## STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

**DIVISION OF HIGHWAYS** 

**PROPOSED** 

HIGHWAY PLANS

**FAU ROUTE 1363: GUNNISON STREET** IL 43 (HARLEM AVE.) TO NAGLE AVE. SECTION 0707.4RS

PROJECT: ESP-1363(004)

**RESURFACING (3P) COOK COUNTY** 

C-91-766-09

TRAFFIC DATA

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THE PROJECT IS LOCATED IN THE

**VILLAGE OF HARWOOD HEIGHTS** AND THE CITY OF CHICAGO

 $\circ$ 

ADT (2006) = 13,600

POSTED SPEED LIMIT = 35 MPH

PROJECT BEGINS STA 10+74

T40N

R12E | R13E

FOSTER NORRIDGE

JEFFERSON TOWNSHIP

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.

O \* \*

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JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 OR 811

CHICAGO UTILITY ALERT NETWORK 1-312-744-7000

PROJECT ENGINEER JENPAI CHANG (847) 705-4432 PROJECT MANAGER KEN ENG

**CONTRACT NO. 60H68** 

GROSS AND NET LENGTH = 5155 FT. = 0.976 MILE

COOK 20 1 ILLINOIS CONTRACT NO. 60H68

#### D-91-766-09



STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** DIVISION OF HIGHWAYS

PROJECT ENDS STA 62+29

Charles J. Incersol/ B Engineer of Design and Environment

August 14, 20 09
Christine M. Reed D

DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

#### INDEX OF SHEETS

## STATE STANDARDS

PAVEMENT JOINTS

CLASS C AND D PATCHES

TRAFFIC CONTROL DEVICES

DESCRIPTION

STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

URBAN LANE CLOSURE, MULTILANE INTERSECTION

URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN

SHEET NO.	DESCRIPTION	STANDARD NO.
1	TITLE SHEET	000001 <i>-05</i>
2	INDEX OF SHEETS, STATE STANDARDS & GENERAL NOTES	420001-07
. 3	SUMMARY OF QUANTITIES	442201- <i>0</i> <b>3</b>
4	EXISTING AND PROPOSED TYPICAL SECTIONS	701000 04
5-6	ROADWAY AND PAVEMENT MARKING PLAN	701606- <i>06</i>
7-9	DETECTOR LOOPS REPLACEMENT PLANS	701701- <i>06</i>
10	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING, BD600-03 (BD-8)	701901 <i>- 01</i>
11	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT, BD 400-04 (BD-22)	
. 12	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT, BD600-06 (BD-24)	
13	BUTT JOINT AND HMA TAPER, BD 400-05 (BD-32)	
14	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS, TC-10	
15	TYPICAL APPLICATIONS: RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT), TC-11	
16	DISTRICT ONE TYPICAL PAVEMENT MARKINGS, TC-13	
17	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC), TC-14	
18	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING, TC-16	
19	ARTERIAL ROAD INFORMATION SIGNING, TC-22	
20	DISTRICT ONE DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING, TS-07	

BEFORE STARTING ANY	EXCAVATION, THE C	ONTRACTOR SHALL	CALL "JULIE"
AT (800) 892-0123 OR	"CUAN" AT (312) 74	4-7000 FOR FIELD	LOCATIONS
OF BURIED ELECTRIC,	TELEPHONE AND GAS	UTILITIES (48 HO	UR NOTIFICATION
IS REQUIRED).			

GENERAL NOTES

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

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 1½INCHES 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 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.

ALL PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS OBLITERATED BY MILLING AND RESURFACING OPERATIONS ON SIDE STREETS AND ENTRANCES SHALL BE REPLACED AND PAID FOR IN KIND.

MILLING OF CONCRETE PATCHES IS INCIDENTAL AND WILL BE PAID FOR WITH THE PAY ITEM HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"

THE RESIDENT ENGINEER SHALL CONTACT WALLY CZARNY, AT (773) 685-4342 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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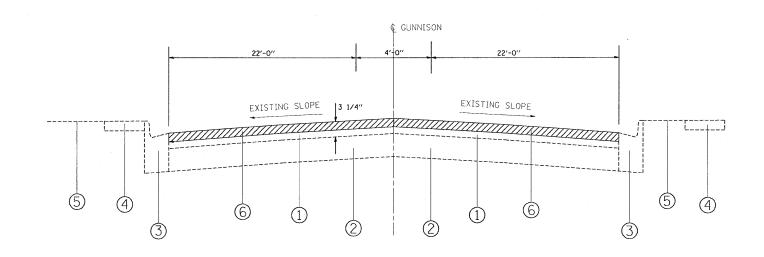
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DEPARTMENT	OF T	<b>TRANSPORTATION</b>

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GUNNISON STREET	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1363	0707.4 RS	соок	20	2
INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES			CONTRACT	NO. 6	60HO
CALE: SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. RO	DAD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT		-

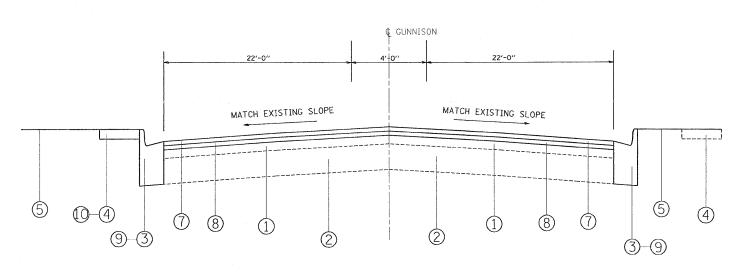
	SUMMARY OF QUANTITIES		URBAN 1001/FEO		CONSTRUCTION 1	TYPE COD	E	IT	SUMMARY OF QUANTITIES		URBAN	I	С	ONSTRUCT	ION TYPE	CODE	
			100%.FEO						GOARTITIES		100%.FED .						
CODE NO	ITEM	UNIT	OUANTITIES	I-000				CODE NO	ITEM	UNIT	QUANTITIES	I-000					
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	24	24				70102635	TRAFFIC CONTROL AND PROTECTION,	L SUM	1	1					
40600300	AGGREGATE (PRIME COAT)	TON	120	120				70700100	STANDARD 701701								
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	45	45				70300100	SHORT-TERM PAVEMENT MARKING TEMPORARY PAVEMENT MARKING	F00T S0 FT	120	120					
40600895	CONSTRUCTING TEST STRIP	EACH	2	2					- LETTERS AND SYMBOLS	30 77	120	120					
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	417	417				70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	10670	10670					
40601005		TON	557	557				70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	1766	1766					
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	2501	2501				70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	120	120					
42001300	PROTECTIVE COAT	SO YD	222	222			,	70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	318	318		,			
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5	SO FT	810	810				70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	1613	1613					
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2	SO YD	29764	29764				* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	120	120					
44000600	SIDEWALK REMOVAL	SQ FT	810	810				* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	10670	10670					
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	590	590				* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1766	1766					
44002213	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 3 1/4"	SO YD	2778	2778				* 78000600	THERMOPLASTIC PAVEMENT MARKING	FOOT	120	120				en een	
44201749	CLASS D PATCHES, TYPE I, 9 INCH	SQ YD	132	132				<b>*</b> 78000650	THERMOPLASTIC PAVEMENT MARKING	FOOT	318	318					
44201753	CLASS D PATCHES, TYPE II. 9 INCH	SO YD	406	406				* 79100100	- LINE 24"	5.0			,				
44201757	CLASS D PATCHES, TYPE III. 9 INCH	SO YD	240	240				* 78100100 78300200	RAISED REFLECTIVE PAVEMENT MARKER RAISED REFLECTIVE PAVEMENT MARKER	EACH	641	641					
44201759	CLASS D PATCHES, TYPE IV. 9 INCH	SO YD	2000	2000				18300200	REMOVAL	EACH	513	513					
55039700	STORM SEWERS TO BE CLEANED	FOOT	516	516				* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	930	930					
60250200	CATCH BASINS TO BE ADJUSTED	EACH	2	2	,			x0322256	TEMPORARY INFORMATION SIGNING	SQ FT	51. 4	51.4					
60253100	CATCH BASINS TO BE RECONSTRUCTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	10	10				X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	1172	1172					
60254330	CATCH BASINS TO BE RECONSTRUCTED WITH NEW TYPE 23 FRAME AND GRATE	EACH	1	1				# 20018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	125	125			·		
60255500	MANHOLES TO BE ADJUSTED	EACH	1	1													
60260100	INLETS TO BE ADJUSTED	EACH	3	3													
60264130	INLETS TO BE RECONSTRUCTED WITH NEW TYPE 23 FRAME AND GRATE	EACH	3	3					*SPECIALITY ITEMS								
60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	49	49					# NON PARTICIPATING ITEMS								
60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	76	76					(100% STATE)			-					
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													
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		ATE -		REVISED REVISED		DEPA	ARTMENT OF T	KANSPORTA	SCALE: SHEET NO. 1 OF 1 SHE	Y OF QUANIT		STA.		AD DIST. NO. 1  I		CONTRACT	NO. 60H68

