

FAU RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7825	(K-15D)BR	ADAMS	31	1

T1
32

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

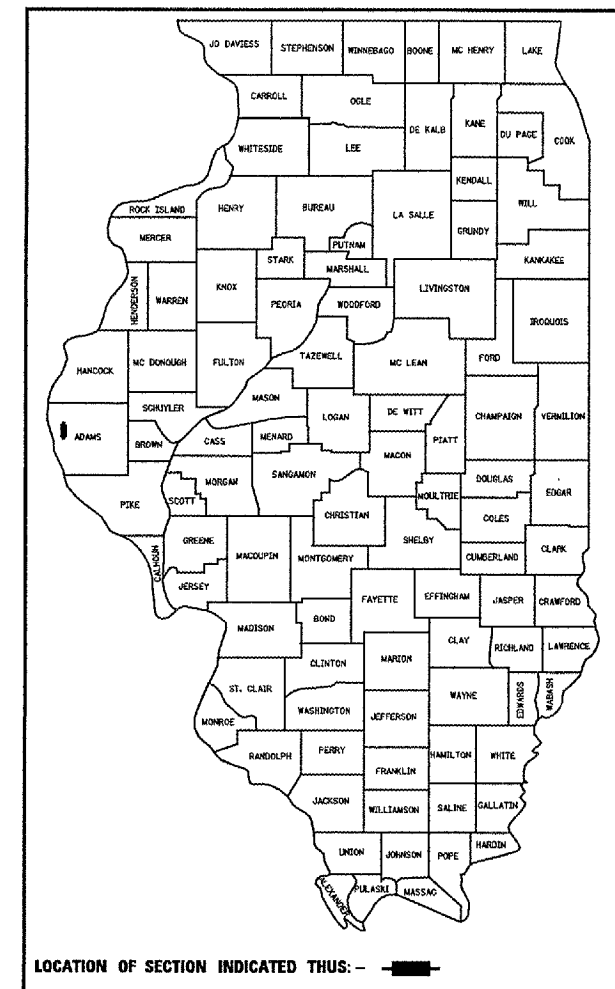
PROPOSED BRIDGE DECK REPLACEMENT PLANS

FAU ROUTE 7825 (IL 96) OVER HOMAN CREEK
SECTION (K-15D)BR
PROJECT: BHM-7825(004)
ADAMS COUNTY
C-96-537-07

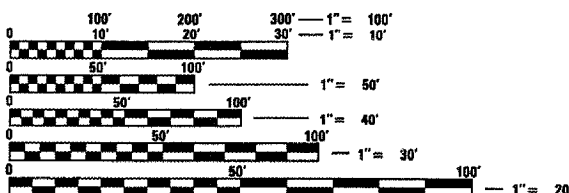
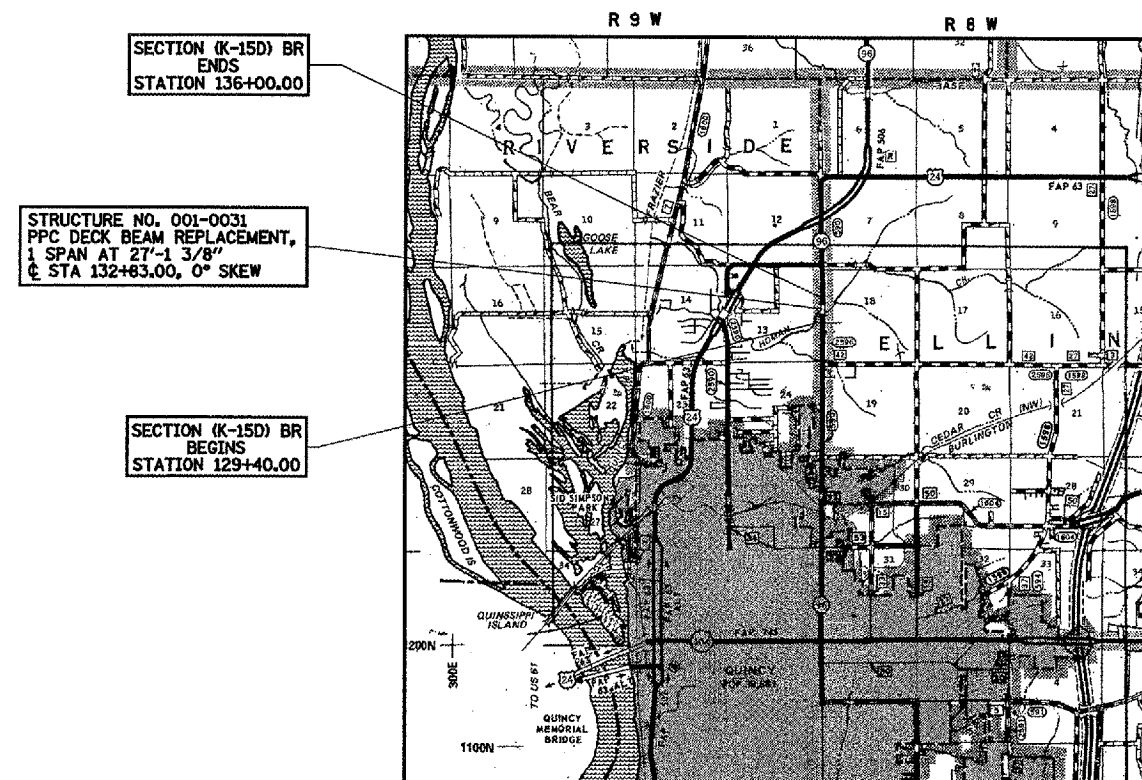
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D-96-516-06



LOCATION OF SECTION INDICATED THIS: - [shaded box]



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.

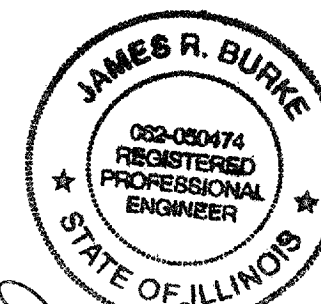
J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123

CONTRACT NO. 72A36

DESIGN DESIGNATION
FAU 7825
COLLECTOR
ADT = 5800 (2027)
% SU = 8
% MU = 4

0 1 2 MILES
APPROXIMATE SCALE 1" = 1 MILE

TOTAL LENGTH OF PROJECT = 660.00 FEET = 0.125 MILES
NET LENGTH OF PROJECT = 660.00 FEET = 0.125 MILES



J. R. Burke 6/26/07
Exp 11/30/07
Rev.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED *June 28, 07*
Cliff M. Reed
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

August 17, 20 07
Eric E. Horn
ENGINEER OF DESIGN AND ENVIRONMENT

August 17, 20 07
Milton R. Sees, P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

Hutchison Engineering, Inc.
JACKSONVILLE
SHOREWOOD
SINCE 1946

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7825	CK-1501BR	ADAMS	31	2
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

GENERAL NOTES

- ALL ELEVATIONS REFER TO NAVD88 DATUM.
- WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL MONUMENTS UNTIL AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR WILL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR RE-ESTABLISH ANY SECTION OR SUBSECTION MONUMENTS DESTROYED BY HIS OPERATIONS.
- ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUB-NUMBER LISTED OR THE COPY OF THE STANDARD INCLUDED IN THESE PLANS.
- ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OUTSIDE THE LIMITS OF RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- ALL DISTURBED UNSURFACED AREAS WITHIN THE ROW AND EASEMENTS SHALL BE SEEDED, FERTILIZED, AND MULCHED AS SHOWN IN THE PLANS. SPECIAL PROVISIONS, AND AS DIRECTED BY THE ENGINEER. SEEDING WILL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET OR IN AN UNTILLABLE CONDITION.
- FERTILIZER NUTRIENTS SHALL BE APPLIED TO BOTH THE SEEDED AREAS AND THE AREAS COVERED WITH EROSION CONTROL BLANKET.
- DO NOT INCLUDE MULCH OR EMULSIFIED ASPHALT ON EROSION CONTROL BLANKET AREAS.
- BEFORE ORDERING PIPE CULVERTS OR PIPE DRAINS, THE CONTRACTOR SHALL CONSULT THE ENGINEER FOR EXACT LENGTHS.
- ALL TREES, BRUSH AND SHRUBS WITHIN THE CONSTRUCTION LIMITS WILL BE REMOVED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. TREES ALONG THE EDGE OF RIGHT OF WAY, OUTSIDE THE CONSTRUCTION LIMITS SHALL BE SAVED IF, IN THE OPINION OF THE ENGINEER, THEY DO NOT INTERFERE WITH CONSTRUCTION OPERATIONS. THE CONTRACTOR WILL PROTECT ALL REMAINING TREES FROM DAMAGE DUE TO HIS OPERATIONS.
- IN ACCORDANCE WITH STATE OF ILLINOIS P.A. 86-0674, THE CONTRACTOR IS TO NOTIFY ALL UTILITY COMPANIES NOT MORE THAN 14 DAYS NOR LESS THAN 48 HOURS (EXCLUSIVE OF SATURDAYS, SUNDAYS, AND HOLIDAYS) IN ADVANCE OF THE START OF EXCAVATION OR DEMOLITION.

- THE LOCATION OF BURIED AND ABOVE GROUND UTILITIES SHOWN ARE APPROXIMATE, AND ARE SHOWN FOR CONTRACTOR INFORMATIONAL USE ONLY, AND ARE NOT TO BE REFERENCED FOR CONSTRUCTION PURPOSES. THE IMPLIED PRESENCE OR ABSENCE OF UTILITIES IS NOT TO BE CONSTRUED BY THE OWNER, ENGINEER, CONTRACTOR, OR SUBCONTRACTORS TO BE AN ACCURATE AND COMPLETE REPRESENTATION OF UTILITIES THAT MAY OR MAY NOT EXIST ON THE CONSTRUCTION SITE. BURIED AND ABOVE GROUND UTILITY LOCATIONS, IDENTIFICATION, AND MARKING ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. REROUTING, DISCONNECTION, PROTECTION, ETC. OF ANY UTILITIES MUST BE COORDINATED BETWEEN THE CONTRACTOR, UTILITY COMPANY, AND OWNER. SITE SAFETY, INCLUDING THE AVOIDANCE OF HAZARDS ASSOCIATED WITH BURIED AND ABOVE GROUND UTILITIES, REMAINS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- AN ASPHALT PRIME SHALL BE REQUIRED FOR THE PRIMING OF THE MAINLINE PAVEMENT TO BE RESURFACED. THE AREA PRIMED SHALL BE LIMITED TO THAT WHICH WILL BE COVERED WITH BITUMINOUS CONCRETE THAT SAME DAY.
- EXISTING RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE REMOVED PRIOR TO RESURFACING.
- THE FOLLOWING RATES OF APPLICATION HAVE BEEN ASSUMED IN CALCULATING PLAN QUANTITIES :
 AGGREGATE (SURFACE, BASE, SUBBASE, OR BACKFILL) 2.05 TON/CUBIC YARD
 STONE DUMPED RIPRAP 1.75 TON/CUBIC YARD
 BITUMINOUS MATERIALS (PRIME COAT) 0.00038 TON/SQUARE YARD (ON PAVEMENT)
 BITUMINOUS MATERIALS (PRIME COAT) 0.001425 TON/SQUARE YARD (ON AGGREGATE)
 AGGREGATE (PRIME COAT) 0.002 TON/SQUARE YARD
 HMA SURFACE/BINDER (112 LBS) 0.056 TON/SQUARE YARD-INCH
- THE REMOVAL AND REPLACEMENT OF MAILBOXES NECESSARY FOR CONSTRUCTION OF THE HMA SHOULDERS AND MAILBOX TURNOUTS AS SHOWN ON THE PLANS SHALL BE INCLUDED IN THE COST OF THE HMA SHOULDERS.
- THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

MIXTURE USE(S)	HMA BASE CSE / WIDENING	FLEXIBLE CONNECTOR BINDER	FLEXIBLE CONNECTOR SURFACE	INCIDENTAL HMA SURFACE	HMA SURFACE COURSE	HMA SHOULDERS
AC/PG	PG 64-22	PG 64-22	PG 64-22	PG 64-22	PG 64-22	PG 58-22
DESIGN AIR VOIDS	4.0% @ N DESIGN=50	4.0% @ N DESIGN=50	4.0% @ N DESIGN=50	4.0% @ N DESIGN=50	4.0% @ N DESIGN=50	2.0% @ N DESIGN=30
MIX COMPOSITION: (GRADATION MIXTURE)	IL-19.0	IL-19.0	IL-9.5 OR 12.5	IL-9.5 OR 12.5	IL-9.5 OR 12.5	BAM
FRICITION AGGREGATE	N/A	N/A	MIX "C"	MIX "C"	MIX "C"	N/A

STANDARDS

- 000001-04
- 280001-03
- 420401-05
- 515001-02
- 630001-07
- 630301-04
- 631032-03
- 635006-02
- 635011-01
- 701001-01
- 701006-02
- 701011-01
- 701201-02
- 701301-02
- 701306-01
- 701311-02
- 701321-08
- 701326-02
- 702001-06
- 704001-03
- 780001-01
- 781001-02
- 886001
- 886006

J.U.L.I.E. TELEPHONE NUMBER
1-800-892-0123





KNOWN UTILITIES LOCATION WITHIN THE LIMITS OF THIS IMPROVEMENT ARE:

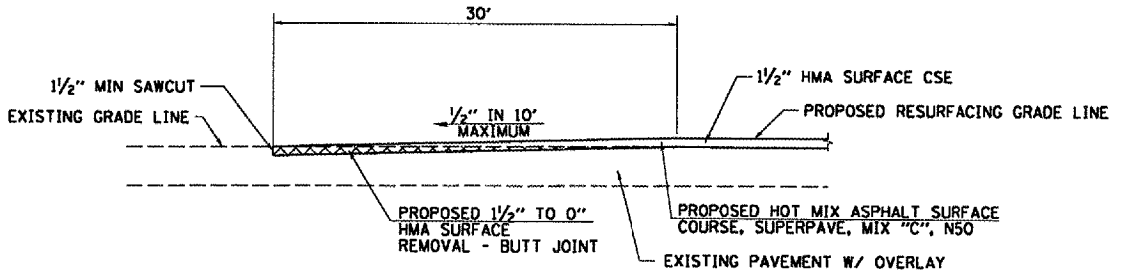
- ADAMS ELECTRIC COOPERATIVE
- ADAMS TELEPHONE COOPERATIVE
- SBC
- INSIGHT COMMUNICATIONS
- AMEREN CIPS
- CLAYTON CAMP POINT WATER COOPERATIVE
- MILL CREEK WATER DISTRICT
- MCLEOD USA
- CITY OF QUINCY
- ENBRIDGE INC

COMMITMENTS

THE FIELD/RESIDENT ENGINEER SHALL CONTACT DISTRICT 6 STUDIES & PLANS AT 217-782-6990 CONCERNING ANY MAJOR PLAN CHANGES TO MAKE SURE NO PREVIOUS COMMITMENTS (NOT LISTED) WERE MADE AFFECTING THE DESIGN, AND TO ALLOW IMPROVEMENTS IN THE DESIGN FOR FUTURE PROJECTS.

LEGEND

-  PAVEMENT REMOVAL
-  HMA SURFACE REMOVAL-BUTT JOINT
-  TO BE REMOVED
-  TRAFFIC CONTROL STAGE NUMBER



BUTT JOINT DETAIL
(SEE PLANS FOR LOCATIONS)

EXAMINED <u>June 12</u> 20 <u>07</u>
<u>W.R. Jones</u> PROGRAM IMPLEMENTATION ENGINEER
EXAMINED <u>June 28</u> 20 <u>07</u>
<u>W.R. Jones</u> PROGRAM DEVELOPMENT ENGINEER

DISTRICT SIX	
EXAMINED <u>June 12</u> 20 <u>07</u>	
<u>Sandra A. Hoan</u> OPERATIONS ENGINEER	

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL NOTES AND LEGEND
DRAWN BY JCW
CHECKED BY JRB

Rev.

F.A.P. SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7825 (K-15D)BR	ADAMS	31	3
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	

SUMMARY OF QUANTITIES

80% FED. / 20% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				I000	X080-2A
X0324744	REMOVAL OF EXISTING PRECAST CONCRETE UNITS	SQ FT	299		299
X0325305	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	209		209
X5030305	CONCRETE WEARING SURFACE, 5"	SQ YD	133		133
X7200201	WIDTH RESTRICTION SIGNING	L SUM	1	1	
Z0030260	IMPACT ATTENUATORS, TEMPORARY (FULLY-REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2	2	
Z0030330	IMPACT ATTENUATORS, RELOCATE (FULLY-REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
Z0073500	TEMPORARY SUPPORT SYSTEM	L SUM	1		1
20200600	EXCAVATING AND GRADING EXISTING SHOULDER	UNIT	12	12	
21400110	GRADING AND SHAPING DITCHES	UNIT	1	1	
28100806	STONE DUMPED RIPRAP, CLASS A3 (SPECIAL)	TON	218	218	

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

DATE: 05/31/07

DRAWN BY JCW
CHECKED BY JRB

SUMMARY OF QUANTITIES

80% FED. / 20% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				I000	X080-2A
35101400	AGGREGATE BASE COURSE, TYPE B	TON	47	47	
35600716	HOT-MIX ASPHALT BASE COURSE WIDENING, 10"	SQ YD	427	427	
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	1	1	
40600300	AGGREGATE (PRIME COAT)	TON	4	4	
40600895	CONSTRUCTING TEST STRIP	EACH	1	1	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	414	414	
40600990	TEMPORARY RAMP	SQ YD	58	58	
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	145	145	
40800050	INCIDENTAL HOT-MIX ASPHALT SURFACE	TON	8	8	
42001400	BRIDGE APPROACH PAVEMENT (SPECIAL)	SQ YD	113	113	

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

DRAWN BY JCW
CHECKED BY JRB

DATE: 05/31/07

SUMMARY OF QUANTITIES

80% FED. / 20% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				I000	X080-2A
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	35	35	
44000100	PAVEMENT REMOVAL	SQ YD	150	150	
48101300	AGGREGATE SHOULDERS, TYPE B (SPECIAL)	TON	26	26	
48203100	HOT-MIX ASPHALT SHOULDERS	TON	36	36	
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1		1
50300260	BRIDGE DECK GROOVING	SQ YD	93		93
50300300	PROTECTIVE COAT	SQ YD	135		135
50400105	PRECAST CONCRETE BRIDGE SLAB	SQ FT	299		299
50400305	PRECAST PRESTRESSED CONCRETE DECK BEAMS (17" DEPTH)	SQ FT	895		895
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1870		1870

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
SUMMARY OF QUANTITIES		DATE: 05/31/07
DRAWN BY JCW		CHECKED BY JRB

SUMMARY OF QUANTITIES

80% FED / 20% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				I000	X080-2A
50800515	BAR SPLICERS	EACH	112		112
50901050	STEEL RAILING, TYPE SM	FOOT	134		134
51500100	NAME PLATES	EACH	1		1
* 63000000	STEEL PLATE BEAM GUARDRAIL, TYPE A	FOOT	237.5	237.5	
* 63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4	4	
* 63100167	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)	EACH	4	4	
63200310	GUARDRAIL REMOVAL	FOOT	533	533	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	8	8	
67100100	MOBILIZATION	L SUM	1	1	
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1	

* SPECIALITY ITEM

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

DRAWN BY JCW
CHECKED BY JRB

DATE: 05/31/07

F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7825	(K-150)BR	ADAMS	31	7
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

80% FED. / 20% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				I000	X080-2A
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1	
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1	
70101205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321 (SPECIAL)	EACH	1	1	
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	5	5	
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1	
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	66	66	
70300230	TEMPORARY PAVEMENT MARKING - LINE 5"	FOOT	4115	4115	
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	24	24	
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	1785	1785	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	320	320	

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

DATE: 05/31/07

DRAWN BY JCW
CHECKED BY JRB

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7825	IK-150)BR	ADAMS	31	8
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

90% FED. / 10% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				I000	X080-2A
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	320	320	
* 78001120	PAINT PAVEMENT MARKING - LINE 5"	FOOT	1485	1485	
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	9	9	
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	8	8	
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4	
78300100	PAVEMENT MARKING REMOVAL	SQ FT	619	619	
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	9	9	

* SPECIALITY ITEM

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

DRAWN BY JCW

CHECKED BY JRB

DATE: 05/31/07

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7825	(K-15)BR	ADAMS	31	9
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

STONE DUMPED RIPRAP, CLASS A3 (SPECIAL)

