STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

**DIVISION OF HIGHWAYS** 

# **PROPOSED HIGHWAY PLANS**

F.A.P. 349 / US 30 SECTION: 10 RS-6 IL 47 TO ORCHARD ROAD RESURFACING (3P) PROJECT: E5P-0349(014) KANE AND KENDALL COUNTIES

C-91-058-09SUGAR GROVE TOWNSHIP **OMISSION:** R. 7 E. STA. 94 + 00 TOSTA. 124 + 76

**PROJECT BEGINS** 

STA. 10 + 29

FOR INDEX OF SHEETS, SEE SHEET NO. 2

**DESIGN DESIGNATION:** SPEED LIMIT: 55 M.P.H. 2007 ADT = 17,600

PROJECT IS LOCATED IN THE

VILLAGE OF MONTGOMERY

ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS 1-800-892-0123

**CONTRACT NO. 60F27** 

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

GROSS LENGTH OF PROJECT = 17.757 FEET = 3.363 MILES **NET LENGTH OF PROJECT = 14,681 FEET = 2.781 MILES** 

CHRISTIAN-ROGE & ASSOCIATES, INC. ENGINEERS - PLANNERS - SURVEYORS 211 W. WACKER DRIVE CHICAGO, IL. 60606

**PROJECT ENDS** 

STA. 187 + 86

10 RS-6 KANE ILLINOIS CONTRACT NO. 60F27

D-91-058-09



STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** SUBMITTED VANUARY 29, 2009

BIRINDER S. SACHDEVA, P.E.

January 28, 2009

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

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### INDEX OF SHEETS

1	COVER SHEET
2	INDEX OF SHEETS, LIST OF STATE STANDARDS AND GENERAL NOTES
3	SUMMARY OF QUANTITIES
4	TYPICAL SECTIONS
5 - 11	ROADWAY PLAN
12 - 18 /84 - 18 D- 19	PAVEMENT MARKING PLAN BRIDGE REPAIR DETAILS DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING
20	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT
21	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
22	BUTT JOINT AND HMA TAPER DETAILS
23	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS
24	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)
25	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
26	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)
27	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
28	ARTERIAL ROAD INFORMATION SIGN

DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

### LIST OF STATE STANDARDS

STANDARD NO.	DESCRIPTION
000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
442201-03	CLASS C AND D PATCHES
604001- <i>03</i>	FRAME AND LIDS, TYPE 1
606001- <i>04</i>	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606301~ <i>04</i>	PC CONCRETE ISLANDS AND MEDIANS
606306-03	CORRUGATED PC CONCRETE MEDIANS
701201- <i>03</i>	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH
701301 - <i>0</i> <b>3</b>	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306 <i>-02</i>	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS > 45 MPH
701311 - <i>0</i> 3	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701336 <i>-05</i>	LANE CLOSURE, 2L, 2W, WORK AREAS IN SERIES, FOR SPEEDS > 45 MPH
701421 <i>-02</i>	LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS > 45 MPH TO 55 MPH
701422 - <i>02</i>	LANE CLOSURE, MULTILANE, FOR SPEEDS > 45 MPH TO 55 MPH
701426- <i>0</i> <b>3</b>	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS > 45 MPH
701606-06	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701 - 06	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901-01	TRAFFIC CONTROL DEVICES
780001- <i>0</i> 2	TYPICAL PAVEMENT MARKINGS

#### GENERAL NOTES

- 1. 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)
- 2. 10 FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER ITEMS OF WORK TO EXISTING CURBS AND GUTTERS AND CONDITIONS IN THE FIELD UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.
- 3. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.
- 4. WHEN ARTIFICIAL LIGHTING IS USED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS
  IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.
- 5. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- 6. SAW CUTTING PRIOR TO ANY REMOVAL ITEMS NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEMS BEING REMOVED.
- 7. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- 8. THE CONTRACTOR SHALL USE CARE IN REMOVING OR EXCAVATING NEAR ALL EXISTING ITEMS WHICH WILL REMAIN. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- 9. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES (40 MM) WHERE THE SPEED LIMIT IS 40 MPH OR LESS AND 1 INCH WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH. WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).
- 10. UNLESS OTHER CONDITIONS WARRANT EXTENDED LANE CLOSURE AS DETERMINED AND APPROVED IN WRITING BY THE ENGINEER OR AS PROVIDED FOR IN THE CONTRACT SPECIFICATIONS, OVERNIGHT CLOSURES SHALL NOT BE ALLOWED FOR REHABILITATION PROJECTS INVOLVING DAYTIME MILLING AND RESURFACING OPERATIONS AND CLASS D PATCHING. SEE NOTE 18 FOR CLASS B PATCHING.
- 11. PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKINGS ON ALL FINAL SURFACES. THE COST OF THE PAVEMENT MARKING TAPE TYPE III SHALL BE INCLUDED IN THE COST OF SHORT TERM PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKINGS.
- 12. THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR
  TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.
- 13. THE CONTRACTOR SHALL CONTACT DON CHIARUGI, THE AREA TRAFFIC FIELD ENGINEER, AT (847) 741-9857 TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- 14. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HWA TAPER DETAILS" INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
- 15. MATCH EXISTING PAVEMENT MARKINGS AT THE PROJECT AND OMISSION LIMITS.
- 16. ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- 17. PAY ITEM 55039700 STORM SEWERS TO BE CLEANED SHALL ONLY BE UTILIZED TO CLEAN STORM SEWER PIPES BETWEEN INLETS AND CATCH BASINS.

FILE NAME = D160F27-sht-gennote.dgn

29

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
PHONE 312132-2023 &AX (312)322-5246

DESIGNED - G.F.L. REVISED 
DRAWN - B.K. REVISED 
CHECKED - M.P. REVISED 
74 DATE - FEBRUARY 2009 REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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	INDEX OF SHEETS, LIST OF	STATE STANDARDS AND	GENERAL NOTES	F.A.P. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
١	US 30 (II	47 TO ORCHARD ROAD)		349	10 RS-6	KANE/KENDALL	29	2
١						CONTRACT	NO. 6	0F27
1	SCALE: NONE   SHEET NO. 1 0	F 1 SHEETS   STA. 10+29	TO STA, 187+86	FFD. R	OAD DIST. NO. 1 THE THOUSE FED. A	ID PROJECT		

SL	JMMARY OF QUANTITI	ES	100% FEO. URBAN	1000	SFTY-2A	1000	SFTY-2
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	KANE (	COUNTY	KENDALL	COUNTY
20300100	CHANNEL EXCAVATION	CU YD	15	7.244	7		8
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	34	17		17	
40600300	AGGREGATE (PRIME COAT)	TON	191	95		96	
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	20	10		10	,
40600895	CONSTRUCTING TEST STRIP	EACH	2	1		1	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	273	112		161	
40600985	PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT	SQ YD	533	200		333	
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	18	5	4	. 5	4
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	3,924	1,934	2	1,986	2
42001300	PROTECTIVE COAT	SQ YD	10	5		5	
44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SQ YD	1,019	306	20	673	20
44000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"	SQ YD	2,290	1,145	, i	1,145	
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	40	20		20	
44002212	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 3"	SQ YD	60	30		30	
44201765	CLASS D PATCHES, TYPE II, 10 INCH	SQ YD	1,080	540		540	
44201769	CLASS D PATCHES, TYPE III, 10 INCH	SQ YD	1,282	625	16	625	16
44201771	CLASS D PATCHES, TYPE IV, 10 INCH	SQ YD	600	300		300	
48101200	AGGREGATE SHOULDERS, TYPE B	TON	3,868	1,934		1,934	
48203007	HOT-MIX ASPHALT SHOULDERS, 2 1/2"	SQ YD	3,498	1,749		1,749	
51500100	NAME PLATES	EACH	1				1
55039700	STORM SEWERS TO BE CLEANED	FOOT	10	5	÷	5	
58700300	CONCRETE SEALER	SQ FT	7,812		3,906		3,906
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	:3		3	
67100100	MOBILIZATION	L SUM	1	0.5		0.5	
70100310	TRAFFIC CONTROL AND PROTECTION, STANDARD 701421	LSUM	1 -	0.5		0.5	
70100320	TRAFFIC CONTROL AND PROTECTION, STANDARD 701422	L SUM	1	0.5		0.5	
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	LSUM	1	0.5		0.5	
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	0.5	,	0.5	
70100600	TRAFFIC CONTROL AND PROTECTION, STANDARD 701336	L SUM	1	0.5		0.5	
70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	LSUM	1		0.5		0,5
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	LSUM	1	0.5		0.5	
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	0.5		0.5	

C1	JMMARY OF QUANTITI	ES	1004.FED. URBAH		<del>7</del>	N TYPE CO	
<u>ى</u>	JIMIMAKT OF QUANTITI	<u> </u>		1000	SFTY-2A	1000	SFTY-2
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	KANE	COUNTY	KENDALL	COUNTY
70300100	SHORT-TERM PAVEMENT MARKING	F00T	10,000	5,000		5,000	
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	348	174		174	
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	F00T	43,372	21,650	36	21,650	36
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	1,414	707		707	
70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	F00T	172	86		86	
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	608	304		304	
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	222	111		111	
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	1,400	700		700	
78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	348	174		174	
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	43,372	21,650	36	21,650	36
78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1,414	707		707	
78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	172	86		86	
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	608	304		304	
78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	222	111		111	
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	403	201		202	
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	403	201		202	
88600600	DETECTOR LOOP REPLACEMENT	FOOT	682	341		341	
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	52	26		26	χ.
X0323076	SILICONE JOINT SEALER, 1 3/4"	FOOT	118		59		59
X0325305	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	48		24		24
X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	2,522	1,261		1,261	
X4421000	PARTIAL DEPTH PATCHING	TON	538	269		269	
X4422030	PARTIAL DEPTH REMOVAL 3"	SQ YD	3,200	1,600		1,600	
X8950200	REBUILD EXISTING HANDHOLE	EACH	2	1		1	
Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	4		2		2
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	3		1	1	1
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\* SPECIALTY ITEM
NP = Non- participating

FILE NAME = D16ØF27-sht-SOQ.dgn PLOT DATE = 3/3/2009

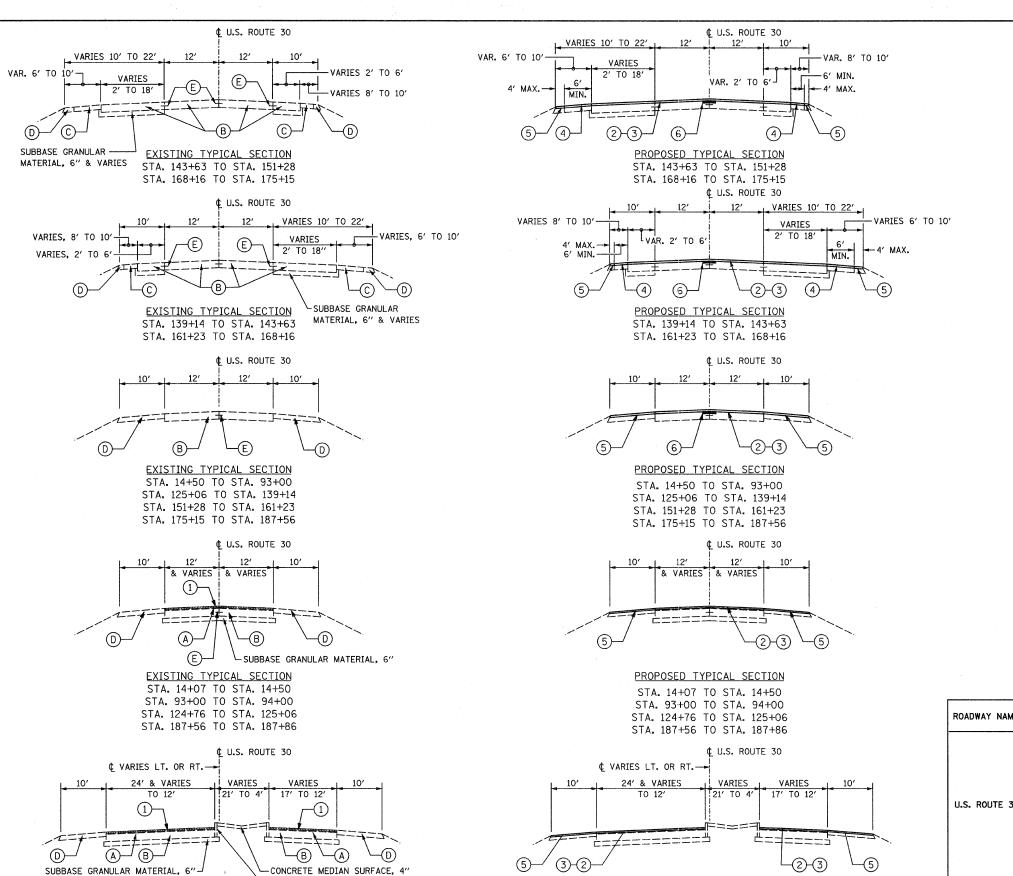
3-5-2009

CHRISTIAN-ROGE & ASSOC'ATES, INC.
ENGINEERS-PLANNERS-SU 'VEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
PHONE: (312)372-2023 FAX: (312)372-5274
DATE

CHRISTIAN-ROGE & ASSOC'ATES, INC.
DRAWN
BRAWN
BRAWN
BRAWN
CHECKED
M.P.
DATE
FEBRUARY 2009 REVISED -REVISED -REVISED -REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES US 30 (IL 47 TO ORCHARD ROAD) SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. 10+29 TO STA. 187+86



HOT-MIX ASPHALT MIXTURE REQUIREMENTS ROADWAY NAME MIXTURE TYPE AC TYPE AIR VOIDS HOT-MIX ASPHALT SURFACE PG 64-22 4% **@** 70 GYR COURSE, MIX "D", N70 (IL-9.5mm) HOT-MIX ASPHALT SHOULDERS, 21/2" (HMA SURFACE COURSE, MIX "D", N70 PG 64-22 4% @ 70 GYR (IL-9.5mm)) U.S. ROUTE 30 POLYMERIZED LEVELING BINDER SBS/SBR PG 76-28/22 4% @ 50 GYR (MACHINE METHOD), IL-4.75, N50 CLASS D PATCHES (HMA BINDER, IL-19) \* PG 64-22 4% @ 70 GYR. HMA REPLACEMENT OVER PATCHES AND PARTIAL DEPTH PATCHING **≮** PG 64-22 4% @ 70 GYR.

