

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	32-3R.1-RS-1	COOK	35	1
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 60F38	

* 35+1=36

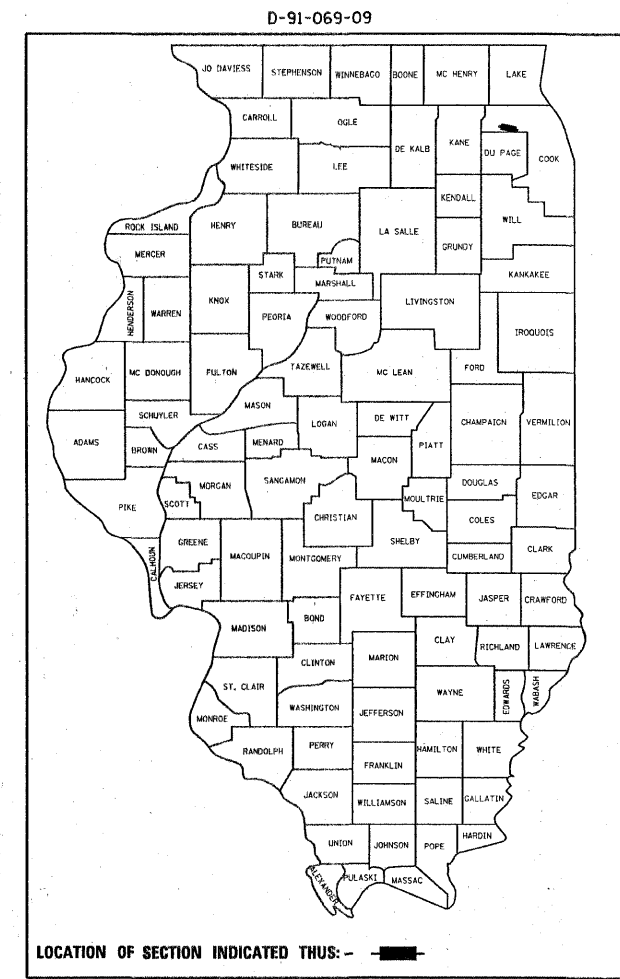
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

F.A.P. 341 / ILL 72 (HIGGINS ROAD)
ALMOND LANE (W. OF PLUM GROVE ROAD) TO MEACHAM ROAD
32-3R.1-RS-1
RESURFACING (MAINTENANCE)
PROJECT: *ESP-0341 (047)*
COOK COUNTY
C-91-069-09

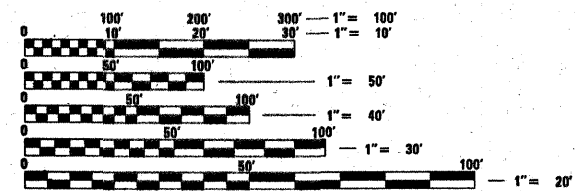
FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT LOCATED IN THE VILLAGE OF
HOFFMAN ESTATE



LOCATION OF SECTION INDICATED THUS: —

DISTRICT ONE DESIGN PLAN PREPARATION ENGINEER:
KEN ENG (847) 705-4247

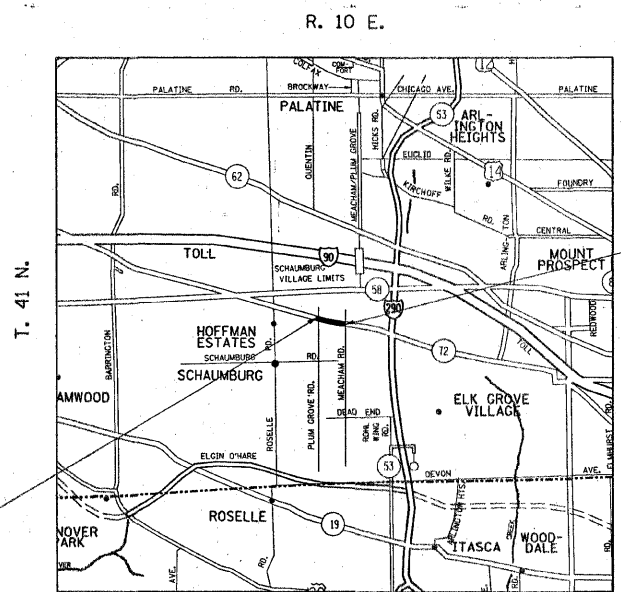


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER: SUNG H. BYUN
PROJECT MANAGER: KEN ENG

CONTRACT NO. 60F38



PROJECT BEGINS
STATION 12+23.8

PROJECT ENDS
STATION 63+79

LOCATION MAP

TRAFFIC DATA
2006 ADT = 43,600
SPEED LIMIT = 45 MPH

SCALE: NONE

GROSS & NET LENGTH OF PROJECT = 5,155 FEET = 0.976 MILES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED *FEBRUARY 5, 20 09*

Diana M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 27, 20 09
Charles J. Ingersoll
ENGINEER OF DESIGN AND ENVIRONMENT

March 27, 20 09
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES
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4-6	TYPICAL SECTIONS
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17-18	DETECTOR LOOP PLAN
19	DRIVEWAY DETAILS - DISTANCE BETWEEN ROW AND CURB OR EDGE GREATER OR EQUAL TO 15' (4.5 METER)
20	DRIVEWAY DETAILS - DISTANCE BETWEEN ROW AND CURB OR EDGE FACE OF CURB GREATER THAN 15' (4.5 METER)
21	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING
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23	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
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31	DISTRICT 1 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING
32-35	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS

STATE STANDARDS

STANDARD NO.	DESCRIPTION
000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
442201-03	CLASS C AND D PATCHES
604001-03	FRAME AND GRATE TYPE 23
604086-02	FRAME AND LIDS, TYPE 1
606001-04	CONCRETE CURB AND COMBINATION CONCRETE CURB AND GUTTER
701301-03	LANE CLOSURE, 2L, 2W SHORT TIME OPERATIONS
701601-06	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NON TRAVERSABLE MEDIAN
701606-06	URBAN LANE CLOSURE, MULTILANE 2W WITH MOUNTABLE MEDIAN
701701-06	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901-01	TRAFFIC CONTROL DEVICES
886001-01	DETECTOR LOOP INSTALLATION
886006-01	TYPICAL LAYOUT FOR DETECTOR LOOPS

GENERAL NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 1-800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOURS NOTIFICATION IS REQUIRED)

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE VILLAGE OF RIVERSIDE.

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

BUTT JOINT WILL BE INSTALLED AT THE ENDS OF RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT) IN ACCORDANCE WITH THE "BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS" SHEET INCLUDED IN THE PLANS UNLESS OTHERWISE SPECIFIED.

10 FEET (3 METER) TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURB & GUTTER AND MEDIANS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITION SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

THE RESIDENT ENGINEER SHALL VERIFY THE LOCATIONS OF ALL EXISTING PAVEMENT MARKINGS PRIOR TO START OF CONSTRUCTION.

WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES WHERE THE SPEED LIMIT IS 45 MPH OR LESS, AND 1 INCH WHERE THE SPEED IS 45 MPH. A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED, WITH WRITTEN APPROVAL FROM THE RESIDENT ENGINEER, IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM OF 1:3 (V:H).

FILE NAME =	USER NAME = byunsh	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL 72 (HIGGINS RD.) ROADWAY PLAN	SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
		DRAWN -	REVISED -								341	32-3R.1-RS-1	COOK	35	2
		CHECKED -	REVISED -												
		DATE -	REVISED -												
PLOT SCALE = 50,0000' / IN.		PLOT DATE = 2/5/2009										CONTRACT NO. 60F38			
										ILLINOIS FED. AID PROJECT					

SUMMARY OF QUANTITIES			URBAN 100% FED.	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	I-000				
35501308	HOT-MIX ASPHALT BASE COURSE, 6"	SO YD	50	50				
35501316	HOT-MIX ASPHALT BASE COURSE, 8"	SO YD	50	50				
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	26	26				
40600300	AGGREGATE (PRIME COAT)	TON	129	129				
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	39	39				
40600895	CONSTRUCTING TEST STRIP	EACH	2	2				
40600985	PORTLAND CEMENT CONCRETE SURFACE REMOVAL BUTT JOINT	SO YD	400	400				
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	295	295				
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	1000	1000				
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	6	6				
40603595	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90	TON	6313	6313				
42001300	PROTECTIVE COAT	SO YD	100	100				
42300200	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	SO YD	50	50				
42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SO YD	50	50				
44000156	HOT-MIX ASPHALT SURFACE REMOVAL, 1 3/4"	SO YD	8500	8500				
44000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"	SO YD	55888	55888				
44001700	COMBINATION CONCRETE CURB AND BUTTER DRIVEWAY PAVEMENT REMOVAL	FOOT	500	500				
44000200	DRIVEWAY PAVEMENT REMOVAL AND REPLACEMENT	SO YD	200	200				
44000500	COMBINATION CURB AND BUTTER REMOVAL	FOOT	1000	1000				
44002212	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 3"	SO YD	5920	5920				
44201765	CLASS D PATCHES, TYPE II, 10 INCH	SO YD	812	812				
44201769	CLASS D PATCHES, TYPE III, 10 INCH	SO YD	1900	1900				
44201771	CLASS D PATCHES, TYPE IV, 10 INCH	SO YD	1200	1200				
60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	6	6				
60300205	FRAMES AND GRATES TO BE ADJUSTED (SPECIAL)	EACH	6	6				
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	25	25				
60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	8	8				

SUMMARY OF QUANTITIES			URBAN 100% FED.	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT	TOTAL QUANTITIES					
60600600	COMBINATION CONCRETE CURB AND BUTTER, TYPE B 6, 24	FOOT	1000	1000				
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6				
67100100	MOBILIZATION	L SUM	1	1				
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	1				
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1				
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1				
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	5400	5400				
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	1200	1200				
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	21000	21000				
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	3900	3900				
70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	650	650				
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	1350	1350				
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	500	500				
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	4050	4050				
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	1200	1200				
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	21000	21000				
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	3600	3600				
* 78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	650	650				
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	1350	1350				
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	500	500				
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	562	562				
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	390	390				

*Specialty Items

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES
IL 72

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	32-3R.1-RS-1	COOK	35	3 A
FED. ROAD DIST. NO. 1		ILLINOIS	HIGHWAY PROJECT	

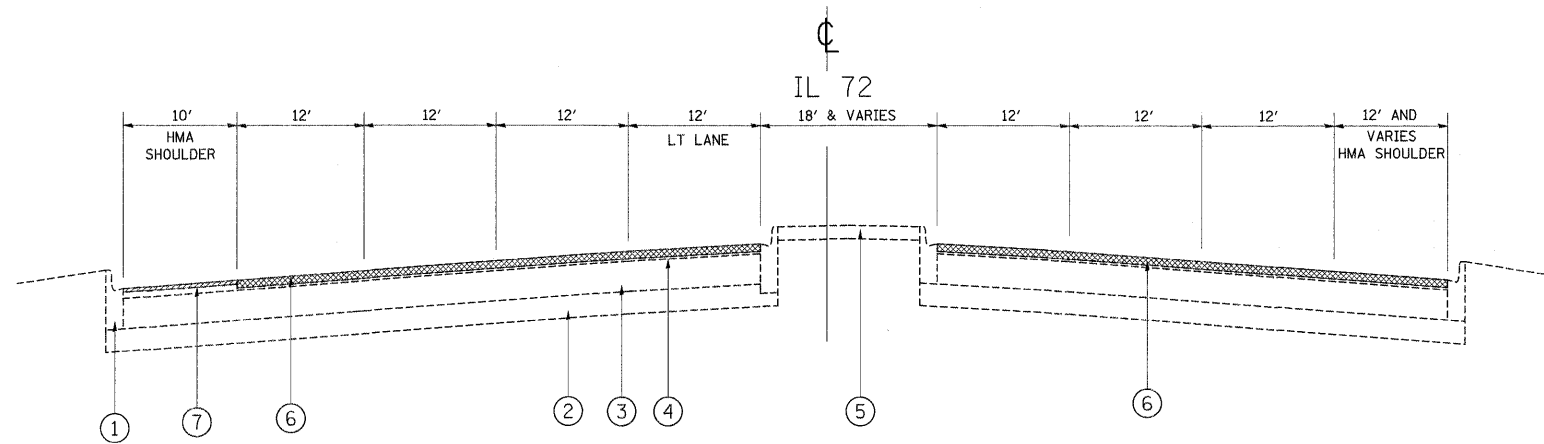
SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE					SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	I-000					CODE NO	ITEM	UNIT	TOTAL QUANTITIES					
* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	1500	1500													
X0322256	TEMPORARY INFORMATION SIGNING	50 FT	51.4	51.4													
X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	2350	2350													
NP Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	20	20													
⊙ Z0076600	TRAINEES	HOUR	500	500													

NP = Non-participating
 * - Specialty Items
 ⊙ Y080

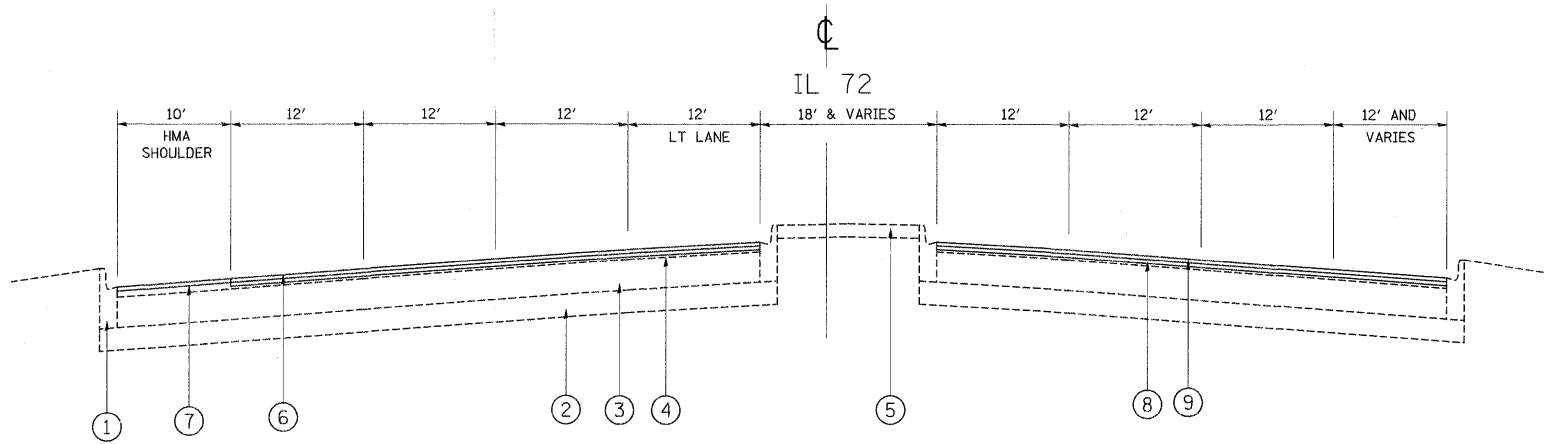
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION SUMMARY OF QUANTITIES	
NAME	DATE	IL 72	

PLOT DATE: 2/6/2009

2/6/2009
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EXISTING TYPICAL SECTION
IL 72 (HIGGINS RD.)
STA. 12+23.8 TO STA. 23+20



PROPOSED TYPICAL SECTION
IL 72 (HIGGINS RD.)
STA. 12+23.8 TO STA. 23+20

LEGEND

- ① EXISTING B-6.24 COMB. CONC. CURB & GUTTER
- ② EXISTING SUB BASE
- ③ EXISTING HMA BASE COURSE, ±10"
- ④ EXISTING HMA SURFACE COURSE, ±3"
- ⑤ EXISTING CONCRETE BARRIER MEDIAN
- ⑥ PROPOSED HMA SURFACE REMOVAL, 2 1/2"
- ⑦ PROPOSED HMA SURFACE REMOVAL, 1 3/4"
- ⑧ PROPOSED POLYMERIZED HMA SURFACE COURSE, MIX "F", N90, 1-3/4"
- ⑨ PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD) COURSE, IL-4.75, N50, 3/4"

NOTE: CONTRACTOR SHALL MILL FIRST BEFORE PATCHING

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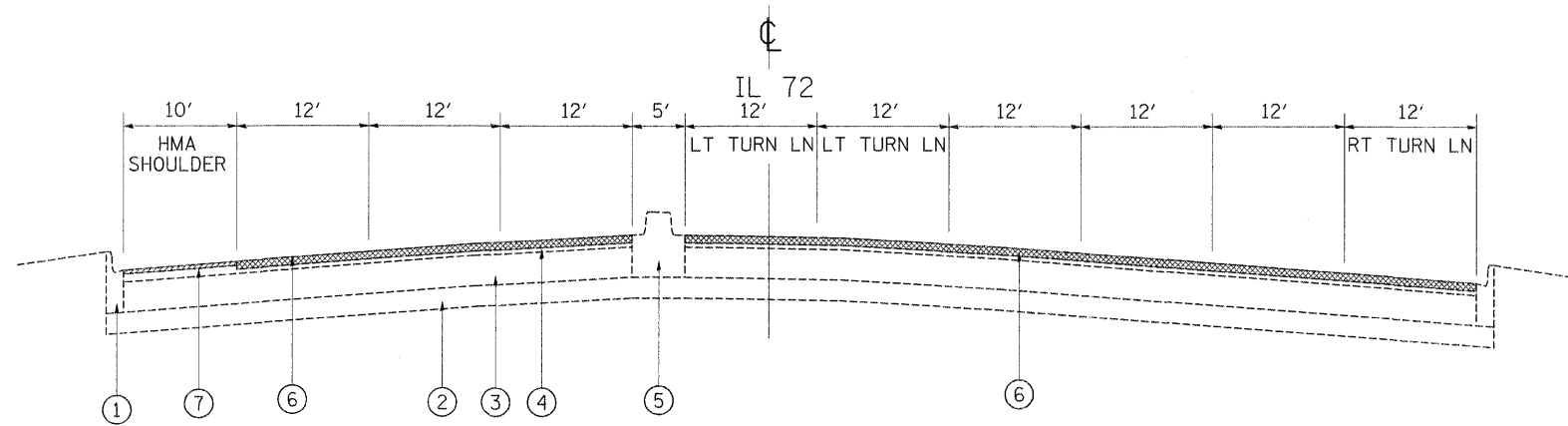
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL 72 (HIGGINS RD.)
TYPICAL SECTIONS**

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

F.A.P. RTE. 341	SECTION 32-3R.1-RS-1	COUNTY COOK	TOTAL SHEETS 4	SHEET NO. 35
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60F38	

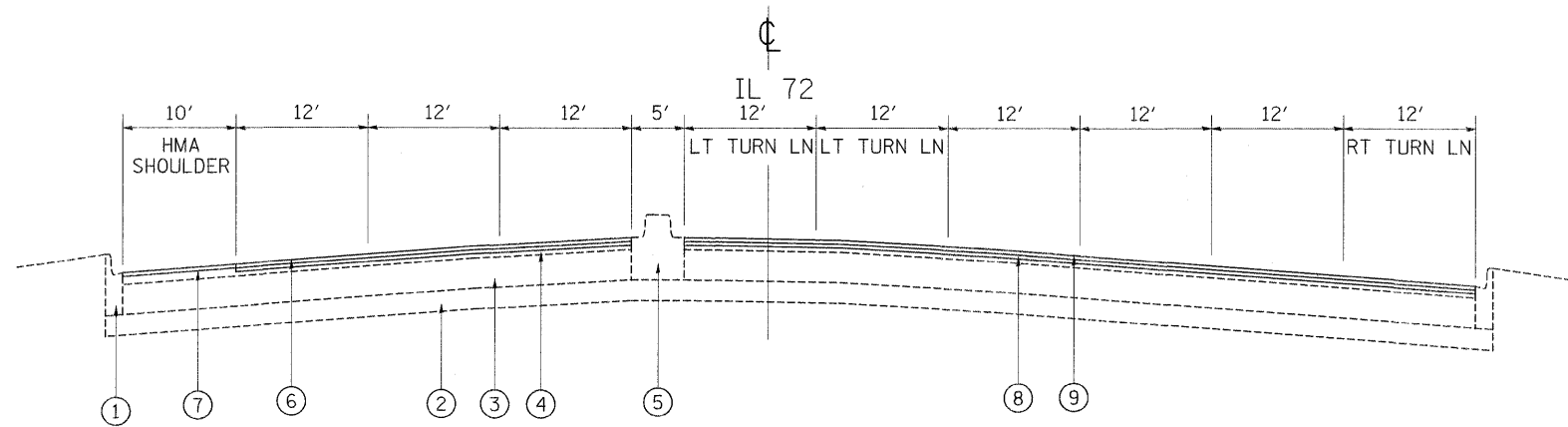


EXISTING TYPICAL SECTION
 IL 72
 STA. 23+50 TO 29+50
 STA. 51+20 TO STA. 56+80
 STA. 60+00 TO 63+79
 LOOKING EAST

LEGEND

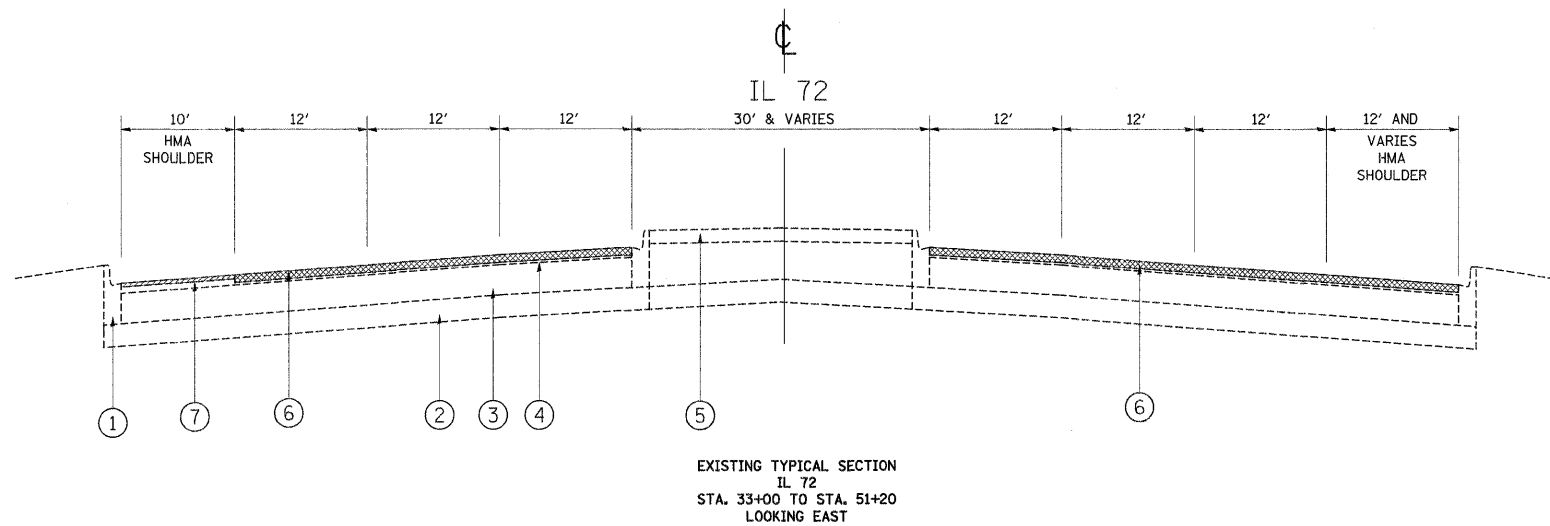
- ① EXISTING B-6.24 COMB. CONC. CURB & GUTTER
- ② EXISTING SUB BASE
- ③ EXISTING HMA BASE COURSE, ±10"
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NOTE: CONTRACTOR SHALL MILL FIRST BEFORE PATCHING



