

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122BR)BR	VERMILION	25	1
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

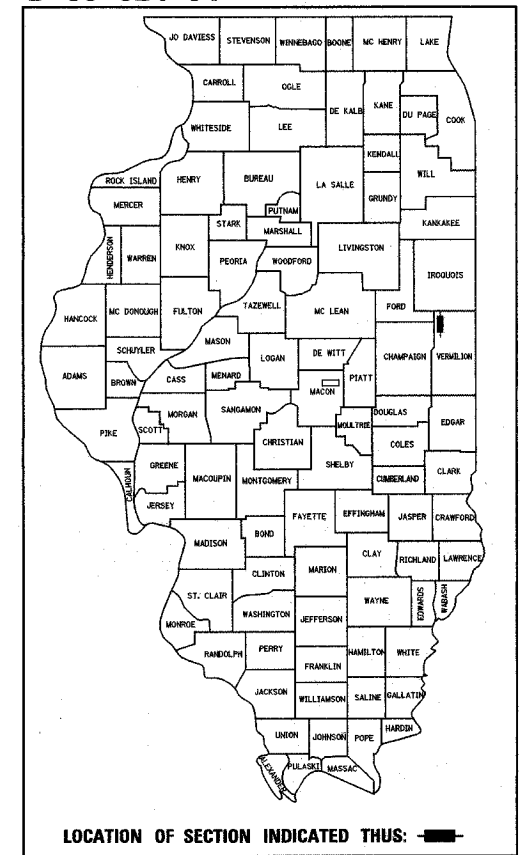
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
**PLANS FOR PROPOSED
FEDERAL AID HIGHWAY**

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

F.A.P. ROUTE 840 (IL ROUTE 49)
SECTION (122BR)BR
VERMILION COUNTY
PROJECT NO. BHF-840(050)
C-95-025-04

BRIDGE BEAM REPLACEMENT & BRIDGE NEW DECK
OVER FAST CREEK SOUTH OF RANKIN

D-95-024-04



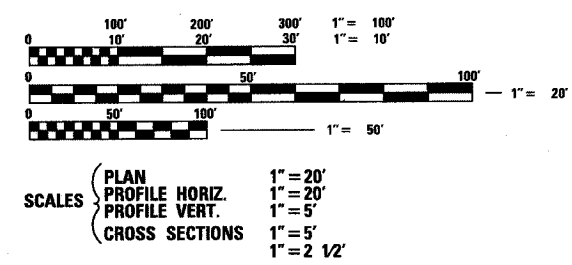
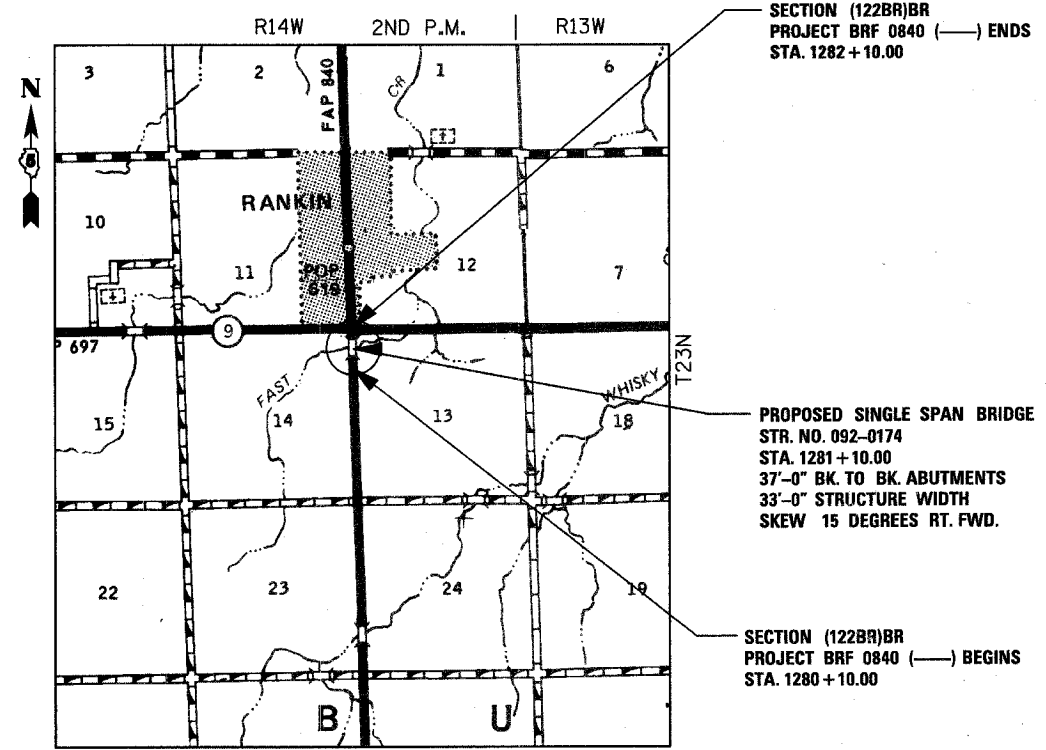
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Oct 18 20 05

[Signature]
DEPUTY DIRECTOR OF HIGHWAYS, REGION THREE ENGINEER

December 9 20 05
[Signature]
ENGINEER OF DESIGN AND ENVIRONMENT

December 9, 20 05
[Signature]
DEPUTY DIRECTOR, DIVISION OF HIGHWAYS



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

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

LOCATION MAP
GROSS AND NET LENGTH OF PROJECT = 200 FEET = 0.038 MILES ADT = 1150 (2003)



[Signature]
SHEILA J. KIMLINGER, P.E., S.E.
DATE September 27 20 05
EXPIRES NOVEMBER 30, 2005

BLANK, WESSELINK, COOK & ASSOCIATES
ENGINEERS - CONSULTANTS
DECATUR, ILLINOIS

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

CONTRACT NO. 70381

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122BR)BR	VERMILION	25	2
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

INDEX OF SHEETS

- 1 COVER SHEET
- 2 INDEX OF SHEETS, HIGHWAY STANDARDS AND GENERAL NOTES
- 3 SUMMARY OF QUANTITIES
- 4-5 EXISTING AND PROPOSED TYPICAL SECTIONS
- 6 SCHEDULE OF QUANTITIES
- 7 PLAN AND PROFILE SHEET
- 8-13 BRIDGE PLANS
- 14 DETOUR SIGNING DETAIL
- 15 ROADWAY DETAILS
- 16-18 TYPICAL APPLICATION OF PAVEMENT MARKINGS
- 19-25 CROSS SECTIONS

HIGHWAY STANDARDS

- 000001-04 STANDARD SYMBOLS, ABBREVIATIONS & PATTERNS
- 001001 AREAS OF REINFORCEMENT BARS
- 001006 DECIMAL OF AN INCH AND OF A FOOT
- 280001-02 TEMPORARY EROSION CONTROL SYSTEMS
- 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
- 702001-05 TRAFFIC CONTROL DEVICES
- 780001-01 TYPICAL PAVEMENT MARKINGS

GENERAL NOTES

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

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

G.N. 107.31
UTILITY LINES WERE PLOTTED FROM INFORMATION FURNISHED BY THE VARIOUS UTILITY COMPANIES INVOLVED AND THEIR ACCURACY SHOULD BE CONSIDERED APPROXIMATE ONLY. THESE UTILITY COMPANIES MAY BE ADJUSTING THEIR FACILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL COOPERATE WITH THESE ORGANIZATIONS WHILE THESE ADJUSTMENTS ARE BEING PERFORMED.
J.U.L.I.E. - JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS SYSTEM (800) 892-0123.

G.N. 250C (SPECIAL)
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 THEIR 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.

GN. 406H
THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

LOCATIONS:	BIT. CONC. SURF. COURSE, SUPERPAVE, MIX C, N50
MIXTURE USE(S):	MAINLINE PAVEMENT
AC/PG:	PG 64-22
RAP %: (MAX)	15
DESIGN AIR VOIDS:	4% @ NDES=50
MIXTURE COMPOSITION:	IL 9.5
(GRADATION MIXTURE)	
FRICITION AGGREGATE:	MIX C

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

G.N. 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 1/4 INCHES IN THICKNESS. CA-13 OR CA-16 MAY BE USED WHEN THE SURFACE COURSE IS 1 1/4 INCHES OR MORE IN THICKNESS.'

THERE ARE NO COMMITMENTS FOR THIS PROJECT.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		INDEX OF SHEETS, HIGHWAY STANDARDS AND GENERAL NOTES
DATE 6/05		DRAWN BY NJV CHECKED BY SJK

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122BR)BR	VERMILION	25	3
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

PAY CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	80% FEDERAL 20% STATE X080-2A
20200100	EARTH EXCAVATION	CU YD	105	105
20400800	FURNISHED EXCAVATION	CU YD	86	86
25000210	SEEDING CLASS 2A	ACRE	0.75	0.75
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	68	68
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	68	68
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	68	68
25100115	MULCH, METHOD 2	ACRE	0.75	0.75
25100630	EROSION CONTROL BLANKET	SQ YD	833	833
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	80	80
28000300	TEMPORARY DITCH CHECKS	EACH	1	1
28000400	PERIMETER EROSION BARRIER	FOOT	80	80
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	34	34
40600980	BITUMINOUS SURFACE REMOVAL - BUTT JOINT	SQ YD	174	174
44000030	BITUMINOUS SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	290	290
48101200	AGGREGATE SHOULDERS, TYPE B	TON	122	122
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1	1
50102400	CONCRETE REMOVAL	CU YD	0.5	0.5
50300225	CONCRETE STRUCTURES	CU YD	0.5	0.5
50300260	BRIDGE DECK GROOVING	SQ YD	134	134
50300300	PROTECTIVE COAT	SQ YD	147	147
X5030305	CONCRETE WEARING SURFACE 5"	SQ YD	144	144
50400305	PRECAST PRESTRESSED CONCRETE DECK BEAMS (17' DEPTH)	SQ FT	1230	1230

PAY CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	80% FEDERAL 20% STATE X080-2A
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1920	1920
50901005	STEEL BRIDGE RAIL, TYPE SM	FOOT	75	75
51500100	NAME PLATES	EACH	1	1
* 63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	500.0	500.0
* 63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4	4
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE I, SPECIAL (TANGENT)	EACH	4	4
63200310	GUARDRAIL REMOVAL	FOOT	456	456
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	2	2
67100100	MOBILIZATION	L SUM	1	1
70101800	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	1	1
* 78001110	PAINT PAVEMENT MARKING - LINE 4'	FOOT	450	450
* 78200400	GUARDRAIL REFLECTORS	EACH	10	10
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4
X4066414	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX C, N50	TON	45	45

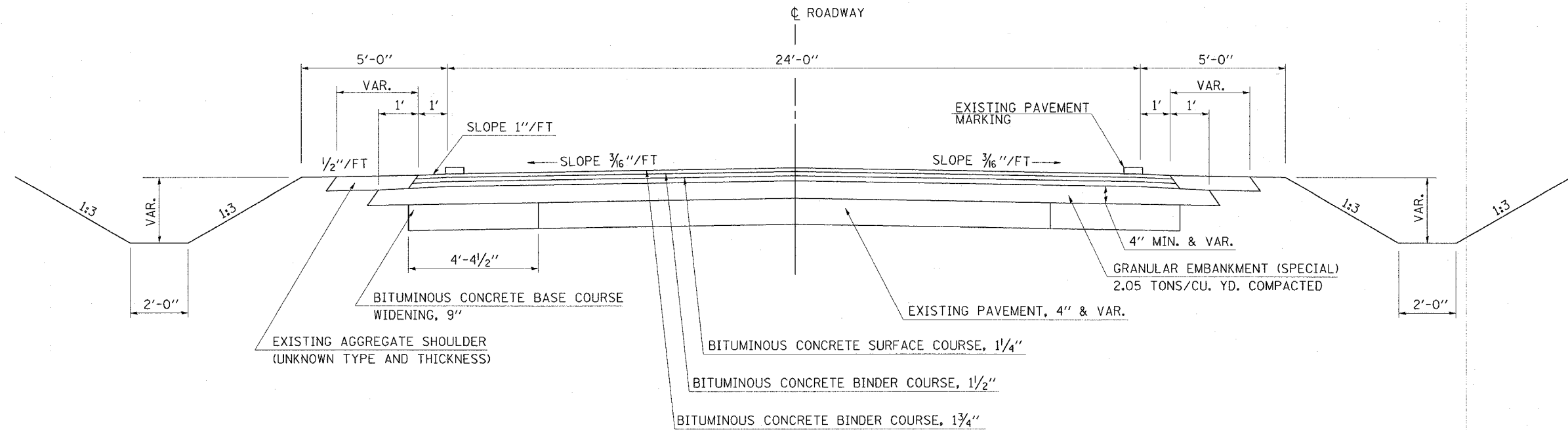
* DENOTES SPECIALTY ITEM

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		SUMMARY OF QUANTITIES DRAWN BY NJV CHECKED BY SJK DATE 6/05

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122BR)BR	VERMILION	25	4
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

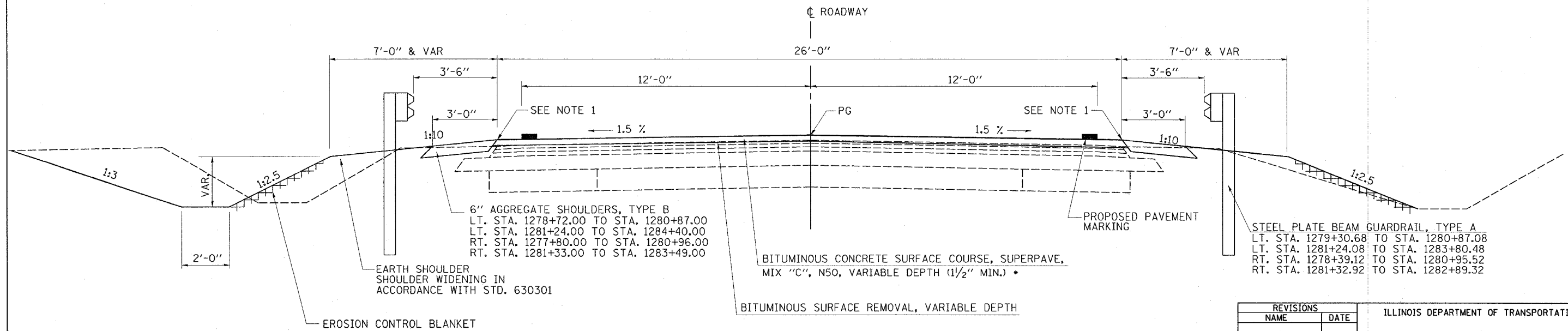
EXISTING TYPICAL SECTION

STA. 1280+10.00 TO STA 1280+91.50
 STA. 1281+28.50 TO STA 1282+10.00



PROPOSED TYPICAL SECTION

STA. 1280+10.00 TO STA 1280+91.50
 STA. 1281+28.50 TO STA 1282+10.00



NOTE:
 1. FROM STA. 1277+80.00 TO STA. 1280+10.00 AND STA. 1282+10.00 TO STA. 1284+40.00, THE PROPOSED SHOULDER SHALL MATCH THE EXISTING EDGE OF PAVEMENT.

