1-20-06 Letting, Item 79

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	119(BR-2&BR-3)	MOULTRIE	37	1

CONTRACT NO. 70347
D-95-003-04

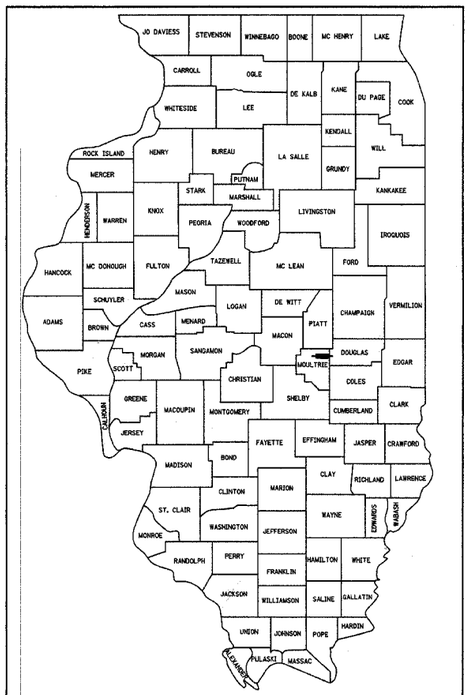
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

FAP ROUTE 749 (IL 133)
SECTION 119(BR-2 & BR-3)
PROJECT BHF-749(017)
MOULTRIE COUNTY
C-95-003-04

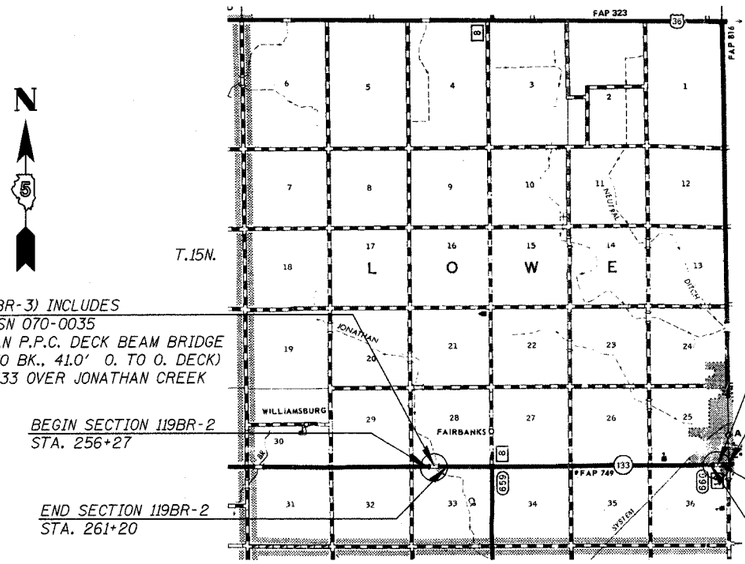
BRIDGE SUPERSTRUCTURE REPLACEMENTS
OVER JONATHAN CREEK 4.0 MI. EAST OF LOVINGTON
OVER DRAINAGE DITCH WEST EDGE OF ARTHUR

INDEX OF SHEETS



LOCATION OF SECTION INDICATED THUS:- ■

SCALES	
PLAN	0 20' 40'
PROFILE HORIZONTAL	0 20' 40'
PROFILE VERTICAL	0 2' 4'
CROSS SECTION HORIZ.	0 5' 10'
CROSS SECTION VERT.	0 5' 10'



100' 200' 300'	1" = 100'
10' 20' 30'	1" = 10'
50' 100'	1" = 50'
50' 100'	1" = 40'
50' 100'	1" = 30'
50' 100'	1" = 20'

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

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

CONTRACT NO. 70347

CURRENT ADT = 1,700 (2003) SEC 119-BR-2
= 3,200 (2003) SEC 119-BR-3

DESIGN DESIGNATION
N.A.

LENGTH OF SECTION:
SN 070-0035 = 493.00 FEET = 0.093 MILES
SN 070-0016 = 307.00 FEET = 0.058 MILES
TOTAL LENGTH = 800.00 FEET = 0.151 MILES

0 1 2 3 4 5
SCALE IN MILES

CUMMINS ENGINEERING CORPORATION
SPRINGFIELD, ILLINOIS

MICHAEL D. CUMMINS
43244
REGISTERED
PROFESSIONAL
ENGINEER
OF
ILLINOIS

Michael D. Cummins (10/20/05)
ILLINOIS PROFESSIONAL NO. 43244
(Expires 11/30/05)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED OCT 24 20 05
DEPUTY DIRECTOR OF HIGHWAYS, REGION 3 ENGINEER
December 9, 20 05
ENGINEER OF DESIGN AND ENVIRONMENT
December 9, 20 05
DEPUTY DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	119(BR-2&BR-3)	MOULTRIE	37	2
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 70347

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.

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

G.N.- 250L - SPL
TEMPORARY EROSION CONTROL SEEDING AND MULCH, METHOD 2 IS INCLUDED IN THIS CONTRACT TO SEED NEW EARTH SHOULDERS DURING TIME PERIODS WHEN PERMANENT SEEDING IS NOT ALLOWED. SOME OR ALL OF THE TEMPORARY EROSION CONTROL SEEDING AND MULCH WILL BE DELETED IF IT IS POSSIBLE TO PLACE PERMANENT SEEDING ON EARTH SHOULDERS AT THE TIME OF THE COMPLETION.

G.N. -406
THE QUANTITIES INCLUDED IN THE PLANS FOR BITUMINOUS CONCRETE RESURFACING ARE INTENDED TO GIVE THE COVERAGE SHOWN ON THE TYPICAL CROSS SECTIONS. IT IS NOT INTENDED TO INCREASE THE THICKNESS OF THE BITUMINOUS MIXTURE IN ORDER TO USE ALL OF THE QUANTITIES INCLUDED IN THE CONTRACT.

G.N.-406D
ALL LEVELING BINDER OR BINDER SHALL BE GIVEN A FOG COAT OF PRIME BEFORE THE SURFACE COURSE IS PLACED WHEN DIRECTED BY THE ENGINEER.

THE FOG COAT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER GALLON FOR BITUMINOUS MATERIAL (PRIME COAT) AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

G.N. -406H

MIXTURE REQUIREMENTS

The following mixture requirements are applicable for this project:

Location(s):		
Mixture Use(s):	LEVELING BINDER	SURFACE COURSE
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 9.5	IL 9.5
Friction Aggregate:	Mix C	Mix C

G.N.-482
ALL MATERIAL PLACED AS BITUMINOUS SHOULDERS SUPERPAVE SHALL BE COMPACTED TO 94.0-98.4 PERCENT OF THE MAXIMUM THEORETICAL DENSITY. THIS REQUIREMENT SHALL APPLY TO BOTH B.A.M. AND IL 9.5L GRADATION SHOULDER MIXES. THIS MAXIMUM DENSITY SHALL BE DETERMINED FROM THE MOVING AVERAGE OF FOUR TESTS AS IN OTHER QC/QA TESTING. A NUCLEAR GAUGE DENSITY/CORE CORRELATION SHALL BE PERFORMED FOR BOTH THE B.A.M. AND IL 9.5L MIXES USING STANDARD CORRELATION PROCEDURES.

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

G.N. -1004.03
REVISE ARTICLE 1004.03 (c) NOTE 5/ OF THE STANDARD SPECIFICATIONS TO READ:

'5/ GRADATION CA-16 SHALL BE USED IN LIEU OF CA-13 WHEN THE SURFACE COURSE IS LESS THAN 1 3/4 INCHES IN THICKNESS. CA-13 OR CA-16 MAY BE USED WHEN THE SURFACE COURSE IS 1 3/4 INCHES OR MORE IN THICKNESS.'

COMMITMENTS

THERE ARE NO COMMITMENTS ON THIS PROJECT.

INDEX OF SHEETS

LIST OF ILLINOIS DOT HIGHWAY STANDARDS

STANDARD NO.	DESCRIPTION
000001-04	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001001	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-02	TEMPORARY EROSION CONTROL SYSTEMS
420001-06	PAVEMENT JOINTS
421001-01	BAR REINFORCEMENT FOR CRC PAVEMENT
420401-05	BRIDGE APPROACH PAVEMENT
515001-02	NAME PLATE FOR BRIDGES
630001-05	STEEL PLATE BEAM GUARDRAIL
630301-03	SHOULDER WIDENING FOR TYPE 1 GUARDRAIL TERMINALS
631032-01	TRAFFIC BARRIER TERMINAL TYPE 6A
635006-02	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-01	REFLECTOR MARKER AND MOUNTING DETAILS
701006-02	TRAFFIC CONTROL AND PROTECTION
701011-01	TRAFFIC CONTROL AND PROTECTION
701301-02	TRAFFIC CONTROL AND PROTECTION
701306-01	TRAFFIC CONTROL AND PROTECTION
701311-02	TRAFFIC CONTROL AND PROTECTION
701701-04	TRAFFIC CONTROL AND PROTECTION
702001-05	TRAFFIC CONTROL DEVICES
780001-01	TYPICAL PAVEMENT MARKINGS
781001-02	TYPICAL APPLICATION RAISED REFLECTIVE PAVEMENT MARKERS

GENERAL NOTES

FAP ROUTE 749 (IL ROUTE 133)
SECTION 119(BR-2 & BR-3)
MOULTRIE COUNTY
S.N. 070-0016 & S.N. 070-0035

CUMMINS ENGINEERING CORPORATION

JOB #: 2114.4
FILE: 2114.4GENNOTES
DATE: 10/10/05

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	119(BR-2&BR-3)	MOULTRIE	37	3
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 70347

				S.N. 070-0035 STA. 256+27 TO STA 261+20 80% FEDERAL 20% STATE	S.N. 070-0016 STA. 451+50 TO STA 1+37 80% FEDERAL 20% STATE
SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE	
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	X080	X080
20200100	EARTH EXCAVATION	CU YD	60	35	25
20400800	FURNISHED EXCAVATION	CU YD	165	120	45
25000200	SEEDING, CLASS 2	ACRE	0.3	0.2	0.1
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	27	18	9
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	27	18	9
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	27	18	9
25100115	MULCH, METHOD 2	ACRE	0.3	0.2	0.1
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	30	20	10
28000300	TEMPORARY DITCH CHECKS	EACH	1		1
28000400	PERIMETER EROSION BARRIER	FOOT	1,026	730	296
28000500	INLET AND PIPE PROTECTION	EACH	7	4	3
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	201	83	118
40600300	AGGREGATE (PRIME COAT)	TON	3		3
40600980	BITUMINOUS SURFACE REMOVAL - BUTT JOINT	SQ YD	536	268	268
40600990	TEMPORARY RAMP	SQ YD	172		172
42001165	BRIDGE APPROACH PAVEMENT	SQ YD	274	274	
42001300	PROTECTIVE COAT	SQ YD	274	274	
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	56	56	
44000100	PAVEMENT REMOVAL	SQ YD	94	94	
44000700	APPROACH SLAB REMOVAL	SQ YD	116	116	
44004250	PAVED SHOULDER REMOVAL	SQ YD	140	112	28
48202000	BITUMINOUS SHOULDERS SUPERPAVE	TON	321	128	193
50101700	REMOVAL OF EXISTING SUPERSTRUCTURES NO. 1	EACH	1	1	
50101800	REMOVAL OF EXISTING SUPERSTRUCTURES NO. 2	EACH	1		1
50102400	CONCRETE REMOVAL	CU YD	6.3	1.0	5.3
50200100	STRUCTURE EXCAVATION	CU YD	11		11
50300225	CONCRETE STRUCTURES	CU YD	6.7	1.0	5.7
50300260	BRIDGE DECK GROOVING	SQ YD	331	150	181
50300300	PROTECTIVE COAT	SQ YD	355	157	198
X5030305	CONCRETE WEARING SURFACE 5"	SQ YD	346	157	189
50301250	FORMED CONCRETE REPAIR (DEPTH GREATER THAN 5")	SQ FT	11.9		11.9

					S.N. 070-0035 STA. 256+27 TO STA 261+20 80% FEDERAL 20% STATE	S.N. 070-0016 STA. 451+50 TO STA 1+37 80% FEDERAL 20% STATE
	SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE	
	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	X080-2A	X080-2A
	50400305	PRECAST PRESTRESSED CONCRETE DECK BEAMS (17" DEPTH)	SQ FT	3,113	1,415	1,698
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	6,250	2,260	3,990
*	50901005	STEEL BRIDGE RAIL, TYPE SM	FOOT	150	69	81
	51500100	NAME PLATES	EACH	2	1	1
*	63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	325	300	25
*	63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	6	4	2
*	63100167	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)	EACH	7	4	3
*	63100169	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (FLARED)	EACH	1		1
*	63100215	TRAFFIC BARRIER TERMINAL, TYPE 6 (SPECIAL)	EACH	2		2
	63200310	GUARDRAIL REMOVAL	FOOT	738	400	338
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	3	3
	67100100	MOBILIZATION	L SUM	1	0.5	0.5
	70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	0.5	0.5
	70101800	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	1	0.5	0.5
	70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1		1
	70300100	SHORT-TERM PAVEMENT MARKING	FOOT	204	52	152
	70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	1,322	628	694
*	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	482	228	254
*	78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1,322	628	694
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	8	4	4
*	78200410	GUARDRAIL MARKERS, TYPE A	EACH	16	8	8
*	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	8	4	4
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	8	4	4
	X0323558	BRIDGE JOINT SYSTEM (EXPANSION), 1-5/8"	FOOT	53		53
	X4066414	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "C", N50	TON	112	48	64
	X4066765	LEVELING BINDER (MACHINE METHOD), SUPERPAVE N50	TON	101	36	65
	Z0037300	PAVEMENT GROOVING	SQ YD	274	274	

* SPECIALTY ITEM

SUMMARY OF QUANTITIES

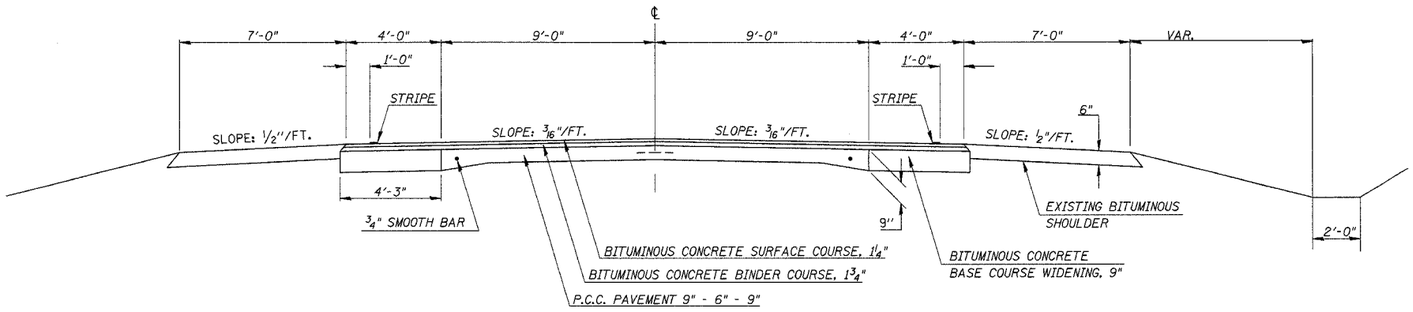
FAP ROUTE 749 (IL ROUTE 133)
SECTION 119(BR-2 & BR-3)
MOULTRIE COUNTY
S.N. 070-0016 & S.N. 070-0035

CUMMINS ENGINEERING CORPORATION

JOB #: 2114.4
FILE: 2114QTY.DGN
DATE: 10/10/05

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	119(BR-2&BR-3)	MOULTRIE	37	4
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

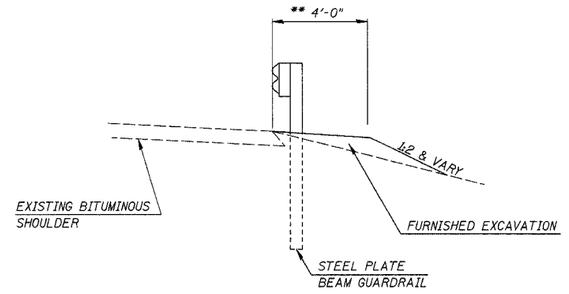
CONTRACT NO. 70347



EXISTING TYPICAL CROSS SECTION

STATION 256+27 TO STATION 258+36.25
STATION 259+10.75 TO STATION 261+20
STATION 451+50 TO STATION 452+90.68
STATION 0+14.00 TO STATION 1+37

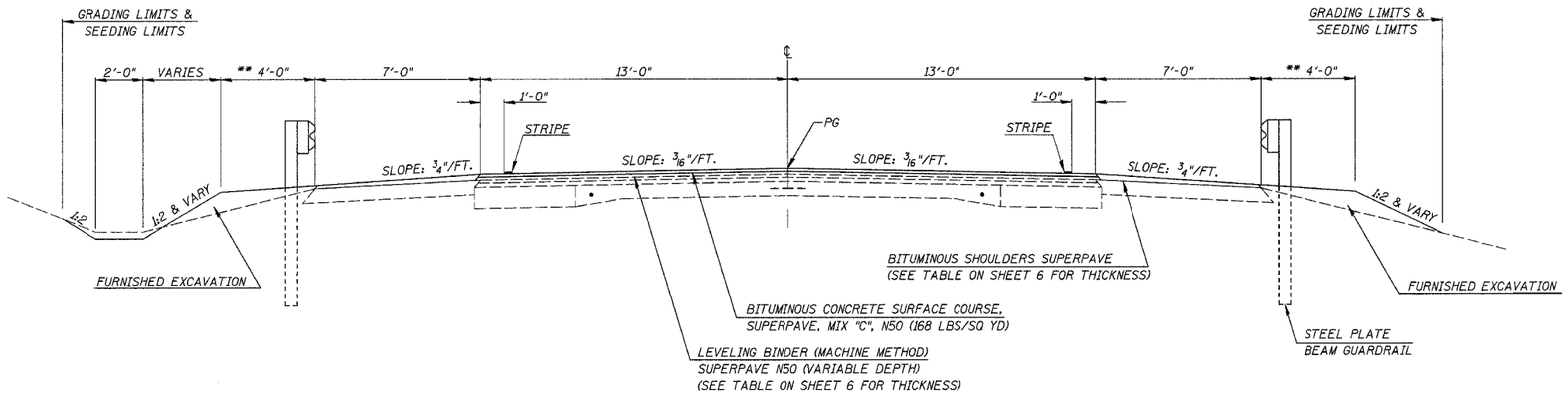
STATION EQUATION:
STATION 453+20.00 BACK =
STATION 0+00.00 AHEAD



DETAIL OF SHOULDER WIDENING

LEFT STATION 257+02 TO STATION 257+30
LEFT STATION 260+09 TO STATION 261+20
RIGHT STATION 256+27 TO STATION 257+30
RIGHT STATION 260+09 TO STATION 260+45

** SEE SHEETS 13 & 14 FOR LIMITS OF SHOULDER WIDENING AND TRANSITIONS.



PROPOSED TYPICAL CROSS SECTION

STATION 257+30 TO STATION 258+26.25
STATION 259+20.75 TO STATION 260+09
STATION 451+50 TO STATION 452+90.68
STATION 0+14.00 TO STATION 1+37

OMISSIONS
BRIDGE APPROACH PAVEMENT:
STA. 258+26.25 TO STA. 258+56.25
STA. 258+90.75 TO STA. 259+20.75
BRIDGE:
STA. 258+56.25 TO STA. 258+90.75
STA. 452+90.68 TO STA. 0+14.00

ALL BITUMINOUS MATERIALS ARE TO BE PLACED UTILIZING A STRINGLINE

TYPICAL CROSS SECTIONS

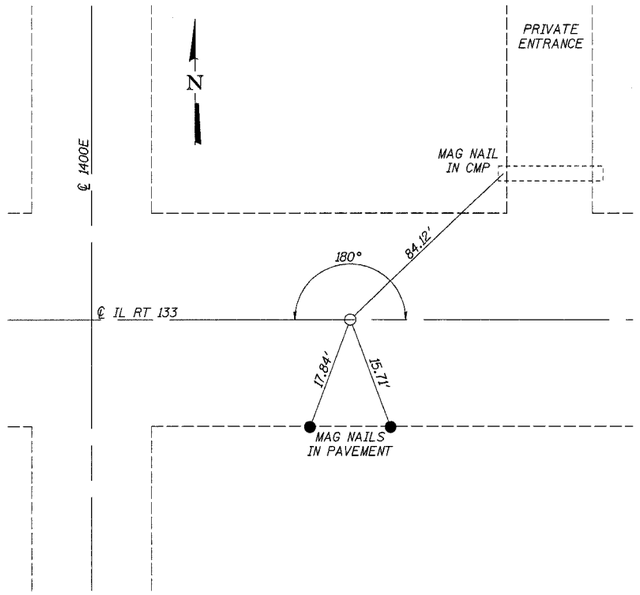
F.A.P. ROUTE 749 (IL RTE. 133)
SECTION 119(BR-2 & BR-3)
MOULTRIE COUNTY
S.N. 070-0016 & S.N. 070-0035

CUMMINS ENGINEERING CORPORATION

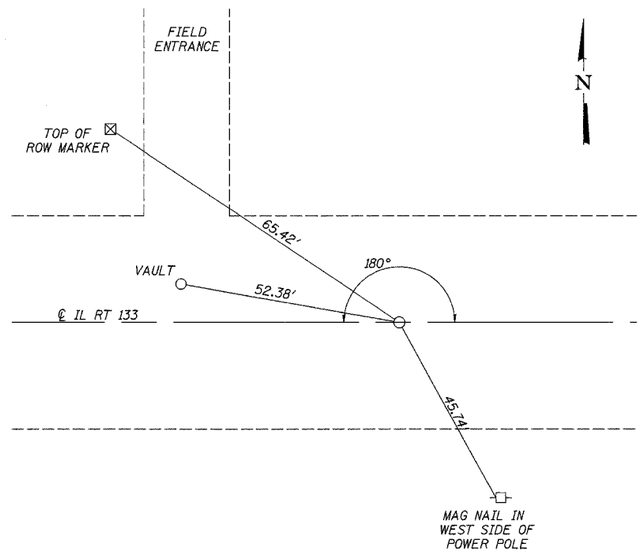
JOB #: 2114.3
FILE: 2114.3TYP
DATE: 10/10/05

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	119(BR-2 & BR-3)	MOULTRIE	37	5
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

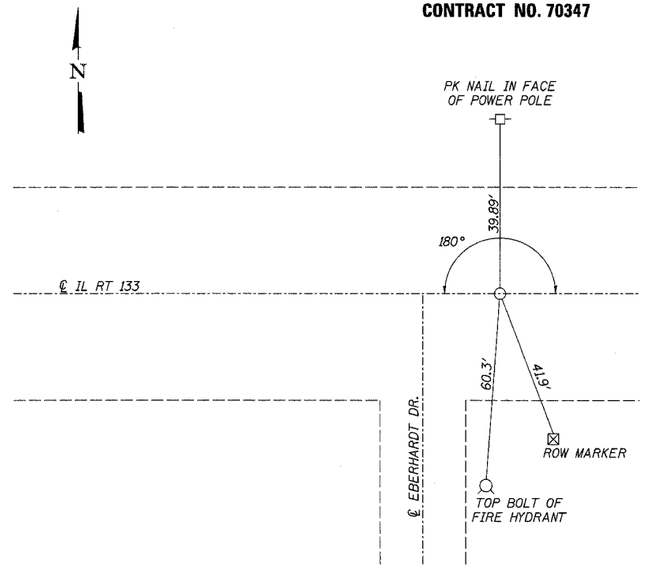
CONTRACT NO. 70347



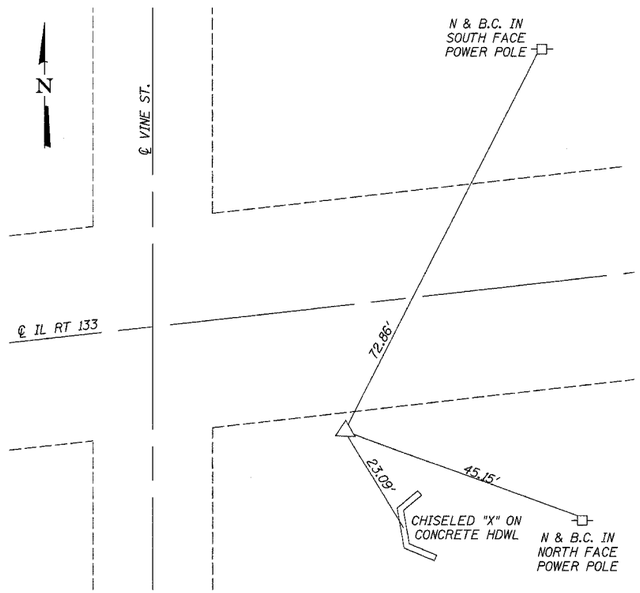
POT STA. 243+93.12
IRON PIN WITH CAP



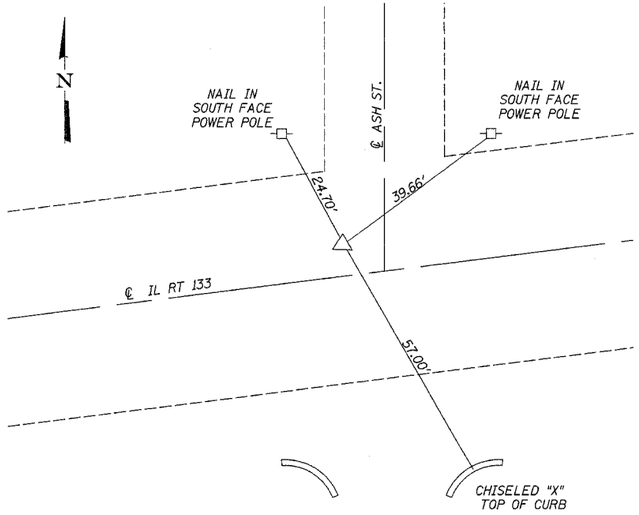
POT STA. 269+40.69
IRON PIN WITH CAP



POT STA. 441+65.70



PI STA. 2+19.14
IRON PIN WITH CAP



PI STA. 6+26.34
IRON PIN WITH CAP

CROSS TIES

FAP ROUTE 749 (IL ROUTE 133)
SECTION 119(BR-2 & BR-3)
MOULTRIE COUNTY
S.N. 070-0016 & S.N. 070-0035

CUMMINS ENGINEERING CORPORATION

JOB #: 2114.4
FILE: 2114XTIES.DGN
DATE: 10/10/05

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	119(BR-2&BR-3)	MOULTRIE	37	6
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 70347

EARTHWORK

LOCATION	EARTH EXCAVATION (CUT) CU YD	EARTH EXCAVATION (SHRINKAGE) CU YD	EMBANKMENT CU YD	EARTHWORK BALANCE WASTE (+) SHORTAGE (-) CU YD
STA 256+27 TO STA 261+20	35	25	145	120
STA 451+50 TO STA 1+37	25	15	60	45
TOTAL	60	40	205	165

SHRINKAGE = 25% FURNISHED EXCAVATION = 165 CU YD

PAVED SHOULDER REMOVAL

LOCATION	SQ YD
LT STA 258+20.25 TO STA 258+56.25	28
LT STA 258+90.75 TO STA 259+26.75	28
RT STA 258+20.25 TO STA 258+56.25	28
RT STA 258+90.75 TO STA 259+26.75	28
LT STA 452+68.70 TO STA 452+80.40	7
LT STA 453+18.05 TO STA 0+09.75	7
RT STA 452+95.50 TO STA 453+07.20	7
RT STA 0+24.70 TO STA 0+36.40	7
TOTAL	140

PAVEMENT REMOVAL

LOCATION	SQ YD
STA 258+20.25 TO STA 258+36.25	47
STA 259+10.75 TO STA 259+26.75	47
TOTAL	94

APPROACH SLAB REMOVAL

LOCATION	SQ YD
STA 258+36.25 TO STA 258+56.25	58
STA 258+90.75 TO STA 259+10.75	58
TOTAL	116

SEEDING

LOCATION	SEEDING CL 2 ACRE	FERTILIZER NETURIENTS NITROGEN POUND	PHOSPHORUS POUND	POTASSIUM POUND	MULCH METHOD 2 ACRE
STA 256+27 TO STA 261+20	0.2	18	18	18	0.2
STA 451+50 TO STA 1+35	0.1	9	9	9	0.1
TOTAL	0.3	27	27	27	0.3

PAVEMENT MARKINGS

LOCATION	PAINT PAVEMENT MARKING - LINE 4" RT FOOT	CL FOOT	LT FOOT	RAISED REFLECTIVE PAVEMENT MARKER EACH	RAISED REFLECTIVE MARKER REMOVAL EACH
STA 258+20.25 TO STA 258+56.25	279	70	279	4	4
STA 451+50.00 TO STA 1+37.00	307	80	307	4	4
TOTAL	586	150	586	8	8