EXISTING CONDITIONS:

B P.C.C. PAVEMENT, 10"

C HMA SHOULDER

D AGGREGATE SHOULDER

PROPOSED IMPROVEMENTS:

1 HOT-MIX ASPHALT SURFACE REMOVAL, 21/2"

(4) HOT-MIX ASPHALT SHOULDERS, 21/2"

(5) AGGREGATE SHOULDERS, TYPE B, 21/2"

2 HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 11/2"

(6) LONGITUDINAL JOINT REPAIR (AT LOCATIONS AS DETERMINED

BY THE ENGINEER - SEE DETAIL ON PLAN SHEET NO. 5 )

3 POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 1"

E TIE BARS

(A) HOT-MIX ASPHALT SURFACE AND BINDER COURSE, 21/2" & VARIES

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

THE UNIT WEIGHT USED TO CALCULATE ALL THE HMA MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.

FILE NAME = D160F27-sht-typical.dgn
PLOT DATE = 2/4/2009

C 1D	CHRISTIAN-ROGE & ASSOCIATES, INC.	DESIGNED	-	G.F.L.	REVISED	-
K S	ENGINEERS-PLANNERS-SURVEYORS 211 WEST WACKER DRIVE	DRAWN	-	B.K.	REVISED	-
	CHICAGO, ILLINOIS 60606	CHECKED	-	D.L.	REVISED	-
	PHONE: (312)372-2023 FAX: (312)372-5274	DATE	-	FEBRUARY 2009	REVISED	-

EXISTING TYPICAL SECTION

STA. 10+29 TO STA. 14+07

-CURB. TYPE B-6

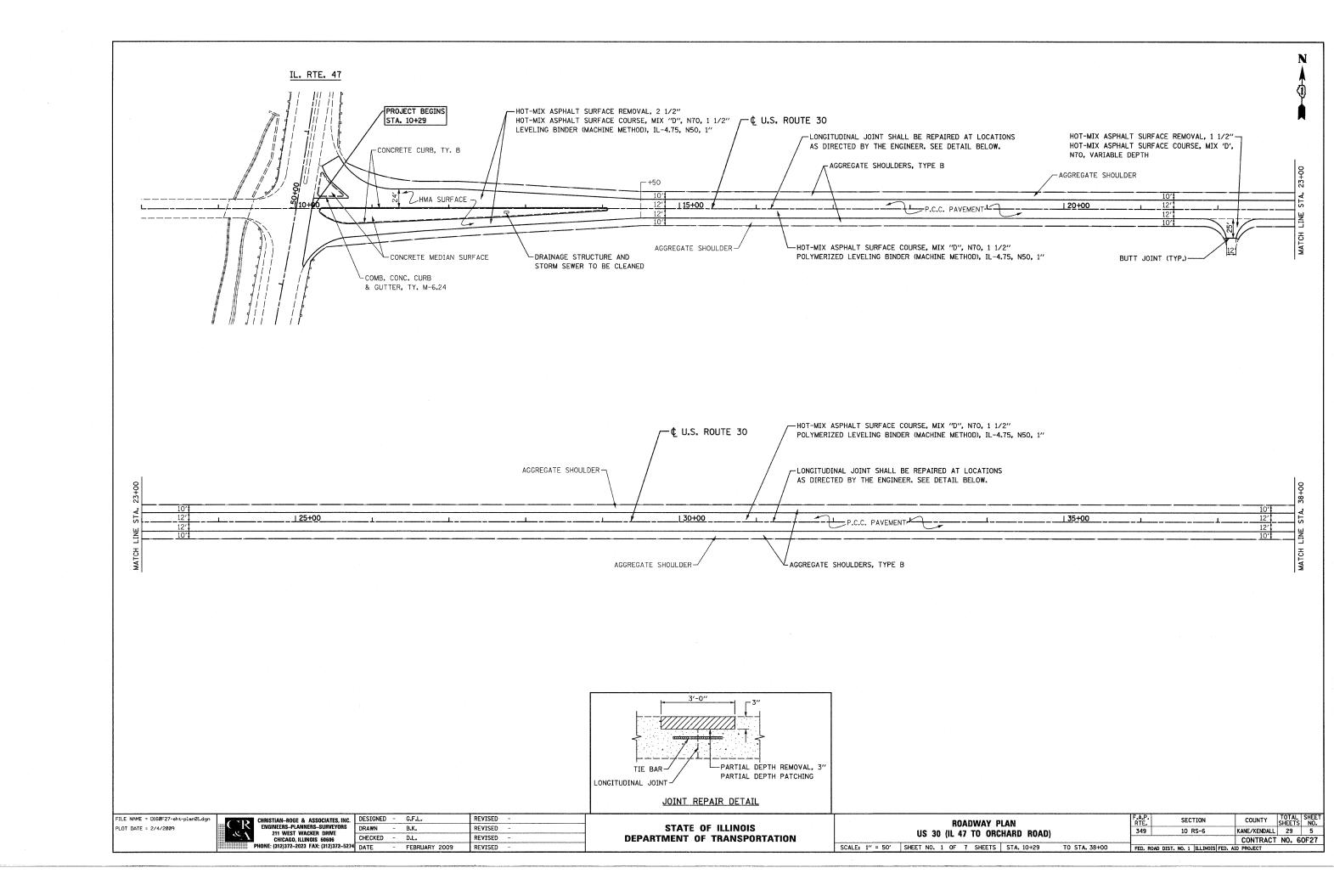
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

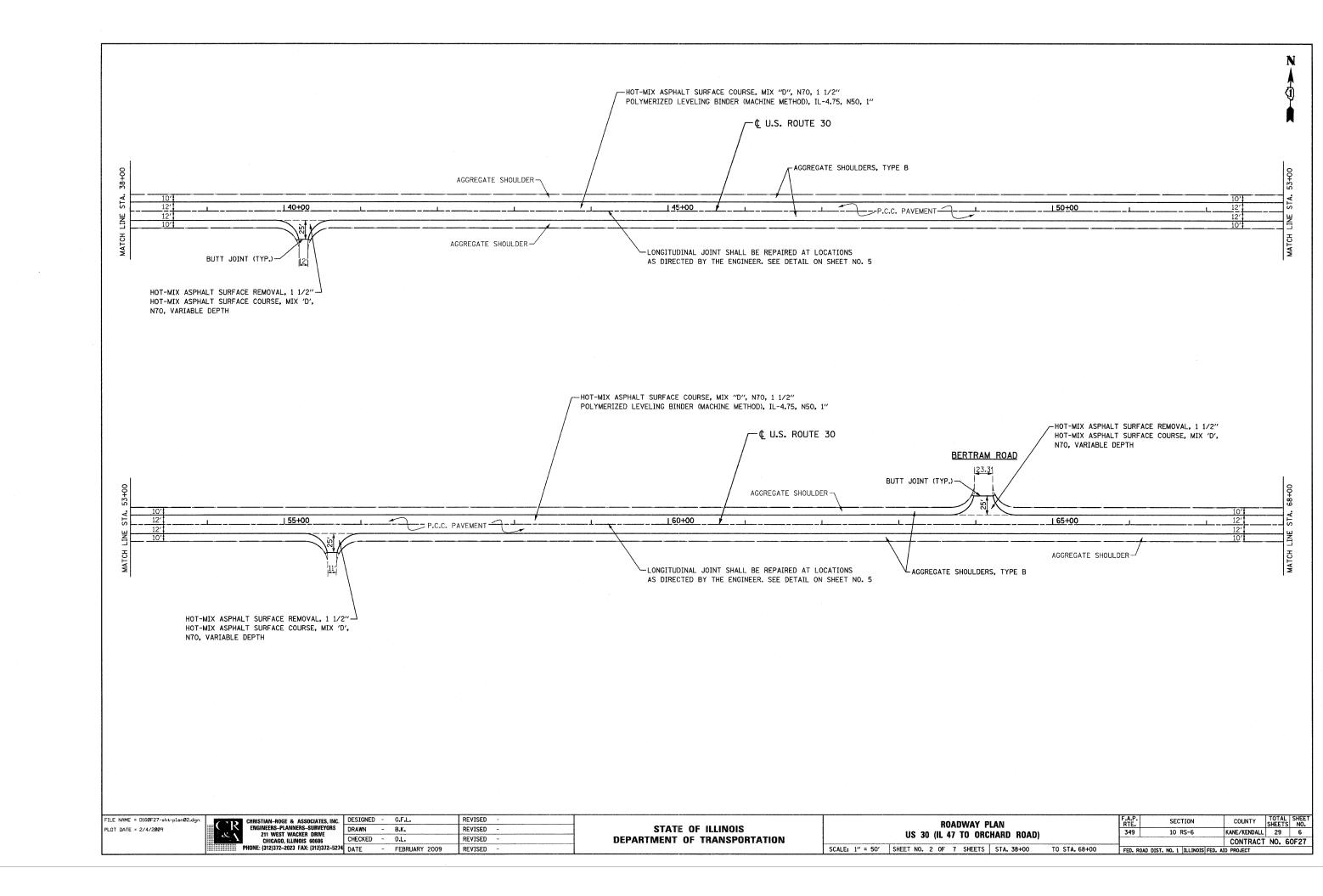
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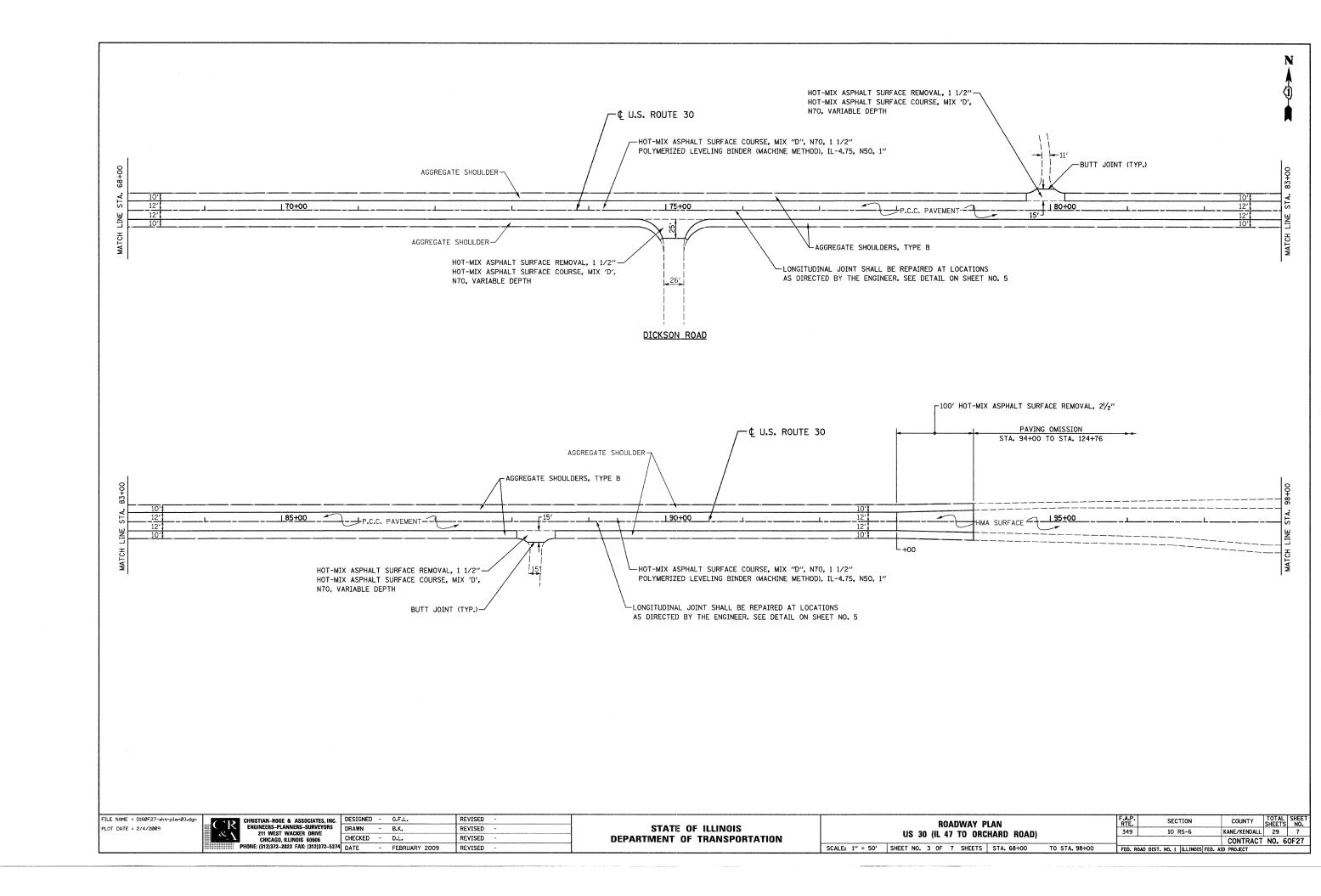
STA. 10+29 TO STA. 14+07