* SURFACE COURSE IS TO BE PLACED UTILIZING A STRING LINE.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING AND PROPOSED TYPICAL SECTIONS

DATE 6/05

DRAWN BY MLO
 CHECKED BY SJK

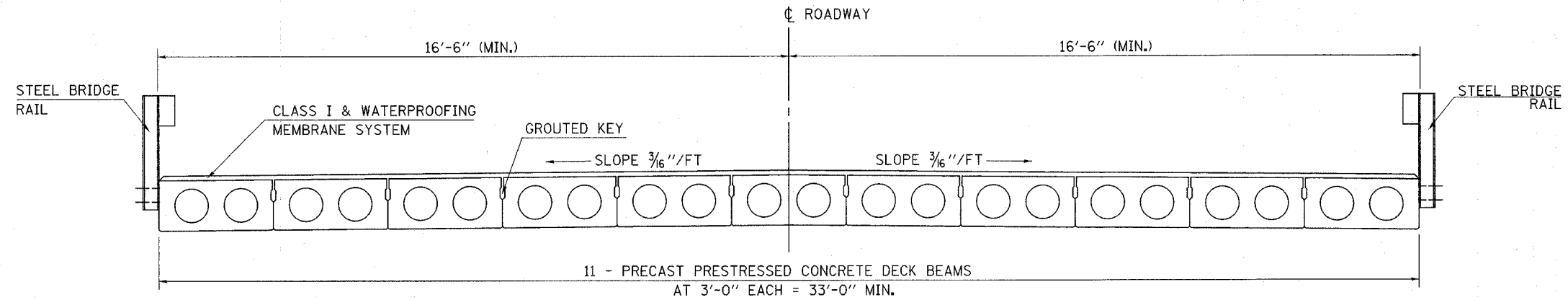
VERMILION COUNTY

PLOT DATE * DATE *
 PLOT SCALE * SCALE *
 USER NAME * USER *

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122BR)BR	VERMILION	25	5
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

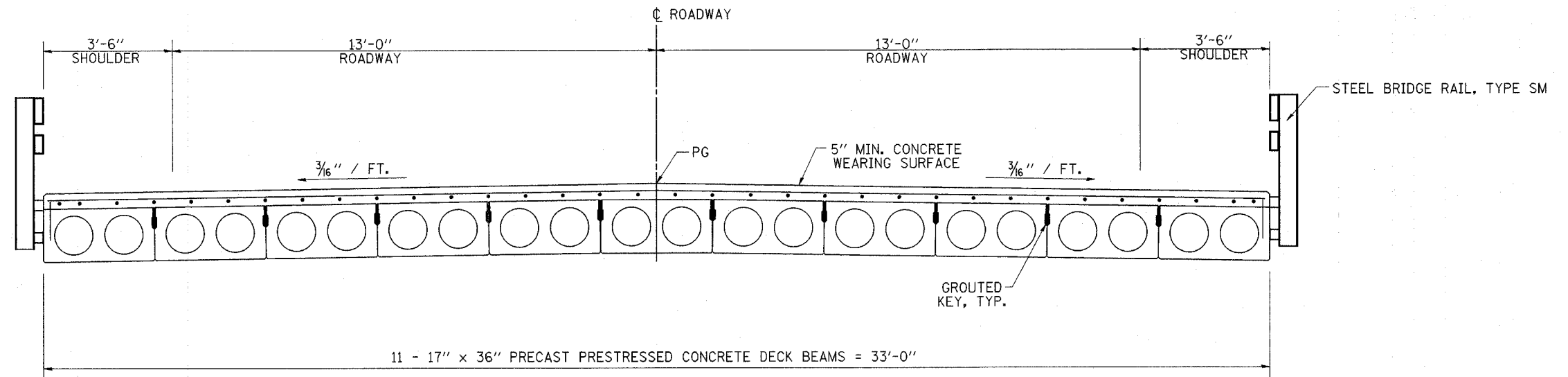
EXISTING TYPICAL SECTION

STA. 1280+91.50 TO STA. 1281+28.50



PROPOSED TYPICAL SECTION

STA. 1280+91.50 TO STA. 1281+28.50



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING AND PROPOSED TYPICAL SECTIONS

DATE 6/05
DRAWN BY MLO
CHECKED BY SJK

DATE * DATE *
PLOT SCALE * SCALE *
USER NAME * USER *

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122BR)BR	VERMILION	25	6
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

EARTH EXCAVATION

LOCATION	EARTH EXCAVATION (CUT) (CU YD)	EARTH * EXCAVATION ADJUSTED FOR SHRINKAGE (CUT) (CU YD)	EARTHWORK EMBANKMENT (FILL) (CU YD)	BALANCE WASTE (+) OR SHORTAGE (-) (CU YD)
NORTH	40	30	55	-25
SOUTH	65	49	110	-61
TOTAL	105	79	165	-86

* AN EARTH SHRINKAGE FACTOR OF 0.25 HAS BEEN APPLIED.

BITUMINOUS SURFACE REMOVAL - BUTT JOINT

STATION TO	STATION	SQ YD
1280+10.00	1280+40.00	87
1281+80.00	1282+10.00	87
TOTAL		174

GUARDRAIL REMOVAL

STATION TO	STATION	OFFSET	FOOT
1279+72.93	1280+86.91	LT	114
1279+81.19	1280+95.64	RT	114
1281+23.98	1282+36.72	LT	113
1281+33.25	1282+47.80	RT	115
TOTAL			456

SEEDING, FERTILIZERS AND MULCH

STATION	TO STATION	SEEDING CLASS 2A (ACRE)	NITROGEN (POUND)	PHOSPHORUS (POUND)	POTASSIUM (POUND)	MULCH METHOD 2 (ACRE)	TEMPORARY EROSION CONTROL SEEDING (POUND)
1277+60.00	1283+70.00	0.25	23.0	23.0	23.0	0.25	30.0
1278+50.00	1284+60.00	0.50	45.0	45.0	45.0	0.50	50.0
TOTAL		0.75	68.0	68.0	68.0	0.75	80.0

BITUMINOUS SURFACE REMOVAL, VARIABLE DEPTH

STATION TO	STATION	SQ YD
1280+40.00	1280+90.34	145
1281+29.67	1281+80.00	145
TOTAL		290

PAINT PAVEMENT MARKING - LINE 4"

STATION	TO STATION	RIGHT (WHITE) (FEET)	CENTER (YELLOW) (FEET)	LEFT (WHITE) (FEET)	TOTAL (FEET)
1280+10.00	1282+10.00	200	50	200	450

AGGREGATE SHOULDERS, TYPE B

STATION	TO STATION	OFFSET	TONS
1277+80.00	1280+96.00	RT	36
1278+72.00	1280+87.00	LT	25
1281+33.00	1283+49.00	RT	25
1281+24.00	1284+40.00	LT	36
TOTAL			122

GUARDRAIL REFLECTORS

STATION	OFFSET	EACH
1280+10.48	LT	1
1280+90.48	LT	1
1281+70.48	LT	1
1282+50.48	LT	1
1283+30.48	LT	1
1278+89.12	RT	1
1279+69.12	RT	1
1280+49.12	RT	1
1281+29.12	RT	1
1282+09.12	RT	1
TOTAL		10

EROSION CONTROL BLANKET

STATION	TO STATION	OFFSET	SQ YD
1277+60.00	1283+70.00	RT	321
1278+50.00	1284+60.00	LT	512
TOTAL			833

STEEL PLATE BEAM GUARD RAIL, TYPE A

STATION TO	STATION	OFFSET	FOOT
1279+80.68	1280+55.68	LT	75.0
1278+89.12	1280+64.12	RT	175.0
1281+55.48	1283+30.48	LT	175.0
1281+64.32	1282+39.32	RT	75.0
TOTAL			500.0

TERMINAL MARKER - DIRECT APPLIED

STATION	OFFSET	EACH
1279+30.68	LT	1
1278+39.12	RT	1
1283+80.48	LT	1
1282+89.32	RT	1
TOTAL		4

TEMPORARY DITCH CHECK

STATION	OFFSET	EACH
1280+00.00	LT	1

TRAFFIC BARRIER TERMINAL, TYPE 6A

STATION TO	STATION	OFFSET	EACH
1280+55.68	1280+87.08	LT	1
1280+64.12	1280+95.52	RT	1
1281+24.08	1281+55.48	LT	1
1281+32.92	1281+64.32	RT	1
TOTAL			4

PERIMETER EROSION BARRIER

STATION	OFFSET	FOOT
1280+70.00	LT	20
1280+80.00	RT	20
1281+30.00	LT	20
1281+40.00	RT	20
TOTAL		80

TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL (TANGENT)

STATION TO	STATION	OFFSET	EACH
1279+30.68	1279+80.68	LT	1
1278+39.12	1278+89.12	RT	1
1283+30.48	1283+80.48	LT	1
1282+39.32	1282+89.32	RT	1
TOTAL			4

BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX C, N50

STATION TO	STATION	TONS
1280+10.00	1280+90.34	22.6
1281+29.67	1282+10.00	21.5
TOTAL		44.1
USE 45		

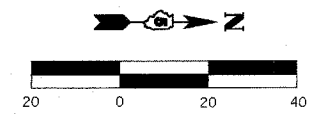
BITUMINOUS MATERIALS (PRIME COAT)

STATION TO	STATION	GALLONS
1280+10.00	1280+90.34	17
1281+29.67	1282+10.00	17
TOTAL		34

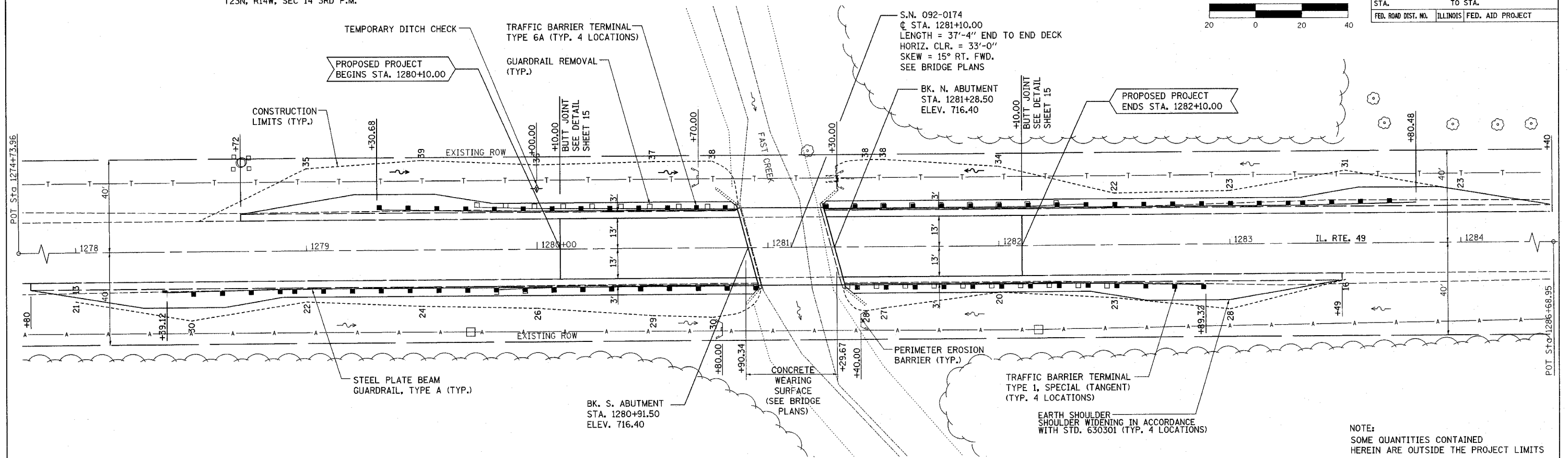
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		<p style="text-align: center;">SCHEDULE OF QUANTITIES</p> <p style="text-align: right;">DRAWN BY MLO CHECKED BY SJK</p> <p>DATE 6/05</p>

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122BR)BR	VERMILION	25	7
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

T23N, R14W, SEC 14 3RD P.M.

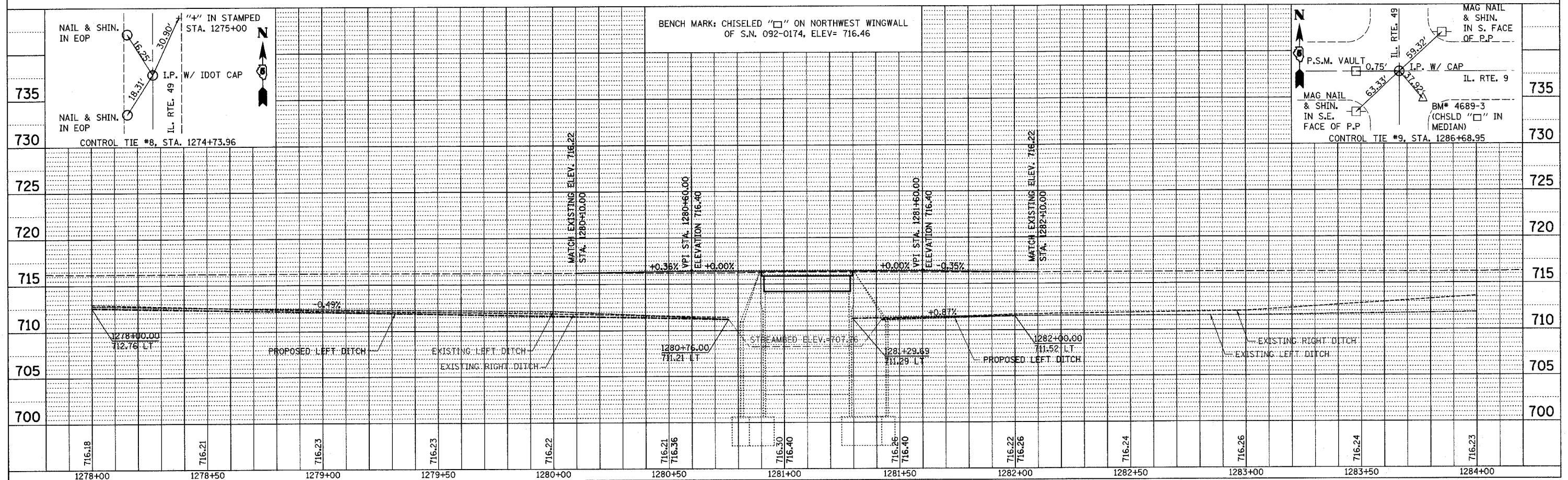


PLAN	DATE
BY	
REVISIONS	
NO.	DESCRIPTION
1	AS SHOWN



NOTE:
SOME QUANTITIES CONTAINED
HEREIN ARE OUTSIDE THE PROJECT LIMITS

PROFILE	DATE
BY	
REVISIONS	
NO.	DESCRIPTION
1	AS SHOWN



Benchmark: Chiseled "□" on northwest wingwall of S.M. 092-0174
Elevation 716.46.

Existing Structure: Structure Number 092-0174 was built in 1976 as FA-840, Section 122 BR.
The structure consists of single span PPC-deck beams on closed abutments.
The bk. to bk. abutments is 37'-0" and the o.-o. width is 33'-0". The existing
superstructure shall be replaced with PPC deck beams. Road closure shall be
used during construction.

No Salvage.

Traffic Barrier Terminal Std. 631032
Type 6A (Typ. all four corners)

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.
840	(122BR)BR	VERMILION	25	8

6 SHEETS

Contract #70381

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Superstructure	Each	1		1
Concrete Removal	Cu. Yd.		0.5	0.5
Concrete Structures	Cu. Yd.		0.5	0.5
Bridge Deck Grooving	Sq. Yd.	134		134
Protective Coat	Sq. Yd.	147		147
Concrete Wearing Surface, 5"	Sq. Yd.	144		144
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	1230		1230
Reinforcement Bars, Epoxy Coated	Pound	1900	20	1920
Steel Bridge Rail, Type SM	Foot	75		75
Name Plates	Each		1	1

GENERAL NOTES

Reinforcement bars shall conform to the requirements of AASHTO M 31 or M 322 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 the 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.
Removal of existing bridge rail included in the cost of Removal of Existing Superstructures.
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
along the entire length of fascia beams to both the exterior vertical face and 9" in on the underside
surface of the 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 in-stream 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.
The Contractor shall temporarily brace the top of abutments prior to the removal of the existing
superstructure. The Contractor shall submit the bracing system to the Engineer for approval prior to
fabrication or installation. Cost included in the cost of Removal of Existing Superstructure.

DESIGN SPECIFICATIONS

2002 AASHTO

LOADING HS-20-44

(No allowance for future wearing surface)

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.046g
Site Coefficient (S) = 1.5 (Assumed)

DESIGN STRESSES

FIELD UNITS $f_c = 5,000$ p.s.i. (Concrete Wearing Surface)
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)

PRECAST PRESTRESSED UNITS

$f'_c = 5,000$ psi
 $f'_{ci} = 4,000$ psi
 $f'_s = 270,000$ psi ($\frac{1}{2}$ " ϕ Low Relax. strands)
 $f_{si} = 201,960$ psi ($\frac{1}{2}$ " ϕ Low Relax. strands)

EXISTING SUBSTRUCTURE FIELD UNITS

$f'_c = 1,000$ psi
 $f_s = 20,000$ psi (Reinforcement)

INDEX OF SHEETS

- 1 General Plan
- 2 Type SM Steel Bridge Rail Side Mounted
- 3 Superstructure
- 4-5 Superstructure Details
- 6 Abutments

STATION 1281+10.00
REBUILT 20__ BY
STATE OF ILLINOIS
F.A.P. ROUTE 840
SECTION (122BR)BR
LOADING HS20
STR. NO. 092-0174

NAME PLATE

See Std. 5J5001

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

EXISTING WATERWAY INFORMATION

Drainage Area 960 Acres
Character : level, rolling, sand, clay, cultivated
Req'd opening (50 yr. fl. freq.) 170 Sq. Ft.
Present Opening 170 Sq. Ft.
Proposed Opening 170 Sq. Ft.
Ordinary Water Elev. 708.41
Design H.W. Elev. 713.34
 $Q(50) = 4.32$ cfs

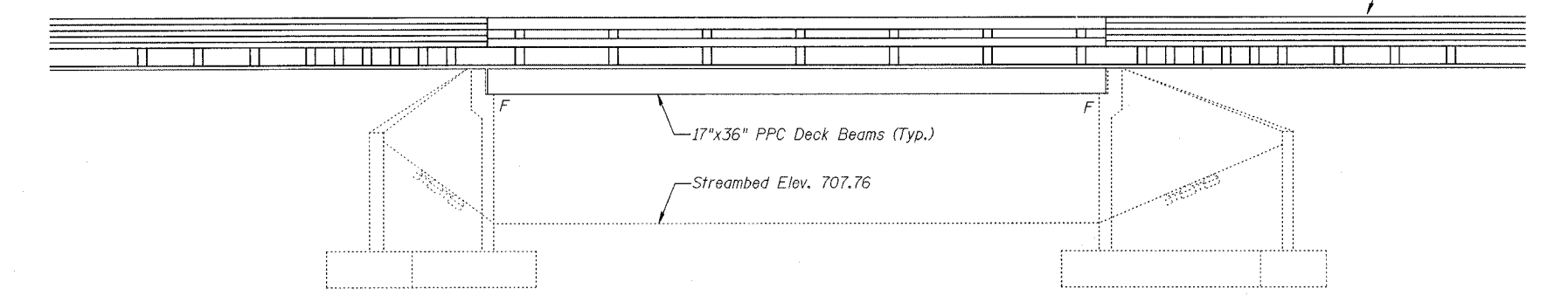
ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL PLAN

