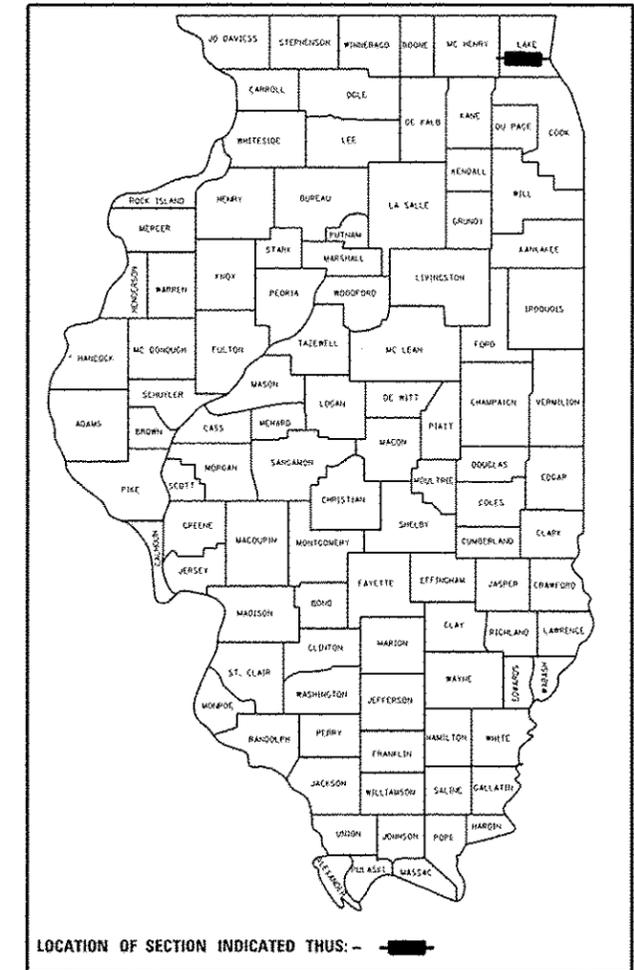


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
352	(2&3) R-RS-2	LAKE	23	1
		ILLINOIS	CONTRACT NO. 62D69	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

D-91-078-17

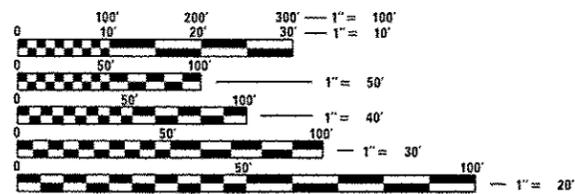


**PROPOSED  
HIGHWAY PLANS**  
FAP ROUTE 352: ILL 137  
US 45 TO BUTTERFIELD ROAD  
SECTION: (2&3) R-RS-2  
RESURFACING (3P)  
PROJECT: NHPP-0352 (016)  
LAKE COUNTY  
C-91-078-17

THIS PROJECT IS LOCATED IN  
THE VILLAGE OF LIBERTYVILLE

TRAFFIC DATA

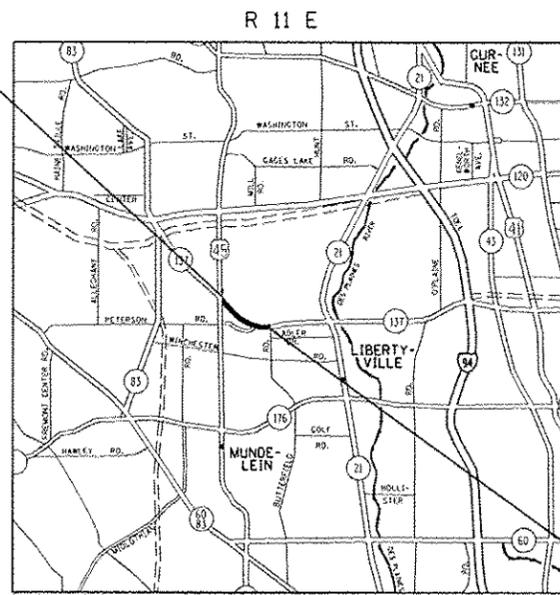
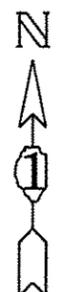
ADT (2015) = 11,100  
SPEED LIMIT = 45 MPH



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

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

PROJECT BEGINS  
STATION 21+40



RESURFACING OMISSION:  
STATION 68+80 TO STATION 71+46

PROJECT ENDS  
STATION 86+25

LIBERTYVILLE TOWNSHIP

PROJECT ENGINEER: DAN WILGREEN / (847) 705-4240  
PROJECT MANAGER: FAWAD AQUEEL / (847) 705-4247

CONTRACT NO. 62D69

GROSS LENGTH OF PROJECT = 6,485 FT. = 1.23 MILE  
NET LENGTH OF PROJECT = 6,219 FT. = 1.18 MILE

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED *April 3 2017*  
*[Signature]* REGIONAL ENGINEER

*May 12 2017*  
*Maureen M. Addis, PE* ENGINEER OF DESIGN AND ENVIRONMENT

*May 12 2017*  
*[Signature]* DIRECTOR OF PROGRAM DEVELOPMENT

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

**INDEX OF SHEETS**

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	INDEX OF SHEETS, LIST OF STATE STANDARDS AND GENERAL NOTES
3-4	SUMMARY OF QUANTITIES
5-8	TYPICAL SECTIONS
9-11	PLAN AND PROFILE SHEETS
12	DETECTOR LOOP REPLACEMENT PLAN
13	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING (BD-8)
14	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT (BD-22)
15	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24)
16	BUTT JOINT AND HMA TAPER DETAILS (BD-32)
17	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)
18	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) (TC-11)
19	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)
20	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) (TC-14)
21	SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING (TC-16)
22	ARTERIAL ROAD INFORMATION SIGN (TC-22)
23	DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING (TS-07)

**GENERAL NOTES**

NOTE NO.	DESCRIPTION
1	BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" (JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION AT 8-1-1 OR (800) 892-0123 FOR FIELD LOCATION OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES (48 HOUR NOTIFICATION IS REQUIRED).
2	10 FEET TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER ITEMS OF WORK TO EXISTING CURBS AND GUTTERS AND CONDITIONS IN THE FIELD UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.
3	THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES THE VILLAGE OF LIBERTYVILLE
4	THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
5	SAW CUTTING OF PAVEMENTS, SIDEWALK, CURB & GUTTER, ETC. SHALL BE TO FULL DEPTH AND SHALL RESULT IN A CLEAN STRAIGHT EDGE ON THE PORTION REMAINING. ALL SAW CUTTING SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEM REMOVED
6	DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS
7	THE CONTRACTOR SHALL USE CARE IN REMOVING OR EXCAVATING NEAR ALL EXISTING ITEMS WHICH WILL REMAIN. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
8	WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL, BETWEEN PASSES OF THE MILLING MACHING SHALL NOT EXCEED 1.5 INCHES WHERE THE SPEED LIMIT IS 40 MPH OR LESS. WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRAD DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF MILLING IS SLOPED A MINIMUM OF 1:3 (V:H)
9	UNLESS OTHER CONDITIONS WARRANT EXTENDED LANE CLOSURES AS DETERMINED AND APPROVED IN WRITING BY THE ENGINEER OR AS PROVIDED FOR IN WRITING BY THE ENGINEER OR AS PROVIDED FOR IN THE CONTRACT SPECIFICATIONS, OVERNIGHT CLOSURES SHALL NOT BE ALLOWED FOR REHABILITATION PROJECTS INVOLVING DAYTIME MILLING AND RESURFACING OPERATIONS AND CLASS D PATCHING.
10	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 MARKING SHALL BE AS DIRECTED BY THE ENGINEER.
11	PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES.
12	THE RESIDENT ENGINEER SHALL CONTACT THE AREA TRAFFIC FIELD ENGINEER, (WALTER CZARNY AT WALTER.CZARNY@ILLINOIS.GOV AT LEAST TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
13	LOCATIONS OF PAVEMENT PATCHING AND CURB AND GUTTER REMOVAL AND REPLACEMENT WILL BE AS DETERMINED BY THE ENGINEER.
14	BUTT JOINTS WILL BE INSTALLED AT THE END OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HMA TAPER DETAILS" INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED
15	MATCH EXISTING PAVEMENT AT THE PROJECT LIMITS.
16	ALL DAMAMGE TO EXISTING PAVEMENT MARKINGS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.
17	THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING OWNERS OF ALL UTILITIES PRIOR TO CONSTRUCTION TO DETERMINE THE LOCATION OF ALL UTILITY EQUIPMENT. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS IF UTILITY RELOCATION, ADJUSTMENT, OR PROTECTION IS NECESSARY

**GENERAL NOTES (CONTINUED)**

NOTE NO.	DESCRIPTION
18	THE LOCATION OF EXISTING DRAINAGE STRUCTURES, STORM SEWERS, WATER MAINS, SANITARY SEWERS, AND ANY OTHER PUBLIC OR PRIVATE UTILITIES AS SHOWN ON THE PLANS IS APPROXIMATE AND THEIR EXACT LOCATION IS TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR.
19	THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND AND SURFACE UTILITES EVEN THOUGH THEY MIGHT NOT BE SHOWN ON THE PLANS IS APPROXIMATE AND THEIR EXACT LOCATION IS TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR.
20	ANY LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES, WHICH OBSTRUCTS THE NATURAL FLOW OF WATER SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. PRIOR TO ACCEPTANCE OF THE IMPROVEMENT, ALL DRAINAGE STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS. THIS WILL NOT BE PAID FOR SEPERATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT.
21	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 ACCORDING TO ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPERATE PAY ITEM HAS BEEN PROVIDED.
22	FOR WORK OUTSIDE THE LIMITS OF THE BRIDGE APPROACH PAVEMENT, ALL REFERENCES IN THE HIGHWAY STANDARDS AND STANDARD SPECIFICATIONS FOR REINFORCEMENT, DOWEL BARS AND TIE BARS IN PAVEMENT, SHOULDERS, CURB, GUTTER, COMBINATION CURB AND GUTTER, AND MEDIAN, AND CHAIR SUPPORTS FOR CRC PAVEMENT, SHALL BE EPOXY COATED

**STATE STANDARDS**

STANDARD NO.	DESCRIPTION
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
442201-03	CLASS C AND D PATCHES
604001-04	FRAME AND LIDS TYPE I
604086-03	FRAME AND GRATE TYPE 23
606001-06	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701011-04	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701101-05	OFF-RD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306-03	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY
701311-03	LANE CLOSURE 2L, 2W MOVING OPERATIONS-DAY ONLY
701336-06	LANE CLOSURE 2L, 2W, WORK AREAS IN SERIES, FOR SPEEDS >45 MPH
701421-07	LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS >45 MPH TO 55 MPH
701426-08	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATIONS FOR SPEEDS > 45 MPH
701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701701-10	URBAN LANE CLOSURE MULTILANE INTERSECTION
701901-06	TRAFFIC CONTROL DEVICES

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**IL 137 (US 45 TO BUTTERFIELD RD.)  
GENERAL NOTES**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
352	(2&3) R-RS-2	COOK	21	2
CONTRACT NO. 62D69				
ILLINOIS FED. AID PROJECT				

FILE NAME	USER NAME	DESIGNED	REVISED
pl\1\1084E810INTEG\Illinois.gov\PH101\Docu	umens\1001 Offices\District 1\Projects\010	DRAWN	11-22-16 D.W.
			REVISED - 5-4-2017 A.C.
			REVISED -
			REVISED -
			REVISED -

SCALE: SHEET OF SHEETS STA. TO STA.



URBAN

URBAN

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	80% FED 20% STATE ROADWAY 0005				
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	423	423				
70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	1771	1771				
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	896	896				
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	52	52				
70300520	PAVEMENT MARKING TAPE, TYPE III 4"	FOOT	1921	1921				
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	117	117				
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	26988	26988				
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	423	423				
* 78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	1771	1771				
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	896	896				
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	51.3	51.3				
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	213	213				

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	80% FED 20% STATE ROADWAY 0005				
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	213	213				
* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	366	366				
X2020110	GRADING AND SHAPING SHOULDERS	UNIT	125	125				
X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SO FT	12158	12158				
Z0004562	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	100	100				
Z0030850	TEMPORARY INFORMATION SIGNING	SO FT	51.4	51.4				

\* = SPECIALTY ITEMS

FILE NAME :	USER NAME :	DESIGNED :	REVISED :
Office\District\Projects\DIGIT\CAAD\Design\DIGIT\URBAN	curryow		
PLOT SCALE :	CHECKED :	DATE :	REVISED :
1000000' = 1" / 10'			
PLOT DATE :			
4/25/2017			

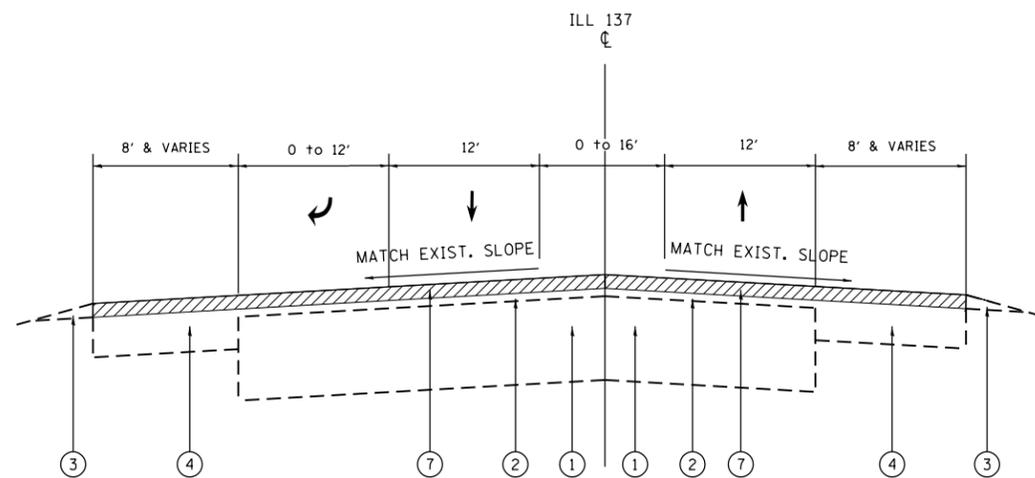
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES			
SCALE:	SHEET NO. OF SHEETS	STA.	TO STA.

