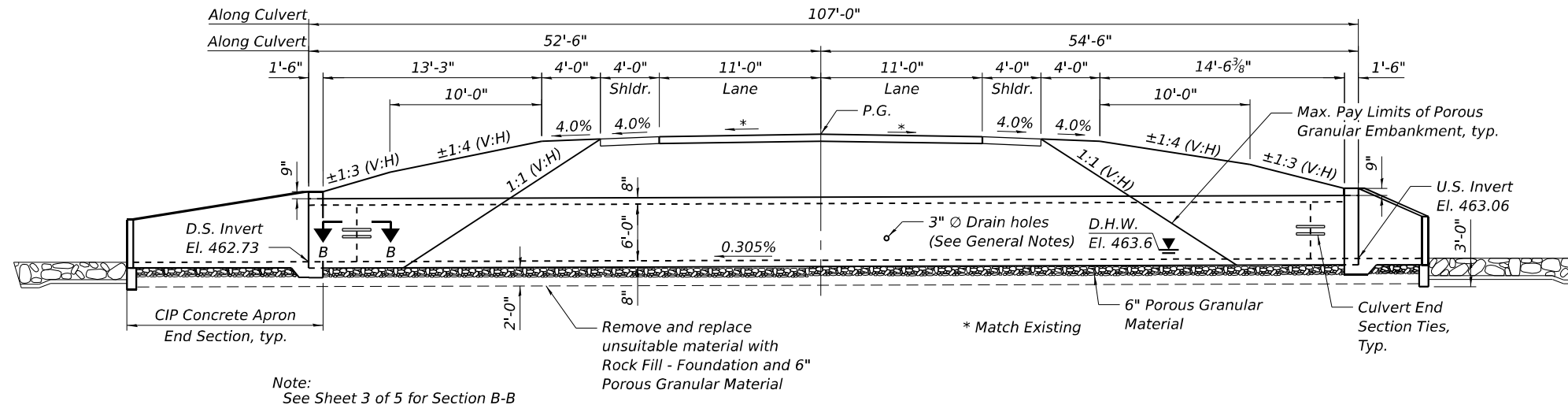
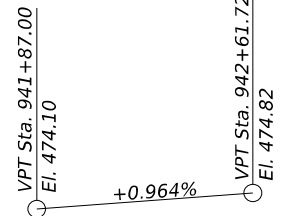
No Salvage.

INDEX OF SHEETS

1. General Plan and Elevation
2. General Data
3. Stage Const. Details
- 4-5. Apron End Section Details

DESIGN SPECIFICATIONS

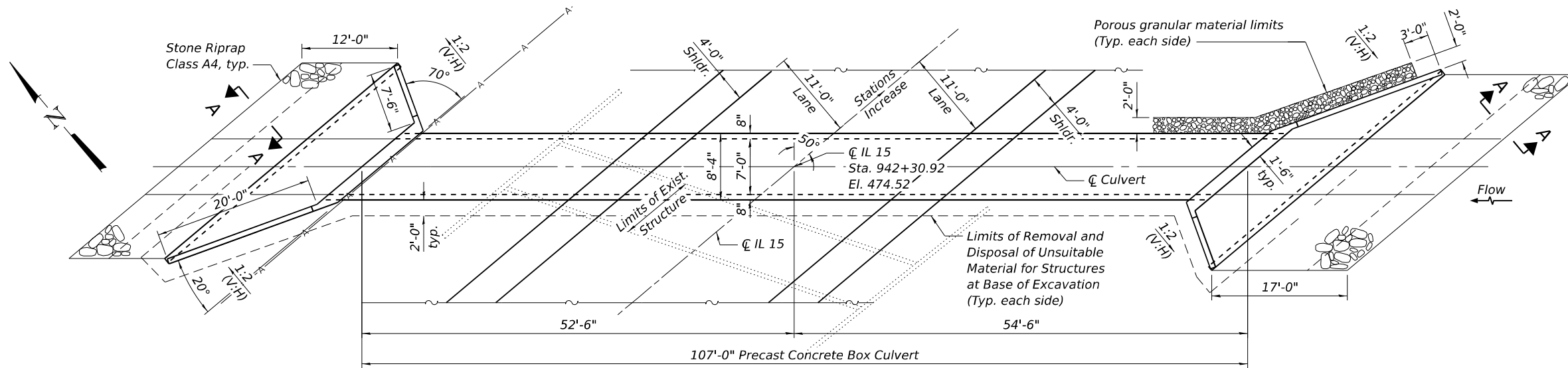
2024 AASHTO LRFD Bridge Design Specifications, 10th Edition



PROFILE GRADE
(Along C/L 15)

LONGITUDINAL SECTION

(Dimensions at Rt. L's unless otherwise noted)

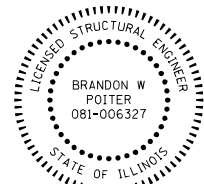


PLAN

WATERWAY INFORMATION

Drainage Area = 0.1 sq. mi.		Overtopping Elev. = 473.6 @ Sta. 931+50							
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	50	17	42	42	463.5	0.4	0.4	463.9	463.9
Base	100	18	42	42	463.6	0.5	0.5	464.1	464.1
Max. Calc.	500	22	42	42	463.6	0.6	0.6	464.2	464.2

10 Yr. Outlet Velocity through Exist. Structure = 4.0 ft/s
10 Yr. Outlet Velocity through Prop. Structure = 3.9 ft/s



DATE: 01/26/2026
EXPIRES: 11/30/2026

LOADING HL-93

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

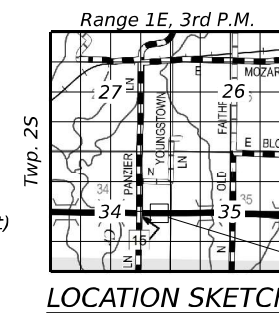
DESIGN STRESSES

PRECAST UNITS

$f_c = 5,000$ psi
 $f_y = 65,000$ psi (Welded Wire Reinforcement)

FIELD UNITS

$f_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)



GENERAL PLAN AND ELEVATION
IL 15 OVER UNNAMED DITCH
F.A.P. RTE. 821 SEC. 11CR-1; 12CR-1
JEFFERSON COUNTY
STATION 942+30.92
STRUCTURE NO. 041-7103

MODEL: Default
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DESIGNED - LAB
CHECKED - JBE
PLOT SCALE = 0.167' / in.
DRAWN - LAB
PLOT DATE = 1/26/2026
CHECKED - JBE
REVISED -

DESIGNED - LAB
CHECKED - JBE
DRAWN - LAB
CHECKED - JBE
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 041-7103

SHEET 1 OF 5 SHEETS

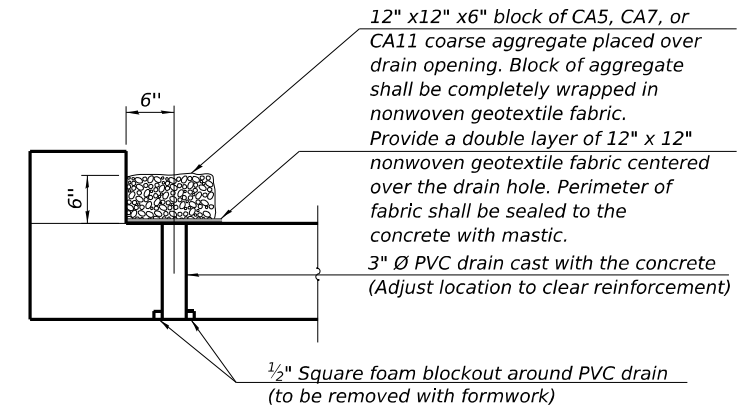
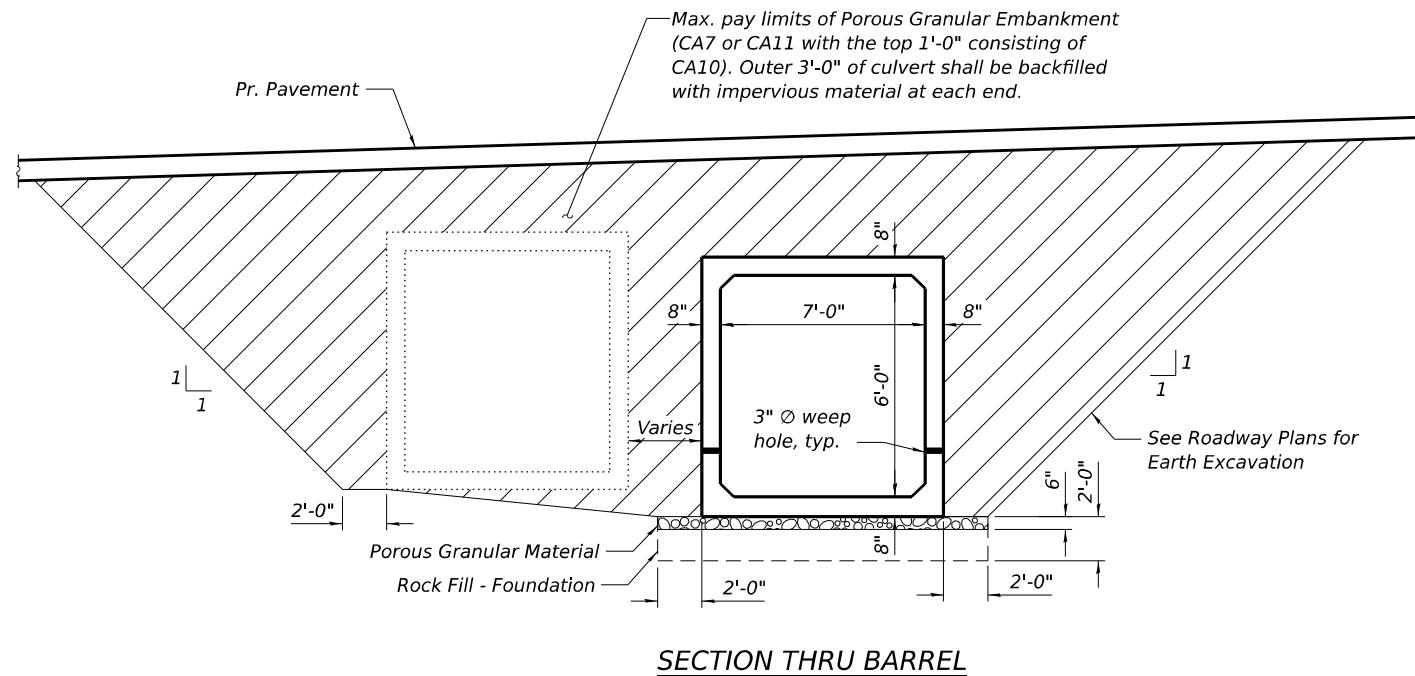
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1; 12CR-1	JEFFERSON	50	36
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				

GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated.
 The design fill height for this box is 5 ft. The precast box culvert sections shall conform to the requirements of ASTM C 1577.
 Drain holes shall be provided on exterior culvert walls for each precast box segment with a clear rise greater than 3 ft. The drain hole shall be located within 1/3 of the clear rise of the box culvert, shall not intercept the haunch, and shall conform to the requirements of Article 503.11 of the Standard Specification.
 Nonwoven geotextile fabric shall conform to the requirements of Art. 1080.01 of the Standard Specifications. The minimum weight of the fabric shall be 6 ounces per square yard.
 Precast concrete box culverts and box culvert end sections shall be backfilled with Porous Granular Embankment in the required excavation areas on the sides of the box culvert from the top of the box culvert to the bottom of the box culvert. This area of PGE is included in the Porous Granular Embankment pay item. The 6-inch thick layer of porous granular material required under the precast concrete box culvert, according to Section 540.06 of the standard specifications, shall also apply to the end sections. Cost of this porous granular material will not be paid for separately but shall be included in the unit price of the work for which it is required.
 The limits and quantities of removal and disposal of unsuitable material shown may be modified by the district Geotechnical and Field Engineers for variable subsurface conditions encountered in the field.
 Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
 The last two precast barrel sections at each end shall be tied together using culvert ties as shown on culvert tie details sheet. cost included in precast concrete box culverts of the size specified in the plans.

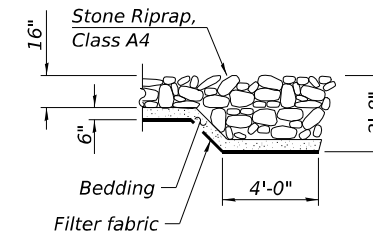
TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Porous Granular Embankment	Cu. Yd.	635
Stone Riprap, Class A4	Sq. Yd.	86
Filter Fabric	Sq. Yd.	86
Removal of Existing Structures No. 2	Each	1
Removal and Disposal of Unsuitable Material for Structures	Cu. Yd.	154
Reinforcement Bars, Epoxy Coated	Pound	2,270
Concrete Box Culverts	Cu. Yd.	28.5
Precast Concrete Box Culverts 7'x6'	Foot	107
Rock Fill - Foundation	Ton	277



DRAIN DETAIL

(All costs associated with furnishing and constructing the above drain detail will not be measured for payment but shall be included in the contract unit price for the associated work.)



