

PROJECT ENGINEER - REBECCA MARRUFFO

SQUAD LEADER - BRAD CUSHMAN (815)284-5996

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5857	1R-T	Rock Island	25	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 64E31		

### INDEX

- 1 COVER SHEET
- 2-3 SUMMARY OF QUANTITIES
- 4-5 GENERAL NOTES
- 6 TYPICAL SECTIONS
- 7-8 SCHEDULE OF QUANTITIES
- 9-10 HORIZONTAL & VERTICAL CONTROL
- 11 PLAN & PROFILE
- 12-16 GABION WALL DETAIL
- 17 BORING LOGS
- 18 DETOUR ROUTE DETAIL
- 19 CURB AND GUTTER OUTLET, SPECIAL (18.4)
- 20 DELINEATOR AND POST ORIENTATION (37.4)
- 21 WITNESS MARKER & PERMANENT SURVEY MARKERS, TYPE II (66.2)
- 22 NAME PLATE FOR CULVERTS (88.2)
- 23 ENTRANCE APPROACHES - URBAN AREA (25.1)
- 24 TRAFFIC CONTROL FOR ROAD CLOSURE (40.1)
- 25 DETAILS OF PLANTING AND BRACING TREES (92.1)
- 24-25 CROSS SECTIONS

### STATE STANDARDS

- 280001-05 TEMPORARY EROSION CONTROL SYSTEMS
- 420001-07 PAVEMENT JOINTS
- 442201-03 CLASS C AND D PATCHES
- 606001-04 CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER DELINEATORS
- 635001-01 TYPICAL APPLICATION OF TRAFFIC CONTROL STANDARD
- 701006-03 TYPICAL APPLICATION OF TRAFFIC CONTROL STANDARD
- 701301-04 TYPICAL APPLICATION OF TRAFFIC CONTROL STANDARD
- 701501-06 TYPICAL APPLICATION OF TRAFFIC CONTROL STANDARD
- 701311-03 TYPICAL APPLICATION OF TRAFFIC CONTROL STANDARD
- 701901-01 TRAFFIC CONTROL DEVICES
- 720011-01 METAL POST FOR SIGNS, MARKERS AND DELINEATORS
- 728001-01 TELESCOPING STEEL SIGN SUPPORT
- 729001-01 APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)
- 780001-02 TYPICAL PAVEMENT MARKINGS

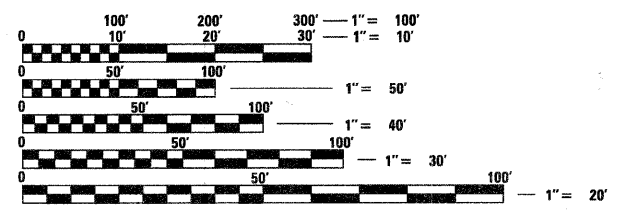
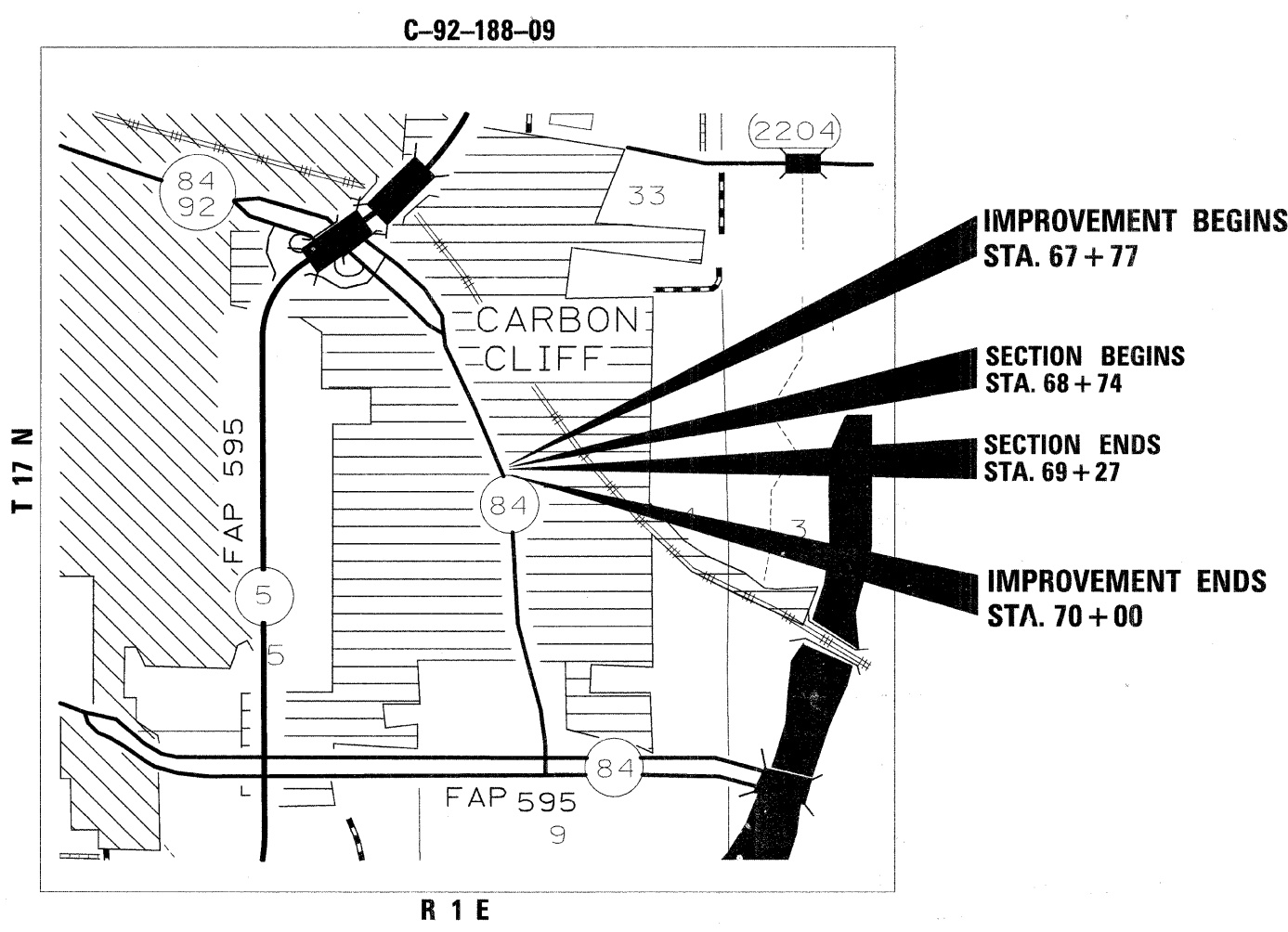
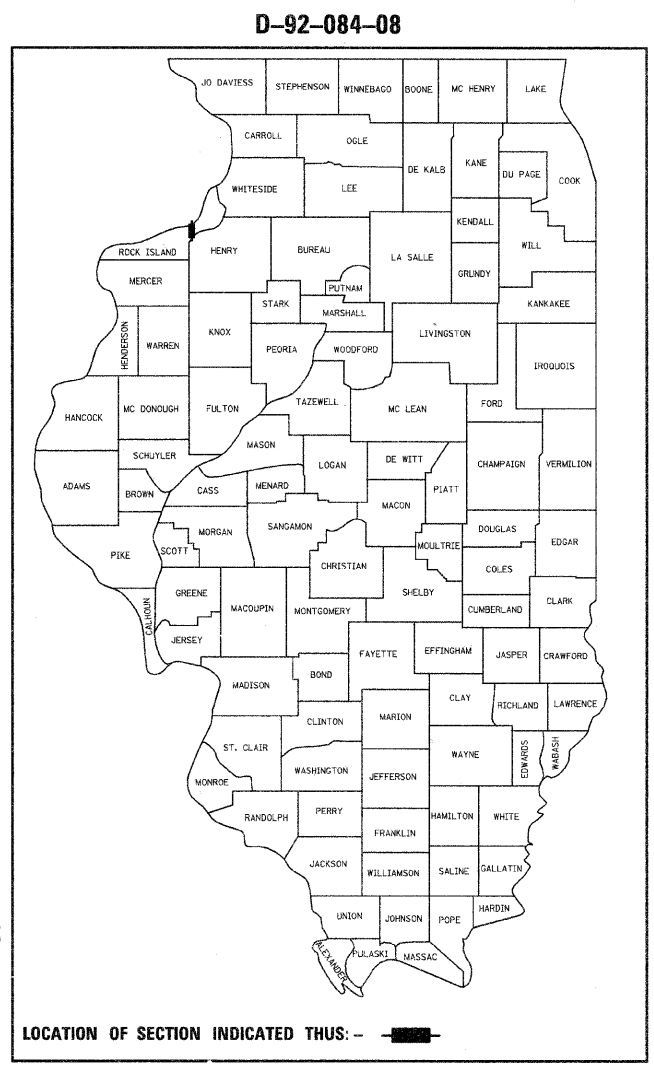
# STATE OF ILLINOIS

## DEPARTMENT OF TRANSPORTATION

### DIVISION OF HIGHWAYS

# PROPOSED HIGHWAY PLANS

**FAU ROUTE 5857 (IL 84)**  
**SECTION 1R-T**  
**PROJECT M - 5857(001)**  
**ROCK ISLAND COUNTY**



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

HAMPTON TOWNSHIP, SECTION 4  
 GROSS LENGTH = 53 FT. = 0.01 MILE  
 NET LENGTH = 53 FT. = 0.01 MILE

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

SUBMITTED Oct 8 20 10  
George F. Ryan  
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

December 10 20 10  
Scott E. Stitt, P.E.  
 acting ENGINEER OF DESIGN AND ENVIRONMENT

December 10 20 10  
Christine M. Reed  
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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

# SUMMARY OF QUANTITIES

			URBAN	
			0040	
			80% FED 20% STATE	
CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	
20100110	TREE REMOVAL (6 TO 15' DIAMETER UNITS)	UNIT	48	
20100210	TREE REMOVAL (OVER 15' DIAMETER UNITS)	UNIT	54	
20200100	EARTH EXCAVATION	CU YD	110	
20200200	ROCK EXCAVATION	CU YD	22	
* 25100630	EROSION CONTROL BLANKET	SQ YD	438	
* 25200110	SODDING, SALT TOLERANT	SQ YD	278	
* 25200200	SUPPLEMENTAL WATERING	UNIT	13	
28000305	TEMPORARY DITCH CHECKS	FOOT	20	
28000400	PERIMETER EROSION BARRIER	FOOT	171	
28000500	INLET <sup>AND</sup> PIPE PROTECTION	EACH	1	
28100107	STONE RIPRAP, CLASS A4	SQ YD	147	
28200200	FILTER FABRIC	SQ YD	470	
28400100	GABIONS	CU YD	288	
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX"D", N50	TON	71	
42300300	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 7 INCH	SQ YD	56	
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	214	
44000400	GUTTER REMOVAL	FOOT	49	
44201383	CLASS C PATCHES, TYPE IV, 12 INCH	SQ YD	155	
48101200	AGGREGATE SHOULDERS, TYPE B	TON	32	
50100300	REMOVAL OF EXISTING STRUCTURES NO.1	EACH	1	
50200100	STRUCTURE EXCAVATION	CU YD	260	

\* SPECIALTY ITEMS

# SUMMARY OF QUANTITIES

CODE NUMBER	ITEM	UNIT	URBAN	
			0040	80% FED 20% STATE
			TOTAL QUANTITY	
51500100	NAME PLATES	EACH	1	
54001001	BOX CULVERT END SECTIONS, CULVERT NO.1	EACH	2	
54010805	PRECAST CONCRETE BOX CULVERTS 8' X 5'	FOOT	146	
60600095	CLASS SI CONCRETE OUTLET	CU YD	2	
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	88	
63500105	DELINEATORS	EACH	2	
66700305	PERMANENT SURVEY MARKERS, TYPE II	EACH	2	
67100100	MOBILIZATION	L SUM	1	
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	776	
* A2006514	TREE, QUERCUS BICOLOR (SWAMP WHITE OAK), 1-3/4" CALIPER, BALLED AND BURLAPPED	EACH	3	
* A2006914	TREE, QUERCUS PALUSTRIS (PINK OAK), 1-3/4" CALIPER, BALLED AND BURLAPPED	EACH	3	
* A2007114	TREE, QUERCUS RUBRA (RED OAK), 1-3/4" CALIPER, BALLED AND BURLAPPED	EACH	3	
X2070302	POROUS GRANULAR EMBANKMENT, SPECIAL	TON	60	
X7013015	TRAFFIC CONTROL FOR ROAD CLOSURE	L SUM	1	
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	
Z0025500	FURNISHING AND INSTALLING PROPERTY MARKERS	EACH	10	

\* SPECIALTY ITEMS

# GENERAL NOTES

See cross sections for special ditches and backslopes.

The final top 100 mm (four inches) of soil in any right-of-way area disturbed by the Contractor must be capable of supporting vegetation. The soil must be from the A horizon (zero to 2' deep) of soil profiles of local soils.

All Borrow/Waste/Use sites must be approved by the Department prior to removing any material from the project or initiating any earthmoving activities, including temporary stockpiling outside the limits of construction.

The Contractor shall seed all disturbed areas within the project limits except where sodding is specified. Seeding Class 4 or 2A shall be used, except in front of properties where the grass will be mowed, then use Seeding, Class 1. Class 2A shall be used on front slopes and ditch bottoms. Class 4 shall be used behind Type A gutter, on all backslopes and areas behind the backslope, and beyond the toe of front slope on fill sections without ditches. This work will be included in the contract unit price per Cubic Meter (Cubic Yard) for EARTH EXCAVATION.

Fertilizer shall be applied to all disturbed areas and incorporated into the seedbed prior to seeding or placement of sod at the rate specified in Sections 250 and 252 of the Standard Specifications. This work shall be included in the cost of EARTH EXCAVATION.

Temporary Erosion Control Seeding shall be included in the cost of EARTH EXCAVATION.

Placement and compaction of the backfill for proposed across road culverts and existing across road culverts that are removed shall conform to Section 502.10 of the Standard Specifications, except that the material shall conform to Article 208.02 of the Standard Specifications, and shall be compacted to a minimum of 95% of the standard laboratory density. Any material conforming to the requirements of Article 1003.04 or 1004.05 which has been excavated from the trenches shall be used for backfilling the trenches. The entire excavation, within 2 feet outside of each shoulder, shall be backfilled with trench backfill material to the bottom of the proposed subgrade. Impervious material shall be used on the outer 3 feet of each end of the culvert. This trench backfill material will not be measured for payment, but shall be included in the contract unit price for the class of concrete involved or other unit price item of the work for which it is required.

The following Mixture Requirements are applicable for this project:

Mixture Uses(s):	Surface
PG:	PG 64-22
Design Air Voids	4.0 @ N50
Mixture Composition (Gradation Mixture)	IL 9.5 or 12.5
Friction Aggregate	D
20 Year ESAL	0.5
Mix Unit Weight	112 lb/sy/in

A Nationwide 404 Permit has been issued for this project and the conditions of that permit must be adhered to.

The new number for this structure will be SN 081-1129.

The boring logs for this structure indicate that groundwater levels may encroach on the construction limits of this culvert. It shall be the responsibility of the contractor to control the ground water and divert the stream flow during construction in order to keep the construction area free of water. The method of controlling the water shall be subject to approval of the Engineer and the cost shall be included in the contract unit price for Precast Concrete Box Culverts.

Culvert & bridge flows must be maintained throughout the project. Normal flow shall be allowed to pass at the rate it enters the jobsite. High flows shall be allowed to pass without causing damage to upstream properties.

Delineators shall be installed as shown in Standard 635001, except that the post shall be rotated 180° and only metal-backed delineators shall be permitted. Delineators shall be placed at the ends of approach guardrail terminal sections, and at each headwall or end section of AR Culverts. This work will be paid for at the contract unit price each for DELINEATORS.

PERMANENT SURVEY MARKERS, TYPE II, shall be set at intervals of 1.6 Km (1 mile) or as directed by the Engineer. Bridge or culvert projects shall have one survey marker placed near the structure. Estimated: 2 Each.

Permanent Survey Markers, Type II shall be cast-in-place as shown on District Standard 66.2. The bottom of the marker shall be 5'-0" below the ground surface.

The Contractor shall submit to the Engineer a description of location, elevation, and coordinates for each permanent survey marker. The horizontal and vertical coordinates must be derived by GPS and the elevation derived by a closed level circuit. The Engineer shall submit this information to the Survey Crew.

Tree planting layout shall be performed by the District Landscape Architect. Mulch shall be placed 4" thick and to the diameter around the tree as shown on District Standard 92.1. The mulch shall be hardwood wood chips placed on weed barrier fabric. This work shall be included in the cost of the tree.

The Contractor shall be responsible for protecting utility property during construction operations as outlined in Article 107.31 of the Standard Specifications. A minimum of 48 hours advance notice is required for non-emergency work. The JULIE number is 800-892-0123. The following listed utilities located within the project limits or immediately adjacent to the project construction limits are members of JULIE:

AT&T (Telephone) Attn: Mr. Dave Creen 309/793-4456	MidAmerican Energy Co. (Electric) Attn: Mr. Jeff Berry 309/793-3833
MidAmerican Energy Co. (Gas) Attn: Steve Hampton 309/793-3707	Paetec (Telephone) Attn: Mr. Paul Baumann 630/925-4751
Mediacom (CATV) Attn: Mr. Dennis Jarding 309/743-4750	MCI World Com (Telephone) Attn: Mr. Bailey Ken 972/729-6016
Village of Carbon Cliff (Water & Sewer) Attn: Ms. Dawn Tubbs 309/792-8297	

The applicable portions of Article 105.07 of the Standard Specification shall apply except for the following: The Contractor shall be responsible to locate the vertical depths of the underground utilities which may interfere with construction operations. This work will not be measured or paid for separately, but shall be considered as included in the unit bid price for the item of construction involved.

Bituminous and Aggregate prime coat shall be placed in accordance with Section 406 of the Standard Specifications. The cost of the prime coats shall be included in the contract unit price per metric ton (ton) for HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50.

Per SB 699 (90 day utility relocation law), once right-of-way is clear to award the project, a notice will be sent to the utility companies instructing them to have their facilities relocated within 90 days. Estimated date relocation complete = Letting Date + 135 days.

