1-19-07 Letting, Item 068

CONTRACT NO. 70262

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
709	104BR-1	CHAMPAIGN	24	1
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

D-95-056-02

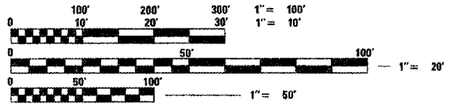
LOCATION OF SECTION INDICATED THUS: ■

FOR INDEX OF SHEETS, SEE SHEET NO. 2
FOR LIST OF STANDARDS, SEE SHEET NO. 2
FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 3

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

F.A.P. ROUTE 709 (US ROUTE 136)
SECTION 104BR-1
CHAMPAIGN COUNTY
PROJECT NO. BHF-0709(021)
C-95-104-02
BRIDGE REHABILITATION
LONE TREE CREEK WEST OF FISHER

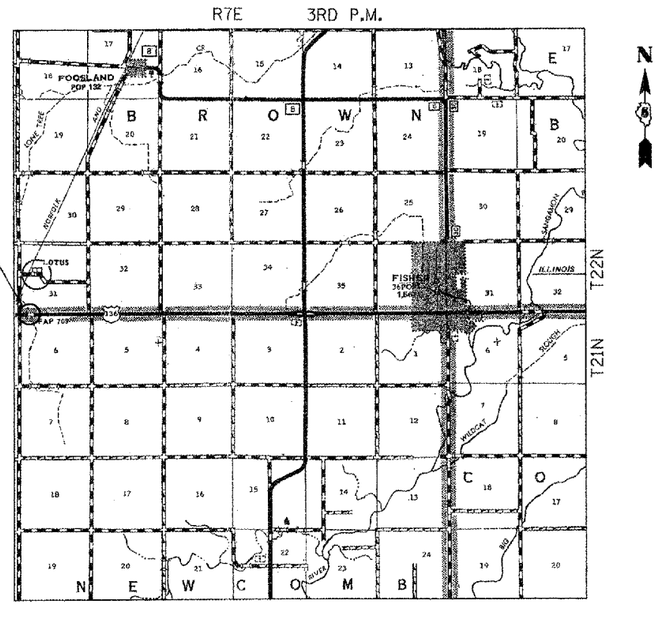


SCALES
PLAN 1"=20'
PROFILE HORIZ. 1"=20'
PROFILE VERT. 1"=5'
CROSS SECTIONS 1"=5'
1"=2 1/2'

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.

FOR UNDERGROUND UTILITY LOCATIONS CALL J.U.L.I.E. TOLL FREE 1-800-892-0123

PROJECT LOCATION
SECTION 104BR-1
BRIDGE SUPERSTRUCTURE
REPLACEMENT SN 010-0058,
STA 1458+06.74
43'-0" BK TO BK ABUTMENTS
32'-0" STRUCTURE WIDTH



LOCATION MAP NOT TO SCALE

GROSS AND NET LENGTH OF PROJECT = 102.08 FEET = 0.019 MILES ADT = 1600 (2005)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 10/20 2006
Joseph E. Lawrence, Jr.
DEPUTY DIRECTOR OF HIGHWAYS, REGION THREE ENGINEER
December 8, 2006
Eric E. Harm, PE
Interim ENGINEER OF DESIGN AND ENVIRONMENT
December 8, 2006
Milton R. Sees, PE
DIRECTOR, DIVISION OF HIGHWAYS

MARY COOMBE BLOXDORF 43208 REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

MARY COOMBE BLOXDORF, P.E., S.E.
DATE October 17 2006
EXPIRES NOVEMBER 30, 2007

CONTRACT NO. 70262

PROJECT ENGINEER: KENSIL GARNETT PHONE: 217-465-4181
CONSULTANT LIAISON: NANCY FASIG

COOMBE-BLOXDORF P.C.
Engineers / Land Surveyors
Springfield, Illinois
Design Firm License No. 184-002703

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CONTRACT NO. 70262

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
709	104BR-1	CHAMPAIGN	24	2
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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2 INDEX OF SHEETS, HIGHWAY STANDARDS AND GENERAL NOTES

3 SUMMARY OF QUANTITIES

4 EXISTING AND PROPOSED TYPICAL SECTIONS

5 SCHEDULE OF QUANTITIES

6 CROSS TIES

7 MAX WIDTH SIGNING

8 STAGE I TRAFFIC CONTROL PLAN

8 STAGE II TRAFFIC CONTROL PLAN

10 PLAN AND PROFILE SHEET

11-18 BRIDGE PLANS

19-21 TYPICAL APPLICATION OF PAVEMENT MARKINGS

22-24 CROSS SECTIONS

HIGHWAY STANDARDS

000001-04 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

001001-01 AREAS OF REINFORCEMENT BARS

001006 DECIMAL OF AN INCH AND A FOOT

280001-03 TEMPORARY EROSION CONTROL SYSTEMS

515001-02 NAME PLATE FOR BRIDGES

630001-07 STEEL PLATE BEAM GUARDRAIL

630201-04 PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL

630301-04 SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS

631026-03 TRAFFIC BARRIER TERMINAL TYPE 5

631032-03 TRAFFIC BARRIER TERMINAL, TYPE 6A

635006-02 REFLECTOR AND TERMINAL MARKER PLACEMENT

635011-01 REFLECTOR MARKERS AND MOUNTING DETAILS

667101 PERMANENT SURVEY MARKERS

701006-02 OFF-ROAD OPERATIONS 2L, 2W, 4.5 m (15') TO PAVEMENT EDGE FOR SPEEDS GREATER THAN OR EQUAL TO 45 MPH

701201-02 LANE CLOSURE, 2L, 2W, DAY ONLY ON-ROAD TO 600 m (24') OFF-ROAD FOR SPEEDS GREATER THAN OR EQUAL TO 45 MPH

701301-02 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS

701311-02 LANE CLOSURE, 2L, 2W, MOVING OPERATION, DAY ONLY

701321-08 LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER

702001-06 TRAFFIC CONTROL DEVICES

704001-03 TEMPORARY CONCRETE BARRIER

780001-01 TYPICAL PAVEMENT MARKINGS

GENERAL NOTES

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

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

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

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

G.N.-406

THE QUANTITIES INCLUDED IN THE PLANS FOR HOT-MIX ASPHALT RESURFACING ARE INTENDED TO GIVE THE COVERAGE SHOWN ON THE TYPICAL CROSS SECTIONS. IT IS NOT INTENDED TO INCREASE THE THICKNESS OF THE HOT-MIX ASPHALT MIXTURE IN ORDER TO USE ALL OF THE QUANTITIES INCLUDED IN THE CONTRACT.

G.N. -406H

MIXTURE REQUIREMENTS

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

LOCATION(S):	US 136	US 136
MIXTURE USE(S):	BASE COURSE (OPTION)	HOT-MIX ASPHALT SURFACE CSE
AC/PG:	PG 64-22	PG 64-22
RAP %: (MAX)••	25%	15%
DESIGN AIR VOIDS:	4.0% @ Ndes = 50	4.0% @ Ndes = 50
MIXTURE COMPOSITION: (GRADATION MIXTURE)	IL 19.0	IL 9.5
FRICTION AGGREGATE:	N.A.	MIX C

G.N.-703A
SHORT TERM PAVEMENT MARKING SHALL BE APPLIED TO THE PAVEMENT AFTER ANY OF THE FOLLOWING: COLD MILLING AND/OR PLACING BITUMINOUS MATERIALS (PRIME COAT), LEVELING BINDER (MACHINE METHOD), BINDER AND SURFACE COURSES. SHORT TERM PAVEMENT MARKING PLACED ON THE SURFACE, SHALL COINCIDE WITH THE FINAL PAVEMENT STRIPING. SHORT TERM PAVEMENT MARKING PLACED PRIOR TO THE SURFACE SHALL COINCIDE WITH THE EXISTING PAVEMENT MARKINGS. USE 4 FEET PER 40 FEET (OR 10% PER STATION).

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.

NO COMMITMENTS

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USER NAME = kayerb

REVISIONS	
NAME	DATE

COOMBE-BLOXDORF P.C.
Engineers / Land Surveyors
Springfield, Illinois
Design Firm License No. 184-002703

ILLINOIS DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, HIGHWAY STANDARDS AND GENERAL NOTES
US 136 OVER LONE TREE CREEK
FAP ROUTE 709, SECTION 104BR-1
CHAMPAIGN COUNTY

SCALE: DRAWN BY CFC
DATE: 04/19/06 CHECKED BY

CONTRACT NO. 70262

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
709	104BR-1	CHAMPAIGN	24	3
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

80% FEDERAL 20% STATE
CONSTRUCTION CODE X080-2A

ITEM NO.	ITEM	UNIT	TOTAL QUANTITY
20200100	EARTH EXCAVATION	CU YD	81
20400800	FURNISHED EXCAVATION	CU YD	4
25000200	SEEDING, CLASS 2	ACRE	0.25
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	23
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	23
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	23
25100115	MULCH, METHOD 2	ACRE	0.25
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	25
28000300	TEMPORARY DITCH CHECKS	EACH	4
28000400	PERIMETER EROSION BARRIER	FOOT	951
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	21
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTTJOINT	SQ YD	262.8
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C",N50	TON	22.1
44004250	PAVED SHOULDER REMOVAL	SQ YD	326
48101200	AGGREGATE SHOULDERS, TYPE B	TON	27
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1
50102400	CONCRETE REMOVAL	CU YD	1.1
50300225	CONCRETE STRUCTURES	CU YD	3.4
50300260	BRIDGE DECK GROOVING	SQ YD	150
50300300	PROTECTIVE COAT	SQ YD	150
50400305	PRECAST PRESTRESSED CONCRETE DECK BEAMS (17" DEPTH)	SQ FT	1344
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2020
50800515	BAR SPLICERS	EACH	42
• 50901050	STEEL RAILING, TYPE SM	FOOT	85
51500100	NAME PLATES	EACH	1
• 63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	300
• 63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4
• 63100167	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)	EACH	4
63200305	STEEL PLATE BEAM GUARD RAIL REMOVAL	FOOT	303
63300205	REMOVAL AND REINSTALLATION OF EXISTING STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	250
63300440	REMOVAL AND REINSTALLATION OF EXISTING TRAFFIC BARRIER TERMINAL, TYPE 5	EACH	4
63304390	TRAFFIC BARRIER TERMINAL REMOVAL, TYPE 1A	EACH	4
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4
67100100	MOBILIZATION	L SUM	1
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	144

80% FEDERAL 20% STATE
CONSTRUCTION CODE X080-2A

ITEM NO.	ITEM	UNIT	TOTAL QUANTITY
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	1808
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	1770
70400100	TEMPORARY CONCRETE BARRIER	FOOT	425
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	350
• 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1808
• 78200410	GUARDRAIL MARKERS, TYPE A	EACH	10
• 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
78300100	PAVEMENT MARKING REMOVAL	SQ FT	664
X5030305	CONCRETE WEARING SURFACE, 5"	SQ YD	150
X7200201	WIDTH RESTRICTION SIGNING	L SUM	1
XX003412	REMOVAL AND REINSTALLATION OF EXISTING TRAFFIC BARRIER TERMINAL, SPECIAL	EACH	4
Z0002900	BASE COURSE (OPTION)	SQ YD	391
Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2
•• Z0030350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2
•• Z0038700	PERMANENT BENCH MARKS	EACH	1

• SPECIALTY ITEM

•• SFTY-3N

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COOMBE-BLOXDORF P.C.
Engineers /Land Surveyors
Springfield, Illinois
Design Firm License No. 184-002703

REVISIONS NAME	DATE

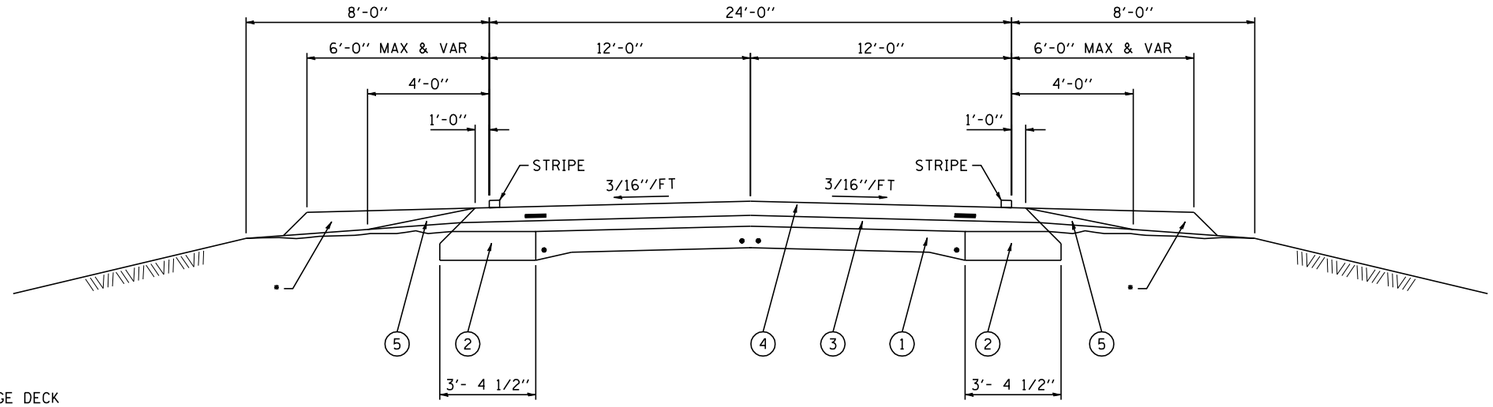
ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
US 136 OVER LONE TREE CREEK
FAP ROUTE 709, SECTION 104BR-1
CHAMPAIGN COUNTY

SCALE:
DATE: 04/19/06
DRAWN BY CFC
CHECKED BY

CONTRACT NO. 70262

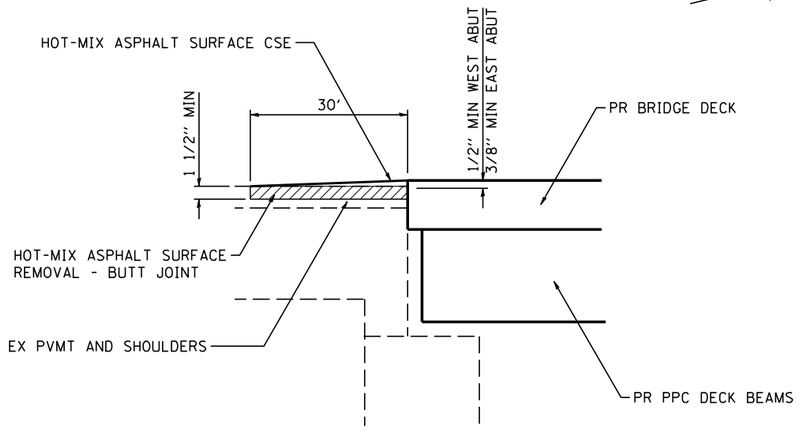
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
709	104BR-1	CHAMPAIGN	24	4
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



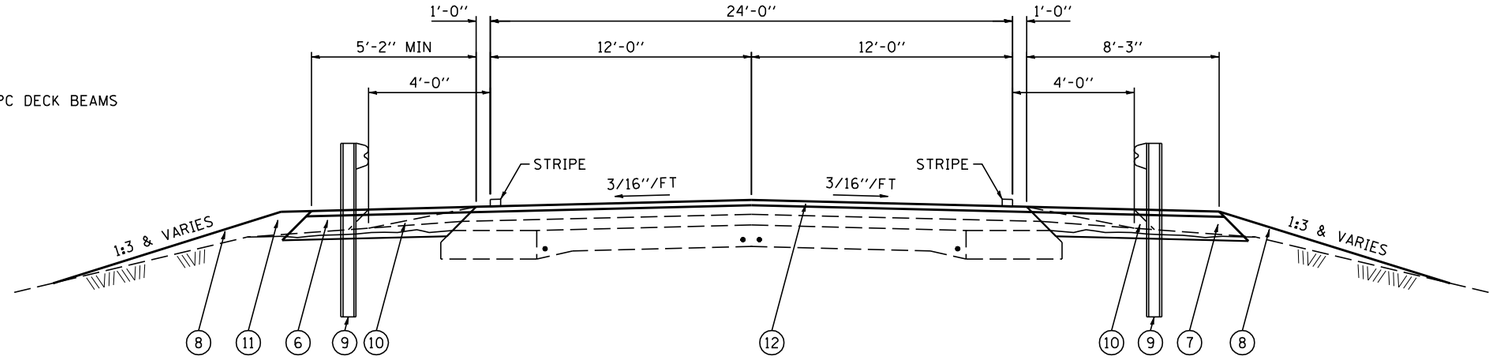
EXISTING TYPICAL SECTION

STA 1454+03 TO STA 1462+07

• BITUMINOUS SHOULDER SEE SCHEDULE



BUTT JOINT DETAIL



PROPOSED TYPICAL SECTION

STA 1454+03 TO STA 1462+07

(1) 9-6-9 P.C.C. PAVEMENT

(2) BASE COURSE WIDENING, 9''

(3) BITUMINOUS CONCRETE BINDER COURSE, 3''

