

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1253	Y-B-R-2	LAKE	17	1

CONTRACT NO.: 62768

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPOSED  
HIGHWAY PLANS**

FAU ROUTE 1253: HALF DAY ROAD  
OVER EAST BRANCH SKOKIE DITCH  
(SN 049-0011)

SECTION: Y-B-R-2  
SUPERSTRUCTURE REPLACEMENT  
LAKE COUNTY  
C-91-234-04

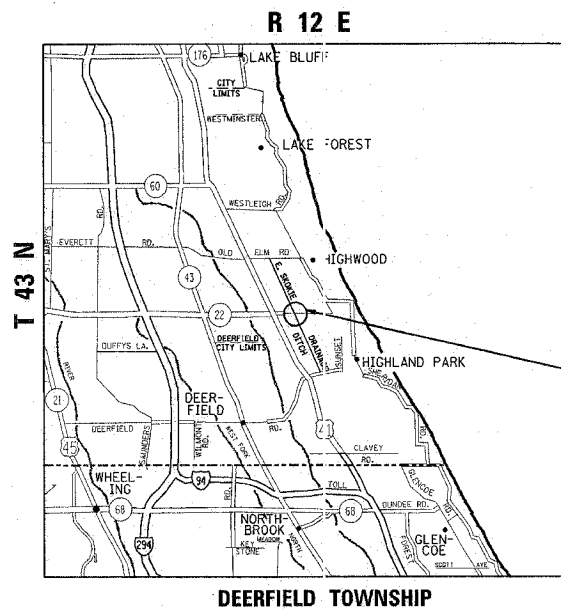
D-91-234-04



LOCATION OF SECTION INDICATED THIS: - [shaded box] -

FOR INDEX OF SHEETS, SEE SHEET NO. 2

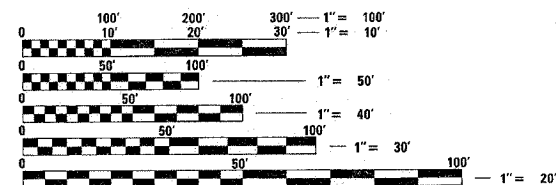
PROJECT LOCATED IN  
VILLAGE OF HIGHLAND PARK



TRAFFIC DATA

2000 ADT = 11,000  
SPEED LIMIT = 40 MPH

LOCATION OF IMPROVEMENT



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. 62768

DIST. 1 - PLAN PREPARATION ENGINEER: KEN ENG / J. CHANG (847) 705-4432

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED Aug. 29 20 06  
Diane O'Keefe  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

October 13, 20 06  
Mike Hine  
ENGINEER OF DESIGN AND ENVIRONMENT

October 13, 20 06  
Milton R. See, P.E.  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS



SUMMARY OF QUANTITIES			URBAN TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		X0B1-2A STATE 100%				
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	20	20				
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1	1				
50102400	CONCRETE REMOVAL	CU YD	0.5	0.5				
50300225	CONCRETE STRUCTURES	CU YD	0.5	0.5				
50300255	CONCRETE SUPERSTRUCTURE	CU YD	47	47				
50300260	BRIDGE DECK GROOVING	SQ YD	384	384				
50300300	PROTECTIVE COAT	SQ YD	566	566				
50400405	PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ FT	4476	4476				
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	12030	12030				
50900105	ALUMINUM RAILING, TYPE L	FOOT	170	170				
51500100	NAME PLATES	EACH	1	1				
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	1	1				
* 63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	25	25				
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	2	2				
63200310	GUARDRAIL REMOVAL	FOOT	127	127				
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	1	1				
67100100	MOBILIZATION	L SUM	1	1				
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1				
70102550	TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	EACH	1	1				
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	1	1				
70300500	PAVEMENT MARKING TAPE, TYPE III	FOOT	2100	2100				
70400500	TEMPORARY CONCRETE BARRIER (STATE OWNED)	FOOT	190	190				
78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	36.4	36.4				
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	1900	1900				
78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	160	160				

SUMMARY OF QUANTITIES			URBAN TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		X0B1-2A STATE 100%				
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	110	110				
* 78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	356	356				
* 78008250	POLYUREA PAVEMENT MARKING TYPE I - LINE 12"	FOOT	30	30				
* 78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	4	4				
78300105	PAVEMENT MARKING REMOVAL	FOOT	3000	3000				
X5030305	CONCRETE WEARING SURFACE, 5"	SQ YD	521	521				
XX001306	SIDEWALK REMOVAL AND REPLACEMENT	SQ FT	560	560				
* XX006128	TRAFFIC BARRIER TERMINAL TYPE 1 (SPECIAL)	EACH	2	2				
Z0002600	BAR SPLICERS	EACH	91	91				
Z0005215	BITUMINOUS STABILIZATION 6" AT STEEL PLATE BEAM GUARD RAIL	SQ YD	17	17				
Z0015550	DEBRIS REMOVAL	CU YD	30	30				
* Z0030240	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2	EACH	2	2				

8/30/2006  
c:\bure\sect\8212\043\design\356.dgn

■ SFTY-3N

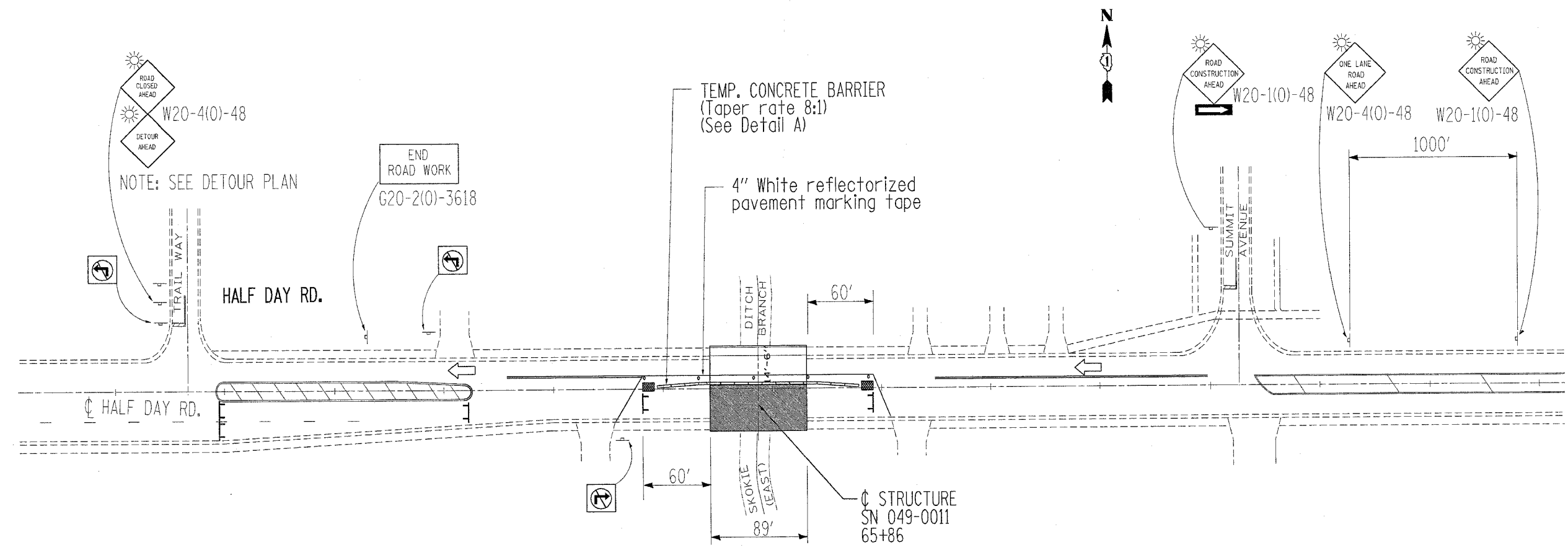
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
SUMMARY OF QUANTITIES








F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1253	Y-B-R-2	LAKE	17	5
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62768



SYMBOLS

-  Sign
-  Barricade or drum with steady burning light
-  Type III barricade w/ monodirectional lights
-  Impact attenuator
-  Work Area

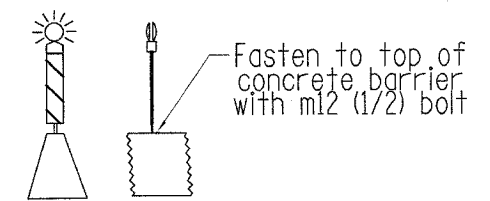
Notes

All existing pavement markings in conflict with construction traffic control shall be covered with black Type III pavement marking

Barricade, barrel and panel spacing shall be 25' centers in taper sections and 50' centers in tangent sections.

Vertical panels shall be used when barrels cannot be placed on the existing pavement or paved shoulder.

