

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
873	107B-1	FRANKLIN	19	1
ILLINOIS			CONTRACT NO. 78311	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

**PROPOSED
HIGHWAY PLANS**

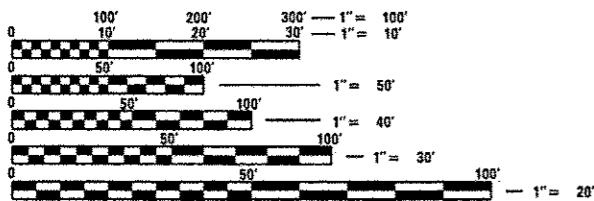
FAP ROUTE 873 (IL 149)
SECTION 107B-1
PROJECT NO. ACF-0873 (034)
BOX CULVERT REPLACEMENT
FRANKLIN COUNTY

C-99-042-12

TRAFFIC DATA

2011 ADT = 3650
WITH 7.7% TRUCKS

TOWNSHIP
FRANKFORT

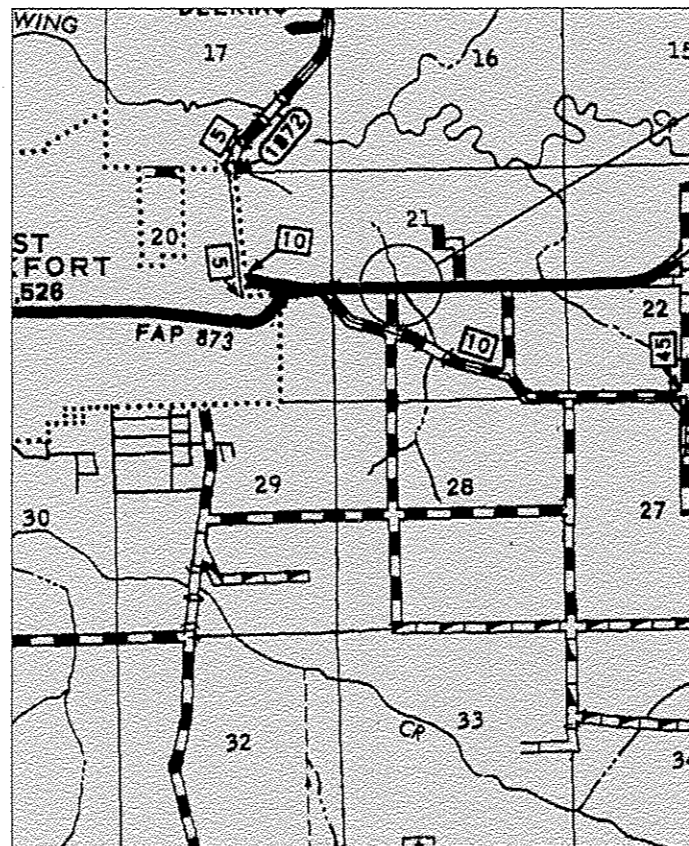


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

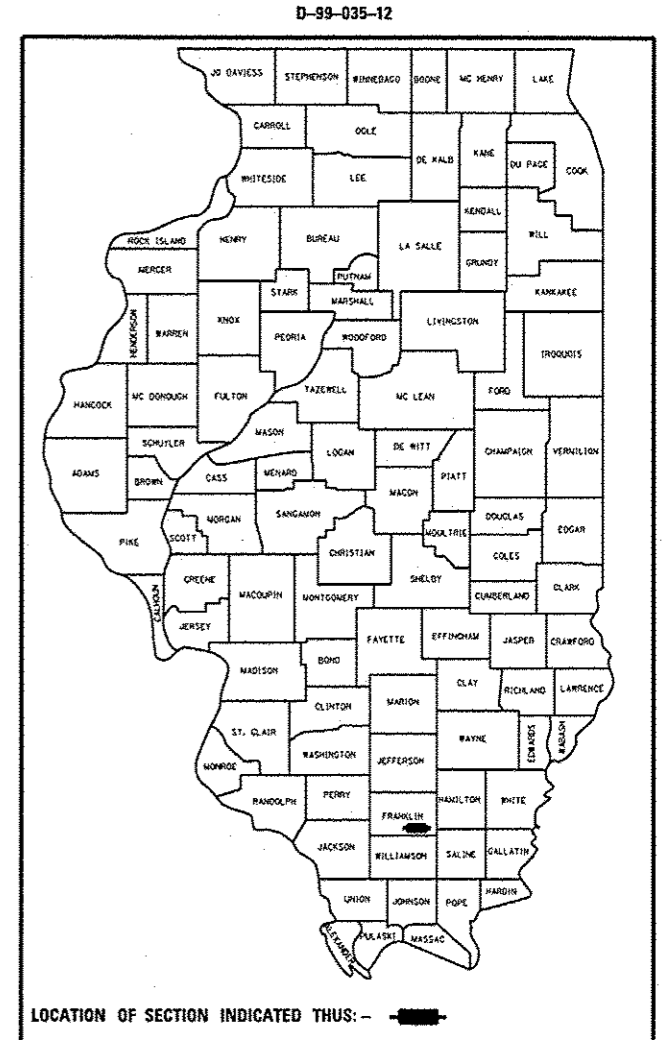
PROJECT ENGINEER: ADRIAN ADAMS (618) 351-5262
PROJECT MANAGER: DAVID PICHE (618) 351-5227

CONTRACT NO. 78311



IMPROVEMENT LOCATION
STRUCTURE NO. 028-7074(E)
STRUCTURE NO. 028-712(P)
IL 149 OVER CREEK

GROSS LENGTH = 50 FT. = 0.01 MILE
NET LENGTH = 31 FT. = 0.01 MILE



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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED October 2 20 13
John D. Baranzelli, PE
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Dec 6 20 13
John D. Baranzelli, PE
admn ENGINEER OF DESIGN AND ENVIRONMENT

Dec 6 20 13
Omer Osman, PE
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

GENERAL NOTES

- 1) THE THICKNESS OF HOT-MIX ASPHALT MIXTURE SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HOT-MIX ASPHALT MIXTURE IS PLACED.
- 2) 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
BITUMINOUS MATERIALS ON PAVEMENT:	0.09 GAL /SO YD
ALL AGGREGATE	2.05 TONS/CU YD
RIP RAP	1.50 TONS/CU YD
- 3) AT ALL LOCATIONS WHERE EXISTING HOT-MIX ASPHALT OR 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.
- 4) THE CONTRACTOR MAY USE P.C.C. PAVEMENT 10" AS PER HIGHWAY STANDARD 420601 IN LIEU OF THE HMA PAVEMENT SHOWN IN THE PLANS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED. A CALCIUM CHLORIDE ACCELERATOR WILL BE ALLOWED. THE CONCRETE SHALL BE CLASS PP-1 OR PP-2 PER ARTICLE 1020 OF THE STANDARD SPECS.
- 6) REMOVAL OF EXISTING AGGREGATE SHOULDERS SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.
- 7) PRIOR TO PLACEMENT OF FINAL PAVEMENT MARKINGS THE RESIDENT ENGINEER SHALL CONTACT THE BUREAU OF OPERATIONS AND ARRANGE FOR INSPECTION AND APPROVAL OF THE PAVEMENT MARKING LAYOUT.
- 8) SAW CUTS FOR PAVEMENT BUTT JOINTS SHALL BE INCLUDED IN THE COST OF HMA SURFACE REMOVAL - BUTT JOINT.
- 9) COMMITMENTS: NO TREE CLEARING BETWEEN APRIL 1 THROUGH SEPTEMBER 30.

INDEX OF SHEETS

- | | |
|-------|---|
| 1 | COVER SHEET |
| 2 | INDEX OF SHEETS, GENERAL NOTES, STANDARDS, & MIXTURE REQUIREMENTS |
| 3-4 | SUMMARY OF QUANTITIES |
| 5 | SCHEDULES |
| 6 | GEOPAK ELEMENTS IDENTIFICATION SHEET |
| 7 | GENERAL PLAN SN 028-7121 |
| 8 | TEMPORARY AND FINAL SECTIONS |
| 9 | LIMITS OF POROUS GRANULAR EMBANKMENT AT SN 028-7121 AND TYPICAL SECTION WITHIN PAVEMENT REMOVAL |
| 10 | R-99-004-12 RIGHT OF WAY PLANS / S.B.I. ROUTE 149 |
| 11-12 | CAST-IN-PLACE APRON END SECTION DETAILS |
| 13-18 | CROSS SECTIONS |
| 19 | DISTRICT STANDARDS |

STANDARDS

- | | |
|-----------|---|
| 000001-06 | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS |
| 001001-02 | AREAS OF REINFORCEMENT BARS |
| 001006 | DECIMAL OF AN INCH AND OF A FOOT |
| 420001-07 | PAVEMENT JOINTS |
| 420601-05 | 24" PCC PAVEMENT |
| 420701-02 | PAVEMENT FABRIC |
| 630301-06 | SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS |
| 635006-03 | REFLECTOR AND TERMINAL MARKER PLACEMENT |
| 635011-02 | REFLECTOR MARKER AND MOUNTING DETAILS |
| 642006 | SHOULDER RUMBLE STRIPS, 8 In. |
| 701001-02 | OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY |
| 701006-05 | OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE |
| 701201-04 | LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH |
| 701901-03 | TRAFFIC CONTROL DEVICES |
| 780001-04 | TYPICAL PAVEMENT MARKINGS |
| BLR 21-9 | TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS |

MIXTURE REQUIREMENTS

LOCATIONS:	HOT-MIX ASPHALT SHOULDERS
MIXTURE USE(S):	HOT-MIX ASPHALT SHOULDERS, N30
AC/PG:	PG58-22
ABR % (MAX)	50
DESIGN AIR VOIDS:	2.0%, 30 GYRATION DESIGN
MIXTURE COMPOSITION: (GRADATION MIXTURE)	HMA SHOULDER
FRICTION AGGREGATE:	NONE

Prepared By:	<i>Joe Zimcik</i> DISTRICT STUDIES & PLANS ENGINEER
Examined By:	<i>[Signature]</i> DISTRICT LAND ACQUISITION ENGINEER
Examined By:	<i>Carrie Nuber</i> DISTRICT PROGRAM DEVELOPMENT ENGINEER
Examined By:	<i>[Signature]</i> DISTRICT OPERATIONS ENGINEER
Examined By:	<i>[Signature]</i> DISTRICT PROJECT IMPLEMENTATION ENGINEER
Examined By:	<i>Dan Nuber</i> DISTRICT CONSTRUCTION ENGINEER
Examined By:	<i>[Signature]</i> DISTRICT MATERIALS ENGINEER

