

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
368	2005-0761	COOK	12	1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FAP 368: PULASKI RD (NB)
OVER BRC RR

SECTION 2005-0761

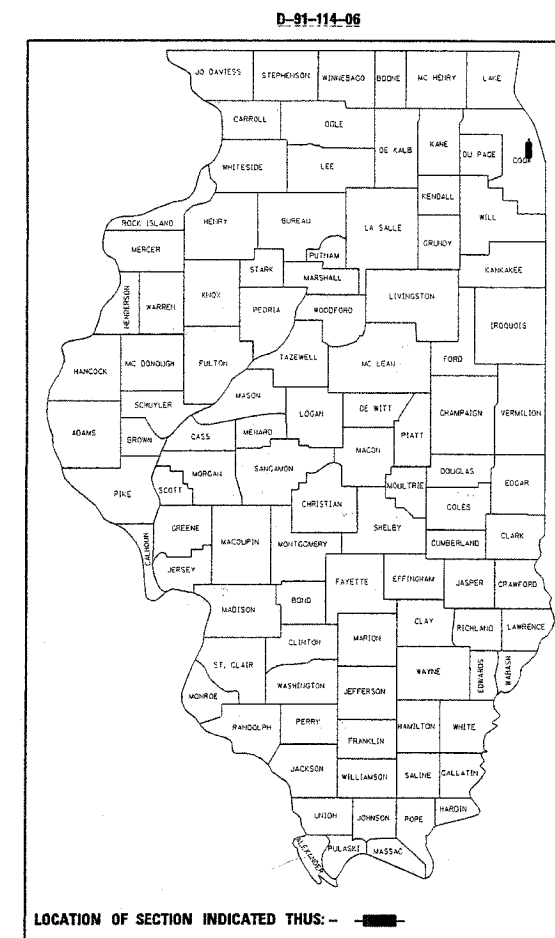
PPC DECK BEAM REPLACEMENT
COOK COUNTY

C-91-114-06

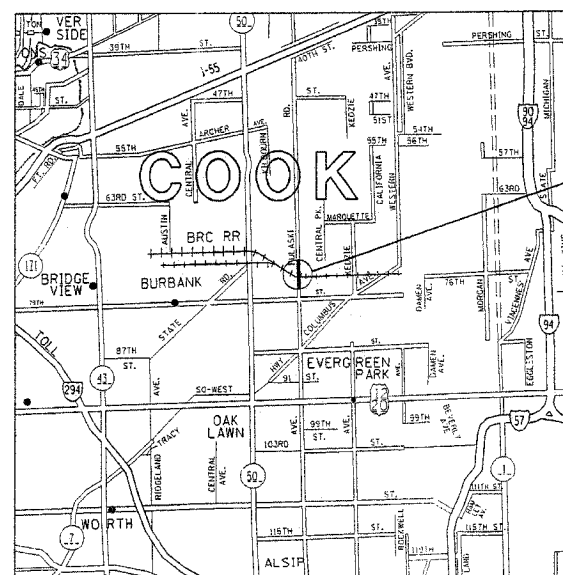
SN 016-1020

FOR INDEX OF SHEETS, SEE SHEET NO. 2

**IMPROVEMENT LOCATED IN
THE CITY OF CHICAGO**



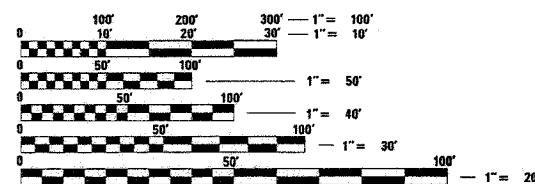
R 12 E R 13 E



**LOCATION OF
IMPROVEMENT**
SN 016-1020

TRAFFIC DATA:

PULASKI RD: 2002 ADT = 52,800
POSTED SPEED LIMIT = 35 MPH



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.

C.U.A.N.
CHICAGO UTILITY ALERT NETWORK
1-312-744-7000

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED: Oct. 27 2005
Diane M. O'Keefe / cd
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

December 9, 2005
Mike Hine / RD
ENGINEER OF DESIGN AND ENVIRONMENT

December 9, 2005
Eric Harms / RD
DEPUTY DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

CONTRACT NO. 60A82

DISTRICT ONE - PLAN PREPARATION ENGINEER
KEN ENG/ R. BORO (847) 705-4178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
368	2005-0761	COOK	12	2
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	INDEX OF SHEETS, STATE STANDARDS, & GENERAL NOTES
3	SUMMARY OF QUANTITIES
4-7	BRIDGE REPAIR DETAILS - SN 016-1020
8-9	TRAFFIC STAGING PLANS
10	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
11	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)
12	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS

STATE STANDARDS

STANDARD NO.	DESCRIPTION
701301-02	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701601-04	URBAN LANE CLOSURE MULTILANE 2W WITH ^{IW OR} NONTRAVERSABLE MEDIAN
701801-03	LANE CLOSURE, MULTILANE, 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
702001-05	TRAFFIC CONTROL DEVICES
704001-02	TEMPORARY CONCRETE BARRIER

GENERAL NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "C.U.A.N." AT (312) 744-7000 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE & GAS UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT

ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

WHEN ARTIFICIAL LIGHT IS UTILIZED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.

BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCES, ALL EXISTING PAVEMENT MARKING LINES AND RAISED REFLECTIVE PAVEMENT MARKERS IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS & CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION & ORDERING OF MATERIAL.

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE ARTERIAL TRAFFIC CONTROL SUPERVISOR AT (847)705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

A MINIMUM OF 10 DAYS BEFORE BEGINNING ANY WORK ON PULASKI RD, THE CONTRACTOR SHALL CONTACT DAVE HOVING IN TRAFFIC SIGNALS AT (847) 705-4418. IN ADDITION, THE CONTRACTOR SHALL CONTACT DAVE HOVING A MINIMUM OF ONE DAY IN ADVANCE OF THE FOLLOWING THREE STAGES: THE START OF JOB, THE POURING OF CONCRETE, AND THE COMPLETION OF THE JOB.

THE ENGINEER SHALL CONTACT SCOTT KUZNICKI TRAFFIC FIELD ENGINEER AT (773) 685-8386 TWO (2) WEEKS PRIOR TO THE START OF THIS PROJECT SO THAT EXACT STATIONING OF NO PASSING ZONES AND OTHER PERMANENT PAVEMENT MARKINGS MAY BE ESTABLISHED

THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THE PROJECT

BITUMINOUS MIXTURE REQUIREMENTS

MIXTURE TYPE	AC TYPE	MAX RAP %	AIR VOID %
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N50	PG 64-22	15	4% @ 50 GYR

THE UNIT WEIGHT USED TO CALCULATE ALL BITUMINOUS SURFACE MIXTURES IS 112 LBS./SQ.YD./IN.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION INDEX OF SHEETS STATE STANDARDS GENERAL NOTES
NAME	DATE	
		SCALE: DATE
		DRAWN BY CHECKED BY

Rev.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
368	2005-0761	COOK	12	3
FED. ROAD DIST. NO. 1		ILLINOIS	HIGHWAY PROJECT	

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	URBAN 100% STATE SFTY-2A	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT							
44001000	BITUMINOUS CONCRETE SURFACE REMOVAL	SQ YD	10.9	10.9					
50102400	CONCRETE REMOVAL	CU YD	1.8	1.8					
50300255	CONCRETE SUPERSTRUCTURE	CU YD	16.6	16.6					
50300300	PROTECTIVE COAT	SQ YD	66.3	66.3					
50400405	PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ FT	806	806					
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	1130	1130					
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2020	2020					
58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	67.6	67.6					
58300100	PORTLAND CEMENT MORTAR FAIRING COURSE	FOOT	272	272					
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	2	2					
67100100	MOBILIZATION	L SUM	1	1					
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1					
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1					
70400100	TEMPORARY CONCRETE BARRIER	FOOT	240	240					
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	110	110					
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	200	200					
X0320047	REMOVAL OF EXISTING PRECAST PRESTRESSED CONCRETE DECK BEAMS	SQ FT	806	806					
X0322467	TEMPORARY INFORMATION SIGNING FOR LANE CLOSURE	SQ FT	48	48					
X4066424	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N50	TON	11.4	11.4					
Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	7	7					
Δ 20030240	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2	EACH	1	1					
Δ 20030340	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 2	EACH	1	1					
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1					

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	SFTY-2A	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT							

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES

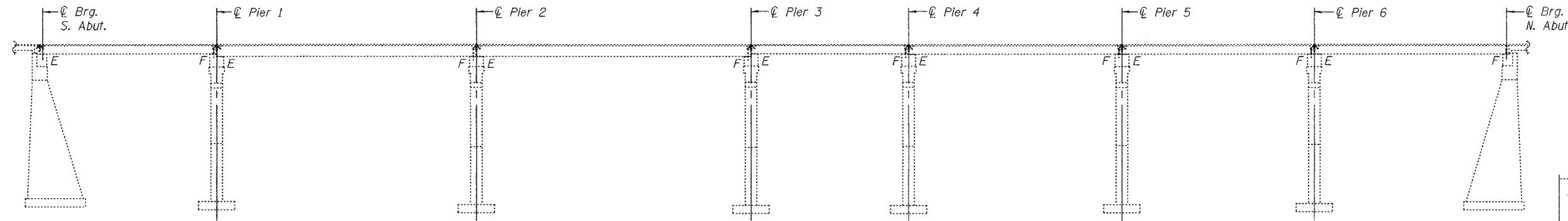
REV.

