

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

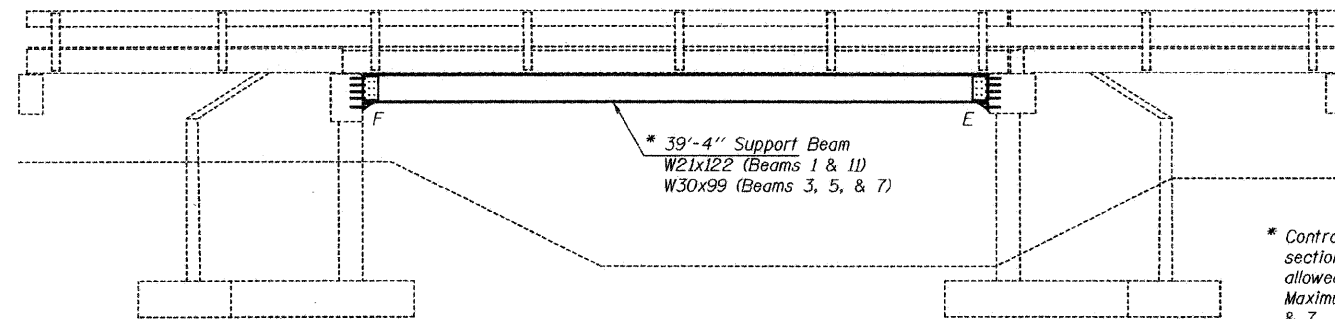
The contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the beams when developing construction procedures.

See Section 584 of the Standard Specifications for Epoxy Grouting of Threaded Rods; Minimum embedment 9".

If the Contractor's procedure for placement of beams involves placement of cranes or other heavy equipment on the bridge, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, prepared and sealed by an Illinois Licensed Structural Engineer, verifying that the equipment and procedure used will not overstress the existing beams. To distribute load to multiple beams and protect the existing surface, in all cases a double layer mat of heavy timbers shall be used at all times under crane tracks or wheels and any outriggers in the down position. If necessary, shims shall be used under the crane mat to ensure uniform contact with the underlying beams.

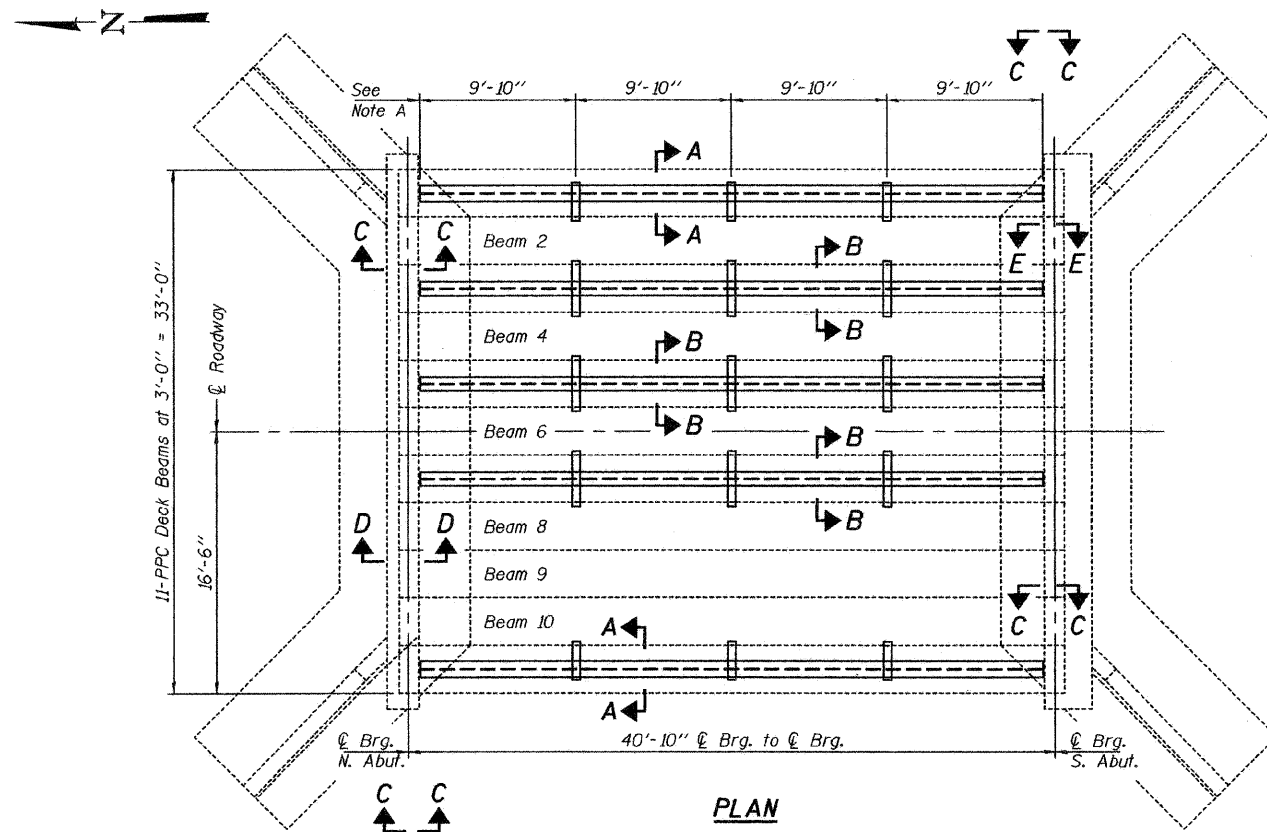
The cost of epoxy grouting threaded rods on the pier cap, abutments and beams shall be included with Furnishing and Erecting Structural Steel.

The Contractor has the option of using used steel. See Special Provisions.



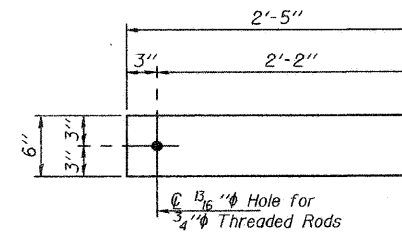
ELEVATION

* Contractor is to verify beam length prior to ordering material. Other sections meeting the section modulus requirements shown may be allowed subject to approval by the Bureau of Bridges and Structures. Maximum Girder depth = 21" for beams 1 & 11, 30" for beams 3, 5, & 7. No additional payment will be allowed if the Contractor chooses a heavier steel section than the one specified in the plans. (Min. $S_x = 273 \text{ in}^3$ for W21 beams or 269 in^3 for W30 beams)



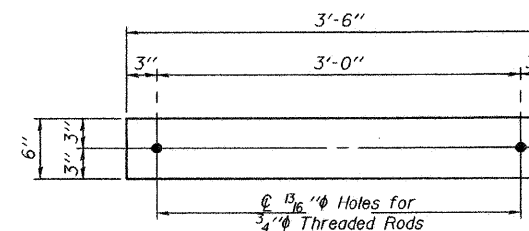
PLAN

Note A:
 ☉ Transverse tie \bar{R} 's (3 per span). Place additional shims at midpoints between tie \bar{R} 's. Securely weld shims to top flange of support beam. Minimum shim size is 6" x flange width.



TRANSVERSE TIE \bar{R} A

\bar{R} $\frac{1}{2}$ " x 6" x 2'-5"
(6 Required)



TRANSVERSE TIE \bar{R} B

\bar{R} $\frac{1}{2}$ " x 6" x 3'-6"
(9 Required)

FOR INFORMATION ONLY

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	Pound	24,170

PLAN & ELEVATION
 IL ROUTE 84 OVER
 DUKE CREEK
 SN 043-0027

DESIGNED *Adrian T. Holloway*
 CHECKED *Victor H. Veltz*
 DRAWN *Kyle M. Steffen*
 CHECKED *ATH VHV*

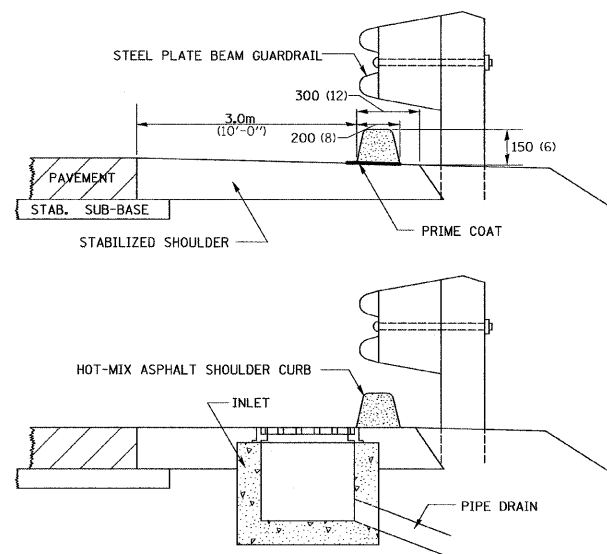
MARCH 19, 2009
 EXAMINED *[Signature]*
 PASSED *[Signature]*
 ENGINEER OF BRIDGES AND STRUCTURES



Expires: November 30, 2010

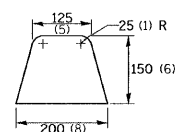
SHEET NO. 1	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2 SHEETS	308	(103BR-2)	JoDAVIESS	4	3
CONTRACT NO. 64E92					
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

HOT-MIX ASPHALT SHOULDER CURB



REVISED - 11-01-07

CURB DETAIL



GENERAL NOTES

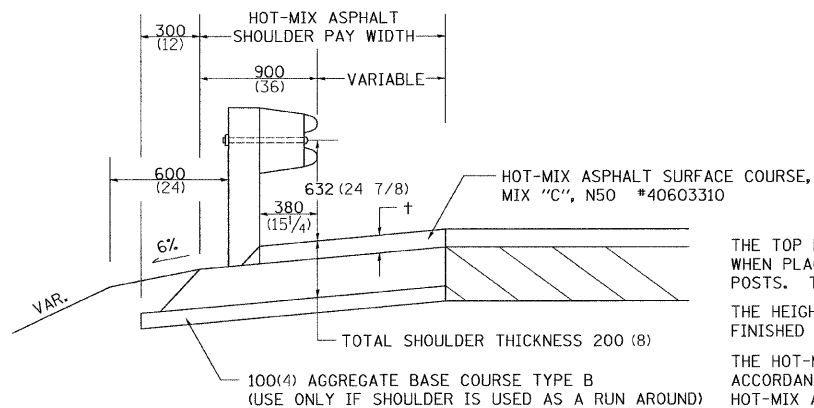
THIS WORK SHALL BE DONE AS SPECIFIED UNDER SECTION 661 OF THE STANDARD SPECIFICATIONS FOR HOT-MIX ASPHALT CURB.

THE METAL PIPES AND INLETS SHALL BE INSTALLED AS DIRECTED BY THE ENGINEER.

THE BITUMINOUS MATERIALS PRIME COAT SHALL BE CONSIDERED INCLUDED TO THE HOT-MIX ASPHALT SHOULDER CURBS.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

HOT-MIX ASPHALT SHOULDER CURB 10.4



† = SEE TYPICAL SECTIONS FOR THICKNESS

GENERAL NOTES

THE TOP LIFT SHALL NOT BE PLACED BEHIND THE GUARDRAIL POSTS. WHEN PLACING THE TOP LIFT THE RAIL MUST BE REMOVED FROM THE POSTS. THE POST SHALL NOT BE REMOVED.

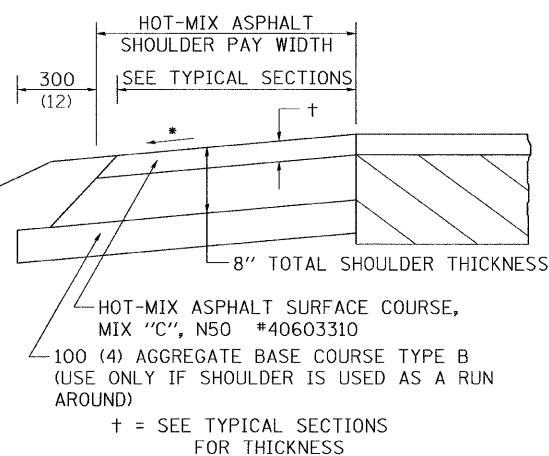
THE HEIGHT OF THE GUARD RAIL SHALL BE SET 632 (24⁷/₈) FROM THE FINISHED SURFACE.

THE HOT-MIX ASPHALT SHOULDER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 482 EXCEPT THE TOP LIFT SHALL BE HOT-MIX ASPHALT SURFACE COURSE, MIXTURE C, N50. THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE, MIXTURE "C", N50 AND SQUARE METER (SQUARE YARD) FOR HOT-MIX ASPHALT SHOULDERS OF THE THICKNESS SPECIFIED. THE REMOVAL & REINSTALLATION OF THE GUARDRAIL WILL BE INCLUDED IN THE COST OF THE HOT-MIX ASPHALT SURFACE COURSE, MIXTURE C, N50.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

REVISED - 11-01-07

DETAIL OF HOT-MIX ASPHALT SHOULDER AT GUARD RAIL 23.4



REVISED - 11-01-07

GENERAL NOTES

THE HOT-MIX ASPHALT SHOULDER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 482 EXCEPT THE TOP LIFT SHALL BE HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 #40603310. THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 #40603310 AND SQUARE YARD FOR HOT-MIX ASPHALT SHOULDERS OF THE THICKNESS SPECIFIED.

USE HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 #40603310. WHEN RESURFACING EXISTING HOT-MIX ASPHALT SHOULDERS, THE THICKNESS IS SHOWN ON THE TYPICAL SECTIONS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 #40603310.

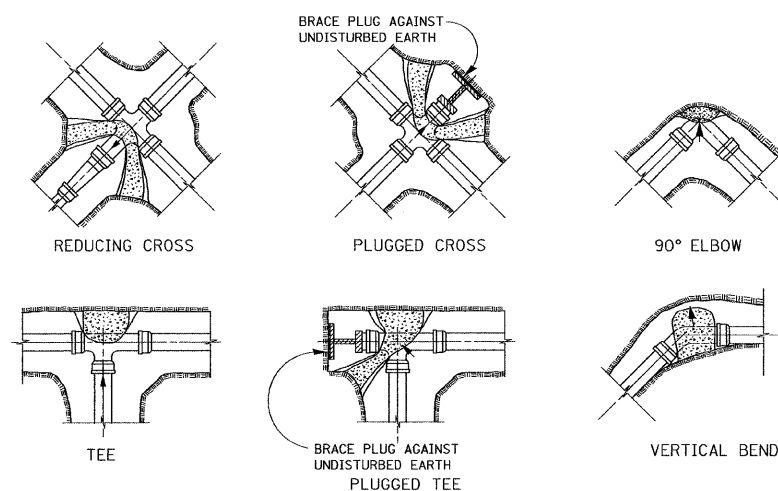
REMOVAL OF MATERIAL FOR PLACEMENT OF THE HOT-MIX ASPHALT SHOULDER TO BE PAID FOR IN UNITS FOR EXCAVATING AND GRADING EXISTING SHOULDERS OR IN CUBIC YARDS FOR EARTH EXCAVATION OR EARTH EXCAVATION WIDENING.

