

01-15-2016 LETTING ITEM 013

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

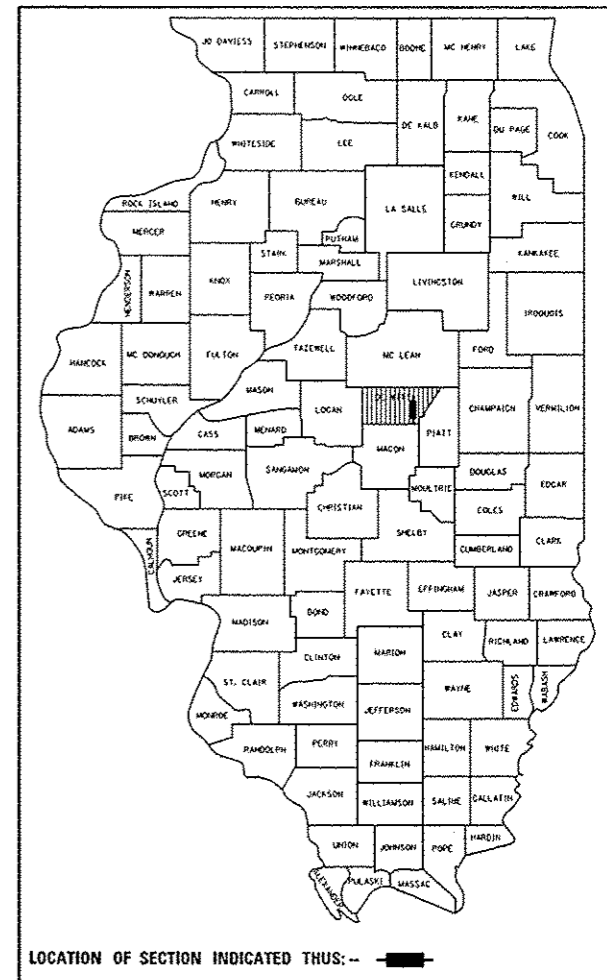
**PROPOSED  
HIGHWAY PLANS**

F.A.P. ROUTE 760 (IL 48)  
SECTION 124CR  
PROJECT ACF-0760(017)  
CULVERT REPLACEMENT  
DEWITT COUNTY

1.3 MI N OF ILL 10 AT WELDON & S OF WELDON  
C-95-011-09

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
760	124CR	DEWITT	41	1
		ILLINOIS	CONTRACT NO. 70754	

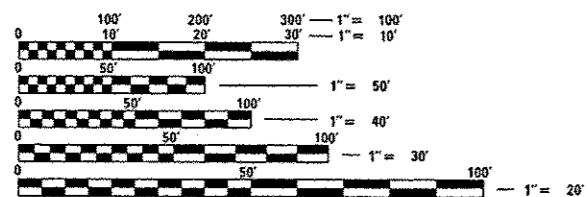
D-95-011-09



FOR INDEX OF SHEETS, SEE SHEET NO. 2  
FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 4-6

EXISTING SN 020-8033 AT STA. 122+60.50  
REPLACED WITH SN 020-8045 AT STA. 122+60.50  
SINGLE 12' x 2' PCBC WITH PRE-CAST END SECTIONS

EXISTING SN 020-8034 AT STA. 1163+25.30  
REPLACED WITH SN 020-8046 AT STA. 1163+25.30  
SINGLE 12' x 3' PCBC WITH PRE-CAST END SECTIONS



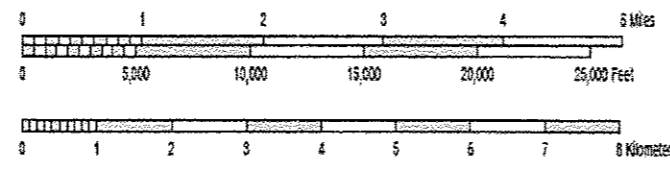
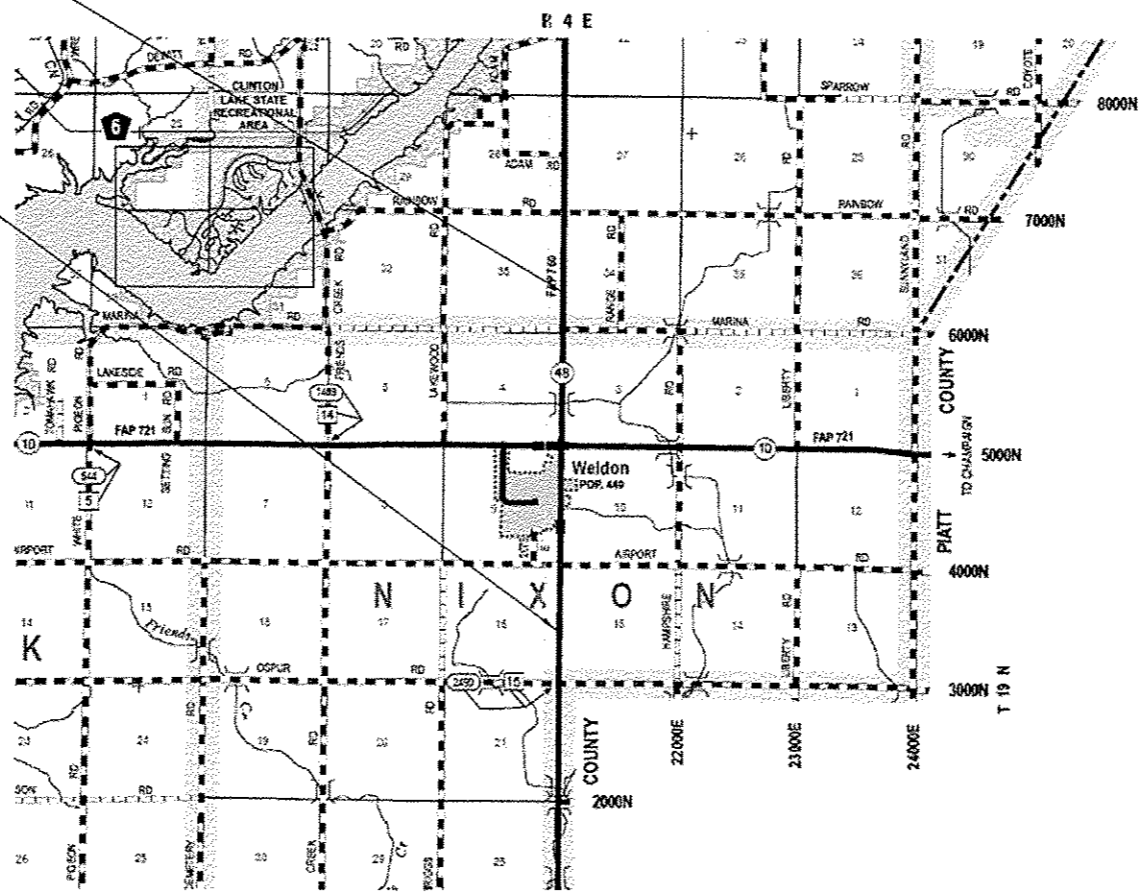
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

**DESIGN DESIGNATION**  
N/A

**CURRENT TRAFFIC DATA**  
SN 020-8033 1000 (2013)  
SN 092-8034 1450 (2013)

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

PROJECT ENGINEER: NANCY FASIG (217-465-4181)  
PROJECT MANAGER: BRENT CEARLOCK  
CONTRACT NO. 70754



GROSS LENGTH & NET LENGTH OF SN 020-8045 = 22.00 FT. = 0.004 MILE  
GROSS LENGTH & NET LENGTH OF SN 020-8046 = 30.00 FT. = 0.006 MILE  
GROSS LENGTH = 52.00 FT. = 0.010 MILE  
NET LENGTH = 52.00 FT. = 0.010 MILE

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
SUBMITTED October 8 2015  
Barbara James  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER  
John D. Baranzelli P.E.  
ENGINEER OF DESIGN AND ENVIRONMENT  
Dec 4 2015  
Omer Osman P.E.  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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

# INDEX OF SHEETS

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32-35	PAVEMENT MARKING AND MARKERS (RURAL & URBAN APPLICATIONS)
36-41	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
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420001-08	PAVEMENT JOINTS
420701-02	PAVEMENT FABRIC
442201-03	CLASS C AND D PATCHES
515001-03	NAME PLATES FOR BRIDGES
630001-10	STEEL PLATE BEAM GUARDRAIL
630106-01	LONG - SPAN GUARDRAIL OVER CULVERT
630301-06	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
667101-02	PERMANENT SURVEY MARKERS
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 m) AWAY
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701011-04	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 OPERATIONS - DAY ONLY
701901-04	TRAFFIC CONTROL DEVICES
780001-05	TYPICAL PAVEMENT MARKINGS
781001-03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS

# 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.-100A  
ELECTRONIC FILES AND/OR ELECTRONIC SURVEY INFORMATION INCLUDING CADD FILES WILL NOT BE AVAILABLE TO THE CONTRACTOR.

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

G.N.-107.37  
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.-280  
TEMPORARY EROSION CONTROL SEEDING IS INCLUDED IN THIS CONTRACT TO SEED DISTURBED EARTH DURING TIME PERIODS WHEN PERMANENT SEEDING IS NOT ALLOWED. SOME OR ALL OF THE TEMPORARY EROSION CONTROL SEEDING WILL BE DELETED IF IT IS POSSIBLE TO PLACE PERMANENT SEEDING ON EARTH AT THE TIME OF THEIR COMPLETION.

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.-550  
BEFORE ORDERING STORM SEWERS, THE CONTRACTOR SHALL CONSULT THE ENGINEER FOR THE EXACT LENGTHS.

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

G.N.-Z0038  
AN ALUMINUM TABLET OF THE TYPE SHOWN ON STANDARD 667101 SHALL BE PLACED ON THE PROPOSED STRUCTURE AS DIRECTED BY THE ENGINEER. THE BENCH MARK ELEVATION WILL BE ESTABLISHED AND MARKED BY THE DEPARTMENT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR PERMANENT BENCH MARKS.

COMMITMENTS  
THERE ARE NO COMMITMENTS ASSOCIATED WITH THIS PROJECT.

LOCAL DRAINAGE DISTRICT CONTACT INFORMATION:  
FRIENDS CREEK DRAINAGE DISTRICT  
P.O. BOX 191  
WELDON, IL 61882  
MR. LARRY HELTON  
PHONE: (217)-739-2241  
OR  
MS. CHRIS HERMANN  
PHONE: (217) 369-8558

FILE NAME :	USER NAME : ceerlockm	DESIGNED - BMC	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>GENERAL NOTES</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
p:\11084EBID\INTEG\111note.gov\110DT\10	Documents\11007 Offices\District 5\Projects\10579	DRAM\02-07-11\BMD78754\shg-genote	REVISED -			760	124CR	DEWITT	41	3
	PLOT SCALE = 40,0000' / in.	CHECKED -	REVISED -		SCALE: N/A					
	PLOT DATE = 12/9/2010	DATE - 02-07-11	REVISED -		SHEET NO. 1 OF 1 SHEETS	STA. --	TO STA. --			CONTRACT NO. 70754
ILLINOIS FED. AID PROJECT										

LOCATION OF WORK: FAP 760 ( IL 48 )  
 DEWITT COUNTY  
 SN 020-8045 & 020-8046  
 RURAL 2-LANE  
 FUNDING BREAKOUT: 80% FEDERAL  
 20% STATE

CONSTRUCTION TYPE CODE: 0040

ITEM CODE NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY
20200100	EARTH EXCAVATION	CU YD	232.0
20700220	POROUS GRANULAR EMBANKMENT	CU YD	93.0
20800150	TRENCH BACKFILL	CU YD	35.0
21301052	EXPLORATION TRENCH 52" DEPTH	FOOT	100.0
25000210	SEEDING, CLASS 2A	ACRE	0.75
25000350	SEEDING, CLASS 7	ACRE	0.75
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	68.0
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	68.0
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	68.0
25100115	MULCH, METHOD 2	ACRE	0.75
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	75.0
28000305	TEMPORARY DITCH CHECKS	FOOT	80.0
28000400	PERIMETER EROSION BARRIER	FOOT	100.0
28000500	INLET AND PIPE PROTECTION	EACH	4.0

\* SPECIALTY ITEM

FILE NAME :	USER NAME :	DESIGNED :	REVISED :	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
p:\1\1084EBID\INTEG.1\inois.gov\PI\DOT\G...	user\1007 OFFICES\District 5\Proje...	BRAND	REVISED			760	I24CR	DEWITT	41	4
PLOT SCALE = 40,0000 1" = 40'	CHECKED :	DATE :	REVISED :			CONTRACT NO. 70754				
PLOT DATE = 12/2/2015	DATE :	REVISED :	SCALE: N/A			SHEET NO. 1 OF 3 SHEETS	STA. -- TO STA. --	ILLINOIS FED. AID PROJECT		

LOCATION OF WORK: FAP 760 ( IL 48)  
 DEWITT COUNTY  
 SN 020-8045 & 020-8046  
 RURAL 2-LANE  
 FUNDING BREAKOUT: 80% FEDERAL  
 20% STATE

CONSTRUCTION TYPE CODE: 0040

28100201	STONE RIPRAP, CLASS A1	TON	155.0
44201335	CLASS C PATCHES, TYPE IV, 8 INCH	SQ YD	148.0
44213100	PAVEMENT FABRIC	SQ YD	148.0
44213204	TIE BARS 3/4"	EACH	26.0
48101500	AGGREGATE SHOULDERS, TYPE B 6"	SQ YD	356.0
50100300	REMOVAL OF EXISTING STRUCTURES NO. 1	EACH	1.0
50100400	REMOVAL OF EXISTING STRUCTURES NO. 2	EACH	1.0
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
54011202	PRECAST CONCRETE BOX CULVERTS 12' X 2'	FOOT	35.0
54011203	PRECAST CONCRETE BOX CULVERTS 12' X 3'	FOOT	35.0
55100500	STORM SEWER REMOVAL 12"	FOOT	70.0
60500050	REMOVING CATCH BASINS	EACH	1.0

• SPECIALTY ITEM

FILE NAME =	USER NAME = bcarlockm	DESIGNED - BMC	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
dm\\sl204EB\QINTEG\illinois.gov\1007100	projects\1007 Offices\District 5\Projects\057	DRAWN Data\BMC\70754-ant-500.dgn	REVISED -					760	124CR	DEWITT	41	5
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PLOT DATE = 10/6/2015	DATE - 02-07-11	REVISED -	REVISED -		ILLINOIS FED. AID PROJECT							

LOCATION OF WORK: FAP 760 ( IL 48)  
 DEWITT COUNTY  
 SN 020-8045 & 020-8046  
 RURAL 2-LANE  
 FUNDING BREAKOUT: 80% FEDERAL  
 20% STATE

CONSTRUCTION TYPE CODE: 0040

	61101020	STORM SEWER PROTECTED, CLASS A, 18"	FOOT	94.0
	61133300	FIELD TILE JUNCTION VAULTS, 4' DIA.	EACH	4.0
*	63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	200.0
*	63000360	LONG-SPAN GUARDRAILOVER CULVERT, 18 FT 9IN SPAN	FOOT	300.0
*	63100167	TRAFFIC TERMINAL TYPE 1, (SPECIAL) TANGENT	EACH	8.0
	67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	2.0
	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
*	78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	148.0
*	78200410	GUARDRAIL MARKERS, TYPE A	EACH	16.0
*	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	8.0
	X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	20.0
	Z0038700	PERMANENT BENCH MARKS	EACH	2.0

14  
 \* SPECIALTY ITEM

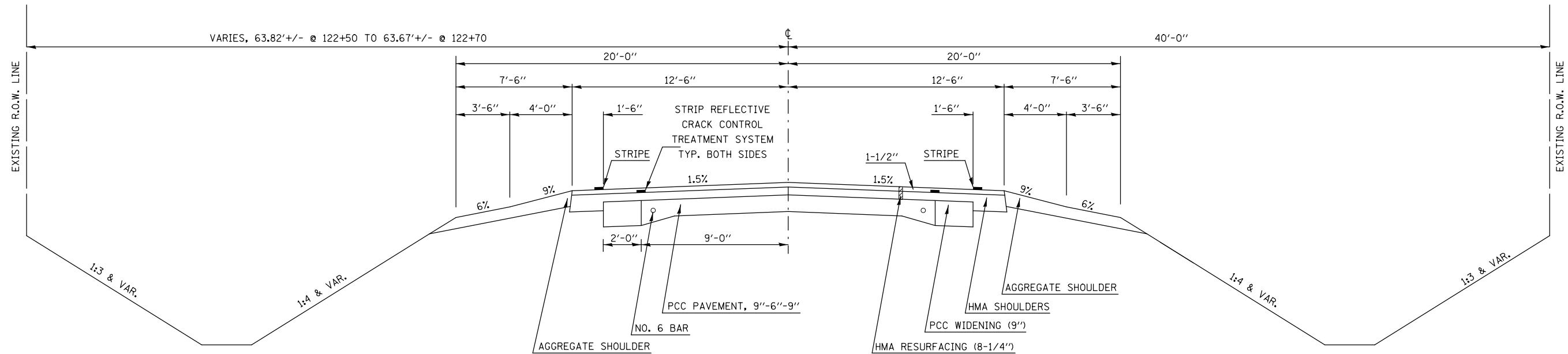
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# CULVERT NO. 1

## EXISTING TYPICAL CROSS SECTION ①

STATION TO STATION  
 122+49.50 122+55.50  
 122+64.50 122+71.50

EXISTING SN 020-8033 @ STA. 122+60.50

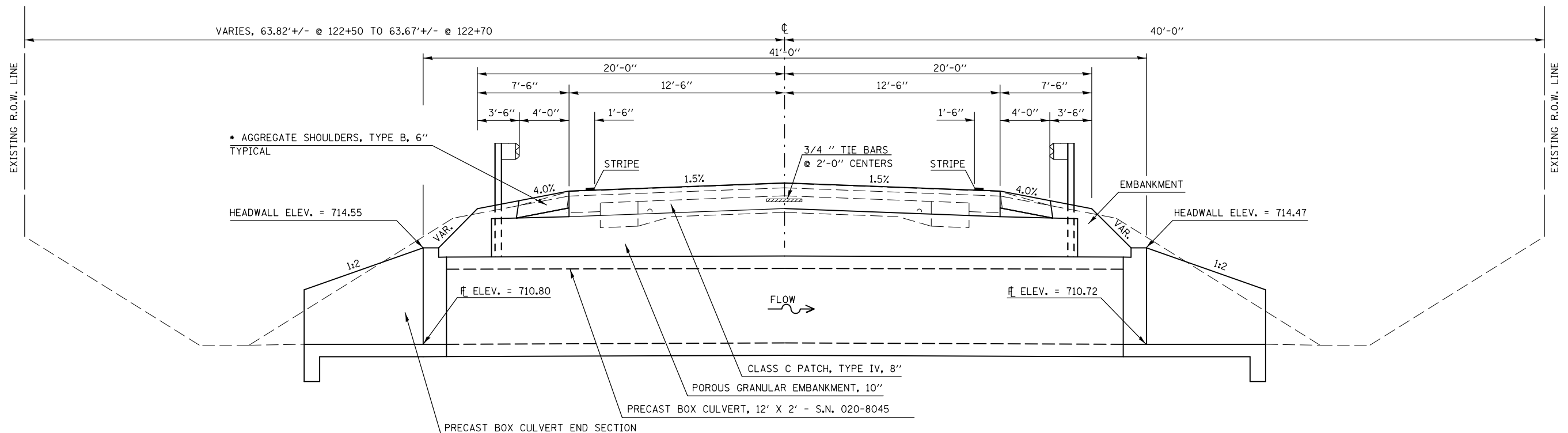


## PROPOSED TYPICAL CROSS SECTION ①

STATION TO STATION  
 122+49.50 122+71.50

PROPOSED SN 020-8045 @ STA. 122+60.50

• AGGREGATE SHOULDERS, TYPE B, 6" SHALL EXTEND FROM STA. 121+60 TO STA. 123+60. TYPICAL ON BOTH SIDES OF ROADWAY.

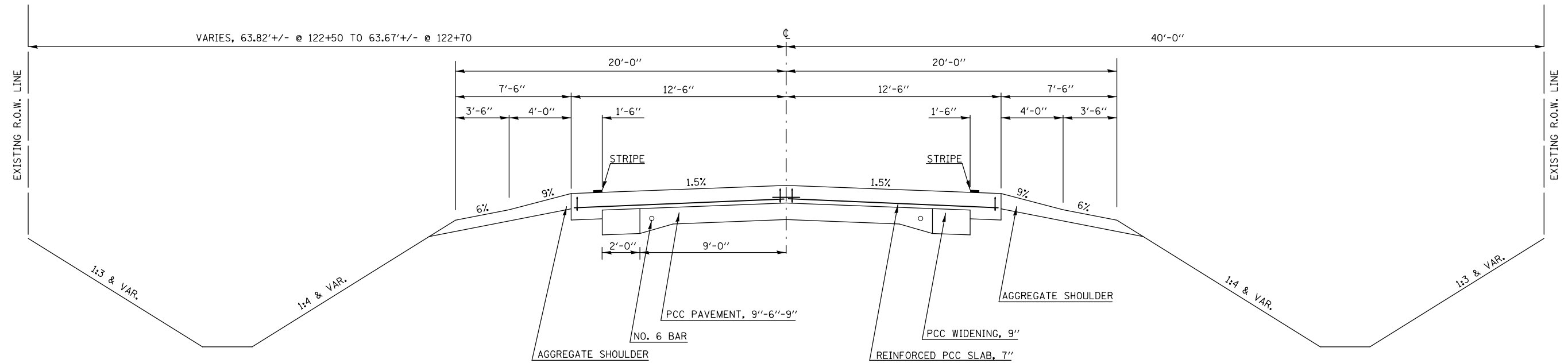


FILE NAME =	USER NAME = ceerlockbm	DESIGNED - BMC	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TYPICAL CROSS SECTION (SN 020-8033 /020-8045)</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
pw:\IL\084EBIDINTEG.illinois.gov\PWIDOT\Documents\IDOT Offices\District 5\Projects\05797\Drawings\Design\BMC\70754-shr-typical.dwg	DRAWN	REVISION	REVISION					760	124CR	DEWITT	41	7	
PLOT SCALE = 40.0000' / in.	CHECKED -	REVISION	REVISION		SCALE: N/A			SHEET NO. 1 OF 4 SHEETS		STA. 122+49.50 TO STA. 122+71.50		CONTRACT NO. 70754	
PLOT DATE = 10/6/2015	DATE - 02-07-2011	REVISION	REVISION		ILLINOIS FED. AID PROJECT								

**EXISTING TYPICAL CROSS SECTION ②**

STATION TO STATION  
122+55.50 122+64.50

EXISTING SN 020-8033 @ STA. 122+60.50

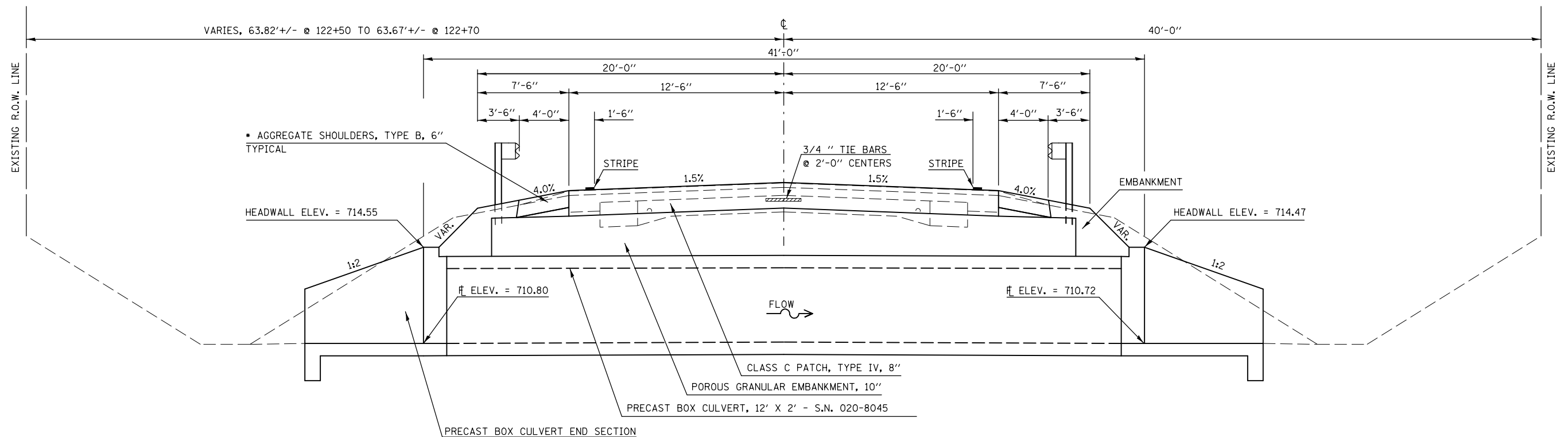


**PROPOSED TYPICAL CROSS SECTION ②**

STATION TO STATION  
122+49.50 122+71.50

PROPOSED SN 020-8045 @ STA. 122+60.50

• AGGREGATE SHOULDERS, TYPE B, 6" SHALL EXTEND FROM STA. 121+60 TO STA. 123+60. TYPICAL ON BOTH SIDES OF ROADWAY.



FILE NAME =	USER NAME = ceorlockbm	DESIGNED - BMC	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TYPICAL CROSS SECTION (SN 020-8033 /020-8045)</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\IL\084EBIDINTEG.illinois.gov\PWIDOT\Documents\IDOT Offices\District 5\Projects\0577\Drawings\Design\BMC\70754-sh-typical.dwg		DRAWN - BMC	REVISED -		760	124CR	DEWITT	41	8	<b>CONTRACT NO. 70754</b>		
PLOT SCALE = 40.0000' / in.		CHECKED -	REVISED -		SCALE: N/A	SHEET NO. 2 OF 4 SHEETS	STA. 122+49.50 TO STA. 122+71.50	ILLINOIS FED. AID PROJECT				
PLOT DATE = 10/6/2015		DATE - 02-07-2011	REVISED -									

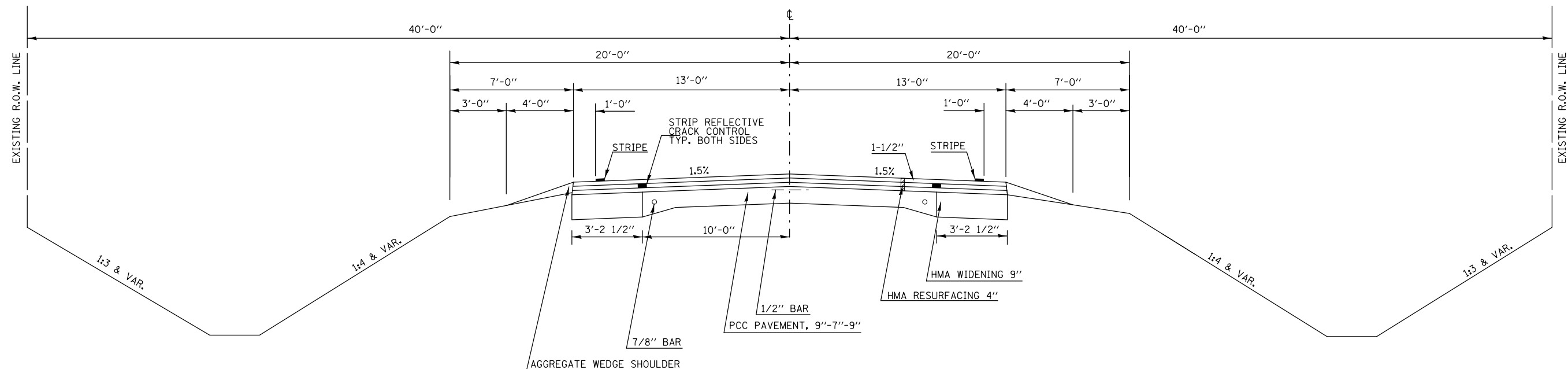


# CULVERT NO. 2

## EXISTING TYPICAL CROSS SECTION ③

STATION TO STATION  
 1163+06.30 1163+18.50  
 1163+29.50 1163+36.30

EXISTING SN 020-8034 @ STA. 1163+25.30

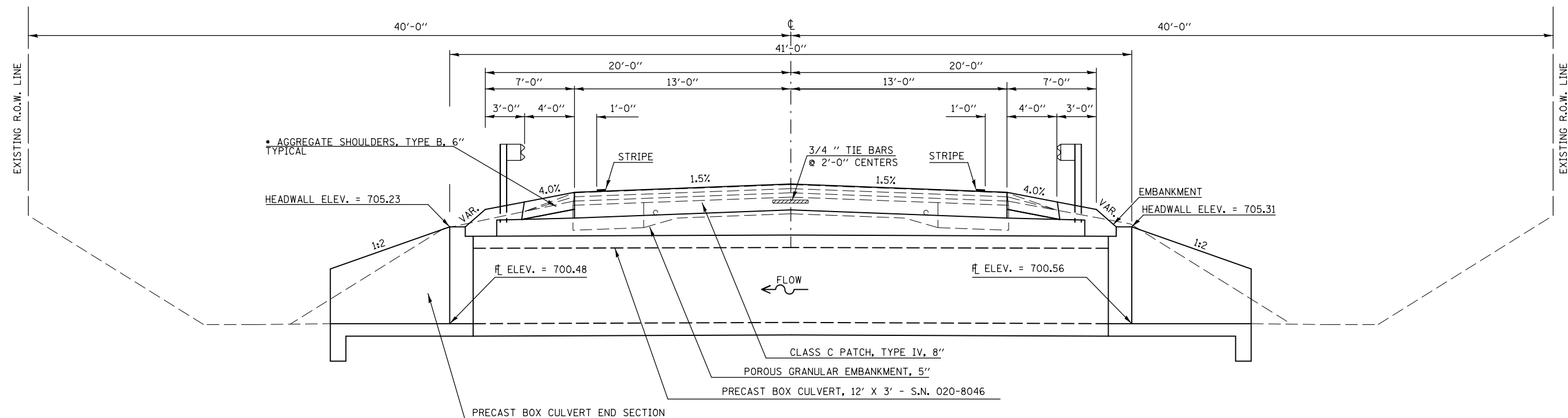


## PROPOSED TYPICAL CROSS SECTION ③

STATION TO STATION  
 1163+06.30 1163+36.30

PROPOSED SN 020-8046 @ STA. 1163+25.30

• AGGREGATE SHOULDERS, TYPE B, 6" SHALL EXTEND FROM STA. 1162+25 TO STA. 1164+25. TYPICAL ON BOTH SIDES OF ROADWAY.



