FOR INDEX OF SHEETS, SEE SHEET NO. 2

DEPARTMENT OF TRANSPORTATION **DIVISION OF HIGHWAYS**

DESIGN DESIGNATION: SPEED LIMIT: 35 M.P.H. 2005 ADT = 30,000

PROPOSED HIGHWAY PLANS

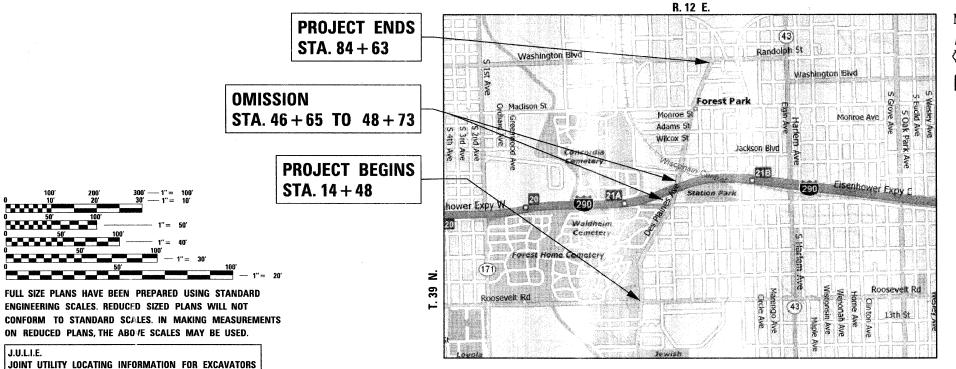
PROJECT LOCATED IN THE **VILLAGE OF FOREST PARK**

OR 300 / F.A.U. 2759 / DES PLAINES AVENUE **SECTION: 0505 RS-6** RANDOLPH STREET TO ROOSEVELT ROAD **RESURFACING (3P)** PROJECT: E5P-2759(003) **COOK COUNTY** C-91-345-08

PROVISO AND RIVER FOREST TOWNSHIP

GROSS LENGTH OF PROJECT = 7,015.00 FEET = 1.329 MILES

NET LENGTH OF PROJECT = 6.807.00 FEET = 1.289 MILES

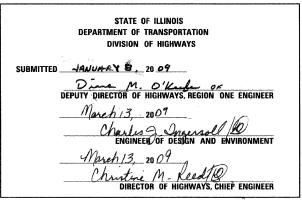


DESIGN SECTION ENGINEER



CHRISTIAN-BOGE & ASSOCIATES INC. ENGINEERS - PLANNERS - SURVEYORS 211 W. WACKER DRIVE CHICAGO, IL. 60606 D-91-345-08







January 06,2009 DATE

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

1-800-892-0123

CONTRACT NO. 60E24

OR 811

 \circ

 \circ

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 - 7	ROADWAY AND PAVEMENT MARKING PLAN,
8 - 12	DETECTOR LOOP REPLACEMENT PLANS
13	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING
14	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT
15	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
16	BUTT JOINT AND HMA TAPER DETAILS
17	HMA TAPER AT EDGE OF PCC PAVEMENT
18	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS
19	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT
20	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
21	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)
22	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
23	ARTERIAL ROAD INFORMATION SIGN
24	DISTRICT 1 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

HIGHWAY STANDARDS

	LALLA-MARTINE CONTROL
STANDARD NO.	DESCRIPTION
000001 <i>-05</i>	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
424001 - <i>05</i>	CURB RAMPS FOR SIDEWALKS
442201 <i>- 03</i>	CLASS C AND D PATCHES
604001- <i>0</i> 3	FRAME AND LIDS, TYPE 1
604086 <i>-02</i>	FRAME AND LIDS, TYPE 23
606001- 04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701501- <i>05</i>	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701606- <i>06</i>	URBAN LANE CLOSURE, MULTI LANE, 2W WITH MOUNTABLE MEDIAN
701701- <i>06</i>	URBAN LANE CLOSURE, MULTI LANE INTERSECTION
701901- <i>01</i>	TRAFFIC CONTROL DEVICES

GENERAL NOTES

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED)
- 2. 10 FEET 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 LTILITY COMPANIES AND THE VILLAGE OF FOREST PARK.
- 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 NEAF 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.
- 11. 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.
- 12. THE CONTRACTOR SHALL CONTACT MS. PATRICE HARRIS, THE AREA TRAFFIC TECHNICIAN, AT (708) 597-9800 AT LEAST TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- 13. 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.
- 14. REFER TO THE DISTRICT ONE TYPICAL PAVEMENT MARKINGS AND TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS FOR DETAILS NOT SHOWN.
- 15. MATCH EXISTING PAVEMENT MARKINGS AT THE PROJECT AND OMISSION LIMITS. ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OUTSIDE
 THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- 16. PARTIAL DEPTH LONGITUDINAL PATCHES SHALL BE 3' WIDE BY 3" DEEP AND SHALL BE USED ON LONGITUDINAL JOINTS WITH A LARGE SEPARATION OR JOINTS PREVIOUSLY FILLED WITH COLD PATCH.
- 17. TEMPORARY RAMPS AT BUTT JOINTS SHALL BE INCLUDED IN THE COST OF THE BUTT JOINT AS SHOWN ON THE BUTT JOINT DETAIL SHEET.
- 18. THE MINIMUM VERTICAL CLEARANCE FOR EACH DIRECTION OF TRAFFIC AT THE TWO STRUCTURES SHALL BE MEASURED AND CALCULATED BY A REGISTERED LAND SURVEYOR. THE CLEARANCES AND CALCULATIONS SHALL BE SUBMITTED TO THE CENTRAL BUREAU OF OPERATIONS. THIS WORK SHALL BE PAID FOR CONSTRUCTION LAYOUT.
- 19. "PATCHING" IN THE AREAS OF THE EXISTING RAILROAD TRACKS SHALL CONSIST OF REMOVING ALL LOOSE PAVEMENT AND DEBRIS AND THE PLACEMENT OF PATCHING MATERIAL. THE RAILS AND TIES SHALL REMAIN IN PLACE. THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE FOR CLASS D PATCHES.

FILE NAME = D16ØE24-sht-gennote.dc

PLOT DATE = 1/12/2009

CHRISTIAN-ROGE & ASSOCIATES, ENGINEERS-PLANNERS-SURVEYO 211 WEST WACKER DRIVE CHICAGO, ILLINOIS 60606

ES, INC.	DESIGNED		K.R.K.	REVISED -	37.50
YORS	DRAWN	-	A.C.S.	REVISED -	
i i	CHECKED	-	S.J.P.	REVISED -	
372-5274		-	JANUARY 9, 2009	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS. LIST OF STATE STA	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
DES PLAINES	2759	0505 RS-6	COOK	24	2			
- DEU FERNIEU .						CONTRACT	NO. 6	0E24
SCALE: NONE SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.		FED. RO	DAD DIST. NO. 1 TULINOIS FED. AT	ID PROJECT		

-	SUMMARY OF QUANTITIES	¥	URBAN 100% FED.	CONSTR TYPE	
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	IOOO-2A URBAN	
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	21	21	
40600300	AGGREGATE (PRIME COAT)	TON	144	144 -	
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	40	40	
40600895	CONSTRUCTING TEST STRIP	EACH	2	2	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	369	369	
40600985	PORTLAND CEMENT CONCRETE REMOVAL - BUTT JOINT	SQ YD	1,008	1,008	
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	1,016	1,016	
40603085	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	TON	118	118	. •
40603595	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90	TON	3,517	3517	
42001300	PROTECTIVE COAT	SQ YD	415	415	
42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	10	10	
42400200	PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SQ FT	288	288	
44000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"	SQ YD	28,753	28,753	
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	10	10	
44000600	SIDEWALK REMOVAL	SQ FT	288	288	
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	1,680	1,680	
44002220	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 5"	SQ-YD	3,156	3,156	
44201753	CLASS D PATCHES, TYPE II, 9 INCH	SQ YD	346	346	
44201757	CLASS D PATCHES, TYPE III, 9 INCH	SQ YD	234	234	
44201759	CLASS D PATCHES, TYPE IV, 9 INCH	SQ YD	2,578	2,578	
55039700	STORM SEWER TO BE CLEANED	FOOT	∫3,200	3,200	
60262700	INLETS TO BE RECONSTRUCTED	EACH	1	1	
60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	106	106	
60404940	FRAMES AND GRATES, TYPE 23	EACH	10	10	
60406000	FRAMES AND LIDS, TYPE 1, OPEN LID	EACH	10	10	
60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	10	10	BAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6	A service was a service as a se
67100100	MOBILIZATION	L SUM	1	1	THE COLUMN TWO COLUMNS TO THE COLUMN TWO COLUMNS TWO COLUMNS TO THE COLUMN TWO COLUMNS TWO

		SUMMARY OF QUANTITIES		URBAN 100% FED.	CONSTR TYPE	
	CODE NO	ITEM	UNIT	TOTAL QUANTITIES	IOOO-2A URBAN	
	70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	1	
	70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	1	
	70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1	
	70300100	SHORT-TERM PAVEMENT MARKING	FOOT	6,240	6,240	
	70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	874	874	
	70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	29,110	29,110	
	70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	8,564	8,564	
	70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	3,776	3,776	
	70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	1,058	1,058	
	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	2,080	2,080	
*	72000200	SIGN PANEL - TYPE 2	SQ FT	20	20	
*	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	437	437	
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	14,555	14,555	r
*	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	4,282	4,282	
*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	1,888	1,888	
*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	529	529	
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	482	482	
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	482	482	
*	88600600	DETECTOR LOOP REPLACEMENT	FOOT	2,478	2,478	
	X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	51	51	
	X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	1,350	/350	*
	X4400100	PORTLAND CEMENT CONCRETE SURFACE REMOVAL (VARIABLE DEPTH)	SQ YD	935	935	
	X4422030	PARTIAL DEPTH REMOVAL 3"	SQ YD	700	700	,
*	X8950200	REBUILD EXISTING HANDHOLE	EACH	2	2	
	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1	
NP	Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	80	80	
	Z0048665	RAILROAD PRÖTECTIVE LIABILITY INSURANCE	L SUM	1	1	
0	Z0076600	TRAINEES	HOUR	500	500	