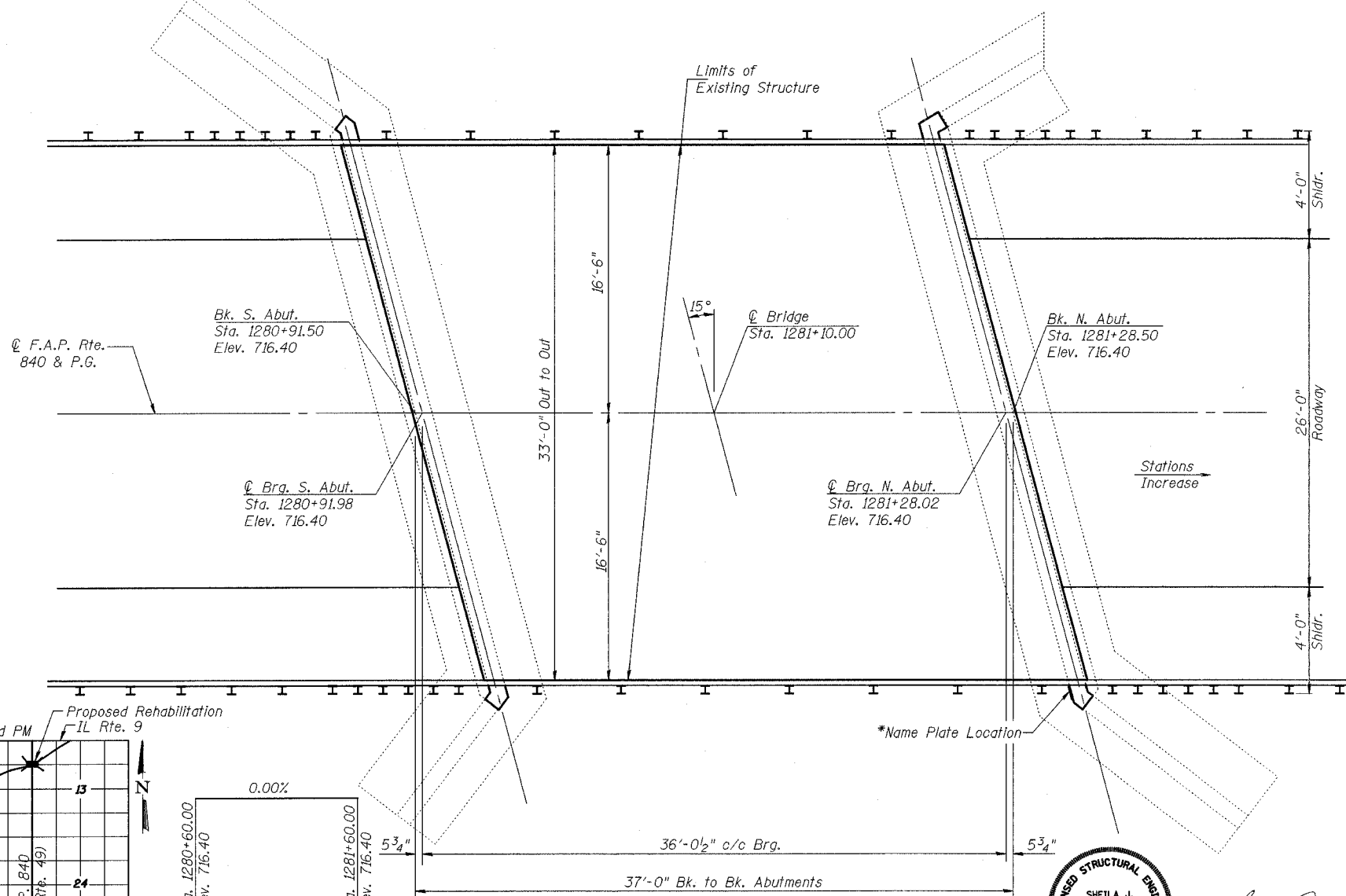
IL ROUTE 49 OVER
FAST CREEK
F.A.P. ROUTE 840 SECTION (122BR)BR
VERMILION COUNTY
STATION 1281+10.00
STRUCTURE NO. 092-0174

DATE: JUNE 2005

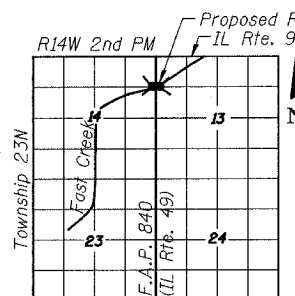
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CHECKED BY: SJK



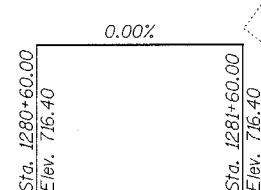
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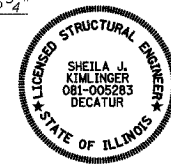
PLAN



LOCATION SKETCH

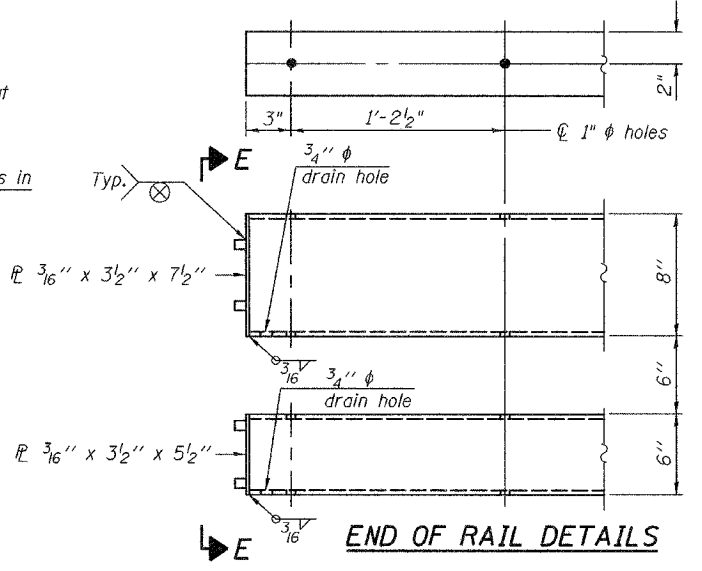
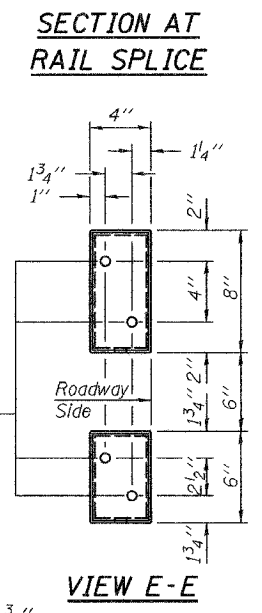
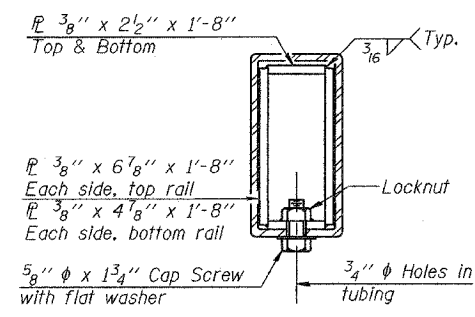
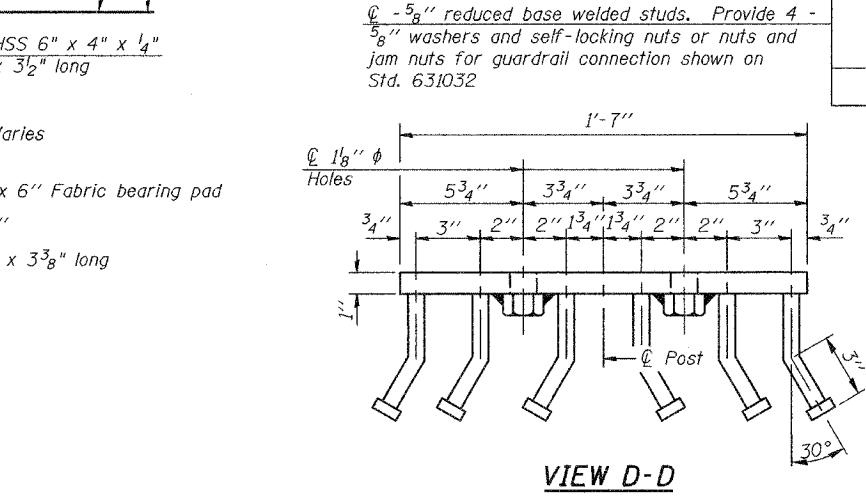
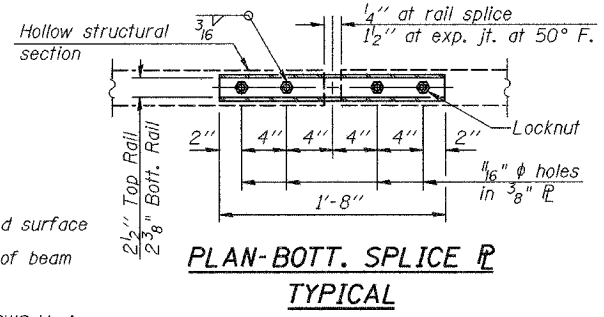
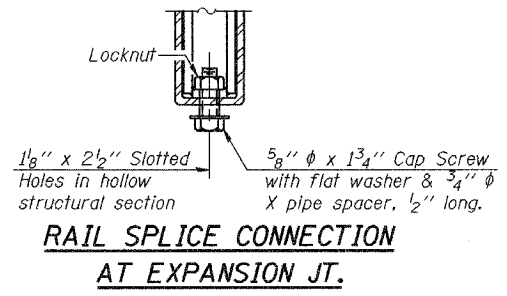
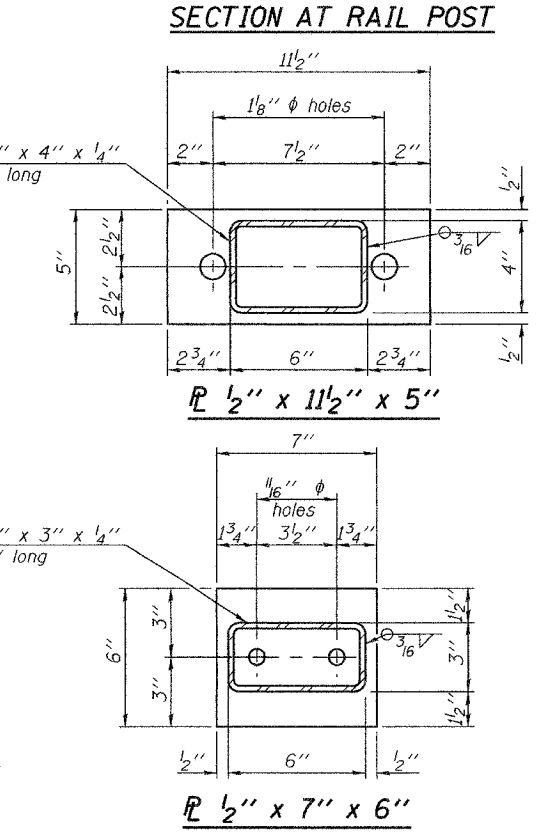
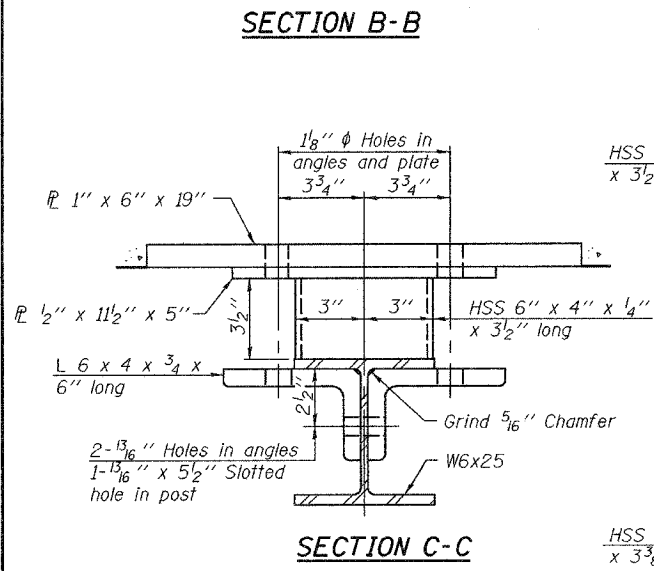
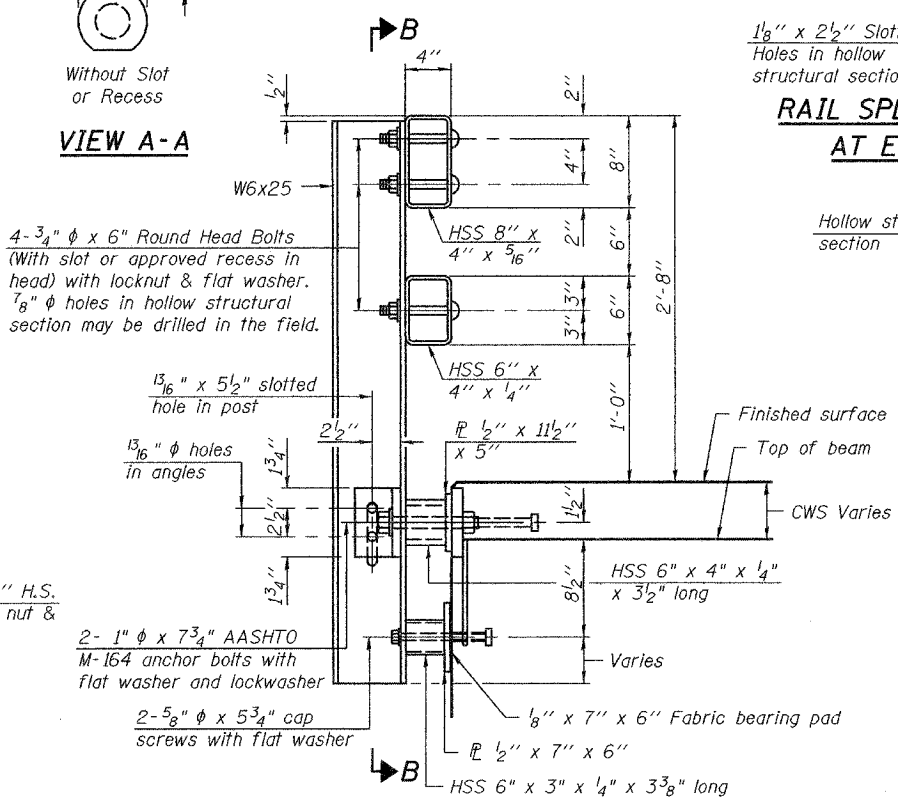
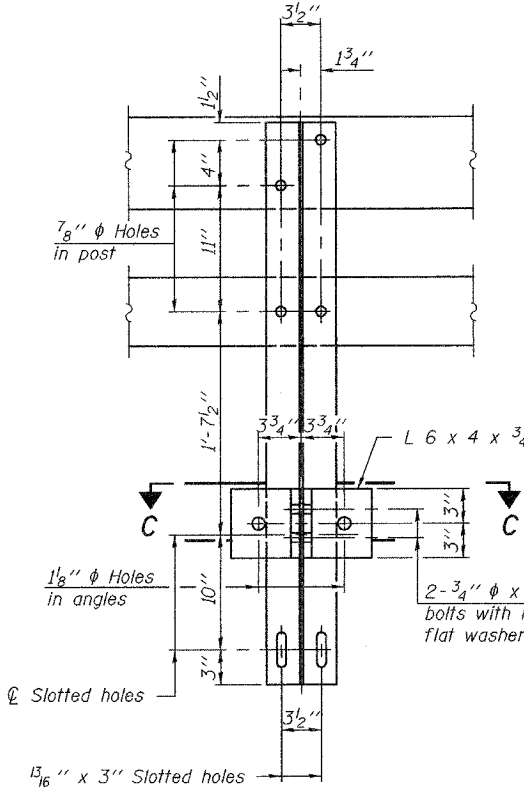
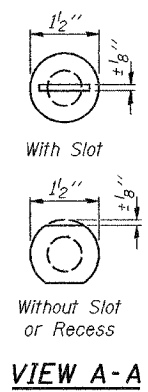
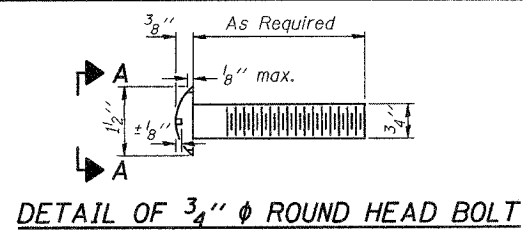


PROFILE GRADE
(along ϕ F.A.P. 840)



Sheila J. Kimlinger 10/7/05
Date
Sheila J. Kimlinger, S.E.
Structural Engineer License No. 081-005283
Expiration Date: 11/30/2006

ROUTE NO.	SECTION	COUNTY	LETS	SHEET NO.	SHEET NO. 2 6 SHEETS
840	(122BR) BR	VERMILION	25	9	
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT-		
Contract #70381					



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 spacings, see sheet 4 of 6.

