STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

**DIVISION OF HIGHWAYS** 

PROPOSED HIGHWAY PLANS

FAP ROUTE 338: ILL 59 (HOUGH ST)

MAIN ST TO BARRINGTON RD

SECTION 1212 RS-3

RESURFACING (MAINTENANCE)

COOK & LAKE COUNTIES C-91-068-09



FOR INDEX OF SHEETS, SEE SHEET NO. 2

 $\circ$ 

 $\circ$ 

THIS PROJECT IS LOCATED
IN THE VILLAGE OF BARRINGTON

TRAFFIC DATA

2007 ADT = 19,200 POSTED SPEED LIMIT = 25 - 35 MPH

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

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

PROJECT ENGINEER ROBERT BORO (847) 705-4178
PROJECT MANAGER KEN ENG

CONTRACT NO. 60F37

GROSS AND NET LENGTH OF PROJECT = 4488 FEET = 0.85 MILES

**CUBA & BARRINGTON TOWNSHIPS** 

PROJECT BEGINS

STA 71+17.7 BARRINGTON RD

D-91-068-09

JO DAVIESS STEPHENSON WINNESSACO GODRE MC MEMPY LAKE

CARROLL

OULE

WHITESIDE

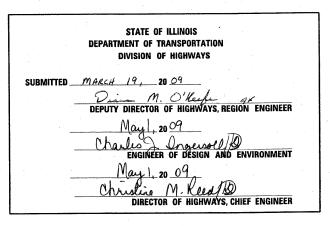
HENGY

BUREAU

JA SALLE

GRUNDT

KANKAKEE



PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

#### INDEX OF SHEETS

ARTERIAL ROAD INFORMATION SIGNING (TC-22)

RESURFACING (TS-07)

DISTRICT ONE DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY

22

#### STATE STANDARDS

	NO.	DESCRIPTION		STANDARD NO	DESCRIPTION
	1	TITLE SHEET		442201-03	CLASS C AND D PATCHES
	2	INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES		602001-01	CATCH BASIN TYPE A
	3	SUMMARY OF QUANTITIES		602016-01	CATCH BASIN TYPE D
	4-7	TYPICAL SECTIONS		604001-03	FRAME AND LIDS, TYPE 1
	8-9	ROADWAY & PAVEMENT MARKING PLANS		604051-03	FRAME AND GRATE, TYPE 11
	10-12	DETECTOR LOOP REPLACEMENT		606001-04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB & GUTTER
	13	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING (BD-8)		701301-03	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
	14	PAVEMENT PATCHING FOR HOT-MIX ASPHALT SURFACED PAVEMENT(BD-22)		701306 - 02	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEED > 45 MPH
	15	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24)		701311- 03	LANE CLOSURE 2L, 2W MOVING OPERATIONS - DAY ONLY
	16	BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS (BD-32)		701501 - <i>05</i>	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
	17	TRAFFIC CONTROL AND PROTECTION FOR SIDES ROADS, INTERSECTIONS AND DRIVEWAYS (TC-10)		701901- 01	TRAFFIC CONTROL DEVICES
26	18	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT) (TC-11)	a .	780001 - 02	TYPICAL PAVEMENT MARKINGS
	19	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)		781001 - 03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
	20	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) (TC-14)			
	21	PAVEMENT MARKING LETTER AND SYMBOLS FOR TRAFFIC STAGING (TC-16)			

#### GENERAL NOTES:

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED)

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

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

ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT NO ADDITIONAL COST TO 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 HMA TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.

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

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

THE ENGINEER SHALL CONTACT WALLY CZARNY, TRAFFIC FIELD ENGINEER (OR TECHNICIAN), AT (773) 685-8386 A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

LOCATION OF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND COMBINATION CURB AND GUTTER (THE TYPE SPECIFIED ON THE PLANS), WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

DRAINAGE ADJUSTMENT OR RECONSTRUCTION LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

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

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND

SIDEWALK REMOVAL AND SIDEWALK (OF THE TYPE SPECIFIED) LOCATIONS SHALL BE DETERMINED BY THE ENGINEER.

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

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.

FOR FRAMES AND LIDS ADJUSTMENT WITHOUT MILLING, REUSE EXISTING FRAME AND LID UNLESS OTHERWISE SPECIFIED IN THE PLANS.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS - RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" SHOWN IN THE PLANS.

ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES. THE COST OF THE PAVEMENT MARKING TAPE, TYPE III AND ITS REMOVAL SHALL BE INCLUDED IN THE COST OF SHORT TERM PAVEMENT MARKING.

COUNTY TOTAL SHEETS NO.

CONTRACT NO. 60F37

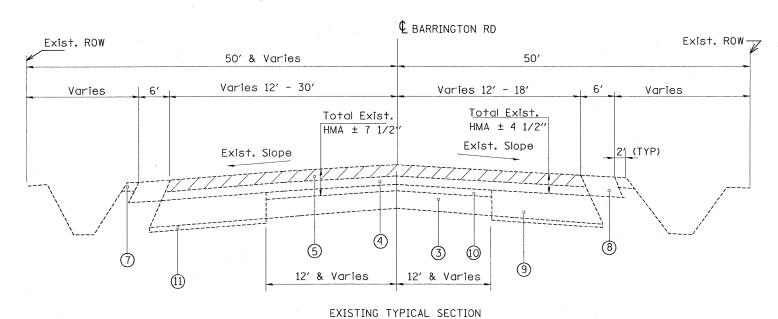
COOK & LAKE 23

		•		
-	FILE NAME =	USER NAME = gorengautab	DESIGNED -	REVISED -
	c:\pw_work\PWIDOT\GORENGAUTAB\dms89240	sh_rdwy.dgn	DRAWN -	REVISED -
		PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -
		PLOT DATE = 3/18/2009	DATE -	REVISED -

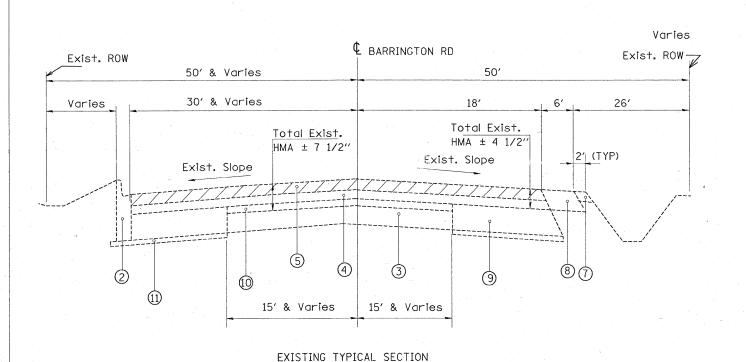
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

IL 59 (HOU	GH STREE	T). MAII	N STREI	T TO BA	RRINGTON ROAD	F.A.P RTE.	SECTION	COUNTY
INDEX OF	· CULTE	338	1212 RS - 3	COOK & L				
INDEX OF	. SHEELS	SIAIC	IANUAI	IN2 VIAN	GENERAL NOTES			CONTR
SCALE: 1" = 50'	SHEET NO.	OF	SHEETS	STA.	TO STA.	FED. R	DAD DIST. NO. 1   ILLINOIS FED. A	ID PROJECT

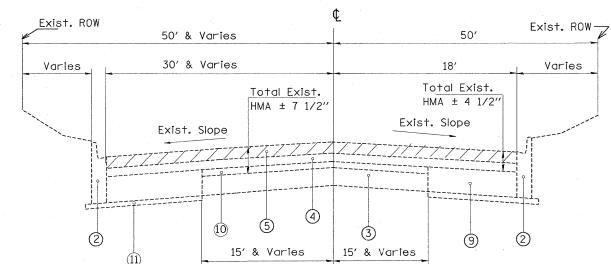
	SUMMARY OF QUANTITIES		URBAN		(	CONSTRUCT	ION TYPE	CODE I	000-2A			SUMMARY OF QUANTITIES		URBAN 100%.STATE		C	ONSTRUCT	ION TYPE	CODE I	)00-2A
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	1000	IOOO LAKE COUNTY		,			CODE		ITEM	UNIT	TOTAL QUANTITIES	I000	I 000 LAKE COUNTY				
21400100	GRADING AND SHAPING DITCHES	FOOT	30	30						604048	OO ERAMES	AND GRATES, TYPE 11	EACH	3	3					
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	0.5	0.5						604040		AND LIDS, TYPE 1, CLOSED LID	EACH	14	14					
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	0.25							670004		ER'S FIELD OFFICE, TYPE A	CAL MO	3	2.5	0.5				
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	0.15	ļ						671001			L SUM	1	0.9					
25200110	SODDING, SALT TOLERANT	SQ YD	22	22						701026		C CONTROL AND PROTECTION,	L SUM	1	0.9			1		
25200200	SUPPLEMENTAL WATERING	UNIT	0.2	0.2							1	RD 701501								
28100705	STONE DUMPED RIPRAP, CLASS A3	SQ YD	3	3			:			703001	00 SHORT-	TERM PAVEMENT MARKING	F00T	2967	2703	264				
28200200	FILTER FABRIC	SQ YD	3	3						703002		ARY PAVEMENT MARKING ERS AND SYMBOLS	SQ FT	543.6	363	180.6				
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	8.2	7.6	0.6					703002		ARY PAVEMENT MARKING	FOOT	11206	10809	397				
40600300	AGGREGATE (PRIME COAT)	TON	41	38	3						- LINE		1			,				
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	6.2	5.7	0.5					703002	40 TEMPOR	ARY PAVEMENT MARKING 6"	FOOT	1915	1186	729				
40600895	CONSTRUCTING TEST STRIP	EACH	1	1						703002	60 TEMPOR	ARY PAVEMENT MARKING 12"	FOOT	1347	1061	286				
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	225	159	66					703002	80 TEMPOR	ARY PAVEMENT MARKING 24"	FOOT	291	199	92				
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	148.5	132	16.5					× 780001	I	PLASTIC PAVEMENT MARKING ERS AND SYMBOLS	SQ FT	543.6	363	180.6				
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	1706	1585	121	e Te	e see ge			<b>*</b> 780002		PLASTIC PAVEMENT MARKING	FOOT	11206	10809	397				
42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	18	18						<b>★</b> 780004	OO THERMO	PLASTIC PAVEMENT MARKING 6"	FOOT	1915	1186	729				
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	20315	18875	1440					<b>*</b> 780006	00 THERMO	PLASTIC PAVEMENT MARKING 12"	FOOT	1347	1061	286				
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD SQ FT	18	18						× 780006	50 THERMO	PLASTIC PAVEMENT MARKING 24"	FOOT	291	199	92				
44000600	SIDEWALK REMOVAL	FOOT	236	236						<b>*</b> 781001	00 RAISEE	REFLECTIVE PAVEMENT MARKER	EACH	267	243	24				
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT				73					783002	RAISEE REMOVA	REFLECTIVE PAVEMENT MARKER	EACH	218	200	18				
44002216	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 4"	SQ YD	661	588	'3					* 886006	OO DETECT	OR LOOP REPLACEMENT	FOOT	1792	1155	637				
44201737	CLASS D PATCHES, TYPE I, 8 INCH	SQ YD	4	4						X0322	256 TEMPOR	RARY INFORMATION SIGNING	SQ FT	51.4	25. 7	25.7				
44201741	CLASS D PATCHES, TYPE II, 8 INCH	SQ YD	246	220	26					X4067		RIZED LEVELING BINDER (MACHINE	TON	800	743	57				
44201745	CLASS D PATCHES, TYPE III, 8 INCH	SQ YD	104	93	. 11					XX002		SIDEWALK REMOVAL	SQ FT	87	77	10				
44201747	CLASS D PATCHES, TYPE IV, 8 INCH	SQ YD	228	203	25					XX004		PAVER SIDEWALK	SQ FT	87	77	10				
55039700	STORM SEWERS TO BE CLEANED	FOOT	5139	4657	482					Z0018		AGE STRUCTURES TO BE CLEANED	EACH	30	30					
60252800	CATCH BASINS TO BE RECONSTRUCTED	EACH	4	4						44201		D PATCHES, TYPE II, 12 1/4 INCH	SQ YD	132	132					
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	13	13						44201		D PATCHES, TYPE III, 12 1/4 INCH	SQ YD	55	55					
60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	24	24						44201	197 CLASS	D PATCHES, TYPE IV, 12 1/4 INCH	SQ YD	123	123					
													:							
												*specialty ITEMS								
FILE NAME =		ESIGNED -		REVISE					STATE O	FILLINOIS						F.A. RTE 338	P. SE	ECTION RS-3		TOTAL SHEET SHEETS NO. E 23 3
G GAT SHOLK V WILLOUT	PLOT SCALE = 50,0000 '/ IN. C	HECKED -		REVISE REVISE	D -		-  -	DEPART	MENT OF			SCALE: SHEET NO. OF	RY OF QUANI		TO STA.			1   ILLINOIS   FED.	CONTRACT	NO. 60F37