* 4% WHEN MAINLINE IS ON TANGENT. FOR CROSS SLOPE ON SUPERELEVATION SECTION, SEE HIGHWAY STANDARD 482001 OR 482006.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

HOT-MIX ASPHALT SHOULDER 23.4a

THRUST BLOCK DETAILS



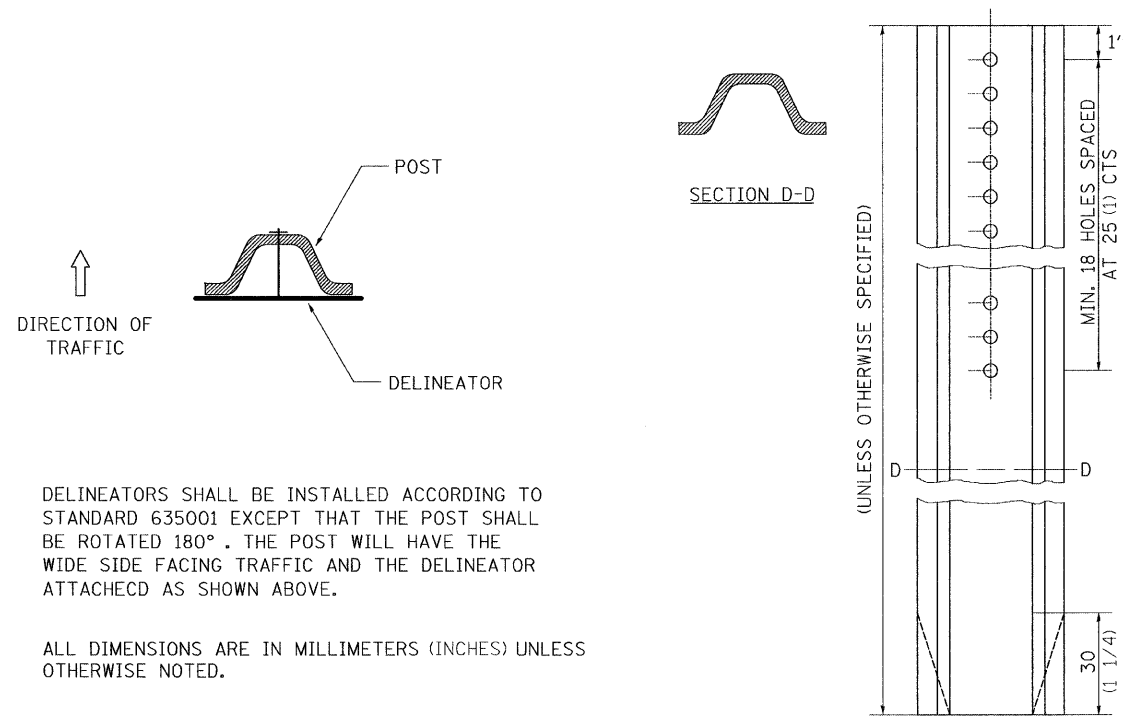
NOTES:
ALL BLOCKS TO BEAR AGAINST UNDISTURBED EARTH. ARROWS INDICATE DIRECTION OF THRUST.
ALL BLOCKS TO BE CLASS S1 CONCRETE.
ALL FITTINGS SHOWN IN PLAN EXCEPT VERTICAL BEND.

REVISED - 10-20-87

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

THRUST BLOCK DETAILS 34.4

REVISED -	REGION 2 / DISTRICT 2 STANDARD			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
REVISED -				308	103BR-3 & 104BR-1	JO DAVIESS	126	103			
REVISED -				SCALE: *SCALE*			SHEET NO. 1 OF 10 SHEETS		STA.	TO STA.	CONTRACT NO. 64B26
REVISED -				PLOT DATE = *DATE*			FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



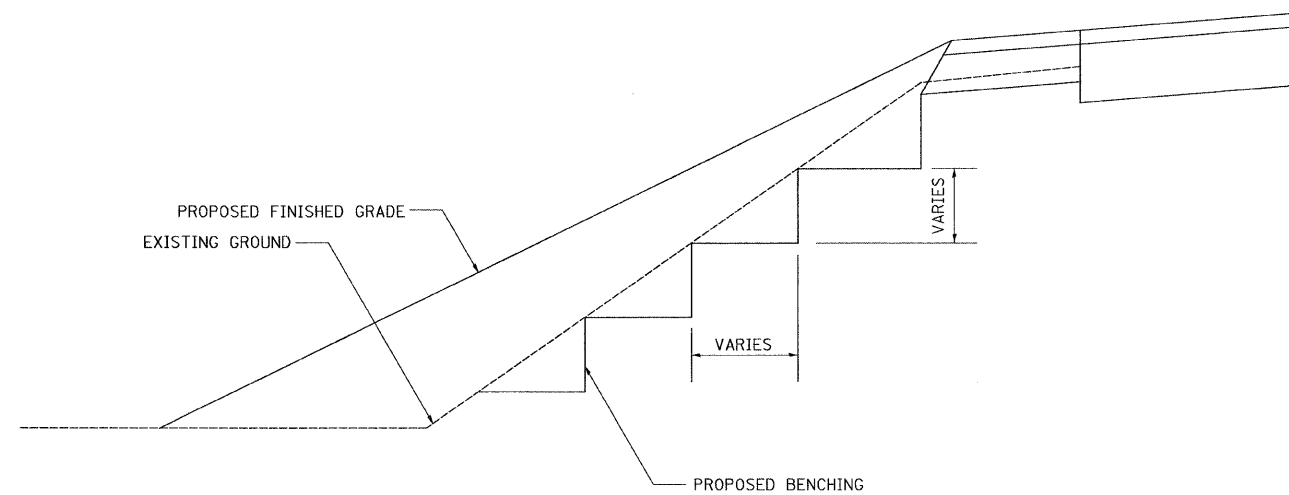
DELINEATORS SHALL BE INSTALLED ACCORDING TO STANDARD 635001 EXCEPT THAT THE POST SHALL BE ROTATED 180°. THE POST WILL HAVE THE WIDE SIDE FACING TRAFFIC AND THE DELINEATOR ATTACHED AS SHOWN ABOVE.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

REVISED - 11-01-07

DELINEATOR AND POST ORIENTATION

37.4

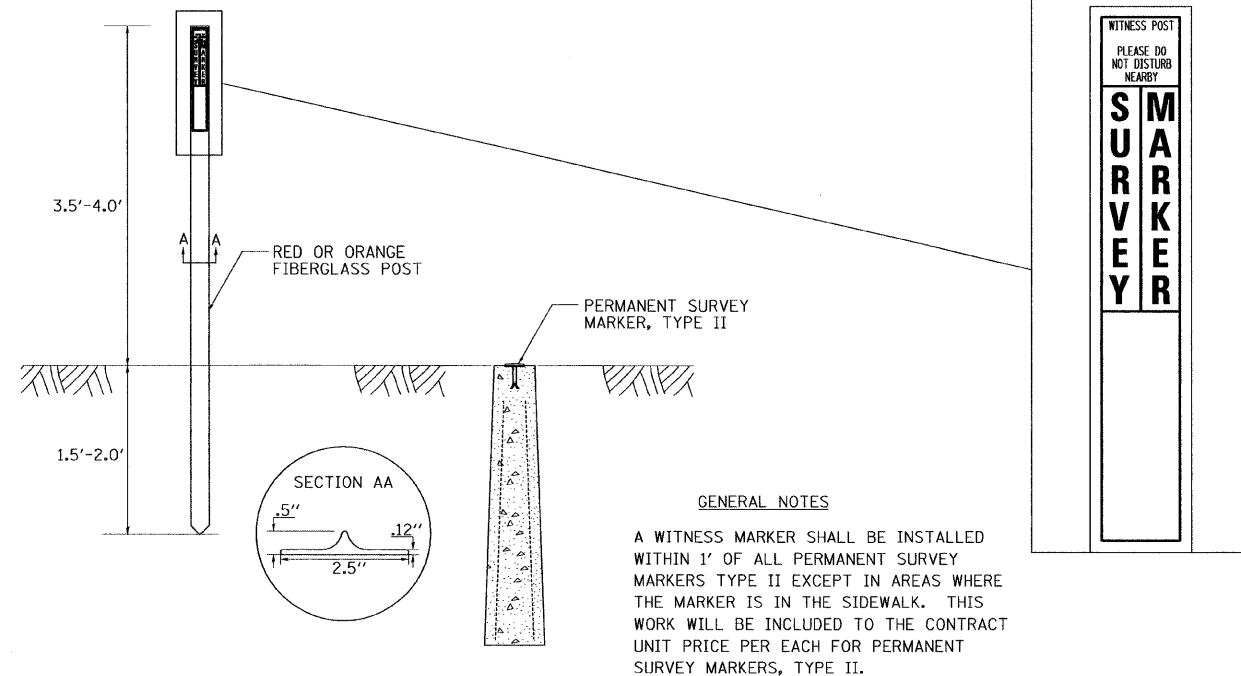


REVISED - 2-22-06

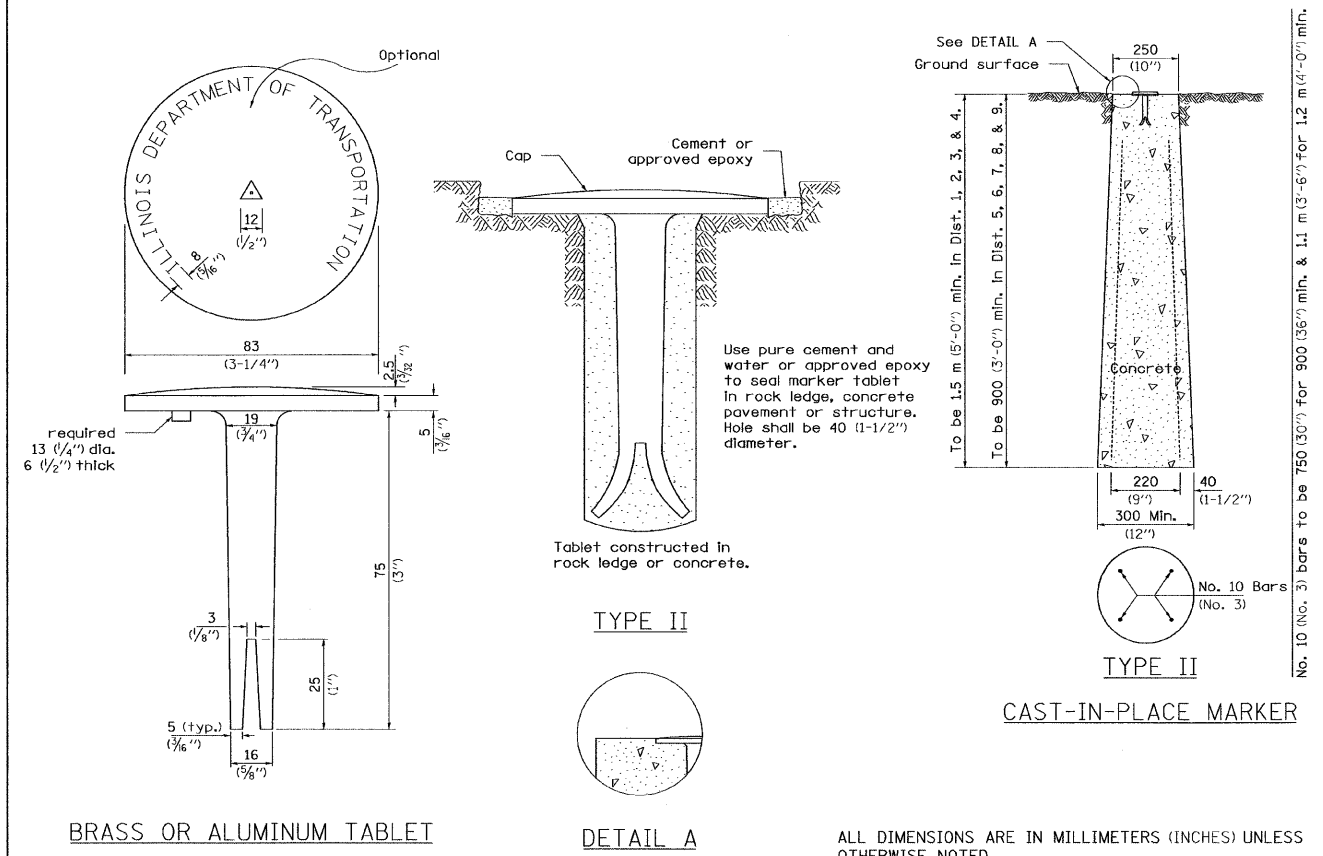
TYPICAL BENCHING ON EXISTING EMBANKMENT

50.4

REVISED -	REGION 2 / DISTRICT 2 STANDARD				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -					30B	103BR-3 & 104BR-1	JO DAVIESS	126	104
REVISED -					CONTRACT NO. 64B26				
REVISED -					FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
SCALE: *SCALE*	SHEET NO. 2 OF 10 SHEETS	STA.	TO STA.						
PLOT DATE - *DATE*									

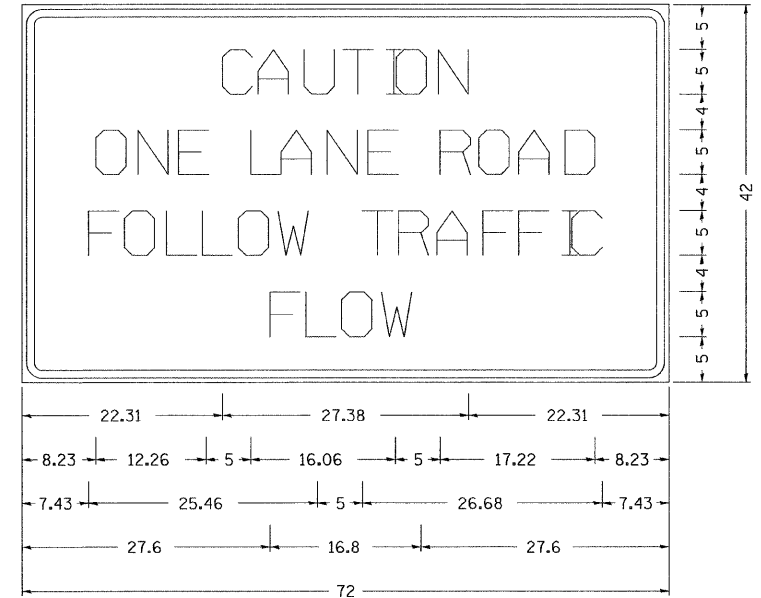


PERMANENT SURVEY MARKERS, TYPE II



REVISED - 10-21-08

WITNESS MARKER & PERMANENT SURVEY MARKERS, TYPE II 66.2



Type AA Fluorescent Orange Sheeting ;
2.25" Radius, 0.88" Border, 0.50" Indent, Black on Orange;
[CAUTION] D; [ONE LANE ROAD] D;
[FOLLOW TRAFFIC] D; [FLOW] D

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									

GENERAL NOTES

THIS SIGN SHALL BE INSTALLED AT ENTRANCES LOCATED BETWEEN THE TEMPORARY SIGNALS AS DIRECTED BY THE ENGINEER.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

THE COST TO FURNISH, INSTALL AND REMOVE THIS SIGN AT THE REQUIRED LOCATIONS SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION STANDARD 701321.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

REVISED - 10-28-05

ENTRANCE SIGN FOR USE WITH TEMPORARY SIGNALS 75.2

REVISED -	REGION 2 / DISTRICT 2 STANDARD	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
REVISED -		308	103BR-3 & 104BR-1	JO DAVIESS	126	106	
REVISED -		SCALE: *SCALE*	SHEET NO. 4 OF 10 SHEETS		STA.	TO STA.	
REVISED -		FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

PLOT DATE = #DATE#

ENTRANCES, SIDE ROADS, AND MAILBOX RETURNS WITH NO HOT-MIX ASPHALT SHOULDERS

7.2m (24') FIELD ENTRANCE		
	APRON	PER M (LIN FT) OF ENTR
AGG BASE CSE T-B M (TON)	38.5 (44.5)	3.5 (1.2)

	1.8m (6')	2.4m (8')	PER METER ENTR (FOOT)
AGG BASE CSE T-B (TON)	59.8 (65.9)	62.1 (68.5)	5.57 (1.87)
INC HMA SURF 50(2) (TON)	16.9 (18.6)	17.7 (19.5)	1.61 (0.54)
BIT PRIME COAT (TON)	0.17 (0.19)	0.18 (0.20)	0.018 (0.006)

