

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPOSED  
HIGHWAY PLANS**

FAU ROUTE 1622 (183RD STREET)  
OAK PARK AVENUE TO IL ROUTE 50 (CICERO AVENUE)

SECTION: 3075 RS-1

RESURFACING (3P)

COOK COUNTY

C-91-575-09

O.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1622	3075 RS-1	COOK	33	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 60H19		

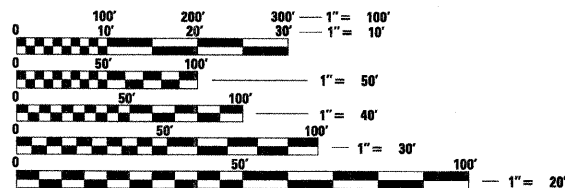
D-91-575-09

FOR INDEX OF SHEETS, SEE SHEET NO. 2

ADT 20000 (2009)  
SPEED LIMIT 50 MPH

**OMMISSIONS**

STA. 45+38 TO STA. 53+70  
STA. 78+20 TO STA. 81+40  
STA. 131+80 TO STA. 134+34  
STA. 149+40 TO STA. 156+40

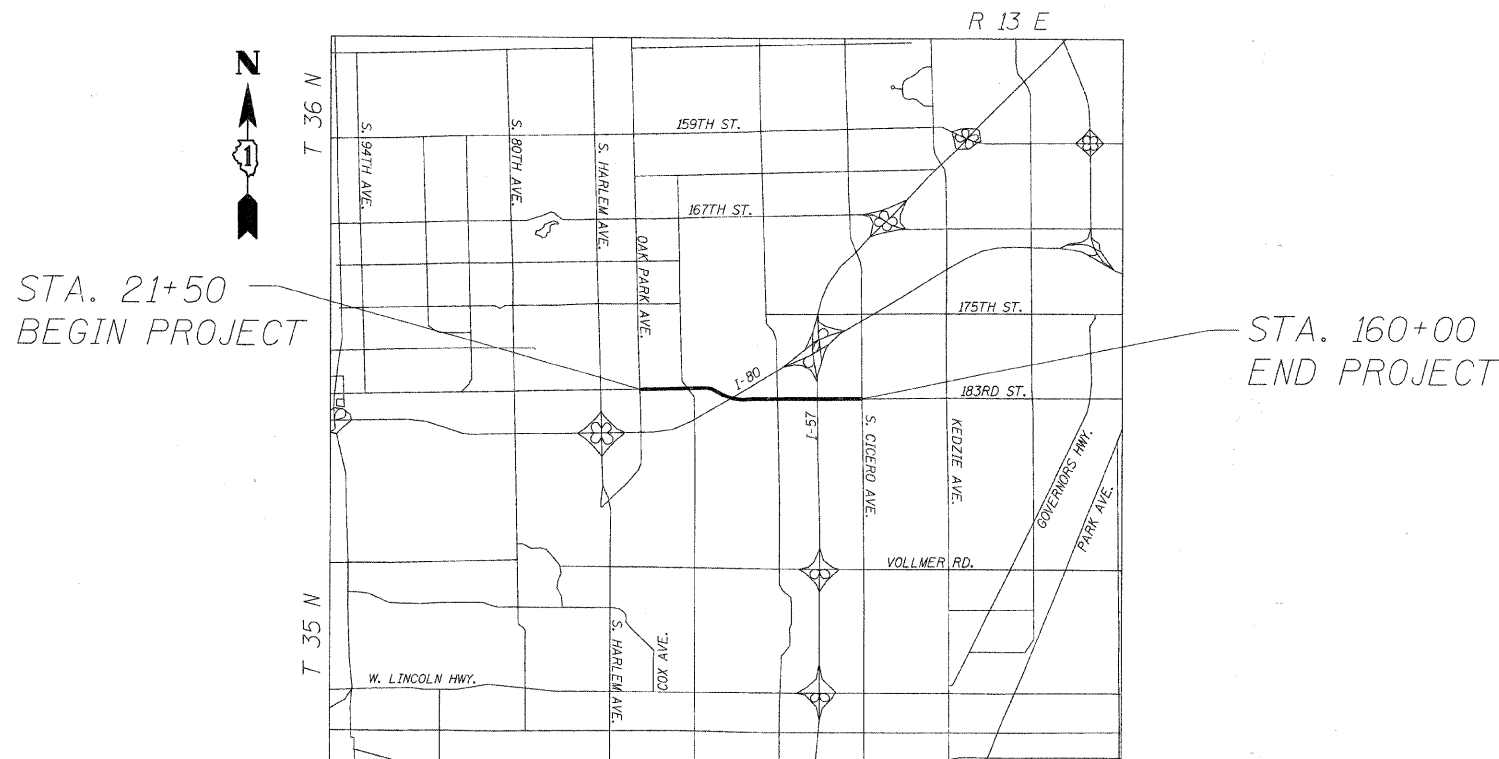


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER: REJENDRA C. SHAH (847) 705-4555  
PROJECT MANAGER: CATHERINE KIBBLE (847) 705-4269

CONTRACT NO. 60H19



LOCATION SKETCH

GROSS LENGTH OF PROJECT = 13,850' = 2.623 MI  
NET LENGTH OF PROJECT = 11,744' = 2.224 MI

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED April 15, 2009  
Diana M. O'Keefe DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER  
May 1, 2009  
Charles G. Ingersoll ENGINEER OF DESIGN AND ENVIRONMENT  
May 1, 2009  
Christine M. Reed DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

LOWCO, INC.  
CONSULTING ENGINEERS  
1560 WALL ST, SUITE 222  
NAPERVILLE, ILLINOIS 60563 PH: (630) 577-9100

WILLIAM H. REED  
062-047827  
REGISTERED  
PROFESSIONAL  
ENGINEER  
W. Reed  
Expires 1/30/09

INDEX OF SHEETS

STATE STANDARDS

PLAN NOTES

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
1	TITLE SHEET
2	INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES
3	SUMMARY OF QUANTITIES
4	EXISTING AND PROPOSED TYPICAL CROSS SECTIONS
5-9	ROADWAY AND PAVEMENT MARKING PLANS
10-12	DETECTOR LOOP PLANS
13	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING (BD-08)
14	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT (BD-22)
15	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
16	BUTT JOINT AND HMA TAPER DETAILS (BD-32)
17	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)
18	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLow RESISTANT) (TC-11)
19	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)
20	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) (TC-14)
21	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING (TC-16)
22	ARTERIAL ROAD INFORMATION SIGN (TC-22)
23	DISTRICT ONE DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING (TS-07)

<u>STANDARD NO.</u>	<u>DESCRIPTION</u>
000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
442201-03	CLASS C AND CLASS D PATCHES
701301-03	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING DAY OPERATIONS
701501-05	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701701-06	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901-01	TRAFFIC CONTROL DEVICES
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUT FOR DETECTION LOOPS

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

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES WITHIN THE VILLAGE OF COUNTRY CLUB HILLS & MATTESON.

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

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

THE RESIDENT ENGINEER SHALL CONTACT MS. PATRICE HARRIS AREA TRAFFIC FIELD ENGINEER AT (708) 597-9800 A MINIMUM OF 2 WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKING.

10 FEET (3 METERS) TRANSITION SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER TO EXISTING CURB AND GUTTERS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITION SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OR WORK SPECIFIED.

WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1/2 INCHES (40MM) WHERE THE SPEED LIMIT IS 45 MPH (80 KM/H) OR LESS AND 1 INCH (25MM) WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH (80 KM/H). WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES (75MM) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).



USER NAME = #USER#	DESIGNED - MJY	REVISED -
PLOT SCALE = #SCALE#	DRAWN - ZDA	REVISED -
PLOT DATE = #DATE#	CHECKED - MJY	REVISED -
	DATE - 04/15/2009	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES  
183RD STREET**

SCALE: NONE SHEET NO. 2 OF 23 SHEETS STA. 21+50 TO STA. 160+00

OR RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1622	3075 RS-1	COOK	23	2
D-91-575-09			CONTRACT NO. 60H19	
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

SUMMARY OF QUANTITIES					SUMMARY OF QUANTITIES				
CODE NO.	ITEM	UNIT	URBAN	CONSTRUCTION TYPE CODE	CODE NO.	ITEM	UNIT	URBAN	CONSTRUCTION TYPE CODE
			TOTAL QUANTITIES	1000 100% STATE				TOTAL QUANTITIES	1000 100% STATE
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	16	16	70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	182	182
40600300	AGGREGATE (PRIME COAT)	TON	76	76	70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	41978	41978
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	5	5	70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	320	320
40600635	LEVELING BINDER (MACHINE METHOD), N70	TON	1587	1587	70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	96	96
40600895	CONSTRUCTING TEST STRIP	EACH	1	1	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	12081	12081
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	1137	1137	* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	182	182
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	76	76	* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	41978	41978
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	3501	3501	* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	320	320
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	36071	36071	* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	150	150
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	1003	1003	* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	48	48
44000100	PAVEMENT REMOVAL	SQ YD	568	568	* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	158	158
44002216	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 4"	SQ YD	336	336	* 88600100	DETECTOR LOOP, TYPE I	FOOT	164	164
44201765	CLASS D PATCHES, TYPE II, 10 INCH	SQ YD	190	190	X0322256	TEMPORARY INFORMATIONAL SIGNING	SQ FT	257	257
44201769	CLASS D PATCHES, TYPE III, 10 INCH	SQ YD	56	56	XX005656	INLET FILTER CLEANING	EACH	9	9
44201771	CLASS D PATCHES, TYPE IV, 10 INCH	SQ YD	94	94	XX006806	HOT-MIX ASPHALT DRIVEWAY PAVEMENT	SQ YD	568	568
55039700	STORM SEWERS TO BE CLEANED	FOOT	1174	1174	X0656100	DRIVEWAY PAVEMENT REMOVAL AND REPLACEMENT	SQ YD	702	702
60255500	MANHOLES TO BE ADJUSTED	EACH	30	30	Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	35	35
60260100	INLETS TO BE ADJUSTED	EACH	44	44					
60250200	CATCH BASINS TO BE ADJUSTED	EACH	30	30					
60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	5	5					
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3	3					
67100100	MOBILIZATION	L SUM	1	1					
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	1					
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1					
70300100	SHORT - TERM PAVEMENT MARKING	FOOT	42407	42407					

\*Specialty Items



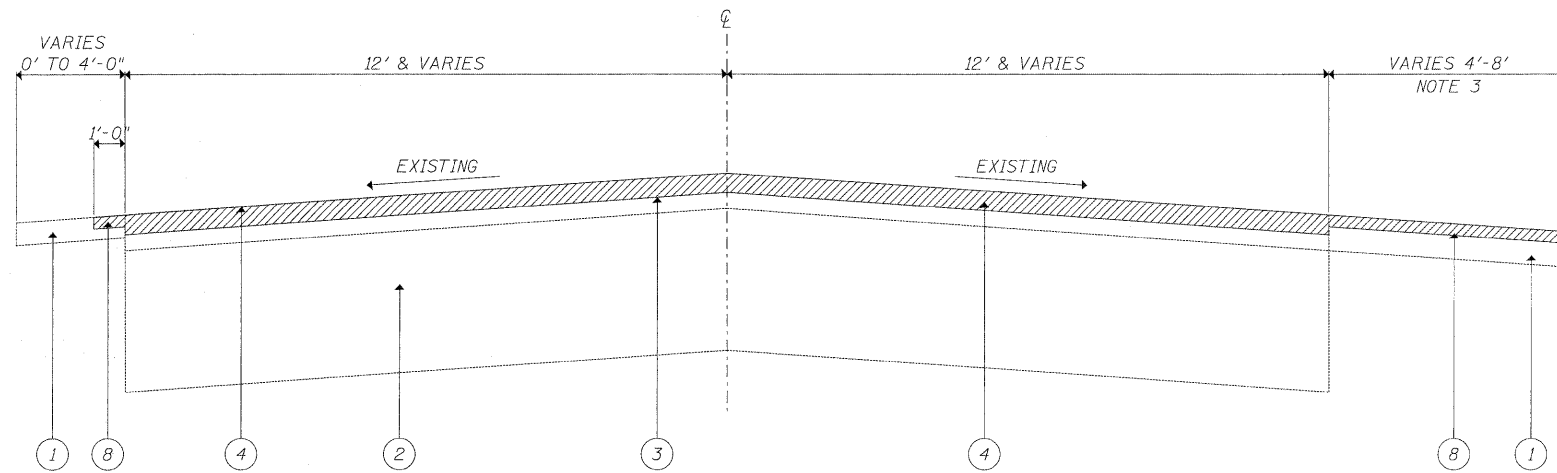
USER NAME = #USER#	DESIGNED - MJY	
DRAWN - RJG	REVISOR -	
PLOT SCALE = #SCALE#	CHECKED - MJY	REVISOR -
PLOT DATE = #DATE#	DATE - 04/15/2009	REVISOR -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