Δ SFTY-34
* SPECIALTY ITEMS

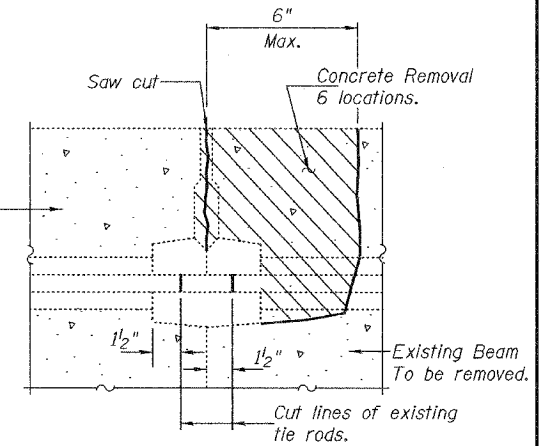
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		Cook	12	4
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

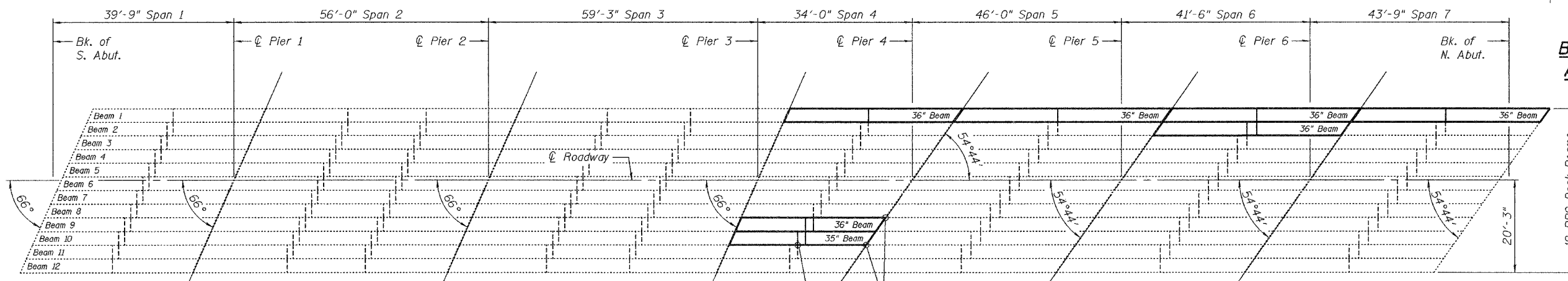
SHEET NO. 1
4 SHEETS
Contract Number: 60A82



ELEVATION



BEAM REMOVAL DETAIL
AT TRANSVERSE TIES



PLAN

GENERAL NOTES

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Any damage done to the bridge during beam removal shall be repaired by the Contractor. Cost to be included in the cost of "Removal of Existing P.P.C. Deck Beams".

Reinforcement bars shall conform to the requirements of AASHTO M 31 or M 322 Grade 60.

The top surface of the beams shall be finished in accordance with Article 504.06 of the Standard Specifications except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners, and the top edge of keys shall be rounded or chamfered a minimum of 1/4".

Temporary concrete barrier shall only be anchored into the overlay and not the PPC Deck Beams.

All structural steel shall be shop painted with the inorganic zinc rich primer per AASHTO M300, Type 1. Cost included with Furnishing and Erecting Structural Steel.

Existing reinforcement extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost shall be included with Concrete Removal.

For stage construction details see Roadway Plans.

DESIGN STRESSES
PRESTRESS UNITS

(New Construction)
f'c = 5,000 psi
f'cl = 4,000 psi
f's = 270,000 (1/2" low relaxation strands)
f'si = 201,960 (1/2" low relaxation strands)

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Bituminous Concrete Surface Removal	Sq. Yd.	10.9
Waterproofing Membrane System	Sq. Yd.	67.6
Removal of Existing PPC Deck Beams	Sq. Ft.	806
Bituminous Concrete Surface Course, Superpave Mix "D", N 50	Tons	11.4
PC Mortar Fairing Course	Foot	272
PPC Deck Beams (21" Depth)	Sq. Ft.	808
Concrete Removal	Cu. Yd.	1.8
Concrete Superstructure	Cu. Yd.	16.6
Protective Coat	Sq. Yd.	66.3
Furnishing and Erecting Structural Steel	Pound	1,130
Asbestos Bearing Pad Removal	Each	7
Reinforcement Bars, Epoxy Coated	Pound	2,020

DESIGNED	Victor H. Veliz
CHECKED	John A. Manis
DRAWN	Ralph E. Anderson
CHECKED	VHV S.F.B.

November 30, 2005
EXAMINED John A. Manis
ENGINEER OF STRUCTURAL SERVICES
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES



Expires: November 30, 2006

PLAN AND ELEVATION
NORTH BOUND LANES
PULASKI ROAD / BRC R.R.
COOK COUNTY
SN 016-1020

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

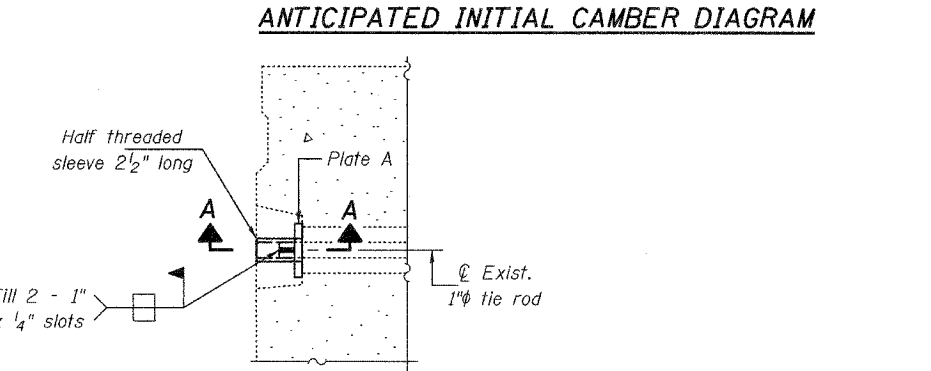
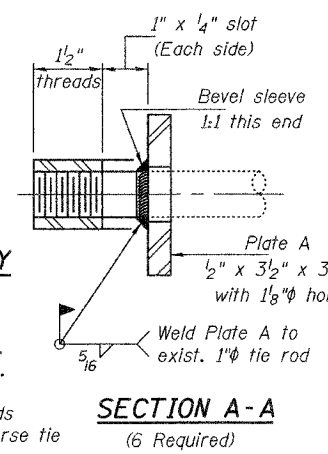
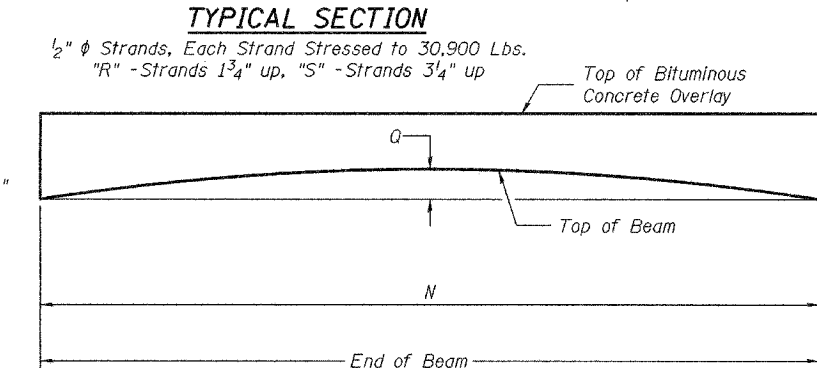
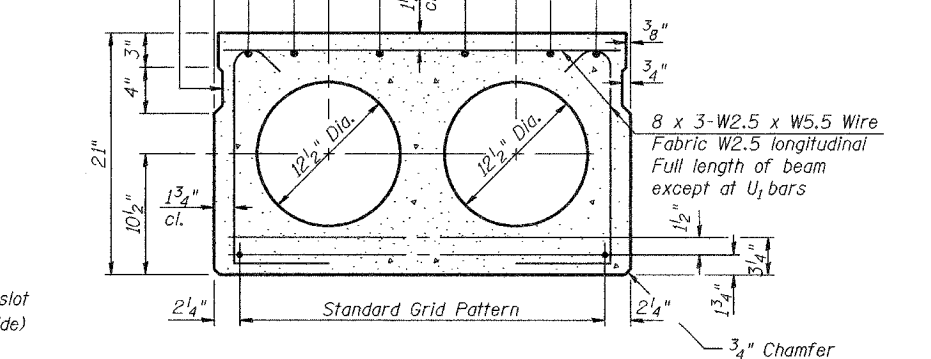
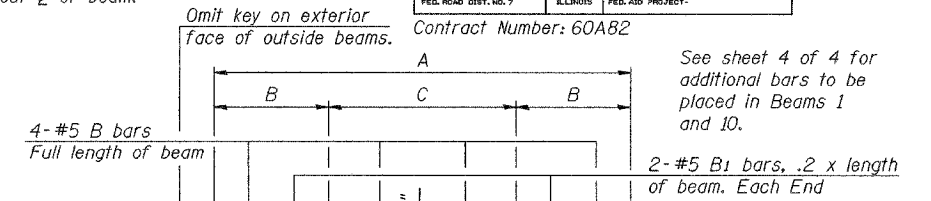
Note:
Place strands symmetrically
about \bar{C} of beam.

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
		Cook	12	5
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

