

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
721	(115BR-1)BR	PIATT	32	1
FED. ROAD DIST. NO.	ILLINOIS		CONTRACT NO. 70433	

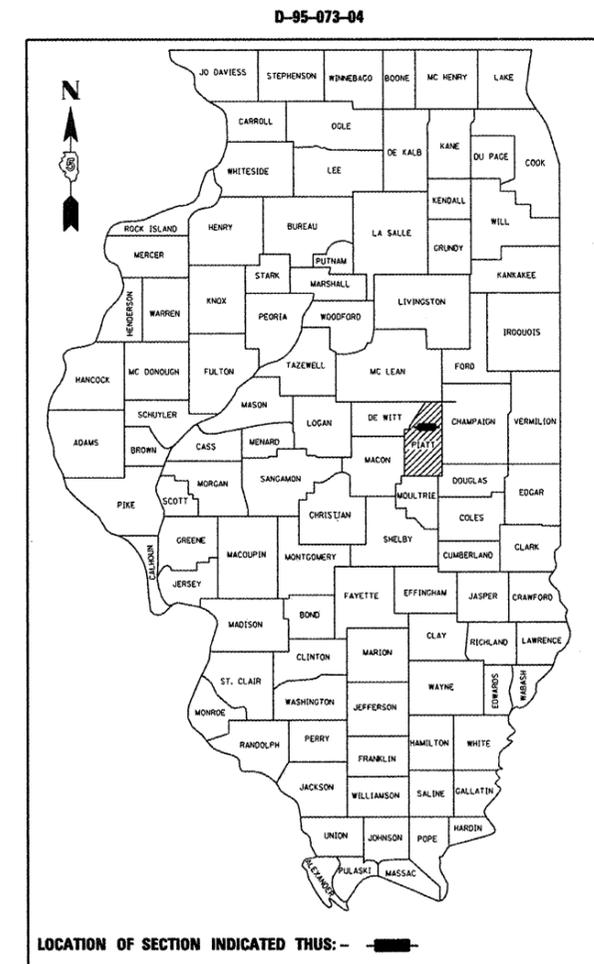
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FAP ROUTE 721 (ILLINOIS 10)
SECTION (115BR-1)BR
PROJECT BHF-0721(077)
PIATT COUNTY

C-95-077-04
SUPERSTRUCTURE REPLACEMENT
OVER MADDEN CREEK
0.5 MILES EAST OF LODGE

FOR INDEX OF SHEETS, SEE SHEET NO. 2



James Paul Biggs
JAMES PAUL BIGGS, P.E.



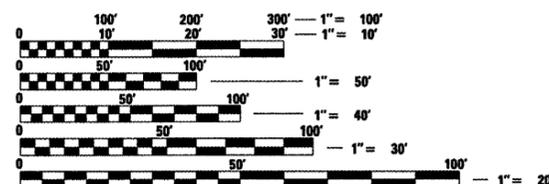
DATE 6/18/08
LICENSE EXPIRES 11/30/09

PLANS PREPARED BY:



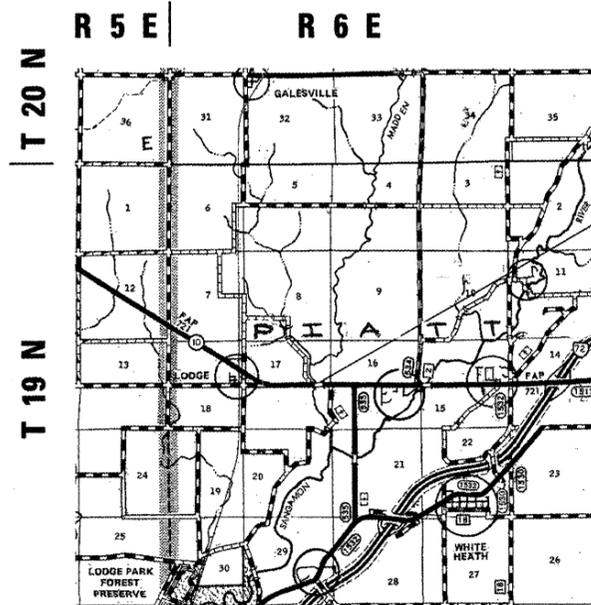
JOHNSON, DEPP & QUISENBERRY
CONSULTING ENGINEERS

6450 South Sixth Street Road, Suite B Springfield, Illinois 62712
Phone: (217) 529-4534 Fax: (217) 529-8278



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

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



LOCATION MAP



SECTION (115BR-1)BR INCLUDES:
EXISTING SUPERSTRUCTURE OF S.N. 074-0005 AT STA. 1210+90 CARRYING F.A.P. RTE. 721 (IL. 10) OVER MADDEN CREEK TO BE REMOVED AND REPLACED.

RURAL MINOR ARTERIAL
F.A.P. 721 (ILLINOIS 10)
ADT (2006) = 1,700
PV = 86.5% SU = 7.9% MU = 5.6%
DESIGN SPEED = 55 MPH

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 6/25 20 08
Joseph K. Crowder
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

August 15, 20 08
Eric E. Harn
ENGINEER OF DESIGN AND ENVIRONMENT

August 15, 20 08
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PROJECT ENGINEER NANCY FASIG
PROJECT MANAGER JASON STULTS
DISTRICT 5 NO. (217)465-4181
CONTRACT NO. 70433

GROSS LENGTH = 800.00 FEET = 0.152 MILES
NET LENGTH = 800.00 FEET = 0.152 MILES

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

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HIGHWAY STANDARDS

000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-01	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
420001-07	PAVEMENT JOINTS
515001-02	NAME PLATE FOR BRIDGES
606201-01	TYPE B GUTTER (INLET, OUTLET & ENTRANCE)
630001-07	STEEL PLATE BEAM GUARDRAIL
630301-04	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631011-04	TRAFFIC BARRIER TERMINAL, TYPE 2
631032-03	TRAFFIC BARRIER TERMINAL, TYPE 6A
635006-02	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-01	REFLECTOR MARKER AND MOUNTING DETAILS
701001-01	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 4.5 M (15') AWAY
701006-02	OFF-ROAD OPERATIONS, 2L, 2W, 4.5 M (15') TO 600 MM (24") FROM PAVEMENT EDGE
701201-02	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45MPH
701311-02	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701321-09	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701901	TRAFFIC CONTROL DEVICES
704001-04	TEMPORARY CONCRETE BARRIER
780001-01	TYPICAL PAVEMENT MARKINGS
781001-02	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS

GENERAL NOTES

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

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

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

UTILITY COMPANIES MAY BE ADJUSTING THEIR FACILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL COOPERATE WITH THESE ORGANIZATIONS WHILE THESE ADJUSTMENTS ARE BEING PERFORMED. J.U.L.I.E. - JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS SYSTEM (800) 892-0123 OR 811.

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

G.N.-406.05B
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.-440B
THE EXISTING TIE BARS BETWEEN THE EXISTING PAVEMENT AND EXISTING MEDIANS, GUTTERS AND/OR COMBINATION CURB AND GUTTERS THAT ARE FOUND SUITABLE FOR REUSE SHALL BE CLEANED, STRAIGHTENED AND INCORPORATED INTO THE NEW CONSTRUCTION. ANY EXISTING TIE BARS THAT ARE FOUND UNSUITABLE TO BE INCORPORATED INTO THE PROPOSED CONSTRUCTION DUE TO EXCESSIVE RUSTING OR DISTRESS SHALL BE REMOVED FLUSH WITH THE FACE OF THE EXISTING CONCRETE AND DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT-OF-WAY IN ACCORDANCE WITH ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS.

THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCLUDED IN THE VARIOUS REMOVAL PAY ITEMS AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

G.N.-667
THE RESIDENT ENGINEER SHALL CONTACT THE PROGRAM DEVELOPMENT CHIEF OF SURVEYS PRIOR TO THE PRE-CONSTRUCTION CONFERENCE FOR INSTRUCTION AS TO SETTING OF TEMPORARY OR PERMANENT TIES FOR CENTERLINE ALIGNMENT CONTROL SURVEY MARKERS (PC'S, PT'S, AND PI'S). PROJECT IMPLEMENTATION PERSONNEL WILL BE RESPONSIBLE FOR SETTING THESE MARKERS.

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 DISCREPANCY BETWEEN THE STANDARD AND THE DETAILS IN THE PLANS, THE DETAILS IN THE PLANS SHALL GOVERN. THE FINAL PAVEMENT MARKINGS SHALL BE IN PLACE PRIOR TO PLACING THE RAISED REFLECTIVE PAVEMENT MARKERS AND THE RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED MIDWAY IN THE 30 FOOT (9 m) SPACE BETWEEN THE DASHED CENTERLINE STRIPES (WHEN APPLICABLE).

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

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

GRANULAR MATERIALS	1.8	TONS / CU YD
BITUMINOUS MAT PRIME COAT	0.08	GAL / SQ YD OR
	0.375	GAL / SQ YD
AGGREGATE PRIME COAT	0.002	TONS / SQ YD
HMA RESURFACING	112	LBS / SQ YD / IN
SHORT TERM PAVEMENT MARKING	4	FT / 40 FT OF APPLICATION

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	STRUCTURE 80% FEDERAL 20% STATE X081-2A															
20200100	EARTH EXCAVATION	CU YD	100	100															
25000210	SEEDING, CLASS 2A	ACRE	0.25	0.25															
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	23	23															
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	23	23															
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	23	23															
25100115	MULCH, METHOD 2	ACRE	0.25	0.25															
25100630	EROSION CONTROL BLANKET	SQ YD	466	466															
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	25	25															
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	28	28															
40600300	AGGREGATE (PRIME COAT)	TON	0.8	0.8															
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	15	15															
40600990	TEMPORARY RAMP	SQ YD	108	108															
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	30	30															
42001300	PROTECTIVE COAT	SQ YD	35	35															
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	356	356															
44000400	GUTTER REMOVAL	FOOT	93	93															
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1	1															
50102400	CONCRETE REMOVAL	CU YD	2.0	2.0															
50300225	CONCRETE STRUCTURES	CU YD	2.0	2.0															
50300260	BRIDGE DECK GROOVING	SQ YD	497	497															
50300300	PROTECTIVE COAT	SQ YD	531	531															
50400405	PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ FT	4,770	4,770															
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	6,790	6,790															
50800515	BAR SPLICERS	EACH	153	153															
51500100	NAME PLATES	EACH	1	1															
52000110	PREFORMED JOINT STRIP SEAL	FOOT	64	64															
59000200	EPOXY CRACK INJECTION	FOOT	40	40															
60600095	CLASS SI CONCRETE (OUTLET)	CU YD	5.8	5.8															
63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	537.5	537.5															
63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	2	2															
63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	3	3															

LEGEND:
* SPECIALTY ITEMS

SHEET NO. 1 OF 2

FILE NAME =	USER NAME = SJS	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
... \10149\Quantities\SUMMOTY.DGN		DRAWN -	REVISED -			721	(115BR-1)BR	PIATT	32	3
Johnson, Depp & Gilsenberry CONSULTING ENGINEERS Springfield, Illinois	PLOT SCALE = 28.8000' / IN.	CHECKED -	REVISED -							
	PLOT DATE = 06/17/2008 16:11:48	DATE -	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.
						FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		CONTRACT NO. 70433

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	STRUCTURE 80% FEDERAL 20% STATE X081-2A															
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	1	1															
63200310	GUARDRAIL REMOVAL	FOOT	511	511															
* 63300725	STEEL PLATE BEAM GUARDRAIL (SHORT RADIUS)	FOOT	50.0	50.0															
67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	4	4															
67100100	MOBILIZATION	L SUM	1	1															
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1															
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1															
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1															
70106700	TEMPORARY RUMBLE STRIP	EACH	6	6															
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	136	136															
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	45	45															
70400100	TEMPORARY CONCRETE BARRIER	FOOT	425	425															
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	400	400															
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1,543	1,543															
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	9	9															
* 78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	2	2															
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	14	14															
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	3	3															
78300100	PAVEMENT MARKING REMOVAL	SQ FT	515	515															
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	11	11															
X0323078	REMOVE AND RE-ERECT EXISTING BRIDGE RAIL	FOOT	299	299															
X0324865	DIAMOND GRINDING (BRIDGE SECTION)	SQ YD	782	782															
X0325305	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	172.0	172.0															
X5030305	CONCRETE WEARING SURFACE, 5"	SQ YD	531	531															
X6330103	REMOVE AND RE-ERECT TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL, TANGENT	EACH	3	3															
* X7200201	WIDTH RESTRICTION SIGNING	L SUM	1	1															
* XX005496	TRAFFIC BARRIER TERMINAL TYPE 6A (SPECIAL)	EACH	1	1															
Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	52	52															
Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2															
Z0030350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2															

LEGEND:

* SPECIALTY ITEMS

SHEET NO. 2 OF 2

FILE NAME = ...\\110149\Quantities\SUMM02Y.DGN	USER NAME = SJS	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES	F.A.P. RTE. 721	SECTION (115BR-1)BR	COUNTY PIATT	TOTAL SHEETS 32	SHEET NO. 4	
Johnson, Depp & Quisenberry CONSULTING ENGINEERS Springfield, Illinois	PLOT SCALE = 20.0000' / IN.	DRAWN -	REVISED -			SCALE: SHEET NO. OF SHEETS STA. TO STA.					
	PLOT DATE = 06/17/2008 16:11:50	CHECKED -	REVISED -			FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT					
		DATE -	REVISED -			CONTRACT NO. 70433					

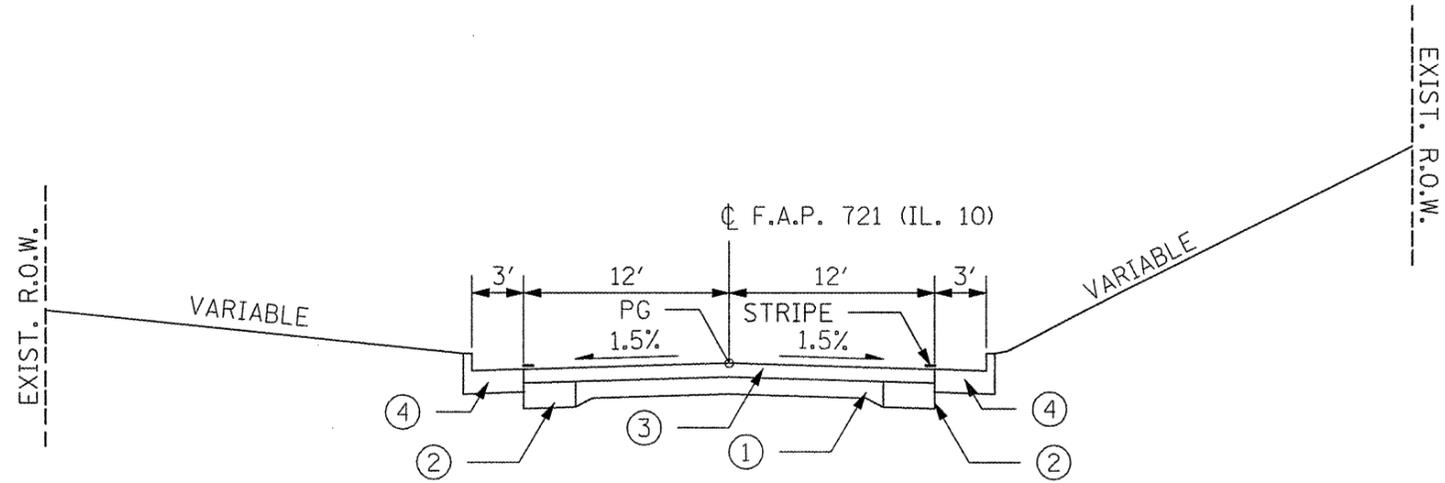
NOTES:

- ① STA. 1207+00 TO STA. 1210+14.86
PCC PAVEMENT 9''-6''-9''
STA. 1211+63.80 TO STA. 1211+84.80
BRIDGE APPROACH PAVEMENT
(16 1/2''-10 1/2''-16 1/2'') 24' WIDE
STA. 1211+84.80 TO STA. 1215+00
PCC PAVEMENT 9''-6''-9''

- ② STA. 1207+00 TO STA. 1207+92.76
HMA BASE COURSE WIDENING 8'' (3' WIDE)
STA. 1207+92.76 TO STA. 1209+05.24
HMA BASE COURSE WIDENING 9'' (3' WIDE)
STA. 1209+05.24 TO STA. 1210+14.86
HMA BASE COURSE WIDENING 9'' (4'-9'' WIDE)
STA. 1211+63.80 TO STA. 1211+84.80
HMA BASE COURSE WIDENING 9'' (1'-4'' WIDE)
STA. 1211+84.80 TO STA. 1214+50.46
HMA BASE COURSE WIDENING 9'' (4'-9'' WIDE)
STA. 1214+50.46 TO STA. 1215+00
HMA BASE COURSE WIDENING 9'' (3' WIDE)

- ③ STA. 1207+00 TO STA. 1210+14.86
HMA RESURFACING (THICKNESS VARIES 2 3/4''+ TO 6''+)
STA. 1211+63.80 TO STA. 1211+84.80
HMA RESURFACING (THICKNESS 3 1/4'')
STA. 1211+84.80 TO STA. 1215+00
HMA RESURFACING (THICKNESS 6'')
OVER GRANULAR EMBANKMENT (THICKNESS 6'' ±

- ④ STA. 1207+00 TO STA. 1207+10
CONCRETE GUTTER, TYPE B SPECIAL
STA. 1207+10 TO STA. 1209+05.24
PCC BASE COURSE WIDENING (3' WIDE)
/W 6'' CURB
STA. 1214+50.46 TO STA. 1215+00
CONCRETE GUTTER, TYPE B SPECIAL

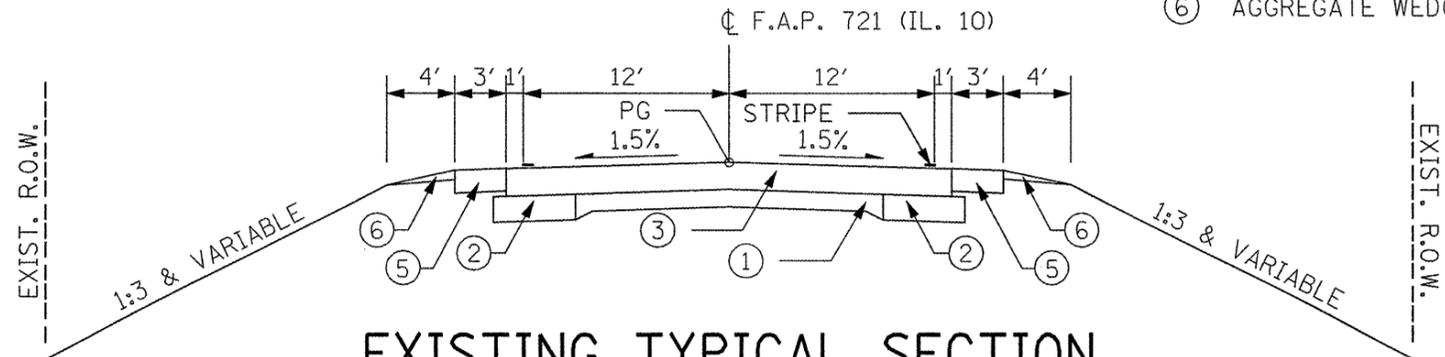


EXISTING TYPICAL SECTION

STA. 1207+00.00 TO STA. 1209+05.24
STA. 1214+50.46 TO STA. 1215+00.00

(SEE NOTES)

- ① PCC PAVEMENT 9''-6''-9''
- ② HMA BASE COURSE WIDENING
- ③ HMA RESURFACING
- ④ PCC BASE COURSE WIDENING (3' WIDE)/W 6'' CURB
- ⑤ PCC BASE COURSE WIDENING (3' WIDE) 8''
/W HMA SURFACE COURSE (THICKNESS UNKNOWN)
- ⑥ AGGREGATE WEDGE SHOULDER, TYPE B



EXISTING TYPICAL SECTION

STA. 1209+05.24 TO STA. 1210+14.86
STA. 1210+14.86 TO STA. 1211+63.80 (BRIDGE OMISSION)
STA. 1211+63.80 TO STA. 1214+50.46

FILE NAME = h:\110149\Plans\typical.dgn 	USER NAME = SJS	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS			F.A.P. RTE. 721	SECTION (115BR-D)BR	COUNTY PIATT	TOTAL SHEETS 32	SHEET NO. 5
	PLOT SCALE = 100.000' / IN.	DRAWN -	REVISED -					FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 70433		
PLOT DATE = 06/17/2008 16:12:16	CHECKED -	REVISED -	DATE -	SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.				