BILL OF MATERIAL

Item	Unit	Quantity
Steel Bridge Rail, Type SM	Foot	75

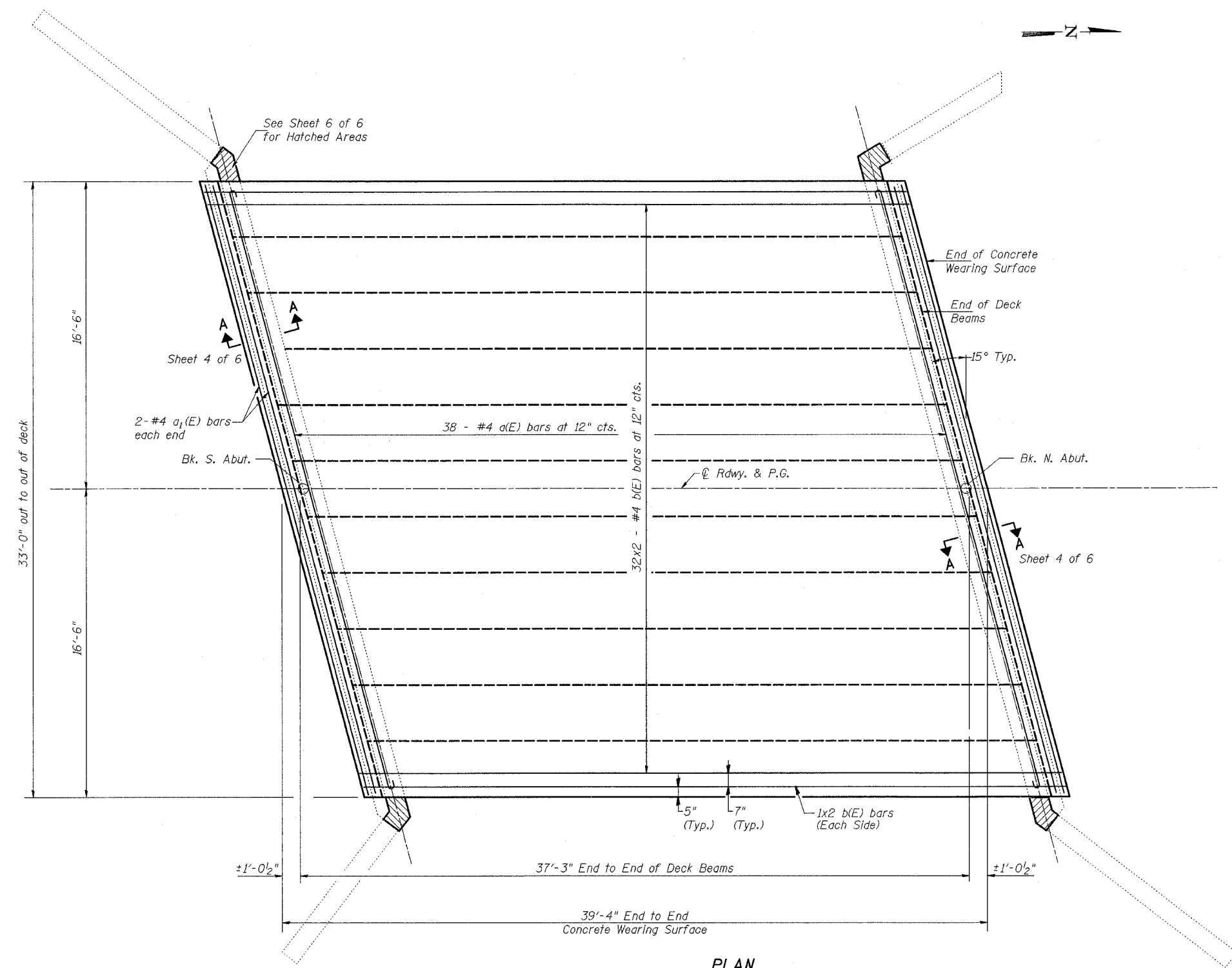
ILLINOIS DEPARTMENT OF TRANSPORTATION
TYPE SM
STEEL BRIDGE RAIL SIDE MOUNTED
IL ROUTE 49 OVER
FAST CREEK
F.A.P. ROUTE 840 SECTION (122BR)BR
VERMILION COUNTY
STATION 1281+10.00
STRUCTURE NO. 092-0174

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

R-34CWS 10-28-05 (6'-3" Maximum Post Spacing) (5" minimum to 7 7/8" maximum CWS thickness)

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 3 6 SHEETS
840	(122BR) BR	VERMILION	29	10	
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-			

Contract #70381



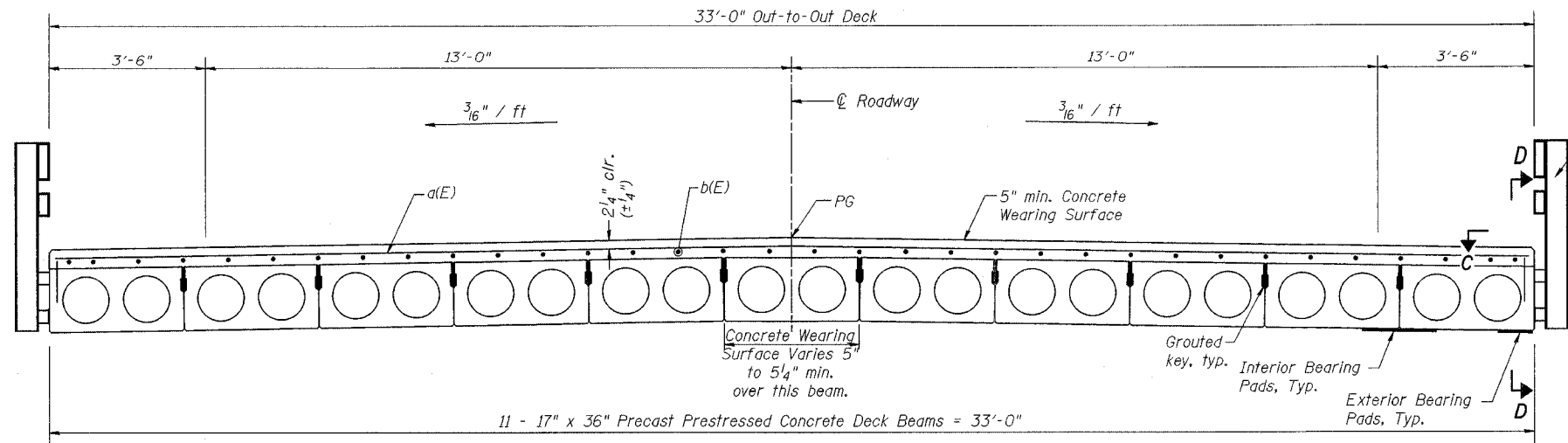
PLAN

NOTES

Reinforcement bars designated (E) shall be epoxy coated.
 For remainder of superstructure details, see sheets 4 and 5 of 6.
 Work this sheet with sheet 4 of 6.
 Bars indicated thus 32x2-#4 etc. indicates 32 lines of bars with 2 lengths per line.
 For Section "A-A" see sheet 4 of 6.

MIN BAR LAPS
 #4 bars = 1'-8"

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SUPERSTRUCTURE
 IL ROUTE 49 OVER
 FAST CREEK
 F.A.P. ROUTE 840 SECTION (122BR)BR
 VERMILION COUNTY
 STATION 1281+10.00
 STRUCTURE NO. 092-0174
 DATE: JUNE 2005
 DRAWN BY: NJV/MLO
 CHECKED BY: tJK

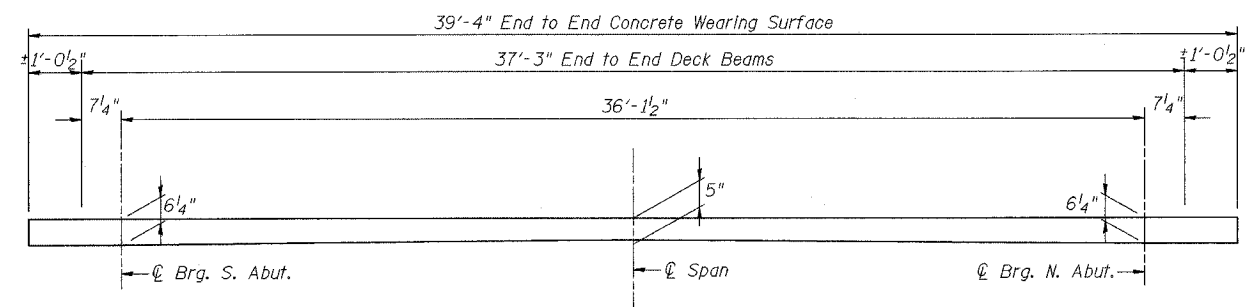


CROSS SECTION

Steel Bridge Rail, Type SM
See Sheet 2 of 6 for details.

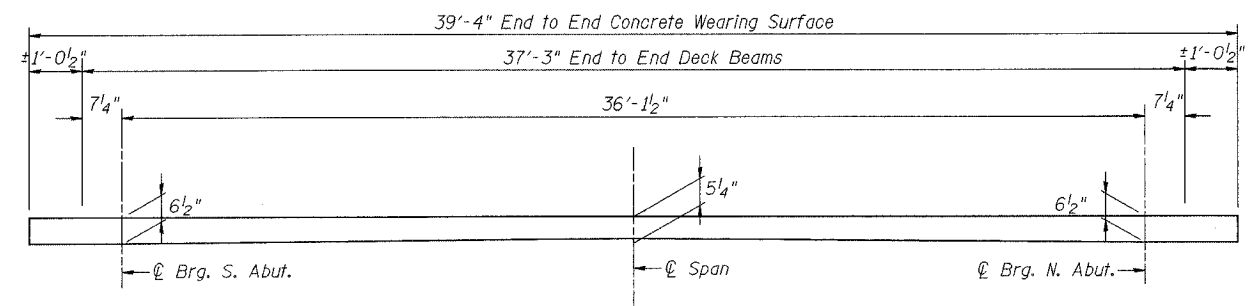
NOTES

See Sheet 5 of 6 for details of Rail Anchorage into Precast Beams and Section D-D.
After beams have been erected, holes shall be drilled into substructure and dowel rods placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hrs. prior to grouting the shear keys.
See sheet 5 of 6 for fabric bearing pad details.
Concrete wearing surface to be poured after grouting the shearkeys.
Dowel rods drilled in cap and grout are included in the cost of Precast Prestressed Concrete Deck Beams (17" Depth).
Work this Sheet with Sheet 3 of 6.
Reinforcement bars designated (E) shall be epoxy coated.

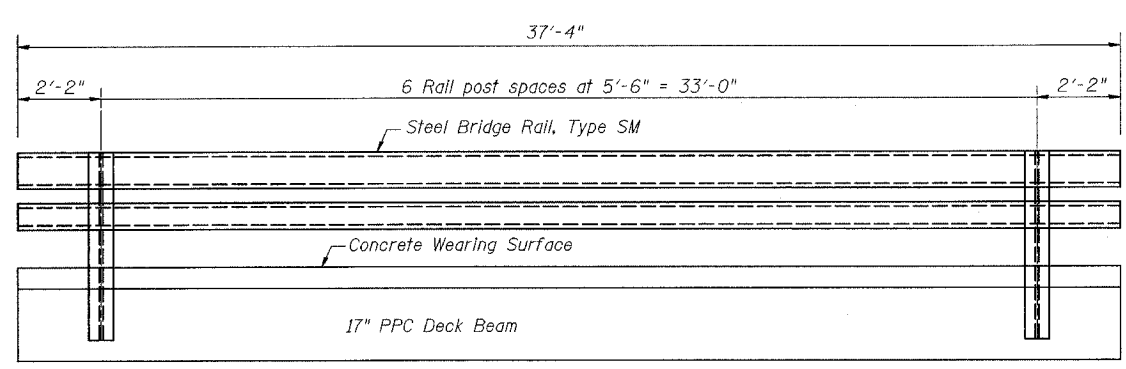


REINFORCED CONCRETE WEARING SURFACE PROFILE
(Along Edge of Deck)

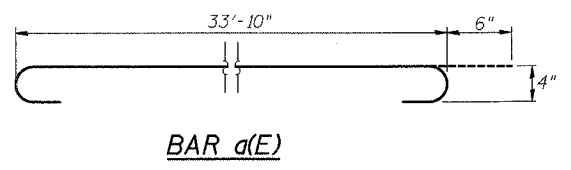
Note: Concrete Wearing Surface at Blockout at expansion Ends of Beams not shown.



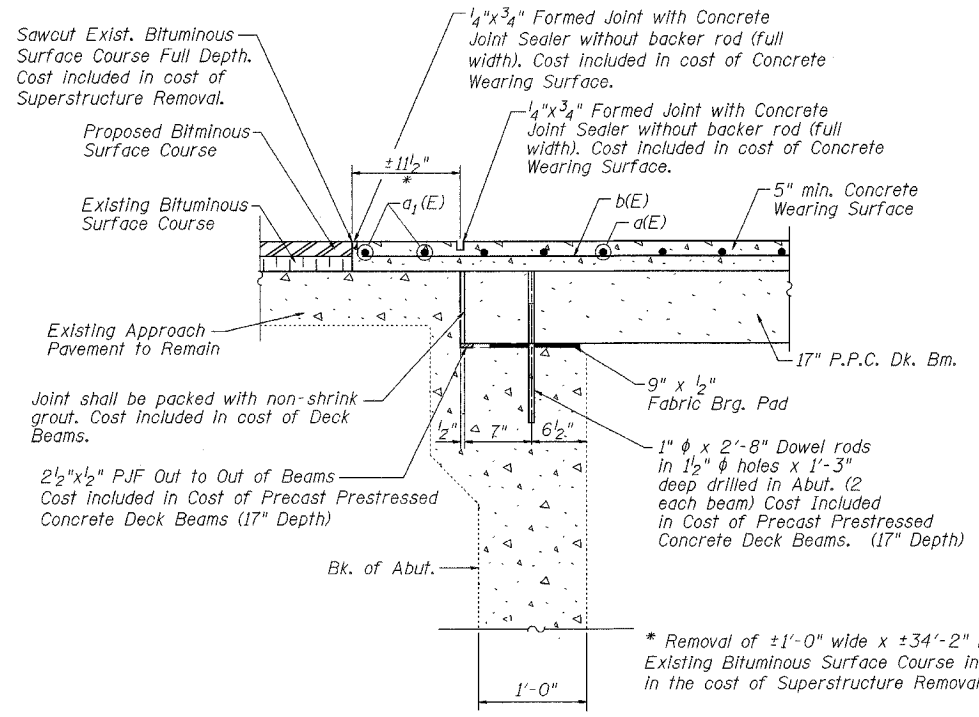
REINFORCED CONCRETE WEARING SURFACE PROFILE
(Along Roadway & P.G.)



RAIL POST SPACING



BAR a(E)

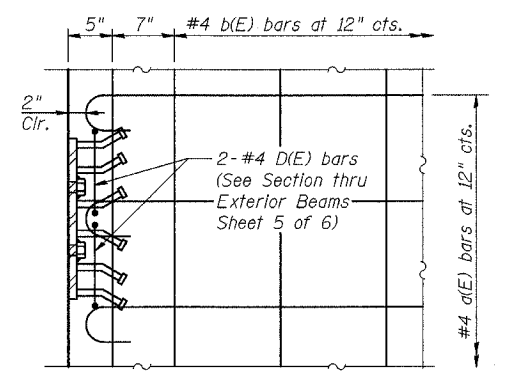


SECTION A-A TYP. SECTION THRU ABUTMENT
(at Rt. Ls.)

* Removal of ±1'-0" wide x ±34'-2" long Existing Bituminous Surface Course included in the cost of Superstructure Removal.