(4) BITUMINOUS CONCRETE SURFACE COURSE, 3 7/8'' & VARIES

(5) AGGREGATE SHOULDERS

(6) PR BASE COURSE (OPTION)
5'-2'' MIN WIDTH. SEE SCHEDULE

(7) PR BASE COURSE (OPTION)
8'-3'' WIDTH. SEE SCHEDULE

(8) PR FURNISHED EXCAVATION

(9) PR GUARDRAIL & TERMINAL SECTIONS. SEE SCHEDULE

(10) PR AGGREGATE SHOULDER, TYPE B (SLOPE 9% MAX) SEE SCHEDULE

(11) EARTH SHOULDER IN ACCORDANCE WITH STANDARD 630301

(12) PR HOT-MIX ASPHALT SURFACE COURSE, 168 LBS/SQ. YD., SEE SCHEDULE

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USER NAME = Roger

REVISIONS NAME	DATE

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Engineers /Land Surveyors
Springfield, Illinois
Design Firm License No. 184-002703

ILLINOIS DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
US 136 OVER LONE TREE CREEK
FAP ROUTE 709, SECTION 104BR-1
CHAMPAIGN COUNTY

SCALE:
DRAWN BY CFC
DATE: 04/19/06
CHECKED BY

CONTRACT NO. 70262

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
709	104BR-1	CHAMPAIGN	24	5
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

AGGREGATE SHOULDERS, TYPE B

LOCATION STA TO STA	AGGREGATE SHLDRS TON
RT STA 1455+45 TO STA 1456+30	8
RT STA 1459+80 TO STA 1459+93	1
LT STA 1456+20 TO STA 1456+90	7
LT STA 1459+20 TO STA 1460+68	11
TOTAL	**27**

BASE COURSE (OPTION)

STATION	WIDTH = 8'-3"	WIDTH VARIES 5'-4" TO 5'-2"	WIDTH = 5'-2"
	SQ YD	SQ YD	SQ YD
RT STA 1456+30 TO STA 1457+85.74	142.8		
RT STA 1458+27.74 TO STA 1459+80	139.6		
LT STA 1456+90 TO STA 1457+04		8.2	
LT STA 1457+04 TO STA 1457+85.74			46.9
LT STA 1458+27.74 TO STA 1459+20			53.0
	282.4	8.2	99.9
TOTAL	**391**		

PAVEDE SHOULDER REMOVAL

LOCATION STA TO STA	REMOVAL SQ YD
RT STA 1456+35.74 TO STA 1457+85.74	100
RT STA 1458+27.28 TO STA 1459+77.28	100
LT STA 1456+90.00 TO STA 1457+85.74	64
LT STA 1458+27.28 TO STA 1459+20.00	62
TOTAL	326

FINAL PROPOSED STEEL PLATE BEAM GUARDRAIL AND TERMINAL SECTIONS

LOCATION	TBT TY 6A EACH	SPBGR TY A FOOT	TBT TY 1, SP• EACH	TERM MKR DIR APP EACH	G.R. MKR. TY A EACH
RT STA 1455+82.67 TO STA 1456+32.67			1	1	
RT STA 1456+32.67 TO STA 1457+45.17		112.5			2
RT STA 1457+45.17 TO STA 1457+88.32	1				1
RT STA 1458+25.16 TO STA 1458+68.31	1				1
RT STA 1458+68.31 TO STA 1459+05.81		37.5			1
RT STA 1459+05.81 TO STA 1459+55.81			1	1	
LT STA 1456+57.67 TO STA 1457+07.67			1	1	
LT STA 1457+07.67 TO STA 1457+45.17		37.5			1
LT STA 1457+45.17 TO STA 1457+88.32	1				1
LT STA 1458+24.91 TO STA 1458+68.06	1				1
LT STA 1458+68.06 TO STA 1459+80.56		112.5			2
LT STA 1459+80.56 TO STA 1460+30.56			1	1	
TOTAL	4	300	4	4	10

•TBT TY 1, SPECIAL (TANGENT) TERMINALS ARE TO BE INITIALLY INSTALLED PRIOR TO STAGE I CONSTRUCTION. USE PAY ITEM XX003412 TO REMOVE AND RE-ERECT THESE TERMINALS WHEN THE PROPOSED SPBGR IS ERECTED.

EXISTING GUARDRAIL REMOVAL & RE-ERECT SCHEDULE

LOCATION	TOTAL BARRIER LENGTH	REMOVAL ONLY 63200305 SPBGR REM	REMOVAL ONLY 63304390 TBT TY 1A•	REMOVAL AND RE-ERECT 63300205 SPBGR	REMOVAL AND RE-ERECT 63300440 TBT TY 5••	REMOVAL AND RE-ERECT XX003412 TBT TY 1 SP
	FOOT	FOOT	EACH	FOOT	EACH	EACH
LT 1456+84.99 TO STA 1457+85.74	100.75	75.75	1	62.5	1	1
LT 1458+27.74 TO STA 1459+28.49	100.75	75.75	1	62.5	1	1
RT 1456+84.99 TO STA 1457+85.74	100.75	75.75	1	62.5	1	1
RT 1458+27.74 TO STA 1459+28.49	100.75	75.75	1	62.5	1	1
TOTAL		303	4	250	4	4

•EXISTING TRAFFIC BARRIER TERMINAL TYPE 1A LENGTH IS 25 FEET.
••EXISTING TRAFFIC BARRIER TERMINAL TYPE 5 LENGTH IS 13.25 FEET.

SHORT TERM PAVEMENT MARKING SCHEDULE

LOCATION STATION TO STATION	LENGTH	SHORT TERM (FT)
4" CENTERLINE STA 1454+03 TO STA 1462+07	804	80
4" EDGE LINE RT STA 1454+03 TO STA 1462+07	804	32
4" EDGE LINE LT STA 1454+03 TO STA 1462+07	804	32
TOTAL		**144**

PAVEMENT MARKING REMOVAL SCHEDULE

LOCATION STATION TO STATION	LENGTH (FT)	REMOVAL (SQ FT)
CENTERLINE STA 1454+03 TO STA 1457+55.70	88.25	37
CENTERLINE STA 1458+57.78 TO STA 1462+07	87.5	37
EDGE LINE RT STA 1454+03 TO STA 1457+55.7	353	148
EDGE LINE LT STA 1454+03 TO STA 1457+55.7	353	148
EDGE LINE RT STA 1458+57.78 TO STA 1462+07	350	147
EDGE LINE LT STA 1458+57.78 TO STA 1462+07	350	147
TOTAL		**664**

WORK ZONE PAVEMENT MARKING REMOVAL SCHEDULE

LOCATION STATION TO STATION	LENGTH (FT)	REMOVAL (SQ FT)
24" STOP BAR STA 1454+03	12	24
24" STOP BAR STA 1462+07	12	24
4" EDGE LINES STA 1454+03 TO STA1462+07 (STAGE I)	804	535.5
4" EDGE LINES STA 1454+03 TO STA1462+07 (STAGE II)	804	535.5
4" CENTERLINE STA 1454+03 TO STA 1462+07 (TEMP & SHORT TERM	804	93.2
4" EDGE LINE RT STA 1454+03 TO STA 1462+07 (SHORT-TERM)	32	11
4" EDGE LINE LT STA 1454+03 TO STA 1462+07 (SHORT-TERM)	32	11
4" EDGE LINE RT STA 1454+03 TO STA 1462+07 (TEMP)	804	267.7
4" EDGE LINE LT STA 1454+03 TO STA 1462+07 (TEMP)	804	267.7
TOTAL		1770

PAINT PAVEMENT MARKING SCHEDULE

LOCATION STATION TO STATION	LENGTH	4" YELLOW SKIP-DASH (FT)	4" WHITE SOLID (FT)
CENTERLINE STA. 1454+03 TO STA. 1462+07	804.00	200.0	
EDGE LINE RT STA. 1454+03 TO STA. 1462+07	804.00		804.0
EDGE LINE LT STA. 1454+03 TO STA. 1462+07	804.00		804.0
TOTAL	**2412.0**	**200.0**	**1608.0**

SUMMARY OF EARTHWORK

LOCATION	EARTH EXCAVATION	EARTH • EXCAVATION ADJUSTED FOR SHRINKAGE	EMBANKMENT	EARTH •• BALANCE WASTE (+) OR SHORTAGE (-)
LEFT SIDE	CU YD	CU YD	CU YD	CU YD
STA 1455+40 TO STA 1457+85	16	12	8	4
BRIDGE OMISSION				
STA 1458+28 TO STA 1460+80	14	10	14	-4
LEFT TOTAL	30	22	22	0
RIGHT SIDE	CU YD	CU YD	CU YD	CU YD
STA 1455+40 TO STA 1457+85	24	18	34	-16
BRIDGE OMISSION				
STA 1458+28 TO STA 1460+80	27	20	8	12
RIGHT TOTAL	51	38	42	-4
PROJECT TOTAL	81	60	64	-4

• AN EARTH SHRINKAGE FACTOR OF 0.25 HAS BEEN APPLIED
•• EARTHWORK SHORTAGE SHALL BE PAID FOR AS FURNISHED EXCAVATION

PERIMETER EROSION BARRIER

STATION TO STATION	FOOT
LT STA 1456+08.71 TO STA 1460+81.05	482.33
RT STA 1455+35.66 TO STA 1459+82.00	468.32
TOTAL	**951**

TEMPORARY PAVEMENT MARKING SCHEDULE

LOCATION STATION TO STATION	LENGTH	4" YELLOW SKIP-DASH (FT)	4" WHITE SOLID (FT)
CENTERLINE STA. 1454+03 TO STA. 1462+07	804.00	200.0	
EDGE LINE RT STA. 1454+03 TO STA. 1462+07	804.00		804.0
EDGE LINE LT STA. 1454+03 TO STA. 1462+07	804.00		804.0
TOTAL	**2412.0**	**200.0**	**1608.0**

RESURFACING

LOCATION	HMA SURF. REM. BUTT-JOINT	BIT. PRIME COAT	HMA SURF. CSE.
	SQ YD	GAL	TON
STA 1457+55.70 TO STA 1457+85.7	131.4	10.5	11.05
STA 1458+27.78 TO STA 1458+57.7	131.4	10.5	11.05
TOTAL	262.8	21	22.1

TEMPORARY DITCH CHECKS

STATION	OFFSET	EACH
1457+60	50' LT	1
1457+60	50' RT	1
1458+40	45' LT	1
1458+40	45' RT	1
TOTAL		**4**

SEEDING, FERTILIZERS, AND MULCH

LOCATION	SEEDING CLASS 2	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	MULCH METHOD 2	TEMPORARY EROSION CONTROL SEEDING
	ACRE	POUND	POUND	POUND	ACRE	POUND
STA 1455+40 TO STA 1460+80 MINUS BRIDGE OMISSION	0.25	23	23	23	0.25	25
TOTAL	0.25	23	23	23	0.25	25

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USER NAME = Angela

COOMBE–BLOXDORF P.C.
Engineers / Land Surveyors
Springfield, Illinois
Design Firm License No. 184-002703

REVISIONS NAME	DATE

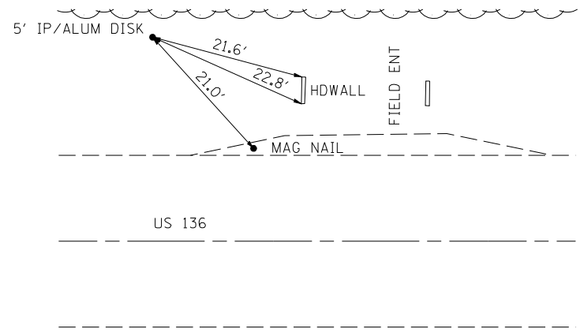
ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
US 136 OVER LONE TREE CREEK
FAP ROUTE 709, SECTION 104BR-1
CHAMPAIGN COUNTY

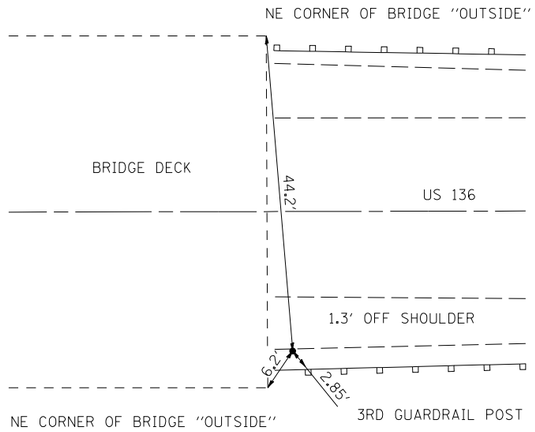
SCALE:
DATE: 04/19/06
DRAWN BY CFC
CHECKED BY

CONTRACT NO. 70262

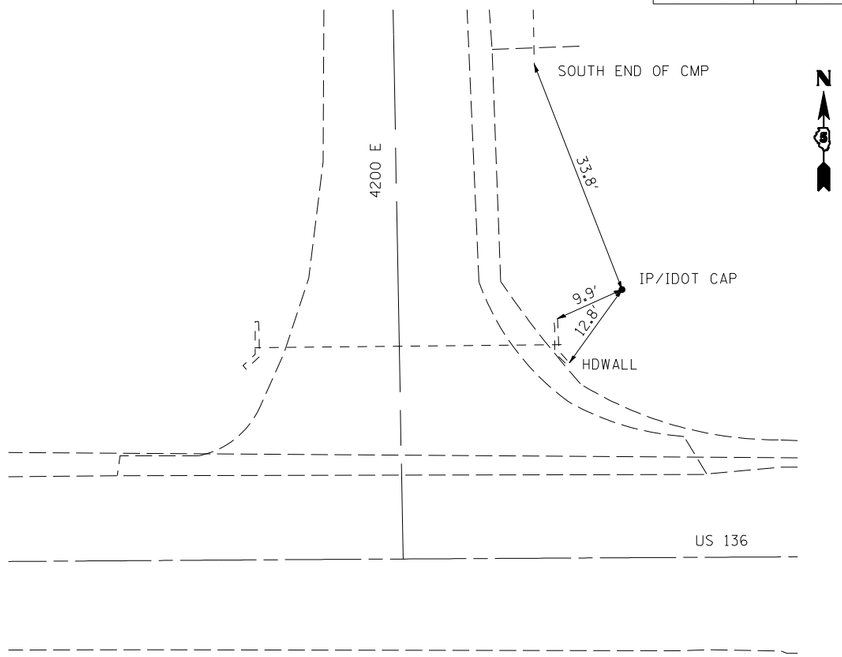
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
709	104BR-1	CHAMPAIGN	24	6
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



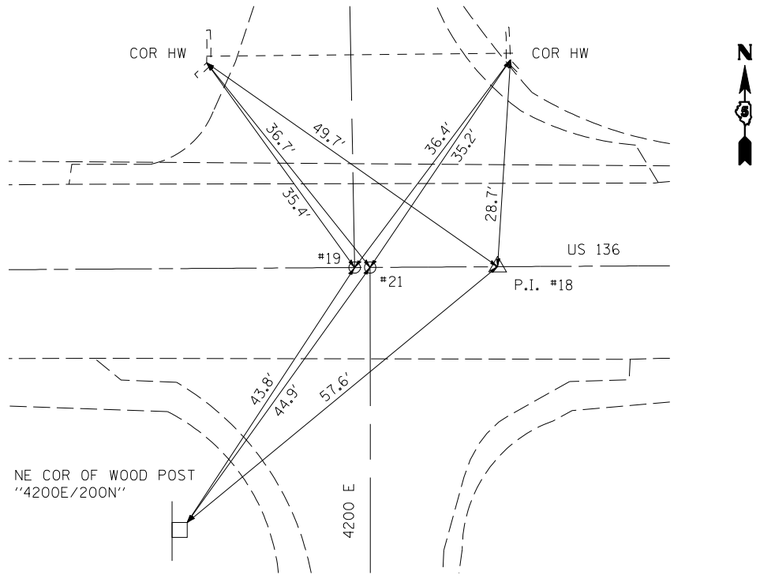
T.S. 400
STA 1469+72.743
33.1' LT



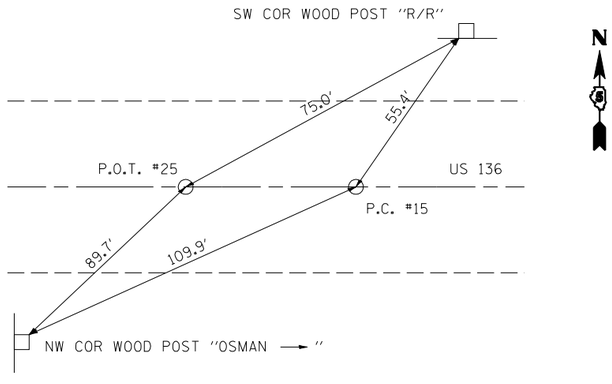
T.S. 401
STA 1458+33.84
20.37' RT



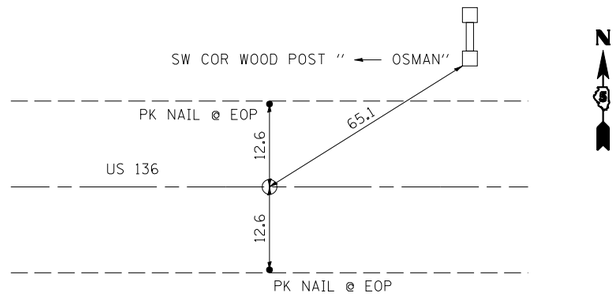
T.S. 402
STA 1450+60.30
37.35' LT



P.I. #18 STA 1450+50.00
AND INTERSECTION C.R. 4200 E / US 136



P.O.T. #25 STA 1448+24.43
AND P.C. #15 STA 1448+45.00



PT #16 STA 1452+55.00

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USER NAME = dwg=b

COOMBE-BLOXDORF P.C.
Engineers /Land Surveyors
Springfield, Illinois
Design Firm License No. 184-002703