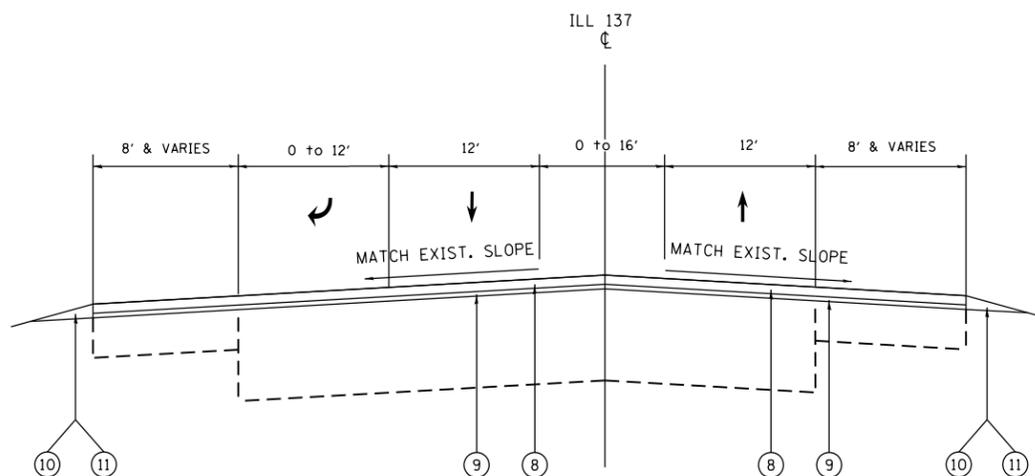
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
352	(2&3) R-RS-2	LAKE	23	4
FED. ROAD DIST. NO. 1			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 62069	

12

6



EXISTING TYPICAL SECTION  
ILL 137.  
STATION:  
21+40 TO 33+22  
STATION  
49+09 TO 52+53



PROPOSED TYPICAL SECTION  
ILL 137  
STATION:  
21+40 TO 33+22  
STATION  
49+09 TO 52+53

**LEGEND**

- ① EXIST. P.C. CONCRETE PAVEMENT , ± 9"
- ② EXIST. HOT-MIX ASPHALT SURFACE COURSE (BEFORE MILLING), ± 5 1/4"
- ③ EXIST. AGGREGATE SHOULDER
- ④ EXIST. HOT-MIX ASPHALT SHOULDER, 8"
- ⑤ EXISTING DITCH
- ⑥ EXISTING PC CONCRETE MEDIAN
- ⑥A EXIST. CONCRETE CURB AND GUTTER TYP B-6. 12
- ⑦ PROP. HMA SURFACE REMOVAL 2 1/4"
- ⑧ PROP. HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2"
- ⑨ PROP. POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50, 3/4"
- ⑩ PROP. AGGREGATE WEDGE SHOULDER, TYPE B
- ⑪ PROP. GRADING AND SHAPING SHOULDERS

**HOT-MIX ASPHALT MIXTURE REQUIREMENTS**

MIXTURE TYPE	AIR VOIDS (%) @ Ndes	OMP
-PAVEMENT RESURFACING-		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, IL-9.5mm	4.0% @ 70 GYR.	OCP
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	3.5% @ 50 GYR.	OCP
-PATCHING-		
CLASS D PATCH (HMA BINDER IL-19 mm)	4% @ 70 GYR.	QC/OA
OMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/OA); QUALITY CONTROL FOR PERFORMANCE (OCP)		

**NOTES:**

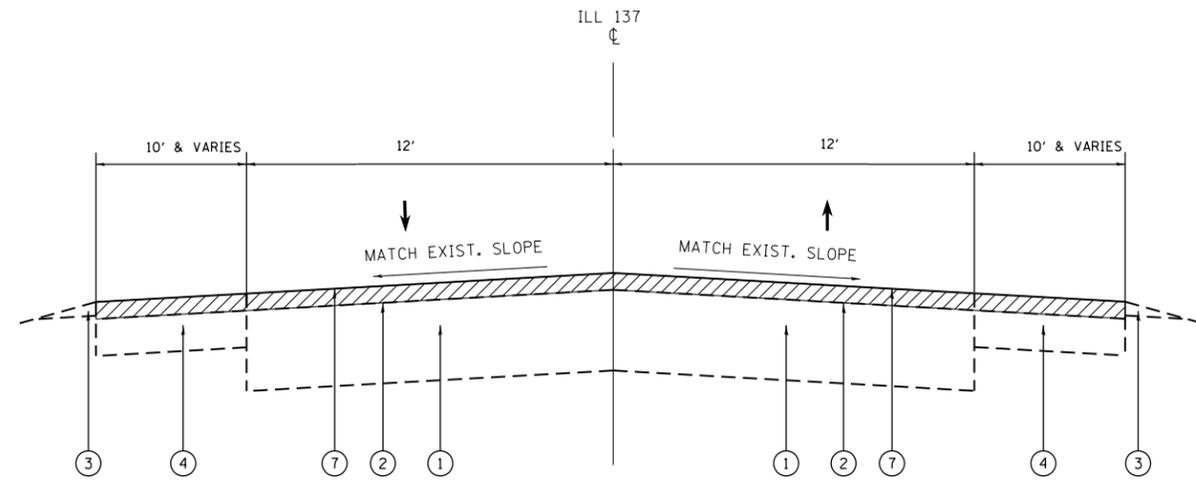
QUALITY MANAGEMENT PROGRAM (OMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE

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

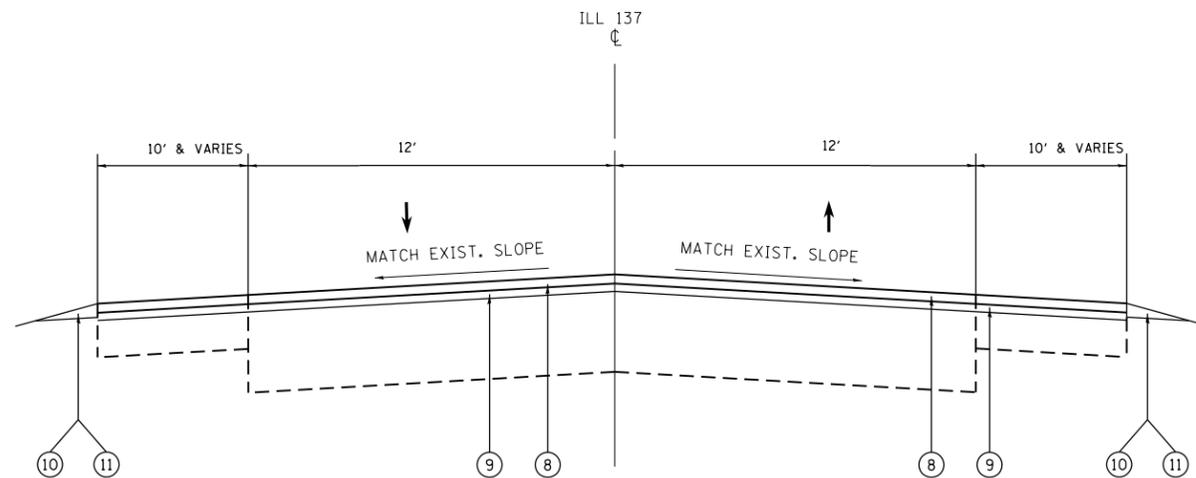
THE "AC TYPE" FOR POLYMERIZED HMA MIXTURES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.

FOR USE OF RECYCLED MATERIALS SEE DISTRICT ONE SPECIAL PROVISIONS

MILLING SHALL BE DONE PRIOR TO PATCHING



EXISTING TYPICAL SECTION  
ILL 137.  
STATION:  
33+22 TO 49+09



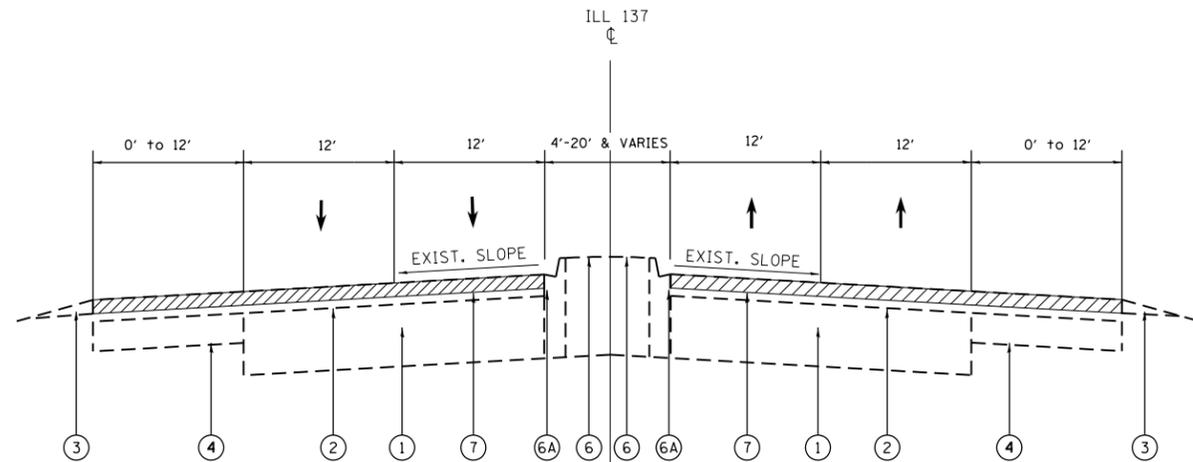
PROPOSED TYPICAL SECTION  
ILL 137  
STATION:  
33+22 TO 49+09

LEGEND

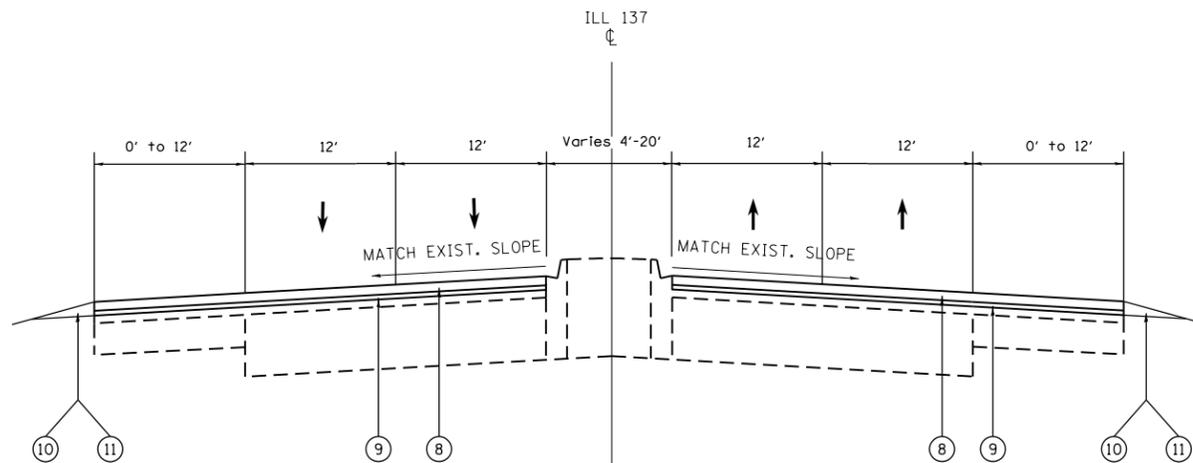
- ① EXIST. P.C. CONCRETE PAVEMENT , ± 9''
- \* ② EXIST. HOT-MIX ASPHALT SURFACE COURSE (BEFORE MILLING), ± 2 1/2''
- ③ EXIST. AGGREGATE SHOULDER
- ④ EXIST. HOT-MIX ASPHALT SHOULDER, 8''
- ⑤ EXISTING DITCH
- ⑥ EXISTING PC CONCRETE MEDIAN
- ⑥A EXIST. CONCRETE CURB AND GUTTER TYP B-6. 12
- ⑦ PROP. HMA SURFACE REMOVAL 2 1/2''
- \* ⑧ PROP. HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2''
- \* ⑨ PROP. POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50, 1''
- ⑩ PROP. AGGREGATE WEDGE SHOULDER, TYPE B
- ⑪ PROP. GRADING AND SHAPING SHOULDERS