#

### LEGEND



EXISTING TYPICAL SECTION
STATION:
10+74 TO 62+29



PROPOSED TYPICAL SECTION STATION:
10+74 TO 62+29

- 1 EXISTING HOT-MIX ASPHALT SURFACE, 1"(±) AFTER MILLING
- (2) EXISTING PCC BASE COURSE, 9"(±)
- (3) EXISTING COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.12
- (4) EXISTING PCC SIDEWALK
- (5) EXISTING TOP SOIL AND SODDING
- (6) PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"
- (7) PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2"
- (8) PROPOSED POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50,  $\frac{3}{4}$ "
- PROPOSED COMBINATION CONCRETE CURB & GUTTER REMOVAL & REPLACEMENT (LOCATIONS TO BE DETERMINED BY THE ENGINEER)
- PROPOSED PCC SIDEWALK REMOVAL & REPLACEMENT (LOCATIONS TO BE DETERMINED BY THE ENGINEER)

#### HOT-MIX ASPHALT MIXTURE REQUIREMENTS

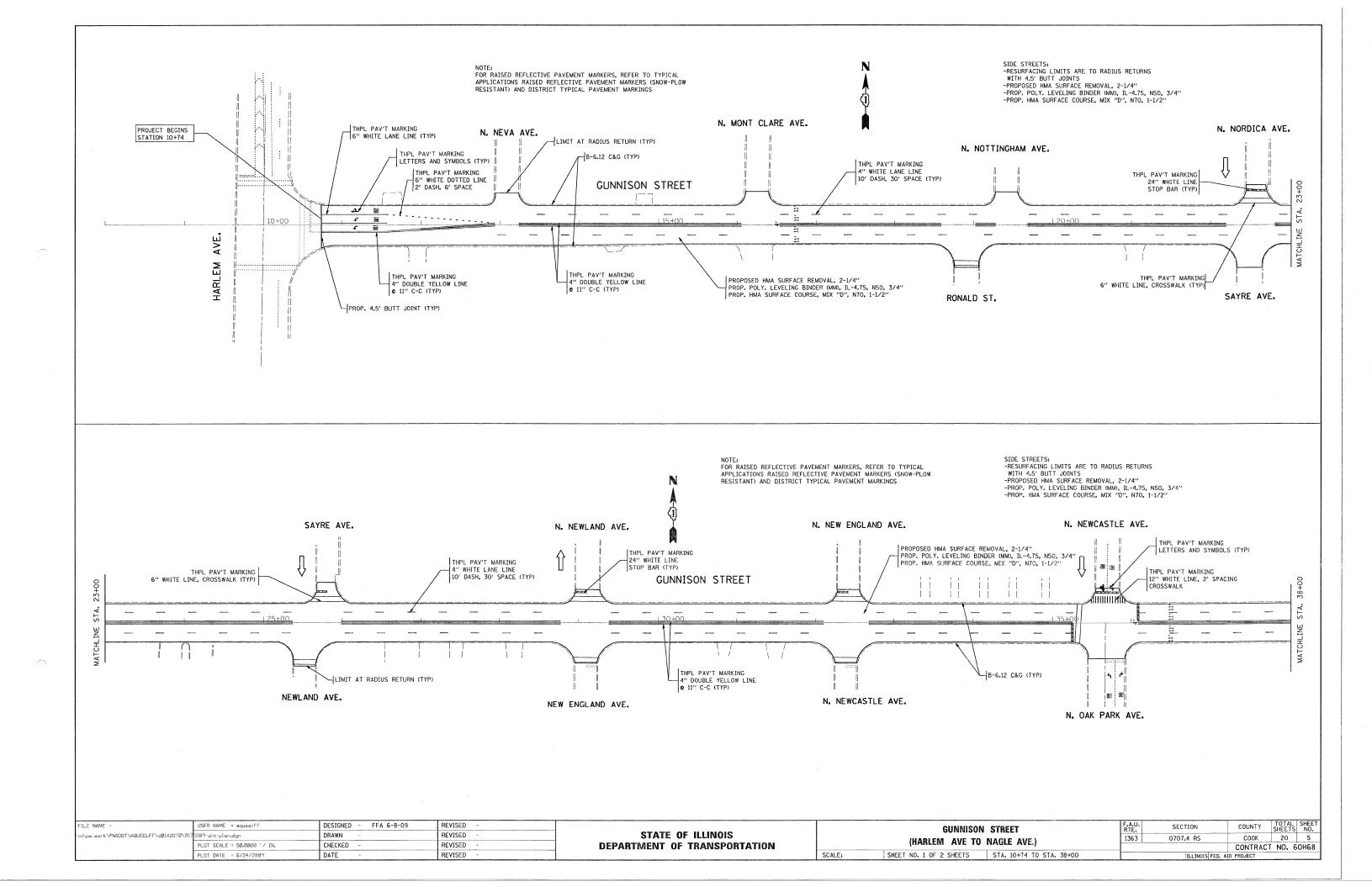
	MIXTURE TYPE	AC TYPE	AIR VOIDS (%)
ROADWAY	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2 " (IL-9.5MM)	PG 64-22	4% @ 70 GYR
KOADWAT	POLYMERIZED LEVELING BINDER (MM), IL 4.75, N50, 3/4"	SBS/SBR PG 76-28/-22	4% @ 50 GYR
DATOUEC	CLASS D PATCHES, (BINDER IL-19.0 MM), 9"(±)	PG 64-22*	4% @ 70 GYR
PATCHES	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES, (BINDER IL-19.0 MM)	PG 64-22*	4% @ 70 GYR