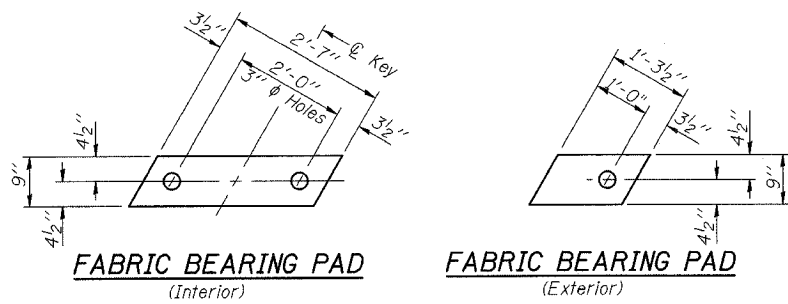
SUPERSTRUCTURE BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
a(E)	38	#4	34'-10"	—
a ₁ (E)	4	#4	33'-10"	—
b(E)	68	#4	20'-4"	—
Reinforcement Bars, Epoxy Coated			Pound	1900
Concrete Wearing Surface			Sq. Yd.	137
Bridge Deck Grooving			Sq. Yd.	134

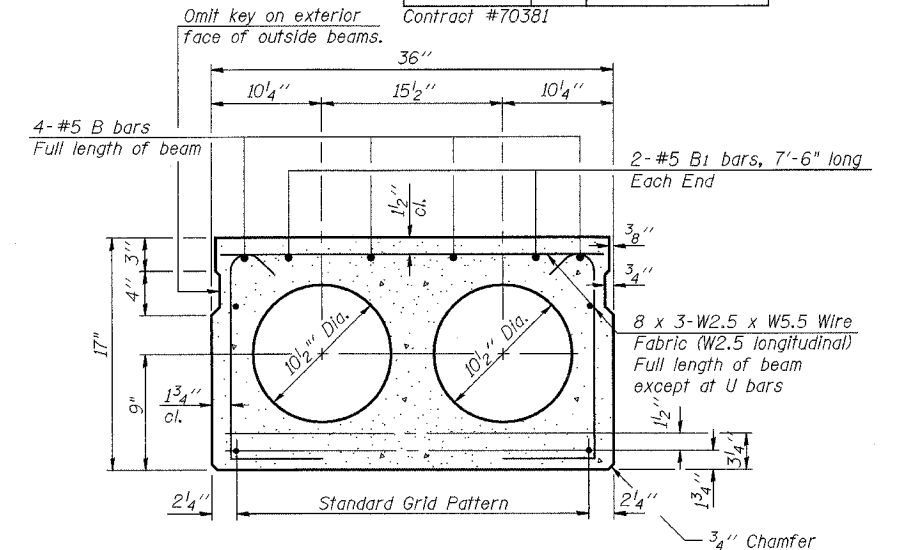
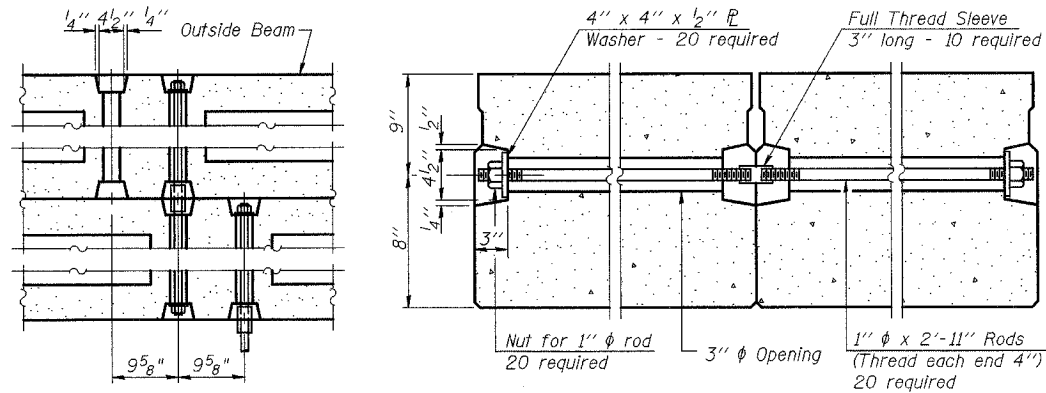
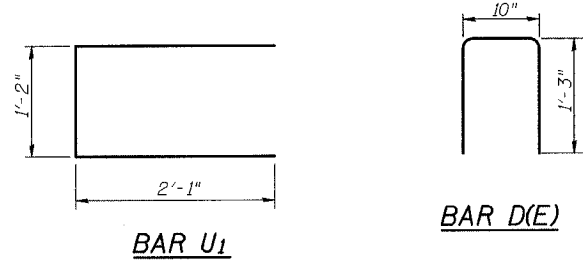


SECTION C-C

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUPERSTRUCTURE DETAILS
 IL ROUTE 49 OVER
 FAST CREEK
 F.A.P. ROUTE 840 SECTION (122BR)BR
 VERMILION COUNTY
 STATION 1281+10.00
 STRUCTURE NO. 092-0174
 DATE: JUNE 2005
 DRAWN BY: NJV/MLO
 CHECKED BY: SJK



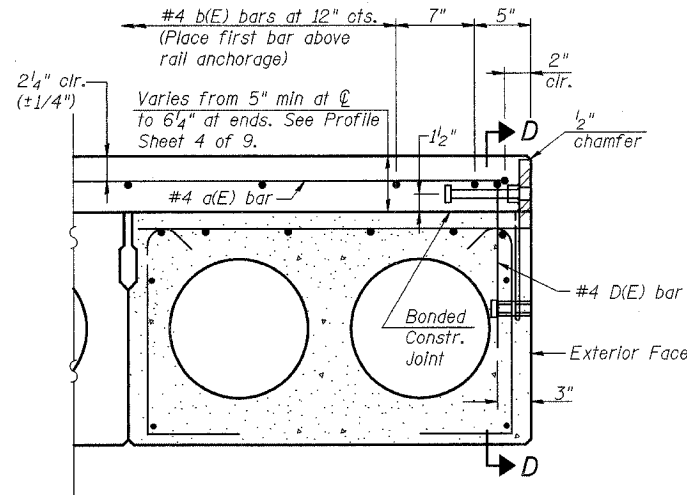
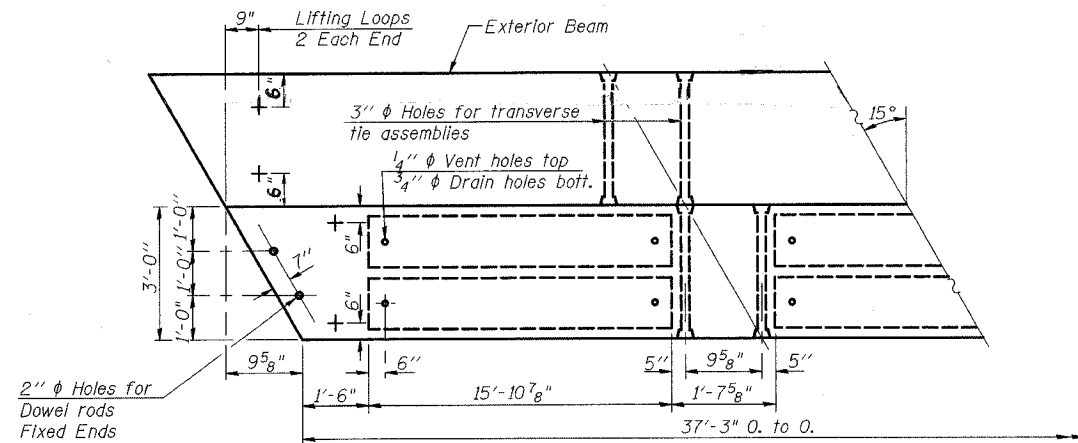
FIXED



SECTION THRU INTERIOR BEAMS

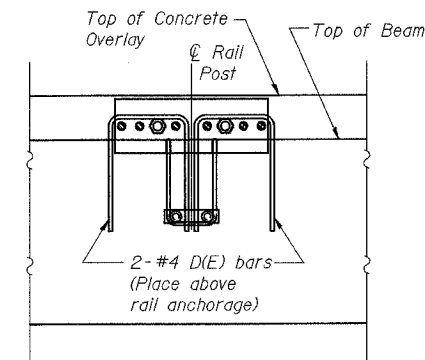
1/2" φ Strands, Each Strand Stressed to 30,900 Lbs.
9 Strands 1 3/4" up, 4 Strands 3/4" up, 2 Strands 12" up

Note:
Place strands symmetrically about C of beam.

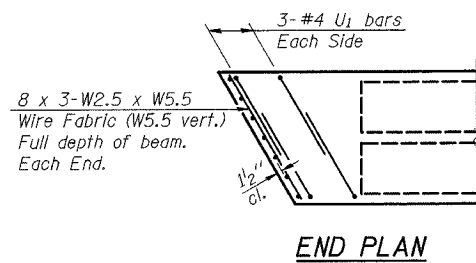


SECTION THRU EXTERIOR BEAMS

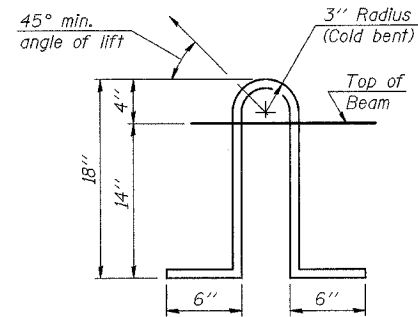
See Section Thru Interior Beams for strand pattern, dimensions and bar call outs.



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.



PLAN



NOTES

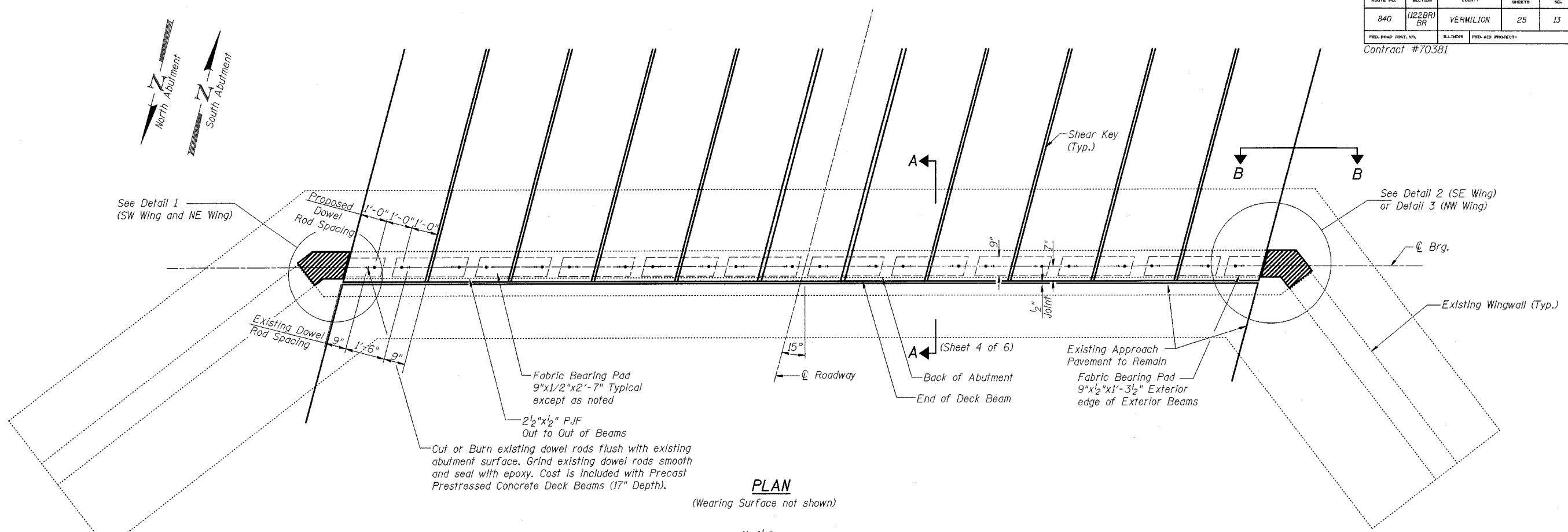
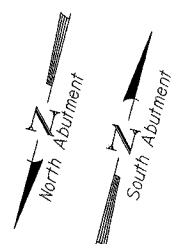
Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be 2-1/2" φ-270 ksi strands, as shown. The 1" φ rods in the transverse tie assembly shall be 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 M-31 or M-322 Grade 60. The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 1/8" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing. Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between top of the beam and the bottom edge of the key. Corrosion Inhibitor, 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. See Sheets 2 and 4 of 6 for location of rail inserts. Bridge rail inserts and D(E) bars shall be cast in precast beams.

BILL OF MATERIAL

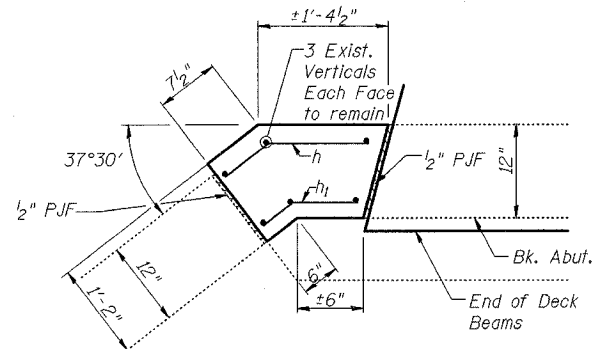
Precast Prestressed Conc. Deck Bms.(17" Depth)	Sq. Ft.	1230
------------------------------------------------	---------	------

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUPERSTRUCTURE DETAILS
IL ROUTE 49 OVER FAST CREEK
F.A.P. ROUTE 840 SECTION (122BR)BR VERMILION COUNTY
STATION 1281+10.00
STRUCTURE NO. 092-0174

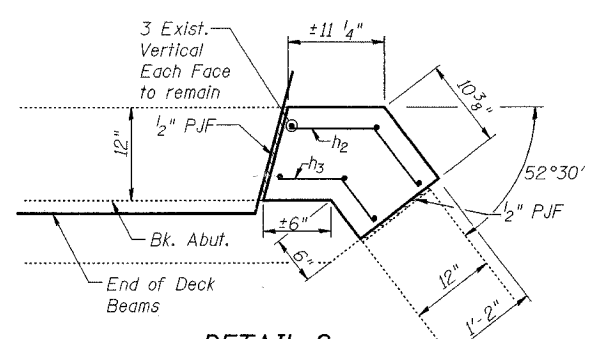
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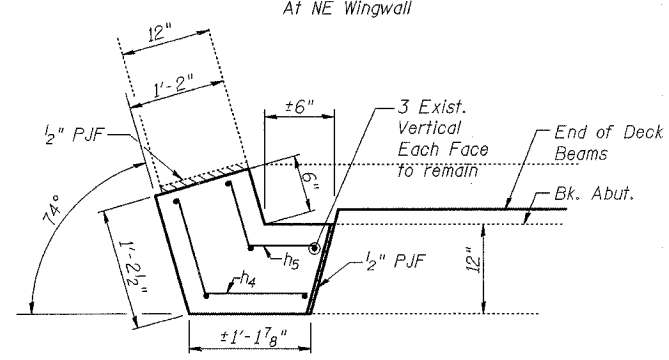
PLAN
(Wearing Surface not shown)



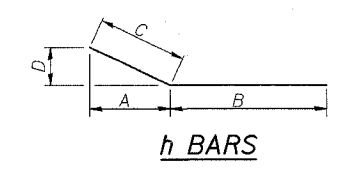
DETAIL 1
At SW Wingwall
At NE Wingwall



DETAIL 2
At SE Wingwall



DETAIL 3
At NW Wingwall



BAR	A	B	C	D
h(E)	4 3/4"	1'-1"	6"	3 5/8"
h ₁ (E)	4"	5"	5"	3"
h ₂ (E)	4 1/4"	9"	8"	6 3/8"
h ₃ (E)	3"	5"	5"	4"
h ₄ (E)	3"	11"	11"	10 5/8"
h ₅ (E)	1 3/8"	5"	5"	4 7/8"

BILL OF MATERIAL (BOTH ABUT'S)

BAR NO.	SIZE	LENGTH	SHAPE
h(E)	#4	1'-7"	
h ₁ (E)	#4	10"	
h ₂ (E)	#4	1'-5"	
h ₃ (E)	#4	10"	
h ₄ (E)	#4	1'-10"	
h ₅ (E)	#4	10"	
Reinforcement Bars, Epoxy Coated			Pound 20
Concrete Removal			Cu. Yd. 0.5
Concrete Structures			Cu. Yd. 0.5

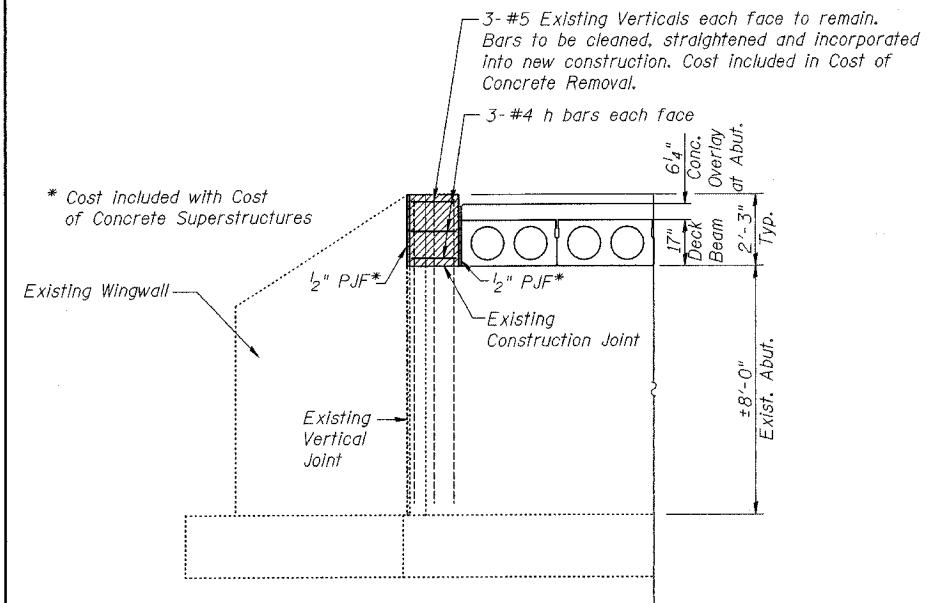
NOTES

Hatched areas indicate concrete removal. These areas are to be poured after concrete wearing surface is in place and cured.
Reinforcement bars designated (E) shall be epoxy coated.