\* MILLING THICKNESS IS 2 1/2'' FROM STA. 33+22 TO 49+09

FILE NAME =	USER NAME = curryw	DESIGNED - TARHONDA WHITE	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ILL 137 (US 45 TO BUTTERFIELD ROAD) EXISTING AND PROPOSED TYPICAL SECTIONS</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
pw:\IL\084EBIDINTEG\illinois.gov\PIWIDOT\Documents\DOT Offices\District 1\Projects\107810\Drawings\Design\107817-sht-typical.dgn						352	(2&3) R-RS-2	LAKE	23	6	
PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED -	SCALE: NONE			SHEET NO. OF SHEETS	STA. 17+94 TO STA. 1+82	CONTRACT NO. 62D69			
PLOT DATE = 4/5/2017	DATE -	REVISED -	ILLINOIS FED. AID PROJECT								



EXISTING TYPICAL SECTION  
ILL 137.  
STATION:  
52+53 TO 78+19

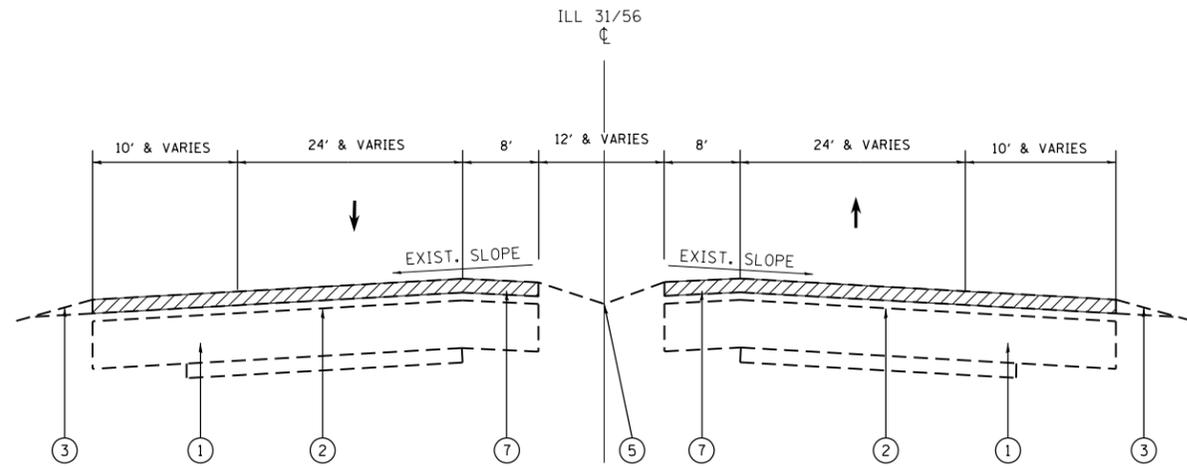


PROPOSED TYPICAL SECTION  
ILL 137  
STATION:  
52+53 TO 78+19

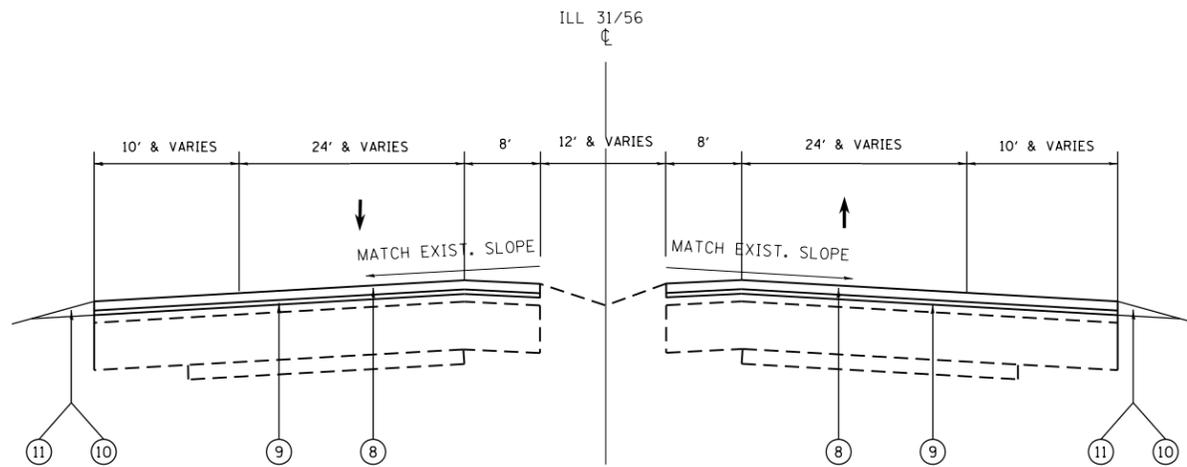
LEGEND

- ① EXIST. P.C. CONCRETE PAVEMENT , ± 9"
- ② EXIST. HOT-MIX ASPHALT SURFACE COURSE (BEFORE MILLING), ± 5 1/4"
- ③ EXIST. AGGREGATE SHOULDER
- ④ EXIST. HOT-MIX ASPHALT SHOULDER, 8"
- ⑤ EXISTING DITCH
- ⑥ EXISTING PC CONCRETE MEDIAN
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- ⑪ PROP. GRADING AND SHAPING SHOULDERS

FILE NAME =	USER NAME = curryw	DESIGNED - TARHONDA WHITE	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ILL 137 (US 45 TO BUTTERFIELD ROAD) EXISTING AND PROPOSED TYPICAL SECTIONS</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
pw:\IL\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\DOT Offices\District 1\Projects\DI07817\Drawings\Design\DI07817-sht-typical.dgn						352	(2&3) R-RS-2	LAKE	23	7	
PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED -	SCALE: NONE			SHEET NO. OF SHEETS	STA. 17+94 TO STA. 1+82	CONTRACT NO. 62D69			
PLOT DATE = 4/5/2017	DATE -	REVISED -	ILLINOIS FED. AID PROJECT								



EXISTING TYPICAL SECTION  
ILL 137.  
STATION:  
78+19 TO 86+25



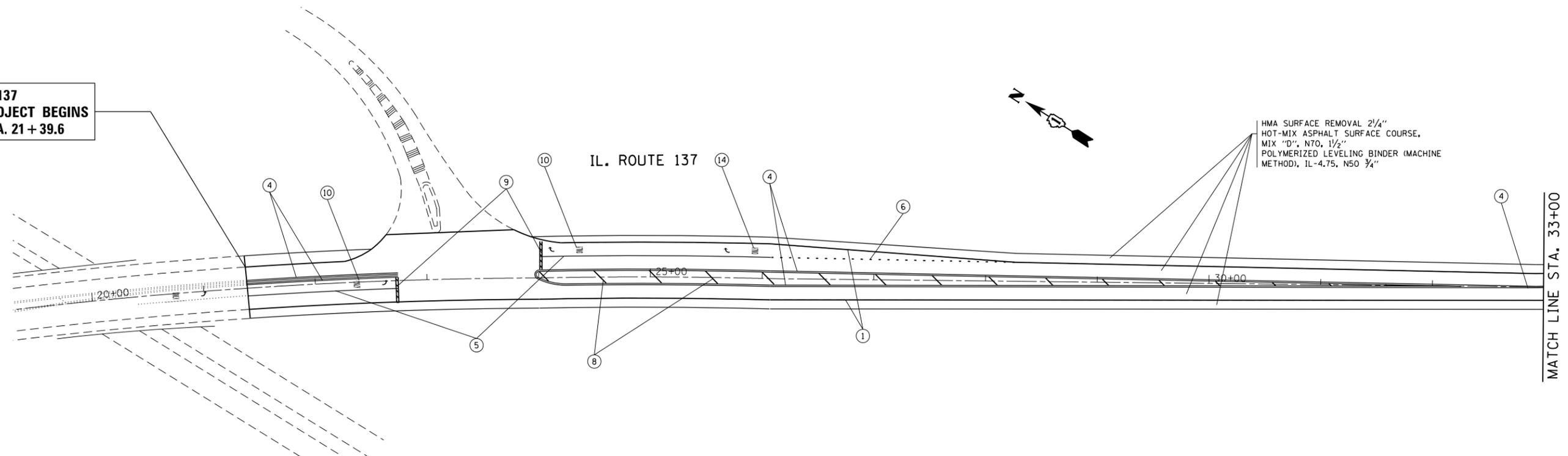
PROPOSED TYPICAL SECTION  
ILL 137  
STATION:  
78+19 TO 86+25

LEGEND

- ① EXIST. P.C. CONCRETE PAVEMENT , ± 9"
- ② EXIST. HOT-MIX ASPHALT SURFACE COURSE (BEFORE MILLING), ± 5 1/4"
- ③ EXIST. AGGREGATE SHOULDER
- ④ EXIST. HOT-MIX ASPHALT SHOULDER, 8"
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- ⑨ PROP. POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50, 3/4"
- ⑩ PROP. AGGREGATE WEDGE SHOULDER, TYPE B
- ⑪ PROP. GRADING AND SHAPING SHOULDERS

FILE NAME =	USER NAME = curryw	DESIGNED - TARHONDA WHITE	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ILL 137 (US 45 TO BUTTERFIELD ROAD) EXISTING AND PROPOSED TYPICAL SECTIONS</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
p:\ill\084EBIDINTEG.illinois.gov\PI\DOT\Documents\DOT Offices\District 1\Projects\DI07817\Drawings\Design\DI07817-sht-typical.dgn	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED -			352	(2&3) R-RS-2	LAKE	23	8	
PLOT DATE = 4/5/2017	DATE -	REVISED -	SCALE: NONE			SHEET NO.	OF SHEETS	STA. 17+94 TO STA. 1+82	ILLINOIS FED. AID PROJECT		
						CONTRACT NO. 62D69					

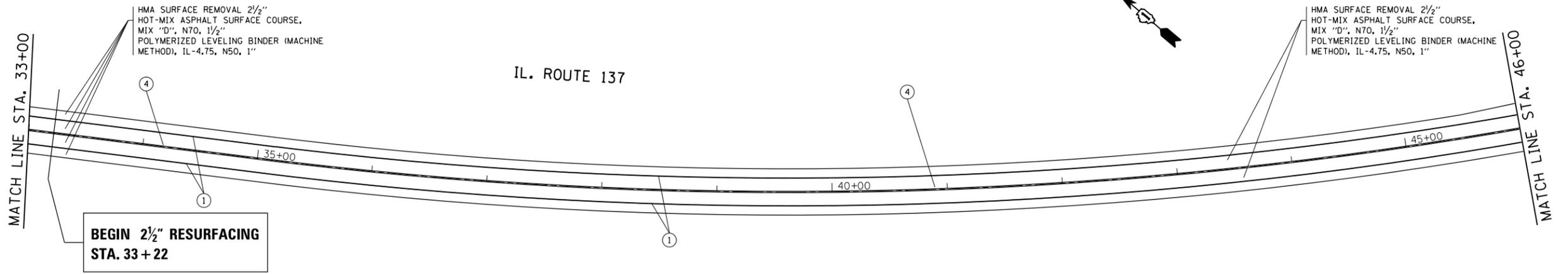
**IL 137  
PROJECT BEGINS  
STA. 21 + 39.6**



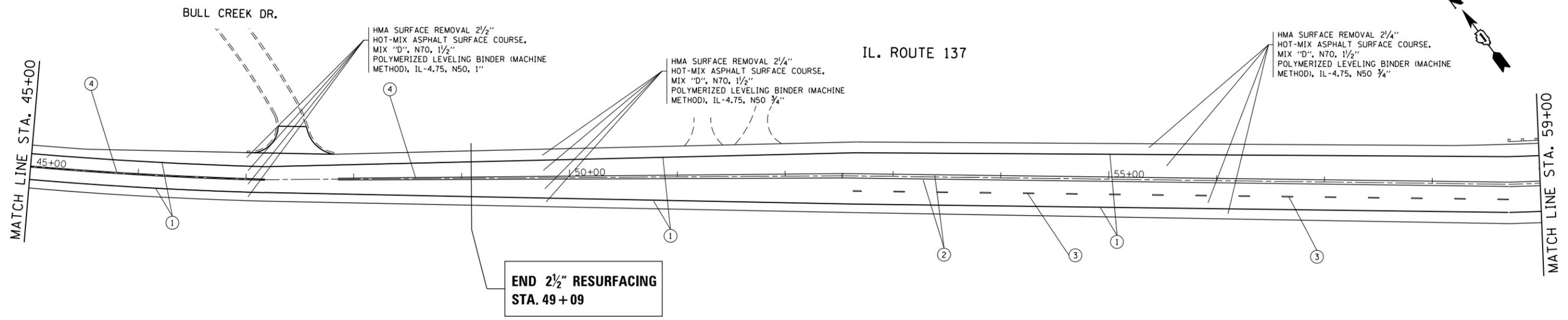
**PROPOSED PAVEMENT MARKINGS LEGEND**

- ① THERMOPLASTIC PVMT. MARKING 4", LINE, WHITE (TYP.)
- ② THERMOPLASTIC PVMT. MARKING 4", LINE, YELLOW (TYP.)
- ③ THERMOPLASTIC PVMT. MARKING 4", 10' LINE - 30' SPACE, WHITE (TYP.)
- ④ THERMOPLASTIC PVMT. MARKING 4", DOUBLE YELLOW (TYP.)
- ⑤ THERMOPLASTIC PVMT. MARKING 6", LINE, WHITE (TYP.)
- ⑥ THERMOPLASTIC PVMT. MARKING 6", 2' LINE - 6' SPACE, WHITE (TYP.)
- ⑦ THERMOPLASTIC PVMT. MARKING 8", LINE, WHITE (TYP.)
- ⑧ THERMOPLASTIC PVMT. MARKING 12", DIAGONALS, YELLOW (TYP.)  
- SEE DISTRICT DETAIL TC-13 FOR SPACING
- ⑨ THERMOPLASTIC PVMT. MARKING 24", STOP BAR, WHITE (TYP.)
- ⑩ THERMOPLASTIC PVMT. MARKING, LETTERS & SYMBOLS, WHITE (TYP.)
- ⑪ RAISED REFLECTIVE PVMT. MARKER (TYP) SEE 781001-04 OR TC-11
- ⑫ THERMOPLASTIC PVMT. MARKING 12", DIAGONALS  
-SEE DISTRICT DETAIL TC-12 FOR SPACING

- NOTES:
- 1) LIMIT OF RESURFACING ON THE SIDE- STREETS THROUGHOUT THE PROJECT SHALL BE TO THE RADIUS RETURN, UNLESS OTHERWISE SHOWN ON THE PLANS, OR AS DIRECTED BY THE RESIDENT ENGINEER / TECHNICIAN.
  - 2) ALL FINAL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC PAVEMENT MARKINGS (OF THE EXTRUDED TYPE).
  - 3) ALL FINAL PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH TC-13 "DISTRICT ONE TYPICAL PAVEMENT MARKINGS" STANDARD DETAIL.
  - 4) ALL RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH TC-11 "TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" STANDARD DETAIL.