PROPOSED TYPICAL SECTION
 IL 72
 STA 23+50 TO 29+50
 STA. 51+20 TO STA. 56+80
 STA. 60+00 TO 63+79
 LOOKING EAST

FILE NAME =	USER NAME = byunsh	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL 72 (HIGGINS RD.) TYPICAL SECTIONS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	PLOT DATE = 5/6/2009	DATE -	REVISED -			SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT

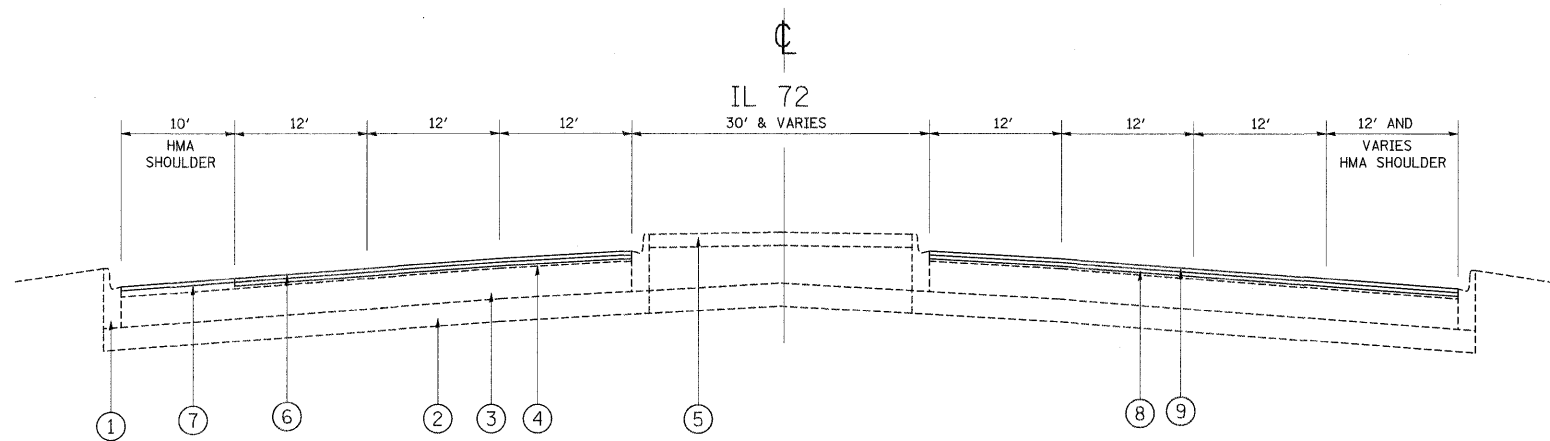


EXISTING TYPICAL SECTION
IL 72
STA. 33+00 TO STA. 51+20
LOOKING EAST

LEGEND

- ① EXISTING B-6.24 COMB. CONC. CURB & GUTTER
- ② EXISTING SUB BASE
- ③ EXISTING HMA BASE COURSE, ±10"
- ④ EXISTING HMA SURFACE COURSE, ±3"
- ⑤ EXISTING CONCRETE BARRIER MEDIAN
- ⑥ PROPOSED HMA SURFACE REMOVAL, 2 1/2"
- ⑦ PROPOSED HMA SURFACE REMOVAL, 1 3/4"
- ⑧ PROPOSED POLYMERIZED HMA SURFACE COURSE, MIX "F", N90, 1-3/4"
- ⑨ PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD) COURSE, IL-4.75, N50, 3/4"

NOTE: CONTRACTOR SHALL MILL FIRST BEFORE PATCHING



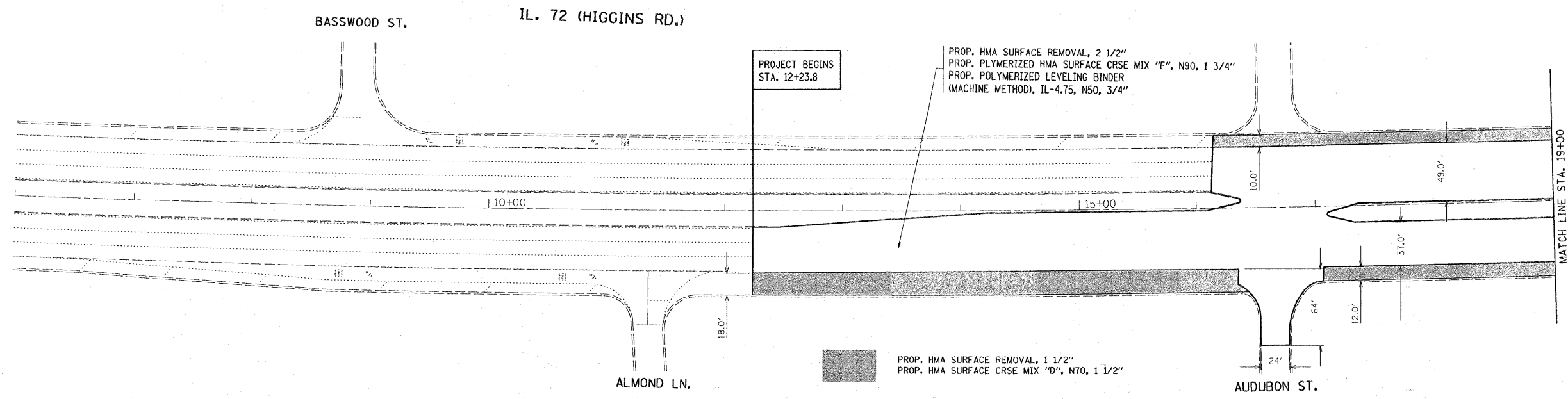
PROPOSED TYPICAL SECTION
IL 72
STA. 33+00 TO STA. 51+20
LOOKING EAST

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

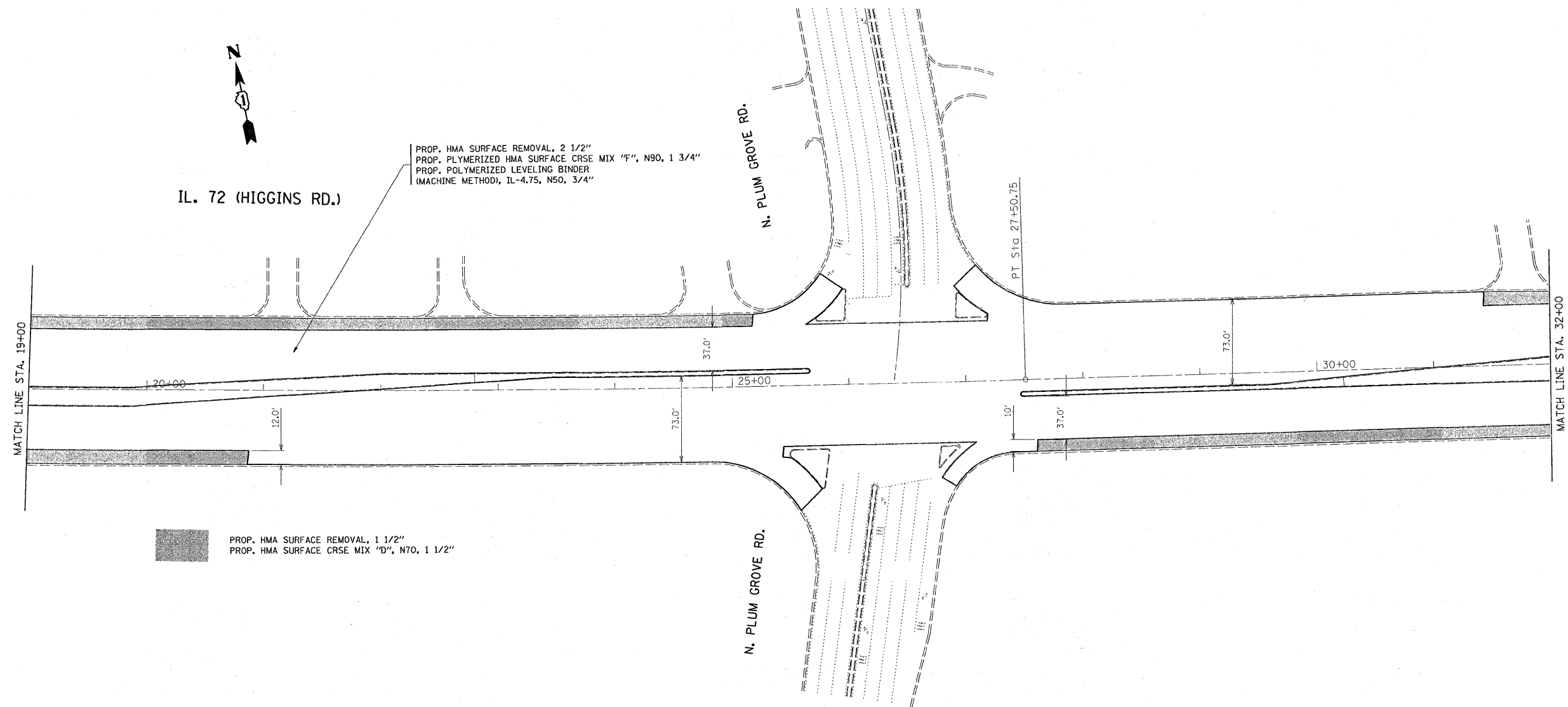
MIXTURE TYPE	AC TYPE	AIR VOIDS (%)
POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50	SBS/SBR 76-28/-22	4% @ 50 GYR
POLYMERIZED HMA SURFACE COURSE, MIX "F", N90	SBS/SBR PG 70-22	4% @ 90 GYR
BIT. REPLACEMENT OVER PATCHES, (HMA BINDER IL-19.0 MM)	PG 64-22 **	4% @ 70 GYR
CLASS D PATCHES, HMA BINDER IL-19 MM, 10"	PG 64-22 **	4% @ 70 GYR
HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	PG 64-22	4% @ 50 GYR
HOT-MIX ASPHALT BASE COURSE	PG 64-22 / 58-22	4% @ 50 GYR

THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURES QUANTITIES IS 112 LBS/SQ YD/IN

** WHEN RAP EXCEEDS 20 %, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22



FILE NAME =	USER NAME = byunsh	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL. 72 (HIGGINS RD.) ROADWAY PLAN	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
et\pw\work\pw\dot\byunsh\d8110889\010690	sh-t-plan\dgn	DRAWN -	REVISED -			341	32-3R.1-RS-1	COOK	7	35	
	PLOT SCALE = 50.9348' / IN.	CHECKED -	REVISED -			CONTRACT NO. 60F38					
	PLOT DATE = 2/5/2009	DATE -	REVISED -			SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		



IL. 72 (HIGGINS RD.)

PROP. HMA SURFACE REMOVAL, 2 1/2"
 PROP. POLYMERIZED HMA SURFACE CRSE MIX "F", N90, 1 3/4"
 PROP. POLYMERIZED LEVELING BINDER
 (MACHINE METHOD), IL-4.75, N50, 3/4"

N. PLUM GROVE RD.

PT. Sta. 27+50.75

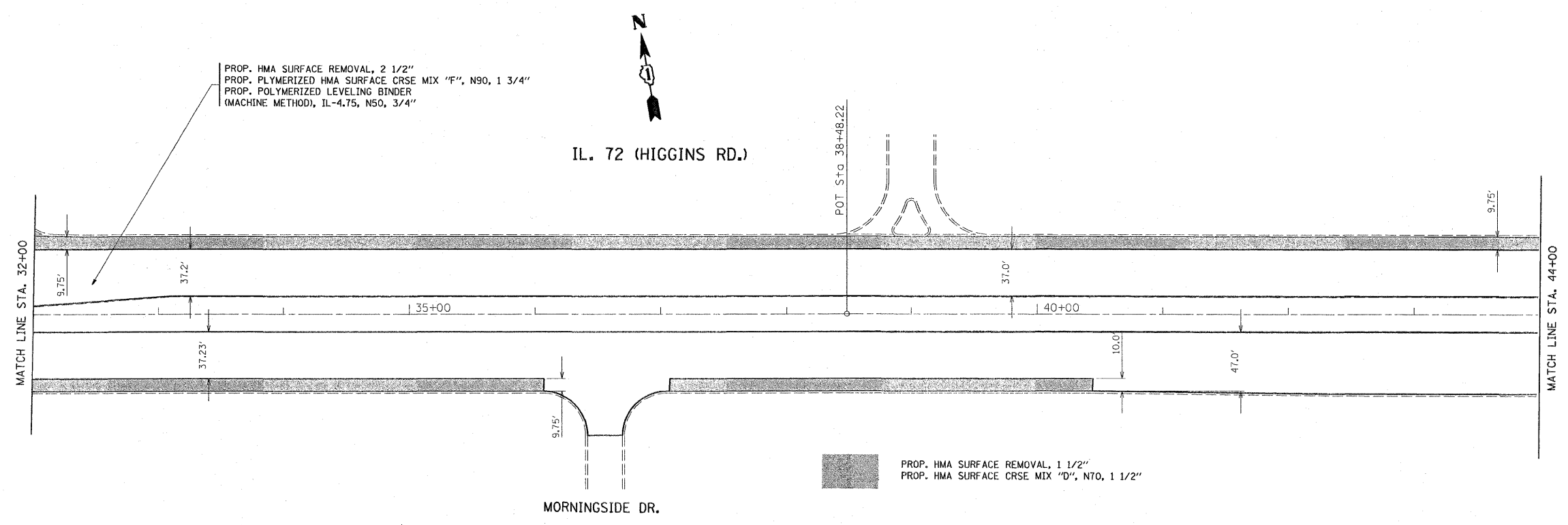
MATCH LINE STA. 19+00

MATCH LINE STA. 32+00

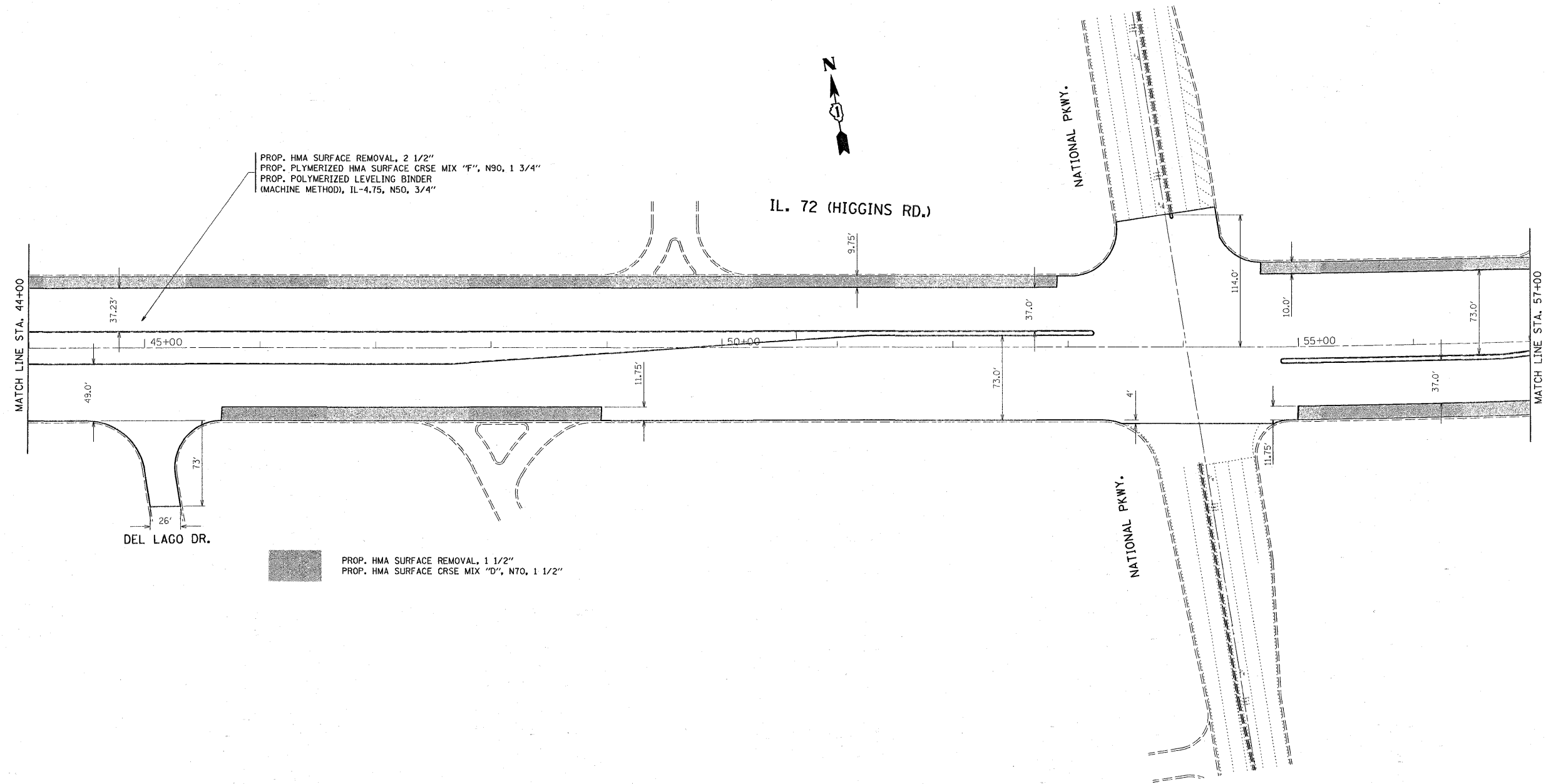
PROP. HMA SURFACE REMOVAL, 1 1/2"
 PROP. HMA SURFACE CRSE MIX "D", N70, 1 1/2"

N. PLUM GROVE RD.

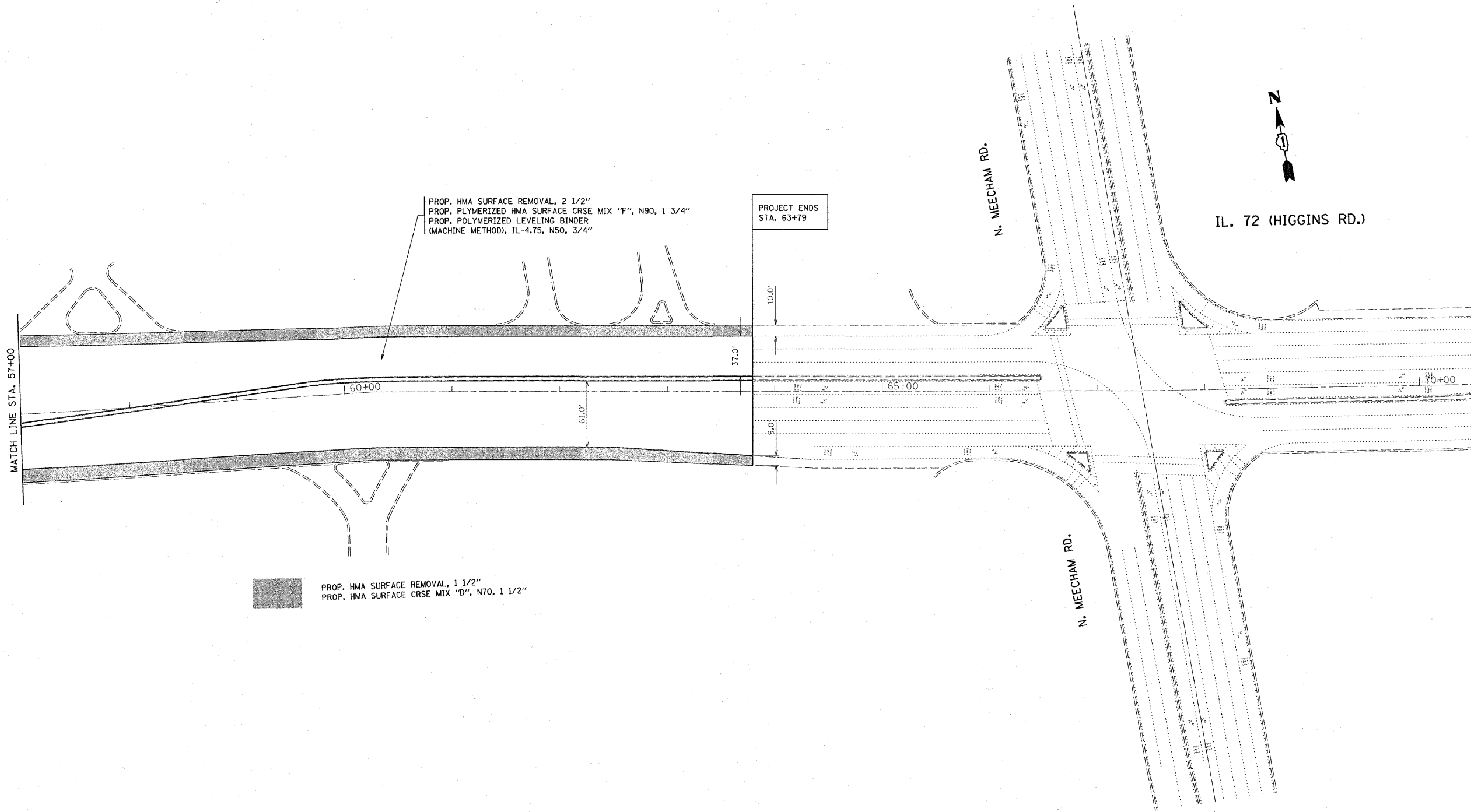
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at\pwork\pwork\bjunsh\08110889\010690	9-shr-plan.dgn	DRAWN -	REVISED -					341	32-3R.1-RS-1	COOK	8	35
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	PLOT DATE = 2/5/2009	DATE -	REVISED -		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							



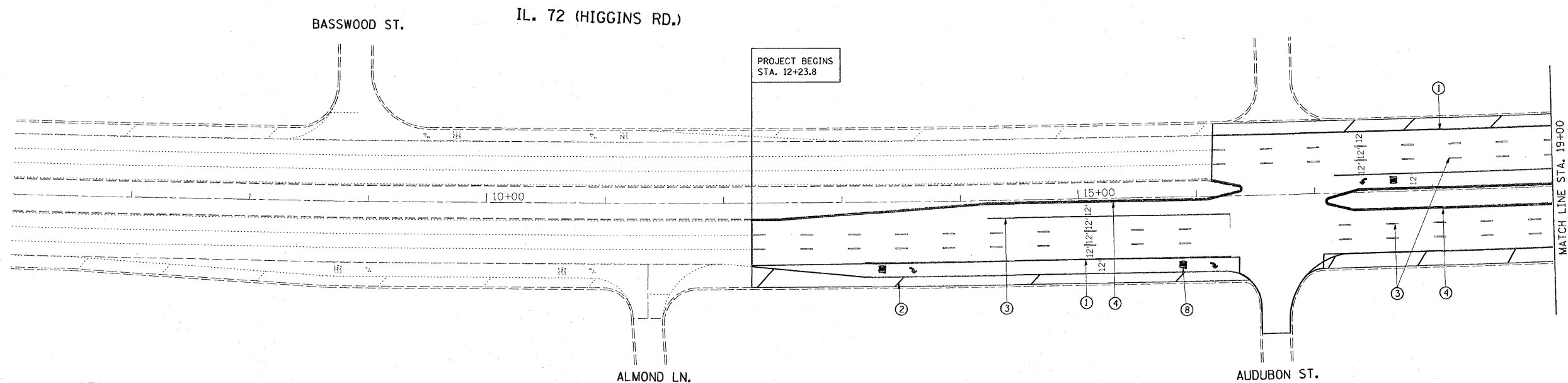
FILE NAME =	USER NAME = bjunsh	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL. 72 (HIGGINS RD.) ROADWAY PLAN			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT DATE = 2/5/2009	DATE -	CHECKED -	REVISED -		CONTRACT NO. 60F38			FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
		DATE -	REVISED -		SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.			