REVISIONS NAME	DATE

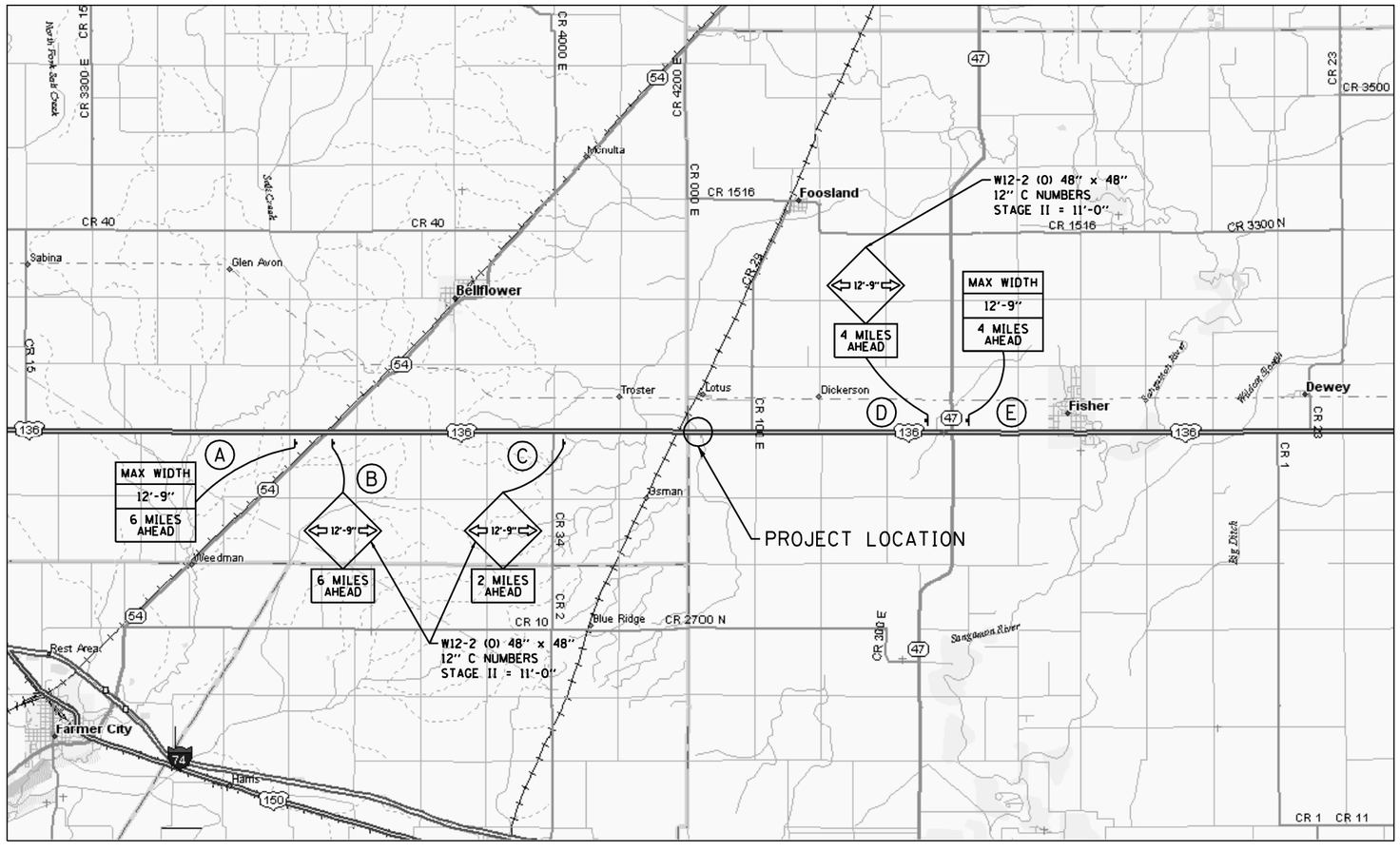
ILLINOIS DEPARTMENT OF TRANSPORTATION

CROSS TIES
US 136 OVER LONE TREE CREEK
FAP ROUTE 709, SECTION 104BR-1
CHAMPAIGN COUNTY

SCALE:
DRAWN BY CFC
DATE: 04/19/06
CHECKED BY

CONTRACT NO. 70262

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
709	104BR-1	CHAMPAIGN	24	7
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



SIGN PLACEMENT

(A) ERECT BESIDE GIBSON CITY, FARMER CITY SIGN
STAGE II = 11'-0"

(B) ERECT BESIDE EAST US 136 SIGN

(C) ERECT 100' EAST OF CH 3

(D) ERECT BESIDE WEST US 136 SIGN

(E) ERECT BESIDE MAHOMET, GIBSON CITY SIGN
STAGE II = 11'-0"

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USER NAME = kwgrob

REVISIONS	
NAME	DATE

COOMBE-BLOXDORF P.C.
Engineers / Land Surveyors
Springfield, Illinois
Design Firm License No. 184-002703

ILLINOIS DEPARTMENT OF TRANSPORTATION

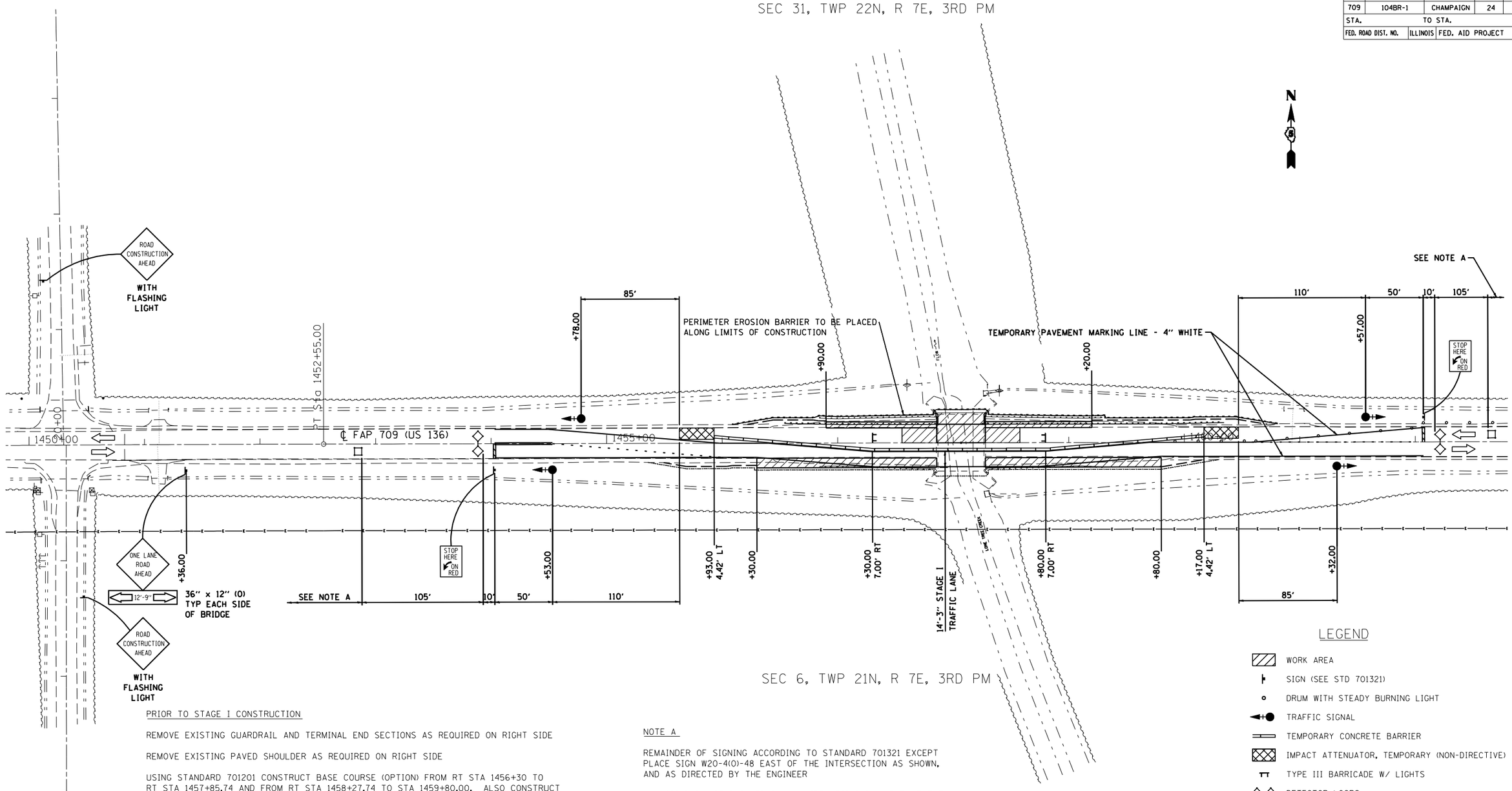
MAX WIDTH SIGNING
US 136 OVER LONE TREE CREEK
FAP ROUTE 709, SECTION 104BR-1
CHAMPAIGN COUNTY

SCALE: N.T.S.
DRAWN BY CFC
DATE: 04/19/06
CHECKED BY

CONTRACT NO. 70262

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
709	104BR-1	CHAMPAIGN	24	8
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SEC 31, TWP 22N, R 7E, 3RD PM



SEC 6, TWP 21N, R 7E, 3RD PM

PRIOR TO STAGE I CONSTRUCTION

REMOVE EXISTING GUARDRAIL AND TERMINAL END SECTIONS AS REQUIRED ON RIGHT SIDE

REMOVE EXISTING PAVED SHOULDER AS REQUIRED ON RIGHT SIDE

USING STANDARD 701201 CONSTRUCT BASE COURSE (OPTION) FROM RT STA 1456+30 TO RT STA 1457+85.74 AND FROM RT STA 1458+27.74 TO STA 1459+80.00. ALSO CONSTRUCT BASE COURSE (OPTION) FROM LT STA 1456+90.00 TO LT STA 1457+85.74 AND FROM LT STA 1458+27.74 TO LT STA 1459+20.00

REINSTALL GUARDRAIL AND TYPE 5 END SECTION AND INSTALL TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL (TANGENT) TO END OF EXISTING GUARDRAIL

STAGE I SEQUENCE OF CONSTRUCTION

PLACE MAX WIDTH SIGNS AS SHOWN ON SHEET 7 OF 24

PLACE STAGE I TRAFFIC CONTROL AS SHOWN AND ACCORDING TO STANDARD 701321

DIRECT TRAFFIC TO STAGE I ROADWAY AND COMPLETE STAGE I STRUCTURAL WORK, PAVEMENT RESURFACING, GUARDRAIL REMOVAL, SHOULDER REMOVAL, CONSTRUCT PROPOSED GUARDRAIL ON LEFT SIDE

NOTE A

REMAINDER OF SIGNING ACCORDING TO STANDARD 701321 EXCEPT PLACE SIGN W20-4(O)-48 EAST OF THE INTERSECTION AS SHOWN, AND AS DIRECTED BY THE ENGINEER

ALL SIGNING, NOT INCLUDING MAX WIDTH SIGNING, AND PAVEMENT MARKING SHOWN OR ACCORDING TO STANDARD 701321 IS INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION STANDARD 701321

LEGEND

- WORK AREA
- SIGN (SEE STD 701321)
- DRUM WITH STEADY BURNING LIGHT
- TRAFFIC SIGNAL
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATOR, TEMPORARY (NON-DIRECTIVE)
- TYPE III BARRICADE W/ LIGHTS
- DETECTOR LOOPS
- DIRECTION OF TRAFFIC

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USER NAME = Reg#6

REVISIONS NAME	DATE

COOMBE-BLOXDORF P.C.
Engineers /Land Surveyors
Springfield, Illinois
Design Firm License No. 184-002703

ILLINOIS DEPARTMENT OF TRANSPORTATION

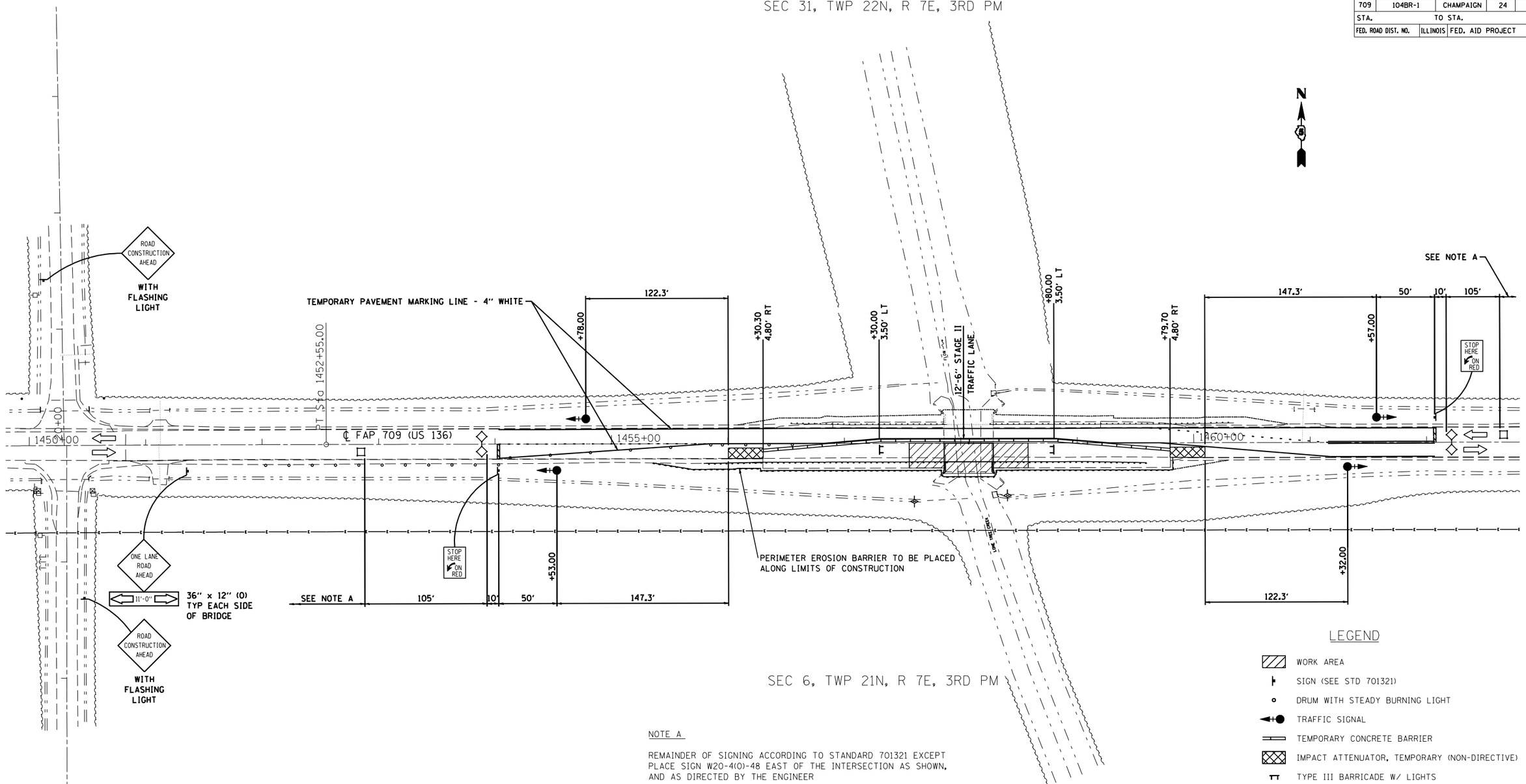
STAGE I TRAFFIC CONTROL PLAN
US 136 OVER LONE TREE CREEK
FAP ROUTE 709, SECTION 104BR-1
CHAMPAIGN COUNTY

SCALE: 1"=40'
DATE: 04/19/06
DRAWN BY CFC
CHECKED BY REG

CONTRACT NO. 70262

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
709	104BR-1	CHAMPAIGN	24	9
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SEC 31, TWP 22N, R 7E, 3RD PM



SEC 6, TWP 21N, R 7E, 3RD PM

LEGEND

- WORK AREA
- SIGN (SEE STD 701321)
- DRUM WITH STEADY BURNING LIGHT
- TRAFFIC SIGNAL
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATOR, TEMPORARY (NON-DIRECTIVE)
- TYPE III BARRICADE W/ LIGHTS
- DETECTOR LOOPS
- DIRECTION OF TRAFFIC

NOTE A

REMAINDER OF SIGNING ACCORDING TO STANDARD 701321 EXCEPT PLACE SIGN W20-4(O)-48 EAST OF THE INTERSECTION AS SHOWN, AND AS DIRECTED BY THE ENGINEER

ALL SIGNING, NOT INCLUDING MAX WIDTH SIGNING, AND PAVEMENT MARKING SHOWN OR ACCORDING TO STANDARD 701321 IS INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION STANDARD 701321