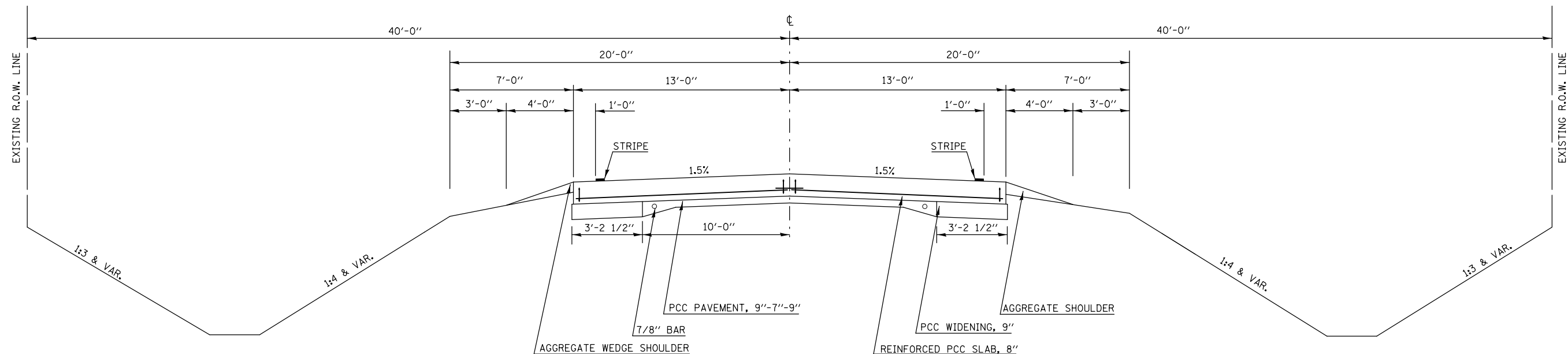
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pw:\IL\084EBIDINTEG.illinois.gov\PWIDOT\Documents\IDOT Offices\District 5\Projects\0579\BMC\020-8046-shr-typical.dwg	DRAWN BY BMC	CHECKED -	REVISED -			760	124CR	DEWITT	41	9	
PLOT SCALE = 40.0000' / in.	DATE - 02-08-2011	REVISIONS				CONTRACT NO. 70754					
PLOT DATE = 10/6/2015						SCALE: N/A	SHEET NO. 3 OF 4 SHEETS	STA. 1163+06.30 TO STA. 1163+36.30	ILLINOIS FED. AID PROJECT		

# CULVERT NO. 2

## EXISTING TYPICAL CROSS SECTION ④

STATION TO STATION  
1163+18.50 1163+29.50

EXISTING SN 020-8034 @ STA. 1163+25.30

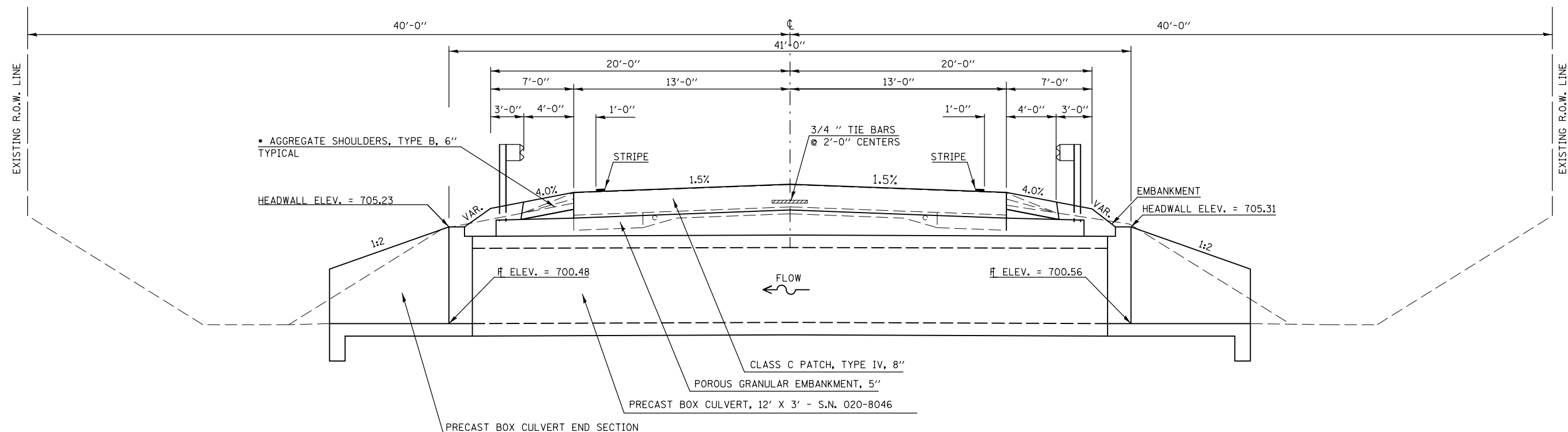


## PROPOSED TYPICAL CROSS SECTION ④

STATION TO STATION  
1163+06.30 1163+36.30

PROPOSED SN 020-8046 @ STA. 1163+25.30

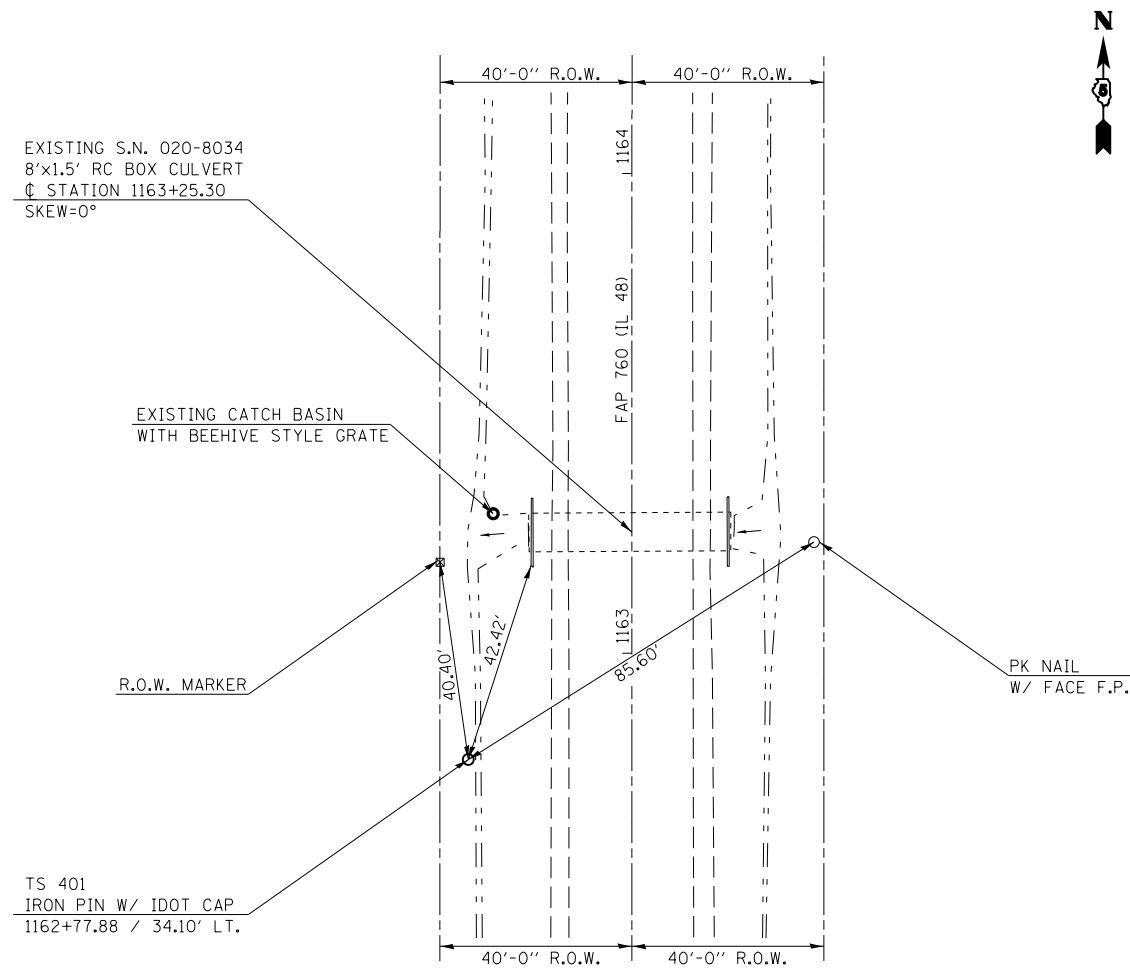
• AGGREGATE SHOULDERS, TYPE B, 6" SHALL EXTEND FROM STA. 1162+25 TO STA. 1164+25. TYPICAL ON BOTH SIDES OF ROADWAY.



FILE NAME =	USER NAME = ceerlockbm	DESIGNED - BMC	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TYPICAL CROSS SECTION (SN 020-8034 / 020-8046)</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\IL\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 5\Projects\05797\Drawings\Design\BMC\70754-sh-typical.dwg	DRAWN BY BMC	CHECKED -	REVISED -					760	124CR	DEWITT	41	10
PLOT SCALE = 40.0000' / in.	CHECKED -	DATE - 02-08-2011	REVISED -		SCALE: N/A SHEET NO. 4 OF 4 SHEETS STA. 1163+06.30 TO STA. 1163+36.30			CONTRACT NO. 70754				
PLOT DATE = 10/6/2015	DATE - 02-08-2011	REVISED -			ILLINOIS FED. AID PROJECT							

# TS 401 (SN 020-8034) – CULVERT NO. 2

## STA. 1162 + 77.88, 34.10' LT.



**NOTE: NO TIE POINTS EXIST WITHIN A CLOSE PROXIMITY OF EXIST. S.N. 020-8033 (CULVERT NO. 1)**

FILE NAME =	USER NAME = ceerlockbm	DESIGNED - BMC	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TIE POINTS – CULVERT NO. 2 EX. SN 020-8034</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\IL\084EBIDINTEG.illinois.gov\PI\DOT\Documents\DOT Offices\District 5\Projects\0579\Drawings\Design\070754-shr-details.dwg		DRAWN BY BMC	REVISED -		760	124CR	DEWITT	41	11			
PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -			CONTRACT NO. 70754			ILLINOIS FED. AID PROJECT				
PLOT DATE = 10/6/2015	DATE - 10-14-10	REVISED -			SCALE: N/A	SHEET NO. 1 OF 1 SHEETS	STA. ---- TO STA. ----					

## SCHEDULE OF QUANTITIES

28000305 TEMPORARY DITCH CHECKS

SIDE	STATION	TO	STATION	EXCAVATION (CU YD)	EARTH EMBANKMENT ADJUSTED FOR SHRINKAGE (25%) (CU YD)	EMBANKMENT (CU YD)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-) (CU YD)
LT	121+00.00		124+00.00	87.0	65.3	23.0	42.3
RT	121+00.00		124+00.00	54.0	40.5	26.0	14.5
LT	1162+00.00		1165+00.00	40.0	30.0	9.0	21.0
RT	1162+00.00		1165+00.00	51.0	38.3	16.0	22.3
TOTAL =				232.0	174.0	74.0	100.0
USE =				232.0	174.0	74.0	100.0

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

EARTH EXCAVATION = 232.0 CUBIC YARDS

STRUCTURE EXCAVATION FROM SN 020-8045 AND SN 020-8046 IS UNSUITABLE MATERIAL FOR EMBANKMENT

20700220 POROUS GRANULAR EMBANKMENT

LOCATION	VOLUME (CU YD)
SN 020-8045	46.9
SN 020-8046	45.8
TOTAL =	
92.7	
USE =	
93.0	

20800150 TRENCH BACKFILL

LOCATION	STATION	VOLUME (CU YD/FT)	TRENCH LENGTH	VOLUME (CU YD)
SN 020-8046	1163+25.00	0.902	38.0	34.3
TOTAL =				34.3
USE =				35.0

21301052 EXPLORATION TRENCH 52" DEPTH

LOCATION	SIDE	STATION	TO	STATION	LENGTH (FT)
SN 020-8046	LT	1163+00.00		1163+50.00	50.0
	RT	1163+00.00		1163+50.00	50.0
TOTAL =					100.0

LOCATION	CLASS 2A (ACRE)	CLASS 7 (ACRE)	25000400 NITROGEN (POUND)	25000500 PHOSPHORUS (POUND)	25000600 POTASSIUM (POUND)	25100115 MULCH METHOD 2 (ACRE)	28000250 TEMPORARY EROSION CONTROL SEEDING (POUND)
SN 020-8045	0.50	0.50	45.0	45.0	45.0	0.50	50.0
SN 020-8046	0.25	0.25	22.5	22.5	22.5	0.25	25.0
TOTAL =							
0.75    0.75    67.5    67.5    67.5    0.75    75.0							
USE =							
0.75    0.75    68.0    68.0    68.0    0.75    75.00							

SN 020-804	1162+75	LT	10.0
	1162+75	RT	10.0
	1163+00	LT	10.0
	1163+00	RT	10.0
	1163+50	LT	10.0
	1163+50	RT	10.0
	1163+75	LT	10.0
	1163+75	RT	10.0
TOTAL =			80.0

28000400 PERIMETER EROSION BARRIER

LOCATION	STATION	TO	STATION	LENGTH (FT)
SN 020-8045	122+35.50		122+85.50	50.0
SN 020-8046	1163+00.00		1163+50.00	50.0
TOTAL =				100.0

28000500 INLET & PIPE PROTECTION

LOCATION	STATION	O/S	EACH
SN 020-8046	1163+11.00	35' LT	1.0
	1163+11.00	35' RT	1.0
	1163+23.00	35' LT	1.0
	1163+23.00	35' RT	1.0
TOTAL =			4.0

28100201 STONE RIPRAP, CLASS A1

LOCATION	STATION	LENGTH (FT)	WIDTH (FT)	DEPTH (FT)	BOX VOLUME (CU YD)	APRON VOLUME (CU YD)	TOTAL VOLUME (CU YD)	TOTAL VOLUME (TON)
SN 020-8045	112+60.50	38.0	18.0	1.5	38.0	12.6	50.6	91.0
SN 020-8046	1163+25.30	38.0	18.0	1.0	25.3	10.0	35.3	63.6
TOTAL =							154.6	
USE =							155.0	

\*NOTE: CONVERSION OF 1.8 TON/CU YD WAS UTILIZED FOR ITEM 28100201.

44201335 CLASS C PATCHES, TYPE IV, 8"

LOCATION	STATION	TO	STATION	LENGTH (FT)	WIDTH (FT)	AREA (SQ YD)
SN 020-8045	122+49.50		122+71.50	22.0	12.5	30.6
	122+49.50		122+71.50	22.0	12.5	30.6
SUB-TOTAL =						61.2
SN 020-8046	1163+06.30		1163+36.30	30.0	13.0	43.3
	1163+06.30		1163+36.30	30.0	13.0	43.3
SUB-TOTAL =						86.6
TOTAL =						147.8
USE =						148.0

## SCHEDULE OF QUANTITIES

### 44213100 PAVEMENT FABRIC

LOCATION	STATION	TO	STATION	LENGTH (FT)	WIDTH (FT)	AREA (SQ YD)
SN 020-8045	122+49.50		122+71.50	LT 22.0	12.5	30.6
	122+49.50		122+71.50	RT 22.0	12.5	30.6
SUB-TOTAL =						61.2
SN 020-8046	1163+06.30		1163+36.30	LT 30.0	13.0	43.3
	1163+06.30		1163+36.30	RT 30.0	13.0	43.3
SUB-TOTAL =						86.6
TOTAL =						147.8
USE =						148.0

### 44213204 TIE BARS 3/4" (24" LENGTH)

LOCATION	STATION	TO	STATION	LENGTH (FT)	SPACING (FT)	EACH
SN 020-8045	122+49.50		122+71.50	22.0	2.0	11.0
SN 020-8046	1163+06.30		1163+36.30	30.0	2.0	15.0
TOTAL =						26.0

### 48101500 AGGREGATE SHOULDERS, TYPE B, 6"

LOCATION	STATION	TO	STATION	LENGTH (FT)	WIDTH (FT)	AREA (SQ YD)
SN 020-8045	121+60.00		123+60.00	RT 200.0	4.0	88.9
	121+60.00		123+60.00	LT 200.0	4.0	88.9
SUB-TOTAL =						177.8
SN 020-8046	1162+25.00		1164+25.00	RT 200.0	4.0	88.9
	1162+25.00		1164+25.00	LT 200.0	4.0	88.9
SUB-TOTAL =						177.8
TOTAL =						355.6
USE =						356.0

### 50100300 REMOVAL OF EXISTING STRUCTURES, CULVERT NO. 1

LOCATION	EACH
SN 020-8045	1.0

### 50100400 REMOVAL OF EXISTING STRUCTURES, CULVERT NO. 2

LOCATION	EACH
SN 020-8046	1.0

### 51500100 NAME PLATES

LOCATION	EACH	
SN 020-8045	1.0	
SN 020-8046	1.0	
TOTAL =		2.0

### 54001001 BOX CULVERT END SECTIONS, CULVERT NO. 1

LOCATION	EACH	
SN 020-8045	LT 1.0	
	RT 1.0	
TOTAL =		2.0

### 54001002 BOX CULVERT END SECTIONS, CULVERT NO. 2

LOCATION	EACH	
SN 020-8046	LT 1.0	
	RT 1.0	
TOTAL =		2.0

### 54011202 PRECAST CONCRETE BOX CULVERT 12' x 2'

LOCATION	LENGTH (FT)	
SN 020-8045	35.0	
TOTAL =		35.0

### 54011203 PRECAST CONCRETE BOX CULVERT 12' x 3'

LOCATION	LENGTH (FT)	
SN 020-8046	35.0	
TOTAL =		35.0

### 55100500 STORM SEWER REMOVAL 12"

LOCATION	STATION	LENGTH (FT)
SN 020-8046	1163+11.00	70.0
TOTAL =		70.0

### 60500050 REMOVING CATCH BASIN

LOCATION	STATION	EACH
SN 020-8046	1163+29.10	1.0
TOTAL =		1.0

### 61101020 STORM SEWERS PROTECTED, CLASS A, 18"

LOCATION	STATION	TO	STATION	LENGTH (FT)
SN 020-8046	1163+11.00	LT	1163+23.00	12.0
			1163+11.00	70.0
	RT	1163+23.00	12.0	
TOTAL =				94.0

### 61133300 FIELD TILE JUNCTION VAULTS, 4' DIA.

LOCATION	STATION	OFFSET	EACH
SN 020-8046	1163+11.00	35' LT	1.0
		35' RT	1.0
	1163+23.00	35' LT	1.0
		35' RT	1.0
TOTAL =			4.0

## SCHEDULE OF QUANTITIES

### 63000001 STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS

LOCATION	SIDE	NB/SB	STATION	TO	STATION	LENGTH (FT)
SN 020-8045	RT	NB	121+73.00		122+23.00	50.0
	LT	SB	122+98.00		123+48.00	50.0
SN 020-8046	RT	NB	1162+37.74		1162+87.74	50.0
	LT	SB	1163+62.74		1164+12.74	50.0
TOTAL=						200.0

### 63000360 LONG-SPAN GUARDRAIL OVER CULVERT, 18 FT 9 IN SPAN

LOCATION	SIDE	NB/SB	STATION	TO	STATION	LENGTH (FT)
SN 020-8045	RT	NB	122+23.00		122+98.00	75.0
	LT	SB	122+23.00		122+98.00	75.0
SN 020-8046	RT	NB	1162+87.74		1163+62.74	75.0
	LT	SB	1162+87.74		1163+62.74	75.0
TOTAL=						300.0

### 63100167 TRAFFIC BARRIER TERMINAL TYPE 1, (SPECIAL) TANGENT

LOCATION	SIDE	NB/SB	STATION	TO	STATION	EACH
SN 020-8045	RT	NB	121+23.00		121+73.00	1.0
	RT	NB	122+98.00		123+48.00	1.0
	LT	SB	121+73.00		122+23.00	1.0
SN 020-8046	LT	SB	123+48.00		123+98.00	1.0
	RT	NB	1161+87.74		1162+37.74	1.0
	RT	NB	1163+62.74		1164+12.74	1.0
	LT	SB	1162+37.74		1162+87.74	1.0
LT	SB	1164+12.74		1164+62.74	1.0	
TOTAL=						8.0

### 78001110 PAINT PAVEMENT MARKING - LINE 4" (WHITE EDGE LINES)

LOCATION	STATION	TO	STATION	LENGTH (FT)
S.N. 020-8045	122+49.50		122+71.50 RT	22.0
	122+49.50		122+71.50 LT	22.0
SUB-TOTAL =				44.0
S.N. 020-8046	1163+06.30		1163+36.30 RT	30.0
	1163+06.30		1163+36.30 LT	30.0
SUB-TOTAL =				60.0
TOTAL =				148.0

### 78200410 GUARDRAIL MARKERS, TYPE A

LOCATION	SIDE	NB/SB	STATION	TO	STATION	LENGTH (FT)	EACH
SN 020-8045	RT	NB	121+23.00		123+48.00	225.0	4.0
	LT	SB	121+73.00		123+98.00	225.0	4.0
SN 020-8046	RT	NB	1161+87.74		1164+12.74	225.0	4.0
	LT	SB	1162+37.74		1164+62.74	225.0	4.0
TOTAL=							16.0

### 78201000 TERMINAL MARKER - DIRECT APPLIED

LOCATION	SIDE	NB/SB	STATION	EACH
SN 020-8045	RT	NB	121+23.00	1.0
	RT	NB	123+48.00	1.0
	LT	SB	121+73.00	1.0
SN 020-8046	LT	SB	123+98.00	1.0
	RT	NB	1161+87.74	1.0
	RT	NB	1164+12.74	1.0
	LT	SB	1162+37.74	1.0
LT	SB	1164+62.74	1.0	
TOTAL=				8.0

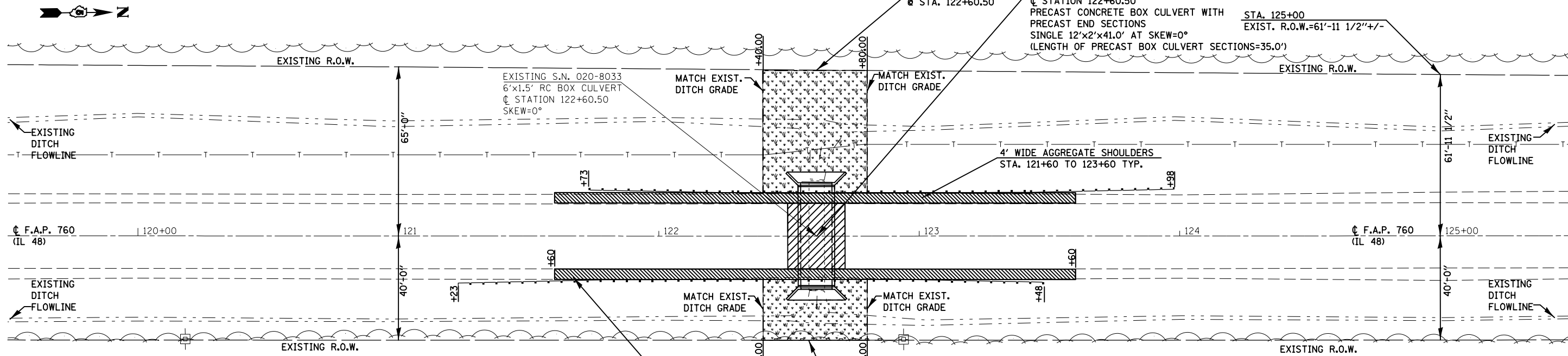
### Z0038700 PERMANENT BENCH MARKS

LOCATION	EACH	
SN 020-8045	1.0	
SN 020-8046	1.0	
TOTAL =		2.0

R.O.W. = 63.78' LT.  
@ STA. 122+60.50

PROPOSED S.N. 020-8045  
@ STATION 122+60.50  
PRECAST CONCRETE BOX CULVERT WITH  
PRECAST END SECTIONS  
SINGLE 12'x2'x41.0' AT SKEW=0°  
(LENGTH OF PRECAST BOX CULVERT SECTIONS=35.0')

STA. 125+00  
EXIST. R.O.W.=61'-11 1/2" +/-



PLAN	SURVEYED	DATE
	PLOTTED	
	NOTE BOOK	
	NO.	
	ALIGNED	
	CHECKED	
	FILE NAME	

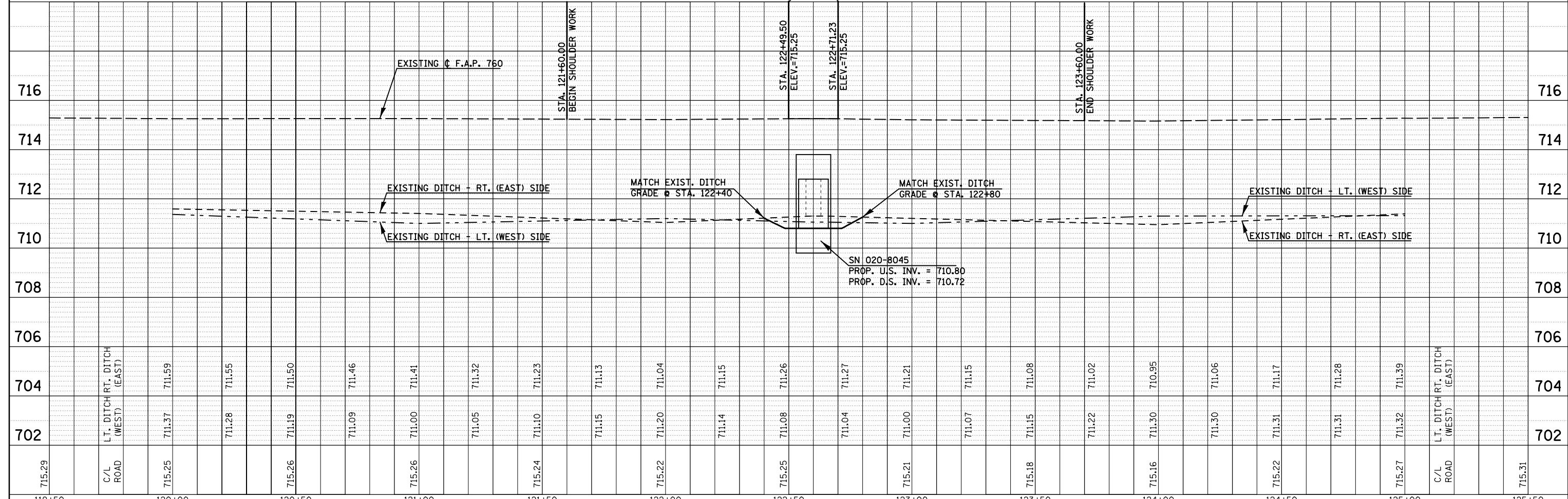
BENCHMARK (DEW-7)  
CHISELED "C" ON TOP OF  
WHITE CONCRETE CORNER POST  
3.5' ABOVE GROUND. POST IS  
SITUATED IN S.E. QUADRANT OF  
IL-48 & TR 600N.  
VERTICAL DATUM = NAVD 88  
ELEVATION=717.37

LEGEND:

	PERIMETER EROSION CONTROL BARRIER		CLASS C PATCHES, TYPE IV, 8"
	SEEDING AREA, CLASS 2A AND/OR CLASS 7		AGGREGATE SHOULDERS, TYPE B, 6"

		Existing Low Grade Elev. = 715.16 ft. @ Sta. 124+00						Proposed Low Grade Elev. = 715.16 ft. @ Sta. 124+00			
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Natural H.W.E.	Head - Ft.		Headwater Elevation			
			Existing	Proposed		Existing	Proposed	Existing	Proposed		
	10	137	9	24					Over	713.46	
Design	50	220	9	24					Over	715.20	
Base	100	256	9	24					Over	Over	
Overlapping											
Max. Calc.	500	345	9	24					Over	Over	

10 YEAR VELOCITY THROUGH EXISTING BRIDGE : Unknown      10 YEAR VELOCITY THROUGH PROPOSED BRIDGE : 6.33 fps



PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	NO.	
	STRUCTURE	
	NOTATIONS CHECKED	

FILE NAME =	USER NAME = ceorlockbm	DESIGNED BMC	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PLAN AND PROFILE</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED -	REVISED -		<b>EXIST. SN 020-8033 / NEW SN 020-8045</b>			760	124CR	DEWITT	41	15
		DATE 02-08-2011	REVISED -		SCALE: N/A			SHEET NO. 1 OF 1 SHEETS		STA. 119+50.00 TO STA. 125+50.00		
								CONTRACT NO. 70754			ILLINOIS FED. AID PROJECT	

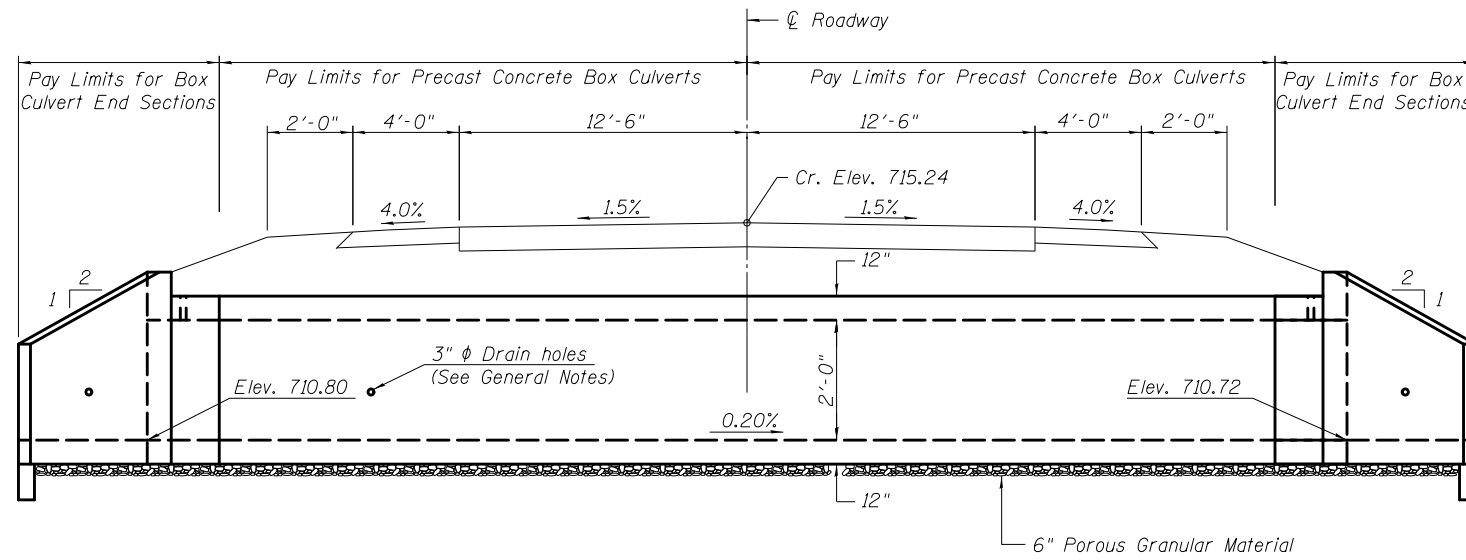
BENCHMARK ELEV. = 717.37 CHISELED SQUARE (NAVD 88)  
SEE PLAN AND PROFILE SHEET FOR ADDITIONAL  
BENCHMARK INFORMATION

**INDEX OF SHEETS**

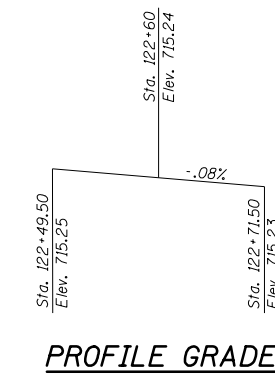
1. General Plan and Elevation
- 2-3. Precast Concrete Box Culvert  
Apron End Section Details
4. Porous Granular Embankment Detail
- 5-6. As-Built Plans
7. Staging Details

**GENERAL NOTES**

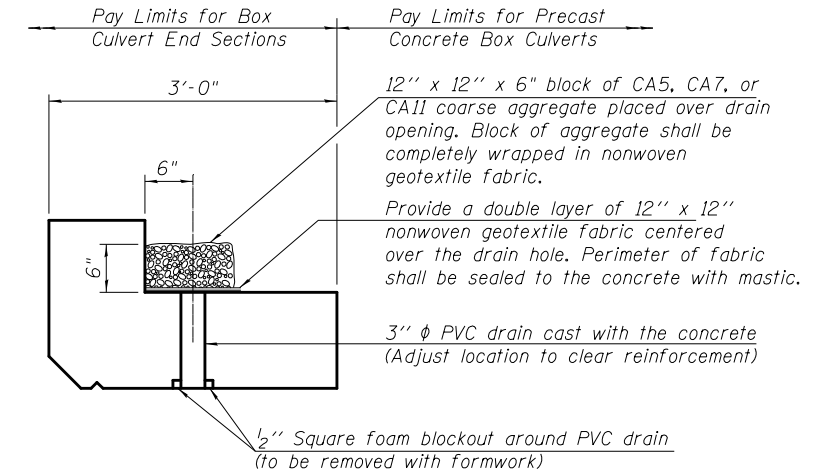
The design fill height for this box is 1.46 feet. The precast box culvert sections shall conform to the requirements of AASHTO C 1577.  
Drain holes shall be provided on exterior culvert walls for each precast box segment with a clear rise greater than 3 ft. The drain hole shall be located within 1/3 of the clear rise of the box culvert, shall not intercept the haunch, and shall conform to the requirements of Article 503.11 of the Standard Specification.  
The 6 in. thick layer of porous granular material required for the precast concrete box culvert per Art. 540.06 of the Standard Specifications shall also apply to the end sections. Cost of the porous granular material will not be paid for separately but shall be included in the unit price of the work for which it is required.  
Nonwoven geotextile fabric shall conform to the requirements of Art. 1080.01 of the Standard Specifications. The minimum weight of the fabric shall be 6 ounces per square yard.



**ELEVATION**



**PROFILE GRADE**



**DRAIN DETAIL**

(All costs associated with furnishing and constructing the above drain details will not be measured for payment but shall be included in the contract unit price for the end section.)