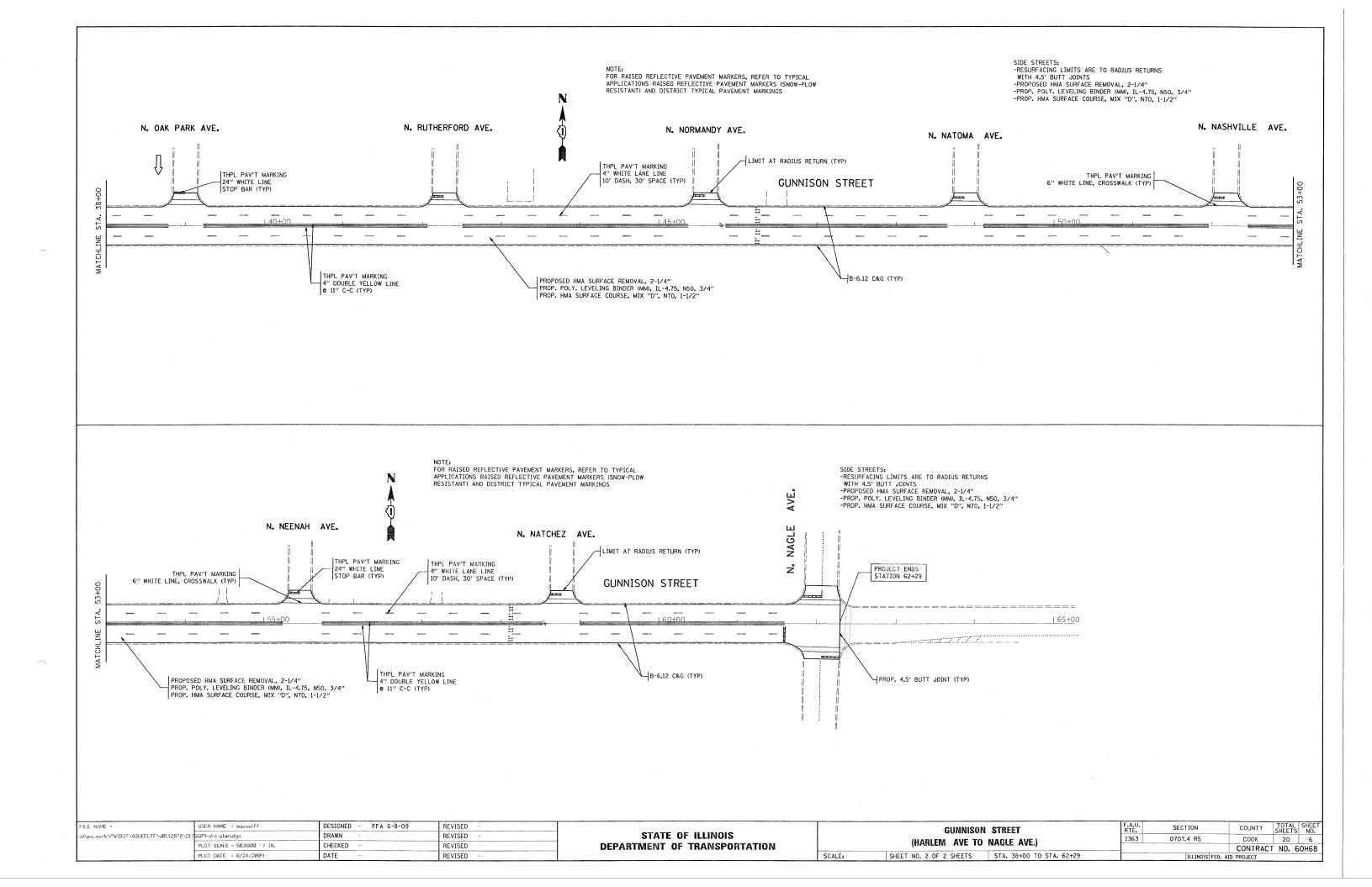
THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN

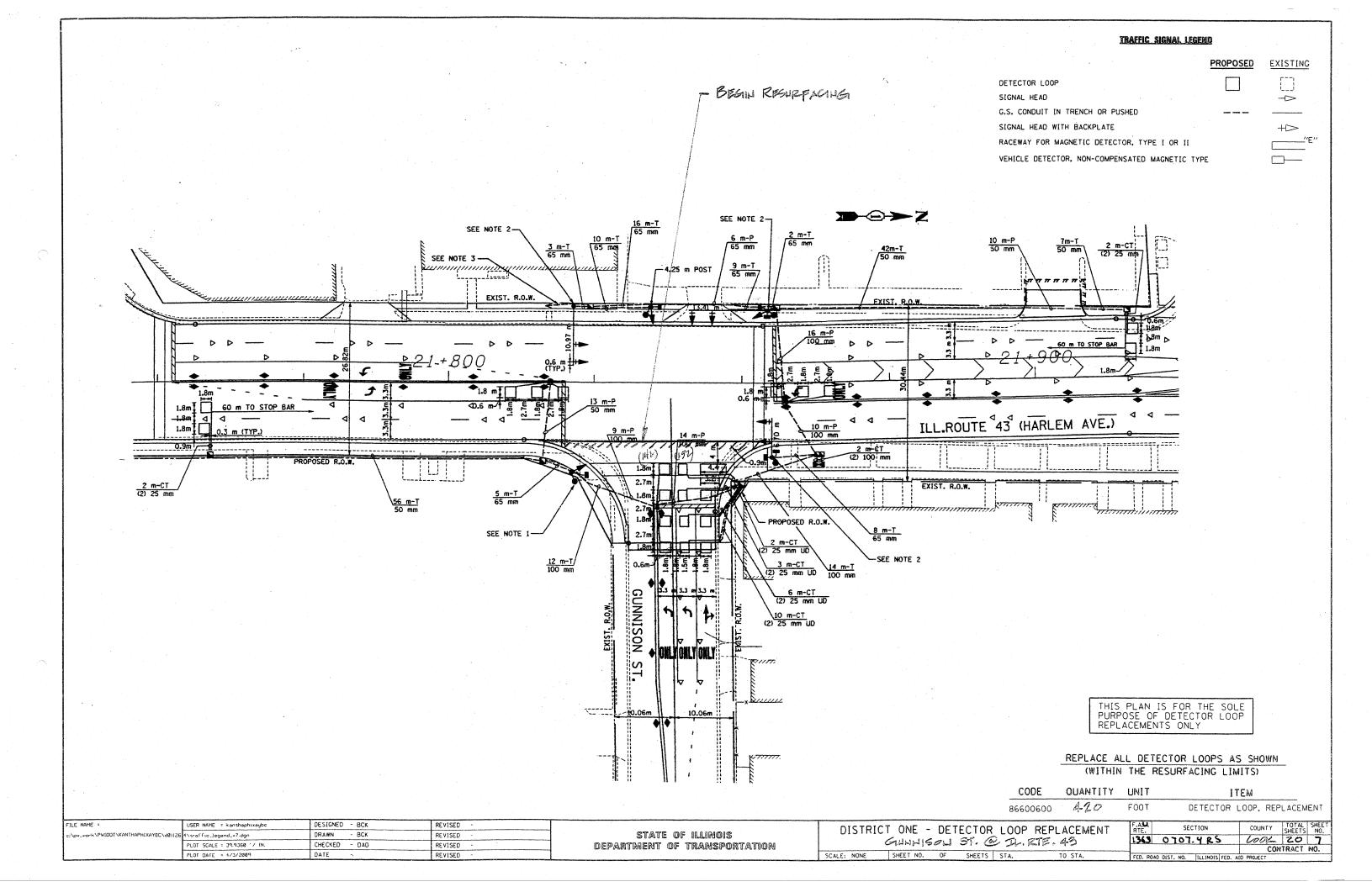
\*WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22

