

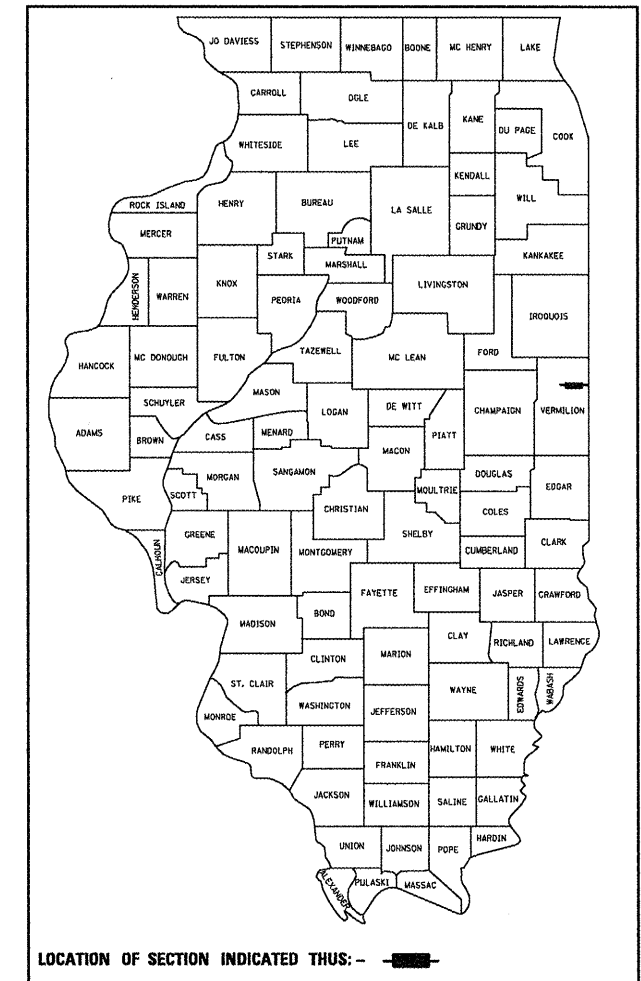
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

F.A.P. ROUTE 711 (IL 119)
SECTION 116CR
PROJECT F-0711(011)
CULVERT REPLACEMENT
VERMILION COUNTY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
711	116CR	VERMILION	50	1
		ILLINOIS	CONTRACT NO. 70801	

D-95-040-09

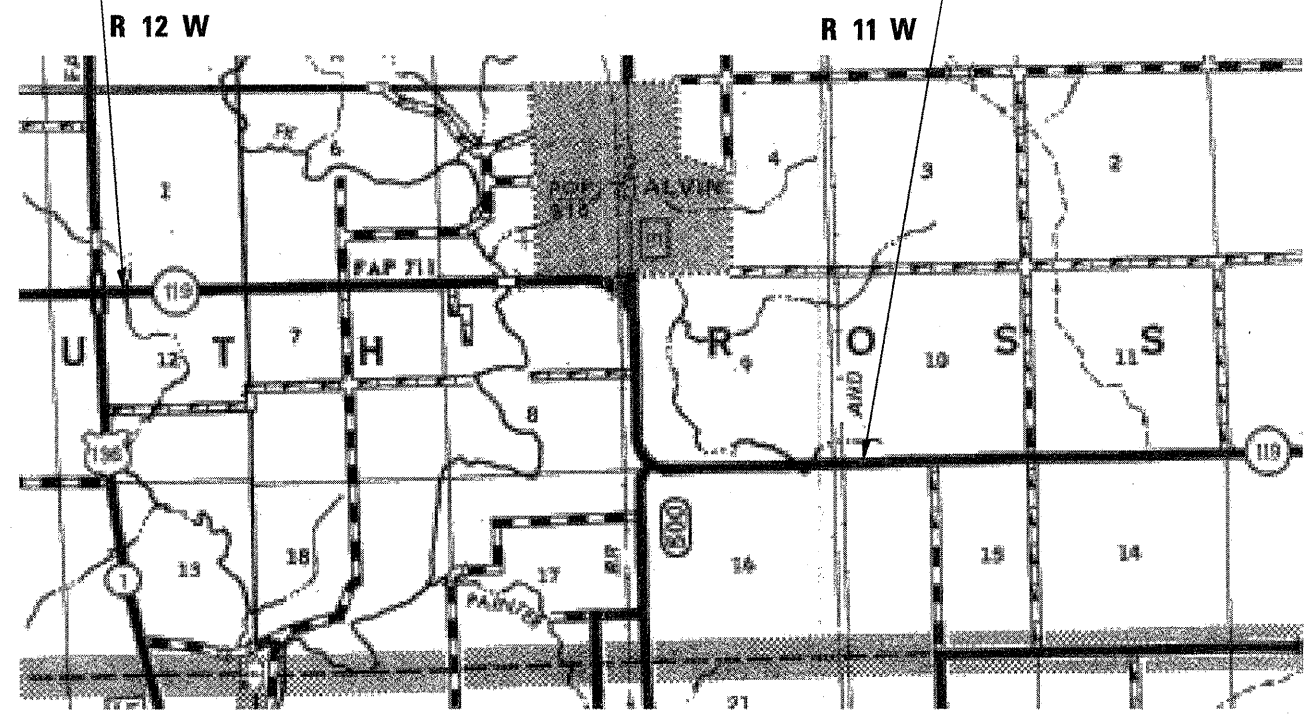


FOR INDEX OF SHEETS, SEE SHEET NO. 2
FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 4

EXISTING SN 092-8033 AT STA. 627+33.00
REPLACED WITH SN 092-8074 AT STA. 627+36.00
1 @ 12'x6'x87.5' PCBC W/CIP END SECTIONS

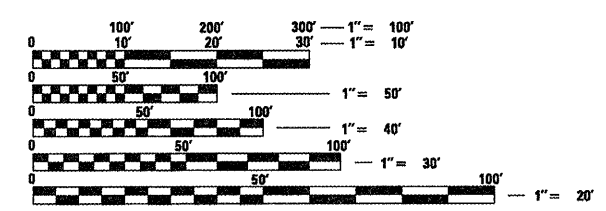
EXISTING SN 092-8036 REPLACED WITH
SN 092-8073 AT STA. 889+37.00
2 @ 9'x3'42' PCBC W/CIP END SECTIONS

DITCH 0.1 & 5.1 MILES EAST OF IL 1
C-95-040-09



CURRENT TRAFFIC DATA

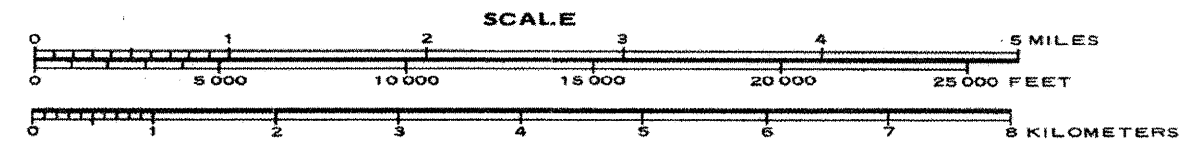
SN 092-8033	1,900 (2010)
SN 092-8036	950 (2010)



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: KEVIN TRAPP
DESIGNER: MATT BOWER
(217) 465-4181
CONTRACT NO. 70801



GROSS & NET LENGTH OF SN 092-8074 = 41.00 FT. = 0.008 MILE
GROSS & NET LENGTH OF SN 092-8073 = 45.00 FT. = 0.009 MILE

GROSS & NET LENGTH = 86.00 FT. = 0.017 MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 11/30 2010

Joseph R. Cowles
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

February 4, 2011
Scott E. Stitt, P.E., B.S.
ENGINEER OF DESIGN AND ENVIRONMENT

February 4, 2011
Christine M. Reed, P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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

INDEX OF SHEETS

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2	INDEX OF SHEETS / HIGHWAY STANDARDS
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27	FIELD TILE SYSTEMS (TREATMENT OF EXISTING)
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32	LOCATION MAP OF CROSS SECTIONS CUT ALONG BOX CULVERTS
33-50	CROSS SECTION SHEETS

HIGHWAY STANDARDS

STANDARD NO.	DESCRIPTION
000001-06	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
420001-07	PAVEMENT JOINTS
442201-03	CLASS C AND D PATCHES
515001-03	NAME PLATES FOR BRIDGES
542401-01	METAL END SECTIONS FOR PIPE CULVERTS
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 4.5 M (15') AWAY
701006-03	OFF-ROAD OPERATIONS, 2L, 2W, 4.5 M (15') TO 600 MM (24")
701011-02	OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701201-04	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS \geq 45 MPH
701206-03	LANE CLOSURE, 2L, 2W, NIGHT ONLY, FOR SPEEDS \geq 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATION - DAY ONLY
701901-01	TRAFFIC CONTROL DEVICES
780001-02	TYPICAL PAVEMENT MARKINGS

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.-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.-250C

SEEDING, CLASS 7 AND MULCH, METHOD 2 IS INCLUDED IN THIS CONTRACT TO SEED THE AREAS ASSOCIATED WITH BOX CULVERT REPLACEMENTS DURING TIME PERIODS WHEN PERMANENT SEEDING IS NOT ALLOWED. SOME OR ALL OF THE CLASS 7 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

MIXTURE USE	INCIDENTAL
AC/PG	PG 64-22
RAP% (MAX)	15
DESIGN AIR VOIDS	4.0% @ Ndes=50
MIX COMP(GRADATION)	IL 9.5
FRICTION AGGREGATE	MIX C

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.-540 SPL

ANY LOOSE CONCRETE WITHIN THE JOB LIMITS SHALL BE REMOVED AND WILL NOT BE PAID FOR BUT WILL BE INCIDENTAL TO THE PAY ITEM REMOVAL OF EXISTING STRUCTURES.

G.N.-542

BEFORE ORDERING PIPE CULVERTS, THE CONTRACTOR SHALL CONSULT THE ENGINEER FOR THE EXACT LENGTHS.

G.N.-550

BEFORE ORDERING STORM SEWERS, THE CONTRACTOR SHALL CONSULT THE ENGINEER FOR THE EXACT LENGTHS.

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

FILE NAME =	USER NAME = bowerm1	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN -	REVISED -			711	116CR	VERMILION	50	3	
		CHECKED -	REVISED -			CONTRACT NO. 70801					
		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					
		PLOT SCALE = 40,0000' / IN.		SCALE: N/A		SHEET NO. OF SHEETS		STA. TO STA.			
		PLOT DATE = 11/30/2010									

LOCATION OF WORK:

FAP 711(IL 119)
VERMILION COUNTY
SN 092-8074 & 092-8073
RURAL 2-LANE
80% FEDERAL
20% STATE

FUNDING BREAKOUT:

CONSTRUCTION TYPE CODE:

0040

CODE NO	ITEM	UNIT	TOTAL QUANTITY
20200100	EARTH EXCAVATION	CU YD	248.0
20700220	POROUS GRANULAR EMBANKMENT	CU YD	225.0
20800150	TRENCH BACKFILL	CU YD	43.0
21301052	EXPLORATION TRENCH 52" DEPTH	FOOT	410.0
* 25000200	SEEDING, CLASS 2	ACRE	0.5
* 25000350	SEEDING, CLASS 7	ACRE	0.5
* 25000400	NITROGEN FERTILIZER NUTRIENT	POUND	45.0
* 25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	45.0
* 25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	45.0
* 25100115	MULCH, METHOD 2	ACRE	0.5
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	50.0
28000305	TEMPORARY DITCH CHECKS	FOOT	100.0
28000400	PERIMETER EROSION BARRIER	FOOT	888.0
28000500	INLET AND PIPE PROTECTION	EACH	7.0
28100107	STONE RIPRAP, CLASS A4	SQ YD	430.0
28100201	STONE RIPRAP, CLASS A1	TON	42.0
28200200	FILTER FABRIC	SQ YD	430.0
35101800	AGGREGATE BASE COURSE, TYPE B 6"	SQ YD	59.0
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	258.0
44201347	CLASS C PATCHES, TYPE IV, 9 INCH	SQ YD	130.0
44201409	CLASS C PATCHES, TYPE IV, 14 INCH	SQ YD	119.0
44213100	PAVEMENT FABRIC	SQ YD	249.0
44213204	TIE BARS 3/4"	EACH	44.0
48101500	AGGREGATE SHOULDERS, TYPE B 6"	SQ YD	334.0
50100300	REMOVAL OF EXISTING STRUCTURES NO. 1	EACH	1.0
50100400	REMOVAL OF EXISTING STRUCTURES NO. 2	EACH	1.0
50105220	PIPE CULVERT REMOVAL	FOOT	213.0

* SPECIALTY ITEMS

LOCATION OF WORK:

FAP 711(IL 119)
VERMILION COUNTY
SN 092-8074 & 092-8073
RURAL 2-LANE
80% FEDERAL
20% STATE

FUNDING BREAKOUT:

CONSTRUCTION TYPE CODE:

0040

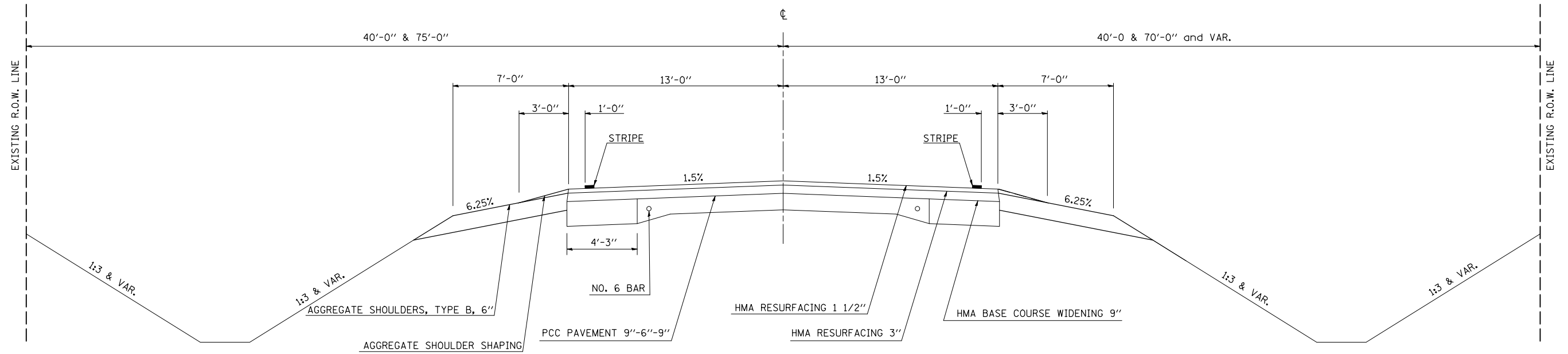
CODE NO	ITEM	UNIT	TOTAL QUANTITY
51500100	NAME PLATES	EACH	2.0
54001001	BOX CULVERT END SECTIONS, CULVERT NO. 1	EACH	2.0
54001002	BOX CULVERT END SECTIONS, CULVERT NO. 2	EACH	2.0
54020903	PRECAST CONCRETE BOX CULVERTS 9' X 3' (M273)	FOOT	84.0
54021206	PRECAST CONCRETE BOX CULVERTS 12' X 6' (M273)	FOOT	87.5
54213453	END SECTIONS 18"	EACH	8.0
5421A072	PIPE CULVERT CLASS A, TYPE 172" (TEMPORARY)	FOOT	18.0
542D1063	PIPE CULVERTS, CLASS D, TYPE 2 18"	FOOT	186.0
55100600	STORM SEWER REMOVAL 14"	FOOT	91.0
61101016	STORM SEWERS PROTECTED, CLASS A, 14"	FOOT	6.0
61101026	STORM SEWERS PROTECTED, CLASS A, 24"	FOOT	88.0
61133200	FIELD TILE JUNCTION VAULTS, 3' DIA.	EACH	1.0
61133300	FIELD TILE JUNCTION VAULTS, 4' DIA.	EACH	2.0
67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	4.0
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	9.0
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	202.0
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	3.0
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	202.0
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	2.0
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	2.0
X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	20.0
Z0026346	NIGHTTIME WORK ZONE LIGHTING	L SUM	1.0
Z0037200	PAVEMENT GRINDING	SQ YD	249.0

* SPECIALTY ITEMS

FILE NAME =	USER NAME = bowerm	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
ct:\pwork\psidot\bowerm\ld0186764\0570801-sh1-500.dgn		DRAWN -	REVISED -		SCALE: N/A	SHEET NO.	OF	SHEETS	STA.	TO STA.	711	116CR	VERMILION	50	4
		CHECKED -	REVISED -										CONTRACT NO.	70801	
		DATE -	REVISED -										ILLINOIS FED. AID PROJECT		

EXISTING TYPICAL CROSS SECTION

STATION	TO	STATION
627+14.00		627+55.00
889+12.00		889+57.00



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ct:\pw\work\p\dot\bowerml\d0186764\7080	Typical.dgn	DRAWN - MLB	REVISED -
PLOT SCALE = 40.0000' / IN.		CHECKED -	REVISED -
PLOT DATE = 11/30/2010		DATE - 5/5/2010	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

EXISTING TYPICAL CROSS SECTION

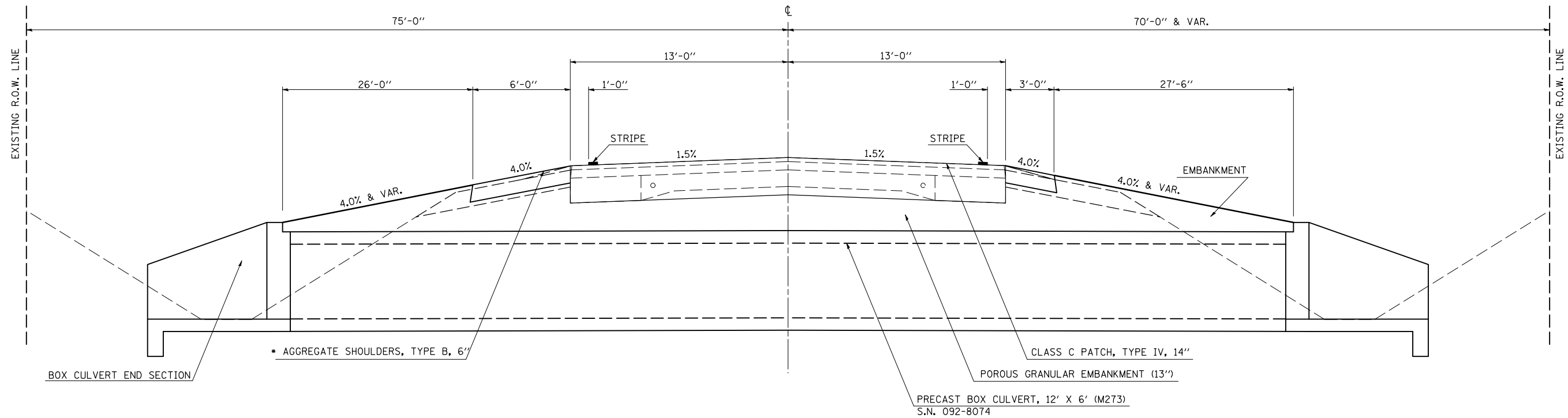
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
711	116CR	VERMILION	50	5
CONTRACT NO. 70801				
ILLINOIS FED. AID PROJECT				

1 PROPOSED TYPICAL CROSS SECTION

STATION TO STATION
627+14.00 627+55.00

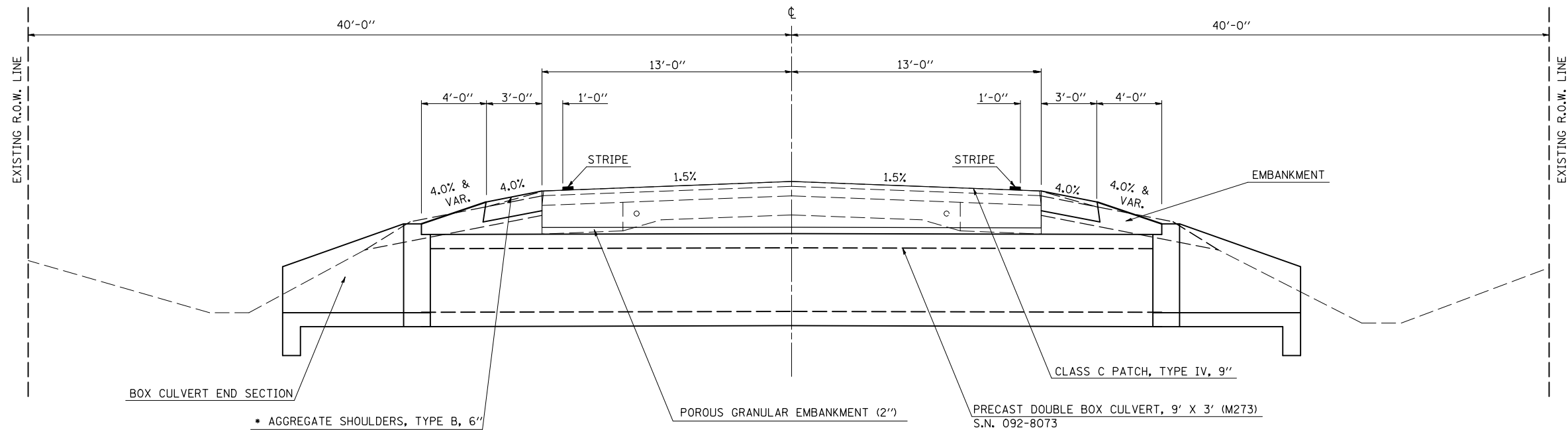
• AGGREGATE SHOULDERS, TYPE B, 6" SHALL
EXTEND FROM STATION 626+36.00 TO 628+36.00



2 PROPOSED TYPICAL CROSS SECTION

STATION TO STATION
889+12.00 889+57.00

• AGGREGATE SHOULDERS, TYPE B, 6" SHALL
EXTEND FROM STATION 888+37.00 TO 890+37.00



FILE NAME =	USER NAME = bowerml	DESIGNED - MLB	REVISED -
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PLOT SCALE = 40.0000' / IN.	CHECKED -	DATE - 5/5/2010	REVISED -
PLOT DATE = 11/30/2010	DATE -		

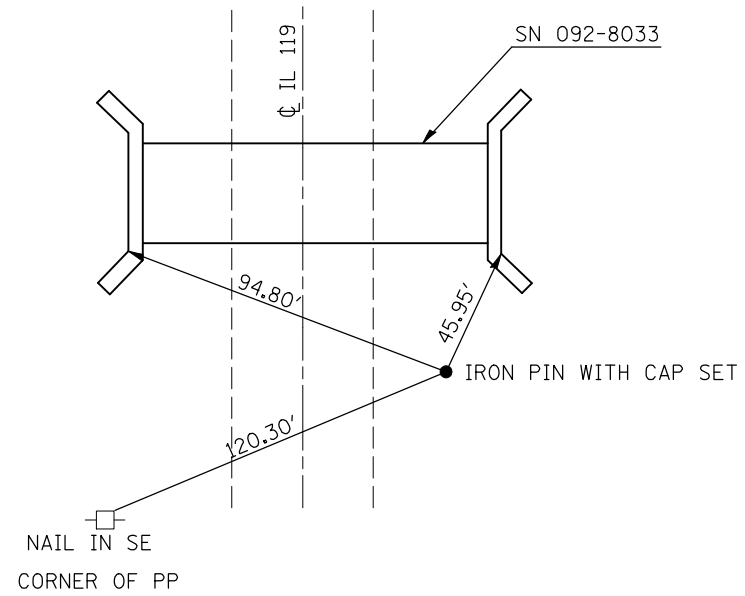
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED TYPICAL CROSS SECTIONS

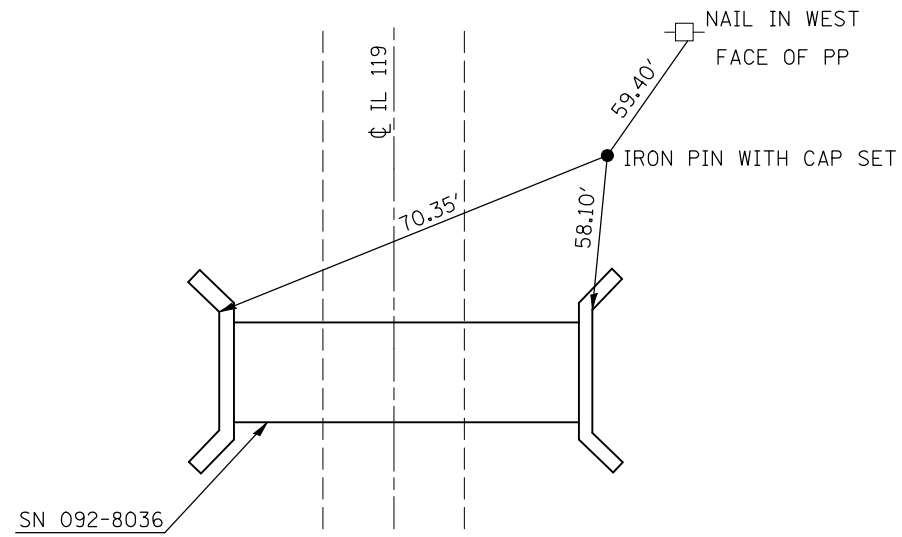
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
711	116CR	VERMILION	50	6
CONTRACT NO. 70801				
ILLINOIS FED. AID PROJECT				

TS 401
STA. 626 + 84.07, 32.86' RT



TS 407
STA. 889 + 98.45, 18.27' RT



FILE NAME =	USER NAME = bowerm1	DESIGNED -	REVISED -
ct:\pw\work\p\dot\bowerm1\d0186764\7080	details.dgn	DRAWN -	REVISED -
	PLOT SCALE = 40.0000' / IN.	CHECKED -	REVISED -
	PLOT DATE = 11/30/2010	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
711	116CR	VERMILION	50	7
CONTRACT NO. 70801				
ILLINOIS FED. AID PROJECT				

EARTHWORK ANALYSIS

LOCATION	20200100 EARTH EXCAVATION		EARTHWORK BALANCE	
	EARTH EXCAVATION	EMBANKMENT ADJUSTED FOR SHRINKAGE (25%)	EMBANKMENT	WASTE (+) OR SHORTAGE (-)
	CU YD	CU YD	CU YD	CU YD
RT 9+25.00 TO 9+80.00	96.0	72.0	65.0	7.00
LT 9+25.00 TO 9+80.00	31.00	23.3	20.00	3.25
RT 10+22.00 TO 10+70.00	30.0	22.5	20.0	2.50
LT 10+22.00 TO 10+70.00	58.0	43.5	79.0	-35.50
* RT 626+36.00 628+36.00	11.1	8.3	0.0	8.33
* LT 626+36.00 628+36.00	11.1	8.3	0.0	8.33
RT 889+00.00 891+50.00	38.0	28.5	10.0	18.50
LT 887+00.00 892+00.00	99.00	74.25	8.00	66.25
TOTALS=	247.2	185.4	117.0	78.7
FINAL TOTALS=	248.0	186.0	117.0	79.0

EARTHWORK BALANCE = EARTH EXCAVATION X ADJUSTMENT FOR SHRINKAGE (0.75) - EMBANKMENT

EARTH EXCAVATION = 248.0 CUBIC YARDS

724.0 CUBIC YARDS OF STRUCTURE EXCAVATION FROM SN 092-8074 AND SN 092-8073 IS UNSUITABLE MATERIAL FOR EMBANKMENT

* EXCAVATION FOR THESE AGGREGATE SHOULDERS NOT CALCULATED WITH THE CROSS SECTIONS.

20700220 POROUS GRANULAR EMBANKMENT

LOCATION	VOLUME (CU YD)	STATION	VOLUME (CU YD)
SN 092-8074	183.0	889+17.00	18.0' LT TO 18.0' RT 43.0
SN 092-8073	42.0		TOTAL= 43.0
TOTAL=	225.0		USE= 43.0

USE= 225.0
21301052 EXPLORATION TRENCH 52" DEPTH

STATION	TO	STATION	LENGTH (FT)
LT 626+69		628+19	150.0
RT 626+80		628+00	120.0
LT 889+02		889+72	70.0
RT 889+02		889+72	70.0
TOTAL=			410.0
USE=			410.0

LOCATION	25000200 SEEDING CLASS 2		25000400 NITROGEN FERTILIZER	25000500 PHOSPHORUS FERTILIZER	25000600 POTASSIUM FERTILIZER	25100115 MULCH METHOD 2	28000250 TEMPORARY EROSION CONTROL SEEDING
	ACRE	ACRE	POUND	POUND	POUND	ACRE	POUND
SN 092-8074	0.15	0.15	13.5	13.5	13.5	0.15	15.0
SN 092-8073	0.35	0.35	31.5	31.5	31.5	0.35	35.0
TOTAL=	0.50	0.50	45.0	45.0	45.0	0.50	50.0
USE=	0.5	0.5	45.0	45.0	45.0	0.5	50.0

28000305 TEMPORARY DITCH CHECKS

STATION	LENGTH (FT)
887+00.00 LT	10.0
888+00.00 LT	10.0
889+00.00 LT & RT	20.0
889+75.00 LT & RT	20.0
890+75.00 LT & RT	20.0
891+50.00 RT	10.0
892+00.00 LT	10.0
TOTAL=	100.0
USE=	100.0

28000400 PERIMETER EROSION BARRIER

STATION	TO	STATION	LENGTH (FT)
626+83.00		626+93.00 RT	10.0
626+69.00		626+79.00 LT	10.0
627+23.00		627+56.00 RT	33.0
627+43.00		627+75.00 LT	32.0
627+87.00		627+97.00 RT	10.0
628+10.00		628+20.00 LT	10.0
886+90.00		892+10.00 LT	520.0
888+97.00		891+60.00 RT	263.0
TOTAL=			888.0
USE=			888.0

28000500 INLET AND PIPE PROTECTION

STATION	EACH
626+65.53 LT	1.0
627+16.00 RT	1.0
628+08.88 LT	1.0
628+15.63 RT	1.0
889+17.00 LT	1.0
889+17.00 RT	1.0
889+33.39 RT	1.0
TOTAL=	7.0
USE=	7.0

28100107 STONE RIP RAP CLASS A4

LOCATION	AREA (SQ YD)
SN 092-8074 LT	140.9
SN 092-8074 RT	105.4
SN 092-8073 LT	91.7
SN 092-8073 RT	91.7
TOTAL=	429.7
USE=	430.0

28200200 FILTER FABRIC

LOCATION	AREA (SQ YD)
SN 092-8074 LT	140.9
SN 092-8074 RT	105.4
SN 092-8073 LT	91.7
SN 092-8073 RT	91.7
TOTAL=	429.7
USE=	430.0

35101800 AGGREGATE BASE COURSE, TYPE B 6"

STATION	AREA (SQ YD)
626+64.42 RT	14.0
626+88.98 LT	13.2
627+60.89 LT	20.8
628+03.67 RT	11.0
TOTAL=	59.0
USE=	59.0

40200800 AGGREGATE SURFACE COURSE, TYPE B

STATION	TONS
626+64.42 RT	58.5
626+88.98 LT	78.8
627+60.89 LT	68.7
628+03.67 RT	51.8
TOTAL=	257.8
USE=	258.0

44201347 CLASS C PATCHES, TYPE IV, 9"

STATION	TO	STATION	AREA SQ YD
LT 889+12.00		889+57.00	65.0
RT 889+12.00		889+57.00	65.0
TOTAL=			130.0
USE=			130.0

44201409 CLASS C PATCHES, TYPE IV, 14"

STATION	TO	STATION	AREA SQ YD
LT 627+14.00		627+55.00	59.2
RT 627+14.00		627+55.00	59.2
TOTAL=			118.4
USE=			119.0

44213100 PAVEMENT FABRIC

STATION	TO	STATION	AREA SQ YD
LT 627+14.00		627+55.00	59.2
RT 627+14.00		627+55.00	59.2
LT 889+12.00		889+57.00	65.0
RT 889+12.00		889+57.00	65.0
TOTAL=			248.4
USE=			249.0

44213204 TIE BARS 3/4"

STATION	TO	STATION	EACH
627+14.00		627+55.00	21.0
889+12.00		889+57.00	23.0
TOTAL=			44.0
USE=			44.0

48101500 AGGREGATE SHOULDERS, TYPE B, 6"

STATION	TO	STATION	WIDTH (FT)	AREA (SQ YD)
RT 626+36.00		628+36.00	3.0	66.7
LT 626+36.00		628+36.00	6.0	133.33
RT 888+37.00		890+37.00	3.0	66.7
LT 888+37.00		890+37.00	3.0	66.7
TOTAL=				333.4
USE=				334.0

54001001 BOX CULVERT END SECTIONS, CULVERT NO. 1

LOCATION	EACH
SN 092-8074	1.0
SN 092-8074	1.0
TOTAL=	2.0
USE=	2.0

54001002 BOX CULVERT END SECTIONS, CULVERT NO. 2

LOCATION	EACH
SN 092-8073	1.0
SN 092-8073	1.0
TOTAL=	2.0
USE=	2.0

542D1063 PIPE CULVERTS, CLASS D, TY 2, 18"

STATION	TO	STATION	AREA (SQ FT)	54213453 END SECTIONS 18" (EACH)
RT 626+65.53		627+12.50	47.0	2.0
LT 626+76.02		627+16.00	47.0	2.0
RT 627+62.00		628+08.88	52.0	2.0
LT 627+64.00		628+15.63	40.0	2.0
TOTAL=			186.0	8.0
USE=			186.0	8.0

70300100 SHORT-TERM PAVEMENT MARKING

STATION	TO	STATION	LENGTH (FT)	70301000 WORK ZONE PAVEMENT MARKING REMOVAL SQ FT
627+14.00		627+55.00	4.1	1.4 (SKIP-DASH)
889+12.00		889+57.00	4.5	1.5 (SKIP-DASH)
TOTAL=			8.6	3.0
USE=			9.0	3.0

78001110 PAINT PAVEMENT MARKING - LINE 4"

STATION	TO	STATION	LENGTH (FT)
RT 627+14.00		627+55.00	41.0
LT 627+14.00		627+55.00	41.0
CL 627+14.00		627+55.00	10.0
RT 889+12.00		889+57.00	45.0
LT 889+12.00		889+57.00	45.0
CL 889+12.00		889+57.00	20.0
TOTAL=			202.0
USE=			202.0

