

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2711	D-RS-3	LAKE	40	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 60E93		

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

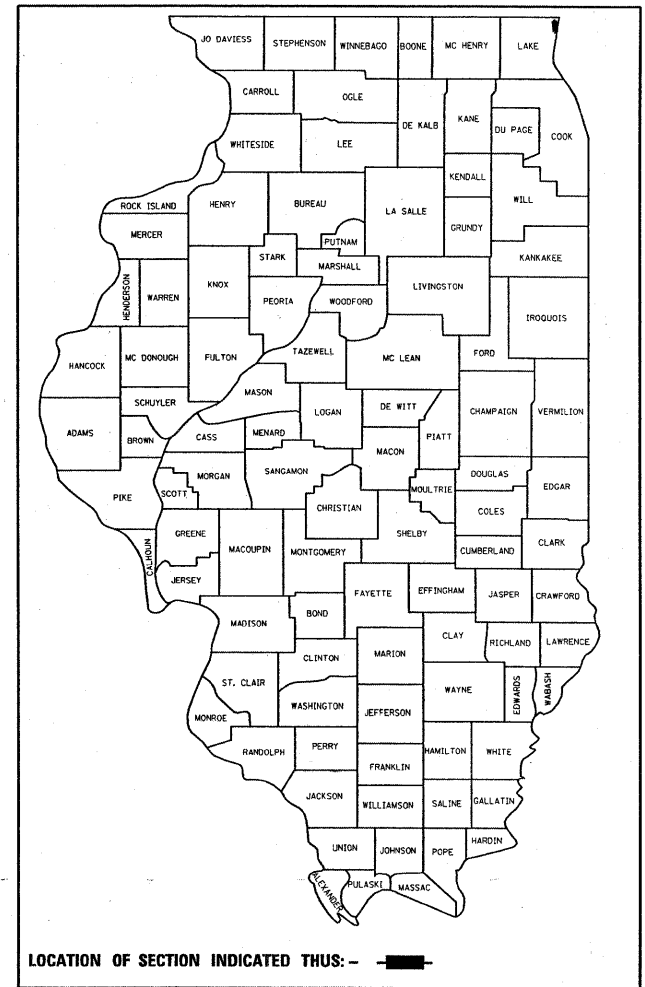
**PROPOSED  
HIGHWAY PLANS**

F.A.U. 2711 / ILL 131  
ILL 120 TO 0.2 MI. S. OF ILL 137  
SECTION: D-RS-3  
RESURFACING (MAINTENANCE)  
LAKE COUNTY  
C-91-539-08

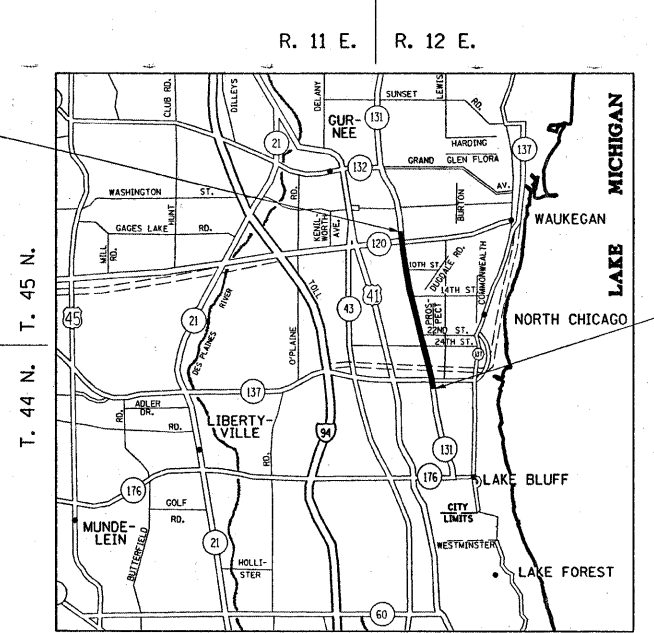
FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT LOCATED IN THE VILLAGE OF NORTH CHICAGO

D-91-539-08



IMPROVEMENT BEGINS  
STATION 173+73.51



IMPROVEMENT ENDS  
STATION 2+42 (SB)  
STATION 2+92 (NB)

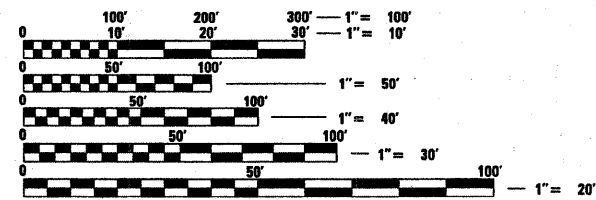
TRAFFIC DATA  
2006 ADT = 22,700  
SPEED LIMIT = 40 MPH

WAUKEGAN TOWNSHIP AND SHIELDS TOWNSHIP

**LOCATION MAP**

SCALE: NONE

GROSS & NET LENGTH = 17,131.51 FEET = 3.24 MILES



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. 60E93

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED JANUARY 9, 2009

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

March 13, 2009  
*Charles J. Ingessoll*  
ENGINEER OF DESIGN AND ENVIRONMENT

March 13, 2009  
*Christine M. Reed*  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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

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

## INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES
3-4	SUMMARY OF QUANTITIES
5-7	TYPICAL SECTIONS
8-16	ROADWAY PLAN
17-23	DETECTOR LOOP REPLACEMENT PLANS
24	DRIVEWAY DETAILS - DISTANCE BETWEEN ROW AND CURB OR EDGE GREATER OR EQUAL TO 15' (4.5 METER)
25	DRIVEWAY DETAILS - DISTANCE BETWEEN ROW AND CURB OR EDGE FACE OF CURB GREATER THAN 15' (4.5 METER)
26	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING
27	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT
28	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
29	BUTT JOINT AND HMA TAPER DETAILS
30	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
31	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)
32	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
33	TRAFFIC CONTROL AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)
34	PAVEMENT MARKINGS, LETTERS AND SYMBOLS FOR TRAFFIC STAGING
35	ARTERIAL ROAD INFORMATION SIGNING
36	DISTRICT 1 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING
37-40	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 -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL 131 INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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	PLOT SCALE = 52.9397' / IN.	CHECKED -	REVISED -								
	PLOT DATE = 1/13/2009	DATE -	REVISED -								
						SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.
						FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2711	D-RS-3	LAKE	40	3
FED. ROAD DIST. NO. 1		ILLINOIS	HIGHWAY PROJECT	

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE							
CODE NO	ITEM	UNIT	URBAN							
			TOTAL QUANTITIES 100% FED.	I 000						
35501308	HOT-MIX ASPHALT BASE COURSE, 6"	SO YD	140	140						
35501316	HOT-MIX ASPHALT BASE COURSE, 8"	SO YD	150	150						
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	52	52						
40600300	AGGREGATE (PRIME COAT)	TON	260	260						
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	50	50						
40600895	CONSTRUCTING TEST STRIP	EACH	2	2						
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	380	380						
40600985	PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT	SO YD	140	140						
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	610	610						
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	35	35						
40603595	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90	TON	13133	13133						
42001300	PROTECTIVE COAT	SO YD	100	100						
42300200	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	SO YD	130	130						
42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SO YD	140	140						
44000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"	SO YD	126290	126290						
44000198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SO YD	3810	3810						
44000200	DRIVEWAY PAVEMENT REMOVAL	SO YD	555	555						
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	2500	2500						
44002212	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 3"	SO YD	3015	3015						
44201765	CLASS D PATCHES, TYPE II, 10 INCH	SO YD	1705	1705						
44201769	CLASS D PATCHES, TYPE III, 10 INCH	SO YD	750	750						
44201771	CLASS D PATCHES, TYPE IV, 10 INCH	SO YD	560	560						
60251730	CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 23 FRAME AND GRATE	EACH	2	2						
60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	6	6						
60300205	FRAMES AND GRATES TO BE ADJUSTED (SPECIAL)	EACH	10	10						

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE							
CODE NO	ITEM	UNIT	URBAN							
			TOTAL QUANTITIES 100% FED.	I 000						
60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	22	22						
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6, 24	FOOT	2500	2500						
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	12	12						
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	15000	15000						
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	800	800						
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	71000	71000						
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	4650	4650						
70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	450	450						
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	1250	1250						
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	1210	1210						
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	5000	5000						
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	800	800						
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	71000	71000						
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	4650	4650						
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	1250	1250						
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	1210	1210						
* 78000845	HOT SPRAY THERMOPLASTIC PAVEMENT MARKING LINE - 8 INCH	FOOT	450	450						
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	1500	1500						

\* SPECIALTY ITEMS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
SUMMARY OF QUANTITIES  
IL 131

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F.A.D. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2711	D-RS-3	LAKE	40	4
FED. ROAD DIST. NO. 1		ILLINOIS	HIGHWAY PROJECT	

SUMMARY OF QUANTITIES			URBAN TOTAL QUANTITIES 100% FED.	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		I 000				
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	900	900				
* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	4000	4000				
X0322256	TEMPORARY INFORMATION SIGNING	SO FT	359.8	359.8				
X0329907	PORTLAND CEMENT CONCRETE SURFACE REMOVAL 2 1/2"	SO YD	1400	1400				
X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	7	7				
X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	5630	5630				
NP Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	20	20				
Q Z0076600	TRAINEES	HR	1500	1500				

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		I 000				

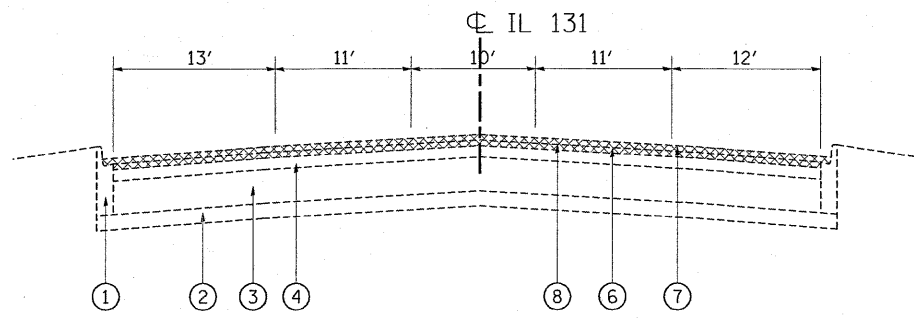
NP= Non-participating  
\* - Specialty Items

REVISIONS	
NAME	DATE

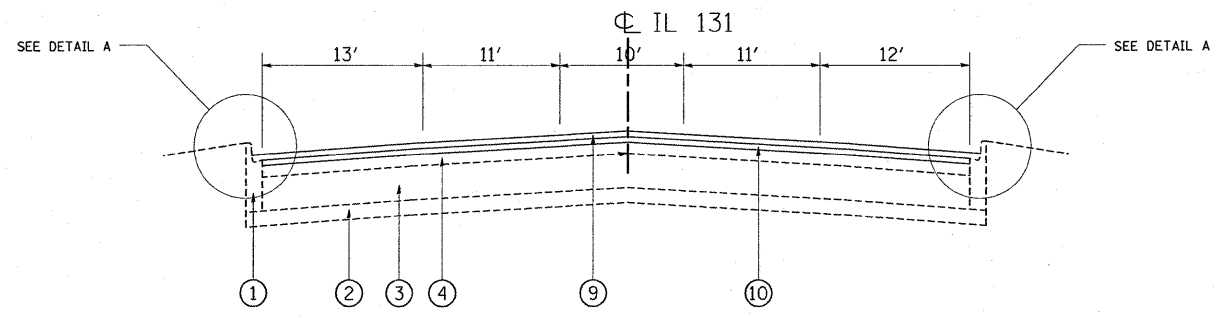
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SUMMARY OF QUANTITIES  
IL 131

Rev.

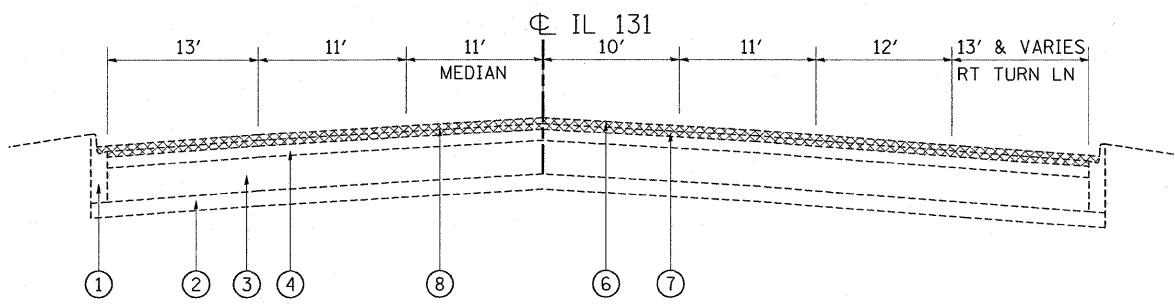
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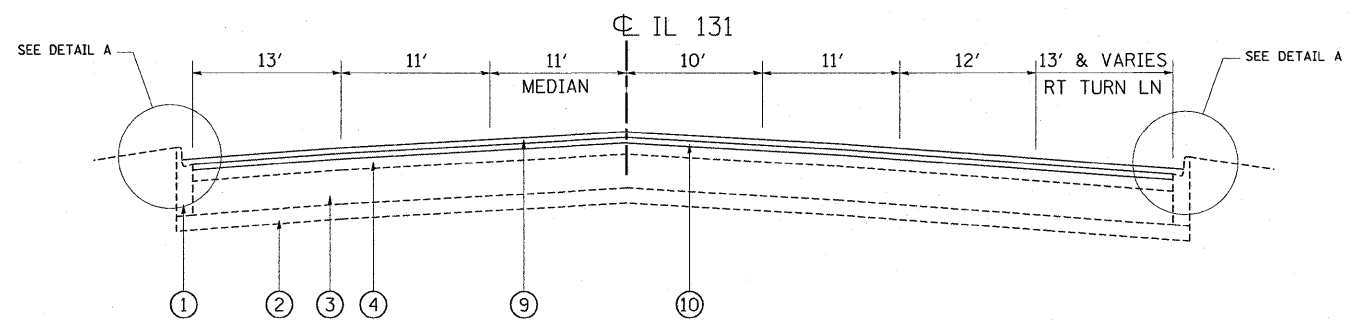
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STA. 50+00 TO STA. 63+00  
STA. 67+00 TO STA. 147+00



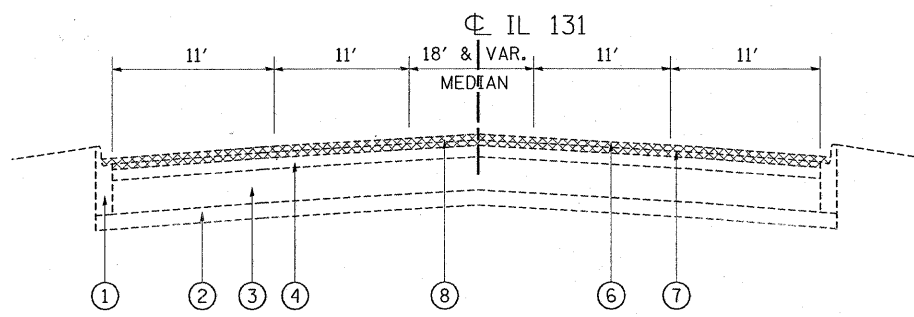
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STA. 50+00 TO STA. 63+00  
STA. 67+00 TO STA. 147+00



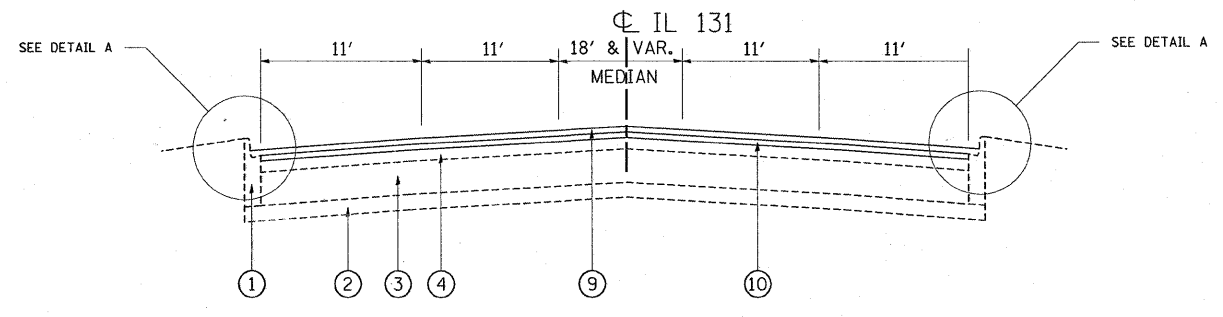
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IL 131  
STA. 40+00 TO STA. 50+00



PROPOSED TYPICAL SECTION  
IL 131  
STA. 40+00 TO STA. 50+00



EXISTING TYPICAL SECTION  
IL 131  
STA. 161+20 TO STA. 163+86.31

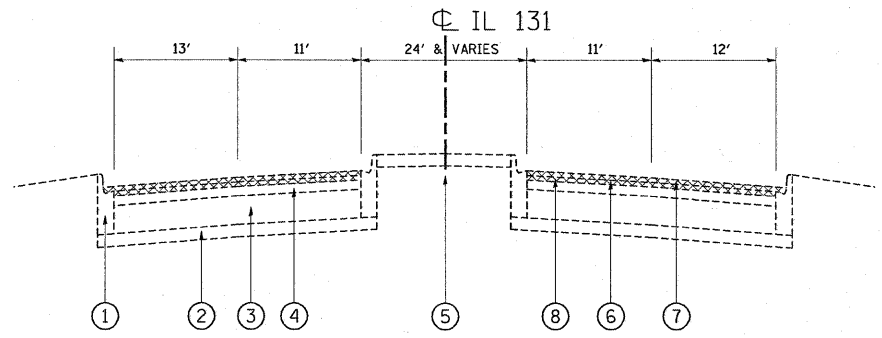


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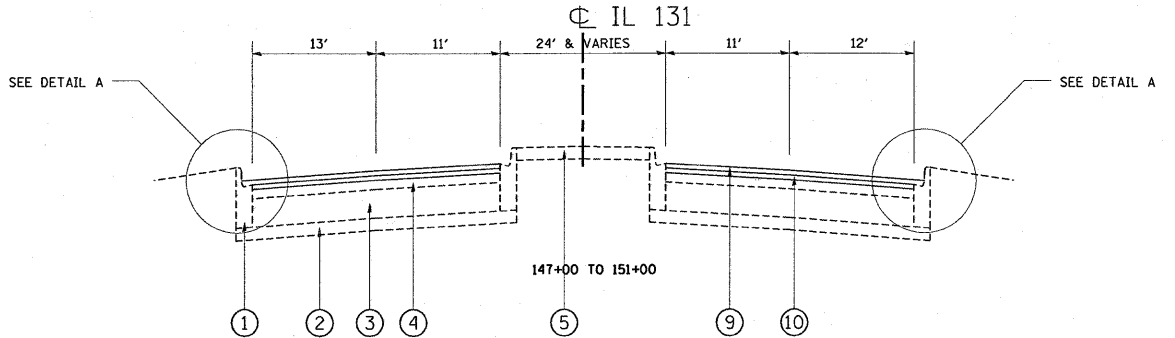
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- ① EXISTING B-6.24 COMB. CONC. CURB & GUTTER
- ② EXISTING SUB BASE
- ③ EXISTING PCC BASE COURSE, ±10"
- ④ EXISTING HMA BASE COURSE, ±4"
- ⑤ EXISTING CONCRETE BARRIER MEDIAN
- ⑥ EXISTING HMA SURFACE COURSE, ±1-1/2"
- ⑦ EXISTING HMA BINDER COURSE, ±1"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

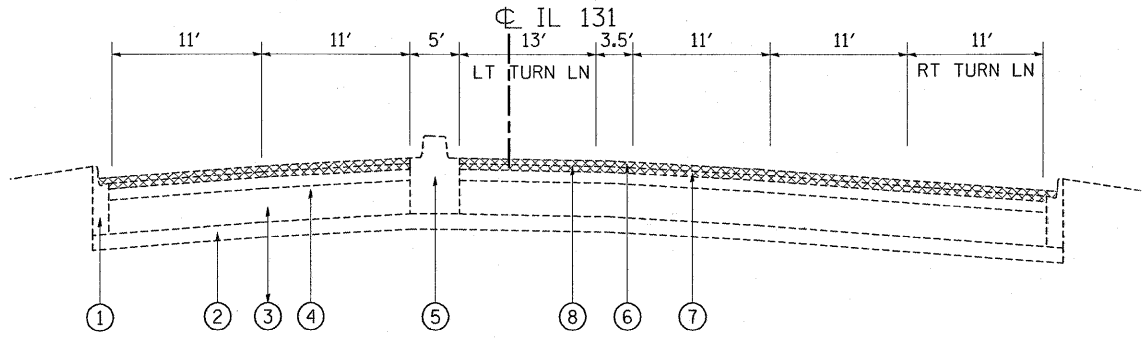
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PLOT SCALE = 5/2,9397' / IN.		CHECKED -	REVISED -			CONTRACT NO. 60E93				
PLOT DATE = 1/13/2009		DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
				SCALE:	SHEET NO. OF SHEETS	STA. TO STA.				



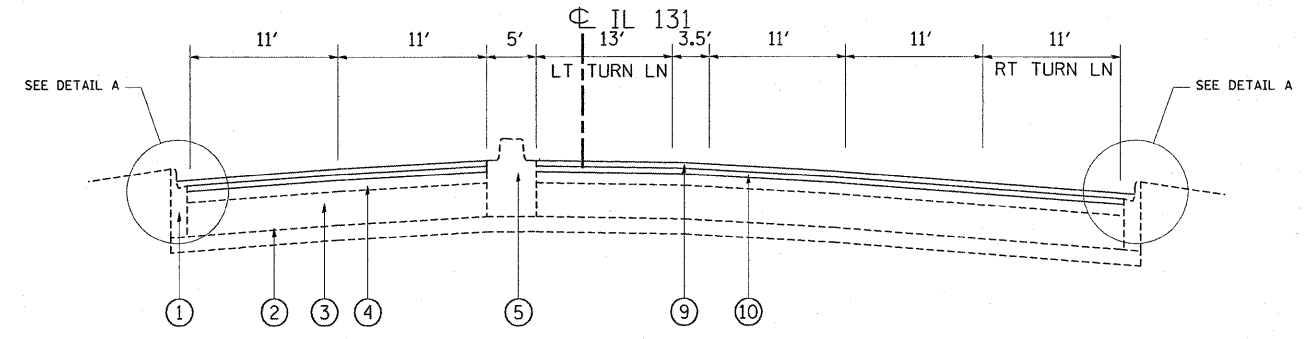
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STA. 147+00 TO STA. 151+00  
LOOKING NORTH



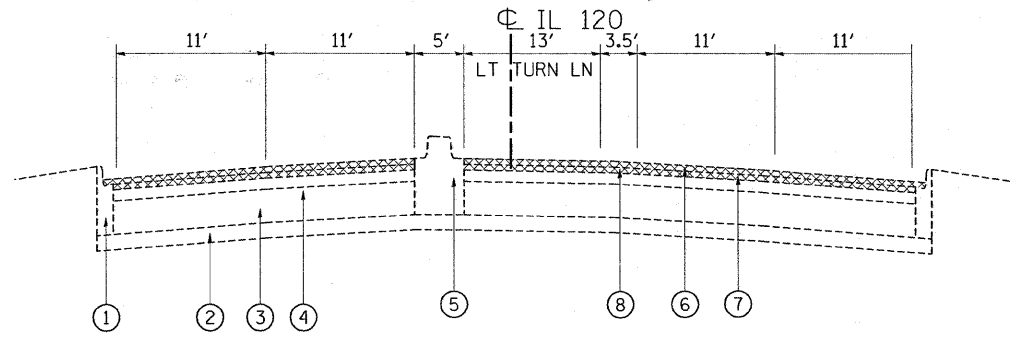
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STA. 147+00 TO STA. 151+00  
LOOKING NORTH



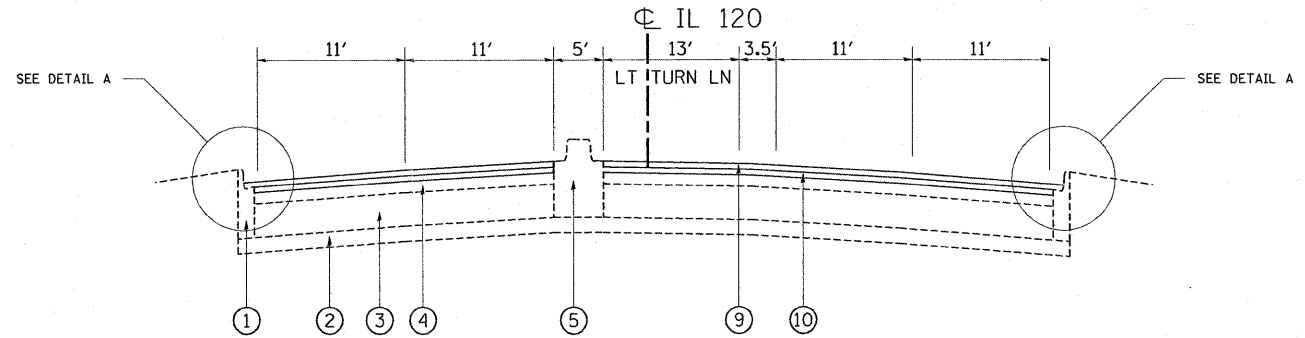
EXISTING TYPICAL SECTION  
IL 131  
STA. 151+00 TO STA. 155+00  
LOOKING SOUTH



PROPOSED TYPICAL SECTION  
IL 131  
STA. 151+00 TO STA. 155+00  
LOOKING SOUTH



EXISTING TYPICAL SECTION  
IL 120 AT IL 131



EXISTING TYPICAL SECTION  
ILL 120 AT ILL 131

LEGEND

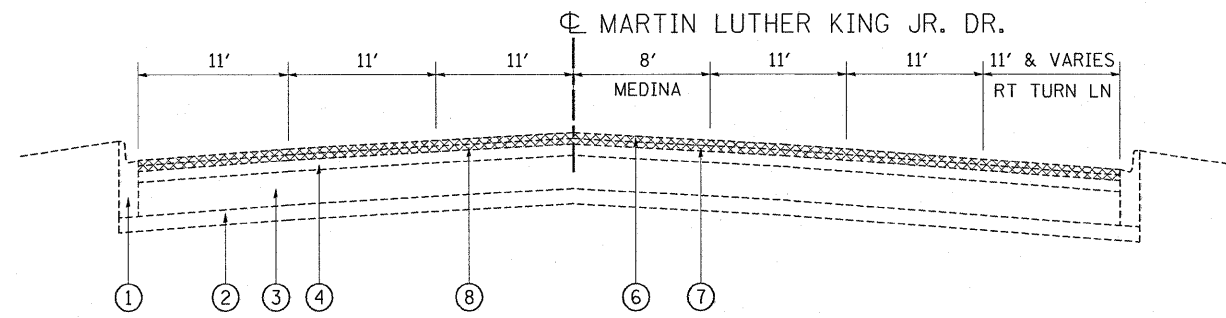
- ① EXISTING B-6.24 COMB. CONC. CURB & GUTTER
- ② EXISTING SUB BASE
- ③ EXISTING PCC BASE COURSE, ±10"
- ④ EXISTING HMA BASE COURSE, ±4"
- ⑤ EXISTING CONCRETE BARRIER MEDIAN
- ⑥ EXISTING HMA SURFACE COURSE, ±1-1/2"
- ⑦ EXISTING HMA BINDER COURSE, ±1"
- ⑧ PROPOSED HMA SURFACE REMOVAL, 2-1/2"
- ⑨ PROPOSED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