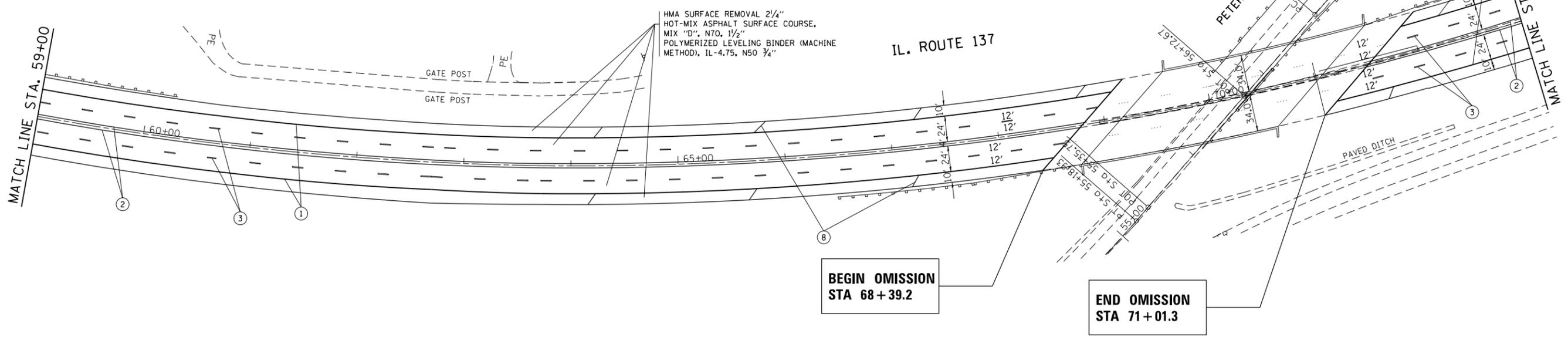
FILE NAME =	USER NAME = curryw	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL 137 (US45 TO BUTTERFIELD RD) ROADWAY AND PAVEMENT MARKING PLAN</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw\IL084EBIDINTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\DI07817\Drawings\Design\DI07817-sht-plen.dgn		CHECKED -	REVISED -			352	(2&3) R-RS-2	LAKE	23	9
PLOT SCALE = 100.0000' / in.		DATE -	REVISED -			CONTRACT NO. 62D69				
Default						ILLINOIS FED. AID PROJECT				
	PLOT DATE = 4/5/2017			SCALE:	SHEET OF SHEETS	STA. TO STA.				



**PROPOSED PAVEMENT MARKINGS LEGEND**

- ① THERMOPLASTIC PVTM. MARKING 4", LINE, WHITE (TYP.)
- ② THERMOPLASTIC PVTM. MARKING 4", LINE, YELLOW (TYP.)
- ③ THERMOPLASTIC PVTM. MARKING 4", 10' LINE - 30' SPACE, WHITE (TYP.)
- ④ THERMOPLASTIC PVTM. MARKING 4", DOUBLE YELLOW (TYP.)
- ⑤ THERMOPLASTIC PVTM. MARKING 6", LINE, WHITE (TYP.)
- ⑥ THERMOPLASTIC PVTM. MARKING 6", 2' LINE - 6' SPACE, WHITE (TYP.)
- ⑦ THERMOPLASTIC PVTM. MARKING 8", LINE, WHITE (TYP.)
- ⑧ THERMOPLASTIC PVTM. MARKING 12", DIAGONALS, YELLOW (TYP.) - SEE DISTRICT DETAIL TC-13 FOR SPACING
- ⑨ THERMOPLASTIC PVTM. MARKING 24", STOP BAR, WHITE (TYP.)
- ⑩ THERMOPLASTIC PVTM. MARKING, LETTERS & SYMBOLS, WHITE (TYP.)
- ⑪ RAISED REFLECTIVE PVTM. MARKER (TYP) SEE 781001-04 OR TC-11
- ⑫ THERMOPLASTIC PVTM. MARKING 12", DIAGONALS -SEE DISTRICT DETAIL TC-12 FOR SPACING

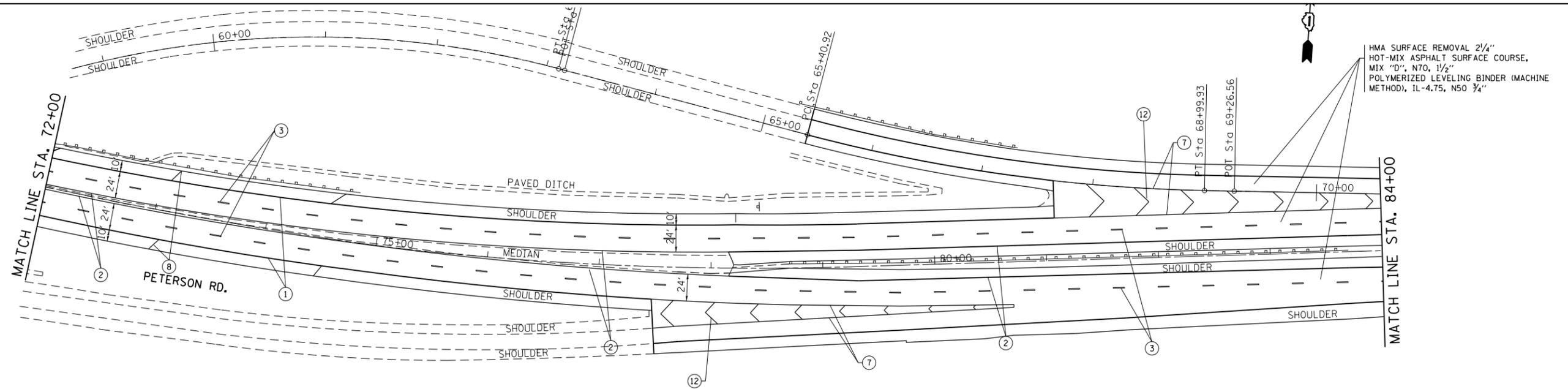
- NOTES:**
- 1) LIMIT OF RESURFACING ON THE SIDE- STREETS THROUGHOUT THE PROJECT SHALL BE TO THE RADIUS RETURN, UNLESS OTHERWISE SHOWN ON THE PLANS, OR AS DIRECTED BY THE RESIDENT ENGINEER / TECHNICIAN.
  - 2) ALL FINAL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC PAVEMENT MARKINGS (OF THE EXTRUDED TYPE).
  - 3) ALL FINAL PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH TC-13 "DISTRICT ONE TYPICAL PAVEMENT MARKINGS" STANDARD DETAIL.
  - 4) ALL RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH TC-11 "TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" STANDARD DETAIL.



**BEGIN OMISSION  
STA 68 + 39.2**

**END OMISSION  
STA 71 + 01.3**

FILE NAME =	USER NAME = currywaw	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL 137 (US45 TO BUTTERFIELD RD) ROADWAY AND PAVEMENT MARKING PLAN</b>	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\IL\084EBIDINTEG.illinois.gov\PWIDOT\Documents\IDOT Offices\District 1\Projects\DI078\Drawings\Design\DI07817-sht-plen.dgn	PLT SCALE = 100.0000' / in.	CHECKED -	REVISED -			352	(2&3) R-RS-2	LAKE	23	10
Default	PLT DATE = 4/5/2017	DATE -	REVISED -			CONTRACT NO. 62D69				



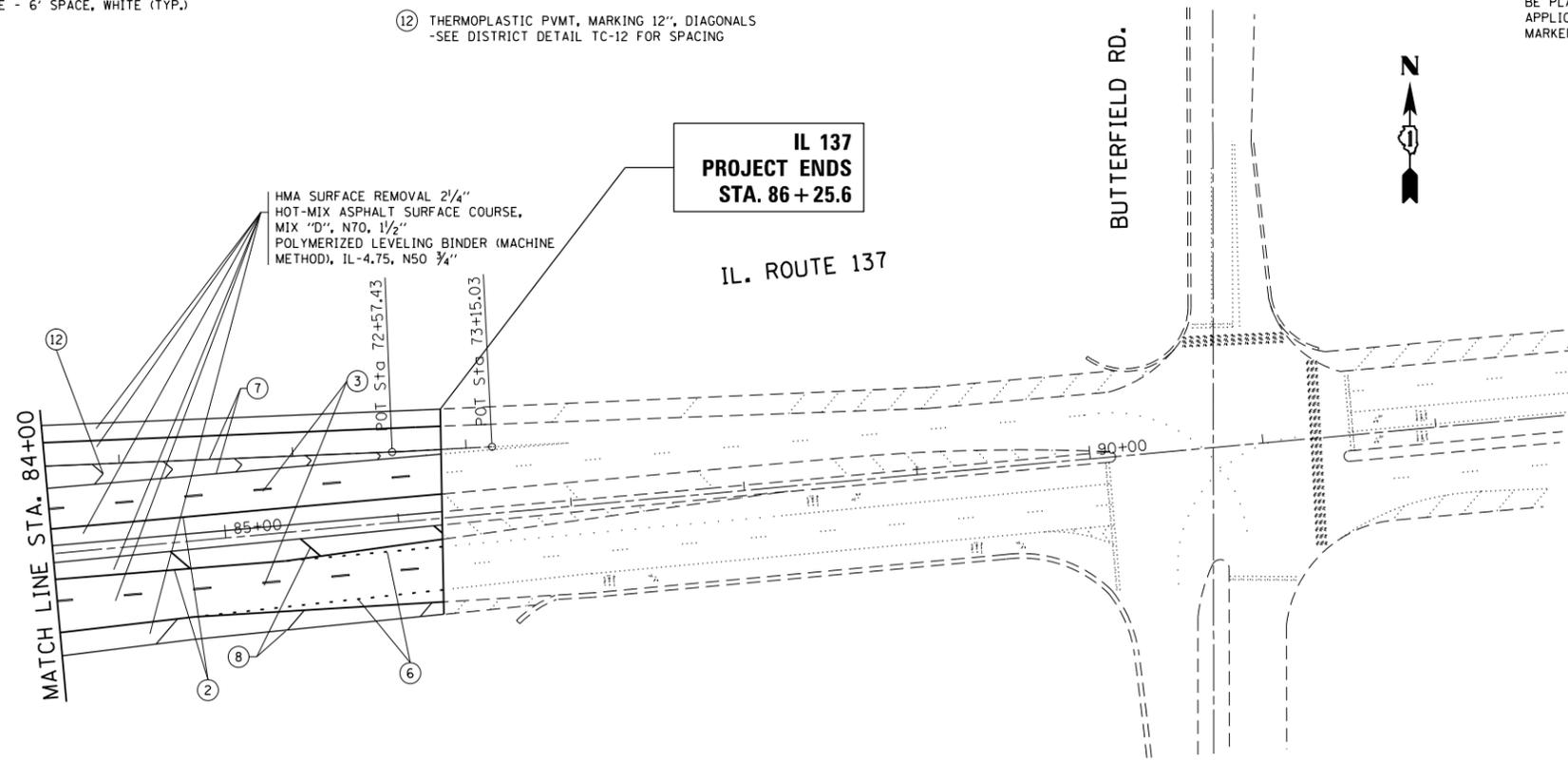
HMA SURFACE REMOVAL 2 1/4"  
HOT-MIX ASPHALT SURFACE COURSE,  
MIX "D", N70, 1 1/2"  
POLYMERIZED LEVELING BINDER (MACHINE  
METHOD), IL-4.75, N50 3/4"