FILE NAME *	USER NAME * odmsom	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES, INDEX OF SHEETS, STANDARDS AND MIX REQUIREMENTS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwork\pwork\odmsom\0317484\7831	-sht-plan.dgn	DRAWN -	REVISED -			873	107B-1	FRANKLIN	19	2	
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -			SCALE: _____	SHEET _____ OF _____ SHEETS	STA. _____ TO STA. _____	ILLINOIS FED. AID PROJECT		
	PLOT DATE = 10/24/2013	DATE -	REVISED -								

CODE NUMBER	PAY ITEM	SN 028-7074 (E), 028-7121 (P) 80/20 Fed/ST - FRANKLIN COUNTY CONSTRUCTION TYPE CODE - 0040	
		UNIT	TOTAL QUANTITY
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	6
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	67
20200100	EARTH EXCAVATION	CU YD	497
20300100	CHANNEL EXCAVATION	CU YD	74
20400800	FURNISHED EXCAVATION	CU YD	217
20700110	POROUS GRANULAR EMBANKMENT	CU YD	306
20800150	TRENCH BACKFILL	CU YD	2
25000200	SEEDING CLASS 2	ACRE	0.25
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	23
25000500	PHOSPHOROUS FERTILIZER NUTRIENT	POUND	23
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	23
25000700	AGRICULTURAL GROUND LIMESTONE	TON	0.5
25100630	EROSION CONTROL BLANKET	SQ YD	930
28100107	STONE RIPRAP, CLASS A4	SQ YD	95

CODE NUMBER	PAY ITEM	SN 028-7074 (E), 028-7121 (P) 80/20 Fed/ST - FRANKLIN COUNTY CONSTRUCTION TYPE CODE - 0040	
		UNIT	TOTAL QUANTITY
28200200	FILTER FABRIC	SQ YD	95
40800010	BITUMINOUS MATERIALS (PRIME COAT)	GAL	47
42000500	PORTLAND CEMENT CONCRETE PAVEMENT 10' '	SQ YD	134
42001200	PAVEMENT FABRIC	SQ YD	134
44000100	PAVEMENT REMOVAL	SQ YD	134
44004250	PAVED SHOULDER REMOVAL	SQ YD	94
48203029	HOT-MIX ASPHALT SHOULDERS, 8' '	SQ YD	523
50102400	CONCRETE REMOVAL	CU YD	59.5
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1330
54003000	CONCRETE BOX CULVERTS	CU YD	31.9
54010808	PRECAST CONCRETE BOX CULVERTS 8' X 8'	FOOT	96
54200220	PIPE CULVERTS, CLASS D, TYPE 1 15' '	FOOT	15
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	163
* 63000025	STEEL PLATE BEAM GUARDRAIL, ATTACHED TO STRUCTURES	FOOT	50

14 * SPECIALTY ITEM

FILE NAME *	USER NAME * USER*	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwwork\pwwork\ledamson\0317404\7831	shp.pln.dgn	DRAWN -	REVISED -		873	107B-1	FRANKLIN	19	3				
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	PLOT DATE * 10/15/2013	DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.			

SN 028-7074 (E), 028-7121 (P)
 80/20 Fed/St - FRANKLIN COUNTY
 CONSTRUCTION TYPE CODE - 0040

CODE NUMBER	PAY ITEM	UNIT	TOTAL QUANTITY
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4
63200310	GUARDRAIL REMOVAL	FOOT	542
64200108	SHOULDER RUMBLE STRIPS, 8 INCH	FOOT	564
66600105	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	8
67100100	MOBILIZATION	L SUM	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1
70101830	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	1
* 78001110	PAINT PAVEMENT MARKING - LINE 4''	FOOT	120
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	8
* 78201000	TERMINAL MARKER, DIRECT APPLIED	EACH	4
78300100	PAVEMENT MARKING REMOVAL	SQ FT	40

12

* SPECIALTY ITEM

FILE NAME *	USER NAME * USER*	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
c:\pvc\work\pvd\dot\ndemson\08317404\7831	shh-plen.dgn	DRAWN -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	873	107B-1	FRANKLIN	19	4
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	PLOT DATE * 10/15/2013	DATE -	REVISED -						ILLINOIS FED. AID PROJECT						

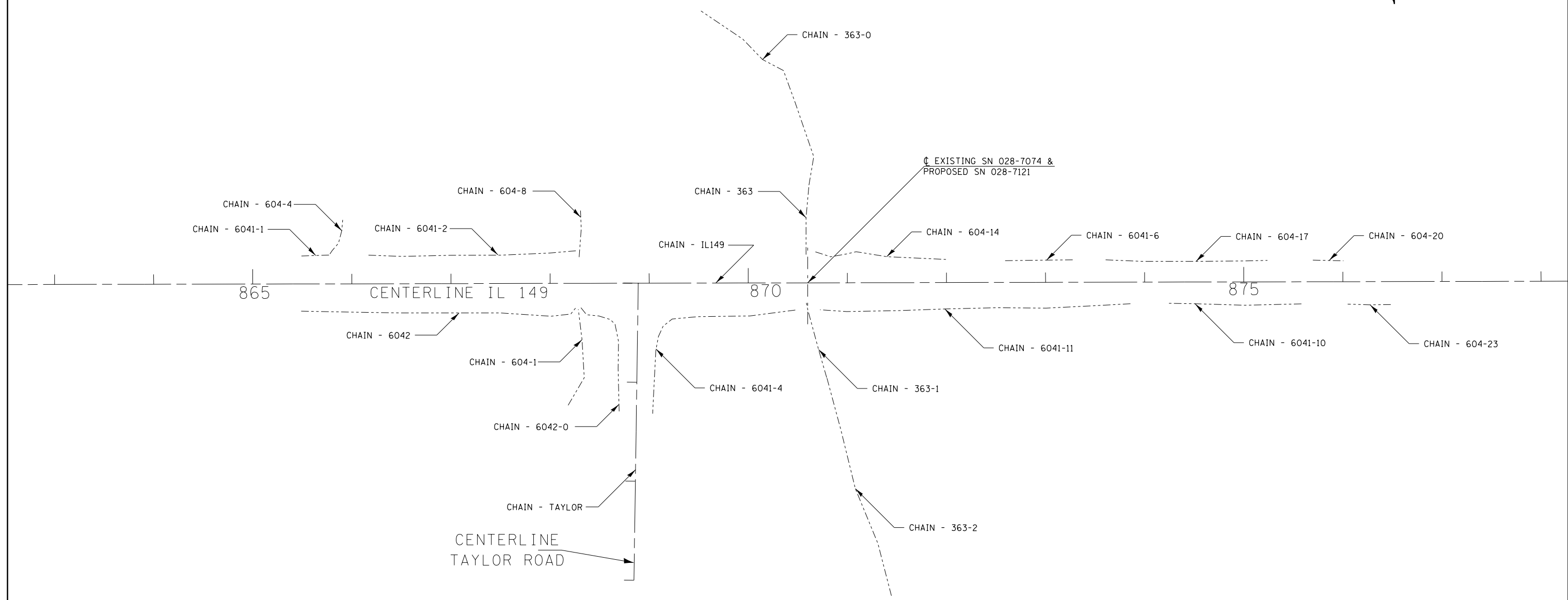
PAVING SCHEDULE										
STATION					PAVEMENT REMOVAL	PAVED SHOULDER REMOVAL	PORTLAND CEMENT CONCRETE PAVEMENT, 10' '	PAVEMENT FABRIC	HOT-MIX ASPHALT SHOULDERS, 8' '	BITUMINOUS MATERIALS (PRIME COAT)
869+19.00	LT	TO	869+82.50	LT		11			42	4
869+82.50	LT	TO	870+35.00	LT		9			53	5
870+35.00	LT	TO	870+85.00	LT	67	8	67	67	48	4
870+85.00	LT	TO	872+01.00	LT		19			113	10
869+19.00	RT	TO	870+35.00	RT		19			113	10
870+35.00	RT	TO	870+85.00	RT	67	8	67	67	48	4
870+85.00	RT	TO	871+76.00	RT		16			89	8
871+76.00	RT	TO	872+01.00	RT		4			17	2
TOTALS					134	94	134	134	523	47

GUARDRAIL SCHEDULE										
STATION					GUARDRAIL REMOVAL	TRAFFIC BARRIER TERMINAL, TY 1 SPL TANGENT	STEEL PLATE BEAM GUARDRAIL	STEEL PLATE BEAM GUARDRAIL ATTACHED TO STRUCTURES		
									FOOT	EACH
869+20.70	RT	TO	869+35.00	RT	14					
869+35.00	RT	TO	869+85.00	RT	50	1				
869+85.00	RT	TO	870+47.50	RT	63		62.5			
870+47.50	RT	TO	870+72.50	RT	25			25		
870+72.50	RT	TO	871+10.00	RT	38		37.5			
871+10.00	RT	TO	871+60.00	RT	50	1				
871+60.00	RT	TO	871+96.80	RT	37					
869+33.30	LT	TO	869+97.50	LT	64					
869+97.50	LT	TO	870+47.50	LT	50	1				
870+47.50	LT	TO	870+72.50	LT	25			25		
870+72.50	LT	TO	871+35.00	LT	63		62.5			
871+35.00	LT	TO	871+85.00	LT	50	1				
871+85.00	LT	TO	871+99.30	LT	14					
TOTALS					542	4	163	50		

PAVEMENT MARKING SCHEDULE									
STATION					NOTES	PAINT PAVEMENT MARKING - LINE 4' '		SHOULDER RUMBLE STRIPS, 8' '	
						SOLID WHITE	YELLOW		
						FOOT	FOOT	FOOT	
869+19.00	RT	TO	872+01.00	RT				282	
870+35.00	RT	TO	870+85.00	RT		50			
870+35.00		TO	870+85.00		ALONG CENTERLINE		20		
870+35.00	LT	TO	870+85.00	LT		50			
869+19.00	LT	TO	872+01.00	LT				282	
SUBTOTALS						100	20		
TOTALS							120	564	

TREE REMOVAL SCHEDULE			
STATION	OFFSET	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	TREE REMOVAL (OVER 15 UNITS DIAMETER)
		UNIT	UNIT
870+05	27' LT	6	
870+49	40' RT		18
870+81	37' LT		22
870+87.50	33' LT		27
TOTALS		6	67

PRECAST BOX CULVERT SCHEDULE (ASTM C 1557)					
STATION	SIZE	SKEW	DESIGN FILL (FT.)		PGE BACKFILL REQUIRED
			EDGE OF SHLD. (MIN)	MAXIMUM	
870+60.00	DUAL 8' X 8'	0	±1.3'	±1.9'	306 CU YD