* SPECIALTY ITEM
NP = Non - participating
0 - yoro

FILE NAME 016ØE24-sht-S00.dgn PLOT DATE : 1/12/2009

CHRISTIAN-ROGE & ASSOCIATES, INI
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, LLLINOIS 60606
PHONE: (312)372-2023 FAX: (312)372-5/2

INC.	DESIGNED		K.R.K.	REVISED	~
RS	DRAWN	_	A.C.S.	REVISED	
	CHECKED	-	S.J.P.	REVISED	-
-5274	DATE	-	JANUARY 9, 2009	REVISED	75 THE TOTAL TO TH

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

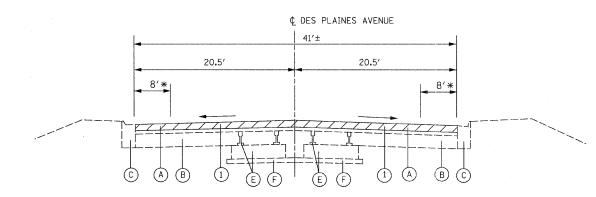
				S				OF Q AINES		ANTITIES VENUE	S	
SCALE:	NONE	Ţ	SHEET	NO.	1	OF	1	SHEETS	T	STA.	TO	STA

F.A.U. RTE. 2759 COUNTY TOTAL SHEET NO.
COOK 24 3 SECTION 0505 RS-6 CONTRACT NO. 60E24

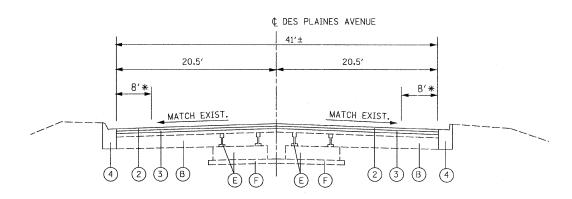
	HOT-MIX ASPHALT MIXTURE REQUIREMENTS		
ROADWAY NAME	MIXTURE TYPE	AC TYPE	AIR VOIDS
	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 (IL-9.5mm)	SBS/SBR PG 70-22	4% @ 90 GYR
DES PLAINES	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	SBS/SBR PG 76-28/22	4% @ 50 GYR
AVENUE	CLASS D PATCHES (HMA BINDER, IL-19)	₩ PG 64-22	4% @ 70 GYR.
	HMA REPLACEMENT OVER PATCHES (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 SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.



EXISTING TYPICAL SECTION
STA. 14+48 TO STA. 42+75 &
STA. 57+30 TO STA. 84+63



PROPOSED TYPICAL SECTION
STA. 14+48 TO STA. 42+75 &
STA. 57+30 TO STA. 84+63

* SEE PLANS FOR PARKING LANE LIMITS

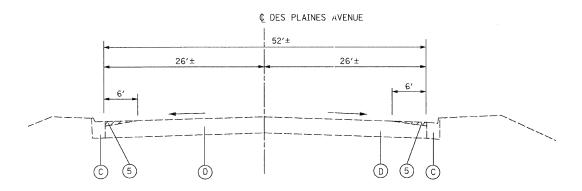
THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED TO CALCULATE THE PLAN QUANTITIES:

EXISTING CONDITIONS:

- A HOT-MIX ASPHALT SURFACE AND BINDER COURSE, 21/2" 4"
- B EXISTING PAVEMENT, 7" 9"
- © COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- D EXISTING CONCRETE PAVEMENT, 10"
- E EXISTING STREET CAR TRACKS (RAILS AND TIES)
- F EXISTING STONE BALLAST

PROPOSED IMPROVEMENTS:

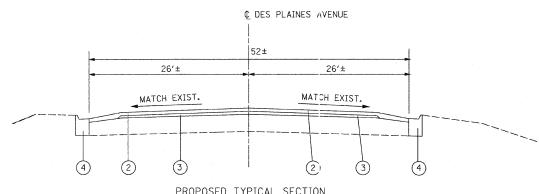
- 1 HOT-MIX ASPHALT SURFACE REMOVAL, 21/2"
- 2) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 13/4"
- 3 POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, ¾"
- (4) COMBINATION CONCRETE CURB & GUTTER REMOVAL AND REPLACEMENT
- 5 P.C.C. SURFACE REMOVAL (VARIABLE DEPTH)



EXISTING TYPICAL SECTION

STA. 42+75 TO STA. 57+30

(OMISSION STA. 46+65 TO 48+73, APPROACH SLAB AND BRIDGE)



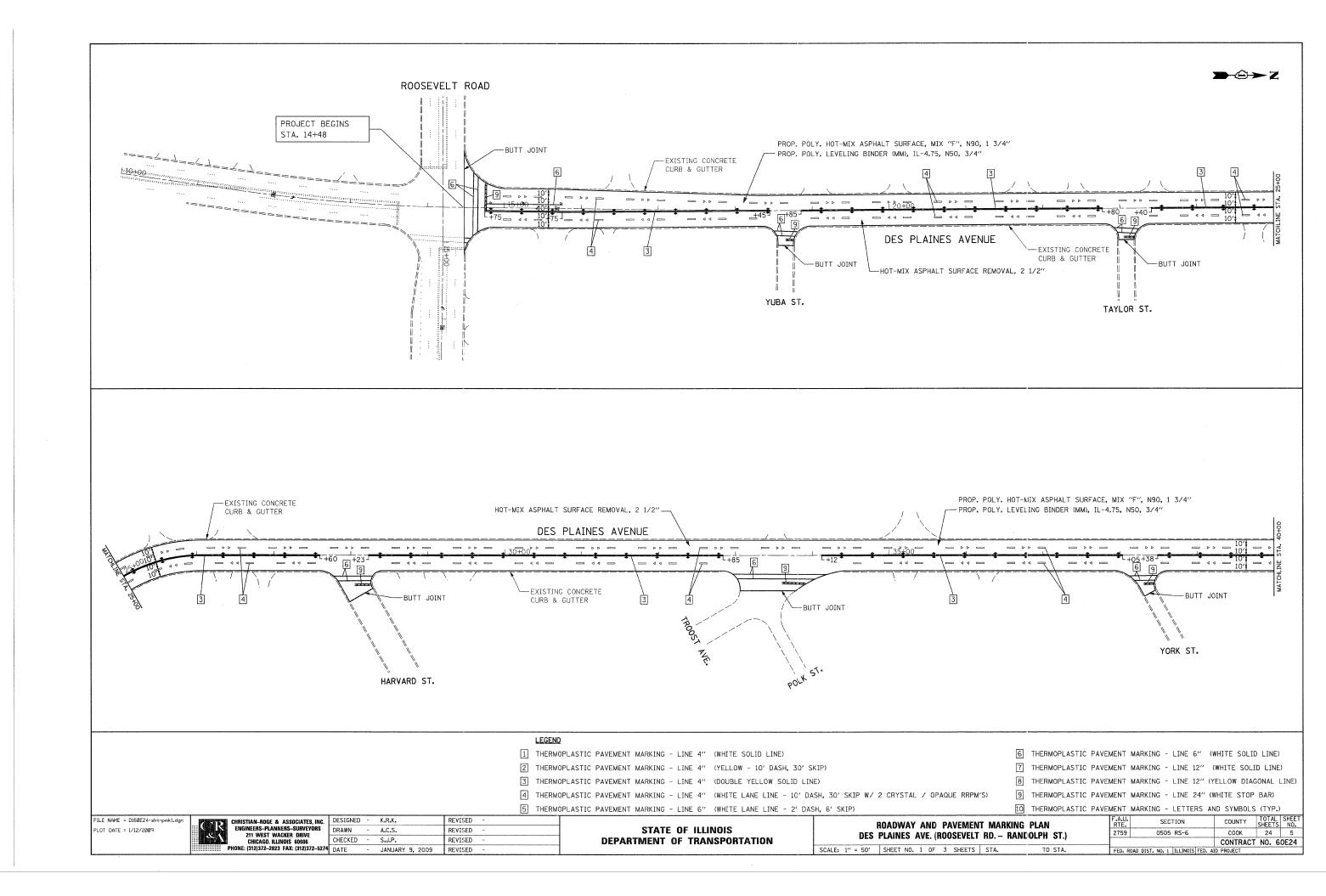
PROPOSED TYPICAL SECTION STA. 42+75 TO STA. 46+65 STA. 48+73 TO STA. 57+30

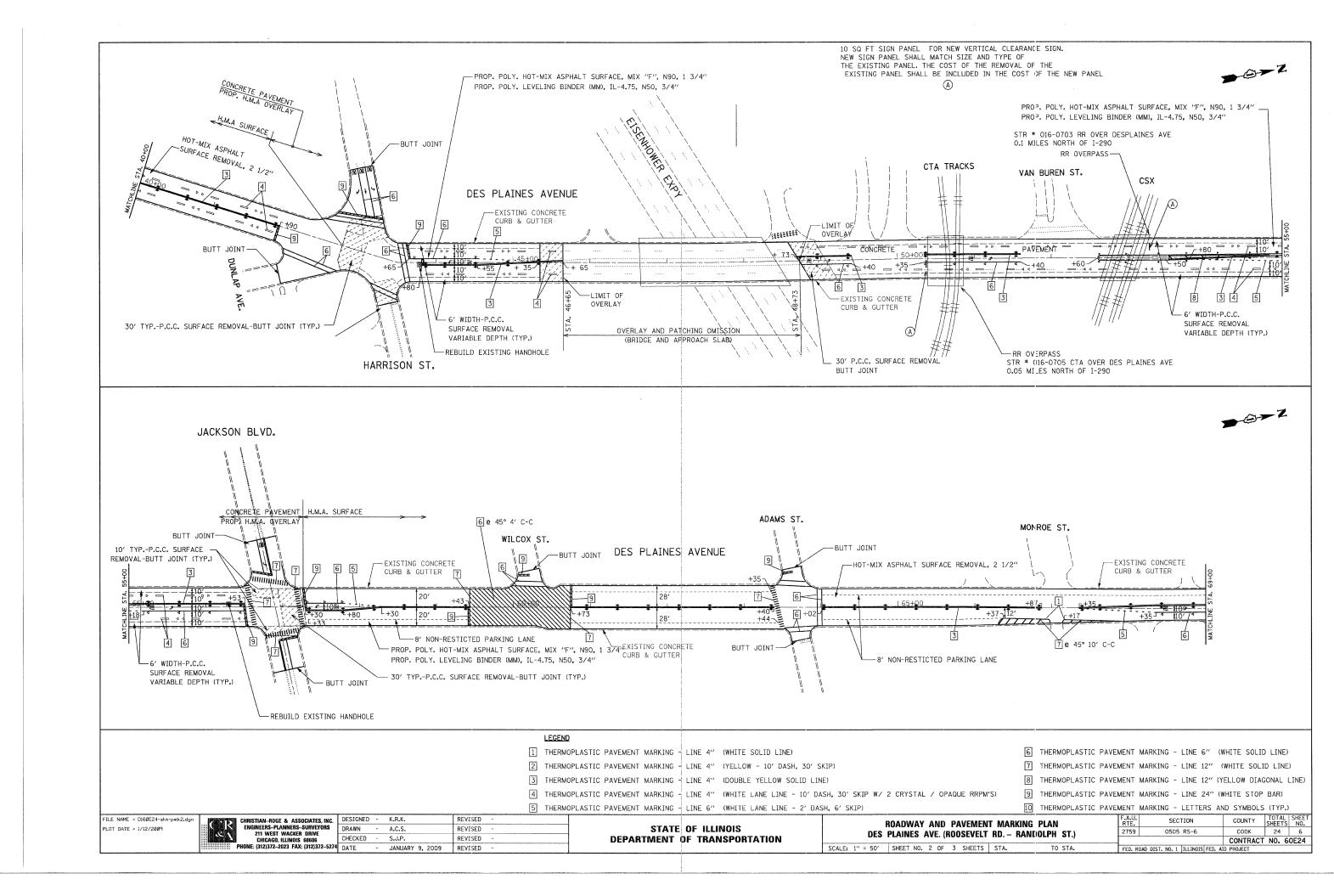
FILE NAME = D160E24-sht-typical.dg PLOT DATE = 1/12/2009 STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

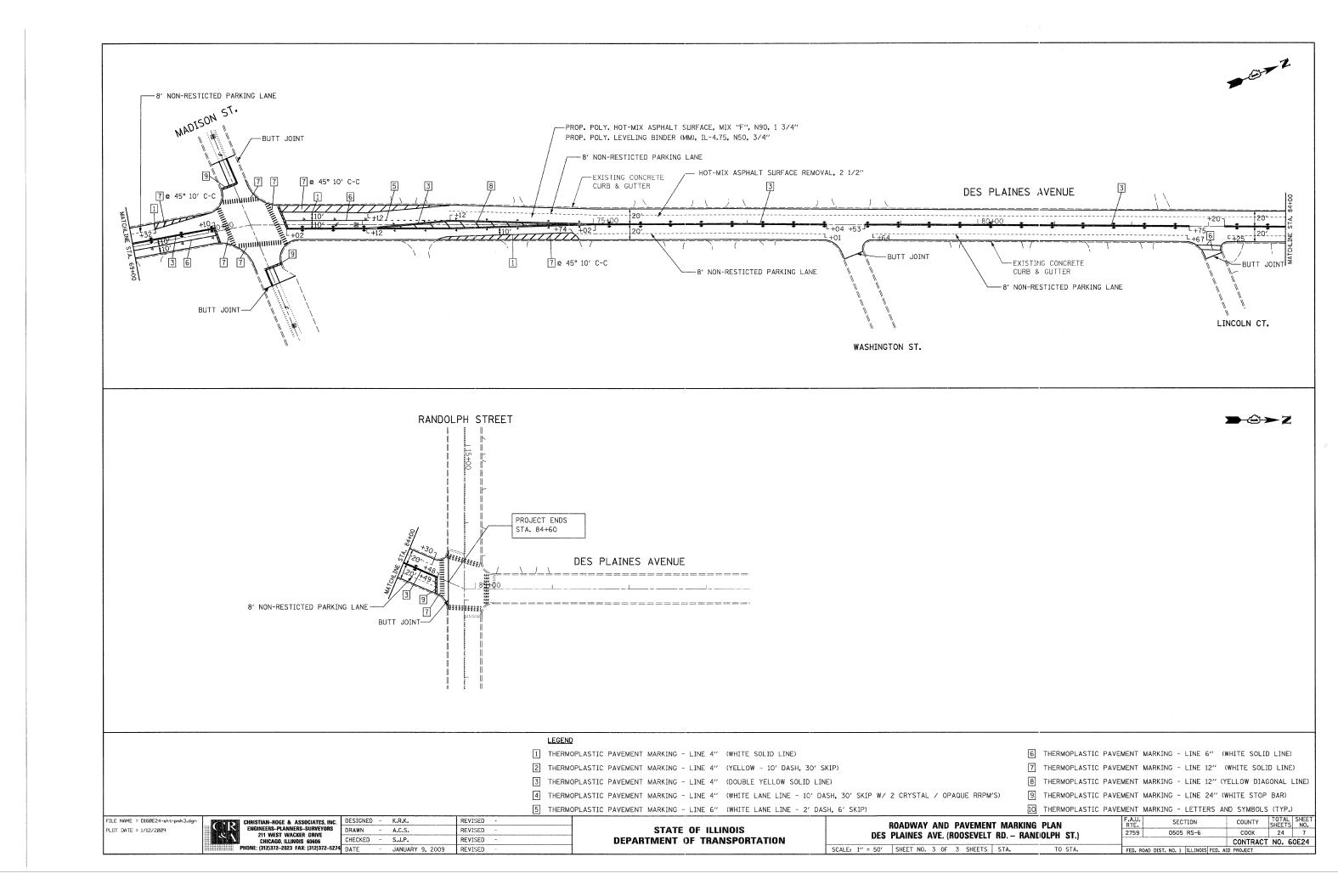
I		TYPICAL SECTIONS		F.A.U. RTE.	SECTION
l		2759	9 0505 RS-6		
l		_			
l	SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. R	OAD DIST. NO. 1 ILLINOIS FED.

COUNTY TOTAL SHEET NO.
COOK 24 4

CONTRACT NO. 60E24







PLOT SCALE : 40.0000 '/ IN.

CHECKED -

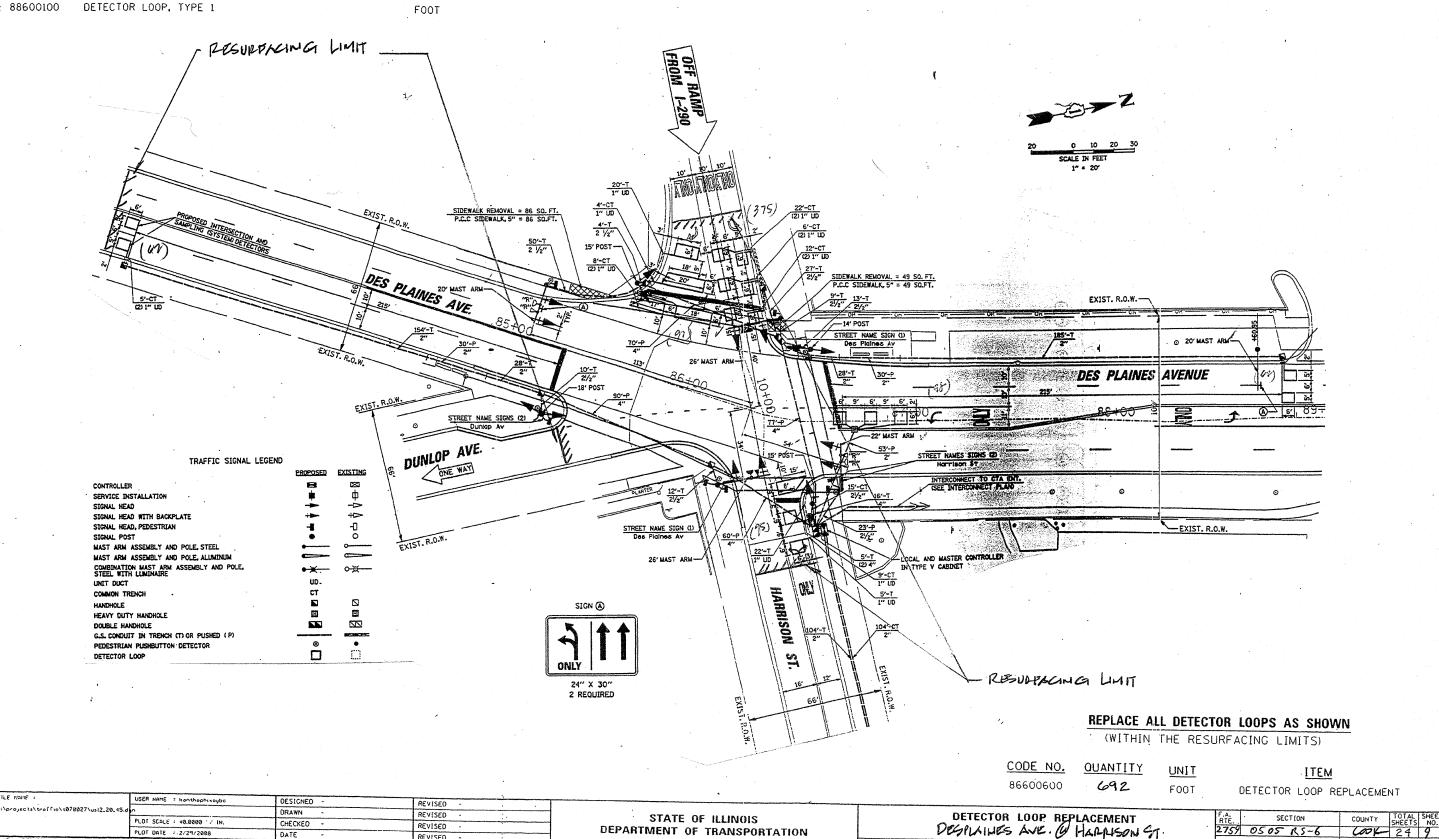
DATE

REVISED

REVISED

NOTE:

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

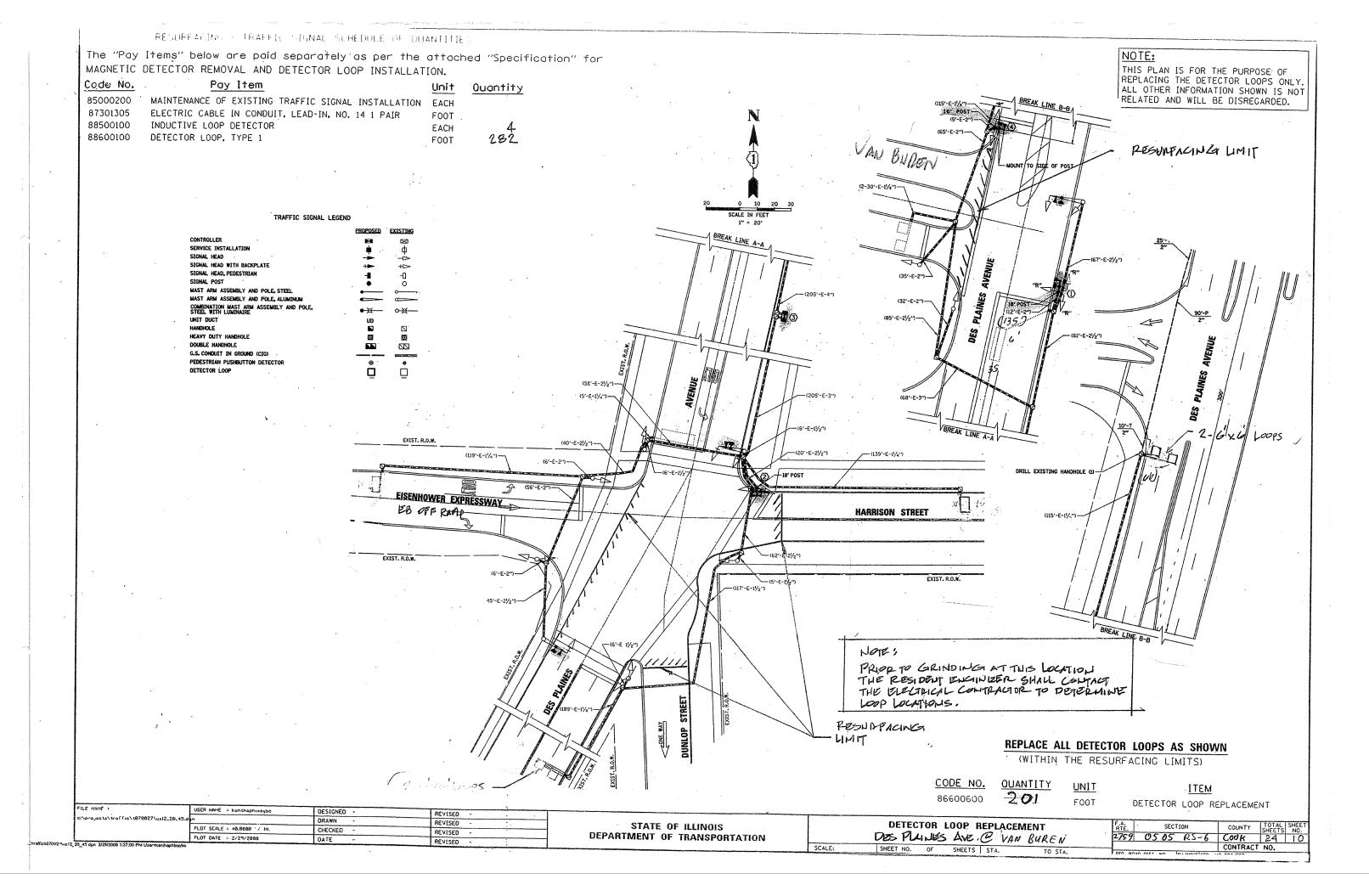


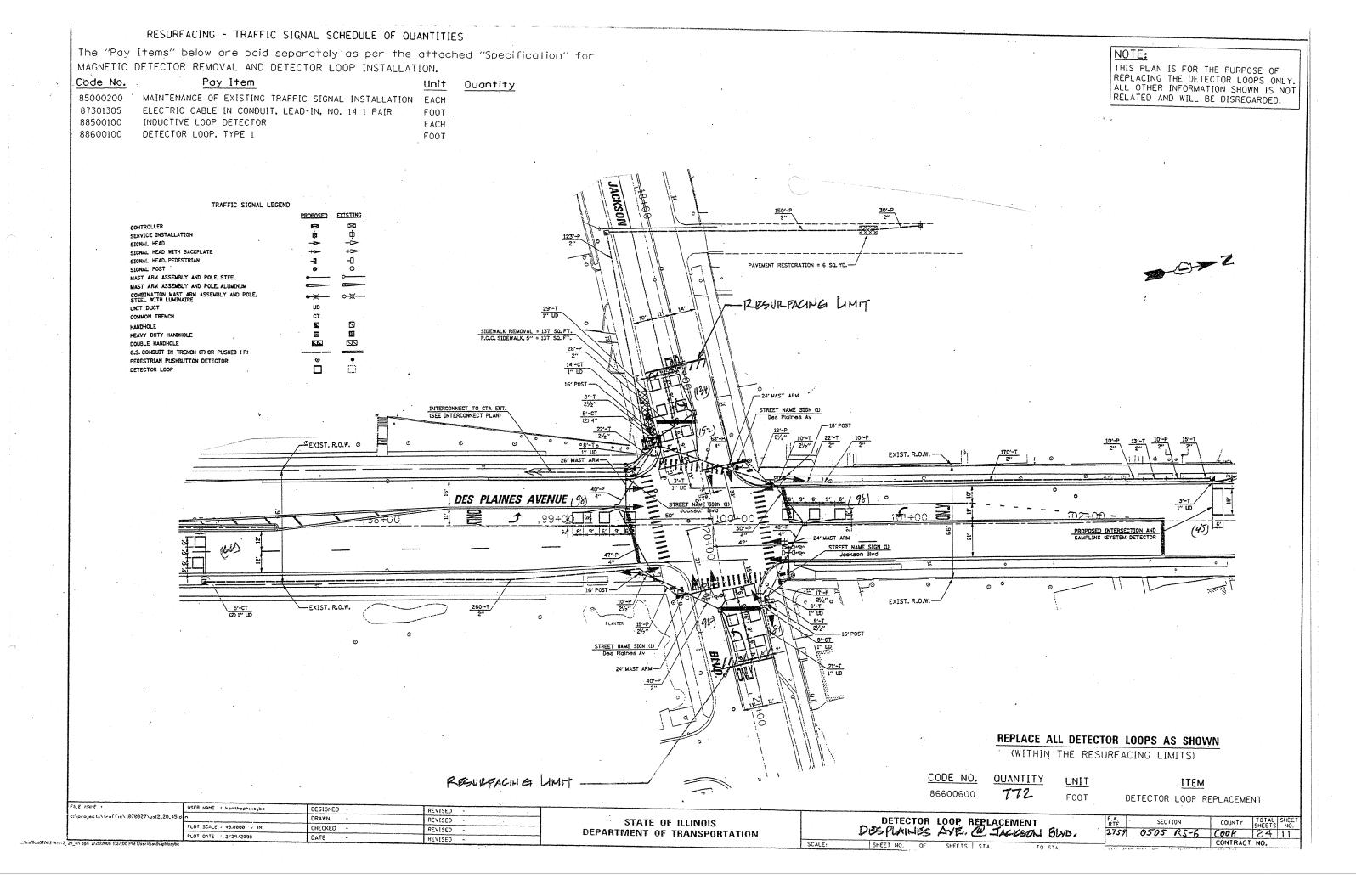
STATE OF ILLINOIS

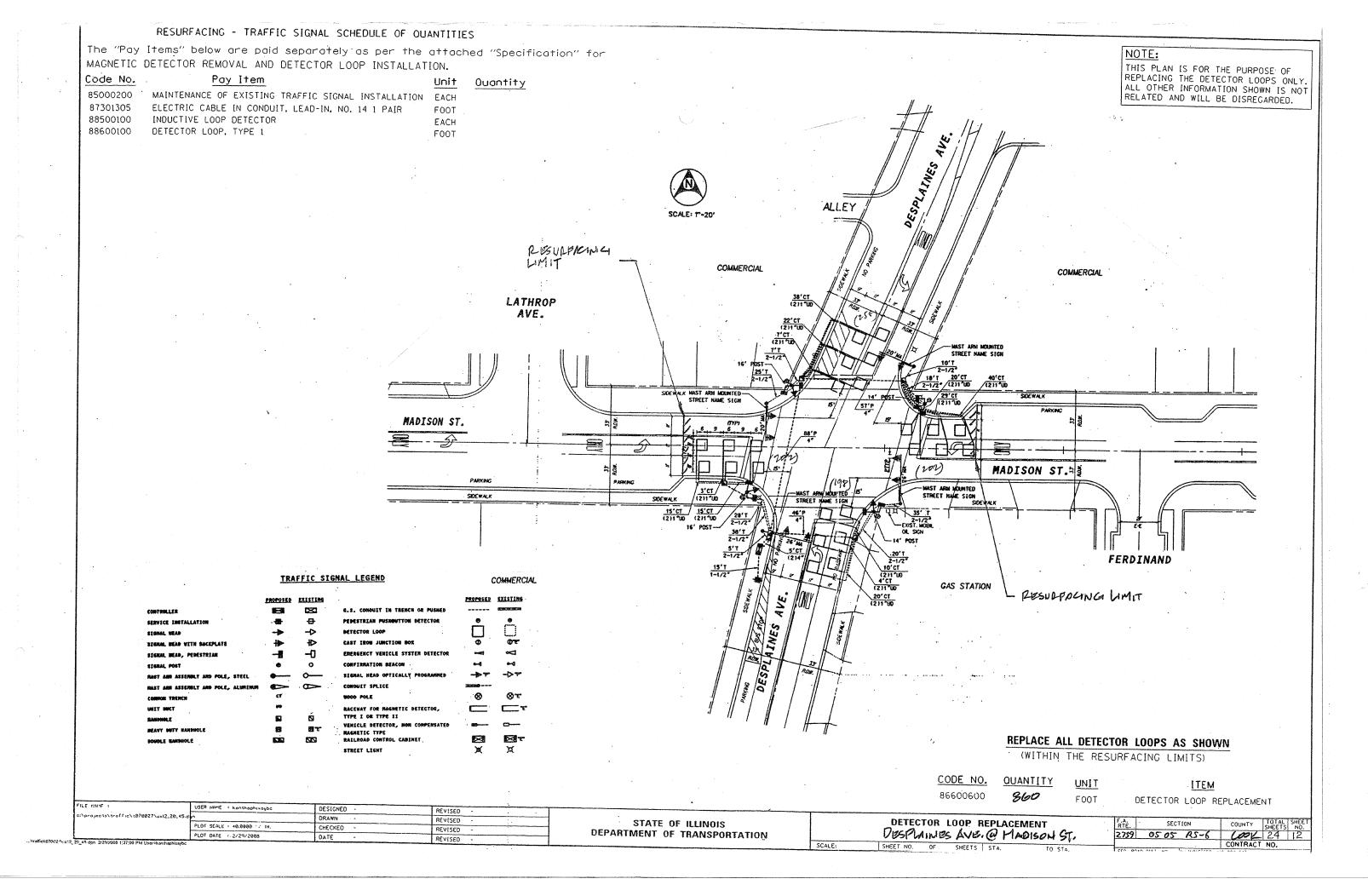
DEPARTMENT OF TRANSPORTATION

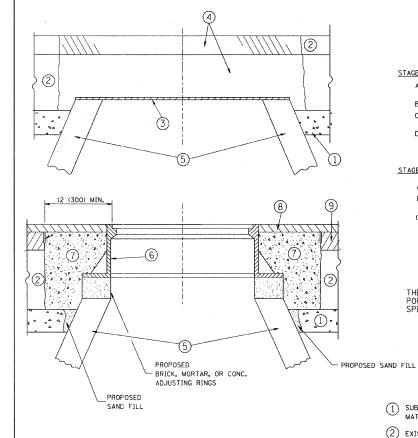
DESPLAINES AVE. Q HARPISON GT.

SHEET NO. OF SHEETS STA.









NOTES:

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE REGINEER, 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 11/2 (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
- ULAR 6 FRAME AND LID (SEE NOTES)
- 2 EXISTING PAVEMENT
- 7 CLASS SI CONCRETE, HMA SURFACE COURSE OR HMA BINDER COURSE
- 3 36 (900) DIAMETER METAL PLATE

 PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- 8 PROPOSED HMA SURFACE COURSE
- 5 EXISTING STRUCTURE
- 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.

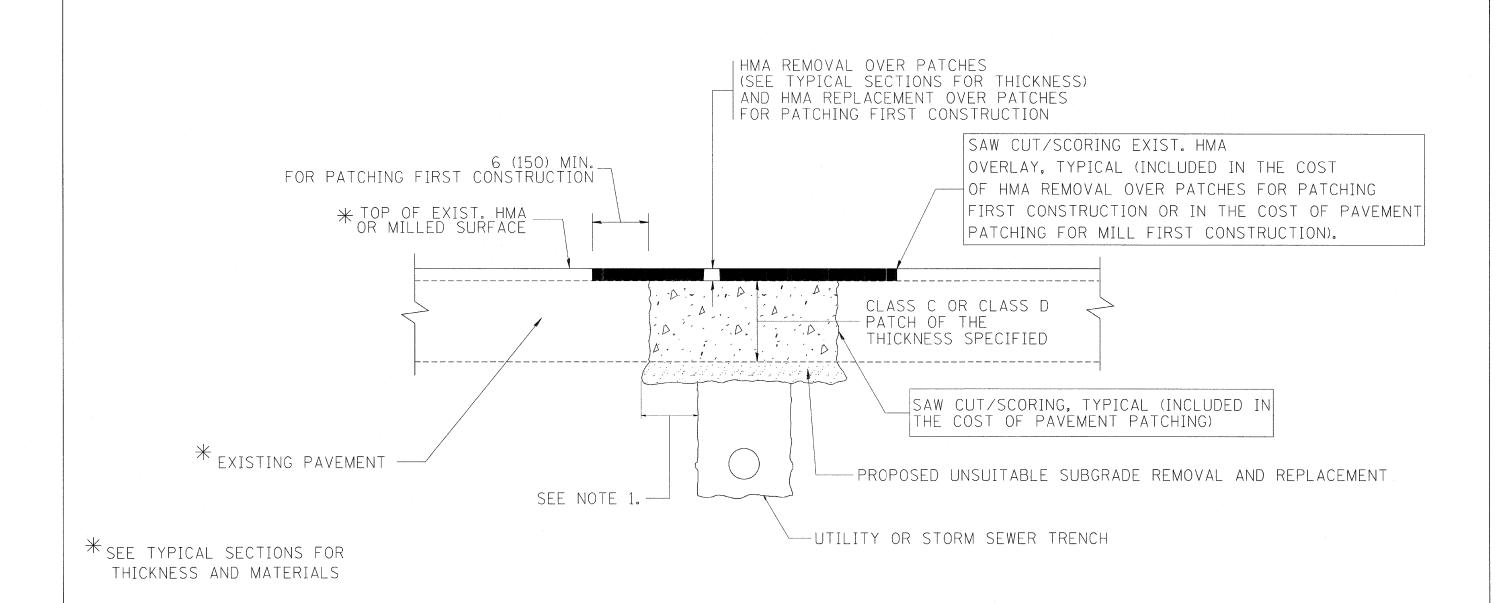
BASIS OF PAYMENT: THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "FRAMES AND LIDS TO BE ADJUSTED, SPECIAL"

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			DETAILS FOR	F.A.U. SECTION	COUNTY TOTAL SHEET
W:\diststd\22×34\bd08.dgn		DRAWN ~	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS			2759 0505 RS-6	COOK 24 13
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED - R. WIEDEMAN 05-14-04	DEPARTMENT OF TRANSPORTATION	FRAMES AND LIDS ADJUSTMENT WITH MILLING		BD600-03 (BD-8)	CONTRACT NO. 60E24
	PLOT DATE = 1/4/2008	DATE - 10-25-94	REVISED - R. BORO 01-01-07	SCAL		SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED.	



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)

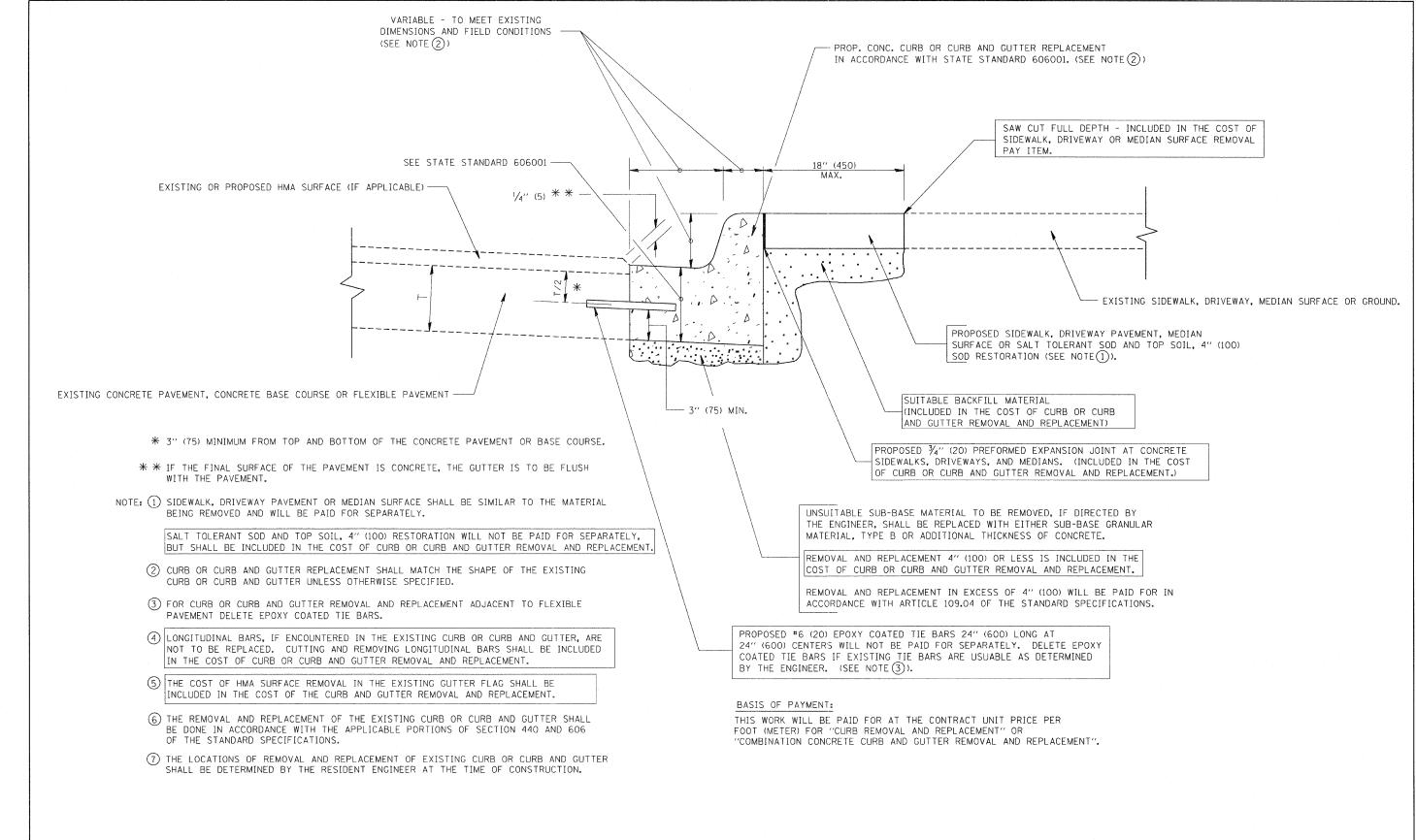
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

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.

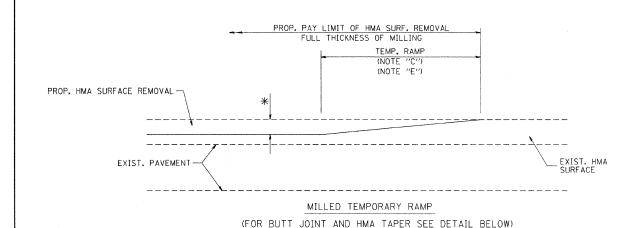
FILE NAME =	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98		PAVEMENT PATCHING FOR	F.A.P. SECTION	COUNTY TOTAL SHEET
c:\projects\distatd22x34\bd22.dgn		DRAWN -	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS		2759 0505 RS-6	COOK 24 14
	PLOT SCALE = 50.000 '/ IN.	CHECKED ~	REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION	HMA SURFACED PAVEMENT	BD400-04 (BD-22)	CONTRACT NO. 60E24
	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.		ND PROJECT



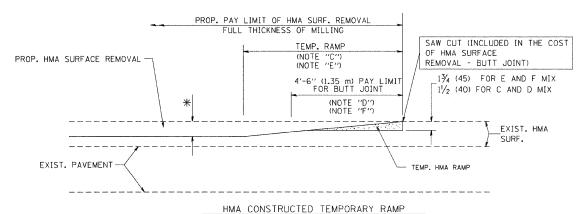
CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

FILE NAME =	USER NAME = gaglianobt	DESIGNED - A. HOUSEH	REVISED ~ R. SHAH 10-03		CURB OR CURB AND GUTTER	1	F.A.U. SECTION	COUNTY TOTAL SHEET
W:\diststd\22x34\bd24.dgn		DRAWN -	REVISED - A. ABBAS 03-2	STATE OF ILLINOIS			2759 0505 RS-6	COOK 24 15
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - M. GOMEZ 01-2	DEPARTMENT OF TRANSPORTATION	REMOVAL AND REPLACEMENT		BD600-06 (BD-24)	CONTRACT NO. 60E24
	PLOT DATE = 1/4/2008	DATE - 03-11-94	REVISED - R. BORO 01-01		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT



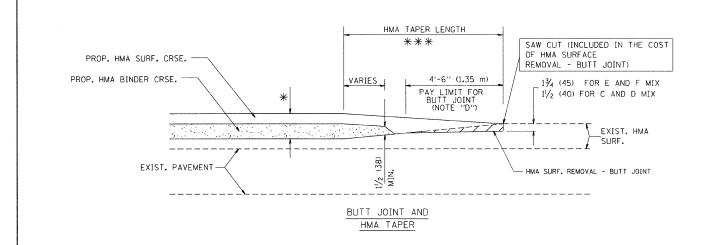
OPTION 1



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 2

TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

DRAWN

CHECKED

FILE NAME =

.\diststd\22×34\bd32.dgn

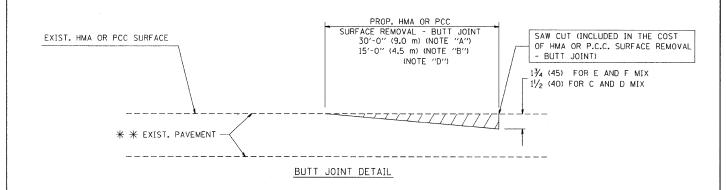
USER NAME = gaglianobt

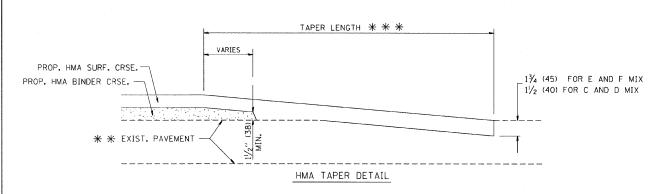
PLOT SCALE = 50.0000 '/ IN.

DESIGNED - M. DE YONG REVISED - R. SHAH 10-25-94 REVISED A. ABBAS 03-21-97 REVISED - M. GOMEZ 04-06-01 REVISED R. BORO 01-01-07

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

COUNTY TOTAL SHEE SHEETS NO. SECTION **BUTT JOINT AND** 0505 RS-6 COOK 24 16 HMA TAPER DETAILS BD400-05 BD32 CONTRACT NO. 60E24
PROJECT SHEET NO. 1 OF 1 SHEETS STA. TO STA.





TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

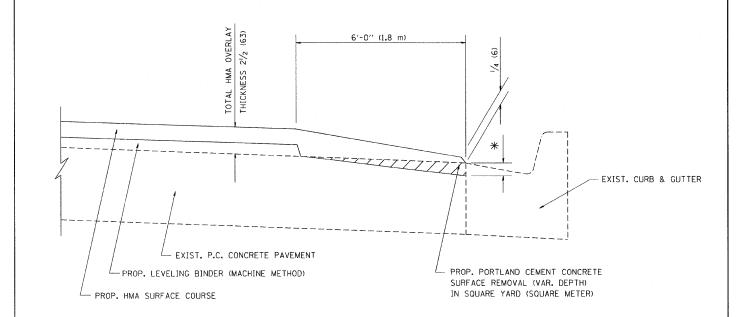
 $****$ PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

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

BASIS OF PAYMENT:

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

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

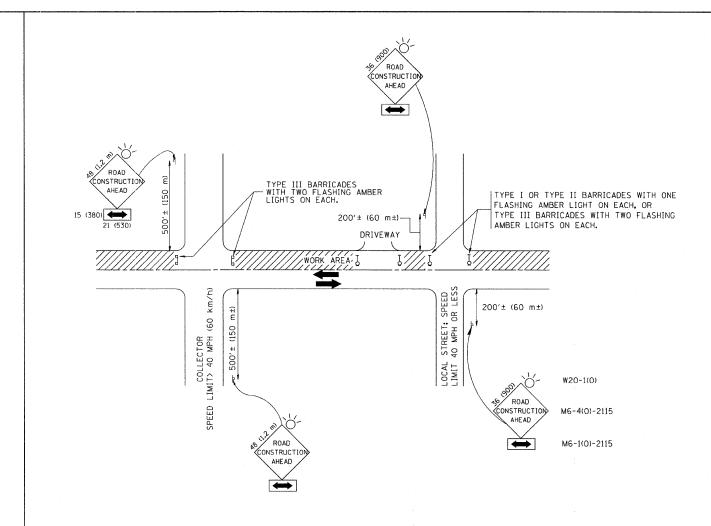


HMA TAPER AT EDGE OF P.C.C PAVEMENT

HMA SURFACE		LEVELING BINDER	
MIX	THICKNESS	THICKNESS	★ MILLING AT GUTTER FLAG
C OR D	11/2 (38)	1 (25)	11/4 (33)
F	1¾ (44)	3/4 (19)	11/2 (38)