**PROPOSED PAVEMENT MARKINGS LEGEND**

- ① THERMOPLASTIC PVMT. MARKING 4", LINE, WHITE (TYP.)
- ② THERMOPLASTIC PVMT. MARKING 4", LINE, YELLOW (TYP.)
- ③ THERMOPLASTIC PVMT. MARKING 4", 10' LINE - 30' SPACE, WHITE (TYP.)
- ④ THERMOPLASTIC PVMT. MARKING 4", DOUBLE YELLOW (TYP.)
- ⑤ THERMOPLASTIC PVMT. MARKING 6", LINE, WHITE (TYP.)
- ⑥ THERMOPLASTIC PVMT. MARKING 6", 2' LINE - 6' SPACE, WHITE (TYP.)
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- ⑫ THERMOPLASTIC PVMT. MARKING 12", DIAGONALS  
-SEE DISTRICT DETAIL TC-12 FOR SPACING

**NOTES:**

- 1) LIMIT OF RESURFACING ON THE SIDE- STREETS THROUGHOUT THE PROJECT SHALL BE TO THE RADIUS RETURN, UNLESS OTHERWISE SHOWN ON THE PLANS, OR AS DIRECTED BY THE RESIDENT ENGINEER / TECHNICIAN.
- 2) ALL FINAL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC PAVEMENT MARKINGS (OF THE EXTRUDED TYPE).
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**IL 137  
PROJECT ENDS  
STA. 86 + 25.6**

IL. ROUTE 137

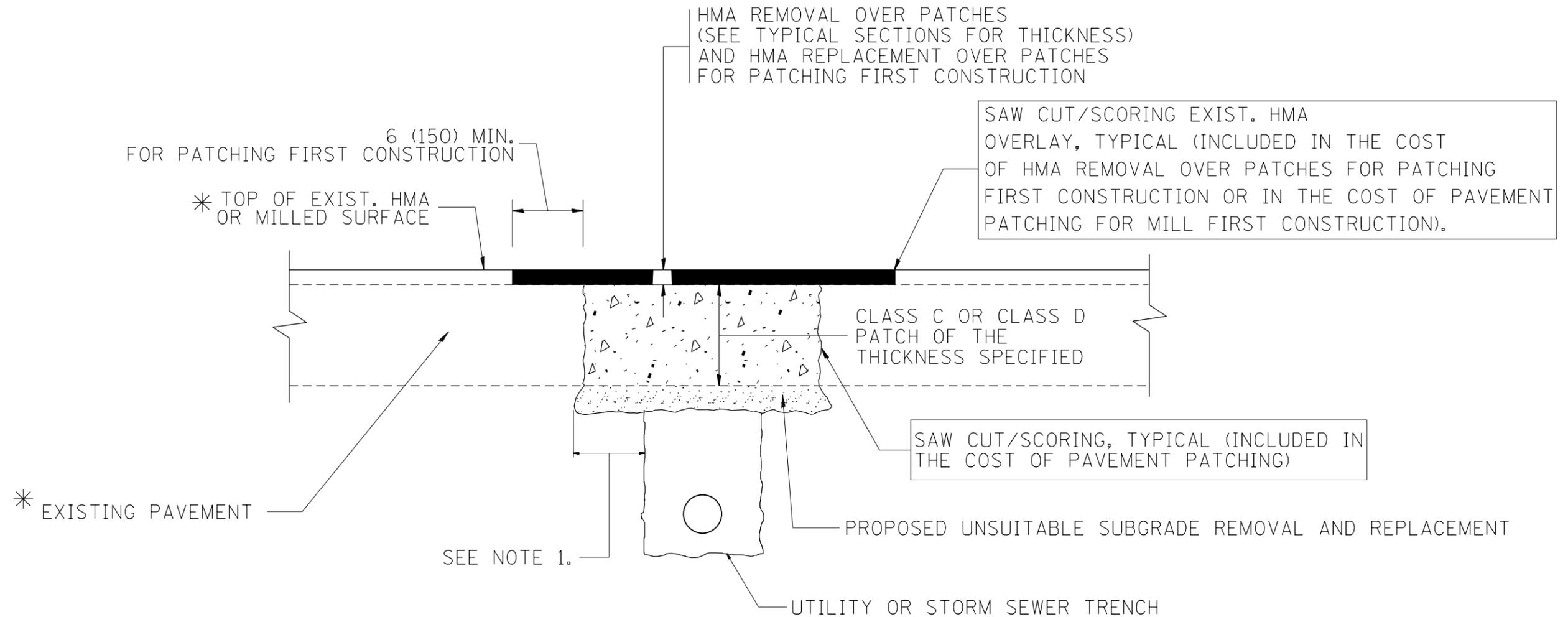
BUTTERFIELD RD.



FILE NAME =	USER NAME = curryw	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL 137 (US45 TO BUTTERFIELD RD) ROADWAY AND PAVEMENT MARKING PLAN</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
pw\IL084EBIDINTEG\illinois.gov\PWIDOT\Documents\DOT Offices\District 1\Projects\DI078\Drawings\Design\DI07817-sht-plan.dgn	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -			352	(2&3) R-RS-2	LAKE	23	11	
Default	PLOT DATE = 4/5/2017	DATE -	REVISED -			CONTRACT NO. 62D69					
						ILLINOIS FED. AID PROJECT					







\* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

**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 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.

FILE NAME =	USER NAME = curryaw	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98
pw:\IL\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\DI078\Drawings\Design\Diststd.dgn		CHECKED -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 100.0000' / 1in.	DATE - 10-25-94	REVISED - R. BORO 09-04-07
	PLOT DATE = 4/5/2017		REVISED - K. ENG 10-27-08

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
352	(2&3) R-RS-2	LAKE	23	14
BD400-04 (BD-22)			CONTRACT NO. 62D69	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

VARIABLE - TO MEET EXISTING DIMENSIONS AND FIELD CONDITIONS (SEE NOTE ②)

PROP. CONC. CURB OR CURB AND GUTTER REPLACEMENT IN ACCORDANCE WITH STATE STANDARD 606001. (SEE NOTE ②)

SAW CUT FULL DEPTH - INCLUDED IN THE COST OF SIDEWALK, DRIVEWAY OR MEDIAN SURFACE REMOVAL PAY ITEM.

SEE STATE STANDARD 606001  
EXISTING OR PROPOSED HMA SURFACE (IF APPLICABLE)

18" (450) MAX.

1/4" (5) \*\*

EXISTING SIDEWALK, DRIVEWAY, MEDIAN SURFACE, SOD OR GROUND.

PROPOSED SIDEWALK, DRIVEWAY PAVEMENT, MEDIAN SURFACE OR SODDING SALT TOLERANT WITH TOP SOIL, 4" (100) SOD RESTORATION (SEE NOTE ①).

EXISTING CONCRETE PAVEMENT, CONCRETE BASE COURSE OR FLEXIBLE PAVEMENT

3" (75) MIN.

SUITABLE BACKFILL MATERIAL (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT)

PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.)

\* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.

\*\* IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.

SODDING, SALT TOLERANT AND TOP SOIL, FURNISH AND PLACE 4" WILL BE PAID FOR SEPARATELY.

② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED

③ CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

④ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

⑤ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑥ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑦ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.

⑧ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

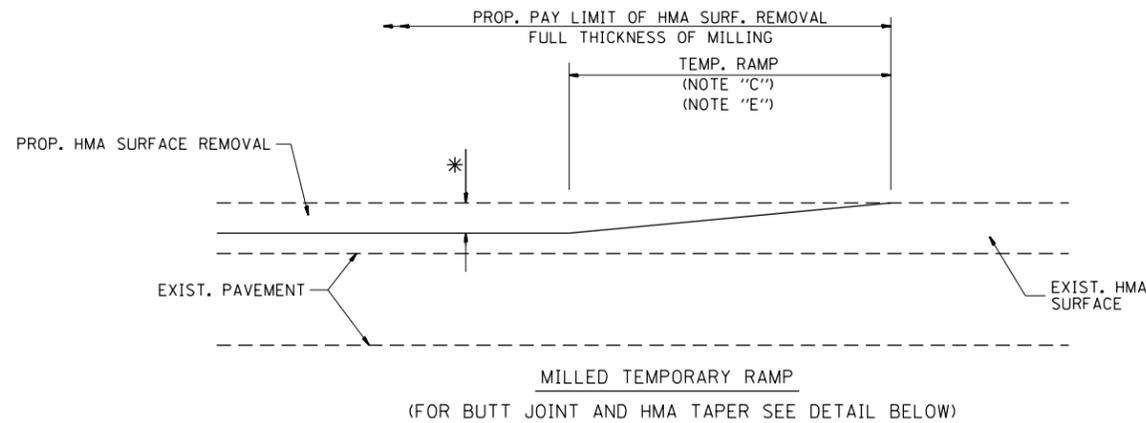
PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

BASIS OF PAYMENT:  
THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

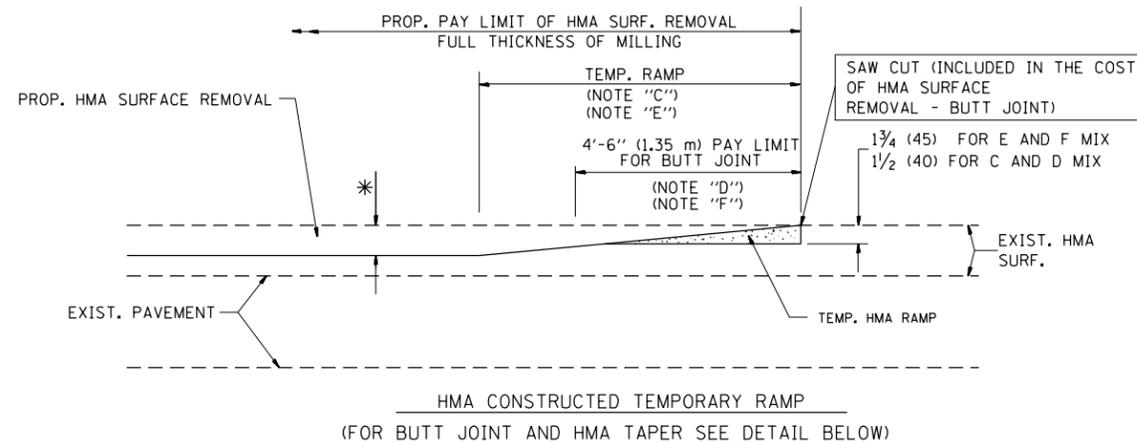
# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

FILE NAME =	USER NAME = curryw	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT</b>	F.A.P. R.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw\11084EBIDINTEG.illinois.gov\PIWIDOT\Documents\DOT Offices\District 1\Projects\DI078\Drawings\Design\Diststd.dgn		REVISED - A. ABBAS 03-21-97	REVISED - M. GOMEZ 01-22-01			352	(2&3) R-RS-2	LAKE	23	15
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - R. BORO 12-15-09				<b>BD600-06 (BD-24)</b>		<b>CONTRACT NO. 62D69</b>		
PLOT DATE = 4/5/2017	DATE - 03-11-94					SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT

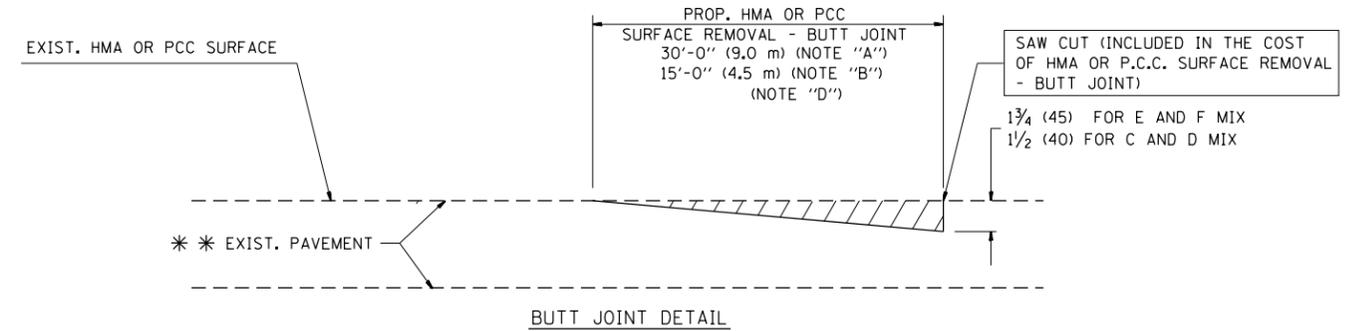


**OPTION 1**

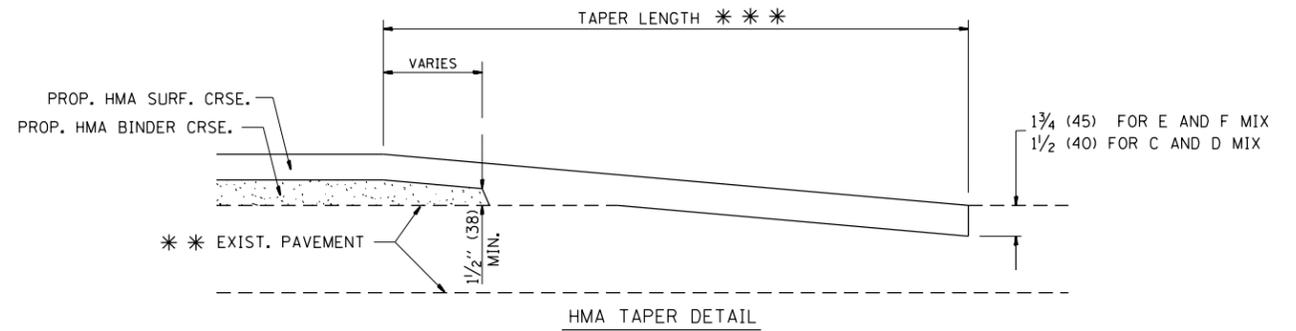


**OPTION 2**

**TYPICAL TEMPORARY RAMP**



**BUTT JOINT DETAIL**



**HMA TAPER DETAIL**

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

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

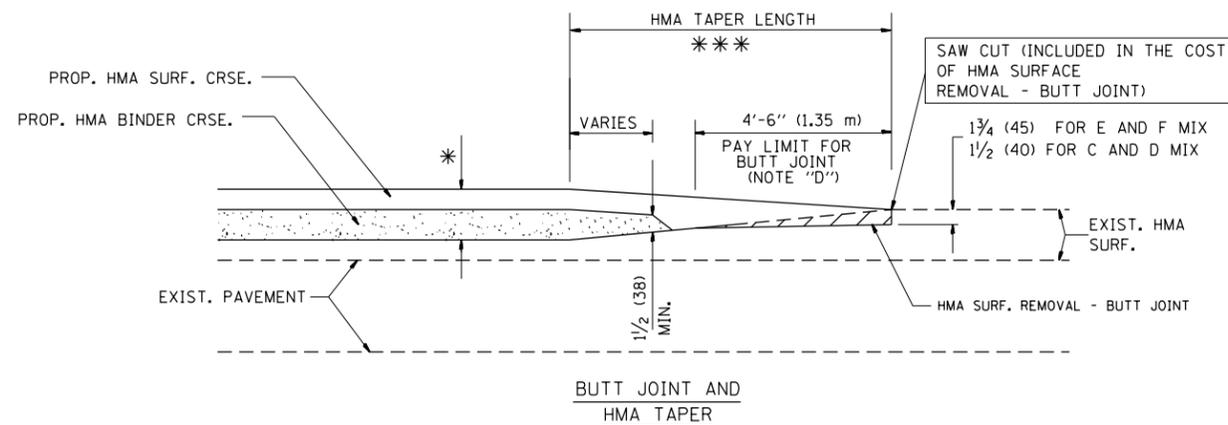
**NOTES**

- 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.



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

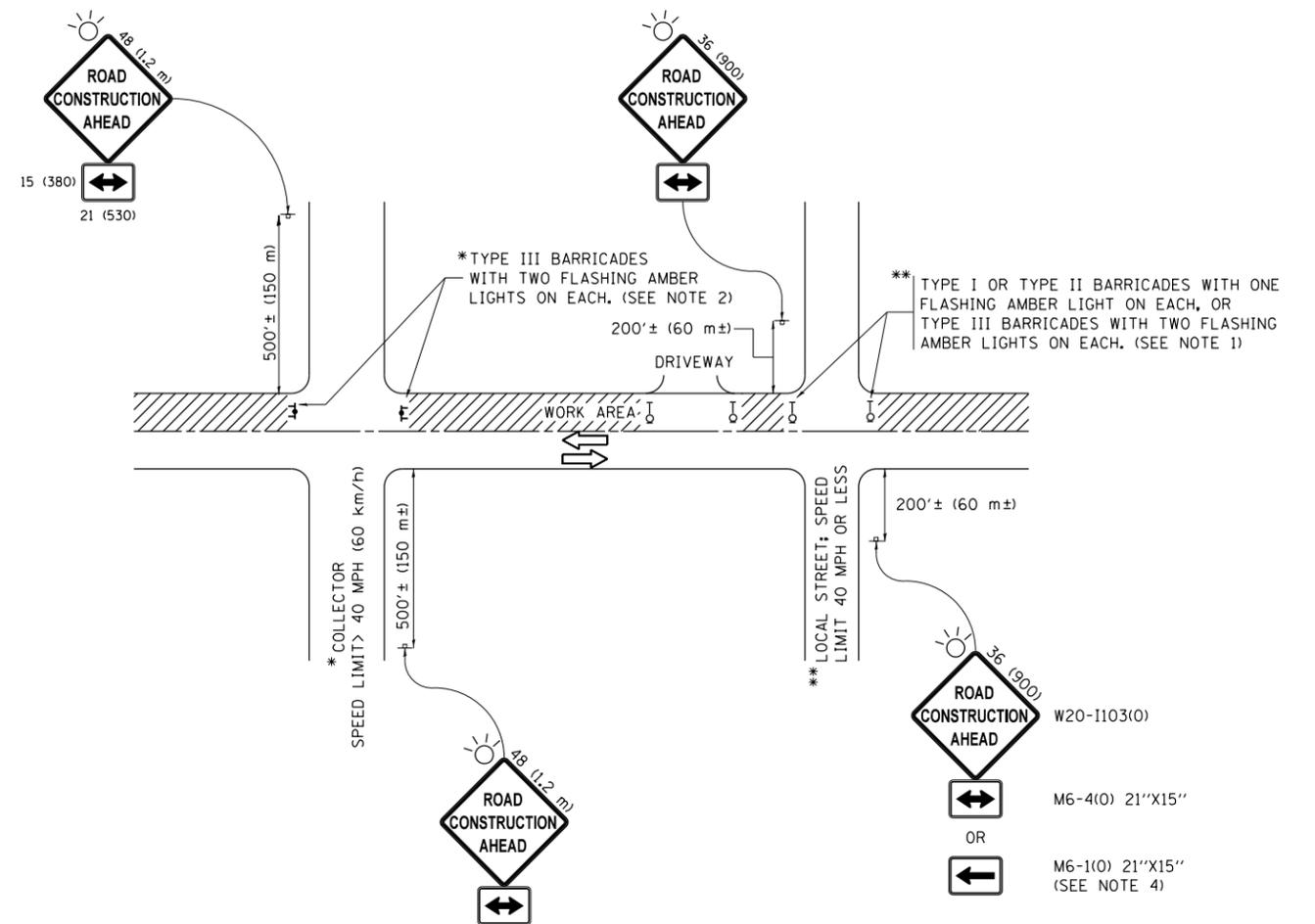
FILE NAME =	USER NAME = currywaw	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
p:\11\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\1078\Drawings\Design\Diststd.dgn			REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 4/5/2017	DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BUTT JOINT AND  
HMA TAPER DETAILS**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
352	(2&3) R-RS-2	LAKE	23	16
<b>BD400-05 BD32</b>		<b>CONTRACT NO. 62D69</b>		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**NOTES:**

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:
  - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER 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 x 48 (1.2 m x 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. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. 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).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

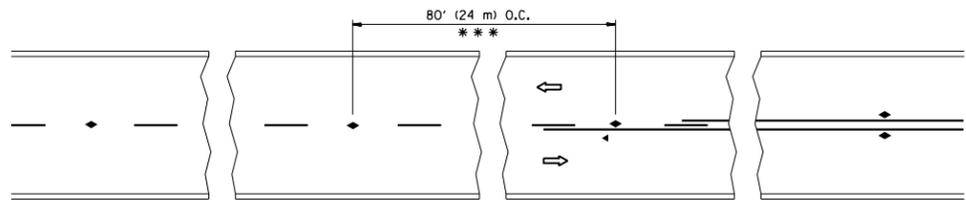
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p:\11084EBIDINTEG\illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\DI078\Drawings\Design\Diststd.dgn			REVISED - T. RAMMACHER 01-06-00
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - A. SCHUETZE 07-01-13
	PLOT DATE = 4/5/2017	DATE - 06-89	REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

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

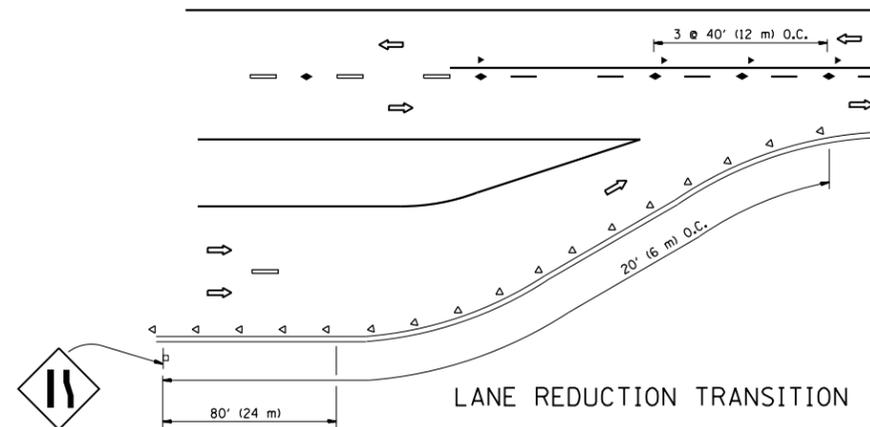
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
352	(2&3) R-RS-2	LAKE	23	17
<b>TC-10</b>			<b>CONTRACT NO. 62D69</b>	
ILLINOIS FED. AID PROJECT				

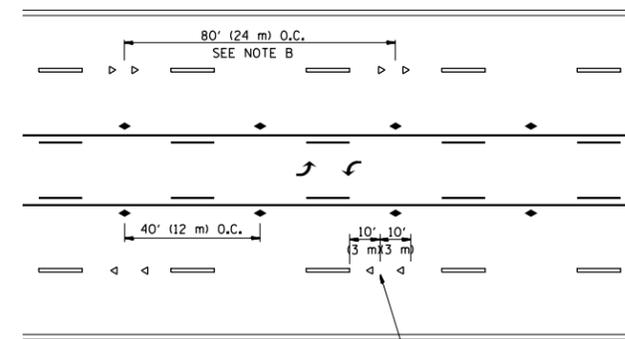


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

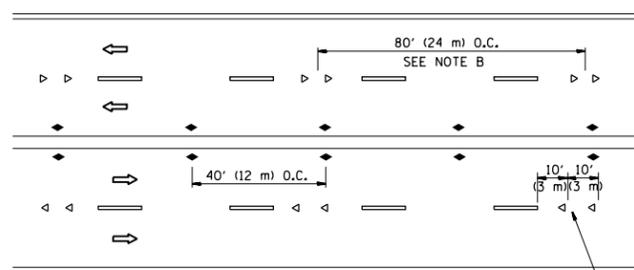
TWO-LANE/TWO-WAY



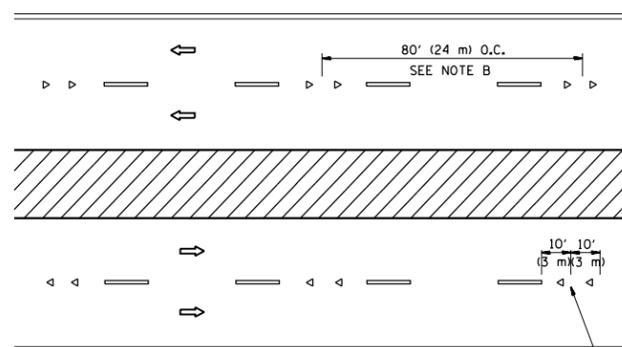
LANE REDUCTION TRANSITION



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.

SYMBOLS

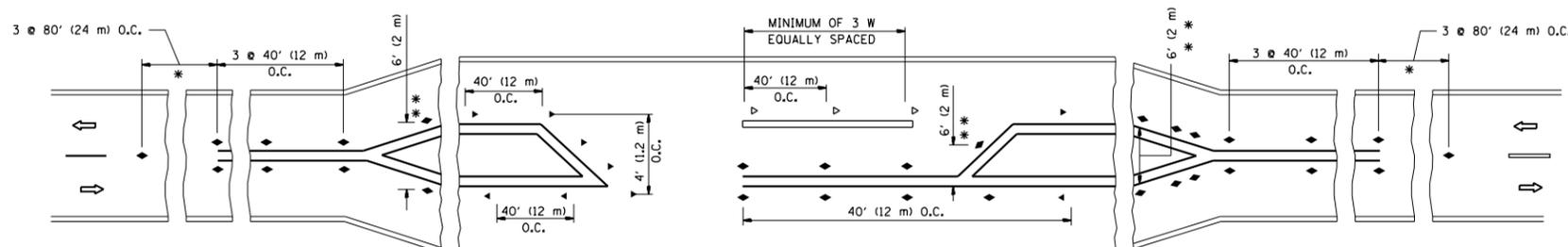
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

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

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 SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



\* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE  
 \*\* WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

LEFT TURN

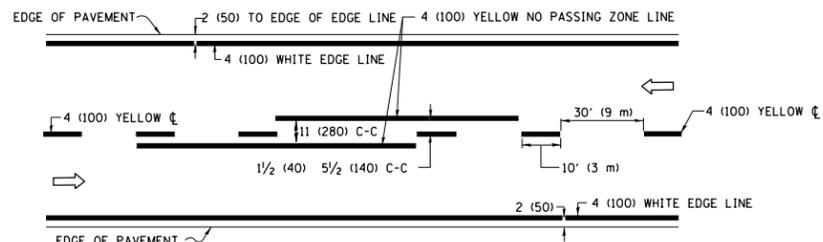
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = currywaw	DESIGNED -	REVISED - T. RAMMACHER 09-19-94
pw:\IL\084EBIDINTEG\illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\DI078\Drawings\Design\Diststd.dgn		CHECKED -	REVISED - T. RAMMACHER 03-12-99
		DATE -	REVISED - T. RAMMACHER 01-06-00
			REVISED - C. JUCIUS 09-09-09