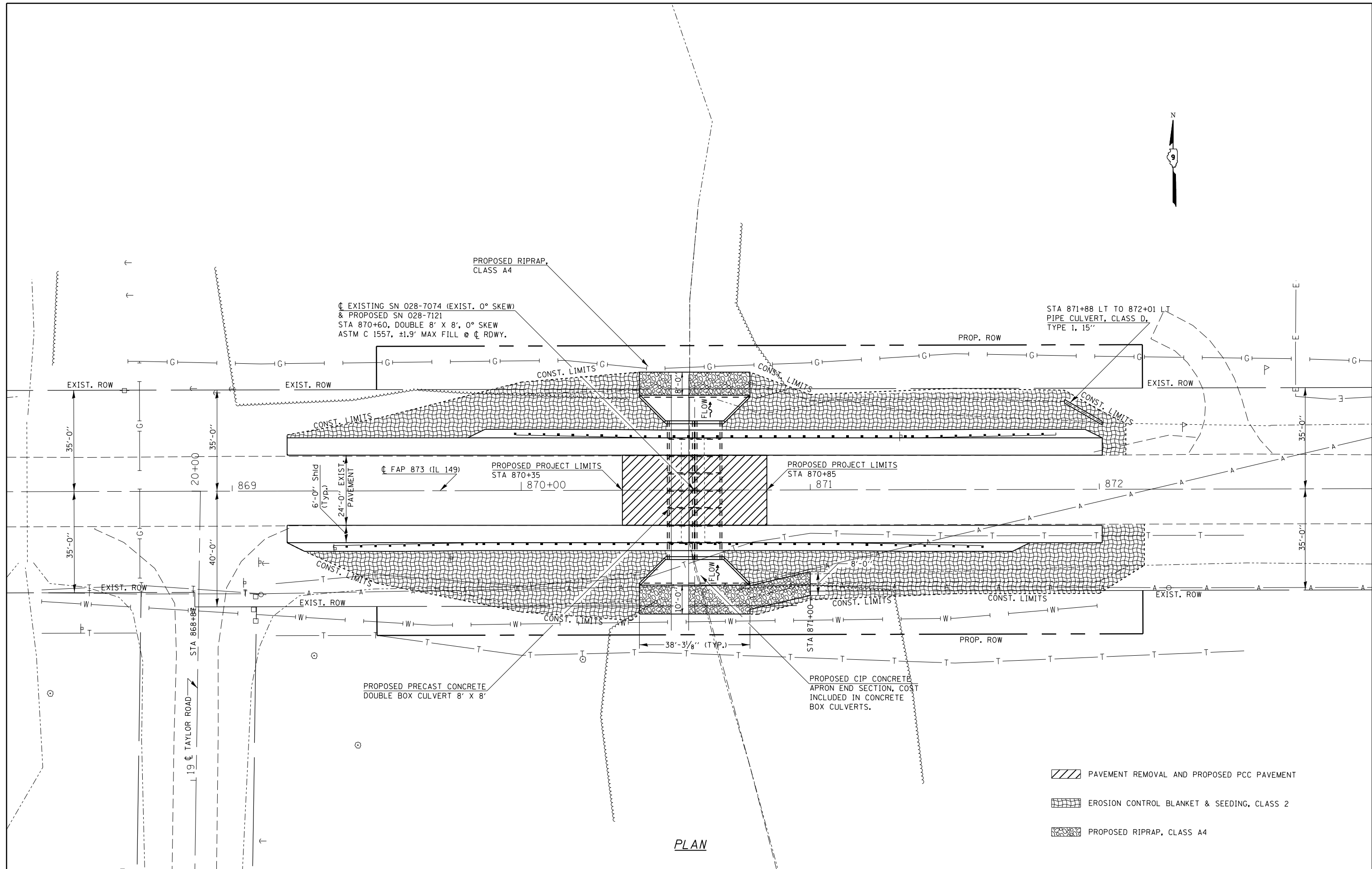
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	PLOT DATE = 10/15/2013	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GEOPAK ELEMENTS
IDENTIFICATION SHEET**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
873	107B-1	FRANKLIN	19	6
CONTRACT NO. 78311			ILLINOIS FED. AID PROJECT	

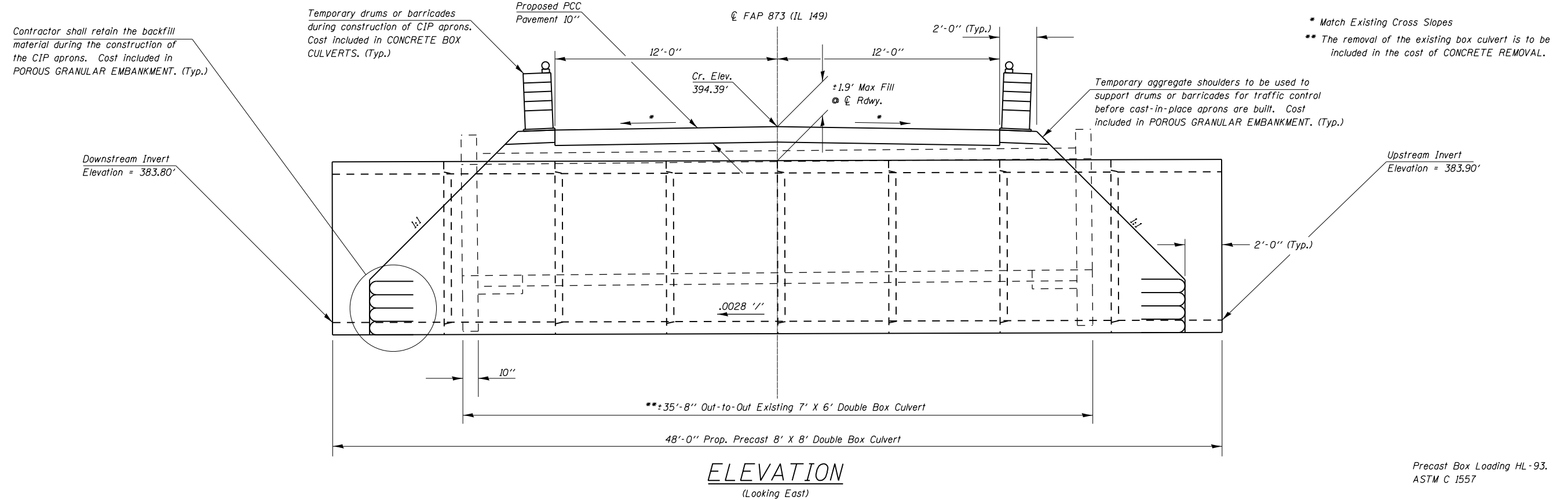


PLAN

- PAVEMENT REMOVAL AND PROPOSED PCC PAVEMENT
- EROSION CONTROL BLANKET & SEEDING, CLASS 2
- PROPOSED RIPRAP, CLASS A4

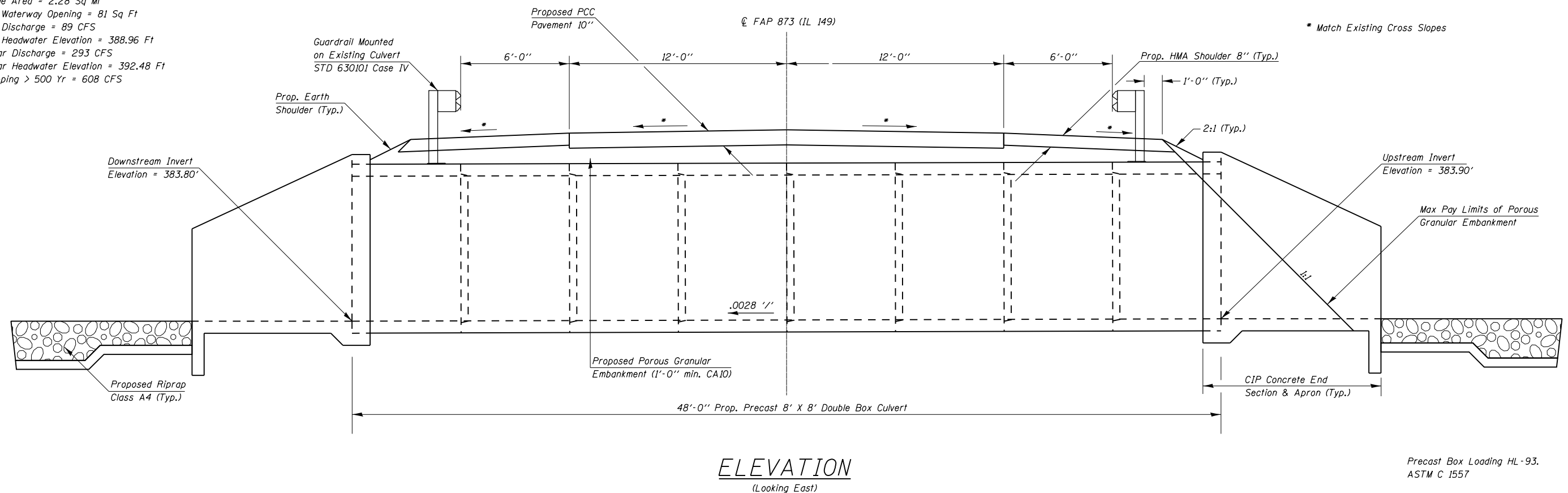
FILE NAME =	USER NAME = \$USER\$	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN SN 028-7121	SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ct:\pw\work\p\dot\adamson\d0317484\7831	-sht-plan.dgn	DRAWN -	REVISED -			873	107B-1	FRANKLIN	19	7	CONTRACT NO. 78311				ILLINOIS FED. AID PROJECT			
\$MODELNAME\$	PLOT DATE = 10/15/2013	CHECKED -	REVISED -															
		DATE -	REVISED -															