STA 71+17.7 TO STA 75+41.38



STA 75+41.38 TO STA 78+58.6



EXISTING TYPICAL SECTION

STA 78+58.6 TO STA 80+00 (BARRINGTON RD) STA 141+66.2 TO STA 150+81 IL 59 (HOUGH RD)

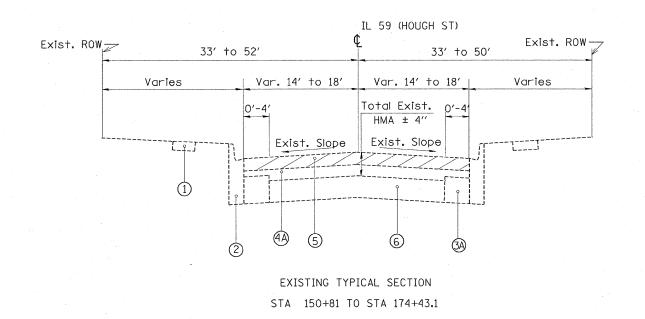
## LEGEND

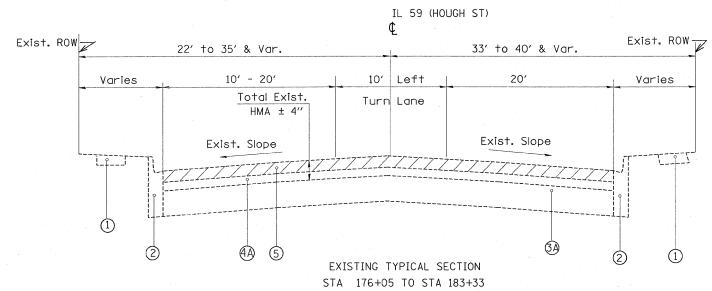
- 1) EXISTING PC CONCRETE SIDEWALK
- (2) EXISTING COMB, CONCRETE CURB AND GUTTER
- 3 EXISTING PC CONCRETE BASE COURSE ± 7"
- (3A) EXISTING PC CONCRETE BASE COURCE ± 8"
- 4 EXISTING HMA, AFTER MILLING SURFACE, ± 2 1/4"
- (A) EXISTING HMA, AFTER MILLING SURFACE 1 3/4"
- (5) PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"
- 6 EXISTING PAVEMENT ± 8"
- 7 EXISTING HMA SHOULDER
- (8) EXISTING AGGREGATE SHOULDER
- 9 EXISTING PC CONCRETE BASE COURSE, 10"
- (10) EXISTING BINDER, 3"
- (11) EXISTING GRANULAR MATERIAL, TYPE B, 4"

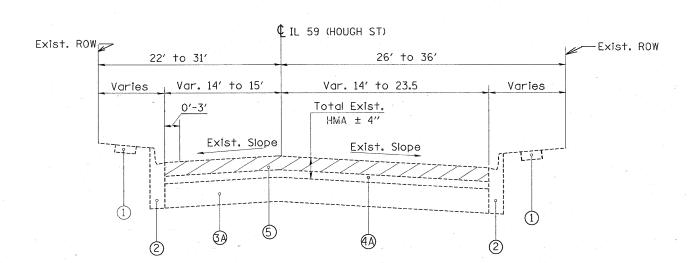
FILE NAME =	USER NAME = gorengautab	DESIGNED -	REVISED -	
c:\pw_work\PWIDOT\GORENGAUTAB\dms89240	sh_rdwy.dgn	DRAWN -	REVISED -	
	PLOT SCALE = 50.00000 '/ IN.	CHECKED -	REVISED -	
	PLOT DATE = 3/18/2009	DATE -	REVISED -	

STATE	OF	ILLINOIS
<b>DEPARTMENT</b>	OF 1	TRANSPORTATION

IL 59 (HOU	GH STREET	). MAIN	STREE	T TO BARR	NGTON	l Ro	IL 59 (HOUGH STREET). MAIN STREET TO BARRINGTON ROAD										TOTAL SHEETS	SHE	
,	EXISTING TYPICAL SECTIONS										1212 F	RS - 3		COOK	& L/	AKE	23	4	1
EVISHING LILICAT SECTIONS														CON	TRA	\CT	NO.	60F3	7
CALE:	SHEET NO.	OF '	SHEETS	STA, 71+17.7	TO 5	STA. :	150+81	-				ILLINO	S FED. A	ID PROJE	CT				







EXISTING TYPICAL SECTION

STA 174+43.1 TO STA 176+05

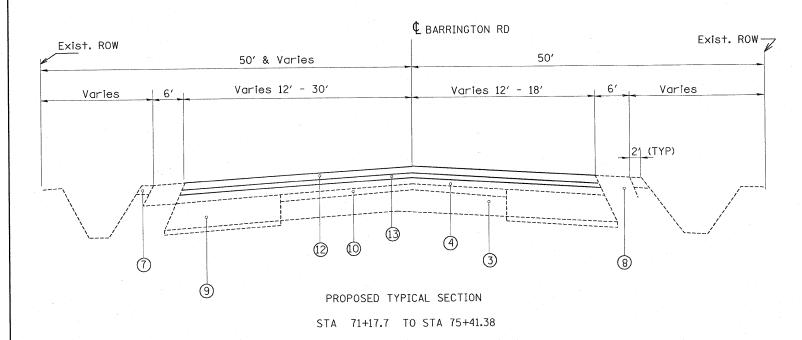
## LEGEND

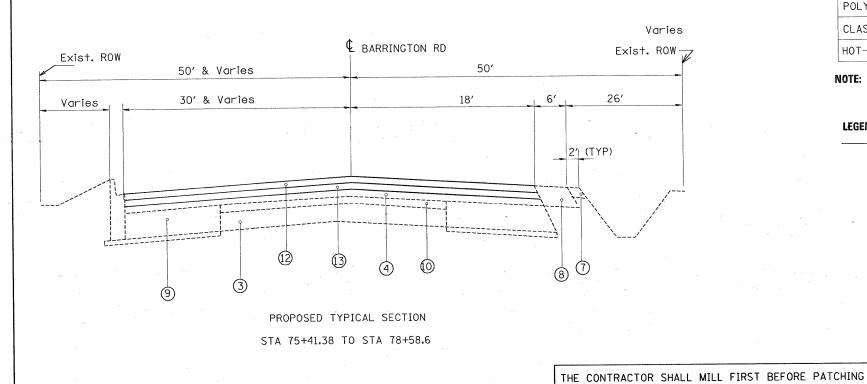
- 1) EXISTING PC CONCRETE SIDEWALK
- 2 EXISTING COMB. CONCRETE CURB AND GUTTER
- (3) EXISTING PC CONCRETE BASE COURSE ± 7"
- (3A) EXISTING PC CONCRETE BASE COURCE ± 8"
- 4 EXISTING HMA, AFTER MILLING SURFACE, ± 2 1/4"
- (4A) EXISTING HMA, AFTER MILLING SURFACE 1 3/4"
- (5) EXISTING PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"
- 6 EXISTING PAVEMENT ± 8"
- 7 EXISTING HMA SHOULDER
- (8) EXISTING AGGREGATE SHOULDER
- 9 EXISTING P.C. CONCRETE BASE COURSE 10"
- (10) EXISTING BINDER, 3"
- (11) EXISTING GRANULAR MATERIAL, TYPE B, 4"