EARTH EXCAVATION

LOCATION	EARTH EXCAVATION		EMBANKMENT		EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)	
	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD
STA. 1207+00 TO STA. 1210+14.86	100	75	7	68		
STA. 1211+63.80 TO STA. 1215+00	0	0	10.2	-10.2		
TOTAL =	100.0	75.0	17.2	57.8		

ASSUME SHRINKAGE FACTOR - 25% EARTH EXCAVATION

EARTH EXCAVATION = 100.0 CU YD

SEEDING, CLASS 2A

LOCATION	ACRE
STA. 1207+00 TO STA. 1210+14.86	0.16
STA. 1211+63.80 TO STA. 1215+00	0.05
TOTAL =	0.21

(USE 0.25)

NITROGEN FERTILIZER NUTRIENT

LOCATION	POUND
SAME AS CLASS 2A SEEDING	23
TOTAL =	23

PHOSPHORUS FERTILIZER NUTRIENT

LOCATION	POUND
SAME AS CLASS 2A SEEDING	23
TOTAL =	23

POTASSIUM FERTILIZER NUTRIENT

LOCATION	POUND
SAME AS CLASS 2A SEEDING	23
TOTAL =	23

MULCH, METHOD 2

LOCATION	ACRE
SAME AS CLASS 2A SEEDING	0.21
TOTAL =	0.21

(USE 0.25)

EROSION CONTROL BLANKET

LOCATION	SQ YD
RT. STA. 1207+00 TO RT. STA. 1209+00	466
TOTAL =	466

TEMPORARY EROSION CONTROL SEEDING

LOCATION	POUND
SAME AS CLASS 2A SEEDING	25
TOTAL =	25

BITUMINOUS MATERIALS (PRIME COAT)

(AREAS MEASURED IN MICROSTATION) (BASED ON 1 COAT COLDMILL)	
LOCATION	GAL
STA. 1209+64.86 TO STA. 1210+14.86	14
STA. 1211+63.80 TO STA. 1212+13.80	14
TOTAL =	28

AGGREGATE (PRIME COAT)

(AREAS MEASURED IN MICROSTATION) (BASED ON 1 COAT COLDMILL)	
LOCATION	TON
STA. 1209+64.86 TO STA. 1210+14.86	0.4
STA. 1211+63.80 TO STA. 1212+13.80	0.4
TOTAL =	0.8

LEVELING BINDER (MACHINE METHOD), N50

(AREAS MEASURED IN MICROSTATION)	
LOCATION	TON
STA. 1209+64.86 TO STA. 1210+14.86	7.5
STA. 1211+63.80 TO STA. 1212+13.80	7.5
TOTAL =	15

TEMPORARY RAMP

LOCATION	SQ YD
STA. 1209+64.86	27
STA. 1210+14.86	27
STA. 1211+63.80	27
STA. 1212+13.80	27
TOTAL =	108

HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50

(AREA BY MICROSTATION)	
LOCATION	TON
STA. 1209+64.86 TO STA. 1210+14.86	15
STA. 1211+63.80 TO STA. 1212+13.80	15
TOTAL =	30

PROTECTIVE COAT

LOCATION	SQ YD
LT. STA. 1214+22 TO LT. STA. 1215+00	35
TOTAL =	35

HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"

(AREA BY MICROSTATION)	
LOCATION	SQ YD
STA. 1209+64.86 TO STA. 1210+14.86	178
STA. 1211+63.80 TO STA. 1212+13.80	178
TOTAL =	356

GUTTER REMOVAL

LOCATION	FOOT
LT. STA. 1214+13 TO LT. STA. 1215+00	93
TOTAL =	93

CLASS SI CONCRETE (OUTLET)

LOCATION	CU YD
LT. STA. 1214+22 TO LT. STA. 1215+00	5.8
TOTAL =	5.8

STEEL PLATE BEAM GUARD RAIL, TYPE A

LOCATION	FOOT
RT. STA. 1207+96.71 TO RT. STA. 1209+71.71	175.0
LT. STA. 1208+37.59 TO LT. STA. 1209+50.09	112.5
RT. STA. 1212+06.95 TO RT. STA. 1212+81.95	75.0
LT. STA. 1212+06.95 TO LT. STA. 1213+81.95	175.0
TOTAL =	537.5

TRAFFIC BARRIER TERMINAL, TYPE 2

LOCATION	EACH
TR 1125E:	
LT. STA. 50+51.18 TO LT. STA. 50+65.97	1
RT. STA. 50+48.48 TO RT. STA. 50+63.27	1
TOTAL =	2

TRAFFIC BARRIER TERMINAL, TYPE 6A

LOCATION	EACH
RT. STA. 1209+71.71 TO RT. STA. 1210+14.86	1
LT. STA. 1211+63.80 TO LT. STA. 1212+06.95	1
RT. STA. 1211+63.80 TO RT. STA. 1212+06.95	1
TOTAL =	3

TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)

LOCATION	EACH
RT. STA. 1207+46.71 TO RT. STA. 1207+96.71	1
TOTAL =	1

GUARDRAIL REMOVAL

(INCLUDES SIDEROAD GUARDRAIL)

LOCATION	FOOT
RT. STA. 1208+75 TO RT. STA. 1210+15	140
*LT. STA. 1209+07 TO LT. STA. 1210+15	153
LT. STA. 1211+64 TO LT. STA. 1213+17	153
RT. STA. 1211+64 TO RT. STA. 1212+29	65
TOTAL =	511

STEEL PLATE BEAM GUARDRAIL (SHORT RADIUS)

LOCATION	FOOT
LT. STA. 1209+50.09 TO LT. STA. 50+51.18 9 (TR 1125E)	50
TOTAL =	50

ENGINEER'S FIELD OFFICE, TYPE B

LOCATION	CAL MO
SECTION (115BR-1)BR	4
TOTAL =	4

MOBILIZATION

LOCATION	L SUM
SECTION (115BR-1)BR	1
TOTAL =	1

TRAFFIC CONTROL AND PROTECTION, STANDARD 701321

LOCATION	EACH
SECTION (115BR-1)BR	1
TOTAL =	1

TRAFFIC CONTROL AND PROTECTION, STANDARD 701201

LOCATION	L SUM
SECTION (115BR-1)BR	1
TOTAL =	1

TEMPORARY BRIDGE TRAFFIC SIGNALS

LOCATION	EACH
SEE STAGING DETAILS	1
TOTAL =	1

TEMPORARY RUMBLE STRIP

LOCATION	EACH
(SEE STANDARD 701321)	
RT. STA. 1189+67	1
RT. STA. 1194+67	1
RT. STA. 1199+67	1
LT. STA. 1221+58	1
LT. STA. 1226+58	1
LT. STA. 1231+58	1
TOTAL =	6

SHORT-TERM PAVEMENT MARKING

LOCATION	FOOT
STAGE CONSTRUCTION:	
STA. 1206+67 TO STA. 1214+58 (YELLOW SKIP-DASH)	80
RESURFACING	
STA. 1209+64.89 TO STA. 1212+13.80 (YELLOW SKIP-DASH)	56
TOTAL =	136

WORK ZONE PAVEMENT MARKING REMOVAL

LOCATION	SQ FT
STAGE CONSTRUCTION:	
STA. 1206+67 TO STA. 1214+58 (YELLOW SKIP-DASH)	27
RESURFACING	
STA. 1209+64.89 TO STA. 1212+13.80 (YELLOW SKIP-DASH)	18
TOTAL =	45

TEMPORARY CONCRETE BARRIER

LOCATION	FOOT
STAGE 1	
STA. 1208+75 TO STA. 1213+00	425
TOTAL =	425

RELOCATE TEMPORARY CONCRETE BARRIER

LOCATION	FOOT
STAGE 2	
STA. 1208+87 TO STA. 1212+87	400
TOTAL =	400

PAINT PAVEMENT MARKING - LINE 4"

LOCATION	FOOT
STA. 1206+67 TO STA. 1211+85 (YELLOW NO-PASSING)	518
STA. 1206+67 TO STA. 1214+58 (YELLOW SKIP-DASH)	200
RT. STA. 1208+75 TO RT. STA. 1213+00 (WHITE EDGELINE)	425
LT. STA. 1208+87 TO LT. STA. 1212+87 (WHITE EDGELINE)	400
TOTAL =	1543

RAISED REFLECTIVE PAVEMENT MARKER

LOCATION	EACH
STA. 1206+67 TO STA. 1210+14.86	5
STA. 1211+63.80 TO STA. 1214+58	4
TOTAL =	9

RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)

LOCATION	EACH
STA. 1210+14.86 TO STA. 1211+63.80	2
TOTAL =	2

GUARDRAIL MARKERS, TYPE A

LOCATION	EACH
RT. STA. 1207+46.71 TO RT. STA. 1213+31.95	5
LT. STA. 1207+87.59 TO LT. STA. 50+65.97 (TR 1125E)	4
RT. STA. 50+63.27 (TR 1125E) TO LT. STA. 1214+31.95	5
TOTAL =	14

TERMINAL MARKER - DIRECT APPLIED

LOCATION	EACH
RT. STA. 1207+46.71	1
TR 1125E	
LT. STA. 50+65.97	1
RT. STA. 50+63.27	1
TOTAL =	3

PAVEMENT MARKING REMOVAL

(PAVEMENT MARKINGS CONFLICT WITH STAGING)

LOCATION	SQ FT
STA. 1206+67 TO STA. 1211+85 (YELLOW NO-PASSING)	173
STA. 1206+67 TO STA. 1214+58 (YELLOW SKIP-DASH)	67
RT. STA. 1208+75 TO RT. STA. 1213+00 (WHITE EDGELINE)	142
LT. STA. 1208+87 TO LT. STA. 1212+87 (WHITE EDGELINE)	133
TOTAL =	515

RAISED REFLECTIVE PAVEMENT MARKER REMOVAL

LOCATION	EACH
STA. 1206+67 TO STA. 1214+58	11
TOTAL =	11

REMOVE AND RE-ERECT TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL, TANGENT

LOCATION	EACH
REMOVE:	
1) LT. STA. 1208+57 TO LT. STA. 1209+07	1
2) RT. STA. 1212+29 TO RT. STA. 1212+79	1
3) LT. STA. 1213+17 TO LT. STA. 1213+67	1
RE-ERECT:	
1) LT. STA. 1207+87.59 TO LT. STA. 1208+37.59	
2) RT. STA. 1212+81.95 TO RT. STA. 1213+31.95	
3) LT. STA. 1213+81.95 TO LT. STA. 1214+31.95	
TOTAL =	3

WIDTH RESTRICTION SIGNING

LOCATION	L SUM
SECTION (115BR-1)BR	1
TOTAL =	1

TRAFFIC BARRIER TERMINAL, TYPE 6A (SPECIAL)

LOCATION	EACH
RT. STA. 50+48.48 (TR 1125E) TO LT. STA. 1210+14.86	1
TOTAL =	1

IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3

LOCATION	EACH
STAGE 1	
LT. STA. 1208+75	1
LT. STA. 1213+00	1
TOTAL =	2

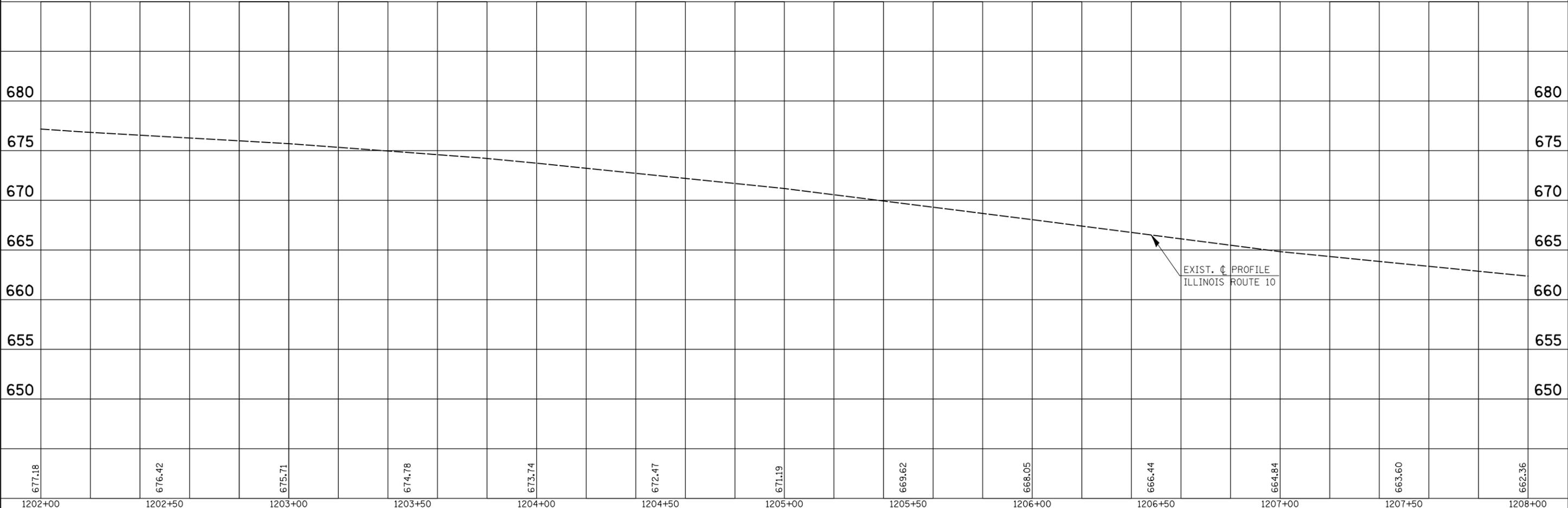
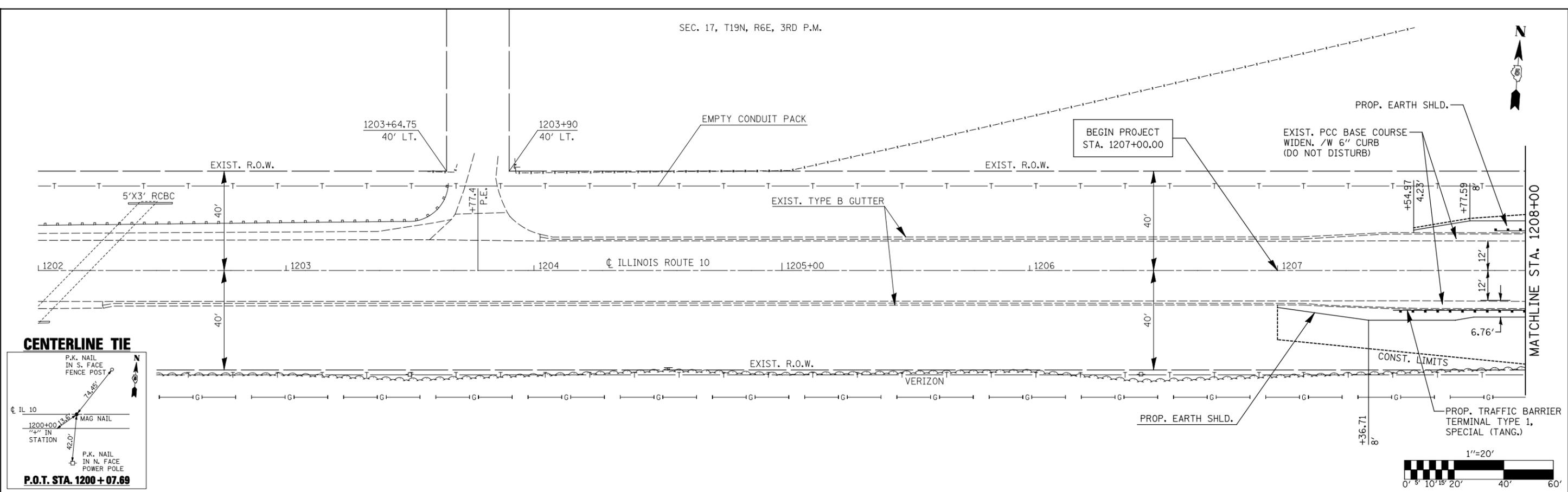
IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3

LOCATION	EACH
STAGE 2	
RT. STA. 1208+87	1
RT. STA. 1212+87	1
TOTAL =	2



DATE	
BY	
PLAN	SURVEYED
	PLOTTED
	CHECKED
	DATE
NOTE BOOK NO.	
CADD FILE NAME	

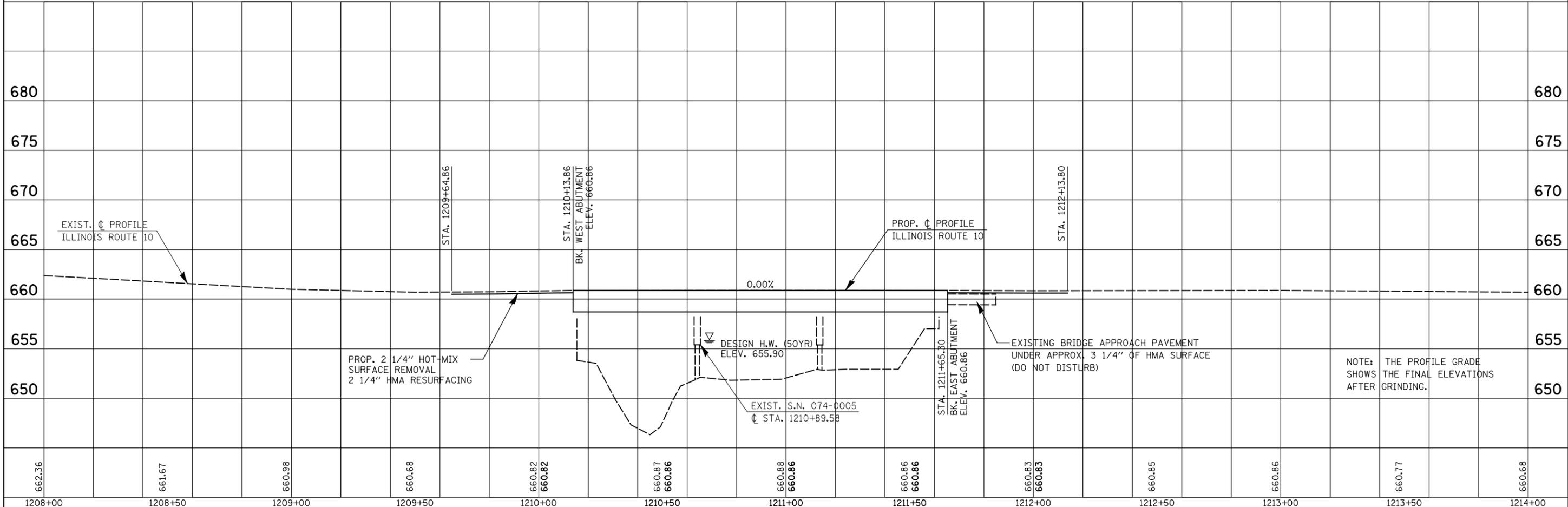
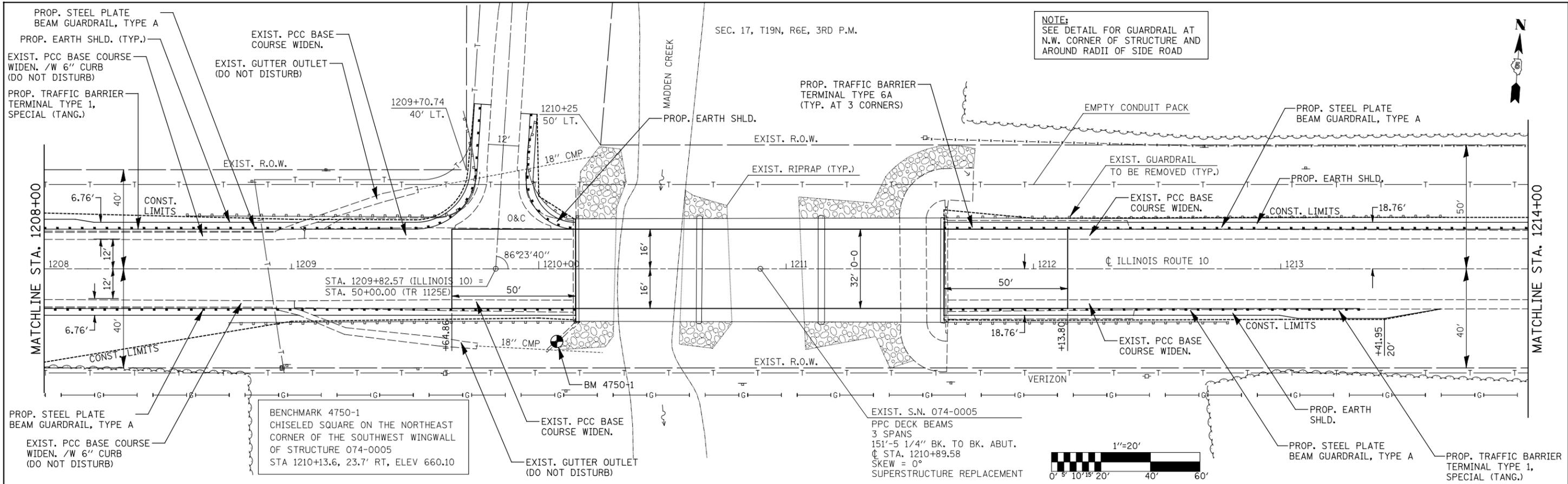
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PROFILE	SURVEYED
	PLOTTED
	CHECKED
	DATE
NOTE BOOK NO.	
STRUCTURE NOTATION CHKD	



FILE NAME =	USER NAME = SJS	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN AND PROFILE SHEET			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
kt:\118149\Plans\ppsh.dgn		DRAWN -	REVISED -					721	(115BR-1)BR	PIATT	32	8
Johnson, Depp & Quisenberry CONSULTING ENGINEERS Springfield, Illinois	PLOT SCALE = 40.00' / IN.	CHECKED -	REVISED -		SCALE:			CONTRACT NO. 70433				
	PLOT DATE = 06/17/2008 16:24:45	DATE -	REVISED -		SHEET NO.	OF	SHEETS	STA. 1202+00 TO STA. 1208+00	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT		

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	NOTED		
	CHECKED		
	APPROVED		
	FILE NAME		

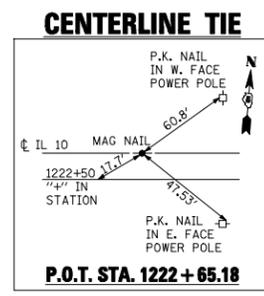
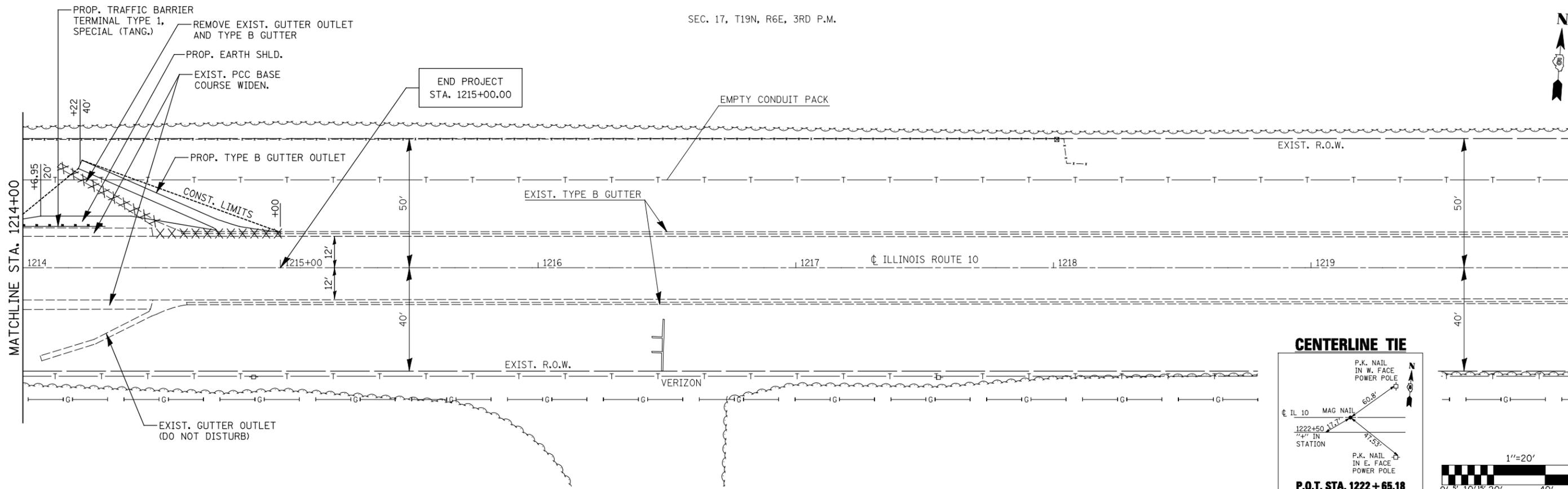
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	APPROVED		
	FILE NAME		