PERIMETER EROSION BARRIER

LOCATION	FOOT
LT STA. 257+02 TO STA. 258+47	145
LT STA. 259+00 TO STA. 261+20	220
RT STA. 256+27 TO STA. 258+47	220
RT STA. 259+00 TO STA. 260+45	145
LT STA. 453+18 TO STA. 1+35	137
RT STA. 451+50 TO STA. 452+82	132
RT STA. 0+43 TO STA. 0+70	27
TOTAL	1,026

INLET AND PIPE PROTECTION

LOCATION	EACH
LT STA. 258+27	1
LT STA. 259+23	1
RT STA. 258+27	1
RT STA. 258+22	1
LT STA. 452+40	1
LT STA. 0+14	1
RT STA. 452+82	1
TOTAL	7

TEMPORARY DITCH CHECK

LT STA. 452+00 1 EACH

LEVELING BINDER THICKNESS

STA	13'LT	℄	13'RT
257+70.00	0.06	0.06	0.06
258+00.00	0.23	0.22	0.18
258+20.00	0.27	0.28	0.25
258+26.25	0.26	0.27	0.25
259+20.75	0.22	0.22	0.25
259+27.00	0.23	0.22	0.25
259+69.00	0.06	0.06	0.06
451+90.00	0.06	0.06	0.06
452+00.00	0.12	0.10	0.13
452+45.00	0.26	0.27	0.27
452+50.00	0.25	0.26	0.27
452+90.68	0.27	0.20	0.19
0+14.00	0.08	0.17	0.12
0+50.00	0.20	0.20	0.20
0+60.00	0.20	0.20	0.20
0+97.00	0.06	0.06	0.06

BITUMINOUS SHOULDER THICKNESS

STA	20'LT	13'LT	13'RT	20'RT
257+30.00	0.12	0.12	0.12	0.12
257+60.00	0.06	0.18	0.15	0.06
257+70.00	0.06	0.22	0.19	0.06
258+00.00	0.14	0.35	0.30	0.16
258+20.00	0.22	0.39	0.37	0.19
258+26.25	0.23	0.38	0.37	0.17
259+20.75	0.22	0.34	0.37	0.24
259+27.00	0.23	0.35	0.37	0.25
259+69.00	0.09	0.19	0.20	0.13
259+79.00	0.06	0.15	0.16	0.10
260+09.00	0.12	0.12	0.12	0.12
451+50.00	0.12	0.12	0.12	0.12
451+60.00	0.06	0.08	0.05	0.06
452+00.00	0.17	0.24	0.25	0.18
452+45.00	0.32	0.38	0.39	0.30
452+50.00	0.32	0.37	0.39	0.29
452+90.68	0.25	0.39	0.31	0.14
0+14.00	0.10	0.20	0.24	0.06
0+50.00	0.24	0.32	0.32	0.22
0+60.00	0.25	0.32	0.32	0.20
0+97.00	0.16	0.17	0.17	0.06
1+37.00	0.12	0.12	0.12	0.12

PRIME COAT

LOCATION	BITUMINOUS MATERIALS GALLON	AGGREGATE TON
STA 257+30.00 TO STA 258+26.25	43	0
STA 259+20.75 TO STA 260+09.00	40	0
STA 451+50.00 TO STA 452+90.68	63	1.5
STA 0+14.00 TO STA 1+37.00	55	1.5
TOTAL	201	3.0

BITUMINOUS CONCRETE SURFACE COURSE

LOCATION	TON
STA 257+30.00 TO STA 258+26.25	25
STA 259+20.75 TO STA 260+09.00	23
STA 451+50.00 TO STA 452+90.68	34
STA 0+14.00 TO STA 1+37.00	30
TOTAL	112

LEVELING BINDER (MACHINE METHOD)

LOCATION	TON
STA 257+70.00 TO STA 258+26.25	21
STA 259+20.75 TO STA 259+69.00	15
STA 451+90.00 TO STA 452+90.68	40
STA 0+14.00 TO STA 0+97.00	25
TOTAL	101

BITUMINOUS SHOULDERS SUPERPAVE

LOCATION	LT TON	RT TON
STA 257+30.00 TO STA 258+26.25	32	32
STA 259+20.75 TO STA 260+09.00	30	34
STA 451+50.00 TO STA 452+90.68	63	59
STA 0+14.00 TO STA 1+37.00	33	26
* STA 452+68.70 TO STA 452+80.40	3	
* STA 453+18.05 TO STA 0+09.75	3	
* STA 452+95.50 TO STA 453+07.20		3
* STA 0+24.70 TO STA 0+36.40		3
TOTAL	164	157

* 6" THICK BITUMINOUS SHOULDER TO REPLACE AREAS REMOVED PRIOR TO PPC DECK BEAM REMOVAL

SEE SHEET 9 FOR BITUMINOUS SURFACE REMOVAL, BUTT JOINT AND TEMPORARY RAMP SCHEDULES.

SEE SHEET 12 FOR BRIDGE APPROACH PAVEMENT SCHEDULE.

SEE SHEETS 13 & 14 FOR GUARDRAIL & TERMINAL SCHEDULES.

SCHEDULE OF QUANTITIES

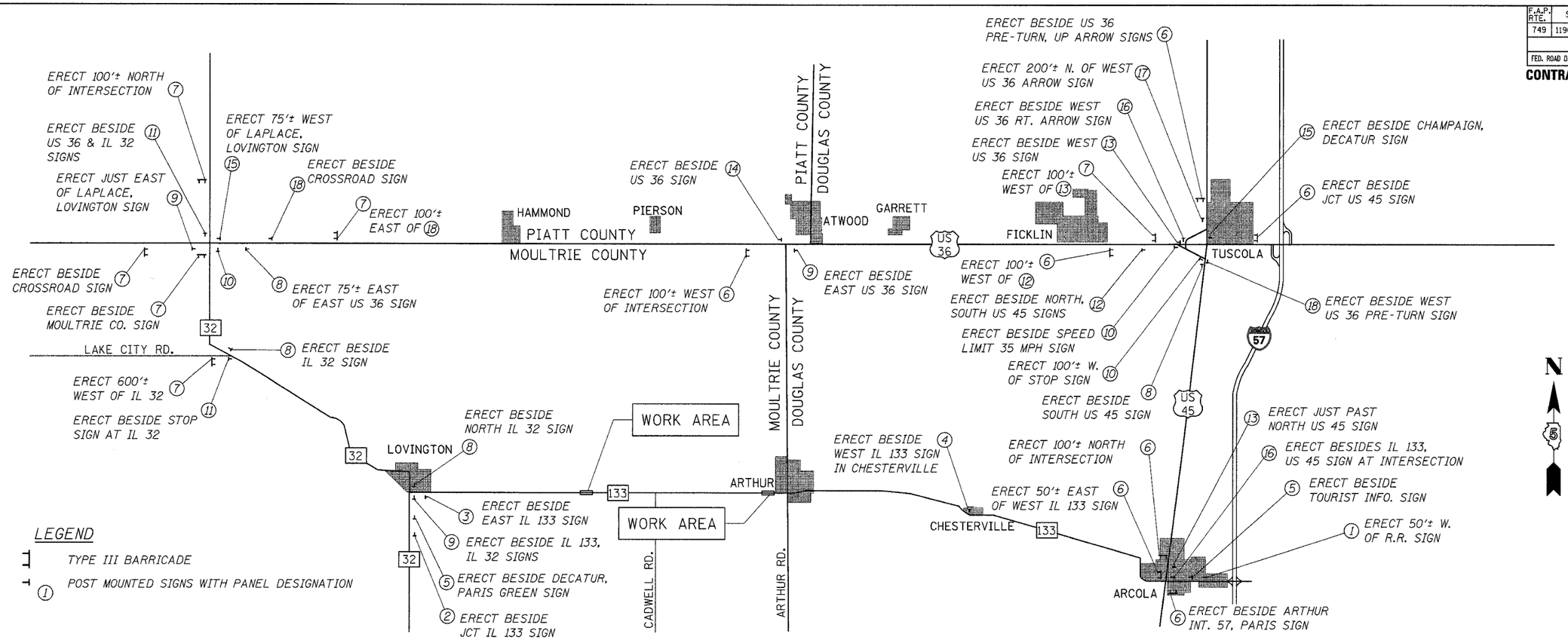
FAP ROUTE 749 (IL ROUTE 133)
SECTION 119(BR-2 & BR-3)
MOULTRIE COUNTY
S.N. 070-0016 & S.N. 070-0035

CUMMINS ENGINEERING CORPORATION

JOB #: 2114.4
FILE: 2114QTY.DGN
DATE: 10/10/05

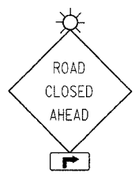
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	119(BR-2&BR-3)	MOULTRIE	34	7
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 70347



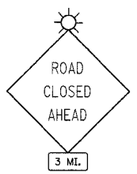
W20-3(0)-48
POST MOUNTED
W/ LIGHT

SIGN PANEL (1)



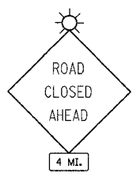
W20-3(0)-48
M5-LR
POST MOUNTED
W/ LIGHT

SIGN PANEL (2)



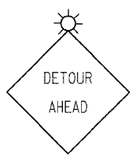
W20-3(0)-48
W16-3A(0)
POST MOUNTED
W/ LIGHT

SIGN PANEL (3)



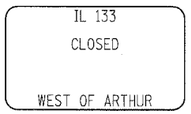
W20-3(0)-48
W16-3A(0)
POST MOUNTED
W/ LIGHT

SIGN PANEL (4)



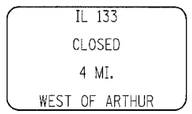
W20-2(0)-48
POST MOUNTED
W/ LIGHT

SIGN PANEL (5)



R11-3A 6030(0)
MOUNTED TO NCHRP-350
APPROVED DEVICE &
TYPE III BARRICADE

SIGN PANEL (6)



R11-3A 6030(0)
MOUNTED TO NCHRP-350
APPROVED DEVICE &
TYPE III BARRICADE

SIGN PANEL (7)

M4-8
M3-2
M1-5
POST MOUNTED

SIGN PANEL (8)

M4-8
M3-2
M1-5
M6-3
POST MOUNTED

SIGN PANEL (9)

M4-8
M3-2
M1-5
M6-1
POST MOUNTED

SIGN PANEL (10)

M4-8
M3-2
M1-5
M6-1
POST MOUNTED

SIGN PANEL (11)

M4-8
M3-2
M1-5
M5-1R
POST MOUNTED

SIGN PANEL (12)

M4-8
M3-4
M1-5
POST MOUNTED

SIGN PANEL (13)

M4-8
M3-4
M1-5
M6-3
POST MOUNTED

SIGN PANEL (14)

M4-8
M3-4
M1-5
M6-1
POST MOUNTED

SIGN PANEL (15)

M4-8
M3-4
M1-5
M6-1
POST MOUNTED

SIGN PANEL (16)

M4-8
M3-4
M1-5
M5-1R
POST MOUNTED

SIGN PANEL (17)

M4-8
M3-4
M1-5
M5-1L
POST MOUNTED

SIGN PANEL (18)

MAINTENANCE OF TRAFFIC GENERAL NOTES

1.) IL 133 SHALL NOT BE CLOSED UNTIL ALL DETOUR SIGNING IS ERECTED AND APPROVED BY THE ENGINEER.

2.) ALL EXISTING SIGNING THAT IS NOT APPLICABLE WHILE THE DETOUR IS IN EFFECT SHALL BE COMPLETELY COVERED BY THE CONTRACTOR. COSTS FOR COVERING EXISTING SIGNS SHALL BE INCLUDED IN THE COST FOR TRAFFIC CONTROL AND PROTECTION (SPECIAL).

3.) AS A MINIMUM, ALL AMBER FLASHING LIGHTS THAT ARE REQUIRED FOR THE DETOUR SIGNING SHALL MEET THE REQUIREMENTS FOR TYPE A-LOW INTENSITY FLASHING LIGHTS PER ARTICLE 1084.01 OF THE STANDARD SPECIFICATIONS. ALL LIGHTS SHALL OPERATE DURING HOURS OF DARKNESS. ONLY LIGHTS THAT HAVE BEEN APPROVED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION SHALL BE USED.

MAINTENANCE OF TRAFFIC DETOUR SIGNING

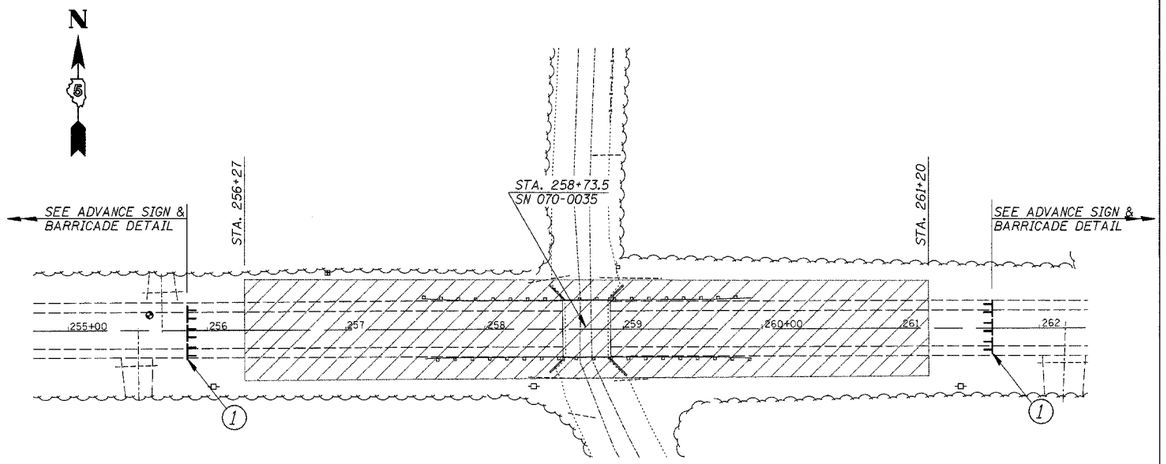
F.A.P. 749 (IL ROUTE 133)
SECTION 119(BR-2 & BR-3)
MOULTRIE COUNTY
S.N. 070-0016 & S.N. 070-0035

CUMMINS ENGINEERING CORPORATION

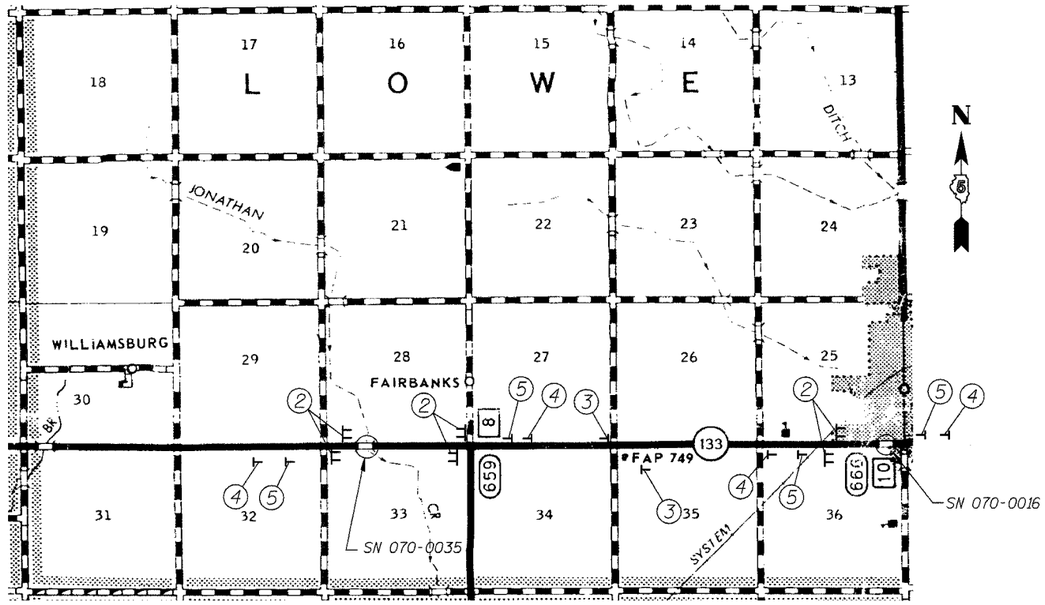
JOB #: 2114.3
FILE: 2114.3DETOUR
DATE: 10/7/05

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	119(BR-2&BR-3)	MOULTRIE	37	8
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

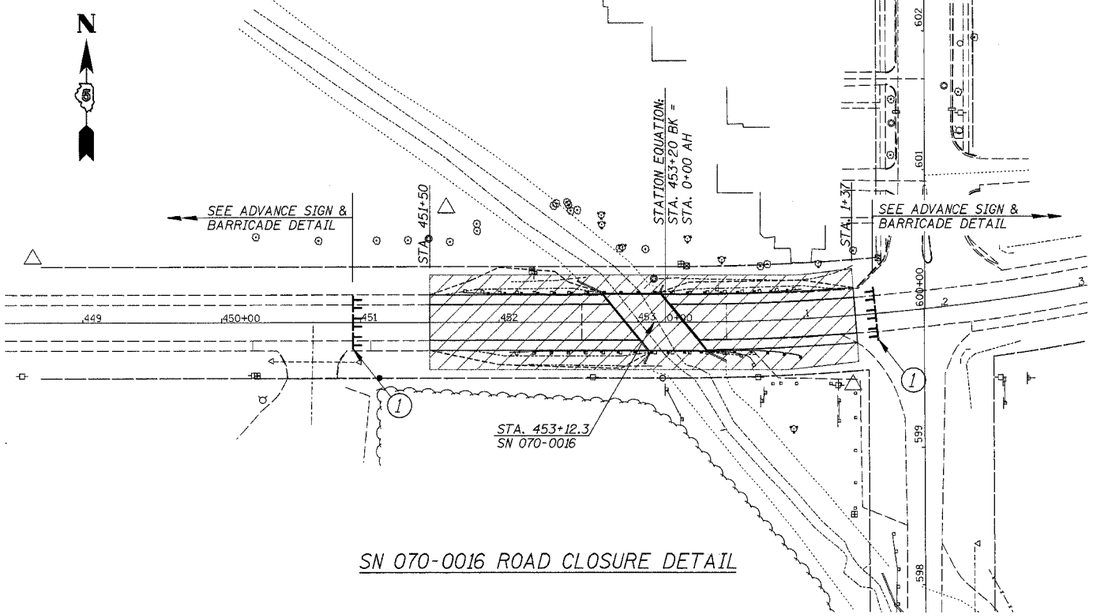
CONTRACT NO. 70347



SN 070-0035 ROAD CLOSURE DETAIL



ADVANCE SIGN & BARRICADE DETAIL



SN 070-0016 ROAD CLOSURE DETAIL

LEGEND

(1) R11-2 "ROAD CLOSED" MOUNTED ON NCHRP 350 TEMPORARY SIGN SUPPORT DIRECTLY IN FRONT OF TYPE III BARRICADES AS SHOWN IN "ROAD CLOSED TO ALL TRAFFIC" DETAIL ON STANDARD 702001

(2) R11-4 "ROAD CLOSED TO THRU TRAFFIC" MOUNTED ON NCHRP 350 TEMPORARY SIGN SUPPORT DIRECTLY IN FRONT OF TYPE III BARRICADES AS SHOWN IN "ROAD CLOSED TO THRU TRAFFIC" DETAIL ON STANDARD 702001.

POST MOUNTED SIGNS

TYPE III BARRICADE

WORK ZONE

(3)

(4)

(5)

SEE SHEET 9 FOR TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR ROAD CLOSURE FOR DETAILS.

MAINTENANCE OF TRAFFIC
ROAD CLOSURE

FAP ROUTE 749 (IL RTE. 133)
SECTION 119(BR-2 & BR-3)
MOULTRIE COUNTY
S.N. 070-0016 & S.N. 070-0035

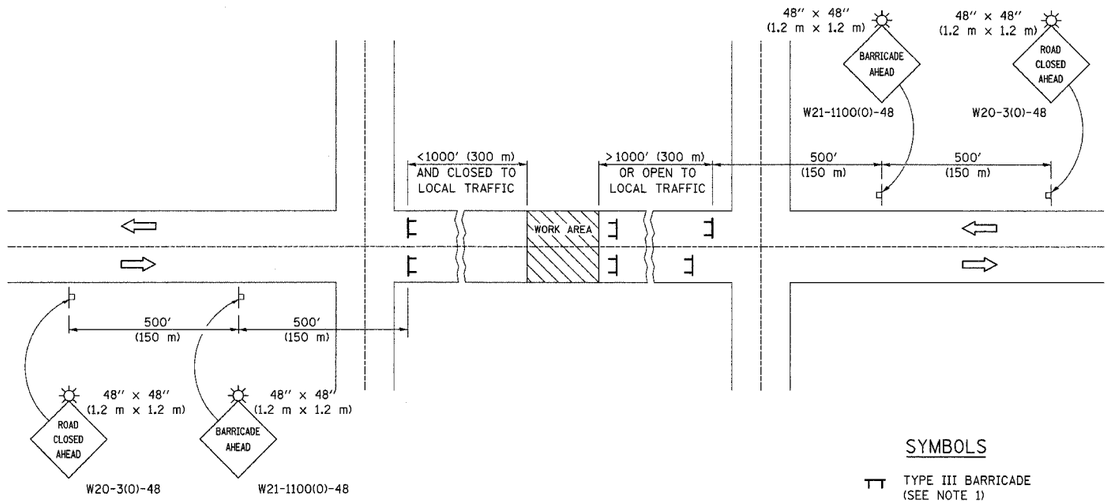
CUMMINS ENGINEERING CORPORATION

JOB #: 2114.3
FILE: 2114.3TCP
DATE: 10/10/05

FAP ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	119(BR-2 & BR-3)	MOULTRIE	37	9
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

CONTRACT NO. 70347

TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR ROAD CLOSURE



SYMBOLS

- TYPE III BARRICADE (SEE NOTE 1)
- FLASHING AMBER LIGHT (TYPE A)

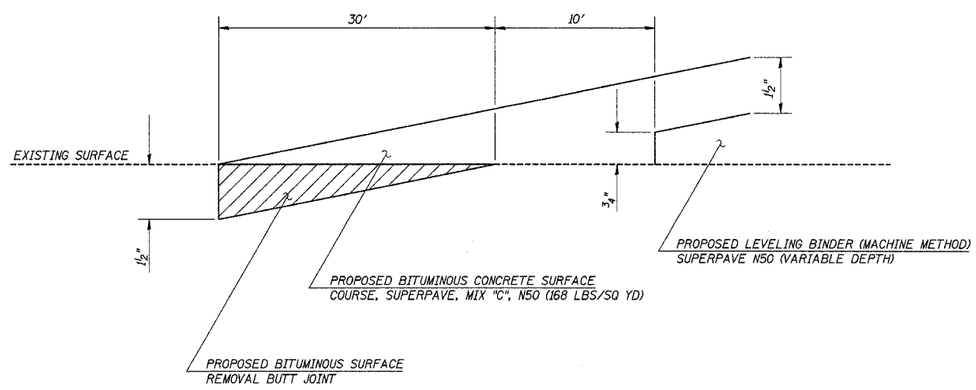
GENERAL NOTES

1. TYPE III BARRICADES SHALL BE AS SHOWN ON STANDARD 702001 "TYPICAL APPLICATIONS OF TYPE III BARRICADES CLOSING A ROAD". EACH TYPE III BARRICADE SHALL HAVE TWO FLASHING AMBER LIGHTS MOUNTED ABOVE IT.
2. IF THE ROAD IS OPEN TO LOCAL TRAFFIC OR EXCEEDS 1000' (300 m), ANOTHER SET OF TYPE III BARRICADES, EQUIPPED AS IN NOTE 1 ABOVE, SHALL BE PLACED AT EACH END OF THE WORK AREA.
3. WHEN A STOP CONDITION EXISTS, NO SIGNS ARE REQUIRED IN ADVANCE OF THE "STOP" SIGN WHEN THE ROAD IS CLOSED WITHIN 100' (30 m) OF THE INTERSECTION.
4. STANDARD 702001 SHALL APPLY FOR THE PLACEMENT & DESIGN OF TYPE III BARRICADES.
5. IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 IS NOT AVAILABLE, THE SIGNS MAY BE MOUNTED ON AN NCHRP 350 TEMPORARY SIGN SUPPORT DIRECTLY IN FRONT OF THE BARRICADE.
6. REFLECTORIZED STRIPING SHALL APPEAR ON BOTH SIDES OF THE TY III BARRICADES IF ROAD IS OPEN TO LOCAL TRAFFIC.
7. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
8. A MINIMUM OF TWO FLASHING LIGHTS SHALL BE USED AT NIGHT ON EACH APPROACH IN ADVANCE OF THE WORK AREA. FLASHING LIGHTS SHALL BE INSTALLED ABOVE THE FIRST TWO SIGNS IN THE SERIES.
9. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED SLIGHTLY TO FIT FIELD CONDITIONS.
10. FORMS BT. 725 AND BT. 726 ARE REQUIRED.
11. WHEN A SIDEROAD INTERSECTS THE HIGHWAY ON WHICH WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC DEVICES SHALL BE ERECTED AND PROVIDED AS DIRECTED BY THE ENGINEER.
12. AN ADDITIONAL SIGN MAY BE REQUIRED AT A MAJOR INTERSECTING ROAD IN ADVANCE OF THE CLOSURE. THE ADDITIONAL SIGN SHALL GIVE THE DISTANCE TO THE BARRICADE IN MILES OR FRACTIONS OF A MILE.

	NAME	DATE	REVISIONS	
DESIGNED	J.H.M.	8-11-87	NAME	DATE
CHECKED	P.E.K.	8-25-87	R.M.H.	12/97
CADD NO.	F-5.03		C.P./K.A.G.	01/05

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

BITUMINOUS SURFACE REMOVAL – BUTT JOINT



BITUMINOUS SURFACE REMOVAL-BUTT JOINT

LOCATION	LENGTH FOOT	WIDTH FOOT	AREA SQ YD
STA. 257+30 TO STA. 257+60	30	40	134
STA. 259+79 TO STA. 260+09	30	40	134
STA. 451+50 TO STA. 451+80	30	40	134
STA. 1+07 TO STA. 1+37	30	40	134
TOTAL			536

TEMPORARY RAMP

LOCATION	LENGTH FOOT	WIDTH FOOT	AREA SQ YD
STA. 451+50 TO STA. 451+55	5	40	23
STA. 452+74.68 TO STA. 452+90.68	16	40	72
STA. 0+14.00 TO STA. 0+26.00	12	40	54
STA. 1+32 TO STA. 1+37	5	40	23
TOTAL			172

MILLING AND RESURFACING AT S.N. 070-0035 SHALL BE DONE WITH THE ROAD CLOSED TO ALL TRAFFIC. IF THE CONTRACTOR ELECTS TO DELAY THIS WORK UNTIL AFTER THE ROAD IS OPEN, ADDITIONAL TRAFFIC CONTROL, AGGREGATE PRIME COAT AND TEMPORARY RAMPS AT THE APPROACH PAVEMENT AND BUTT JOINT WILL BE REQUIRED. THE COST OF THESE ITEMS WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE VARIOUS RESURFACING ITEMS.

ROAD CLOSURE & BUTT JOINT DETAILS

FAP ROUTE 749 (IL RTE. 133)
SECTION 119(BR-2 & BR-3)
MOULTRIE COUNTY
S.N. 070-0016 & S.N. 070-0035

CUMMINS ENGINEERING CORPORATION

JOB #: 2114.3
FILE: 2114.3BUTTJT
DATE: 10/10/05

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	11(BR-2&BR-3)	MOULTRIE	37	10
STA. 256+00	TO STA. 262+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 70347

EXISTING STRUCTURE NO. 070-0035
SINGLE SPAN PPC DECK BEAM BRIDGE ON CLOSED ABUTMENTS.
34'-0" BK TO BK ABUTMENTS; 41'-0" O TO O DECK

REMOVAL OF EXISTING SUPERSTRUCTURES, NO. 1 1 EACH

SEC 28, T15N, R6E, 3RD PM

N

SECTION BEGINS
STA. 256+27

EXIST. 12" CMP
(TYP. AT EACH CORNER)

GRADING LIMITS

JONATHAN CREEK

STA. 258+73.5 EXISTING SN 070-0035
PROPOSED PPC DECK BEAMS (17" DEPTH)
PROPOSED CONCRETE WEARING SURFACE

GRADING LIMITS

SECTION ENDS
STA. 261+20

STA. 257+30 BUTT JOINT
STA. 257+60
STA. 258+20.25
STA. 258+26.25
STA. 258+56.25
STA. 258+90.75
STA. 259+20.75
STA. 259+26.75
STA. 259+79
STA. 260+09 BUTT JOINT

EXISTING ROW LINE

40' ROW
7'
13'
13'
7'
40' EXISTING

256 | 257 | 258 | 259 | 260+00 | 261 | ℄ IL RT 133

GRADING LIMITS

PROPOSED BRIDGE APPROACH
PAVEMENT CONNECTOR
(FLEXIBLE) STANDARD 420401

PROPOSED BRIDGE APPROACH
PAVEMENT STANDARD 420401

PROPOSED BRIDGE APPROACH
PAVEMENT CONNECTOR
(FLEXIBLE) STANDARD 420401

PROPOSED BRIDGE APPROACH
PAVEMENT STANDARD 420401

EXISTING ROW LINE

GRADING LIMITS

BITUMINOUS SURFACE REMOVAL - BUTT JOINT
PAVED SHOULDER REMOVAL
PAVEMENT REMOVAL
APPROACH SLAB REMOVAL
INLET AND PIPE PROTECTION
PERIMETER EROSION BARRIER

SEE SHEET 13 FOR SHOULDER WIDENING AND GUARDRAIL DETAILS

SEE SHEET 12 FOR BRIDGE APPROACH PAVEMENT DETAILS.