FILE NAME =	USER NAME = gorengautab	DESIGNED -	REVISED -	Γ
c:\pw_work\PWIDOT\GORENGAUTAB\dms89240	ish_rdwy,dgn	DRAWN -	REVISED -	
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -	
•	PLDT DATE = 3/18/2009	DATE -	REVISED -	

STATE	OF	ILLINOIS
DEPARTMENT	OF '	TRANSPORTATION

	I 50 /HOUGH	STREET).	MAIN STR	EET TO BARRINGTON ROAD		RTE. SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
•	r 22 /1100dii				338	1212 RS - 3	COOK & LAKE	23	5	
		EXISTIN	G TYPICAL S	SECTIONS			CONTRACT	NO. 6	OF 37	
1 F.	SHE	T NO. 1	OF SHEETS	STA.	TO STA.	EED BO	AD DIST NO THINNIS EED A	ID PROJECT		





Exist. ROW Exist. ROW -50' & Varies 30' & Varies Varies PROPOSED TYPICAL SECTION

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

STA 78+58.6 TO STA 80+00 (BARRINGTON RD)

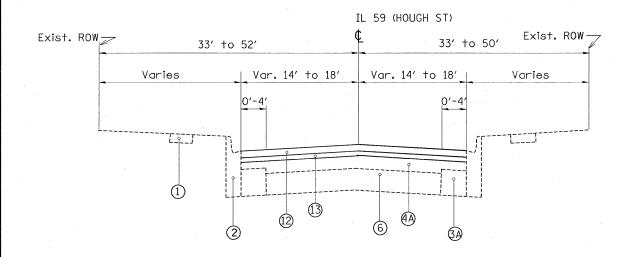
STA 141+66.2 TO STA 150+81 IL 59 (HOUGH ST)

NOTE: THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURES IS 112 LBS/SQ.YD/IN. \*\*WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22.

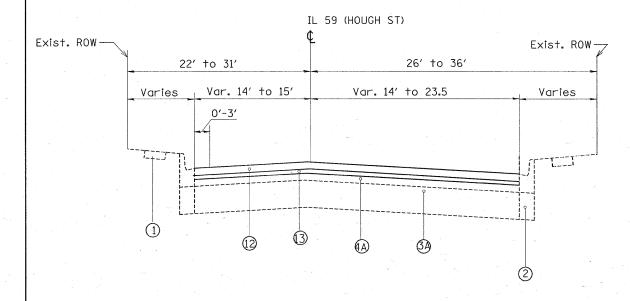
#### LEGEND:

- 1) EXISTING PC CONCRETE SIDEWALK
- 2 EXISTING COMB. CONCRETE CURB AND GUTTER
- 3) EXISTING PC CONCRETE BASE COURSE ± 7"
- (A) EXISTING PC CONCRETE BASE COURSE ± 8"
- EXISTING HMA, AFTER MILLING SURFACE, ± 2 1/4"
- EXISTING HMA, AFTER MILLING SURFACE 1 3/4"
- 6 EXISTING PAVEMENT ± 8"
- 7 EXISTING HMA SHOULDER
- (8) EXISTING AGGREGATE SHOULDER
- EXISTING PC CONCRETE BASE COURSE, 10"
- 10 EXISTING BINDER 3"
- PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2"
- PROPOSED LEVELING BINDER (MACHINE METHOD), N50, 3/4"

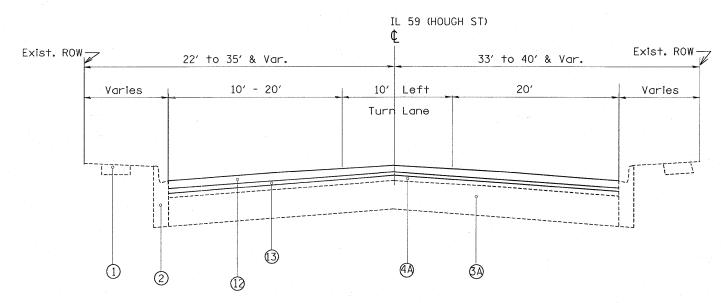
	· ·					F.A.P SECTION	COUNTY TOTAL SHEET
IF NAME =	USER NAME = gorengautab	DESIGNED -	REVISED -		IL 59 (HOUGH STREET). MAIN STREET TO BARRINGTON ROAD	RIE.	SILL 13 Ito:
\pw_work\PWIDOT\GORENGAUTAB\dms89240	Nsh_rdwy.dgn	DRAWN -	REVISED -	STATE OF ILLINOIS	PROPOSED TYPICAL SECTIONS	338 1212 RS - 3 C	COOK & LAKE 23 6
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	TO CT4	TILLINOIS FED. AID	CONTRACT NO. 60F37
	PLOT DATE ~ 3/19/2009	DATE -	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.	ILLINOIS FEB. AID	) FROOLET



PROPOSED TYPICAL SECTION STA 150+81 TO STA 174+43.1



PROPOSED TYPICAL SECTION STA 174+43.1 TO STA 176+05



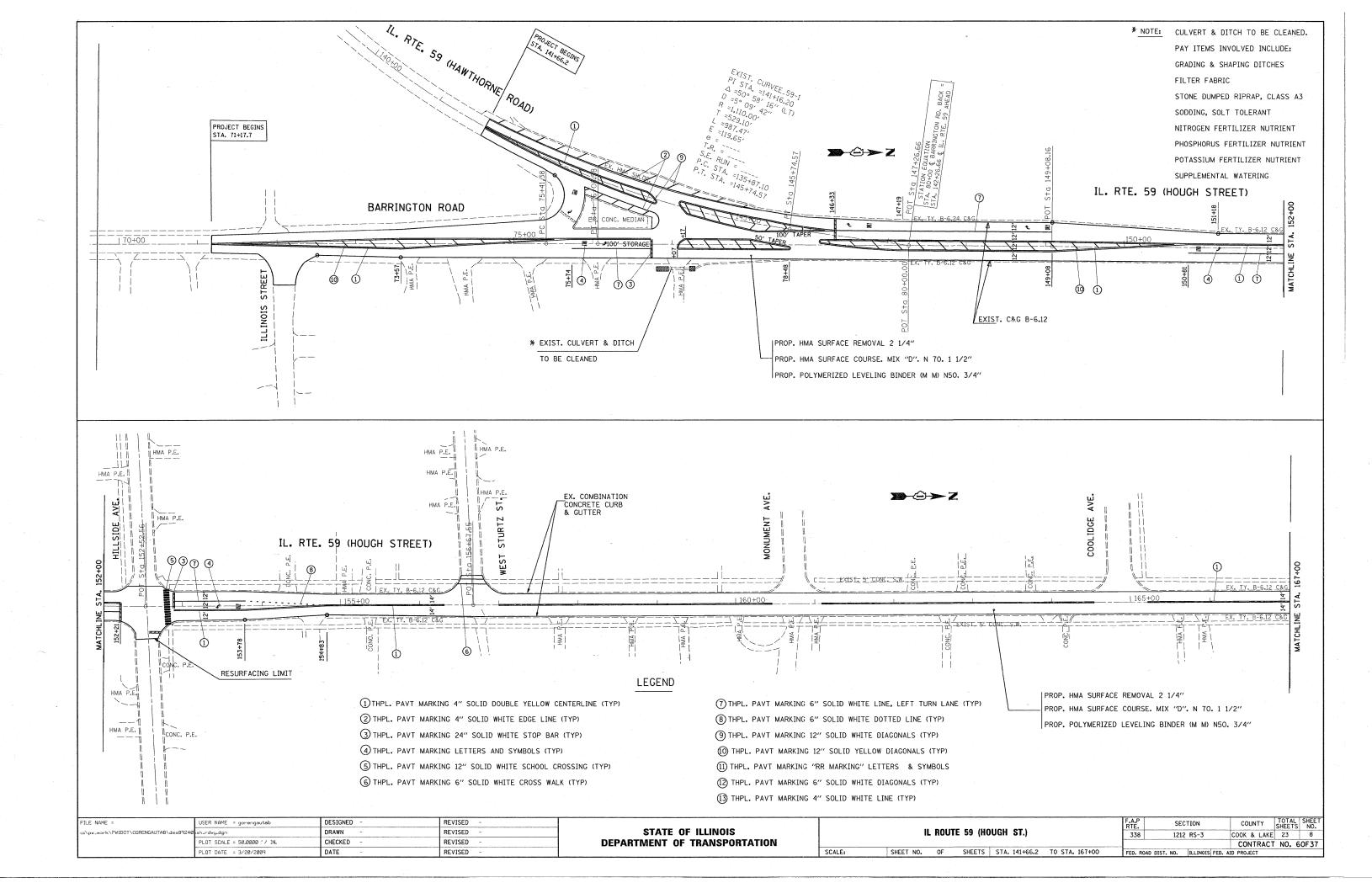
PROPOSED TYPICAL SECTION STA 176+05 TO STA 183+33