**DESIGN SPECIFICATIONS**

2012 AASHTO LRFD Bridge Design Specifications  
6th Edition

**LOADING HL-93**

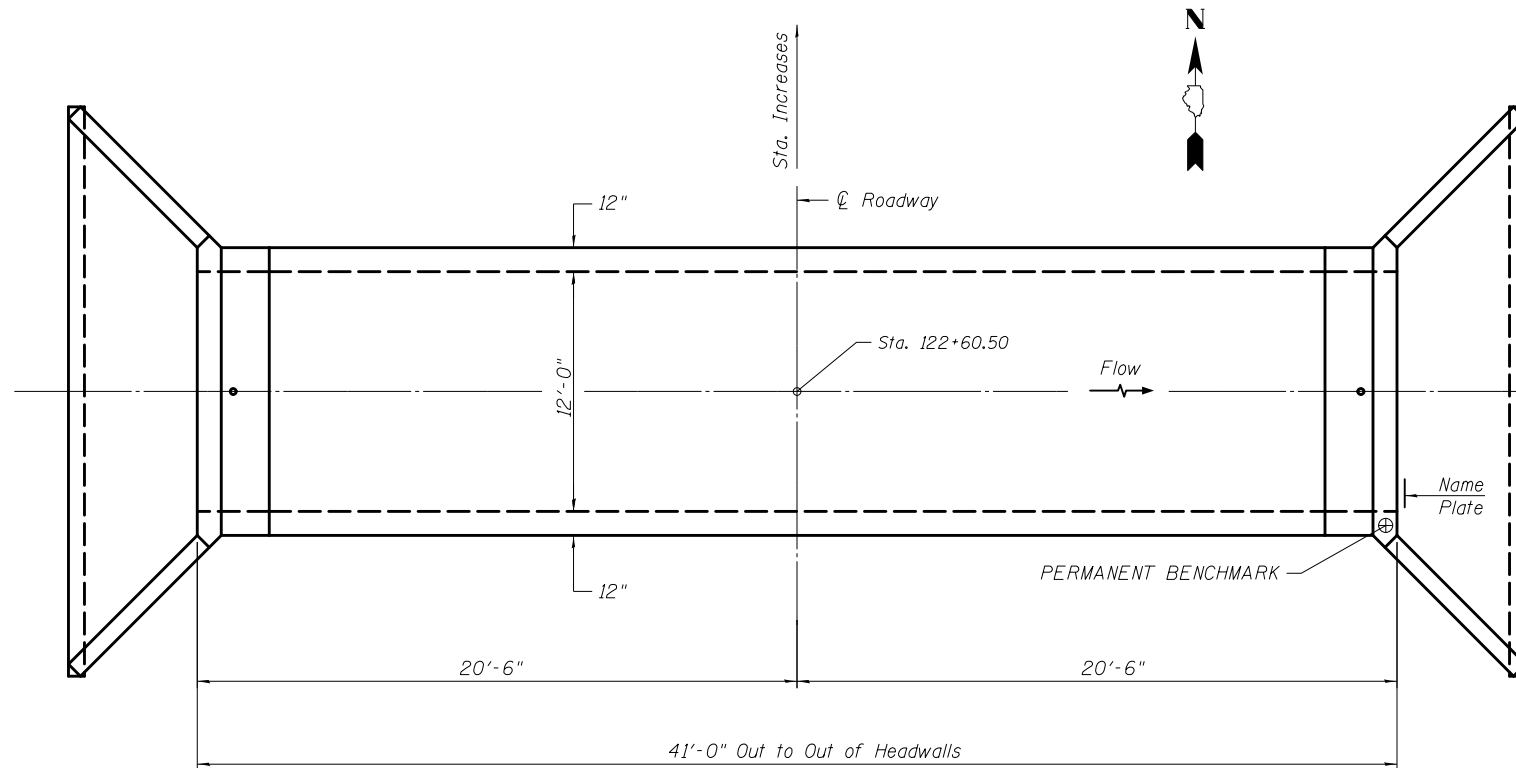
**DESIGN STRESSES**

**PRECAST UNITS**

f'c = 5,000 psi  
fy = 65,000 psi (Welded Wire Fabric)

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Removal of Existing Structures No. 1	Each	1
Name Plates	Each	1
Box Culvert End Sections, Culvert No. 1	Each	2
Precast Concrete Box Culverts, 12' x 2'	Foot	35'
Stone Riprap, Class A1	Ton	91.0
Porous Granular Embankment	Cu. yd	46.9



**PLAN**

**WATERWAY INFORMATION TABLE**

		Existing Low Grade Elev. = 715.16 ft. @ Sta. 124+00		Proposed Low Grade Elev. = 715.16 ft. @ Sta. 124+00			
Flood	Freq.	Opening Sq. Ft.		Natural H.W.E.	Head - Ft.	Headwater Elevation	
	Yr.	Existing	Proposed			Existing	Proposed
Design	10	137	9	24		Over	713.46
Base	50	220	9	24		Over	715.20
Overtopping	100	256	9	24		Over	Over
Max. Calc.	500	345	9	24		Over	Over

10 YEAR VELOCITY THROUGH EXISTING BRIDGE: Unknown      10 YEAR VELOCITY THROUGH PROPOSED BRIDGE: 6.33 fps

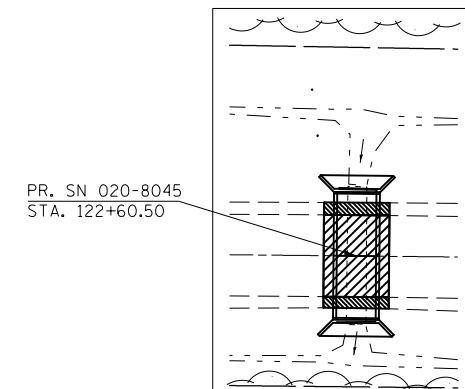
STATION 122+60.50  
BUILT 2011 BY  
STATE OF ILLINOIS  
F.A.P. RTE. 760 SEC. 124CR  
LOADING HL-93  
STRUCTURE NO. 020-8045

**NAME PLATE**

See Std. 515001

**DESIGN SCOUR ELEVATION TABLE**

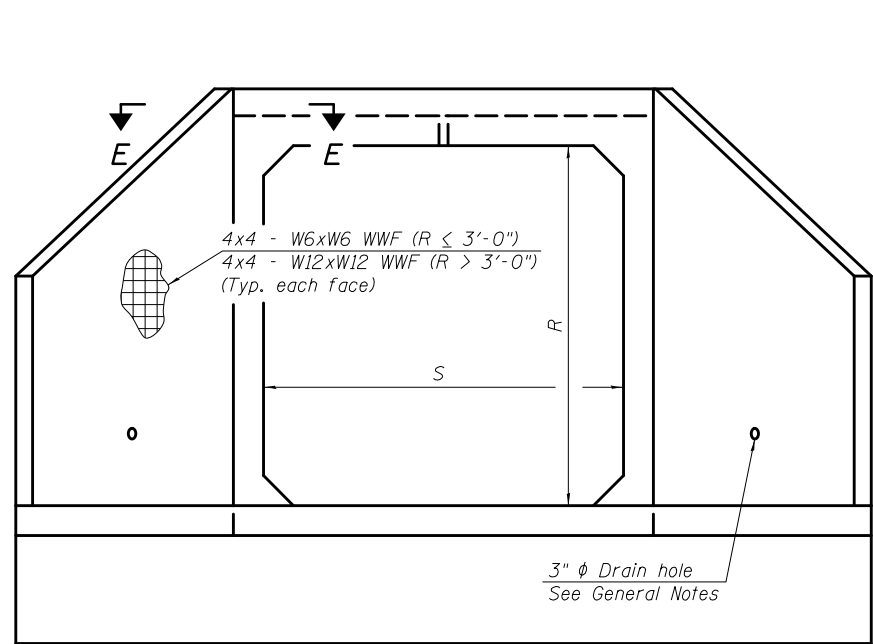
Design Scour Elevation (ft.)	Upstream	Downstream
		707.80



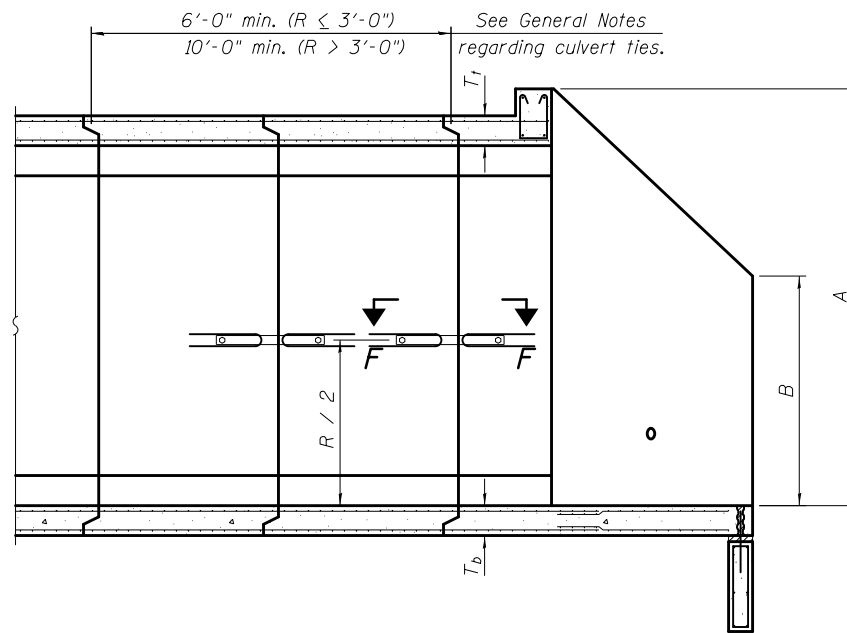
**LOCATION SKETCH**

**GENERAL PLAN AND ELEVATION**  
**SINGLE 12' X 3' PRECAST BOX CULVERT**  
**IL RTE. 48**  
**F.A.P. RTE. 760 SEC. 124CR**  
**DEWITT COUNTY**  
**STATION 122+60.50**  
**S.N. 020-8045**





END VIEW



SECTION A-A

GENERAL NOTES

Box Culvert End Sections shall be constructed according to the requirements of Section 540 of the Standard Specifications except as modified herein. End sections will be paid for at the contract unit price per each for Box Culvert End Sections.

The Contractor may furnish the end section as a single precast concrete piece or construct the end section in the field using cast-in-place (CIP) construction. For CIP construction, the bottom slab thickness shall be increased by 2" and the clear cover to the bottom mat of reinforcement shall be increased to 3".

Box section dimensions, materials, and reinforcement details for Box Culvert End Sections shall be according to the requirements for ASTM C 1577 as required for the design of the portion of the culvert within the limits of Precast Concrete Box Culverts except as modified herein.

The number of culvert ties shall be sufficient to engage the minimum length of culvert barrel shown within the pay limits for Precast Concrete Box Culverts and will be dependent upon the length of box culvert segments furnished by the Contractor. Culvert ties are not required for box culverts having a rise (R) less than or equal to 3 ft and a span (S) greater than or equal to 10 ft.

All costs associated with furnishing and installing or constructing the toewall and culvert ties will not be measured for payment but shall be included in the unit price for Box Culvert End Sections of the culvert number specified.

Shop drawings that detail slab thickness and reinforcement layout for the Box Culvert End Sections shall be provided to the Engineer for review and approval. Reinforcement bars not detailed herein shall be detailed with a clear distance at the end of the reinforcement not less than 1/2" nor more than 2". For the precast option, it shall be the Contractor's responsibility for determining a method of handling and a construction procedure shall be included on the shop drawings. The Contractor shall determine and detail in the shop drawings any necessary strengthening or stiffening provisions necessary to handle the precast segment. Any required modifications shall be at no extra charge.

The Contractor may use reinforcement bars in lieu of welded wire fabric (WWF). Reinforcement bars shall be limited to the sizes of #3 through #5 bars, a maximum spacing of the lesser of 8" or the member thickness, and shall result in area of reinforcement equal to or greater than that provided by the WWF. Minimum lap lengths detailed herein are applicable to WWF and reinforcement bars.

Reinforcement (circumferential and longitudinal) in the culvert barrel portion of the end section being lapped with reinforcement from the wingwalls or bottom slab of the end section shall not be less than that required by ASTM C 1577 for the design fill height or the reinforcement detailed for the end section, whichever is greater.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60.

Reinforcement bars designated (E) shall be epoxy coated.

Bonded construction joints shall be prepared according to Article 503.09 of the Standard Specifications.

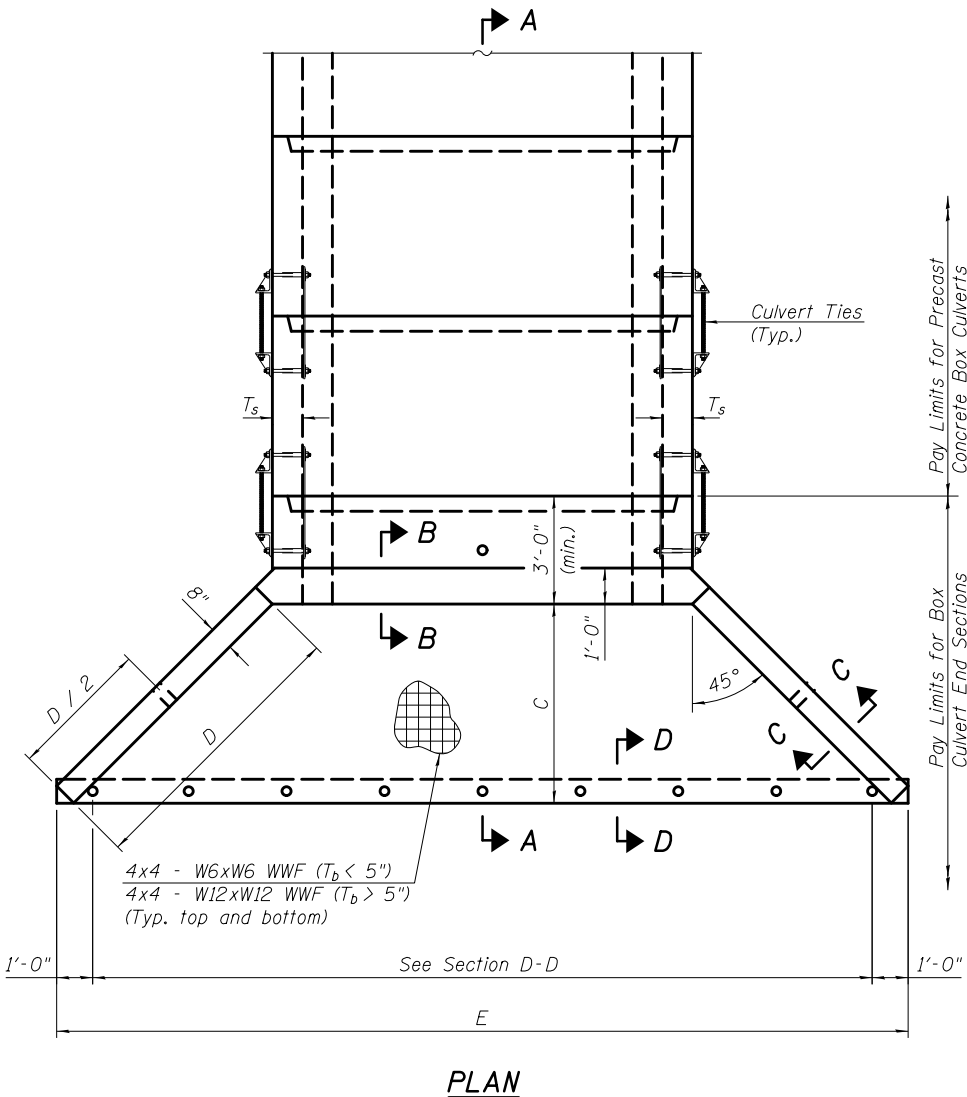
One drain hole shall be provided in each wingwall for end sections of box culverts having an opening with a clear rise greater than 3 ft. The drain hole shall be located within the lower 1/3 of the clear rise of the box culvert and shall conform to the requirements of Article 503.11 of the Standard Specifications.

APRON END SECTION DIMENSIONS

Span (S)	Rise (R)	T <sub>t</sub>	T <sub>b</sub>	T <sub>s</sub>	A	B	C	D	E	Concrete Cu. Yd.	Culvert Ties Required
3'-0"	2'-0"	7"	6"	4"	3'-4"	2'-2"	2'-10 <sup>5</sup> / <sub>8</sub> "	4'-1"	10'-4 <sup>5</sup> / <sub>8</sub> "	2.8	Yes
3'-0"	2'-0"	4"	4"	4"	3'-1"	2'-1"	2'-7 <sup>7</sup> / <sub>8</sub> "	3'-9"	9'-11"	2.3	Yes
3'-0"	3'-0"	7"	6"	4"	4'-4"	2'-8"	3'-10 <sup>5</sup> / <sub>8</sub> "	5'-6"	12'-4 <sup>5</sup> / <sub>8</sub> "	3.7	Yes
3'-0"	3'-0"	4"	4"	4"	4'-1"	2'-7"	3'-7 <sup>7</sup> / <sub>8</sub> "	5'-2"	11'-11"	3.1	Yes
4'-0"	2'-0"	7.5"	6"	5"	3'-4 <sup>1</sup> / <sub>2</sub> "	2'-2 <sup>1</sup> / <sub>2</sub> "	2'-11 <sup>3</sup> / <sub>8</sub> "	4'-2"	11'-8"	3.3	Yes
4'-0"	2'-0"	5"	5"	5"	3'-2"	2'-1"	2'-8 <sup>1</sup> / <sub>2</sub> "	3'-10"	11'-2 <sup>3</sup> / <sub>8</sub> "	2.8	Yes
4'-0"	3'-0"	7.5"	6"	5"	4'-4 <sup>1</sup> / <sub>2</sub> "	2'-8 <sup>1</sup> / <sub>2</sub> "	3'-11 <sup>3</sup> / <sub>8</sub> "	5'-7"	13'-8 <sup>1</sup> / <sub>8</sub> "	4.2	Yes
4'-0"	3'-0"	5"	5"	5"	4'-2"	2'-7"	3'-8 <sup>1</sup> / <sub>2</sub> "	5'-3"	13'-2 <sup>3</sup> / <sub>8</sub> "	3.7	Yes
4'-0"	4'-0"	7.5"	6"	5"	5'-4 <sup>1</sup> / <sub>2</sub> "	3'-2 <sup>1</sup> / <sub>2</sub> "	4'-11 <sup>3</sup> / <sub>8</sub> "	7'-0"	15'-8 <sup>1</sup> / <sub>8</sub> "	5.3	Yes
4'-0"	4'-0"	5"	5"	5"	5'-2"	3'-1"	4'-8 <sup>5</sup> / <sub>8</sub> "	6'-8"	15'-2 <sup>1</sup> / <sub>2</sub> "	4.7	Yes
5'-0"	2'-0"	8"	7"	6"	3'-5"	2'-3"	2'-11 <sup>3</sup> / <sub>8</sub> "	4'-2"	12'-10"	3.9	Yes
5'-0"	2'-0"	6"	6"	6"	3'-3"	2'-2"	2'-10"	4'-0"	12'-7 <sup>1</sup> / <sub>4</sub> "	3.5	Yes
5'-0"	3'-0"	8"	7"	6"	4'-5"	2'-9"	3'-11 <sup>3</sup> / <sub>8</sub> "	5'-7"	14'-10 <sup>1</sup> / <sub>8</sub> "	4.9	Yes
5'-0"	3'-0"	6"	6"	6"	4'-3"	2'-8"	3'-10"	5'-5"	14'-7 <sup>1</sup> / <sub>4</sub> "	4.5	Yes
5'-0"	4'-0"	8"	7"	6"	5'-5"	3'-3"	4'-11 <sup>3</sup> / <sub>8</sub> "	7'-0"	16'-10 <sup>1</sup> / <sub>8</sub> "	6.1	Yes
5'-0"	4'-0"	6"	6"	6"	5'-3"	3'-2"	4'-9 <sup>1</sup> / <sub>4</sub> "	6'-9"	16'-5 <sup>7</sup> / <sub>8</sub> "	5.5	Yes
5'-0"	5'-0"	8"	7"	6"	6'-5"	3'-9"	5'-11 <sup>3</sup> / <sub>8</sub> "	8'-5"	18'-10 <sup>1</sup> / <sub>8</sub> "	7.4	Yes
5'-0"	5'-0"	6"	6"	6"	6'-3"	3'-8"	5'-9 <sup>1</sup> / <sub>4</sub> "	8'-2"	18'-5 <sup>7</sup> / <sub>8</sub> "	6.8	Yes
6'-0"	2'-0"	8"	7"	7"	3'-5"	2'-3"	2'-11 <sup>3</sup> / <sub>8</sub> "	4'-2"	14'-0"	4.3	Yes
6'-0"	2'-0"	7"	7"	7"	3'-4"	2'-2"	2'-10 <sup>5</sup> / <sub>8</sub> "	4'-1"	13'-10 <sup>5</sup> / <sub>8</sub> "	4.2	Yes
6'-0"	3'-0"	8"	7"	7"	4'-5"	2'-9"	3'-11 <sup>3</sup> / <sub>8</sub> "	5'-7"	16'-0 <sup>1</sup> / <sub>8</sub> "	5.4	Yes
6'-0"	3'-0"	7"	7"	7"	4'-4"	2'-8"	3'-10 <sup>5</sup> / <sub>8</sub> "	5'-6"	15'-10 <sup>5</sup> / <sub>8</sub> "	5.2	Yes
6'-0"	4'-0"	8"	7"	7"	5'-5"	3'-3"	4'-11 <sup>3</sup> / <sub>8</sub> "	7'-0"	18'-0 <sup>1</sup> / <sub>8</sub> "	6.5	Yes
6'-0"	4'-0"	7"	7"	7"	5'-4"	3'-2"	4'-10 <sup>3</sup> / <sub>4</sub> "	6'-11"	17'-10 <sup>3</sup> / <sub>4</sub> "	6.5	Yes
6'-0"	5'-0"	8"	7"	7"	6'-5"	3'-9"	5'-11 <sup>3</sup> / <sub>8</sub> "	8'-5"	20'-0 <sup>1</sup> / <sub>8</sub> "	8.0	Yes
6'-0"	5'-0"	7"	7"	7"	6'-4"	3'-8"	5'-10 <sup>3</sup> / <sub>4</sub> "	8'-4"	19'-10 <sup>3</sup> / <sub>4</sub> "	7.8	Yes
6'-0"	6'-0"	8"	7"	7"	7'-5"	4'-3"	6'-11 <sup>1</sup> / <sub>2</sub> "	9'-10"	22'-0 <sup>1</sup> / <sub>4</sub> "	9.5	Yes
6'-0"	6'-0"	7"	7"	7"	7'-4"	4'-2"	6'-10 <sup>3</sup> / <sub>4</sub> "	9'-9"	21'-10 <sup>3</sup> / <sub>4</sub> "	9.3	Yes
7'-0"	4'-0"	8"	8"	8"	5'-5"	3'-3"	4'-11 <sup>3</sup> / <sub>8</sub> "	7'-0"	19'-2 <sup>1</sup> / <sub>8</sub> "	7.4	Yes
7'-0"	5'-0"	8"	8"	8"	6'-5"	3'-9"	5'-11 <sup>3</sup> / <sub>8</sub> "	8'-5"	21'-2 <sup>1</sup> / <sub>8</sub> "	8.9	Yes
7'-0"	6'-0"	8"	8"	8"	7'-5"	4'-3"	6'-11 <sup>1</sup> / <sub>2</sub> "	9'-10"	23'-2 <sup>1</sup> / <sub>4</sub> "	10.6	Yes
8'-0"	2'-0"	8"	8"	8"	3'-5"	2'-3"	2'-11 <sup>3</sup> / <sub>8</sub> "	4'-2"	16'-2"	5.3	Yes
8'-0"	3'-0"	8"	8"	8"	4'-5"	2'-9"	3'-11 <sup>3</sup> / <sub>8</sub> "	5'-7"	18'-2 <sup>1</sup> / <sub>8</sub> "	6.5	Yes
8'-0"	4'-0"	8"	8"	8"	5'-5"	3'-3"	4'-11 <sup>3</sup> / <sub>8</sub> "	7'-0"	20'-2 <sup>1</sup> / <sub>8</sub> "	7.8	Yes
8'-0"	5'-0"	8"	8"	8"	6'-5"	3'-9"	5'-11 <sup>3</sup> / <sub>8</sub> "	8'-5"	22'-2 <sup>1</sup> / <sub>8</sub> "	9.3	Yes
8'-0"	6'-0"	8"	8"	8"	7'-5"	4'-3"	6'-11 <sup>1</sup> / <sub>2</sub> "	9'-10"	24'-2 <sup>1</sup> / <sub>4</sub> "	11.0	Yes
9'-0"	5'-0"	9"	9"	9"	6'-6"	3'-9"	6'-0 <sup>7</sup> / <sub>8</sub> "	8'-7"	23'-7"	10.6	Yes
9'-0"	6'-0"	9"	9"	9"	7'-6"	4'-3"	7'-0 <sup>1</sup> / <sub>8</sub> "	9'-11"	25'-5 <sup>5</sup> / <sub>8</sub> "	12.4	Yes
10'-0"	2'-0"	10"	10"	10"	3'-7"	2'-4"	3'-1 <sup>1</sup> / <sub>2</sub> "	4'-5"	18'-10 <sup>1</sup> / <sub>4</sub> "	7.1	No
10'-0"	3'-0"	10"	10"	10"	4'-7"	2'-10"	4'-1 <sup>1</sup> / <sub>2</sub> "	5'-10"	20'-10 <sup>1</sup> / <sub>4</sub> "	8.6	No
10'-0"	5'-0"	10"	10"	10"	6'-7"	3'-10"	6'-1 <sup>1</sup> / <sub>2</sub> "	8'-8"	24'-10 <sup>3</sup> / <sub>8</sub> "	12.0	Yes
10'-0"	6'-0"	10"	10"	10"	7'-7"	4'-4"	7'-1 <sup>1</sup> / <sub>2</sub> "	10'-1"	26'-10 <sup>3</sup> / <sub>8</sub> "	13.9	Yes
11'-0"	4'-0"	11"	11"	11"	5'-8"	3'-4"	5'-2 <sup>1</sup> / <sub>4</sub> "	7'-4"	24'-1 <sup>3</sup> / <sub>4</sub> "	11.5	Yes
11'-0"	6'-0"	11"	11"	11"	7'-8"	4'-4"	7'-2 <sup>1</sup> / <sub>4</sub> "	10'-2"	28'-1 <sup>7</sup> / <sub>8</sub> "	15.5	Yes
12'-0"	2'-0"	12"	12"	12"	3'-9"	2'-5"	3'-3 <sup>5</sup> / <sub>8</sub> "	4'-8"	21'-6 <sup>1</sup> / <sub>2</sub> "	9.3	No
12'-0"	3'-0"	12"	12"	12"	4'-9"	2'-11"	4'-3 <sup>5</sup> / <sub>8</sub> "	6'-1"	23'-6 <sup>1</sup> / <sub>2</sub> "	11.1	No
12'-0"	4'-0"	12"	12"	12"	5'-9"	3'-5"	5'-3 <sup>5</sup> / <sub>8</sub> "	7'-6"	25'-6 <sup>5</sup> / <sub>8</sub> "	13.0	Yes
12'-0"	6'-0"	12"	12"	12"	7'-9"	4'-5"	7'-3 <sup>5</sup> / <sub>8</sub> "	10'-4"	29'-6 <sup>5</sup> / <sub>8</sub> "	17.4	Yes

Note:

Two sets of apron end section dimensions are shown above for some box culvert sizes due to the top and bottom slabs having different thicknesses per ASTM C 1577 for design fill heights less than 2 ft.



PLAN

FILE NAME =	USER NAME =	DESIGNED -	REVISED
		CHECKED -	REVISED
PLOT SCALE =		DRAWN -	REVISED
PLOT DATE		CHECKED -	REVISED

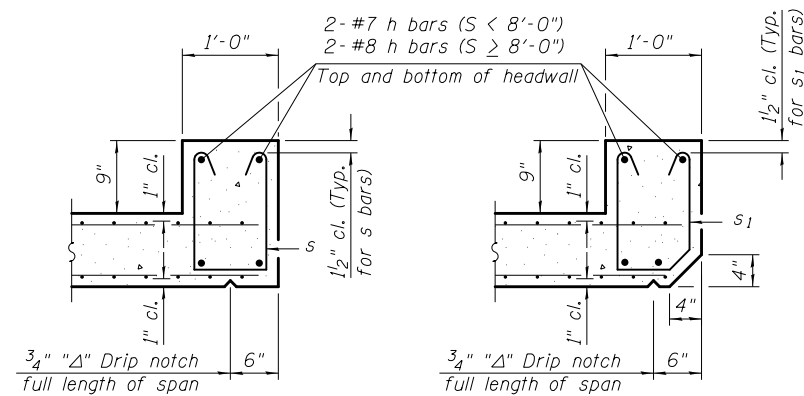
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PRECAST CONCRETE BOX CULVERT  
APRON END SECTION DETAILS - CULVERT NO. 1 (SN 020-8045)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
760	124CR	DEWITT	41	17
CONTRACT NO. 70754				

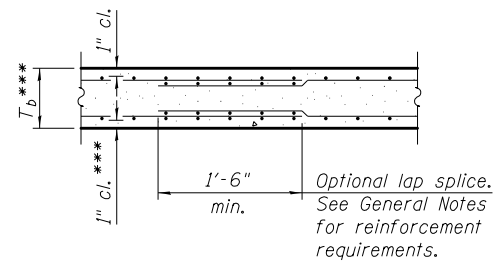
SHEET NO. 2 OF 7 SHEETS

ILLINOIS FED. AID PROJECT

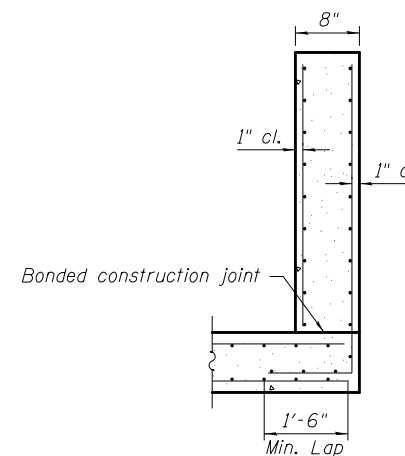


**SECTION B-B**  
(Top slab at downstream end)

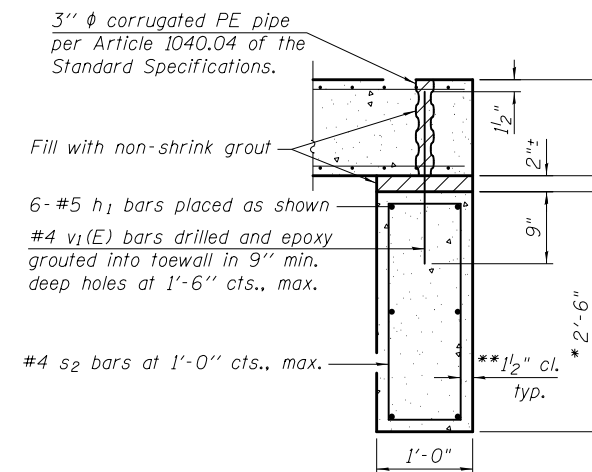
**SECTION B-B**  
(Top slab at upstream end)



**SECTION B-B**  
(Bottom Slab)

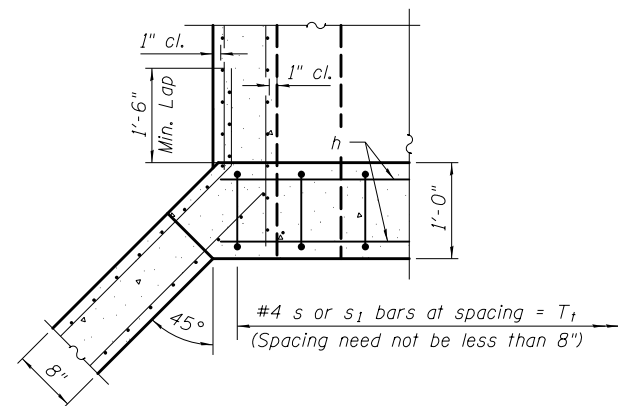


**SECTION C-C**

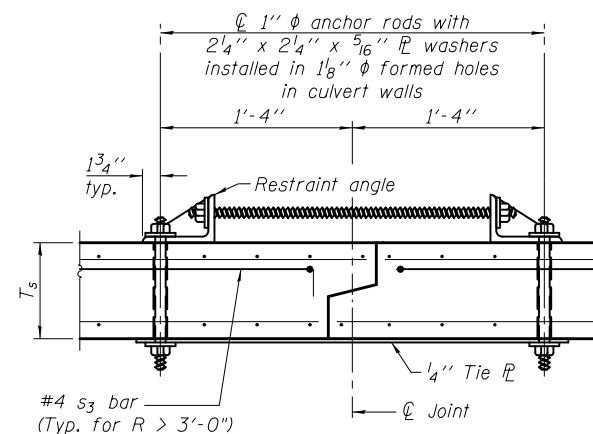


**SECTION D-D**

\*\*\* This dimension shall be increased by 2" for CIP construction.



**SECTION E-E**



**SECTION F-F**  
(Showing culvert tie details)

**TOEWALL CONSTRUCTION SEQUENCE**

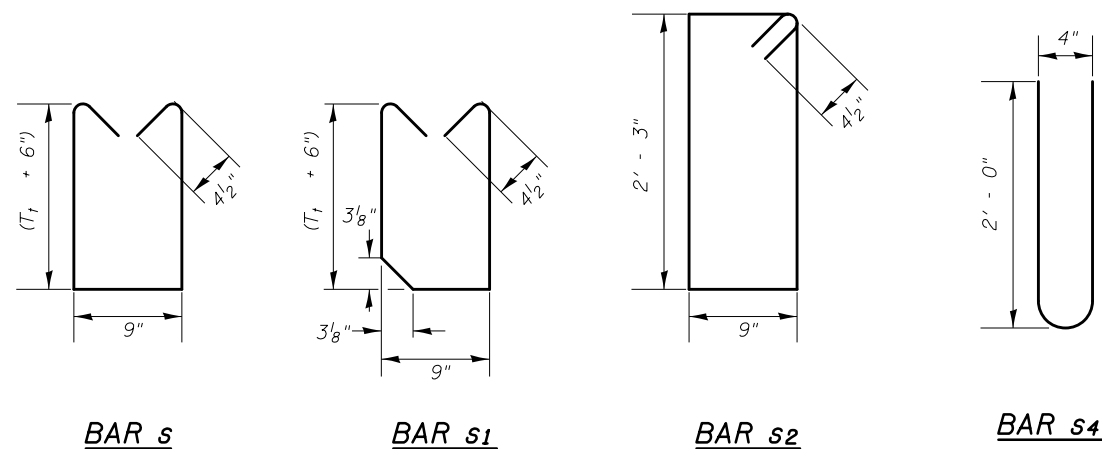
1. Perform excavation and construct toewall.
2. Backfill accordingly and place bedding for precast box culvert end sections.
3. Set precast box culvert end section.
4. Drill and epoxy grout reinforcement in toewall in accordance with Section 584 of the Standard Specifications.
5. Pressure grout voids using non-shrink grout conforming to Section 1024 of the Standard Specifications.