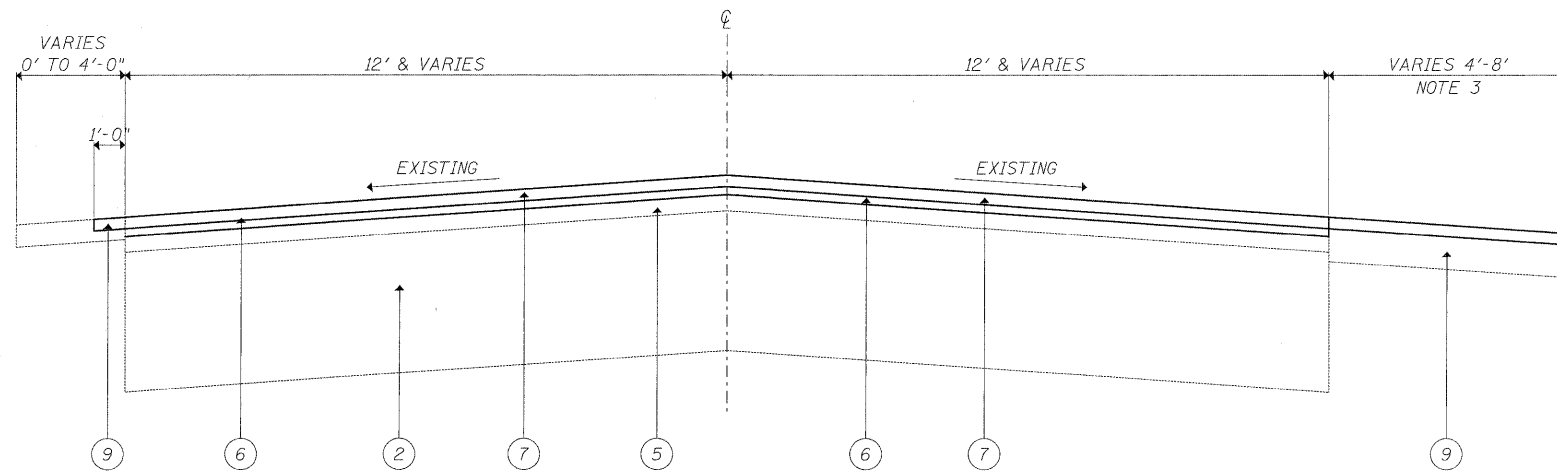
SUMMARY OF QUANTITIES  
183RD STREET

SCALE: NONE SHEET NO. 3 OF 23 SHEETS STA. 21+50 TO STA. 160+00

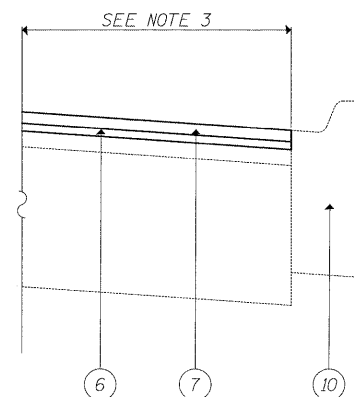
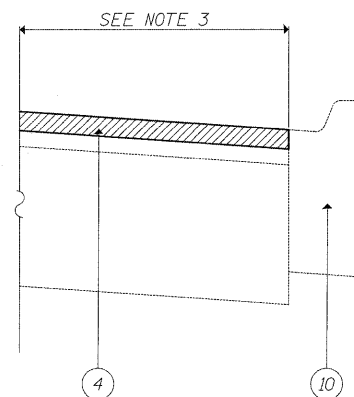
OR RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1622	3075 RS-1	COOK	23	3
D-91-575-09		CONTRACT NO. 60H19		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



EXISTING TYPICAL SECTION W/ SHOULDERS



PROPOSED TYPICAL SECTION W/ SHOULDERS



PROPOSED TYPICAL SECTION W/ CURB AND GUTTERS

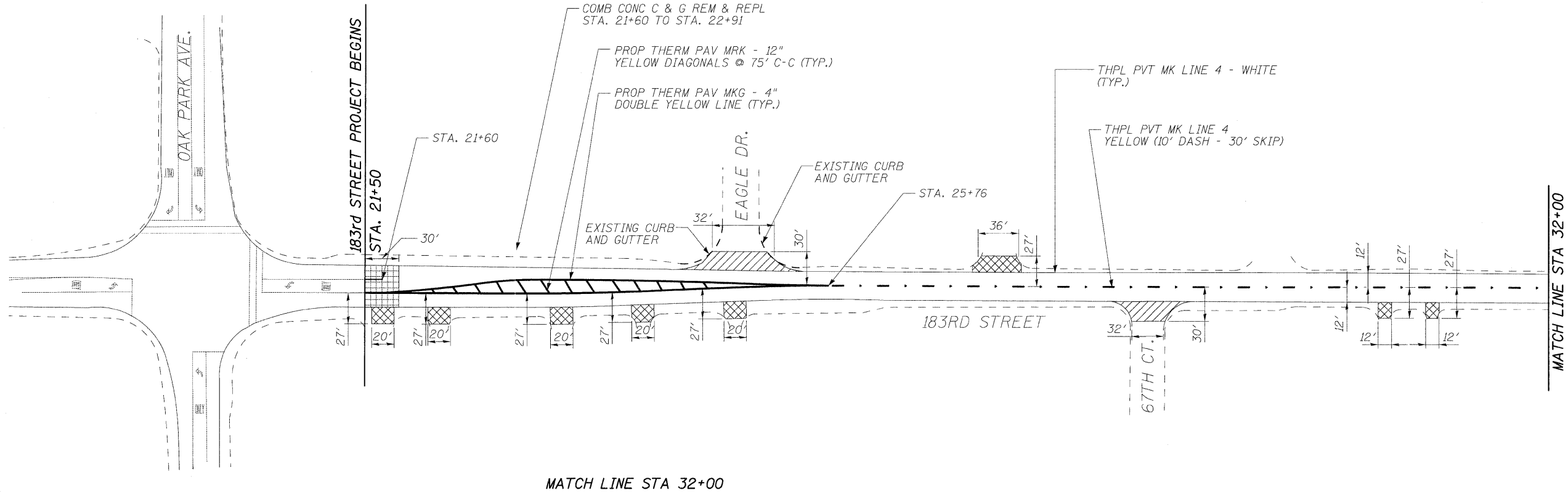
**LEGEND**

- ① EXISTING BITUMINOUS SHOULDER
- ② EXISTING P.C. CONCRETE PAVEMENT +/- 9"
- ③ EXISTING HMA SURFACE COURSE +/- 4 1/2"
- ④ PROPOSED HMA SURFACE REMOVAL (2 1/4")
- ⑤ PROPOSED HMA SURFACE OVERLAY AFTER MILLING, +/- 2"
- ⑥ PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD) IL-4.75, N50 (3/4")
- ⑦ PROPOSED HMA SURFACE COURSE, MIX "D", N70 (1 3/4")
- ⑧ PROPOSED HMA SURFACE REMOVAL (1 1/2 ")
- ⑨ PROPOSED HMA SURFACE COURSE, MIX "D", N70 (1 1/2")
- ⑩ EXISTING CONCRETE CURB AND GUTTER

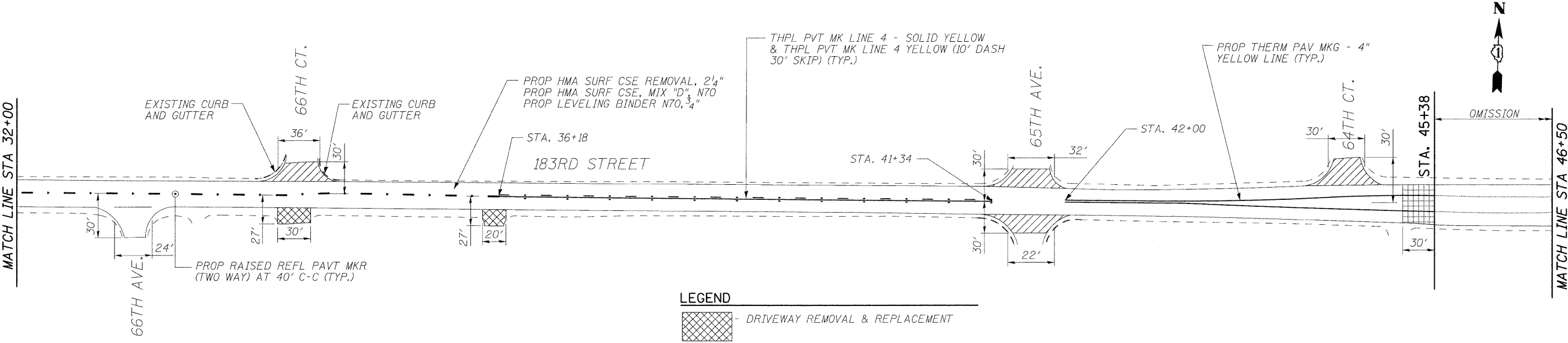
HOT-MIX ASPHALT MIXTURE REQUIREMENTS		
MIXTURE TYPE	AC/PG	DESIGN AIR VOIDS
HMA SURFACE COURSE, MIX D, N70. (IL-9.5 mm)	PG 64-22	4% @ 70 GYR
POLYMERIZED LEVELING BINDER (MACHINE METHOD). IL-4.75, N50	SBS-SBR PG 76-28/22	4% @ 50 GYR
CLASS D PATCHES (HMA BINDER IL 19 mm)	PG 64-22*	4% @ 70 GYR
HMA REPLACEMENT OVER PATCHES (HMA BINDER IL 19 mm)	PG 64-22*	4% @ 70 GYR

**NOTE:**

- 1: THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE COURSE MIXTURES IS 112 LSB/SQYD/IN. \*WHEN RAP EXCEEDS 20%. THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22
- 2: THE CONTRACTOR SHALL PATCH FIRST BEFORE MILLING
- 3: CONCRETE CURB AND GUTTER SHOWN AT VARIOUS LOCATIONS AS SHOWN IN THE PLANS

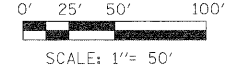
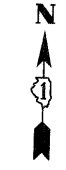


MATCH LINE STA 32+00



**LEGEND**

- DRIVEWAY REMOVAL & REPLACEMENT
- PAVEMENT REMOVAL
- BUTT JOINT



**LOWCO, INC.**  
CONSULTING ENGINEERS  
1560 WALL STREET  
NAPERVILLE, ILLINOIS 60563 PH: (630) 577-9100

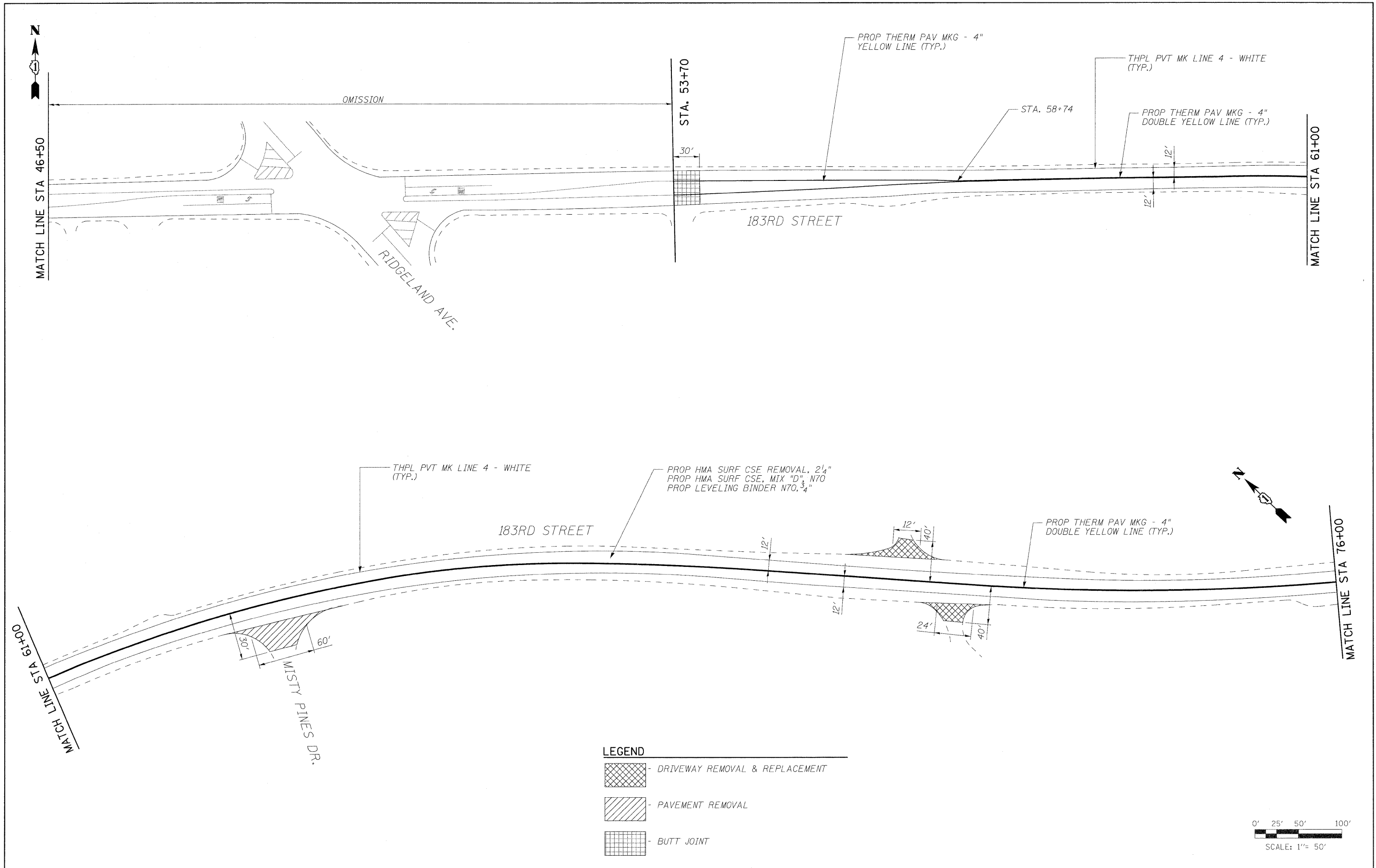
USER NAME = #USER#	DESIGNED - MJY	REVISED -
PLOT SCALE = #SCALE#	DRAWN - ZDA & ST	REVISED -
PLOT DATE = #DATE#	CHECKED - MJY	REVISED -
	DATE - 04/15/2009	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**