SECTION A-A

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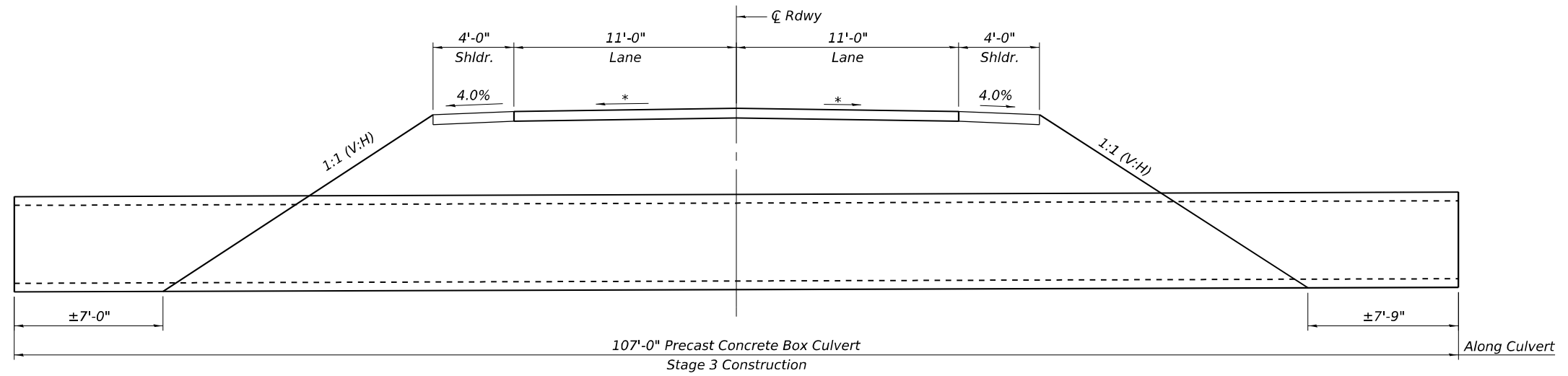
TWM
 ENGINEERING
 GEOSPATIAL SERVICES
 TWM, INC.
 WWW.TWM-INC.COM
 IL DESIGN FIRM
 LICENSE NO:
 184-001220

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		CHECKED -	JBE	REVISED -	
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 041-7103
 SHEET 2 OF 5 SHEETS

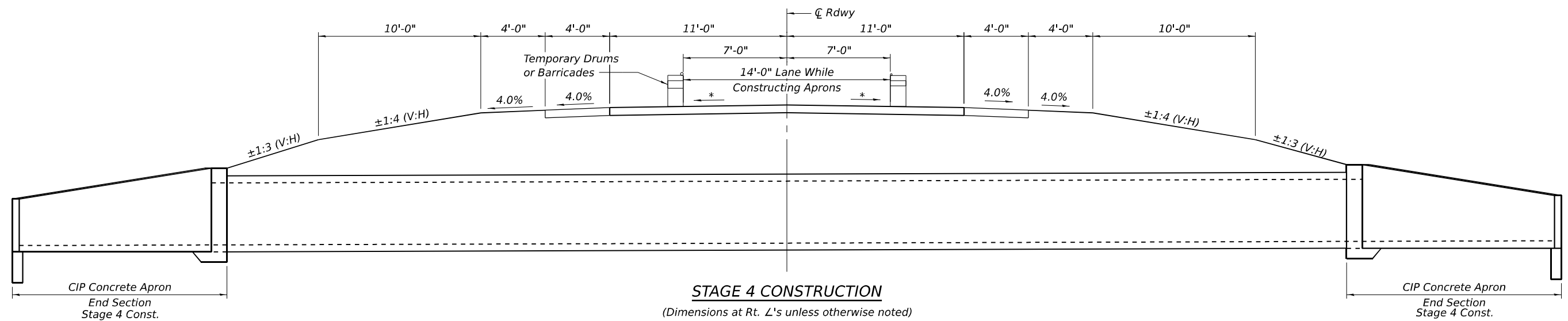
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821	11CR-1; 12CR-1	JEFFERSON	50	37
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				



STAGE 3 CONSTRUCTION

(Dimensions at Rt. \perp 's unless otherwise noted)

* Match Existing



STAGE 4 CONSTRUCTION

(Dimensions at Rt. \perp 's unless otherwise noted)

CIP Concrete Apron
End Section
Stage 4 Const.

CIP Concrete Apron
End Section
Stage 4 Const.

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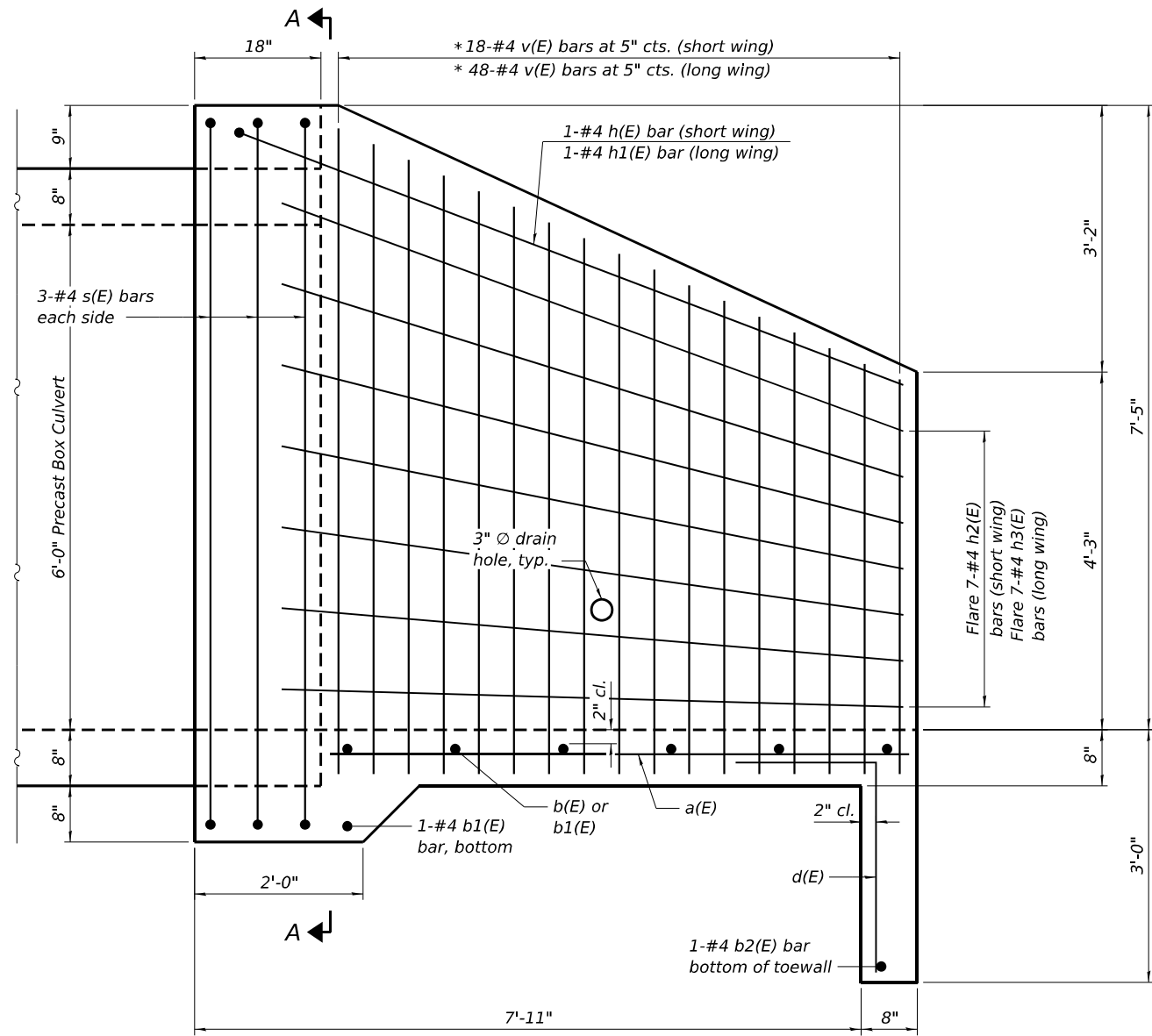
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

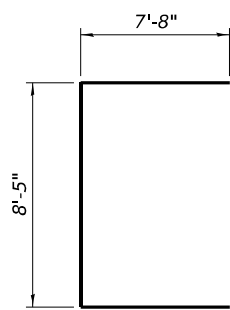
**STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 041-7103**

SHEET 3 OF 5 SHEETS

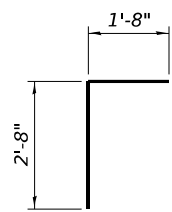
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CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				



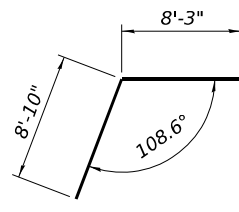
HALF SIDE ELEVATION
(Dimensions at Rt. \angle 's)



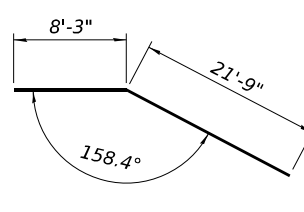
BAR s(E)



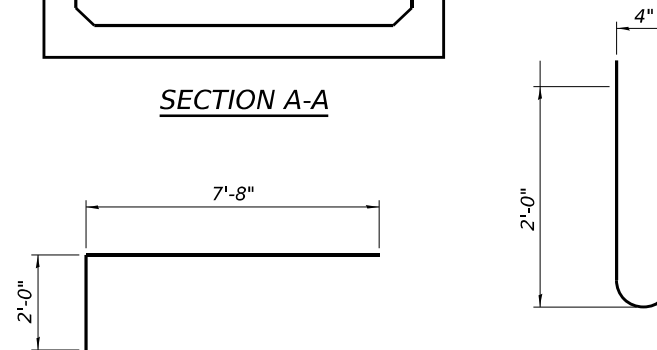
BAR d(E)



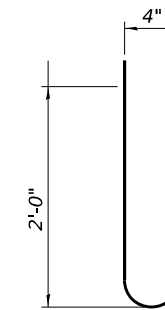
BAR h(E)



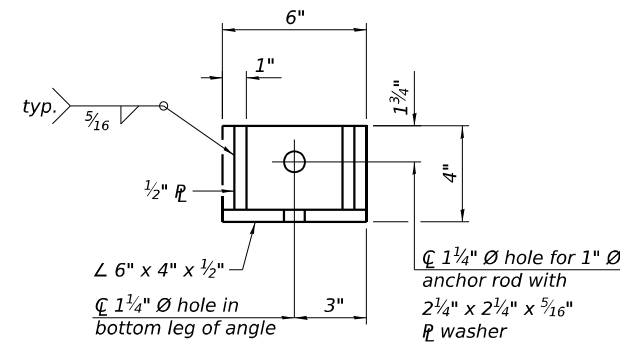
BAR h1(E)



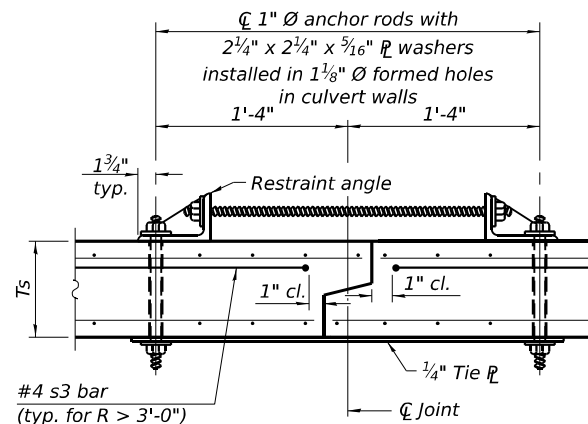
BAR v(E)



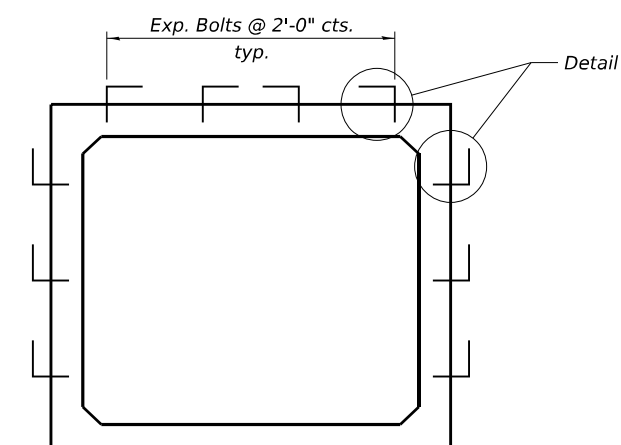
BAR s3



RESTRAINT ANGLE DETAIL

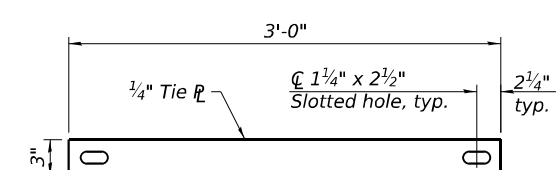


SECTION B-B
(Showing culvert tie details)

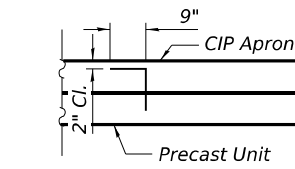


SECTION A-A

Notes:
 1" \varnothing anchor rods for the culvert ties shall conform to the requirements of ASTM F1554, Grade 105. Structural steel for the tie plate and restraint angle shall conform to the requirements of Article 1006.04 of the Standard Specifications. All components of the culvert tie detail shall be galvanized according to the requirements of AASHTO M 111 or M 232 as applicable. 2 1/4"x2 1/4"x5/16" plate washers shall be provided under each nut required for the anchor rods. Anchor rods connecting precast sections shall be brought to a snug tight condition followed by an additional 1/2 turn on one of the nuts for anchor rods installed in the walls. Match marks shall be provided on the bolt and nut to verify relative rotation between the bolt and the nut. Holes in the walls for the culvert tie assembly may be drilled using core bits in lieu of using formed holes.
 The cast-in-place apron end section shall be tied to the precast barrel at each end using expansion bolts spaced at 2'-0" centers as shown in Section A-A. Expansion bolts shall be 3/4" diameter hooked bolts. The hooks shall be as shown in Detail A and shall be bent in the field as needed. Cost included in precast concrete box culverts of the size specified in the plans
 Reinforcement bars shall conform to the requirements of ASTM A 706.



