

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

**PROPOSED
 HIGHWAY PLANS**

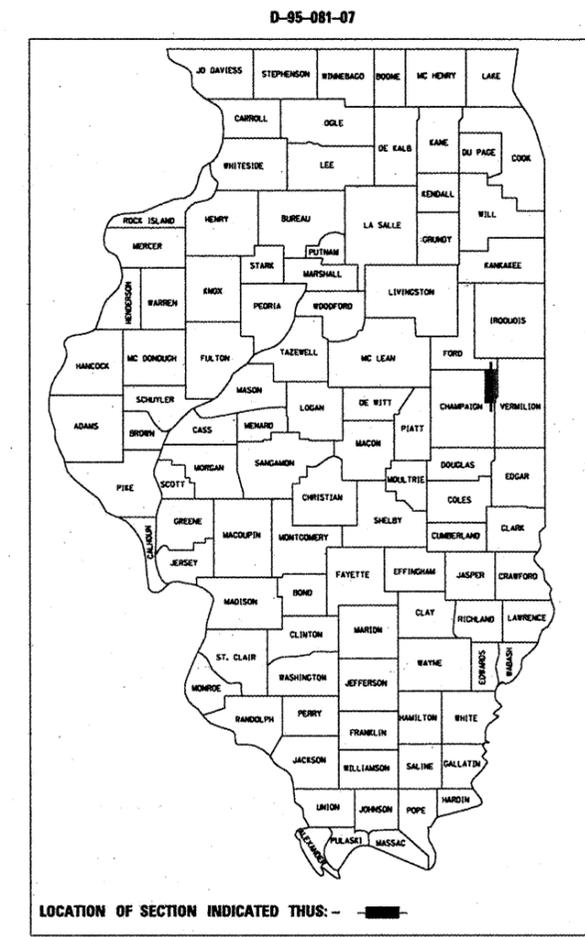
FAP ROUTE 836 (IL ROUTE 49)
 SECTION 119CR
 PROJECT **ACF-0836(029)**
 CULVERT REPLACEMENT
 CHAMPAIGN COUNTY

C-95-081-07

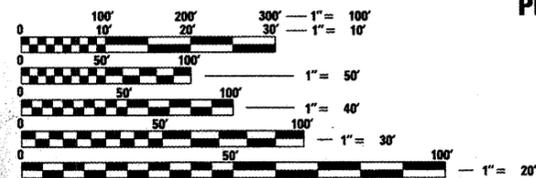
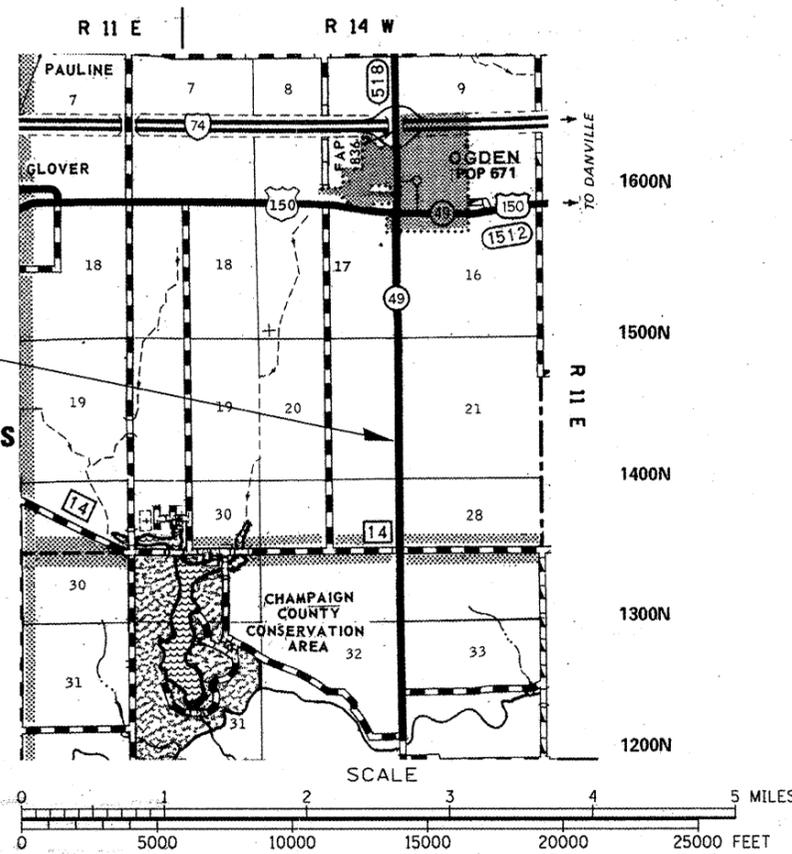
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	119CR	CHAMPAIGN	29	1
		ILLINOIS	CONTRACT NO. 70698	

FOR INDEX OF SHEETS, SEE SHEET NO. 2
 FOR SUMMARY OF QUANTITIES, SEE SHEETS NO.4 & NO.5

DESIGN DESIGNATION
 3,300 (2008) MINOR ARTERIAL IL.RTE.49



SN010-8131(P) ; SN010-8101(E)
 STA. 1133 + 79
 1 @ 12'x3'x37.5'
 PRCBC W/PRECAST END SECTIONS



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

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

PROJECT ENGINEER: NANCY FASIG
 PROJECT MANAGER: TODD BLACK

CONTRACT NO. 70698

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

SUBMITTED 10/23 20 09
Joseph C. Lewis
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

December 4, 2009
Charles G. Ingersoll
 ENGINEER OF DESIGN AND ENVIRONMENT

December 4, 2009
Christine M. Reed
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	COVER
2	INDEX OF SHEETS & LIST OF HIGHWAY STANDARDS
3	GENERAL NOTES
4-5	SUMMARY OF QUANTITIES
6	EXISTING TYPICAL SECTION
7-8	PROPOSED TYPICAL SECTION
9-11	SCHEDULE OF QUANTITIES
12	CENTERLINE CROSS TIES
13-14	CULVERT STAGING DETAILS
15	PLAN AND PROFILE SHEET
16	DETAIL OF EROSION CONTROL PLAN
17	DETAIL OF BOX CULVERT END SECTION
18	DETAIL FOR TREATMENT OF EXISTING FIELD TILE SYSTEMS
19	DETAIL OF STRUCTURAL EXCAVATION AND POROUS GRANULAR EMBANKMENT
20	DETAIL OF EXISTING REINFORCED BOX CULVERT
21-24	DETAIL OF TYPICAL APPLICATIONS OF PAVEMENT MARKINGS AND MARKERS
25-29	STATION CROSS SECTIONS

LIST OF HIGHWAY STANDARDS

STANDARD NO.	DESCRIPTION
000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-05	TEMPORARY EROSION CONTROL SYSTEMS
442201-03	CLASS C AND D PATCHES
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 4.5 m (15') AWAY FROM EDGE OF PAVEMENT
701006-03	OFF-ROAD OPERATIONS, 2L, 2W, 4.5 m (15') TO 600 mm (24") FROM PAVEMENT EDGE
701011-02	OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701201-03	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS \geq 45 MPH
701301-03	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701901-01	TRAFFIC CONTROL DEVICES
720011-01	METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
780001-02	TYPICAL PAVEMENT MARKINGS
781001-03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS

701206-02

FILE NAME =	USER NAME = blackrt	DESIGNED - RTB	REVISED -
c:\pwork\pwork\DOT\BLACKRT\0124546\0574698-SHT-GENNOTE.dgn		DRAWN - RTB	REVISED -
	PLOT SCALE = 48.0344' / IN.	CHECKED -	REVISED -
	PLOT DATE = 10/23/2009	DATE - 09/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS
HIGHWAY STANDARDS

SCALE: N/A	SHEET NO.	OF	SHEETS	STA.	TO STA.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
						836	119CR	CHAMPAIGN	29	2
						ILLINOIS FED. AID PROJECT CONTRACT NO. T0698				

GENERAL NOTES

G.N.-100
 ENGLISH UNITS OF MEASUREMENT SHALL GOVERN OVER AND SUPERSEDE ANY METRIC UNITS SHOWN IN THIS CONTRACT. WHERE INCLUDED, METRIC UNITS ARE FOR INFORMATION ONLY.

G.N.-105.09A
 ALL ELEVATIONS SHOWN IN THE PLANS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988. (NAVD 88)

G.N.-107.31
 UTILITY LINES WERE PLOTTED FROM INFORMATION FURNISHED BY THE VARIOUS UTILITY COMPANIES INVOLVED (QUALITY LEVEL C &/OR QUALITY LEVEL D) AND THE ACCURACY SHOULD BE CONSIDERED APPROXIMATE ONLY.

UTILITY COMPANIES MAY BE ADJUSTING THEIR FACILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL COOPERATE WITH THESE ORGANIZATIONS WHILE THESE ADJUSTMENTS ARE BEING PERFORMED. J.U.L.I.E. - JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS SYSTEM (800)892-0123 OR 811.

G.N.-202
 GRADING SHALL BE DONE BY HAND AROUND LIGHT POLES, UTILITY POLES, SIGN POSTS, SHRUBS, TREES OR OTHER NATURAL OR MAN-MADE OBJECTS WHERE SHALLOW FILLS OR CUTS ARE ADJACENT TO THE ITEMS. IT IS THE INTENT THAT THE LIMITS OF CONSTRUCTION BE SUCH AS TO PRESERVE IN THE ORIGINAL STATE AS MUCH AREA OF TEMPORARY EASEMENTS AS POSSIBLE. THE DECISION AS TO ITEMS TO REMAIN IN PLACE SHALL BE AS DIRECTED BY THE ENGINEER.

THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE CONTRACT UNIT PRICE PER CUBIC YARD FOR EARTH EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

G.N.-280
 TEMPORARY EROSION CONTROL SEEDING IS INCLUDED IN THIS CONTRACT TO SEED NEW EARTH SHOULDERS DURING TIME PERIODS WHEN PERMANENT SEEDING IS NOT ALLOWED. SOME OR ALL OF THE TEMPORARY EROSION CONTROL SEEDING AND MULCH WILL BE DELETED IF IT IS POSSIBLE TO PLACE PERMANENT SEEDING ON EARTH SHOULDERS AT THE TIME OF THEIR COMPLETION.

G.N.-406H
 MIXTURE REQUIREMENTS
 The following mixture requirements are applicable for this project:

Location(s):	Pavement Patch (F.D.) Binder	Pavement Patch (F.D.) Surface
Mixture Use(s):	**	*
AC/PG:	PG 64-22	PG 64-22
RAP %: (Max)**	25 %	15 %
Design Air Voids:	4 % @ N Design = 50	4 % @ N Design = 50
Mixture Composition: (Gradation Mixture)	IL 19.0	IL 9.5
Friction Aggregate:	N/A	Mix C

* This mixture shall be used for the top 2" of Pavement Patch (F.D.)
 **This mixture shall be used for the bottom lifts of Pavement Patch (F.D.)

G.N.-540
 THE CONTRACTOR SHALL ASSEMBLE AND MATCH-MARK THE PRECAST BOX CULVERT SECTIONS AND END SECTIONS PRIOR TO SHIPMENT OF THESE COMPONENTS FROM THE MANUFACTURER, AND AS DIRECTED BY THE ENGINEER IN ORDER TO SECURE A PROPER FIT ON EACH JOINT. ANY SECTIONS OR END SECTIONS WHICH DO NOT PROVIDE A PROPER FIT AT THE JOINT SHALL BE REJECTED BY THE ENGINEER AND REPLACED BY THE CONTRACTOR WITH NO ADDITIONAL COMPENSATION BEING ALLOWED.

THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER FOOT FOR PRECAST CONCRETE BOX CULVERTS OF THE SIZE SPECIFIED.

G.N.-542.07
 AT LOCATIONS WHERE END SECTIONS ARE SPECIFIED, CAST-IN-PLACE CONCRETE HEADWALLS WILL NOT BE ALLOWED.

G.N.-667
 THE RESIDENT ENGINEER SHALL CONTACT THE PROGRAM DEVELOPMENT CHIEF OF SURVEYS PRIOR TO THE PRE-CONSTRUCTION CONFERENCE FOR INSTRUCTION AS TO SETTING OF TEMPORARY OR PERMANENT TIES FOR CENTERLINE ALIGNMENT CONTROL SURVEY MARKERS (PC'S, PT'S, AND PI'S). PROJECT IMPLEMENTATION PERSONNEL WILL BE RESPONSIBLE FOR SETTING THESE MARKERS.

G.N.-781
 RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH STANDARD 781001, AND THE DETAILS SHOWN IN THE PLANS. IF THERE IS ANY DISCREPANCY BETWEEN THE STANDARD AND THE DETAILS IN THE PLANS, THE DETAILS IN THE PLANS SHALL GOVERN. THE FINAL PAVEMENT MARKINGS SHALL BE IN PLACE PRIOR TO PLACING THE RAISED REFLECTIVE PAVEMENT MARKERS AND THE RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED MIDWAY IN THE 30 FOOT (9 m) SPACE BETWEEN THE DASHED CENTERLINE STRIPES (WHEN APPLICABLE).

G.N.-1004.01
 COARSE AGGREGATE GRADATION CA-10 MAY BE USED WHENEVER COARSE AGGREGATE CA-6 IS SPECIFIED IN THE STANDARD SPECIFICATIONS.

NO COMMITMENTS ON THIS PROJECT

THE DESIGN REINFORCEMENT AREAS SHALL CONFORM TO THOSE FOUND IN TABLE 1 OF THE AASHTO M273 SPECIFICATION FOR A 12' x 4' BOX SECTION.

FILE NAME =	USER NAME = blackrt	DESIGNED - RTB	REVISED -
cd:\pwwork\PW1001\BLACKRT\0124546\0576698-SHT-GENNOTE.dgn		DRAWN - RTB	REVISED -
	PLOT SCALE = 48.0317' / IN.	CHECKED -	REVISED -
	PLOT DATE = 10/23/2009	DATE - 09/2009	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

GENERAL NOTES

SCALE: N/A SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	119CR	CHAMPAIGN	35	3
CONTRACT NO. 70698			ILLINOIS FED. AID PROJECT	

SUMMARY OF QUANTITIES

LOCATION OF WORK: FAP ROUTE 836 (IL 49)
 CHAMPAIGN COUNTY
 SN 010-8131
 STA. 1129+75.00 to STA. 1139+25
 RURAL TWO-LANE
 80% FED
 20% STATE

CONSTRUCTION TYPE CODE: **Y007**

CODE NO	ITEM	UNIT	TOTAL QUANTITY
X0326785	PRECAST CONCRETE BOX CULVERT END SECTIONS 12' X 3'	EACH	2.0
X542A485	PIPE CULVERTS, CLASS A, TYPE 1 EQUIVALENT ROUND-SIZE 30", TEMPORARY	FOOT	40.0
20400800	FURNISHED EXCAVATION	CU YD	25.0
20700220	POROUS GRANULAR EMBANKMENT	CU YD	55.0
* 25000200	SEEDING, CLASS 2	ACRE	0.1
* 25000400	NITROGEN FERTILIZER NUTRIENT	POUND	10.0
* 25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	10.0
* 25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	10.0
*25100115	MULCH, METHOD 2	ACRE	0.1
* 25100630	EROSION CONTROL BLANKET	SQ YD	140.0
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	10.0
28000305	TEMPORARY DITCH CHECKS	FOOT	114.0
28000400	PERIMETER EROSION BARRIER	FOOT	300.0
28000500	INLET AND PIPE PROTECTION	EACH	5.0
31100300	SUB-BASE GRANULAR MATERIAL, TYPE A 4"	SQ YD	100.0
35102000	AGGREGATE BASE COURSE, TYPE B 8"	SQ YD	100.0
40800010	BITUMINOUS MATERIALS(PRIME COAT)	GALLON	9.0
40800030	AGGREGATE(PRIME COAT)	TON	0.2
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	11.0

* SPECIALTY ITEMS

SUMMARY OF QUANTITIES

LOCATION OF WORK: FAP ROUTE 836 (IL 49)
 CHAMPAIGN COUNTY
 SN 010-8131
 STA. 1129+75.00 to STA. 1139+25
 RURAL TWO-LANE
 80% FED
 20% STATE

CONSTRUCTION TYPE CODE: Y007

CODE NO	ITEM	UNIT	TOTAL QUANTITY
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1.0
50200100	STRUCTURE EXCAVATION	CU YD	75.0
54021203	PRECAST CONCRETE BOX CULVERT 12' X 3' (M273)	FOOT	37.5
61100500	EXPLORATION TRENCH 52" DEPTH	FOOT	300.0
67100100	MOBILIZATION	L SUM	1.0
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1.0
70100455	TRAFFIC CONTROL AND PROTECTION, STANDARD 701206	L SUM	1.0
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	1070.0
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	1125.0
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	715.0
78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1125.0
X4420099	CLASS D PATCHES, TYPE IV, 9 1/2 INCH	SQ YD	90.0
Z0010555	DITCH CLEANING	FOOT	100.0

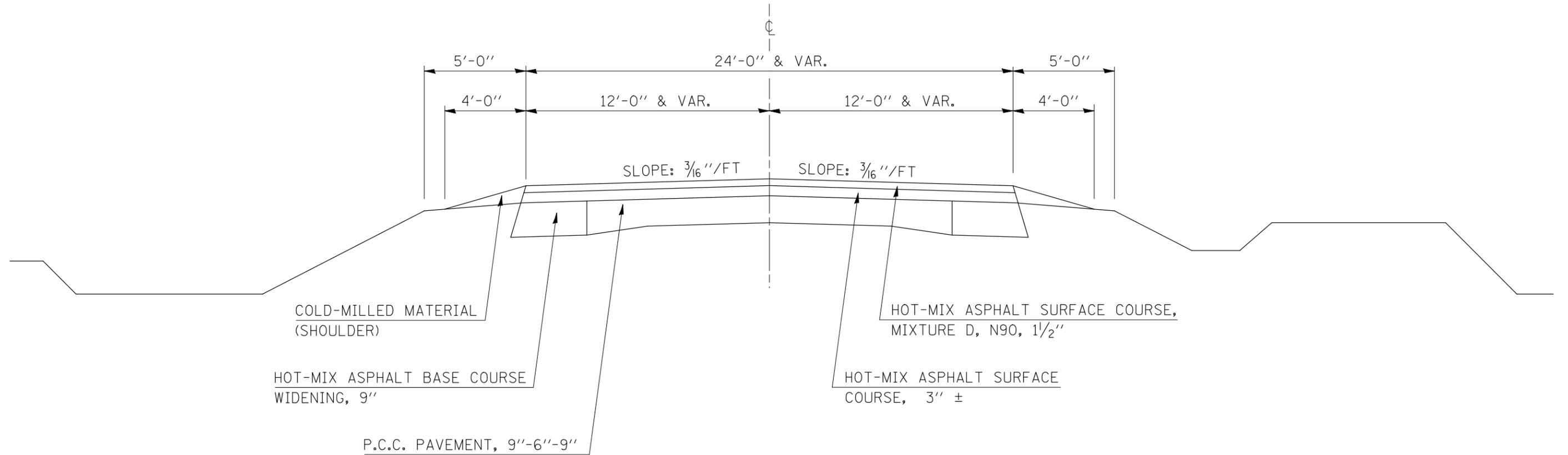
• SPECIALTY ITEMS

FILE NAME =	USER NAME = blackrt	DESIGNED - RTB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwork\pwork\blackrt\d0124546\057099B-SH1-500.dgn	DRAWN - RTB	REVISED -			836	119CR	CHAMPAIGN	29	5				
PLOT SCALE = 40.0268 1/ IN.	CHECKED -	REVISED -			SCALE: N/A				SHEET NO. 2 OF 2 SHEETS		STA.	TO STA.	CONTRACT NO. 70698
PLOT DATE = 10/23/2009	DATE - 09/2009	REVISED -			ILLINOIS FED. AID PROJECT								