SEC 33, T15N, R6E, 3RD PM

B.M.4701-01 CHISELED SQUARE ON
NW WINGWALL OF SN 070-0035
23' LT STA 258+56
ELEV. = 675.21

EARTH EXCAVATION = 35 CU. YD.
EMBANKMENT = 145 CU. YD.
(FURNISHED EXCAVATION = 120 CU. YD.)

PROPOSED ℄ PROFILE
EXISTING ℄ PROFILE

257+30 674.98
258+20 675.32
259+27 675.32
260+09 674.95

0.38%
0.00%
-0.45%

683 681 679 677 675 673 671 669 667

	256+00	256+50	257+00	257+50	258+00	258+50	259+00	259+50	260+00	260+50	261+00	261+50	262+00
EXISTING	675.0	675.0	675.0	675.0	675.0	675.0	675.0	675.0	674.9	674.9	675.0	675.0	675.0
PROPOSED	675.0	675.0	675.0	675.0	675.0	675.06	675.15	674.9 675.24	674.9 675.32	674.9 675.32	675.0 675.32	675.0 675.32	675.0 675.32
	675.0	675.0	675.0	675.0	675.0	675.0	675.0	675.0	675.0	674.9	675.0	675.0	675.1
								675.32	675.22	675.10	674.99		

IL RTE 133 STA. 256+00 TO STA. 262+00

PLAN
SURVEYED
DRAWN
ALIGNMENT CHECKED
NOTE BOOK
NO.
DATE
BY

PROFILE
SURVEYED
DRAWN
GRADES CHECKED
NOTE BOOK
NO.
DATE
BY
STRUCTURE NO(S)/ING CHKD

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	119(BR-2&BR-3)	MOULTRIE	37	11
STA. 451+00	TO STA. 3+30			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 70347

PLAN — SURVEYED / PLOTTED / NOTE BOOK / NO. / BY / DATE / CHECKED / QUANTITIES CHECKED / STRUCTURE NOTATING CHKD

EXISTING STRUCTURE NO. 070-0016
SINGLE SPAN PPC DECK BEAM BRIDGE ON CLOSED ABUTMENTS.
42'-2 3/4" BK TO BK ABUTMENTS; 41'-0" O TO O DECK.

REMOVAL OF EXISTING SUPERSTRUCTURES NO. 2 1 EACH

STA. 453+12.03 EXISTING SN 070-0016
PROPOSED PPC DECK BEAMS (17" DEPTH)
PROPOSED CONCRETE WEARING SURFACE

SEC 25, T15N, R6E, 3RD PM

N

GRADING LIMITS
SECTION BEGINS
STA. 451+50
STA. 451+50 BUTT JOINT
STA. 451+80
EXISTING ROW LINE
STA. 452+68.70
EXISTING MANHOLE
EQUATION:
Sta 453+20.00 BK =
Sta 0+00.00 AH
STA. 0+09.75
GRADING LIMITS
STA. 1+07
STA. 1+37 BUTT JOINT
SECTION ENDS
STA. 1+37
℄ NORTH VINE
STA. 1+87.35 IL 133 =
STA. 600+00 N. VINE
96°06'24"
℄ IL RTE 133
600+00
84°01'29"
PI Sta 2+19.14
STA. 1+86.96 IL 133 =
STA. 600+00 N. VINE
599
℄ SOUTH VINE
40' ROW
7'
13'
13'
40' EXISTING
7'
451
452
453
0+00
PC Sta 0+08.30
EXISTING ROW LINE
GRADING LIMITS
STA. 452+95.50
STA. 0+36.40
EXIST. 15" CMP (TYP.)

EXIST. CURVE C5
PI STA. = 2+19.14
Δ = 14° 34' 02" (LT)
D = 3° 28' 24"
R = 1,649.63'
T = 210.84'
L = 419.41'
E = 13.42'
e = 2.3%
T.R. = MATCH EXISTING
P.C. STA. = 0+08.30
P.T. STA. = 4+27.71

BITUMINOUS SURFACE REMOVAL - BUTT JOINT
PAVED SHOULDER REMOVAL
PERIMETER EROSION BARRIER
TEMPORARY DITCH CHECK
INLET AND PIPE PROTECTION

SEE SHEETS 14 FOR SHOULDER WIDENING AND GUARDRAIL DETAILS

PROFILE — SURVEYED / PLOTTED / NOTE BOOK / NO. / BY / DATE / CHECKED / BM NOTED / STRUCTURE NOTATING CHKD

SEC 36, T15N, R6E, 3RD PM

B.M. 4702-01 CHISELED SQUARE ON TOP OF NE WINGWALL OF SN 070-0016
22.1' LT STA. 453+15.5
ELEV. 656.17

EARTH EXCAVATION = 25 CU. YD.
EMBANKMENT = 60 CU. YD.
(FURNISHED EXCAVATION = 45 CU. YD.)

PROPOSED ℄ PROFILE
EXISTING ℄ PROFILE

451+50 656.30
452+45 656.77
0+60 656.77
1+37 656.48
0.49%
0.00%
-0.38%
SD LT -1.06%
451+50 MATCH EXISTING
452+44 652.1

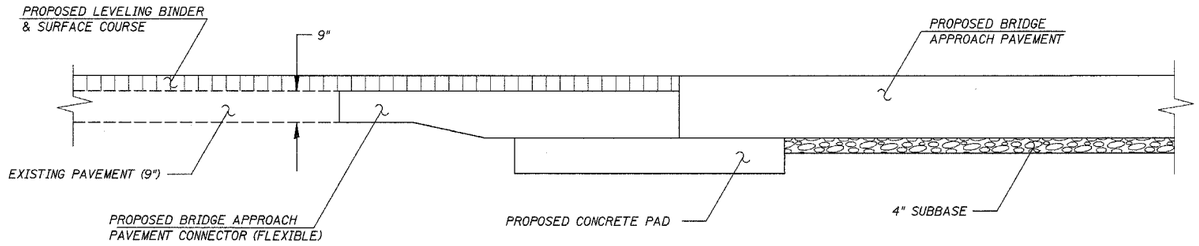
663 661 659 657 655 653 651 649 647

	451+00	451+50	452+00	452+50	453+00	0+30	0+80	1+30	1+80	2+30	2+80	3+30
EXISTING	656.3	656.3	656.3	656.3	656.4	656.5	656.4	656.5	656.5	656.5	656.6	656.5
PROPOSED		656.30	656.42	656.55	656.67	656.77	656.77	656.77	656.69	656.60	656.51	656.5	656.5	656.5	656.6	656.6	656.5	656.5

IL RTE 133 STA. 451+00 TO STA. 3+30

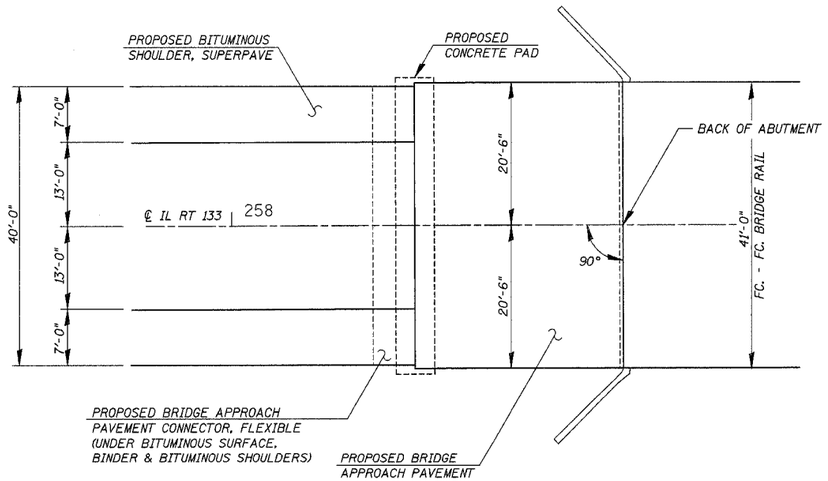
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	119(BR-2&BR-3)	MOULTRIE	37	12
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 70347



SECTION THROUGH APPROACH PAVEMENT

N



PLAN

(WEST APPROACH SHOWN)
(EAST APPROACH SIMILAR BY 180° ROTATION)

BRIDGE APPROACH PAVEMENT

LOCATION	WIDTH	SQ YD
STA 258+26.25 TO STA 258+56.25	41'	137
STA 258+90.75 TO STA 259+20.75	41'	137
TOTAL		274

BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)

LOCATION	WIDTH	SQ YD
STA 258+20.25 TO STA 258+26.25	40'	28
STA 259+20.75 TO STA 259+26.75	40'	28
TOTAL		56

PAVEMENT GROOVING

LOCATION	SQ YD
STA 258+26.25 TO STA 258+56.25	137
STA 258+90.75 TO STA 259+20.75	137
TOTAL	274

NOTES:

BRIDGE APPROACH PAVEMENT SHALL BE CONSTRUCTED AS DETAILED ON STANDARD 420401 EXCEPT THAT THE 3" WIDE CURB SHOWN IN SECTION D-D SHALL BE OMITTED

BRIDGE APPROACH PAVEMENT

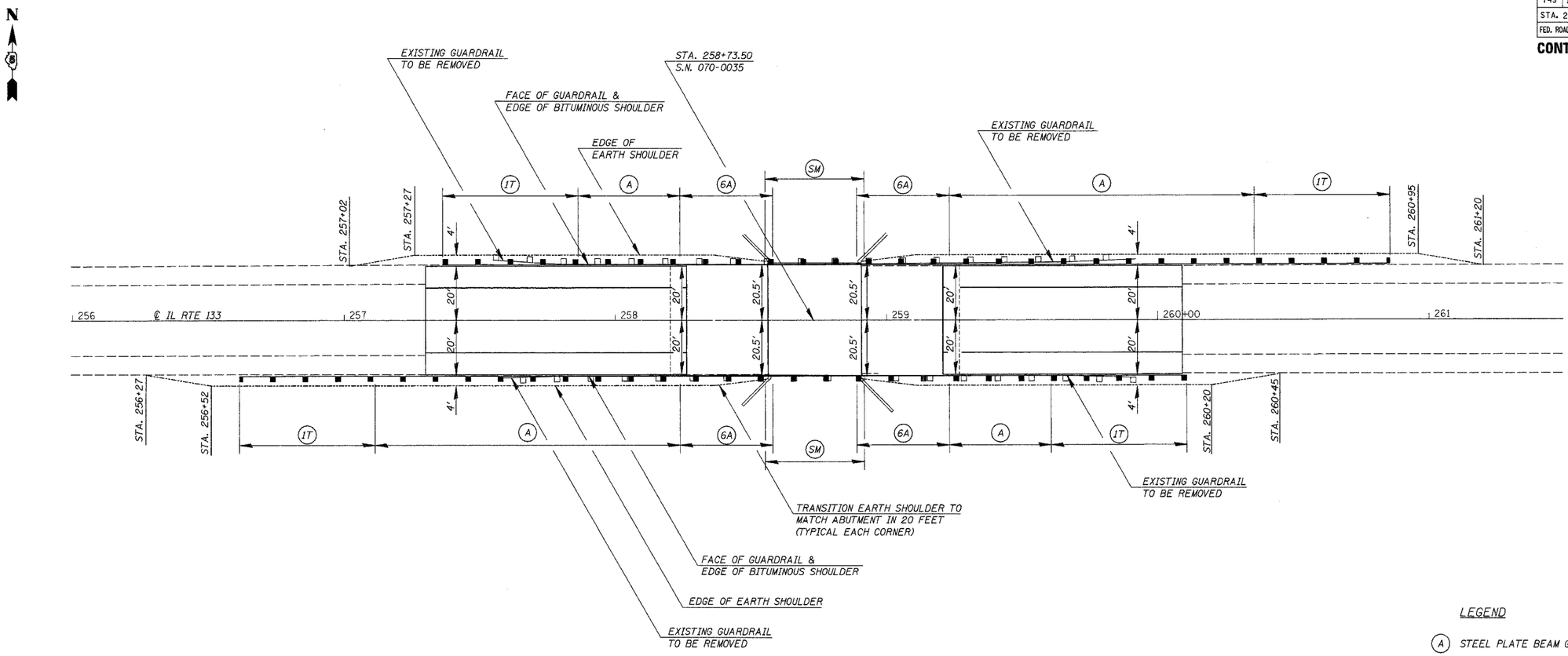
FAP ROUTE 749 (IL RTE. 133)
SECTION 119(BR-2 & BR-3)
MOULTRIE COUNTY
S.N. 070-0016 & S.N. 070-0035

CUMMINS ENGINEERING CORPORATION

JOB #: 2114.4
FILE: 2114.4APPR
DATE: 10/10/05

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEET'S	SHEET NO.
749	119(BR-2&BR-3)	MOULTRIE	37	13
STA. 256+27		TO STA. 261+20		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 70347



LEGEND

- (A) STEEL PLATE BEAM GUARDRAIL, TYPE A
- (6A) TRAFFIC BARRIER TERMINAL, TYPE 6A
- (IT) TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)
- (SM) STEEL BRIDGE RAIL, TYPE SM

STEEL PLATE BEAM GUARDRAIL, TYPE A

LOCATION			FEET
LT STA 257+87.43	TO	STA 258+24.93	37.5
LT STA 259+22.07	TO	STA 260+34.57	112.5
RT STA 257+12.43	TO	STA 258+24.93	112.5
RT STA 259+22.07	TO	STA 259+59.57	37.5
TOTAL			300

TRAFFIC BARRIER TERMINAL, TYPE 6A

LOCATION			EACH
LT STA 258+24.93	TO	STA 258+59.08	1
LT STA 258+87.92	TO	STA 259+22.07	1
RT STA 258+24.93	TO	STA 258+59.08	1
RT STA 258+87.92	TO	STA 259+22.07	1
TOTAL			4

TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)

LOCATION			EACH
LT STA 257+37.43	TO	STA 257+87.43	1
LT STA 260+34.57	TO	STA 260+84.57	1
RT STA 256+62.43	TO	STA 257+12.43	1
RT STA 259+59.57	TO	STA 260+09.57	1
TOTAL			4

GUARDRAIL REMOVAL

LOCATION			FOOT
LT STA 257+56	TO	STA 258+56	100
LT STA 258+91	TO	STA 259+91	100
RT STA 257+56	TO	STA 258+56	100
RT STA 258+91	TO	STA 259+91	100
TOTAL			400

GUARDRAIL MARKERS, TYPE A

LOCATION			EACH
LT STA 257+91	TO	STA 260+31	4
RT STA 257+16	TO	STA 259+66	4
TOTAL			8

TERMINAL MARKER - DIRECT APPLIED

LOCATION	EACH
LT STA 257+37.43	1
LT STA 260+84.57	1
RT STA 256+62.43	1
RT STA 260+09.57	1
TOTAL	4

SEE STANDARD 630301 FOR DETAILS OF SHOULDER WIDENING NOT SHOWN.

GUARDRAIL AND SHOULDER DETAILS

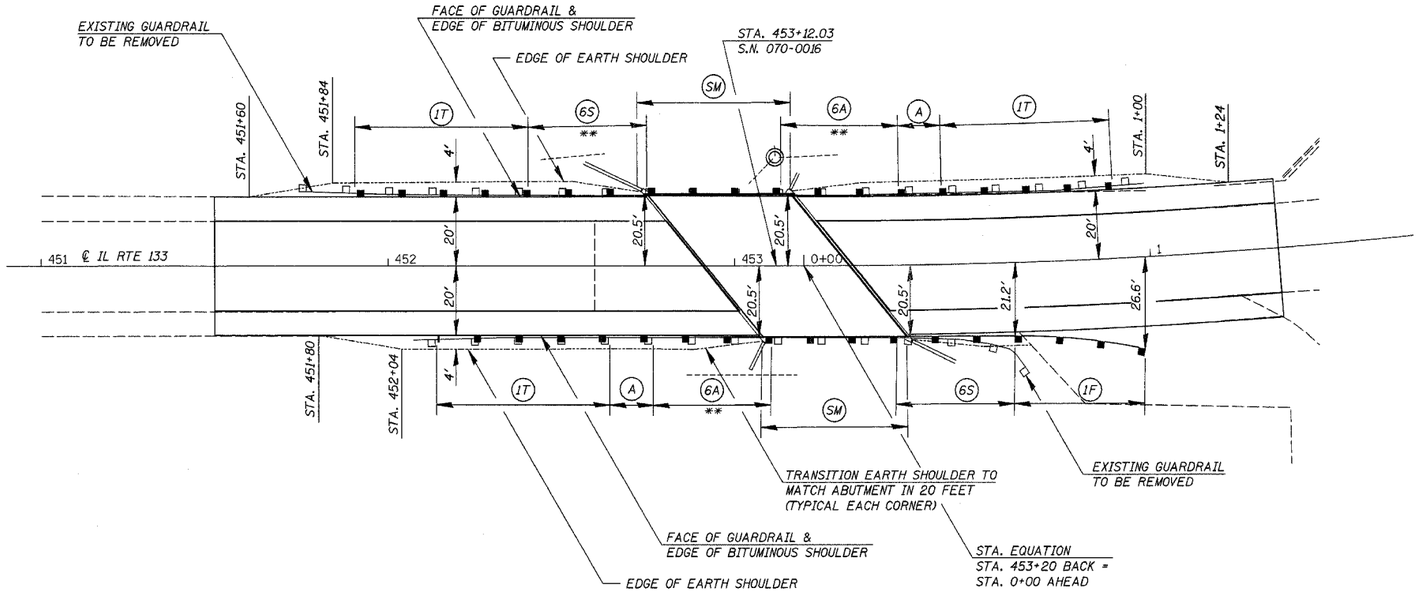
FAP ROUTE 749 (IL RTE. 133)
SECTION 119(BR-2 & BR-3)
MOULTRIE COUNTY
S.N. 070-0016 & S.N. 070-0035

CUMMINS ENGINEERING CORPORATION

JOB #: 2114.4
FILE: 2114.4GRAIL
DATE: 10/10/05

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	119(BR-2&BR-3)	MOULTRIE	37	14
STA. 451+00		TO STA. 1+37		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 70347

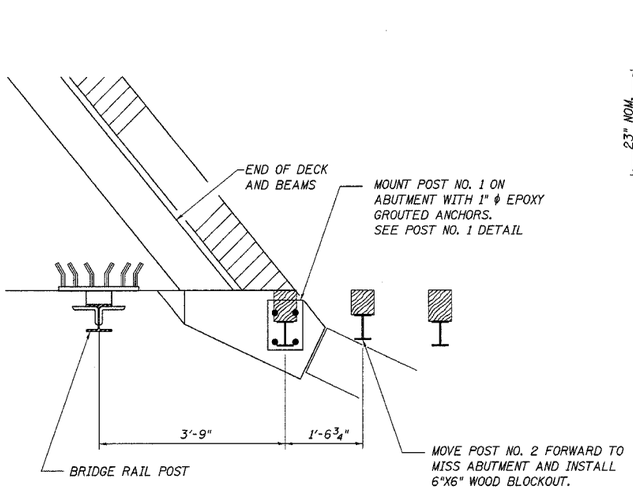


LEGEND

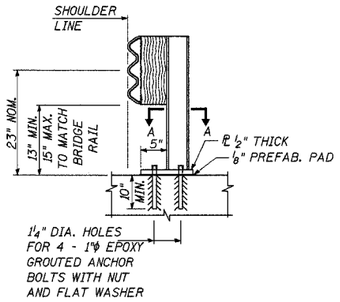
- (A) STEEL PLATE BEAM GUARDRAIL, TYPE A
- (6A) TRAFFIC BARRIER TERMINAL, TYPE 6A
- (6S) TRAFFIC BARRIER TERMINAL, TYPE 6 (SPECIAL)
- (1T) TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)
- (1F) TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (FLARED)
- (SM) STEEL BRIDGE RAIL, TYPE SM

** TRANSITION THE INSIDE FACE OF THE TRAFFIC BARRIER TERMINAL FROM 20'-6" LT & RT AT BRIDGE RAIL TO 20' LT & RT AT GUARDRAIL OR TYPE I TERMINAL.

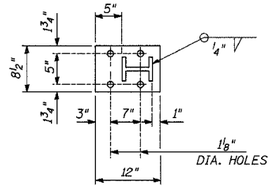
TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (FLARED) SHALL BE 37'-6" LONG.



PLAN



POST NO. 1 DETAIL



SECTION A-A

POST DETAILS FOR TRAFFIC BARRIER TERMINAL, TYPE 6 (SPECIAL)

(SE CORNER SHOWN, NW CORNER SIMILAR)

SEE STANDARD 731032 FOR DETAILS OF TRAFFIC BARRIER TERMINAL, TYPE 6 (SPECIAL) NOT SHOWN

STEEL PLATE BEAM GUARDRAIL, TYPE A

LOCATION			FOOT
LT STA. 0+27.31	TO	STA. 0+39.81	12.5
RT STA. 452+64.30	TO	STA. 452+76.80	12.5
TOTAL			25

TRAFFIC BARRIER TERMINAL, TYPE 6A

LOCATION			EACH
LT STA. 453+13.16	TO	STA. 0+27.31	1
RT STA. 452+76.80	TO	STA. 453+10.95	1
TOTAL			2

TRAFFIC BARRIER TERMINAL, TYPE 6 (SPECIAL)

LOCATION			EACH
LT STA. 452+44.10	TO	STA. 452+78.25	1
RT STA. 0+25.65	TO	STA. 0+59.80	1
TOTAL			2

TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)

LOCATION			EACH
LT STA. 451+94.10	TO	STA. 452+44.10	1
LT STA. 0+39.81	TO	STA. 0+89.81	1
RT STA. 452+14.30	TO	STA. 452+64.30	1
TOTAL			3

TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (FLARED)

LOCATION			EACH
RT STA. 0+59.80	TO	STA. 0+97.30	1
TOTAL			1

GUARDRAIL REMOVAL

LOCATION			FOOT
LT STA. 451+75	TO	STA. 452+75	100
LT STA. 453+17	TO	STA. 0+97.00	100
RT STA. 452+08	TO	STA. 453+08	100
RT STA. 0+30.00	TO	STA. 0+65.00	38
TOTAL			338

GUARDRAIL MARKERS, TYPE A

LOCATION			EACH
LT STA. 452+44.1	TO	STA. 0+39.81	4
RT STA. 452+64.3	TO	STA. 0+59.80	4
TOTAL			8

TERMINAL MARKER - DIRECT APPLIED

LOCATION	EACH
LT STA. 451+94.10	1
LT STA. 0+89.81	1
RT STA. 452+14.30	1
RT STA. 0+97.30	1
TOTAL	4

SEE STANDARD 630301 FOR DETAILS OF SHOULDER WIDENING NOT SHOWN.

GUARDRAIL AND SHOULDER DETAILS

FAP ROUTE 749 (IL RTE. 133)
SECTION 119(BR-2 & BR-3)
MOULTRIE COUNTY
S.N. 070-0016 & S.N. 070-0035

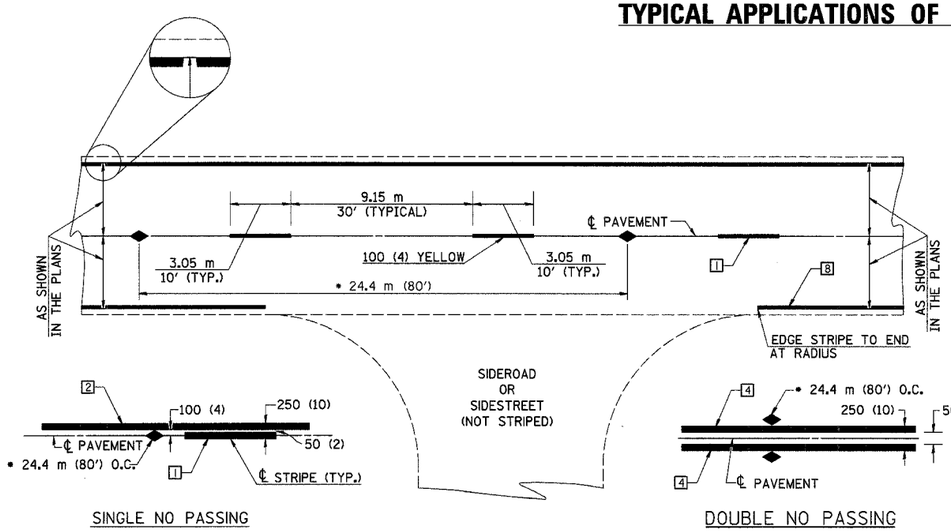
CUMMINS ENGINEERING CORPORATION

JOB #: 2114.3
FILE: 21143GRAIL
DATE: 10/10/05

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	119(BR-2&BR-3)	MOULTRIE	37	15
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 70347

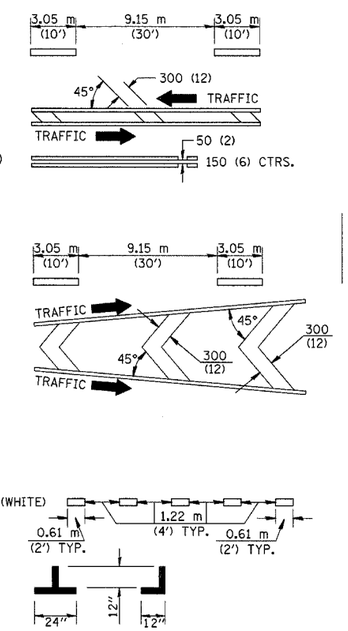
TYPICAL APPLICATIONS OF PAVEMENT MARKINGS AND MARKERS



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

TYPICAL PAVEMENT MARKING LEGEND

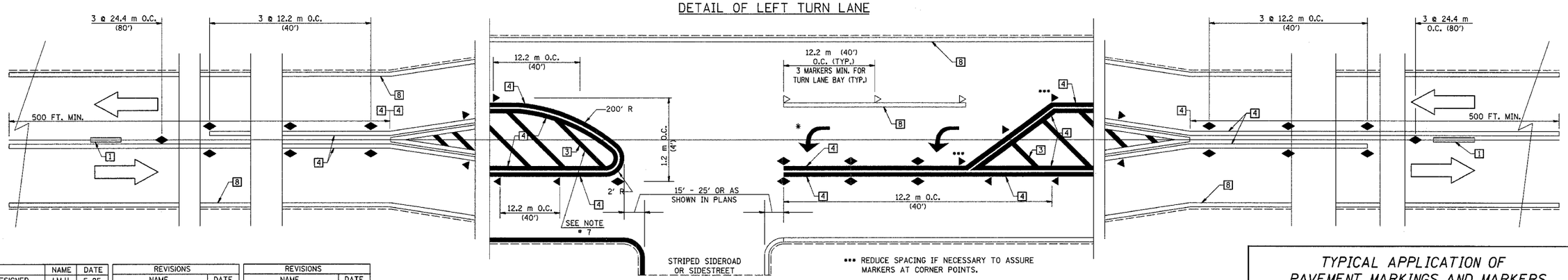
1. 100 (4) SKIP-DASH (YELLOW)
2. 100 (4) SOLID (YELLOW)
3. 300 (12) DIAGONAL (YELLOW)
4. 100 (4) DOUBLE YELLOW (NARROW)
5. RESERVED
6. RESERVED
7. 100 (4) SKIP-DASH (WHITE)
8. 100 (4) SOLID (WHITE)
9. 300 (12) DIAGONAL (WHITE)
10. 150 (6) CROSS WALK (WHITE)
11. 600 (24) STOP BAR (WHITE)
12. 200 (8) SOLID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



TYPICAL PAVEMENT MARKERS LEGEND

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

DETAIL OF LEFT TURN LANE



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

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

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED

	NAME	DATE
DESIGNED	J.M.H.	5-85
CHECKED	F.M.S.	6-85
CADD NO.	F-5.25	

REVISIONS	
NAME	DATE
J.M.H.	5-3-88
J.M.H.	10-88

REVISIONS	
NAME	DATE
D.L.P.	11-96
D.L.P.	5-97
D.L.P.	4-01
GEOMETRICS	6-01
K.A.G.	7-02

TYPICAL APPLICATION OF PAVEMENT MARKINGS AND MARKERS

F.A.P. ROUTE 749 (IL RTE. 133)
SECTION 119(BR-2 & BR-3)
MOULTRIE COUNTY
S.N. 070-0016 & S.N. 070-0035

CUMMINS ENGINEERING CORPORATION

JOB #: 2114.3
FILE: 21143PVMTM
DATE: 10/10/05

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 749	119(BR-2 & BR-3)	MOULTRIE	37	16
FED. ROAD DIST. NO. 5	ILLINOIS	PROJECT		

Sheet 1 of 8 CONTRACT #70347

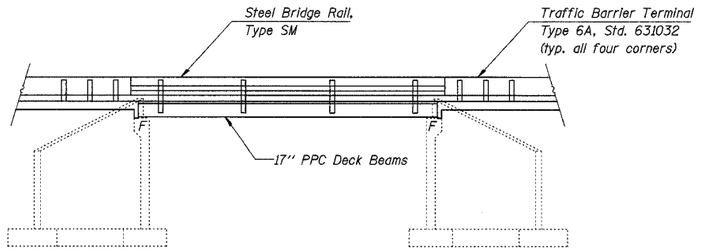
Bench Mark: B.M. 4701-1 Chiseled square on NW corner wingwall SN 070-0035, 23' Lt. Sta. 258+56.14, Elev. 675.21

Existing Structure: The existing structure, SN 070-0035, is a single span precast prestressed deck beam bridge on closed abutments. Out-to-out bridge width is 41'-0" and back-to-back abutment length is 34'-0". It was originally constructed in 1977 as FA RTE 175, Sec. 119BR at Sta. 258+73.50 The existing superstructure is to be removed and replaced as noted.