FILE NAME =	USER NAME = byunsh	DESIGNED -	REVISED -
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PLOT SCALE = 52.9397' / IN.		CHECKED -	REVISED -
PLOT DATE = 1/13/2009		DATE -	REVISED -

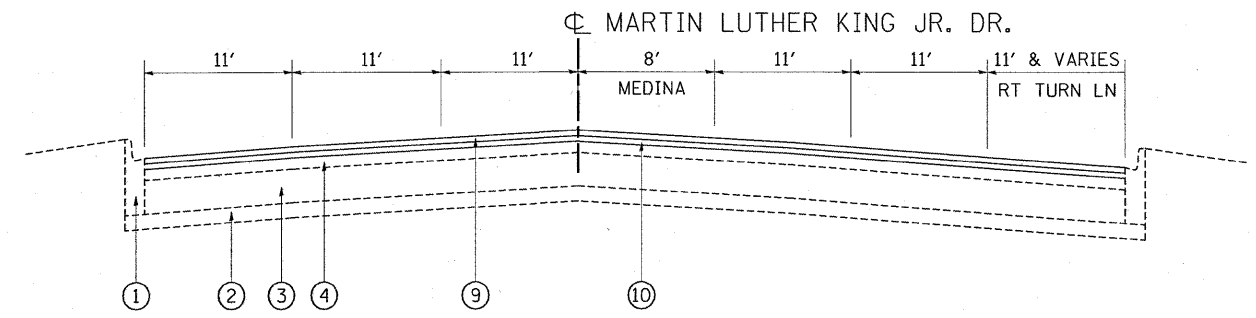
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

IL 131 TYPICAL SECTIONS			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2711	D-RS-3	LAKE	40	6
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60E93	



EXISTING TYPICAL SECTION  
MARTIN LUTHER KING JR DR AT IL 131



PROPOSED TYPICAL SECTION  
MARTIN LUTHER KING JR DR AT IL 131

**LEGEND**

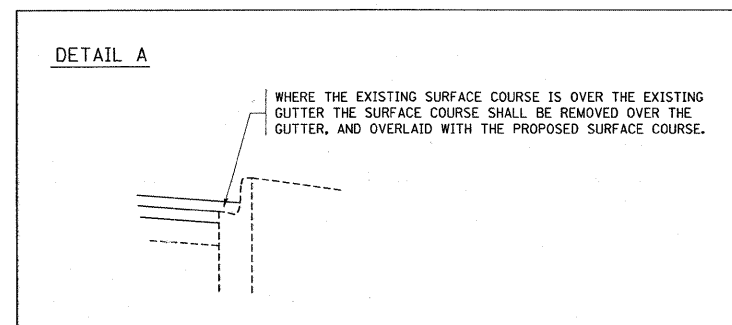
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- ⑨ PROPOSED POYMERIZED HMA SURFACE COURSE, MIX "F", N90, 1-3/4"
- ⑩ PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD) COURSE, IL-4.75, N50, 3/4"

**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



**IL 131  
TYPICAL SECTIONS**

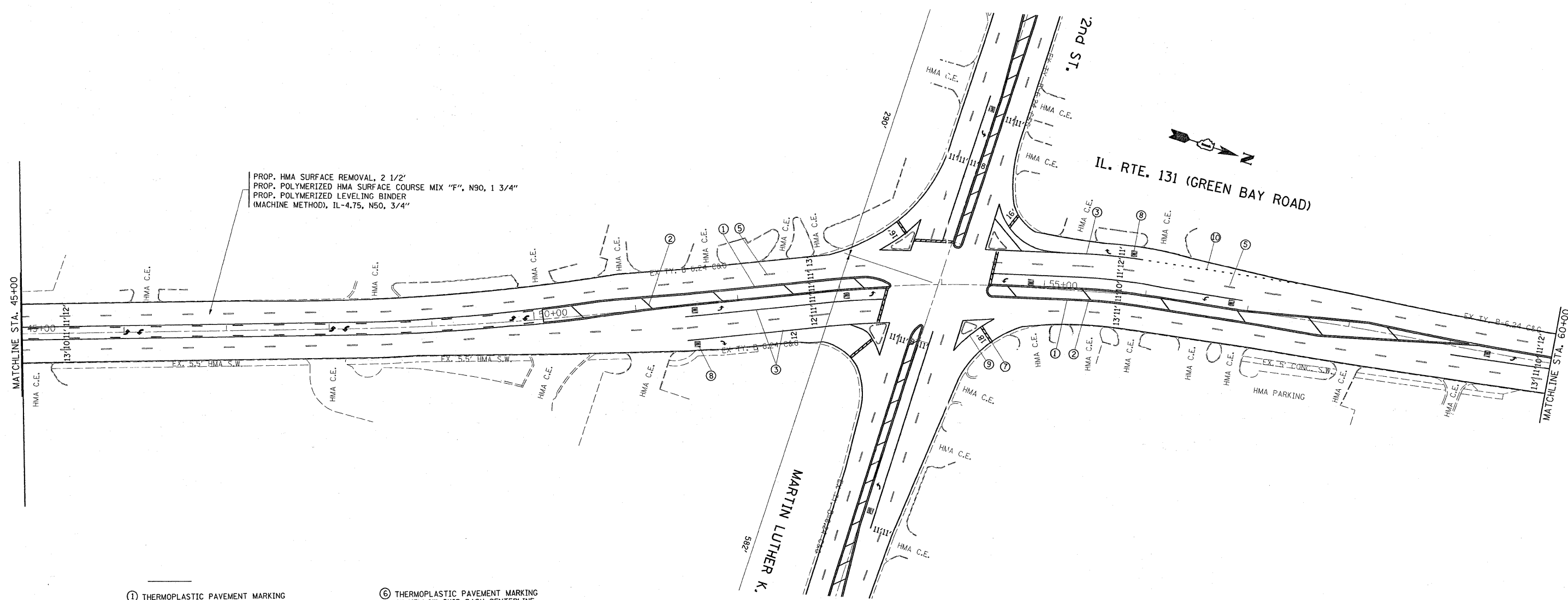
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F.A.U. RTE. 2711	SECTION D-RS-3	COUNTY LAKE	TOTAL SHEETS 40	SHEET NO. 7
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60E93	





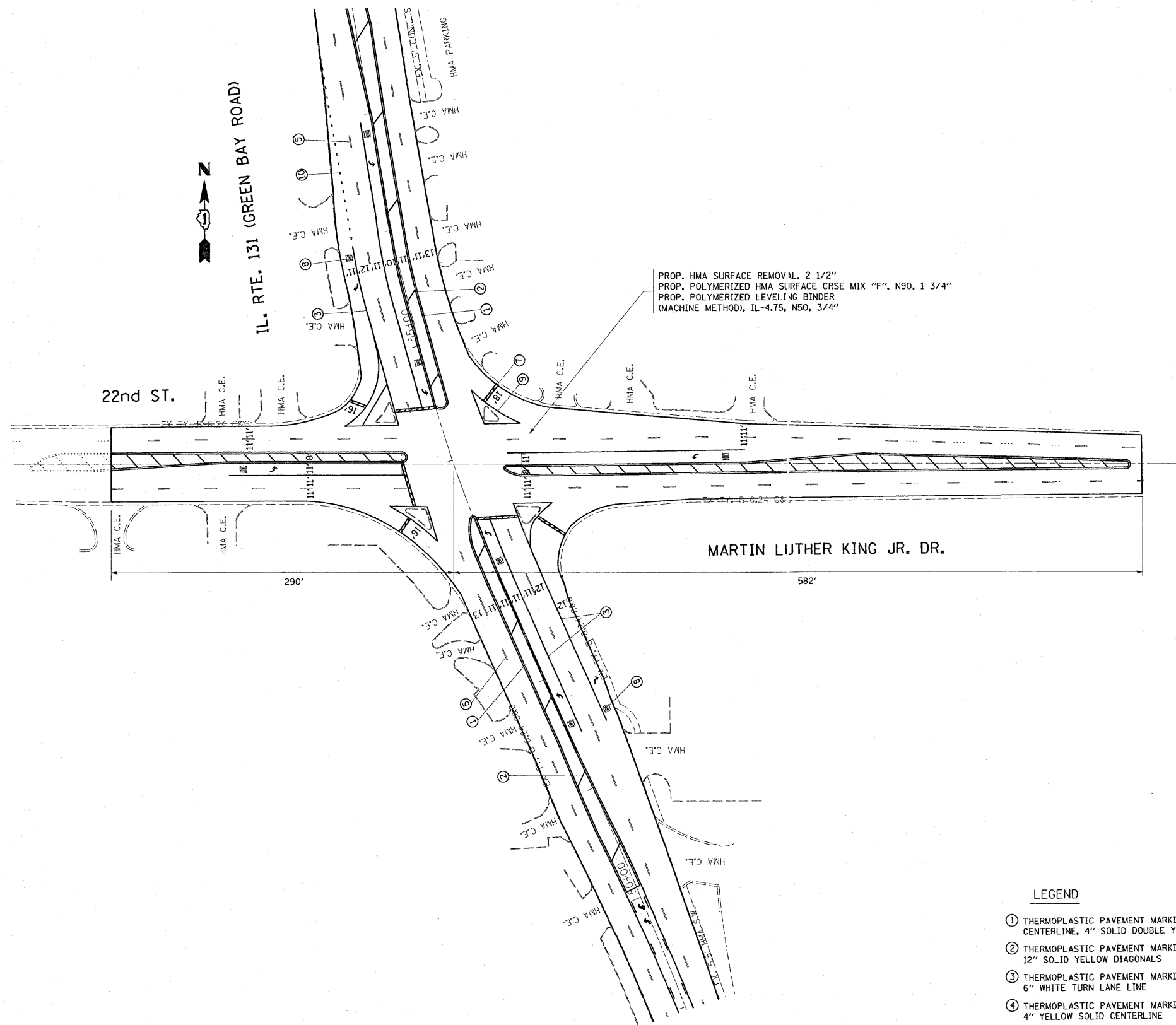




PROP. HMA SURFACE REMOVAL, 2 1/2"  
 PROP. POLYMERIZED HMA SURFACE COURSE MIX "F", N90, 1 3/4"  
 PROP. POLYMERIZED LEVELING BINDER  
 (MACHINE METHOD), IL-4.75, N50, 3/4"

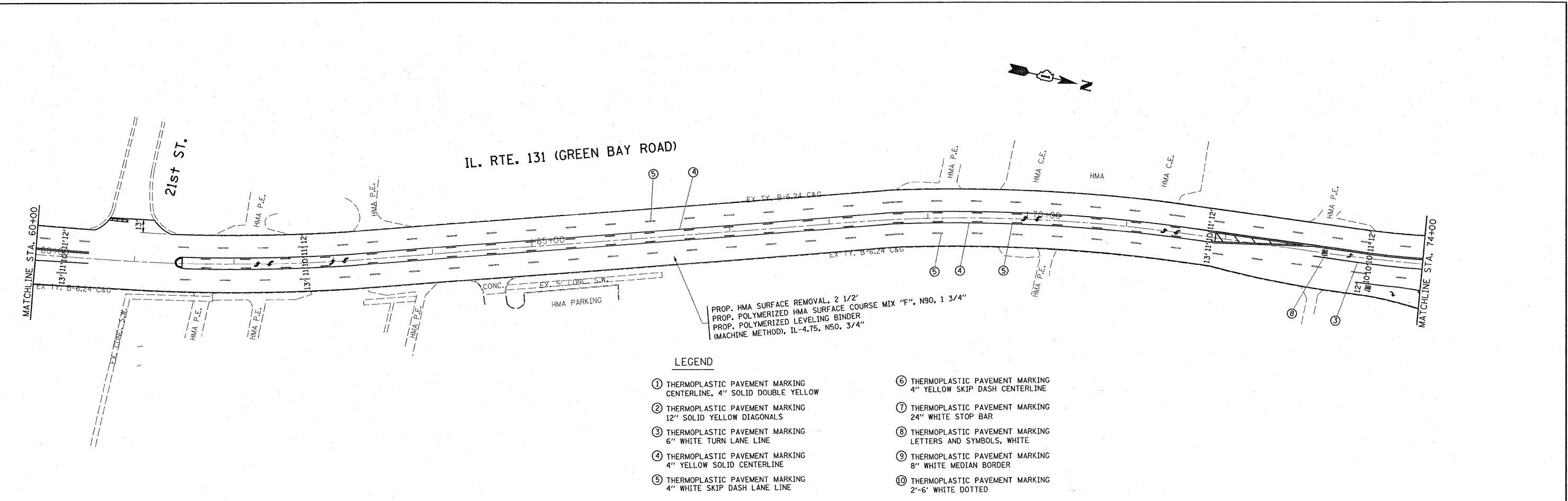
- |  |  |
|--|--|
| ① THERMOPLASTIC PAVEMENT MARKING<br>CENTERLINE, 4" SOLID DOUBLE YELLOW | ⑥ THERMOPLASTIC PAVEMENT MARKING<br>4" YELLOW SKIP DASH CENTERLINE |
| ② THERMOPLASTIC PAVEMENT MARKING<br>12" SOLID YELLOW DIAGONALS         | ⑦ THERMOPLASTIC PAVEMENT MARKING<br>24" WHITE STOP BAR         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

FILE NAME = c:\pw_work\pwsdot\byunsh\d0101576\sh_rdw.dgn	USER NAME = byunsh	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	PLAN IL. 131 (IL. 120 TO IL. 137)			F.A.U. RTE. 2711	SECTION D-RS-3	COUNTY LAKE	TOTAL SHEETS 40	SHEET NO. 10
					SCALE: 1"=50'    SHEET NO. OF SHEETS    STA. 30+00    TO STA. 45+00			CONTRACT NO. 60E93				
					ILLINOIS FED. AID PROJECT							



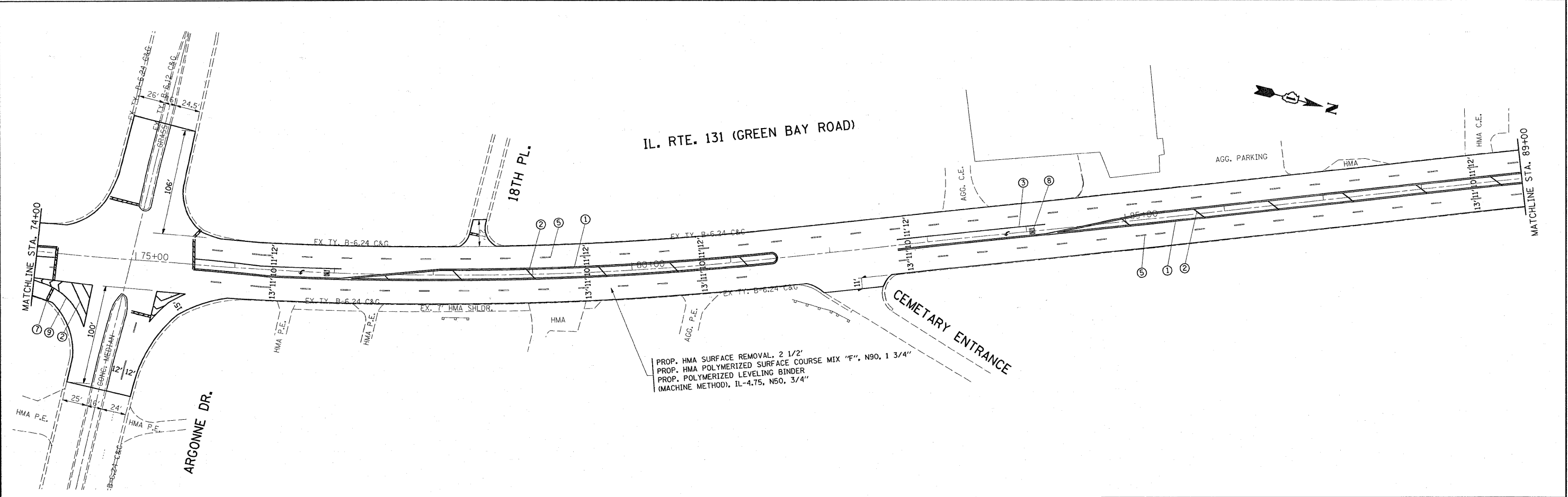
- LEGEND**
- ① THERMOPLASTIC PAVEMENT MARKING CENTERLINE, 4" SOLID DOUBLE YELLOW
  - ② THERMOPLASTIC PAVEMENT MARKING 12" SOLID YELLOW DIAGONALS
  - ③ THERMOPLASTIC PAVEMENT MARKING 6" WHITE TURN LANE LINE
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  - ⑦ THERMOPLASTIC PAVEMENT MARKING 24" WHITE 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 =	USER NAME = byunsh	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PLAN IL. 131 (IL. 120 TO IL. 137)</b>			F-AJ RTE. 2711	SECTION D-RS-3	COUNTY LAKE	TOTAL SHEETS 40	SHEET NO. 11
c:\pw_work\pwwork\byunsh\d0101576\sh_rdw.dgn		DRAWN -	REVISED -		SCALE: 1"=50'	SHEET NO. OF	SHEETS	STA. 45+00	TO STA. 60+00	CONTRACT NO. 60E93		
		CHECKED -	REVISED -							FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT		
		DATE -	REVISED -									

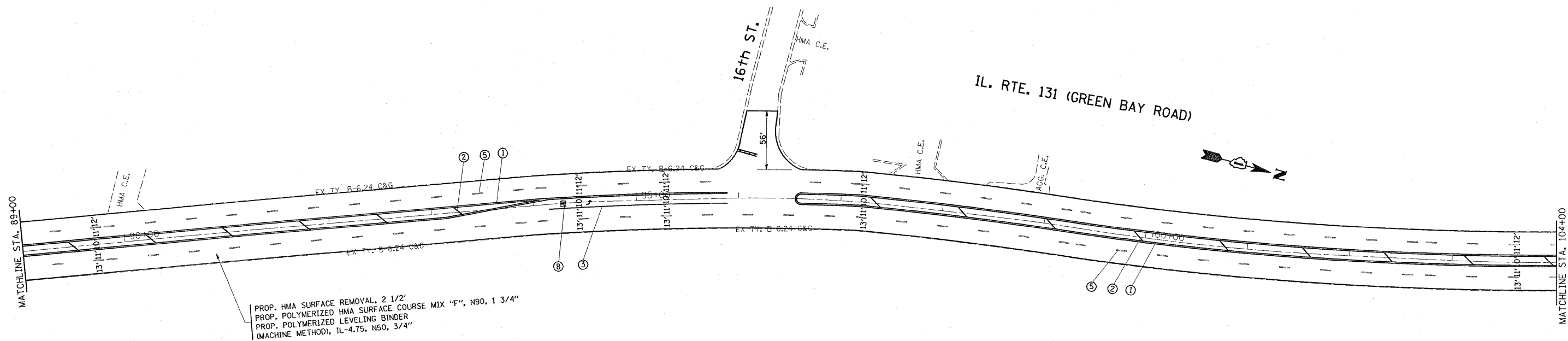


**LEGEND**

- ① THERMOPLASTIC PAVEMENT MARKING CENTERLINE, 4" SOLID DOUBLE YELLOW
- ② THERMOPLASTIC PAVEMENT MARKING 12" SOLID YELLOW DIAGONALS
- ③ THERMOPLASTIC PAVEMENT MARKING 6" WHITE TURN LANE LINE
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- ⑨ THERMOPLASTIC PAVEMENT MARKING 8" WHITE MEDIAN BORDER
- ⑩ THERMOPLASTIC PAVEMENT MARKING 2'-6" WHITE DOTTED

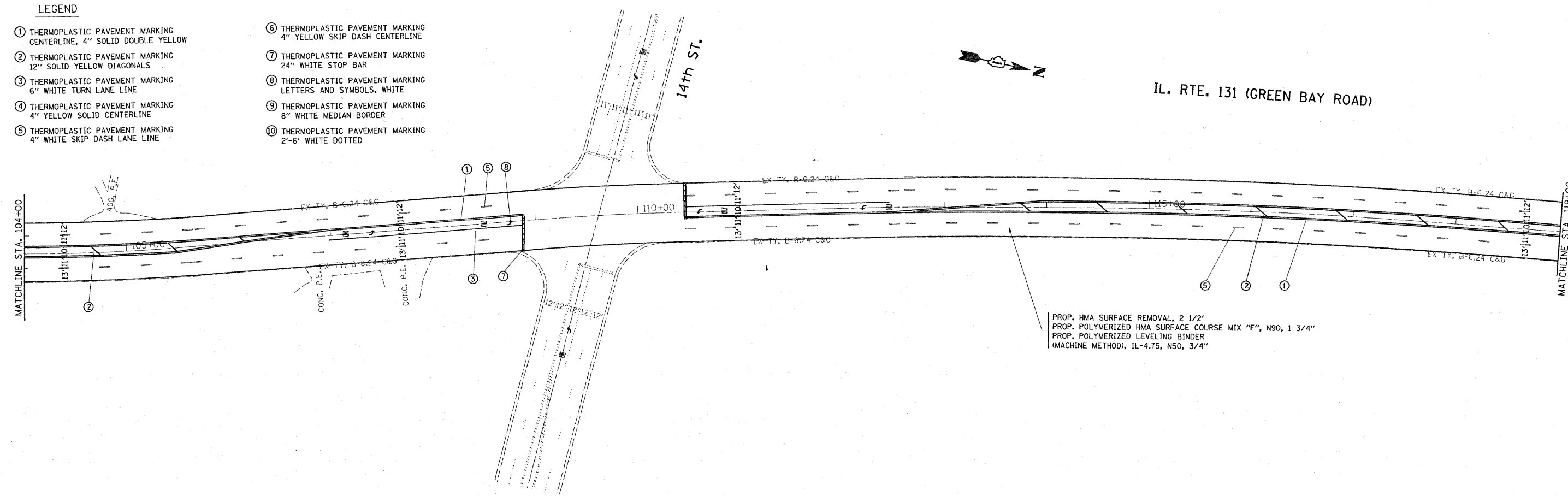


FILE NAME =	USER NAME = byunsh	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PLAN IL. 131 (IL. 120 TO IL. 137)</b>	F.A.U. RTE. 2711	SECTION D-RS-3	COUNTY LAKE	TOTAL SHEETS 40	SHEET NO. 12	
c:\pwwork\pwwork\byunsh\d8181576\sh_rdr.dgn	PLOT SCALE = 50.0000' / IN.	DRAWN -	REVISED -			SCALE: 1"=50'	SHEET NO. OF SHEETS	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		CONTRACT NO. 60E93	
	PLOT DATE = 1/13/2009	CHECKED -	REVISED -			STA. 60+00 TO STA. 89+00					
		DATE -	REVISED -								



**LEGEND**

- ① THERMOPLASTIC PAVEMENT MARKING CENTERLINE, 4" SOLID DOUBLE YELLOW
- ② THERMOPLASTIC PAVEMENT MARKING 12" SOLID YELLOW DIAGONALS
- ③ THERMOPLASTIC PAVEMENT MARKING 6" WHITE TURN LANE LINE
- ④ THERMOPLASTIC PAVEMENT MARKING 4" YELLOW SOLID CENTERLINE
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- ⑨ THERMOPLASTIC PAVEMENT MARKING 8" WHITE MEDIAN BORDER
- ⑩ THERMOPLASTIC PAVEMENT MARKING 2'-6" WHITE DOTTED



