STATE OF ILLINOIS
RIMENT OF TRANSPORTATION

DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

FOR INDEX OF SHEETS, SEE SHEET NO. 2

IMPROVEMENT ENDS STATION 34 + 42

IMPROVEMENT IS LOCATED IN THE CITY OF NORTHLAKE

0

PROPOSED HIGHWAY PLANS

FAU ROUTE 2690: WOLF ROAD
WINTERS DRIVE TO GRAND AVENUE
SECTION: 2527 RS-1
RESURFACING
COOK COUNTY

C-91-571-09

R12E

VILLE

294

MEMORIAL

ST.

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MANKE IN

PARK

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PARK

IMPROVEMENT BEGINS

STATION 15+52

LEYDEN TOWNSHIP

GROSS AND NET LENGTH OF IMPROVEMENT = 1,890 LF = 0.36 MILES

CONTRACT NO. 60H15

PROJECT MANAGER: KEN ENG

J.U.L.I.E.

 \circ

1-800-892-0123

ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION

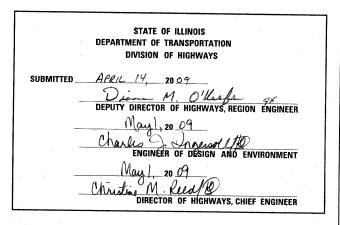
CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

PROJECT ENGINEER: DAN WILGREEN (847) 705-4240

* 18+2=20

D-91-571-09





PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

INDEX OF SHEETS

STATE STANDARDS

SHE	ET NO.	DESCRIPTION
	1	TITLE SHEET
	2	INDEX OF SHEETS, STATE STANDARDS & GENERAL NOTES
	3	SUMMARY OF QUANTITIES
	4	EXISTING AND PROPOSED TYPICAL SECTIONS
	5	ROADWAY AND PAVEMENT MARKING PLANS
	5A-5B	DETECTOR LOOP REPLACEMENT PLANS
	6	DRIVEWAY DETAILS, DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5 M)
	7	DETAILS FOR FRAME AND LIDS ADJUSTMENT WITH MILLING
	8	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT
	. 9	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
	10	BUTT JOINT AND HMA TAPER DETAILS
	11	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS
	12	TYPICAL APPLICATIONS: RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)
	13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
	14	TRAFFIC CONTROL AND PROTECTION OF TURN BAYS (TO REMAIN OPEN TO TRAFFIC)
	15	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
	16	ARTERIAL INFORMATION SIGNING
	17	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS
	18	DISTRICT ONE DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

STANDARD NO.

000001-05 TYPICAL SYMBOLS, ABBREVIATIONS AND PATTERNS

DESCRIPTION

606001-04 CONCRETE CURB AND COMBINATION CONCRETE CURB AND GUTTER

701606-06 URBAN LANE CLOSURE, MULTILANE 2W WITH MOUNTABLE MEDIAN

DEPARTMENT OF

701701-06 URBAN LANE CLOSURE, MULTILANE INTERSECTION

701901-0/ TRAFFIC CONTROL DEVICES

442201-03 CLASS C AND D PATCHES

886001-01 DETECTOR LOOP INSTALLATION

886006-01 TYPICAL LAYOUT FOR DETECTION LOOPS

GENERAL NOTES

BEFORE STARTING ANY EXCAVATION. THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC. TELEPHONE, AND GAS FACILITIES. (48 HOUR NOTIFICATION REQUIRED)

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

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE CITY OF NORTHLAKE.

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

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

WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISABILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.

ALL PAVEMENT PATCHING AND DRIVEWAY PAVEMENT REMOVAL LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT 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.

DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS - RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" SNOWN IN THE PLANS.

THE RESIDENT ENGINEER SHALL CONTACT MR. WALLY CZARNY, AREA TRAFFIC FIELD ENGINEER, AT (773) 685-8386 A MINIMUM OF 2 WEEKS PRIOR TO PLACEMENT OF FINAL PAVEMENT MARKINGS.

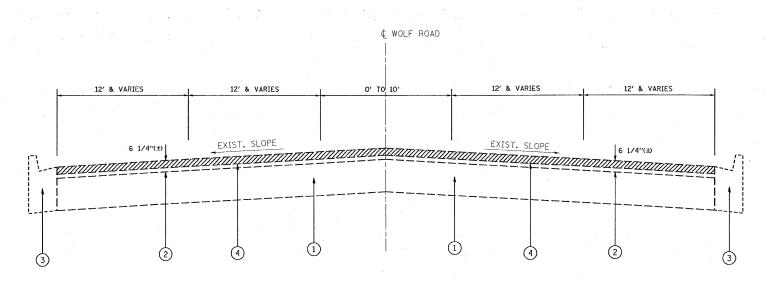
THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE INSTALLATION OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.

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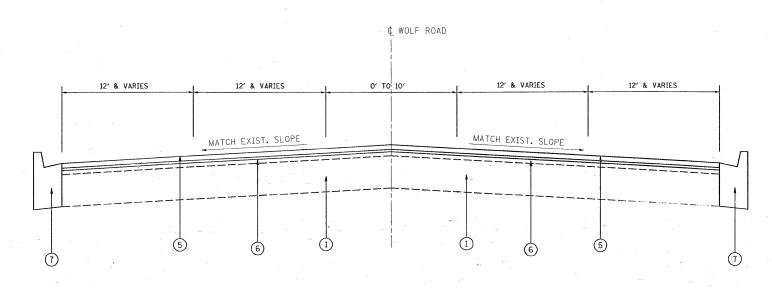
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(WINTERS DR. TO GRAND AVE.)	F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEE NO.
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CODE NO	ITEM	UNIT	TOTAL OUANTITIES	ROADWAY IOOO		-				CODE NO	ITEM	UNIT	TOTAL QUANTITIES	ROADWAY 1000					
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	10	10		·-				*78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	110	110					
40600300	AGGREGATE (PRIME COAT)	TON	47	47						*78000200		FOOT	7010	7010	-				
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	4	. 4						*78000400	- LINE 4"	F007	1040	1040					
40600895	CONSTRUCTING TEST STRIP	EACH	2	2		-	-			* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1040	1040					
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	150	150						*78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	600	600					
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	975	975						*78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	280	280					
42001300	PROTECTIVE COAT	SO YD	135	135	-					* 78100100		EACH	175	175					
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5	SO FT	36	36						88600600	DETECTOR LOOP REPLACEMENT	FOOT	702	702					
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2	SO YD	11580	11580						x0322256	A Company of the Company of the	SO FT	52	52					£.
44000600	1/4" SIDEWALK REMOVAL	SQ FT	36	36			14			X0656100	DRIVEWAY PAVEMENT REMOVAL AND REPLACEMENT	SO YD	105	105				:	
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	600	600						X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	457	457					
44201798	CLASS D PATCHES, TYPE I, 13 INCH	SQ YD	4	4.						Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	7	. 7					
44201803	CLASS D PATCHES, TYPE II, 13 INCH	SO YD	336	336	1. 1											-			
44201807	CLASS D PATCHES, TYPE III, 13 INCH	SQ YD	20	20															
44201809	CLASS D PATCHES, TYPE IV, 13 INCH	SO YD	27	27															
55039700	STORM SEWERS TO BE CLEANED	FOOT	550	550	1														
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	15	15		1					* SPECIALTY ITEMS								1
60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	12	12										* . · · ·					:
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6															
67100100	MOBILIZATION	L SUM	1	1				*											
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	1										3 <u>1</u>					
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1				9 . 19							.			·	
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	2100	2100			1												
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	110	110															
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	7010	7010		3 - 4 - 1													
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	1040	1040												4.			
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	600	600														·	
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	280	280		. *													
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	700	700									1						
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EXISTING TYPICAL SECTION WOLF RD.