**PAVING & PAVEMENT MARKING PLAN  
183RD STREET**

SCALE: 1" = 50' SHEET NO. 5 OF 23 SHEETS STA. 21+50 TO STA. 46+50

OR. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1622	3075 RS-1	COOK	23	5
D-91-575-09		CONTRACT NO. 60H19		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



**LEGEND**

	- DRIVEWAY REMOVAL & REPLACEMENT
	- PAVEMENT REMOVAL
	- BUTT JOINT

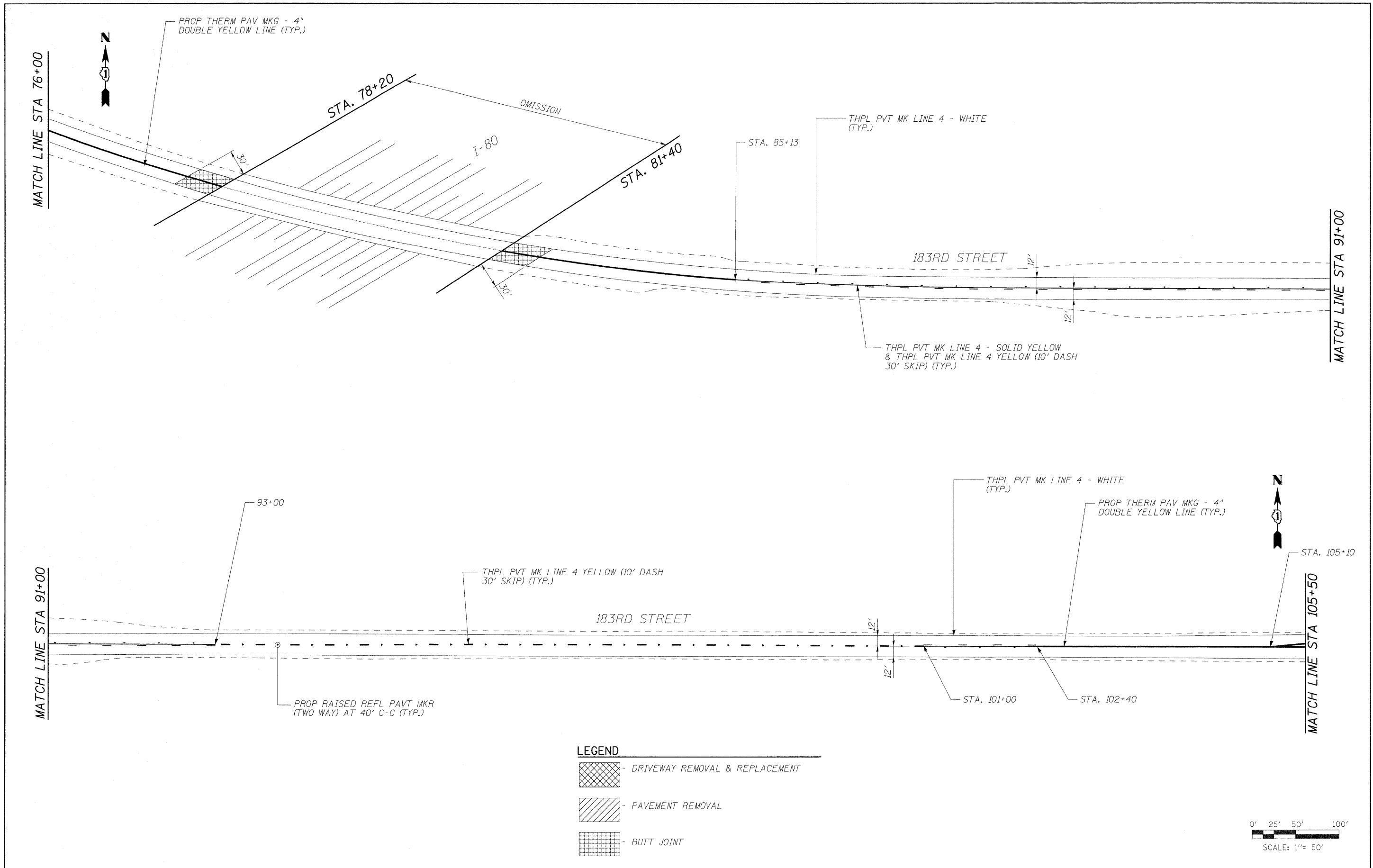
**LOWCO, INC.**  
 CONSULTING ENGINEERS  
 1560 WALL STREET  
 NAPERVILLE, ILLINOIS 60563 PH: (630) 577-9100

USER NAME = #USER#	DESIGNED - MJY	REVISED -
PLOT SCALE = #SCALE#	DRAWN - ZDA & ST	REVISED -
PLOT DATE = #DATE#	CHECKED - MJY	REVISED -
	DATE - 04/15/2009	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

<b>PAVING &amp; PAVEMENT MARKING PLAN 183RD STREET</b>		
SCALE: 1" = 50'	SHEET NO. 6 OF 23 SHEETS	STA. 46+50 TO STA. 76+00

OR. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1622	3075 RS-1	COOK	23	6
D-91-575-09		CONTRACT NO. 60H19		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



**LONCO, INC.**  
 CONSULTING ENGINEERS  
 1560 WALL STREET  
 NAPERVILLE, ILLINOIS 60563 PH: (630) 577-9100

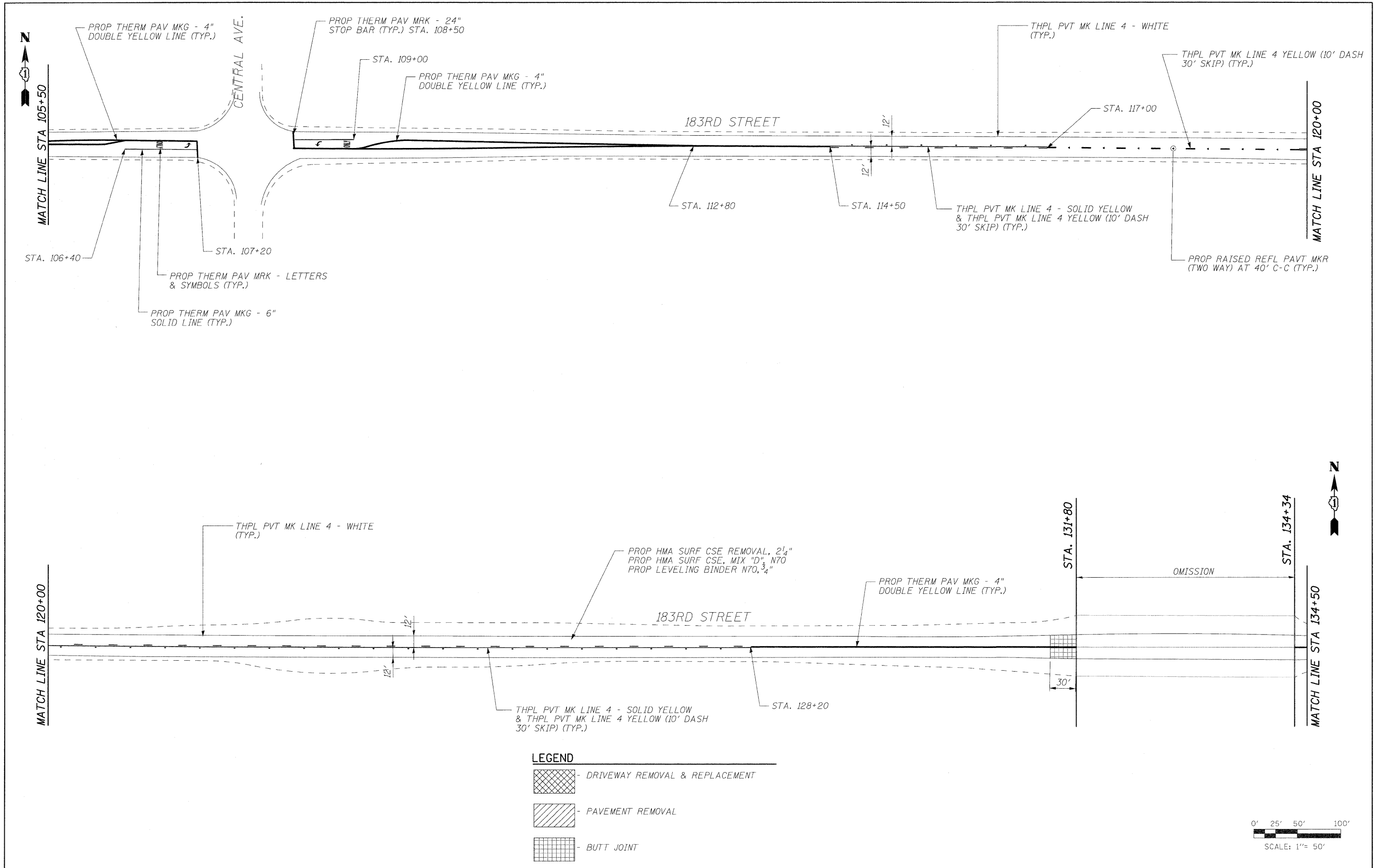
USER NAME = \$USER\$	DESIGNED - MJY	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - ZDA & ST	REVISED -
PLOT DATE = \$DATE\$	CHECKED - MJY	REVISED -
	DATE - 04/15/2009	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PAVING & PAVEMENT MARKING PLAN  
 183RD STREET**

SCALE: 1" = 50'    SHEET NO. 7 OF 23 SHEETS    STA. 76+00 TO STA. 105+50

OR. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1622	3075 RS-1	COOK	23	7
D-91-575-09			CONTRACT NO. 60H19	
FED. ROAD DIST. NO.    ILLINOIS FED. AID PROJECT				



**LOWCO, INC.**  
 CONSULTING ENGINEERS  
 1560 WALL STREET  
 NAPERVILLE, ILLINOIS 60563 PH: (630) 577-9100

USER NAME = \$USER\$	DESIGNED - MJY	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - ZDA & ST	REVISED -
PLOT DATE = \$DATE\$	CHECKED - MJY	REVISED -
	DATE - 04/15/2009	REVISED -

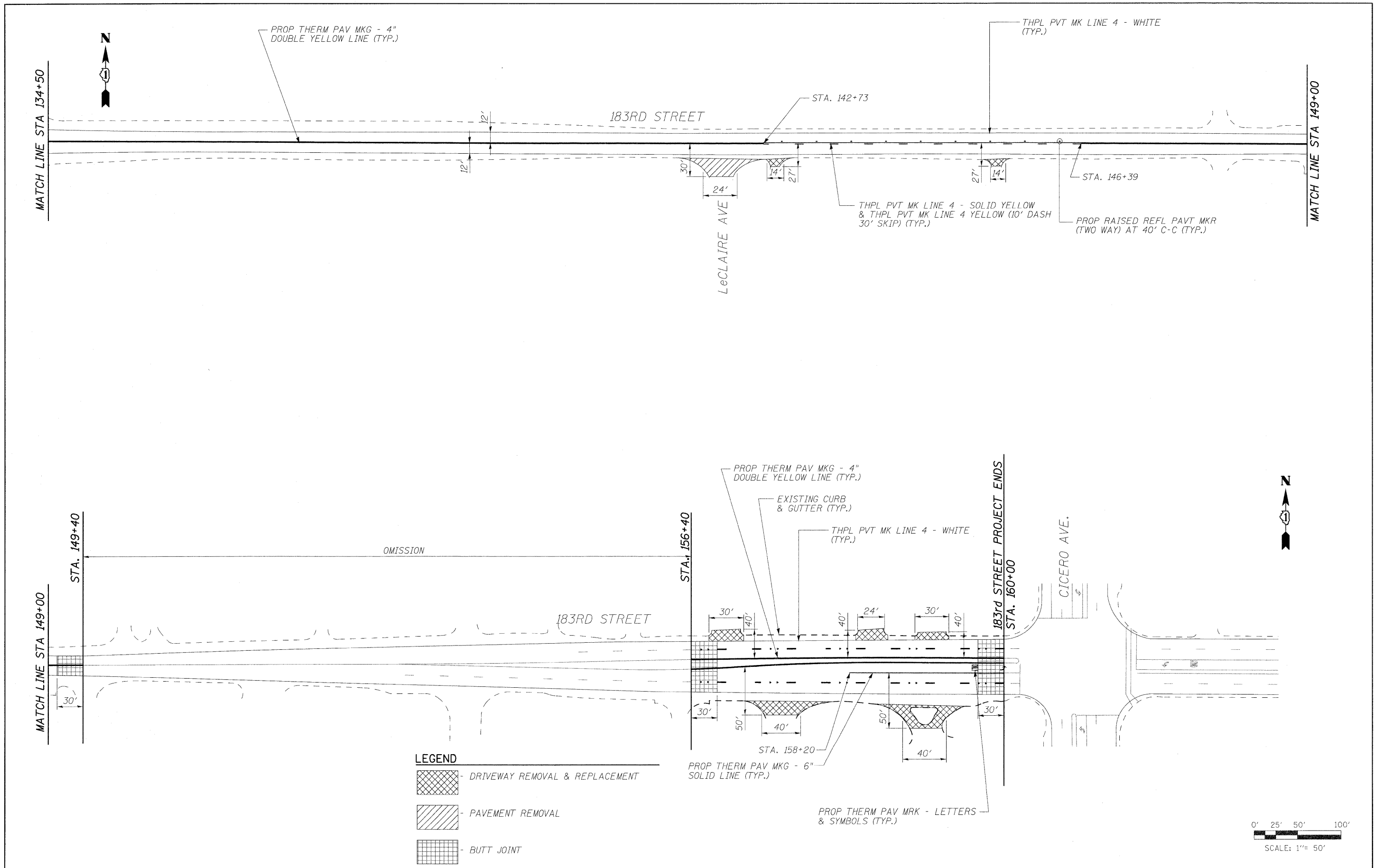
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PAVING & PAVEMENT MARKING PLAN  
 183RD STREET**