Traffic control details shown on this sheet shall be included in the contract lump sum price for "Traffic Control & Protection (Special)"



DETAIL A  
(Suggested Mounting Detail)

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		TRAFFIC STAGING PLANS - STAGE II HALF DAY RD OVER E. BRANCH SKOKIE DITCH SN 049-0011




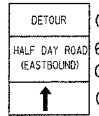
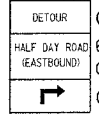
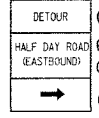
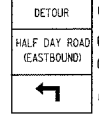
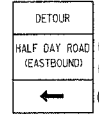


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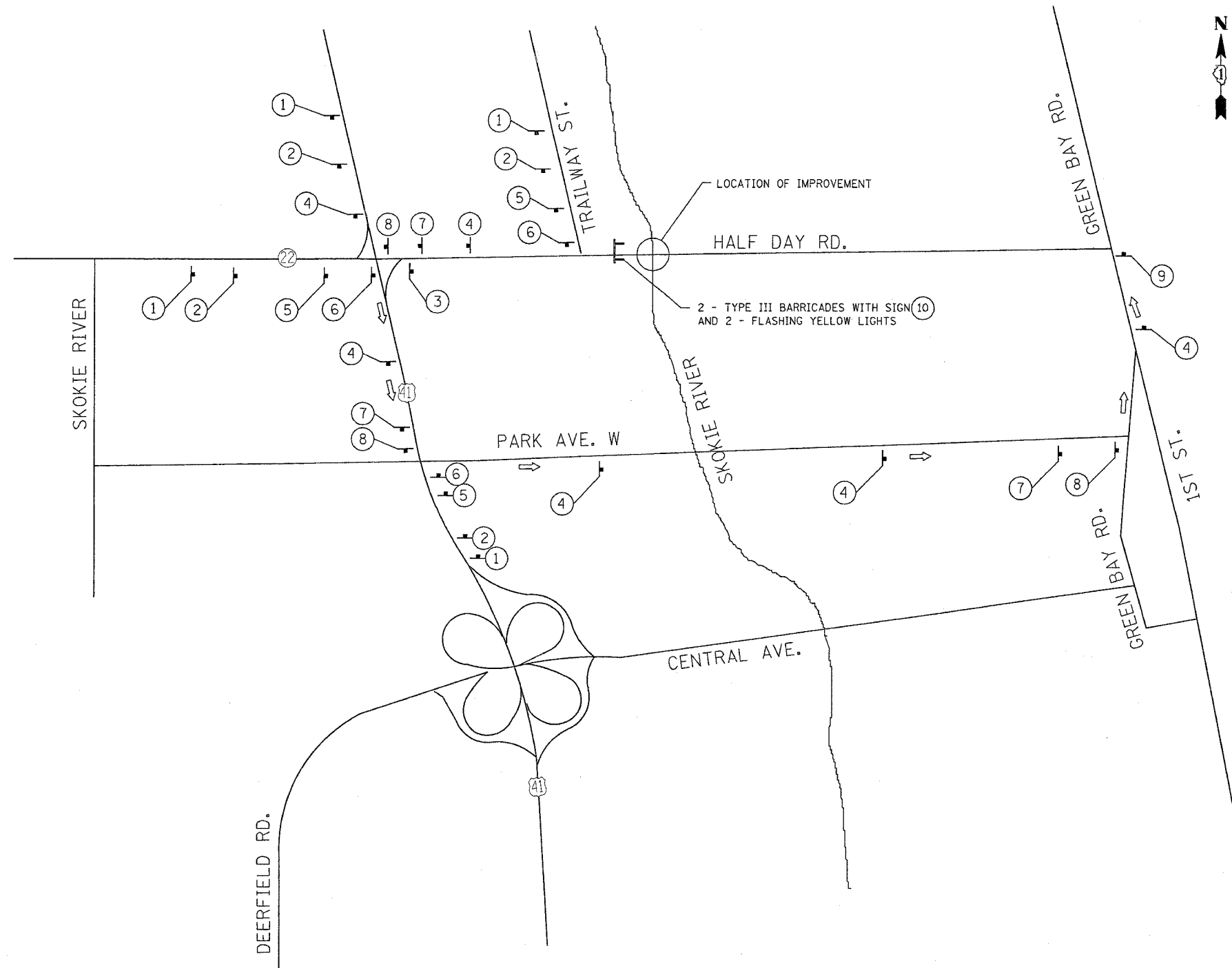
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CHECKED BY

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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1253	Y-B-R-2	LAKE	17	6
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62768

- ①  (W 20-2)
- ②  (W 20-2)
- ③  (R11-4-4830)
- ④  (M4-8)  
6" BLACK LETTERS ON WHITE BACKGROUND  
(M6-3-2115)
- ⑤  (M4-8)  
6" BLACK LETTERS ON WHITE BACKGROUND  
(M6-1R-2115)
- ⑥  (M4-8)  
6" BLACK LETTERS ON WHITE BACKGROUND  
(M6-1R-2115)
- ⑦  (M1-7-219)  
6" BLACK LETTERS ON WHITE BACKGROUND  
(M6-3-2115)
- ⑧  (M1-7-219)  
6" BLACK LETTERS ON WHITE BACKGROUND  
(M6-1L-2115)
- ⑨  (M4-8a)  
6" BLACK LETTERS ON WHITE BACKGROUND
- ⑩  R11-2



REVISIONS	
NAME	DATE

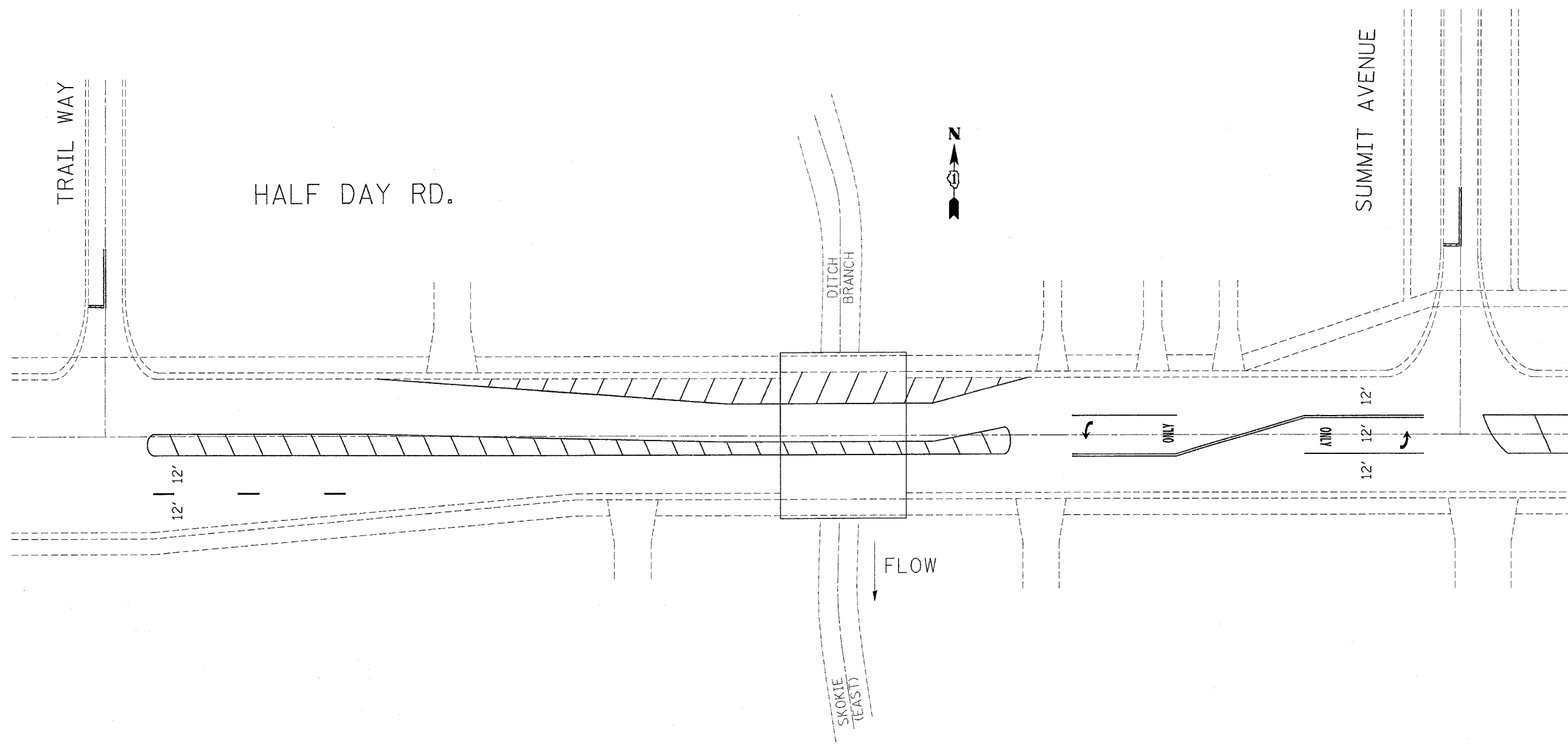
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DETOUR PLAN FOR  
 HALF DAY RD (EASTBOUND) OVER  
 E. BRANCH SKOKIE DITCH  
 SN 049-0011