STATION: 15+52 TO 34+42



PROPOSED TYPICAL SECTION WOLF RD.

STATION: 15+52 TO 34+42

LEGEND

- 1 EXIST. PCC BASE COURSE, 9"(±)
- (2) EXIST. HOT-MIX ASPHALT SURFACE COURSE (BEFORE MILLING), 6 1/4"(±)
- (3) EXIST. CONCRETE CURB AND GUTTER
- 4 PROP. HOT-MIX ASPHALT SURFACE REMOVAL 2 1/4" (4" OF HOT-MIX ASPHALT TO REMAIN)
- (5) PROP. HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2"
- 6 PROP. POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50, 3/4"
- 7 PROP. CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT (LOCATIONS TO BE DETERMINED BY THE RESIDENT ENGINEER)

NOTES:

SCALE: NONE

- 1. SEE ROADWAY AND PAVEMENT MARKING PLAN SHEETS FOR LOCATIONS OF LEFT TURN LANES AND PAINTED MEDIANS.
- 2. MILLING OF THE ROADWAY SHALL BE DONE PRIOR TO PAVEMENT PATCHING.

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

·	MIXTURE TYPE	AC TYPE	AIR VOIDS (%)
ROADWAY	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, (IL-9.5MM), 1 1/2"	PG 64-22	4% @ 70 GYR
NOADWAT	POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50, 3/4"	SBS/SBR PG 76-28/-22	4% @ 50 GYR
PATCHES	CLASS D PATCHES, (BINDER IL-19.0 MM), 9"	PG 64-22*	4% @ 70 GYR
DRIVEWAY	HOT-MIX ASPHALT BASE COURSE, (BINDER IL-19,0 MM), 8"	PG 64-22*	4% @ 50 GYR
	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50, (IL-9.5MM), 2"	PG 64-22	4% @ 50 GYR

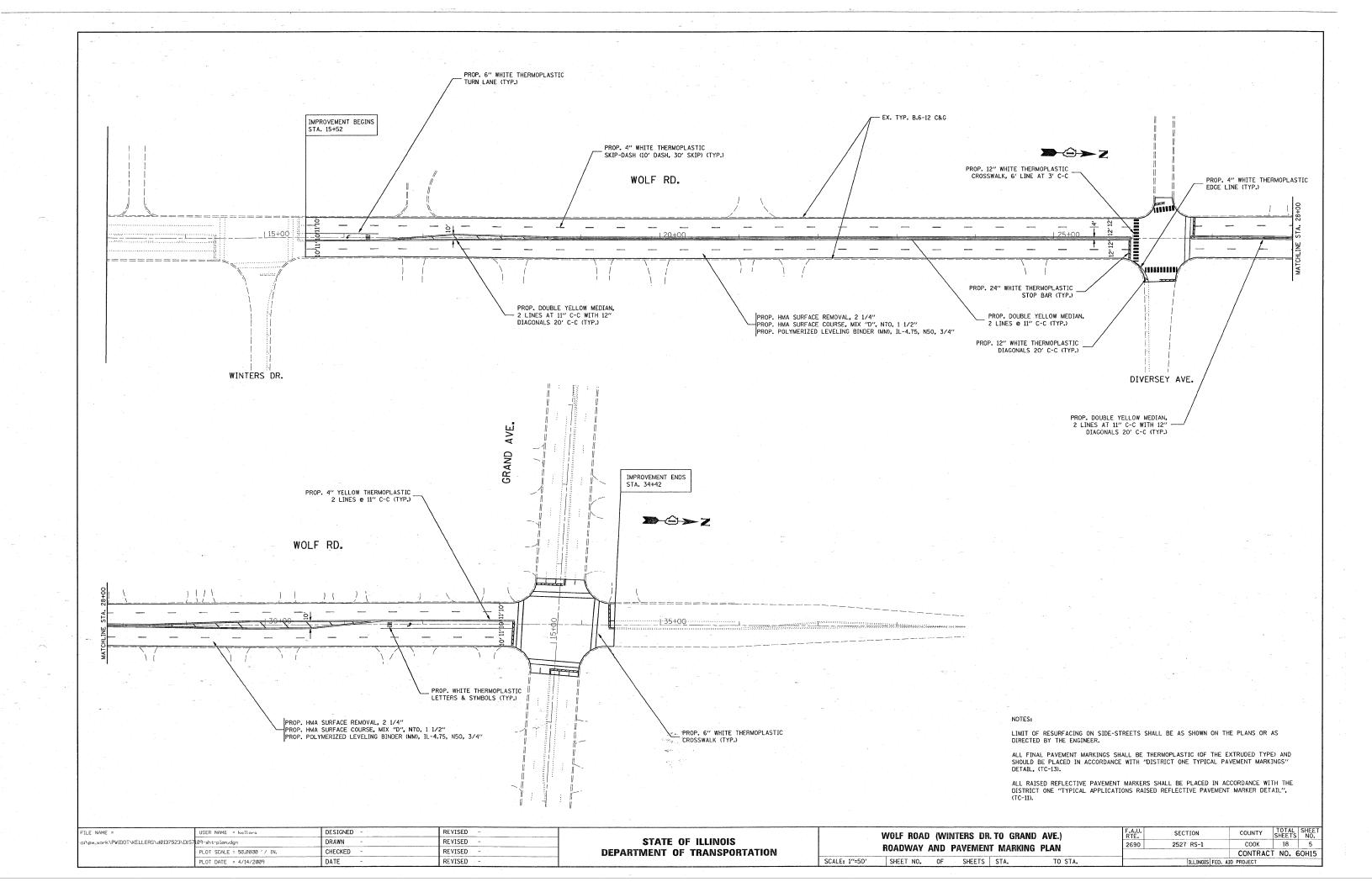
THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN

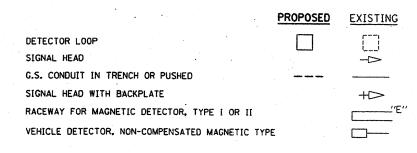
*WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22

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WOLF ROA	D (WIN	TERS DR	.TO GRA	ND AVE.)	
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--- 135 SQ. YD. PAVEMENT REMOVAL AND REPLACEMENT

DIVERSEY ST.

WITH CALL DELAY

20 LIN. FT. 24" WIDE STOP BAR

-24 LIN.FT. 24" WIDE STOP BAR

–165 LIN.FT. 12" WIDE LONGITUDINAL LINES

L_{R.O.W.}

R.O.W.-

26'-T

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	112	FOOT	DETECTOR LOOP, REPLACEMENT

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- RESURFACING LIMITS

INTERCONNECT CONDUIT, SEE PLAN BELOW FOR LENGTH AND SIZE. SEE NOTE9

REMOVE EXISTING STOP BAR-24 LIN.FT. 24" WIDE STOP BAR

DIVERSEY ST.