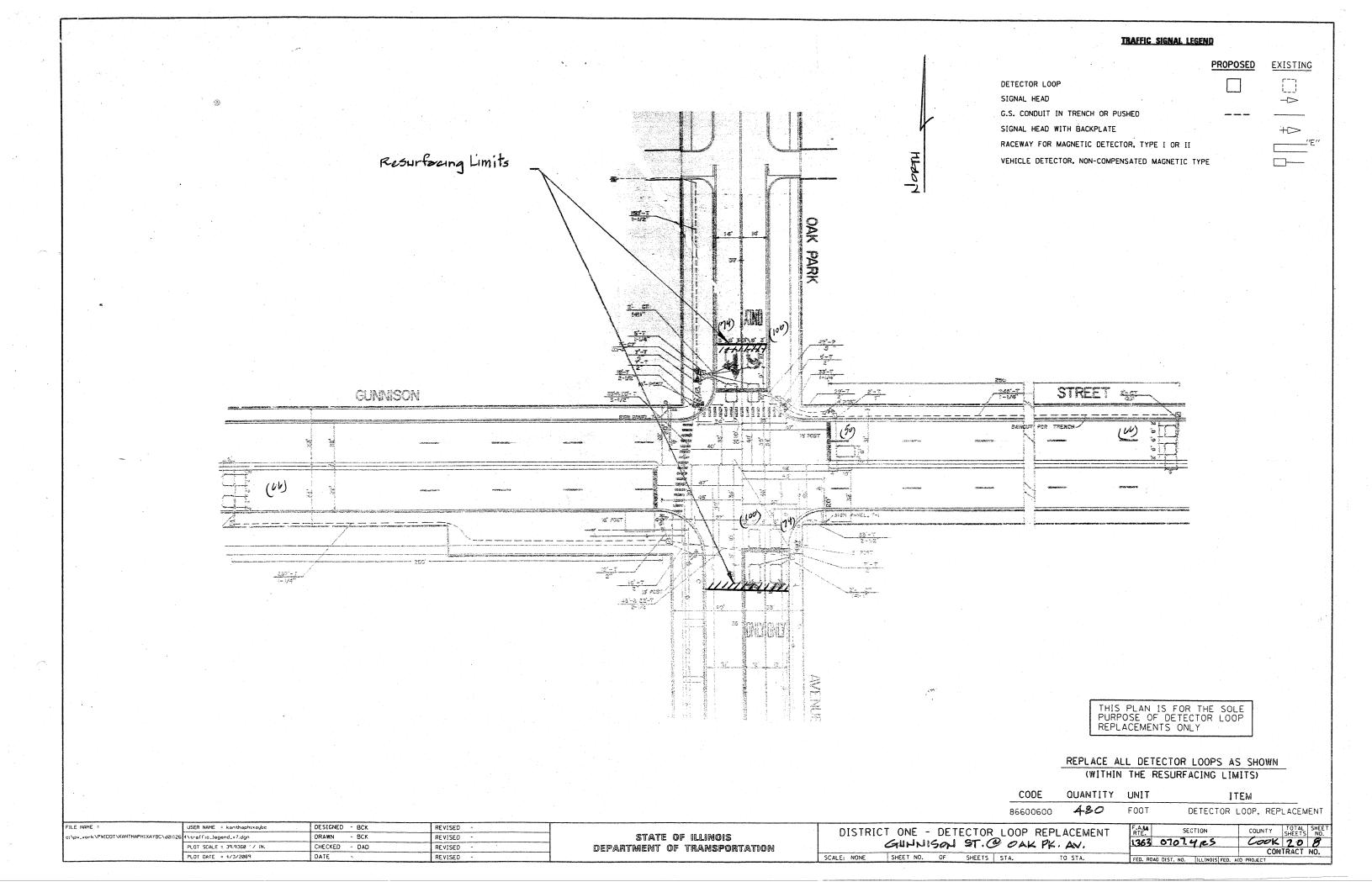
NOTE: PATCH FIRST THEN MILL

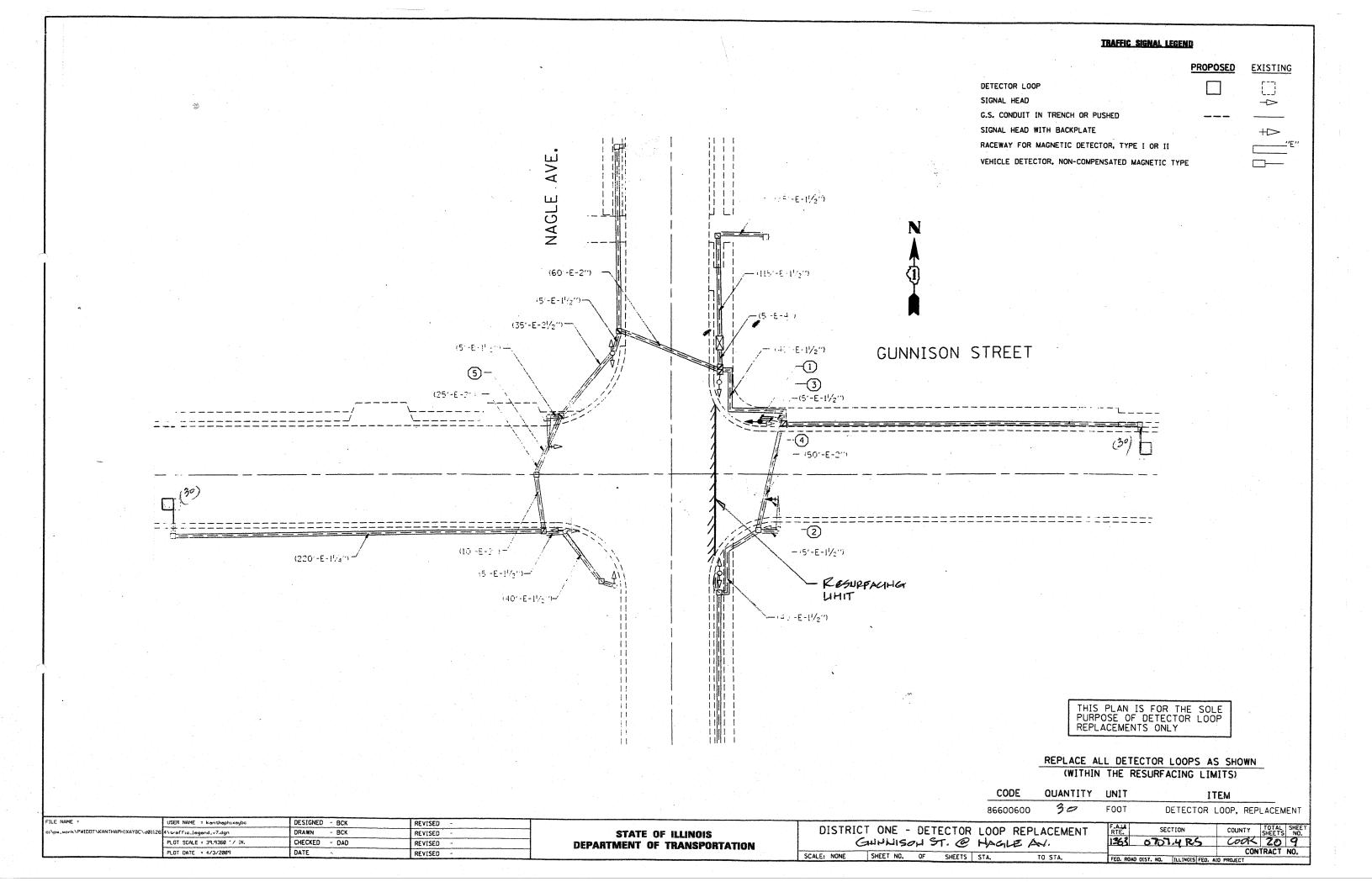
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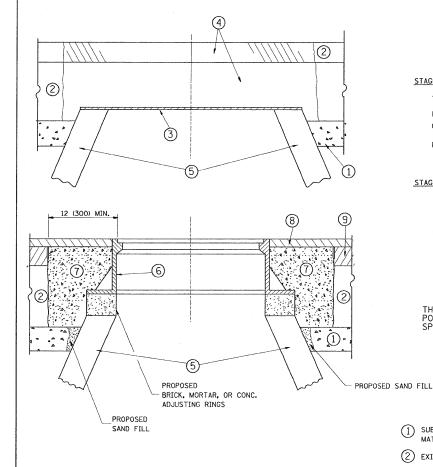












#### NOTES:

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 103,04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

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

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

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

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

#### CONSTRUCTION PROCEDURES

#### STAGE 1 (BEFORE PAVEMENT MILLING)

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

#### STAGE 2 (AFTER PAVEMENT MILLING)

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

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

#### LEGEND

- 1 SUB-BASE GRANULAR MATERIAL
- 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
- 8 PROPOSED HMA SURFACE COURSE
- PROPOSED CRUSHED STONE AND HMA SURFACE MIX 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.