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 CHECKED BY

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F.A.I.D. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1753	Y-B-R-2	LAKE	17	7
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62768



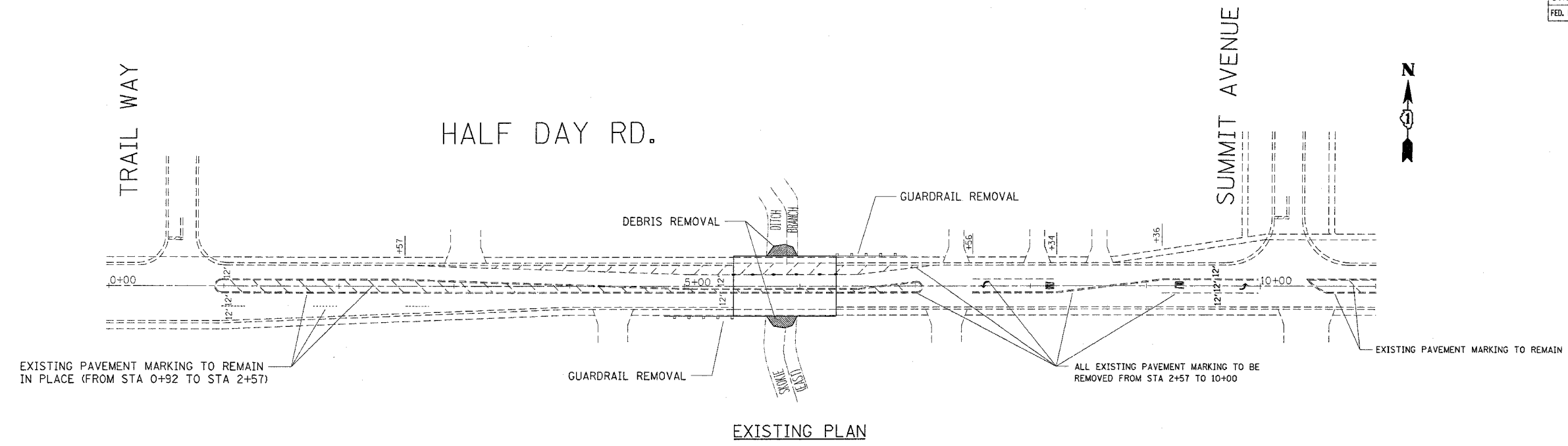
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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 GENERAL EXISTING PLAN  
 HALF DAY RD. OVER E.  
 BRANCH SKOKIE DITCH  
 SN 049-0011  
 SCALE: NO SCALE  
 DATE: 8/30/2006  
 DRAWN BY  
 CHECKED BY

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1753	Y-B-R-2	LAKE	17	8
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62768

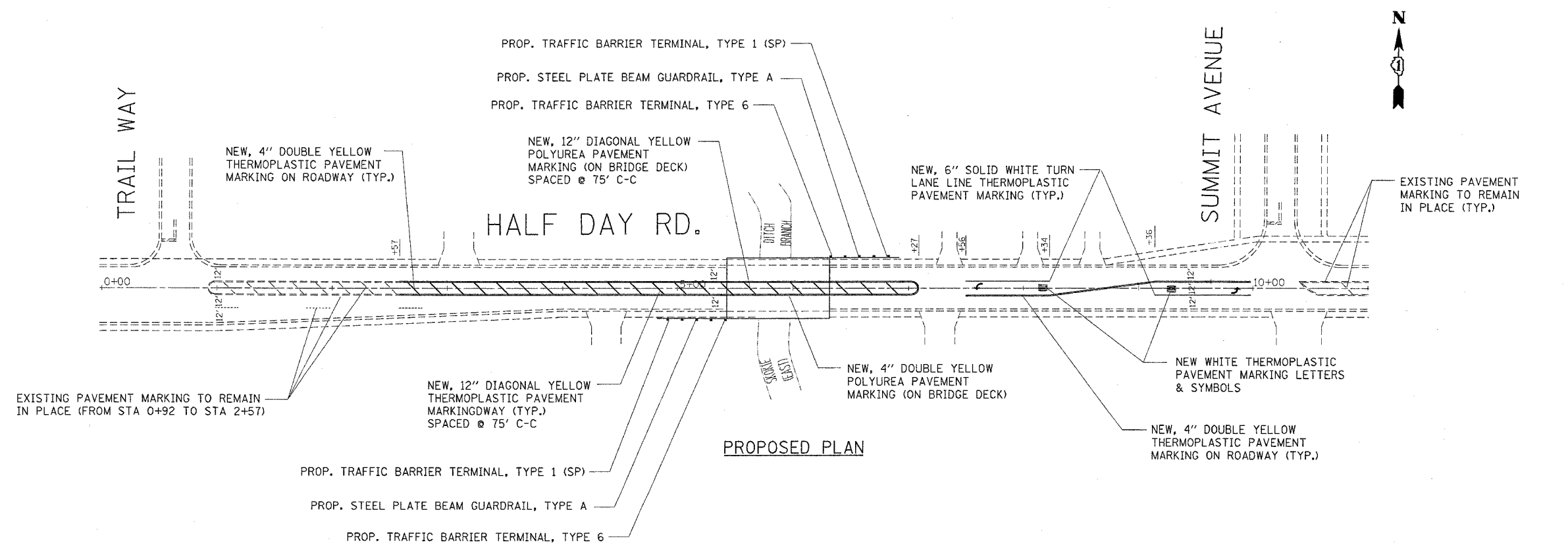


EXISTING PAVEMENT MARKING TO REMAIN IN PLACE (FROM STA 0+92 TO STA 2+57)

GUARDRAIL REMOVAL

ALL EXISTING PAVEMENT MARKING TO BE REMOVED FROM STA 2+57 TO 10+00

EXISTING PLAN



EXISTING PAVEMENT MARKING TO REMAIN IN PLACE (FROM STA 0+92 TO STA 2+57)

PROP. TRAFFIC BARRIER TERMINAL, TYPE 1 (SP)

PROP. STEEL PLATE BEAM GUARDRAIL, TYPE A

PROP. TRAFFIC BARRIER TERMINAL, TYPE 6

PROPOSED PLAN

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 EXISTING AND PROPOSED ROADWAY  
 AND PAVEMENT MARKING PLANS  
 HALF DAY RD. OVER E. BRANCH  
 SKOKIE DITCH  
 SN 049-0011  
 SCALE: NO SCALE  
 DATE: 8/30/2006  
 DRAWN BY  
 CHECKED BY