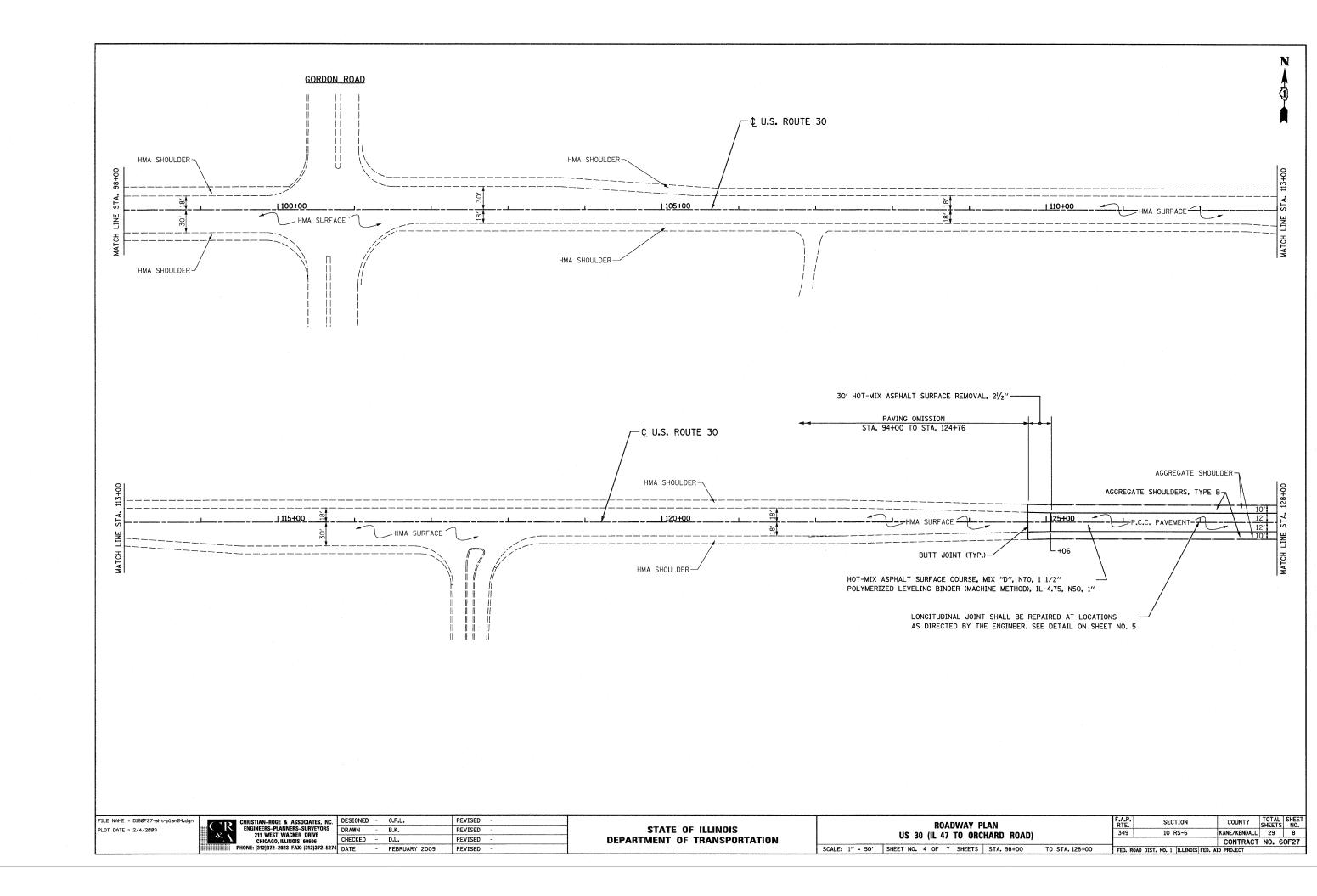
TYPICAL SECTIONS	F.A.P. RTE.	SEC	LION	COUNTY	TOTAL SHEETS	SHEET NO.
U.S ROUTE 30 (IL 47 TO ORCHARD ROAD)	349	10 F	RS-6	KANE/KENDALL	29	4
				CONTRACT	NO. 6	0F27
CALE: NONE SHEET NO. 1 OF 1 SHEETS	FED. R	OAD DIST. NO. 1	ILLINOIS FED. A	ID PROJECT		

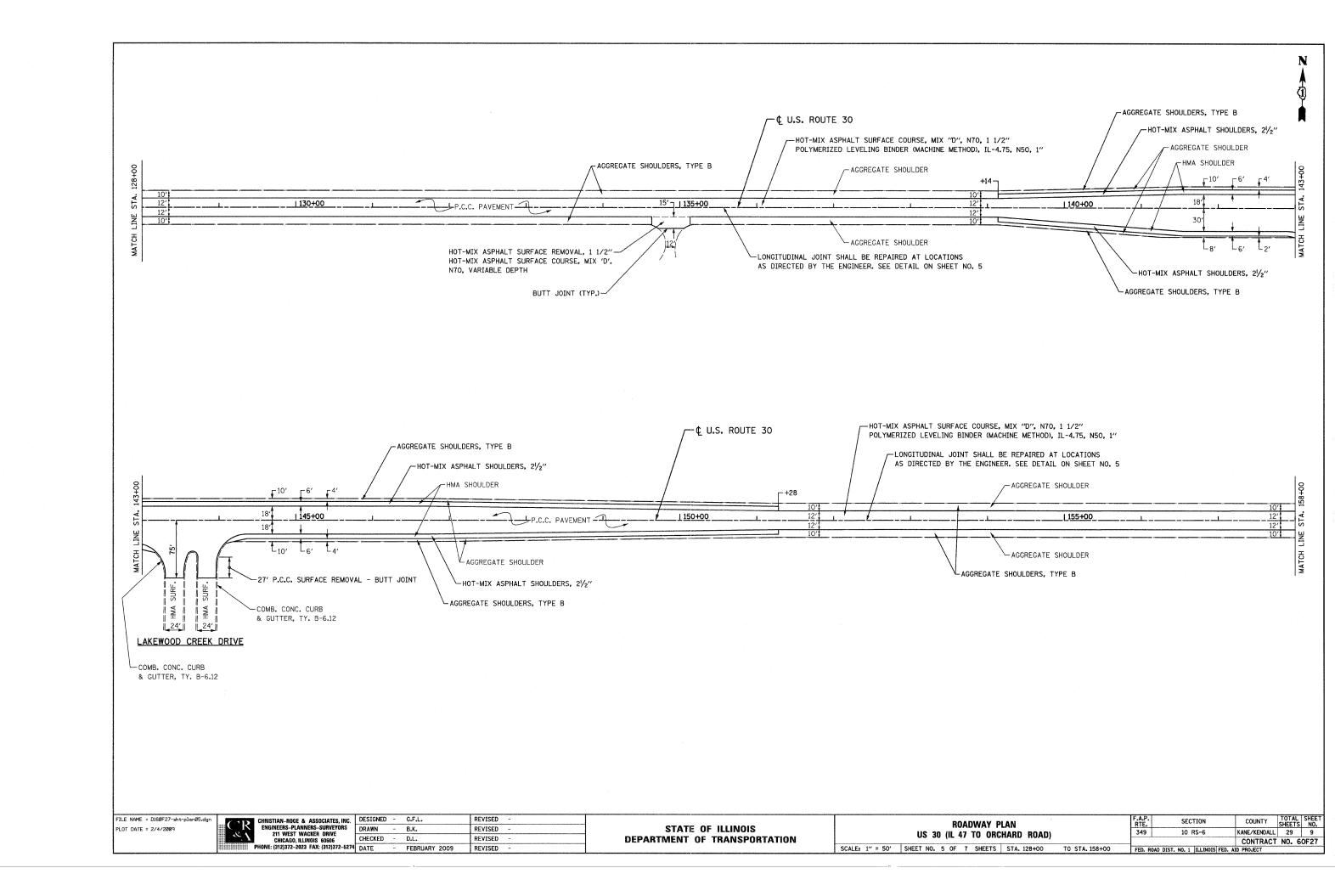
(HMA BINDER, IL-19)