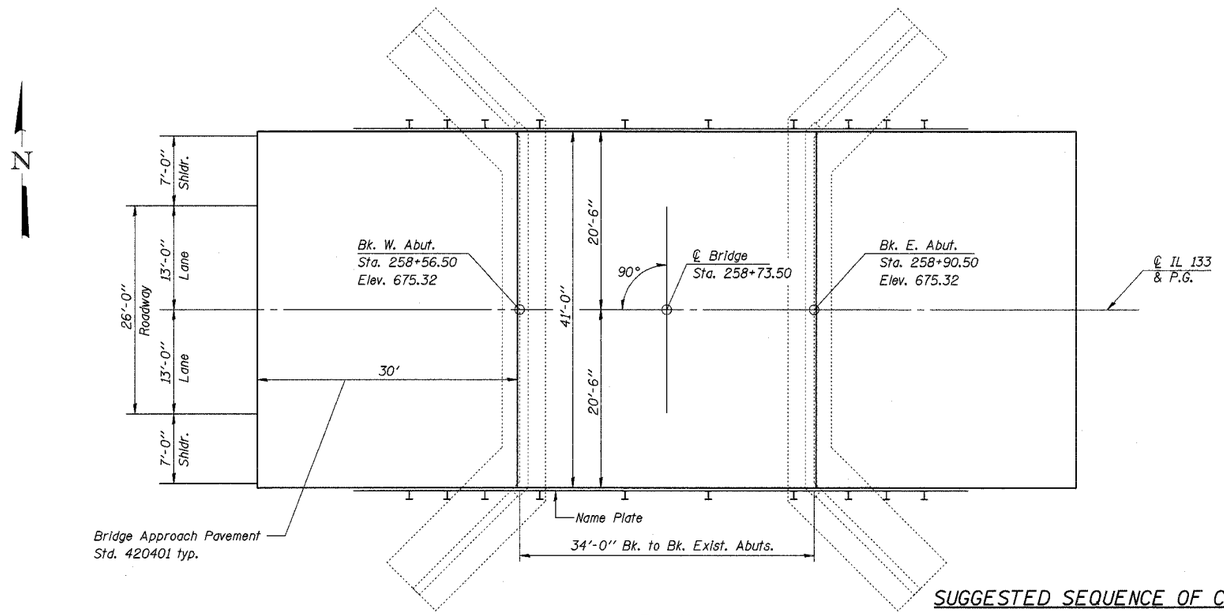
Traffic is to be detoured.

No salvage

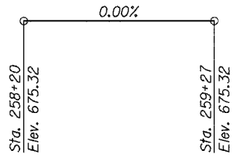
INDEX OF SHEETS



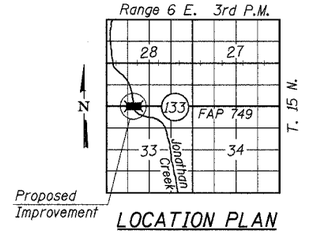
ELEVATION



PLAN



PROFILE GRADE



LOCATION PLAN

GENERAL NOTES

Reinforcement bars shall conform to the requirements of AASHTO M31 or M322 Grade 60.

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field 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 the scope of work. However, the Contractor will be paid for the quantity actually furnished at the unit price for the work.

All construction joints shall be bonded.

The minimum thickness of the Concrete overlay shall be 5" and varies as required to adjust for the new profile grade and beam camber.

The cut strands at each beam end shall be given two coats of zinc dust spray or paint meeting the requirements of ASTM A 780. 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. 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.

No instream work will be allowed on this project

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.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Superstructures No. 1	Each	1		1
Concrete Removal	Cu. Yd.		1.0	1.0
Concrete Structures	Cu. Yd.		1.0	1.0
Bridge Deck Grooving	Sq. Yd.	150		150
Protective Coat	Sq. Yd.	157		157
Concrete Wearing Surface, 5"	Sq. Yd.	157		157
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	1415		1415
Reinforcement Bars, Epoxy Coated	Pound	2000	260	2260
Steel Bridge Rail, Type SM	Foot	69		69
Name Plates	Each	1		1

DESIGN STRESSES (NEW)

FIELD UNITS

f'_c = 5,000 p.s.i. (Concrete Wearing Surface)
f'_c = 3,500 p.s.i.
f_y = 60,000 p.s.i. (Reinf. Bars)

PRECAST PRESTRESSED UNITS

f'_c = 5,000 p.s.i.
f'_{ci} = 4,000 p.s.i.
f_s = 270,000 p.s.i. ($\frac{1}{2}$" ϕ low relax strands)
f_{si} = 201,960 p.s.i. ($\frac{1}{2}$" ϕ low relax strands)

STATION 258+73.50
REBUILT 200 BY
STATE OF ILLINOIS
F.A.P. RT. 749
SEC. 119(BR-2 & BR-3)
LOADING HS20
STR. NO. 070-0035

DESIGN SPECIFICATIONS

2002 AASHTO

NAME PLATE

See Std. 515001
Existing Name Plate shall be cleaned and relocated adjacent to new Name Plate. Cost included with Name Plates.

LOADING HS20-44

No future wearing surface is allowed.

EXISTING WATERWAY INFORMATION

Drainage Area	4590 acres
Design Discharge (50 year)	1170 c.f.s.
Required Opening (below 50 year H.W.E.)	260 sq. ft.
Existing Opening (below 50 year H.W.E.)	260 sq. ft.
Created Head for Design Flood	0.28'
100 year Discharge	1460 c.f.s.
Created Head for 100 year Flood	0.35'
100 year H.W. Elevation	672.8

Note: Information per original 1977 construction plans.

SUGGESTED SEQUENCE OF CONSTRUCTION

The existing closed abutments are braced by the superstructure. To ensure stability of the abutments, the Contractor shall remove and replace the existing superstructure as follows:

Existing Beam Removal and Proposed Beam Erection Sequence:

1. Starting at either edge of deck, remove three (3) adjacent beams.
2. Install two (2) new beams and dowel into position.
3. Continue alternating removal and replacement of two (2) beams at a time until all existing beams have been removed and all new beams have been installed.

In lieu of the noted beam removal and replacement sequence, the Contractor has the option of providing external bracing to the abutments or completely removing the soil behind the abutments prior to removal of the superstructure. If either option is used, a design submittal including plan details and calculations sealed by an Illinois Licensed Structural Engineer will be required for review and acceptance by the Engineer.

DESIGNED	T.S.H.
CHECKED	R.V.B.
DRAWN	T.S.H.
CHECKED	M.D.C.

MICHAEL D. CUMMINS 001-004822 LICENSED STRUCTURAL ENGINEER OF SPRINGFIELD ILLINOIS

10/20/05

(Expires 11/30/2006)

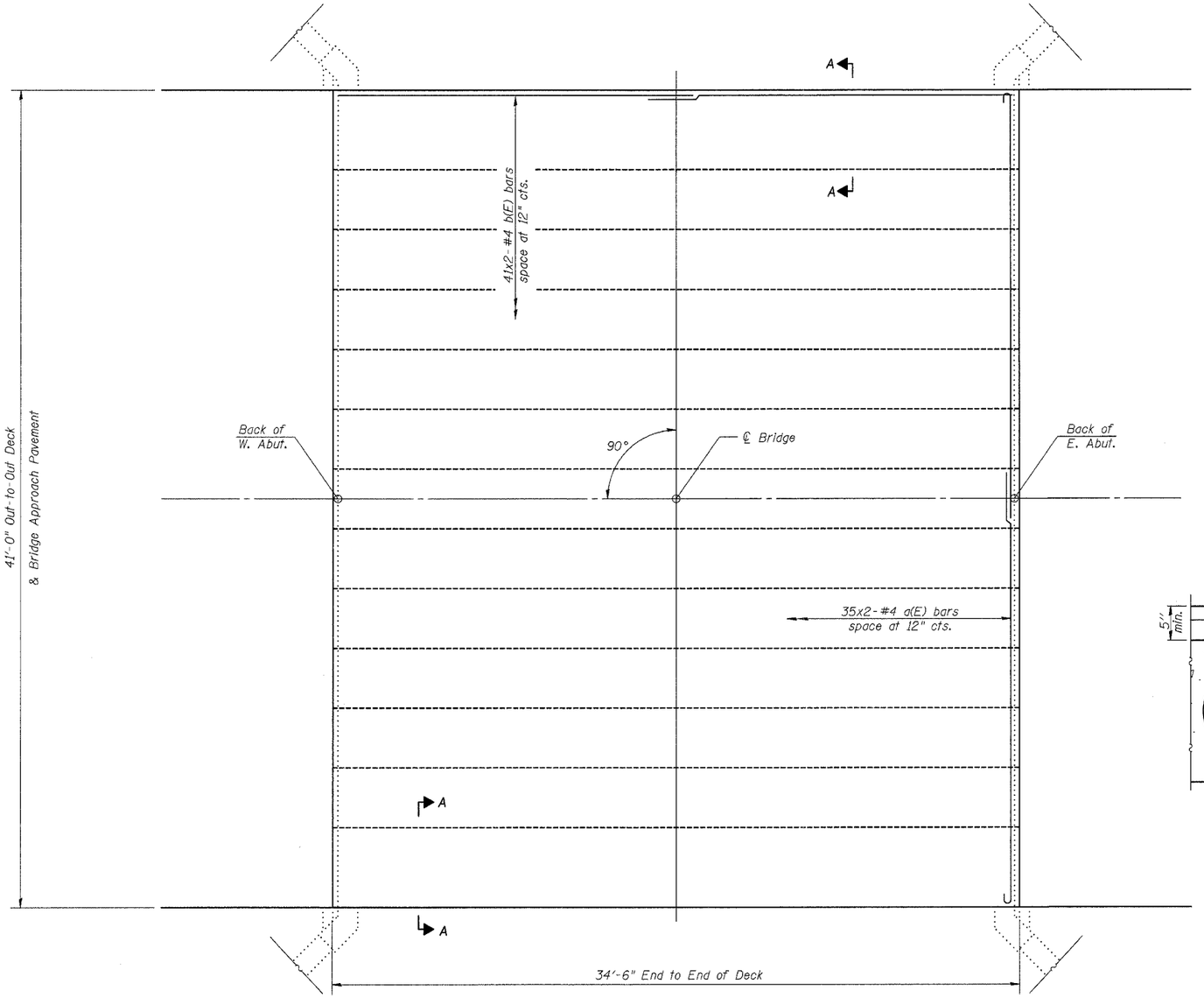
GENERAL PLAN & ELEVATION
ILLINOIS ROUTE 133 OVER
JONATHAN CREEK
F.A.P. ROUTE 749 - SEC. 119(BR-2 & BR-3)
MOULTRIE COUNTY
STATION 258+73.50
STRUCTURE NO. 070-0035

CUMMINS ENGINEERING CORPORATION

JOB #: 2114.4
FILE: 21144GPE
DATE: 10/12/05

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 749	119(BR-2 & BR-3)	MOULTRIE	37	17
FED. ROAD DIST. NO. 5	ILLINOIS	PROJECT		

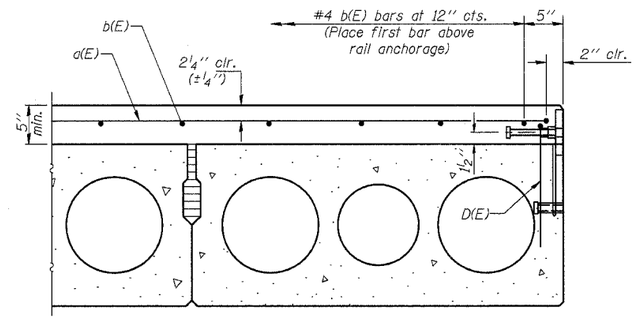
Sheet 2 of 8 CONTRACT #70347



PLAN

MIN. BAR LAP

#4 BAR = 1'-8"



SECTION A-A

Notes :
For remainder of superstructure details, see sheets 3 thru 5 of 8.
Reinforcement bars designated (E) shall be epoxy coated.
Bars indicated thus 35x2-#4 etc. indicates 35 lines of bars with 2 lengths per line.

DESIGNED	T.S.H.
CHECKED	R.V.B.
DRAWN	T.S.H.
CHECKED	M.D.C.

SUPERSTRUCTURE

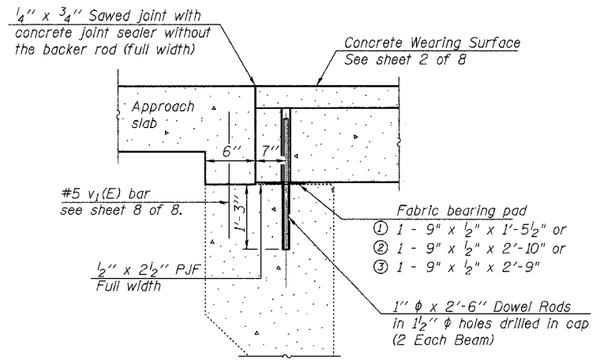
ILLINOIS ROUTE 133 OVER
JONATHAN CREEK
F.A.P. ROUTE 749 - SEC. 119(BR-2 & BR-3)
MOULTRIE COUNTY
STATION 258+73.50
STRUCTURE NO. 070-0035

CUMMINS ENGINEERING CORPORATION

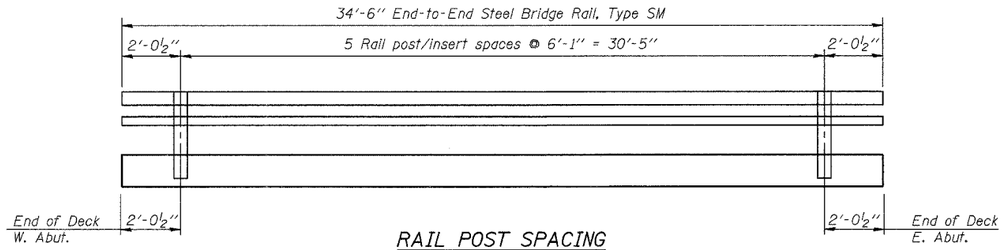
JOB #: 2114.4
FILE: 21144SUPER
DATE: 10/12/05

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 749	119(BR-2 & BR-3)	MOULTRIE	37	18
FED. ROAD DIST. NO. 5	ILLINOIS	PROJECT		

Sheet 3 of 8 CONTRACT #70347

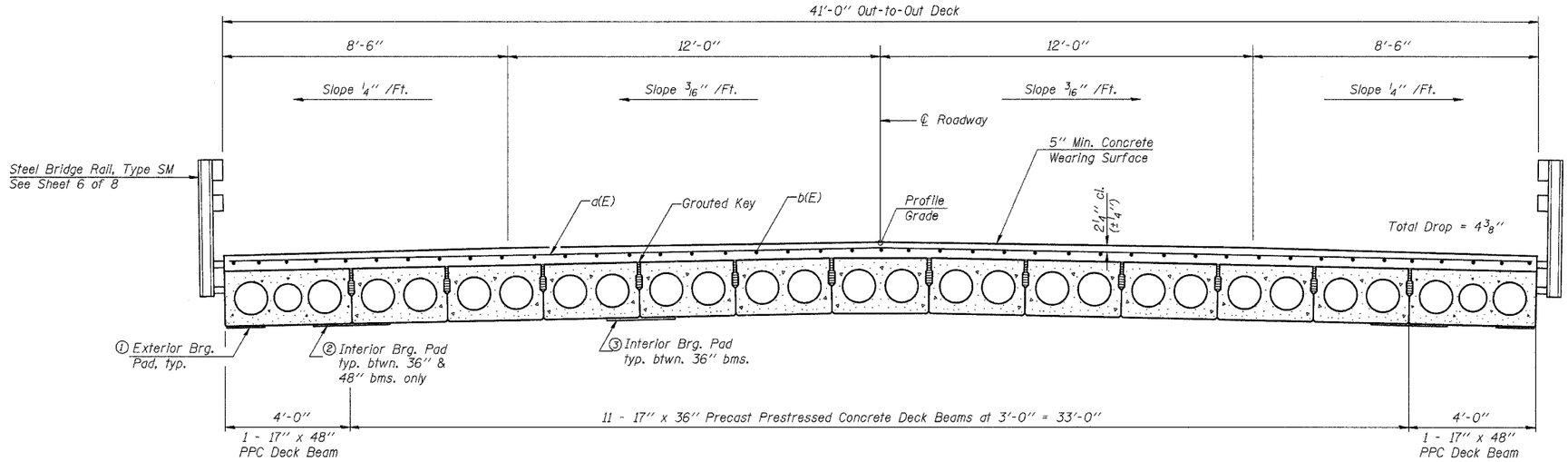


SECTION THRU ABUTMENT



RAIL POST SPACING

(See Sheet 6 of 8 for details)



CROSS SECTION

Notes :

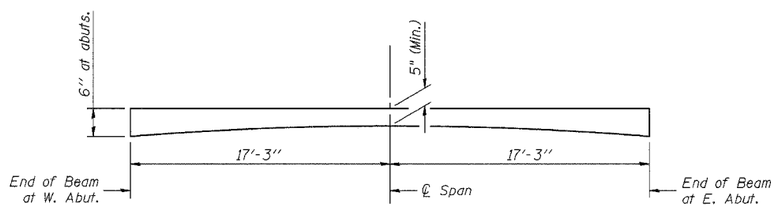
After beams have been erected, holes for dowel rods shall be drilled into the substructure and dowel rods placed. Dowel holes shall be filled with non-shrink grout to the top of beam and allowed to cure a minimum of 24 hrs. prior to grouting the shear keys.

Dowel rods drilled in cap are included in the cost of Precast Prestressed Concrete Deck Beams (17" Depth).

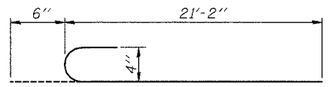
Concrete wearing surface to be poured after grouting the shear keys.

Approach Slab to be poured after concrete wearing surface is in place.

See sheets 4 and 5 of 8 for bearing pad details.



REINFORCED CONCRETE WEARING SURFACE PROFILE



BAR a(E)

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	70	#4	21'-8"	⊂
b(E)	82	#4	18'-0"	—
Reinforcement Bars, Epoxy Coated			Pound	2000
Concrete Wearing Surface			Sq. Yd.	157

Reinforcement bars designated (E) shall be epoxy coated.

DESIGNED	T.S.H.
CHECKED	R.V.B.
DRAWN	T.S.H.
CHECKED	M.D.C.

SUPERSTRUCTURE DETAILS

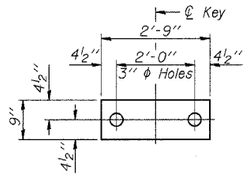
ILLINOIS ROUTE 133 OVER
JONATHAN CREEK
F.A.P. ROUTE 749 - SEC. 119(BR-2 & BR-3)
MOULTRIE COUNTY
STATION 258+73.50
STRUCTURE NO. 070-0035

CUMMINS ENGINEERING CORPORATION

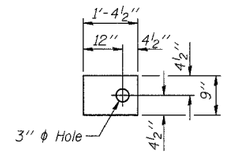
JOB #: 2114.4
FILE: 21144SUPER
DATE: 10/12/05

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 749	119(BR-2 & BR-3)	MOULTRIE	37	19
FED. ROAD DIST. NO. 5	ILLINOIS	PROJECT		

Sheet 4 of 8 CONTRACT #70347

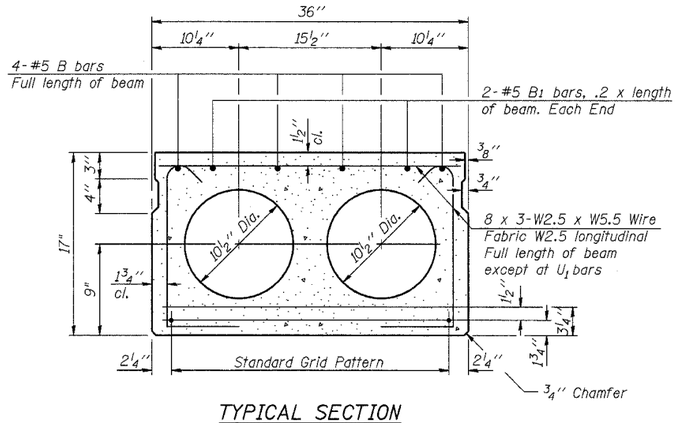


FABRIC BEARING PAD
(Interior, between 36" beams)
(20 Required)



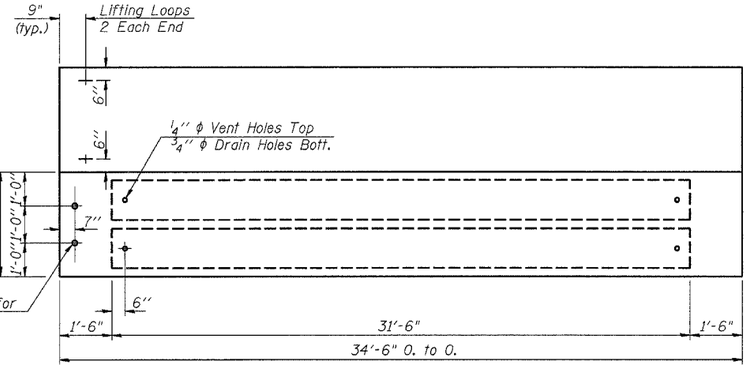
FABRIC BEARING PAD
(Exterior)
(0 Required)

FIXED

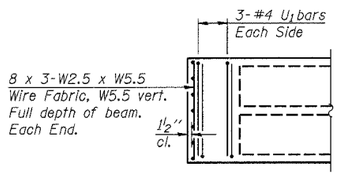


TYPICAL SECTION
(11 Required)
½" ϕ Strands, Each Strand Stressed to 30,900 Lbs.
5-Strands 1¾" up, 4-Strands 3¼" up

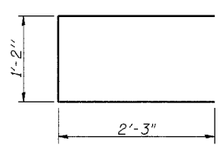
Note:
Place strands symmetrically about ℄ of beam.



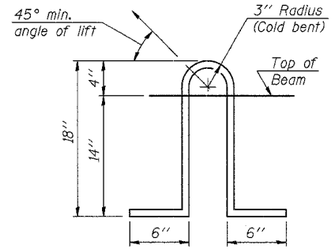
PLAN



END PLAN



BAR U1



LIFTING LOOP DETAIL

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.

Non prestressing steel shall conform to AASHTO M31 or M322 Grade 60.

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 beam end (44 required total).

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, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams.

Required Release Strength, f'ci, shall be 4,000 p.s.i.

BILL OF MATERIAL

Item	Unit	Quantity
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	1,139

DESIGNED	T.S.H.
CHECKED	R.V.B.
DRAWN	T.S.H.
CHECKED	M.D.C.

PD-3-SA 10-22-04

SUPERSTRUCTURE

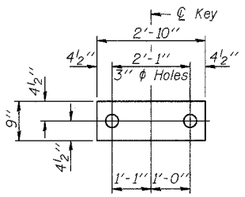
ILLINOIS ROUTE 133 OVER
JONATHAN CREEK
F.A.P. ROUTE 749 - SEC. 119(BR-2 & BR-3)
MOULTRIE COUNTY
STATION 258+73.50
STRUCTURE NO. 070-0035

CUMMINS ENGINEERING CORPORATION

JOB #: 2114.4
FILE: 21144BEAMS
DATE: 10/12/05

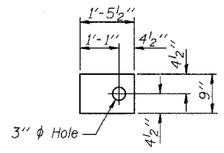
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 749	119(BR-2 & BR-3)	MOULTRIE	37	20
FED. ROAD DIST. NO. 5	ILLINOIS	PROJECT		

Sheet 5 of 8 CONTRACT #70347

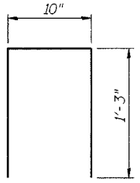


FABRIC BEARING PAD
(Interior, btwn. 36" & 48" bms.)
(4 Required)

FIXED

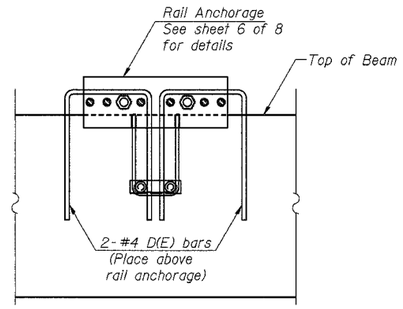


FABRIC BEARING PAD
(Exterior)
(4 Required)



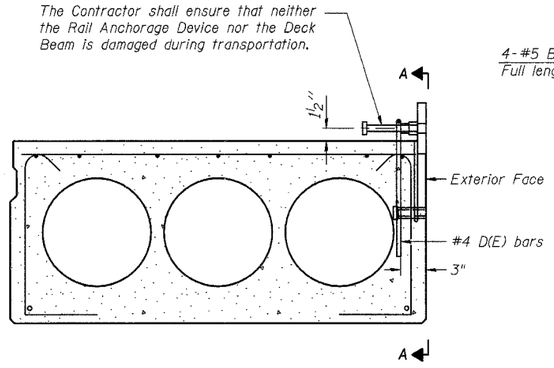
#4 D(E) BAR

Reinforcement bars designated (E) shall be epoxy coated.



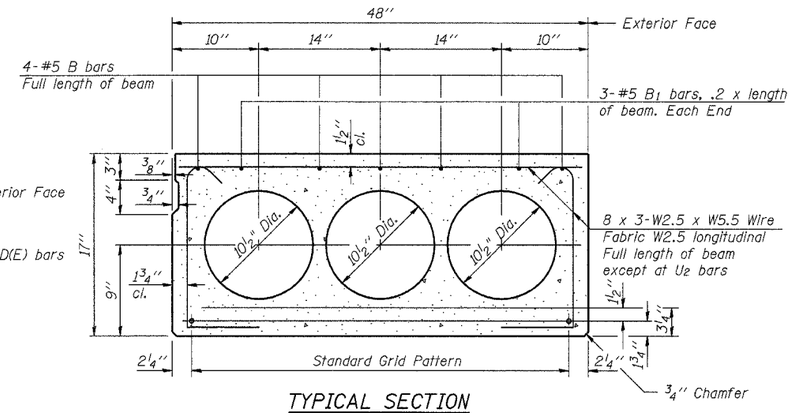
SECTION A-A

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 utilizing the bottom rail anchorage Inserts and/or additional inserts cast into beam. Drilling into the beam will not be permitted.



SECTION THRU EXTERIOR BEAMS

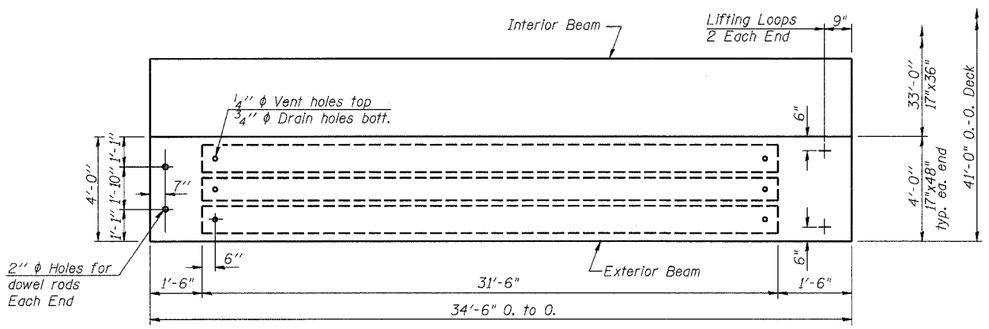
See Typical Section for strand pattern, dimensions and bar locations.



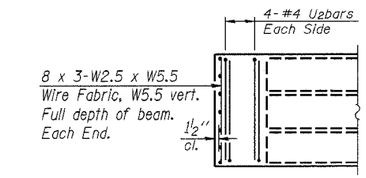
TYPICAL SECTION

(2 Required)
½" ϕ Strands, Each Strand Stressed to 30,900 Lbs.
8-Strands 1¾" up, 4-Strands 3¼" up

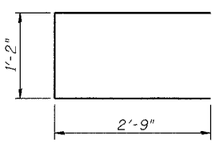
Note:
Place strands symmetrically about ℄ of beam.



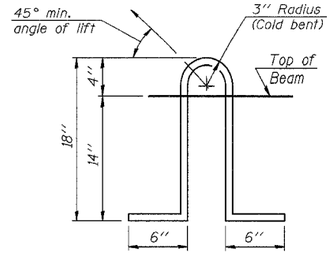
PLAN



END PLAN



BAR U2



LIFTING LOOP DETAIL

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.
Non prestressing steel shall conform to AASHTO M31 or M322 Grade 60.
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 beam end (8 required total).
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, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams.
Required Release Strength, f'ci, shall be 4,000 p.s.i.
Bridge rail inserts shall be cast in the precast beams. See sheet 3 of 8 for location of rail inserts. Cost is included with Precast Prestressed Concrete Deck Beams (17" Depth).

BILL OF MATERIAL

Item	Unit	Quantity
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	276

DESIGNED	T.S.H.
CHECKED	R.V.B.
DRAWN	T.S.H.
CHECKED	M.D.C.

PD-4-SA 10-22-04

SUPERSTRUCTURE

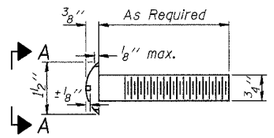
ILLINOIS ROUTE 133 OVER
JONATHAN CREEK
F.A.P. ROUTE 749 - SEC. 119(BR-2 & BR-3)
MOULTRIE COUNTY
STATION 258+73.50
STRUCTURE NO. 070-0035

CUMMINS ENGINEERING CORPORATION

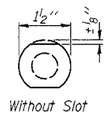
JOB #: 2114.4
FILE: 21144BEAMS
DATE: 10/12/05

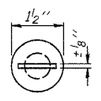
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 749	119(BR-2 & BR-3)	MOULTRIE	37	21
FED. ROAD DIST. NO. 5	ILLINOIS	PROJECT		

Sheet 6 of 8 CONTRACT #70347

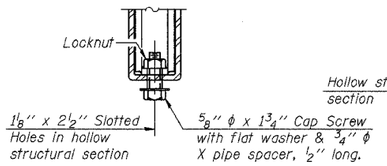


DETAIL OF 3/4" ϕ ROUND HEAD BOLT

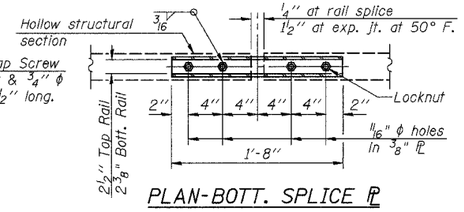




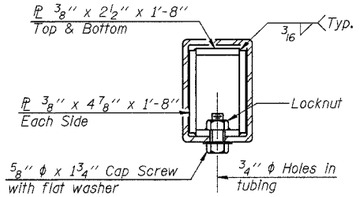
VIEW A-A



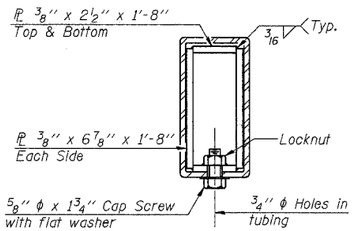
RAIL SPLICE CONNECTION AT EXPANSION JT.



PLAN-BOTT. SPLICE ℄ TYPICAL

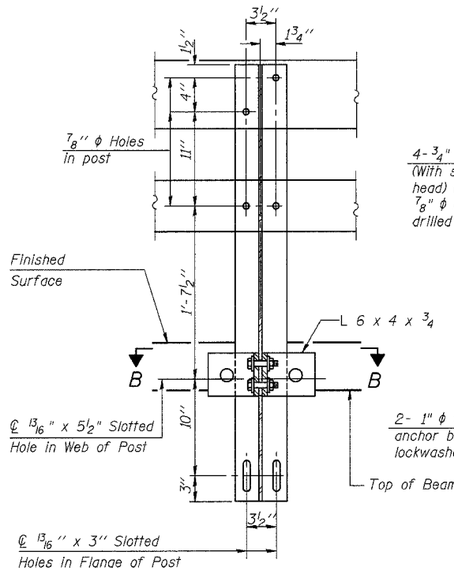


BOTTOM RAIL

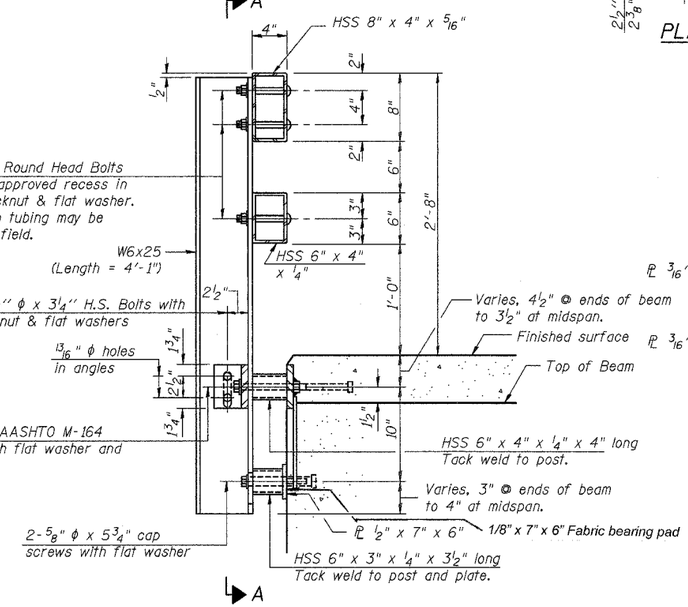


TOP RAIL

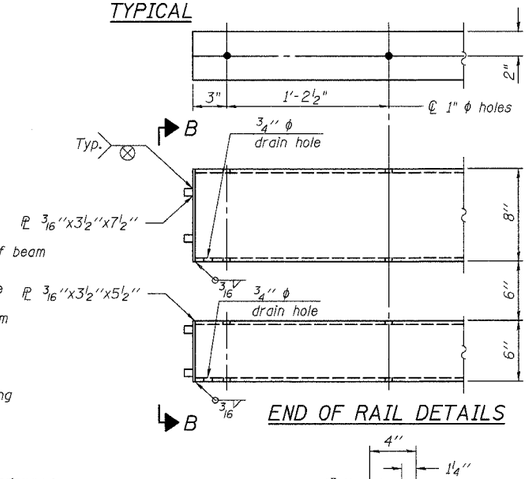
SECTIONS AT RAIL SPLICE



SECTION A-A

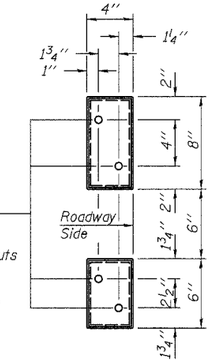


SECTION AT RAIL POST



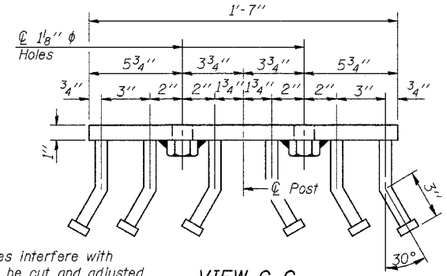
SECTION B-B

ANCHOR DEVICE



VIEW B-B

END OF RAIL DETAILS



VIEW C-C

NOTES

Hollow structural sections shall conform to the requirements of ASTM designation A 500 Grade B Structural Steel Tubing and shall meet the longitudinal CVN requirements of 15 ft-lbs at 0° F.

All other steel shapes and plates shall conform to the requirements of AASHTO M 270 Grade 36 except posts and angles shall conform to AASHTO M 270, Grade 50.

Bolts, cap screws, and nuts shall conform to the requirements of ASTM designation A 307 except for high strength bolts, nuts and washers noted which shall conform to AASHTO M 164.

All bolts, nuts, cap screws, washers and lock washers shall be galvanized according to AASHTO M 232.

All posts, railing, rail splices, anchor devices and angles shall be galvanized after shop fabrication according to AASHTO M 111 and ASTM A 385. Galvanized rail shall not be painted.

Railing shall be according to Section 509 of the Standard Specifications, except as noted, and will be paid for at the contract unit price per foot for Steel Bridge Rail, Type SM.

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 Bridge Rail, Type SM.

The 3/4" ϕ high strength bolts used to connect the 6 x 4 x 3/4 angles to the post shall be tightened according to Article 505.04(f)(2) of the Standard Specifications. The 1" ϕ high strength bolts connecting the angles to the concrete shall be tightened to a snug fit and given an additional 1/8 turn. The 5/8" ϕ cap screws in bottom of posts shall be tightened to a snug fit only.

For rail post spacing, see sheet 3 of 8.

BILL OF MATERIAL

Item	Unit	Quantity
Steel Bridge Rail, Type SM	Foot	69

DESIGNED	T.S.H.
CHECKED	R.V.B.
DRAWN	M.L.D.
CHECKED	M.D.C.

(6'-3" Maximum Post Spacing)

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

** Whenever the lower insert assemblies interfere with strand locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed 1/2".

TYPE SM STEEL BRIDGE RAIL SIDE MOUNTED

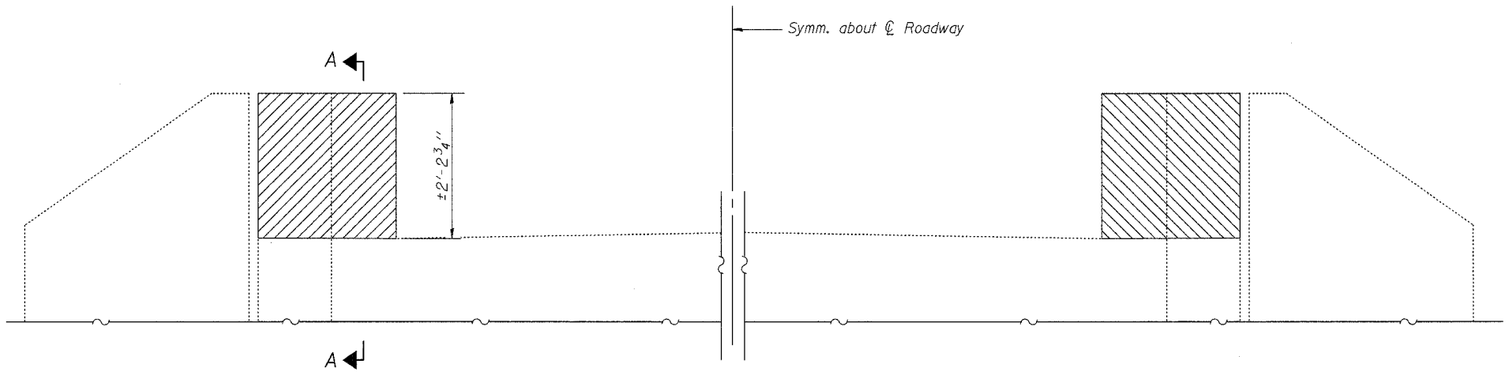
ILLINOIS ROUTE 133 OVER
JONATHAN CREEK
F.A.P. ROUTE 749 - SEC. 119(BR-2 & BR-3)
MOULTRIE COUNTY
STATION 258+73.50
STRUCTURE NO. 070-0035

CUMMINS ENGINEERING CORPORATION

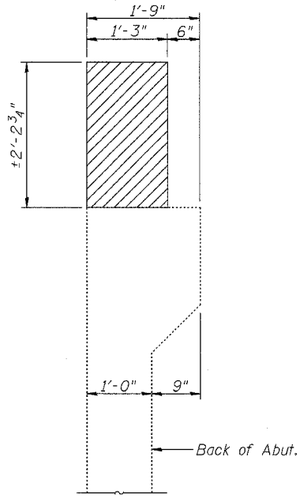
JOB #: 2114.4
FILE: 2114RAILSM
DATE: 10/12/05

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 749	119(BR-2 & BR-3)	MOULTRIE	37	22
FED. ROAD DIST. NO. 5	ILLINOIS	PROJECT		

Sheet 7 of 8 CONTRACT #70347



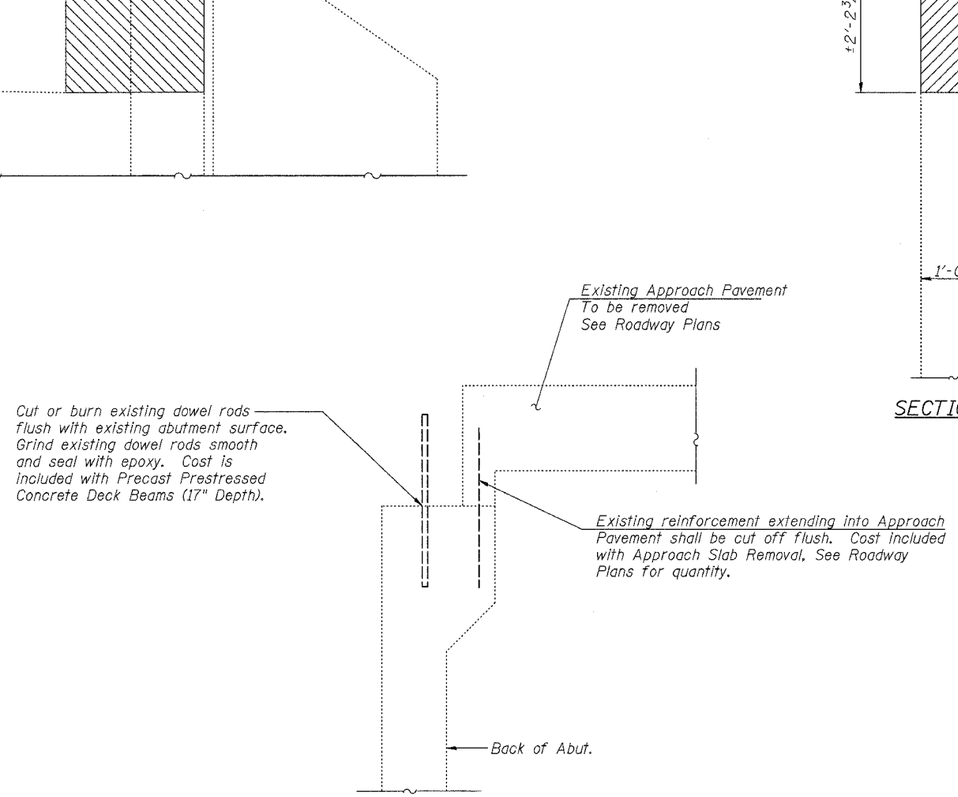
ELEVATION



SECTION A-A

CONCRETE REMOVAL DETAIL AT ABUTMENT CORNERS

(NE & SW corners shown, NW & SE corners similar)



SECTION THRU ABUTMENT AT APPROACH PAVEMENT

TWO ABUTMENTS
BILL OF MATERIAL

Concrete Removal	Cu. Yd.	1.0

Notes:

Hatched area indicates limits of Concrete Removal.

* Existing #7 v bars at each corner (typ.) to be re-used. Existing reinforcement bars extending into the removal area are to be cleaned, straightened, and incorporated into the new construction. All reinforcement bars damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system.

DESIGNED	T.S.H.
CHECKED	R.V.B.
DRAWN	T.S.H.
CHECKED	M.D.C.

CONCRETE REMOVAL

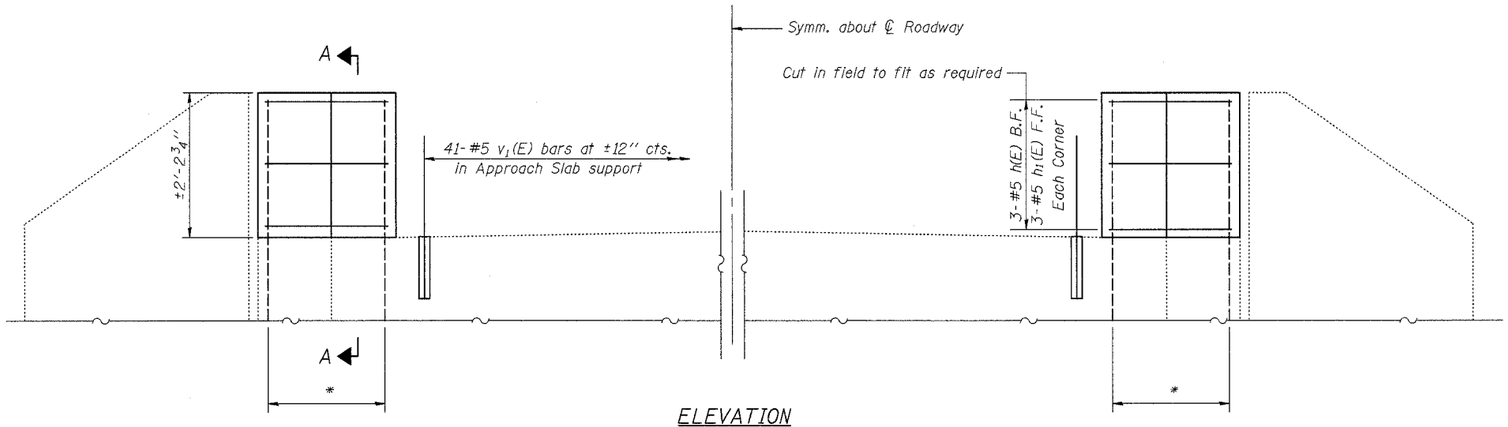
ILLINOIS ROUTE 133 OVER
JONATHAN CREEK
F.A.P. ROUTE 749 - SEC. 119(BR-2 & BR-3)
MOULTRIE COUNTY
STATION 258+73.50
STRUCTURE NO. 070-0035

CUMMINS ENGINEERING CORPORATION

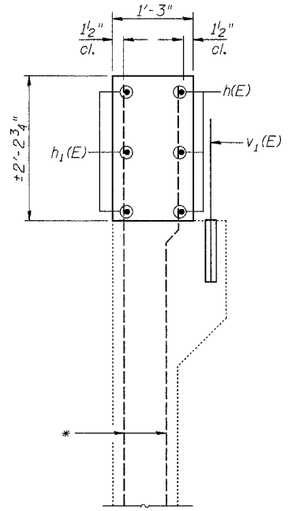
JOB #: 2114.4
FILE: 21144ABUTS
DATE: 10/12/05

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 749	119(BR-2 & BR-3)	MOULTRIE	37	23
FED. ROAD DIST. NO. 5	ILLINOIS	PROJECT		

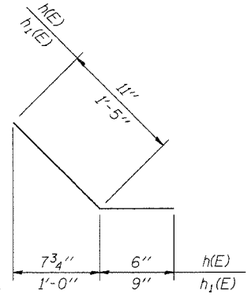
Sheet 8 of 8 CONTRACT #70347



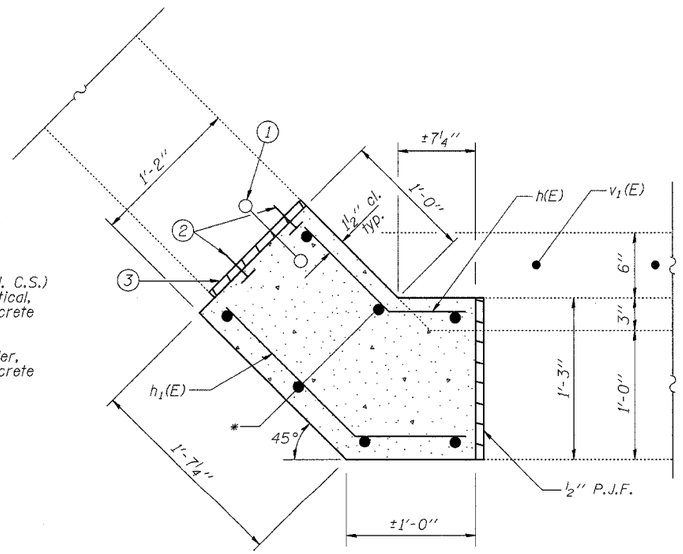
ELEVATION



SECTION A-A



BAR h(E) & h_1(E)



DETAIL AT ABUTMENT CORNERS

(NE & SW corners shown, NW & SE corners similar)

1. Existing water seal, to remain. See existing plans for details.
2. Concrete Nails (Flat Hd. C.S.) 1" long at 12" cts. vertical, cost included with Concrete Structures.
3. ½" Premolded Joint Filler, cost included with Concrete Structures.

Notes:

All exposed edges shall have ¾" chamfers unless noted otherwise.

Concrete Structures shown are to be poured after the Concrete Wearing Surface is in place and cured.

Reinforcement bars designated (E) shall be epoxy coated.

Epoxy grout v_1(E) bars into drilled holes according to Section 584 of the Standard Specifications. Locate holes to miss existing reinforcement. Min. embedment = 9"

* Existing #7 v bars at each corner (typ.) to be re-used. Existing reinforcement bars extending into the removal area are to be cleaned, straightened, and incorporated into the new construction. All reinforcement bars damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system.

TWO ABUTMENTS
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	12	#5	1'-5"	
h_1(E)	12	#5	2'-2"	
v_1(E)	82	#5	2'-6"	
Reinforcement Bars, Epoxy Coated			Pound	260
Concrete Structures			Cu. Yd.	1.0

DESIGNED	T.S.H.
CHECKED	R.V.B.
DRAWN	T.S.H.
CHECKED	M.D.C.

ABUTMENTS

ILLINOIS ROUTE 133 OVER
JONATHAN CREEK
F.A.P. ROUTE 749 - SEC. 119(BR-2 & BR-3)
MOULTRIE COUNTY
STATION 258+73.50
STRUCTURE NO. 070-0035

CUMMINS ENGINEERING CORPORATION

JOB #: 2114.4
FILE: 21144ABUTS
DATE: 10/12/05

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 749	119(BR-2 & BR-3)	MOULTRIE	37	24
FED. ROAD DIST. NO. 5	ILLINOIS	PROJECT		

Sheet 1 of 12 CONTRACT #70347

Bench Mark: B.M. 4702-1 Chiseled square on NE corner wingwall SN 070-0016, 22.1' Lt. Sta. 453+15.50, Elev. 656.17.

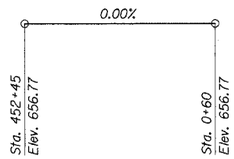
Existing Structure: The existing structure, SN 070-0016, is a single span precast prestressed deck beam bridge on closed abutments. Out-to-out bridge width is 41'-0" and back-to-back abutment length is 42'-2 3/4". It was originally constructed in 1929 as SBI 133, Sec. 120B at Sta. -0+08.00. In 1977 the superstructure was replaced and the substructure widened as FA 749, Sec. 120 BR-1 at Sta. -0+07.97. The existing superstructure is to be removed and replaced.

Traffic is to be detoured.

No salvage

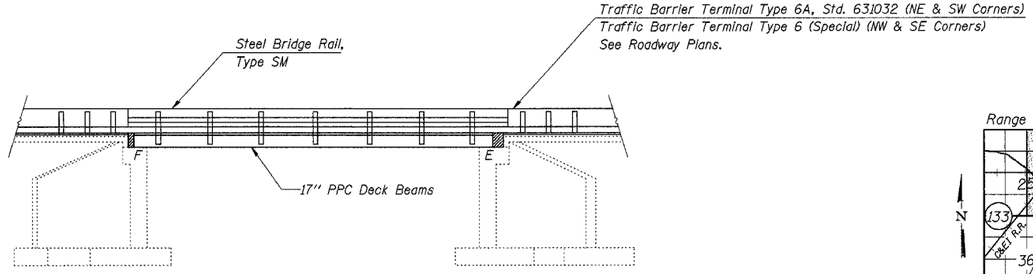
CURVE DATA

PI Sta. = 2+19.14
Δ = 14° 34' 02" (LT)
D = 3° 28' 24"
R = 1,649.63'
T = 210.84'
L = 419.41'
E = 13.42'
P.C. Sta. = 0+08.30
P.T. Sta. = 4+27.71

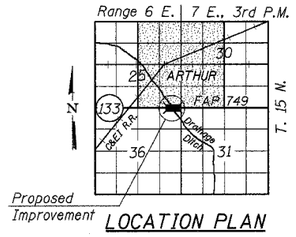


PROFILE GRADE

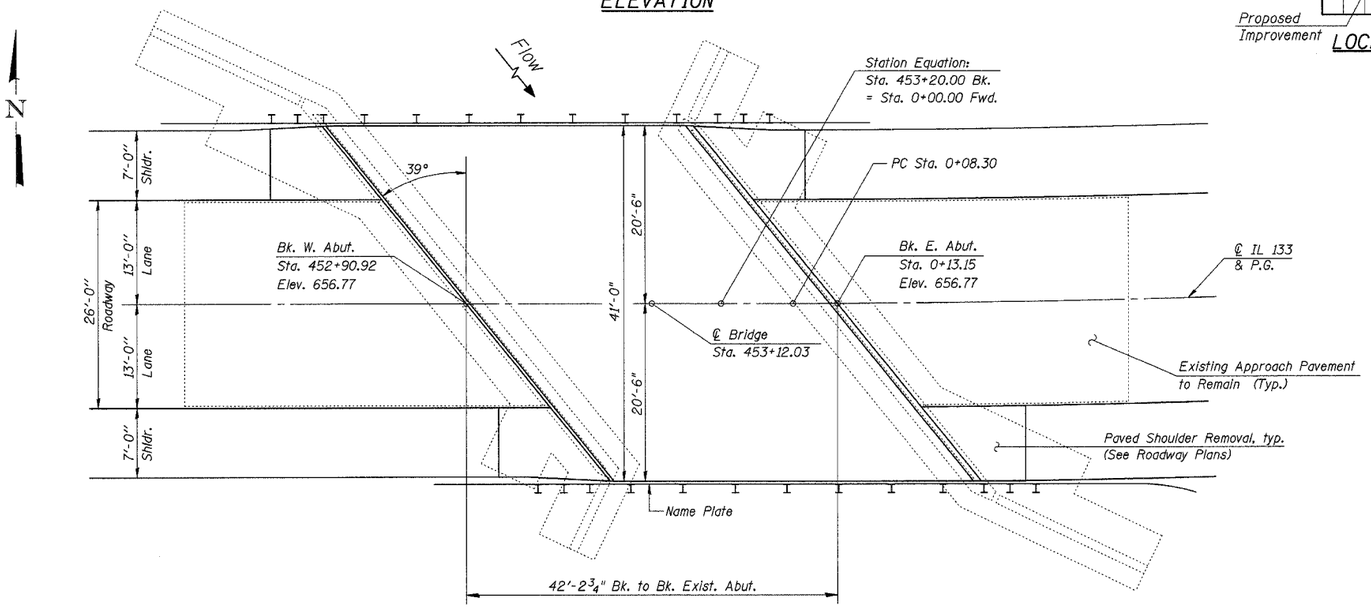
INDEX OF SHEETS



ELEVATION



LOCATION PLAN



PLAN

GENERAL NOTES

Reinforcement bars shall conform to the requirements of AASHTO M31 or M322 Grade 60.

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field 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 the scope of work. However, the Contractor will be paid for the quantity actually furnished at the unit price for the work.

All construction joints shall be bonded.

The minimum thickness of the Concrete overlay shall be 5" and varies as required to adjust for the new profile grade and beam camber.

The cut strands at each beam end shall be given two coats of zinc dust spray or paint meeting the requirements of ASTM A 780. 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. 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.

No instream work will be allowed on this project

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.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Superstructures No. 2	Each	1		1
Concrete Removal	Cu. Yd.		5.3	5.3
Structure Excavation	Cu. Yd.		11	11
Concrete Structures	Cu. Yd.		5.7	5.7
Bridge Deck Grooving	Sq. Yd.	181		181
Protective Coat	Sq. Yd.	198		198
Concrete Wearing Surface, 5"	Sq. Yd.	189		189
Formed Concrete Repair (Depth Greater Than 5")	Sq. Ft.		11.9	11.9
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	1698		1698
Reinforcement Bars, Epoxy Coated	Pound	3070	920	3990
Steel Bridge Rail, Type SM	Foot	81		81
Name Plates	Each	1		1
Bridge Joint System (Expansion), 1 5/8"	Foot	53		53

DESIGN STRESSES (NEW)

FIELD UNITS
f'_c = 5,000 p.s.i. (Concrete Wearing Surface)
f'_c = 3,500 p.s.i.
f_y = 60,000 p.s.i. (Reinf. Bars)
PRECAST PRESTRESSED UNITS
f'_c = 5,000 p.s.i.
f'_{ci} = 4,000 p.s.i.
f'_s = 270,000 p.s.i. (1/2" ϕ low relax strands)
f_{si} = 201,960 p.s.i. (1/2" ϕ low relax strands)

STATION 453+12.03
REBUILT 200 BY
STATE OF ILLINOIS
F.A.P. RT. 749
SEC. 119(BR-2 & BR-3)
LOADING HS20
STR. NO. 070-0016

DESIGN SPECIFICATIONS

2002 AASHTO

NAME PLATE

See Std. 515001
Existing Name Plate shall be cleaned and relocated adjacent to new Name Plate. Cost included with Name Plates.

LOADING HS20-44

No future wearing surface is allowed.

EXISTING WATERWAY INFORMATION

Drainage Area	3860 acres
Design Discharge (50 year)	1210 c.f.s.
Required Opening (below 50 year H.W.E.)	175 sq. ft.
Existing Opening (below 50 year H.W.E.)	175 sq. ft.
Created Head for Design Flood	0.0'
100 year Discharge	1530 c.f.s.
Created Head for 100 year Flood	0.0'
100 year H.W. Elevation	653.5

Note: Information per 1977 reconstruction plans.

DESIGNED	R.V.B.
CHECKED	T.S.H.
DRAWN	N.L.D.
CHECKED	M.D.C.

MICHAEL D. CUMMINS
061-004822
LICENSED STRUCTURAL ENGINEER OF SPRINGFIELD
ILLINOIS

Michael D. Cummins (10/20/05)
(Expires 11/30/2006)

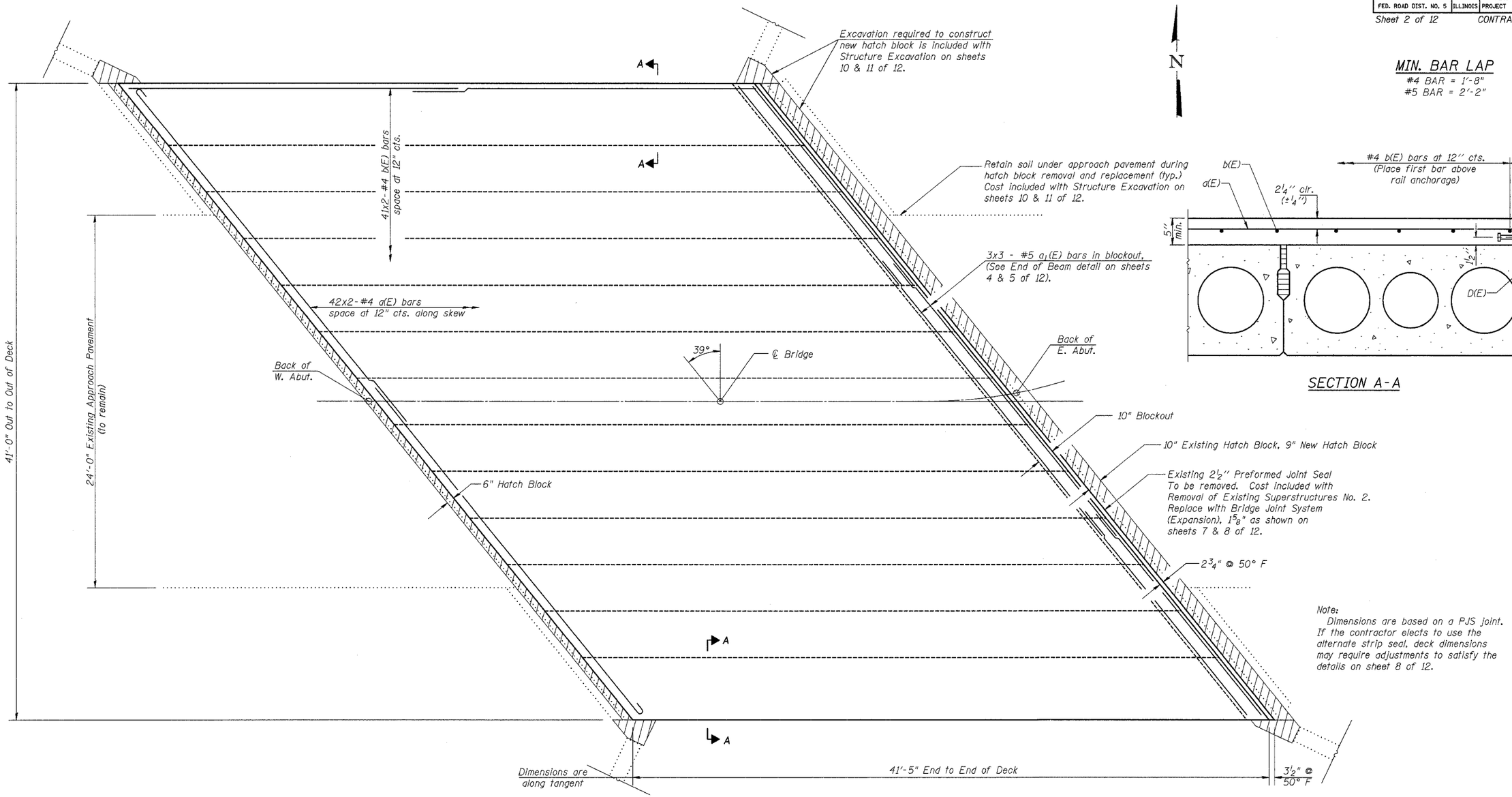
GENERAL PLAN & ELEVATION
ILLINOIS ROUTE 133 OVER
DRAINAGE DITCH
F.A.P. ROUTE 749 - SEC. 119(BR-2 & BR-3)
MOULTRIE COUNTY
STATION 453+12.03
STRUCTURE NO. 070-0016

CUMMINS ENGINEERING CORPORATION

JOB #: 2114.3
FILE: 21143GPE
DATE: 10/12/05

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 749	119(BR-2 & BR-3)	MOULTRIE	37	25
FED. ROAD DIST. NO. 5	ILLINOIS	PROJECT		

Sheet 2 of 12 CONTRACT #70347



PLAN

Note:
Dimensions are based on a PJS joint. If the contractor elects to use the alternate strip seal, deck dimensions may require adjustments to satisfy the details on sheet 8 of 12.

MIN. BAR LAP

#4 BAR = 1'-8"
#5 BAR = 2'-2"

SECTION A-A

Notes :
For remainder of superstructure details, see sheets 3 thru 5 of 12.
Reinforcement bars designated (E) shall be epoxy coated.
Hatched area indicates concrete removal as shown on sheet 9 of 12.
Bars indicated thus 42x2-#4 etc. indicates 42 lines of bars with 2 lengths per line.

DESIGNED	R.V.B.
CHECKED	T.S.H.
DRAWN	N.L.D.
CHECKED	M.D.C.

SUPERSTRUCTURE

ILLINOIS ROUTE 133 OVER
DRAINAGE DITCH
F.A.P. ROUTE 749 - SEC. 119(BR-2 & BR-3)
MOULTRIE COUNTY
STATION 453+12.03
STRUCTURE NO. 070-0016

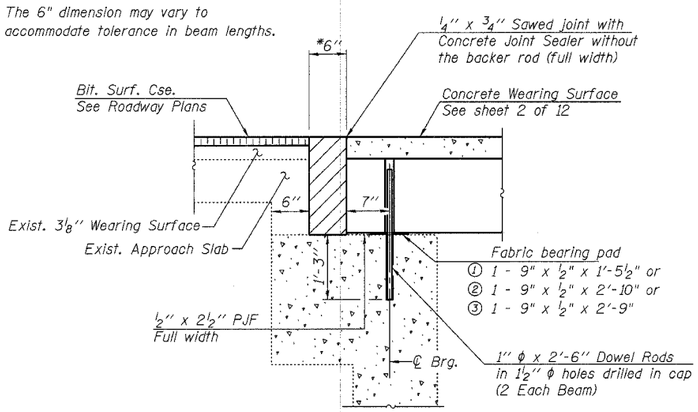
CUMMINS ENGINEERING CORPORATION

JOB #: 2114.3
FILE: 21143SUPER
DATE: 10/12/05

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 749	119(BR-2 & BR-3)	MOULTRIE	37	26
FED. ROAD DIST. NO. 5	ILLINOIS	PROJECT		

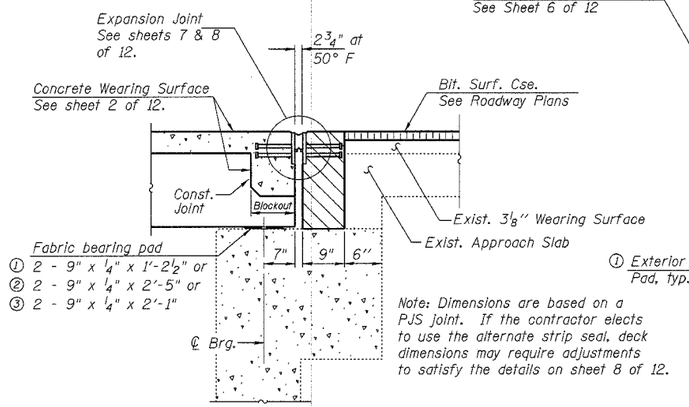
Sheet 3 of 12 CONTRACT #70347

* The 6" dimension may vary to accommodate tolerance in beam lengths.



SECTION THRU W. ABUTMENT

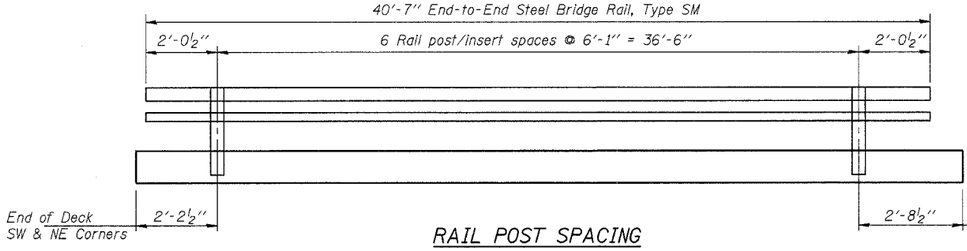
Dimensions at Rt. L's



Note: Dimensions are based on a PJS joint. If the contractor elects to use the alternate strip seal, deck dimensions may require adjustments to satisfy the details on sheet 8 of 12.

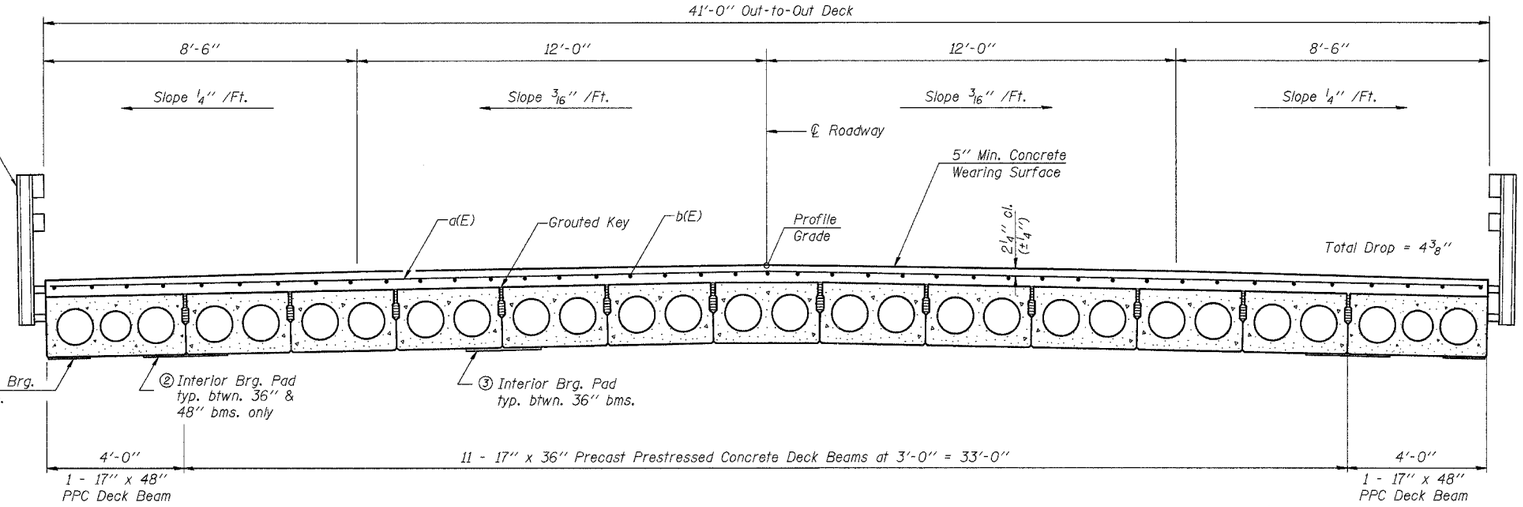
SECTION THRU E. ABUTMENT

Dimensions at Rt. L's



RAIL POST SPACING

(S. Rail Looking North, N. Rail Looking South)
(See Sheet 6 of 12 for details)



CROSS SECTION

Dimensions at Rt. L's

Notes :

Ends of beams shall be aligned at the expansion joint. Any lineal variation in the beam lengths shall be placed at the fixed joint.

After beams have been erected, temporary retainers shall be installed at the E. Abut. Holes for dowel rods shall be drilled into the W. Abut. and dowel rods placed. Dowel holes shall be filled with non-shrink grout to the top of beam and allowed to cure a minimum of 24 hrs. prior to grouting the shear keys.

Dowel rods drilled in cap are included in the cost of Precast Prestressed Concrete Deck Beams (17" Depth).

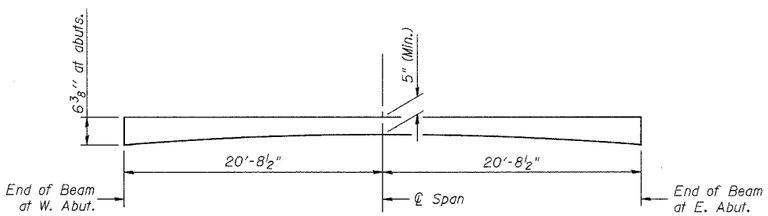
Concrete wearing surface (including blockout) to be poured after grouting the shear keys. Volume of concrete in blockout is included with Concrete Wearing Surface.

Hatched area to be poured after concrete wearing surface (including blockout) is in place. Quantity included with Concrete Structures on sheets 10 and 11 of 12.

See sheets 4 and 5 of 12 for bearing pad details.

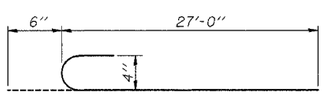
See sheet 12 of 12 for temporary retainer details.

DESIGNED	R.V.B.
CHECKED	T.S.H.
DRAWN	N.L.D.
CHECKED	M.D.C.



REINFORCED CONCRETE WEARING SURFACE PROFILE

(Concrete wearing surface at blockout at expansion end of beam not shown.)



BAR d(E)

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	84	#4	27'-6"	
a_1(E)	18	#5	19'-0"	
b(E)	82	#4	21'-4"	
Reinforcement Bars, Epoxy Coated			Pound	3,070
Concrete Wearing Surface			Sq. Yd.	189

Reinforcement bars designated (E) shall be epoxy coated.

SUPERSTRUCTURE DETAILS

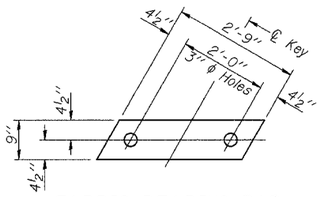
ILLINOIS ROUTE 133 OVER
DRAINAGE DITCH
F.A.P. ROUTE 749 - SEC. 119(BR-2 & BR-3)
MOULTRIE COUNTY
STATION 453+12.03
STRUCTURE NO. 070-0016

CUMMINS ENGINEERING CORPORATION

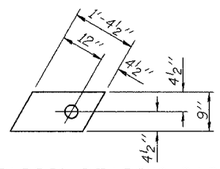
JOB #: 2114.3
FILE: 21143SUPER
DATE: 10/12/05

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 749	119(BR-2 & BR-3)	MOULTRIE	37	27
FED. ROAD DIST. NO. 5	ILLINOIS	PROJECT		

Sheet 4 of 12 CONTRACT #70347

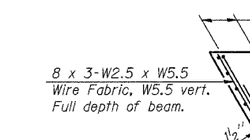


FABRIC BEARING PAD
(Interior, between 36" beams)
(10 Required)



FABRIC BEARING PAD
(Exterior)
(0 Required)

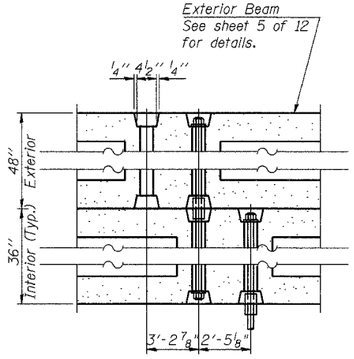
FIXED

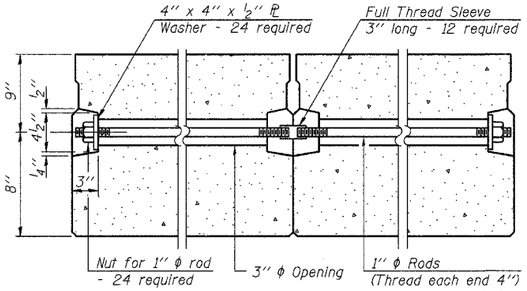


FABRIC BEARING PAD
(Interior, between 36" beams)
(10 Required)

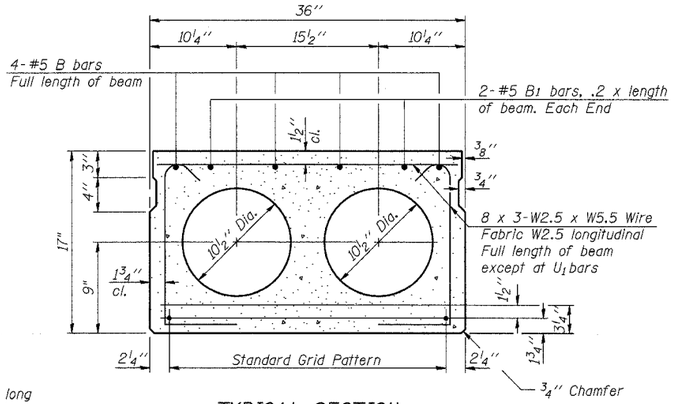
FABRIC BEARING PAD
(Exterior)
(0 Required)

EXPANSION



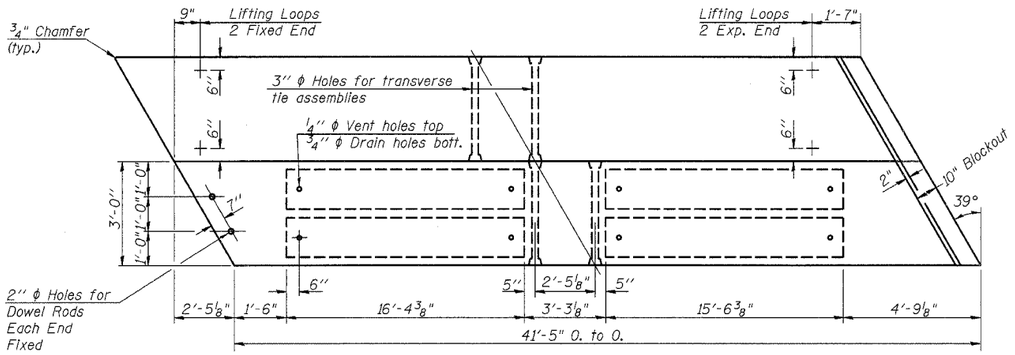


TYPICAL TRANSVERSE TIE ASSEMBLY

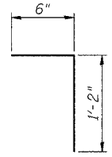


TYPICAL SECTION
(11 Required)
½" ϕ Strands, Each Strand Stressed to 30,900 Lbs.
9-Strands 1¾" up, 4-Strands 3¼" up and 2-Strands 12" up.

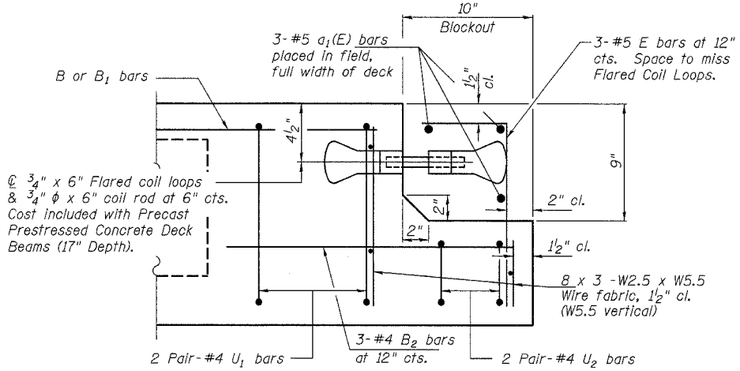
Note:
Place strands symmetrically about ℄ of beam.



PLAN

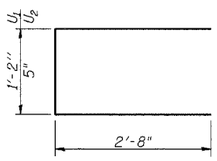


BAR E

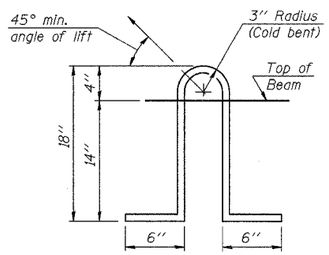


END OF BEAM - ELEVATION
(Expansion End)

END PLAN
(Fixed End)



BAR U1 & U2



LIFTING LOOP DETAIL

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.

Non prestressing steel shall conform to AASHTO M31 or M322 Grade 60.

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 beam end (44 required total).

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, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams.

Required Release Strength, f'ci, shall be 4,000 p.s.i.

BILL OF MATERIAL

Item	Unit	Quantity
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	1,367

DESIGNED	R.V.B.
CHECKED	T.S.H.
DRAWN	N.L.D.
CHECKED	M.D.C.

SUPERSTRUCTURE

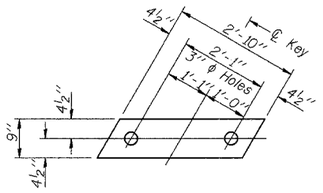
ILLINOIS ROUTE 133 OVER
DRAINAGE DITCH
F.A.P. ROUTE 749 - SEC. 119(BR-2 & BR-3)
MOULTRIE COUNTY
STATION 453+12.03
STRUCTURE NO. 070-0016

CUMMINS ENGINEERING CORPORATION

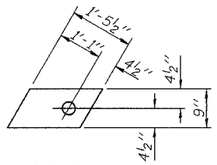
JOB #: 2114.3
FILE: 21143BEAMS
DATE: 10/12/05

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 749	119(BR-2 & BR-3)	MOULTRIE	37	28
FED. ROAD DIST. NO. 5	ILLINOIS	PROJECT		

Sheet 5 of 12 CONTRACT #70347

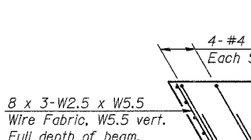


FABRIC BEARING PAD
(Interior, btwn. 36" & 48" bms.)
(2 Required)



FABRIC BEARING PAD
(Exterior)
(2 Required)

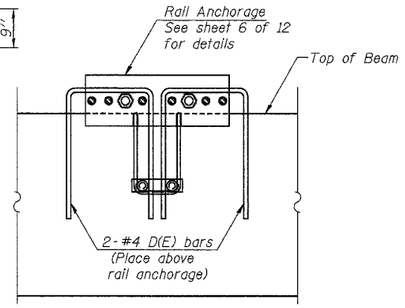
FIXED



FABRIC BEARING PAD
(Interior, btwn. 36" & 48" bms.)
(2 Required)

FABRIC BEARING PAD
(Exterior)
(2 Required)

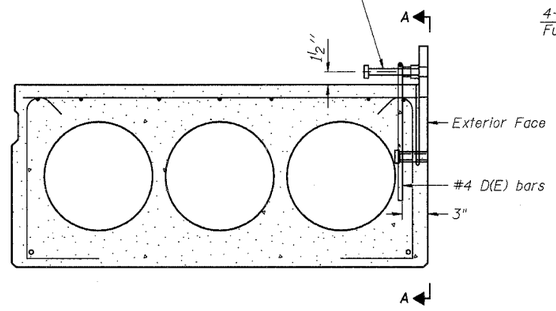
EXPANSION



SECTION A-A

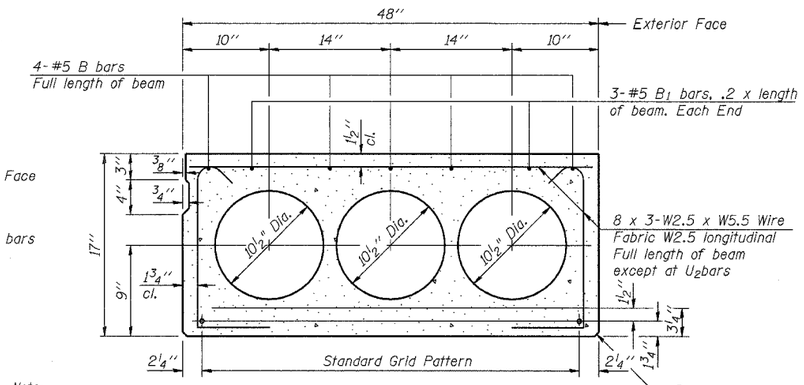
The rail anchorage shall be cast with the beam and the wearing surface shall be cast in the field. Formwork necessary for the wearing surface may be secured utilizing the bottom rail anchorage Inserts and/or additional inserts cast into beam. Drilling into the beam will not be permitted.

The Contractor shall ensure that neither the Rail Anchorage Device nor the Deck Beam is damaged during transportation.



SECTION THRU EXTERIOR BEAMS

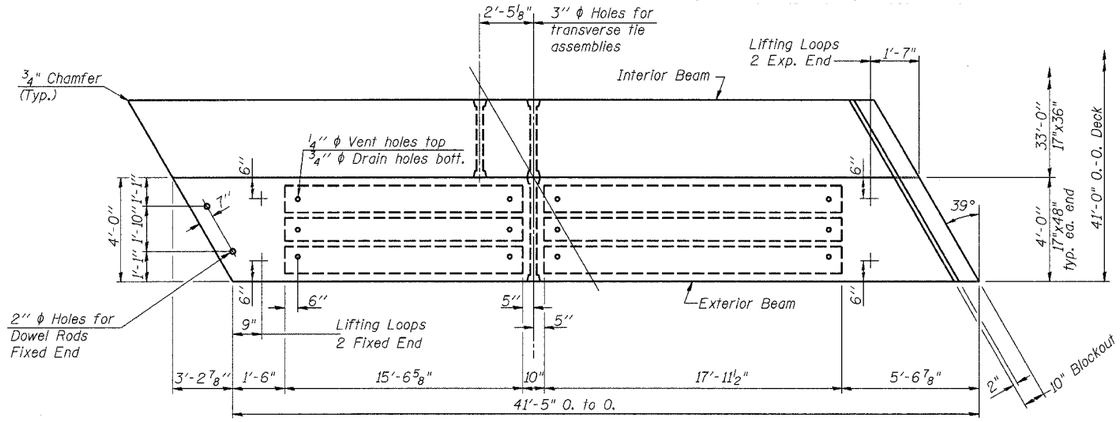
See Typical Section for strand pattern, dimensions and bar locations.



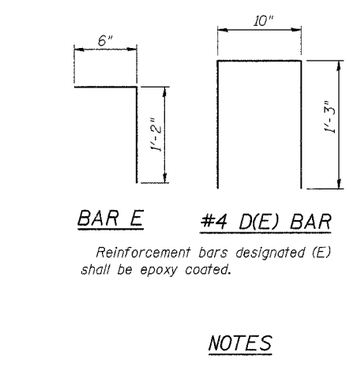
Note:
Place strands symmetrically about ℄ of beam.

TYPICAL SECTION

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

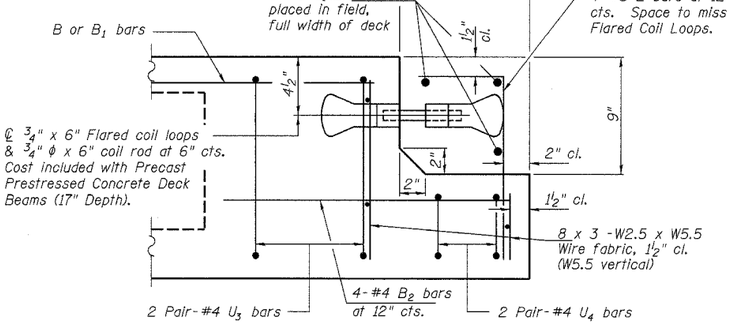


PLAN



BAR E #4 D(E) BAR

Reinforcement bars designated (E) shall be epoxy coated.

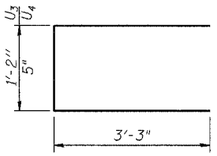


END OF BEAM - ELEVATION

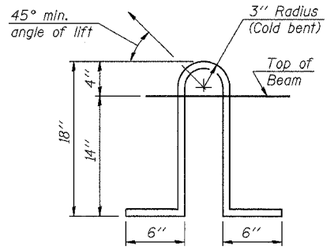
(Expansion End)

END PLAN

(Fixed End)



BAR U3 & U4



LIFTING LOOP DETAIL

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.

Non prestressing steel shall conform to AASHTO M31 or M322 Grade 60.

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 beam end (8 required total).

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, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams.

Required Release Strength, f'ci, shall be 4.000 p.s.i.

Bridge rail inserts shall be cast in precast beams. See sheet 3 of 12 for location of bridge rail inserts. Cost is included with Precast Prestressed Concrete Deck Beams (17" Depth).

BILL OF MATERIAL

Item	Unit	Quantity
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	331

DESIGNED	R.V.B.
CHECKED	T.S.H.
DRAWN	N.L.D.
CHECKED	M.D.C.

SUPERSTRUCTURE

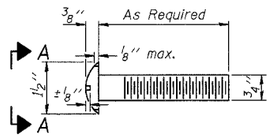
ILLINOIS ROUTE 133 OVER
DRAINAGE DITCH
F.A.P. ROUTE 749 - SEC. 119(BR-2 & BR-3)
MOULTRIE COUNTY
STATION 453+12.03
STRUCTURE NO. 070-0016

CUMMINS ENGINEERING CORPORATION

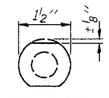
JOB #: 2114.3
FILE: 21143BEAMS
DATE: 10/12/05

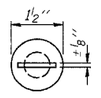
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 749	119(BR-2 & BR-3)	MOULTRIE	37	29
FED. ROAD DIST. NO. 5	ILLINOIS	PROJECT		

Sheet 6 of 12 CONTRACT #70347

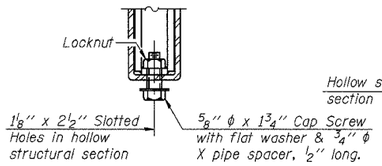


DETAIL OF 3/4" ϕ ROUND HEAD BOLT

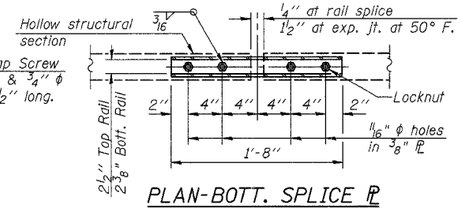




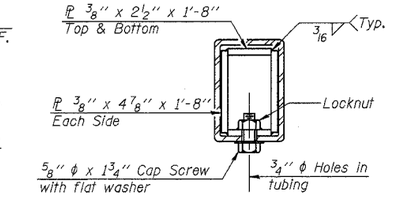
VIEW A-A



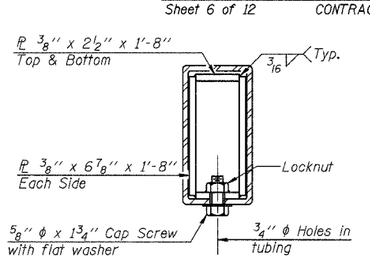
RAIL SPLICE CONNECTION AT EXPANSION JT.



PLAN-BOTT. SPLICE PL TYPICAL

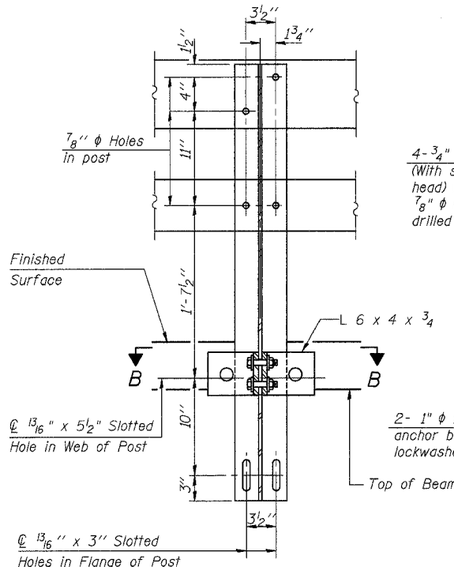


BOTTOM RAIL

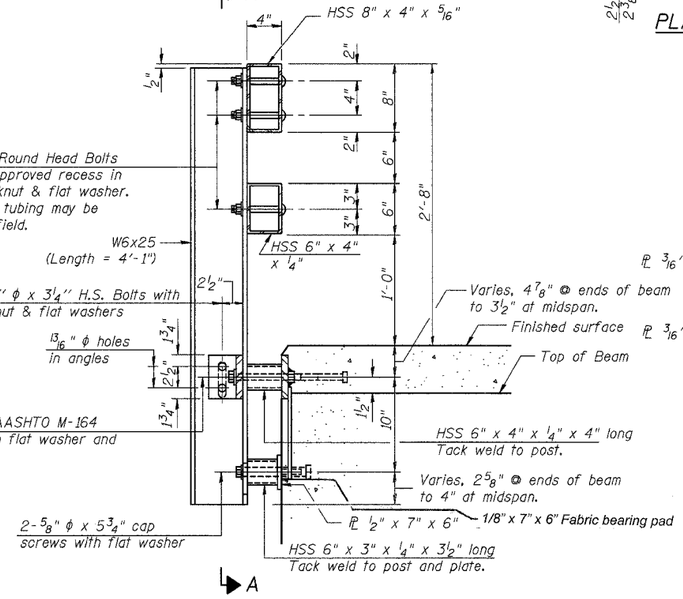


TOP RAIL

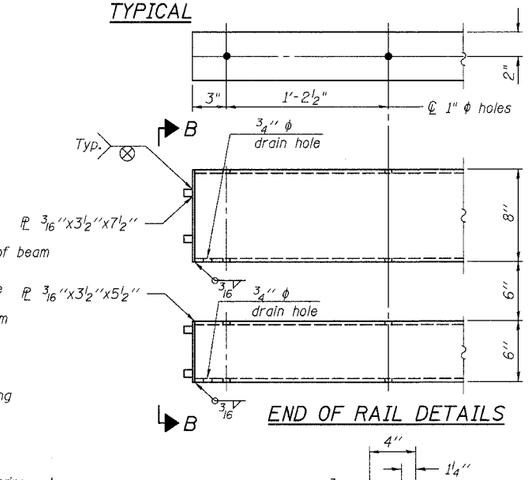
SECTIONS AT RAIL SPLICE



SECTION A-A

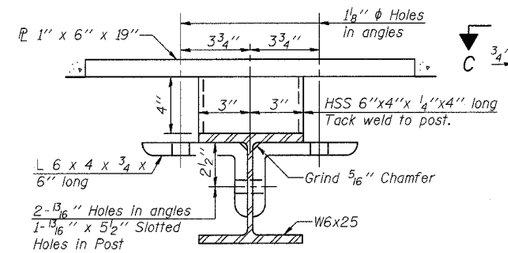


SECTION AT RAIL POST

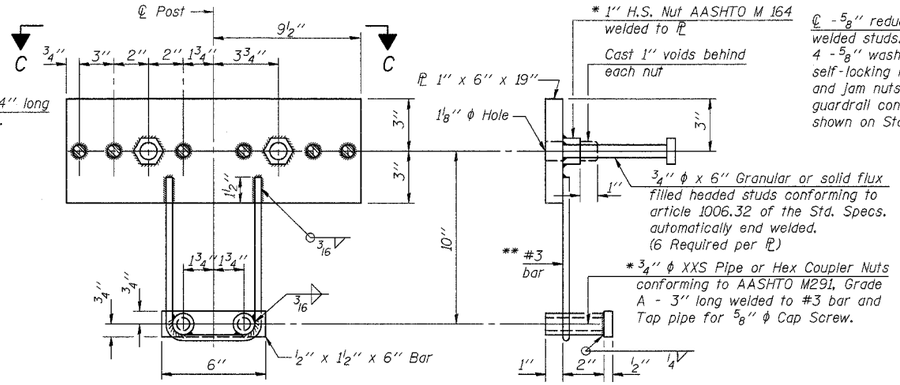


VIEW B-B

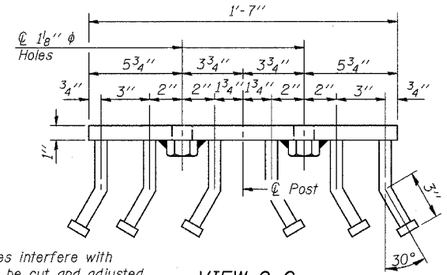
END OF RAIL DETAILS



SECTION B-B



ANCHOR DEVICE



VIEW C-C

NOTES

Hollow structural sections shall conform to the requirements of ASTM designation A 500 Grade B Structural Steel Tubing and shall meet the longitudinal CVN requirements of 15 ft-lbs at 0° F.

All other steel shapes and plates shall conform to the requirements of AASHTO M 270 Grade 36 except posts and angles shall conform to AASHTO M 270, Grade 50.

Bolts, cap screws, and nuts shall conform to the requirements of ASTM designation A 307 except for high strength bolts, nuts and washers noted which shall conform to AASHTO M 164.

All bolts, nuts, cap screws, washers and lock washers shall be galvanized according to AASHTO M 232.

All posts, railing, rail splices, anchor devices and angles shall be galvanized after shop fabrication according to AASHTO M 111 and ASTM A 385. Galvanized rail shall not be painted.

Railing shall be according to Section 509 of the Standard Specifications, except as noted, and will be paid for at the contract unit price per foot for Steel Bridge Rail, Type SM.

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 Bridge Rail, Type SM.

The 3/4" ϕ high strength bolts used to connect the 6 x 4 x 3/4 angles to the post shall be tightened according to Article 505.04(f)(2) of the Standard Specifications. The 1" ϕ high strength bolts connecting the angles to the concrete shall be tightened to a snug fit and given an additional 1/8 turn. The 5/8" ϕ cap screws in bottom of posts shall be tightened to a snug fit only.

For rail post spacing, see sheet 3 of 12.

℄ -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

BILL OF MATERIAL

Item	Unit	Quantity
Steel Bridge Rail, Type SM	Foot	81

DESIGNED	T.S.H.
CHECKED	R.V.B.
DRAWN	N.L.D.
CHECKED	M.D.C.

(6'-3" Maximum Post Spacing)

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

** Whenever the lower insert assemblies interfere with strand locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed 1/2".

TYPE SM STEEL BRIDGE RAIL SIDE MOUNTED

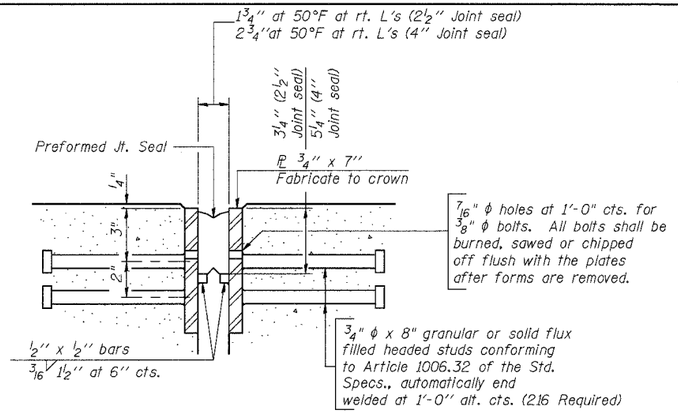
ILLINOIS ROUTE 133 OVER DRAINAGE DITCH
F.A.P. ROUTE 749 - SEC. 119(BR-2 & BR-3)
MOULTRIE COUNTY
STATION 453+12.03
STRUCTURE NO. 070-0016

CUMMINS ENGINEERING CORPORATION

JOB #: 2114.3
FILE: 21143RAILSM
DATE: 10/12/05

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 749	119(BR-2 & BR-3)	MOULTRIE	37	30
FED. ROAD DIST. NO. 5	ILLINOIS	PROJECT		

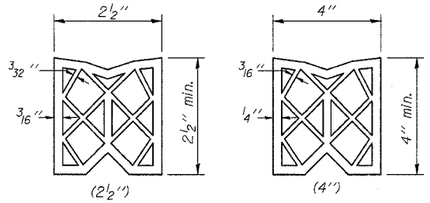
Sheet 7 of 12 CONTRACT #70347



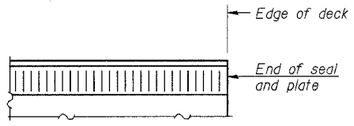
SECTION THRU EXPANSION JOINT

(2 1/2" and 4" joint seals)

Bridge Joint System (Expansion)		
Design Movement	Required Preformed Joint Seal Size	Required Strip Seal Rated movement
1"	2 1/2"	1"
1 5/8"	4"	2"

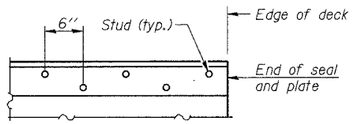


PREFORMED JOINT SEAL



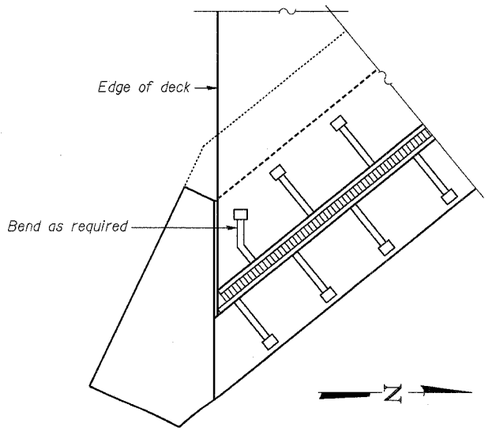
END TREATMENT ELEVATION

(Showing seal)

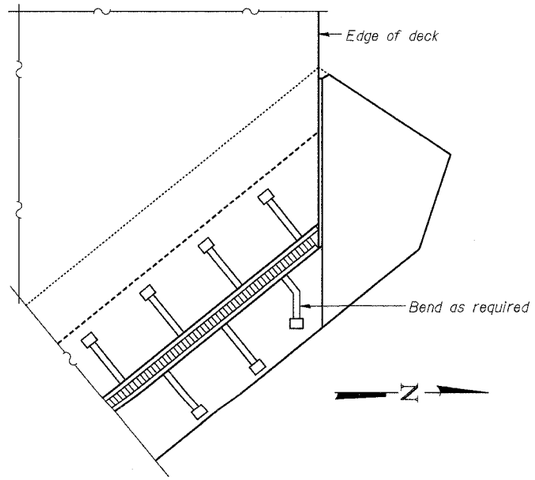


END TREATMENT ELEVATION

(Showing plate)



PLAN AT S.E. CORNER



PLAN AT N.E. CORNER

GENERAL NOTES

Furnish steel plates in segments of 20 feet maximum length. Maximum space between installed segments shall be 3/16". Seal space with silicone sealant suitable for structural steel.

BILL OF MATERIAL

Item	Unit	Total
Bridge Joint System (Expansion), 1 5/8"	Foot	53.0

(Sheet 1 of 2)

DESIGNED	R.V.B.
CHECKED	T.S.H.
DRAWN	N.L.D.
CHECKED	M.D.C.

BRIDGE JOINT SYSTEM

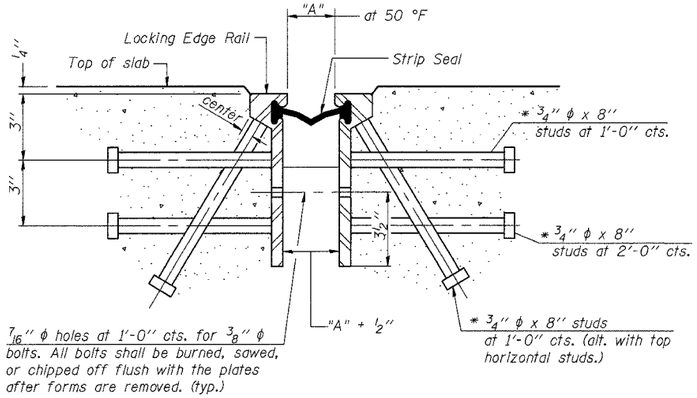
ILLINOIS ROUTE 133 OVER
DRAINAGE DITCH
F.A.P. ROUTE 749 - SEC. 119(BR-2 & BR-3)
MOULTRIE COUNTY
STATION 453+12.03
STRUCTURE NO. 070-0016

CUMMINS ENGINEERING CORPORATION

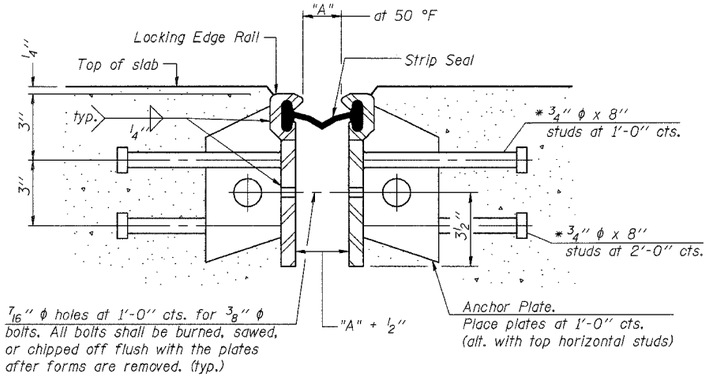
JOB #: 2114.3
FILE: 21143EXP
DATE: 10/12/05

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 749	119(BR-2 & BR-3)	MOULTRIE	37	31
FED. ROAD DIST. NO. 5	ILLINOIS	PROJECT		

Sheet 8 of 12 CONTRACT #70347



Required Strip Seal rated movement	"A"
1"	1 1/8"
2"	1 3/4"



GENERAL NOTES

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails.

The height and thickness of the Locking Edge Rails shown are minimum dimensions. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed.

Locking Edge Rails may be spliced at slope discontinuities and stage construction joints.

The manufacturer's recommended installation methods shall be followed.

The joint opening and deck dimensions detailed on the superstructure are based on a preformed joint seal. If the contractor elects to use the alternate strip seal joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

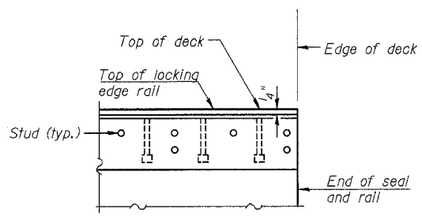
SECTION THRU ROLLED RAIL EXP. JOINT

(268 Studs Required)

* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

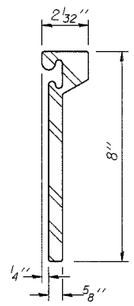
SECTION THRU WELDED RAIL EXP. JOINT

(162 Studs Required)
(106 Anchor Plates Required)

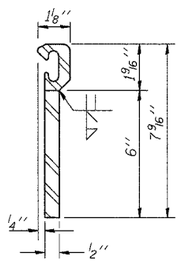


END TREATMENT ELEVATION

(Showing Rolled Rail, Welded Rail Similar)

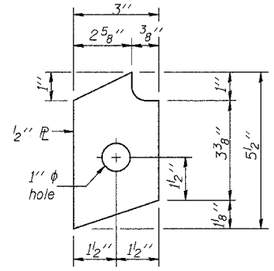


ROLLED (EXTRUDED) RAIL



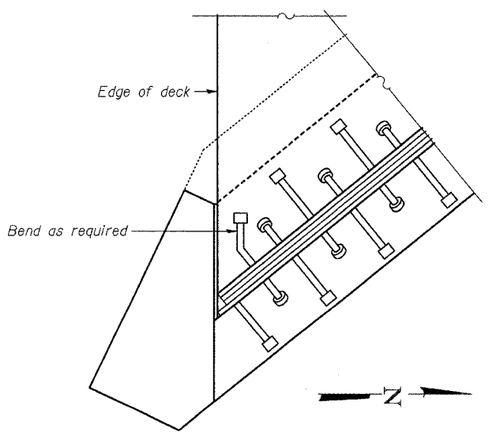
WELDED RAIL

LOCKING EDGE RAILS

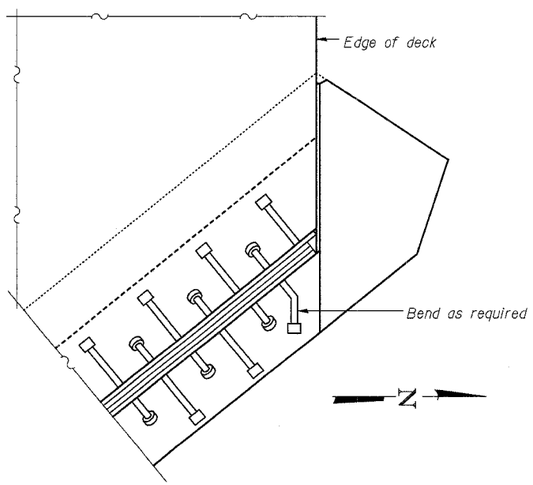


ANCHOR ℄

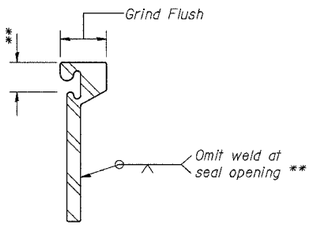
(for welded rail)



PLAN AT S.E. CORNER



PLAN AT N.E. CORNER



LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue.

DESIGNED	R.V.B.
CHECKED	T.S.H.
DRAWN	N.L.D.
CHECKED	M.D.C.

(Sheet 2 of 2)

BRIDGE JOINT SYSTEM

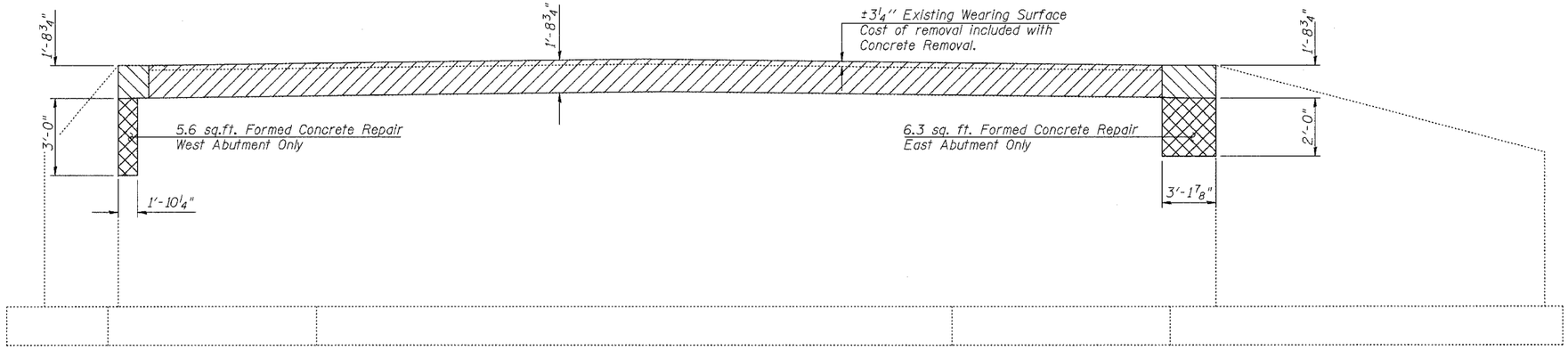
ILLINOIS ROUTE 133 OVER
DRAINAGE DITCH
F.A.P. ROUTE 749 - SEC. 119(BR-2 & BR-3)
MOULTRIE COUNTY
STATION 453+12.03
STRUCTURE NO. 070-0016

CUMMINS ENGINEERING CORPORATION

JOB #: 2114.3
FILE: 21143EXP
DATE: 10/12/05

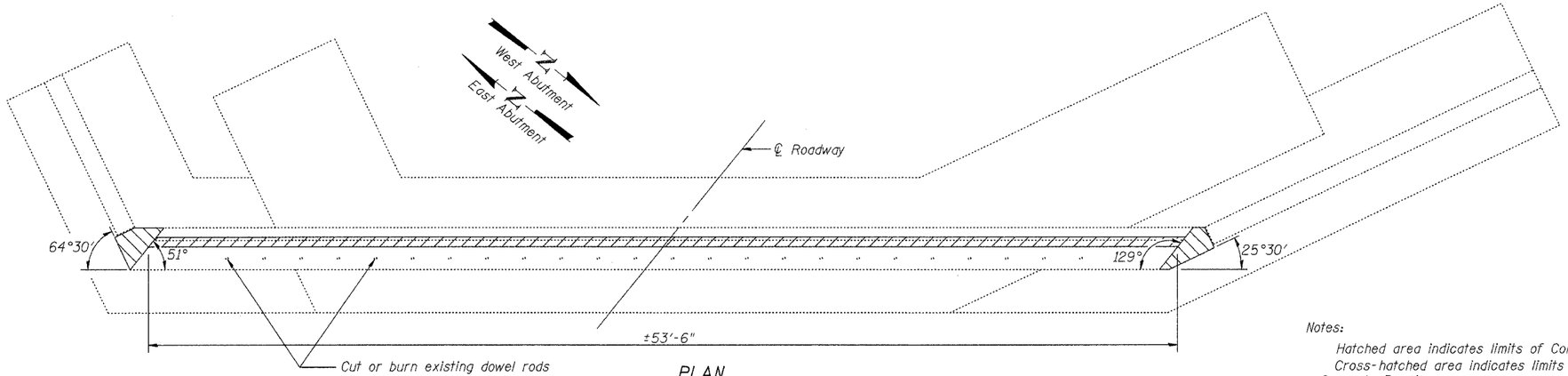
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 749	119(BR-2 & BR-3)	MOULTRIE	37	32
FED. ROAD DIST. NO. 5	ILLINOIS	PROJECT		

Sheet 9 of 12 CONTRACT #70347



ELEVATION

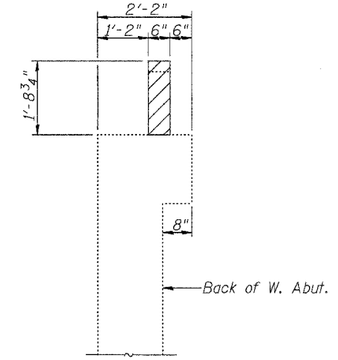
(W. Abut. shown, E. Abut. Similar)



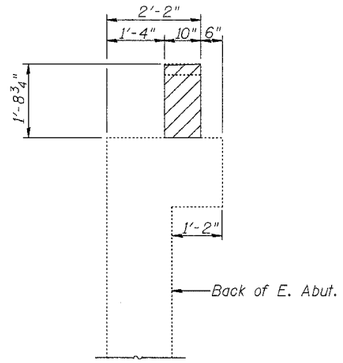
Cut or burn existing dowel rods flush with existing abutment surface. Grind existing dowel rods smooth and seal with epoxy. Cost is included with Precast Prestressed Concrete Deck Beams (17" Depth).

PLAN

(W. Abut. shown, E. Abut. Similar)



SECTION A-A



SECTION B-B

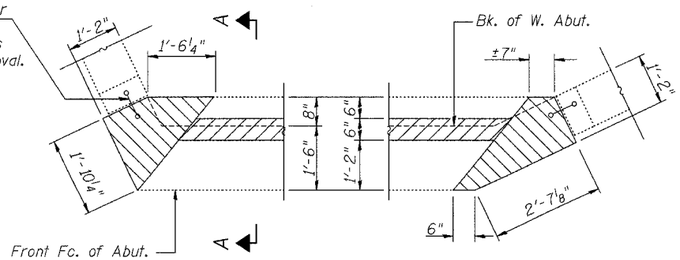
Notes:

Hatched area indicates limits of Concrete Removal.

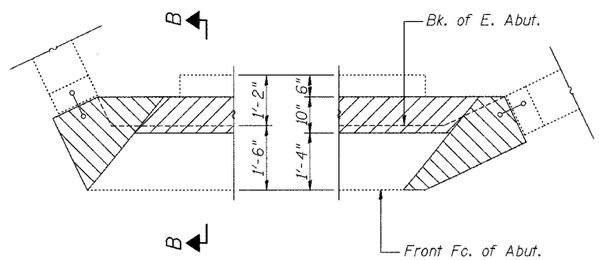
Cross-hatched area indicates limits of Formed Concrete Repair.

Existing reinforcement extending into the new construction shall be cut off flush. Cost included with Concrete Removal.

Existing water seal at each corner (typ.) to be re-used. Contractor shall ensure existing water seal is not damaged during concrete removal. See existing plans for details of water seal not shown.



CORNER DETAILS - WEST ABUTMENT



CORNER DETAILS - EAST ABUTMENT

(Dimensions not shown are same as West Abutment)

BOTH ABUTMENTS

BILL OF MATERIAL

Concrete Removal	Cu. Yd.	5.3
Formed Concrete Repair	Sq. Ft.	11.9

DESIGNED	R.V.B.
CHECKED	T.S.H.
DRAWN	N.L.D.
CHECKED	M.D.C.

CONCRETE REMOVAL

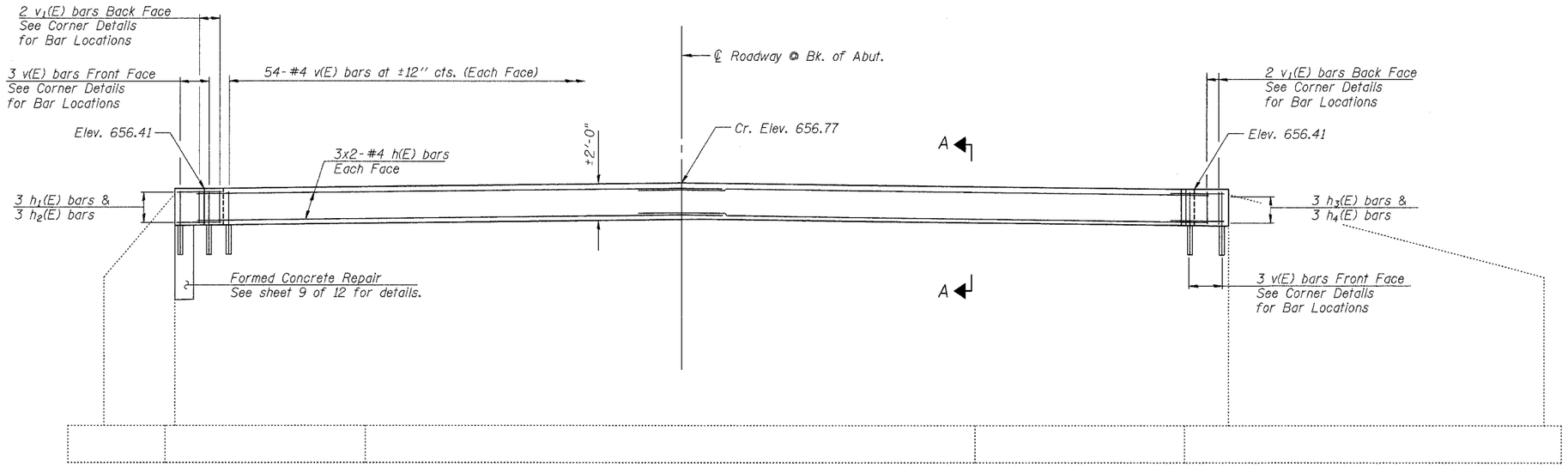
ILLINOIS ROUTE 133 OVER
DRAINAGE DITCH
F.A.P. ROUTE 749 - SEC. 119(BR-2 & BR-3)
MOULTRIE COUNTY
STATION 453+12.03
STRUCTURE NO. 070-0016

CUMMINS ENGINEERING CORPORATION

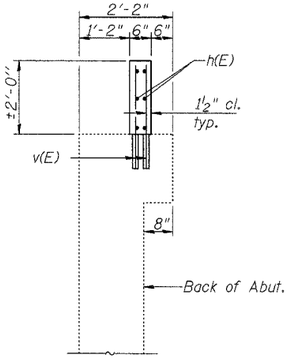
JOB #: 2114.3
FILE: 21143ABUTS
DATE: 10/12/05

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 749	119(BR-2 & BR-3)	MOULTRIE	37	33
FED. ROAD DIST. NO. 5	ILLINOIS	PROJECT		

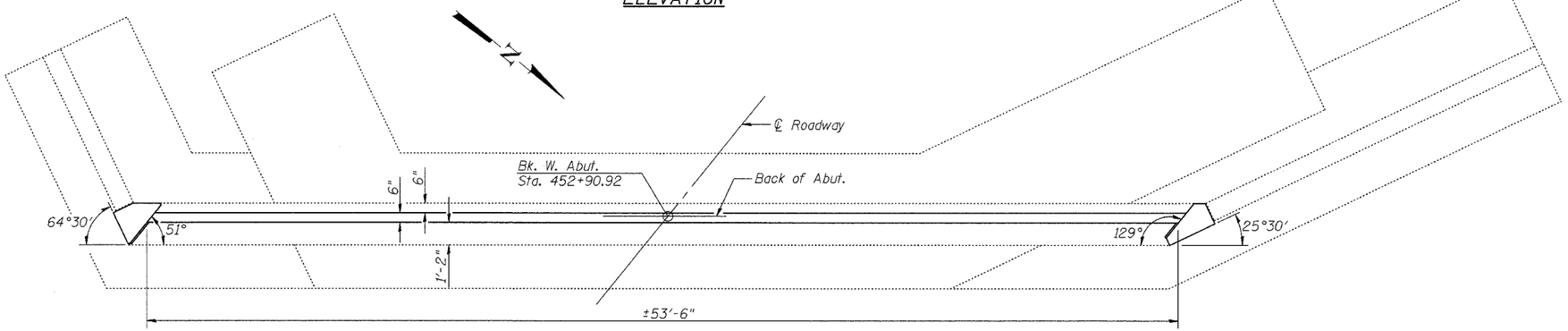
Sheet 10 of 12 CONTRACT #70347



ELEVATION



SECTION A-A

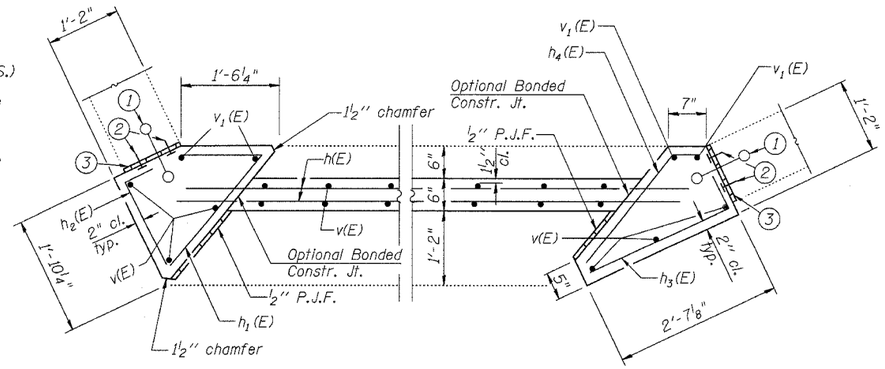


PLAN

WEST ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	12	#4	28'-9"	
h_1(E)	3	#4	3'-2"	
h_2(E)	3	#4	1'-11"	
h_3(E)	3	#4	2'-9"	
h_4(E)	3	#4	2'-5"	
v(E)	114	#4	2'-7"	
v_1(E)	4	#4	1'-8"	
Reinforcement Bars, Epoxy Coated			Pound	460
Concrete Structures			Cu. Yd.	2.4
Structure Excavation			Cu. Yd.	5.5

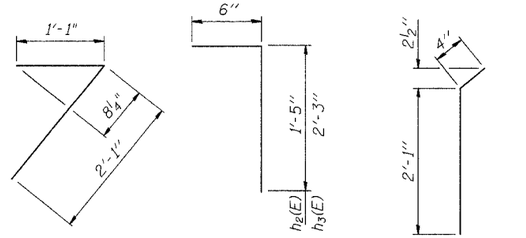
1. Existing water seal, to remain. See existing plans for details.
2. Concrete Nails (Flat Hd. C.S.) 1" long at 12" cts. vertical, cost included with Concrete Structures.
3. ½" Premolded Joint Filler, cost included with Concrete Structures.



CORNER DETAILS

MIN BAR LAPS

#4 bar = 1'-10"



BAR h_1(E) BAR h_2(E) & h_3(E) BAR h_4(E)

Notes:

All exposed edges shall have ¾" chamfers unless noted otherwise.

Concrete Structures shown are to be poured after the Concrete Wearing Surface is in place and cured.

Epoxy grout v(E) bars into drilled holes according to Section 584 of the Standard Specifications. Locate holes to miss existing reinforcement. Min. embedment = 9".

Reinforcement bars designated (E) shall be epoxy coated.

Bars indicated thus 3x2-#5 etc. indicates 3 lines of bars with 2 lengths per line.

DESIGNED	R.V.B.
CHECKED	T.S.H.
DRAWN	N.L.D.
CHECKED	M.D.C.

WEST ABUTMENT

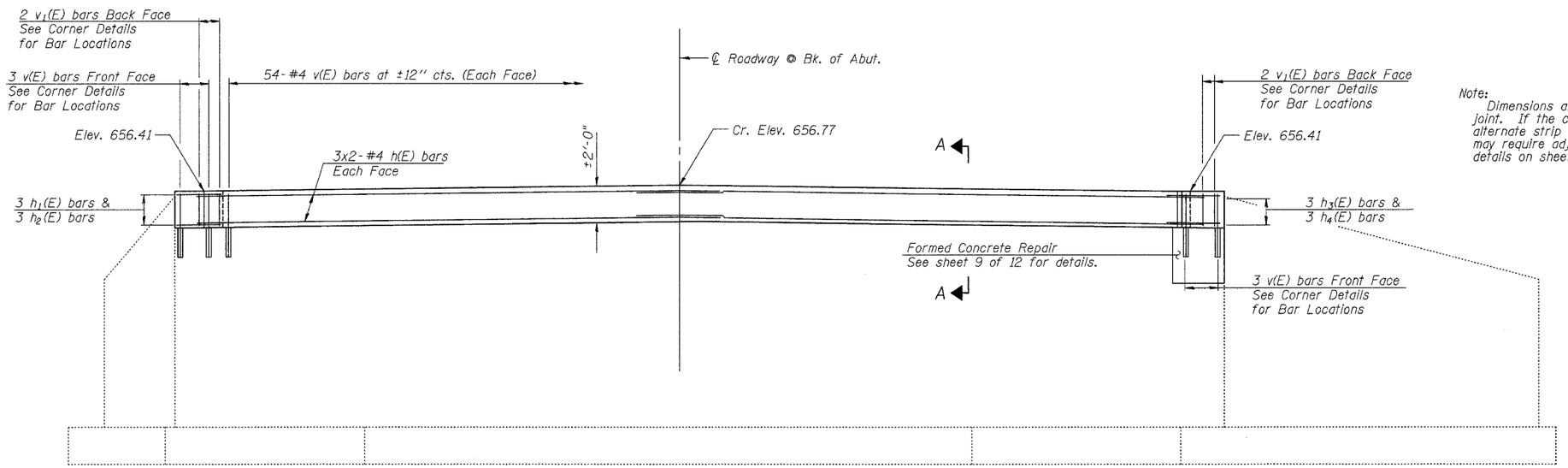
ILLINOIS ROUTE 133 OVER
DRAINAGE DITCH
F.A.P. ROUTE 749 - SEC. 119(BR-2 & BR-3)
MOULTRIE COUNTY
STATION 453+12.03
STRUCTURE NO. 070-0016

CUMMINS ENGINEERING CORPORATION

JOB #: 2114.3
FILE: 21143ABUTS
DATE: 10/12/05

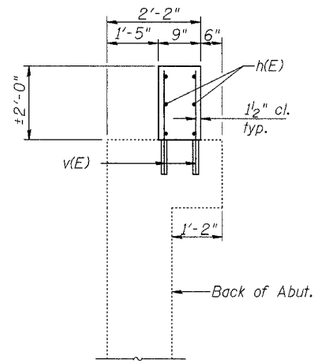
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 749	119(BR-2 & BR-3)	MOULTRIE	37	34
FED. ROAD DIST. NO. 5	ILLINOIS	PROJECT		

Sheet 11 of 12 CONTRACT #70347

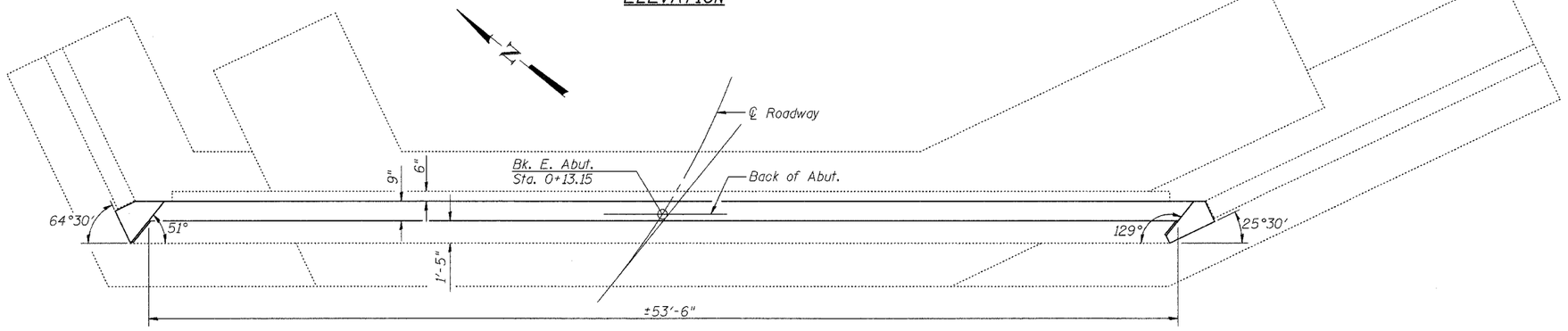


ELEVATION

Note:
Dimensions are based on a PJS joint. If the contractor elects to use the alternate strip seal, deck dimensions may require adjustments to satisfy the details on sheet 8 of 12.



SECTION A-A

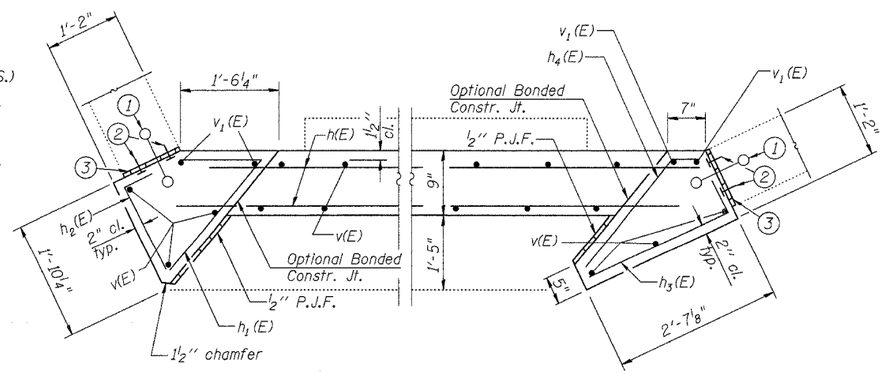


PLAN

EAST ABUTMENT BILL OF MATERIAL

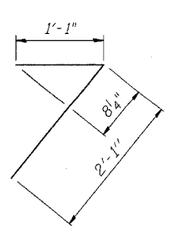
Bar	No.	Size	Length	Shape
h(E)	12	#4	28'-9"	
h_1(E)	3	#4	3'-2"	
h_2(E)	3	#4	1'-11"	
h_3(E)	3	#4	2'-9"	
h_4(E)	3	#4	2'-5"	
v(E)	114	#4	2'-7"	
v_1(E)	4	#4	1'-8"	
Reinforcement Bars, Epoxy Coated			Pound	460
Concrete Structures			Cu. Yd.	3.3
Structure Excavation			Cu. Yd.	5.5

1. Existing water seal, to remain. See existing plans for details.
2. Concrete Nails (Flat Hd. C.S.) 1" long at 12" cts. vertical, cost included with Concrete Structures.
3. ½" Premolded Joint Filler, cost included with Concrete Structures.

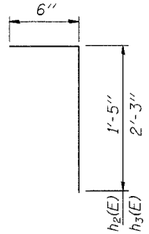


CORNER DETAILS

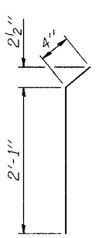
MIN BAR LAPS
#4 bar = 1'-10"



BAR h_1(E)



BAR h_2(E) & h_3(E)



BAR h_4(E)

Notes:
All exposed edges shall have ¾" chamfers unless noted otherwise.
Concrete Structures shown are to be poured after the Concrete Wearing Surface is in place and cured.
Epoxy grout v(E) bars into drilled holes according to Section 584 of the Standard Specifications. Locate holes to miss existing reinforcement. Min. embedment = 9".
Reinforcement bars designated (E) shall be epoxy coated.
Bars indicated thus 3x2-#5 etc. indicates 3 lines of bars with 2 lengths per line.

DESIGNED	R.V.B.
CHECKED	T.S.H.
DRAWN	N.L.D.
CHECKED	M.D.C.

EAST ABUTMENT

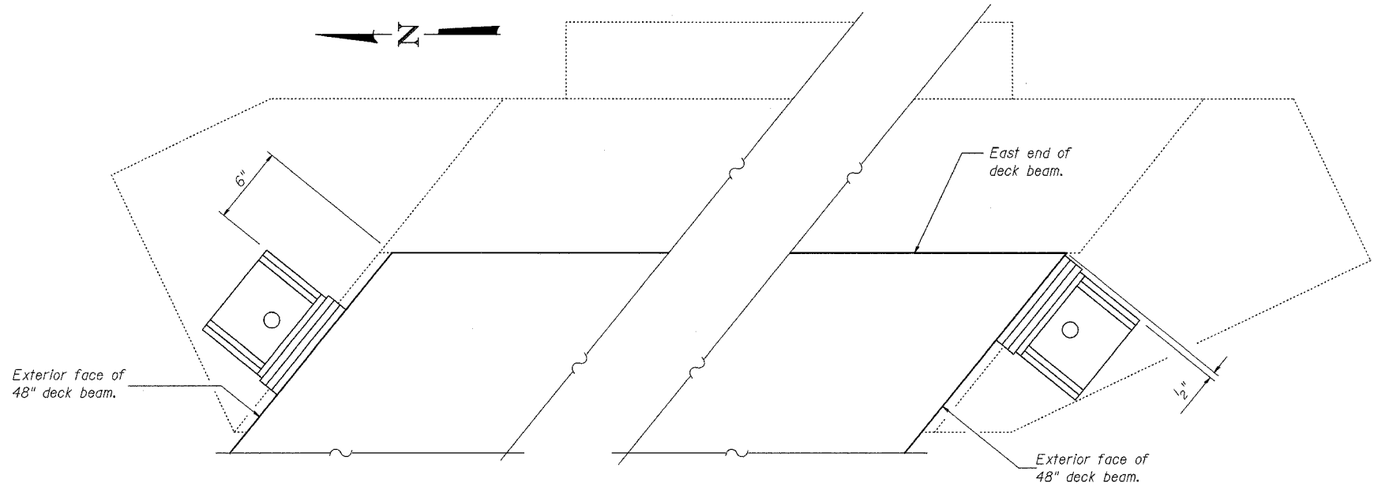
ILLINOIS ROUTE 133 OVER
DRAINAGE DITCH
F.A.P. ROUTE 749 - SEC. 119(BR-2 & BR-3)
MOULTRIE COUNTY
STATION 453+12.03
STRUCTURE NO. 070-0016

CUMMINS ENGINEERING CORPORATION

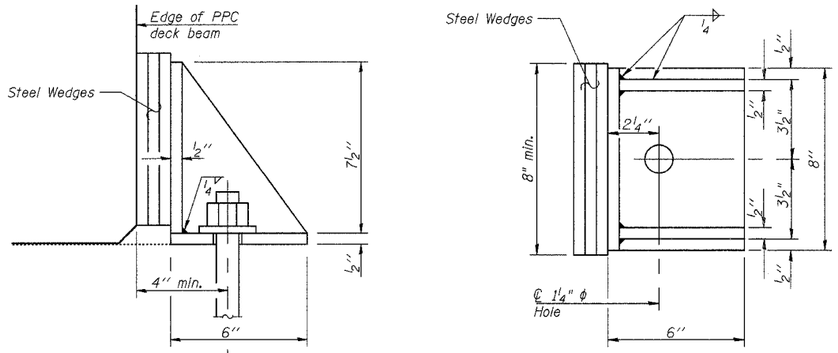
JOB #: 2114.3
FILE: 21143ABUTS
DATE: 10/12/05

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 749	119(BR-2 & BR-3)	MOULTRIE	37	35
FED. ROAD DIST. NO. 5	ILLINOIS	PROJECT		

Sheet 12 of 12 CONTRACT #70347



PLAN VIEW - EAST ABUTMENT



TEMPORARY RETAINER

Notes

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

After block-outs are poured and cured the retainer angles shall be removed. Anchor bolts may be left in place.

Cost of temporary side retainers, anchor bolts and accessories are included with Precast Prestressed Concrete Deck Beams (17" Depth).

ANCHOR BOLTS FOR RETAINERS

GENERAL NOTES

Holes in the masonry for anchor bolts shall be drilled or according to the manufacturer's recommendation after beams or girders have been erected and adjusted.

Prior to setting the bolts, the holes shall be dry and all dust and loose particles shall be removed by the use of compressed air or vacuuming.

The anchor bolts, furnished and installed and including the epoxy grout or capsules shall not be paid for separately but shall be included in the unit bid price for Precast Prestressed Concrete Deck Beams (17" Depth).

The Contractor may use, at his option, the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures.

The capsule or the adhesive cartridge type anchor rods shall be a two part system composed of:

1. A threaded rod stud with nut and washer of the type specified.
2. A sealed capsule or a sealed adhesive cartridge containing premeasured amounts of the adhesive chemical.

Location	Type
Abutments	A307

ASTM F 1554 Grade 105, ASTM A 449 and AASHTO M 314 Grade 105 anchor bolts may be substituted for the anchor bolts shown above.

DESIGNED	R.V.B.
CHECKED	T.S.H.
DRAWN	N.L.D.
CHECKED	M.D.C.

TEMPORARY SIDE RETAINER

ILLINOIS ROUTE 133 OVER
DRAINAGE DITCH
F.A.P. ROUTE 749 - SEC. 119(BR-2 & BR-3)
MOULTRIE COUNTY
STATION 453+12.03
STRUCTURE NO. 070-0016

CUMMINS ENGINEERING CORPORATION

JOB #: 2114.3
FILE: 21143SUB
DATE: 10/12/05

CONTRACT NO. 70347

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	119(BR-2&BR-3)	MOULTRIE	37	36
STA. 256+00		TO STA. 261+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SURVEY	SURVEYED			
	PLOTTED			
NOTE BOOK	DRAWN BY			
NO.	AREAS CHECKED			

EXISTING ROW LINE

MATCH EXISTING ROADWAY STA. 261+20

STA. 261+20 AHEAD C=0 F=0 BACK C=0 F=0

TRANSITION EARTH SHOULDER FROM 4'-0" AT STA. 260+20 TO 0'-0" AT STA. 260+45.

VARY

C =0
F =3

674.99

C =0
F =12

TRANSITION EARTH SHOULDER FROM 4'-0" AT STA. 260+95 TO 0'-0" AT STA. 261+20.

STA. 259+20.75 AHEAD C=0 F=12 BACK C=14 F=12

675.32

C =14
F =13

STA. 258+90.75 AHEAD C=14 F=0 BACK C=0 F=0

BRIDGE OMISSION
STA. 258+56.25 TO STA. 258+90.75

STA. 258+56.25 AHEAD C=0 F=0 BACK C=14 F=0

675.32

C =14
F =8

STA. 258+26.25 AHEAD C=14 F=15 BACK C=0 F=15

675.24

C =0
F =15

TRANSITION EARTH SHOULDER FROM 0'-0" AT STA. 257+02 TO 4'-0" AT STA. 257+27.

EXISTING ROW LINE

STA. 256+27 AHEAD C=0 F=0 BACK C=0 F=0

TRANSITION EARTH SHOULDER FROM 0'-0" AT STA. 256+27 TO 4'-0" AT STA. 256+52.

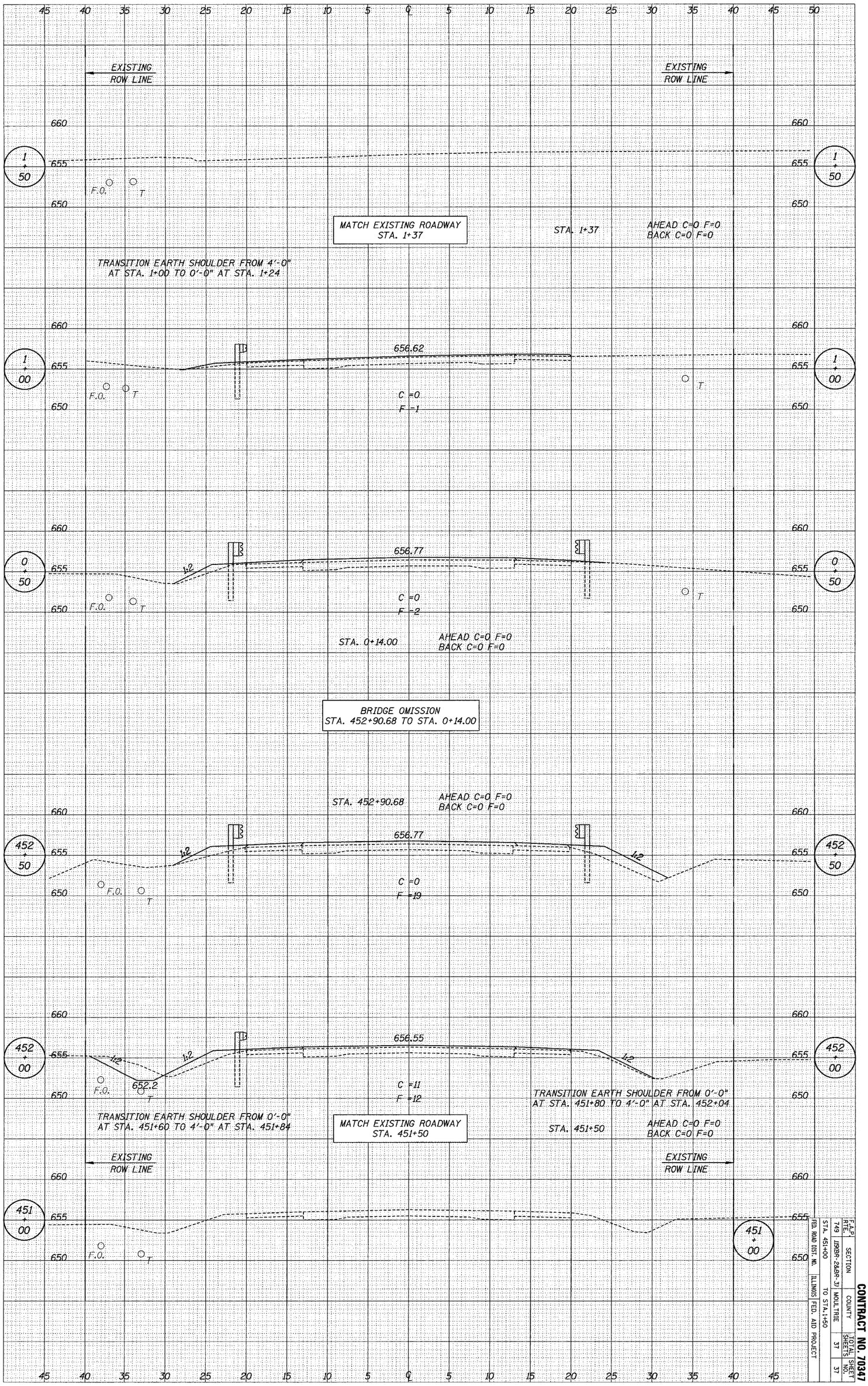
C =0
F =4

MATCH EXISTING ROADWAY STA. 256+27

IL RTE 133 STA. 256+00 TO STA. 261+00

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

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



CONTRACT NO. 70347

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	I39(BR-2&BR-3)	MOULTRIE	37	37
	STA. 451+00 TO STA.1+50			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

IL RTE 133 STA. 451+00 TO STA. 1+50