TEMPORARY SECTION PRIOR TO CONSTRUCTION OF CAST-IN-PLACE APRONS



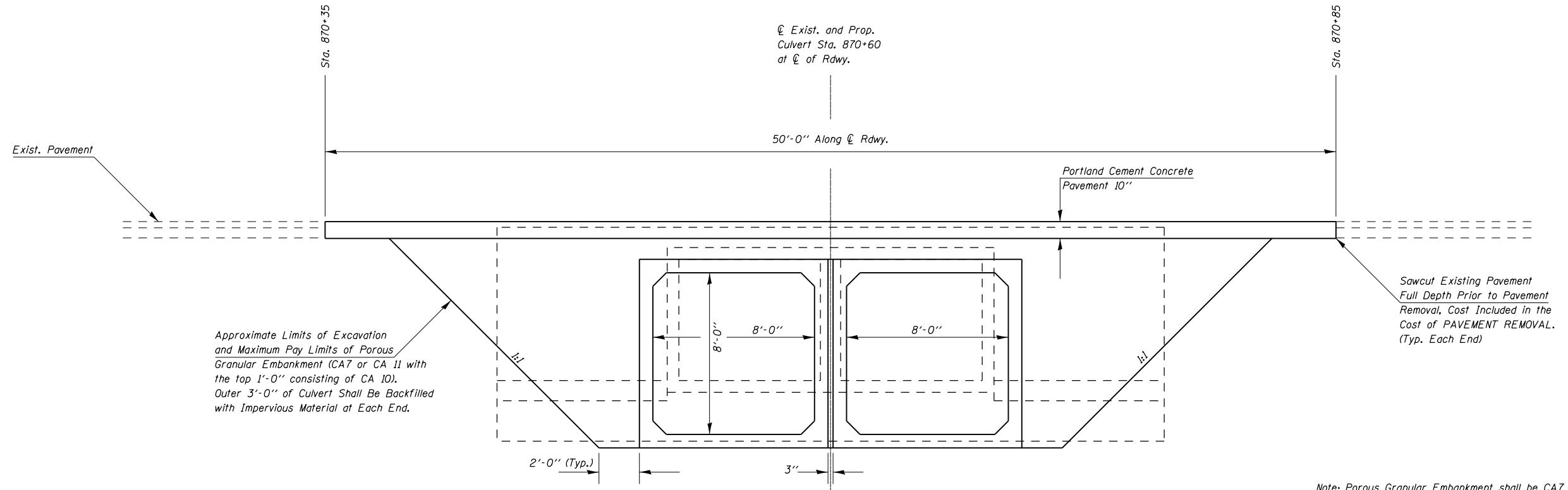
FINAL SECTION AFTER CONSTRUCTION OF CAST-IN-PLACE APRONS

HYDRAULIC DATA
 Drainage Area = 2.28 Sq Mi
 Design Waterway Opening = 81 Sq Ft
 Design Discharge = 89 CFS
 Design Headwater Elevation = 388.96 Ft
 100 Year Discharge = 293 CFS
 100 Year Headwater Elevation = 392.48 Ft
 Overtopping > 500 Yr = 608 CFS



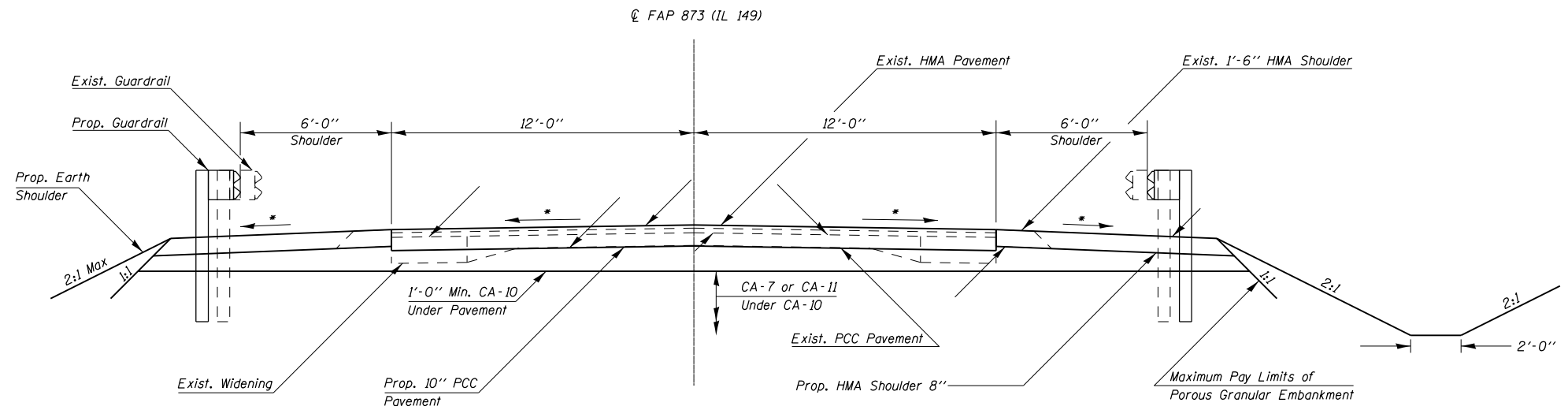
FILE NAME =	USER NAME = \$USER\$	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY AND FINAL SECTIONS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Default	ct:\pwork\work\pwork\adamson\d0317484\7831-sh1-plan.dgn	DRAWN -	REVISED -			873	107B-1	FRANKLIN	19	8
	PLOT SCALE = 6.0000' / in.	CHECKED -	REVISED -							CONTRACT NO. 78311
	PLOT DATE = 10/15/2013	DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
										ILLINOIS FED. AID PROJECT

LIMITS OF POROUS GRANULAR EMBANKMENT



Note: Porous Granular Embankment shall be CA7 or CA 11 with the top 1' Consisting of CA 10.

SECTION WITHIN PAVEMENT REMOVAL



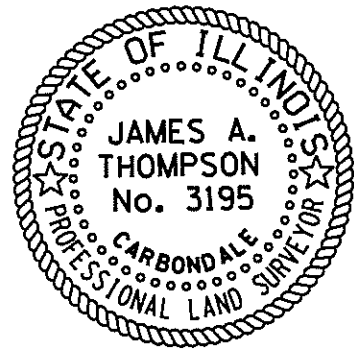
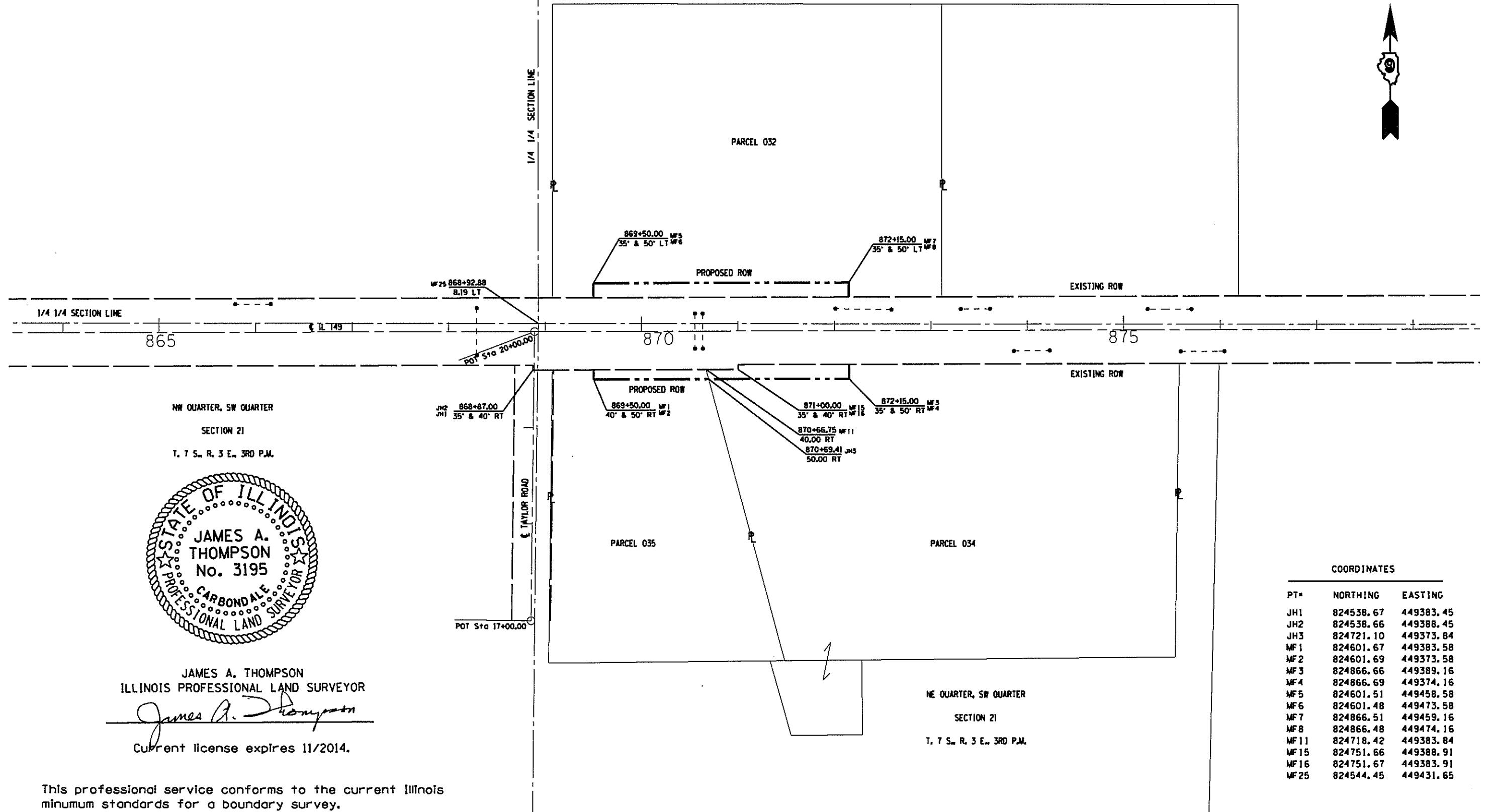
* Match Existing Cross Slopes

FILE NAME =	USER NAME = \$USER*	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LIMITS OF POROUS GRANULAR EMBANKMENT AT SN 028-7121 AND SECTION WITHIN PAVEMENT REMOVAL	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Default	ct:\pw\work\pwidot\adamson\d0317484\7831	DRAWN -	REVISED -			873	107B-1	FRANKLIN	19	9	
	PLOT SCALE = 6.0000' / in.	CHECKED -	REVISED -			CONTRACT NO. 78311					
	PLOT DATE = 10/15/2013	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

SW QUARTER, NW QUARTER
SECTION 21
T. 7 S., R. 3 E., 3RD P.M.

SE QUARTER, NW QUARTER
SECTION 21
T. 7 S., R. 3 E., 3RD P.M.