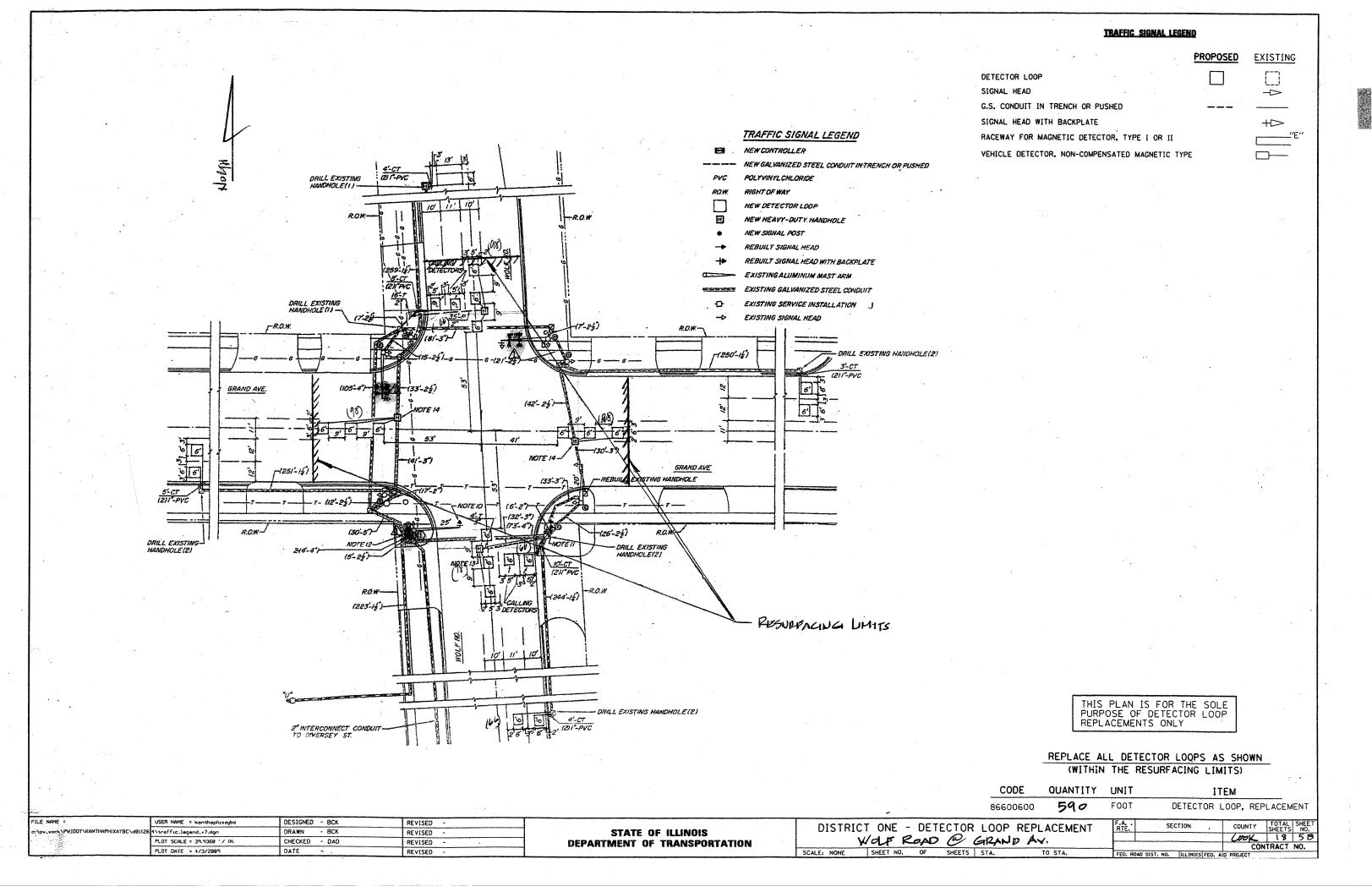
110 SQ.FT. SIDEWALK REMOVAL & REPLACEME

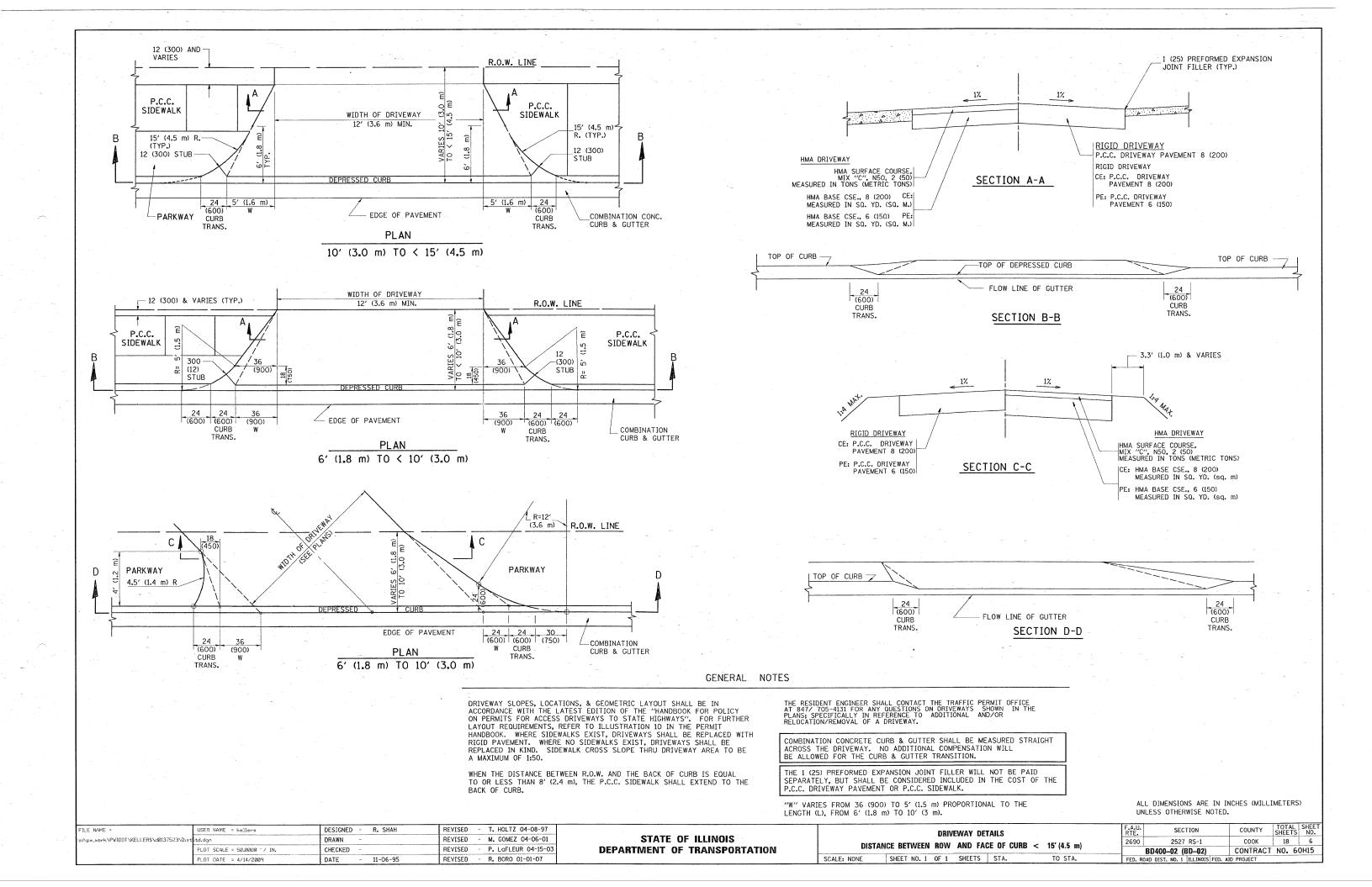
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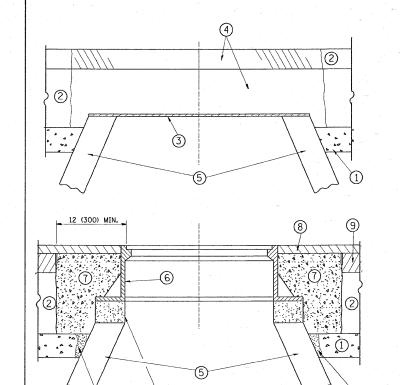
STATE OF ILLINOIS PARTMENT OF TRANSPORTATION

