

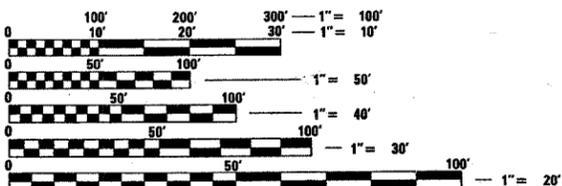
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FAP ROUTE 350 & FAP ROUTE 840: IL-50
SECTION: 143RS-4
CICERO AVENUE TO WILSON STREET
RESURFACING (MAINTENANCE)
PROJECT NO.: ACNHF-000S(589)
WILL COUNTY
C-91-224-04

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT IS LOCATED IN THE VILLAGES OF
UNIVERSITY PARK AND MONEE



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

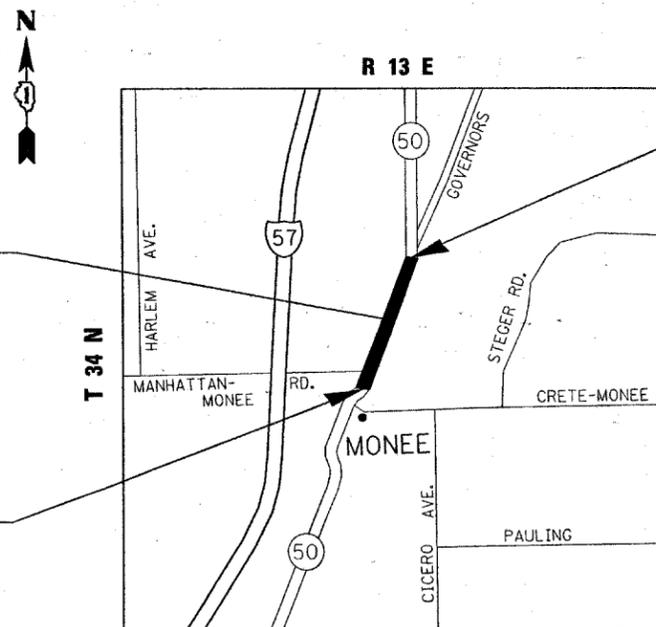
J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

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

CONTRACT NO. 62762

OMISSION FOR RAILROAD
STA. 36+07 TO STA. 35+77

PROJECT ENDS:
STATION 85+98



PROJECT BEGINS:
STATION 0+00

TRAFFIC DATA

2005 ADT = 11,200
POSTED SPEED LIMIT: 45-50 MPH

GROSS LENGTH OF PROJECT = 8598 FEET = 1.628 MILES
NET LENGTH OF PROJECT = 8568 FEET = 1.623 MILES

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	143RS-4	WILL	16	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 62762		

•350 & 840



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED MARCH 31, 20 08

Diana M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 9, 20 08
Eric E. Harnik
ENGINEER OF DESIGN AND ENVIRONMENT

May 9, 20 08
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES
3	SUMMARY OF QUANTITIES
4-5	TYPICAL SECTIONS
6-7	ROADWAY AND PAVEMENT MARKING PLANS
8	DETECTOR LOOPS REPLACEMENT PLAN
9	PAVEMENT PATCHING FOR HMA SURFACE PAVEMENT
10	BUTT JOINT AND HMA TAPER DETAILS
11	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS
12	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT)
13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
14	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
15	TEMPORARY INFORMATION SIGNING
16	DISTRICT 1 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

LIST OF STANDARDS

000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
442201-03	CLASS C AND D PATCHES
482011-03	HMA SHOULDER DETAILS- RESURFACING OR WIDENING OF RESURFACING PROJECTS
701201-02	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH
701426-02	LANE CLOSURE, MULTI-LANE INTERMITTENT OR MOVING OPERATION FOR SPEEDS > 45MPH
701601-05	URBAN LANE CLOSURE, MULTI-LANE 1W OR 2W WITH NON TRAVERSABLE MEDIAN
701606-05	URBAN LANE CLOSURE, MULTI-LANE 2W WITH MOUNTABLE MEDIAN
701701-05	URBAN LANE CLOSURE, MULTI-LANE INTERSECTION
701901	TRAFFIC CONTROL DEVICES
780001-01	TYPICAL PAVEMENT MARKINGS

GENERAL NOTES

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

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE VILLAGES OF MONEE AND UNIVERSITY PARK.