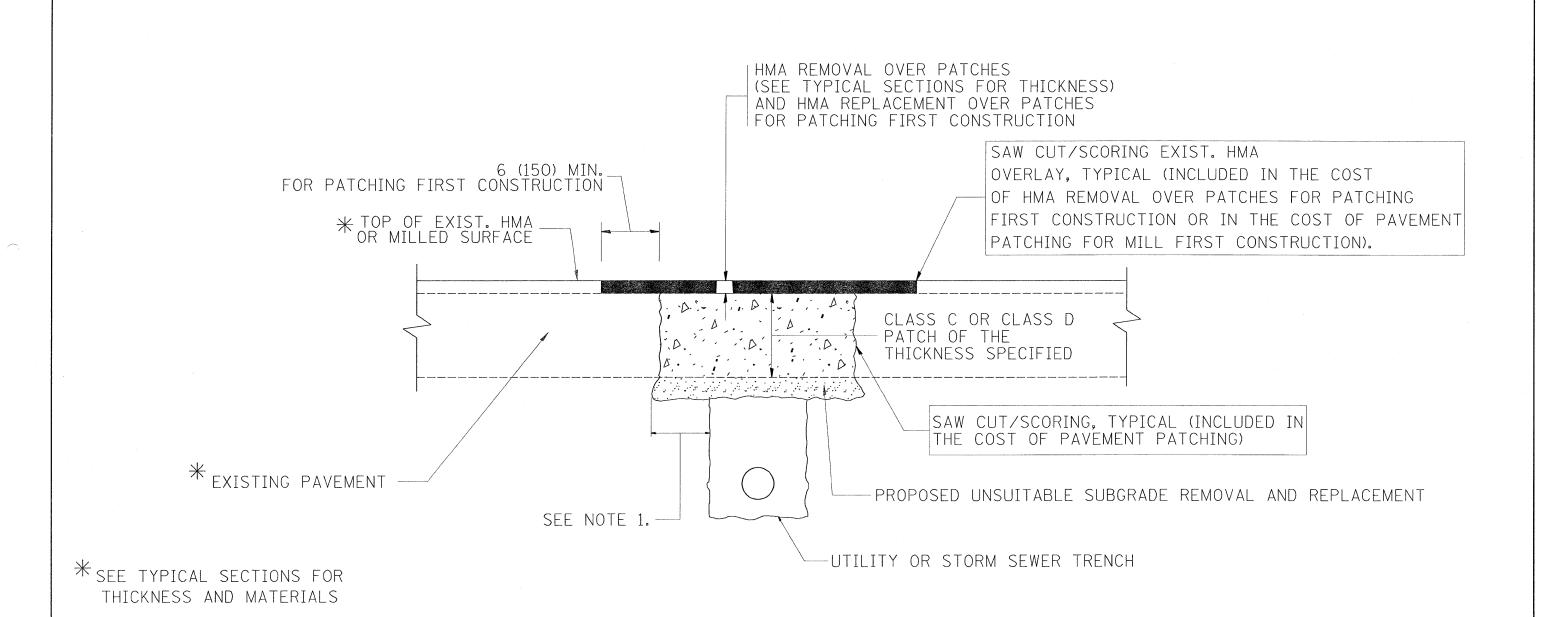
#### DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

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	DEPARTMENT
	PLOT DATE = 6/24/2009	DATE	-	10-25-94	REVISED	- R	. BORO 01-01-07	

TE OF ILLINOIS **OF TRANSPORTATION** 

	DETAILS TO	, , , , , , , , , , , , , , , , , , ,	F.A.U.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FRAMES AND LIDS ADJUSTMENT WITH MILLING	2	1363	0707.4 RS	COOK	20	10
	TRANCS AND LIDS ADSOSTNENT WITH IMPLINI			BD600-03 (BD-8)	CONTRACT	NO. 60	3H68
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. RO	DAD DIST. NO. 1 ILLINOIS FED. A	ID 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)

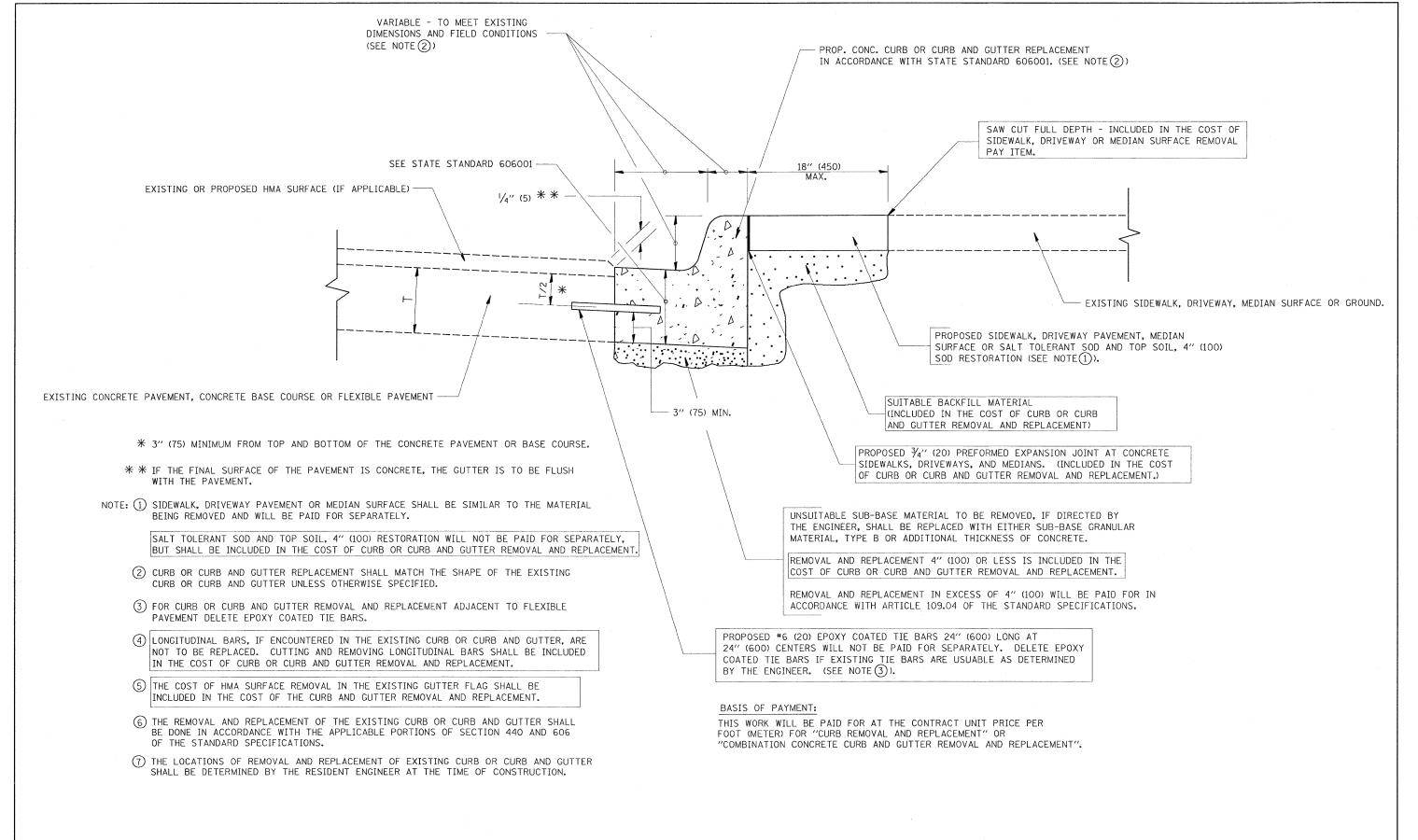
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

#### SEQUENCE OF CONSTRUCTION (MILLING FIRST)

- 1. MILL HMA FIRST IF THERE IS AT LEAST  $4\frac{1}{2}$  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.