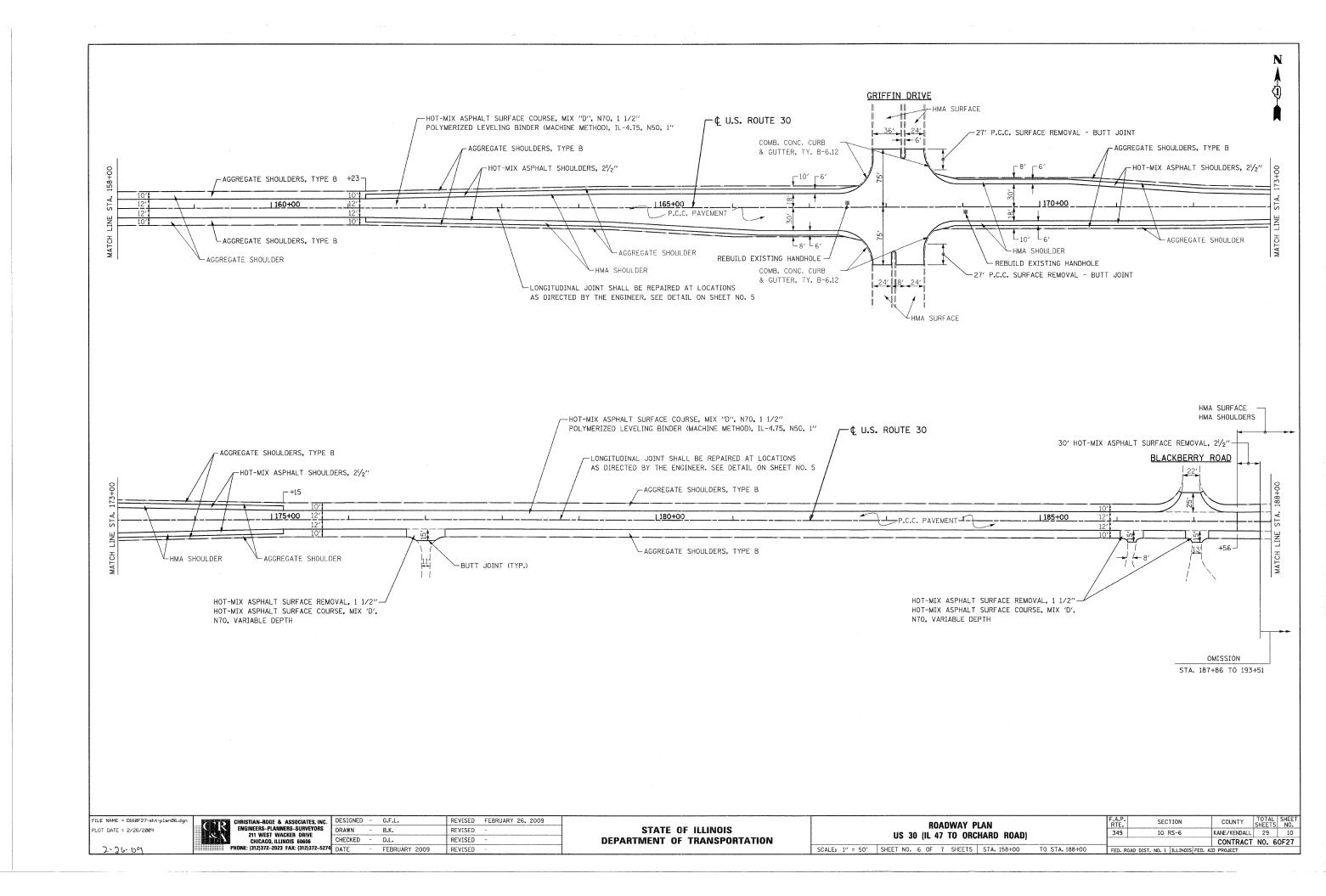


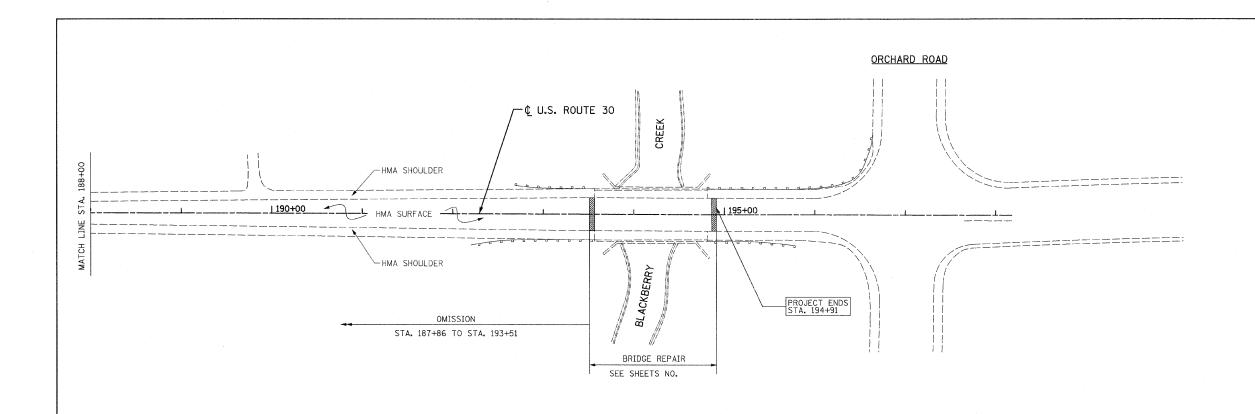








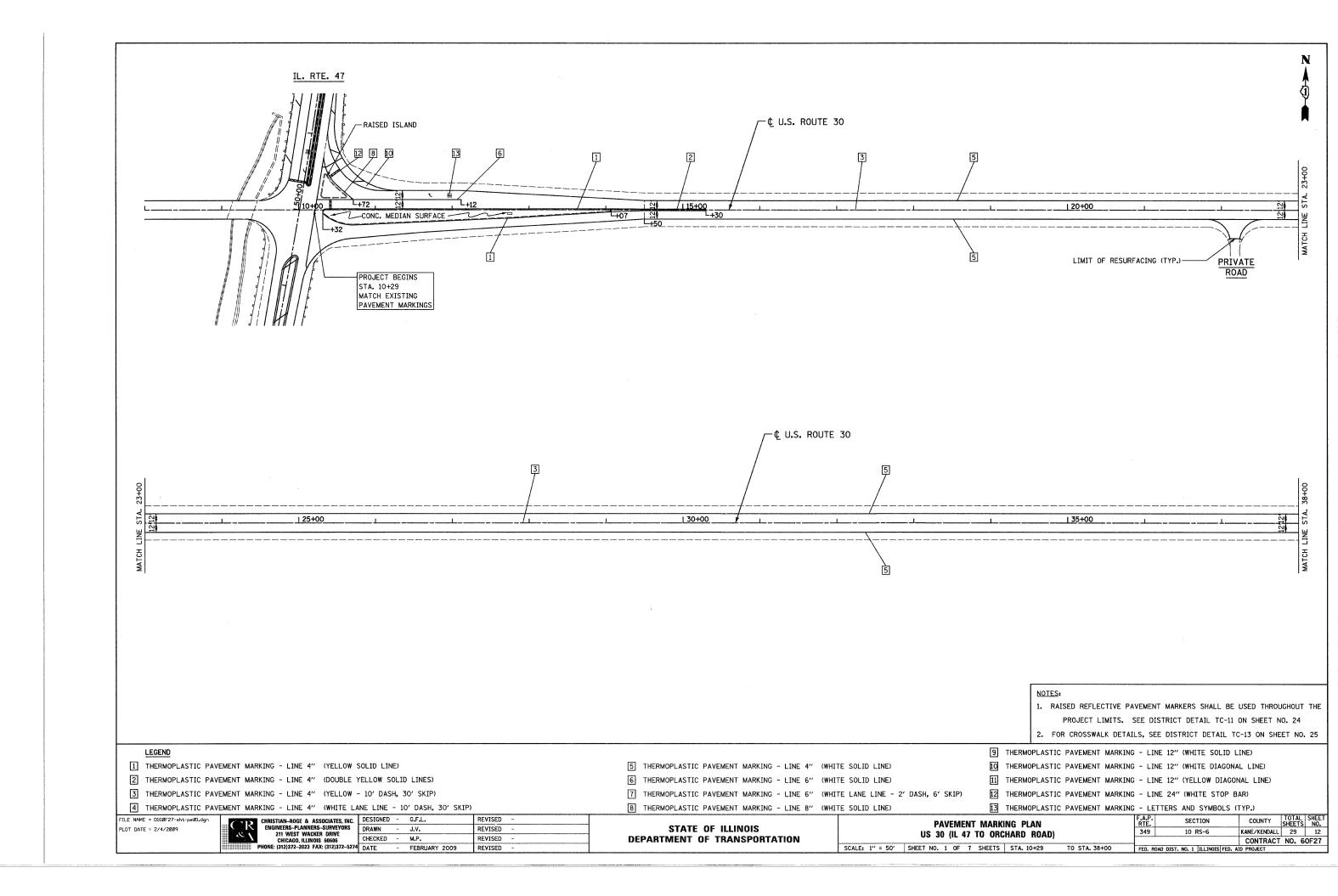


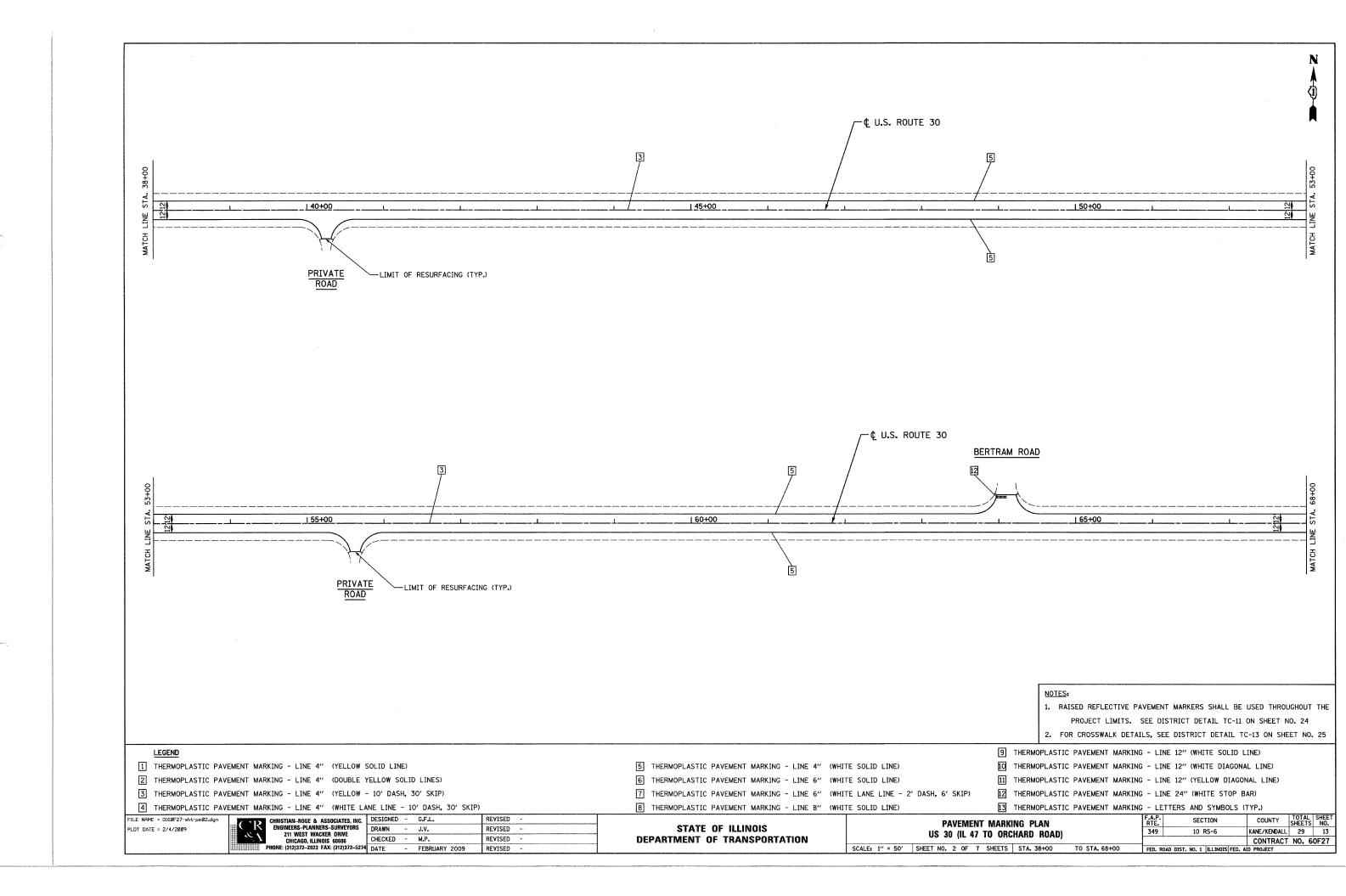


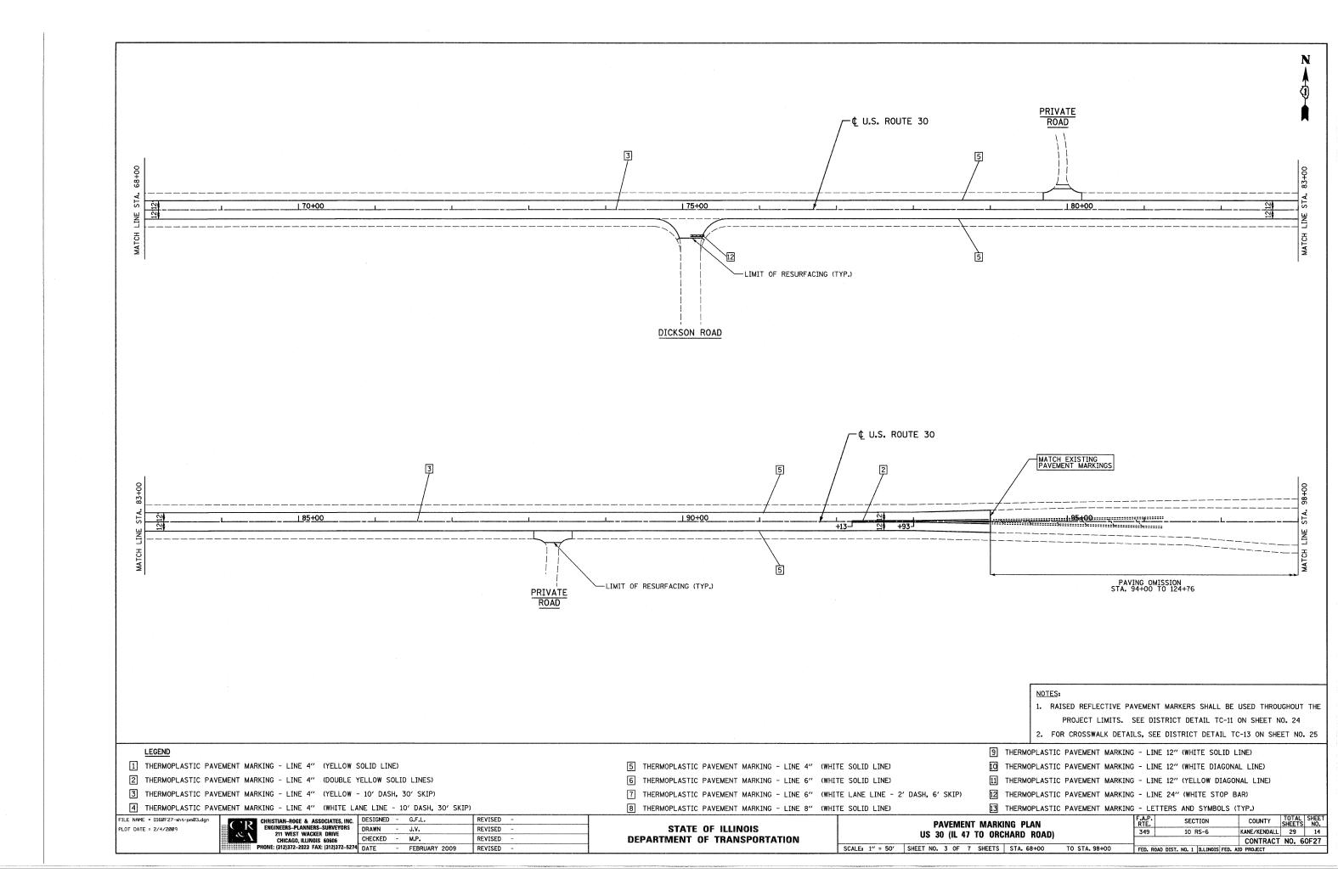
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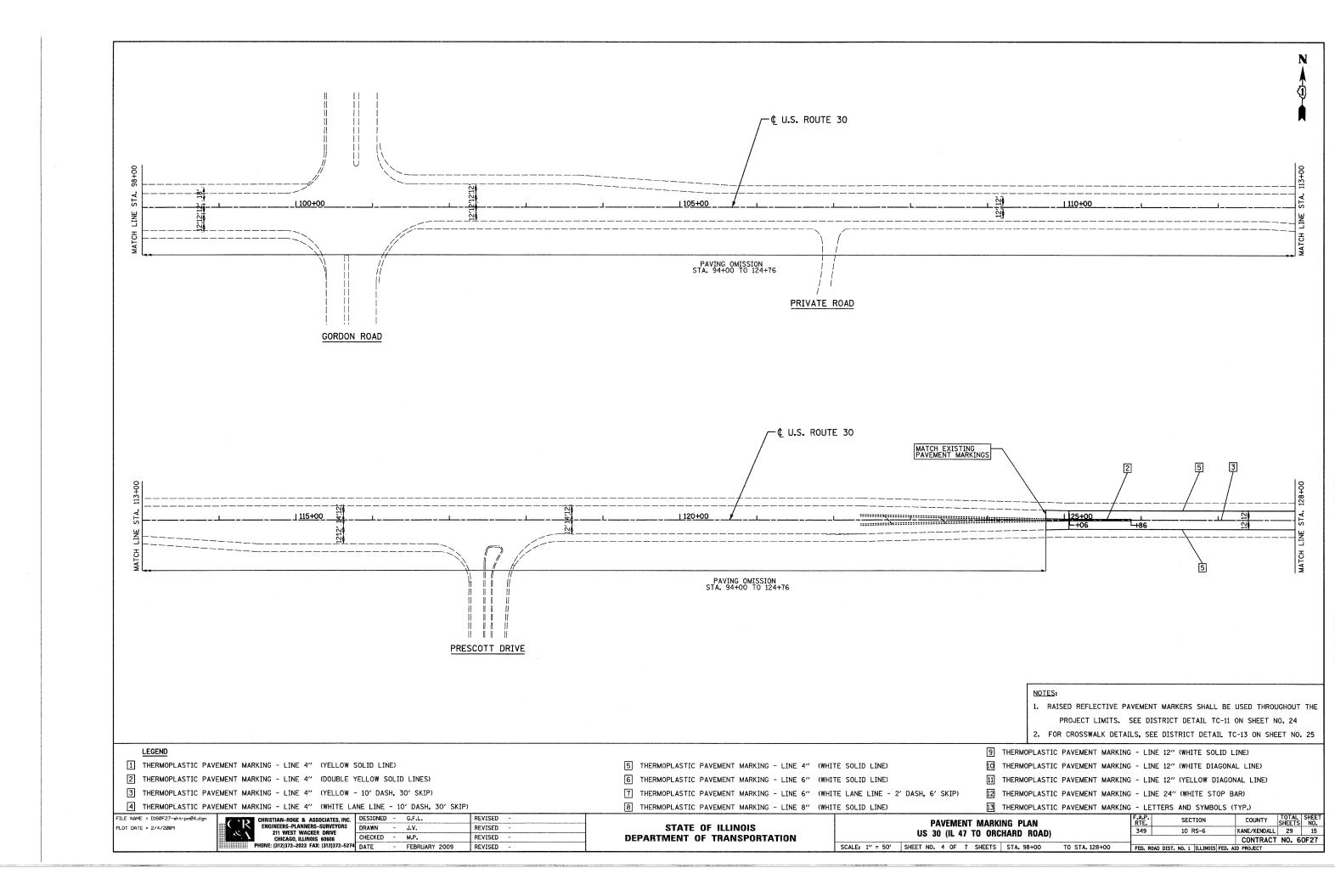
2-26-09