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

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

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

THE RESIDENT ENGINEER SHALL CONTACT MS. CORA MATHIS, AREA TRAFFIC ENGINEER AT (847) 485-6475 A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

ALL PATCHES SHALL BE CLASS D COMPLETE ALL PAVEMENT PATCHING BEFORE MILLING OPERATIONS.

CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470.

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 PLOT SCALE = 50.0000' / IN.
 USER NAME = bky

FILE NAME = c:\projects\122404\sh_r.dwg	USER NAME = bky	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL. RTE. 50 (CICERO AVENUE TO WILSON STREET) INDEX OF SHEETS, LIST OF STATE STANDARDS, AND PLAN NOTES	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -			•	143RS-4	WILL	16	2
		CHECKED -	REVISED -			•	350 & 840			CONTRACT NO. 62762
		DATE -	REVISED -			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
					SCALE: 1" = 50'	SHEET NO.	OF	SHEETS	STA.	TO STA.

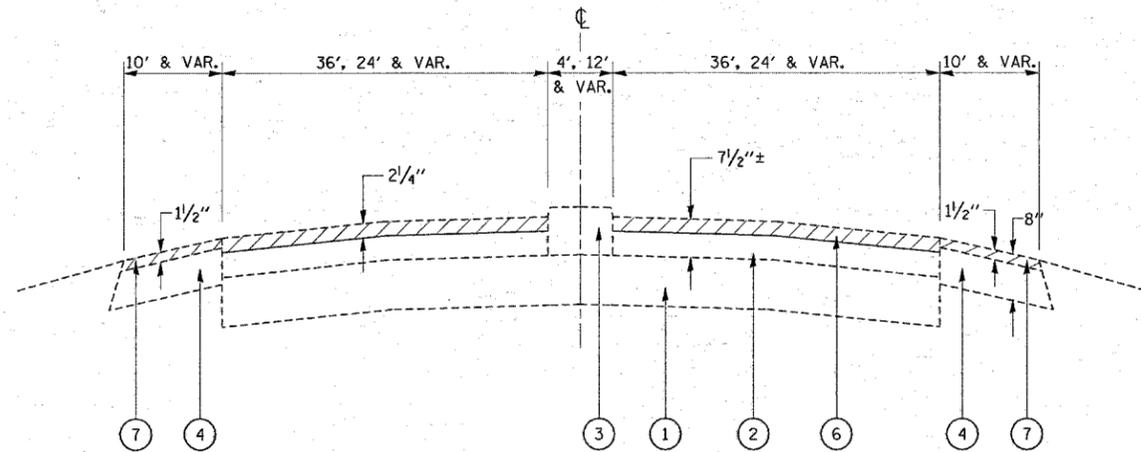
SUMMARY OF QUANTITIES			80% FED. 20% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		1000 URBAN				
20201006	GRADING AND SHAPING SHOULDERS	UNIT	124	124				
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	20	20				
40600300	AGGREGATE (PRIME COAT)	TON	97	97				
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	5	5				
40600895	CONSTRUCTING TEST STRIP	EACH	1	1				
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	229	229				
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	1375	1375				
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	4248	4248				
44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SQ YD	1939	1939				
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	48636	48636				
44002230	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 7 1/2"	SQ YD	4666	4666				
44201737	CLASS D PATCHES, TYPE I, 8 INCH	SQ YD	825	825				
44201741	CLASS D PATCHES, TYPE II, 8 INCH	SQ YD	1020	1020				
44201745	CLASS D PATCHES, TYPE III, 8 INCH	SQ YD	996	996				
44201747	CLASS D PATCHES, TYPE IV, 8 INCH	SQ YD	1263	1263				
48102100	AGGREGATE WEDGE SHOULDERS, TYPE B	TON	350	350				
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	5	5				
67100100	MOBILIZATION	L SUM	1	1				
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1				
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	1				
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1				
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1				
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	9058	9058				
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	35	35				
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	37275	37275				
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	479	479				