FILE NAME =	USER NAME = byunsh	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL. 72 (HIGGINS RD.) ROADWAY PLAN			F.A.P. RTE. 341	SECTION 32-3R.1-RS-1	COUNTY COOK	TOTAL SHEETS 10	SHEET NO. 35
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	PLOT SCALE = 50.9348' / IN.	CHECKED -	REVISED -							FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	
	PLOT DATE = 2/5/2009	DATE -	REVISED -									



FILE NAME =	USER NAME = byunsh	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL. 72 (HIGGINS RD.) ROADWAY PLAN			F.A.P. RTE. 341	SECTION 32-3R.1-RS-1	COUNTY COOK	TOTAL SHEETS 11	SHEET NO. 35
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	PLOT SCALE = 50.9348' / IN.	CHECKED -	REVISED -		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							
	PLOT DATE = 2/5/2009	DATE -	REVISED -									



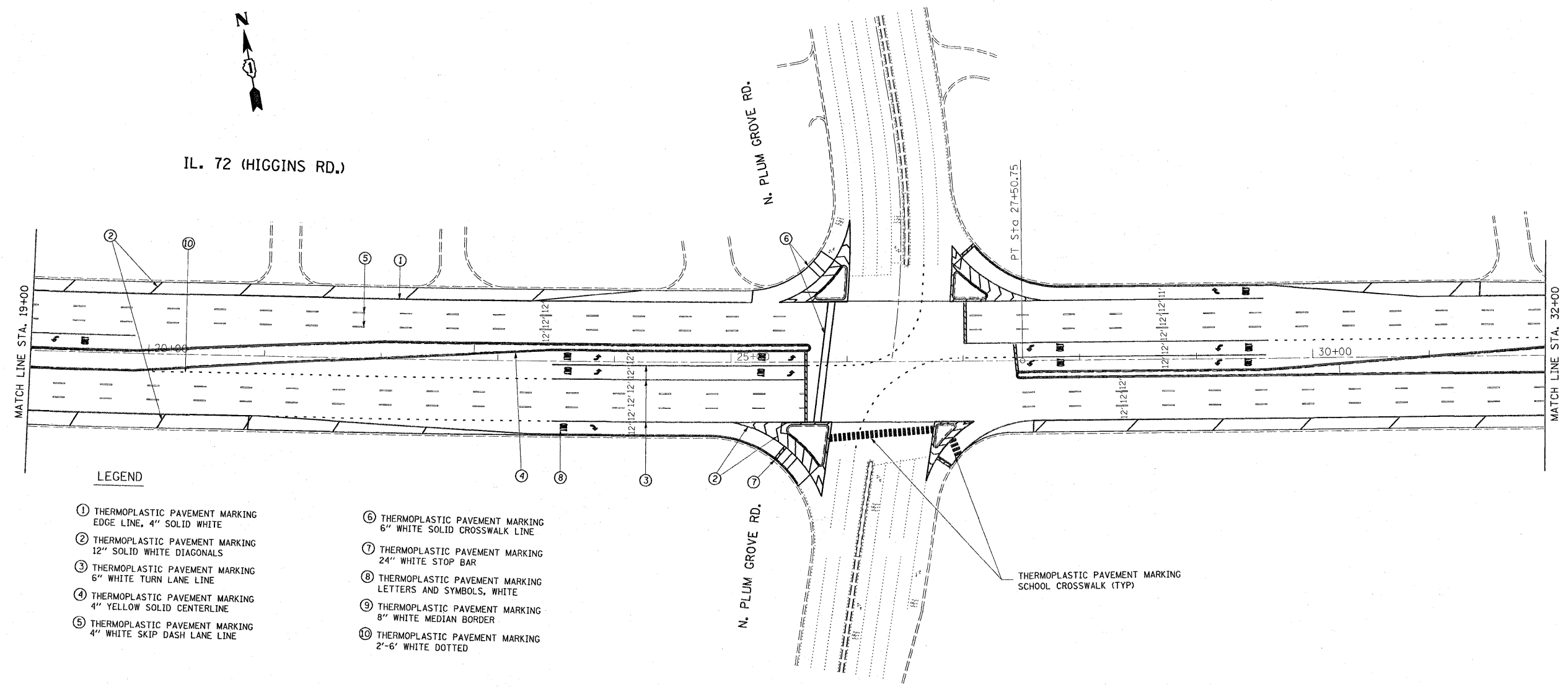
LEGEND

- | | |
|--|---|
| ① THERMOPLASTIC PAVEMENT MARKING
EDGE LINE, 4" SOLID WHITE | ⑥ THERMOPLASTIC PAVEMENT MARKING
6" WHITE SOLID CROSSWALK LINE |
| ② THERMOPLASTIC PAVEMENT MARKING
12" SOLID WHITE DIAGONALS | ⑦ THERMOPLASTIC PAVEMENT MARKING
24" WHITE STOP BAR |
| ③ THERMOPLASTIC PAVEMENT MARKING
6" WHITE TURN LANE LINE | ⑧ THERMOPLASTIC PAVEMENT MARKING
LETTERS AND SYMBOLS, WHITE |
| ④ THERMOPLASTIC PAVEMENT MARKING
4" YELLOW SOLID CENTERLINE | ⑨ THERMOPLASTIC PAVEMENT MARKING
8" WHITE MEDIAN BORDER |
| ⑤ THERMOPLASTIC PAVEMENT MARKING
4" WHITE SKIP DASH LANE LINE | ⑩ THERMOPLASTIC PAVEMENT MARKING
2'-6' WHITE DOTTED |

FILE NAME c:\pwwork\pwwork\bgunsh\d0110889\010690	USER NAME = bgunsh p-slt-plen.dgn	DESIGNED - DRAWN -	REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL. 72 (HIGGINS RD.) PAVEMENT MARKING PLAN		F.A.P. RTE. 341	SECTION 32-3R.1-RS-1	COUNTY COOK	TOTAL SHEETS 12	SHEET NO. 35	
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -		SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
PLOT DATE = 2/5/2009		DATE -	REVISED -		CONTRACT NO. 60F38							



IL. 72 (HIGGINS RD.)



LEGEND

- ① THERMOPLASTIC PAVEMENT MARKING
EDGE LINE, 4" SOLID WHITE
- ② THERMOPLASTIC PAVEMENT MARKING
12" SOLID WHITE DIAGONALS
- ③ THERMOPLASTIC PAVEMENT MARKING
6" WHITE TURN LANE LINE
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- ⑦ THERMOPLASTIC PAVEMENT MARKING
24" WHITE STOP BAR
- ⑧ THERMOPLASTIC PAVEMENT MARKING
LETTERS AND SYMBOLS, WHITE
- ⑨ THERMOPLASTIC PAVEMENT MARKING
8" WHITE MEDIAN BORDER
- ⑩ THERMOPLASTIC PAVEMENT MARKING
2'-6' WHITE DOTTED

FILE NAME
c:\pw_work\pwidot\byunsh\d0110889\010690

USER NAME = byunsh
-sh-t-pln.vdgn
PLOT SCALE = 50.0000' / IN.
PLOT DATE = 2/5/2009

DESIGNED -
DRAWN -
CHECKED -
DATE -

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

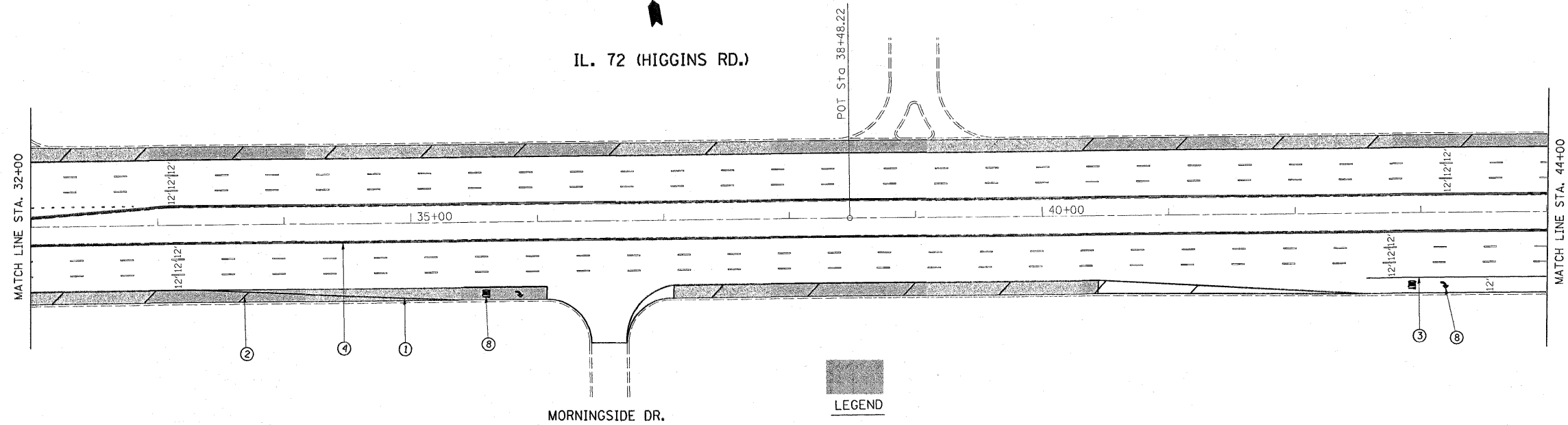
**IL. 72 (HIGGINS RD.)
PAVEMENT MARKING PLAN**

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

F.A.P. RTE. 341	SECTION 32-3R.1-RS-1	COUNTY COOK	TOTAL SHEETS 13	SHEET NO. 35
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
CONTRACT NO. 60F38				



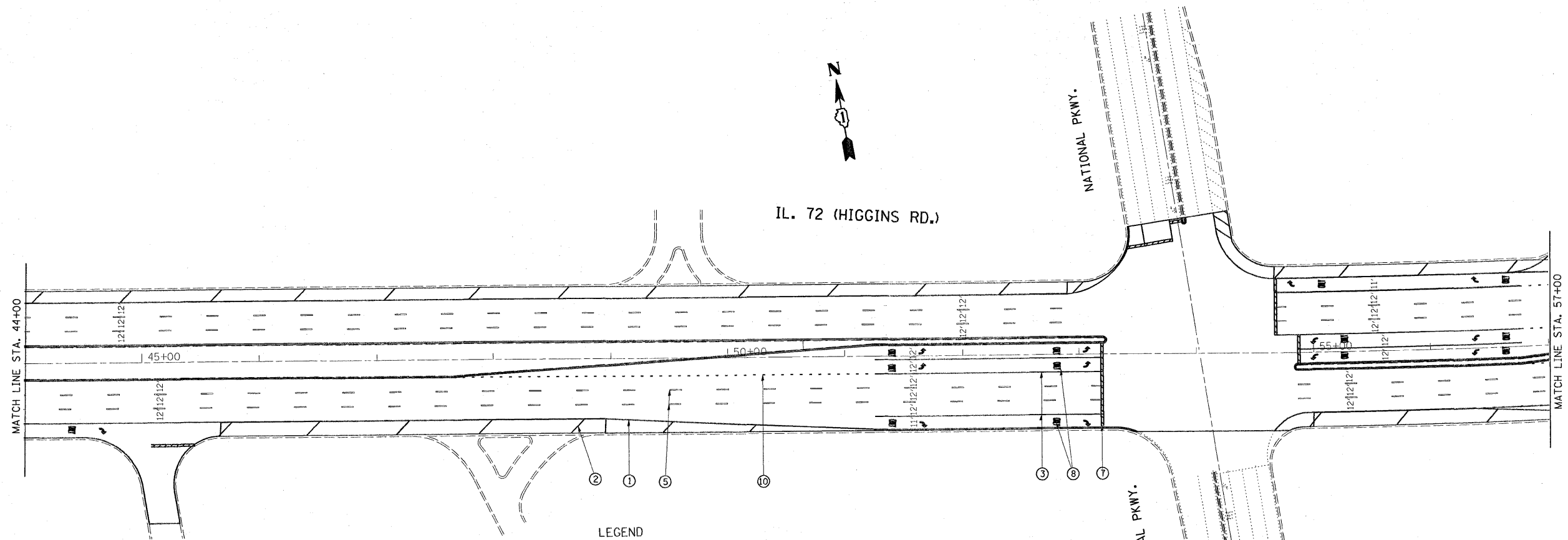
IL. 72 (HIGGINS RD.)



LEGEND

- ① THERMOPLASTIC PAVEMENT MARKING
EDGE LINE, 4" SOLID WHITE
- ② THERMOPLASTIC PAVEMENT MARKING
12" SOLID WHITE DIAGONALS
- ③ THERMOPLASTIC PAVEMENT MARKING
6" WHITE TURN LANE LINE
- ④ THERMOPLASTIC PAVEMENT MARKING
4" YELLOW SOLID CENTERLINE
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6" WHITE SOLID CROSSWALK LINE
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24" WHITE STOP BAR
- ⑧ THERMOPLASTIC PAVEMENT MARKING
LETTERS AND SYMBOLS, WHITE
- ⑨ THERMOPLASTIC PAVEMENT MARKING
8" WHITE MEDIAN BORDER
- ⑩ THERMOPLASTIC PAVEMENT MARKING
2'-6" WHITE DOTTED

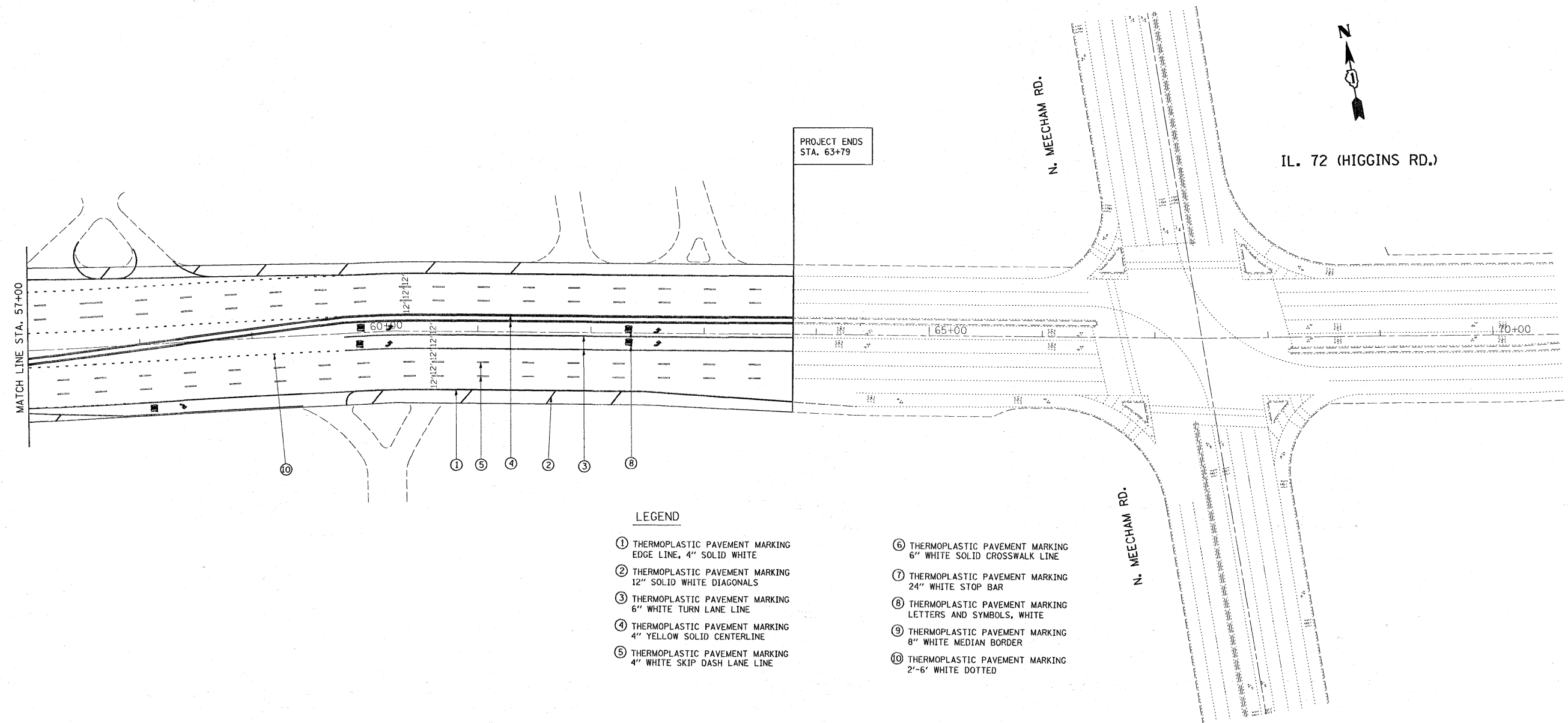
FILE NAME c:\pwork\pwork\BYUNSH\d0110889\DI0699-ahh-plandgn	USER NAME = byunsh	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL. 72 (HIGGINS RD.) PAVEMENT MARKING PLAN			F.A.P. RTE. 341	SECTION 32-3R.1-RS-1	COUNTY COOK	TOTAL SHEETS 14	SHEET NO. 35
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	PLOT DATE = 2/6/2009	DATE -	REVISED -					FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
								SCALE:	SHEET NO. OF SHEETS	STA. TO STA.		



LEGEND

- ① THERMOPLASTIC PAVEMENT MARKING
EDGE LINE, 4" SOLID WHITE
- ② THERMOPLASTIC PAVEMENT MARKING
12" SOLID WHITE DIAGONALS
- ③ THERMOPLASTIC PAVEMENT MARKING
6" WHITE TURN LANE LINE
- ④ THERMOPLASTIC PAVEMENT MARKING
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6" WHITE SOLID CROSSWALK LINE
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24" WHITE STOP BAR
- ⑧ THERMOPLASTIC PAVEMENT MARKING
LETTERS AND SYMBOLS, WHITE
- ⑨ THERMOPLASTIC PAVEMENT MARKING
8" WHITE MEDIAN BORDER
- ⑩ THERMOPLASTIC PAVEMENT MARKING
2'-6" WHITE DOTTED

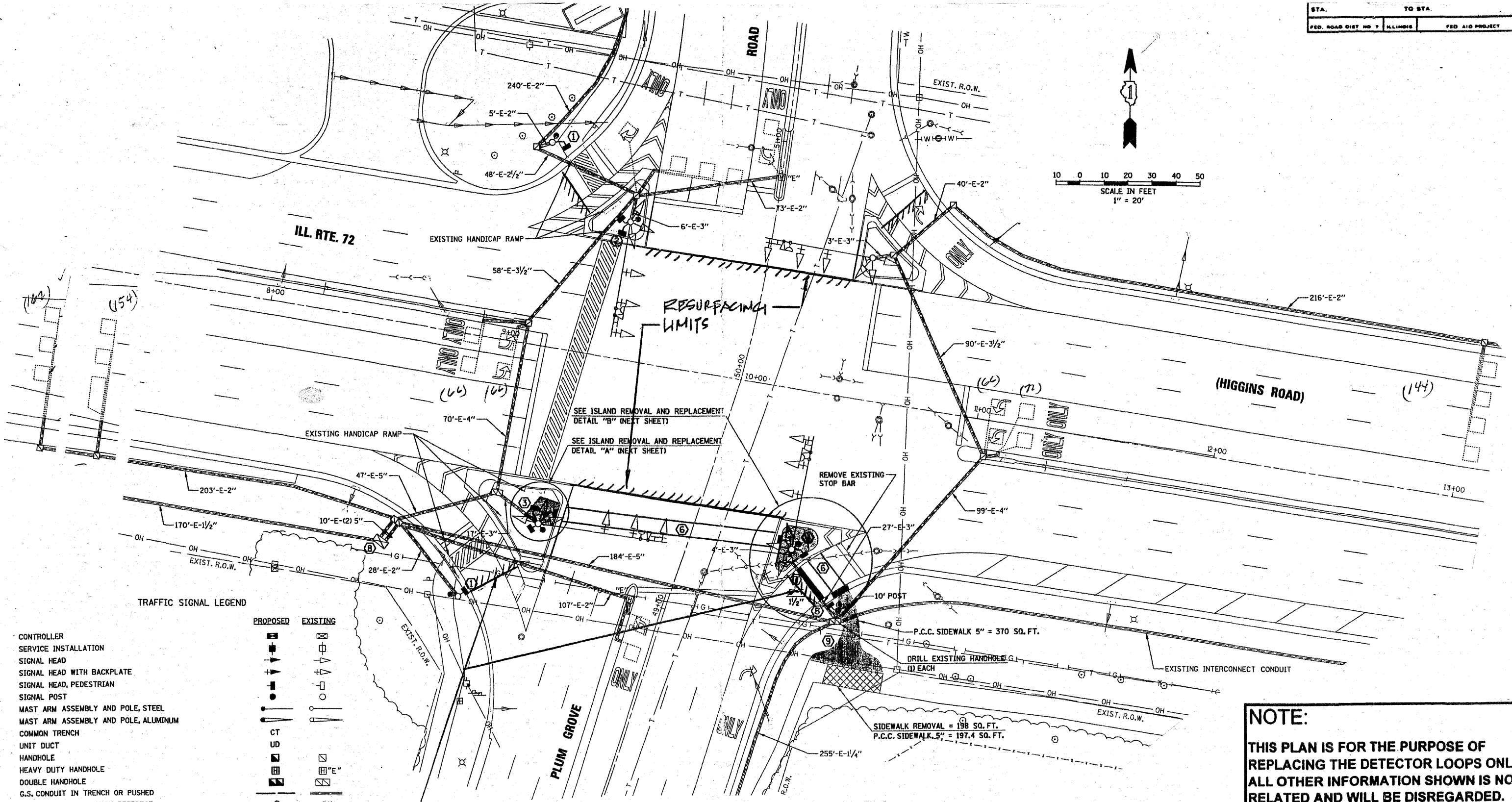
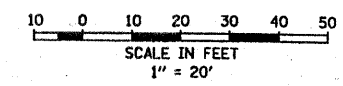
FILE NAME <small>ct:\pwwork\pwwdot\byunsh\d2110889\010690</small>	USER NAME = byunsh <small>sh-t-plen.dgn</small>	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL. 72 (HIGGINS RD.) PAVEMENT MARKING PLAN	F.A.P RTE. 341	SECTION 32-3R.1-RS-1	COUNTY COOK	TOTAL SHEETS 15	SHEET NO. 35
PLOT SCALE = 50,0000' / IN.		CHECKED -	REVISED -	SCALE: SHEET NO. OF SHEETS STA. TO STA.		FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT		CONTRACT NO. 60F38		
PLOT DATE = 2/3/2009		DATE -	REVISED -							



LEGEND

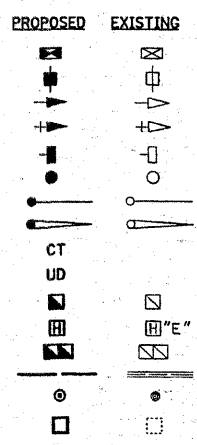
- ① THERMOPLASTIC PAVEMENT MARKING
EDGE LINE, 4" SOLID WHITE
- ② THERMOPLASTIC PAVEMENT MARKING
12" SOLID WHITE DIAGONALS
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8" WHITE MEDIAN BORDER
- ⑩ THERMOPLASTIC PAVEMENT MARKING
2'-6" WHITE DOTTED

FILE NAME c:\pw_work\pw\dot\byunsh\d0110889\010690	USER NAME = byunsh	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL. 72 (HIGGINS RD.) PAVEMENT MARKING PLAN			F.A.P. RTE. 341	SECTION 32-3R.1-RS-1	COUNTY COOK	TOTAL SHEETS 16	SHEET NO. 35	
	shz-plan.dgn	DRAWN -	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					
	PLOT SCALE = 50,0000' / IN.	CHECKED -	REVISED -		CONTRACT NO. 60F38								
	PLOT DATE = 2/5/2009	DATE -	REVISED -										



TRAFFIC SIGNAL LEGEND

- CONTROLLER
- SERVICE INSTALLATION
- SIGNAL HEAD
- SIGNAL HEAD WITH BACKPLATE
- SIGNAL HEAD, PEDESTRIAN
- SIGNAL POST
- MAST ARM ASSEMBLY AND POLE, STEEL
- MAST ARM ASSEMBLY AND POLE, ALUMINUM
- COMMON TRENCH
- UNIT DUCT
- HANDHOLE
- HEAVY DUTY HANDHOLE
- DOUBLE HANDHOLE
- G.S. CONDUIT IN TRENCH OR PUSHED
- PEDESTRIAN PUSHBUTTON DETECTOR
- DETECTOR LOOP



REPLACE ALL DETECTOR LOOPS AS SHOWN

(WITHIN THE RESURFACING LIMITS)

CODE NO.	QUANTITY	UNIT	ITEM
86600600	724	Foot	Detector Loop Replacement

NOTE:
 THIS PLAN IS FOR THE PURPOSE OF REPLACING THE DETECTOR LOOPS ONLY. ALL OTHER INFORMATION SHOWN IS NOT RELATED AND WILL BE DISREGARDED.