STATION TO STATION	SIDE	STONE RIPRAP, CLASS A3 TON	
129+40.0	132+69.4	RT	151.7
132+49.5	132+69.4	LT	11.0
132+69.4	132+96.6	LT & RT	0.0
132+96.6	136+00.0	LT	29.8
132+96.6	133+16.0	RT	10.9
133+16.0	133+50.0	RT	14.5
TOTAL			217.9
USE			218

AGGREGATE SHOULDERS, TYPE B (SPECIAL)

STATION TO STATION	SIDE	AGGREGATE SHOULDERS, TYPE B (SP) TON	
130+53.00	130+77.00	LT	0.5
130+77.00	132+49.50	LT	6.2
130+80.18	130+83.93	RT	0.1
130+83.93	132+49.50	RT	5.9
133+16.50	135+51.52	LT	8.4
135+51.52	135+72.52	LT	0.5
133+16.50	134+20.50	RT	3.7
134+20.50	134+24.25	RT	0.1
TOTAL			25.4
USE			26

EARTHWORK SCHEDULE

STATION TO STATION	EXCAVATION	EXCAVATION ADJUSTED FOR	EMBANKMENT	BALANCE WASTE OR SHORTAGE (-)
CU. YD.				
129+40.00	132+69.42	0	0	33.5
132+69.42	132+96.58	0	0	0
132+96.58	136+00.00	0	0	5.4
TOTALS		0	0	38.9
USE				-40

EXCAVATING AND GRADING EXISTING SHOULDER

STATION TO STATION	SIDE	LENGTH FT	UNITS
129+40.00	132+49.50	LT & RT	619.0
133+16.50	136+00.00	LT & RT	567.0
TOTAL			1186
USE			12

* EXCAVATED MATERIAL GENERATED FROM EXCAVATING AND GRADING EXISTING SHOULDER TO BE USED FOR EMBANKMENT

GUARDRAIL REMOVAL

STATION TO STATION	SIDE	LENGTH FT	
131+21.8	134+19.3	LT	297.5
131+59.3	133+94.0	RT	234.7
TOTAL			532.2
USE			533

BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE) SCHEDULE

STATION TO STATION	LENGTH FT	WIDTH FT	AREA SQ YD
132+43.49	132+49.50	6	26
133+16.02	133+22.02	6	26
TOTAL			34.8
USE			35

GRADING AND SHAPING DITCHES

STATION TO STATION	SIDE	LENGTH FT	UNIT
131+00.00	132+00.00	RT	100
TOTAL			100
USE			1

GUARDRAIL SCHEDULE

STATION TO STATION	SIDE	STEEL PLATE BEAM GUARDRAIL, TYPE A	STEEL RAILING, TYPE SM	TRAFFIC BARRIER TERMINALS		TERMINAL MARKER - DIRECT APPLIED
				TYPE 1, SPECIAL	TYPE 6A	
FOOT						
130+99.5	132+49.5	RT	50.0	1	1	1
130+87.0	132+49.5	LT	62.5	1	1	1
132+49.5	133+16.5	LT				
132+49.5	133+16.5	RT				
133+16.5	134+16.5	RT				
133+16.5	135+41.5	LT	125.0	1	1	1
TOTALS			237.5	4	4	4
USE			237.5	4	4	4

HMA WIDENING & SHOULDER SCHEDULE

STATION TO STATION	SIDE	HMA	
		BASE COURSE WIDENING, 10"	SHOULDERS
SQ YD			
129+40.00	130+15.00	LT & RT	37.5
130+15.00	132+49.50	LT & RT	182.4
133+16.50	135+50.00	LT & RT	181.6
135+50.00	136+00.00	LT & RT	25.0
TOTAL			426.5
USE			427

PAINT PAVEMENT MARKING - LINE 5" SCHEDULE

STATION TO STATION	SIDE	PAINT PAVEMENT MARKING - LINE 5"	
		SOLID WHITE	SKIP-DASH YELLOW
FOOT			
129+40.00	136+00.00	LT & RT	1320
129+40.00	136+00.00	CL	165
TOTALS			1485
USE			1485

PAVEMENT REMOVAL

STATION TO STATION	SIDE	LENGTH FT	WIDTH FT	AREA SQ YD
132+43.49	132+69.40	LT & RT	25.9	26
132+96.60	133+22.00	LT & RT	25.9	26
TOTAL				149.7
USE				150

PAVING SCHEDULE

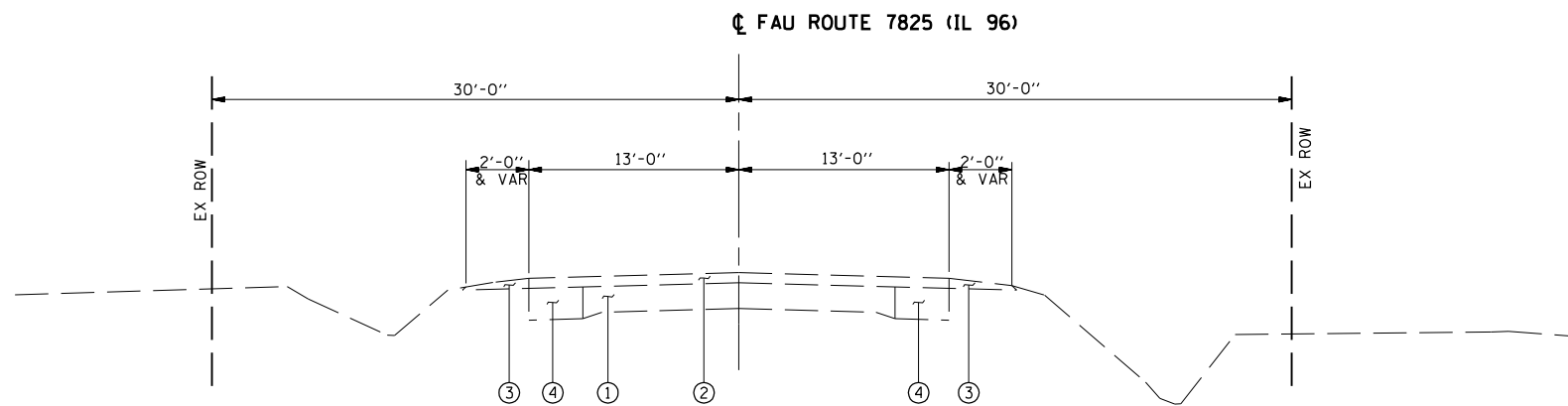
STATION TO STATION	BITUMINOUS MATERIALS (PRIME COAT)	AGGREGATE (PRIME COAT)	HMA SURFACE CSE, MIX "C", NSO, 1 1/2"	BRIDGE APPROACH PAVEMENT (SPECIAL)
129+40.00	132+49.50	0.5	1.8	75.5
132+49.50	132+69.42			56.4
132+96.58	133+16.50			56.4
133+16.50	136+00.00	0.5	1.7	69.1
TOTAL		1.0	3.5	144.6
USE		1	4	145

ENTRANCE PAVEMENT SCHEDULE

STATION	SIDE	TYPE	AREA SQ YD	AGG BASE CSE, TY B	INCLD HMA SURFACE
130+66.0	RT	PE/SR	36.5	16.6	7.1
134+32.0	RT	PE	29.5	10.1	
134+57.7	RT	MB T/O	9.8	3.4	
135+14.0	RT	CE	36.5	16.6	
TOTAL			46.7	46.7	7.1
USE			47		8

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
SCHEDULE OF QUANTITIES		DATE: 05/31/07
DRAWN BY JCW		CHECKED BY JRB

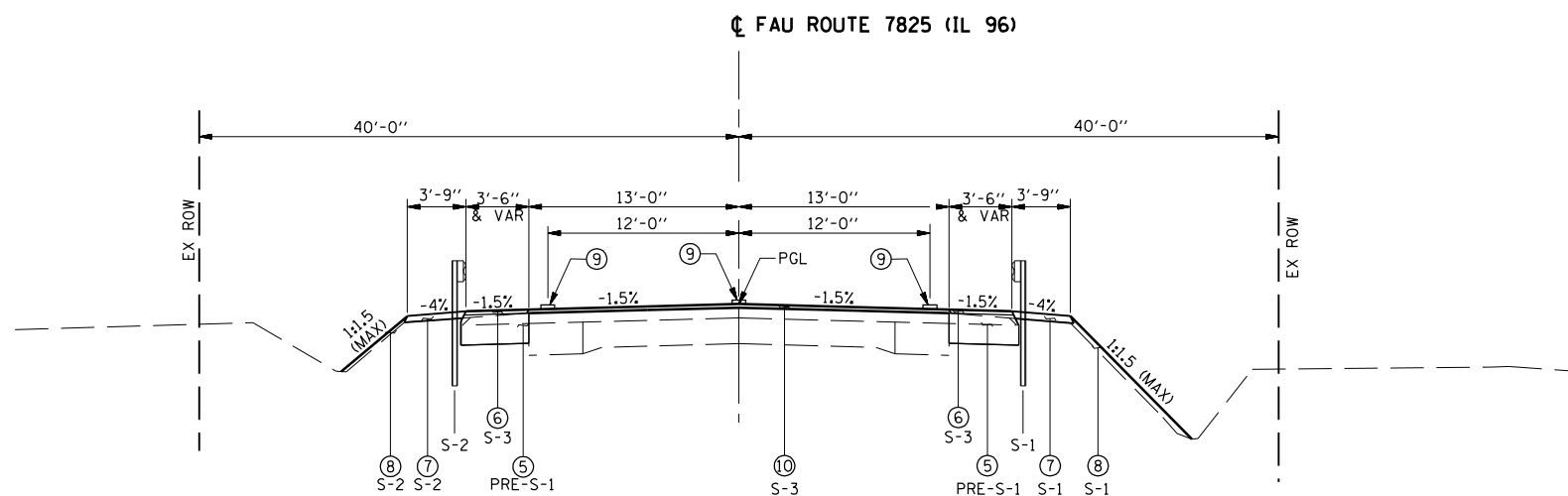
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7825	(K-15D)BR	ADAMS	31	10
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



EXISTING TYPICAL SECTION
 STA. 129+40.00 TO STA. 136+00.00
 (BRIDGE STA. 132+69.90 TO STA. 132+96.10)

LEGEND

- ① EXISTING 9-6-9 PCC PAVEMENT
- ② EXISTING HOT MIX ASPHALT SURFACE (4 1/2")
- ③ EXISTING AGGREGATE SHOULDER WEDGE / PCC PRECAST UNIT
- ④ EXISTING HOT MIX ASPHALT WIDENING (9")
- ⑤ PROPOSED HOT MIX ASPHALT BASE COURSE WIDENING, 10"
- ⑥ PROPOSED HOT-MIX ASPHALT SHOULDERS (1 1/2")
- ⑦ PROPOSED AGGREGATE SHOULDERS, TYPE B (SPECIAL)
- ⑧ PROPOSED STONE DUMPED RIP-RAP, CLASS A-3 (SPECIAL)
- ⑨ PROPOSED PAINT PAVEMENT MARKING, LINE 5"
- ⑩ PROPOSED HOT MIX ASPHALT SURFACE COURSE, MIX "C", N50 (1 1/2")



PROPOSED TYPICAL SECTION
 STA. 129+40.00 TO STA. 136+00.00
 (BRIDGE/APPROACH STA. 132+49.50 TO STA. 133+16.50)

NOTE:
 SEE PLAN VIEW FOR GUARDRAIL
 LOCATIONS AND SHOULDER TAPERS.

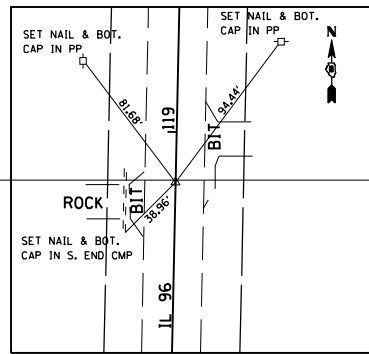
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

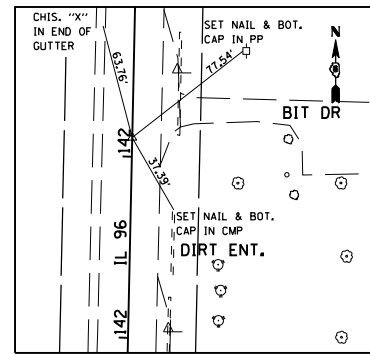
TYPICAL SECTIONS

DATE: 05/31/07
 DRAWN BY JCW
 CHECKED BY JRB

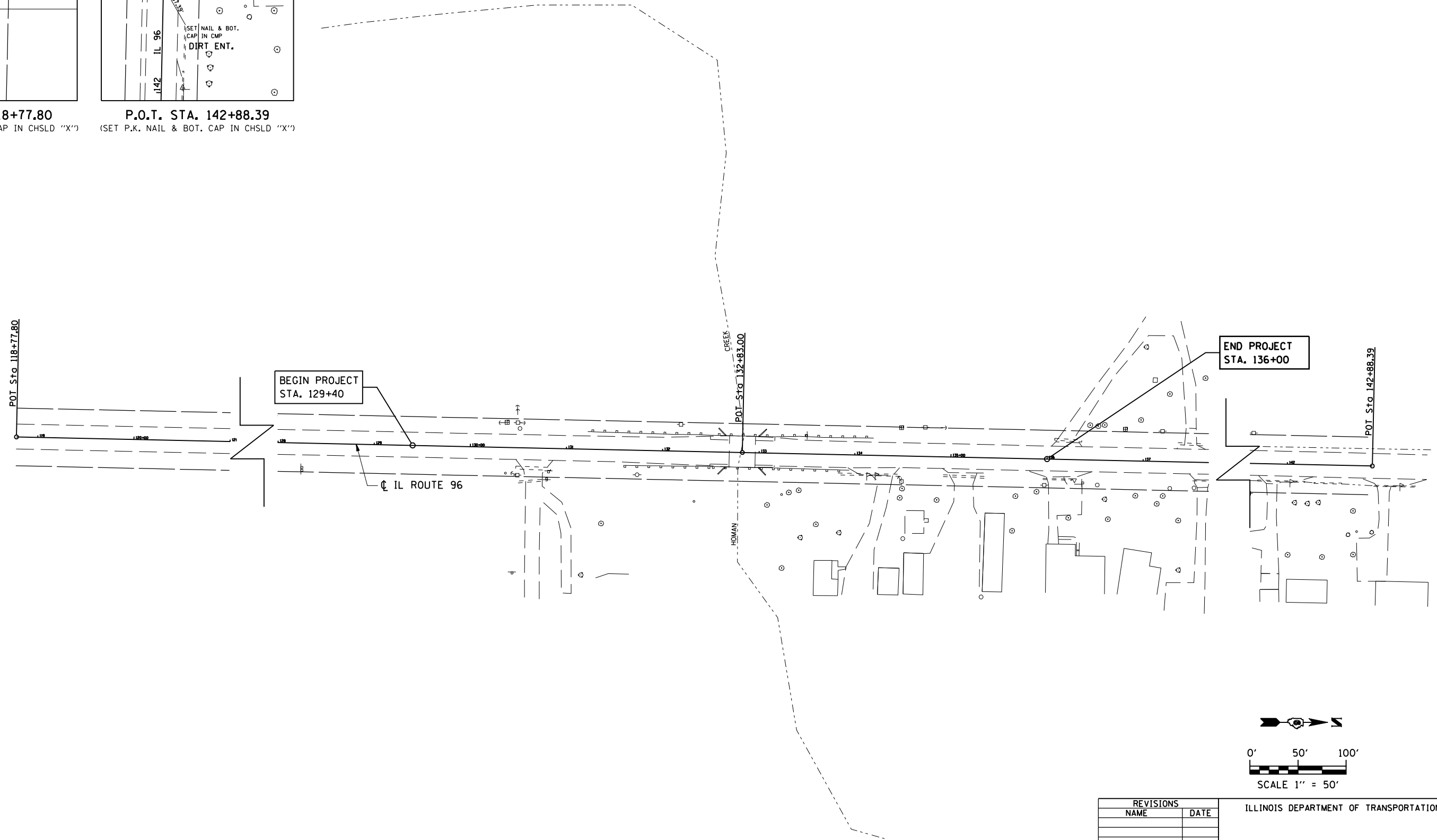
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7825	(K-15D)BR	ADAMS	31	11
STA. 118+77.80		TO STA. 142+88.39		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



P.O.T. STA. 118+77.80
(SET P.K. NAIL & BOT. CAP IN CHSLD "X")

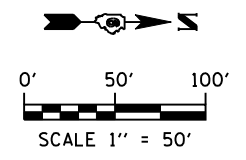


P.O.T. STA. 142+88.39
(SET P.K. NAIL & BOT. CAP IN CHSLD "X")



PLOT DATE = 6/29/2007
 FILE NAME = c:\projects\651686\hutchison\lma\2447-7a001.dgn
 PLOT SCALE = 1/8"=100' / IN.
 USER NAME = laughlin-1

BM TA-14: STA. 132+83
 CHISLED "□" AROUND HIGH POINT
 ON COARSE W. WALL, SN 001-0031
 ● SE CORNER
 ELEV. = 581.89



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION











ALIGNMENT AND TIES

DATE: 05/31/07

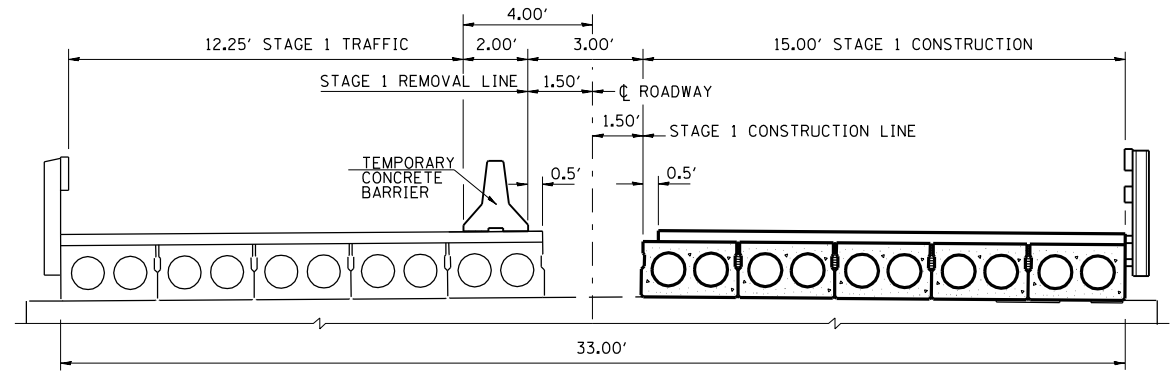
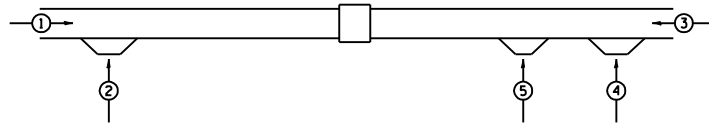
DRAWN BY JCW
CHECKED BY JRB

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7825	(K-15D)BR	ADAMS	31	12
STA. 129+40.00		TO STA.135+80.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

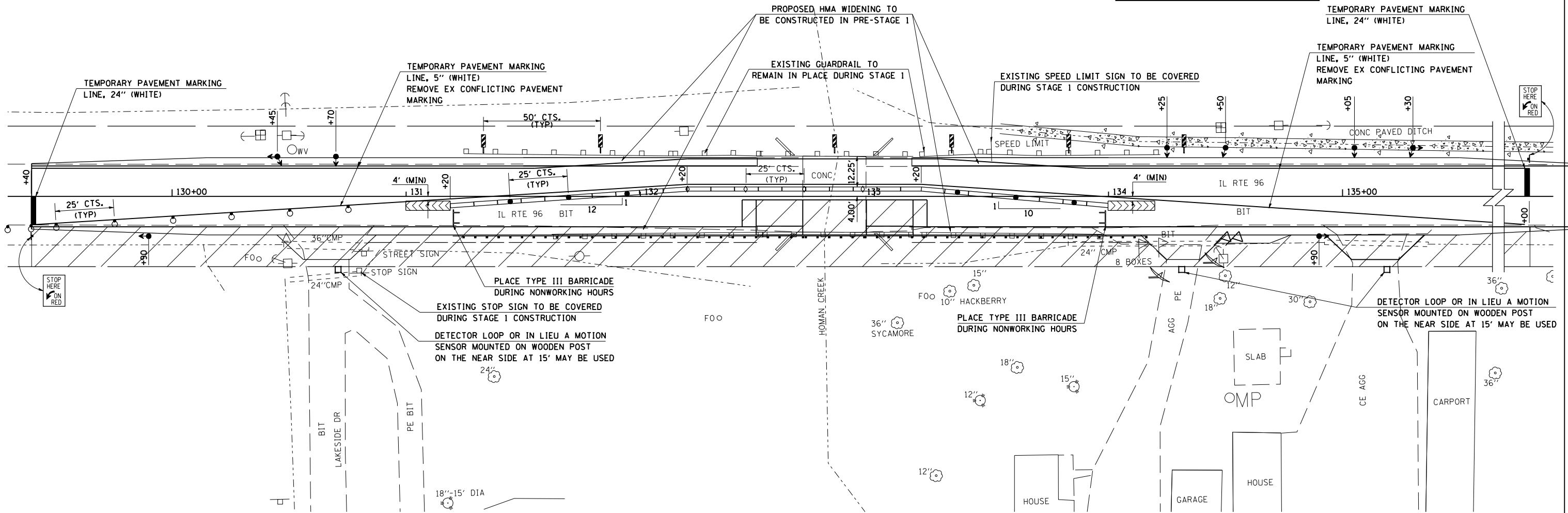
LEGEND

-  WORK AREA
-  SIGN
-  TYPE III BARRICADE
-  DRUM WITH STEADY BURNING LIGHT
-  TRAFFIC SIGNAL
-  TYPE C BIDIRECTIONAL REFLECTOR
-  TEMPORARY CONCRETE BARRIER (STD 704001)
-  IMPACT ATTENUATOR
-  STEADY BURNING LIGHTS AND DOUBLE VERTICAL PANELS
-  DOUBLE VERTICAL PANEL

TEMPORARY SIGNAL PHASE DIAGRAM



TYPICAL SECTION FOR STAGE 1 CONSTRUCTION



PRE-STAGE 1 CONSTRUCTION:

- INSTALL ALL NECESSARY ITEMS IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION STANDARD 701326 TO CONSTRUCT WIDENING.
- CONSTRUCT HOT-MIX ASPHALT BASE COURSE WIDENING BOTH LEFT RIGHT OF CENTERLINE.
- INSTALL TEMPORARY TRAFFIC SIGNALS, TEMPORARY CONCRETE BARRIER, AND OTHER TRAFFIC CONTROL IN ACCORDANCE WITH STANDARD 701321 AND STAGE 1 TRAFFIC DETAILS.

