STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

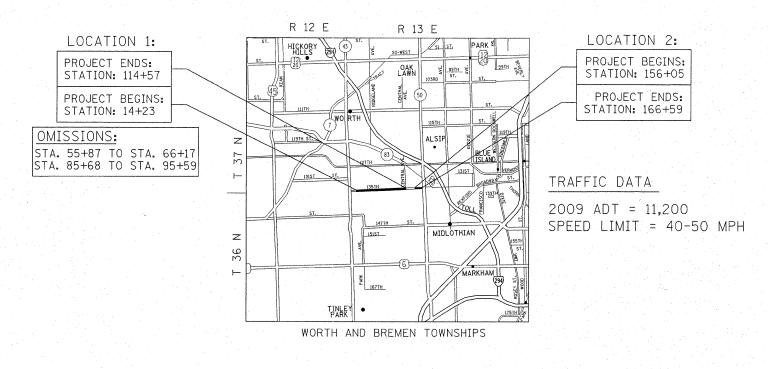
PROPOSED HIGHWAY PLANS

FAU 1596: 135TH ST.

LOCATION 1: IL 43 (HARLEM AVE.) TO CENTRAL AVE. LOCATION 2: LAVERGNE AVE. TO IL 50 (CICERO AVE.)

SECTION: 3145A-RS

RESURFACING COOK COUNTY C-91-068-11



GROSS LENGTH OF PROJECT = 15,236 FEET = 2.89 MILES
NET LENGTH OF PROJECT = 9,067 FEET = 1.72 MILES

D-91-068-11



STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

SUBMITTED MAY 16 20 11

DIAM M. O'MAY

DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Tuly 20 11

Coatt C. Stitt P.C. A

Cattry Engineer of Design and Environment

Tuly 20 11

Christian M. Rood A

DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT LOCATED IN THE CITY OF PALOS HEIGHTS AND VILLAGE OF CRESTWOOD

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

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

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

PROJECT ENGINEER: KARI SMITH (847) 705–4437 PROJECT MANAGER: KEN ENG (847) 705–4247

CONTRACT NO. 60M01

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INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES
3.4	SUMMARY OF QUANTITIES
4-5	TYPICAL SECTIONS
6-10	ROADWAY AND PAVEMENT MARKING PLANS
11-IIA	DETECTOR LOOP REPLACEMENT PLANS
12	DETAILS FOR FRAMES AND LIDS ADJUSTMENTS WITH MILLING
13	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT
14	CURB AND CURB AND GUTTER REMOVAL AND REPLACEMENT
15	BUTT JOINT AND HMA TAPER DETAILS
16	HMA TAPER AT EDGE OF P.C.C PAVEMENT
17	TRAFFIC CONTROL AND PROTECTION FOR SIDEROADS, INTERSECTIONS, AND DRIVEWAYS
18	TYPICAL APPLICATION FOR RAISED REFLECTIVE PAVEMENT MARKERS
19	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
20	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS
21	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
22	ARTERIAL ROAD INFORMATION SIGN
23	DISTRICT ONE DETECTOR LOOP INSTALLATION DETAIL FOR ROADWAY RESURFACING

STATE STANDARDS

000001-06 STANDARD SYMBOLS ARREVIATIONS AND PATTERNS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
442201- <i>03</i>	CLASS C AND D PATCHES
604001- <i>03</i>	FRAME AND LIDS, TYPE 1
606001 <i>-04</i>	CONCRETE CURB TYBE B AND COMBINATION CONCRETE CURB AND GUTTER
642001 <i>-0</i> J	SHOULDER RUMBLE STRIPS
701011- <i>02</i>	OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701201 -<i>0</i>4	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS≥ 45 MPH
701301- 04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306 <i>-03</i>	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATION DAY ONLY FOR SPEEDS ≥ 45 MPH
701311 <i>-03</i>	LANE CLOSURE, 2L 2W, MOVING OPERATIOS, DAY ONLY
701426 <i>-0</i> 4	LANE CLOSURE, MULTILANE, INTERMITTEN OR MOVING OPERATION, FOR SPEEDS≥ 45 MPH
701427	LANE CLOSURE, MULTILANE, INTERMITTEN OR MOVING OPERATION, FOR SPEEDS ≤ 40 MPH
701606 <i>-0</i> 7	URBAN LANE CLOSURE, MULTILANE 2W WITH MOUNTABLE MEDIAN
701701 -<i>0</i>7	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901- <i>01</i>	TRAFFIC CONTROL DEVICES

GENERAL NOTES

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

10 FEET (3 METER) TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURB AND 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 VILLAGE OF CRESTWOOD AND THE CITY OF PALOS HEIGHTS.

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

WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 11/2 INCHES (40 MM) WHERE THE SPEED LIMIT IS 45 MPH (80 KM/H) OR LESS AND 1 INCH (25 MM) WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH (80 KM/H). WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES (75 MM) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).

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

THE RESIDENT ENGINEER SHALL CONTACT MS. PATRICE HARRIS, AREA TRAFFIC FIELD ENGINEER AT (708) 597-9800 A MINIMUM OF 2 WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKING.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MININMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF TEMPORARY TRAFFIC CONTROL DEVICES.

THE RESIDENT ENGINEER SHALL DETERMINE THE LOCATIONS OF CLASS "D" PATCHES AND CURB AND GUTTER REMOVAL AND REPLACEMENT.

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

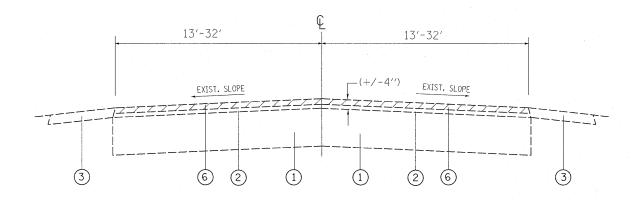
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INDEX	OF SHEETS, STATE STA	NDARDS, AND	GENERAL	NOTES
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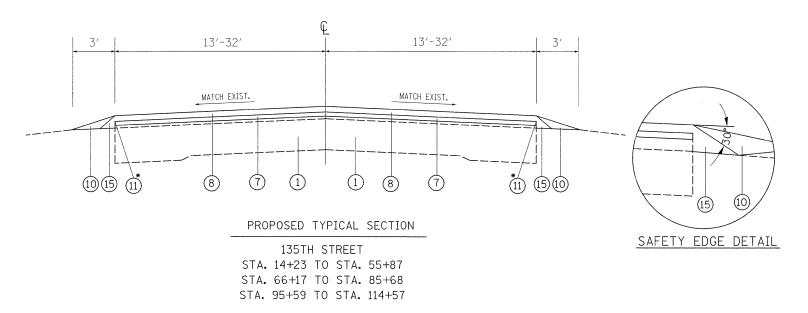
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	SUMMARY OF QUANTITIES	V ·	URBAN		Ç	ONSTRUCT	ION TYPE	CODE		\prod		SUMMARY OF QUANTITIES		URBAN		C	ONSTRUCTI	ON TYPE	CODE	
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	0005 100%STATE							CODE NO	ITEM	UNIT	TOTAL	0005 100%STATE					
		SO YD	18	ROADWAY							70300240	TEMPORARY PAVEMENT MARKING	FOOT	460	ROADWAY 460					
21101615	TOPSOIL FURNISH AND PLACE, 4"										70300240	- LINE 6"								
25200110 40600200	SODDING, SALT TOLERANT BITUMINOUS MATERIALS (PRIME COAT)	SO YD	30	18 30							70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	565	565					
40600300	AGGREGATE (PRIME COAT)	TON	146	146							70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	45	45					
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	55	55							70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	2270	2270					
40600895	CONSTRUCTING TEST STRIP	EACH	2	2						*	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	182	182					
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	228	228						*	78000200	THERMOPLASTIC PAVEMENT MARKING	FOOT	31380	31380					
40600985	PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT	SO YD	273	273						*	78000400	- LINE 4" THERMOPLASTIC PAVEMENT MARKING	FOOT	460	460					
40601005	HOT-MIX ASPHALT REPLACEMENT OVER	TON	139	139								- LINE 6"	FOOT	565	6.5					
40603340	PATCHES HOT-MIX ASPHALT SURFACE COURSE,	TON	3061	3061						*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	7001	363	565					
	MIX "D", N70	SQ YD	20	20						*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	45	45					
42001300	PROTECTIVE COAT HOT-MIX ASPHALT SURFACE REMOVAL, 21/4"	SQ YD	30317	30317						*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	355	355					
44000016	HOT-MIX ASPHALT REMOVAL OVER PATCHES.	SO YD	605	605							78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	350	350					
44002216	4"	30 10	003	003							88600600	DETECTOR LOOP REPLACEMENT	FOOT	173	173					
44003510	MEDIAN REMOVAL PARTIAL DEPTH	SQ FT	6143	6143							X2020110	GRADING AND SHAPING SHOULDERS	UNIT	150	150					
44201753	CLASS D PATCHES, TYPE II. 9 INCH	SQ YD	433	433							X4060826	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	1590	1590					
44201757	CLASS D PATCHES, TYPE III, 9 INCH CLASS D PATCHES, TYPE IV, 9 INCH	SO YD	204	79 204							X4400100	PORTLAND CEMENT CONCRETE SURFACE REMOVAL (VARIABLE DEPTH)	SO YD	1405	1405					
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	600	600							X6030310	FRAMES AND LIDS TO BE ADJUSTED	EACH	2	2					
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	6	6							70004560	(SPECIAL)	БООТ		105					
64200105	SHOULDER RUMBLE STRIPS	FOOT	300	300							Z0004562	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	105	105					
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6 _.							Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	6	6					
67100100	MOBILIZATION	L SUM	i	1.							Z0030850	TEMPORARY INFORMATION SIGNING	SO FT	102.8	102.8					
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1		-														
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1																
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	1																
70102635		L SUM	1	1																
70300100	SHORT TERM PAVEMENT MARKING	FOOT :	6810	6810																
70300210		SQ FT	182	182																
70300220	TEMPORARY PAVEMENT MARKING	FOOT	31380	31380																
	- LINE 4"																			
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EXISTING TYPICAL SECTION