	1.8m (6')	2.4m (8')	PER METER ENTR (FOOT)
AGG BASE CSE T-B (TON)	39.7 (43.8)	42.0 (46.3)	2.11 (0.71)
INC HMA SURF 50(2) (TON)	10.7 (11.8)	11.5 (12.7)	0.57 (0.19)
BIT PRIME COAT (TON)	0.11 (0.12)	0.18 (0.13)	0.006 (0.002)

	5.5m (18')	6m (20')	6.5m (21')	5.5m (18')	6m (20')	6.5m (21')	5.5m (18')	6m (20')	6.5m (21')
AGG BASE CSE T-B (TON)	70.3 (77.5)	74.4 (82.0)	78.6 (86.6)	105.5 (116.3)	111.0 (122.4)	116.6 (128.5)	146.6 (161.6)	153.5 (169.2)	116.6 (176.8)
INC HMA SURF AT 25(1) (TON)	5.3 (5.8)	5.5 (6.1)	5.9 (6.5)	8.0 (8.8)	8.4 (9.3)	9.0 (9.9)	11.1 (12.2)	11.7 (12.9)	9.0 (13.5)
BIT PRIME COAT (TON)	0.14 (0.15)	0.15 (0.16)	0.15 (0.17)	0.20 (0.22)	0.22 (0.24)	0.23 (0.25)	0.30 (0.33)	0.32 (0.35)	0.32 (0.37)

FIELD ENTRANCE

MAILBOX TURNOUT

COMMERCIAL ENTRANCE

COMMERCIAL ENTRANCE

PRIVATE ENTRANCE

SIDE ROAD RETURN

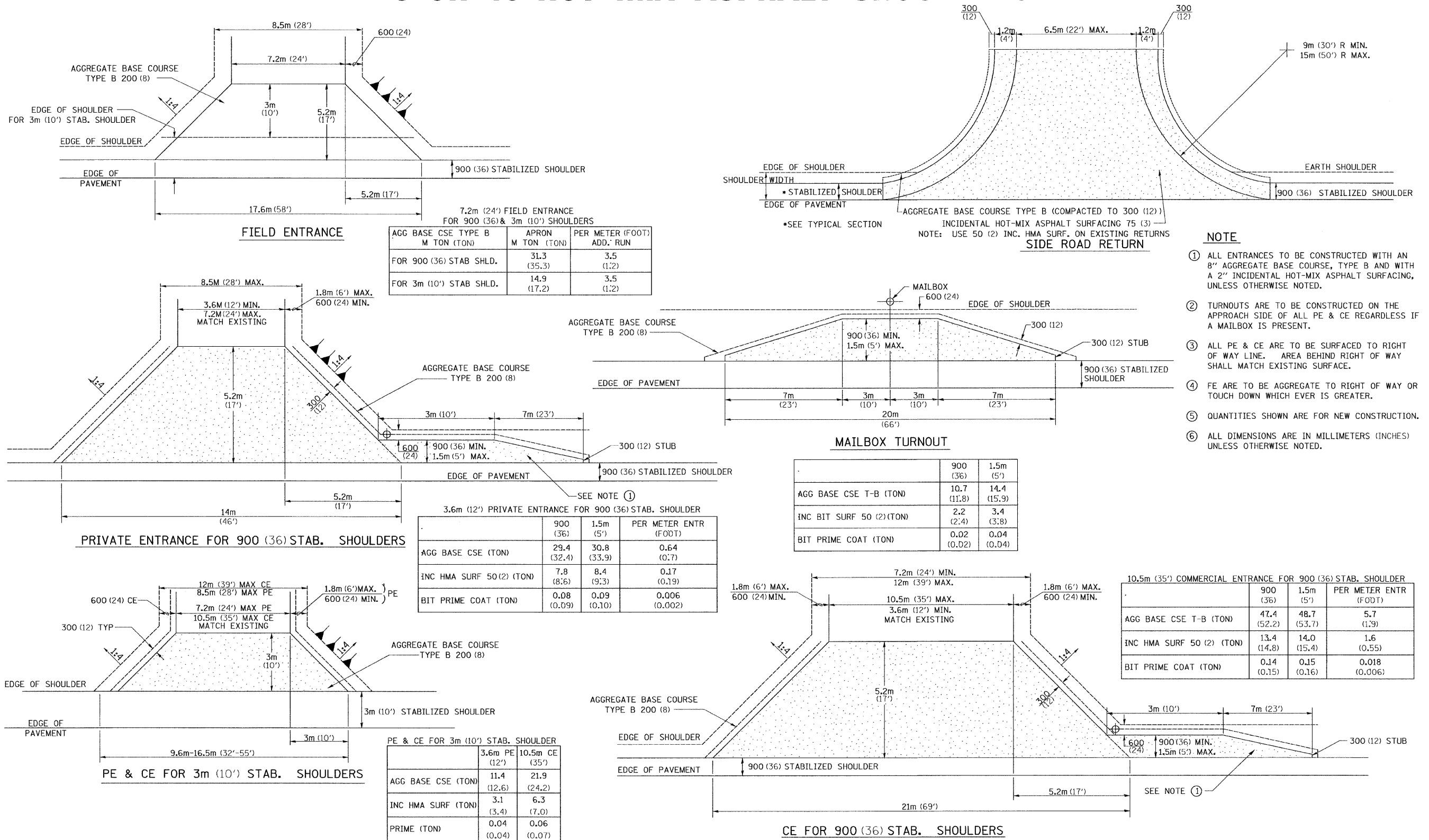
NOTE

- TURNOUTS ARE TO BE CONSTRUCTED ON THE APPROACH SIDE OF ALL PE & CE REGARDLESS IF A MAILBOX IS PRESENT.
- ALL PE & CE ARE TO BE SURFACED TO RIGHT OF WAY LINE. AREA BEHIND RIGHT OF WAY SHALL MATCH EXISTING SURFACE.
- FE ARE TO BE AGGREGATE TO RIGHT OF WAY OR TOUCH DOWN, WHICH EVER IS GREATEST.
- QUANTITIES ARE CALCULATED WITH 1' BITUMINOUS SHOULDER IN PLACE. AGGREGATE QUANTITIES SHOWN ARE FOR NEW CONSTRUCTION.
- EXCAVATION REQUIRED FOR PLACEMENT OF AGGREGATE BASE COURSE SHALL BE CONSIDERED INCLUDED TO THE AGGREGATE BASE COURSE.
- ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

ENTRANCES, SIDE ROADS, AND MAILBOX RETURNS WITH NO HOT-MIX ASPHALT SHOULDERS 20.1

FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED - 1-15-08	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
#FILE#		DRAWN -	REVISED -			308	103BR-3 & 104BR-1	JO DAVIESS	126	107	
		CHECKED -	REVISED -			CONTRACT NO. 64B26					
		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					
						SCALE: SHEET NO. 5 OF 10 SHEETS STA. TO STA.					

ENTRANCES, SIDEROADS, AND MAILBOX RETURNS WITH 3' OR 10' HOT-MIX ASPHALT SHOULDERS



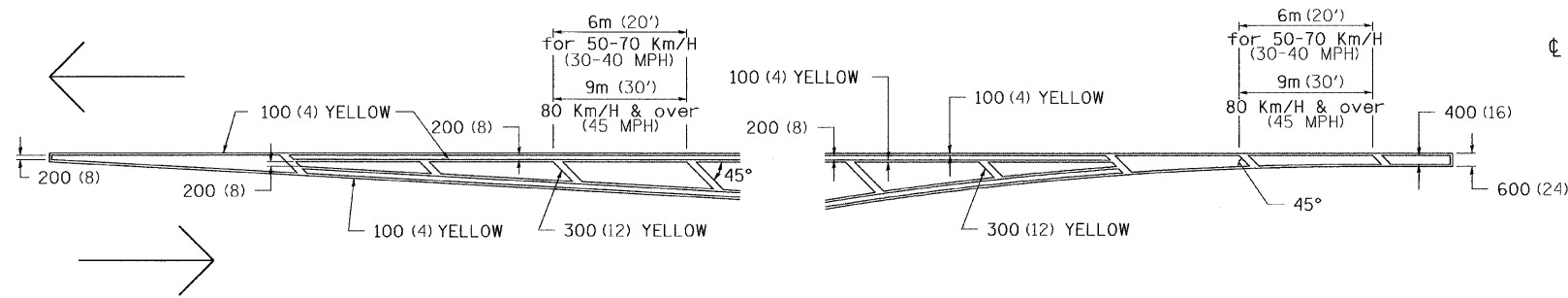
- NOTE**
- ALL ENTRANCES TO BE CONSTRUCTED WITH AN 8" AGGREGATE BASE COURSE, TYPE B AND WITH A 2" INCIDENTAL HOT-MIX ASPHALT SURFACING, UNLESS OTHERWISE NOTED.
 - TURNOUTS ARE TO BE CONSTRUCTED ON THE APPROACH SIDE OF ALL PE & CE REGARDLESS IF A MAILBOX IS PRESENT.
 - ALL PE & CE ARE TO BE SURFACED TO RIGHT OF WAY LINE. AREA BEHIND RIGHT OF WAY SHALL MATCH EXISTING SURFACE.
 - FE ARE TO BE AGGREGATE TO RIGHT OF WAY OR TOUCH DOWN WHICH EVER IS GREATER.
 - QUANTITIES SHOWN ARE FOR NEW CONSTRUCTION.
 - ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

ENTRANCES, SIDE ROADS, AND MAILBOX RETURNS WITH 3' OR 10' HOT-MIX ASPHALT SHOULDERS 21.1

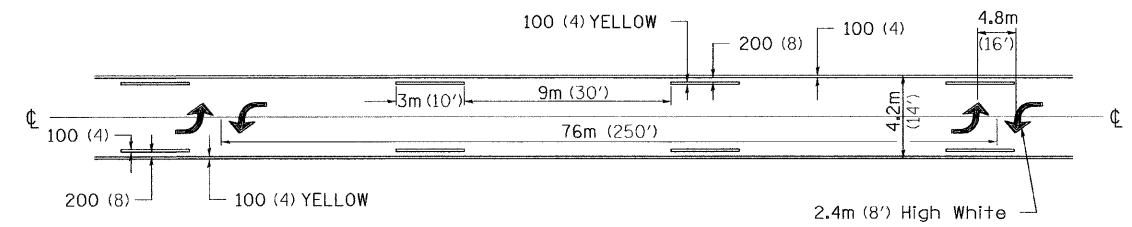
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#FILEL*		DRAWN -	REVISED -			308	103BR-3 & 104BR-1	JO DAVIESS	126	108	
		CHECKED -	REVISED -			CONTRACT NO. 64B26					
		DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					
				SCALE:		SHEET NO. 6 OF 10 SHEETS		STA.		TO STA.	

TYPICAL PAVEMENT MARKINGS

TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN AT LEFT TURN LANE

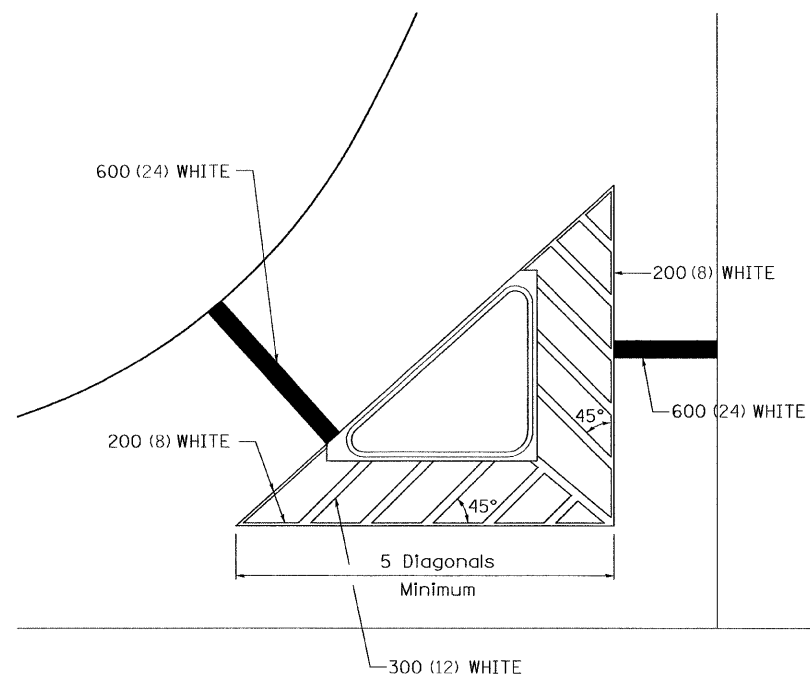


MEDIAN PAVEMENT MARKING

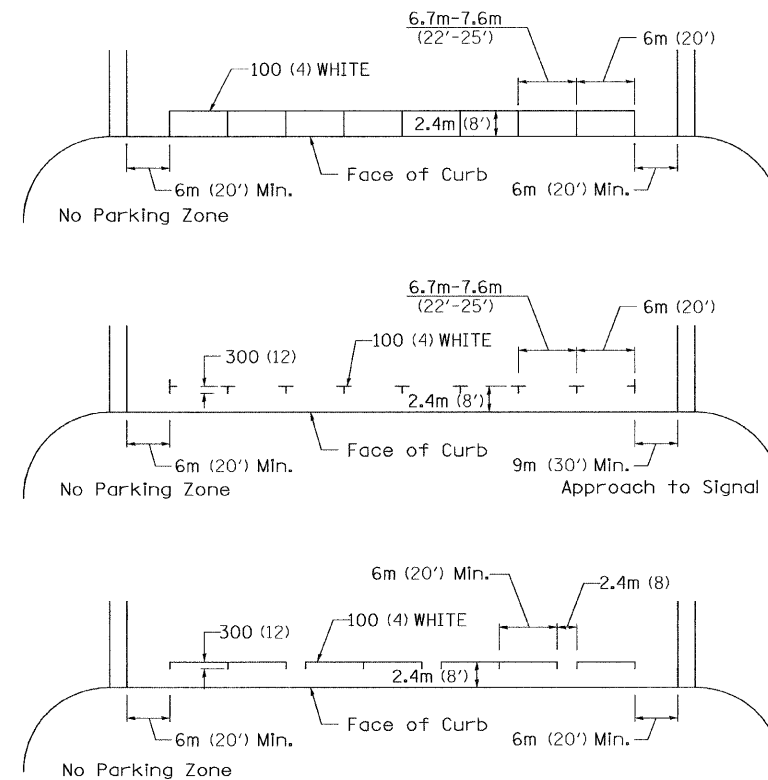


** ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

TYPICAL ISLAND OFFSET SHOULDER WIDTH

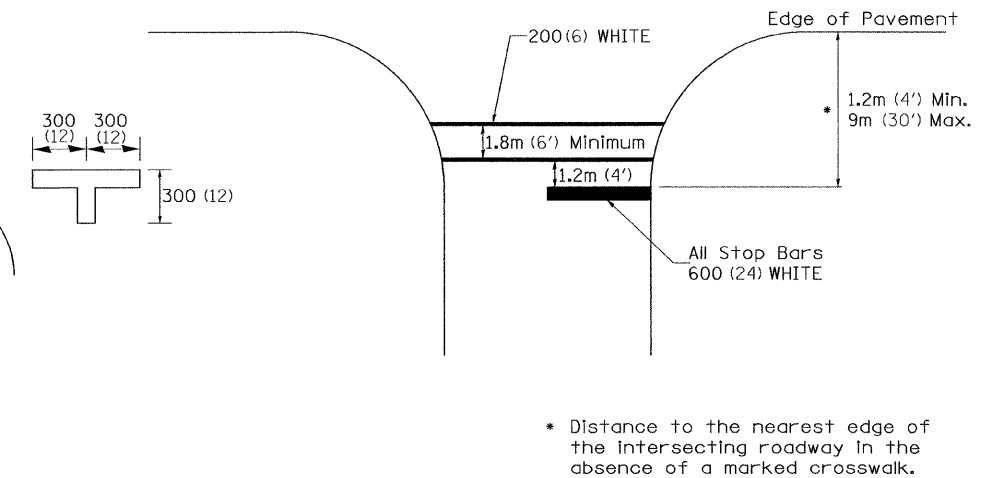


TYPICAL PARKING SPACING



STANDARD CROSSWALK MARKING

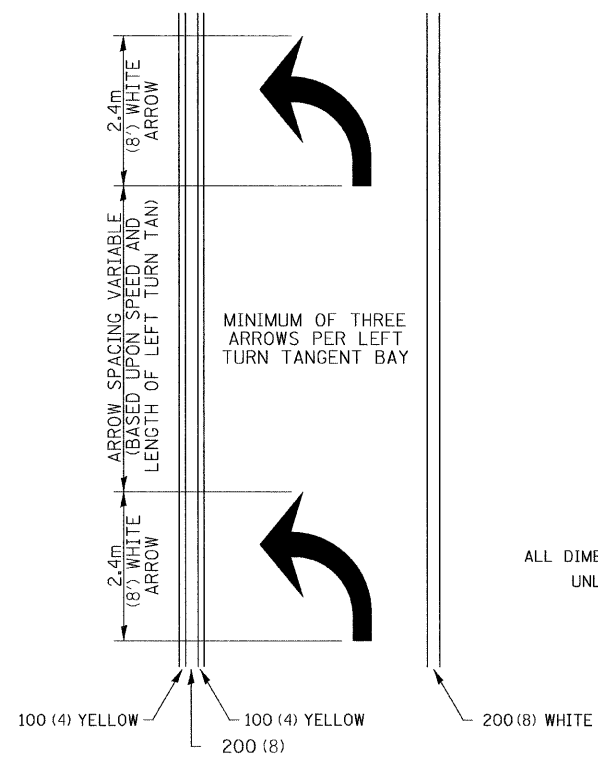
See Schedules for Locations



FILE NAME = \$FILEL\$	USER NAME = \$USER\$	DESIGNED -	REVISED - 10-21-08	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -				308	103BR-3 & 104BR-1	JO DAVIESS	126	109
		CHECKED -	REVISED -		SCALE: SHEET NO. 7 OF 10 SHEETS STA. TO STA.		CONTRACT NO. 64B26		ILLINOIS FED. AID PROJECT		
		DATE -	REVISED -								

