STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

F.A.P. ROUTE 338 /ILL 59 ILL 22 TO LAKE-COOK ROAD

> SECTION: N-RS-2 RESURFACING

PROJECT: *ESP-0338(039)*

LAKE COUNTY C-91-758-09

LAKE 27 1 N-RS-2

D-91-758-09



PROJECT IS LOCATED IN THE VILLAGE OF BARRINGTON

FOR INDEX OF SHEETS, SEE SHEET NO. 2

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ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS

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

ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

PROJECT BEGINS STA. 19+93

FROM STA. 20+83 TO STA. 21+09 FROM STA. 35+24 TO STA. 35+38

CUBA TOWNSHIP

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

GROSS LENGTH OF PROJECT = 13,011 FEET (2.46 MILES) NET LENGTH OF PROJECT = 12,971 FEET (2.45 MILES)

PROJECT ENGINEER: DAN WILGREEN (847) 705-4240 PROJECT MANAGER: KEN ENG

CONTRACT NO. 60H60

PROJECT ENDS STA. 150+04 TRAFFIC DATA SPEED LIMIT: 25 MPH TO 50 MPH 2007 ADT: 19,100

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS

SHEET

SHEET NO.	DESCRIPTION		STATE STANDARDS
1	TITLE SHEET	000001 <i>-05</i>	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
2	INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES	442201- <i>03</i>	CLASS C AND D PATCHES
3	SUMMARY OF QUANTITIES	606001-04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB & GUTTER
3 4-7	TYPICAL SECTIONS	701011 - <i>02</i>	OFF-ROAD MOVING OPERATIONS 2L, 2W DAY ONLY
4-1 8-12	ROADWAY & PAVEMENT MARKING PLANS	701301- <i>03</i>	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
13-16	DETECTOR LOOP REPLACEMENT PLANS	701306- <i>0</i> 2	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS > 45 MPH
17	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING (BD-08)	701501- <i>05</i>	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
	PAVEMENT PATCHING FOR HOT-MIX ASPHALT SURFACED PAVEMENT (BD-22)	701606- <i>06</i>	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
18	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24)	701701- <i>0</i> 6	URBAN LANE CLOSURE, MULTILANE INTERSECTION
19	BILTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS (BD-32)	701901-01	TRAFFIC CONTROL DEVICES
20			
21	TRAFFIC CONTROL AND PROTECTION FOR SIDES ROADS, INTERSECTIONS AND DRIVEWAYS (TC-10)		
22	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT) (TC-11)		
23	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)		
24	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) (TC-14)		
25	DISTRICT 1 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING (TS-07)		
26	SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS (TC-18)		
27	ARTERIAL ROAD INFORMATION SIGNING (TC-22)		

GENERAL NOTES:

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

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE VILLAGE OF BARRINGTON.

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

ALL HOT-MIX ASPHALT PAVEMENT PATCHING SHALL BE CLASS D.

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

WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES (40MM) WHERE THE SPEED LIMIT IS 45 MPH (80KM/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

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

THE RESIDENT ENGINEER SHALL VERIFY THE LOCATIONS OF ALL EXISTING PAVEMENT MARKINGS PRIOR TO MILLING OR RESURFACING.

ALL PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE IMPROVEMENT ACCORDING TO DISTRICT 1 TYPICAL PAVEMENT MARKING.

TWO WEEKS PRIOR TO PLACING PERMANENT PAVEMENT MARKINGS, CONTACT DEBBIE HANLON, AREA TRAFFIC FIELD ENGINEER AT (847) 438-2300.

RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED THROUGHOUT THE IMPROVEMENT ACCORDING TO THE DISTRICT STANDARDS AS NOTED

THE UNIT WEIGHT (CONVERSION FACTOR) QUOTED IS FOR THE ESTIMATING PLAN QUANTITIES ONLY. ACTUAL QUANTITIES TO FULFILL CONTRACT REQUIREMENTS WILL BE DETERMINED BASED ON UNIT WEIGHT OF APPROVED MIX DESIGN, PLAN DIMENSIONS, AND DENSITY LIMITATIONS, MAXIMUM PAYMENT WILL BE COMPUTED BASED ON WEIGHT AVERAGE DENSITIES OF THE IN-PLACE MIXTURE.

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

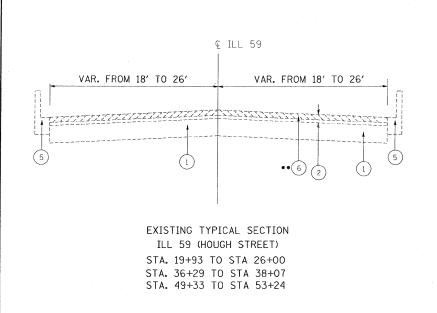
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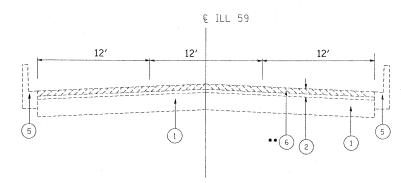
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CONTRACT NO. 60H60

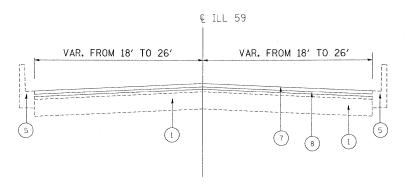
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		Т	T		CONSTRUCTI	ON TYPE	CODE			SUMMARY OF QUANTIT	IES				co	NSTRUCTIO	ON TYPE (CODE	
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CODE NO	ITEM	UNIT	TOTAL OUANTITIES	1000 100% FED					CODE NO	ITEM		UNIT	OUANTITIES	1					
20201006	GRADING AND SHAPING SHOULDERS	UNIT	147	147				•	78000200	THERMOPLASTIC PAVEMENT MAI	RKING	FOOT	46737	46737					
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	43	43					78000400	THERMOPLASTIC PAVEMENT MA	RK ING	FOOT	3961	3961					
40600300	AGGREGATE (PRIME COAT)	TON	215	215						- LINE 6"					. 1			-	
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	80.5	80.5				•	78000600	THERMOPLASTIC PAVEMENT MAI - LINE 12"	RKING	FOOT	1237	1237					
40600895	CONSTRUCTING TEST STRIP	EACH	1	1				•	78000650	THERMOPLASTIC PAVEMENT MA	RKING	FOOT	621	621					
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	534	534				•	78100100	RAISED REFLECTIVE PAVEMEN	T MARKER	EACH	602	602					
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	4517	4517					78300200	RAISED REFLECTIVE PAVEMEN REMOVAL	T MARKER	EACH	482	482					į
42001300	PROTECTIVE COAT	SQ YD	47	47			-	*	88600600	DETECTOR LOOP REPLACEMENT		FOOT	2027	2027					
44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1	SO YD	376	376					X0322256	TEMPORARY INFORMATION SIG		SO FT TON	2103	51.4					
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2	SO YD	53397	53397					X4067107	METHOD), IL-4.75, N50		FOOT	920	920					
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	210	210					Z0014800 Z0018500	DRAINAGE STRUCTURES TO BE	CLEANED	EACH	42	42					
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	587.4	587.4					Z0048665	RAILROAD PROTECTIVE LIABI	LITY INSURANCE	L SUM	1	1					
55039700	STORM SEWERS TO BE CLEANED	FOOT	1500	1500				•	X4421803	CLASS D PATCHES, TYPE II.	13 1/4"	SOYD	765	765				-	İ
60300310	FRAMES AND LIDS TO BE ADJUSTED	EACH	63	63						CLASS D PATCHES, TYPE III,	· · · · · · · · · · · · · · · · · · ·	SOYD	333 3790	333 3790					
60406100	(SPECIAL) FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	53	53				11		TRAFFIC CONTROL AND		L SUM		,					
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	, 6	. 6	,					5TANOARD 70/50/							,		
67100100	MOBILIZATION	L SUM	1	1					70102625	TRAFFIC CONTROL AND STANDARD 701606	PROTECTION	LSUM		'					
70100450	TRAFFIC CONTROL AND PROTECTION, -STANDARD 701201	L SUM																	
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1															
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1										,					
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	12746	12746															
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	936.4	936.4															
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	46737	46737	·														
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	3961	3961													:		
70300260		FOOT	1237	1237					,										
70300280		FOOT	621	621															
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	1416	1416		,										,			
78000100		SO FT	936.4	936.4						ANon-participating									
				<u> </u>				•	SPECIAL	Y ITEMS	HOU CEDEETS E	DON TIL	22 TO 1	VKE-COOK	RD F.A.P.	SEC	CTION	COUNTY	TOTAL SHEE SHEETS NO.
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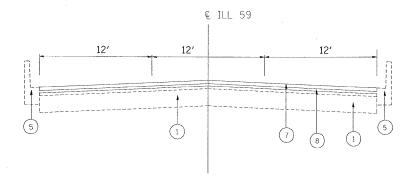




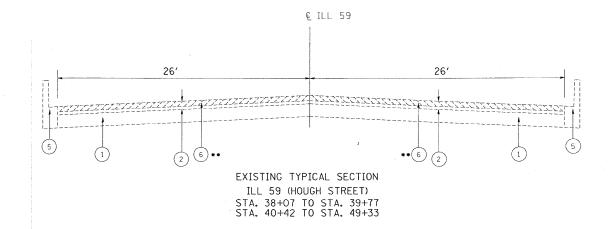
EXISTING TYPICAL SECTION ILL 59 (HOUGH STREET) STA. 26+00 TO STA 35+24 STA. 35+24 TO STA 36+29



PROPOSED TYPICAL SECTION ILL 59 (HOUGH STREET) STA. 19+93 TO STA 26+00 STA. 36+29 TO STA 38+07 STA. 49+33 TO STA 53+24



PROPOSED TYPICAL SECTION ILL 59 (HOUGH STREET) STA. 26+00 TO STA 36+29 STA. 35+24 TO STA 36+29



€ ILL 59 26' 26'

> PROPOSED TYPICAL SECTION ILL 59 (HOUGH STREET) STA. 38+07 TO STA. 39+77 STA. 40+42 TO STA. 49+33

HOT-MIX ASPHALT MIXTURE REQUIREMENT	TS	
MIXTURE TYPE	AC TYPE	AIR VOIDS
RESURFACING		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL-9.5 MM)	PG 64-22	4% @ 70 GYR
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	SBS/SBR PC 76-28/-22	4% ⊚ 50 GYR
PATCHING		
CLASS D PATCHES (HMA BINDER IL-19 mm)	PG 64-22*	4% © 70 GYR

- "THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LB/ SQ YD/IN"
- * WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58 -22.
- •• CONTRACTOR SHALL MILL FIRST ACCORDING STD. BD-22, REFER TO SHEET 18.