EXISTING TYPICAL SECTION

F. A. P. ROUTE 836 (IL ROUTE 49)

STATION 1131+00.00 TO STATION 1136+00.00



FILE NAME =	USER NAME = craigre	DESIGNED - RTB	REVISED - RTB
ct:\pw\work\pwidot\craigre\d0124546\0570098-SHT-TYPICAL.DGN		DRAWN - JRP	REVISED -
	PLOT SCALE = 40.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 10/23/2009	DATE - SEPTEMBER 2008	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

EXISTING TYPICAL SECTION

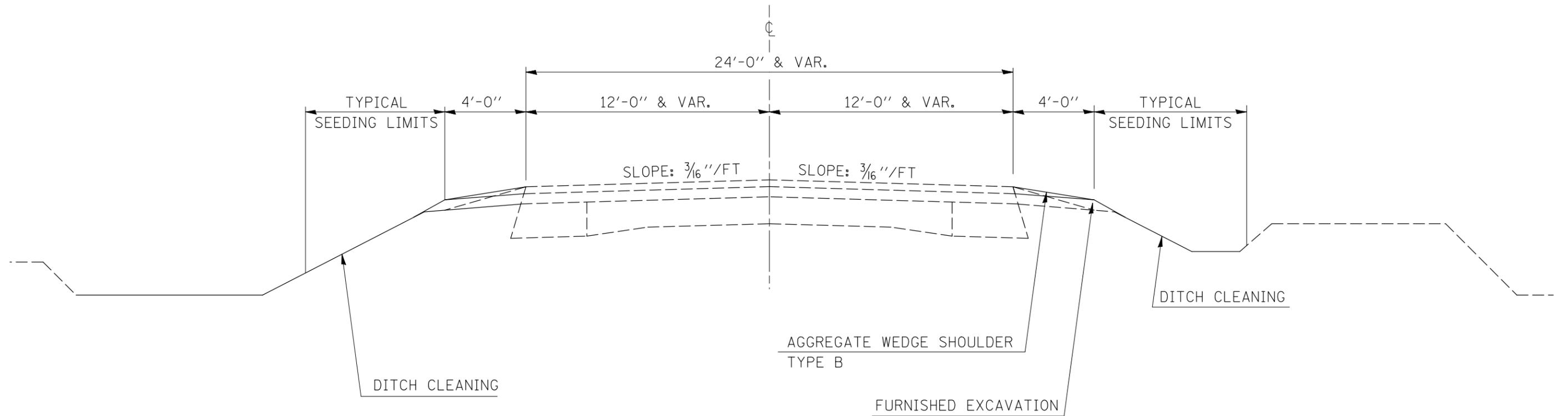
SCALE: N/A SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	119CR	CHAMPAIGN	29	6
CONTRACT NO. 70698				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

PROPOSED TYPICAL SECTION

F. A. P. ROUTE 836 (IL ROUTE 49)

STATION 1131+00.00 TO STATION 1136+00.00



FILE NAME =	USER NAME = craigre	DESIGNED - RTB	REVISED -
ct:\pw\work\pwidot\craigre\d0124546\0570098-SHT-TYPICAL.DGN		DRAWN - RTB	REVISED -
	PLOT SCALE = 40.0000' / IN.	CHECKED -	REVISED -
	PLOT DATE = 10/23/2009	DATE - 10/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

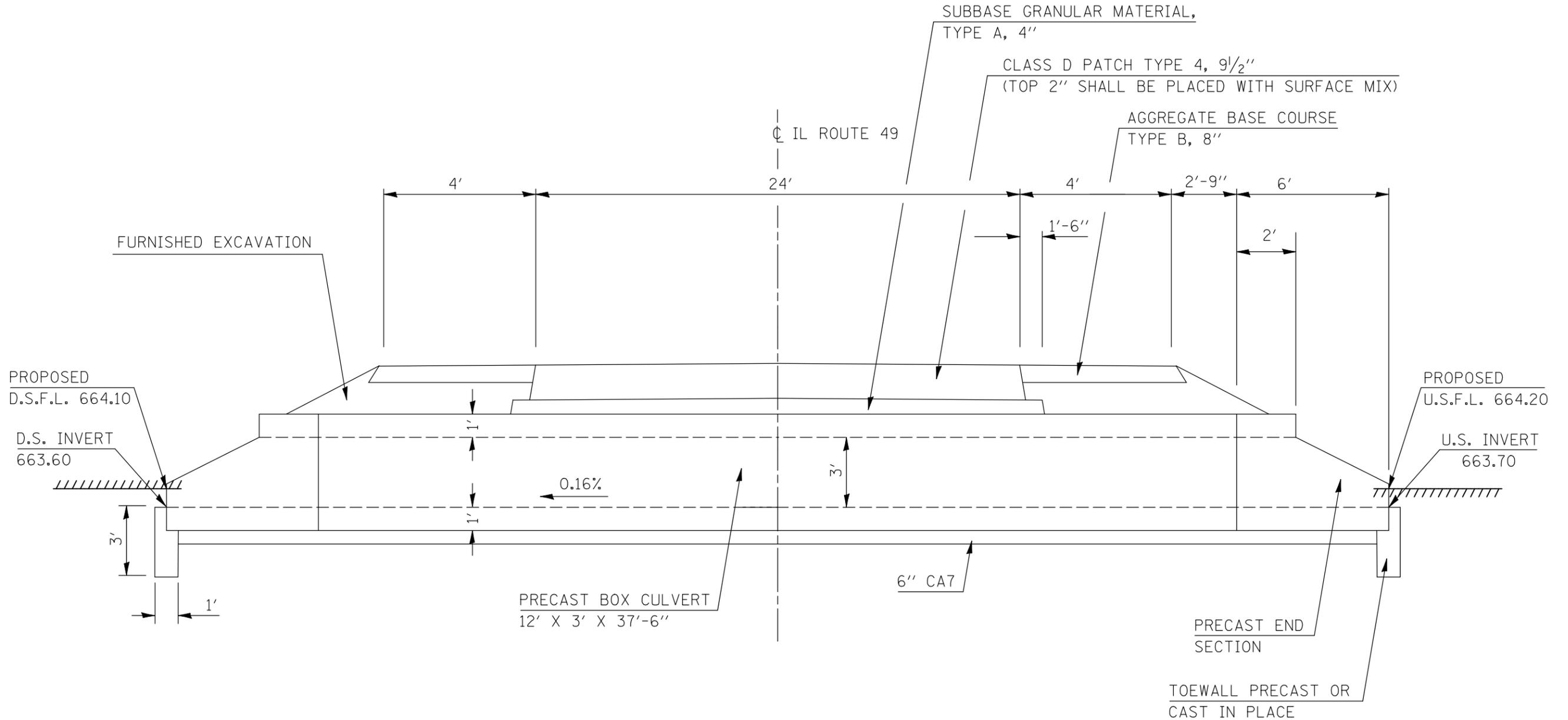
PROPOSED TYPICAL SECTION

SCALE: N/A SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	119CR	CHAMPAIGN	29	7
CONTRACT NO. 70698				
ILLINOIS FED. AID PROJECT				

PROPOSED BOX CULVERT SECTION

F. A. P. ROUTE 836 (IL ROUTE 49)
 S. N. 010-8131 - STATION 1133+79.00



FILE NAME =	USER NAME = craigre	DESIGNED - RTB	REVISED - RTB
ct:\pwork\pwork\craigre\d0124546\0570098-SHT-TYPICAL.DGN		DRAWN - JJB	REVISED -
	PLOT SCALE = 40.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 10/23/2009	DATE - 3-3-2009	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

PROPOSED BOX CULVERT SECTION

SCALE: N/A SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	119CR	CHAMPAIGN	29	8
CONTRACT NO. 70698				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

SCHEDULE OF QUANTITIES

EARTHWORK

LOCATION	STATION	TO	STATION	OFFSET	Z0010555 DITCH CLEANING (FOOT)	EMBANK (CU YD)	20400800 FURNISH EXCAVAT (CU YD)	50200100 STRUCTURE EXCAVAT (CU YD)	20700220 POUROUS GRANULAR EMBANK (CU YD)
RT DITCH CUT	1133+50.00		1134+50.00	16.0' RT - 25.0' LT	100.0	---	---	---	---
LT EMBANKMENT	1133+00.00		1135+00.00	16.0' LT - 30.0' LT	---	7.9	7.9	---	---
RT EMBANKMENT	1133+00.00		1135+00.00	16.0' RT - 25.0' RT	---	12.5	12.5	---	---
LT STRUCTURE	1133+64.50		1133+93.50	18.0' LT - 0.0' LT	---	---	---	37.5	27.5
RT STRUCTURE	1133+64.50		1133+93.50	0.0 RT - 18.0' RT	---	---	---	37.5	27.5
TOTAL =					100.0	20.4	20.4	75.0	55.0
USE =					100.0	---	25.0	75.0	55.0

ASSUME 25% SHRINKAGE FACTOR FOR EARTH EXCAVATION

SEEDING

STATION	TO	STATION	OFFSET	25000200 SEEDING CL 2 (ACRE)	25000400 NITROGEN FERTILIZER NUTRIENT (POUND)	25000500 PHOSPORUS FERTILIZER NUTRIENT (POUND)	25000600 POTASSIUM FERTILIZER NUTRIENT (POUND)	25100115 MULCH METHOD 2 (ACRE)	28000250 TEMP EROS CTL SEEDING (POUND)
1133+00.00		1134+50.00	16.0' LT - 30.0' LT	0.05	4.5	4.5	4.5	0.05	5.0
1133+00.00		1134+50.00	16.0' RT - 35.0' RT	0.05	4.5	4.5	4.5	0.05	5.0
TOTAL =				0.10	9.0	9.0	9.0	0.10	10.0
USE =				0.10	10.0	10.0	10.0	0.10	10.0

SCHEDULE OF QUANTITIES

28000400 PERIMETER EROSION BARRIER

		STATION	TO	STATION	LENGTH (FOOT)
ROW	LT	1133+00.00		1134+50.00	150.0
ROW	RT	1133+00.00		1134+50.00	150.0
TOTAL =					300.0
USE =					300.0

61100500 EXPLORATION TRENCH, 52"

		STATION	TO	STATION	LENGTH (FOOT)
ROW	LT	1133+00.00		1134+50.00	150.0
ROW	RT	1133+00.00		1134+50.00	150.0
TOTAL =					300.0
USE =					300.0

28000305 TEMPORARY DITCH CHECKS

STATION	OFFSET	(EACH)
1132+00.00	40.0' LT	25.0
1132+00.00	25.0' RT	6.0
1133+15.00	50.0' LT	20.0
1133+15.00	34.0' RT	6.0
1134+43.00	45.0' LT	25.0
1134+43.00	32.0' RT	6.0
1134+43.00	54.0' RT	20.0
1136+00.00	35.0' LT	20.0
1136+00.00	24.0' RT	6.0
TOTAL		114.0
USE =		114.0

25100630 EROSION CONTROL BLANKET

		STATION	TO	STATION	LENGTH (FOOT)	AVERAGE WIDTH (FOOT)	AREA (SQ.YD)
BOX CULV	LT	1133+65.00		1133+90.00	25.0	10.0	30.0
DITCH	RT	1133+00.00		1135+00.00	200.0	4.0	90.0
BOX CULV	RT	1133+65.00		1133+90.00	25.0	6.0	20.0
TOTAL =							140.0
USE =							140.0

28000500 INLET & PIPE PROTECTION

STATION	OFFSET		(EACH)
1133+79.00	20.0' LT	SN 010-8101	1.0
1133+79.00	45.0' LT	SN 010-8131	1.0
1133+79.00	20.0' RT	SN 010-8101	1.0
1133+79.00	45.0' RT	SN 010-8131	1.0
1133+95.00	37.0' LT	FIELD INLET	1.0
TOTAL =			5.0
USE =			5.0

50100100 REMOVAL EXISTING STRUCTURE

STATION		(EACH)
1133+79.00	SN 010-8101	1.0
TOTAL =		1.0
USE =		1.0

35102000 AGGREGATE BASE COURSE, TYPE B, 8 INCH

		STATION	TO	STATION	LENGTH (FOOT)	WIDTH (FOOT)	AREA (SQ.YD)
LT		1133+24.00		1134+34.00	110.0	4.0	50.0
RT		1133+24.00		1134+34.00	110.0	4.0	50.0
TOTAL =							100.0
USE =							100.0

#5000910 PIPE CULVERTS, EQV R-S 30" TEMPORARY

STATION	OFFSET	(FOOT)
1133+79.00	4.0' RT - 24.0' RT	40.0
TOTAL		40.0
USE =		40.0

SCHEDULE OF QUANTITIES

31100300 SUB-BASE GRANULAR MATERIAL A 4"

	STATION	TO	STATION	LENGTH (FOOT)	WIDTH (FOOT)	AREA (SQ YD)
LT	1133+62.50		1133+95.50	33.0	13.5	49.5
RT	1133+62.50		1133+95.50	33.0	13.5	49.5
TOTAL =						99.0
USE =						100.0

X4420099 CLASS D PATCH TYPE 4.9 1/2 INCH

	STATION	TO	STATION	LENGTH (FOOT)	WIDTH (FOOT)	AREA (SQ YD)
LT	1133+62.50		1133+95.50	33.0	12.0	44.0
RT	1133+62.50		1133+95.50	33.0	12.0	44.0
TOTAL =						88.0
USE =						90.0

40800010 BITUMINOUS MATERIALS PRIME COAT

	STATION	TO	STATION	LENGTH (FOOT)	WIDTH (FOOT)	(GALLON)
LT	1133+62.50		1133+95.50	33.0	12.0	4.4
RT	1133+62.50		1133+95.50	33.0	12.0	4.4
TOTAL =						8.8
USE =						9.0

40800030 AGGREGATE PRIME COAT

	STATION	TO	STATION	LENGTH (FOOT)	WIDTH (FOOT)	(TON)
LT	1133+62.50		1133+95.50	33.0	12.0	0.1
RT	1133+62.50		1133+95.50	33.0	12.0	0.1
TOTAL =						0.2
USE =						0.2

48102100 AGGREGATE WEDGE SHOULDER, TYPE B

	STATION	TO	STATION	LENGTH (FOOT)	WIDTH (FOOT)	AREA (SQ YD)	SHOULDER THICKNESS (INCHES)	(TON)
LT	1133+15.00		1134+50.00	135.0	4.0	60.0	1.50	5.2
RT	1133+15.00		1134+50.00	135.0	4.0	60.0	1.50	5.2
TOTAL =								10.4
USE =								11.0

70300100 SHORT-TERM PAVEMENT MARKING

	STATION	TO	STATION	BINDER FOOT	SURFACE FOOT	TOTAL FOOT	7E+07 PVT MK REM SQ FT
LT SHLD	1133+24.00		1134+34.00	110.0	110.0	22.0	3.6
CL	1133+24.00		1134+34.00	110.0	110.0	22.0	3.6
RT SHLD	1133+24.00		1134+34.00	110.0	110.0	22.0	3.6
CLOSURE	1133+00.00		1136+00.00			1000.0	701.3
TOTAL =						1066.0	712.2
USE =						1070.0	715.0

70300220 TEMPORARY PAVEMENT MARKING - LINE 4"

	WHITE	STATION	TO	STATION	(FOOT)
LT EOP		1131+00.00		1136+00.00	500.0
RT EOP		1131+00.00		1136+00.00	500.0
SUB-TOTAL WHITE =					1000.0
	YELLOW	STATION	TO	STATION	(FOOT)
CL		1131+00.00		1136+00.00	125.0
SUB-TOTAL YELLOW =					125.0
TOTAL =					1125.0
USE =					1125.0

54021203 PRE-CAST BOX CULVERT 12 X 3 (M273)

STATION		(FOOT)
1133+79.00	SN 010-8131	37.5
TOTAL =		37.5
USE =		37.5

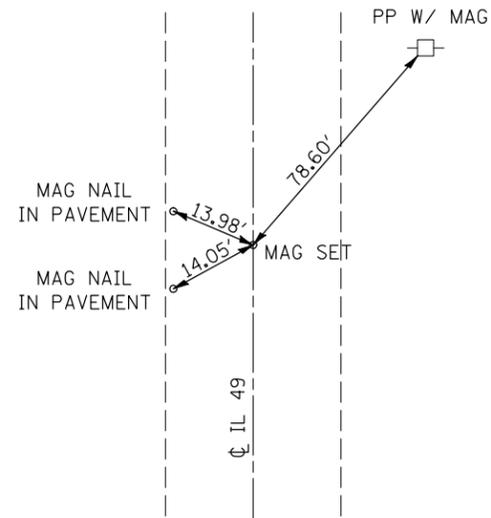
#5000862 PRE-CAST BOX CULVERT END SECTION 12 X 3

	STATION		(EACH)
LT	1133+79.00	SN 010-8131	1.0
RT	1133+79.00	SN 010-8131	1.0
TOTAL =			2.0
USE =			2.0

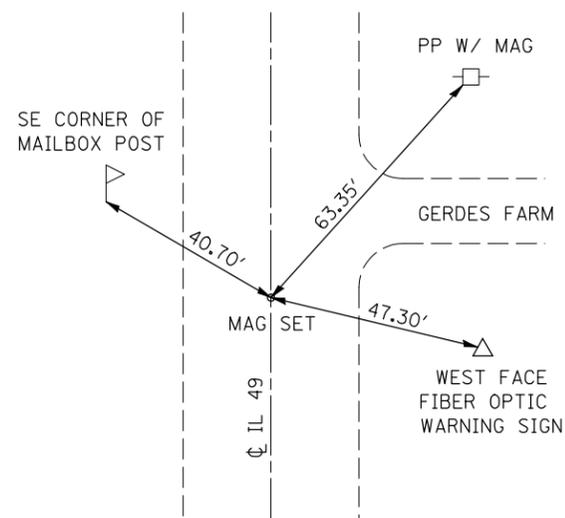
78001110 PAINT PAVEMENT MARKING - LINE 4"

	WHITE	STATION	TO	STATION	(FOOT)
LT EOP		1131+00.00		1136+00.00	500.0
RT EOP		1131+00.00		1136+00.00	500.0
SUB-TOTAL WHITE =					1000.0
	YELLOW	STATION	TO	STATION	(FOOT)
CL		1131+00.00		1136+00.00	125.0
SUB-TOTAL YELLOW =					125.0
TOTAL =					1125.0
USE =					1125.0

P.O.T.
STA. 1124 + 36.71



P.O.T.
STA. 1142 + 31.61



FILE NAME = c:\pwork\pwork\craigre\d0124546\057098-sh-t-ATB.dgn	USER NAME = craigre	DESIGNED -	REVISED -
		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

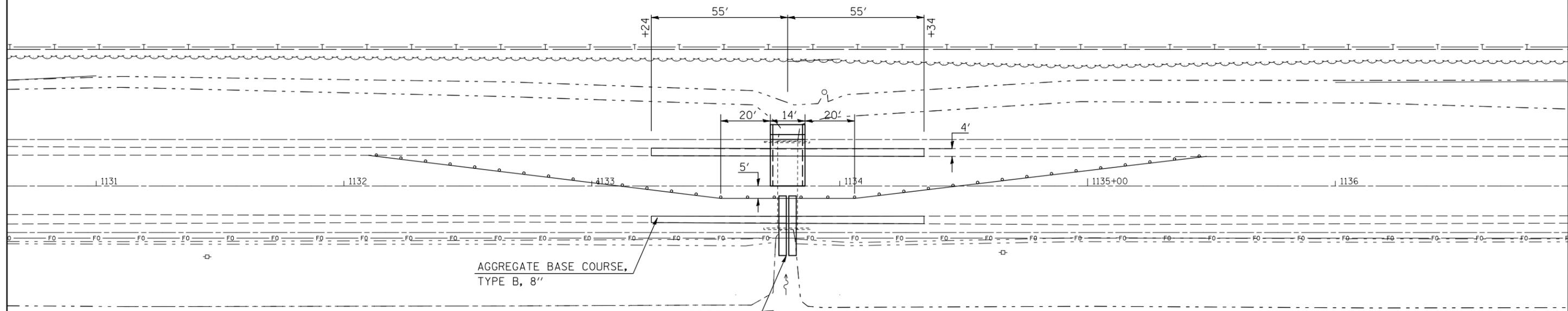
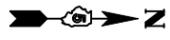
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CENTERLINE CROSS TIES

SCALE: N/A SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	119CR	CHAMPAIGN	29	12
CONTRACT NO. 70698				
ILLINOIS FED. AID PROJECT				

TYPICAL CULVERT STAGE I PLAN



NOTES:

- 1. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ENTRANCES WITHIN THE WORK ZONE.
- 2. THIS STAGING SHALL BE CONSTRUCTED UTILIZING STANDARD 701201.