STAGE 1 CONSTRUCTION:

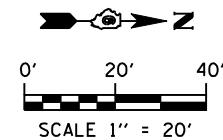
- SHIFT TRAFFIC TO LEFT (SOUTHBOUND) LANE.
- REMOVE EXISTING DECK BEAMS, GUARDRAIL AND PAVEMENT FOR NEW APPROACHES RIGHT OF CENTERLINE.
- CONSTRUCT NEW DECK BEAMS AND APPROACH PAVEMENT RIGHT OF CENTERLINE.
- CONSTRUCT WIDENING, EMBANKMENT, AND RIPRAP RIGHT OF CENTERLINE.
- INSTALL PROPOSED GUARDRAIL RIGHT OF CENTERLINE.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL DETAILS

STAGE 1

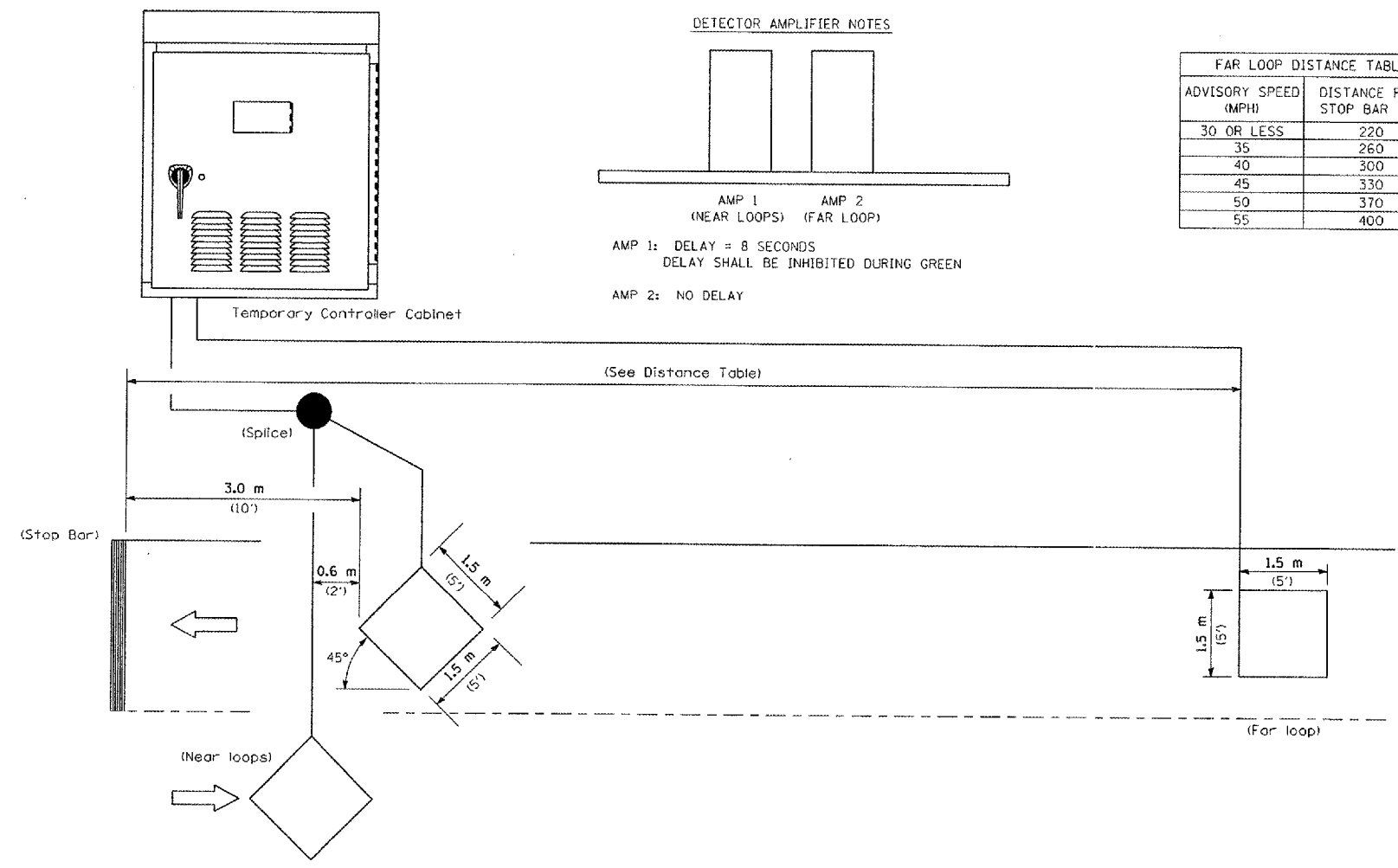


DATE: 05/31/07

DRAWN BY JCW

CHECKED BY JRB

F.A. LI RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7825	(K-150) BR	ADAMS	31	13A
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



NOTE: All loops centered in lane.











INDUCTION LOOP DETECTOR

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 USER NAME = fough12w1

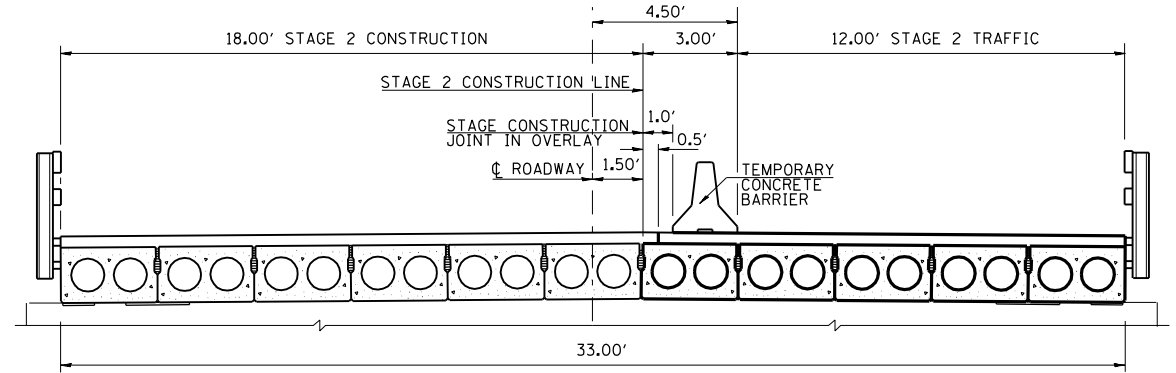
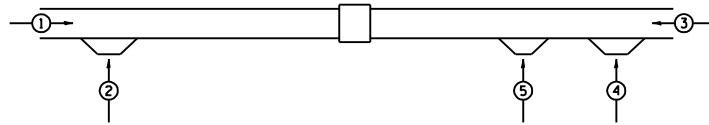
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION	
NAME	DATE	TRAFFIC CONTROL & PROTECTION	
		TEMPORARY BRIDGE TRAFFIC SIGNAL	
		LOOP PLACEMENT DETAIL SHEET	
		SCALE: VERT. NONE	DRAWN BY DIST. 6
		HORIZ. NONE	CHECKED BY
		DATE	

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7825	(K-15D)BR	ADAMS	31	13
STA. 129+40.00		TO STA. 135+80.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

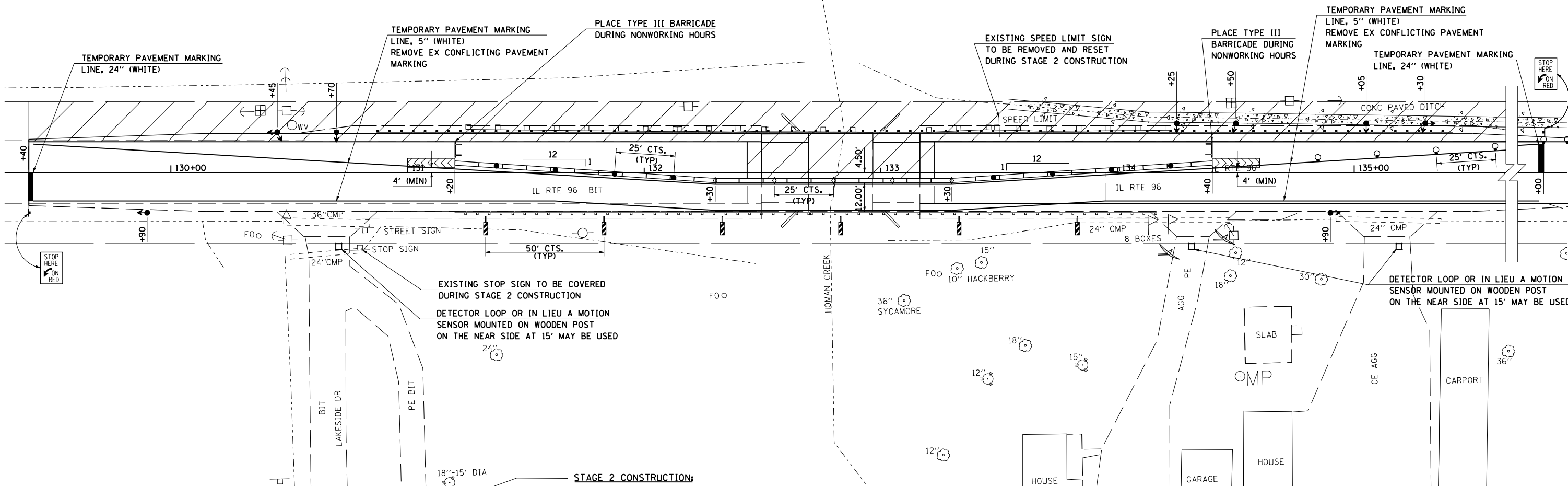
LEGEND

-  WORK AREA
-  SIGN
-  TYPE III BARRICADE
-  DRUM WITH STEADY BURNING LIGHT
-  TRAFFIC SIGNAL
-  TYPE C BIDIRECTIONAL REFLECTOR
-  TEMPORARY CONCRETE BARRIER (STD 704001)
-  IMPACT ATTENUATOR
-  STEADY BURNING LIGHTS AND DOUBLE VERTICAL PANELS
-  DOUBLE VERTICAL PANEL

TEMPORARY SIGNAL PHASE DIAGRAM



STAGE 2 CONSTRUCTION

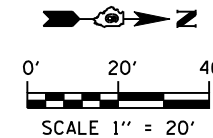


STAGE 2 CONSTRUCTION:

1. RELOCATE TEMPORARY CONCRETE BARRIER AND OTHER TRAFFIC CONTROL ITEMS IN ACCORDANCE WITH STANDARD 701321 AND STAGE 2 TRAFFIC DETAILS.
2. SHIFT TRAFFIC TO RIGHT (NORTHBOUND) LANE.
3. REMOVE EXISTING DECK BEAMS, GUARDRAIL AND PAVEMENT FOR NEW APPROACHES LEFT OF CENTERLINE.
4. CONSTRUCT NEW DECK BEAMS AND APPROACH PAVEMENT LEFT OF CENTERLINE.
5. CONSTRUCT WIDENING, EMBANKMENT, AND RIPRAP LEFT OF CENTERLINE.
6. INSTALL PROPOSED GUARDRAIL LEFT OF CENTERLINE.

STAGE 3 CONSTRUCTION:

1. REMOVE TRAFFIC CONTROL ITEMS ASSOCIATED WITH STANDARD 701321 AND RESTORE TWO-LANE TWO-WAY TRAFFIC
2. MILL ROADWAY AND CONSTRUCT THE HMA SURFACE COURSE/SHOULDERS, AGGREGATE SHOULDERS, AND STRIPING USING THE APPROPRIATE TRAFFIC CONTROL



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL DETAILS
 STAGE 2

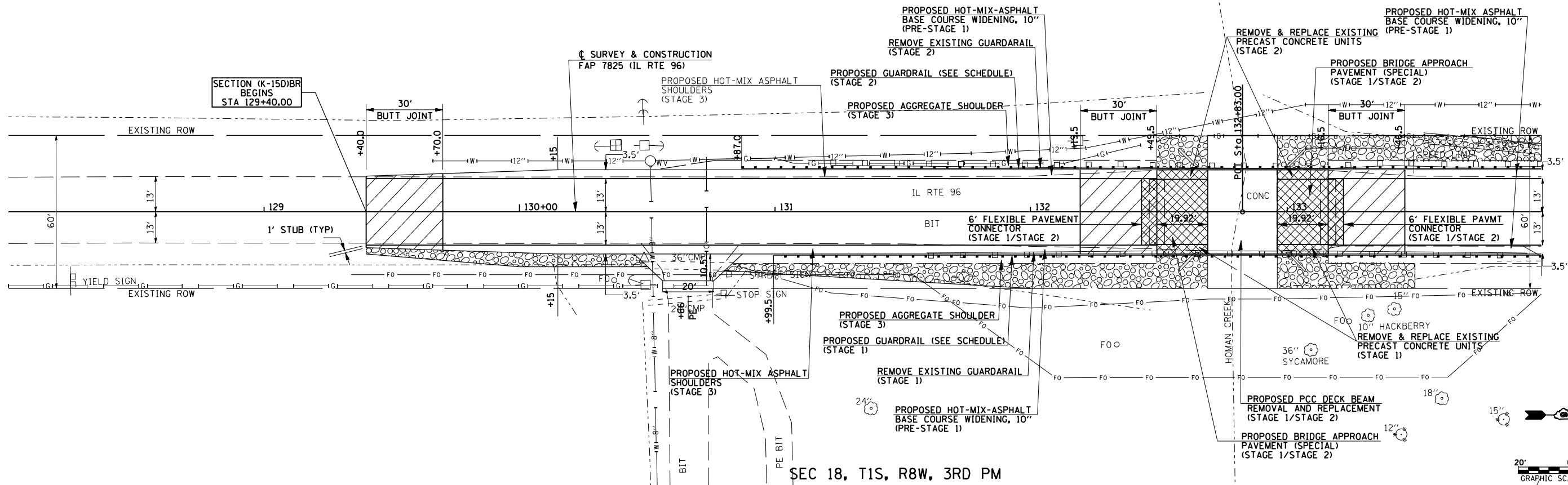
DATE: 05/31/07
 DRAWN BY JCW
 CHECKED BY JRB

PLOT DATE = 6/29/2007
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 PLOT SCALE = 42.3524 / IN.
 USER NAME = laughlin-1

FAU RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7825	(K-15D)BR	ADAMS	31	14
STA. 129+40		TO STA. 134+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SEC 13, T1S, R9W, 3RD PM

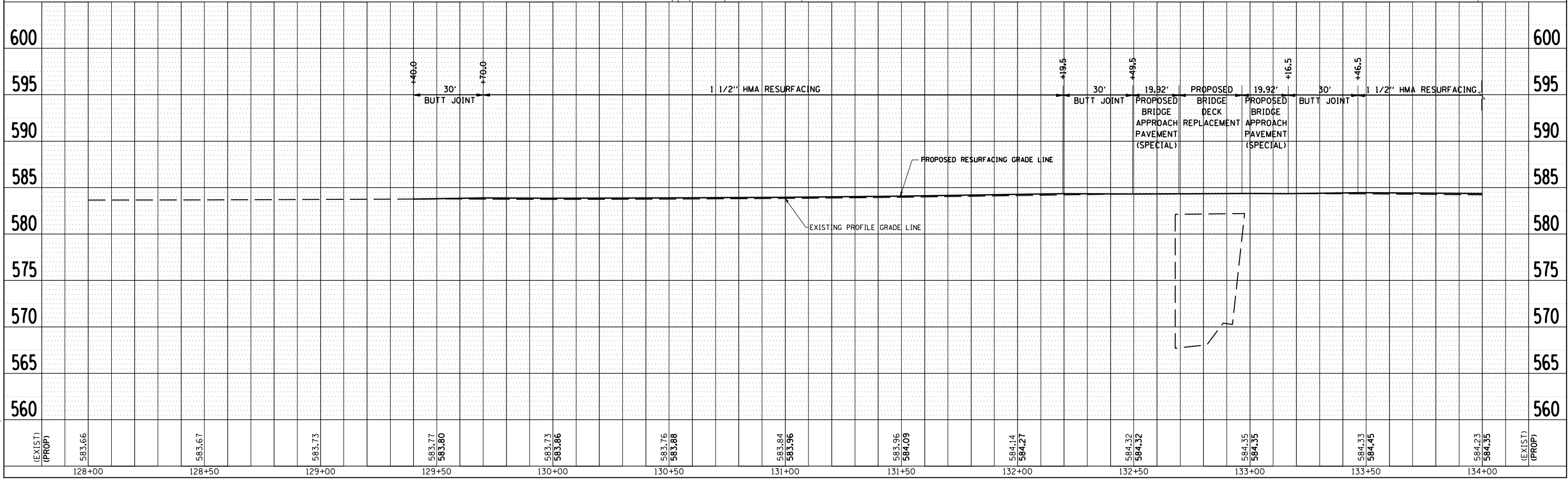
SEC 18, T1S, R8W, 3RD PM



PLAN	SURVEYED	BY	DATE
	PLOTTED		
	NOTE BOOK		
	NO. _____		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	NOTE BOOK		
	NO. _____		

PLOT DATE = 6/29/2007
 FILE NAME = c:\proje\7825\br\129+40\14.dgn
 PLOT SCALE = 4.23628" / IN.
 USER NAME = laughlin-1



B.M.: Chiseled "□" on top of SE Wingwall
Str. No. 001-0031 Sta. 132+83, Elev. 581.89

EXISTING STRUCTURE: SN 001-0031 Built in 1929, Re-Built in 1974. A single span 17" deep prestressed concrete deck beam superstructure, 28'-8 3/4" back to back abutments and 33'-0" clear roadway width with steel barrier rails.