LEGEND

- EXISTING PCC PAVEMENT ±8"
- EXISTING HMA OVERLAY ±7 1/2"
- EXISTING AGGREGATE SHOULDER

SCALE: NTS

- EXISTING HMA SHOULDER
- EXISTING CURB & GUTTER

- PROSPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"
- PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2"
- PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B
- PROPOSED GRADING & SHAPING SHOULDERS
- (11)PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"

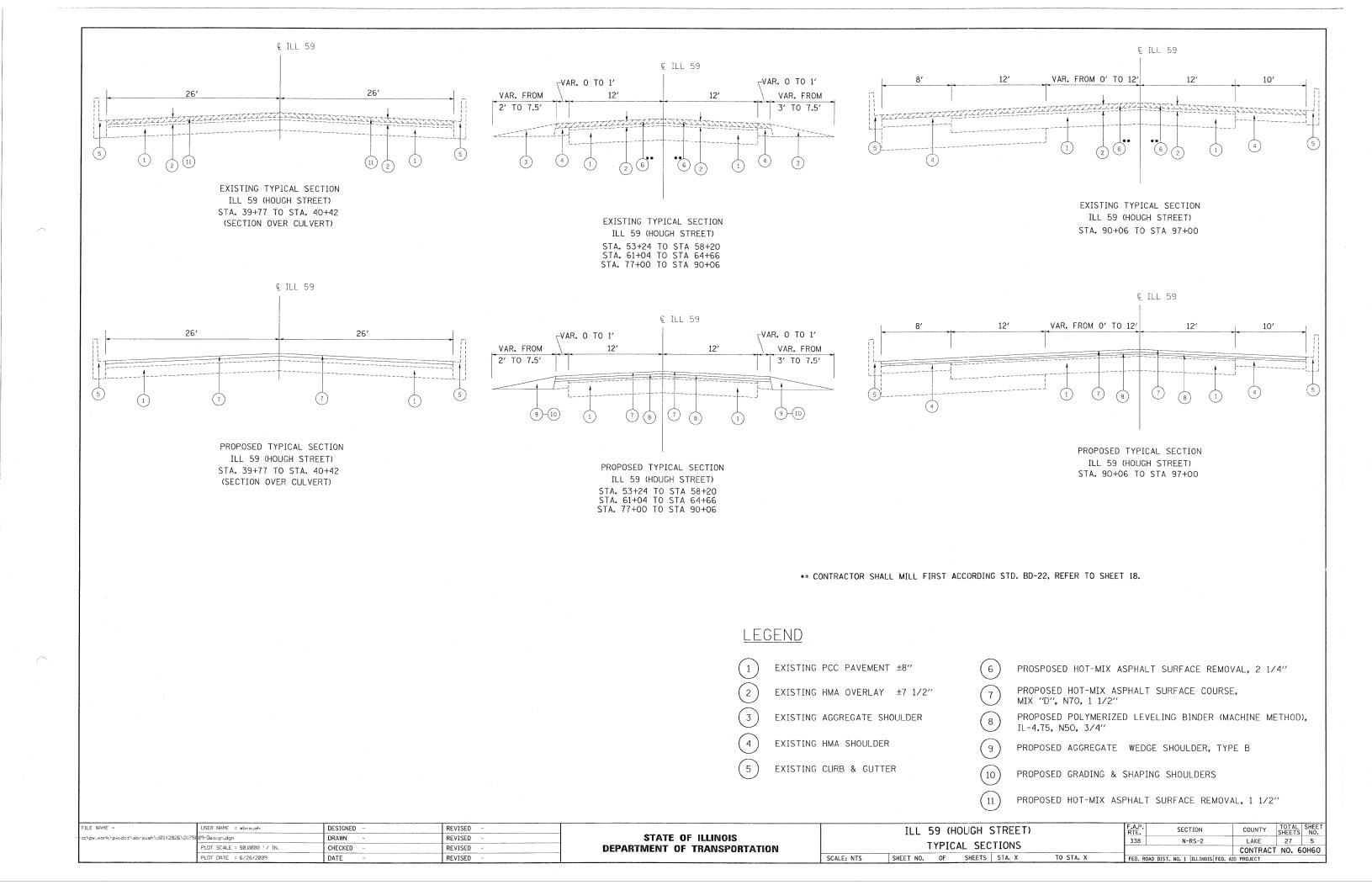
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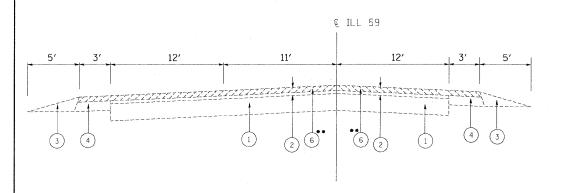
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** ILL 59 (HOUGH STREET) SECTION N-RS-2

COUNTY SHEETS NO.

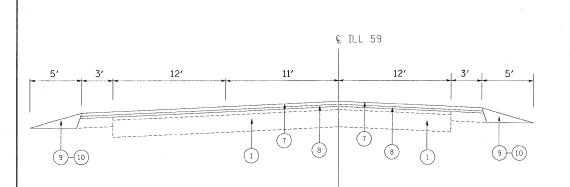
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CONTRACT NO. 60H60 TYPICAL SECTIONS SHEET NO. OF SHEETS STA. X TO STA. X FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

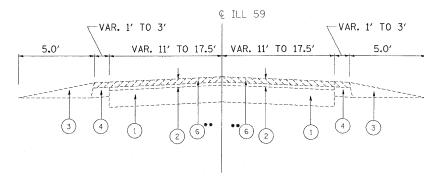




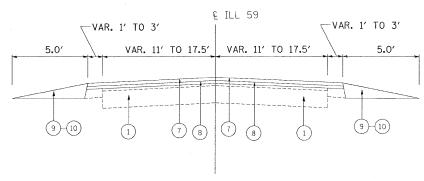
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ILL 59 (HOUGH STREET)
STA. 97+00 TO STA 101+16



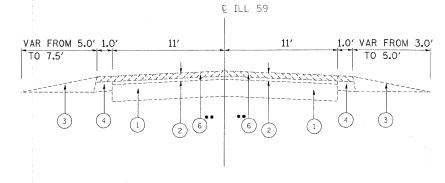
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ILL 59 (HOUGH STREET)
STA. 97+00 TO STA 101+16



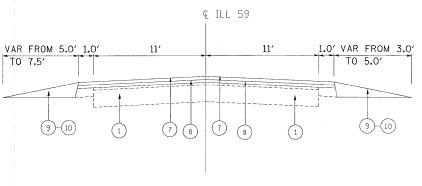
EXISTING TYPICAL SECTION
ILL 59 (HOUGH STREET)
STA. 101+16 TO STA 104+89



PROPOSED TYPICAL SECTION
ILL 59 (HOUGH STREET)
STA. 101+16 TO STA 104+89



EXISTING TYPICAL SECTION
ILL 59 (HOUGH STREET)
STA. 104+89 TO STA 142+57



PROPOSED TYPICAL SECTION
ILL 59 (HOUGH STREET)
STA. 104+89 TO STA 142+57

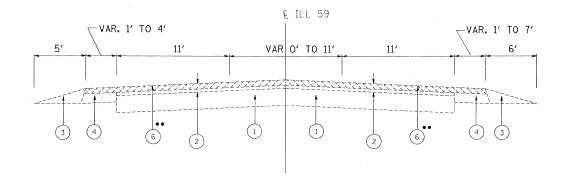
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LEGEND

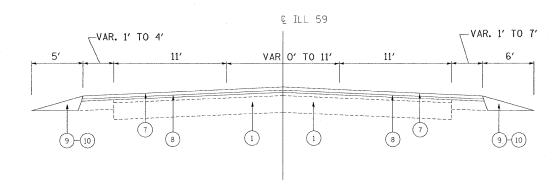
- (1) EXISTING PCC PAVEMENT ±8"
- 2 EXISTING HMA OVERLAY ±7 1/2"
- 3 EXISTING AGGREGATE SHOULDER
- 4) EXISTING HMA SHOULDER
- (5) EXISTING CURB & GUTTER

- 6) PROSPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"
- 7 PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2"
- PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- 9) PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B
- PROPOSED GRADING & SHAPING SHOULDERS
- 11) PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"

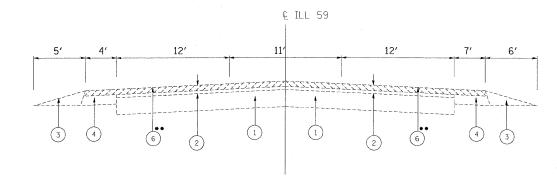
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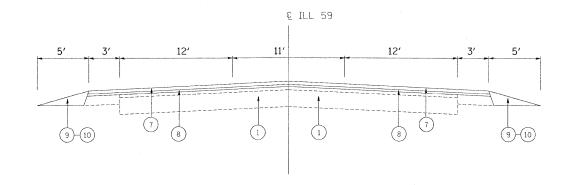
EXISTING TYPICAL SECTION
ILL 59 (HOUGH STREET)
STA. 142+57 TO STA 146+45