Contract Number: 60A82

4 SHEETS

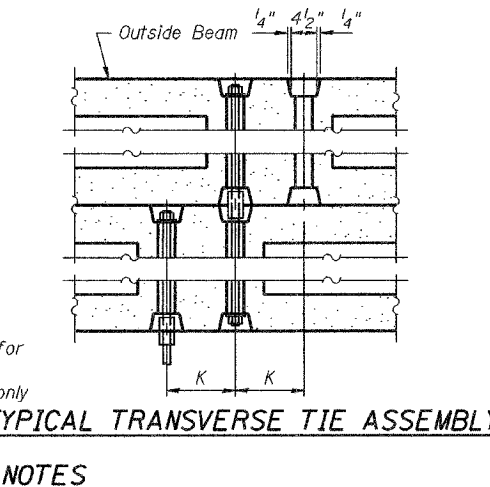
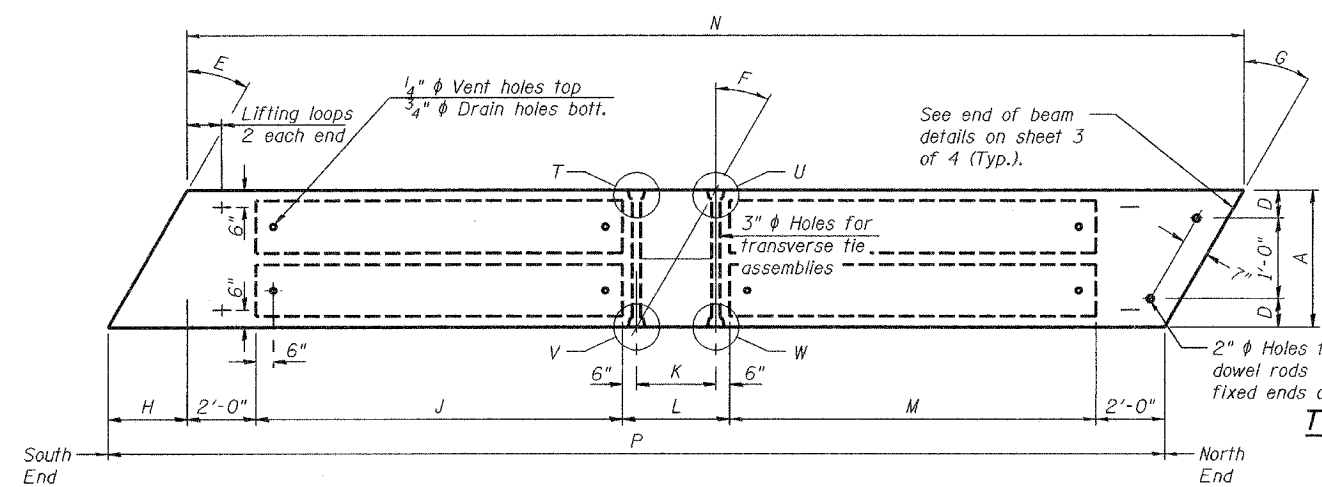
Span	Beam	Beam Width Dimensions				Skew Angle			Beam Length Dimensions								Camber	# of Strands		Tie Rod Detail			
		A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q		R	S	T	U	V	W
4	1	36"	10 1/4"	15 1/2"	1'-0"	24°-0'	29°-57'	35°-16'	1'-4"	14'-6 3/4"	1'-8 3/4"	2'-8 3/4"	14'-6 3/4"	37'-11 1/2"	37'-2 1/8"	3/8"	8	0	E	-	B	-	
4	9	36"	10 1/4"	15 1/2"	1'-0"	24°-0'	29°-57'	35°-16'	1'-4"	11'-4 7/8"	1'-8 3/4"	2'-8 3/4"	11'-5"	31'-8 8/8"	30'-10 5/8"	1/4"	8	0	A	B	C	D	
4	10	35"	10"	15"	11 1/2"	24°-0'	29°-57'	35°-16'	1'-4"	11'-0 1/4"	1'-8 3/4"	2'-8 3/4"	11'-0 1/4"	30'-10 3/8"	30'-1 1/4"	1/4"	8	0	D	C	B	A	
5	1	36"	10 1/4"	15 1/2"	1'-0"	35°-16'	35°-16'	35°-16'	2'-1 1/2"	18'-3 3/8"	2'-1 1/2"	3'-1 1/2"	18'-3 1/2"	45'-9 7/8"	45'-9 7/8"	1"	4	8	E	-	B	-	
6	1	36"	10 1/4"	15 1/2"	1'-0"	35°-16'	35°-16'	35°-16'	2'-1 1/2"	16'-0 3/8"	2'-1 1/2"	3'-1 1/2"	16'-0 1/2"	41'-3 7/8"	41'-3 7/8"	3/4"	6	4	E	-	C	-	
6	2	36"	10 1/4"	15 1/2"	1'-0"	35°-16'	35°-16'	35°-16'	2'-1 1/2"	16'-0 3/8"	2'-1 1/2"	3'-1 1/2"	16'-0 1/2"	41'-3 7/8"	41'-3 7/8"	3/4"	6	4	D	C	B	A	
7	1	36"	10 1/4"	15 1/2"	1'-0"	35°-16'	35°-16'	35°-16'	2'-1 1/2"	16'-1 5/8"	2'-1 1/2"	3'-1 1/2"	16'-1 5/8"	41'-6 1/4"	41'-6 1/4"	3/4"	6	4	E	-	B	-	



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	18	#5	3'-6"	
a1(E)	12	#5	7'-2"	
Precast Prestressed Conc. Deck Bms.		Sq. Ft.	808	
Reinforcing Bars, Epoxy Coated		Pound	160	

BEAM DETAILS
NORTH BOUND LANES
PULASKI ROAD / BRC R.R.
COOK COUNTY
SN 016-1020



NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be 2-1/2" ϕ -270 ksi strands, as shown.

The 1" ϕ rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place.

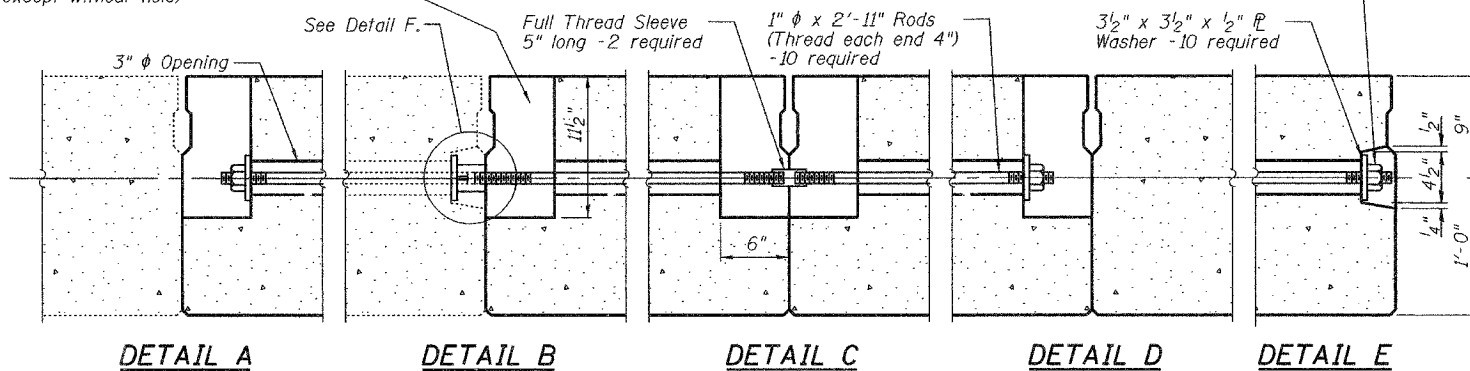
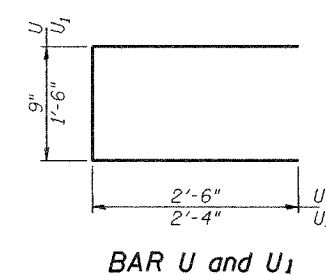
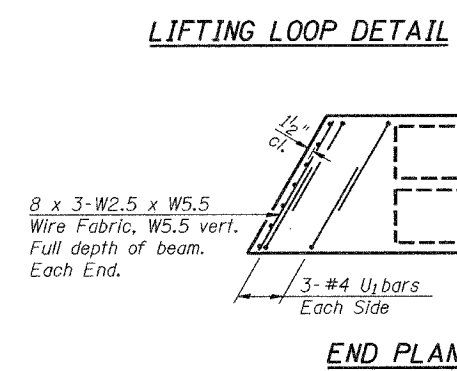
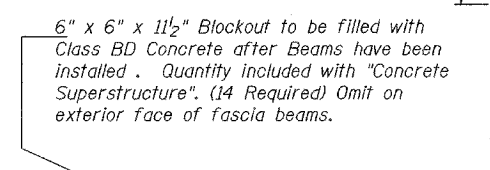
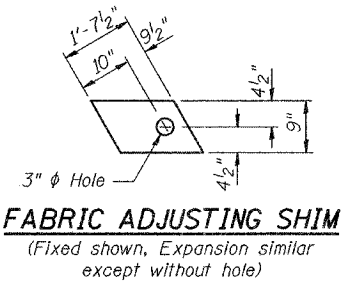
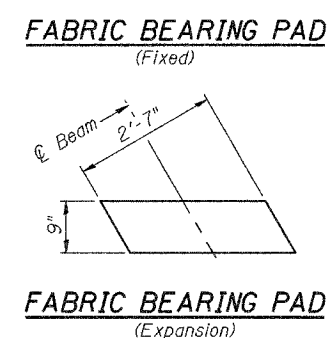
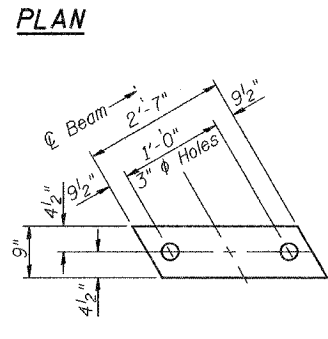
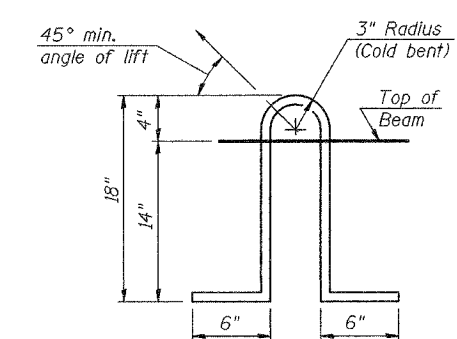
Non prestressing steel shall conform to AASHTO M31 or M322 Grade 60.

The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 1/8" fabric adjusting shims of the dimensions shown shall be provided for each bearing.

Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between top of the beam and the bottom edge of the key.

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

Required Release Strength, f'ci, shall be 4000 p.s.i.



DESIGNED V.H.V.
CHECKED S.J.B.
DRAWN Drew Christopher
CHECKED V.H.V. S.J.B.
PD-3-L

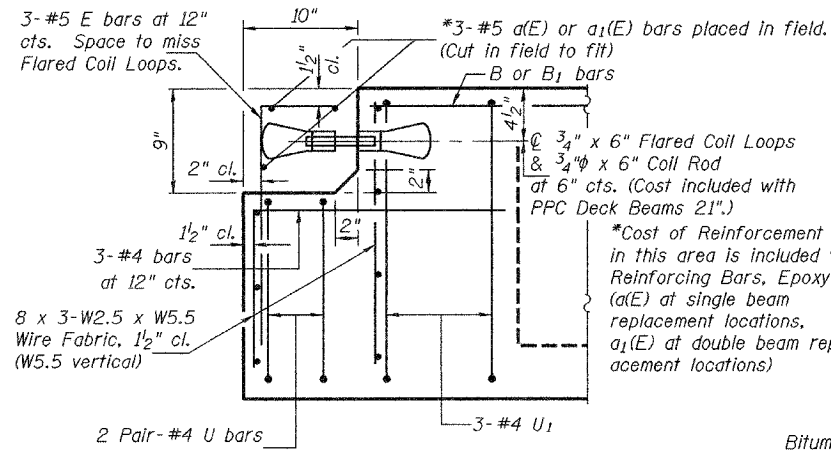
November 16, 2005
EXAMINED John A. Morris
ENGINEER OF STRUCTURAL SERVICES
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES
10-22-04

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		COOK	12	6
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

Contract Number: 60A82

SHEET NO. 3
4 SHEETS

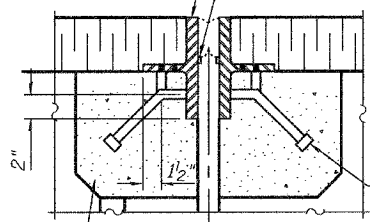


BAR E

END OF BEAM (EXP. END)

**WT 4x33.5 x L Each End See table for lengths

1/2" x 1/2" Bar (3/4" from top) Fillet weld at 6" cts.