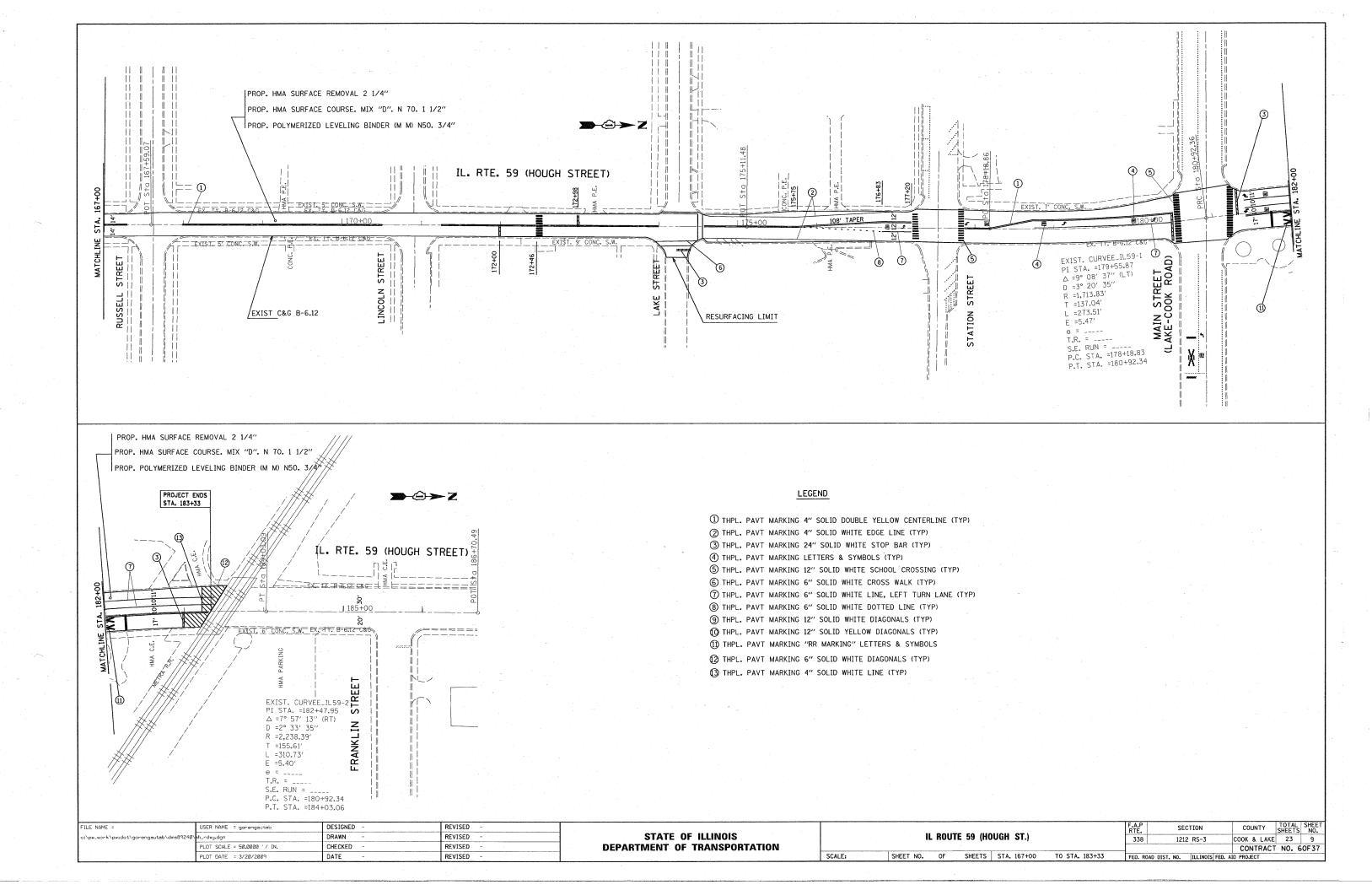
# LEGEND:

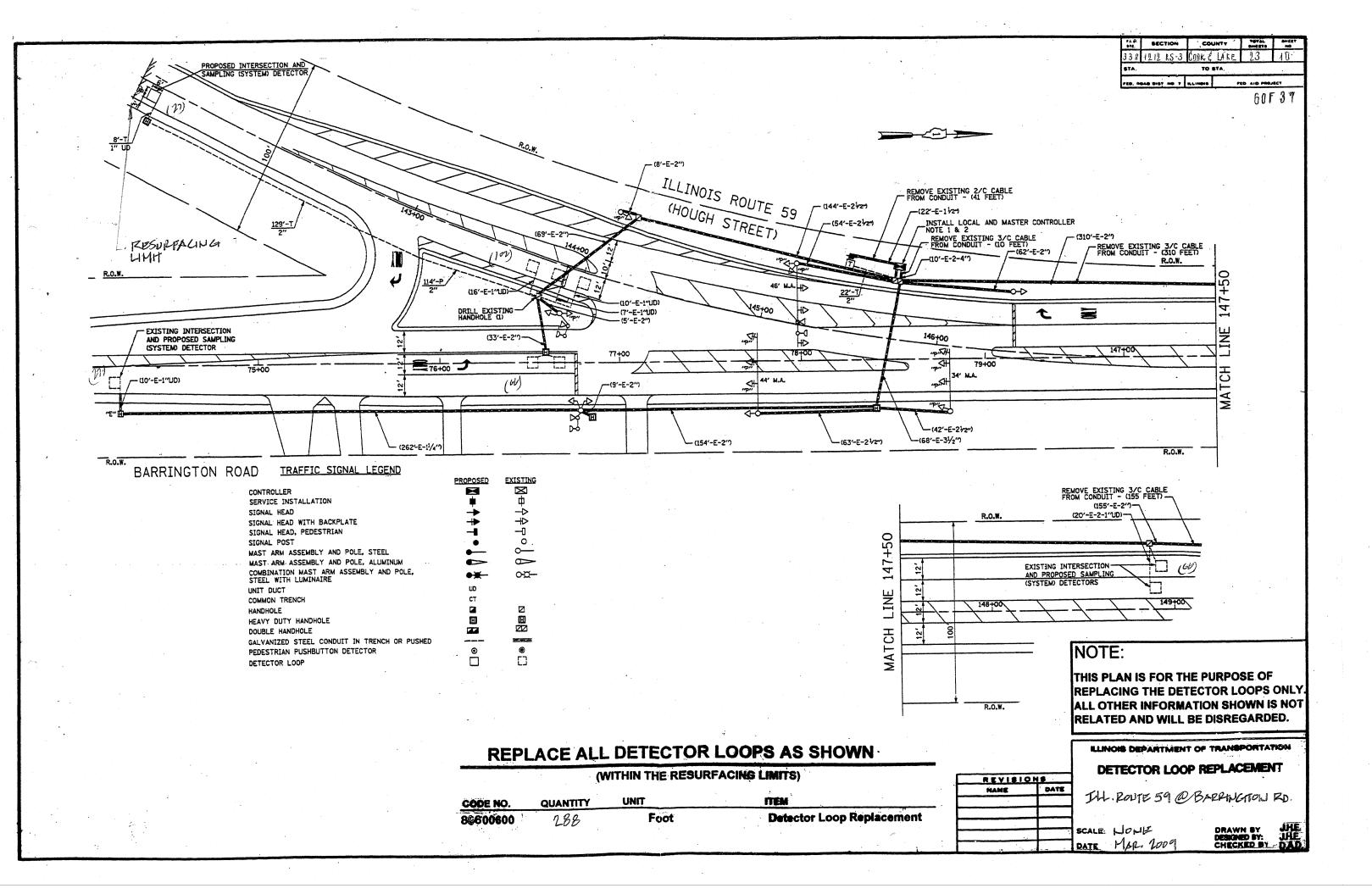
- 1 EXISTING PC CONCRETE SIDEWALK
- (2) EXISTING COMB. CONCRETE CURB AND GUTTER
- (3) EXISTING PC CONCRETE BASE COURSE ± 7"
- (3A) EXISTING PC CONCRETE BASE COURSE ± 8"
- (4) EXISTING HMA, AFTER MILLING SURFACE,  $\pm$  2 1/4"
- (4A) EXISTING HMA, AFTER MILLING SURFACE 1 3/4"
- 6 EXISTING PAVEMENT ± 8"
- 7 EXISTING HMA SHOULDER
- 8 EXISTING AGGREGATE SHOULDER
- (9) EXISTING P.C. CONCRETE BASE COURSE, 10"
- 12) PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2"
- (13) PROPOSED LEVELING BINDER (MACHINE METHOD), N50, 3/4"