ILLINOIS DEPARTMENT OF TRANSPORTATION
DETECTOR LOOP REPLACEMENT

ILL. ROUTE 72 @ PLUM GROVE ROAD

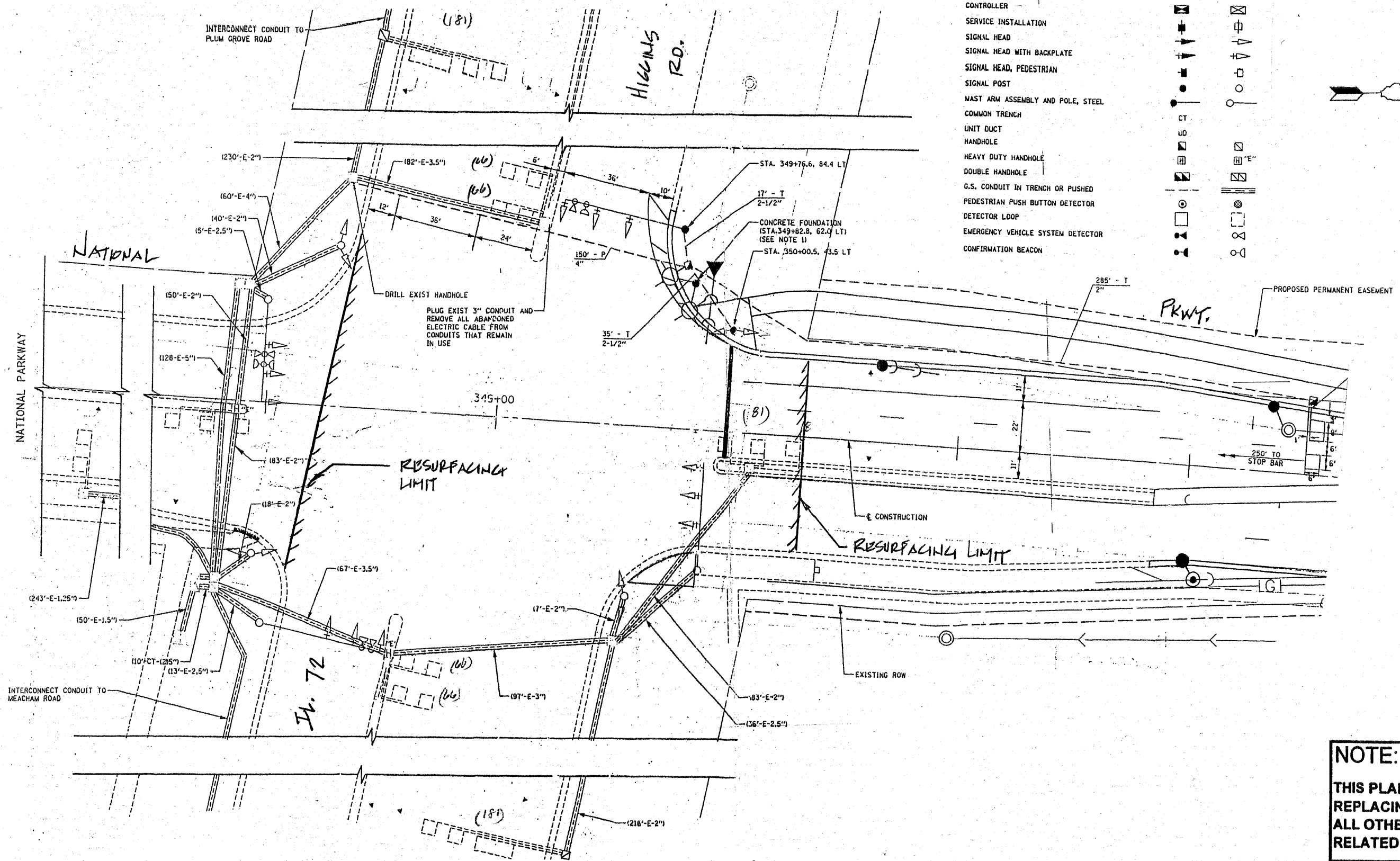
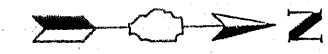
REVISIONS	
NAME	DATE

SCALE: NONE
 DATE: FEB. 2009

DRAWN BY: JHE
 DESIGNED BY: JHE
 CHECKED BY: DAD

TRAFFIC SIGNAL LEGEND

- | | | |
|-----------------------------------|----------|----------|
| CONTROLLER | PROPOSED | EXISTING |
| SERVICE INSTALLATION | | |
| SIGNAL HEAD | | |
| SIGNAL HEAD WITH BACKPLATE | | |
| SIGNAL HEAD, PEDESTRIAN | | |
| SIGNAL POST | | |
| MAST ARM ASSEMBLY AND POLE, STEEL | | |
| COMMON TRENCH | | |
| UNIT DUCT | | |
| HANDHOLE | | |
| HEAVY DUTY HANDHOLE | | |
| DOUBLE HANDHOLE | | |
| G.S. CONDUIT IN TRENCH OR PUSHED | | |
| PEDESTRIAN PUSH BUTTON DETECTOR | | |
| DETECTOR LOOP | | |
| EMERGENCY VEHICLE SYSTEM DETECTOR | | |
| CONFIRMATION BEACON | | |



REPLACE ALL DETECTOR LOOPS AS SHOWN

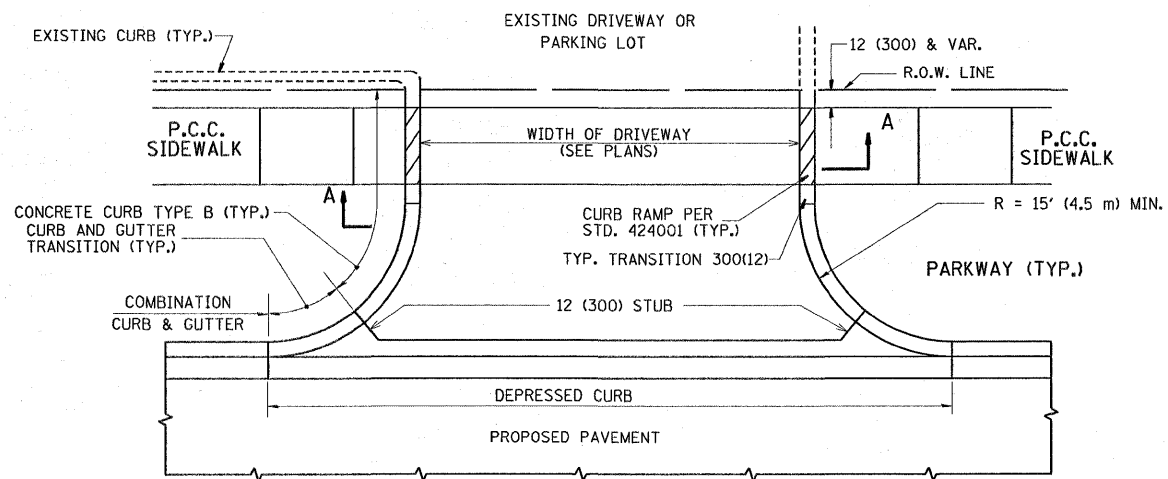
(WITHIN THE RESURFACING LIMITS)

CODE NO.	QUANTITY	UNIT	ITEM
80600600	707	Foot	Detector Loop Replacement

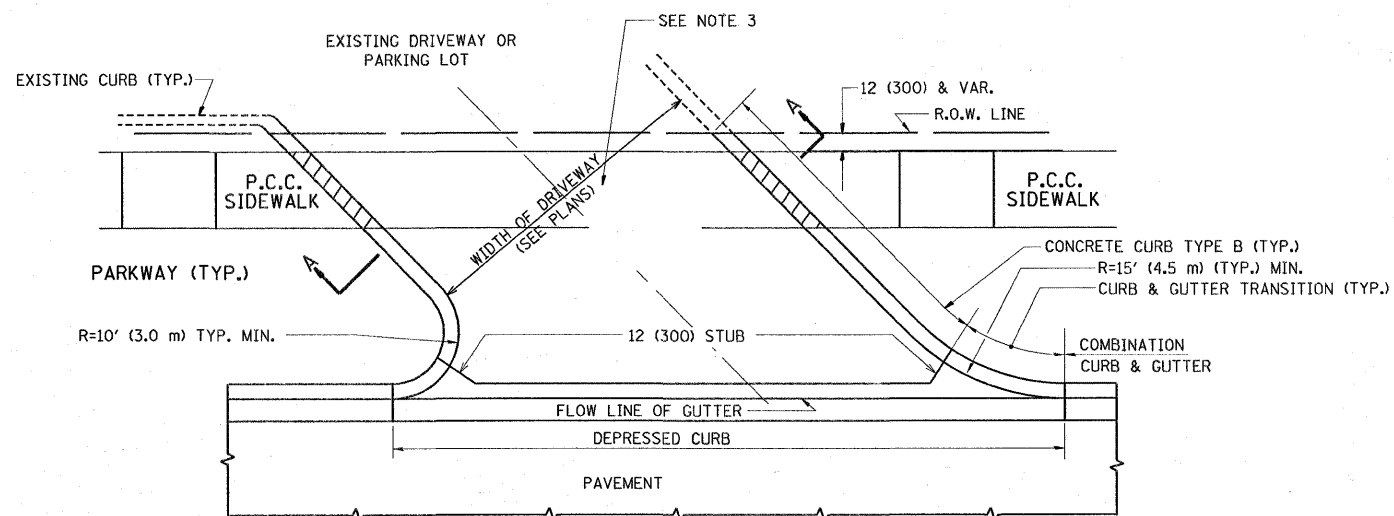
REVISIONS	
NAME	DATE

NOTE:
 THIS PLAN IS FOR THE PURPOSE OF REPLACING THE DETECTOR LOOPS ONLY. ALL OTHER INFORMATION SHOWN IS NOT RELATED AND WILL BE DISREGARDED.

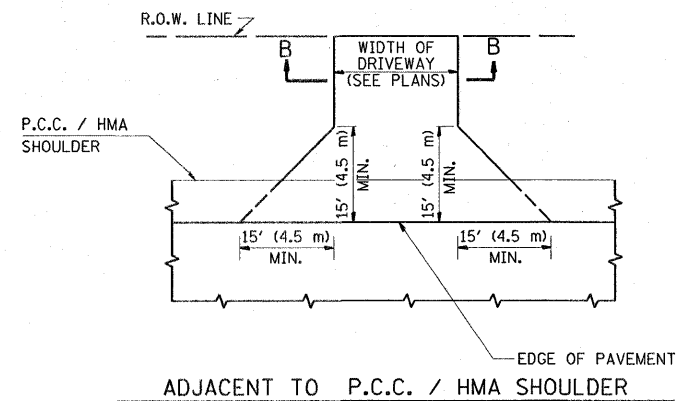
ILLINOIS DEPARTMENT OF TRANSPORTATION
DETECTOR LOOP REPLACEMENT
 ILL. ROUTE 72 @ NATIONAL PKWY.
 SCALE: NONE
 DATE: FEB. 2009
 DRAWN BY: JHE
 DESIGNED BY: JHE
 CHECKED BY: DAD



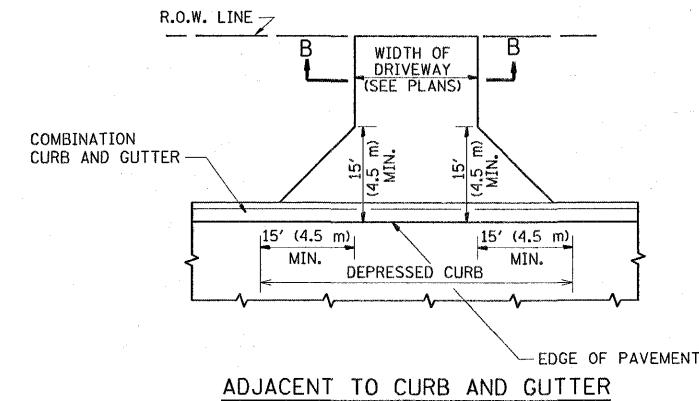
WITH CONCRETE CURB, TYPE B



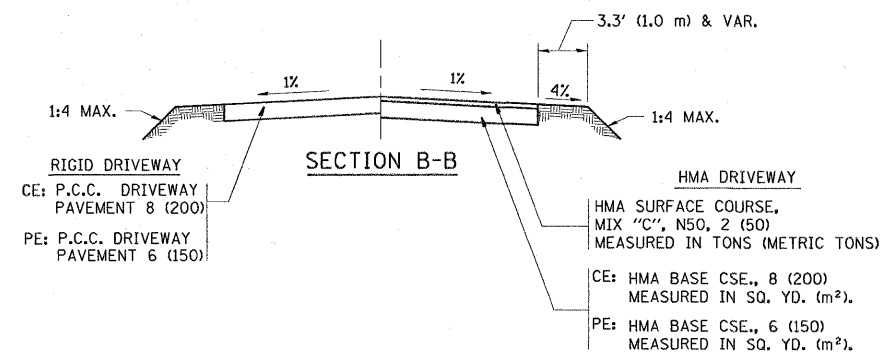
WITH CONCRETE CURB, TYPE B



ADJACENT TO P.C.C. / HMA SHOULDER



ADJACENT TO CURB AND GUTTER



RURAL FIELD ENTRANCE (FE)

HMA SURFACE COURSE,
MIX "C", N50, 2 (50)
MEASURED IN TONS (METRIC TONS)

CE: HMA BASE CSE., 8 (200)
MEASURED IN SQ. YD. (M²).
PE: HMA BASE CSE., 6 (150)
MEASURED IN SQ. YD. (M²).

GENERAL NOTES:

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

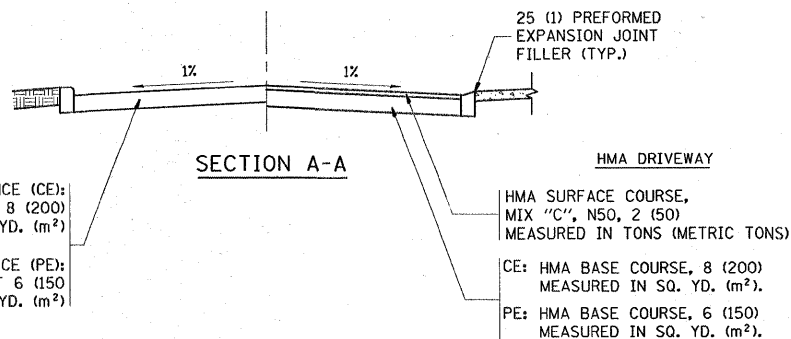
COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

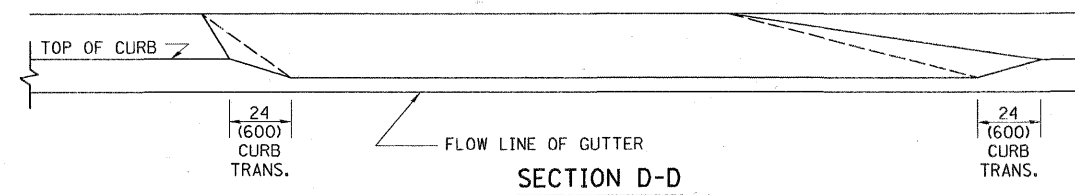
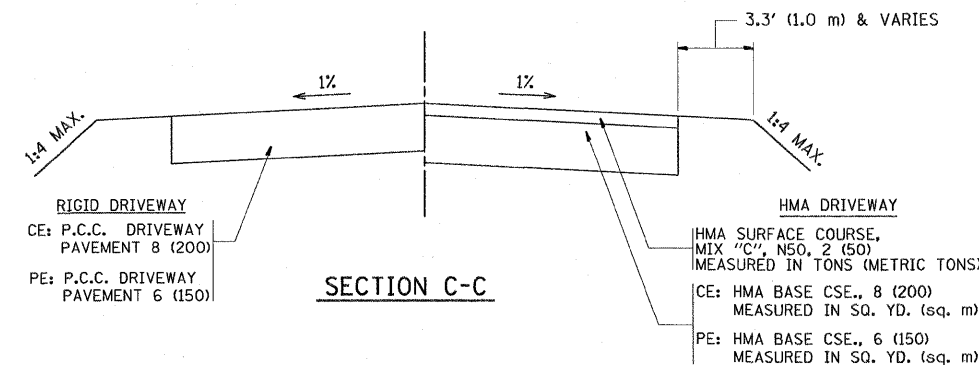
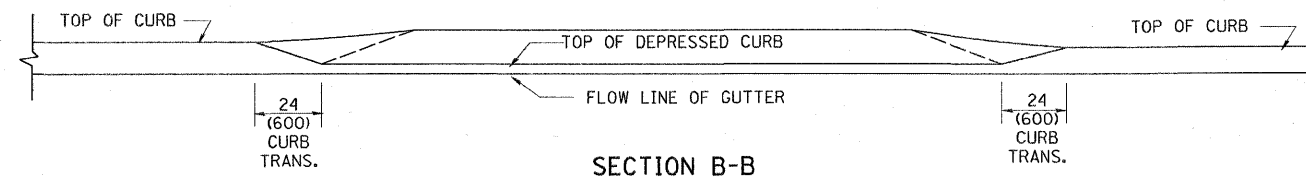
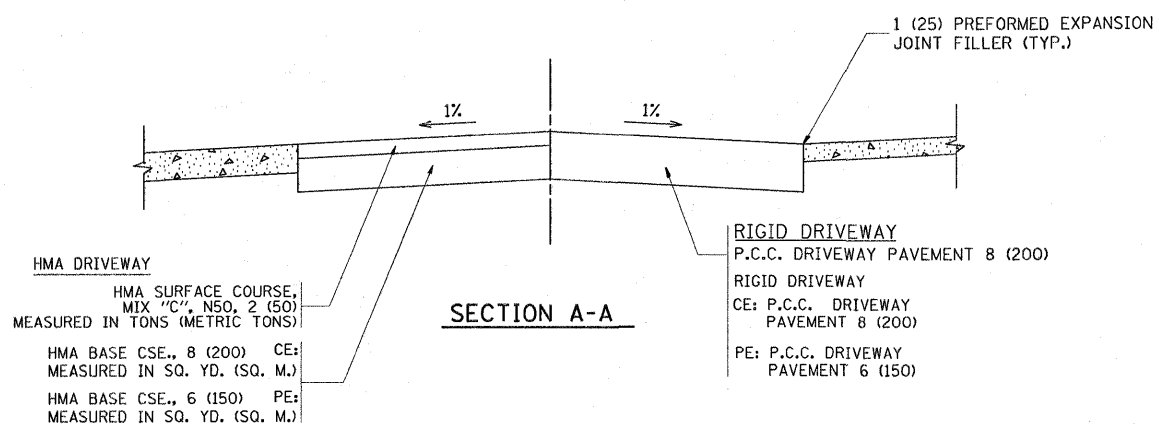
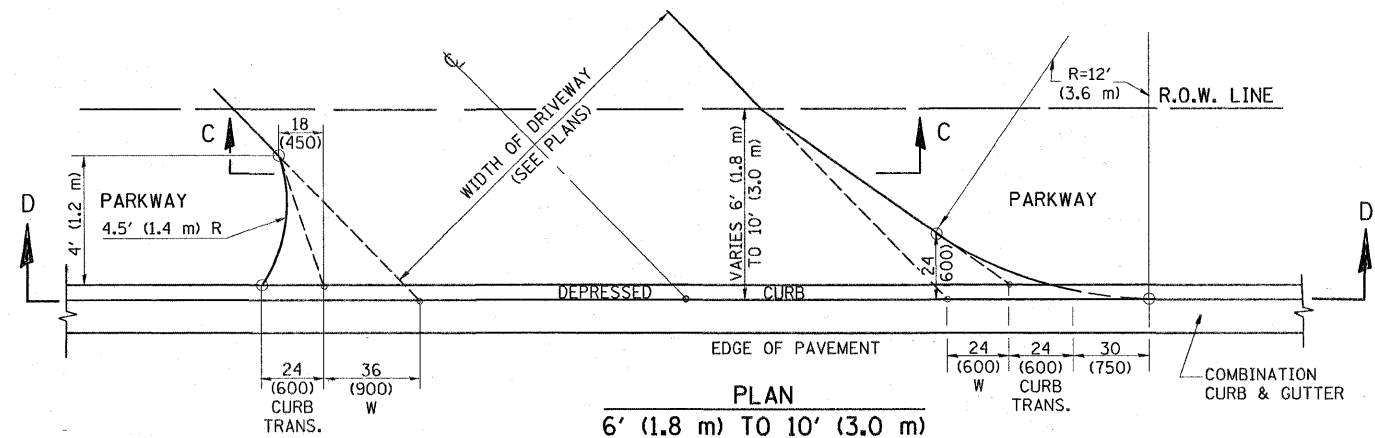
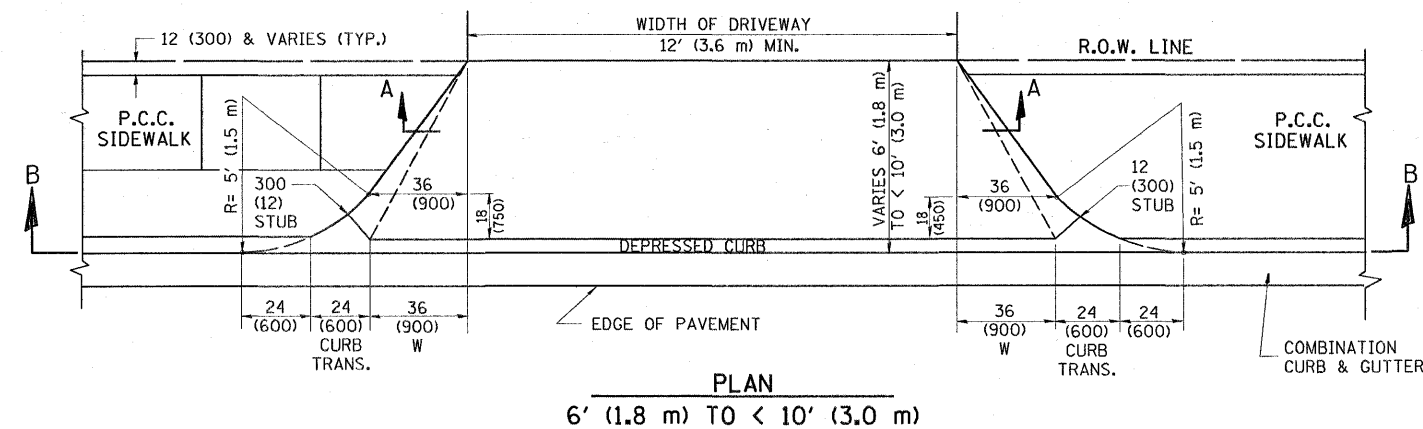
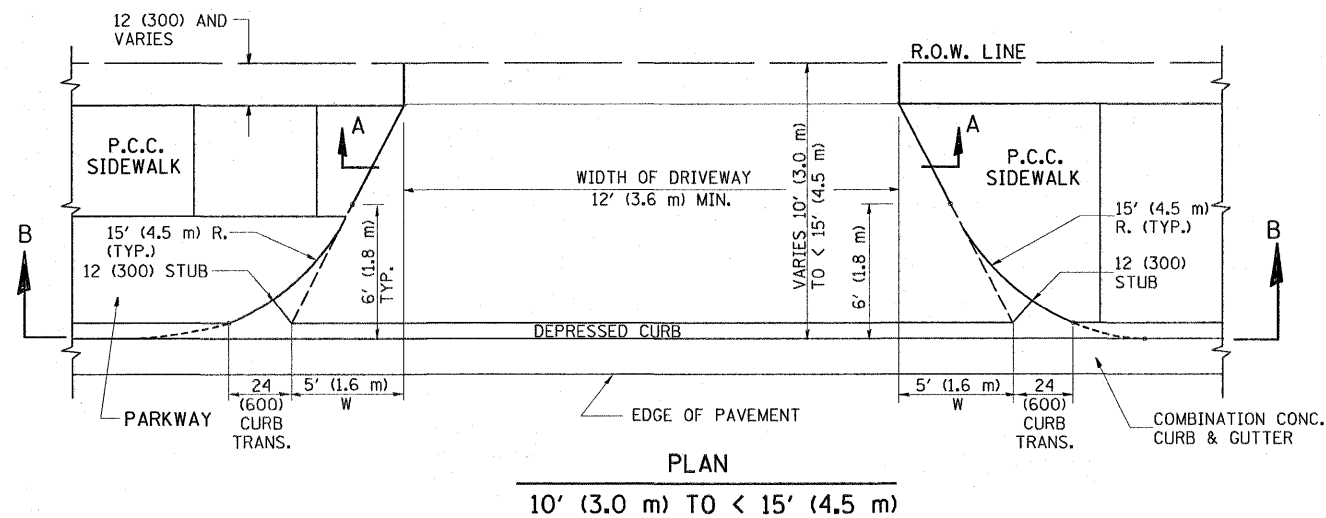
COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.