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PLOT DATE = 1/13/2009

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CHECKED -  
DATE -

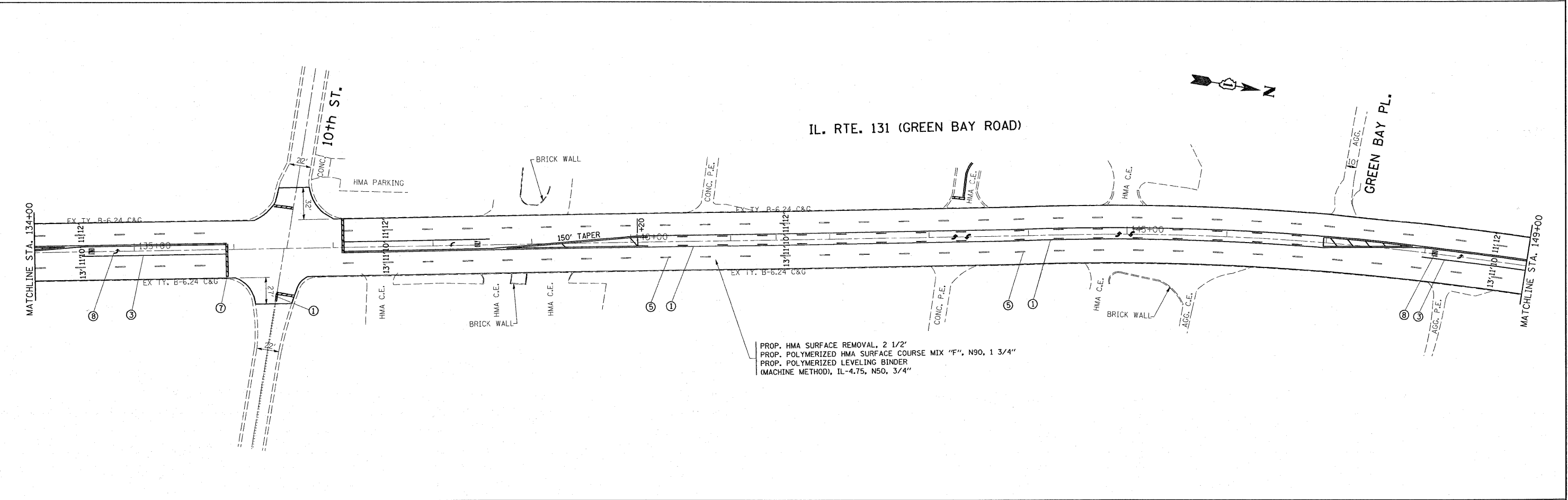
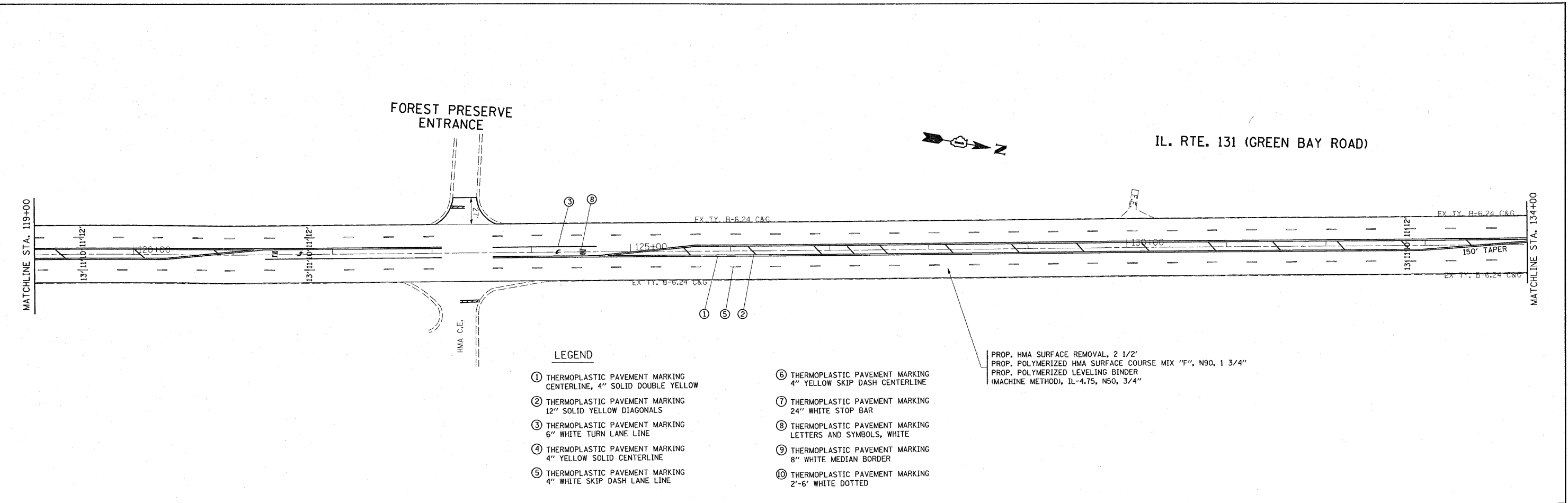
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PLAN IL. 131 (IL. 120 TO IL. 137)**

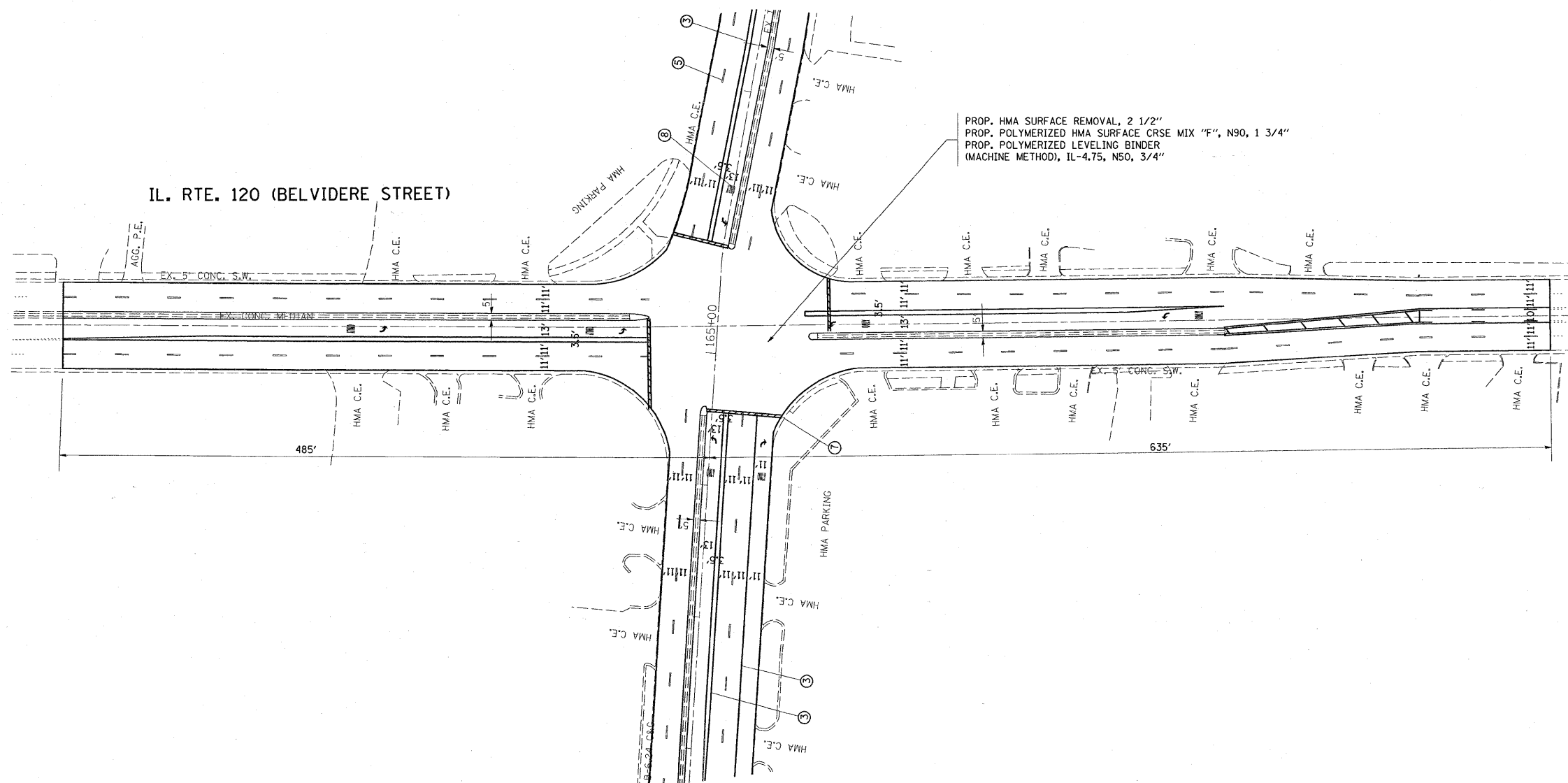
SCALE: 1"=50' SHEET NO. OF SHEETS STA. 89+00 TO STA. 119+00

F.A.U. RTE. 2711	SECTION D-RS-3	COUNTY LAKE	TOTAL SHEETS 40	SHEET NO. 13
CONTRACT NO. 60E93				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



FILE NAME =	USER NAME = bygunsh	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PLAN IL. 131 (IL. 120 TO IL. 137)</b>	F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ca\pw_work\pwsdot\bygunsh\d0101576\sh_rdn.dgn	PLOT SCALE = 50.0000 / IN.	DRAWN -	REVISED -			2711	D-RS-3	LAKE	40	14	
PLOT DATE = 1/13/2009	CHECKED -	REVISED -	REVISED -			CONTRACT NO. 60E93					
	DATE -	REVISED -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					





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"

**LEGEND**

- ① THERMOPLASTIC PAVEMENT MARKING CENTERLINE, 4" SOLID DOUBLE YELLOW
- ② THERMOPLASTIC PAVEMENT MARKING 12" SOLID YELLOW DIAGONALS
- ③ THERMOPLASTIC PAVEMENT MARKING 6" WHITE TURN LANE LINE
- ④ THERMOPLASTIC PAVEMENT MARKING 4" YELLOW SOLID CENTERLINE
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- ⑨ THERMOPLASTIC PAVEMENT MARKING 8" WHITE MEDIAN BORDER
- ⑩ THERMOPLASTIC PAVEMENT MARKING 2'-6' WHITE DOTTED

FILE NAME =	USER NAME = byunsh	DESIGNED -	REVISED -
ct:\pw_work\pwsido\byunsh\d0101576\sh_rdw.dgn		DRAWN -	REVISED -
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -
PLOT DATE = 1/13/2009		DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

PLAN IL. 131 (IL. 120 TO IL. 137)

SCALE: 1"=50' SHEET NO. OF SHEETS STA. TO STA.

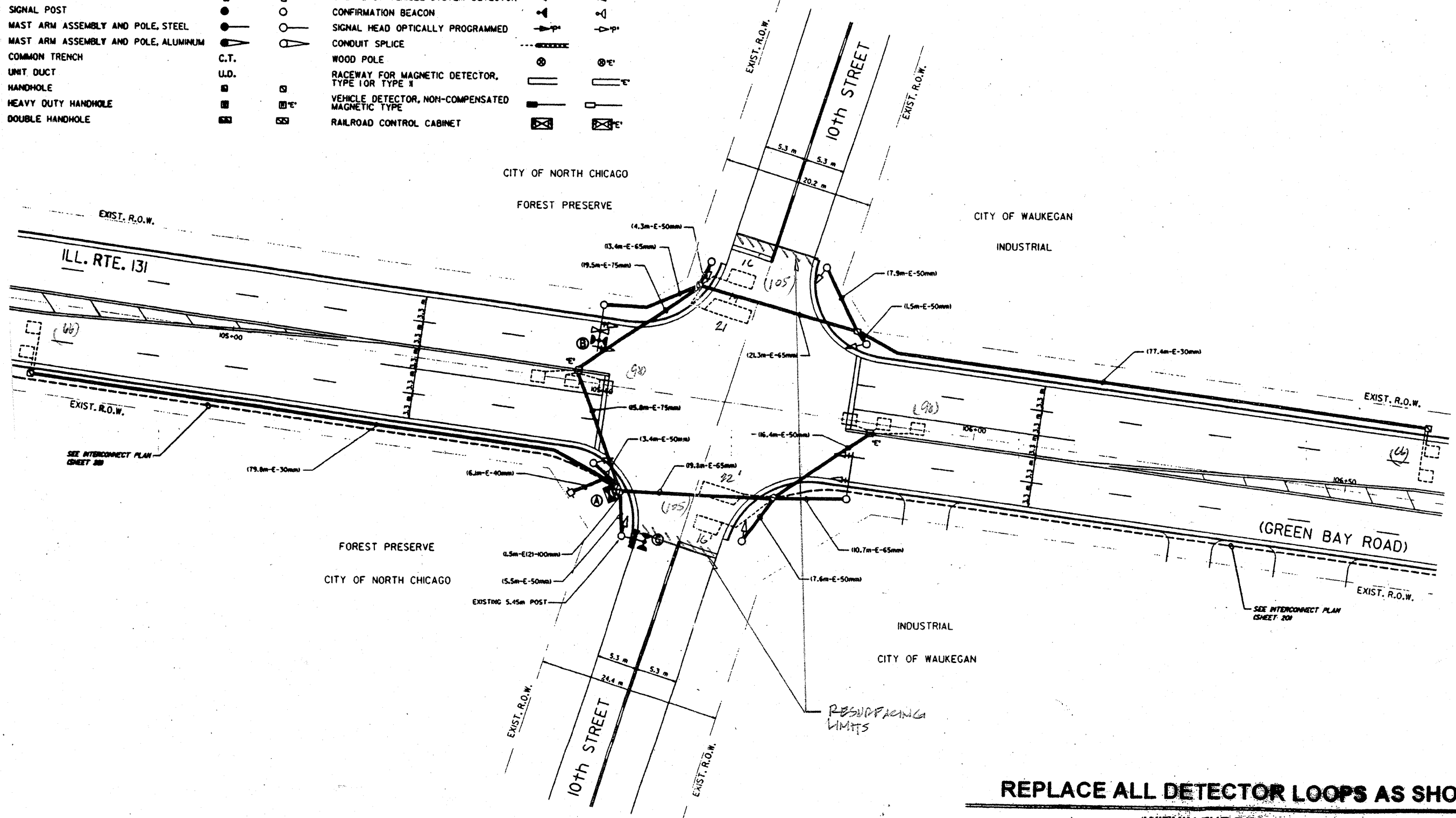
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2711	D-RS-3	LAKE	40	16
CONTRACT NO. 60E93				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



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

**TRAFFIC SIGNAL LEGEND**

	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER	[Symbol]	[Symbol]	G.S. CONDUIT IN TRENCH OR PUSHED	[Symbol]	[Symbol]
SERVICE INSTALLATION	[Symbol]	[Symbol]	PEDESTRIAN PUSHBUTTON DETECTOR	[Symbol]	[Symbol]
SIGNAL HEAD	[Symbol]	[Symbol]	DETECTOR LOOP	[Symbol]	[Symbol]
SIGNAL HEAD WITH BACKPLATE	[Symbol]	[Symbol]	CAST IRON JUNCTION BOX	[Symbol]	[Symbol]
SIGNAL HEAD, PEDESTRIAN	[Symbol]	[Symbol]	EMERGENCY VEHICLE SYSTEM DETECTOR	[Symbol]	[Symbol]
SIGNAL POST	[Symbol]	[Symbol]	CONFIRMATION BEACON	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]	[Symbol]	SIGNAL HEAD OPTICALLY PROGRAMMED	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, ALUMINUM	[Symbol]	[Symbol]	CONDUIT SPLICE	[Symbol]	[Symbol]
COMMON TRENCH	C.T.	[Symbol]	WOOD POLE	[Symbol]	[Symbol]
UNIT DUCT	U.D.	[Symbol]	RACEWAY FOR MAGNETIC DETECTOR, TYPE 1 OR TYPE 2	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]	VEHICLE DETECTOR, NON-COMPENSATED MAGNETIC TYPE	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]	RAILROAD CONTROL CABINET	[Symbol]	[Symbol]
DOUBLE HANDHOLE	[Symbol]	[Symbol]			



**REPLACE ALL DETECTOR LOOPS AS SHOWN**  
 (WITHIN THE RESURFACING LIMITS)

CODE NO.	QUANTITY	UNIT	ITEM
80000600	577	Foot	Detector Loop Replacement

FILE NAME =	USER NAME = kenthaphixaybc	DESIGNED -	REVISED -
PROJECT = C:\p1\1070022\11688\forestby.dgn		DRAWN -	REVISED -
PLOT SCALE = 1/8" = 1' IN.		CHECKED -	REVISED -
PLOT DATE = 10/15/2007		DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

ILL. RTE. 131 (GREEN BAY RD.) @ 10TH STREET

F.A.U./F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		COOK	40	17
CONTRACT NO.				

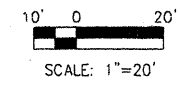
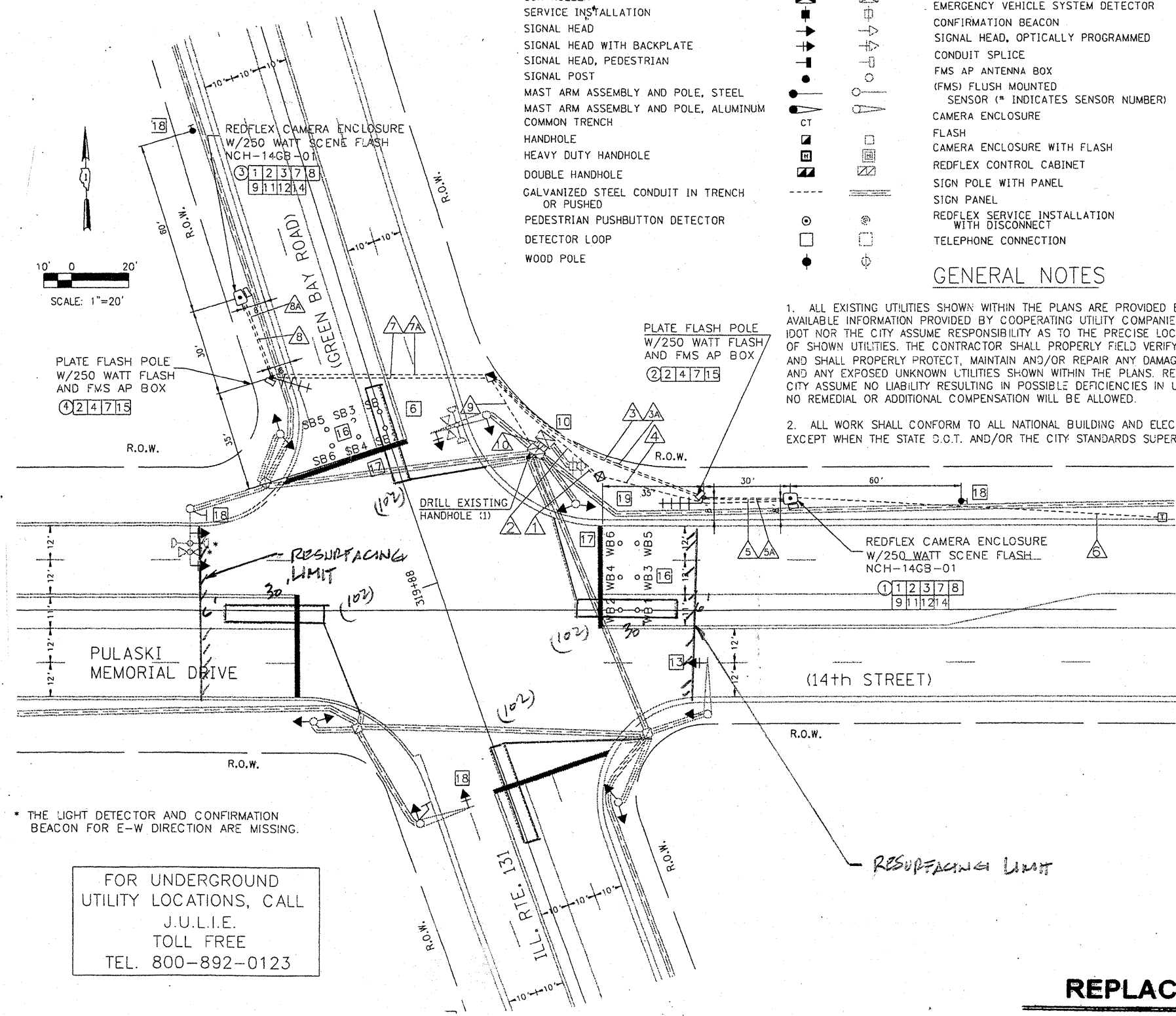
**NOTE:**  
**THIS PLAN IS FOR THE PURPOSE OF REPLACING THE DETECTOR LOOPS ONLY. ALL OTHER INFORMATION SHOWN IS NOT RELATED AND WILL BE DISREGARDED.**

**TRAFFIC SIGNAL LEGEND**

<p>CONTROLLER SERVICE INSTALLATION</p> <p>SIGNAL HEAD</p> <p>SIGNAL HEAD WITH BACKPLATE</p> <p>SIGNAL HEAD, PEDESTRIAN</p> <p>SIGNAL POST</p> <p>MAST ARM ASSEMBLY AND POLE, STEEL</p> <p>MAST ARM ASSEMBLY AND POLE, ALUMINUM</p> <p>COMMON TRENCH</p> <p>HANDHOLE</p> <p>HEAVY DUTY HANDHOLE</p> <p>DOUBLE HANDHOLE</p> <p>CALVANIZED STEEL CONDUIT IN TRENCH OR PUSHED</p> <p>PEDESTRIAN PUSHBUTTON DETECTOR</p> <p>DETECTOR LOOP</p> <p>WOOD POLE</p>	<p>PROPOSED</p> <p>EXISTING</p>	<p>EMERGENCY VEHICLE SYSTEM DETECTOR</p> <p>CONFIRMATION BEACON</p> <p>SIGNAL HEAD, OPTICALLY PROGRAMMED</p> <p>CONDUIT SPLICE</p> <p>FMS AP ANTENNA BOX (FMS) FLUSH MOUNTED SENSOR (* INDICATES SENSOR NUMBER)</p> <p>CAMERA ENCLOSURE</p> <p>FLASH</p> <p>CAMERA ENCLOSURE WITH FLASH</p> <p>REFLEX CONTROL CABINET</p> <p>SIGN POLE WITH PANEL</p> <p>SIGN PANEL</p> <p>REFLEX SERVICE INSTALLATION WITH DISCONNECT</p> <p>TELEPHONE CONNECTION</p>	<p>PROPOSED</p> <p>EXISTING</p>
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**GENERAL NOTES**

1. ALL EXISTING UTILITIES SHOWN WITHIN THE PLANS ARE PROVIDED BY THE BEST AVAILABLE INFORMATION PROVIDED BY COOPERATING UTILITY COMPANIES. NEITHER REDFLEX, IDOT NOR THE CITY ASSUME RESPONSIBILITY AS TO THE PRECISE LOCATION OR ACCURACY OF SHOWN UTILITIES. THE CONTRACTOR SHALL PROPERLY FIELD VERIFY UTILITY LOCATIONS AND SHALL PROPERLY PROTECT, MAINTAIN AND/OR REPAIR ANY DAMAGE OF ALL KNOWN AND ANY EXPOSED UNKNOWN UTILITIES SHOWN WITHIN THE PLANS. REDFLEX, IDOT AND THE CITY ASSUME NO LIABILITY RESULTING IN POSSIBLE DEFICIENCIES IN UTILITY LOCATIONS AND NO REMEDIAL OR ADDITIONAL COMPENSATION WILL BE ALLOWED.
2. ALL WORK SHALL CONFORM TO ALL NATIONAL BUILDING AND ELECTRICAL CODES EXCEPT WHEN THE STATE D.O.T. AND/OR THE CITY STANDARDS SUPERSEDE.



\* THE LIGHT DETECTOR AND CONFIRMATION BEACON FOR E-W DIRECTION ARE MISSING.

FOR UNDERGROUND UTILITY LOCATIONS, CALL J.U.L.I.E. TOLL FREE TEL. 800-892-0123

**REPLACE ALL DETECTOR LOOPS AS SHOWN**  
**(WITHIN THE RESURFACING LIMITS)**

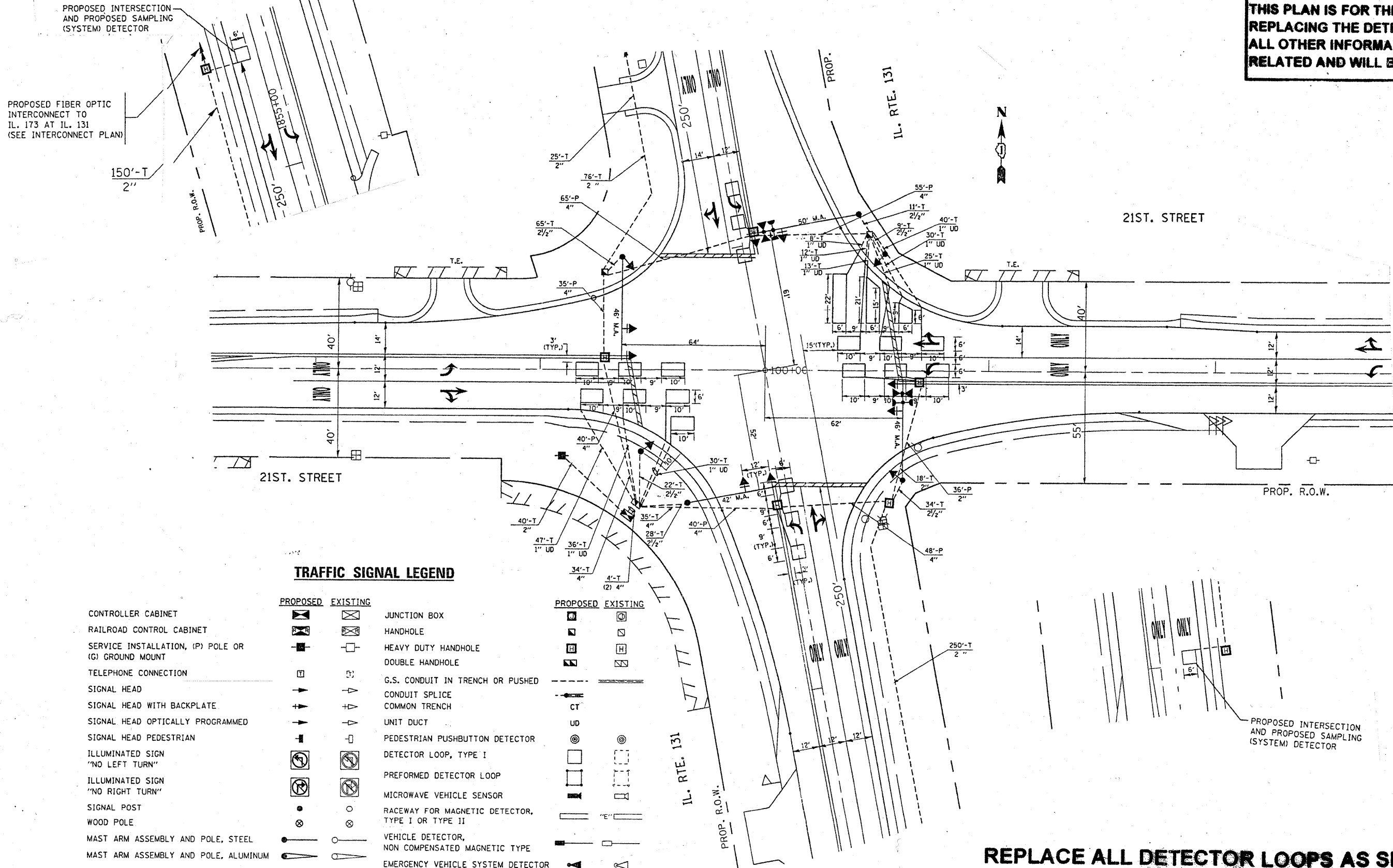
CODE NO.	QUANTITY	UNIT	ITEM
80000600	403	Foot	Detector Loop Replacement

FILE NAME =	USER NAME = kenthphixeybc	DESIGNED -	REVISED -
PROJECT = traffic\1070022\1158e\forest.dgn		DRAWN -	REVISED -
PLOT SCALE = 40.0000 / IN.		CHECKED -	REVISED -
PLOT DATE = 10/5/2007		DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

IL RTE 131 (GREEN BAY RD) @ 14TH STREET	F.A.U./F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.
				FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJ. NO.