TYPICAL PAVEMENT MARKINGS

ARROW LAYOUT



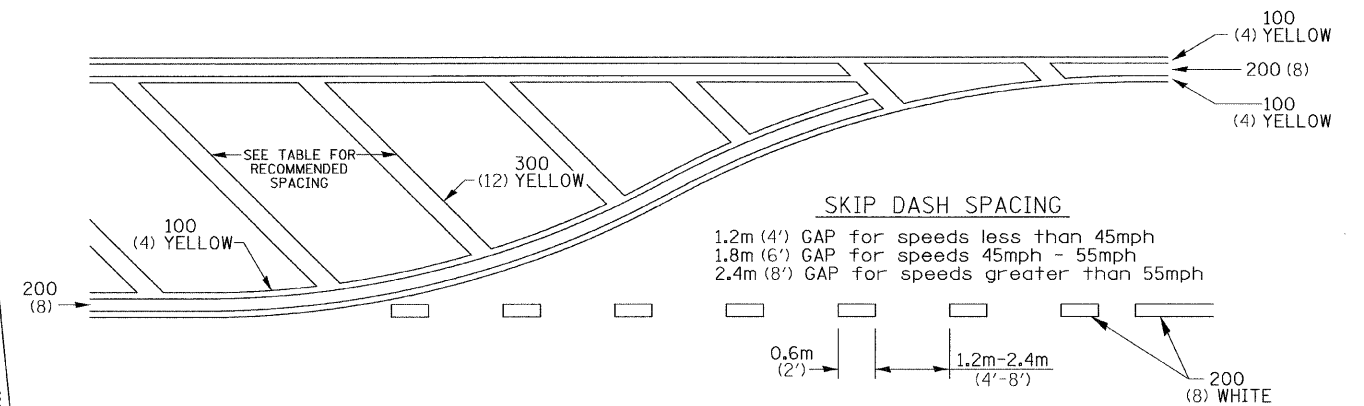
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER
- ◆ TWO-WAY AMBER MARKER

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

12.2m (40') O.C. APPROACH SIDE ONLY

See Typical Drawing at right

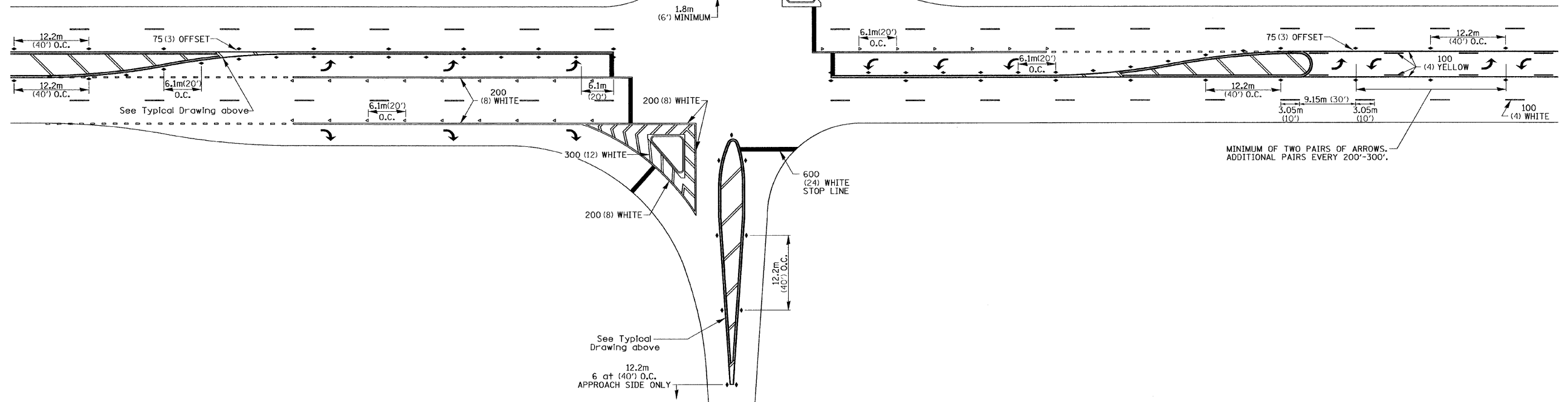
TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN



RECOMMENDED SPACING BETWEEN DIAGONALS (IN FEET)

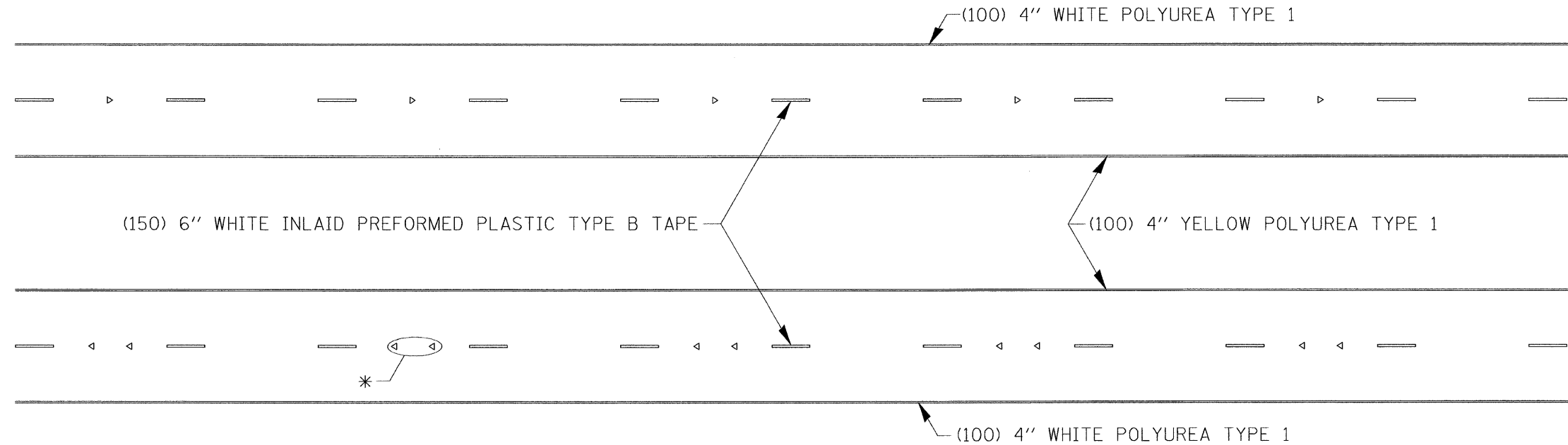
Speed Limit Range	Continuous Median Area	Intersection Channelization	Objects (Islands)
less than 50Km/H (30MPH)	15.3m (50')	4.53m (15')	3.05m (10')
50-60Km/H (30-40MPH)	22.9m (75')	6.1m (20')	4.53m (15')
70Km/H (45MPH) & over	22.9m (75')	9.05m (30')	6.1m (20')

NOTE: If the spacing recommended in the Table does not permit at least five diagonal lines in the area being marked, the spacing from the next lowest speed range should be used. The recommended spacing is measured parallel to the pavement center line.



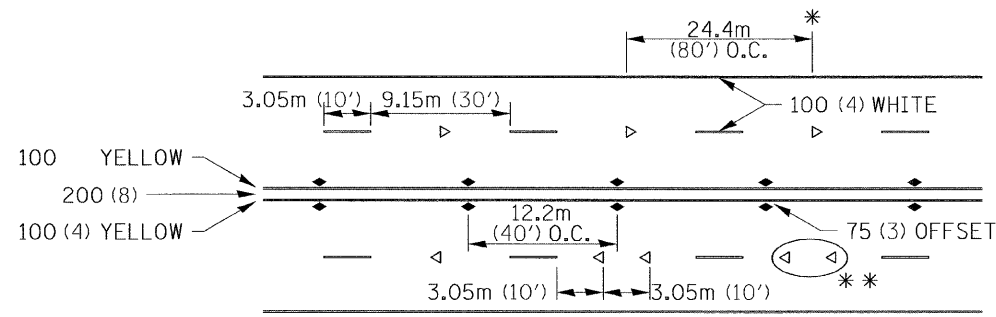
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#FILEL#	PLOT SCALE = #SCALE#	DRAWN -	REVISED -				308	103BR-3 & 104BR-1	JO DAVIESS	126	110
	PLOT DATE = #DATE#	CHECKED -	REVISED -				CONTRACT NO. 64B26				
		DATE -	REVISED -				FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
				SCALE:	SHEET NO. 8 OF 10 SHEETS	STA.	TO STA.				

TYPICAL PAVEMENT MARKINGS



* SEE HIGHWAY STANDARD 781001 FOR SPACING DETAILS.
USE DOUBLE MARKERS WHEN ADT \geq 25,000.

MULTI-LANE / DIVIDED

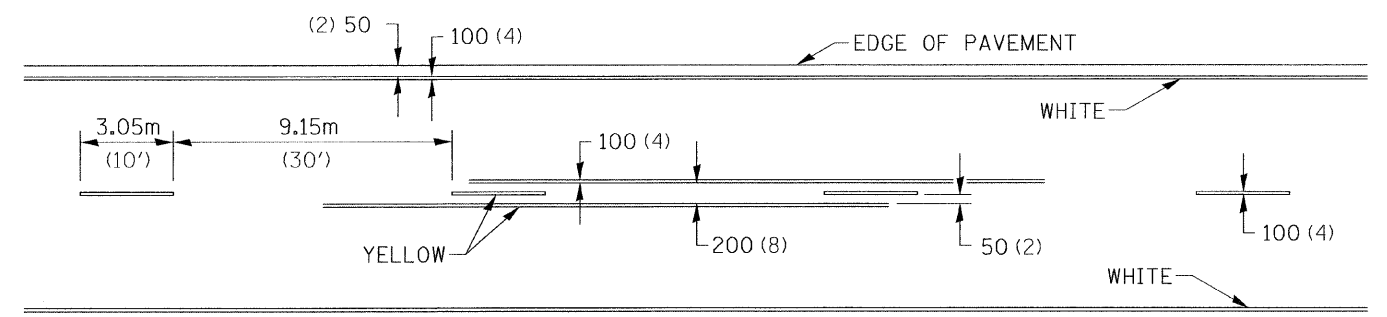


* REDUCE TO 12.2m (40') O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 15km/H (10MPH) LOWER THAN POSTED SPEEDS.

** USE DOUBLE MARKERS WHEN ADT \geq 25,000

MULTI-LANE / UNDIVIDED

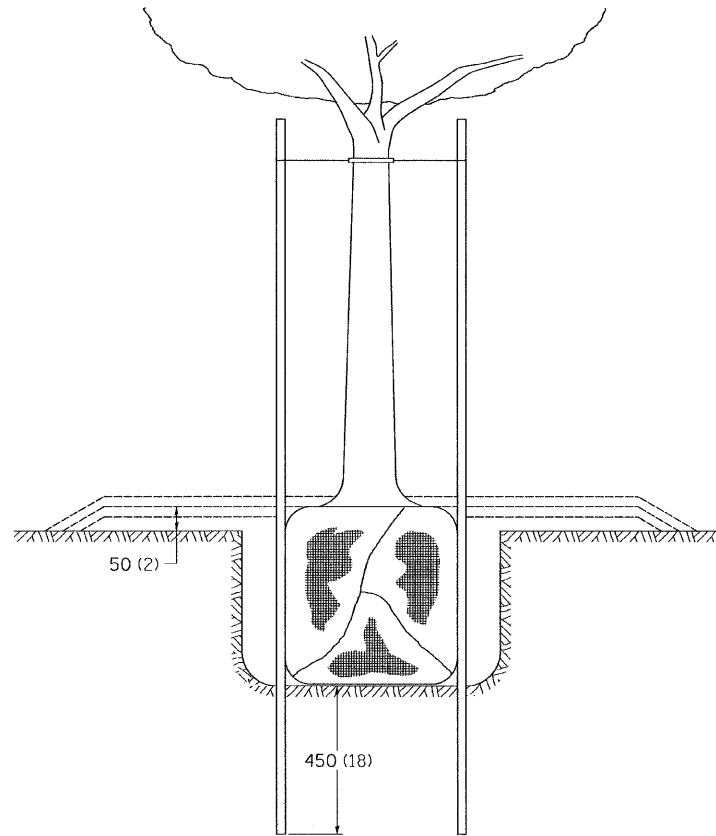
TYPICAL PAVEMENT MARKING FOR TWO LANE SECTION - NO PASSING ZONES



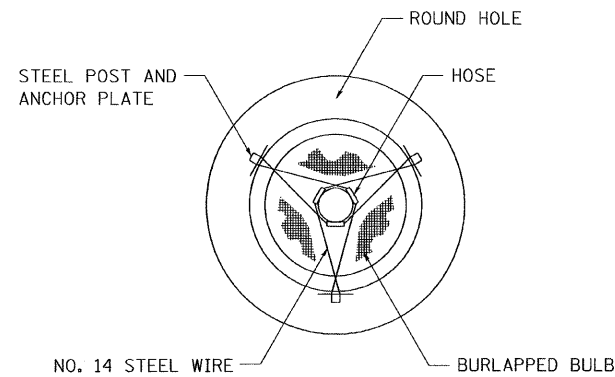
SYMBOLS

FILE NAME =	USER NAME = #USER*	DESIGNED -	REVISED - 10-21-08	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
#FILEL*		DRAWN -	REVISED -			308	103BR-3 & 104BR-1	JO DAVIESS	126	111	
	PLOT SCALE = #SCALE*	CHECKED -	REVISED -			CONTRACT NO. 64B26					
	PLOT DATE = #DATE*	DATE -	REVISED -			FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT					
				SCALE:	SHEET NO. 9 OF 10 SHEETS	STA.	TO STA.				