PROPOSED TYPICAL SECTION ILL 59 (HOUGH STREET) STA. 142+57 TO STA 146+45



EXISTING TYPICAL SECTION
ILL 59 (HOUGH STREET)
STA 146+45 TO STA. 150+04



PROPOSED TYPICAL SECTION
ILL 59 (HOUGH STREET)
STA 146+45 TO STA. 150+04

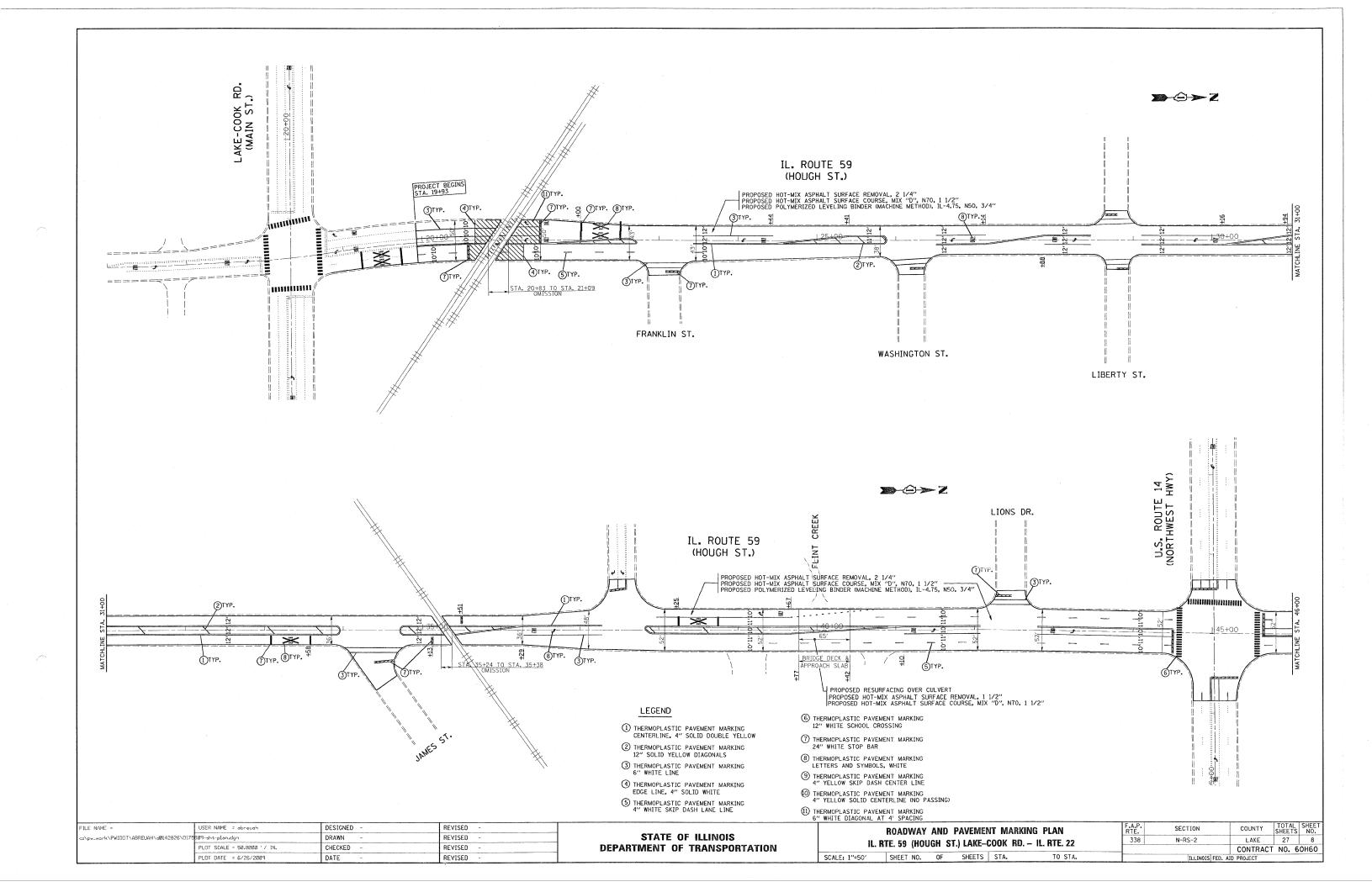
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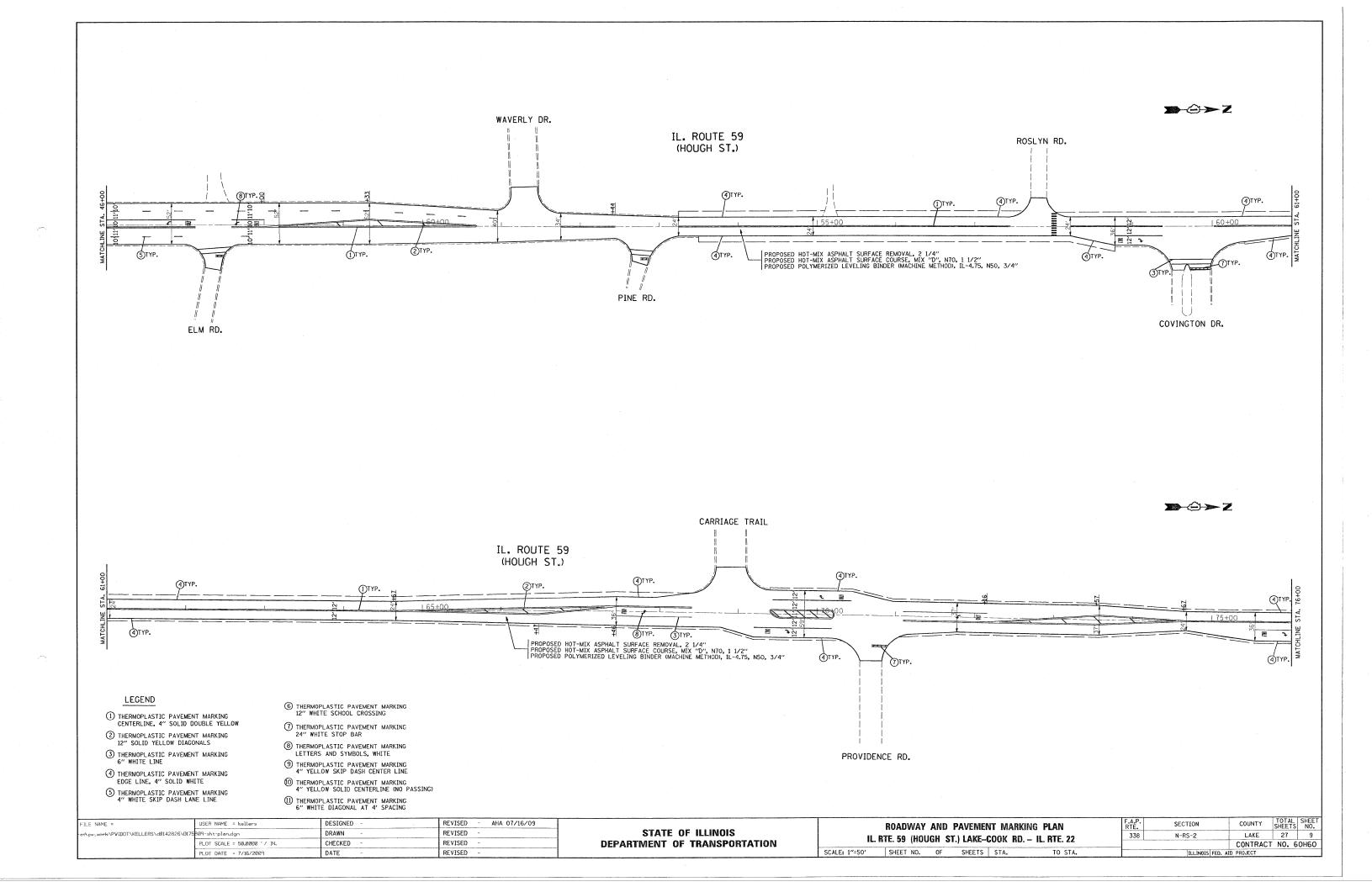
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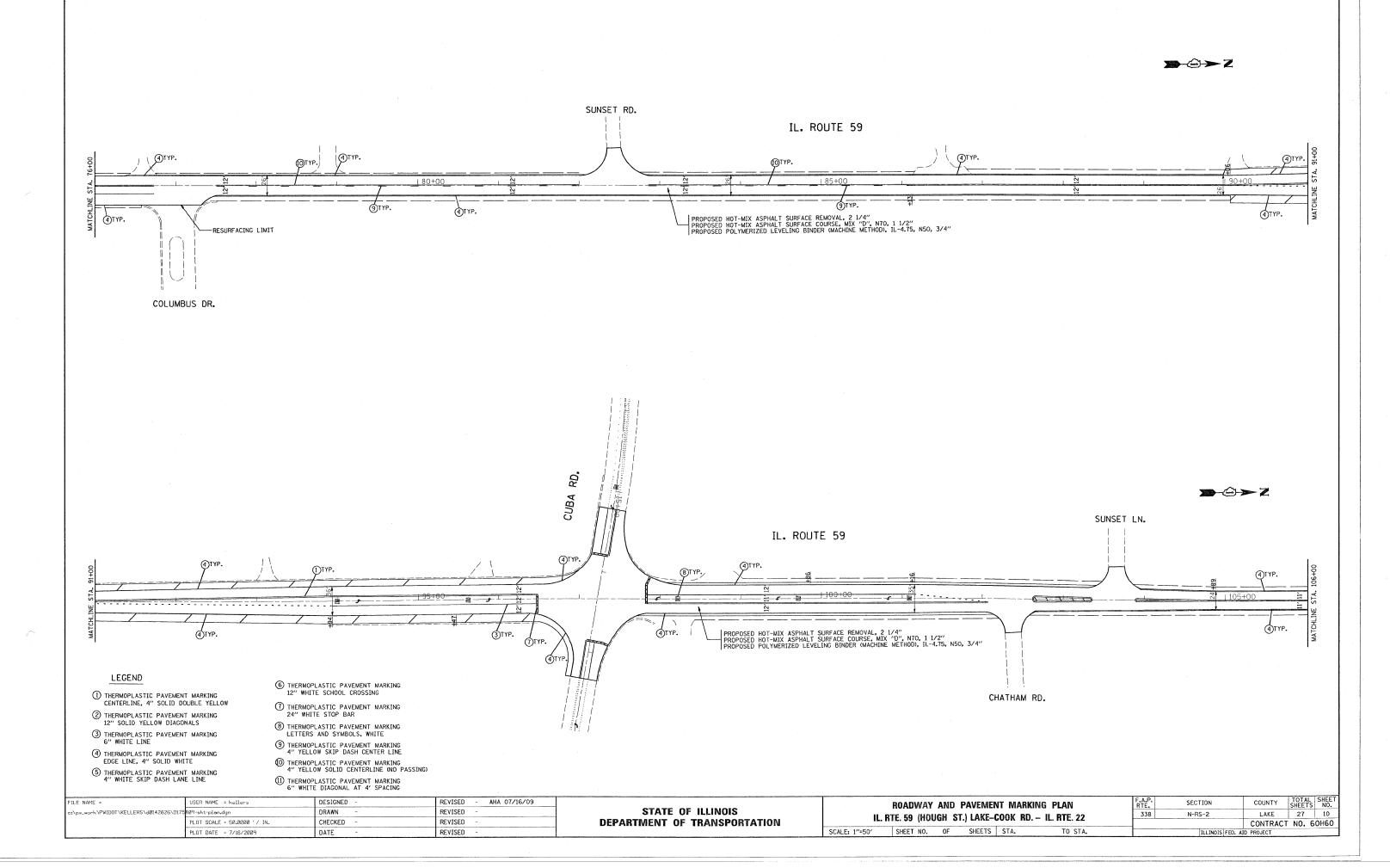
- 1 EXISTING PCC PAVEMENT ±8"
- 2 EXISTING HMA OVERLAY ± 7 1/2"
- 3 EXISTING AGGREGATE SHOULDER
- 4 EXISTING HMA SHOULDER
- 5 EXISTING CURB & GUTTER

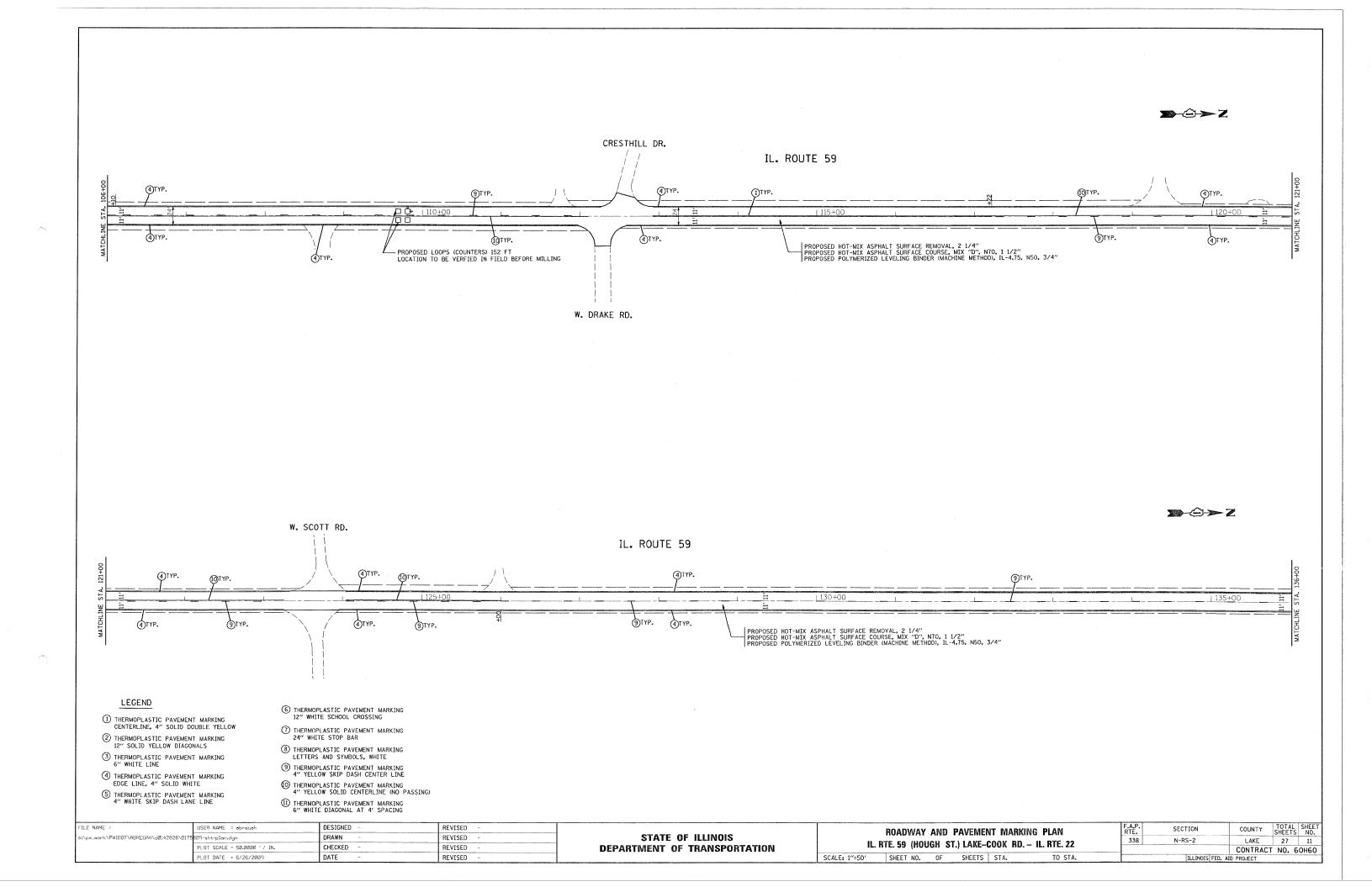
- (6) PROSPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"
- 7 PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2"
- 8 PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- 9 PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B
- 10 PROPOSED GRADING & SHAPING SHOULDERS
- (11) PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"