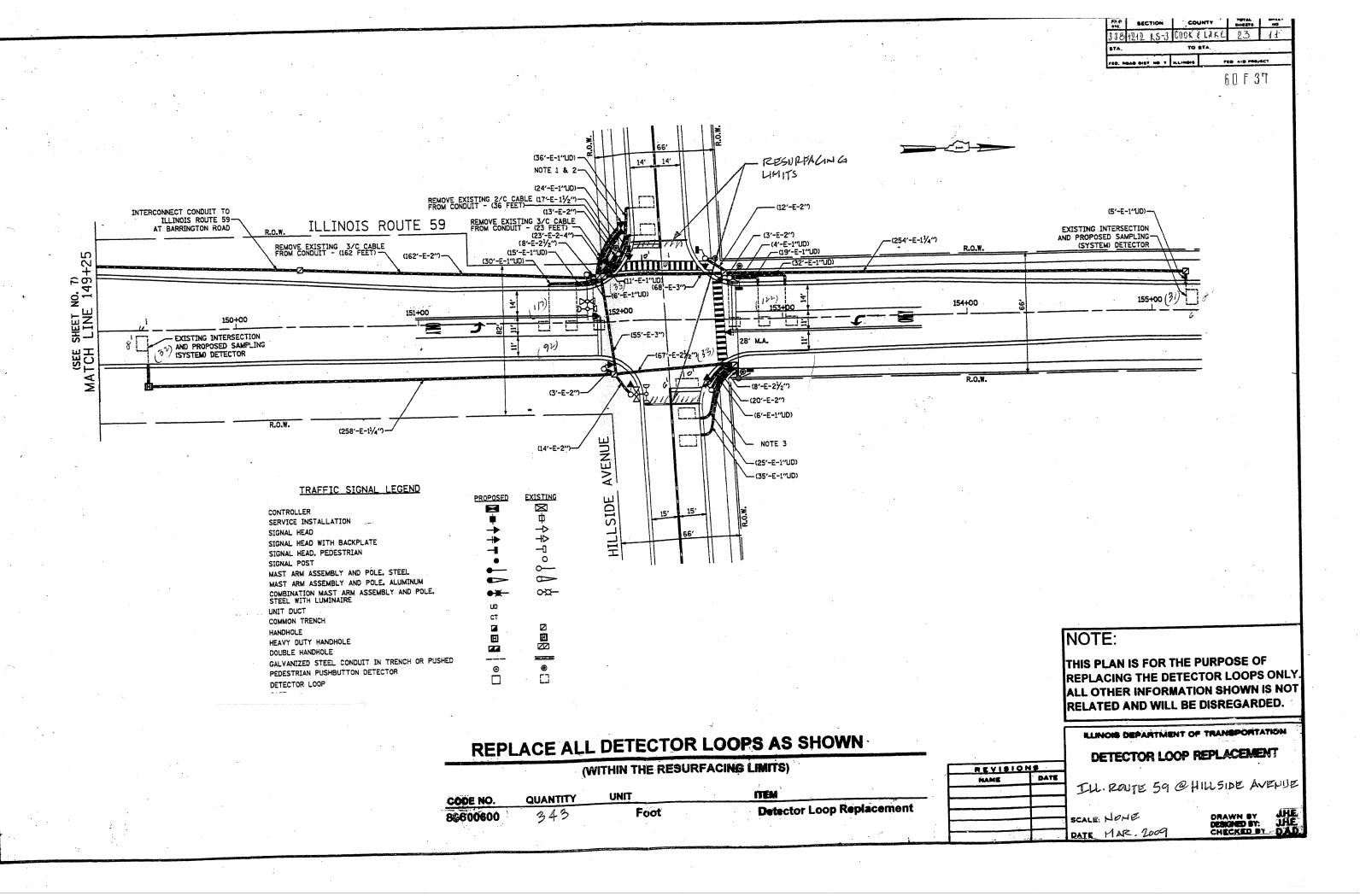
THE CONTRACTOR SHALL PATCH FIRST BEFORE MILLING

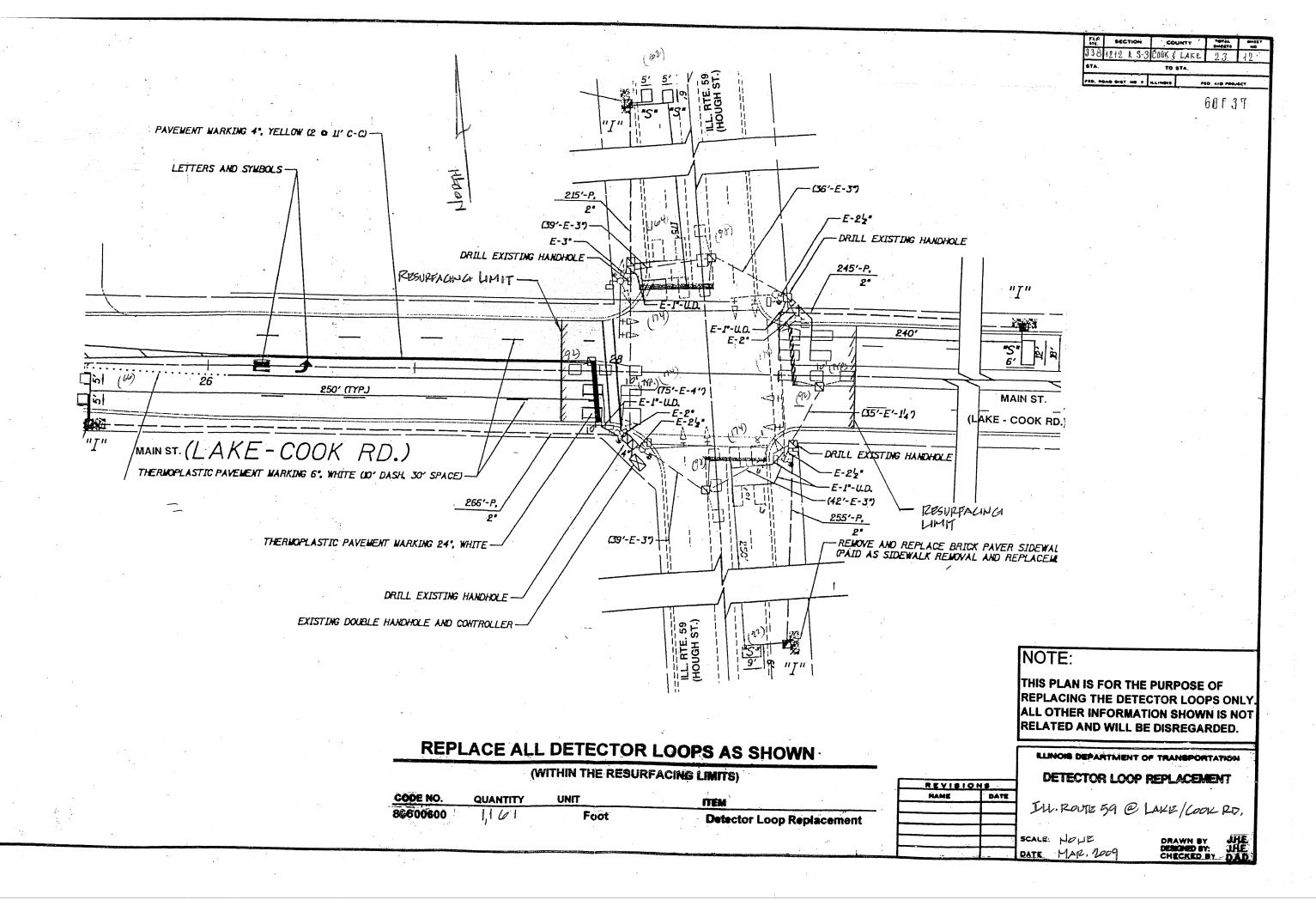
FILE NAME =	USER NAME = garengautab	DESIGNED -	REVISED -		II 59 /H	OUGH STREET), MAIN STREET TO BARRINGTON ROAD	F.A.P	SECTION	COUNTY TOTAL SHEET
c:\pw_work\PWIDOT\GORENGA	AUTAB\dms89240 sh_rdwy.dgn	DRAWN -	REVISED -	STATE OF ILLINOIS	12 33 (11	PROPOSED TYPICAL SECTIONS	338	1212 RS - 3	COOK & LAKE 23 7
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION		PROPUSED ITFICAL SECTIONS			CONTRACT NO. 60F37
	PLOT DATE = 3/18/2009	DATE -	REVISED -		SCALE:	SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD E	IST. NO. ILLINOIS FED.	AID PROJECT

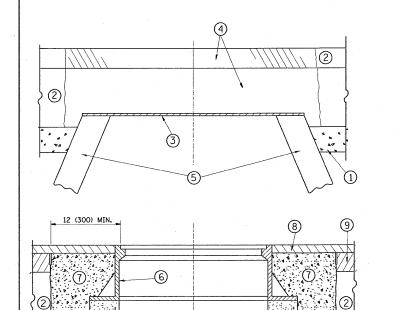












BRICK, MORTAR, OR CONC. ADJUSTING RINGS

PROPOSED

SAND FILL

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 PAYEMENT 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.

NOTES:

#### 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 LEEVATION 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.

1 SUB-BASE GRANULAR MATERIAL

PROPOSED SAND FILL

- 6 FRAME AND LID (SEE NOTES)
- 2 EXISTING PAVEMENT
- CLASS SI CONCRETE, HMA SURFACE COURSE OR HMA BINDER COURSE
- 3 36 (900) DIAMETER METAL PLATE PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- 8 PROPOSED HMA SURFACE COURSE
- (5) EXISTING STRUCTURE
- 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.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

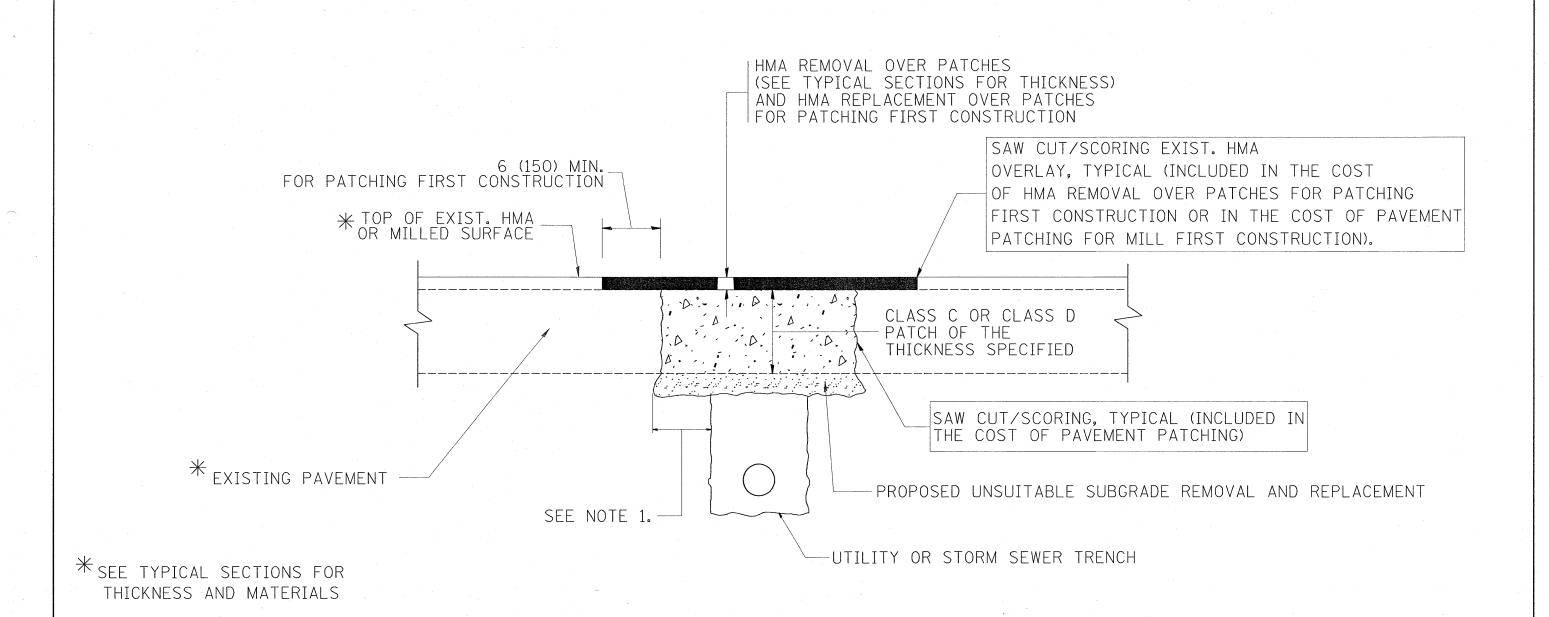
> ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

REVISED - R. SHAH 03-10-95 FILE NAME = USER NAME = gorengautab DESIGNED - R. SHAH DRAWN - A. ABBAS 03-21-97 PLOT SCALE = 50.0000 '/ IN. REVISED - R. WIEDEMAN 05-14-04 CHECKED DATE PLOT DATE = 3/20/2009 10-25-94 REVISED - R. BORO 01-01-07

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

FRAMES AND LIDS ADJUSTMENT WITH MILLING SHEET NO. 1 OF 1 SHEETS STA.