PRE-STAGE NOTES:

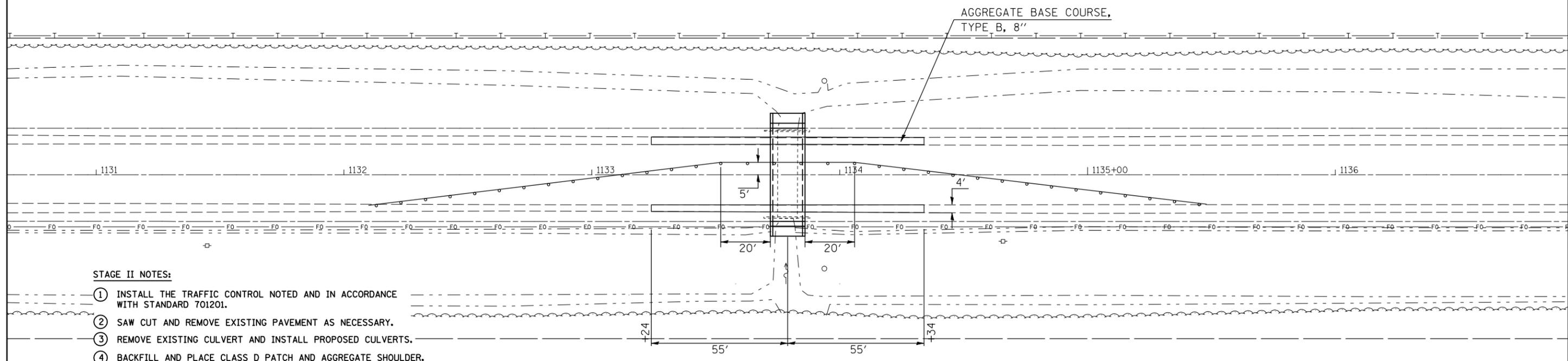
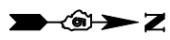
- ① EXCAVATE PROPOSED DITCH AT BOTH UPSTREAM AND DOWNSTREAM ENDS OF PROPOSED CULVERT.
- ② INSTALL TEMPORARY PIPE CULVERTS ON UPSTREAM END OF EXISTING CULVERT AND CONSTRUCT PROPOSED EMBANKMENT.
- ③ CONSTRUCT PROPOSED AGGREGATE BASE COURSE TYPE B, 8" FOR STAGE CONSTRUCTION TRAFFIC, 55' EACH SIDE OF PROPOSED CULVERT FOR STAGE I AND STAGE II TRAFFIC.

STAGE I NOTES:

- ① INSTALL TRAFFIC CONTROL AS NOTED AND IN ACCORDANCE WITH STANDARD 701201.
- ② REMOVE PAVEMENT AND EXISTING CULVERT.
- ③ INSTALL PROPOSED CULVERT, TEMPORARY CONNECTION TO THE EXISTING CULVERT, BACKFILL AND PLACE CLASS D PATCH AND AGGREGATE SHOULDER.
- ④ OPEN TO TWO LANE & TWO-WAY TRAFFIC AT THE END OF EACH WORK DAY.

TEMPORARY RCPC TY1 30" EQV-RND PLACED WITHIN EXISTING CULVERT THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR "PIPE CULVERTS, TY1, RC EQV-RND-SIZE 30 INCH WHICH PRICE SHALL INCLUDE ALL MATERIAL AND LABOR TO COMPLETE THE INSTALLATION, REMOVAL, AND ASSOCIATED EARTHWORK.

TYPICAL CULVERT STAGE II PLAN



STAGE II NOTES:

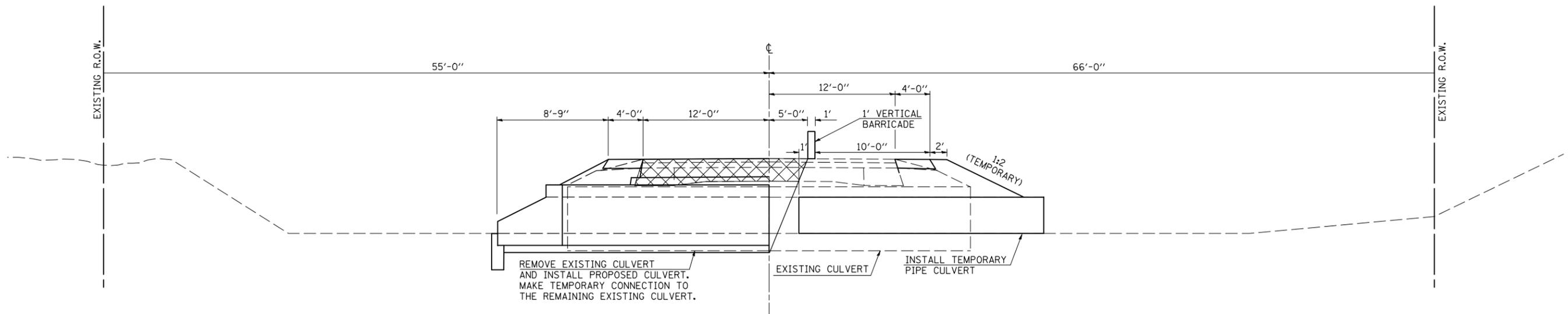
- ① INSTALL THE TRAFFIC CONTROL NOTED AND IN ACCORDANCE WITH STANDARD 701201.
- ② SAW CUT AND REMOVE EXISTING PAVEMENT AS NECESSARY.
- ③ REMOVE EXISTING CULVERT AND INSTALL PROPOSED CULVERTS.
- ④ BACKFILL AND PLACE CLASS D PATCH AND AGGREGATE SHOULDER.
- ⑤ OPEN THE ROADWAY TO TWO LANE TRAFFIC AT THE END OF EACH WORK DAY.

FILE NAME =	USER NAME = craigre	DESIGNED - RTB	REVISED -
ct:\pw\work\p\idot\craigre\d0124546\0570098-sh1-staging.dgn		DRAWN - JDC	REVISED -
	PLOT SCALE = 40.0000' / IN.	CHECKED -	REVISED -
	PLOT DATE = 10/23/2009	DATE - 09/2009	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TYPICAL CULVERT STAGE CONSTRUCTION PLAN
SCALE: SHEET NO. 1 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	119CR	CHAMPAIGN	29	13
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				



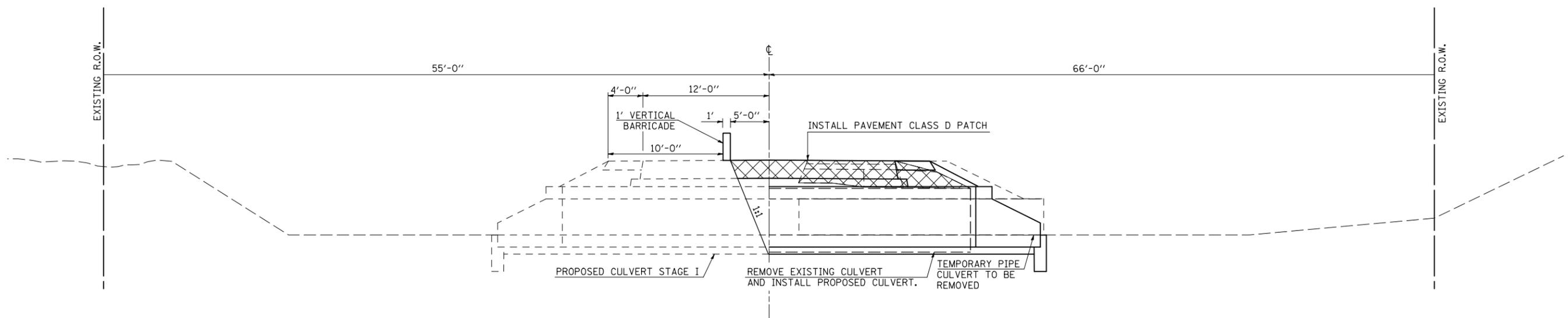
TYPICAL STAGE I SECTION VIEW

PRE-STAGE NOTES:

- ① EXCAVATE PROPOSED DITCHES AT BOTH UPSTREAM AND DOWNSTREAM ENDS OF THE CULVERT.
- ② INSTALL TEMPORARY PIPE CULVERT AND CONSTRUCT EMBANKMENT ON UPSTREAM END OF CULVERT.
- ③ CONSTRUCT PROPOSED AGGREGATE BASE COURSE TYPE B, 8" FOR STAGE CONSTRUCTION TRAFFIC, 55' EACH SIDE OF PROPOSED CULVERT FOR STAGE I AND STAGE II TRAFFIC.

STAGE I NOTES:

- ① INSTALL TRAFFIC CONTROL AND PROTECTION 701201, PLACE 1' VERTICAL BARRICADE AROUND CULVERT CONSTRUCTION AREA.
- ② REMOVE EXISTING PAVEMENT AND EXISTING DOWNSTREAM END OF THE CULVERT TO THE APPROXIMATE CENTERLINE OF THE ROAD.
- ③ INSTALL THE DOWNSTREAM PORTION OF THE PROPOSED CULVERT AND MAKE A TEMPORARY CONNECTION TO THE EXISTING UPSTREAM PORTION OF THE CULVERT.
- ④ BACKFILL THE TRENCH USING POROUS GRANULAR EMBANKMENT, PLACE CLASS D PAVEMENT PATCH AND AGGREGATE SHOULDER.
- ⑤ OPEN TO TWO LANE & TWO-WAY TRAFFIC AT THE END OF EACH WORK DAY.



TYPICAL STAGE II SECTION VIEW

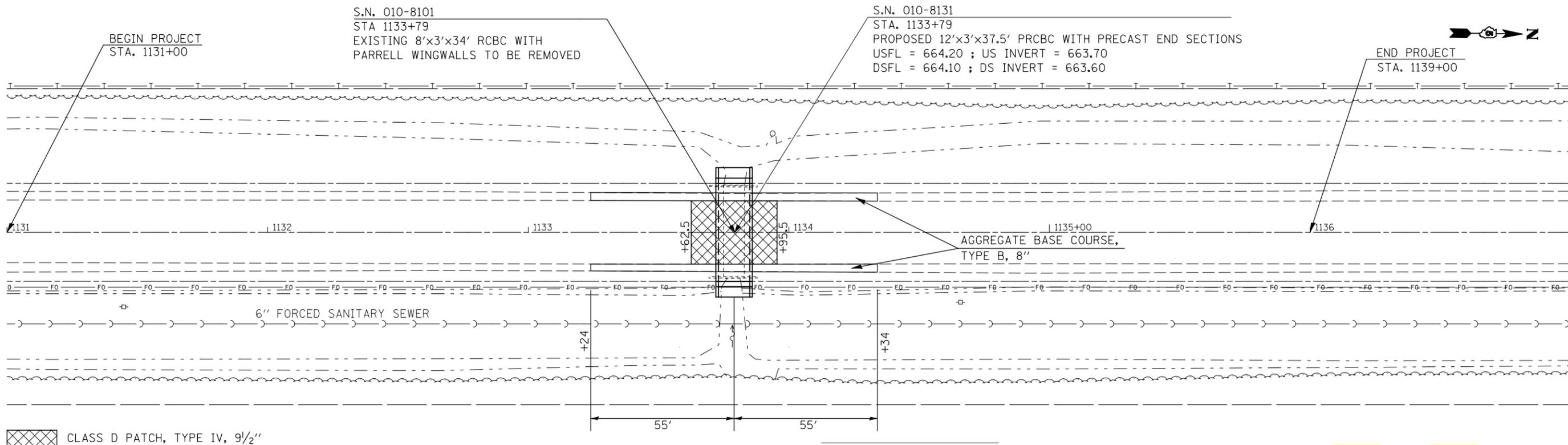
STAGE II NOTES:

- ① INSTALL TRAFFIC CONTROL PROTECTION 701201.
- ② SAW CUT AND REMOVE PAVEMENT AND PART OF CLASS D PATCH AS NECESSARY FOR CULVERT REMOVAL AND REPLACEMENT.
- ③ REMOVE TEMPORARY CONNECTION, EXISTING CULVERT AND TEMPORARY PIPE CULVERT. INSTALL THE PROPOSED CULVERT AND BACKFILL.
- ④ INSTALL THE CLASS D PAVEMENT PATCH AND PROPOSED AGGREGATE SHOULDER.
- ⑤ OPEN THE ROADWAY TO TWO LANE TRAFFIC AT THE END OF EACH WORK DAY.

FILE NAME =	USER NAME = craigre	DESIGNED - RTB	REVISED - RTB	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL CULVERT STAGE CONSTRUCTION PLAN			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pw\work\p\dot\craigre\d0124546\0570098-sh1-staging.dgn		DRAWN - JJB	REVISED - RTB		836	119CR	CHAMPAIGN	29	14	CONTRACT NO. 70698		
PLOT SCALE = 100.0000' / IN.		CHECKED -	REVISED -		SCALE: N/A	SHEET NO. 2 OF 2 SHEETS	STA.	TO STA.		ILLINOIS FED. AID PROJECT		
PLOT DATE = 10/23/2009		DATE - 10/20/09	REVISED -									

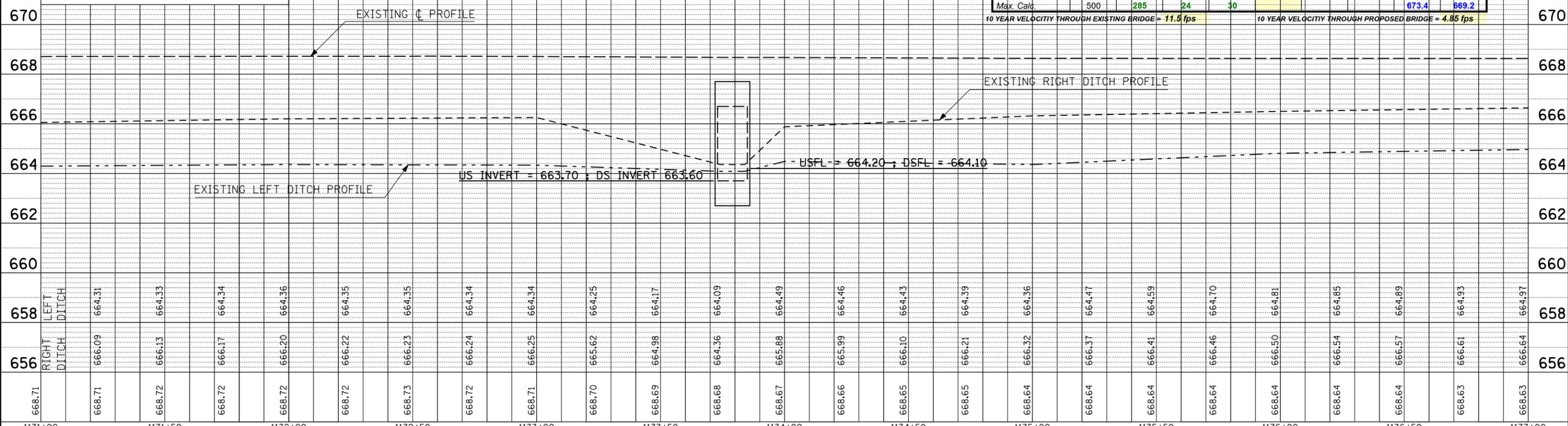
PLAN	SURVEYED	DATE
	PLOTTED	BY
	CHECKED	
	AT	
	FILE NAME	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	CHECKED	
	AT	
	FILE NAME	
	NO.	