SCALE: 1" = 50' SHEET NO. 8 OF 23 SHEETS STA. 105+50 TO STA. 134+50

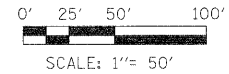
OR. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1622	3075 RS-1	COOK	23	8
D-91-575-09		CONTRACT NO. 60H19		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				





**LEGEND**

	- DRIVEWAY REMOVAL & REPLACEMENT
	- PAVEMENT REMOVAL
	- BUTT JOINT



**LONCO, INC.**  
 CONSULTING ENGINEERS  
 1560 WALL STREET  
 NAPERVILLE, ILLINOIS 60563 PH: (630) 577-9100

USER NAME = #USER#	DESIGNED - MJY	REVISED -
PLOT SCALE = #SCALE#	DRAWN - ZDA & ST	REVISED -
PLOT DATE = #DATE#	CHECKED - MJY	REVISED -
	DATE - 04/15/2009	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

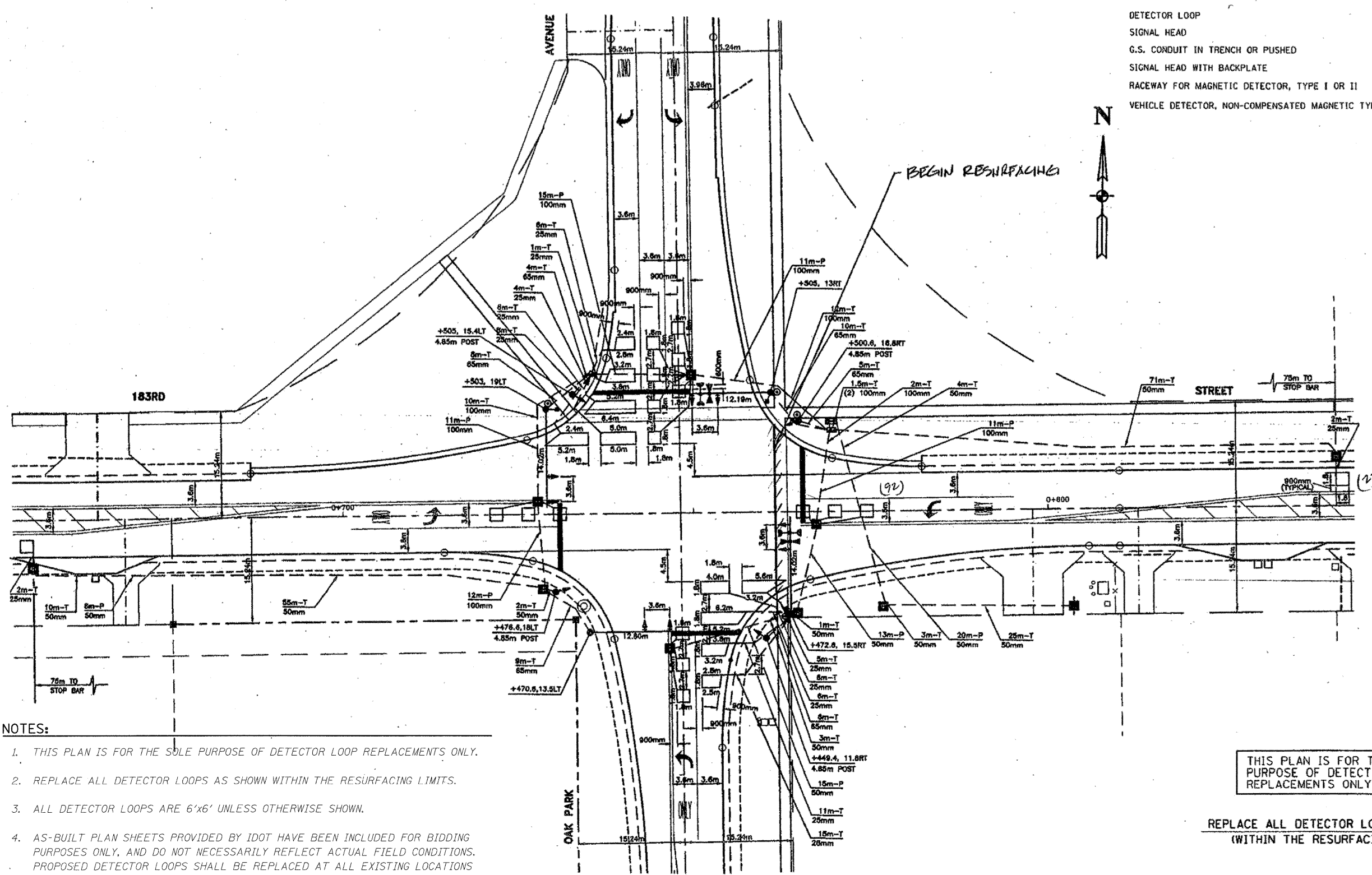
**PAVING & PAVEMENT MARKING PLAN  
 183RD STREET**

SCALE: 1" = 50'    SHEET NO. 9 OF 23 SHEETS    STA. 134+50 TO STA. 160+00

OR. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1622	3075 RS-1	COOK	23	9
D-91-575-09			CONTRACT NO. 60H19	
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

**TRAFFIC SIGNAL LEGEND**

	PROPOSED	EXISTING
DETECTOR LOOP		
SIGNAL HEAD		
G.S. CONDUIT IN TRENCH OR PUSHED		
SIGNAL HEAD WITH BACKPLATE		
RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR II		
VEHICLE DETECTOR, NON-COMPENSATED MAGNETIC TYPE		



**NOTES:**

1. THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENTS ONLY.
2. REPLACE ALL DETECTOR LOOPS AS SHOWN WITHIN THE RESURFACING LIMITS.
3. ALL DETECTOR LOOPS ARE 6'x6' UNLESS OTHERWISE SHOWN.
4. AS-BUILT PLAN SHEETS PROVIDED BY IDOT HAVE BEEN INCLUDED FOR BIDDING PURPOSES ONLY, AND DO NOT NECESSARILY REFLECT ACTUAL FIELD CONDITIONS. PROPOSED DETECTOR LOOPS SHALL BE REPLACED AT ALL EXISTING LOCATIONS WITHIN THE PROJECT LIMITS, IN ACCORDANCE WITH STANDARD TS-07, SPECIAL PROVISIONS, AND AS DIRECTED BY THE ENGINEER.

THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENTS ONLY

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

**LOWCO, INC.**  
CONSULTING ENGINEERS  
1560 WALL STREET  
NAPERVILLE, ILLINOIS 60563 PH (630) 577-9100

USER NAME = *USER*	DESIGNED - MJY	REVISED -
PLOT SCALE = *SCALE*	DRAWN - ZDA & ST	REVISED -
PLOT DATE = *DATE*	CHECKED - MJY	REVISED -
	DATE - 04/15/2009	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

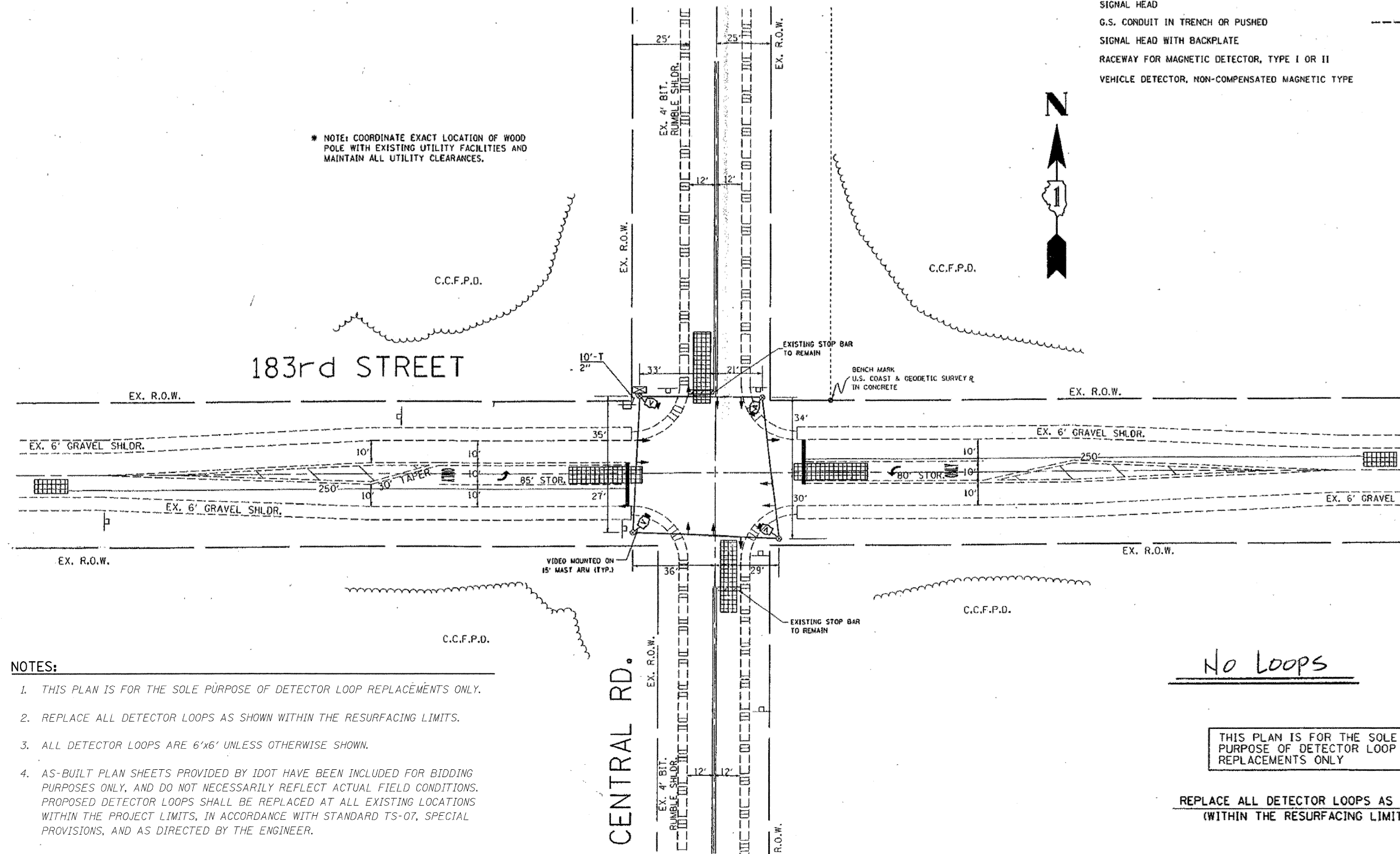
DETECTOR LOOP PLAN - OAKPARK AVENUE INTERSECTION  
183RD STREET  
SCALE: 1" = 50' SHEET NO. 10 OF 23 SHEETS STA. 21+50 TO STA. 160+00

OR. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1622	3075 RS-1	COOK	23	10
D-91-575-09		CONTRACT NO. 60H19		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

**TRAFFIC SIGNAL LEGEND**

	PROPOSED	EXISTING
DETECTOR LOOP		
SIGNAL HEAD		
G.S. CONDUIT IN TRENCH OR PUSHED		
SIGNAL HEAD WITH BACKPLATE		
RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR II		
VEHICLE DETECTOR, NON-COMPENSATED MAGNETIC TYPE		

\* NOTE: COORDINATE EXACT LOCATION OF WOOD POLE WITH EXISTING UTILITY FACILITIES AND MAINTAIN ALL UTILITY CLEARANCES.