Class BD Concrete (Typ.) (Cost included with Concrete Superstructure)

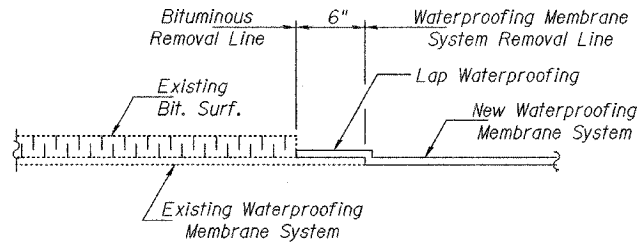
ENLARGED DETAIL A

Existing 2 1/2" P.J.S. to be removed, stored and re-installed.

** Seal space between existing and new WT 4 x 33.5 with silicone sealant suitable for Structural Steel. Cost of silicone sealant is included with Furnishing and Erecting Structural Steel.

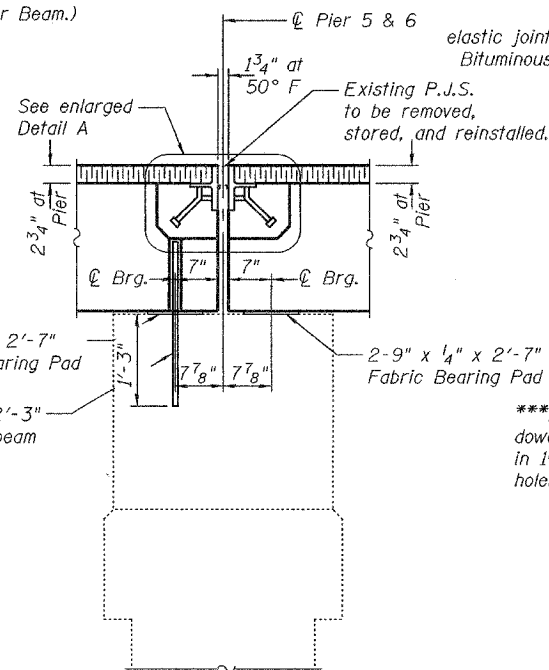
WT 4x33.5 Lengths

Span	Beam	"L" at End	
		South	North
4	1	1'-4 3/8"	1'-6 3/8"
	9	6'-3 1/2"	7'-0 1/2"
5	1	1'-6 3/8"	1'-6 3/8"
	2	5'-2 3/8"	5'-2 3/8"
7	1	1'-6 3/8"	

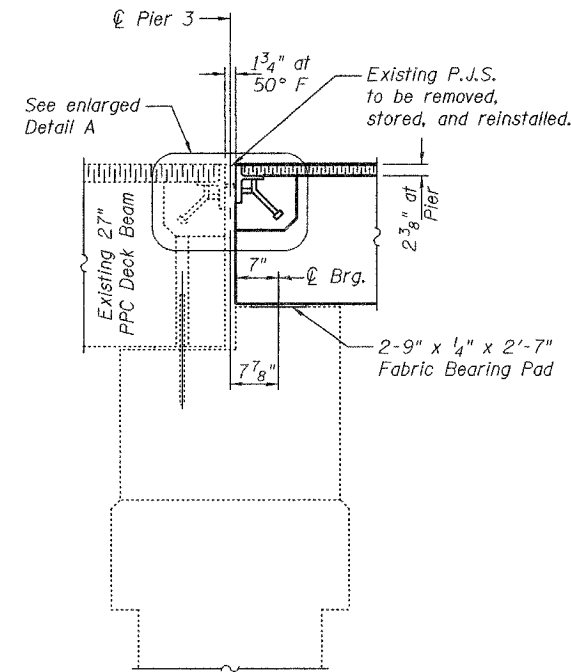


WATERPROOFING TREATMENT

3/4" x 8" Granular or solid flux filled headed studs conforming to Article 1006.32 of the Standard Specifications automatically end welded at Alternate 12" cts. (4 Required per Beam.)

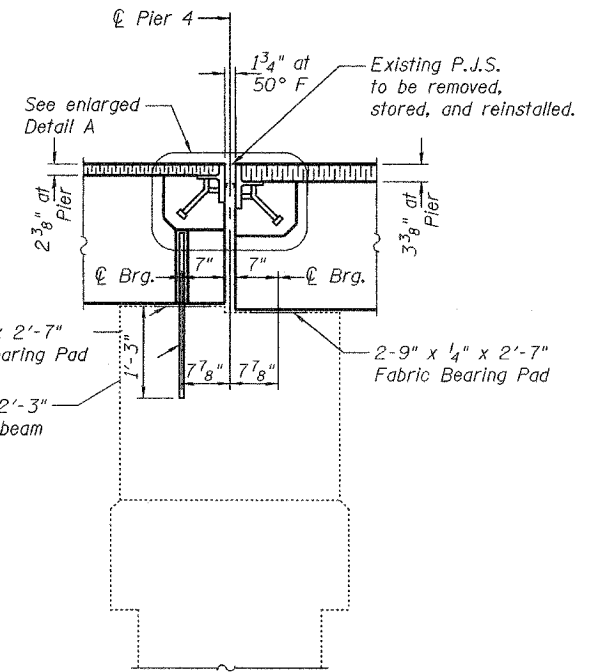


TYPICAL SECTION PIERS 5 AND 6



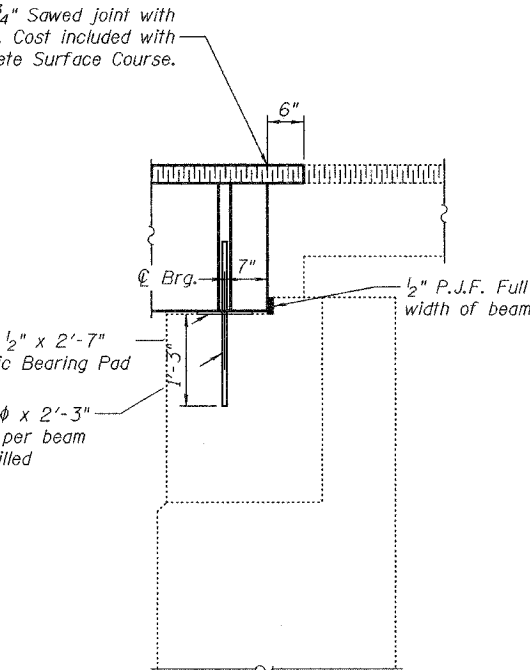
TYPICAL SECTION PIER 3

***Existing dowel rods are to be cut off and ground flush with cap.

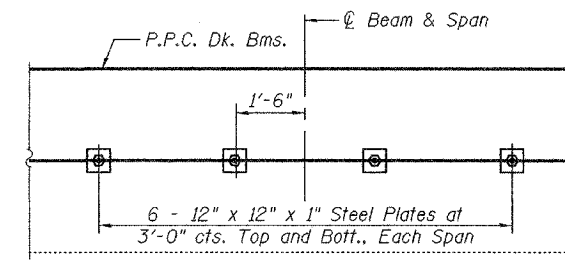


TYPICAL SECTION PIER 4

1/4" x 3/4" Sawed joint with elastic joint sealer. Cost included with Bituminous Concrete Surface Course.

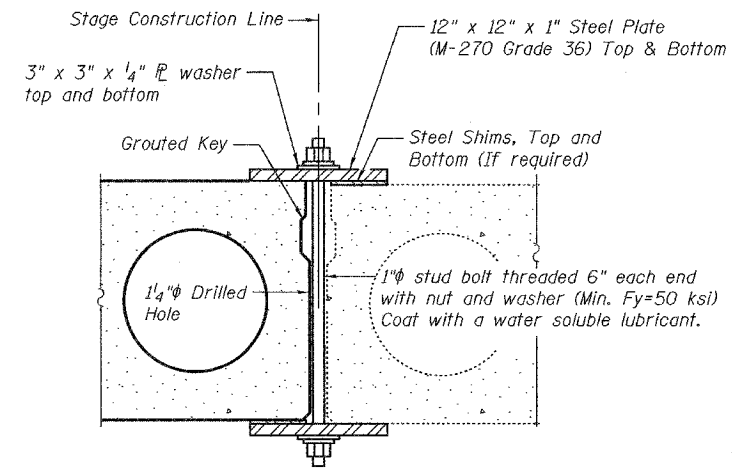


TYPICAL SECTION NORTH ABUTMENT

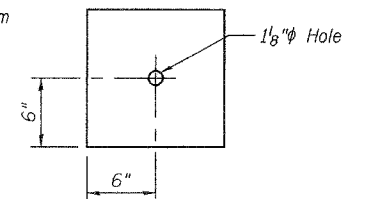


SHEAR KEY CLAMPING PLAN

Notes:
See Special Provisions for Stage Construction Precast Prestressed Concrete Deck Beams.
See Stage Construction Detail for traffic lane. Cost is included with Precast Prestressed Concrete Deck Beams.



SHEAR KEY CLAMPING SECTION



CLAMPING PLATE

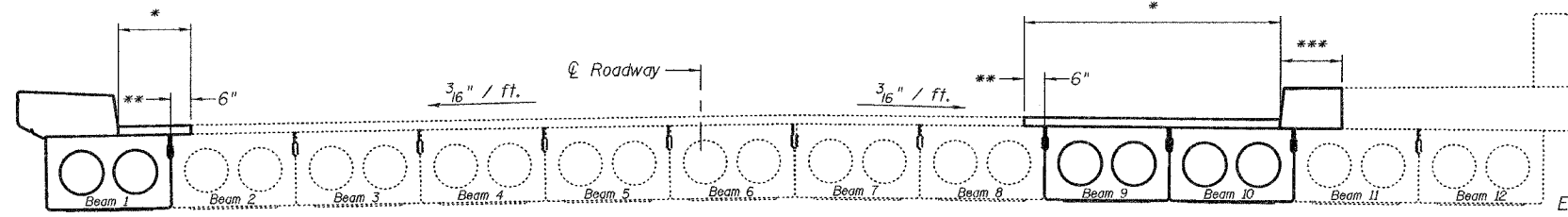
JOINT DETAILS
NORTH BOUND LANES
PULASKI ROAD / BRC R.R.
COOK COUNTY
SN 016-1020

DESIGNED	V.H.V.
CHECKED	S.J.B.
DRAWN	Drew Christopher
CHECKED	V.H.V. S.J.B.