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



**TRAFFIC SIGNAL LEGEND**

- CONTROLLER CABINET
- RAILROAD CONTROL CABINET
- SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT
- TELEPHONE CONNECTION
- SIGNAL HEAD
- SIGNAL HEAD WITH BACKPLATE
- SIGNAL HEAD OPTICALLY PROGRAMMED
- SIGNAL HEAD PEDESTRIAN
- ILLUMINATED SIGN "NO LEFT TURN"
- ILLUMINATED SIGN "NO RIGHT TURN"
- SIGNAL POST
- WOOD POLE
- MAST ARM ASSEMBLY AND POLE, STEEL
- MAST ARM ASSEMBLY AND POLE, ALUMINUM
- COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE

- | PROPOSED | EXISTING |  | PROPOSED | EXISTING |
|----------|----------|--|----------|----------|
|          |          | JUNCTION BOX                                     |          |          |
|          |          | HEAVY DUTY HANDHOLE                              |          |          |
|          |          | G.S. CONDUIT IN TRENCH OR PUSHED                 |          |          |
|          |          | COMMON TRENCH                                    |          |          |
|          |          | PEDESTRIAN PUSHBUTTON DETECTOR                   |          |          |
|          |          | DETECTOR LOOP, TYPE I                            |          |          |
|          |          | PREFORMED DETECTOR LOOP                          |          |          |
|          |          | MICROWAVE VEHICLE SENSOR                         |          |          |
|          |          | RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II |          |          |
|          |          | VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE  |          |          |
|          |          | EMERGENCY VEHICLE SYSTEM DETECTOR                |          |          |
|          |          | CONFIRMATION BEACON                              |          |          |

**REPLACE ALL DETECTOR LOOPS AS SHOWN**  
 (WITHIN THE RESURFACING LIMITS)

CODE NO.	QUANTITY	UNIT	ITEM
80000600	716	Foot	Detector Loop Replacement

F.A.U./F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			40	19

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

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

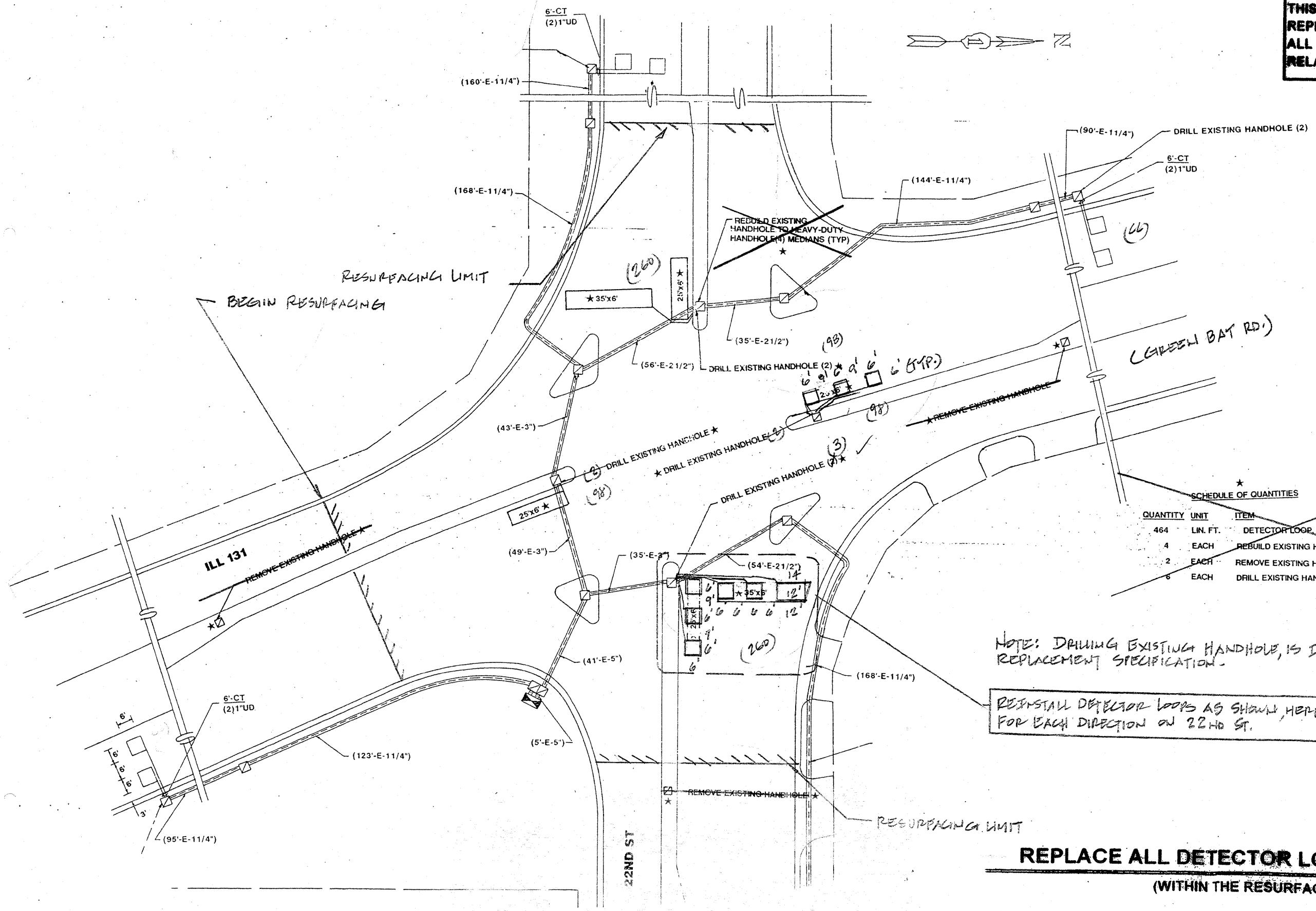
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c:\projects\traffic\1070022\11680forestby.dgn		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

IL RTE 131 (GREEN BAY RD.) @ 21 ST STREET

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

**NOTE:**  
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**SCHEDULE OF QUANTITIES**

QUANTITY	UNIT	ITEM
464	LIN. FT.	DETECTOR LOOP, TYPE I
4	EACH	REBUILD EXISTING HANDHOLE TO HEAVY-DI
2	EACH	REMOVE EXISTING HANDHOLE
6	EACH	DRILL EXISTING HANDHOLE

NOTE: DRAWING EXISTING HANDHOLE, IS INCIDENTAL; SEE LOOP REPLACEMENT SPECIFICATION.

REINSTALL DETECTOR LOOPS AS SHOWN, HERE FOR EACH DIRECTION ON 22ND ST.

**REPLACE ALL DETECTOR LOOPS AS SHOWN**  
 (WITHIN THE RESURFACING LIMITS)

CODE NO.	QUANTITY	UNIT	ITEM
80000600	782	Foot	Detector Loop Replacement

FILE NAME =	USER NAME = kenthphixoybc	DESIGNED -	REVISED -
PROJECT =		DRAWN -	REVISED -
PLOT SCALE = 1/8" = 1'-0"		CHECKED -	REVISED -
PLOT DATE = 10/5/2007		DATE -	REVISED -

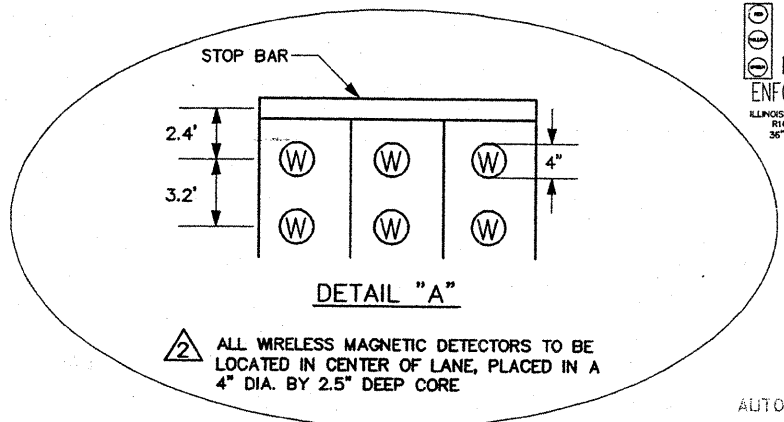
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

ILL. RTE. 131 (GREEN BAY RD.) @ 22ND STREET

F.A.U./F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		LAKE	40	20
CONTRACT NO.				

SCALE: SHEET NO. OF SHEETS STA. TO STA. FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

**NOTE:**  
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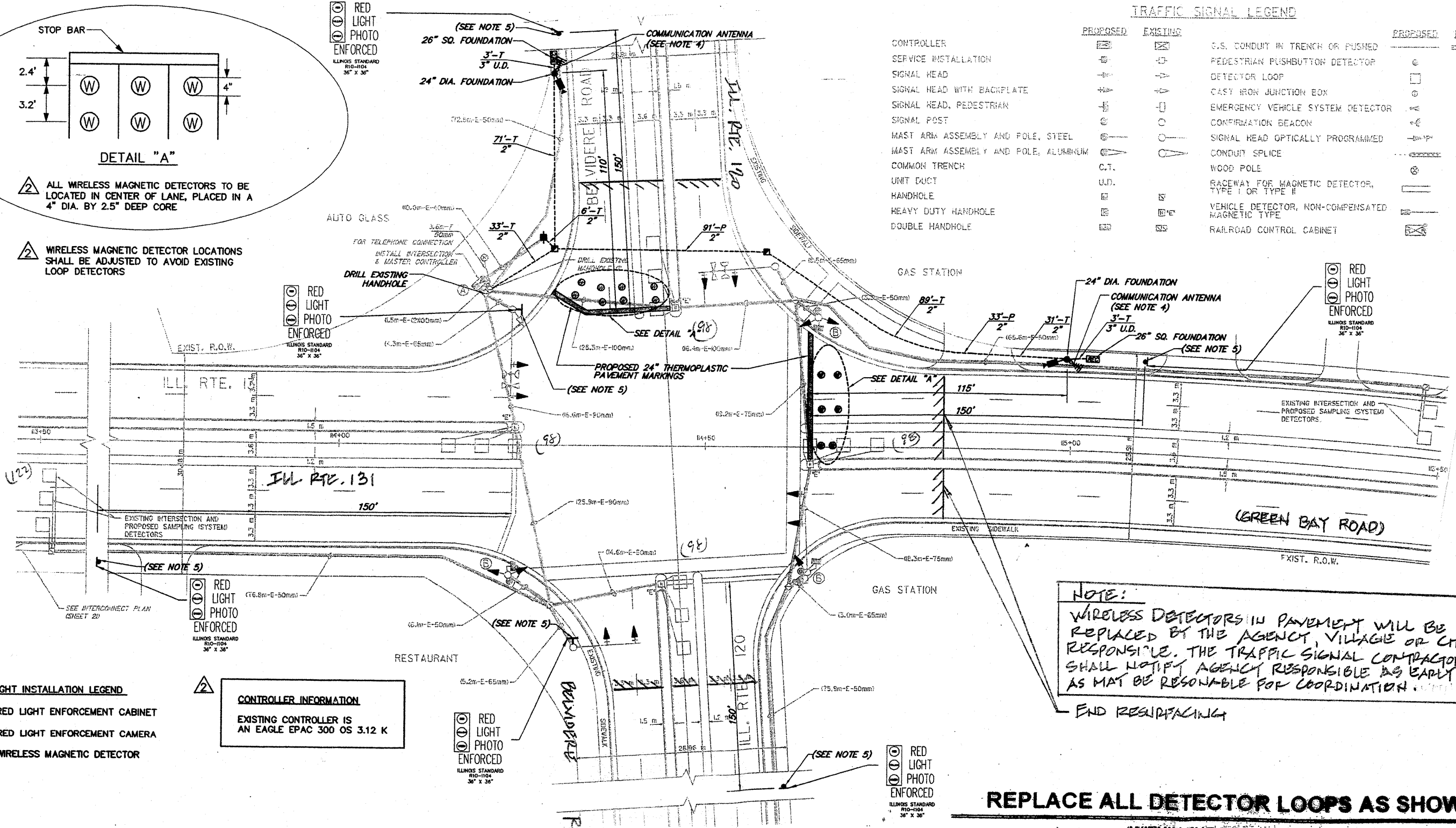


ALL WIRELESS MAGNETIC DETECTORS TO BE LOCATED IN CENTER OF LANE, PLACED IN A 4" DIA. BY 2.5" DEEP CORE

WIRELESS MAGNETIC DETECTOR LOCATIONS SHALL BE ADJUSTED TO AVOID EXISTING LOOP DETECTORS

**TRAFFIC SIGNAL LEGEND**

	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER	[Symbol]	[Symbol]	G.S. CONDUIT IN TRENCH OR PUSHED	[Symbol]	[Symbol]
SERVICE INSTALLATION	[Symbol]	[Symbol]	PEDESTRIAN PUSHBUTTON DETECTOR	[Symbol]	[Symbol]
SIGNAL HEAD	[Symbol]	[Symbol]	DETECTOR LOOP	[Symbol]	[Symbol]
SIGNAL HEAD WITH BACKPLATE	[Symbol]	[Symbol]	CAST IRON JUNCTION BOX	[Symbol]	[Symbol]
SIGNAL HEAD, PEDESTRIAN	[Symbol]	[Symbol]	EMERGENCY VEHICLE SYSTEM DETECTOR	[Symbol]	[Symbol]
SIGNAL POST	[Symbol]	[Symbol]	CONFIRMATION BEACON	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]	[Symbol]	SIGNAL HEAD OPTICALLY PROGRAMMED	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, ALUMINUM	[Symbol]	[Symbol]	CONDUIT SPLICE	[Symbol]	[Symbol]
COMMON TRENCH	C.T.	[Symbol]	WOOD POLE	[Symbol]	[Symbol]
UNIT DUCT	U.D.	[Symbol]	RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]	VEHICLE DETECTOR, NON-COMPENSATED MAGNETIC TYPE	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]	RAILROAD CONTROL CABINET	[Symbol]	[Symbol]
DOUBLE HANDHOLE	[Symbol]	[Symbol]			



**NOTE:**  
 WIRELESS DETECTORS IN PAVEMENT WILL BE REPLACED BY THE AGENCY, VILLAGE OR CITY RESPONSIBLE. THE TRAFFIC SIGNAL CONTRACTOR SHALL NOTIFY AGENCY RESPONSIBLE AS EARLY AS MAY BE REASONABLE FOR COORDINATION.

END RESURFACING

**RED LIGHT INSTALLATION LEGEND**

[Symbol] RED LIGHT ENFORCEMENT CABINET

[Symbol] RED LIGHT ENFORCEMENT CAMERA

[Symbol] WIRELESS MAGNETIC DETECTOR

**CONTROLLER INFORMATION**

EXISTING CONTROLLER IS AN EAGLE EPAC 300 OS 3.12 K

**REPLACE ALL DETECTOR LOOPS AS SHOWN (WITHIN THE RESURFACING LIMITS)**

CODE NO.	QUANTITY	UNIT	ITEM
50000600	514	Foot	Detector Loop Replacement

FILE NAME =	USER NAME = kentphixoybc	DESIGNED -	REVISED -
c:\projects\traffic\1070022\11686\forest.dgn		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

DATE = 10/15/2007  
 ILL. 131 (GREEN BAY RD.) @ ILL. 120 (BEWIDERE RD.)

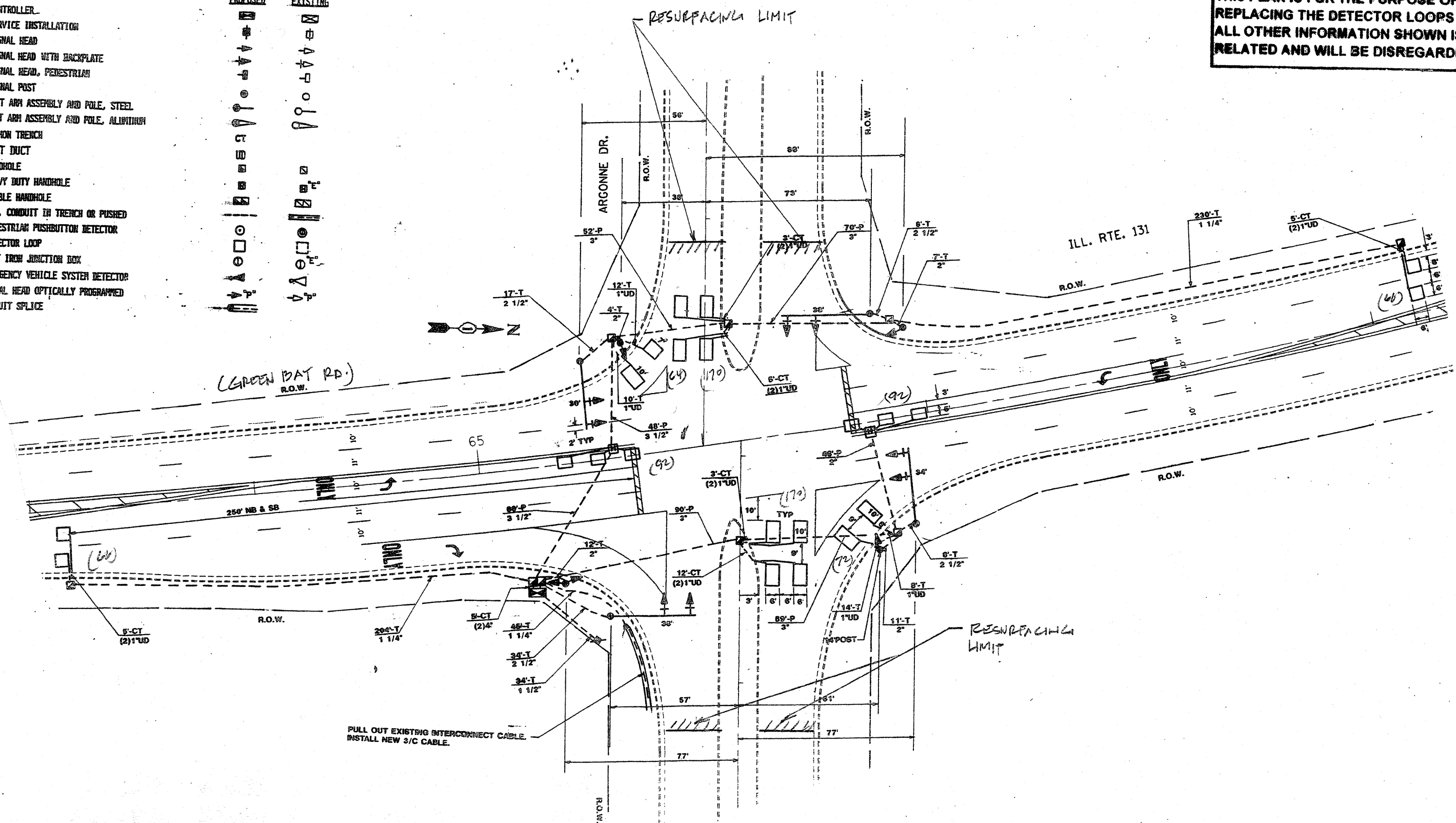
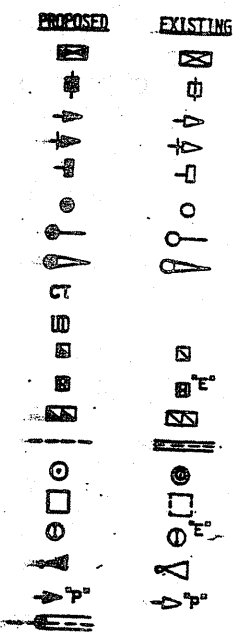
F.A.U./F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		LAKE	40	21
CONTRACT NO.				



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

**TRAFFIC SIGNAL LEGEND**

- CONTROLLER
- SERVICE INSTALLATION
- SIGNAL HEAD
- SIGNAL HEAD WITH BACKPLATE
- SIGNAL HEAD, PEDESTRIAN
- SIGNAL POST
- FAST ARM ASSEMBLY AND POLE, STEEL
- FAST 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
- CAST IRON JUNCTION BOX
- EMERGENCY VEHICLE SYSTEM DETECTOR
- SIGNAL HEAD OPTICALLY PROGRAMMED
- CONDUIT SPLICE



PULL OUT EXISTING INTERCONNECT CABLE.  
 INSTALL NEW S/C CABLE.

**REPLACE ALL DETECTOR LOOPS AS SHOWN**  
 (WITHIN THE RESURFACING LIMITS)

CODE NO.	QUANTITY	UNIT	ITEM
90000600	720	Foot	Detector Loop Replacement

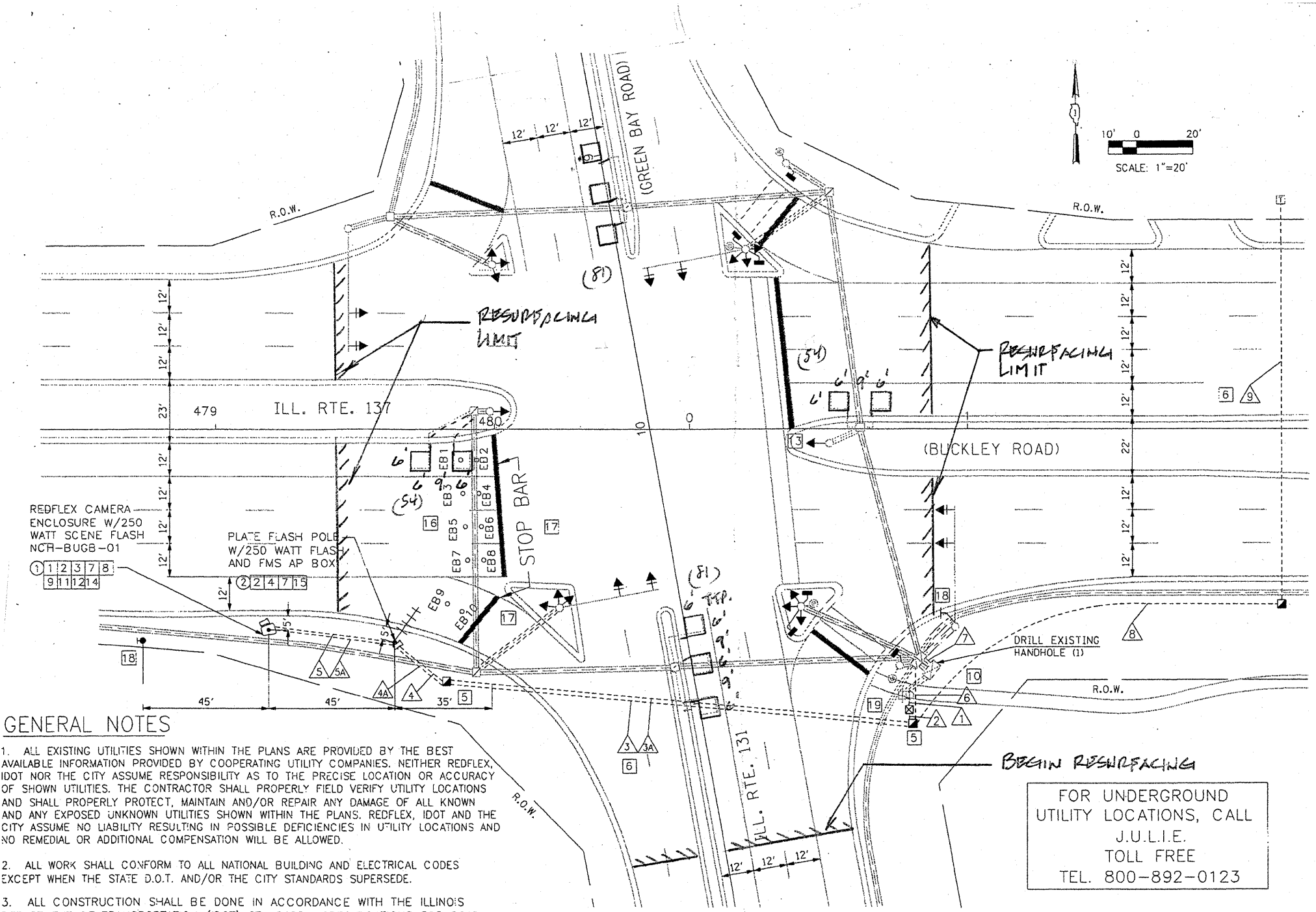
FILE NAME	USER NAME	DESIGNED	REVISED
PROJECT	DATE	DRAWN	REVISED
		CHECKED	REVISED
		DATE	REVISED

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

IL 131 (GREEN BAT RD) @ ARGONNE DRIVE

F.A.U./F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		LAKE	40	22

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



**GENERAL NOTES**

1. ALL EXISTING UTILITIES SHOWN WITHIN THE PLANS ARE PROVIDED BY THE BEST AVAILABLE INFORMATION PROVIDED BY COOPERATING UTILITY COMPANIES. NEITHER REDFLEX, IDOT NOR THE CITY ASSUME RESPONSIBILITY AS TO THE PRECISE LOCATION OR ACCURACY OF SHOWN UTILITIES. THE CONTRACTOR SHALL PROPERLY FIELD VERIFY UTILITY LOCATIONS AND SHALL PROPERLY PROTECT, MAINTAIN AND/OR REPAIR ANY DAMAGE OF ALL KNOWN AND ANY EXPOSED UNKNOWN UTILITIES SHOWN WITHIN THE PLANS. REDFLEX, IDOT AND THE CITY ASSUME NO LIABILITY RESULTING IN POSSIBLE DEFICIENCIES IN UTILITY LOCATIONS AND NO REMEDIAL OR ADDITIONAL COMPENSATION WILL BE ALLOWED.
2. ALL WORK SHALL CONFORM TO ALL NATIONAL BUILDING AND ELECTRICAL CODES EXCEPT WHEN THE STATE D.O.T. AND/OR THE CITY STANDARDS SUPERSEDE.
3. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (SSRBC) ADOPTED JANUARY 1, 2007 AND THE IDOT SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ADOPTED JANUARY 1, 2007.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE TRAFFIC SIGNAL INSTALLATION IN PROPER OPERATING CONDITION. THE CONTRACTOR MUST FOLLOW THE PROCEDURES AS SPECIFIED IN THE ARTICLE 801.11 OF THE IDOT STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL PERFORM THE MAINTENANCE PROCEDURES AS OUTLINED IN IDOT DISTRICT 1 "TRAFFIC SIGNAL SPECIAL PROVISIONS".
5. ALL SUBSTRUCTURES AND UNDERGROUND UTILITIES MUST BE LOCATED PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL AND MUST NOTIFY ALL UTILITY COMPANIES WITHIN A MINIMUM OF TWO WORKING DAYS PRIOR TO START OF WORK.
6. REDFLEX WILL MEET WITH THE CONTRACTOR, CITY AND IDOT (ILLINOIS DEPARTMENT OF TRANSPORTATION) OFFICIALS, AND POLICE TO MARK THE EXACT LOCATION OF THE POLES AND CABINET PRIOR TO CONSTRUCTION.
7. TRAFFIC FLOW SHALL BE MAINTAINED AT ALL TIMES. TEMPORARY SHUTDOWNS OR DISRUPTION MUST BE COORDINATED WITH THE CITY AND DOT.