COUNTY TOTAL SHEETS NO. COOK & LAKE 23 13 SECTION 1212 RS - 3 BD600-03 (BD-8) CONTRACT NO. 60F37 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT



# 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".

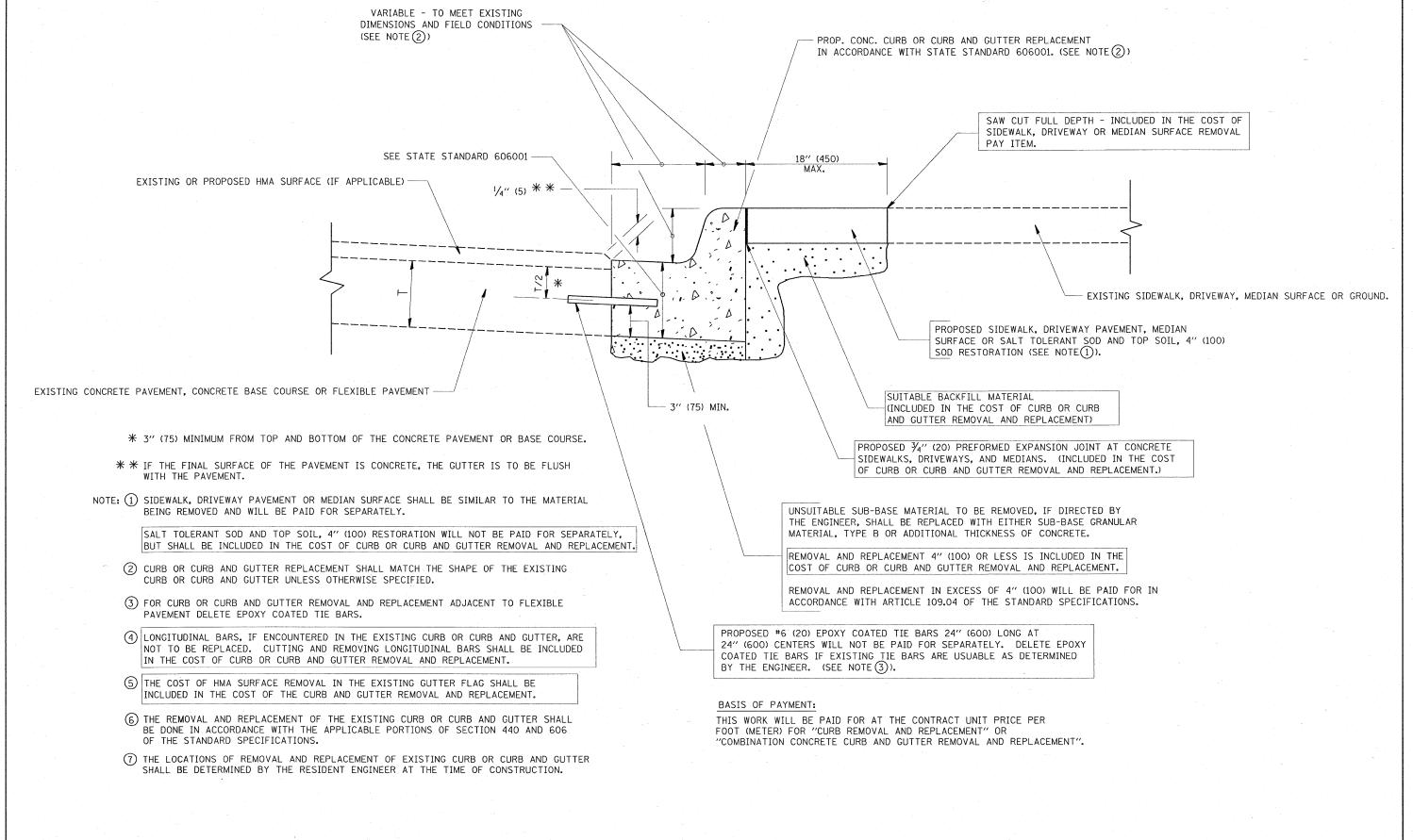
## SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

- 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)

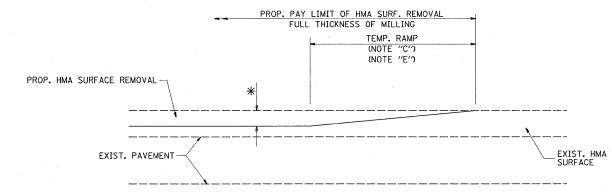
- 1. MILL HMA FIRST IF THERE IS AT LEAST 41/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
- 2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

FIL	LE NAME =	USER NAME = gorengoutab	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98		PAVEMENT PATCHING FOR	F.A.P. SECTION	COUNTY TOTAL SHEET
0:/	pw_work\PWIDOT\GORENGAUTAB\dms89240	DistStd.dgn	DRAWN -	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS		338 1212M RS - 3	COOK & LAKE 23 14
		PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION	HMA SURFACED PAVEMENT	BD400-04 (BD-22)	CONTRACT NO. 60F37
		PLOT DATE = 3/20/2009	DATE - 10-25-94	REVISED - K. ENG 10-27-08		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.		D PROJECT



# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

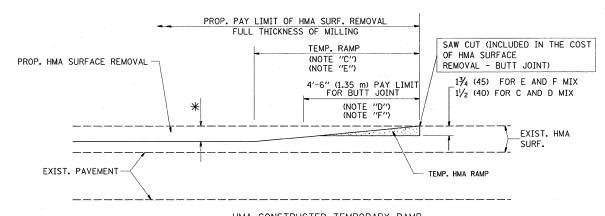
FILE NAME =	USER NAME = gorengautab	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96		CURB OR CURB AND GUTTER	RTE. SECTION COUNTY TOTAL SHEET NO.
c:\pw_work\PWIDOT\GORENGAUTAB\dms89240	DistStd.dgn	DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS	REMOVAL AND REPLACEMENT	338 1212 RS - 3 COOK & LAKE 23 15
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED - M. GOMEZ 01-22-01	DEPARTMENT OF TRANSPORTATION	KEMUVAL AND KEPLAGEMENT	BD600-06 (BD-24) CONTRACT NO. 60F37
	PLOT DATE = 3/20/2009	DATE ~ 03-11-94	REVISED - R. BORO 01-01-07		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID   PROJECT



MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

#### OPTION 1

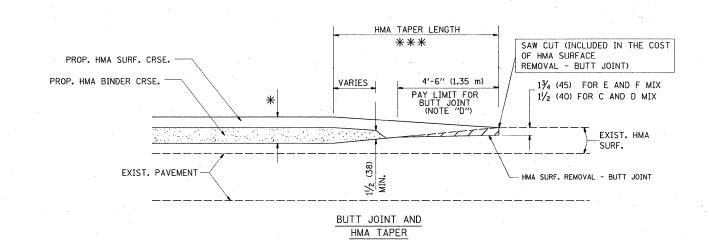


HMA CONSTRUCTED TEMPORARY RAMP

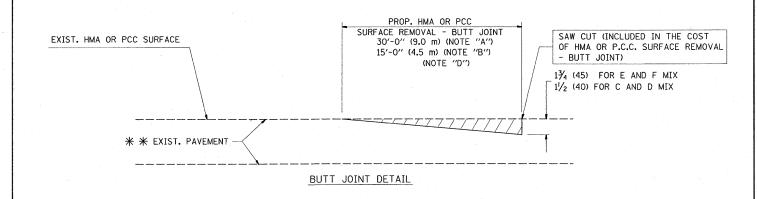
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

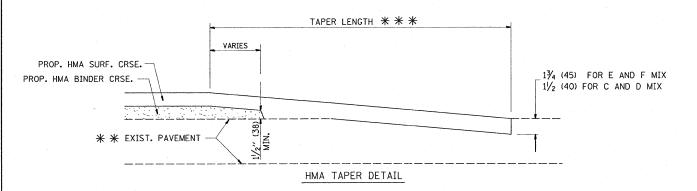
# OPTION 2

## 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.

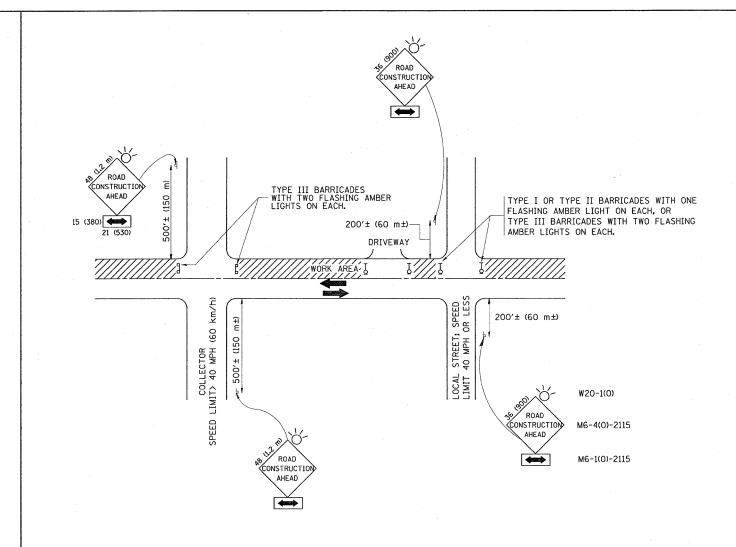
#### NOTES

- 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'-O" (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".

FILE NAME =	USER NAME = gorengautab	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94		BUTT JOINT AND	F.A.P. SECTION	COUNTY TOTAL SHEET SHEETS NO.
c:\pw_work\PWIDOT\GORENGAUTAB\dms89240	DistStd.dgn	DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS	HMA TAPER DETAILS	338 1212 RS - 3	COOK & LAKE 22 16
·	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01	DEPARTMENT OF TRANSPORTATION		BD400-05 BD32	CONTRACT NO. 60F37
	PLOT DATE = 3/20/2009	DATE - 06-13-90	REVISED - R. BORO 01-01-07		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS FED. A	AID PROJECT



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

## NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- 0) ONE ROAD CONSTRUCTION AHEAD SIGN 36  $\times$  36 (900 $\times$ 900) 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:
- g) ONE ROAD CONSTRUCTION AHEAD SIGN 48  $\times$  48 (1.2 m  $\times$  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).