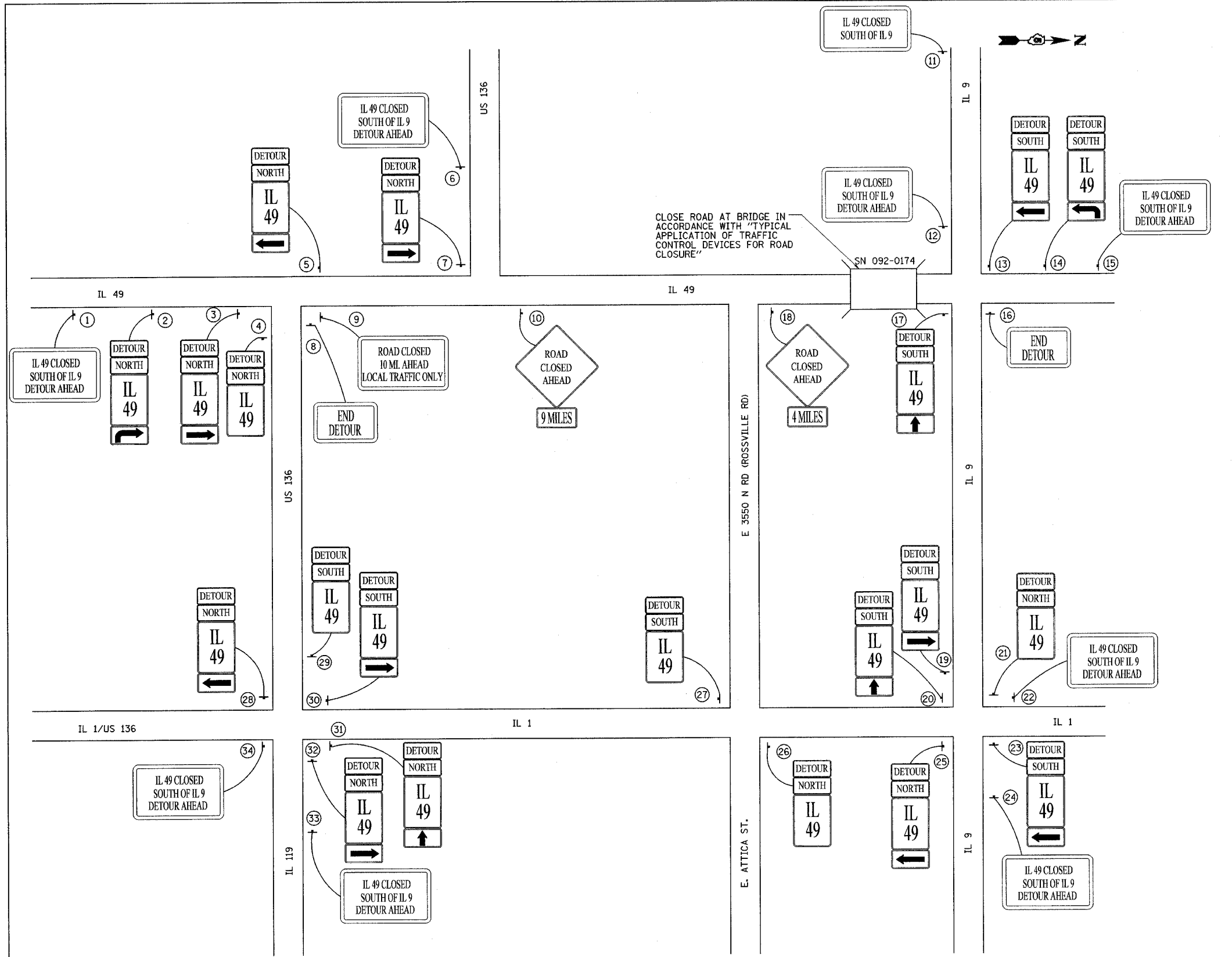
ILLINOIS DEPARTMENT OF TRANSPORTATION
ABUTMENTS
IL ROUTE 49 OVER
FAST CREEK
F.A.P. ROUTE 840 SECTION (I22BR)BR
VERMILION COUNTY
STATION 1281+10.00
STRUCTURE NO. 092-0174

DATE: JUNE 2005
DRAWN BY: NJV/MLC
CHECKED BY: SJK

SECTION B-B
TYPICAL ELEVATION AT HATCHED AREA



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122BR)BR	VERMILION	25	14
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



- | SIGN NO. | LOCATION |
|----------|------------------------------------------------------|
| 1 | ERECT OFF SHOULDER, EVEN WITH "JCT US 136" SIGN |
| 2 | ERECT BESIDE "KANKAKEE/DANVILLE" SIGN |
| 3 | ERECT BESIDE US 136, NORTH IL 49 SIGNS |
| 4 | ERECT BESIDE "EAST US 136" SIGN |
| 5 | ERECT 50'± NORTH OF IL 49/US 136 INTERSECTION |
| 6 | ERECT 200'± WEST OF US 136/IL 49 INTERSECTION |
| 7 | ERECT 50'± WEST OF US 136/IL 49 INTERSECTION |
| 8 | ERECT 100'± EAST OF IL 49 |
| 9 | ERECT 75'± SOUTH OF "WEST US 136, NORTH IL 49" SIGNS |
| 10 | ERECT BESIDE "NORTH IL 49" SIGN |
| 11 | ERECT AT EAST SIDE OF US 45 & IL 19 IN PAXTON |
| 12 | ERECT BESIDE "JCT IL 49" SIGNS |
| 13 | ERECT 50'± SOUTH OF "IL 49, IL 9" SIGNS |
| 14 | ERECT 100'± NORTH OF SIGN 13 |
| 15 | ERECT BESIDE "JCT IL 9" SIGN |
| 16 | ERECT JUST EAST OF INTERSECTION |
| 17 | ERECT BESIDE "EAST IL 9" SIGN |
| 18 | ERECT BESIDE "NORTH IL 49" SIGN |
| 19 | ERECT 75'± WEST OF HOSPITAL SIGN |
| 20 | ERECT BESIDE "SOUTH IL 1" SIGN |
| 21 | ERECT 50'± EAST OF "WEST IL 9" SIGN |
| 22 | ERECT 75'± NORTH OF IL 9 |
| 23 | ERECT 50'± EAST OF IL 9/IL 1 INTERSECTION |
| 24 | ERECT 200'± EAST OF IL 9/IL 1 INTERSECTION |
| 25 | ERECT BESIDE HOSPITAL SIGN |
| 26 | ERECT 250'± NORTH OF ATTICA RD IN ROSSVILLE |
| 27 | ERECT 250'± SOUTH OF ATTICA RD IN ROSSVILLE |
| 28 | ERECT 150'± WEST OF IL 1 INTERSECTION |
| 29 | ERECT BESIDE "WEST US 136" SIGN |
| 30 | ERECT 50'± SOUTH OF "ALVIN, RANTOUL" SIGN |
| 31 | ERECT BESIDE "NORTH IL 1" SIGN |
| 32 | ERECT 50'± EAST OF IL 1/US 136 INTERSECTION |
| 33 | ERECT 200'± EAST OF IL 1/US 136 INTERSECTION |
| 34 | ERECT 75'± SOUTH OF IL 1/US 136 INTERSECTION |

- LOCATION**
- EXISTING SIGNS WHICH CONFLICT WITH THE MARKED DETOUR SHALL BE COVERED.
 - SEE SPECIAL PROVISION "TRAFFIC CONTROL AND PROTECTION (SPECIAL)" FOR MORE DETAILS.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

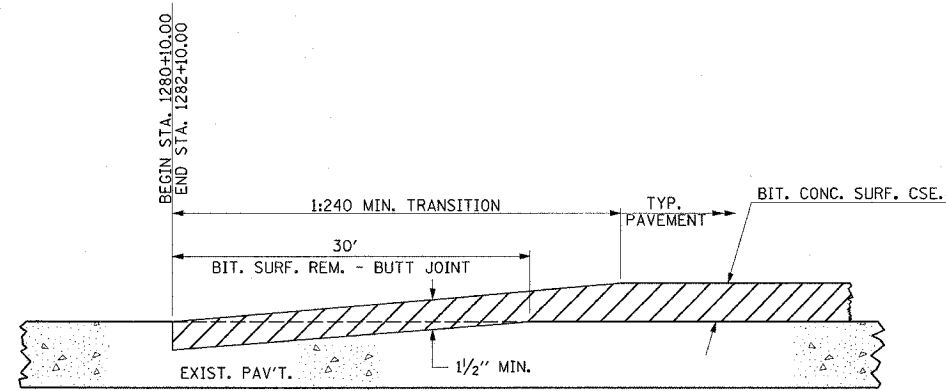
DETOUR SIGNING DETAIL

SCALE: NONE
DATE: 9/05

DRAWN BY: MLO
CHECKED BY: RJC

•DGN-SPEC•
•DATE•

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122BR)BR	VERMILION	25	15
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

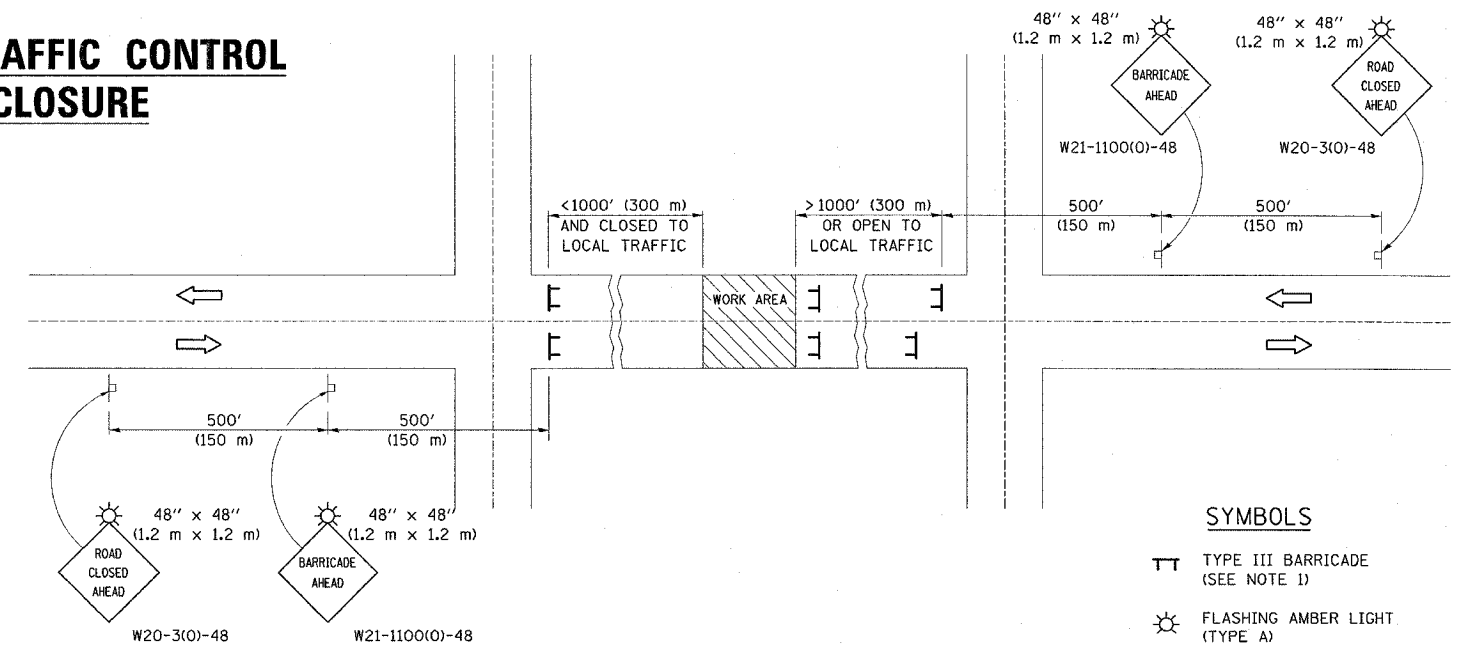


BUTT JOINT DETAIL

TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR ROAD CLOSURE

GENERAL NOTES

- 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.
- 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.
- 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.
- STANDARD 702001 SHALL APPLY FOR THE PLACEMENT & DESIGN OF TYPE III BARRICADES.
- 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.
- REFLECTORIZED STRIPING SHALL APPEAR ON BOTH SIDES OF THE TYPE III BARRICADES IF ROAD IS OPEN TO LOCAL TRAFFIC.
- ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
- 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.
- LONGITUDINAL DIMENSIONS MAY BE ADJUSTED SLIGHTLY TO FIT FIELD CONDITIONS.
- FORMS BT. 725 AND BT. 726 ARE REQUIRED.
- WHEN A SIDEROAD INTERSECTS THE HIGHWAY ON WHICH WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC DEVICES SHALL BE ERRECTED AND PROVIDED AS DIRECTED BY THE ENGINEER.
- 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.



SYMBOLS

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

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

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

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

ROADWAY DETAILS

SCALE: NONE
DATE 6/05

DRAWN BY RJC
CHECKED BY SJK

DGN-SPEC
DATE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122BR)BR	VERMILION	25	16
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

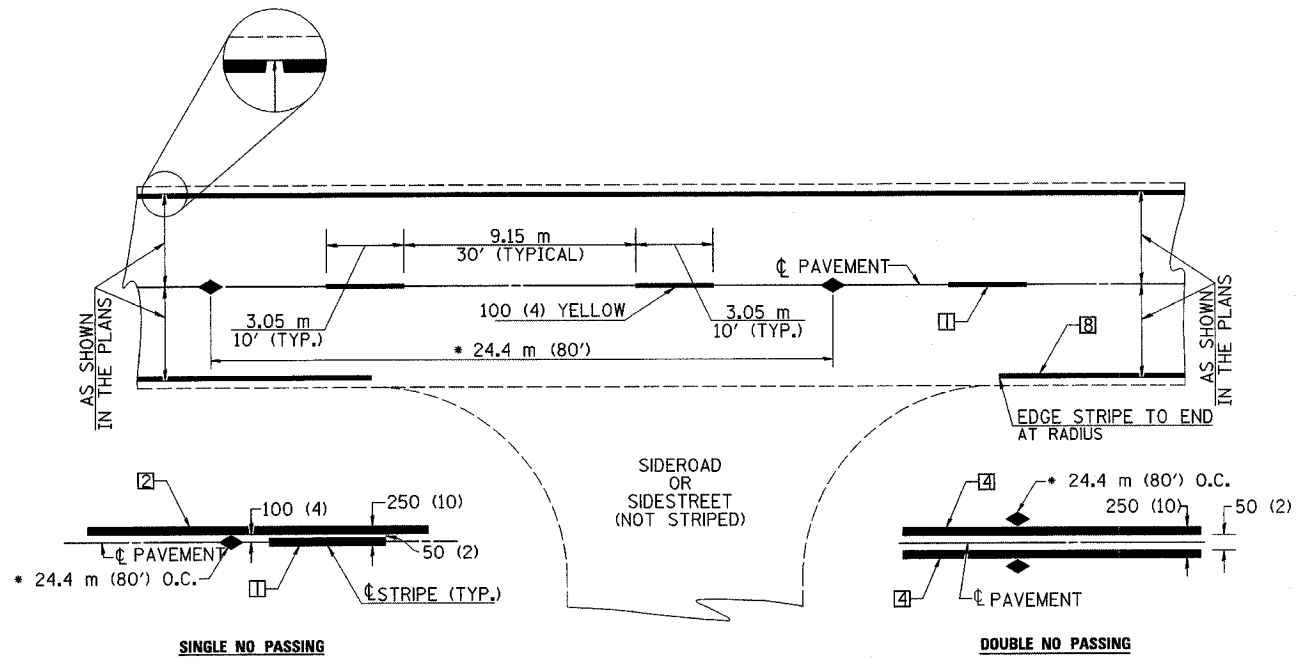
TYPICAL APPLICATIONS OF PAVEMENT MARKINGS AND MARKERS

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)
-

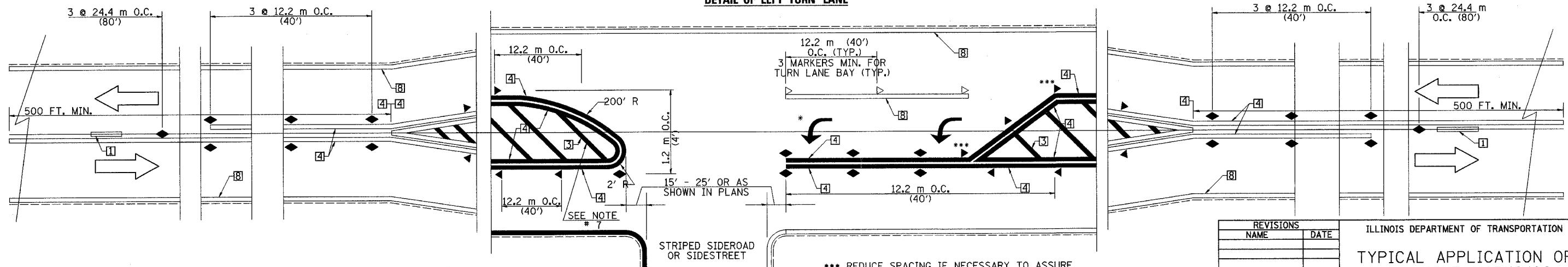
TYPICAL PAVEMENT MARKERS LEGEND

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



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

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.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TYPICAL APPLICATION OF PAVEMENT MARKINGS
 SHEET 1 OF 3

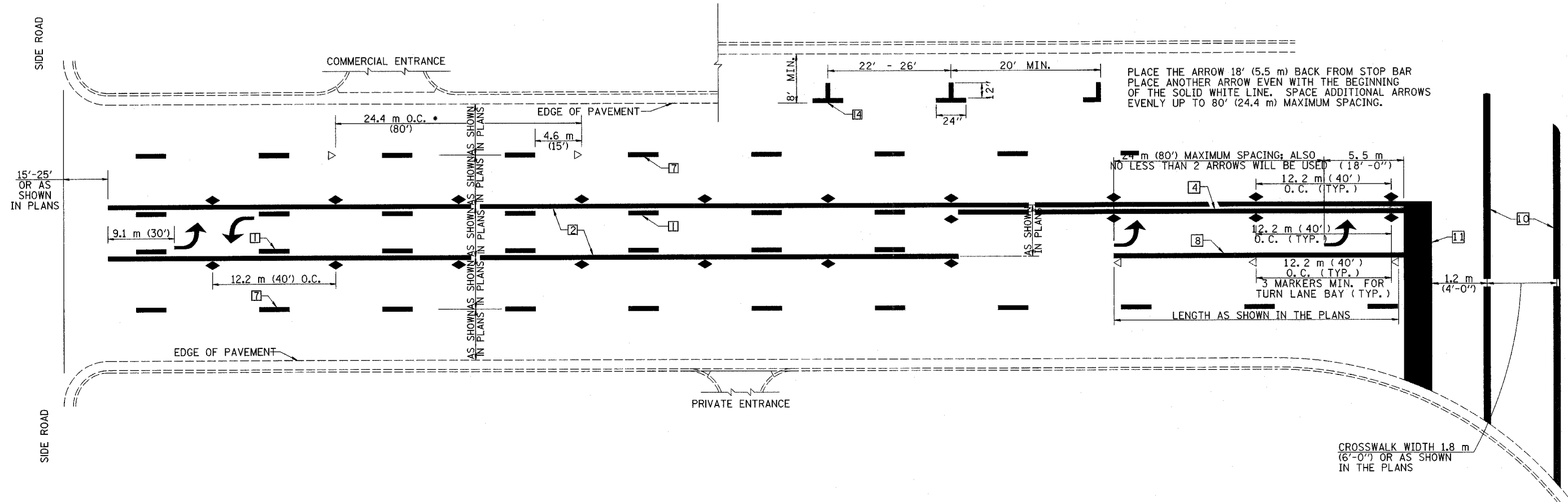
SCALE: NONE
 DATE 6/05

DRAWN BY DIST. 5
 CHECKED BY DIST. 5

DGN-SPEC
 DATE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	122BR/BR	VERMILION	25	17
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TYPICAL APPLICATIONS OF PAVEMENT MARKINGS AND MARKERS



SPECIAL NOTES:

TURN ARROW PAIRS SHALL BE PLACED AT 75 m (250') INTERVALS AND SHALL BE EVENLY SPACED BETWEEN BOTH ENDS OF THE BIDIRECTIONAL LEFT TURN LANE.