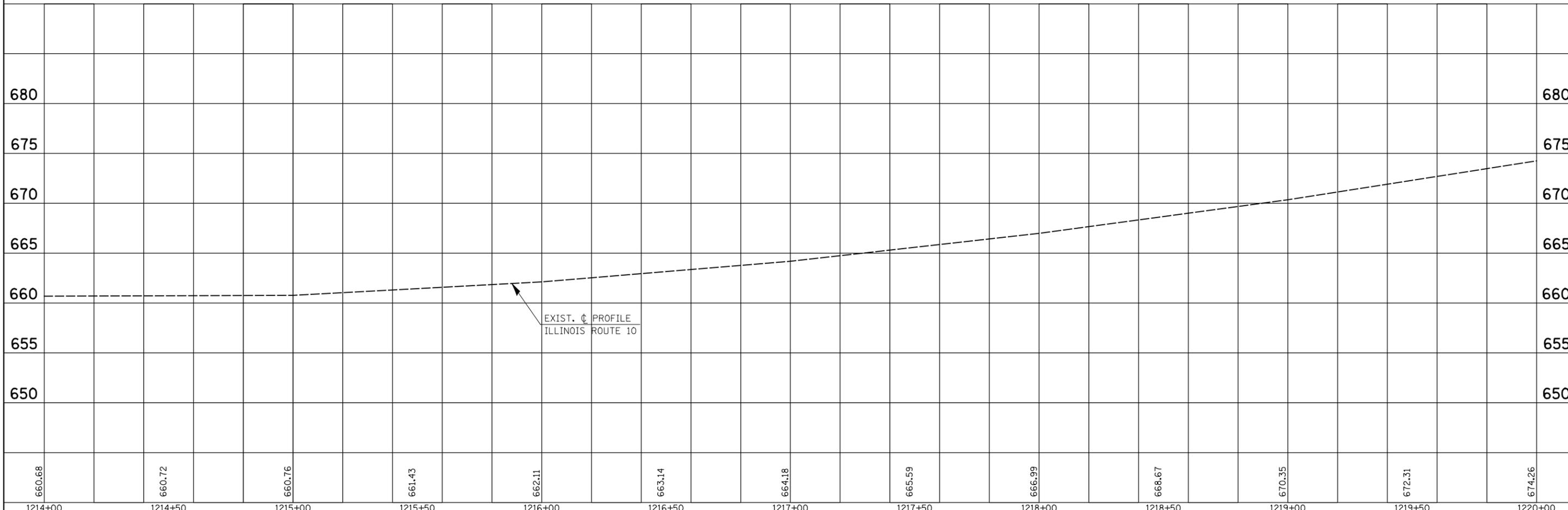
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kt:\10149\Plans\ppsh.dgn		DRAWN -	REVISED -		721	(115BR-1BR)	PIATT	32	9				
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PLOT DATE = 06/17/2008 16:24:47		DATE -	REVISED -		FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT						



PLAN	SURVEYED	DATE
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PROFILE	SURVEYED	DATE
NOTE BOOK	PLOTTED	
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	DATE	

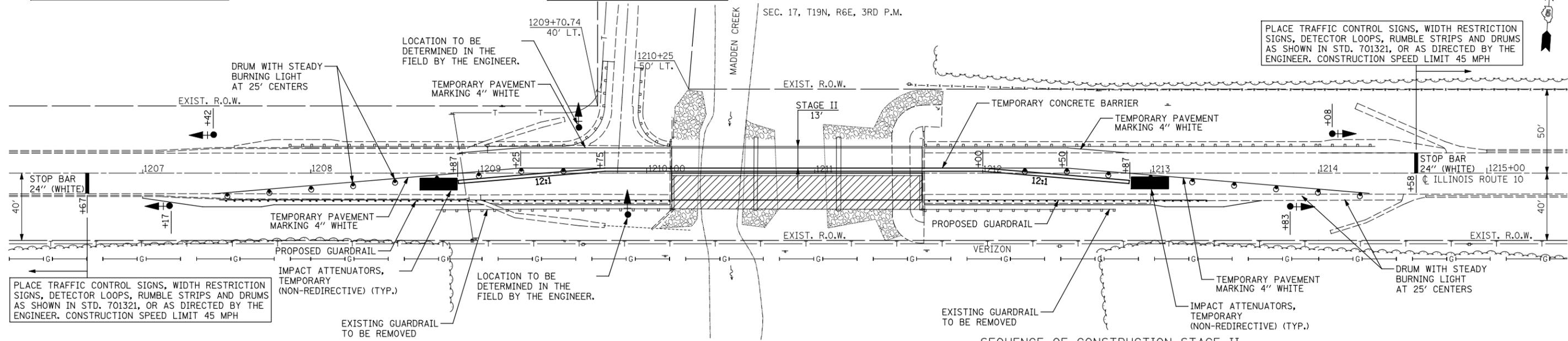


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kt:\110149\Plans\ppsh.t.dgn		DRAWN -	REVISED -					721	(115BR-1)BR	PIATT	32	10
PLOT SCALE = 40.00' / IN.		CHECKED -	REVISED -		SCALE: SHEET NO. OF SHEETS STA. 1214+00 TO STA. 1220+00			CONTRACT NO. 70433				
PLOT DATE = 06/17/2008 16:12:50		DATE -	REVISED -					FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

NOTE: SEE ADDITIONAL DETAILS FOR WIDTH RESTRICTION SIGNAGE.

OPEN TR 1125E DURING STAGE II. INSTALL ADDITIONAL SIGNALS, DETECTOR LOOPS, SIGNS AS SHOWN IN STD. 701321 AND (NO TURN ON RED) SIGNS.

PLACE TRAFFIC CONTROL SIGNS, WIDTH RESTRICTION SIGNS, DETECTOR LOOPS, RUMBLE STRIPS AND DRUMS AS SHOWN IN STD. 701321, OR AS DIRECTED BY THE ENGINEER. CONSTRUCTION SPEED LIMIT 45 MPH



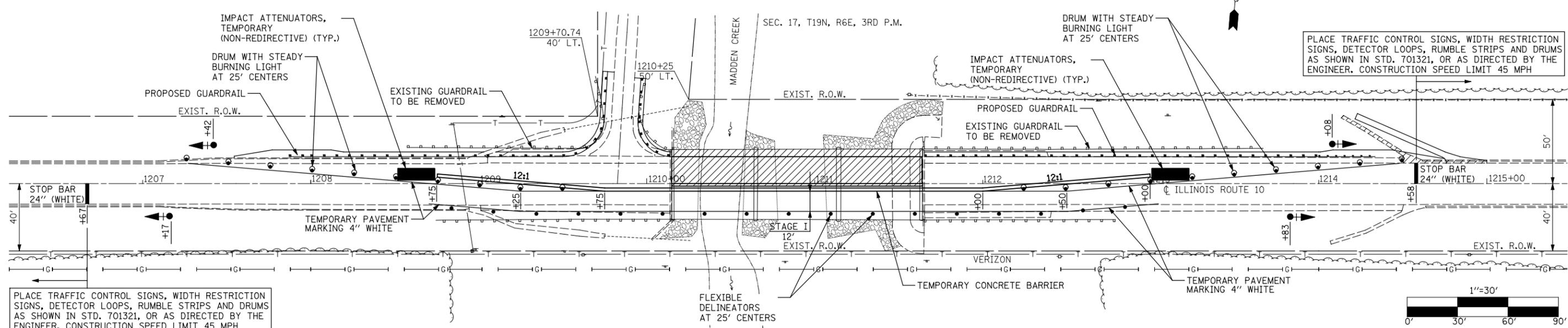
STAGE II									
TRAFFIC SIGNAL SEQUENCE									
PHASE	A	B	C						
INTERVAL	1	2	3	4	5	6	7	8	9
EASTBOUND	G	Y	R	R	R	R	R	R	R
WESTBOUND	R	R	R	G	Y	R	R	R	R
SIDEROAD	R	R	R	R	R	R	G	Y	R

STAGE II

- 1.) RELOCATE THE TEMPORARY CONCRETE BARRIER AND ATTENUATORS AS SHOWN IN THIS DETAIL AND TRAFFIC CONTROL STANDARD 701321. INSTALL ADDITIONAL SIGNALS AND REOPEN TR 1125E. THEN REDIRECT TRAFFIC TO THE WESTBOUND LANE.
- 2.) REMOVE THE STAGE II PORTION OF THE EXISTING SUPERSTRUCTURE AND GUARDRAIL.
- 3.) COMPLETE THE STAGE II PORTION OF THE NEW SUPERSTRUCTURE AND GUARDRAIL (RT. SIDE).
- 4.) REMOVE THE TRAFFIC CONTROL ITEMS.

STAGE III
UNDER TRAFFIC, COLDMILL, RESURFACE AND STRIPE ROADWAY AS SHOWN ELSEWHERE IN THE PLANS AND COMPLETE ALL REMAINING WORK.

TR 1125E TO BE CLOSED DURING STAGE I IN ACCORDANCE WITH APPLICABLE PORTIONS OF DISTRICT CADD STANDARD 70200000 AND THE SPECIAL PROVISION FOR TC&P DEVICES (ROAD AND SIDEROAD/ STREET CLOSURES).



STAGE I								
TRAFFIC SIGNAL SEQUENCE								
PHASE	A	B						
INTERVAL	1	2	3	4	5	6		
EASTBOUND	G	Y	R	R	R	R		
WESTBOUND	R	R	R	G	Y	R		

STAGE I

- 1.) INSTALL TRAFFIC SIGNALS, SIGNS, TEMPORARY CONCRETE BARRIER AND IMPACT ATTENUATORS, ETC. ACCORDING TO THESE DETAILS AND TRAFFIC CONTROL STANDARD 701321, (MAINTAINING ALL TRAFFIC ON EASTBOUND LANE). CLOSE TR 1125E DURING THIS STAGE.
- 2.) REMOVE THE STAGE I PORTION OF THE EXISTING SUPERSTRUCTURE, GUARDRAIL AND GUTTER AS SHOWN ELSEWHERE IN THE PLANS AND THIS DETAIL.
- 3.) CONSTRUCT THE STAGE I PORTION OF THE NEW SUPERSTRUCTURE, GUARDRAIL (LT. SIDE), GUTTER OUTLET (LT. SIDE).

B.M. 4750-1: Chiseled square on the northeast corner of the southwest wingwall of S.N. 074-0005, Sta. 1210+13.6, 23.7' Rt., Elev. 660.10.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 1
OF 10

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
721	(115BR-1)BR	PIATT	32	12
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 70433				

EXISTING STRUCTURE: S.N. 074-0005, originally constructed in 1931 as SBI 120 Sec. 115B at Station 1210+52, reconstructed with longer superstructure and new substructures (existing west abut widened) in 1977 as SBI 120 Sec. 115BR-1 at Station 1210+89.58, using 21" PPC Deck Beams with 3/4" bituminous overlay, 3 spans, 151'-5 1/4" back-back abutments, 41'-0" out-out width, (W. Abut.) closed abutment on timber pile footings, (Pier 1) wall pier on concrete piles, (Pier 2) wall pier with footing on concrete piles, (E. Abut.) open abutment cap on concrete piles. In 2000, bituminous overlay was removed and replaced with 5" concrete wearing surface, and steel railing was replaced with Type SM railing.

Existing superstructure shall be removed and replaced using staged construction to maintain one lane of traffic.

Existing Steel Bridge Railing shall be salvaged and reused on the new superstructure.

INDEX OF SHEETS

Sheet No.	Description
1	General Plan, General Notes & Bill of Material
2	Stage Construction and Strip Seal Joint Details
3	Temporary Concrete Barrier for Stage Construction
4	Superstructure Details
5	Steel Bridge Rail, Type SM
6-7	PPC Deck Beam Details
8	West & East Abutments
9	Piers 1 & 2
10	Bar Splicer Assembly Details

GENERAL NOTES

Plan dimensions and details relative to existing plans are subject to routine variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished based upon the unit price bid for the work.

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

Reinforcement bars designated (E) shall be epoxy coated.

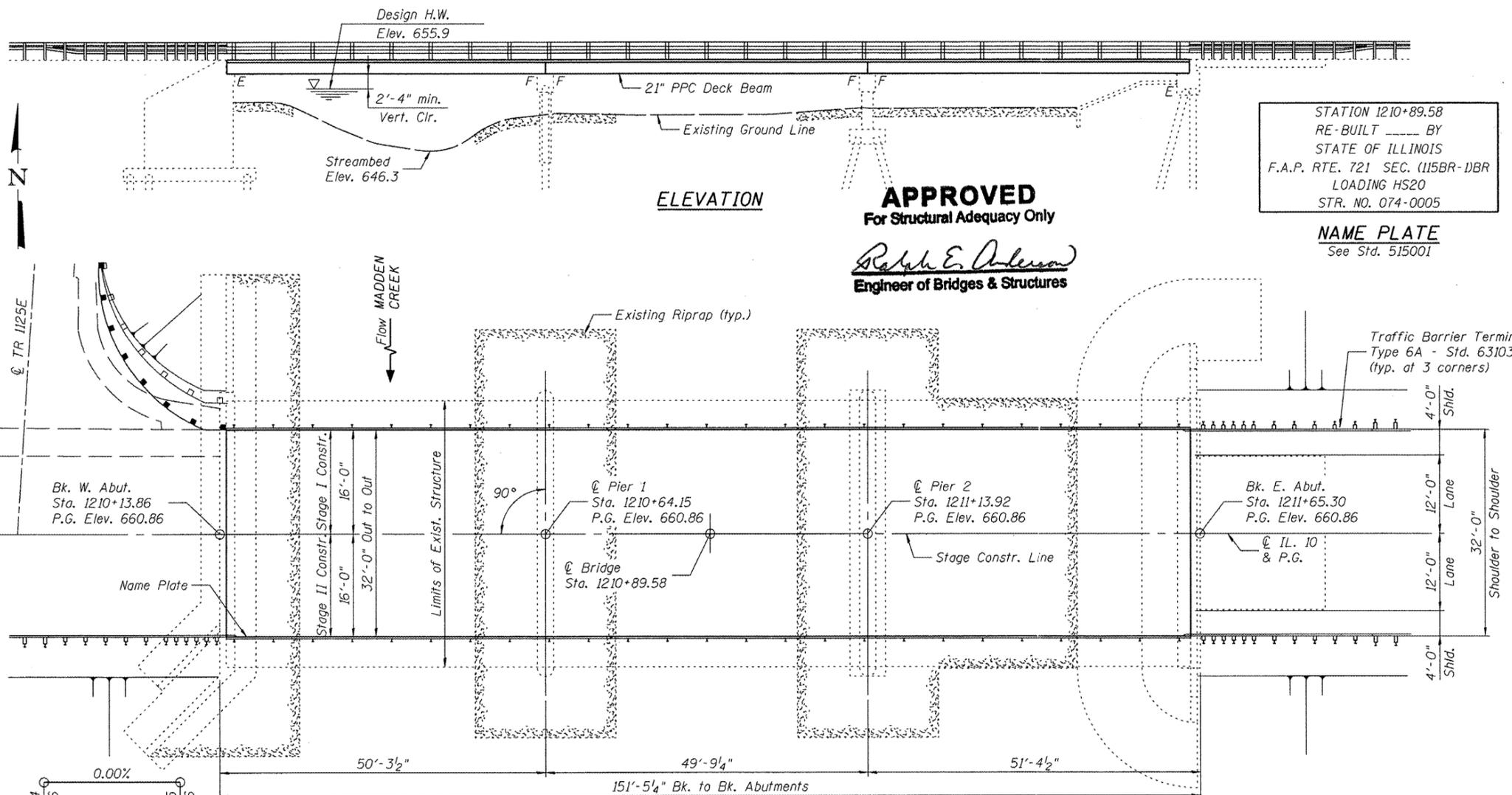
The existing bearing pads at the West and East Abutments contain asbestos. The Contractor shall take appropriate precautions to deal with the presence and disposal of asbestos on this project. See Special Provisions.

The minimum thickness of the concrete wearing surface shall be 5" and varies as required to adjust for the profile grade and beam camber.

Repair of the pier caps shall be completed prior to placement of the new deck beams.

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.

If the Contractor's procedures for existing beam removal or placement of new beams involves placement of heavy equipment on the new or existing deck beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, sealed by an Illinois Licensed Structural Engineer, verifying the structural adequacy of the beams for the proposed loads.



STATION 1210+89.58
RE-BUILT BY
STATE OF ILLINOIS
F.A.P. RTE. 721 SEC. (115BR-1)BR
LOADING HS20
STR. NO. 074-0005

NAME PLATE
See Std. 515001

APPROVED
For Structural Adequacy Only

Ralph E. Anderson
Engineer of Bridges & Structures

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal Of Existing Superstructures	Each	1	--	1
Concrete Removal	Cu Yd	--	2.0	2.0
Concrete Structures	Cu Yd	--	2.0	2.0
Bridge Deck Grooving	Sq Yd	497	--	497
Protective Coat	Sq Yd	531	--	531
Precast Prest. Conc. Deck Beams (21" Depth)	Sq Ft	4770	--	4770
Reinforcement Bars, Epoxy Coated	Pound	6530	260	6790
Bar Splicers	Each	149	4	153
Name Plates	Each	1	--	1
Preformed Joint Strip Seal	Foot	64	--	64
Epoxy Crack Injection	Foot	--	40	40
Remove And Re-Erect Existing Bridge Rail	Foot	299	--	299
Diamond Grinding (Bridge Section)	Sq Yd	782	--	782
Structural Repair Of Concrete (Depth < 5")	Sq Ft	--	172.0	172.0
Concrete Wearing Surface, 5"	Sq Yd	531	--	531
Asbestos Bearing Pad Removal	Each	--	52	52

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	Pier 1	Pier 2	E. Abut.
	643.0	645.0	648.0	655.5

LOADING HS20-44
Allow 50#/sq. ft. for future wearing surface.
DESIGN SPECIFICATIONS
2002 AASHTO

WATERWAY INFORMATION

Existing Low Grade Elevation: 660.7 @ Sta. 1210+18.4

Flood	Freq. Yr.	Opening Sq. Ft.		Head - Ft.		Headwater El.			
		Exist.	Prop.	Exist.	Prop.	Exist.	Prop.		
Design	10	1896	515	515	655.0	0.7	0.7	655.7	655.7
Base	50	3012	658	658	655.9	1.1	1.1	657.0	657.0
Overtopping	100	3503	712	712	656.2	1.2	1.2	657.4	657.4
Max. Calc.	500	4693	790	790	656.8	1.5	1.5	658.3	658.3

DESIGN STRESSES
FIELD UNITS

f'c = 3,500 psi
f'c = 5,000 psi (Concrete Wearing Surface)
fy = 60,000 psi (Reinforcement)

PRECAST PRESTRESSED UNITS

f'c = 6,000 psi
f'ci = 5,000 psi
f's = 270,000 psi (1/2" φ low lax strands)
f'si = 201,960 psi (1/2" φ low lax strands)

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.050g
Site Coefficient (S) = 1.0

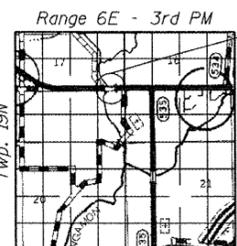
PROFILE GRADE

The profile grade shows the final elevations after grinding. Up to 1/4" will be ground off the bridge slab.

DESIGNED: JDO	DRAWN: SJS
CHECKED: DCD	CHECKED: DCD



Signed: David Depp
Date: 6-16-2008
Lic. Expires: 11-30-2008



LOCATION SKETCH

GENERAL PLAN

ILLINOIS 10 OVER
MADDEN CREEK
FAP ROUTE 721 SECTION (115BR-1)BR
PIATT COUNTY
STATION 1210+89.58
STRUCTURE NO. 074-0005

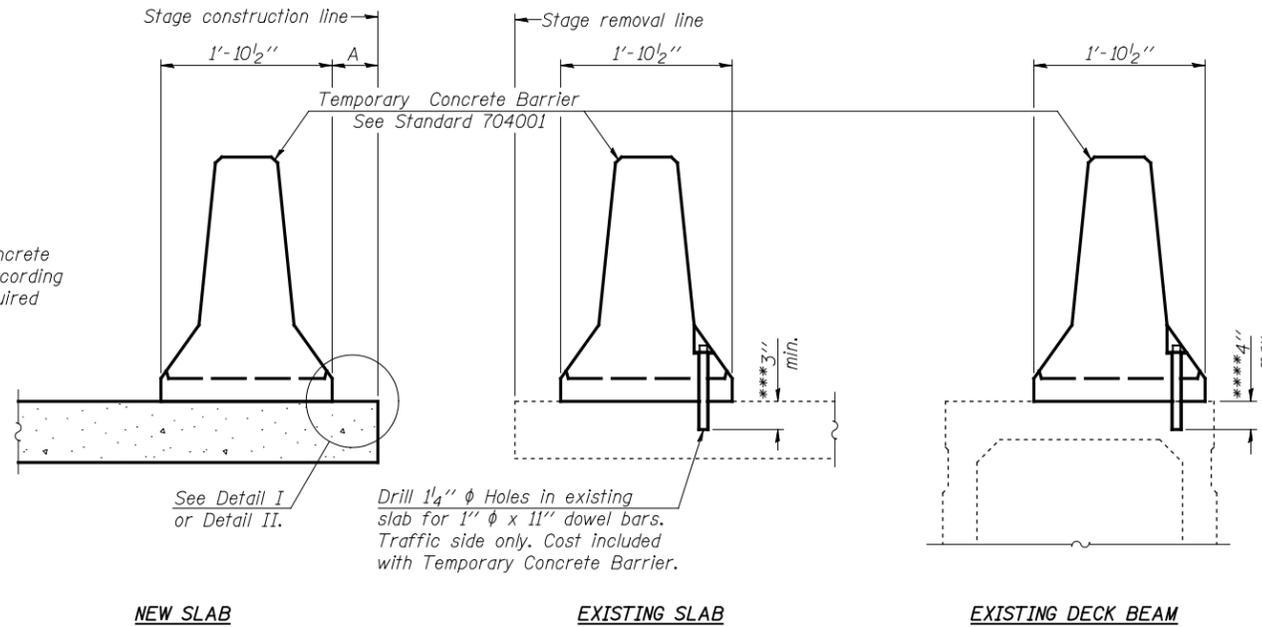
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USER: RUSER
DATE: 06/13/2008 09:38:20

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 3
OF 10

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
721	(115BR-1)BR	PIATT	32	14
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
			CONTRACT NO. 70433	

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



NEW SLAB

EXISTING SLAB

EXISTING DECK BEAM

See Detail I or Detail II.

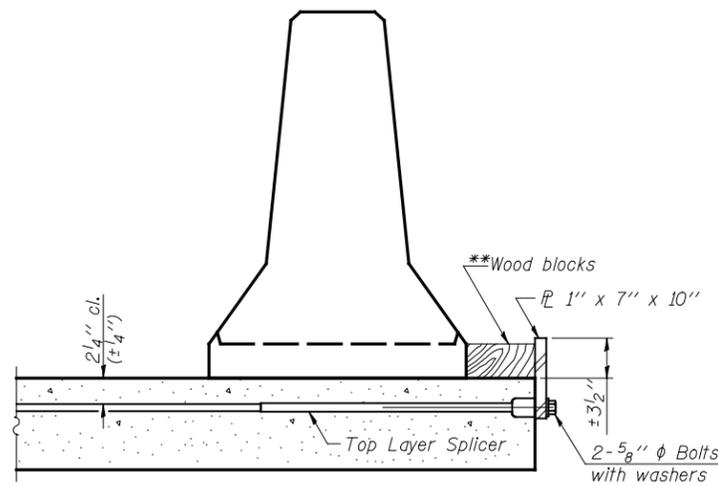
Drill 1/4" ϕ Holes in existing slab for 1" ϕ x 11" dowel bars. Traffic side only. Cost included with Temporary Concrete Barrier.