DISTRIC	T ONE - WOLF	DETE	CTOR	LOOP PIVERS	REPLACEMENT	
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PROPOSED

BRICK, MORTAR, OR CONC. ADJUSTING RINGS

NOTES:

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

SAND FILL

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

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

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

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

SCALE: NONE

CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 11/2 (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

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

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

1 SUB-BASE GRANULAR MATERIAL

PROPOSED SAND FILL

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

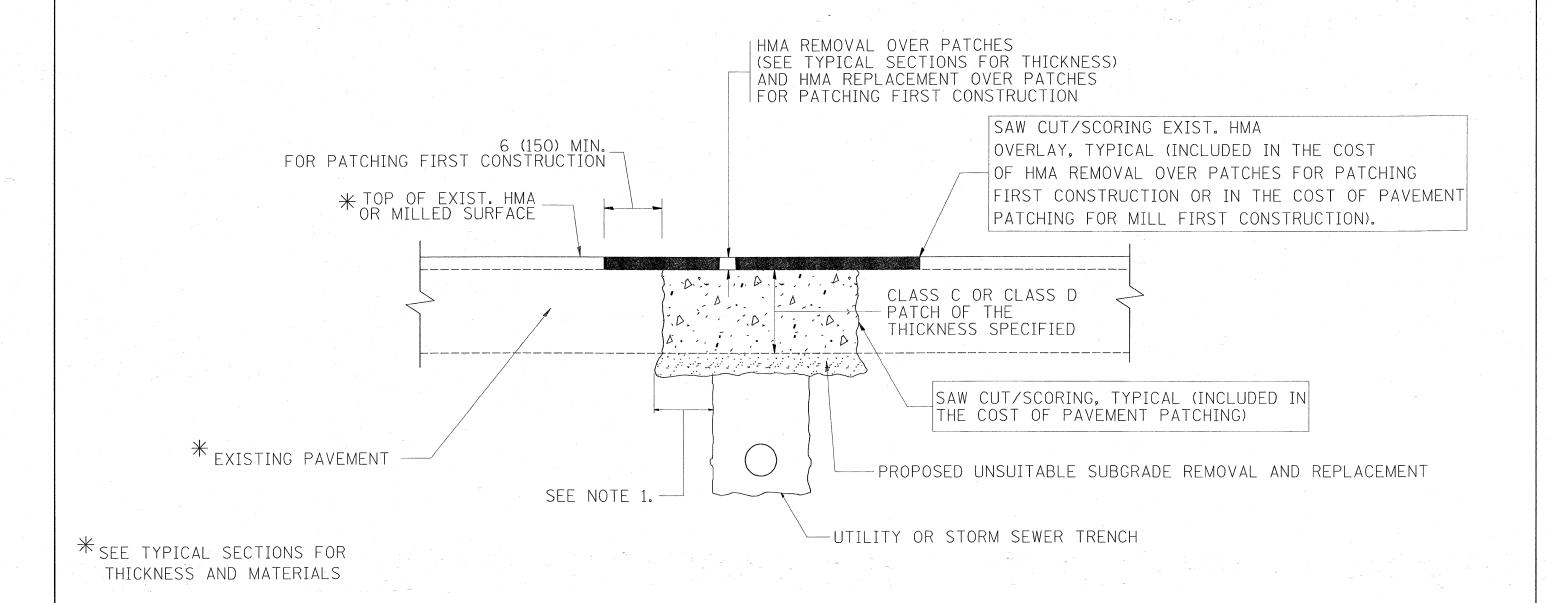
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

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	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED - R. WIEDEMAN 05-14-04
	PLOT DATE = 4/14/2009	DATE - 10-25-94	REVISED - R. BORO 01-01-07

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

		D	ETAILS FO	R	
FRAME	S AND	LIDS	ADJUSTM	ENT WITH	MILLING
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COUNTY TOTAL SHEET NO. 2527 RS-1 CONTRACT NO. 60H15 BD600-03 (BD-8)



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)

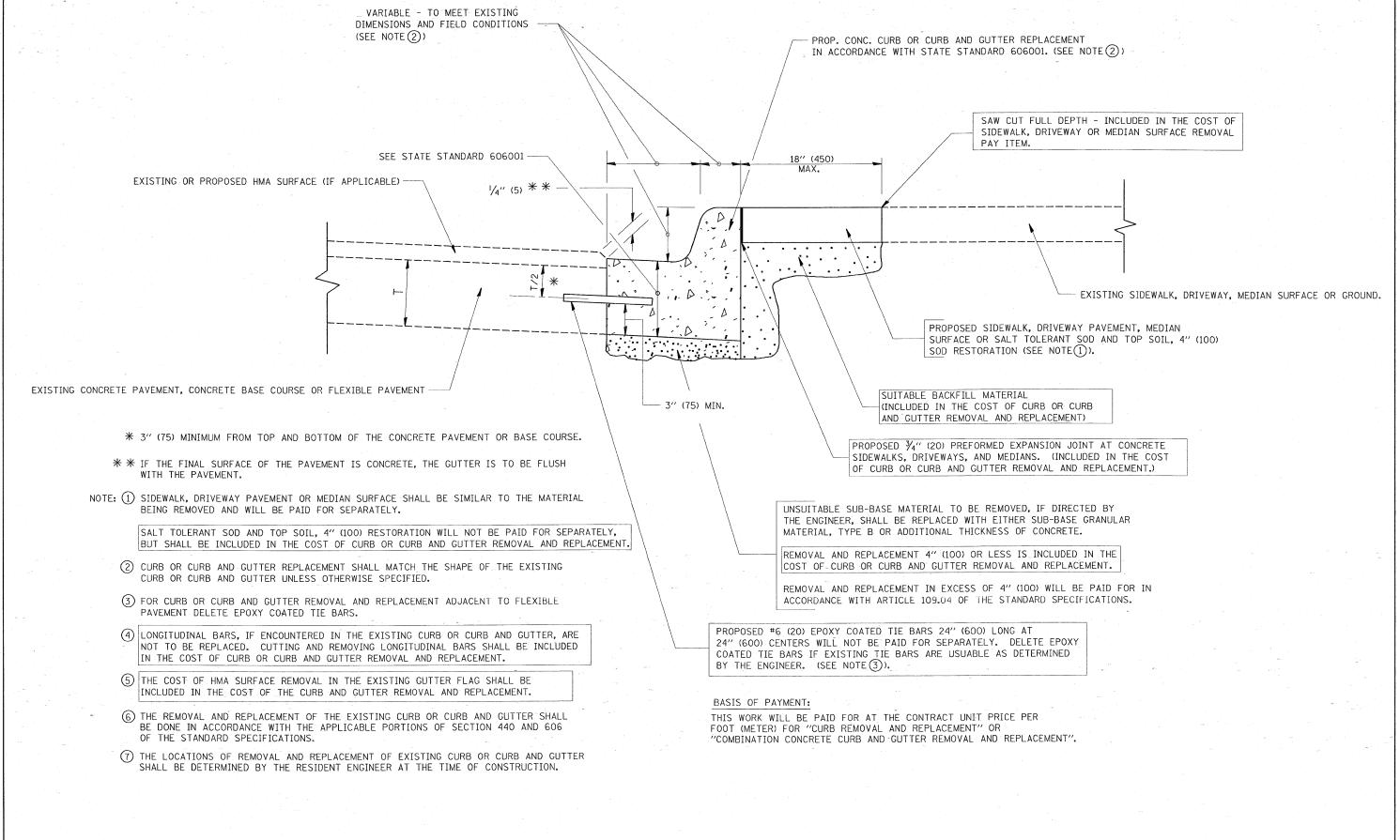
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