STAGE II SEQUENCE OF CONSTRUCTION

PLACE MAX WIDTH SIGN AS SHOWN ON SHEET 7 OF 24

RELOCATE BARRIER WALL AND IMPACT ATTENUATORS AND INSTALL OTHER TRAFFIC CONTROL MEASURES FOR STAGE II AS REQUIRED BY STANDARD 701321

ONCE TRAFFIC IS DIRECTED TO STAGE II TRAFFIC LANES COMPLETE STAGE II STRUCTURAL WORK, PAVEMENT AND SHOULDER RESURFACING, GUARDRAIL REMOVAL, CONSTRUCT PROPOSED TYPE 6A END SECTION AND SPBGR AND REINSTALL TBT TY 1, SPECIAL (TANGENT)

COOMBE-BLOXDORF P.C.
Engineers /Land Surveyors
Springfield, Illinois
Design Firm License No. 184-002703

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STAGE II TRAFFIC CONTROL PLAN
US 136 OVER LONE TREE CREEK
FAP ROUTE 709, SECTION 104BR-1
CHAMPAIGN COUNTY

SCALE: 1"=40' DRAWN BY CFC
DATE: 04/19/06 CHECKED BY REG

PLOT DATE = 10/17/2006
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USER NAME = kwarda

11/15/2006

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
709	104BR-1	CHAMPAIGN	24	10
STA. 1455+00	TO STA. 1461+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 70262

PLAN
SURVEYED BY
DRAWN BY
ALIGNMENT CHECKED BY
TOP OF W CHECKED BY
NOTE BOOK
NO.
DATE

SEC 31, TWP 22N, R 7E, 3RD PM

EXISTING S.N. 010-0058
PCPS 17" DECK BEAM BRIDGE
CLEAR SPAN = 40'-0"
STA 1458+06.74
SKEW = 0°
SUPERSTRUCTURE TO BE REPLACED
SEE BRIDGE PLANS

FLOW

PR SUPERSTRUCTURE REMOVAL AND REPLACEMENT SN 010-0058 CONCRETE WEARING SURFACE SEE BRIDGE PLANS FOR DETAILS

CONSTRUCTION LIMITS

PR BASE COURSE (OPTION) 5'-2" WIDE MIN SEE SCHEDULE

BK EX W ABUT STA 1457+85.24

PR STEEL PLATE BEAM GUARDRAIL AND TERMNINAL SECTIONS (SEE SCHEDULE FOR DETAILS)

AGG SHLDR

+90.00

+04.00

REMOVE EX SPBGR

EX APPROACH PVMT TO REMAIN

+20.00

PR BASE COURSE (OPTION) 5'-2" WIDE MIN SEE SCHEDULE

PR STEEL PLATE BEAM GUARDRAIL AND TERMNINAL SECTIONS (SEE SCHEDULE FOR DETAILS)

REMOVE EX SPBGR

AGG SHLDR

℄ FAP 709 (U.S. 136)

1455+00 | 1456 | 1457 | 1458 | 1459 | 1460+00 | 1461

BEGIN PROJECT PR BUTT JOINT STA 1457+55.70

END PROJECT PR BUTT JOINT STA 1458+57.78

AGG SHLDR

+30.00

REMOVE EX SPBGR

PR HOT-MIX ASPHALT SURFACE COURSE, 1 1/2"

PR HOT-MIX ASPHALT SHOULDER OVERLAY

42'-1" CONC WEARING SURF

PR HOT-MIX ASPHALT SURFACE COURSE, 1 1/2"

PR HOT-MIX ASPHALT SHOULDER OVERLAY

REMOVE EX SPBGR

+80.00

AGG SHLDR

75'

PR STEEL PLATE BEAM GUARDRAIL AND TERMNINAL SECTIONS (SEE SCHEDULE FOR DETAILS)

PR BASE COURSE (OPTION) 8'-3" WIDE SEE SCHEDULE

EX APPROACH PVMT TO REMAIN

+85.70

+27.78

BK EX E ABUT STA 1458+28.24

PR STEEL PLATE BEAM GUARDRAIL AND TERMNINAL SECTIONS (SEE SCHEDULE FOR DETAILS)

CONSTRUCTION LIMITS

BENCHMARK: 4686-2
CHISELED SQUARE ON SOUTHWEST ABUTMENT OF STRUCTURE 010-0058
ELEVATION = 743.83

LONE TREE CREEK

ABANDONED EASTERN ILLINI ELECTRIC COOPERATIVE 7.2 KV THREE PHASE DIRECT BURIAL CABLE

PR BASE COURSE (OPTION) 8'-3" WIDE SEE SCHEDULE

0' 20' 40' 60'

SEC 6, TWP 21N, R 7E, 3RD PM

PROFILE
SURVEYED BY
DRAWN BY
GRADES CHECKED BY
STAK. NOTED BY
STRUCTURE NOTATNS CHKD BY
NOTE BOOK
NO.
DATE

VPI STA. 1457+55.70 MATCH EX. EL 744.13

VPI STA. 1457+85.70 EL 744.18

VPI STA. 1458+27.78 EL 744.18

VPI STA. 1458+57.78 MATCH EX. EL 744.15

EXISTING OPENING @ CENTERLINE

NOTE:
PR PROFILE GRADE SAME AS EXISTING

745 | 740 | 735 | 730 | 725 | 720

744.14 744.18

744.14 744.18

CENTERLINE ELEVATIONS	743.17	743.33	743.48	743.63	743.77	743.90	744.04	744.08	744.11	744.12	744.13	744.14	744.14	744.15	744.16	744.13	744.11	744.08	744.04	743.96	743.88	743.75	743.61	743.43	743.26

1455+00 | 1455+50 | 1456+00 | 1456+50 | 1457+00 | 1457+50 | 1458+00 | 1458+50 | 1459+00 | 1459+50 | 1460+00 | 1460+50 | 1461+00

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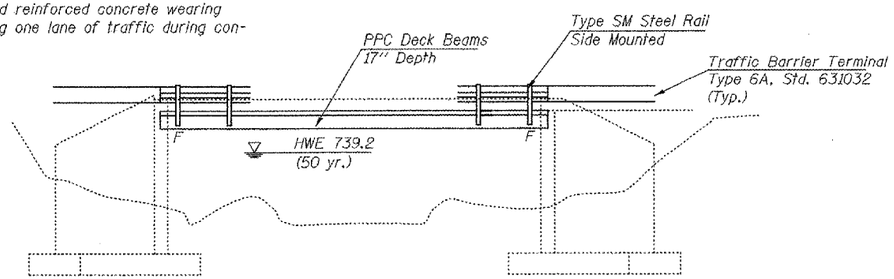
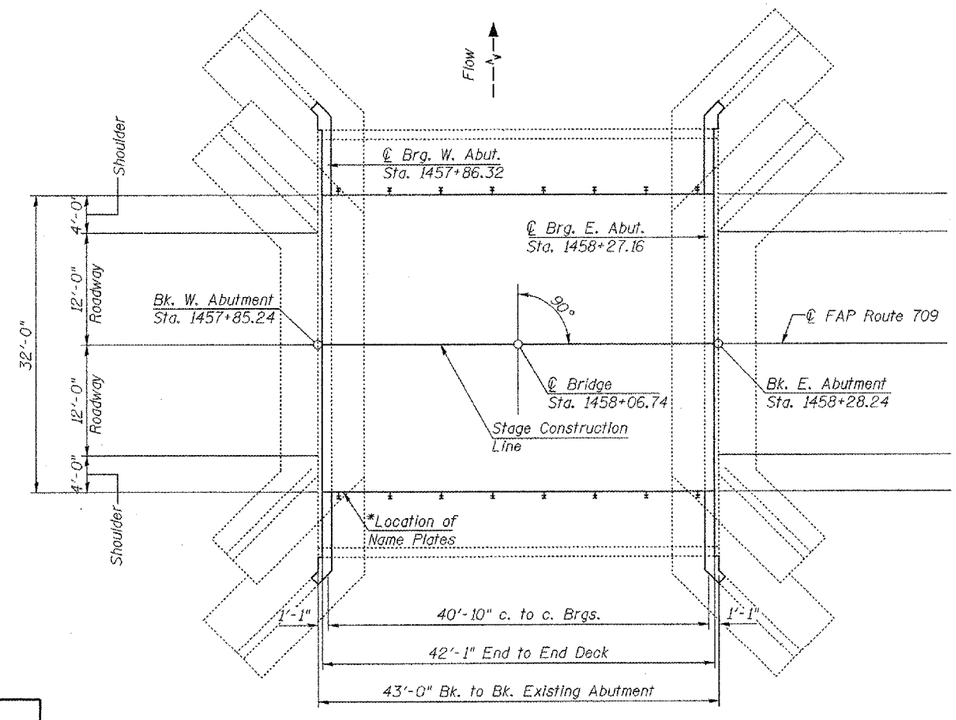
Benchmark: Chiseled "□" on S.W. corner of southwest abut. Elev. 743.83

Existing Structure: SN 010-0058 Built 1932 Sta. 1458+09.00 as SBI Route 119. Rebuilt 1971 Sta. 1458+06.74 as FA Route 119, Section 104BR. Structure is single span precast prestressed concrete deck beam superstructure 43'-0" Bk. to Bk. abutments and 46'-0" out to out on closed abutments. Bridge superstructure shall be removed and replaced with new beams and reinforced concrete wearing surface. Stage construction will be utilized allowing one lane of traffic during construction.

No salvage



ELEVATION



PLAN

STATION 1458+06.74
RE-BUILT 20___ BY
STATE OF ILLINOIS
F.A.P. RTE 709 SEC. 104BR-1
LOADING HS20
STRUCTURE NO. 010-0058

NAME PLATE

See Std. 515001

*The existing name plate shall be cleaned and relocated next to the new name plate. Both name plates shall be attached to the backside of the 8" rail element in the location shown. Cost included with Name Plates.

LOADING HS20-44

No allowance for future wearing surface

DESIGN SPECIFICATIONS

2002 AASHTO

DESIGN STRESSES

FIELD UNITS

f'_c = 5,000 psi (Concret Wearing Surface)
f'_c = 3,500 psi (Concrete Structures)
f_y = 60,000 psi (reinforcement)

PRECAST PRESTRESSED UNITS

f'_c = 5,000 psi
f'_{ci} = 4,000 psi
f'_s = 270,000 psi (½" ϕ Low Relaxation Strands)
f_{si} = 201,960 psi (½" ϕ Low Relaxation Strands)

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Removal of Existing Superstructures	Each	1
Concrete Removal	Cu. Yd.	1.1
Concrete Structures	Cu. Yd.	3.4
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	1344
Reinforcement Bars, Epoxy Coated	Pound	2020
Steel Railing, Type SM	Foot	85
Name Plates	Each	1
Bar Splicers	Each	42
Concrete Wearing Surface, 5"	Sq. Yd.	150
Protective Coat	Sq. Yd.	150
Bridge Deck Grooving	Sq. Yd.	150

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 709	104BR-1	CHAMPAIGN	24	11
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 1
8 SHEETS

Contract #70262

GENERAL NOTES

Plan dimensions and details relative to existing plans are subject to routine 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 based upon the unit price bid for the work.

The cut strands at each beam end shall be given two coats of zinc dust spray or paint meeting the requirements of ASTM A780. The zinc dust spray or paint shall be applied before corrosion appears and allowed to dry according to the manufacturer's specifications prior to another coat of zinc. A concrete sealer meeting the requirements of Section 587 of the Standard Specifications shall be applied to the exterior face and 9" in on the underside of the fascia beams. (Top surface, to which waterproofing will be applied, shall be kept free of sealer). The sealer shall be applied after visible crack growth has subsided. This work shall be performed by the producer and included with the cost of the beam.

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

No drilling will be permitted into the existing precast deck beams to be used for Stage I traffic lane or the proposed deck beams.

If the Contractor's procedure for existing beam removal or placement of new beams involves placement of cranes or other heavy equipment on new beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, prepared and sealed by an Illinois Licensed Structural Engineer, verifying that the equipment and procedure used will not overstress the new beams. To distribute load to multiple beams and protect the concrete, in all cases a double layer mat of heavy timbers shall be used at all times under crane tracks or wheels and any outriggers in the down position. If necessary, shims shall be used under the crane mat to ensure uniform contact with the underlying beams. Prior to placement of the timber mats the following shall be done: placement and tightening of transverse tie assemblies, grouting and curing the dowel rods 24 hours minimum and grouting and curing the shear keys.

Any damage done to the bridge during beam removal shall be repaired by the Contractor. Cost to be included in the cost of Removal of Existing Superstructures.

Concrete Removal and Structural Repair of Concrete shall occur during its respective stage construction and prior to placement of the new deck beams.

Reinforcement bars designated (E) shall be epoxy coated.

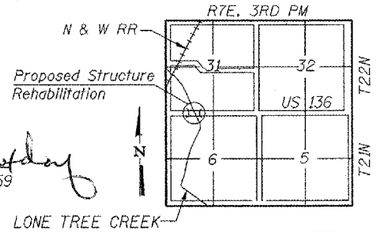
Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.

INDEX OF SHEETS

1) General Plan & Elevation
2) Staged Construction
3) Temporary Concrete Barrier For Staged Construction
4) Superstructure
5) Beam Details
6) Type SM Steel Bridge Rail Side Mounted With Concrete Wearing Surface
7) Abutment Details
8) Bar Splicer Assembly Details

LICENSED STRUCTURAL ENGINEER
MARY COOMBE BLOXDORF
4859
SPRINGFIELD
STATE OF ILLINOIS

ILLINOIS STRUCTURAL NO. 4859
EXPIRES: 11/30/08
DATE: 12-5-06



LOCATION SKETCH

ILLINOIS DEPARTMENT OF TRANSPORTATION

SHEET TITLE
GENERAL PLAN & ELEVATION

PROJECT
US ROUTE 136 OVER LONE TREE CREEK
FAP ROUTE 709 SECTION 104BR-1
CHAMPAIGN COUNTY
STATION 1458+06.74
STRUCTURE NUMBER 010-0058

PROJECT NO. 03061-8
SCALE
DATE 12/04/06
DRAWN BY TFG
CHECKED BY BD/REG/MCB
DRAWING NO. 1

COOMBE-BLOXDORF P.C.
Engineers / Land Surveyors
Springfield, Illinois
Design Firm License No. 184-002703

OF 8 SHTS

PLOT DATE = 12/04/2006
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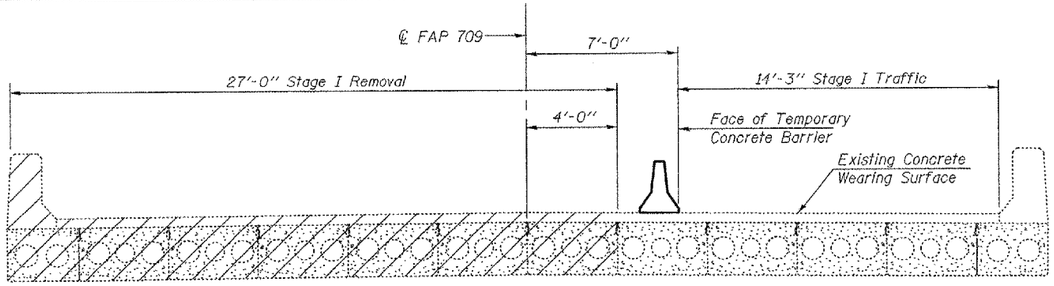
USER NAME = TFG

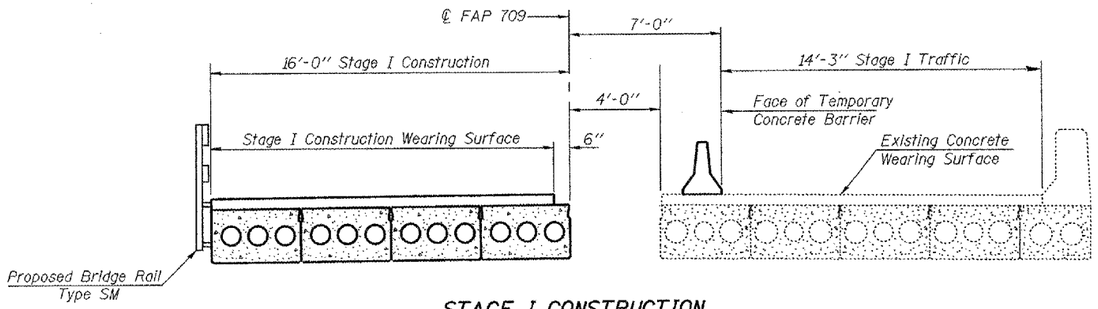
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 709	104BR-1	CHAMPAIGN	24	12
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 2
8 SHEETS

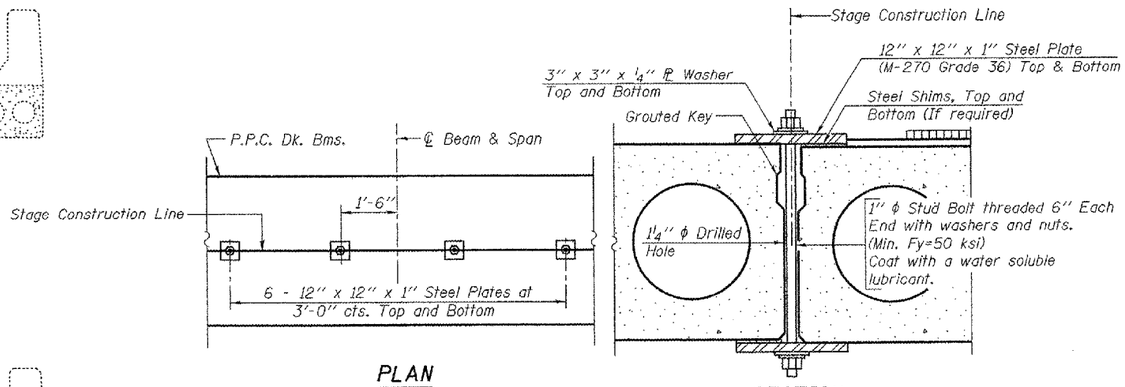
Contract #70262



STAGE I REMOVAL
(Looking East)