SUMMARY OF QUANTITIES			80% FED. 20% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		1000 URBAN				
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	88	88				
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	1330	1330				
• 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	35	35				
• 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	37275	37275				
• 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	479	479				
• 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	88	88				
• 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	589	589				
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	350	350				
* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	213	213				
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	52	52				
X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	2124	2124				
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1				
• 20076600	TRAINERS	HOUR	1500	1500				

•SPECIALTY ITEM
© Y080

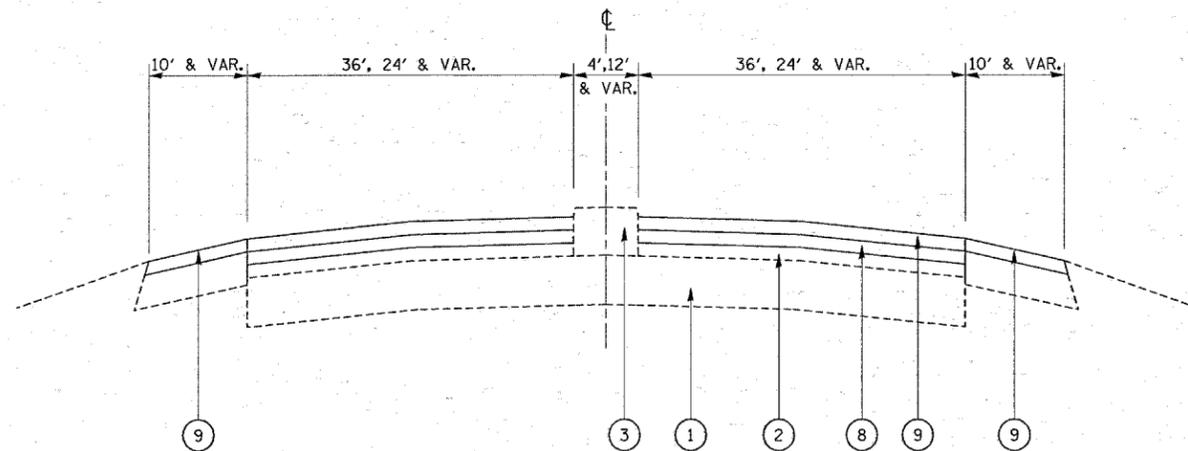
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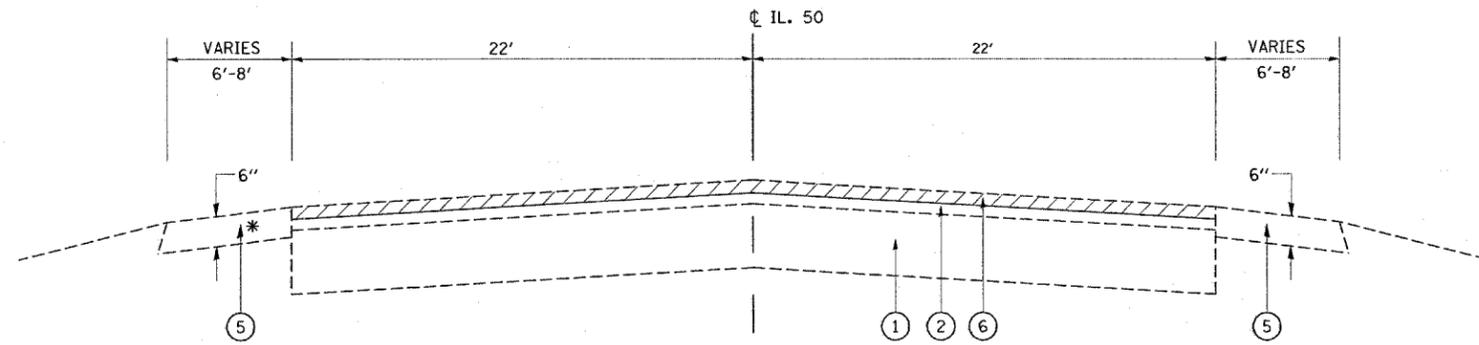
IL. 50
 CICERO AVENUE TO WILSON STREET
 EXISTING TYPICAL SECTION
 STA. 0+00 TO STA. 11+00