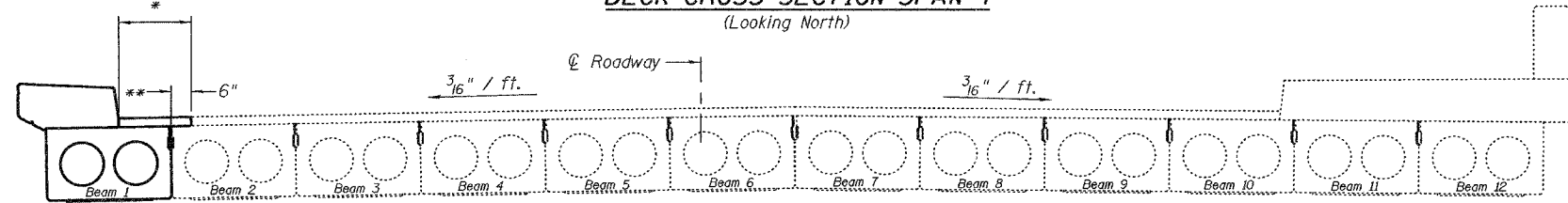
November 16, 2005

EXAMINED *John A. Morris*
ENGINEER OF STRUCTURAL SERVICES

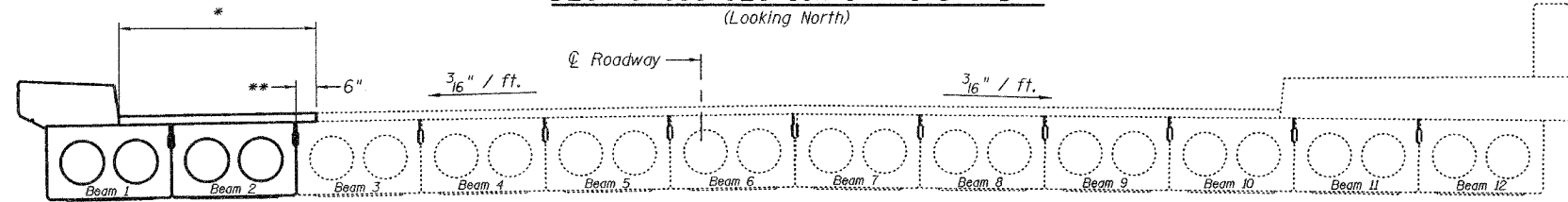
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES



DECK CROSS SECTION SPAN 4
(Looking North)



DECK CROSS SECTION SPANS 5 AND 7
(Looking North)

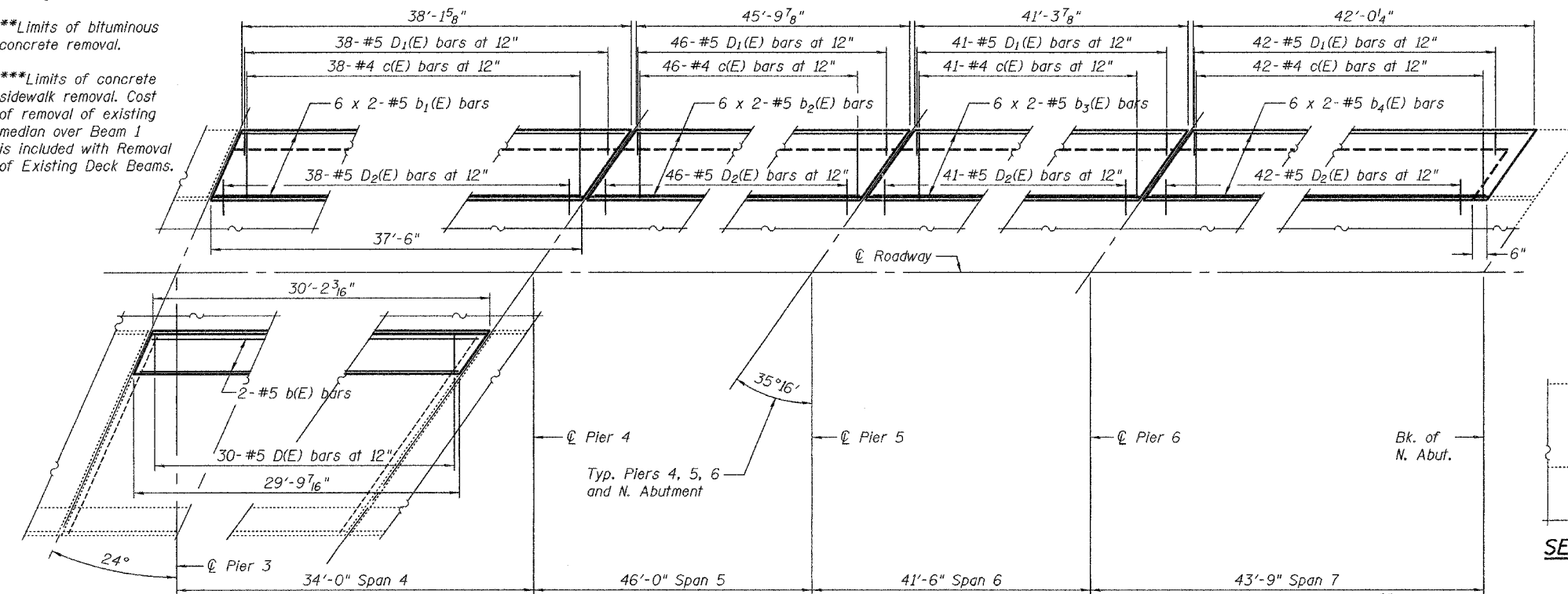


DECK CROSS SECTION SPAN 6
(Looking North)

*New waterproofing membrane and bituminous wearing surface.

**Limits of bituminous concrete removal.

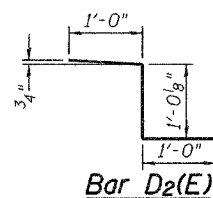
***Limits of concrete sidewalk removal. Cost of removal of existing median over Beam 1 is included with Removal of Existing Deck Beams.



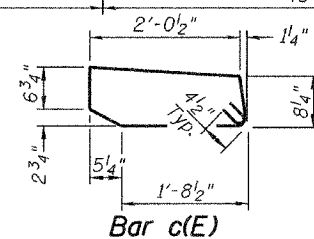
PARTIAL DECK PLAN
(Showing median and sidewalk removal and replacement)

DESIGNED	V.H.V.
CHECKED	S.J.B.
DRAWN	Drew Christopher
CHECKED	V.H.V. S.J.B.

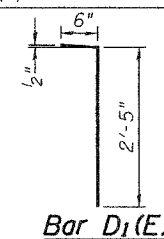
November 16, 2005
EXAMINED *John A. Morris*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES



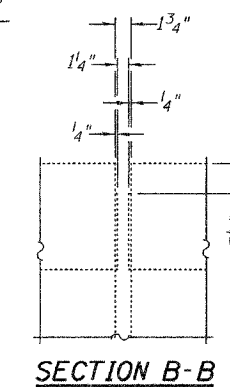
Bar D₂(E)



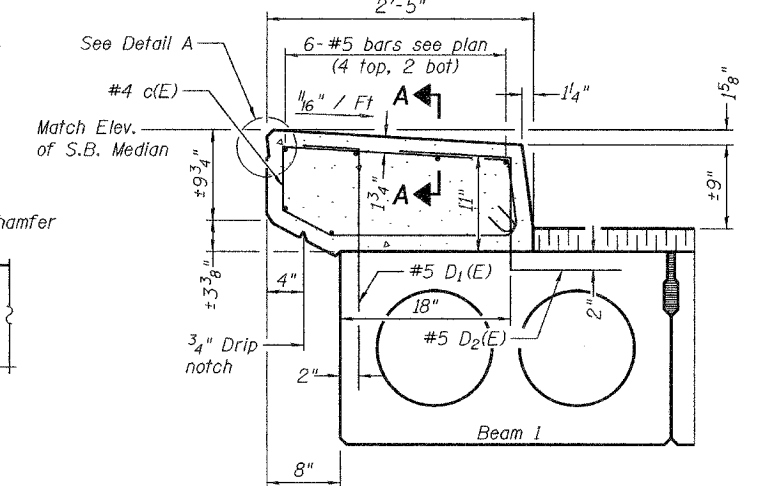
Bar c(E)



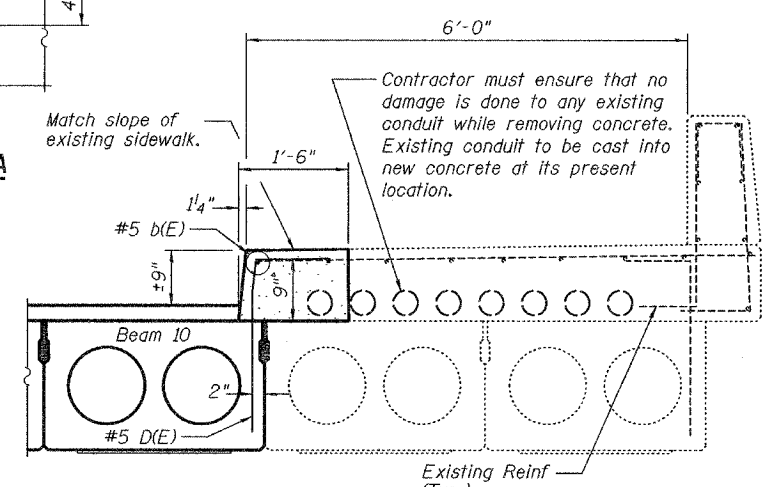
Bar D₁(E)



SECTION B-B



TYPICAL MEDIAN SECTION

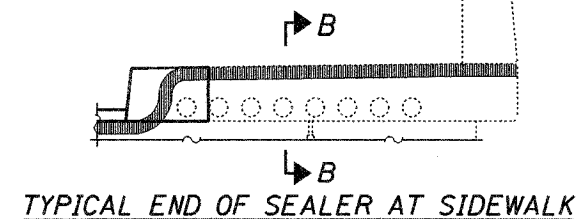


TYPICAL SIDEWALK SECTION

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
b(E)	2	#5	30'-0"	▬
b ₁ (E)	12	#5	20'-0"	▬
b ₂ (E)	12	#5	24'-0"	▬
b ₃ (E)	12	#5	21'-9"	▬
b ₄ (E)	12	#5	22'-2"	▬
c(E)	167	#4	6'-3"	┘
Concrete Removal			Cu. Yd.	1.8
Concrete Superstructure			Cu. Yd.	16.6
Reinforcement Bars, Epoxy Coated			Lbs.	1,860

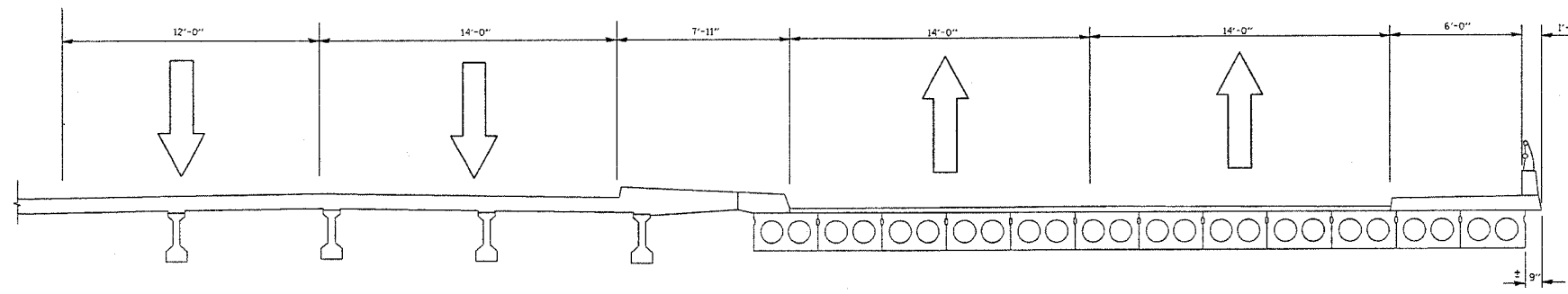
Reinforcement bars designated (E) shall be epoxy coated.
Bars indicated thus 1 x 2-#5 etc. indicates 1 line of bars with 2 lengths per line.