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

FILE NAME =	USER NAME = gagl:anobt	DESIGNED - R. SHAH	REVISED - R. SHAH 10-25-94			HMA TAPER AT	F.A.U. RTE.	SECTION	COUNTY TOTAL SHE
W:\dsetad\22x34\bd33.dgn PLOT SCALE = 8		DRAWN - JIS	REVISED - A. ABBAS 05-05-99	STATE OF ILLINOIS	STATE OF ILLINOIS		2759	0505 RS-6	COOK 24 1
	PLOT SCALE = 50.0000 '/ IN.	CHECKED - A. ABBAS	REVISED - E. GOMEZ 12-21-00	DEPARTMENT OF TRANSPORTATION		EDGE OF P.C.C. PAVEMENT	BD4	00-06 (BD33)	CONTRACT NO. 60E24
1	PLOT DATE = 1/4/2008	DATE - 09-10-94	REVISED - R. BORO 01-01-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD		AID PROJECT



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

NOTES:

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

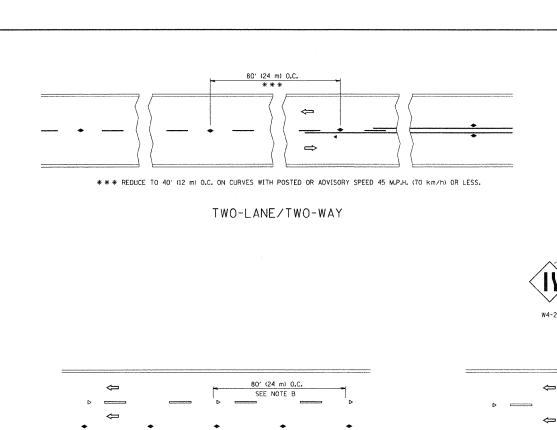
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD 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 = gaglianobt	DESIGNED - LHA	REVISED ~ J. OBERLE 10-18-95
W:\d:ststd\22x34\tcl0.dgn		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED -T. RAMMACHER 01-06-00

STATE (OF ILLINOIS	
DEPARTMENT OF	F TRANSPORTATION	

	TRAFFIC CONTROL	AND P	ROTECTIO	N FOR	F.A.U. RTE	SECTION	COUNTY	TOTAL	SHEE NO.
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS						0505 RS-6	COOK	24	18
SIDE KUADS, INTERSECTIONS, AND DRIVEWATS						Г NO. 60I	324		
SCALE: NONE	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



SEE NOTE A

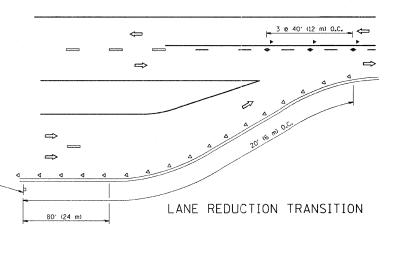
 \Rightarrow

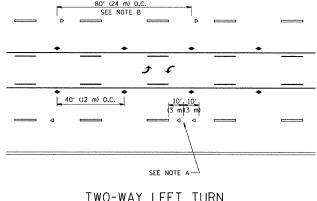
MULTI-LANE/UNDIVIDED



80' (24 m) O.C. SEE NOTE B

SEE NOTE A





TWO-WAY LEFT TURN



- 1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
- 2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
- 3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

LANE MARKER NOTES

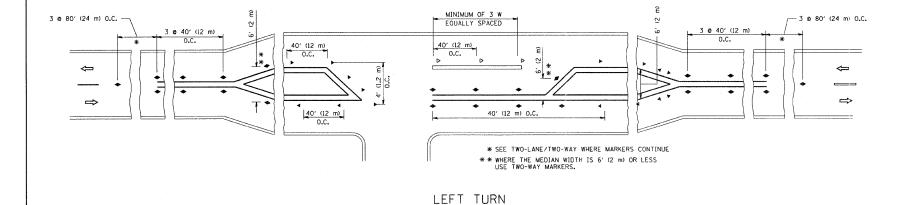
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

SYMBOLS

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

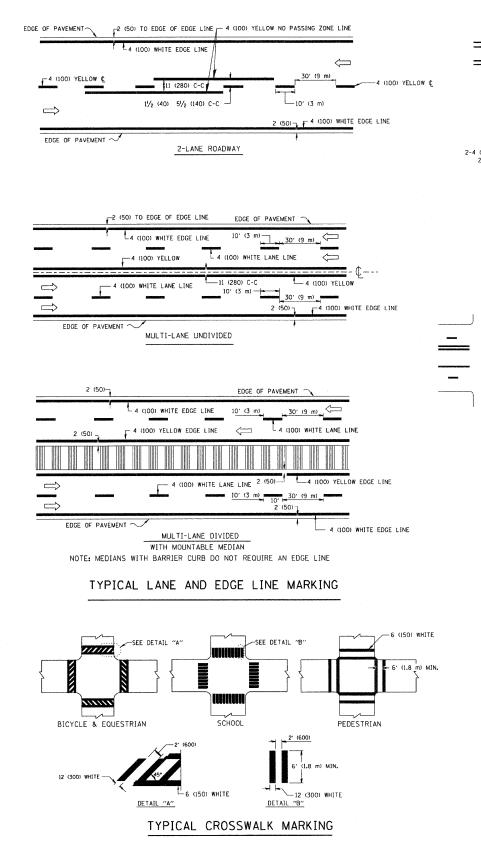
DESIGN NOTES

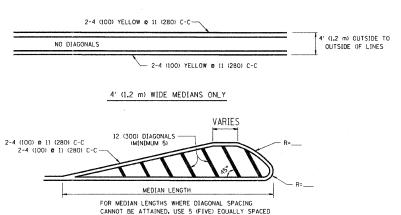
- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- 2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
- 4. MARKERS SHOULD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



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

FILE NAME =		USER NAME = gaglianobt	DESIGNED -	REVISED - T. RAMMACHER 09-19-94		TYPICAL APPLICATIONS	F.A.U. SECTION	COUNTY TOTAL SHEE	.Τ
Wi\distatd\22x3	34\tc11.dgn		DRAWN -	REVISED - T. RAMMACHER 03-12-99	STATE OF ILLINOIS		2759 0505 RS-6	COOK 24 19	7
		PLOT SCALE = 50.000 '/ IN.	CHECKED ~	REVISED - T. RAMMACHER 01-06-00	DEPARTMENT OF TRANSPORTATION	RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)	TC-11	CONTRACT NO. 60E24	7
		PLOT DATE = 1/4/2008	DATE -	REVISED -		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST, NO. 1 ILLINOIS F	ED. AID PROJECT	

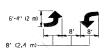




DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

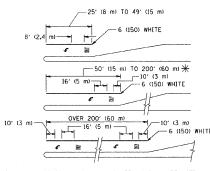
MEDIANS OVER 4' (1.2 m) WIDE 4 (100) YELLOW 4 (100) YELLOW LINES (51/2 (140) C-C) 4 (100) YELLOW LINES (51/2 (140) C-C) -2-4 (100) YELLOW @ 11 (280) C-C

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

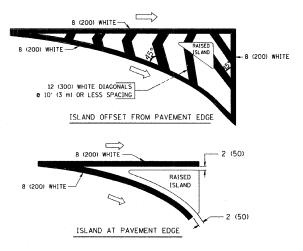


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. \P AREA = 15.6 SO. FT. (1.5 m²) \P AREA = 20.8 SO. FT. (1.9 m²)

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

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVEDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 & 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 51/2 (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	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (500) APART 2' (500) APART 5' (500) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	II (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 (OYER 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 m²) EACH "X"=54.0 SO. FT. (5.0 m²)
SHOULDER DIAGONALS	12 (300) @ 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) T0 45MPH (70 km/h) 150' (45 m) C-C (0VER 45MPH (70 km/h))

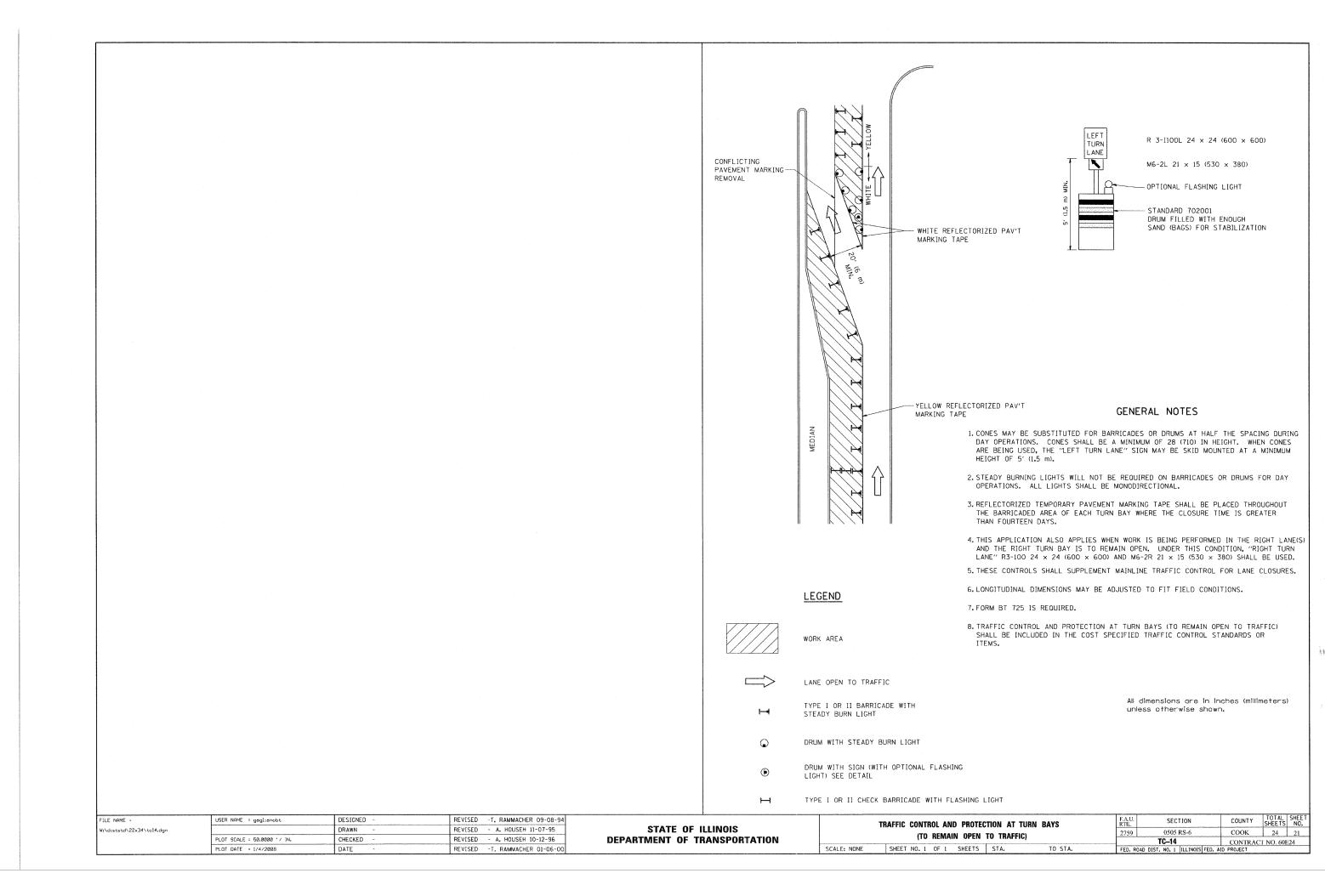
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