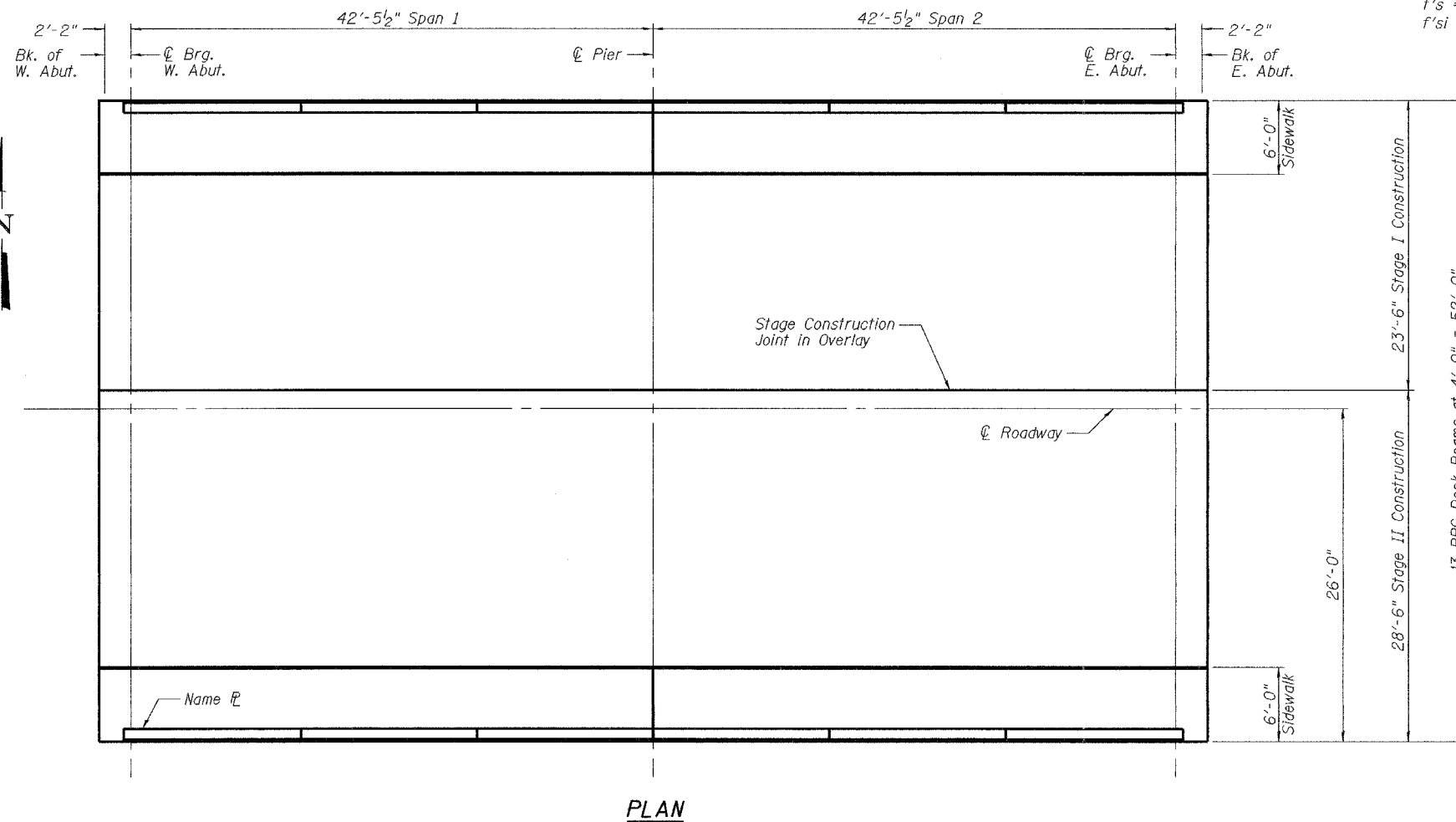
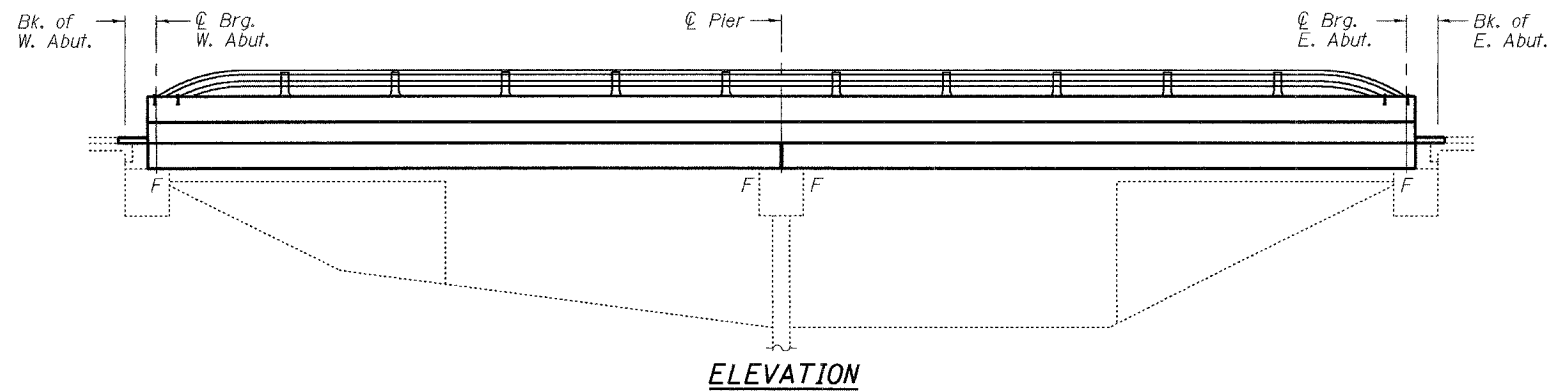
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 USER NAME = 5826889 / JN  
 USER NAME = 5826889



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET	SHEET NO. 1
		Lake	17	9	7 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract Number: 62768



**LOADING HS20-44**

No allowance for future wearing surface.

**DESIGN SPECIFICATIONS**  
2002 AASHTO Standard Specifications

**DESIGN STRESSES**

**FIELD UNITS**

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

**PRECAST PRESTRESSED UNITS**

$f'c = 5,000$  psi  
 $f'ci = 4,000$  psi  
 $f's = 270,000$  psi ( $\frac{1}{2}$ "  $\phi$  low lax strands)  
 $f'si = 201,960$  psi ( $\frac{1}{2}$ "  $\phi$  low lax strands)

**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.

The minimum thickness of the Concrete overlay shall be 5" and varies as required to adjust for the new profile grade and beam camber. The cut strands at each beam end shall be given two coats of zinc dust spray or paint meeting the requirements of ASTM A780. The zinc dust spray or paint shall be applied before corrosion appears and allowed to dry according to 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 each fascia beam. 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.

All construction joints shall be bonded. 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.

Attach new Name plate to the inside face of parapet, southwest corner. Existing name plate is to be removed, cleaned and relocated adjacent to new name plate. Cost included in the cost of Name Plates.

If the contractor's procedure for existing beam removal or placement of new beams involves placement of cranes or other heavy equipment on 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. A temporary means of lateral restraint will be required for fascia beams at expansion ends of beams to prevent movement of the beams.

Weight restrictions will be required for Stage I Traffic. See Roadway plans for sign details and placement locations. Signs must be placed prior to installation of Stage I traffic control.

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Protective Coat	Sq. Yd.	565.8
Removal of Existing Superstructures	Each	1
PPC Deck Beams (21" Depth)	Sq. Ft.	4,476
Reinforcement Bars, Epoxy Coated	Pound	12,030
Aluminum Railing Type L	Foot	170
Concrete Wearing Surface, 5"	Sq. Yd.	521
Bridge Deck Grooving	Sq. Yd.	383.9
Name Plates	Each	1
Bar Splacers	Each	91
Concrete Structures	Cu. Yd.	0.5
Concrete Superstructure	Cu. Yd.	46.8
Concrete Removal	Cu. Yd.	0.5

STATION 65+88.00  
RE-BUILT 20 BY  
STATE OF ILLINOIS  
F.A.U. ROUTE 1253  
SEC. Y-B-R-2  
LOADING HS20  
STR. NO. 049-0011

**NAME PLATE**  
(See Std. 515001)

**PLAN AND ELEVATION**  
**F.A.U. RT. 1253**  
**HALF DAY RD / EAST**  
**BRANCH OF SKOKIE DITCH**  
**LAKE COUNTY**  
**SN 049-0011**

DESIGNED *Adrian T. Holloway*  
CHECKED *John A. Morrison*  
DRAWN *John A. Morrison*  
CHECKED *ATH* *STB*

September 21, 2006  
EXAMINED *John A. Morrison*  
PASSED *Ralph E. Andino*  
ENGINEER OF STRUCTURAL SERVICES  
ENGINEER OF BRIDGES AND STRUCTURES

