**DESIGN DESIGNATION:** SPEED LIMIT: 40 M.P.H.

2007 ADT = 29,200

PROJECT IS LOCATED IN THE CITY OF DES PLAINES AND THE VILLAGE OF ROSEMONT

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

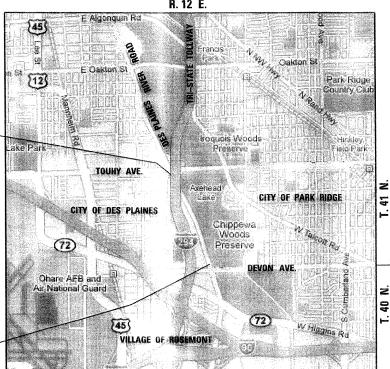
STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION **DIVISION OF HIGHWAYS** 

# **PROPOSED** HIGHWAY PLANS

FAU 2710 (DES PLAINES RIVER ROAD) SECTION: 51 RS-2 DEVON AVE. TO SOUTH OF TOUHY AVE. **RESURFACING (3P)** PROJECT: ESP-27/0(010) **COOK COUNTY** C-91-134-09

> MAINE TOWNSHIP R. 12 E.



**PROJECT BEGINS** STA. 50 + 28

**PROJECT ENDS** 

STA. 105 + 85

GROSS LENGTH OF PROJECT = 5.557 FEET = 1.053 MILES **NET LENGTH OF PROJECT** = 5,557 FEET = 1.053 MILES

ENGINEERS - PLANNERS - SURVEYORS 211 W. WACKER DRIVE CHICAGO, IL. 60606

COOK 23 1 51 RS-2 FED. ROAD DIST. NO. 1 ILLINOIS CONTRACT NO. 60F57

D-91-134-09



DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

STATE OF ILLINOIS

Birinder S. Sachdera

BIRINDER S. SACHDEVA, P.E.

January 20, 2009

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT

CONTRACT NO. 60F57

 $\circ$ 

## INDEX OF SHEETS

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3	SUMMARY OF QUANTITIES
4 - 5	TYPICAL SECTIONS
6	ALIGNMENT PLAN
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12	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT
13	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
14	BUTT JOINT AND HMA TAPER DETAILS
15	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS
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20	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS
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22	ARTERIAL ROAD INFORMATION SIGN
23	DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

### LIST OF STATE STANDARDS

STANDARD NO.	DESCRIPTION
000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
420701*02	PAVEMENT FABRIC
442101-07	CLASS B PATCHES
442201-03	CLASS C AND D PATCHES
482011-03	HMA SHOULDER STRIPS/SHOULDERS WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
604001- 03	FRAME AND LIDS, TYPE 1
606001-04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701601-06	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701606-00	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701 - 06	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901-01	TRAFFIC CONTROL DEVICES
780001-02	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, THE CITY OF DES PLAINES, THE VILLAGE OF ROSEMONT AND THE ILLINOIS STATE TOLLWAY.
- 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 17 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 MR. WALTER CZARNY, THE AREA TRAFFIC FIELD ENGINEER, AT (773) 685-8386 AT LEAST 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 HMA 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. OVERNIGHT LANE CLOSURES SHALL BE ALLOWED FOR CONSTRUCTION OF CLASS B PATCHES AT THE LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE LANE CLOSURES SHALL BE COORDINATED WITH THE TRAFFIC CONTROL SUPERVISOR. SEE NOTE 12.
- 18. PAY ITEM 55039700 STORM SEWERS TO BE CLEANED SHALL ONLY BE UTILIZED TO CLEAN STORM SEWER LATERAL PIPES BETWEEN INLETS OR CATCH BASINS AND MAIN SEWERS.
- 19. THE CLOSURE OF THE EXIT AND ENTRANCE RAMPS AT THE TRI-STATE TOLLWAY SHALL BE COORDINATED WITH THE ILLINOIS STATE TOLLWAY.

INDEX OF SHEETS, LIST OF STATE STANDARDS AND GENERAL NOTES	F.A.U. RTE.	SECTION	COUNTY	T(
DES PLAINES RIVER ROAD	2710	51 RS-2	СООК	
			CONTRACT	N
SCALE: NONE   SHEET NO. 1 OF 1 SHEETS   STA. TO STA.	FFD. R	DAD DIST. NO. 1 THE INDIS FED. A	ID PROJECT	

CODE NO	ITEM	UNIT	TOTAL	IOOO-2A URBAN
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	22	22
40600300	AGGREGATE (PRIME COAT)	TON	124	124
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	30	30
40600895	CONSTRUCTING TEST STRIP	EACH	2	2
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	367	367
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	27	27
40603595	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90	TON	3,035	3,035
42001300	PROTECTIVE COAT	SQ YD	92	92
44000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"	SQ YD	26,718	26,718
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	100	100
44002212	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 3"	SQ YD	160	160
44200998	CLASS B PATCHES, TYPE III, 12 INCH	SQ YD	75	75
44213100	PAVEMENT FABRIC	SQ YD	75	75
44213200	SAW CUTS	FOOT	132	132
44201765	CLASS D PATCHES, TYPE II, 10 INCH	SQ YD	448	448
44201769	CLASS D PATCHES, TYPE III, 10 INCH	SQ YD	96	96
44201771	CLASS D PATCHES, TYPE IV, 10 INCH	SQ YD	128	128
44201777	CLASS D PATCHES, TYPE II, 11 INCH	SQ YD	590	590
44201781	CLASS D PATCHES, TYPE III, 11 INCH	SQ YD	320	320
44201783	CLASS D PATCHES, TYPE IV, 11 INCH	SQ YD	100	100
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	42	42
55039700	STORM SEWERS TO BE CLEANED	FOOT	1,022	1,022
60252800	CATCH BASINS TO BE RECONSTRUCTED	EACH	2	2
60257900	MANHOLES TO BE RECONSTRUCTED	EACH	2	2
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	1	1
60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	3	3
60406000	FRAMES AND LIDS, TYPE 1, OPEN LID	EACH	2	2
60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	2	2

	SUMMARY OF QUANTITIES		100%, FED.	CONSTRUCTIO TYPE CODE
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	IOOO-2A URBAN
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6
67100100	MOBILIZATION	L SUM	1	1
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	1
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	10,000	10,000
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	109.2	109.2
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	24,352	24,352
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	481	481
70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	457	457
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	239	239
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	113	113
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	1,200	1,200
78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	109.2	109.2
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	24,352	24,352
78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	481	481
78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	457	457
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	239	239
78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	113	113
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	519	519
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	519	519
88600600	DETECTOR LOOP REPLACEMENT	FOOT	442	442
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	52	52
X0656100	DRIVEWAY PAVEMENT REMOVAL AND REPLACEMENT	SQ YD	70	70
X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	1,336	1,336
Z0017202	DOWEL BARS 1 1/2"	EACH	80	80
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	61	61
20076600	TRAINEES	HOUR	500	500

@ Y080

NP= Non- participating

\* SPECIALTY ITEM

FILE NAME = D16ØF57-sht-S00.dgn PLOT DATE = 2/1/2009

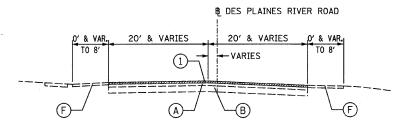
CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
PHONE: (312)372-2023 FAX: (312)372-5274

	DESIGNED	-	G.F.L.	REVISED	
	DRAWN	-	J.V.	REVISED	-
	CHECKED	-	M.P.	REVISED	-
4	DATE	-	FEBRUARY 2009	REVISED	~

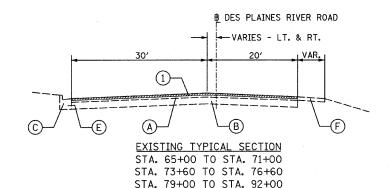
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

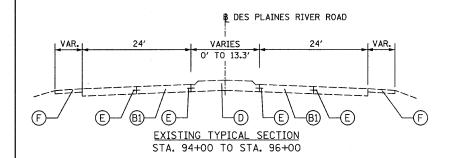
1		SUMMARY OF Q	IANTITIES		F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
		DES PLAINES RIV	2710	51 RS-2	COOK	23	3		
ı		DEO I LAMEO MA	TEN NOAD				CONTRACT	NO. 6	50F57
J	SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	FED. ROAD D	IST. NO. 1 ILLINOIS FED.	AID PROJECT				

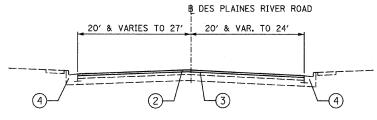
# B DES PLAINES RIVER ROAD 20' & VARIES TO 27' 20' & VAR. TO 24' EXISTING TYPICAL SECTION STA. 50+28 TO STA. 58+00



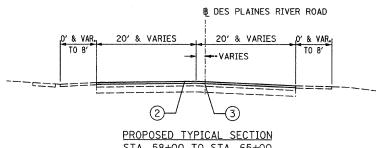
EXISTING TYPICAL SECTION STA. 58+00 TO STA. 65+00 STA. 71+00 TO STA. 73+60 STA. 76+60 TO STA. 79+00 STA. 92+00 TO STA. 94+00