- 1. MILL HMA FIRST IF THERE IS AT LEAST 4/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
- 2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

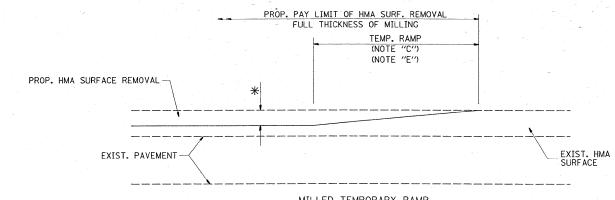
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	PLOT DATE = 4/14/2009	DATE - 10-25-94	REVISED - K. ENG 10-27-08		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. ROAD D		AID PROJECT		



CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

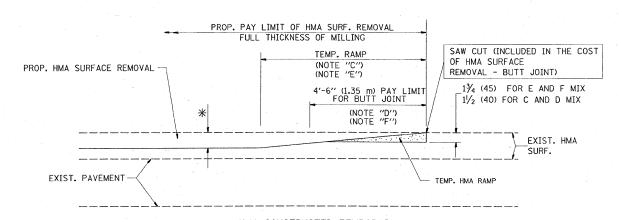
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cs/pw_work/PWIDOT/KELLERS/dØ137523/Dist	itd.dgn	DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS	REMOVAL AND REPLACEMENT	2690 2527 RS-1	COOK 18 9
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED - M. GOMEZ 01-22-01	DEPARTMENT OF TRANSPORTATION		BD600-06 (BD-24)	CONTRACT NO. 60H15
	PLOT DATE = 4/14/2009	DATE - 03-11-94	REVISED - R. BORO 01-01-07		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. A	AID PROJECT



MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

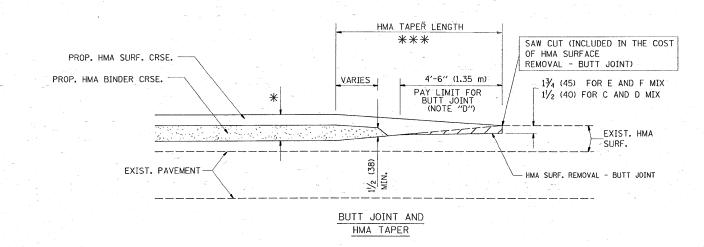
OPTION 1



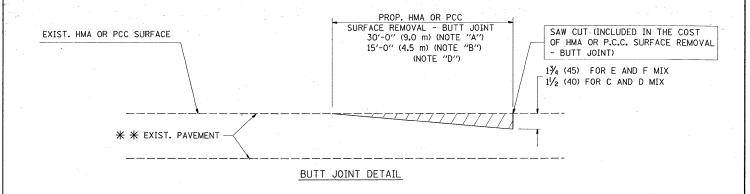
_____HMA_CONSTRUCTED_TEMPORARY_RAMP______(FOR_BUTT_JOINT_AND_HMA_TAPER_SEE_DETAIL_BELOW)

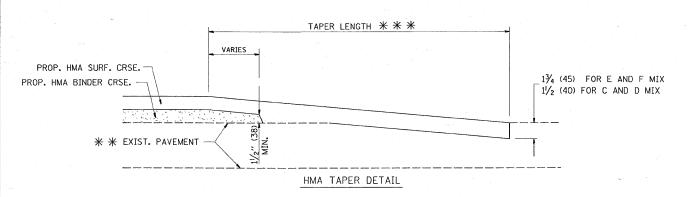
OPTION 2

TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING





TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

 $\ensuremath{\mathtt{\#}}$ 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".

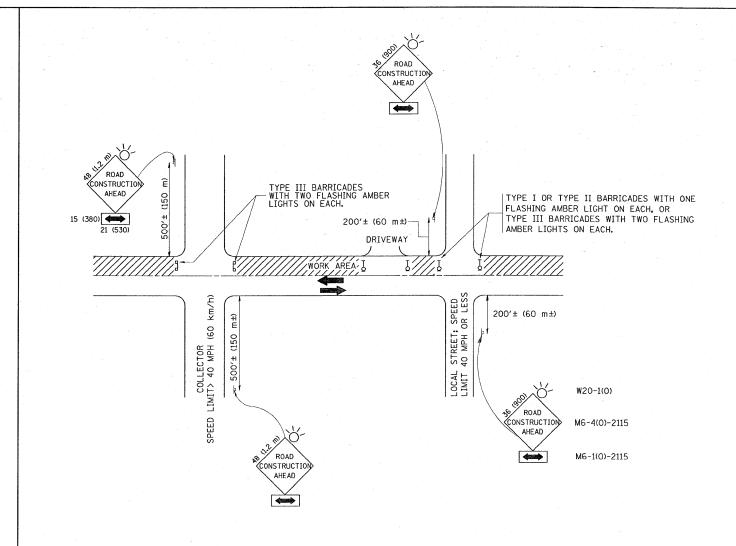
SCALE: NONE

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

FILE NAME =	USER NAME = kellers	DESIGNED -	- 1	M. DE YONG	REVISED	-	R. SHAH 10-25-94
or\pwwwork\PWIDOT\KELLERS\d0137523\Dist	itd.dgn	DRAWN -			REVISED	-	A. ABBAS 03-21-97
	PLOT SCALE = 50.0000 // IN.	CHECKED -			REVISED	-	M. GOMEZ 04-06-01
	PLOT DATE = 4/14/2009	DATE -		06-13-90	REVISED	-	R. BORO 01-01-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

-	BU	TT JOINT	AND		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEE NO.
	LINKA	TAPER DE	TAHE	*	2690	2527 RS-1	COOK	18	10
	UIM	IMPER DE	IAILO			BD400-05 BD32	CONTRACT	NO. 6	OH15
	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FED. R	DAD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT		



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

NOTES:

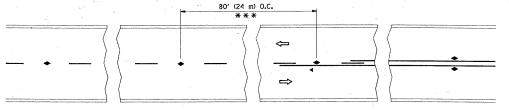
- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- d) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE 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:
- d) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500° (150 m) IN ADVANCE OF THE MAIN ROLLIF.
- 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) unless otherwise shown.