135TH STREET STA. 14+23 TO STA. 55+87 STA. 66+17 TO STA. 85+68 STA. 95+59 TO STA. 114+57



* NOTE: PROP. SHOULDER RUMBLE STRIPS FROM STA. 113+07 TO STA. 114+57

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STATE OF ILLINOIS

LEGEND

- (1) EXISTING P.C.C. PAVEMENT, 9" (+/-)
- (2) EXISTING HMA SURFACE COURSE, 4" (+/-)
- 3 EXISTING AGGREGATE SHOULDER
- (4) EXISTING CONCRETE CURB AND GUTTER
- (5) EXISTING CONCRETE MEDIAN
- (6) PROPOSED HMA SURFACE REMOVAL, 2 1/4 "
- 7 PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4 "
- (8) PROPOSED HMA SURFACE COURSE, MIX "D", N70, 1 1/2 "
- (9) PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 1"
- (10) PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B PROPOSED GRADING AND SHAPING SHOULDERS
- (11) PROPOSED SHOULDER RUMBLE STRIPS
- (12) PROPOSED PCC SURFACE REMOVAL (VARIABLE DEPTH), 6' WIDE
- (13) PROPOSED MEDIAN REMOVAL, PARTIAL DEPTH
- (14) EXISTING MEDIAN AFTER PARTIAL DEPTH REMOVAL
- (15) SAFETY EDGE

NOTES:

- 1. PAVEMENT PATCHING SHALL BE DONE PRIOR TO MILLING OF ROADWAY (SEE BD-22)
- 2. SEE ROADWAY AND PAVEMENT MARKING PLAN SHEETS FOR LOCATIONS OF LEFT AND RIGTH TURN LANES.

HOT-MIX ASPHALT MIXTURE R	EQUIREM	MENTS	
MIXTURE USES		DESIGN AIF	R VOIDS
RESURFACING			
HMA SURFACE COURSE, MIX "D", N70 (IL-9.5 mm)		4% AT 70	GYR.
POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50		4% AT 50	GYR.
PATCHING			
HMA REPLACEMENT OVER PATCHES, (HMA BINDER IL-19) mm)	4% AT 70	GYR.

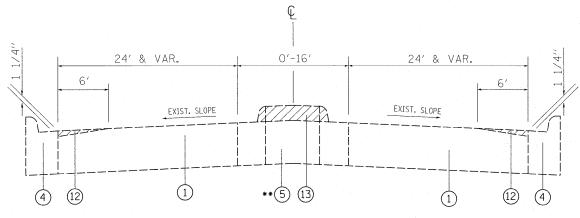
CLASS D PATCHES, (HMA BINDER IL-19 mm) 4% AT 70 GYR.

SCALE:

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

THE "AC TYPE FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 70-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PECENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.

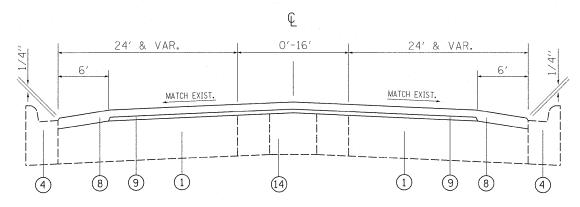
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EXISTING AND PROPOSED TYPICAL SECTIONS 135 TH ST. (HARLEM AVE. TO CICERO AVE.)							1596			3145	A-RS		соок	23	4
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EXISTING TYPICAL SECTION

135TH STREET STA. 160+19 TO STA. 165+23

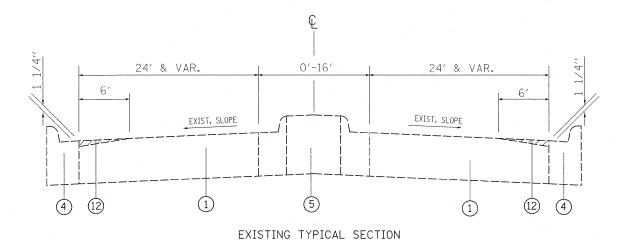
** EXISTING CORRUGATED MEDIAN FROM STA. 160+19 TO STA. 162+37 EXISTING MOUNTABLE MEDIAN FROM STA. 162+37 TO STA. 165+23



PROPOSED TYPICAL SECTION

135TH STREET

STA. 160+19 TO STA. 165+23



135TH STREET STA. 165+23 TO STA. 166+59

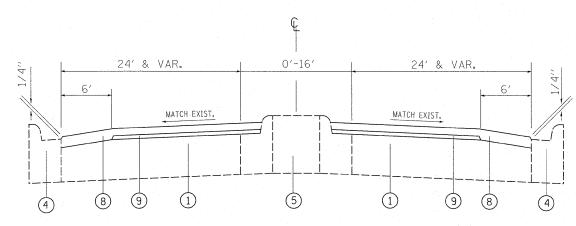
__LEGEND

- 1) EXISTING P.C.C. PAVEMENT, 9" (+/-)
- 2 EXISTING HMA SURFACE COURSE, 4" (+/-)
- 3 EXISTING AGGREGATE SHOULDER
- 4 EXISTING CONCRETE CURB AND GUTTER
- 5 EXISTING CONCRETE MEDIAN
- (6) PROPOSED HMA SURFACE REMOVAL, 2 1/4 "
- 7 PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4 "
- 8 PROPOSED HMA SURFACE COURSE, MIX "D", N70, 1 1/2 "
- 9 PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 1"
- PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B
 PROPOSED GRADING AND SHAPING SHOULDERS
- (11) PROPOSED SHOULDER RUMBLE STRIPS
- (12) PROPOSED PCC SURFACE REMOVAL (VARIABLE DEPTH), 6' WIDE
- (13) PROPOSED MEDIAN REMOVAL, PARTIAL DEPTH
- (14) EXISTING MEDIAN AFTER PARTIAL DEPTH REMOVAL
- (15) SAFETY EDGE

NOTES:

SCALE:

- 1. PAVEMENT PATCHING SHALL BE DONE PRIOR TO MILLING OF ROADWAY (SEE BD-22)
- 2. SEE ROADWAY AND PAVEMENT MARKING PLAN SHEETS FOR LOCATIONS OF LEFT AND RIGTH TURN LANES.