FILE NAME = 64E31 GN.DOCX	USER NAME =	DESIGNED - Engineering Systems	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>GENERAL NOTES</b>	ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE =	CHECKED -	REVISED -			FAU 5857	1R-T	Rock Island	25	4
	PLOT DATE = 10/8/2010 7:43 AM	DATE - 11/5/2009 12:06 PM	REVISED -			(IL 84)		CONTRACT NO. 64E31		
						SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	ILLINOIS	FED. AID PROJECT

# GENERAL NOTES

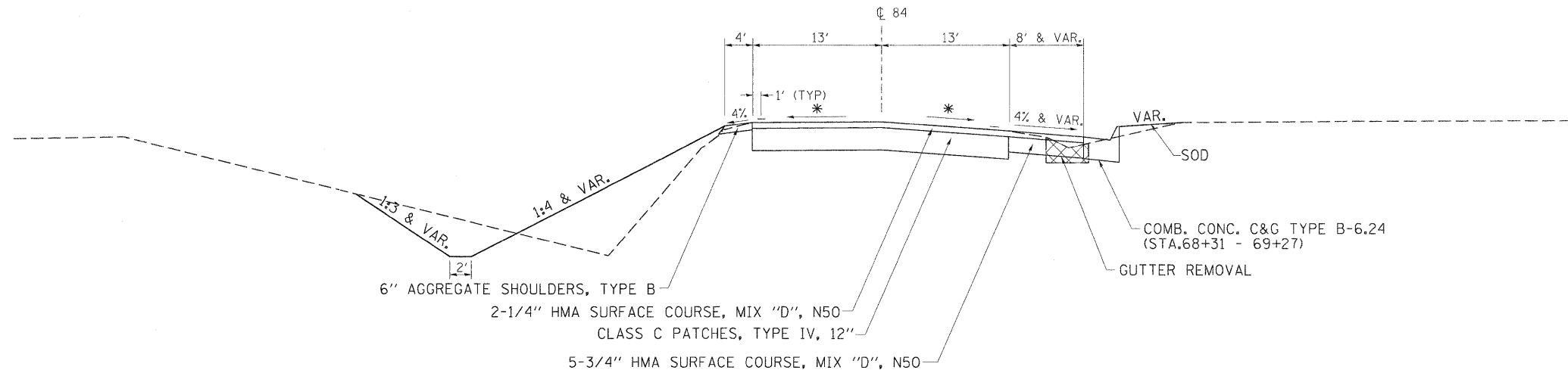
CADD data will be available to Contractors and Consultants working on this project. This information will be provided upon request as MicroStation CADD files and Geopak coordinate geometry files ONLY. If data is required in other formats it will be your responsibility to make these conversions. If any discrepancy or inconsistency arises between the electronic data and the information on the hard copy, the information on the hard copy should be used. Contact the District's Project Engineer to request these files.

It shall be the Contractor's responsibility to contact the municipality to determine approved methods of utility structure adjustment. Utility structures may include, but are not limited to, manholes, water valves, handholes, etc. All materials and work necessary to complete adjustments per municipality requirements shall be considered included in the cost of the associated adjustment pay item.

FILE NAME = 64E31 GN.DOCX	USER NAME =	DESIGNED - Engineering Systems	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES	ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -			FAU 5857	1R-T	Rock Island	25	5
	PLOT SCALE =	CHECKED -	REVISED -			(IL 84)		CONTRACT NO. 64E31		
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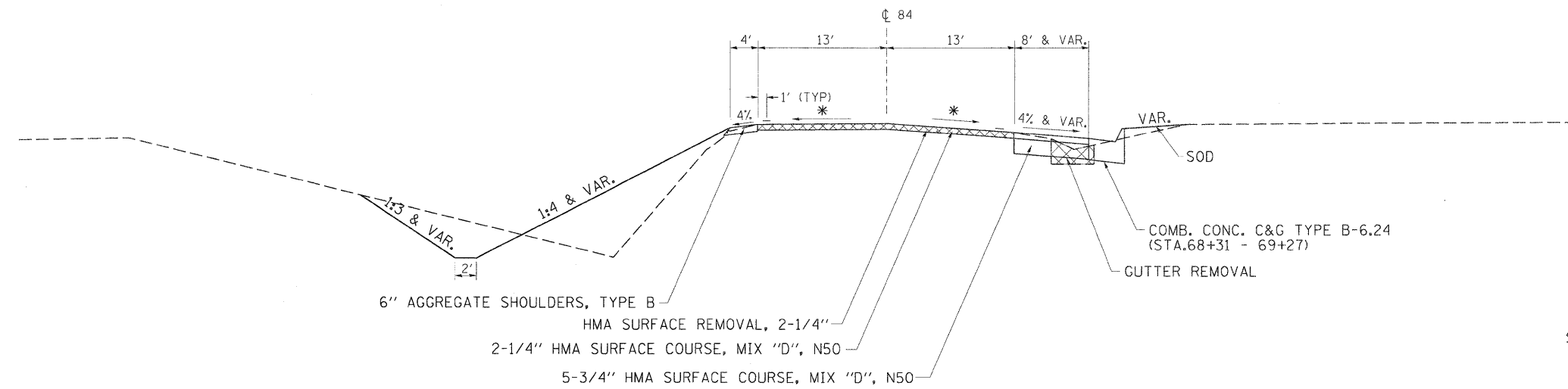
# TYPICAL SECTIONS

STA. 68+74 - 69+27

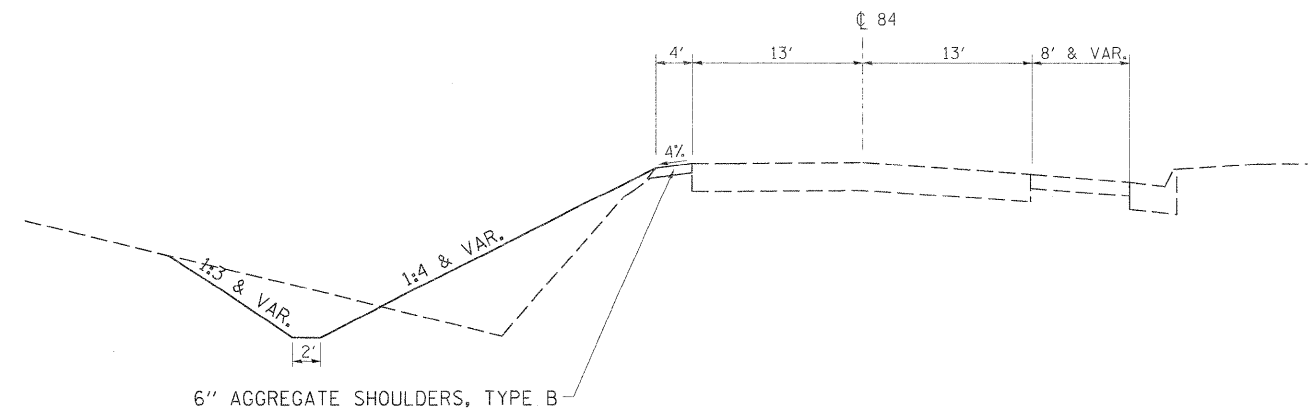


STA. 68+31 - 68+74

\* MATCH EXISTING CROSS SLOPE



STA. 69+27 - 70+00



FILE NAME =	USER NAME = cushmanbw	DESIGNED -	REVISED -
c:\pwwork\pwwid\cushmanbw\0133431\0228498-shr-typical.dgn		DRAWN -	REVISED -
PLOT SCALE = 20.0000' / 1 IN.		CHECKED -	REVISED -
PLOT DATE = Wed Oct 06 07:52:29 2010		DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

## TYPICAL SECTIONS

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

F.A.U. RTE. 5857	SECTION IR-T	COUNTY ROCK ISLAND	TOTAL SHEETS 25	SHEET NO. 6
				CONTRACT NO. 64E31
ILLINOIS FED. AID PROJECT				

# SCHEDULE OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	LOCATION	TO	FROM	REMARKS
20100110	TREE REMOVAL (6 TO 15 DIAMETER UNITS)					
		8	STA. 68 + 79	45.1'	RT	
		8	STA. 68 + 80	49.1'	RT	
		8	STA. 68 + 86	67'	LT	
		8	STA. 69 + 5	44.1'	RT	
		6	STA. 69 + 22	46'	LT	
		10	STA. 69 + 36	61.5'	LT	
		48	TOTAL			
20100210	TREE REMOVAL (OVER 15 DIAMETER UNITS)					
		16	STA. 68 + 71	76.6'	RT	
		18	STA. 69 + 5	57.5'	RT	
		20	STA. 69 + 12	48.7'	RT	
		54	TOTAL			
20200100	EARTH EXCAVATION	CU YD	LOCATION			
		110	LT & RT STA. 68 + 31		70 + 0	
		110	TOTAL			
20200200	ROCK EXCAVATION	CU YD	LOCATION			
		20	LT & RT STA. 69 + 0			Possible excavation under proposed Box Culvert
		20	TOTAL			
25100630	EROSION CONTROL BLANKET	SQ YD	LOCATION			
		438.0	LT. STA. 68 + 75		70 + 0	
		438.0	TOTAL			
25200110	SODDING, SALT TOLERANT	SQ YD	LOCATION			
		278.0	RT. STA. 67 + 77		69 + 27	
		278.0	TOTAL			
25200200	SUPPLEMENTAL WATERING	UNIT	LOCATION			
		13.0	LT. STA. 67 + 77		69 + 27	
		13.0	TOTAL			
28000305	TEMPORARY DITCH CHECKS	FOOT	LOCATION			
		20	LT. STA. 69 + 50			
		20	TOTAL			
28000400	PERIMETER EROSION BARRIER	FOOT	LOCATION			
		145	RT STA. 69 + 58		69 + 28	
		26	LT STA. 68 + 77		69 + 3	
		171	TOTAL			
28000500	INLET AND PIPE PROTECTION	EACH	LOCATION			
		1	LT. STA. 69 + 0			
		1	TOTAL			
28100107	STONE RIPRAP, CLASS A4	SQ YD	LOCATION			
		68.0	LT. STA. 69 + 0			
		79.0	RT. STA. 69 + 0			
		147.0	TOTAL			

ITEM NO.	DESCRIPTION	UNIT	LOCATION	TO	FROM	REMARKS
28200200	FILTER FABRIC	SQ YD	LOCATION			
		470.0	LT & RT STA. 69 + 0			
		470.0	TOTAL			
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	LOCATION			
		71.0	LT & RT STA. 68 + 31		69 + 27	
		71.0	TOTAL			
42300300	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 7"	SQ YD	LOCATION			
		56.0	RT STA. 68 + 50			
		56.0	TOTAL			
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	LOCATION			
		214.0	LT & RT STA. 68 + 31		68 + 74	Includes shoulder and 2nd Ave.
		214.0	TOTAL			
44000400	GUTTER REMOVAL	FOOT	LOCATION			
		29	RT STA. 68 + 31		68 + 60	
		20	RT STA. 69 + 6		69 + 26	
		49	TOTAL			
44201383	CLASS C PATCHES, TYPE IV, 12 INCH	SQ YD	LOCATION			
		155.0	CL STA. 68 + 74		69 + 27	
		155.0	TOTAL			
48101200	AGGREGATE SHOULDERS, TYPE B	TON	LOCATION			
		32.0	LT STA. 68 + 31		70 + 0	
		32.0	TOTAL			
50100300	REMOVAL OF EXISTING STRUCTURES NO. 1	EACH	LOCATION			
		1	STA. 69 + 0			12x6 Concrete Box Culvert
		1	TOTAL			
51500100	NAME PLATES	EACH	LOCATION			
		1	69 + 0			REMARK'S SN 081-1129
		1	TOTAL			
54010805	PRECAST CONCRETE BOX CULVERTS 8' X 5'	FOOT	LOCATION			
		146	69 + 0			
		146	TOTAL			
60600095	CLASS SI CONCRETE OULET	CU YD	LOCATION			
		2	RT. STA. 68 + 95			REMARK'S OUTLET OVER CULVERT
		2	TOTAL			
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	LOCATION			
		88	RT. STA. 68 + 31		69 + 27	
		88	TOTAL			

# SCHEDULE OF QUANTITIES

63500105	DELINEATORS EACH <u>2</u> 2	LT/RT TOTAL	LOCATION 69 + 0		REMARK'S
66700305	PERMANENT SURVEY MARKERS, TYPE II EACH <u>2</u> 2		LOCATION TO BE DETERMINED BY FIELD ENGINEER TOTAL		REMARK'S
78001110	PAINTE PAVEMENT MARKING - LINE 4" EQOI 676 <u>100</u> 776	LT & RT STA CL STA. TOTAL	68 + 31 68 + 31 TOTAL	TO TO	70 + 0 70 + 0 REMARK'S WHITE EOP (2) APPLICATIONS YELLOW SKIP DASH (2) APPLICATIONS
X2070302	POROUS GRANULAR EMBANKMENT, SPECIAL TON <u>60.0</u> 60.0	LT & RT. STA. TOTAL	69 + 0		REMARK'S Used as sub-base for PreCast Box Culvert
Z0025500	FURNISHING AND INSTALLING PROPERTY MARKERS EACH 1 1 1 1 1 1 1 1 1 1 <u>1</u> 10	STA. STA. STA. STA. STA. STA. STA. STA. STA. STA. STA. TOTAL	68 + 65 68 + 74.64 68 + 75 68 + 65 68 + 95.37 69 + 0.00 69 + 26.58 69 + 38 70 + 15 70 + 15 TOTAL	30' RT 86.44' RT 50' RT 85' RT 89.37' RT 90' RT 80' LT 25' RT 55' LT 30' LT	REMARK'S



# HORIZONTAL & VERTICAL CONTROL

HORIZONTAL CONTROL POINTS							
POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
1	1757100.3338	2235423.7528	584.7842	IL84	63+20.6395	19.7477' LT	TOPO SURVEY POINT, PIN
2	1757414.8328	2235343.7673	588.2928	IL84	66+44.9651	30.7113' LT	TOPO SURVEY POINT, PIN
3	1757619.9889	2235302.1337	590.8488	IL84	68+53.2169	28.9506' LT	TOPO SURVEY POINT, PIN
4	1757846.3683	2235283.5711	591.7469	IL84	70+77.5095	20.06' LT	TOPO SURVEY POINT, TOPO SURVEY POINT
5	1758115.2628	2235272.2724	591.5100	IL84	73+45.2263	27.2235' LT	TOPO SURVEY POINT, PIN
90339	1761721.1510	2234327.5810	587.4370	IL84	111+23.1289	29.6174' RT	PHOTO CONTROL H. & V., PIN

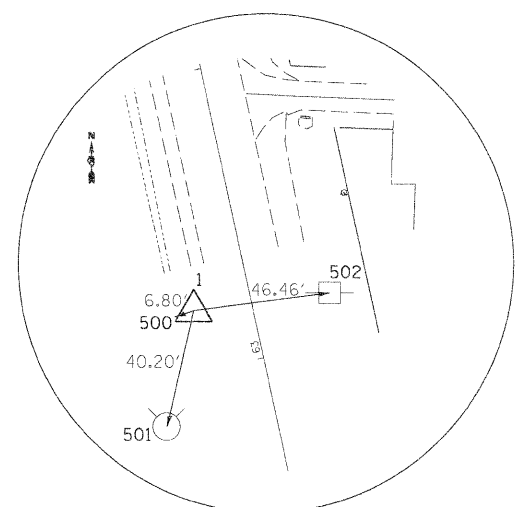
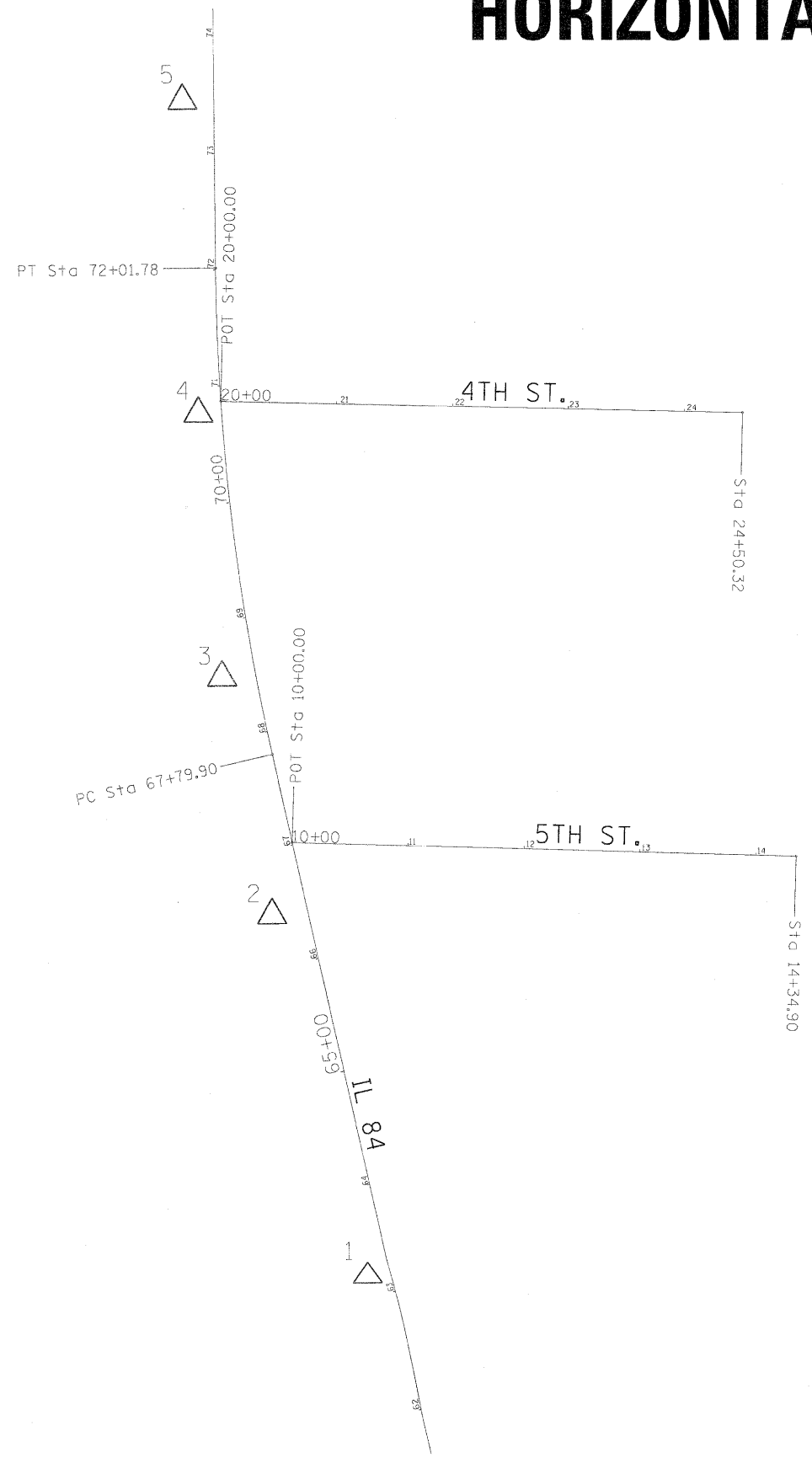
REFERENCE TIES				
POINT	CHAIN	STATION	OFFSET	DESCRIPTION
500	IL84	63+20.0043	26.5189' LT	PIPE CULVERT, CMP
501	IL84	62+84.2970	36.9308' LT	FIRE HYDRANT
502	IL84	63+16.7392	26.5493' RT	POWER POLE WITH LIGHT, POWER POLE WITH LIGHT
503	IL84	65+65.4587	24.7866' LT	MANHOLE LID
504	IL84	66+75.7897	70.0998' LT	TELEPHONE SPLICE BOX
505	IL84	66+96.4586	56.6327' LT	TREE DECIDUOUS
506	IL84	68+90.4396	30.6455' LT	TOP OF WINGWALL, TOP OF WINGWALL
507	IL84	68+48.6878	47.3747' LT	FIRE HYDRANT
508	IL84	68+43.6183	28.6999' LT	MANHOLE LID
509	IL84	70+62.2527	45.3065' LT	POWER POLE, SHINER
510	IL84	71+27.4682	43.4529' LT	TELEPHONE POLE, SHINER
511	IL84	70+62.6914	24.5837' RT	FIRE HYDRANT
512	IL84	73+43.9835	27.6382' RT	POWER POLE WITH LIGHT, SHINER
513	IL84	73+83.8470	27.1431' RT	SIGN, END
514	IL84	73+75.9003	49.2326' LT	PIPE CULVERT, RCP