**NOTES:**

1. THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENTS ONLY.
2. REPLACE ALL DETECTOR LOOPS AS SHOWN WITHIN THE RESURFACING LIMITS.
3. ALL DETECTOR LOOPS ARE 6'x6' UNLESS OTHERWISE SHOWN.
4. AS-BUILT PLAN SHEETS PROVIDED BY IDOT HAVE BEEN INCLUDED FOR BIDDING PURPOSES ONLY, AND DO NOT NECESSARILY REFLECT ACTUAL FIELD CONDITIONS. PROPOSED DETECTOR LOOPS SHALL BE REPLACED AT ALL EXISTING LOCATIONS WITHIN THE PROJECT LIMITS, IN ACCORDANCE WITH STANDARD TS-07, SPECIAL PROVISIONS, AND AS DIRECTED BY THE ENGINEER.

No Loops

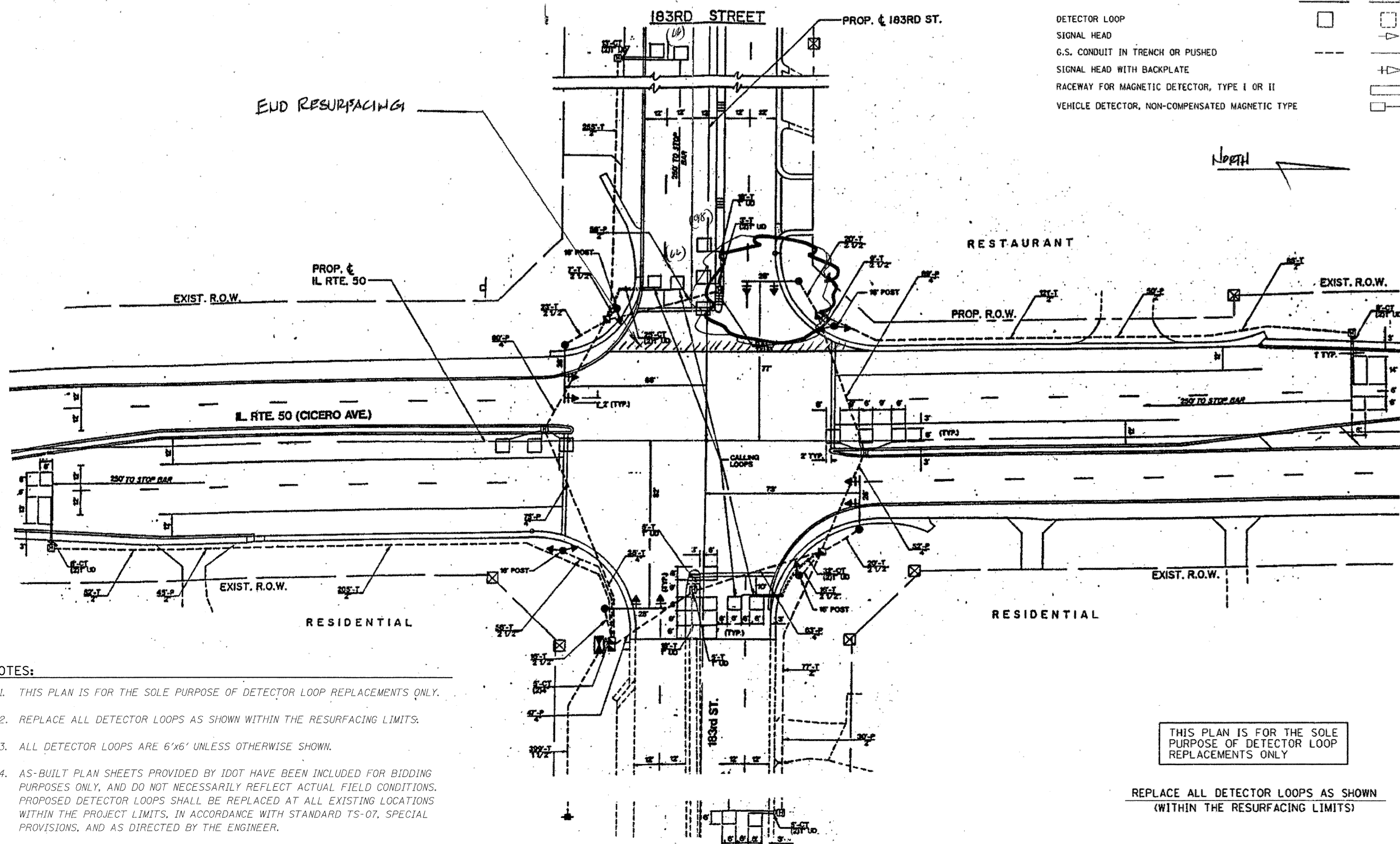
THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENTS ONLY

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

<p>CONSULTING ENGINEERS 1500 WALL STREET NAPERVILLE, ILLINOIS 60563 PH: (630) 577-9100</p>	USER NAME = #USER#	DESIGNED - MJY	REVISED -	<p align="center"><b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b></p>	<p align="center"><b>DETECTOR LOOP PLAN - CENTRAL ROAD INTERSECTION 183RD STREET</b></p>	OR RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = #SCALE#	DRAWN - ZDA & ST	REVISED -			1622	3075 RS-1	COOK	23	11
PLOT DATE = #DATE#	CHECKED - MJY	REVISED -	DATE - 04/15/2009	SCALE: 1" = 50'	SHEET NO. 11 OF 23 SHEETS	STA. 21+50 TO STA. 160+00	<p align="center">D-91-575-09 CONTRACT NO. 60H19</p>			
							<p align="center">FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT</p>			

**TRAFFIC SIGNAL LEGEND**

	PROPOSED	EXISTING
DETECTOR LOOP		
SIGNAL HEAD		
G.S. CONDUIT IN TRENCH OR PUSHED		
SIGNAL HEAD WITH BACKPLATE		
RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR II		
VEHICLE DETECTOR, NON-COMPENSATED MAGNETIC TYPE		



**NOTES:**

1. THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENTS ONLY.
2. REPLACE ALL DETECTOR LOOPS AS SHOWN WITHIN THE RESURFACING LIMITS.
3. ALL DETECTOR LOOPS ARE 6'x6' UNLESS OTHERWISE SHOWN.
4. AS-BUILT PLAN SHEETS PROVIDED BY IDOT HAVE BEEN INCLUDED FOR BIDDING PURPOSES ONLY, AND DO NOT NECESSARILY REFLECT ACTUAL FIELD CONDITIONS. PROPOSED DETECTOR LOOPS SHALL BE REPLACED AT ALL EXISTING LOCATIONS WITHIN THE PROJECT LIMITS, IN ACCORDANCE WITH STANDARD TS-07, SPECIAL PROVISIONS, AND AS DIRECTED BY THE ENGINEER.

THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENTS ONLY

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

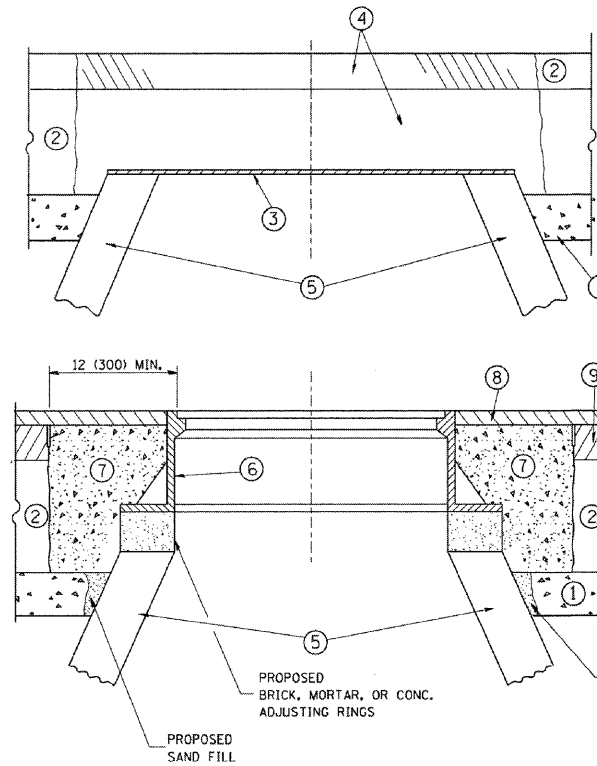
**LOWCO, INC.**  
CONSULTING ENGINEERS  
1560 WALL STREET  
NAPERVILLE, ILLINOIS 60563 PH: (630) 577-9100

USER NAME = \$USER\$	DESIGNED - MJY	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - ZDA & ST	REVISED -
PLOT DATE = \$DATE\$	CHECKED - MJY	REVISED -
	DATE - 04/15/2009	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DETECTOR LOOP PLAN - (IL ROUTE 50) CICERO AVENUE INTERSECTION  
183RD STREET  
SCALE: 1" = 50' SHEET NO. 12 OF 23 SHEETS STA. 21+50 TO STA. 160+00

OR RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1622	3075 RS-1	COOK	23	12
D-91-575-09		CONTRACT NO. 60H19		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



**CONSTRUCTION PROCEDURES**

**STAGE 1 (BEFORE PAVEMENT MILLING)**

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

**STAGE 2 (AFTER PAVEMENT MILLING)**

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS S1 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 S1 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.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

**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.

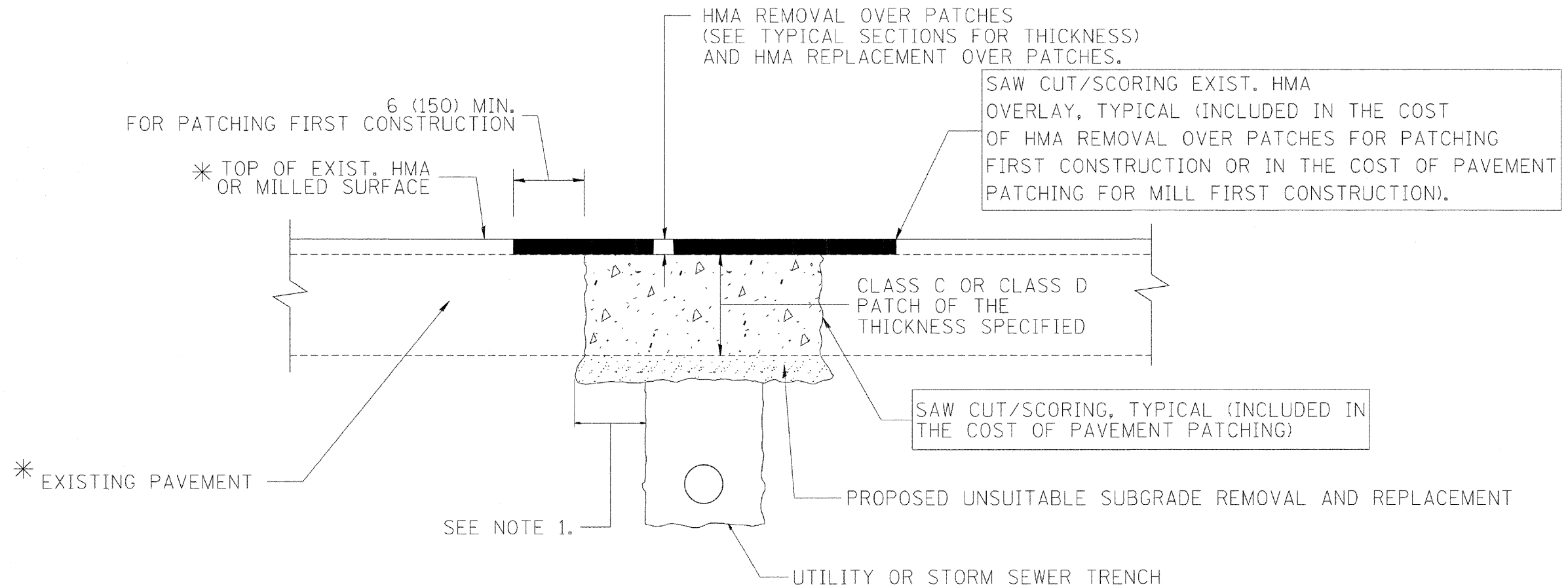
THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

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**

USER NAME = #USER#	DESIGNED - MJY	REVISED -
	DRAWN - ST	REVISED -
PLOT SCALE = #SCALE#	CHECKED - MJY	REVISED -
PLOT DATE = #DATE#	DATE - 04/15/2009	REVISED -

OR RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1622	3075 RS-1	COOK	23	13
D-91-575-09		CONTRACT NO. 60H19		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



\* 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.

**PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT**

	USER NAME = \$USER\$	DESIGNED - MJY	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT ONE DETAIL SHEETS</b> <b>183RD STREET</b>	OR	SECTION	COUNTY	TOTAL	SHEET
	PLOT SCALE = \$SCALE\$	CHECKED - MJY	REVISED -			1622	3075 RS-1	COOK	23	14
PLOT DATE = \$DATE\$	DATE - 04/15/2009	REVISED -		SCALE: NONE	SHEET NO. 14 OF 23 SHEETS	STA. 21+50 TO STA. 160+00	<b>D-91-575-09</b> FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT <b>CONTRACT NO. 60H19</b>			

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).

EXISTING CONCRETE PAVEMENT, CONCRETE BASE COURSE OR FLEXIBLE PAVEMENT

3" (75) MIN.

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

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.)

\* 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.

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.