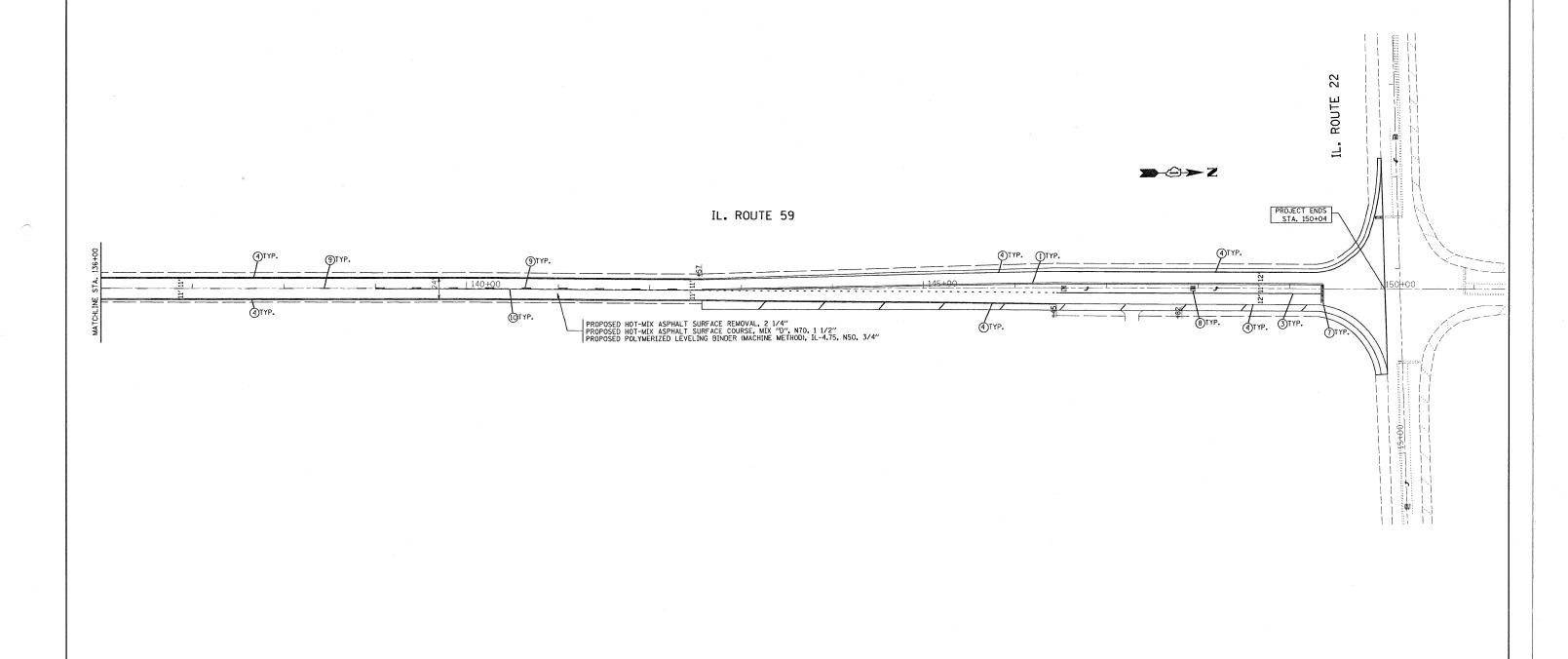
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	PLOT DATE = 6/26/2009	DATE -	REVISED -		SCALE: NTS SHEET NO. OF SHEETS STA. X TO STA. X	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT







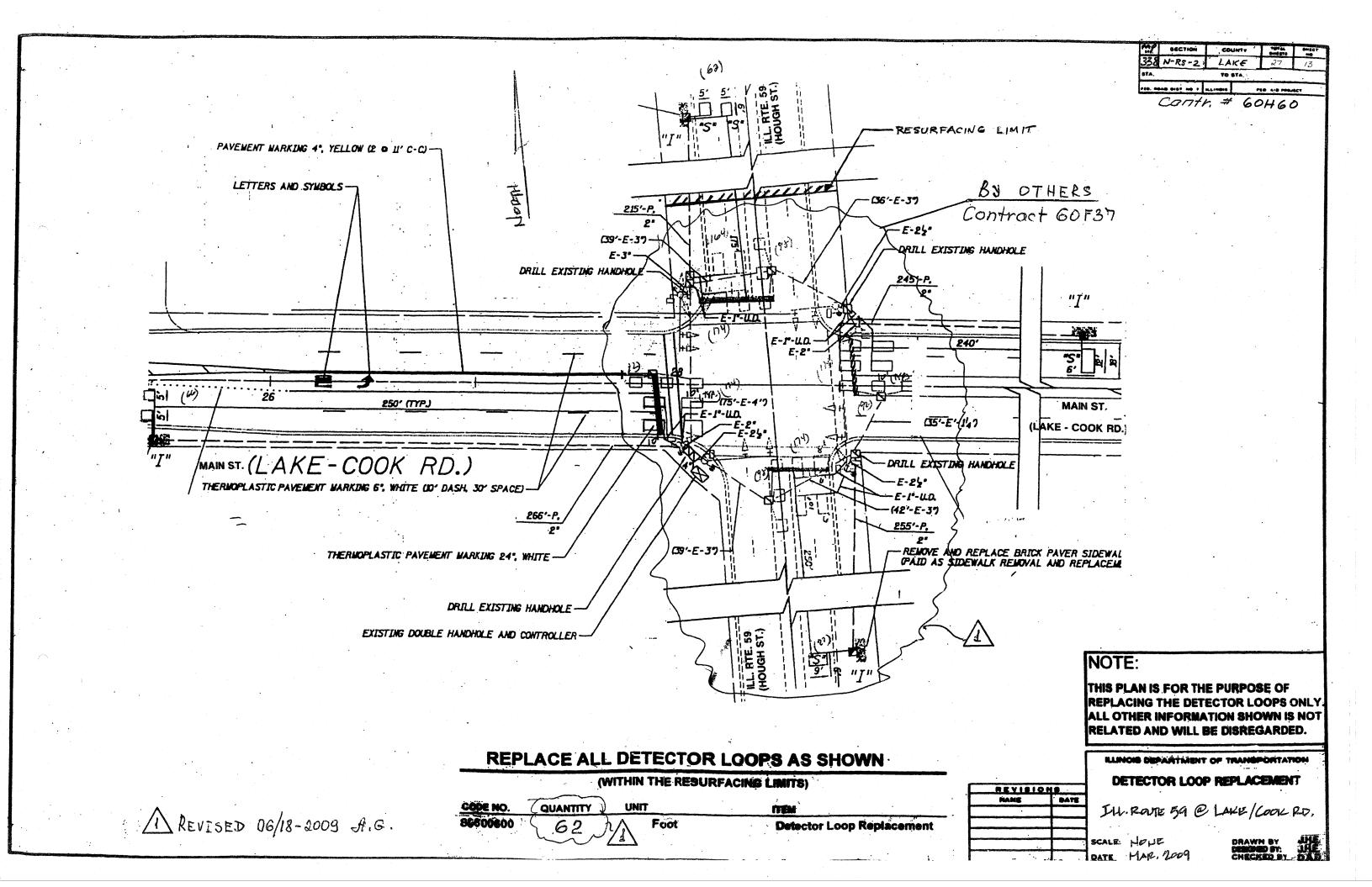


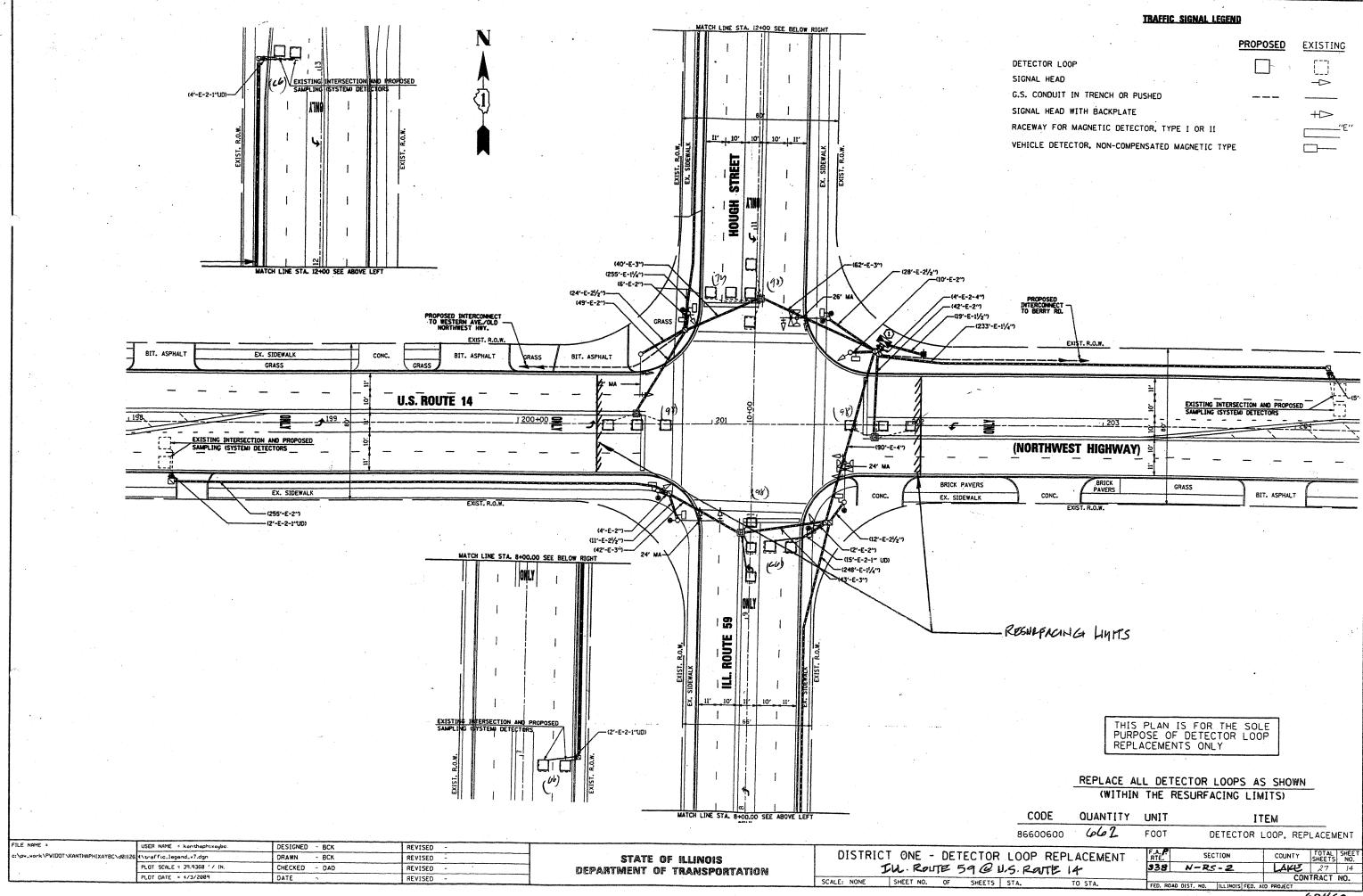


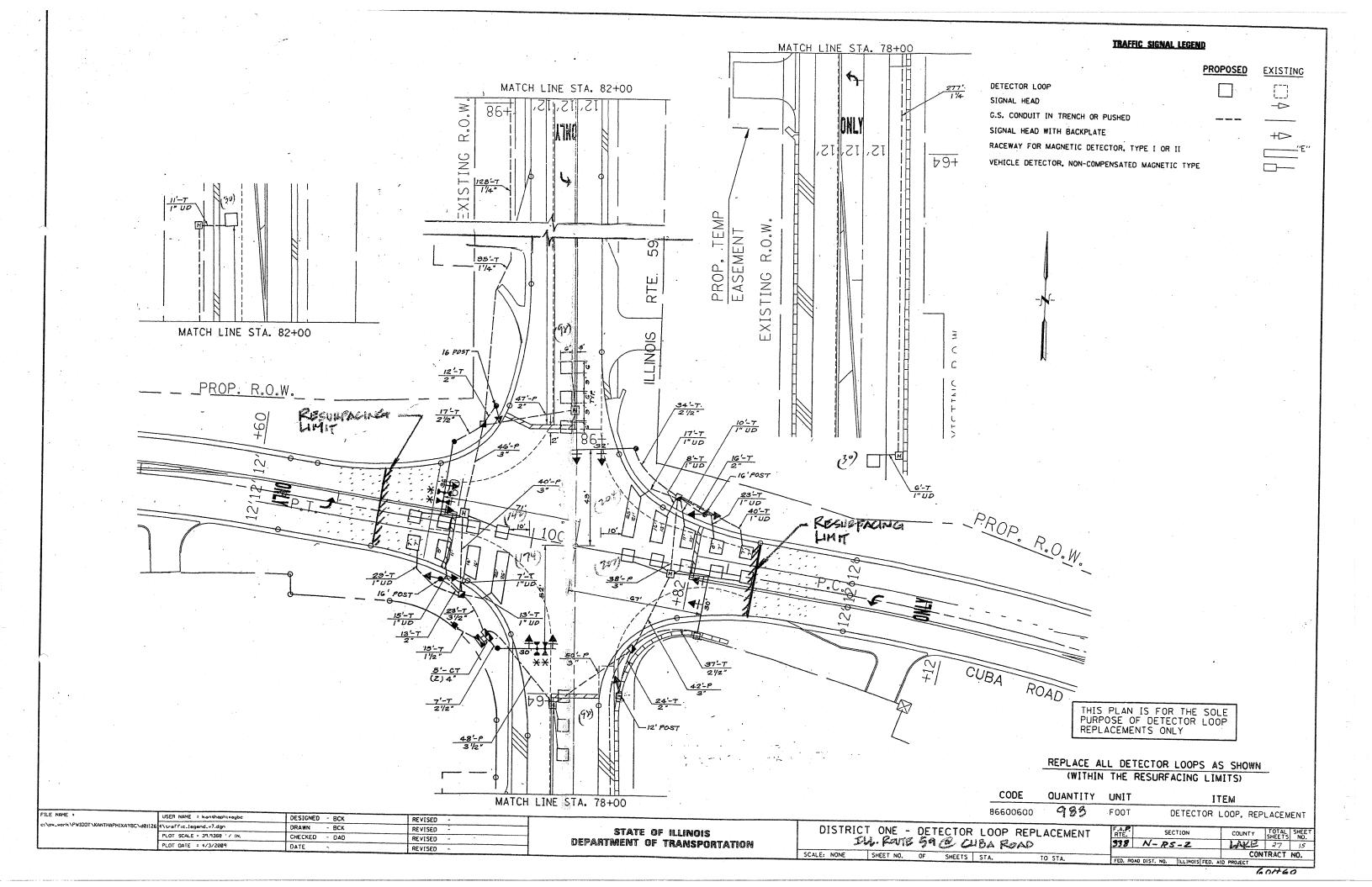
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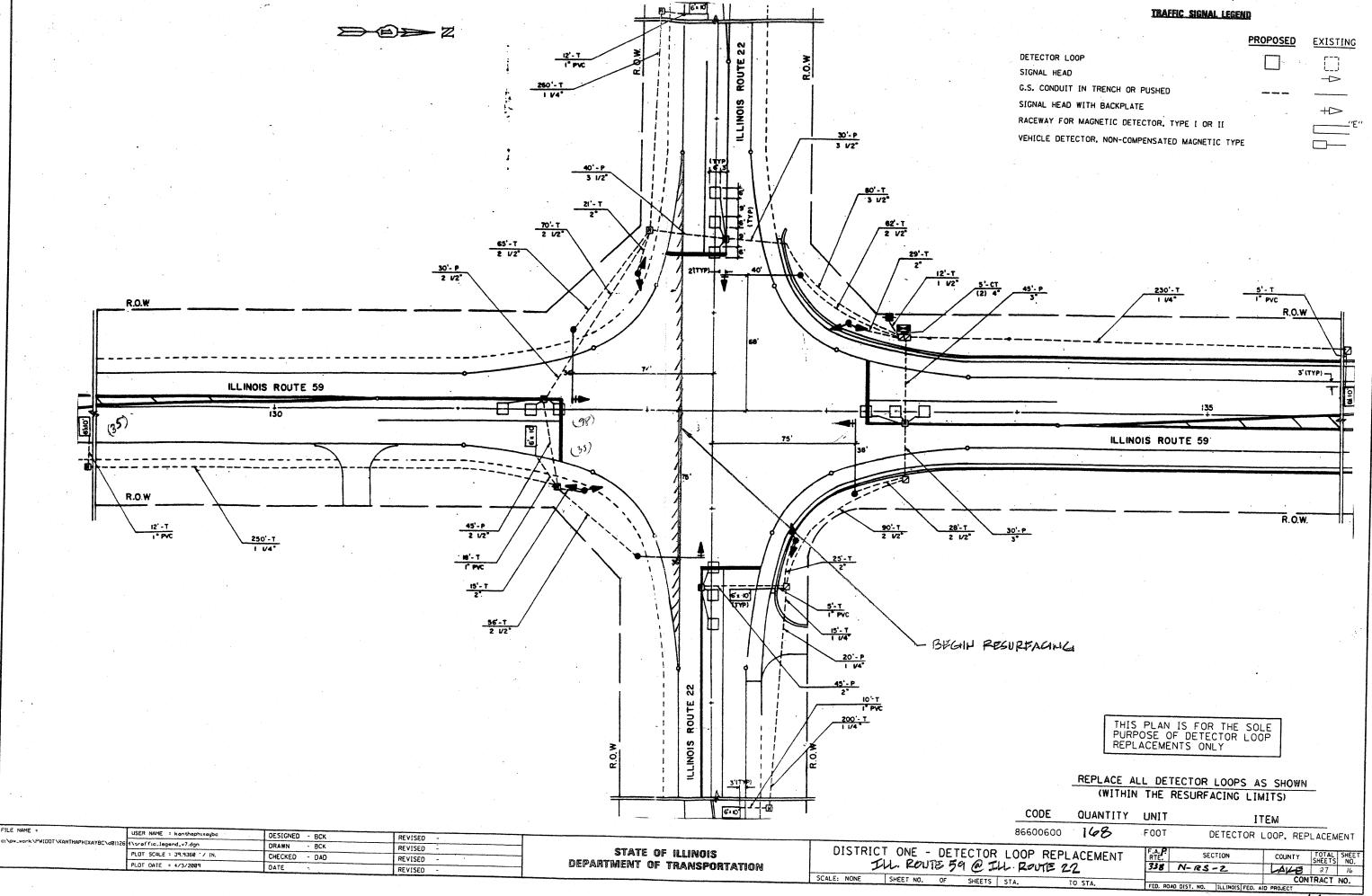
- 1 THERMOPLASTIC PAVEMENT MARKING CENTERLINE, 4" SOLID DOUBLE YELLOW
- (2) THERMOPLASTIC PAVEMENT MARKING 12" SOLID YELLOW DIAGONALS
- 3 THERMOPLASTIC PAVEMENT MARKING 6" WHITE LINE
- (4) THERMOPLASTIC PAVEMENT MARKING EDGE LINE, 4" SOLID WHITE
- 5 THERMOPLASTIC PAVEMENT MARKING 4" WHITE SKIP DASH LANE LINE
- 6 THERMOPLASTIC PAVEMENT MARKING 12" WHITE SCHOOL CROSSING
- 7 THERMOPLASTIC PAVEMENT MARKING 24" WHITE STOP BAR
- 8 THERMOPLASTIC PAVEMENT MARKING LETTERS AND SYMBOLS, WHITE
- THERMOPLASTIC PAVEMENT MARKING
 4" YELLOW SKIP DASH CENTER LINE
- THERMOPLASTIC PAVEMENT MARKING
 4" YELLOW SOLID CENTERLINE (NO PASSING)
- 11) THERMOPLASTIC PAVEMENT MARKING 6" WHITE DIAGONAL AT 4' SPACING

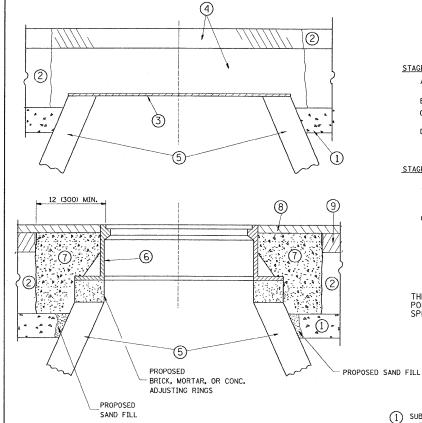
Ī	TLE NAME =	USER NAME = kellers	DESIGNED -	REVISED - AHA 07/16/09		ROADWAY AND PAVEMENT MARKING PLAN						F.A.P.	SECTION	COUNTY	TOTAL SHEET	
	;\pw_work\PWID0T\KELLERS\d0142826\D175	309-sht-plan.dgn	DRAWN -	REVISED -	STATE OF ILLINOIS	l .	IL. RTE. 59 (HOUGH ST.) LAKE-COOK RD IL. RTE. 22					338	N-RS-2	LAKE	27 12	
- 1		PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	IL.	11E. 59 (NU	iuun 3	I.) LAN	E-CUUK K	ID. — IL. RIE. 22		CONTRACT NO. 60H60			
- 1		PLOT DATE = 7/16/2009	DATE - REVISED -			SCALE: 1"=50"	SHEET NO.	OF	SHEET	S STA.	TO STA.		ILLIN0IS FE	D. AID PROJECT		











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.