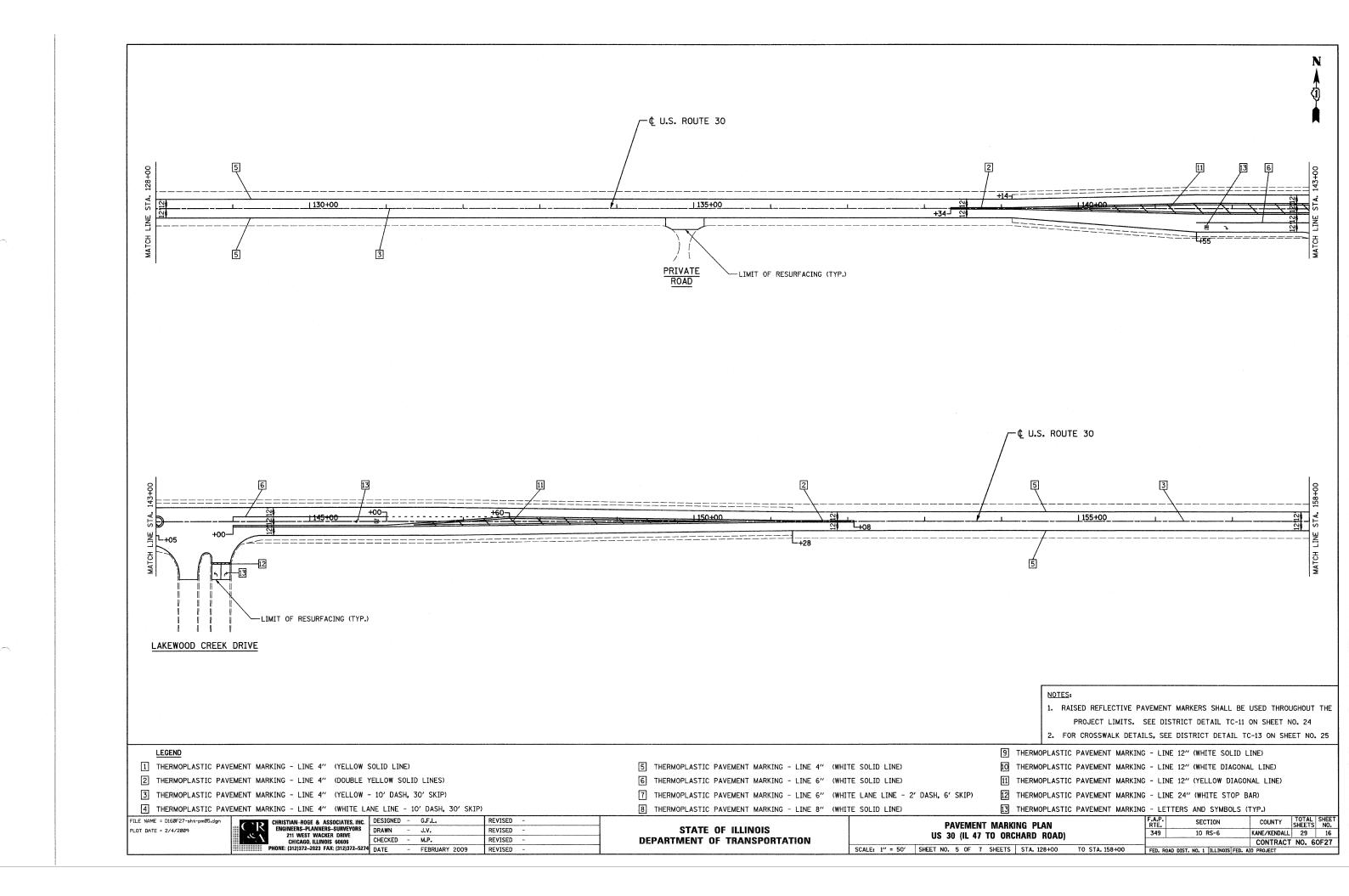
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