DETAILS OF PLANTING AND BRACING TREES

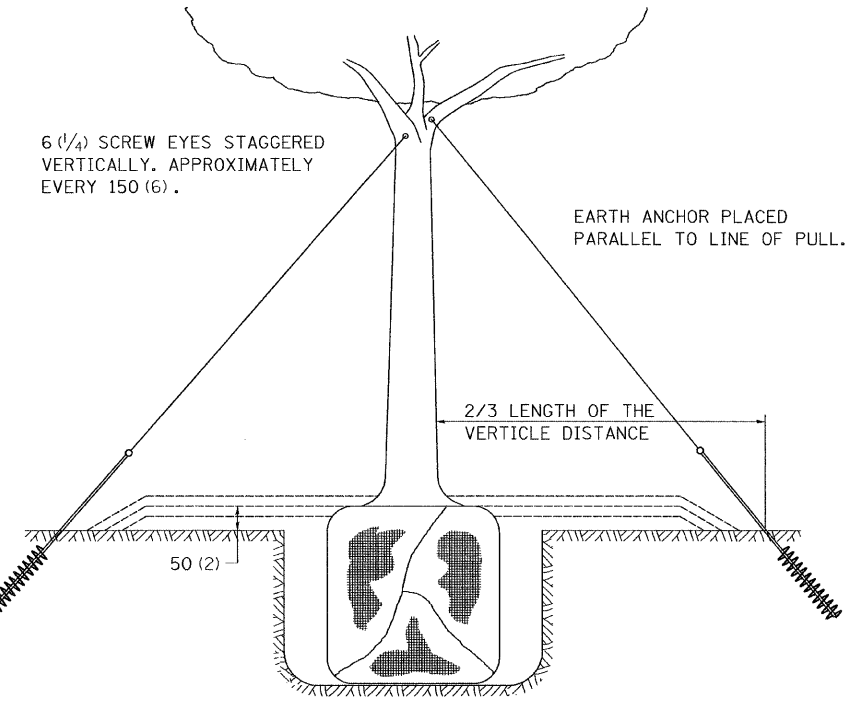
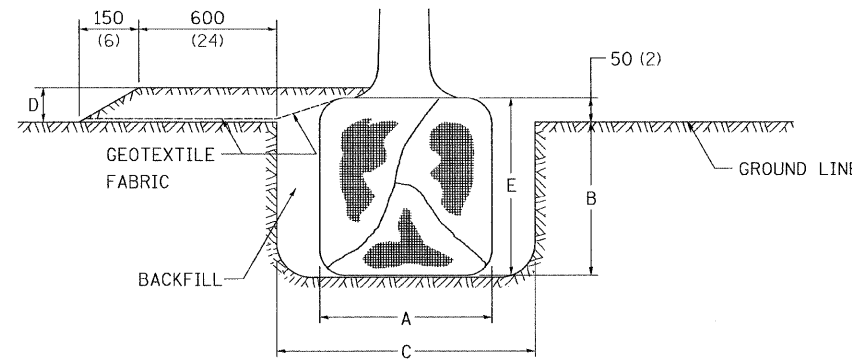


TREES SMALLER THAN 115 (4 1/2) IN DIAMETER

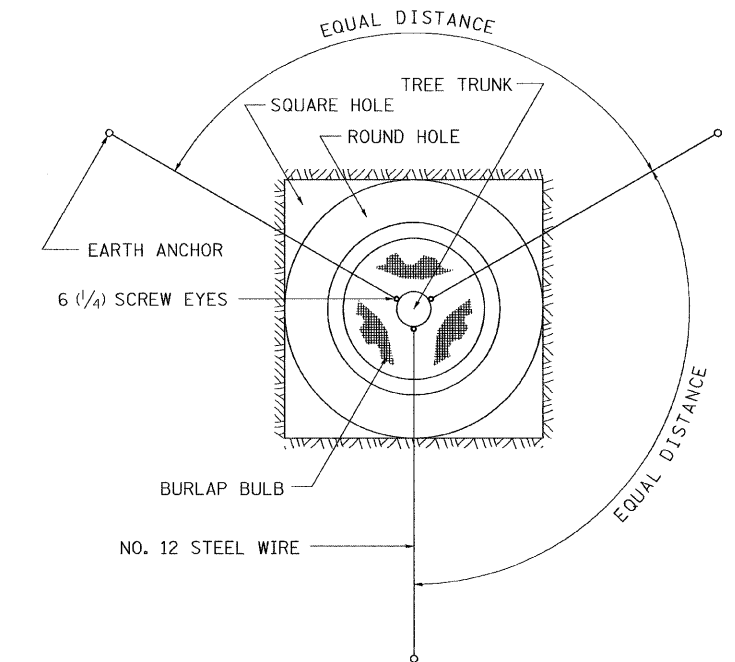


SMALL	A	B	C	D	E	F
TREE SIZE	DIAMETER OF BALL OR ROOT SYS.	DEPTH OF HOLE EXCAVATION	WIDTH OF HOLE EXCAVATION	THICKNESS OF MULCH COVER	DEPTH OF BALL OR ROOT SYS.	VOLUME OF MULCH COVER m ³ (CU. YDS.)
1.5-1.8m (5'-6')	400 (16)	250 (10)	750 (30)	100 (4)	300 (12)	0.41 (0.54)
1.5-1.8m (5'-6') BB	400 (16)	250 (10)	750 (30)	100 (4)	300 (12)	0.41 (0.54)
1.8-2.0m (6'-7') BB	450 (18)	300 (12)	750 (30)	100 (4)	350 (14)	0.41 (0.54)
2.0-2.4m (7'-8') BB	500 (20)	275 (11)	750 (30)	100 (4)	325 (13)	0.41 (0.54)
2.4-3.0m (8'-10') BB	600 (24)	350 (14)	900 (36)	100 (4)	400 (16)	0.47 (0.61)
3.0-3.6m (10'-12') BB	650 (26)	375 (15)	900 (36)	100 (4)	425 (17)	0.47 (0.61)

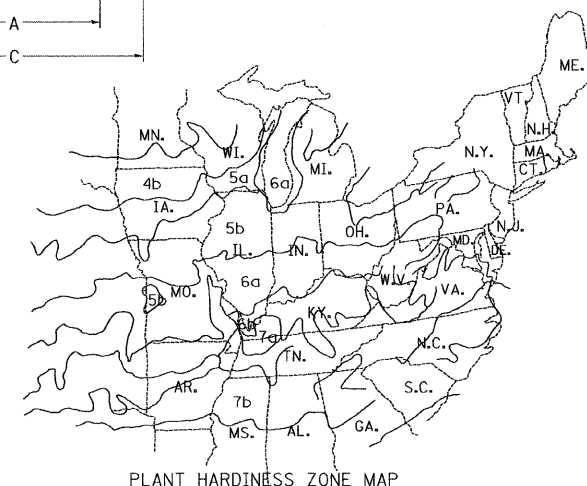
LARGE	A	B	C	D	E	F
TREE SIZE	DIAMETER OF BALL OR ROOT SYS.	DEPTH OF HOLE EXCAVATION	WIDTH OF HOLE EXCAVATION	THICKNESS OF MULCH COVER	DEPTH OF BALL OR ROOT SYS.	VOLUME OF MULCH COVER m ³ (CU. YDS.)
0-50 (0-2)	500 (20)	275 (11)	900 (36)	100 (4)	325 (13)	0.47 (0.61)
50-65 (2-2 1/2) BB	600 (24)	350 (14)	1200 (48)	100 (4)	400 (16)	0.60 (0.78)
65-75 (2 1/2-3) BB	700 (28)	425 (17)	1200 (48)	100 (4)	475 (19)	0.60 (0.78)
75-90 (3-3 1/2) BB	800 (32)	425 (17)	1500 (60)	100 (4)	475 (19)	0.73 (0.96)
90-100 (3 1/2-4) BB	900 (36)	500 (20)	1500 (60)	100 (4)	550 (22)	0.73 (0.96)
100-115 (4-4 1/2) BB	1000 (40)	550 (22)	1800 (72)	100 (4)	600 (24)	0.89 (1.16)
115-125 (4 1/2-5) BB	1100 (44)	600 (24)	1800 (72)	100 (4)	650 (26)	0.89 (1.16)
125-140 (5-5 1/2) BB	1200 (48)	675 (27)	2100 (84)	100 (4)	725 (29)	1.06 (1.38)



TREES OVER 115 (4 1/2) IN DIAMETER



ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.



PLANT HARDINESS ZONE MAP
U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
PUBLICATION NO. 814

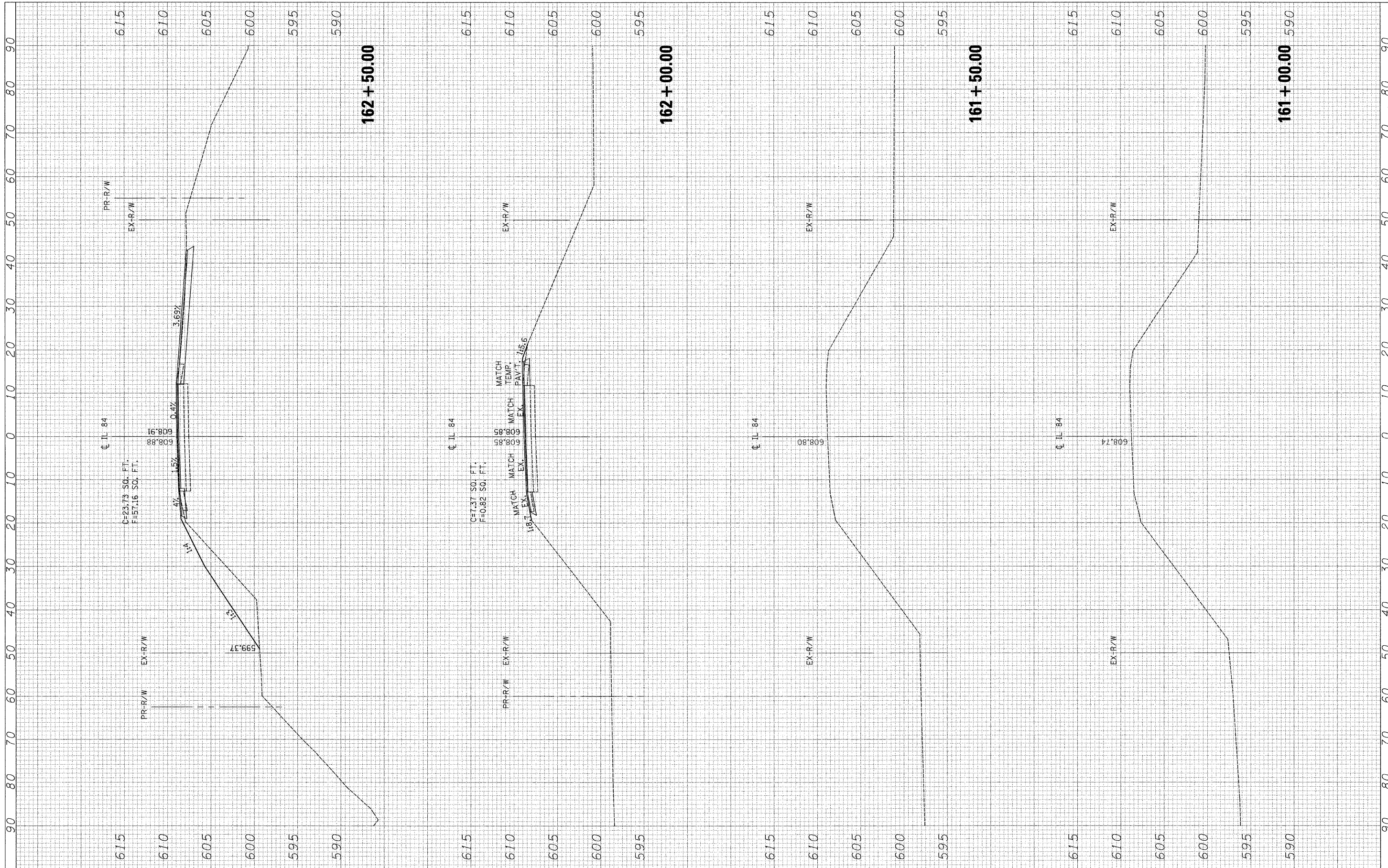
DETAILS OF PLANTING AND BRACING TREES

92.1

FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED - 10-15-04	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
\$FILEL\$		DRAWN -	REVISED -			308	103BR-3 & 104BR-1	JO DAVIESS	126	112	
		CHECKED -	REVISED -			CONTRACT NO. 64B26					
		DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

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

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



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CHECKED - FML
DATE - 10-15-2010

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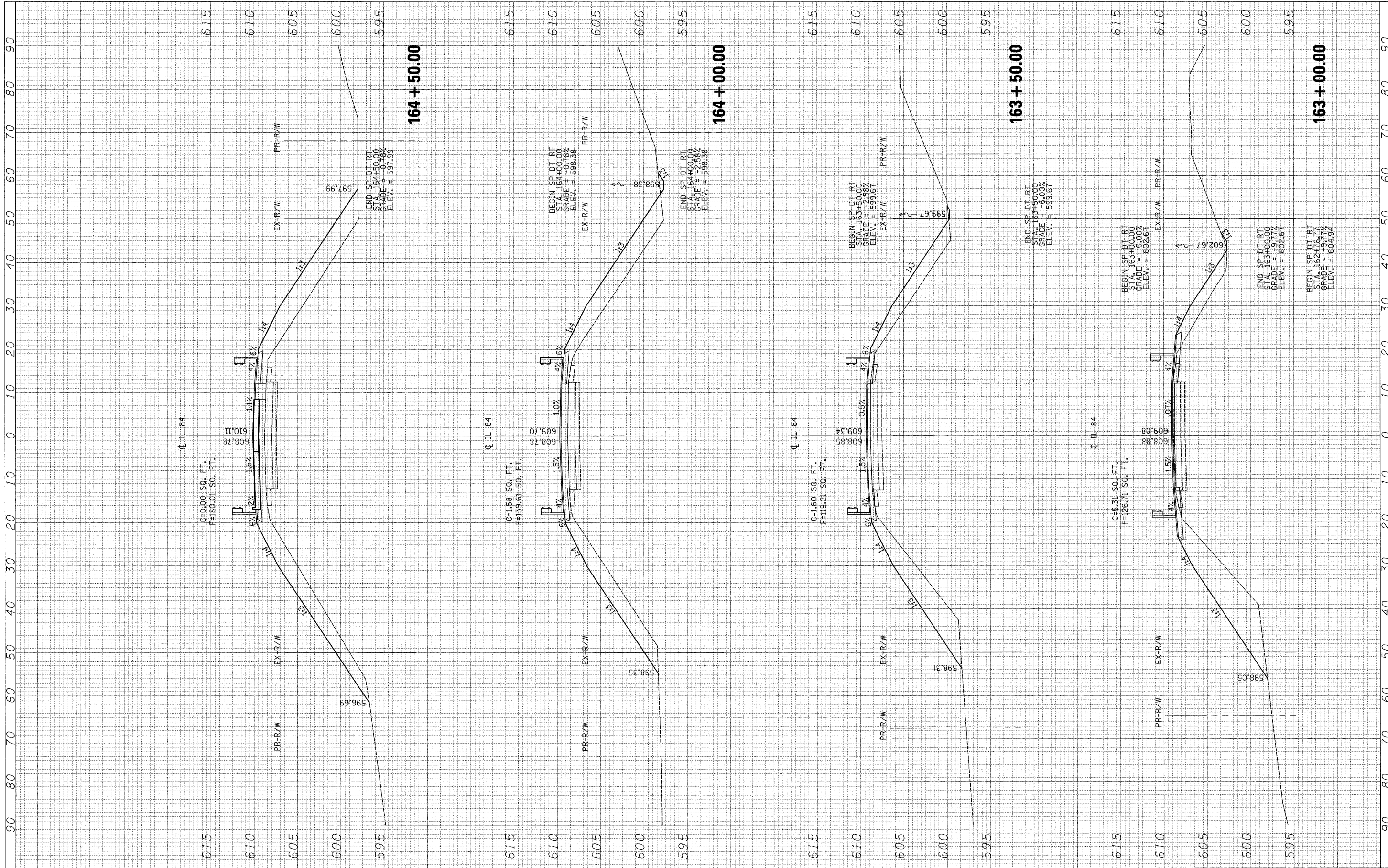
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS
IL 84 OVER UNNAMED TRIBUTARY TO APPLE RIVER**
SCALE: 1"=10'H, 5'V SHEET NO. 1 OF 5 SHEETS STA. 161+00.00 TO STA. 162+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
308	103BR-3 & 104BR-1	JO DAVIESS	126	113
CONTRACT NO. 64B26				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