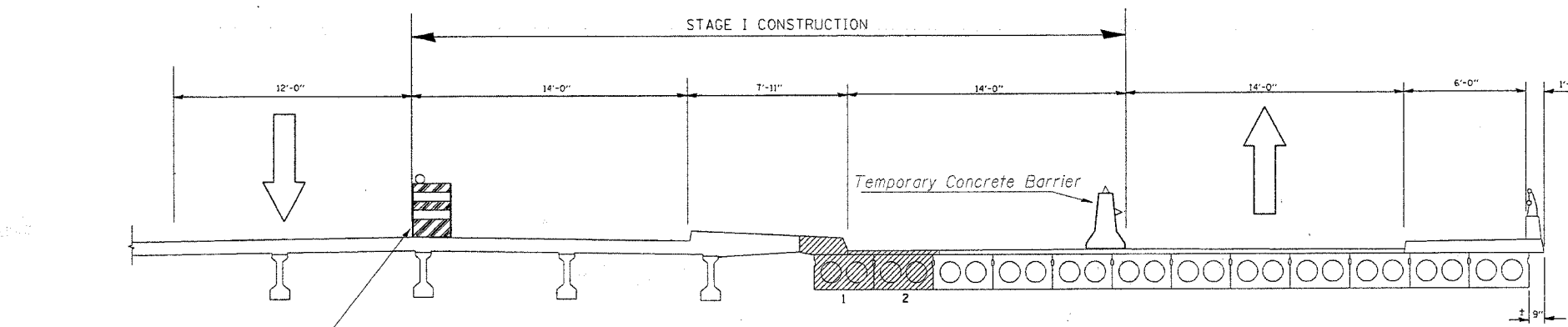
TYPICAL END OF SEALER AT SIDEWALK

DECK DETAILS
NORTH BOUND LANES
PULASKI ROAD / BRC R.R.
COOK COUNTY
SN 016-1020

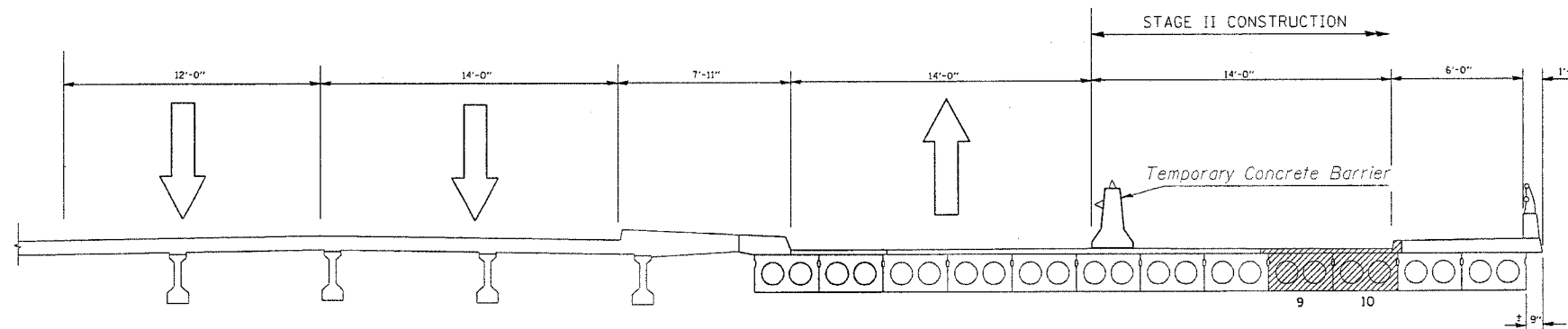
F.A.R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
368	2005-0161	COOK	12	8
STA. _____		TO STA. _____		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



EXISTING TYPICAL SECTION
(LOOKING NORTH)



REMOVAL AND REPLACEMENT
STAGE I



REMOVAL AND REPLACEMENT
STAGE II

PLOT DATE = 11/7/2005
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USER NAME = mdyj

REVISIONS	
NAME	DATE

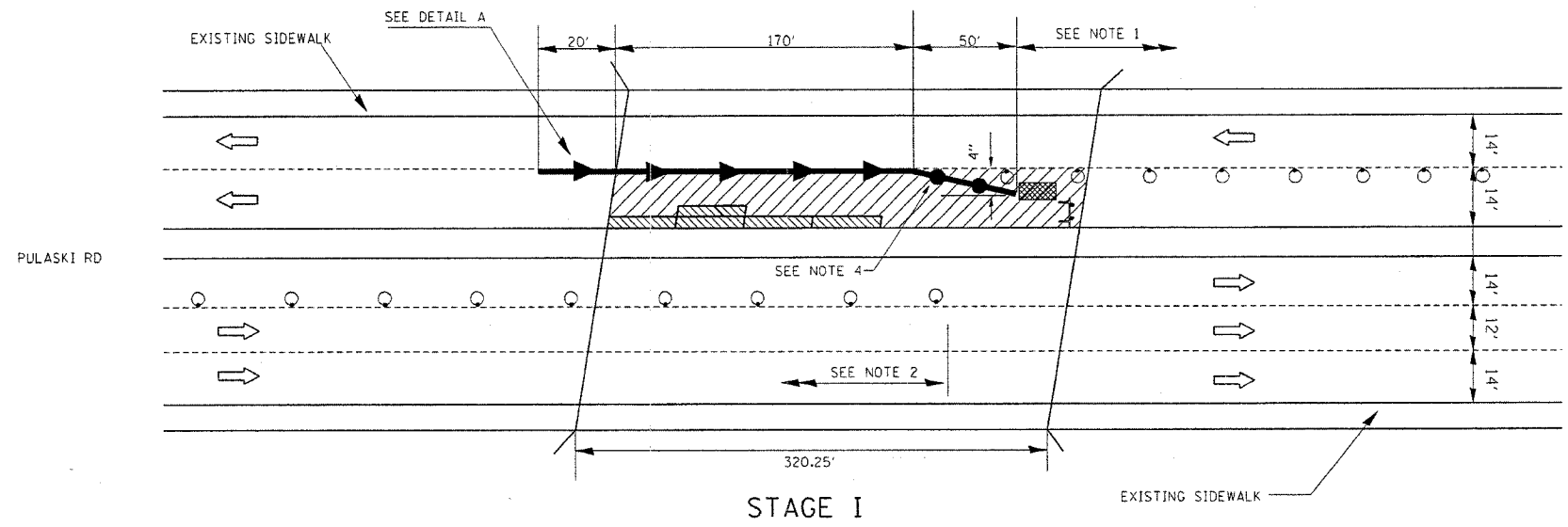
ILLINOIS DEPARTMENT OF TRANSPORTATION

STAGING LAYOUT

SCALE: VERT.
HORIZ.
DATE

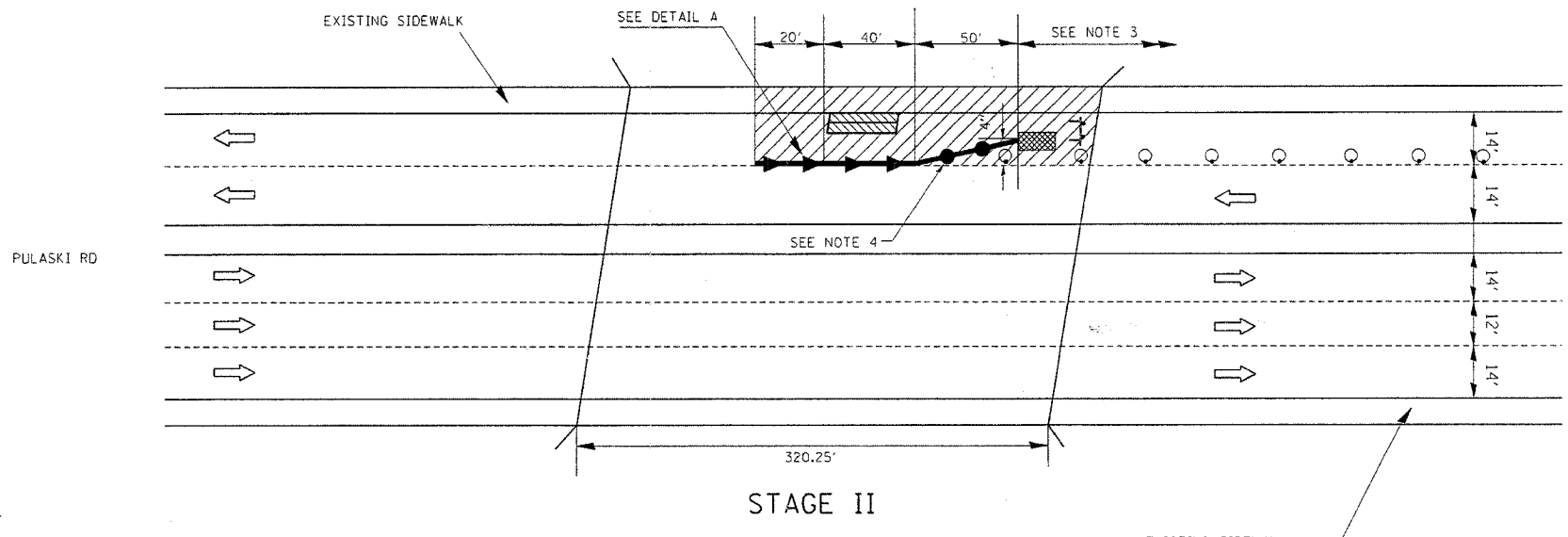
DRAWN BY
CHECKED BY

F.A.P. RYE:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
368	2005-0161	COOK	12	9
STA.	TO STA.			
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