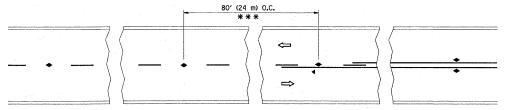
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL 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
- 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.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

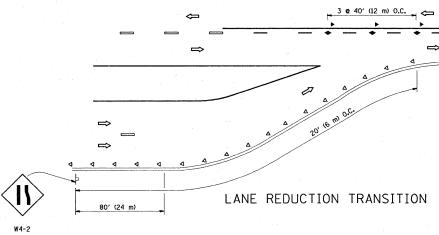
TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

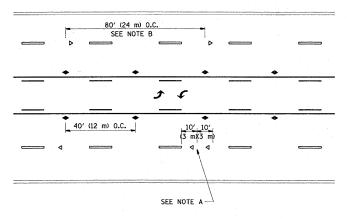
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA. FED. ROAD DIST. NO. 1 [ILLINOIS FED. AID PROJECT



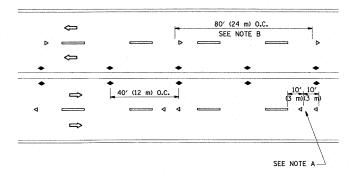
\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

TWO-LANE/TWO-WAY

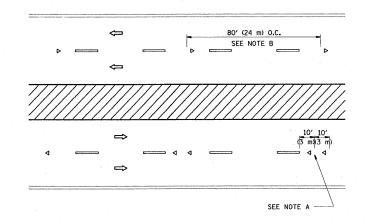




TWO-WAY LEFT TURN



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.
- MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

# 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.

## SYMBOLS

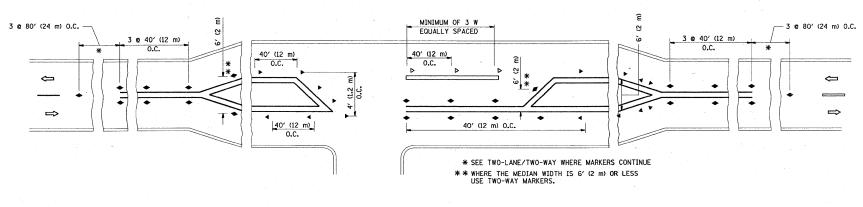
---- YELLOW STRIPE

WHITE STRIPE

- ONE-WAY AMBER MARKER
- ONE-WAY CRYSTAL MARKER (₩/O)
- ◆ TWO-WAY AMBER MARKER

## DESIGN NOTES

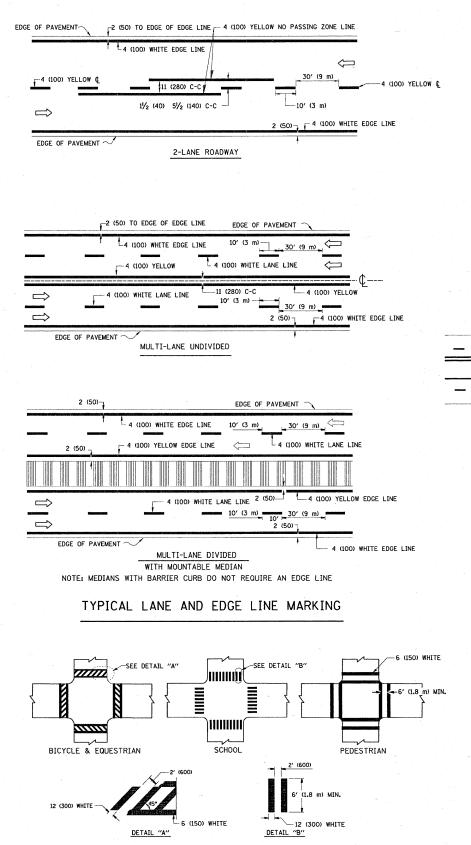
- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
- MARKERS SHOULD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

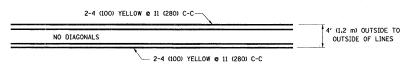


LEFT TURN

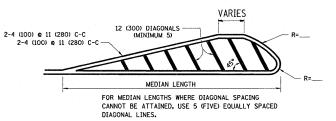
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = gorengautab	DESIGNED -	REVISED - T. RAMMACHER 09-19-94		TYPICAL APPLICATIONS	F.A.P. SECTION	COUNTY TOTAL SHEET SHEETS NO.
o:\pw_work\PWIDOT\GORENGAUTAB\dms89240	DistStd.dgn	DRAWN -	REVISED -T. RAMMACHER 03-12-99	STATE OF ILLINOIS	RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)	338 1212 RS - 3	COOK & LAKE 23 18
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 01-06-00	DEPARTMENT OF TRANSPORTATION		TC-11	CONTRACT NO. 60F37
1	PLOT DATE = 3/20/2009	DATE -	REVISED		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS F	ED. AID PROJECT



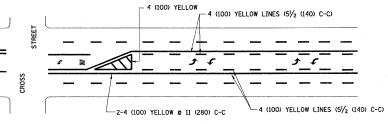


#### 4' (1.2 m) WIDE MEDIANS ONLY

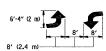


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

#### MEDIANS OVER 4' (1.2 m) WIDE

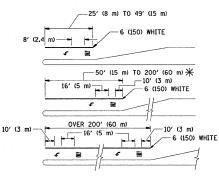


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

## TYPICAL PAINTED MEDIAN MARKING

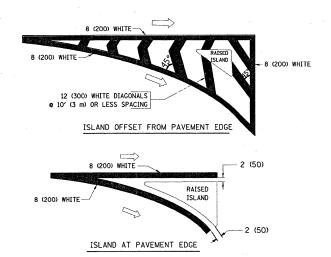


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  $\P$  AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup> )  $\P$  AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)

\* 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 UNDIVEDED 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	5½ (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	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	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 5EE 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	DIACONALS: 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 SO. 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 (0VER 45MPH (70 km/h))

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

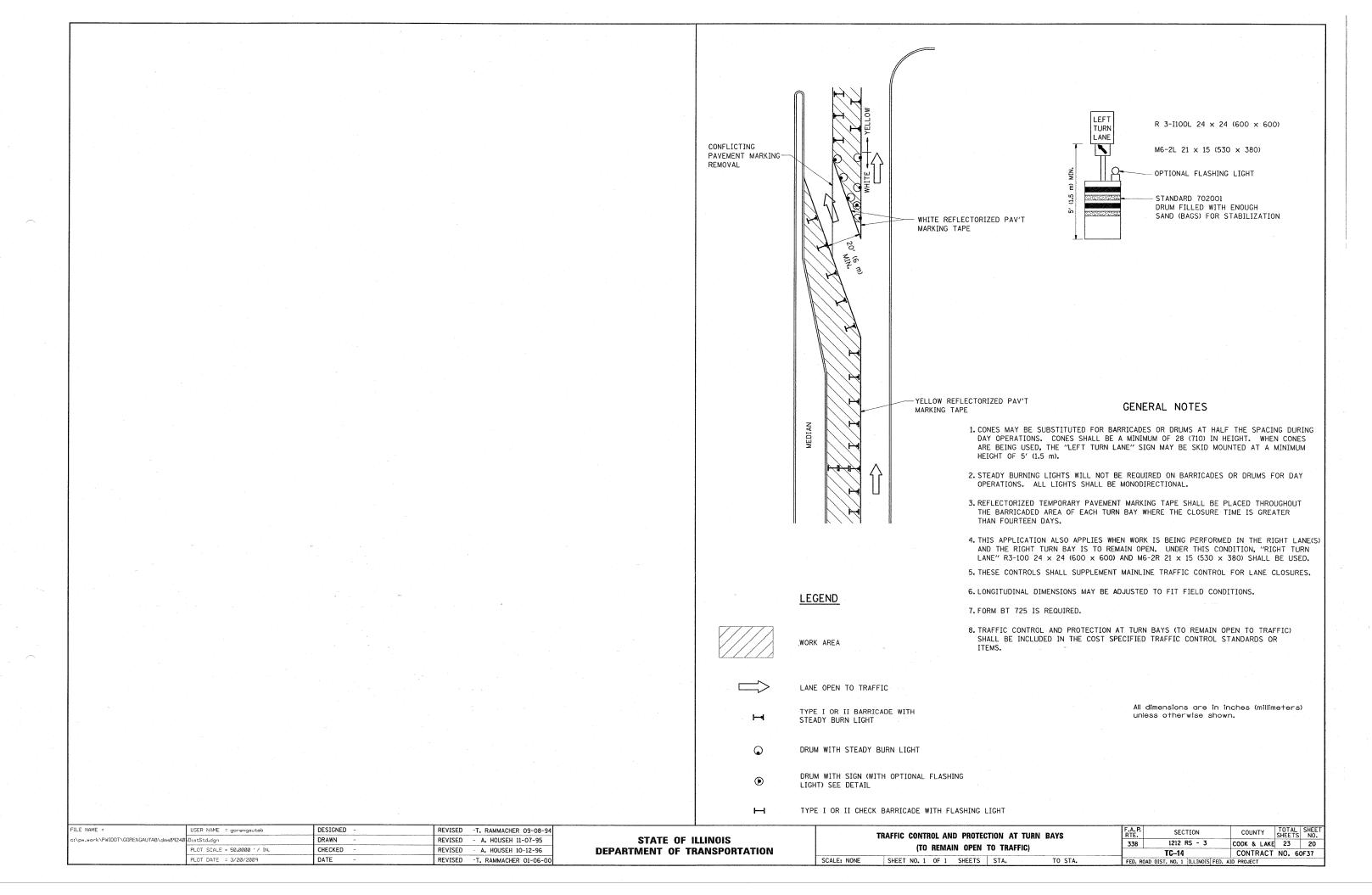
All dimensions are in inches (millimeters) unless otherwise shown.