STAGE I CONSTRUCTION
(Looking East)

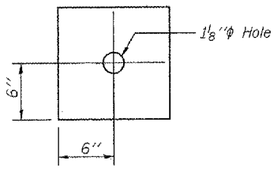


PLAN

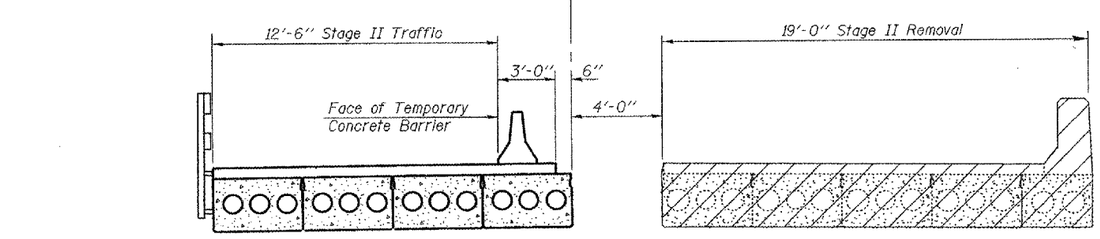
SECTION

SHEAR KEY CLAMPING DETAILS AT STAGE CONSTRUCTION JOINT

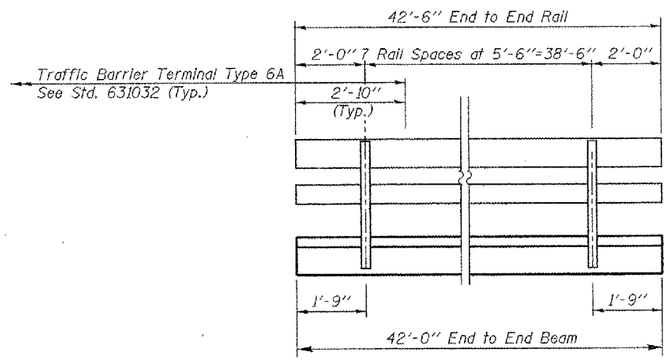
Cost of clamping device included in Precast Prestressed Concrete Deck Beams.



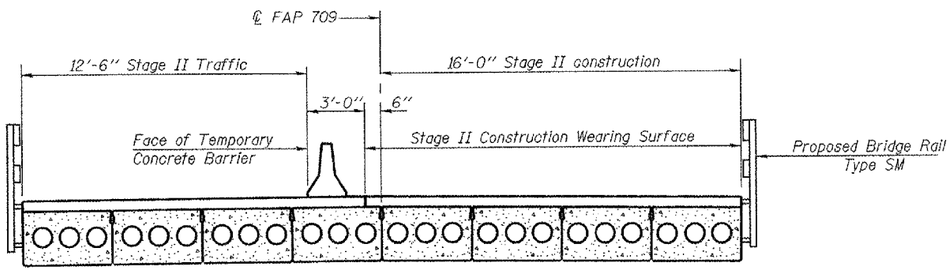
CLAMPING PLATE



STAGE II REMOVAL
(Looking East)



RAIL POST SPACING
(Showing Outside Face of Railing)



STAGE II CONSTRUCTION
(Looking East)

NOTES

Hatched area indicates Removal of Existing Superstructures.
Removal of Existing concrete wearing surface and parapet are included with Removal of Existing Superstructures.
See Roadway plans for quantity of Temporary Concrete Barrier.

ILLINOIS DEPARTMENT OF TRANSPORTATION

SHEET TITLE
STAGED CONSTRUCTION

PROJECT
US ROUTE 136 OVER LONE TREE CREEK
FAP ROUTE 709 SECTION 104BR-1
CHAMPAIGN COUNTY
STATION 1458+06.74
STRUCTURE NUMBER 010-0058

PROJECT NO. 03061-B
SCALE
DATE 12/04/06
DRAWN BY TFG
CHECKED BY BD/REG/MCB
DRAWING NO. 2
OF 8 SHTS

COOMBE-BLOXDORF P.C.
Engineers / Land Surveyors
Springfield, Illinois
Design Firm License No. 184-002703

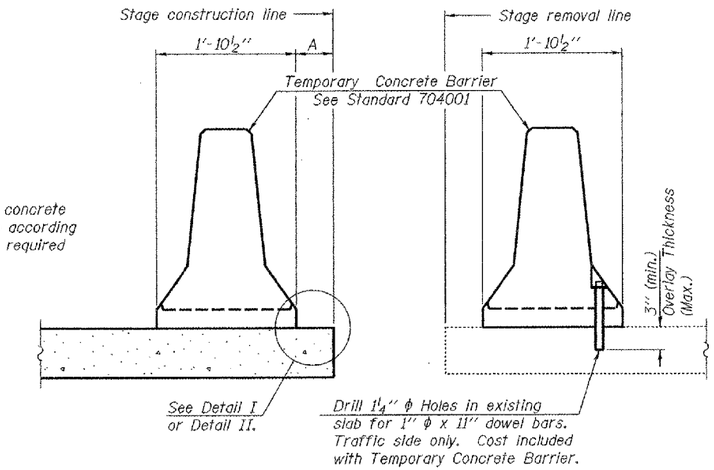
PLOT DATE = 12/04/2006
FILE NAME = ...\bri-010-0058-sht-2-stage-const.dgn
PLOT SCALE = 0.0000 '/' IN.
USER NAME = TFG

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 709	104BR-1	CHAMPAIGN	24	13
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 3
8 SHEETS

Contract #70262

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



NEW SLAB

EXISTING SLAB

SECTIONS THRU SLAB

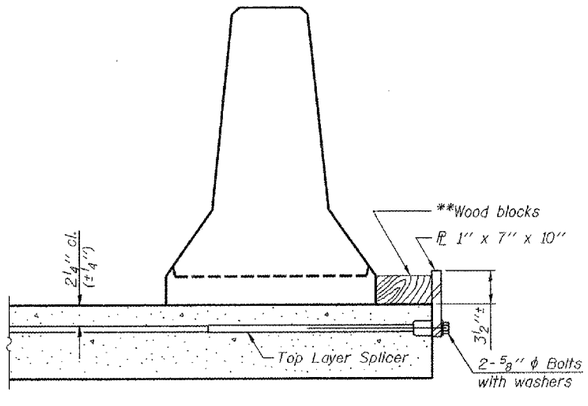
NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel ℙ to the top layer of couplers with 2-⅝" ϕ bolts screwed to coupler at approximate ℄ of each barrier panel.

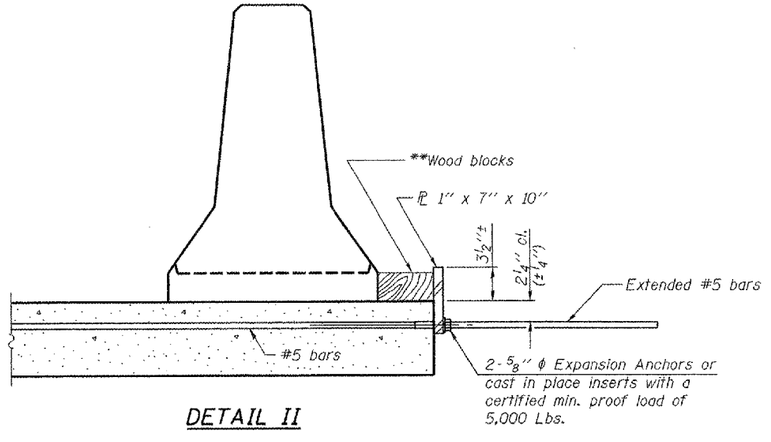
Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" steel ℙ to the concrete slab with 2-⅝" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate ℄ of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier.

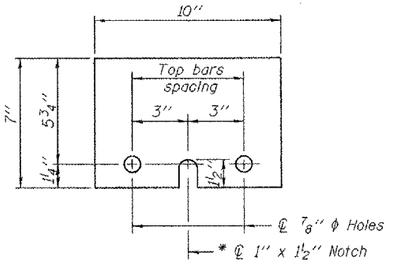
The 1" x 7" x 10" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.



DETAIL I



DETAIL II



STEEL RETAINER ℙ 1" x 7" x 10"

* Required only with Detail II

** Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

ILLINOIS DEPARTMENT OF TRANSPORTATION

SHEET TITLE
TEMPORARY CONCRETE BARRIER
FOR STAGE CONSTRUCTION

PROJECT
US ROUTE 136 OVER LONE TREE CREEK
FAP ROUTE 709 SECTION 104BR-1
CHAMPAIGN COUNTY
STATION 1458+06.74
STRUCTURE NUMBER 010-0058

PROJECT NO. 03061-8
SCALE
DATE 12/04/06
DRAWN BY TFC
CHECKED BY BD/REG/MCB
DRAWING NO. 3 OF 8 SHTS

COOMBE-BLOXDORF P.C.
Engineers / Land Surveyors
Springfield, Illinois
Design Firm License No. 184-002703

R-27

11-1-06

PLOT DATE = 12/04/2006
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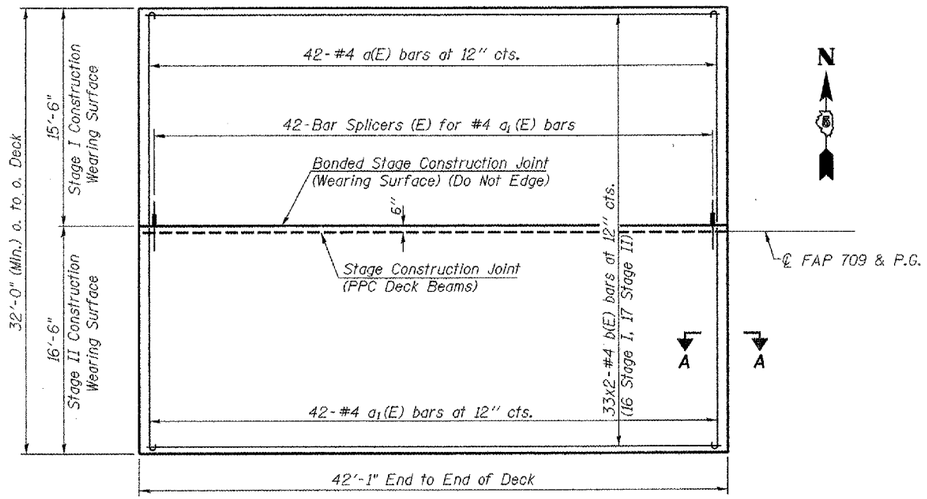
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 709	104BR-1	CHAMPAIGN	24	14
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

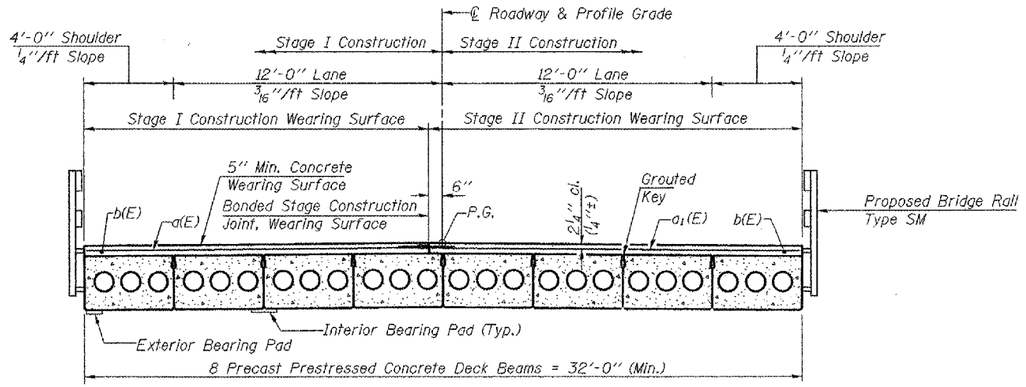
SHEET NO. 4
8 SHEETS

Contract #70262



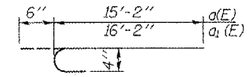
PLAN

Concrete Wearing Surface



CROSS SECTION

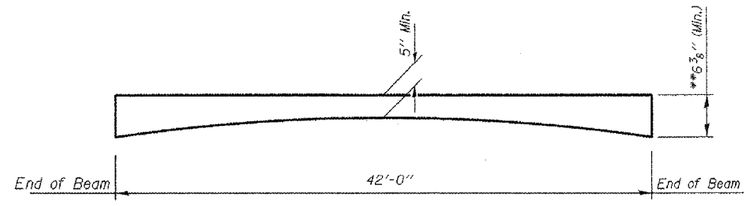
(Looking East)



a(E) & a1(E) BARS

MIN. BAR LAP

#4 bar=1'-4"



**Based on 1 3/8" Camber

REINFORCED CONCRETE WEARING SURFACE CAMBER DIAGRAM

SUPERSTRUCTURE BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
a(E)	42	#4	15'-8"	⊂
a1(E)	42	#4	16'-8"	⊂
b(E)	66	#4	21'-8"	—
Conc. Wearing Surface. 5"			Sq. Yd.	150
Reinforcement Bars (Epoxy Coated)			Pound	1860
Bar Splicers			Each	42

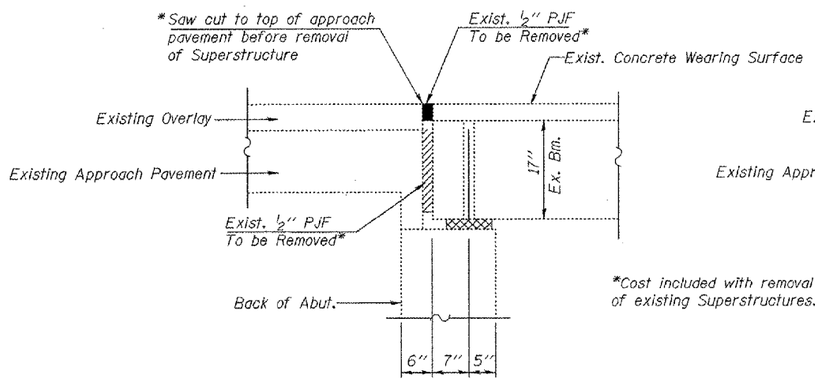
NOTES

Bars indicated thus 33x2-#4 etc. indicates 33 lines of bars with 2 lengths per line.

After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure minimum 24 hours prior to grouting shear keys.

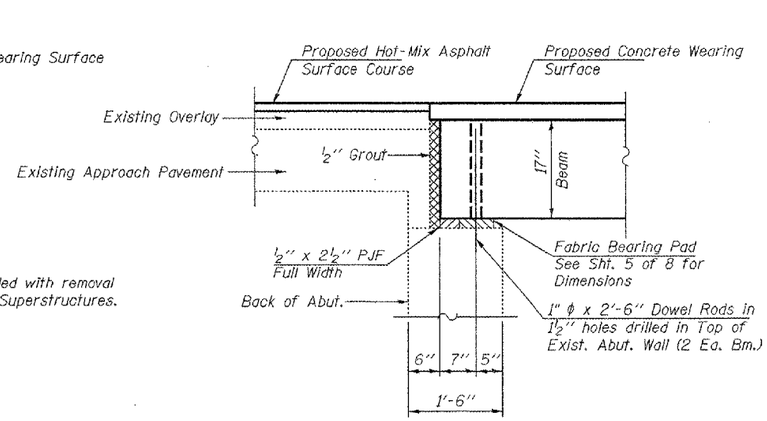
See sheet 8 of 8 for Bar Splicer details.

See sheet 2 and 6 of 8 for rail details.



EXISTING SECTION AT ABUTMENT

*Cost included with removal of existing Superstructures.