THE SOLID YELLOW PAVEMENT MARKINGS [2] SHOULD GENERALLY START OR END NEAR THE RADIUS POINT OF EACH STREET RETURN EXCEPT WHERE ONE OR BOTH ENDS WOULD INCLUDE STOP BARS.

THE SKIP-DASH PAVEMENT MARKINGS [1] OR [7] SHOULD BE CENTERED BETWEEN BOTH ENDS OF EACH CITY BLOCK AND SHALL BE PLACED SO THEY LINE UP ACROSS FROM EACH OTHER. SEE EXAMPLE ABOVE.

• REDUCE TO 12.2 METERS (40 FEET) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 15 kph (10 MPH) LOWER THAN POSTED SPEEDS.

•• WHERE DOUBLE LANE LINE MARKERS ARE SPECIFIED, THEY SHALL BE SPACED AS SHOWN ABOVE.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATION OF PAVEMENT MARKINGS SHEET 2 OF 3

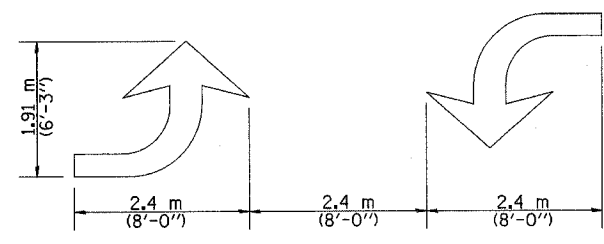
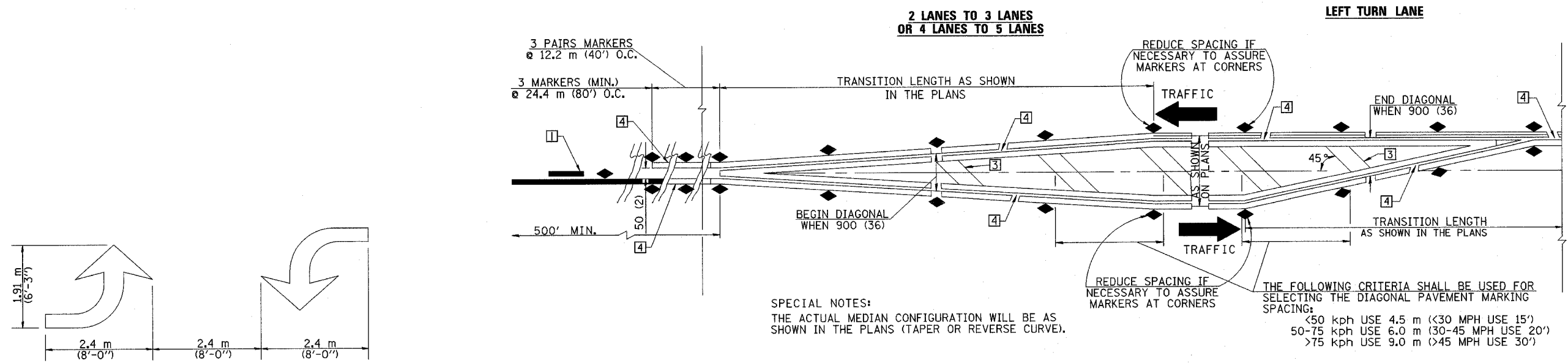
SCALE: NONE
DATE 6/05

DRAWN BY DIST. 5
CHECKED BY DIST. 5

DGN-SPEC
DATE

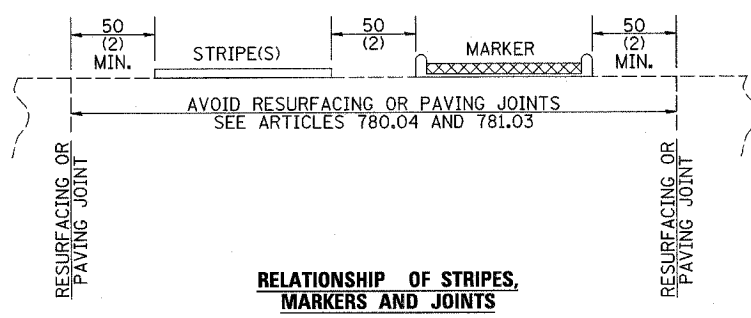
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122BR)BR	VERMILION	25	18
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

TYPICAL APPLICATIONS OF PAVEMENT MARKINGS AND MARKERS

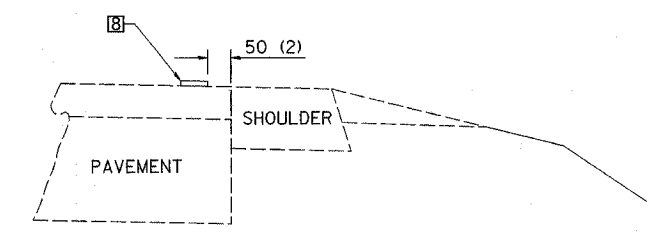


TYPICAL DOUBLE TURN ARROWS (WHITE)

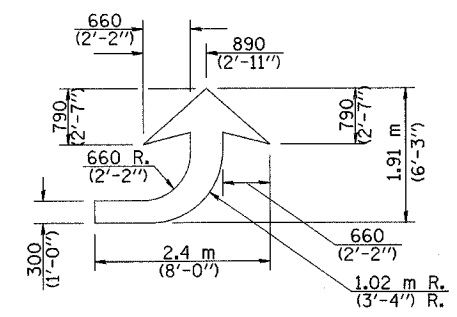
TYPICAL MEDIAN TRANSITIONS



RELATIONSHIP OF STRIPES, MARKERS AND JOINTS



RELATIONSHIP OF EDGE STRIPE TO SAFETY SHOULDER OR PAVED SURFACE



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

GENERAL NOTES

- WHEN MEDIANS ARE PRESENT PAVEMENT MARKINGS ARE TO BE PLACED ADJACENT TO MEDIANS.
- SCALE: NONE
- SOME OF THE INFORMATION INCLUDED WITH THIS DETAIL MAY NOT BE APPLICABLE TO THIS IMPROVEMENT.
- PAVEMENT MARKINGS ARE TO BE EXTENDED THROUGH OMISSIONS WHEN APPLICABLE.
- A STRIPING KEY IS AVAILABLE ELSEWHERE AND SHALL BE SHOWN WHERE THE QUANTITIES ARE LISTED.
- FINAL PAVEMENT MARKINGS SHALL BE IN PLACE PRIOR TO PLACING ANY RAISED REFLECTIVE PAVEMENT MARKERS.
- THE FOLLOWING CRITERIA SHALL BE USED FOR SELECTING THE DIAGONAL PAVEMENT MARKING SPACING:
< 50 kph USE 4.5 m (< 30 MPH USE 15')
50-75 kph USE 6.0 m (30-45 MPH USE 20')
> 75 kph USE 9.0 m (> 45 MPH USE 30')

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATION OF PAVEMENT MARKINGS

SHEET 3 OF 3

SCALE: NONE
DATE: 6/05

DRAWN BY DIST. 5
CHECKED BY DIST. 5

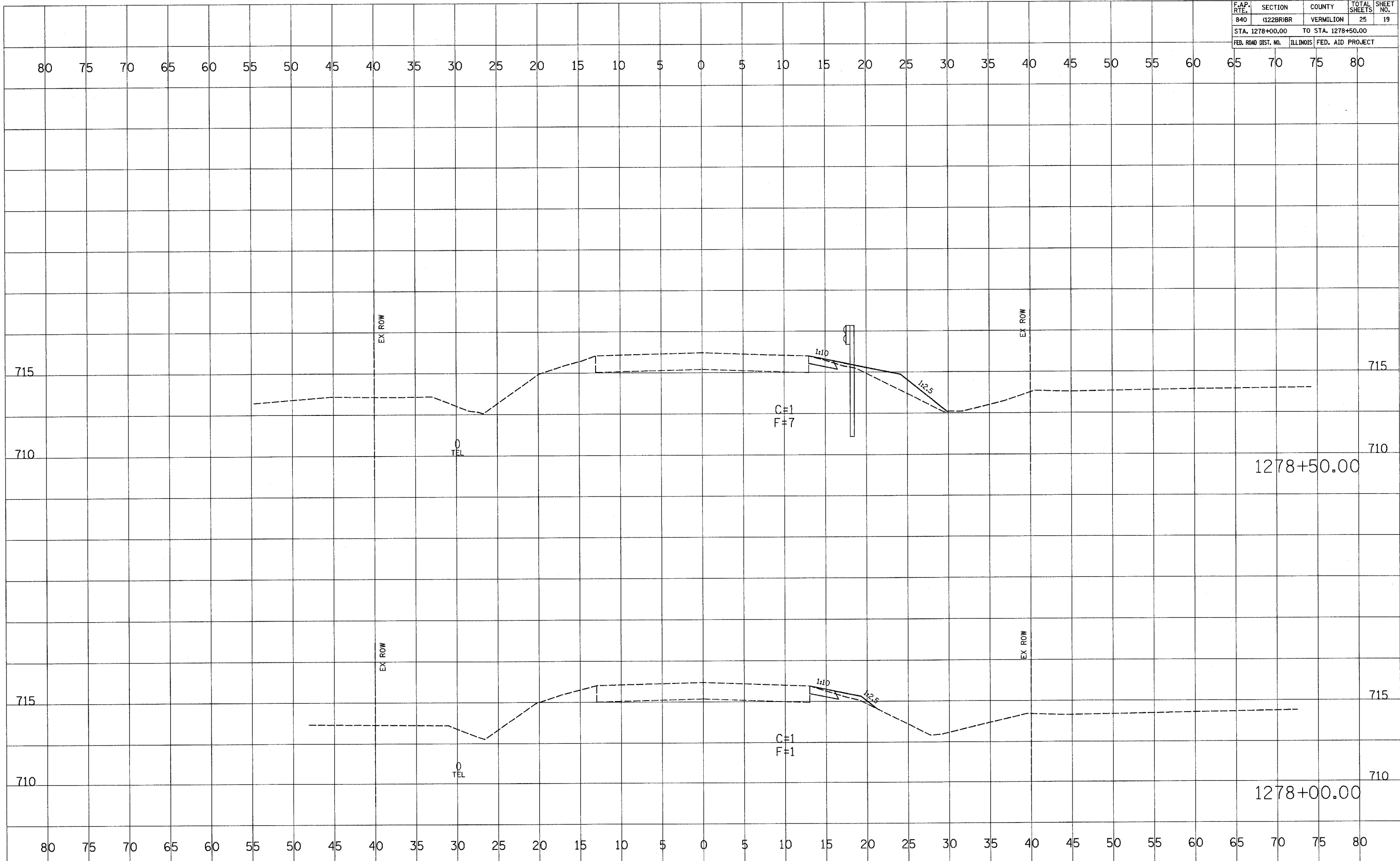
•DGN-SPEC•
•DATE•

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122BR)BR	VERMILION	25	19
STA. 1278+00.00		TO STA. 1278+50.00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

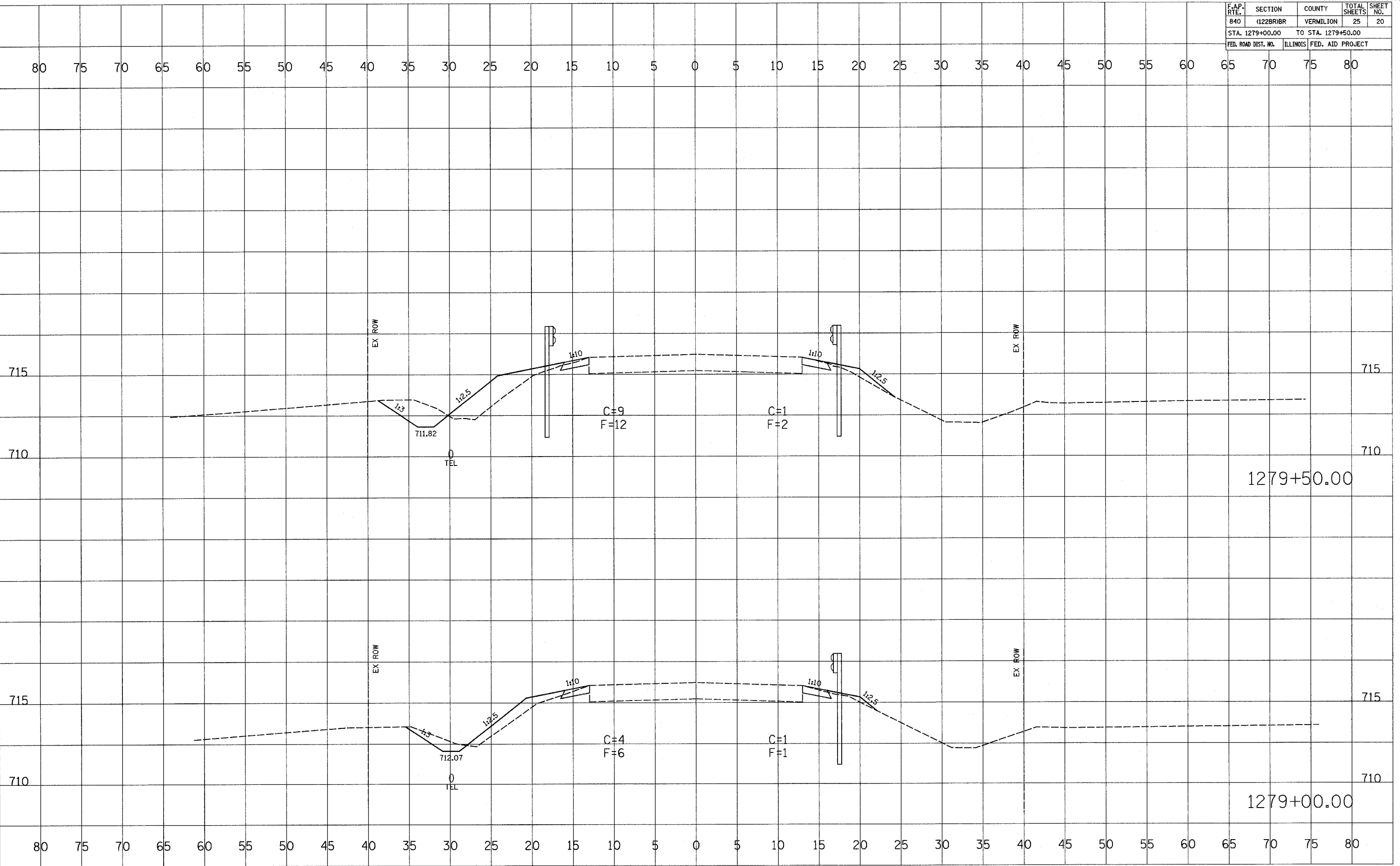
DATE	
BY	
NO.	
FINAL SURVEY	
NOTE BOOK	
AREAS CHECKED	