\* The Contractor may furnish a precast or cast-in-place toewall. The Contractor shall be responsible for the strength and stability of the precast toewall during handling. Additional lifting points may be required depending upon the length of the toewall or the Contractor may need to modify the design of the toewall for the proposed handling method.

\*\* If soil conditions permit, the sides of the toewall may be poured directly against the soil. The clear cover on the sides of the toewall shall be increased to 3" by increasing the thickness of the toewall.

Notes:

1" φ anchor rods for the culvert ties shall conform to the requirements of ASTM F1554, Grade 105. Structural steel for the tie plate and restraint angle shall conform to the requirements of Article 1006.04 of the Standard Specifications. All components of the culvert tie detail shall be galvanized according to the requirements of AASHTO M 111 or M 232 as applicable. 2 1/4"x2 1/4"x5/16" plate washers shall be provided under each nut required for the anchor rods. Anchor rods installed in the sidewalls of the culvert shall be tightened per Article 505.04(f)2(d) of the Standard Specifications. Holes in the walls for the culvert tie assembly may be drilled using core bits in lieu of using formed holes. Alternate culvert ties similar in strength and stiffness to the plan details may be provided by the Contractor. Alternate culvert ties shall be subject to the approval of the Engineer.

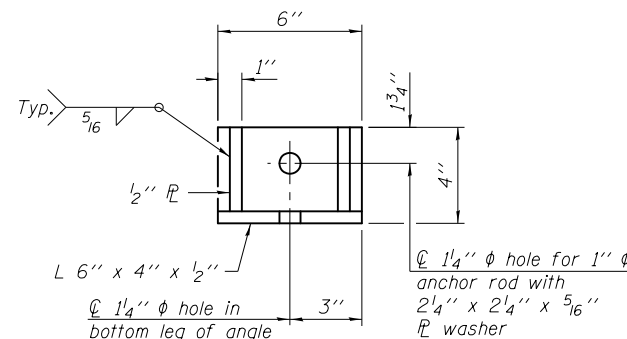


**BAR s**

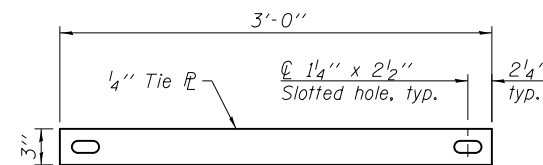
**BAR s<sub>1</sub>**

**BAR s<sub>2</sub>**

**BAR s<sub>4</sub>**



**RESTRAINT ANGLE DETAIL**

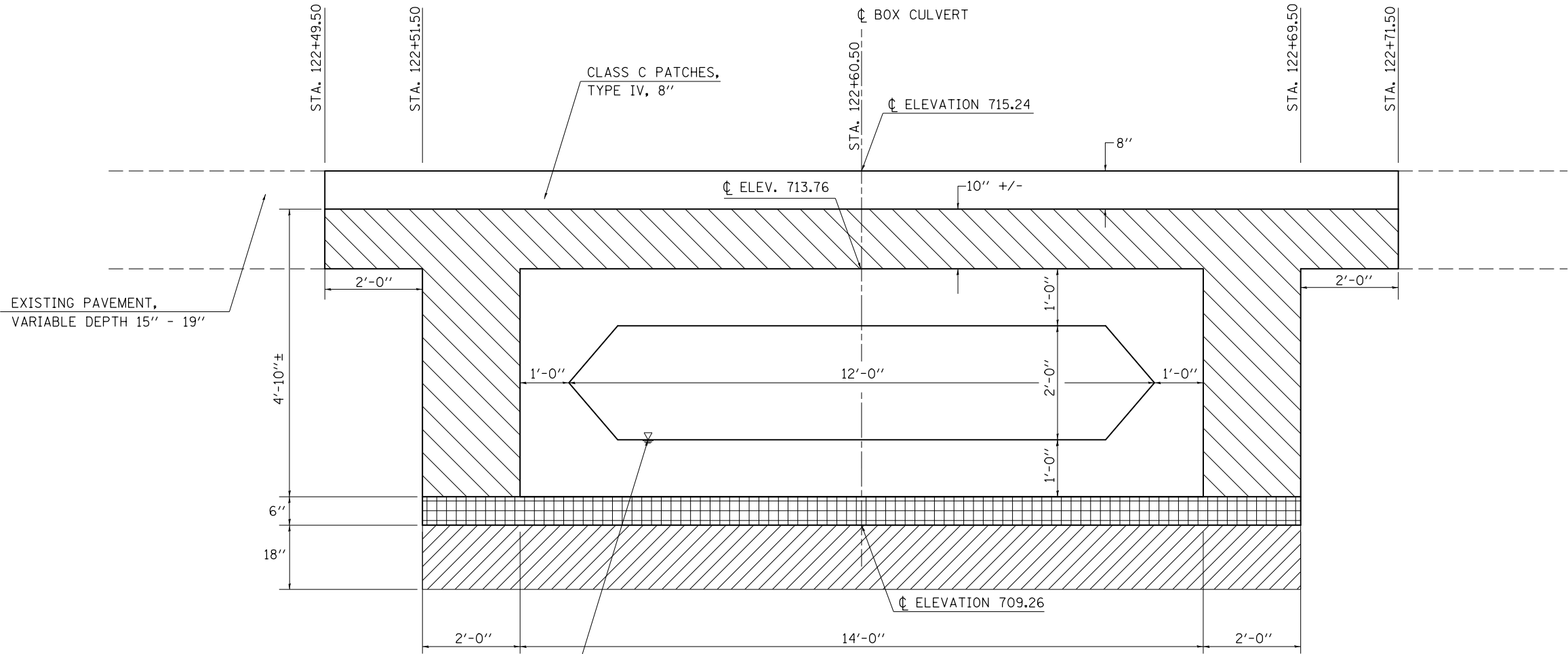


**TIE PLATE DETAIL**

FILE NAME =	USER NAME =	DESIGNED -	REVISOR	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PRECAST CONCRETE BOX CULVERT APRON END SECTION DETAILS - CULVERT NO.1 (SN 020-8045)	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		CHECKED -	REVISOR			760	124CR	DEWITT	41	18	
		DRAWN -	REVISOR			CONTRACT NO. 70754					
		CHECKED -	REVISOR			ILLINOIS FED. AID PROJECT					

# DETAIL OF POROUS GRANULAR EMBANKMENT PAY LIMITS

## CULVERT NO. 1, STATION 122 + 60.50 S.N. 020-8045



**STONE RIPRAP, CLASS A1**  
( IF REQUIRED )

STONE RIPRAP, CLASS A1 SHALL BE USED DUE TO UNSTABLE SOIL CONDITIONS

THE WORK SHOWN IN THE DETAIL SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE PORTIONS OF SECTION 281 OF THE STANDARD SPECIFICATIONS.

THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR STONE RIPRAP, CLASS A1.

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.

PROPOSED U.S.F.L. = 710.80  
PROPOSED D.S.F.L. = 710.72

**POROUS GRANULAR EMBANKMENT**

POROUS GRANULAR EMBANKMENT SHALL EXTEND 2 FT. BEYOND THE AGGREGATE SHOULDER

THE WORK SHOWN IN THE DETAIL SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF ARTICLE 207 AND ARTICLE 540 OF THE STANDARD SPECIFICATIONS.

THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR POROUS GRANULAR EMBANKMENT.

THE AREA TO BE EXCAVATED FOR THE PROPOSED BOX CULVERT SHALL NOT BE MEASURED FOR PAYMENT. THE COST OF THE EXCAVATION SHALL BE INCLUDED IN THE COST OF PRECAST CONCRETE BOX CULVERTS.

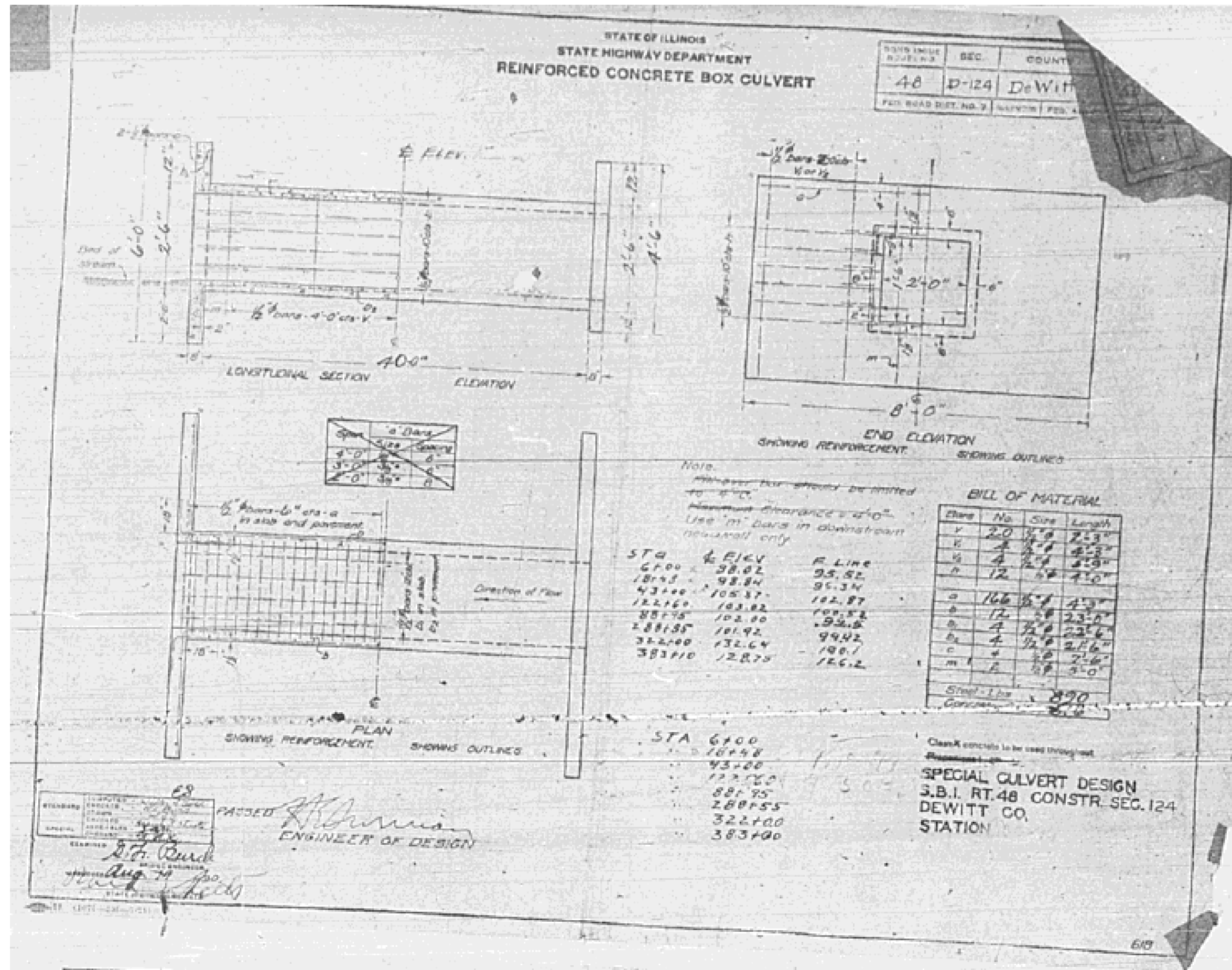
**LEGEND**

- PAY LIMITS OF POROUS GRANULAR EMBANKMENT - CA-6
- POROUS GRANULAR MATERIAL - CA-7 (6") INCLUDED IN PAY ITEM FOR BOX CULVERT
- STONE RIPRAP, CLASS A1

DRAWING NOT TO SCALE

FILE NAME =	USER NAME = ceorlockbm	DESIGNED - BMC	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>POROUS GRANULAR EMBANKMENT PAY LIMITS STATION 122 + 60.50, SN 020-8045</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
						760	124CR	DEWITT	41	19
						CONTRACT NO. 70754				
				SCALE: N/A		SHEET NO. 4 OF 7 SHEETS		STA. -- TO STA. --		ILLINOIS FED. AID PROJECT

FOR INFORMATION ONLY



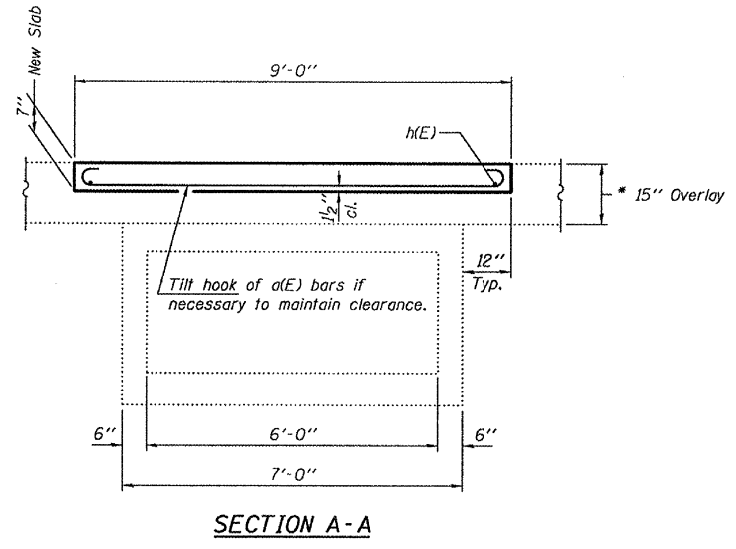
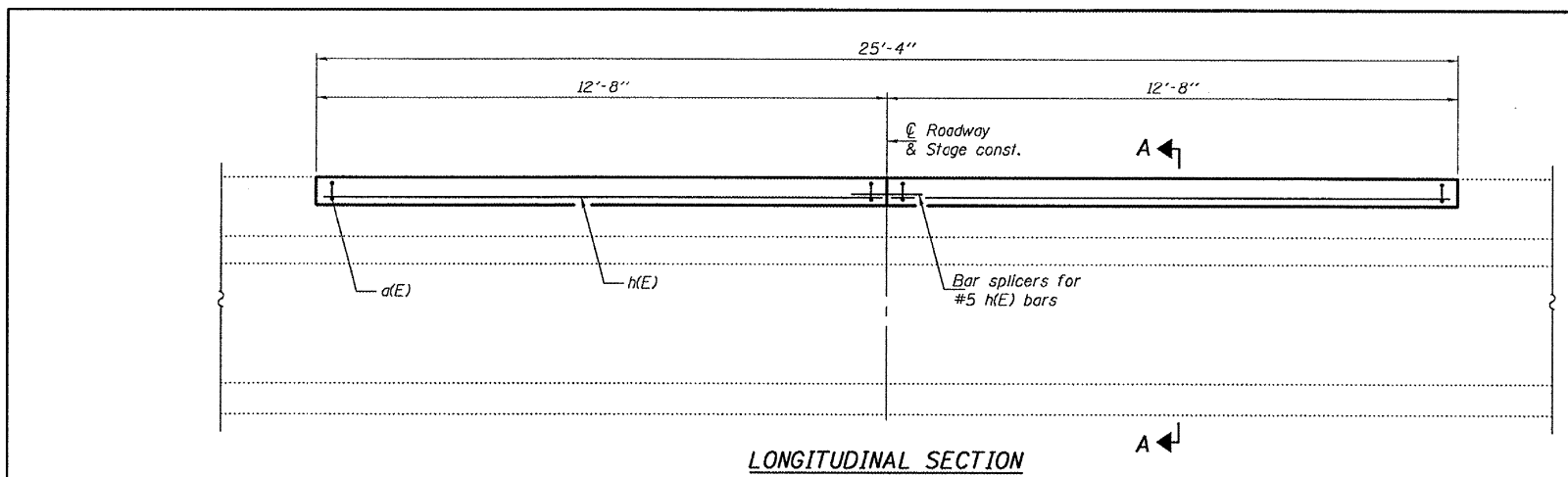
NOTES:  
1. EXISTING S.N. 020-8033 IS LOCATED AT STA. 122+60.50

FOR INFORMATION ONLY

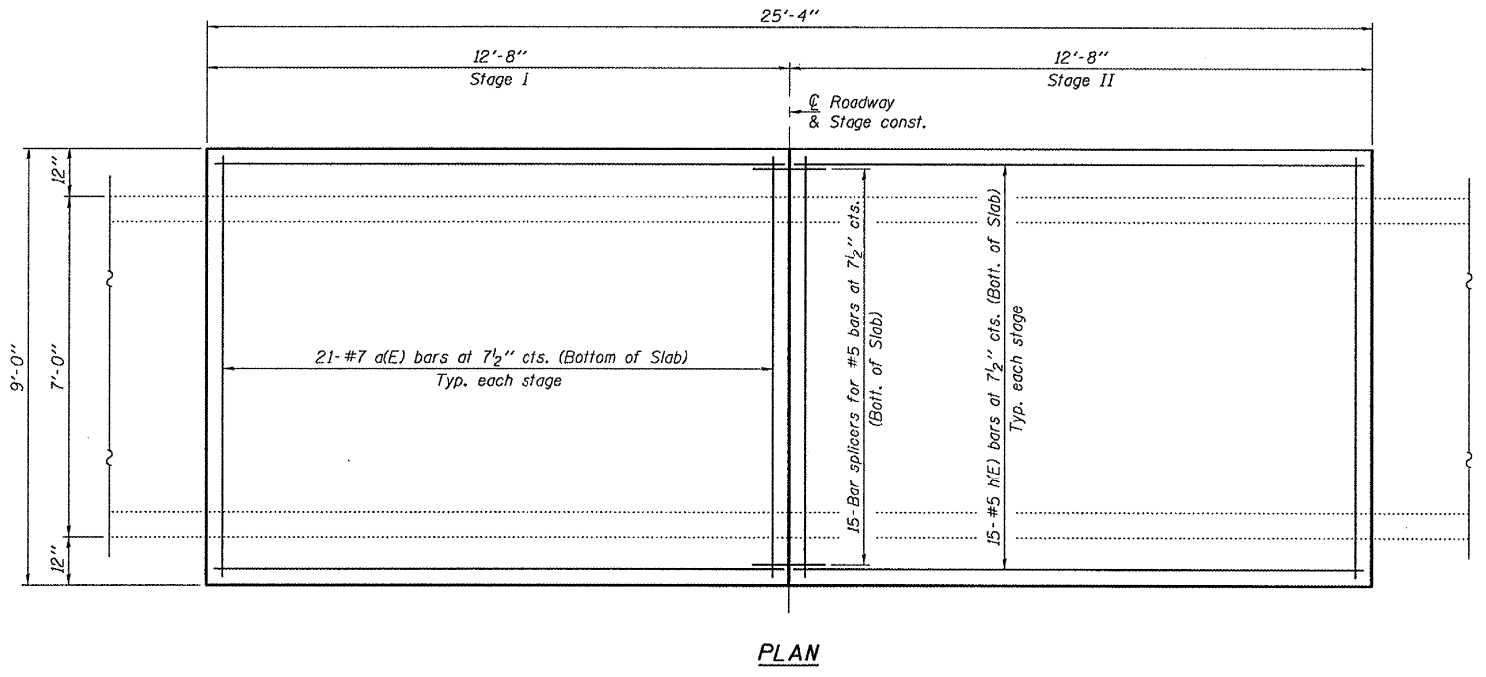
NOTES:  
 1. THIS AS-BUILT PLAN SHEET IS FROM POSTING MITIGATION CONTRACT 70894.

FOR INFORMATION ONLY

FOR INFORMATION ONLY



\* Remove 7" of existing overlay and replace with 7" concrete slab as shown. Slope to match roadway. Cost of removal included with Hot-Mix Asphalt Surface Removal, 7".



**GENERAL NOTES**

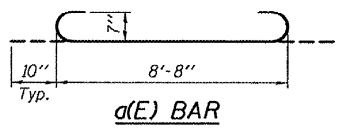
Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.  
 Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.  
 Reinforcement bars designated (E) shall be epoxy coated.  
 The slab surface shall have its final finish tined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with Concrete Superstructure.

**DESIGN STRESSES**

FIELD UNITS  
 $f'_c = 3,500 \text{ psi}$   
 $f_y = 60,000 \text{ psi (Reinf.)}$

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	42	#7	10'-4"	U
h(E)	30	#5	12'-4"	—
Bar Splicers	Each		15	
Hot-Mix Asphalt Surface Removal, 7"	Sq. Yds.		25.3	
Reinforcement Bars, Epoxy Coated	Pound		1270	
Concrete Superstructure	Cu. Yds.		4.9	



DESIGNED: [Signature]  
 CHECKED: [Signature]  
 DRAWN: baliva  
 EXAMINED: [Signature]  
 PASSED: [Signature]  
 DATE: MARCH 14, 2011

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SLAB DETAILS  
 LOCATION 1  
 SN 020-8033  
 SHEET NO. 1 OF 2 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
760	POSTING MITIGATION FY2011-1	DEWITT	23	10
CONTRACT NO. 70894				

FILE NAME =	USER NAME = ceorlockbm	DESIGNED BMC	REVISED -
pw:\IL\084EBID\TEG\illinois.gov\PIWIDOT\Documents\DOT Offices\District 5\Projects\05797\BAG\0579754-shr-details.dwg	DRAWN Data	CHECKED -	REVISED -
PLOT SCALE = 40.0000' / in.	DATE 02-08-2011	REVISED -	REVISED -
PLOT DATE = 10/6/2015		REVISED -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

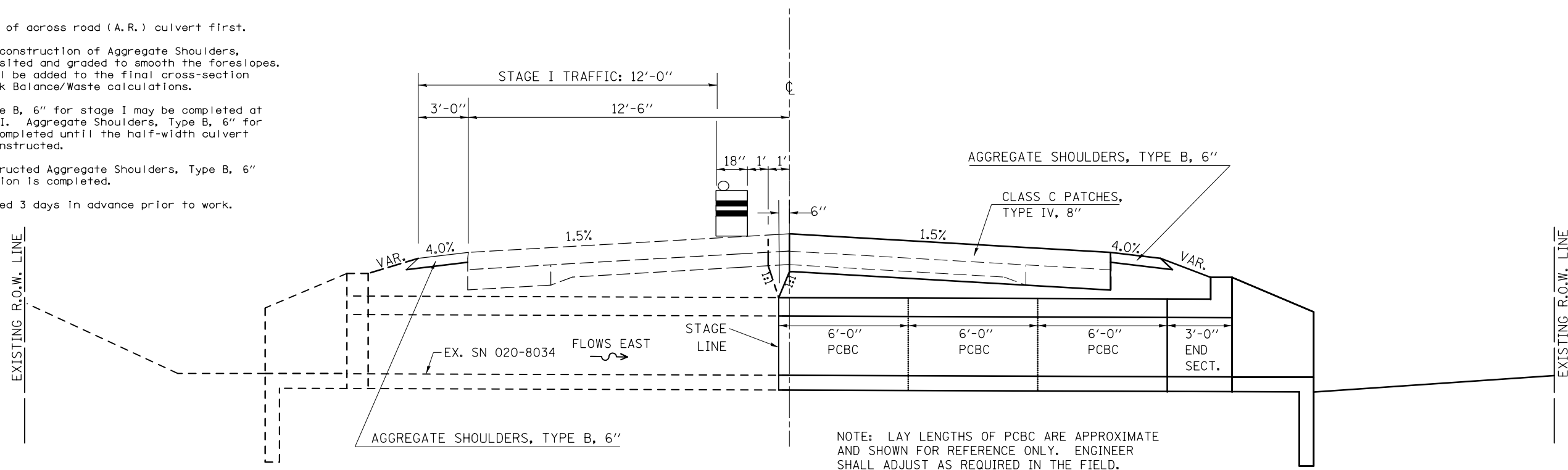
BOX CULVERT END SECTION DETAILS  
 PROPOSED CULVERT NO. 1 - STR. NO. 020-8045  
 SCALE: N/A SHEET NO. 6 OF 7 SHEETS STA. -- TO STA. --

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
760	124CR	DEWITT	41	21
CONTRACT NO. 70754				

NOTES

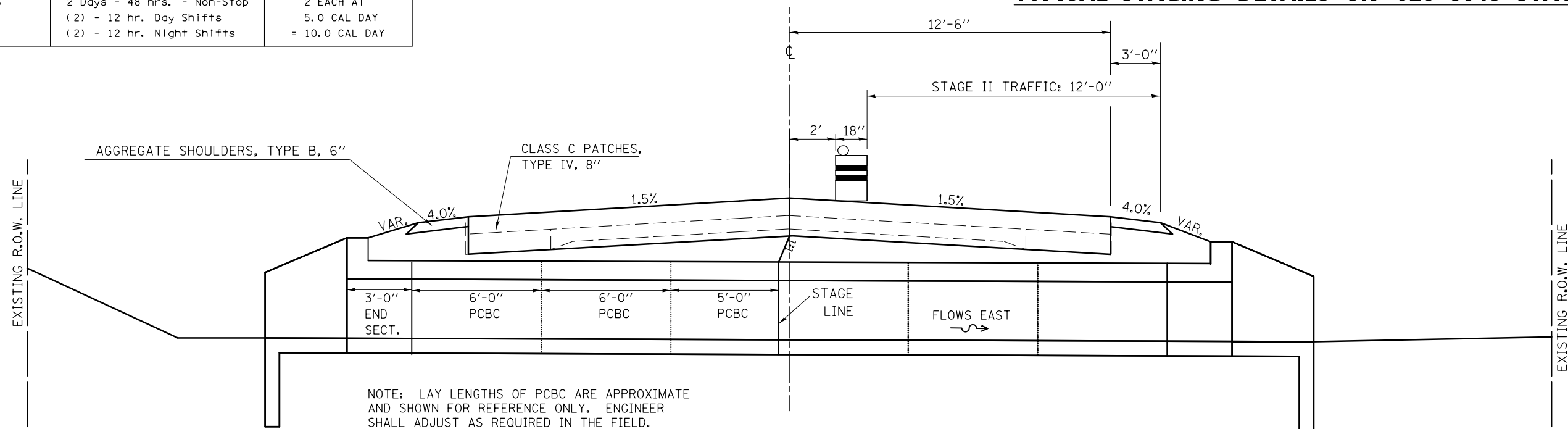
1. Refer to Special Provisions for TRAFFIC CONTROL AND PROTECTION, STANDARD 701206 and STAGE CONSTRUCTION ACROSS ROAD STRUCTURES for additional information.
2. The Engineer may reduce or eliminate lengths or locations of Aggregate Shoulders, Type B, 6" and Earth Excavation based on field conditions.
3. Construct downstream end of across road (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.

**TYPICAL STAGING DETAILS SN 020-8045 STAGE I**



A. R. CULVERT LOCATION	TRAFFIC CONTROL STANDARD	ESTIMATED TIME	CHANGEABLE MESSAGE SIGNS
STA. 1163+25.30	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 020-8045 STAGE II**

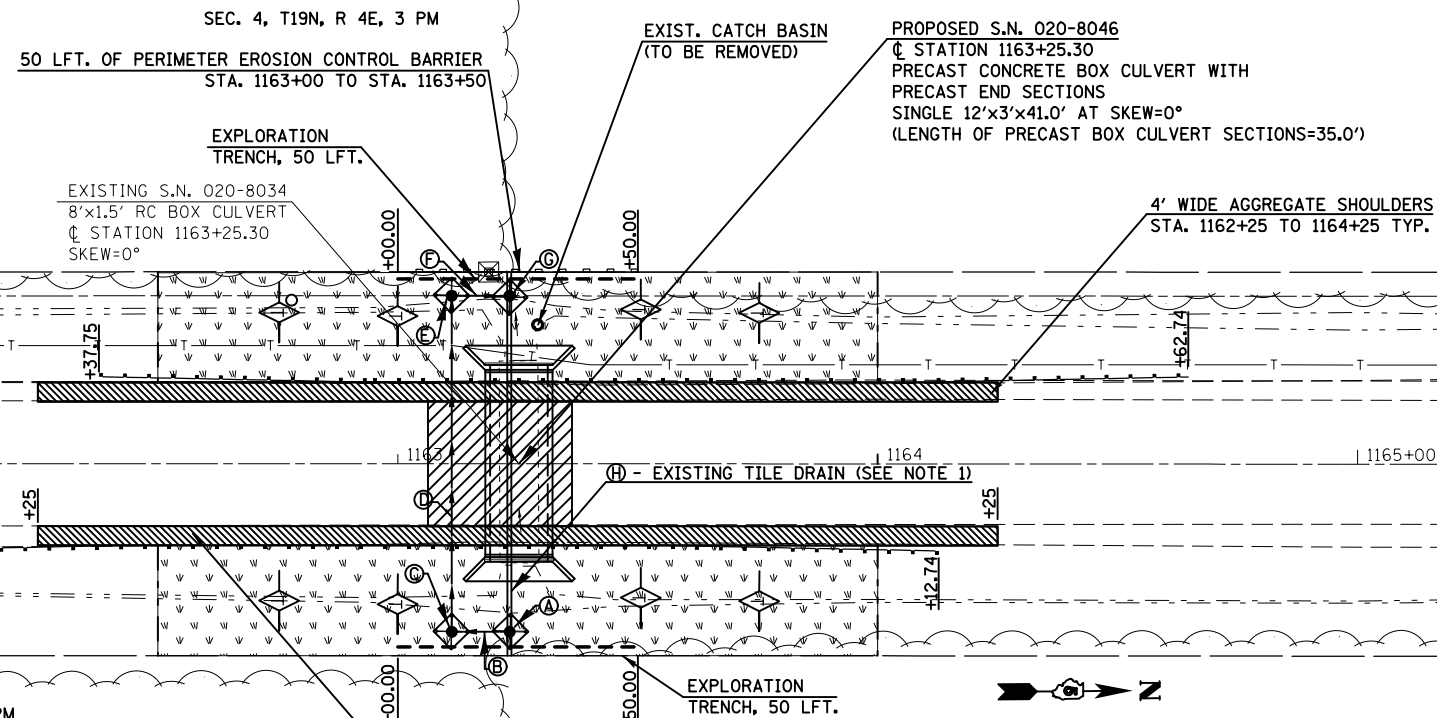


DRAWING NOT TO SCALE

DATE	
BY	
SURVEYED	
PLOTTED	
GRADES CHECKED	
STRUCTURE NOTATIONS CHECKED	
NOTE BOOK NO.	
PLAN	

DATE	
BY	
SURVEYED	
PLOTTED	
GRADES CHECKED	
STRUCTURE NOTATIONS CHECKED	
NOTE BOOK NO.	
PROFILE	

- (A) FIELD TILE JUNCTION VAULT 4.0' DIA STA. ± 1163+23.00, 35.0' RT
- (B) STORM SEWER PROTECTED CLASS A, 18" - 12.0'
- (C) FIELD TILE JUNCTION VAULT 4.0' DIA STA. ± 1163+11.00, 35.0' RT
- (D) STORM SEWER PROTECTED CLASS A, 18" - 70.0'
- (E) FIELD TILE JUNCTION VAULT 4.0' DIA STA. ± 1163+11.00, 35.0' LT
- (F) STORM SEWER PROTECTED CLASS A, 18" - 12.0'
- (G) FIELD TILE JUNCTION VAULT 4.0' DIA STA. ± 1163+23.00, 35.0' LT
- (H) STORM SEWER, UNKNOWN SIZE, REMOVAL - 70'



NOTE 2:  
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 48. THE DEPTH OF THE VAULTS AND STORM SEWER INVERTS SHALL BE FIELD VERIFIED AFTER THE DEPTH OF THE EXISTING STORM SEWER IS DETERMINED.

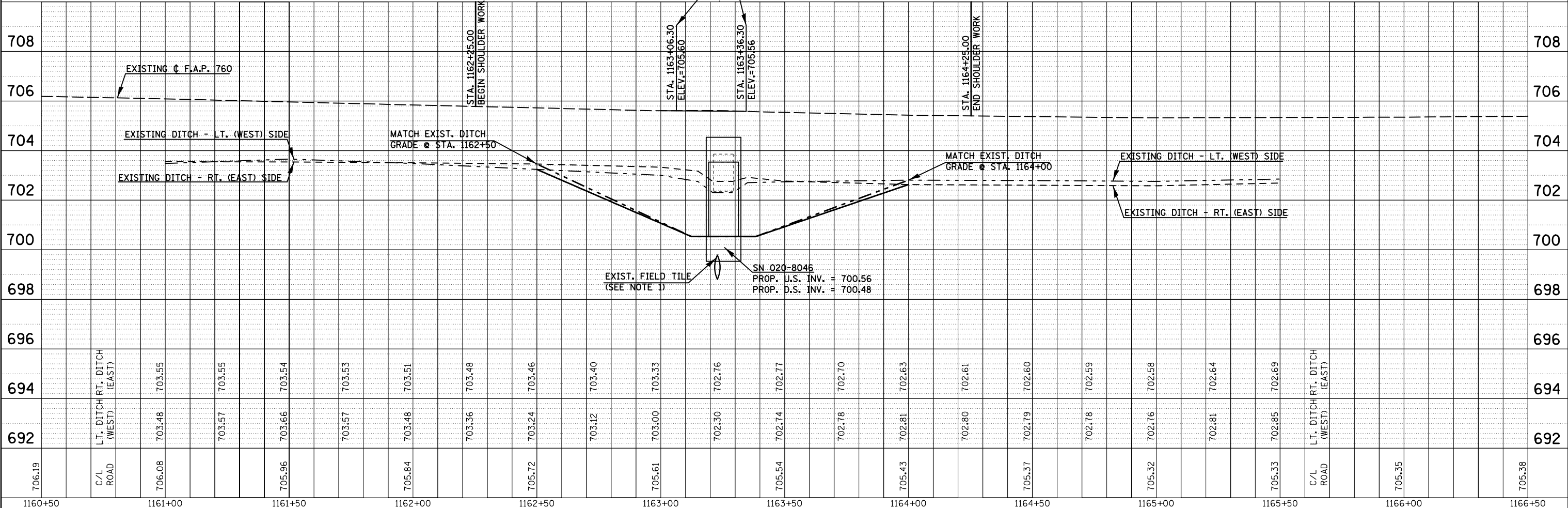
BENCHMARK (DEW-29)  
ALUMINUM DISK ON 3/4"X5' IRON ROD SET IN CONCRETE WITH WITNESS POST ON WEST SIDE OF MONUMENT. LOCATED ON WEST SIDE OF IL-48 APPROX. 300' SOUTH OF INT. OF IL-48 & IL-10  
VERTICAL DATUM = NAVD 88  
ELEVATION = 713.98

- LEGEND:
- PERIMETER EROSION CONTROL BARRIER
  - INLET & PIPE PROTECTION
  - TEMPORARY DITCH CHECK
  - CLASS C PATCHES, TYPE IV, 8"
  - AGGREGATE SHOULDERS, TYPE B, 6"
  - SEEDING AREA, CLASS 2A AND/OR CLASS 7

NOTE 1:  
LOCATION OF EXISTING TILE IS APPROXIMATE. TILE IS TO BE REMOVED AND RELOCATED FROM R.O.W. TO R.O.W. SIZE AND TYPE OF EXIST. TILE IS UNKNOWN. TILE RUNS ALONG WITH AND BELOW SN 020-8034. TOP OF TILE IS LOCATED AT ELEV. = 699.79' +/- JUST WEST OF SN 020-8034.