SECTION A-A

ILLINOIS DEPARTMENT OF TRANSPORTATION

SHEET TITLE: SUPERSTRUCTURE

PROJECT: US ROUTE 136 OVER LONE TREE CREEK
FAP ROUTE 709 SECTION 104BR-1
CHAMPAIGN COUNTY
STATION 1458+06.74
STRUCTURE NUMBER 010-0058

PROJECT NO. 03061-8
SCALE
DATE 12/04/06
DRAWN BY TFG
CHECKED BY BD/REG/MCB
DRAWING NO. 4

COOMBE-BLOXDORF P.C.
Engineers / Land Surveyors
Springfield, Illinois
Design Firm License No. 184-002703

OF 8 SHTS

PLOT DATE = 12/04/2006
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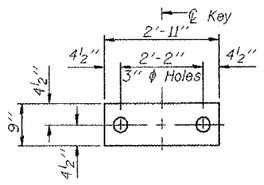
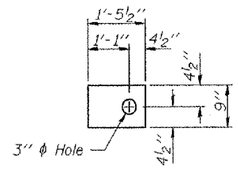
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 709	104BR-1	CHAMPAIGN	24	15
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 5
8 SHEETS

Contract #70262

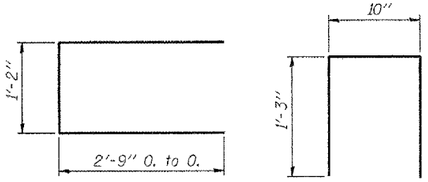


FABRIC BEARING PAD
(Interior) (14 required)



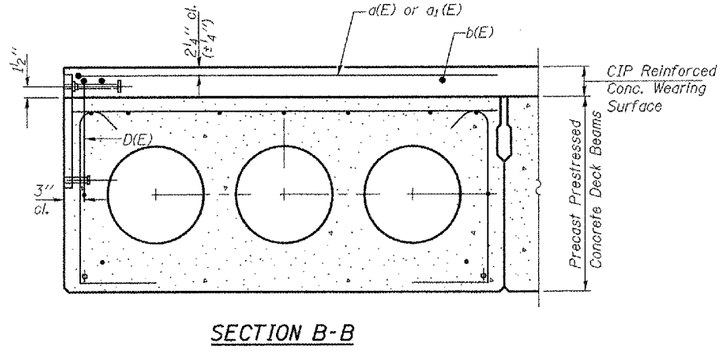
FABRIC BEARING PAD
(Exterior) (4 required)

FIXED

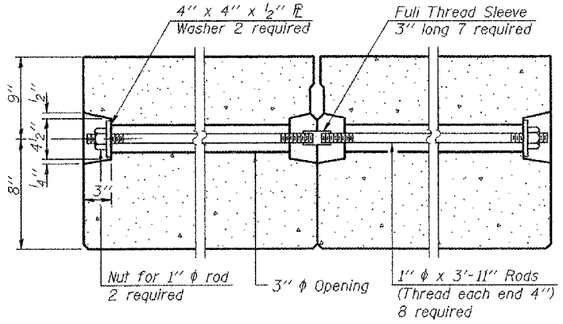


BAR U

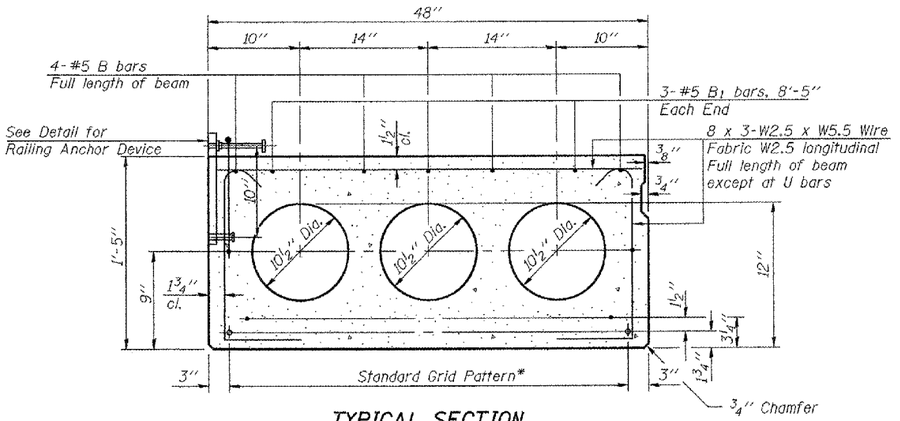
BAR D(E)



SECTION B-B



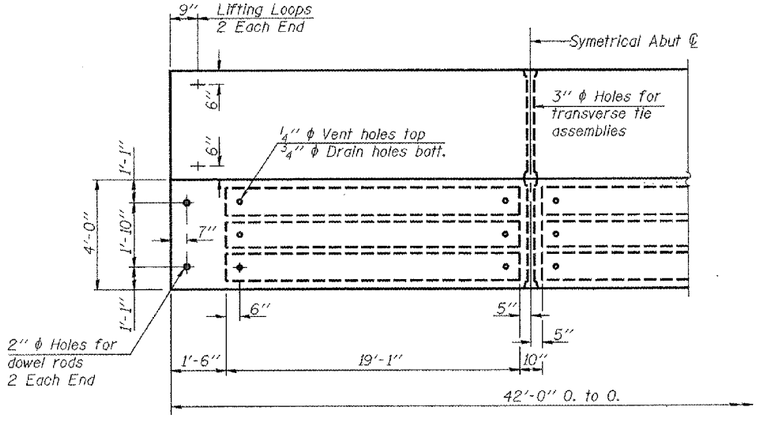
TYPICAL TRANSVERSE TIE ASSEMBLY



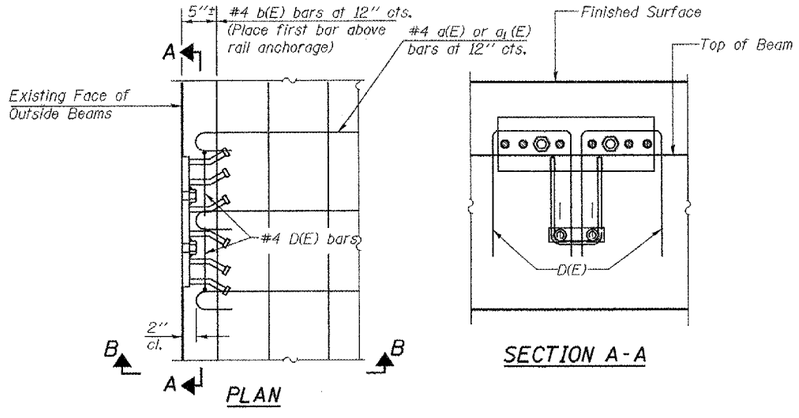
TYPICAL SECTION

19-½" ϕ Strands, Each Strand Stressed to 30,900 Lbs.
13-Strands 1¾" up, 4-Strands 3¼" up, 2-Strands 12" up.

Note:
Place strands symmetrically about ℄ of beam.



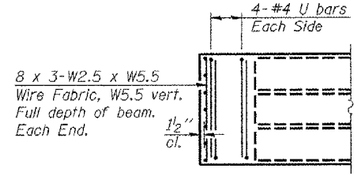
PLAN



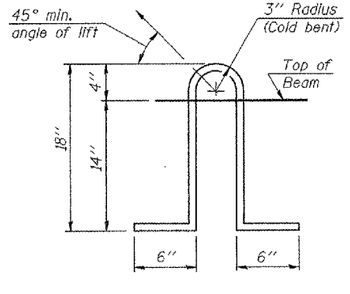
PLAN

SECTION A-A

RAILING ANCHOR DEVICE DETAIL



END PLAN



LIFTING LOOP DETAIL

*TRANSVERSE STRAND PLACEMENT GUIDELINES

1) Place strands symmetrically about centerline of beam.
2) The minimum distance from center to center of strands in all directions shall be 2".
3) The minimum clearance from strand to dowel hole shall be ½".
4) The minimum clearance from strand to void shall be 1½".

Vertical placement of strands shall not be adjusted to satisfy the above guidelines.

BILL OF MATERIAL

Item	Unit	Total
Precast Prestressed Conc. Deck Bms. (17" depth)	Sq. Ft.	1344

Weight of beam=25,000 lbs.

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270.
The nominal diameter shall be ½" and the nominal cross-sectional area shall be 0.153 sq. in.
Lifting loops shall be 2 -½" ϕ-270 ksi strands, as shown.
The 1" ϕ rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place.
The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two ⅛" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing.
Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between top of the beam and the bottom edge of the key.
Corrosion Inhibitor, per Articles 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
Required Release Strength, f'ci, shall be 4,000 p.s.i.
The Rail Anchorage shall be cast with the beam and the wearing surface shall be cast in the field. Formwork necessary for the wearing surface may be secured using the bottom rail anchorage inserts and/or additional inserts cast into the beam. Drilling into the beam will not be permitted.
See Sheet 4 of 8 for cross section.
Non prestressing steel shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified).

ILLINOIS DEPARTMENT OF TRANSPORTATION

SHEET TITLE
BEAM DETAILS

PROJECT
US ROUTE 136 OVER LONE TREE CREEK
FAP ROUTE 709 SECTION 104BR-1
CHAMPAIGN COUNTY
STATION 1458+06.74
STRUCTURE NUMBER 010-0058

PROJECT NO. 03061-8
SCALE
DATE 12/04/06
DRAWN BY TFG
CHECKED BY BD/REG/MCB
DRAWING NO. 5 OF 8 SHTS

COOMBE-BLOXDORF P.C.
Engineers / Land Surveyors
Springfield, Illinois
Design Firm License No. 184-002703

PLOT DATE = 12/04/2006
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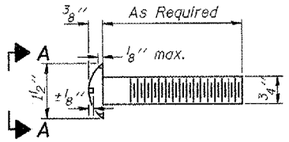
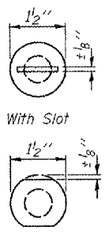
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 709	104BR-1	CHAMPAIGN	24	16
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 6
8 SHEETS

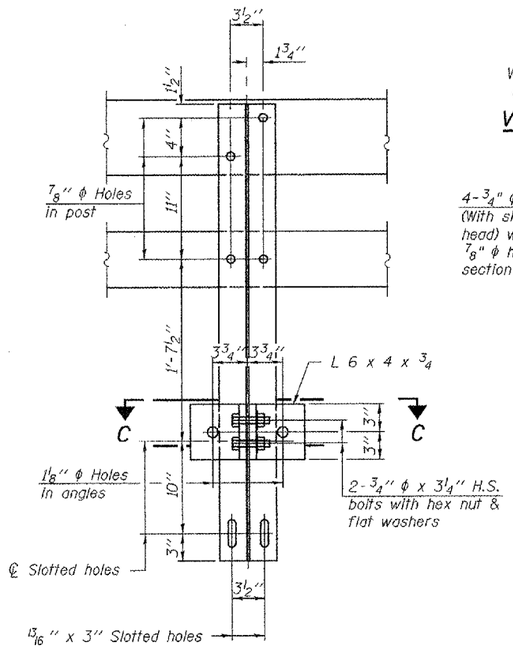
Contract #70262



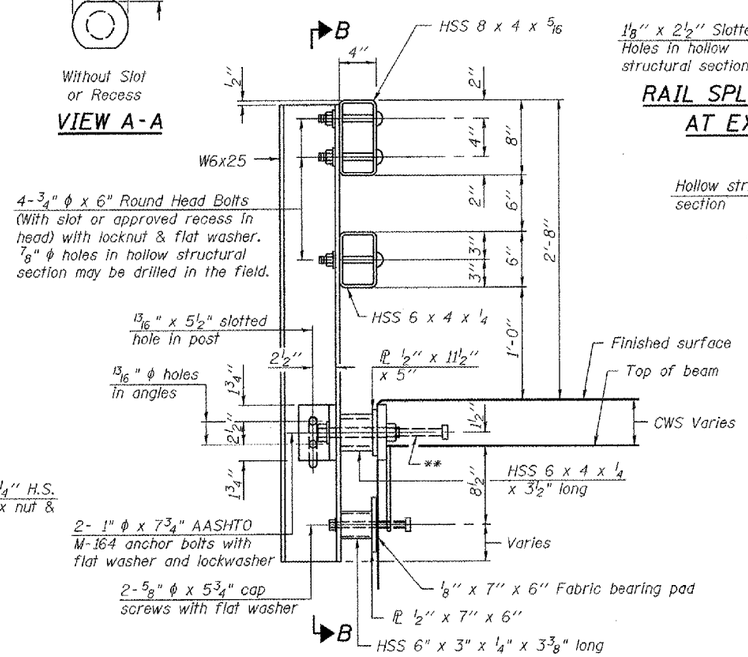
DETAIL OF 3/4" ϕ ROUND HEAD BOLT



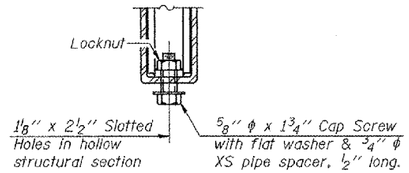
VIEW A-A



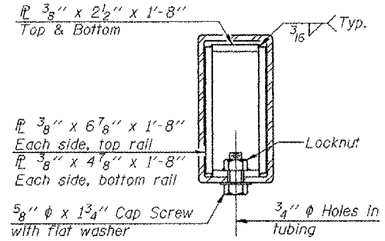
SECTION B-B



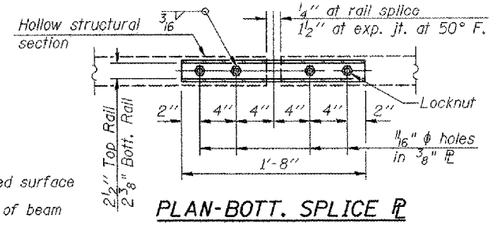
SECTION AT RAIL POST



RAIL SPLICE CONNECTION AT EXPANSION JT.

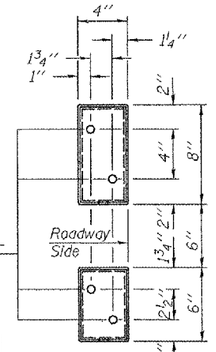


SECTION AT RAIL SPLICE

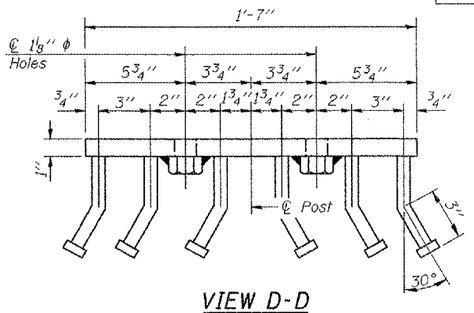


PLAN-BOTT. SPLICE PL TYPICAL

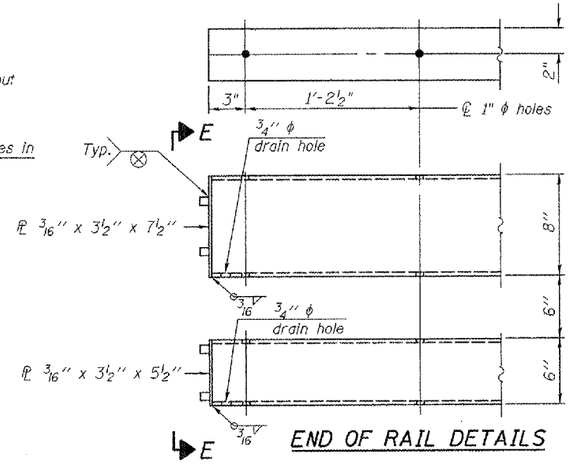
℄ - 5/8" reduced base welded studs. Provide 4 - 5/8" washers and self-locking nuts or nuts and jam nuts for guardrail connection shown on Std. 631032



VIEW E-E

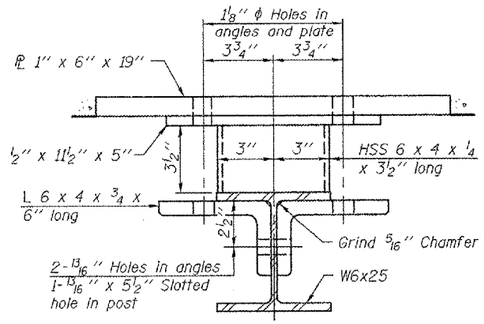


VIEW D-D

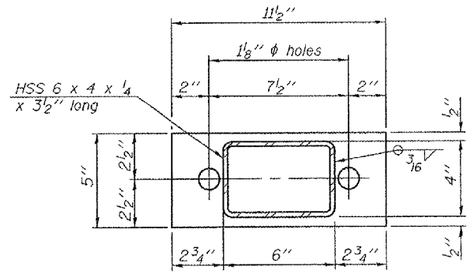


END OF RAIL DETAILS

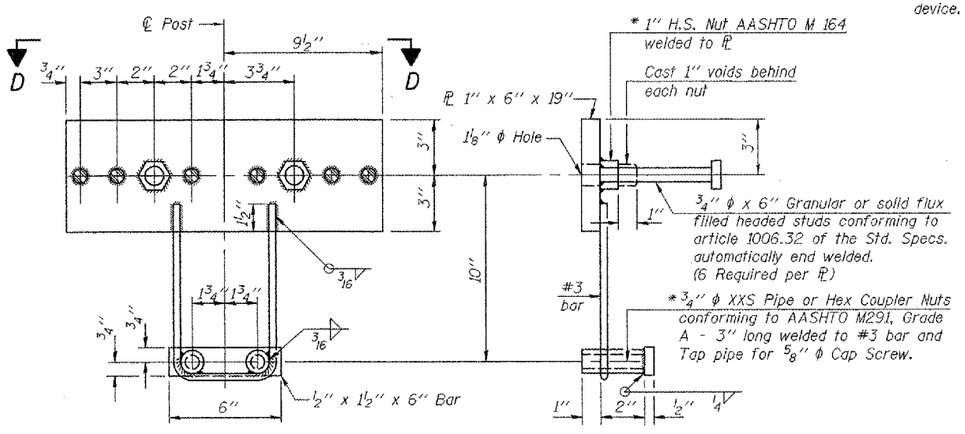
Notes:
All field drilled holes shall be coated with an approved zinc rich paint before erection.
For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type SM.
Steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
** The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.