PARCEL	PROPERTY OWNER	PURPOSE	ACREAGE
032	GREGORY A. MURPHY & KARMEL L. ROWE	ROW	0.091
034	GREGORY K. & LISA M. WOOLARD	ROW	0.046
035	RALPH W. & MARGARET A. DUNHAM	ROW	0.027



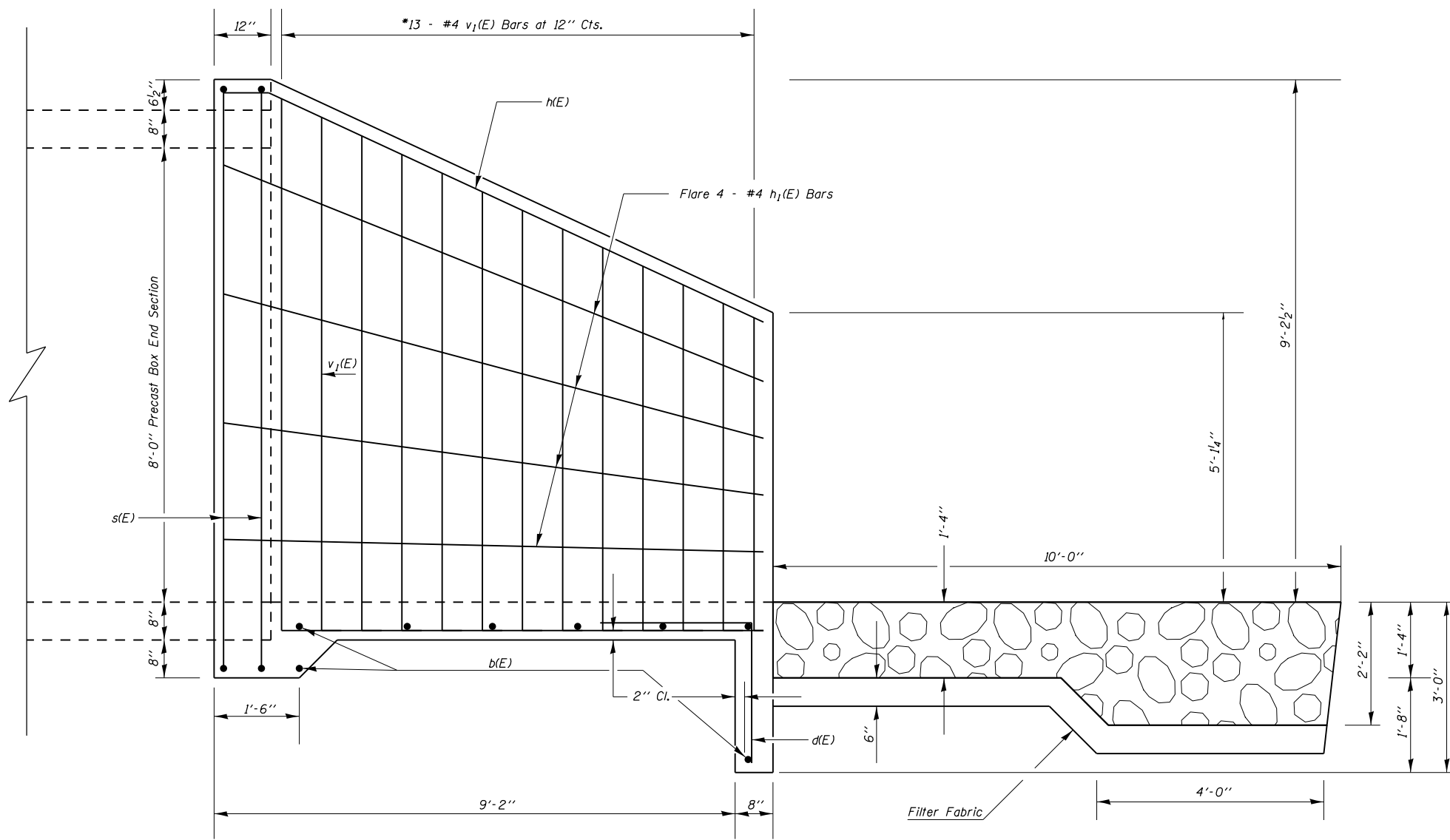
JAMES A. THOMPSON
ILLINOIS PROFESSIONAL LAND SURVEYOR
James A. Thompson
Current license expires 11/2014.

COORDINATES

PT#	NORTHING	EASTING
JH1	824538.67	449383.45
JH2	824538.66	449388.45
JH3	824721.10	449373.84
MF1	824601.67	449383.58
MF2	824601.69	449373.58
MF3	824866.66	449389.16
MF4	824866.69	449374.16
MF5	824601.51	449458.58
MF6	824601.48	449473.58
MF7	824866.51	449459.16
MF8	824866.48	449474.16
MF11	824718.42	449383.84
MF15	824751.66	449388.91
MF16	824751.67	449383.91
MF25	824544.45	449431.65

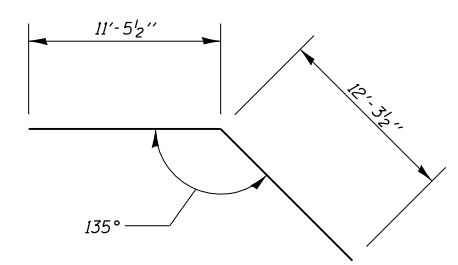
This professional service conforms to the current Illinois minimum standards for a boundary survey.

FILE NAME :	USER NAME : *USER*	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	R-99-004-12 RIGHT OF WAY PLANS/S. B. ROUTE 149	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
*FILE#		DRAWN -	REVISED -			149	107B-1	FRANKLIN			
MODELNAME		CHECKED -	REVISED -			CONTRACT NO. J811					
		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					
				SCALE: 1" = 100'		SHEET OF SHEETS		STA. 868+00.00 TO STA. 875+00.00			

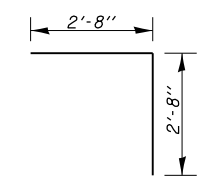


DESIGN STRESSES
 $f_y = 60,000 \text{ psi}$
 $f_c' = 3,500 \text{ psi}$

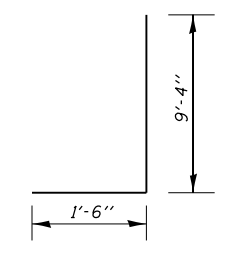
HALF SIDE ELEVATION



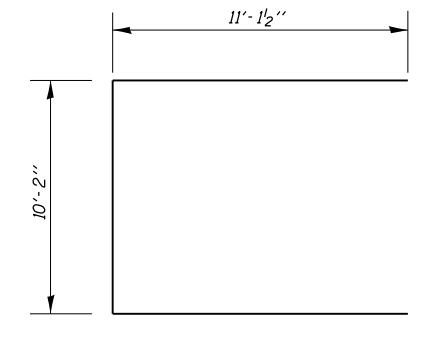
Bar h(E)



Bar d(E)



Bar v1(E)



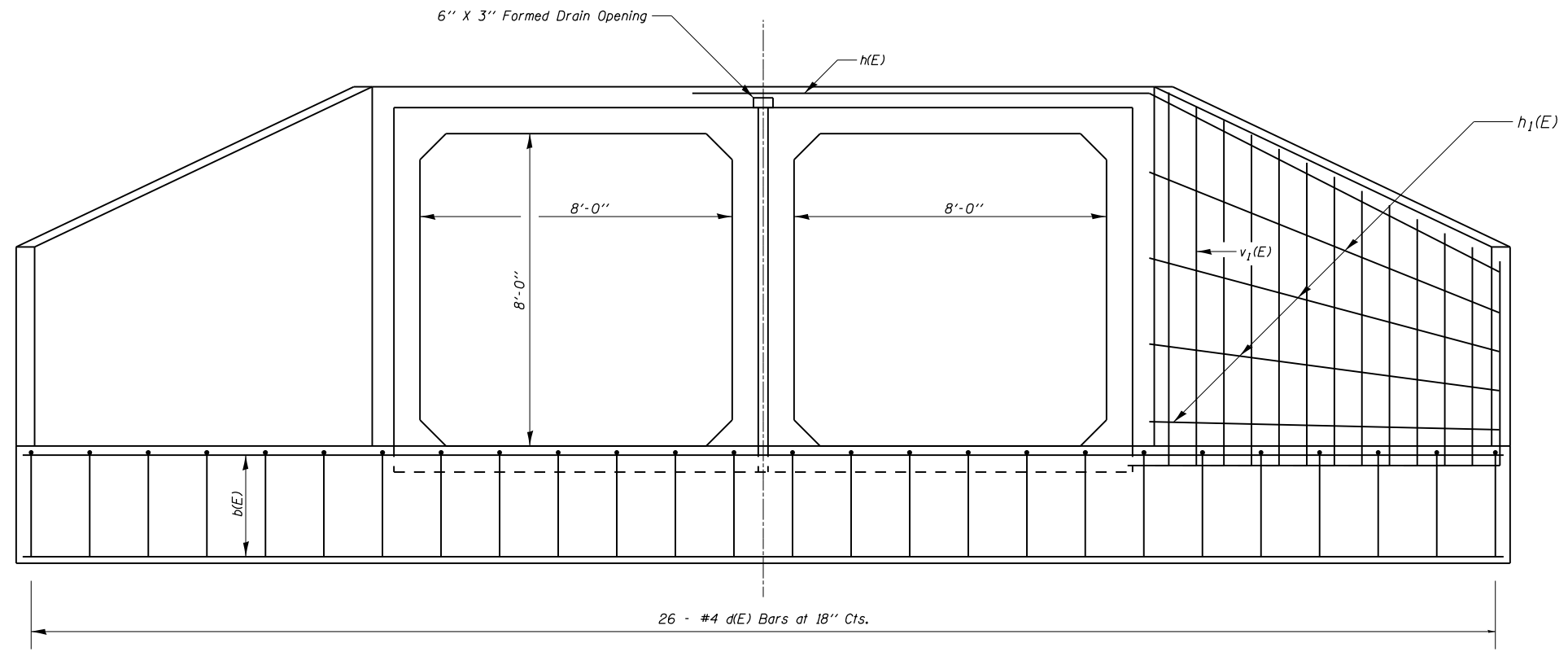
Bar s(E)