NOTES

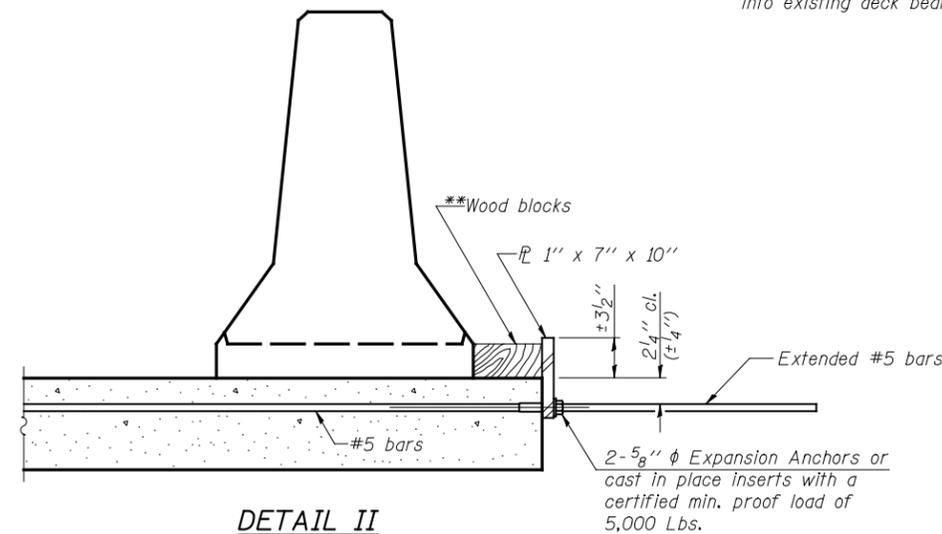
- Detail I - With Bar Splicer or Couplers:
Connect one (1) 1" x 7" x 10" steel \bar{r} to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate \bar{C} of each barrier panel.
- Detail II - With Extended Reinforcement Bars:
Connect one (1) 1" x 7" x 10" steel \bar{r} to the concrete slab or concrete wearing surface with 2-5/8" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \bar{C} of each barrier panel.
- Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x 10" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

SECTIONS THRU SLAB OR DECK BEAM

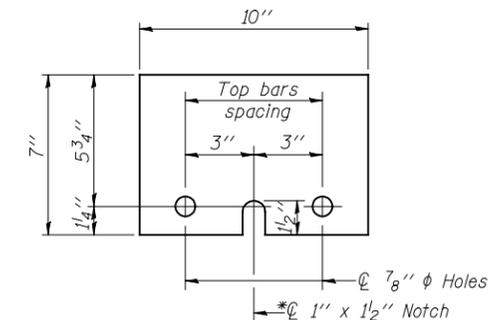
- ***Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.
- ****If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



STEEL RETAINER \bar{r} 1" x 7" x 10"

* Required only with Detail II

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

TEMPORARY CONCRETE BARRIER
FOR STAGE CONSTRUCTION

ILLINOIS 10 OVER
MADDEN CREEK
FAP ROUTE 721 SECTION (115BR-1)BR
PIATT COUNTY
STATION 1210+89.58
STRUCTURE NO. 074-0005

JD Johnson, Depp & Quisenberry
CONSULTING ENGINEERS
Springfield, Illinois

DESIGNED: JDQ	DRAWN: SJS
CHECKED: DCD	CHECKED: DCD

R-27

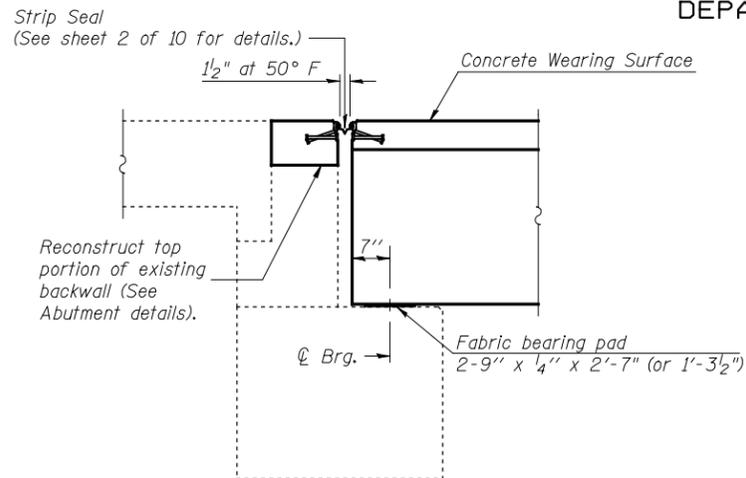
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

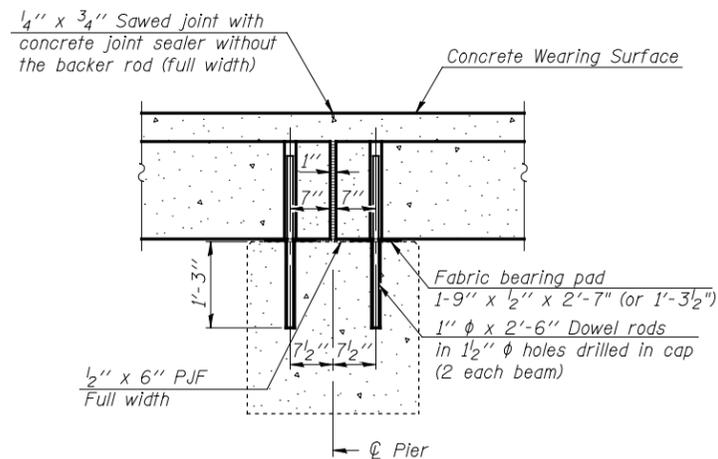
SHEET 4
OF 10

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
721	(115BR-1)BR	PIATT	32	15
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
			CONTRACT NO. 70433	



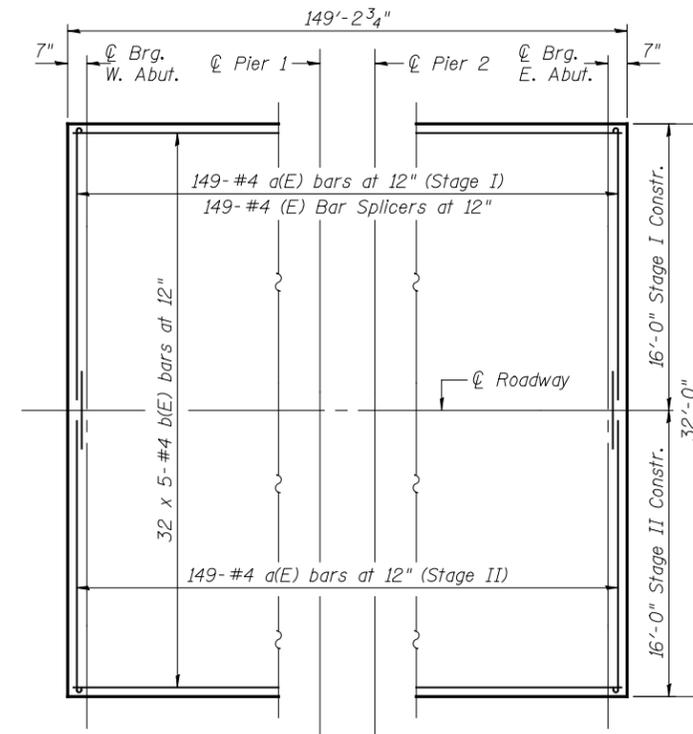
SECTION THRU ABUTMENT

Notes:
All horizontal dimensions are at right angles to beam ends.
See sheet 7 of 10 for bearing pad details.

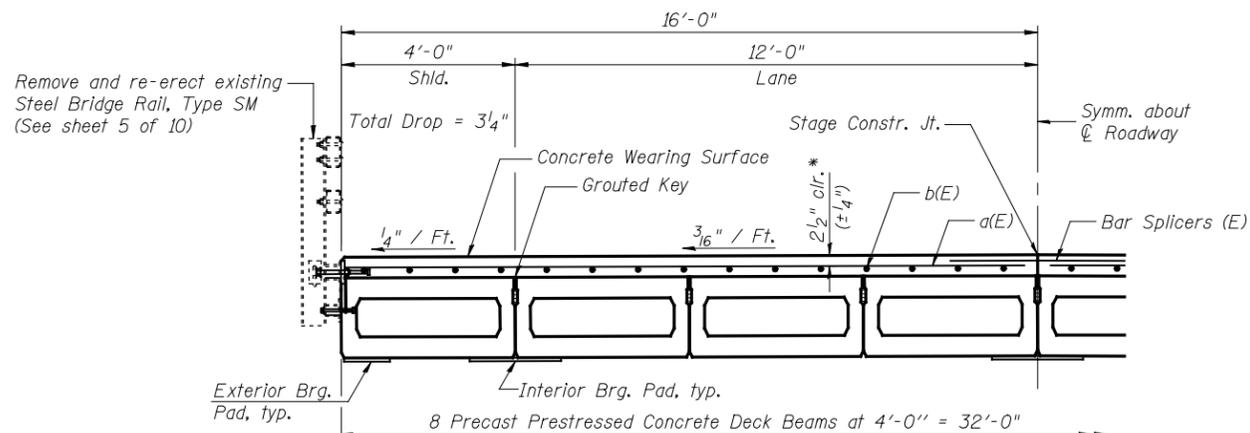


SECTION THRU FIXED PIER

1" Jt. shall be filled with non-shrink grout. 1" dimension may vary to accommodate tolerance in beam lengths.

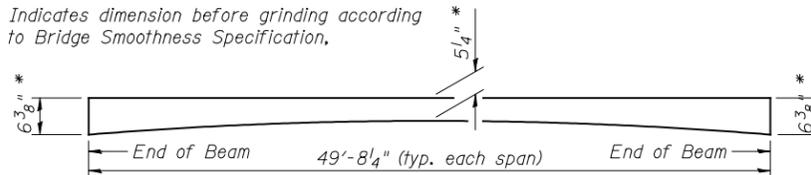


PLAN - CONCRETE WEARING SURFACE



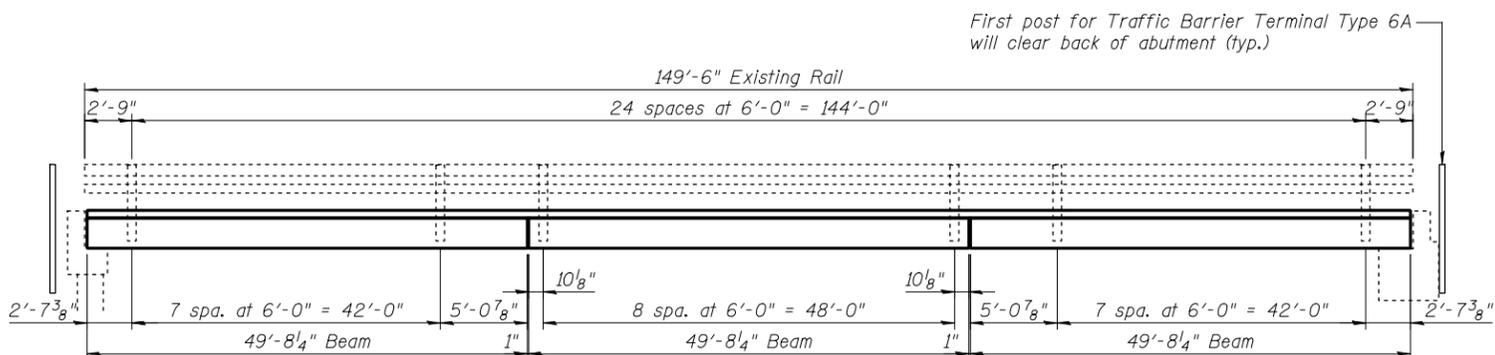
HALF CROSS SECTION

* Indicates dimension before grinding according to Bridge Smoothness Specification.



CONCRETE WEARING SURFACE PROFILE

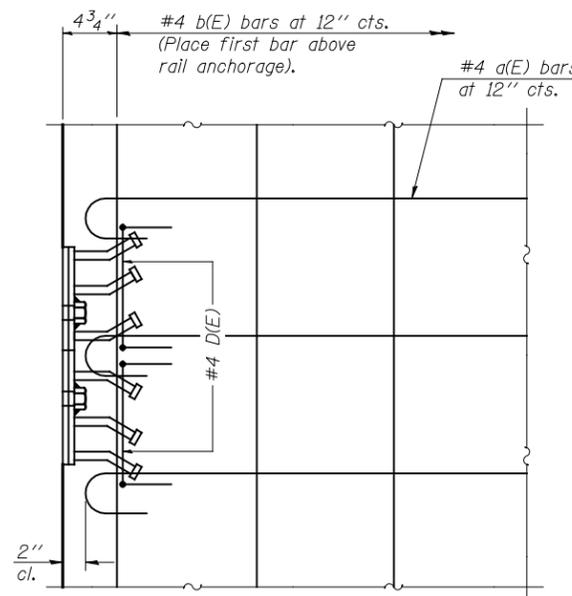
Notes:
The estimated midspan deflection due to weight of the concrete wearing surface is 1/4 inch.



RAIL POST SPACING

First post for Traffic Barrier Terminal Type 6A will clear back of abutment (typ.)

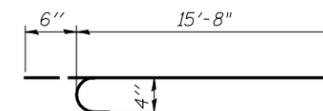
Notes:
The 6'-0" existing rail post spacing shown is based on field measurements, rounded within a tolerance of about 1/2". The Contractor shall verify the existing post spacing prior to preparing the shop drawings for the beams.



PLAN AT RAIL POST ANCHOR

Notes:
Formwork necessary for the wearing surface may be secured utilizing the bottom rail anchorage inserts and/or additional inserts cast into the beam.

MIN. BAR LAP
#4 = 1'-4"



BAR a(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	298	#4	16'-2"	
b(E)	160	#4	30'-11"	
Reinforcement Bars, Epoxy Coated			Pound	6530
Concrete Wearing Surface, 5"			Sq. Yd.	531
Preformed Joint Strip Seal			Foot	64

Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.

SUPERSTRUCTURE DETAILS

ILLINOIS 10 OVER
MADDEN CREEK
FAP ROUTE 721 SECTION (115BR-1)BR
PIATT COUNTY
STATION 1210+89.58
STRUCTURE NO. 074-0005

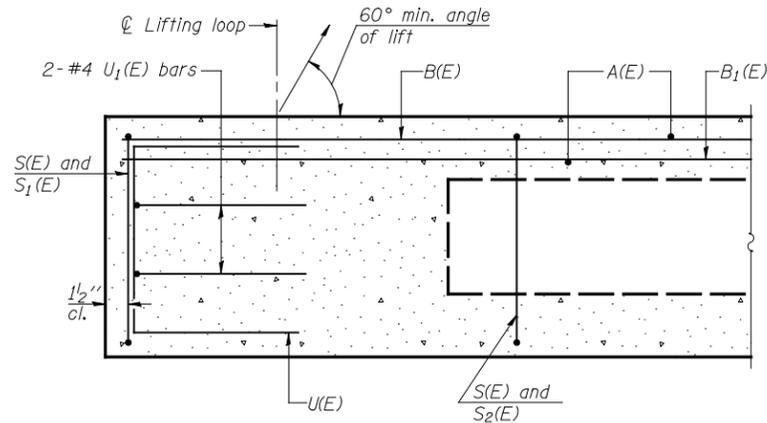
JD Johnson, Depp & Quisenberry
CONSULTING ENGINEERS
Springfield, Illinois

DESIGNED: JDQ DRAWN: SJS
CHECKED: DCD CHECKED: DCD

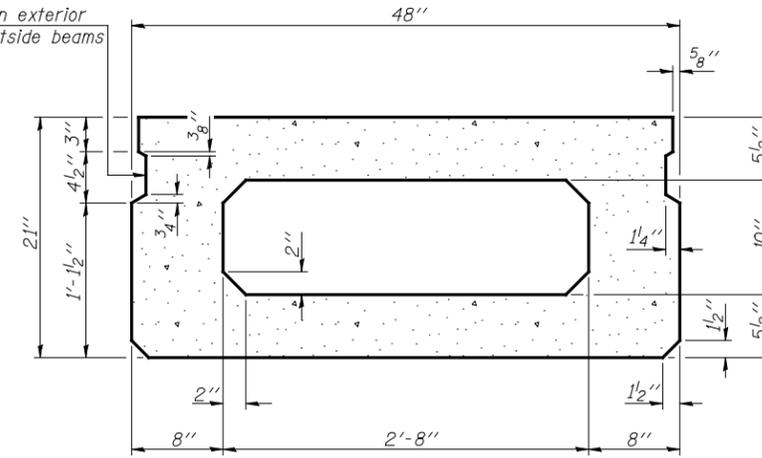
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 6
OF 10

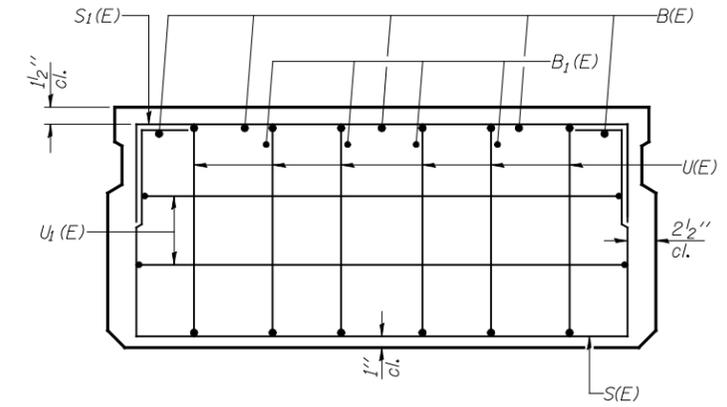
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
721	(115BR-1)BR	PIATT	32	17
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
			CONTRACT NO. 70433	



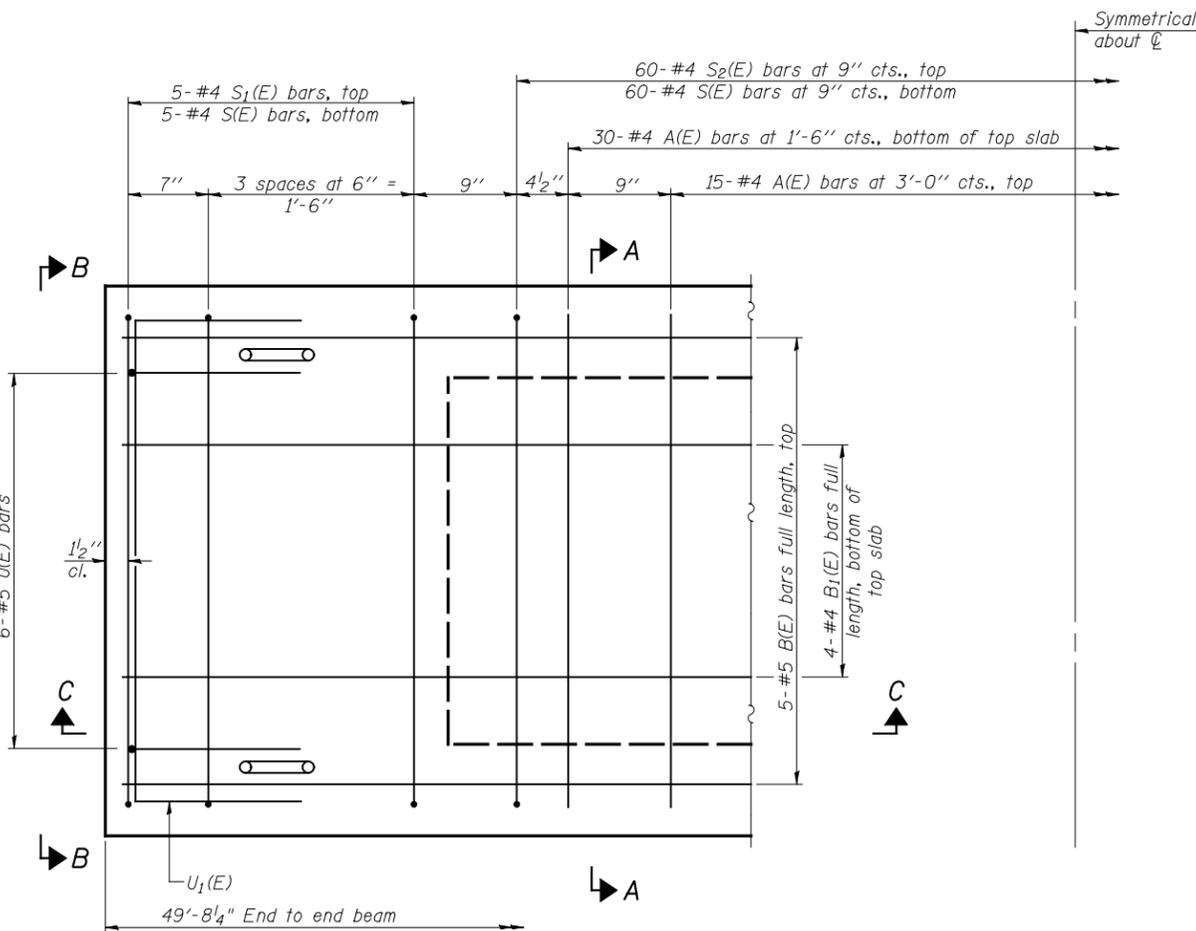
SECTION C-C



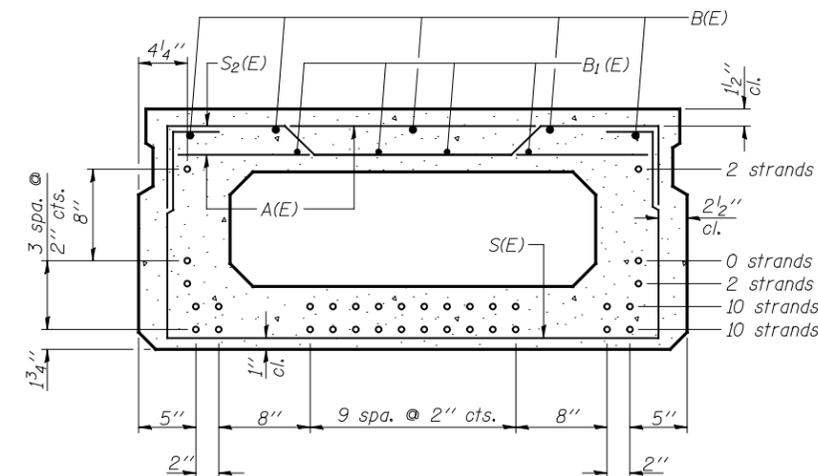
SECTION A-A
(Showing dimensions)



VIEW B-B



PLAN VIEW



SECTION A-A

(Showing reinforcement and permissible strand locations)
Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

BAR LIST
ONE BEAM ONLY
(For Information Only)

Bar	No.	Size	Length	Shape
A(E)	46	#4	3'-7"	—
B(E)	5	#5	49'-5"	—
B1(E)	4	#4	49'-5"	—
S(E)	70	#4	7'-5"	□
S1(E)	10	#4	6'-7"	□
S2(E)	60	#4	6'-10"	□
U(E)	12	#5	4'-0"	□
U1(E)	4	#4	6'-0"	□

Note: See sheet 7 of 10 for additional details and Bill of Material.

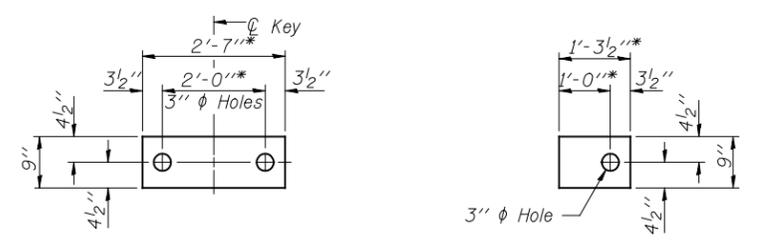
Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.