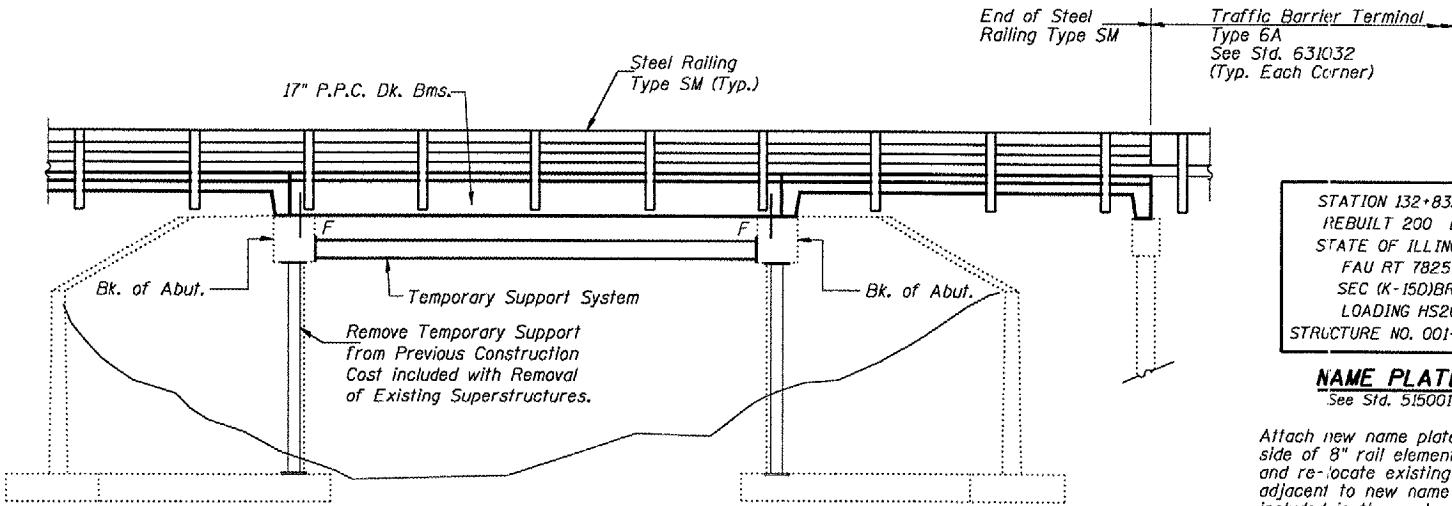
The existing superstructure is to be replaced with PPC Deck Beams and 5"(min.) Concrete Wearing Surface.

Traffic shall be maintained by utilizing Stage Construction.

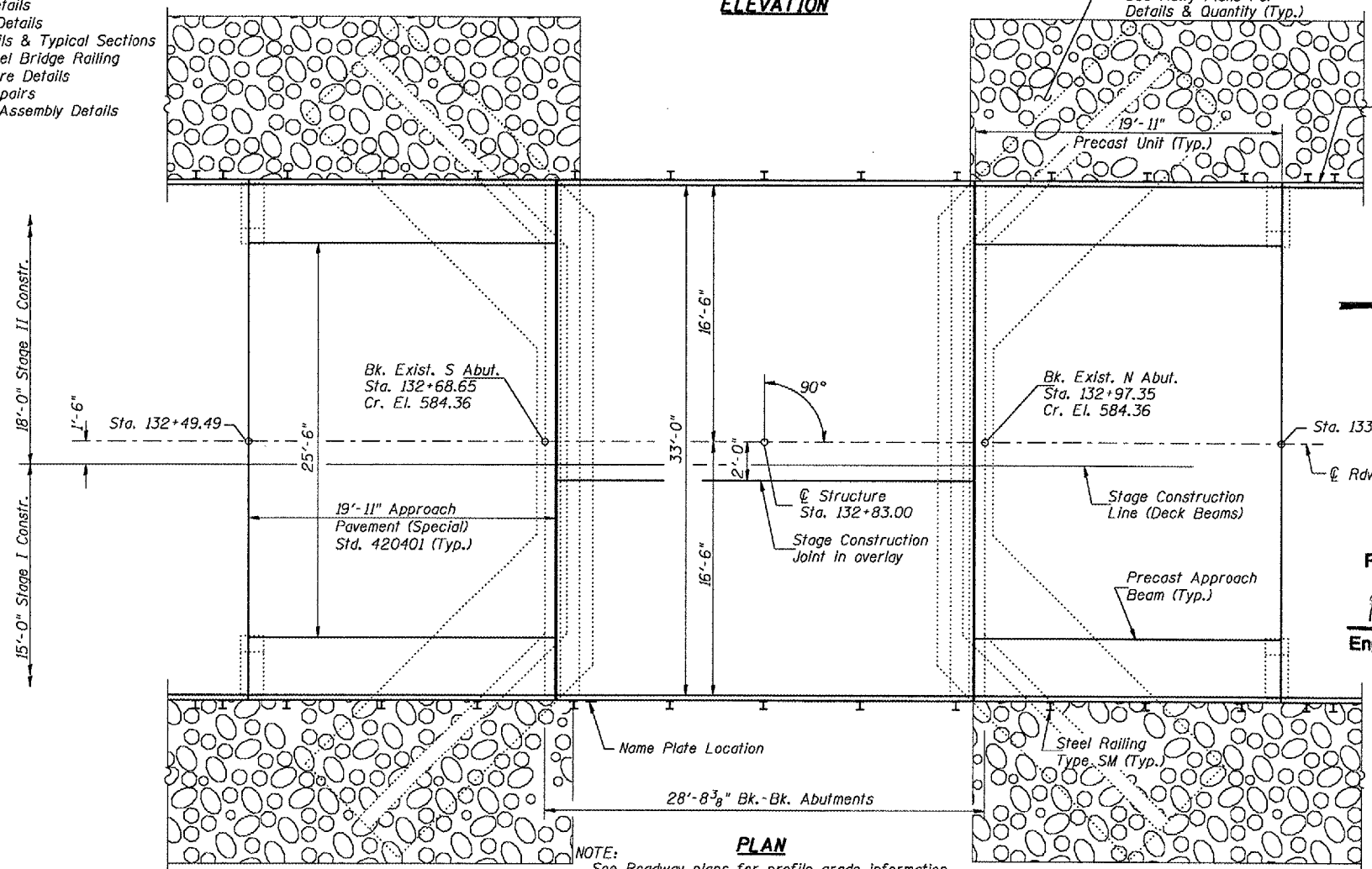
No Salvage

INDEX TO SHEETS

1. General Plan
2. Stage Construction
3. Temporary Concrete Barrier For Stage Construction
4. Approach Details
5. Deck Beam Details
6. Overlay Details & Typical Sections
7. Type SM Steel Bridge Railing Superstructure Details
8. Abutment Repairs
9. Bar Splicer Assembly Details
- 10.



ELEVATION



PLAN

NOTE: See Roadway plans for profile grade information.

DESIGNED	BAN
CHECKED	JOH
DRAWN	TC
CHECKED	BAN

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

DESIGN STRESSES
FIELD UNITS

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

PRECAST PRESTRESSED UNITS

$f'_c = 5,000$ p.s.i.
 $f'_{ci} = 4,000$ p.s.i.
 $f'_s = 270,000$ p.s.i. (1/2" ϕ low relaxation strands)
 $f'_{si} = 201,960$ p.s.i. (1/2" ϕ low relaxation strands)

PRECAST NON-PRESTRESSED UNITS

$f'_c = 4,500$ p.s.i.

STATION 132+83.00
REBUILT 200 BY
STATE OF ILLINOIS
FAU RT 7825
SEC (K-15D)BR
LOADING HS20
STRUCTURE NO. 001-0031

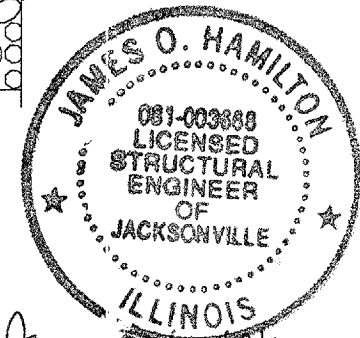
NAME PLATE

See Std. 515001

Attach new name plate to back side of 8" rail element. Clean and re-locate existing name plate adjacent to new name plate. Cost included in the cost of "Name Plates".

APPROVED
For Structural Adequacy Only

Ralph E. Anderson
Engineer of Bridges & Structures



James O. Hamilton
6/26/2007
Lic. Expires 4/30/2008

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 7825	*	ADAMS	31	16

SHEET NO. 1
OF 10 SHEETS

CONTRACT NO. 72A36

GENERAL NOTES

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

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.

All construction joints shall be bonded.

No in-stream work will be allowed on this project.

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

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

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.

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

Temporary supports under east end of caps shall be removed after Stage I Superstructure Removal.

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

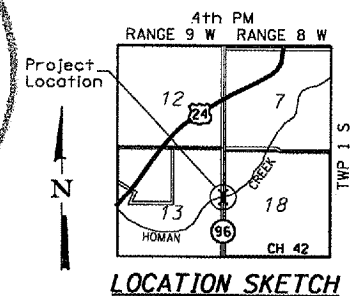
Reinforcement bars designated (E) shall be epoxy coated.

Temporary support system shall be in place prior to superstructure removal.

Protective Coat shall be applied to the top and edges of the concrete wearing surface.

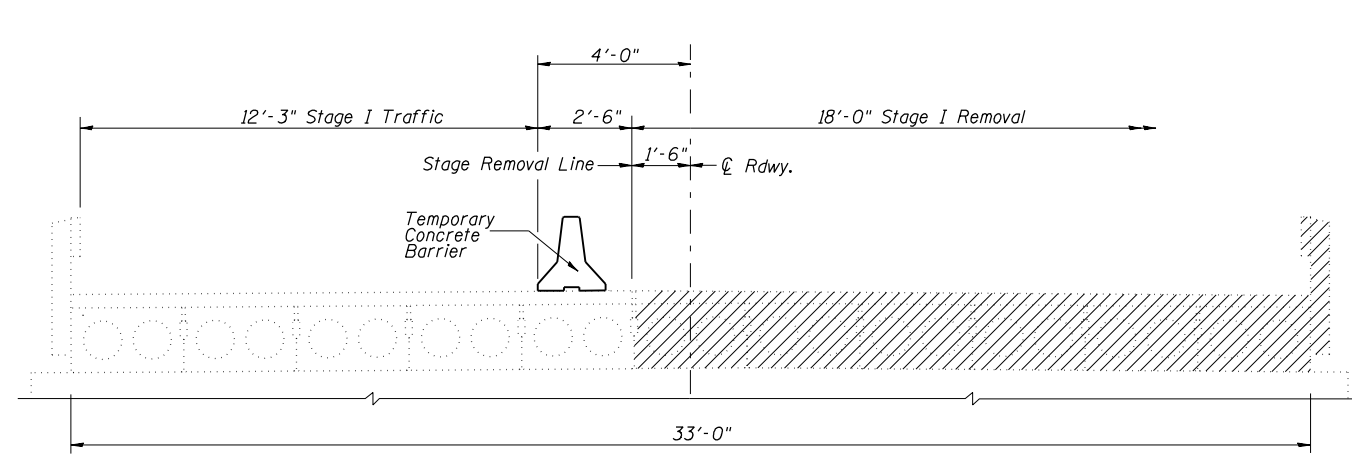
TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub.	Total
Removal of Existing Superstructures	Each	-	-	1
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	895	-	895
Removal of Existing Precast Concrete Units	Sq. Ft.	299	-	299
Precast Concrete Bridge Slab	Sq. Ft.	299	-	299
Protective Coat	Sq. Yd.	135	-	135
Reinforcement Bars, Epoxy Coated	Pound	1,690	180	1,870
Steel Railing, Type SM	Foot	134	-	134
Concrete Wearing Surface, 5"	Sq. Yd.	133	-	133
Bridge Deck Grooving	Sq. Yd.	93	-	93
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	-	209	209
Name Plates	Each	-	-	1
Bar Splicers	Each	112	-	112
Temporary Support System	L. Sum	-	1	1

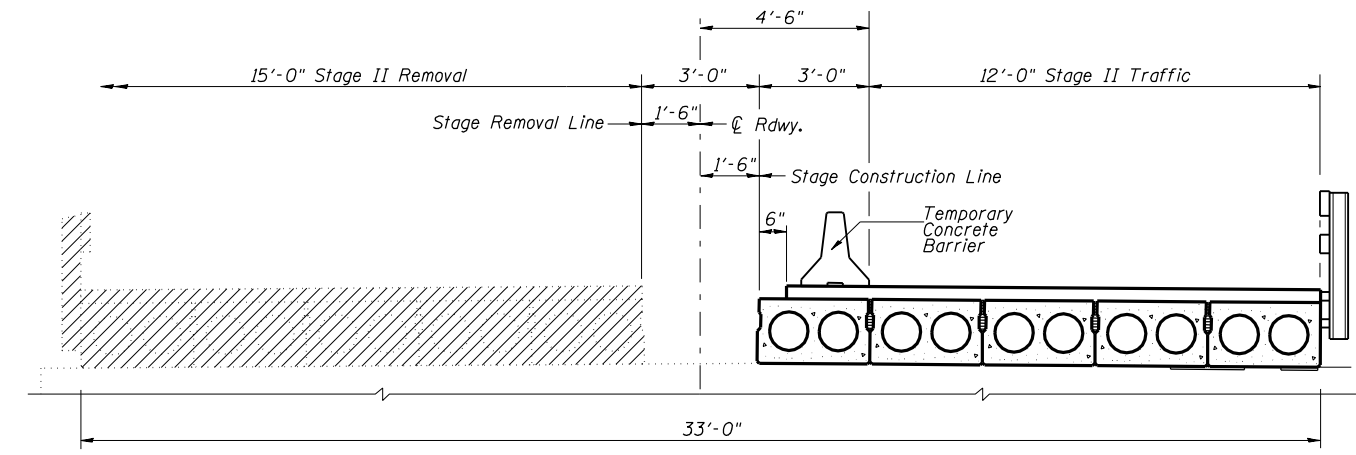


GENERAL PLAN
ILLINOIS ROUTE 96 OVER
HOMAN CREEK
F.A.U. RT. 7825 SEC. (K-15D)BR
ADAMS COUNTY
STATION 132+83.00
STR. NO. 001-0031

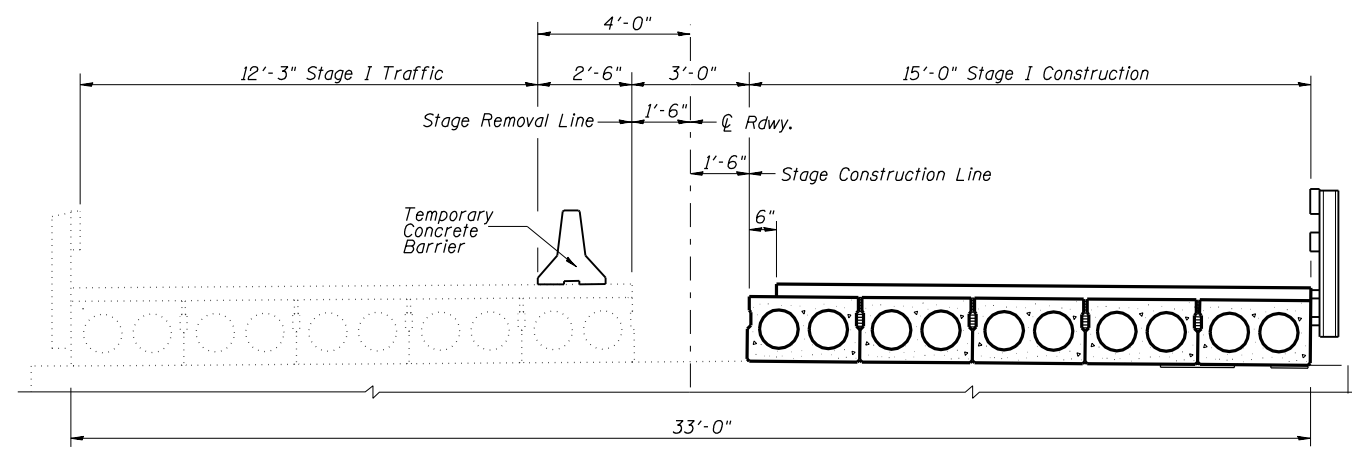
HUTCHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS
Rev: _____ Date: _____



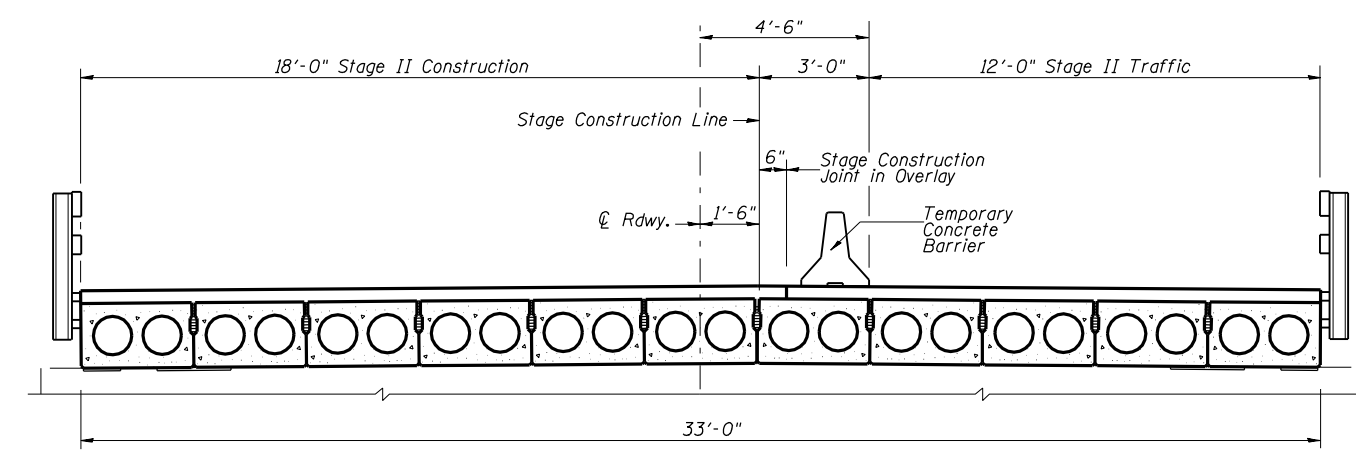
STAGE I REMOVAL



STAGE II REMOVAL



STAGE I CONSTRUCTION



STAGE II CONSTRUCTION

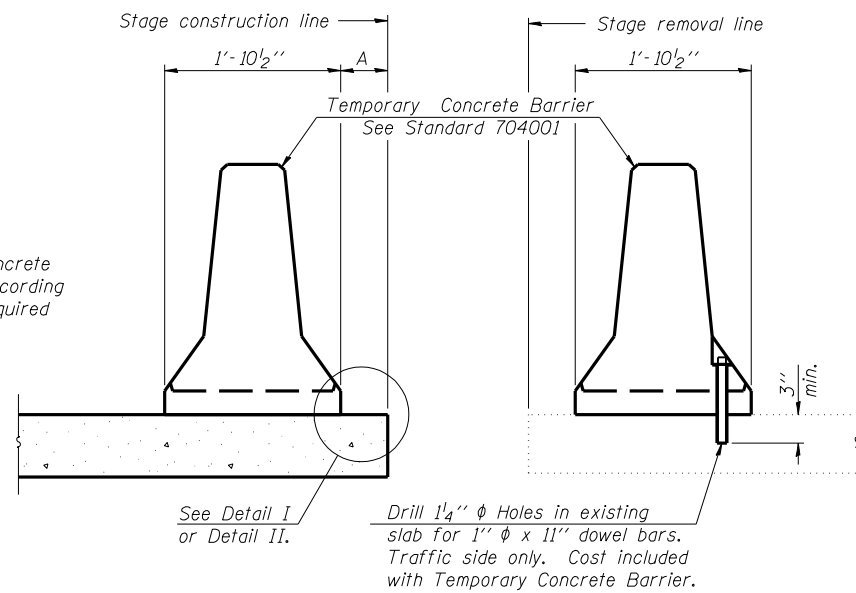
Notes:
 All cross-sections are looking north.
 Hatched area indicates Removal
 of Existing Superstructure.
 For Temporary Concrete Barrier Details
 see sheet 3 of 10.