BILL OF MATERIAL

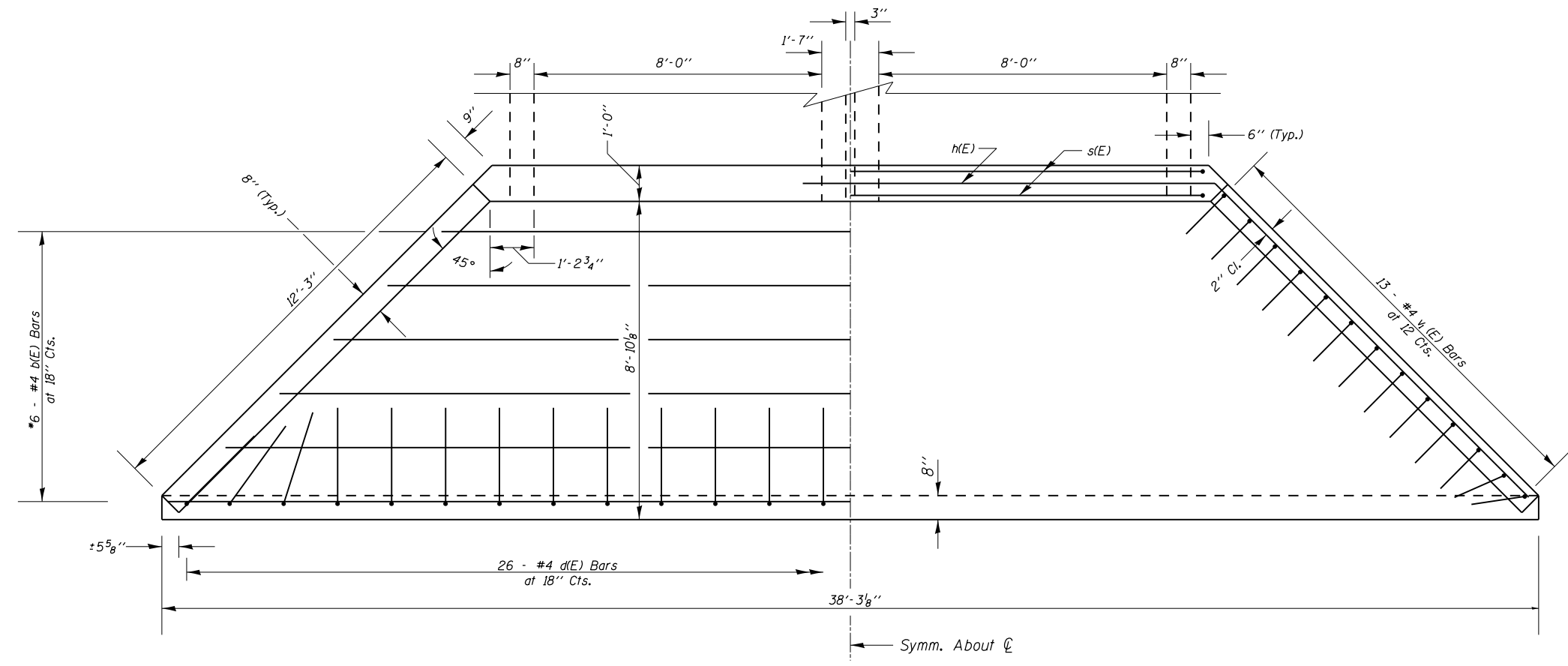
Bar	No.	Size	Length	Shape
b(E)	32	#4	20'-3 1/2"	—
d(E)	52	#4	5'-4"	J
h(E)	4	#4	23'-9"	—
h1(E)	16	#4	10'-3"	—
s(E)	8	#4	32'-5"	⌊
v1(E)	52	#4	10'-6"	⌋
Concrete Box Culverts			Cu. Yd.	31.9
Reinforcement Bars, Epoxy Coated			Pound	1330

Reinforcement bars designated (E) shall be epoxy coated.
 *Cut or bend to fit.
 Reinforcement bars shall conform to the requirements of ASTM A 706.
 Exposed edges shall be beveled 3/4"

Cast-in-Place
 Apron End Section Details
 Franklin County
 SN 028-7121



END ELEVATION



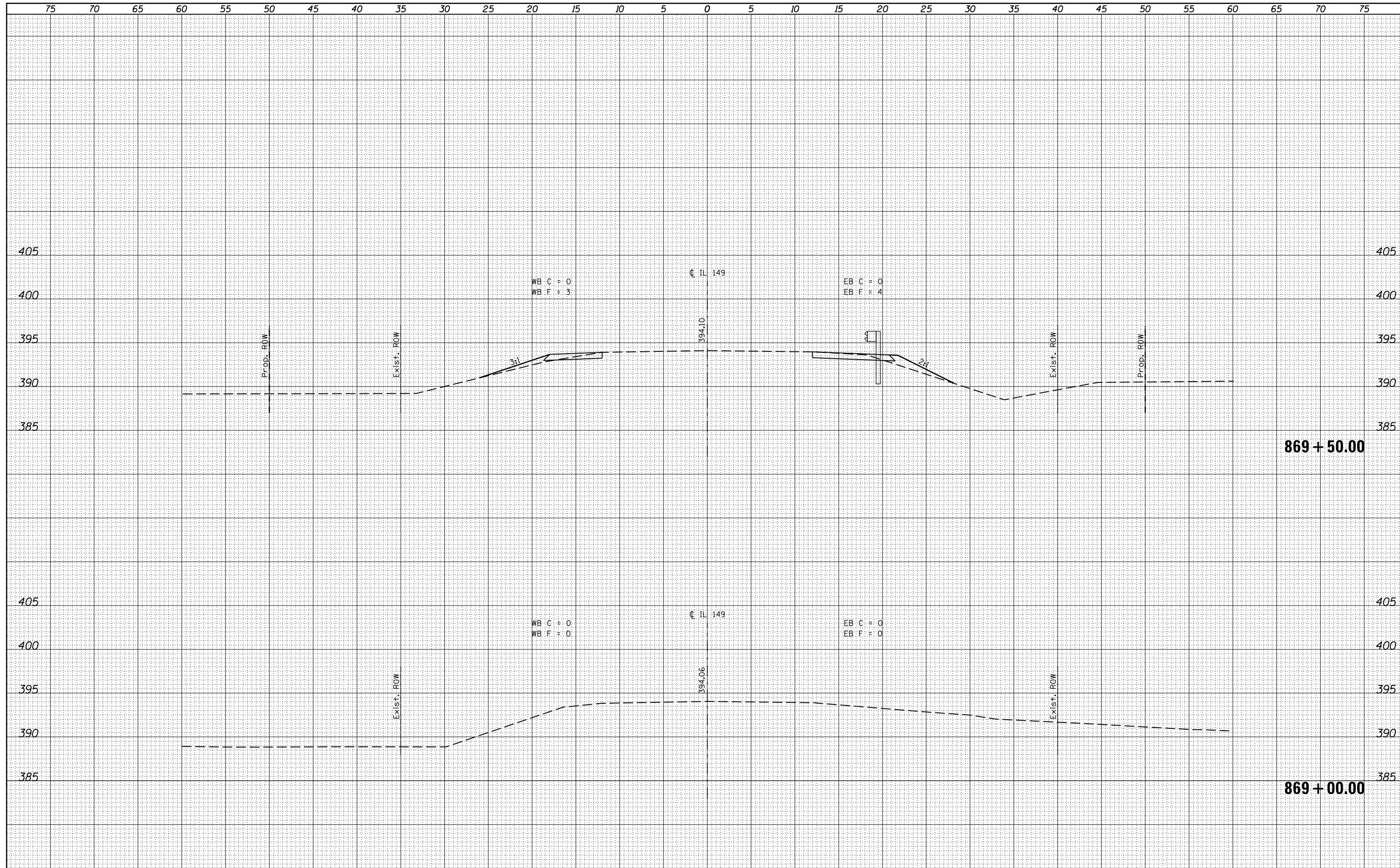
PLAN

* Cut or Bend to Fit
Work this sheet with Sheet 11 of 19.

FILE NAME =	USER NAME = \$USER\$	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CAST-IN-PLACE APRON END SECTION DETAILS SN 028-7121				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwwork\pwwork\adamsam\d0317484\7831	-sht-plan.dgn	DRAWN -	REVISED -		873	107B-1	FRANKLIN	19	12				
\$MODELNAME\$	PLOT SCALE = 4.0000' / in.	CHECKED -	REVISED -		CONTRACT NO. 78311								
	PLOT DATE = 10/15/2013	DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.	ILLINOIS FED. AID PROJECT	

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

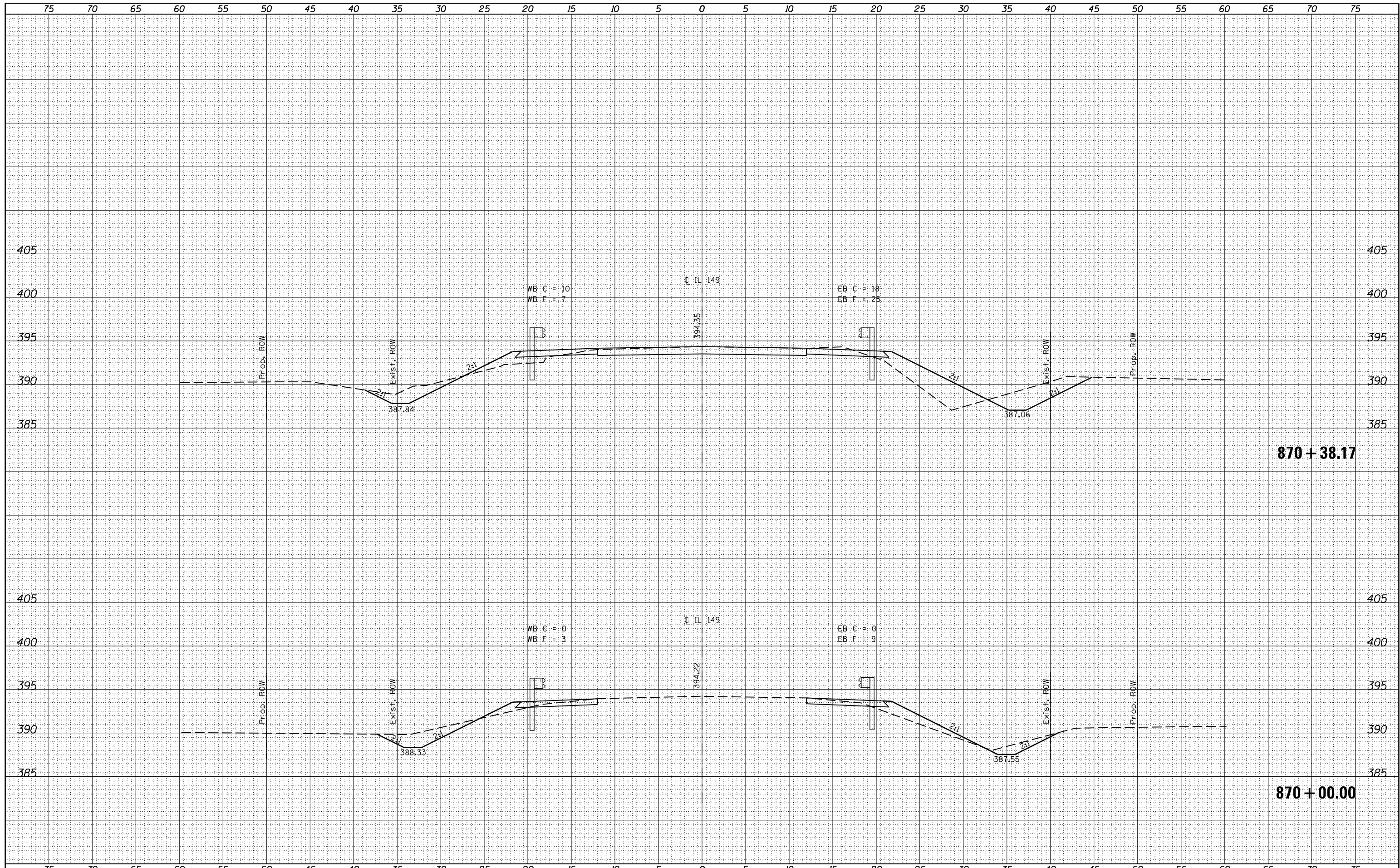
DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED
	AREAS CHECKED



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c:\pw_work\pwidot\adamson\d0317484\78311-xssht.dgn		DRAWN -	REVISED -		873	107B-1	FRANKLIN	19	13
		CHECKED -	REVISED -		CONTRACT NO. 78311				
\$MODELNAME\$		DATE -	REVISED -		ILLINOIS FED. AID PROJECT				

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

DATE
BY
ORIGINAL SURVEY
PLOTTED
TEMPLATE
AREAS CHECKED
NO.