TIE PLATE DETAIL



DETAIL A

BILL OF MATERIAL - 2 APRONS

Bar	No.	Size	Length	Shape
a(E)	74	#4	6'-9"	—
b(E)	5	#4	28'-7"	—
b1(E)	14	#4	18'-6"	—
b2(E)	2	#4	37'-10"	—
d(E)	78	#4	4'-4"	└
h(E)	2	#4	17'-1"	└
h1(E)	2	#4	30'-0"	└
h2(E)	14	#4	8'-6"	—
h3(E)	14	#4	22'-2"	—
s(E)	12	#4	23'-9"	└
v(E)	132	#4	9'-8"	└
Concrete Box Culverts		Cu. Yd.	28.5	
Reinforcement Bars, Epoxy Coated		Pound	2,270	

*Cut or bend to fit
 Note:
 Exposed edges shall be beveled 3/4"

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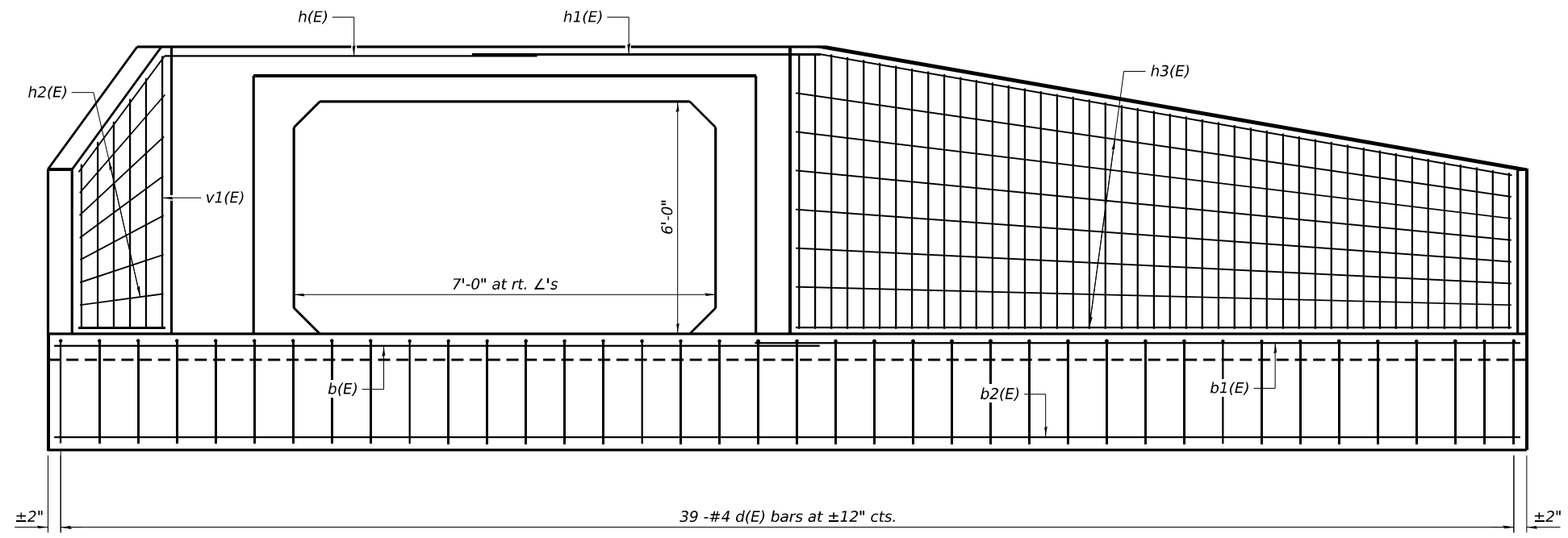
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

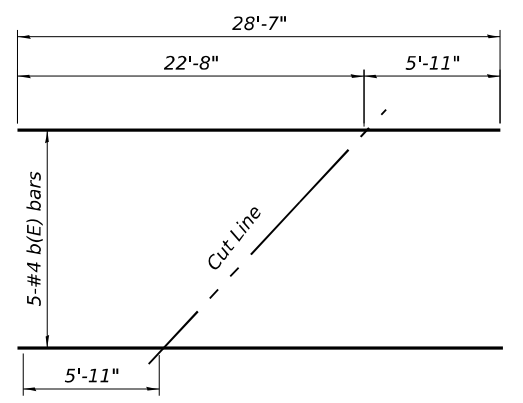
APRON END SECTION DETAILS
STRUCTURE NO. 041-7103

SHEET 4 OF 5 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1; 12CR-1	JEFFERSON	50	39
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				



ELEVATION



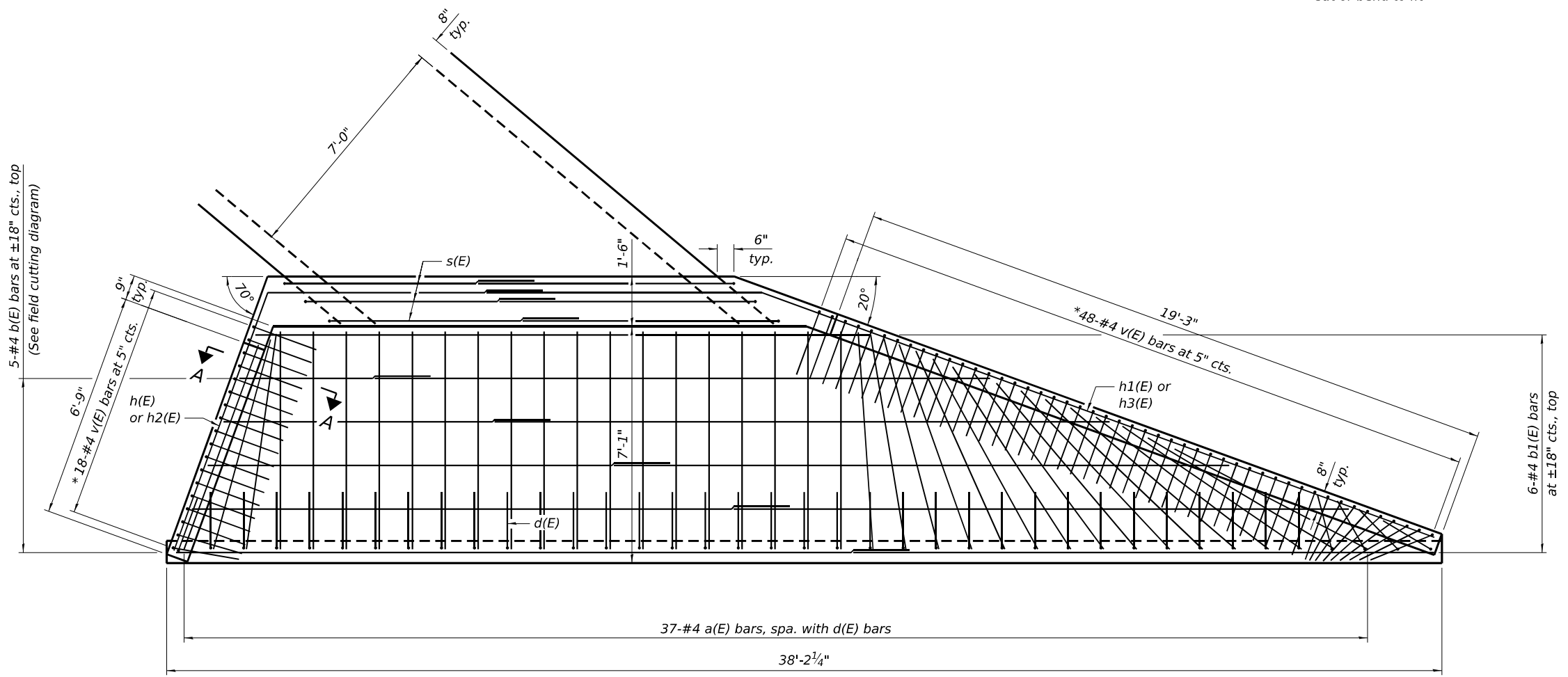
FIELD CUTTING DIAGRAM

Order b(E) bars full length. Cut as shown and use remainder of bars in opposite apron end section.

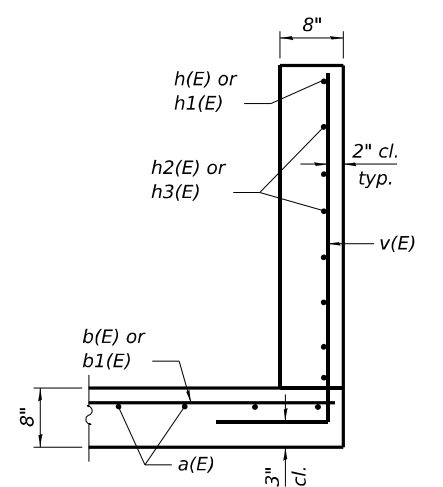
* Cut or bend to fit

MINIMUM BAR LAP

#4 bar = 1'-8"



PLAN



SECTION A-A

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GEOSPATIAL SERVICES
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IL DESIGN FIRM
LICENSE NO:
184-001220

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PLOT DATE = 1/26/2026	DRAWN - MJH/LAB	REVISED -
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**APRON END SECTION DETAILS
STRUCTURE NO. 041-7103**

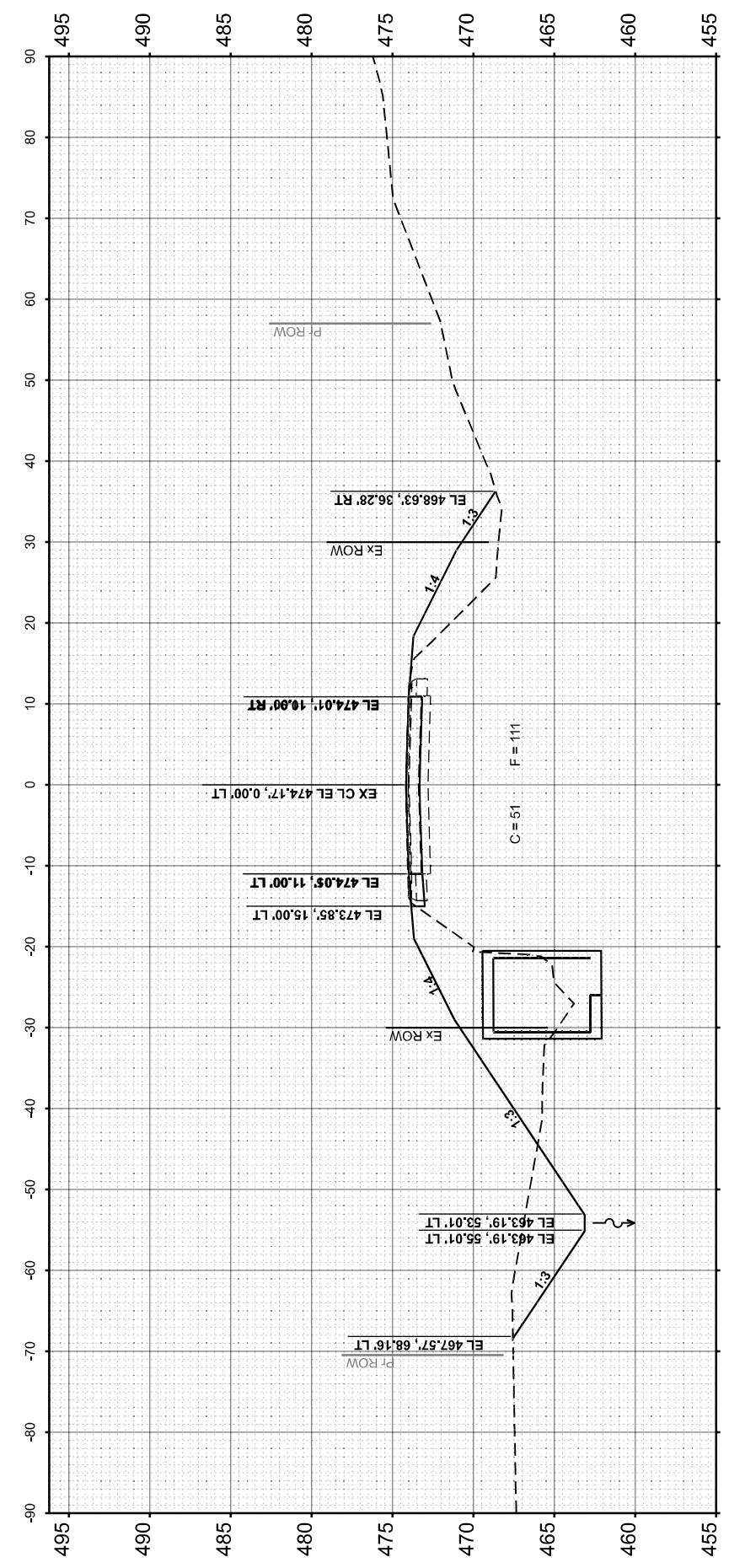
SHEET 5 OF 5 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1; 12CR-1	JEFFERSON	50	40
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				