DESIGNED	BAN
CHECKED	JOH
DRAWN	TC
CHECKED	BAN

STAGE CONSTRUCTION DETAILS
ILLINOIS ROUTE 96 OVER
HOMAN CREEK
F.A.U. RT. 7825 SEC. (K-15D)BR
ADAMS COUNTY
STATION 132+83.00
STR. NO. 001-0031

HUTCHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS
 Rev: _____ Date: _____

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



NEW SLAB

EXISTING SLAB

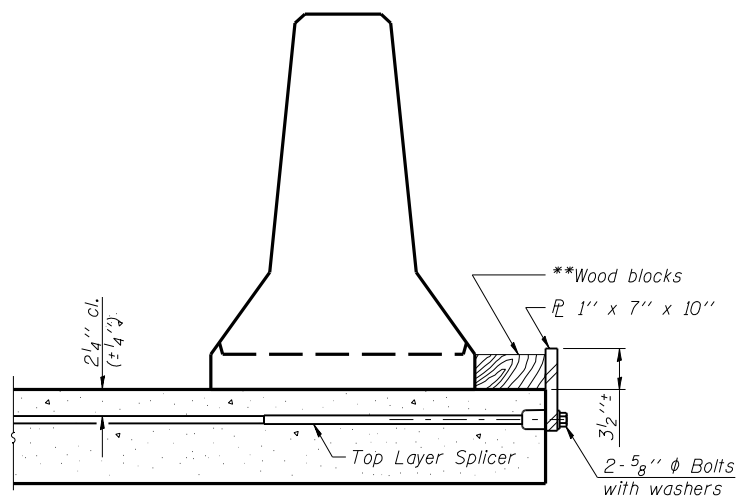
SECTIONS THRU SLAB

NOTES

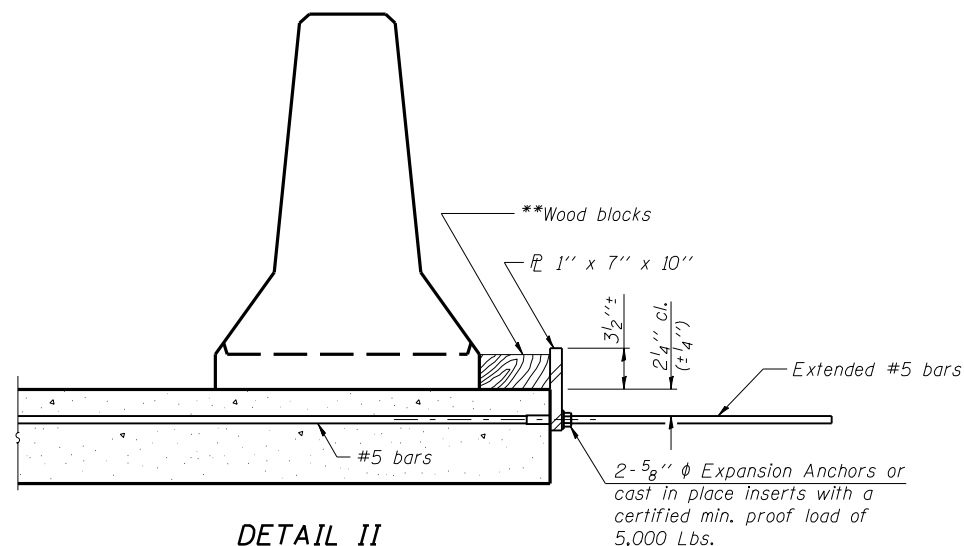
Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel PL to the top layer of couplers with 2-5/8" phi bolts screwed to coupler at approximate C of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" steel PL to the concrete slab with 2-5/8" phi Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate C of each barrier panel.

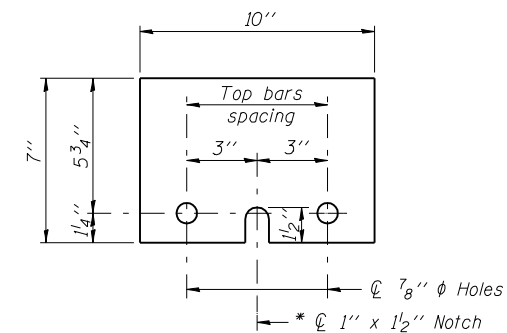
Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x 10" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.



DETAIL I



DETAIL II



STEEL RETAINER PL 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.

DESIGNED	BAN
CHECKED	JOH
DRAWN	TC
CHECKED	BAN

R-27

11-1-06

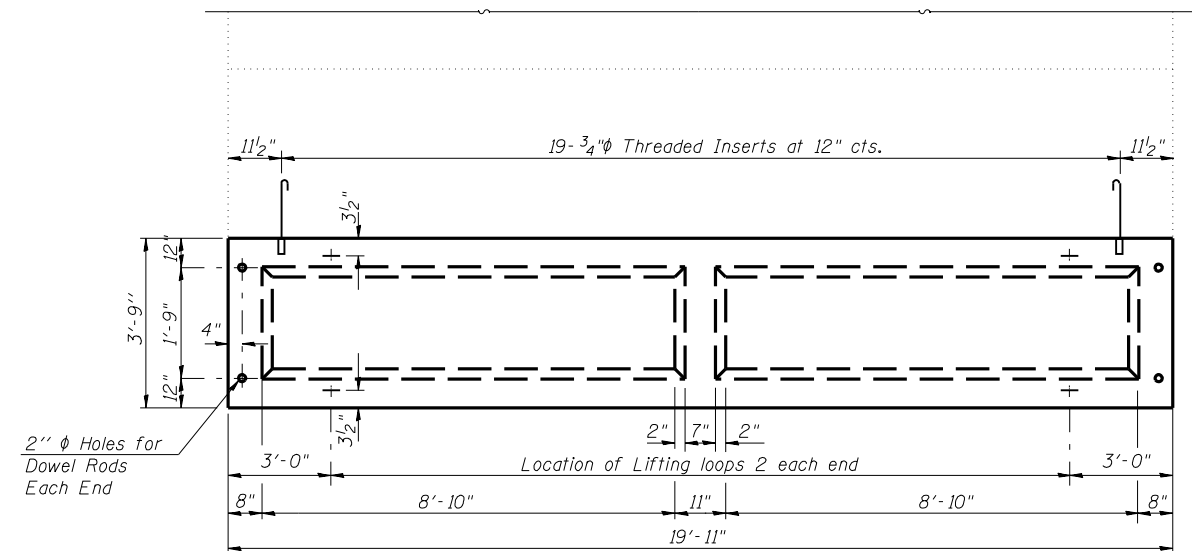
2447-76003

**TEMPORARY CONCRETE BARRIER
FOR STAGE CONSTRUCTION
ILLINOIS ROUTE 96 OVER
HOMAN CREEK
F.A.U. RT. 7825 SEC. (K-15D)BR
ADAMS COUNTY
STATION 132+83.00
STR. NO. 001-0031**

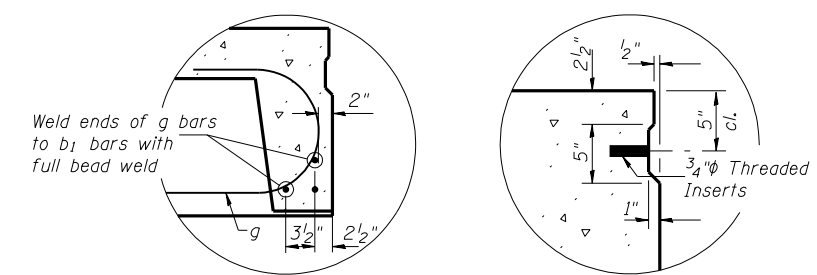
HUTCHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS
Rev: _____ Date: _____

Note:
Tack welding of stirrups to bottom longitudinal reinforcement bars will not be permitted except as otherwise authorized in writing by the Engineer.

* (K-15D)BR



TYPICAL PLAN OF BEAM



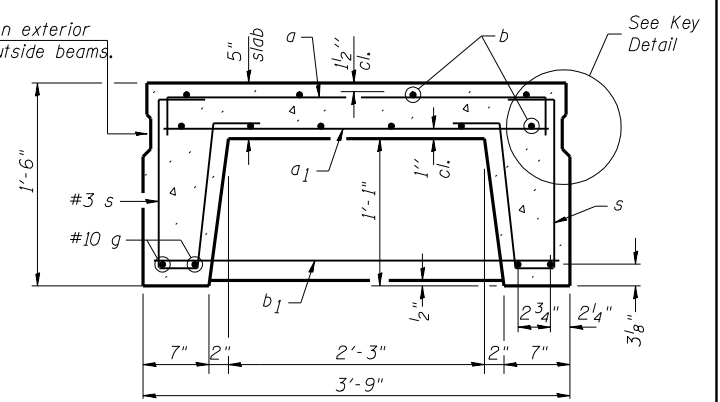
DETAIL A **KEY DETAIL**

The surface of the member shall not deviate more than 1/1200 of the full length of the member from a straight line connecting the two end points on the member's surface. In addition to State inspection and prior to erection, the beam shall be approved by the resident Engineer at the jobsite. The units shall remain on the bottom supporting forms until the concrete has attained a compressive strength of not less than 3,500 pounds per square inch.

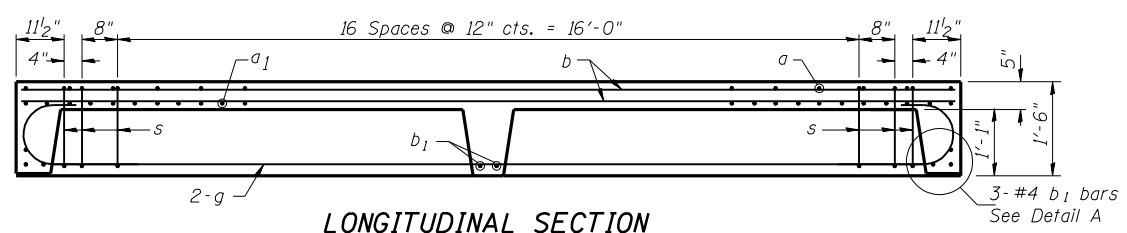
Precast Concrete Bridge Slab shall meet the requirements of Section 504 of the Standard Specifications and shall be paid for at the contract unit price per square foot for Precast Concrete Bridge Slab.

FABRIC BEARING PAD
(4 Req'd.)

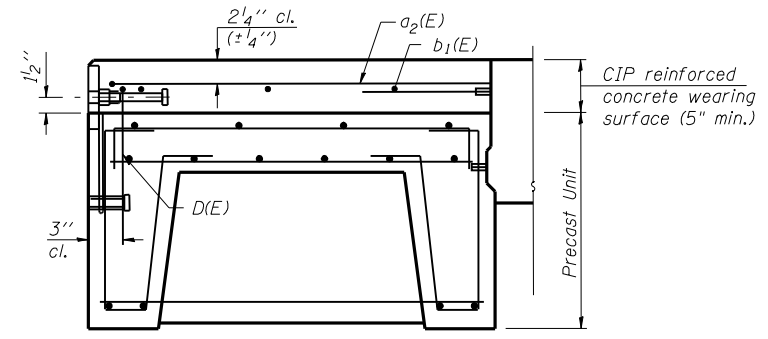
Omit key on exterior face of outside beams.



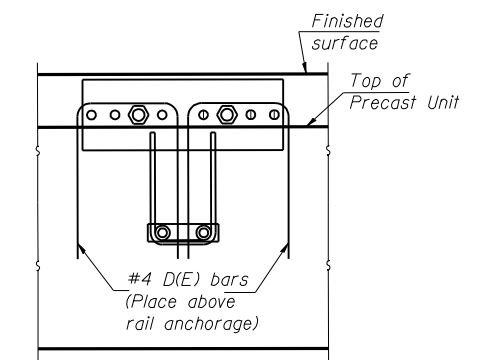
SECTION THRU PRECAST UNIT



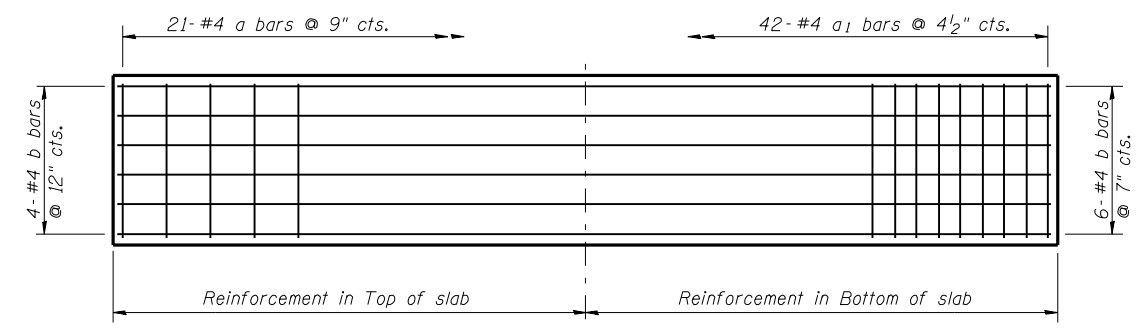
LONGITUDINAL SECTION



FASCIA BEAM



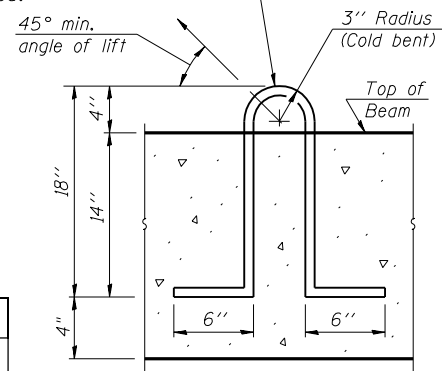
SECTION A-A



PLAN

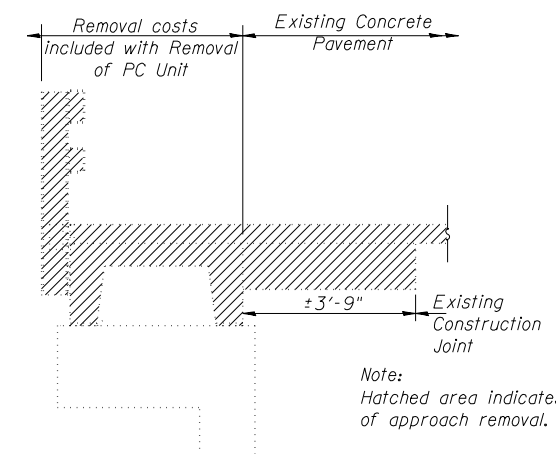
Showing Slab Reinforcement

2- 1/2" ϕ Strands/Loop, 2 Ea. End Ea. Beam. Loop shall be burned off after beams have been erected. Strands shall conform to the requirements of AASHTO M 203.

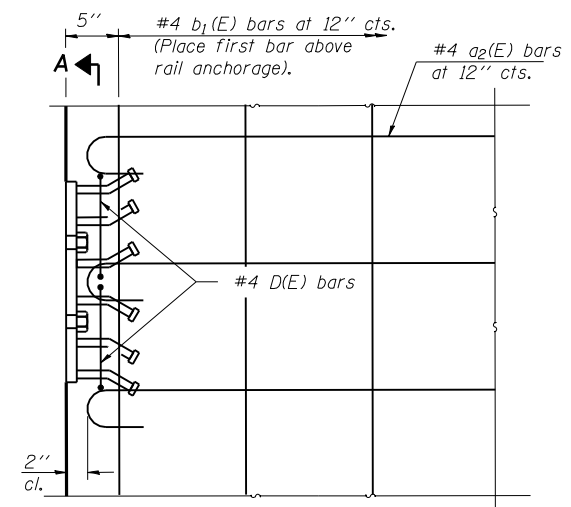


LIFTING LOOP DETAIL

Approved alternate may be substituted for the above

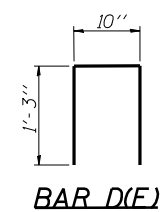


TYPICAL APPROACH REMOVAL SECTION

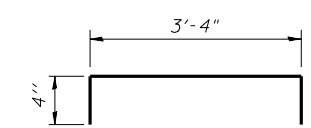


PLAN

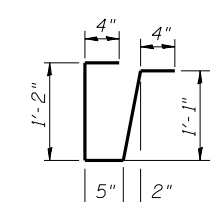
Rail anchorage shall be cast in precast units. See typical section for dimensions, strand pattern and bar callouts not shown. Formwork necessary for the wearing surface may be secured utilizing the bottom rail anchorage inserts and/or additional inserts cast into the beam. Drilling into the precast unit will not be permitted.



BAR D(E)



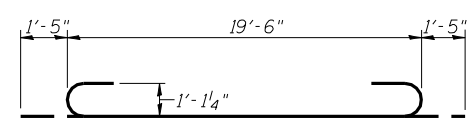
BAR a



BAR s

BILL OF MATERIAL

Item	Unit	Quantity
Precast Concrete Bridge Slab	Sq. Ft.	299
Removal of Existing Precast Unit	Sq. Ft.	299