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

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



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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

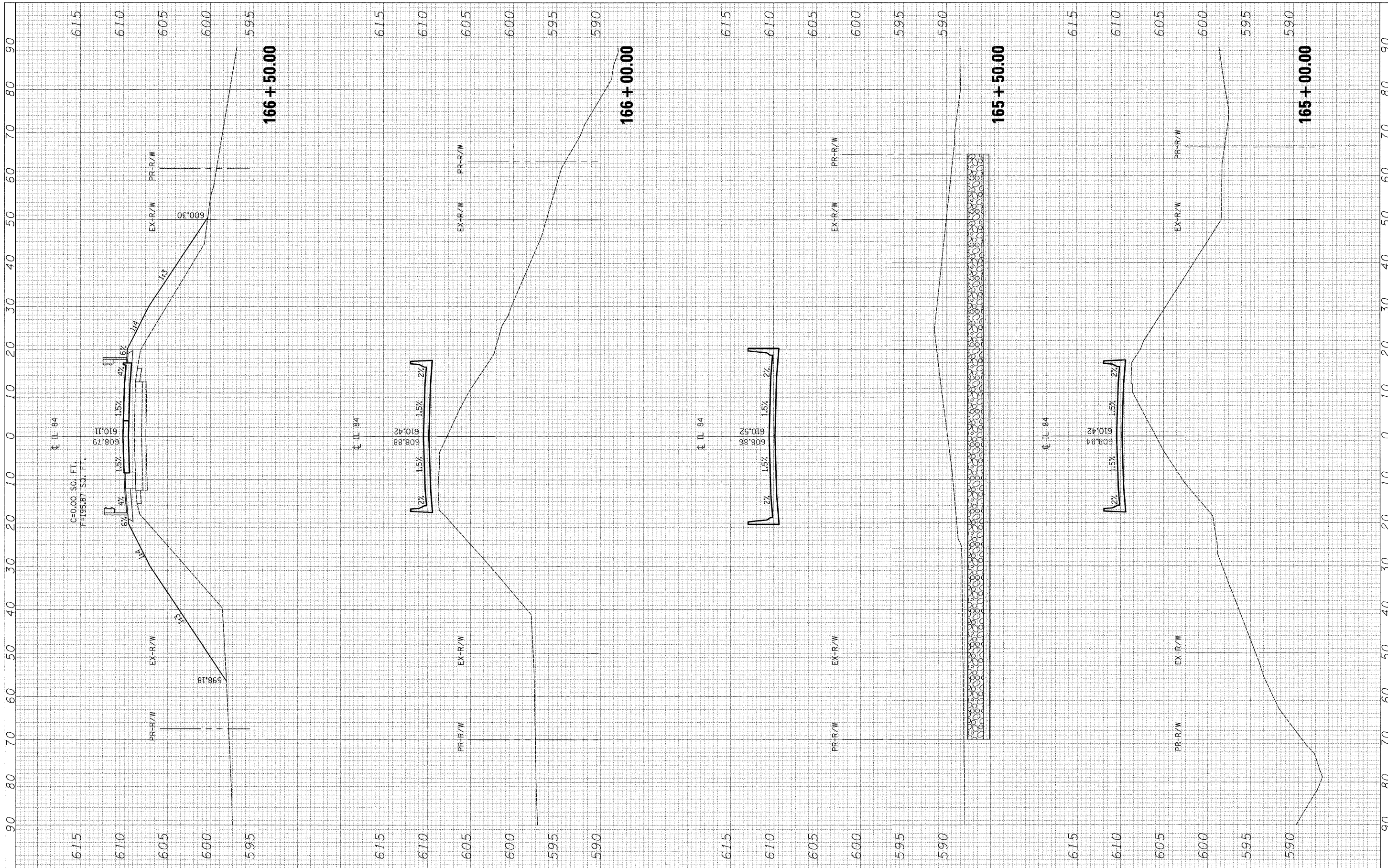
**CROSS SECTIONS
IL 84 OVER UNNAMED TRIBUTARY TO APPLE RIVER**

SCALE: 1"=10'H, 5'V | SHEET NO. 2 OF 5 SHEETS | STA. 163+00.00 TO STA. 164+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
308	103BR-3 & 104BR-1	JO DAVIESS	126	114
CONTRACT NO. 64826				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

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



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

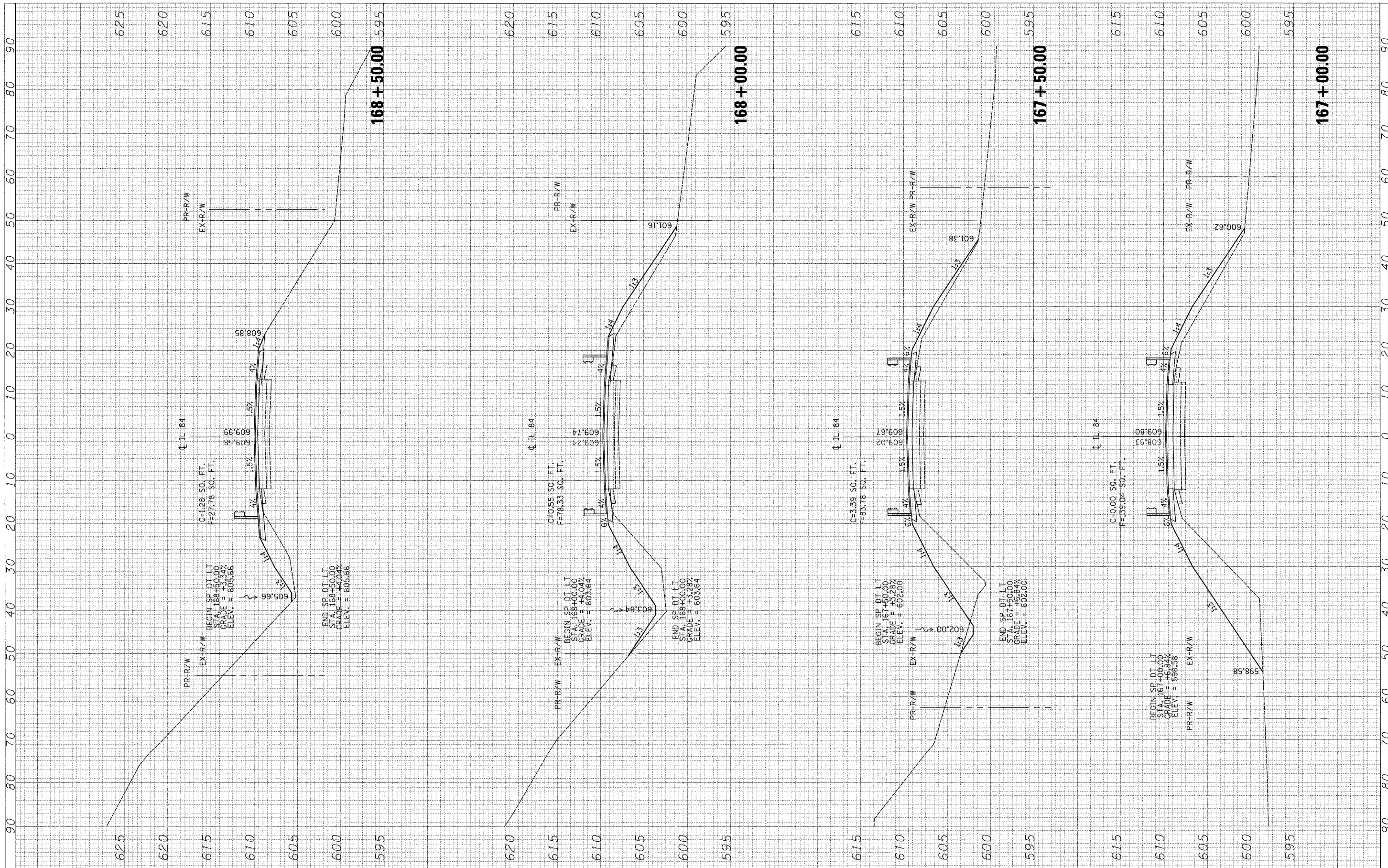
CROSS SECTIONS
IL 84 OVER UNNAMED TRIBUTARY TO APPLE RIVER

SCALE: 1"=10'H, 5'V SHEET NO. 3 OF 5 SHEETS STA. 165+00.00 TO STA. 166+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
308	103BR-3 & 104BR-1	JO DAVIESS	126	115
CONTRACT NO. 64B26				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

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



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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

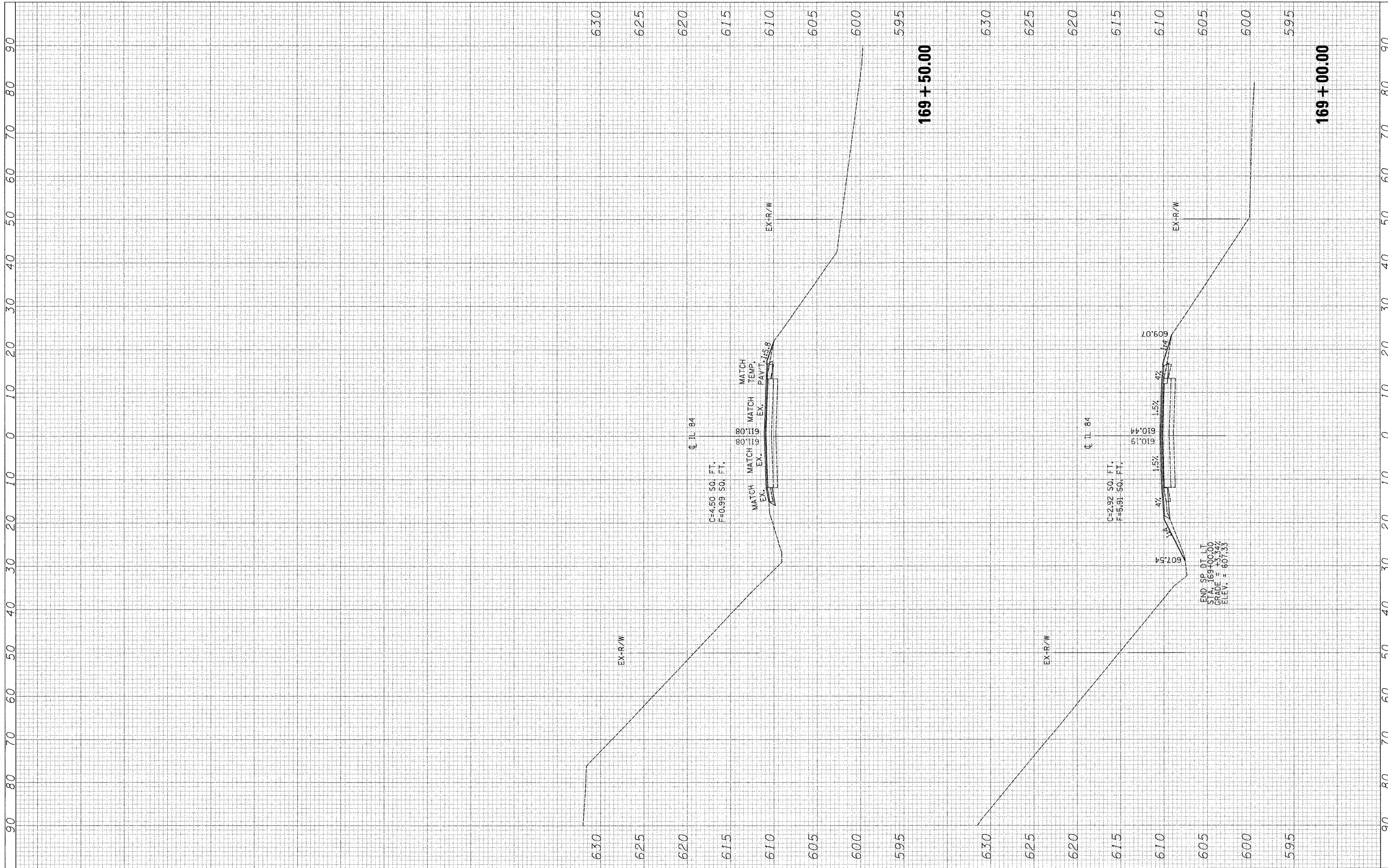
**CROSS SECTIONS
 IL 84 OVER UNNAMED TRIBUTARY TO APPLE RIVER**

SCALE: 1"=10'H, 5'V SHEET NO. 4 OF 5 SHEETS STA. 167+00.00 TO STA. 168+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
308	103BR-3 & 104BR-1	JO DAVIESS	126	116
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
		CONTRACT NO. 64B26		

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

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



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DEPARTMENT OF TRANSPORTATION	DRAWN - ST	REVISED -
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

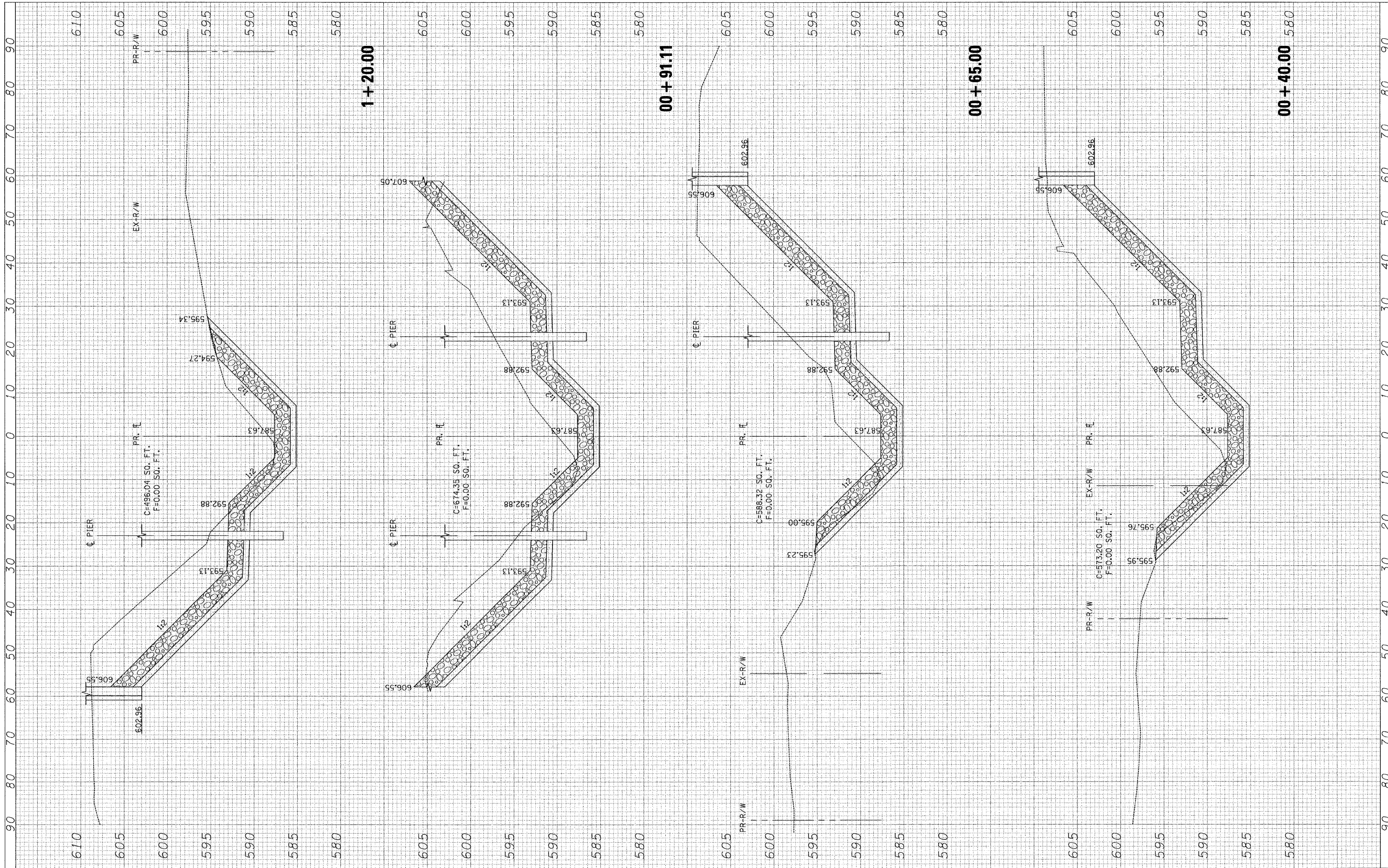
**CROSS SECTIONS
IL 84 OVER UNNAMED TRIBUTARY TO APPLE RIVER**

SCALE: 1"=10'H, 5'V | SHEET NO. 5 OF 5 SHEETS | STA. 169+00.00 TO STA. 169+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
308	103BR-3 & 104BR-1	JO DAVIESS	126	117
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
		CONTRACT NO. 64B26		