78100100 RAISED REFLECTIVE PAVEMENT MARKER

STATION	TO	STATION	(EACH)
627+14.00		627+55.00	1.0
889+12.00		889+57.00	1.0
TOTAL=			2.0
USE=			2.0

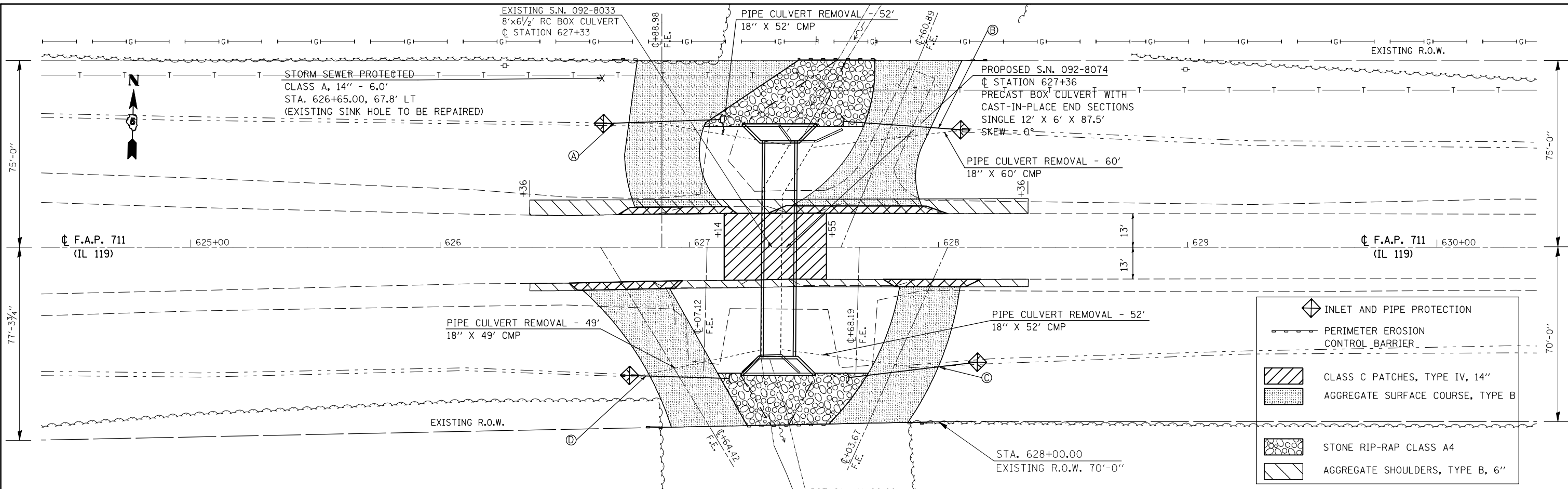
78300200 RAISED REFLECTIVE PAVEMENT MARKER REMOVAL

STATION	TO	STATION	(EACH)
627+14.00		627+55.00	1.0
889+12.00		889+12.00	1.0
TOTAL=			2.0
USE=			2.0

Z0037200 PAVEMENT GRINDING

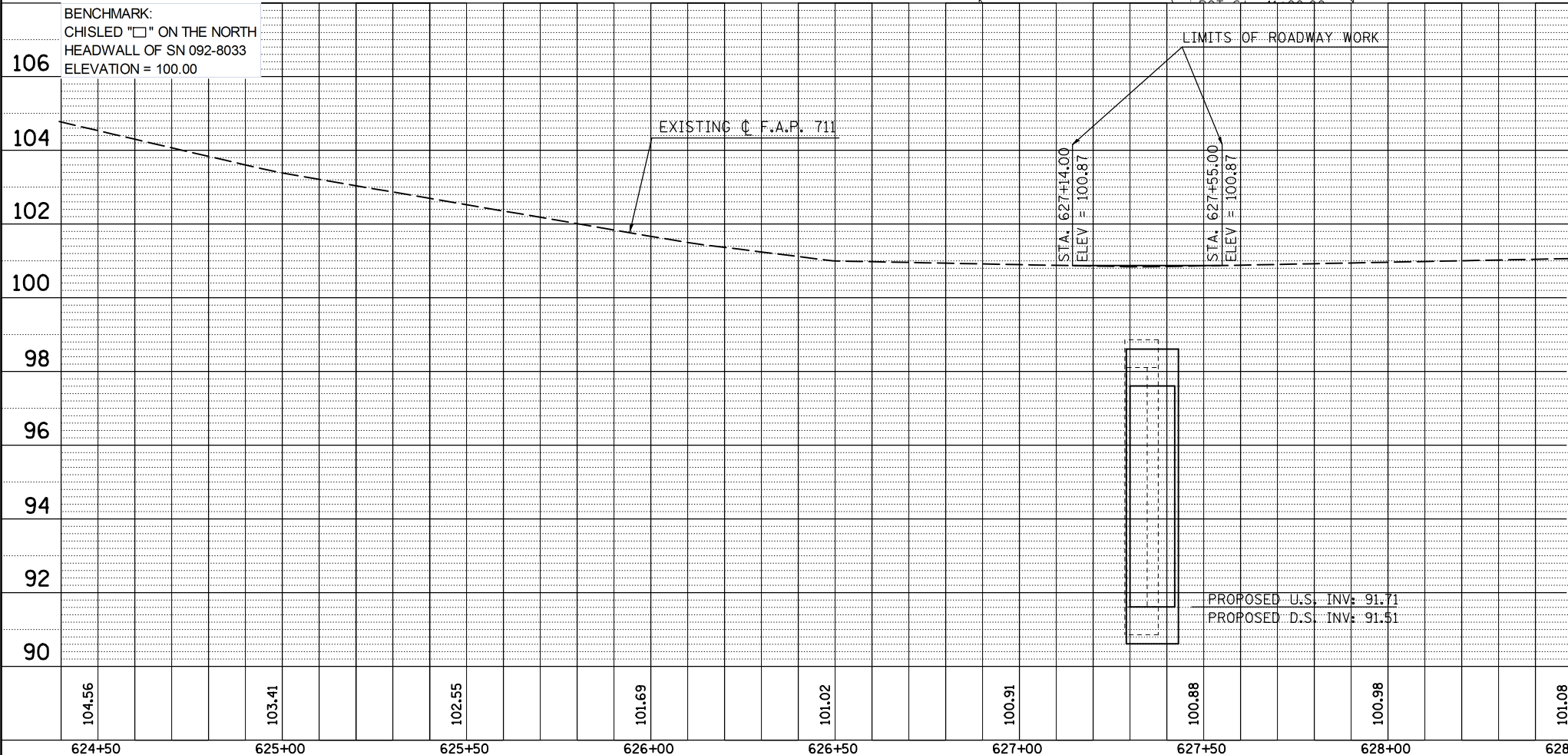
STATION	TO	STATION	AREA (SQ YD)
RT 627+14.00		627+55.00	59.5
LT 627+14.00		627+55.00	59.5
RT 889+12.00		889+57.00	65.0
LT 889+12.00		889+57.00	65.0
TOTAL			249.0
USE=			249.0

PLAN	SURVEYED	DATE
	PLOTTED	BY
	CHECKED	
	ALIGNED	
	FILE NAME	
	NO.	



	INLET AND PIPE PROTECTION
	PERIMETER EROSION CONTROL BARRIER
	CLASS C PATCHES, TYPE IV, 14"
	AGGREGATE SURFACE COURSE, TYPE B
	STONE RIP-RAP CLASS A4
	AGGREGATE SHOULDERS, TYPE B, 6"

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	CHECKED	
	GRADES	
	STRUCTURE	
	NOTATION	
	CHRD	
	NO.	



BENCHMARK: CHISLED "□" ON THE NORTH HEADWALL OF SN 092-8033 ELEVATION = 100.00

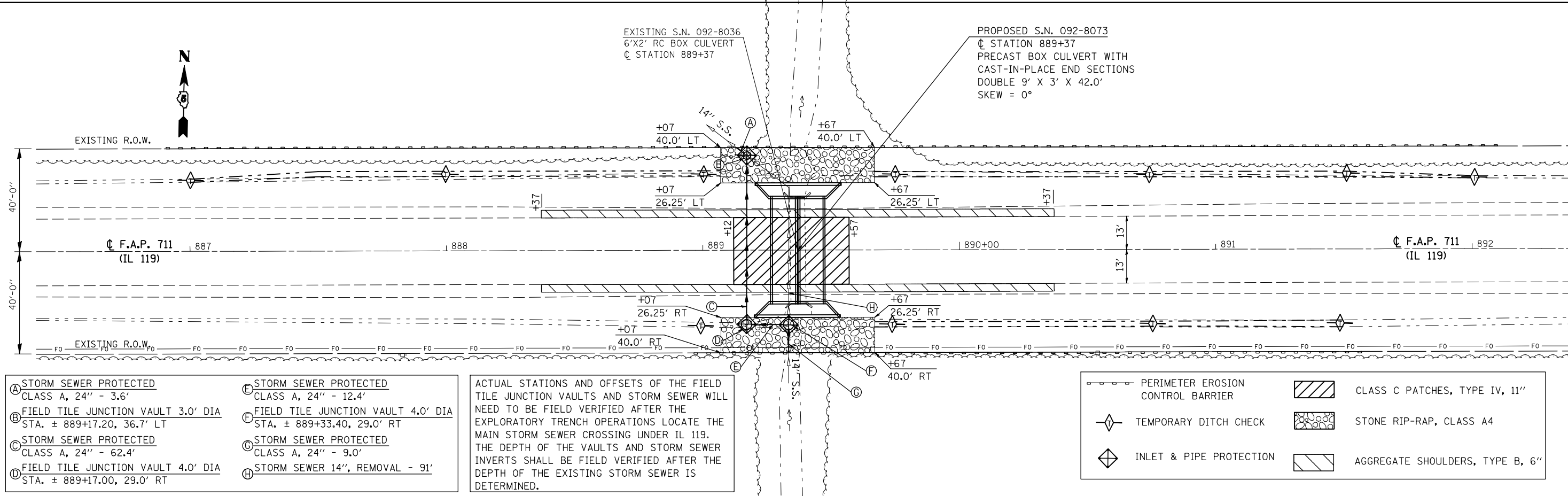
Existing Low Grade Elev. = 100.87 at Sta. 627+33									
Flood	Freq. Yr.	Q Ft ³ /s	Opening - ft		Natural H.W.E.	Head - ft		Headwater Elevation	
			Existing	Proposed		Existing	Proposed	Existing	Proposed
Design	10	310	40.5	52.6			97.7	96.5	
Base	50	504	52	72			99.9	97.9	
Overtop Existing	100	590	52	72			Overtopped	98.5	
Overtop Proposed							Overtopped		
Max. Calc.	500	799	52	72			Overtopped	100.2	

10 YEAR VELOCITY THROUGH EXISTING BRIDGE = 8 ft/s 10 YEAR VELOCITY THROUGH PROPOSED BRIDGE = 6 ft/s

①	PIPE CULVERTS, CLASS D, TYPE 2, 18" X 47.0' WITH END SECTIONS, 18" - 2.0 EACH 49.6' LT., STA. 626+65.53 U.S.F.L. = 96.46 51.2' LT., STA. 627+12.50 D.S.F.L. = 96.00
②	PIPE CULVERTS, CLASS D, TYPE 2, 18" X 47.0' WITH END SECTIONS, 18" - 2.0 EACH 50.5' LT., STA. 627+62.00 D.S.F.L. = 96.10 47.1' LT., STA. 628+08.88 U.S.F.L. = 96.53
③	PIPE CULVERTS, CLASS D, TYPE 2, 18" X 52.0' WITH END SECTIONS, 18" - 2.0 EACH 52.3' RT., STA. 627+64.00 D.S.F.L. = 96.28 46.1' RT., STA. 628+15.63 U.S.F.L. = 96.75
④	PIPE CULVERTS, CLASS D, TYPE 2, 18" X 40.0' WITH END SECTIONS, 18" - 2.0 EACH 51.4' RT., STA. 626+76.02 U.S.F.L. = 95.97 52.6' RT., STA. 627+16.00 D.S.F.L. = 95.58

PLAN	SURVEYED	DATE
	PLOTTED	BY
	NOTED	
	CHECKED	
	FILE NAME	

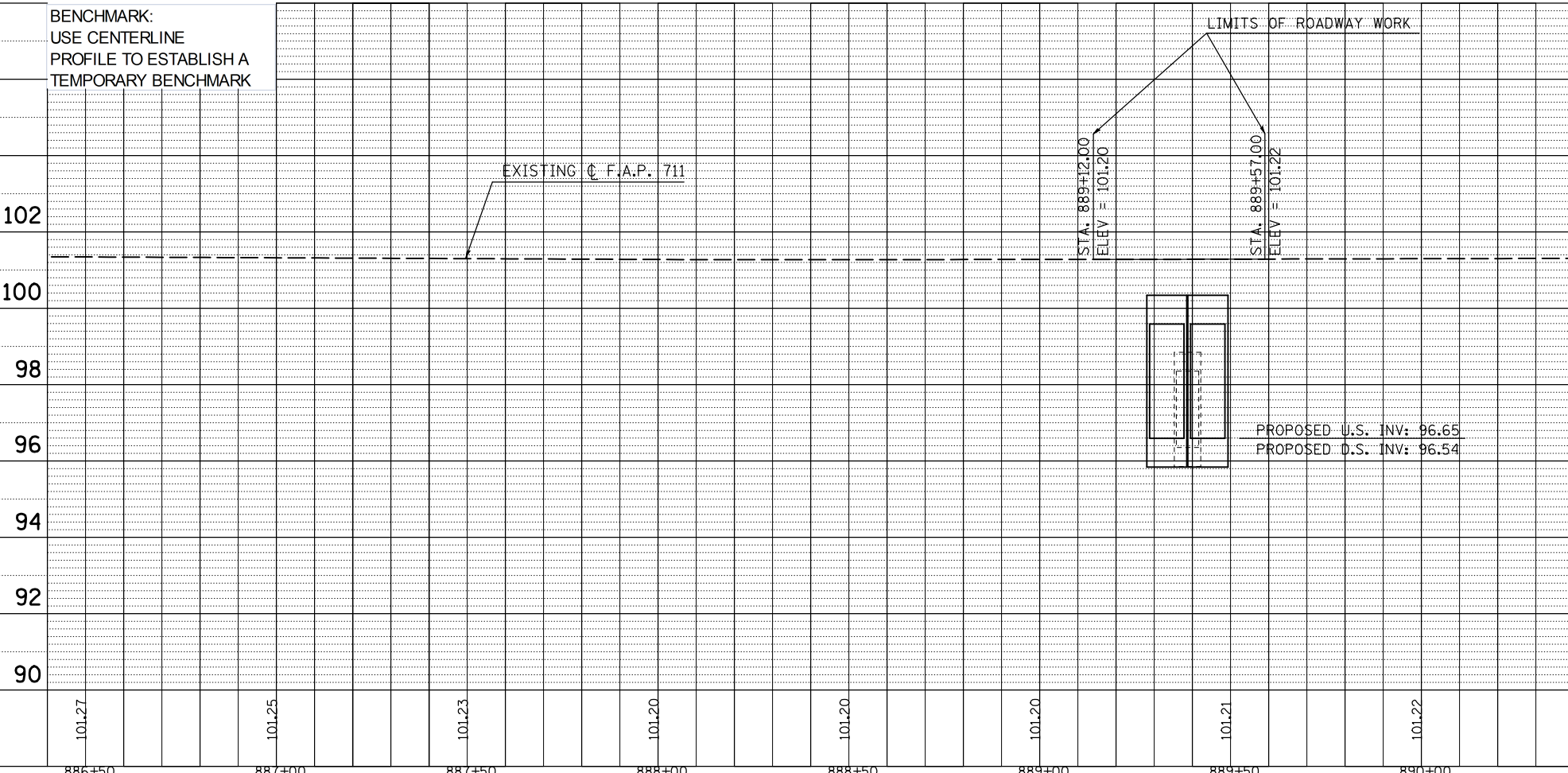
PROFILE	SURVEYED	DATE
	PLOTTED	BY
	NOTED	
	CHECKED	
	FILE NAME	



- (A) STORM SEWER PROTECTED CLASS A, 24" - 3.6'
- (B) FIELD TILE JUNCTION VAULT 3.0' DIA STA. ± 889+17.20, 36.7' LT
- (C) STORM SEWER PROTECTED CLASS A, 24" - 62.4'
- (D) FIELD TILE JUNCTION VAULT 4.0' DIA STA. ± 889+17.00, 29.0' RT
- (E) STORM SEWER PROTECTED CLASS A, 24" - 12.4'
- (F) FIELD TILE JUNCTION VAULT 4.0' DIA STA. ± 889+33.40, 29.0' RT
- (G) STORM SEWER PROTECTED CLASS A, 24" - 9.0'
- (H) STORM SEWER 14", REMOVAL - 91'

ACTUAL STATIONS AND OFFSETS OF THE FIELD TILE JUNCTION VAULTS AND STORM SEWER WILL NEED TO BE FIELD VERIFIED AFTER THE EXPLORATORY TRENCH OPERATIONS LOCATE THE MAIN STORM SEWER CROSSING UNDER IL 119. THE DEPTH OF THE VAULTS AND STORM SEWER INVERTS SHALL BE FIELD VERIFIED AFTER THE DEPTH OF THE EXISTING STORM SEWER IS DETERMINED.

- PERIMETER EROSION CONTROL BARRIER
- TEMPORARY DITCH CHECK
- INLET & PIPE PROTECTION
- CLASS C PATCHES, TYPE IV, 11"
- STONE RIP-RAP, CLASS A4
- AGGREGATE SHOULDERS, TYPE B, 6"



Drainage Area = 0.82 mi ²		Existing Low Grade Elev. = 101.21 at Sta. 889+37		Proposed Low Grade Elev. = 101.40 at Sta. 889+37					
Flood	Freq. Yr.	Q Ft ³ /s	Opening - ft ²		Natural H.W.E.	Head - ft.		Headwater Elevation	
			Existing	Proposed		Existing	Proposed	Existing	Proposed
Design	50	361	12	24.0				Overtopped	99.2
Base	100	423	12	25.1				Overtopped	100.7
Overtop Existing									
Overtop Proposed	225	490	12	26.4					101.4
Max. Calc.	500	573	12	27.0				Overtopped	102.3

10 YEAR VELOCITY THROUGH EXISTING BRIDGE = 9 ft/s 10 YEAR VELOCITY THROUGH PROPOSED BRIDGE = 5 ft/s

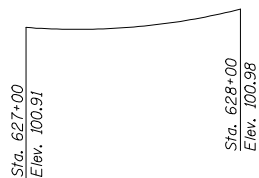
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		CHECKED -	REVISED -
		DATE - 03/05/10	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PLAN & PROFILE SHEET	
S.N. 092-8073, STATION 889 + 37.00	
SCALE: 1" = 20'	SHEET NO. 1 OF 1 SHEETS
STA. 886+40.00 TO STA. 892+40.00	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
711	116CR	VERMILION	50	11
CONTRACT NO. 70801				
ILLINOIS FED. AID PROJECT				

BENCHMARK ELEV. = 100.00 Chiseled square on north headwall of SN 092-8033.



Profile Grade
Along \bar{C} Roadway

STATION 627+36
BUILT 201 BY
STATE OF ILLINOIS
F.A.P. RT. 711 SEC. 116CR
LOADING HS 20
STRUCTURE NO. 092-8074

NAME PLATE
See Std. 515001

INDEX OF SHEETS

1. General Plan and Elevation
2. Box Culvert End Section Details
3. Porous Granular Embankment Detail
4. Soil Borings
- 5-7. As-Built Plans

DESIGN SPECIFICATIONS
2002 AASHTO

LOADING HS20-44

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

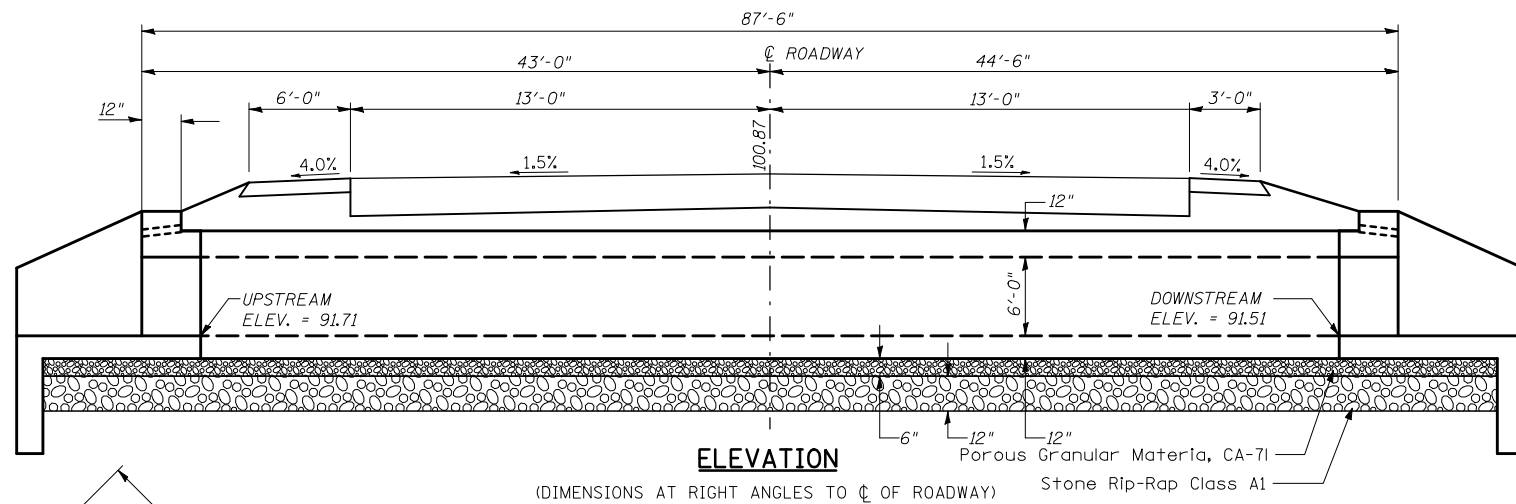
DESIGN STRESSES

FIELD UNITS

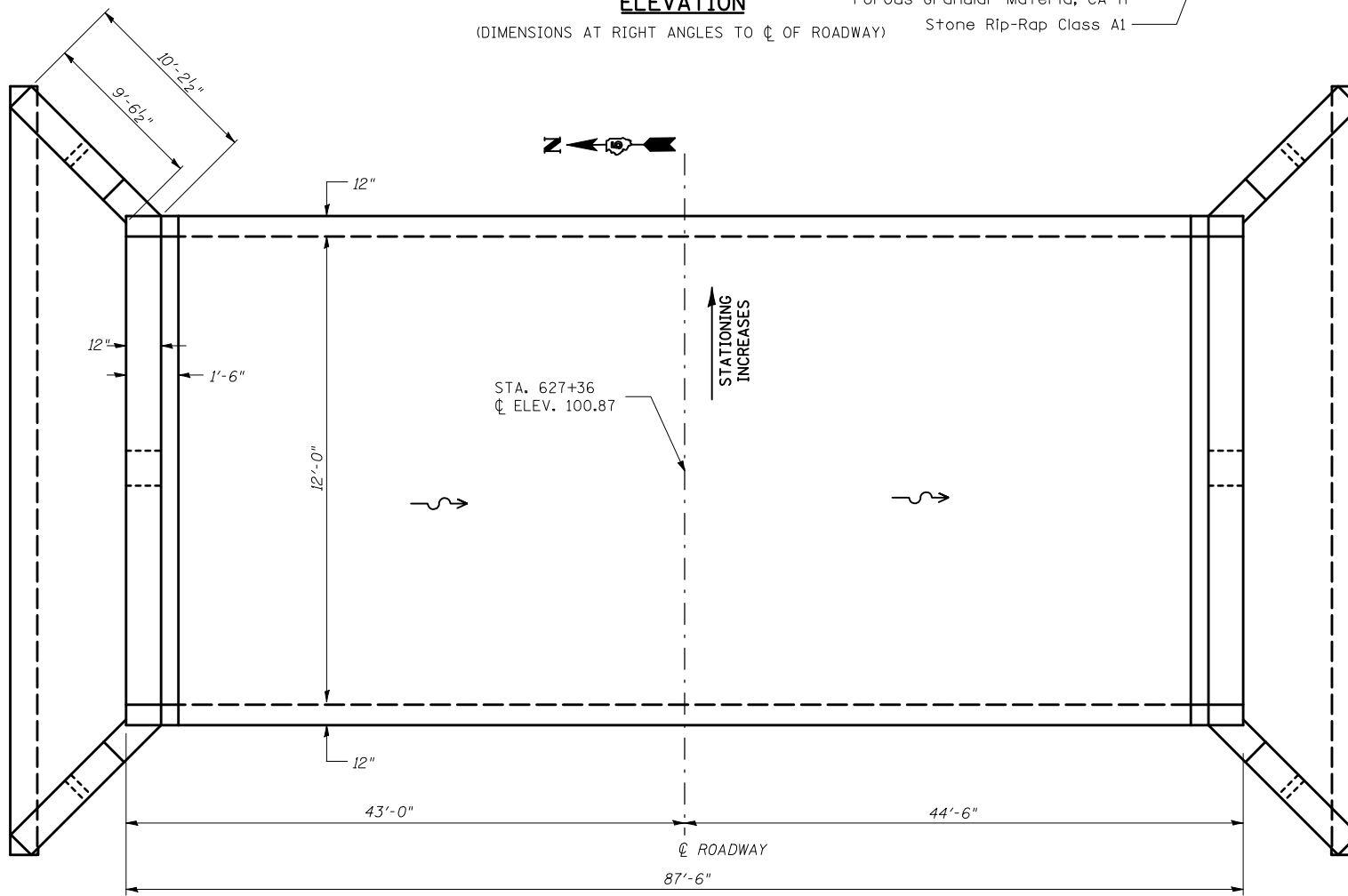
$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)
 $f_y = 65,000$ psi (welded wire fabric)

PRECAST UNITS

$f'_c = 5,000$ psi
 $f_y = 65,000$ psi (welded wire fabric)



ELEVATION
(DIMENSIONS AT RIGHT ANGLES TO \bar{C} OF ROADWAY)

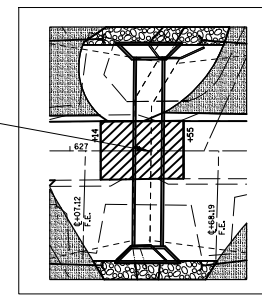


PLAN

Flood	Freq. Yr.	Q Ft ³ /s	Opening - ft ²		Natural H.W.E.	Head - ft.		Headwater Elevation	
			Existing	Proposed		Existing	Proposed	Existing	Proposed
			Proposed Low Grade = 101.06 at Sta. 627+33			Existing Low Grade Elev. = 100.87 at Sta. 627+33			
Design	50	504	52	72			97.7	96.5	
Base	100	590	52	72			Overtopped	98.5	
Overtop Existing	100	590	52				Overtopped		
Overtop Proposed									
Max. Calc.	500	799	52	72			Overtopped	100.2	

Design Scour Elevation Table

Design Scour Elevation (ft.)	Upstream	Downstream
	88.71	88.51



LOCATION SKETCH

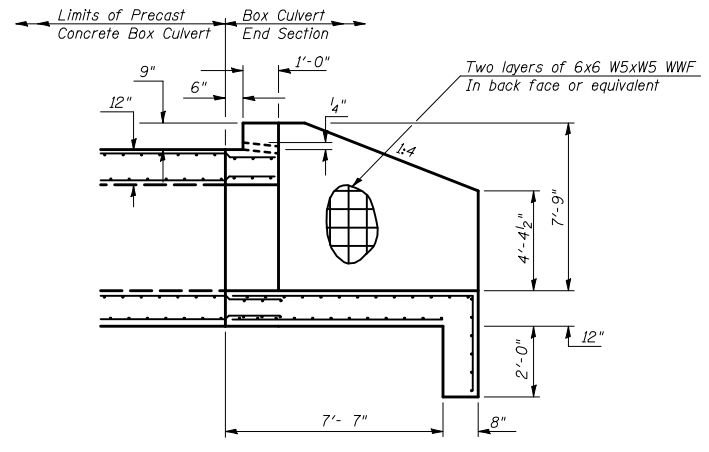
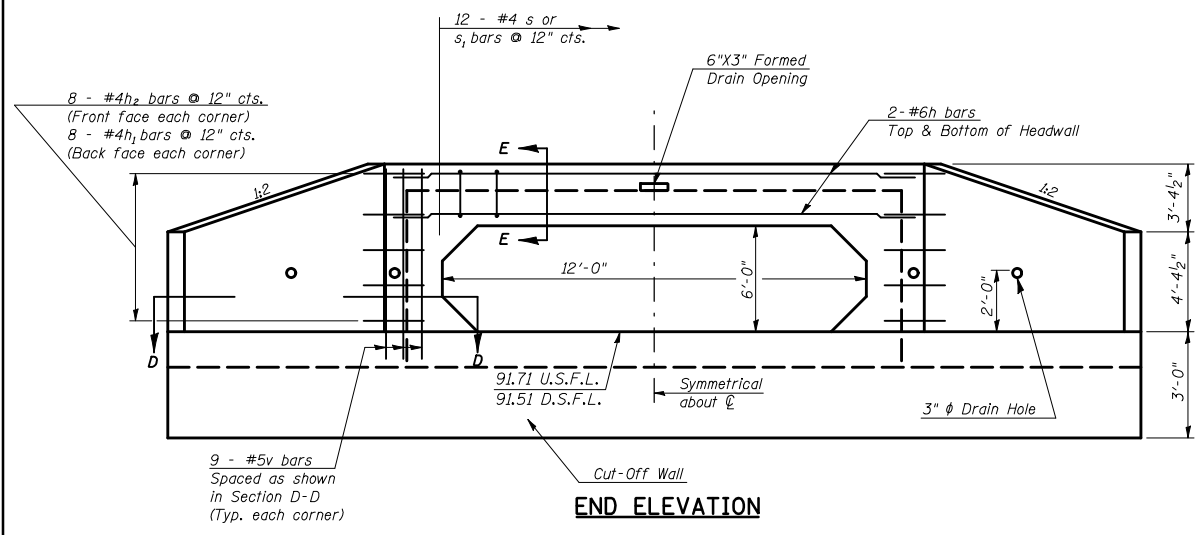
General Notes

- Build tops of headwalls parallel to the grade lines.
- All construction joints shall be bonded according to Article 503.09 of the Standard Specifications.
- Reinforcement bars shall conform to the requirements of ASTM A706 Gr. (IL Modified). See Special Provisions.
- All bars should be rounded and conform to the requirements of Article 1006.10 of the Standard Specification.
- The 6" Porous Granular Material required per Art. 540.06 of the Standard Specifications shall also extend beneath the Box Culvert End Sections and shall be considered included in the cost of Precast Concrete Box Culverts and Box Culvert End Sections.
- When lapping sheets of welded wire fabric, the overlap measured between the outermost cross wires of each fabric sheet shall not be less than 8"
- End Sections will be paid for at the contract unit price per each for BOX CULVERT END SECTIONS, as outlined in Section 540 of the Standard Specifications.
- Class SI Concrete shall be used throughout.
- Concrete, Rebar, and Welded Wire Fabric quantities and lengths calculated for the cast-in-place End Sections may vary based on the precast box culverts supplied.
- Drain holes shall be provided in accordance with Article 503.11 of the Standard Specifications.
- The precast manufacturer shall design and detail a connection/construction joint between the precast concrete box sections and the cast-in-place apron and wingwall. The minimum area of reinforcement passing through these construction joints shall be 0.20 sq. in./lineal ft. of welded wire fabric. The design shall be detailed in the shop drawings. The cost of the connection is included in the cost of the end section.
- The box culvert end section may be built in the field or using precast construction methods. If the contractor elects to use precast construction methods, shop drawings and a proposed construction sequence shall be submitted to the Engineer for approval. See Special Provisions.
- The ends of the precast box sections adjacent to the end section shall be formed without the male and female shapes specified in Article 8.1 of AASHTO M273. See Sections B-B, D-D, and E-E on Sheet 2.
- The design fill height for this box is less than 2 feet. The Precast Concrete Box Culvert Sections shall conform to the requirements of AASHTO M 273.
- The joints between precast box sections shall be sealed, all voids filled with a mastic joint sealer. In addition, the joints shall be externally sealed on all four sides with a 13 inch wide external sealing band. The seal shall be centered over the joint, secured in place and protected during the backfilling process.
- All dimensions are in FEET (') - INCHES (") unless otherwise noted.
- Drawings not to scale.