DESIGNED: JDQ	DRAWN: SJS
CHECKED: DCD	CHECKED: DCD

PD-2148-0 8-29-07

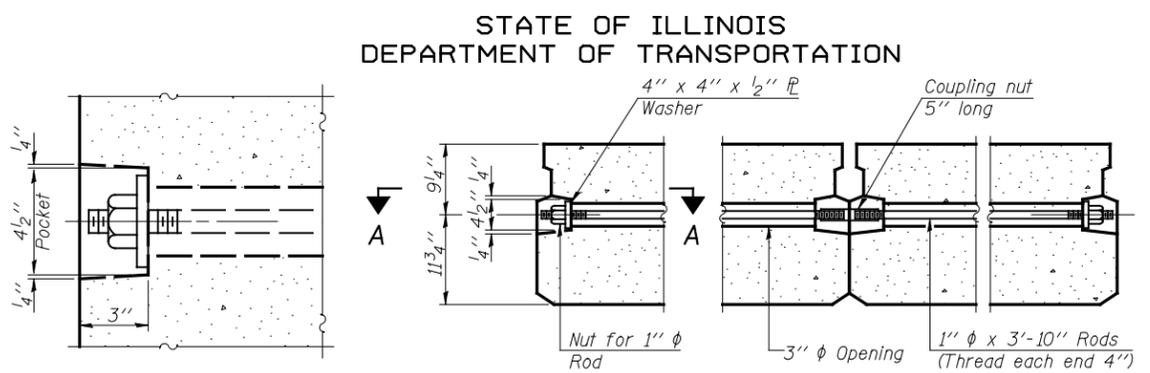
21" X 48" PPC DECK BEAM
ILLINOIS 10 OVER
MADDEN CREEK
FAP ROUTE 721 SECTION (115BR-1)BR
PIATT COUNTY
STATION 1210+89.58
STRUCTURE NO. 074-0005



FABRIC BEARING PAD
 (Interior) **FABRIC BEARING PAD**
 (Exterior)

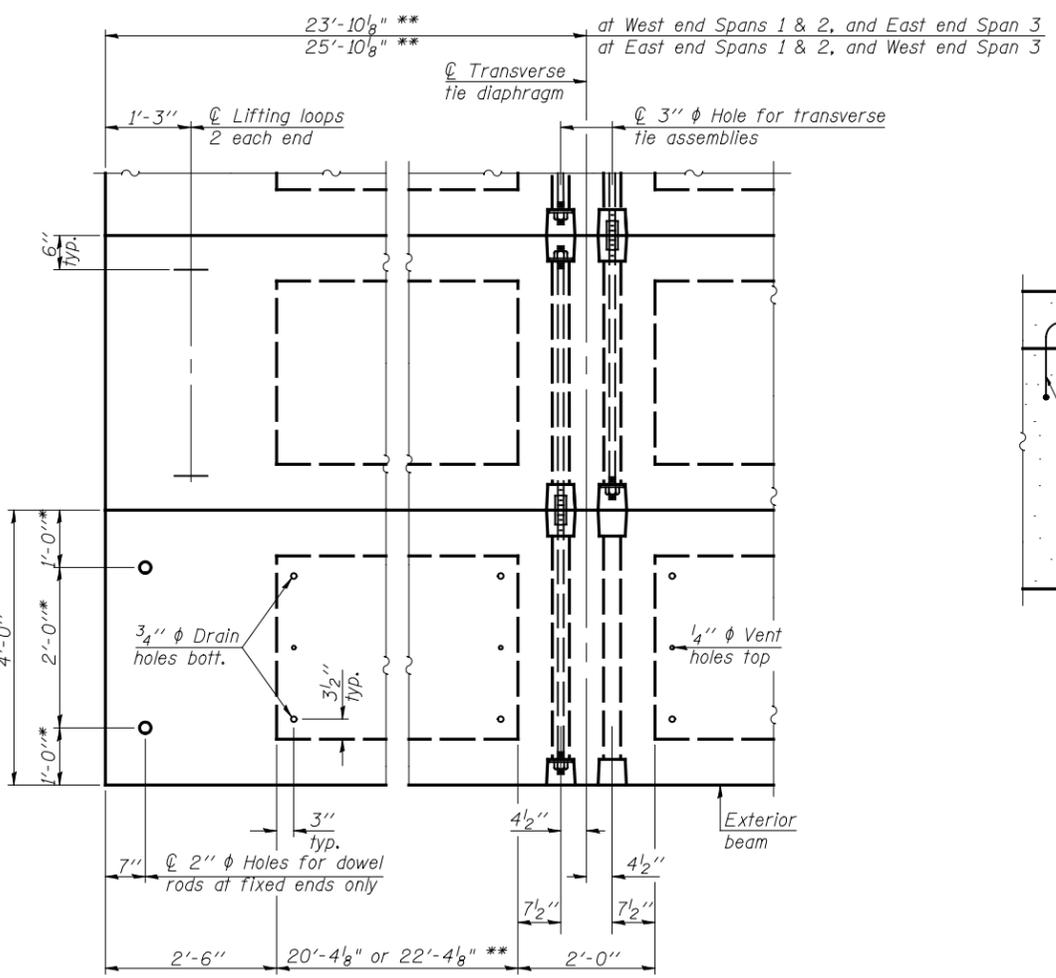
FIXED

Note: Omit holes when using expansion bearings.

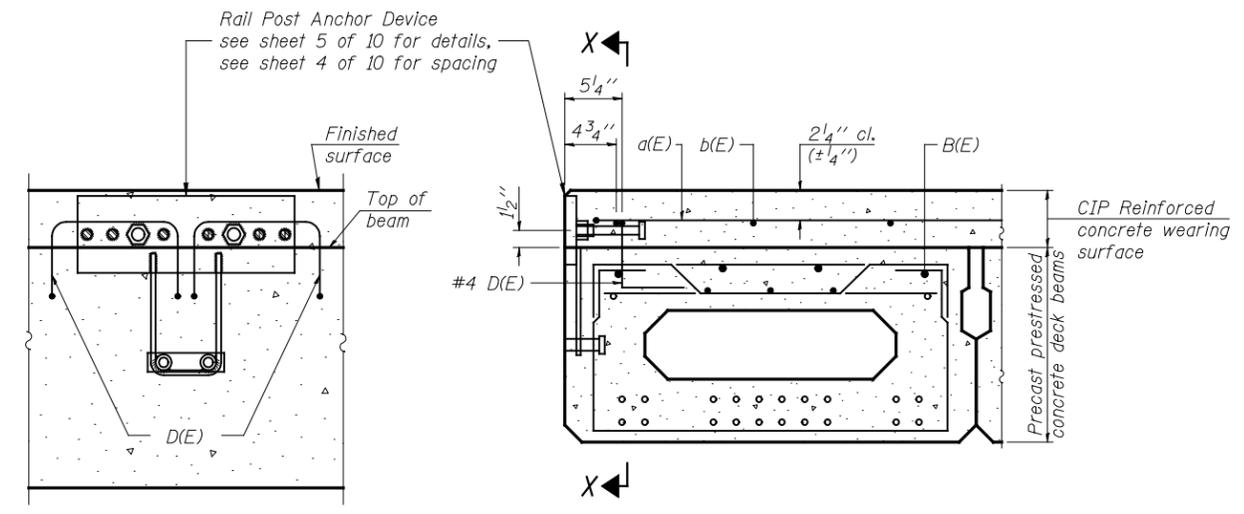


STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

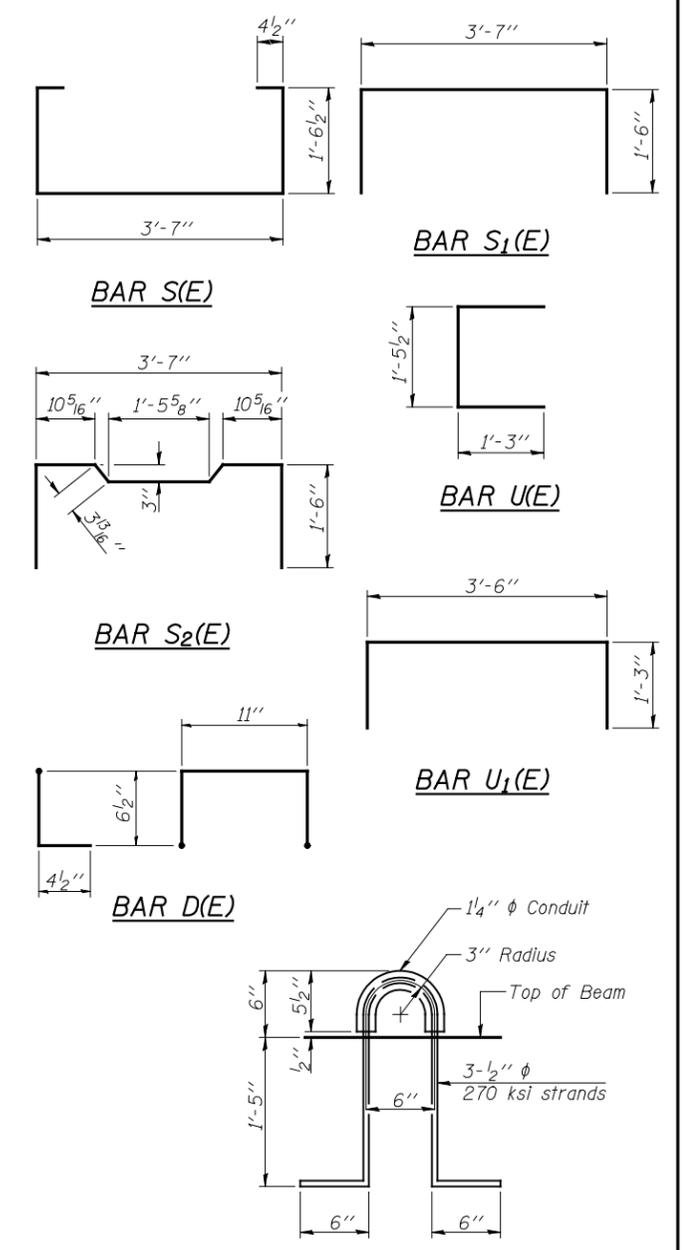
SECTION A-A **TYPICAL TRANSVERSE TIE ASSEMBLY**
 (21 required)



PLAN VIEW



SECTION X-X **CROSS SECTION**
RAIL POST ANCHOR DEVICE



- NOTES:**
- * Dowel Rod locations and Bearing Pad dimensions are "non-standard", in order to avoid conflicts with existing dowel rods at the piers.
 - ** Transverse Tie locations are staggered to avoid conflict with Rail Post Anchors for existing bridge rail.

- NOTES**
- Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2 inch and the nominal cross-sectional area shall be 0.153 sq. in. The 1 inch rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.
 - Reinforcement bars shall conform to ASTM A 706 (IL MOD), Grade 60. (See Special Provisions)
 - Two 1/8 inch fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.
 - A minimum 2 1/2 inch diameter lifting pin shall be used to engage the lifting loops during handling.
 - Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
 - Compressive strength of prestressed concrete, f'c, shall be 6000 psi.
 - Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (21" depth)	Sq. Ft.	4770
---	---------	------

21" X 48" PPC DECK BEAM DETAILS
 ILLINOIS 10 OVER
 MADDEN CREEK
 FAP ROUTE 721 SECTION (115BR-1)BR
 PIATT COUNTY
 STATION 1210+89.58
 STRUCTURE NO. 074-0005

JD Johnson, Depp & Quisenberry
 CONSULTING ENGINEERS
 Springfield, Illinois

DESIGNED: JDQ	DRAWN: SJS
CHECKED: DCD	CHECKED: DCD

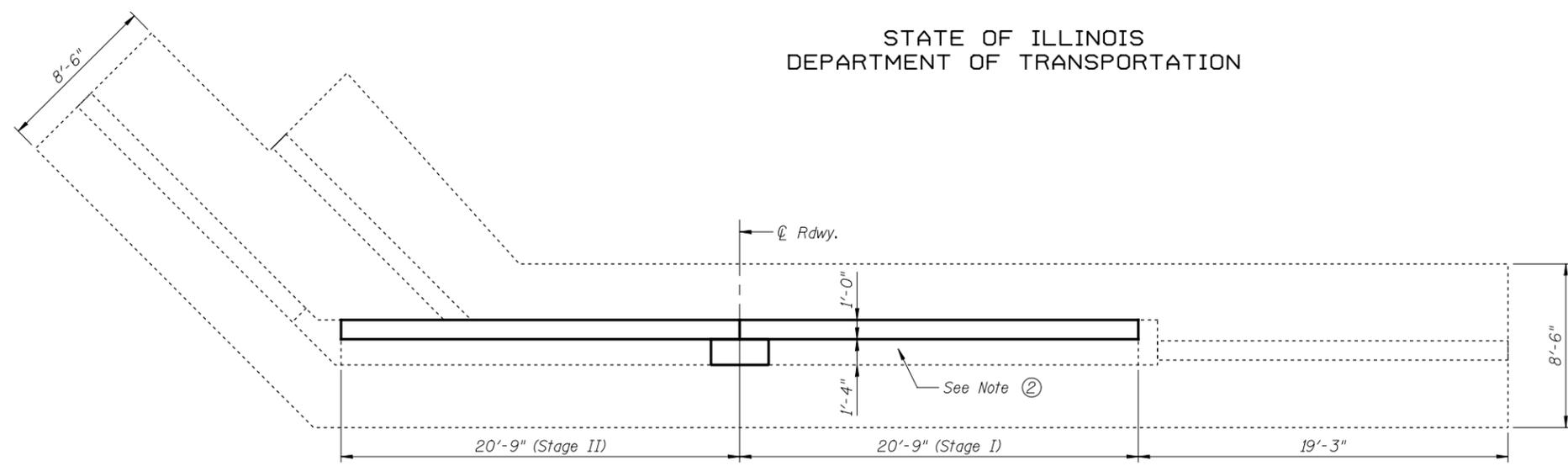
PD-2148-OD 8-29-07

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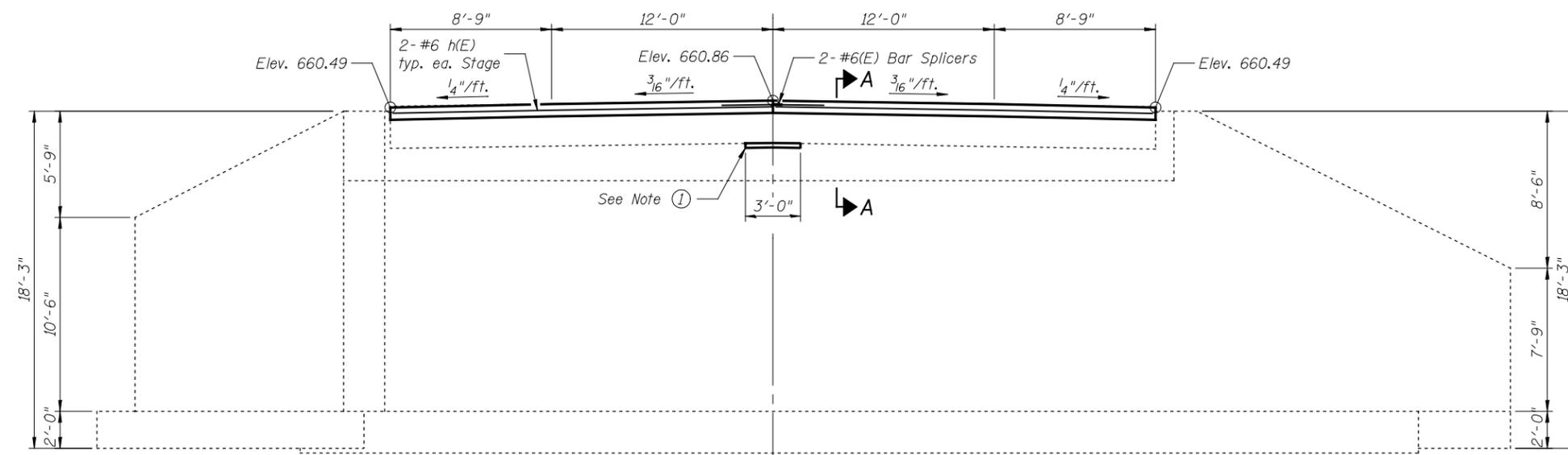
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 8
OF 10

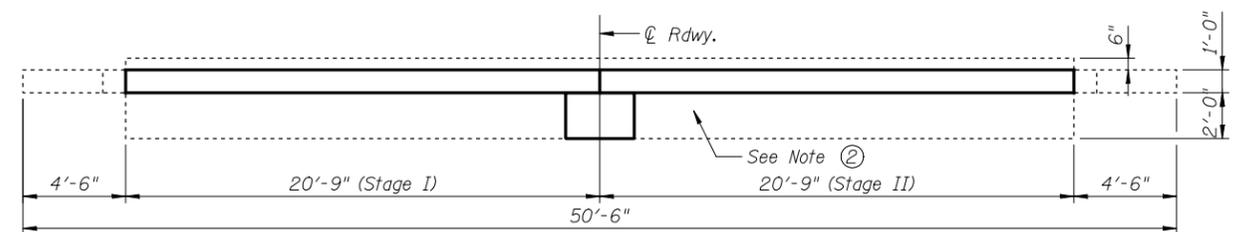
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
721	(115BR-1)BR	PIATT	32	19
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	CONTRACT NO. 70433	



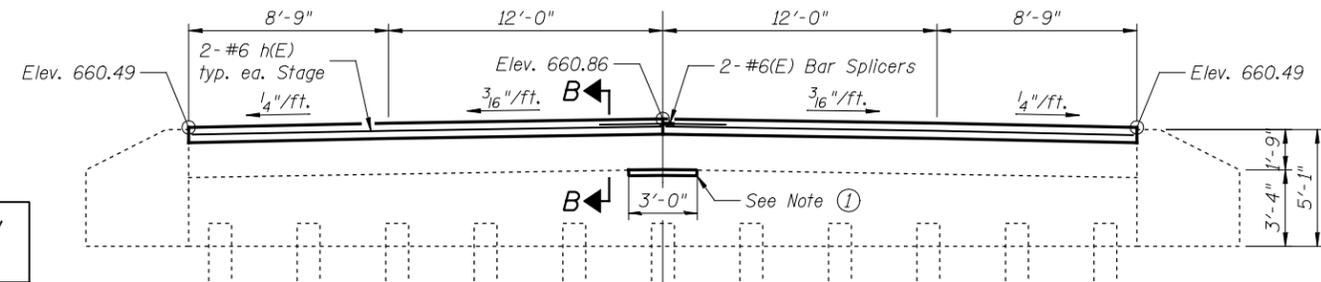
PLAN - WEST ABUTMENT



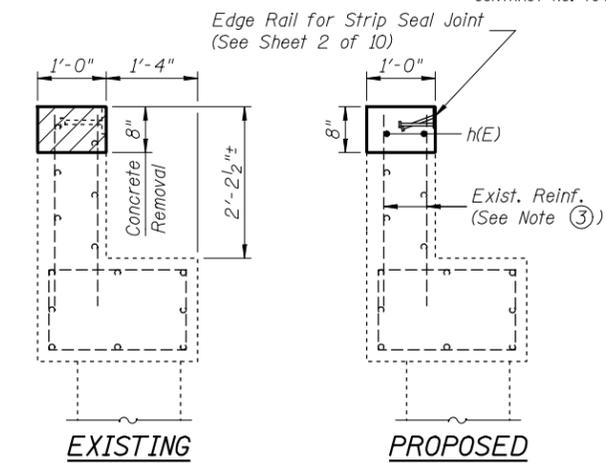
ELEVATION - WEST ABUTMENT
(Facing West)



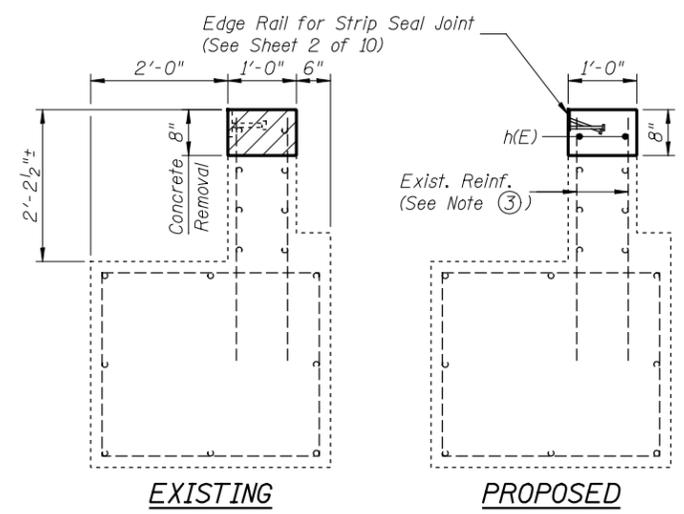
PLAN - EAST ABUTMENT



ELEVATION - EAST ABUTMENT
(Facing East)



SECTION A-A
(West Abutment)



SECTION B-B
(East Abutment)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	4	#6	20'-5"	
Reinforcement Bars, Epoxy Coated				
		Pound	130	W. Abut.
			130	E. Abut.
Concrete Removal				
		Cu. Yd.	1.0	W. Abut.
			1.0	E. Abut.
Concrete Structures				
		Cu. Yd.	1.0	W. Abut.
			1.0	E. Abut.
Structural Repair of Concrete (Depth < 5")				
		Sq. Ft.	14.0	W. Abut.
			16.0	E. Abut.
Epoxy Crack Injection				
		Foot	10	W. Abut.
			10	E. Abut.

Bill of Material for 1 Abutment only, except as noted.

WEST & EAST ABUTMENTS

ILLINOIS 10 OVER
MADDEN CREEK
FAP ROUTE 721 SECTION (115BR-1)BR
PIATT COUNTY
STATION 1210+89.58
STRUCTURE NO. 074-0005

- Notes:
- Use Structural Repair of Concrete to reconstruct existing level portion of cap to provide a crowned surface for new beam configuration.
 - Existing bearing seat area shall be inspected by the Engineer after deck beam removal. Deteriorated concrete areas shall be repaired (estimated 10 S.F. per abutment) and cracks 1/16" or larger shall be sealed (estimated 10 FT. per abutment).
 - Existing vertical reinforcement bars in the abutment backwall are to remain in place. The existing reinforcement shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.