PROPOSED TYPICAL SECTION

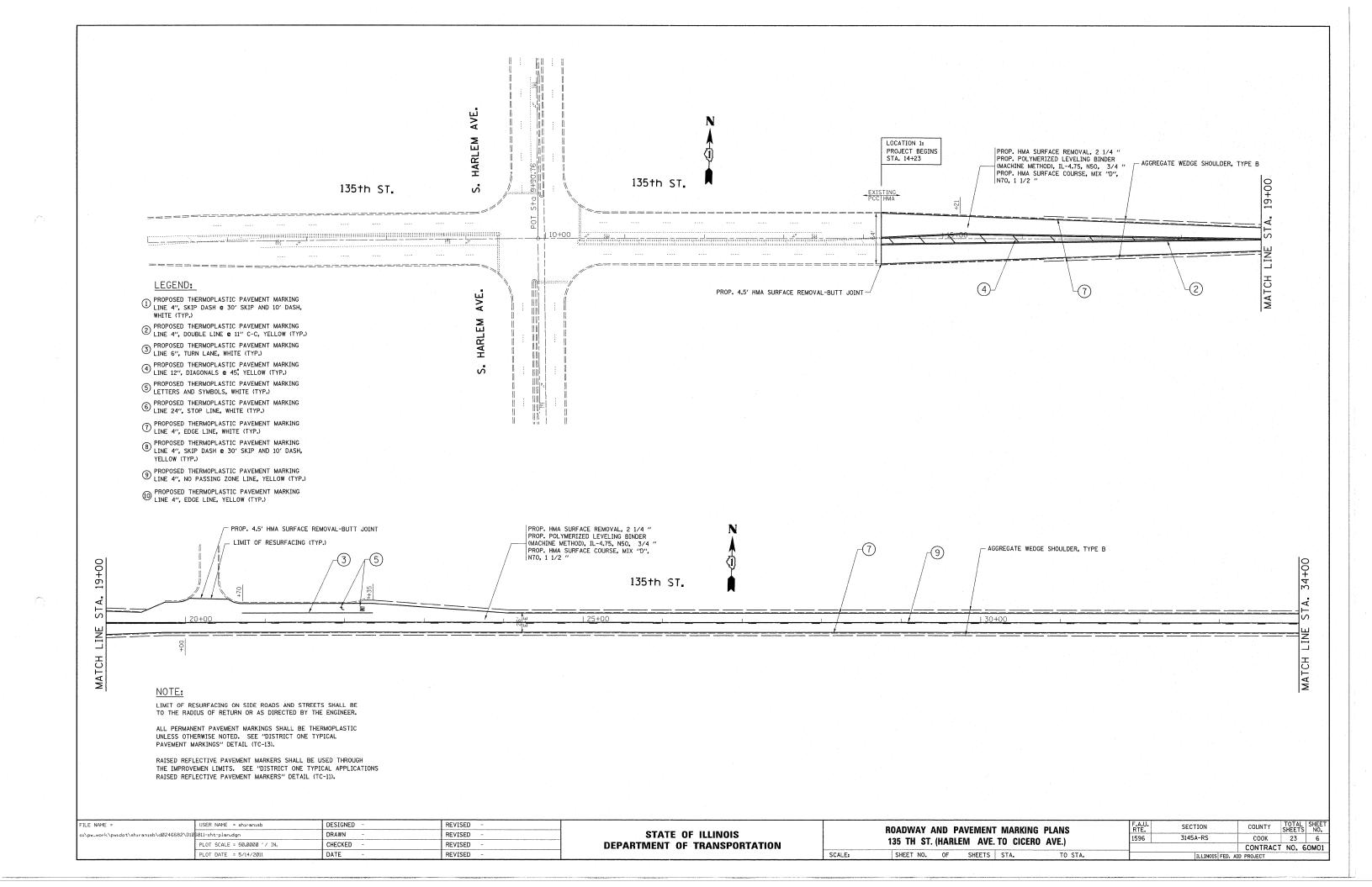
135TH STREET STA. 165+23 TO STA. 166+59

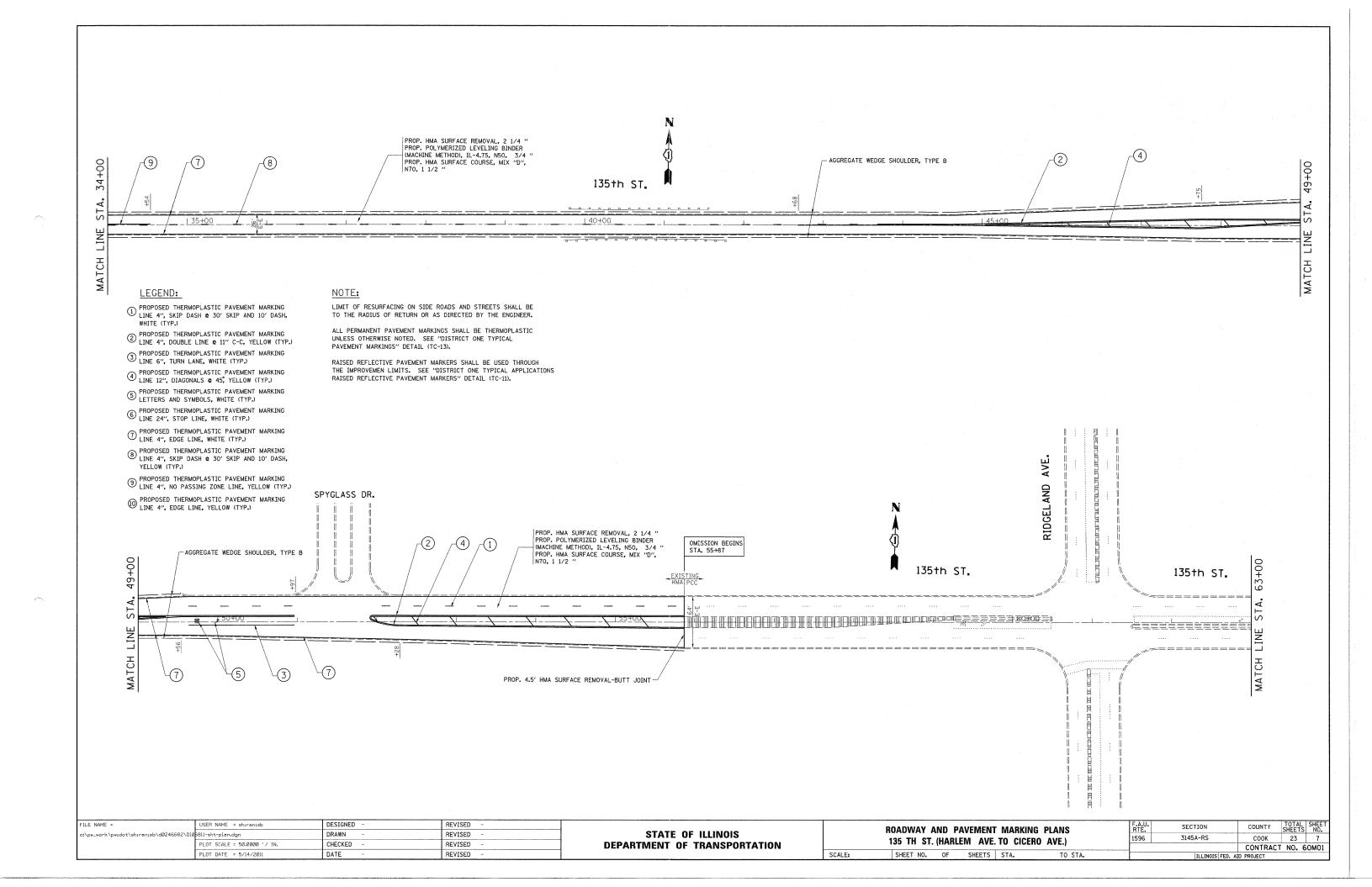
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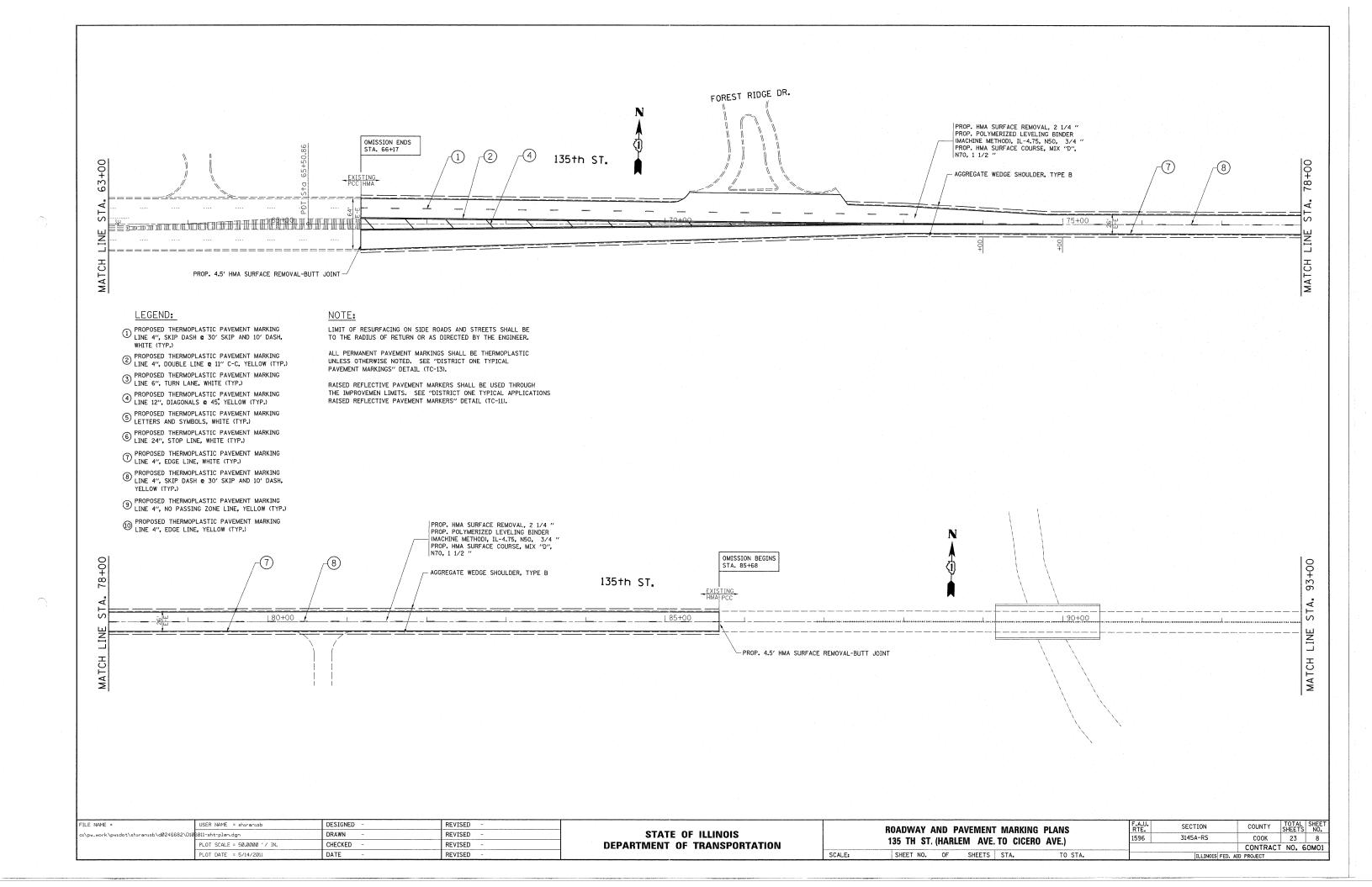
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DEPARTMENT OF TRANSPORTATION