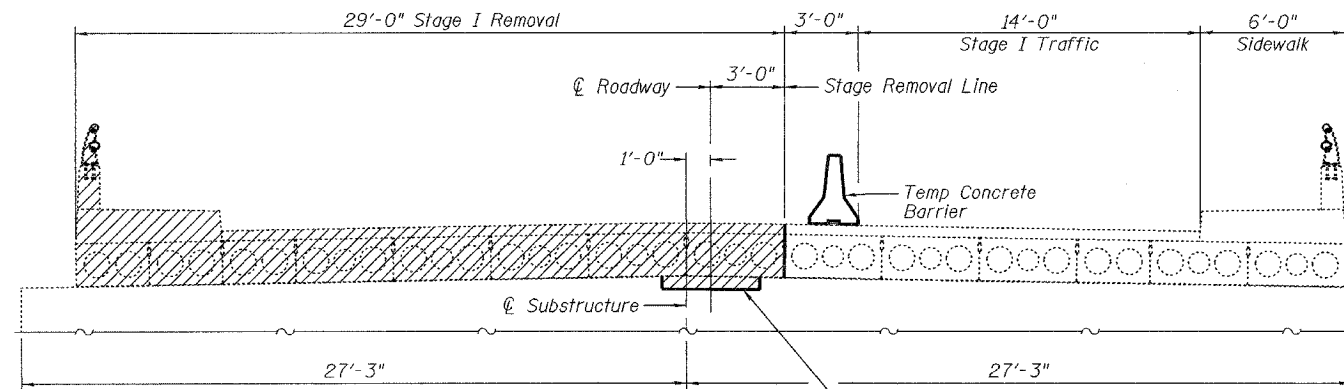


Expires: November 30, 2006

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

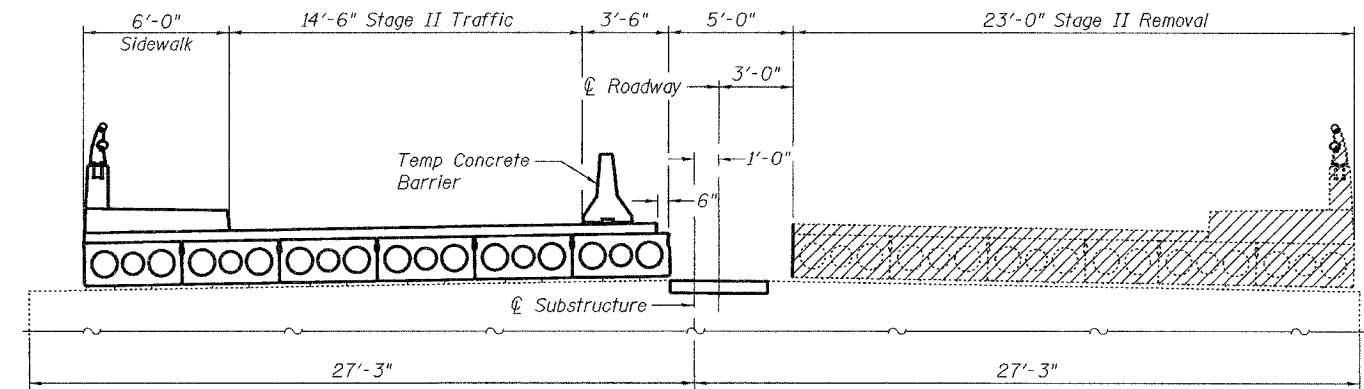
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		Lake	17	10
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		

SHEET NO. 2  
7 SHEETS  
Contract Number: 62768

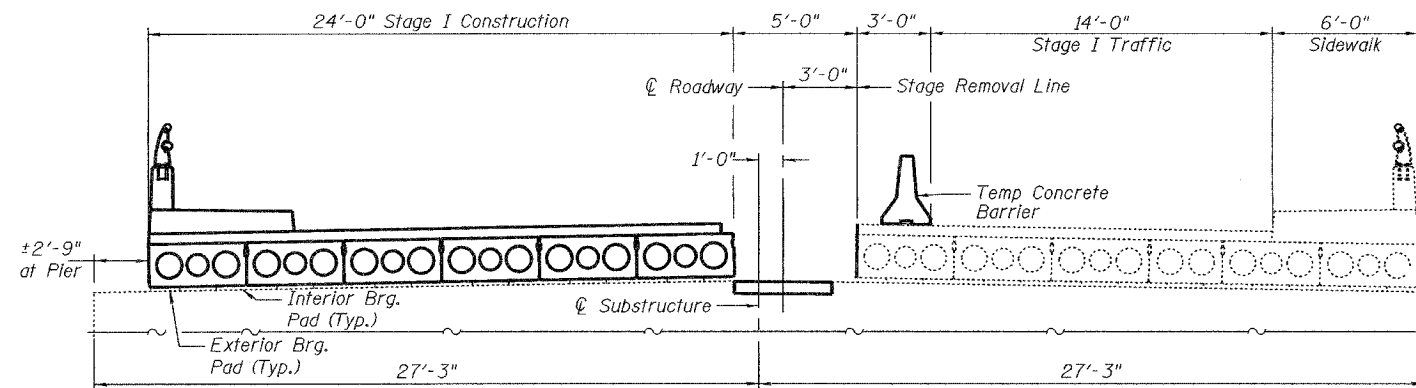


**STAGE I REMOVAL**

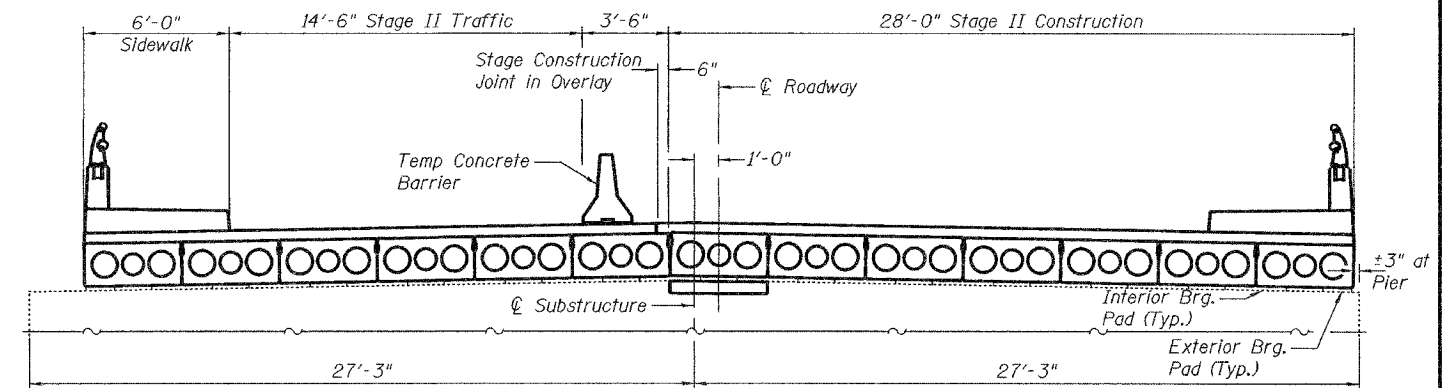
Part of Brg. Seat at Abutments and Pier to be removed and replaced in Stage I. See sheet 4 of 7 for details.



**STAGE II REMOVAL**

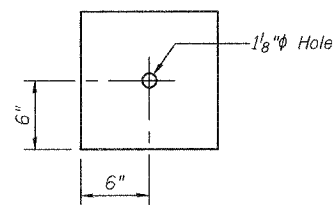


**STAGE I CONSTRUCTION**



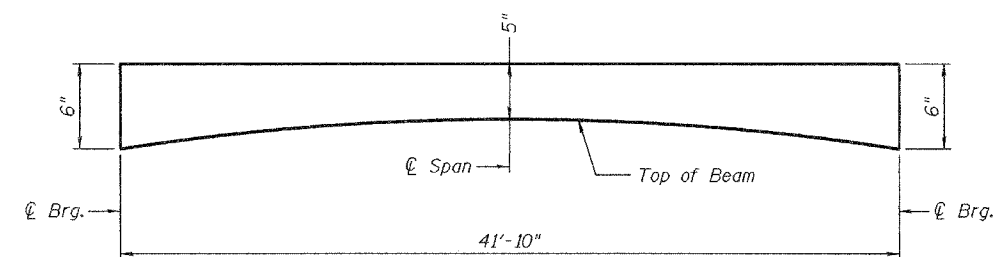
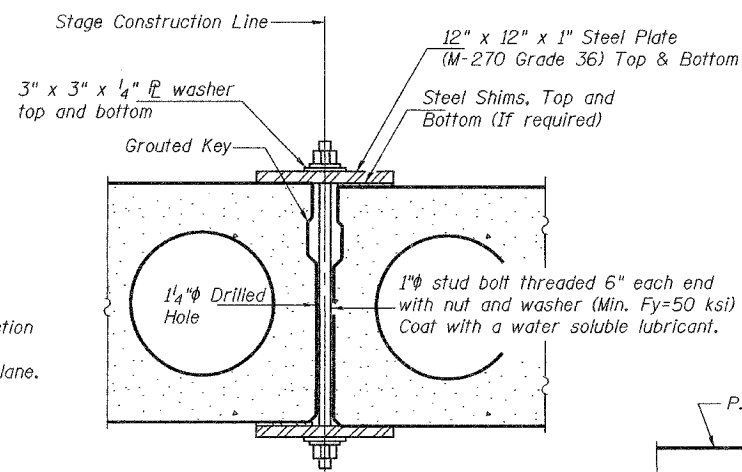
**STAGE II CONSTRUCTION**

Notes:  
All cross-sections are looking East.  
Cross hatched area indicates area of removal.  
For Temporary Concrete Barrier Details see sheet 6 of 7.