BENCHMARK 4839-1
CHISLED "□" ON THE NORTHEAST
SIDE OF CATCH BASIN AT SN 010-8101
STATION 1133+94.39, 36.64' LT.
ELEVATION = 664.47' (NAVD 1988)

Drainage Area = 0.6 mi. ²		Existing Low Grade Elev. = 668.63 @ Sta. 1137+00							
		Proposed Low Grade Elev. = 668.63 @ Sta. 1137+00							
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Existing	Proposed	Natural H.W.E.	Head - Ft. Existing	Proposed	Headwater Elevation Existing	Proposed
10	10	114	24	29				667.6	666.6
Design	50	182	24	30				669.3	667.4
Base	100	213	24	30				670.2	667.8
Overtopping									
Max. Calc.	500	285	24	30				673.4	669.2
10 YEAR VELOCITY THROUGH EXISTING BRIDGE = 11.5 fps					10 YEAR VELOCITY THROUGH PROPOSED BRIDGE = 4.85 fps				



668.71	668.71	668.72	668.72	668.72	668.72	668.73	668.72	668.71	668.70	668.69	668.68	668.67	668.66	668.65	668.65	668.64	668.64	668.64	668.64	668.64	668.64	668.63	668.63
1131+00	1131+50	1132+00	1132+50	1133+00	1133+50	1134+00	1134+50	1135+00	1135+50	1136+00	1136+50	1137+00											

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE

SCALE: 1" = 20' SHEET NO. 2 OF 3 SHEETS STA. 1131+00.00 TO STA. 1137+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	119CR	CHAMPAIGN	29	15
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT	CONTRACT NO. 70698	

FILE NAME = USER NAME = craigre
DRAWN - RTB
CHECKED - JJB
DATE -
PLOT SCALE = 40.0000' / IN.
PLOT DATE = 10/23/2009

DESIGNED - RTB
REVISIONS - RTB
DRAWN - JJB
CHECKED - JJB
DATE -

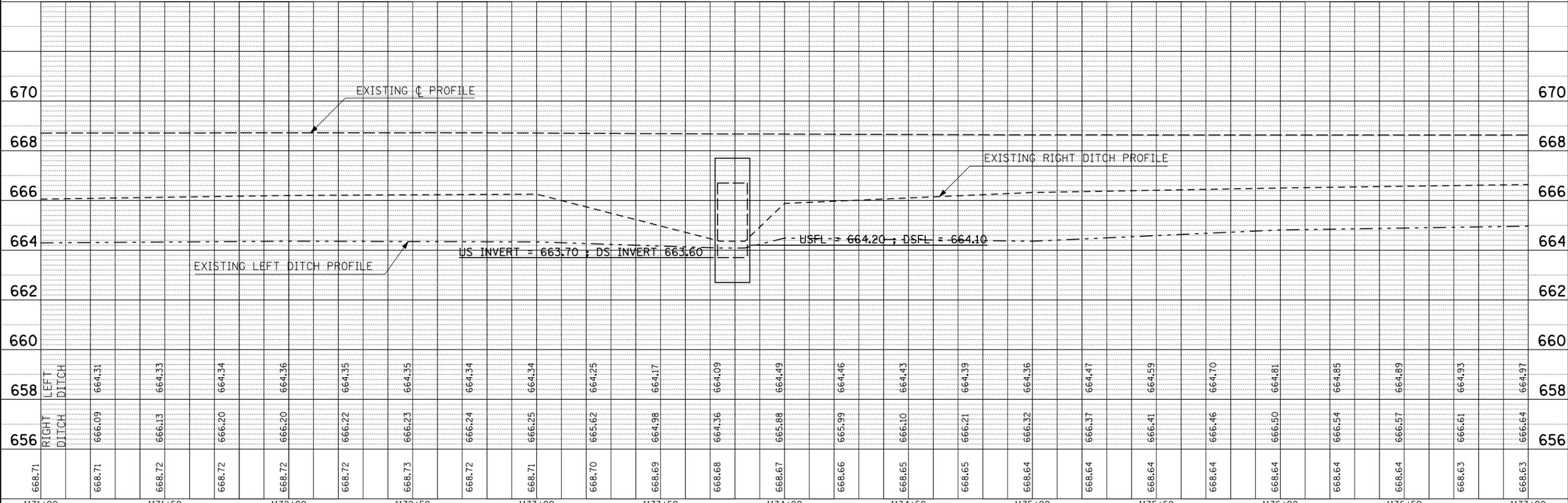
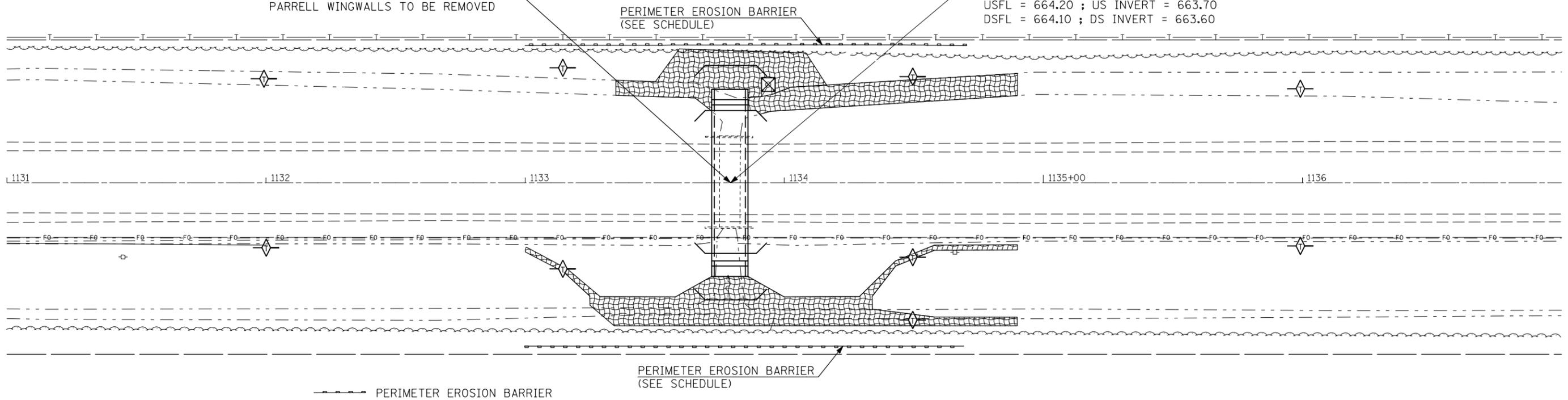
PLAN	SURVEYED	DATE
	PLOTTED	BY
	CHECKED	
	AT	
	WORK	
	NO.	
	FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	CHECKED	
	AT	
	WORK	
	NO.	
	NOTATION	

EROSION CONTROL PLAN

S.N. 010-8101
STA 1133+79
EXISTING 8'x3'x34' RCBC WITH
PARRELL WINGWALLS TO BE REMOVED

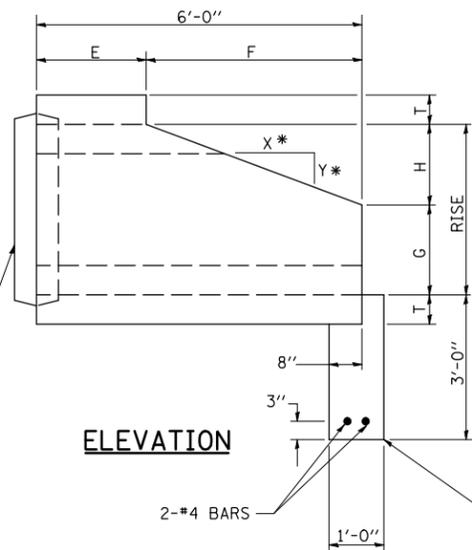
S.N. 010-8131
STA. 1133+79
PROPOSED 12'x3'x37.5' PRBC WITH PRECAST END SECTIONS
USFL = 664.20 ; US INVERT = 663.70
DSFL = 664.10 ; DS INVERT = 663.60



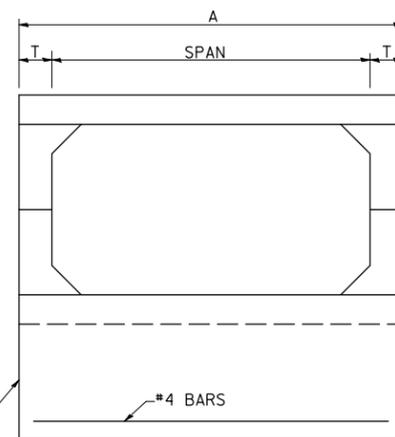
FILE NAME =	USER NAME = craige	DESIGNED - RTB	REVISED - RTB	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EROSION CONTROL PLAN		F.A.P. RTE. 836	SECTION 119CR	COUNTY CHAMPAIGN	TOTAL SHEETS 29	SHEET NO. 16	
ct:\pwork\pwork\craige\d0124546\0570698-SHT-DETAILS.dgn	PLOT SCALE = 40.0000' / IN.	DRAWN - JJB	REVISED -		SCALE: 1" = 20'	SHEET NO. 2 OF 3 SHEETS	STA. 1131+00.00 TO STA. 1137+00.00	CONTRACT NO. 70698		ILLINOIS FED. AID PROJECT		
	PLOT DATE = 10/23/2009	CHECKED -	REVISED -									
		DATE -	REVISED -									

DIMENSIONS **

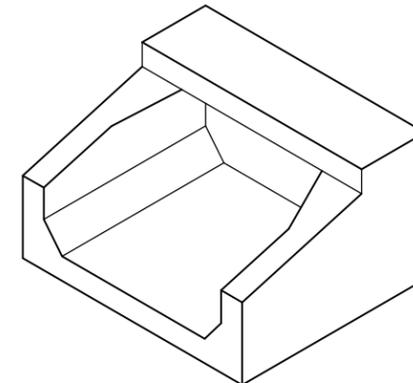
SPAN X RISE	T (INCHES)	A (FT.-IN.)	B (FT.-IN.)	C (INCHES)	E (FT.-IN.)	F (FT.-IN.)	G (FT.-IN.)	H (FT.-IN.)	SLOPE (X:Y)
2' X 2'	4	2-8	2-8	4	3-0	3-0	1-0	1-0	3:1
3' X 2'	4	3-8	2-8	4	3-0	3-0	1-0	1-0	3:1
3' X 3'	4	3-8	3-8	4	2-0	4-0	1-8	1-4	3:1
4' X 2'	5	4-10	2-10	5	3-0	3-0	1-0	1-0	3:1
4' X 3'	5	4-10	3-10	5	2-0	4-0	1-8	1-4	3:1
4' X 4'	5	4-10	4-10	5	2-0	4-0	2-0	2-0	2:1
5' X 2'	6	6-0	3-0	6	3-0	3-0	1-0	1-0	3:1
5' X 3'	6	6-0	4-0	6	2-0	4-0	1-8	1-4	3:1
5' X 4'	6	6-0	5-0	6	2-0	4-0	2-0	2-0	2:1
5' X 5'	6	6-0	6-0	6					
6' X 2'	7	7-2	3-2	7	3-0	3-0	1-0	1-0	3:1
6' X 3'	7	7-2	4-2	7	2-0	4-0	1-8	1-4	3:1
6' X 4'	7	7-2	5-2	7	2-0	4-0	2-0	2-0	2:1
6' X 5'	7	7-2	6-2	7	2-0	4-0	3-0	2-0	2:1
6' X 6'	7	7-2	7-2	7	2-0	4-0	4-0	2-0	2:1
7' X 4'	8	8-4	5-4	8	2-0	4-0	2-0	2-0	2:1
7' X 5'	8	8-4	6-4	8					
7' X 6'	8	8-4	7-4	8					
7' X 7'	8	8-4	8-4	8					
8' X 4'	8	9-4	5-4	8	2-0	4-0	2-0	2-0	2:1
8' X 5'	8	9-4	6-4	8					
8' X 6'	8	9-4	7-4	8					
8' X 7'	8	9-4	8-4	8					
8' X 8'	8	9-4	9-4	8					
9' X 5'	9	10-6	6-6	9					
9' X 6'	9	10-6	7-6	9					
9' X 7'	9	10-6	8-6	9					
9' X 8'	9	10-6	9-6	9					
9' X 9'	9	10-6	10-6	9					
10' X 5'	10	11-8	6-8	10					
10' X 6'	10	11-8	7-8	10					
10' X 7'	10	11-8	8-8	10					
10' X 8'	10	11-8	9-8	10					
10' X 9'	10	11-8	10-8	10					
10' X 10'	10	11-8	11-8	10					
11' X 4'	11	12-10	5-10	11					
11' X 6'	11	12-10	7-10	11					
11' X 8'	11	12-10	9-10	11					
11' X 10'	11	12-10	11-10	11					
11' X 11'	11	12-10	12-10	11					
12' X 3'	12	14-0	5-0	12	2-0	4-0	1-8	1-4	3:1
12' X 4'	12	14-0	6-0	12					
12' X 6'	12	14-0	8-0	12					
12' X 8'	12	14-0	10-0	12					
12' X 10'	12	14-0	12-0	12					
12' X 12'	12	14-0	14-0	12					



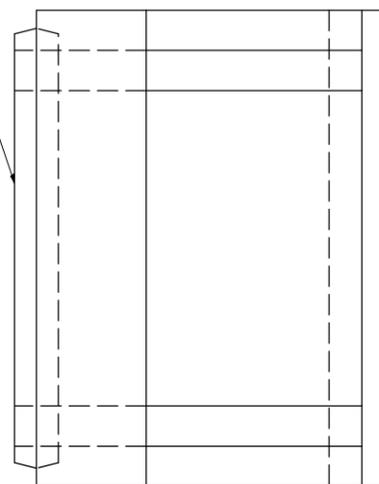
* 2:1 SLOPE MINIMUM



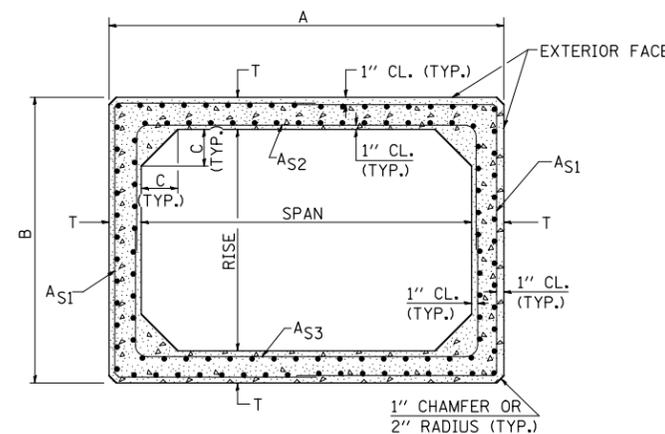
END VIEW



ISOMETRIC



PLAN



CROSS SECTION

GENERAL NOTES

SHOP DRAWINGS SHALL BE SUBMITTED IN ACCORDANCE WITH THE REQUIREMENTS OF ARTICLE 1042.03(b) OF THE STANDARD SPECIFICATIONS.

MINIMUM CONCRETE STRENGTH SHALL BE 5000 PSI AFTER 28 DAYS.

THE JOINTS OF THE PRECAST BOX SECTIONS SHALL BE SEALED WITH MASTIC IN ACCORDANCE WITH SECTION 1055 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

THE TERMS AS1, AS2, & AS3 DENOTE THE REQUIRED STEEL AREAS FOR REINFORCEMENT AS SPECIFIED IN AASHTO M259. REINFORCEMENT SHALL BE WELDED WIRE FABRIC CONFORMING TO AASHTO M55-81.

**** NOTE:**

THE DIMENSIONS INDICATED ARE FOR END SECTIONS THAT ARE TO BE USED WITH PRECAST BOX CULVERT SECTIONS DESIGNED FOR 2' OR MORE OF FILL. THE DIMENSIONS MUST BE MODIFIED FOR THE END SECTION TO BE COMPATIBLE WITH PRECAST CULVERT SECTIONS DESIGNED FOR LESS THAN 2' OF FILL.

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

STD. 9-50 (FROM DISTRICT 9)

FILE NAME =	USER NAME = craige	DESIGNED -	REVISED - RTB
ct:\pw\work\p\dot\craige\d0124546\0570098-SHT-DETAILS.dgn		DRAWN - JJB	REVISED -
PLOT SCALE = 40.0000 ' / IN.		CHECKED -	REVISED -
PLOT DATE = 10/23/2009		DATE - 3-3-2009	REVISED -

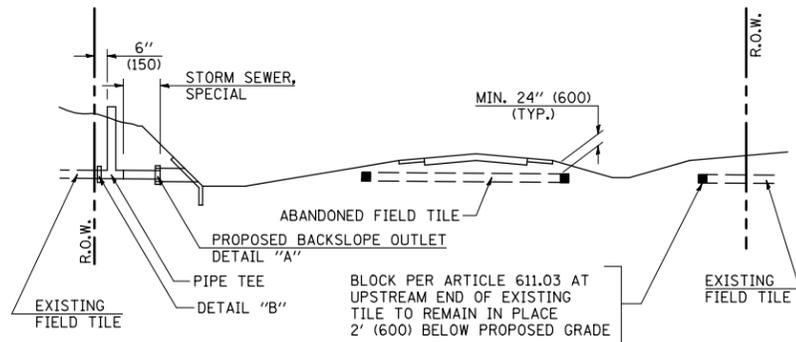
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BOX CULVERT END SECTION
(PRECAST OPTION)**

SCALE: N/A SHEET NO. OF SHEETS STA. TO STA.

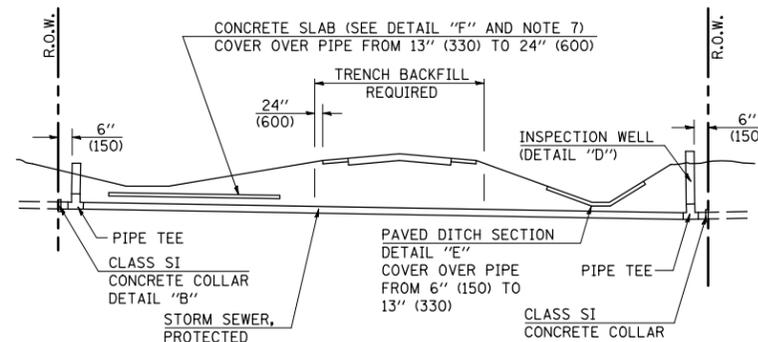
DISTRICT 5 DETAIL NO. 54001AAA

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	119CR	CHAMPAIGN	29	17
				CONTRACT NO. 70698
ILLINOIS FED. AID PROJECT				



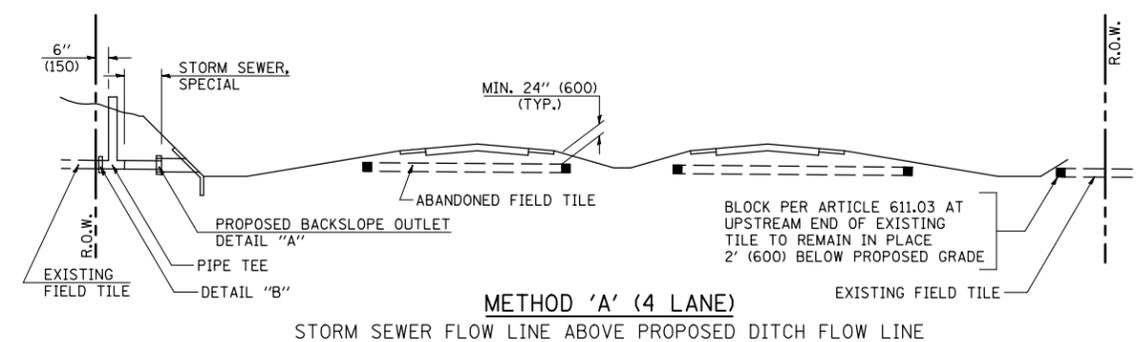
METHOD 'A' (2 LANE)

STORM SEWER FLOW LINE ABOVE PROPOSED DITCH FLOW LINE



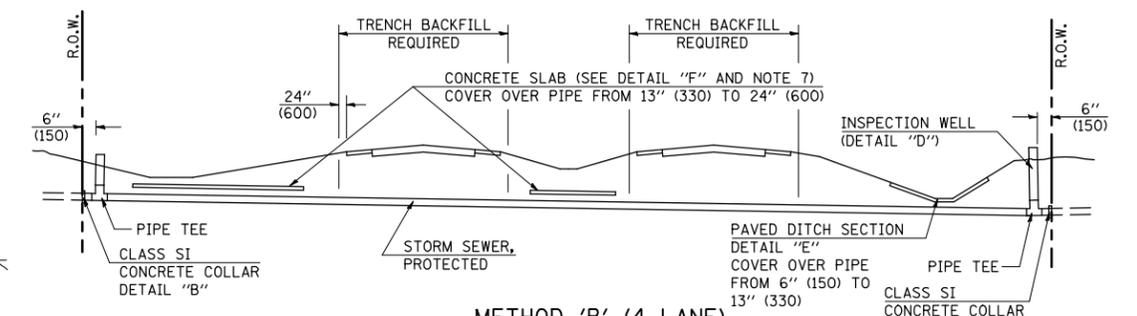
METHOD 'B' (2 LANE)