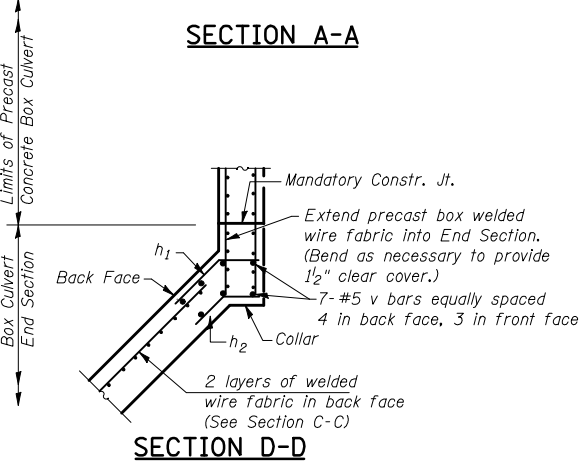
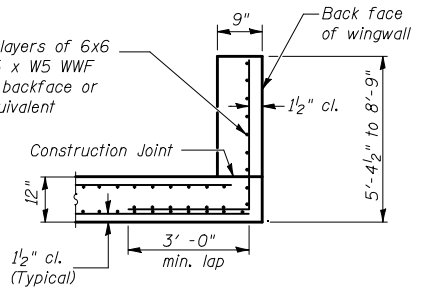
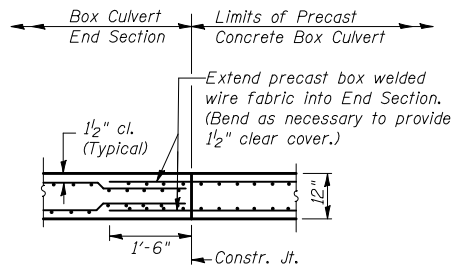
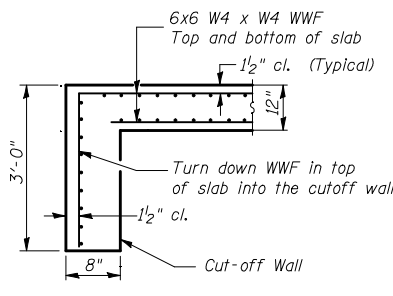
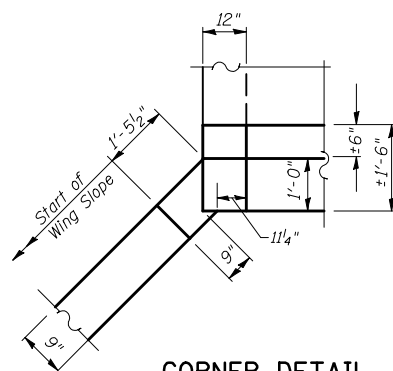
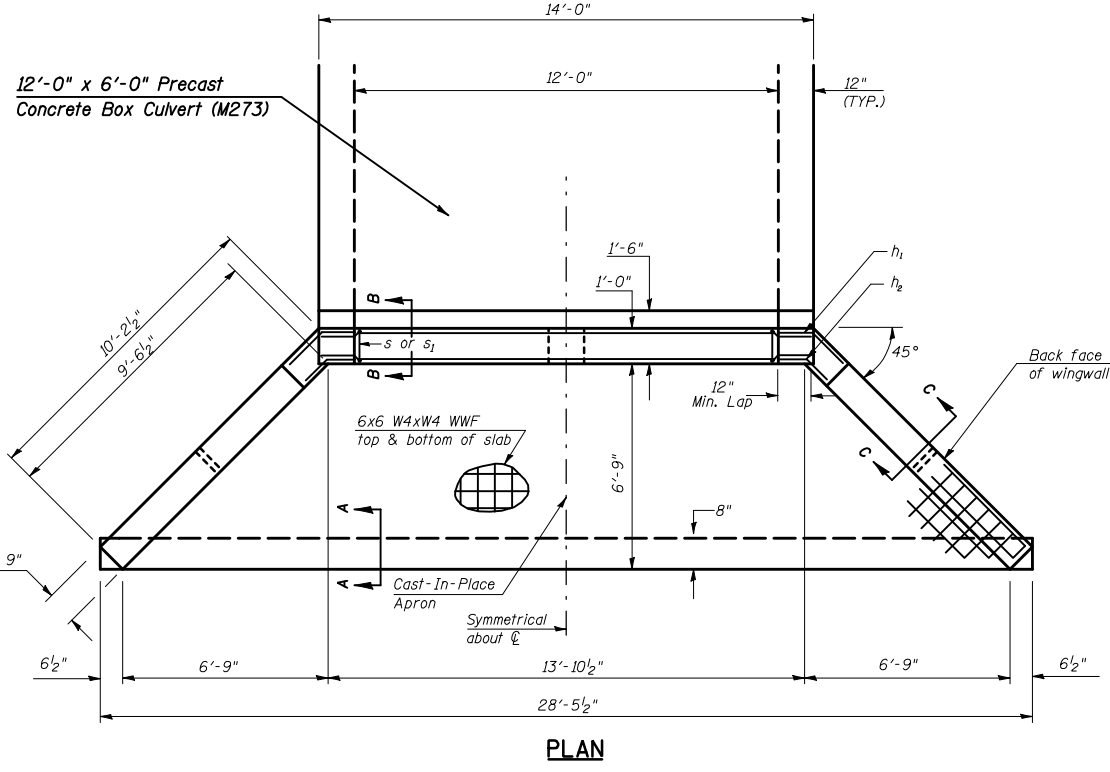
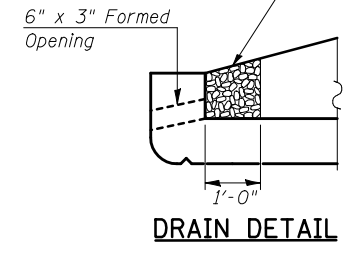
TOTAL BILL OF MATERIAL

Item	Unit	Total
Removal of Existing Structures No. 1	Each	1
Precast Concrete Box Culverts 12'x6'	Foot	87.5
Box Culvert End Sections, Culvert No. 1	Each	2
Name Plates	Each	1
Porous Granular Embankment	Cu Yd	183
Stone RipRap, Class A1	Ton	42

SHEET 1 OF 7
GENERAL PLAN AND ELEVATION
SINGLE 12'x6' PRECAST BOX CULVERT
F.A.P. ROUTE 711 - SECTION 116CR
VERMILION COUNTY
STATION 627+36.00 S.N. 092-8074
CULVERT NO. 1



Coarse aggregate full length of both headwalls. To be placed by Grading Contractor. Cost included with Box Culvert End Sections.

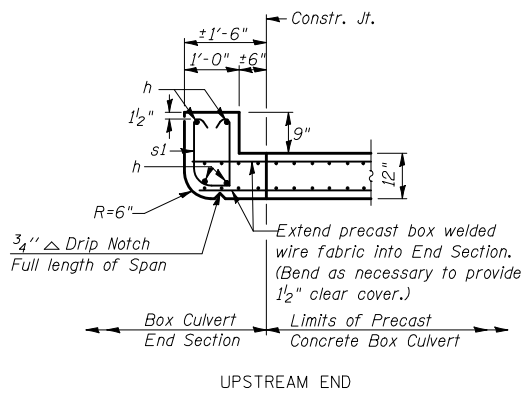
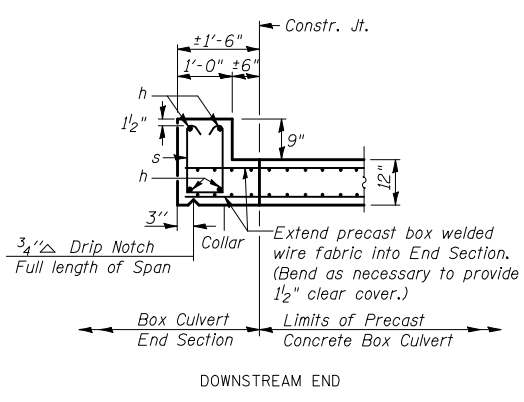
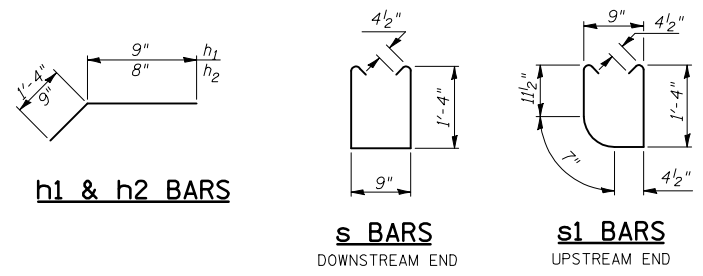


BILL OF MATERIAL

For Information Only (One End Section)

Bar	No.	Size	Length	Shape
h	4	#6	14'-0"	—
h ₁	16	#4	2'-1"	—
h ₂	16	#4	1'-5"	—
s or s ₁	12	#4	4'-2"	—
v	14	#5	8'-6"	—

Item	Unit	Total
Concrete Box Culverts	Cu. Yd.	13.2
Reinforcement Bars	Pound	279.0
Welded Wire Fabric	Sq. Ft.	795.0



SHEET 2 OF 7

END SECTION DETAILS

12'x6' PRECAST BOX CULVERT

F.A.P. ROUTE 711 - SECTION 116CR

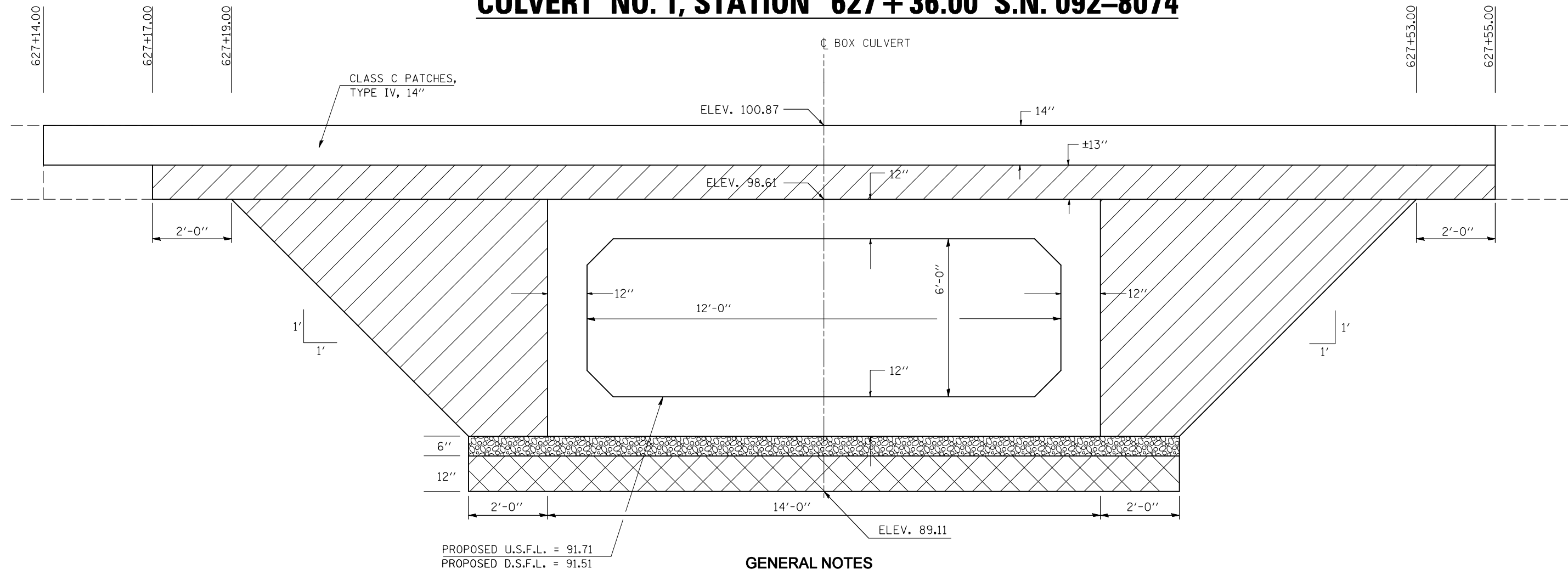
VERMILION COUNTY

STATION 627+36, S.N. 092-8074

CULVERT NO. 1

POROUS GRANULAR EMBANKMENT DETAILS

CULVERT NO. 1, STATION 627 + 36.00 S.N. 092-8074



PROPOSED U.S.F.L. = 91.71
 PROPOSED D.S.F.L. = 91.51

GENERAL NOTES

- ① STONE RIPRAP, CLASS A1 SHALL BE USED WHERE A.R. CULVERTS ARE REQUIRED TO BE UNDERCUT DUE TO UNSTABLE SOIL CONDITIONS.
- ② THE WORK FOR STONE RIPRAP, CLASS A1 & FILTER FABRIC SHOWN IN THE DETAIL SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE PORTIONS OF SECTION 281 AND SECTION 282 OF THE STANDARD SPECIFICATIONS.
- ③ THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR STONE RIPRAP, CLASS A1. FILTER FABRIC WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED WITH THE PAY ITEM FOR STONE RIPRAP, CLASS A1.
- ④ THE EXCAVATION AND REMOVAL OF THE UNSUITABLE MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED WITH THE PAY ITEM FOR STONE RIPRAP, CLASS A1.
- ⑤ POROUS GRANULAR EMBANKMENT SHALL EXTEND 2 FT. BEYOND THE AGGREGATE SHOULDER
- ⑥ THE WORK FOR POROUS GRANULAR EMBANKMENT & BOX CULVERTS SHOWN IN THE DETAIL SHALL BE DONE ACCORDING TO THE APPLICABLE PORTIONS OF ARTICLE 207 AND ARTICLE 540 OF THE STANDARD SPECIFICATIONS.
- ⑦ THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR POROUS GRANULAR EMBANKMENT.
- ⑧ THE AREA TO BE EXCAVATED FOR THE PROPOSED BOX CULVERT SHALL NOT BE MEASURED FOR PAYMENT. THE COST OF THE EXCAVATION SHALL BE CONSIDERED AS INCLUDED IN THE COST OF PRECAST CONCRETE BOX CULVERTS AND BOX CULVERT END SECTIONS.

DRAWING NOT TO SCALE.

LEGEND	
	POROUS GRANULAR EMBANKMENT (CA-6)
	POROUS GRANULAR MATERIAL (CA-7) (6") INCLUDED WITH PRECAST BOX CULVERT
	STONE RIPRAP, CLASS A1

SHEET 3 OF 7

FILE NAME =	USER NAME = bowerml	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	POROUS GRANULAR EMBANKMENT DETAILS STATION 627 + 36.00, SN 092-8074	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pw\work\p\dot\bowerml\d0186764\7080	details.dgn	DRAWN -	REVISED -			711	116CR	VERMILION	50	14
	PLOT SCALE = 40.0000' / IN.	CHECKED -	REVISED -							
	PLOT DATE = 11/30/2010	DATE -	REVISED -							
						SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.
						ILLINOIS FED. AID PROJECT				

SOIL BORING LOG

Date 4/14/10

ROUTE FAP (711) IL 119 DESCRIPTION Box Culvert on IL 119 - 0.25 Miles East of IL 1 LOGGED BY CNA

SECTION 116CR LOCATION SW, SEC. 1, TWP. 21N, RNG. 12W, 2nd PM GPS:

COUNTY Vermilion DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 092-8033
Station 627+33

BORING NO. 1 NE Boring
Station 627+68
Offset 32.0 ft Lt.
Ground Surface Elev. 99.9 ft

Description	Elev. (ft)	DPTH (ft)	BLOS (/6")	UCS (tsf)	MOS (%)	Surface Water Elev. ft	Stream Bed Elev. ft	Groundwater Elev.: First Encounter ft	Upon Completion ft	After Hrs. ft	DPTH (ft)	BLOS (/6")	UCS (tsf)	MOS (%)
Brown to Black Silty Clay Loam	99.9													
Brown Coarse Sand (Backfill)	97.9													
Gray Clay Loam Till (Hard)	76.9													
End of Boring	74.9	-25												
Brown Clay Loam Till with Silt Seams	92.9													
Gray Clay Loam Till	85.9													
Gray Dirty Coarse Sand to Silt with Trace of Gray Clay Loam Till	81.9													

An assumed centerline elevation of 100.00 and station of 10+00 is used when this information is not available.

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)

SOIL BORING LOG

Date 4/14/10

ROUTE FAP (711) IL 119 DESCRIPTION Box Culvert on IL 119 - 0.25 Miles East of IL 1 LOGGED BY CNA

SECTION 116CR LOCATION NW, SEC. 12, TWP. 21N, RNG. 12W, 2nd PM GPS:

COUNTY Vermilion DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 092-8033
Station 627+33

BORING NO. 2 SW Boring
Station 627+25
Offset 35.0 ft Rt.
Ground Surface Elev. 99.4 ft

Description	Elev. (ft)	DPTH (ft)	BLOS (/6")	UCS (tsf)	MOS (%)	Surface Water Elev. ft	Stream Bed Elev. ft	Groundwater Elev.: First Encounter ft	Upon Completion ft	After Hrs. ft	DPTH (ft)	BLOS (/6")	UCS (tsf)	MOS (%)
Black Silty Clay Loam	99.4													
Brown Coarse Sand (Backfill)	98.4													
Gray Clay Loam Till (continued)														
(Drilled Firmer)														
End of Boring	74.4	-25												
Dark Gray to Gray Dirty Coarse Sand/Sand Loam with Silt Seams	92.4													
(Trace of Gray Sand Loam Till)														
Gray Clay Loam Till	83.9													

An assumed centerline elevation of 100.00 and station of 10+00 is used when this information is not available.

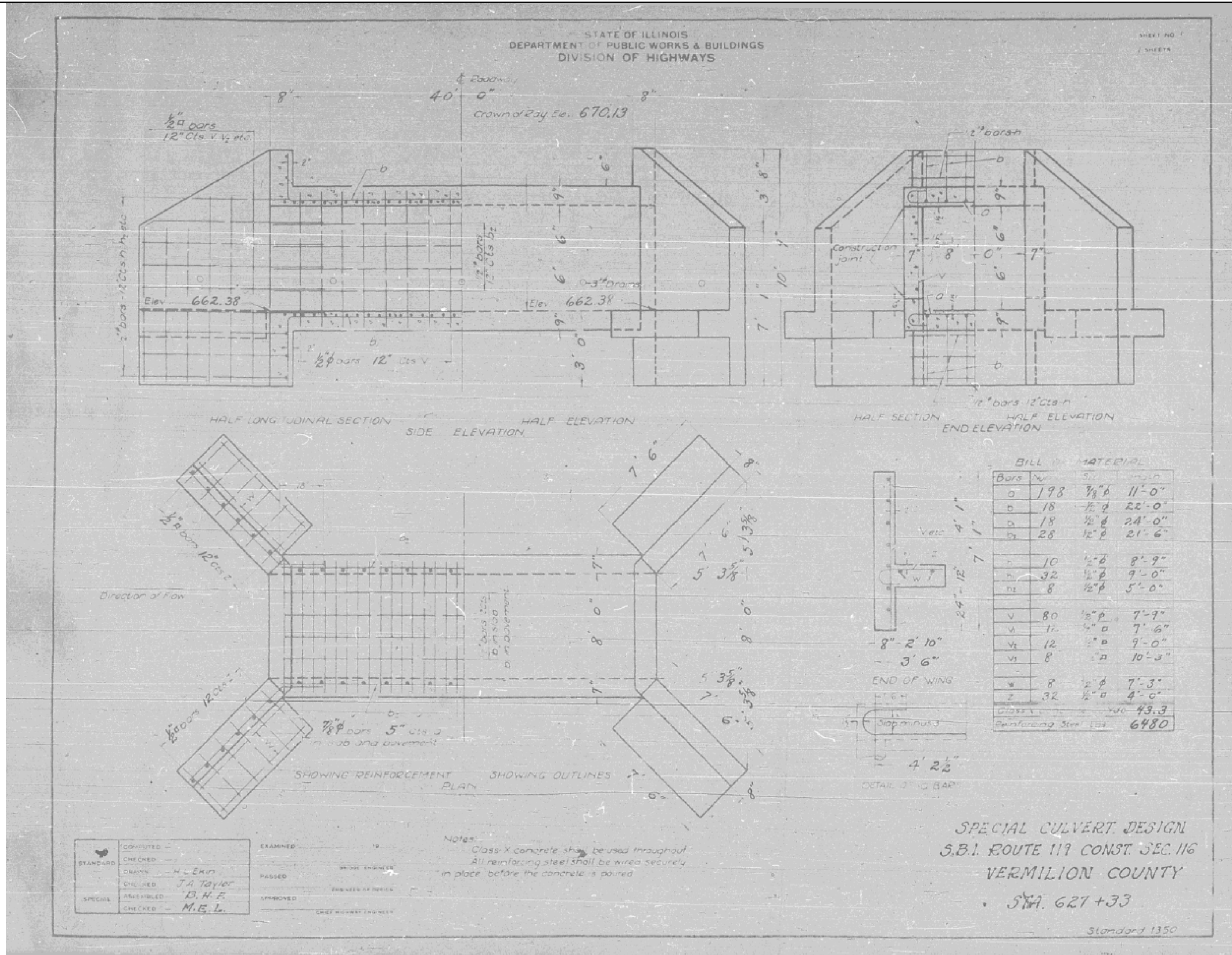
The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)

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)

FOR INFORMATION ONLY

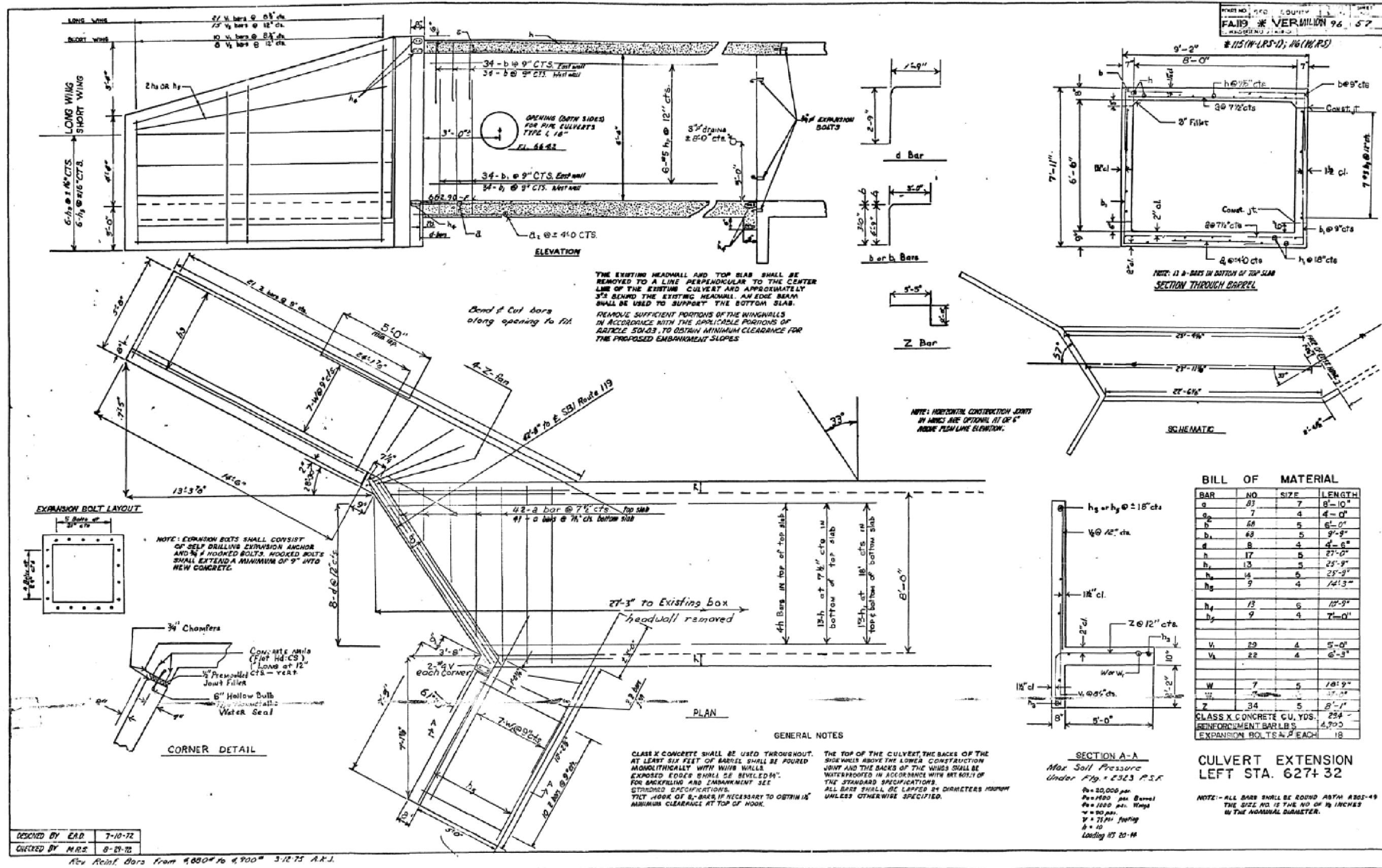
FOR INFORMATION ONLY



FILE NAME =	USER NAME = bowerml	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	AS-BUILTS FOR SN 092-8033	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ct:\pw_work\pwork\dot\bowerml\d0186764\7080	sht-BoxCulverts.dgn	DRAWN - H. EKIN	REVISED -			711	116CR	VERMILION	50	16	
		CHECKED - J.A. Taylor	REVISED -			CONTRACT NO. 70801					
		APPROVED - D.H.F.	REVISED -			ILLINOIS FED. AID PROJECT					
		CHECKED - M.E.L.	REVISED -	SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.			

FOR INFORMATION ONLY

FOR INFORMATION ONLY



FAIR # VERMILION 96 57

BILL OF MATERIAL

BAR	NO	SIZE	LENGTH
a	83	7	8'-10"
a ₂	7	4	4'-0"
b	68	5	6'-0"
b ₁	68	5	9'-9"
d	8	4	4'-6"
h	17	5	27'-0"
h ₁	13	5	25'-9"
h ₂	14	5	25'-9"
h ₃	9	4	14'-3"
h ₄	13	5	18'-9"
h ₅	9	4	7'-0"
v	29	4	5'-0"
v ₁	22	4	6'-3"
w	7	5	18'-9"
w ₁	7	5	17'-0"
z	34	5	8'-1"
CLASS X CONCRETE CU. YDS.			284
REINFORCEMENT BAR LBS.			4,700
EXPANSION BOLTS & B EACH			18

CULVERT EXTENSION
LEFT STA. 627+32

NOTE: ALL BARS SHALL BE ROUNDED AS PER A305-49 THE SIZE NO. IS THE NO. OF INCHES IN THE NOMINAL DIAMETER.

DESIGNED BY E.A.D. 7-10-72
CHECKED BY M.R.S. 8-21-72

See Reinf. Bars from 4880 to 4900 3-12-75 A.S.I.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILTS FOR 092-8033

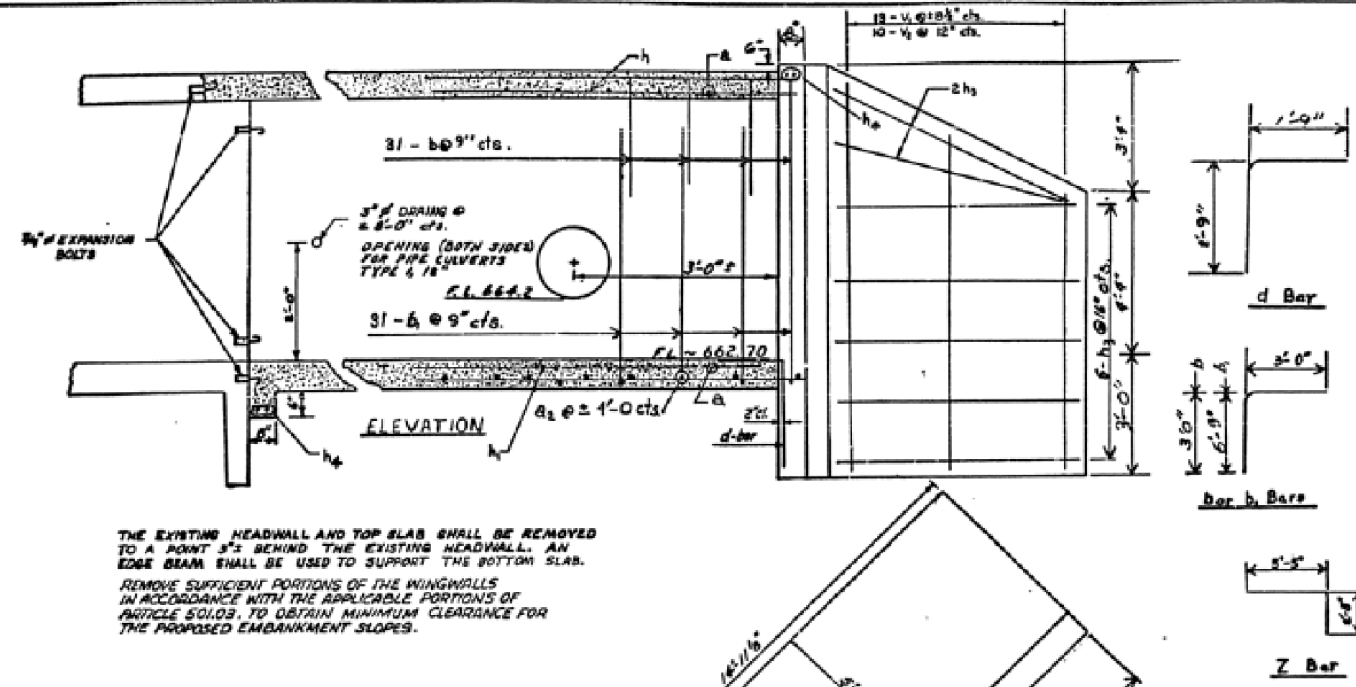
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
711	116CR	VERMILION	50	17

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

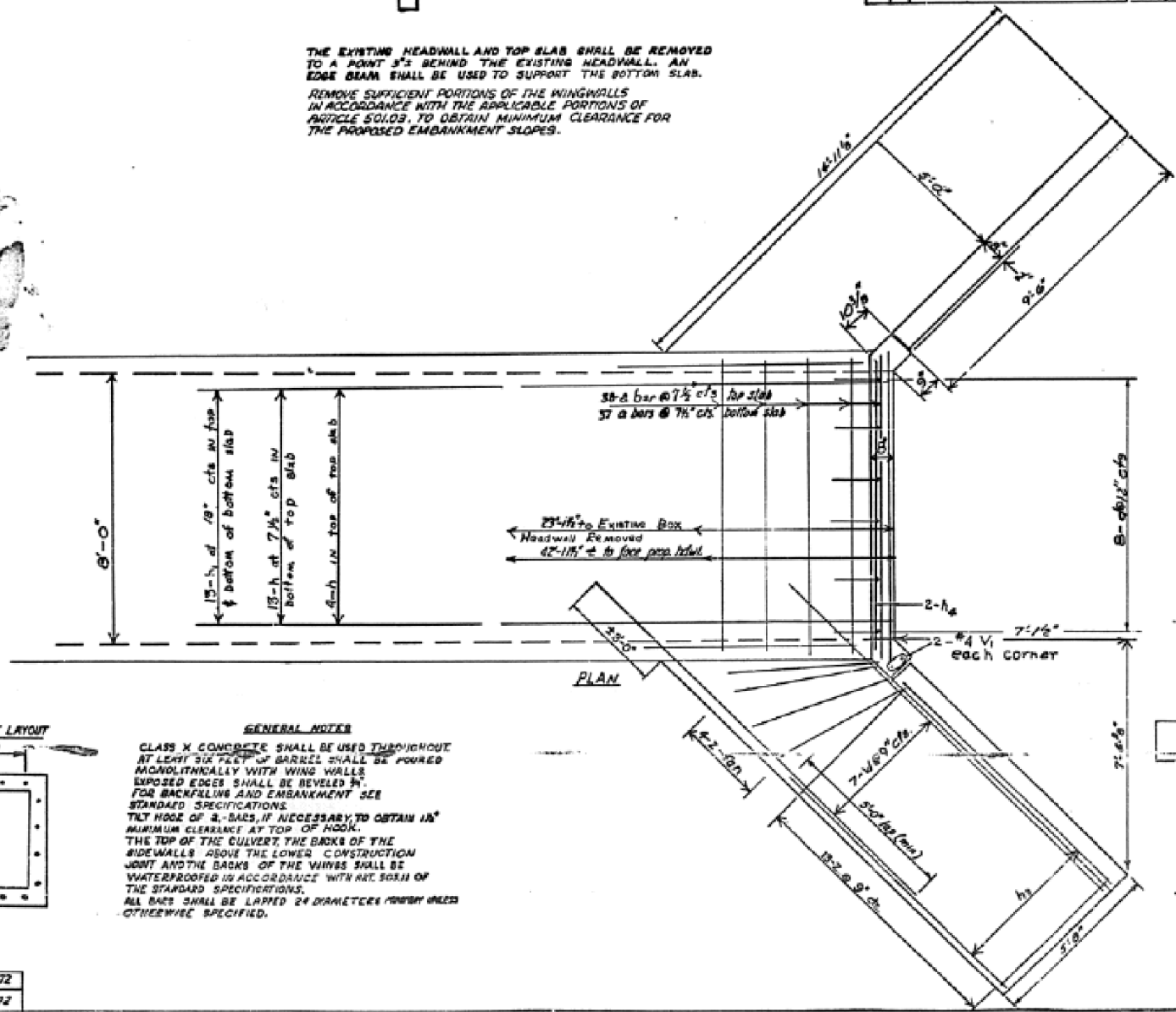
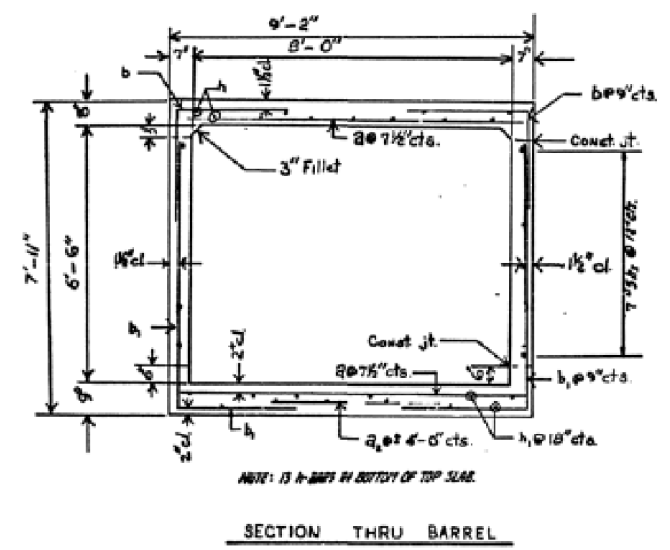
FOR INFORMATION ONLY

FOR INFORMATION ONLY

PROJECT NO.	SECTION	COUNTY	SHEET NO.
EA 119	116CR	VERMILION	96-578
*15 (N.A.S.) 116 (N.A.S.)			

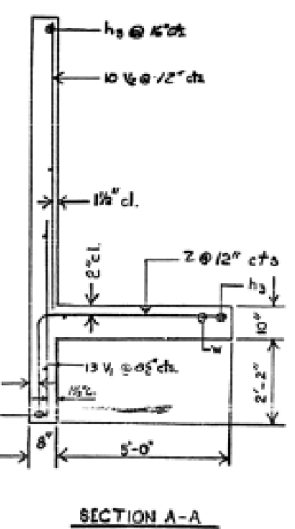
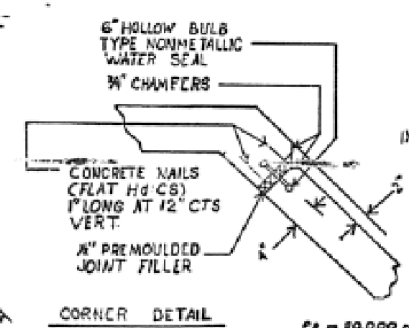


THE EXISTING HEADWALL AND TOP SLAB SHALL BE REMOVED TO A POINT 3'-2\"/>



NOTE: EXPANSION BOLTS SHALL CONSIST OF SELF DRILLING EXPANSION ANCHOR AND 1/2\"/>

NOTE: HORIZONTAL CONSTRUCTION JOINTS IN WINGS ARE OPTIONAL AT OR 6\"/>



BILL OF MATERIAL

BAR	NO	SIZE	LENGTH
a	75	7	8'-10"
a ₁	6	4	4'-0"
b	62	5	6'-0"
b ₁	62	5	9'-9"
d	8	4	4'-6"
h	17	5	22'-9"
h ₁	13	5	22'-0"
h ₂	14	5	22'-0"
h ₃	18	5	9'-3"
h ₄	4	6	9'-0"
v	30	4	5'-0"
v ₁	20	5	6'-3"
w	14	5	14'-0"
z	34	5	8'-2"

class x concrete cu. yds. 25.6
rein. bars lbs. 4,200
expans. bolts #4 / each 18

**CULVERT EXTENSION
RIGHT STA. 627+32**

NOTE: ALL BARS SHALL BE ROUND ASTM A605-49 THE SIZE AND 1/2 THE NO. OF 3/8 INCHES BY THE NOMINAL DIAMETER.