Existing Low Grade Elev. = 705.608 ft @ Sta. 1163+00		Proposed Low Grade Elev. = 705.608 ft @ Sta. 1163+00				
Drainage Area = 0.540 mi. <sup>2</sup>	Flood Freq. Yr.	Q C.F.S.	Opening Sq. Ft.	Natural H.W.E.	Head - Ft.	Headwater Elevation
	10	106	12	32	Existing	Proposed
	50	170	12	32		Over
	100	197	12	32		Over
	500	264	12	32		Over
						705.0

10 YEAR VELOCITY THROUGH EXISTING BRIDGE - Unknown      10 YEAR VELOCITY THROUGH PROPOSED BRIDGE - 4.05 fps



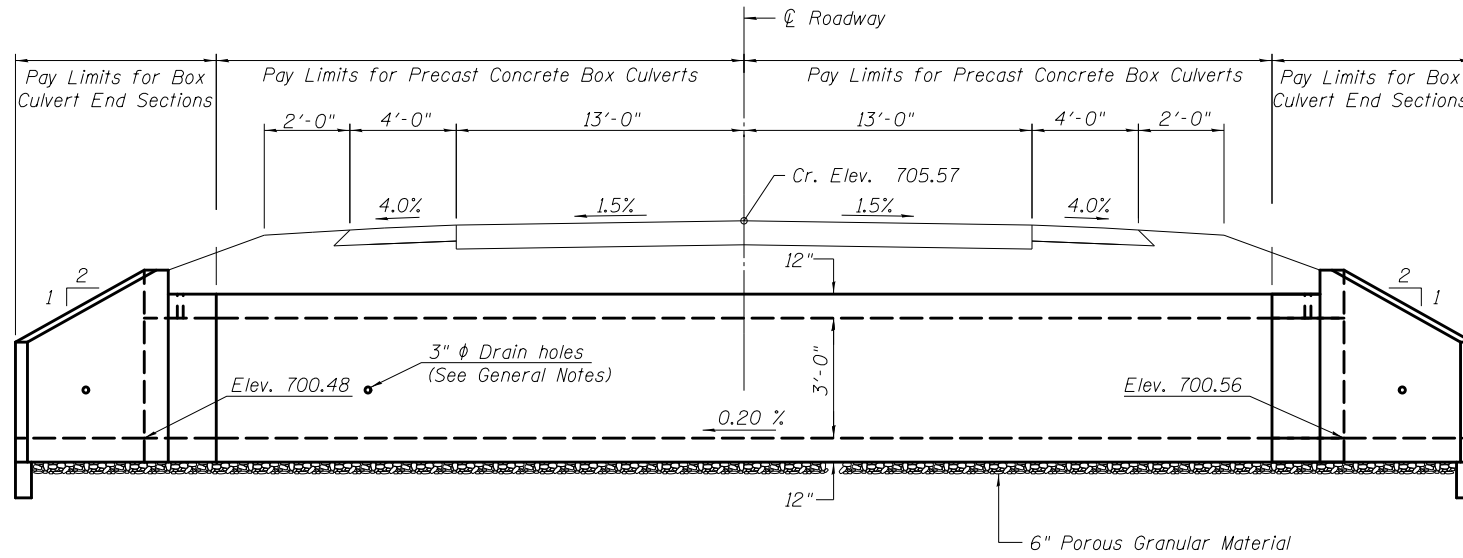
BENCHMARK ELEV. = 713.98 ALUMINUM DISK (NAVD 88)  
SEE PLAN AND PROFILE SHEET FOR ADDITIONAL  
BENCHMARK INFORMATION

**INDEX OF SHEETS**

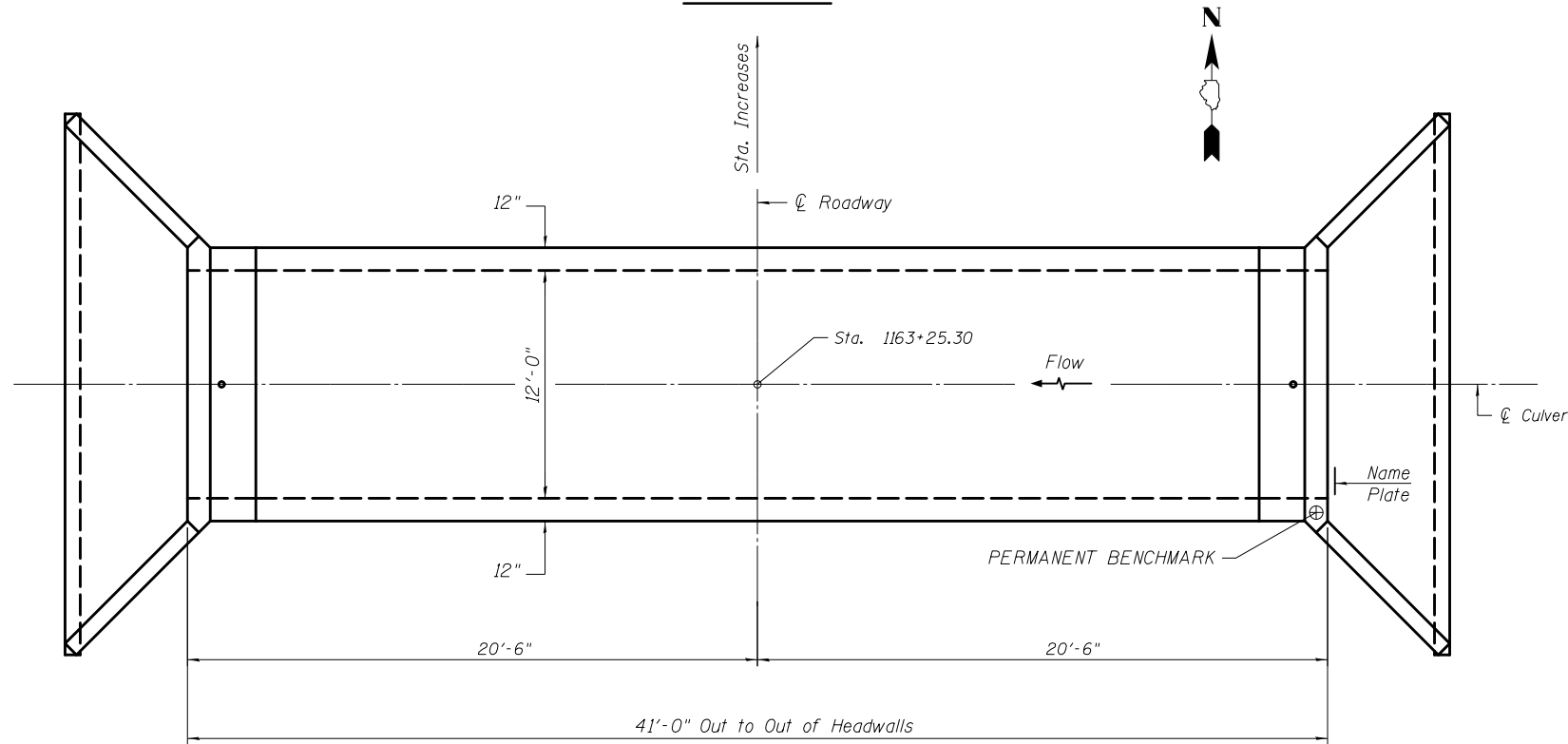
1. General Plan and Elevation
- 2-3. Precast Concrete Box Culvert Apron End Section Details
4. Porous Granular Embankment Detail
- 5-6. As-Built Plans
7. Staging Details

**GENERAL NOTES**

The design fill height for this box is 1.13 feet. The precast box culvert sections shall conform to the requirements of AASHTO C 1577.  
Drain holes shall be provided on exterior culvert walls for each precast box segment with a clear rise greater than 3 ft. The drain hole shall be located within 1/3 of the clear rise of the box culvert, shall not intercept the haunch, and shall conform to the requirements of Article 503.11 of the Standard Specification.  
The 6 in. thick layer of porous granular material required for the precast concrete box culvert per Art. 540.06 of the Standard Specifications shall also apply to the end sections. Cost of the porous granular material will not be paid for separately but shall be included in the unit price of the work for which it is required.  
Nonwoven geotextile fabric shall conform to the requirements of Art. 1080.01 of the Standard Specifications. The minimum weight of the fabric shall be 6 ounces per square yard.



**ELEVATION**



**PLAN**

**WATERWAY INFORMATION TABLE**

Drainage Area = 0.540 mi. <sup>2</sup>		Existing Low Grade Elev. = 705.608 ft @ Sta. 1163+00		Proposed Low Grade Elev. = 705.608 ft @ Sta. 1163+00		
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Existing	Opening Sq. Ft. Proposed	Headwater Elevation Existing	Headwater Elevation Proposed
Design	10	106	12	32	Over 703.1	Over 703.9
Base	50	170	12	32	Over 703.9	Over 704.2
Overtopping	100	197	12	32	Over 704.2	Over 704.2
Max. Calc.	500	264	12	32	Over 705.0	Over 705.0

10 YEAR VELOCITY THROUGH EXISTING BRIDGE: Unknown      10 YEAR VELOCITY THROUGH PROPOSED BRIDGE: 4.05 fps

STATION 1163+25.30  
BUILT 201\_ BY  
STATE OF ILLINOIS  
F.A.P. RT. 760 SEC. 124CR  
LOADING HL-93  
STRUCTURE NO. 020-8046

**NAME PLATE**  
See Std. 515001

**DESIGN SCOUR ELEVATION TABLE**

Design Scour Elevation (ft.)	Upstream	Downstream
	697.56	697.48

**DESIGN SPECIFICATIONS**

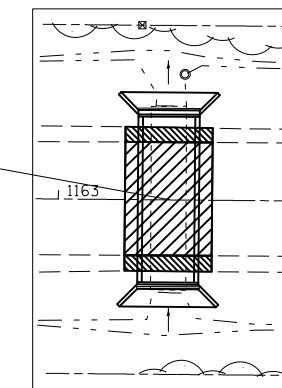
2012 AASHTO LRFD Bridge Design Specifications  
6th Edition

**LOADING HL-93**

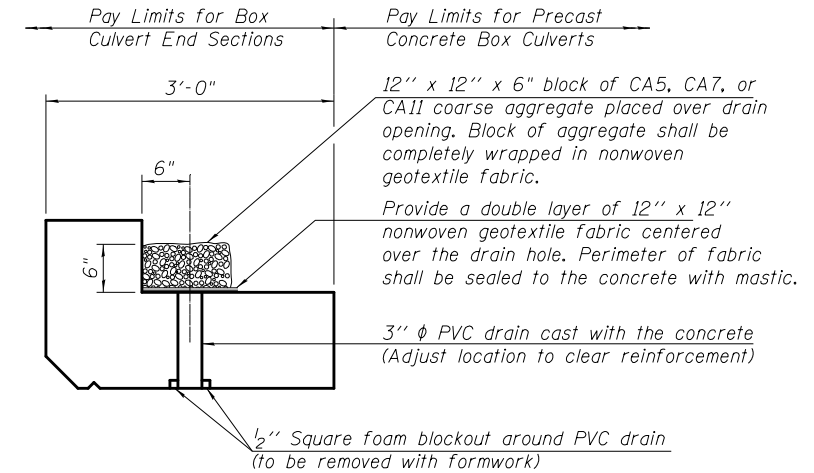
**DESIGN STRESSES**

**PRECAST UNITS**

f'c = 5,000 psi  
fy = 65,000 psi (Welded Wire Fabric)



**LOCATION SKETCH**



**DRAIN DETAIL**

(All costs associated with furnishing and constructing the above drain details will not be measured for payment but shall be included in the contract unit price for the end section.)

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Removal of Existing Structures, No. 2	Each	1
Name Plates	Each	1
Box Culvert End Sections, Culvert No. 2	Each	2
Precast Concrete Box Culverts, 12' x 3'	Foot	35'
Stone Riprap, Class A1	Ton	64.0
Porous Granular Embankment	Cu. yd	45.8

**GENERAL PLAN AND ELEVATION**  
**SINGLE 12' X 3' PRECAST BOX CULVERT**  
**IL RTE. 48**  
**F.A.P. RTE. 760 SEC. 124CR**  
**DEWITT COUNTY**  
**STATION 1163+25.30**  
**S.N. 020-8046**

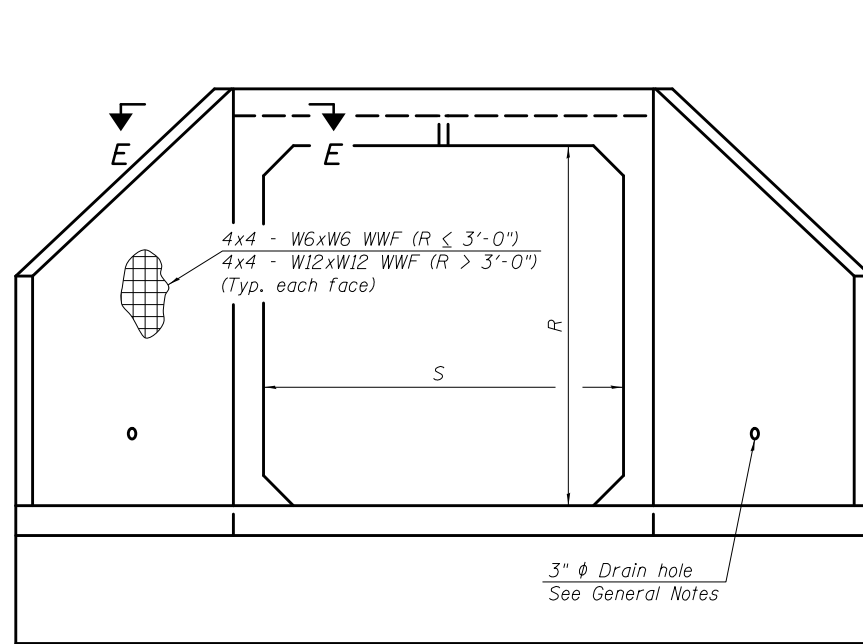


**APRON END SECTION DIMENSIONS**

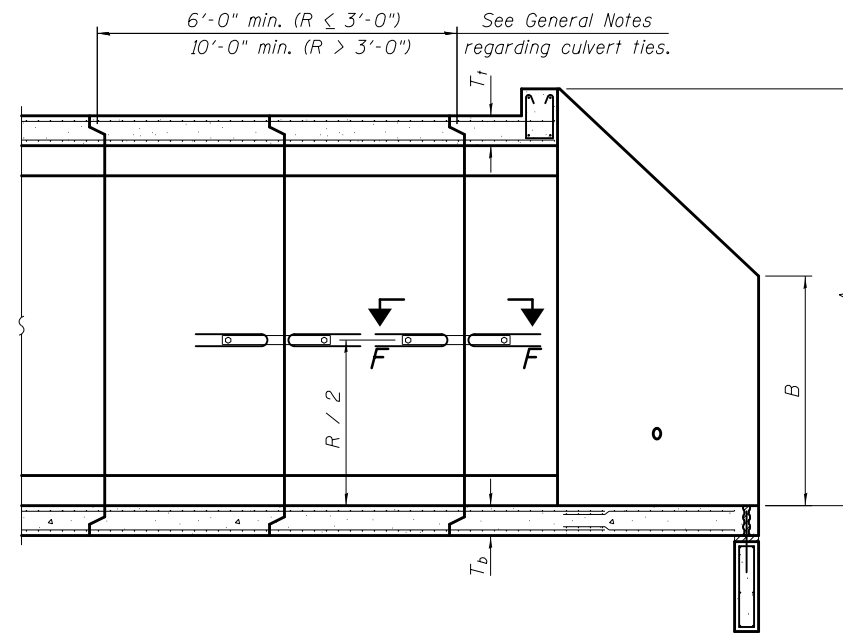
Span (S)	Rise (R)	T <sub>f</sub>	T <sub>b</sub>	T <sub>s</sub>	A	B	C	D	E	Concrete Cu. Yd.	Culvert Ties Required
3'-0"	2'-0"	7"	6"	4"	3'-4"	2'-2"	2'-10 <sup>5</sup> / <sub>8</sub> "	4'-1"	10'-4 <sup>5</sup> / <sub>8</sub> "	2.8	Yes
3'-0"	2'-0"	4"	4"	4"	3'-1"	2'-1"	2'-7 <sup>7</sup> / <sub>8</sub> "	3'-9"	9'-11"	2.3	Yes
3'-0"	3'-0"	7"	6"	4"	4'-4"	2'-8"	3'-10 <sup>5</sup> / <sub>8</sub> "	5'-6"	12'-4 <sup>5</sup> / <sub>8</sub> "	3.7	Yes
3'-0"	3'-0"	4"	4"	4"	4'-1"	2'-7"	3'-7 <sup>7</sup> / <sub>8</sub> "	5'-2"	11'-11"	3.1	Yes
4'-0"	2'-0"	7.5"	6"	5"	3'-4 <sup>1</sup> / <sub>2</sub> "	2'-2 <sup>1</sup> / <sub>2</sub> "	2'-11 <sup>3</sup> / <sub>8</sub> "	4'-2"	11'-8"	3.3	Yes
4'-0"	2'-0"	5"	5"	5"	3'-2"	2'-1"	2'-8 <sup>1</sup> / <sub>2</sub> "	3'-10"	11'-2 <sup>3</sup> / <sub>8</sub> "	2.8	Yes
4'-0"	3'-0"	7.5"	6"	5"	4'-4 <sup>1</sup> / <sub>2</sub> "	2'-8 <sup>1</sup> / <sub>2</sub> "	3'-11 <sup>3</sup> / <sub>8</sub> "	5'-7"	13'-8 <sup>1</sup> / <sub>8</sub> "	4.2	Yes
4'-0"	3'-0"	5"	5"	5"	4'-2"	2'-7"	3'-8 <sup>1</sup> / <sub>2</sub> "	5'-3"	13'-2 <sup>3</sup> / <sub>8</sub> "	3.7	Yes
4'-0"	4'-0"	7.5"	6"	5"	5'-4 <sup>1</sup> / <sub>2</sub> "	3'-2 <sup>1</sup> / <sub>2</sub> "	4'-11 <sup>3</sup> / <sub>8</sub> "	7'-0"	15'-8 <sup>1</sup> / <sub>8</sub> "	5.3	Yes
4'-0"	4'-0"	5"	5"	5"	5'-2"	3'-1"	4'-8 <sup>5</sup> / <sub>8</sub> "	6'-8"	15'-2 <sup>1</sup> / <sub>2</sub> "	4.7	Yes
5'-0"	2'-0"	8"	7"	6"	3'-5"	2'-3"	2'-11 <sup>3</sup> / <sub>8</sub> "	4'-2"	12'-10"	3.9	Yes
5'-0"	2'-0"	6"	6"	6"	3'-3"	2'-2"	2'-10"	4'-0"	12'-7 <sup>1</sup> / <sub>4</sub> "	3.5	Yes
5'-0"	3'-0"	8"	7"	6"	4'-5"	2'-9"	3'-11 <sup>3</sup> / <sub>8</sub> "	5'-7"	14'-10 <sup>1</sup> / <sub>8</sub> "	4.9	Yes
5'-0"	3'-0"	6"	6"	6"	4'-3"	2'-8"	3'-10"	5'-5"	14'-7 <sup>1</sup> / <sub>4</sub> "	4.5	Yes
5'-0"	4'-0"	8"	7"	6"	5'-5"	3'-3"	4'-11 <sup>3</sup> / <sub>8</sub> "	7'-0"	16'-10 <sup>1</sup> / <sub>8</sub> "	6.1	Yes
5'-0"	4'-0"	6"	6"	6"	5'-3"	3'-2"	4'-9 <sup>1</sup> / <sub>4</sub> "	6'-9"	16'-5 <sup>7</sup> / <sub>8</sub> "	5.5	Yes
5'-0"	5'-0"	8"	7"	6"	6'-5"	3'-9"	5'-11 <sup>3</sup> / <sub>8</sub> "	8'-5"	18'-10 <sup>1</sup> / <sub>8</sub> "	7.4	Yes
5'-0"	5'-0"	6"	6"	6"	6'-3"	3'-8"	5'-9 <sup>1</sup> / <sub>4</sub> "	8'-2"	18'-5 <sup>7</sup> / <sub>8</sub> "	6.8	Yes
6'-0"	2'-0"	8"	7"	7"	3'-5"	2'-3"	2'-11 <sup>3</sup> / <sub>8</sub> "	4'-2"	14'-0"	4.3	Yes
6'-0"	2'-0"	7"	7"	7"	3'-4"	2'-2"	2'-10 <sup>5</sup> / <sub>8</sub> "	4'-1"	13'-10 <sup>5</sup> / <sub>8</sub> "	4.2	Yes
6'-0"	3'-0"	8"	7"	7"	4'-5"	2'-9"	3'-11 <sup>3</sup> / <sub>8</sub> "	5'-7"	16'-0 <sup>1</sup> / <sub>8</sub> "	5.4	Yes
6'-0"	3'-0"	7"	7"	7"	4'-4"	2'-8"	3'-10 <sup>5</sup> / <sub>8</sub> "	5'-6"	15'-10 <sup>5</sup> / <sub>8</sub> "	5.2	Yes
6'-0"	4'-0"	8"	7"	7"	5'-5"	3'-3"	4'-11 <sup>3</sup> / <sub>8</sub> "	7'-0"	18'-0 <sup>1</sup> / <sub>8</sub> "	6.5	Yes
6'-0"	4'-0"	7"	7"	7"	5'-4"	3'-2"	4'-10 <sup>3</sup> / <sub>4</sub> "	6'-11"	17'-10 <sup>3</sup> / <sub>4</sub> "	6.5	Yes
6'-0"	5'-0"	8"	7"	7"	6'-5"	3'-9"	5'-11 <sup>3</sup> / <sub>8</sub> "	8'-5"	20'-0 <sup>1</sup> / <sub>8</sub> "	8.0	Yes
6'-0"	5'-0"	7"	7"	7"	6'-4"	3'-8"	5'-10 <sup>3</sup> / <sub>4</sub> "	8'-4"	19'-10 <sup>3</sup> / <sub>4</sub> "	7.8	Yes
6'-0"	6'-0"	8"	7"	7"	7'-5"	4'-3"	6'-11 <sup>1</sup> / <sub>2</sub> "	9'-10"	22'-0 <sup>1</sup> / <sub>4</sub> "	9.5	Yes
6'-0"	6'-0"	7"	7"	7"	7'-4"	4'-2"	6'-10 <sup>3</sup> / <sub>4</sub> "	9'-9"	21'-10 <sup>3</sup> / <sub>4</sub> "	9.3	Yes
7'-0"	4'-0"	8"	8"	8"	5'-5"	3'-3"	4'-11 <sup>3</sup> / <sub>8</sub> "	7'-0"	19'-2 <sup>1</sup> / <sub>8</sub> "	7.4	Yes
7'-0"	5'-0"	8"	8"	8"	6'-5"	3'-9"	5'-11 <sup>3</sup> / <sub>8</sub> "	8'-5"	21'-2 <sup>1</sup> / <sub>8</sub> "	8.9	Yes
7'-0"	6'-0"	8"	8"	8"	7'-5"	4'-3"	6'-11 <sup>1</sup> / <sub>2</sub> "	9'-10"	23'-2 <sup>1</sup> / <sub>4</sub> "	10.6	Yes
8'-0"	2'-0"	8"	8"	8"	3'-5"	2'-3"	2'-11 <sup>3</sup> / <sub>8</sub> "	4'-2"	16'-2"	5.3	Yes
8'-0"	3'-0"	8"	8"	8"	4'-5"	2'-9"	3'-11 <sup>3</sup> / <sub>8</sub> "	5'-7"	18'-2 <sup>1</sup> / <sub>8</sub> "	6.5	Yes
8'-0"	4'-0"	8"	8"	8"	5'-5"	3'-3"	4'-11 <sup>3</sup> / <sub>8</sub> "	7'-0"	20'-2 <sup>1</sup> / <sub>8</sub> "	7.8	Yes
8'-0"	5'-0"	8"	8"	8"	6'-5"	3'-9"	5'-11 <sup>3</sup> / <sub>8</sub> "	8'-5"	22'-2 <sup>1</sup> / <sub>8</sub> "	9.3	Yes
8'-0"	6'-0"	8"	8"	8"	7'-5"	4'-3"	6'-11 <sup>1</sup> / <sub>2</sub> "	9'-10"	24'-2 <sup>1</sup> / <sub>4</sub> "	11.0	Yes
9'-0"	5'-0"	9"	9"	9"	6'-6"	3'-9"	6'-0 <sup>7</sup> / <sub>8</sub> "	8'-7"	23'-7"	10.6	Yes
9'-0"	6'-0"	9"	9"	9"	7'-6"	4'-3"	7'-0 <sup>1</sup> / <sub>8</sub> "	9'-11"	25'-5 <sup>5</sup> / <sub>8</sub> "	12.4	Yes
10'-0"	2'-0"	10"	10"	10"	3'-7"	2'-4"	3'-1 <sup>1</sup> / <sub>2</sub> "	4'-5"	18'-10 <sup>4</sup> / <sub>4</sub> "	7.1	No
10'-0"	3'-0"	10"	10"	10"	4'-7"	2'-10"	4'-1 <sup>1</sup> / <sub>2</sub> "	5'-10"	20'-10 <sup>4</sup> / <sub>4</sub> "	8.6	No
10'-0"	5'-0"	10"	10"	10"	6'-7"	3'-10"	6'-1 <sup>1</sup> / <sub>2</sub> "	8'-8"	24'-10 <sup>3</sup> / <sub>8</sub> "	12.0	Yes
10'-0"	6'-0"	10"	10"	10"	7'-7"	4'-4"	7'-1 <sup>1</sup> / <sub>2</sub> "	10'-1"	26'-10 <sup>3</sup> / <sub>8</sub> "	13.9	Yes
11'-0"	4'-0"	11"	11"	11"	5'-8"	3'-4"	5'-2 <sup>1</sup> / <sub>4</sub> "	7'-4"	24'-1 <sup>3</sup> / <sub>4</sub> "	11.5	Yes
11'-0"	6'-0"	11"	11"	11"	7'-8"	4'-4"	7'-2 <sup>1</sup> / <sub>4</sub> "	10'-2"	28'-1 <sup>7</sup> / <sub>8</sub> "	15.5	Yes
12'-0"	2'-0"	12"	12"	12"	3'-9"	2'-5"	3'-3 <sup>5</sup> / <sub>8</sub> "	4'-8"	21'-6 <sup>1</sup> / <sub>2</sub> "	9.3	No
12'-0"	3'-0"	12"	12"	12"	4'-9"	2'-11"	4'-3 <sup>5</sup> / <sub>8</sub> "	6'-1"	23'-6 <sup>1</sup> / <sub>2</sub> "	11.1	No
12'-0"	4'-0"	12"	12"	12"	5'-9"	3'-5"	5'-3 <sup>5</sup> / <sub>8</sub> "	7'-6"	25'-6 <sup>5</sup> / <sub>8</sub> "	13.0	Yes
12'-0"	6'-0"	12"	12"	12"	7'-9"	4'-5"	7'-3 <sup>5</sup> / <sub>8</sub> "	10'-4"	29'-6 <sup>5</sup> / <sub>8</sub> "	17.4	Yes

Note:

Two sets of apron end section dimensions are shown above for some box culvert sizes due to the top and bottom slabs having different thicknesses per ASTM C 1577 for design fill heights less than 2 ft.



**END VIEW**



**SECTION A-A**

**GENERAL NOTES**

Box Culvert End Sections shall be constructed according to the requirements of Section 540 of the Standard Specifications except as modified herein. End sections will be paid for at the contract unit price per each for Box Culvert End Sections.

The Contractor may furnish the end section as a single precast concrete piece or construct the end section in the field using cast-in-place (CIP) construction. For CIP construction, the bottom slab thickness shall be increased by 2" and the clear cover to the bottom mat of reinforcement shall be increased to 3".

Box section dimensions, materials, and reinforcement details for Box Culvert End Sections shall be according to the requirements for ASTM C 1577 as required for the design of the portion of the culvert within the limits of Precast Concrete Box Culverts except as modified herein.

The number of culvert ties shall be sufficient to engage the minimum length of culvert barrel shown within the pay limits for Precast Concrete Box Culverts and will be dependent upon the length of box culvert segments furnished by the Contractor. Culvert ties are not required for box culverts having a rise (R) less than or equal to 3 ft and a span (S) greater than or equal to 10 ft.

All costs associated with furnishing and installing or constructing the toewall and culvert ties will not be measured for payment but shall be included in the unit price for Box Culvert End Sections of the culvert number specified.

Shop drawings that detail slab thickness and reinforcement layout for the Box Culvert End Sections shall be provided to the Engineer for review and approval. Reinforcement bars not detailed herein shall be detailed with a clear distance at the end of the reinforcement not less than 1/2" nor more than 2". For the precast option, it shall be the Contractor's responsibility for determining a method of handling and a construction procedure shall be included on the shop drawings. The Contractor shall determine and detail in the shop drawings any necessary strengthening or stiffening provisions necessary to handle the precast segment. Any required modifications shall be at no extra charge.

The Contractor may use reinforcement bars in lieu of welded wire fabric (WWF). Reinforcement bars shall be limited to the sizes of #3 through #5 bars, a maximum spacing of the lesser of 8" or the member thickness, and shall result in area of reinforcement equal to or greater than that provided by the WWF. Minimum lap lengths detailed herein are applicable to WWF and reinforcement bars.

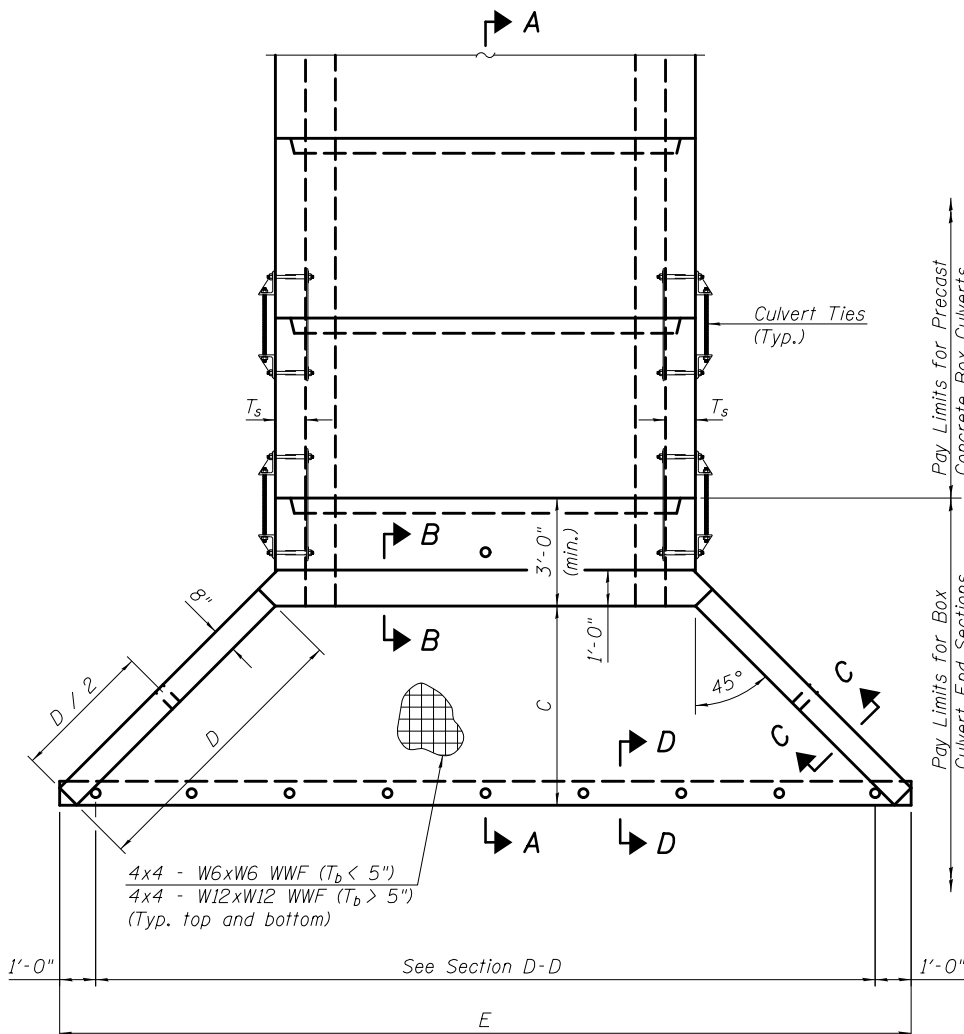
Reinforcement (circumferential and longitudinal) in the culvert barrel portion of the end section being lapped with reinforcement from the wingwalls or bottom slab of the end section shall not be less than that required by ASTM C 1577 for the design fill height or the reinforcement detailed for the end section, whichever is greater.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60.