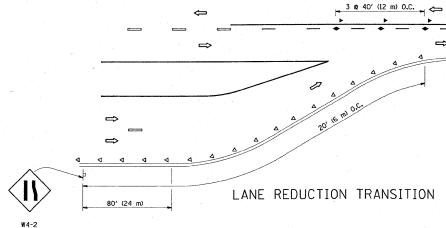
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

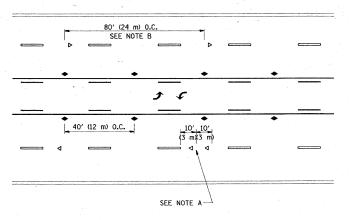
	TR	AFFIC CO	ONTROL	AND P	ROTECTI	ON FOR
	SIDE	ROADS,	INTERS	ECTIONS	, AND [PRIVEWAYS
SCALE: NONE	SHEET	NO. 1 C	OF 1 5	SHEETS	STA.	TC



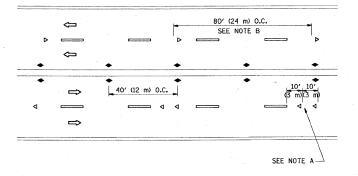
*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

TWO-LANE/TWO-WAY

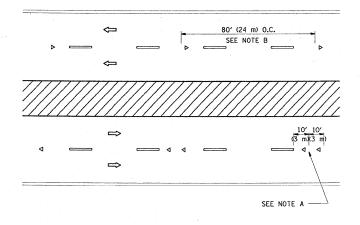




TWO-WAY LEFT TURN



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.
- MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

LANE MARKER NOTES

B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

SYMBOLS

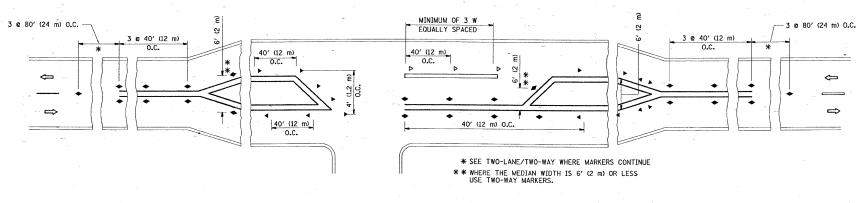
---- YELLOW STRIPE

WHITE STRIPE

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

DESIGN NOTES

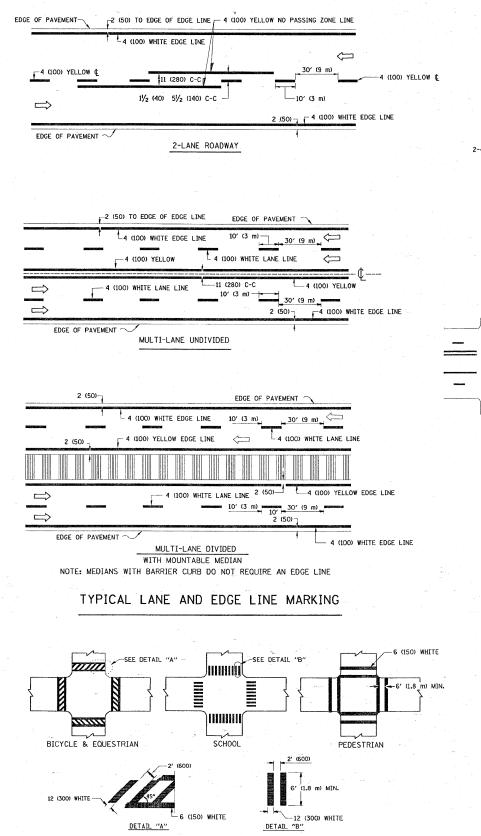
- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- 2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
- 4. MARKERS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



LEFT TURN

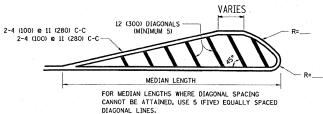
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = kellers	DESIGNED -	REVISED - T. RAMMACHER 09-19-94				TVDICAL	L APPLIC	ATIONIC		F.A.U.	SECTION	COUNTY	TOTAL	SHEET
-c:\pwwwork\PWIBOT\KELLERS\dØ137523\Dist	Std.dgn	DRAWN -	REVISED - T. RAMMACHER 03-12-99	STATE OF ILLINOIS							2690	2527 RS-1	COOK	18	12
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 01-06-00	DEPARTMENT OF TRANSPORTATION	RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)			LOW RESISTANT)		TC-11	CONTRAC	T NO. 6	0H15		
	PLOT DATE = 4/14/2009	DATE -	REVISED -		SCALE: NONE	SHEET NO. 1	OF 1	SHEETS	STA.	TO STA.	FED. ROAD	DIST. NO. 1 ILLINOIS FED.			



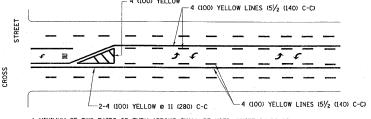
TYPICAL CROSSWALK MARKING



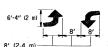


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

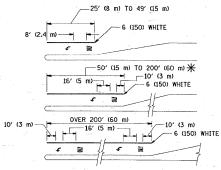


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

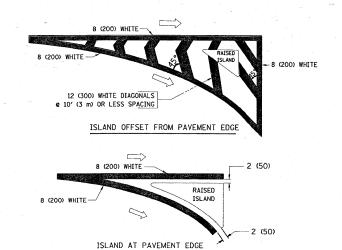


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. \uparrow AREA = 15.6 SQ. FT. (1.5 m²) () AREA = 20.8 SQ. FT. (1.9 m²)