GENERAL NOTES

CLASS X CONCRETE SHALL BE USED THROUGHOUT AT LEAST SIX FEET OF BARREL SHALL BE POURED MONOLITHICALLY WITH WING WALLS EXPOSED EDGES SHALL BE REVELED 3/4\"/>

DESIGNED BY	E.A.D.	6-7-72
CHECKED BY	M.R.S.	8-24-72

Rev. Cl. X Conc. from 25.5 to 25.6 cu yds. Rein. Bars from 4,260 to 4,200 # 3-18-75 A.R.J.

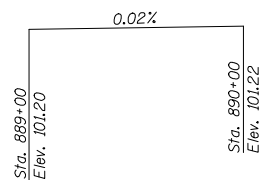
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILTS FOR SN 092-8033

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
711	116CR	VERMILION	50	18
CONTRACT NO. 70801				

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

BENCHMARK ELEV. = USE CENTERLINE PROFILE TO ESTABLISH A TEMPORARY BENCHMARK.



Profile Grade
Along ϕ Roadway

STATION 889+37
BUILT 2011 BY
STATE OF ILLINOIS
F.A.P. RT. 711 SEC. 116CR
LOADING HS 20
STRUCTURE NO. 092-8073

NAME PLATE
See Std. 515001

INDEX OF SHEETS

1. General Plan and Elevation
2. Box Culvert End Section Details
3. Porous Granular Embankment Detail
4. Soil Borings
5. As-Built Plan

DESIGN SPECIFICATIONS
2002 AASHTO

LOADING HS20-44

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

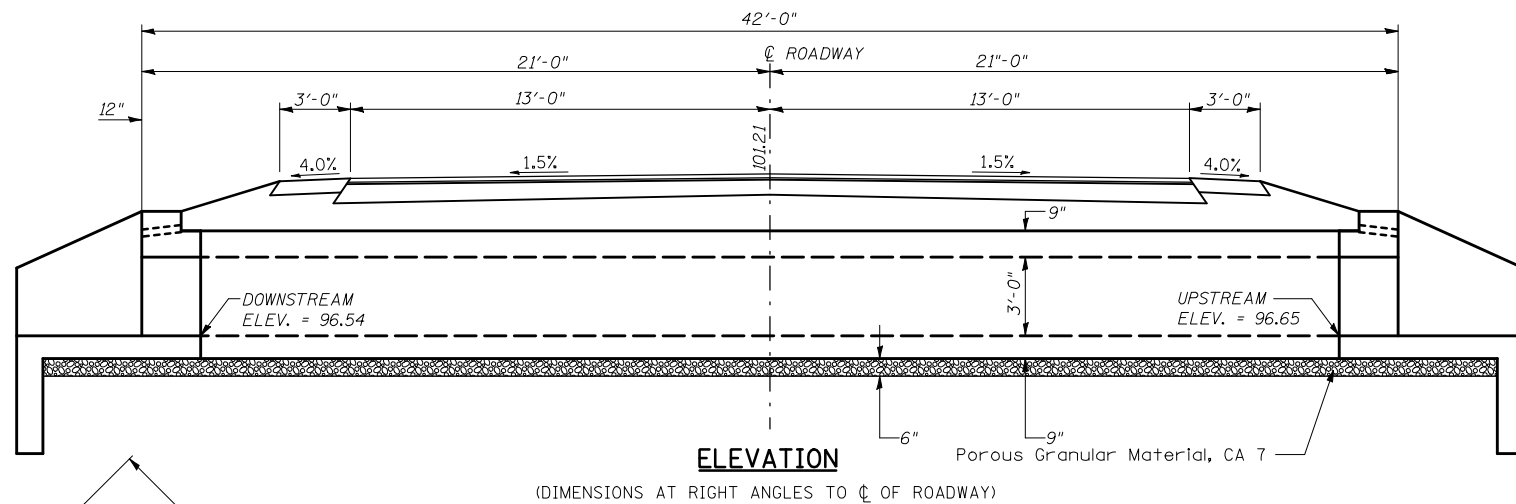
DESIGN STRESSES

FIELD UNITS

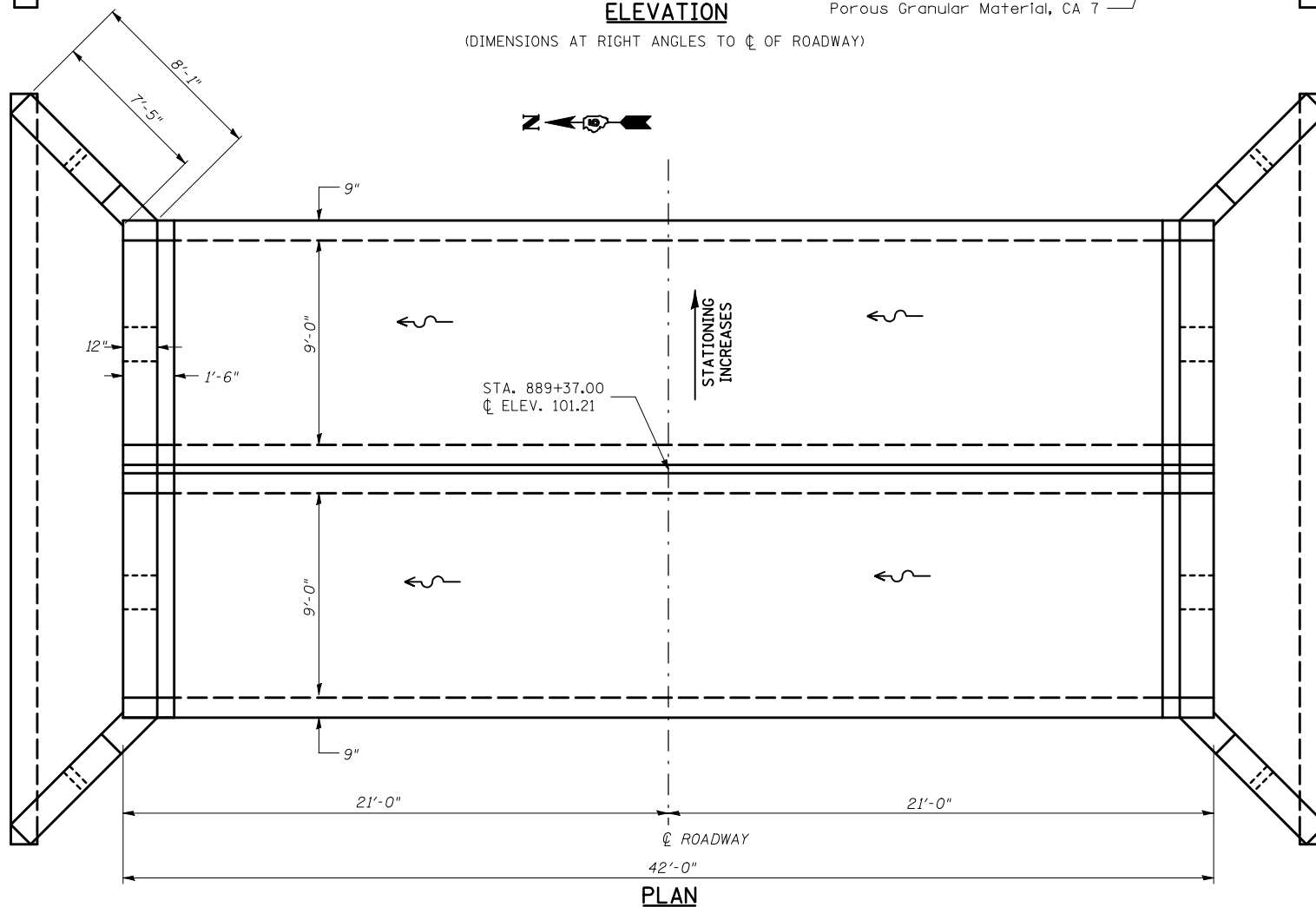
$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)
 $f_y = 65,000$ psi (welded wire fabric)

PRECAST UNITS

$f'_c = 5,000$ psi
 $f_y = 65,000$ psi (welded wire fabric)



ELEVATION
(DIMENSIONS AT RIGHT ANGLES TO ϕ OF ROADWAY)



PLAN

Existing Low Grade Elev. = 101.21 at Sta. 889+37

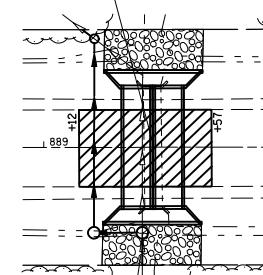
Proposed Low Grade = 101.40 at Sta. 889+37

Flood	Freq. Yr.	Q Ft ³ /s	Opening - ft ²		Natural H.W.E.	Head - ft.		Headwater Elevation	
			Existing	Proposed		Existing	Proposed	Existing	Proposed
Design	10	222	12	21.1				Overtopped	99.2
Base	50	361	12	24.0				Overtopped	100.2
Base	100	423	12	25.1				Overtopped	100.7
Overtop Existing									
Overtop Proposed	225	490	12	26.4					101.4
Max. Calc.	500	573	12	27.0				Overtopped	102.3

Design Scour Elevation Table

Design Scour Elevation (ft.)	Upstream	Downstream
	93.65	93.54

SN 092-8073
STA. 889+37.00



LOCATION SKETCH

General Notes

Build tops of headwalls parallel to the grade lines.

All construction joints shall be bonded according to Article 503.09 of the Standard Specifications.

Reinforcement bars shall conform to the requirements of ASTM A706 Gr. (IL Modified). See Special Provisions.

All bars should be rounded and conform to the requirements of Article 1006.10 of the Standard Specification.

The 6" Porous Granular Material required per Art. 540.06 of the Standard Specifications shall also extend beneath the Box Culvert End Sections and shall be considered included in the cost of Precast Concrete Box Culverts and Box Culvert End Sections.

When lapping sheets of welded wire fabric, the overlap measured between the outermost cross wires of each fabric sheet shall not be less than 8"

End Sections will be paid for at the contract unit price per each for BOX CULVERT END SECTIONS, as outlined in Section 540 of the Standard Specifications.

Class SI Concrete shall be used throughout.

Concrete, Rebar, and Welded Wire Fabric quantities and lengths calculated for the cast-in-place End Sections may vary based on the precast box culverts supplied.

Drain holes shall be provided in accordance with Article 503.11 of the Standard Specifications.

The precast manufacturer shall design and detail a connection/construction joint between the precast concrete box sections and the cast-in-place apron and wingwall. The minimum area of reinforcement passing through these construction joints shall be 0.20 sq. in./lineal ft. of welded wire fabric. The design shall be detailed in the shop drawings. The cost of the connection is included in the cost of the end section.

The box culvert end section shall be built in the field and a precast option is not allowed except the cut-off wall may be precast. If the contractor elects to use a precast cut-off wall, shop drawings and a proposed construction sequence shall be submitted to the Engineer for approval.

The ends of the precast box sections adjacent to the end section shall be formed without the male and female shapes specified in Article 8.1 of AASHTO M273. See Sections B-B, D-D, and E-E on Sheet 2.

The design fill height for this box is less than 2 feet. The Precast Concrete Box Culvert Sections shall conform to the requirements of AASHTO M 273.

The joints between precast box sections shall be sealed, all voids filled with a mastic joint sealer. In addition, the joints shall be externally sealed on all four sides with a 13 inch wide external sealing band. The seal shall be centered over the joint, secured in place and protected during the backfilling process.

All dimensions are in FEET (') - INCHES (") unless otherwise noted.

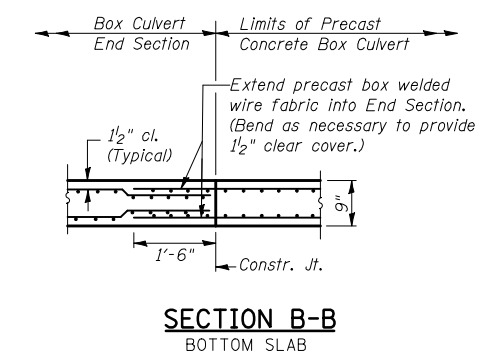
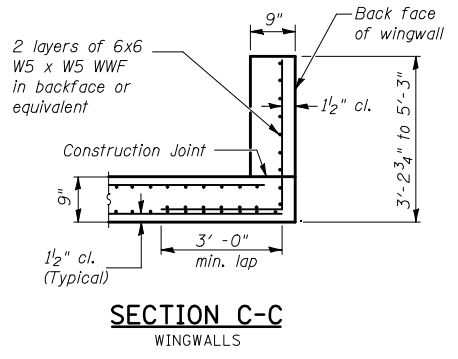
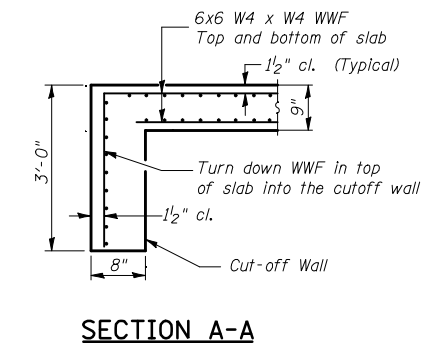
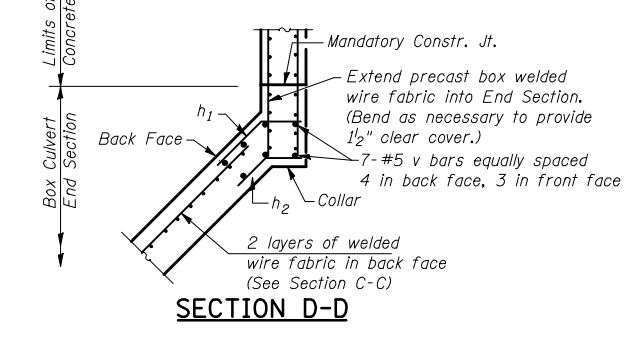
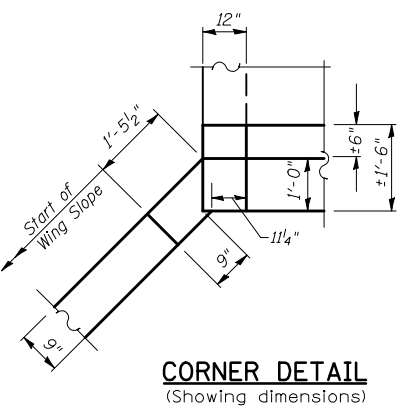
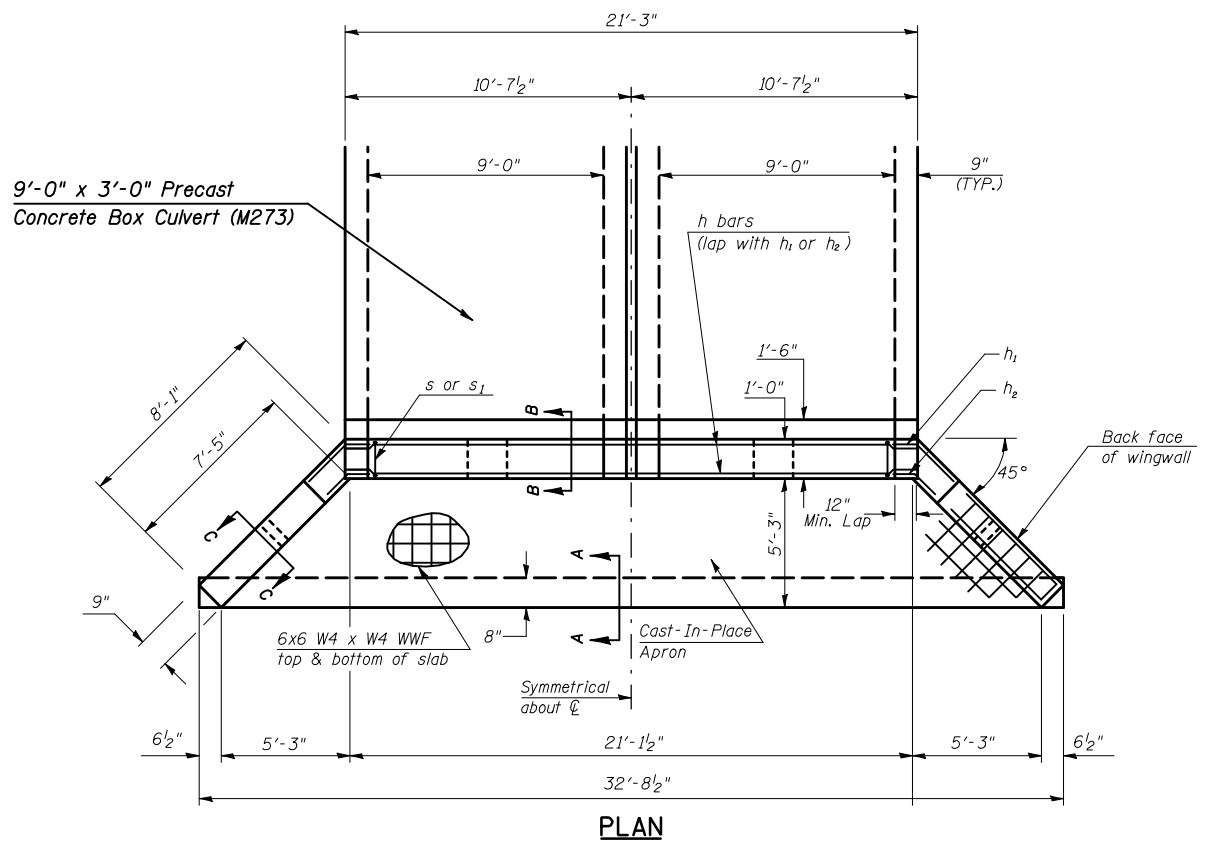
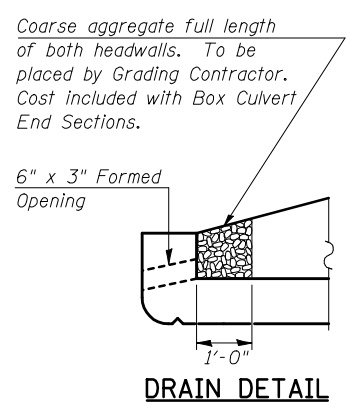
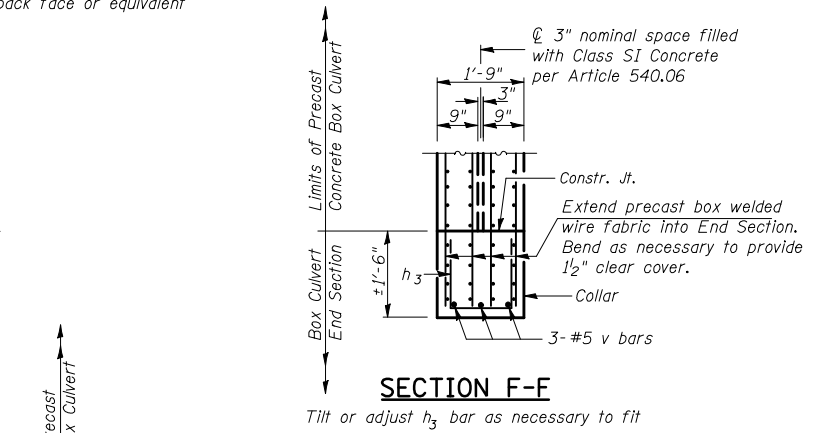
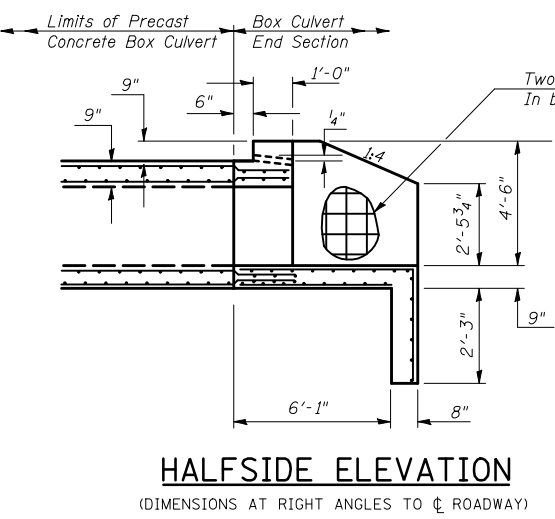
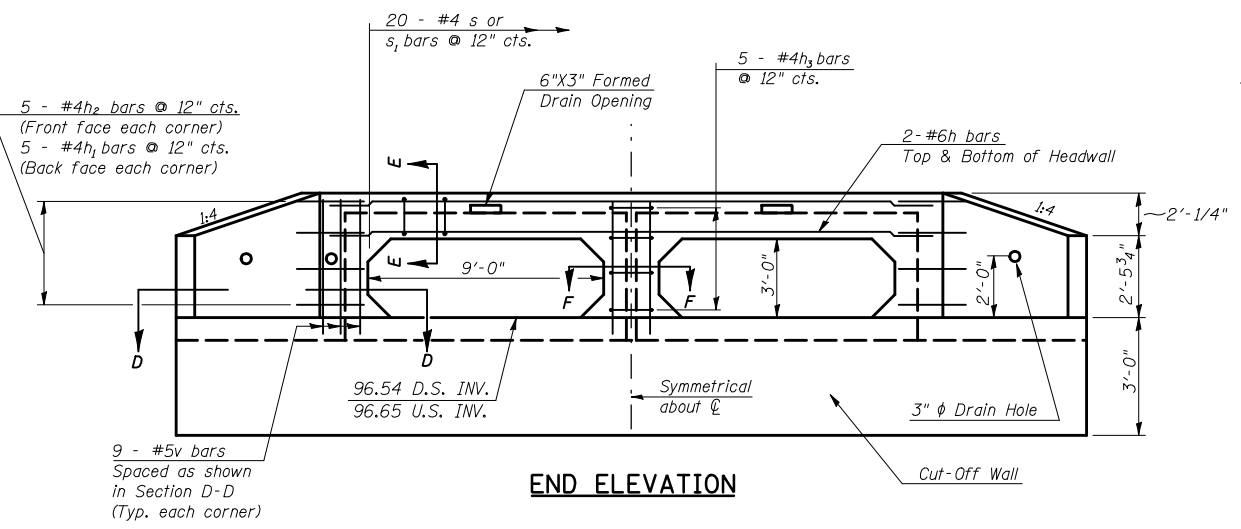
Drawings not to scale.

TOTAL BILL OF MATERIAL

Item	Unit	Total
Removal of Existing Structures No. 2	Each	1
Precast Concrete Box Culverts 9'x3'	Foot	84
Box Culvert End Sections, Culvert No. 2	Each	2
Name Plates	Each	1
Porous Granular Embankment	Cu Yd	42

SHEET 1 OF 5

GENERAL PLAN AND ELEVATION
DOUBLE 9'x3' PRECAST BOX CULVERT
F.A.P. ROUTE 711 - SECTION 116CR
VERMILION COUNTY
STATION 889+37.00 S.N. 092-8073
CULVERT NO. 2

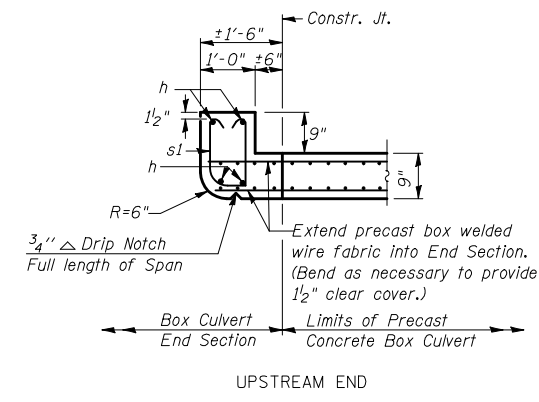
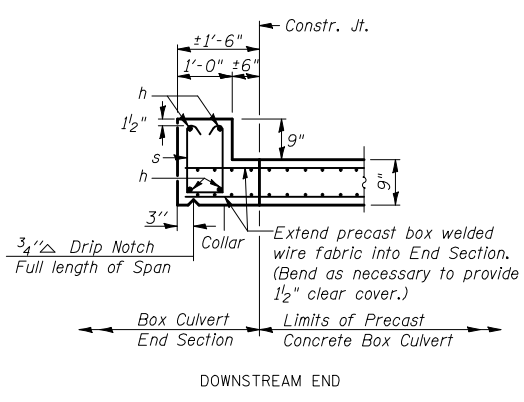


BILL OF MATERIAL
For Information Only
(One End Section)

Bar	No.	Size	Length	Shape
h	4	#6	21'-1 1/2"	—
h ₁	10	#4	2'-1"	—
h ₂	10	#4	1'-5"	—
h ₃	5	#4	3'-11"	—
s or s ₁	20	#4	4'-2"	—
v	17	#5	8'-6"	—
Item		Unit	Total	
Concrete Box Culverts		Cu. Yd.	10.5	
Reinforcement Bars		Pound	370.0	
Welded Wire Fabric		Sq. Ft.	657.0	

SHEET 2 OF 5

END SECTION DETAILS
DOUBLE 9'x3' PRECAST BOX CULVERT
F.A.P. ROUTE 711 - SECTION 116CR
VERMILION COUNTY
STATION 889+37, S.N. 092-8073
CULVERT NO. 2



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PLOT DATE = 11/30/2010	DATE -	REVISED -	REVISED -

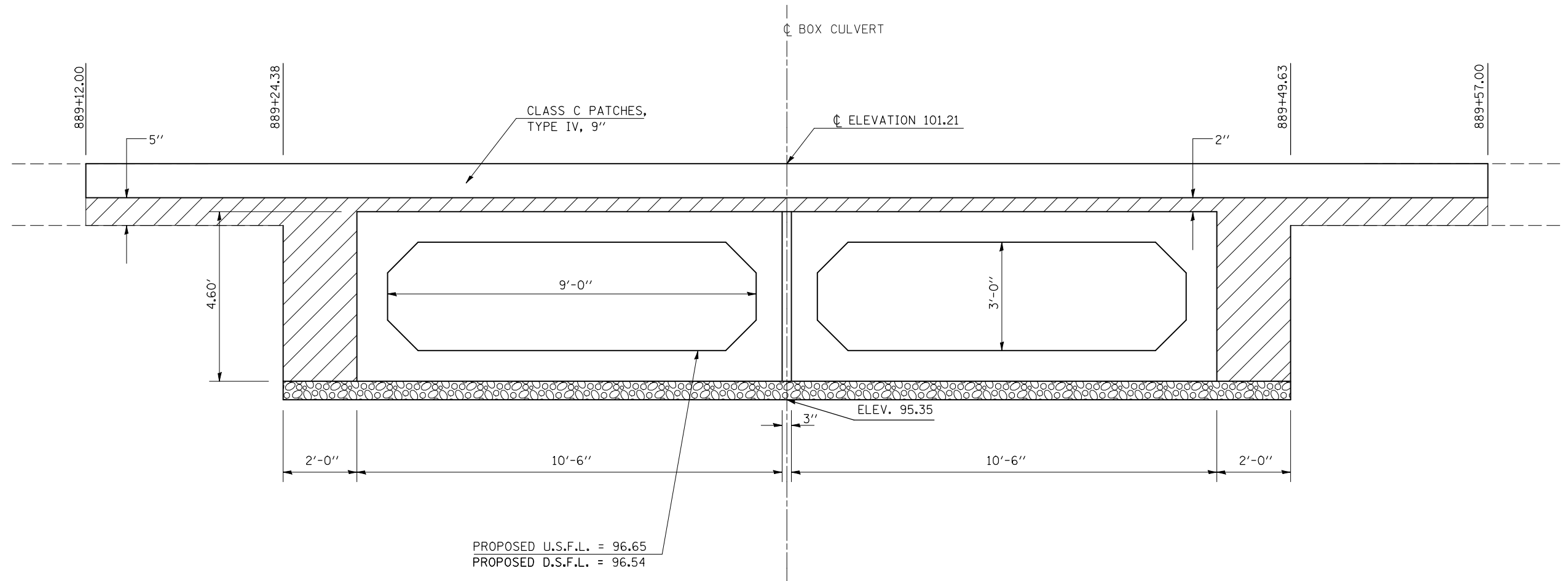
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BOX CULVERT END SECTION DETAILS				
PROPOSED CULVERT NO. 2 - STR. NO. 092-8073				
SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.

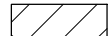

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
711	116CR	VERMILION	50	20
ILLINOIS FED. AID PROJECT				
CONTRACT NO. 70801				

POROUS GRANULAR EMBANKMENT DETAILS

CULVERT NO. 2, STATION 889 + 37.00 S.N. 092-8073



DRAWING NOT TO SCALE.

LEGEND	
	POROUS GRANULAR EMBANKMENT
	POROUS GRANULAR MATERIAL - CA-7 (6") INCLUDED IN PAY ITEM FOR BOX CULVERT

DETAIL NOTE(S):

- ① POROUS GRANULAR EMBANKMENT SHALL EXTEND 2 FT. BEYOND THE AGGREGATE SHOULDER
- ② WORK SHOWN IN DETAIL SHALL BE DONE ACCORDING TO THE APPLICABLE PORTIONS OF ARTICLE 207 AND ARTICLE 540 OF THE STANDARD SPECIFICATIONS.
- ③ THE AREA TO BE EXCAVATED FOR THE PROPOSED BOX CULVERT SHALL NOT BE MEASURED FOR PAYMENT. THE COST OF THE EXCAVATION SHALL BE CONSIDERED AS INCLUDED IN THE COST OF PRECAST CONCRETE BOX CULVERTS AND BOX CULVERT END SECTIONS.
- ④ THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR POROUS GRANULAR EMBANKMENT.
- ⑤ SPACE BETWEEN BOXES SHALL BE FILLED ACCORDING TO ARTICLE 540.06 AND SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE VARIOUS PAY ITEMS ASSOCIATED WITH BOX CULVERT CONSTRUCTION.
- ⑥ THE CLASS C PATCH TYPE IV, 9" SHALL BE EXCAVATED TO 14" OUTSIDE THE BOX CULVERT LIMITS AND SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCIDENTAL TO CLASS C PATCHES TYPE IV, 9".