Reinforcement bars designated (E) shall be epoxy coated.

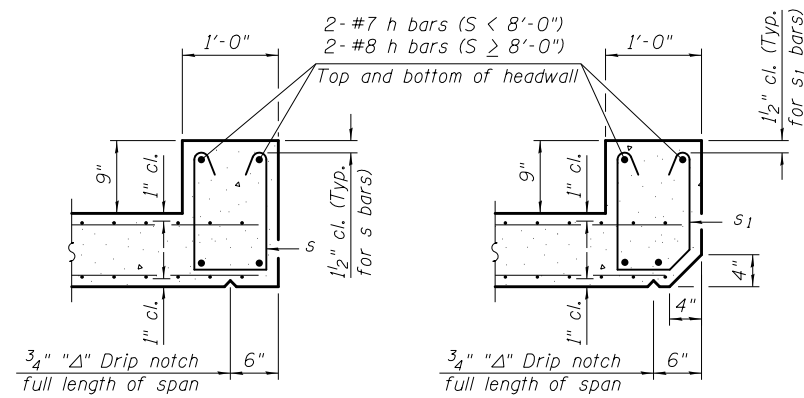
Bonded construction joints shall be prepared according to Article 503.09 of the Standard Specifications.

One drain hole shall be provided in each wingwall for end sections of box culverts having an opening with a clear rise greater than 3 ft. The drain hole shall be located within the lower 1/3 of the clear rise of the box culvert and shall conform to the requirements of Article 503.11 of the Standard Specifications.



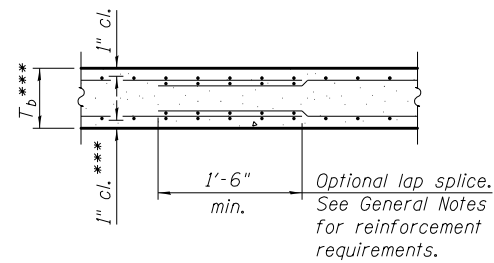
**PLAN**

FILE NAME =	USER NAME =	DESIGNED -	REVISER	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PRECAST CONCRETE BOX CULVERT APRON END SECTION DETAILS - CULVERT NO. 2 (SN 020-8046)</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		CHECKED -	REVISER			760	124CR	DEWITT	41	25	
		PLOT SCALE =	REVISER			<b>CONTRACT NO. 70754</b>					
		PLOT DATE	REVISER			<small>ILLINOIS FED. AID PROJECT</small>					
					<small>SHEET NO. 2 OF 7 SHEETS</small>						



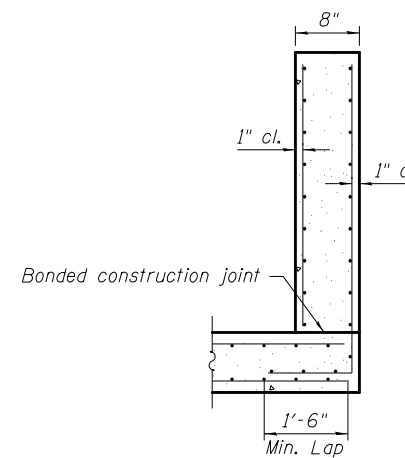
**SECTION B-B**  
(Top slab at downstream end)

**SECTION B-B**  
(Top slab at upstream end)

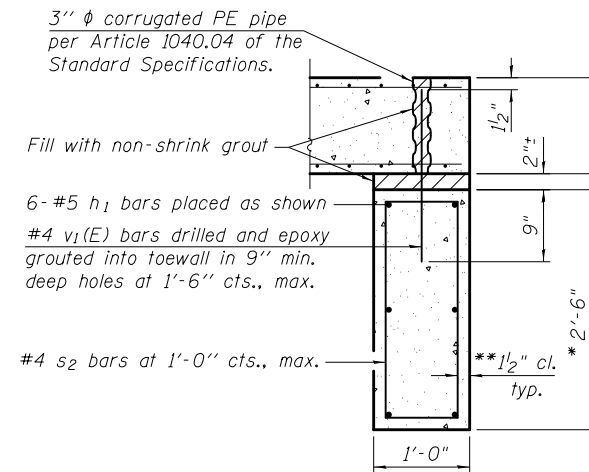


**SECTION B-B**  
(Bottom Slab)

\*\*\* This dimension shall be increased by 2" for CIP construction.



**SECTION C-C**



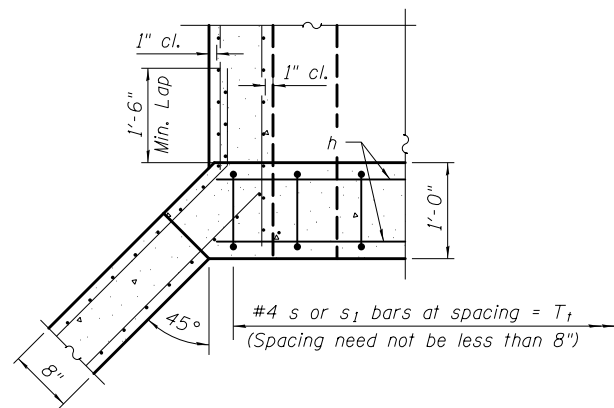
**SECTION D-D**

**TOEWALL CONSTRUCTION SEQUENCE**

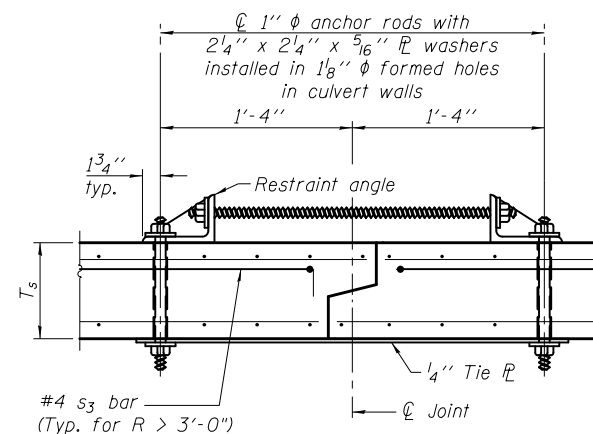
1. Perform excavation and construct toewall.
2. Backfill accordingly and place bedding for precast box culvert end sections.
3. Set precast box culvert end section.
4. Drill and epoxy grout reinforcement in toewall in accordance with Section 584 of the Standard Specifications.
5. Pressure grout voids using non-shrink grout conforming to Section 1024 of the Standard Specifications.

\* The Contractor may furnish a precast or cast-in-place toewall. The Contractor shall be responsible for the strength and stability of the precast toewall during handling. Additional lifting points may be required depending upon the length of the toewall or the Contractor may need to modify the design of the toewall for the proposed handling method.

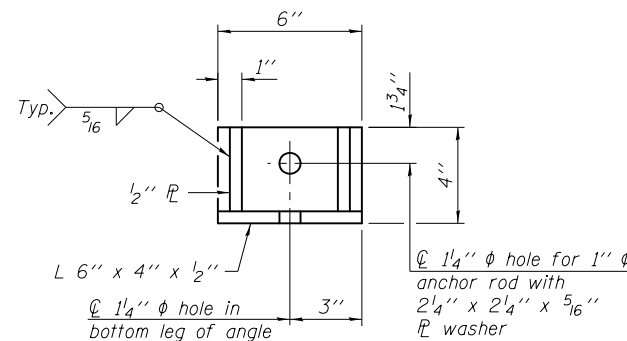
\*\* If soil conditions permit, the sides of the toewall may be poured directly against the soil. The clear cover on the sides of the toewall shall be increased to 3" by increasing the thickness of the toewall.



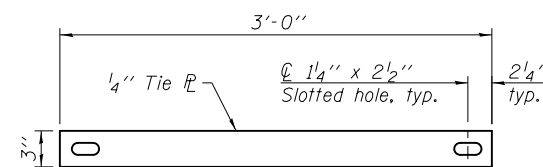
**SECTION E-E**



**SECTION F-F**  
(Showing culvert tie details)



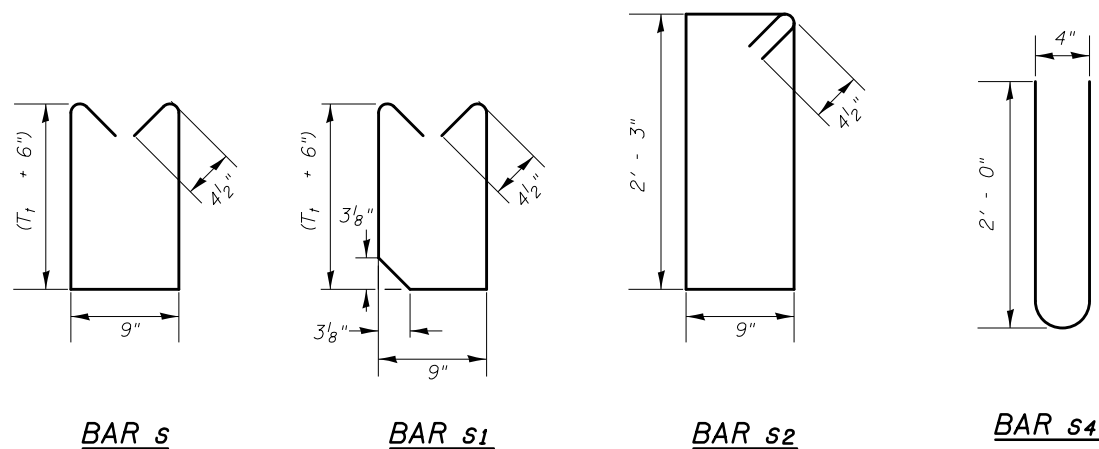
**RESTRAINT ANGLE DETAIL**



**TIE PLATE DETAIL**

Notes:

1" φ anchor rods for the culvert ties shall conform to the requirements of ASTM F1554, Grade 105. Structural steel for the tie plate and restraint angle shall conform to the requirements of Article 1006.04 of the Standard Specifications. All components of the culvert tie detail shall be galvanized according to the requirements of AASHTO M 111 or M 232 as applicable. 2 1/4"x2 1/4"x5/16" plate washers shall be provided under each nut required for the anchor rods. Anchor rods installed in the sidewalls of the culvert shall be tightened per Article 505.04(f)2(d) of the Standard Specifications. Holes in the walls for the culvert tie assembly may be drilled using core bits in lieu of using formed holes. Alternate culvert ties similar in strength and stiffness to the plan details may be provided by the Contractor. Alternate culvert ties shall be subject to the approval of the Engineer.



**BAR s**

**BAR s1**

**BAR s2**

**BAR s4**

FILE NAME =	USER NAME =	DESIGNED -	REVISED
		CHECKED -	REVISED
		DRAWN -	REVISED
		CHECKED -	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PRECAST CONCRETE BOX CULVERT  
APRON END SECTION DETAILS - CULVERT NO. 2 (SN 020-8046)

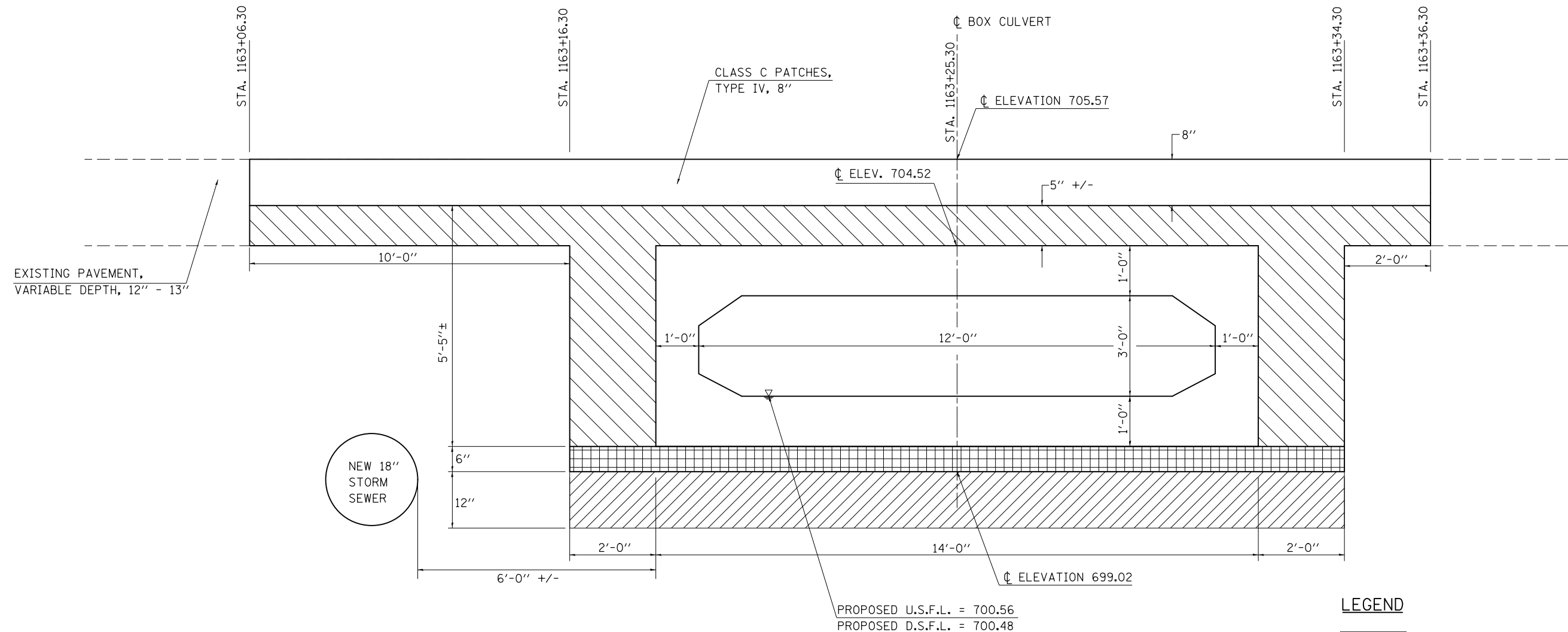
SHEET NO. 3 OF 7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
760	124CR	DEWITT	41	26
CONTRACT NO. 70754				

ILLINOIS FED. AID PROJECT

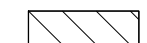
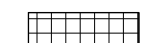
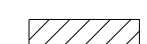
# DETAIL OF POROUS GRANULAR EMBANKMENT PAY LIMITS

## CULVERT NO. 2, STATION 1163 + 25.30 S.N. 020-8046



PROPOSED U.S.F.L. = 700.56  
 PROPOSED D.S.F.L. = 700.48

### LEGEND

-  PAY LIMITS OF POROUS GRANULAR EMBANKMENT - CA-6
-  POROUS GRANULAR MATERIAL - CA-7 (6") INCLUDED IN PAY ITEM FOR BOX CULVERT
-  STONE RIPRAP, CLASS A1

DRAWING NOT TO SCALE

### STONE RIPRAP, CLASS A1

( IF REQUIRED )

STONE RIPRAP, CLASS A1 SHALL BE USED DUE TO UNSTABLE SOIL CONDITIONS

THE WORK SHOWN IN THE DETAIL SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE PORTIONS OF SECTION 281 OF THE STANDARD SPECIFICATIONS.

THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR STONE RIPRAP, CLASS A1.

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.

### POROUS GRANULAR EMBANKMENT

POROUS GRANULAR EMBANKMENT SHALL EXTEND 2 FT. BEYOND THE AGGREGATE SHOULDER

THE WORK SHOWN IN THE DETAIL SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF ARTICLE 207 AND ARTICLE 540 OF THE STANDARD SPECIFICATIONS.

THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR POROUS GRANULAR EMBANKMENT.

THE AREA TO BE EXCAVATED FOR THE PROPOSED BOX CULVERT SHALL NOT BE MEASURED FOR PAYMENT. THE COST OF THE EXCAVATION SHALL BE INCLUDED IN THE COST OF PRECAST CONCRETE BOX CULVERTS.

FILE NAME =	USER NAME = ceorlockbm	DESIGNED - BMC	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>POROUS GRANULAR EMBANKMENT PAY LIMITS STATION 1163 + 25.30, SN 020-8046</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\IL\084EBIDINTEG.illinois.gov\PIDOT\Documents\DOT Offices\District 5\Projects\05797\BMC\0754-shr-details.dwg	760	124CR	DEWITT			41	27			
PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -	CONTRACT NO. 70754							
PLOT DATE = 10/6/2015	DATE - 02-08-2011	REVISED -	ILLINOIS FED. AID PROJECT							

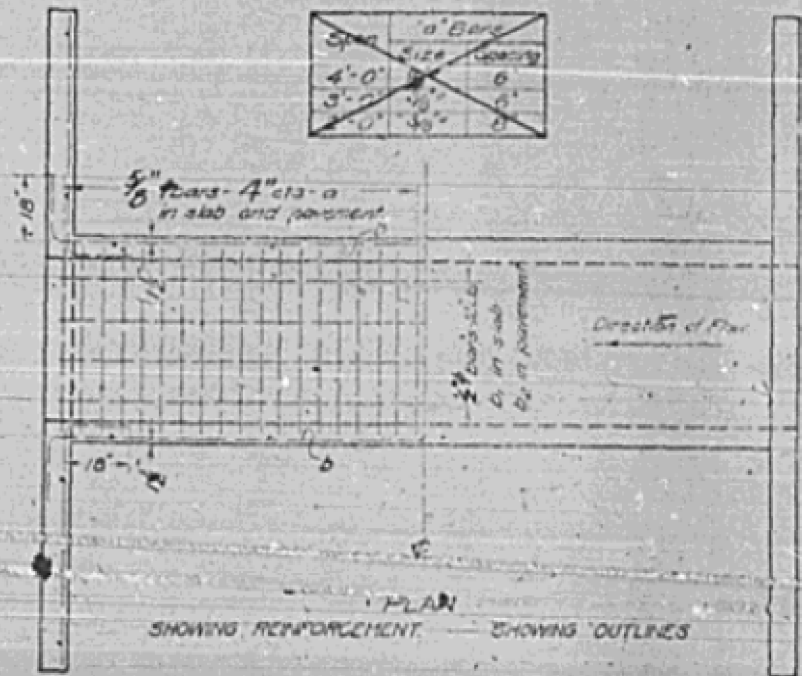
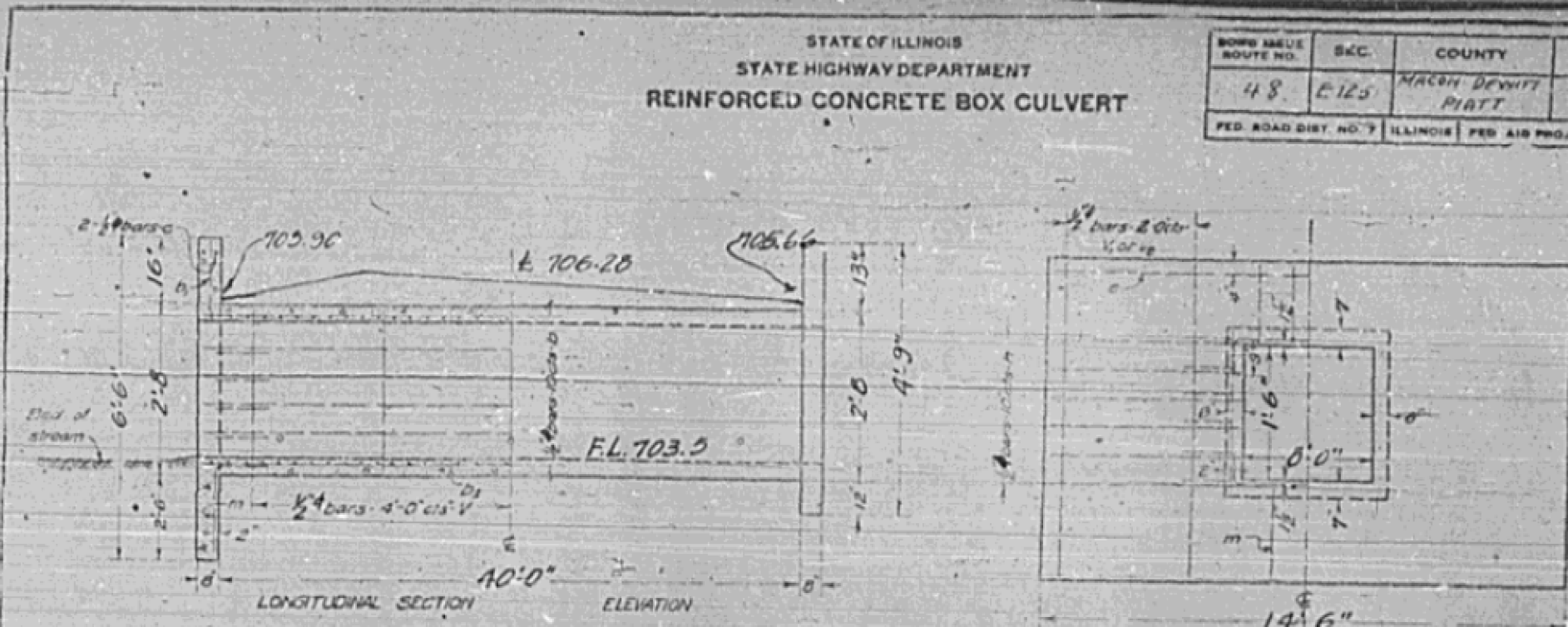
FOR INFORMATION ONLY

FOR INFORMATION ONLY

STATE OF ILLINOIS  
STATE HIGHWAY DEPARTMENT  
REINFORCED CONCRETE BOX CULVERT

ROAD DISTRICT NO.	S.C.C.	COUNTY	TOTAL SHEETS	SHEET NO.
48	E-125	MACON-DEWITT PIATT	90	69
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT 159	

NOTES:  
1. EXISTING S.N. 020-8034 IS LOCATED AT STA. 1163+25 +/-



Note:  
Maximum Clearance = 4'-0"  
Use m-bars in downstream half only.

BILL OF MATERIAL

Bars	No.	Size	Length
V	22	2"	2'-6"
V	4	3"	6'-3"
V <sub>2</sub>	4	2"	4'-6"
11	12	1/2"	4'-3"
a	240	3/8"	10'-3"
b	12	3/4"	23'-0"
c	16	3/4"	22'-6"
D <sub>1</sub>	16	2"	21'-6"
G	4	1"	14'-0"
m	4	1/2"	5'-0"
Steel - Lbs			3460
Concrete - Cu Yds			263

Class X concrete to be used throughout

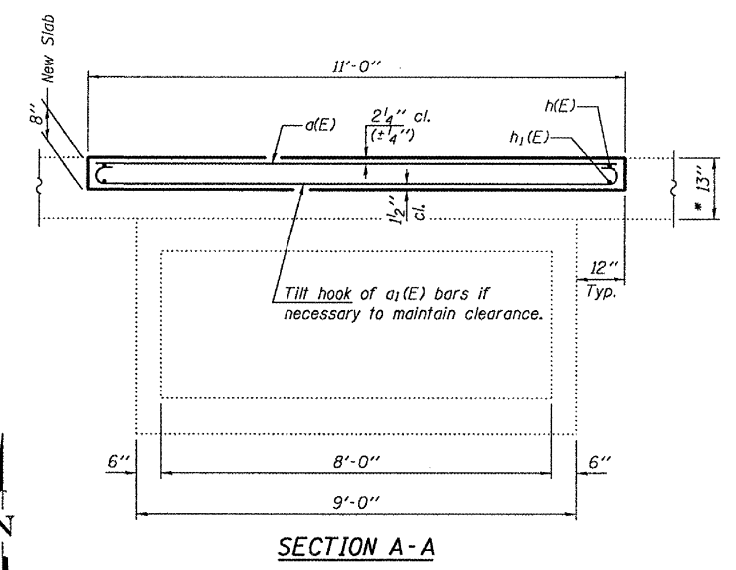
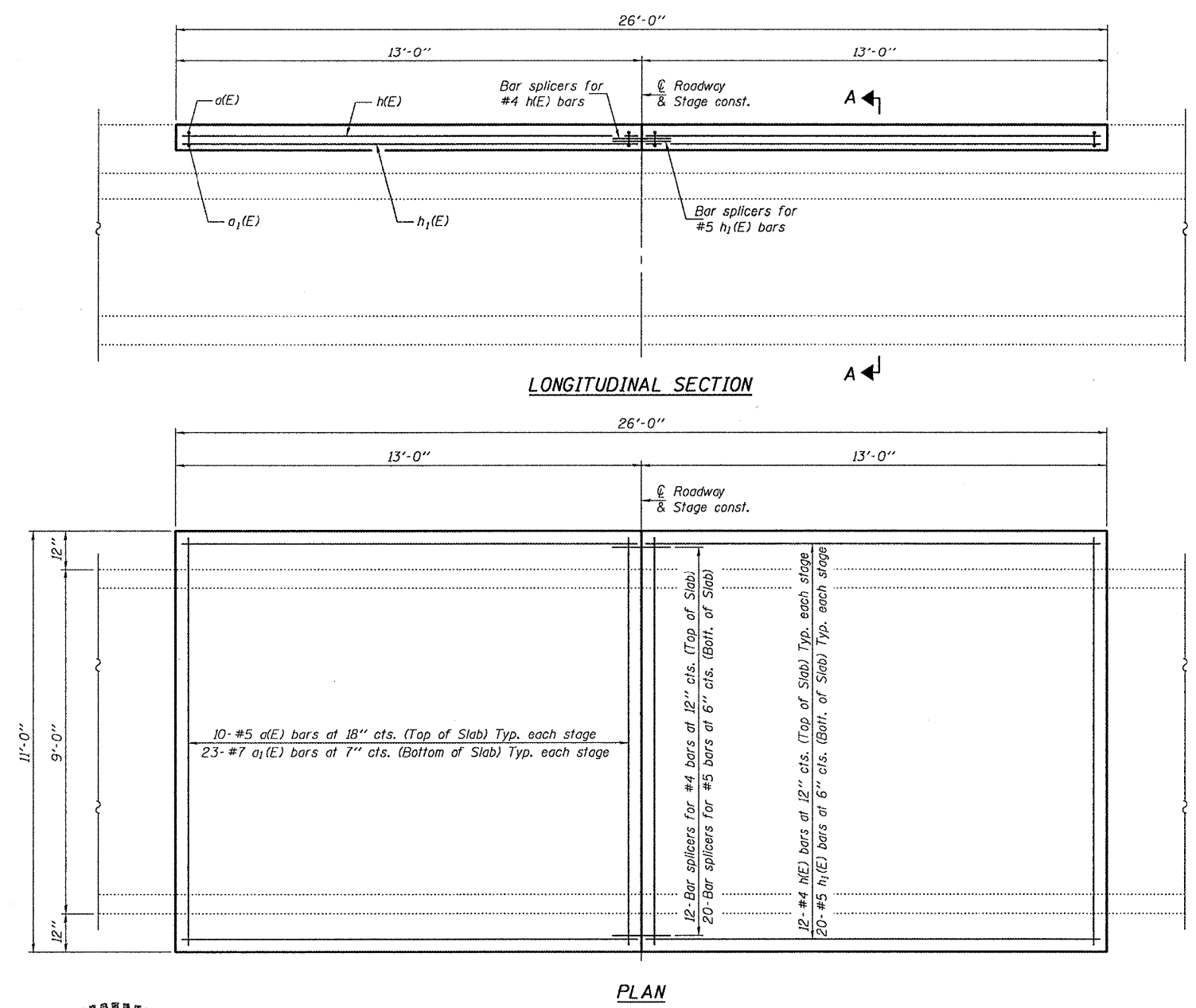
SPECIAL CULVERT DESIGN  
S.B.I. RT. 48 CONST. SEC. 125  
MACON-PIATT-DEWITT COUNTIES  
STA. 1163+24

STANDARD CHECKED  
COMPUTER CHECKED  
DESIGNED BY  
DRAWN BY  
CHECKED BY  
DATE 02-08-2011  
Engr. at Design

NOTES:  
 1. THIS AS-BUILT PLAN SHEET IS FROM POSTING MITIGATION CONTRACT 70894.

FOR INFORMATION ONLY

FOR INFORMATION ONLY



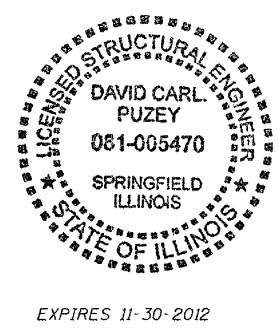
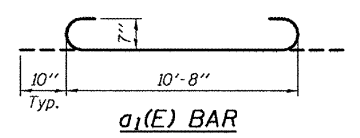
\* Remove 4" of existing HMA overlay and 4" of existing PCC pavement and replace with 8" concrete slab as shown. Slope to match roadway. Cost of removal included with Partial Depth Removal (Variable Depth).

**GENERAL NOTES**  
 Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.  
 Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.  
 Reinforcement bars designated (E) shall be epoxy coated.  
 The slab surface shall have its final finish tined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with Concrete Superstructure.