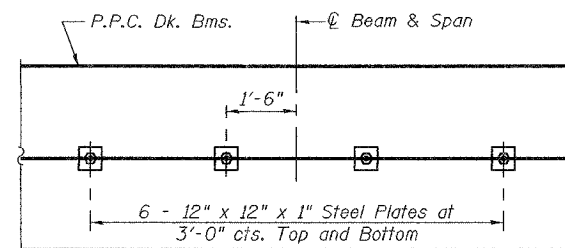


**CLAMPING PLATE**

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.



**CONCRETE WEARING SURFACE PROFILE**



**PLAN AT STAGE CONSTRUCTION LINE**

**STAGE CONSTRUCTION DETAILS**  
F.A.U. RT. 1253  
HALF DAY RD / EAST  
BRANCH OF SKOKIE DITCH  
LAKE COUNTY  
SN 049-0011

DESIGNED	A.T.H.
CHECKED	S.J.B.
DRAWN	Drew Christopher
CHECKED	A.T.H. S.J.B.

September 21, 2006  
EXAMINED *John A. Morris*  
ENGINEER OF STRUCTURAL SERVICES  
PASSED *Ralph E. Anderson*  
ENGINEER OF BRIDGES AND STRUCTURES

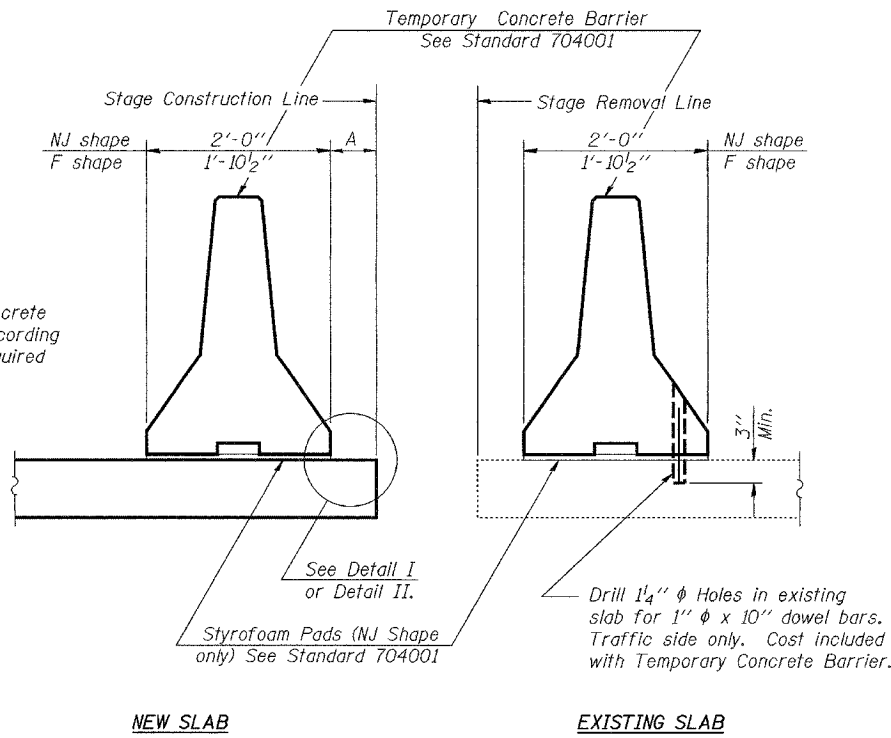






STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

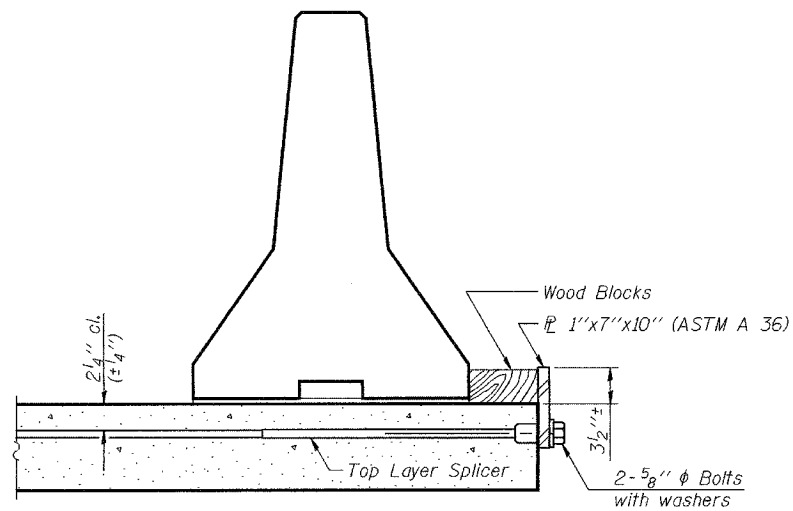
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 6 7 SHEETS
		Lake	17	14	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-	Contract Number: 62768		



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".

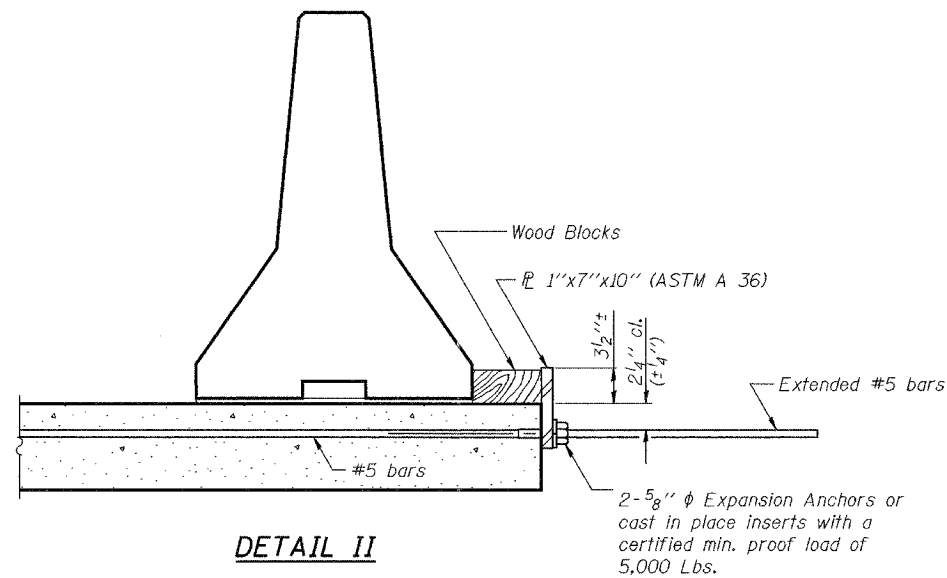
- NOTES**
- Detail I - With Bar Splicer or Couplers:  
Connect one (1) 1"x7"x10" steel  $\bar{P}$  to the top layer of couplers with 2-5/8"  $\phi$  bolts screwed to coupler at approximate  $\bar{C}$  of each barrier panel.
- Detail II - With Extended Reinforcement Bars:  
Connect one (1) 1"x7"x10" steel  $\bar{P}$  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  $\bar{C}$  of each barrier panel.
- Cost of anchorage is included with Temporary Concrete Barrier.

SECTIONS THRU SLAB



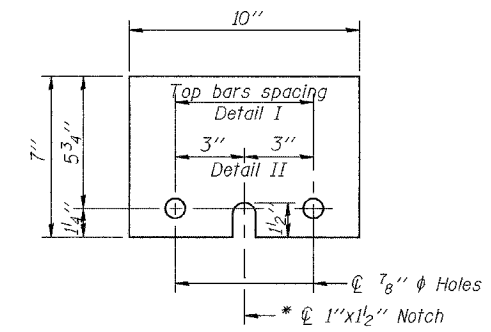
DETAIL I

The 1"x7"x10" Plate shall not be removed until Stage II Construction forms and reinforcement bars are in place.



DETAIL II

The 1"x7"x10" 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.



$\bar{P}$  1"x7"x10"

\* Required only with Detail II

DESIGNED	A.T.H.
CHECKED	S.J.B.
DRAWN	Drew Christopher
CHECKED	A.T.H. S.J.B.

EXAMINED	September 21, 2006
PASSED	John A. Morris ENGINEER OF STRUCTURAL SERVICES
	Ralph E. Anderson ENGINEER OF BRIDGES AND STRUCTURES

R-27 10-22-04

TEMPORARY CONCRETE BARRIER  
F.A.U. RT. 1253  
HALF DAY RD / EAST  
BRANCH OF SKOKIE DITCH  
LAKE COUNTY  
SN 049-0011

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
		Lake	17	15
SHEET NO. 7 7 SHEETS				
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		
Contract Number: 62768				

**NOTES**

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.  
Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.  
All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.  
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.  
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

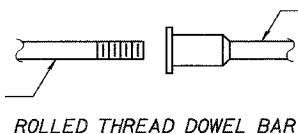
- ① Minimum Capacity (Tension in kips) =  $1.25 \times f_y \times A_1$
- ② Minimum \*Pull-out Strength (Tension in kips) =  $1.25 \times f_{s_{allow}} \times A_1$

Where  $f_y$  = Yield strength of lapped reinforcement bars in ksi.  
 $f_{s_{allow}}$  = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)  
 $A_1$  = 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	5.9
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6
#9	5'-9"	75.0	30.0
#10	7'-3"	95.0	38.0
#11	9'-0"	117.4	46.8

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."

The diameter of this part is the same as the diameter of the bar spliced.

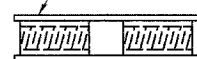


ROLLED THREAD DOWEL BAR



\*\* ONE PIECE

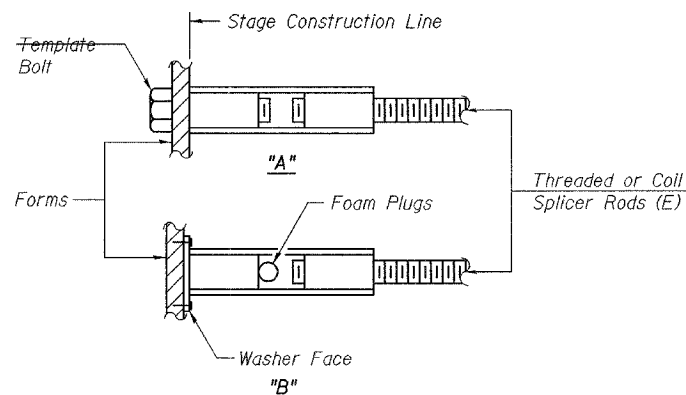
Wire Connector



WELDED SECTIONS

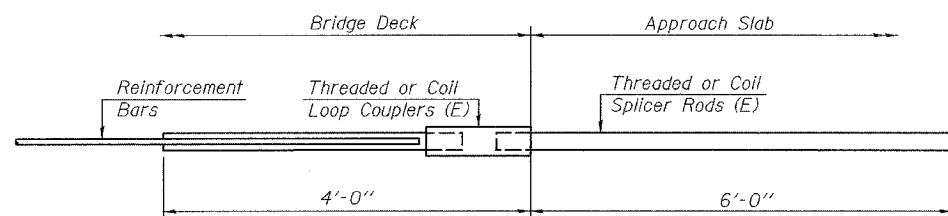
**BAR SPLICER ASSEMBLY ALTERNATIVES**

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



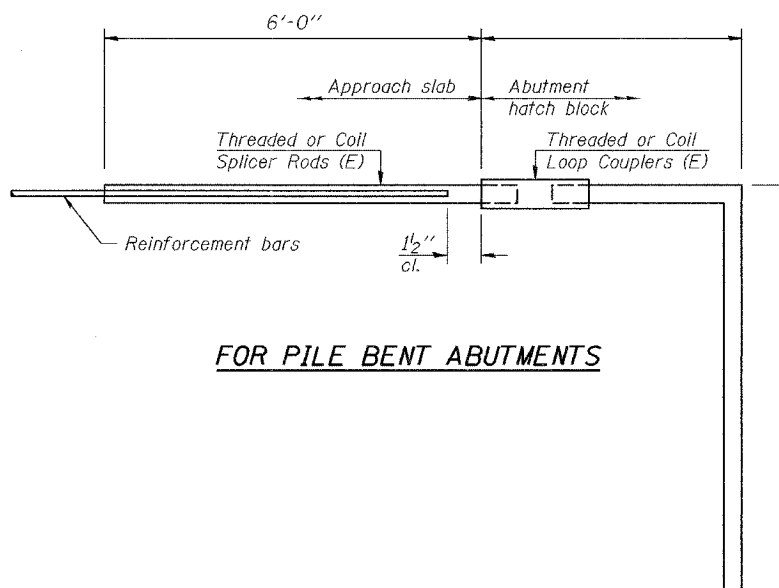
**INSTALLATION AND SETTING METHODS**

"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.



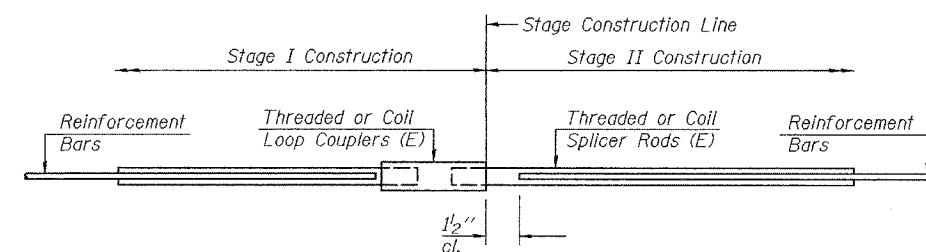
**FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS**

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required =



**FOR PILE BENT ABUTMENTS**

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required =



**STANDARD**

Bar Size	No. Assemblies Required	Location
#4	91	Overlay

**BAR SPLICER DETAILS**  
F.A.U. RT. 1253  
HALF DAY RD / EAST  
BRANCH OF SKOKIE DITCH  
LAKE COUNTY  
SN 049-0011

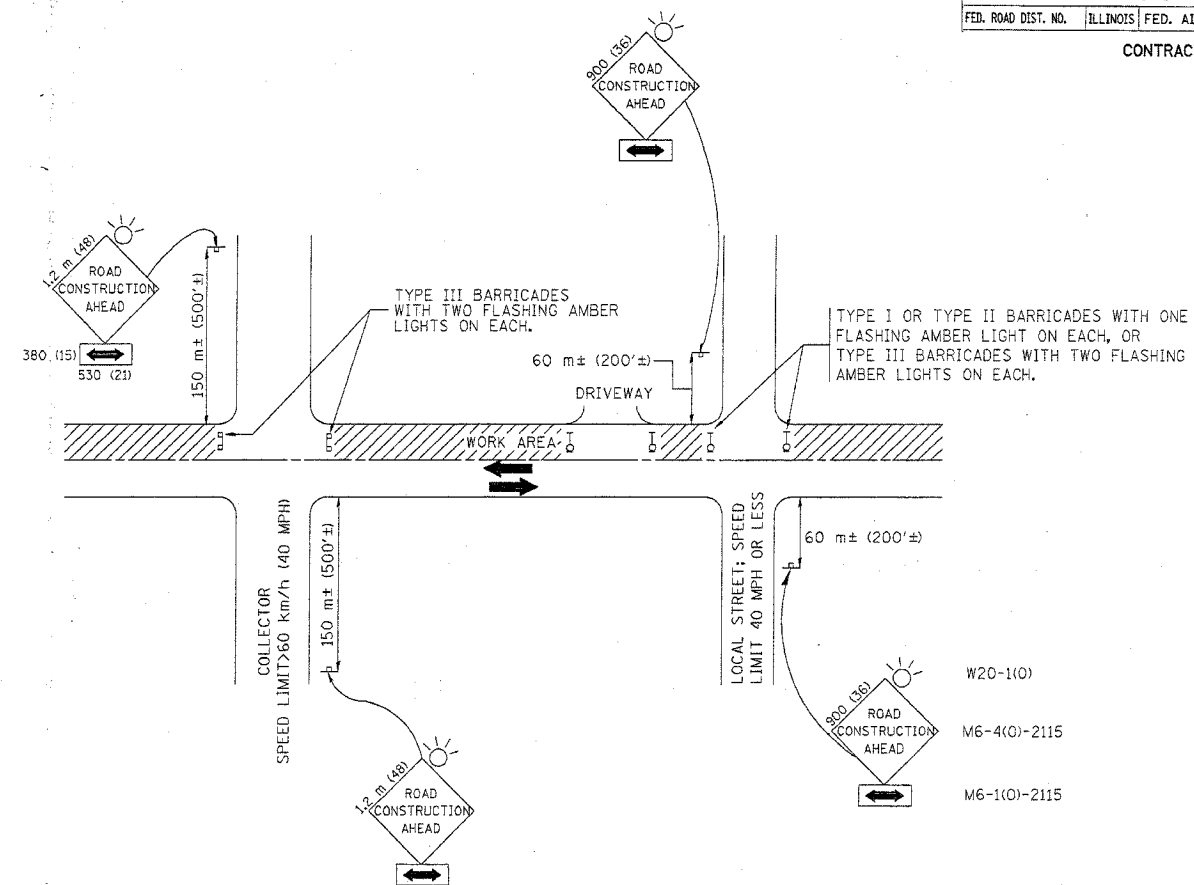
DESIGNED	A.T.H.
CHECKED	S.J.B.
DRAWN	Drew Christopher
CHECKED	A.T.H. S.J.B.