FILE NAME = c:\pwwork\pwwid01\BYUNSH\08110889\01.dwg	USER NAME = bjunsh	DESIGNED - R. SHAH	REVISED - M. GOMEZ 04-06-01	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 m)		F.A.P. RTE. 341	SECTION	COUNTY	TOTAL SHEETS 19	SHEET NO. 35	
PLDT SCALE = 50,0000' / IN.	CHECKED -	REVISED - P. LGFLUER 04-15-03	REVISED - R. BORO 01-01-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	BD0156-07 (BD-01)		CONTRACT NO. 60F38	
PLDT DATE = 2/5/2009	DATE - 11-04-95	REVISED - R. BORO 06-11-08			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							



GENERAL NOTES

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATION 10 IN THE PERMIT HANDBOOK. WHERE SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED WITH RIGID PAVEMENT. WHERE NO SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED IN KIND. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

WHEN THE DISTANCE BETWEEN R.O.W. AND THE BACK OF CURB IS EQUAL TO OR LESS THAN 8' (2.4 m), THE P.C.C. SIDEWALK SHALL EXTEND TO THE BACK OF CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

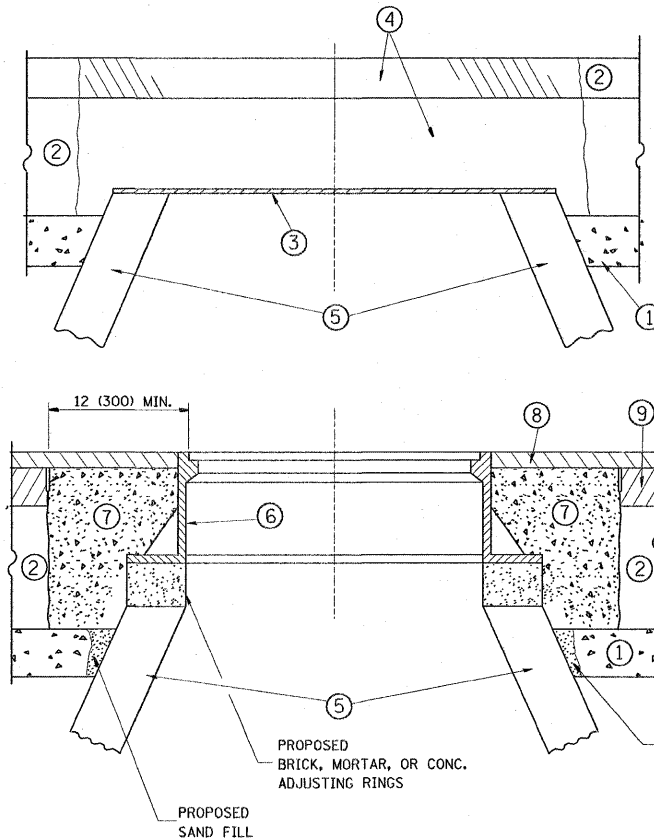
COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

THE 1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

"W" VARIES FROM 36 (900) TO 5' (1.5 m) PROPORTIONAL TO THE LENGTH (L), FROM 6' (1.8 m) TO 10' (3 m).

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

FILE NAME =	USER NAME = byunsh	DESIGNED - R. SHAH	REVISED - T. HOLTZ 04-08-97	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DRIVEWAY DETAILS		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cd:\pw_work\PIWIDOT\BYUNSH\dl118989\DistS.dgn		DRAWN -	REVISED - M. GOMEZ 04-06-01		DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5 m)		341			20	35
		CHECKED -	REVISED - P. LOFLEUR 04-15-03		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.		BD400-02 (BD-02)		CONTRACT NO. 60F 38		
		DATE - 11-06-95	REVISED - R. BORO 01-01-07		FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT						



CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1 1/2 (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS SI CONCRETE, OR HMA SURFACE COURSE OR HMA BINDER COURSE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS.

LEGEND

- ① SUB-BASE GRANULAR MATERIAL
- ② EXISTING PAVEMENT
- ③ 36 (900) DIAMETER METAL PLATE
- ④ PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- ⑤ EXISTING STRUCTURE
- ⑥ FRAME AND LID (SEE NOTES)
- ⑦ CLASS SI CONCRETE, HMA SURFACE COURSE OR HMA BINDER COURSE
- ⑧ PROPOSED HMA SURFACE COURSE
- ⑨ PROPOSED HMA BINDER COURSE

LOCATION OF STRUCTURES:

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

BASIS OF PAYMENT: THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "FRAMES AND LIDS TO BE ADJUSTED, SPECIAL"

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

NOTES:

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

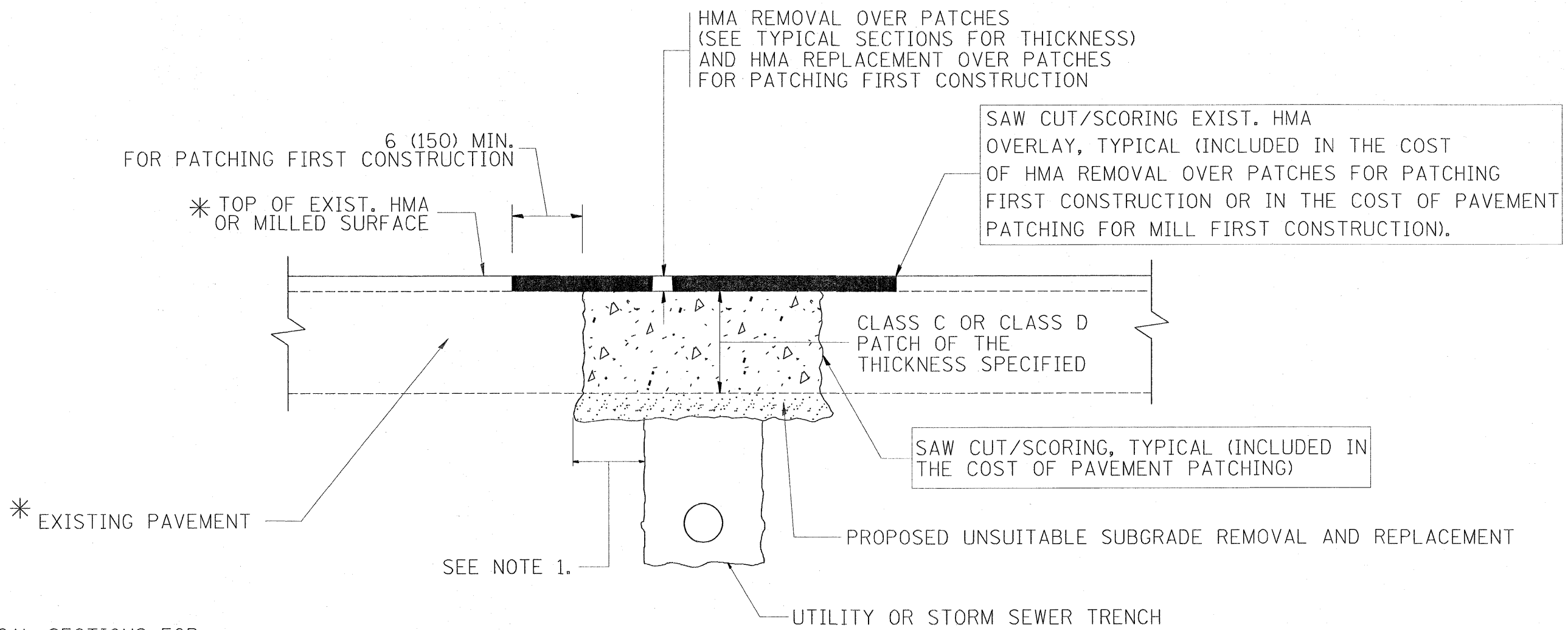
THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = byunsh	DESIGNED - R. SHAH	REVISED - R. SHAH 03-10-95	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING			F.A.P. RTE. 341	SECTION	COUNTY	TOTAL SHEETS 21	SHEET NO. 35
cd:\pwr_work\PW1001\BYUNSH\20110889\DistS	.dgn	DRAWN -	REVISED - A. ABBAS 03-21-97		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	BD600-03 (BD-8)	CONTRACT NO. 60F38	FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT	
		PLT SCALE = 50.0000' / IN.	REVISED - R. WIEDEMAN 05-14-04									
		PLT DATE = 2/5/2009	REVISED - R. BORO 01-01-07									



* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

NOTES:

1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

1. MILL HMA FIRST IF THERE IS AT LEAST 4 1/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

FILE NAME =	USER NAME = byumsh	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ca:\p_wor\p\1007\BYUNSH\0110889\01stS.dgn		DRAWN -	REVISED - R. BORO 01-01-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	341		22	35
		CHECKED -	REVISED - R. BORO 09-04-07						BD400-04 (BD-22)		CONTRACT NO. 60F38	
		DATE - 10-25-94	REVISED - K. ENG 10-27-08						FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			

VARIABLE - TO MEET EXISTING DIMENSIONS AND FIELD CONDITIONS (SEE NOTE ②)

PROP. CONC. CURB OR CURB AND GUTTER REPLACEMENT IN ACCORDANCE WITH STATE STANDARD 606001. (SEE NOTE ②)

SAW CUT FULL DEPTH - INCLUDED IN THE COST OF SIDEWALK, DRIVEWAY OR MEDIAN SURFACE REMOVAL PAY ITEM.

SEE STATE STANDARD 606001
EXISTING OR PROPOSED HMA SURFACE (IF APPLICABLE)

1/4" (5) **

18" (450) MAX.

EXISTING SIDEWALK, DRIVEWAY, MEDIAN SURFACE OR GROUND.

PROPOSED SIDEWALK, DRIVEWAY PAVEMENT, MEDIAN SURFACE OR SALT TOLERANT SOD AND TOP SOIL, 4" (100) SOD RESTORATION (SEE NOTE ①).

SUITABLE BACKFILL MATERIAL (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT)

3" (75) MIN.

PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.)

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USUABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

BASIS OF PAYMENT:

THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.

** IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.

SALT TOLERANT SOD AND TOP SOIL, 4" (100) RESTORATION WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

② CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

③ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

④ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑤ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.

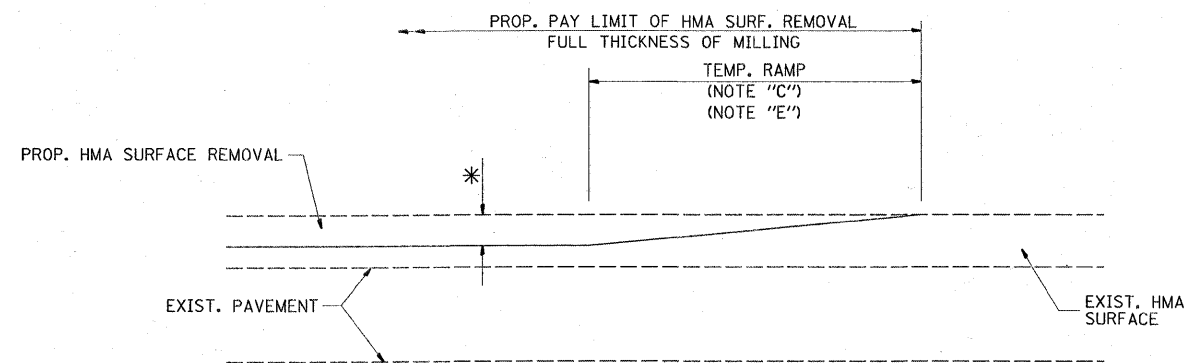
⑥ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.

⑦ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

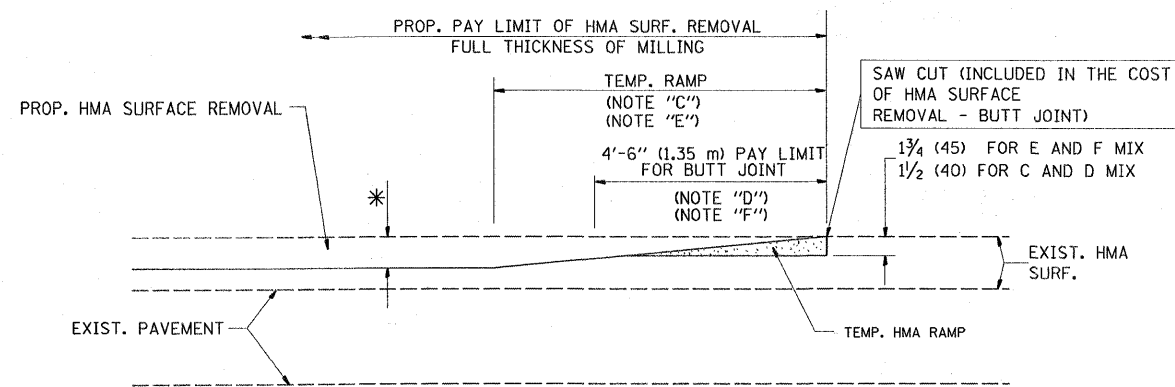
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = bgyeah	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT		F.A.P. RTE. 341	SECTION	COUNTY	TOTAL SHEETS 23	SHEET NO. 35	
cd:\pw_work\PWIDOT\BYUNSH\0110889\DistS	ed.dgn	DRAWN -	REVISED - A. ABBAS 03-21-97		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	BD600-06 (BD-24)	CONTRACT NO. 60F38	FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT	
	PLOT SCALE = 500,0000' / IN.	CHECKED -	REVISED - M. GOMEZ 01-22-01									
	PLOT DATE = 2/5/2009	DATE - 03-11-94	REVISED - R. BORO 01-01-07									



MILLED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

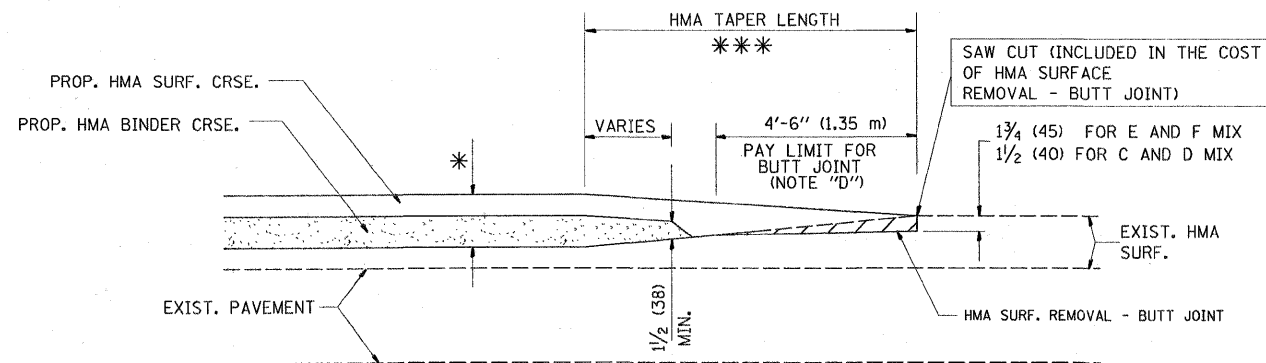
OPTION 1



HMA CONSTRUCTED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

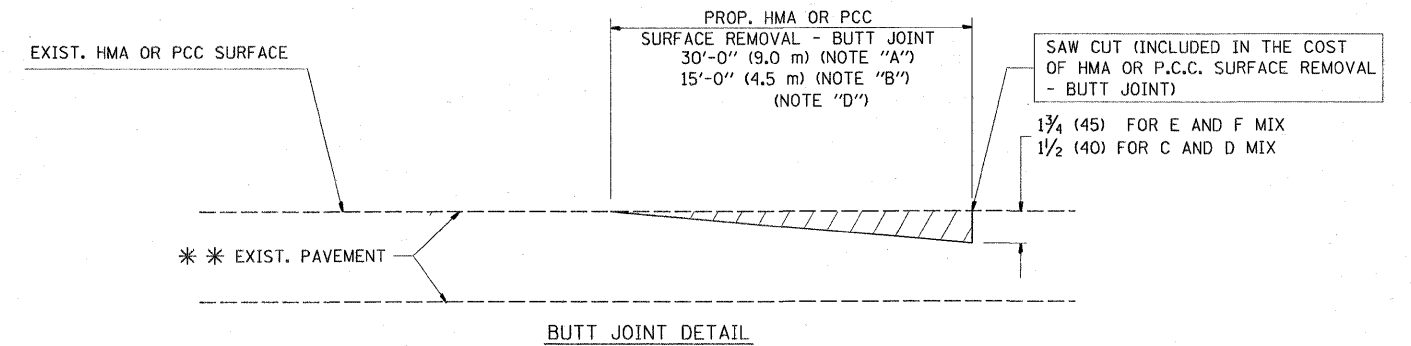
OPTION 2

TYPICAL TEMPORARY RAMP

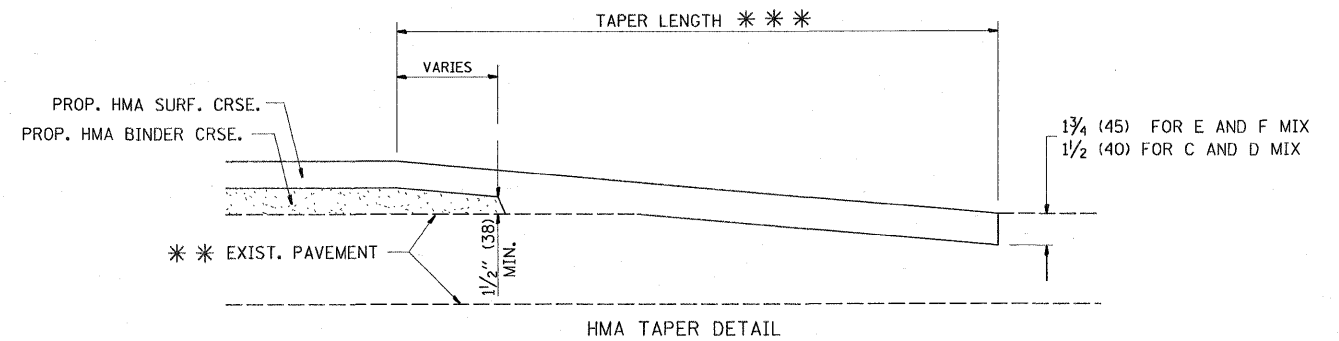


BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

*** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
 - B: MINOR SIDE ROADS.
 - C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
 - D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
 - E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
 - F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
 - G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- *** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT:

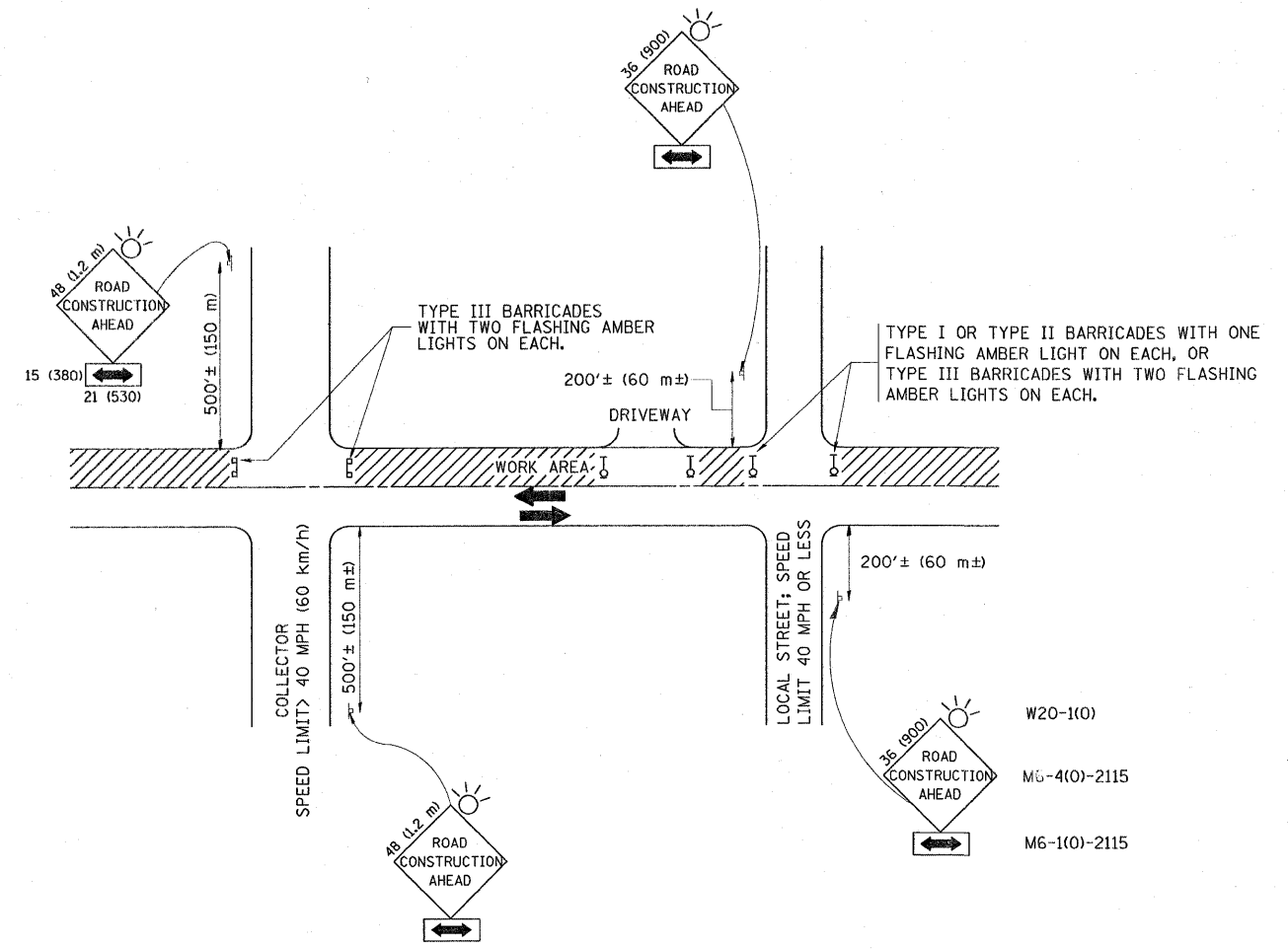
THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

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

FILE NAME =	USER NAME = byunsh	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
ca:\pw_work\VPWIDOT\BYUNSH\d0110889\DistS	d.dgn	DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 50.0000" / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLDT DATE = 2/5/2009	DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

BUTT JOINT AND HMA TAPER DETAILS		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.		24	35
				BD400-05 BD32	CONTRACT NO. 00F38	
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
 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) 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.
 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) 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.
 3. 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.