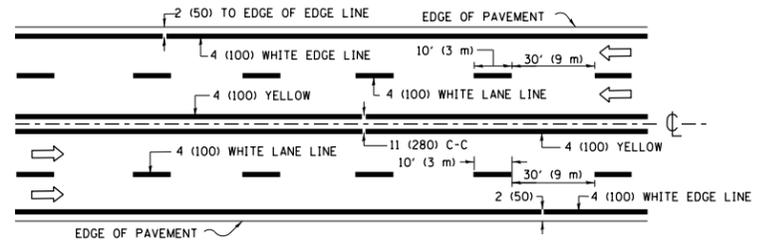
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS			
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

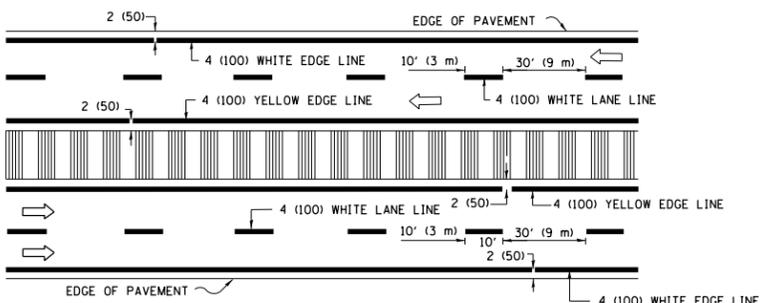
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
352	(2&3) R-RS-2	LAKE	23	18
TC-11		CONTRACT NO. 62D69		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**2-LANE ROADWAY**

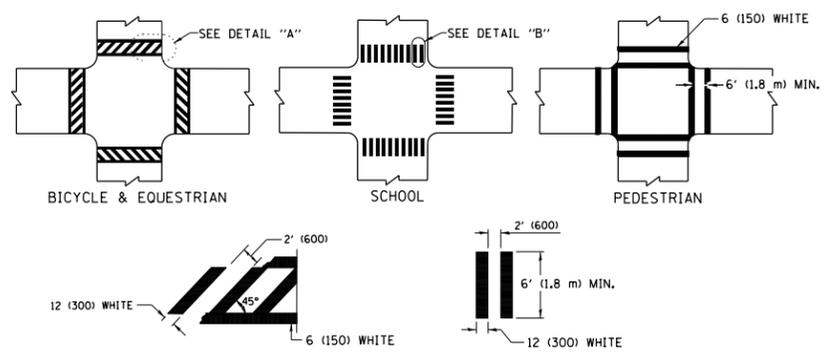


**MULTI-LANE UNDIVIDED**



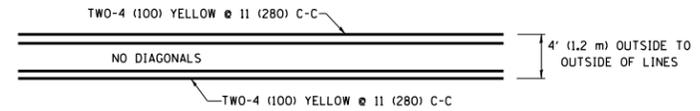
**MULTI-LANE DIVIDED WITH MEDIAN**

**TYPICAL LANE AND EDGE LINE MARKING**

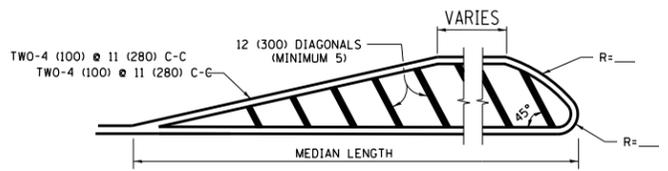


**TYPICAL CROSSWALK MARKING**

\* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES

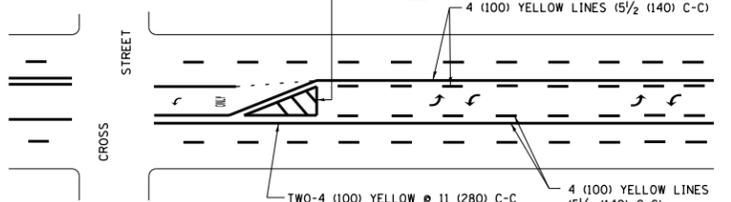


**4' (1.2 m) WIDE MEDIANS ONLY**



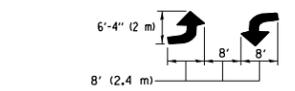
**MEDIANS OVER 4' (1.2 m) WIDE**

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))



**MEDIAN WITH TWO-WAY LEFT TURN LANE TYPICAL PAINTED MEDIAN MARKING**

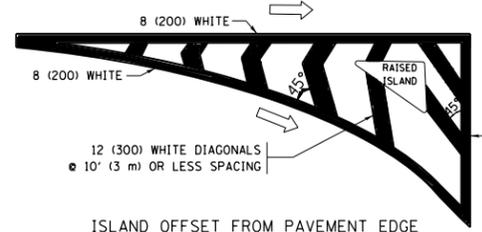
A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



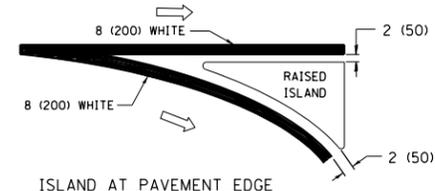
**TYPICAL LEFT (OR RIGHT) TURN LANE**

FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)  
\* 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 TURN LANE MARKING**

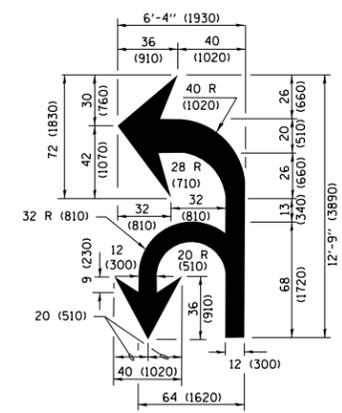


**ISLAND OFFSET FROM PAVEMENT EDGE**

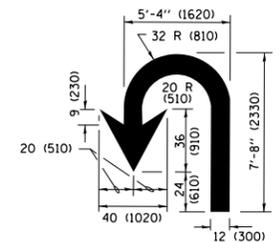


**ISLAND AT PAVEMENT EDGE**

**TYPICAL ISLAND MARKING**



**COMBINATION LEFT AND U-TURN**



**U-TURN**

**LANE REDUCTION TRANSITION**  
\* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5 1/2 (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 MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE 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 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	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 m <sup>2</sup> ) EACH "X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	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))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

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 = currywaw	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09
pw\1\084EBIDINTEG\illinois.gov\PIWIDOT\Documents\DOT Offices\District 1\Projects\01078\Drawings\Design\Diststd.dgn		CHECKED -	REVISED - C. JUCIUS 07-01-13
Default	PLOT SCALE = 100.0000' / in.	DATE - 03-19-90	REVISED - C. JUCIUS 12-21-15
	PLOT DATE = 4/5/2017		REVISED - C. JUCIUS 04-12-16

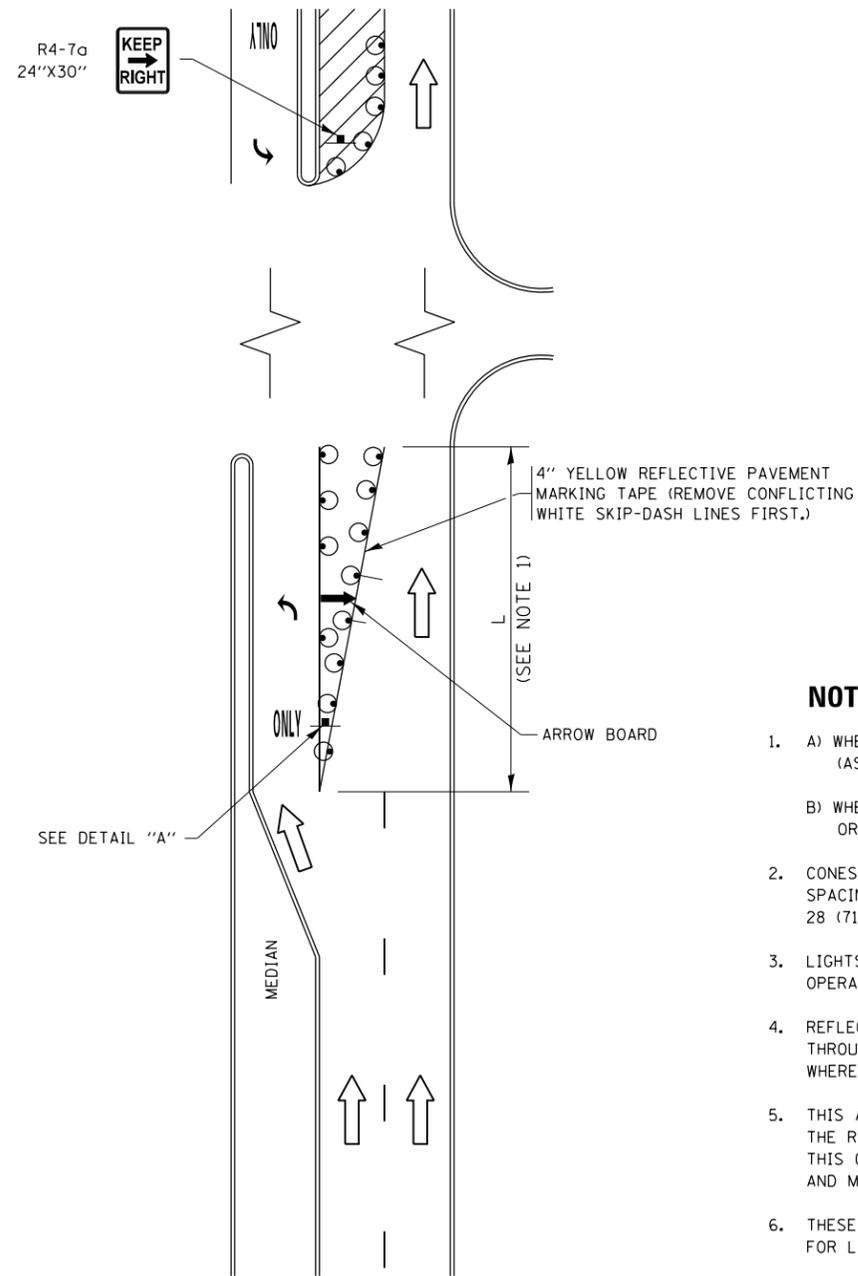
**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE TYPICAL PAVEMENT MARKINGS**

SCALE: NONE	SHEET 1	OF 1 SHEETS	STA.	TO STA.
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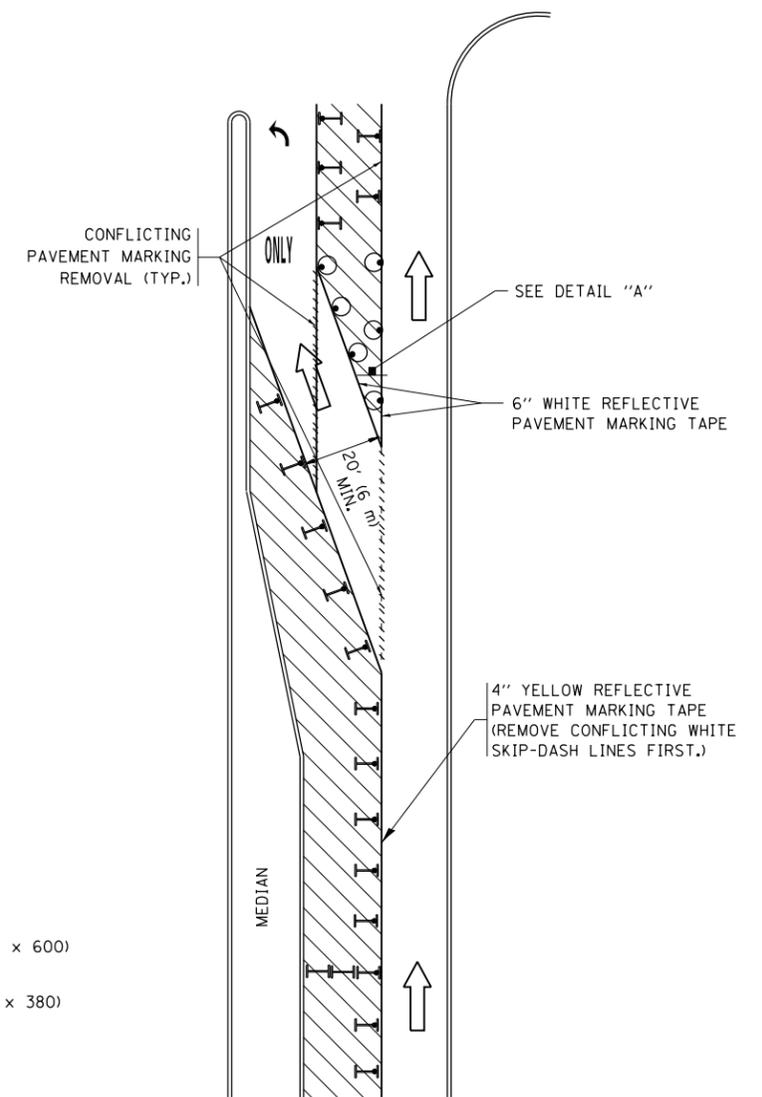
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
352	(2&3) R-RS-2	LAKE	23	19
TC-13		CONTRACT NO.	62D69	
ILLINOIS FED. AID PROJECT				

# TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER



**FIGURE 1**

# TURN BAY ENTRANCE WITHIN A LANE CLOSURE



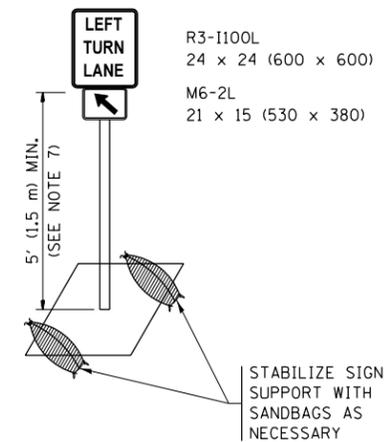
**FIGURE 2**

## LEGEND

- WORK AREA
- LANE OPEN TO TRAFFIC
- ARROW BOARD
- TYPE I OR II BARRICADE OR DRUM WITH STEADY BURN LIGHT
- DRUM WITH STEADY BURN LIGHT
- SIGN ASSEMBLY
- TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

## NOTES:

1. A) WHEN "L" IS  $\leq$  THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.  
B) WHEN "L" IS  $>$  THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
2. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-1100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH PREQUIREMENTS.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.