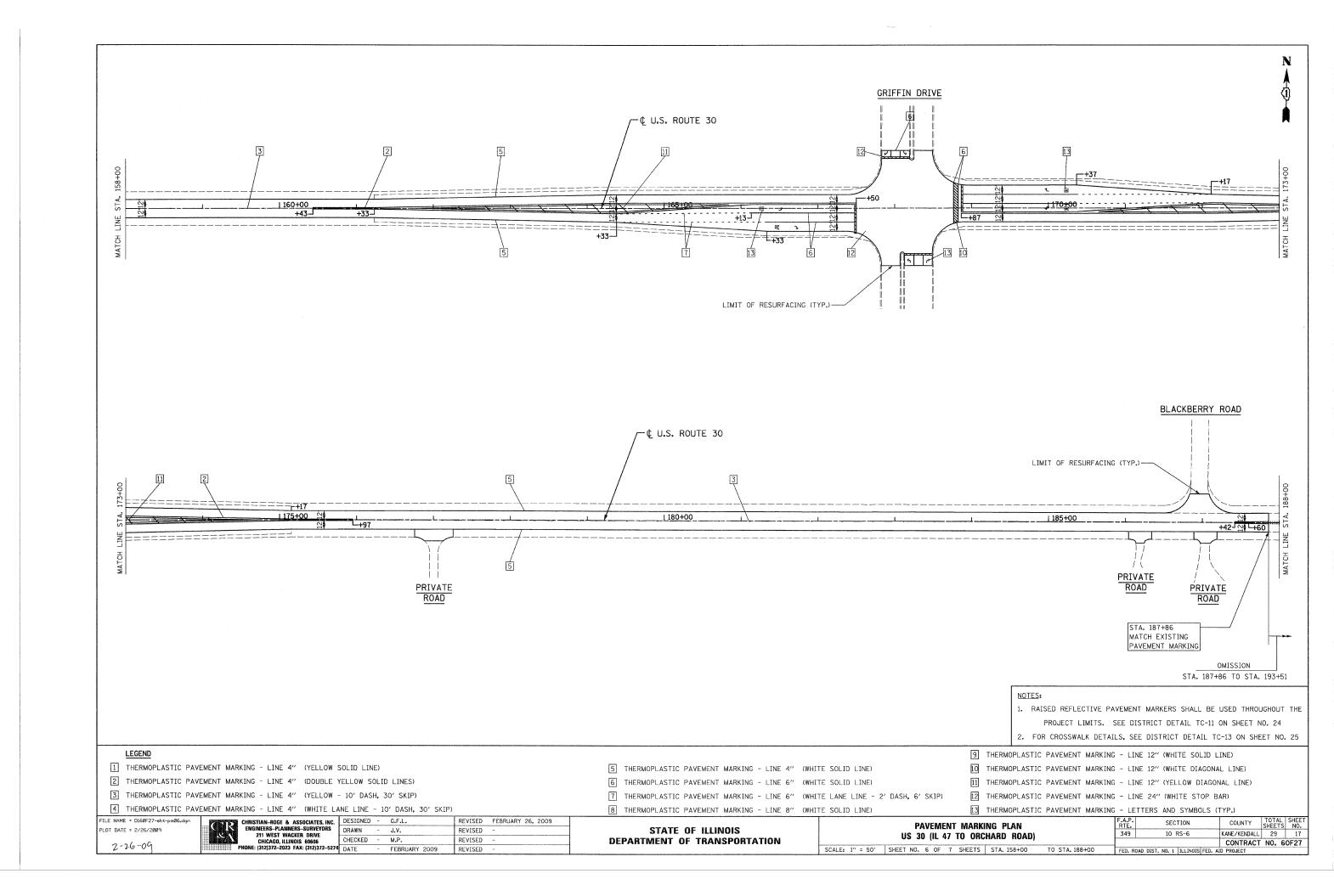


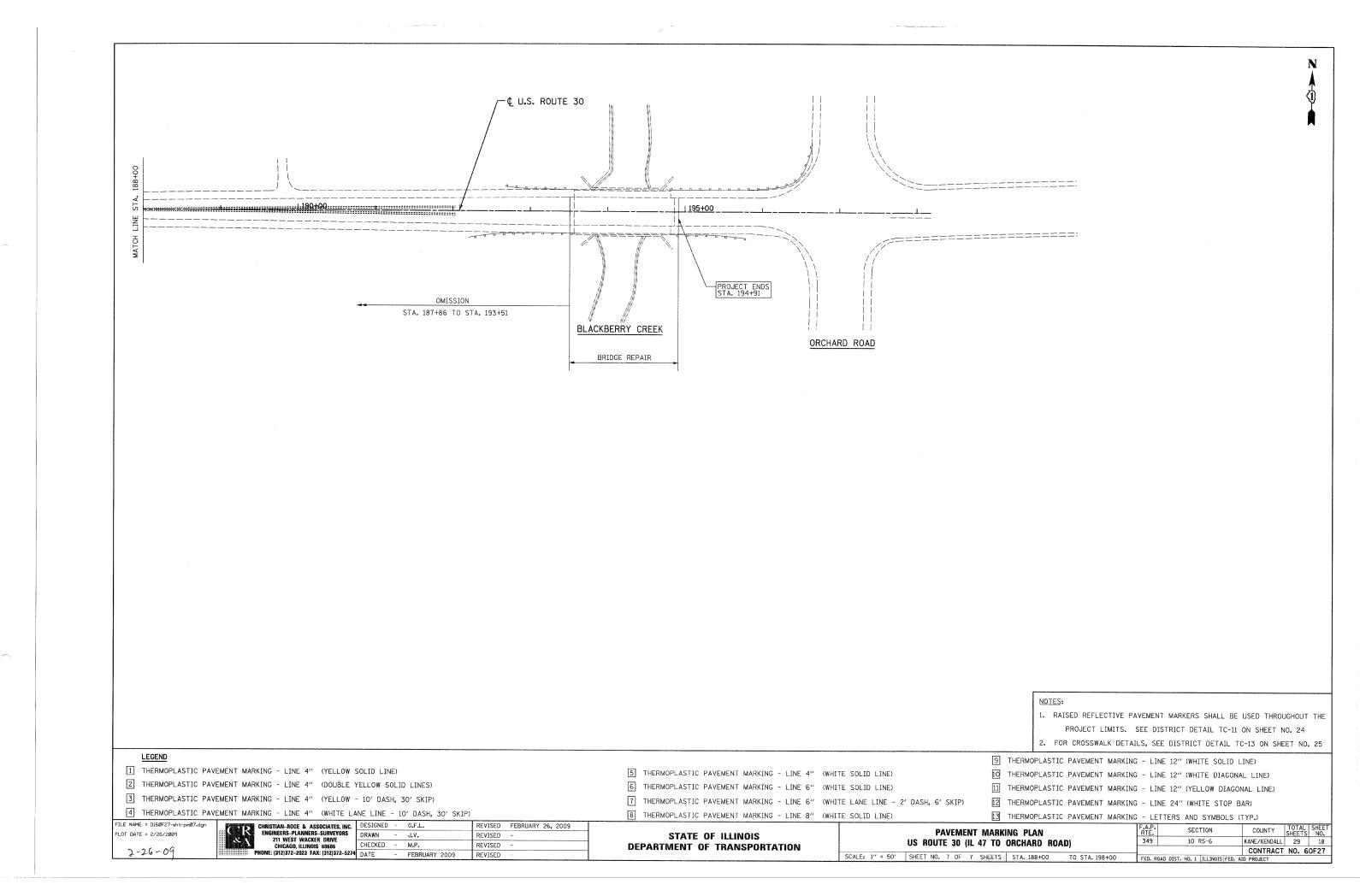


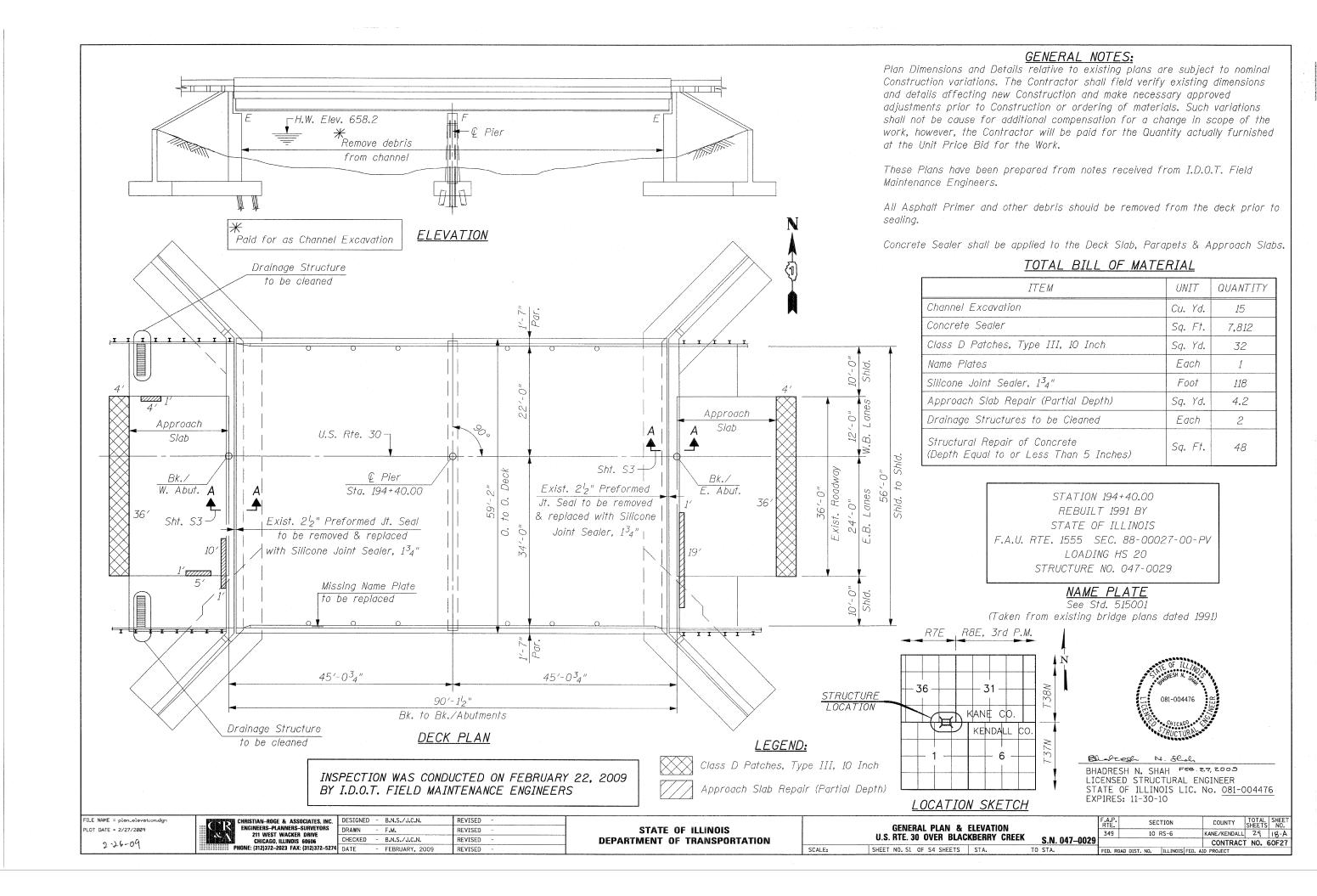


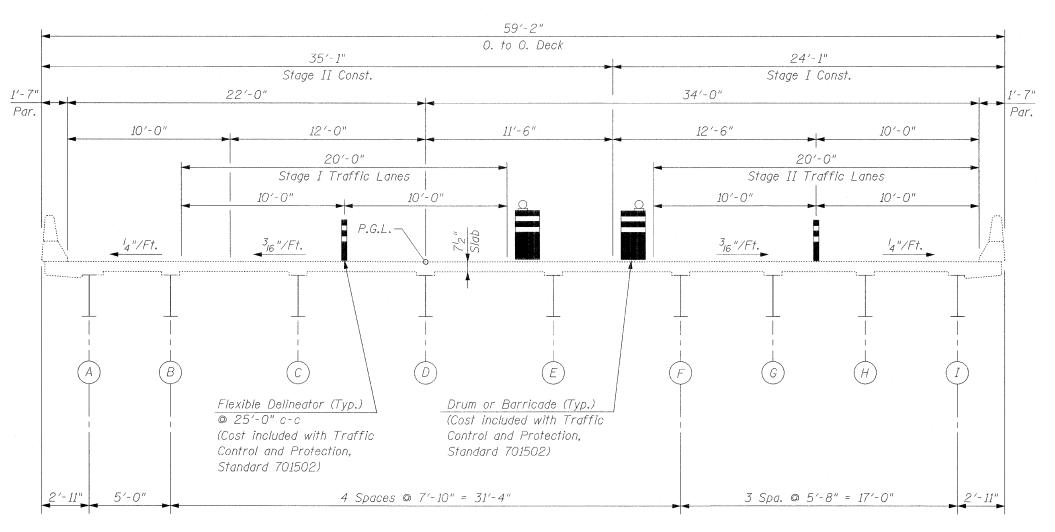












DECK CROSS SECTION (Looking East)

FILE NAME = deck\_x-section.dgn PLOT DATE = 2/26/2009 2-26-09

REVISED REVISED REVISED - FEBRUARY, 2009

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

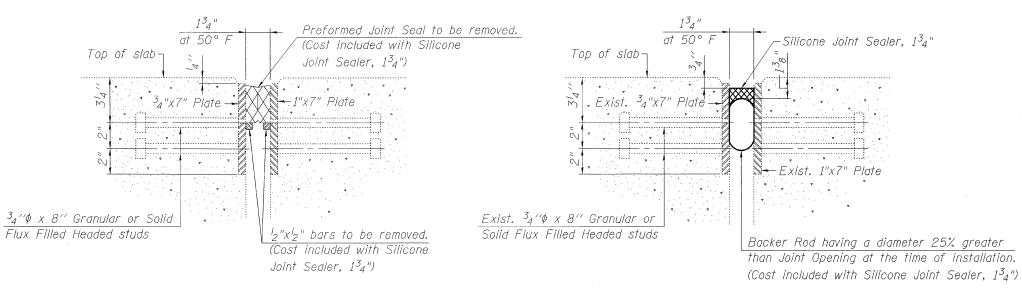
**EXISTING DECK CROSS SECTION** U.S. RTE. 30 OVER BLACKBERRY CREEK S.N. 047-0029 SHEET NO. S2 OF S4 SHEETS STA.

F.A.P. RTE. 349 SECTION 10 RS-6 TO STA.

COUNTY SHEETS NO.

KANE/KENDALL 29 18 8

CONTRACT NO. 60F27 FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT



EXISTING SECTION A-A <u>PROPOSED</u> <u>SECTION A-A</u>

### BILL OF MATERIAL

Item	Unit	Total
Silicone Joint Sealer, 1 <sup>3</sup> 4"	Foot	118

NOTE:
Work this Sheet with Sht. S1

FILE NAME = joint\_details.dgn PLOT DATE = 2/26/2009

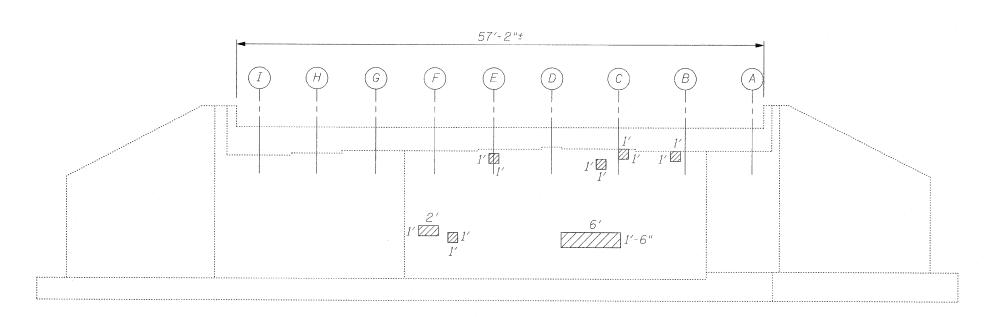
2-26-09

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
PHONE: (312)372-2023 FAKE, (312)372-5274
DATE - FERDILARY 20

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

U.S. RTE. 30 OVER BLACKBERRY CREEK

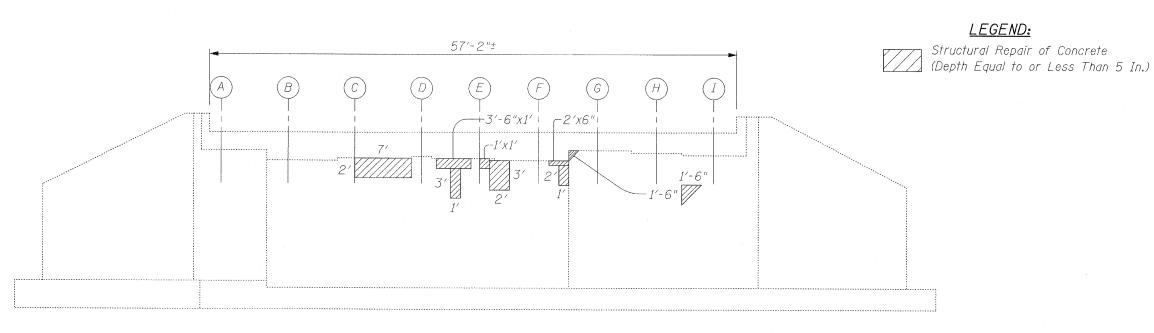
SHEET NO. S3 OF S4 SHEETS | STA. TO S



# ELEVATION WEST ABUTMENT (Looking West)

### BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal to or Less Than 5 In.)	Sq. Ft.	48



# ELEVATION EAST ABUTMENT (Looking East)

FILE NAME = west\_east-abutment.dgn PLOT DATE = 2/26/2009

2.26-09

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 66666
PHONE: (312)372-2023 FAX: (312)372-5274

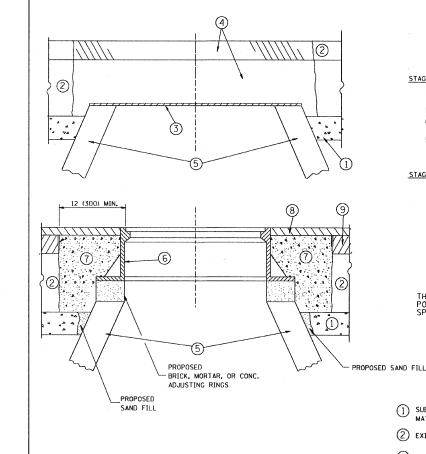
VC.	DESIGNED	-	B.N.S./J.C.N.	REVISED	-	
S	DRAWN	-	F.M.	REVISED	-	
	CHECKED	-	B.N.S./J.C.N.	REVISED	**	
5274	DATE	-	FEBRUARY, 2009	REVISED	-	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:

ABUTMENTS
U.S. RTE. 30 OVER BLACKBERRY CREEK
S.N. 047-0029
SHEET NO. S4 OF S4 SHEETS STA. TO STA.

	F.A.P. RTE.		SEC.	TION		COUNTY	TOTAL SHEETS	SHEET NO.
	349		10 F	RS-6		KANE/KENDALL	29	18-2
29						CONTRACT	NO. 6	60F27
	FFD. ROAD	DIST. N	n.	TI I TNOTS	FFD	AID PROJECT		



### 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.

#### 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  $1\frac{1}{2}$  (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

### STAGE 2 (AFTER PAVEMENT MILLING)

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

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

### LEGEND

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

### DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

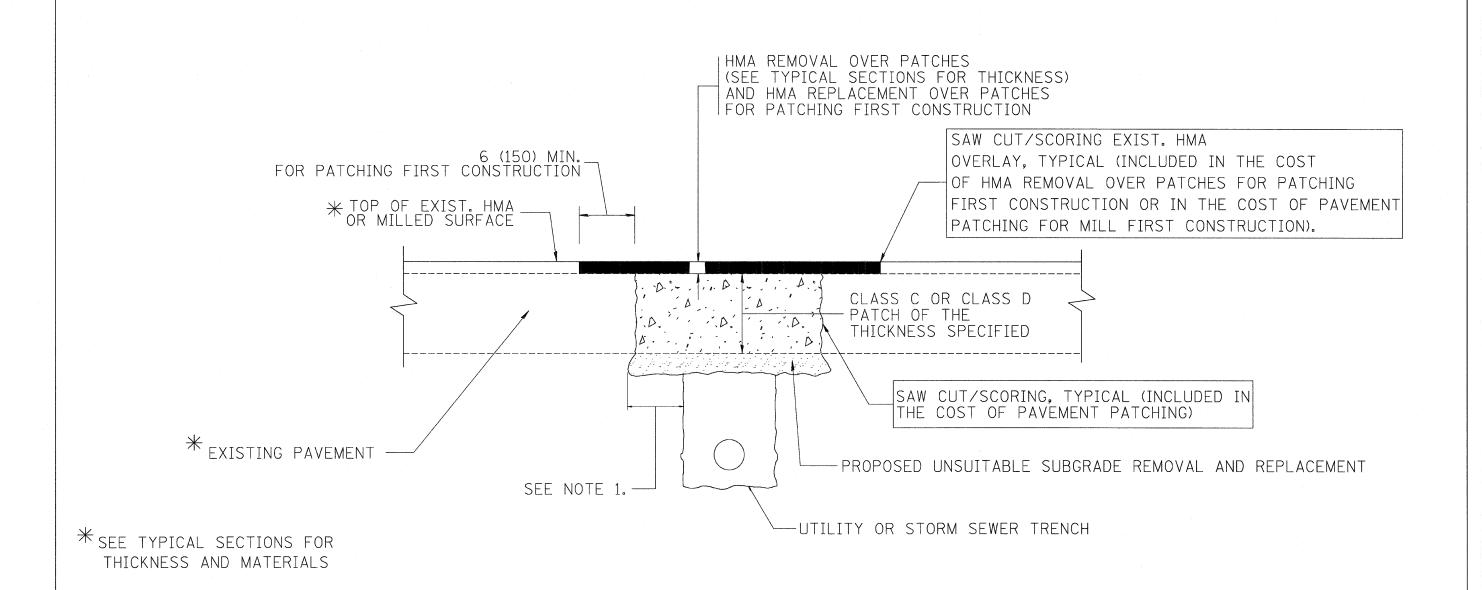
FILE NAME = USER NAME = gaglianobt DESIGNED - R, SHAH REVISED - R, SHAH 03-10-95
Wh\distatd\22x34\bd08.dgn

DRAWN - REVISED - A, ABBAS 03-21-97
PLOT SCALE = 56.0000 '/ IN. CHECKED - REVISED - R, WIEDEMAN 05-14-04
PLOT DATE = 1/4/2008 DATE - 10-25-94 REVISED - R, BORO 01-01-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS FOR
FRAMES AND LIDS ADJUSTMENT WITH MILLING