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

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



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DRAWN - ST
CHECKED - FML
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

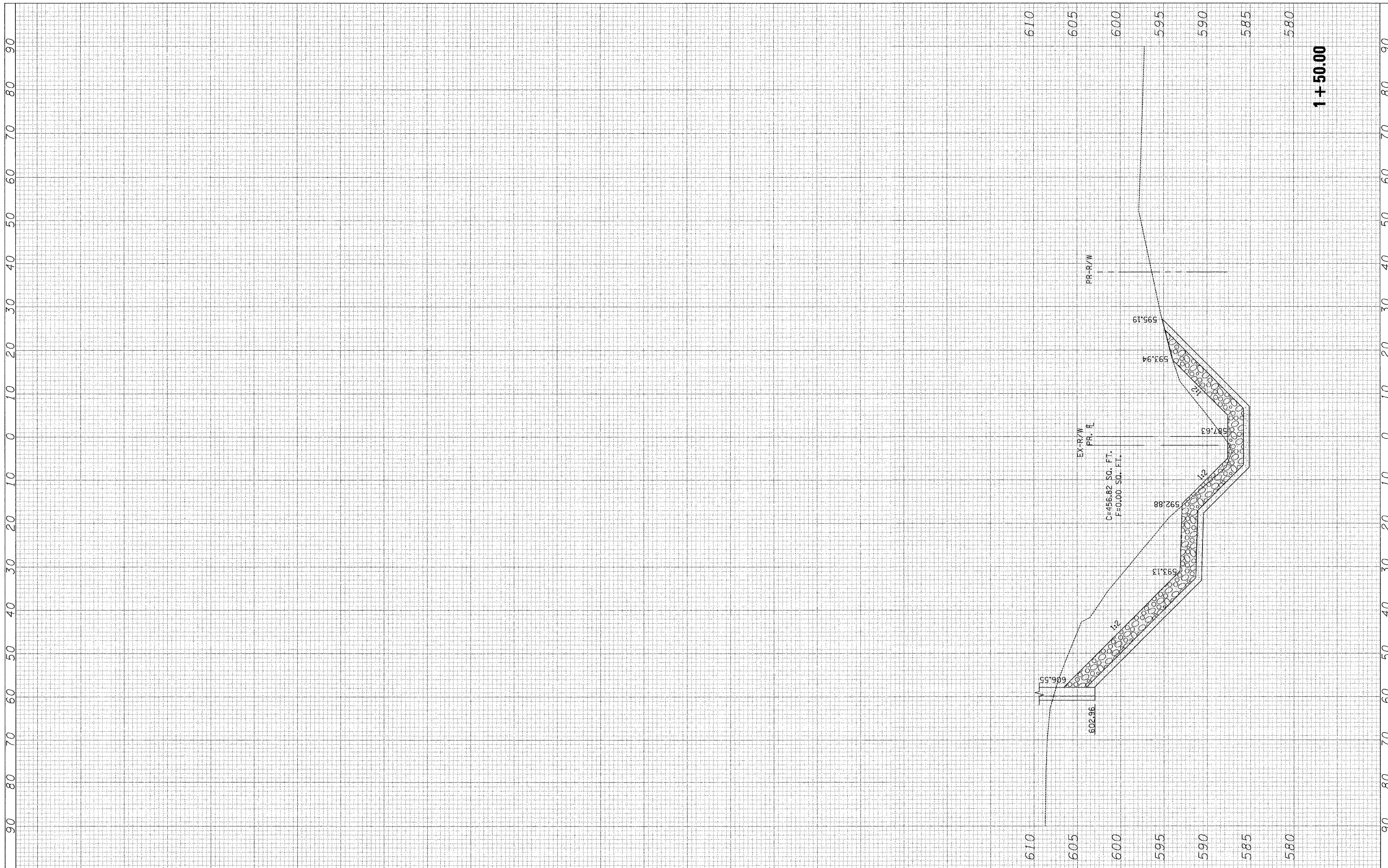
**CROSS SECTIONS
UNNAMED TRIBUTARY TO APPLE RIVER CHANNEL GRADING**

SCALE: 1"=10'H, 5'V | SHEET NO. 1 OF 2 SHEETS | STA. 0+40.00 TO STA. 1+20.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
308	103BR-3 & 104BR-1	JO DAVIESS	126	118
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 64B26	

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
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ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
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PLOT DATE = *DATE*	CHECKED - FML	REVISED -
	DATE - 10-15-2010	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS
UNNAMED TRIBUTARY TO APPLE RIVER CHANNEL GRADING**
SCALE: 1"=10'H, 5'V SHEET NO. 2 OF 2 SHEETS STA. 1+50.00 TO STA. 1+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
308	103BR-3 & 104BR-1	JO DAVIESS	126	119
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

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

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



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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

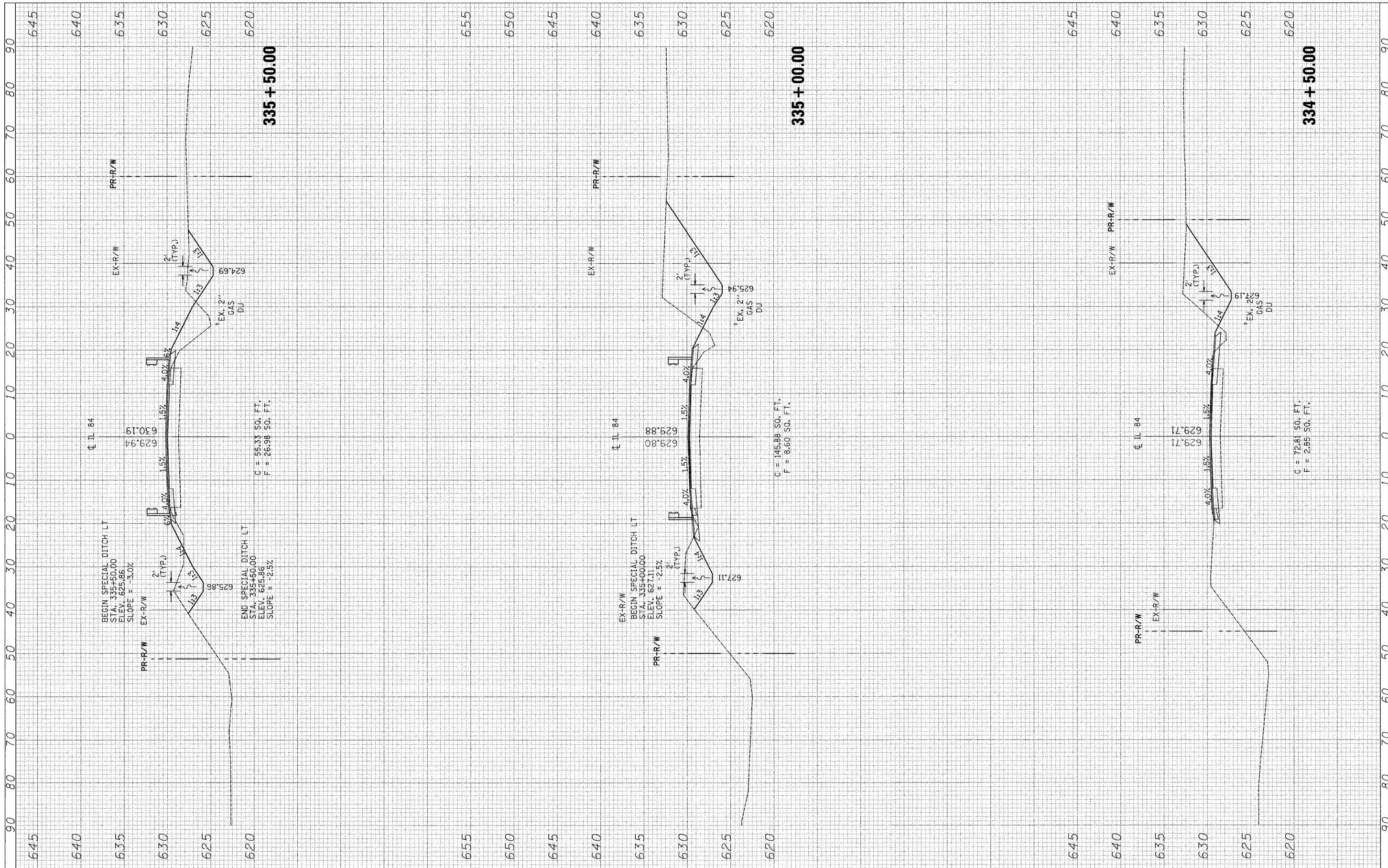
**CROSS SECTIONS
IL 84 OVER DUKE CREEK**

SCALE: 1"=10'H, 5'V | SHEET NO. 1 OF 5 SHEETS | STA. 333+50.00 TO STA. 334+29.39

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
30B	103BR-3 & 104BR-1	JO DAVIESS	126	120
CONTRACT NO. 64B26				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
AREAS CHECKED	DATE		
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ORIGINAL SURVEY	SURVEYED	BY	DATE
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

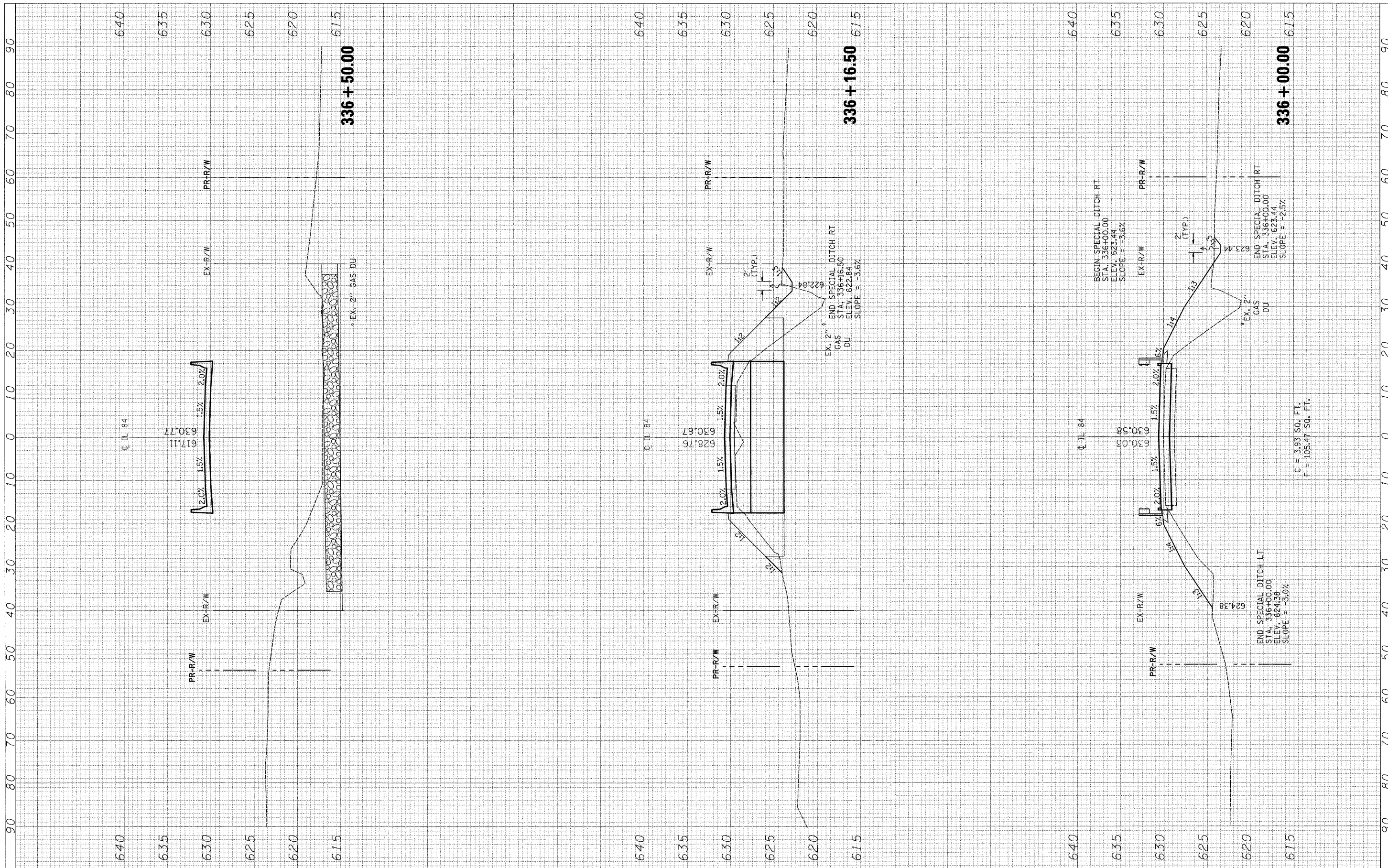
SCALE: 1"=10'H, 5'V SHEET NO. 2 OF 5 SHEETS STA. 334+50.00 TO STA. 335+50.00