**DESIGN STRESSES**  
 FIELD UNITS  
 $f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (Reinf.)

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	20	#5	10'-8"	—
a1(E)	46	#7	12'-4"	—
h(E)	24	#4	12'-8"	—
h1(E)	40	#5	12'-8"	—
Bar Splicers	Each		32	
Partial Depth Removal (Variable Depth)	Sq. Yds.		31.8	
Reinforcement Bars, Epoxy Coated	Pound		2080	
Concrete Superstructure	Cu. Yds.		7.1	



DESIGNED: *[Signature]* EXAMINED: *[Signature]* DATE: MARCH 14, 2011  
 CHECKED: *[Signature]* PASSED: *[Signature]*  
 DRAWN: *[Signature]*  
 CHECKED: *[Signature]*

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**  
 SLAB DETAILS  
 LOCATION 2  
 SN 020-8034  
 SHEET NO. 1 OF 2 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
760	POSTING MITIGATION FY2011-1	DEWITT	23	12
CONTRACT NO. 70894				
ILLINOIS FED. AID PROJECT				

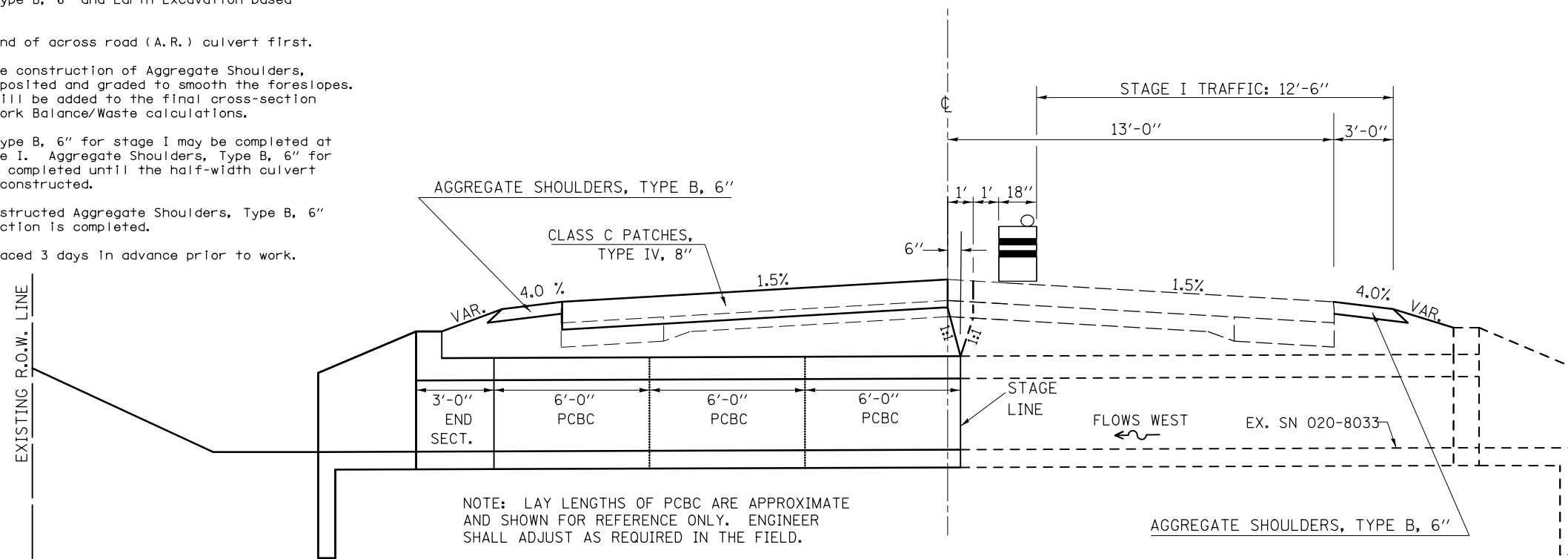
FILE NAME = USER NAME = ceorlockbm DESIGNED BMC REVISIONS -  
 pw\11084EBIDINTEG.illinois.gov\PIWIDOT\Documents\DOT Offices\District 5\Projects\05797\Drawings\020-8034\020-8034-shd-details.dwg DRAWN: BMC REVISIONS -  
 PLOT SCALE = 48.0000' / in. CHECKED - REVISIONS -  
 PLOT DATE = 10/6/2015 DATE 02-08-2011 REVISIONS -

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**  
 BOX CULVERT END SECTION DETAILS  
 PROPOSED CULVERT NO. 1 - STR. NO. 020-8045  
 SCALE: N/A SHEET NO. 6 OF 7 SHEETS STA. -- TO STA. --  
 F.A.P. RTE. SECTION COUNTY TOTAL SHEETS SHEET NO.  
 760 124CR DEWITT 41 29  
 CONTRACT NO. 70754  
 ILLINOIS FED. AID PROJECT

NOTES

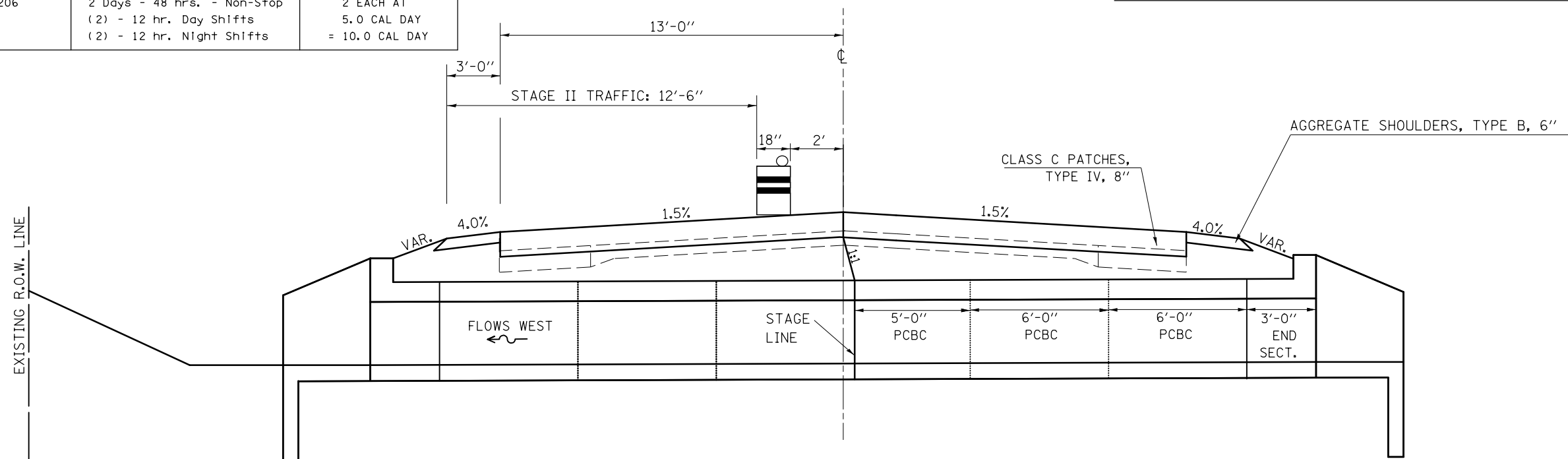
1. Refer to Special Provisions for TRAFFIC CONTROL AND PROTECTION, STANDARD 701206 and STAGE CONSTRUCTION ACROSS ROAD STRUCTURES for additional information.
2. The Engineer may reduce or eliminate lengths or locations of Aggregate Shoulders, Type B, 6" and Earth Excavation based on field conditions.
3. Construct downstream end of across road (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.

**TYPICAL STAGING DETAILS SN 020-8046 STAGE I**



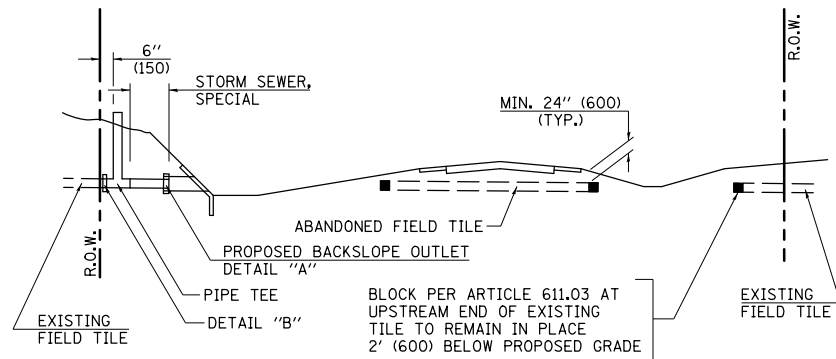
A. R. CULVERT LOCATION	TRAFFIC CONTROL STANDARD	ESTIMATED TIME	CHANGEABLE MESSAGE SIGNS
STA. 122+60.50	701206	2 Days - 48 hrs. - Non-Stop (2) - 12 hr. Day Shifts (2) - 12 hr. Night Shifts	2 EACH AT 5.0 CAL DAY = 10.0 CAL DAY

**TYPICAL STAGING DETAILS SN 020-8046 STAGE II**



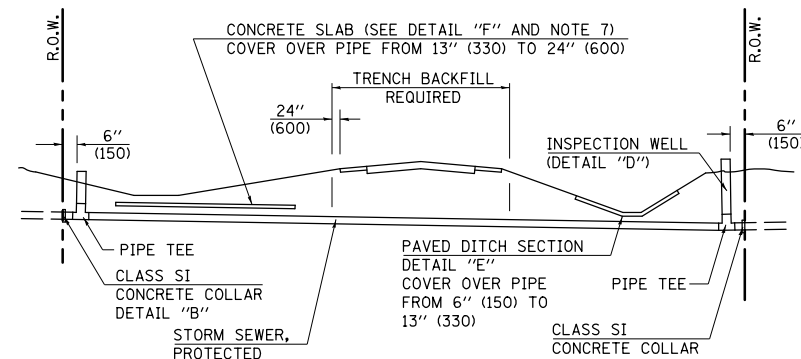
DRAWING NOT TO SCALE

FILE NAME =	USER NAME = ceorlockbm	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>STAGING DETAIL - CULVERT NO. 2 SN 020-8046</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\IL\084EBID\INTEG.illinois.gov\PIWIDOT\Documents\DOT Offices\District 5\Projects\0579\Drawings\Design\0579754-shd-details.dwg	DRAWN	REVISOR	REVISION			760	124CR	DEWITT	41	30
PLOT SCALE = 40.0000' / in.	CHECKED -	REVISOR	REVISION			CONTRACT NO. 70754				
PLOT DATE = 10/6/2015	DATE -	REVISOR	REVISION			SCALE: N/A	SHEET NO. 7 OF 7 SHEETS	STA. 1163+14.30 TO STA. 1163+36.30	ILLINOIS FED. AID PROJECT	



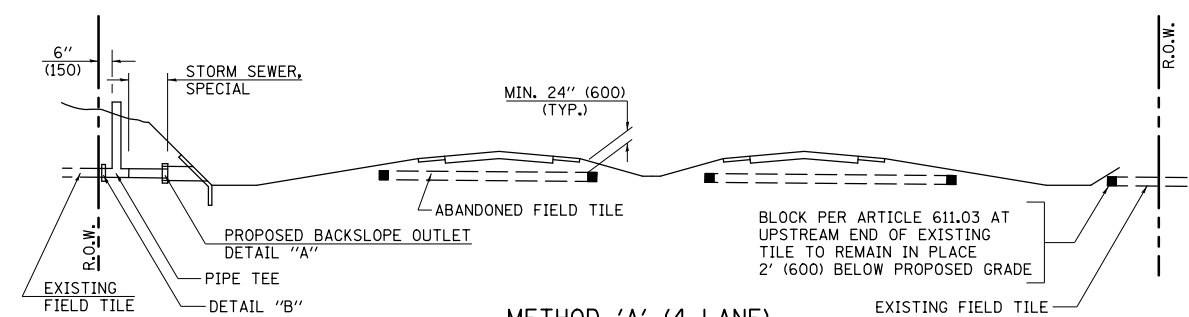
**METHOD 'A' (2 LANE)**

STORM SEWER FLOW LINE ABOVE PROPOSED DITCH FLOW LINE



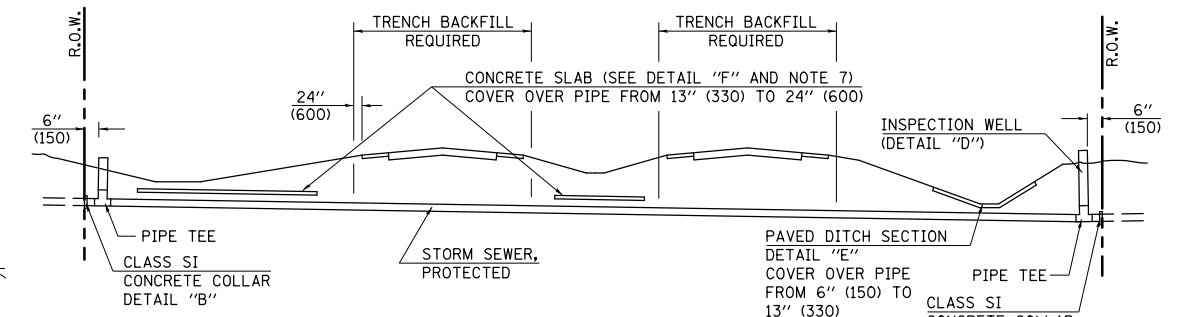
**METHOD 'B' (2 LANE)**

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



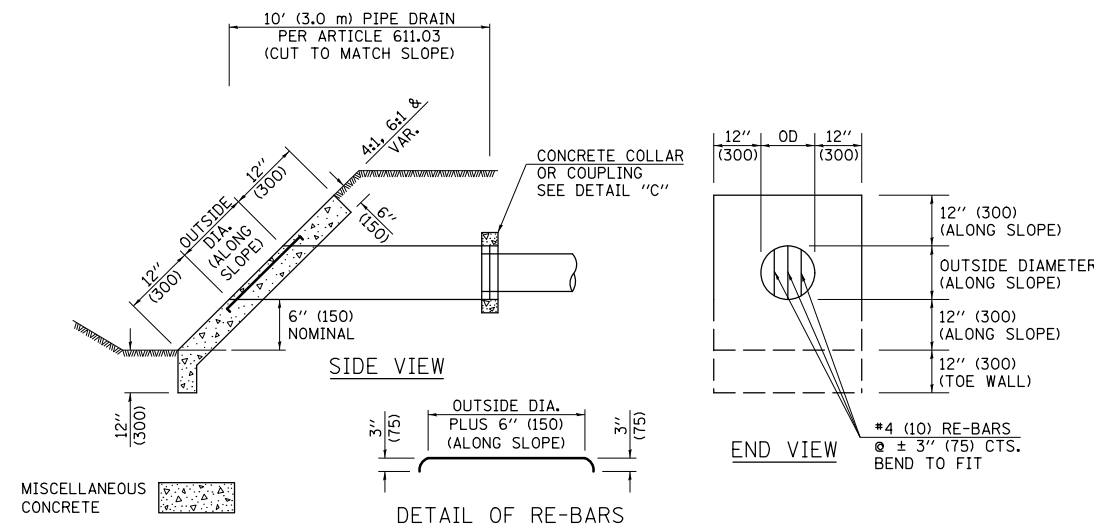
**METHOD 'A' (4 LANE)**

STORM SEWER FLOW LINE ABOVE PROPOSED DITCH FLOW LINE

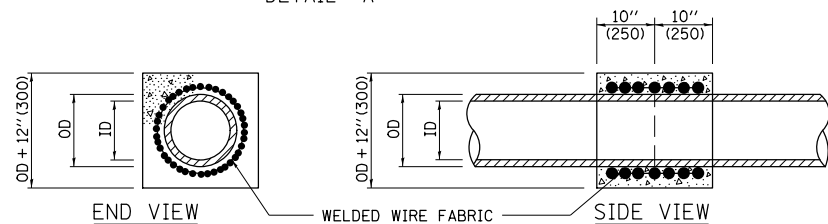


**METHOD 'B' (4 LANE)**

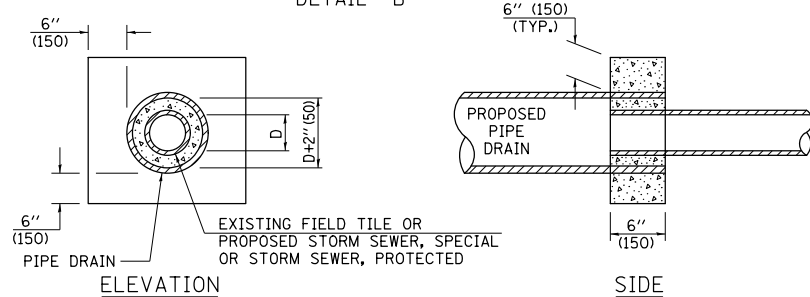
STORM SEWER LESS THAN 2' (600 mm) BELOW DITCH FLOW LINE AND STORM SEWERS CROSSING UNDER PAVEMENTS AND PAVED DITCHES



**HEADWALL FOR BACKSLOPE OUTLET  
DETAIL "A"**



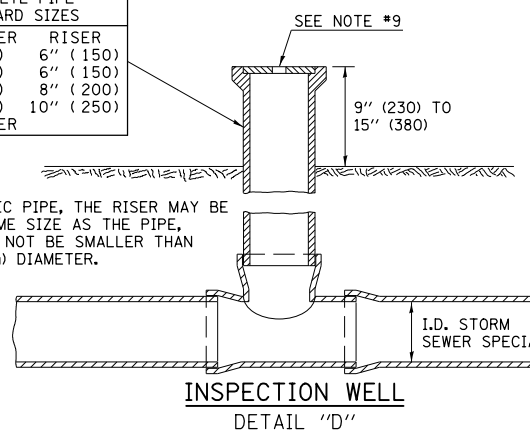
**CONCRETE COLLAR  
DETAIL "B"**



**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)	10" (250)
OR GREATER	

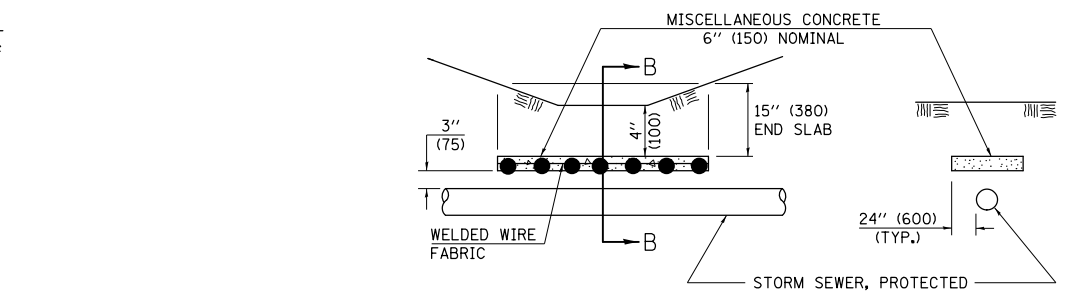
FOR PLASTIC PIPE, THE RISER MAY BE OF THE SAME SIZE AS THE PIPE, BUT SHALL NOT BE SMALLER THAN 4" (100 mm) DIAMETER.



**INSPECTION WELL  
DETAIL "D"**

**GENERAL NOTES**

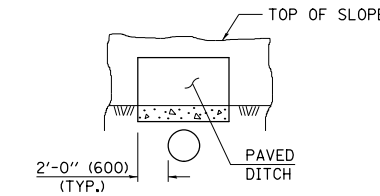
- EXISTING FIELD TILE ENCOUNTERED BY EXPLORATION TRENCH SHALL BE INSPECTED BY THE ENGINEER FOR UNOBSTRUCTED FLOW WITHIN THE LIMITS OF THE RIGHT-OF-WAY.
- ONLY FIELD TILE THAT DOES NOT HAVE SATISFACTORY FLOW AND OR HAS VISIBLE SIGNS OF DETERIORATION (SINK HOLES, ETC.) SHALL BE REPLACED WITHIN THE LIMITS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



**SLAB ELEVATION**

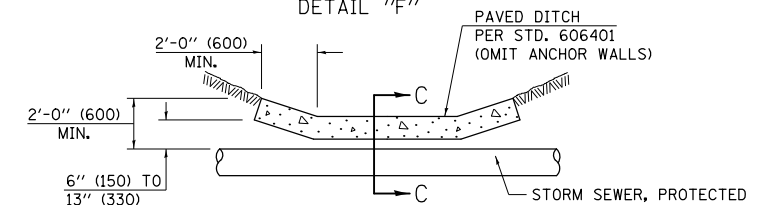
**CONCRETE SLAB  
DETAIL "F"**

**SECTION B-B**



**SECTION C-C**

**PAVED DITCH  
DETAIL "E"**



**PAVED DITCH ELEVATION**

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

**DISTRICT 5 DETAIL NO. 61101011A**

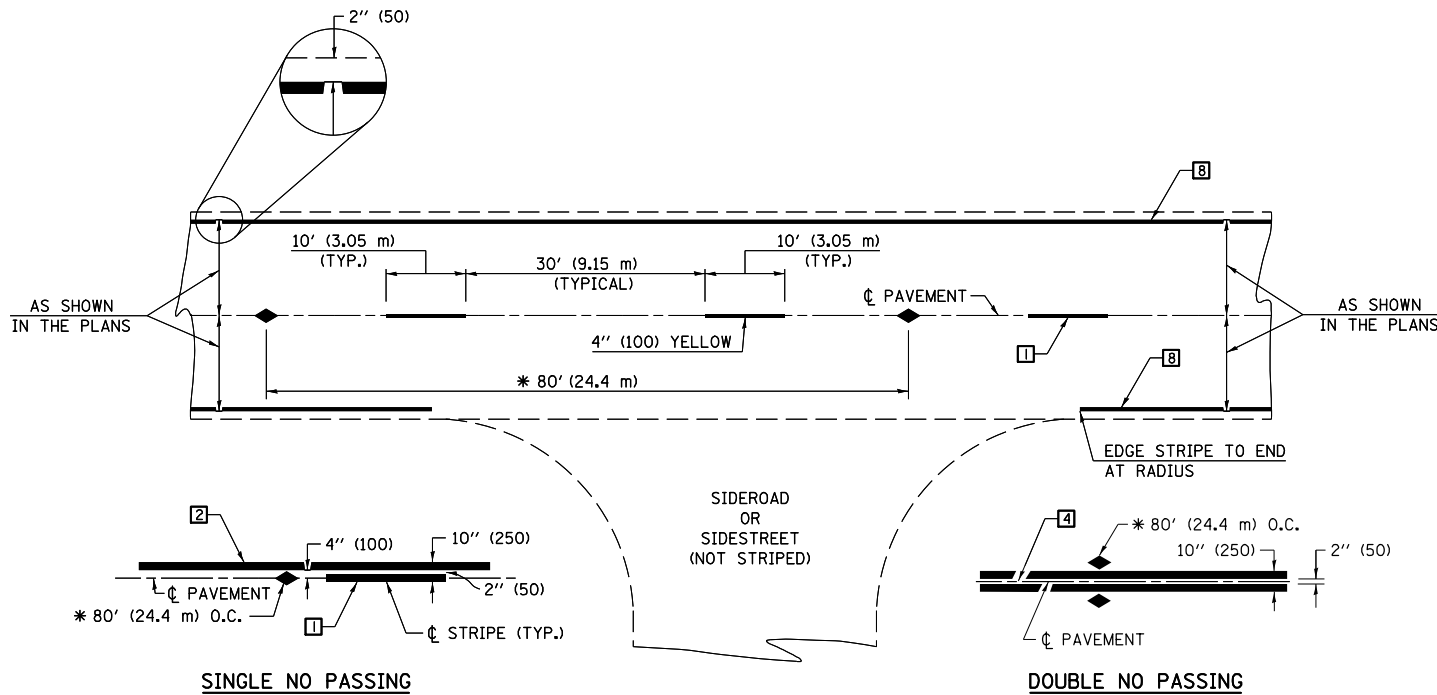
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		DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**FIELD TILE SYSTEMS (TREATMENT OF EXISTING)**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
760	124CR	DEWITT	41	31
CONTRACT NO. 70754				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



\* 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**

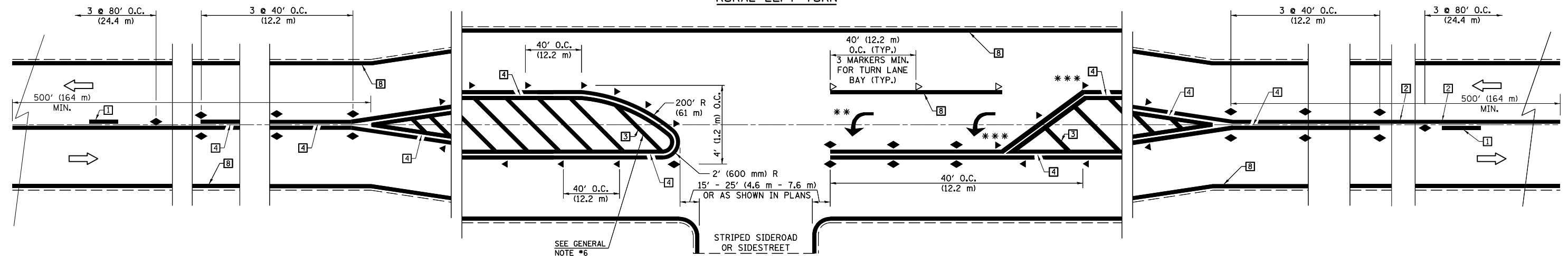
**TYPICAL PAVEMENT MARKING LEGEND**

- 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**



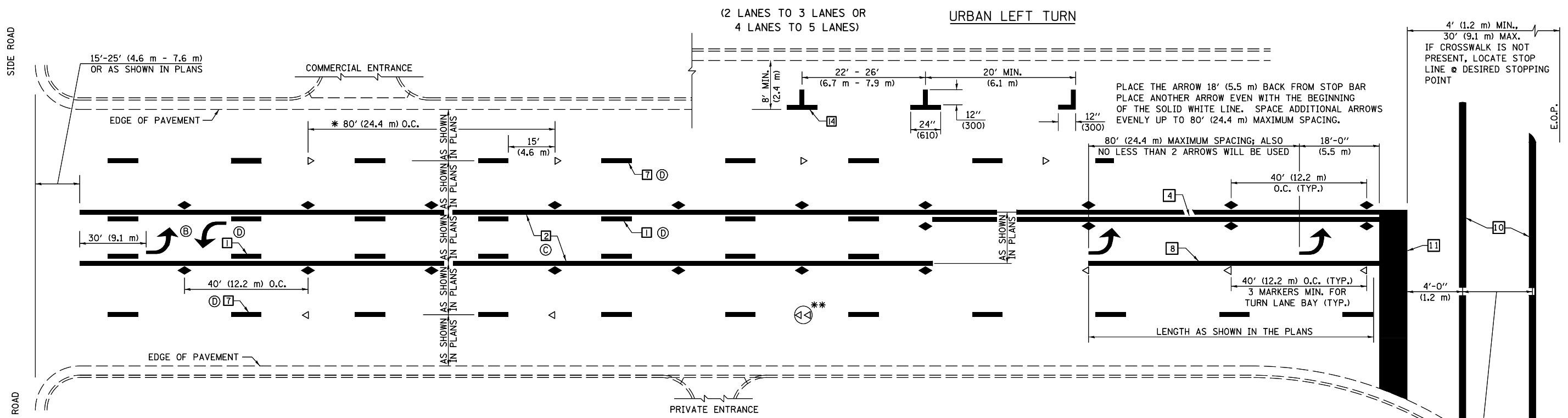
\*\*\* REDUCE SPACING IF NECESSARY TO ASSURE MARKERS AT CORNER POINTS.  
 \*\* TURN ARROWS SHALL BE PLACED AS SHOWN ON SHEET #2.

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

**DISTRICT 5 DETAIL NO. 7800AAA**

FILE NAME =	USER NAME = ceerlockbm	DESIGNED -	REVISED - 11/06	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PAVEMENT MARKING AND MARKERS (RURAL &amp; URBAN APPLICATIONS)</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\IL\084EBIDINTEG\illinois.gov\PWIDOT\Documents\DOT Offices\District 5\Projects\0579\BROWND\Design\0579754-shr-details.dwg		DRAWN -	REVISED - 09/2009 - KJT					760	124CR	DEWITT	41	32
		CHECKED -	REVISED -					CONTRACT NO. 70754				
		DATE -	REVISED -					FED. ROAD DIST. NO. N ILLINOIS FED. AID PROJECT				
					SCALE: N/A	SHEET NO. 1 OF 4 SHEETS	STA. --	TO STA. --				



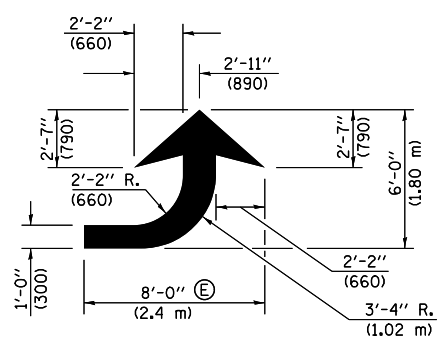


\* REDUCE TO 40 FEET (12.2 METERS) ON CENTER ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH (15 km/h) LOWER THAN POSTED SPEEDS.

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

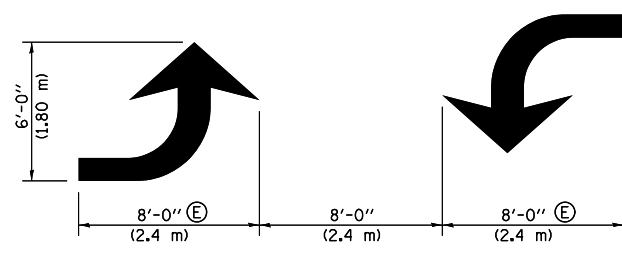
**GENERAL NOTES:**

- ⓑ 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)



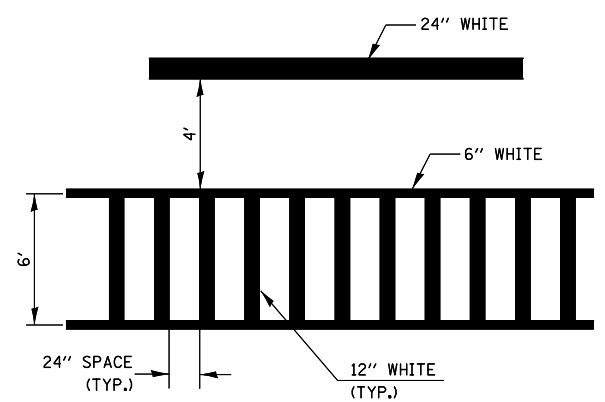
**LEFT ARROW**

REVERSE FOR RIGHT ARROW  
AREA = 15.6 SQ. FT. (1.47 m<sup>2</sup>)  
(WHITE)

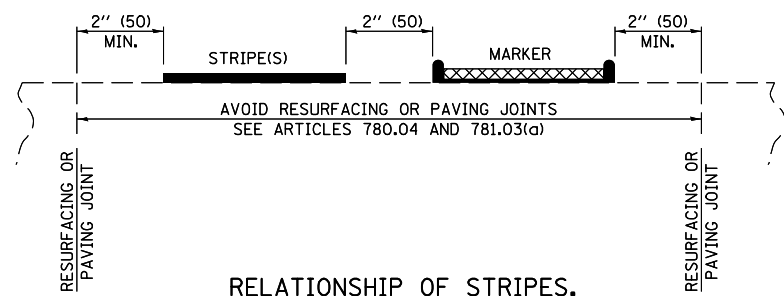


**TYPICAL DOUBLE TURN ARROWS (WHITE)**

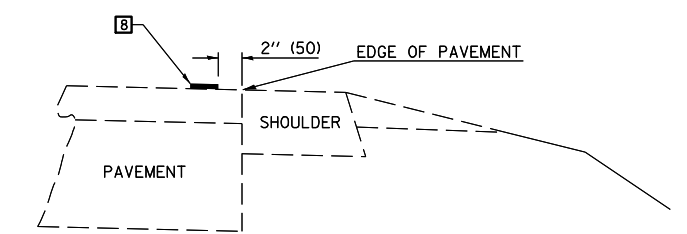
**BLOOMINGTON-NORMAL CITY LIMITS ONLY**



**TYPICAL SPACING FOR CROSSWALKS & STOP BARS**



**RELATIONSHIP OF STRIPES, MARKERS AND JOINTS**



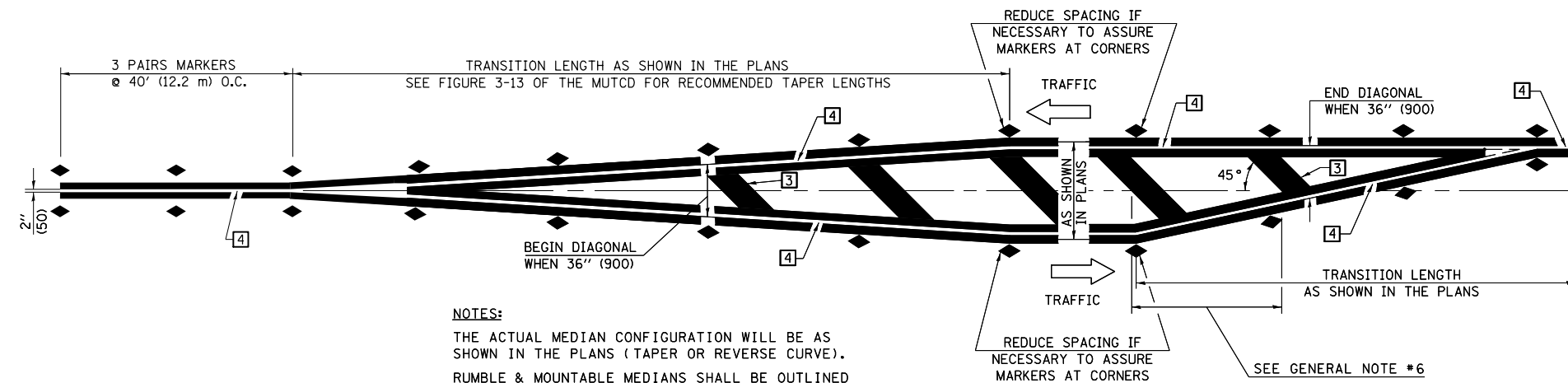
**RELATIONSHIP OF EDGE LINE TO EDGE OF PAVEMENT (SAFETY SHOULDER OR PAVED SURFACE) SEE ARTICLE 780.04**

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

**DISTRICT 5 DETAIL NO. 7800AAA**

FILE NAME =	USER NAME = ceorlockbm	DESIGNED -	REVISED - 11/06	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PAVEMENT MARKING AND MARKERS (RURAL &amp; URBAN APPLICATIONS)</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
pw:\11\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\DOT Offices\District 5\Projects\05797\DRAWING\Design\0579754-shd-details.dwg	PLLOT SCALE = 40.0000' / in.	CHECKED -	REVISED - 09/2009 - KJT			760	124CR	DEWITT	41	33	
	PLLOT DATE = 10/6/2015	DATE -	REVISED -			CONTRACT NO. 70754					
						FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

SCALE: N/A SHEET NO. 2 OF 4 SHEETS STA. -- TO STA. --

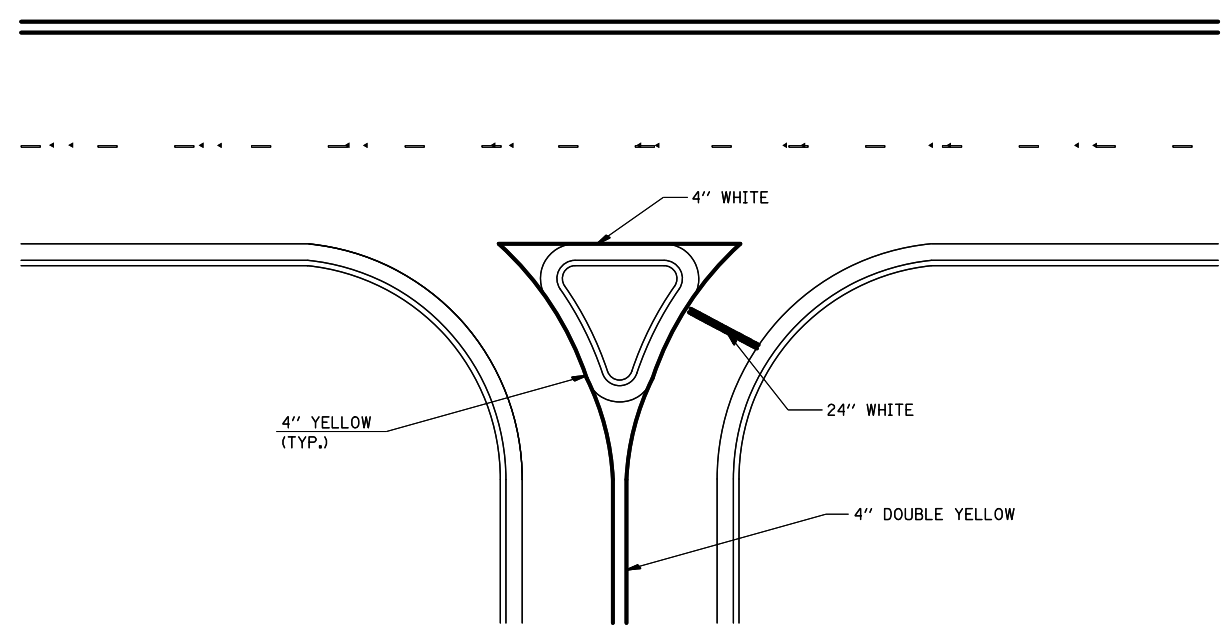


**NOTES:**  
 THE ACTUAL MEDIAN CONFIGURATION WILL BE AS SHOWN IN THE PLANS (TAPER OR REVERSE CURVE).  
 RUMBLE & MOUNTABLE MEDIANS SHALL BE OUTLINED WITH [2].