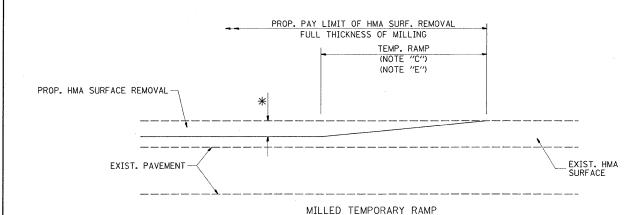
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	c:\pwiwork\PWIDOT\AGUEELFF\d0142870\Dis	tStd.dgn	DRAWN -	REVISED -	R. BORO 01-01-07	STATE OF ILLINOIS		l	1363	0707.4 RS	COOK	20	11
l		PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -	R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION	HMA SURFACED PAVEMENT		BD40	00-04 (BD-22)	CONTRACT		168
		PLOT DATE = 6/24/2009	DATE - 10-25-94	REVISED -	K. ENG 10-27-08	SCALE:	NONE SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. ROAD DI		ID PROJECT		



## CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

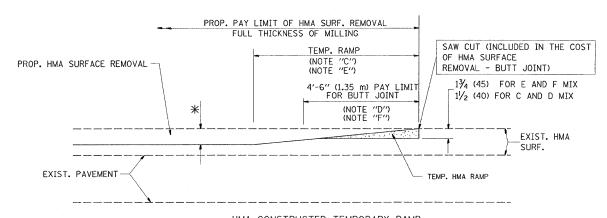
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME	=	USER NAME ≈ aqueelff	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96			CURB OR CURB AND GUTTER	F	F.A.U.	SECTION	COUNTY TOT	TAL SHEET ETS NO.
c:\pw_work	\PWIDOT\AQUEELFF\d0142870\Dis	tStd.dgn	DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS		REMOVAL AND REPLACEMENT	1	1363	0707.4 RS	COOK 20	
- 1		PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED - M. GOMEZ 01-22-01	DEPARTMENT OF TRANSPORTATION				BD600	0-06 (BD-24)	CONTRACT NO.	. 60H68
		PLOT DATE = 6/24/2009	DATE - 03-11-94	REVISED - R. BORO 01-01-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO	STA. F	FED. ROAD DIST	F. NO. 1 ILLINOIS FED.	AID PROJECT	



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

#### OPTION 1

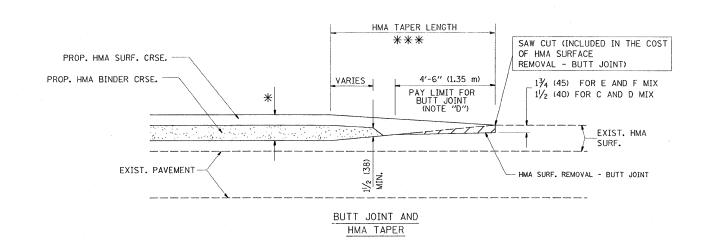


HMA CONSTRUCTED TEMPORARY RAMP

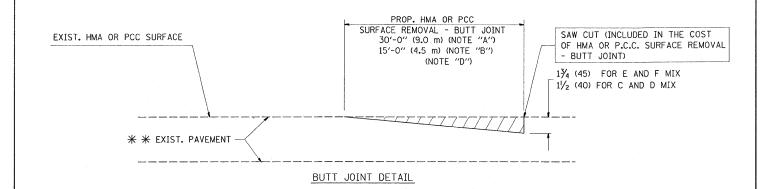
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

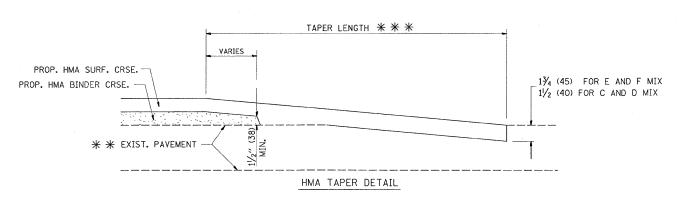
#### OPTION 2

#### TYPICAL TEMPORARY RAMP



### TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING





#### TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

#### NOTES

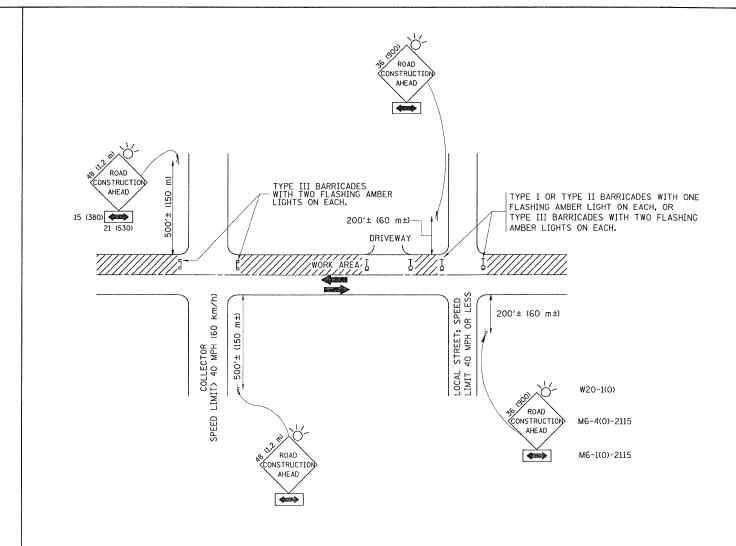
- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (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".

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

TOTAL SHEET SHEETS NO. FILE NAME = USER NAME = aqueelff DESIGNED - M. DE YONG REVISED R. SHAH 10-25-94 SECTION STATE OF ILLINOIS DRAWN REVISED A. ABBAS 03-21-97 1363 0707.4 RS COOK 20 HMA TAPER DETAILS PLOT SCALE = 50.0000 '/ IN. CHECKED REVISED M. GOMEZ 04-06-01 **DEPARTMENT OF TRANSPORTATION** BD400-05 BD32 CONTRACT NO. 60H68 SHEET NO. 1 OF 1 SHEETS STA. TO STA. DATE 06-13-90 REVISED R. BORO 01-01-07 SCALE: NONE PLOT DATE = 6/24/2009 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT



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

#### NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- 0) ONE ROAD CONSTRUCTION AHEAD SIGN 36  $\times$  36 (900 $\times$ 900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- d) 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 (MG-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (MG-4).

SCALE: NONE

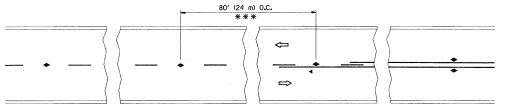
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL 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.

1	FILE NAME =	USER NAME = aqueelff	DESIGNED	~	LHA	REVISED	-	J. OBERLE 10-18-95
1	c:\pw_work\PWIDOT\AQUEELFF\d0142870\D1s	tStd.dgn	DRAWN	-		REVISED	-	A. HOUSEH 03-06-96
١		PLOT SCALE = 50,0000 '/ IN.	CHECKED	-		REVISED	-	A. HOUSEH 10-15-96
1		PLOT DATE = 6/24/2009	DATE	-	06-89	REVISED	-T.	RAMMACHER 01-06-00

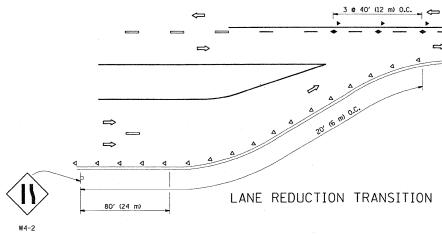
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

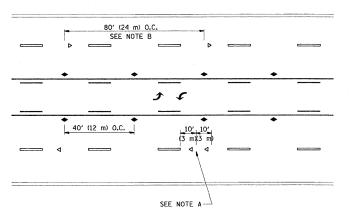
TR	AFFI	C	CON	T	ROL AN	D PR	OTEC	TION	FOR	
SIDE	RO <i>F</i>	۱D	S, IN	TE	RSECTI	ONS,	AND	DRIV	EWAYS	;
 SHEET	NO.	1	OF	1	SHEE	rs	STA.			TO



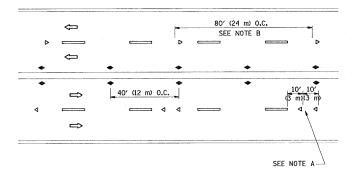
\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