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 PLOT SCALE = 10.0000 ' / in.
 PLOT DATE = 10/15/2013

DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

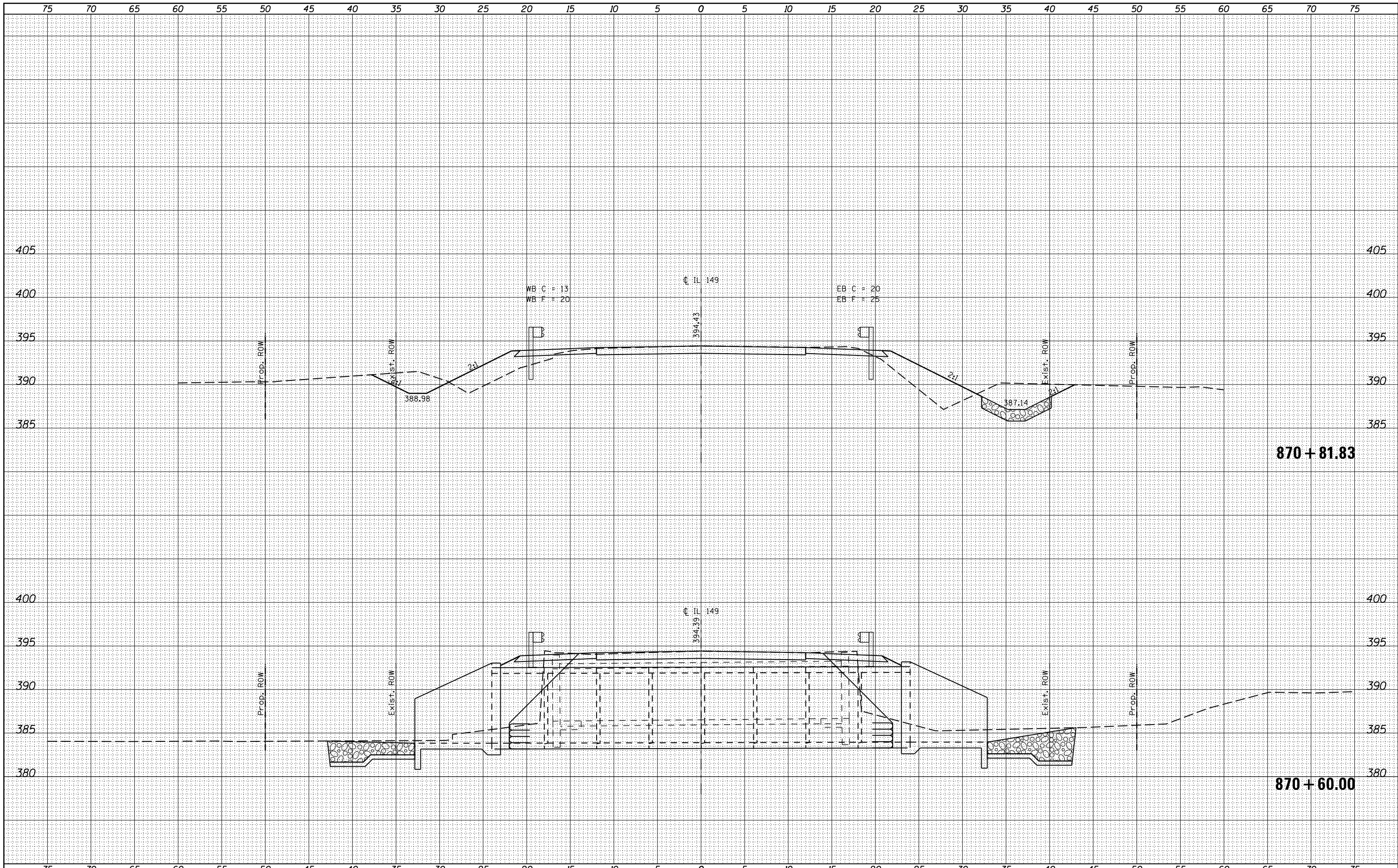
CROSS SECTIONS IL 149

SCALE: SHEET OF SHEETS STA. 870+00.00 TO STA. 870+38.17

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
873	107B-1	FRANKLIN	19	14
			CONTRACT NO. 78311	
ILLINOIS FED. AID PROJECT				

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

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



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 USER NAME = susers
 PLOT SCALE = 10.0000' / 1" = 100
 PLOT DATE = 10/15/2013

DESIGNED -
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 DATE -

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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

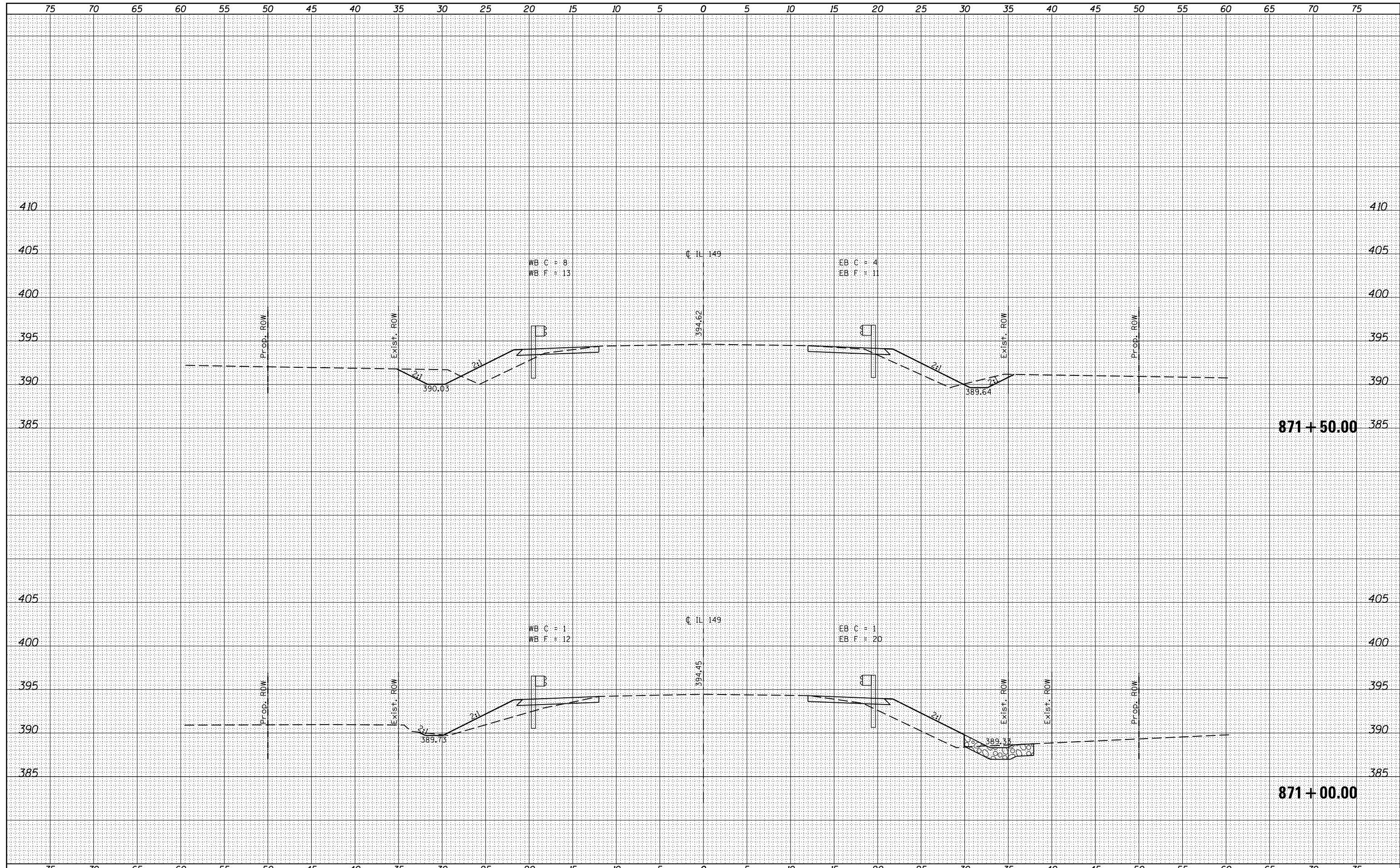
CROSS SECTIONS IL 149

SCALE: SHEET OF SHEETS STA. 870+60.00 TO STA. 870+81.83

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
873	107B-1	FRANKLIN	19	15
CONTRACT NO. 78311			ILLINOIS FED. AID PROJECT	

BY	DATE

BY	DATE



FILE NAME = c:\pw_work\pwidot\adamson\d0317484\78311-xssht.dgn
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 PLOT SCALE = 10.0000' / in.
 PLOT DATE = 10/15/2013