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 LEVATION 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
- (7) 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.

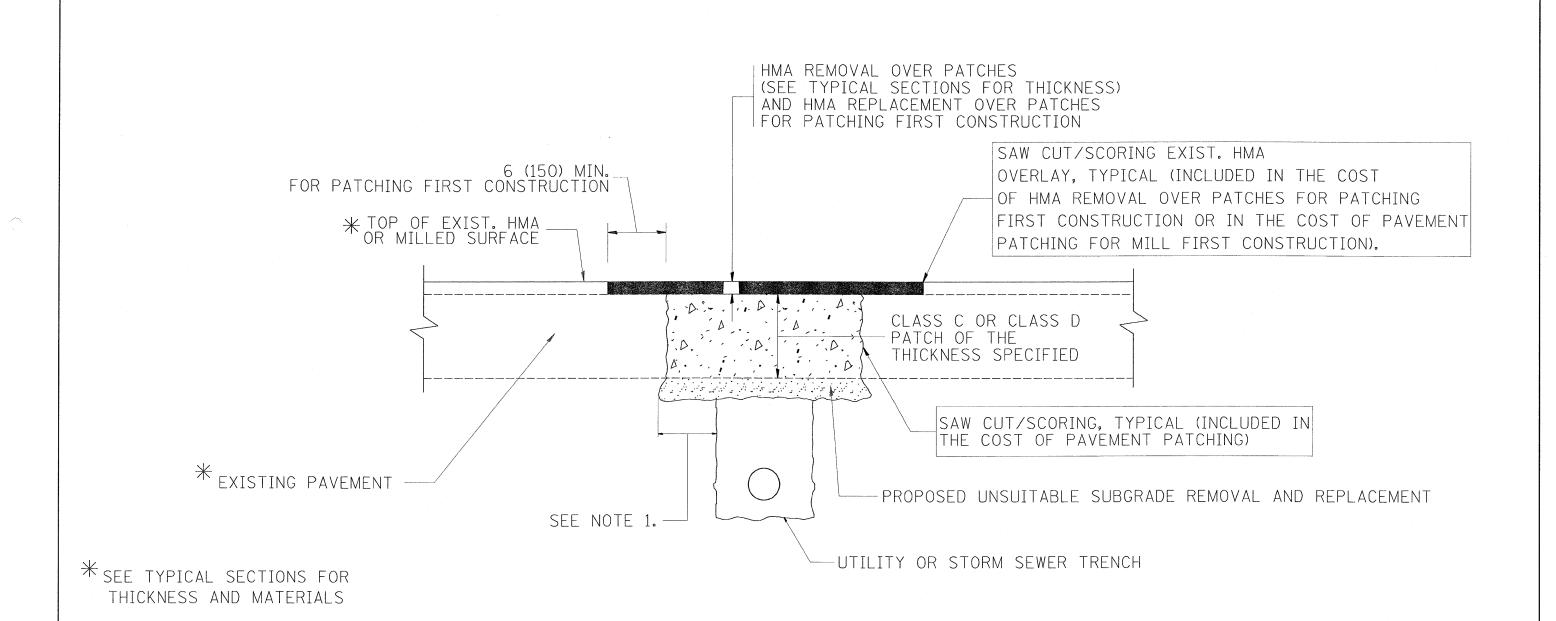
DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = abreuah	DESIGNED - R. SHAH	REVISED - R. SHAH 03-10-95	
c:\pw_work\PWIDOT\ABREUAH\d0142826\Dist	td.dgn	DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLI
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED - R. WIEDEMAN 05-14-04	DEPARTMENT OF TRAIN
	PLOT DATE = 6/23/2009	DATE - 10-25-94	REVISED - R. BORO 01-01-07	

STATE	. OF	ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

DETAILS FOR	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FRAMES AND LIDS ADJUSTMENT WITH MILLING	338	N-RS-2	LAKE	27	17
LUMINES WAD TINS WOODSTANEAL ANTE IMPERING		BD600-03 (BD-8)	CONTRACT	NO. 6	0н60
SHEET NO. 1 OF 1 SHEETS STA. TO STA.	EED. RO	AD DIST, NO. 1 ILLINOIS FED. AI	D 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)

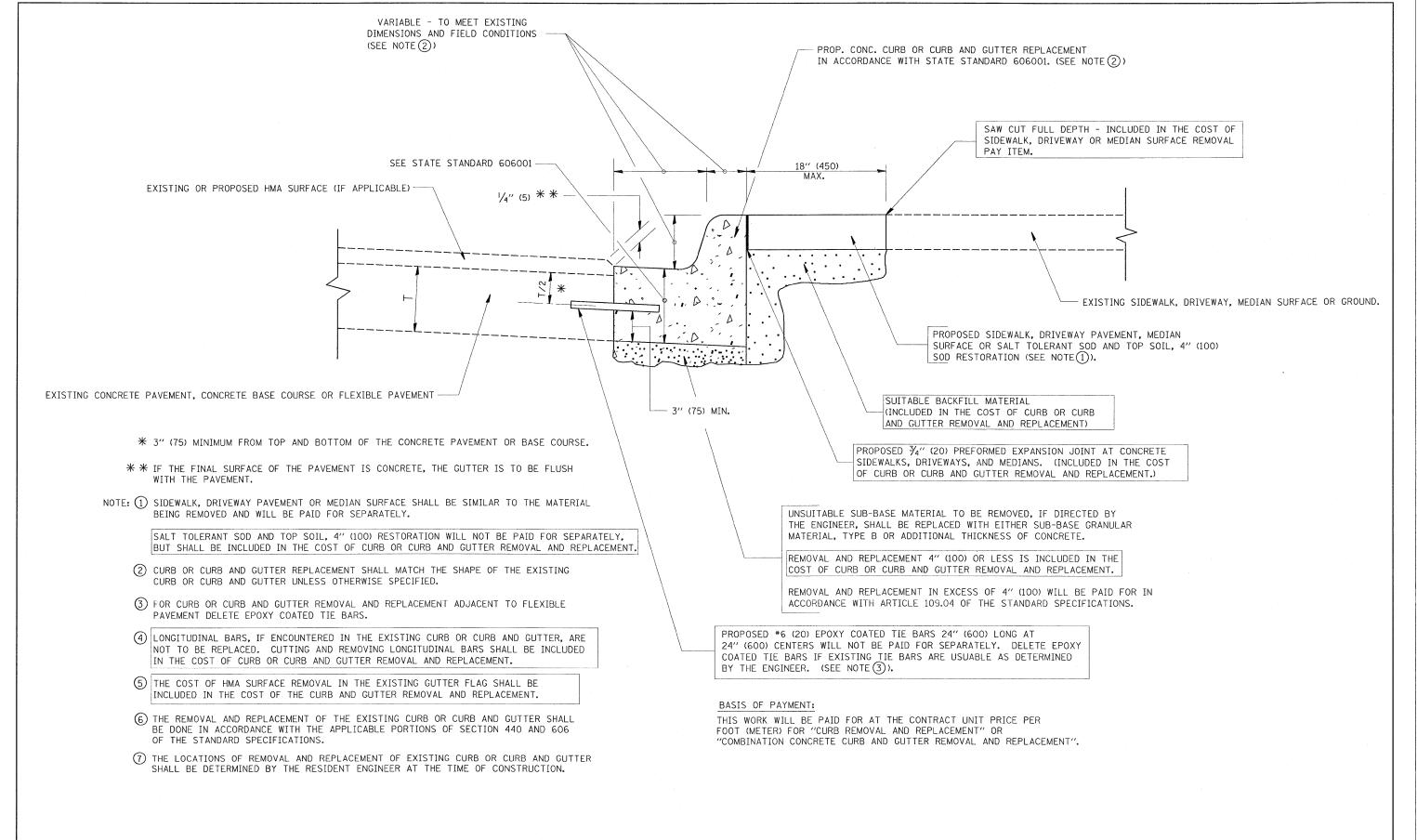
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

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.

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

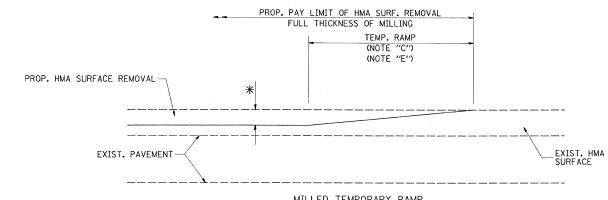
FILE NAMÉ =	USER NAME = abrevah	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98		PAVEMENT PATCHING FOR	F.A.P. SECTION	COUNTY TOTAL SHEET	
c:\pw_work\PWIDOT\ABREUAH\d0142826\Dist	td.dgn	DRAWN -	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS		338 N-RS-2	I AKF 27 18	
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION	HMA SURFACED PAVEMENT	BD400-04 (BD-22)	CONTRACT NO. 60H60	
	PLOT DATE = 6/23/2009	DATE - 10-25-94	REVISED - K. ENG 10-27-08		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.		ID PROJECT	



CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

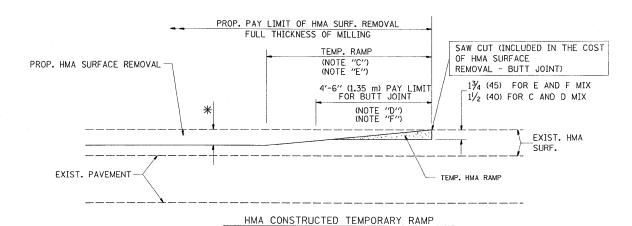
FILE NAME =	USER NAME = abrewah	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96			CURB OR CURB AND GUTTER		F.A.P.	SECTION	COUNTY TO	OTAL SHEET EETS NO.
-c:\pw_work\PWIDOT\ABREUAH\dØ142826\Dist	td.dgn	DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS	REMOVAL AND REPLACEMENT			338	N-RS-2	LAKE 2	27 19
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED - M. GOMEZ 01-22-01	DEPARTMENT OF TRANSPORTATION		KEIWUVAL AND KEPLACEIMENI		BD60	00-06 (BD-24)	CONTRACT NO	O. 60H60
	PLOT DATE = 6/23/2009	DATE - 03-11-94	REVISED - R. BORO 01-01-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. ROAD DI	ST. NO. 1 ILLINOIS FED. A	AID PROJECT	



MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

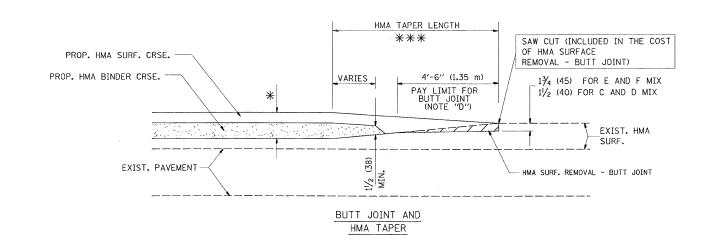
OPTION 1



OPTION 2

TYPICAL TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

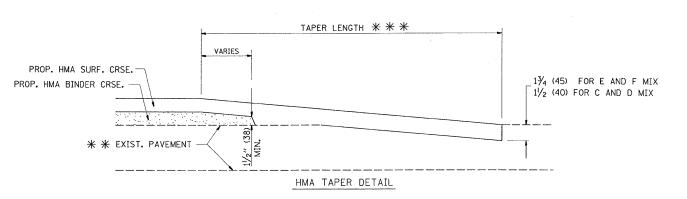


TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

30'-0" (9.0 m) (NOTE "A") OF HMA OR P.C.C. SURFACE REMOVAL 15'-0" (4.5 m) (NOTE "B") - BUTT JOINT) (NOTE "D") 13/4 (45) FOR E AND F MIX 1/2 (40) FOR C AND D MIX * * EXIST. PAVEMENT BUTT JOINT DETAIL

PROP. HMA OR PCC

SURFACE REMOVAL - BUTT JOINT



TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

* * PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

EXIST. HMA OR PCC SURFACE

- 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".