SECTION C-C



(6'-3" Maximum Post Spacing) (5" minimum to 7 1/8" maximum CWS thickness)



ANCHOR DEVICE

* Threaded areas shall be plugged or blocked off during casting of beam. Galvanized after fabrication.

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type SM	Foot	85

ILLINOIS DEPARTMENT OF TRANSPORTATION

SHEET TITLE
STEEL RAILING, TYPE SM
WITH CONCRETE WEARING SURFACE

PROJECT
US ROUTE 136 OVER LONE TREE CREEK
FAP ROUTE 709 SECTION 104BR-1
CHAMPAIGN COUNTY
STATION 1458+06.74
STRUCTURE NUMBER 010-0058

PROJECT NO. 03061-8
SCALE
DATE 12/04/06
DRAWN BY TFG
CHECKED BY BD/REG/MCB
DRAWING NO. 6 OF 8 SHTS

COOMBE-BLOXDORF P.C.
Engineers / Land Surveyors
Springfield, Illinois
Design Firm License No. 184-002703

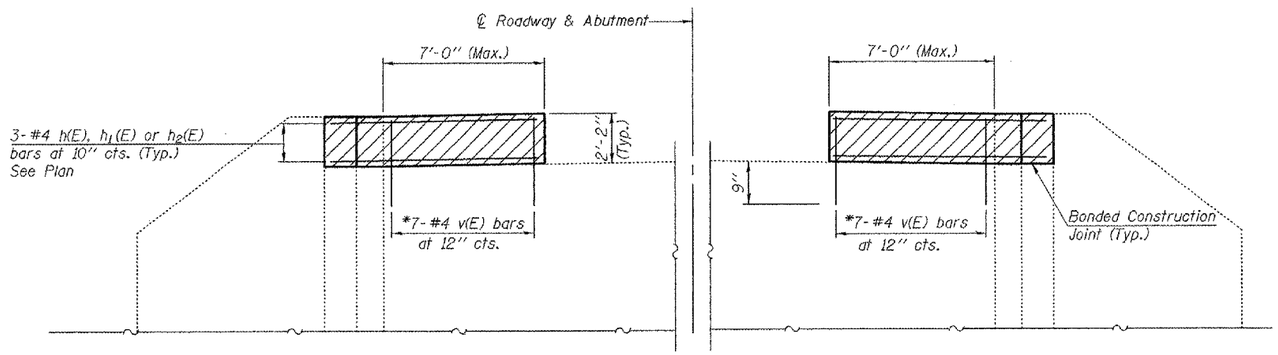
R-34CWS 11-1-06

PLOT DATE = 12/04/2006
FILE NAME = ...\Bgn-010-0058-dgn\t-6-R-34CWS.dgn
PLOT SCALE = 0.0000 '/' IN.
USER NAME = TFG

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 709	104BR-1	CHAMPAIGN	24	17
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

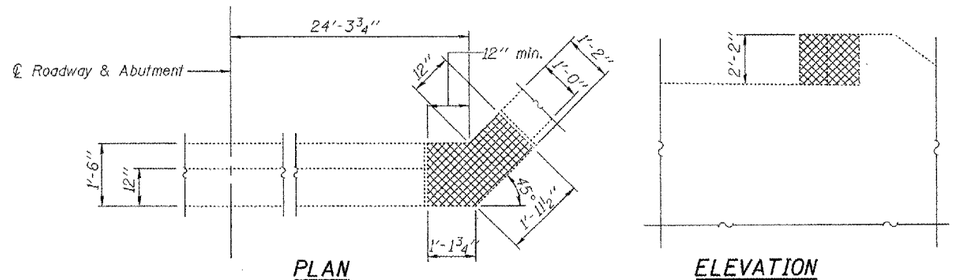
SHEET NO. 7
8 SHEETS

Contract #70262



ELEVATION

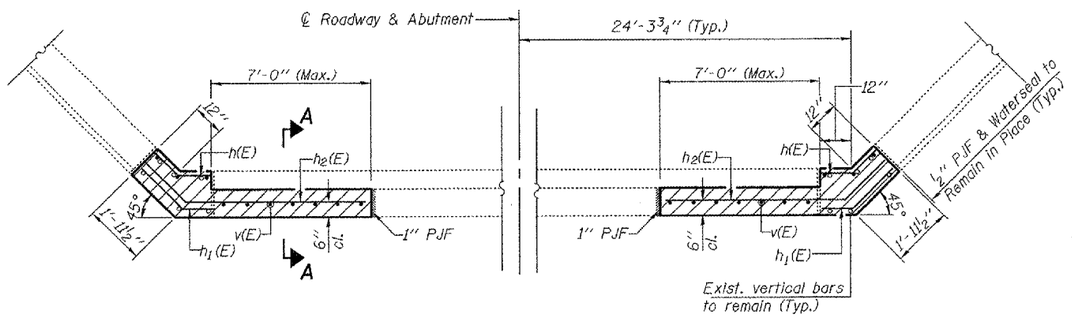
*Epoxy grout v(E) bars into $\frac{3}{4}$" ϕ x 9" drilled holes. See Section 584 of the Standard Specifications.



PLAN

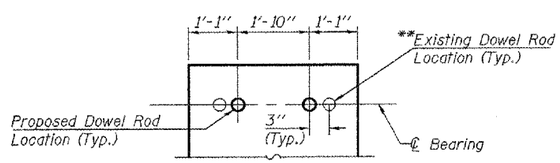
ELEVATION

CONCRETE REMOVAL DETAIL
(Each side of each abutment)

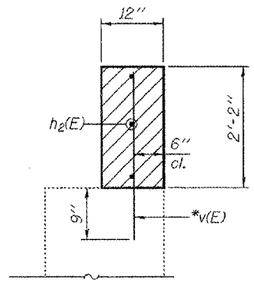


PLAN
(W. Abut. Looking West)
(E. Abut. Looking East)

**Burn existing dowel rods including those at beams not being replaced, flush with existing abutment surface, grind smooth and seal with epoxy. Cost included with removal of Existing Superstructure. (48 Total)



END OF BEAM PLAN
Showing Dowel Rod Locations



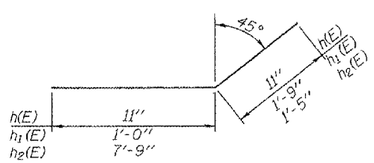
SECTION A-A

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	12	#4	1'-10"	
h_1(E)	12	#4	2'-9"	
h_2(E)	12	#4	9'-2"	
v(E)	28	#4	2'-9"	
Reinforcement Bars Epoxy Coated			Lb.	160
Concrete Removal			Cu. Yd.	1.1
Concrete Structures			Cu. Yd.	3.4

Limits of concrete removal

Limits of concrete structures



BARS h(E) h_1(E) & h_2(E)

NOTES

Existing vertical reinforcement to be cleaned, straightened and incorporated into new construction. Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included in Concrete Removal.

Hatched area shall be poured after superstructure is in place.

ILLINOIS DEPARTMENT OF TRANSPORTATION

SHEET TITLE: ABUTMENT DETAILS

PROJECT: US ROUTE 136 OVER LONE TREE CREEK
FAP ROUTE 709 SECTION 104BR-1
CHAMPAIGN COUNTY
STATION 1458+06.74
STRUCTURE NUMBER 010-0058

PROJECT NO. 03061-8
SCALE
DATE 12/04/06
DRAWN BY TFG
CHECKED BY BD/REG/MCB
DRAWING NO. 7
OF 8 SHTS

COOMBE-BLOXDORF P.C.
Engineers / Land Surveyors
Springfield, Illinois
Design Firm License No. 184-002703

PLOT DATE = 12/04/2006
FILE NAME = ...\ben-010-0058-sht-7-abut-details.dgn
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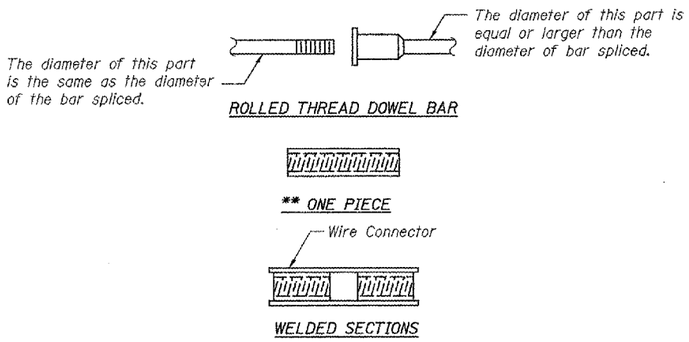
USER NAME = TFG_

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 709	104BR-1	CHAMPAIGN	24	18
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

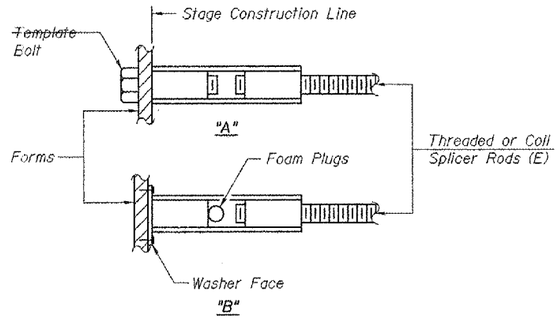
SHEET NO. 8
8 SHEETS

Contract #70262



BAR SPLICER ASSEMBLY ALTERNATIVES

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



INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.

Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.

All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.

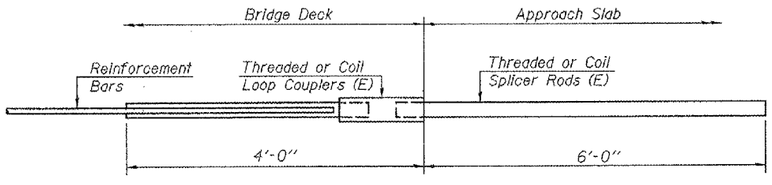
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

① Minimum Capacity (Tension in kips) = $1.25 \times fy \times A_t$

② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times fy \times A_t$

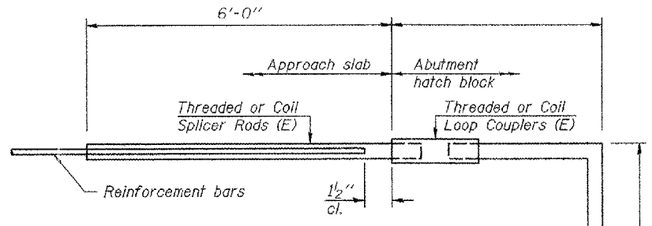
Where fy = Yield strength of lapped reinforcement bars in ksi.
A_t = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	7.9
#5	2'-0"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8



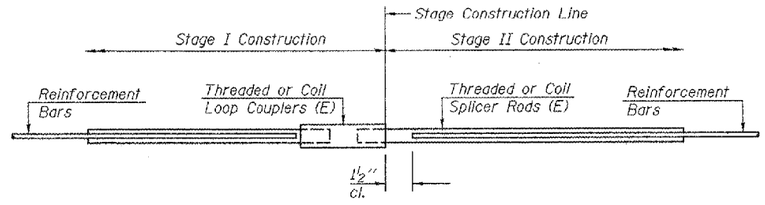
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

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



FOR STUB ABUTMENTS

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



STANDARD

Bar Size	No. Assemblies Required	Location
#4	42	Conc. Wear. Surf.

ILLINOIS DEPARTMENT OF TRANSPORTATION

SHEET TITLE
BAR SPLICER ASSEMBLY DETAILS

PROJECT
US ROUTE 136 OVER LONE TREE CREEK
FAP ROUTE 709 SECTION 104BR-1
CHAMPAIGN COUNTY
STATION 1458+06.74
STRUCTURE NUMBER 010-0058

PROJECT NO. 03061-8
SCALE
DATE 12/04/06
DRAWN BY TFG
CHECKED BY BD/REG/MCB
DRAWING NO. 8

COOMBE-BLOXDORF P.C.
Engineers / Land Surveyors
Springfield, Illinois
Design Firm License No. 184-002703

8 OF 8 SHTS

BSD-1

11-1-06

PLOT DATE = 12/04/2006
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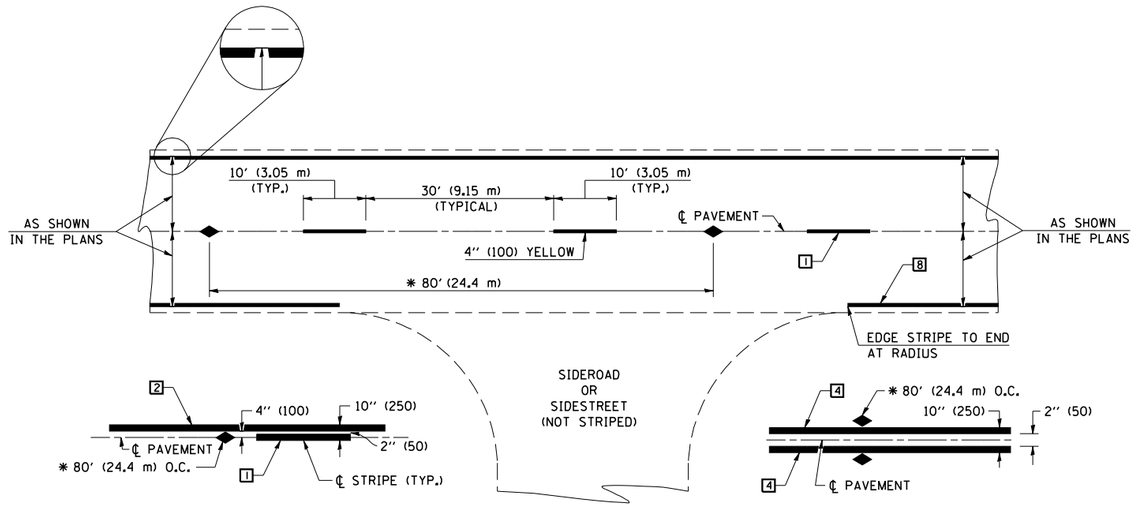
USER NAME = TFG.

CONTRACT NO. 70262

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
709	104BR-1	CHAMPAIGN	24	19
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TYPICAL APPLICATIONS OF PAVEMENT MARKINGS AND MARKERS



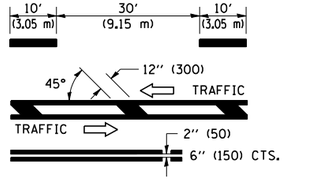
SINGLE NO PASSING

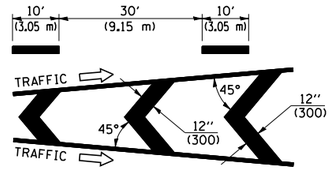
DOUBLE NO PASSING

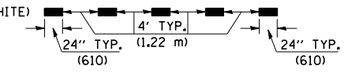
* REDUCE TO 40' (12.2 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEEDS OF 45 mph (70 km/h) OR LESS.

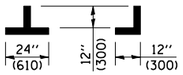
TYPICAL PAVEMENT MARKING LEGEND

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) CROSS WALK (WHITE)
11. 24" (600) STOP BAR (WHITE)
12. 8" (200) SOLID (WHITE)
13. 4" (100) LANE LINE EXTENSIONS (WHITE)
14. 4" (100) PARKING WHITE





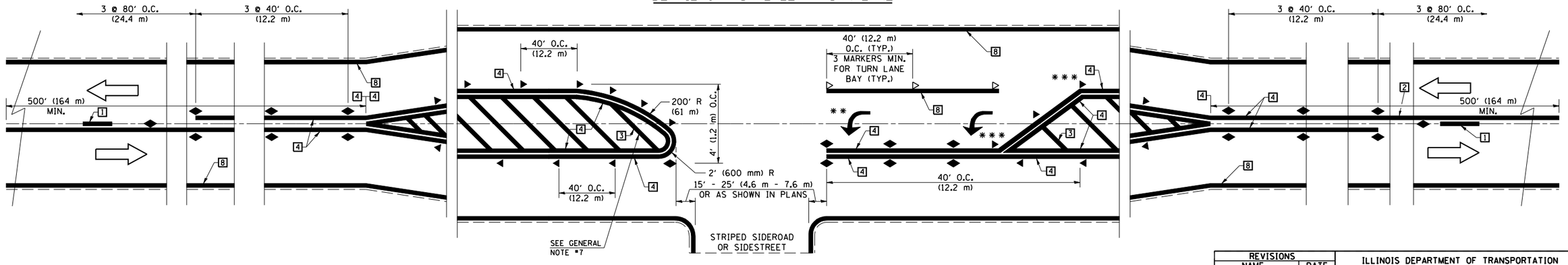




TYPICAL PAVEMENT MARKERS LEGEND

- TWO-WAY AMBER MARKER
- ONE-WAY AMBER MARKER
- ONE-WAY CRYSTAL MARKER

DETAIL OF RURAL LEFT TURN LANE



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

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

SHEET 1 OF 3

	NAME	DATE	REVISIONS	
DESIGNED	J.M.H.	5/85 6/88	NAME	DATE
CHECKED	FMS CTD	6/85 6/88	GEOMETRICS/K.A.G.	07/02
CADD NO.	F-5.25		K.A.G.	09/05