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



### 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)

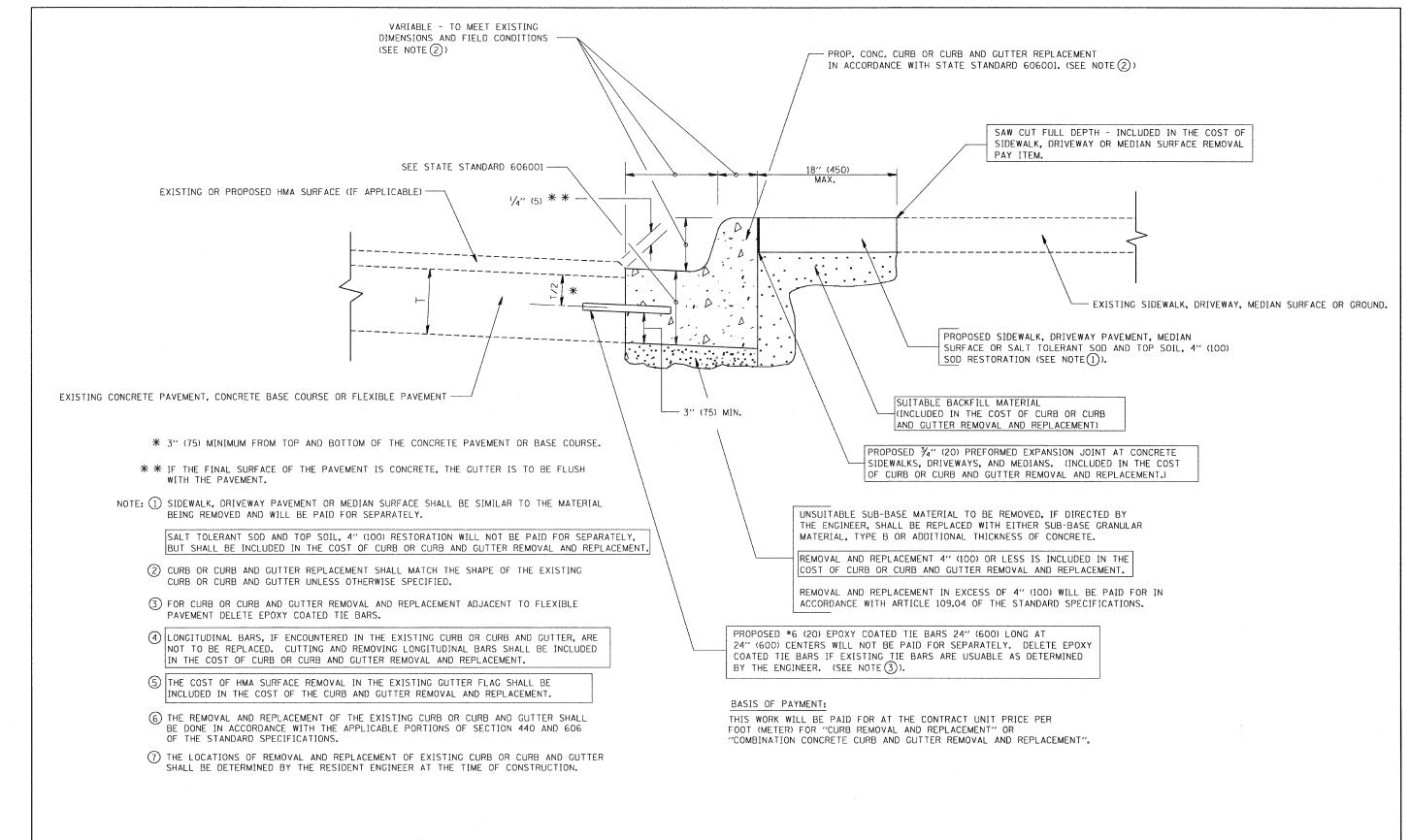
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

### 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.

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

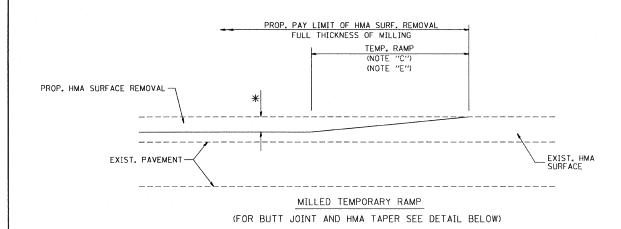
FILE NAME =	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98	·	PAVEMENT PATCHING FOR	F.A.P. SECTION	COUNTY TOTAL SHEET
c:\projects\diststd22x34\bd22.dgn		DRAWN -	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS		349 10 RS-6	KANE/KENDALL 29 20
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION	HMA SURFACED PAVEMENT	BD400-04 (BD-22)	CONTRACT NO. 60F27
	PLOT DATE = 10/27/2008	DATE - 10-25-94	REVISED - K. ENG 10-27-08		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AI	



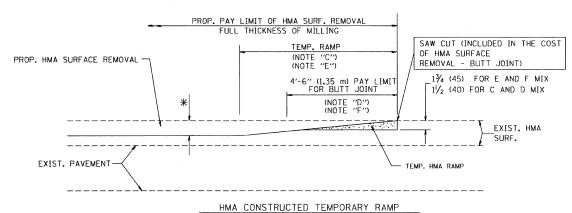
### CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

FILE NAME =	USER NAME = gaglianobt	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96		CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT  SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.		F.A.P.	SECTION	COUNTY	TOTAL SHEET
W:\diststd\22x34\bd24.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS			349	10 RS-6	KANE/KENDALL	29 21
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - M. GOMEZ 01-22-01	DEPARTMENT OF TRANSPORTATION				BD600-06 (BD-24)	CONTRACT	NO. 60F27
	PLOT DATE = 1/4/2008	DATE - 03-11-94	REVISED - R. BORO 01-01-07	·			FED. F	ROAD DIST. NO. 1 ILLINOIS FED.	. AID PROJECT	



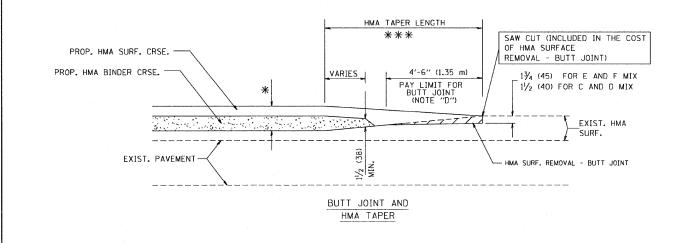
### OPTION 1



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

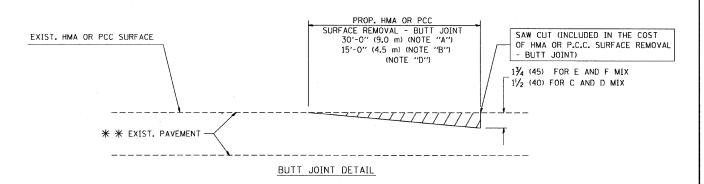
### OPTION 2

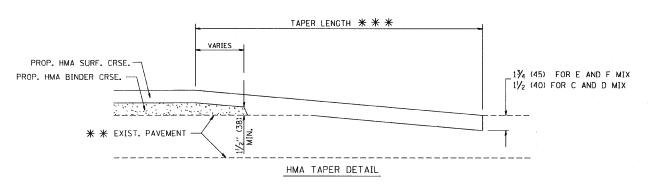
### TYPICAL TEMPORARY RAMP



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

### STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION





### TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

 $\mbox{*}$   $\mbox{*}$  PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

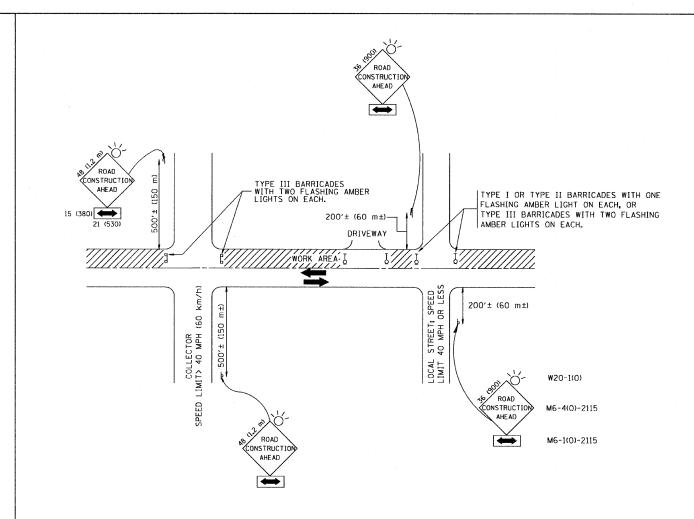
### NOTES

- 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.

### BASIS OF PAYMENT:

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

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



### 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:
- O) ONE ROAD CONSTRUCTION AHEAD SIGN 36 × 36 (900×900) 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:
- d) 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 (MG-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (MG-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 LANF CLOSURE.

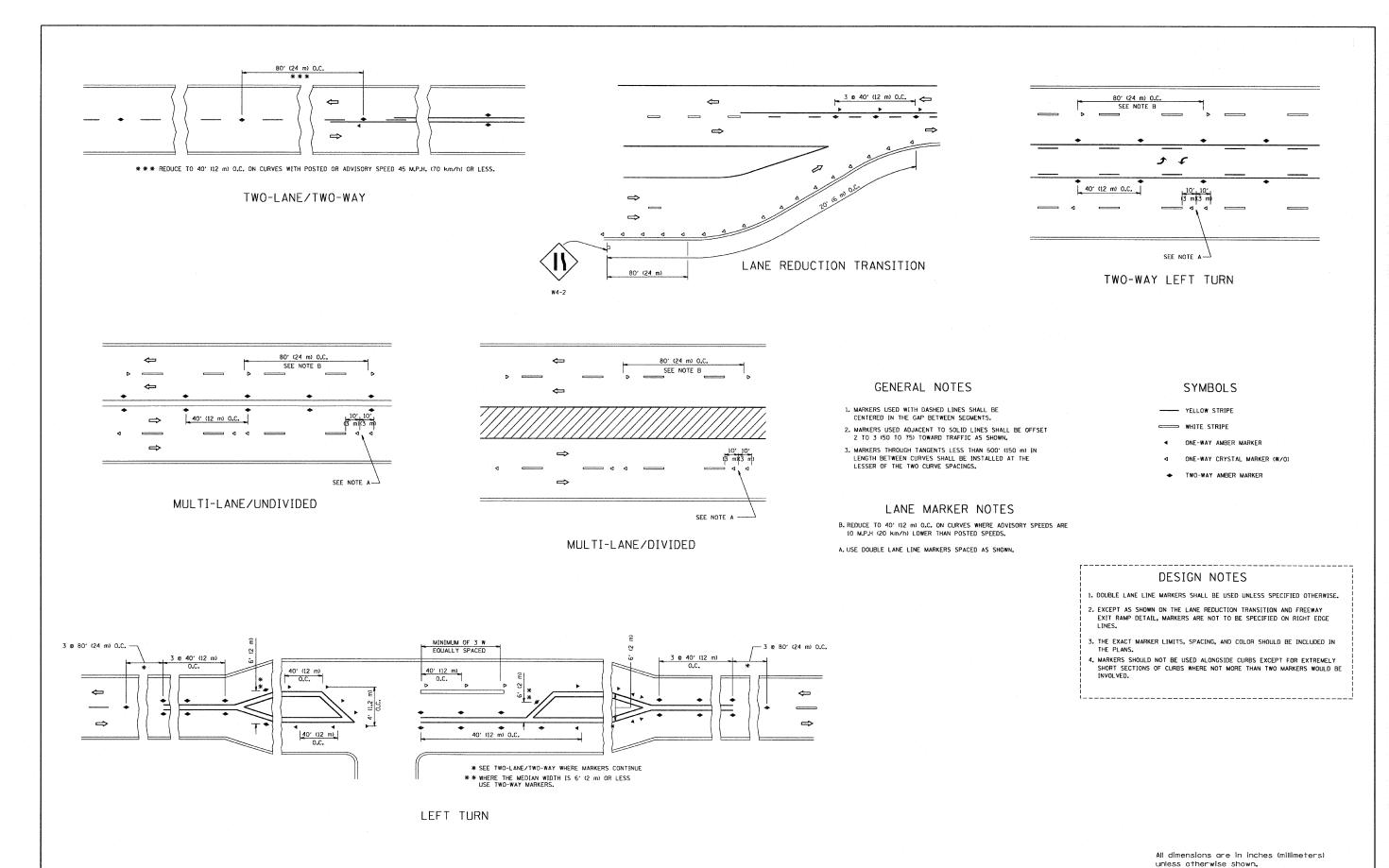
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

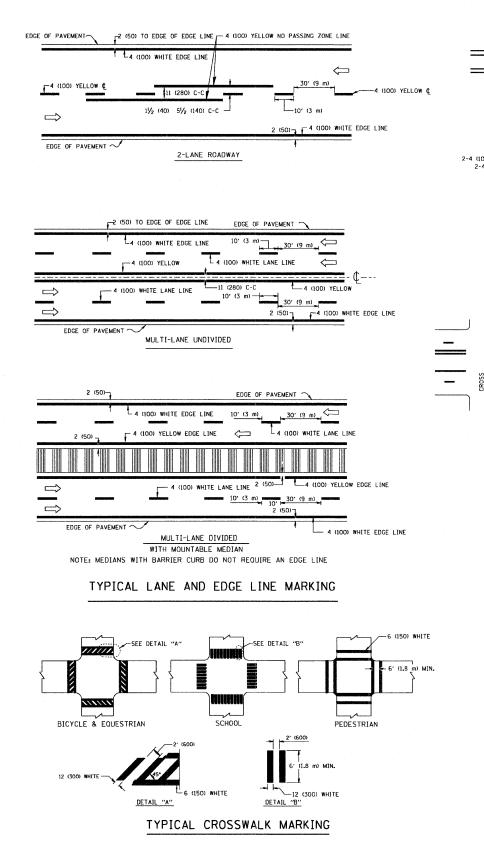
FILE NAME = Geglanobt DESIGNED - LHA REVISED - J. OBERLE 10-18-95
Wi\distatd\22x34\to18dgn

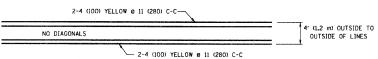
| DRAWN - REVISED - A. HOUSEH 03-06-96
| PLOT SCALE = 50,080 '/ IN. CHECKED - REVISED - A. HOUSEH 10-15-96
| PLOT DATE = 1/4/2088 DATE - 06-89 REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

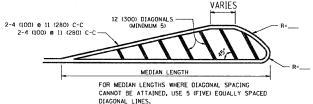


COUNTY TOTAL SHEET NO.
KANE/KENDALL 29 24 FILE NAME = USER NAME = gaglianobt DESIGNED -REVISED - T. RAMMACHER 09-19-94 SECTION TYPICAL APPLICATIONS REVISED - T. RAMMACHER 03-12-99 STATE OF ILLINOIS /i\diststd\22x34\tc11.dgn DRAWN 349 RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) PLOT SCALE = 50.000 '/ IN. CHECKED -REVISED - T. RAMMACHER 01-06-00 **DEPARTMENT OF TRANSPORTATION** TC-11 CONTRACT NO. 60F27 PLOT DATE = 1/4/2008 DATE REVISED SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA.