SHEET 3 OF 5

FILE NAME = ct:\pw\work\p\dot\bowerm\0186764\7080	USER NAME = bowerm details.dgn	DESIGNED - DRAWN -	REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	POROUS GRANULAR EMBANKMENT DETAILS STATION 889 + 37.00, SN 092-8073	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT DATE = 11/30/2010	DATE -	REVISED -	SCALE: SHEET NO. OF SHEETS STA. TO STA.			CONTRACT NO. 70801		ILLINOIS FED. AID PROJECT		



SOIL BORING LOG

ROUTE FAP 711 (IL 119) DESCRIPTION Box Culvert on IL 119 - 1 Mile SE of Alvin LOGGED BY CNA
SECTION 116CR LOCATION SW, SEC. 10, TWP. 21N, RNG. 11W, 2nd PM GPS:
COUNTY Vermilion DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. Station	DEPTH H	BLOW W S	UCS Qu	MOIST S T	Surface Water Elev. Stream Bed Elev.
BORING NO. Station Offset Ground Surface Elev.	(ft)	(/6")	(tsf)	(%)	ft ft
092-8036 889+37					
1 SW Boring 889+27 15.0 ft Rt. 100.9 ft					Groundwater Elev.: First Encounter Upon Completion After Hrs.
Gravel - Shoulder Stone	99.9				
Brown Sand Loam (Embankment)	97.9				
Brown/Gray Mottled Silty Clay Loam	95.9	2	1.3	23	
Brown Clay Loam Till	91.9	2	2.3	17	
Brown to Gray Clay Loam Till	89.9	3	6.3	14	
Gray Clay Loam Till	85.9	5	6.3	15	
End of Boring	-20				

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An assumed centerline elevation of 100.00 and station of 10+00 is used when this information is not available.
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)



SOIL BORING LOG

ROUTE FAP 711 (IL 119) DESCRIPTION Box Culvert on IL 119 - 1 Mile SE of Alvin LOGGED BY CNA
SECTION 116CR LOCATION SW, SEC. 10, TWP. 21N, RNG. 11W, 2nd PM GPS:
COUNTY Vermilion DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

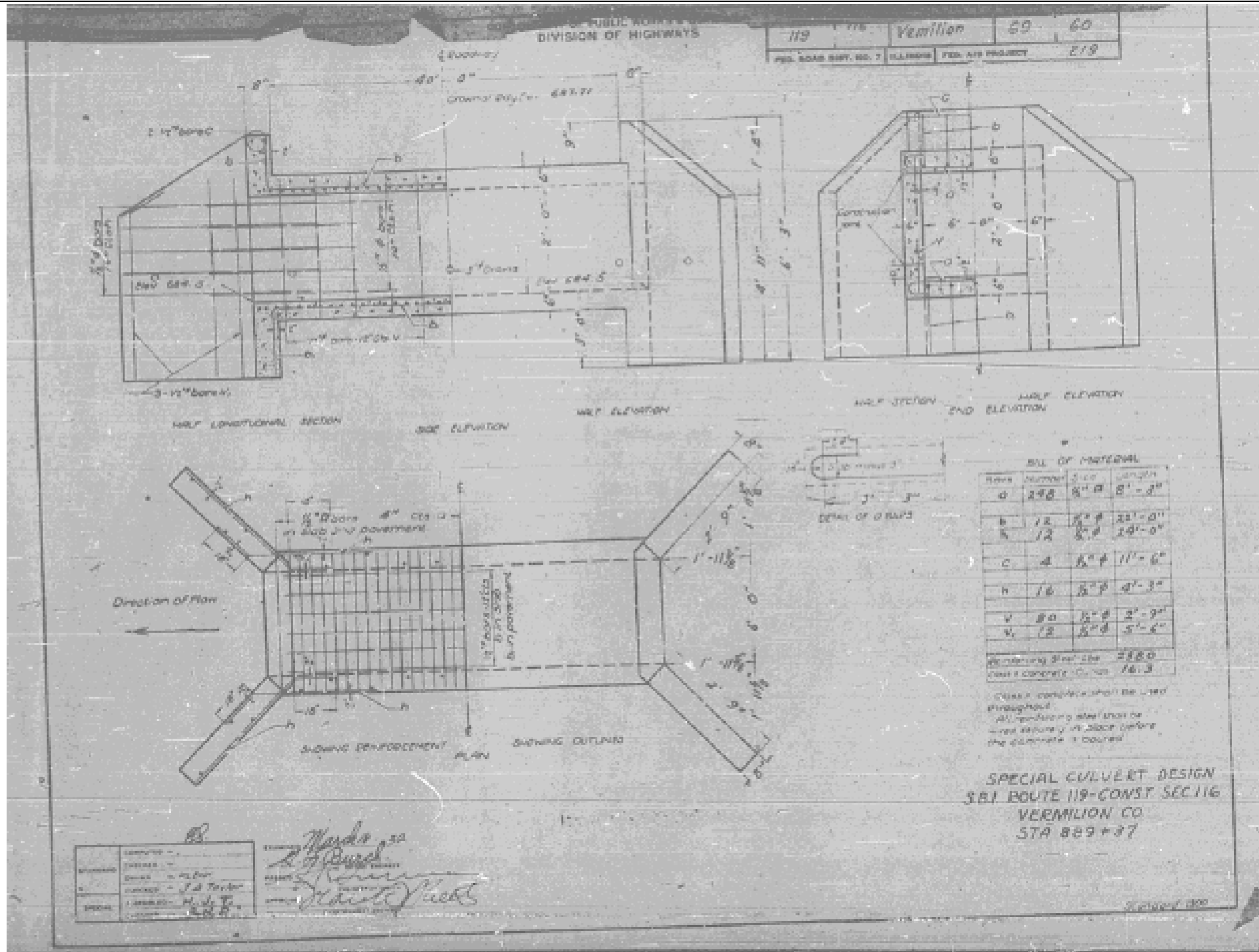
STRUCT. NO. Station	DEPTH H	BLOW W S	UCS Qu	MOIST S T	Surface Water Elev. Stream Bed Elev.
BORING NO. Station Offset Ground Surface Elev.	(ft)	(/6")	(tsf)	(%)	ft ft
092-8036 889+37					
2 NE Boring 889+45 14.0 ft Lt. 100.9 ft					Groundwater Elev.: First Encounter Upon Completion After Hrs.
Shoulder Stone	99.9				
Brown Mottled Silty Clay Loam (Backfill)	96.9	2	1.0	28	
Brown/Gray Mottled Silty Clay Loam	94.4	2	1.2	20	
Brown Clay Loam Till	91.9	3	6.3	15	
Gray Clay Loam Till	87.4	4	7.8	15	
End of Boring	85.9				

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An assumed centerline elevation of 100.00 and station of 10+00 is used when this information is not available.
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)

FILE NAME =	USER NAME = bowerm1	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING LOGS FOR SN 092-8036	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ct:\pw\work\p\d0t\bowerm1\d0186764\70801	sht-BoxCulverts.dgn	DRAWN -	REVISED -			711	116CR	VERMILION	50	22	
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	PLOT DATE = 11/30/2010	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

FOR INFORMATION ONLY



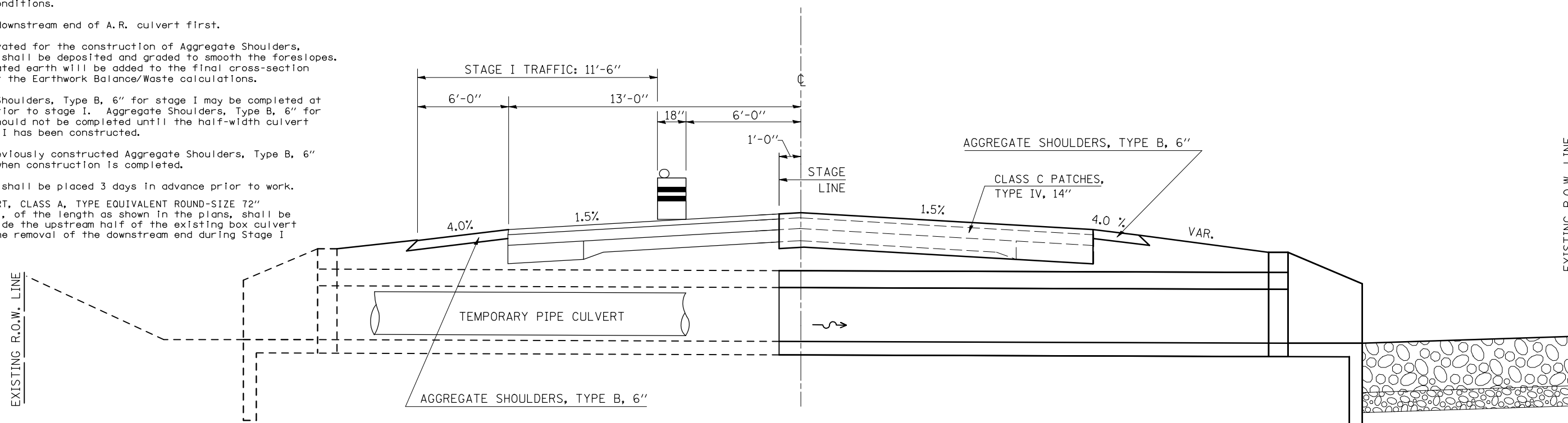
FOR INFORMATION ONLY

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	PLOT DATE = 11/30/2010	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

NOTES

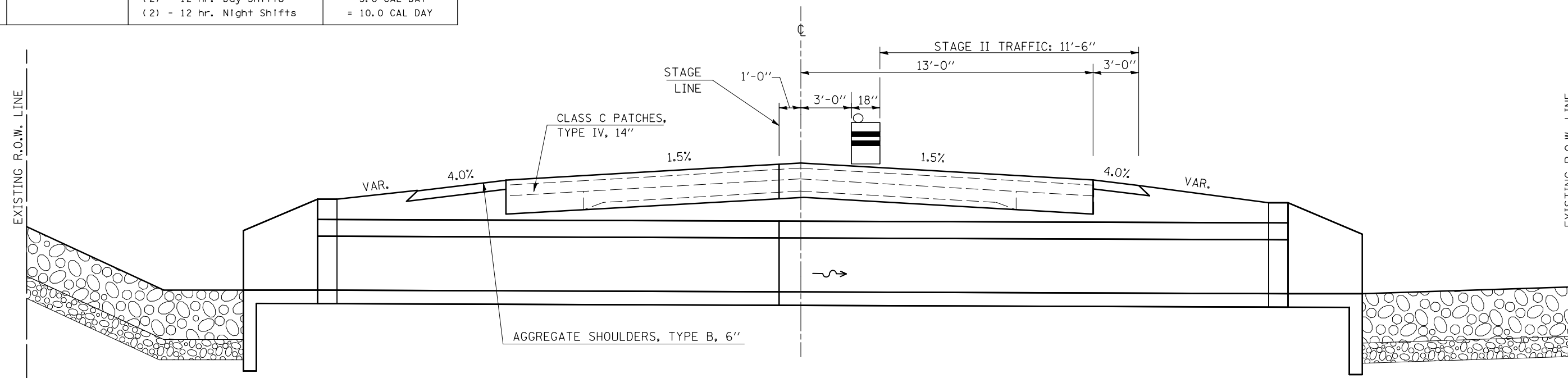
1. Refer to Special Provisions for TRAFFIC CONTROL AND PROTECTION, STANDARD 701206 and STAGE CONSTRUCTION ACROSS ROAD STRUCTURES for additional information.
2. The Engineer may reduce or eliminate lengths or locations of Aggregate Shoulders, Type B, 6" and Earth Excavation based on field conditions.
3. Construct downstream end of A.R. culvert first.
4. Earth excavated for the construction of Aggregate Shoulders, Type B, 6" shall be deposited and graded to smooth the foreslopes. This excavated earth will be added to the final cross-section volumes for the Earthwork Balance/Waste calculations.
5. Aggregate Shoulders, Type B, 6" for stage I may be completed at any time prior to stage I. Aggregate Shoulders, Type B, 6" for stage II should not be completed until the half-width culvert from stage I has been constructed.
6. Replace previously constructed Aggregate Shoulders, Type B, 6" as needed when construction is completed.
7. CMS boards shall be placed 3 days in advance prior to work.
8. PIPE CULVERT, CLASS A, TYPE EQUIVALENT ROUND-SIZE 72" (TEMPORARY), of the length as shown in the plans, shall be placed inside the upstream half of the existing box culvert prior to the removal of the downstream end during Stage I operations.

TYPICAL STAGING DETAILS SN 092-8074 STAGE I



A. R. CULVERT LOCATION	TRAFFIC CONTROL STANDARD	ESTIMATED TIME	CHANGEABLE MESSAGE SIGNS
STA. 627+36.00	701206	2 Days - 48 hrs. - Non-Stop (2) - 12 hr. Day Shifts (2) - 12 hr. Night Shifts	2 EACH AT 5.0 CAL DAY = 10.0 CAL DAY

TYPICAL STAGING DETAILS SN 092-8074 STAGE II



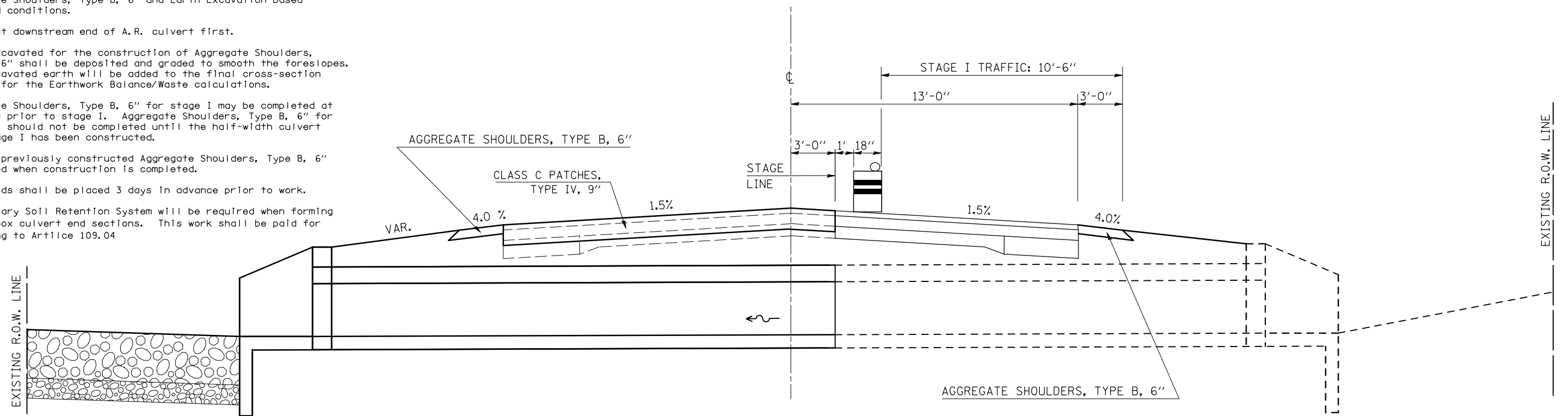
DRAWING NOT TO SCALE

FILE NAME =	USER NAME = bowerml	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STAGING DETAIL FOR SN 092-8074			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pw\work\p\dot\bowerml\d0186764\7080	details.dgn	DRAWN -	REVISED -					711	116CR	VERMILION	50	24
	PLOT SCALE = 40.0000' / IN.	CHECKED -	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.			CONTRACT NO. 70801				
	PLOT DATE = 11/30/2010	DATE -	REVISED -		ILLINOIS FED. AID PROJECT							

NOTES

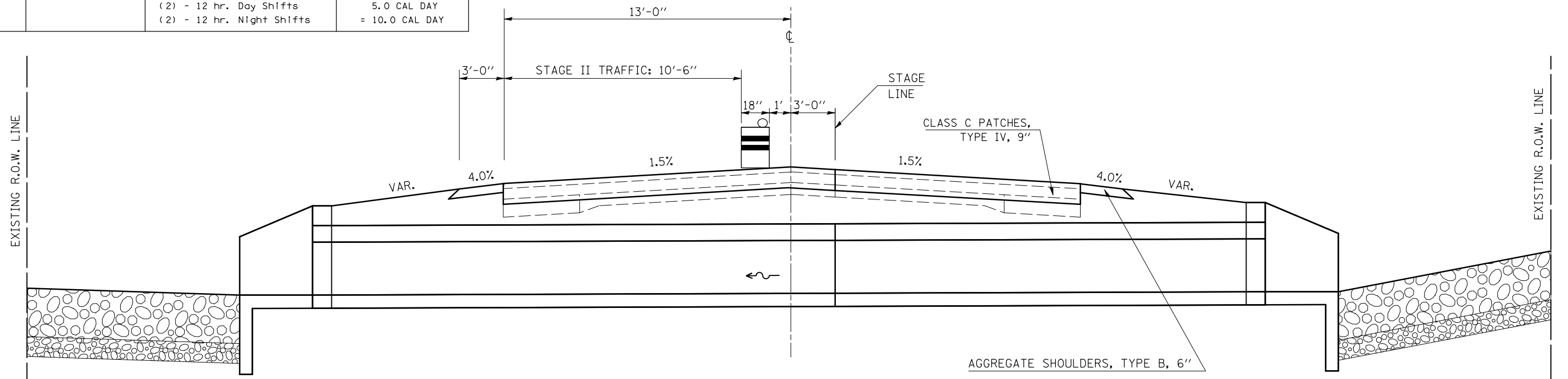
1. Refer to Special Provisions for TRAFFIC CONTROL AND PROTECTION, STANDARD 701206 and STAGE CONSTRUCTION ACROSS ROAD STRUCTURES for additional information.
2. The Engineer may reduce or eliminate lengths or locations of Aggregate Shoulders, Type B, 6" and Earth Excavation based on field conditions.
3. Construct downstream end of A.R. culvert first.
4. Earth excavated for the construction of Aggregate Shoulders, Type B, 6" shall be deposited and graded to smooth the foreslopes. This excavated earth will be added to the final cross-section volumes for the Earthwork Balance/Waste calculations.
5. Aggregate Shoulders, Type B, 6" for stage I may be completed at any time prior to stage I. Aggregate Shoulders, Type B, 6" for stage II should not be completed until the half-width culvert from stage I has been constructed.
6. Replace previously constructed Aggregate Shoulders, Type B, 6" as needed when construction is completed.
7. CMS boards shall be placed 3 days in advance prior to work.
8. A Temporary Soil Retention System will be required when forming up the box culvert end sections. This work shall be paid for according to Article 109.04

TYPICAL STAGING DETAILS SN 092-8073 STAGE I



A. R. CULVERT LOCATION	TRAFFIC CONTROL STANDARD	ESTIMATED TIME	CHANGEABLE MESSAGE SIGNS
STA. 889+37.00	701206	2 Days - 48 hrs. - Non-Stop (2) - 12 hr. Day Shifts (2) - 12 hr. Night Shifts	2 EACH AT 5.0 CAL DAY = 10.0 CAL DAY

TYPICAL STAGING DETAILS SN 092-8073 STAGE II



DRAWING NOT TO SCALE

FILE NAME =	USER NAME = bowerml	DESIGNED -	REVISED -
ct:\pw\work\p\dot\bowerml\d0186764\7080	details.dgn	DRAWN -	REVISED -
	PLOT SCALE = 40.0000' / IN.	CHECKED -	REVISED -
	PLOT DATE = 11/30/2010	DATE -	REVISED -

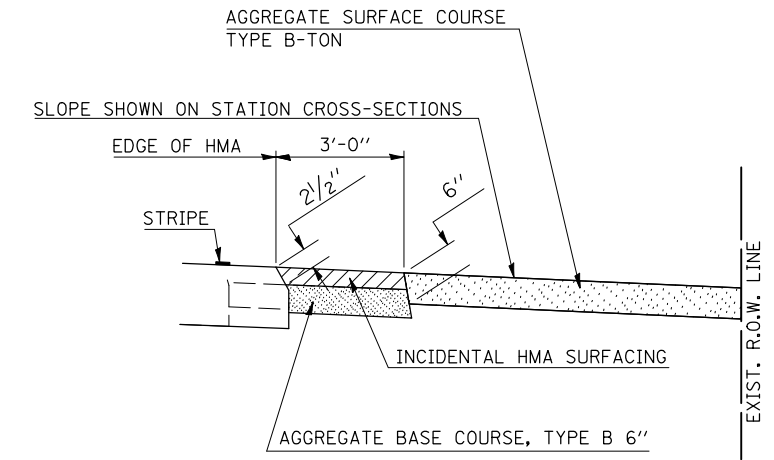
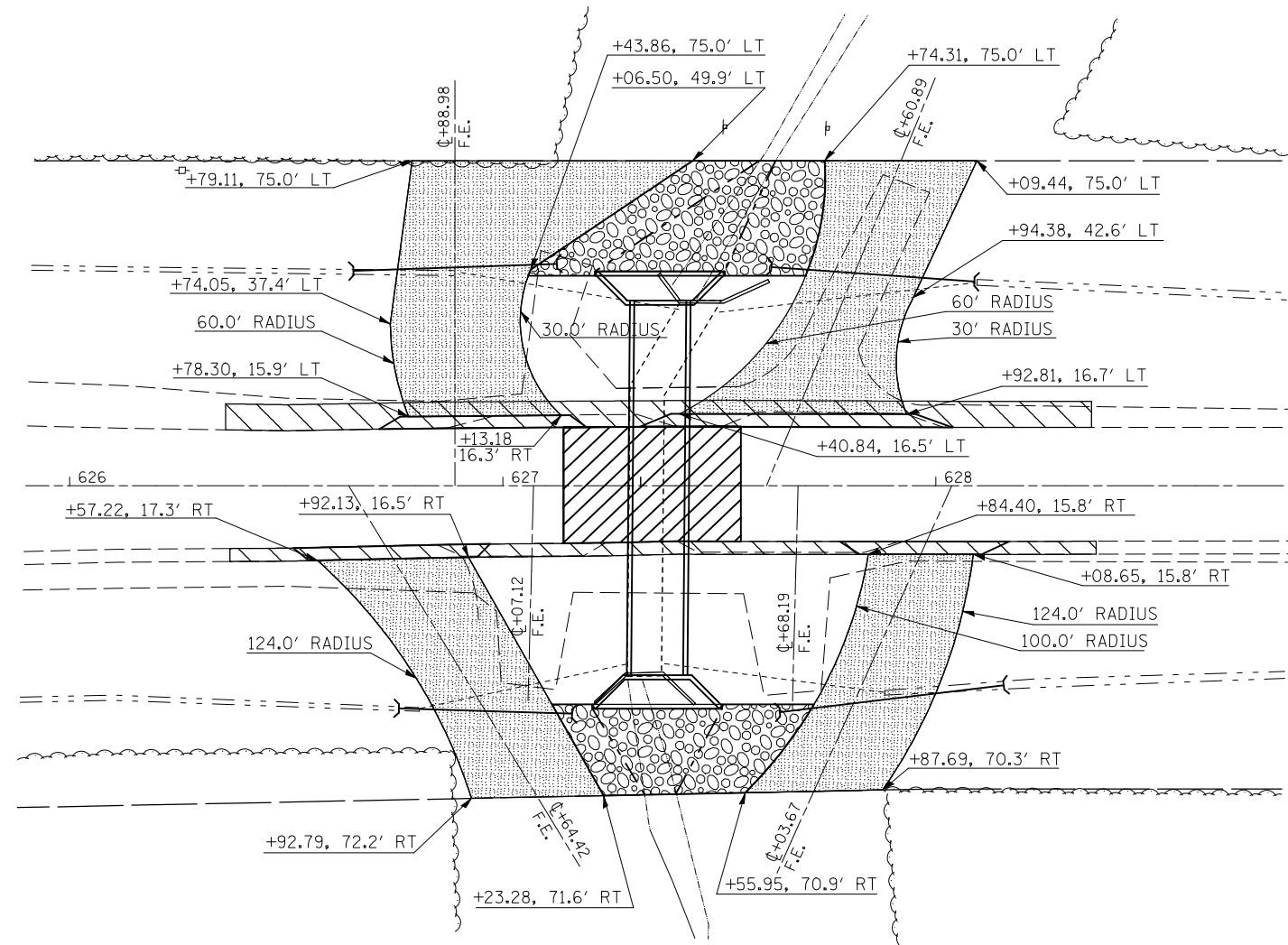
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING DETAIL FOR SN 092-8073

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
711	116CR	VERMILION	50	25
CONTRACT NO. 70801				
ILLINOIS FED. AID PROJECT				

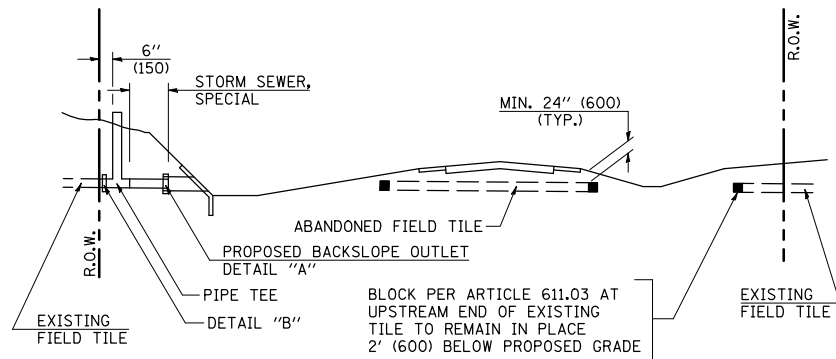
DETAILS OF FIELD ENTRANCES



GENERAL NOTES:

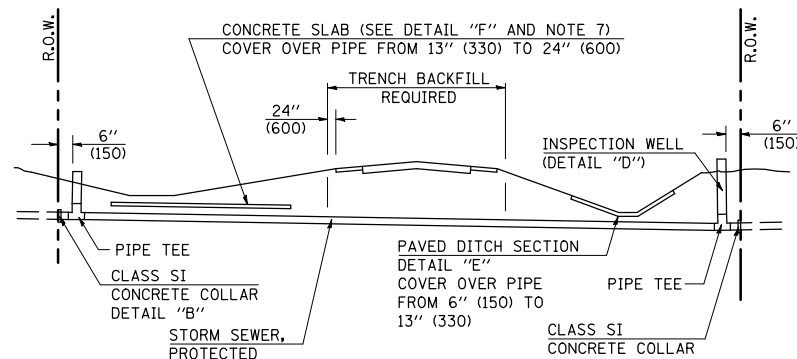
1. THE INCIDENTAL HMA SURFACING, AGGREGATE PRIME COAT, AND BITUMINOUS PRIME COAT FOR THE FOUR FIELD ENTRANCES SHALL NOT BE PAID FOR BUT WILL BE INCLUDED IN THE PRICE FOR AGGREGATE SURFACE COURSE.

FILE NAME =	USER NAME = bowerml	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FIELD ENTRANCES AT SN 092-8033			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pw\work\p\dot\bowerml\d0186764\7080	details.dgn	DRAWN -	REVISED -		711	116CR	VERMILION	50	26			
PLOT SCALE = 40.0000' / IN.	CHECKED -	REVISED -	REVISED -		CONTRACT NO. 70801			ILLINOIS FED. AID PROJECT				
PLOT DATE = 11/30/2010	DATE -	REVISED -	REVISED -		SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.			



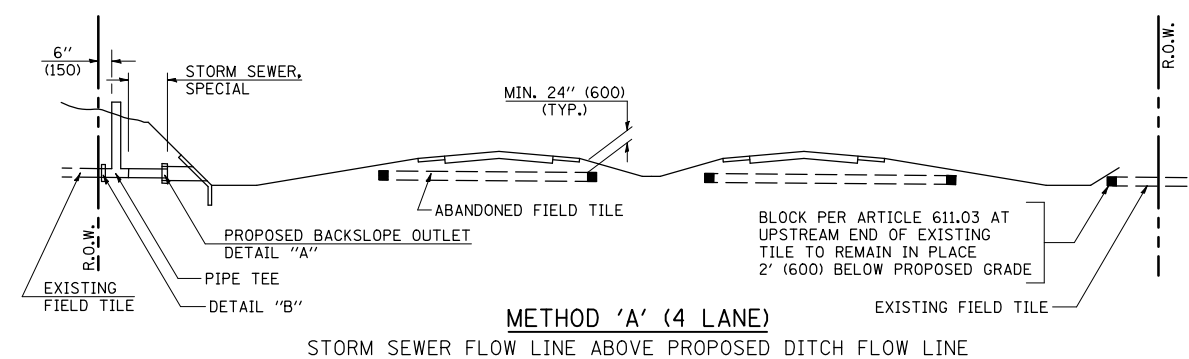
METHOD 'A' (2 LANE)

STORM SEWER FLOW LINE ABOVE PROPOSED DITCH FLOW LINE



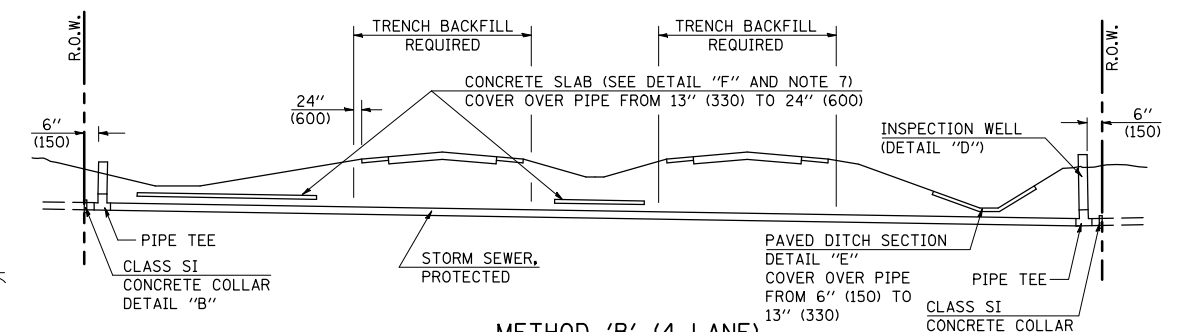
METHOD 'B' (2 LANE)

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



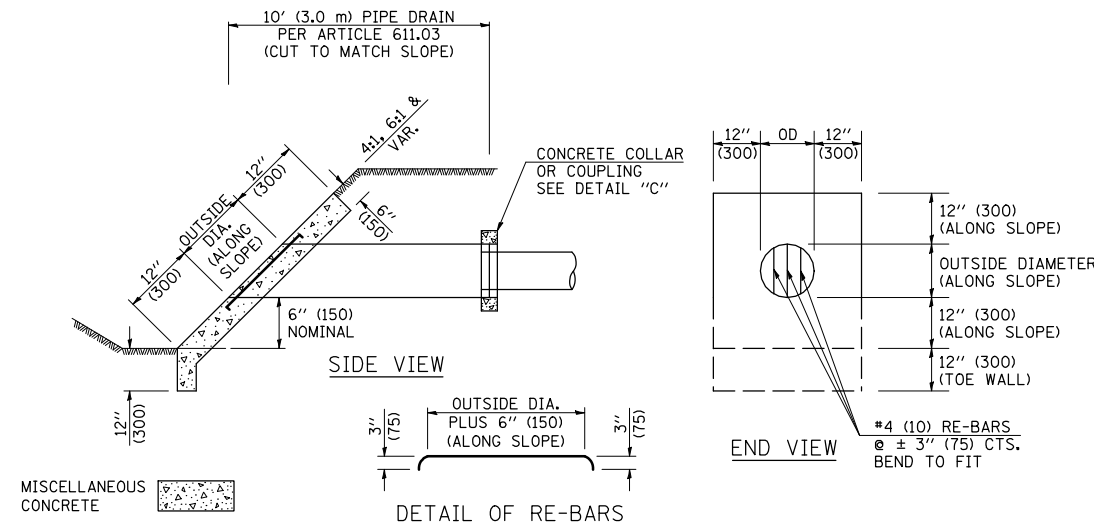
METHOD 'A' (4 LANE)

STORM SEWER FLOW LINE ABOVE PROPOSED DITCH FLOW LINE

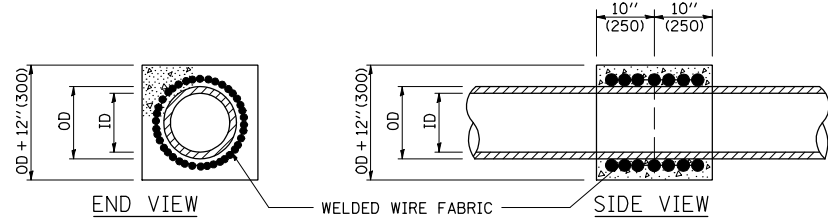


METHOD 'B' (4 LANE)

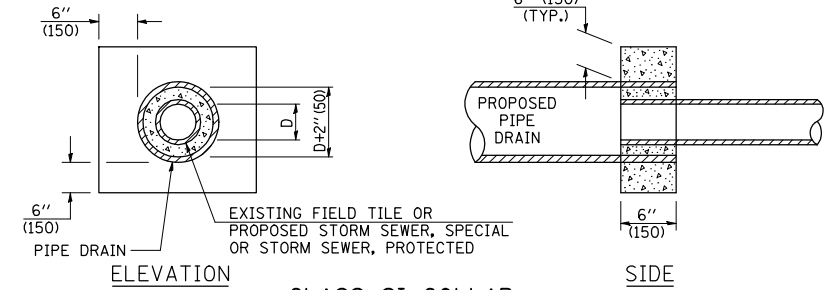
STORM SEWER LESS THAN 2' (600 mm) BELOW DITCH FLOW LINE AND STORM SEWERS CROSSING UNDER PAVEMENTS AND PAVED DITCHES



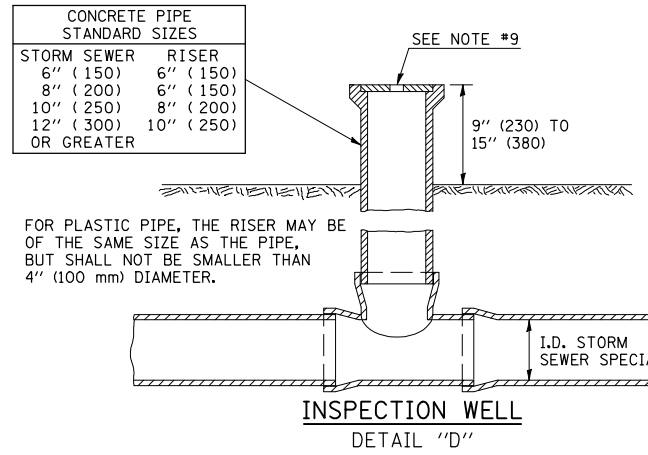
HEADWALL FOR BACKSLOPE OUTLET
DETAIL "A"



CONCRETE COLLAR
DETAIL "B"



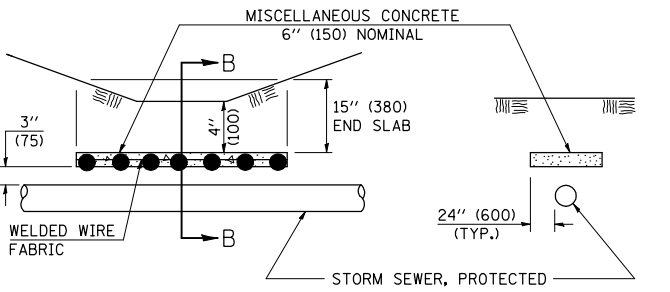
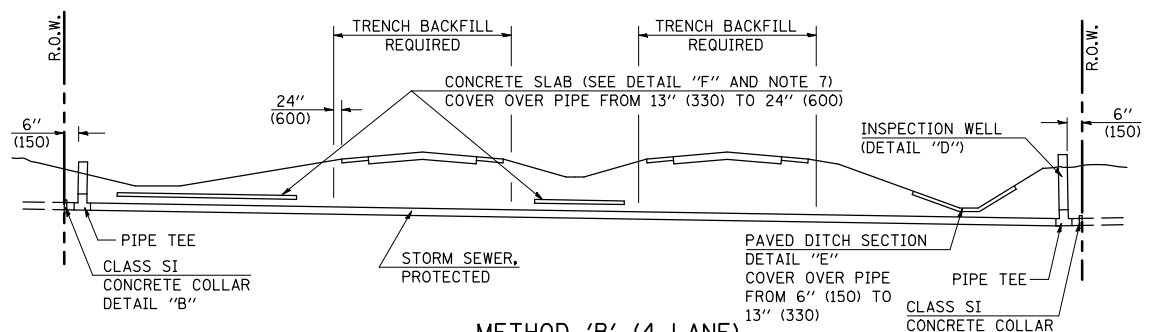
CLASS SI COLLAR
DETAIL "C"



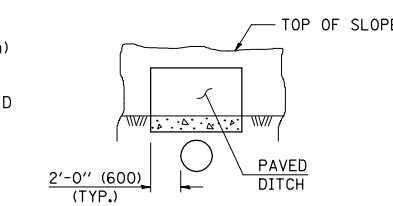
INSPECTION WELL
DETAIL "D"

GENERAL NOTES

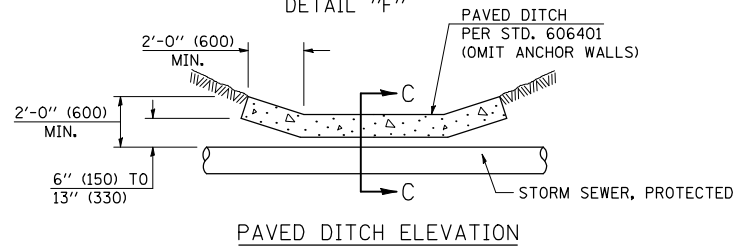
- EXISTING FIELD TILE ENCOUNTERED BY EXPLORATION TRENCH SHALL BE INSPECTED BY THE ENGINEER FOR UNOBSTRUCTED FLOW WITHIN THE LIMITS OF THE RIGHT-OF-WAY.
- ONLY FIELD TILE THAT DOES NOT HAVE SATISFACTORY FLOW AND OR HAS VISIBLE SIGNS OF DETERIORATION (SINK HOLES, ETC.) SHALL BE REPLACED WITHIN THE LIMITS 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.