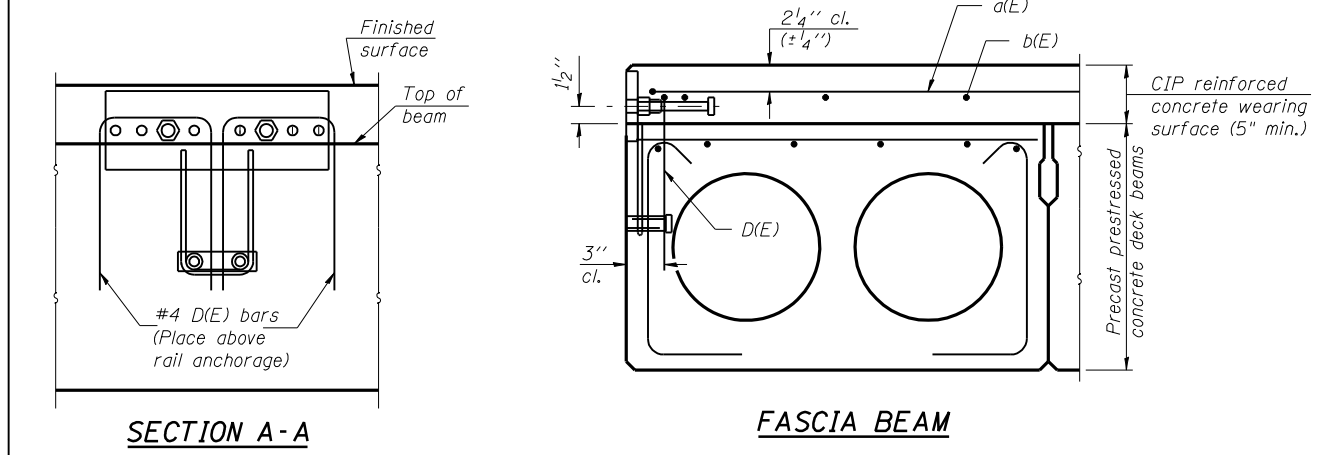
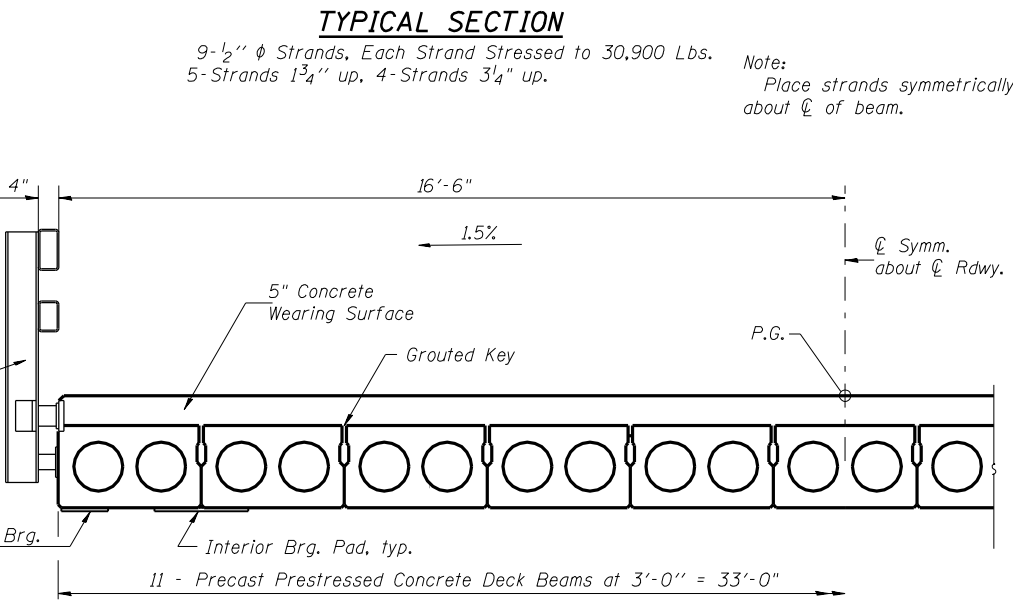
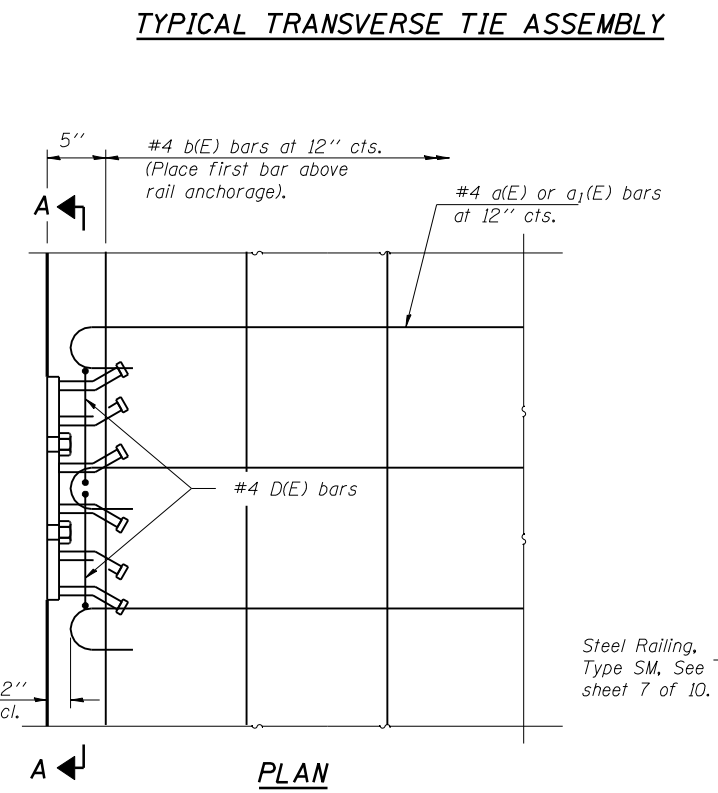
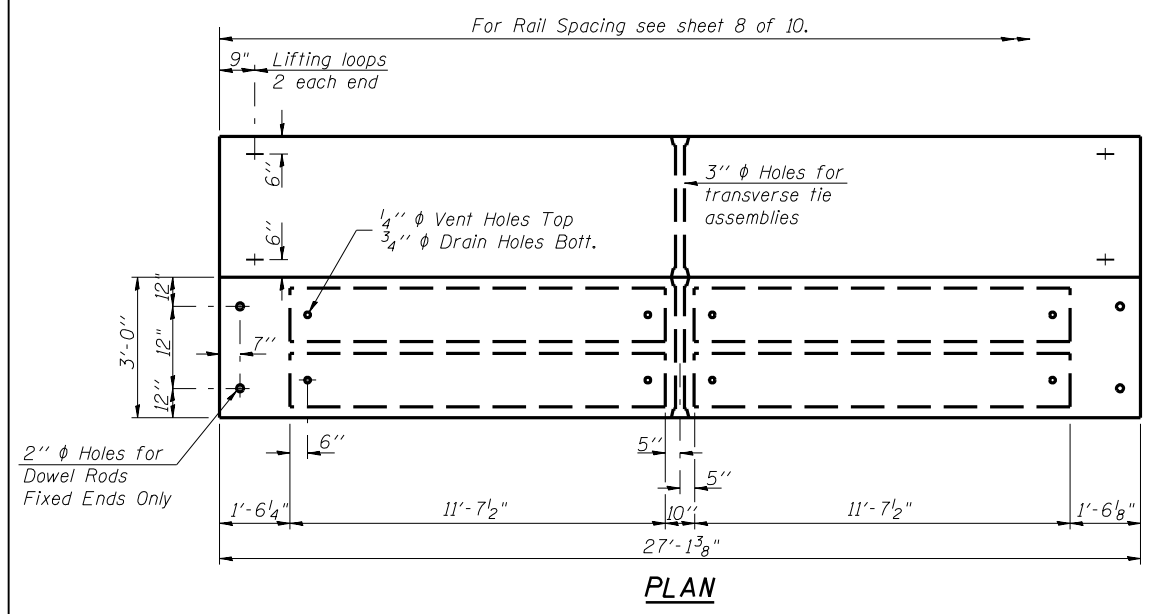
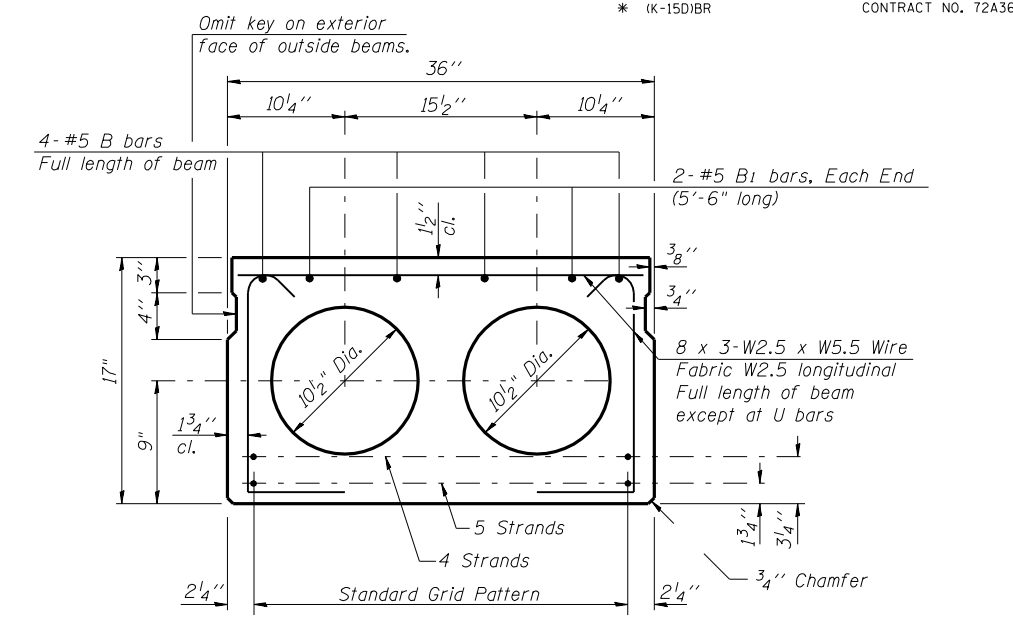
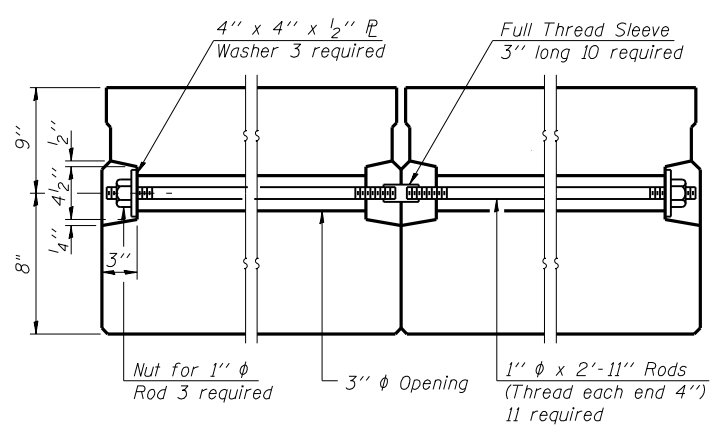
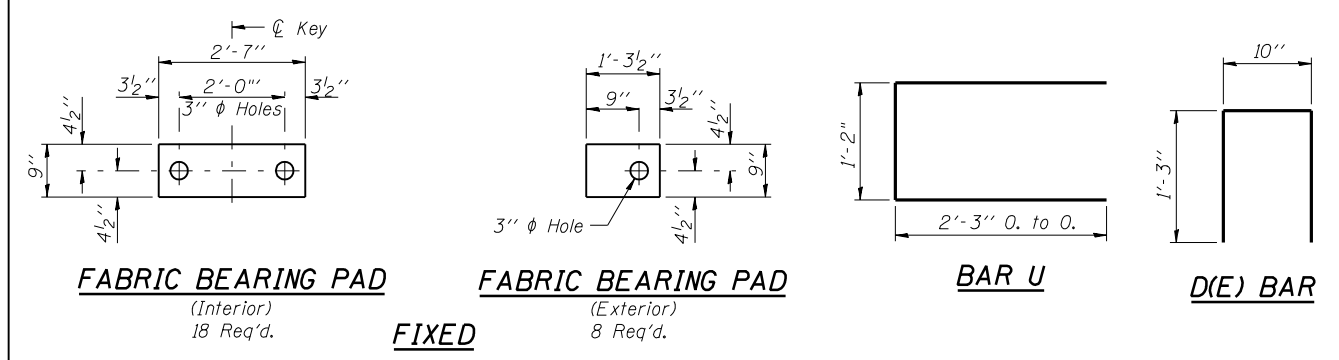


BAR g

APPROACH DETAILS
ILLINOIS ROUTE 96 OVER
HOMAN CREEK
F.A.U. RT. 7825 SEC. (K-15D)BR
ADAMS COUNTY
STATION 132+83.00
STR. NO. 001-0031

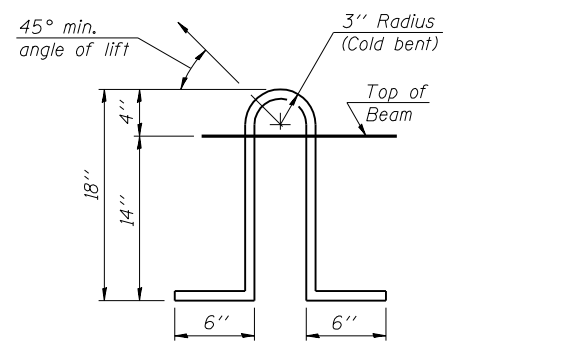
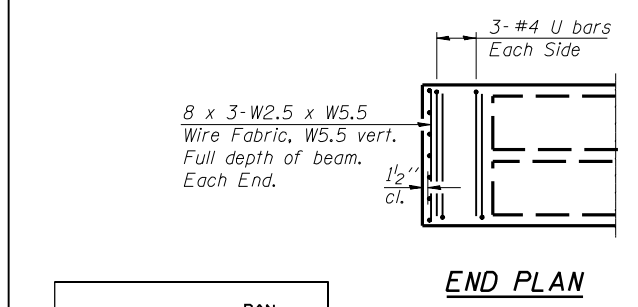
HUTCHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS

DESIGNED	BAN
CHECKED	JOH
DRAWN	TC
CHECKED	BAN



Rail anchorage shall be cast in precast beams. See typical section for dimensions, strand pattern and bar callouts not shown.
Formwork necessary for the wearing surface may be secured utilizing the bottom rail anchorage inserts and/or additional inserts cast into the beam. Drilling into the beam will not be permitted.

HALF CROSS SECTION



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 ASTM A 706 (IL MOD), 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, per Article 1020.05(b)(12) of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
Required Release Strength, f'ci, shall be 4,000 p.s.i.
Rail post anchor devices shall be cast into outside face of exterior beams as specified elsewhere.

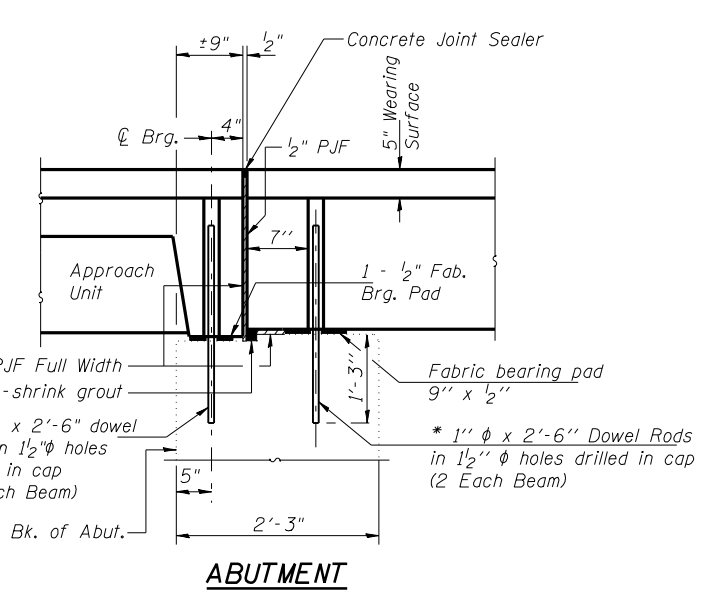
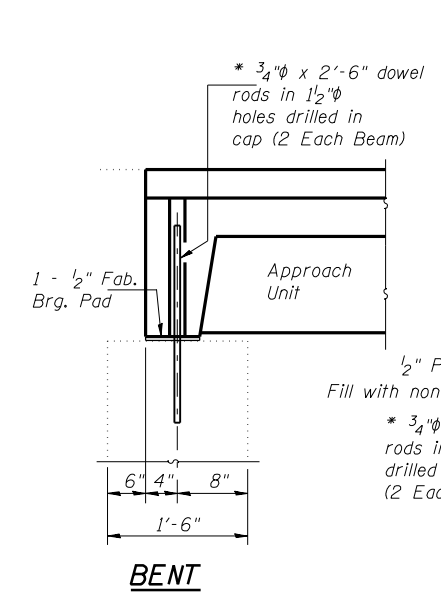
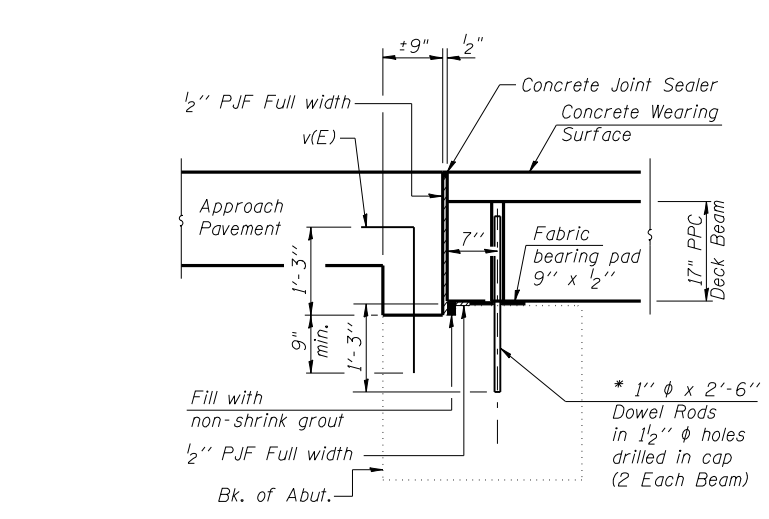
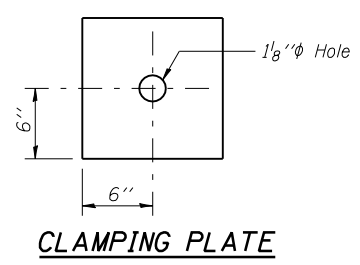
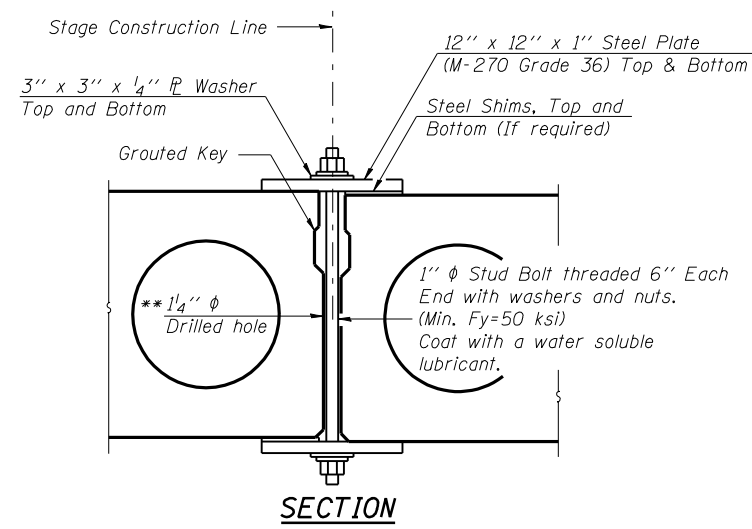
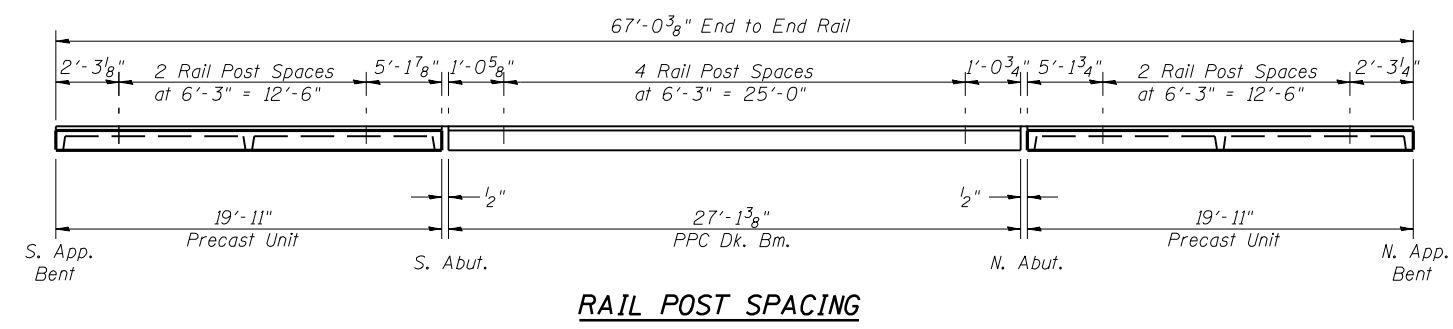
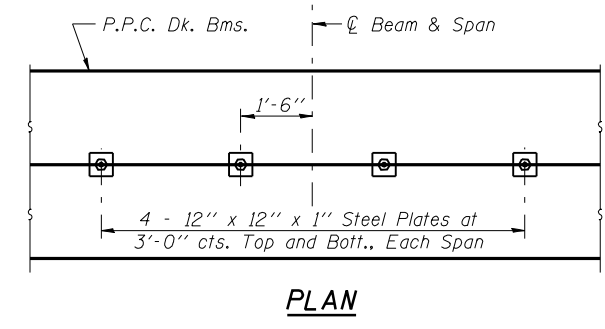
BILL OF MATERIAL

Item	Unit	Quantity
Precast Prestressed Conc. Deck Bms. (17" Depth)	Sq. Ft.	895

SUPERSTRUCTURE DETAILS
ILLINOIS ROUTE 96 OVER
HOMAN CREEK
F.A.U. RT. 7825 SEC. (K-15D)BR
ADAMS COUNTY
STATION 132+83.00
STR. NO. 001-0031

HUTCHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS
Rev: _____ Date: _____

DESIGNED	BAN
CHECKED	JOH
DRAWN	TC
CHECKED	BAN



TYPICAL SECTION AT OUTSIDE FACE OF APPROACH BEAM

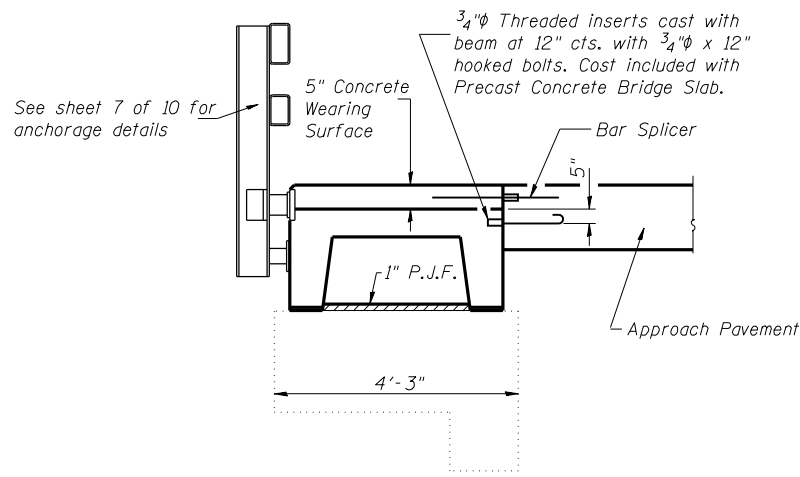
* Existing Dowel Rods shall be burned off flush with the top of existing concrete, ground smooth, and sealed with epoxy. Cost to be included in the cost of Removal of Existing Superstructures/Removal of Existing Precast Concrete Units. After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hrs. prior to grouting the shear keys.

SHEAR KEY CLAMPING DETAILS AT STAGE CONST. JT.

Cost included with Precast Prestressed Concrete Deck Beams.
See Stage Construction Details for traffic lanes.

** As an alternate to the drilled holes, the Contractor may request the Fabricator to cast 2'' diameter semi-circular recesses in the sides of each beam adjacent to the stage construction line. These recesses should align to form a hole at the appropriate locations for the clamping device bolts. If the Contractor elects to use this alternate, the details shall be identified on the shop drawings.