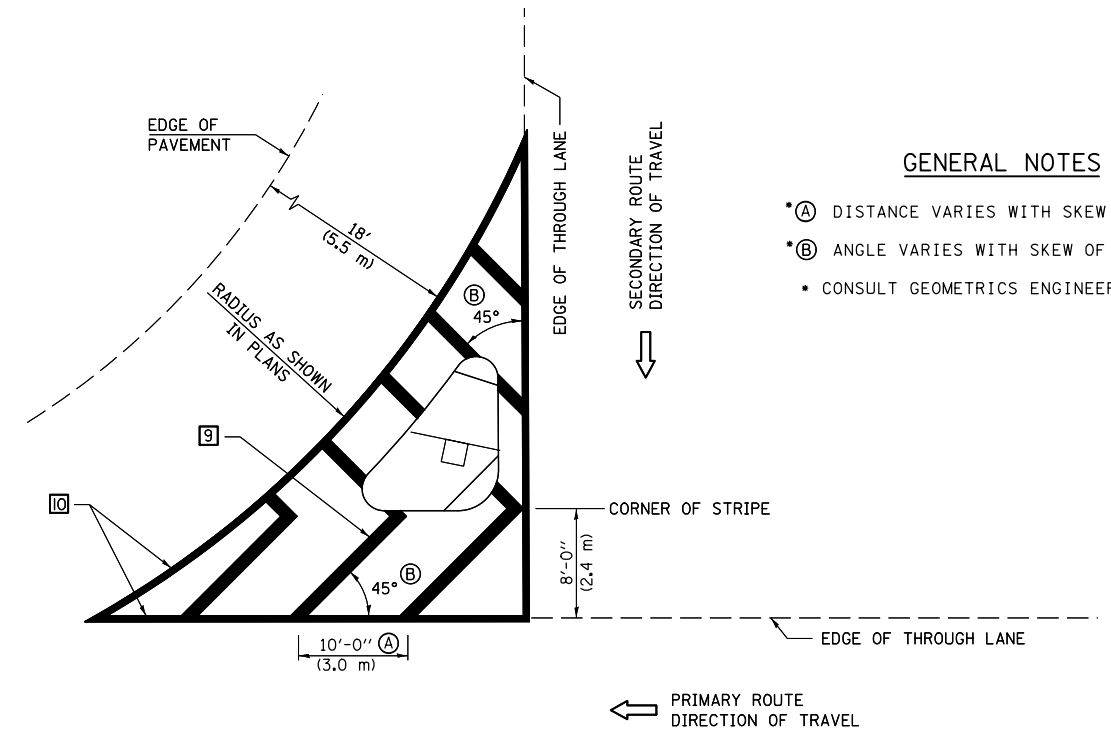
**TYPICAL MEDIAN TRANSITIONS**

**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.

FILE NAME =	USER NAME = ceorlockbm	DESIGNED -	REVISED - 11/06
pw:\IL\084EBIDINTEG.illinois.gov\PWIDOT\Documents\DOT Offices\District 5\Projects\0579\Drawings\Design\0579754-shr-details.dwg		DRAWN -	REVISED - 09/2009 - KJT
	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 10/6/2015	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

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

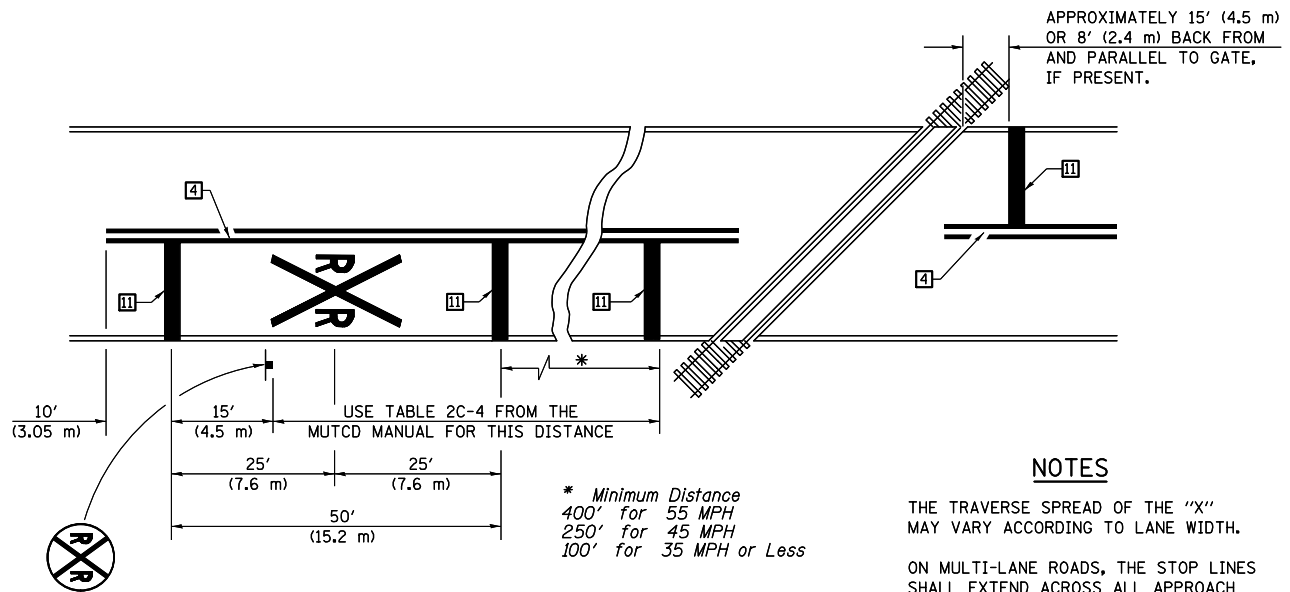
SCALE: N/A SHEET NO. 3 OF 4 SHEETS STA. -- TO STA. --

**DISTRICT 5 DETAIL NO. 7800AAAA**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
760	124CR	DEWITT	41	34
CONTRACT NO. 70754				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

RAILROAD CROSSING WITH INTERCONNECT ONLY

RAILROAD CROSSING WITH INTERCONNECT AND PRE-SIGNALS



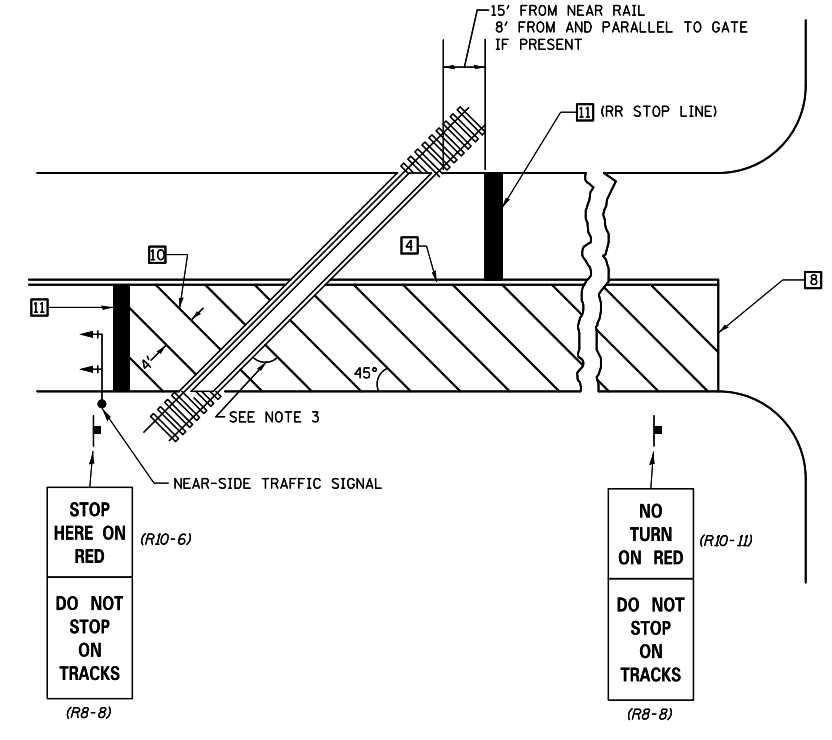
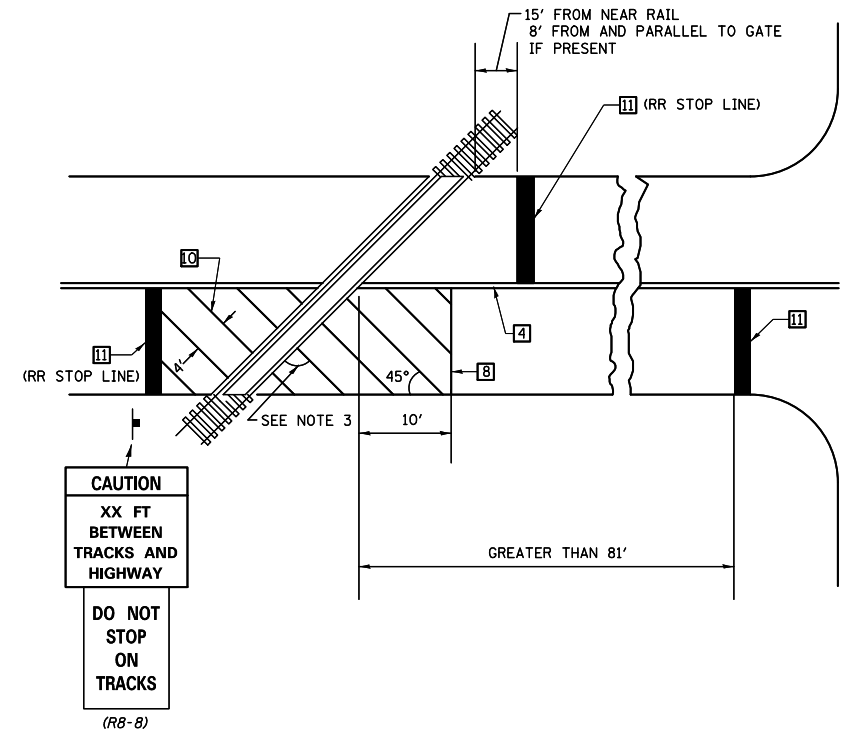
PAVEMENT MARKINGS AT RAILROAD-HIGHWAY GRADE CROSSING

NOTES

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.

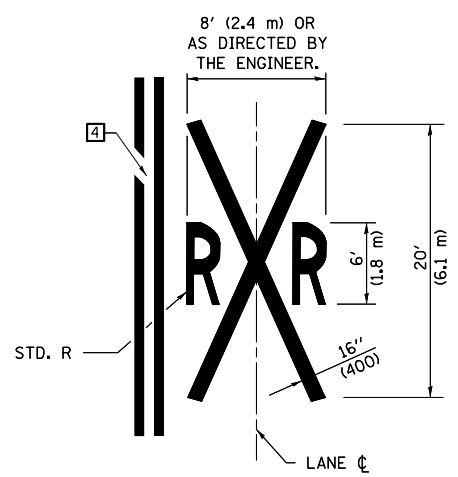
WHEN THE PAVEMENT MARKING SYMBOL IS USED, A PORTION OF THE SYMBOL SHOULD BE LOCATED DIRECTLY ADJACENT TO THE ADVANCE WARNING SIGN (W10-1) AS PLACED BY TABLE II-1, CONDITION B OF THE MUTCD.



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 = ceorlockbm	DESIGNED -	REVISED - 11/06
pw:\11\084EBIDINTEG\illinois.gov\PIWIDOT\Documents\DOT Offices\District 5\Projects\0579\Drawings\Design\0579754-shr-details.dwg		DRAWN -	REVISED - 09/2009 - KJT
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	PLOT DATE = 10/6/2015	DATE -	REVISED -

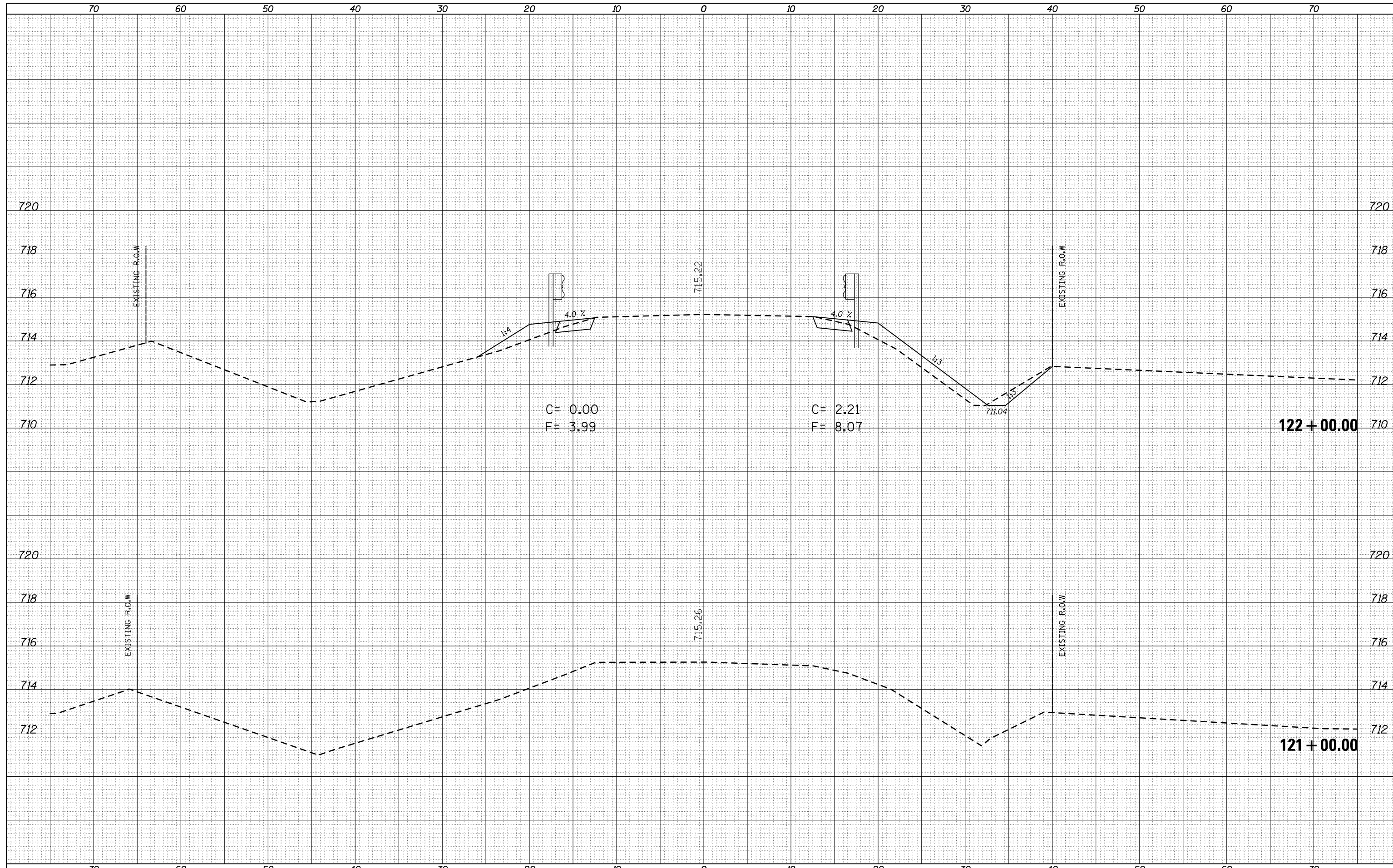
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND MARKERS  
(RURAL & URBAN APPLICATIONS)

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

DISTRICT 5 DETAIL NO. 7800AAA

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
760	124CR	DEWITT	41	35
CONTRACT NO. 70754				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



BY \_\_\_\_\_ DATE \_\_\_\_\_

FINISH SURVEY SURVEYED SURVEYED SURVEYED  
 NOTE BOOK PLOTTED PLOTTED PLOTTED  
 NO. AREAS AREAS AREAS CHECKED CHECKED CHECKED

BY \_\_\_\_\_ DATE \_\_\_\_\_

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

FILE NAME =	USER NAME = cealockbm	DESIGNED -	REVISOR -
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PLOT SCALE = 10.0000 / in.		DATE -	REVISOR -
\$MODELNAME\$			

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS - S.N. 020-8045**

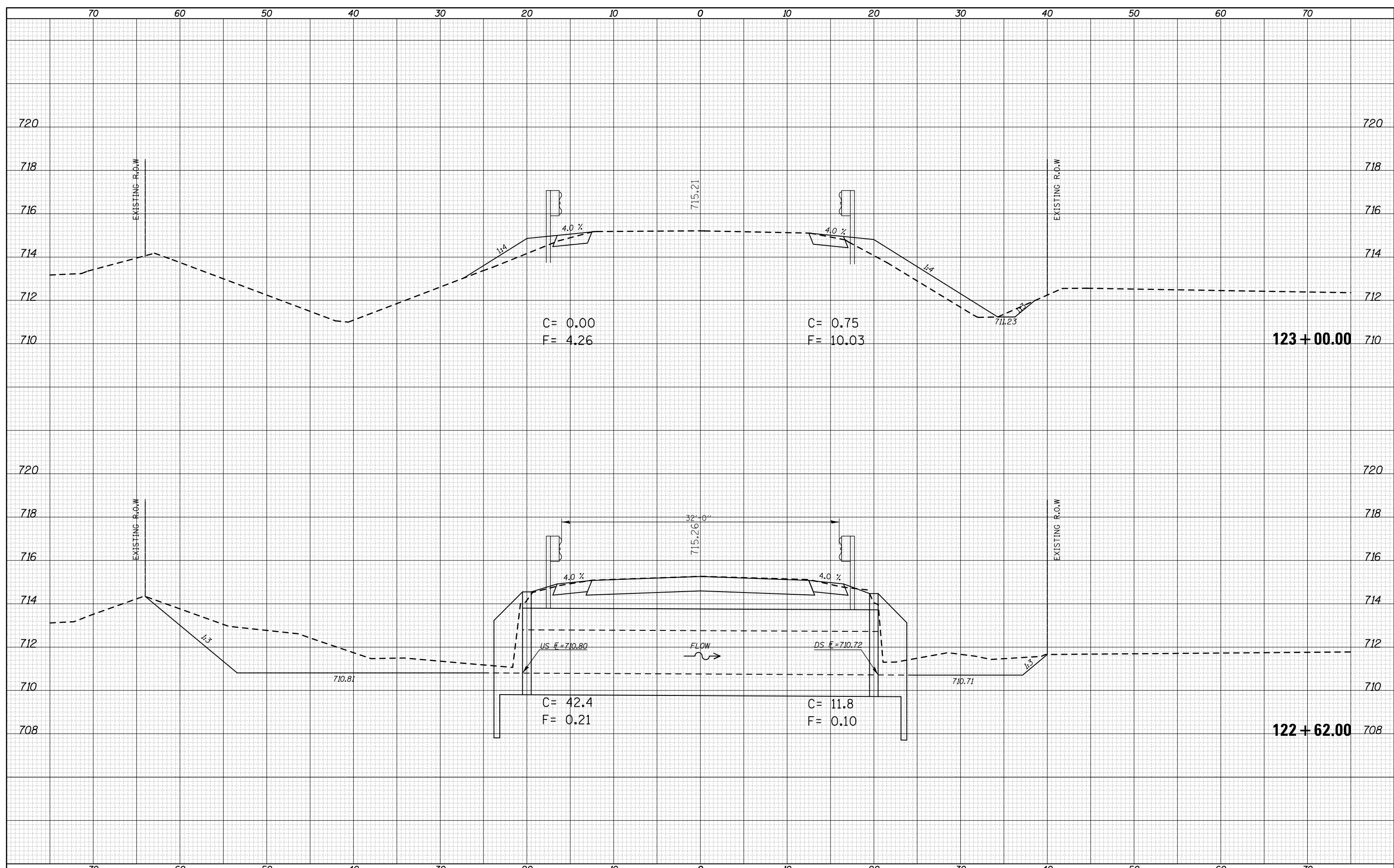
SCALE: ----- SHEET 1 OF 3 SHEETS STA. 121+00.00 TO STA. 122+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
760	124CR	DEWITT	41	36
CONTRACT NO.				70754

ILLINOIS FED. AID PROJECT

DATE	
BY	
FINISHED	
NO.	
DESIGNED	
CHECKED	
DATE	
REVISIONS	
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DATE	
BY	
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REVISIONS	
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DATE	



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USER NAME = cealockbm	DESIGNED -	REVISIONS
NO.	CHECKED -	NO.
PLOT DATE = 10/6/2015	DATE -	NO.

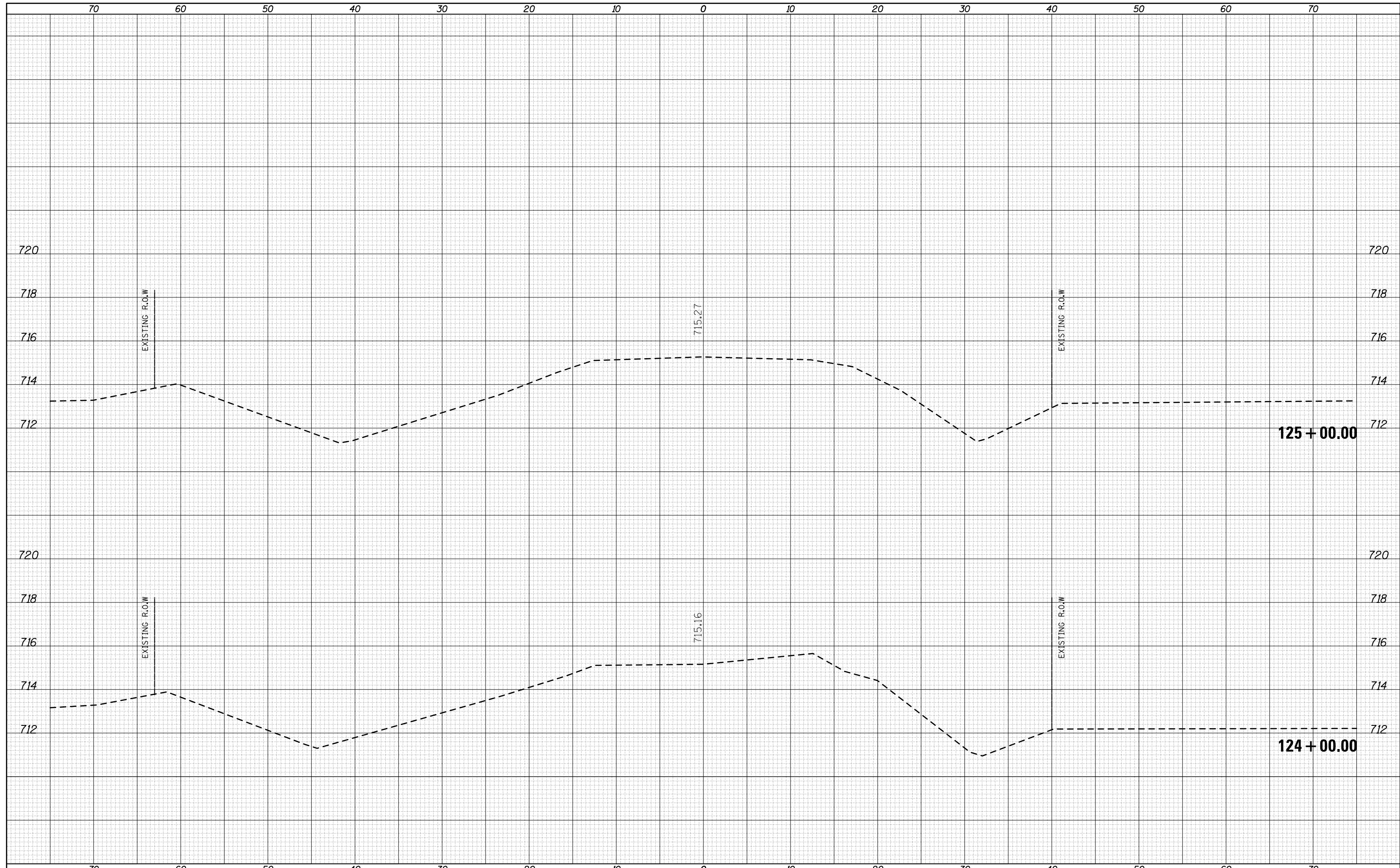
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS - S.N.020-8045  
SCALE: ----- SHEET 2 OF 3 SHEETS STA. 122+62.00 TO STA. 123+00.00

F.A.P. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
760	124CR	DEWITT	41	37
CONTRACT NO. 70754				
ILLINOIS FED. AID PROJECT				

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

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



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\$MODELNAME\$	PLOT DATE = 10/6/2015	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

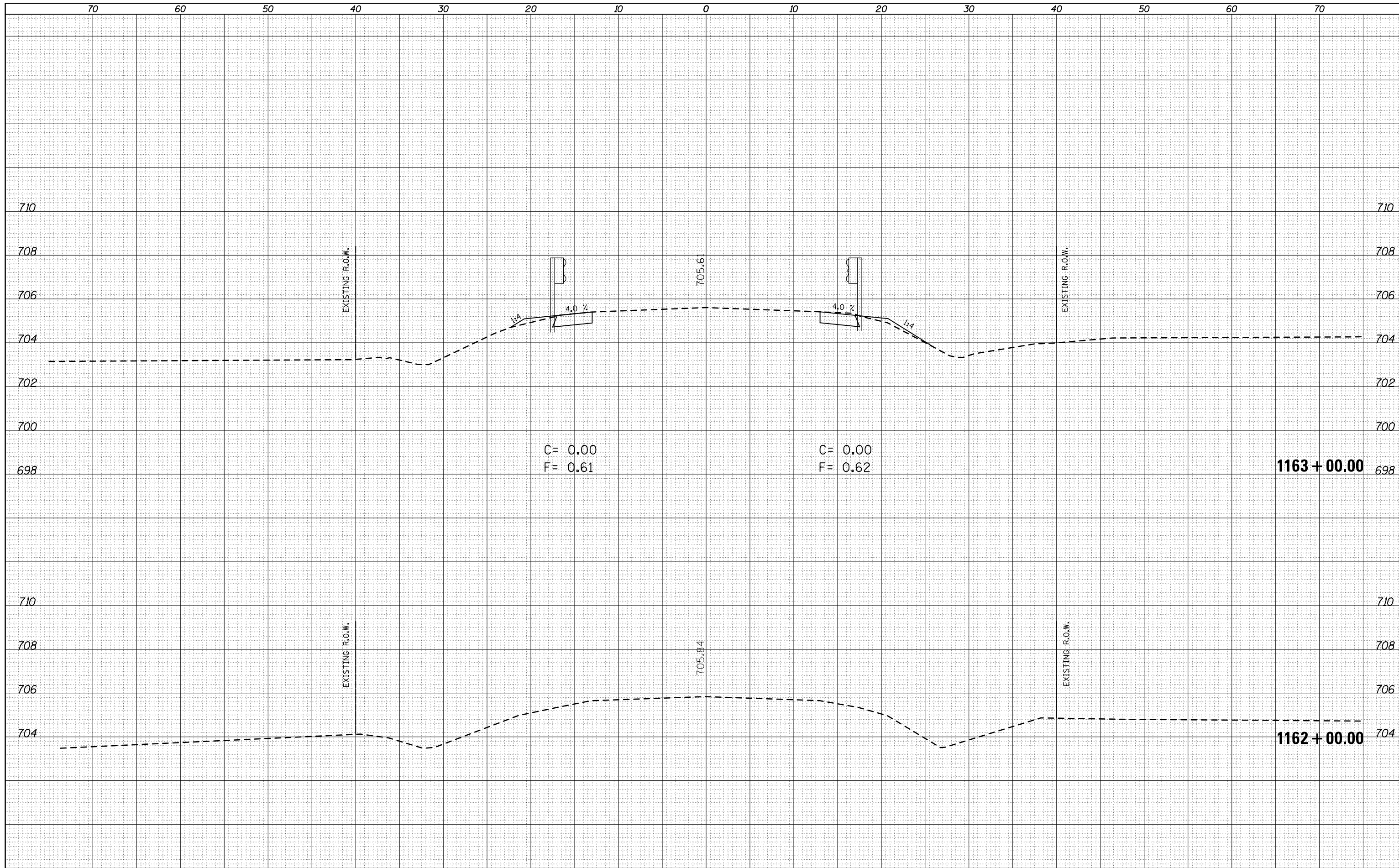
**CROSS SECTIONS - S.N.020-8045**

SCALE: ----- SHEET 3 OF 3 SHEETS STA. 124+00.00 TO STA. 125+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
760	124CR	DEWITT	41	38
			CONTRACT NO. 70754	
ILLINOIS FED. AID PROJECT				

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

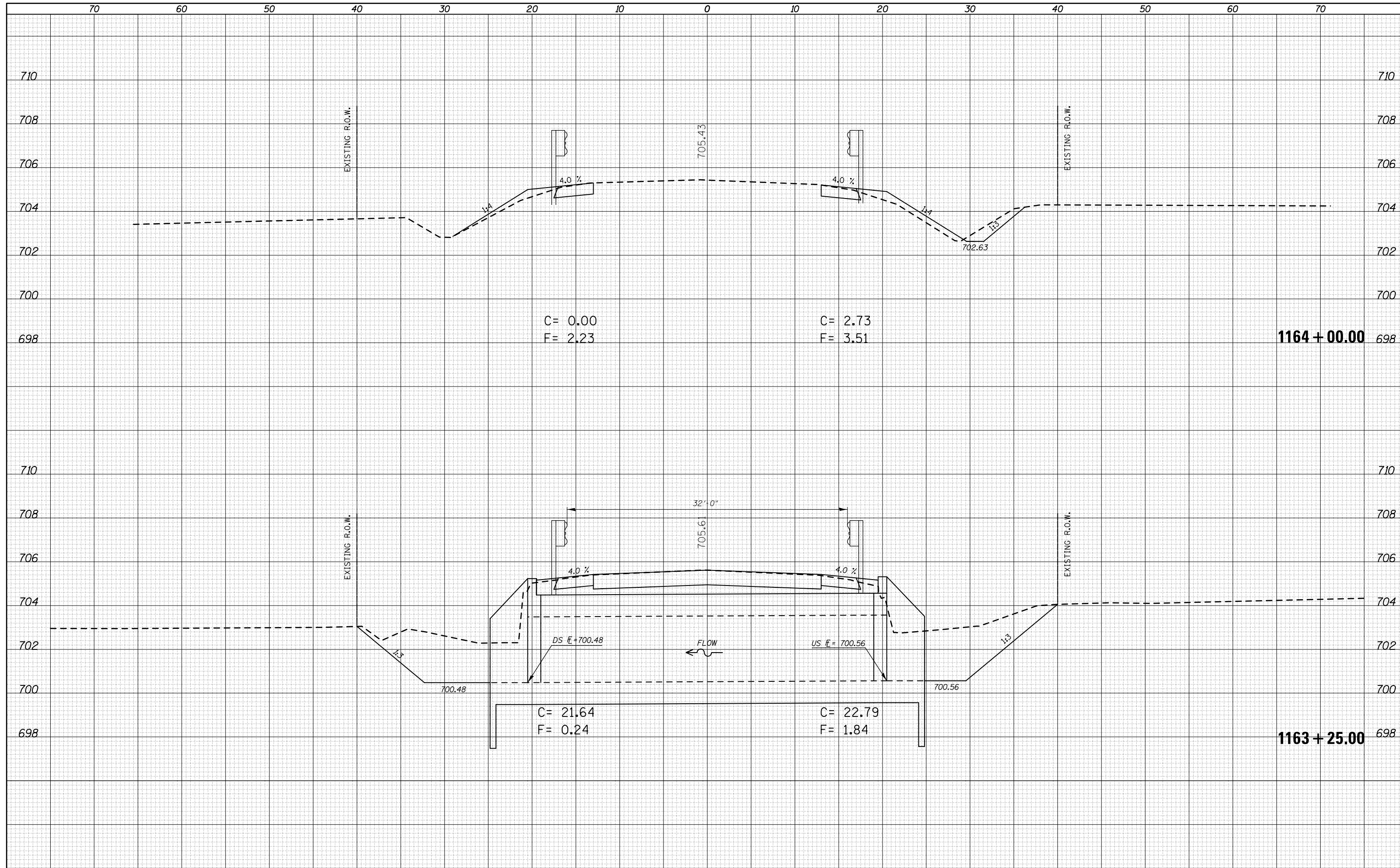
BY	DATE
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED



FILE NAME =	USER NAME = cealockbm	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTIONS - S.N. 020-8046</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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\$MODELNAME\$	PLOT DATE = 10/6/2015	DATE -	REVISOR -	SCALE: ----	SHEET 1 OF 3 SHEETS	STA. 1162+00.00 TO STA. 1163+00.00	ILLINOIS FED. AID PROJECT					

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

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





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

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