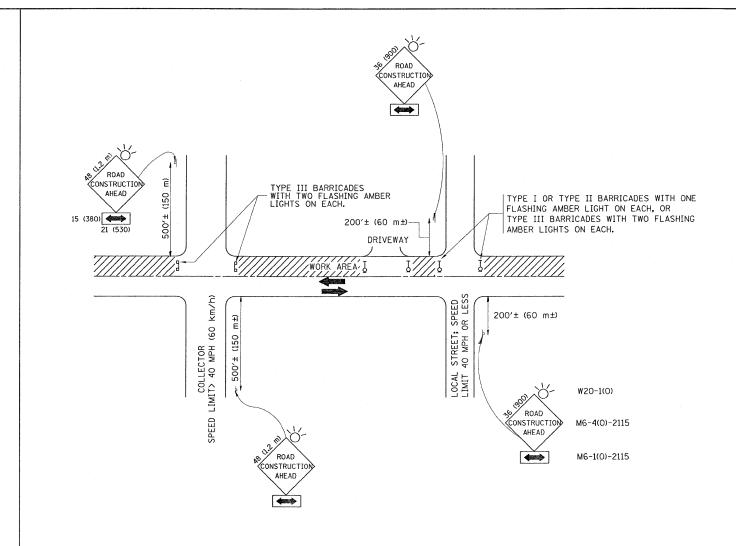
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

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FILE NAME =	USER NAME = abrevah	DESIGNED	**	M. DE YONG	REVISED	-	R. SHAH 10-25-94
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	PLOT SCALE = 50.0000 '/ IN.	CHECKED	-		REVISED	-	M. GOMEZ 04-06-01
	PLOT DATE = 6/23/2009	DATE	-	06-13-90	REVISED	-	R. BORO 01-01-07

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

_	BUTT JOINT AND	F.A.P. RTE.	SECTION	COUNTY	TOTAL	SHEE
	HMA TAPER DETAILS	338	N-RS-2	LAKE	27	20
		_	BD400-05 BD32	CONTRACT	NO. 6	60H6
1	SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. R	OAD DIST, NO. 1 THEINOIS 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
- 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:
- 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:
- a) 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).

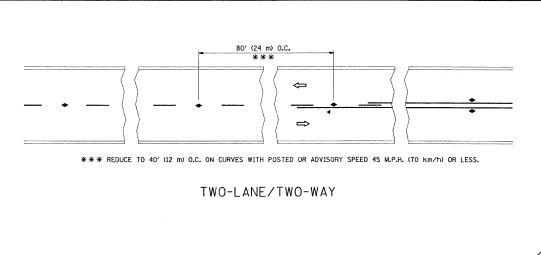
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL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

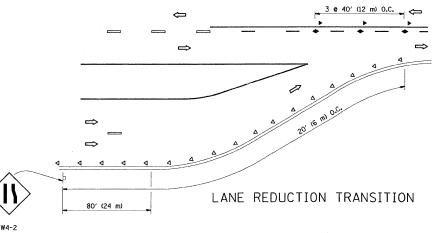
All dimensions are in millimeters (inches) unless otherwise shown.

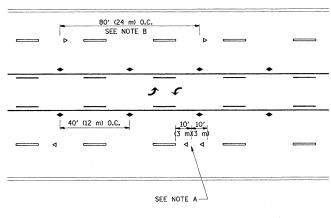
FILE NAME =	USER NAME = abrewah	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
o:\pw_work\PWIDOT\ABREUAH\d0142826\Dist	6td.dgn	DRAWN	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
·	PLOT DATE = 6/23/2009	DATE - 06-89	REVISED -T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

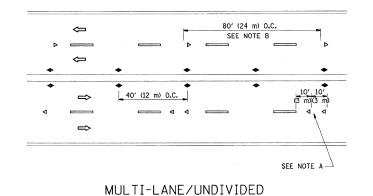
-	TR	AFFIC	CON	TRO	L AND F	ROTEC	TION FOR
	SIDE	ROAD	S, IN	TER	SECTIONS	S, AND	DRIVEWAYS
SCALE: NONE	SHEET	NO. 1	OF	1	SHEETS	STA.	TO STA.

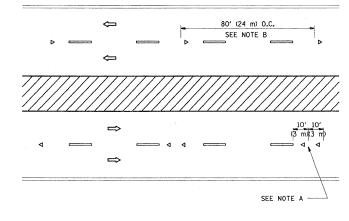






TWO-WAY LEFT TURN





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 (W/O)
- ◆ TWO-WAY AMBER MARKER

DESIGN NOTES

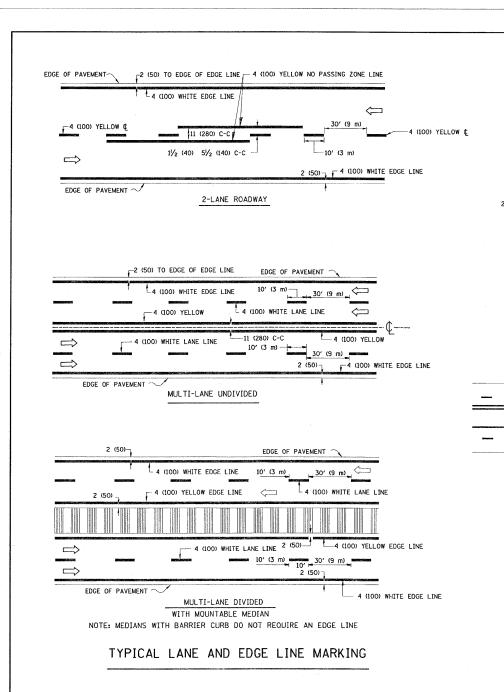
- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- 2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE INFS.
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
- MARKERS SHOULD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

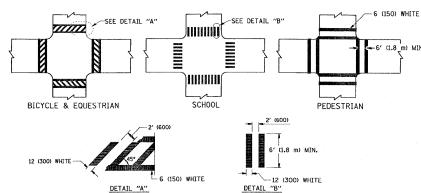
3 e 80' (24 m) 0.C.	* 0.C.	MINIMUM OF 3 W EQUALLY SPACED 40' (12 m) O.C. D Q **	€ 2 3 € 80' (24 m) 0.C. 3 € 80' (24 m) 0.C. 3 € 80' (24 m) 0.C.
	40' (12 m) 100.c.	* SEE TWO-LANE/TWO-WAY WHERE MARK ** WHERE THE MEDIAN WIDTH IS 6' (2 m	

LEFT TURN

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

FILE	NAME =	USER NAME = abreugh	DESIGNED -	REVISED - T. RAMMACHER 09-19-94		TYPICAL APPLICATIONS	F.A.P.	SECTION	COUNTY	TOTAL	SHEET
ct/b	w_work\PWIDOT\ABREUAH\d0142826\Dist	td.dgn	DRAWN -	REVISED - T. RAMMACHER 03-12-99	STATE OF ILLINOIS		338	N-RS-2	LAKE	27	22
- 1		PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 01-06-00	DEPARTMENT OF TRANSPORTATION	RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)		TC-11	CONTRACT	ſ NO. €	0Н60
		PLOT DATE = 6/23/2009	DATE -	REVISED -		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST	. NO. 1 ILLINOIS FED.	AID PROJECT		





TYPICAL CROSSWALK MARKING

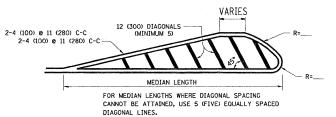
2-4 (100) YELLOW • 11 (280) C-C

NO DIAGONALS

4' (1.2 m) OUTSIDE TO OUTSIDE OF LINES

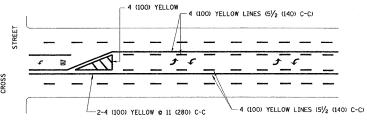
2-4 (100) YELLOW • 11 (280) C-C

4' (1.2 m) WIDE MEDIANS ONLY

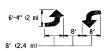


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

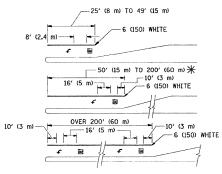


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

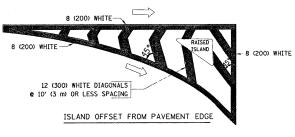


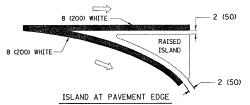
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. \P AREA = 15.6 SQ. FT. (1.5 m²) \P AREA = 20.8 SQ. FT. (1.9 m²)

* 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 e 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (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 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 (0VER 48MPH (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 (OVER 45MPH (70 km/h))