DATE	
BY	
NO.	
ORIGINAL SURVEY	
NOTE BOOK	
AREAS CHECKED	

PLOT DATE = 4/24/88
 FILE NAME = 47LE1
 PLOT SCALE = 8/3240
 USER NAME = WUSBY



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122BR)BR	VERMILION	25	20
STA. 1279+00.00		TO STA. 1279+50.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY PLOTTED AREAS CHECKED

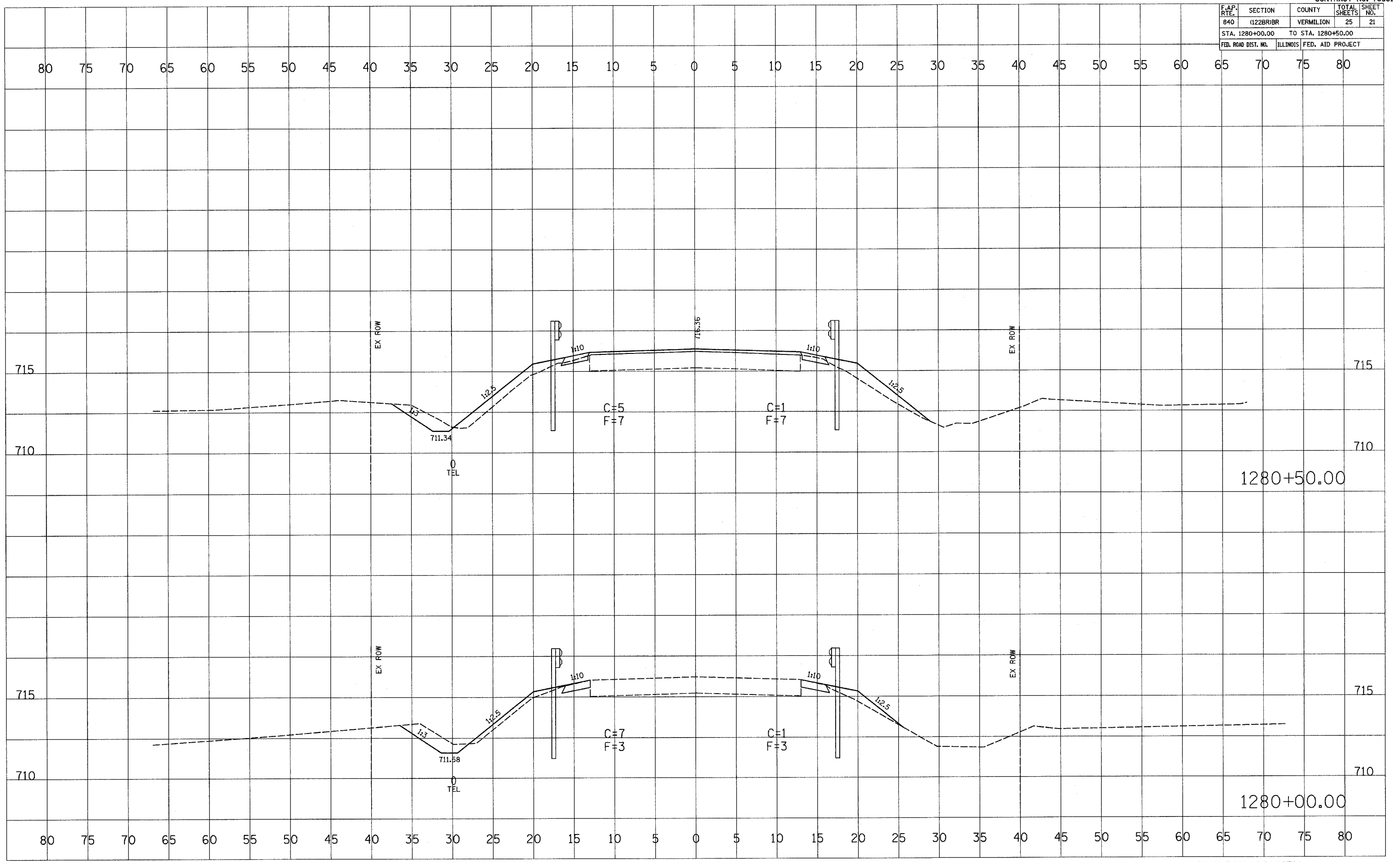
DATE	
BY	
NO.	

ORIGINAL SURVEY PLOTTED AREAS CHECKED

DATE	
BY	
NO.	

PLOT DATE = #DATE*
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 PLOT SCALE = #SCALE#*
 USER NAME = #USER#*

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122BR)BR	VERMILION	25	21
STA. 1280+00.00		TO STA. 1280+50.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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

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

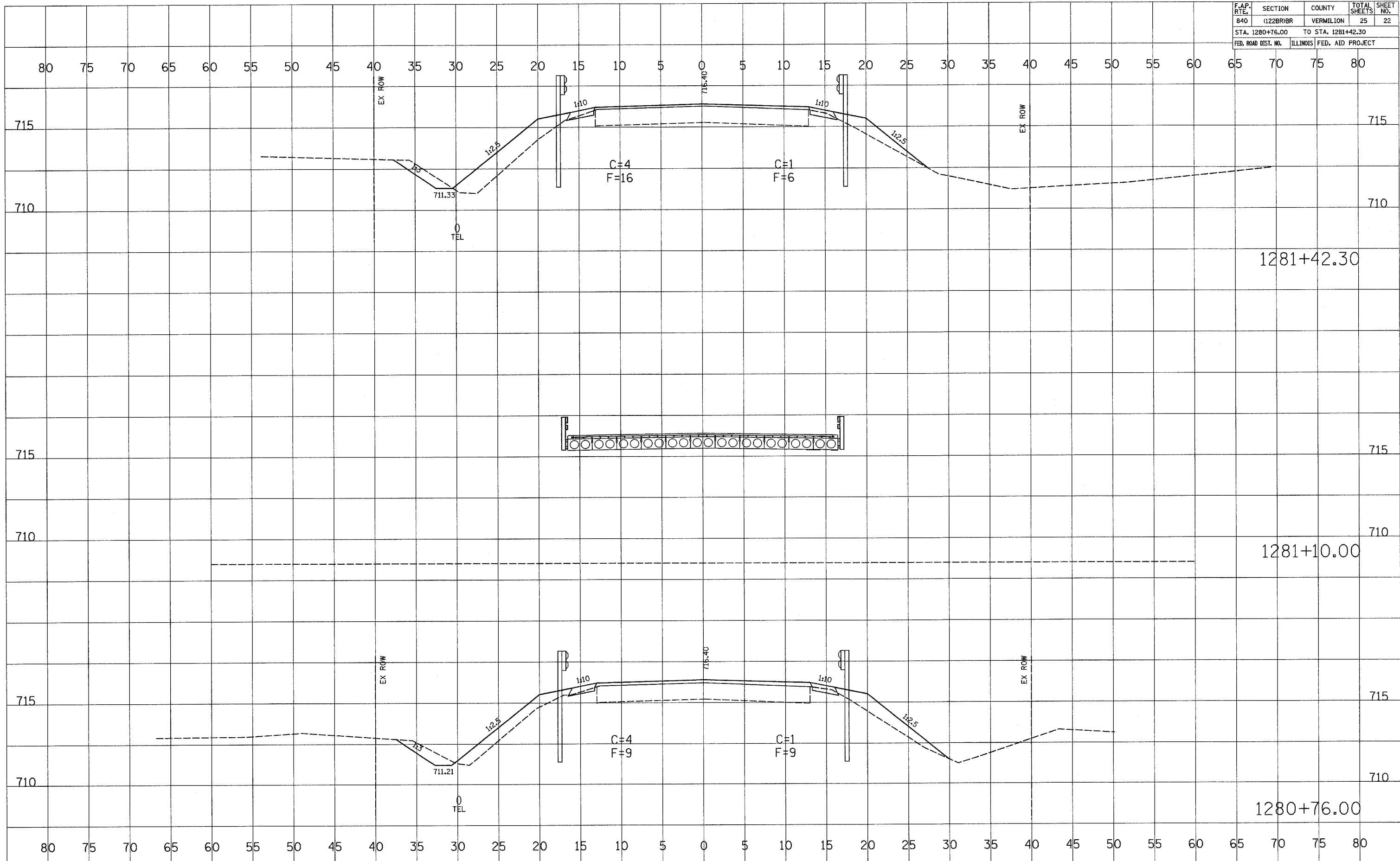
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 FILE NAME = FILE
 PLOT SCALE = SCALE
 USER NAME = USER

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122BR)BR	VERMILION	25	22
STA. 1280+76.00		TO STA. 1281+42.30		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

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

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

PLOT DATE = 00/00/00
 FILE NAME = #FILE#
 PLOT SCALE = #SCALE#
 USER NAME = #USER#

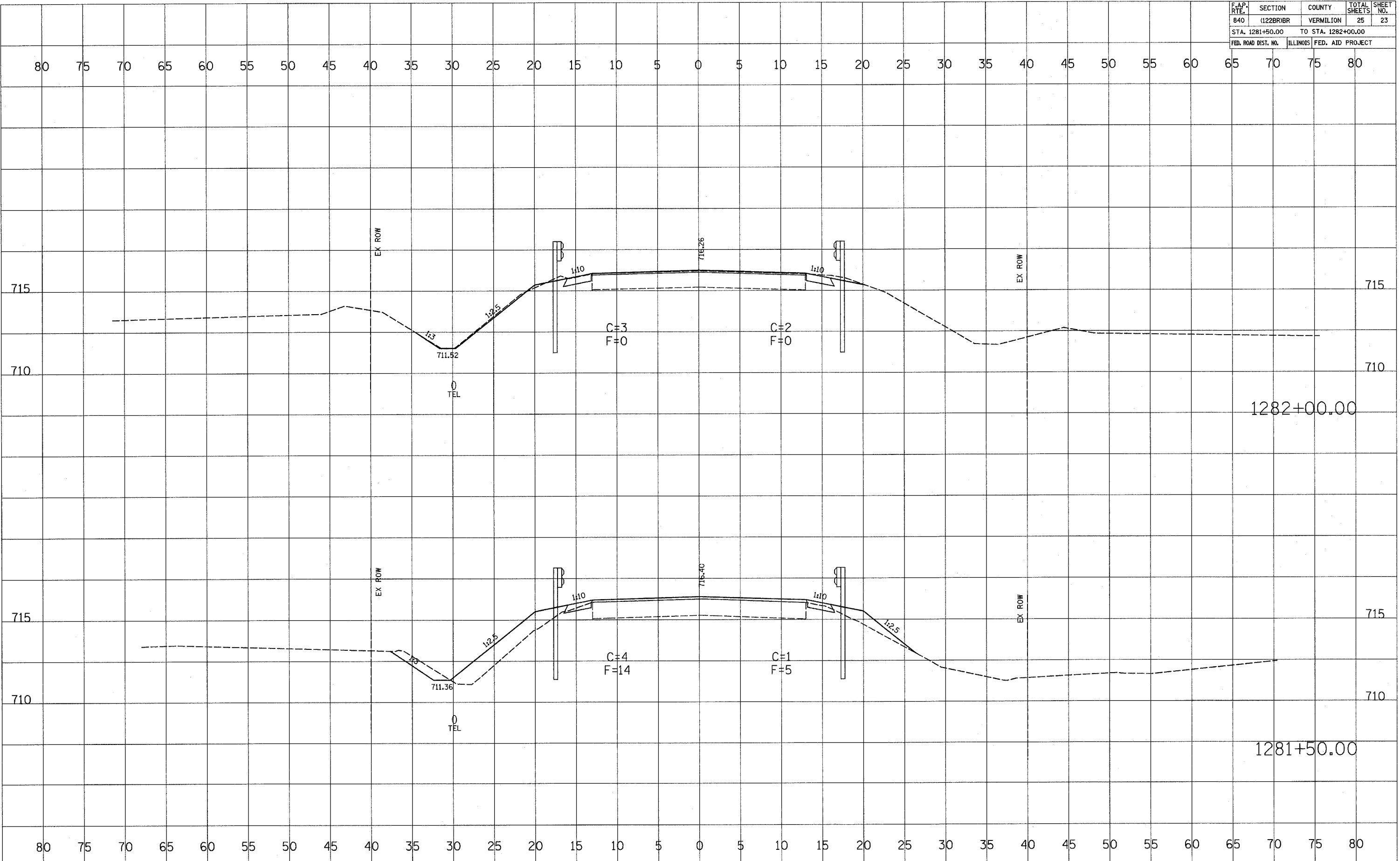


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122BR)BR	VERMILION	25	23
STA. 1281+50.00		TO STA. 1282+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

DATE	
BY	
FINAL SURVEY	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
NO.	

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 FILE NAME = 111111
 PLOT SCALE = 1"=40'
 USER NAME = RUSBY

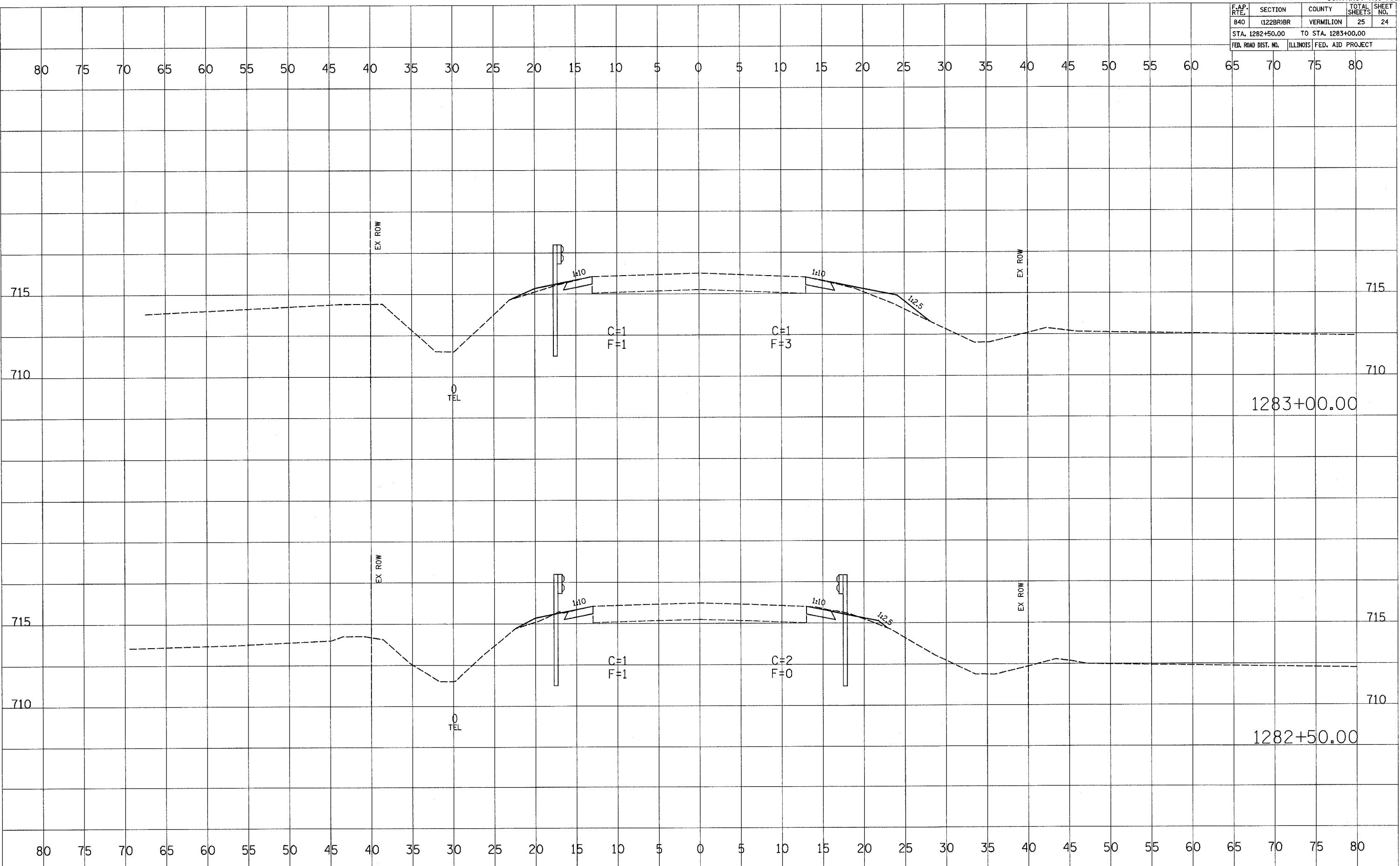


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122BR)BR	VERMILION	25	24
STA. 1282+50.00		TO STA. 1283+00.00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

DATE	
BY	
FINAL SURVEY	
NOTE BOOK	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
NOTE BOOK	
NO.	

PLOT DATE = #DATE*
 FILE NAME = #FILE*
 PLOT SCALE = #SCALE*
 USER NAME = #USER*



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(122BR)BR	VERMILION	25	25
STA. 1283+50.00		TO STA. 1284+00.00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

FINAL SURVEY

DATE _____

BY _____

SURVEYED _____

PLOTTED _____

NOTE BOOK _____

AREAS CHECKED _____

NO. _____

ORIGINAL SURVEY

DATE _____

BY _____

SURVEYED _____

PLOTTED _____

NOTE BOOK _____

AREAS CHECKED _____

NO. _____

PLOT DATE = 8/24/83

FILE NAME = 830825

PLOT SCALE = 830825

USER NAME = 830825