SURVEY WORK POINTS							
POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
100	1757747.6183	2235208.4121	595.8867	IL84	69+88.4150	103.4917' LT	TOPO SURVEY POINT, NAIL
101	1757807.7877	2235107.1710	598.5283	IL84	70+52.7638	198.7338' LT	TOPO SURVEY POINT, NAIL
102	1757671.6566	2235378.7072	582.5802	IL84	68+91.5936	55.1957' RT	TOPO SURVEY POINT, TOPO SURVEY POINT
103	1757667.6993	2235305.4048	583.2978	IL84	68+99.1821	17.8278' LT	TOPO SURVEY POINT, TOPO SURVEY POINT
104	1757664.4496	2235152.5611	585.2335	IL84	69+17.8901	169.4462' LT	TOPO SURVEY POINT, PIN
105	1757676.8707	2235607.2182	580.4336	IL84	68+55.5249	281.3839' RT	TOPO SURVEY POINT, PIN
106	1757677.4537	2235044.9807	587.8689	IL84	69+42.8297	274.1974' LT	TOPO SURVEY POINT, NAIL
107	1757619.6469	2234935.5566	589.5559	IL84	69+07.0747	390.6835' LT	TOPO SURVEY POINT, NAIL
108	1757642.6071	2234836.2687	591.0949	IL84	69+37.2200	485.6927' LT	TOPO SURVEY POINT, NAIL
109	1757565.3730	2234762.2513	591.4459	IL84	68+85.6302	570.3197' LT	TOPO SURVEY POINT, NAIL
110	1757669.8755	2235242.6423	584.4287	IL84	69+10.5357	79.541' LT	TOPO SURVEY POINT, NAIL

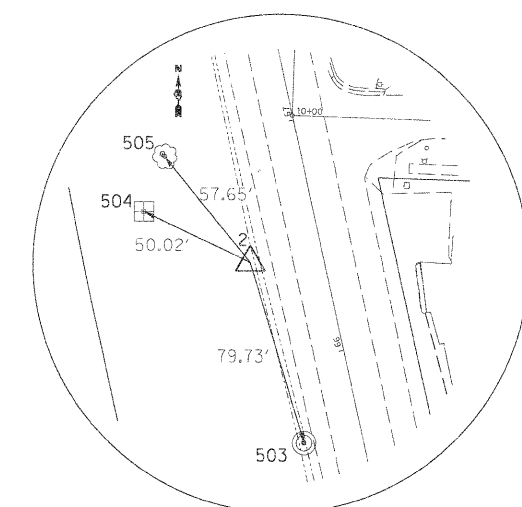
BENCH MARKS							
POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
401	1757100.0953	2235475.7606	584.9173	IL84	63+09.2978	31.0089' RT	HEADWALL, CHISELED SQUARE
402	1757663.4792	2236358.4083	583.1968	IL84	66+71.1491	1013.6238' RT	HEADWALL, HEADWALL
403	1757668.6535	2235302.3309	592.1353	IL84	69+00.5834	20.7186' LT	HEADWALL, CHISELED SQUARE
405	1758350.2696	2235239.0675	594.7684	IL84	75+80.2538	60.2816' LT	SIGN FOUNDATION, SIGN FOUNDATION

APPARENT PROPERTY CORNERS							
POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
700	1758186.3901	2235327.1263	591.3641	IL84	74+16.3193	27.6748' RT	BLOCK CORNER, PIN
701	1757880.7455	2235328.9836	590.7567	IL84	71+09.3612	27.1989' RT	BLOCK CORNER, PIN

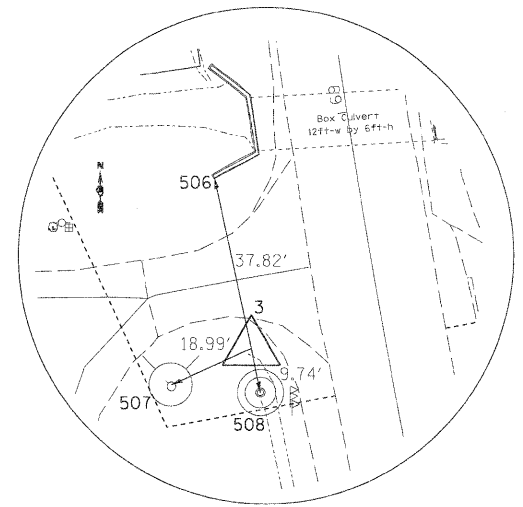
# HORIZONTAL & VERTICAL CONTROL



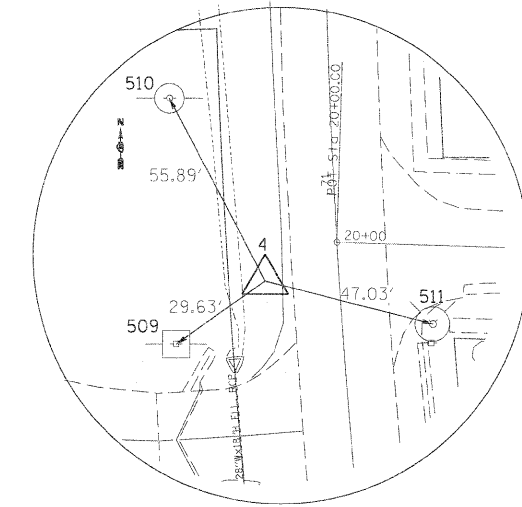
HORIZONTAL CONTROL POINT 1



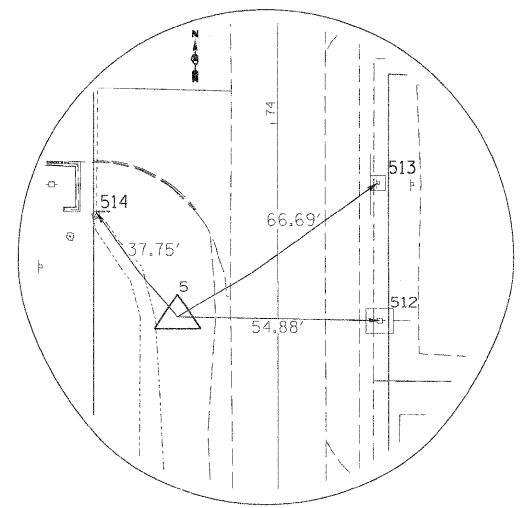
HORIZONTAL CONTROL POINT 2



HORIZONTAL CONTROL POINT 3



HORIZONTAL CONTROL POINT 4



HORIZONTAL CONTROL POINT 5

Curve Data  
 Curve 250  
 P.I. Station 69+91.6558 N 1,757,760.0823 E 2,235,299.7178  
 Delta = 12° 17' 50.7463" (RT)  
 Degree = 2° 54' 53.7421"  
 Tangent = 211.7523'  
 Length = 421.8776'  
 Radius = 1,965.5982'  
 External = 11.3730'  
 Long Chord = 421.0683'  
 Mid. Ord. = 11.3076'  
 P.C. Station 67+79.9034 N 1,757,553.2168 E 2,235,344.9474  
 P.T. Station 72+01.7810 N 1,757,971.8345 E 2,235,299.5855  
 C.C. N 1,757,973.0625 E 2,237,265.1833

Course from PT 250 to PC 260 359° 57' 51.1422" Dist 866.1301'

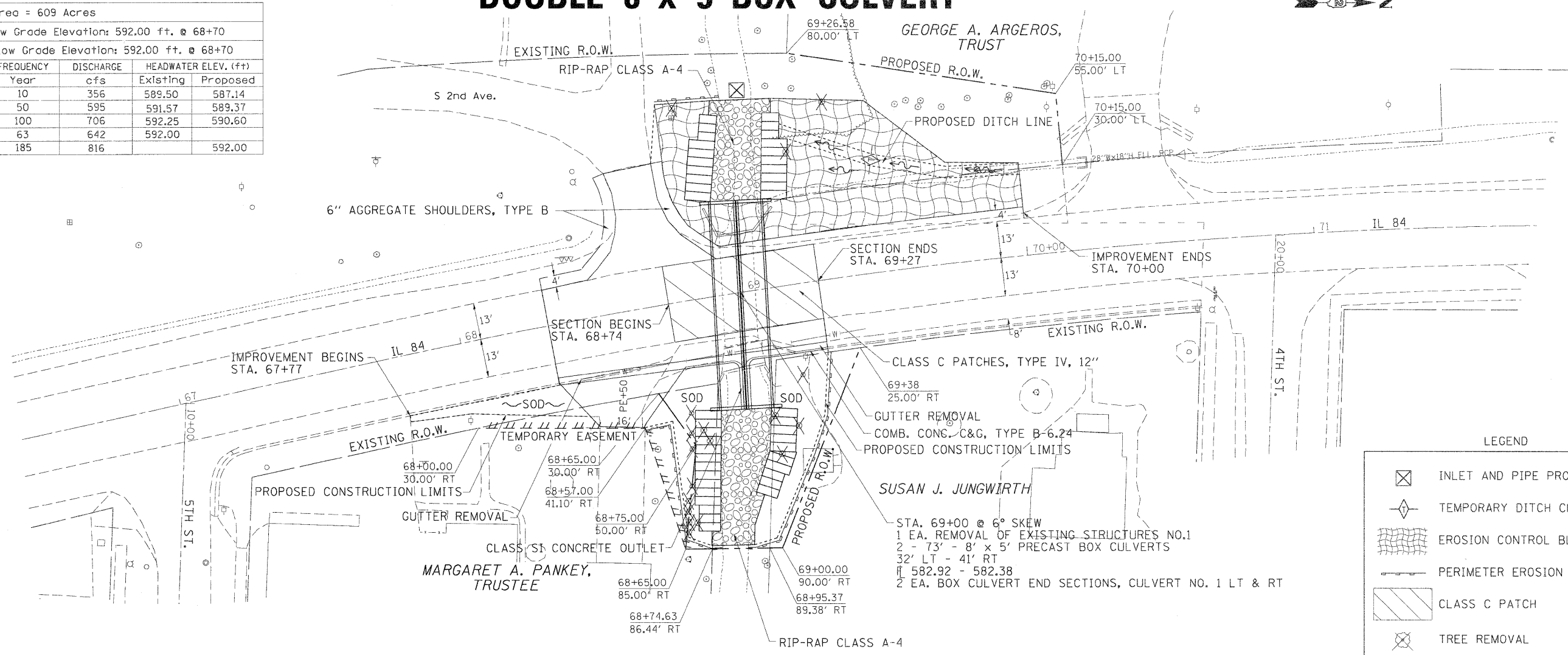
DRAWING NTS

FILE NAME =	USER NAME = cushmanbw	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>HORIZONTAL &amp; VERTICAL CONTROL</b>	F.A.U. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\p\work\p\dot\cushmanbw\0133431\028\08-sh-t-ATB.dgn		DRAWN -	REVISED -			5857	IR-T	ROCK ISLAND	25	10	
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -			CONTRACT NO. 64E31					
PLOT DATE = Wed Oct 06 08:07:47 2010		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

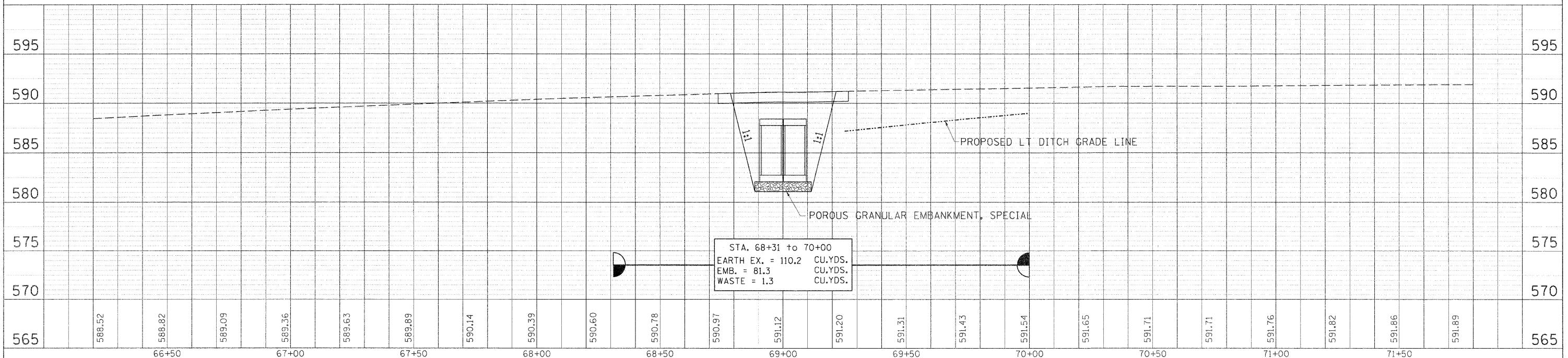
# STA. 69+00 DOUBLE 8' x 5' BOX CULVERT



Drainage Area = 609 Acres				
Existing Low Grade Elevation: 592.00 ft. @ 68+70				
Proposed Low Grade Elevation: 592.00 ft. @ 68+70				
FLOOD	FREQUENCY	DISCHARGE	HEADWATER ELEV. (ft)	
	Year	cfs	Existing	Proposed
Ten-Year	10	356	589.50	587.14
Design	50	595	591.57	589.37
Base	100	706	592.25	590.60
OVT (E)	63	642	592.00	
OVT (P)	185	816		592.00



	INLET AND PIPE PROTECTION
	TEMPORARY DITCH CHECK
	EROSION CONTROL BLANKET
	PERIMETER EROSION BARRIER
	CLASS C PATCH
	TREE REMOVAL



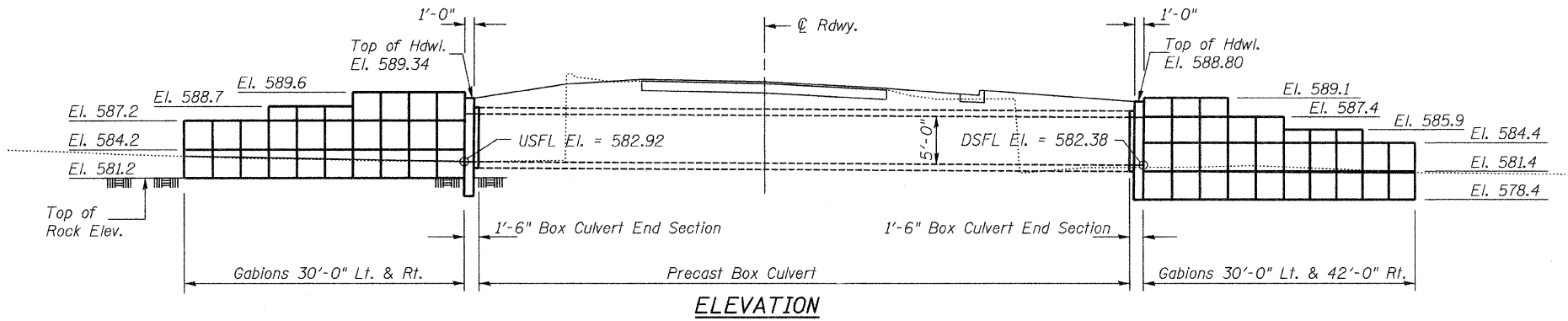
PLAN  
DATE  
BY  
SCAVENGED  
ALIGNMENT CHECKED  
NOTE BOOK NO.  
RIP-RAP FILE NAME

PROFILE  
DATE  
BY  
GRADES CHECKED  
B.M. NOTED  
NOTE BOOK NO.  
STRUCTURE NOTATIONS CHRD

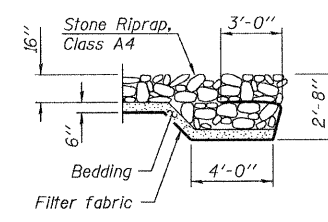
FILE NAME =	USER NAME = cushmanbw	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>				<b>STA. 69+00 DOUBLE 8' x 5' BOX CULVERT</b>				F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pw\work\pwsdot\cushmanbw\133431\2289408-shr-plnpr.f.dgn	PLOT SCALE = 20,0000 1/ IN.	DRAWN -	REVISED -									5857	1R-T	ROCK ISLAND	25	11
PLOT DATE = Wed Oct 06 08:08:46 2010	DATE -	CHECKED -	REVISED -									ILLINOIS FED. AID PROJECT				
		DATE -	REVISED -									SCALE:	SHEET NO. OF SHEETS	STA. TO STA.		