FOR UNDERGROUND UTILITY LOCATIONS, CALL J.U.L.I.E. TOLL FREE TEL. 800-892-0123

**TRAFFIC SIGNAL LEGEND**

PROPOSED	EXISTING	PROPOSED	EXISTING
CONTROLLER	[Symbol]	EMERGENCY VEHICLE SYSTEM DETECTOR	[Symbol]
SERVICE INSTALLATION	[Symbol]	CONFIRMATION BEACON	[Symbol]
SIGNAL HEAD	[Symbol]	SIGNAL HEAD, OPTICALLY PROGRAMMED	[Symbol]
SIGNAL HEAD WITH BACKPLATE	[Symbol]	CONDUIT SPLICE	[Symbol]
SIGNAL HEAD, PEDESTRIAN	[Symbol]	FMS AP ANTENNA BOX	[Symbol]
SIGNAL POST	[Symbol]	(FMS) FLUSH MOUNTED SENSOR (# INDICATES SENSOR NUMBER)	[Symbol]
MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]		
MAST ARM ASSEMBLY AND POLE, ALUMINUM	[Symbol]		
WOOD POLE	[Symbol]		
HANDHOLE	[Symbol]		
HEAVY DUTY HANDHOLE	[Symbol]		
DOUBLE HANDHOLE	[Symbol]		
CALVANIZED STEEL CONDUIT IN TRENCH OR PUSHED	[Symbol]		
PEDESTRIAN PUSHBUTTON DETECTOR	[Symbol]		
DETECTOR LOOP	[Symbol]		

**REPLACE ALL DETECTOR LOOPS AS SHOWN**  
**(WITHIN THE RESURFACING LIMITS)**

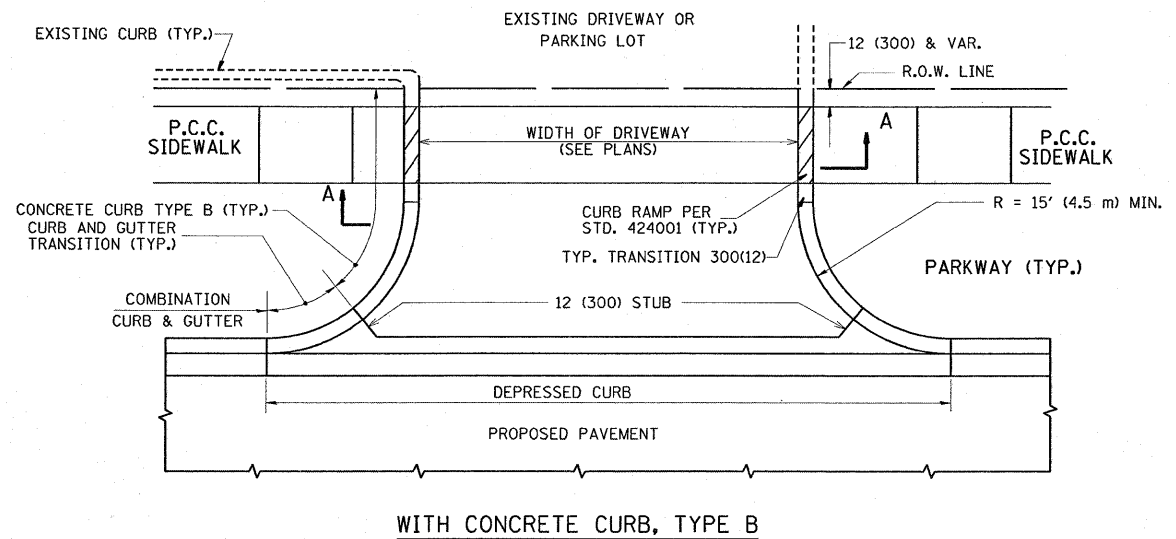
CODE NO.	QUANTITY	UNIT	ITEM
8000600	270	Foot	Detector Loop Replacement

FILE NAME	USER NAME	DESIGNED	REVISED
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PLOT SCALE	DATE	CHECKED	REVISED
1/8" = 1' IN.	08/15/2007	-	-
PLOT DATE		DATE	REVISED

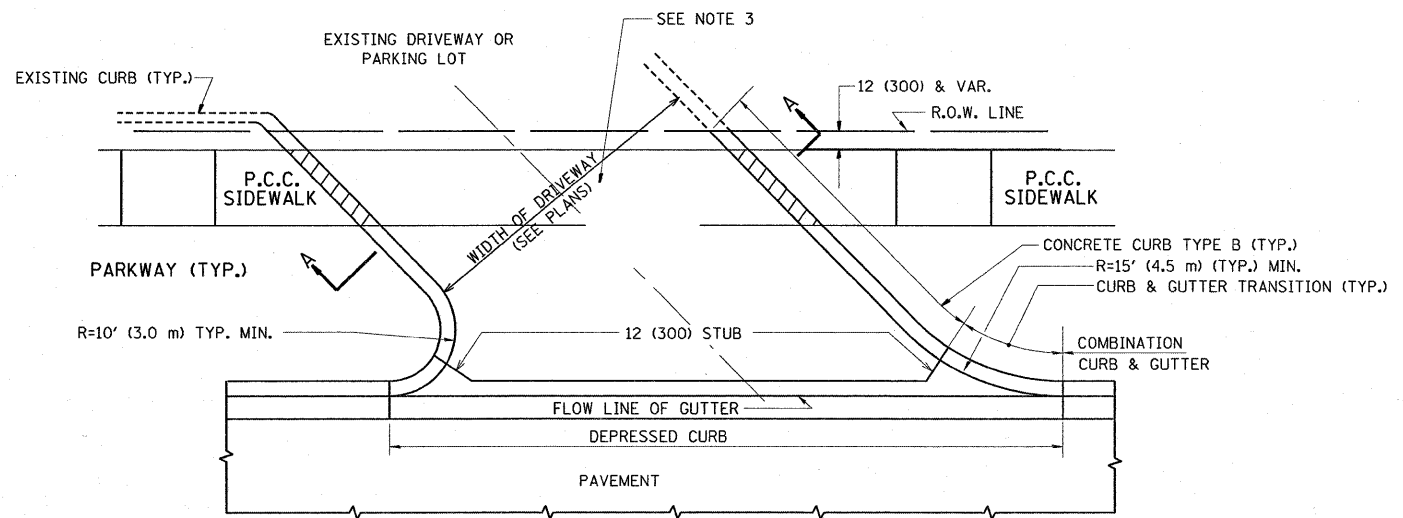
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ILL. RTE. 131 (GREEN BAY RD.) @ ILL. RTE. 137 (BUCKLEY RD.)

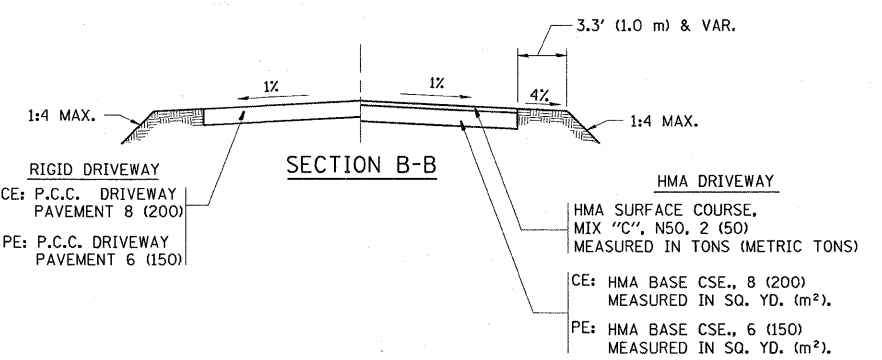
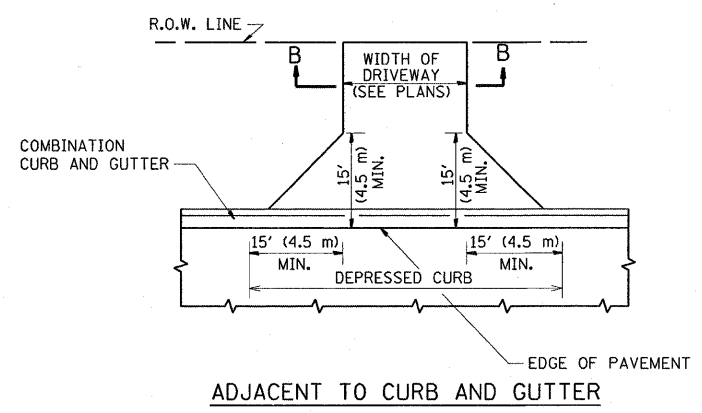
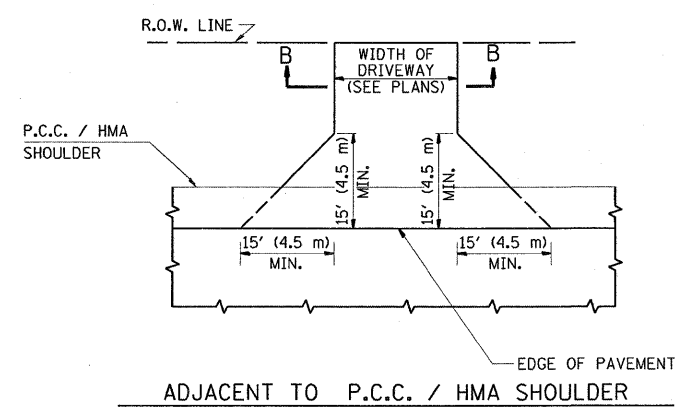
F.A.U./F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		LAKE	40	23
CONTRACT NO.				



WITH CONCRETE CURB, TYPE B



WITH CONCRETE CURB, TYPE B



RURAL FIELD ENTRANCE (FE)  
 HMA SURFACE COURSE,  
 MIX "C", N50, 2 (50)  
 MEASURED IN TONS (METRIC TONS)  
 AGGREGATE BASE CSE., TYPE B, 8 (200)  
 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.

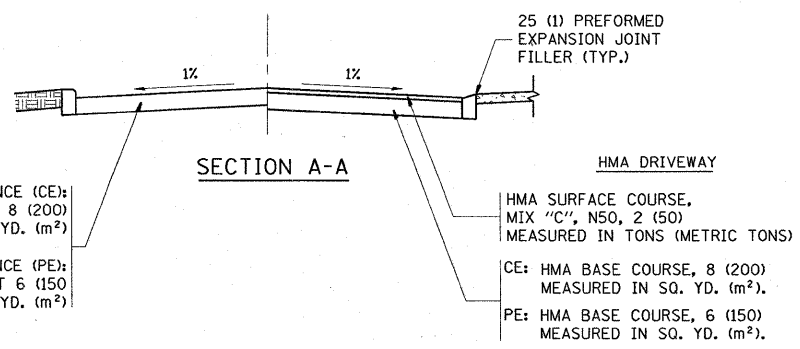
COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

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.

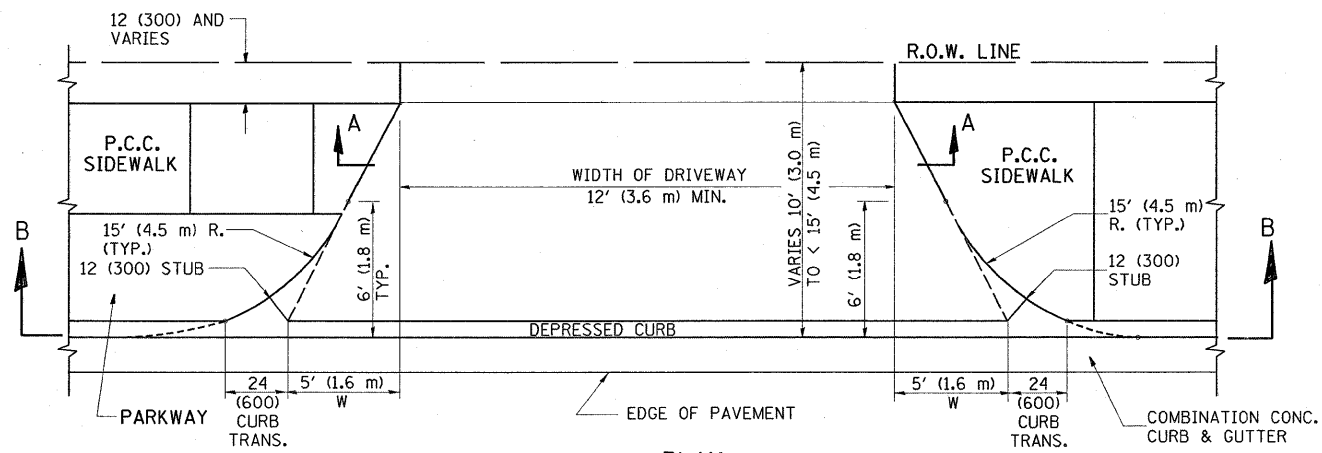
1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

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.

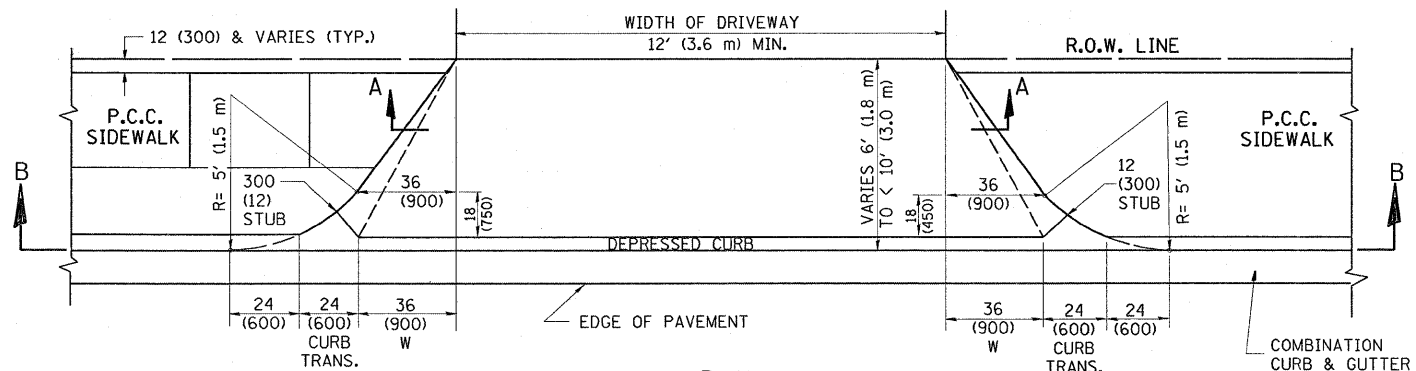


FILE NAME =	USER NAME = byunsh	DESIGNED - R. SHAH	REVISED - M. GOMEZ 04-06-01	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W. AND FACE OF CURB &amp; EDGE OF SHOULDER &gt;= 15' (4.5 m)</b>	F.A.U. RTE. 2711	SECTION D-RS-3	COUNTY LAKE	TOTAL SHEETS 40	SHEET NO. 24	
es\pwork\pwork\byunsh\0101576\01st5.dgn	PLOT SCALE = 58.0000 / / IN.	DRAWN -	REVISED - P. LOFLUER 04-15-03			<b>BD0156-07 (BD-01)</b>		CONTRACT NO. 60E93			
	PLOT DATE = 1/13/2009	CHECKED -	REVISED - R. BORO 01-01-07			SCALE: NONE		SHEET NO. 1 OF 1 SHEETS		STA. TO STA.	
		DATE - 11-04-95	REVISED - R. BORO 06-11-08			FED. ROAD DIST. NO. 1 ILLINOIS		FED. AID PROJECT			

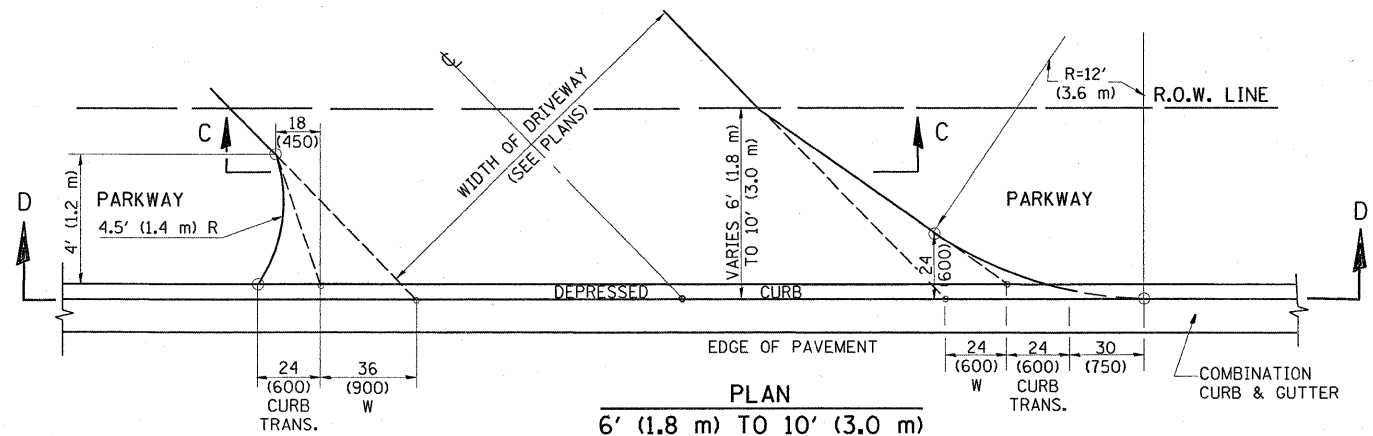




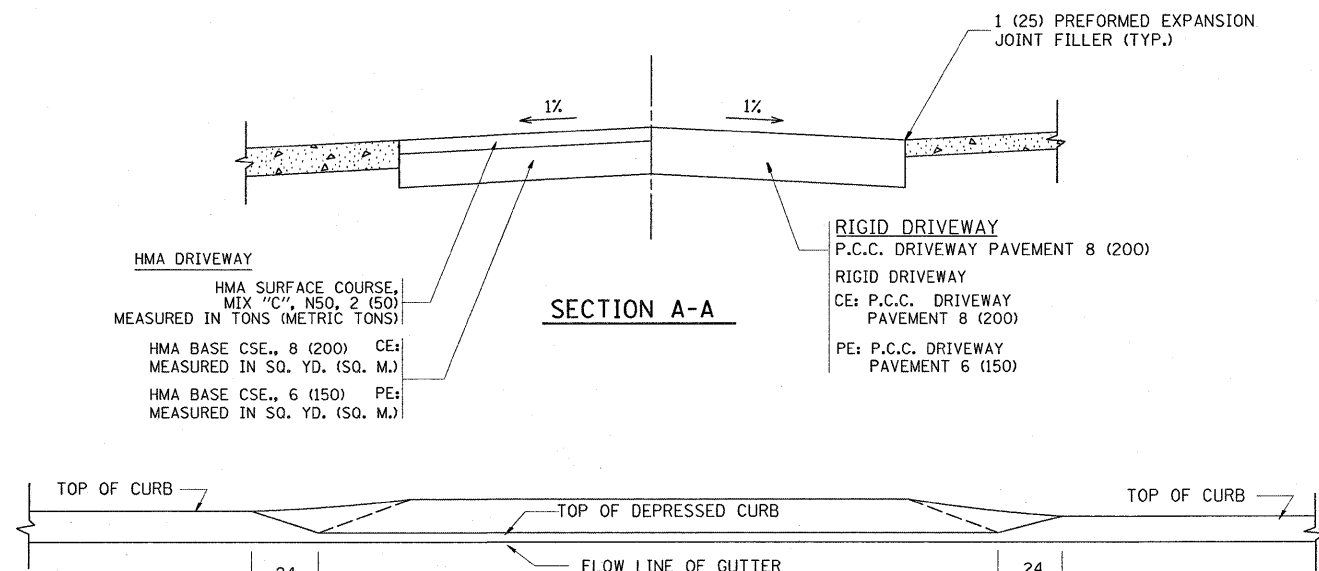
PLAN  
10' (3.0 m) TO < 15' (4.5 m)



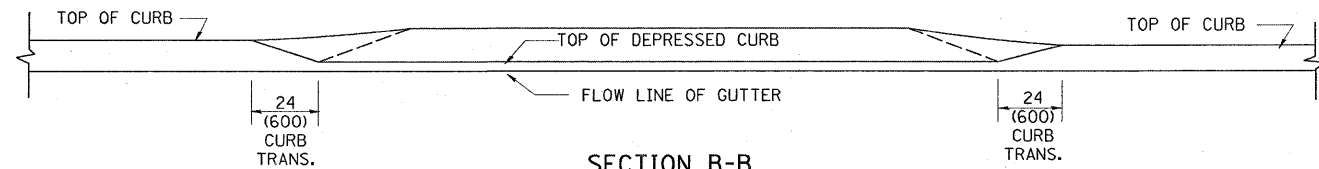
PLAN  
6' (1.8 m) TO < 10' (3.0 m)



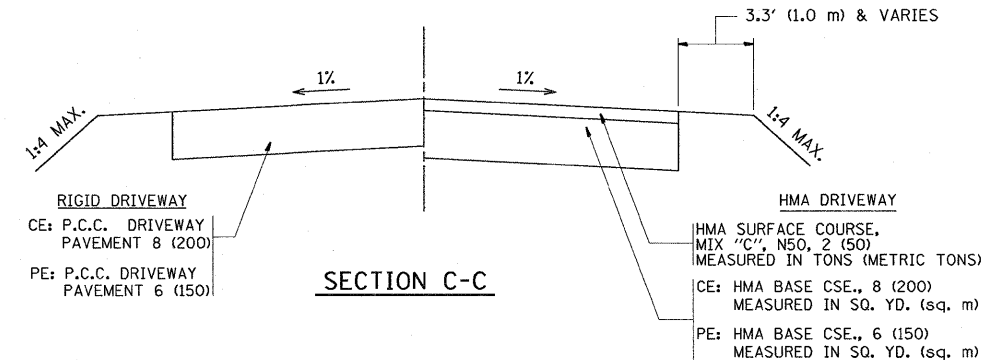
PLAN  
6' (1.8 m) TO 10' (3.0 m)



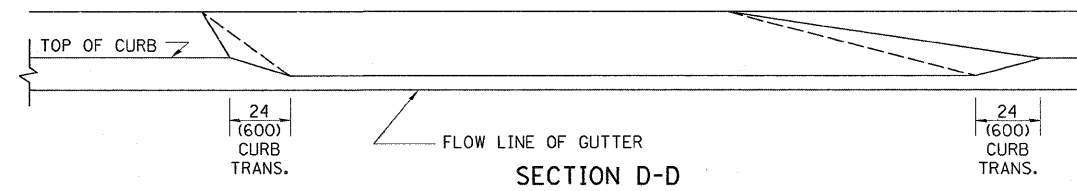
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

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.

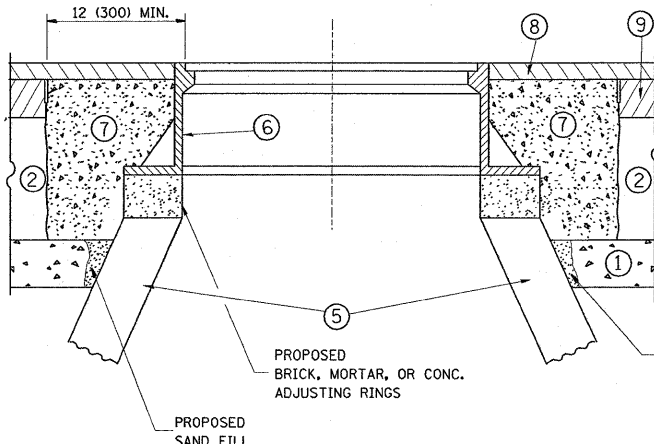
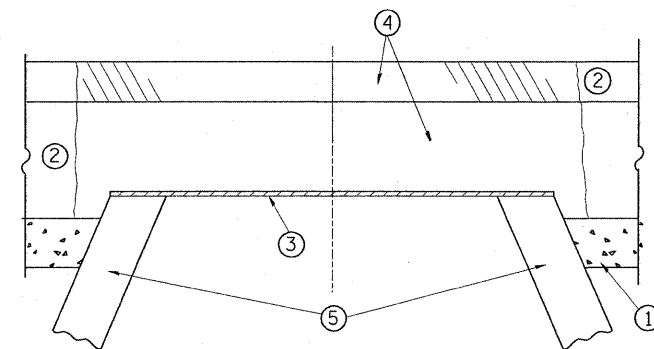
COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

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	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DRIVEWAY DETAILS</b>			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pw_work\pwi\dot\byunsh\d0101576\DistSto.dgn		DRAWN -	REVISED - M. GOMEZ 04-06-01		DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5 m)			2711	0-RS-3	LAKE	40	25
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - P. LAFLEUR 04-15-03		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	BD400-02 (BD-02)		CONTRACT NO. 60E93		
	PLOT DATE = 1/13/2009	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 1/2 (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.