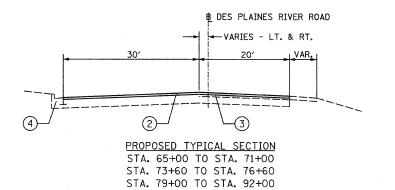


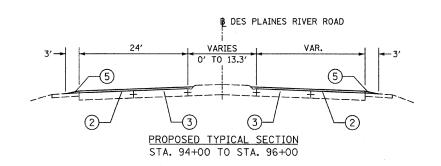


PROPOSED TYPICAL SECTION STA. 50+28 TO STA. 58+00



STA. 58+00 TO STA. 65+00 STA. 71+00 TO STA. 73+60 STA, 76+60 TO STA, 79+00 STA. 92+00 TO STA. 94+00





### EXISTING CONDITIONS:

- A HOT-MIX ASPHALT SURFACE AND BINDER COURSE (VARIES, 3" TO 11")
- (B) P.C.C. BASE COURSE (VARIES, 7" TO 14")
- (B1) P.C.C. PAVEMENT, 10"
- C COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (C1) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18
- © COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- (D) CONCRETE MEDIAN, CORRUGATED
- (D1) CONCRETE MEDIAN, BARRIER TYPE SB-6.06
- (E) TIE BARS
- (F) AGGREGATE SHOULDER

### PROPOSED IMPROVEMENTS:

- 1 HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2 "
- (2) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1 3/4 "
- (3) POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4 "
- (4) COMB. CONC. CURB AND GUTTER REMOVAL AND REPLACEMENT
- (5) (AT LOCATIONS DETERMINED BY THE ENGINEER) AGGREGATE WEDGE SHOULDER, TYPE B

- 1. FROM STA. 50+28 TO STA. 94+00 THE CONTRACTOR SHALL MILL HMA SURFACE (2 1/2") FIRST BEFORE PATCHING.
- 2. FROM STA. 101+72 TO STA. 105+85 THE CONTRACTOR SHALL PATCH FIRST BEFORE MILLING HMA SURFACE (2 1/2").

ROADWAY NAME	HOT-MIX ASPHALT MI	IXTURE REQUIREMENTS			
ROADWAT NAME	MIXTURE TYPE	AC TYPE	AIR VOIDS		
	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 (IL-9.5mm)	SBS/SBR PG 70-22	4% @ 90 GYR		
DES PLAINES RIVER ROAD	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	SBS/SBR PG 76-28/22	4% @ 50 GYR		
	CLASS D PATCHES (HMA BINDER, IL-19)	* PG 64-22	4% @ 70 GYR.		
	HMA REPLACEMENT OVER PATCHES AND PARTIAL DEPTH PATCHING (HMA BINDER, IL-19)	*PG 64-22	4% @ 70 GYR.		

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

FILE NAME = D16ØF57-sht-typica PLOT DATE = 2/1/2009

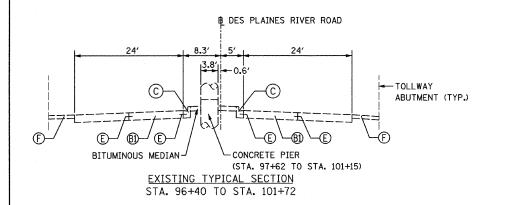
CHRISTIAN-ROGE & ASSOCIATES, INC. 211 WEST WACKER DRIVE

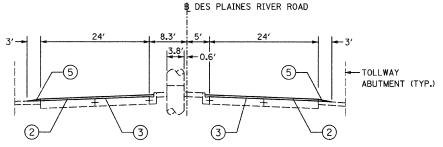
DESIGNED - G.F.L. REVISED REVISED CHECKED - M.P. REVISED PHONE: (312)372-2023 FAX: (312)372-5274 DATE FEBRUARY 2009 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

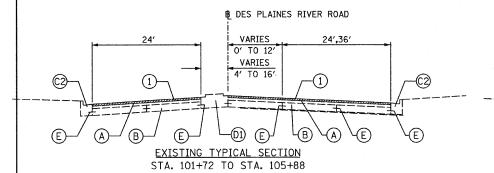
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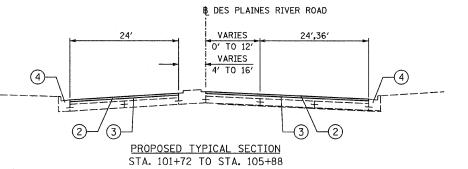
COOK 23 4 SECTION TYPICAL SECTIONS 2710 **DES PLAINES RIVER ROAD** CONTRACT NO. 60F57 SCALE: NONE SHEET NO. 1 OF 2 SHEETS STA. TO STA.





PROPOSED TYPICAL SECTION STA. 96+40 TO STA. 101+72





### EXISTING CONDITIONS:

- (A) HOT-MIX ASPHALT SURFACE AND BINDER COURSE (VARIES, 3" TO 11")
- B P.C.C. BASE COURSE (VARIES, 7" TO 14")
- (B1) P.C.C. PAVEMENT, 10"
- (C) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (1) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18
- © COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- D CONCRETE MEDIAN, CORRUGATED
- (D1) CONCRETE MEDIAN, BARRIER TYPE SB-6.06
- (E) TIE BARS
- (F) AGGREGATE SHOULDER

### PROPOSED IMPROVEMENTS:

- 1 HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2 "
- (2) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1 3/4 "
- (3) POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4 "
- (4) COMB. CONC. CURB AND GUTTER REMOVAL AND REPLACEMENT
- (at locations determined by the engineer)

  AGGREGATE WEDGE SHOULDER, TYPE B

### NOTES:

- FROM STA. 50+28 TO STA. 94+00 THE CONTRACTOR SHALL MILL HMA SURFACE (2 1/2") FIRST BEFORE PATCHING.
- 2. FROM STA. 101+72 TO STA. 105+85 THE CONTRACTOR SHALL PATCH FIRST BEFORE MILLING HMA SURFACE (2 1/2").

TO STA.

FILE NAME = D160F57-sht-typical.dg PLOT DATE = 2/1/2009



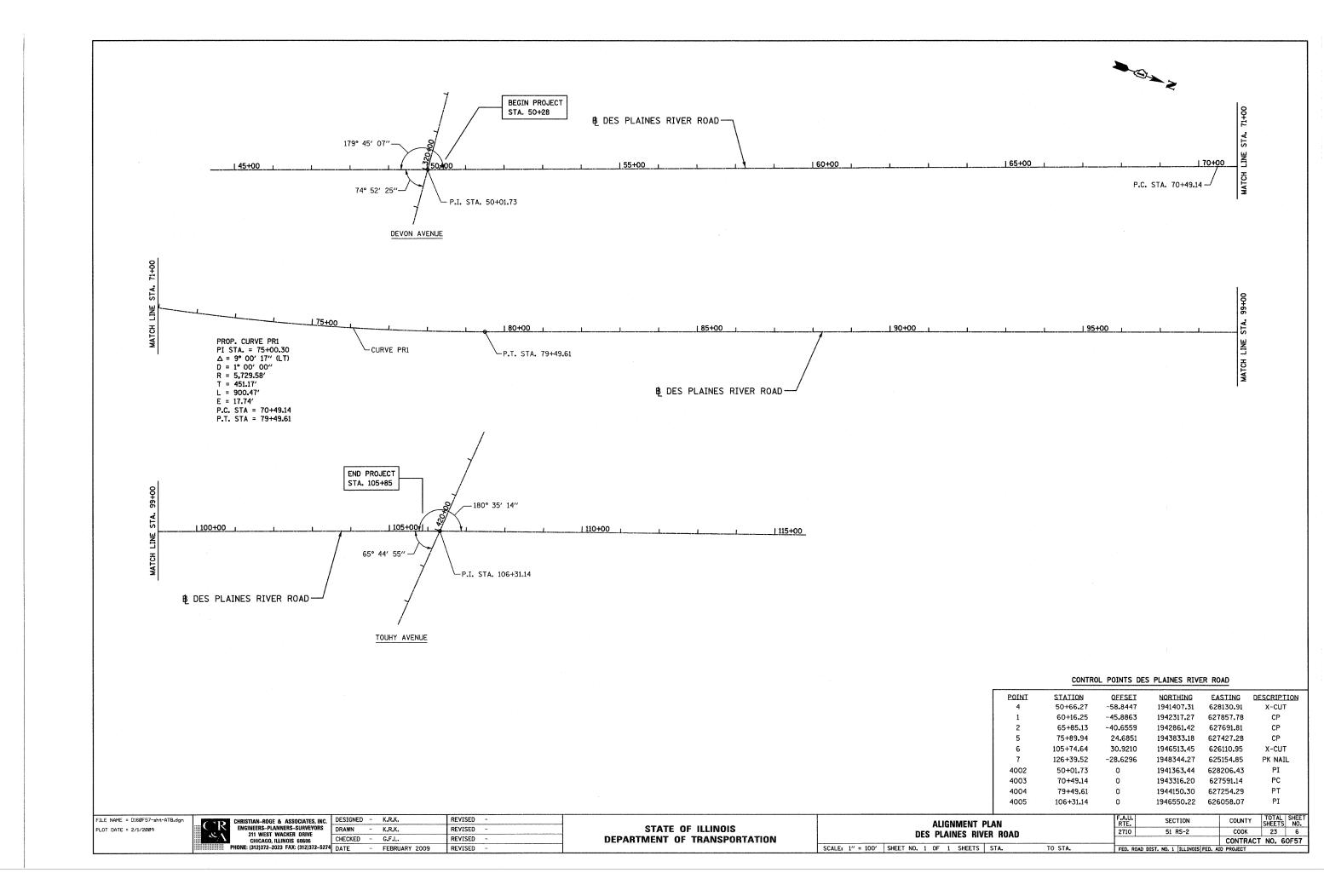
DESIGNED - G.F.L. REVISED 
DRAWN - B.K. REVISED 
CHECKED - M.P. REVISED 
TABLE - FEBRUARY 2009 REVISED -