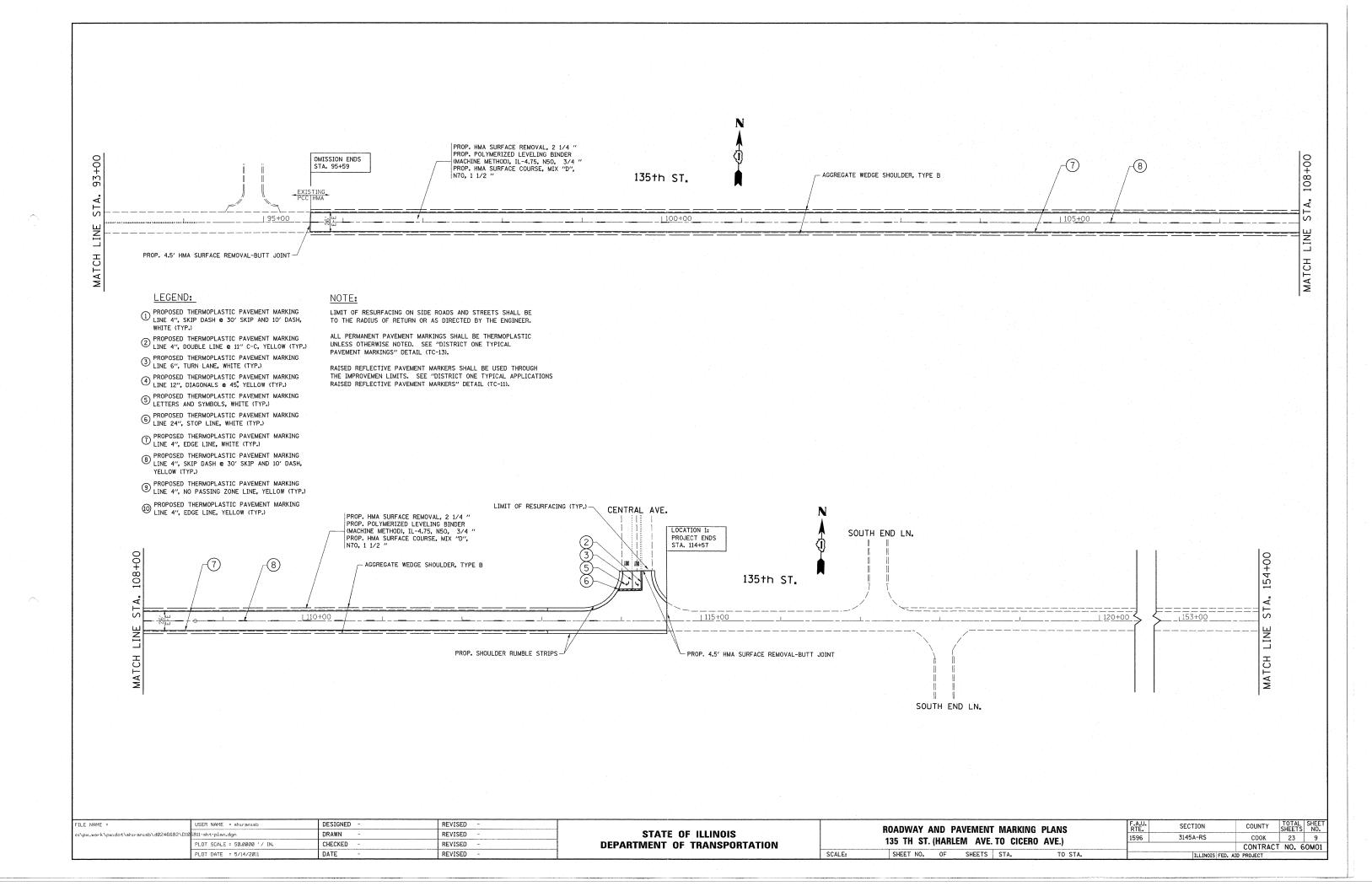
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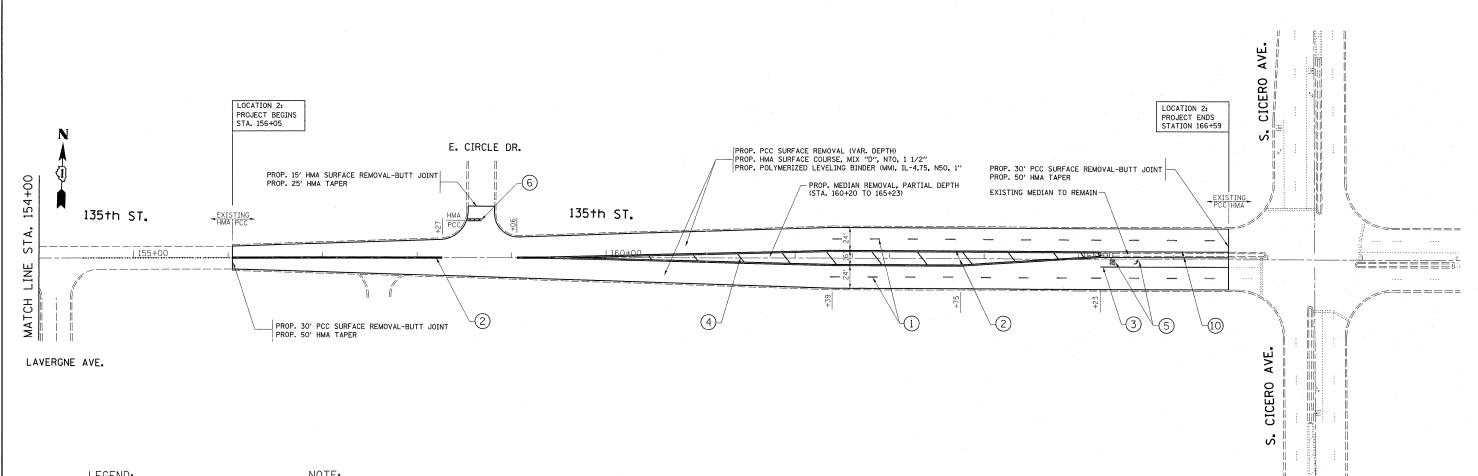
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LEGEND:

- (1) PROPOSED THERMOPLASTIC PAVEMENT MARKING LINE 4", SKIP DASH & 30' SKIP AND 10' DASH, WHITE (TYP.)
- PROPOSED THERMOPLASTIC PAVEMENT MARKING LINE 4", DOUBLE LINE @ 11" C-C, YELLOW (TYP.)
- 3 PROPOSED THERMOPLASTIC PAVEMENT MARKING LINE 6", TURN LANE, WHITE (TYP.)
- PROPOSED THERMOPLASTIC PAVEMENT MARKING LINE 12", DIAGONALS @ 45, YELLOW (TYP.)
- 5 PROPOSED THERMOPLASTIC PAVEMENT MARKING LETTERS AND SYMBOLS, WHITE (TYP.)
- © PROPOSED THERMOPLASTIC PAVEMENT MARKING LINE 24", STOP LINE, WHITE (TYP.) PROPOSED THERMOPLASTIC PAVEMENT MARKING LINE 4", EDGE LINE, WHITE (TYP.)
- (8) PROPOSED THERMOPLASTIC PAVEMENT MARKING LINE 4", SKIP DASH @ 30' SKIP AND 10' DASH, YELLOW (TYP.)
- PROPOSED THERMOPLASTIC PAVEMENT MARKING LINE 4", NO PASSING ZONE LINE, YELLOW (TYP.)
- PROPOSED THERMOPLASTIC PAVEMENT MARKING LINE 4", EDGE LINE, YELLOW (TYP.)

LIMIT OF RESURFACING ON SIDE ROADS AND STREETS SHALL BE TO THE RADIUS OF RETURN OR AS DIRECTED BY THE ENGINEER.

ALL PERMANENT PAVEMENT MARKINGS SHALL BE THERMOPLASTIC UNLESS OTHERWISE NOTED. SEE "DISTRICT ONE TYPICAL PAVEMENT MARKINGS" DETAIL (TC-13).

RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE USED THROUGH THE IMPROVEMEN LIMITS. SEE "DISTRICT ONE TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS" DETAIL (TC-11).

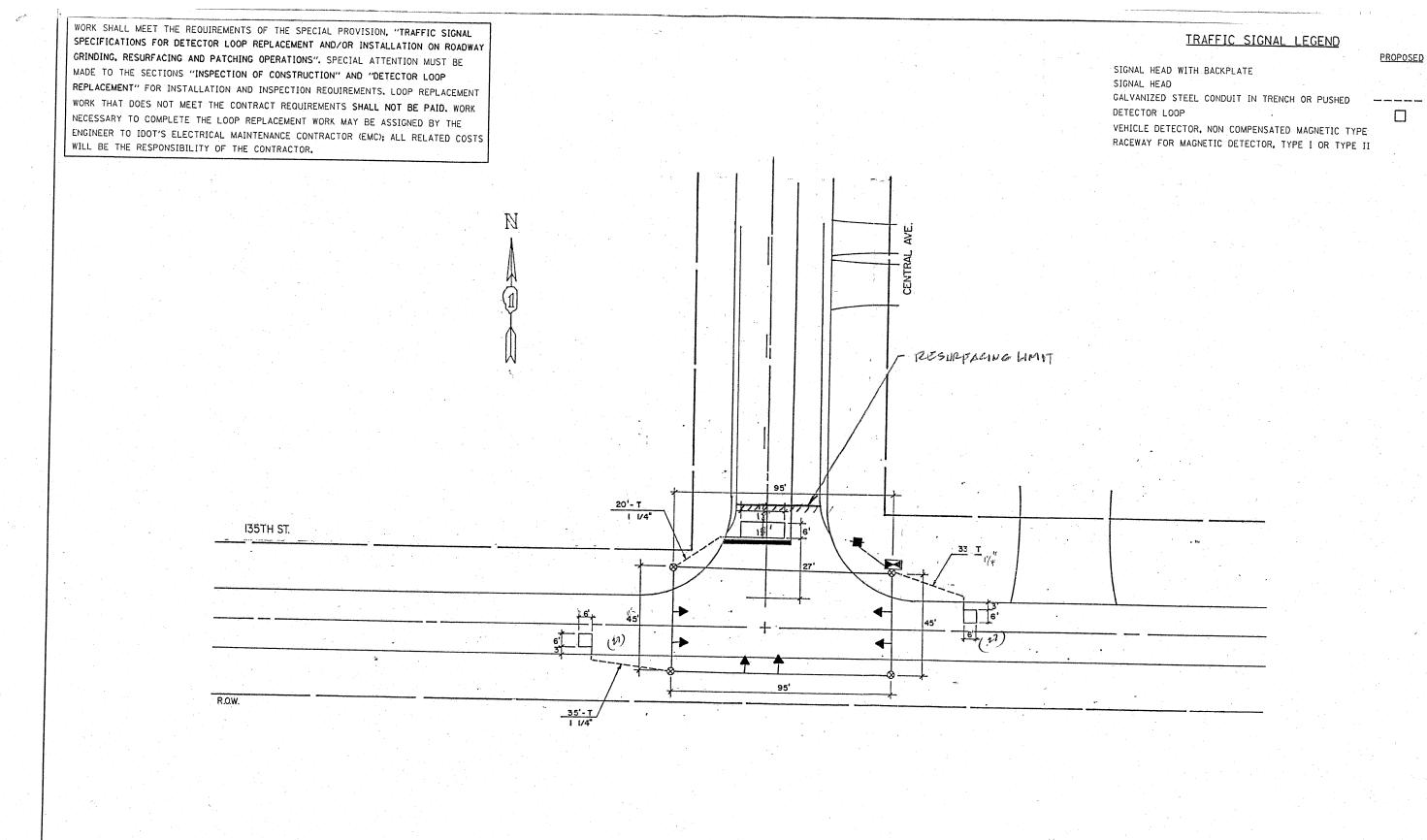
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STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SCALE:

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			CONTRACT	NO. 6	OMO1
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THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENTS ONLY

REPLACE ALL DETECTOR LOOPS AS SHOWN
(WITHIN THE RESURFACING LIMITS)

CODE QUANTITY UNIT

ITEM

86600600

107

FOOT

DETECTOR LOOP, REPLACEMENT

EXISTING

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE - DETECTOR LOOP REPLACEMENT
135TH ST. C CENTRAL AVE.