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

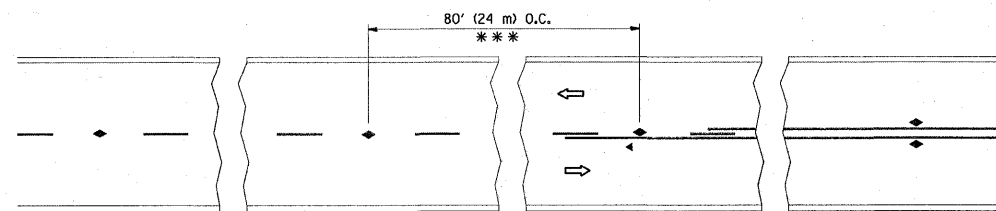
FILE NAME =	USER NAME = byunsh	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
ct:\pw\work\PNW\DOT\BYUNSH\20110889\DistS	d.dgn	DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50,0000 ' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 2/5/2009	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

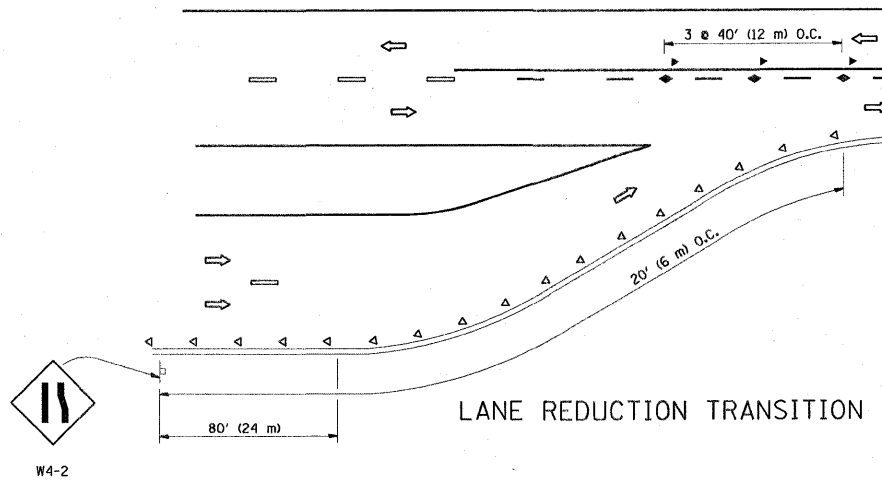
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE. 241	SECTION	COUNTY	TOTAL SHEETS 25	SHEET NO. 35
TC-10		CONTRACT NO. 60F 38		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

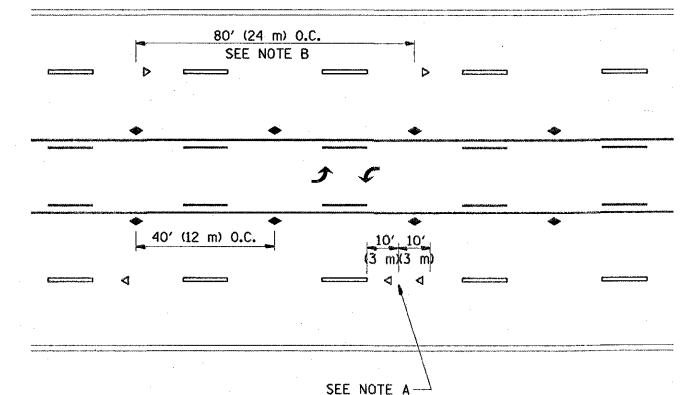


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

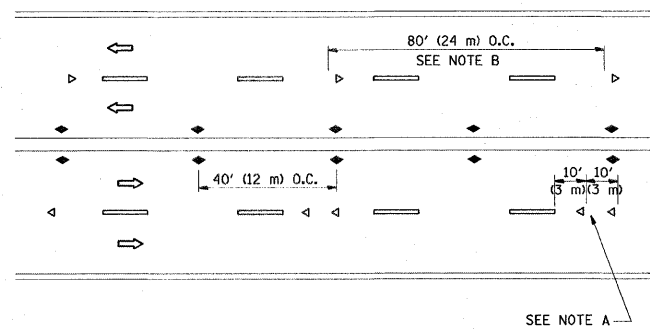
TWO-LANE/TWO-WAY



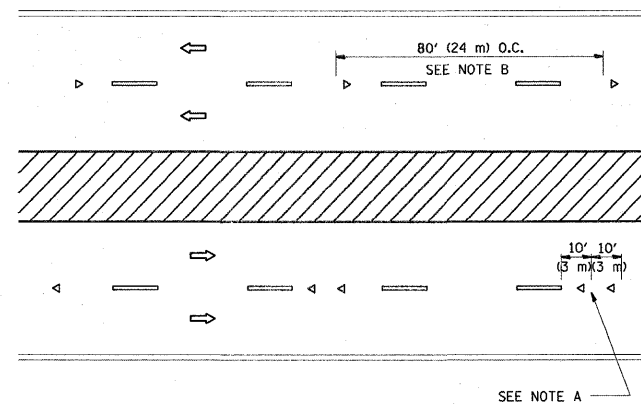
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

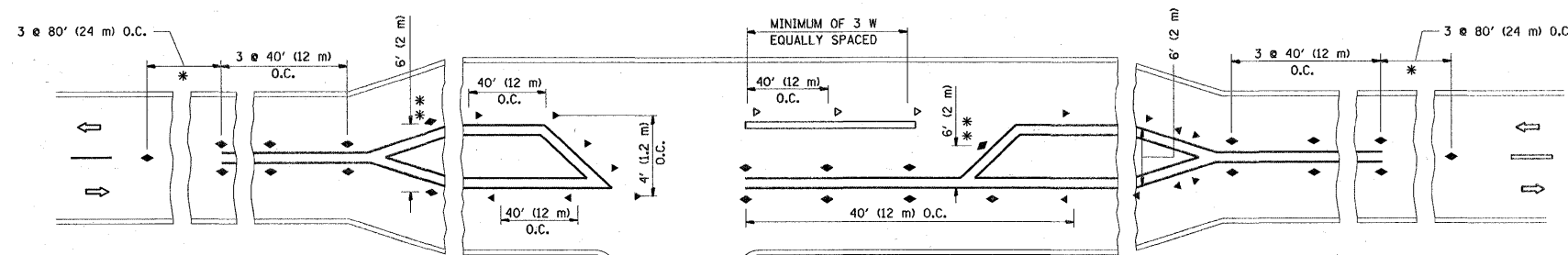
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◄ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H. (20 km/h) LOWER THAN POSTED SPEEDS.
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.

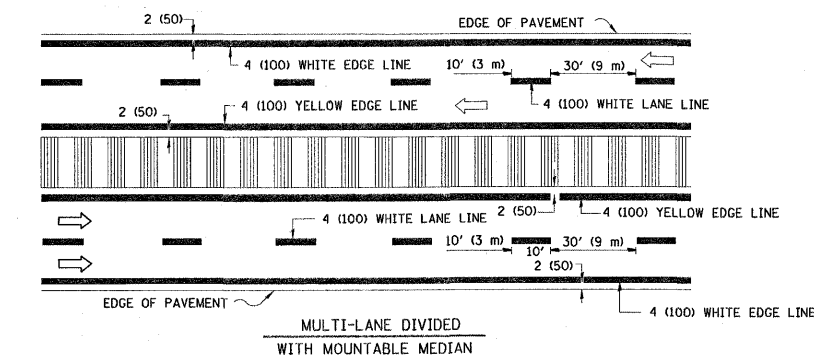
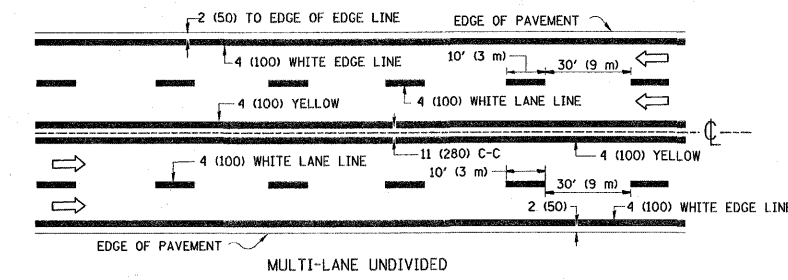
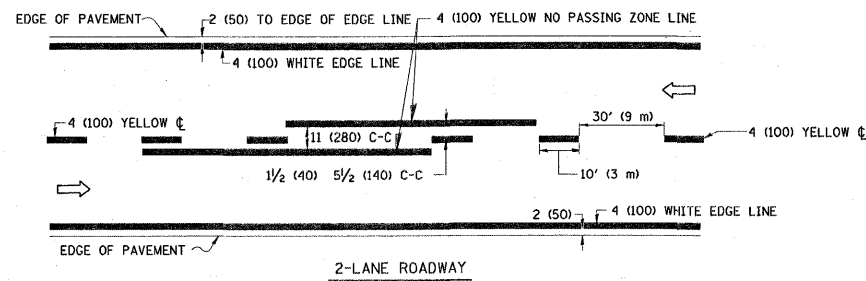


* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE
 ** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

LEFT TURN

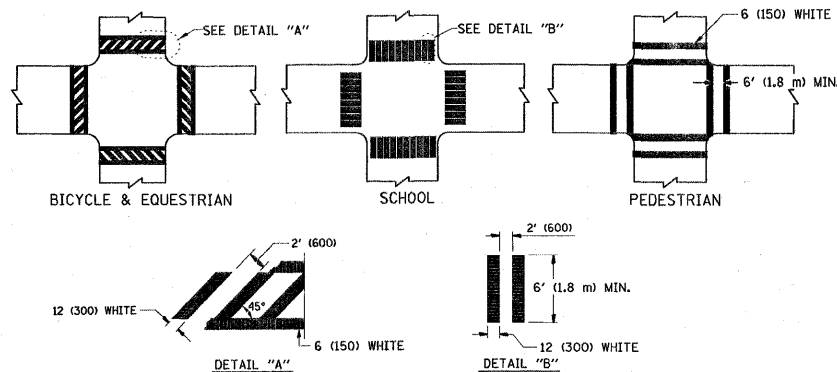
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = byunsh	DESIGNED -	REVISED - T. RAMMACHER 09-19-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL APPLICATIONS		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ca:\pw_work\PW1001\BYUNSH\0110889\DistS.dgn		DRAWN -	REVISED - T. RAMMACHER 03-12-99		RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)		341			26	35
		CHECKED -	REVISED - T. RAMMACHER 01-06-00		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	TC-11	CONTRACT NO. 60F38	
		DATE -	REVISED -						FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		

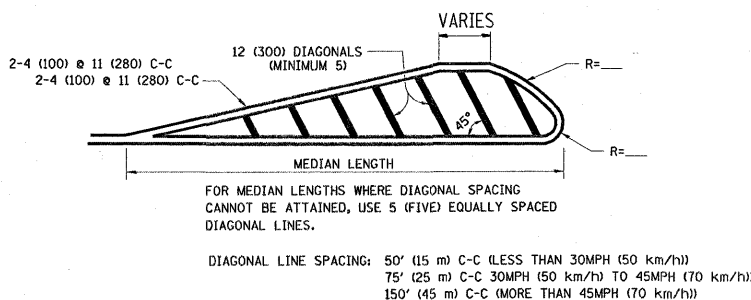
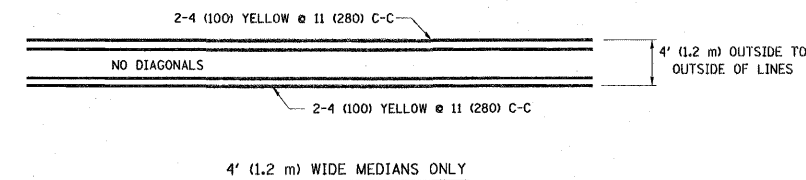


NOTE: MEDIANS WITH BARRIER CURBS DO NOT REQUIRE AN EDGE LINE

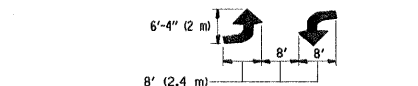
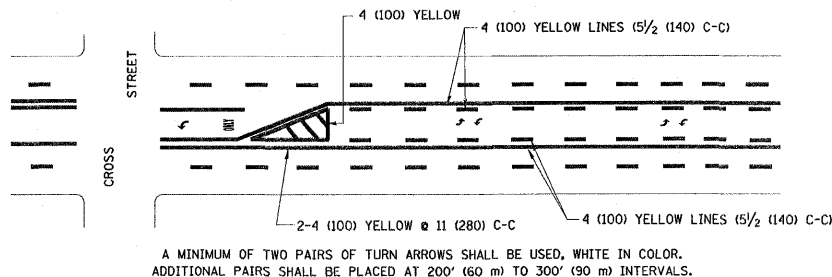
TYPICAL LANE AND EDGE LINE MARKING



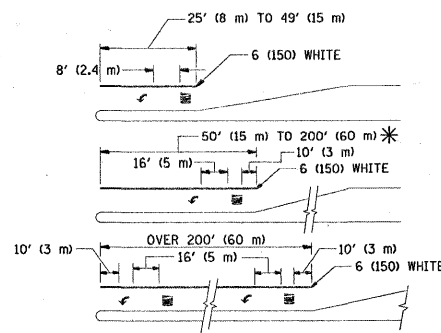
TYPICAL CROSSWALK MARKING



MEDIANS OVER 4' (1.2 m) WIDE



TYPICAL PAINTED MEDIAN MARKING

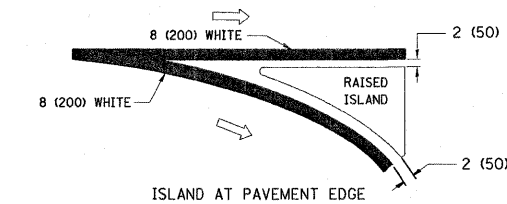
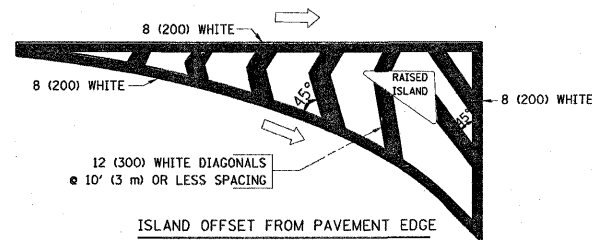


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

* TURN LANES IN EXCESS OF 400' (120 m) 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



TYPICAL ISLAND MARKING

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

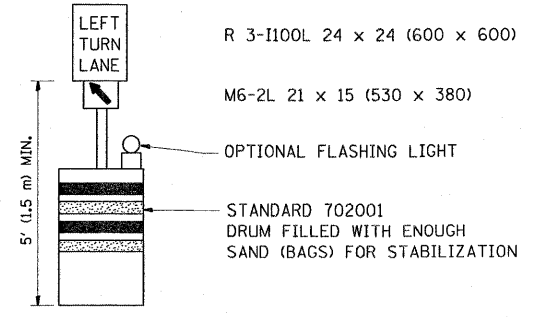
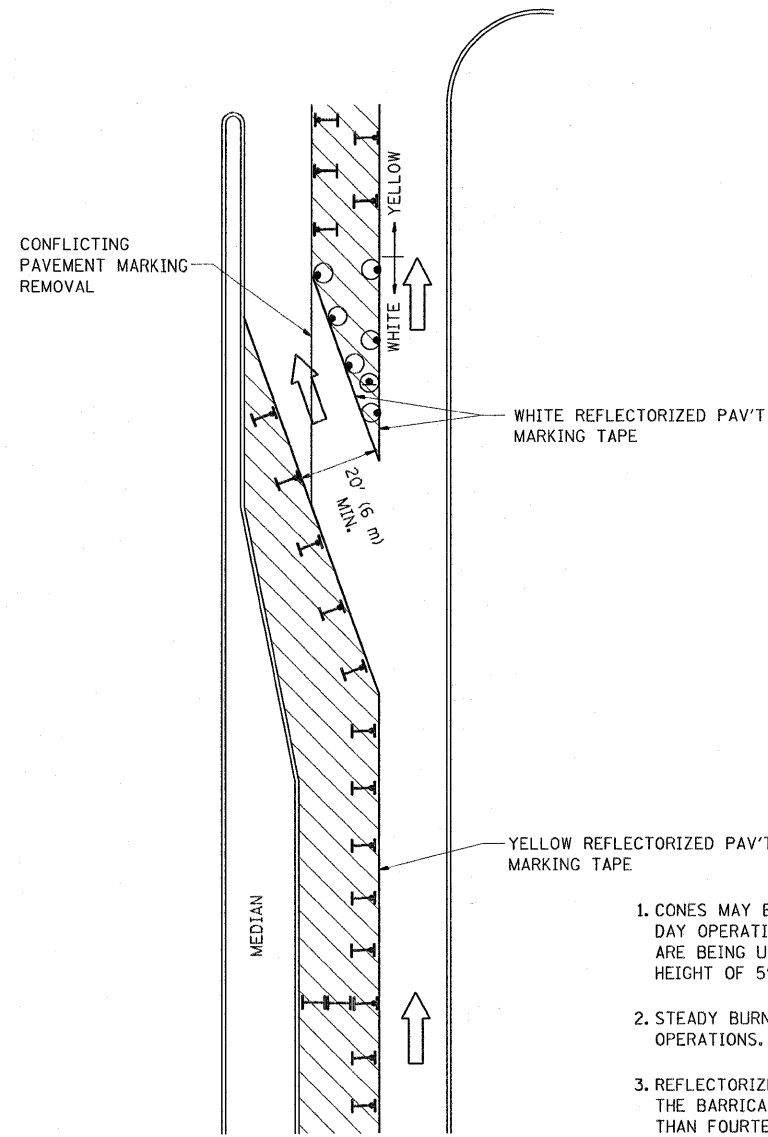
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

FILE NAME =	USER NAME = byunsh	DESIGNED - EVERS	REVISED - T. RAMMACHER 10-27-94
c:\pe_work\PWIDOT\BYUNSH\0110889\DistS	dwg	DRAWN -	REVISED - A. HOUSEH 10-09-96
	PLOT SCALE = 50,0000' / IN.	CHECKED -	REVISED - A. HOUSEH 10-17-96
	PLOT DATE = 2/5/2009	DATE - 03-19-90	REVISED - T. RAMMACHER 01-06-00

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

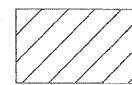





DISTRICT ONE		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TYPICAL PAVEMENT MARKINGS		341			27	35
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	CONTRACT NO. 60 F 38		
				FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT		



GENERAL NOTES

1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).
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 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) 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 inches (millimeters) unless otherwise shown.