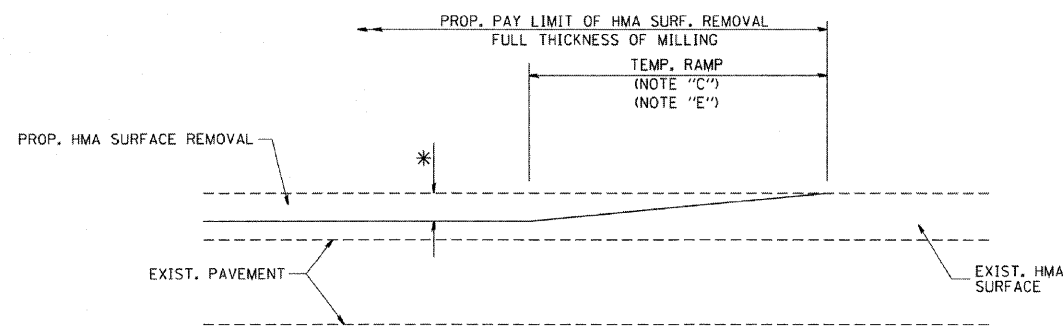
PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USUABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

**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".

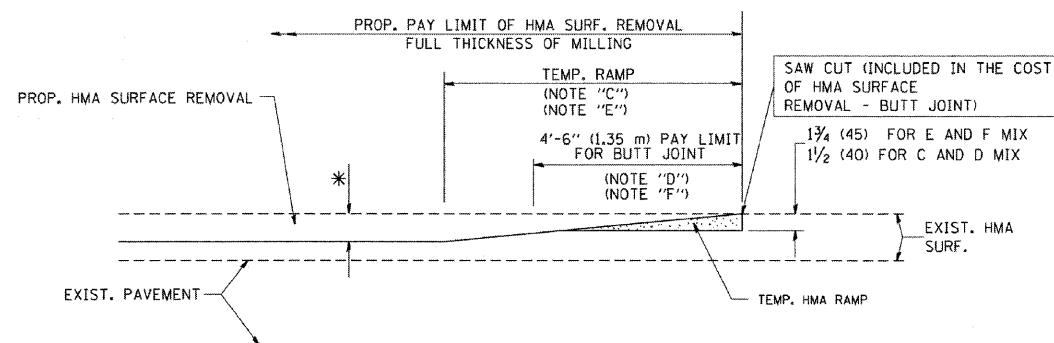
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

## CURB OR CURB AND GUTTER REMOVAL AND REPACEMENT



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

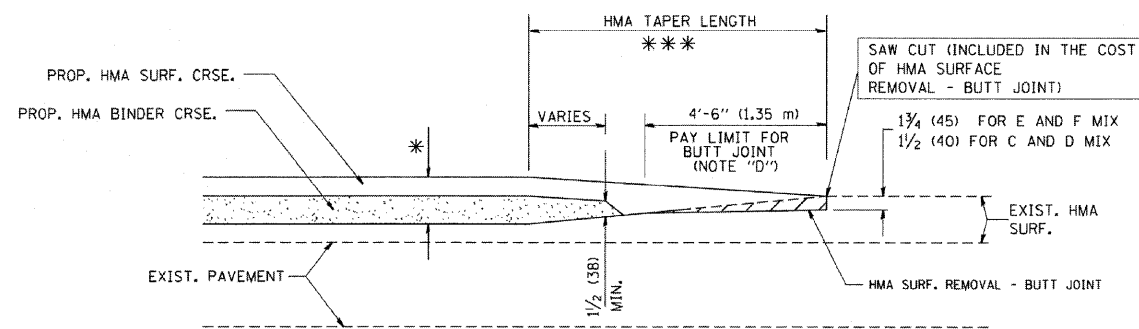
OPTION 1



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

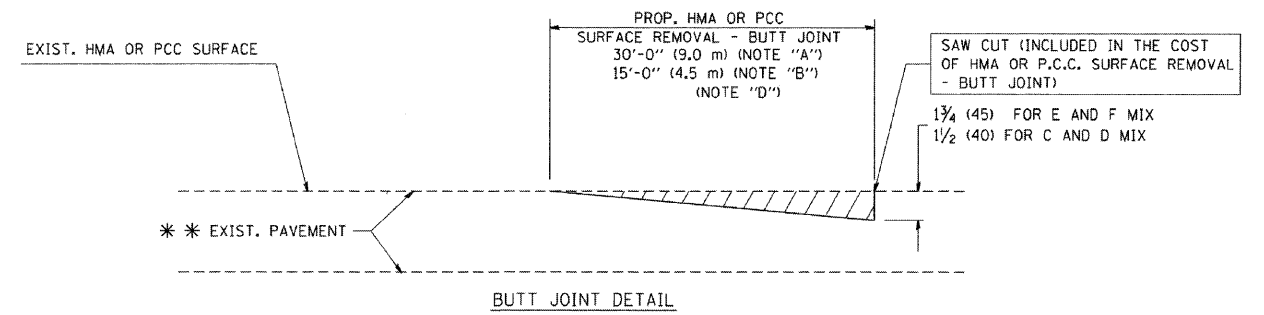
OPTION 2

TYPICAL TEMPORARY RAMP

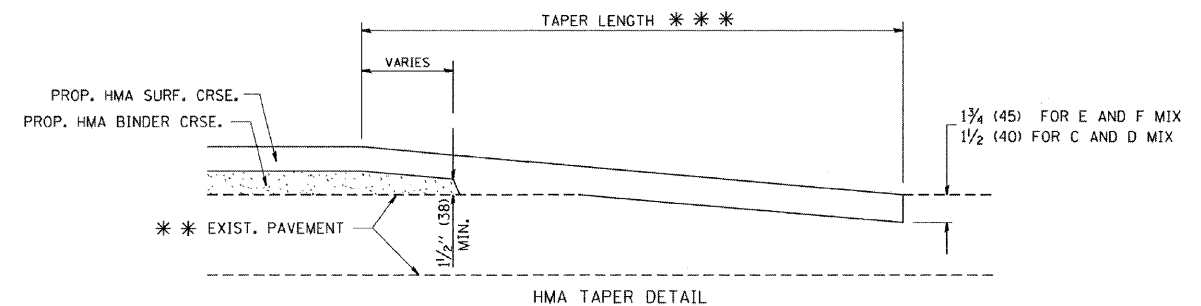


BUTT JOINT AND  
HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER  
FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER  
FOR RESURFACING ONLY

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

NOTES

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

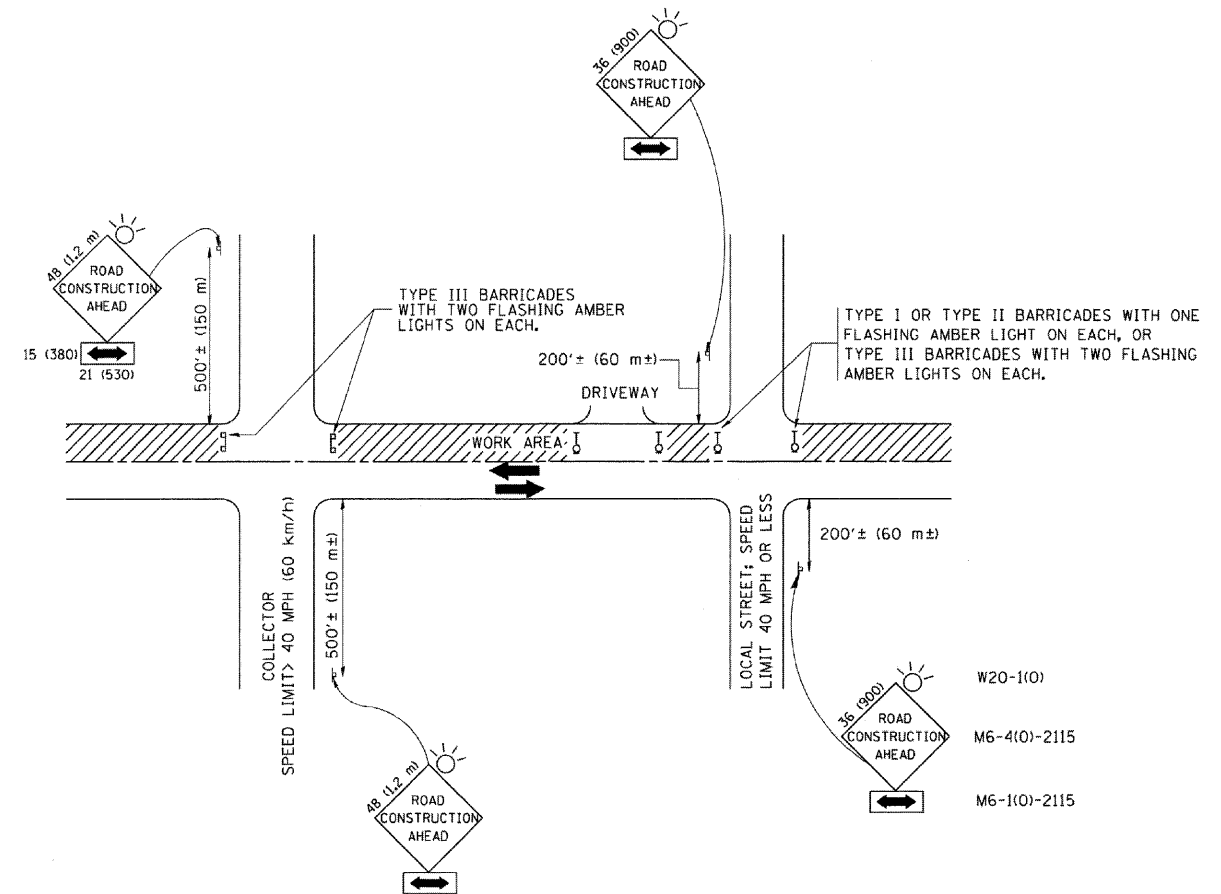
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

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".

BUTT JOINT AND HMA TAPER DETAILS





**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:**

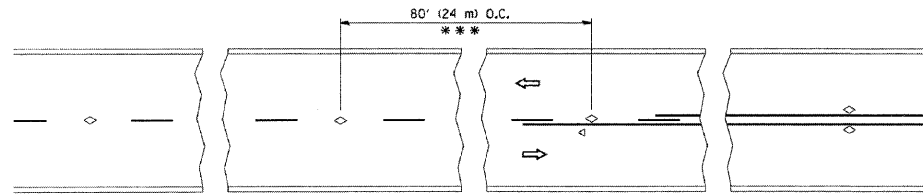
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER 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.

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

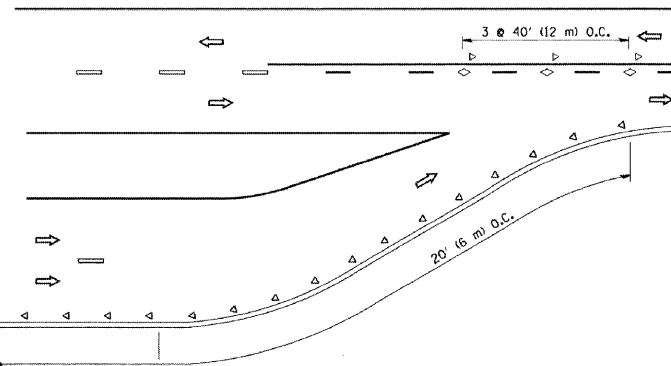
USER NAME = #USER#	DESIGNED - MJY	REVISED -
	DRAWN - ST	REVISED -
PLOT SCALE = #SCALE#	CHECKED - MJY	REVISED -
PLOT DATE = #DATE#	DATE - 04/15/2009	REVISED -

OR RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1622	3075 RS-1	COOK	23	17
D-91-575-09		CONTRACT NO. 60H19		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