CONCRETE SLAB
DETAIL "F"



PAVED DITCH
DETAIL "E"

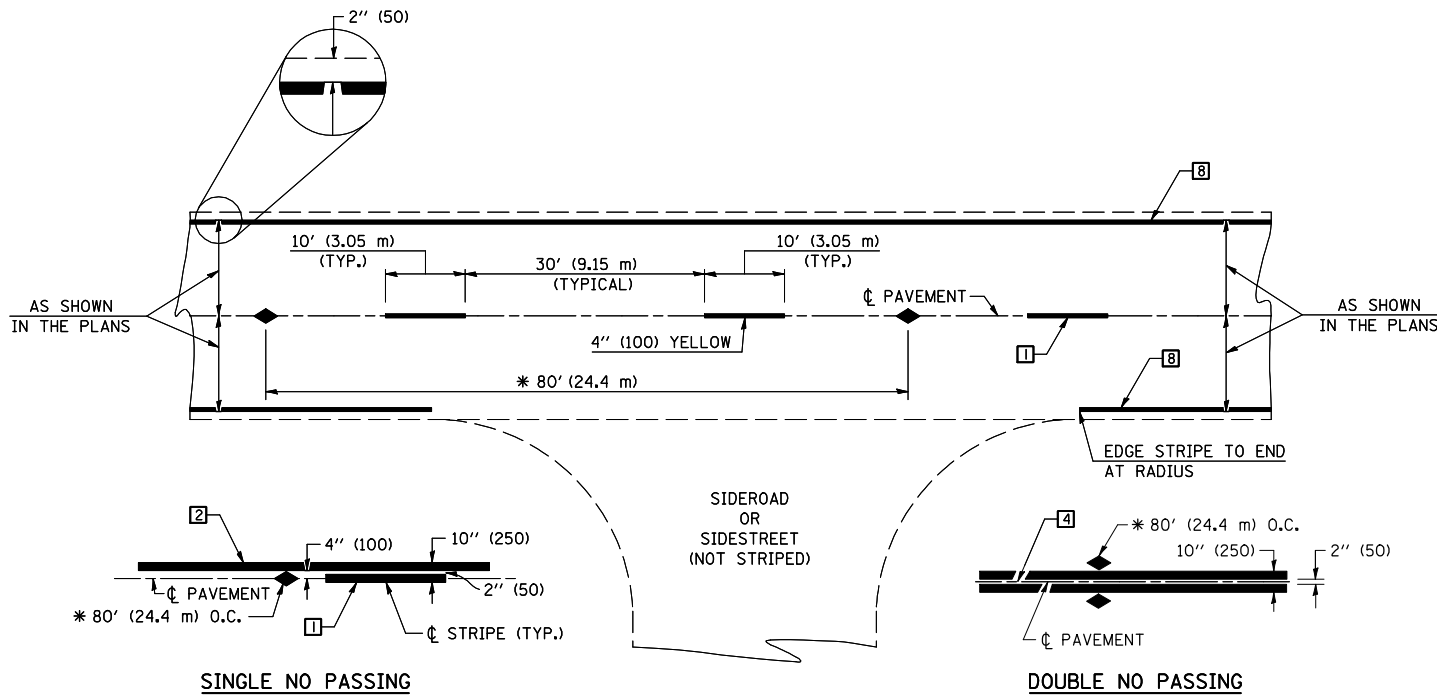


PAVED DITCH ELEVATION

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

DISTRICT 5 DETAIL NO. 61101011A

FILE NAME = c:\pw\work\p1\dot\bowerm\l\d0186764\7080	USER NAME = bowerm1 details.dgn	DESIGNED - DRAWN -	REVISED - REVISED -	11/06	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FIELD TILE SYSTEMS (TREATMENT OF EXISTING)	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 40.0000 ' / IN.	CHECKED -	REVISED -				711	116CR	VERMILION	50	27
	PLOT DATE = 11/30/2010	DATE -	REVISED -		SCALE: N/A	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 70801	



* 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

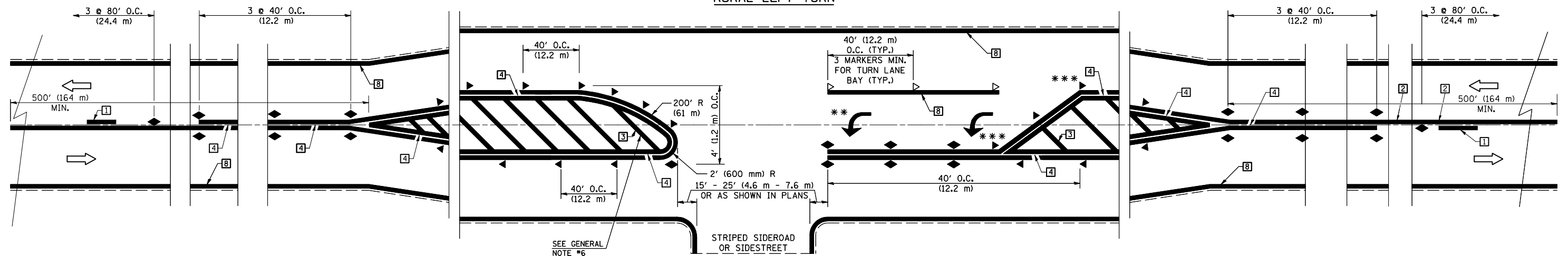
TYPICAL PAVEMENT MARKING LEGEND

- 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.

FILE NAME =	USER NAME = bowerml	DESIGNED -	REVISED - 11/06
ct:\pw\work\p\dot\bowerml\d0186764\7080	details.dgn	DRAWN -	REVISED - 09/2009 - KJT
	PLOT SCALE = 40.0000' / IN.	CHECKED -	REVISED -
	PLOT DATE = 11/30/2010	DATE -	REVISED -

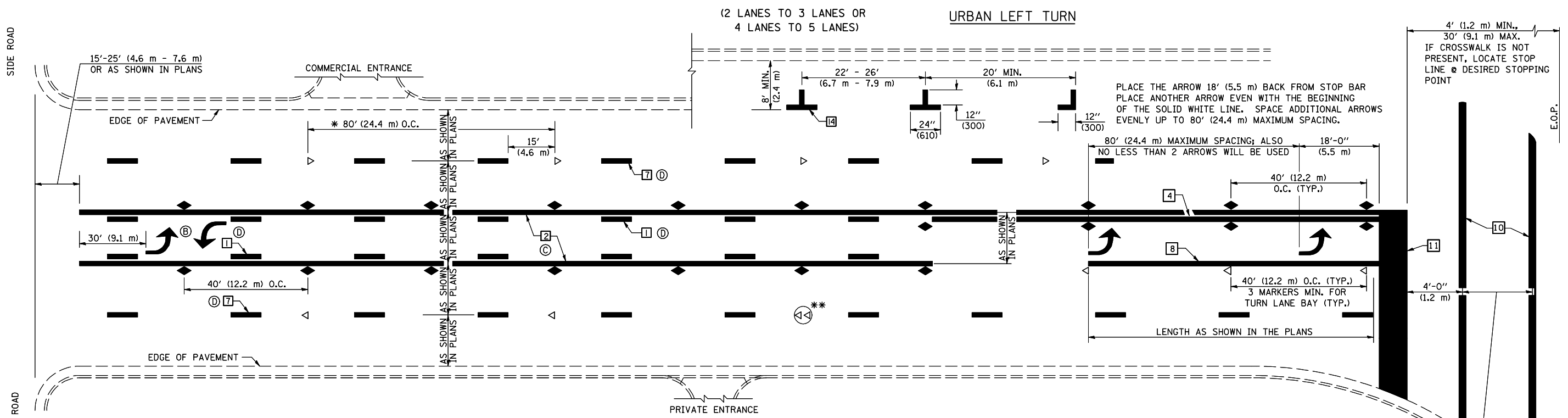
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

SCALE: N/A SHEET NO. 1 OF 4 SHEETS STA. TO STA.

DISTRICT 5 DETAIL NO. 7800AAA

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
711	116CR	VERMILION	50	28
CONTRACT NO. 70801				
FED. ROAD DIST. NO. N ILLINOIS FED. AID PROJECT				

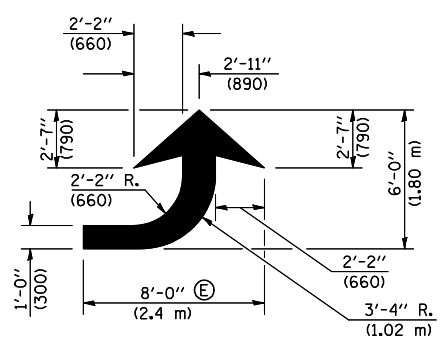


* REDUCE TO 40 FEET (12.2 METERS) ON CENTER ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH (15 km/h) LOWER THAN POSTED SPEEDS.

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

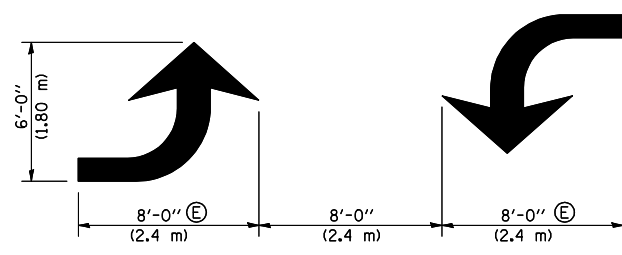
GENERAL NOTES:

- Ⓑ 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)



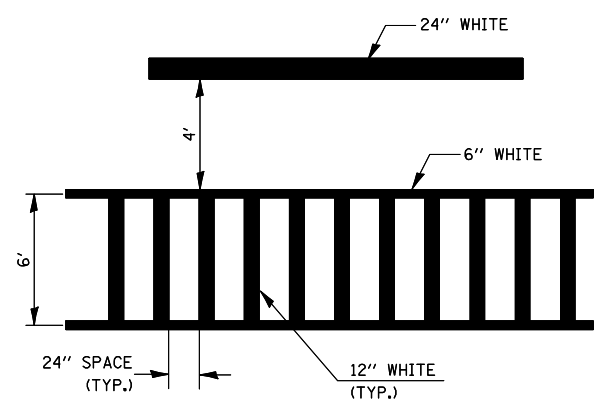
LEFT ARROW

REVERSE FOR RIGHT ARROW
AREA = 15.6 SQ. FT. (1.47 m²)
(WHITE)

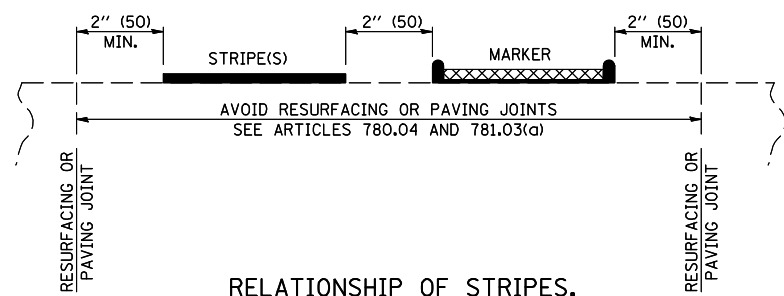


TYPICAL DOUBLE TURN ARROWS (WHITE)

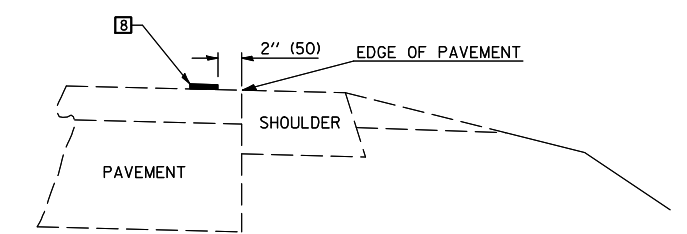
BLOOMINGTON-NORMAL CITY LIMITS ONLY



TYPICAL SPACING FOR CROSSWALKS & STOP BARS



RELATIONSHIP OF STRIPES, MARKERS AND JOINTS

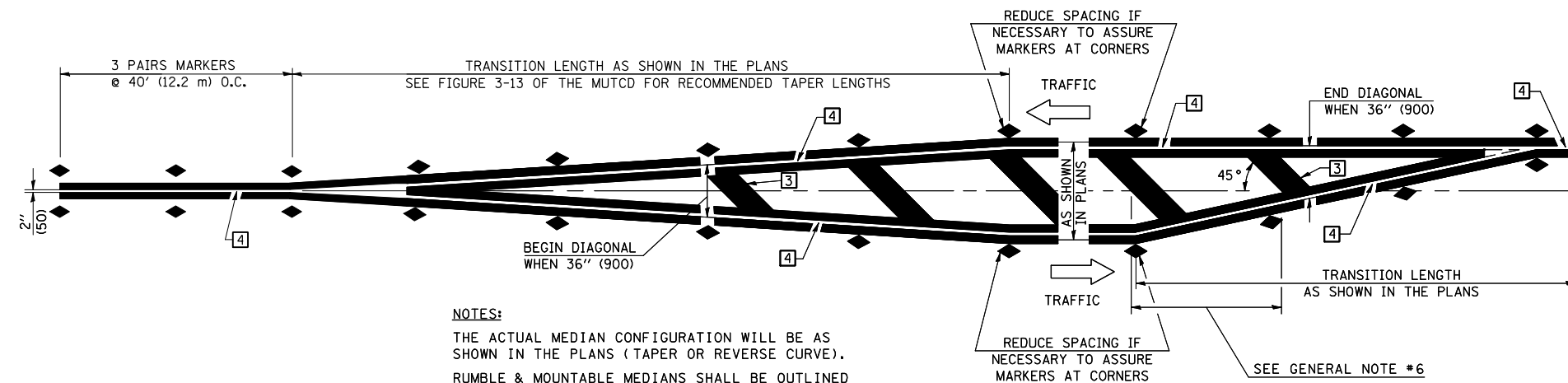


RELATIONSHIP OF EDGE LINE TO EDGE OF PAVEMENT
(SAFETY SHOULDER OR PAVED SURFACE)
SEE ARTICLE 780.04

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

DISTRICT 5 DETAIL NO. 7800AAA

FILE NAME = c:\pwk\work\p\dot\bowerm\10186764\7080	USER NAME = bowerm details.dgn	DESIGNED - DRAWN -	REVISED - 11/06 REVISED - 09/2009 - KJT	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT MARKING AND MARKERS (RURAL & URBAN APPLICATIONS)			F.A.P. RTE. 711	SECTION 116CR	COUNTY VERMILION	TOTAL SHEETS 50	SHEET NO. 29
PLOT SCALE = 40.0000' / IN.	CHECKED -	DATE -	REVISED -					SCALE: N/A	SHEET NO. 2 OF 4 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

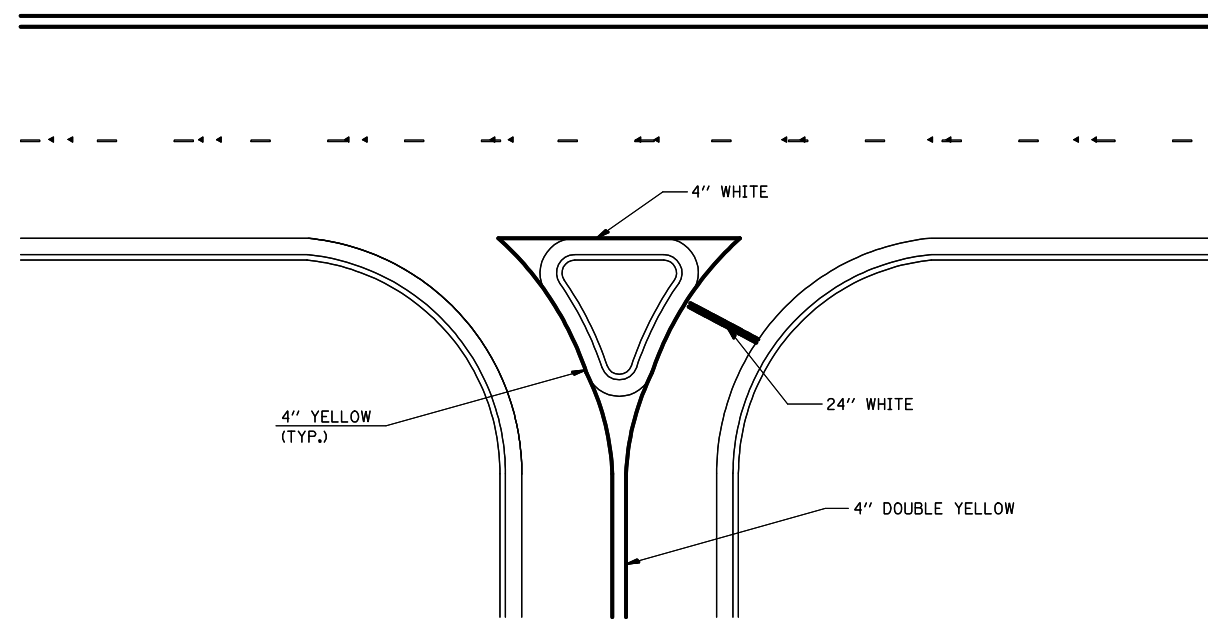


NOTES:
 THE ACTUAL MEDIAN CONFIGURATION WILL BE AS SHOWN IN THE PLANS (TAPER OR REVERSE CURVE).
 RUMBLE & MOUNTABLE MEDIANS SHALL BE OUTLINED WITH [2].

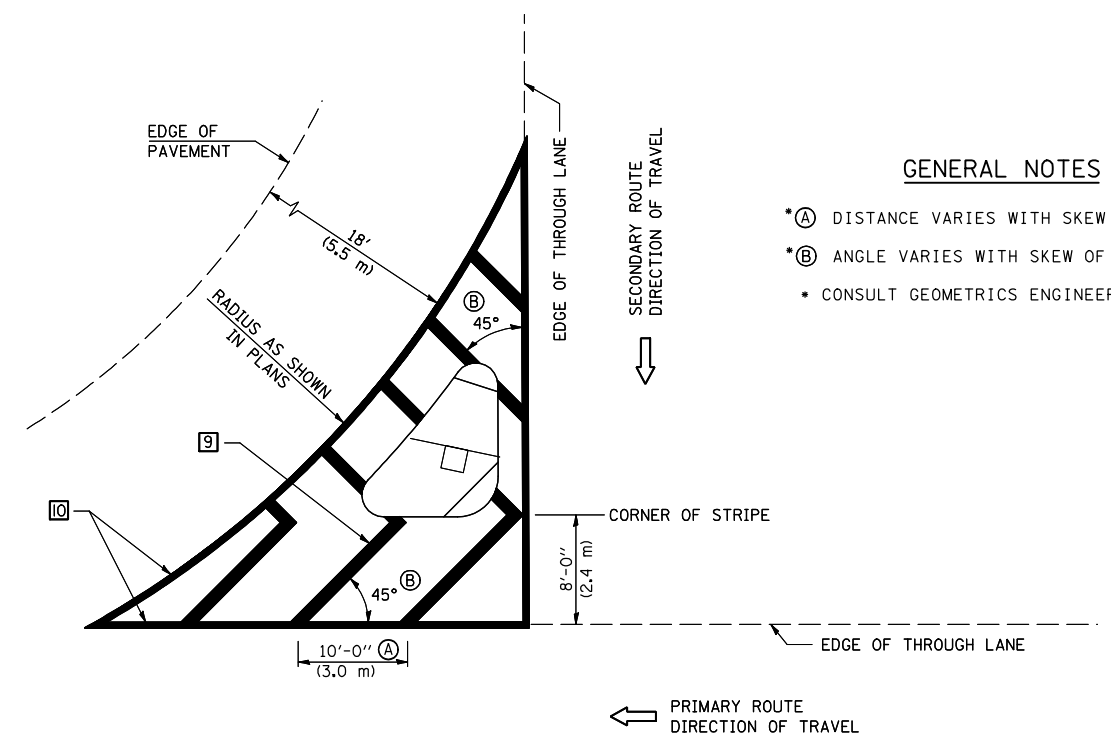
TYPICAL MEDIAN TRANSITIONS

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



ISLAND

GENERAL NOTES

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

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

FILE NAME =	USER NAME = bowerml	DESIGNED -	REVISED - 11/06
ct:\pw\work\pwwork\bowerm\0186764\7080	details.dgn	DRAWN -	REVISED - 09/2009 - KJT
	PLOT SCALE = 40.0000' / IN.	CHECKED -	REVISED -
	PLOT DATE = 11/30/2010	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

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

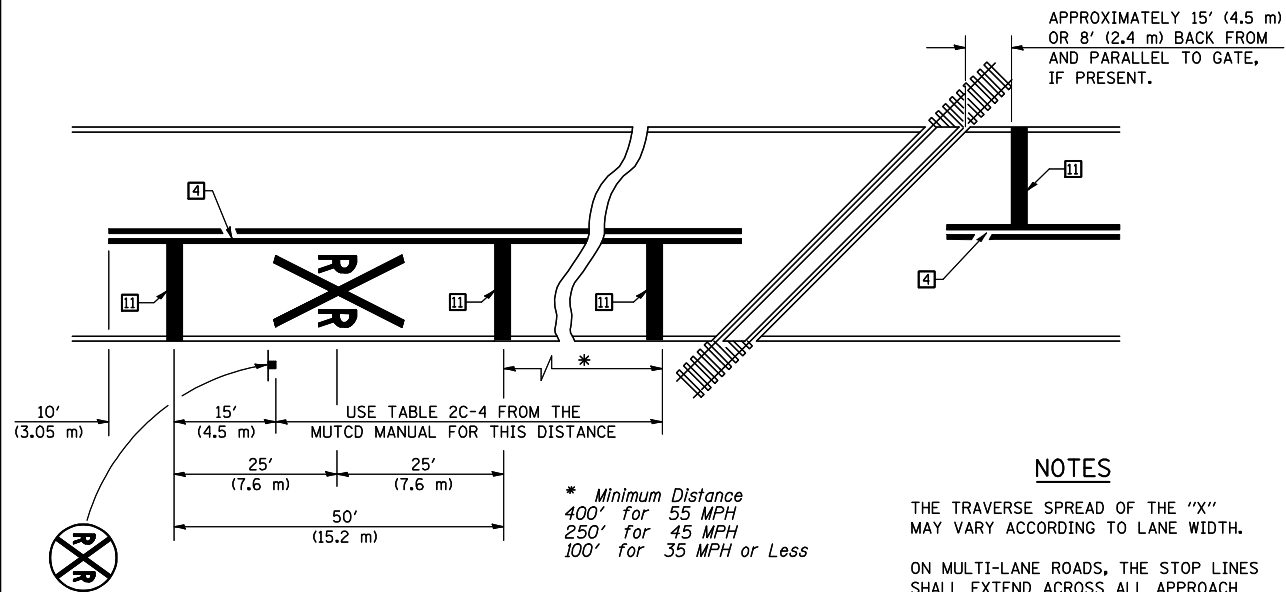
SCALE: N/A SHEET NO. 3 OF 4 SHEETS STA. TO STA.

DISTRICT 5 DETAIL NO. 7800AAA

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
711	116CR	VERMILION	50	30
CONTRACT NO. 70801				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

RAILROAD CROSSING WITH INTERCONNECT ONLY

RAILROAD CROSSING WITH INTERCONNECT AND PRE-SIGNALS



PAVEMENT MARKINGS AT RAILROAD-HIGHWAY GRADE CROSSING

NOTES

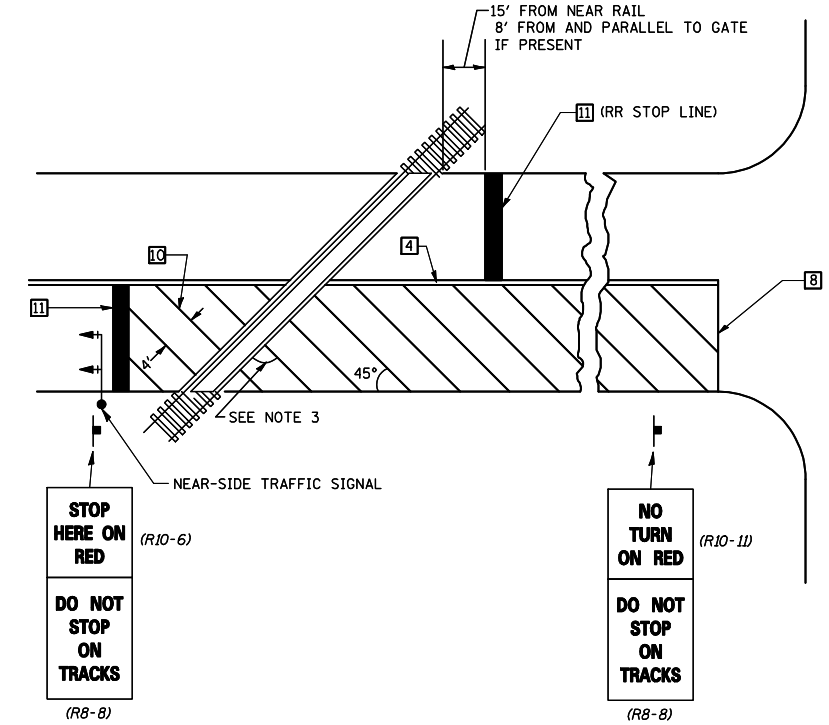
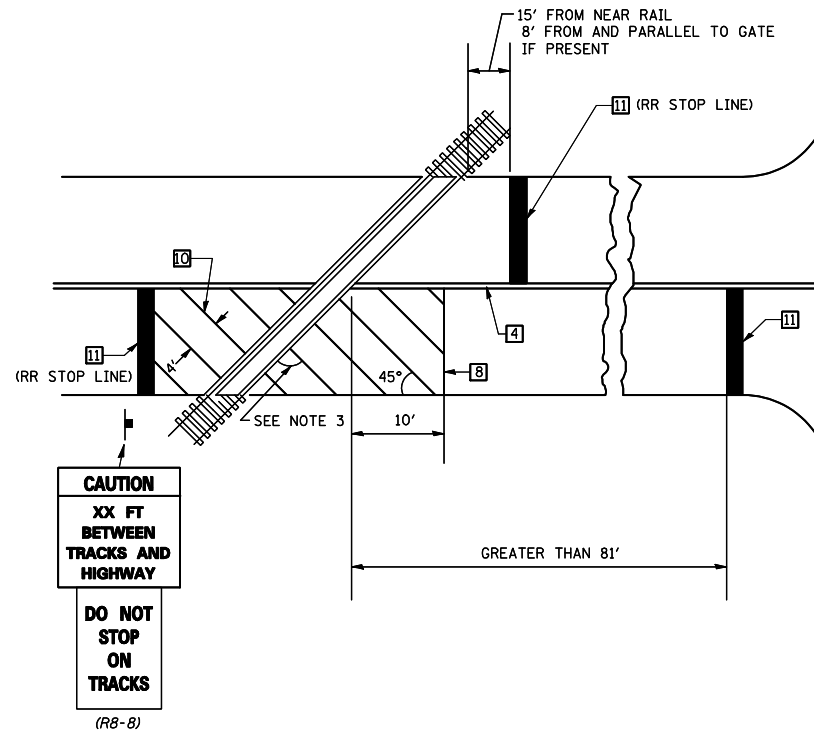
APPROXIMATELY 15' (4.5 m) OR 8' (2.4 m) BACK FROM AND PARALLEL TO GATE, IF PRESENT.

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.

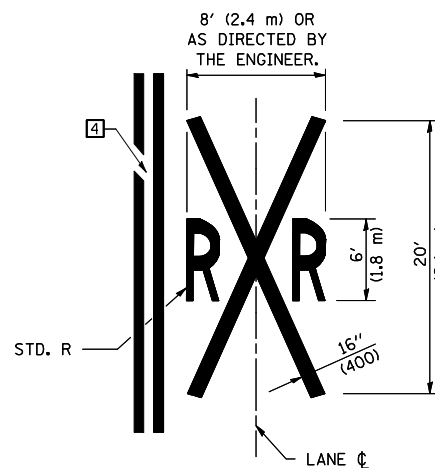
* Minimum Distance
400' for 55 MPH
250' for 45 MPH
100' for 35 MPH or Less



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.

DISTRICT 5 DETAIL NO. 7800AAAA

FILE NAME =	USER NAME = bowerml	DESIGNED -	REVISED - 11/06
ct:\pw\work\p\dot\bowerml\d0186764\7080	details.dgn	DRAWN -	REVISED - 09/2009 - KJT
	PLOT SCALE = 40.0000' / IN.	CHECKED -	REVISED -
	PLOT DATE = 11/30/2010	DATE -	REVISED -

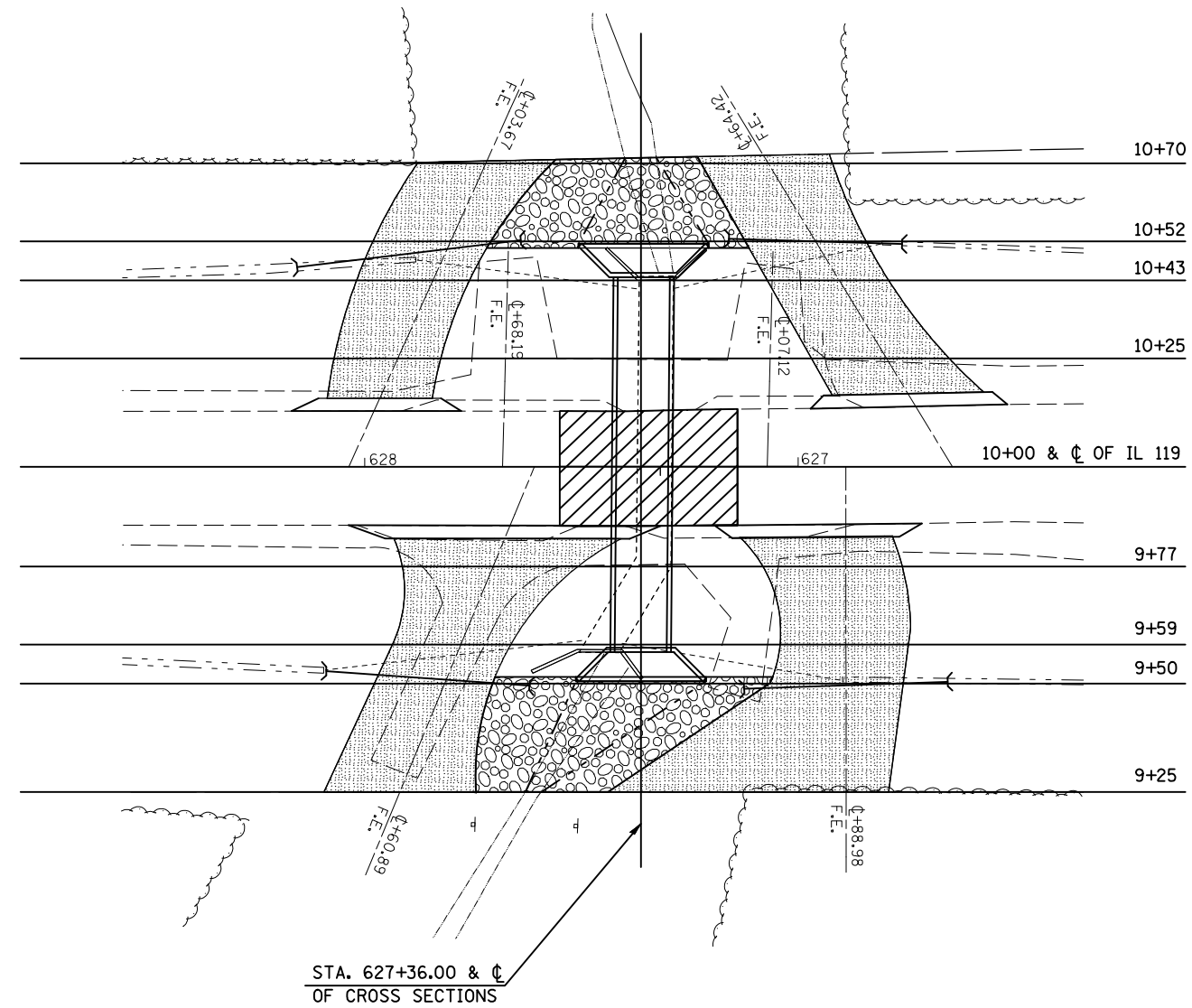
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND MARKERS
(RURAL & URBAN APPLICATIONS)