STORM SEWER LESS THAN 2' (600 mm) BELOW DITCH FLOW LINE AND STORM SEWERS CROSSING UNDER PAVEMENT AND PAVED DITCH



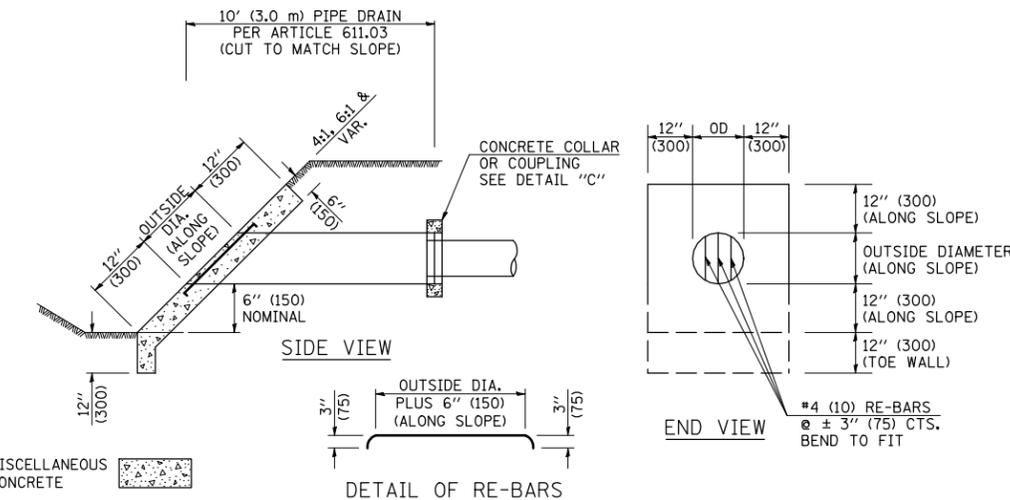
METHOD 'A' (4 LANE)

STORM SEWER FLOW LINE ABOVE PROPOSED DITCH FLOW LINE

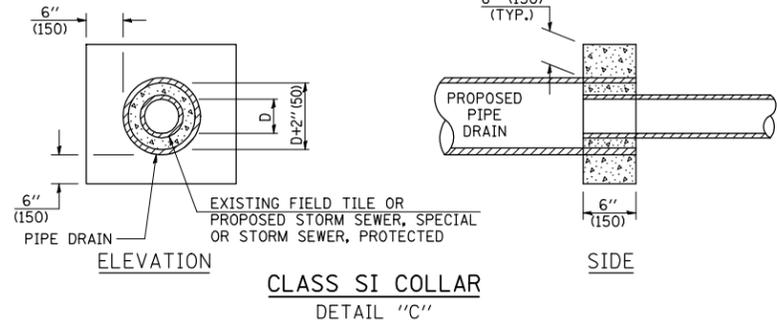
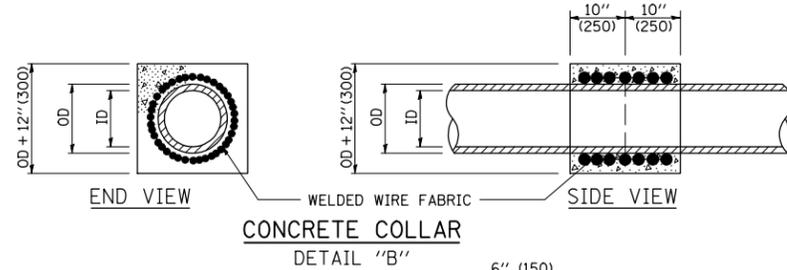


METHOD 'B' (4 LANE)

STORM SEWER LESS THAN 2' (600 mm) BELOW DITCH FLOW LINE AND STORM SEWERS CROSSING UNDER PAVEMENTS AND PAVED DITCHES



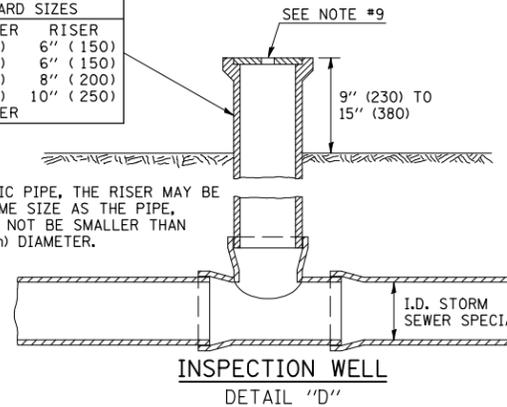
HEADWALL FOR BACKSLOPE OUTLET DETAIL 'A'



CLASS SI COLLAR DETAIL 'C'

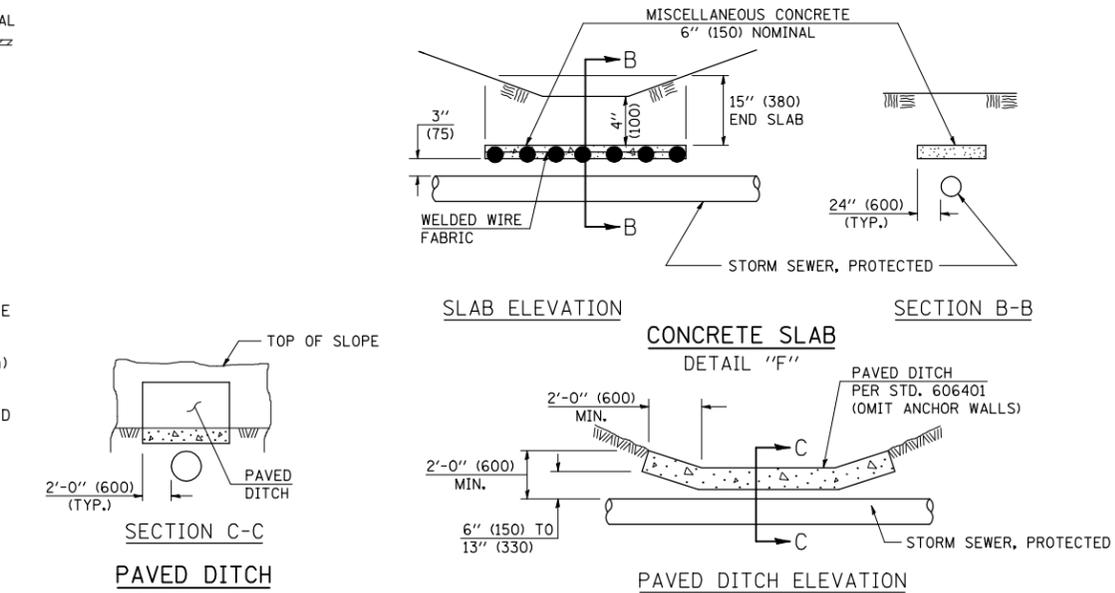
CONCRETE PIPE STANDARD SIZES	
STORM SEWER	RISER
6" (150)	6" (150)
8" (200)	6" (150)
10" (250)	8" (200)
12" (300)	8" (200)
OR GREATER	10" (250)

FOR PLASTIC PIPE, THE RISER MAY BE OF THE SAME SIZE AS THE PIPE, BUT SHALL NOT BE SMALLER THAN 4" (100 mm) DIAMETER.



GENERAL NOTES

- EXISTING FIELD TILE ENCOUNTERED BY EXPLORATION TRENCH SHALL BE INSPECTED BY THE ENGINEER FOR UNOBSTRUCTED FLOW WITHIN THE LIMITS OF THE RIGHT-OF-WAY.
- ONLY FIELD TILE THAT DOES NOT HAVE SATISFACTORY FLOW AND OR HAS VISIBLE SIGNS OF DETERIORATION (SINK HOLES, ETC.) SHALL BE REPLACED WITHIN THE LIMITS OF THE RIGHT-OF-WAY IN ACCORDANCE WITH METHOD "B".
- INSPECTION WELLS SHALL BE CONSTRUCTED APPROXIMATELY 6" (150 mm) INSIDE OF BOTH RIGHT-OF-WAY LINES AT ALL FIELD TILE LOCATIONS.
- EXISTING FIELD TILE ABANDONED UNDER EXISTING PAVEMENTS OR PAVED SHOULDERS SHALL BE FILLED WITH FLOWABLE GROUT AS DIRECTED BY THE ENGINEER. THIS WORK WILL BE PAID FOR ACCORDING TO ARTICLE 109.04.
- NON-CIRCULAR FIELD TILE SHALL BE REPLACED WITH STORM SEWER, SPECIAL OF AT LEAST THE SAME CROSS SECTIONAL AREA. ALL EXISTING FIELD TILE SHALL BE REPLACED WITH STORM SEWER OF THE TYPE REQUIRED FOR THE MINIMUM DEPTH OF COVER.
- THE 6" (150 mm) CONCRETE SLAB OR DITCH LINING SHALL BE POURED THE LENGTH OF THE TRENCH AT ALL DITCH FLOW LINE LOCATIONS WITHIN THE RIGHT-OF-WAY WITH LESS THAN 2' (600 mm) OF EARTH COVER. MISCELLANEOUS CONCRETE SHALL BE USED ACCORDING TO SECTION 611.
- ALL MISCELLANEOUS SLABS, APRONS AND DITCH LININGS SHALL BE REINFORCED WITH WELDED WIRE FABRIC AS SHOWN FOR PAVED DITCH IN STANDARD 606401.
- HEADWALL FOR BACKSLOPE OUTLET MAY BE USED FOR PIPE DRAIN DIAMETERS UP TO 10" (250 mm). SPECIAL DESIGNS WILL BE REQUIRED FOR LARGER SIZES.
- THE INSPECTION WELL LID FOR P.C.C. PIPE SHALL BE CONSTRUCTED OF 3/8" (10 mm) CAST IRON AND PROVIDED WITH A 1" (25 mm) DIAMETER HOLE IN CENTER. THE LID FOR THE OTHER PIPE MATERIALS SHALL BE A GRATE ASSEMBLY PREFABRICATED FOR AND COMPATIBLE WITH THE PIPE SYSTEM.



Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

DISTRICT 5 DETAIL NO. 61101011A

FILE NAME =	USER NAME = craige	DESIGNED -	REVISED - 11/06
et:\pw\work\p\d\craige\d0124546\0570098-SHT-DETAILS.dgn		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

FIELD TILE SYSTEMS (TREATMENT OF EXISTING)

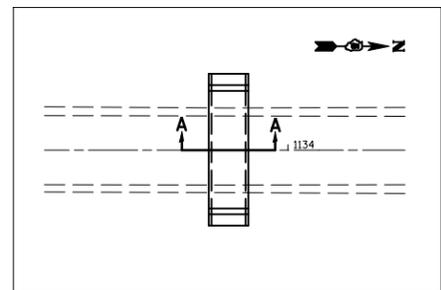
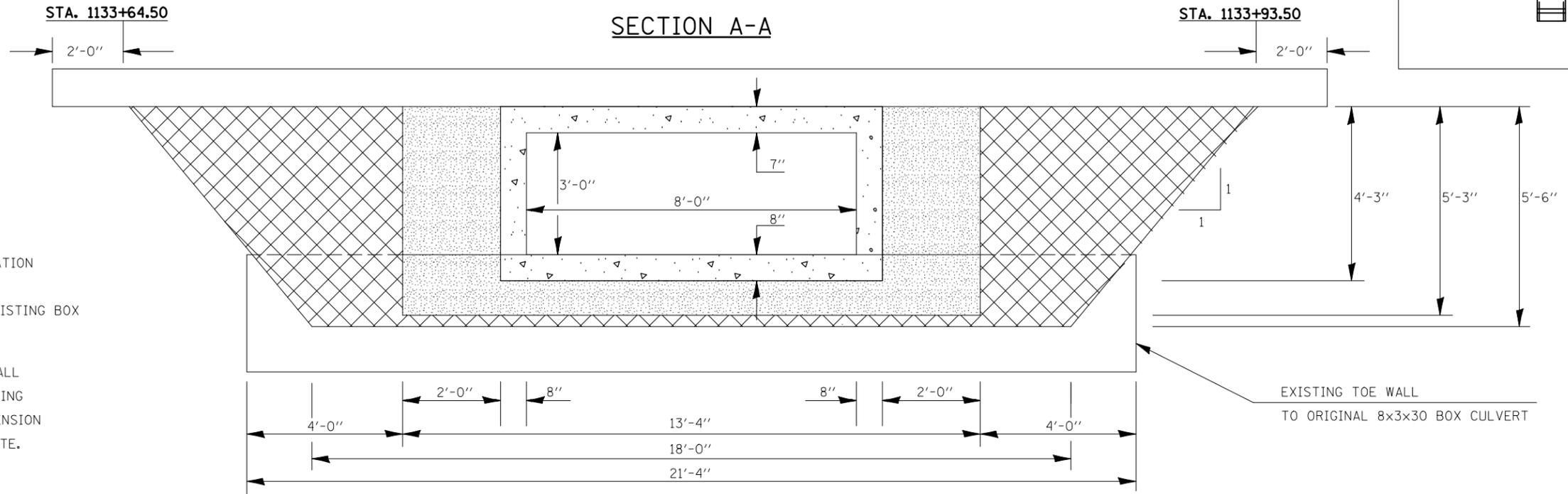
SCALE: N/A	SHEET NO.	OF SHEETS	STA.	TO STA.
------------	-----------	-----------	------	---------

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	119CR	CHAMPAIGN	29	18
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 70698	

DETAIL OF STRUCTURAL EXCAVATION PAY LIMITS

EXISTING STRUCTURE 010-8101 STA. 1133+79

NOTE: EXISTING 4FT. EXTENSION NOT SHOWN



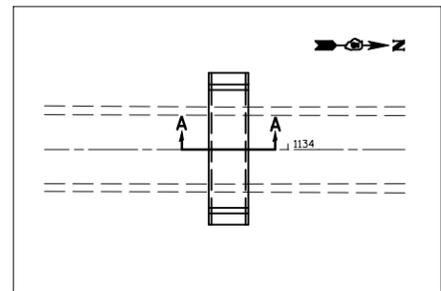
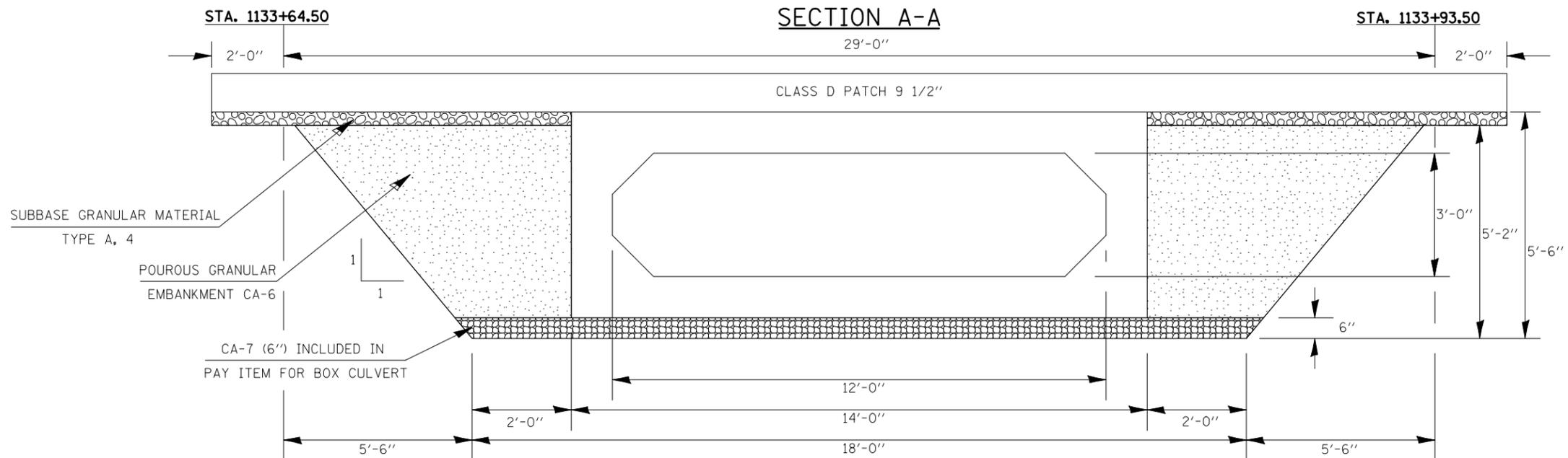
- PAY LIMITS OF STRUCTURE EXCAVATION
- AREA INCLUDED IN REMOVAL OF EXISTING BOX

NOTE: STRUCTURE EXCAVATION SHALL INCLUDE REMOVAL OF EXISTING TOE WALLS AND 4 FT. EXTENSION AT NO EXTRA COST TO STATE.

DETAIL OF POUROUS GRANULAR EMBANKMENT PAY LIMITS

PROPOSED STRUCTURE 010-8131 STA. 1133+79

- POUROUS GRANULAR EMBANKMENT CA-6
- SUBBASE GRANULAR MATERIAL TYPE A, 4
- CA-7 (6'') INCLUDED IN PAY ITEM FOR BOX CULVERT



FILE NAME =	USER NAME = craige	DESIGNED -	REVISED -
ct:\pw\work\p\dot\craige\d0124546\0570098-SHT-DETAILS.dgn		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