DESIGNED -	REVISIED -
DRAWN -	REVISIED -
CHECKED -	REVISIED -
DATE -	REVISIED -

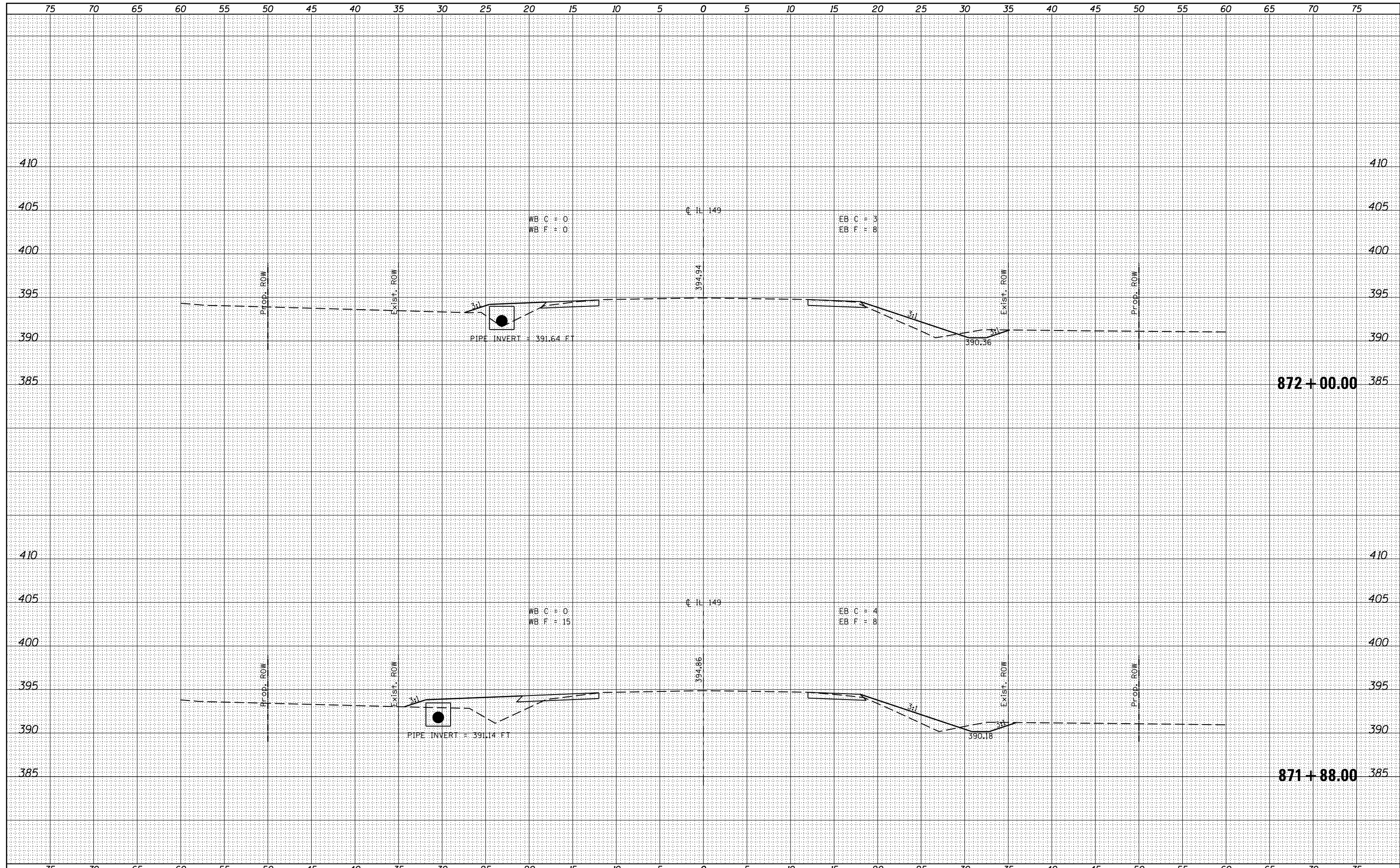
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS IL 149
 SCALE: SHEET OF SHEETS STA. 871+00.00 TO STA. 871+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
873	107B-1	FRANKLIN	19	16
CONTRACT NO. 78311			ILLINOIS FED. AID PROJECT	

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

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



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 PLOT SCALE = 10.0000' / 1"

DESIGNED -	REVISIED -
DRAWN -	REVISIED -
CHECKED -	REVISIED -
DATE -	REVISIED -
PLOT DATE = 10/15/2013	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

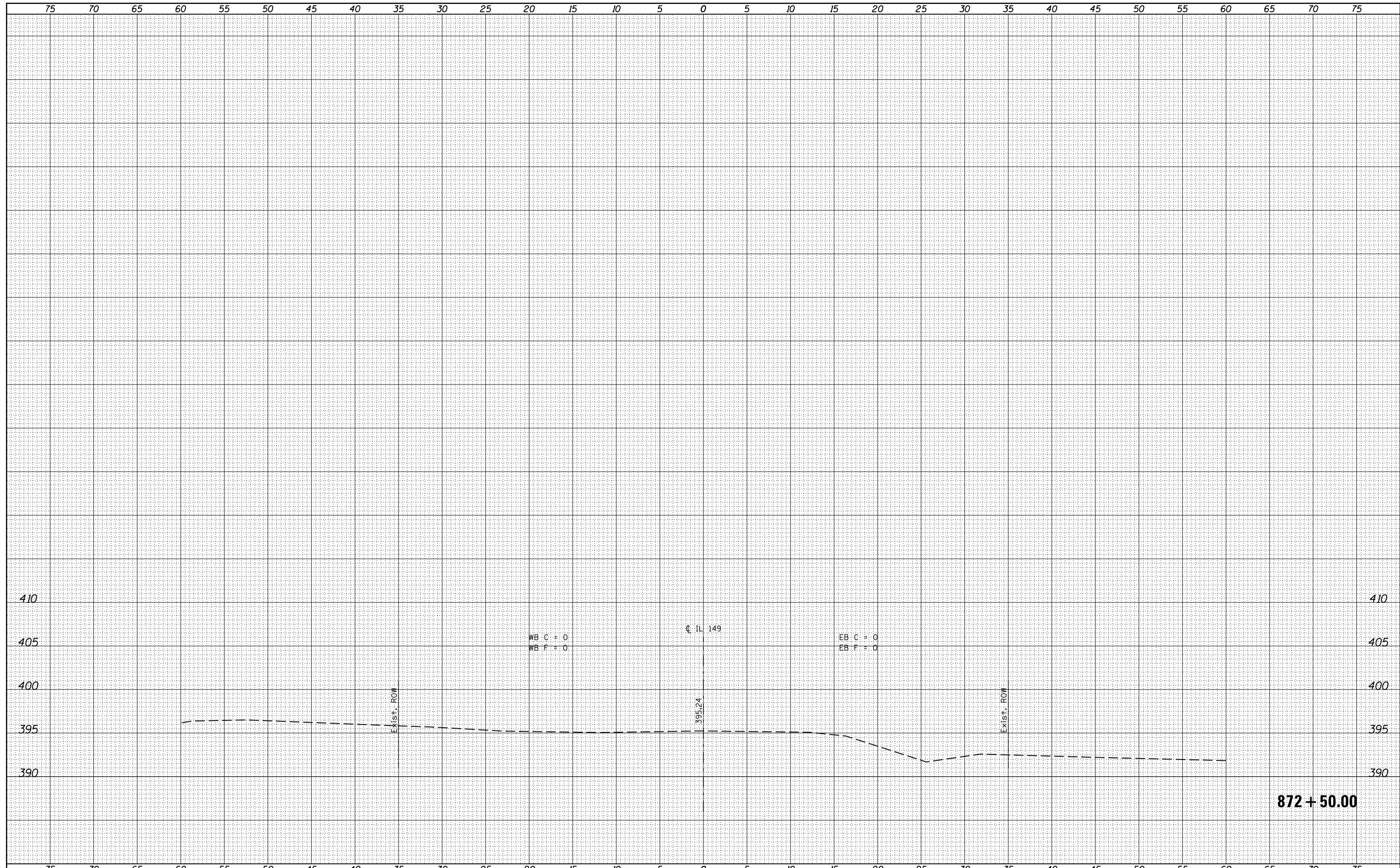
CROSS SECTIONS IL 149

SCALE: SHEET OF SHEETS STA. 871+88.00 TO STA. 872+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
873	107B-1	FRANKLIN	19	17
CONTRACT NO. 78311				
ILLINOIS FED. AID PROJECT				

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

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



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 PLOT DATE = 10/15/2013

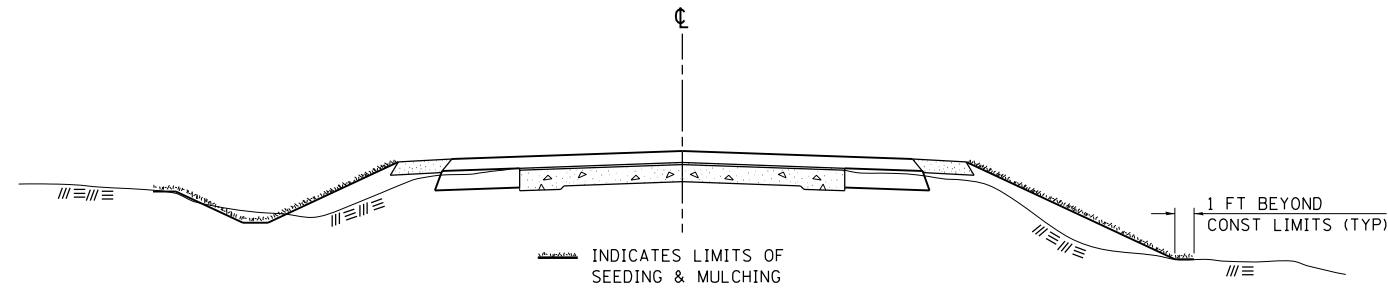
DESIGNED -	REVISIED -
DRAWN -	REVISIED -
CHECKED -	REVISIED -
DATE -	REVISIED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS IL 149
 SCALE: SHEET OF SHEETS STA. 872+50.00 TO STA. 872+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
873	107B-1	FRANKLIN	19	18
			CONTRACT NO. 78311	
ILLINOIS FED. AID PROJECT				

SEEDING & MULCHING



GENERAL NOTES

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

FERTILIZER NUTRIENTS AND LIMESTONE SHALL BE APPLIED TO ALL SEEDED AREAS.

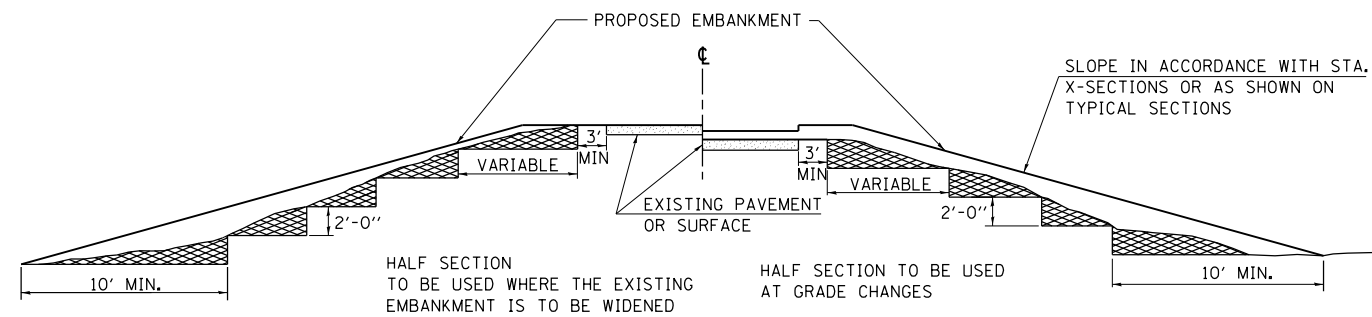
THE RATES OF APPLICATION OF FERTILIZER, MULCH AND LIMESTONE SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS.

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

STD. 9-12

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

STD. 9-16

FILE NAME =	USER NAME = \$USER*	DESIGNED -	REVISED -
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	PLOT DATE = 10/15/2013	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STANDARD DETAILS
SN 028-7121**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
873	107B-1	FRANKLIN	19	19
				CONTRACT NO. 78311
ILLINOIS FED. AID PROJECT				