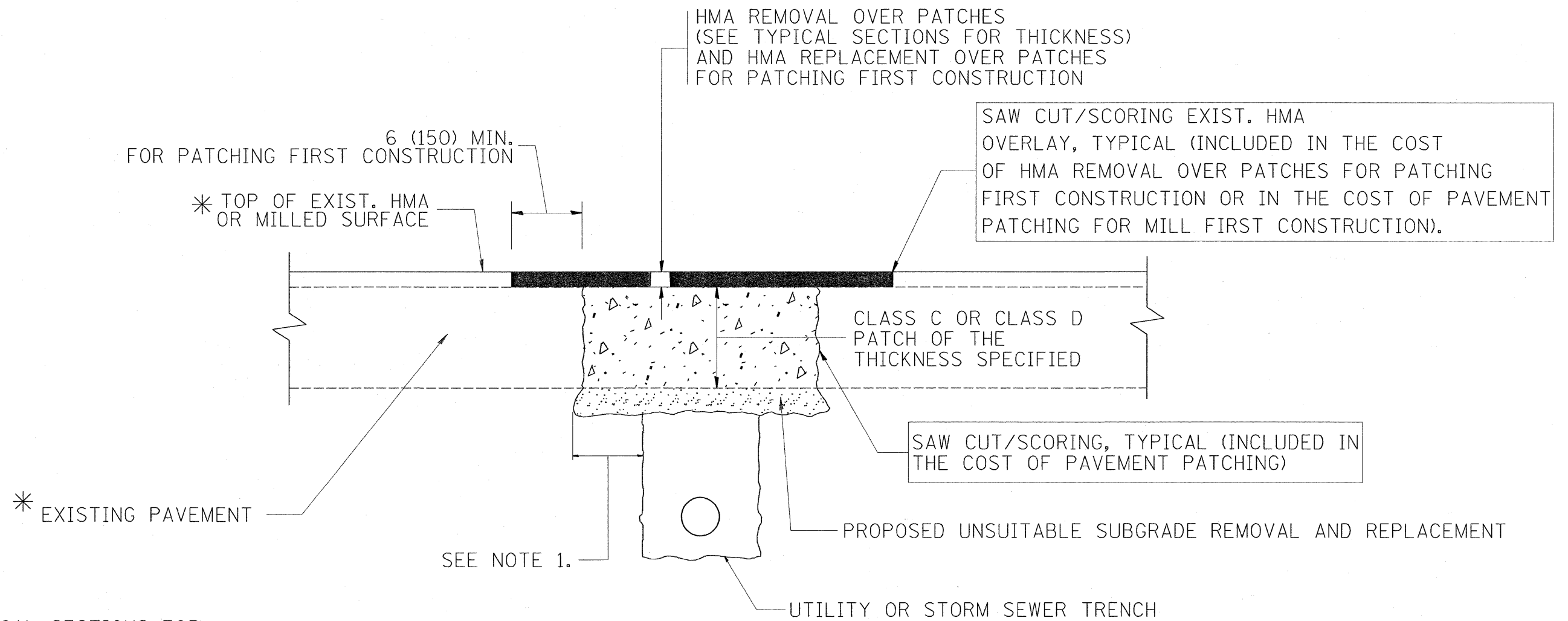
THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

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 = bygunsh	DESIGNED - R. SHAH	REVISED - R. SHAH 03-10-95	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING</b>		F.A.U. RTE. 2711	SECTION D-RS-3	COUNTY LAKE	TOTAL SHEETS 40	SHEET NO. 26
cd:\pw_work\pwsdot\bygunsh\d0101576\01st5tdgn		DRAWN -	REVISED - A. ABBAS 03-21-97		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	<b>BD600-03 (BD-8)</b>		CONTRACT NO. 60E93	
		CHECKED -	REVISED - R. WIEDEMAN 05-14-04		FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT						
		DATE - 10-25-94	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 = byunsh	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pwwork\pwwork\byunsh\d0101576\01st5tdgn	DRAWN -	REVISED - R. BORO 01-01-07	2711			D-RS-3	LAKE	40	27	
PLOT SCALE = 50,0000' / IN.	CHECKED -	REVISED - R. BORO 09-04-07	<b>BD400-04 (BD-22)</b>			CONTRACT NO. 60E93				
PLOT DATE = 1/13/2009	DATE - 10-25-94	REVISED - K. ENG 10-27-08	SCALE: NONE			SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	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

18" (450) MAX.

EXISTING OR PROPOSED HMA SURFACE (IF APPLICABLE)

1/4" (5) \*\*

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.

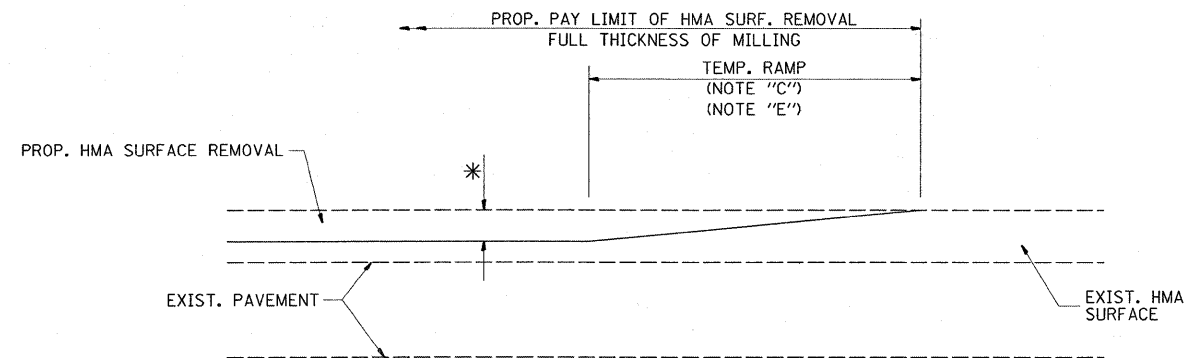
⑥ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.

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

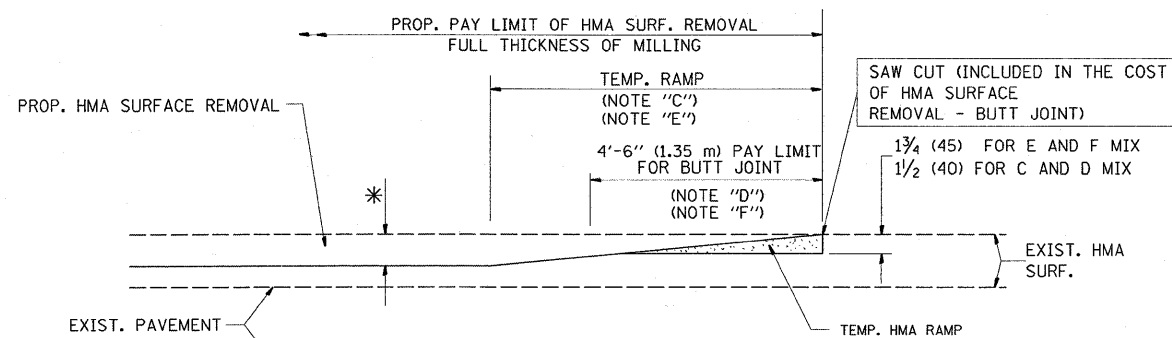
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = byunsh	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT</b>			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
c:\pw_work\pawdot\byunsh\d0101576\01st.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97		SCALE: NONE	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	2711	D-RS-3	LAKE	40	28
		PLDT SCALE = 50.0000" / IN.	REVISED - M. GOMEZ 01-22-01								<b>BD600-06 (BD-24)</b>	CONTRACT NO.	60E93	
		PLDT DATE = 1/13/2009	REVISED - R. BORO 01-01-07								FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT			



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

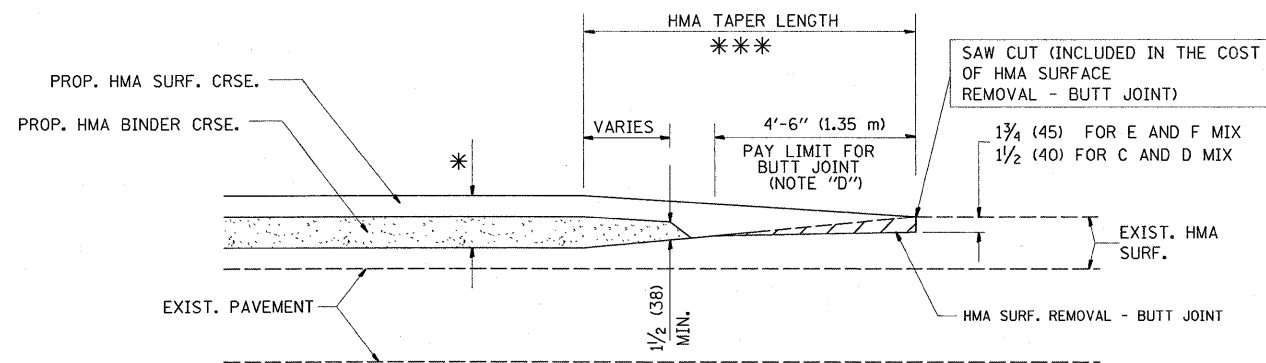
**OPTION 1**



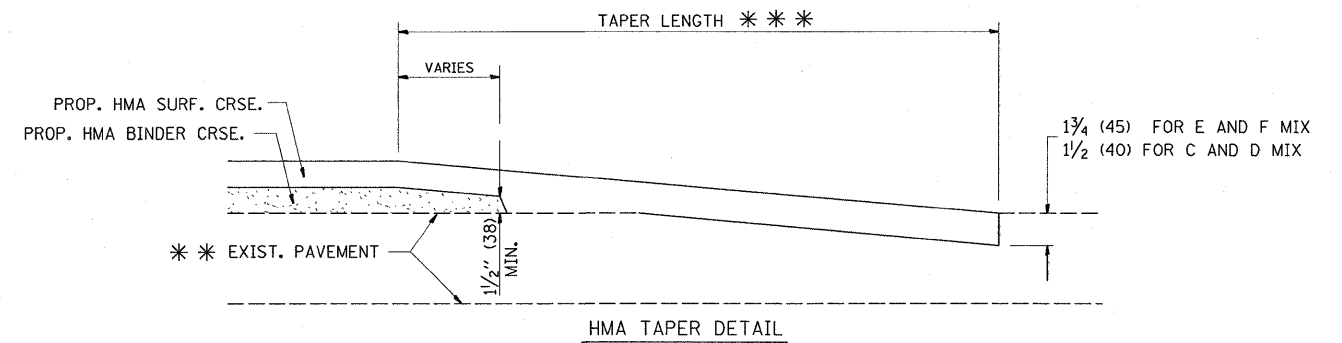
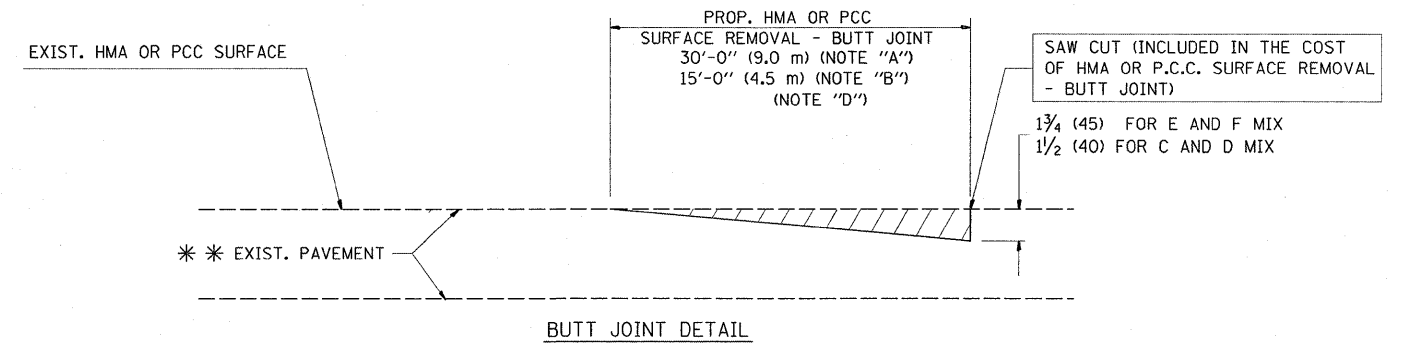
HMA CONSTRUCTED TEMPORARY RAMP  
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

**OPTION 2**

**TYPICAL TEMPORARY RAMP**



**TYPICAL BUTT JOINT AND HMA TAPER  
FOR MILLING AND RESURFACING**



**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.

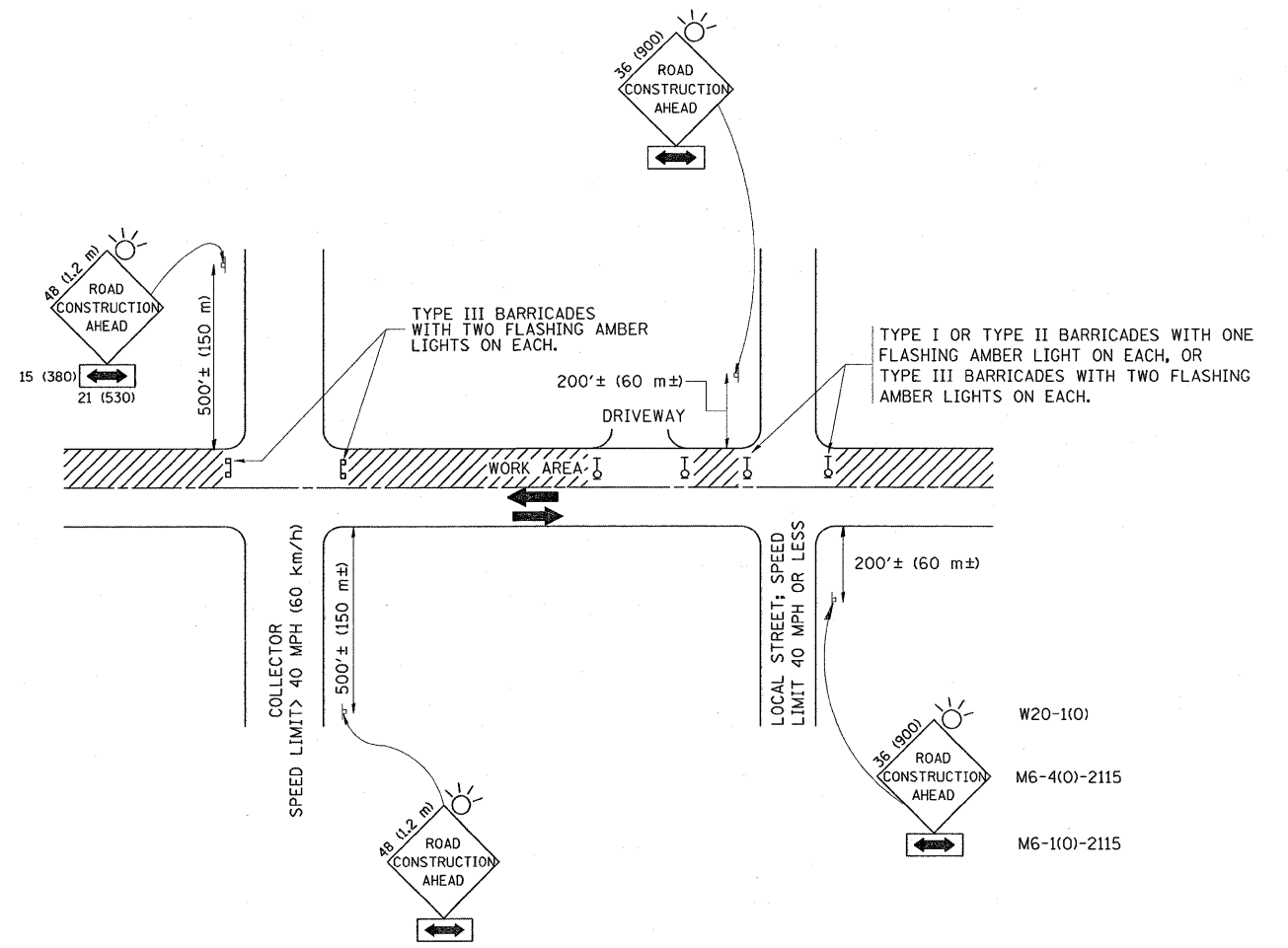
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		CHECKED -	REVISED - M. GOMEZ 04-06-01
		DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BUTT JOINT AND  
HMA TAPER DETAILS**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2711	D-RS-3	LAKE	40	29
BD400-05 BD32			CONTRACT NO. 60E93	
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.

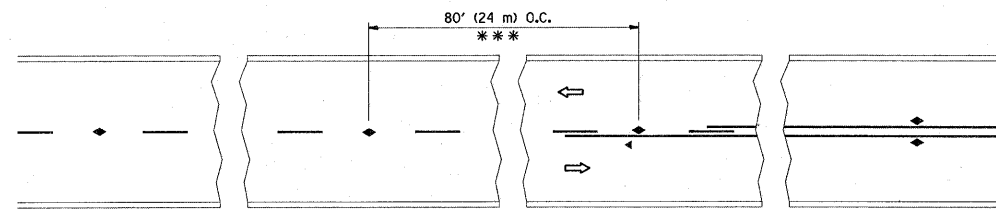
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		CHECKED -	REVISED - A. HOUSEH 10-15-96
		DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

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

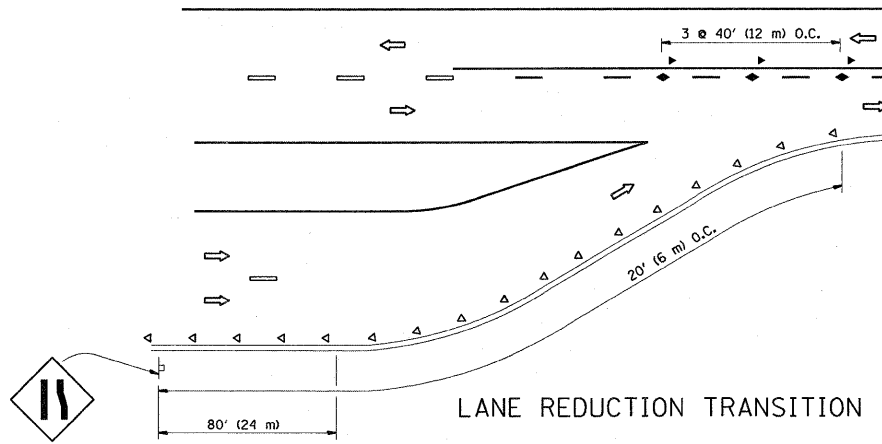
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2711	D-RS-3	LAKE	40	30
TC-10			CONTRACT NO. 60E93	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

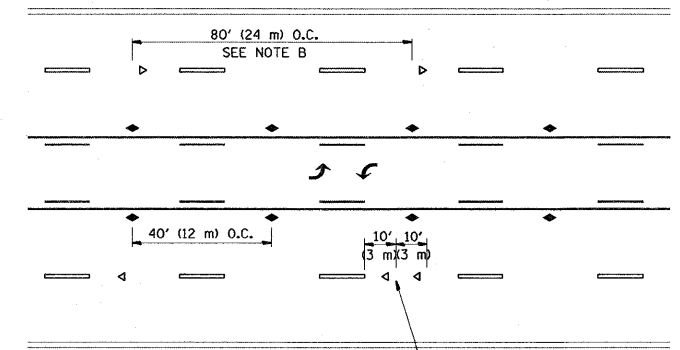


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

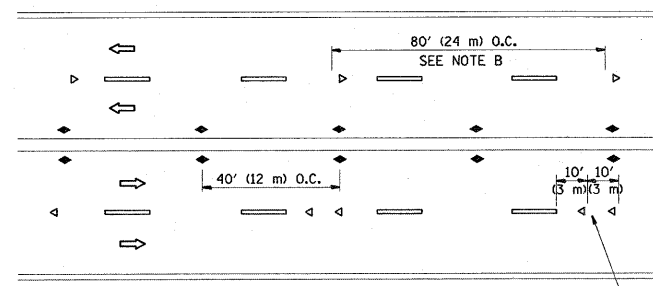
TWO-LANE/TWO-WAY



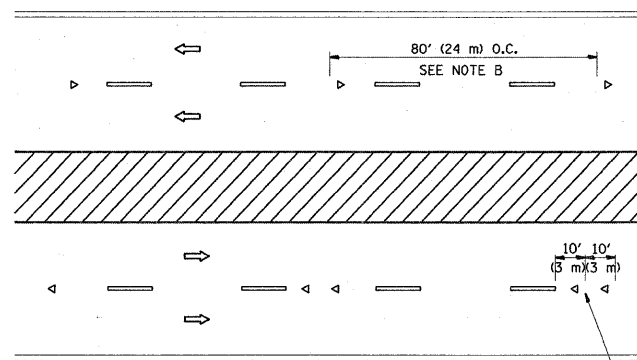
LANE REDUCTION TRANSITION



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

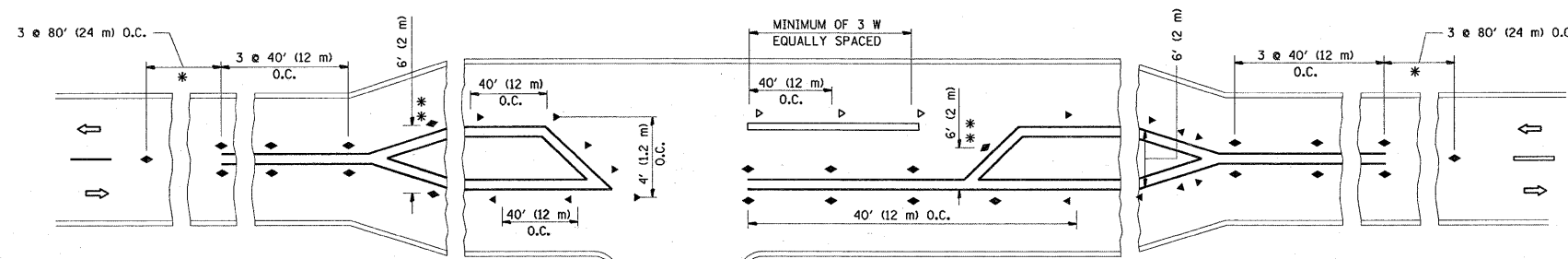
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◀ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

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.