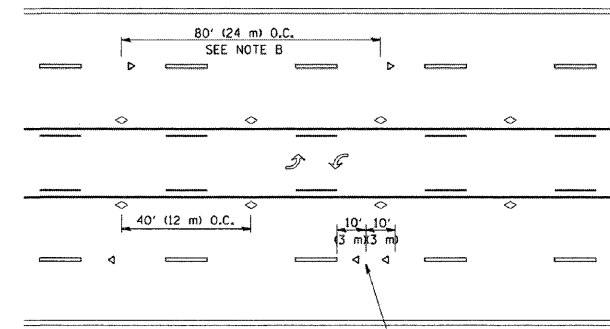


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

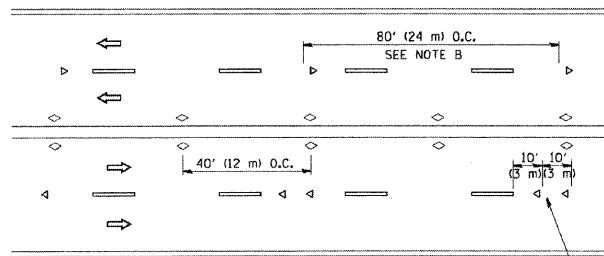
TWO-LANE/TWO-WAY



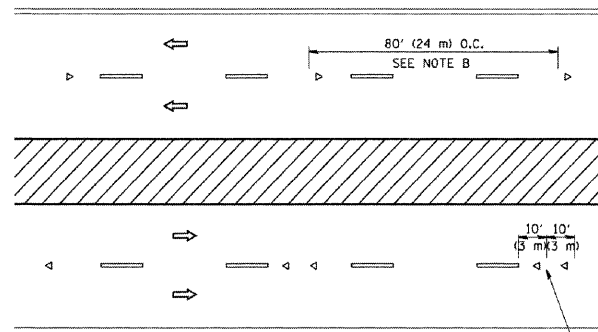
LANE REDUCTION TRANSITION



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

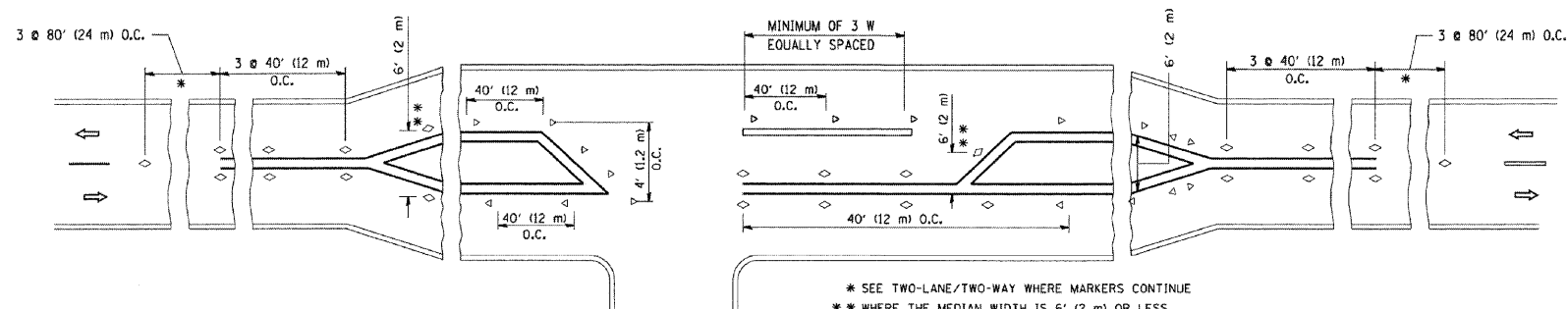
- YELLOW STRIPE
- WHITE STRIPE
- ◁ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◇ TWO-WAY AMBER MARKER

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.

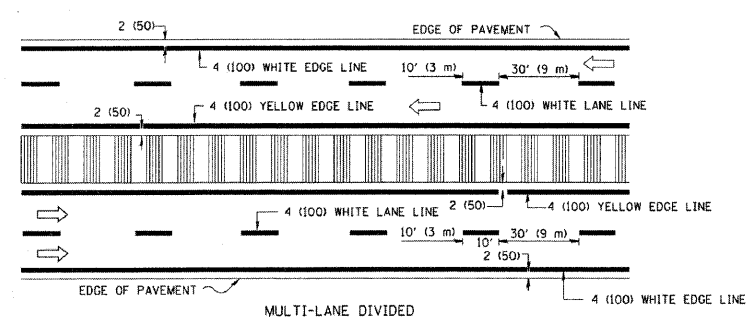
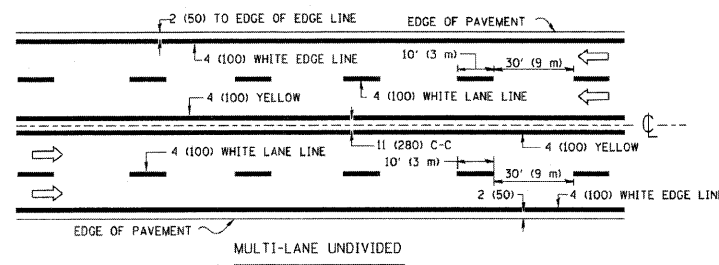
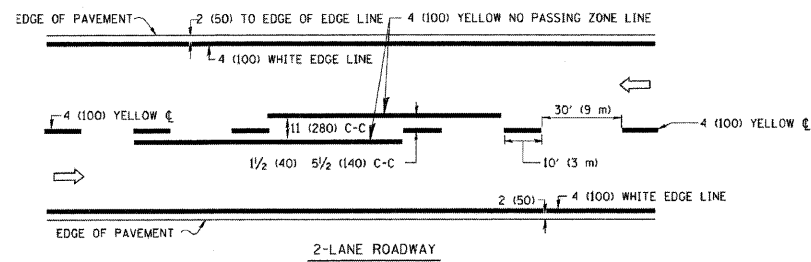
DESIGN NOTES

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.



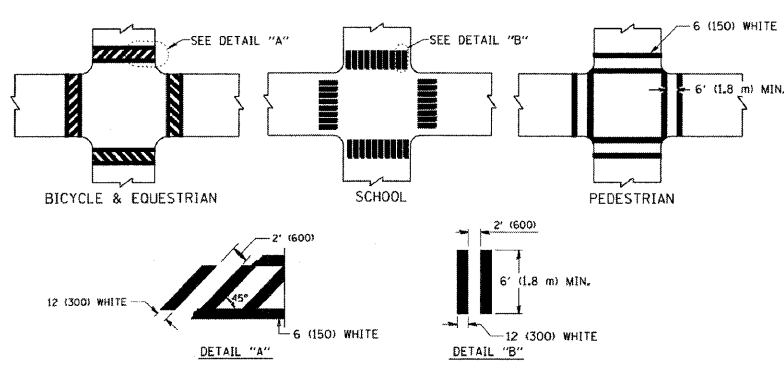
LEFT TURN

TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

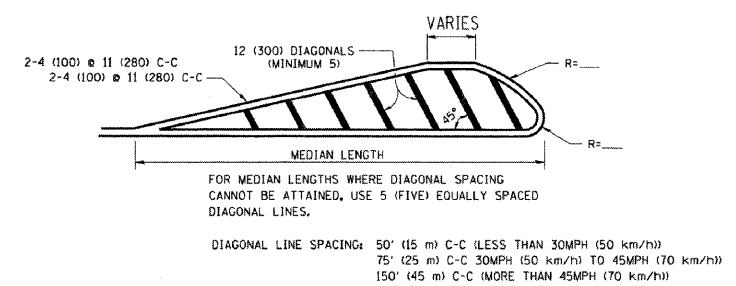
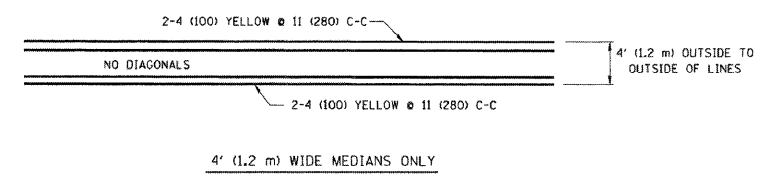


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

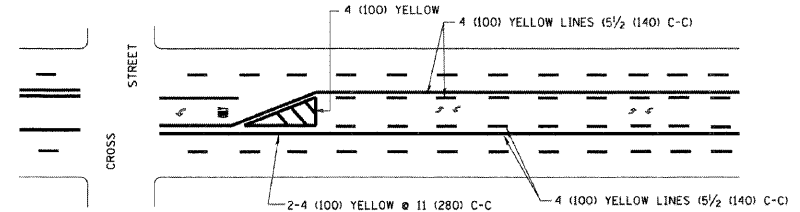
TYPICAL LANE AND EDGE LINE MARKING



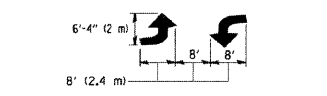
TYPICAL CROSSWALK MARKING



MEDIANS OVER 4' (1.2 m) WIDE

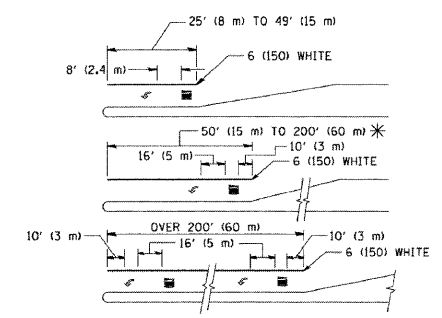


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

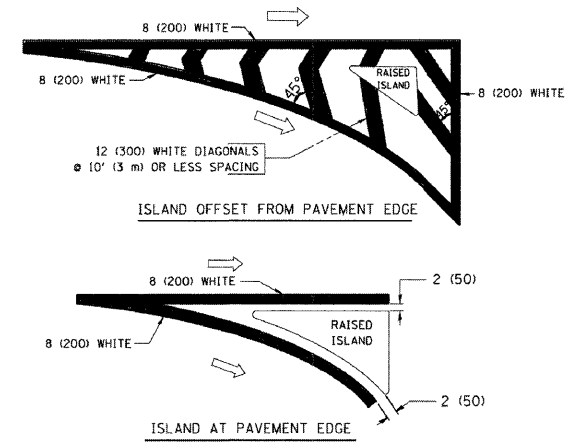


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)

\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



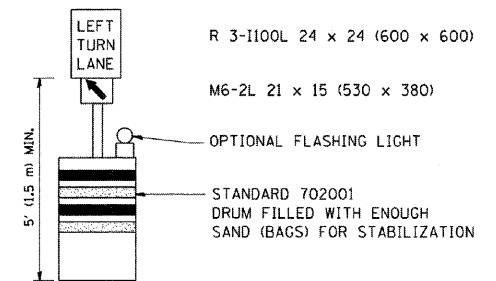
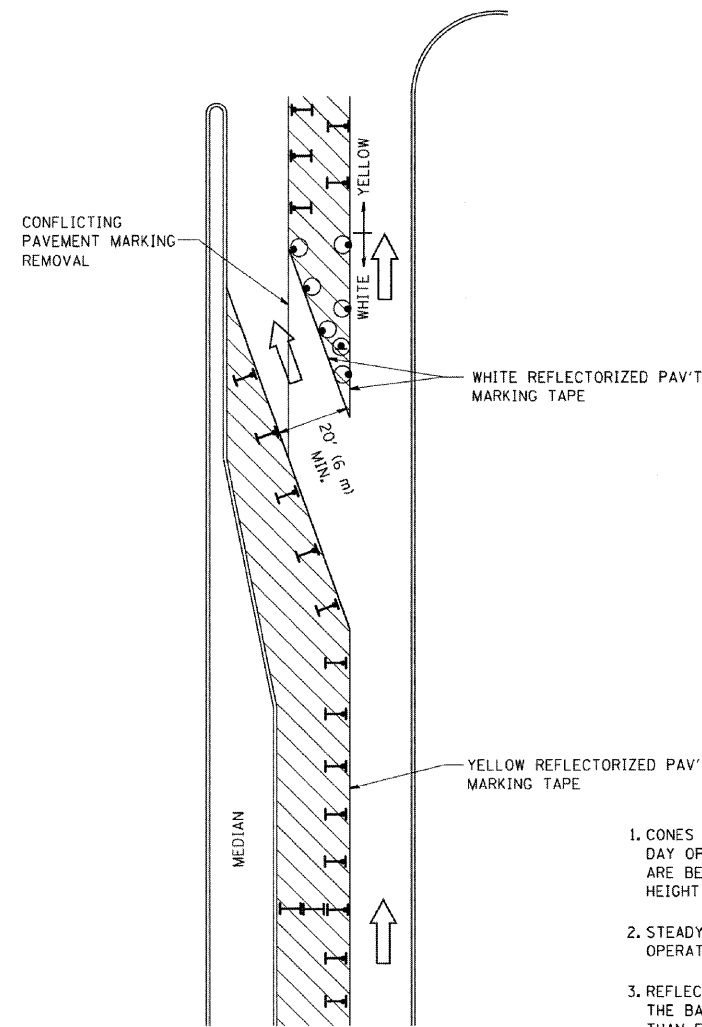
TYPICAL ISLAND MARKING

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

# DISTRICT ONE TYPICAL PAVEMENT MARKINGS



**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

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

**LOWCO, INC.**  
CONSULTING ENGINEERS  
1560 WALL ST., SUITE 222  
NAPERVILLE, ILLINOIS 60563 P: (630) 577-9100

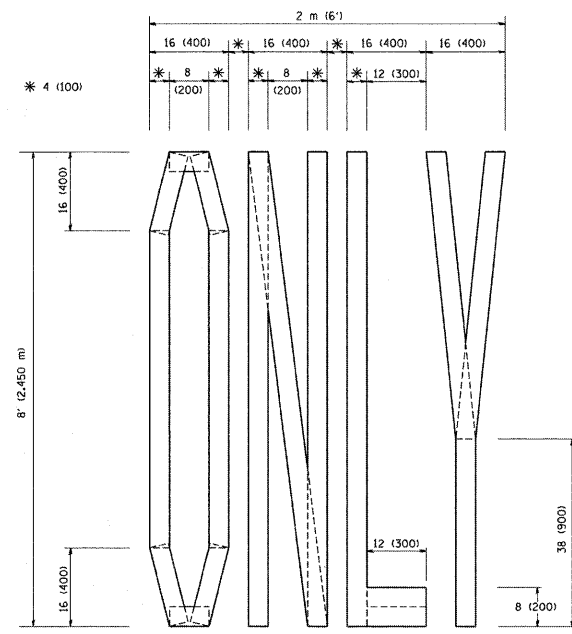
USER NAME = #USER#	DESIGNED - MJY	REVISED -
	DRAWN - ST	REVISED -
PLOT SCALE = #SCALE#	CHECKED - MJY	REVISED -
PLOT DATE = #DATE#	DATE - 04/15/2009	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