DESIGNED	BAN
CHECKED	JOH
DRAWN	TC
CHECKED	BAN



Notes:
All horizontal dimensions are at right angles to beam ends.
See sheet 4 & 5 of 10 for bearing pad details.

SUPERSTRUCTURE DETAILS
ILLINOIS ROUTE 96 OVER
HOMAN CREEK
F.A.U. RT. 7825 SEC. (K-15D)BR
ADAMS COUNTY
STATION 132+83.00
STR. NO. 001-0031

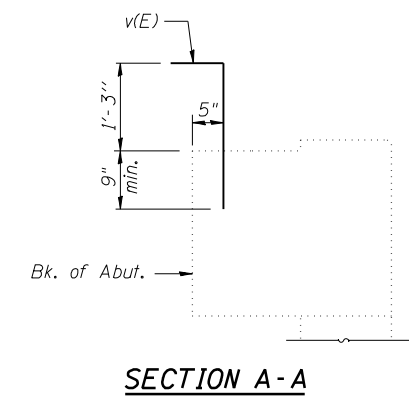
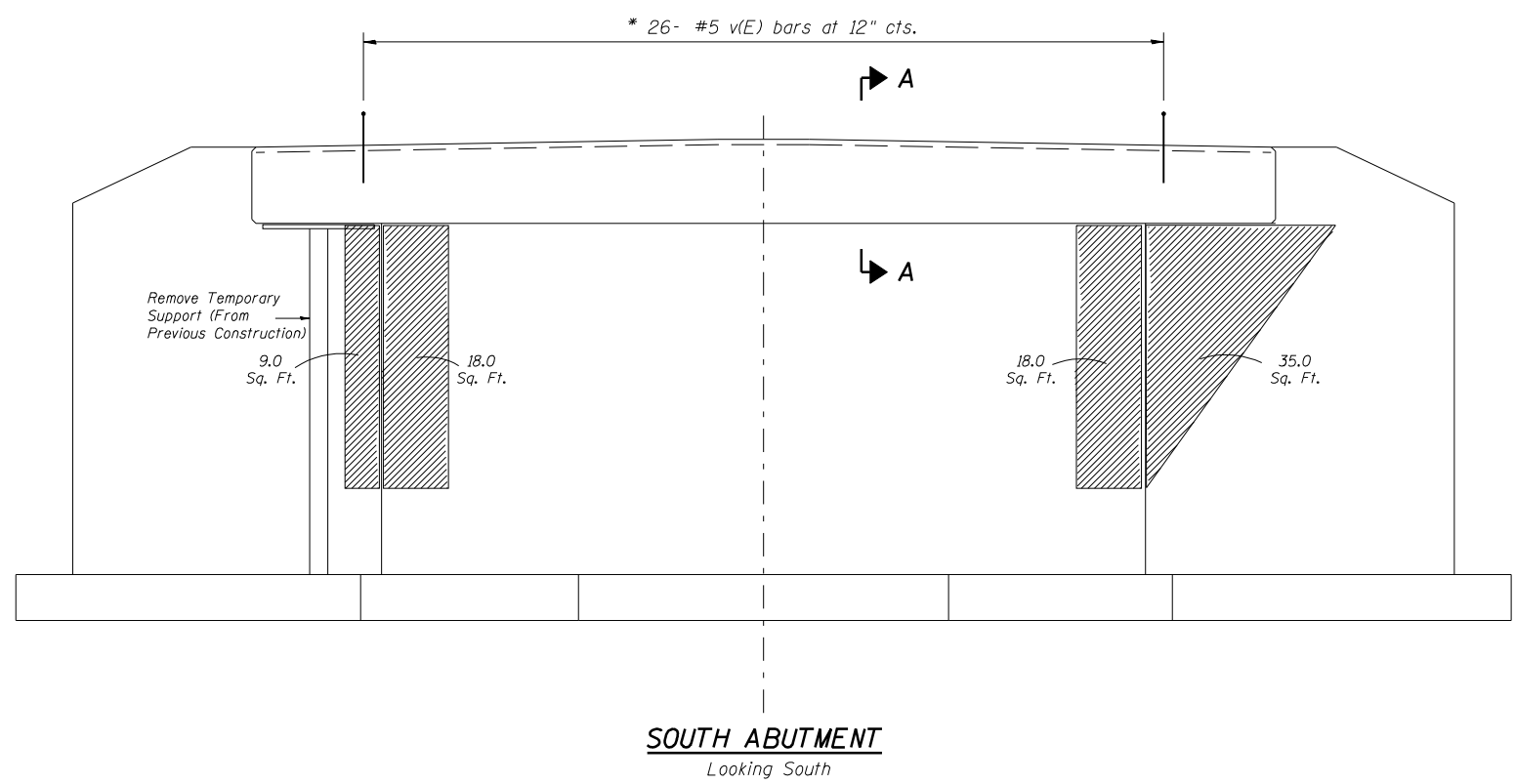
HUTCHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS
Rev: _____ Date: _____

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FALU 7825	*	ADAMS	31	24
FED. ROAD DIST. NO. 6	ILLINOIS	PROJECT		

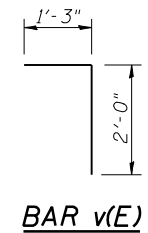
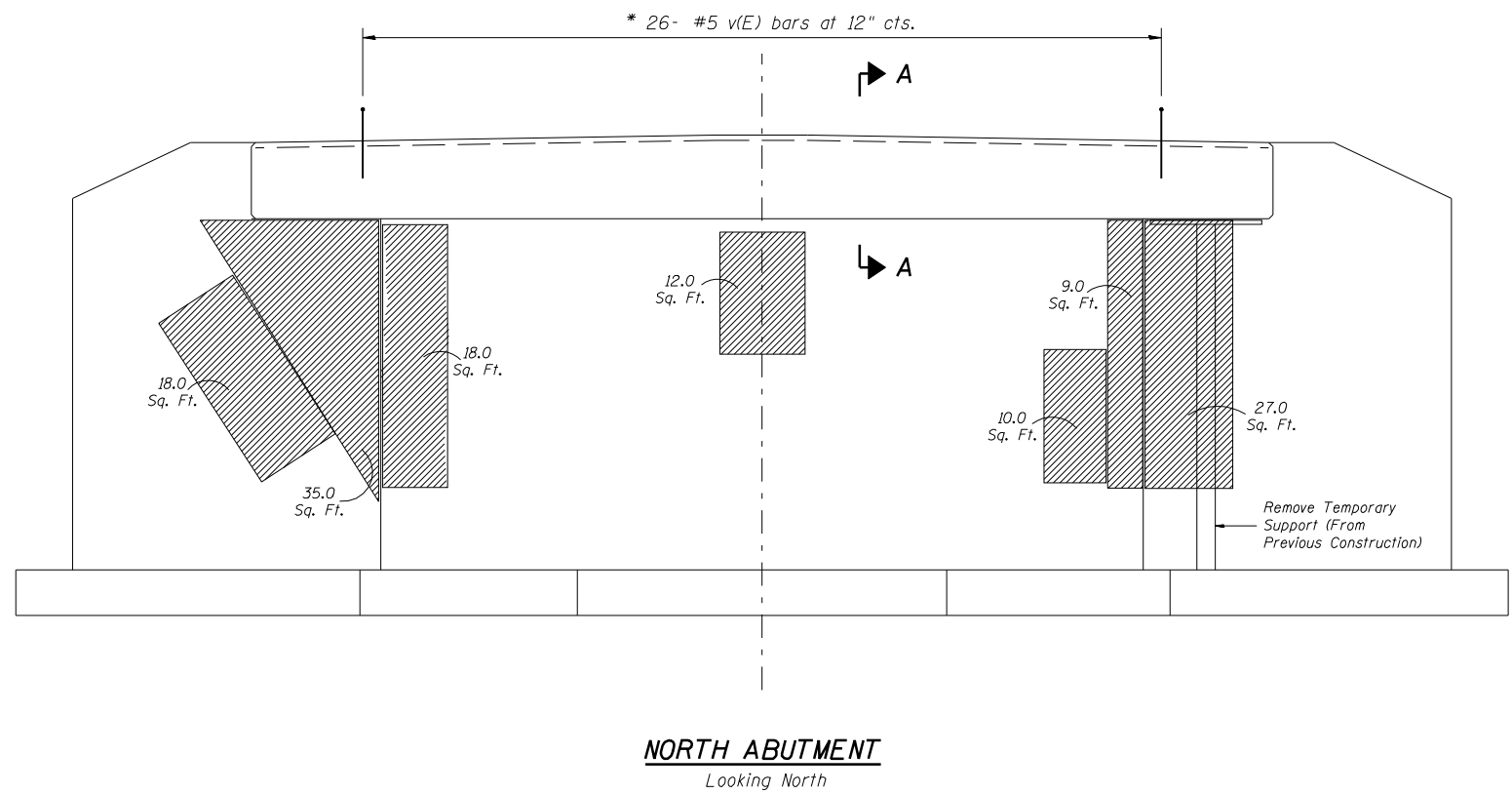
SHEET NO. 9
OF 10 SHEETS

* (K-15D)BR

CONTRACT NO. 72A36



SOUTH ABUTMENT
Looking South



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
v(E)	52	#5	3'-3"	7
Reinforcement Bars, Epoxy Coated			Pound	180
Structural Repair of Concrete (Depth equal to or less than 5")			Sq. Ft.	209

Reinforcement bars designated (E) shall be Epoxy Coated.

LEGEND
 Structural Repair of Concrete (Depth Equal to or less than 5")

NORTH ABUTMENT
Looking North

* Epoxy grout v(E) bars 9" min. into drilled holes according to Section 584 of the Standard specifications.

DESIGNED	BAN
CHECKED	JOH
DRAWN	TC
CHECKED	BAN

ABUTMENT DETAILS
ILLINOIS ROUTE 96 OVER
HOMAN CREEK
F.A.U. RT. 7825 SEC. (K-15D)BR
ADAMS COUNTY
STATION 132+83.00
STR. NO. 001-0031

HUTCHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS

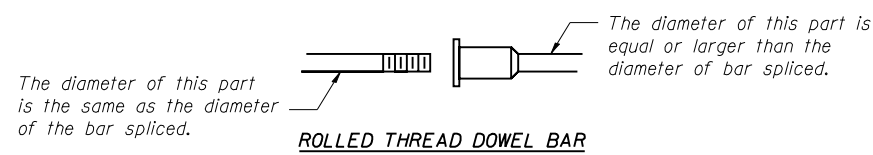
Rev: _____ Date: _____

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 = $1.25 \times f_y \times A_l$
(Tension in kips)
 - ② Minimum *Pull-out Strength = $0.66 \times f_y \times A_l$
(Tension in kips)
- Where f_y = Yield strength of lapped reinforcement bars in ksi.
 A_l = 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

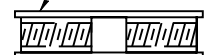


ROLLED THREAD DOWEL BAR



**** ONE PIECE**

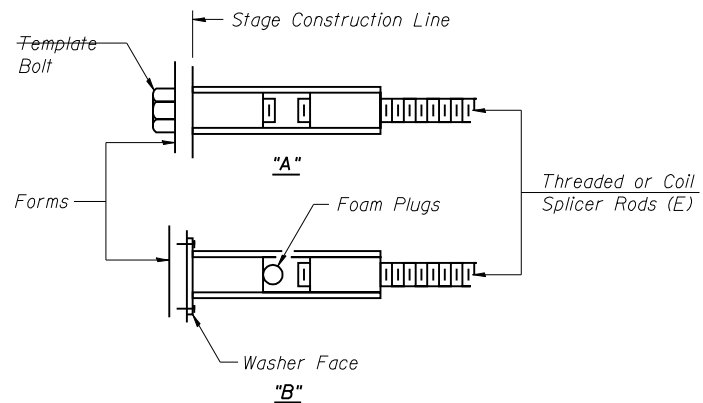
Wire Connector



WELDED SECTIONS

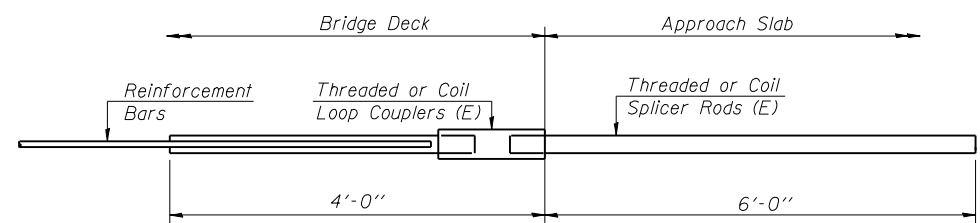
BAR SPLICER ASSEMBLY ALTERNATIVES

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



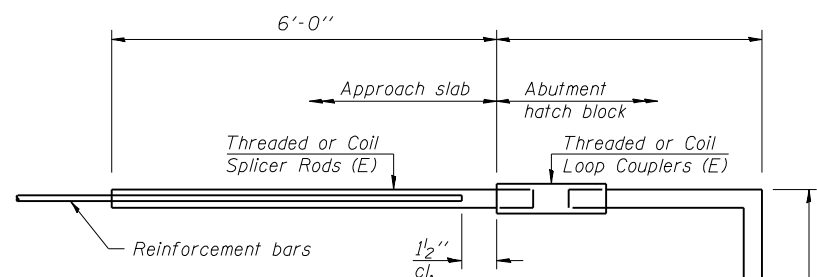
INSTALLATION AND SETTING METHODS

"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.



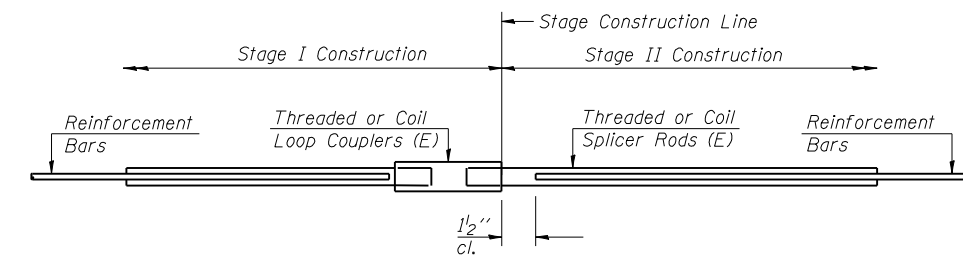
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

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

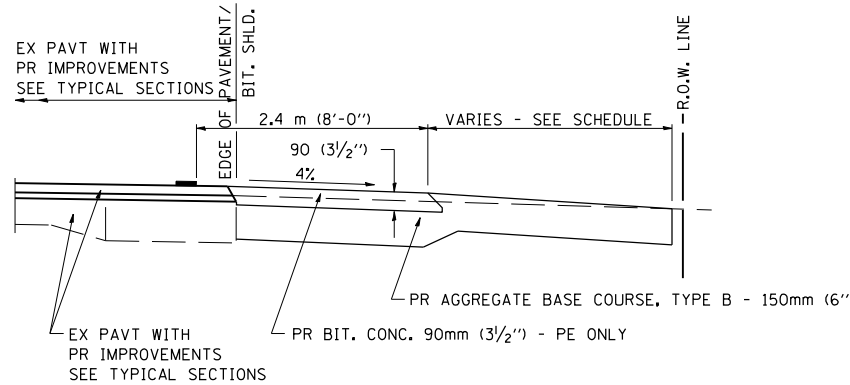
Bar Size	No. Assemblies Required	Location
#4	112	Conc. Wear. Surf.

DESIGNED	BAN
CHECKED	JOH
DRAWN	TC
CHECKED	BAN

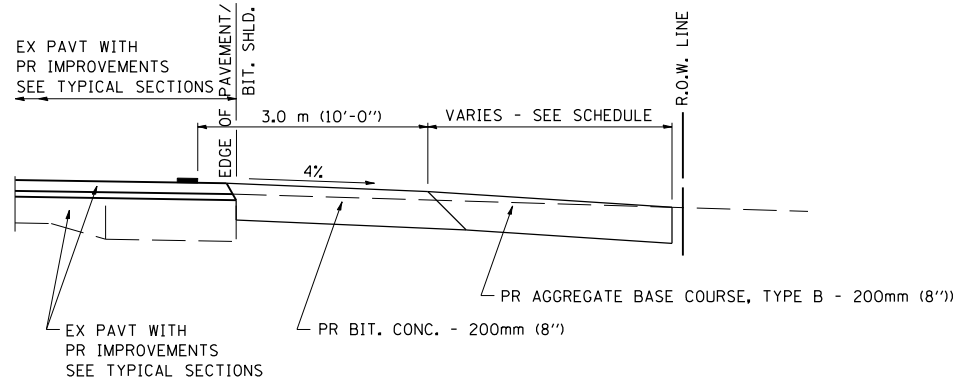
BAR SPLICER ASSEMBLY DETAILS
ILLINOIS ROUTE 96 OVER
HOMAN CREEK
F.A.U. RT. 7825 SEC. (K-15D)BR
ADAMS COUNTY
STATION 132+83.00
STR. NO. 001-0031

HUTCHISON ENGINEERING, INC.
 JACKSONVILLE, ILLINOIS
 Rev: _____ Date: _____

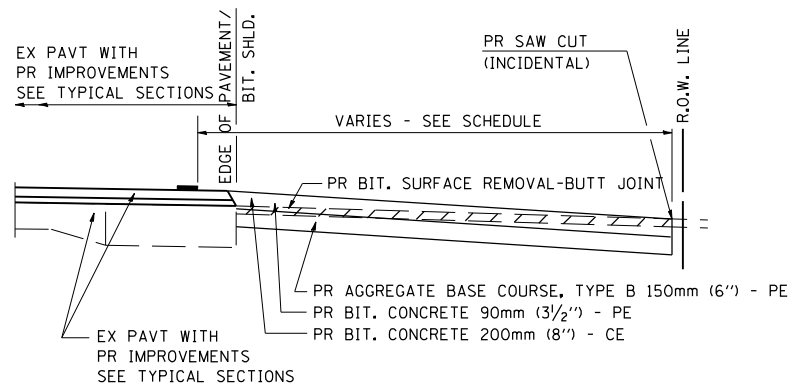
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7825	(K-15D)BR	ADAMS	31	26
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



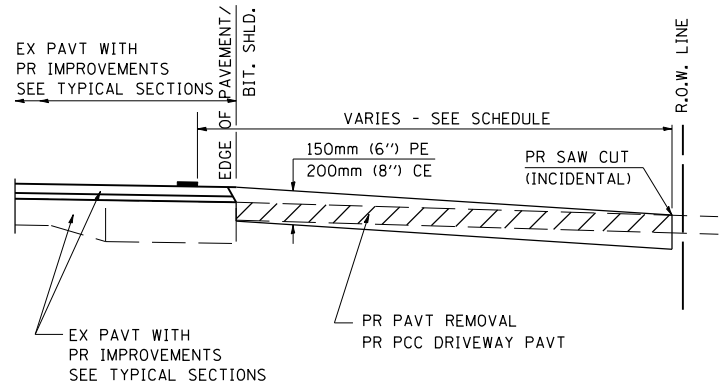
SECTION A-A FOR EX EARTH/AGGREGATE FE & PE