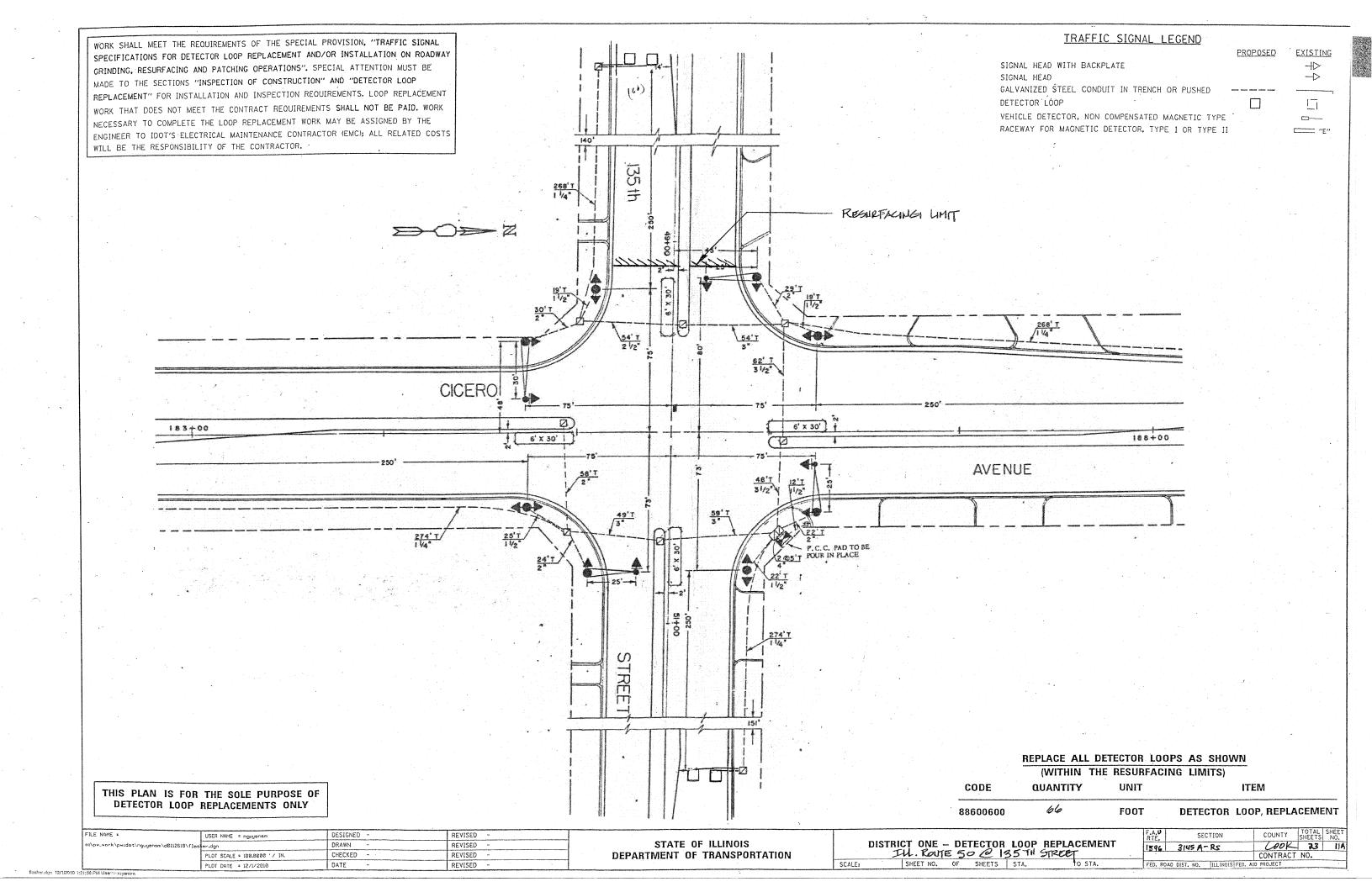
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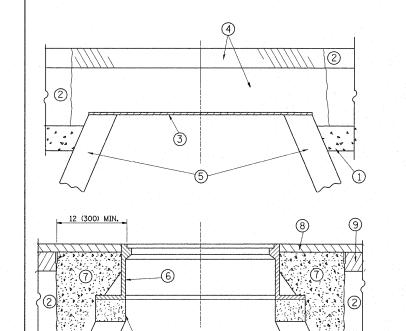
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 SECTION
 COUNTY SHEETS
 TOTAL NO.
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 CONTRACT
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 FED. ROAD DIST. NO. 1 | ILLIMOIS | FED. AID PROJECT





PROPOSED

SAND FILL

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

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAYEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

NOTES:

BRICK, MORTAR, OR CONC. ADJUSTING RINGS

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,

LEGEND

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

PROPOSED SAND FILL

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SUB-BASE GRANULAR MATERIAL

(6) FRAME AND LID (SEE NOTES)

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

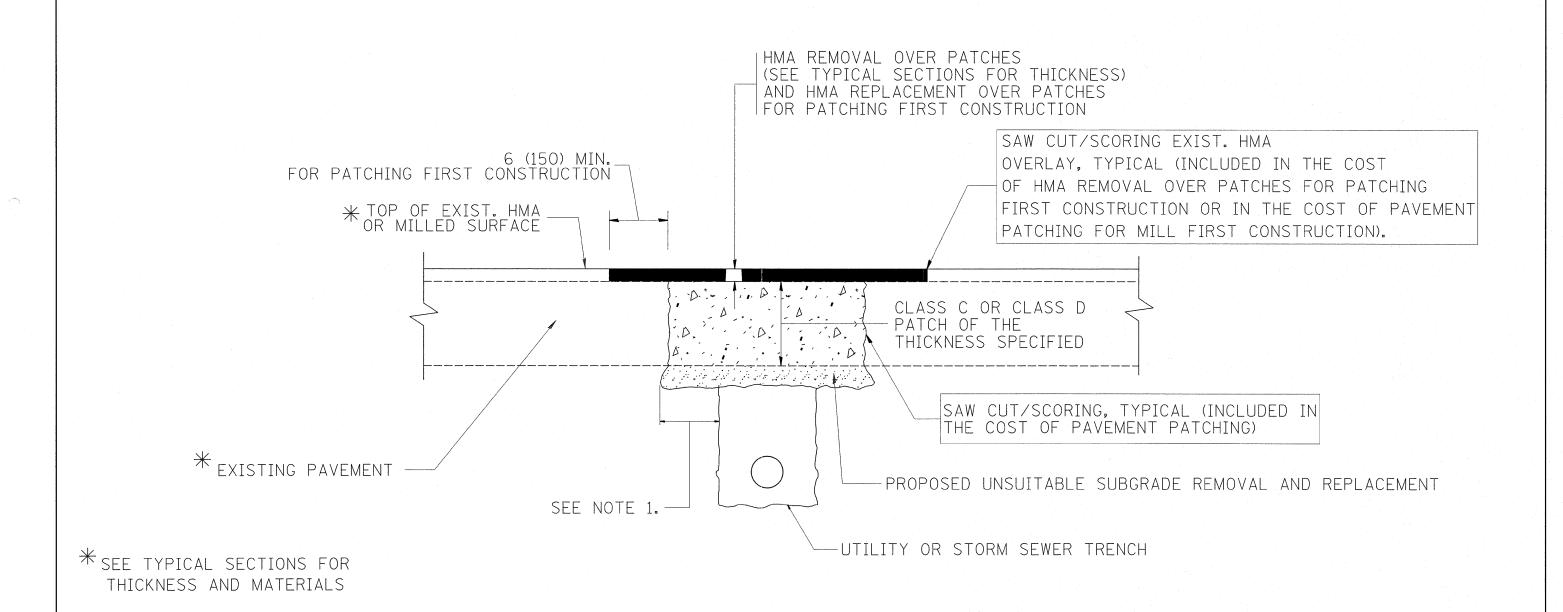
BASIS OF PAYMENT: THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "FRAMES AND LIDS TO BE ADJUSTED, SPECIAL"

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

COUNTY TOTAL SHEET NO. COOK 23 12 FILE NAME = DESIGNED - R. SHAH REVISED - R. SHAH 03-10-95 COUNTY **DETAILS FOR** STATE OF ILLINOIS DRAWN REVISED - A. ABBAS 03-21-97 n\pw_work\pwidot\shiranisb\d0246682\DistStd.dgn 3145A-RS 1596 FRAMES AND LIDS ADJUSTMENT WITH MILLING **DEPARTMENT OF TRANSPORTATION** PLOT SCALE = 50.0000 '/ IN. CHECKED REVISED - R. WIEDEMAN 05-14-04 CONTRACT NO. 60M01 BD600-03 (BD-8) SCALE: NONE PLOT DATE = 5/16/2011 DATE 10-25-94 REVISED - R. BORO 01-01-07 SHEET NO. 1 OF 1 SHEETS STA. FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT



NOTES:

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

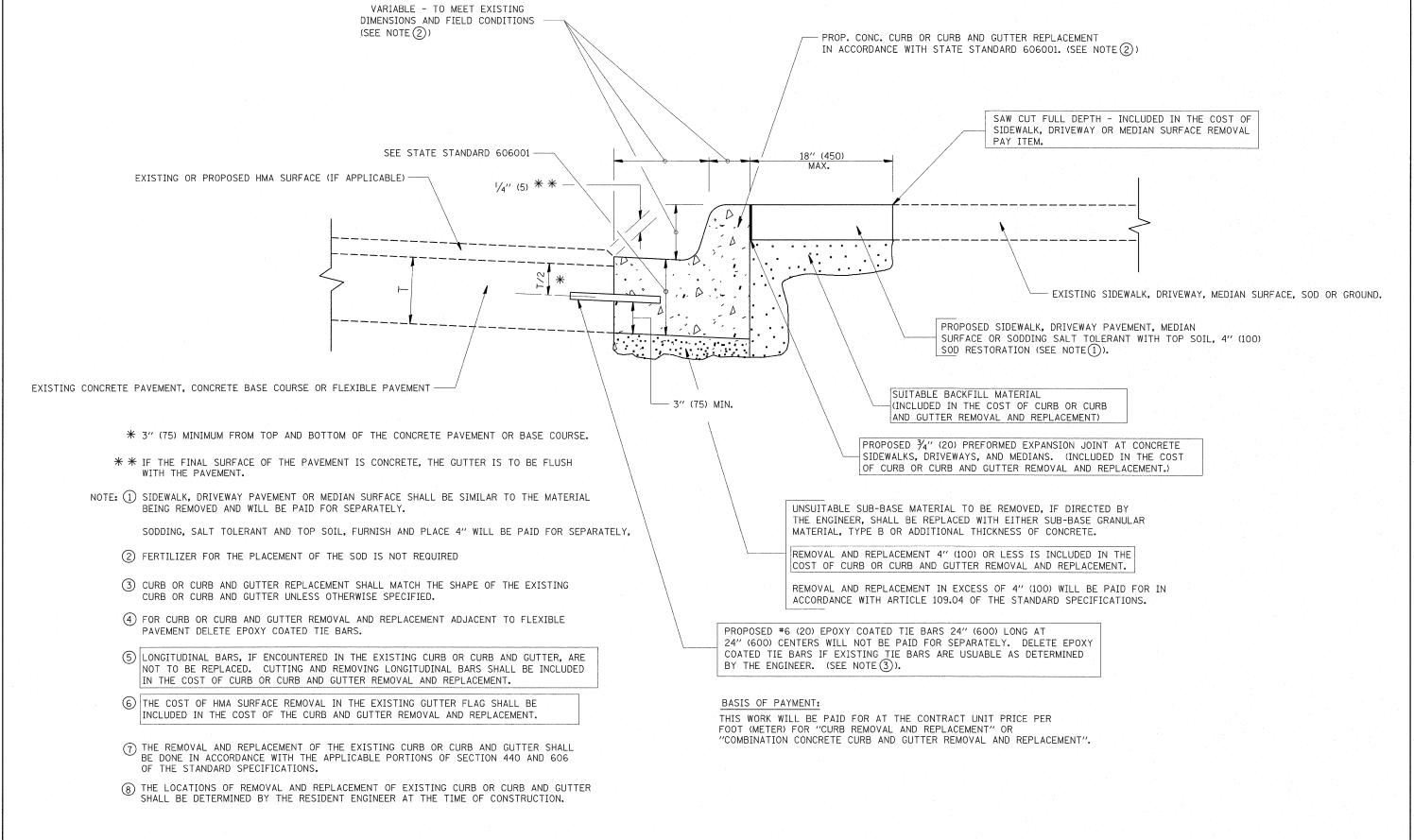
SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

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

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

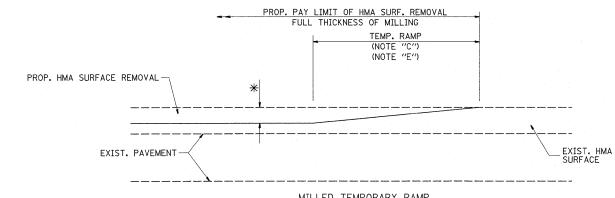
- 1. MILL HMA FIRST IF THERE IS AT LEAST 41/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
- 2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

FILE NAME = USER	NAME = shiranisb	DESIGNED - R. SHAH	REVISED -	A. ABBAS 04-27-98			PAVEMENT PATCHING FOR	F.A.L	SECTION	COUNTY	TOTAL SHEET
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PLOT :	SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -	R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION		HMA SURFACED PAVEMENT		BD400-04 (BD-22)		CT NO. 60M01
PLOT	DATE = 5/16/2011	DATE - 10-25-94	REVISED -	K. ENG 10-27-08		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED.		AID PROJECT	



CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

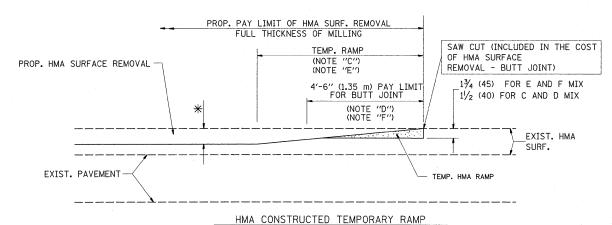
	PLOT DATE = 5/16/2011	DATE - 03-11-94	REVISED - R. BORO 12-15-09		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.		AID PROJECT
·	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED - M. GOMEZ 01-22-01	DEPARTMENT OF TRANSPORTATION		REMOVAL AND REPLACEMENT		BD600-06 (BD-24)	CONTRACT NO. 60M01
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FILE NAME =	USER NAME = shiranisb	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96			CURB OR CURB AND GUTTER		F.A.U. SECTION	COUNTY TOTAL SHEET



MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

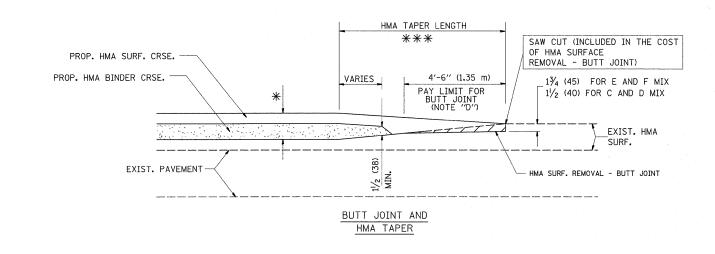
OPTION 1



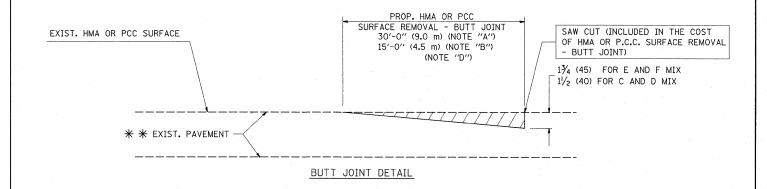
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

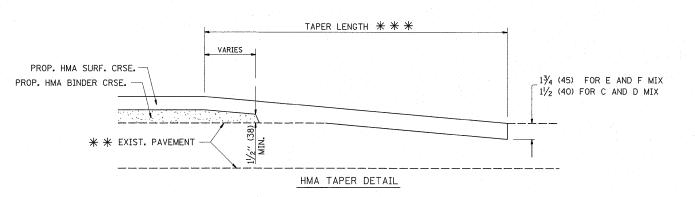
OPTION 2

TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING





TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

* * PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

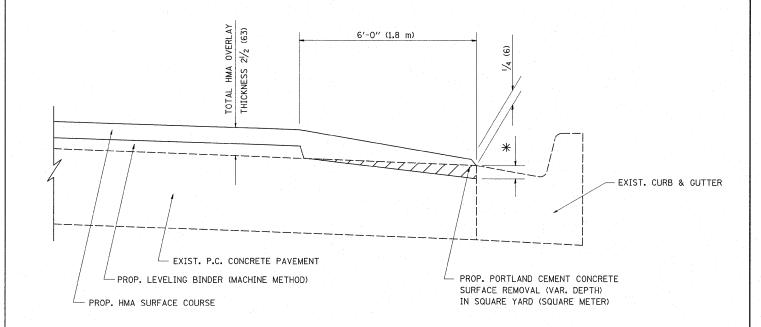
NOTES

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

BASIS OF PAYMENT:

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

FILE NAME =	USER NAME = shiranisb	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25		BUTT JOINT AN		F.A.U.	SECTION	COUNTY	TOTAL	SHEET
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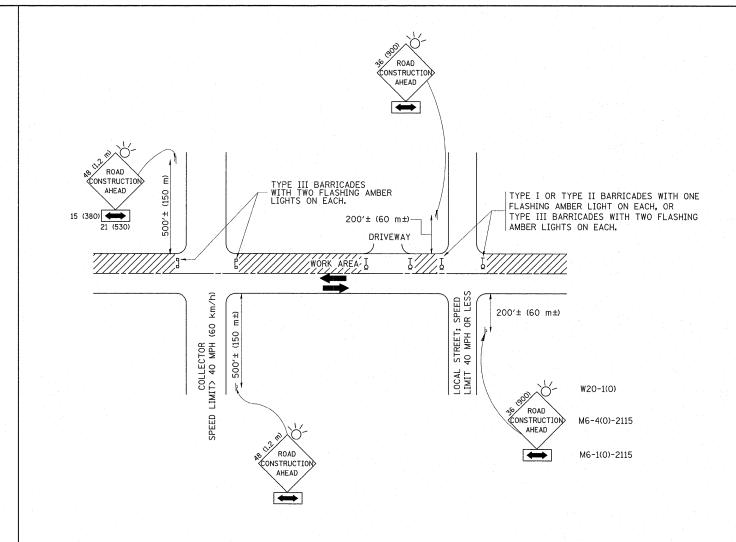
HMA TAPER AT EDGE OF P.C.C PAVEMENT