**GENERAL NOTES**

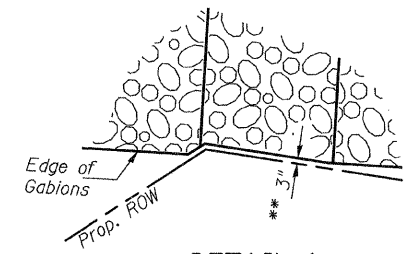
This work shall be done according to the applicable portion of 284, 503 and 508 of the Standard Specifications.  
 Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60.  
 Layout of slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.  
 Filter fabric shall be placed underneath and on the back face of the gabion walls.  
 Exposed edges shall be beveled 3/4"



**ELEVATION**



**SECTION K-K**



**DETAIL A**

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Structure Excavation	Cu. Yd.	260.0
Rock Excavation	Cu. Yd.	2.0
Stone Riprap, Class A4	Sq. yd.	147.0
Filter Fabric	Sq. yd.	470.0
<del>Removal of Existing Structure</del>	<del>Each</del>	<del>1</del>
Box Culvert End Sections, Culvert No. 1	Each	2
Gabions	Cu. Yd.	288.0

**DESIGN STRESSES**

**FIELD UNITS**  
 f'c = 3,500 psi  
 fy = 60,000 psi (Reinforcement)

**DESIGN SPECIFICATIONS**

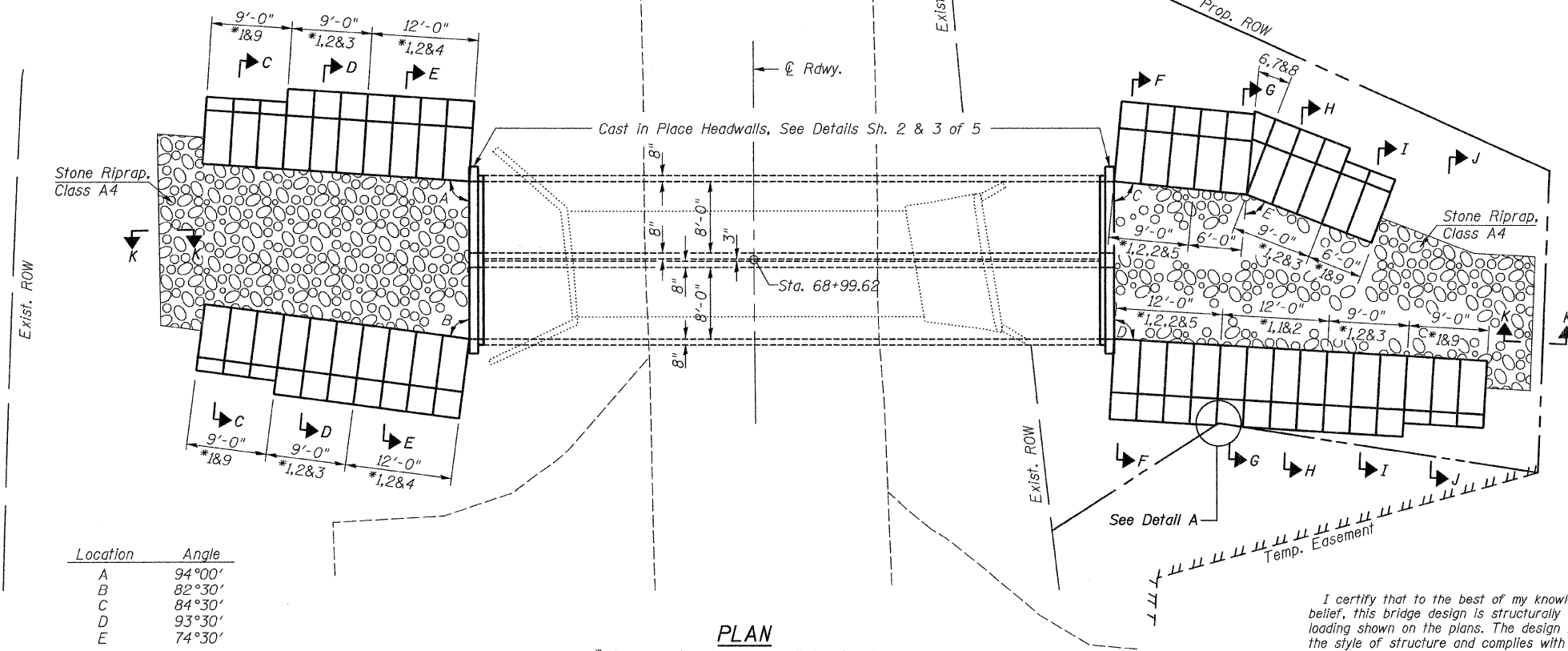
2007 AASHTO LRFD Bridge Design Specifications with 2008 and 2009 Interims

**LOADING HL-93**

Allow 50#/Sq. Ft. For future wearing surface.

**INDEX OF SHEETS**

- 1 - General Plan & Elevation
- 2-3 - Box Culvert End Section Details
- 4 - Gabion Wall Details
- 5 - Bar Splicer Assembly Details



**PLAN**

\* Gabions, See Sheet 4 of 5 for Details

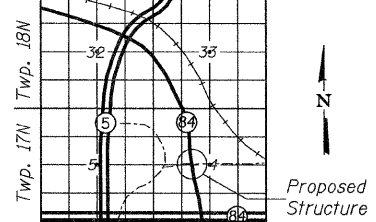
Location	Angle
A	94°00'
B	82°30'
C	84°30'
D	93°30'
E	74°30'

I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current AASHTO LRFD Bridge Design Specifications.

*Benjamin A. Neel* 9/22/2010  
 Illinois Structural No. 6527  
 Expires 11/30/2010

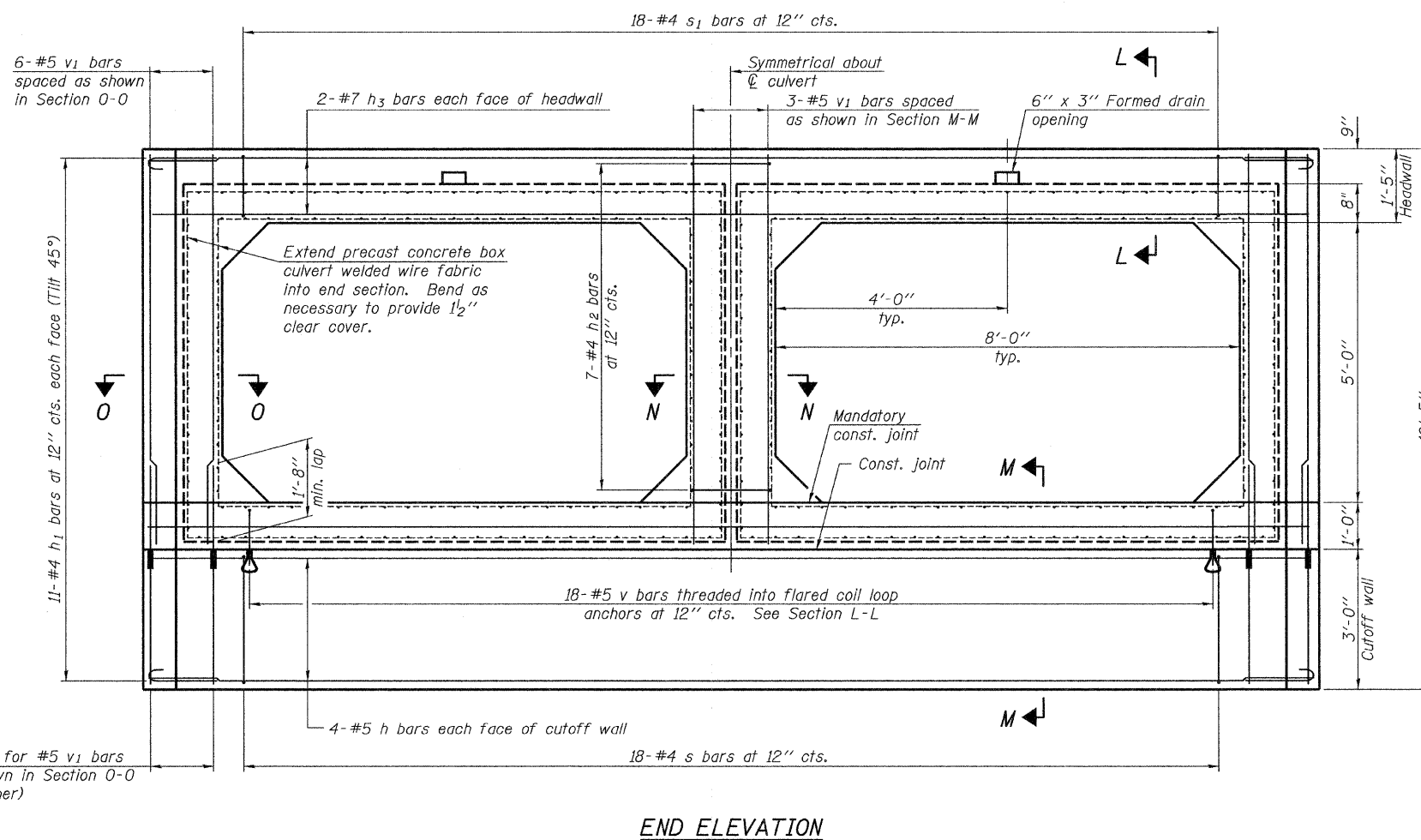
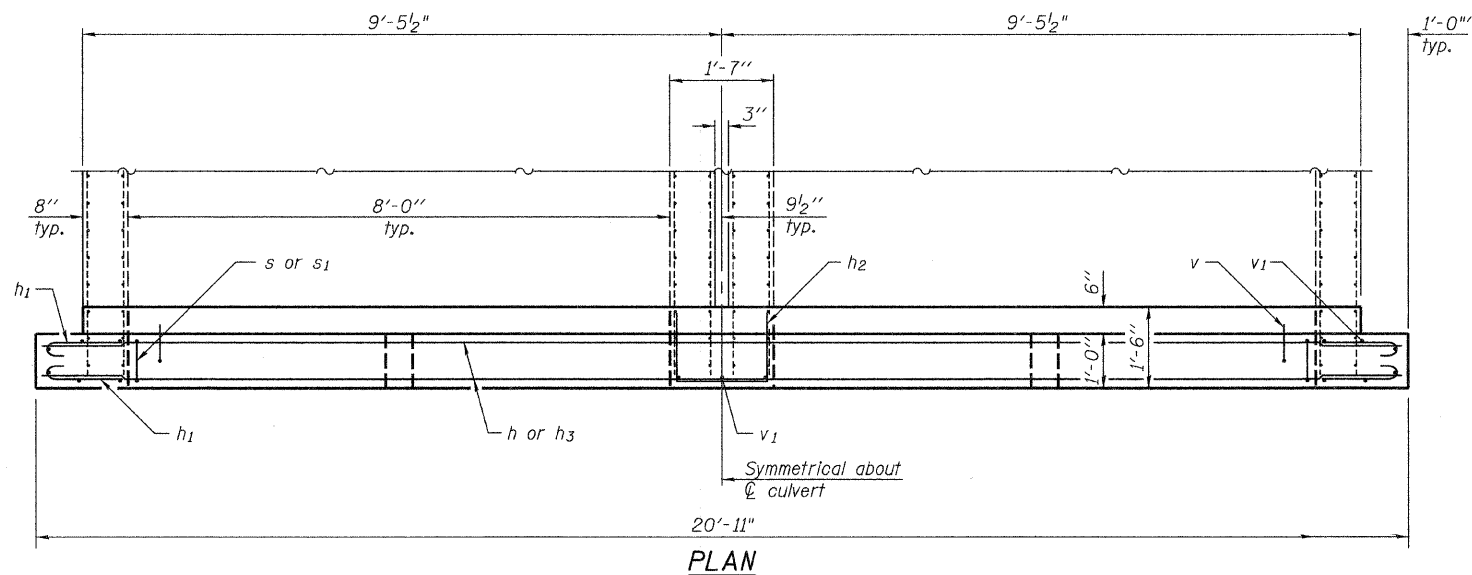


**LOCATION SKETCH**



**GENERAL PLAN & ELEVATION**  
**IL. RTE. 84 OVER UNNAMED CREEK**  
**F.A.S. RTE. 5857 - SEC. 1R-T**  
**ROCK ISLAND COUNTY**  
**STATION 68+99.62**

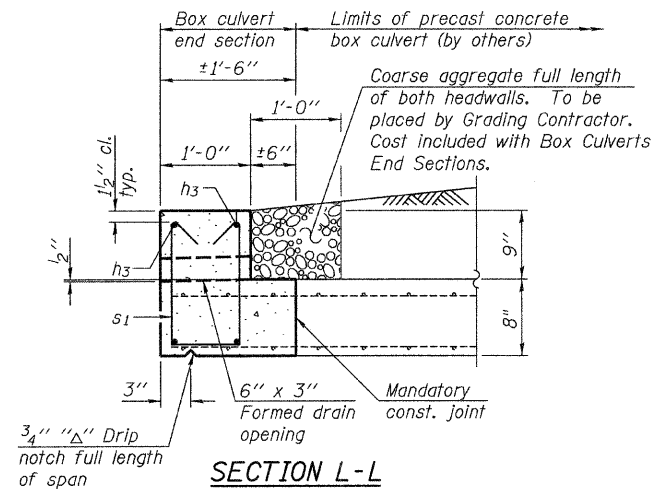
DESIGNED - BAN	EXAMINED _____	DATE - ___/___/___	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>BOX CULVERT END SECTION &amp; GABION WALL DETAILS</b>	F.A.S. RTE. 5857	SECTION 1R-T	COUNTY ROCK ISLAND	TOTAL SHEETS 25	SHEET NO. 12	
CHECKED - _____	ENGINEER OF BRIDGE DESIGN				CONTRACT NO. 64E31		ILLINOIS FED. AID PROJECT			
DRAWN - TAC	PASSED _____									
CHECKED - _____	ENGINEER OF BRIDGES AND STRUCTURES									



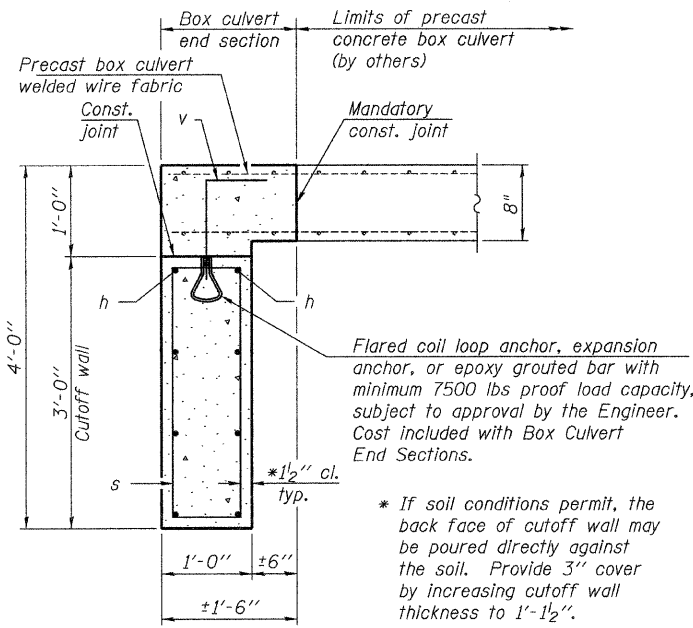
6 Bar Splicers for #5 v1 bars spaced as shown in Section O-O (Typ. each corner)

**BOX CULVERT END SECTION DETAILS**  
**IL. RTE. 84 OVER UNNAMED CREEK**  
**F.A.S. RTE. 5857 - SEC. 1R-T**  
**ROCK ISLAND COUNTY**  
**STATION 68+99.62**

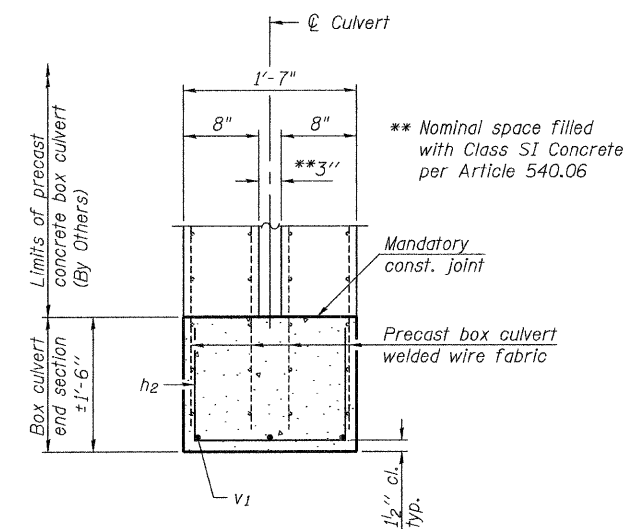
DESIGNED - BAN	EXAMINED _____	DATE - ____	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>BOX CULVERT END SECTION &amp; GABION WALL DETAILS</b>	F.A.S. RTE. 5857	SECTION 1R-T	COUNTY ROCK ISLAND	TOTAL SHEETS 25	SHEET NO. 13
CHECKED - ____	ENGINEER OF BRIDGE DESIGN				CONTRACT NO. 64E31				
DRAWN - TAC	PASSED _____				SHEET NO. 2 OF 5 SHEETS				
CHECKED - ____	ENGINEER OF BRIDGES AND STRUCTURES				ILLINOIS FED. AID PROJECT				



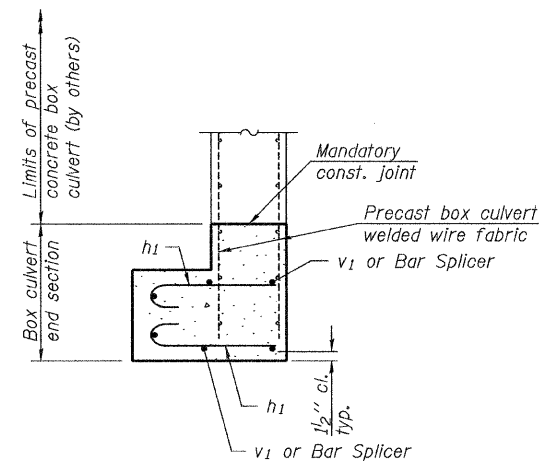
**SECTION L-L**



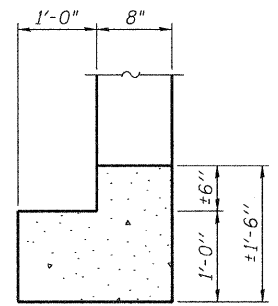
**SECTION M-M**



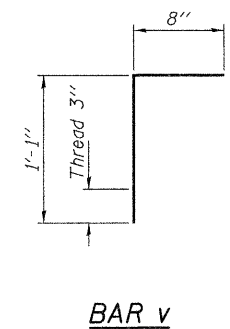
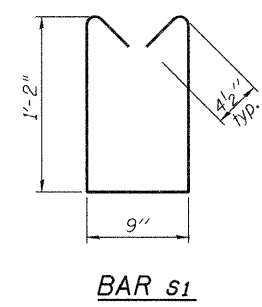
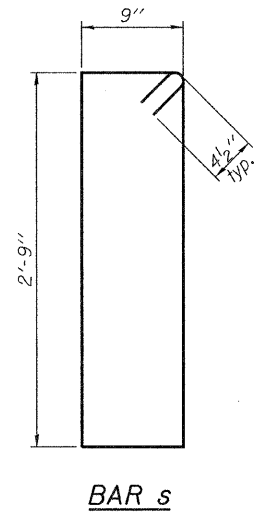
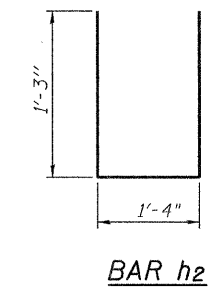
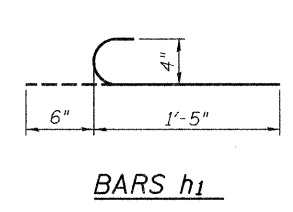
**SECTION N-N**