- LEGEND:
- ① EXISTING PCC PAVEMENT, 7 1/2"
 - ② EXISTING HMA SURFACE AFTER MILLING, 5 1/4" ±
 - ③ EXISTING CONCRETE MEDIAN
 - ④ EXISTING HMA SHOULDER 8" ±
 - ⑤ EXISTING AGGREGATE SHOULDER (GRADING AND SHAPING PRIOR TO PROPOSED AGGREGATE SHOULDER TYPE "B")
 - ⑥ PROPOSED HMA SURFACE REMOVAL, 2 1/4"
 - ⑦ PROPOSED HMA SURFACE REMOVAL 1 1/2"
 - ⑧ PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 (3/4")
 - ⑨ PROPOSED HMA SURFACE COURSE MIX "D", N70, (1 1/2")
 - ⑩ PROPOSED AGGREGATE SHOULDER, TYPE B, 6"



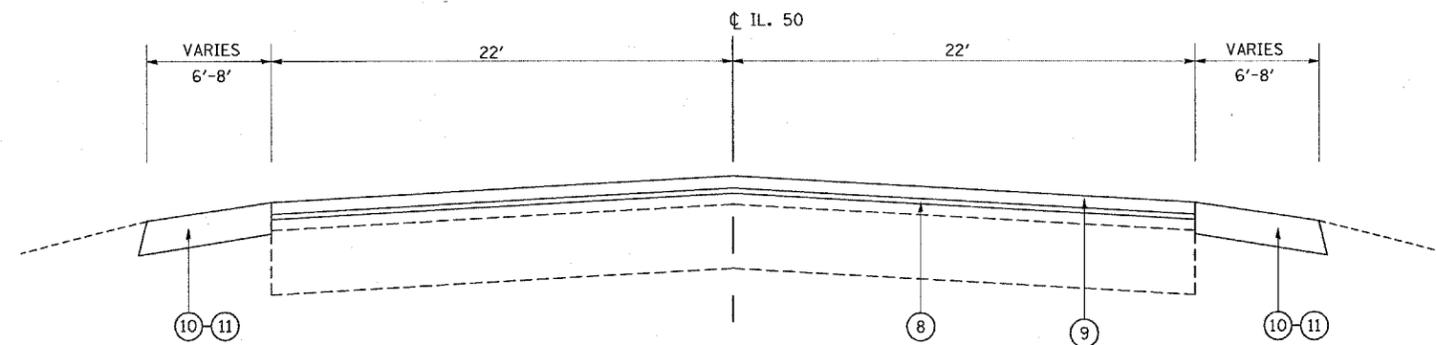
IL. 50
 CICERO AVENUE TO WILSON STREET
 PROPOSED TYPICAL SECTION
 STA. 0+00 TO STA. 11+00

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	PLOT SCALE = 50:1000 1" = 50'	CHECKED -	REVISED -			•	143RS-4	WILL	16	4
	PLOT DATE = 3/28/2008	DATE -	REVISED -			•350 & 840	CONTRACT NO. 62762		FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT	
SCALE: 1" = 50'					SHEET NO. OF SHEETS	STA. TO STA.				



EXISTING TYPICAL SECTION
IL. ROUTE 50
CICERO AVENUE TO WILSON STREET
STA. 11+00 TO 35+77
STA. 36+07 TO 85+98

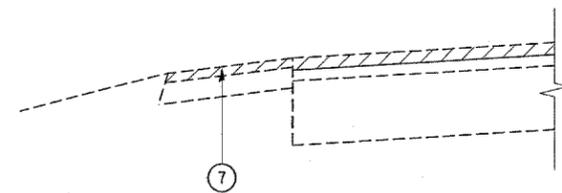
* GRADING AND SHAPING OF THE EXISTING AGGREGATE SHOULDER SHALL BE COMPLETED PRIOR TO LAYING OF THE PROPOSED AGGREGATE SHOULDER, TYPE "B".