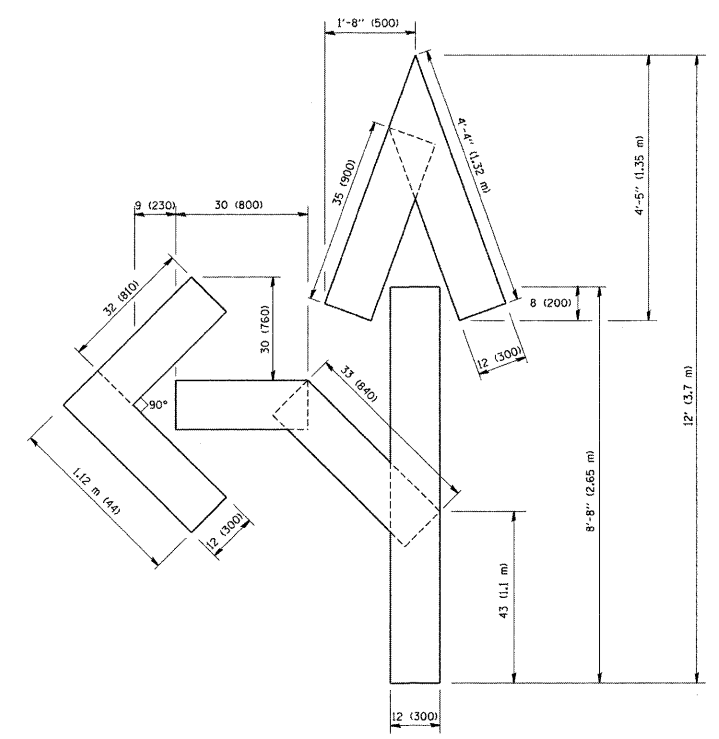
**DISTRICT ONE DETAIL SHEETS  
183RD STREET**

SCALE: NONE SHEET NO. 20 OF 23 SHEETS STA. 21+50 TO STA. 160+00

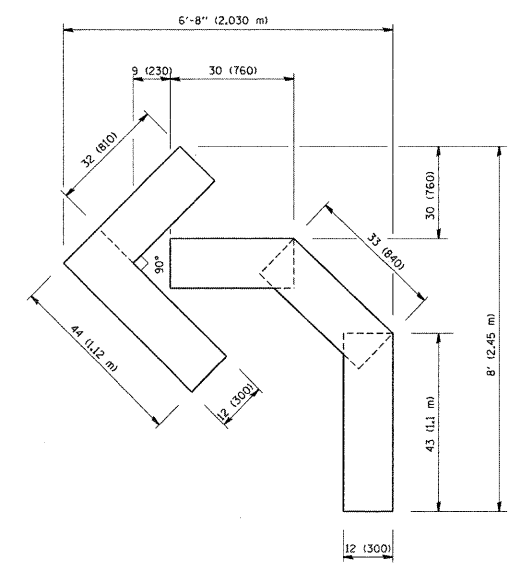
OR RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1622	3075 RS-1	COOK	23	20
D-91-575-09		CONTRACT NO. 60H19		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



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.

## PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING

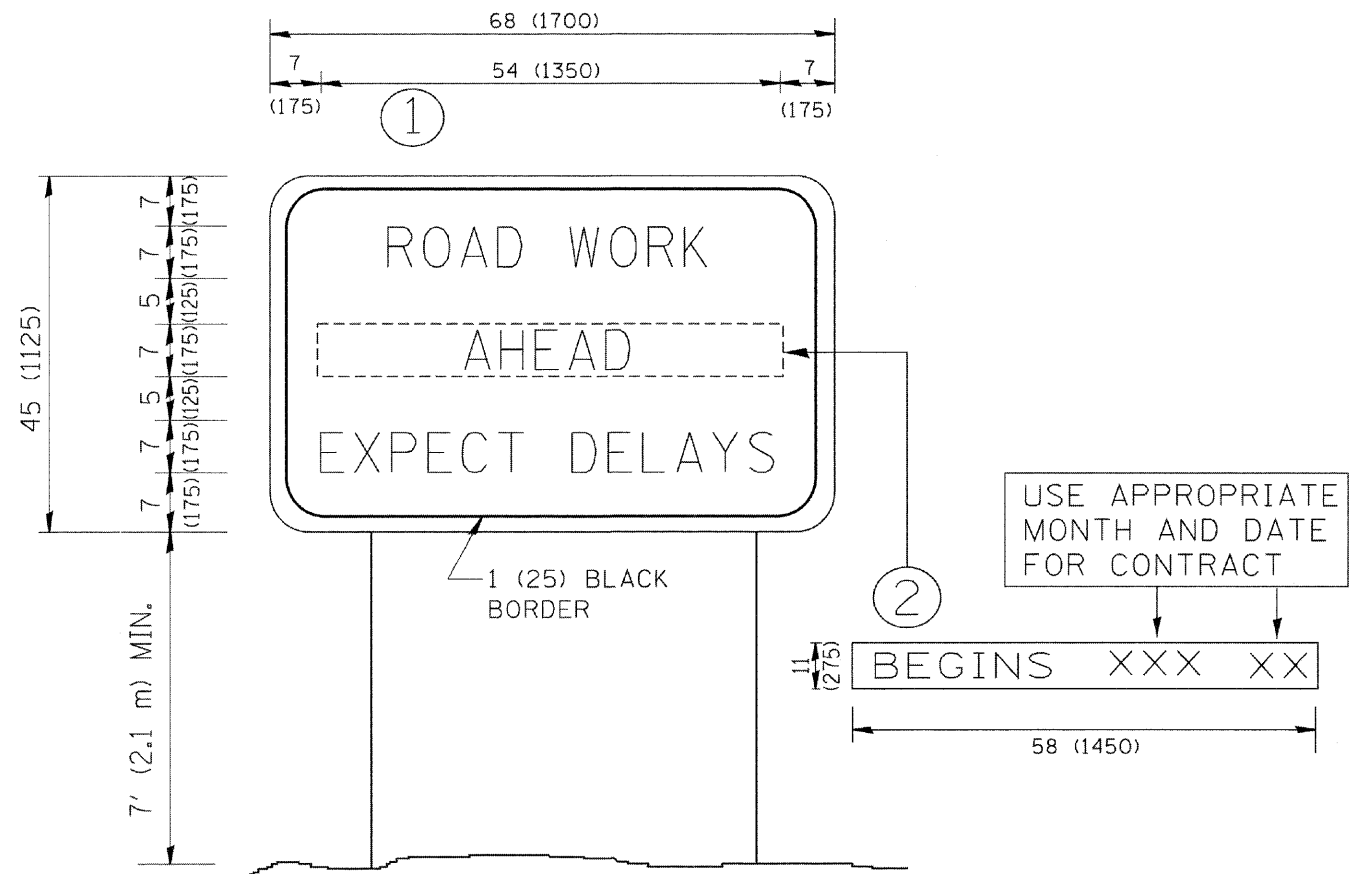
**LOWCO, INC.**  
 CONSULTING ENGINEERS  
 1560 WALL ST., SUITE 222  
 NAPERVILLE, ILLINOIS 60563 PH: (630) 577-9100

USER NAME = #USER#	DESIGNED - MJY	REVISED -
	DRAWN - ST	REVISED -
PLOT SCALE = #SCALE#	CHECKED - MJY	REVISED -
PLOT DATE = #DATE#	DATE - 04/15/2009	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

<b>DISTRICT ONE DETAIL SHEETS 183RD STREET</b>		
SCALE: NONE	SHEET NO. 21 OF 23 SHEETS	STA. 21+50 TO STA. 160+00

OR R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1622	3075 RS-1	COOK	23	21
D-91-575-09		CONTRACT NO. 60H19		
FED. ROAD DIST. NO.		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.

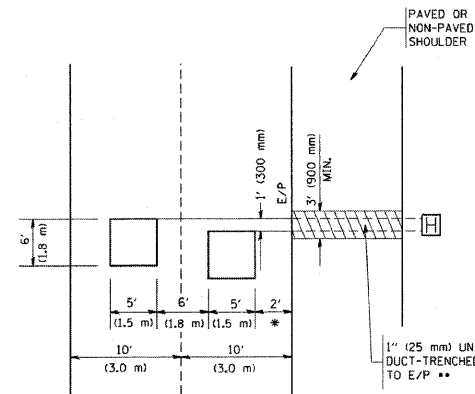
**ARTERIAL ROAD INFORMATION SIGN**

USER NAME = #USER#	DESIGNED - MJY	REVISED -
	DRAWN - ST	REVISED -
PLOT SCALE = #SCALE#	CHECKED - MJY	REVISED -
PLOT DATE = #DATE#	DATE - 04/15/2009	REVISED -

OR RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1622	3075 RS-1	COOK	23	22
D-91-575-09		CONTRACT NO. 60H19		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

**LOOPS NEXT TO SHOULDERS**

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

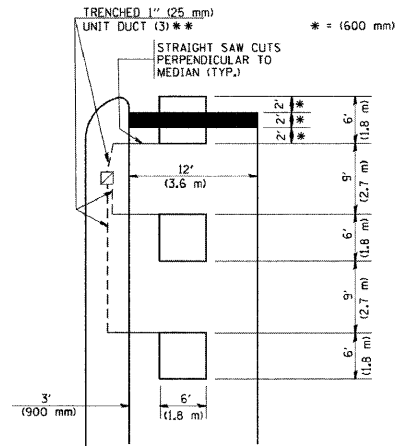


\* = (600 mm)

\*\* 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)**

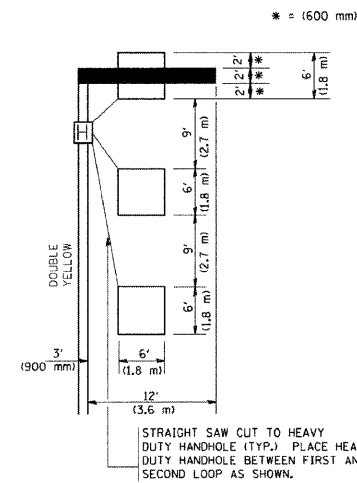
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



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

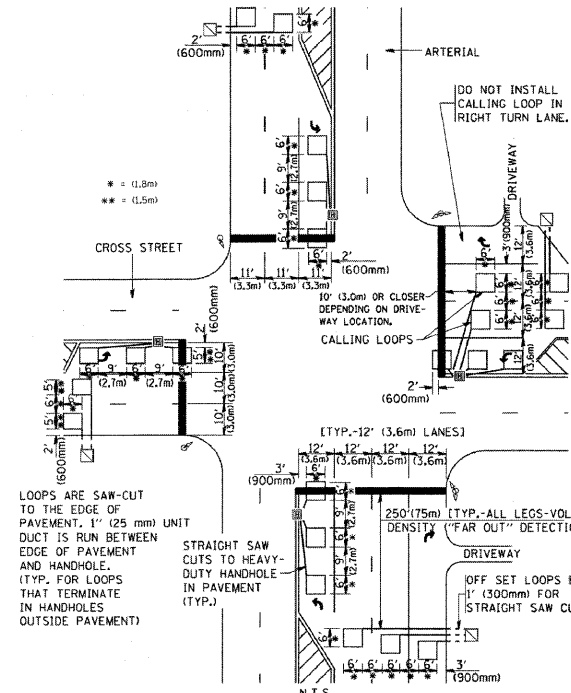
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



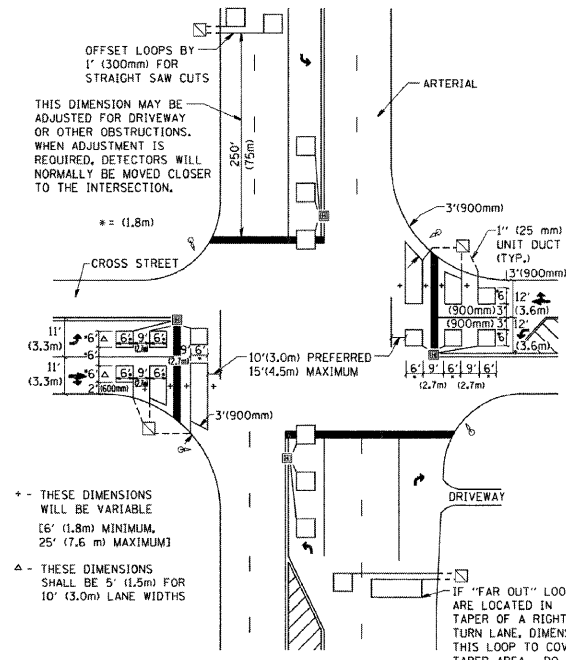
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

**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.

**DISTRICT ONE DETECTOR LOOP INSTALLATION DETAILS  
FOR ROADWAY RESURFACING**

USER NAME = #USER#	DESIGNED - MJY	REVISED -
PLOT SCALE = #SCALE#	DRAWN - ST	REVISED -
PLOT DATE = #DATE#	CHECKED - MJY	REVISED -
	DATE - 04/15/2009	REVISED -

OR RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1622	3075 RS-1	COOK	23	23
D-91-575-09			CONTRACT NO. 60H19	
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		