**SECTION O-O (Showing reinforcement)**



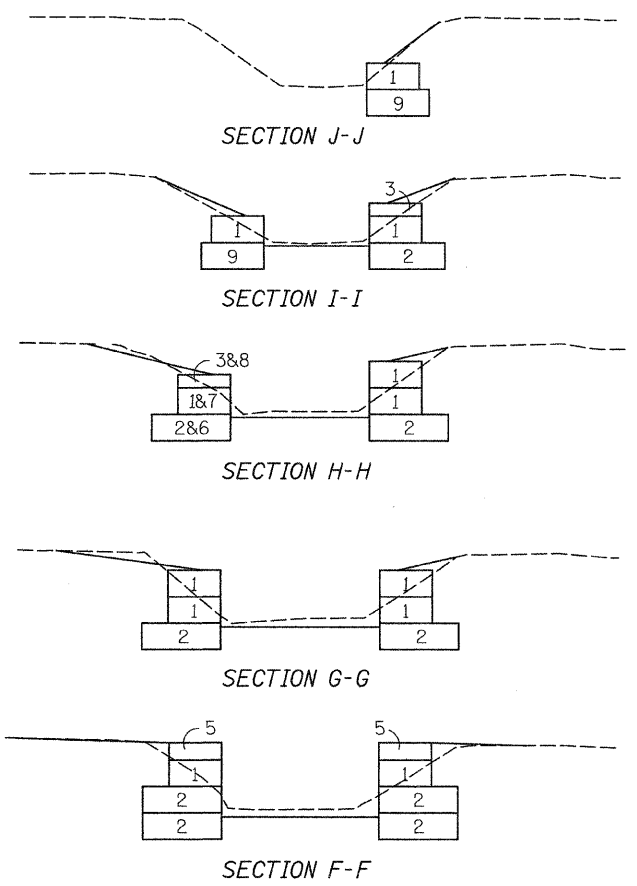
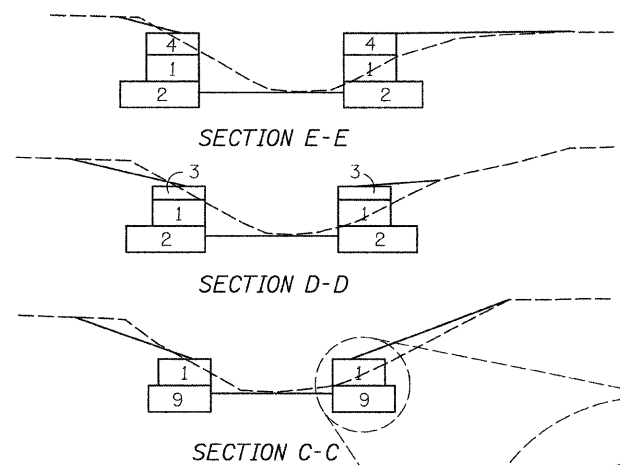
**SECTION O-O (Showing dimensions)**



**ONE END SECTION BILL OF MATERIAL**  
(For information only)

Bar	No.	Size	Length	Shape	
h	8	#5	19'-8"	—	
h1	44	#4	1'-11"	⌋	
h2	7	#4	3'-10"	⌋	
h3	4	#7	19'-8"	—	
s	18	#4	7'-9"	⌋	
s1	18	#4	3'-10"	⌋	
v	18	#5	1'-9"	⌋	
v1	15	#5	7'-2"	⌋	
Concrete Box Culverts				Cu. Yd.	5.9
Reinforcement Bars				Pound	680
Bar Splicers				Each	12

**BOX CULVERT END SECTION DETAILS**  
**IL. RTE. 84 OVER UNNAMED CREEK**  
**F.A.S. RTE. 5857 - SEC. 1R-T**  
**ROCK ISLAND COUNTY**  
**STATION 68+99.62**



**GABIONS**

Gabion	Length	Width	Depth
1	3'-0"	6'-0"	3'-0"
2	3'-0"	9'-0"	3'-0"
3	3'-0"	6'-0"	1'-6"
4	3'-0"	6'-0"	2'-5"
5	3'-0"	6'-0"	1'-9"
6	varies	9'-0"	3'-0"
7	varies	6'-0"	3'-0"
8	varies	6'-0"	1'-6"
9	3'-0"	7'-6"	3'-0"

**GABION WALL DETAILS**  
**IL. RTE. 84 OVER UNNAMED CREEK**  
**F.A.S. RTE. 5857 - SEC. 1R-T**  
**ROCK ISLAND COUNTY**  
**STATION 68+99.62**

DESIGNED - BAN	EXAMINED _____ DATE - ___/___/___	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>BOX CULVERT END SECTION &amp; GABION WALL DETAILS</b>	F.A.S. RTE. 5857	SECTION 1R-T	COUNTY ROCK ISLAND	TOTAL SHEETS 25	SHEET NO. 15	
CHECKED - ---	ENGINEER OF BRIDGE DESIGN			SHEET NO. 4 OF 5 SHEETS		CONTRACT NO. 64E31			
DRAWN - TAC	PASSED _____					ILLINOIS FED. AID PROJECT			
CHECKED - ---	ENGINEER OF BRIDGES AND STRUCTURES								

The diameter of this part is the same as the diameter of the bar spliced.

The diameter of this part is equal or larger than the diameter of bar spliced.

**ROLLED THREAD DOWEL BAR**



**\*\* ONE PIECE**

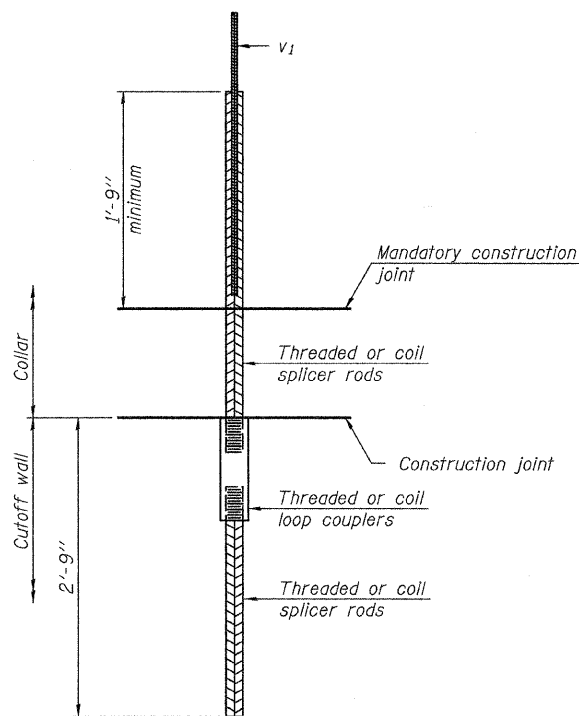
Wire Connector



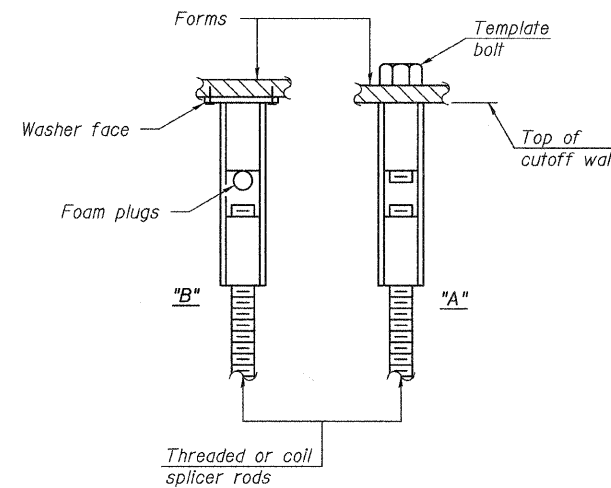
**WELDED SECTIONS**

**BAR SPLICER ASSEMBLY ALTERNATIVES**

\*\*Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



**FOR BOX CULVERT END SECTIONS**



**INSTALLATION AND SETTING METHODS**

"A" : Set bar splicer assembly by means of a template bolt.  
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

**NOTES**

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.  
 Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.  
 All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.  
 Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity =  $1.25 \times f_y \times A_t$   
 (Tension in kips)
  - ② Minimum \*Pull-out Strength =  $0.66 \times f_y \times A_t$   
 (Tension in kips)
- Where  $f_y$  = Yield strength of lapped reinforcement bars in ksi.  
 $A_t$  = Tensile stress area of lapped reinforcement bars.  
 \* = 28 day concrete


Bar Splicer for #5 bar	
Min. Capacity =	23.0 kips - tension
Min. Pull-out Strength =	12.3 kips - tension
No. Required =	24

**BAR SPLICER ASSEMBLY DETAILS**  
**IL. RTE. 84 OVER UNNAMED CREEK**  
**F.A.S. RTE. 5857 - SEC. 1R-T**  
**ROCK ISLAND COUNTY**  
**STATION 68+99.62**

DESIGNED - BAN	EXAMINED _____ DATE - ____	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>BOX CULVERT END SECTION &amp; GABION WALL DETAILS</b>	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - ---	ENGINEER OF BRIDGE DESIGN			5857	1R-T	ROCK ISLAND	25	16
DRAWN - TAC	PASSED _____			CONTRACT NO. 64E31				
CHECKED - ---	ENGINEER OF BRIDGES AND STRUCTURES			ILLINOIS FED. AID PROJECT				
			SHEET NO. 5 OF 5 SHEETS					



# BORING LOGS



**Illinois Department of Transportation**  
Division of Highways  
Illinois Department of Transportation/D-2

## SOIL BORING LOG

Page 1 of 1  
Date 7/10/08

ROUTE FAU 5857 DESCRIPTION P92-084-08 Culvert on IL 84, .6 m. N. of Colona Road LOGGED BY W. Garza


SECTION 1 R-T LOCATION Hampton Twp. - 4W1/2, SEC. , TWP. 17N, RNG. 1E

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	D E P T H	B L O W S	U C S Qu	M O I S T U R E	Surface Water Elev.	
					ft	ft
94+49						
B-1 94+28						
16.00ft Rt CL						
592.10						
STIFF black LOAM			1.0 P	15.0		
590.10		2				
VERY LOOSE brown/black LOAM		2		16.0		
588.60		2				
MEDIUM brown/tan LOAM		2				
586.10		3	0.5 P	22.0		
VERY STIFF gray CLAY LOAM		2				
583.10		3	2.7 B	19.0		
DENSE gray SHALE		10				
581.10		12				
MEDIUM gray SHALE		9		17.0		
578.60		12				
VERY DENSE gray SAND STONE		100/1"				
576.10						
End of Boring						

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

BBS, from 137 (Rev. 8-99)



**Illinois Department of Transportation**  
Division of Highways  
Illinois Department of Transportation/D-2

## SOIL BORING LOG

Page 1 of 1  
Date 7/10/08

ROUTE FAU 5857 DESCRIPTION P92-084-08 Culvert on IL 84, .6 m. N. of Colona Road LOGGED BY W. Garza

SECTION 1 R-T LOCATION Hampton Twp. - 4W1/2, SEC. , TWP. 17N, RNG. 1E

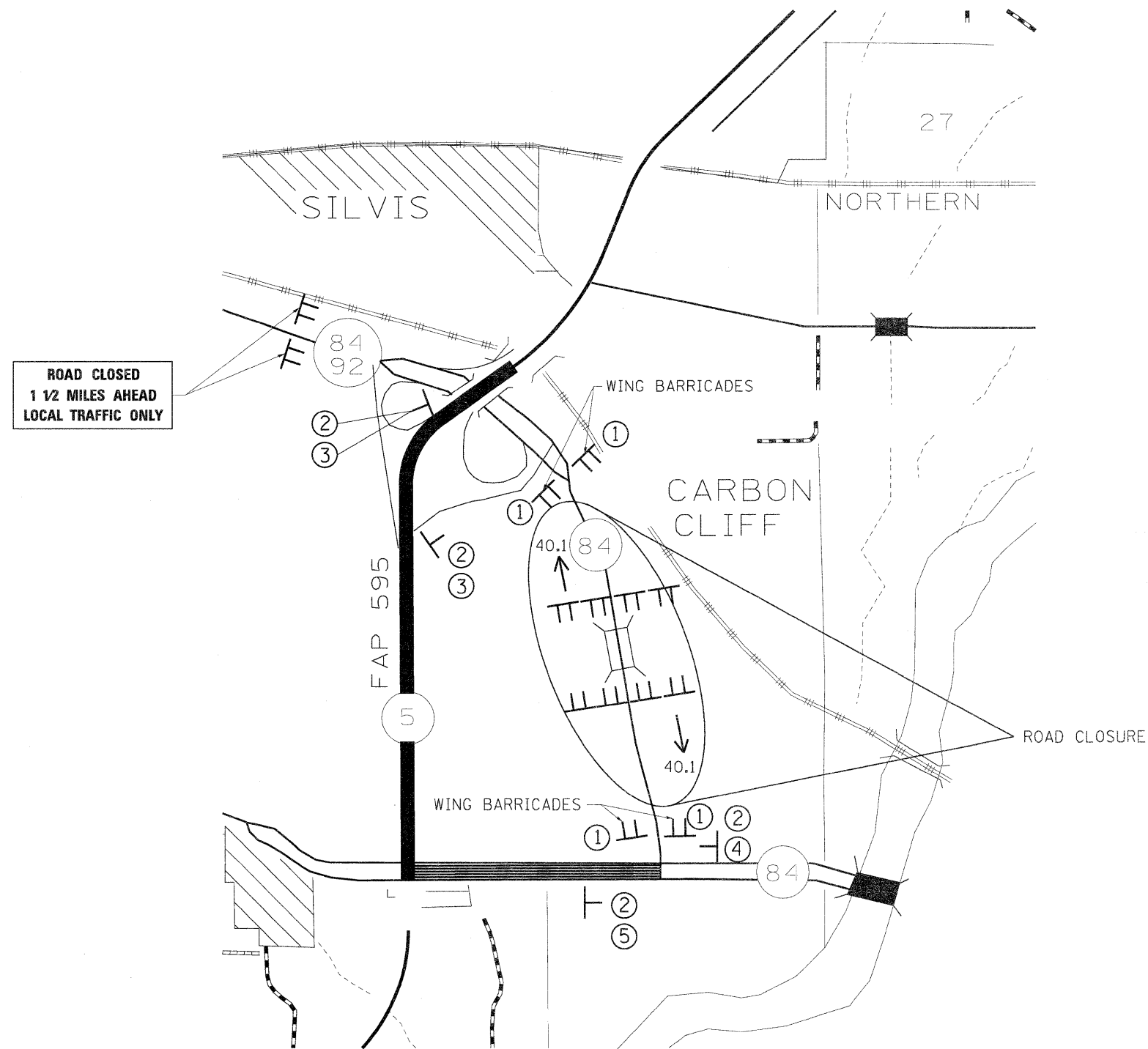
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	D E P T H	B L O W S	U C S Qu	M O I S T U R E	Surface Water Elev.	
					ft	ft
94+49						
B-2 94+69						
14.00ft Lt CL						
591.20						
Road Rock						
589.20		2				
MEDIUM dark gray LOAM		2	0.5 P	19.0		
587.70		3				
STIFF brown LOAM with ROCKS		1	1.1 P	16.0		
584.70		1				
SOFT gray CLAY LOAM/SHALE		0	0.5 B	32.0		
582.70		1				
VERY DENSE gray SAND STONE		6				
580.20		100/4"				
End of Boring						




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

BBS, from 137 (Rev. 8-99)

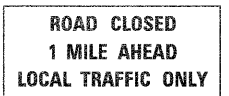




# DETOUR ROUTE



### LEGEND

-  DETOUR ROUTE
-  TYPE III BARRICADES WITH FLASHERS PLACED AS SHOWN IN STANDARD 701901.
-  ROAD CLOSED X MILE(S) SIGN WITH SUPPLEMENTAL PLATES AS REQUIRED IN THE SPECIAL PROVISIONS.

THIS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LUMP SUM FOR TRAFFIC CONTROL FOR ROAD CLOSURE.

- ①  ROAD CLOSED 1 MILE AHEAD LOCAL TRAFFIC ONLY
- ②  ROAD CLOSED 1 MILE
- ③  SOUTH IL 84
- ④ 
- ⑤ 

FILE NAME =	USER NAME = cushmanbw	DESIGNED -	REVISED -
c:\pwork\pwork\cushmanbw\08133431\02081408-shr-detour.dgn		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

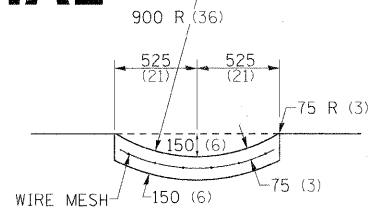
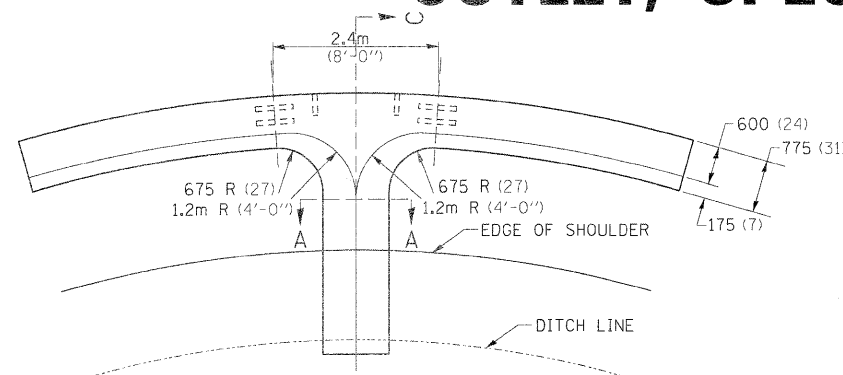
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

## DETOUR ROUTE

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5787	1R-T	ROCK ISLAND	25	18
CONTRACT NO. 64E31			ILLINOIS FED. AID PROJECT	

# CURB AND GUTTER OUTLET, SPECIAL



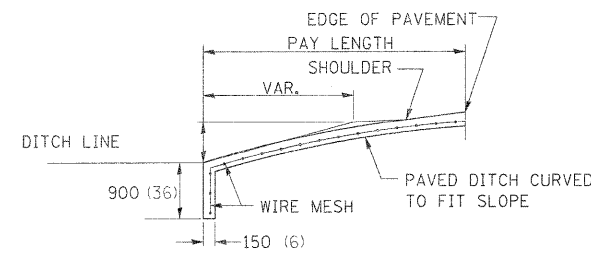
QUANTITY OF CONCRETE  
SECTION A-A = 4.72m<sup>3</sup>/m (0.07 CU.YD./FT.)  
8' SECTION OF CURB & GUTTER UP TO  
SECTION A-A = 0.57 m<sup>3</sup> (0.75 CU.YD.)