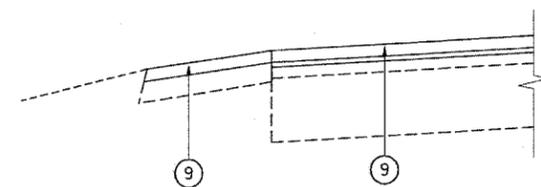
PROPOSED TYPICAL SECTION
IL. ROUTE 50
CICERO AVENUE TO WILSON STREET
STA. 11+00 TO STA. 35+77
STA. 36+07 TO STA. 85+98

LEGEND:

- ① EXISTING PCC PAVEMENT, 7 1/2"
- ② EXISTING HMA SURFACE AFTER MILLING, 5 1/4"±
- ③ EXISTING CONCRETE MEDIAN
- ④ EXISTING HMA SHOULDER 8"±
- ⑤ EXISTING AGGREGATE WEDGE SHOULDER, TYPE B
- ⑥ PROPOSED HMA SURFACE REMOVAL, 2 1/4"
- ⑦ PROPOSED HMA SURFACE REMOVAL 1 1/2"
- ⑧ PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 (3/4")
- ⑨ PROPOSED HMA SURFACE COURSE MIX "D", N70, (1 1/2")
- ⑩ PROPOSED AGGREGATE SHOULDER, TYPE B
- ⑪ PROPOSED GRADING AND SHAPING OF SHOULDERS



EXISTING



PROPOSED

MIXTURE REQUIREMENTS

MIXTURE TYPE	AC/PG	AIR VOIDS (%)	REMARKS
HMA SURFACE COURSE, MIX "D", N70, 1 1/2" (IL-9.5mm)	PG 64-22	4% @ 70 GYR	IL- 9.5 MM
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"	SBS/SBR PG 76-28/-22	4% @ 50 GYR	
HMA REPLACEMENT OVER PATCHES, 5 1/4"	PG 64-22*	4% @ 70 GYR	BINDER IL-19 MM
CLASS D PATCHES, 8"	PG 64-22*	4% @ 70 GYR	BINDER IL-19 MM

NOTE: THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE IS 112 LBS./SQ. IN.