EXAMINED	September 21, 2006
PASSED	John A. Morris ENGINEER OF STRUCTURAL SERVICES
	Ralph E. Anderson ENGINEER OF BRIDGES AND STRUCTURES

BSD-1 10-22-04

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1253	Y-B-R-2	LAKE	17	16
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62768



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 300x300 (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

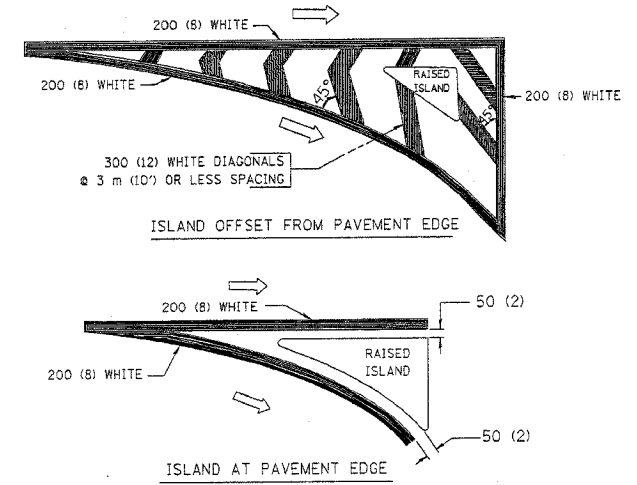
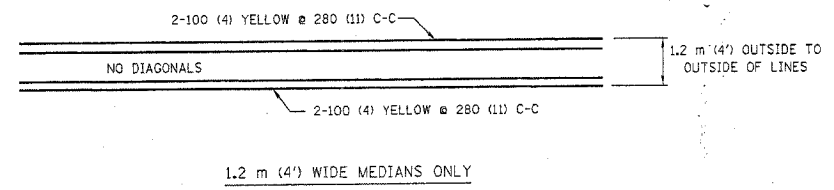
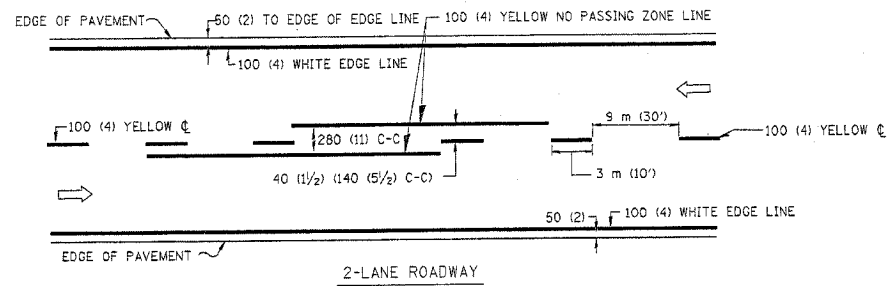
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 TRAFFIC CONTROL AND PROTECTION  
 FOR  
 SIDE ROADS, INTERSECTIONS, AND  
 DRIVEWAYS

SCALE: VERT.  
 HORIZ.  
 DATE 10/18/2002

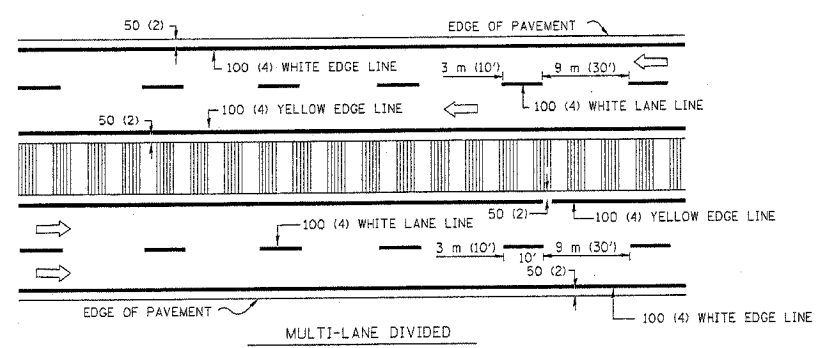
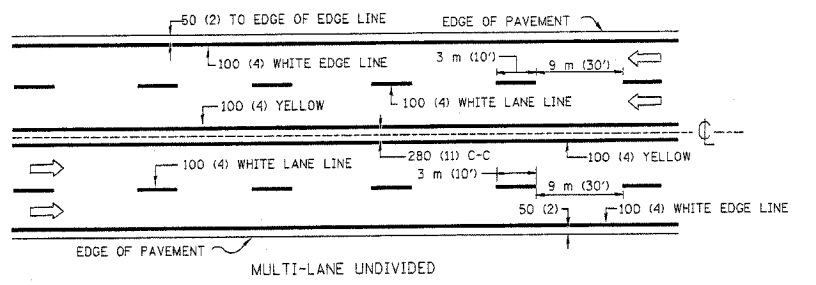
DRAWN BY  
 CHECKED BY  
 TC-10

REVISION DATE: 01/06/00



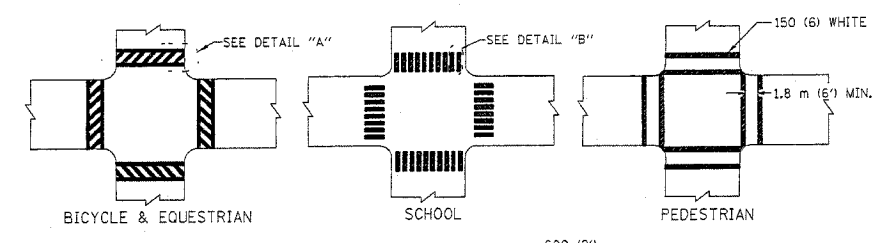


TYPICAL ISLAND MARKING

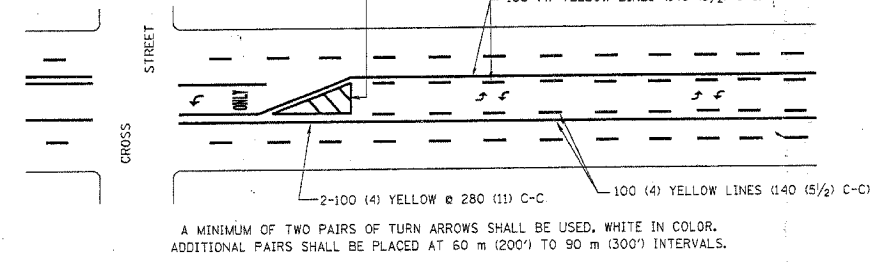
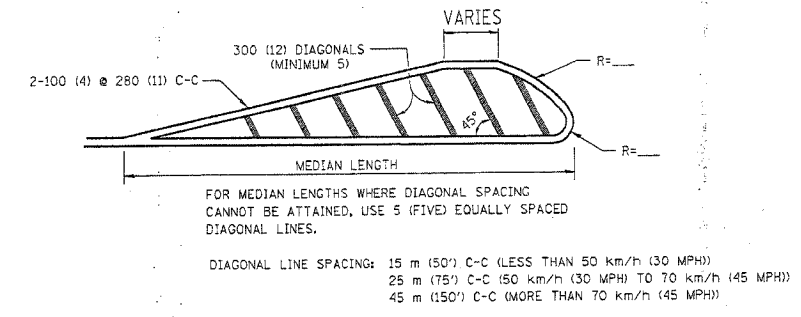


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

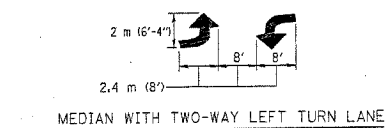
TYPICAL LANE AND EDGE LINE MARKING



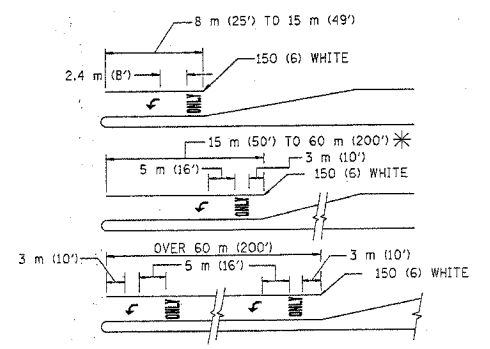
TYPICAL CROSSWALK MARKING



TYPICAL PAINTED MEDIAN MARKING



TYPICAL TURN LANE MARKING



FULL SIZE LETTERS 2.4 m (8') AND ARROWS SHALL BE USED.  
AREA = 1.5 m<sup>2</sup> (15.6 SQ. FT.) ONLY AREA = 1.9 m<sup>2</sup> (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 LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE 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) LINE; 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" 15 1.8 m (6') LETTERS; 400 (16) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=0.33m <sup>2</sup> (3.6 SQ. FT.) EACH "X"=5.0 m <sup>2</sup> (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