SECTION A-A

**NOTE:**

CLASS SI CONCRETE SHALL BE USED THROUGHOUT. CURB AND GUTTER OUTLET SHALL BE TIED TO PAVEMENT SLAB WITH 2 TIE BARS, 750(30) LONG - 750(30) CENTERS. OUTLET SHALL BE TIED TO CURB AND GUTTER AT CONTRACTION JOINTS AS SHOWN. GUTTER OUTLET AND PAVED DITCH SHALL BE REINFORCED WITH WIRE MESH HAVING A WEIGHT OF AT LEAST 2.83 Kg/m<sup>2</sup> (58 LBS/FT.<sup>2</sup>) COST TO BE INCLUDED IN THE UNIT PRICE PER (CUBIC METER) (CU.YD.) FOR CLASS SI CONCRETE (OUTLET).

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

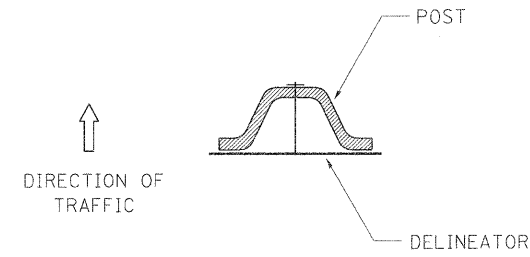


SECTION C-C

REVISED - 9-5-95

**CURB AND GUTTER OUTLET, SPECIAL 18.4**

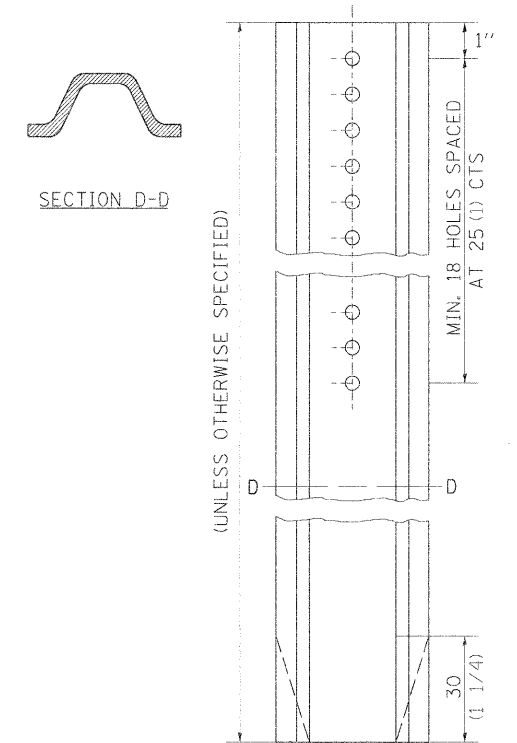
# DELINEATOR AND POST ORIENTATION



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.

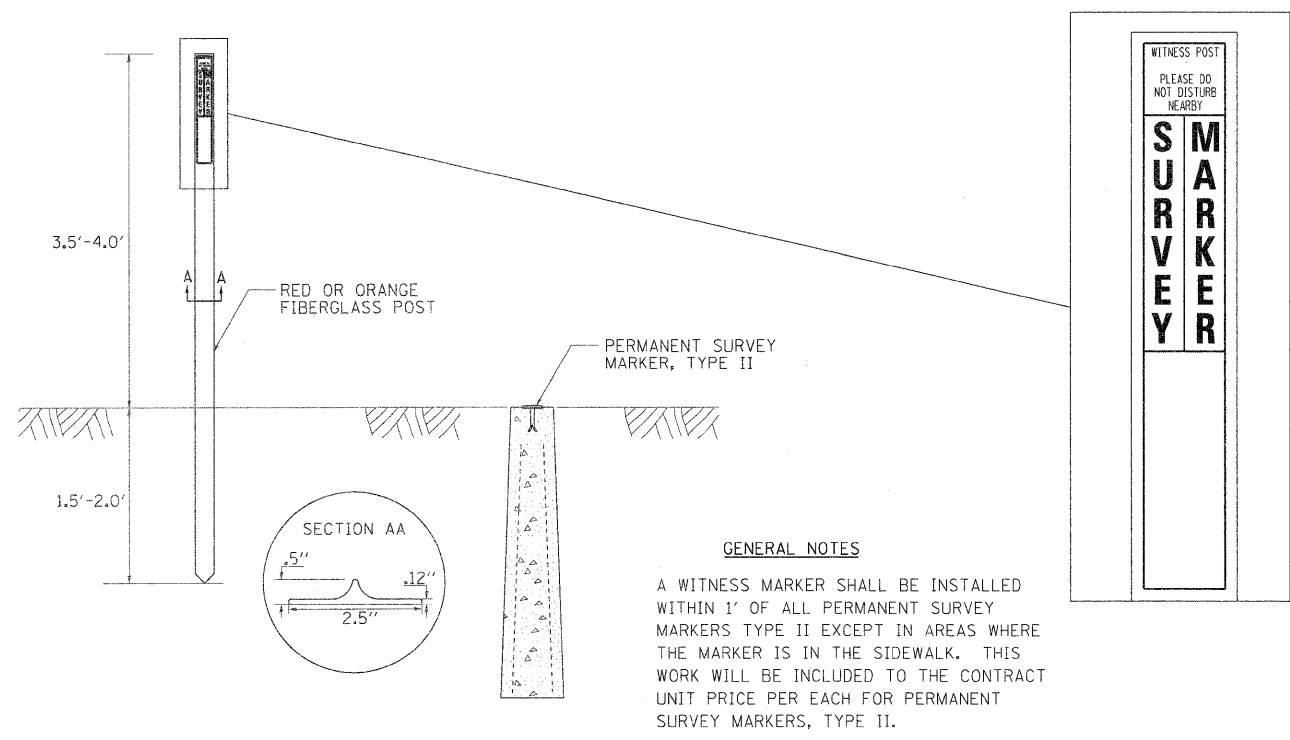
REVISED - 11-01-07



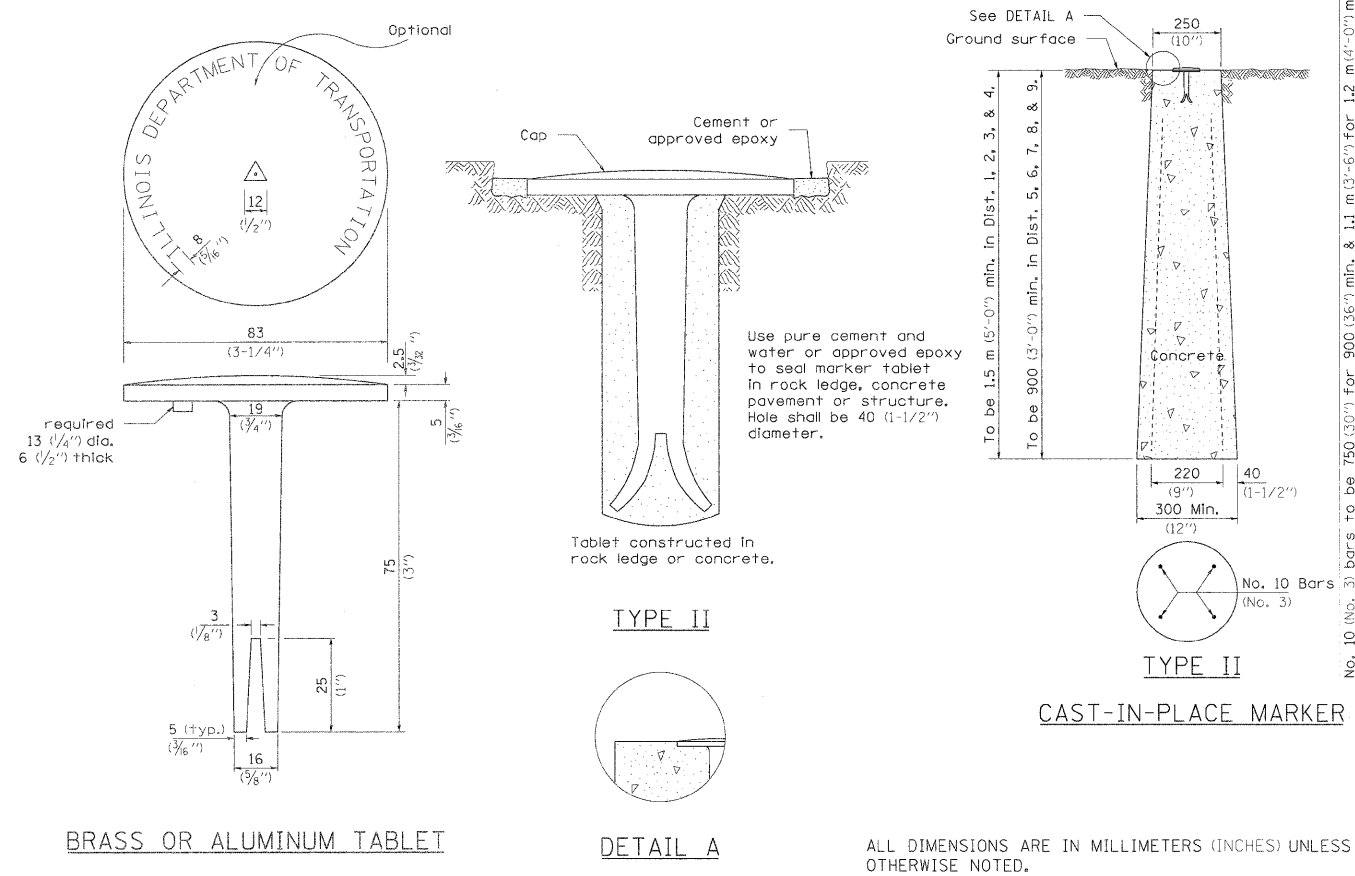
**DELINEATOR AND POST ORIENTATION 37.4**

REVISED -	<b>REGION 2 / DISTRICT 2 STANDARD</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -		5787	1R-T	ROCK ISLAND	25	19
REVISED -		CONTRACT NO. 64E31				
REVISED -		SCALE: 50.0000' / 1" SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT		

# WITNESS MARKER FOR PERMANENT SURVEY MARKERS, TYPE II



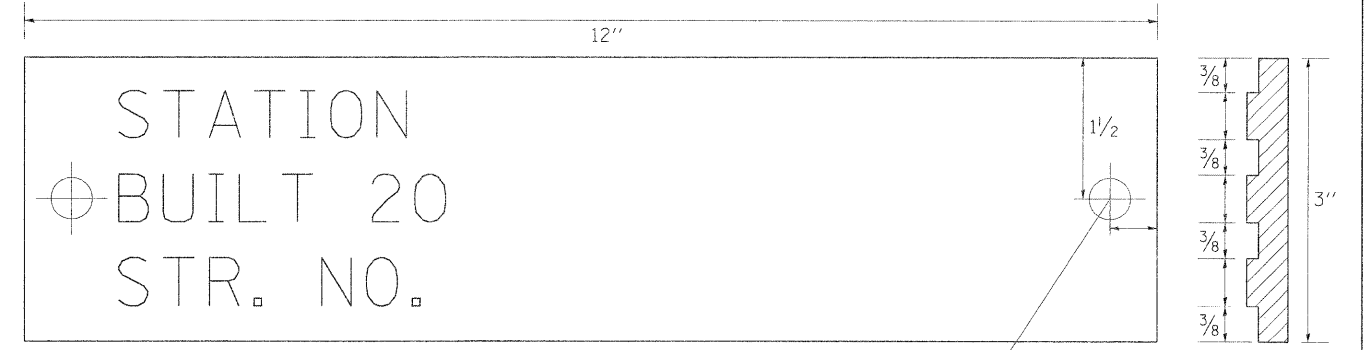
# PERMANENT SURVEY MARKERS, TYPE II



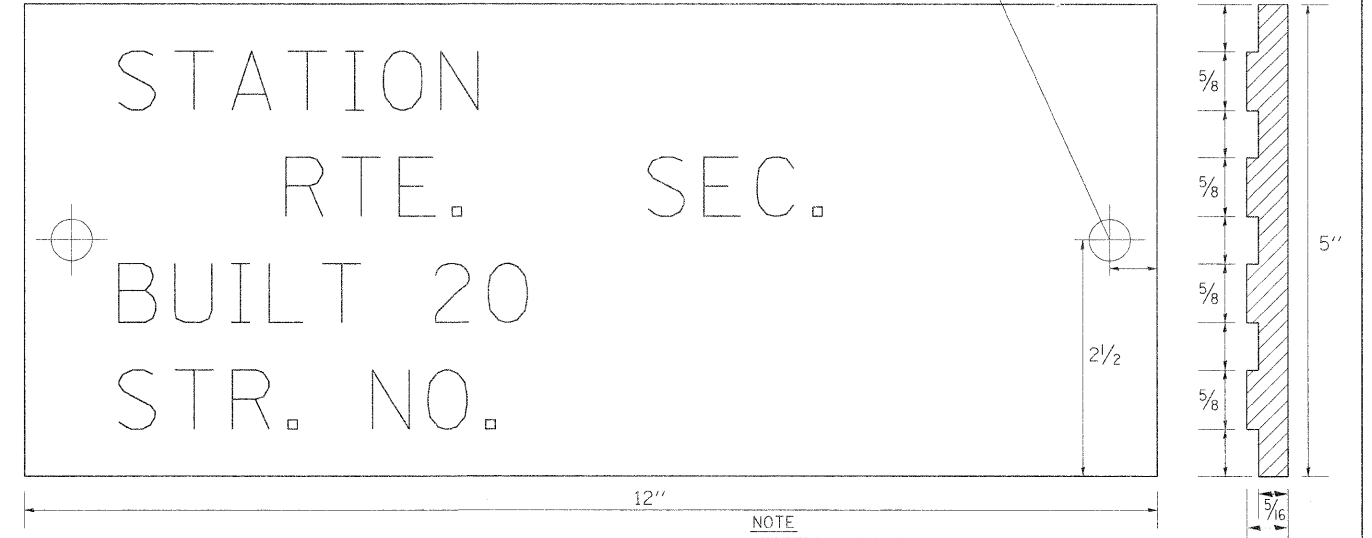
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

# NAME PLATE FOR CULVERTS

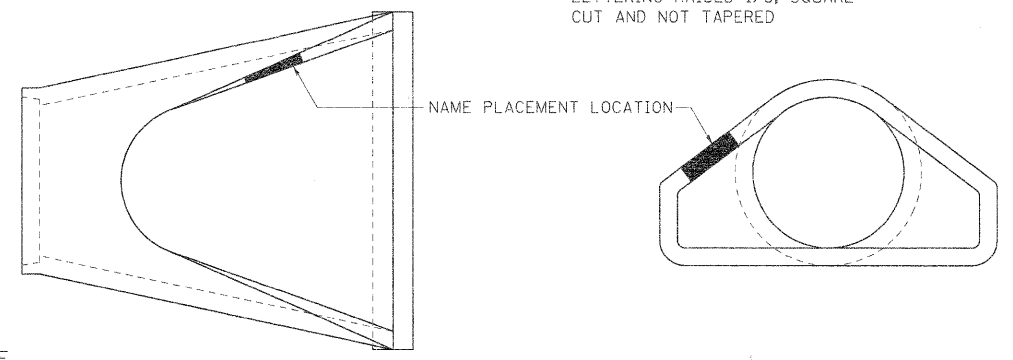
FOR 24"-42" PIPE CULVERTS



FOR 48"-84" PIPE CULVERTS



NOTE  
LETTERING RAISED 1/8, SQUARE CUT AND NOT TAPERED



### DESIGNERS NOTE

NAME PLATES SHALL BE FURNISHED & INSTALLED ACCORDING TO SECTION 515 OF THE STANDARD SPECIFICATIONS, EXCEPT 2 BOLTS SHALL BE USE TO FASTEN THE PLATE TO THE END SECTION.

USE STANDARD 515001 FOR BRIDGES AND MULTI-CELL CULVERTS WITH SPANS OF 20' OR MORE MEASURED ALONG THE CENTERLINE AT THE HIGHWAY.

USE THIS DETAIL FOR ALL OTHER PIPE CULVERTS & BOX CULVERTS WITH STRUCTURE NUMBERS. INCLUDE THE INFORMATION TO FILL OUT THE NAME PLATE FOR EACH CULVERT.

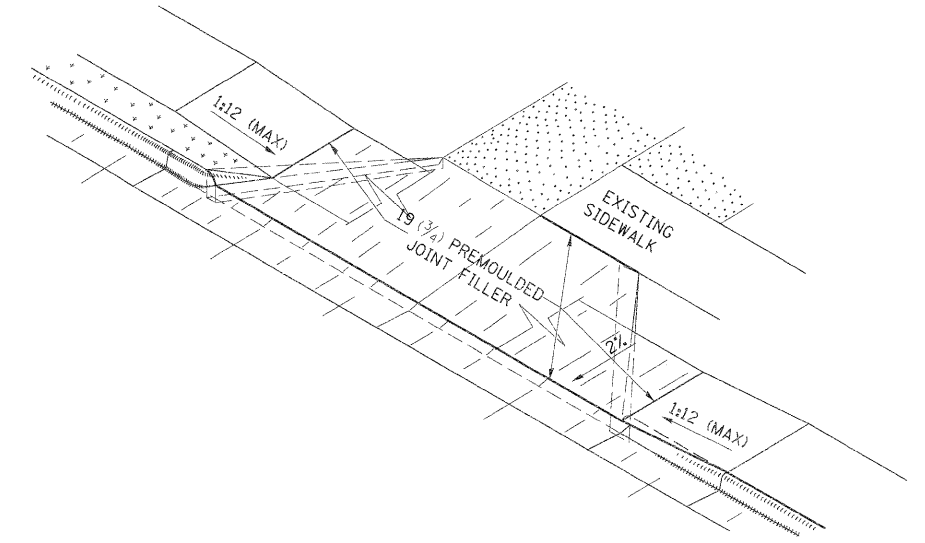
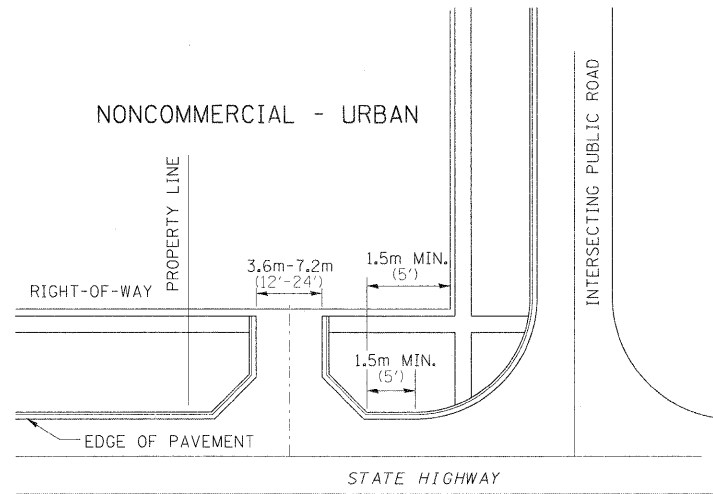
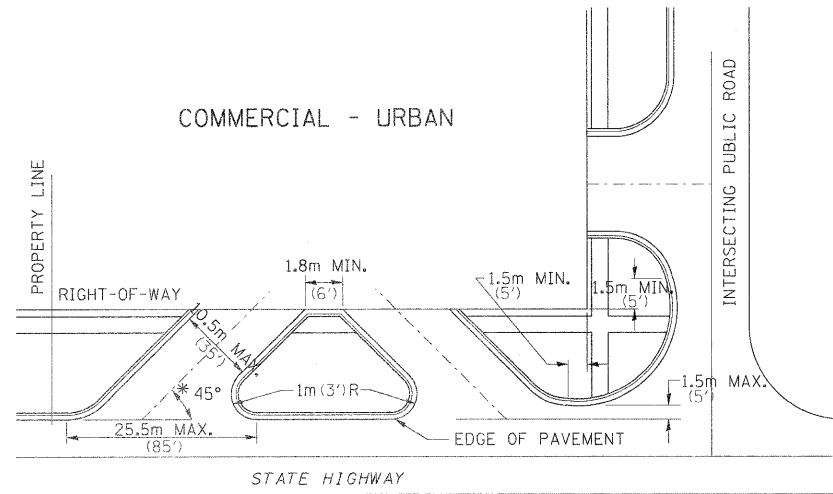
IN BOTH CASES INCLUDE A PAY ITEM FOR NAME PLATES.

STATION	STRUCTURE NO.
69+00	SN 081-1129

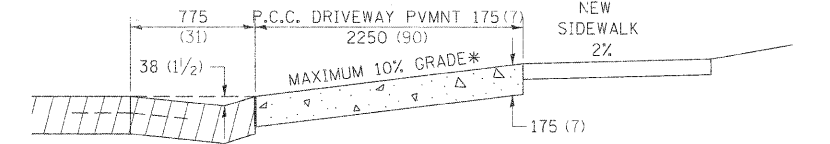
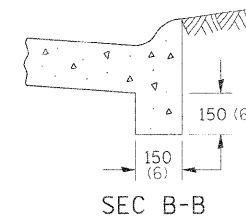
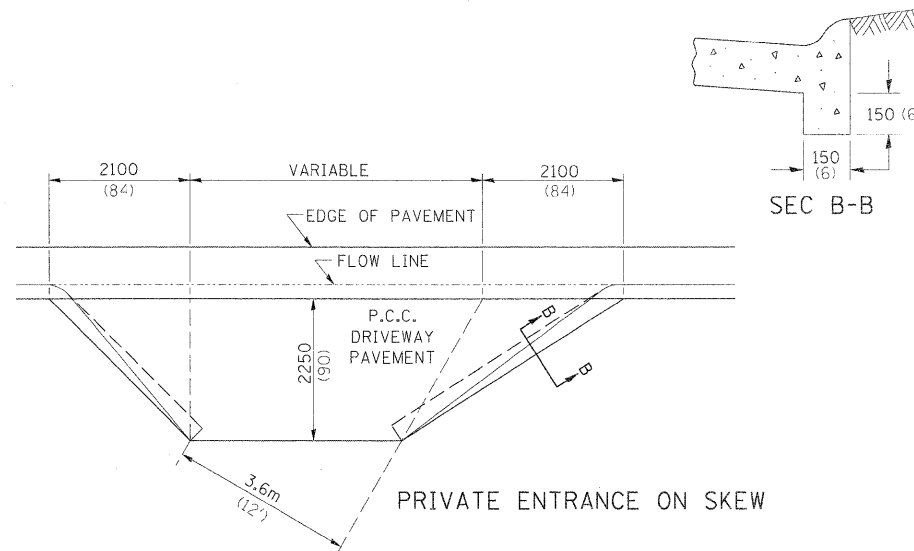
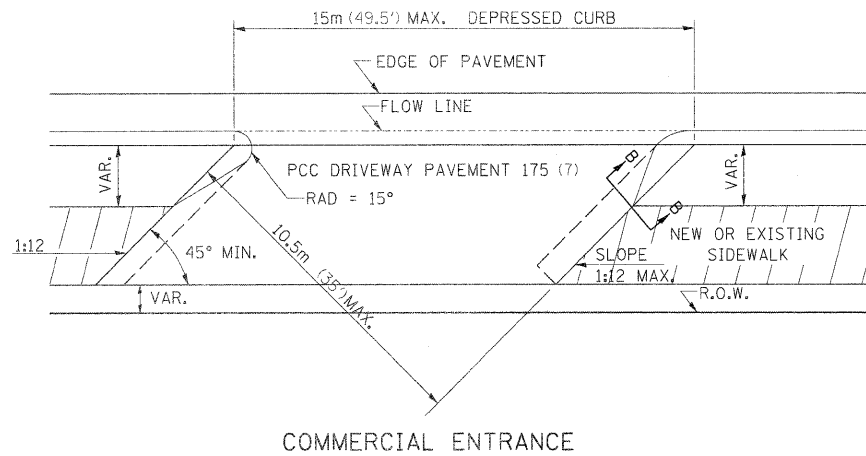
REVISED - 5-27-09	<b>REGION 2 / DISTRICT 2 STANDARD</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -		5787	1R-T	ROCK ISLAND	25	20
REVISED -		SCALE: 58.0000 1" = 10'	ILLINOIS FED. AID PROJECT		CONTRACT NO. 64E31	
REVISED -		STA. TO STA.				

# ENTRANCE APPROACHES – URBAN AREA

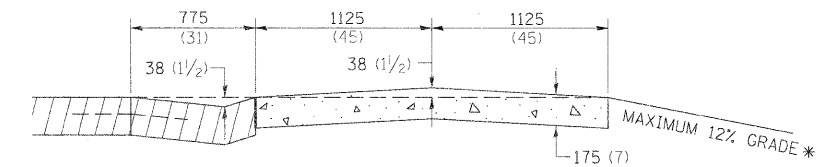
TYPICAL APPLICATION OF ENTRANCES



WHEN THE ISLAND BETWEEN DRIVES IS LESS THAN 7.5m (25') LONG OR LESS THAN 10 FEET WIDE, IT SHALL BE DEFINED BY CURBS, MASONRY, OR OTHER DEVICES.  
 \* 45° MIN. ANGLE PERMITTED ONLY FOR ONE-WAY DRIVEWAYS.  
 60° MIN. ANGLE FOR TWO-WAY DRIVEWAYS.

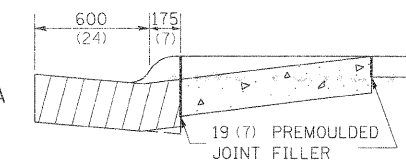


ASCENDING APPROACH



DESCENDING APPROACH

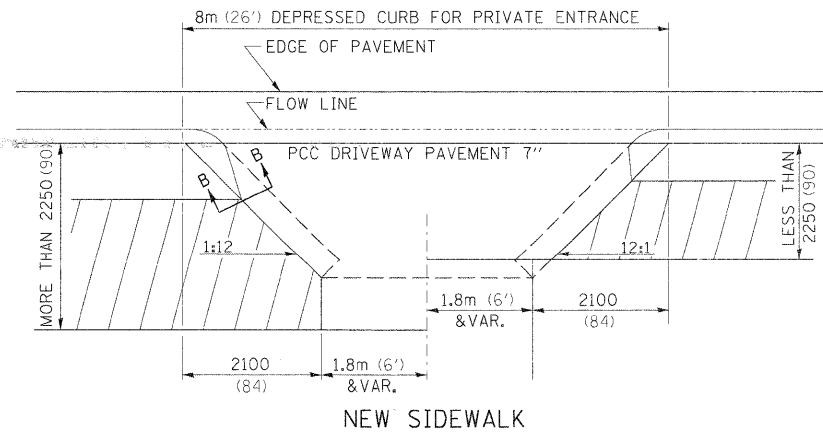
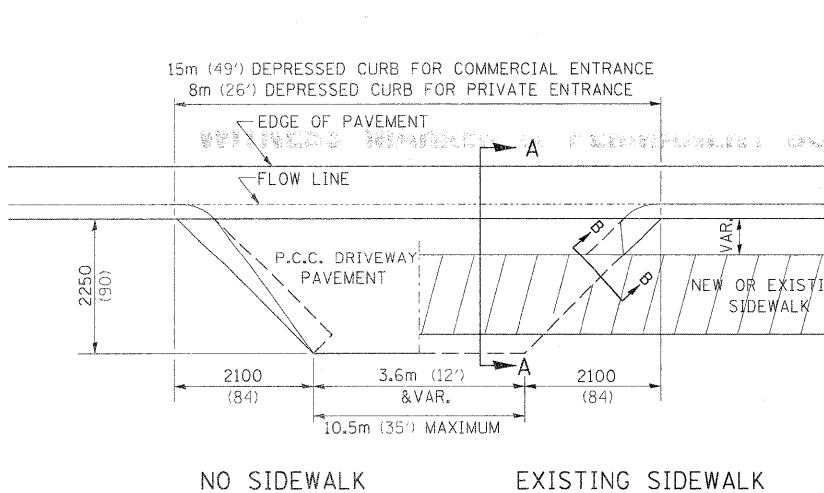
\* IN CASES WHERE GRADE EXCEEDS 10%, THE RESIDENT ENGINEER SHALL CHECK WITH DISTRICT DESIGN OFFICE TO DETERMINE NEW APPROACH GRADE. PARTICULAR ATTENTION SHALL BE PAID TO THE NEGATIVE GRADE TO PREVENT DRAINAGE FROM OVER FLOWING INTO THE PRIVATE ENTRANCE.



SECTION A-A

THE VARIABLE HEIGHT INTEGRAL CURB AND PREMOULDED JOINT FILLER WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE OF DRIVEWAY PAVEMENT OF THE THICKNESS SPECIFIED.

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



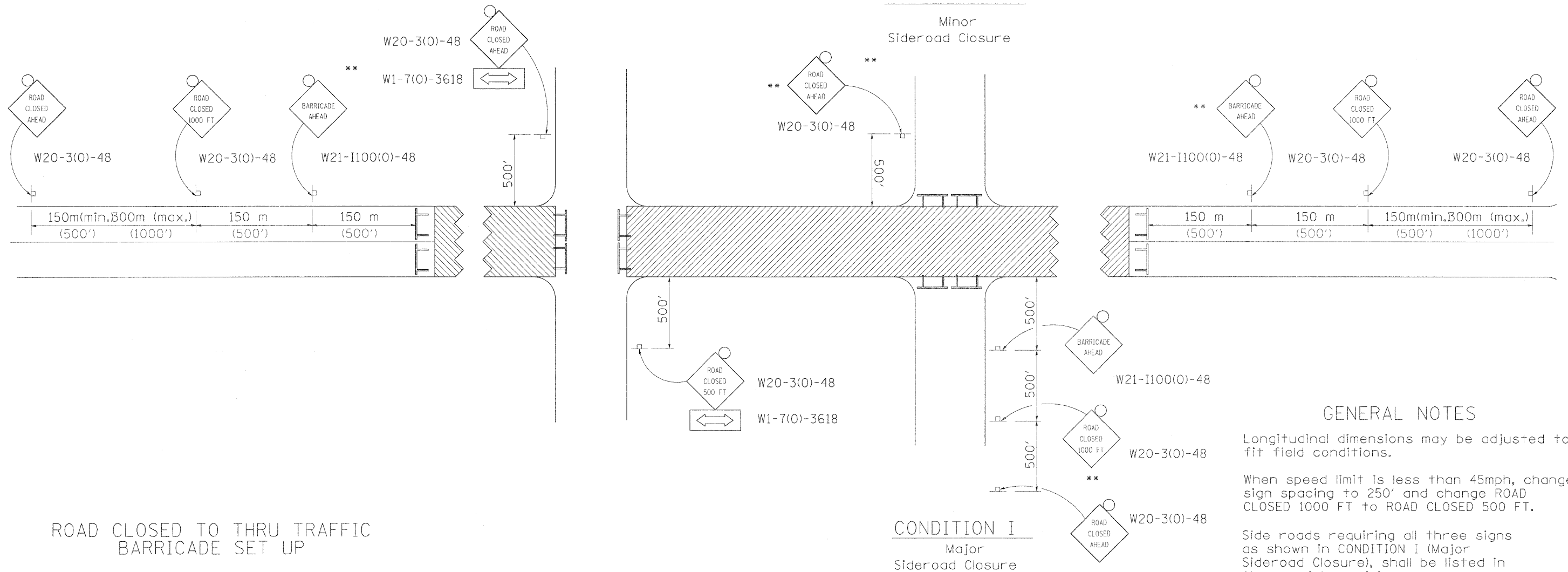
NEW SIDEWALK

FILE NAME =	USER NAME = cushmanbw	DESIGNED -	REVISED - 1-11-08	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>REGION 2 / DISTRICT 2 STANDARD</b>	F.A.U. R.T.E. 5787	SECTION IR-T	COUNTY ROCK ISLAND	TOTAL SHEETS 25	SHEET NO. 21		
CONTRACT NO. 64E31	PLOT SCALE = 50.00000 / IN.	DRAWN -	REVISED -			SCALE:	SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
	PLOT DATE = Wed Oct 06 08:11:41 2010	CHECKED -	REVISED -									
		DATE -	REVISED -									

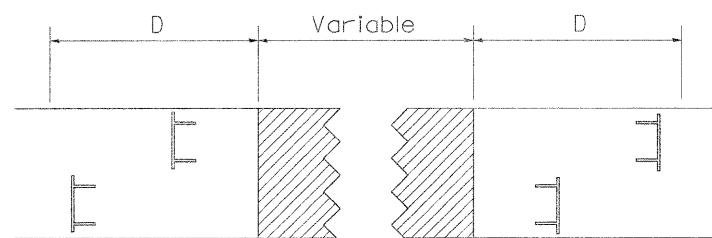
# TRAFFIC CONTROL FOR ROAD CLOSURE

## CONDITION II

Minor Sideroad Closure

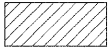




### ROAD CLOSED TO THRU TRAFFIC BARRICADE SET UP



Type III Barricades and R11-4-4830 signs shall be as shown in "Road Closed To All Thru Traffic" detail on Highway Standard 701901. If the distance "D" exceeds 600 m (2000') an additional set of barricades and R11-4-4830 shall be placed at each end of the work area.

### SYMBOLS

-  Work area
-  Type III Barricade with Flashers
-  Sign with flashing light

### GENERAL NOTES

Longitudinal dimensions may be adjusted to fit field conditions.

When speed limit is less than 45mph, change sign spacing to 250' and change ROAD CLOSED 1000 FT to ROAD CLOSED 500 FT.

Side roads requiring all three signs as shown in CONDITION I (Major Sideroad Closure), shall be listed in the special provision.

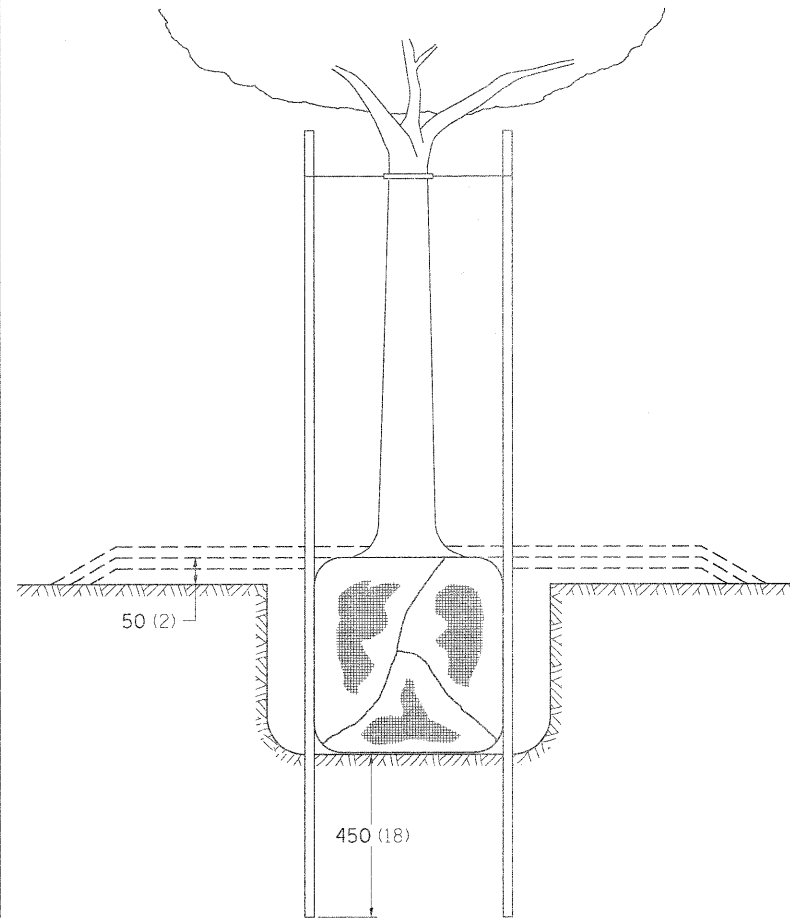
\*\* Where local access is to be maintained, barricades are to be set up as shown in Road Closed to thru traffic. Type III Barricades and R11-2-4830 signs shall be as shown in "Road Closed To All Traffic" detail on Highway Standard 701901.