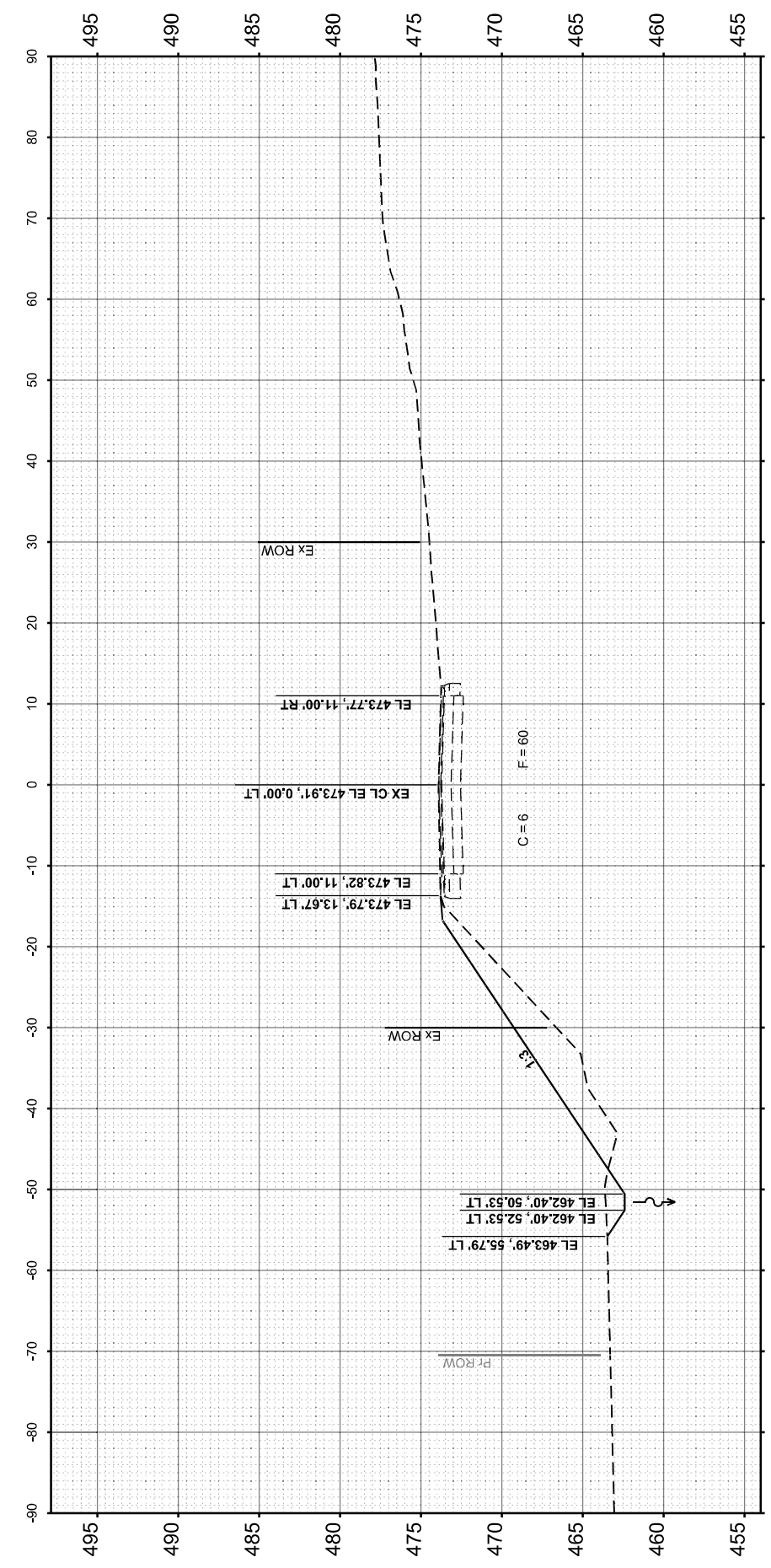
FINAL SURVEY NO.	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
AREAS CHECKED	TEMPLATE		
	AREAS CHECKED		

ORIGINAL SURVEY NO.	SURVEYED	BY	DATE
	PLOTTED		
	TEMPLATE		
	AREAS CHECKED		

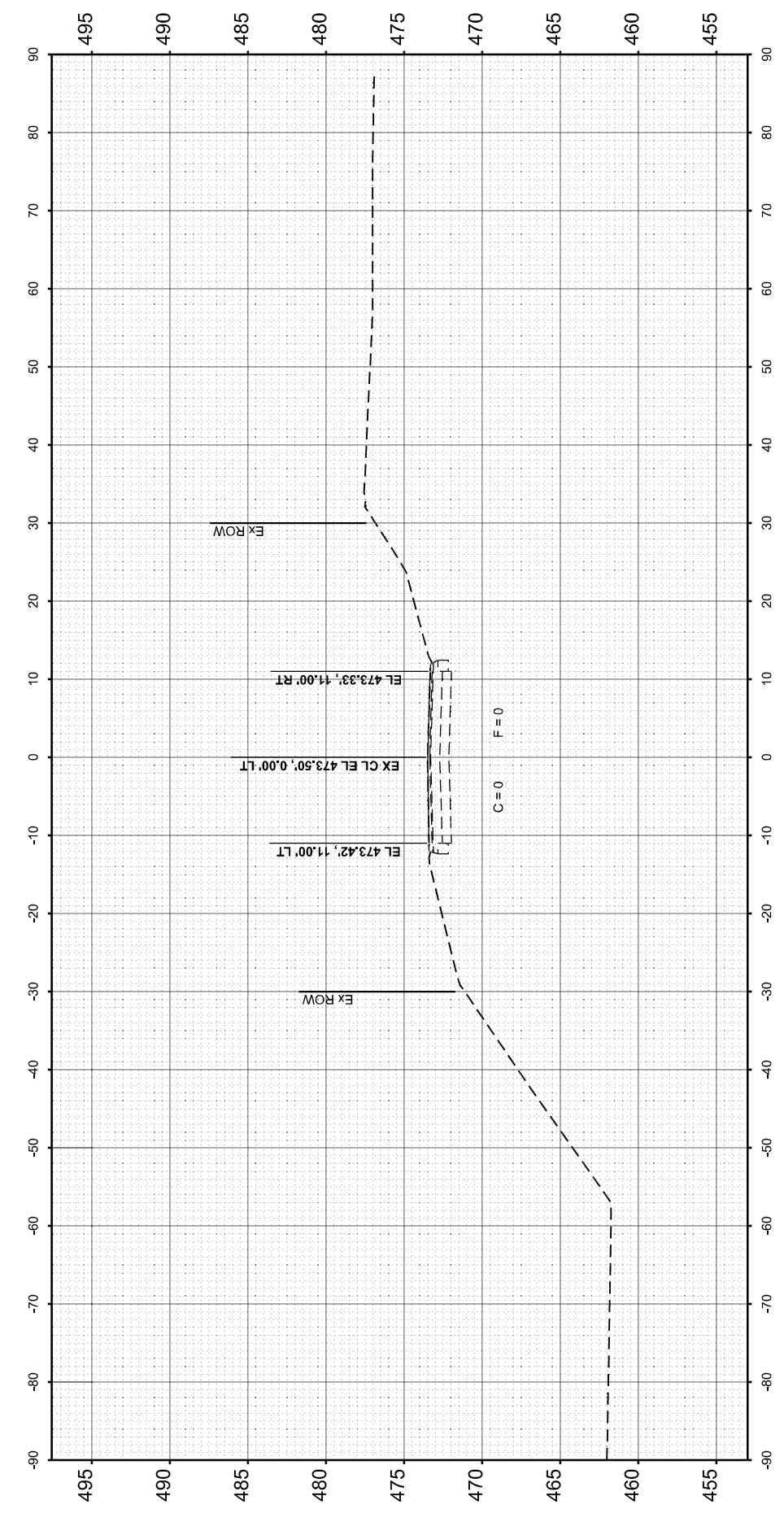
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 FILE NAME: P:\2024\20240606E - IL 15 Culverts (P)\1111 CAD - DWG\1111_Traffic\1111_Culverts\DWG\1111_Culverts\1111-7103.dwg