NOTE 1 CLOSE LANE 1 OF 3 (NB) SOUTH OF 74TH ST+ PER STANDARD 701601
ALLOW LEFT TURN AT 74TH ST+ PER DISTRICT STD "TRAFFIC CONTROL AND PROTECTION AT TURN BAYS"

NOTE 2 TEMPORARY CLOSURE AS NEEDED FOR CRANE:
CLOSE LANE 1 OF 3 (SB) NORTH OF 71ST ST+ PER STANDARD 701601
ALLOW LEFT TURN AT 71ST ST+ PER DISTRICT STD "TRAFFIC CONTROL AND PROTECTION AT TURN BAYS"

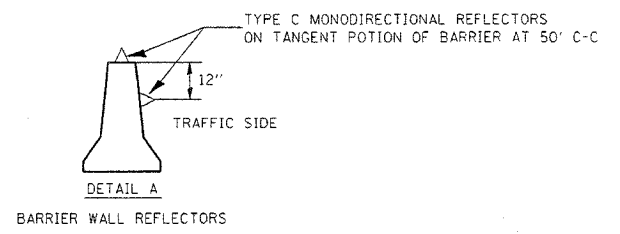


NOTE 3 CLOSE LANE 3 (NB) SOUTH OF 74TH ST. PER STANDARD 701601 AND MERGE LANE 2 AND 1 *AS PER STANDARD 701601* NORTH OF 74TH ST.

NOTE 4 VERTICAL PANELS AT 25' CTS WITH STEADY BURNING MONODIRECTIONAL LIGHTS

LEGEND

- DRUMS WITH STEADY BURNING LIGHTS AT 50' C-C
- WORK ZONE
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE BARRIER WITH TYPE C MONODIRECTIONAL REFLECTORS
- BOX BEAM REMOVAL AND REPLACEMENT
- TRAFFIC DIRECTION
- TYPE III BARRICADE WITH STEADY BURN LIGHTS

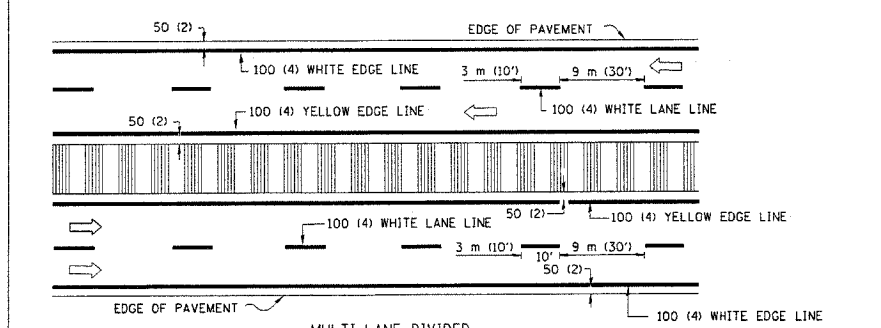
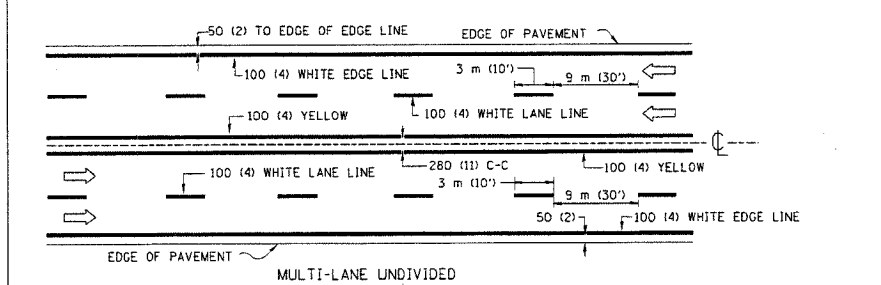
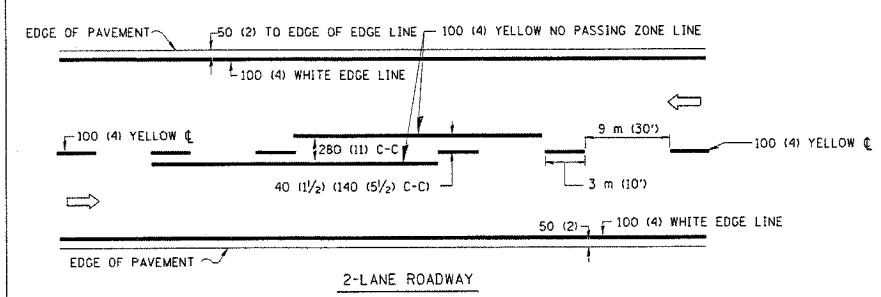


REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
STAGING LAYOUT FOR
TEMPORARY CONCRETE BARRIER
SCALE: VERT. DATE
HORIZ. DATE
DRAWN BY
CHECKED BY

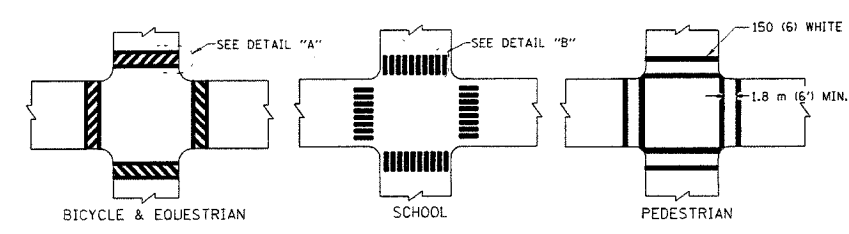
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F. & P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

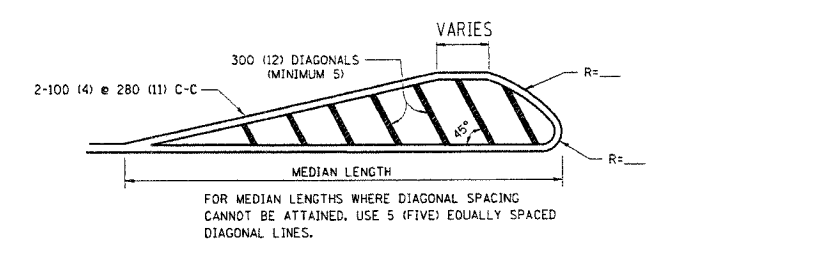
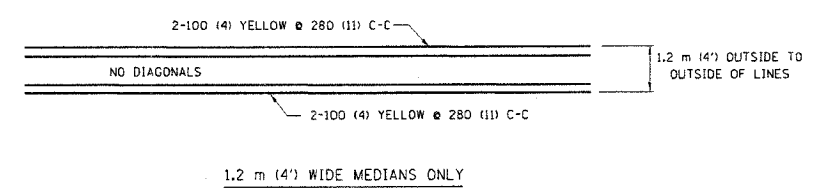


NOTE: MEDIANS WITH BARRIER CURBS DO NOT REQUIRE AN EDGE LINE

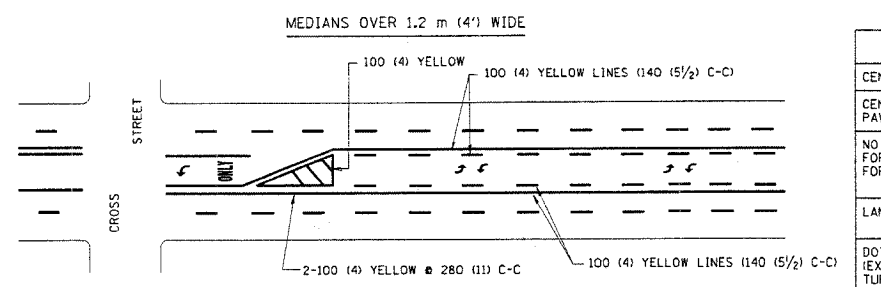
TYPICAL LANE AND EDGE LINE MARKING



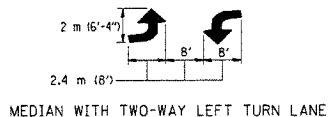
TYPICAL CROSSWALK MARKING



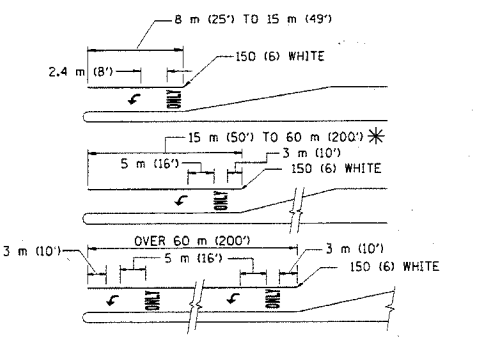
DIAGONAL LINE SPACING: 15 m (50') C-C (LESS THAN 50 km/h (30 MPH))
25 m (75') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH))
45 m (150') C-C (MORE THAN 70 km/h (45 MPH))



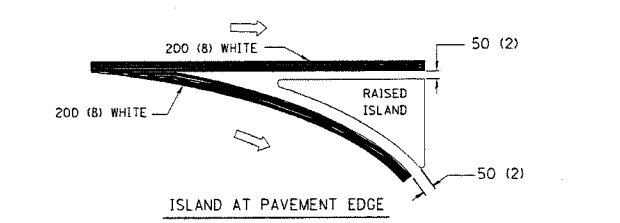
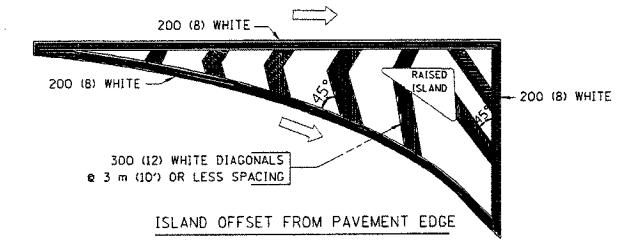
A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 60 m (200') TO 90 m (300') INTERVALS.



TYPICAL TURN LANE MARKING



FULL SIZE LETTERS 2.4 m (8') AND ARROWS SHALL BE USED.
AREA = 1.5 m² (15.6 SQ. FT.) ONLY AREA = 1.9 m² (20.8 SQ. FT.)
* TURN LANES IN EXCESS OF 120 m (400') IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".



TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	100 (4)	SKIP-DASH	YELLOW	3 m (10') LINE WITH 9 m (30') SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 100 (4)	SOLID	YELLOW	280 (11) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	100 (4) 2 @ 100 (4)	SOLID SOLID	YELLOW YELLOW	140 (5 1/2) C-C FROM SKIP-DASH CENTERLINE 280 (11) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	100 (4) 125 (5) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	3 m (10') LINE WITH 9 m (30') SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	600 (2') LINE WITH 1.8 m (6') SPACE
EDGE LINES	100 (4)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	150 (6) LINES FULL SIZE LETTERS & SYMBOLS (2.4 m (8'))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 100 (4) EACH DIRECTION 2.4 m (8') LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	3 m (10') LINE WITH 9 m (30') SPACE FOR SKIP-DASH; 140 (5 1/2) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 150 (6) 300 (12) @ 45° 300 (12) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 1.8 m (6') APART 600 (2') APART 600 (2') APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	600 (24')	SOLID	WHITE	PLACE 1.2 m (4') IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 100 (4) WITH 300 (12) DIAGONALS @ 45° NO DIAGONALS USED FOR 1.2 m (4') WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	280 (11) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	200 (8) WITH 300 (12) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 4.5 m (15') C-C (LESS THAN 50 km/h (30 MPH)) 6 m (20') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 9 m (30') C-C (OVER 70 km/h (45 MPH))
RAILROAD CROSSING	600 (24) TRANSVERSE LINES: "RR" IS 1.8 m (6') LETTERS; 400 (16) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "RR"=0.33m ² (3.6 SQ. FT.) EACH "X"=5.0 m ² (54.0 SQ. FT.)
SHOULDER DIAGONALS	300 (12) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	15 m (50') C-C (LESS THAN 50 km/h (30 MPH)) 25 m (75') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 45 m (150') C-C (OVER 70 km/h (45 MPH))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in millimeters (Inches) unless otherwise shown.

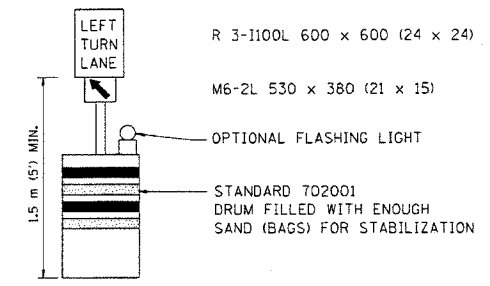
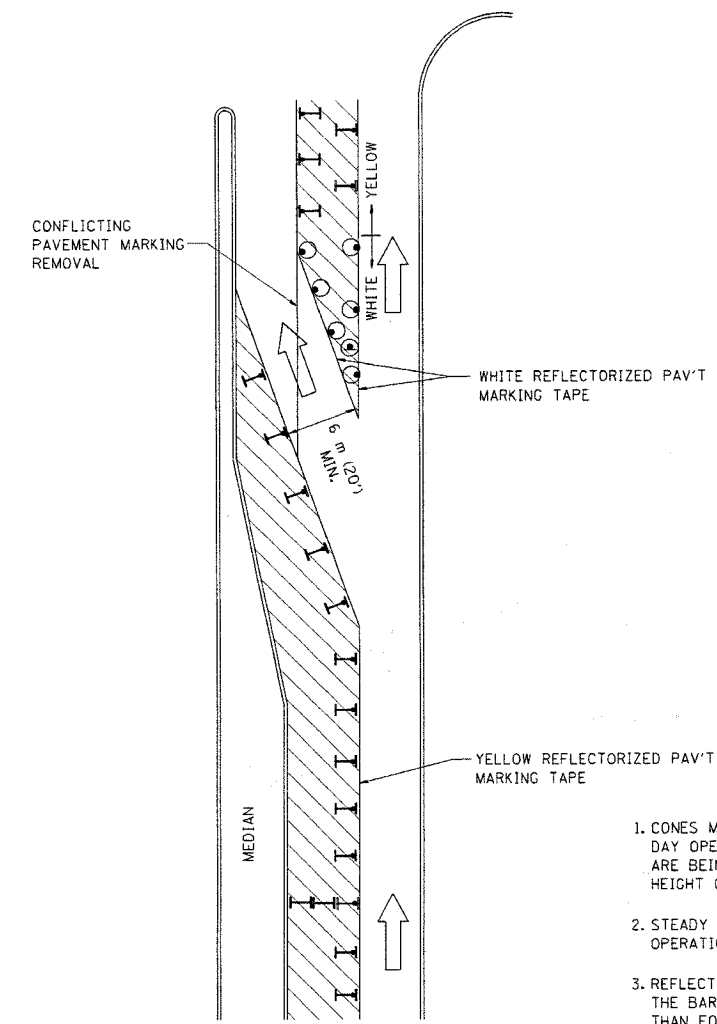
ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

REVISIONS	NAME	DATE
	EVERS	03-19-90
	T. RAMMACHER	10-27-94
	ALEX HOUSEH	10-09-96
	ALEX HOUSEH	10-17-96
	T. RAMMACHER	01-06-00

SCALE: NONE
DATE: 10/18/2002
DRAWN BY: CADD
CHECKED BY: TC-13
REVISION DATE: 01/06/00

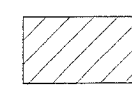





F. & D. SHEET NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
368	2005-076I Cook	12	11	11
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



GENERAL NOTES

1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 710 (28) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 1.5 m (5').
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 600 x 600 (24 x 24) AND M6-2R 530 x 380 (21 x 15) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM BT 725 IS REQUIRED.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

LEGEND

-  WORK AREA
-  LANE OPEN TO TRAFFIC
-  TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
-  DRUM WITH STEADY BURN LIGHT
-  DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
-  TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

All dimensions are in millimeters (Inches) unless otherwise shown.

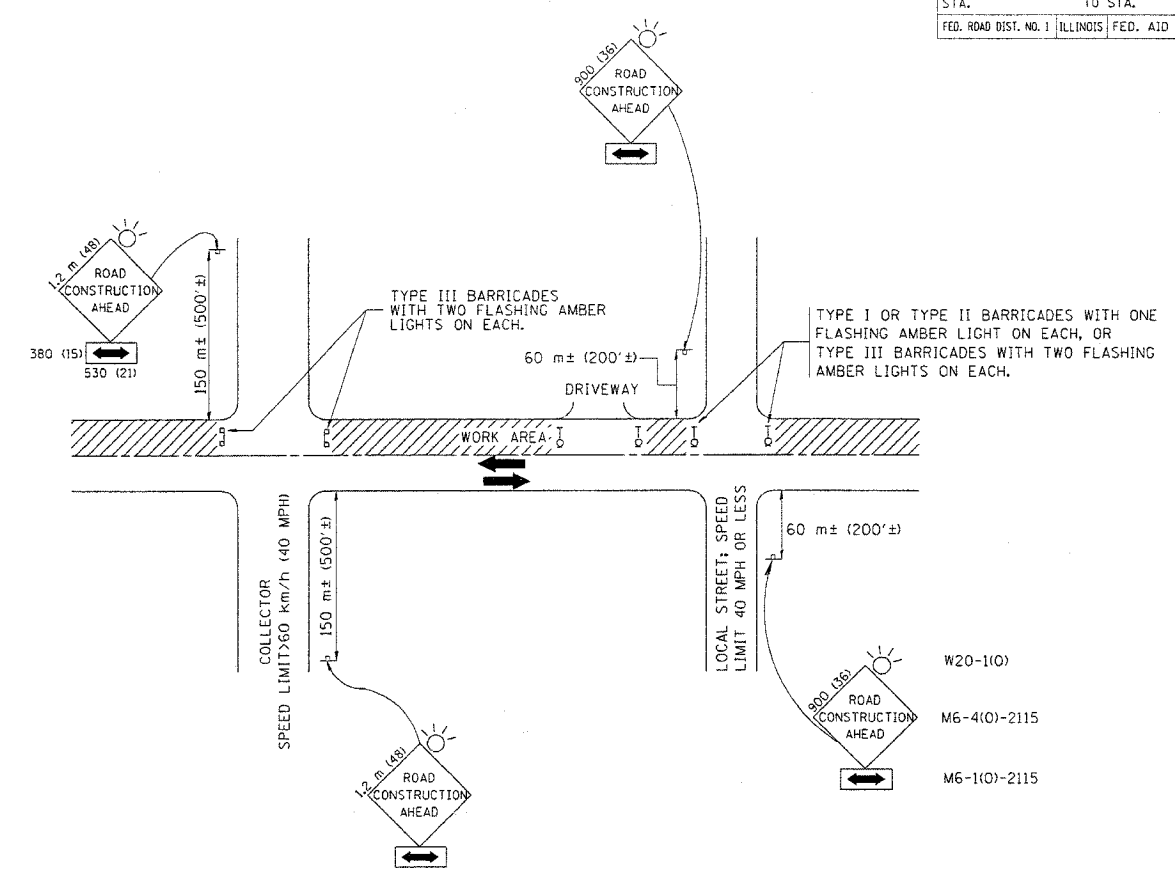
ILLINOIS DEPARTMENT OF TRANSPORTATION
 TRAFFIC CONTROL AND PROTECTION
 AT TURN BAYS
 (TO REMAIN OPEN TO TRAFFIC)

REVISIONS	
NAME	DATE
T. RAMMACHER	09/08/94
A. HOUSEH	11/07/95
A. HOUSEH	10/12/96
T. RAMMACHER	01/06/00

SCALE: NONE
 DATE: 10/18/2002
 DRAWN BY:
 CHECKED BY: LHA
 TC-14
 REVISION DATE: 01/06/00

Contract No.: 60A82

F.A.P. SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
368 2005-076I Cook		12	12
STA. TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

- SIDE ROAD WITH A SPEED LIMIT OF 60 km/h (40 MPH) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE ROAD CONSTRUCTION AHEAD SIGN 900x900 (36x36) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 60 m (200') IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- SIDE ROAD WITH A SPEED LIMIT GREATER THAN 60 km/h (40 MPH) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE ROAD CONSTRUCTION AHEAD SIGN 1.2 m x 1.2 m (48x48) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 150 m (500') IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

REVISIONS	
NAME	DATE
LHA	6/89
T. RAMMACHER	09/08/94
J. OBERLE	10/18/95
A. HOUSEH	03/06/96
A. HOUSEH	10/15/96
T. RAMMACHER	01/06/00

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TRAFFIC CONTROL AND PROTECTION
 FOR
 SIDE ROADS, INTERSECTIONS, AND
 DRIVEWAYS

VERT. SCALE: HORIZ. DATE 10/18/2002
 DRAWN BY: CHECKED BY: TC-10