LEFT TURN

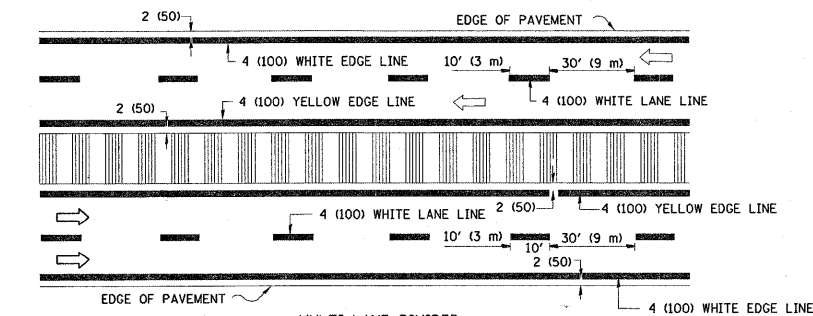
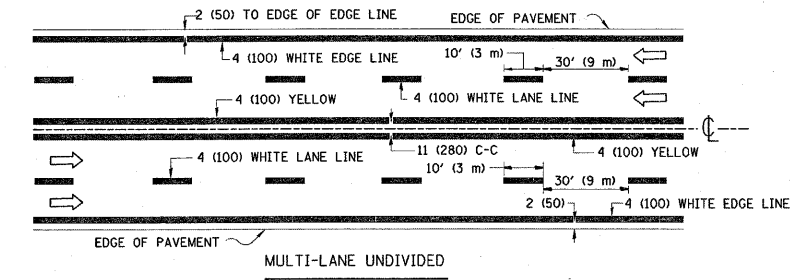
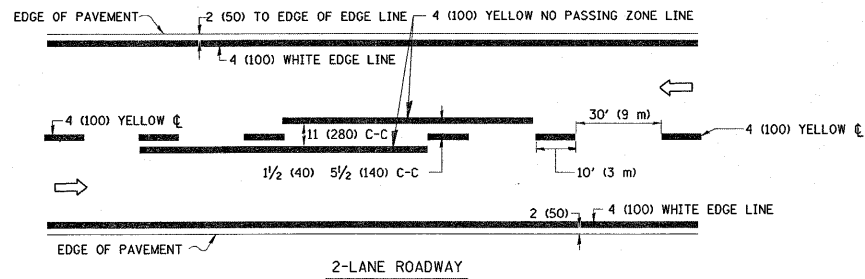
\* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE  
 \*\* WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

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

FILE NAME = es:\pw\work\p\dot\byunsh\d0101576\01stSt.dgn	USER NAME = byunsh	DESIGNED -	REVISED - T. RAMMACHER 09-19-94
		DRAWN -	REVISED - T. RAMMACHER 03-12-99
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	PLOT DATE = 1/13/2009	DATE -	REVISED -

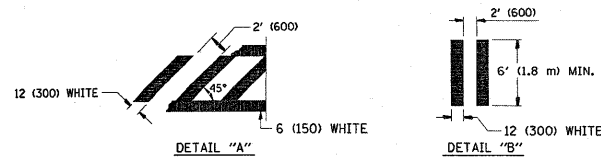
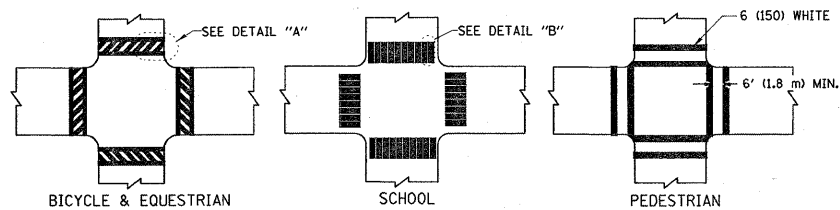
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLow RESISTANT)		2711	D-RS-3	LAKE	40	31
SCALE: NONE		SHEET NO. 1 OF 1 SHEETS		CONTRACT NO. 60E93		
STA. TO STA.		FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT				

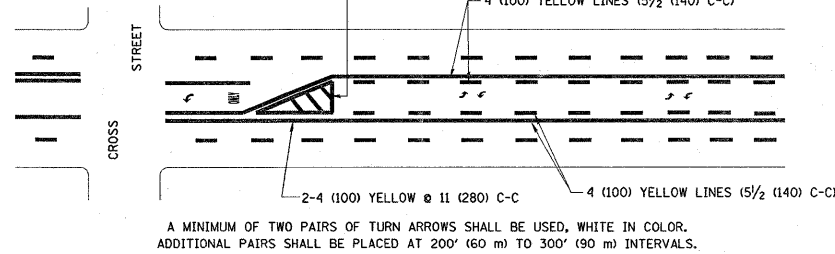
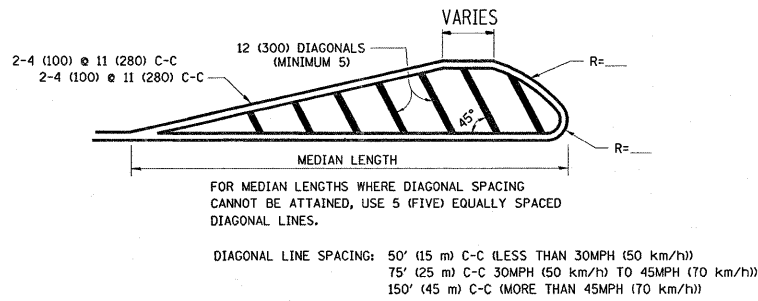
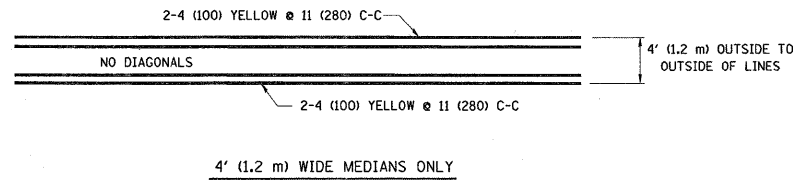


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

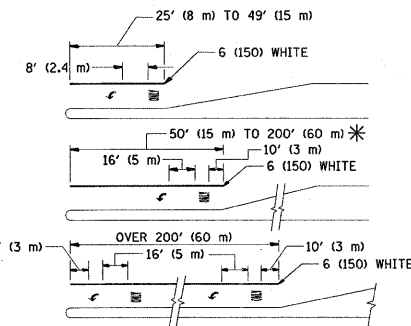
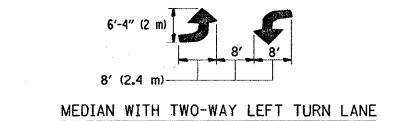
**TYPICAL LANE AND EDGE LINE MARKING**



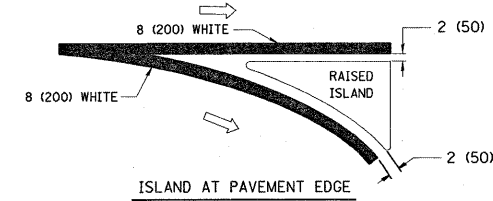
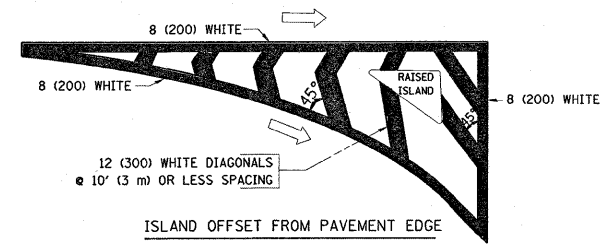
**TYPICAL CROSSWALK MARKING**



**TYPICAL PAINTED MEDIAN MARKING**



**TYPICAL TURN LANE MARKING**



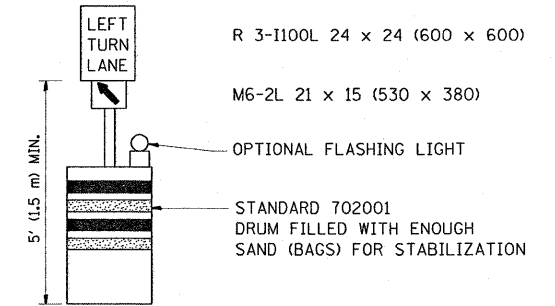
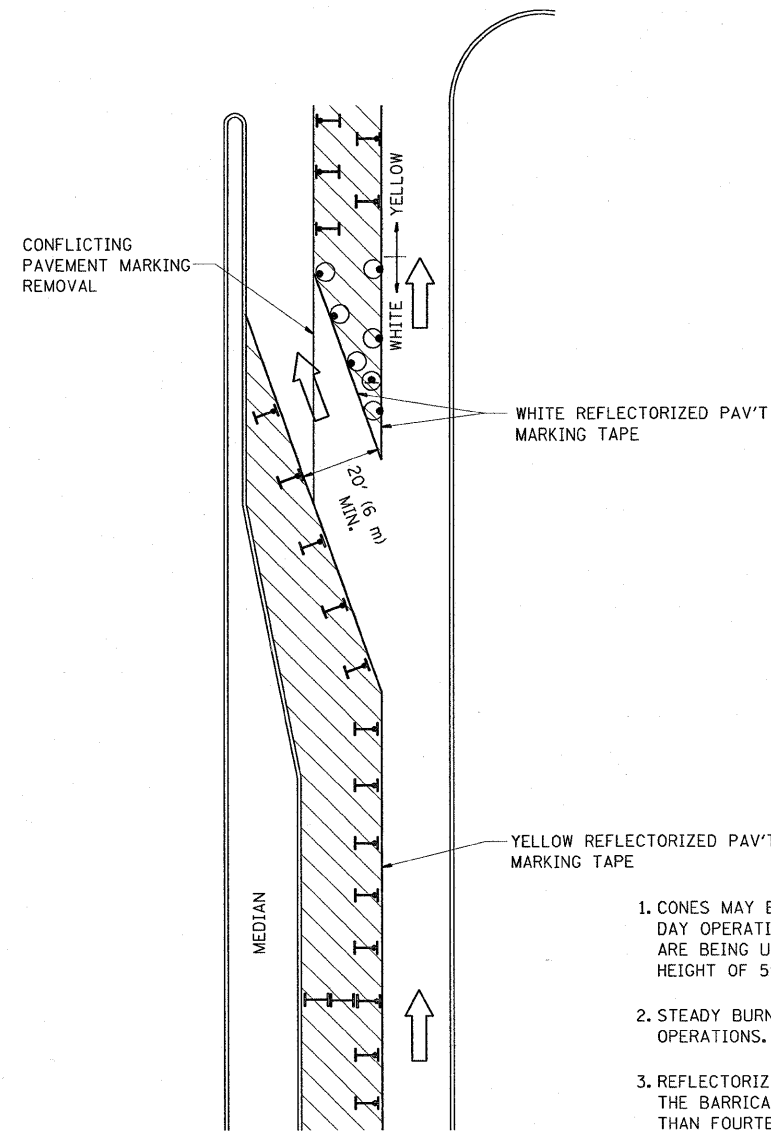
**TYPICAL ISLAND MARKING**

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 1/2 (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 1/2 (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 m²) EACH "X"=54.0 SQ. FT. (5.0 m²)
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.



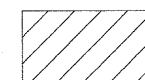







**GENERAL NOTES**

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.

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

**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

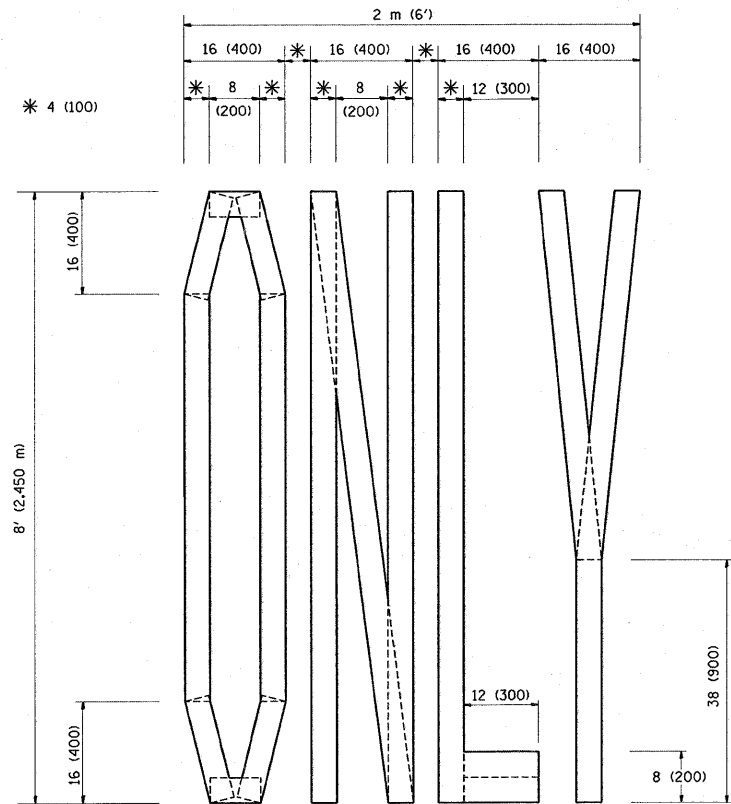
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		CHECKED -	REVISED - A. HOUSEH 10-12-96
		DATE -	REVISED -T. RAMMACHER 01-06-00

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

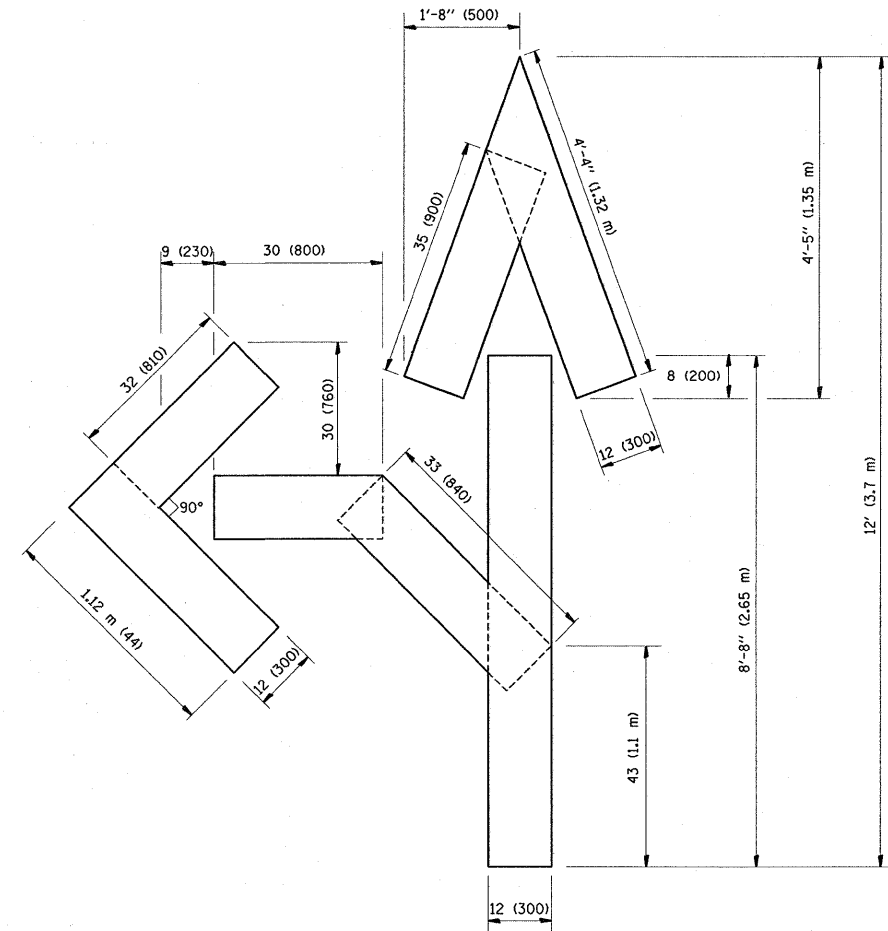
**TRAFFIC CONTROL AND PROTECTION AT TURN BAYS  
(TO REMAIN OPEN TO TRAFFIC)**

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

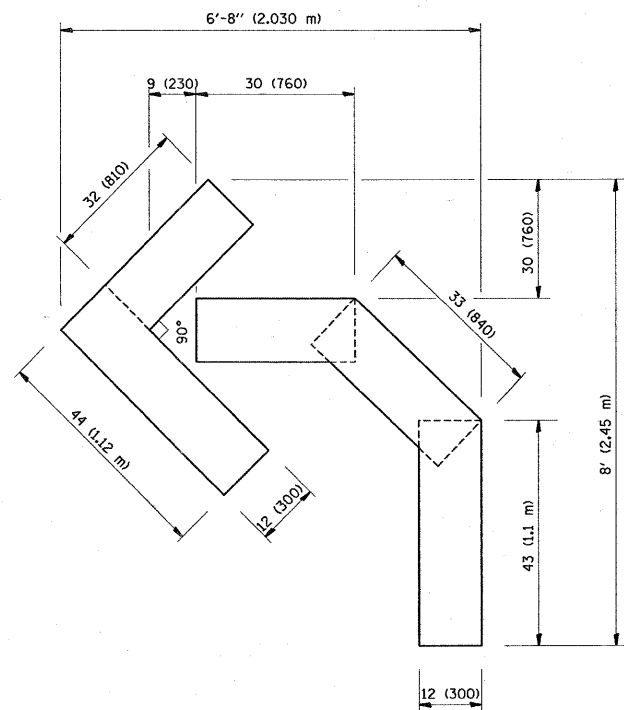
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2711	D-RS-3	LAKE	40	33
TC-14			CONTRACT NO. 60E93	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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.

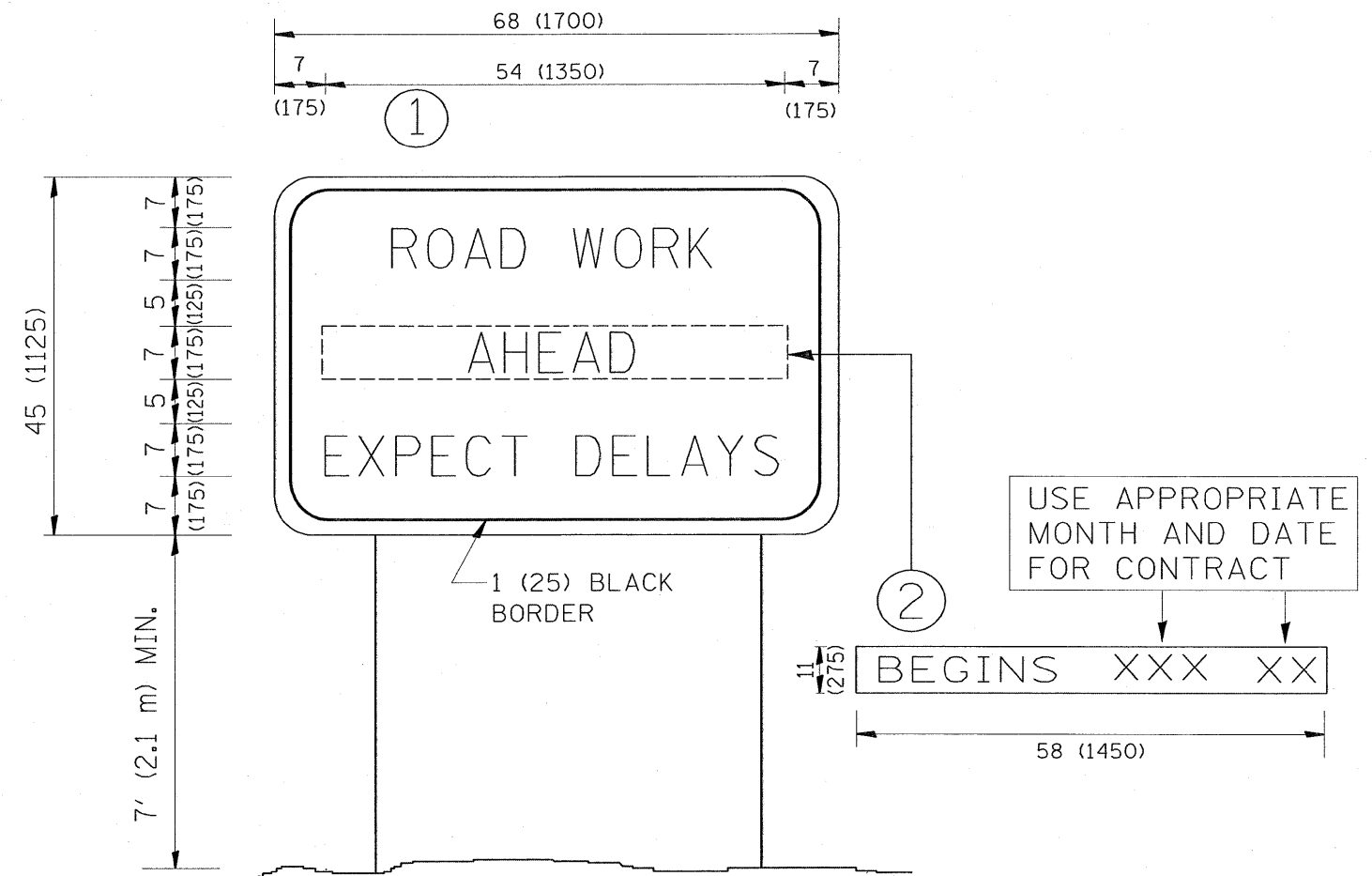
FILE NAME =	USER NAME = byunsh	DESIGNED -	REVISED -T. RAMMACHER 06-05-96
ca:\pw_work\pawidot\byunsh\d0101576\01stst.dgn		DRAWN -	REVISED -T. RAMMACHER 11-04-97
		CHECKED -	REVISED -T. RAMMACHER 03-02-98
		DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING LETTERS AND SYMBOLS  
 FOR TRAFFIC STAGING**

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

F.A.U. RTE. 2711	SECTION D-RS-3	COUNTY LAKE	TOTAL SHEETS 40	SHEET NO. 34
TC-16			CONTRACT NO. 60E93	
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 = byunsh	DESIGNED -	REVISED - R. MIRS 09-15-97
cs:\pw_work\pw\dot\byunsh\d0101576\Dist5t.dgn		DRAWN -	REVISED - R. MIRS 12-11-97
		CHECKED -	REVISED - T. RAMMACHER 02-02-99
		DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

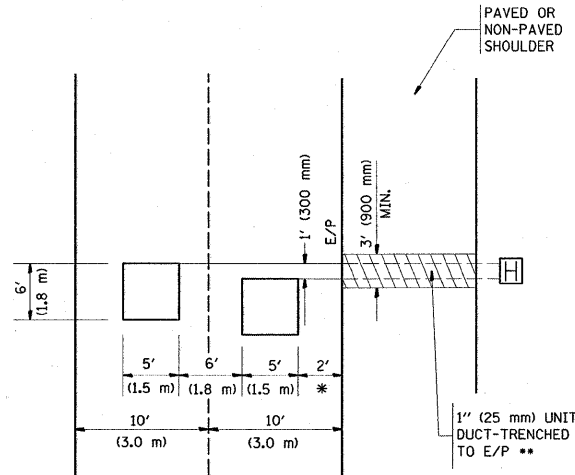
**ARTERIAL ROAD  
INFORMATION SIGN**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2711	D-RS-3	LAKE	40	35
TC-22			CONTRACT NO. 60E93	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

**LOOPS NEXT TO SHOULDERS**

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

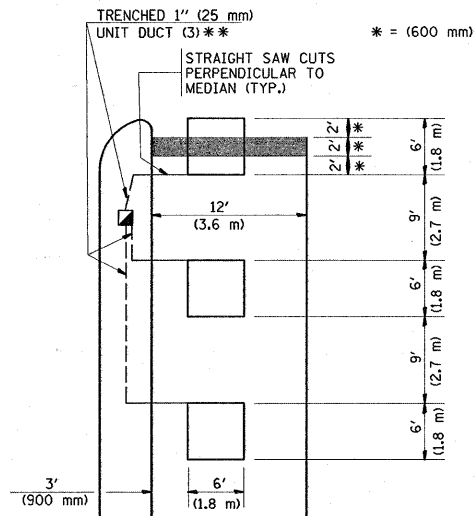


\* = (600 mm)

\*\* 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)**

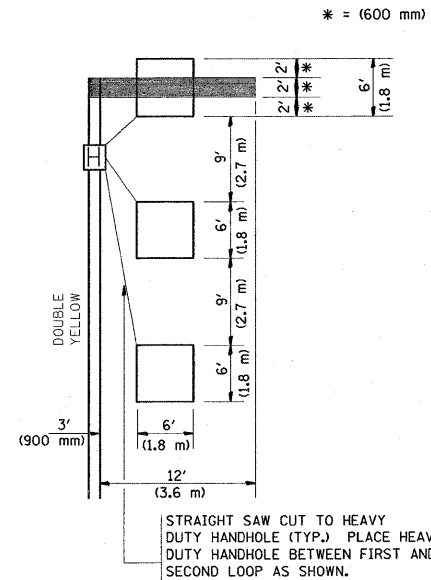
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



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

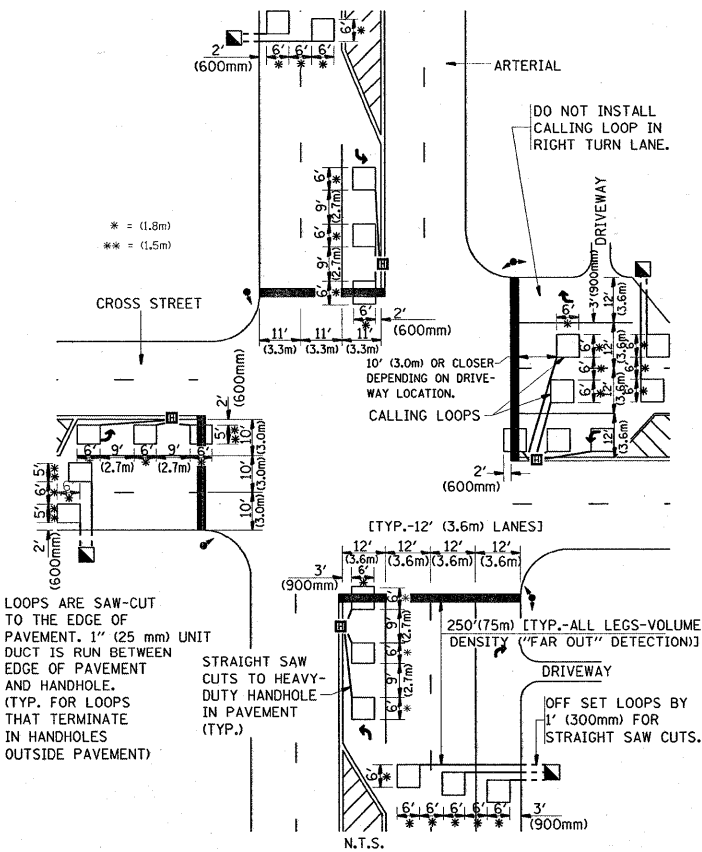
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



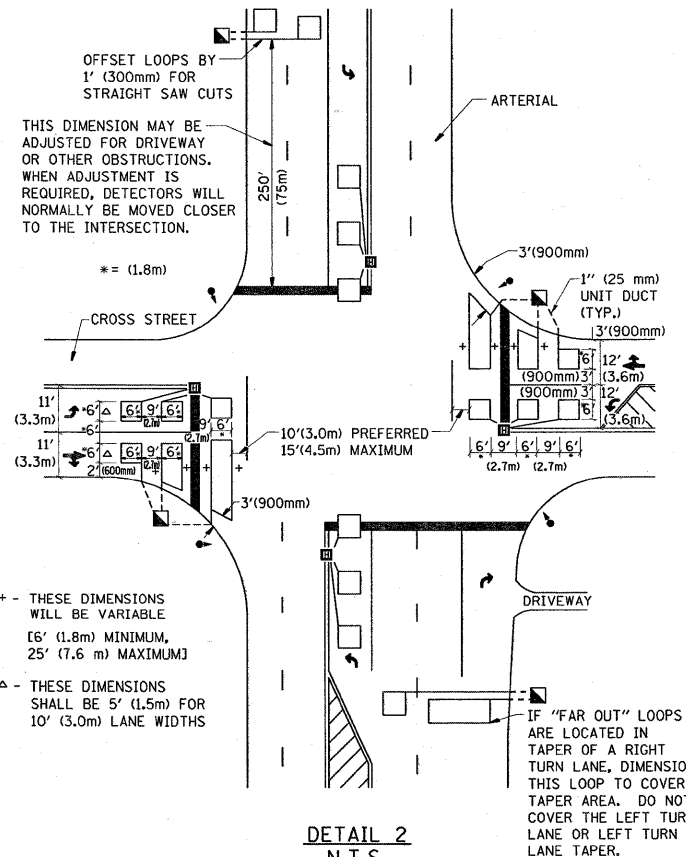
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

**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 DIMENSIONS 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

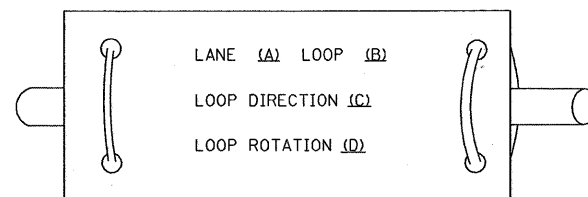
THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

FILE NAME =	USER NAME = bygunsh	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ca:\pw_work\pwwdot\bygunsh\d0101576\Dist1st5.dgn	PLOT SCALE = 50.0000' / IN.	DRAWN -	REVISED -			2711	D-RS-3	LAKE	40	36
PLOT DATE = 1/13/2009	DATE -	CHECKED - R.K.F.	REVISED -			<b>TS-07</b>		CONTRACT NO. 60E93		
		DATE -	REVISED -			SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

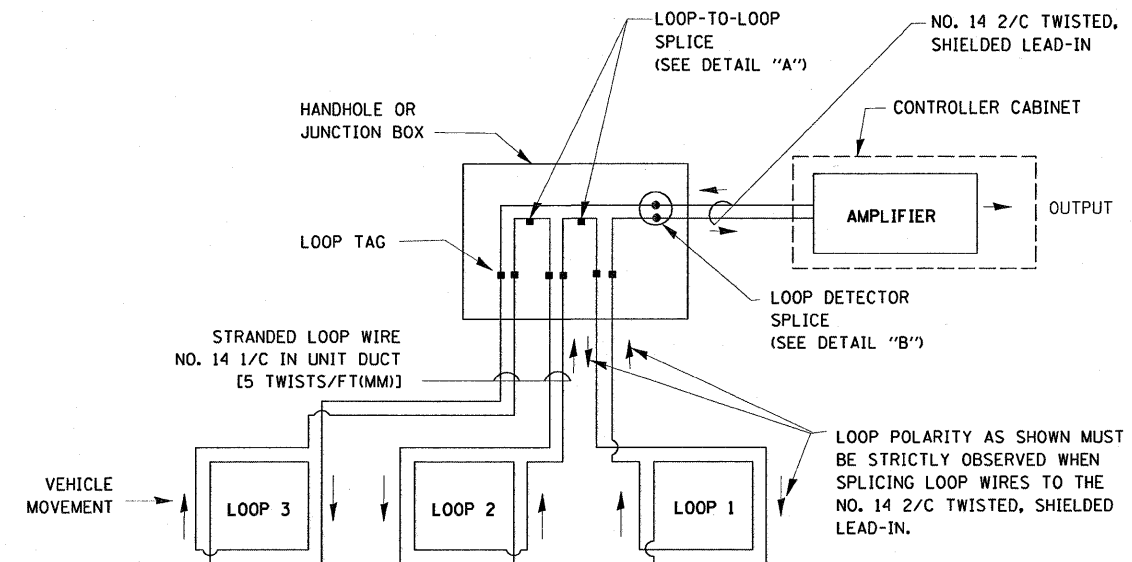
## LOOP DETECTOR NOTES

- 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.
- 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.
- 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.
- ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- 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.
- 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.
- 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.