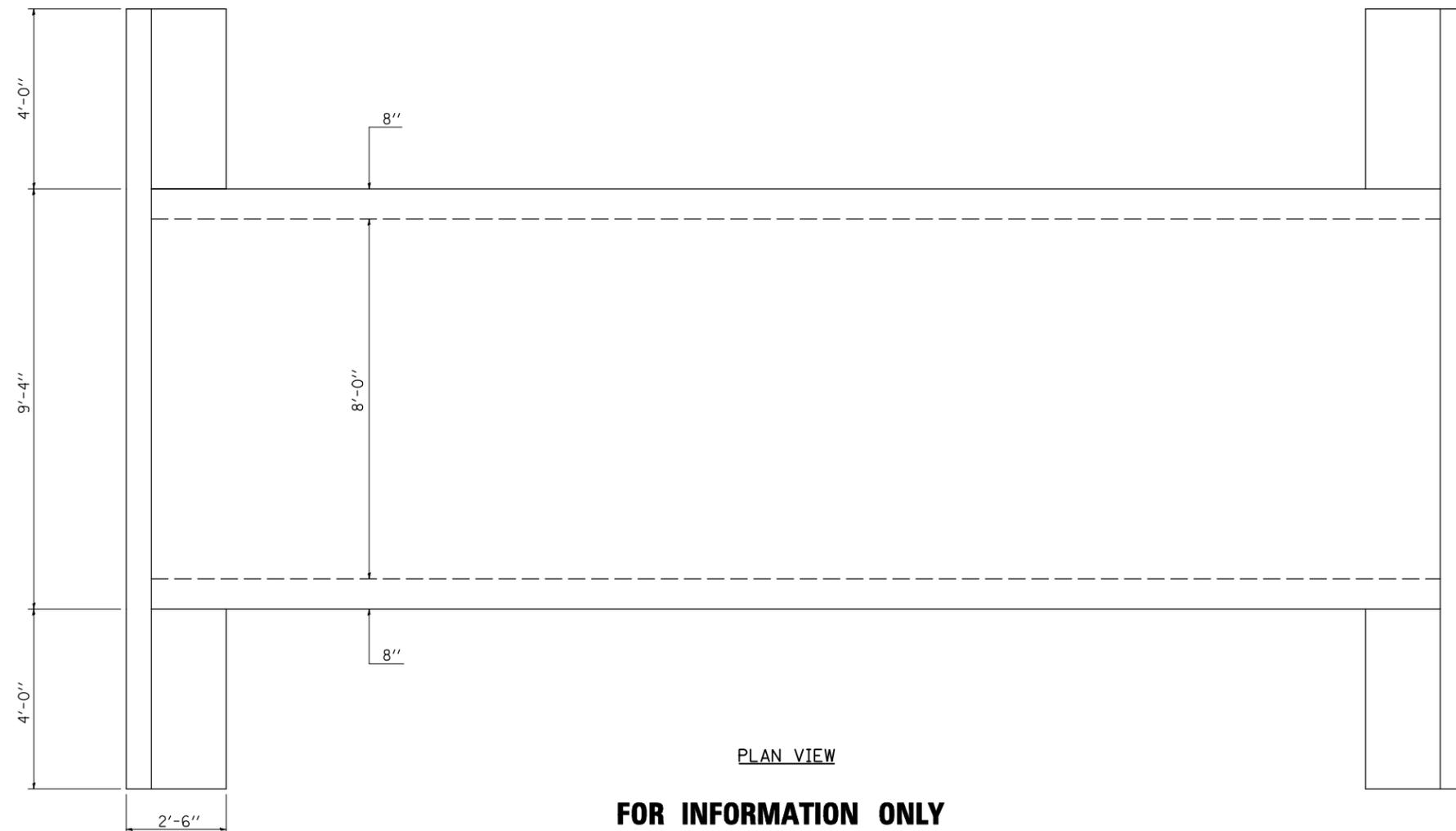
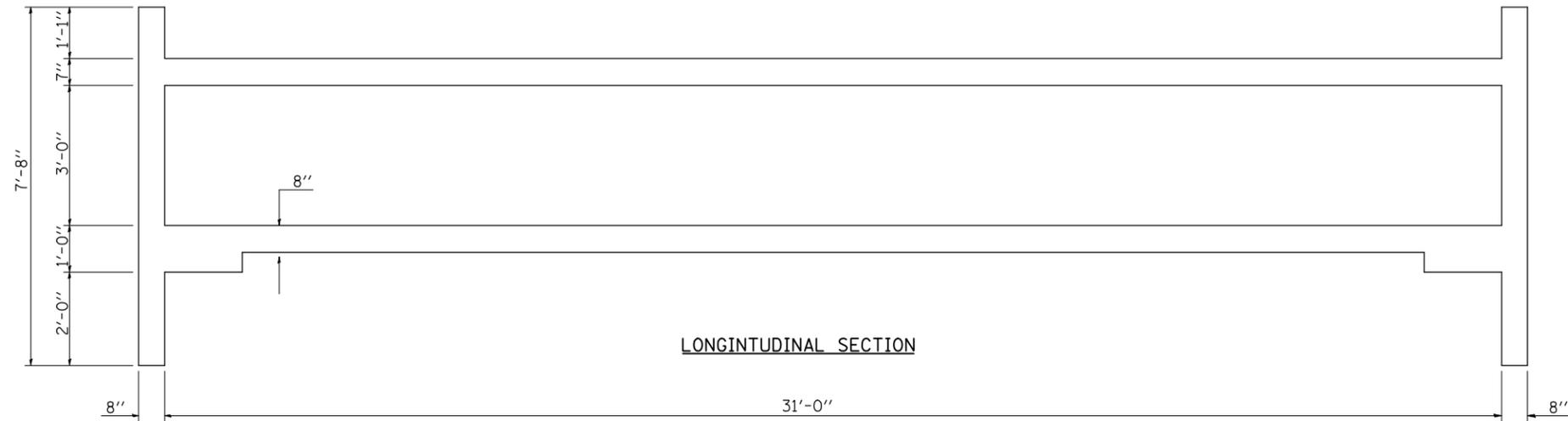
**DETAIL OF POUROUS GRANULAR
BACKFILL PAY LIMITS**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	119CR	CHAMPAIGN	29	19
			CONTRACT NO. 70698	
ILLINOIS FED. AID PROJECT				

EXISTING REINFORCED BOX CULVERT

NOTE: 4 FT. EXISTING BOX CULVERT EXTENTION NOT SHOWN



BILL OF MATERIALS		
STRUCTURE REMOVAL SUB-TOTAL	ORIGINAL 8'x3'x30' BOX CULVERT	20.1 CU. YD.*
STRUCTURE REMOVAL SUBTOTAL	4 FT. EXTENSION * (NOT SHOWN)	7.6 CU. YD.*
STRUCTURE REMOVAL TOTAL		27.7 CU. YD.

* NO READABLE PLANS AVAILABLE
ESTIMATED QUANTITY

REINFORCEMENT DETAILS NOT SHOWN

FOR INFORMATION ONLY

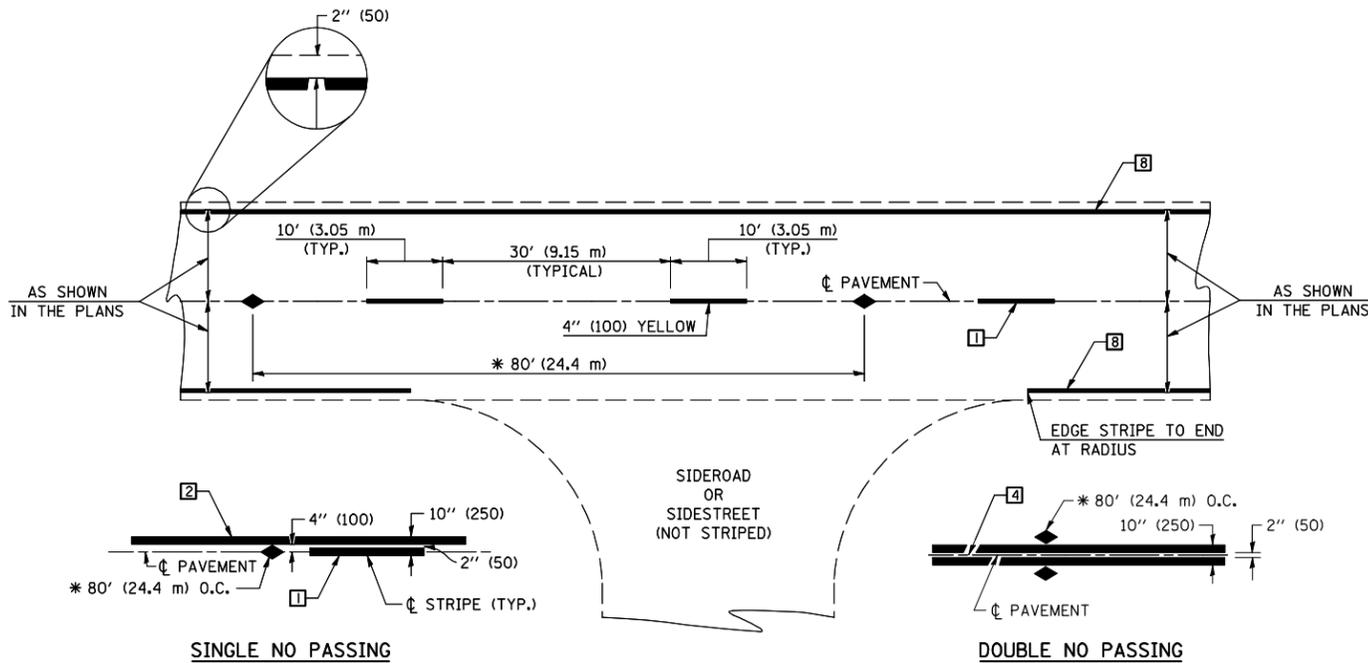
FILE NAME =	USER NAME = craigre	DESIGNED -	REVISED -
ct:\pw\work\p\dot\craigre\d0124546\0570098-SHT-DETAILS.dgn		DRAWN -	REVISED -
	PLOT SCALE = 40.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 10/23/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING CONCRETE BOX CULVERT PLAN

SCALE: N/A SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	119CR	CHAMPAIGN	29	20
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 70698	



* REDUCE TO 40' (12.2 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEEDS OF 45 mph (70 km/h) OR LESS.

TWO LANE/TWO WAY

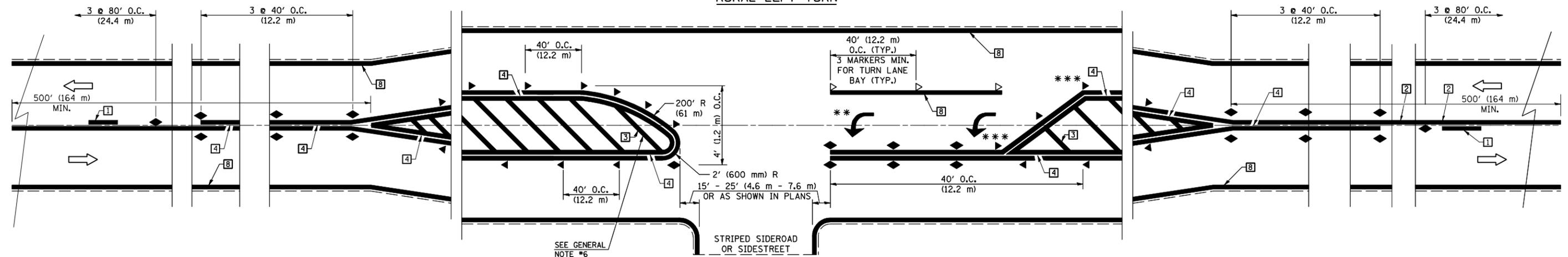
TYPICAL PAVEMENT MARKING LEGEND

- 1 4" (100) SKIP-DASH (YELLOW)
- 2 4" (100) SOLID (YELLOW)
- 3 12" (300) DIAGONAL (YELLOW)
- 4 4" (100) DOUBLE YELLOW (NARROW)
- 5 RESERVED
- 6 RESERVED
- 7 4" (100) SKIP-DASH (WHITE)
- 8 4" (100) SOLID (WHITE)
- 9 12" (300) DIAGONAL (WHITE)
- 10 6" (150) SOLID (WHITE)
- 11 24" (600) STOP BAR (WHITE)
- 12 8" (200) SOLID (WHITE)
- 13 4" (100) LANE LINE EXTENSIONS (WHITE)
- 14 4" (100) PARKING WHITE

TYPICAL PAVEMENT MARKERS LEGEND

- ◆ TWO-WAY AMBER MARKER
- ▶ ONE-WAY AMBER MARKER
- ▷ ONE-WAY CRYSTAL MARKER

RURAL LEFT TURN



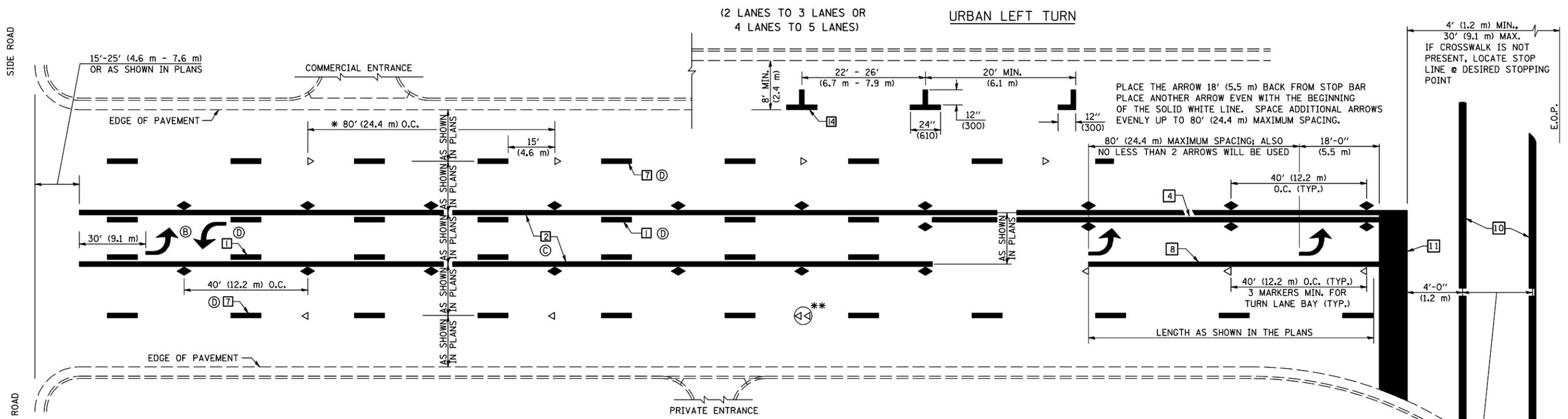
*** REDUCE SPACING IF NECESSARY TO ASSURE MARKERS AT CORNER POINTS.

** TURN ARROWS SHALL BE PLACED AS SHOWN ON SHEET #2.

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

DISTRICT 5 DETAIL NO. 7800AAA

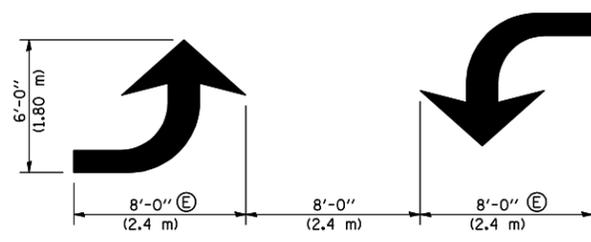
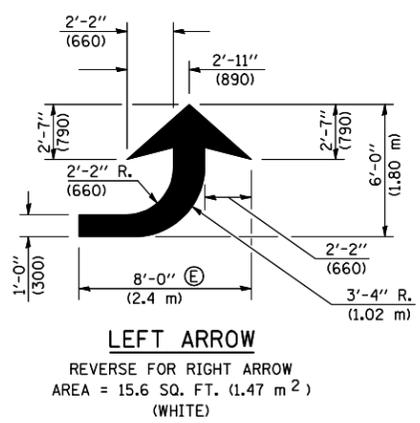
FILE NAME =	USER NAME = craige	DESIGNED -	REVISED - 11/06	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT MARKING AND MARKERS (RURAL & URBAN APPLICATIONS)	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ct:\pw\work\p\dot\craige\d0124546\0570098-SHT-DETAILS.dgn	98-SHT-DETAILS.dgn	DRAWN -	REVISED - 09/2009 - KJT			836	119CR	CHAMPAIGN	29	21	
	PLOT SCALE = 40.0000' / IN.	CHECKED -	REVISED -			CONTRACT NO. 70698					
	PLOT DATE = 10/23/2009	DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					



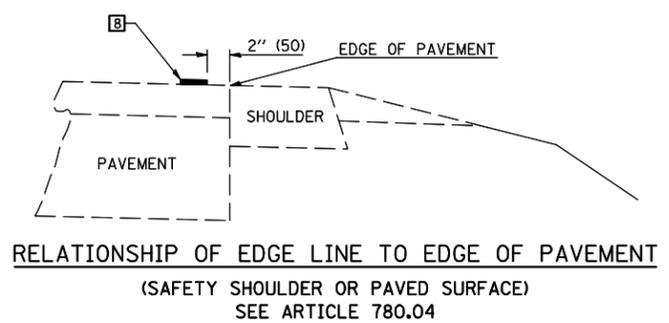
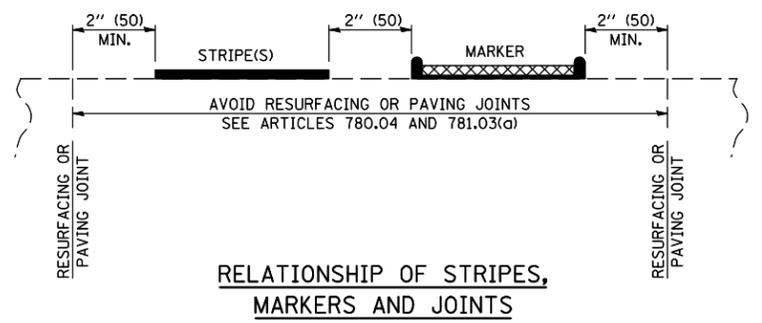
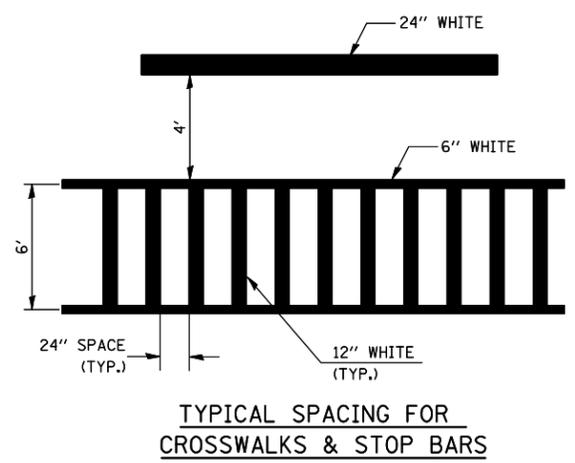
* REDUCE TO 40 FEET (12.2 METERS) ON CENTER ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH (15 km/h) LOWER THAN POSTED SPEEDS.

** DOUBLE LANE LINE MARKERS SHALL BE SPECIFIED AND SPACED AS SHOWN IN HIGHWAY STANDARD 781001 FOR MULTI-LANE DIVIDED AND UNDIVIDED HIGHWAYS.