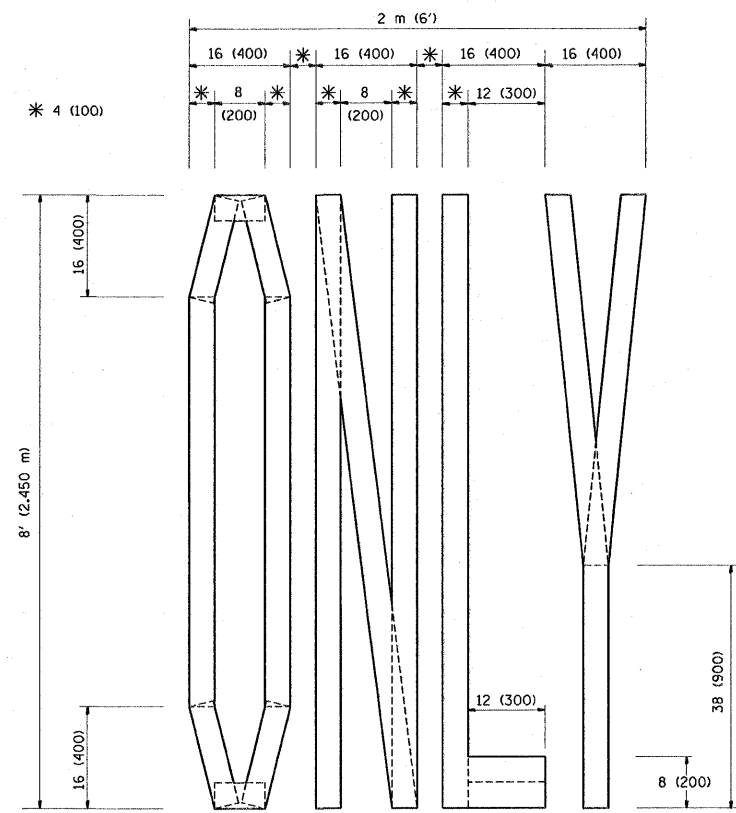
FILE NAME =	USER NAME = byunsh	DESIGNED -	REVISED -T. RAMMACHER 09-08-94
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	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - A. HOUSEH 10-12-96
	PLOT DATE = 2/5/2009	DATE -	REVISED -T. RAMMACHER 01-06-00

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

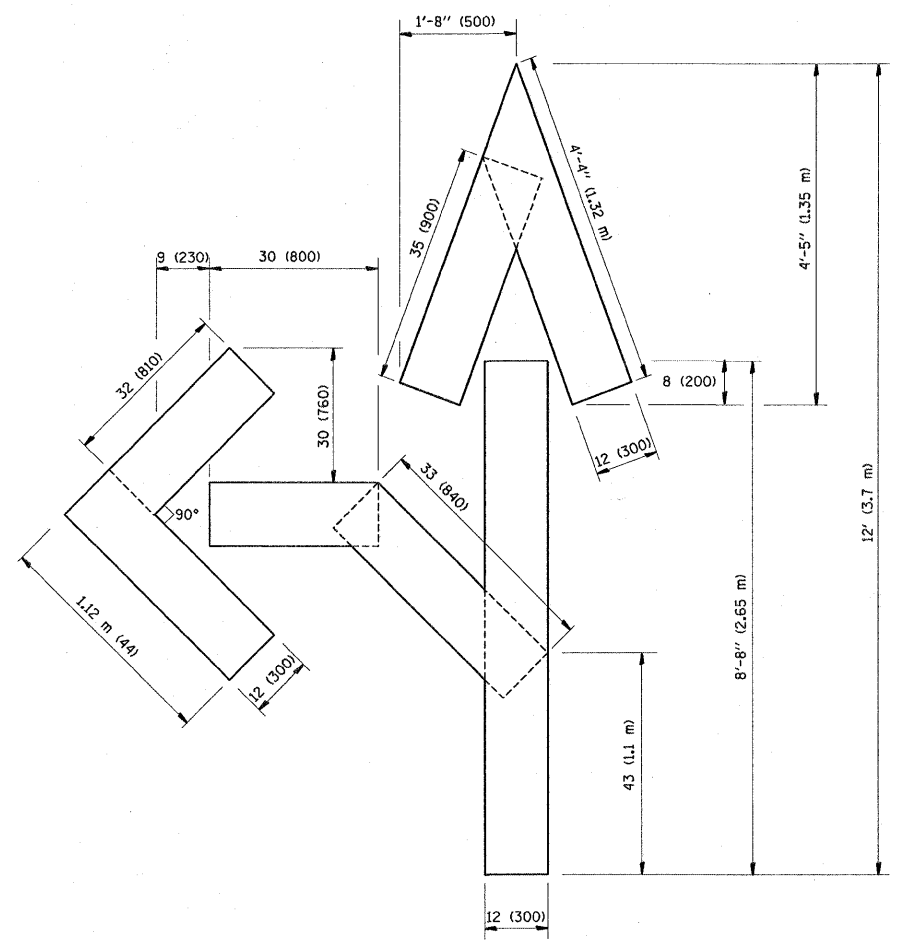
**TRAFFIC CONTROL AND PROTECTION AT TURN BAYS
(TO REMAIN OPEN TO TRAFFIC)**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

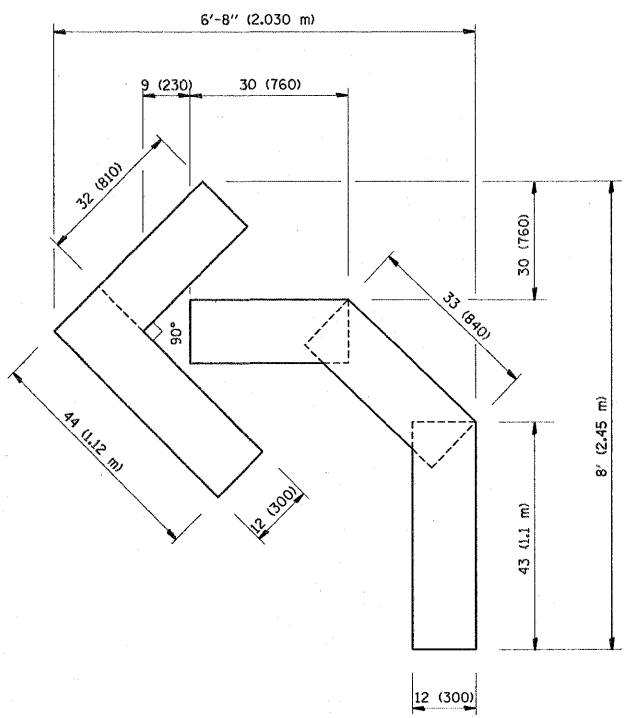
F.A.P. RTE. 341	SECTION	COUNTY	TOTAL SHEETS 28	SHEET NO. 35
TC-14			CONTRACT NO. 60F 38	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



QUANTITY
 4 (100) LINE = 64.1 ft. (19.7 m)
 21.1 sq. ft. (1.97 sq. m)



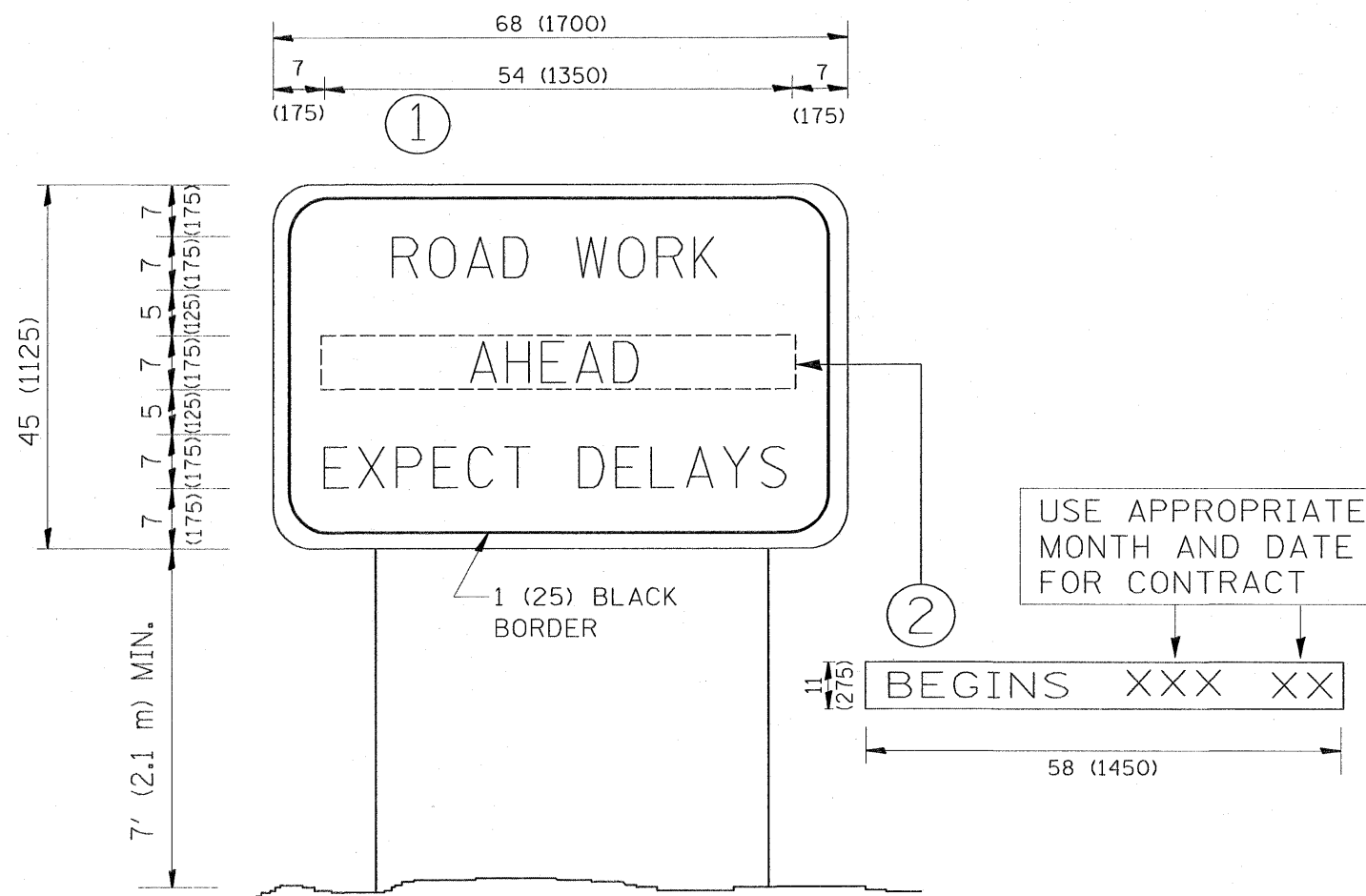
QUANTITY
 4 (100) LINE = 82.5 ft. (25.3 m)
 27.5 sq. ft. (2.53 sq. m)



QUANTITY
 4 (100) LINE = 45.5 ft. (13.9 m)
 15.2 sq. ft. (1.39 sq. m)

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

FILE NAME =	USER NAME = byunsh	DESIGNED -	REVISED -T. RAMMACHER 06-05-96	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pw_work\PW100T\BYUNSH\d0110809\01.dwg		DRAWN -	REVISED -T. RAMMACHER 11-04-97		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	341		29	35
		PLOT SCALE = 50.0000 / IN.	REVISED -T. RAMMACHER 03-02-98						TC-16		CONTRACT NO. 60 F 38	
		PLOT DATE = 2/5/2009	REVISED -E. GOMEZ 08-28-00						FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			



NOTES:

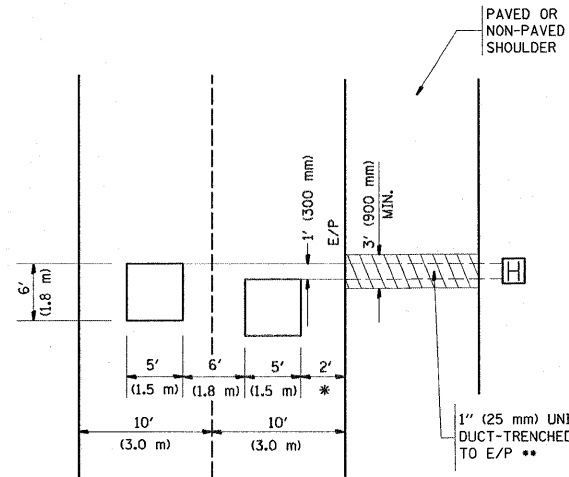
1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

FILE NAME =	USER NAME = bjunsh	DESIGNED -	REVISED - R. MIRS 09-15-97	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ARTERIAL ROAD INFORMATION SIGN	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ci\pw_work\PWIDOT\BYUNSH\0110869\01st5.dgn	DRAWN -	REVISED - R. MIRS 12-11-97	341					30	35	
PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99	TC-22			CONTRACT NO. 60F38				
PLOT DATE = 2/5/2009	DATE -	REVISED - C. JUCIUS 01-31-07	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							
				SCALE: NONE		SHEET NO. 1 OF 1 SHEETS		STA. TO STA.		

LOOPS NEXT TO SHOULDERS

PROVIDE A PAVEMENT REPLACEMENT
NOTE WHICH SHOULD EQUAL
3' (900 mm) X WIDTH OF
PAVED SHOULDER.

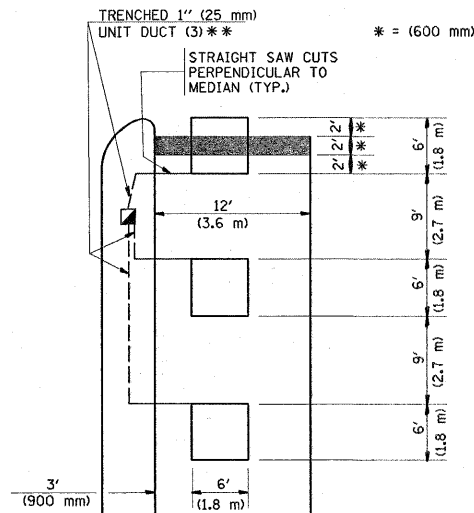


* = (600 mm)

** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS
BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

**LEFT TURN LANES WITH MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH
(PROTECTED / PERMITTED LEFT TURN PHASING)**

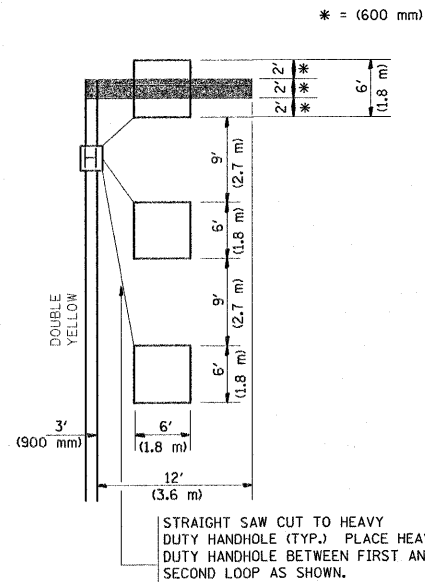
HANDHOLE LOCATION MAY
VARY DEPENDING ON GEOMETRICS
AND DESIGN OF TRAFFIC SIGNALS.
HEAVY-DUTY HANDHOLES TO BE
USED WHEN THE MEDIAN IS
MOUNTABLE. REFER TO STANDARD
814001 TO ENSURE THAT HANDHOLE
FITS IN MEDIAN.



** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS
BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

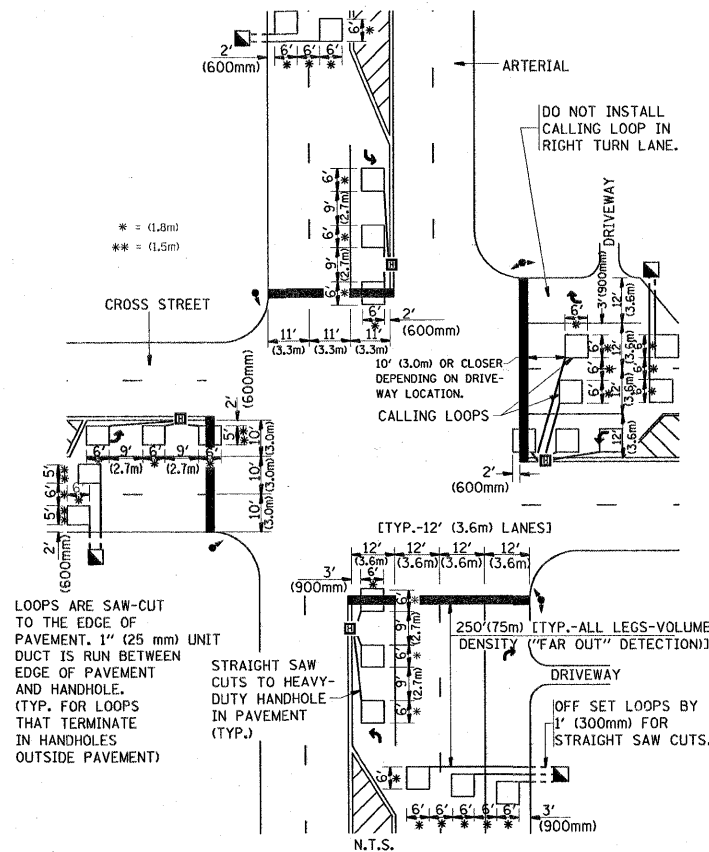
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO
PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

**LEFT TURN LANES WITHOUT MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH
(PROTECTED / PERMITTED LEFT TURN PHASING)**



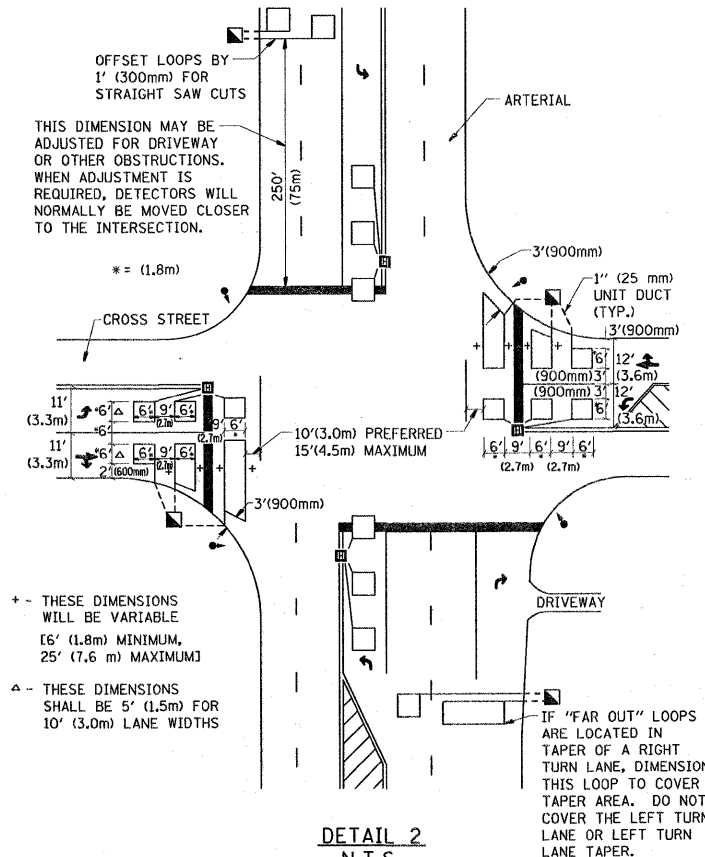
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO
PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

**ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
CROSS STREET-VOLUME DENSITY ("FAR OUT" DETECTION)**



**DETAIL 1
N.T.S.**

**ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)**



**DETAIL 2
N.T.S.**

NOTES:

VEHICLES LOOP DETECTORS

- * ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATELY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- * ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- * EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- * WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).
- * WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

PLACEMENT OF DETECTORS

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DEMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

NOTE:

ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

FILE NAME =
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USER NAME = byunsh
DRAWN =
PLOT SCALE = 50.0000 / IN.
PLOT DATE = 2/5/2009

DESIGNED -
CHECKED - R.K.F.
DATE -

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REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

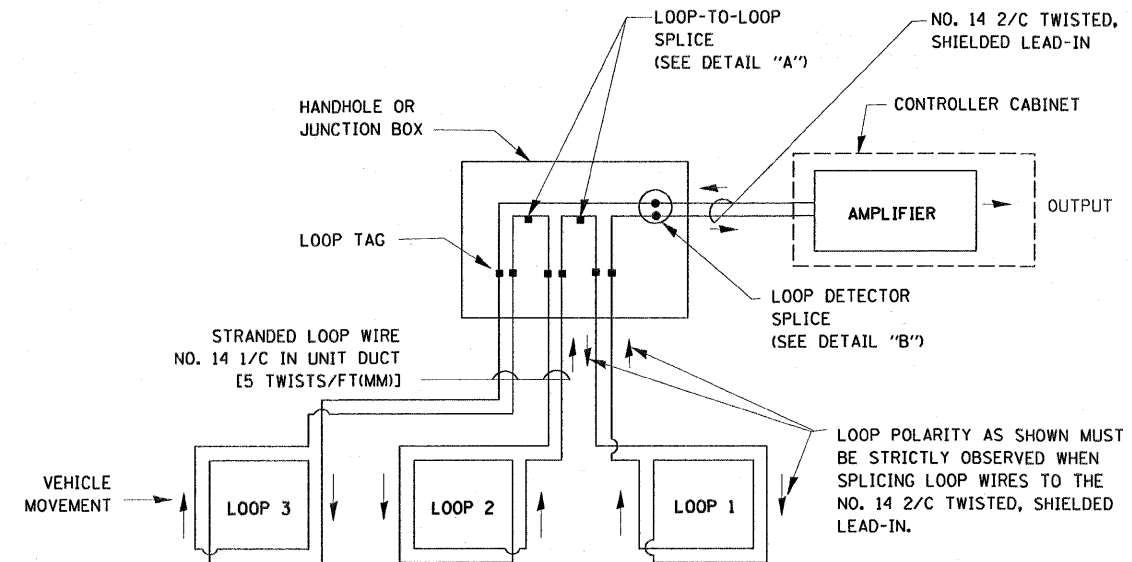
**DISTRICT 1 - DETECTOR LOOP INSTALLATION
DETAILS FOR ROADWAY RESURFACING**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE. 341	SECTION	COUNTY	TOTAL SHEETS 31	SHEET NO. 35
TS-07		CONTRACT NO. 60F38		
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				

LOOP DETECTOR NOTES

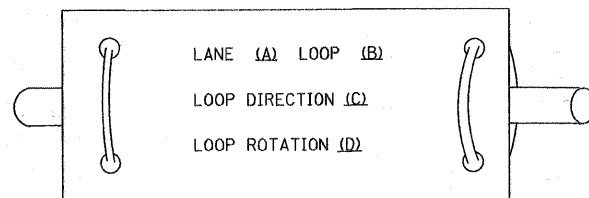
1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.



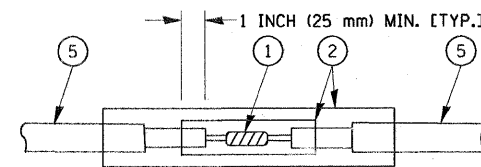
DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.