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

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATION OF PAVEMENT MARKINGS

1 OF 3

DRAWN BY

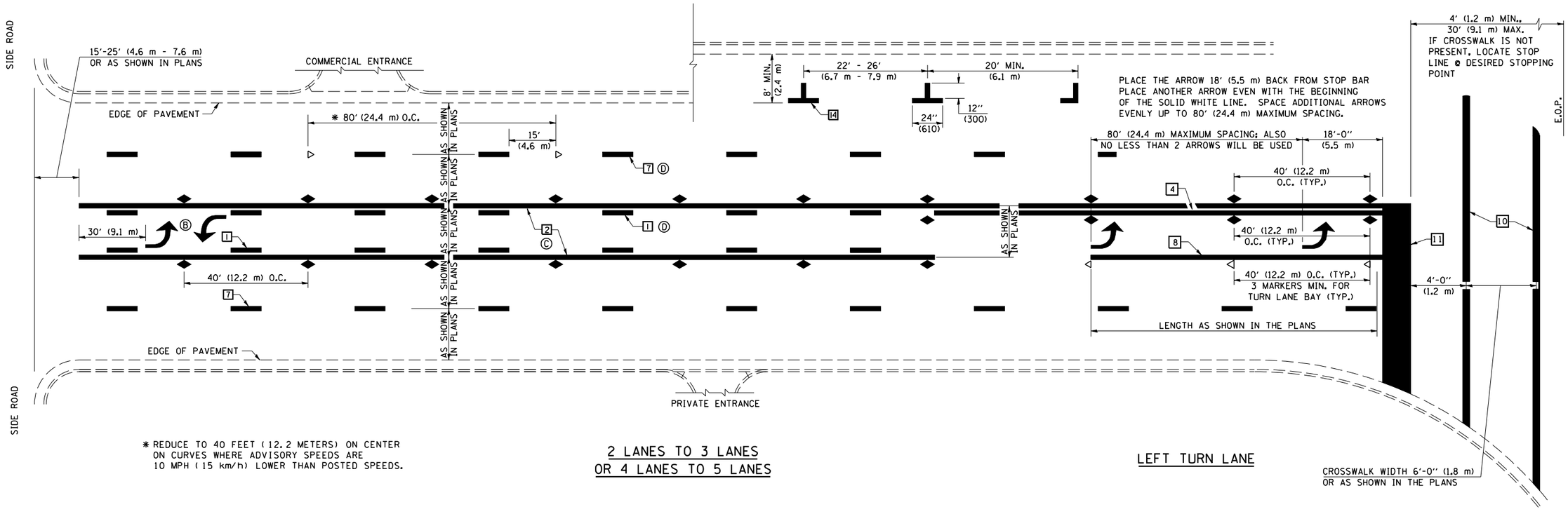
DATE : 01/06 CHECKED BY

PLOT DATE = 10/17/2006
FILE NAME = c:\projects\d605602\submit 10.13.06\dgn\pavt marking details.dgn
PLOT SCALE = 42.3529 / IN.
USER NAME = kagerb

CONTRACT NO. 70262

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
709	104BR-1	CHAMPAIGN	24	20
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TYPICAL APPLICATIONS OF PAVEMENT MARKINGS AND MARKERS



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

2 LANES TO 3 LANES OR 4 LANES TO 5 LANES

LEFT TURN LANE

SHEET 2 OF 3

	NAME	DATE	REVISIONS	
DESIGNED	J.M.H.	5/85 6/88	NAME	DATE
CHECKED	FMS CTD	6/85 6/88	GEOMETRICS/K.A.G.	07/02
CADD NO.	F-5.25		K.A.G.	09/05

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

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATION OF PAVEMENT MARKINGS

2 OF 3

DRAWN BY

DATE : 01/06 CHECKED BY

PLOT DATE = 10/17/2006
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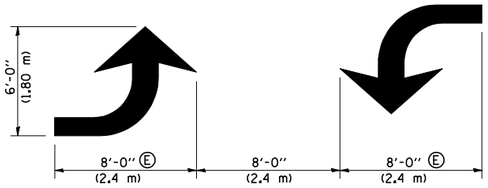
USER NAME = kagarb

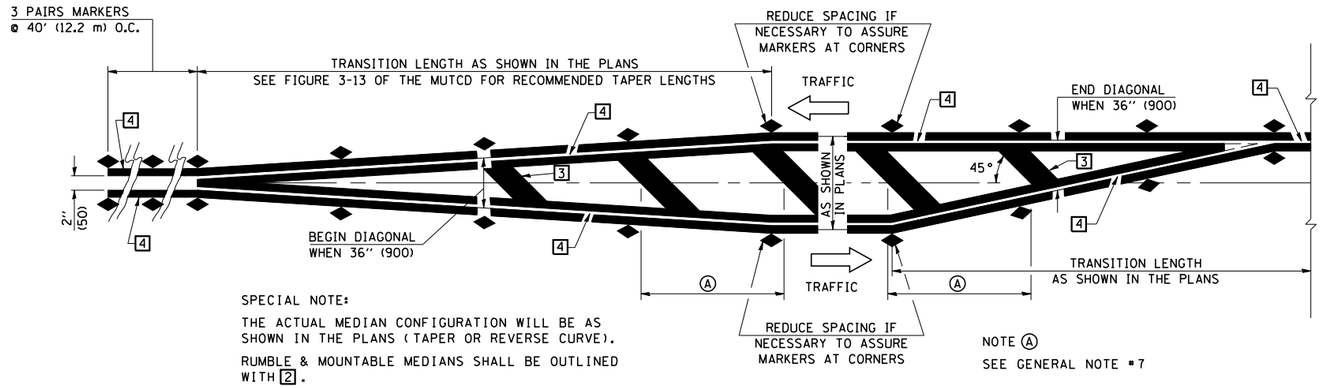
CONTRACT NO. 70262

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
709	104BR-1	CHAMPAIGN	24	21
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

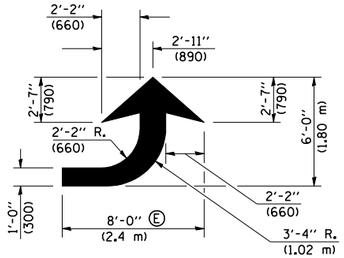
TYPICAL APPLICATIONS OF PAVEMENT MARKINGS AND MARKERS



TYPICAL DOUBLE TURN ARROWS (WHITE)

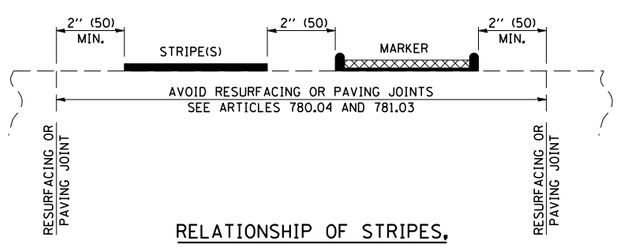


TYPICAL MEDIAN TRANSITIONS

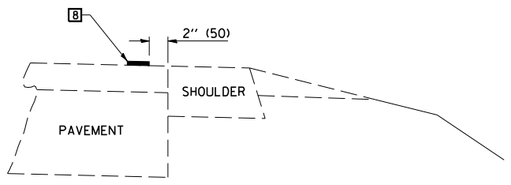


LEFT ARROW

REVERSE FOR RIGHT ARROW
AREA = 15.6 SQ. FT. (1.47 m^2)
(WHITE)



RELATIONSHIP OF STRIPES, MARKERS AND JOINTS



RELATIONSHIP OF EDGE STRIPE TO SAFETY SHOULDER OR PAVED SURFACE

SPECIAL 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.

Ⓔ TURN ARROW SIZE DEPENDS ON THE LOCATION.
RURAL LOCATION - LARGE ARROW SIZE
URBAN LOCATION - SMALL ARROW SIZE

GENERAL NOTES

1. WHEN MEDIANS ARE PRESENT, PAVEMENT MARKINGS ARE TO BE PLACED ADJACENT TO MEDIANS.
2. SCALE: NONE
3. SOME OF THE INFORMATION INCLUDED WITH THIS DETAIL MAY NOT BE APPLICABLE TO THIS IMPROVEMENT.
4. PAVEMENT MARKINGS ARE TO BE EXTENDED THROUGH OMISSIONS WHEN APPLICABLE.
5. A STRIPING KEY IS AVAILABLE ELSEWHERE AND SHALL BE SHOWN WHERE THE QUANTITIES ARE LISTED.
6. FINAL PAVEMENT MARKINGS SHALL BE IN PLACE PRIOR TO PLACING ANY RAISED REFLECTIVE PAVEMENT MARKERS.
7. 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)

SHEET 3 OF 3

	NAME	DATE	REVISIONS	
DESIGNED	J.M.H.	5/85 6/88	NAME	DATE
CHECKED	FMS CTD	6/85 6/88	GEOMETRICS/K.A.G.	07/02
CADD NO.	F-5.25		K.A.G.	09/05

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

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATION OF PAVEMENT MARKINGS

3 OF 3

DRAWN BY

DATE : 01/06 CHECKED BY

PLOT DATE = 10/17/2006
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USER NAME = kagarb

PLOT DATE = 10/17/2006
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USER NAME = keysrb

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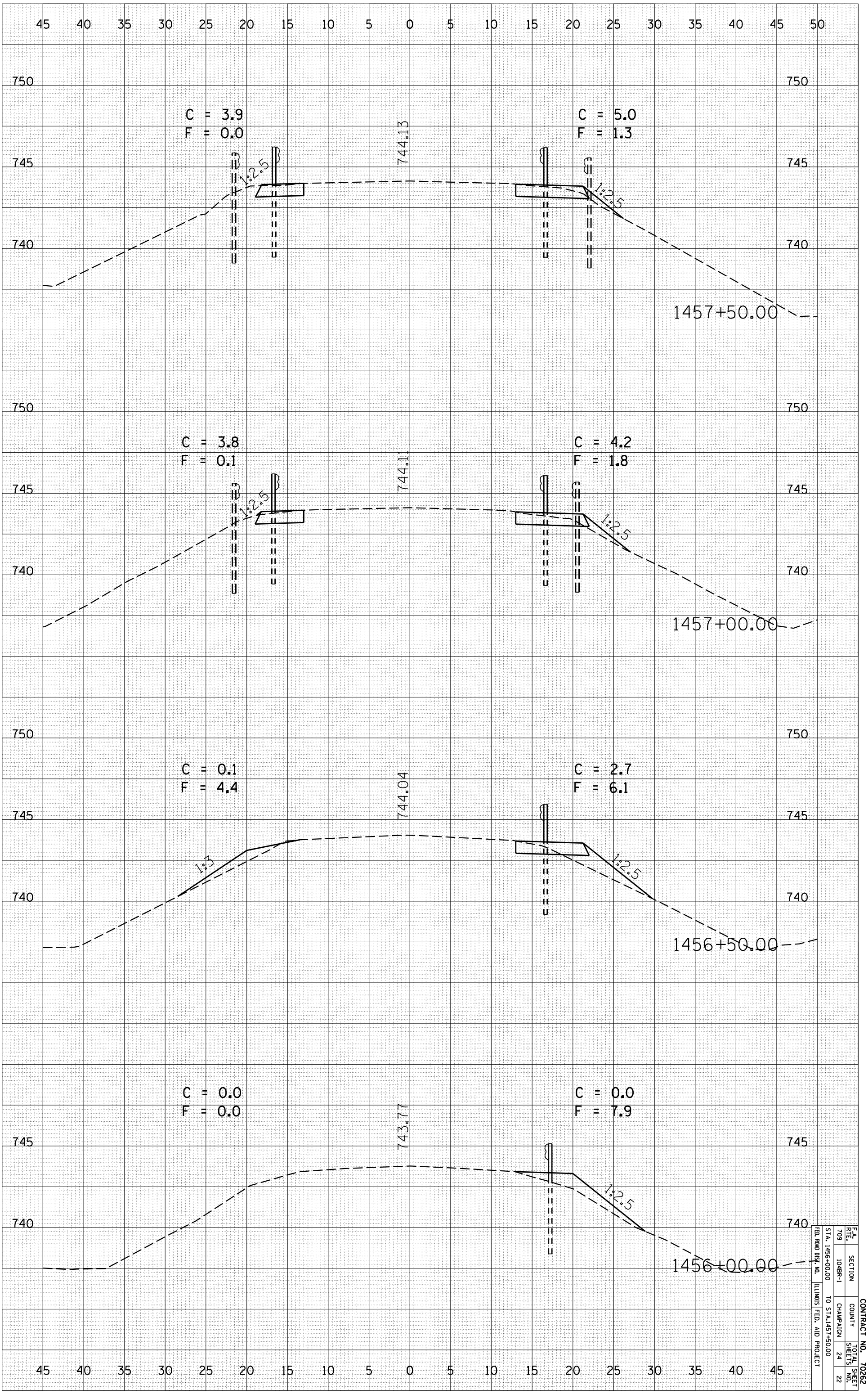
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

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



CONTRACT NO. 70262

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
709	104BR-1	CHAMPAIGN	24	22
STA. 1456+00.00		TO STA.1457+50.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PLOT DATE = 10/17/2006
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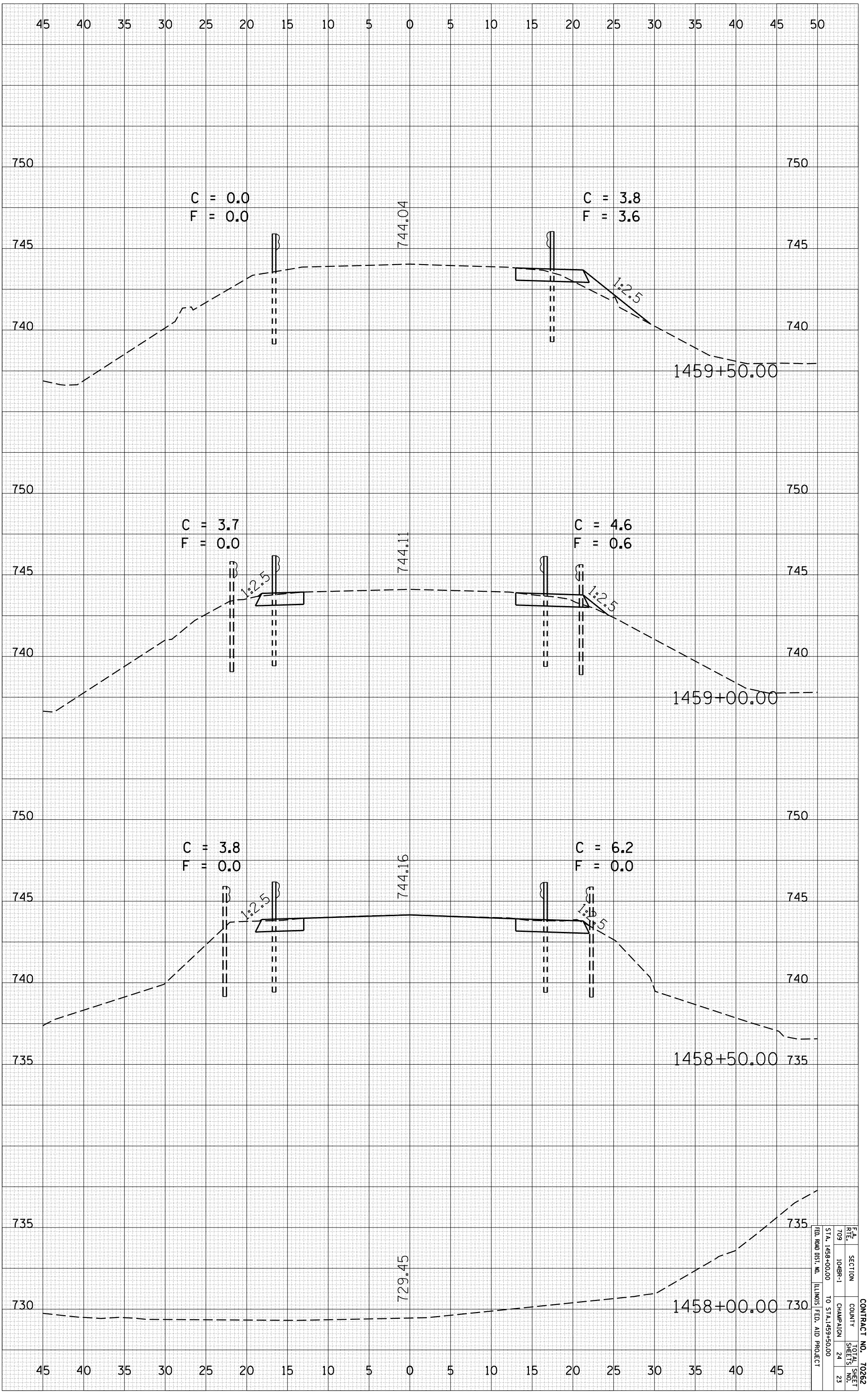
USER NAME = keysrb

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

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



F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
709	104BR-1	CHAMPAIGN	24	23
STA. 1458+00.00	TO STA.1459+50.00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 70262

PLOT DATE = 10/17/2006
FILE NAME = c:\projects\d505602\submit 10.13.06\edge-usd3-sheet.dgn
PLOT SCALE = 10.5882 ' / IN.
USER NAME = keysrb

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

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

45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50

C = 0.0
F = 8.3

743.61

C = 0.0
F = 0.0

745

740

1:3

1460+50.00

C = 0.0
F = 0.7

743.88

C = 0.0
F = 0.0

1:2.5

1460+00.00

45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
709	104BR-1	CHAMPAIGN	24	24
STA. 1460+00.00		TO STA.1460+50.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 70262