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

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PLOT DATE = 4/23/2008

DATE -

REVISED -

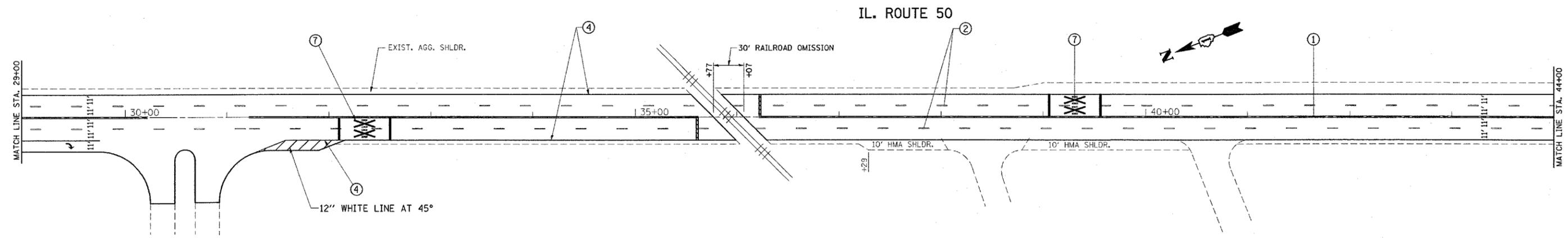
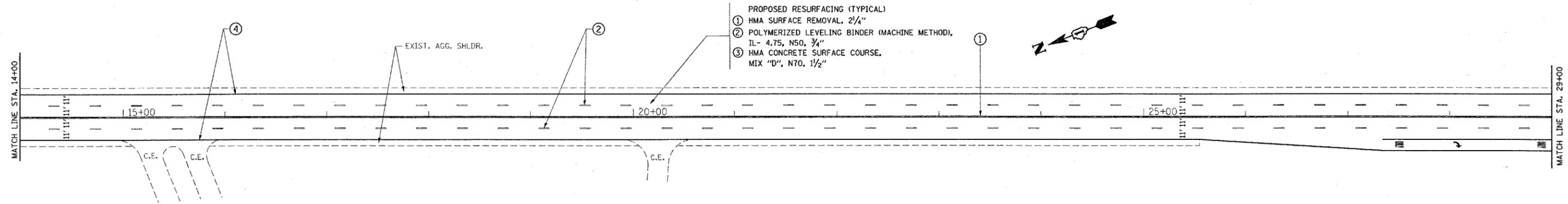
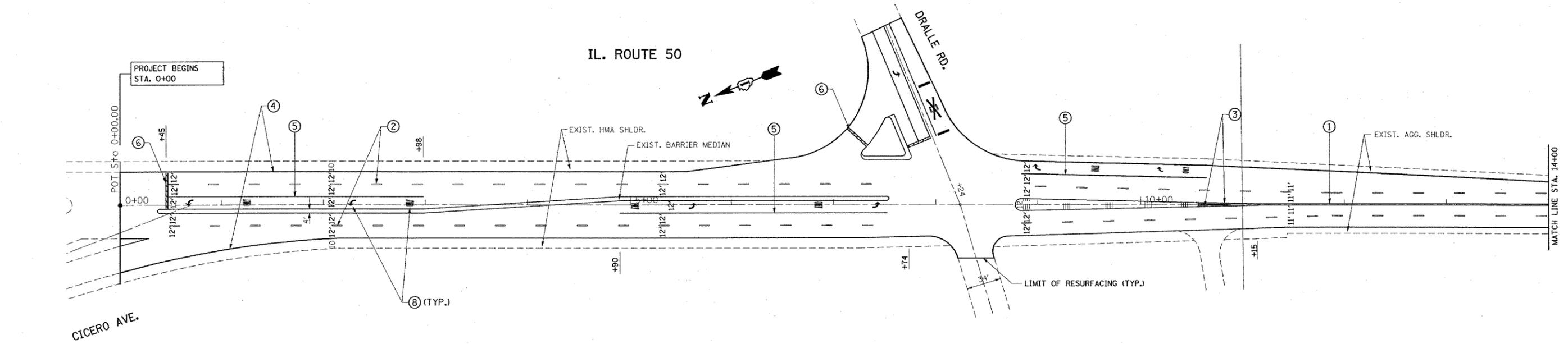
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL. ROUTE 50 (CICERO AVENUE TO WILSON STREET)
TYPICAL SECTIONS

SCALE: 1" = 50' SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	143RS-4	WILL	16	5
* 350 & 840			CONTRACT NO. 62762	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

IL. ROUTE 50



LEGEND

- ① PROPOSED THERMOPLASTIC PAVEMENT MARKING, 4" DOUBLE SOLID YELLOW LINE AT 11" C-C (TYP.)
- ② PROPOSED THERMOPLASTIC PAVEMENT MARKING, 4" LINE SKIP DASH (10' DASH, 30' SKIP) WHITE
- ③ PROPOSED THERMOPLASTIC PAVEMENT MARKING, 4" YELLOW LINE (TYP.)
- ④ PROPOSED THERMOPLASTIC PAVEMENT MARKING, 4" WHITE EDGE LINE (TYP.)
- ⑤ PROPOSED THERMOPLASTIC PAVEMENT MARKING, 6" WHITE LINE

- ⑥ PROPOSED THERMOPLASTIC PAVEMENT MARKING, 24" WHITE LINE, STOP BAR (TYP.)
- ⑦ PROPOSED THERMOPLASTIC PAVEMENT MARKING, RAILROAD CROSSING
- ⑧ PROPOSED THERMOPLASTIC PAVEMENT MARKING, LETTERS AND SYMBOLS (TYP.)

* NOTE:
RAISED REFLECTIVE PAVEMENT MARKERS AS PER DISTRICT ONE DETAILS (SEE SHEET *12)

* NOTE:
FOR HMA SHOULDER RESURFACING AND AGGREGATE SHOULDER REPAIRS ON TYPICAL CROSS SECTIONS.