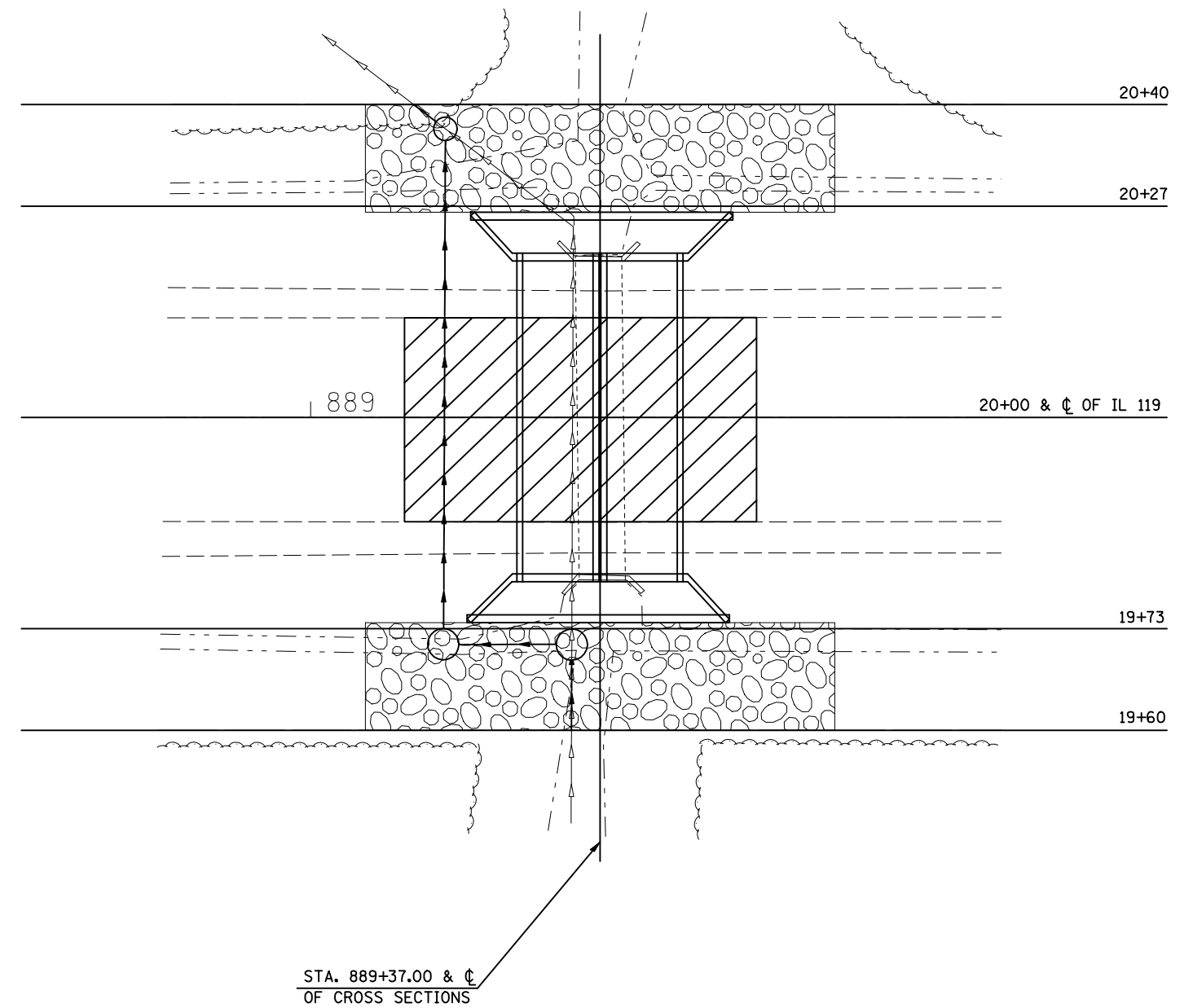
SCALE: N/A SHEET NO. 4 OF 4 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
711	116CR	VERMILION	50	31
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 70801	

SN 092-8074



SN 092-8073



FILE NAME = c:\pw\work\pwwork\bowerm1\d0186764\7080	USER NAME = bowerm1 details.dgn	DESIGNED - DRAWN -	REVISED - REVISED -
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	PLOT DATE = 11/30/2010	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

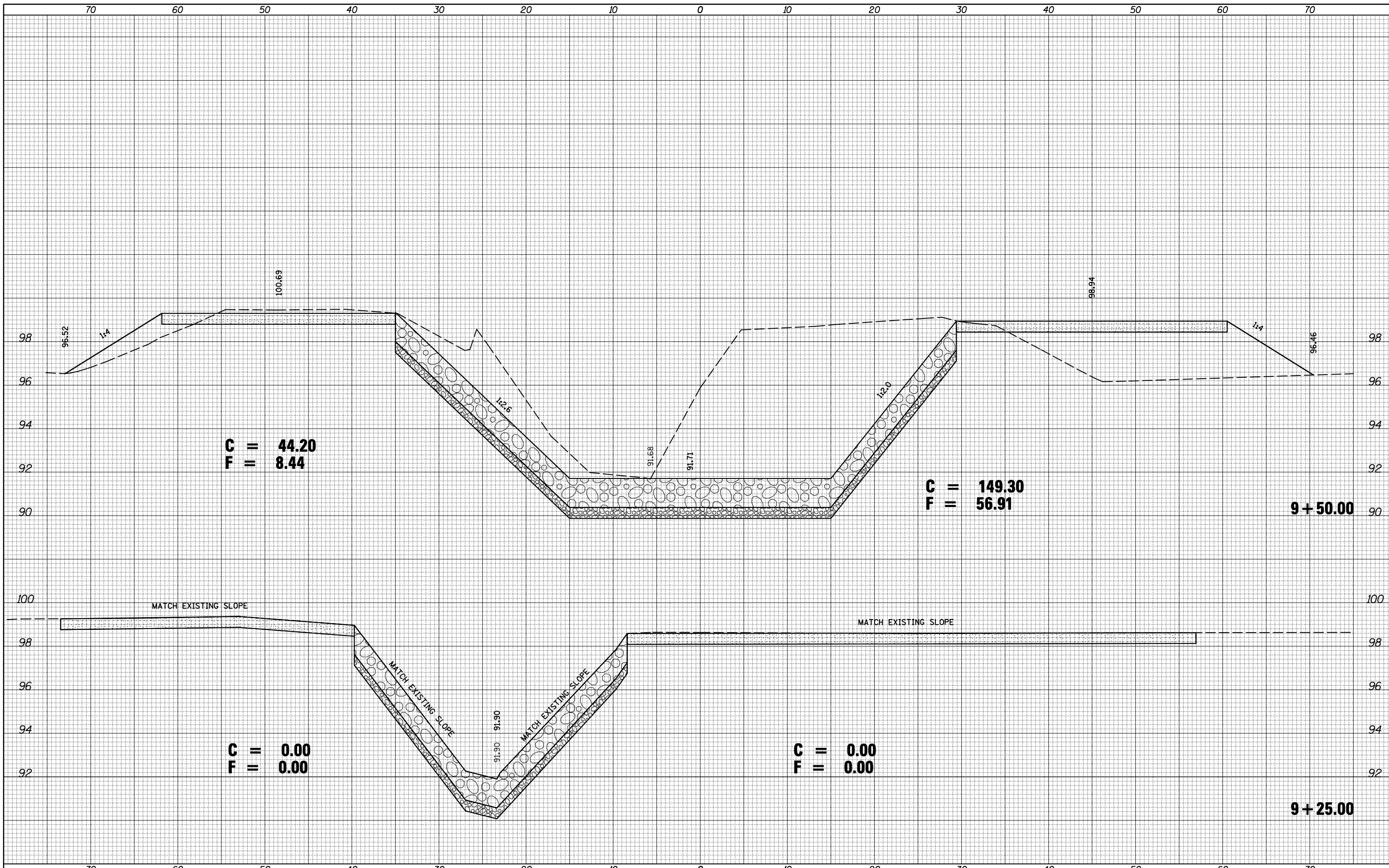
**LOCATIONS OF CROSS SECTIONS
CUT ACROSS BOX CULVERTS**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
711	116CR	VERMILION	50	32
CONTRACT NO. 70801				
ILLINOIS FED. AID PROJECT				

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

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



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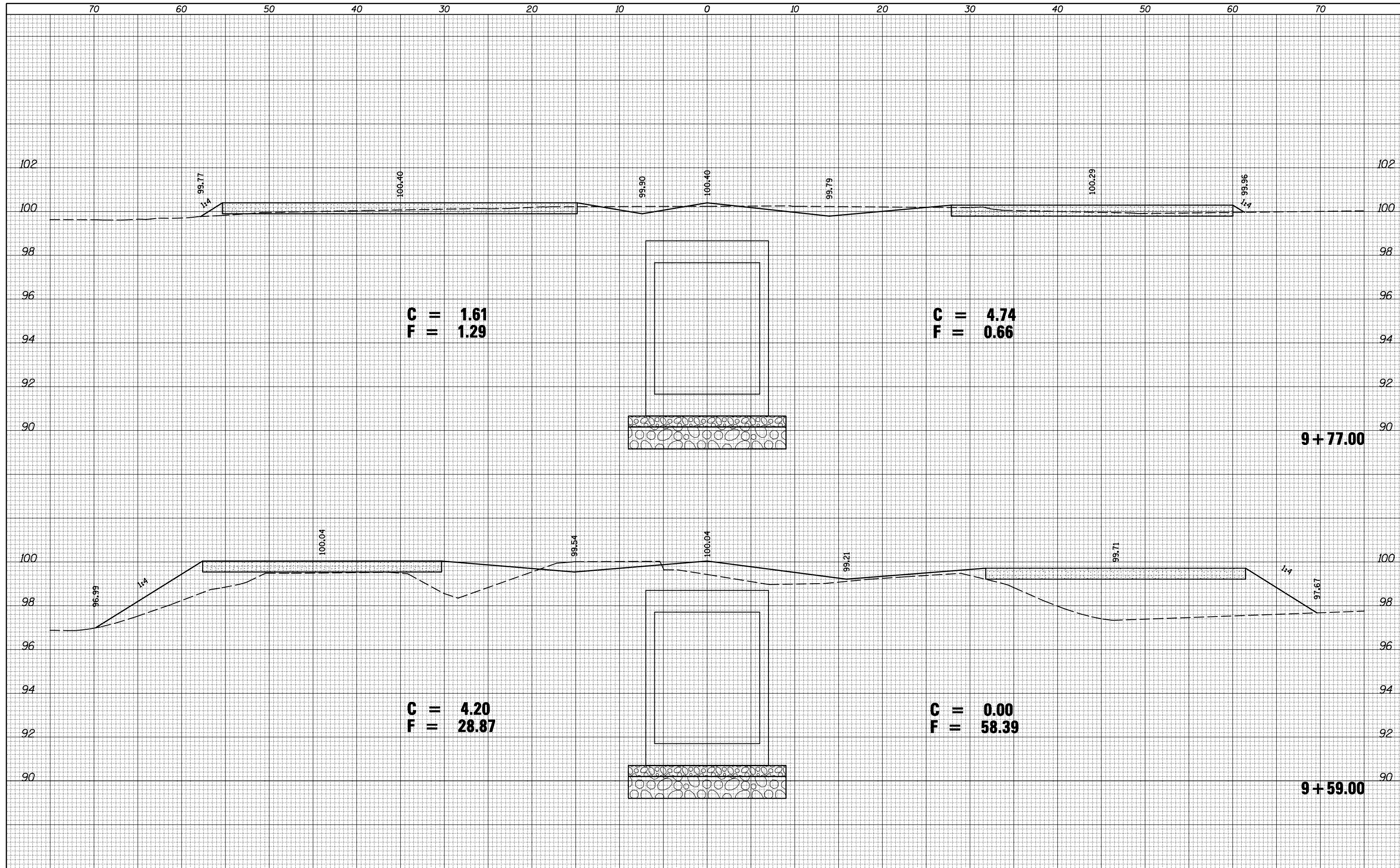
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS ALONG SN 092-8074
SCALE: SHEET NO. OF SHEETS STA. 9+25.00 TO STA. 9+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
711	116CR	VERMILION	50	33
CONTRACT NO. 70801				
ILLINOIS FED. AID PROJECT				

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

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



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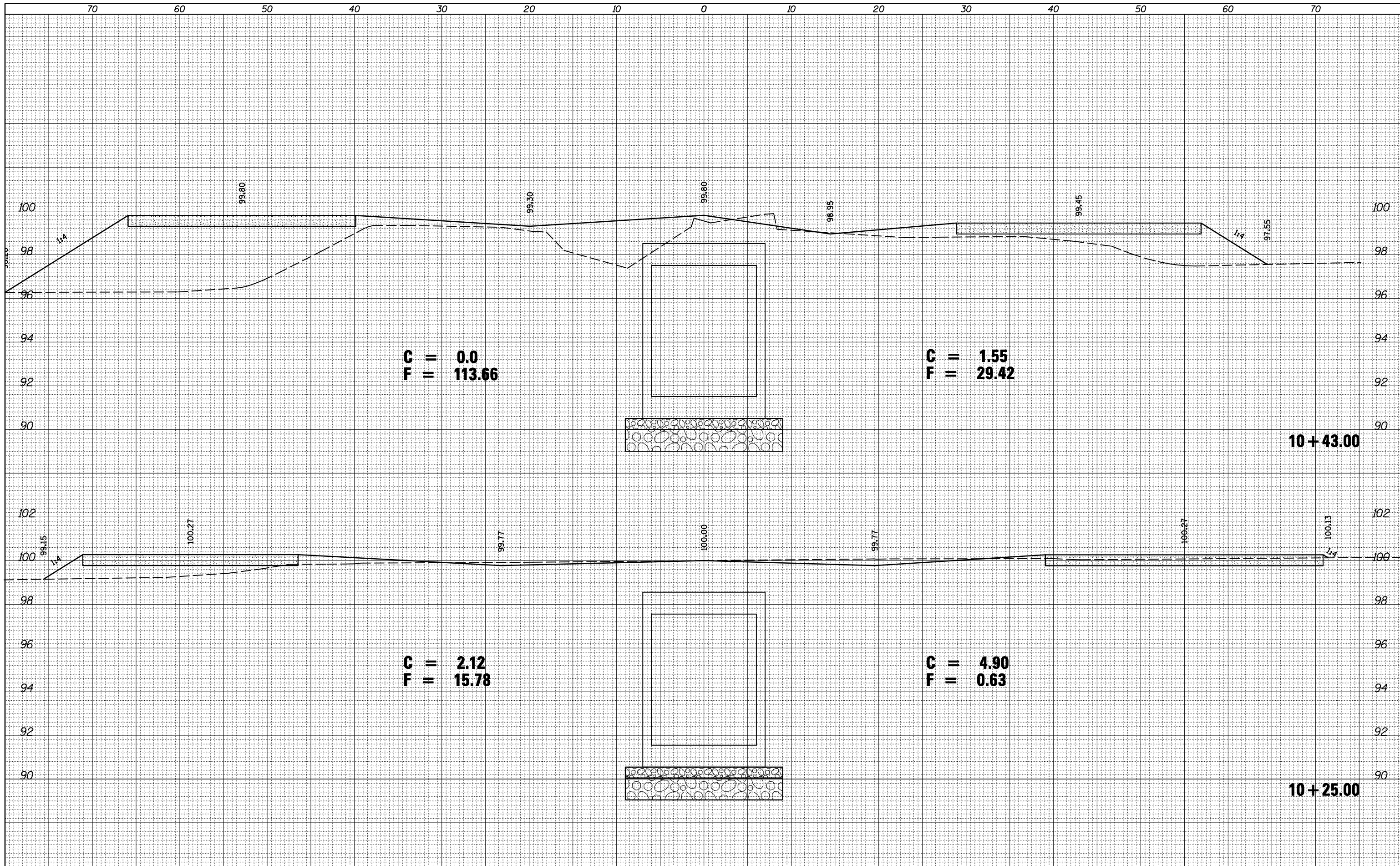
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:		SHEET NO.	OF	SHEETS	STA. 9+59.00	TO STA. 9+77.00
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
711	116CR	VERMILION	50	34
ILLINOIS FED. AID PROJECT			CONTRACT NO. 70801	

BY	DATE
SURVEYED	PLOTTED
NOTE BOOK	TEMPLATE
NO.	AREAS CHECKED

BY	DATE
SURVEYED	PLOTTED
NOTE BOOK	TEMPLATE
NO.	AREAS CHECKED



C = 0.0
F = 113.66

C = 1.55
F = 29.42

C = 2.12
F = 15.78

C = 4.90
F = 0.63

10+43.00

10+25.00

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PLOT SCALE = 10.0000 "/ IN.
PLOT DATE = 11/30/2010

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

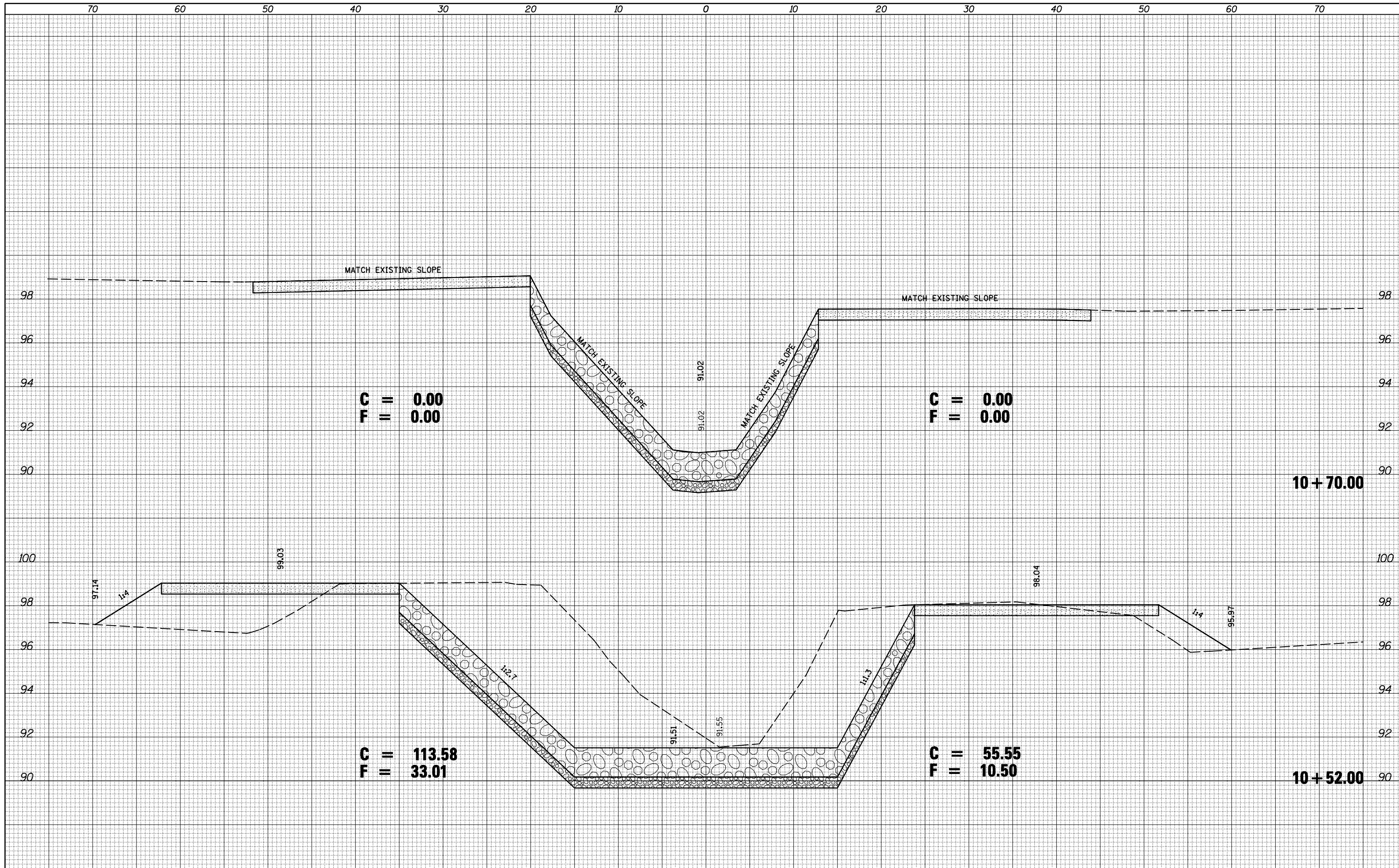
CROSS SECTIONS ALONG SN 092-8074

SCALE: SHEET NO. OF SHEETS STA. 10+25.00 TO STA. 10+43.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
711	116CR	VERMILION	50	35
ILLINOIS FED. AID PROJECT			CONTRACT NO. 70801	

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

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



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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

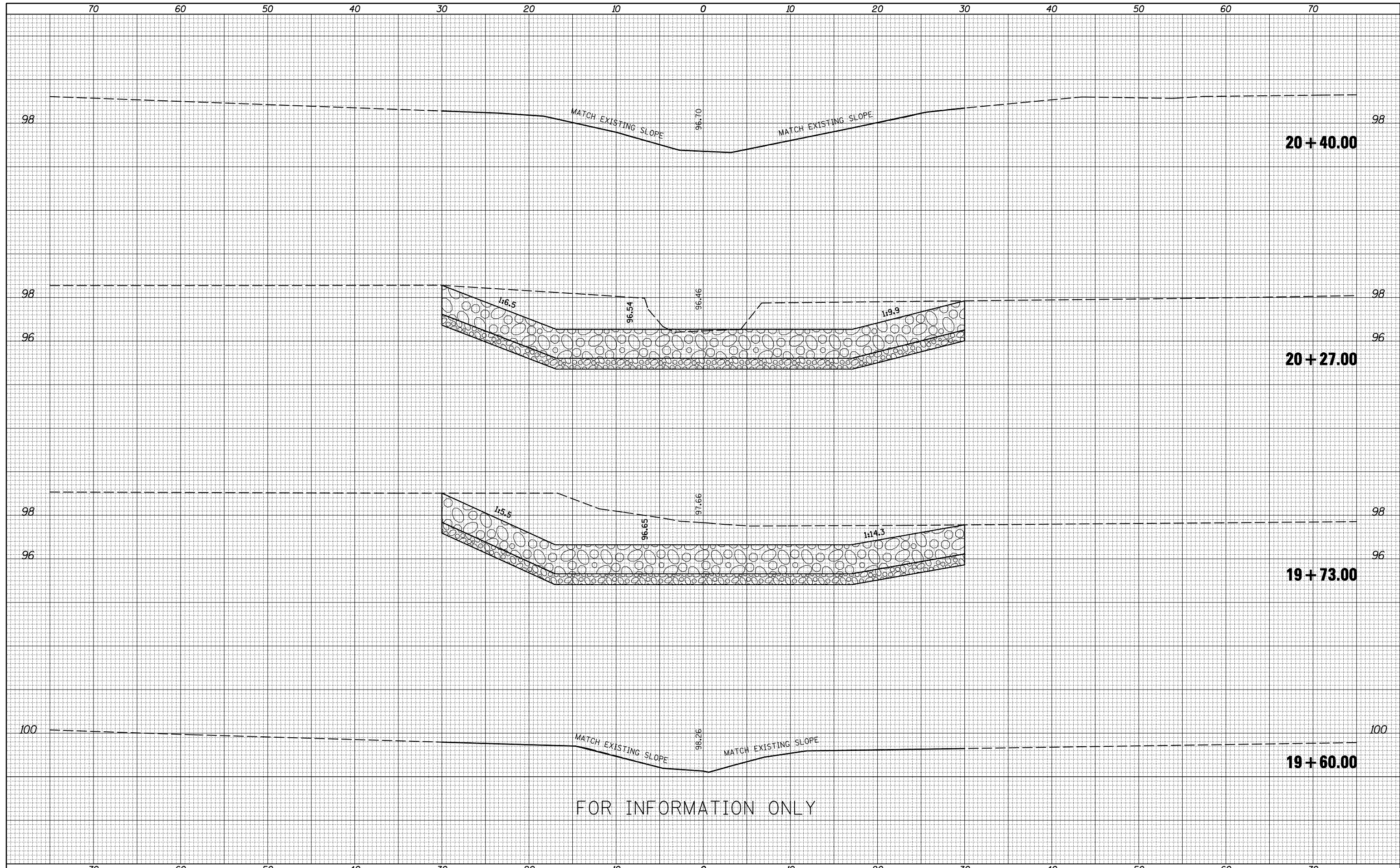
CROSS SECTIONS ALONG SN 092-8074

SCALE: SHEET NO. OF SHEETS STA. 10+52.00 TO STA. 10+70.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
711	116CR	VERMILION	50	36
CONTRACT NO. 70801				
ILLINOIS FED. AID PROJECT				

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

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



FOR INFORMATION ONLY

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DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

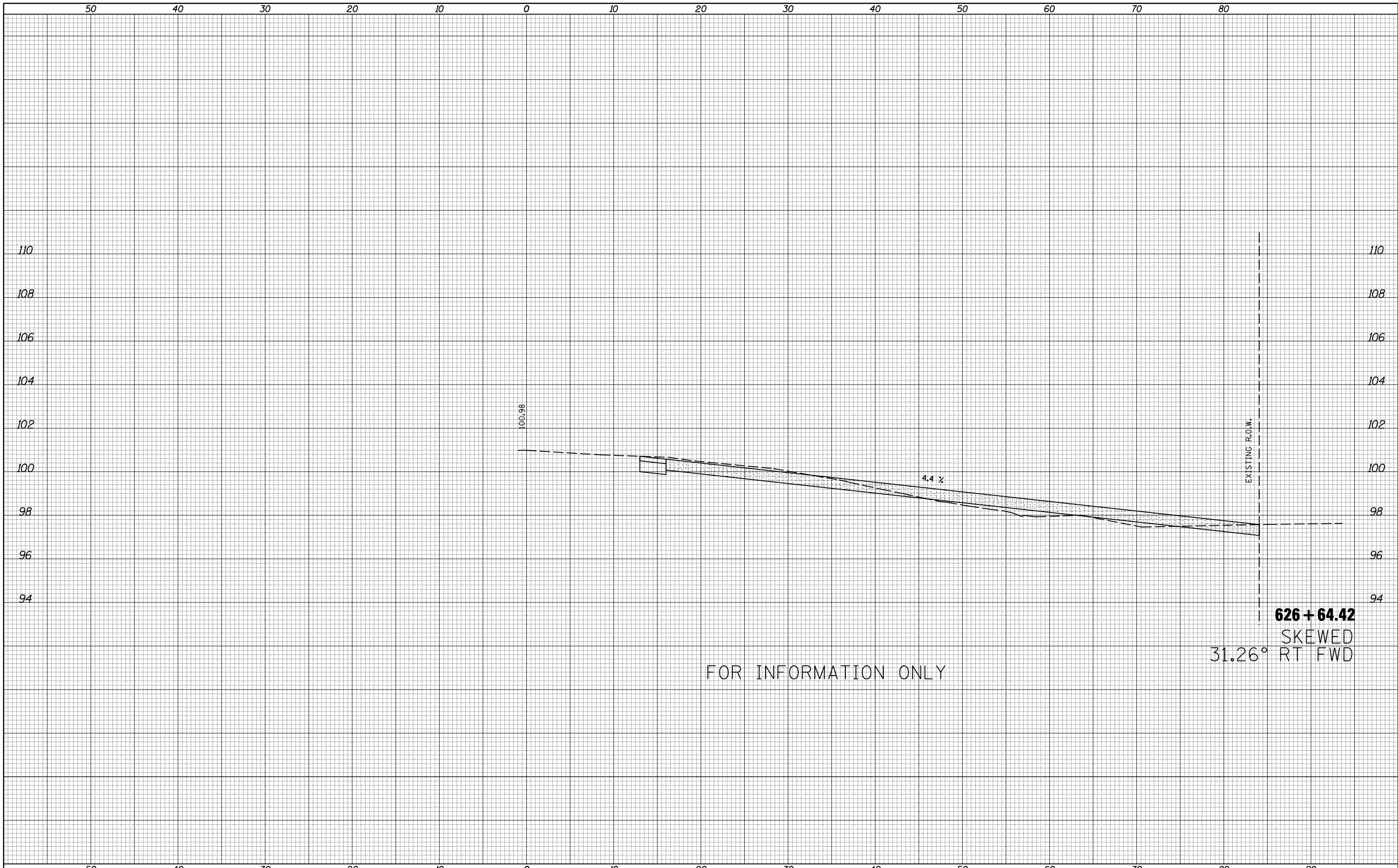
CROSS SECTIONS ALONG SN 092-8073

SCALE: SHEET NO. OF SHEETS STA. 19+60.00 TO STA. 20+40.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
711	116CR	VERMILION	50	37
			CONTRACT NO. 70801	
ILLINOIS FED. AID PROJECT				

DATE	
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PLOTTED	
TEMPLATE	
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FINAL SURVEY	
NOTE BOOK	
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NOTE BOOK	
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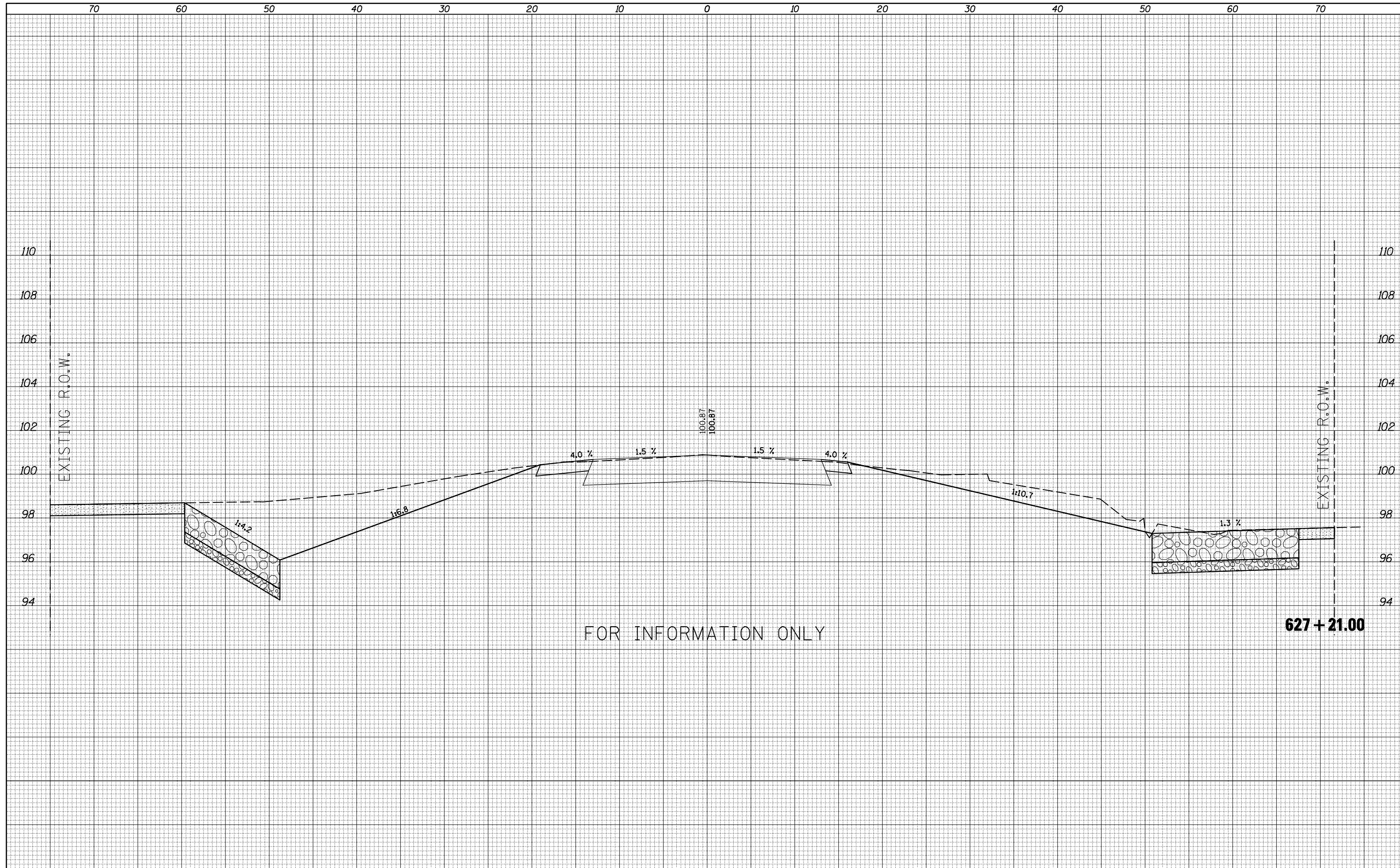


626 + 64.42
 31.26° SKewed
 RT FWD

FOR INFORMATION ONLY

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FINAL SURVEY	
NOTE BOOK	
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FOR INFORMATION ONLY

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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

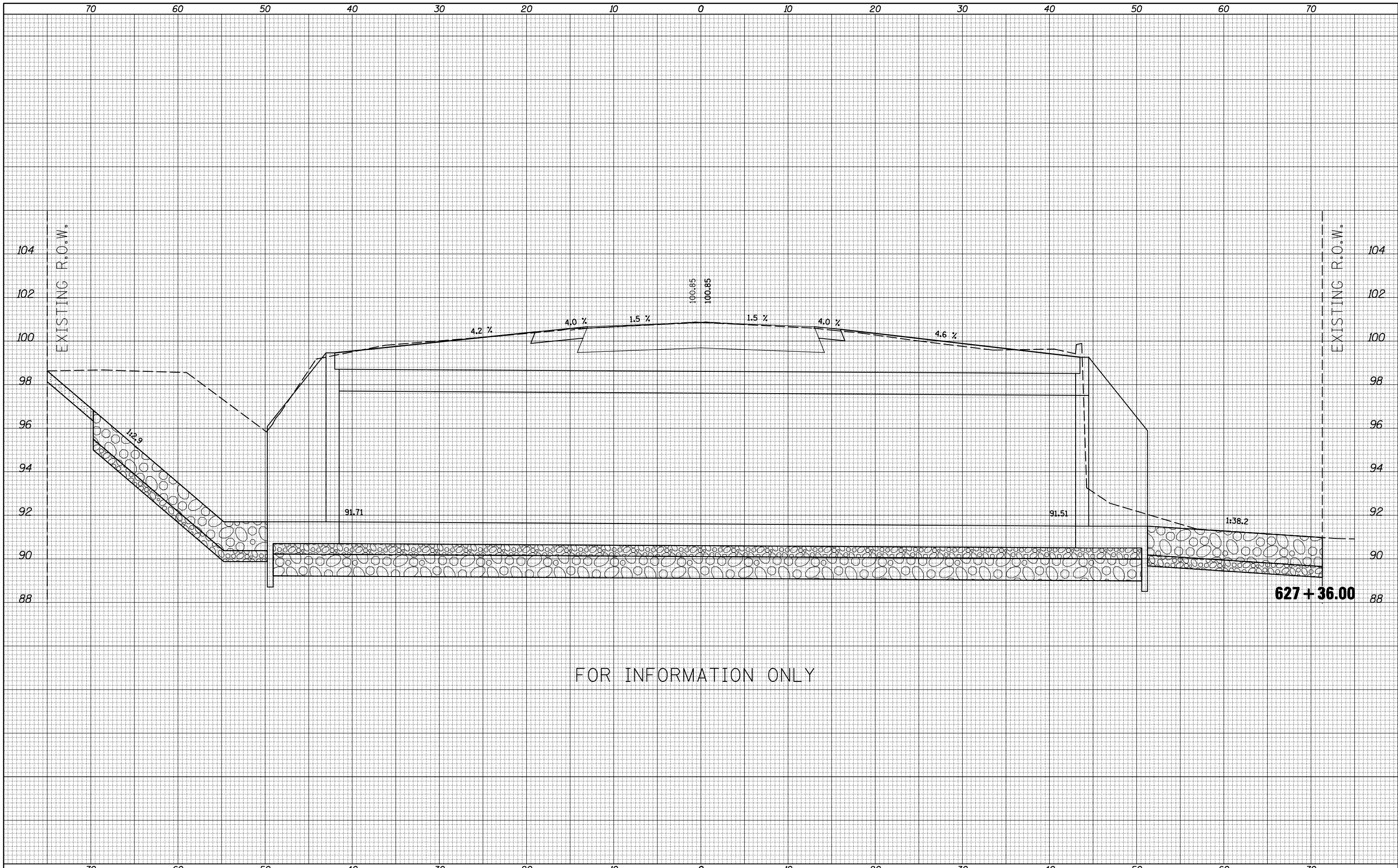
CROSS SECTIONS ALONG IL 119

SCALE: SHEET NO. OF SHEETS STA. 627+21.00 TO STA. 627+21.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
711	116CR	VERMILION	50	40
CONTRACT NO.			70801	
ILLINOIS FED. AID PROJECT				