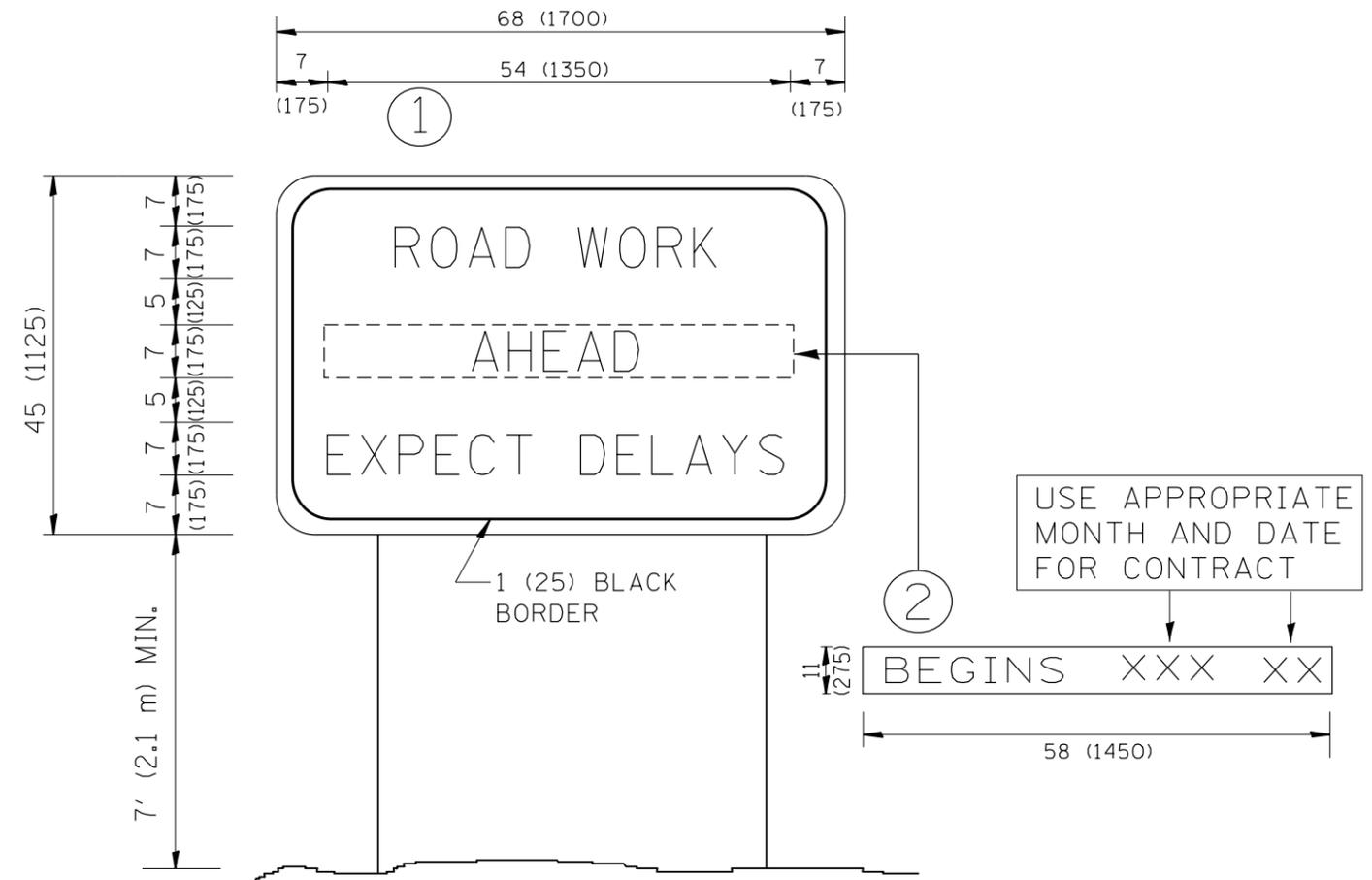
**DETAIL A**

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

FILE NAME =	USER NAME = curryw	REVISED - T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)</b>	F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\IL\084EBIDINTEG.illinois.gov\PI\DOT\Documents\DOT Offices\District 1\Projects\1079\REVISED Design\HOUSEH 11-07-95	REVISED - A. HOUSEH 11-07-95	REVISED - A. SCHUETZE 07-01-13	REVISED - A. SCHUETZE 07-01-13			352	(2&3) R-RS-2	LAKE	23	20
Default	PLOT SCALE = 100.0000' / in.	REVISED - A. HOUSEH 10-12-96	REVISED - A. SCHUETZE 09-15-16			<b>TC-14</b>		<b>CONTRACT NO. 62D69</b>		
	PLOT DATE = 4/5/2017	REVISED - T. RAMMACHER 01-06-00	REVISED -			SCALE: NONE		SHEET 1 OF 1 SHEETS		STA. TO STA.

ILLINOIS FED. AID PROJECT





**NOTES:**

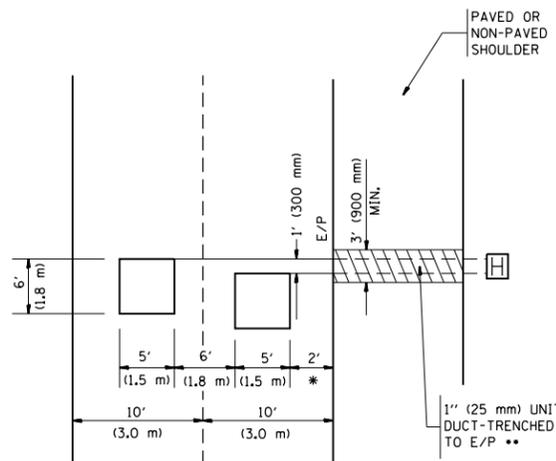
1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
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 = curryw	DESIGNED -	REVISED - R. MIRS 09-15-97	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ARTERIAL ROAD INFORMATION SIGN</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
p:\11\084EBIDINTEG.illinois.gov\PWIDOT\Documents\DOT Offices\District 1\Projects\DI078\Drawings\Design\Diststd.dgn		CHECKED -	REVISED - R. MIRS 12-11-97			352	(2&3) R-RS-2	LAKE	23	22
PLOT SCALE = 100.0000' / in.		DATE -	REVISED - T. RAMMACHER 02-02-99			<b>TC-22</b>		<b>CONTRACT NO. 62D69</b>		
PLOT DATE = 4/5/2017		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.



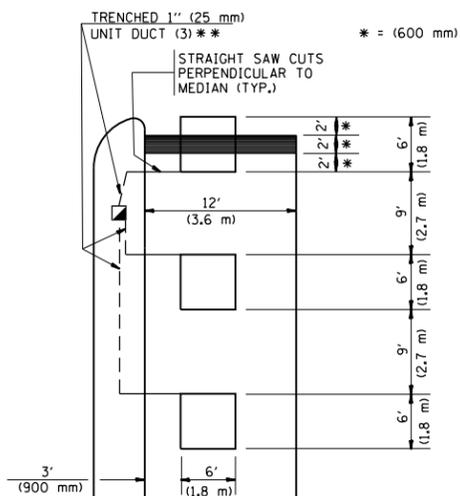
\* = (600 mm)

\*\* 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 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.

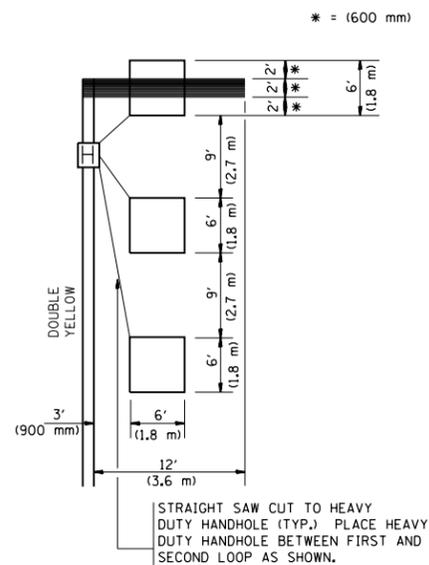


\*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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

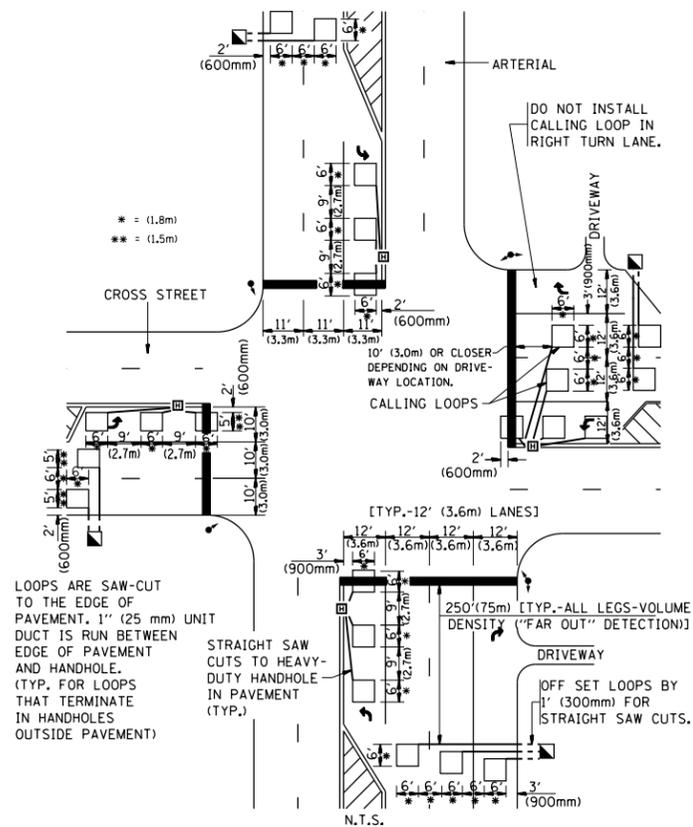
LEFT TURN LANES WITHOUT MEDIANS  
VOLUME DENSITY ("FAR OUT" DETECTION)  
ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)



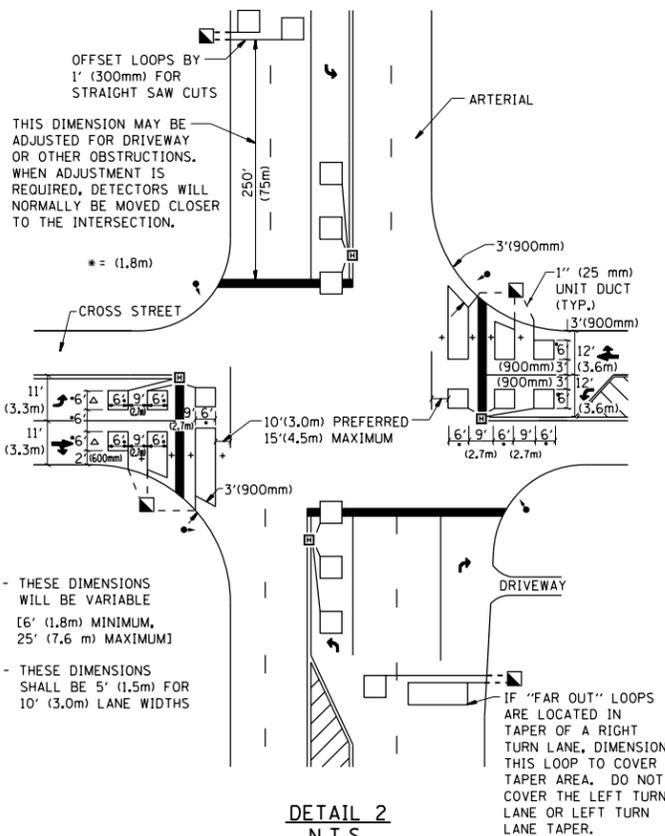
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



DETAIL 1  
N.T.S.

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



DETAIL 2  
N.T.S.

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 SEPARATELY. 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.

FILE NAME =	USER NAME = currywaw	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING</b>			F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
p:\11\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\DI079\Drawings\Design\Diststd.dgn		CHECKED - R.K.F.	REVISED -		352	(2&3) R-RS-2	LAKE	23	23			
PLOT SCALE = 100.0000' / 1".		DATE -	REVISED -		<b>TS-07</b>			<b>CONTRACT NO. 62D69</b>				
PLOT DATE = 4/5/2017					SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			