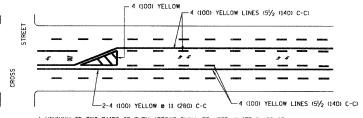


#### 4' (1.2 m) WIDE MEDIANS ONLY

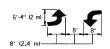


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

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

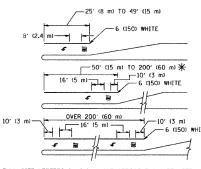


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR, ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

### TYPICAL PAINTED MEDIAN MARKING

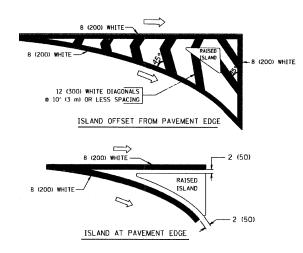


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED,  $\P$  AREA = 15.6 SO. FT. (1.5 m<sup>2</sup>)  $\P$  AREA = 20.8 SO. FT. (1.9 m<sup>2</sup>)

\* 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)	SOL1D	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))	SOL1D	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 6 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' (500) APART 2' (500) APART 5EE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' 11.2 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 Ø 45°	SOLID	YELLOW: TWO WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE
	NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS		WHITE: ONE WAY TRAFFIC	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 (0VER 45MPH (70 km/h))

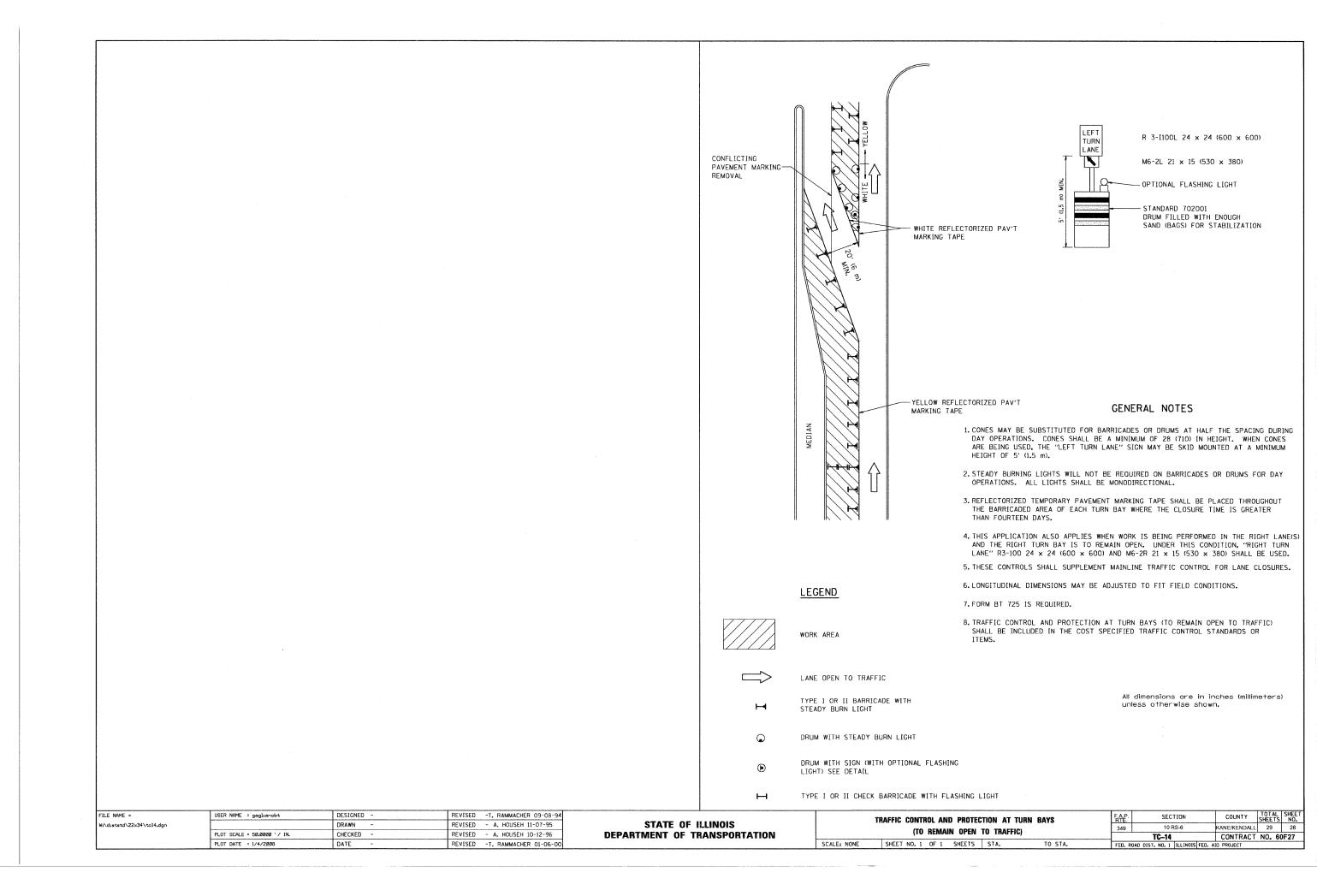
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

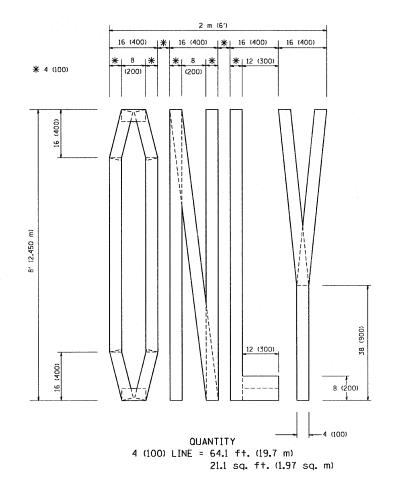
All dimensions are in inches (millimeters) unless otherwise shown.

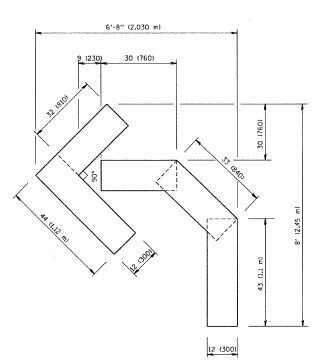
ILE NAME =	USER NAME = gaglianobt	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94
r\diststd\22x34\tc13.dgn		DRAWN -	REVISED -A, HOUSEH 10-09-96
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -A. HOUSEH 10-17-96
	PLOT DATE = 1/4/2008	DATE - 03-19-90	REVISED -T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

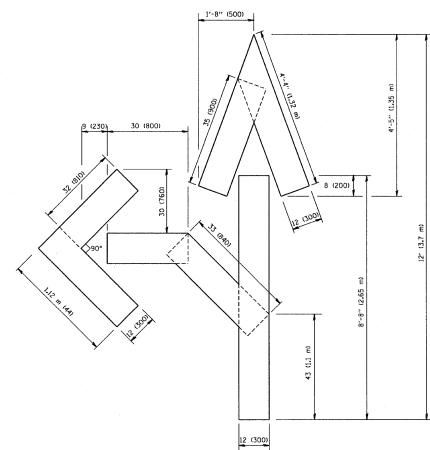
			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
	TYPICAL PAVEMENT MARKINGS						10 RS-6	KANE/KENDALL	29	25
							TC-13 CONTRACT NO			
	SCALE: NONE	SHEET NO. 1 OF	1 SHEETS	STA.	TO STA.	FED. R	OAD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT		







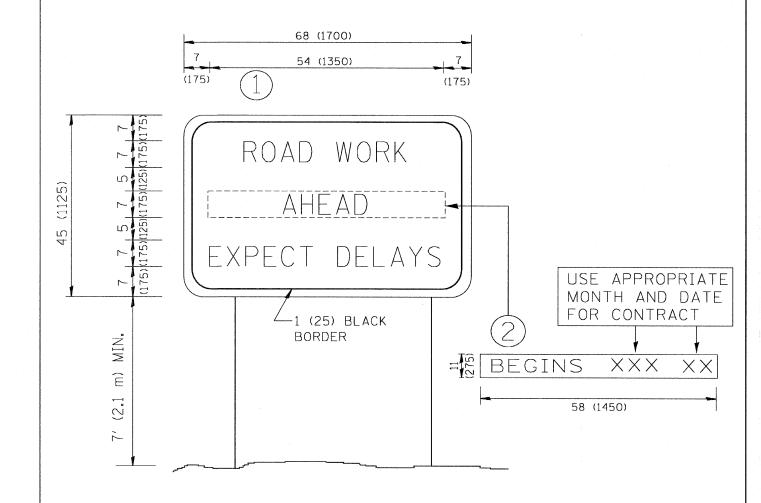
OUANTITY 4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.39 sq. m)



OUANTITY 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.

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED -T. RAMMACHER 06-05-96		PAVEMENT MARKING LETTERS AND SYMBOLS	F.A.P. SECTION	COUNTY TOTAL SHEET
W:\d:ststd\22x34\tc16.dgn		DRAWN -	REVISED -T. RAMMACHER 11-04-97	STATE OF ILLINOIS	FOR TRAFFIC STAGING	349 10 RS-6	KANE/KENDALL 29 27
1	PLOT SCALE = 50.00000 // IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-98	DEPARTMENT OF TRANSPORTATION	FUN INAFFIC STAUTING	TC-16	CONTRACT NO. 60F27
	PLOT DATE = 1/4/2008	DATE - 09-18-94	REVISED ~E. GOMEZ 08-28-00		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. A	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 () WITH INSTALLED PANEL (2) ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
- 4. REMOVE PANEL 2 SOON AFTER THE START OF CONSTRUCTION.
- 5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
- 6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
- 7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

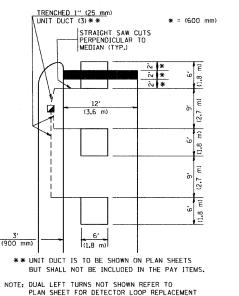
FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED - R. MIRS 09-15-97		ARTERIAL ROAD		FAP.	SECTION	COUNTY	TOTAL SHEET
W:\diststd\22x34\to22.dgn		DRAWN -	REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS			349	10 RS-6	KANE/KENDALL	29 28
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION		INFORMATION SIGN		TC-22	CONTRACT	NO. 60F27
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD	DIST. NO. 1 ILLINOIS FED.		

## LOOPS NEXT TO SHOULDERS PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER. PAVED OR NON-PAVED SHOULDER (1.5 m) (1.8 m) (1.5 m) 1" (25 mm) UNIT DUCT-TRENCHED TO E/P \*\* (3.0 m)(3.0 m) \* = (600 mm) \* \* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)

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

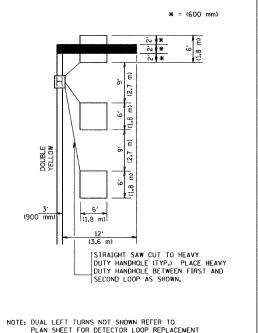
(PROTECTED / PERMITTED LEFT TURN PHASING)

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.

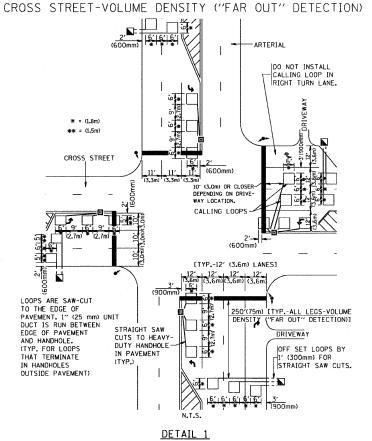


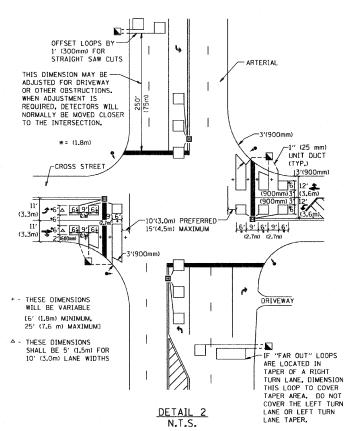
LEFT TURN LANES WITHOUT MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)



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





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

### PLACEMENT OF DETECTORS

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

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

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

### NOTE:

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

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

TOTAL SHEE SHEETS NO.

KANE/KENDALL 29 29 CONTRACT NO. 60F27

COUNTY

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	PLOT SCALE = 50.0000 '/ IN.	CHECKED - R.K.F.	REVISED -	DEPARTMENT OF TRANSPORTATION
	PLOT DATE = 1/4/2008	DATE -	REVISED -	

	DISTRICT 1 – DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING					F.A.P. SECTION			COUNT		
						349	.10 F	KANE/KENI			
	DETAILS FUN NUADWAT NESUNFACING						TS-07	7	CONTR		
	SHEET NO. 1	OF 1	SHEETS	STA.	TO STA.	FED. RO	DAD DIST. NO. 1	ILLINOIS FED.	AID PROJECT		