* 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



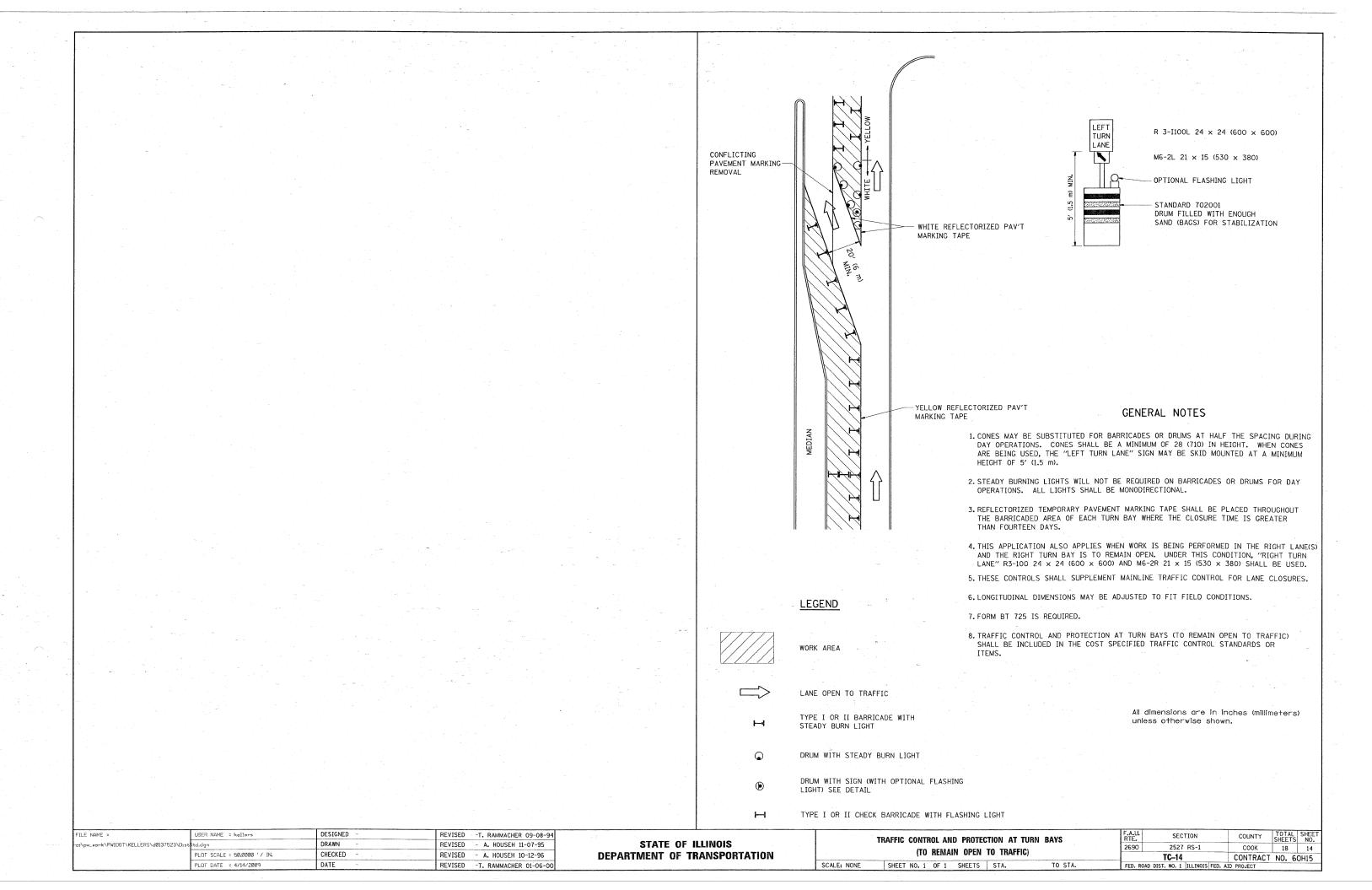
TYPICAL ISLAND MARKING

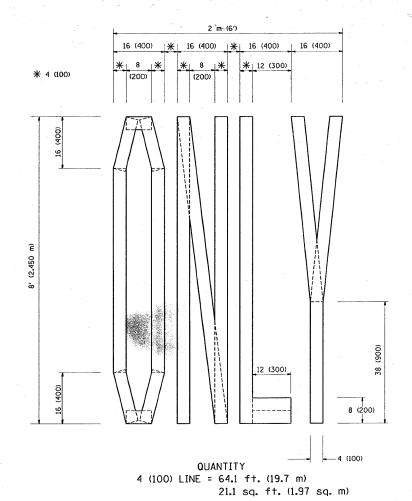
TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVEDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE: FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART 5' (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 SQ. FT. (0.33 m²) EACH "X"=54.0 SQ. FT. (5.0 m²)
SHOULDER DIAGONALS	12 (300) © 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h) 1150' (45 m) C-C (OVER 45MPH (70 km/h))

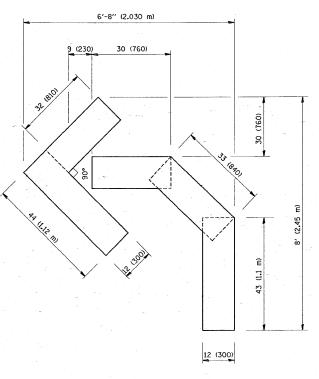
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

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	FILE NAME =	USER NAME = kellers	DESIGNED - EVERS	REVISED -T.	r. RAMMACHER 10-27-94			DISTRICT ONE	F.A.U.	SECTION	COUNTY SHEET NO.
- 1	c:\pw_work\PWIDOT\KELLERS\d0137523\Bist	itd.dgn	DRAWN -	REVISED -A.	A. HOUSEH 10-09-96	STATE OF ILLINOIS			2690	2527 RS-1	COOK 18 13
1		PLDT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -A	A. HOUSEH 10-17-96	DEPARTMENT OF TRANSPORTATION		TYPICAL PAVEMENT MARKINGS	-	TC-13	CONTRACT NO. 60H15
		PLOT DATE = 4/14/2009	DATE - 03-19-90	REVISED -T	T. RAMMACHER 01-06-00		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAF	D DIST. NO. 1 ILLINOIS FED. A	

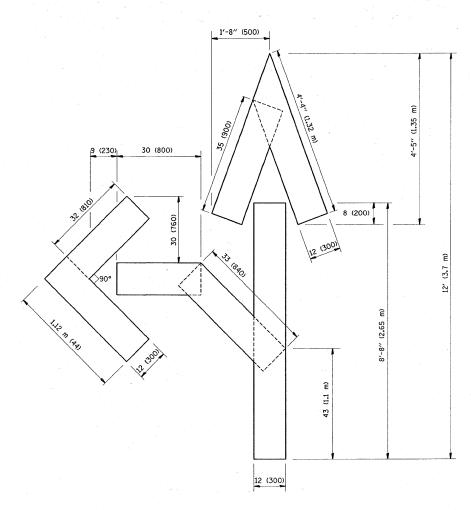






OUANTITY 4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.39 sq. m)

SCALE: NONE



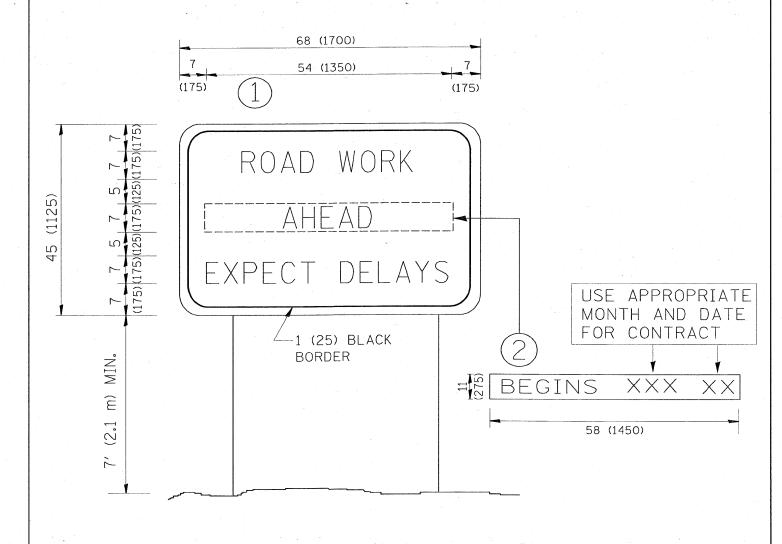
OUANTITY 4 (100) LINE = 82.5 ft. (25.3 m) 27.5 sq. ft. (2.53 sq. m)

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

FILE NAME =	USER NAME = kellers	DESIGNED			REVISED	-T.	RAMMACHER	06-05-96
o:\pw_work\PWIDOT\KELLERS\dØ137523\Dist	td.dgn	DRAWN	-		REVISED	-T.	RAMMACHER	11-04-97
	PLOT SCALE = 50.0000 '/ IN.	CHECKED	-		REVISED	-T.	RAMMACHER	03-02-98
· ·	PLOT DATE = 4/14/2009	DATE	_	09-18-94	REVISED	- E.	GOMEZ 08-2	8-00