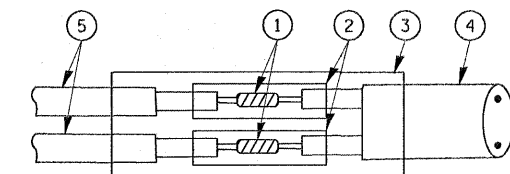
LOOP LEAD-IN CABLE TAG



- A. LANE #1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



**DETAIL "A"
LOOP-TO-LOOP SPLICE**



**DETAIL "B"
LOOP-TO-CONTROLLER SPLICE**

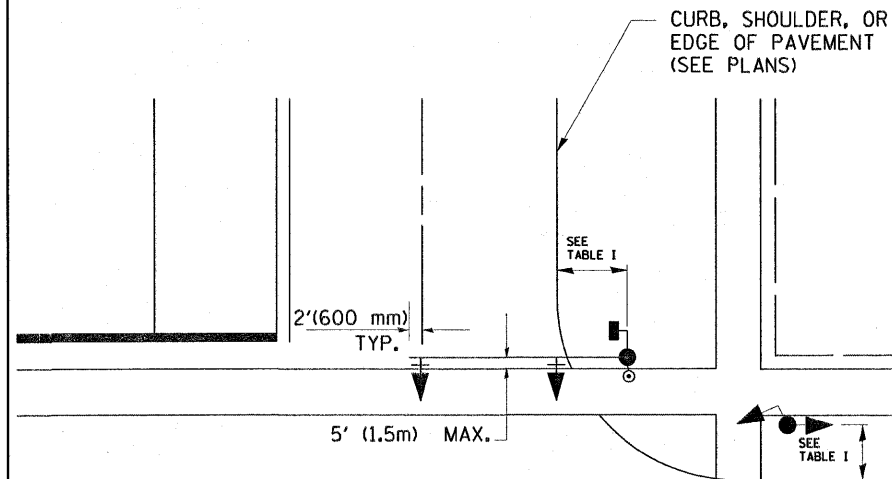
LOOP DETECTOR SPLICE

- 1 WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- 2 WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- 3 WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- 4 NO. 14 2/C TWISTED, SHIELDED CABLE.
- 5 LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

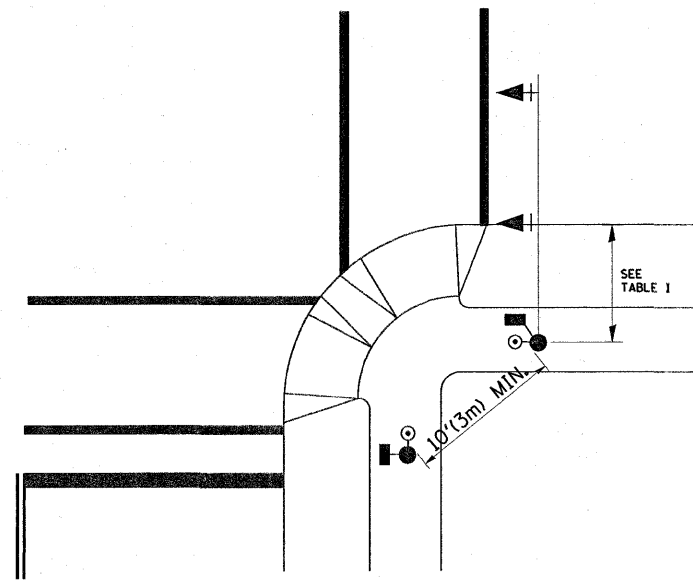
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02\pwwork\pwwid01\BYUNSH\0110869\Dist1.dgn		DRAWN - R.W.P.	REVISED - BUR. TRAFFIC 01-01-02			341			32	35
	PLOT SCALE = 50,0000' / IN.	CHECKED - D.A.Z.	REVISED -			TS-05		CONTRACT NO. 60 F 38		
	PLOT DATE = 2/5/2009	DATE - 05-30-00	REVISED -			SCALE: NONE	SHEET NO. 1 OF 4 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT	

TRAFFIC SIGNAL MAST ARM AND POST

MAST ARM MOUNTED SIGNAL IN PROPOSED & FUTURE SIDEWALK AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNAL AND PUSHBUTTON DETECTOR



PEDESTRIAN SIGNAL PUSHBUTTON



RECOMMENDED PUSHBUTTON LOCATIONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHALL BE IN ACCORDANCE WITH THE CURRENT MUTCD (SEE NOTE 1). TO MEET MUTCD REQUIREMENTS, PEDESTRIAN SIGNAL PUSHBUTTONS MAY HAVE TO BE MOUNTED ON A SEPARATE POST.

NOTES:

- AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS WITH PEDESTRIAN ACTUATION, EACH PUSHBUTTON SHALL ACTIVATE BOTH THE WALK INTERVAL AND THE ACCESSIBLE PEDESTRIAN SIGNALS.

AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS, PUSHBUTTONS SHOULD CLEARLY INDICATE WHICH CROSSWALK SIGNAL IS ACTUATED BY EACH PUSHBUTTON. PUSHBUTTONS AND TACTILE ARROWS SHOULD HAVE HIGH VISUAL CONTRAST (SEE THE DEPARTMENT OF JUSTICE'S AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN, 1991). TACTILE ARROWS SHOULD POINT IN THE SAME DIRECTION AS THE ASSOCIATED CROSSWALK. AT CORNERS OF SIGNALIZED LOCATIONS WITH ACCESSIBLE PEDESTRIAN SIGNALS WHERE PEDESTRIAN PUSHBUTTONS ARE PROVIDED, THE PUSHBUTTONS SHOULD BE SEPARATED BY THE DISTANCE OF AT LEAST 10 FT (3m). THIS ENABLES PEDESTRIANS WHO HAVE VISUAL DISABILITIES TO DISTINGUISH AND LOCATE THE APPROPRIATE PUSHBUTTON.

PUSHBUTTONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHOULD BE LOCATED AS FOLLOWS:
 A: ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR, AND WHERE THERE IS AN ALL WEATHER SURFACE, WHEELCHAIR ACCESSIBLE ROUTE TO THE RAMP.
 B: WITHIN 5 FT (1.5m) OF THE CROSSWALK EXTENDED.
 C: WITHIN 10 FT (3m) OF THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
 D: PARALLEL TO THE CROSSWALK TO BE USED (SEE MUTCD FIGURE 4E-2).
 E: NORMAL PEDESTRIAN PUSHBUTTON MOUNTING HEIGHT SHOULD BE 3.5 FT (1.05m) ABOVE ADJACENT SIDEWALK
- PEDESTRIAN SIGNAL FACES SHALL BE MOUNTED WITH THE BOTTOM OF THE HOUSING NOT LESS THAN 8 FT (2.4m) NOR MORE THAN 10 FT (3.0m) ABOVE THE SIDEWALK LEVEL AND SO THERE IS A PEDESTRIAN INDICATION IN THE LINE OF PEDESTRIANS' VISION WHICH PERTAINS TO THE CROSSWALK BEING USED.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, NOT MOUNTED OVER A ROADWAY, SHALL BE AT LEAST 10 FT (3.0m) BUT NOT MORE THAN 15 FT (4.5m) ABOVE THE SIDEWALK OR, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALKS EXIST.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, MOUNTED OVER A ROADWAY, SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001 AND 877006. (16 FT (5m) MIN., 18 FT (5.5m) MAX., FROM HIGHEST POINT OF PAVEMENT)

PEDESTRIAN SIGNAL POST

PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON DETECTOR LOCATION

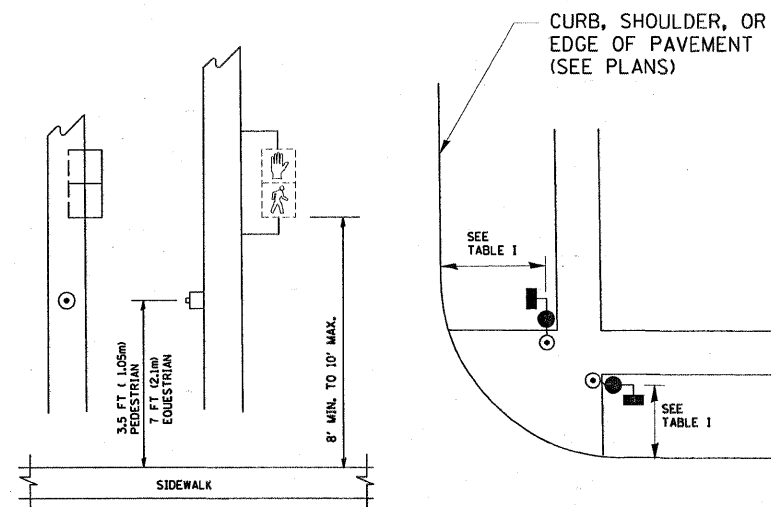
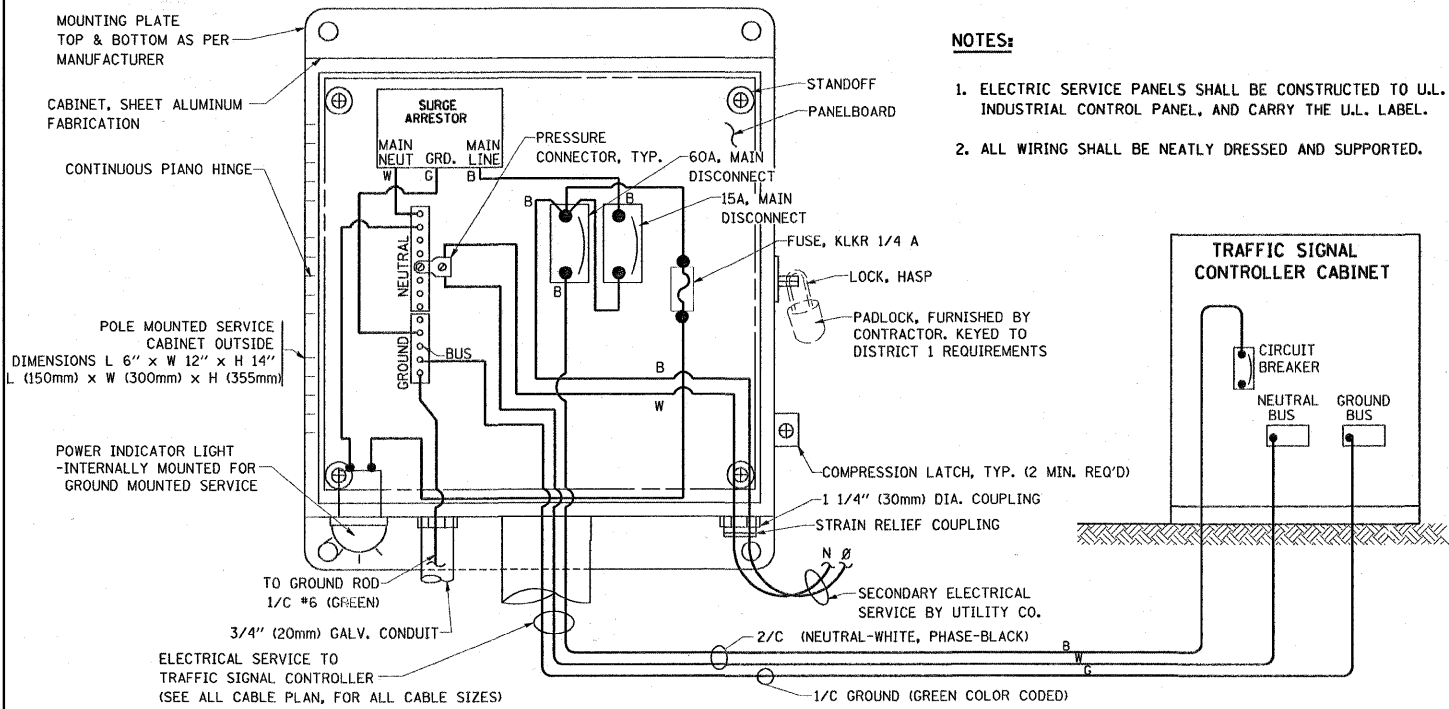
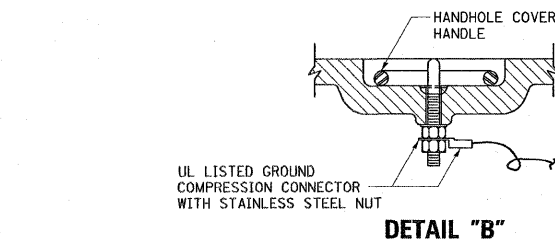
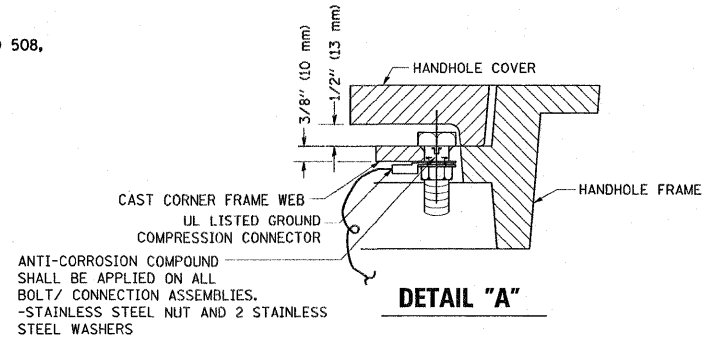
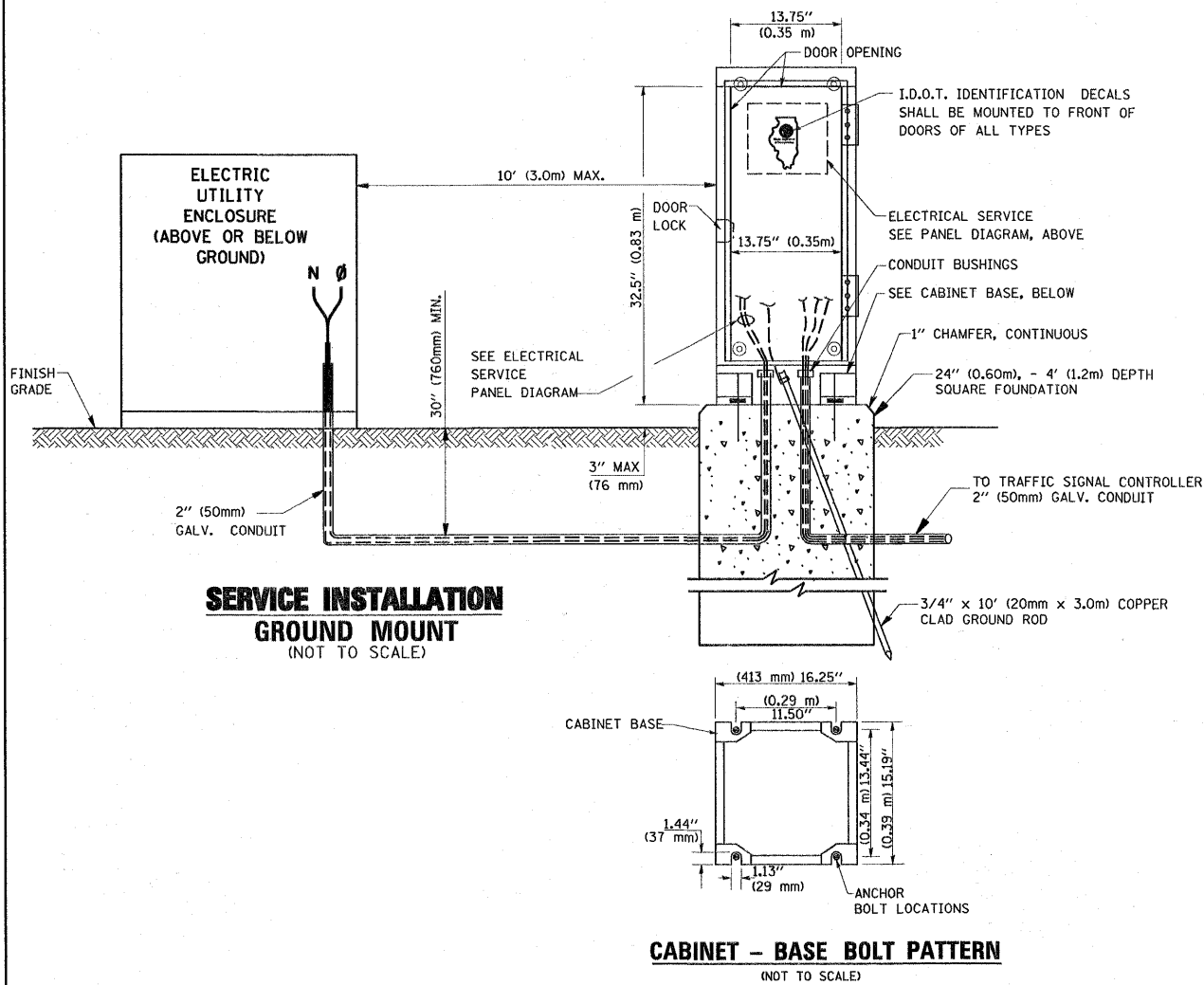


TABLE I

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MIN. DIST. FROM BACK OF CURB)	SHOULDER/NON-CURBED AREA (MIN. DIST. FROM EDGE OF PAVEMENT)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN PUSHBUTTON	SEE NOTE 1	SEE NOTE 1

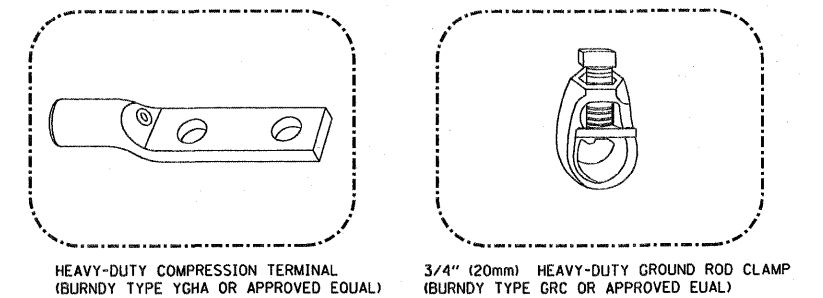
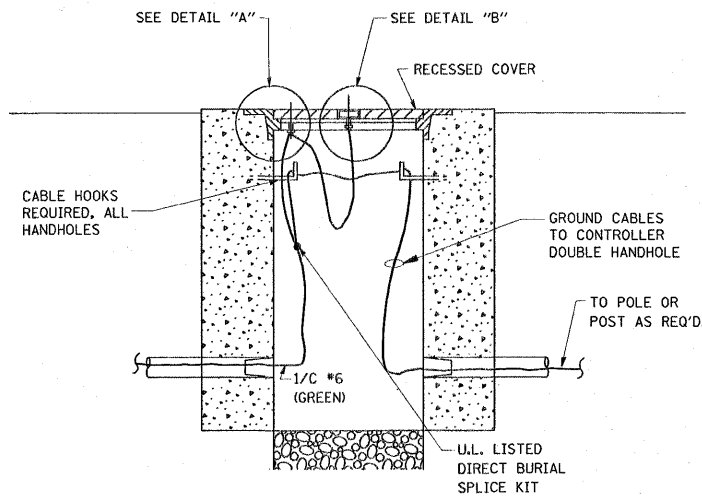


**ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
(NOT TO SCALE)**

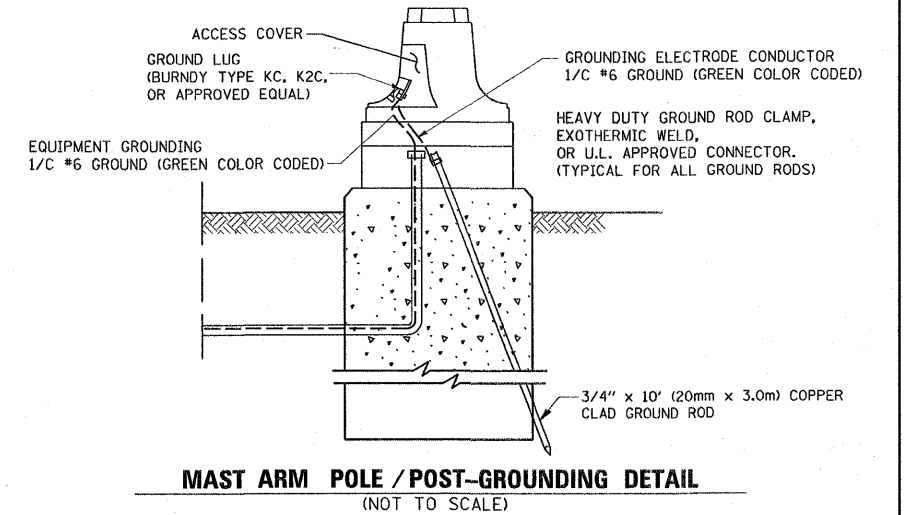
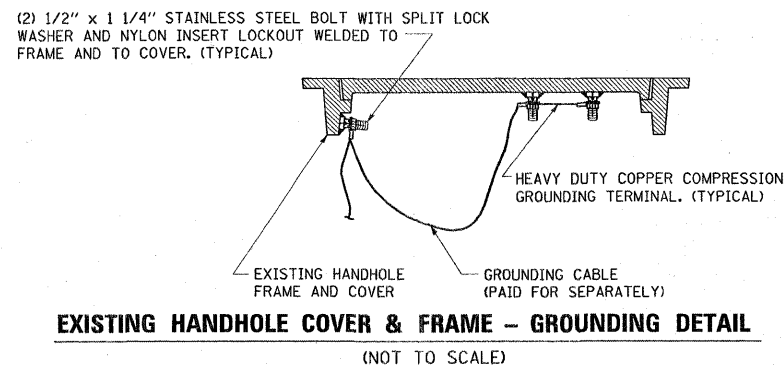


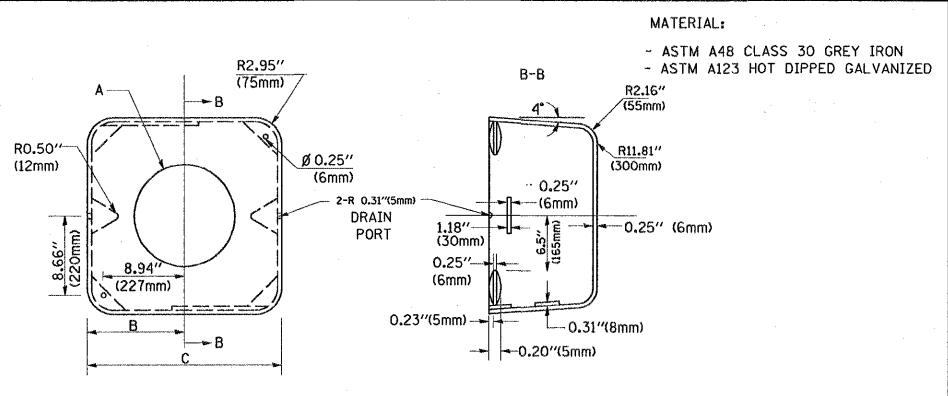
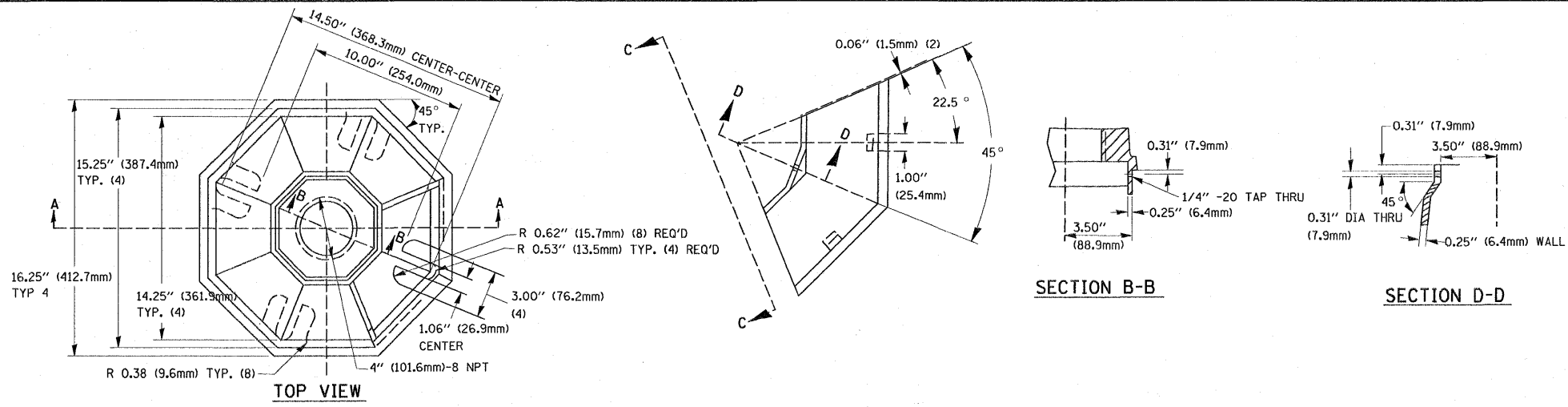
NOTES:
GROUNDING SYSTEM

- THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD, ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
- THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
- ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



- NOTES:**
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
 - GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES. 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES. 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.





TYPE	A	B	C	HEIGHT	WEIGHT
I	Ø 10.125\"(257mm)	9.5\"(241mm)	19\"(483mm)	12\"(300mm)	24kg
II	Ø 11.125\"(283mm)	10.75\"(273mm)	21.5\"(546mm)	12\"(300mm)	26kg