- GENERAL NOTES:**
- ⓑ TURN ARROW PAIRS SHALL BE PLACED AT 250' (75 m) INTERVALS AND SHALL BE EVENLY SPACED BETWEEN BOTH ENDS OF THE BIDIRECTIONAL LEFT TURN LANE.
 - ⓒ THE SOLID YELLOW PAVEMENT MARKINGS [2] SHOULD GENERALLY START OR END NEAR THE RADIUS POINT OF EACH STREET RETURN EXCEPT WHERE ONE OR BOTH ENDS WOULD INCLUDE STOP BARS.
 - ⓓ THE SKIP-DASH PAVEMENT MARKINGS [1] OR [7] SHOULD BE CENTERED BETWEEN BOTH ENDS OF EACH CITY BLOCK AND SHALL BE PLACED SO THEY LINE UP ACROSS FROM EACH OTHER. SEE EXAMPLE ON SHEET 2 OF 3.
 - ⓔ USE LARGE ARROW SIZE FOR BOTH RURAL AND URBAN LOCATIONS. (SEE LAST PAGE OF SECTION 780x FOR SYMBOLS TABLE)



BLOOMINGTON-NORMAL CITY LIMITS ONLY



Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

DISTRICT 5 DETAIL NO. 7800AAA

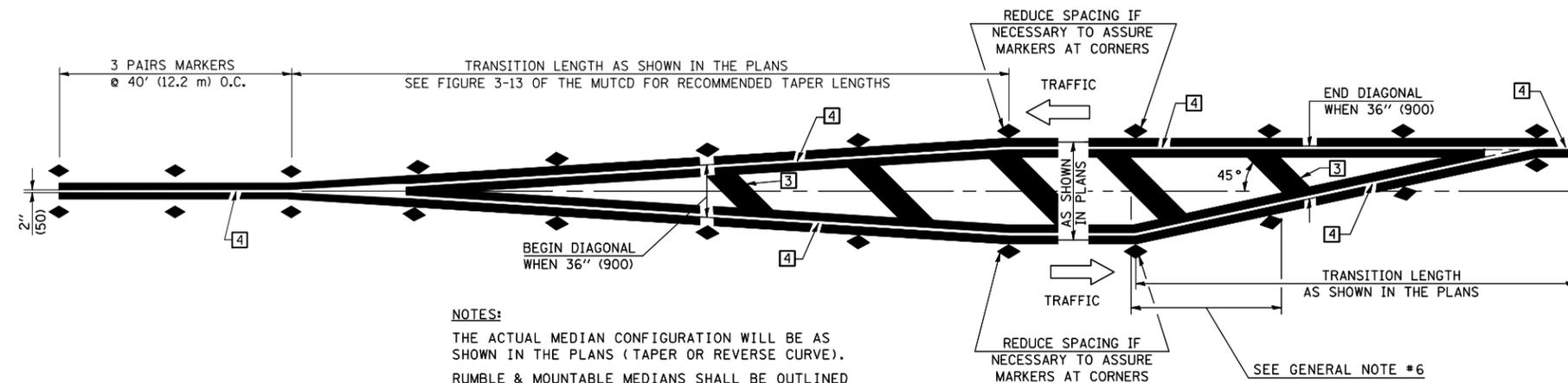
FILE NAME =	USER NAME = craige	DESIGNED -	REVISED - 11/06
ct:\pw_work\p\dot\craige\d0124546\0570098-SHT-DETAILS.dgn		DRAWN -	REVISED - 09/2009 - KJT
	PLOT SCALE = 40.0000' / IN.	CHECKED -	REVISED -
	PLOT DATE = 10/23/2009	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING AND MARKERS
 (RURAL & URBAN APPLICATIONS)**

SCALE: SHEET NO. 2 OF 4 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	119CR	CHAMPAIGN	29	22
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 70698	

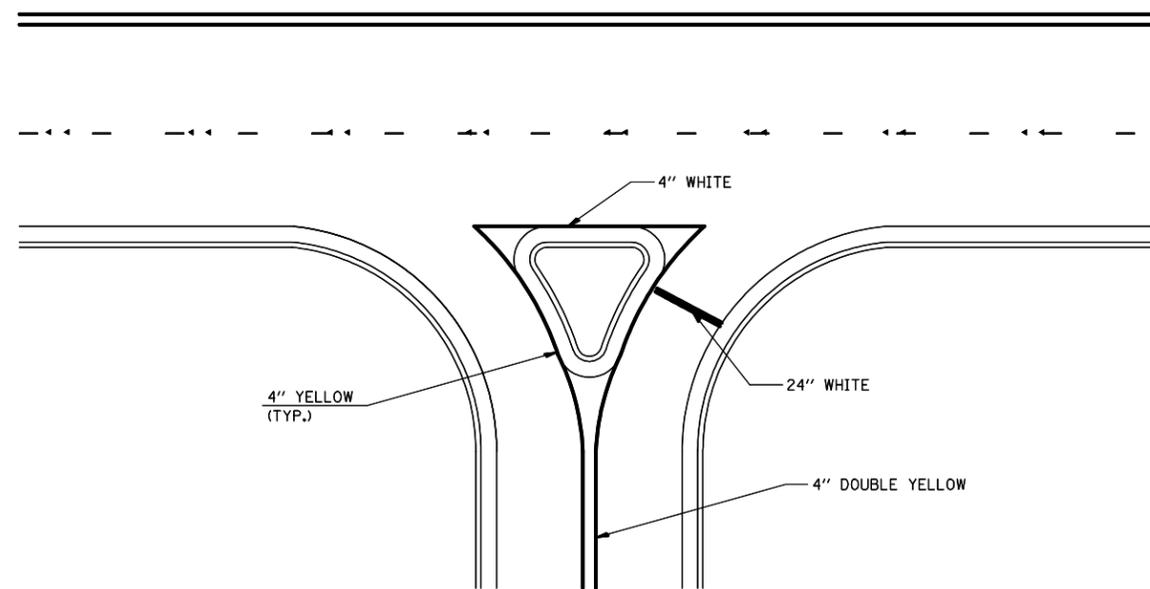


NOTES:
 THE ACTUAL MEDIAN CONFIGURATION WILL BE AS SHOWN IN THE PLANS (TAPER OR REVERSE CURVE).
 RUMBLE & MOUNTABLE MEDIANS SHALL BE OUTLINED WITH [2].

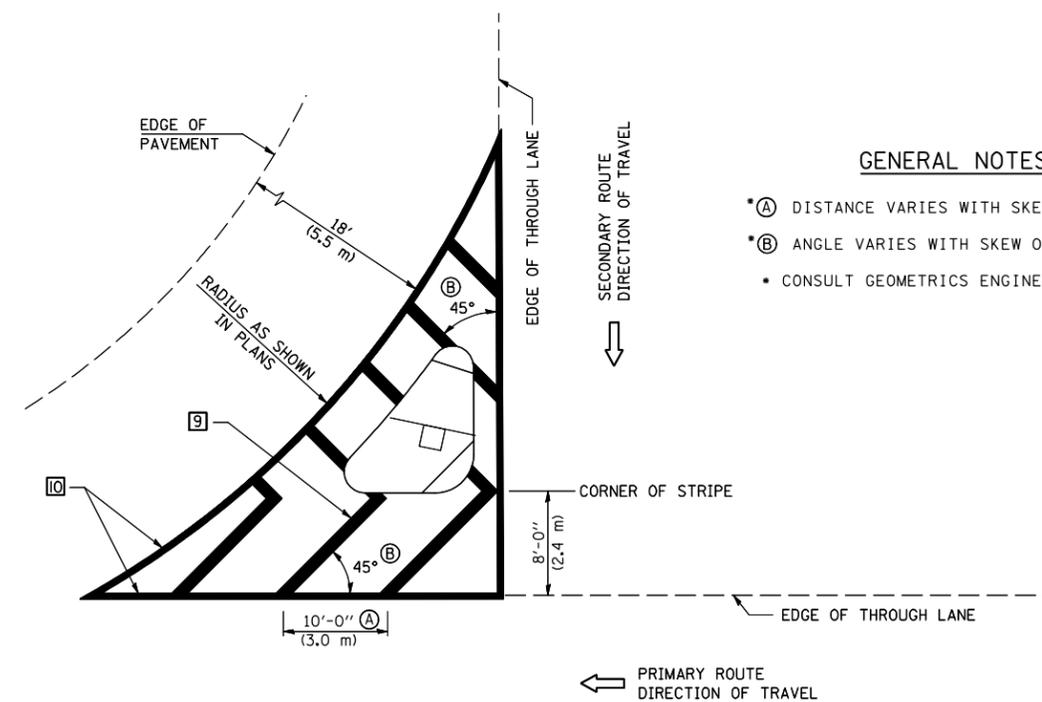
TYPICAL MEDIAN TRANSITIONS

GENERAL NOTES

1. WHEN MEDIANS ARE PRESENT, PAVEMENT MARKINGS ARE TO BE PLACED ADJACENT TO MEDIANS.
2. SOME OF THE INFORMATION INCLUDED WITH THIS DETAIL MAY NOT BE APPLICABLE TO THIS IMPROVEMENT.
3. PAVEMENT MARKINGS ARE TO BE EXTENDED THROUGH OMISSIONS WHEN APPLICABLE.
4. A STRIPING KEY IS AVAILABLE ELSEWHERE AND SHALL BE SHOWN WHERE THE QUANTITIES ARE LISTED.
5. FINAL PAVEMENT MARKINGS SHALL BE IN PLACE PRIOR TO PLACING ANY RAISED REFLECTIVE PAVEMENT MARKERS.
6. THE FOLLOWING CRITERIA SHALL BE USED FOR SELECTING THE DIAGONAL PAVEMENT MARKING SPACING,
 < 30 MPH USE 15' (< 50 km/h USE 4.5 m)
 30-45 MPH USE 20' (50-75 km/h USE 6.0 m)
 > 45 MPH USE 30' (> 75 km/h USE 9.0 m)



RIGHT IN - RIGHT OUT ACCESS



GENERAL NOTES

- *A DISTANCE VARIES WITH SKEW OF INTERSECTION.
- *B ANGLE VARIES WITH SKEW OF INTERSECTION.
- CONSULT GEOMETRICS ENGINEER

ISLAND

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

DISTRICT 5 DETAIL NO. 7800AAA

FILE NAME =	USER NAME = craige	DESIGNED -	REVISED - 11/06
ct:\pw\work\pwwork\craige\d0124546\0570098-SHT-DETAILS.dgn		DRAWN -	REVISED - 09/2009 - KJT
	PLOT SCALE = 40.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 10/23/2009	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

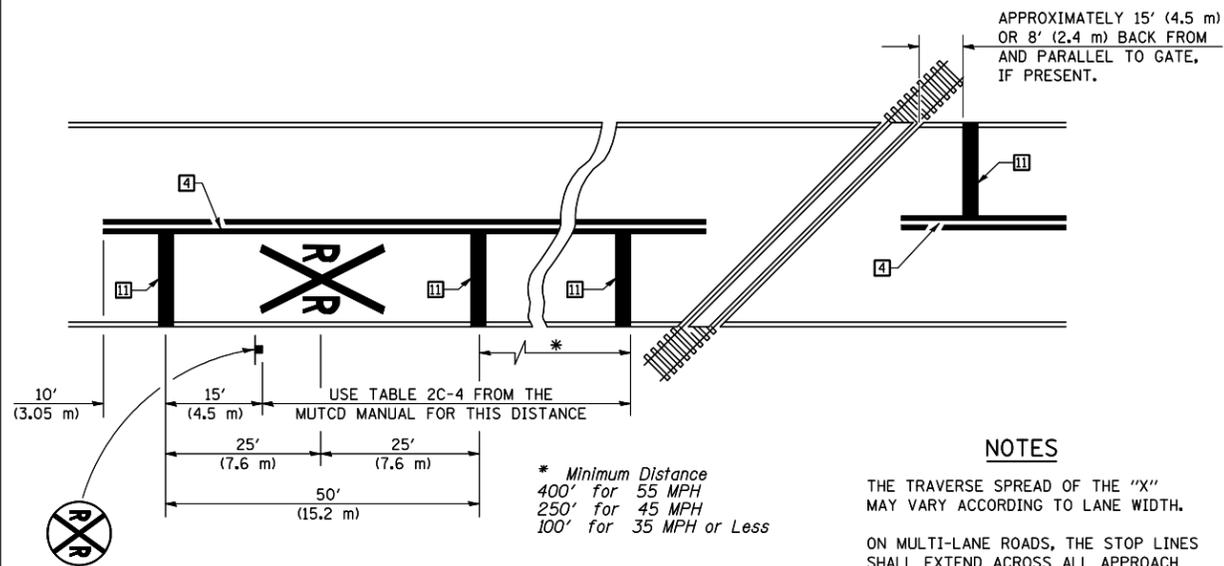
**PAVEMENT MARKING AND MARKERS
 (RURAL & URBAN APPLICATIONS)**

SCALE: SHEET NO. 3 OF 4 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	119CR	CHAMPAIGN	29	23
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 70698	

RAILROAD CROSSING WITH INTERCONNECT ONLY

RAILROAD CROSSING WITH INTERCONNECT AND PRE-SIGNALS



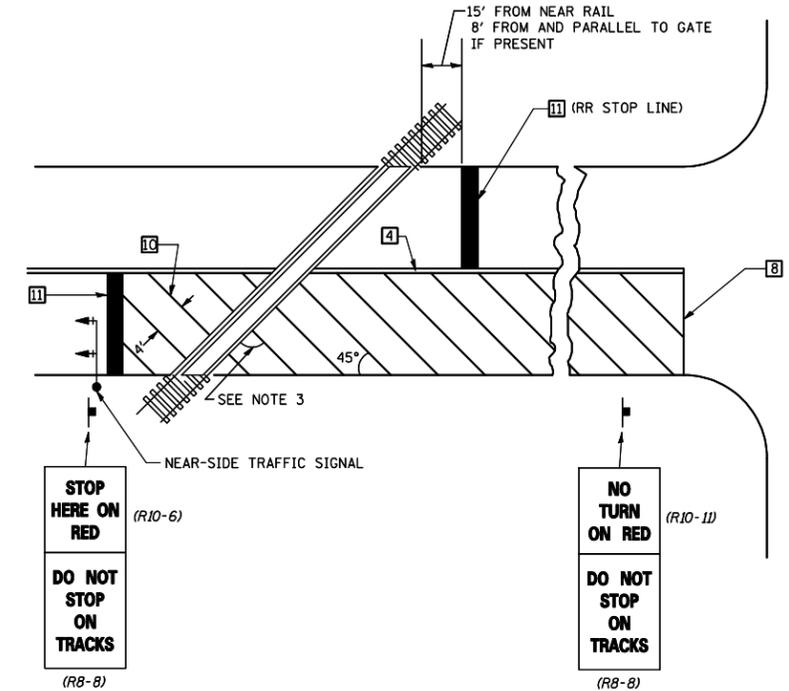
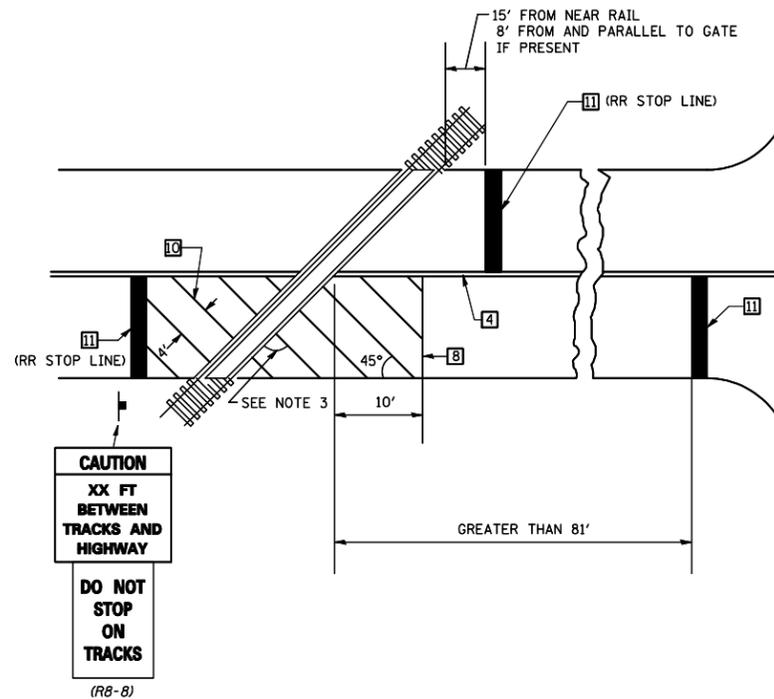
PAVEMENT MARKINGS AT RAILROAD-HIGHWAY GRADE CROSSING

NOTES

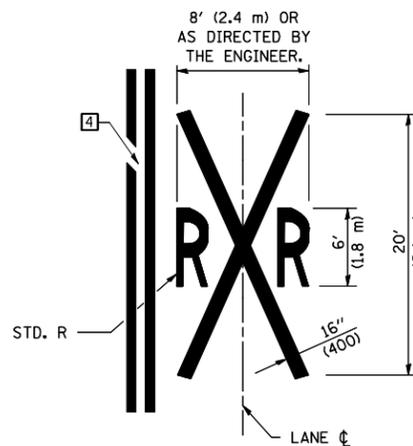
THE TRAVERSE SPREAD OF THE "X" MAY VARY ACCORDING TO LANE WIDTH.

ON MULTI-LANE ROADS, THE STOP LINES SHALL EXTEND ACROSS ALL APPROACH LANES AND SEPARATE RXR SYMBOLS SHALL BE PLACED ADJACENT TO EACH OTHER IN EACH LANE.

WHEN THE PAVEMENT MARKING SYMBOL IS USED, A PORTION OF THE SYMBOL SHOULD BE LOCATED DIRECTLY ADJACENT TO THE ADVANCE WARNING SIGN (W10-1) AS PLACED BY TABLE II-1, CONDITION B OF THE MUTCD.



SUPPLEMENTAL PAVEMENT MARKING TREATMENT FOR RAILROAD-HIGHWAY GRADE CROSSING



GENERAL NOTES

- SUPPLEMENTAL PAVEMENT MARKINGS TO BE INSTALLED ONLY ON APPROACHES TO INTERSECTIONS CONTROLLED BY TRAFFIC SIGNALS WHICH ARE INTERCONNECTED WITH THE RAILROAD WARNING SIGNALS.
- EXTEND PAVEMENT MARKINGS TO THE INTERSECTION ONLY WHERE NEAR-SIDE TRAFFIC SIGNALS ARE USED.
- WHERE THE ANGLE BETWEEN THE DIAGONAL PAVEMENT MARKINGS AND THE TRACK WOULD BE LESS THAN 20°, THE PAVEMENT MARKINGS SHOULD BE PLACED IN THE OPPOSITE DIRECTION FROM THAT SHOWN.

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = craigre	DESIGNED -	REVISED - 11/06
ct:\pw\work\p\dot\craigre\d0124546\0570098-SHT-DETAILS.dgn		DRAWN -	REVISED - 09/2009 - KJT
	PLOT SCALE = 40.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 10/23/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND MARKERS
(RURAL & URBAN APPLICATIONS)

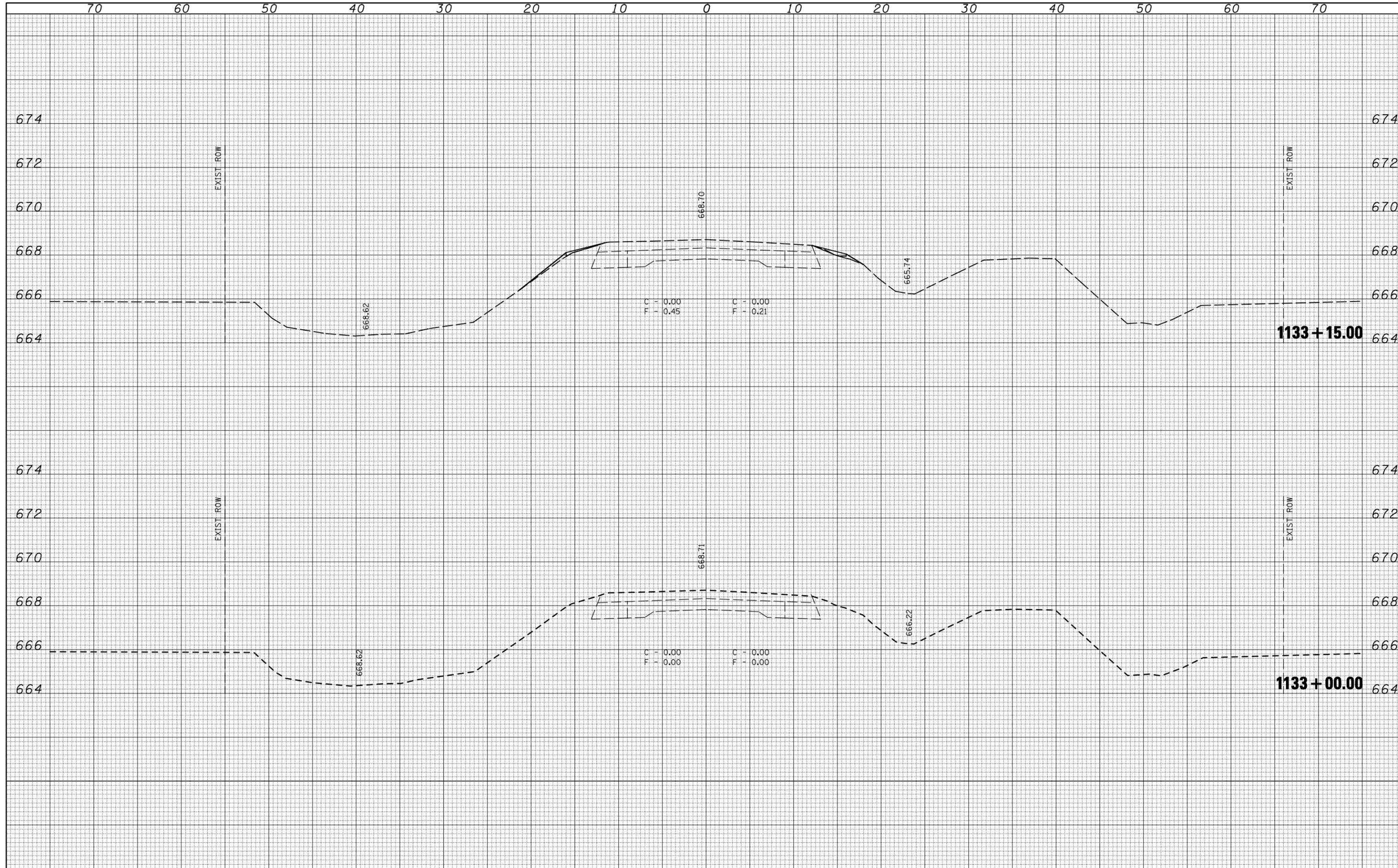
SCALE: SHEET NO. 4 OF 4 SHEETS STA. TO STA.