#### TWO-LANE/TWO-WAY

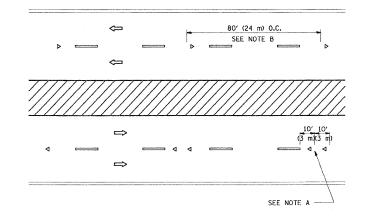




TWO-WAY LEFT TURN



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

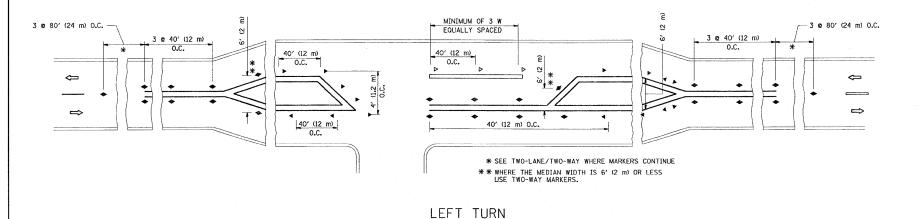
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

#### SYMBOLS

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

#### DESIGN NOTES

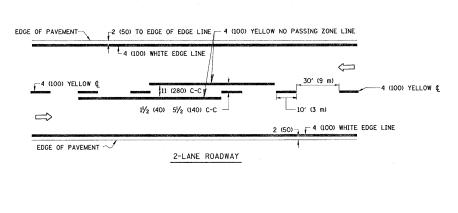
- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- 2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
- MARKERS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

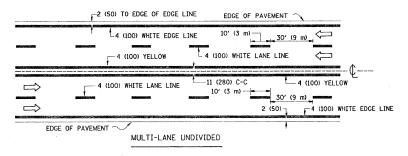


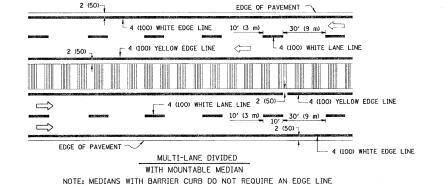
All dimensions are in inches (millimeters) unless otherwise shown.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

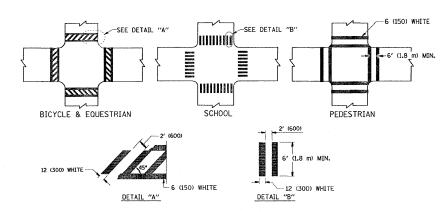
	<del></del>	***************************************	TYPICAL	APPLICAT	IONS	
	RAISED	REFLECTIVE	PAVEMENT	MARKERS	(SNOW-PLOW	RESISTANT)
SCALE:	NONE	SHEET NO.	1 OF 1	SHEETS	STA.	TO STA.



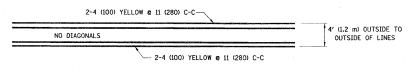




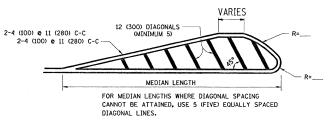
#### TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING



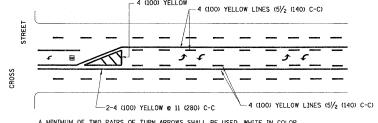
#### 4' (1.2 m) WIDE MEDIANS ONLY



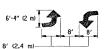
DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))

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

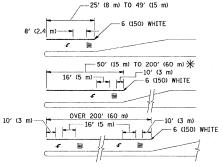


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

#### TYPICAL PAINTED MEDIAN MARKING

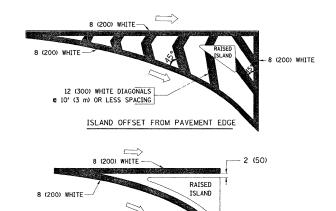


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  $\P$  AREA = 15.6 SQ. FT. (1.5 m²)  $\P$  AREA = 20.8 SQ. FT. (1.9 m²)

 $\mbox{\ensuremath{\Re{+}}}$  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

ISLAND AT PAVEMENT EDGE

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVEDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 51/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART 5EE 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	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 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)) 150' (45 m) C-C (0VER 45MPH (70 km/h))

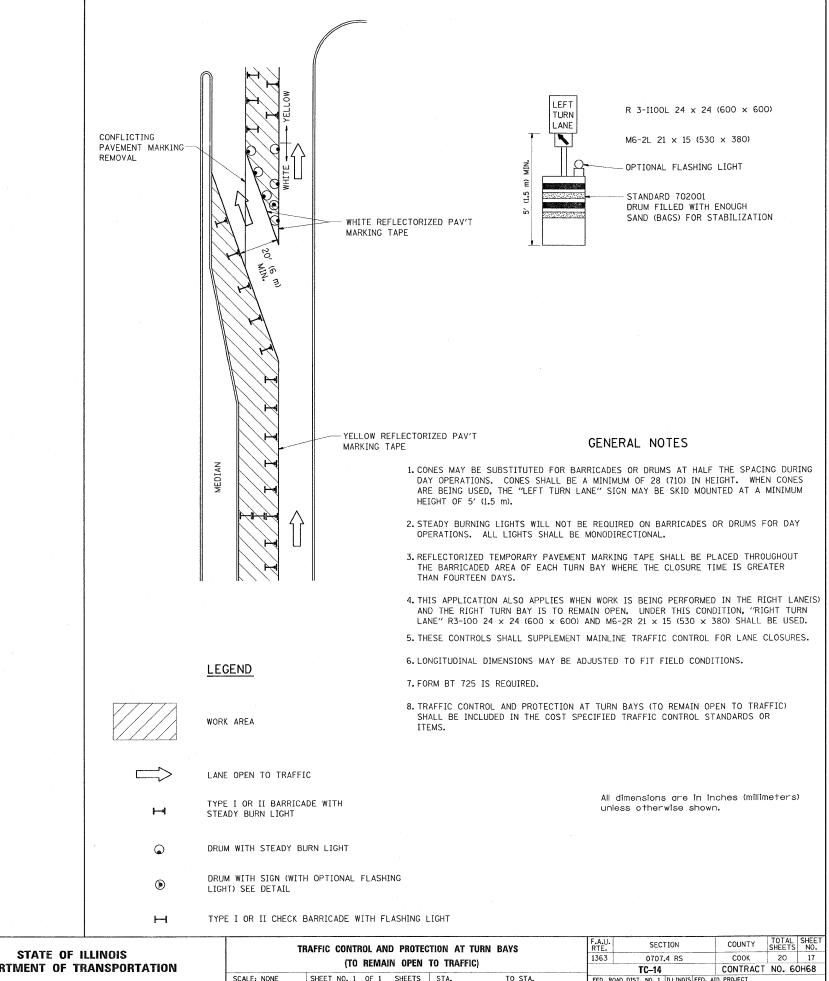
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

FILE NAME =	USER NAME = aqueelff	DESIGNED -	EVERS	REVISED	-T. RAMMACHER 10-27-94
c:\pw_work\PWIDOT\AQUEELFF\dØ142870\Dis	tStd.dgn	DRAWN -		REVISED	-A. HOUSEH 10-09-96
-	PLOT SCALE = 50.0000 '/ IN.	CHECKED -		REVISED	- A. HOUSEH 10-17-96
	PLOT DATE = 6/24/2009	DATE -	03-19-90	REVISED	-T. RAMMACHER 01-06-0

STATE	OF	ILLINOIS
<b>DEPARTMENT</b>	OF	TRANSPORTATION

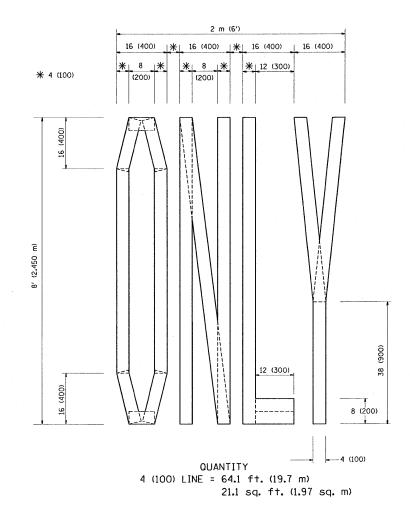
	DI	STRICT ONE		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TVDICAL D	AVENENT MARKINGS	1363	0707.4 RS	COOK	20	16	
	TTTIGAL FA	AVENUENT INMANUAGO			TC-13		NO. 60	0H68
SCALE: NONE	SHEET NO. 1 OF 1	SHEETS STA.	TO STA.	FED. ROAL	D DIST. NO. 1 ILLINOIS FED. AI	D PROJECT		