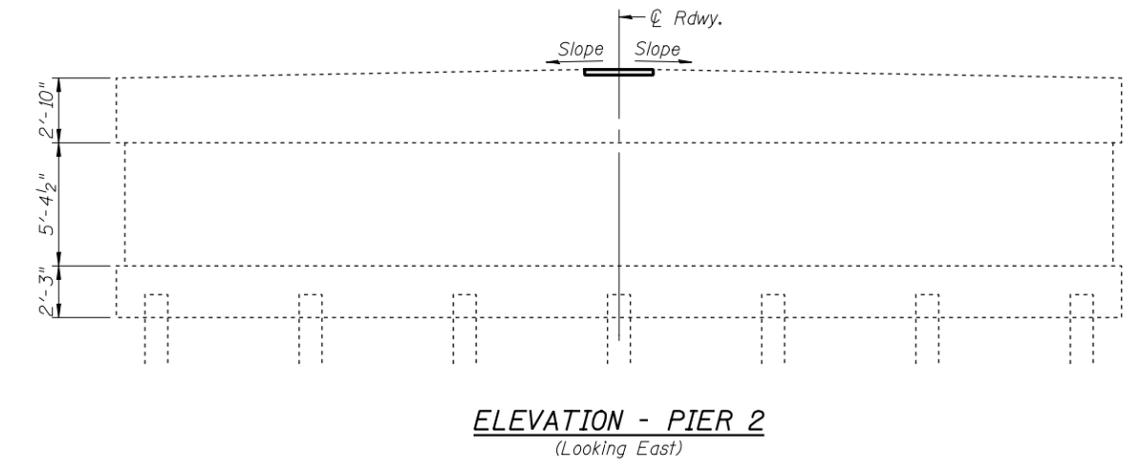
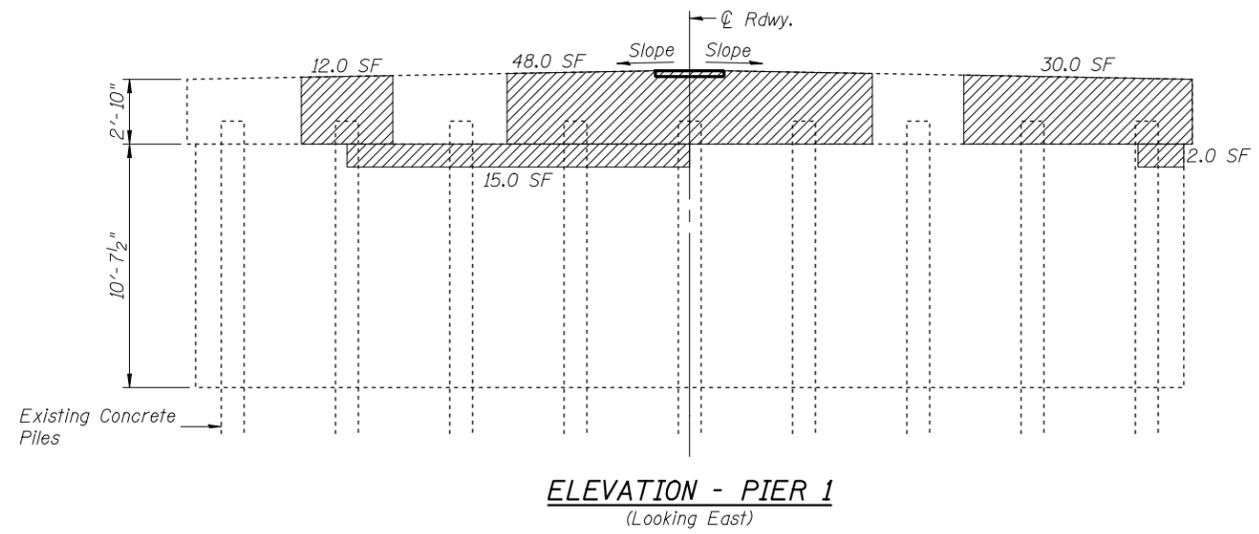
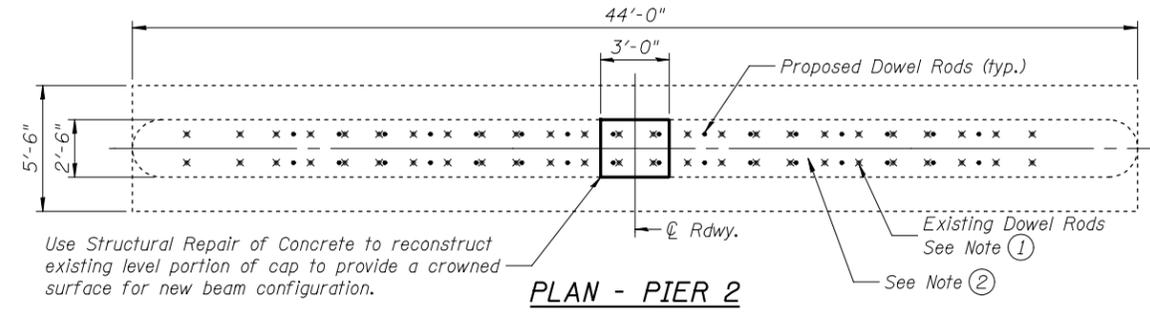
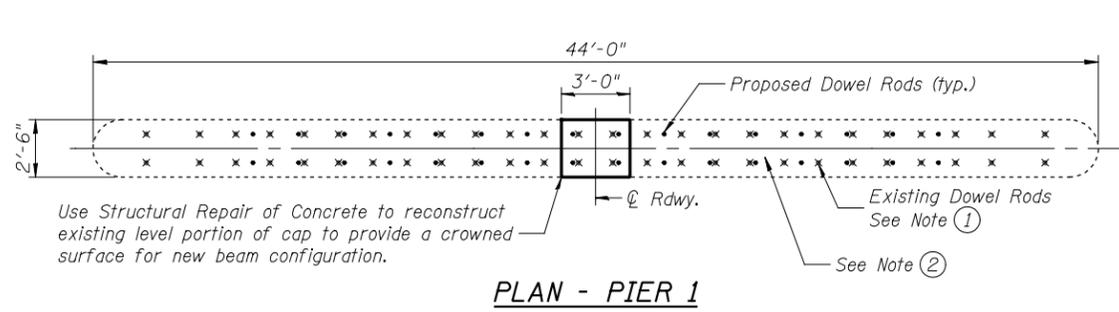
DESIGNED: JDQ	DRAWN: SJS/PTR
CHECKED: DCD	CHECKED: DCD

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 9
OF 10

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
721	(115BR-1)BR	PIATT	32	20
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
			CONTRACT NO. 70433	



LEGEND
 Delaminated Area
 (use Structural Repair of Concrete, Depth = < 5")
 Inspection Date: 8-1-2007

- Notes:
- ① Burn existing dowel rods flush with existing concrete, grind smooth and seal with epoxy. Prior to installing new beams, the proposed dowel locations shall be measured, and any existing dowel rods interfering with the new dowel locations shall be removed by coring. Cost is included with Removal of Existing Superstructures.
 - ② Existing bearing seat area shall be inspected by the Engineer after deck beam removal. Deteriorated concrete areas shall be repaired (estimated 10 S.F. per pier) and cracks 1/16" or larger shall be sealed (estimated 10 FT. per pier).

BILL OF MATERIAL

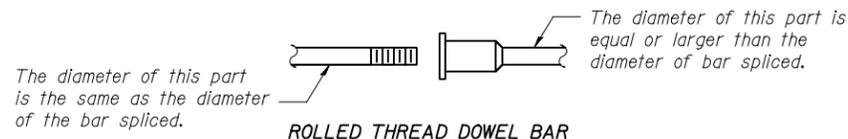
Structural Repair of Concrete (Depth = < 5")	Sq. Ft.	124.5	Pier 1
		17.5	Pier 2
Epoxy Crack Injection	Foot	10	Pier 1
		10	Pier 2

PIERS 1 & 2
 ILLINOIS 10 OVER
 MADDEN CREEK
 FAP ROUTE 721 SECTION (115BR-1)BR
 PIATT COUNTY
 STATION 1210+89.58
 STRUCTURE NO. 074-0005

JD Johnson, Depp & Quisenberry
 CONSULTING ENGINEERS
 Springfield, Illinois

DESIGNED: JDQ	DRAWN: SJS
CHECKED: DCD	CHECKED: DCD

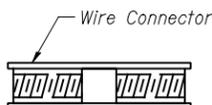
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ROLLED THREAD DOWEL BAR



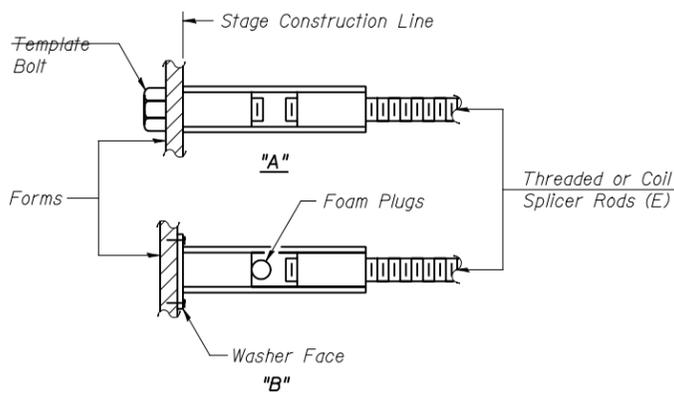
** ONE PIECE



WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTERNATIVES

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



INSTALLATION AND SETTING METHODS

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

NOTES

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

Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length. All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.

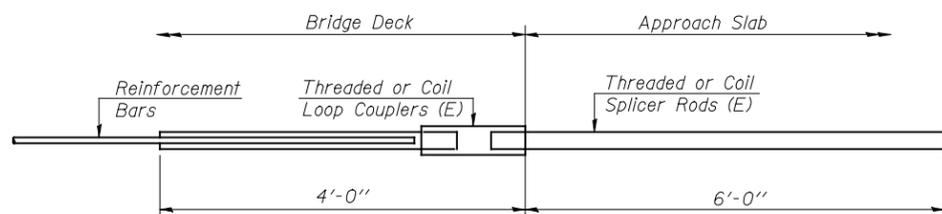
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.

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

- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_t$
- ② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times f_y \times A_t$

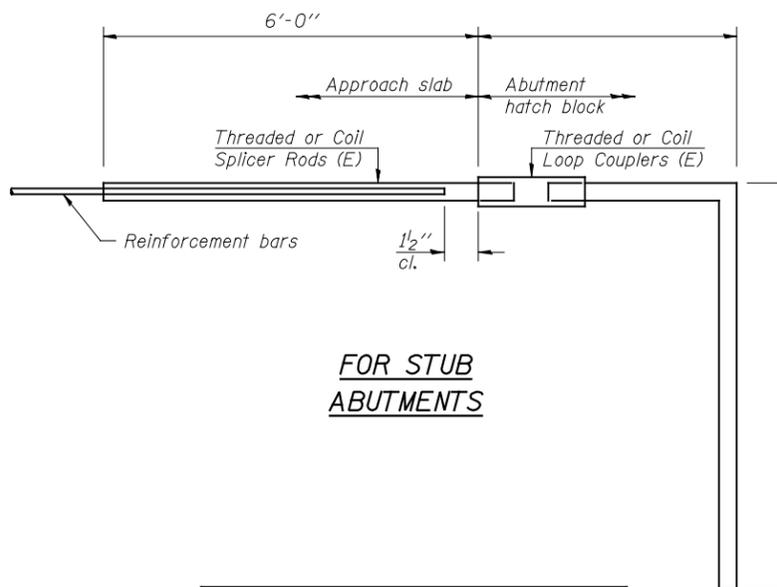
Where f_y = Yield strength of lapped reinforcement bars in ksi.
 A_t = Tensile stress area of lapped reinforcement bars.
 * = 28 day concrete

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



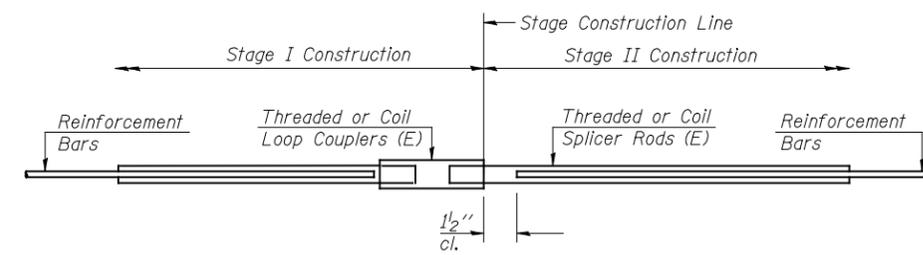
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

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



FOR STUB ABUTMENTS

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



STANDARD

Bar Size	No. Assemblies Required	Location
#4	149	Wearing Surf.
#6	2	W. Abut.
#6	2	E. Abut.

BAR SPLICER ASSEMBLY DETAILS

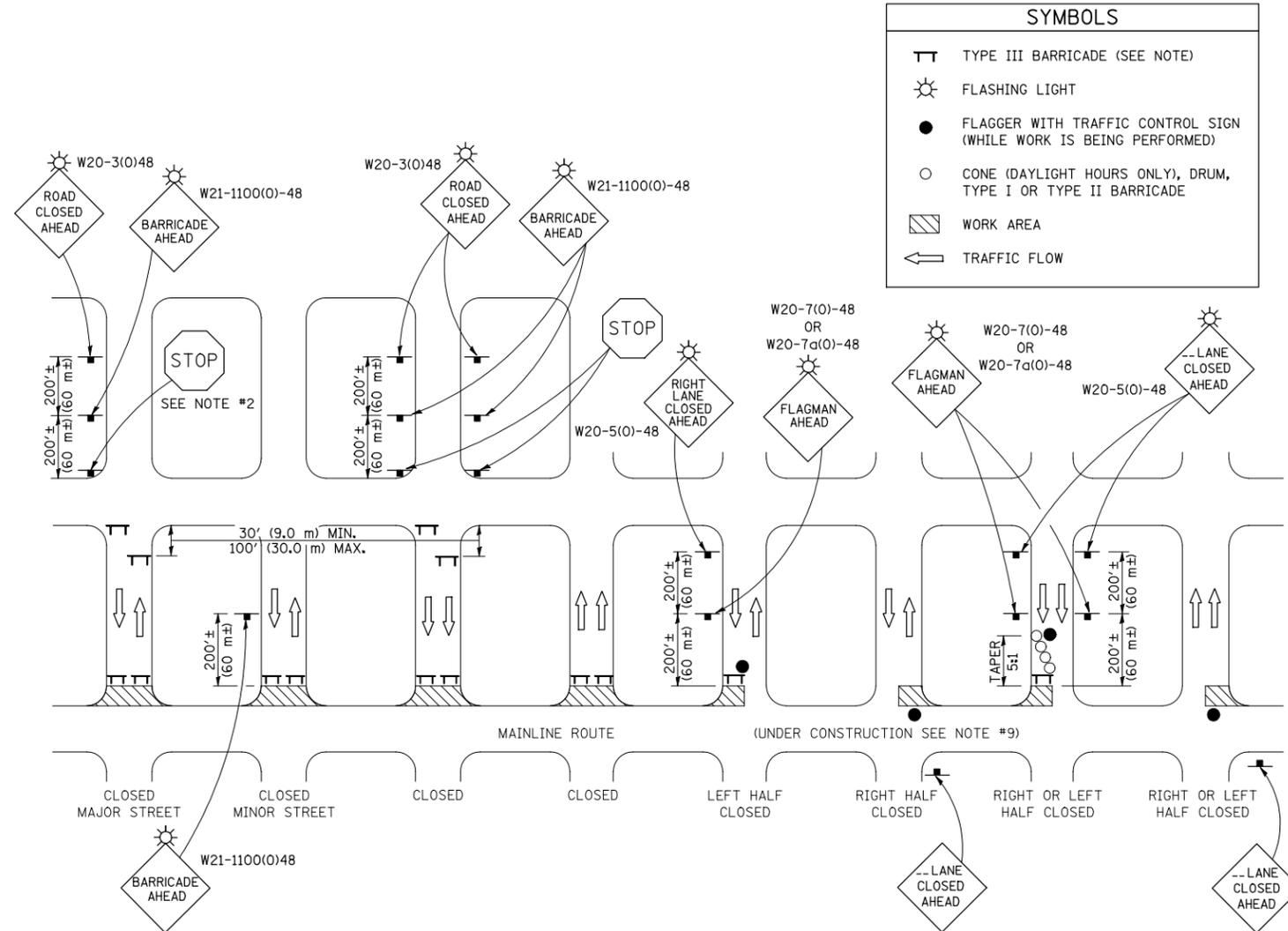
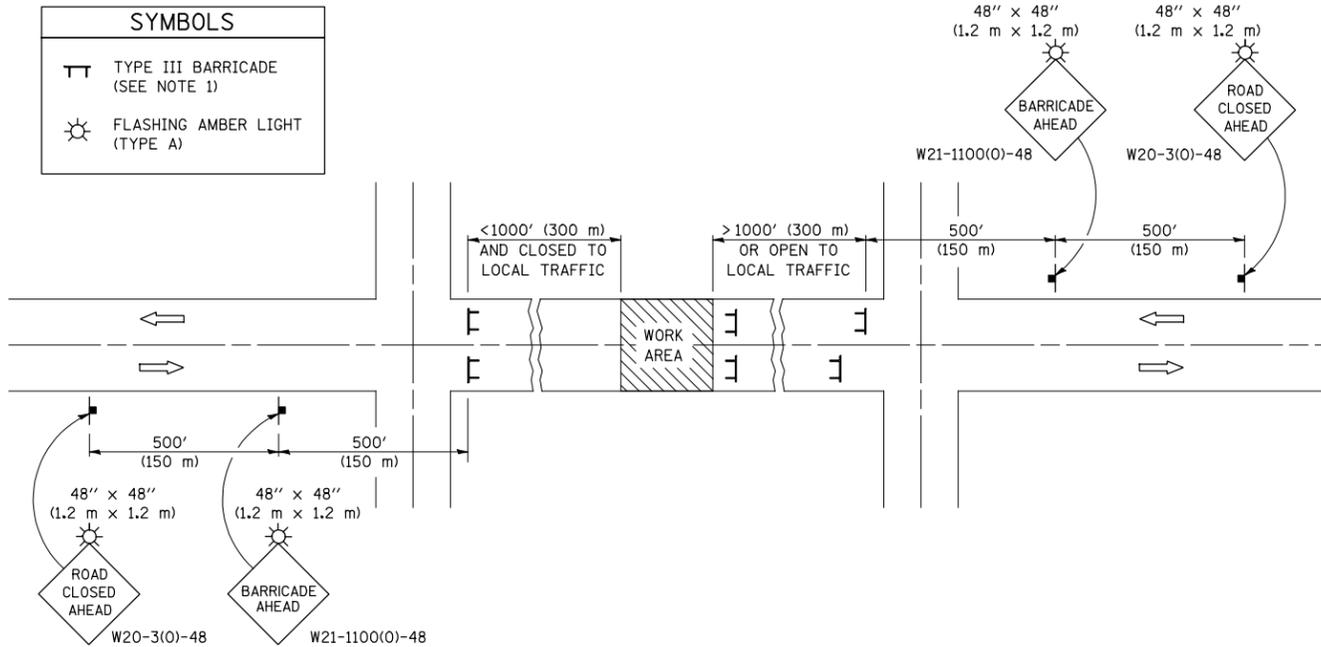
ILLINOIS 10 OVER
MADDEN CREEK
FAP ROUTE 721 SECTION (115BR-1)BR
PIATT COUNTY
STATION 1210+89.58
STRUCTURE NO. 074-0005



DESIGNED: JDQ	DRAWN: SJS
CHECKED: DCD	CHECKED: DCD

ROAD CLOSURE

SIDEROAD / STREET CLOSURE



GENERAL NOTES

- TYPE III BARRICADES SHALL BE AS SHOWN ON STANDARD 701901 "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 701901 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 TY 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 ERECTED 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.

GENERAL NOTES

- TYPE III BARRICADES SHALL BE AS SHOWN ON "TYPICAL APPLICATIONS OF TYPE III BARRICADES CLOSING A ROAD". EACH TYPE III BARRICADE SHALL HAVE TWO FLASHING AMBER LIGHTS MOUNTED ABOVE IT.
- WHERE A STOP CONDITION EXISTS, AS SHOWN ABOVE, WARNING SIGNS MAY BE OMITTED IN ADVANCE OF THE "STOP" SIGN.
- STANDARD 702001 SHALL APPLY FOR THE PLACEMENT & MANUFACTURE OF TYPE III BARRICADES.
- ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
- ONE FLASHING LIGHT IS REQUIRED ABOVE EACH ADVANCE WARNING SIGN DURING HOURS OF DARKNESS.
- LONGITUDINAL DIMENSIONS MAY BE ADJUSTED SLIGHTLY TO FIT FIELD CONDITIONS.
- FORMS BT 725 AND BT 726 ARE REQUIRED.
- THE MAINLINE ROUTE TEMPORARY TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE PLANS, SPECIAL PROVISIONS AND STANDARD SPECIFICATIONS.
- THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCLUDED IN THE VARIOUS PAY ITEMS INVOLVING THE RECONSTRUCTION OF ALL APPLICABLE SIDE STREETS AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

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

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	PLOT SCALE = 48.00' / IN.	CHECKED -	REVISED -
	PLOT DATE = 06/17/2008 16:31:19	DATE -	REVISED -

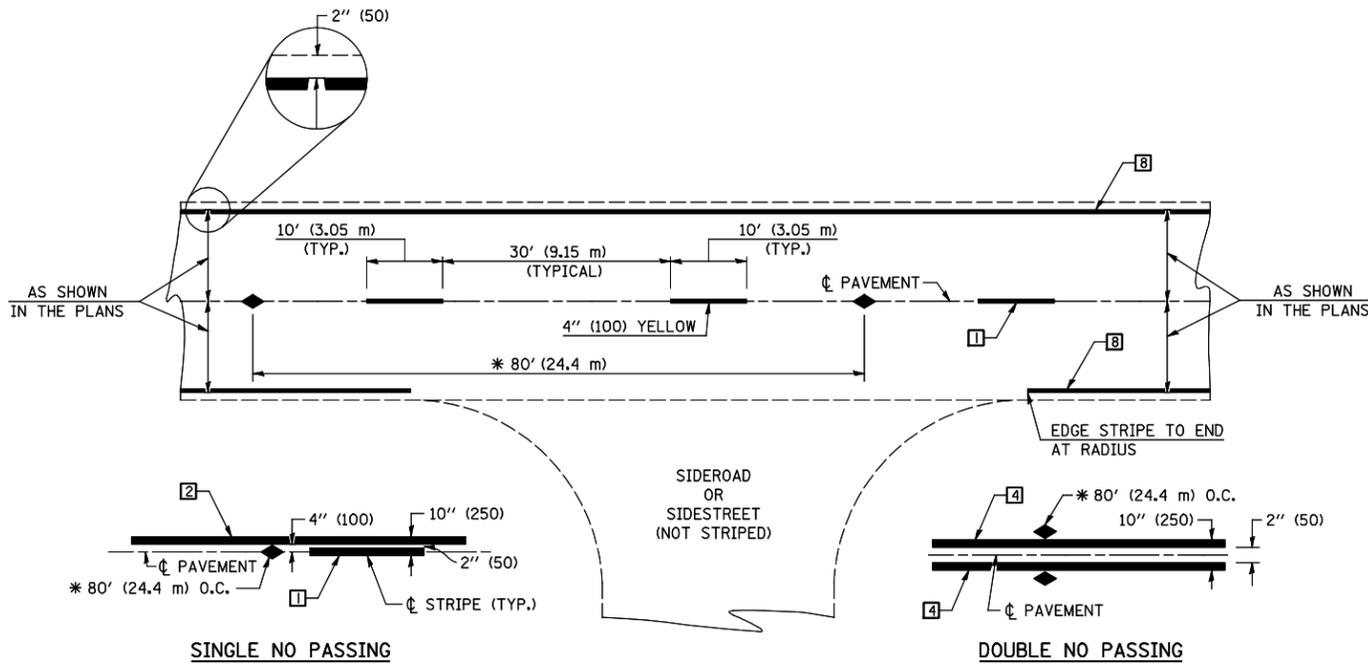
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL & PROTECTION DEVICES
(ROAD & SIDEROAD/STREET CLOSURES)

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

DISTRICT 5 DETAIL NO. 7020000

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
721	(115BR-11BR)	PIATT	32	22
CONTRACT NO. 70433				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



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

TWO LANE/TWO WAY

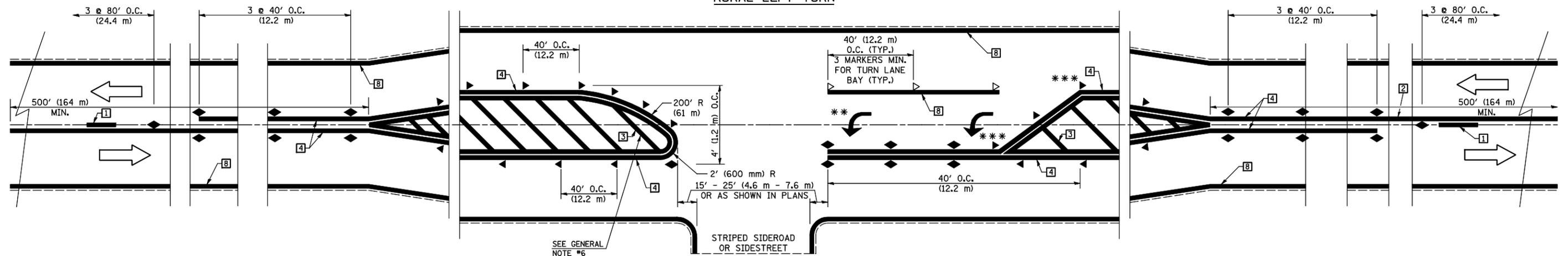
TYPICAL PAVEMENT MARKING LEGEND

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

TYPICAL PAVEMENT MARKERS LEGEND

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

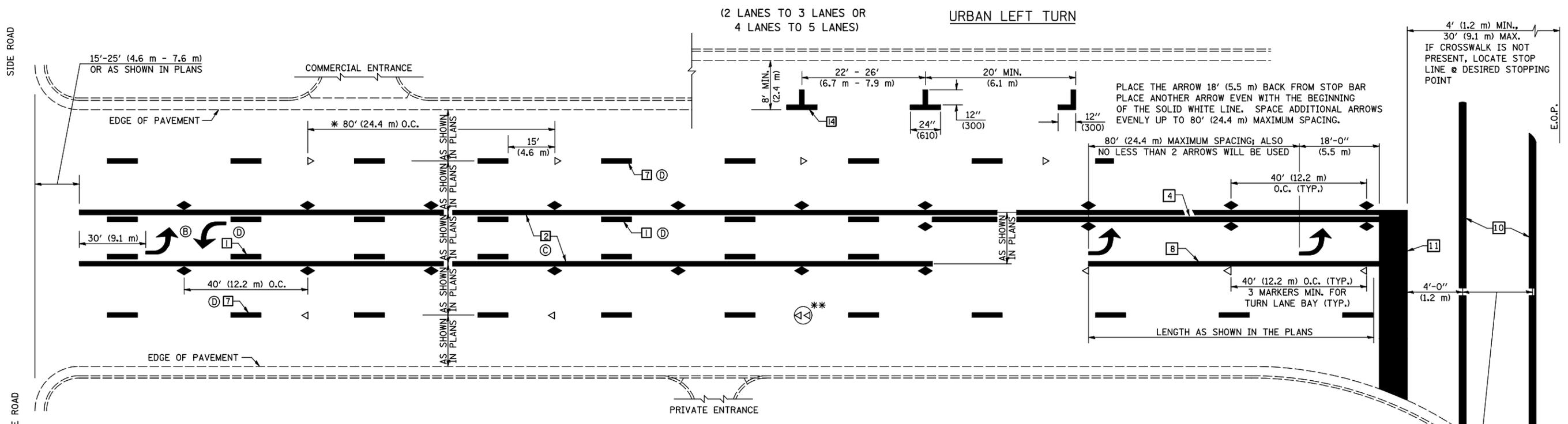
RURAL LEFT TURN



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

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

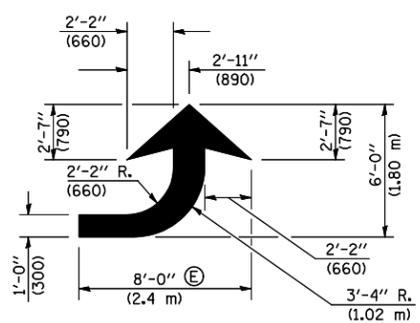
Note: All dimensions are in INCHES (millimeters) unless otherwise shown.



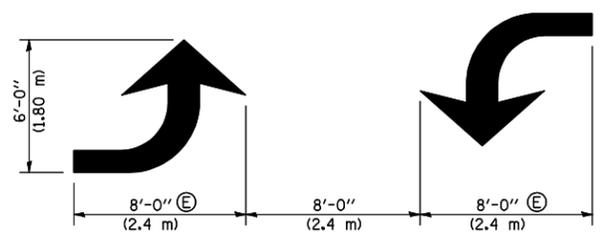
* REDUCE TO 40 FEET (12.2 METERS) ON CENTER ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH (15 km/h) LOWER THAN POSTED SPEEDS.

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

- GENERAL NOTES:**
- (B) TURN ARROW PAIRS SHALL BE PLACED AT 250' (75 m) INTERVALS AND SHALL BE EVENLY SPACED BETWEEN BOTH ENDS OF THE BIDIRECTIONAL LEFT TURN LANE.
 - (C) 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.
 - (D) THE SKIP-DASH PAVEMENT MARKINGS [1] OR [7] SHOULD BE CENTERED BETWEEN BOTH ENDS OF EACH CITY BLOCK AND SHALL BE PLACED SO THEY LINE UP ACROSS FROM EACH OTHER. SEE EXAMPLE ON SHEET 2 OF 3.
 - (E) USE LARGE ARROW SIZE FOR BOTH RURAL AND URBAN LOCATIONS. (SEE LAST PAGE OF SECTION 780x FOR SYMBOLS TABLE)

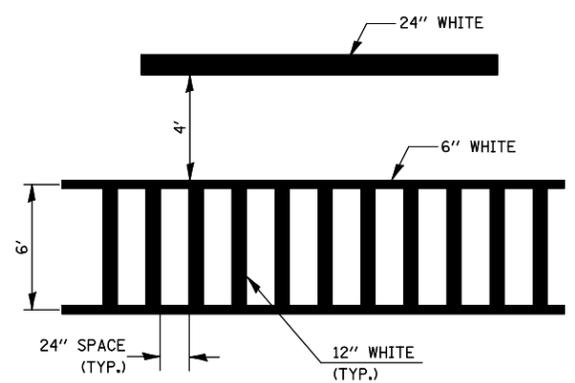


LEFT ARROW
 REVERSE FOR RIGHT ARROW
 AREA = 15.6 SQ. FT. (1.47 m²)
 (WHITE)

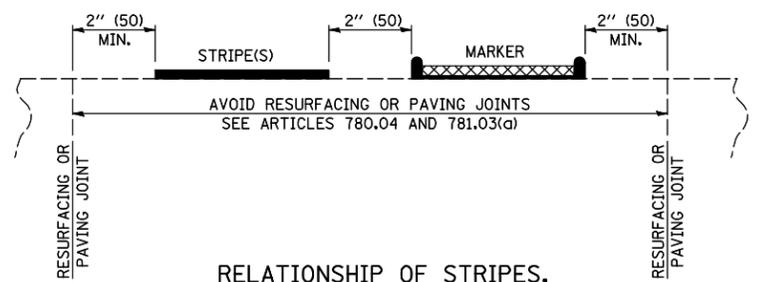


TYPICAL DOUBLE TURN ARROWS (WHITE)

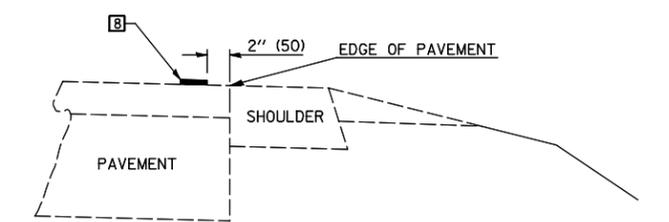
BLOOMINGTON-NORMAL CITY LIMITS ONLY



TYPICAL SPACING FOR CROSSWALKS & STOP BARS



RELATIONSHIP OF STRIPES, MARKERS AND JOINTS



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

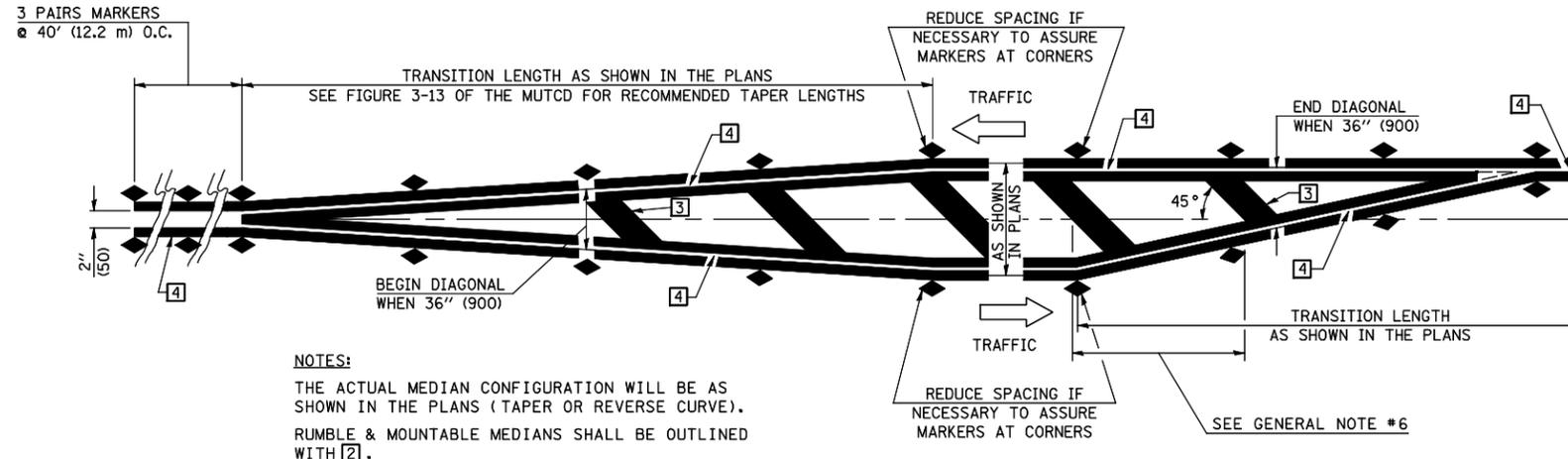
Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

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	PLOT DATE = 06/17/2008 16:33:26	CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

PAVEMENT MARKING AND MARKERS (RURAL & URBAN APPLICATIONS)			
SCALE:	SHEET NO. 2 OF 4 SHEETS	STA.	TO STA.

DISTRICT 5 DETAIL NO. 7800AAA			
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS
721	(115BR-1)BR	PIATT	32
			SHEET NO. 24
CONTRACT NO. 70433			
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			

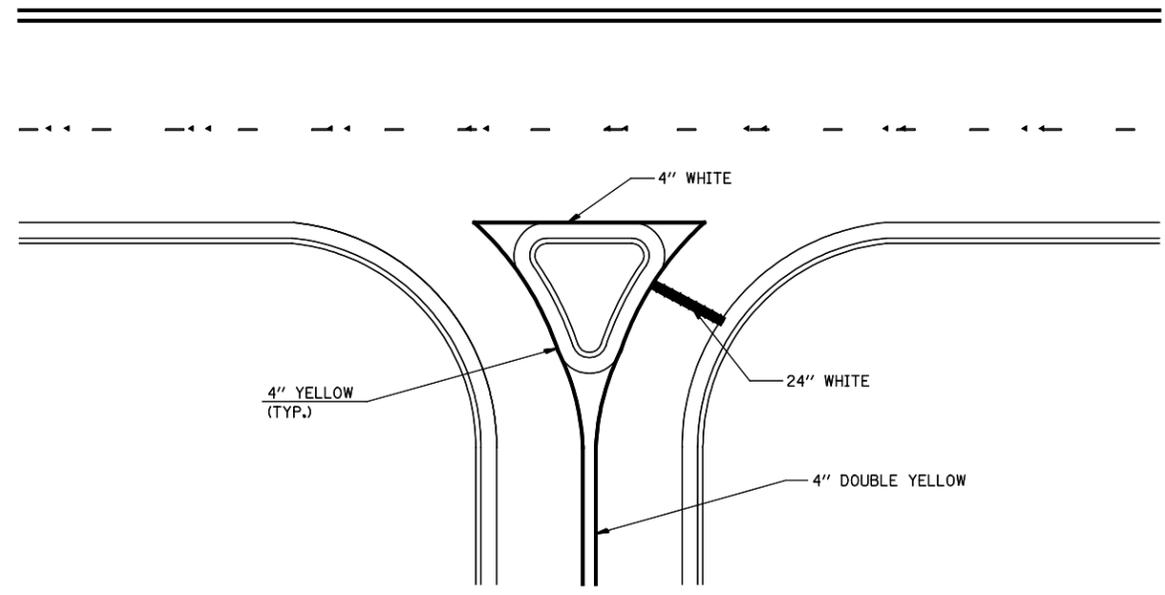


NOTES:
 THE ACTUAL MEDIAN CONFIGURATION WILL BE AS SHOWN IN THE PLANS (TAPER OR REVERSE CURVE).
 RUMBLE & MOUNTABLE MEDIANS SHALL BE OUTLINED WITH [2].

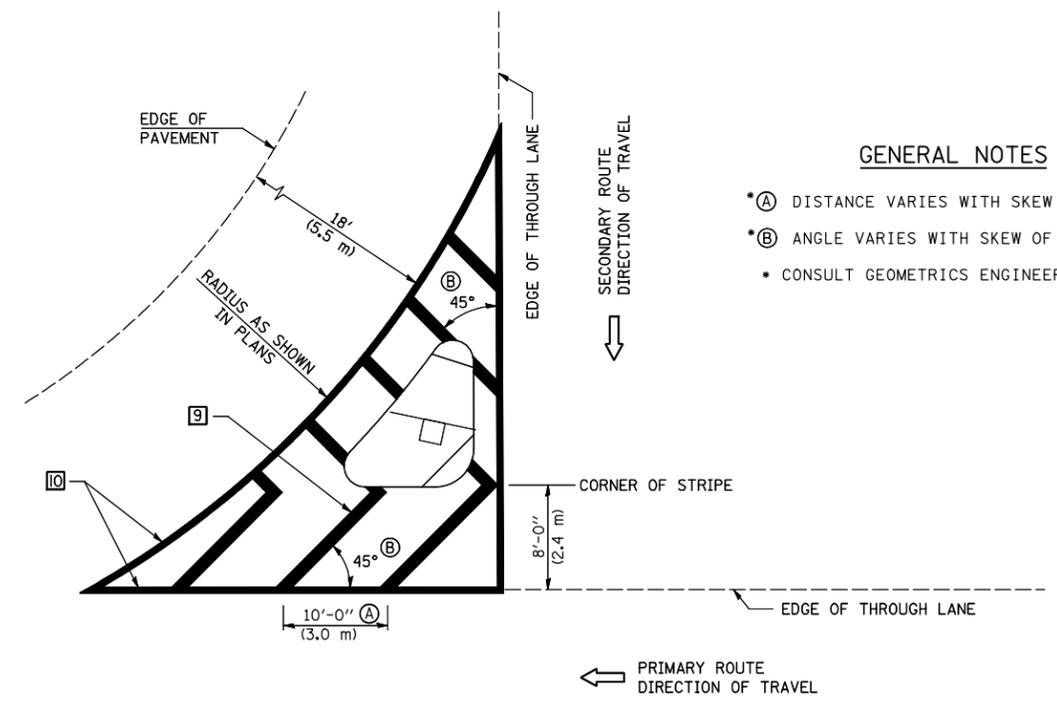
TYPICAL MEDIAN TRANSITIONS

GENERAL NOTES

1. WHEN MEDIANS ARE PRESENT, PAVEMENT MARKINGS ARE TO BE PLACED ADJACENT TO MEDIANS.
2. SOME OF THE INFORMATION INCLUDED WITH THIS DETAIL MAY NOT BE APPLICABLE TO THIS IMPROVEMENT.
3. PAVEMENT MARKINGS ARE TO BE EXTENDED THROUGH OMISSIONS WHEN APPLICABLE.
4. A STRIPING KEY IS AVAILABLE ELSEWHERE AND SHALL BE SHOWN WHERE THE QUANTITIES ARE LISTED.
5. FINAL PAVEMENT MARKINGS SHALL BE IN PLACE PRIOR TO PLACING ANY RAISED REFLECTIVE PAVEMENT MARKERS.
6. THE FOLLOWING CRITERIA SHALL BE USED FOR SELECTING THE DIAGONAL PAVEMENT MARKING SPACING,
 < 30 MPH USE 15' (< 50 km/h USE 4.5 m)
 30-45 MPH USE 20' (50-75 km/h USE 6.0 m)
 > 45 MPH USE 30' (> 75 km/h USE 9.0 m)



RIGHT IN - RIGHT OUT ACCESS



GENERAL NOTES

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

ISLAND

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

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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

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

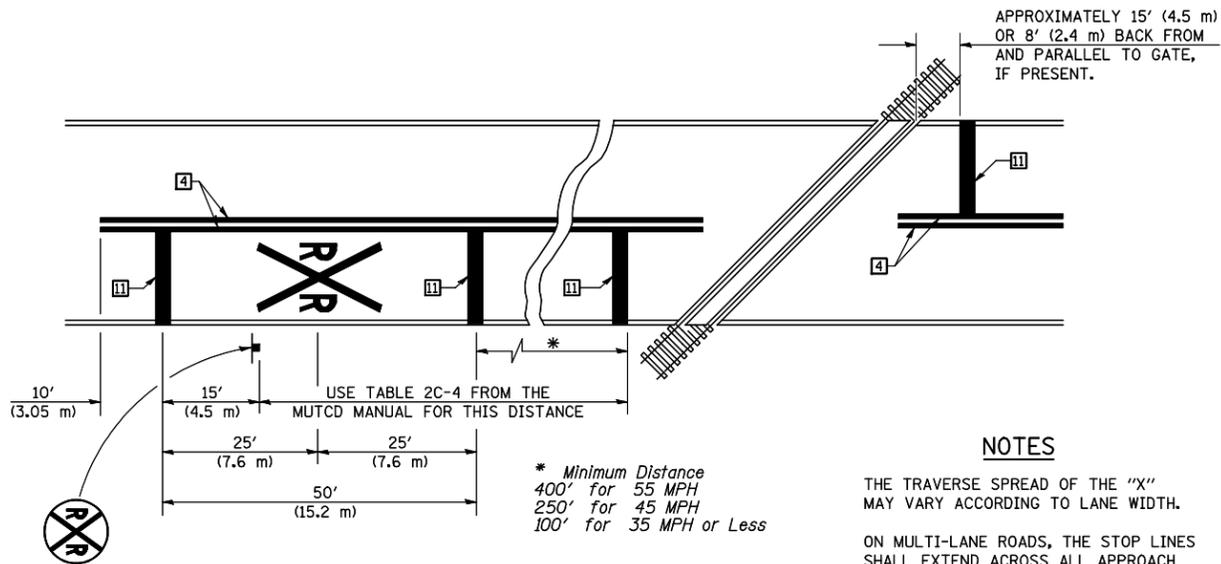
SCALE: SHEET NO. 3 OF 4 SHEETS STA. TO STA.

DISTRICT 5 DETAIL NO. 7800AAA

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
721	(115BR-1)BR	PIATT	32	25
CONTRACT NO. 70433				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

RAILROAD CROSSING WITH INTERCONNECT ONLY

RAILROAD CROSSING WITH INTERCONNECT AND PRE-SIGNALS



PAVEMENT MARKINGS AT RAILROAD-HIGHWAY GRADE CROSSING

NOTES

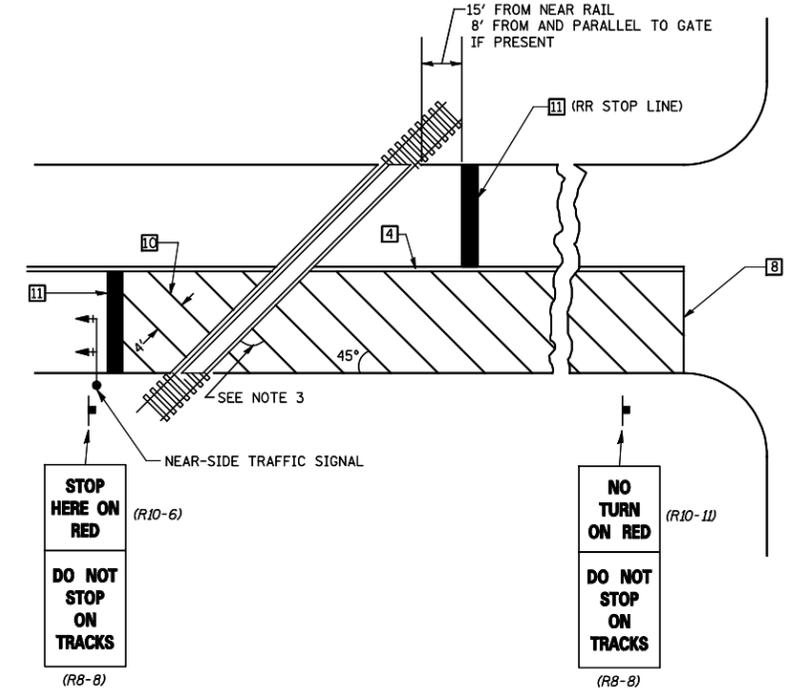
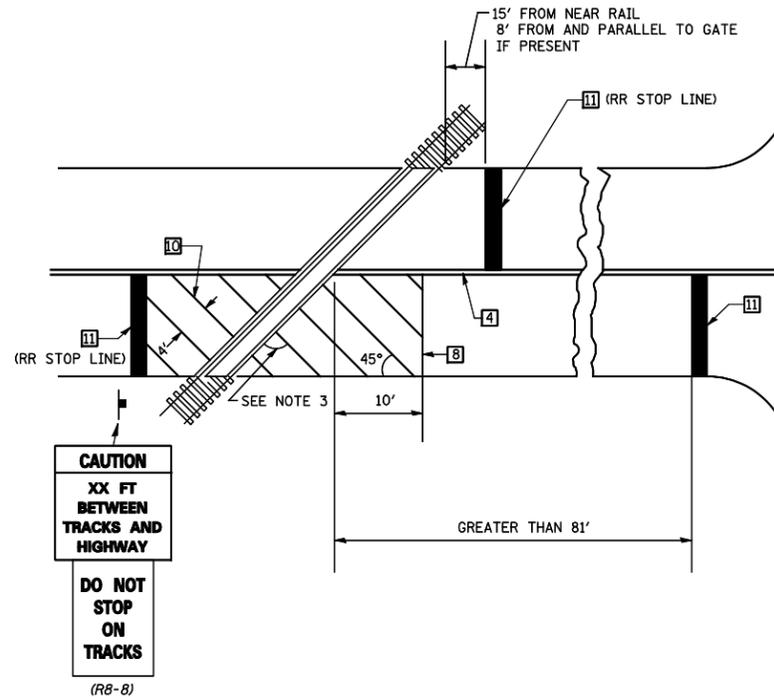
APPROXIMATELY 15' (4.5 m) OR 8' (2.4 m) BACK FROM AND PARALLEL TO GATE, IF PRESENT.

THE TRAVERSE SPREAD OF THE "X" MAY VARY ACCORDING TO LANE WIDTH.

ON MULTI-LANE ROADS, THE STOP LINES SHALL EXTEND ACROSS ALL APPROACH LANES AND SEPARATE RXR SYMBOLS SHALL BE PLACED ADJACENT TO EACH OTHER IN EACH LANE.