DISTRICT 5 DETAIL NO. 7800AAAA

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	119CR	CHAMPAIGN	29	24
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 70698	

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

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



FILE NAME =
 c:\pwwork\pwidot\CRAIGRE\d0124546\0570698-SHT

USER NAME = craigre
 DESIGNED - RTB
 DRAWN - RTB
 PLOT SCALE = 10.0000' / IN.
 PLOT DATE = 10/23/2009

REVISIED -
 REVISIED -
 REVISIED -
 REVISIED -
 DATE - 10/2009

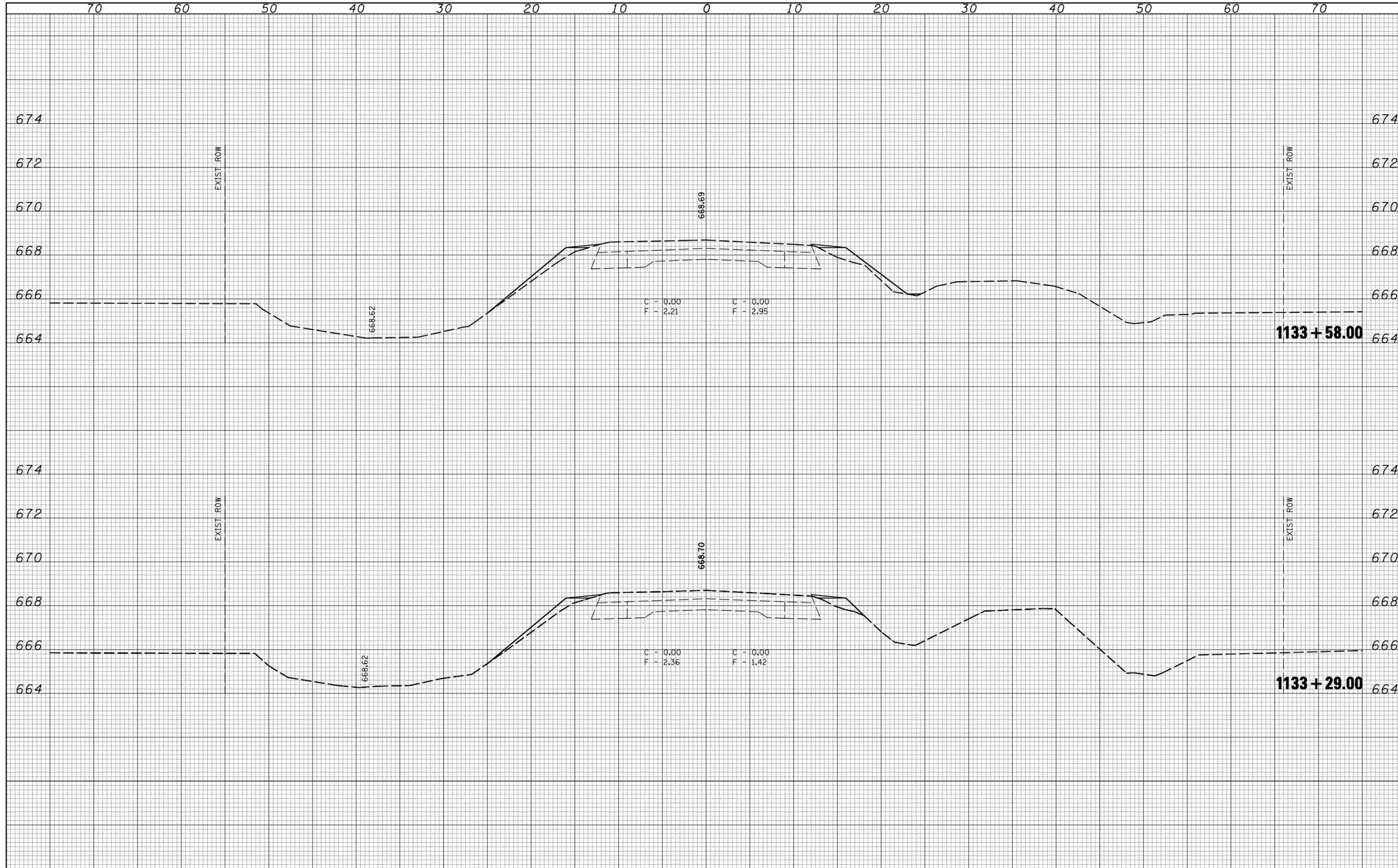
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS
 SCALE: SHEET NO. 3 OF 10 SHEETS STA. 1133+00 TO STA. 1133+15

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	119CR	CHAMPAIGN	29	25
CONTRACT NO. 70698				
ILLINOIS FED. AID PROJECT				

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	
NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	
NO.	



FILE NAME = c:\pwwork\pwidot\CRAIGRE\d0124546\0570698-SH1

USER NAME = craigre
 DESIGNED - RTB
 DRAWN - RTB
 CHECKED -
 DATE - 10/2009

REVISED -
 REVISED -
 REVISED -
 REVISED -

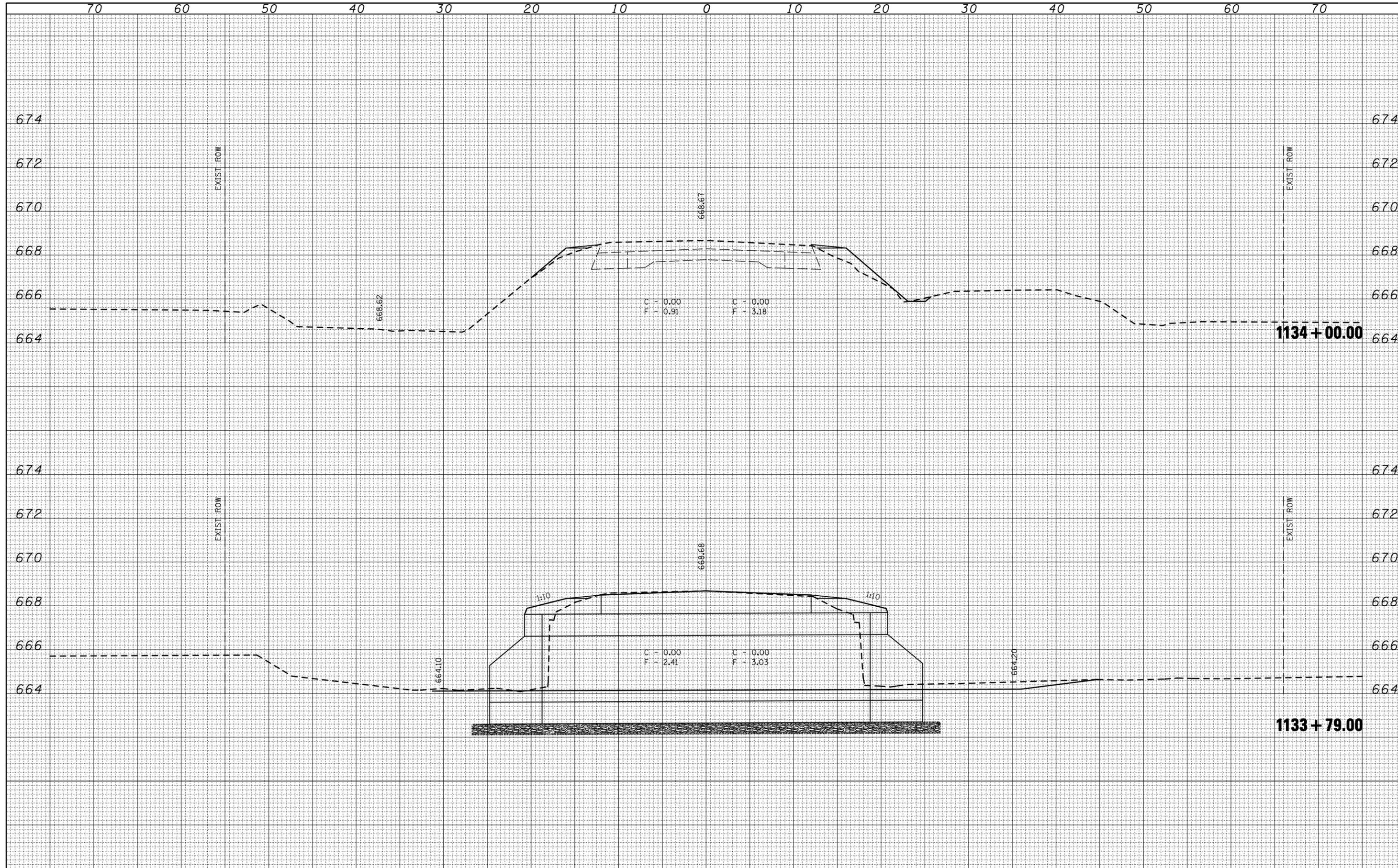
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS
 SCALE: SHEET NO. 4 OF 10 SHEETS STA. 1133+29 TO STA. 1133+58

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	119CR	CHAMPAIGN	29	26
CONTRACT NO. 70698				
ILLINOIS FED. AID PROJECT				

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

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



FILE NAME =
 c:\pwwork\pwwid\craigre\d0124546\0570698-SHT

USER NAME = craigre
 DESIGNED - RTB
 DRAWN - RTB
 CHECKED -
 DATE - 10/2009

REVISIED -
 REVISIED -
 REVISIED -
 REVISIED -

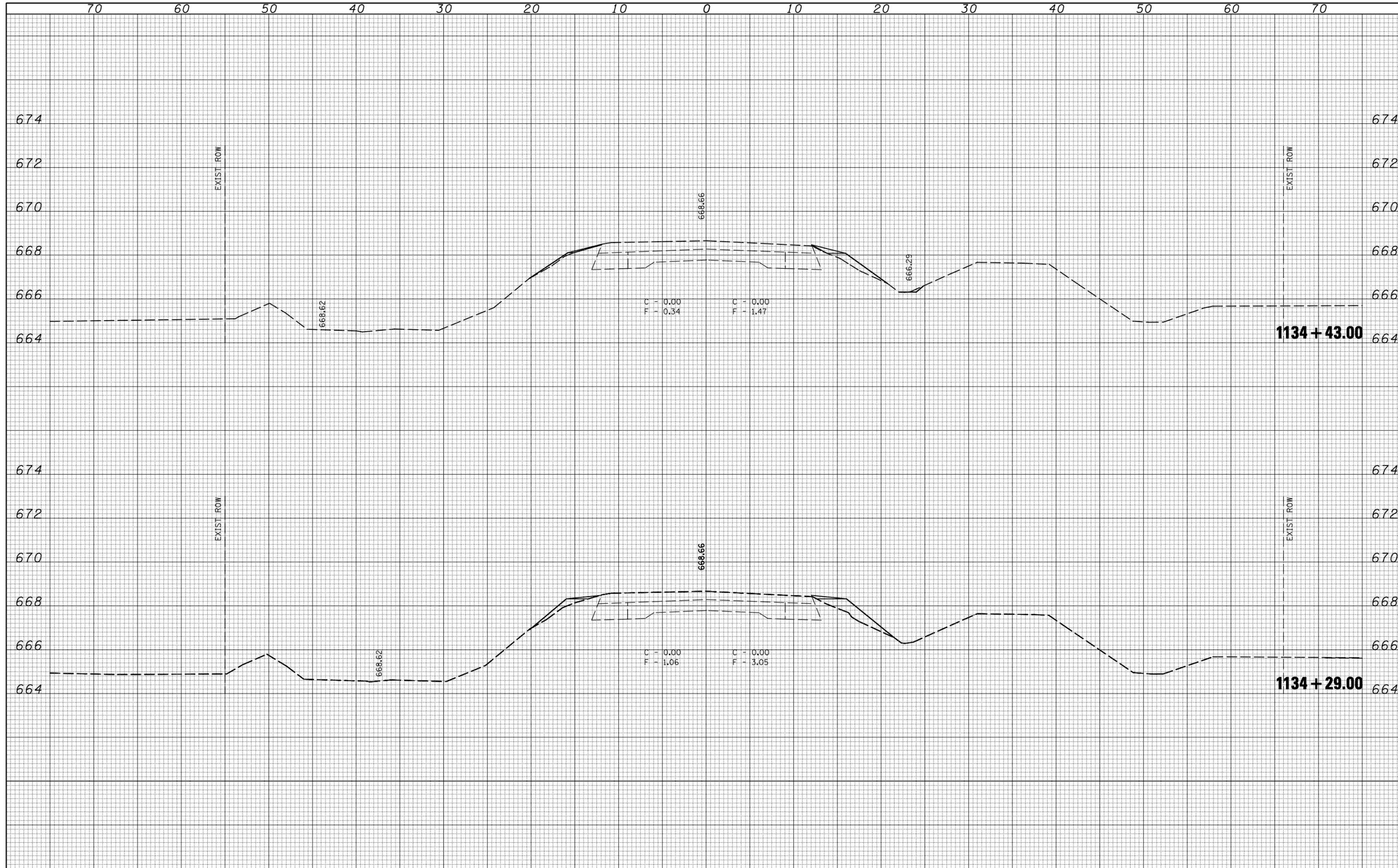
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS
 SCALE: SHEET NO. 5 OF 10 SHEETS STA. 1133+79 TO STA. 1134+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	119CR	CHAMPAIGN	29	27
CONTRACT NO. 70698			ILLINOIS FED. AID PROJECT	

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

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



FILE NAME =
 c:\pwwork\pwwid\craigre\d0124546\0570698-SH1

USER NAME = craigre
 DESIGNED - RTB
 DRAWN - RTB
 CHECKED -
 DATE - 10/2009

REVISED -
 REVISED -
 REVISED -
 REVISED -

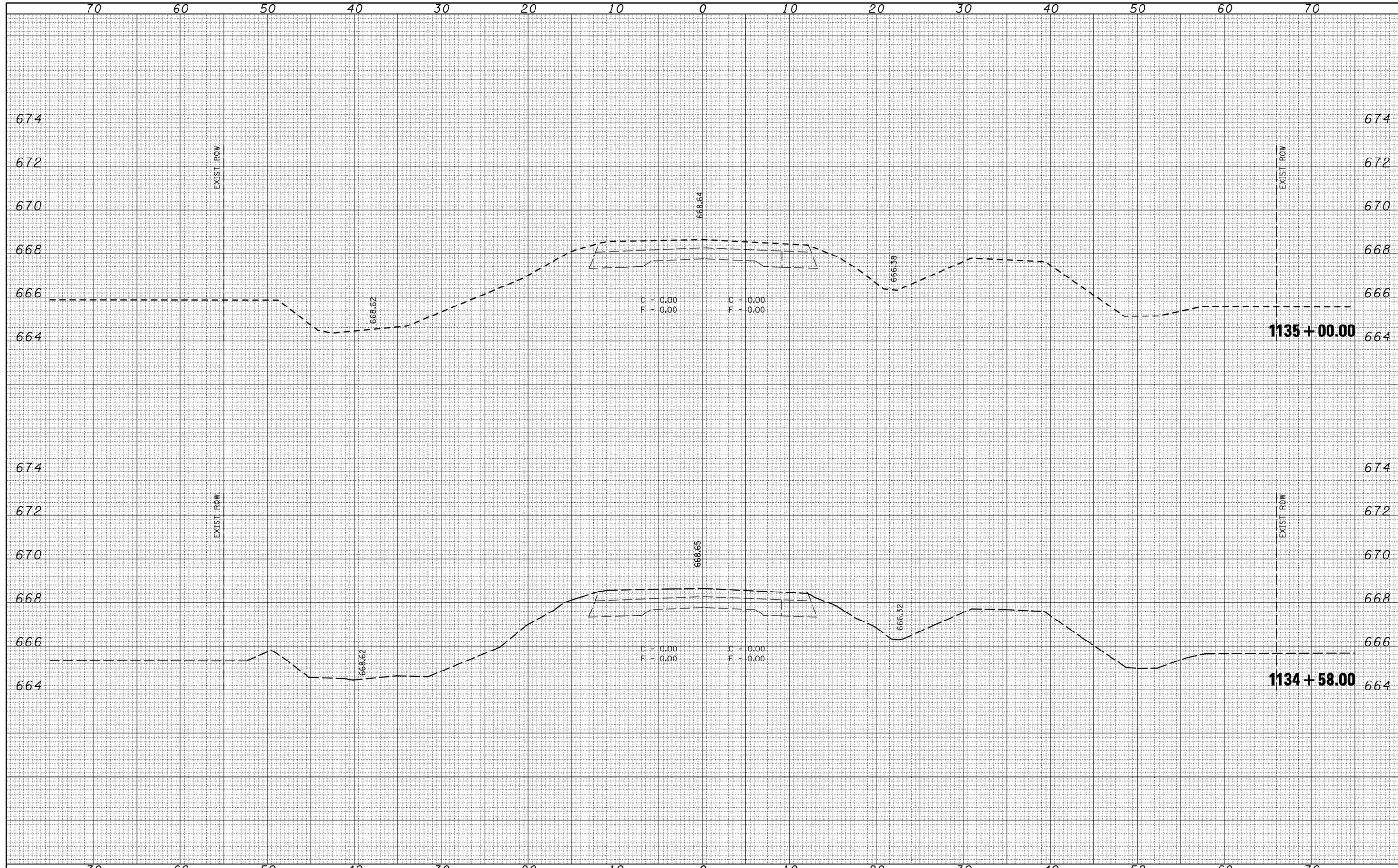
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS
 SCALE: SHEET NO. 6 OF 10 SHEETS STA. 1134+29 TO STA. 1134+43

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	119CR	CHAMPAIGN	29	28
CONTRACT NO. 70698			ILLINOIS FED. AID PROJECT	

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

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



FILE NAME = c:\pwwork\pwwidot\CRAIGRE\d0124546\0570698-SH1

USER NAME = craigre
 DESIGNED - RTB
 DRAWN - RTB
 CHECKED -
 DATE - 10/2009

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS
 SCALE: SHEET NO. 7 OF 10 SHEETS STA. 1134+58 TO STA. 1135+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	119CR	CHAMPAIGN	29	29
CONTRACT NO. 70698			ILLINOIS FED. AID PROJECT	