STA 942+00.00



STA 941+50.00



STA 941+00.00



TWM, INC.
 www.twm-inc.com
 IL DESIGN FIRM
 LICENSE NO:
 184-001220

USER NAME = bhillhartz
 DESIGNED - TBP
 DRAWN - BAR
 CHECKED -
 DATE -

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

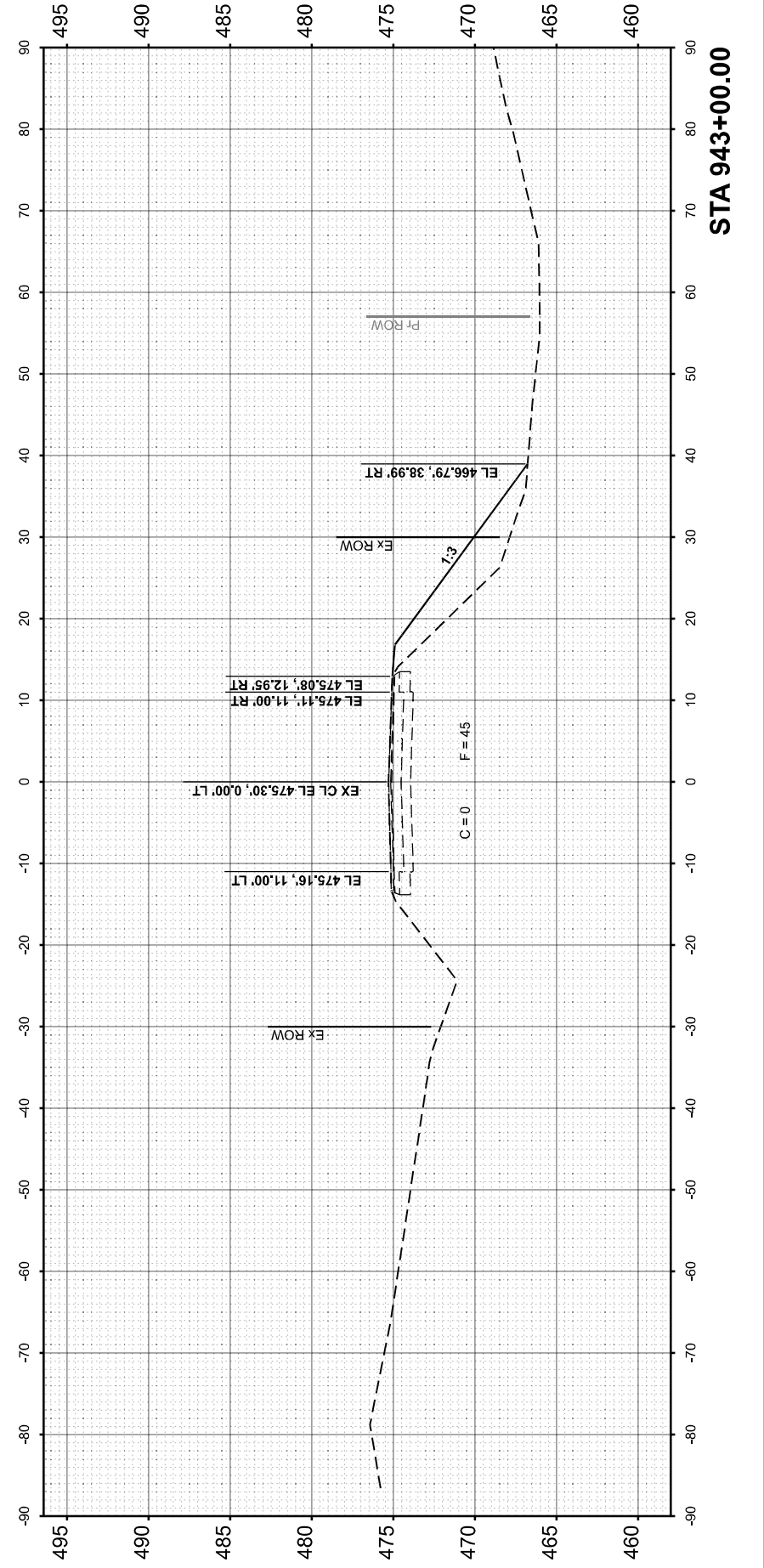
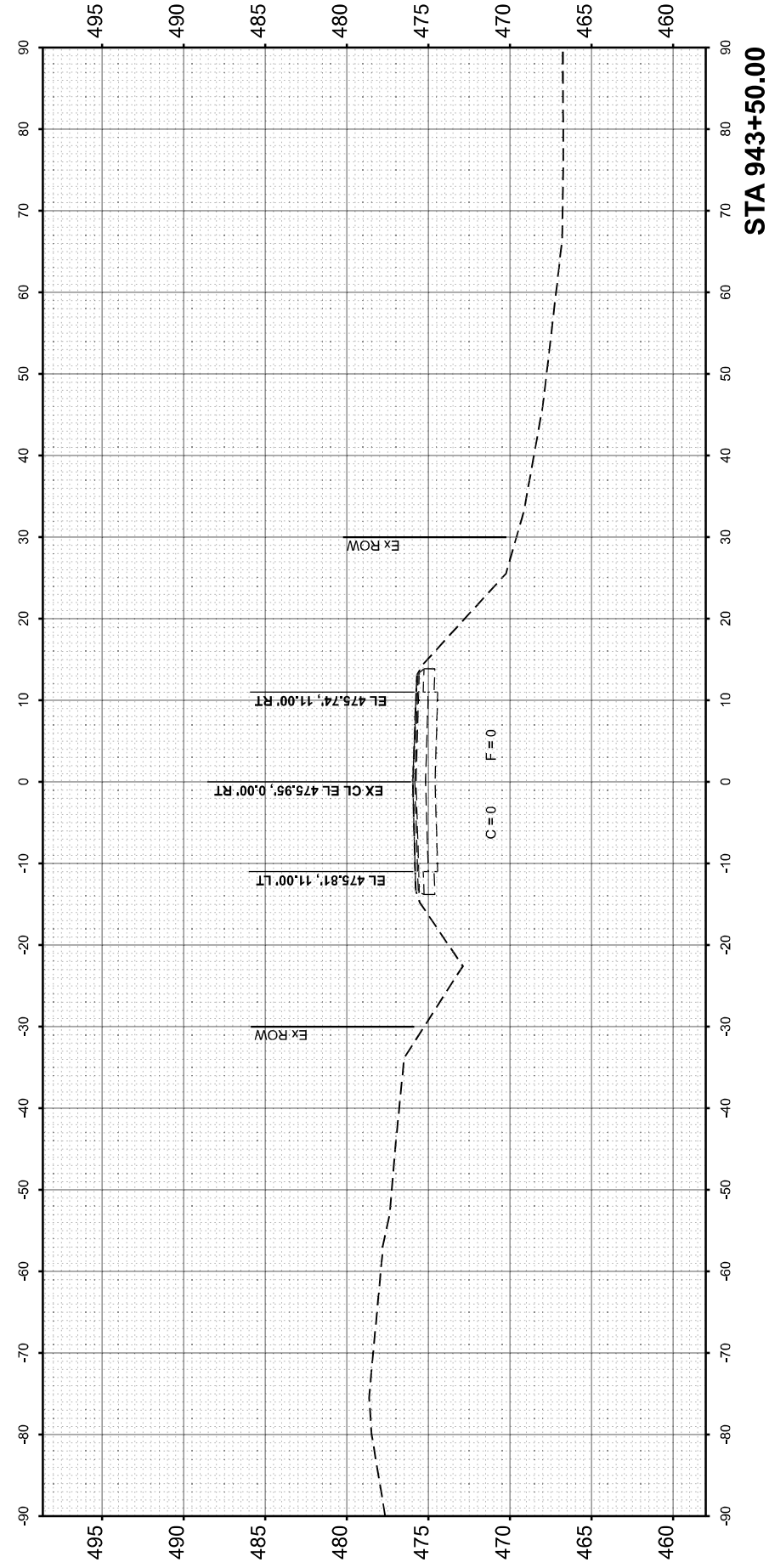
CROSS SECTIONS
 IL 15 - PR, SN 041-7103
 SCALE: 1"=10'
 SHEET 1 OF 3 SHEETS
 STA. 941+00.00 R2 TO STA. 942+00.00 R2

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1; 12CR-1	JEFFERSON	50	41
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				

FINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

MODEL: S:\041-7103 - 943+00.00 R2-1
FILE NAME: P:\2024\240166E - IL 15 Culverts (P)\111 CAD - DWG\17 TranCAD_Sheet\07\0955-SPR-XSEC-041-7103.dgn



TWM, INC.
www.twm-inc.com
IL DESIGN FIRM
LICENSE NO: 184-001220

USER NAME = bhillhartz
DESIGNED - TBP
DRAWN - BAB
CHECKED -
DATE -

REVISIED -
REVISIED -
REVISIED -
REVISIED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
IL 15 - PR. SN 041-7103
SCALE: 1"=10'
SHEET 3 OF 3 SHEETS
STA. 943+00.00 R2 TO STA. 943+50.00 R2

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1; 12CR-1	JEFFERSON	50	43
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				

SUGGESTED STAGE CONSTRUCTION SEQUENCE
FOR CONSTRUCTION PRE-STAGE A

TRAFFIC CONTROL PLACEMENT

1. INSTALL TRAFFIC CONTROL FOR 1 LANE, 2 WAY TRAFFIC WITH TEMPORARY SIGNALS PRIOR TO ROAD CLOSURE. (SEE STAGING PLAN)

SUGGESTED STAGE CONSTRUCTION SEQUENCE
FOR STAGE 1

CULVERT REPLACEMENT: SN 041-7102

1. ERECT DETOUR SIGNING.
2. CLOSE IL 15 TO THRU TRAFFIC FOR 1 WEEKEND UTILIZING HIGHWAY STANDARD BLR 21. (SEE SPECIAL PROVISIONS)
3. REMOVE EXISTING PAVEMENT AND EXISTING STRUCTURE.
4. INSTALL PRECAST BOX CULVERT SECTIONS. (SEE STRUCTURE PLANS)
5. BACKFILL EXISTING AND PROPOSED CULVERT LOCATIONS WITH POROUS GRANULAR EMBANKMENT.
6. CONSTRUCT PCC PAVEMENT AND PCC SHOULDERS.
7. REOPEN IL 15 TO 1 LANE, 2 WAY TRAFFIC WITH TEMPORARY SIGNALS. (SEE STAGING PLAN)

SUGGESTED STAGE CONSTRUCTION SEQUENCE
FOR STAGE 2

CULVERT REPLACEMENT: 041-7102

1. CONSTRUCT CAST-IN-PLACE CONCRETE APRONS AND WINGWALLS. (SEE STRUCTURE PLANS)

SUGGESTED STAGE CONSTRUCTION SEQUENCE
FOR STAGE 3

CULVERT REPLACEMENT: 041-7103

1. CLOSE IL 15 TO THRU TRAFFIC FOR 1 WEEKEND UTILIZING HIGHWAY STANDARD BLR 21. (SEE SPECIAL PROVISIONS)
2. REMOVE EXISTING PAVEMENT AND EXISTING STRUCTURE.
3. INSTALL PRECAST BOX CULVERT SECTIONS. (SEE STRUCTURE PLANS)
4. BACKFILL EXISTING AND PROPOSED CULVERT LOCATIONS WITH POROUS GRANULAR EMBANKMENT.
5. CONSTRUCT PCC PAVEMENT AND PCC SHOULDERS.
6. REOPEN IL 15 TO 1 LANE, 2 WAY TRAFFIC WITH TEMPORARY SIGNALS. (SEE STAGING PLAN)

SUGGESTED STAGE CONSTRUCTION SEQUENCE
FOR STAGE 4

CULVERT REPLACEMENT: 041-7103

1. CONSTRUCT CAST-IN-PLACE CONCRETE APRONS AND WINGWALLS. (SEE STRUCTURE PLANS)

SUGGESTED STAGE CONSTRUCTION SEQUENCE
FOR STAGE 5

ROADWAY

1. FINAL GRADING AND ITEMS RELATED TO RIPRAP AND PERMANENT SEEDING.
2. REMOVE TRAFFIC CONTROL AND DETOUR SIGNING.
3. TEMPORARY STRIPING.
4. FINAL PAVEMENT MARKINGS.

MODEL: D:\64bit...
FILE NAME: P:\2024\240186E - IL 15 Culverts (P)\114 CADD - DWG\14.7 Tran\CAD_Sheets\078495-115-Suggested Stage Construction Sequence.dgn



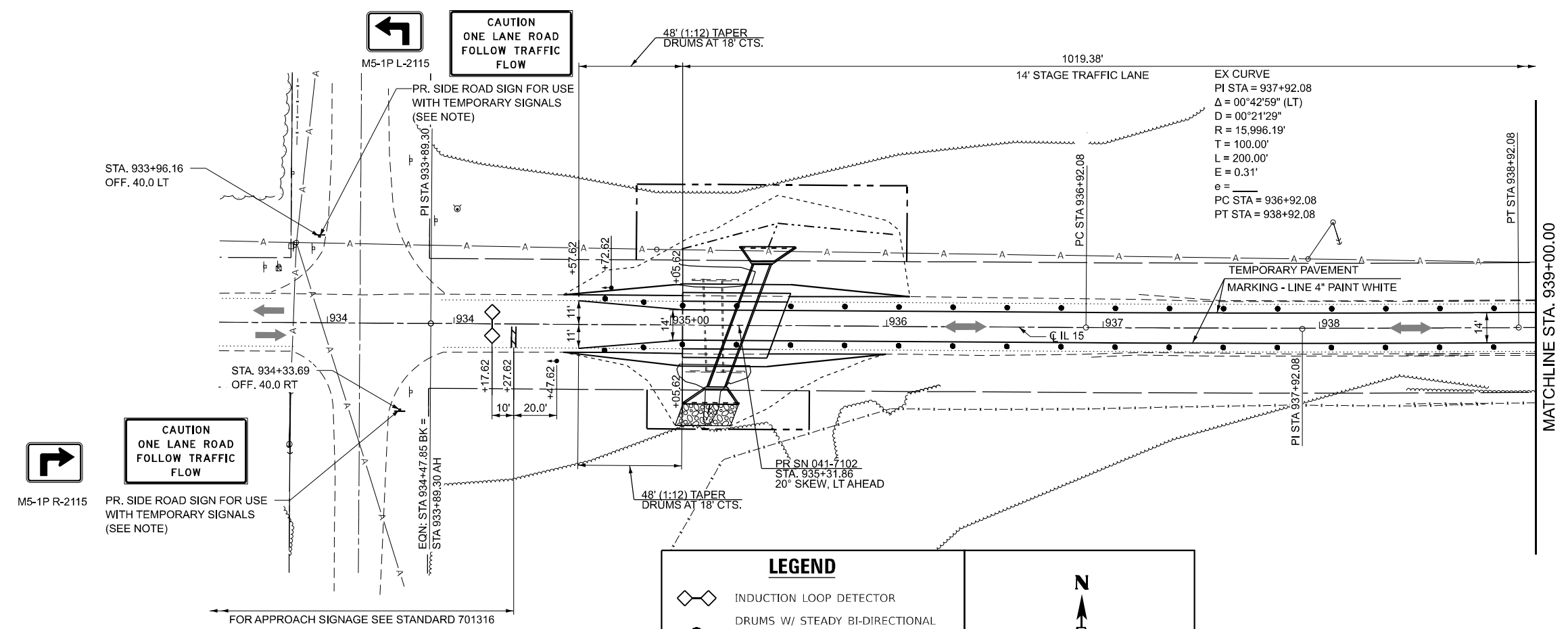
USER NAME = bbillhartz	DESIGNED - TBP	REVISED -
	DRAWN - BAB	REVISED -
PLOT SCALE = 40,000' / in.	CHECKED -	REVISED -
PLOT DATE = 1/23/2026	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED STAGE CONSTRUCTION SEQUENCE