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)	¾ (19)	11/2 (38)

FILE NAME =	USER NAME = shiranisb	DESIGNED	-	R. SHAH	REVISED	-	R. SHAH 10-25-94
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	PLOT SCALE = 50.0000 '/ IN.	CHECKED	-	A. ABBAS	REVISED	~	E. GOMEZ 12-21-00
	PLOT DATE = 5/16/2011	DATE	-	09-10-94	REVISED	~	R. BORO 01-01-07

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	HMA TAPER	F.A RTE.	SECTION	COUNTY TOTAL SHEETS		SHEET NO.		
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TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- O) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- q) ONE ROAD CONSTRUCTION AHEAD SIGN 48 \times 48 (1.2 m \times 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS 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)

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	PLOT DATE = 5/16/2011	DATE	-	06-89	REVISED	-T.	RAMMACHER	₹ 01-06-00	1

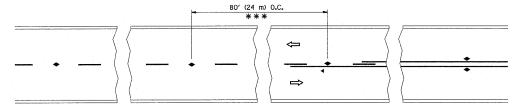
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	TRA	AFFIC	0	CON	TR	OL AND P	ROTEC	TION FOR		
	SIDE	ROA	DS	, IN	TE	RSECTIONS	AND	DRIVEWAYS		
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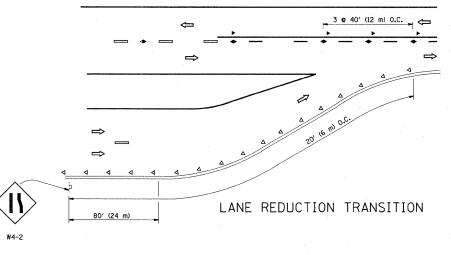
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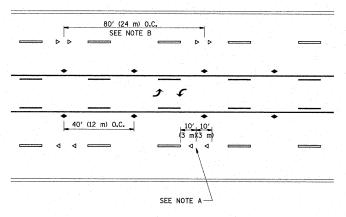
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 CONTRACT NO.
 60M01



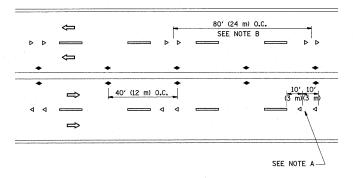
*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

TWO-LANE/TWO-WAY

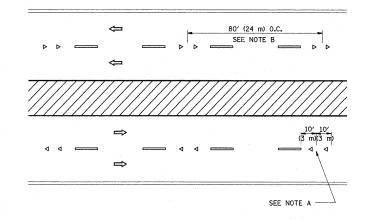




TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

- 1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
- 2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
- 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

A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

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.

SYMBOLS

---- YELLOW STRIPE

WHITE STRIPE

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

DESIGN NOTES

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

MINIMUM OF 3 W EQUALLY SPACED 3 @ 80' (24 m) O.C. 3 & 40' (12 m) 0.C. 3 @ 40' (12 m) 40' (12 m) 0.C. \Rightarrow 40' (12 m) 0.C. 40' (12 m) O.C. * SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE ** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

LEFT TURN

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

> SECTION 3145A-RS

TC-11

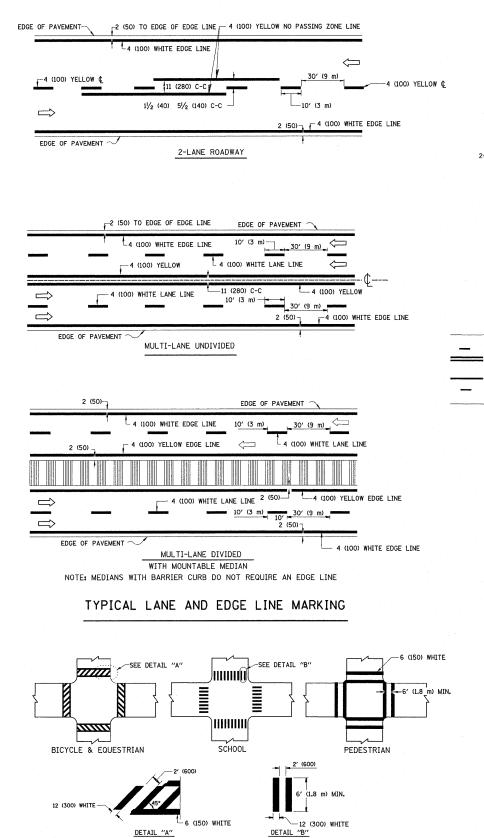
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 COUNTY
 TOTAL SHEETS NO.

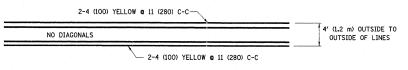
 COOK
 23
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 CONTRACT
 NO.
 60M01

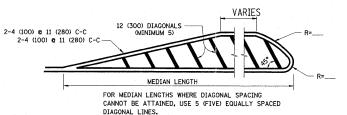
FILE NAME =	USER NAME = shiranisb	DESIGNED -	REVISED - T. RAMMACHER 09-19-94		TYPICAL APPLICATIONS
c:\pw_work\pwidot\shiranisb\d0246682\0is	:Std.dgn	DRAWN -	REVISED -T. RAMMACHER 03-12-99	STATE OF ILLINOIS	
,	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 01-06-00	DEPARTMENT OF TRANSPORTATION	RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)
•	PLOT DATE = 5/16/2011	DATE ~	REVISED - C. JUCIUS 09-09-09		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.



TYPICAL CROSSWALK MARKING

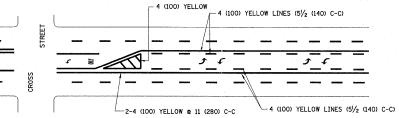


4' (1.2 m) WIDE MEDIANS ONLY

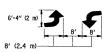


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

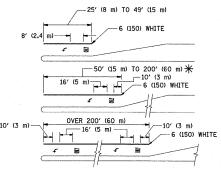


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

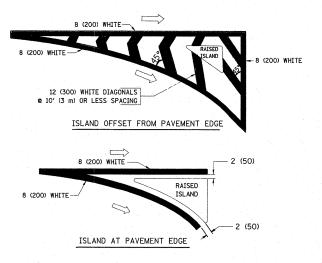


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. \uparrow AREA = 15.6 SQ. FT. (1.5 m²) \downarrow AREA = 20.8 SQ. FT. (1.9 m²)

* 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 UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 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 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH, 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE ESE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 c 6 (150) 12 (300) c 45° 12 (300) c 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIACONALS: 15' (4,5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SO. FT. (0.33 m²) EACH "X"=54.0 SO. FT. (5.0 m²)
SHOULDER DIAGONALS	12 (300) c 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h) 1150' (45 m) C-C (OVER 45MPH (70 km/h))

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

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

SECTION 3145A-RS

FED. ROAD DIST. NO. 1 | ILLINOIS FED. AID PROJECT

TC-13

1596

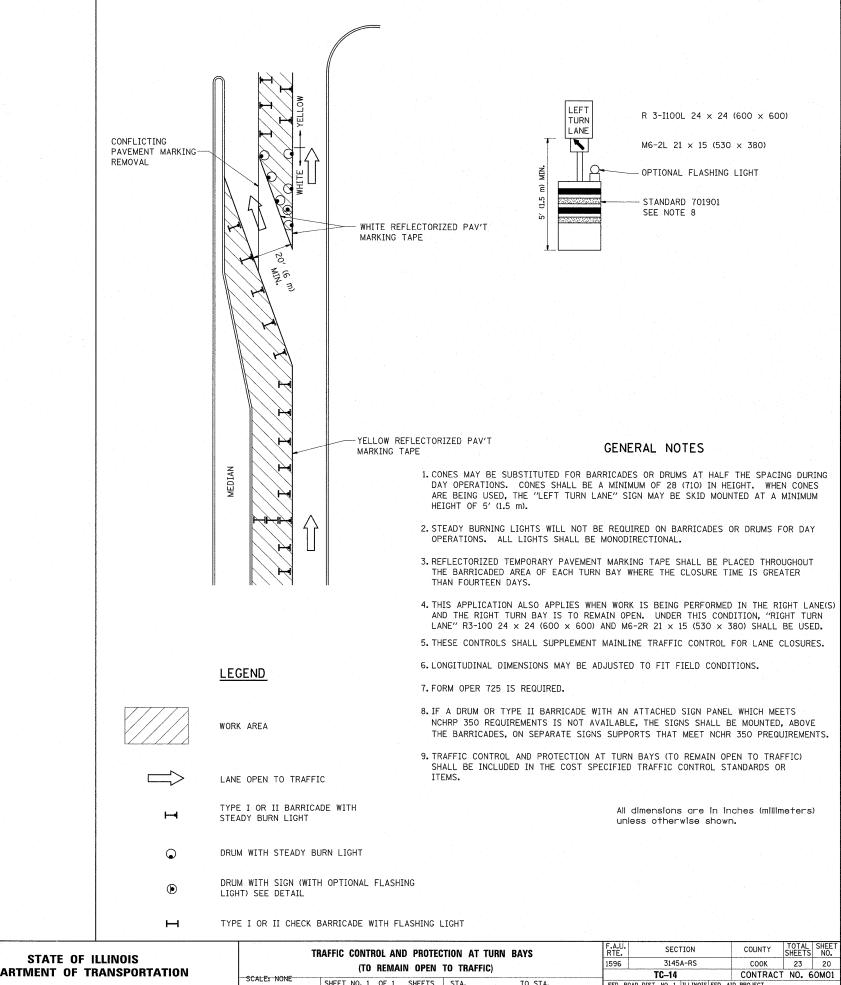
COUNTY TOTAL SHEE NO.