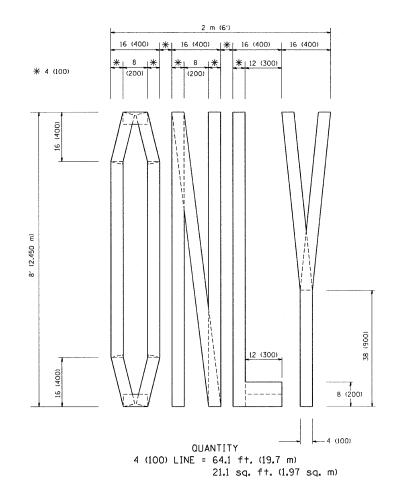
All dimensions are in inches (millimeters) unless otherwise shown.

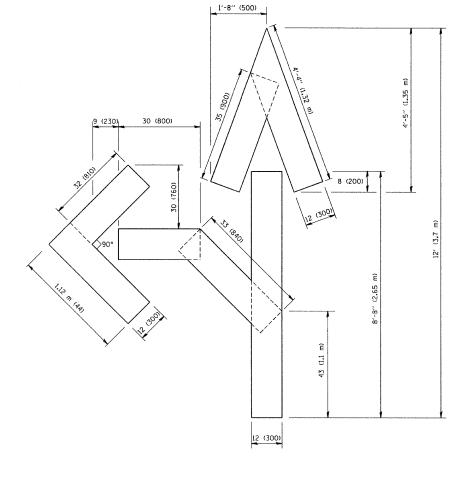
ILE NAME =	USER NAME = gaglianobt	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94
:\diststd\22x34\tcl3.dgn		DRAWN -	REVISED -A. HOUSEH 10-09-96
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -A. HOUSEH 10-17-96
	PLOT DATE = 1/4/2008	DATE - 03-19-90	REVISED -T. RAMMACHER 01-06-00

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

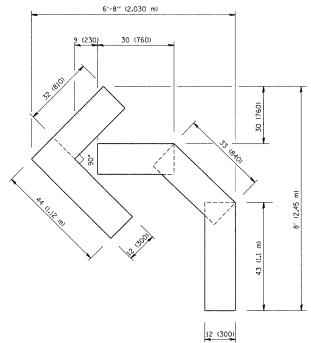
		DI:	STRICT OF	VE		F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TYPICAL PAVEMENT MARKINGS						0505 RS-6	COOK	24	20
							TC-13 CONTRACT I			
	SCALE: NONE	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED.		D PROJECT		







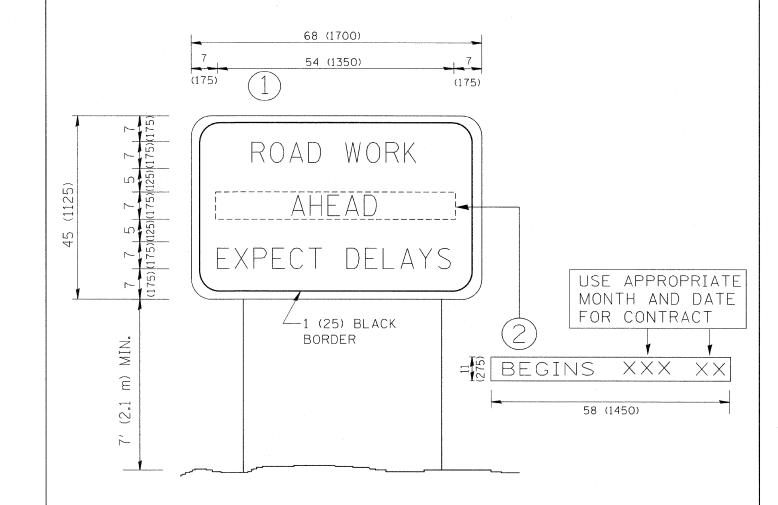
QUANTITY 4 (100) LINE = 82.5 ft. (25.3 m) 27.5 sq. ft. (2.53 sq. m)



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	OTATE OF WINDIG		PAVEMENT MARKING LETTERS AND SYMBOLS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEE SHEETS NO.
W:\diststd\22x34\tc16.dgn		DRAWN -	REVISED -T. RAMMACHER 11-04-97	STATE OF ILLINOIS		FOR TRAFFIC STAGING		0505 RS-6	COOK	24 22
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-98	DEPARTMENT OF TRANSPORTATION				TC-16	CONTRAC	T NO. 60E24
	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.	. AID PROJECT	

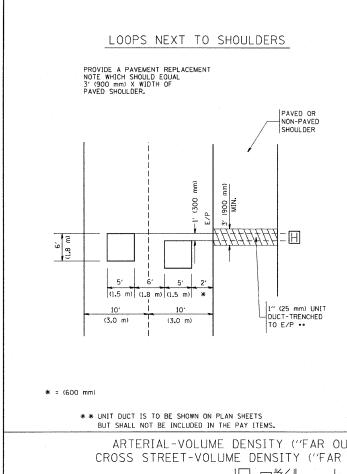


NOTES:

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

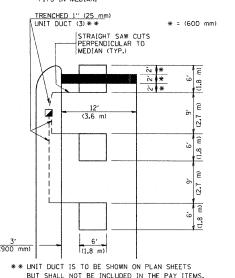
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED - R. MIRS 09-15-97			ARTERIAL ROAD		F.A.U.	SECTION	COUNTY	TOTAL SHE	ETI a.
W:\distatd\22x34\tc22.dgn		DRAWN -	REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS				2759	0505 RS-6	COOK	24 2	 3
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION		INFORMATION SIGN		2135	TC-22	CONTRAC	CT NO 60F24	-
	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 D	IST. NO. 1 ILLINOIS FED.	. AID PROJECT		



LEFT TURN LANES WITH MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH (PROTECTED / PERMITTED LEFT TURN PHASING)

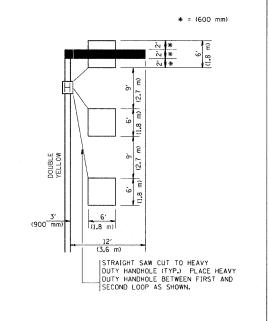
HANDHOLE LOCATION MAY HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO EMSURE THAT HANDHOLE FITS IN MEDIAN.



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

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

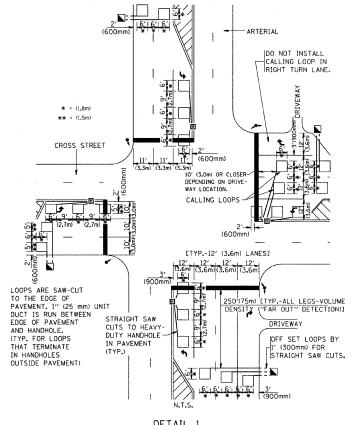
(PROTECTED / PERMITTED LEFT TURN PHASING)

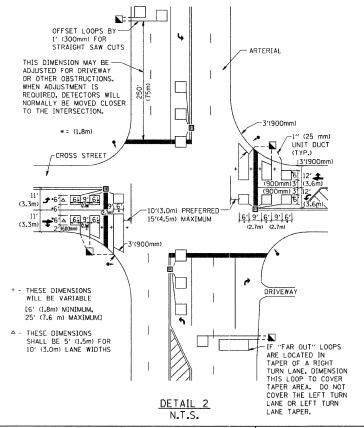


NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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

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,
- * 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.

COUNTY TOTAL SHEET NO.

	TVe T a U z					
FILE	NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED -		
W:\d	lststd\22x34\ts07.dgn		DRAWN -	REVISED -		
		PLOT SCALE = 50.0000 '/ IN.	CHECKED - R.K.F.	REVISED -		
		PLOT DATE = 1/4/2008	DATE -	REVISED -		

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

DISTRICT 1 - DETECTOR LOOP INSTALLATION						SECTION	COUNTY	TOTAL SHEETS	SHEE 1
DETAILS FOR ROADWAY RESURFACING					2759	0505 RS-6	COOK	24	24
					TS-07 CONTRACT NO. 60E			324	
	SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				