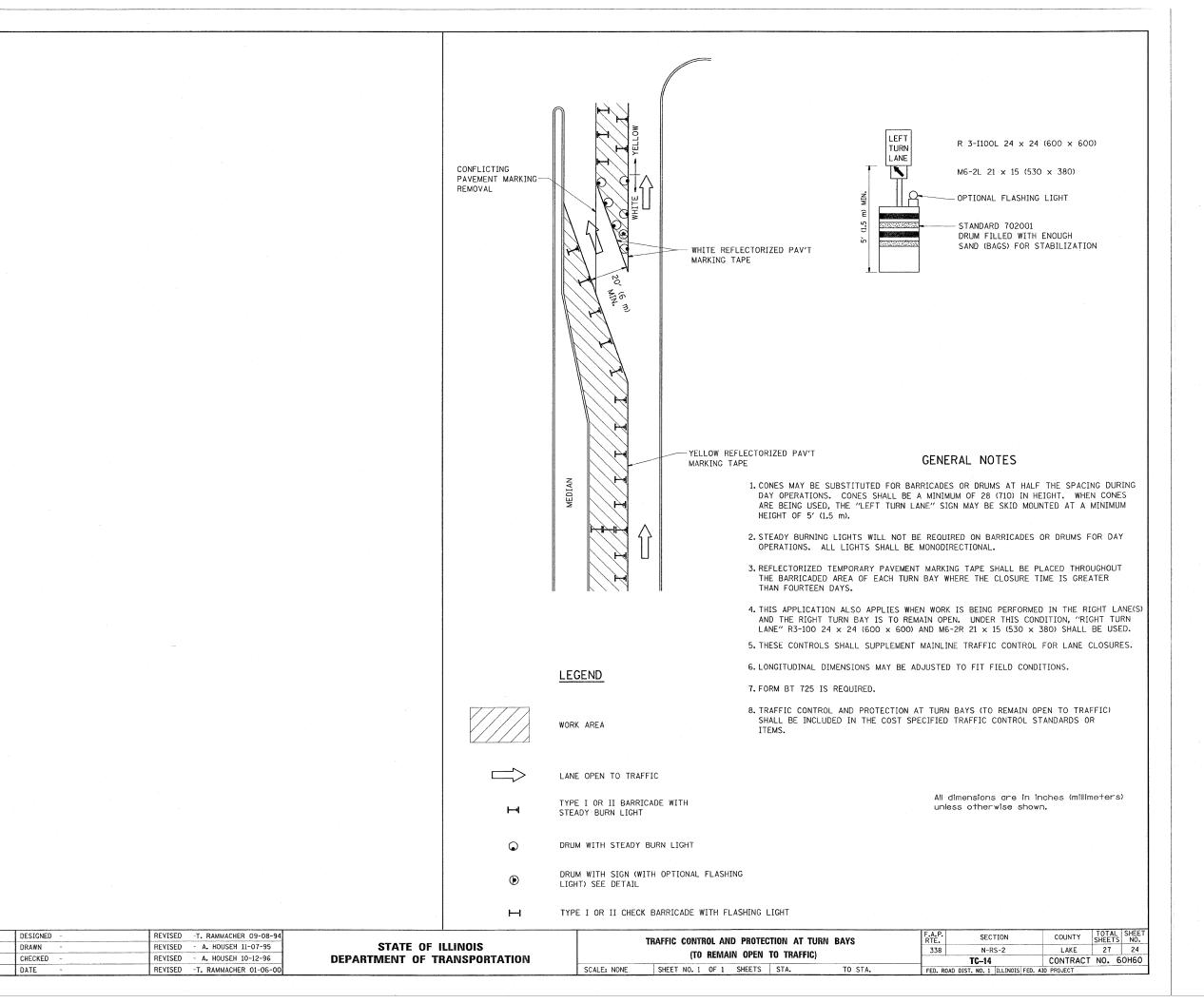
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

FILE NAME =	USER NAME = abrewah	DESIGNED	-	EVERS	REVISED	-T.	RAMMACHER 10-27-94
c:\pw_work\PWIDOT\ABREUAH\d0l42826\Dist	Std.dgn	DRAWN	-		REVISED	- A.	HOUSEH 10-09-96
	PLOT SCALE = 50.0000 '/ IN.	CHECKED			REVISED	- A.	. HOUSEH 10-17-96
	PLOT DATE = 6/23/2009	DATE	-	03-19-90	REVISED	- T.	. RAMMACHER 01-06-00

STATE	OF	ILLINOIS	
DEPARTMENT	OF	TRANSPORTATIO	N

DISTRICT ONE							SECTION	COUNTY	TOTAL	SHEET NO.
	TYPICAL PAVEMENT MARKINGS							LAKE	27	23
							NO. 6	50H60		
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.							DAD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT		



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PLOT SCALE = 50.0000 '/ IN.

PLOT DATE = 6/23/2009

LOOPS NEXT TO SHOULDERS

PROVIDE A PAVEMENT REPLACEMENT
NOTE WHICH SHOULD EQUAL
37 (900 mm) X WIDTH OF
PAVED SHOULDER.

PAVED OR
NON-PAVED
SHOULDER

PAVED OR
NON-PAVED
SHOULDER

* = (600 mm)

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

10

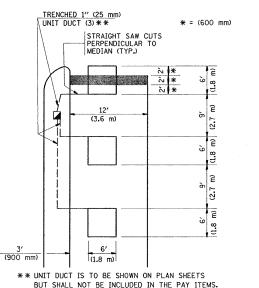
(3.0 m)

(1.5 m) (1.8 m) (1.5 m)

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.

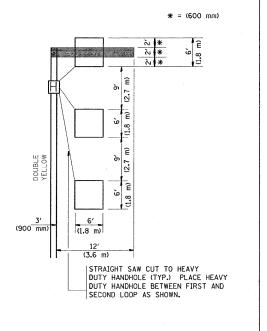


NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO

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

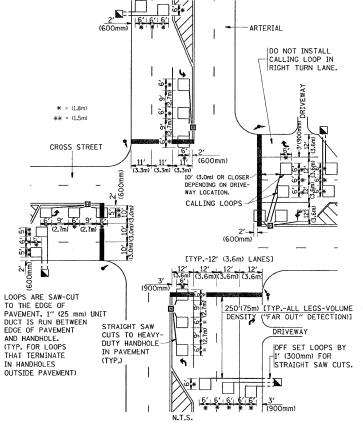
SCALE: NONE

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

1" (25 mm) UNIT

DUCT-TRENCHED TO E/P **

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



OFFSET LOOPS BY 1' (300mm) FOR STRAIGHT SAW CUTS - ARTERIAL THIS DIMENSION MAY BE ADJUSTED FOR DRIVEWAY OR OTHER OBSTRUCTIONS. WHEN ADJUSTMENT IS REQUIRED, DETECTORS WILL NORMALLY BE MOVED CLOSER TO THE INTERSECTION. 3'(900mm ~1" (25 mm) UNIT DUCT -CROSS STREET 3'(900mm (3.3m) 3.6 \alpha 619/61 -10'(3.0m) PREFERRED -11' (3.3m) 6 6 6 9' 6' 6' 9' 6' 9' 6' + - THESE DIMENSIONS WILL BE VARIABLE DRIVEWAY E6' (1.8m) MINIMUM. 25' (7.6 m) MAXIMUM] △ - THESE DIMENSIONS SHALL BE 5' (1.5m) FOR TE "FAR OUT" LOOPS 10' (3.0m) LANE WIDTHS ARE LOCATED IN TAPER OF A RIGHT TURN LANE, DIMENSION THIS LOOP TO COVER TAPER AREA. DO NOT COVER THE LEFT TURN DETAIL 2 LANE OR LEFT TURN N.T.S.

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

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 (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 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

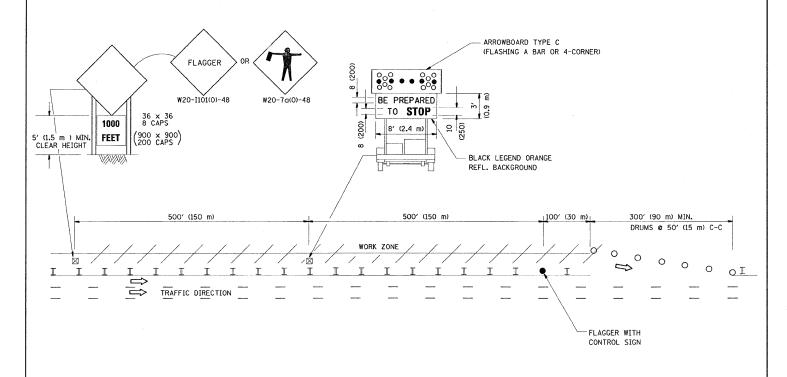
THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

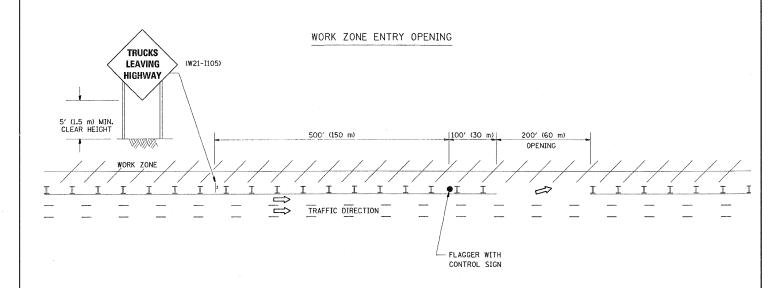
DIS	TRIC	T	1 -	DET	ECTOR	LOO	P INS	STALLATIO	ON	
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SHEET	NO.	1	OF	1	SHEETS	S	TA.		TO	STA

	F.A.P. RTE.	SECTION	COUNT	Y TOTAL SHEET	S NO.
	338	N-RS-2	LAKE	27	25
_		TS-07	CONTR	ACT NO.	60H60
	FED. R	OAD DIST. NO. 1 ILLINOIS FED	AID PROJECT		

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



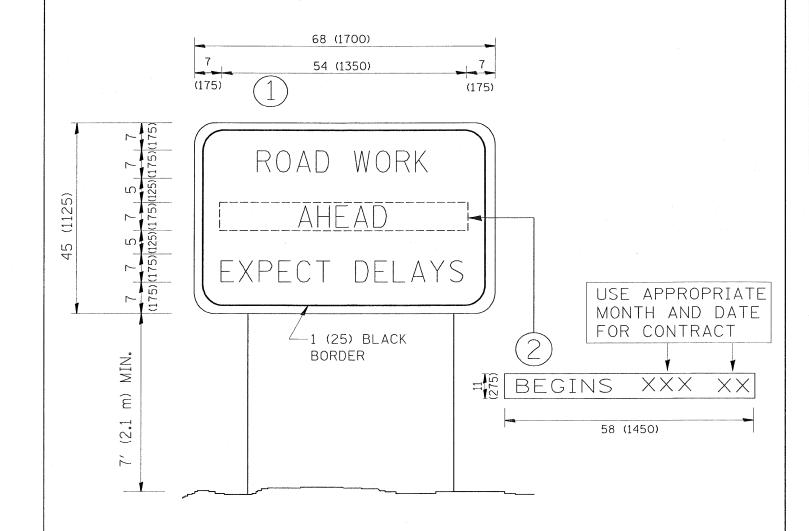


NOTES

- The Arrowboard, the Flagger Ahead trailer mounted sign, and the Trucks Leaving
 Highway sign shall be removed or turned away from traffic and the exit and entry
 openings shall be closed when the flagging operation ceases.
- 2. Work Zone Exit Openings should be a minimum of one half mile apart.
- Exiting the work zone at any place other than at a Work Zone Exit Opening will be prohibited.
- 4. All vehicles shall enter the work zone at entry openings, using their turn signals to warn motorists

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = abrewah	DESIGNED -	REVISED - D.W.S. 08-98		SIGNING FOR FLAGGING OPERATIONS	F.A.P. SECTION	COUNTY TOTAL SHEET
c:\pw_work\PWIDOT\ABREUAH\dØ142826\Dis	Std.dgn	DRAWN -	REVISED - J.A.F. 04-03	STATE OF ILLINOIS		338 N-RS-2	LAKE 27 26
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED - J.A.F. 02-06	DEPARTMENT OF TRANSPORTATION	AT WORK ZONE OPENINGS	TC-18	CONTRACT NO. 60H60
	PLOT DATE = 6/23/2009	DATE -	REVISED - S.P.B. 01-07		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS	FED. AID PROJECT



NOTES:

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

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

FILE NAME :=	USER NAME = abrewah	DESIGNED -	REVISED - R. MIRS 09-15-97	*		ARTERIAL ROAD		F.A.P.	SECTION	COUNTY	TOTAL SHEET
ro:\pw_work\PWIDOT\ABREUAH\dØ142826\Dist	t Btd.dgn	DRAWN -	REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS	INFORMATION SIGN			338	N-RS-2	LAKE	27 27
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED -T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION					TC-22	CONTRACT	T NO. 60H60
	PLOT DATE = 6/23/2009	DATE ~	REVISED - C. JUCIUS 01-31-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. ROAD DIS	T. NO. 1 ILLINOIS FED. A	ID PROJECT	