COOK 23 19

CONTRACT NO. 60MO1

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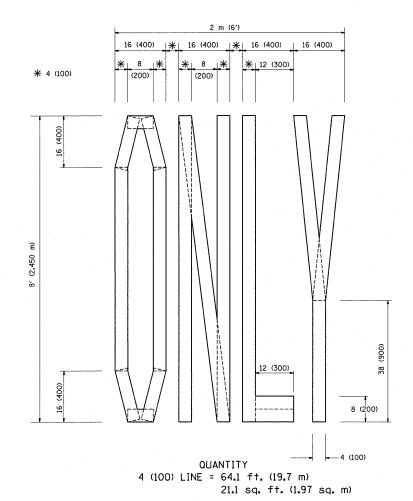
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FILE NAME =	USER NAME = shiranisb .	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94			DISTRICT ONE	
c:\pw_work\pwidot\shiranisb\d0246682\Dis	:Std.dgn	DRAWN -	REVISED -C. JUCIUS 09-09-09	STATE OF ILLINOIS		DISTRICT ONE	
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED	DEPARTMENT OF TRANSPORTATION		TYPICAL PAVEMENT MARKINGS	
	PLOT DATE = 5/16/2011	DATE - 03-19-90	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.

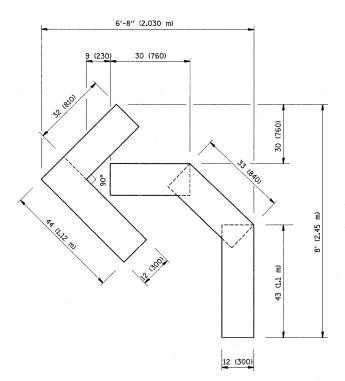


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c:\pw_work\pwidot\shiranisb\d0246682\Dis	:Std.dgn	REVISED	- A. HOUSEH 11-07-95	REVISED	-		
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	PLOT DATE = 5/16/2011	REVISED	-T. RAMMACHER 01-06-00	REVISED	~		

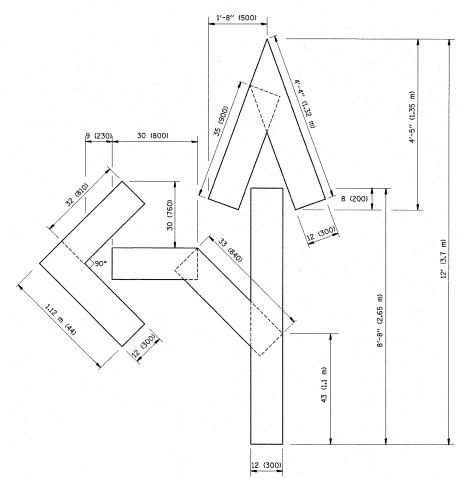
DEPARTMENT OF TRANSPORTATION

TF	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS						RTE. SECTION		COUNTY	TOTAL SHEETS	
	/TO	REMAII	N OPEN	TO TRAFFIC	4		1596	3145A-RS	COOK	23	I
: NONE	(10	ILLIAN	W OI LIV	10 IIIAIII	''			TC-14	CONTRACT	NO. 6	3(
. NONE	SHEET NO. 1	OF 1	SHEETS	STA.	·	TO STA.	FED. R	OAD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT		_





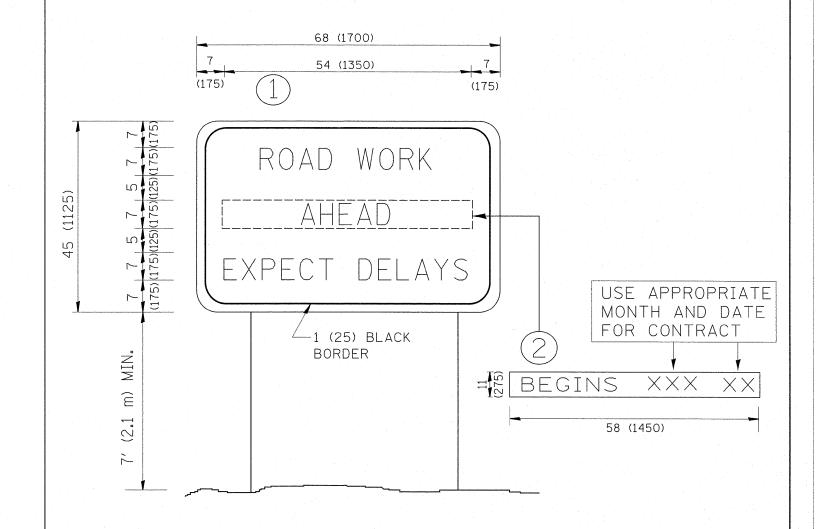
QUANTITY 4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.39 sq. m)



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

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

FILE NAME =	USER NAME = shiranisb	DESIGNED -	REVISED -T. RAMMACHER 06-	96	PAVEMENT MARKING LETTERS AND SYMBOLS	F.A.U. SECTION	ON COUNTY TOTAL SHEET
c:\pw_work\pwidot\shiranisb\d0246682\Dis	:Std.dgn	DRAWN -	REVISED -T. RAMMACHER 11-0	STATE OF ILLINOIS		1596 3145A-	JINLETS NO.
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 03-			TC-16	CONTRACT NO. 60MOI
	PLOT DATE = 5/16/2011	DATE - 09-18-94	REVISED - E. GOMEZ 08-28-0		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.		LINOIS FED. AID PROJECT



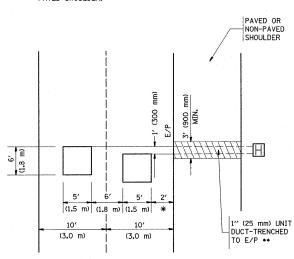
NOTES:

- 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.

FILE NAME =	USER NAME = shiranisb	DESIGNED -	REVISED - R. MIRS 09-15-97		ARTERIAL ROAD		F.A.U. SECTION	COUNTY TOTAL SHEET
c:\pw_work\pwidot\shiranisb\d0246682\	ıstStd.dgn	DRAWN -	REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS			1596 3145A-RS	COOK 23 22
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION	INFORMATION SIGN		TC-22	CONTRACT NO. 60M01
	PLOT DATE = 5/16/2011	DATE -	REVISED - C. JUCIUS 01-31-07		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. A	

LOOPS NEXT TO SHOULDERS

PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAYED SHOULDER.



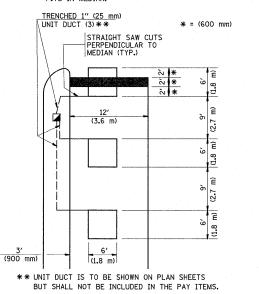
* * UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS
BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

* = (600 mm)

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

(PROTECTED / PERMITTED LEFT TURN PHASING)

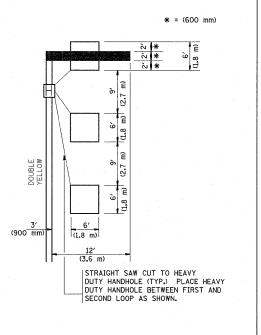
HANDHOLE LOCATION MAY
VARY DEPENDING ON GEOMETRICS
AND DESIGN OF TRAFFIC SIGNALS,
HEAVY-DUTY HANDHOLES TO BE
USED WHEN THE MEDIAN IS
MOUNTABLE. REFER TO STANDARD
814001 TO ENSURE THAT HANDHOLE
FITS IN MEDIAN.



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

SCALE: NONE

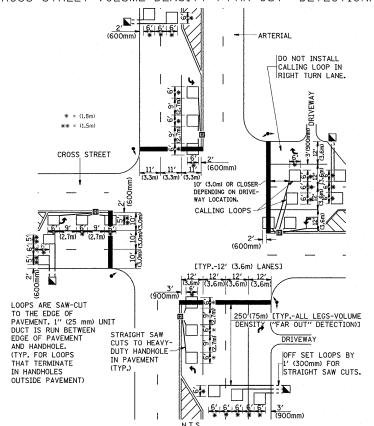
ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
CROSS STREET-VOLUME DENSITY ("FAR OUT" DETECTION)

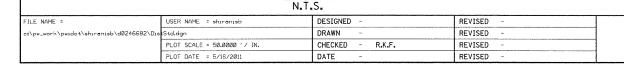
ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)

OFFSET LOOPS BY

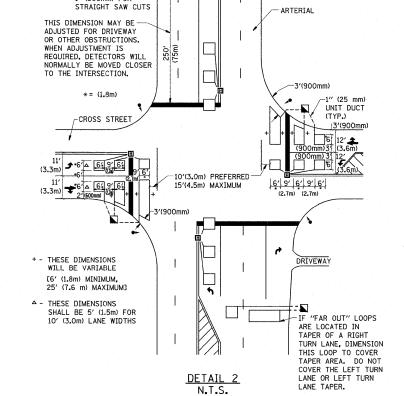
STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION





DETAIL 1



NOTES:

VEHICLES LOOP DETECTORS

- * ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATLY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- * ONE DIMENSION OF <u>ALL</u> DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- * EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- * WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (I.e. 1-1/2, 1-3/4, 2).
- * WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION 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 <u>ALL</u> 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:

DISTRICT 1 - DETECTOR LOOP INSTALLATION

SHEET NO. 1 OF 1 SHEETS STA.

DETAILS FOR ROADWAY RESURFACING

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.

1596

TO STA.

SECTION

3145A-RS

FED. ROAD DIST. NO. 1 | ILLINOIS FED. AID PROJECT

TS-07

TOTAL SHEETS NO.

23 23

CONTRACT NO. 60M01

COUNTY

COOK