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1;12CR-1	JEFFERSON	50	44
CONTRACT NO. 78495				
ILLINOIS			FED. AID PROJECT	



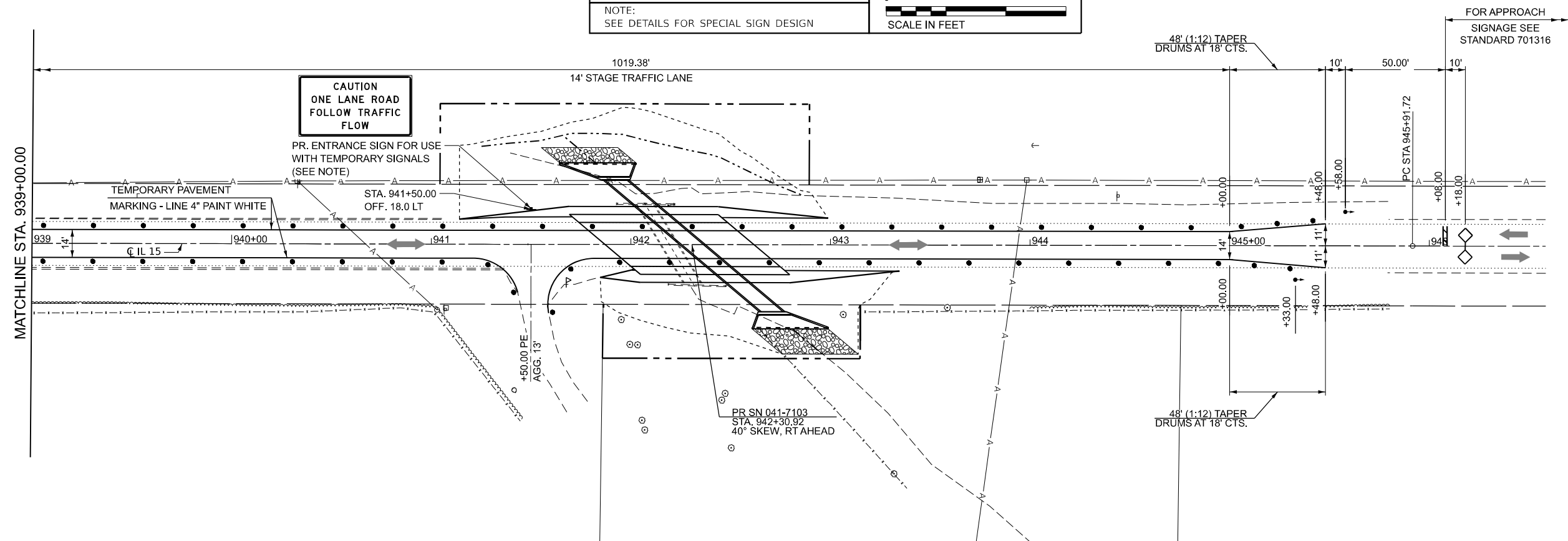
LEGEND

- INDUCTION LOOP DETECTOR
- DRUMS W/ STEADY BI-DIRECTIONAL BURN LIGHTS (25' CTS EXCEPT AS NOTED)
- TEMPORARY BRIDGE TRAFFIC SIGNALS
- STOP BAR

NOTE:
SEE DETAILS FOR SPECIAL SIGN DESIGN

SCALE IN FEET

0 30 60 90



MODEL: IL_15 - 5th/11th (5th+11)
 FILE NAME: P:\2022\20220106\IL_15_Culverts (P&I)\4_CADD - DWG\4.7_TrafficCAD_Sheets\0778495-11-15-2022.dwg

TWM, INC.
 WWW.TWM-INC.COM
 IL DESIGN FIRM
 LICENSE NO: 184-001220

USER NAME =	bbillhartz	DESIGNED -	TBP	REVISED -	
PLOT SCALE =	= 59.99988000' / in.	DRAWN -	BAB	REVISED -	
PLOT DATE =	1/23/2026	CHECKED -		REVISED -	
		DATE -		REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN
IL 15

SCALE: 1"=30' SHEET 1 OF 1 SHEETS STA. 933+50.00 TO STA. 946+50.00

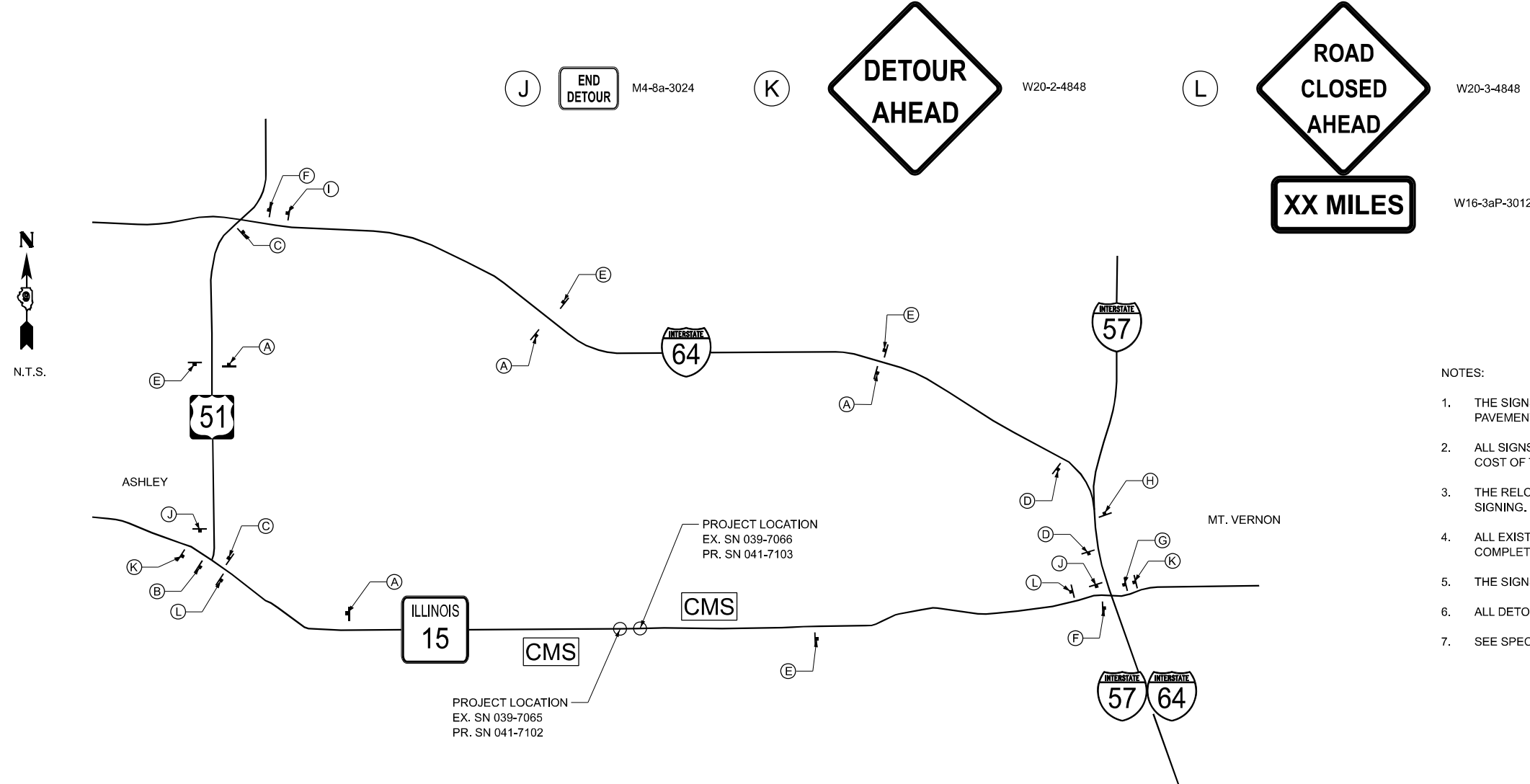
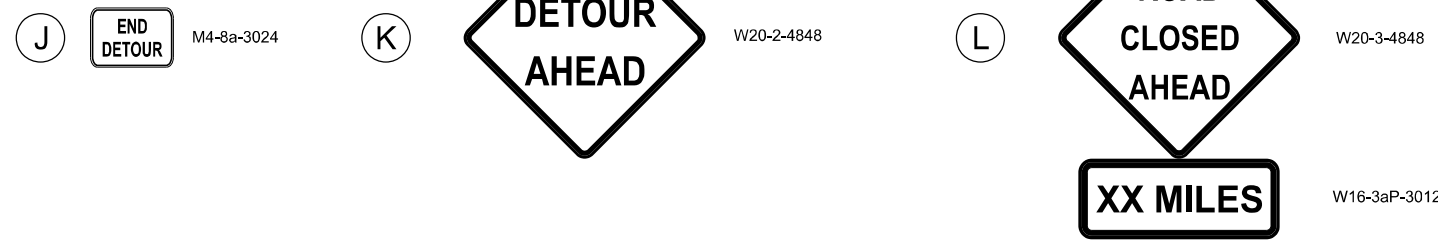
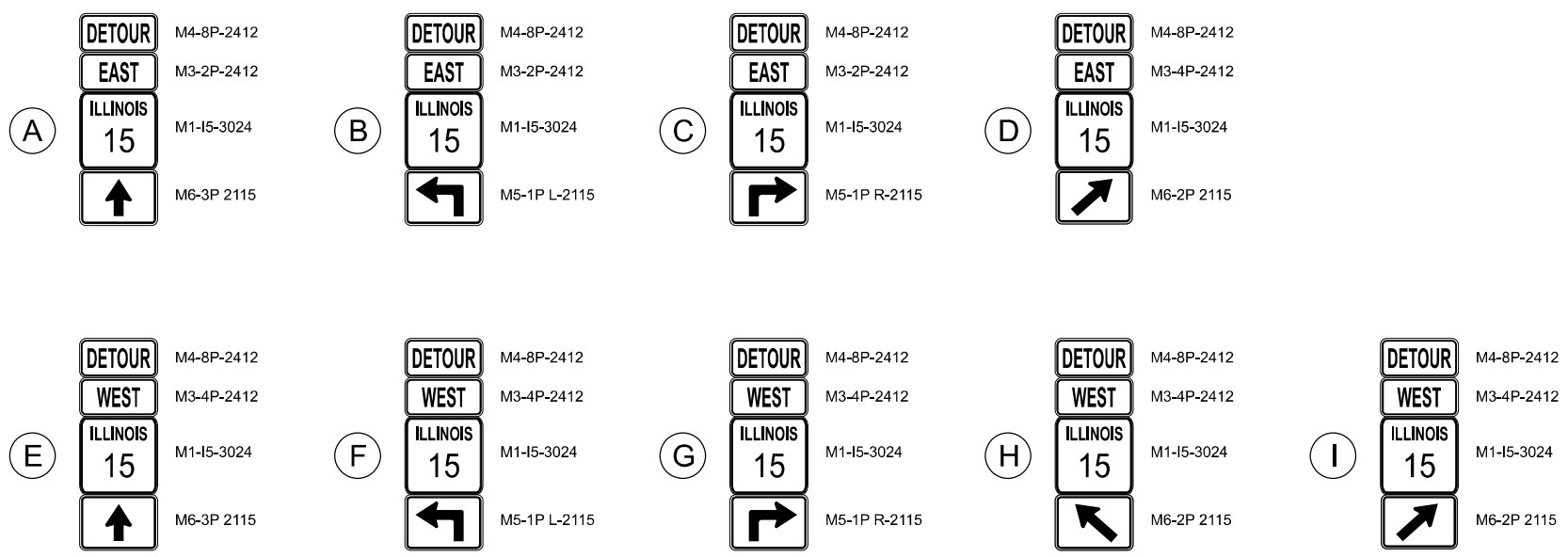
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1:12CR-1	JEFFERSON	50	45
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				

PRIOR TO CLOSURE

CMS CHANGEABLE MESSAGE BOARD - 2 REQUIRED
(NOTIFICATION - 2 WEEKS PRIOR TO START OF
WORK AND DURATION OF THE CLOSURE)

PRIOR TO CLOSURE	DURING CLOSURE
ILLINOIS 15 WILL BE CLOSED	ILLINOIS 15 CLOSED
XX MILES AHEAD	XX MILES AHEAD
DATE TO DATE	LOCAL TRAFFIC ONLY

SUGGESTED MESSAGE
(EXACT MESSAGE AND LOCATION OF SIGN TO BE
DETERMINED BY THE ENGINEER)



NOTES:

1. THE SIGNS SHALL BE BLACK ON ORANGE. THE POSTS SHALL BE PLACED 12 FEET FROM THE EDGE OF PAVEMENT AS DIRECTED BY THE ENGINEER.
2. ALL SIGNS AND HARDWARE REQUIRED TO INSTALL THE DETOUR ROUTE SIGNING SHALL BE INCLUDED IN COST OF THE DETOUR SIGNING.
3. THE RELOCATING, MAINTENANCE OR REPLACEMENT OF SIGNS SHALL BE INCLUDED IN COST OF DETOUR SIGNING.
4. ALL EXISTING SIGNING THAT IS NOT APPLICABLE WHILE THE ROAD CLOSURE IS IN EFFECT SHALL BE COMPLETELY COVERED BY THE CONTRACTOR.
5. THE SIGNS ON THIS SHEET WILL BE USED FOR THE REPLACEMENT OF BOTH STRUCTURES.
6. ALL DETOUR SIGNS SHALL BE COMPLETELY COVERED WHEN IL 15 IS OPEN TO TRAFFIC.
7. SEE SPECIAL PROVISIONS.

MODEL: D:\p1\11...
 FILE NAME: P:\2024\2401866E - IL 15 Closures (P)\11\11...
 MODEL: D:\p1\11...



TWM, INC.
www.twm-inc.com
IL DESIGN FIRM
LICENSE NO: 184-001220

USER NAME = bblilhartz	DESIGNED - TBP	REVISED -
PLOT SCALE = 100,000 * / in.	DRAWN - BAB	REVISED -
PLOT DATE = 1/23/2026	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DETOUR PLAN
IL 15**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1;12CR-1	JEFFERSON	50	46
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				



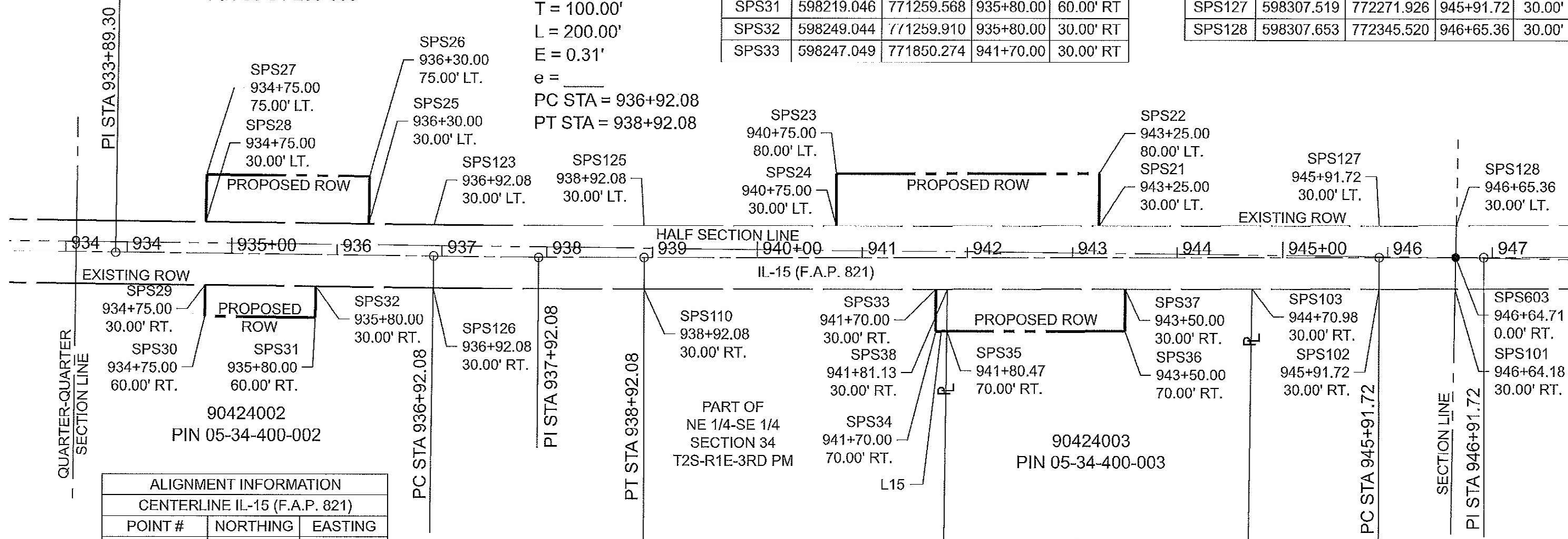
PART OF
SE 1/4-NE 1/4
SECTION 34
T2S-R1E-3RD PM

90424001
PIN 05-34-200-005

EX CURVE
PI STA = 937+92.08
 $\Delta = 00^\circ 42' 59''$ (LT)
 $D = 00^\circ 21' 29''$
 $R = 15,996.19'$
 $T = 100.00'$
 $L = 200.00'$
 $E = 0.31'$
 $e =$
PC STA = 936+92.08
PT STA = 938+92.08

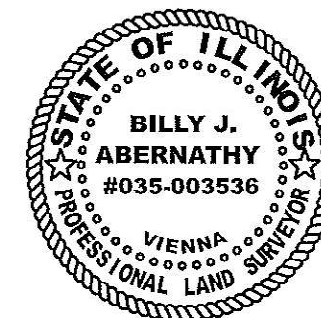
POINT TABLE				
POINT	NORTHING	EASTING	STATION	OFFSET
603	598277.651	772344.953	946+64.71	0.00' RT
SPS21	598307.221	772005.207	943+25.00	30.00' LT
SPS22	598357.221	772005.151	943+25.00	80.00' LT
SPS23	598356.943	771755.151	940+75.00	80.00' LT
SPS24	598306.943	771755.207	940+75.00	30.00' LT
SPS25	598308.471	771310.590	936+30.00	30.00' LT
SPS26	598353.468	771311.102	936+30.00	75.00' LT
SPS27	598355.233	771156.112	934+75.00	75.00' LT
SPS28	598310.236	771155.600	934+75.00	30.00' LT
SPS29	598250.240	771154.917	934+75.00	30.00' RT
SPS30	598220.242	771154.575	934+75.00	60.00' RT
SPS31	598219.046	771259.568	935+80.00	60.00' RT
SPS32	598249.044	771259.910	935+80.00	30.00' RT
SPS33	598247.049	771850.274	941+70.00	30.00' RT

POINT TABLE				
SPS34	598207.049	771850.318	941+70.00	70.00' RT
SPS35	598207.060	771860.787	941+80.47	70.00' RT
SPS36	598207.249	772030.318	943+50.00	70.00' RT
SPS37	598247.249	772030.273	943+50.00	30.00' RT
SPS38	598247.061	771861.227	941+80.95	30.00' RT
SPS101	598247.650	772344.521	946+64.21	30.00' RT
SPS102	598247.519	772271.993	945+91.72	30.00' RT
SPS103	598247.384	772151.248	944+70.98	30.00' RT
SPS110	598246.739	771572.351	938+92.08	30.00' RT
SPS123	598307.764	771372.663	936+92.08	30.00' LT
SPS125	598306.739	771572.284	938+92.08	30.00' LT
SPS126	598247.768	771371.980	936+92.08	30.00' RT
SPS127	598307.519	772271.926	945+91.72	30.00' LT
SPS128	598307.653	772345.520	946+65.36	30.00' LT



ALIGNMENT INFORMATION		
CENTERLINE IL-15 (F.A.P. 821)		
POINT #	NORTHING	EASTING
PI 933+89.30	598281.214	771069.567
PC 936+92.08	598277.766	771372.321
PI 937+92.08	598276.940	771472.318
PT 938+92.08	598276.739	771572.317
PC 945+91.72	598277.519	772271.960
PI 946+91.72	598277.726	772371.959

PARCEL #	PURPOSE	ACREAGE
P0424001	ROW	TRACT 1 = 0.160 ACRES
		TRACT 2 = 0.287 ACRES
P0424002	ROW	TRACT 1 = 0.072 ACRES
		TRACT 2 = 0.01 ACRES
P0424003	ROW	0.155 ACRES

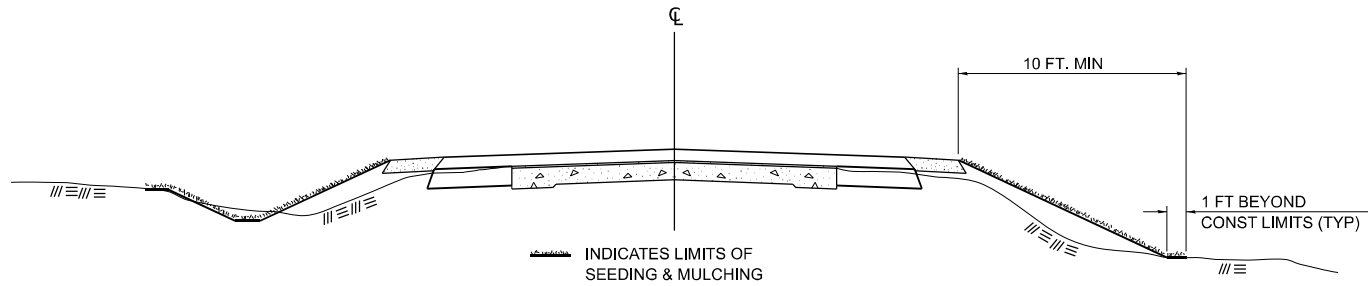


BILLY J. ABERNATHY
ILLINOIS PROFESSIONAL LAND SURVEYOR
Billy J. Abernathy
CURRENT LICENSE EXPIRES 11/30/2026

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY

NOTES:
COORDINATES ARE BASED ON NAD83 (2007 ADJ) ILLINOIS EAST ZONE
REFERENCE TO AN ALIGNMENT BY IDOT DATED 06/04/2015
REFERENCE TO A SURVEY BY SHAWNEE PROFESSIONAL SERVICES, DATED 06/06/2016

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.

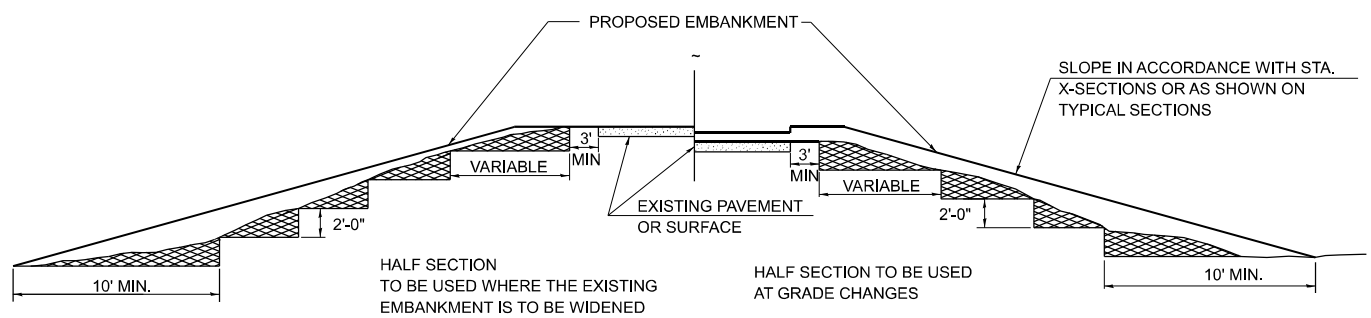
THE RATES OF APPLICATION OF FERTILIZER, MULCH AND LIMESTONE SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS FOR ROAD AND BRIDGE CONSTRUCTION.

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

DRAWN	02-15-89
REVISED	03-27-08
REVISED	10-21-21
REVISED	05-27-22

STD. 9-19

TYPICAL CROSS SECTION SHOWING STEP CONSTRUCTION ON EXISTING FILL



STEPS SHALL BE CUT IN THE EXISTING SLOPE IN ACCORDANCE WITH ART. 205.03 EXCEPT THAT THE REQUIREMENT THAT STEPS SHALL BE CUT INTO THE EXISTING SLOPE BEFORE THE CONSTRUCTION OF THE EXISTING EMBANKMENT IS STARTED SHALL NOT APPLY. MATERIAL TO BE REMOVED AND REPLACED IN THE EMBANKMENT IN ACCORDANCE WITH ART. 205.04. COST TO BE INCLUDED IN THE VARIOUS ITEMS OF EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED BECAUSE OF THIS WORK.

DRAWN	02-15-89
REVISED	05-07-08
REVISED	10-21-21
REVISED	05-27-22

STD. 9-25

MODEL: D:\p4\h... FILE NAME: P:\2024\240166\F - IL 15 Culverts (P&U)\4 CAD - DWG\4.7 TranCAD_Sheets\078495-rhc-District_Details.dgn



USER NAME =	bbillhartz
PLOT SCALE =	40,000' / in.
PLOT DATE =	1/23/2026

DESIGNED -	TBP
DRAWN -	BAB
CHECKED -	
DATE -	

REVISED -	
REVISED -	
REVISED -	
REVISED -	

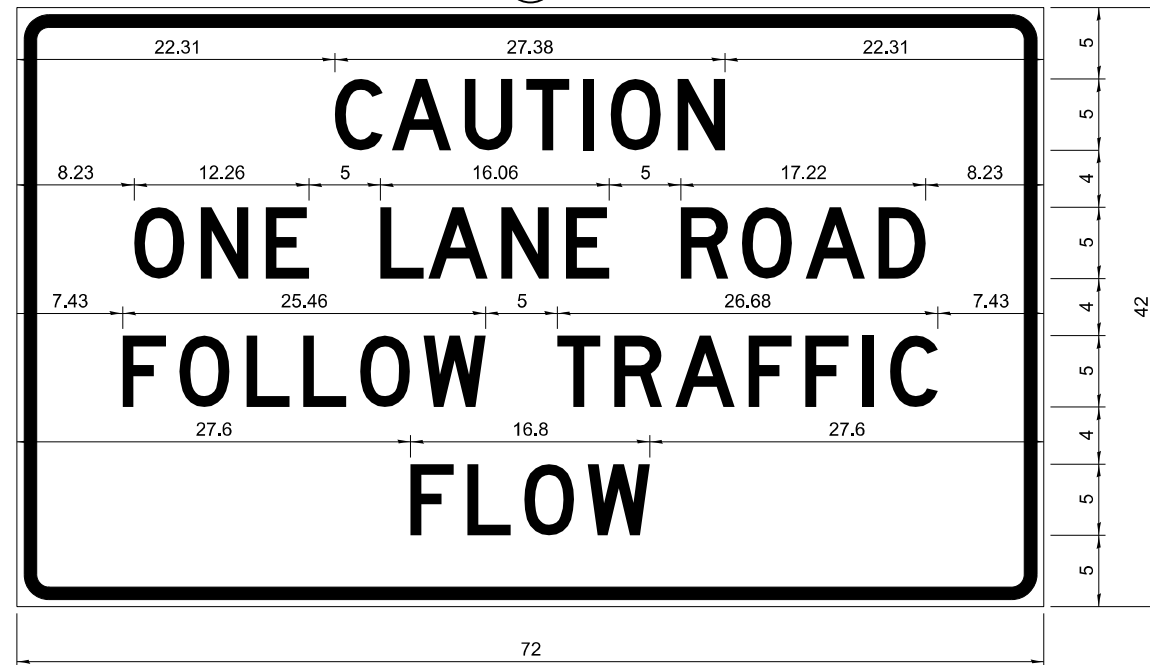
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DISTRICT 9 DETAILS			
SCALE: N.T.S.	SHEET 1	OF 3 SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1;12CR-1	JEFFERSON	50	48
CONTRACT NO. 78495				
ILLINOIS			FED. AID PROJECT	

**ENTRANCE SIGN FOR USE
WITH TEMPORARY SIGNALS**

②



COLOR LEGEND AND BORDER BACKGROUND BLACK ORANGE NON-REFLECTORIZED REFLECTORIZED

2.25" Radius, 0.88" Border, 0.50" Indent;
[CAUTION] D; [ONE LANE ROAD] D;
[FOLLOW TRAFFIC] D; [FLOW] D

② This sign shall be installed at entrances located between the temporary signals as shown in the staging plans.

Table Of Widths And Spaces

22.31	C	3.36	0.62	A	4.18	0.94	U	3.36	0.94	T	3.04	0.94	I	0.78	1.17	O	3.52	1.17	N	3.36	22.31
-------	---	------	------	---	------	------	---	------	------	---	------	------	---	------	------	---	------	------	---	------	-------

8.23	O	3.51	1.17	N	3.36	1.18	E	3.04
------	---	------	------	---	------	------	---	------

5.00	L	3.05	0.31	A	4.18	0.94	N	3.36	1.17	E	3.05
------	---	------	------	---	------	------	---	------	------	---	------

5.00	R	3.36	0.93	O	3.52	0.94	A	4.18	0.93	D	3.36	8.23
------	---	------	------	---	------	------	---	------	------	---	------	------

7.43	F	3.04	0.94	O	3.52	1.17	L	3.04	0.94	L	3.05	0.94	O	3.51	0.94	W	4.37
------	---	------	------	---	------	------	---	------	------	---	------	------	---	------	------	---	------

5.00	T	3.05	0.94	R	3.36	0.94	A	4.18	0.93	F	3.05	0.94	F	3.04	0.94	I	0.78	1.18	C	3.35	7.43
------	---	------	------	---	------	------	---	------	------	---	------	------	---	------	------	---	------	------	---	------	------

27.60	F	3.05	0.94	L	3.04	0.94	O	3.52	0.93	W	4.38	27.60
-------	---	------	------	---	------	------	---	------	------	---	------	-------

Sign not to scale

GENERAL NOTES

All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

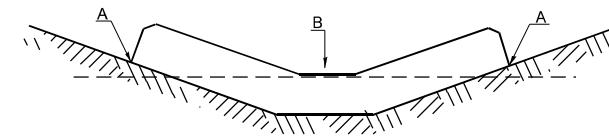
All dimensions are in inches unless otherwise noted.

DRAWN	3-2-16 D2
REVISED	03-12-24
REVISED	
REVISED	

STD. 9-34

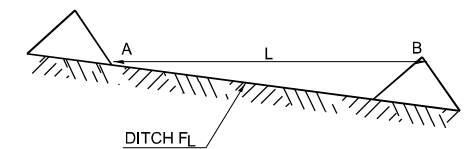
TEMPORARY DITCH CHECKS

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

DRAWN	09-01-99
REVISED	05-08-08
REVISED	10-21-21
REVISED	05-27-22

STD. 9-28

MODEL: D:\p4\h... FILE NAME: P:\2024\240166E - IL 15 Culverts (P)\114 CAD - DWG\4.7 Tran\CAD_Sheets\078495-rhc-District_Details.dgn



USER NAME = bblilhartz
DESIGNED - TBP
DRAWN - BAB
PLOT SCALE = 40,000' / in.
PLOT DATE = 1/23/2026

REVISIED -
REVISIED -
REVISIED -
REVISIED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

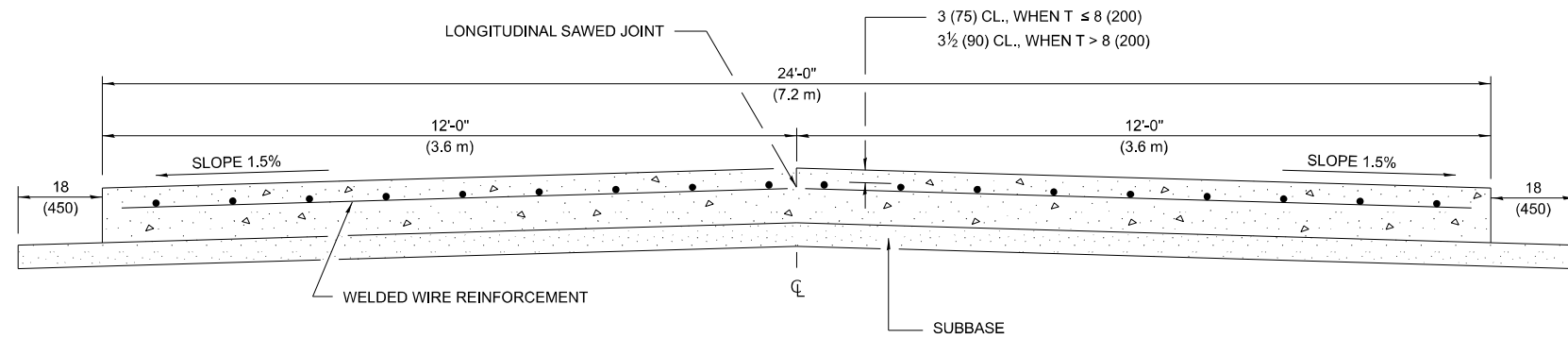
DISTRICT 9 DETAILS

SCALE: N.T.S. SHEET 2 OF 3 SHEETS STA. TO STA.

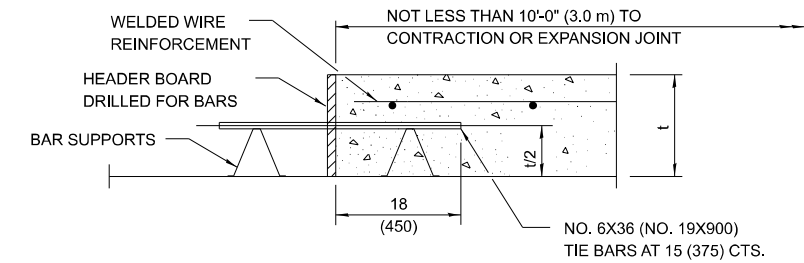
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1;12CR-1	JEFFERSON	50	49
CONTRACT NO. 78495				

ILLINOIS FED. AID PROJECT

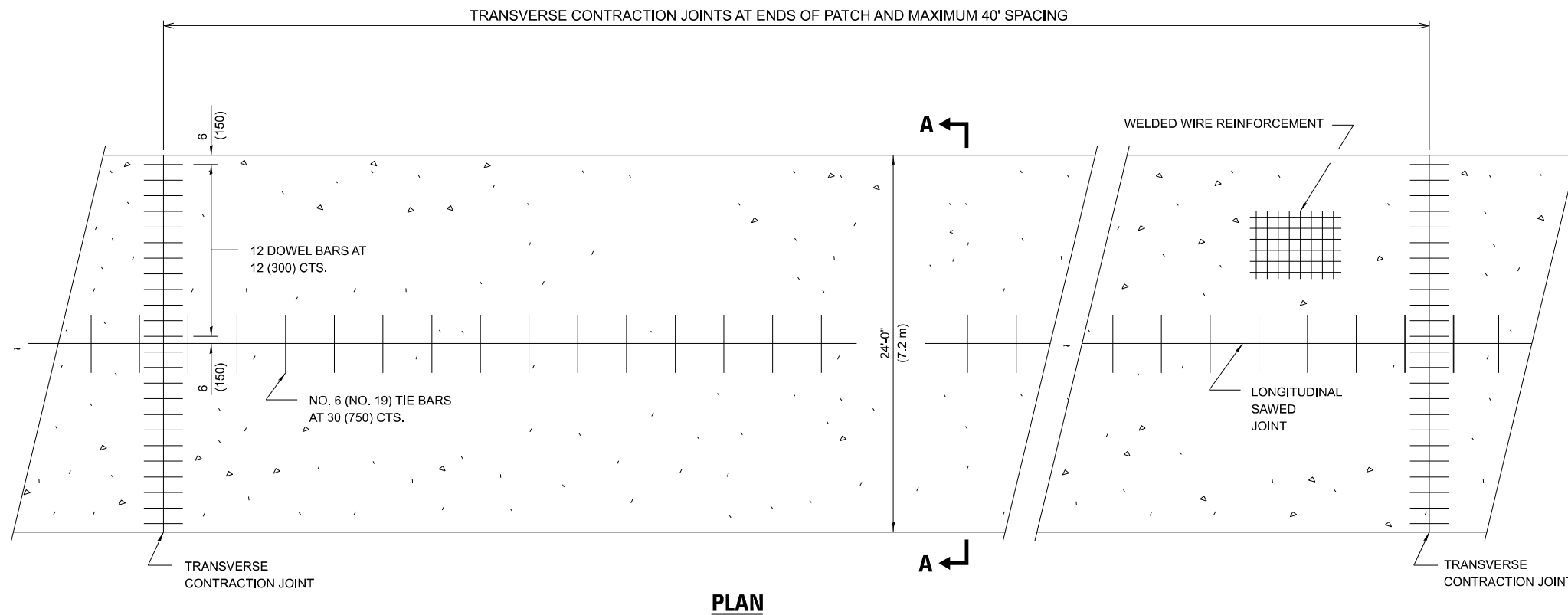
24' (7.2 m) PCC PAVEMENT OVER BOX CULVERT



SECTION A-A
(TYPICAL 2-LANE WITH SHOULDERS)



TRANSVERSE CONSTRUCTION JOINT
(IF NEEDED PER STANDARD SPECIFICATIONS)



PLAN

GENERAL NOTES

- SEE STANDARD 420001 FOR DETAILS NOT SHOWN.
- SEE STANDARD 420701 FOR WELDED WIRE REINFORCEMENT DETAILS.
- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- ACTUAL DIMENSIONS TO MATCH FIELD CONDITIONS AND CONSTRUCTION METHODS.

DRAWN	11-09-17
REVISED	07-23-18
REVISED	10-21-21
REVISED	05-04-22

STD. 9-13

MODEL: D:\p4\11... FILE NAME: P:\2024\240166E - IL 15 Culverts (P)\11\4.7_TranCAD_Sheets\078495-rlc-District_Details.dgn



TWM, INC.
www.twm-inc.com
IL DESIGN FIRM
LICENSE NO: 184-001220

USER NAME =	bbillhartz	DESIGNED -	TBP	REVISED -	
		DRAWN -	BAB	REVISED -	
PLOT SCALE =	40,000' / in.	CHECKED -		REVISED -	
PLOT DATE =	1/23/2026	DATE -		REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DISTRICT 9 DETAILS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	11CR-1;12CR-1	JEFFERSON	50	50
CONTRACT NO. 78495				
ILLINOIS FED. AID PROJECT				