CROSS SECTIONS
IL 84 OVER DUKE CREEK

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
308	103BR-3 & 104BR-1	JO DAVIESS	126	121
CONTRACT NO. 64826				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK		
AREAS CHECKED		
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ORIGINAL SURVEY	BY	DATE
SURVEYED		
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NOTE BOOK		
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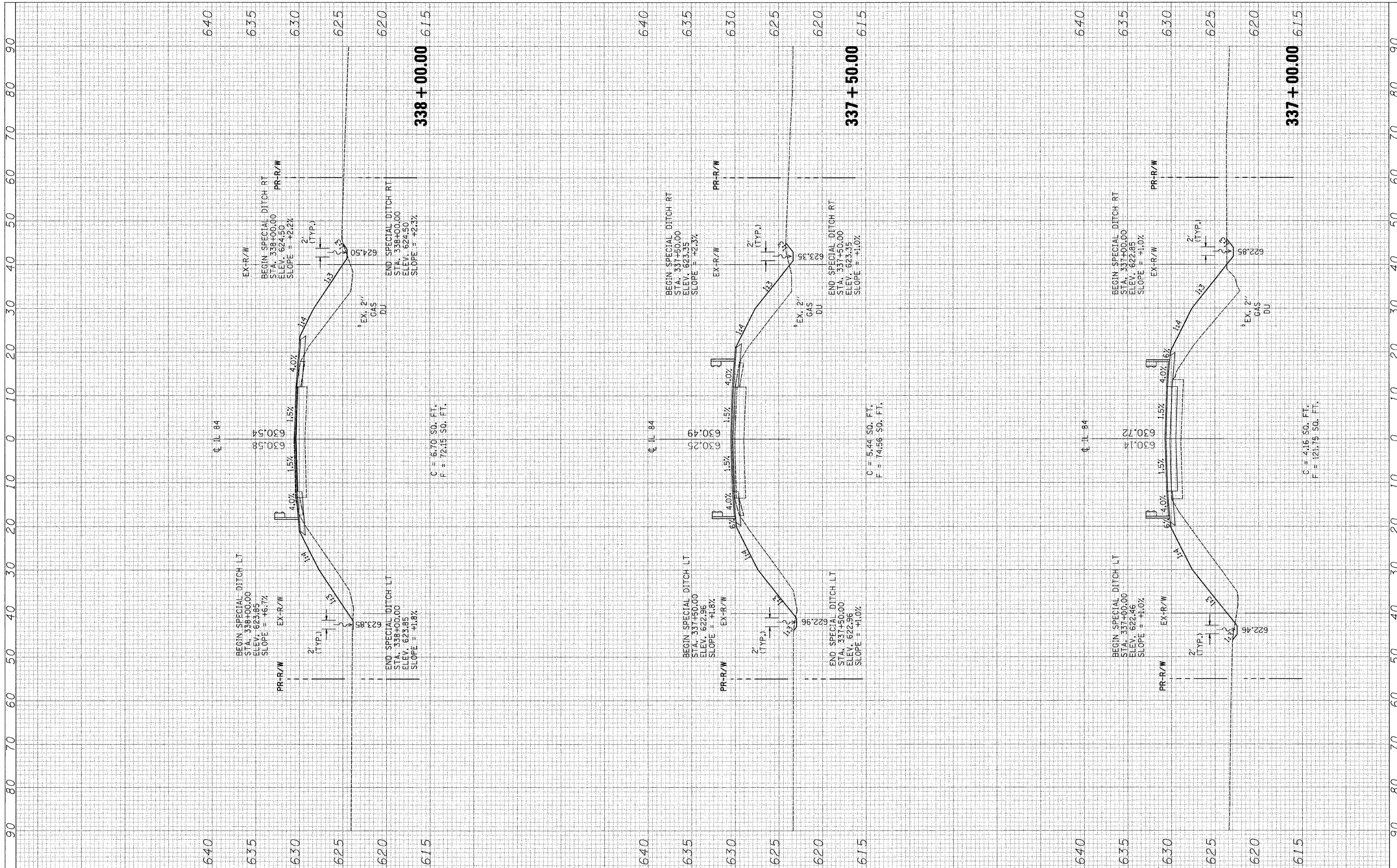
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
IL 84 OVER DUKE CREEK
SCALE: 1"=10'H, 5'V SHEET NO. 3 OF 5 SHEETS STA. 336+00.00 TO STA. 336+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
308	103BR-3 & 104BR-1	JO DAVIESS	126	122
CONTRACT NO. 64B26				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

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



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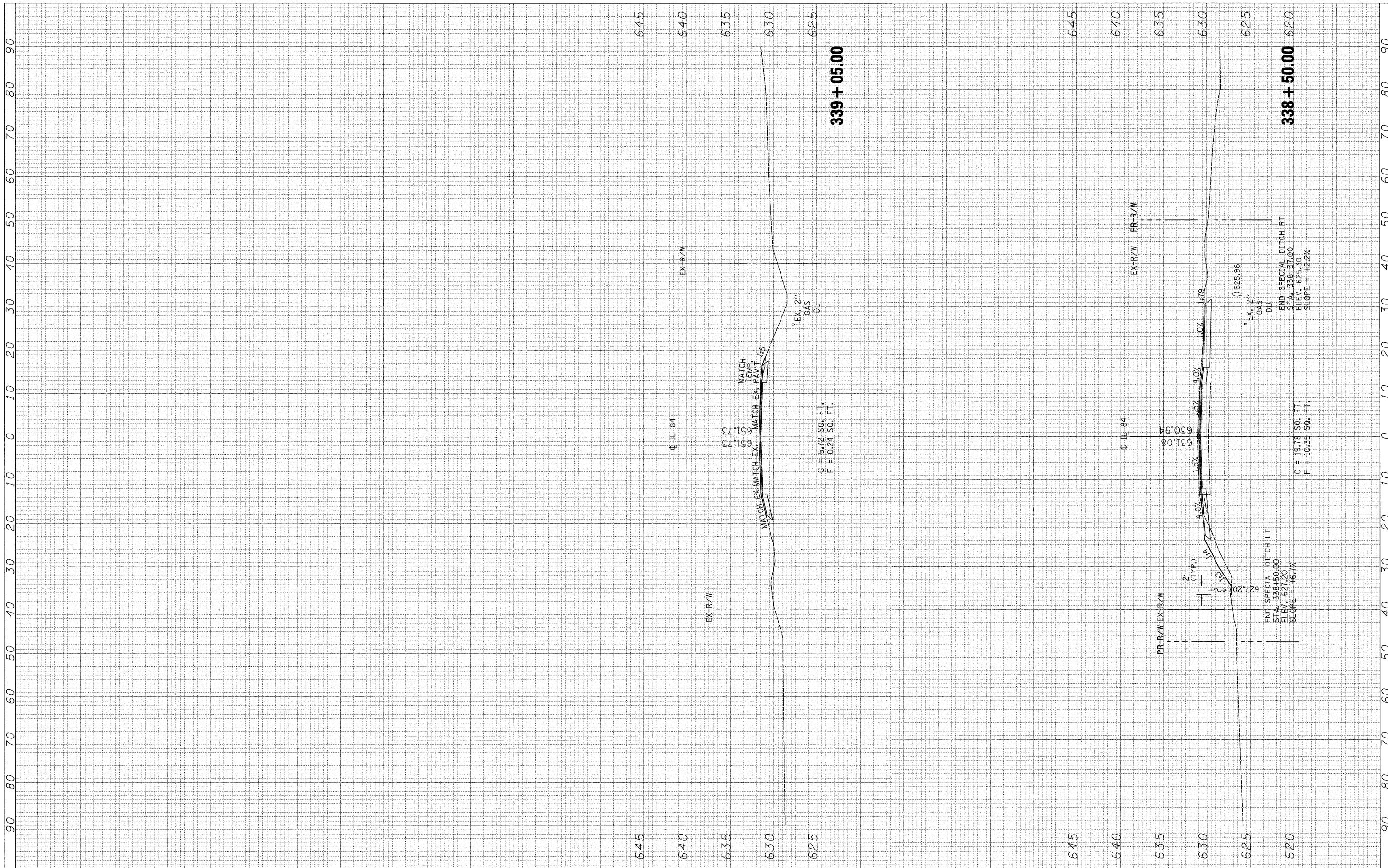
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS IL 84 OVER DUKE CREEK	
SCALE: 1"=10'H, 5'V	SHEET NO. 4 OF 5 SHEETS
STA. 337+00.00	TO STA. 338+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
30B	103BR-3 & 104BR-1	JO DAVIESS	126	123
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
		CONTRACT NO. 64826		

FINAL SURVEY	BY	DATE
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NOTE BOOK NO.		
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ORIGINAL SURVEY	BY	DATE
SURVEYED		
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NOTE BOOK NO.		
AREAS CHECKED		



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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

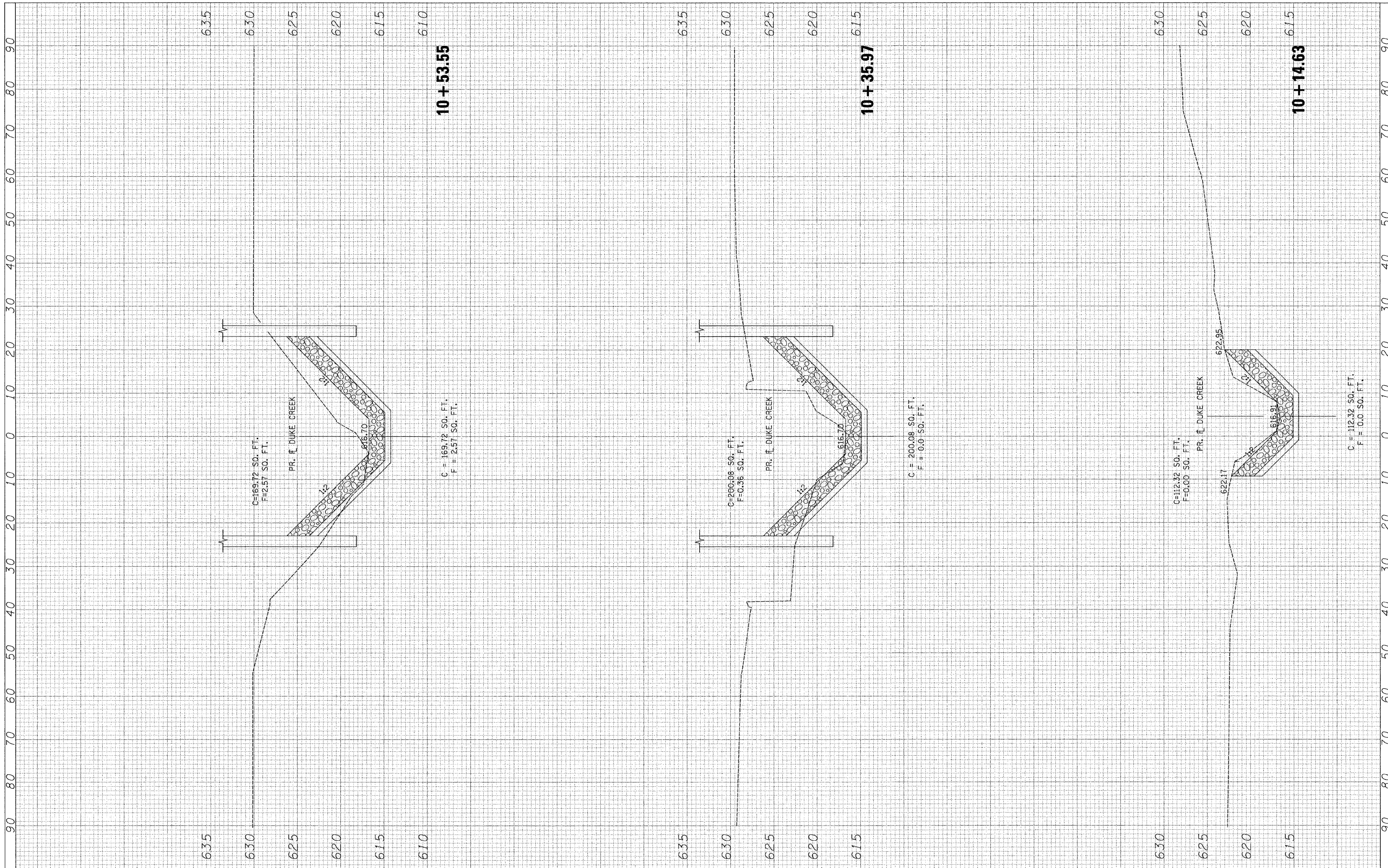
**CROSS SECTIONS
IL 84 OVER DUKE CREEK**

SCALE: 1"=10'H, 5'V SHEET NO. 5 OF 5 SHEETS STA. 338+50.00 TO STA. 339+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
308	103BR-3 & 104BR-1	JO DAVIESS	126	124
CONTRACT NO. 64B26				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				

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



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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

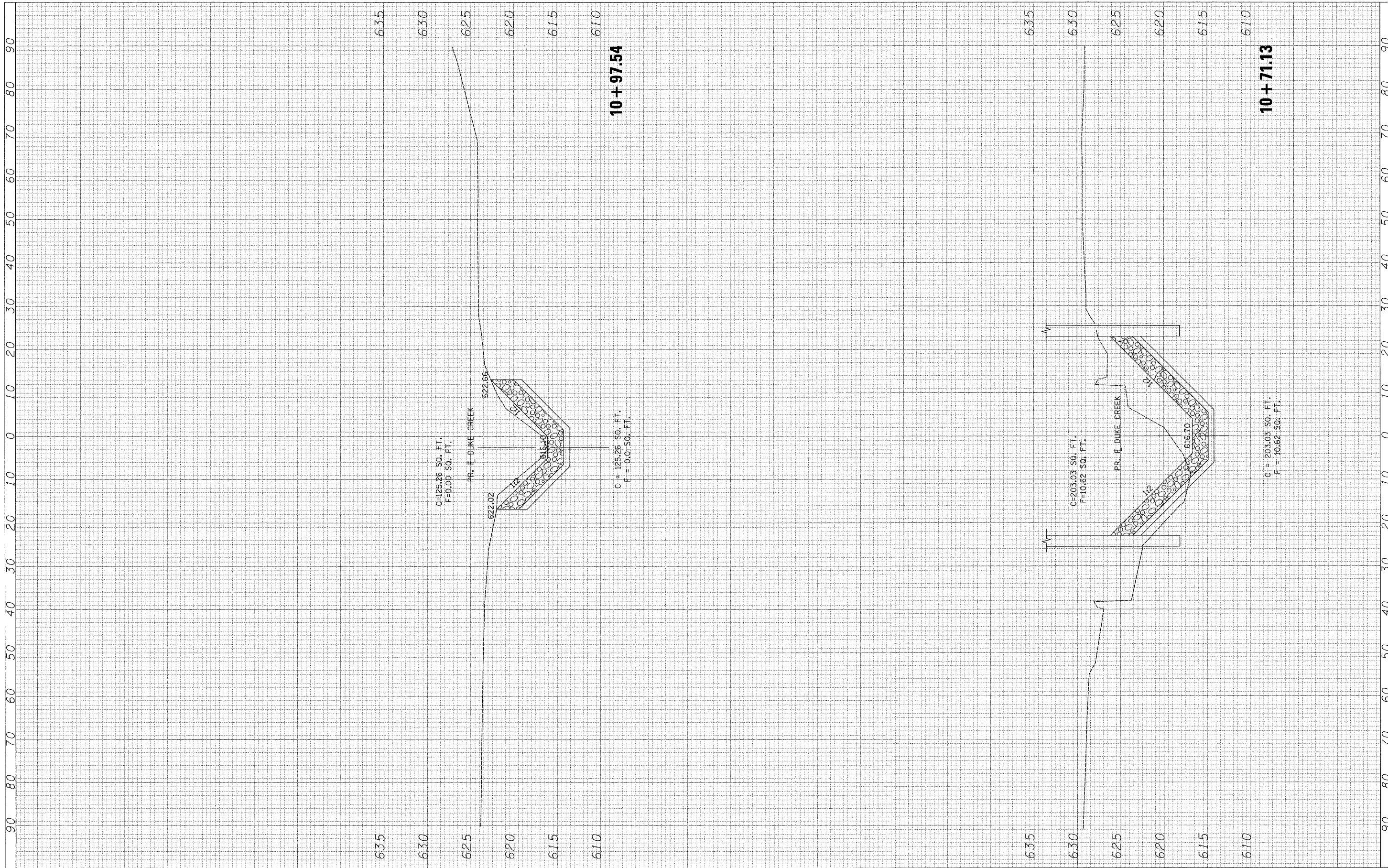
**CROSS SECTIONS
 DUKE CREEK CHANNEL GRADING**

SCALE: 1"=10'H, 5'V SHEET NO. 1 OF 2 SHEETS STA. 333+50.00 TO STA. 334+29.39

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
30B	103BR-3 & 104BR-1	JO DAVIESS	126	125
CONTRACT NO. 64B26				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
	DATE		
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ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
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FILE NAME =
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DESIGNED - SEW
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
DUKE CREEK CHANNEL GRADING
SCALE: 1"=10'H, 5'V SHEET NO. 2 OF 2 SHEETS STA. 334+50.00 TO STA. 335+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
308	103BR-3 & 104BR-1	JO DAVIESS	126	126
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 64826	