STATE	0F	ILLINOIS
DEPARTMENT (OF	TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS						
							2690	2527 RS-1	COOK	18	15
	FOR TRAFFIC STAGING						TC-16	CONTRACT	NO. 6	OH15	
	SHEET NO. 1	0F 1	SHEETS	STA.	. TO	STA.	FED. RO	AD DIST, NO. 1 ILLINOIS FED. AI	D PROJECT		



NOTES:

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

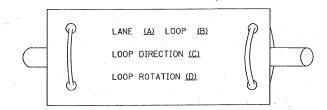
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = kellers	DESIGNED -	REVISED - R. MIRS 09-15-97		ARTERIAL ROAD	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHET SHEETS NO	ĒT]
or\pw_work\PWIBOT\KELLERS\dØ137523\Dist	itd.dgn	DRAWN -	REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS	INFORMATION SIGN	2690	2527 RS-1	COOK	18 16	š
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION			TC-22	CONTRACT	T NO. 60H15	آ وَ
	PLOT DATE = 4/14/2009	DATE -	REVISED - C. JUCIUS 01-31-07		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD D	DIST. NO. 1 ILLINOIS FED. AI	PROJECT		

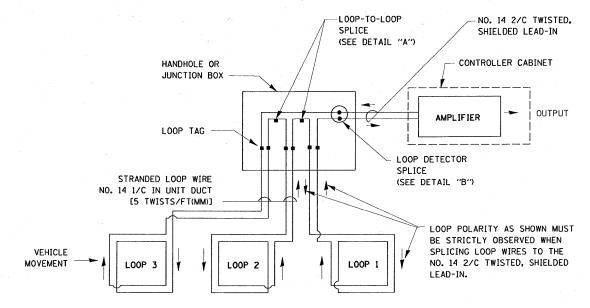
LOOP DETECTOR NOTES

- 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

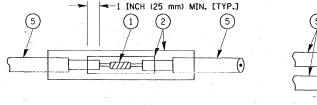


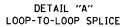
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

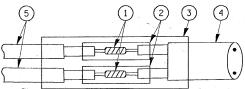


DETECTOR LOOP WIRING SCHEMATIC

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







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.

FILE NAME =	USER NAME = kellers	DESIGNED	-	D.A.D.	REVISED	- 11-12-01
c:\pw_work\PWIDOT\KELLERS\d0137523\Dist	itd.dgn	DRAWN	-	R.W.P.	REVISED	- BUR. TRAFFIC 01-01-02
	PLOT SCALE = 50.0000 '/ IN.	CHECKED	-	D.A.Z.	REVISED	-
	PLDT DATE = 4/14/2009	DATE	-	05-30-00	REVISED	-

STATE	OF	ILLINOIS
DEPARTMENT	OF T	RANSPORTATION

	-	DISTRICT OF	ΙE		
	STANDARD	TRAFFIC SIGNAL	. DESIGN	DETAILS	
NE	SHEET NO 1	OE A SUEETS	CTA	TO STA	

F.A.U. RTE.	SECT	ION	COUNTY	TOTAL SHEETS	SHEET NO.
2690	2527	RS-1	COOK	18	17
	TS-05		CONTRACT	NO. 6	0H15
FED. R	DAD DIST. NO. 1	ILLINOIS FED.	. AID PROJECT		

LOOPS NEXT TO SHOULDERS PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF

PAVED SHOULDER. PAVED OR NON-PAVED SHOULDER (1.5 m) (1.8 m) (1.5 m) * 10' 1" (25 mm) HNTT DUCT-TRENCHED
TO E/P ** (3.0 m)(3.0 m)

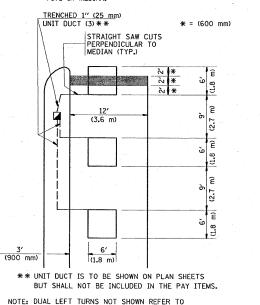
* * UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

* = (600 mm)

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

(PROTECTED / PERMITTED LEFT TURN PHASING)

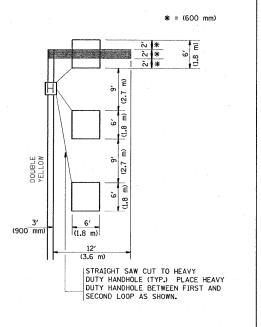
HANDHOLE LOCATION MAY
VARY DEPENDING ON GEOMETRICS
AND DESIGN OF TRAFFIC SIGNALS.
HEAVY-DUTY HANDHOLES TO BE
USED WHEN THE MEDIAN IS
MOUNTABLE. REFER TO STANDARD
814001 TO ENSURE THAT HANDHOLE
FITS IN MEDIAN.



PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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

(PROTECTED / PERMITTED LEFT TURN PHASING)



TAPER AREA. DO NOT COVER THE LEFT TURN

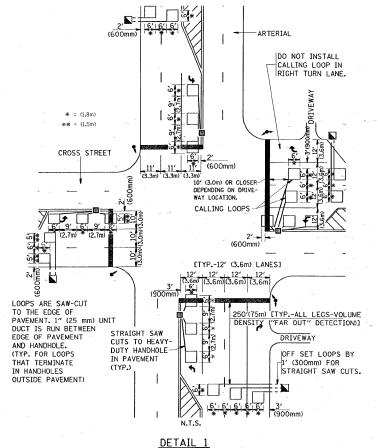
LANE OR LEFT TURN LANE TAPER.

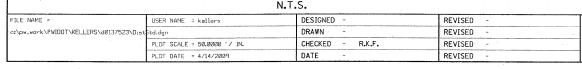
SCALE: NONE

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)





STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING SHEET NO. 1 OF 1 SHEETS STA. TO STA.

SECTION COUNTY 2690 СООК 18 18 CONTRACT NO. 60H15 TS-07 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

OFFSET LOOPS BY (300mm) FOR STRAIGHT SAW CUTS ARTERIAL THIS DIMENSION MAY BE ADJUSTED FOR DRIVEWAY OR OTHER OBSTRUCTIONS. REQUIRED, DETECTORS WILL NORMALLY BE MOVED CLOSER TO THE INTERSECTION. * = (1.8m) ~1" (25 mm UNIT DUCT (TYP.) CROSS STREET |3'(90'0mm 11' (3.3m) 3 6 4 6: 9' 6' -10'(3.0m) PREFERRED 11' *6' \(\(\) 6' 9' 6' \(\) (3.3m) 2' (600mm) 2.10 6' 9' 6' 9' 6' 15'(4.5m) MAXIMUM (2.7m) (2.7m) + - THESE DIMENSIONS DRIVEWAY WILL BE VARIABLE [6' (1.8m) MINIMUM, 25' (7.6 m) MAXIMUM3 A - THESE DIMENSIONS SHALL BE 5' (1.5m) FOR - IF "FAR OUT" LOOPS ARE LOCATED IN 10' (3.0m) LANE WIDTHS TAPER OF A RIGHT TURN LANE, DIMENSION THIS LOOP TO COVER

DETAIL 2

NOTES:

VEHICLES LOOP DETECTORS

- * ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED. SHIELDED.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATLY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- * ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET (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 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.