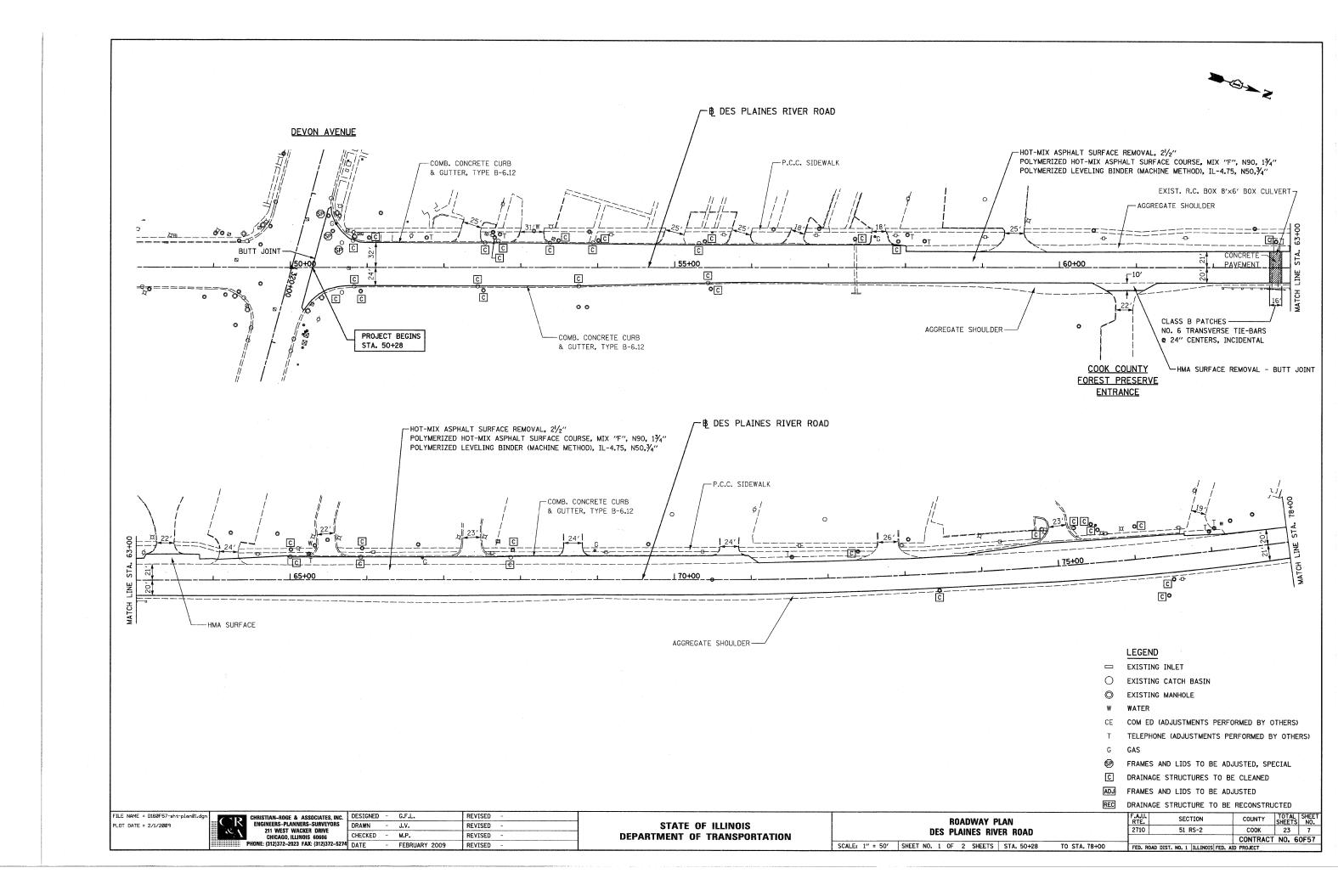
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

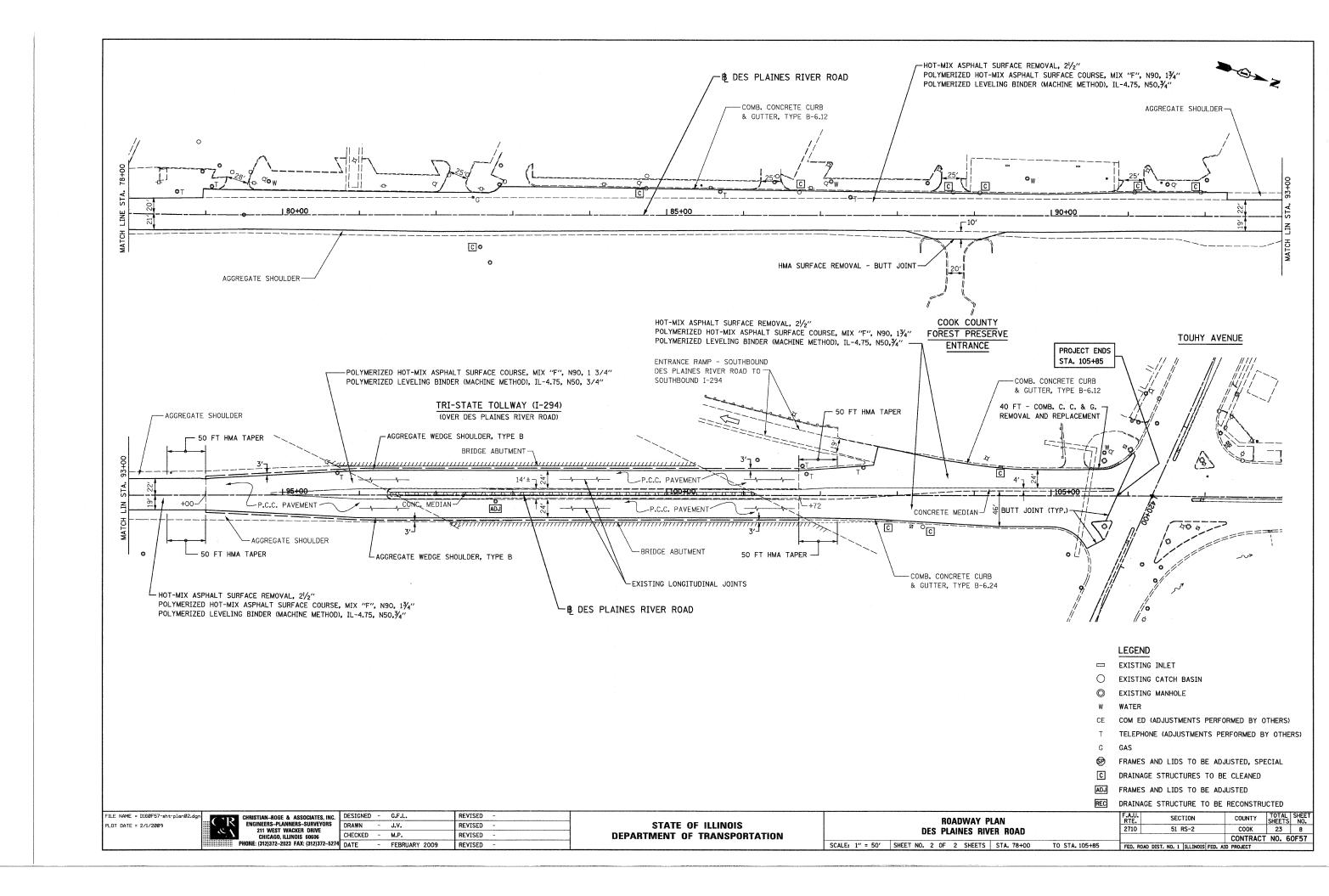
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DES PLAINES RIVER ROAD

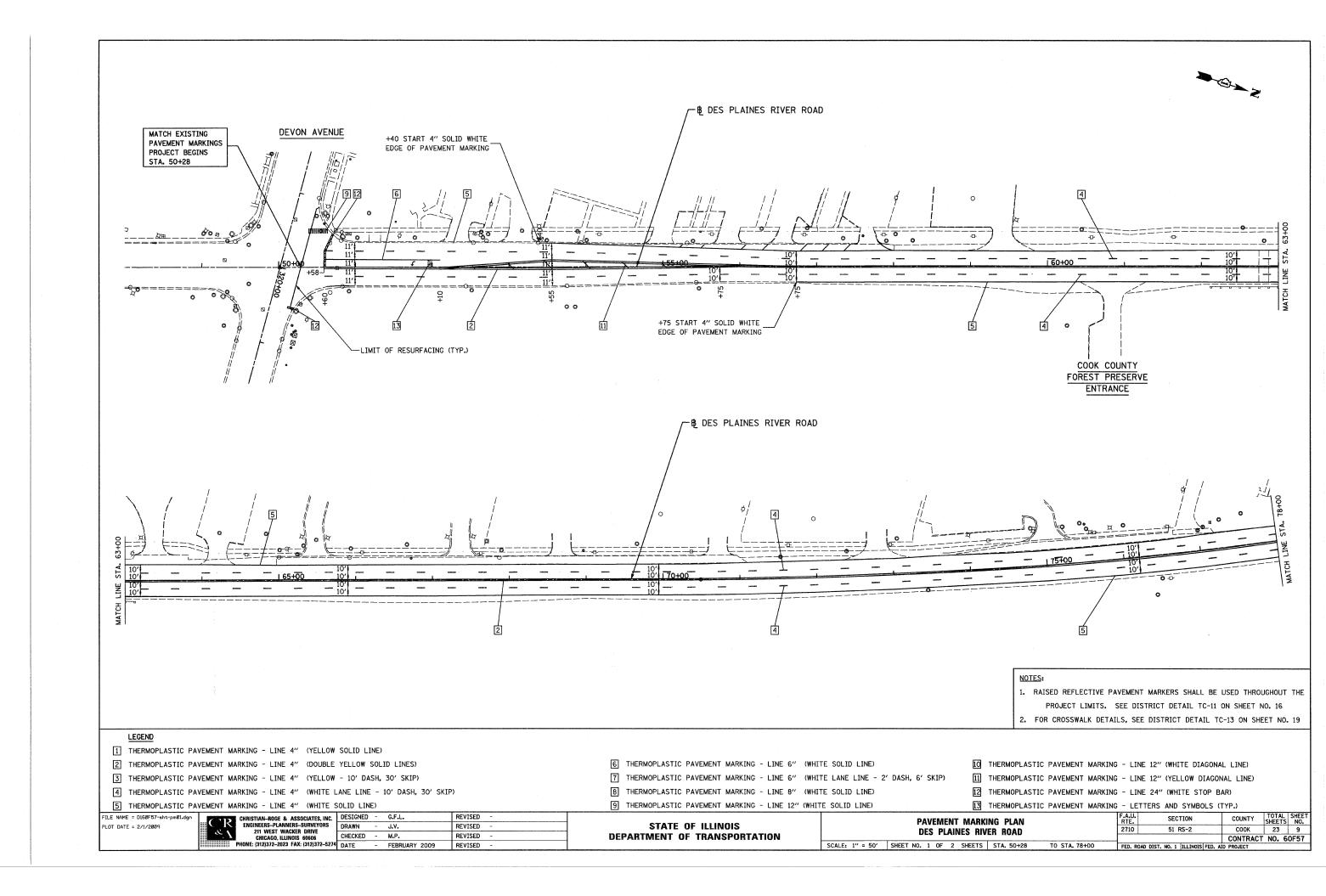
SCALE: NONE SHEET NO. 2 OF 2 SHEETS STA.

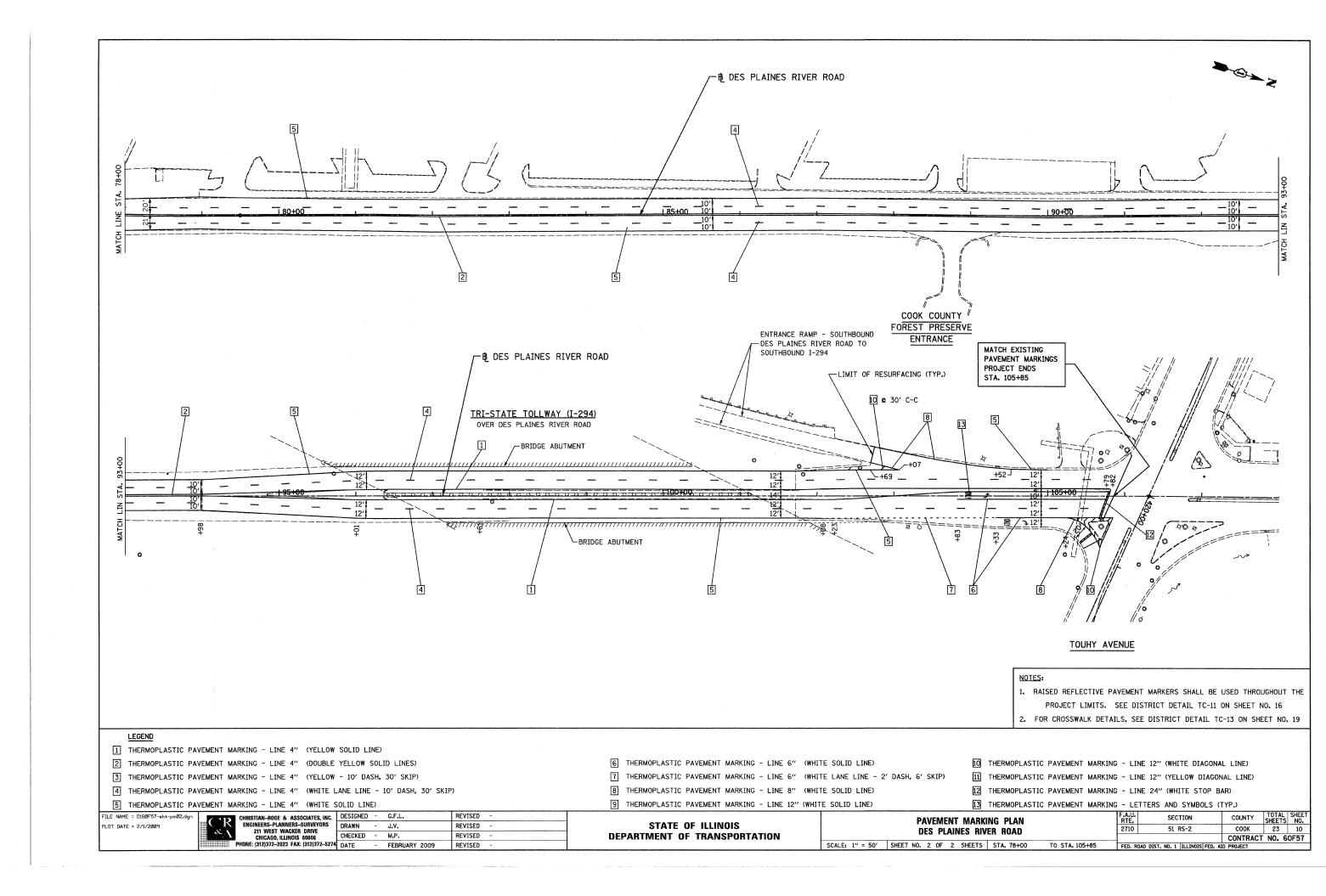
L. SECTION COUNTY TOTAL SHEETS NO.
0 51 RS-2 COOK 23 5
CONTRACT NO. 60F57

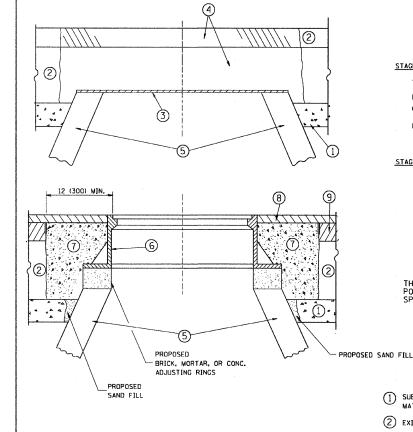












EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109,04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

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.

1 SUB-BASE GRANULAR MATERIAL

6 FRAME AND LID (SEE NOTES)

2 EXISTING PAVEMENT

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,

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.

# 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 \d:ststd\22x34\bdØ8.dgr DRAWN REVISED - A. ABBAS 03-21-97 PLOT SCALE = 50.0000 '/ 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** 

NOTES:

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

TOTAL SHEET SHEETS NO. SECTION COUNTY 51 RS-2 COOK 23 11 CONTRACT NO. 60F57 BD600-03 (BD-8)

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 11/2 (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

CONSTRUCTION PROCEDURES

### 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 HWA SURFACE COURSE OR HWA BINDER COURSE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

LEGEND

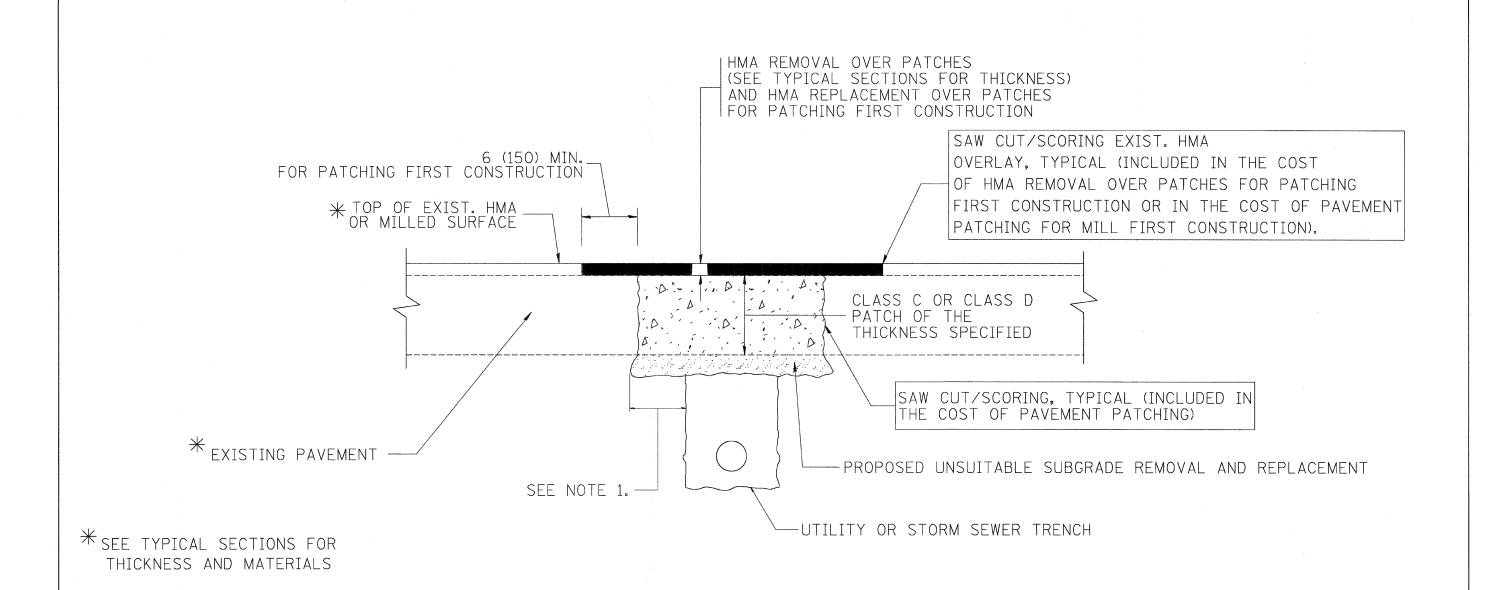
THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS.

CLASS SI CONCRETE, HMA SURFACE COURSE OR HMA BINDER COURSE

3 36 (900) DIAMETER METAL PLATE

THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT



### 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)

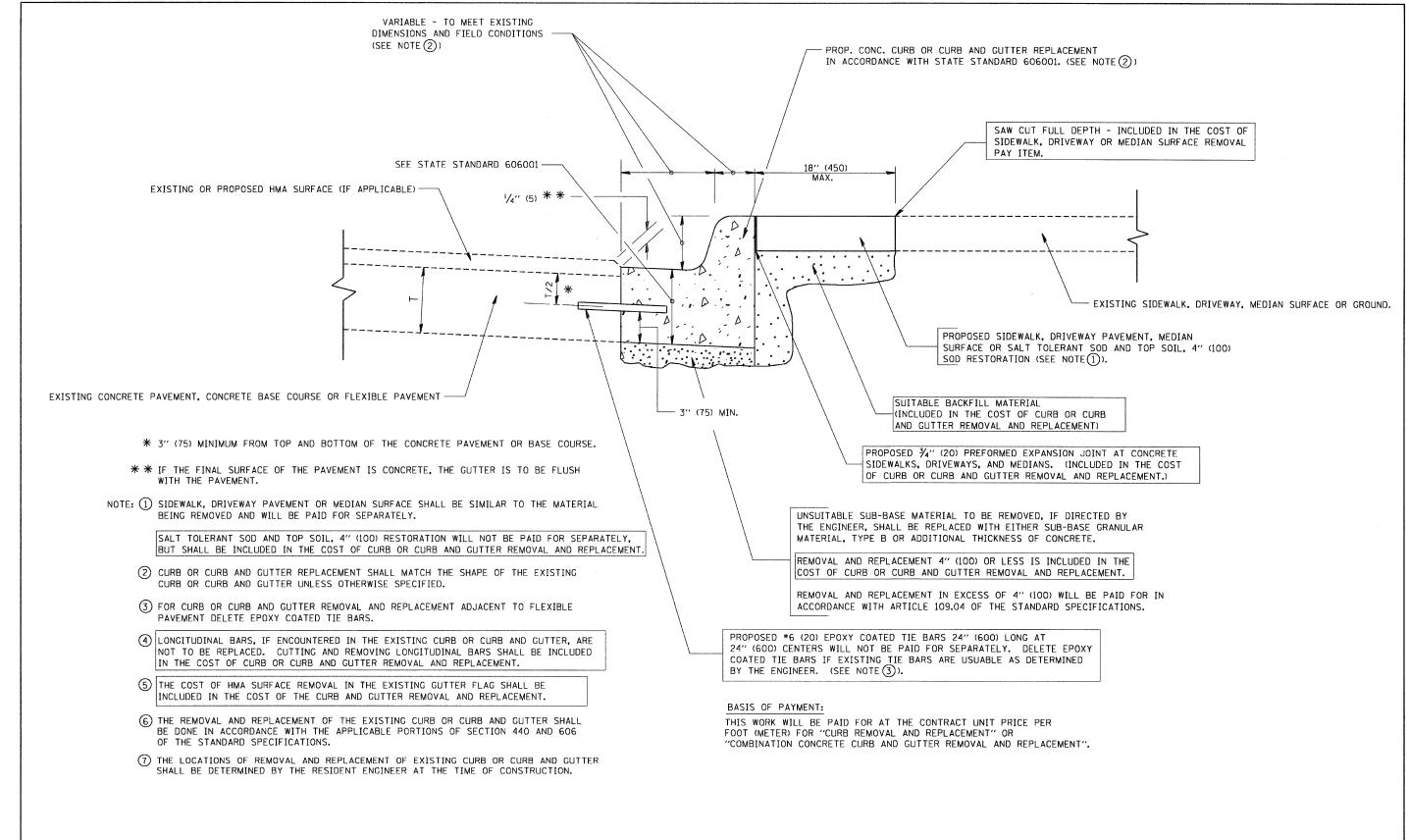
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

### 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.

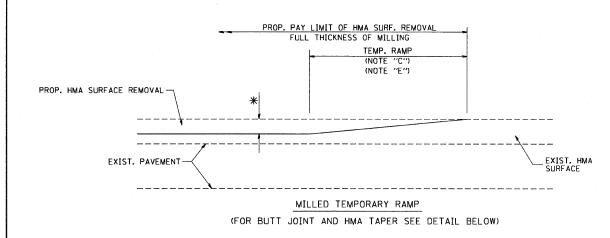
FILE NAME =	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98		PAVEMENT PATCHING FOR	FA.U. SECTION	COUNTY TOTAL SHEET
o:\projects\diststd22x34\bd22.dgn		DRAWN -	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS		2710 51 RS-2	COOK 23 12
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION	HMA SURFACED PAVEMENT	BD400-04 (BD-22)	CONTRACT NO. 60F57
·	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. A	



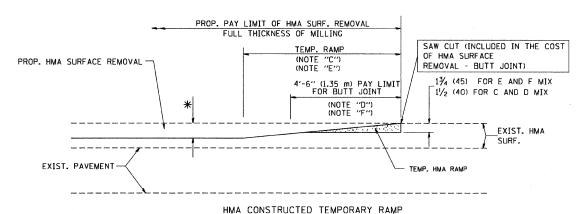
# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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	FAU. SECTION	COUNTY TOTAL SHEET SHEET NO.
W:\diststd\22x34\bd24.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS		2710 51 RS-2	COOK 23 13
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - M. GOMEZ 01-22-01	DEPARTMENT OF TRANSPORTATION	REMOVAL AND REPLACEMENT	BD600-06 (BD-24)	CONTRACT NO. 60F57
	PLOT DATE = 1/4/2008	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 FE	



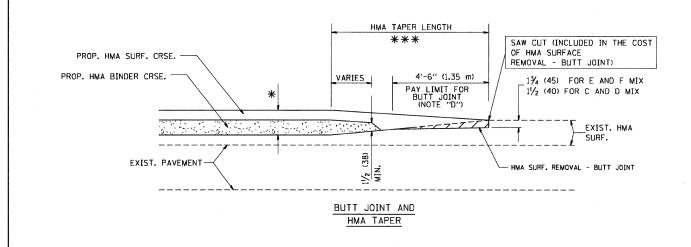
### OPTION 1



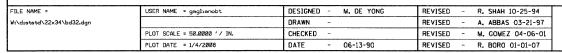
### (FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

### OPTION 2

### TYPICAL TEMPORARY RAMP



# TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



PROP. HMA OR PCC
SURFACE REMOVAL - BUTT JOINT
30'-0" (9.0 m) (NOTE "B")

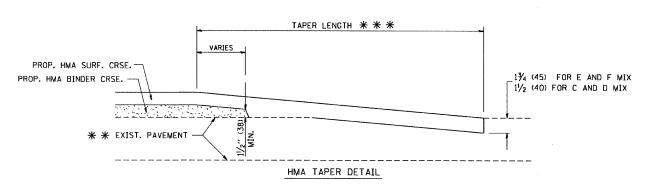
SAW CUT (INCLUDED IN THE COST OF HMA OR P.C.C. SURFACE REMOVAL - BUTT JOINT)

15'-0" (4.5 m) (NOTE "B")

17/4 (45) FOR E AND F MIX

11/2 (40) FOR C AND D MIX

BUTT JOINT DETAIL



# TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

### NOTES

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

### BASIS OF PAYMENT:

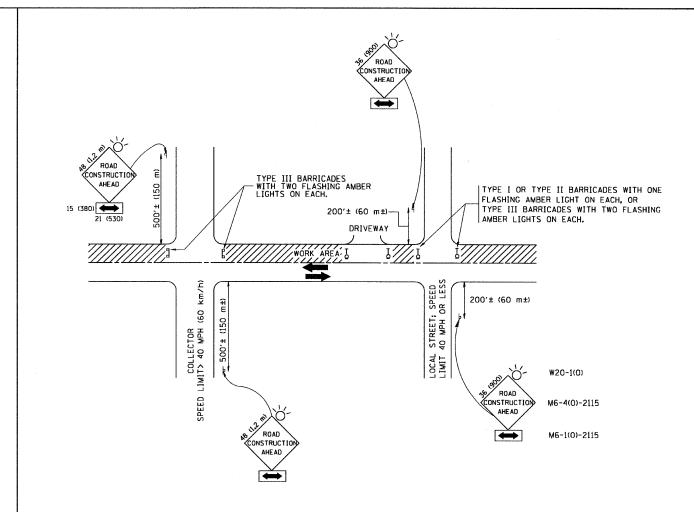
STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

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

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

	BUTT JOINT A	MD		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	HMA TAPER DE	TAILC		2710	51 RS-2	COOK	23	14
	7				BD400-05 BD32	CONTRACT	NO. 60	)F57
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. R	OAD DIST, NO. 1 ILLINOIS FED. AT	D PROJECT		



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

### NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- O) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200° (60 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- c) 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 MANN POLYTY.
- 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 LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

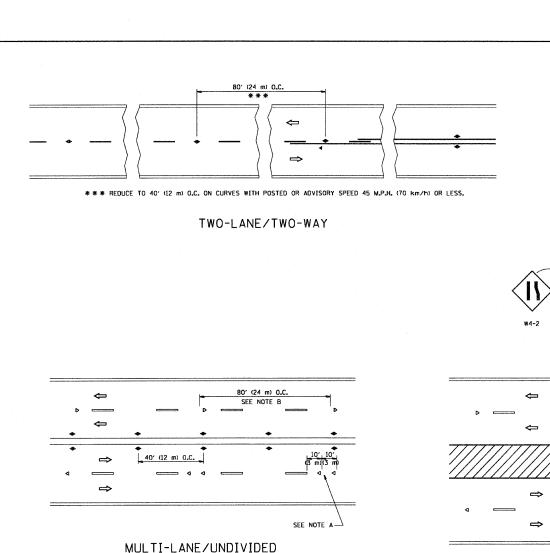
FILE NAME = USER NAME = gaglacobt DESIGNED - LHA REVISED - J. OBERLE 10-18-95
Widdstatd\22x34\to10ddgn

| DRAWN - REVISED - A. HOUSEH 03-06-96
| PLOT SCALE = 50.000 '/ IN. CHECKED - REVISED - A. HOUSEH 10-15-96
| PLOT DATE = 1/4/2000 DATE - 06-89 REVISED - T. RAMWACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

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

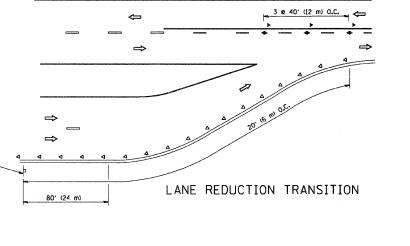


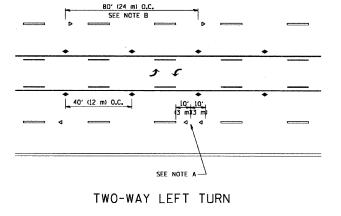
MULTI-LANE/DIVIDED

80' (24 m) O.C.

SEE NOTE B

SEE NOTE A







- 1. WARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE CAP BETWEEN SECMENTS.
- MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET
   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

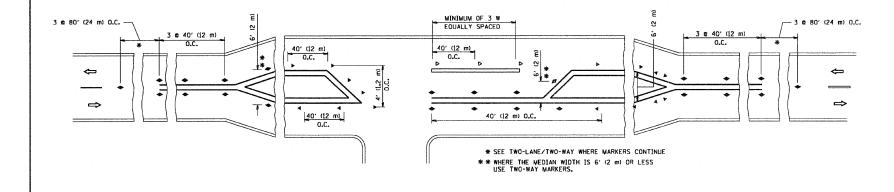
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

### SYMBOLS

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

### DESIGN NOTES

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



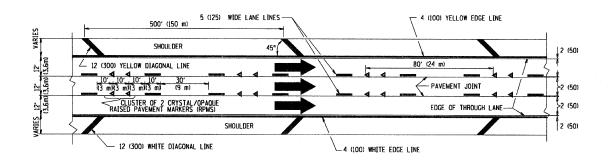
LEFT TURN

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

DESIGNED -REVISED - T. RAMMACHER 09-19-94 FILE NAME = USER NAME = gaglianobt SECTION COUNTY TYPICAL APPLICATIONS STATE OF ILLINOIS REVISED - T. RAMMACHER 03-12-99 Wi\distatd\22x34\to11.dan DRAWN соок 23 16 RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) REVISED -T. RAMMACHER 01-06-00 PLOT SCALE = 50.000 '/ IN. CHECKED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 60F57 TC-11 SHEET NO. 1 OF 1 SHEETS STA. PLOT DATE = 1/4/2008 DATE REVISED SCALE: NONE

THE DIAGONAL LINES SHALL BE SPACED AT 40' (12 m) C-C ACROSS ALL STRUCTURES WHICH ARE 500' (150 m) OR LESS

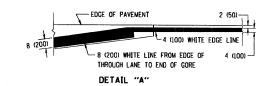
THE DIAGONAL LINES ARE NOT REQUIRED ON SHOULDERS WHICH ARE 6' (1.8 m) OR LESS IN WIDTH

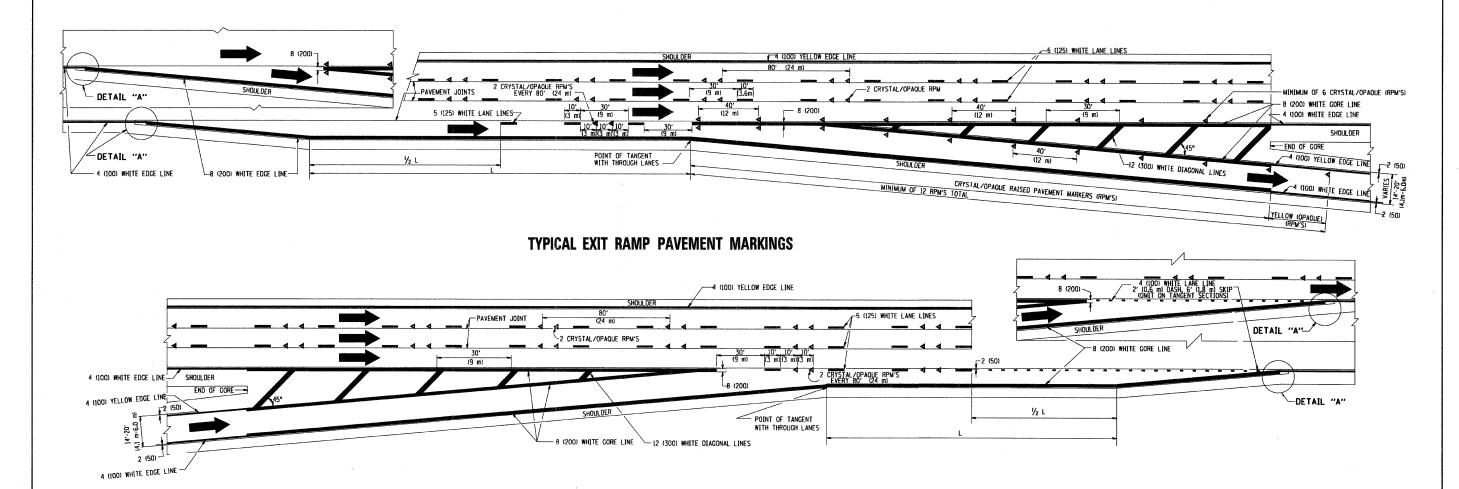


### TYPICAL EDGE LINES & LANE LINES

- NOTES:

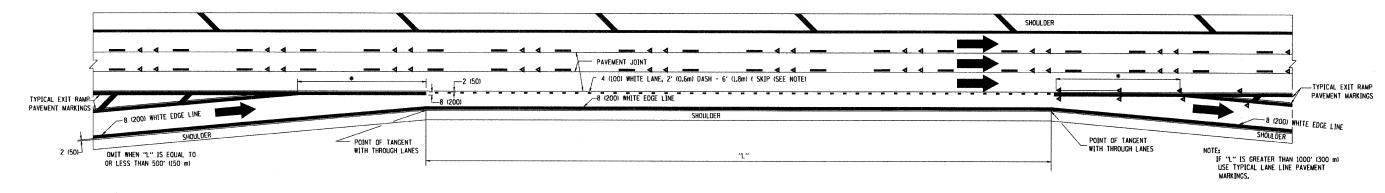
  1. THERMO PLASTIC PAVEMENT MARKING LINE SHALL BE USED FOR THE EDGE LINES, GORE LINES, AND DIAGONAL LINES ON BITUMINOUS PAVEMENT ONLY.
- 2. PREFORMED PLASTIC TYPE B PAVEMENT MARKING LINE SHALL BE USED FOR ALL LANE LINES ON BITUMINOUS PAVEMENT
- 3. POLYUREA PAVEMENT MARKING SHALL BE USED FOR ALL MARKINGS ON PCC



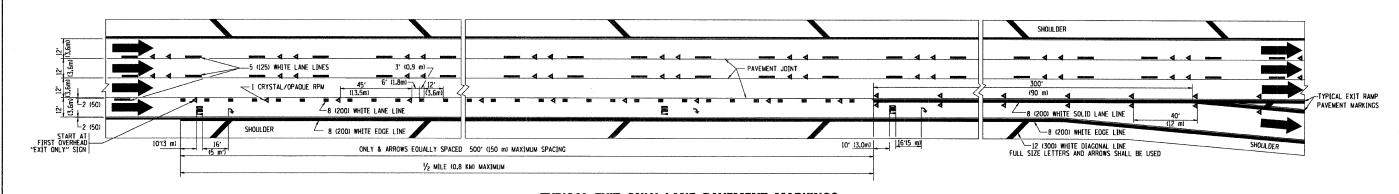


### TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS

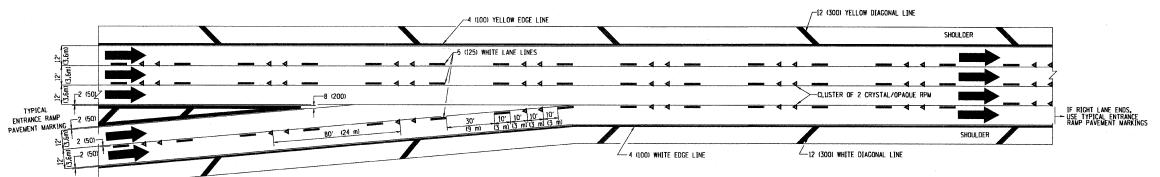
FILE NAME =	USER NAME = gaglianobt	DESIGNED - D.W.S.	REVISED - A.H. 03-96			ADDITED LAND PROPERTY	F.A.P. SECTION	COUNTY TOTAL SHEE
W:\diststd\22x34\to12.dgn		DRAWN -	REVISED - D.W.S. 07-96	STATE OF ILLINOIS		RTE. 51 RS-2	COOK 23 17	
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - J.A.F. 02-06	DEPARTMENT OF TRANSPORTATION		PAVEMENT MARKING DETAILS	TC 12	CONTRACT NO. 60F57
	PLOT DATE = 1/4/2008	DATE - 01-90	REVISED - S.P.B. 01-07		SCALE: NONE	SHEET NO. 1 OF 2 SHEETS STA. TO STA.	FED. ROAD DIST, NO. 1 ILLINOIS	FED. AID PROJECT



### TYPICAL ENTRANCE/EXIT RAMP COMBINATION PAVEMENT MARKINGS

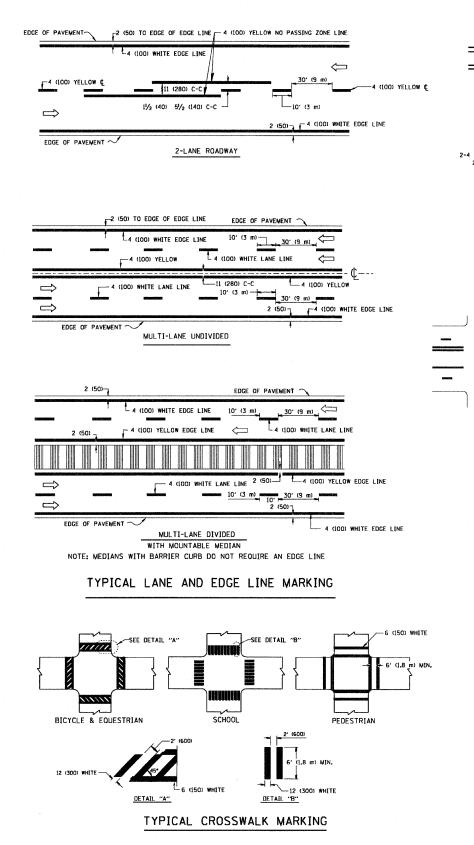


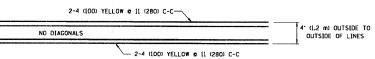
### TYPICAL EXIT ONLY LANE PAVEMENT MARKINGS



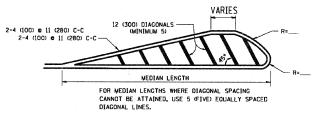
### TYPICAL TWO LANE ENTRANCE RAMP PAVEMENT MARKINGS

FILE NAME =	USER NAME = gaglianobt	DESIGNED - D.W.S.	REVISED - A.H. 03-96		MULTI-LANE FREEWAY	F.A.P. SECTION	COUNTY TOTAL SHEET
W:\diststd\22x34\to12.dgn		DRAWN -	REVISED - D.W.S. 07-96	STATE OF ILLINOIS		2710 51 RS-2	COOK 23 18
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - J.A.F. 02-06	DEPARTMENT OF TRANSPORTATION	PAVEMENT MARKING DETAILS	TC-12	CONTRACT NO. 60F57
	PLOT DATE = 1/4/2008	DATE - 01-90	REVISED - S.P.B. 01-07		SCALE: NONE SHEET NO. 2 OF 2 SHEETS STA. TO STA.	FED. ROAD DIST, NO. 1   ILLINOIS FED.	





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

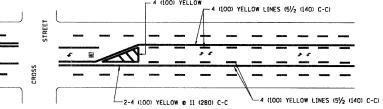


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))

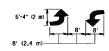
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))

150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

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

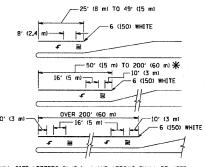


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR.
ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

### TYPICAL PAINTED MEDIAN MARKING

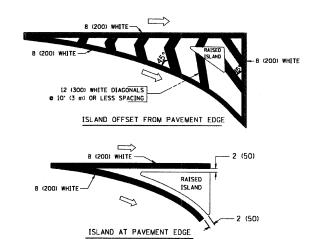


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  $\P$  AREA = 15.6 SO. FT. (1.5 m<sup>2</sup> ) (NLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)

\* 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 0 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES; FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 m 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 WARKINGS)	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 WARKINGS	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	YELLO#	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 & EDUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 <b>c</b> 6 (150) 12 (300) <b>c</b> 45° 12 (300) <b>c</b> 90°	SOLID SOLID SOLID	WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 0 4 (100) WITH 12 (300) DIAGONALS 0 45° NO DIAGONALS USED FOR 4' (1,2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS & 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES: "RR" IS 6' (1.8 m) LETTERS: 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SO. FT. (0.33 m <sup>2</sup> ) EACH "X"=54.0 SO. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS	12 (300) <b>a</b> 45°	SOLID	WHITE - RIGHT	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)) 1150' (45 m) C-C (OVER 45MPH (70 km/h))

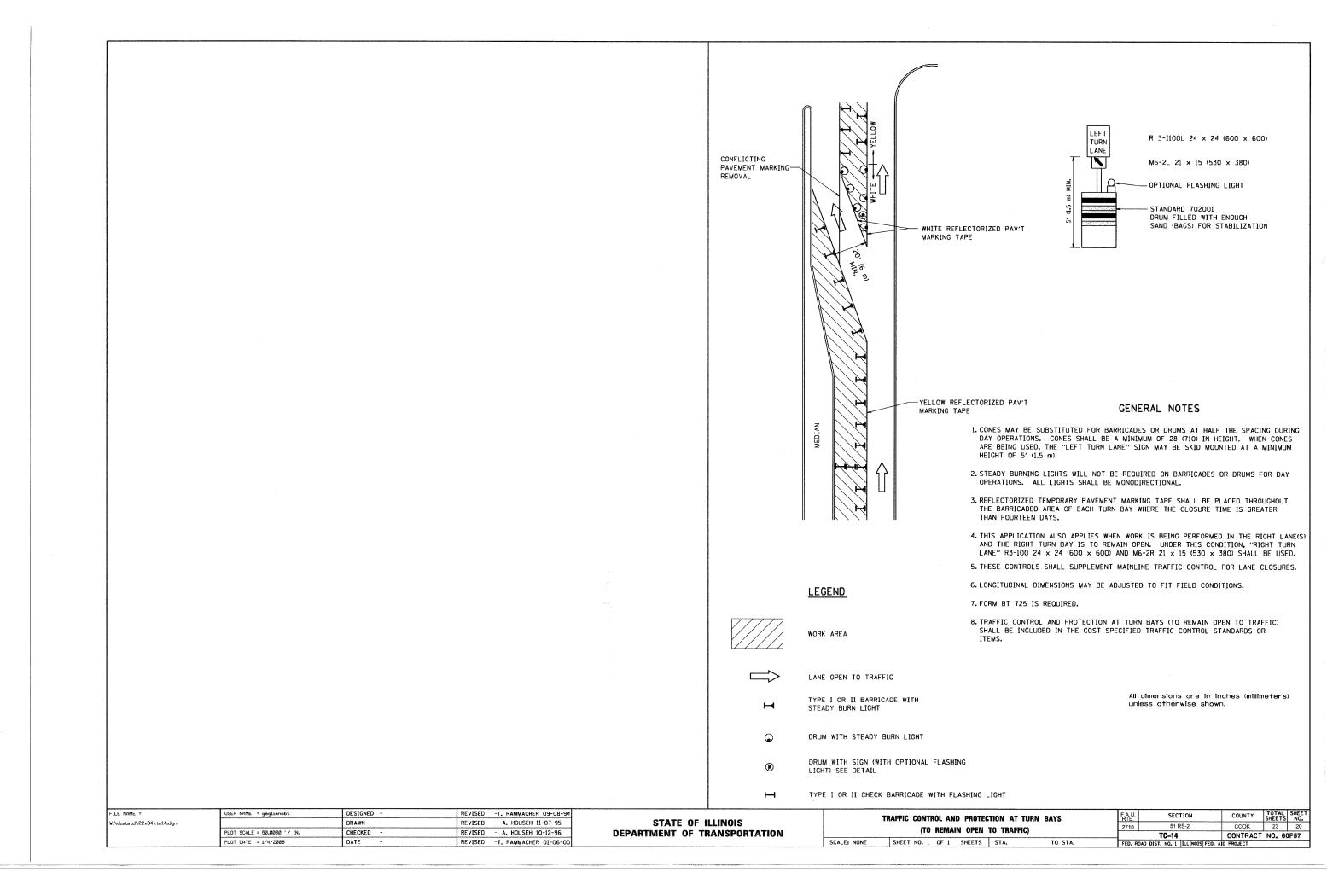
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

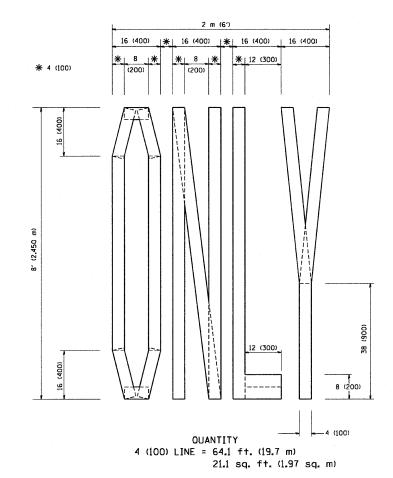
All dimensions are in inches (millimeters) unless otherwise shown,

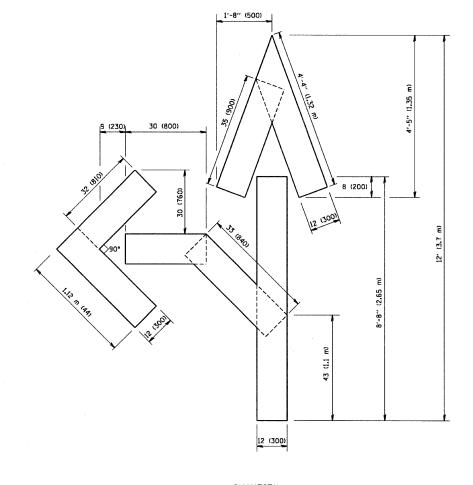
FILE NAME =	USER NAME = gaglianobt	DESIGNED - EVERS	REVISED	-T. RAMMACHER 10-27-9
#:\diststd\22x34\tc13.dgn		DRAWN -	REVISED	-A. HOUSEH 10-09-96
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED	-A. HOUSEH 10-17-96
	PLOT DATE = 1/4/2008	DATE - 03-19-90	REVISED	-T. RAMMACHER 01-06-0

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

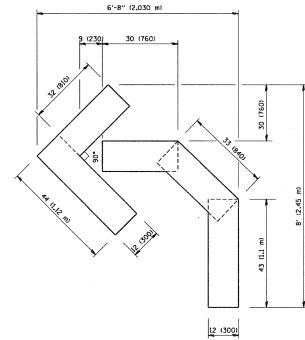
DISTRICT ONE TYPICAL PAVEMENT MARKINGS					F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
					2710	51 RS-2	COOK	23	19
	FIFTCAL PAVENENT MARKINGS					TC-13	CONTRACT NO. 60F57		)F57
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.						OAD DIST. NO. 1   ILLINOIS FED. A	D PROJECT		







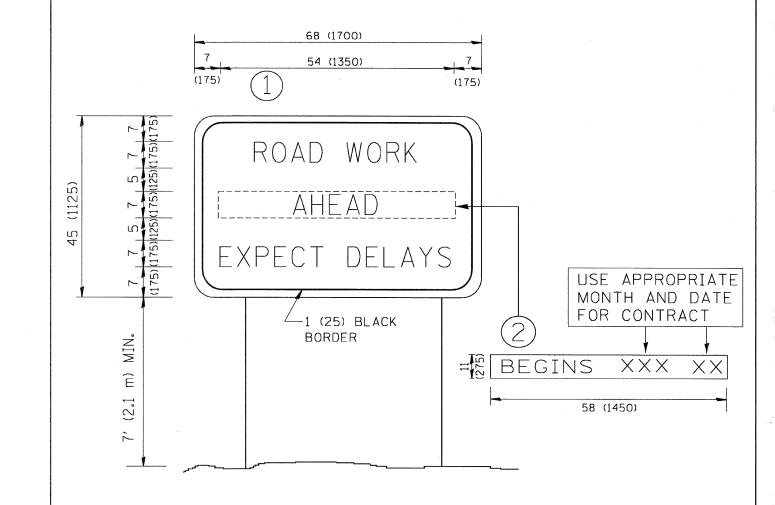
OUANTITY 4 (100) LINE = 82.5 ft. (25.3 m) 27.5 sq. ft. (2.53 sq. m)



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

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

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED -T. RAMMACHER 06-05-96			PAVEMENT MARKING LETTERS AND SYMBOLS	FAU.	SECTION	COUNTY TOTAL	SHEET
W:\diststd\22x34\tc16.dgn		DRAWN -	REVISED -T. RAMMACHER 11-04-97	STATE OF ILLINOIS			2710	51 RS-2	COOK 23	21
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-98	DEPARTMENT OF TRANSPORTATION		FOR TRAFFIC STAGING		TC-16	CONTRACT NO. 6	0F57
	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. ROAL	D DIST. NO. 1   ILLINOIS FED.		



### NOTES:

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

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

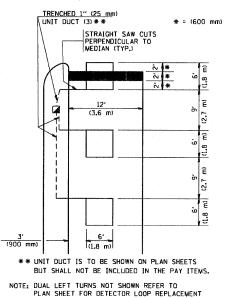
FILE NAME	E =	USER NAME = gaglianobt	DESIGNED -	REVISED - R. MIRS 09-15-97		ARTERIAL ROAD	F.A.U. SECTION	COUNTY SHEET
Wi\diststd	d\22x34\to22.dgn		DRAWN ~	REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS		2710 51 RS-2	COOK 23 22
		PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION	INFORMATION SIGN	TC-22	CONTRACT NO. 60F57
		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	

# PROVIDE A PAYEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' 1900 mm X WIDTH OF PAVED SHOULDER. PAVED OR NON-PAVED SHOULDER \* = (600 mm) \* = (600 mm) \* = (600 mm) \* = MUNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS. ARTERIAL - VOLUME DENSITY ("FAR OUT" DETECTION)

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

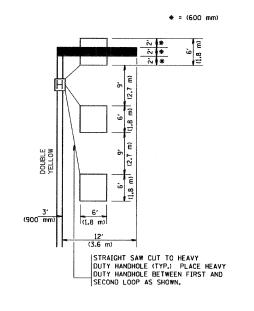
(PROTECTED / PERMITTED LEFT TURN PHASING)

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.



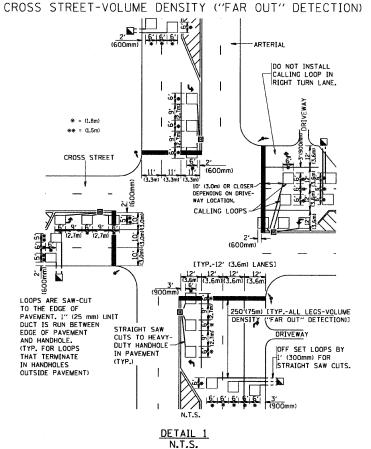
# LEFT TURN LANES WITHOUT MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

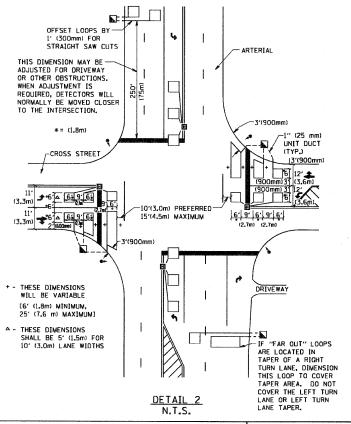
(PROTECTED / PERMITTED LEFT TURN PHASING)



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

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 <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. 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 THINING SHALL ALSO BE USED AS SYSTEM DETECTORS. <u>EACH</u> ONE OF THESE TYPE OF LOOPS REQUIRES A <u>SEPARATE</u> TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A <u>SEPARATE</u> 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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

		DISTRICT 1 - DETECTOR L	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS			
ĺ	DETAILS FOR ROADWAY RESURFACING					51 RS-2	COOK	23	23
						TS07	CONTRACT	NO. 60	)F57
	SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	FED. ROAD	DIST. NO. 1 ILLINOIS FED. A	ID PROJECT				