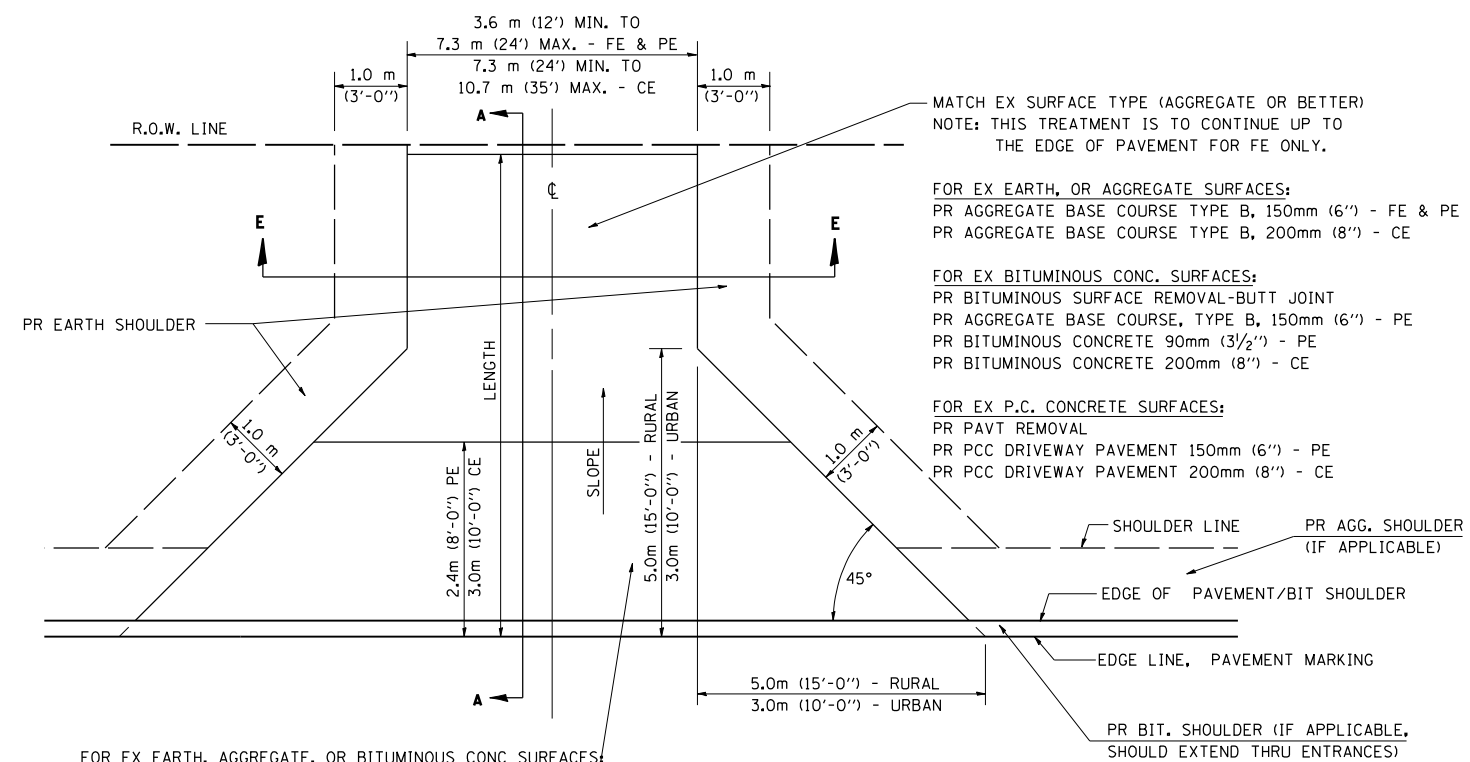
SECTION A-A FOR EX EARTH/AGGREGATE CE



SECTION A-A FOR EX BITUMINOUS PE & CE



SECTION A-A FOR EX P.C. CONC. PE & CE



FOR EX EARTH, AGGREGATE, OR BITUMINOUS CONC SURFACES:
 PR BIT SURFACE REMOVAL-BUTT JOINT (IF APPLICABLE)
 PR AGGREGATE BASE COURSE TYPE B 150mm (6") - FE
 PR AGGREGATE BASE COURSE TYPE B, 150mm (6") &
 PR BITUMINOUS CONCRETE 90mm (3/2") - PE
 PR BITUMINOUS CONCRETE 200mm (8") - CE

FOR P.C. CONCRETE SURFACES:
 PR PAVT REMOVAL
 PR PCC DRIVEWAY PAVT 150mm (6") - PE
 PR PCC DRIVEWAY PAVT 200mm (8") - CE

GENERAL NOTES:

THE RESIDENT ENGINEER WILL DETERMINE THE EXACT TYPE OF IMPROVEMENT TO BE COMPLETED FOR ALL ENTRANCES, SIDEROADS AND MAILBOX TURNOUTS ON THIS PROJECT.

THE PLAN DETAILS AND SCHEDULES SHOULD BE USED AS A GUIDE FOR THE ENGINEER TO IMPLEMENT THE FINAL DESIGN. THE ENGINEER MAY DECIDE TO SALVAGE PORTIONS OF THE EXISTING ENTRANCE PAVEMENT STRUCTURE; THEREFORE, REDUCING PAY ITEM QUANTITIES. NO ADDITIONAL PAYMENT WILL BE ALLOWED FOR THIS REDUCTION IN QUANTITIES.

ANY WORK THE ENGINEER REQUIRES WHICH IS NOT COVERED BY A PAY ITEM CONTAINED IN THE PLANS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

BITUMINOUS CONCRETE REQUIRED TO CONSTRUCT THE ENTRANCES SHALL BE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 406 AND 408 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER.

WHEN THE BITUMINOUS CONCRETE PROPOSED FOR THE IMPROVEMENT IS THICKER THAN 75 mm (3 INCHES) AND REQUIRE PLACEMENT IN MORE THAN ONE LIFT. THE BOTTOM LIFT(S) SHALL MEET THE REQUIREMENTS OF BITUMINOUS BASE COURSE IN SECTION 406 OF THE STANDARD SPECIFICATIONS AND THE TOP LIFT OF 50 mm (2 INCHES) SHALL MEET THE REQUIREMENTS OF BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE.

THIS WORK WILL BE PAID FOR IN ACCORDANCE WITH SECTIONS 351, 358, 408, 423 AND 440 OF THE STANDARD SPECIFICATIONS.

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

NOTE 1: WIDTH OF ENTRANCE MAY BE INCREASED AT THE PIPE CULVERT DUE TO THE DITCHLINE BEING LOCATED IN THE ENTRANCE FLARE AREA.

REVISIONS	
NAME	DATE
JCN	2/19/03
JCN	4/01/04

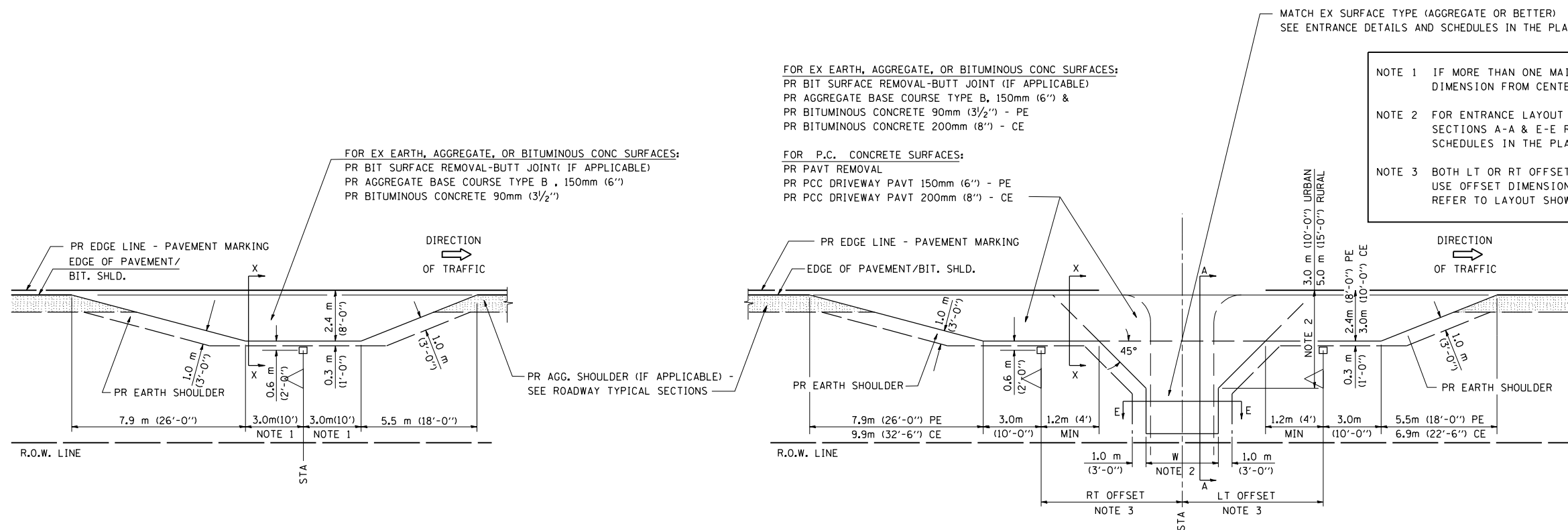
SHEET 1 OF 3
 ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT SIX
DETAILS FOR RURAL / URBAN
ENTRANCE & MAILBOX TURNOUT
W/O CONCRETE GUTTER
(3R - PROJECTS)

SCALE: VERT. HORIZ.
 DATE: FEBRUARY 23, 1999
 DRAWN BY: CADD
 CHECKED BY: JCN

PLOT DATE = 6/29/2007
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 PLOT SCALE = 4:2,3528 / IN.
 USER NAME = laughlin-1

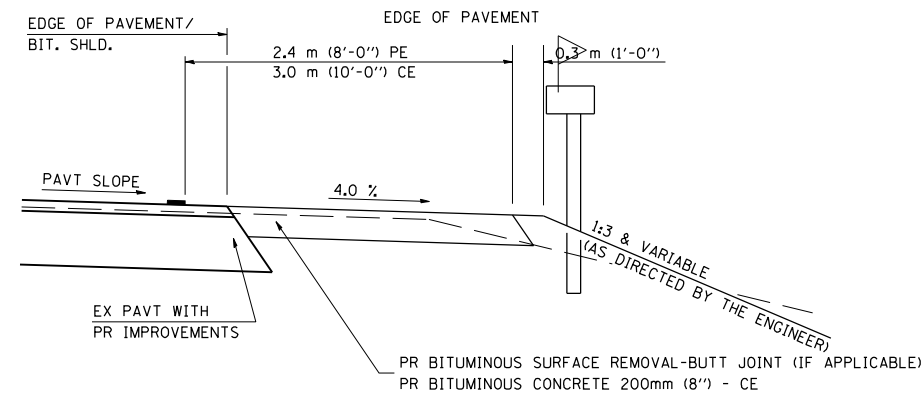
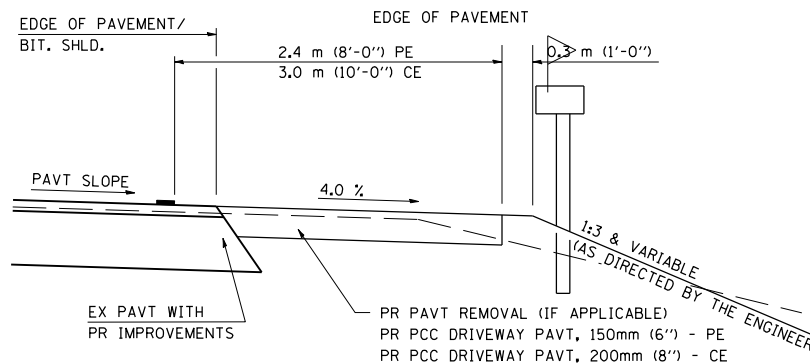
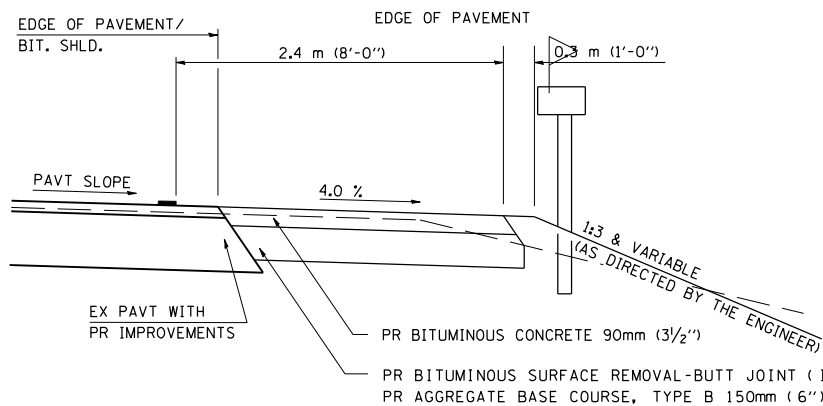
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7825	(K-15D)BR	ADAMS	31	27
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

DETAILS OF MAILBOX TURNOUTS



PLAN - MAILBOX TURNOUTS

PLAN - COMBINED MAILBOX TURNOUT WITH TRAILING OR LEADING ENTRANCE



REVISIONS	
NAME	DATE
JCN	2/19/03
JCN	4/01/04

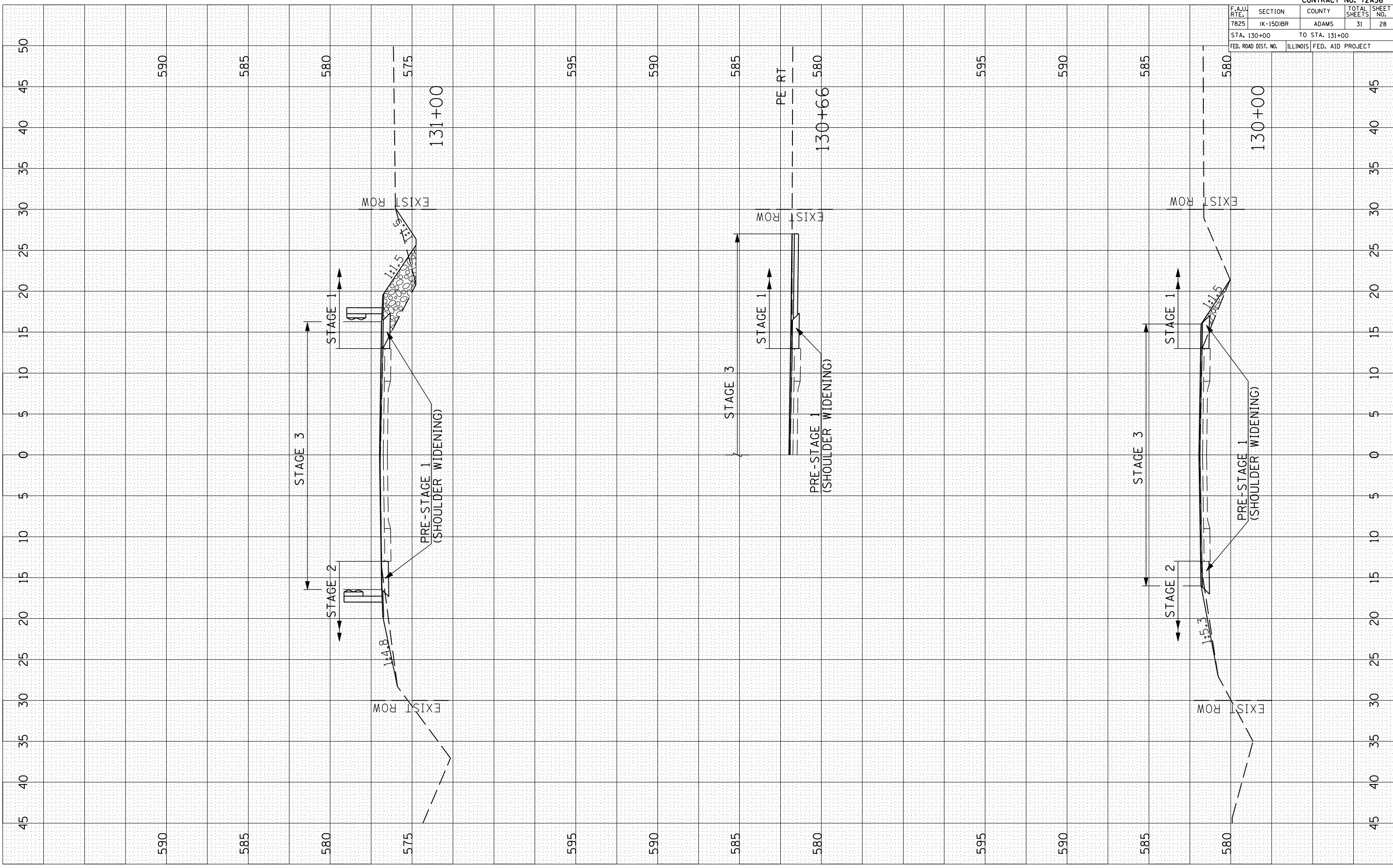
ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT SIX
DETAILS FOR RURAL / URBAN
ENTRANCE & MAILBOX TURNOUT
W / O CONCRETE GUTTER
(3R - PROJECTS)

SCALE: VERT. / HORIZ.
 DATE: FEBRUARY 23, 1999
 DRAWN BY: CADD
 CHECKED BY: JCN

PLOT DATE = 6/25/2007
 FILE NAME = I:\651686\tech\son...
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 USER NAME = laughlin

ORIGINAL SURVEYED SURVEY PLOTTED
 NO. DATE

FINAL SURVEY SURVEYED SURVEY PLOTTED
 NO. DATE

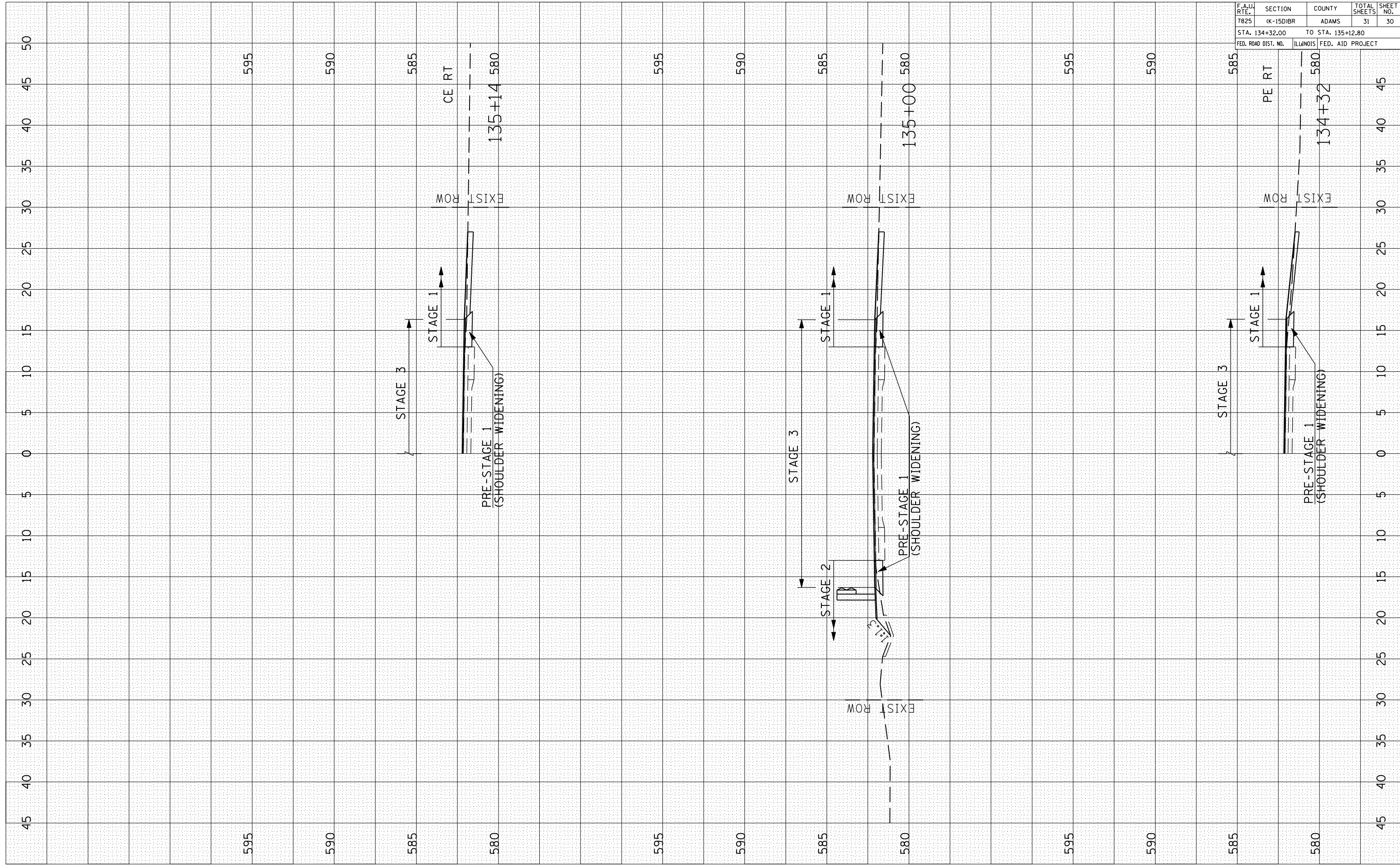


CONTRACT NO. 72A36				
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7825	(K-15D)BR	ADAMS	31	28
STA. 130+00		TO STA. 131+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PLOT DATE = 6/25/2007
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 PLOT SCALE = 10:5000
 USER NAME = laughlinr1

ORIGINAL SURVEY	SURVEYED	DATE
NO.		

FINAL SURVEY	SURVEYED	DATE
NO.		



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7825	(K-15D)BR	ADAMS	31	30

STA. 134+32.00 TO STA. 135+12.80

FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT