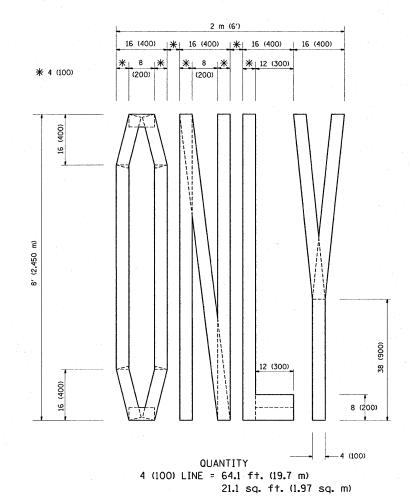
FILE NAME =	USER NAME = gorengautab	DESIGNED -	-	EVERS	REVISED	-T. RAMMACHER 10-27-94
st\pw_work\PWIDOT\GORENGAUTAB\dms89240	DistStd.dgn	DRAWN -	-		REVISED	-A. HOUSEH 10-09-96
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	-		REVISED	-A. HOUSEH 10-17-96
	PLOT DATE = 3/20/2009	DATE -	-	03-19-90	REVISED	-T. RAMMACHER 01-06-0

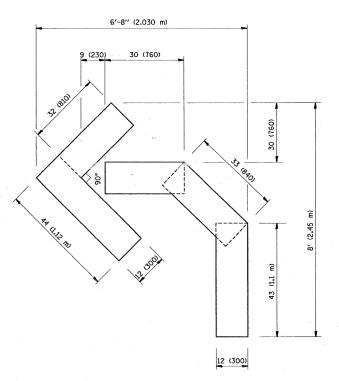
TYPICAL CROSSWALK MARKING

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

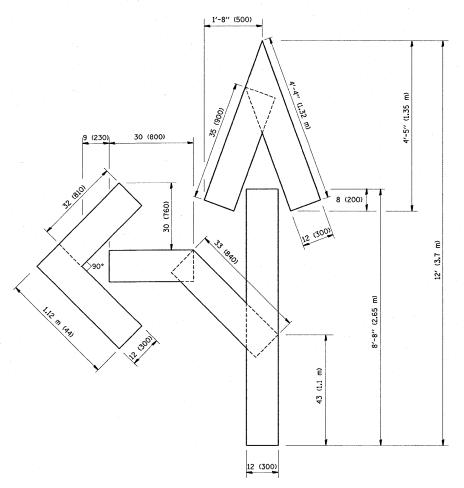
	DISTRICT ONE		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TYPICAL PAVEMENT MARKINGS		338	1212 RS - 3	COOK & LAKE	23	19
	ITPICAL PAVEIVIENT WARKINGS			TC-13	CONTRACT	NO. 60	DF37
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. ROA	D DIST. NO. 1 ILLINOIS FED.	AID PROJECT		







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



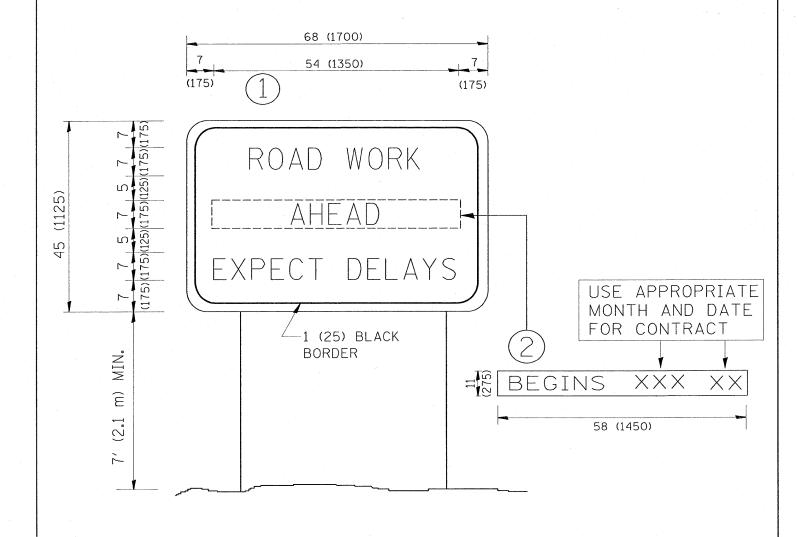
QUANTITY 4 (100) LINE = 82.5 ft. (25.3 m) 27.5 sq. ft. (2.53 sq. m)

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

F	FILE NAME =	USER NAME = gorengautab	DESIGNED -		REVISED	-T. RAMMACHER 06-05-96
	o:\pw_work\PWIDOT\GORENGAUTAB\dms89240	DistStd.dgn	DRAWN -		REVISED	-T. RAMMACHER 11-04-97
-		PLOT SCALE = 50.0000 '/ IN.	CHECKED -		REVISED	-T. RAMMACHER 03-02-98
-	· ·	PLOT DATE = 3/20/2009	DATE -	09-18-94	REVISED	-E. GOMEZ 08-28-00

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

	PAVEMENT	MARK	ING LETTER	S AND	SYMBOLS		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
							338	1212 RS - 3	COOK & LAKE	23	21
	FOR TRAFFIC STAGING							TC-16	CONTRACT	NO. 6	0F37
SCALE: NONE	SHEET NO. 1	0F 1	SHEETS	STA.	TO ST	Α.	FED. RO	DAD DIST. NO. 1 ILLINOIS FED. A	ID 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.

FILE NAME =	USER NAME = gorengautab	DESIGNED -	REVISED - R. MIRS 09-	5-97			ARTERIAL ROAD		F.A.P.	SECTION	COUNTY TOTAL SHEET NO.
c:\pw_work\PWIDOT\GORENGAUTAB\dms8924@	DistStd.dgn	DRAWN -	REVISED - R. MIRS 12-	1-97	STATE OF ILLINOIS		INFORMATION SIGN		338	1212 RS - 3	COOK & LAKE 23 22
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER	2-02-99	DEPARTMENT OF TRANSPORTATION		INFURIVIATION SIGN			TC-22	CONTRACT NO. 60F37
	PLOT DATE = 3/20/2009	DATE -	REVISED - C. JUCIUS C	-31-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. ROAD	DIST. NO. 1   ILLINOIS FE	D. AID PROJECT

# PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER. PAVED OR NON-PAVED SHOULDER PAVED OR NON-PAVED SHOULDER 1" (25 mm) UNIT DUCT-TRENCHED TO E/P \*\* \* = (600 mm)

\* \* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS.

ILE NAME =

\pw\_work\PWIDOT\GORENGAUTAB\dms892

BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

JSER NAME = gorengautab

PLOT SCALE = 50.0000 '/ IN.

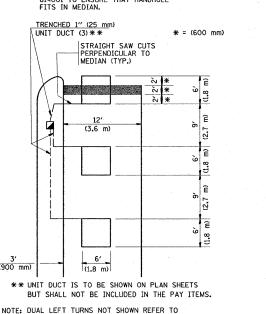
PLOT DATE = 3/20/2009

DistStd.dar

# LEFT TURN LANES WITH MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)

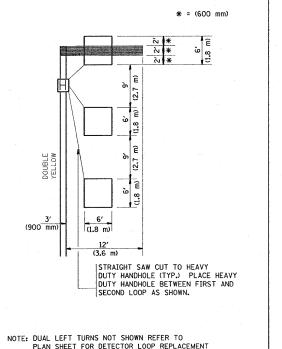
HANDHOLE LOCATION MAY
VARY DEPENDING ON GEOMETRICS
AND DESIGN OF TRAFFIC SIGNALS.
HEAVY-DUTY HANDHOLES TO BE
USED WHEN THE MEDIAN IS
MOUNTABLE. REFER TO STANDARD
814001 TO ENSURE THAT HANDHOLE
FITS IN MEDIAN.



PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

# LEFT TURN LANES WITHOUT MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)



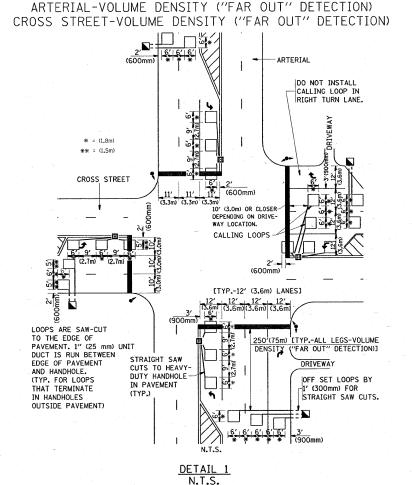
TAPER AREA. DO NOT

LANE OR LEFT TURN

LANE TAPER.

SCALE: NONE

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



DESIGNED

DRAWN

DATE

CHECKED

R.K.F.

OFFSET LOOPS BY-1' (300mm) FOR STRAIGHT SAW CUTS ARTERIAL THIS DIMENSION MAY BE ADJUSTED FOR DRIVEWAY OR OTHER OBSTRUCTIONS. WHEN ADJUSTMENT IS REQUIRED, DETECTORS WILL NORMALLY BE MOVED CLOSEF TO THE INTERSECTION. \*= (1.8m) **∕-1"** (25 mm) UNIT DUCT (TYP.) CROSS STREET + 6 12' 12' 100mm)31 (3.6m) 11' 2.6' A 6: 9' 6: -10'(3.0m) PREFERRED-6' 9' 6' 9' 6' 15'(4.5m) MAXIMUM + - THESE DIMENSIONS WILL BE VARIABLE F6' (1.8m) MINIMUM △ - THESE DIMENSIONS SHALL BE 5' (1.5m) FOR TE "FAR OUT" LOOPS 10' (3.0m) LANE WIDTHS ARE LOCATED IN TAPER OF A RIGHT TURN LANE, DIMENSION THIS LOOP TO COVER

DETAIL 2

#### 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 SEPARATLY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- \* ONE DIMENSION OF <u>ALL</u> 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, <u>MORE</u>
  THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR
  (i.e. 1-1/2, 1-3/4, 2).
- \* WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

#### PLACEMENT OF DETECTORS

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

LOCATIONS AND DEMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON  $\underline{\mathsf{ALL}}$  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.

4.5
DE

REVISED

REVISED

REVISED

REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 – DETECTOR LOOP INSTALLATION  DETAILS FOR ROADWAY RESURFACING	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	338	1212 RS-3	COOK & LAKE	23	23
		TS-07	CONTRACT	NO. 6	0F37
SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				