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

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



FOR INFORMATION ONLY

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 PLOT DATE = 11/30/2010

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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

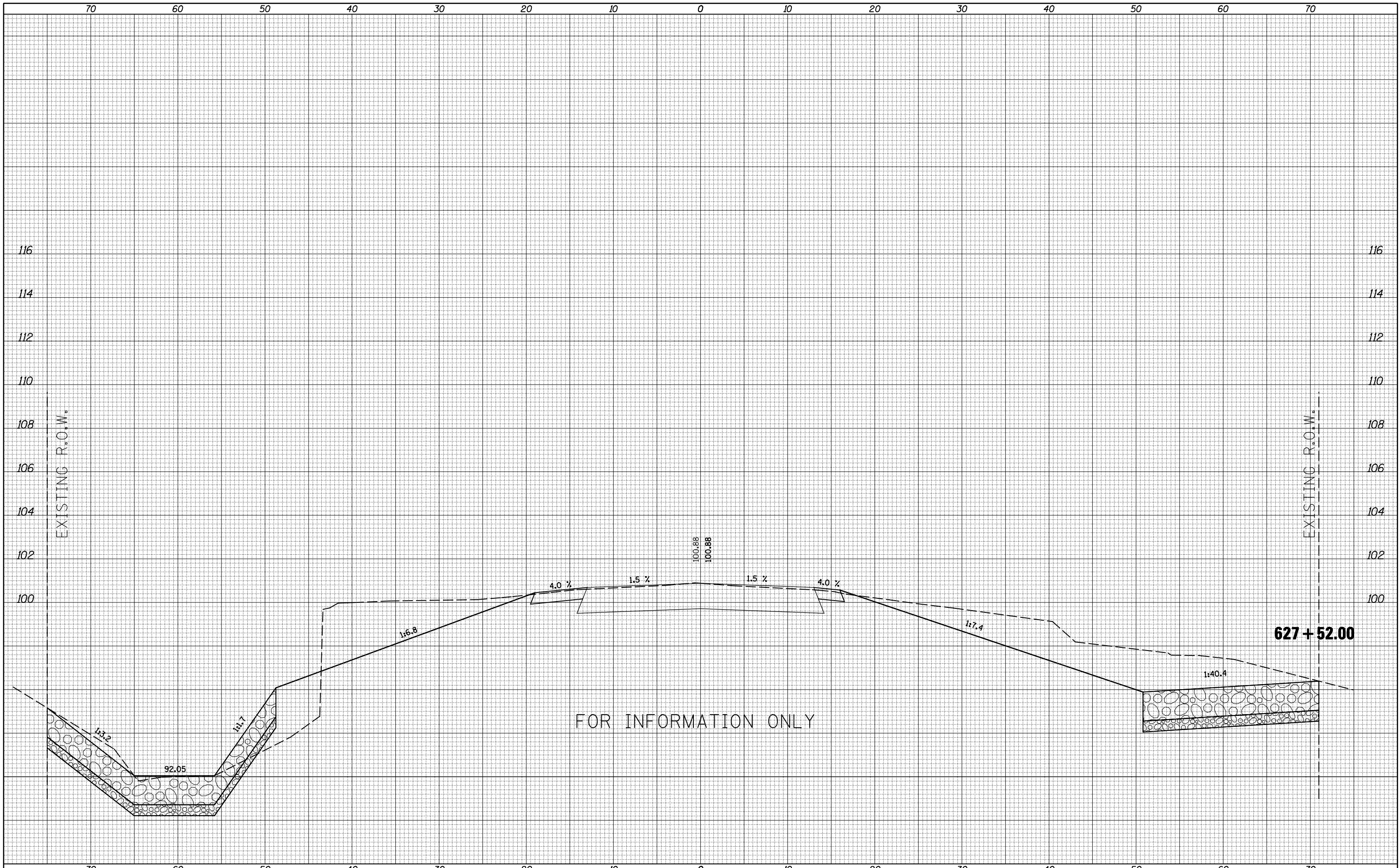
CROSS SECTIONS ALONG IL 119

SCALE: SHEET NO. OF SHEETS STA. 627+36.00 TO STA. 627+36.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
711	116CR	VERMILION	50	41
CONTRACT NO. 70801			ILLINOIS FED. AID PROJECT	

BY	DATE

ORIGINAL SURVEY	SURVEYED
NOTE BOOK NO.	PLOTTED
	TEMPLATE
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS ALONG IL 119

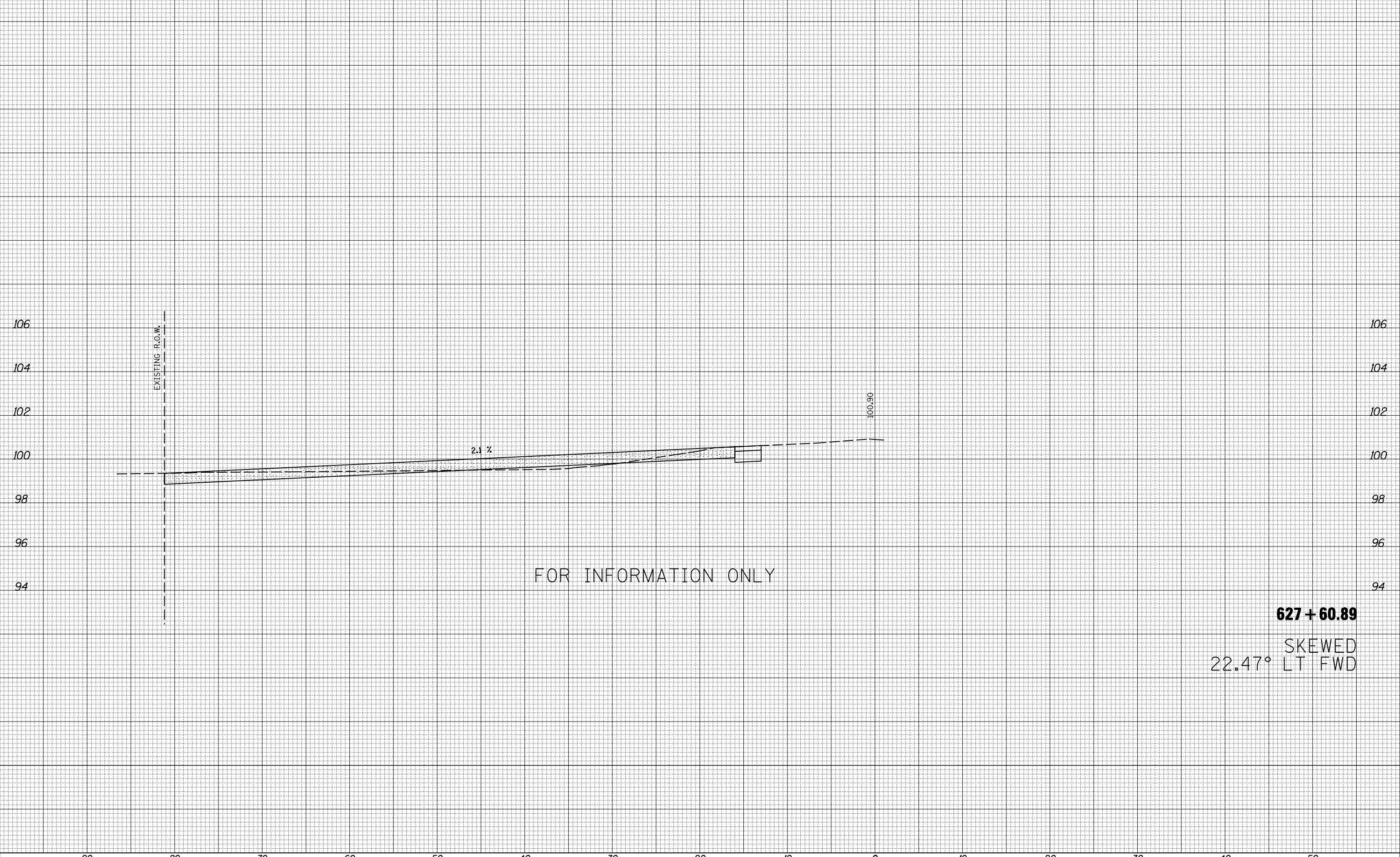
SCALE: SHEET NO. OF SHEETS STA. 627+52.00 TO STA. 627+52.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
711	116CR	VERMILION	50	42
CONTRACT NO. 70801				
ILLINOIS FED. AID PROJECT				

90 80 70 60 50 40 30 20 10 0 10 20 30 40 50

BY	DATE
FINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED

BY	DATE
ORIGINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED

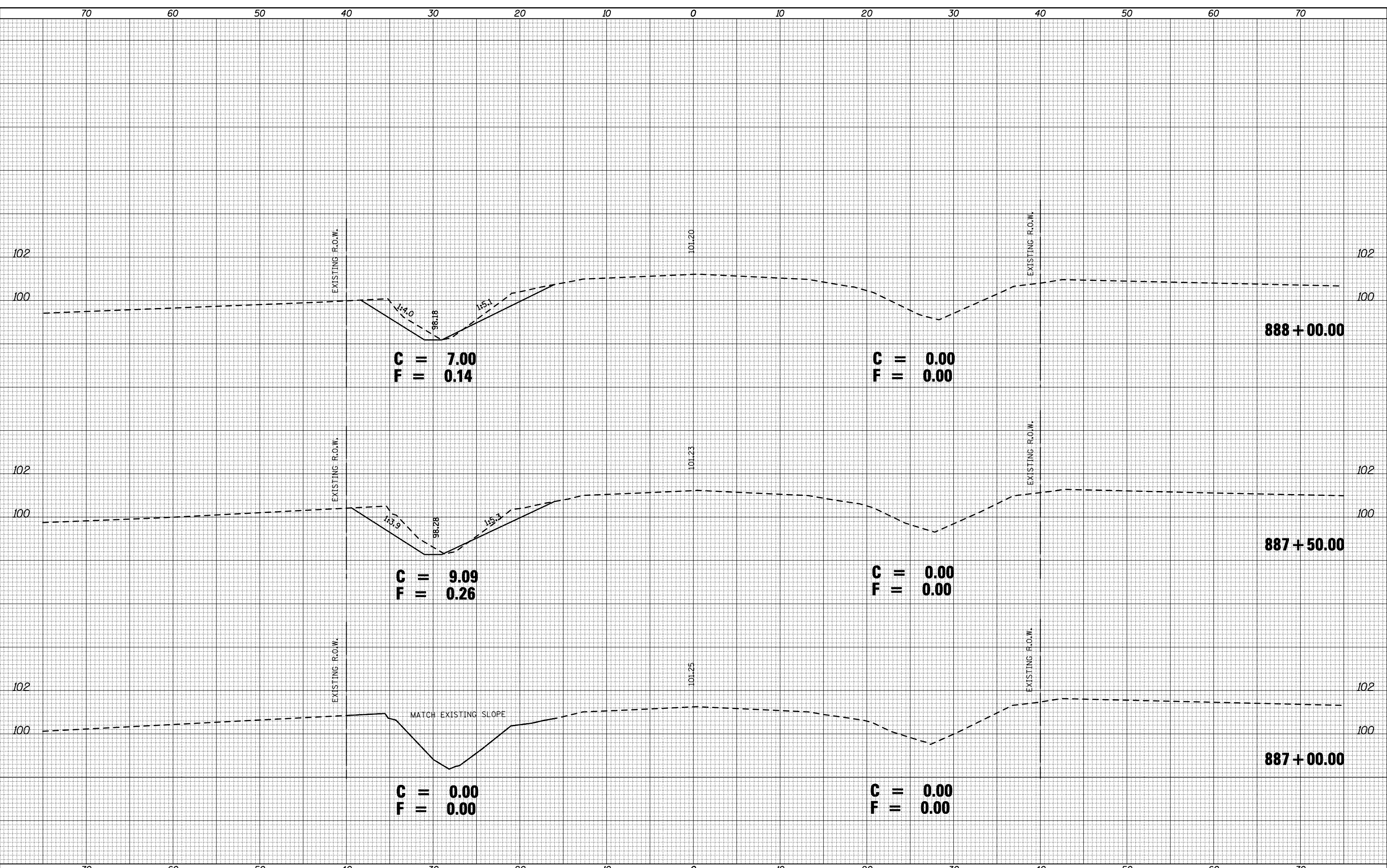


FOR INFORMATION ONLY

627 + 60.89
 22.47° SKewed LT FWD

BY	DATE

BY	DATE



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

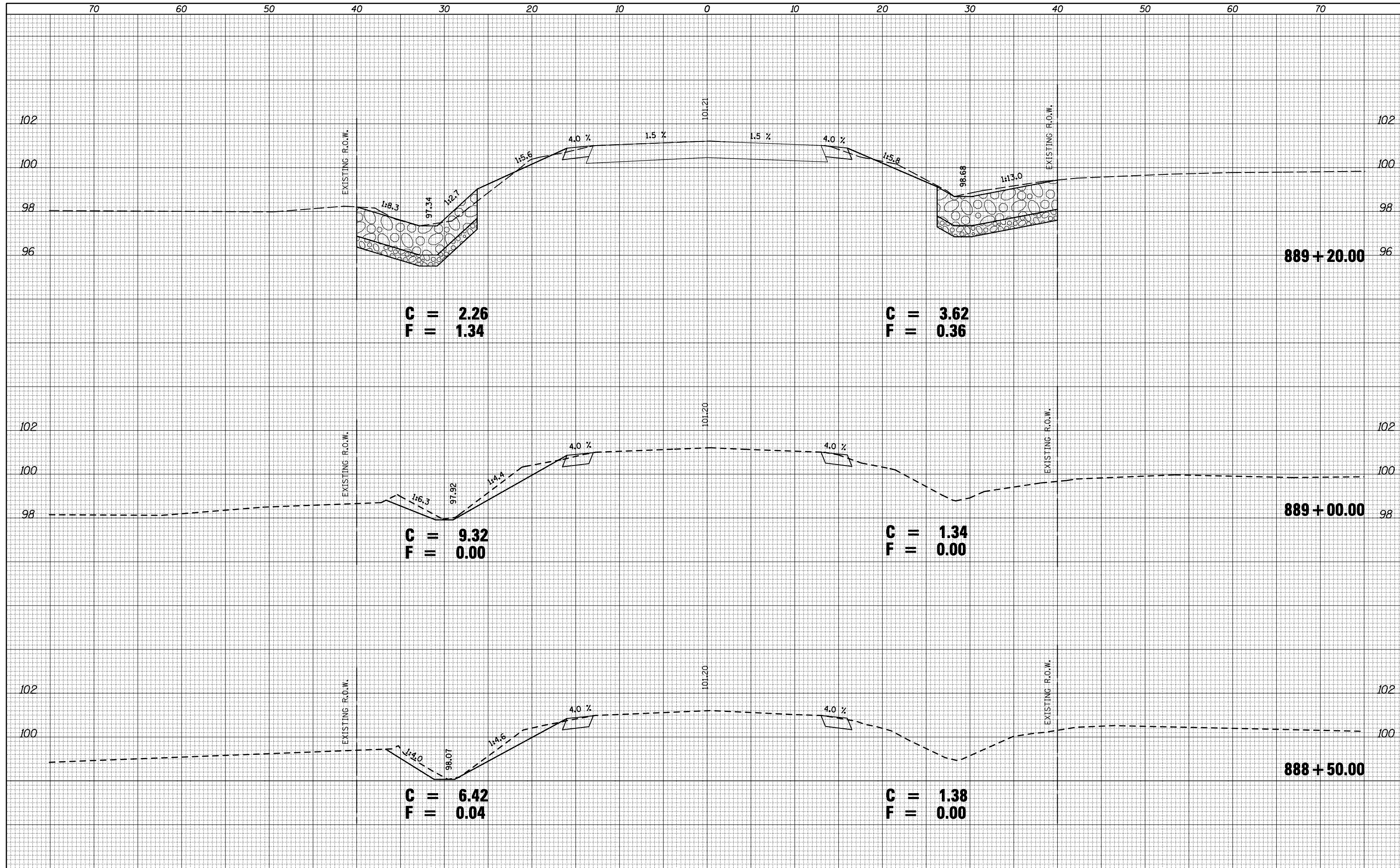
CROSS SECTIONS ALONG IL 119

SCALE: SHEET NO. OF SHEETS STA. 887+00.00 TO STA. 888+00.00

F.A.P. RTE. 711	SECTION 116CR	COUNTY VERMILION	TOTAL SHEETS 50	SHEET NO. 45
		CONTRACT NO. 70801		ILLINOIS FED. AID PROJECT

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



C = 2.26
F = 1.34

C = 3.62
F = 0.36

C = 9.32
F = 0.00

C = 1.34
F = 0.00

C = 6.42
F = 0.04

C = 1.38
F = 0.00

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PLOT DATE = 11/30/2010

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

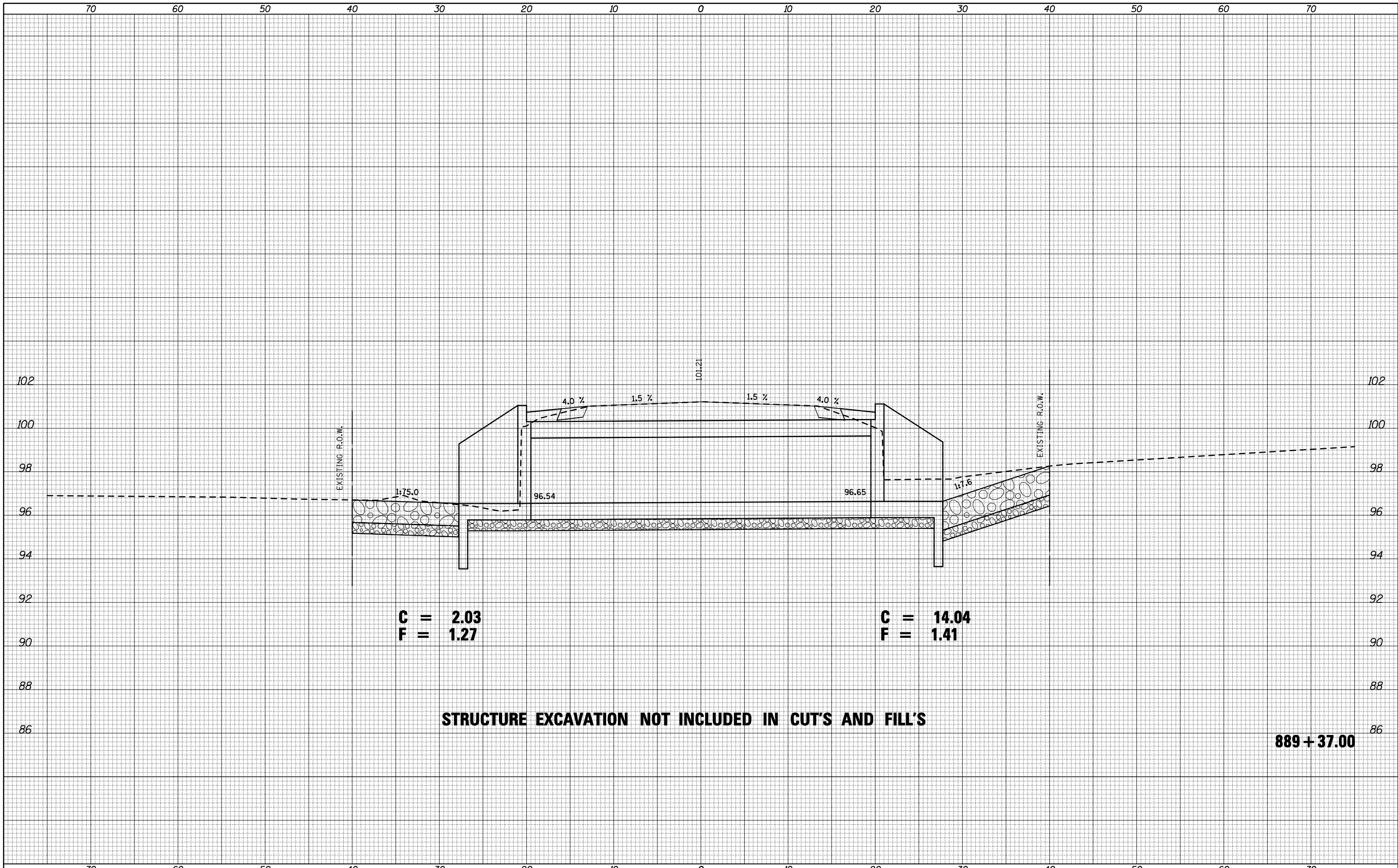
CROSS SECTIONS ALONG IL 119

SCALE: SHEET NO. OF SHEETS STA. 888+50.00 TO STA. 889+20.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
711	116CR	VERMILION	50	46
CONTRACT NO.			70801	
ILLINOIS FED. AID PROJECT				

FINAL SURVEY NO.	SURVEYED AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED AREAS CHECKED	BY	DATE



C = 2.03
F = 1.27

C = 14.04
F = 1.41

STRUCTURE EXCAVATION NOT INCLUDED IN CUT'S AND FILL'S

889 + 37.00

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

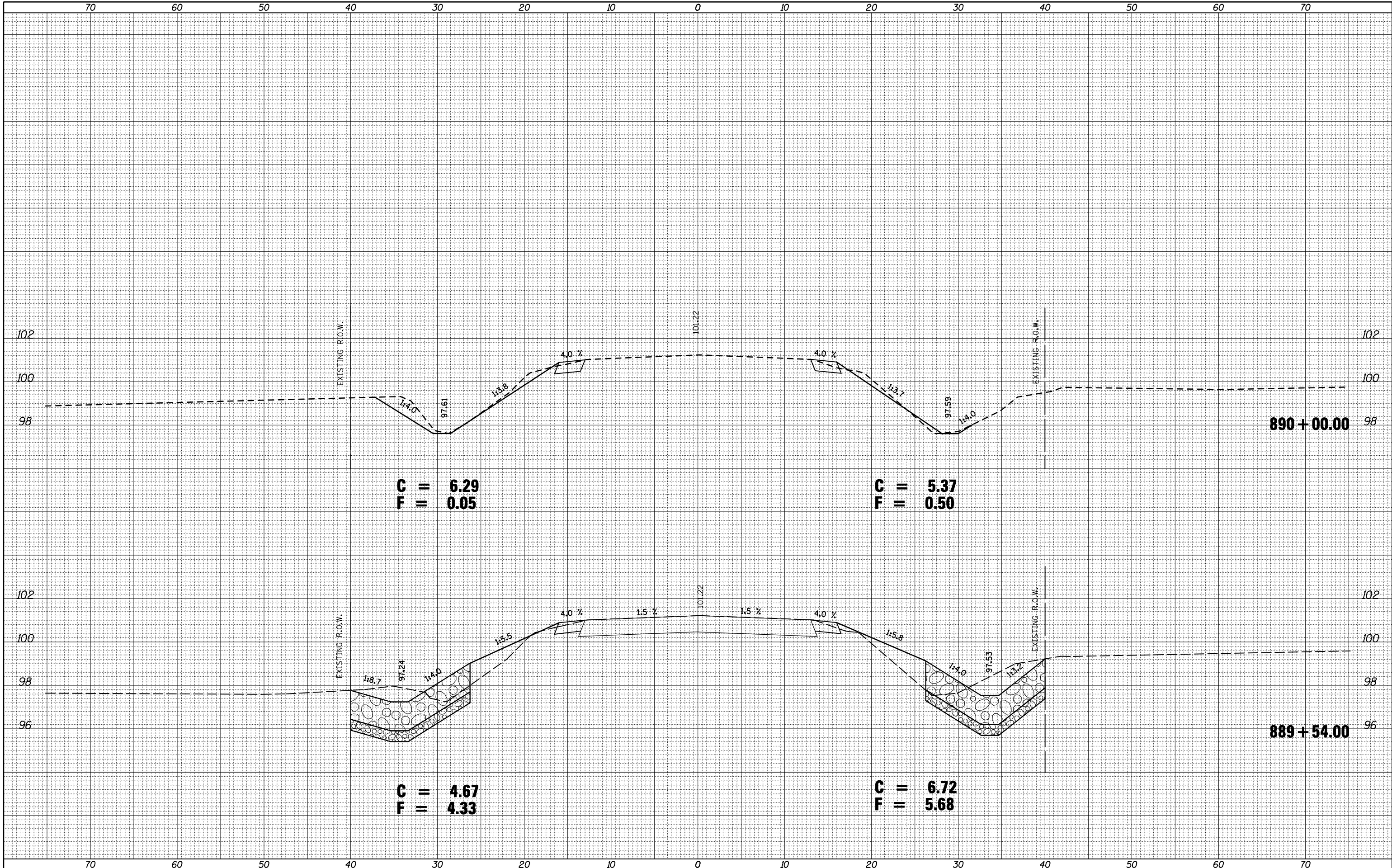
CROSS SECTIONS ALONG IL 119

SCALE: SHEET NO. OF SHEETS STA. 889+37.00 TO STA. 889+37.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
711	116CR	VERMILION	50	47
ILLINOIS FED. AID PROJECT			CONTRACT NO. 70801	

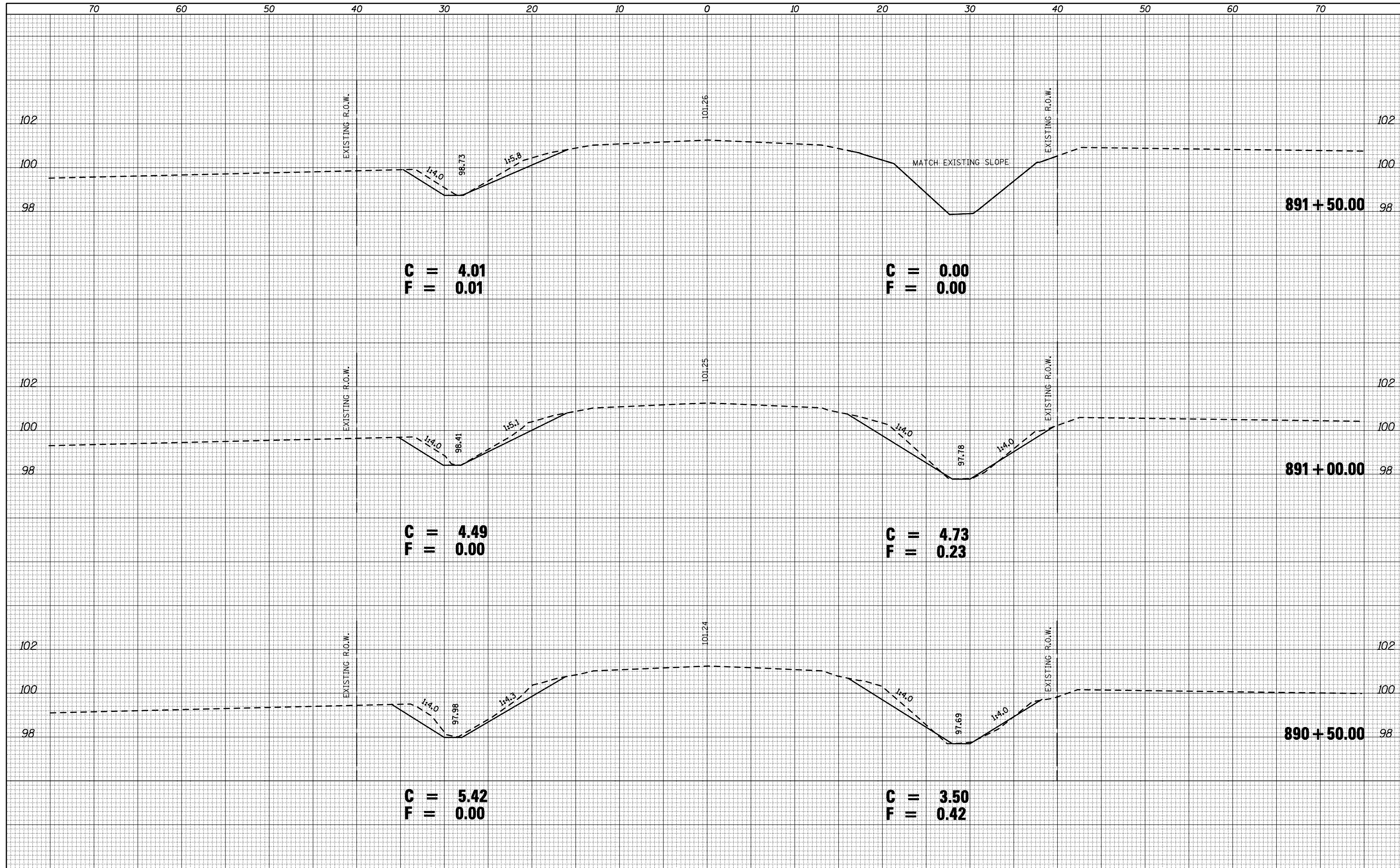
BY	DATE
FINAL SURVEY NO.	SURVEYED PLOTTED AREA CHECKED

BY	DATE
ORIGINAL SURVEY NO.	SURVEYED PLOTTED AREA CHECKED



DATE	
BY	
SURVEYED	
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FINAL SURVEY	
NOTE BOOK	
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DATE	
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS ALONG IL 119

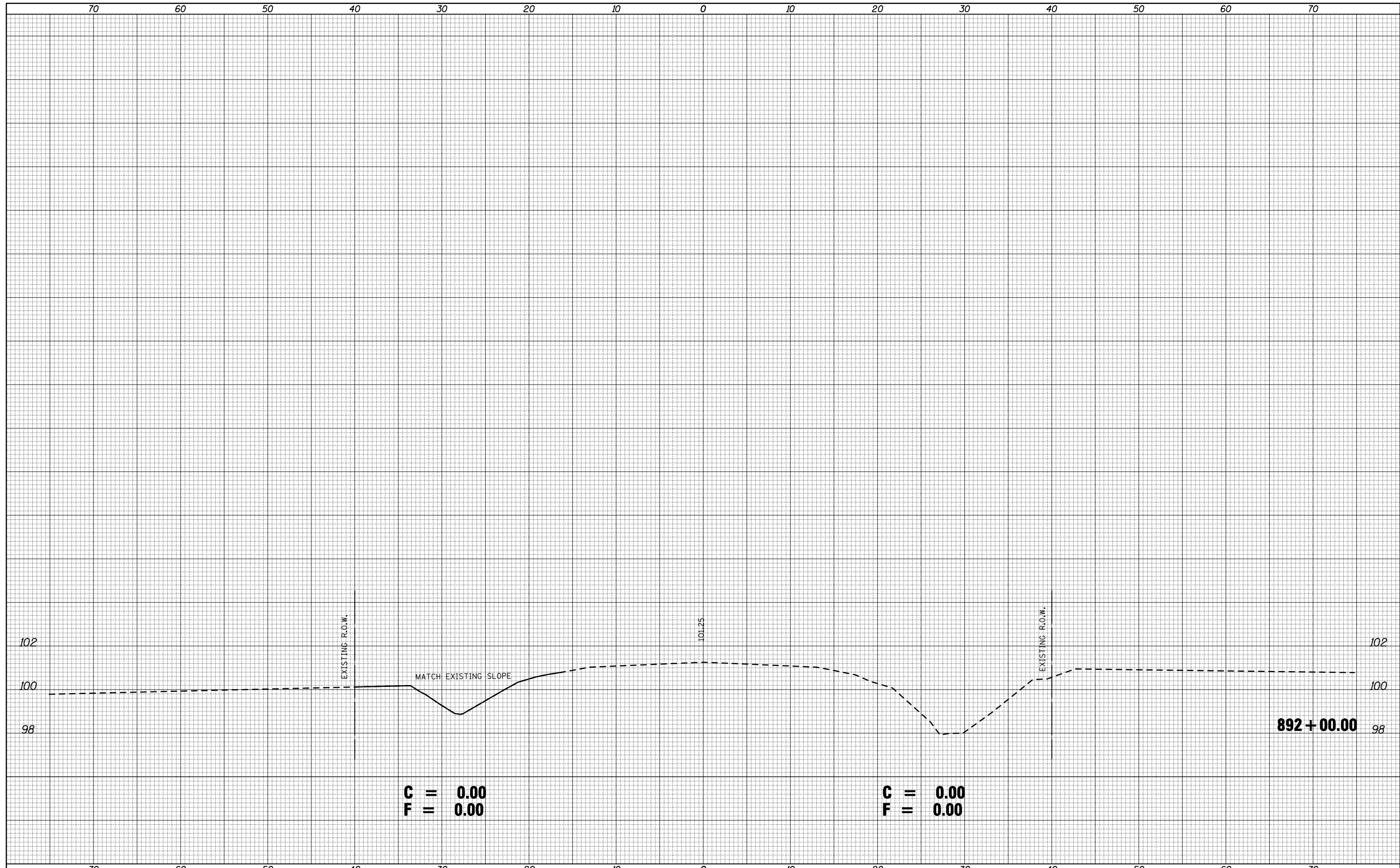
SCALE: SHEET NO. OF SHEETS STA. 890+50.00 TO STA. 891+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
711	116CR	VERMILION	50	49
CONTRACT NO.			70801	

ILLINOIS FED. AID PROJECT

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

DATE	
BY	
SURVEYED	
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TEMPLATE	
AREAS	
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ORIGINAL SURVEY	
NOTE BOOK	
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 PLOT DATE = 11/30/2010

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 CHECKED -
 DATE -

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS ALONG IL 119
 SCALE: SHEET NO. OF SHEETS STA. 892+00.00 TO STA. 892+00.00

F.A.P. RTE. 711	SECTION 116CR	COUNTY VERMILION	TOTAL SHEETS 50	SHEET NO. 50
CONTRACT NO. 70801			ILLINOIS FED. AID PROJECT	