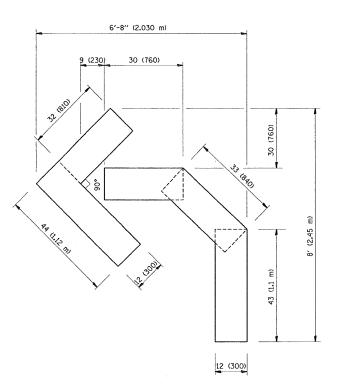


FILE NAME = USER NAME = equeelff DESIGNED REVISED -T. RAMMACHER 09-08-94 o:\pw\_work\PWIDOT\AQUEELFF\d0142870\D. DRAWN - A. HOUSEH 11-07-95 PLOT SCALE = 50.0000 '/ IN. REVISED - A. HOUSEH 10-12-96 CHECKED REVISED -T. RAMMACHER 01-06-00 PLOT DATE = 6/24/2009 DATE

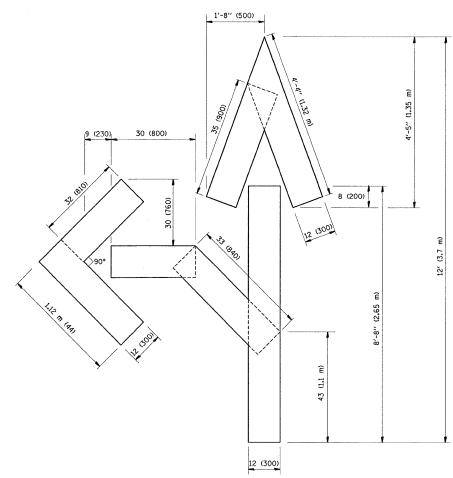
**DEPARTMENT OF TRANSPORTATION** 

SHEET NO. 1 OF 1 SHEETS STA. TO STA.





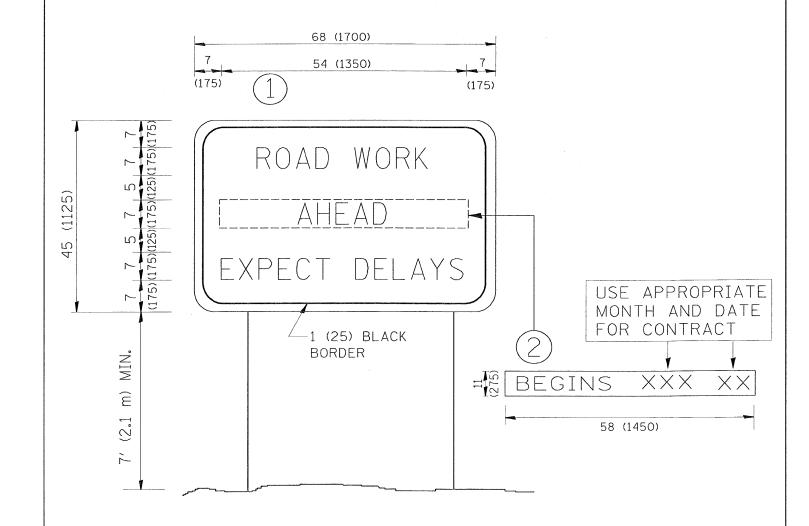
OUANTITY 4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.39 sq. m)



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.

ı	FILE NAME =	USER NAME = equeelff	DESIGNED -	REVISED -T. RAMMACHER 06-05-96		PAVEMENT MARKING LETTERS AND SYMBOLS	F.A.U. RTF.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ŀ	c:\pw_work\PWIDOT\AQUEELFF\dØ14287Ø\D:s	tStd.dgn	DRAWN -	REVISED -T. RAMMACHER 11-04-97	STATE OF ILLINOIS	FOR TRAFFIC STAGING	1363	0707.4 RS	СООК	20	18
		PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-98	DEPARTMENT OF TRANSPORTATION			TC-16	CONTRACT	T NO. 60	OH68
.		PLOT DATE = 6/24/2009	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD	DIST. NO. 1   ILLINOIS   F	ED. AID PROJECT		



## NOTES:

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

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

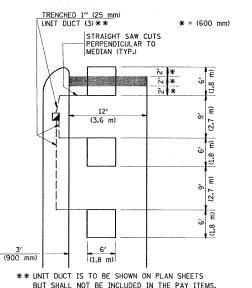
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es/pw_work/PWIDOT/AGUEELFF/c	\dØ14287Ø\D1stStd.dgn	DRAWN -	REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS	INFORMATION SIGN	1363 0707.4 RS	COOK 20 19
	PLOT SCALE = 50.0000 '/ [N.	CHECKED -	REVISED -T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION		TC-22	CONTRACT NO. 60H68
1	PLOT DATE = 6/24/2009	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.	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 900 MIN. (1.5 m) (1.8 m) (1.5 m) 1" (25 mm) UNIT DUCT-TRENCHED (3.0 m)(3.0 m) TO F/P \*\* \* = (600 mm)\*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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

(PROTECTED / PERMITTED LEFT TURN PHASING)

HANDHOLE LOCATION MAY
VARY DEPENDING ON GEOMETRICS
AND DESIGN OF TRAFFIC SIGNALS.
HEAVY-DUTY HANDHOLES TO BE
USED WHEN THE MEDIAN IS
MOUNTABLE. REFER TO STANDARD
BI4001 TO ENSURE THAT HANDHOLE
FITS IN MEDIAN.

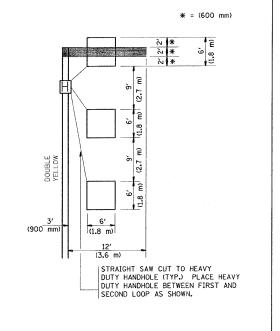


NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO

PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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

(PROTECTED / PERMITTED LEFT TURN PHASING)

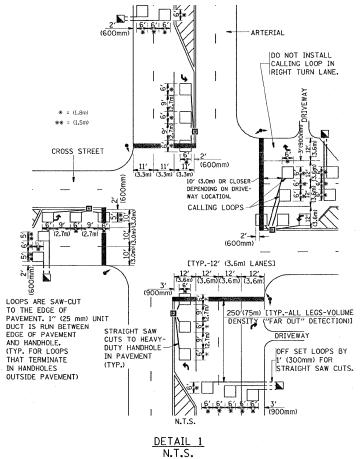


NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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)



DESIGNED

CHECKED

R.K.F.

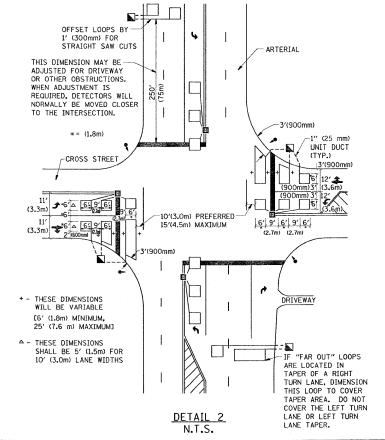
DRAWN

DATE

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PLOT SCALE = 50.0000 ' / IN.

PLOT DATE = 6/24/2009



#### NOTES:

#### VEHICLES LOOP DETECTORS

- \* ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIFLDED.
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATLY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- \* ONE DIMENSION OF <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 (1.e. 1-1/2, 1-3/4, 2).
- \* WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

#### PLACEMENT OF DETECTORS

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

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

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

#### NOTE:

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

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

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1363	0707.4 RS	СООК	20	20
	TS-07	CONTRACT	NO. 60	36HC
FED. F	OAD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT		