CONTRACT 62124

 F.A.U. RTE.
 SECTION
 COUNTY
 TOTAL SHEETS
 SHEETS NO.

 2831
 (3140 & 3141) RS-2
 COOK
 32
 1

D-91-059-01



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 8/30 20 06

Biane O' Keefe Of

DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

October 13, 20 06

Muke Line 100 environment

October 13, 20 06
Milton & Sees & BO
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY

OF THE STATE OF ILLINOIS

phenore of manyara, once enables

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

F.A.U. ROUTE 2831: KEDZIE AVENUE 103RD STREET TO 127TH STREET SECTION: (3140 & 3141)RS-2 RESURFACING (MAINTENANCE)

COOK COUNTY C-91-059-01

IMPROVEMENT BEGINS STA. 1+16

OMISSION: STA. 108+39 TO STA. 160+80 TRAFFIC DATA

2000 ADT = 18100
POSTED SPEED LIMIT=35 MPH

IMPROVEMENT ENDS STA. 165 + 44

WORTH TOWNSHIP

0 100' 200' 300' -- 1" = 100'
0 10' 20' 30' -- 1" = 10'
0 50' 100' 1" = 50'
0 50' 100' 1" = 40'
0 50' 100' -- 1" = 30'
0 50' 100' -- 1" = 20'

FOR INDEX OF SHEETS, SEE SHEET NO. 2

IMPROVEMENT LOCATED IN:

• CITY OF BLUE ISLAND

• CITY OF CHICAGO • VILLAGE OF MERRIONETTE PARK

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

J.U.L.I.E.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123

C.U.A.N. (CHICAGO UTILITY ALERT NETWORK)

CONTRACT NO. 62124

GROSS LENGTH OF IMPROVEMENT = 16,428 FT = 3.11 MILES NET LENGTH OF IMPROVEMENT = 11,187 FT = 2.12 MILES

ENGINEER: KEN ENG/LONG TR/

8/30/2006

F.A.U. RTE.	SECTION	C	OUNT	Y	TOTAL	SHEET NO.
2831	31 •		COO	K	32	2
STA.	xxxxxxx	× TO	STA.×	xxx	×××××	
FED. RO	AD DIST. NO. 1	TEL INOTS	FFD.	ATO	PROJECT	

* (3140 & 3141) RS-2

INDEX OF SHEETS

SHEET	NO.

DESCRIPTION

1	IIILE SHEET
2	INDEX OF SHEETS, STATE STANDARDS, CHICAGO NOTES, AND GENERAL NOTES
3	SUMMARY OF QUANTITIES
4-5	TYPICAL CROSS SECTIONS AND MIXTURE REQUIREMENTS
6-9	RESURFACING AND PAVEMENT MARKING PLANS
10-13	DETECTOR LOOP REPLACEMENT PLANS
14	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING
15	CITY OF CHICAGO DRAINAGE DETAILS

16 CITY OF CHICAGO DETAILS FOR PC CONCRETE DRIVEWAY, ALLEY RETURN AND SIDEWALK

17 PAVEMENT PATCHING FOR BITUMINOUS SURFACED PAVEMENT 18

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

19 BUTT JOINT AND BITUMINOUS TAPER DETAILS

20 TEMPORARY INFORMATION SIGNING

TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS

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

23 DISTRICT ONE TYPICAL PAVEMENT MARKINGS

24 TRAFFIC CONTROL AND PROTECITON AT TURN BAYS

25 PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING

26-29 DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS

DISTRICT 1 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

CITY OF CHICAGO TYPICAL PAVEMENT MARKINGS

STATE STANDARDS

STANDARD NO.

21

DESCRIPTION

 STANDAND NO.	DE00/17 110/4
000001-04	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
442201-01	CLASS C AND D PATCHES
604001 -02	FRAME AND LIDS, TYPE 1
604086 -0 1	FRAME AND GRATE, TYPE 23
606001- <i>0</i> 2	CONCRETE CURB AND COMBINATION CONCRETE CURB AND GUTTER
701001- <i>01</i>	OFF-ROAD OPERATIONS, 2-L, 2-W, 4.5 M (15') MIN. AWAY, FOR SPEEDS > 45 MPH
701101-01	OFF-ROAD OPERATIONS, MULTILANE, LESS THAN 4.5 M (15') AWAY, SPEEDS > 45 MPH
701301 -02	LANE CLOSURE, 2-L, 2-W, SHORT TIME OPERATIONS
701606 -04	URBAN LANE CLOSURE, MULTILANE, 2W, WITH MOUNT MEDIAN
701701-04	URBAN LANE CLOSURE, MULTILANE INTERSECTION
702001-06	TRAFFIC CONTROL DEVICES
846006	TYPICAL LAYOUT FOR DETECTION LOOPS

CHICAGO NOTES

PERMIT FROM THE DEPARTMENT OF SEWERS ARE REQUIRED FOR ALL UNDERGROUND STORM, SANITARY OR COMBINED SEWER SYSTEM CONSTRUCTION, AND FOR ALL WORK INVOLVING ADJUSTMENT OF SEWER STRUCTURES. THE DEPARTMENT OF SEWERS' PERMIT MUST BE OBTAINED BY A LICENSED SEWER DRAIN LAYER PRIOR TO START OF CONSTRUCTION. THE LICENSED SEWER CONTRACTOR / SUBCONTRACTOR MUST SUBMIT TWO SET OF PLANS APPROVED BY THE DEPARTMENT OF SEWERS FOR THE ISSUE OF THE SEWER PERMIT TO SUITE 410, 333 SOUTH STATE STREET, CHICAGO, IL 60604-3971, INSPECTION WILL BE PROVIDED BY THE DEPARTMENT OF SEWERS.

IN CASE OF DAMAGE TO CITY OF CHICAGO SEWERS, PRIVATE AND PUBLIC DRAINS, SEWER STRUCTURES AND/OR BENCH MONUMENTS, THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE DEPARTMENT OF SEWERS AT (312) 747-7892 OR (312) 747-7893.

PERFORATED LIDS SHALL BE PLACED ON ALL MANHOLES AND CATCH BASINS.

BENCH MONUMENT LOCATIONS WITHIN THE LIMITS OF THE IMPROVEMENT CAN BE OBTAINED FROM THE DEPARTMENT OF SEWERS AT SUITE 410, 333 SOUTH STATE STREET, CHICAGO, IL 60604-3971. THE CONTRACTOR IS RESPONSIBLE FOR THE COST OF REPLACING ANY BENCH MONUMENT DAMAGED OR DESTROYED DURING CONSTRUCTION.

SIDEWALK ACCESSIBILITY RAMPS SHALL NOT BE CONSTRUCTED DIRECTLY OVER EXISTING OR PROPOSED DRAINAGE STRUCTURES.

ALL BROKEN, CRACKED, WORN OR OTHERWISE DAMAGED OR BICYCLE UNSAFE FRAMES AND GRATED OR LIDS ON SEWER STRUCTURED SHALL BE REPLACED WITH NEW DEPARTMENT OF SEWERS' STANDARD FRAMES AND GRATES OR LIDS. OLD FRAMES AND GRATES OR LIDS SHALL BE DELIVERED TO THE DEPARTMENT OF SEWERS AT 39TH STREET AND ASHLAND AVENUE.

CITY OF CHICAGO WATER VALVE VAULTS AND SEWER STRUCTURES SHALL NOT BE CLOSED. COVERED OR OTHERWISE OBSTRUCTED DURING CONSTRUCTION WITHOUT WRITTEN PERMISSION FROM THE CITY OF CHICAGO DEPARTMENT OF WATER AND/OR DEPARTMENT

CURB AND GUTTER CONSTRUCTION SHALL PROVIDE A MINIMUM CURB HEIGHT OF 75 MM (3").

BACKFILL MATERIAL UNDER SIDEWALKS SHALL BE FA-2.

PAVEMENT REPLACEMENT AROUND FRAMES AND GRATES OR LIDS WHERE DRAINAGE. WATER MAIN OR ELECTRICAL STRUCTURES ARE ADJUSTED OR RECONSTRUCTED, SHALL BE WITH CLASS

ALL PAVEMENT PATCHING SHALL BE CLASS C.

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." (JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION) AT 1-800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELE-PHONE AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED.)

GENERAL NOTES

3 METER (10 FEET) TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB & GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURBS & GUTTERS AND MEDIANS IN THE FIELD, UNLESS OTHERWISE SHOWN.THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE CITY OF CHICAGO, MARRIONETTE PARK, AND THE CITY OF BLUE ISLAND.

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

BARRICADES: THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SANDBAGS ON EACH TYPE I OR TYPE II BARRICADE USED ONE (1) WEIGHTED SAND BAG ACROSS EACH BOTTOM RAIL.

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

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

THE CONTRACTOR WILL CONTACT THE AREA TRAFFIC ENGINEER, PATRICE HARRIS AT (773) 685-8386 TWO WEEKS PRIOR TO PLACING PERMANENT PAVEMENT MARKING.

> ILLINOIS DEPARTMENT OF TRANSPORTATION ILLINOIS DEPARTMENT OF TRANSPORTATION KEDZIE AVENUE (FROM 103RD ST. TO 127TH ST.) INDEX OF SHEETS, LIST OF STANDARDS, CHICAGO NOTES, AND GENERAL NOTES

HORIZ.VERT.

DRAWN BY CHECKED BY

CONTRACT 62124

F.A.L RTE	SECTION	COUNTY		TOTAL SHEETS	SHEET NO.	
2831	(3140 & 3141) RS	COOK		32	3	
FED	FED. ROAD DIST. NO. 1		INOIS	HIG	HWAY PRO	JECT

	SUMMARY OF QUANTITIES				CONSTRUCTI	ON TYPE CODE			SUMMARY OF QUANTITIES				CONSTRUCTION TYPE	CODE
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	URBAN 100%STATE 1000	Y025 KEDZIE SOY.CITY SOYSTATE PARKING			CODE NO	ITEM	UNIT	TOTAL QUANTITIES	URBAN 100%STATE 1000	Y025 KEDZIE SO',C/TY SO',STATE PARKING	
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	24	22	2			70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	F00T	205	205		
40600300	AGGREGATE (PRIME COAT)	TON	115	106	9			70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	1760	1760		as consideration of the constant of the consta
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	21.0	19.5	1.5			X 78000100	THERMOPLASTIC PAVEMENT MARKING	SQ FT	250	250		
40600895	CONSTRUCTING TEST STRIP	EACH	1	1					- LETTERS AND SYMBOLS					
40600980	BITUMINOUS SURFACE REMOVAL - BUTT JOINT	SQ YD	720	720				X 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	7850	7850		
40601000	BITUMINOUS REPLACEMENT OVER PATCHES	TON	381	332.5	48.5			78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	4060	4060		
42001300	PROTECTIVE COAT	SQ YD	1724	1724				X 78000650	THERMOPLASTIC PAVEMENT MARKING	FOOT	205	205		
44000109	BITUMINOUS REMOVAL OVER PATCHES 2 1/4"	SQ YD	2262	1972	290	. "		7, 10000000	- LINE 24"	1001	203	203		
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	4569	3984	585			78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	135	135		
44201741	CLASS D PATCHES, TYPE II, 8 INCH	SQ YD	229	200	29			84700600	DETECTOR LOOP REPLACEMENT	FOOT	2693	2693		
44201745	CLASS D PATCHES, TYPE III, 8 INCH	SQ YD	277	242	35		·	X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	52	52		
44201765	CLASS D PATCHES, TYPE II, 10 INCH	SQ YD	917	800	117			X0656100	DRIVEWAY PAVEMENT REMOVAL AND REPLACEMENT	SQ YD	13	13		
44201769	CLASS D PATCHES, TYPE III, 10 INCH	SQ YD	642	560	82			V4055405		TON	5500	5150	470	
55039700	STORM SEWERS TO BE CLEANED	FOOT	620	600	20			X4066426	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70	TON	5592	5162	430	
60250200	CATCH BASINS TO BE ADJUSTED	EACH	31	27	4			X4067100	POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50	TON	2392	2209	183	
60251730	CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 23 FRAME AND GRATE	EACH	12	10	2			X4409410	BITUMINOUS SURFACE REMOVAL 2 1/4"	SQ YD	57321	52931	4390	
60254330	CATCH BASINS TO BE RECONSTRUCTED WITH NEW TYPE 23 FRAME AND GRATE	EACH	5	4	1 "			X6020064	MANHOLES TO BE RECONSTRUCTED WITH NEW FRAME AND PERFORATED LID FOR CATCH	EACH	5	5		
60255500	MANHOLES TO BE ADJUSTED	EACH	41	35	6				BASINS AND MANHOLES, CHICAGO STANDARD					
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4	4				Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	90	90		
67100100	MOBILIZATION	L SUM	1	1				78100100	RAISED REFLECTIVE PAVEMENT MARKERS	EACH	150	150		
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	0.9	0.1									
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	0.9	0.1									
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	13576	13576										
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	250	250										
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	7850	7850										
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	4060	4060										

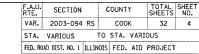
REVISIONS

NAME DATE

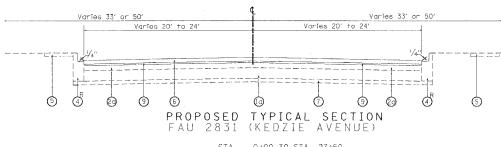
ILLINOIS DEPARTMENT OF TRANSPORTATION SUMMARY OF QUANTITIES

Rov.

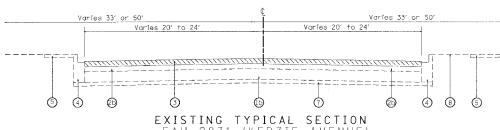
PLOT DATE: 8/31/2006



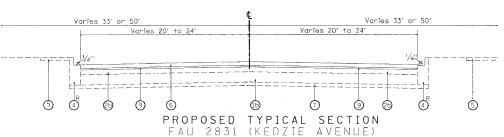
> STA 0+00 TO STA 27+50 STA 66+50 TO STA 78+50 STA 82+50 TO STA 96+50



STA 0+00 T0 STA 27+50 STA 66+50 T0 STA 78+50 STA 82+50 T0 STA 96+50



FAU 2831 (KEDZIE AVENUE) STA 27+50 TO STA 51+50 STA 78+50 TO STA 81+50 STA 161+50 TO STA 165+44



U 2831 (KEDZIE AVENUE STA 27+50 TO STA 51+50 STA 78+50 TO STA 81+50

STA 161+50 TO STA 165+44

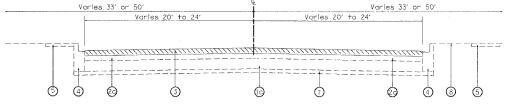
LEGEND

- (1a) EXISTING P.C.C. PAVEMENT, 1.5"-3.5"
- (1b) EXISTING P.C.C. PAVEMENT, 6.25"-7.75"
- (1c) EXISTING P.C.C. PAVEMENT, 6.25"-7.75"
- (1d) EXISTING P.C.C. PAVEMENT, 7.25"-7.5"
- 2a) EXISTING BITUMINOUS CONCRETE RESURFACING (AFTER MILLING +1")
- (2b) EXISTING BITUMINOUS CONCRETE RESURFACING (AFTER MILLING +10)
- 20 EXISTING BITUMINOUS CONCRETE RESURFACING (AFTER MILLING +5)
- (2d) EXISTING BITUMINOUS CONCRETE RESURFACING (AFTER MILLING +3)
- (3) PROPOSED BITUMINOUS SURFACE REMOVAL 21/4"
- EXISTING COMBINATION CONCRETE C&G TYPE
 B.6-12
- 5 EXISTING P.C.C SIDEWALK
- PROPOSED BITUMINOUS CONC.

 SURFACE COURSE, SUPERPAVE, MIX "D", N70, 11/2
- 7) EXISTING SUBBASE GRANULAR MATERIAL
- 8 EXISTING PARKWAY
- 9 PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD) SUPERPAVE, IL-4.75, N50, 3/4
- R REMOVAL AND REPLACEMENT ITEM AS DIRECTED BY ENGINEER

REVISIONS NAME DATE		ILLINOIS DEPARTMENT OF TRANSPORTATION				
77.11		TYPICAL SECTIONS				
		K	EDZIE AVENUE			
		103RD	ST. TO 127TH ST.			
		SCALE: VERT.	DRAWN BY			
		DATE	CHECKED BY			

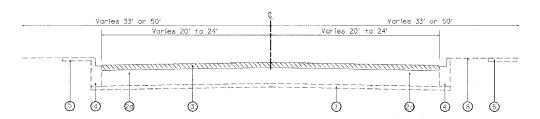




EXISTING TYPICAL SECTION
FAU 2831 (KEDZIE AVENUE)

STA 81+50 TO STA 82+50

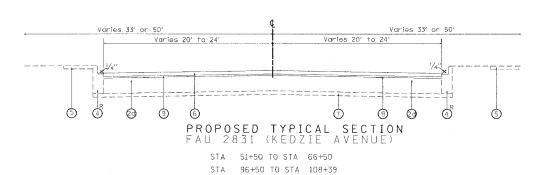
STA 81+50 TO STA 82+50



EXISTING TYPICAL SECTION FAU 2831 (KEDZIE AVENUE)

STA 51+50 TO STA 66+50 STA 96+50 TO STA 108+39

STA 160+80 TO STA 161+50



STA 160+80 TO STA 161+50

LEGEND

- (a) EXISTING P.C.C. PAVEMENT, 1.5"-3.5"
- (1b) EXISTING P.C.C. PAVEMENT, 6.25"-7.75"
- (a) EXISTING P.C.C. PAVEMENT, 6.25"-7.75"
- (Id) EXISTING P.C.C. PAVEMENT, 7.25"-7.5"
- (AFTER MILLING +1")
- (2b) EXISTING BITUMINOUS CONCRETE RESURFACING (AFTER MILLING +10)
- 2c) EXISTING BITUMINOUS CONCRETE RESURFACING
 (AFTER MILLING +5)
- (2d) EXISTING BITUMINOUS CONCRETE RESURFACING
 (AFTER MILLING +3)

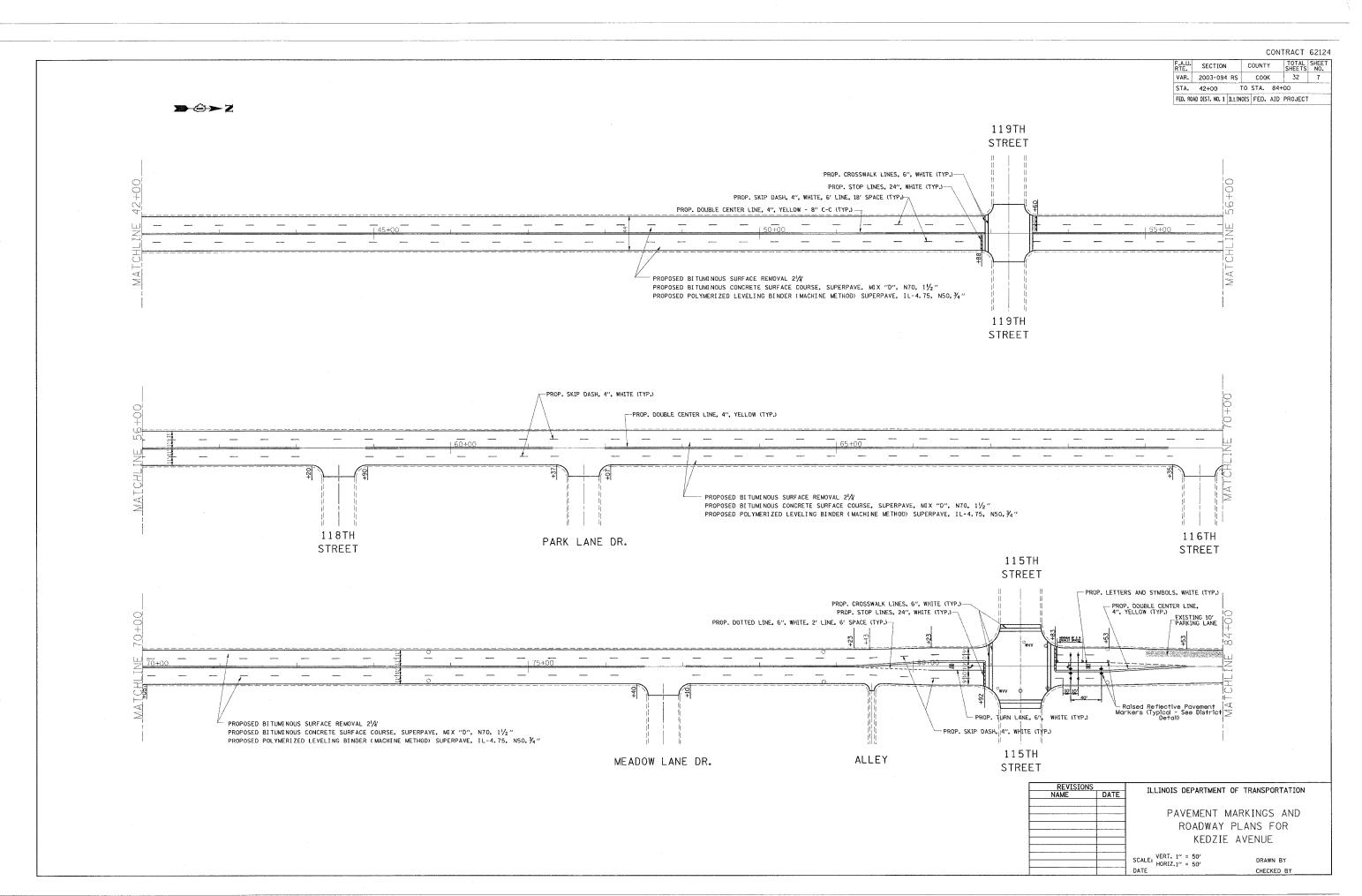
- (3) PROPOSED BITUMINOUS SURFACE REMOVAL 21/4"
- 4 EXISTING COMBINATION CONCRETE C&G TYPE
 B.6-12
- 5 EXISTING P.C.C SIDEWALK
- 6 PROPOSED BITUMINOUS CONC. SURFACE COURSE, SUPERPAVE, MIX "D", NTO, 11/2"
- (7) EXISTING SUBBASE GRANULAR MATERIAL
- (8) EXISTING PARKWAY
- 9 PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD) SUPERPAVE, IL-4.75, N50, 7/4"
- R REMOVAL AND REPLACEMENT ITEM AS DIRECTED
 BY ENGINEER

MIXTURE F	REQUIREMENTS						
MIXTURE USES	AC / PG	RAP % (MAX)	DESIGN AIR VOIDS				
POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50	SBS/SBR PG76-28	0%	2.5% AT 50 GYRATIONS				
BIT. CONC. SURFACE COURSE, SUPERPAVE, MIX "D", N70	PG 64-22	10%	4% AT 70 GYRATIONS				
ALL CLASS D PATCHING BINDER IL - 19MM	PG 64-22	15%	4% AT 70 GYRATIONS				
BIT. REPLACEMENT OVER PATCHES BINDER IL - 19MM	PG 64-22	15%	4% AT 70 GYRATIONS				
UNIT WEIGHT USED TO CALCULATE ALL BITUMINOUS SURFACE MIXTURE IS 112 LBS/SY/IN							

REVISIONS NAME DAT	E ILLINOIS DEPARTME	ILLINOIS DEPARTMENT OF TRANSPORTATION				
		SECTIONS				
		AVENUE				
Maria (1971)	103RD ST. I	0 127TH ST.				
	SCALE: VERT.	DRAWN BY				
	DATE	CHECKED BY				

CONTRACT 62124 TOTAL SHEET SHEETS NO. STA. 1+16 TO STA. 42+00
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT 0+00 IMPROVEMENT BEGINS @ STA 1+16 S | e | S | g | 127TH VPROP. MEDIAN, 4", YELLOW (TYP.) PROP. SKIP DASH, 4", WHITE, 6' LINE, 18' SPACE (TYP.) PROP. DIAGONAL LINES, 12", YELLOW (TYP.), 75' C-C PROPOSED BITUMINOUS SURFACE REMOVAL 21/4 PROPOSED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D". N70, 1½" PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD) SUPERPAVE, IL-4.75, N50,¾" PROP. LETTERS AND SYMBOLS, WHITE (TYP.) PROP. TURN LANE, 6", WHITE (TYP.) 123RD STREET RAISED REFLECTIVE PAVEMENT MARKERS (TYPICAL - SEE DISTRICT DETAIL) PROP. SKIP DASH, 4", WHITE (TYP.) PROP. DOUBLE CENTER LINE, 4", YELLOW - 8" C-C (TYP.)-PROP, CROSSWALK LINES, O 6". WHITE (TYP.) PROPOSED BITUMINOUS SURFACE REMOVAL 21%PROPOSED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70, 11/2" PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD) SUPERPAVE, IL-4.75, N50, $\frac{7}{4}$ " 123RD STREET PROP. DOUBLE CENTER LINE, 4", YELLOW (TYP.) PROP. SKIP DASH, 4", WHITE (TYP.) PROPOSED BITUMINOUS SURFACE REMOVAL 21/4/
PROPOSED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", NTO, 11/2"
PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD) SUPERPAVE, IL-4.75, N5O, ₹4" ILLINOIS DEPARTMENT OF TRANSPORTATION PAVEMENT MARKINGS AND ROADWAY PLANS FOR KEDZIE AVENUE SCALE: VERT. 1" = 50' HORIZ.1" = 50'

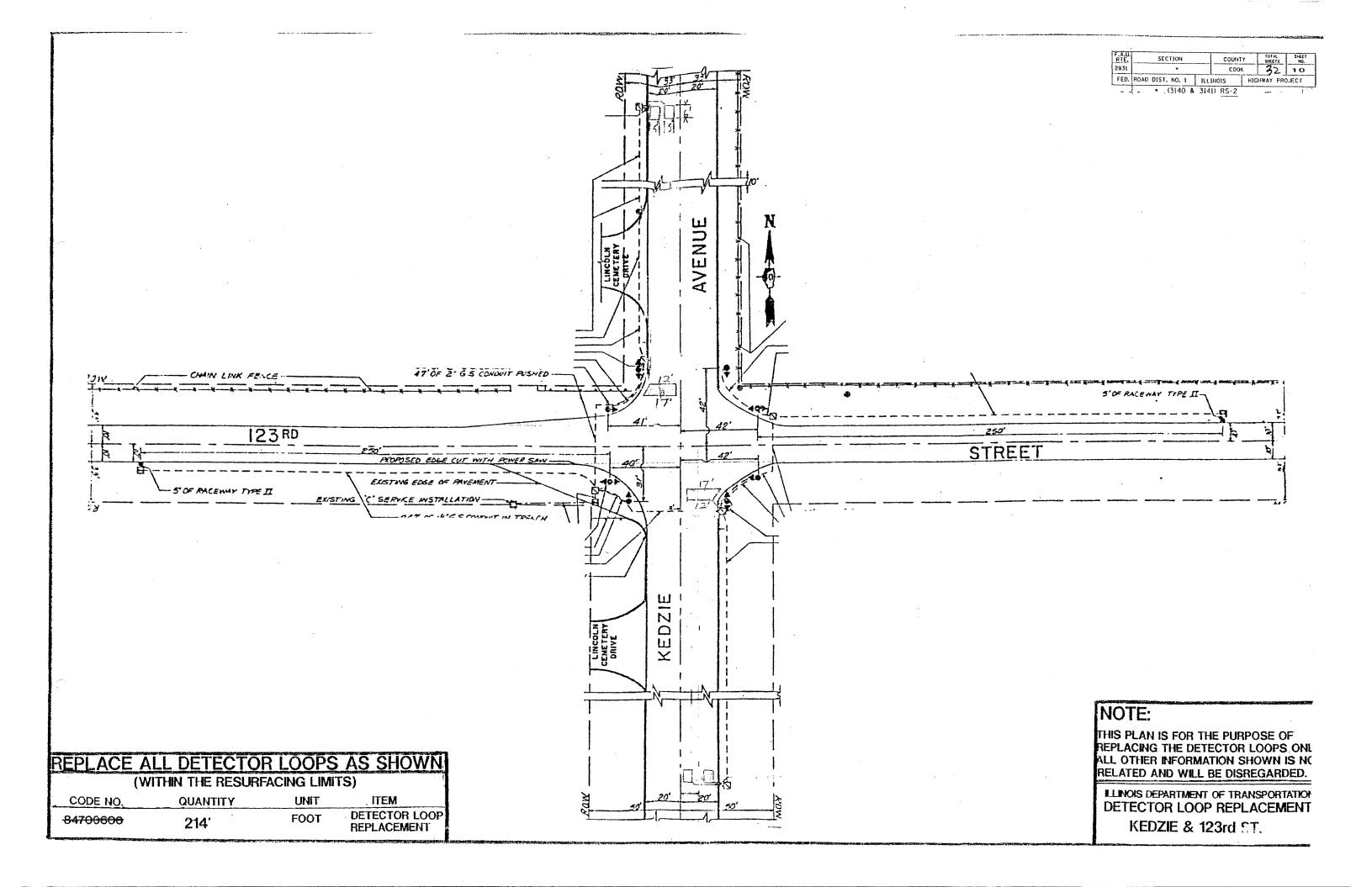
CHECKED BY

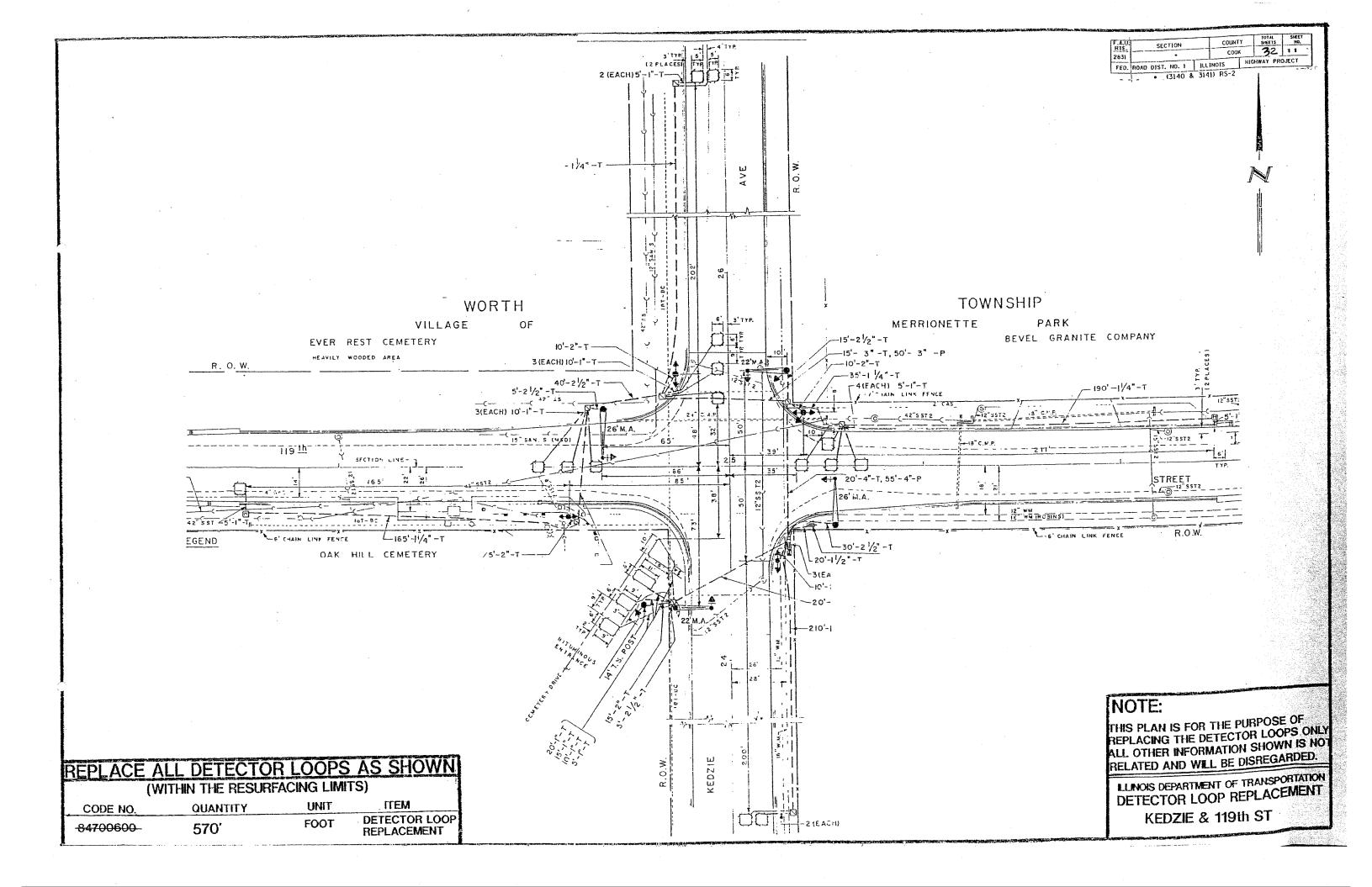


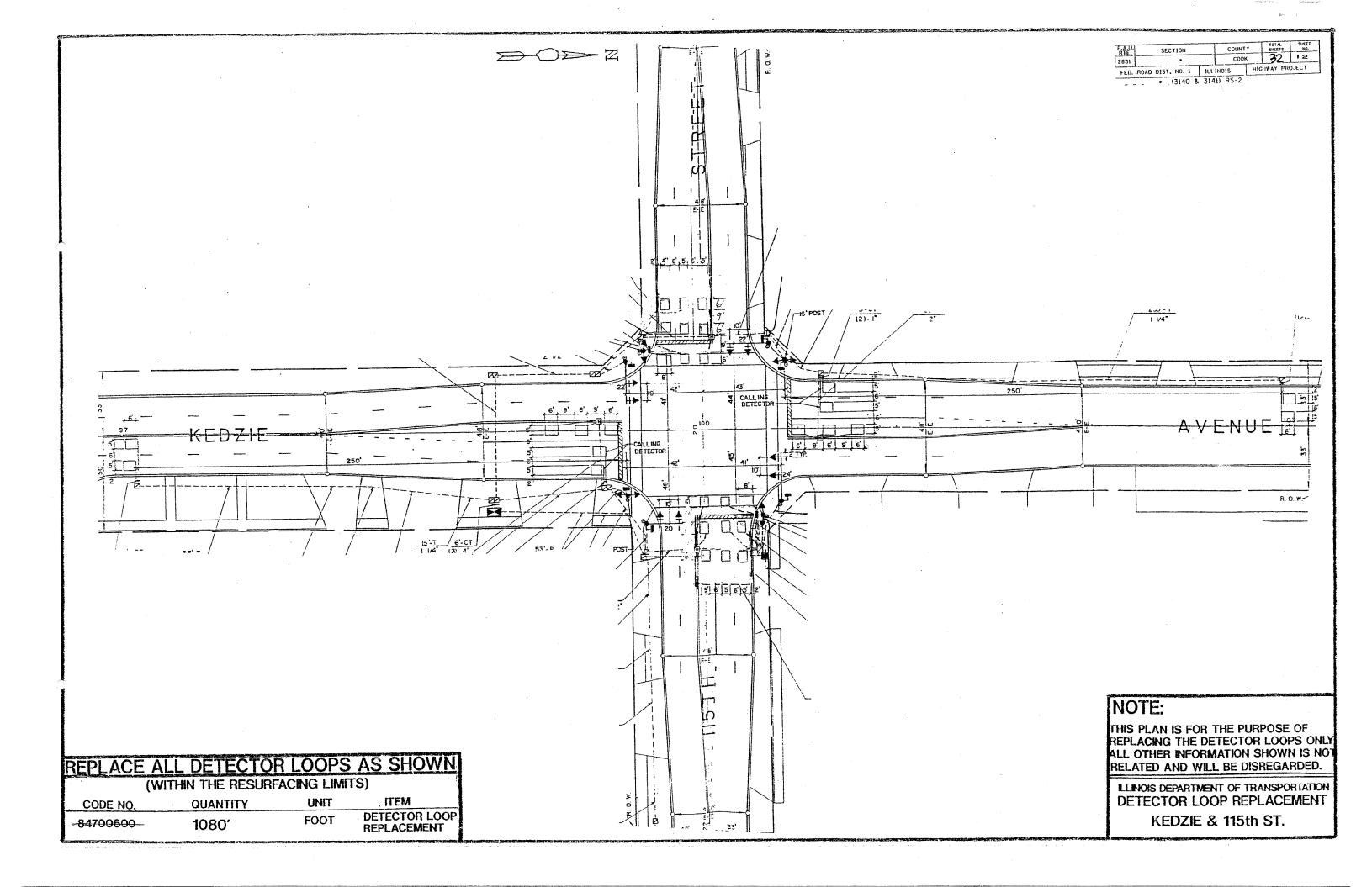
CONTRACT 62124 RTE. SECTION COUNTY SHEETS NO.

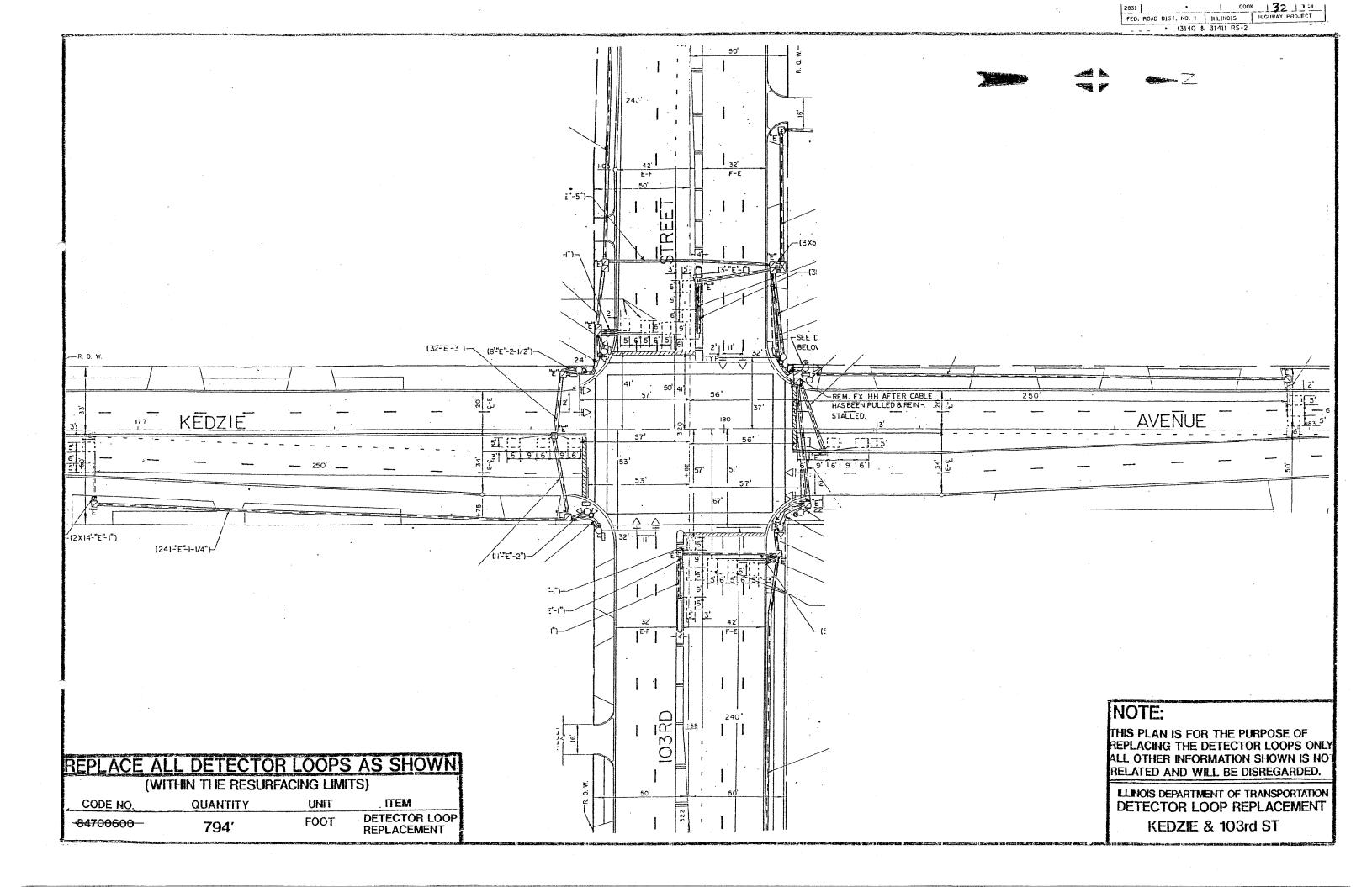
VAR. 2003-094 RS COOK 32 8 SECTION COUNTY TOTAL SHEETS NO. STA. 84+00 TO STA. 126+00 FED. ROAD DIST. NO. 1 [ILLINOIS FED. AID PROJECT $\Rightarrow \ominus > Z$ 114TH 112TH STREET PLACE EXISTING 10' PARKING LANE PROP. SKIP DASH, 4", YELLOW (TYP.) PROPOSED BITUMINOUS SURFACE REMOVAL $21\!/\!\!/$ PROPOSED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MLX "D". NTO, $11\!/\!\!/_2$ " PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD) SUPERPAVE, IL-4.75, N50, $7\!/\!\!/_4$ " 114TH 113TH 114TH STREET PLACE STREET 111TH OMISSION - DONE BY OTHERS STA. 108+39 TO STA. 160+80 STREET ALLEY EXISTING 10' PARKING LANE PROPOSED BITUMINOUS SURFACE REMOVAL 21/4
PROPOSED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70, 11/2"
PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD) SUPERPAVE, IL-4.75, N50, ¾ " PROP. CROSSWALK LINES, 151, WHITE (TYP.) ALLEY 112TH 111TH ALLEY STREET STREET 110TH 109TH 108TH STREET STREET PLACE 109TH STREET ILLINOIS DEPARTMENT OF TRANSPORTATION PAVEMENT MARKINGS AND ROADWAY PLANS FOR KEDZIE AVENUE SCALE: VERT. 1" = 50' HORIZ.1" = 50' DRAWN BY CHECKED BY

CHECKED BY

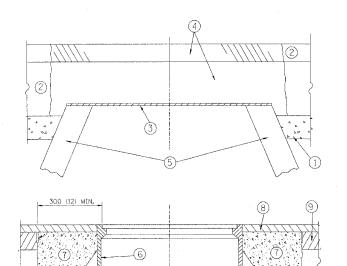








F. A. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET
				32	14
STA.		10	STA.		
FED. ROAD	81ST, NO	ILLENDIS	1	ED. AND PROJECT	



- BRICK, MORTAR, OR CONC. ADJUSTING RINGS

SAND FILL

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED 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 1TEM.

NOTES:

CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

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

STAGE 2 (AFTER PAVEMENT MILLING)

- A) REMOVE THE BITUMINOUS MATERIAL 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 BITUMINGUS CONCRETE SURFACE OR BINDER COURSE MATERIAL 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

PROPOSED SAND FILL

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

LOCATION OF STRUCTURES:

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURGO 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: FRAMES AND LIDS TO BE ADJUSTED, SPECIAL EACH

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN

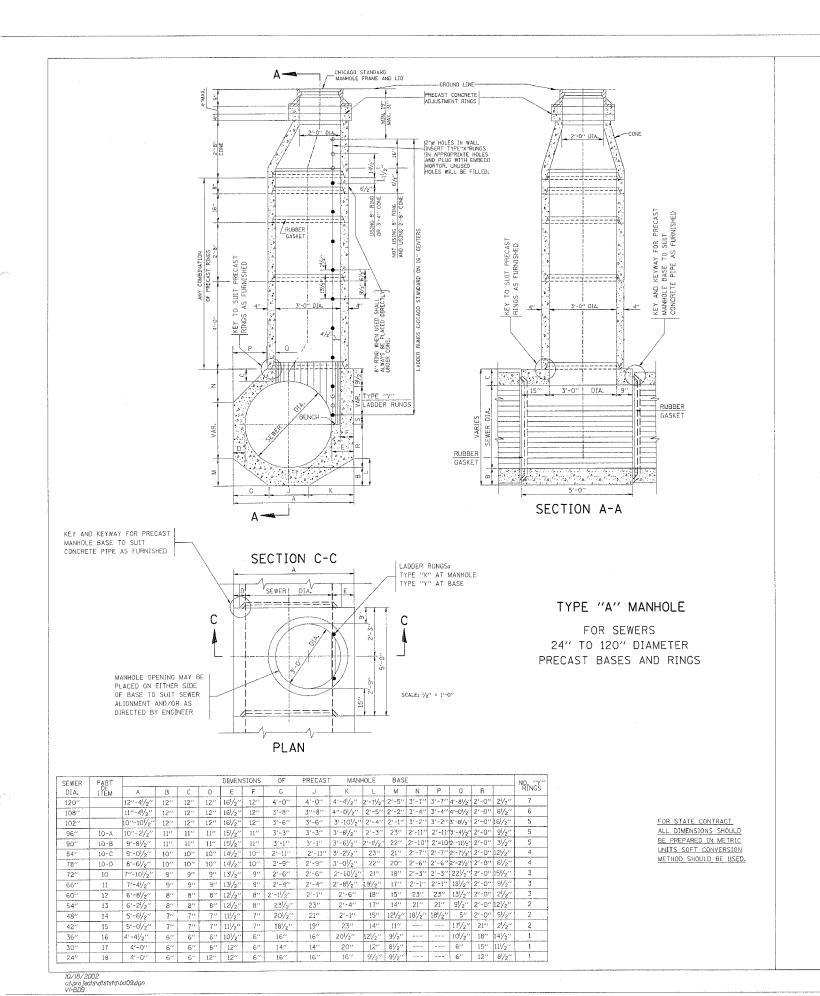
ILLINOIS DEPARTMENT OF TRANSPORTATION

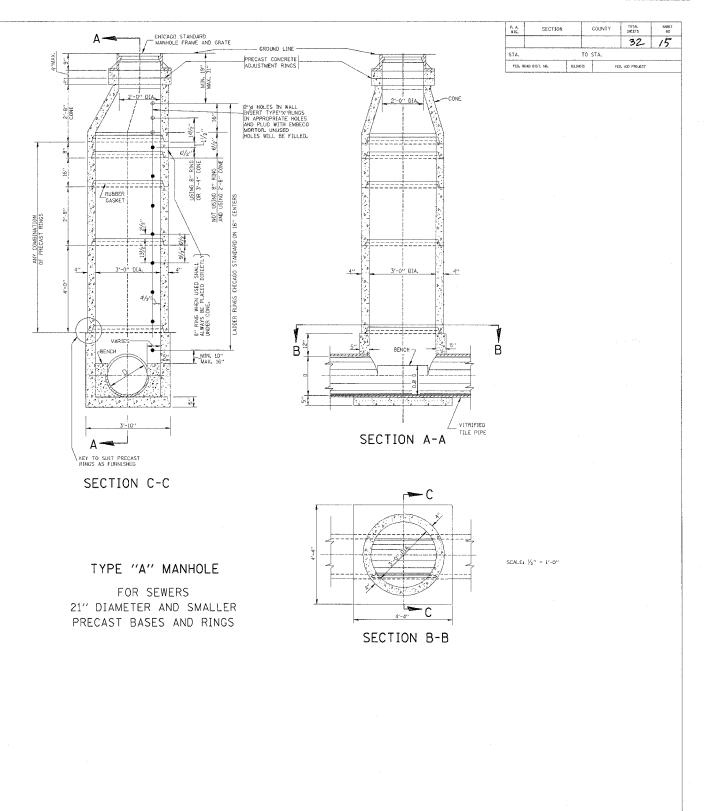
DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

SCALE: NONE DATE: 05/17/2004 DRAWN BY CHECKED BY

BD600-03 (BD-8)

05/17/2004 K:\diststd\bd08.dgn VI=BD8

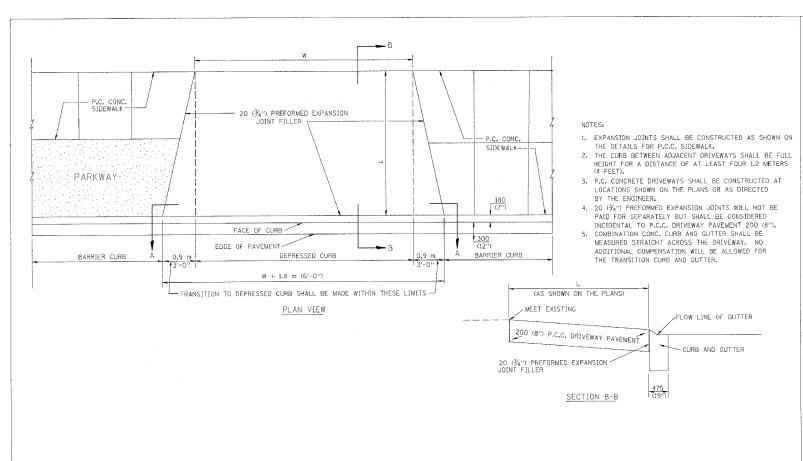


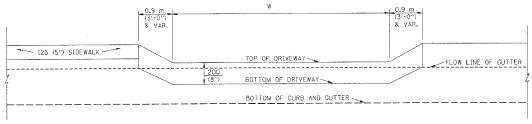


	REVISIONS				
DATE	DESCRIPTION				
6-18-82	CHICAGO STANDARD MH				
9-22-90	TYPE "A" MANHOLE	MDY	CITY	OF	CHICAGO
			D	RAI	NAGE
				DET.	AILS
			10/18/2002		

BD600-12 (BD-9) REVISION DATE: 09/22/90

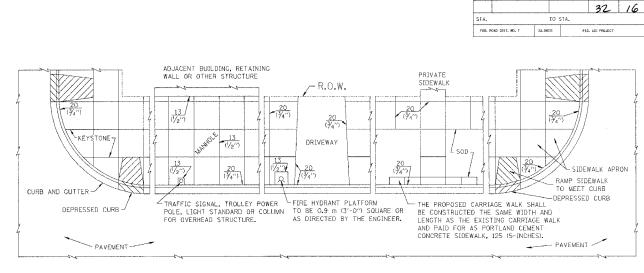
COLINTY TOTAL SHEET NO





P.C.C. DRIVEWAY PAVEMENT DETAIL

SECTION A-A



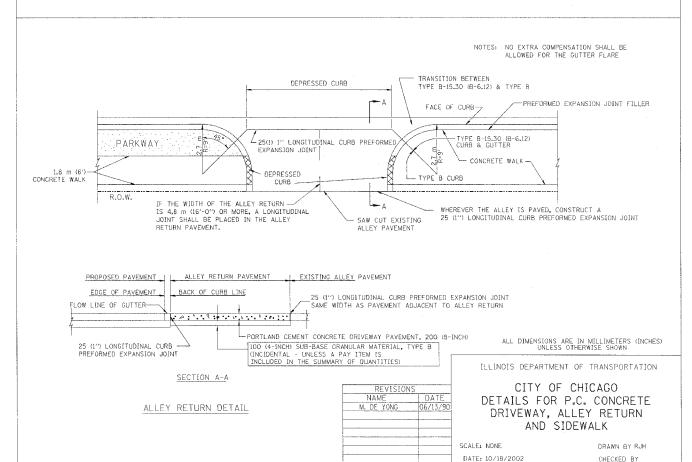
-SIDEWALK PREFORMED EXPANSION

SLOPE FOR SIDEWALK 25 (1") IN 0.9 m (3"-0") IN CHICAGO

- ONE-HALF INCH THICK EXPANSION JOINTS SHALL BE PLACED BETWEEN THE SIGEWALK AND ALL STRUCTURES SUCH AS LIGHT STANDARDS, TRAFFIC LIGHT STANDARDS, MANHOLES, WHICH EXTEND THROUGH THE SIDEWALK.

 2. 20 (3/4) THICK EXPANSION JOINTS SHALL BE PLACED AT INTERVALS OF NOT MORE THAN 30 METERS GOO FEET) IN THE SIDEWALK. WHERE THE SIDEWALK IS CONSTRUCTED ADJACENT-TO PAVEMENT OR CURB HAVING EXPANSION JOINTS, THE EXPANSION JOINTS IN THE SIDEWALK SELECTION OF THE SIDEWALK STANDARD SHALL BE PLACED OPPOSITE THE EXISTING EXPANSION JOINTS AS NEARLY AS PRACTICABLE. EXPANSION JOINTS SHALL ALSO BE PLACED WHERE THE SIDEWALK ABUTS EXISTING SIDEWALKS, BETWEEN DRIVEWAY PAVEMENT AND SIDEWALK, AND BETWEEN SIDEWALK AND CURBS WHERE THE-SIDEWALK ABUTS A CURB.

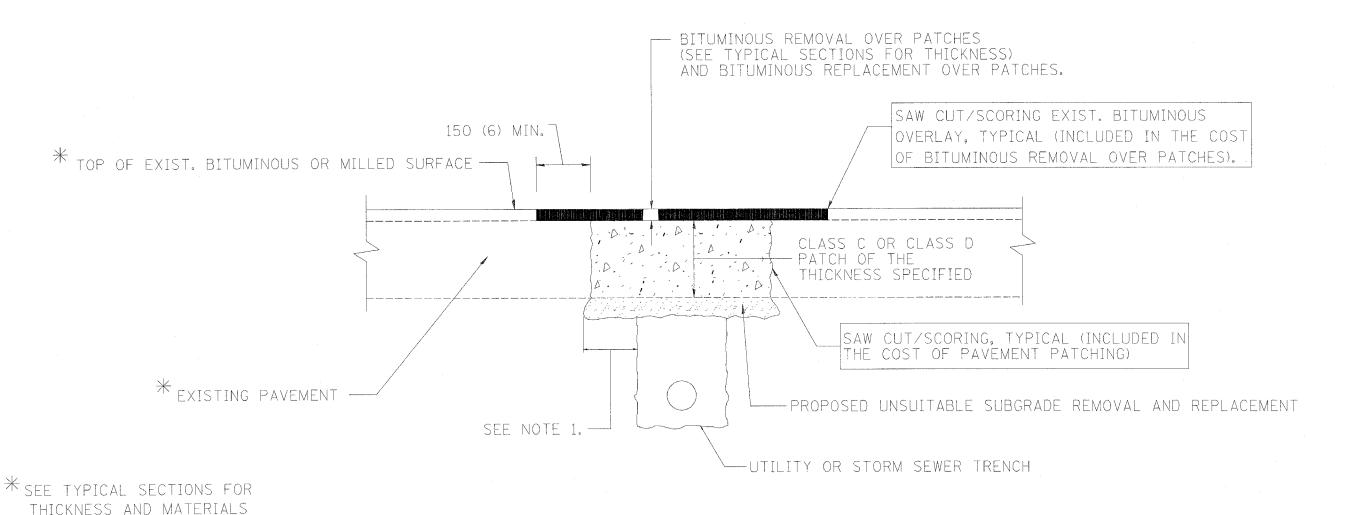
PORTLAND CEMENT CONCRETE SIDEWALK DETAILS



Npro jects\diststd\bdl7.dgn i-porz

(BD-17) REVISION DATE: 06/13/90





NOTES:

- 1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 300 (12) WIDER ON EACH SIDE OF THE TRENCH.
- 2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE SPECIAL PROVISION "PATCHING WITH BITUMINOUS OVERLAY REMOVAL".