All dimensions are in millimeters (inches) unless otherwise shown.

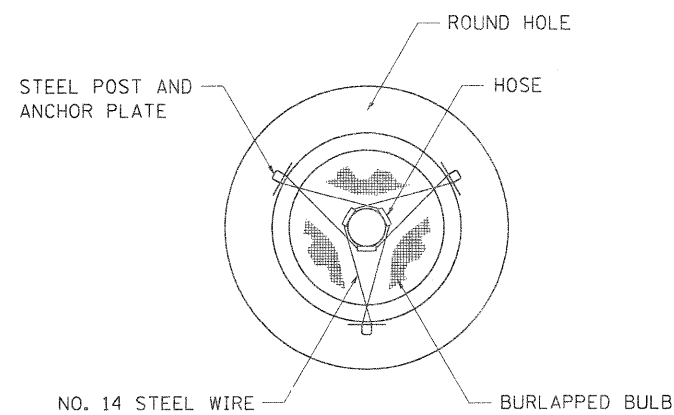
### TYPICAL APPLICATION FOR ROAD CLOSURE

FILE NAME =	USER NAME = cushmanbw	DESIGNED -	REVISED - 1-11-08	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
ct:\pwork\pwork\cushmanbw\0133431\0228408-shr-detail.dgn		DRAWN -	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	5787	IR-T	ROCK ISLAND	25	22
		CHECKED -	REVISED -						CONTRACT NO. 64E31						
		DATE -	REVISED -		ILLINOIS FED. AID PROJECT										

# DETAILS OF PLANTING AND BRACING TREES

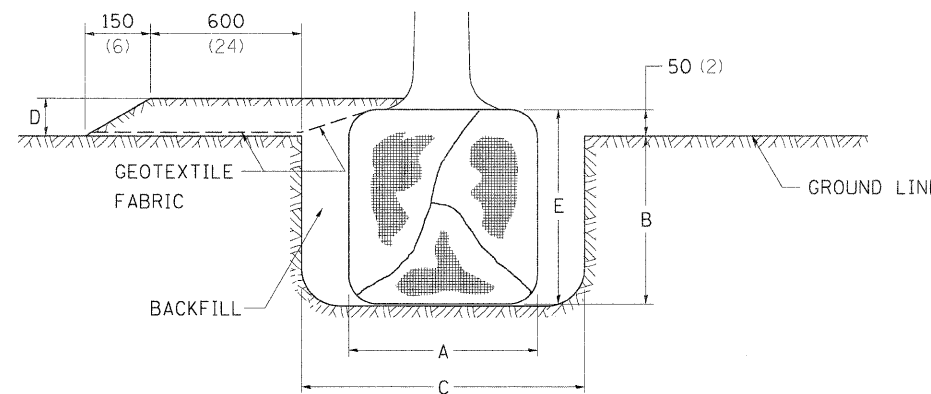


TREES SMALLER THAN 115 (4 1/2) IN DIAMETER

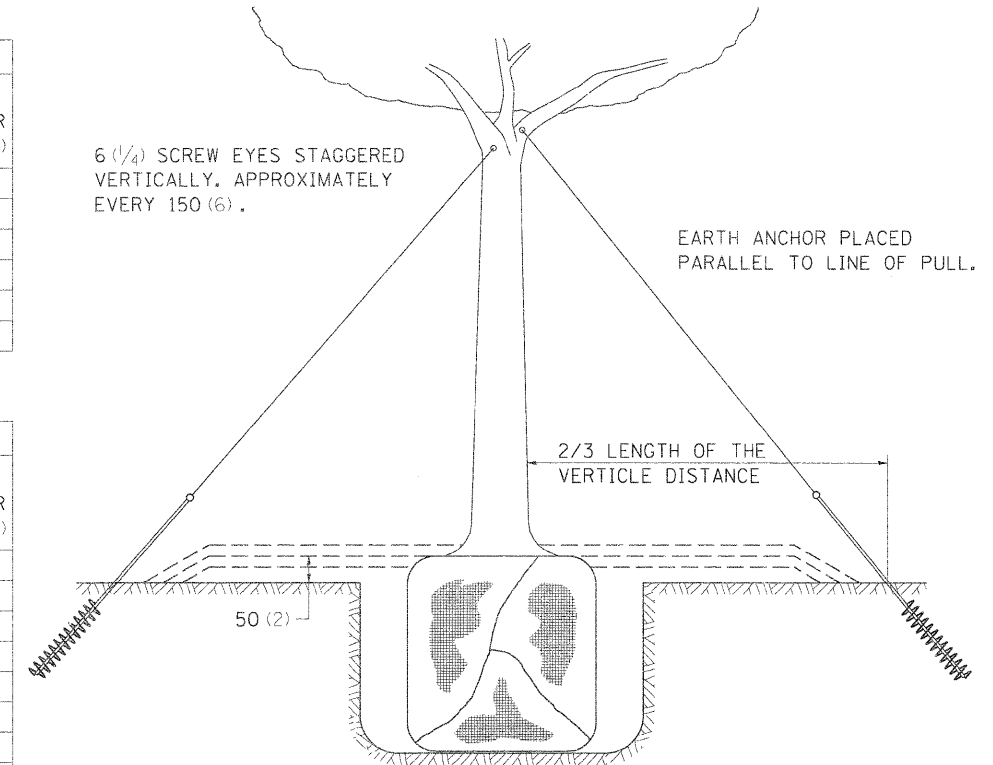


SMALL	A	B	C	D	E	F
TREE SIZE	DIAMETER OF BALL OR ROOT SYS.	DEPTH OF HOLE EXCAVATION	WIDTH OF HOLE EXCAVATION	THICKNESS OF MULCH COVER	DEPTH OF BALL OR ROOT SYS.	VOLUME OF MULCH COVER m <sup>3</sup> (CU. YDS.)
1.5-1.8m (5'-6')	400 (16)	250 (10)	750 (30)	100 (4)	300 (12)	0.41 (0.54)
1.5-1.8m (5'-6') BB	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 <sup>3</sup> (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)



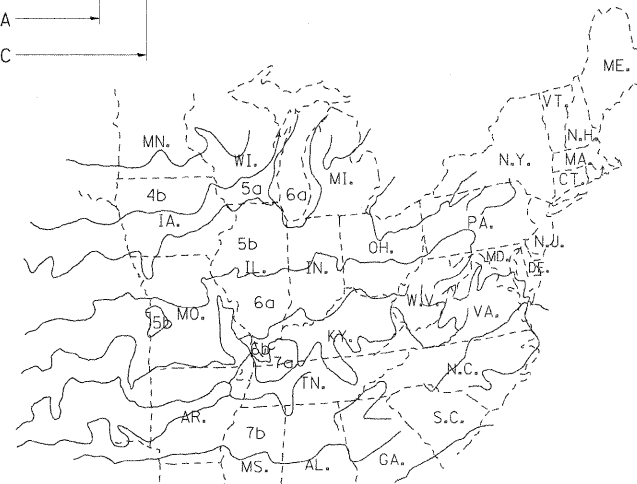
TREES OVER 115 (4 1/2) IN DIAMETER



6 (1/4) SCREW EYES STAGGERED VERTICALLY. APPROXIMATELY EVERY 150 (6).

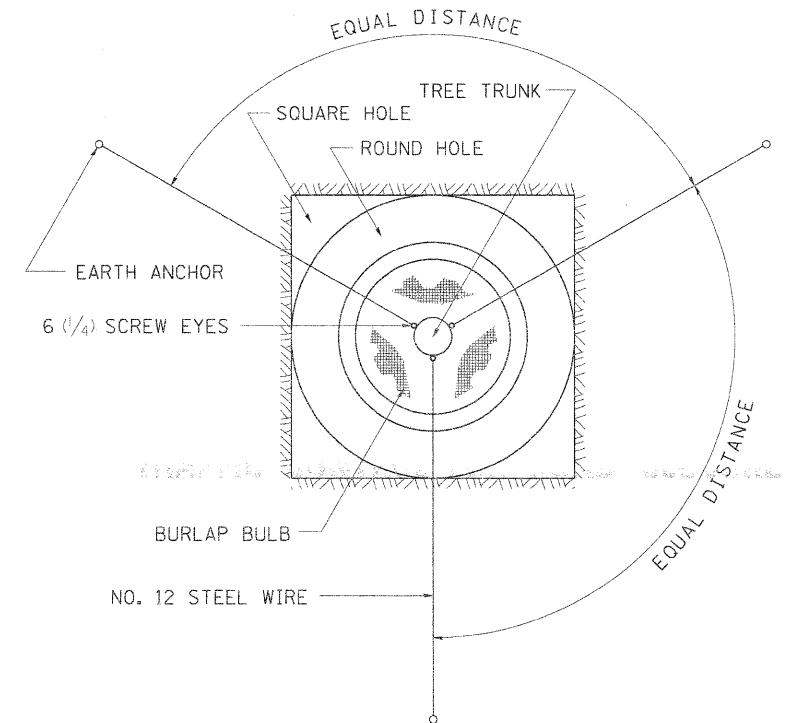
EARTH ANCHOR PLACED PARALLEL TO LINE OF PULL.

2/3 LENGTH OF THE VERTICAL DISTANCE



PLANT HARDINESS ZONE MAP

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL RESEARCH SERVICE  
PUBLICATION NO. 814

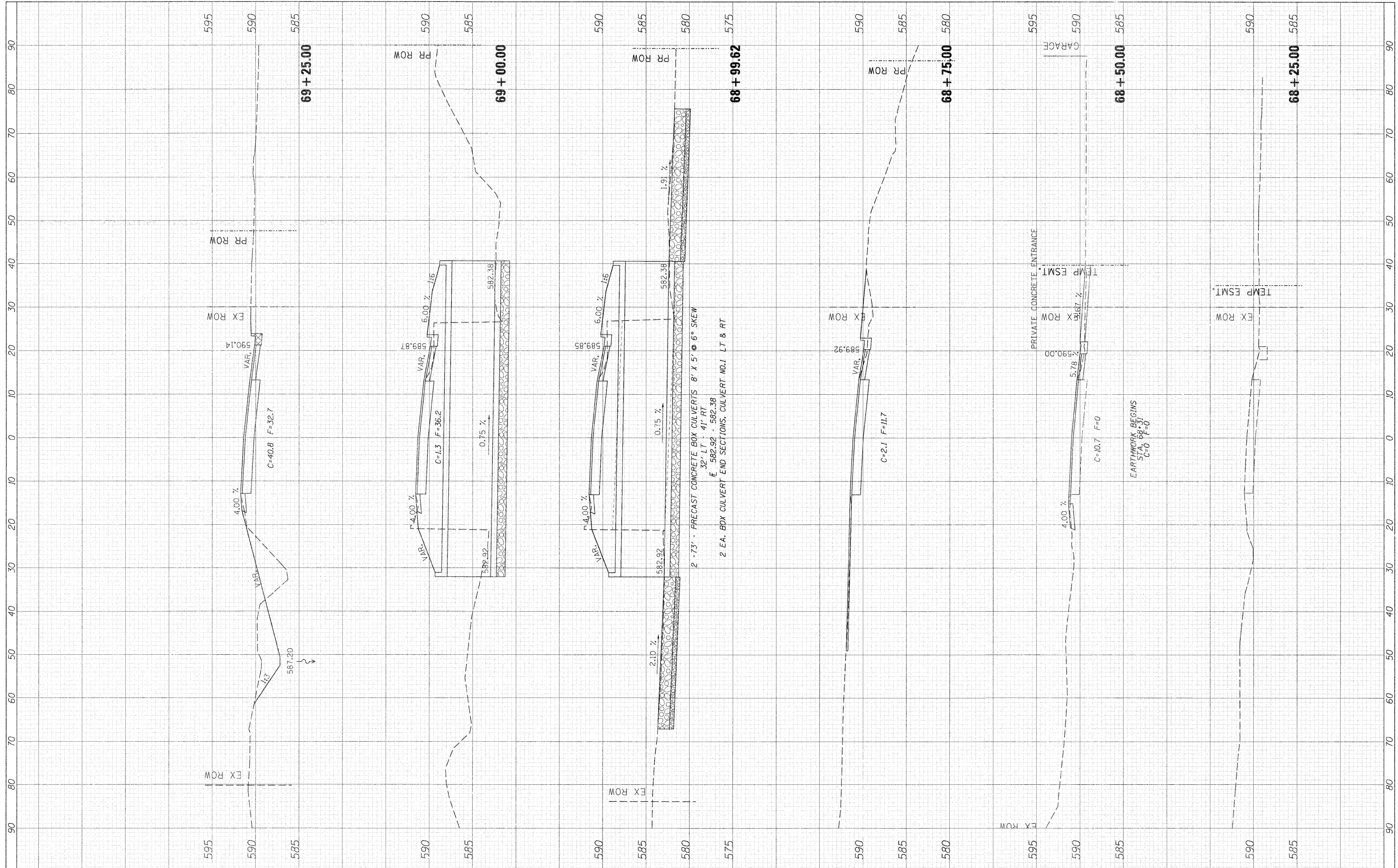


ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

FILE NAME =	USER NAME = cushmanbw	DESIGNED -	REVISED - 10-15-04	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>REGION 2 / DISTRICT 2 STANDARD</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwork\pwork\cushmanbw\0133431\0208408-shr-detail1.s.dgn		DRAWN -	REVISED -			5787	1R-T	ROCK ISLAND	25	23	
PLOT SCALE = 50.0000 / 1"		CHECKED -	REVISED -			CONTRACT NO. 64E31					
PLOT DATE = Wed Oct 06 08:12:04 2010		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

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

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



FILE NAME = c:\pwwork\work\cushmanba\id\133457\10288428-1\11.dgn

USER NAME = cushmanba

DESIGNED -

DRAWN -

CHECKED -

DATE -

REVISED -

REVISED -

REVISED -

REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

IL 84 CROSS SECTIONS

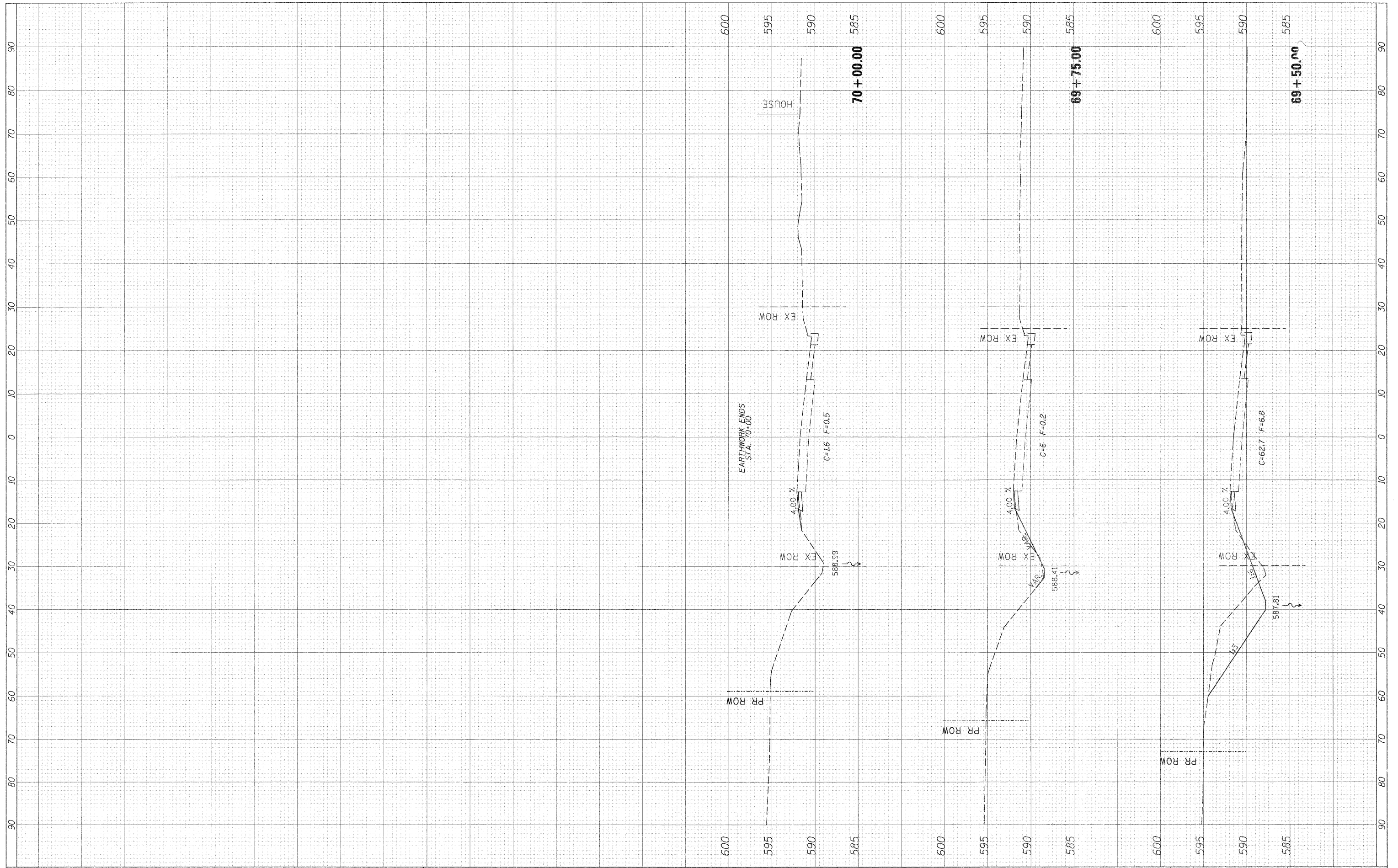
SCALE: SHEET NO. OF SHEETS STA. 68+25.00 TO STA. 69+88.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5857	1R-T	ROCK ISLAND	25	24
			CONTRACT NO. 64E31	
ILLINOIS FED. AID PROJECT				



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

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



FILE NAME =  
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USER NAME = cushmanb  
 PLOT SCALE = 10.0000" / IN.  
 PLOT DATE = Wed Oct 06 08:57:58 2010

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

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**IL 84 CROSS SECTIONS**

SCALE: SHEET NO. OF SHEETS STA. 69+50.00 TO STA. 70+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5857	1R-T	ROCK ISLAND	25	25
CONTRACT NO. 64E31				
ILLINOIS FED. AID PROJECT				