### LOOP LEAD-IN CABLE TAG

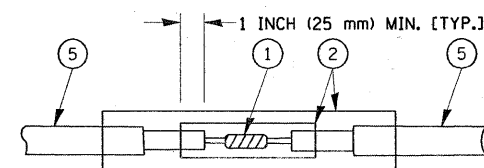


- LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

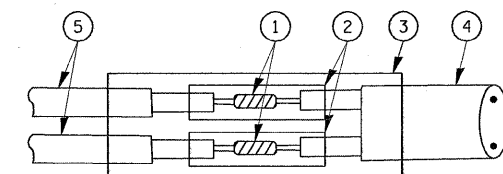


### DETECTOR LOOP WIRING SCHEMATIC

- 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.



DETAIL "A"  
LOOP-TO-LOOP SPLICE



DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

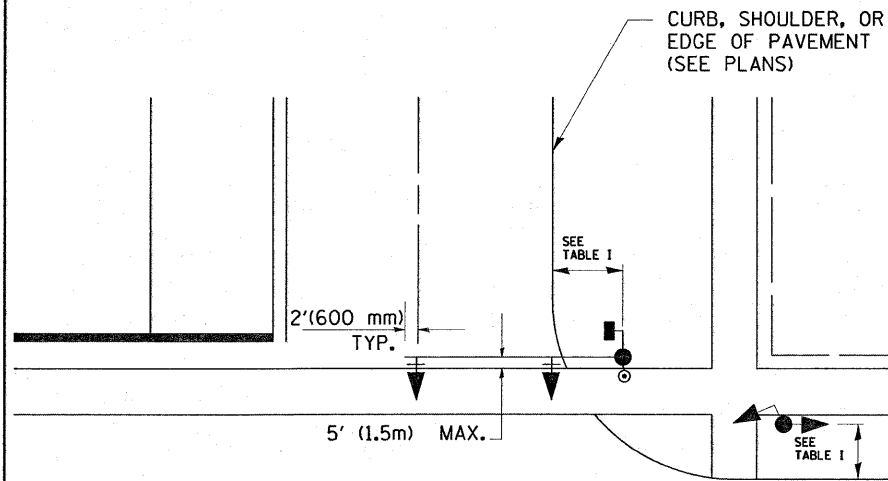
### LOOP DETECTOR SPLICE

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

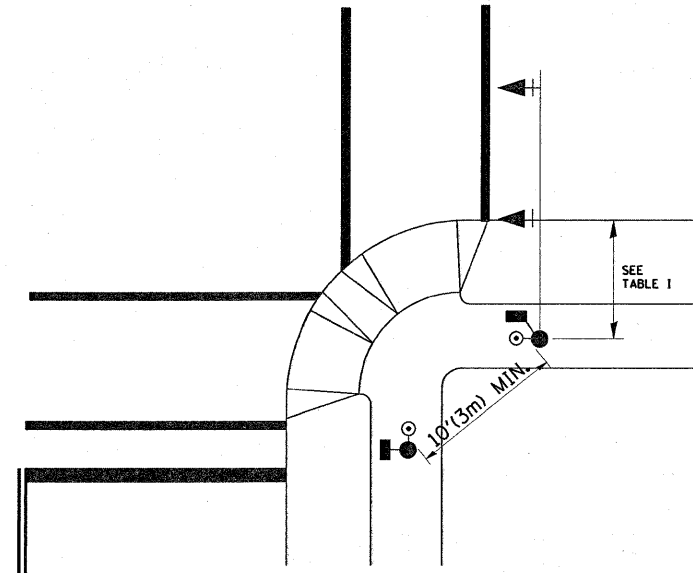
FILE NAME =	USER NAME = byunsh	DESIGNED - D.A.D.	REVISED - 11-12-01	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ca\pw_work\pw\dot\byunsh\d0101576\Dis tStd.dgn	DRAWN - R.W.P.	REVISED - BUR. TRAFFIC 01-01-02	2711			D-RS-3	LAKE	40	37	
PLOT SCALE = 50.0000 ' / IN.	CHECKED - D.A.Z.	REVISED -	<b>TS-05</b>			CONTRACT NO. 60E93				
PLOT DATE = 1/13/2009	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**



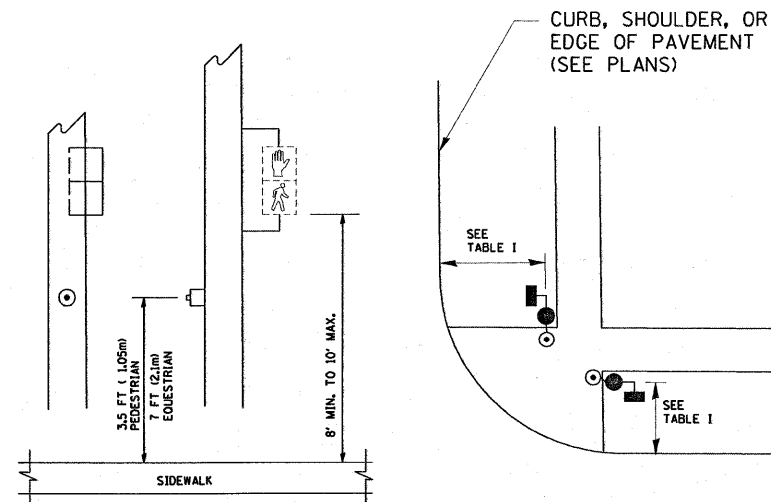
RECOMMENDED PUSHBUTTON LOCATIONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHALL BE IN ACCORDANCE WITH THE CURRENT MUTCD (SEE NOTE 1). TO MEET MUTCD REQUIREMENTS, PEDESTRIAN SIGNAL PUSHBUTTONS MAY HAVE TO BE MOUNTED ON A SEPARATE POST.

**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**

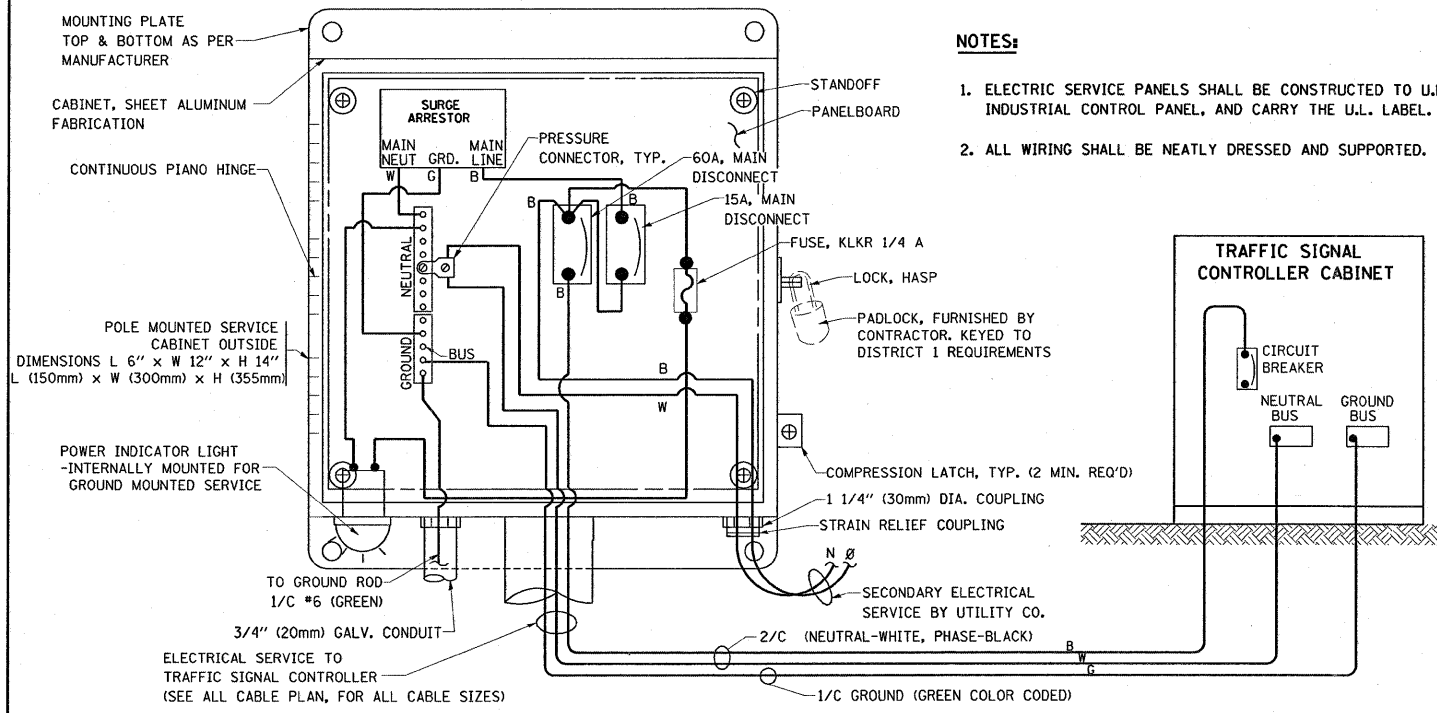
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MIN. DIST. FROM BACK OF CURB)	SHOULDER/NON-CURBED AREA (MIN. DIST. FROM EDGE OF PAVEMENT)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m),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

FILE NAME =	USER NAME = byunsh	DESIGNED - D.A.D.	REVISED - BUR. TRAFFIC 01-01-02
ca:\pw_work\pwi\d0t\byunsh\d0101576\01st5.dgn		DRAWN - R.W.P.	REVISED -
		CHECKED - D.A.Z.	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

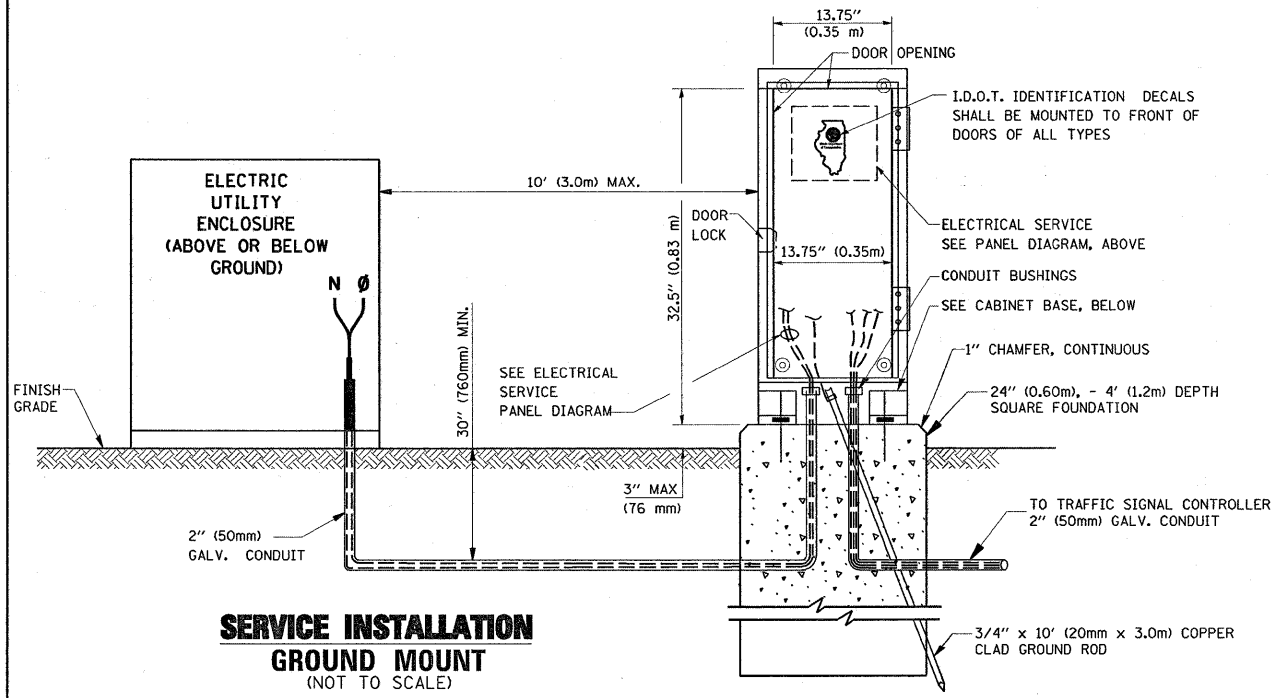
<b>DISTRICT ONE</b>	
<b>STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>	
SCALE: NONE	SHEET NO. 2 OF 4 SHEETS STA. TO STA.

F.A.U. RTE. 2711	SECTION D-RS-3	COUNTY LAKE	TOTAL SHEETS 40	SHEET NO. 38
<b>TS-05</b>		CONTRACT NO. 60E93		
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				

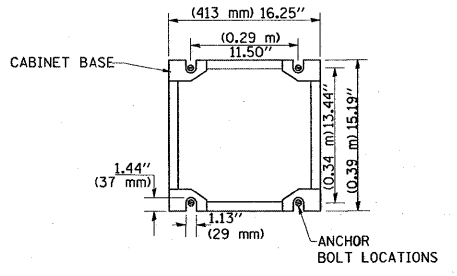


**ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)**

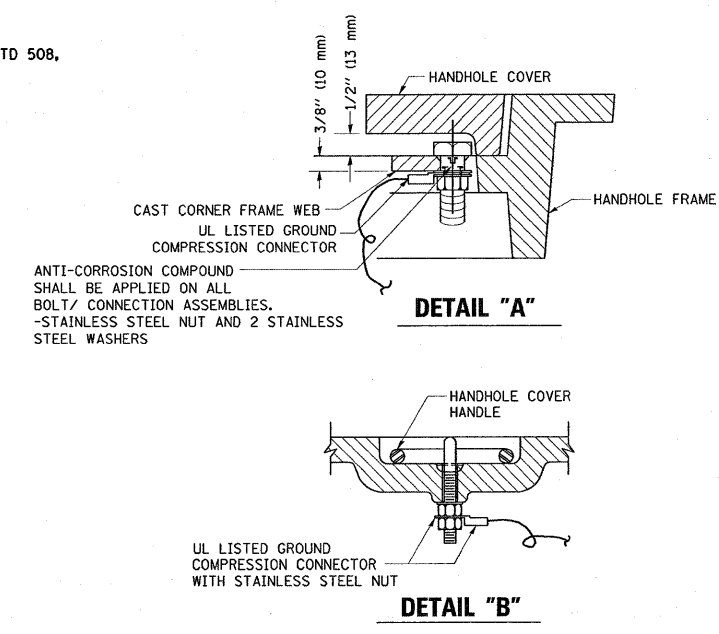
**SERVICE INSTALLATION POLE MOUNT (SHOWN) (NOT TO SCALE)**



**SERVICE INSTALLATION GROUND MOUNT (NOT TO SCALE)**



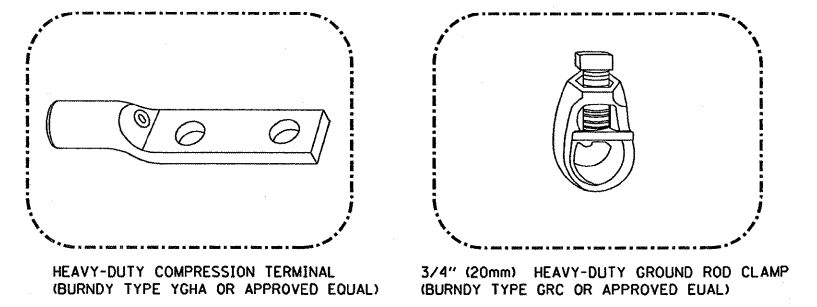
**CABINET - BASE BOLT PATTERN (NOT TO SCALE)**



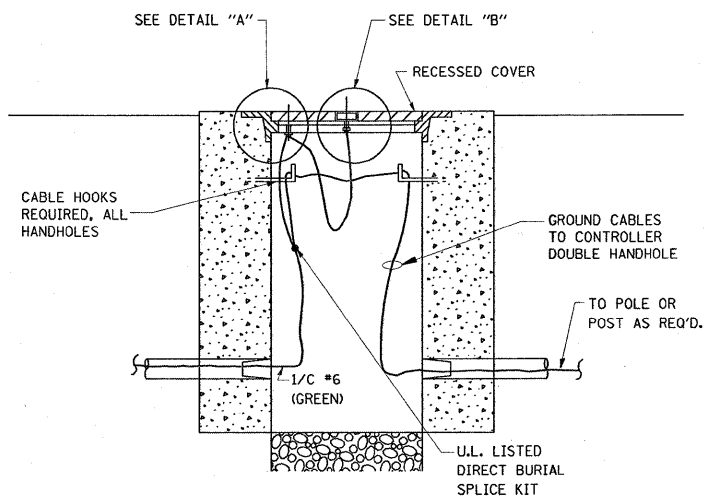
**NOTES:**

**GROUNDING SYSTEM**

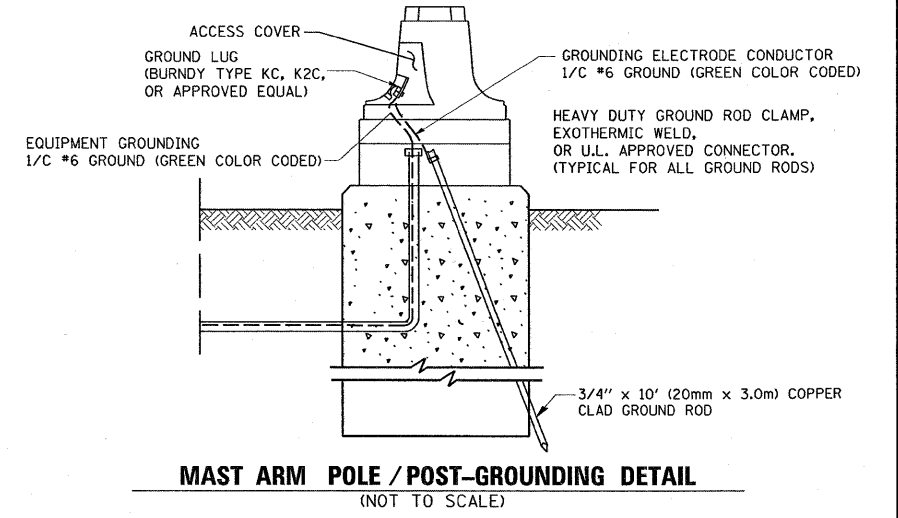
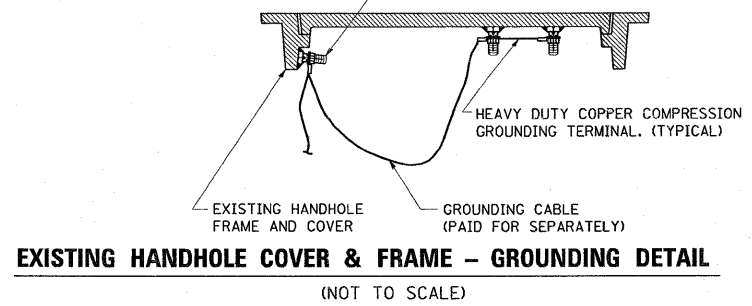
1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, 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.
2. 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.
3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
4. 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.



(2) 1/2" x 1 1/4" STAINLESS STEEL BOLT WITH SPLIT LOCK WASHER AND NYLON INSERT LOCKOUT WELDED TO FRAME AND TO COVER. (TYPICAL)



FILE NAME =	USER NAME = byjush	DESIGNED - D.A.D.	REVISED - 03-15-01
ca:\pw\work\p10101\byjush\d0101576\01st576.dgn		DRAWN - R.W.P.	REVISED - BUR. TRAFFIC 01-01-02
PLOT SCALE = 50,0000' / IN.		CHECKED - D.A.Z.	REVISED -
PLOT DATE = 1/13/2009		DATE - 05-30-00	REVISED -

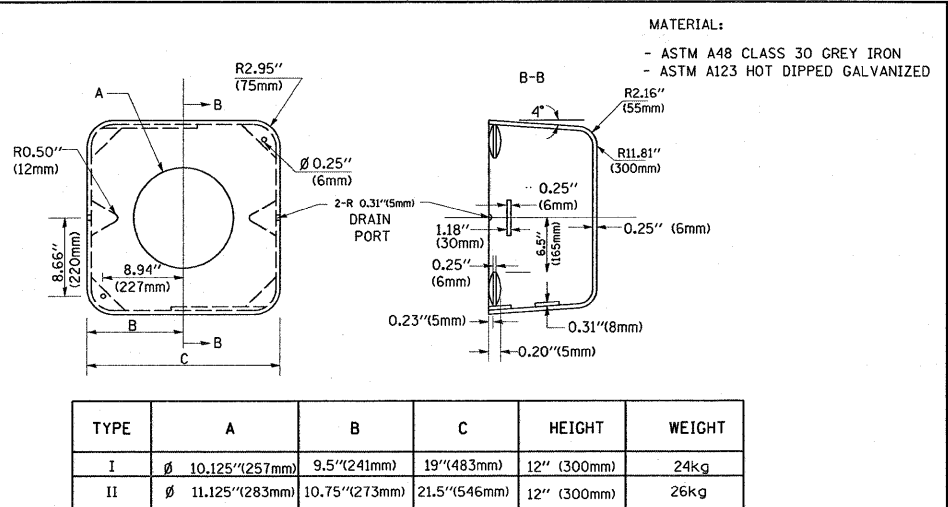
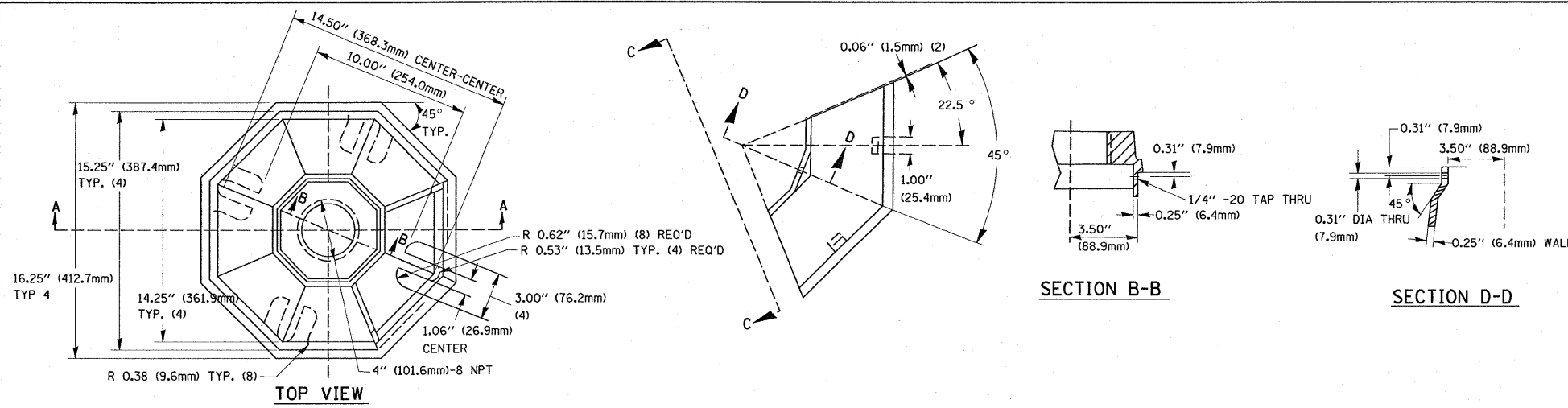
**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET NO. 3 OF 4 SHEETS STA. TO STA.

F.A.U. RTE. 2711	SECTION D-RS-3	COUNTY LAKE	TOTAL SHEETS 40	SHEET NO. 39
TS-05			CONTRACT NO. 60E93	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				





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