SEQUENCE OF CONSTRUCTION

- 1. REMOVE THE EXISTING BITUMINOUS MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE FULL DEPTH PATCHES
- 3. REPLACE BITUMINOUS MATERIAL OVER THE AREA TO BE PATCHED.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS

ILLINOIS DEPARTMENT OF TRANSPORTATION

REVISIONS REVISIONS

NAME DATE NAME DATE

R. SHAH 10/25/94 ART ABBAS 04/27/9B

R. SHAH 01/14/95

R. SHAH 03/23/95

R. SHAH 04/24/95

A. HOUSEH 03/15/96

A. ABBAS 03/21/97

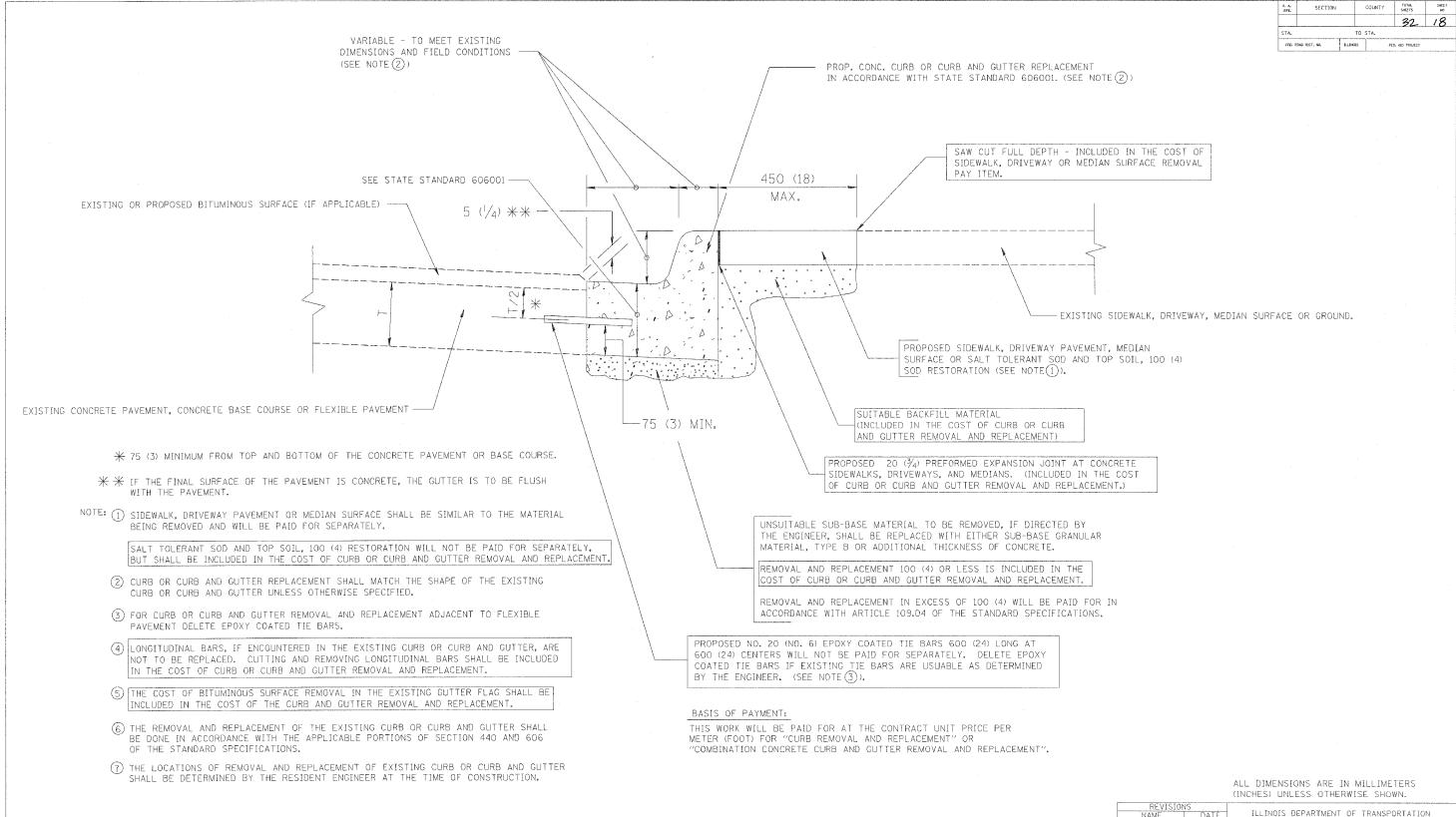
PAVEMENT PATCHING FOR BITUMINOUS SURFACED PAVEMENT

SCALE: NONE
DATE 10/18/2002

DRAWN BY

BD400-04 (BD-22) REVISION DATE: 04/27/98

c:\projects\diststd\bd22.dgn LV: Friday October 18,2002 @ 09:04:45 AM



CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

REVISION	
NAME	DATE
M. DE YONG	05/28/91
A. HOUSEH	03/11/94
R. SHAH	02/24/95
R. SHAH	03/02/95
R. SHAH	08/19/96
R. SHAH	09/12/96
R. SHAH	09/19/96
R, SHAH	10/03/96
A VDD VC	03/21/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

CURB OR
CURB AND GUTTER
REMOVAL AND REPLACEMENT

A. ABBAS 03/21/97 SCALE: NONE
M. GOMEZ 01/22/01 DATE 10/18/2002

DRAWN BY CHECKED BY

BD600-06 (BD-24)

REVISION DATE:12/06/88

IO/I8/2002 c:\projects\diststd\bd24.dgn

PROP. PAY LIMIT OF BIT. SURF. REMOVAL FULL THICKNESS OF MILLING TEMP RAMP (NOTE "C") PROP. BIT. SURFACE REMOVAL -EXIST, PAVEMENT MILLED TEMPORARY RAMP (FOR BUTT JOINT AND BIT. TAPER SEE DETAIL BELOW) OPTION 1 PROP. PAY LIMIT OF BIT. SURF. REMOVAL FULL THICKNESS OF MILLING SAW CUT (INCLUDED IN THE COST OF BITUMINOUS SURFACE PROP. BIT. SURFACE REMOVAL-REMOVAL - BUTT JOINT) 1.35 m (4.5') PAY LIMIT FOR BUTT JOINT (NOTE "D") (NOTE "F") EXIST. BIT. SURF.

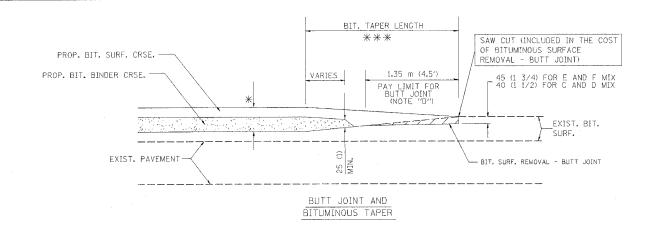
BITUMINOUS CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND BIT. TAPER SEE DETAIL BELOW)

OPTION 2

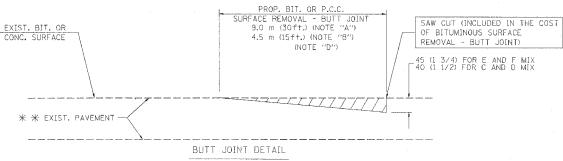
EXIST, PAVEMENT

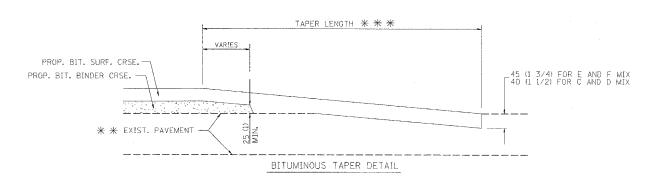
TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND BITUMINOUS TAPER
FOR MILLING AND RESURFACING

| F.A. | SECTION | COUNTY | TOTAL | TOTAL | SEETS | SECTION | | STAL | TO STAL | TO STAL | FED. ROAD 915T, INC. | July 2015 | FED. AND PREASET | PROP. BIT. OR P.C.C. | SURFACE REMOVAL - BUTT JOINT | CAMP OUT (INCLUDED IN THE OCT)





TYPICAL BUTT JOINT AND BITUMINOUS TAPER FOR RESURFACING ONLY

PC CONCRETE, BITUMINOUS OR BITUMINOUS RESURFACED PAVEMENT.

NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.

THE BUTT JOINT WILL BE PAID FOR PER SQUARE METER (SQUARE YARD.) AS "BITUMINOUS SURFACE REMOVAL - BUTT JOINT" OR AS "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

BASIS OF PAYMENT:

- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING BITUMINOUS SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED BITUMINOUS COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 900 (3 ft.) PER INCH OF MILLING THICKNESS.
- F: INSTALLATION AND REMOVAL OF THE 1.35 m (4.5') TEMP, BIT, RAMP WILL BE PAID AS "BITUMINOUS SURFACE REMOVAL BUTT JOINT".
- G: SEE ARTICLE 406.18 AND 406.24 OF THE STANDARD SPECIFICATIONS FOR "BITUMINOUS AND PCC SURFACE REMOVAL, BUTT JOINT".
- * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

** * * * 6.1 m (20') PER 25 (1) RESURFACING (NOTE "A")
3.0 m (10') PER 25 (1) RESURFACING (NOTE "B")

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND BITUMINOUS TAPER DETAILS

SCALE: NONE

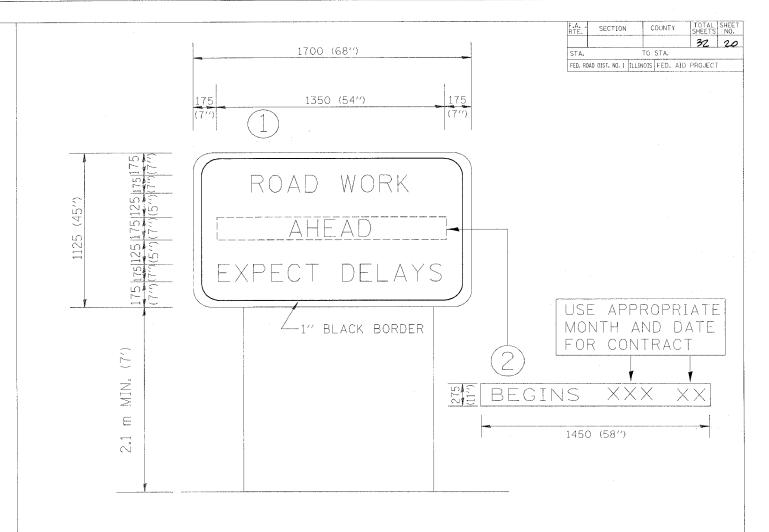
E PLOTTED:10/18/2002

DRAWN BY

/18/2002 CHECKED BY BD400-05 (VI=BD32

REVISION DATE: 04/06/01

DATE-TIME *DGN-SPEC* G AND RESURFACING



<u>NOTES:</u>

- 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 2.3 SQ. M. (25.70 SQ. FT.)

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES)

UNLESS OTHERWISE SHOWN.

REVISIONS
NAME DATE
R. MIRS D-15-97
R. MIRS 12-11-97
T. RAMMACHER 2-2-99

SCALE: DRAWN BY: BUR. OF DESIGN DATE 10/18/2002 CHECKED BY

Friday October 18, 2002 & 10:25:17 AM c:\projects\diststd\tc22.dgn LV=35,63 VI=TC22

REVISION DATE:02/02/99

RTE. SECTION COUNTY 32 21 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT TYPE III BARRICADES -WITH TWO FLASHING AMBER LIGHTS ON EACH. TYPE I OR TYPE II BARRICADES WITH ONE FLASHING AMBER LIGHT ON EACH, OR TYPE III BARRICADES WITH TWO FLASHING 60 m± (200'±)-AMBER LIGHTS ON EACH. DRIVEWAY 60 m± (200'±) (40 COLLECTOR LIMIT>60 Km/h (W20-1(0) M6-4(0)-2115 AHEAD M6-1(0)-2115

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

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OF DRIVEWAYS
- 1. SIDE ROAD WITH A SPEED LIMIT OF 60 km/h (40 MPH) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- 0) ONE ROAD CONSTRUCTION AHEAD SIGN 900x900 (36x36) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 60 m (200') 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 60 km/h (40 MPH) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- a) ONE ROAD CONSTRUCTION AHEAD SIGN 1.2 m x 1.2 m (48×48) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 150 m (500') 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:

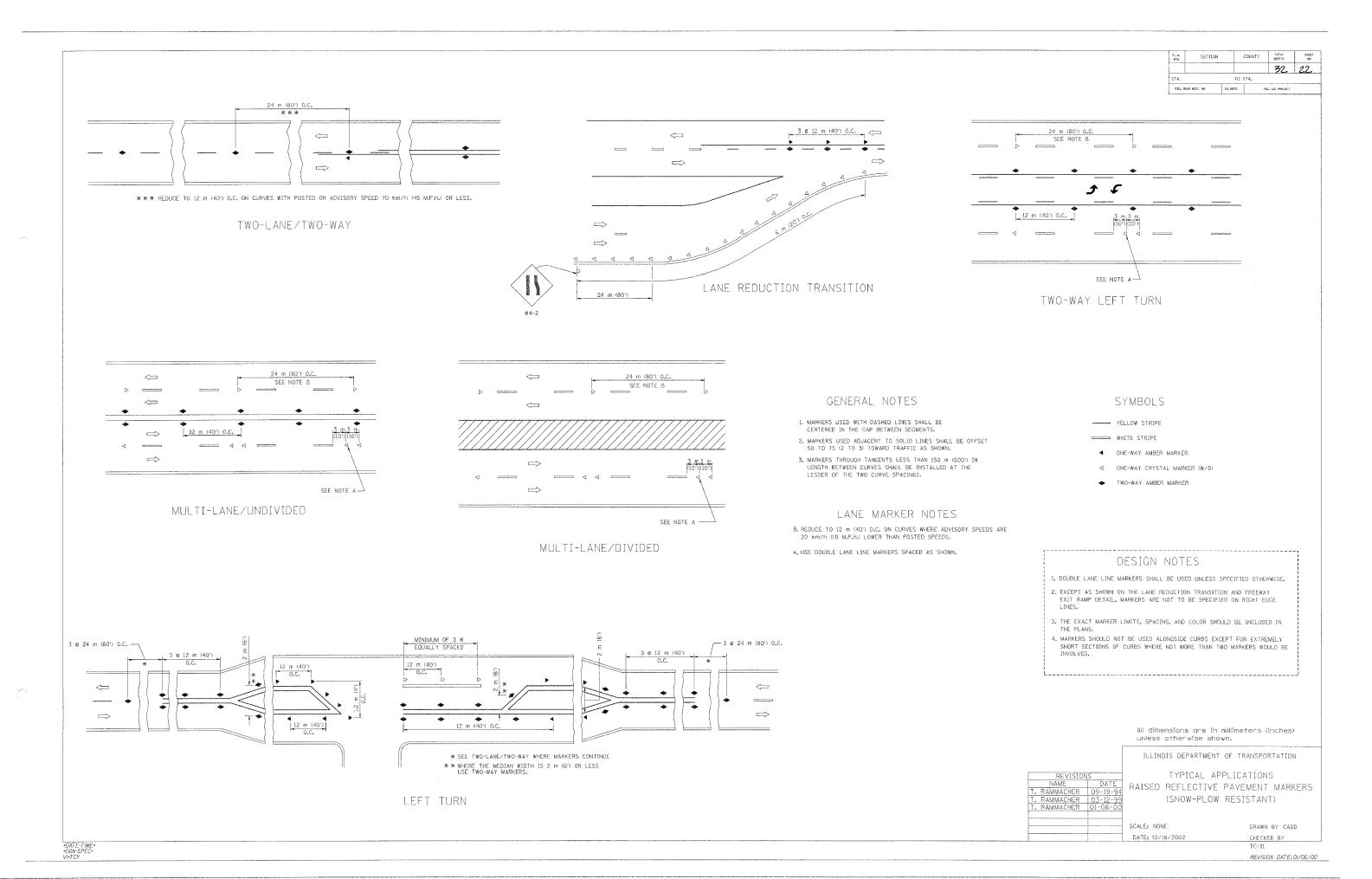
USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER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

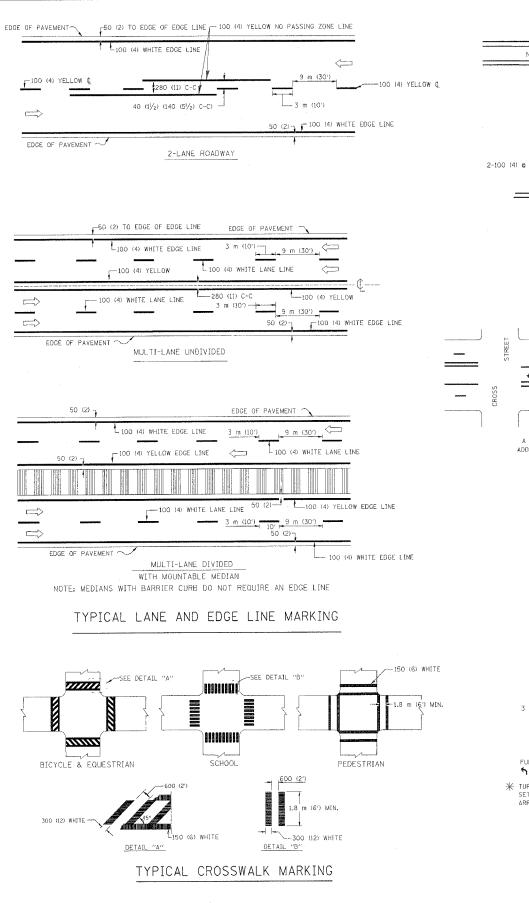
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

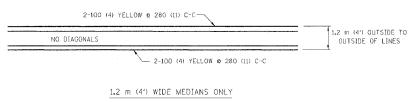
REVISIO!	VS	THE INDIC DEPARTM	ENT OF TRANSPORTATION
NAME	DATE	ILLINOIS DEL AITIM	ENT OF TRANSFORTATION
LHA	6/89	TRACETO CONTR	OL AND PROTECTION
T. RAMMACHER	09/08/94	INAFFIC CONIN	OL AND PROTECTION
J. OBERLE	10/18/95		FOR
A. HOUSEH	03/06/96	CIRE DOADS	NITEDOEOTIONS AND
A. HOUSEH	10/15/96	SIDE RUADS, I	INTERSECTIONS, AND
T. RAMMACHER	01/06/00	n n	RIVEWAYS
		טר	(IVEWAIS
	***************************************	SCALE: VERT. HORIZ.	DRAWN BY
		DATE 10/18/2002	CHECKED BY

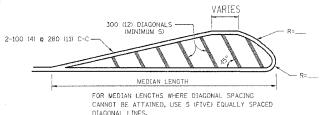
REVISION DATE: 01/06/00

L
Friday October 18,2002 @ 10:20:23 AM
c:\projects\diststd\tcl0.dgn L.V=35,63
USER



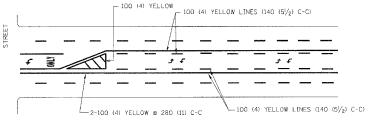




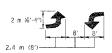


DIAGONAL LINE SPACING: 15 m (50') C-C (LESS THAN 50 km/h (30 MPH))
25 m (75') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH))
45 m (150') C-C (MORE THAN 70 km/h (45 MPH))

MEDIANS OVER 1.2 m (4') WIDE

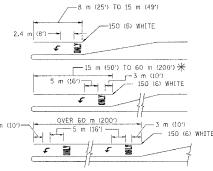


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR, ADDITIONAL PAIRS SHALL BE PLACED AT 60 m (200') TO 90 m (300') INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

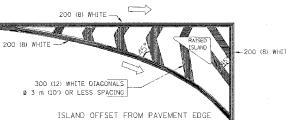
TYPICAL PAINTED MEDIAN MARKING

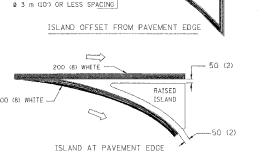


* TURN LANES IN EXCESS OF 120 m (400") IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

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	100 (4)	SKIP-DASH	YELLOW	3 m (10") LINE WITH 9 m (30") SPACE
CENTERLINE ON MULTI-LANE UNDIVEDED PAVEMENT	2 @ 100 (4)	SOLID	YELLOW	280 (11) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	100 (4) 2 @ 100 (4)	SOLID SOLID	YELLOW YELLOW	140 (51/2) C-C FROM SKIP-DASH CENTERLINE 280 (11) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	100 (4) 125 (5) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	3 m (10') LINE WITH 9 m (30') SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	600 (2') LINE WITH 1.8 m (6') SPACE
EDGE LINES	100 (4)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW: EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	150 (6) LINE; FULL SIZE LETTERS & SYMBOLS (2.4 m (8'))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 100 (4) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	3 m (10") LINE WITH 9 m (30") SPACE FOR SKIP-DASH; 140 (51/2) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	2.4 m (8') 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 & 150 (6) 300 (12) & 45° 300 (12) & 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 1.8 m (6') APART 600 (2') APART 600 (2') APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	600 (24)	SOLID	WHITE	PLACE 1.2 m (4') IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 100 (4) WITH 300 (12) DIAGONALS @ 45° NO DIAGONALS USED FOR 1.2 m (4') WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	280 (11) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	200 (8) WITH 300 (12) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 4.5 m (15') C-C (LESS THAN 50 km/h (30 MPH)) 6 m (20') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH) 9 m (30') C-C (OVER 70 km/h (45 MPH))
RAILROAD CROSSING	600 (24) TRANSVERSE LINES: "RR" IS 1,8 m (6") LETTERS; 400 (16) LINE FOR "X"	SOLID	WHETE	SEE STATE STANDARD 780001 AREA OF: "R"=0.33m2 (3.6 SQ. FT.) EACH "X"=5.0 m2 (94.0 SQ. FT.)
SHOULDER DIAGONALS	300 (L2) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	15 m (50°) C-C (LESS THAN 50 km/h (30 MPH)) 25 m (75°) C-C (50 km/h (30 MPH) T0 70 km/h (45 MPH 45 m (150°) C-C (0VER 70 km/h (45 MPH))

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE TYPICAL PAVEMENT MARKINGS

SCALE: NONE

DRAWN BY CADD CHECKED BY

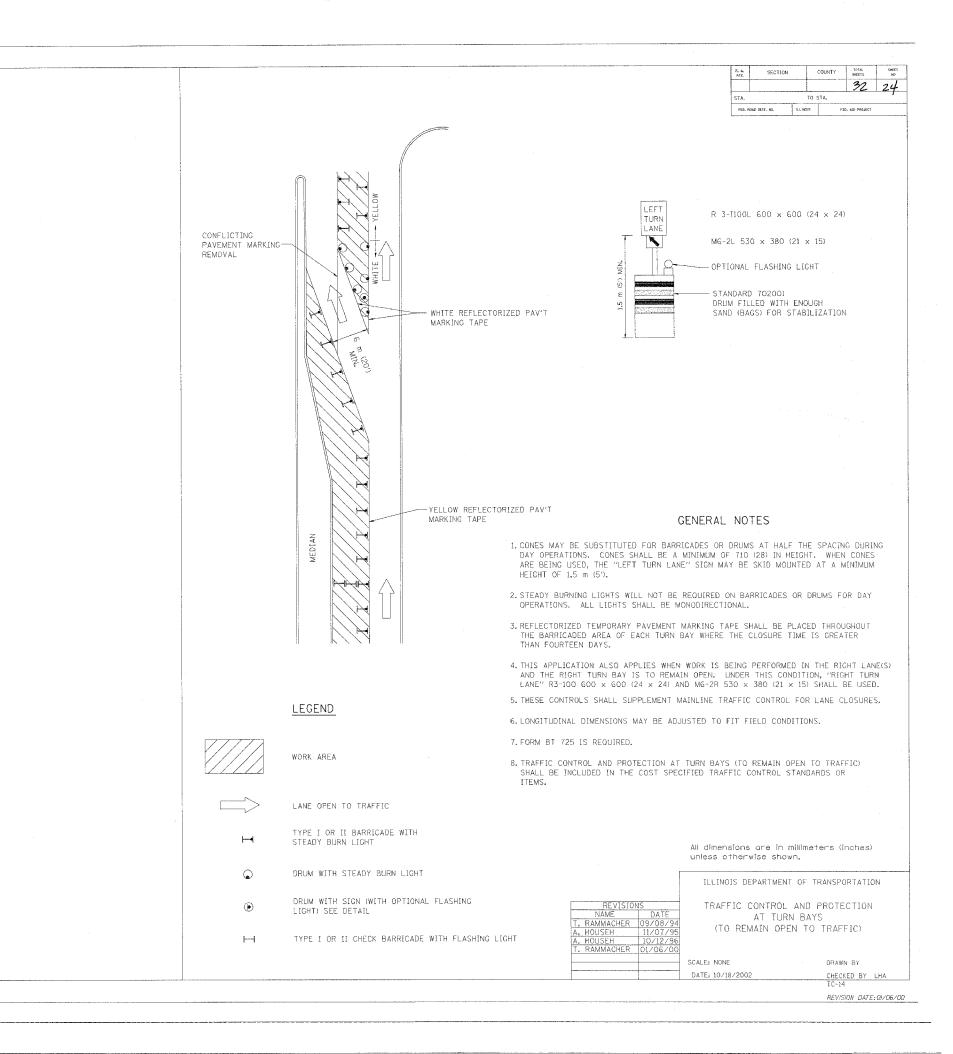
TC-13

REVISION DATE: 01/06/00

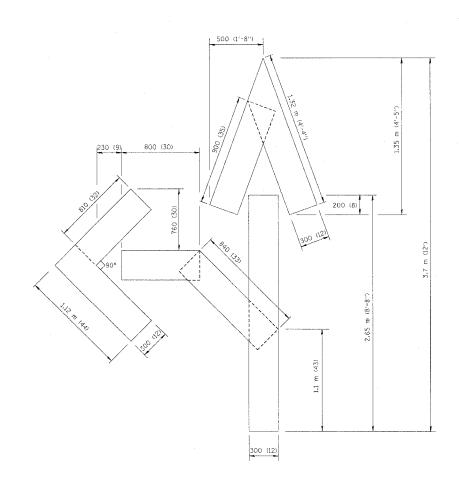
TOFAL SHEET NO 32 23

FED. AID PROJECT

BLILENOIS







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

2.030 m (6'-8") 760 (30)

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING

SCALE: NONE DATE 10/18/2002 DRAWN BY CADD

CHECKED BY TC-16

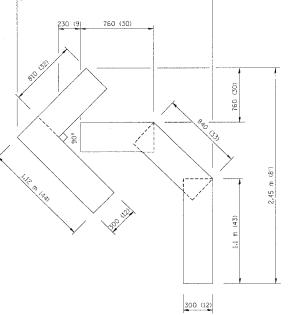
REVISION DATE: 08/28/00

300 (12) QUANTITY 100 (4) LINE = 19.7 m (64.1 ft.) 1.97 sq. m (21.1 sq. ft.)

2 m (6°)

* 200 | * | * | 200 | * | * | 300 (12)

* 100 (4)

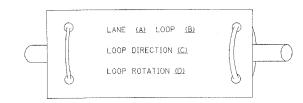


Friday October 18.2002 @ 10:23:21 AM c:\projects\diststd\tc16.dgn LV=35,63 VFTC16

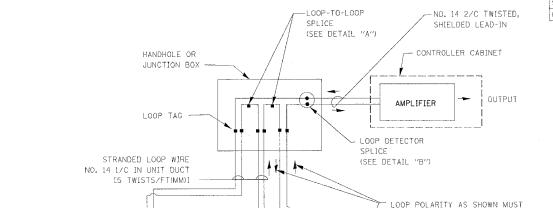
LOOP DETECTOR NOTES

- 1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
- 2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
- 3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE, EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
- 4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- 5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
- 6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
- 7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG



- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



F.A. SECTION COUNTY TOTAL SHEET NO.

STA. TO STA.

FED. 80A0 DIST, NO. I ILLINOIS FED. AID PROJECT

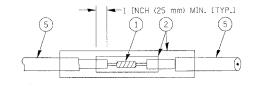
DETECTOR LOOP WIRING SCHEMATIC

L00P 2

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.

LOOP 1

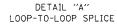
■ LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.

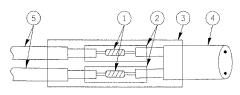


VEHICLE

L00P 3

MOVEMENT





BE STRICTLY OBSERVED WHEN

SPLICING LOOP WIRES TO THE

NO. 14 2/C TWISTED, SHIELDED

LEAD-IN.

DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

- (1) WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- (2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- (3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.
- (4) NO. 14 2/C TWISTED, SHIELDED CABLE.
- (5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

ILLINOIS DEPARTMENT OF TRANSPORTATION

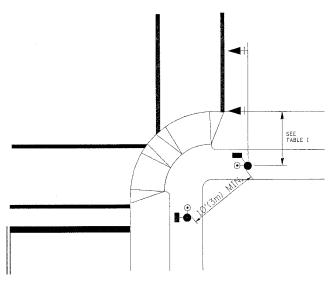
DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: VERT. NONE HORIZ. DATE 10/18/2002 DRAWN BY: RWP DESIGNED BY: DAD CHECKED BY: DAZ SHEFT 1 05 4

MAST ARM MOUNTED SIGNAL IN PROPOSED & FUTURE SIDEWALK AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNAL AND PUSHBUTTON DETECTOR CURB, SHOULDER, OR EDGE OF PAVEMENT (SEE PLANS) 2′(<u>600 mm)</u> TYP. 401 5' (1.5m) MAX.

TRAFFIC SIGNAL MAST ARM AND POST

PEDESTRIAN SIGNAL PUSHBUTTON



RECOMMENDED PUSHBUTTON LOCATIONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHALL BE IN ACCORDANCE WITH THE CURRENT MUTCO (SEE NOTE 1). TO MEET MUTCD REQUIREMENTS, PEDESTRIAN SIGNAL PUSHBUTTONS MAY HAVE TO BE MOUNTED ON A SEPARATE POST.

F.A RTE.	SECTION	COUNT	Y	TOTAL	SHEET NO.
				32	27
STA.		TO STA.			,
FED ROAD	DIST NO 1 TILES	nis EED	ΔIN	PROJECT	-

NOTES:

1. AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS WITH PEDESTRIAN ACTUATION. EACH PUSHBUTTON SHALL ACTIVATE BOTH THE WALK INTERVAL AND THE ACCESSIBLE PEDESTRIAN SIGNALS.

AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS, PUSHBUTTONS SHOULD CLEARLY INDICATE WHICH CROSSWALK SIGNAL IS ACTUATED BY EACH PUSHBUTTON. PUSHBUTTONS AND TACTILE ARROWS SHOULD HAVE HIGH VISUAL CONTRAST (SEE THE DEPARTMENT OF JUSTICE'S AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN, 1991). TACTILE ARROWS SHOULD POINT IN THE SAME DIRECTION AS THE ASSOCIATED CROSSWALK. AT CORNERS OF SIGNALIZED LOCATIONS WITH ACCESSIBLE PEDESTRIAN SIGNALS WHERE PEDESTRIAN PUSHBUTTONS ARE PROVIDED, THE PUSHBUTTONS SHOULD BE SEPARATED BY THE DISTANCE OF AT LEAST 10 FT (3m). THIS ENABLES PEDESTRIANS WHO HAVE VISUAL DISABILITIES TO DISTINGUISH AND LOCATE THE APPROPRIATE PUSHBUTTON.

PUSHBUTTONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHOULD BE LOCATED AS FOLLOWS:

- A: ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR, AND WHERE THERE IS AN ALL WEATHER SURFACE, WHEELCHAIR ACCESSIBLE ROUTE TO THE RAMP.
- B: WITHIN 5 FT (1.5m) OF THE CROSSWALK EXTENDED.
- C: WITHIN 10 FT (3m) OF THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- D: PARALLEL TO THE CROSSWALK TO BE USED (SEE MUTCD FIGURE 4E-2).
- E: NORMAL PEDESTRIAN PUSHBUTTON MOUNTING HEIGHT SHOULD BE 3.5 FT (1.05m) ABOVE ADJACENT SIDEWALK
- 2. PEDESTRIAN SIGNAL FACES SHALL BE MOUNTED WITH THE BOTTOM OF THE HOUSING NOT LESS THAN 8 FT (2.4m) NOR MORE THAN 10 FT (3.0m) ABOVE THE SIDEWALK LEVEL AND SO THERE IS A PEDESTRIAN INDICATION IN THE LINE OF PEDESTRIANS' VISION WHICH PERTAINS TO THE CROSSWALK
- 3. THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, NOT MOUNTED OVER A ROADWAY, SHALL BE AT LEAST 10 FT (3,0m) BUT NOT MORE THAN 15 FT (4.5m) ABOVE THE SIDEWALK OR, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALKS EXIST.
- 4. THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, MOUNTED OVER A ROADWAY, SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001 AND 877006. (16 FT (5m) MIN., 18 FT (5.5m) MAX., FROM HIGHEST POINT OF PAVEMENT)

PEDESTRIAN SIGNAL POST

PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON DETECTOR LOCATION

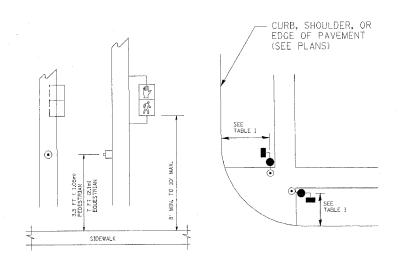


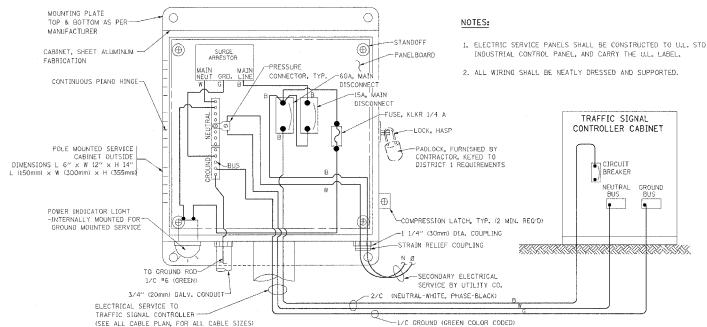
TABLE I

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MIN. DIST. FROM BACK OF CURB)	SHOULDER/NON-CURBED AREA (MIN. DIST. FROM EDGE OF PAVEMENT)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1,2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN PUSHBUTTON	SEE NOTE 1	SEE NOTE I

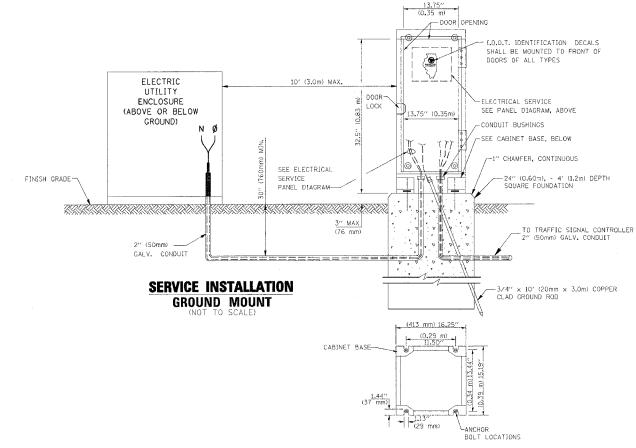
ILLINOIS DEPARTMENT OF TRANSPORTATION NAME DAT BUREAU OF TRAFFIC 1/01/ DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS DRAWN BY: RWP DESIGNED BY: DAD CHECKED BY: DAZ SHEET 2 OF 4 SCALE: VERT. NONE DATE 10/18/2002

ci\prajects\diststd\ts05.dgn VI-TS05

REVISION DATE: 01/01/02

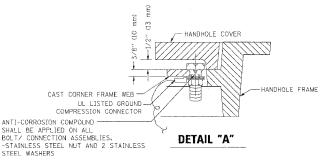


ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE) SERVICE INSTALLATION POLE MOUNT (SHOWN)



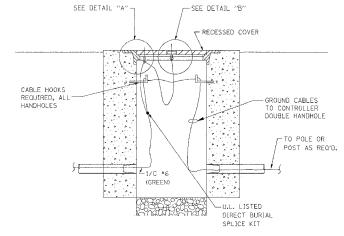
10/18/2002 o:\projects\distatd\ts05.dgn **CABINET - BASE BOLT PATTERN**

I. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508.





DETAIL "B"



HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

(2) 1/2" x 1 1/4" STAINLESS STEEL BOLT WITH SPLIT LOCK WASHER AND NYLON INSERT LOCKOUT WELDED TO _____ FRAME AND TO COVER, (TYPICAL) HEAVY DUTY COPPER COMPRESSION GROUNDING TERMINAL (TYPICAL) - EXISTING HANDHOLE GROUNDING CABLE (PAID FOR SEPARATELY)

EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL

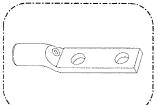
(NOT TO SCALE)

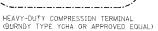
NOTES:

GROUNDING SYSTEM

COUNTY SECTION 32 28 STA. TO STA. FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

- L. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.), GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
- 2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
- 3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- 4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



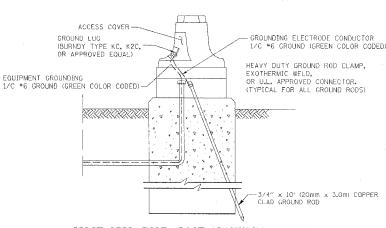




3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EUAL)

NOTES:

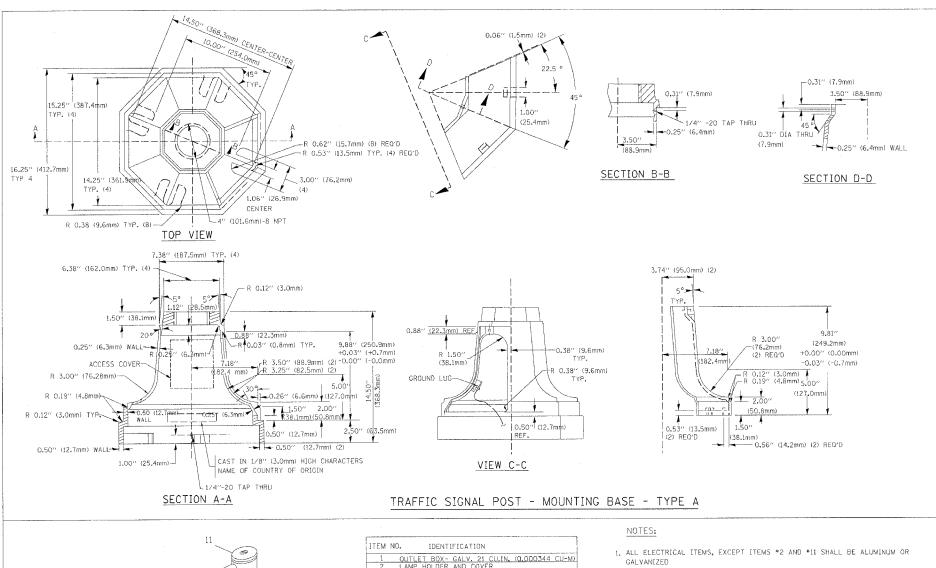
 ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED. · GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.

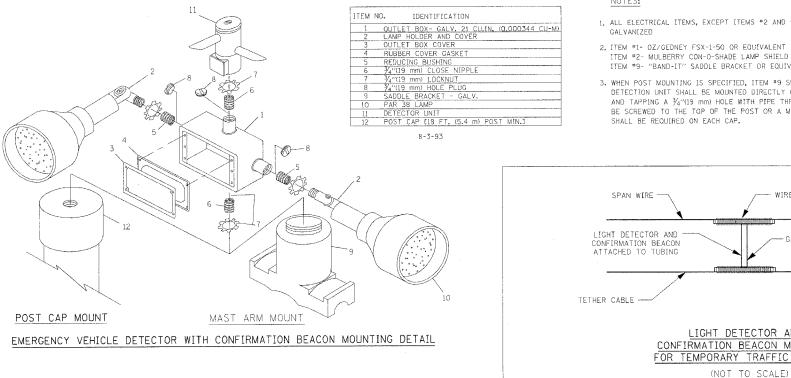


MAST ARM POLE / POST-GROUNDING DETAIL

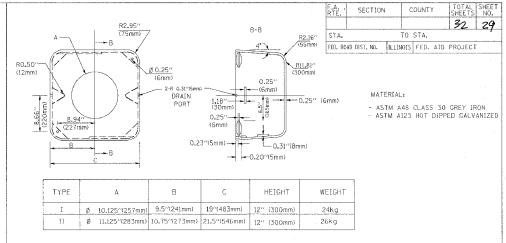
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION		
NAME.	DATE.	ILLINOIS DEFARTMEN	OF TRANSPORTATION	
CADD	5/30/00			
CADD	3/15/01	DISTR	ICT 1	
BUREAU OF TRAFFIC	1/01/02	DISTR		
		STANDARD TR.	AFFIC SIGNAL	
		DESIGN	DETAILS	
		VERT	DRAWN BY: RWP	
		SCALE: VERT. NONE HORIZ, NONE	DESIGNED BY: DAD CHECKED BY: DAZ	
		DATE 10/18/2002	SHEET 3 OF 4	

REVISION DATE:01/01/02

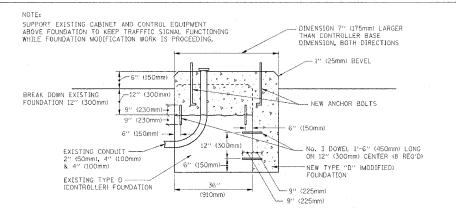




10/18/2002 c:\projects\diststd\ts05.dgn VI-TS05

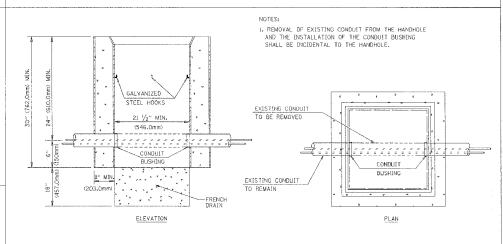


SHROUD DETAIL



MODIFY EXISTING TYPE "D" FOUNDATION

(NOT TO SCALE)



DETAIL HANDHOLE TO INTERCEPT EXISTING CONDUIT

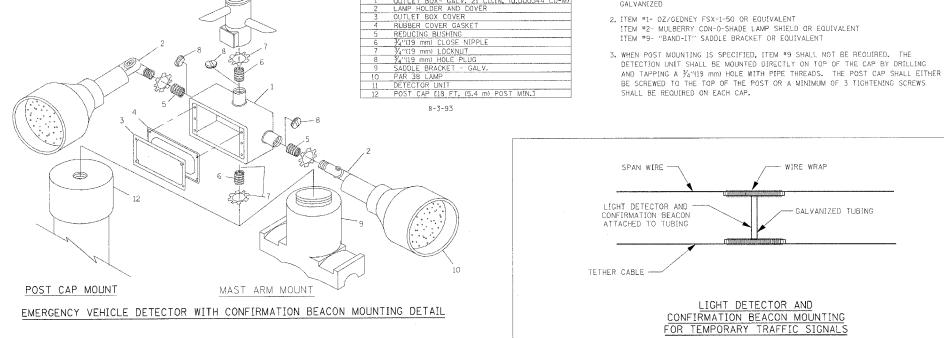
		VISIONS	RE		
	DATE	NAME			
	5/30/00	TRAFFIC	OF	BUREAU	
	3/15/01	TRAFFIC	OF	BUREAU	
	11/12/01	TRAFFIC	OF	BUREAU	
(1-01-02	TRAFFIC	ΟF	BUREAU	
,					
Ì					
]					
1					
SCA			_		
1			_		

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT 1 TANDARD TRAFFIC SIGNAL DESIGN DETAILS

NLE: VERT. NONE

REVISION DATE: 01/01/02



PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EDUAL 3' (900 mm) X * UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

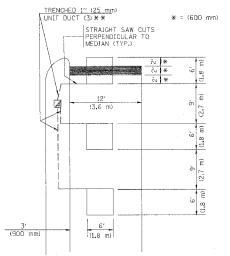
LEFT TURN LANES WITH MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)

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

TRENCHED 1" 125 mm)
UNIT DUCT (3) * *

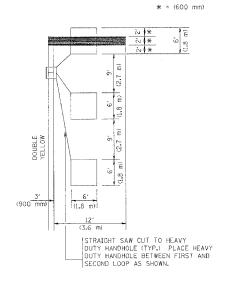
STRAIGHT SAW CUTS
PERPENDICULAR TO
MEDIAN (TYP.)



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

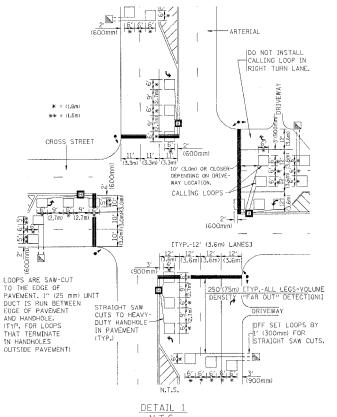
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)

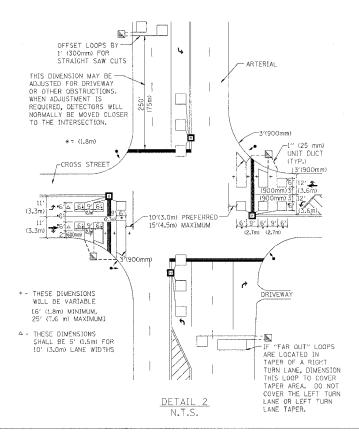


NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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)



| T. A. | SECTION | COUNTY | STAR. | SecT. | S

NOTES:

VEHICLES LOOP DETECTORS

- * ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIFLDED.
- * 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 \underline{ALL} DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- * EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- * WHEN NON-LOCKING, PRESENCE DETECTION IS USED, <u>MORE</u>
 THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR
 (i.e. 1-1/2, 1-3/4, 2).
- * WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

PLACEMENT OF DETECTORS

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

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

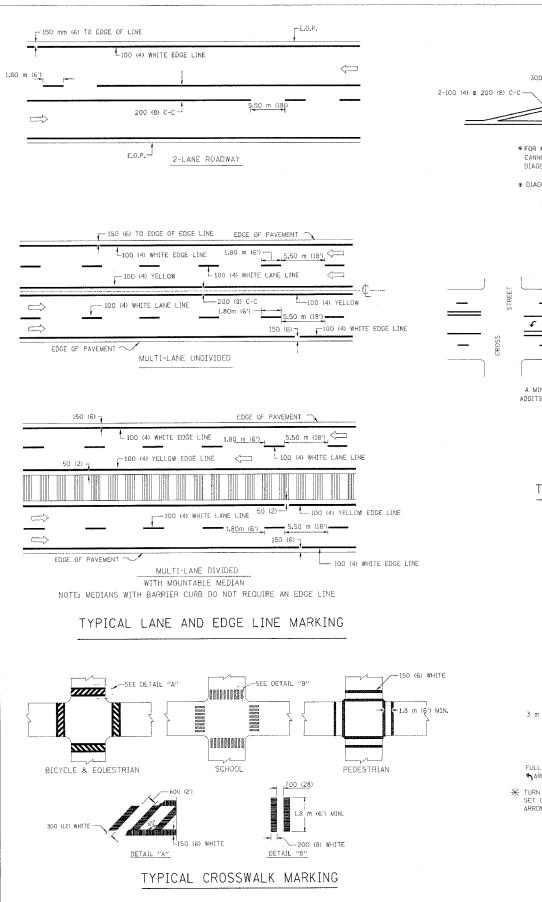
ALL DETAILS AND NOTES SHOWN ARE FROM THE I,D.O.T. DISTRICT 1
TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

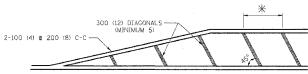
THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

	ILLINOIS DEPARTMENT OF TRANSPORTATION	
REVISIONS	DISTRICT 1	
NAME DATE	DETECTOR LOOP	
	INSTALLATION DETAILS	
	FOR ROADWAY RESURFACING	ò
	SCALE: NONE DRAWN BY CADD DESIGNED BY	
	DATE 10/18/2002 - CHECKED BY R.K.F	

10/18/2002 c:\projects\diststd\ts07.dgn VI=TS07

REVISION DATE:

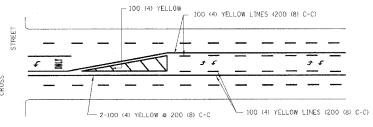




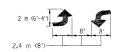
*FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED

* DIAGONAL LINE SPACING: 6.1 m (20') C-C

PAINTED MEDIANS

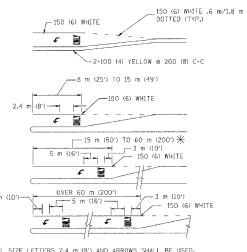


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 60 m (200') TO 90 m (300') INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

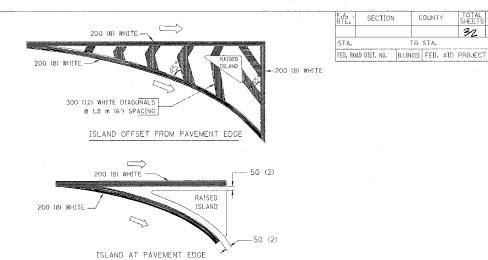


FULL SIZE LETTERS 2.4 m (8") AND ARROWS SHALL BE USED, \P AREA = 1.47 m² (15.8 SQ. FT.) INT AREA = 2.13 m² (22.9 SQ. FT.)

* TURN LANES IN EXCESS OF 120 m (400') 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	100 (4)	SKIP-DASH	YELLOW	1.80 m (6') LINE WITH 5.50 m (18') SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 100 (4)	SOLID	YELLOW	200 (8) C-C
NO PASSING ZONE LINES: OR ONE DIRECTION FOR BOTH DIRECTIONS	100 (4) 2 @ 100 (4)	SOLID SOLID	AETTOM AETTOM	200 (8) C-C
ANE LINES	100 (4) 125 (5) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	1.80 m (6') LINE WITH 5.50 m (18') SPACE
OOTTED LINES EXTENSIONS OF CENTER, LANE OR FURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	600 (2') LINE WITH 1.8 (6') SPACE
EDGE LINES	100 (4)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW: EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	150 (6) LINE: FULL SIZE LETTERS & SYMBOLS (2.4 m (8"))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 100 (4) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	L.8 m (6') LINE WITH 5.50 m (18') SPACE FOR SKIP-DASH; 200 (8) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	2.4 m (8') 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 © 150 (6) 300 (12) @ 45° 200 (8) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 1.8 m (6') APART 600 (2') APART 700 (2'-4") APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	600 (24)	SOLID	WHITE	PLACE 1.2 m (4') IN ADVANCE OF AND PARALLEL TO (ROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHENE POSSIBLE
PAINTED MEDIANS 2 @ 100 (4) 300 (12) DIAM @ 45°		SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	200 (8) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES 200 (8) WITH 300 (12) DIAGONALS @ 45°		SOLID	WHITE	DIAGONALS: 6.1 m (20') (LESS THAN 50 km/h (30 MPH))
RAILROAD CROSSING	600 (24) TRANSVERSE LINES; "RR" IS 1.8 m (6') LETTERS; 400 (16) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA 0F: 'PP*=0,33m2' (3.6 SQ. FT.) EACH 'YY*=5.0 m2' (54.0 SQ. FT.)

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STREET MARKING STANDARDS, PRINTED BY CITY OF CHICAGO, DEPARTMENT OF TRANSPORTATION, BUREAU OF TRAFFIC.

All dimensions are in millimeters (inches) unless otherwise shown. ILLINGIS DEPARTMENT OF TRANSPORTATION CITY OF CHICAGO REVISIONS NAME

TYPICAL PAVEMENT MARKINGS

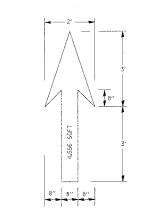
> SCALE: NONE DATE 10/18/2002

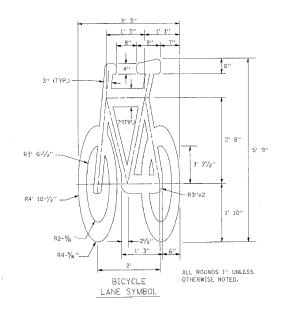
DRAWN BY CADD CHECKED BY TC-24

REVISION DATE: 12/07/00

1 OF 2

32 31

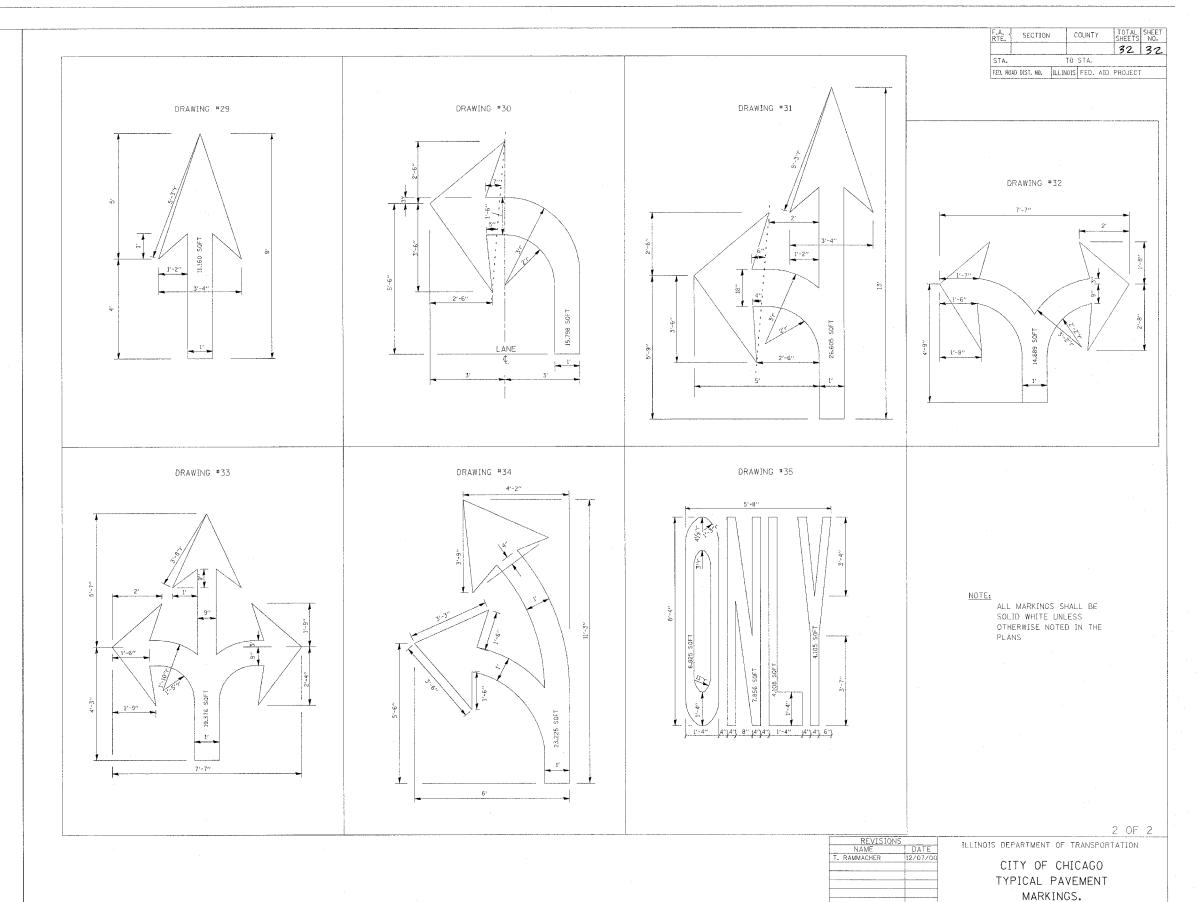




NOTE:
1.) FOR BIKE LANE SYMBOLS ONLY,
USE PRE-FORMED THERMOPLASTIC
WITH A MINIMUM THICKNESS OF 90 MILS,
MINIMUM SKID RESISTANCE VALUE OF 60 BPN,
& A MINIMUM INDEX OF REFRACTION OF 1.50.

2.) THE RESIDENT ENGINEER SHALL CONTACT MR. BEN GOMBERG AT 312-744-8093 AT LEAST ONE CALENDAR WEEK PRIOR TO INSTALLING BIKE LANE SYMBOLS.

TYPICAL BIKE LANE SYMBOLS
DRAWING #28



SCALÉ: NONE DATE 03/09/2004 DRAWN BY CHECKED BY TC-24

REVISION DATE:02/25/04