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

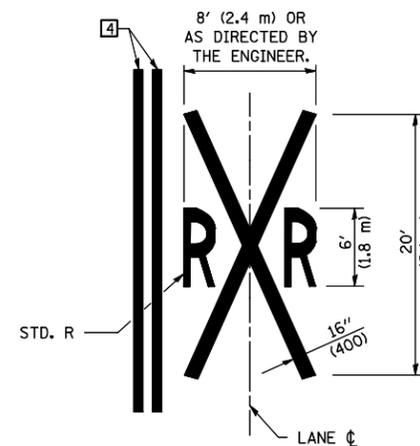
* Minimum Distance
400' for 55 MPH
250' for 45 MPH
100' for 35 MPH or Less



SUPPLEMENTAL PAVEMENT MARKING TREATMENT FOR RAILROAD-HIGHWAY GRADE CROSSING

GENERAL NOTES

- SUPPLEMENTAL PAVEMENT MARKINGS TO BE INSTALLED ONLY ON APPROACHES TO INTERSECTIONS CONTROLLED BY TRAFFIC SIGNALS WHICH ARE INTERCONNECTED WITH THE RAILROAD WARNING SIGNALS.
- EXTEND PAVEMENT MARKINGS TO THE INTERSECTION ONLY WHERE NEAR-SIDE TRAFFIC SIGNALS ARE USED.
- WHERE THE ANGLE BETWEEN THE DIAGONAL PAVEMENT MARKINGS AND THE TRACK WOULD BE LESS THAN 20°, THE PAVEMENT MARKINGS SHOULD BE PLACED IN THE OPPOSITE DIRECTION FROM THAT SHOWN.



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

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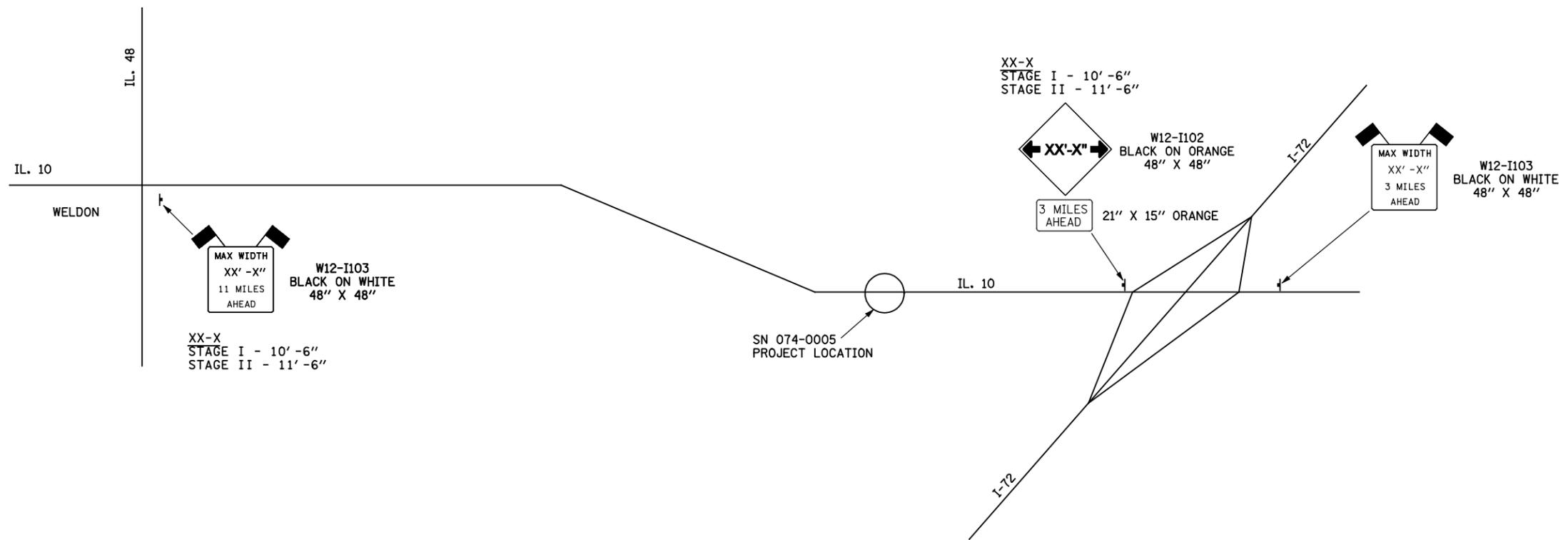
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND MARKERS
(RURAL & URBAN APPLICATIONS)

SCALE: SHEET NO. 4 OF 4 SHEETS STA. TO STA.

DISTRICT 5 DETAIL NO. 7800AAA

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
721	(115BR-1)BR	PIATT	32	26
CONTRACT NO. 70433				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



WIDTH RESTRICTION SIGNING DETAIL

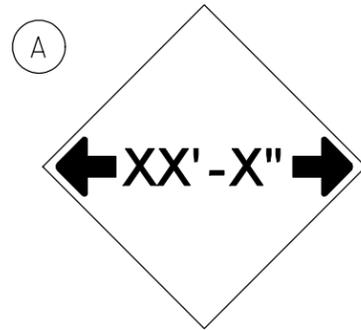
SEE DISTRICT 5 DETAIL NO. X7200201
 WIDTH RESTRICTION SIGNING FOR
 ADDITIONAL INFORMATION

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	CHECKED -	REVISED -	REVISED -
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

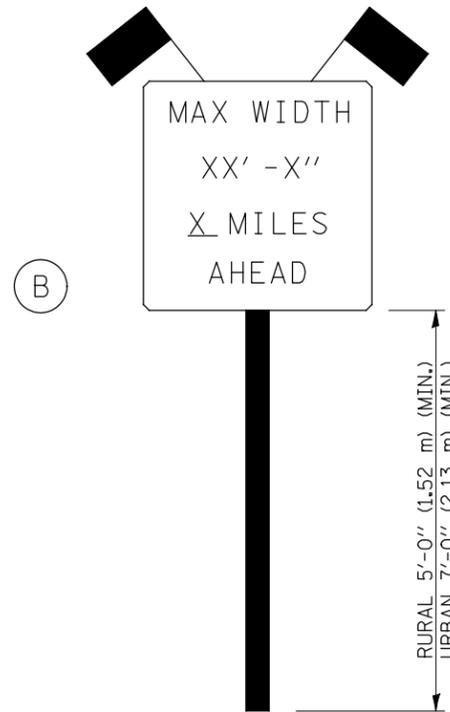
WIDTH RESTRICTION SIGNING DETAIL			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
721	(115BR-1)BR	PIATT	32	27
CONTRACT NO. 70433				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

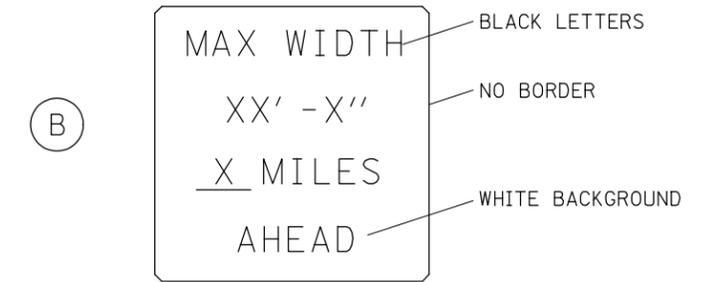


W12-2(0)-48"x48"(1200x1200)

XX-X
 STAGE I - 10'-6"
 STAGE II - 11'-6"



SIGN PANEL, TYPE II



W12-I103-48"x48"(1200x1200)
 "D" LETTERS/NUMBERS

SIGN (A) 2 SIGNS - W12-2(0)-48"x48"(1200x1200) ARE TO BE PLACED AT EACH END OF THE REPAIR IN EACH DIRECTION ALONG ROUTE 721.

SIGN (B) 2 SIGNS - (SIGN PANEL, TYPE II) AS SHOWN ARE TO BE PLACED APPROXIMATELY X MILES EACH SIDE OF THE PROJECT ON ROUTE 721.

X
 11 MILES WEST
 3 MILES EAST

GENERAL NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED AND MAINTAINED BY THE CONTRACTOR.
2. ALL (B) SIGNS SHALL HAVE FLAGS INSTALLED UNLESS OTHERWISE DIRECTED.
3. LOCATIONS OF TRAFFIC CONTROL DEVICES MAY BE ADJUSTED BY THE ENGINEER.
4. ALL TRAFFIC CONTROL SHOWN ON THIS SHEET SHALL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR WIDTH RESTRICTION SIGNING.
5. THE ILLINOIS DEPARTMENT OF TRANSPORTATION WILL SUPPLY ALL "ROUTE MARKER" SIGNS, IF APPLICABLE. THE CONTRACTOR SHALL NOTIFY THE DISTRICT BUREAU OF OPERATIONS A MINIMUM OF 10 WORKING DAYS PRIOR TO PLACEMENT OF WIDTH RESTRICTION SIGNING TO ENSURE AVAILABILITY OR FABRICATION OF THE "ROUTE MARKER" SIGNS.
6. ALL SIGNS SHALL BE POST MOUNTED UNLESS OTHERWISE DIRECTED.
7. ALL SIGNS SHOWN ORANGE (O) SHALL BE FLUORESCENT ORANGE.

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

FILE NAME = ks:\110149\Plans\details.dgn	USER NAME = SJS	DESIGNED -	REVISED - 11/06
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

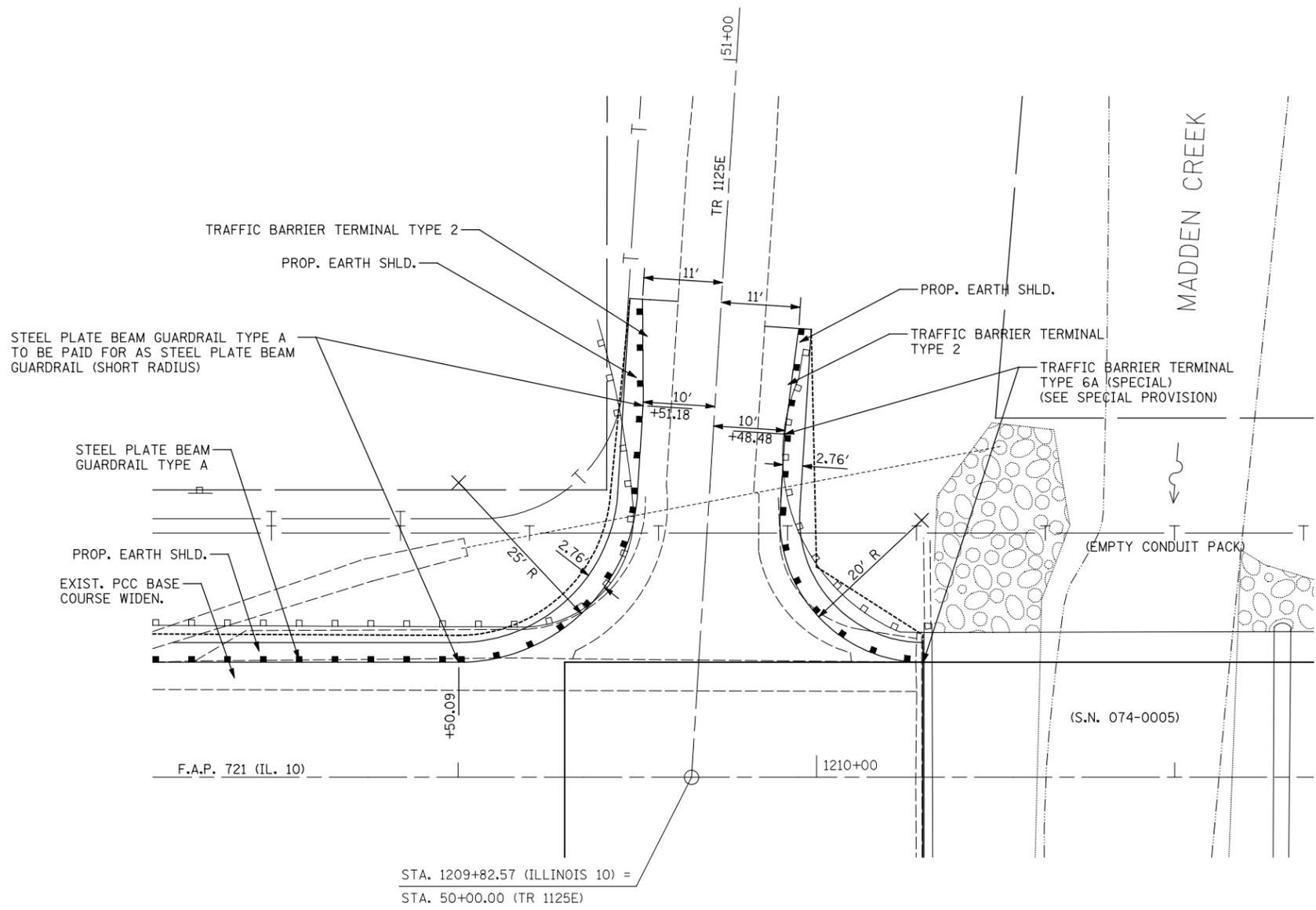
WIDTH RESTRICTION SIGNING

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

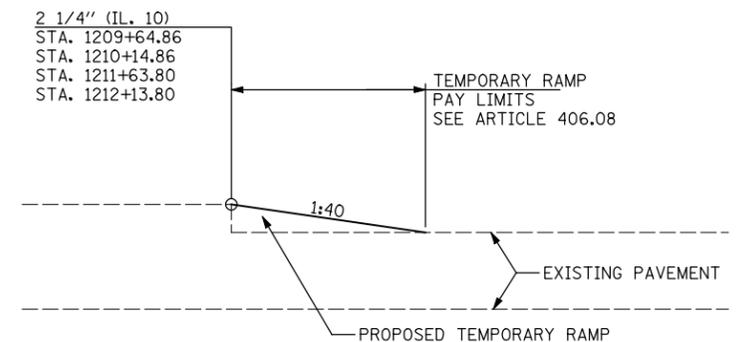
DISTRICT 5 DETAIL NO. X7200201

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
721	(115BR-1)BR	PIATT	32	28
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 70433	





GUARDRAIL LAYOUT AT SIDEROAD (TR 1125E)
LT. STA. 1209+82.57



TEMPORARY RAMP DETAIL

NOTES:
THE TEMPORARY RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
INSTALLATION AND REMOVAL OF THE TEMPORARY RAMP WILL BE PAID FOR AS "TEMPORARY RAMP".

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Johnson, Depp & Quisenberry CONSULTING ENGINEERS Springfield, Illinois	PLOT SCALE = 20.00' / IN.	DRAWN -	REVISED -
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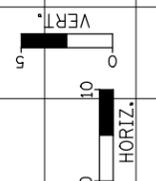
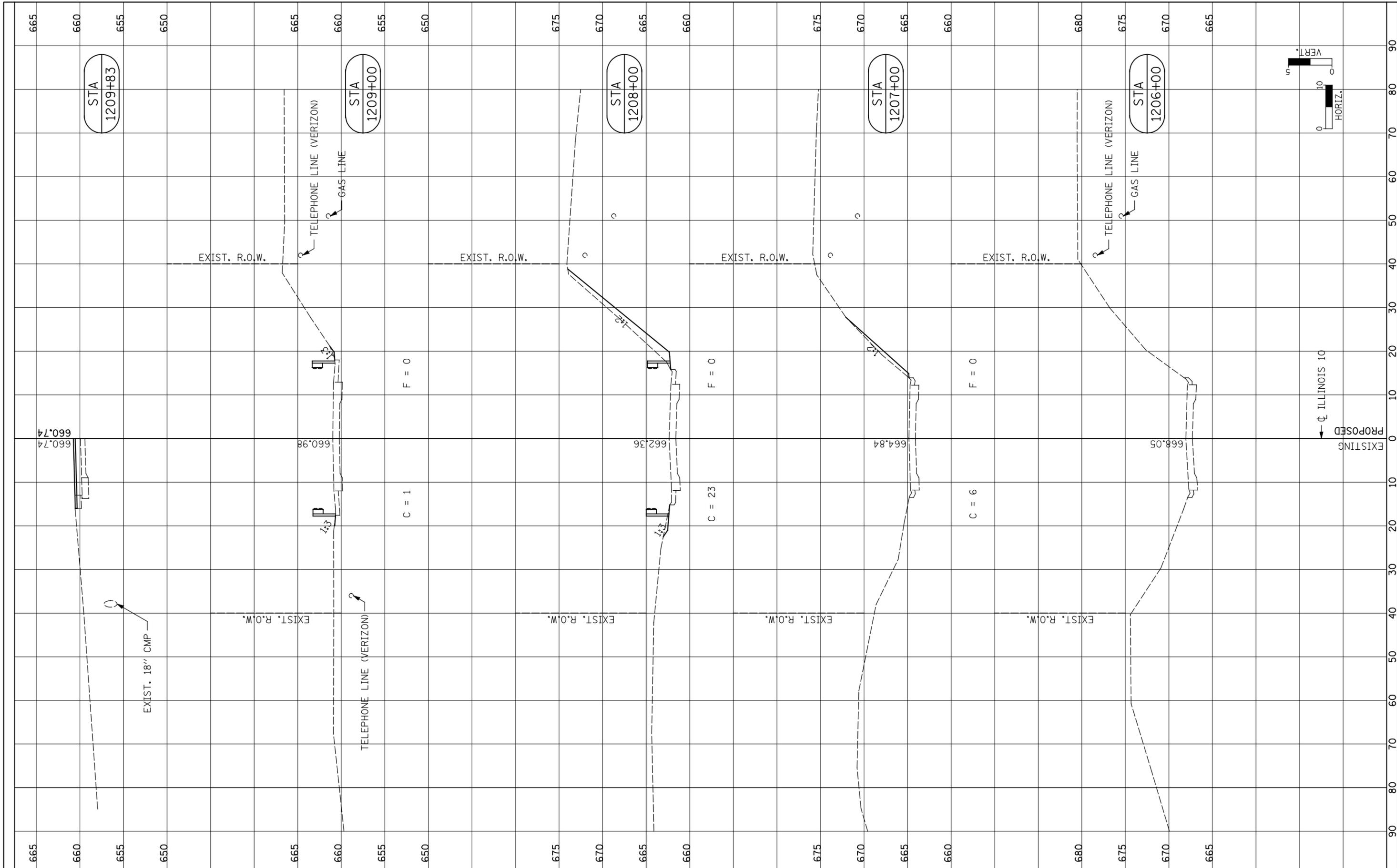
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

F.A.P. RTE. 721	SECTION (115BR-1BR)	COUNTY PIATT	TOTAL SHEETS 32	SHEET NO. 29
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 70433	

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

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



FILE NAME = kt:\110149\Plans\asec.dgn
Johnson, Depp & Quisenberry
 CONSULTING ENGINEERS
 Springfield, Illinois

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 DRAWN -
 CHECKED -
 DATE -
 PLOT SCALE = 20.0000' / IN.
 PLOT DATE = 06/17/2008 16:13:52

DESIGNED -
 DRAWN -
 CHECKED -
 DATE -

REVISED -
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

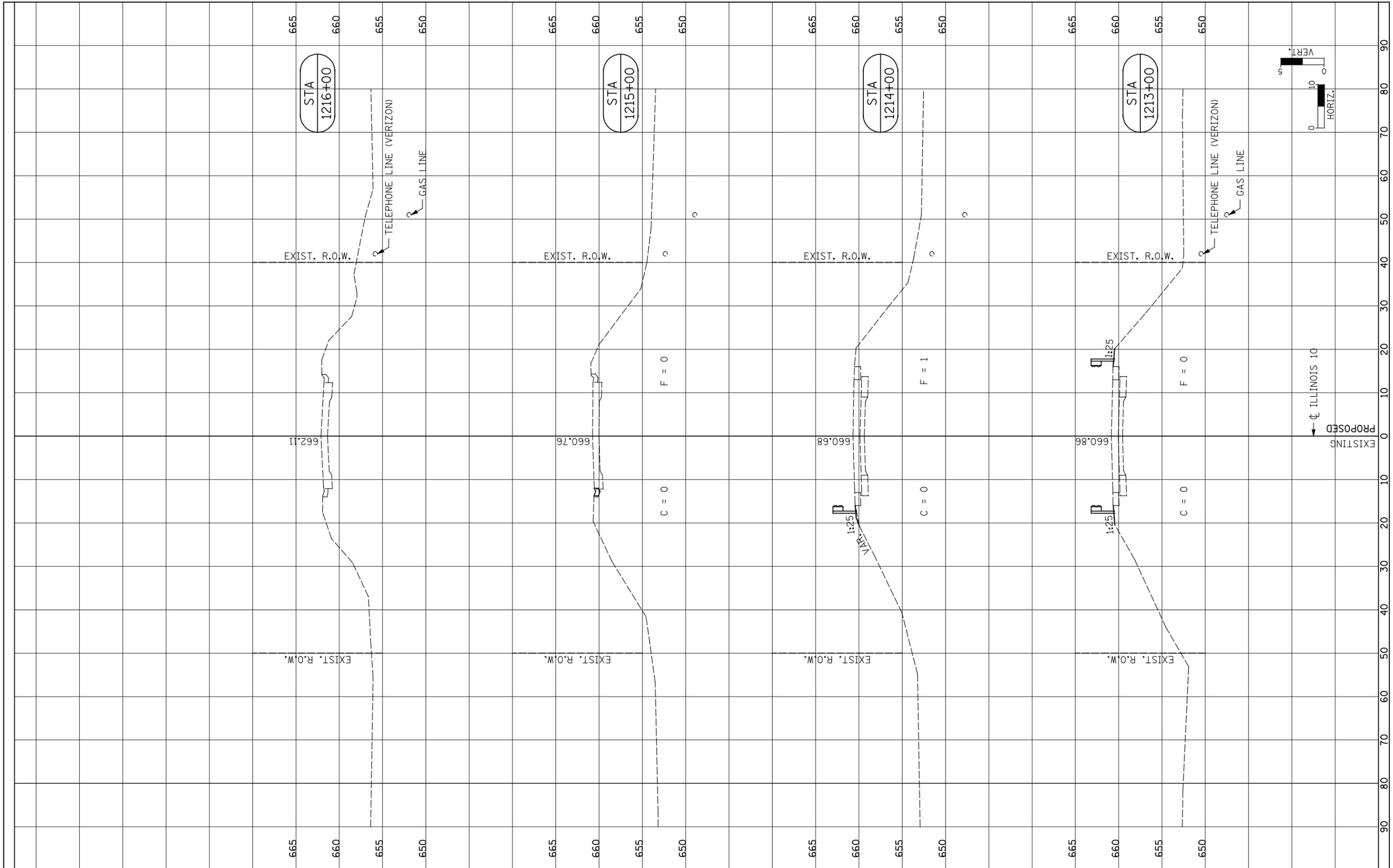
CROSS SECTION

SCALE: SHEET NO. OF SHEETS STA. 1206+00 TO STA. 1209+83

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
721	(115BR-1)BR	PIATT	32	30
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 70433	

FINAL SURVEY NO.	SURVEYED PLOTTED AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED AREAS CHECKED	BY	DATE



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Johnson, Depp & Quisenberry
 CONSULTING ENGINEERS
 Springfield, Illinois

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 CHECKED -
 DATE -
 PLOT SCALE = 20.0000' / IN.
 PLOT DATE = 06/17/2008 16:13:55

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CROSS SECTION

SCALE: SHEET NO. OF SHEETS STA. 1213+00 TO STA. 1216+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
721	(115BR-1)BR	PIATT	32	32
CONTRACT NO. 70433				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				