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DATE -

REVISED -

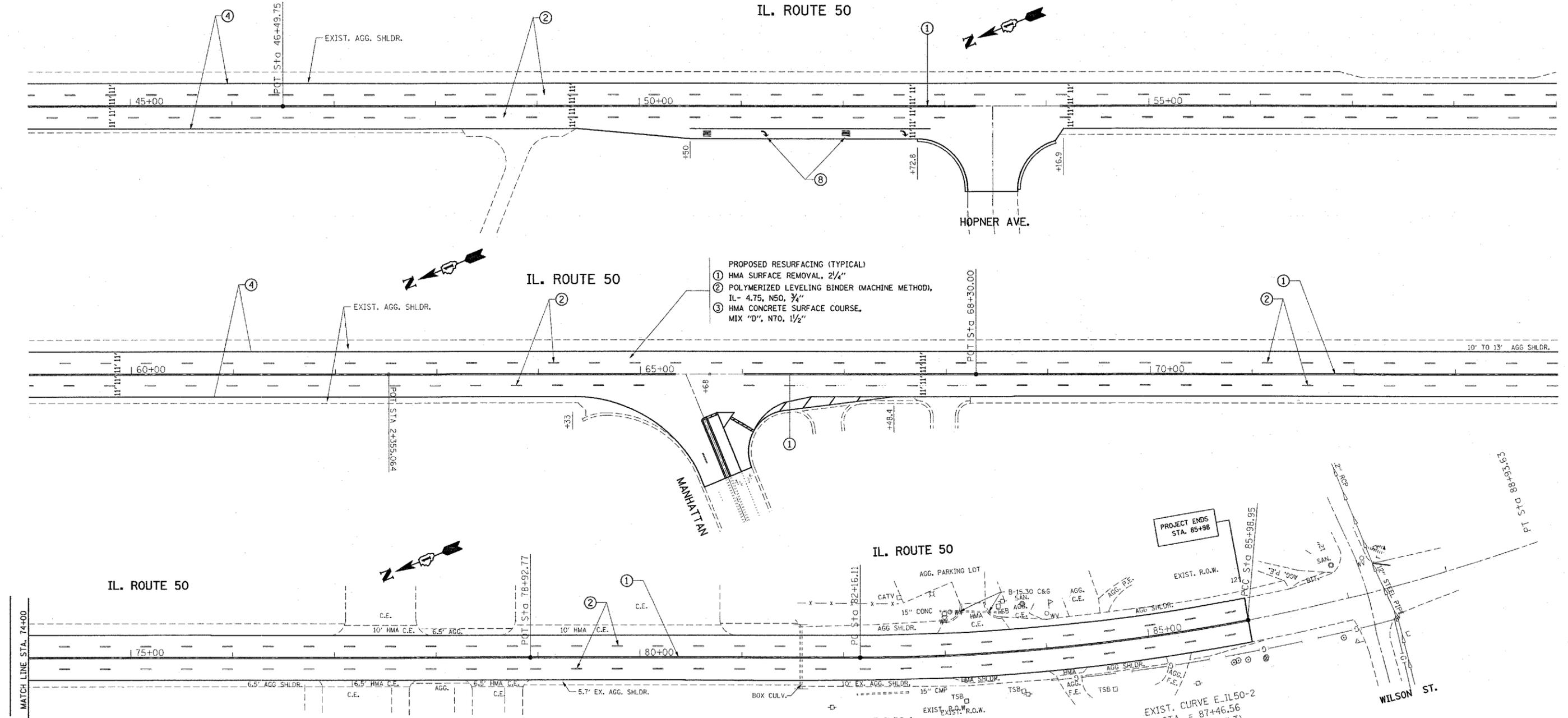
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL. RTE. 50 (CICERO AVENUE TO WILSON ST.)
ROADWAY AND PAVEMENT MARKING PLAN

SCALE: 1" = 50' SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	143RS-4	WILL	16	6
*350 & 840			CONTRACT NO. 62762	
FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT				

IL. ROUTE 50



- PROPOSED RESURFACING (TYPICAL)
- ① HMA SURFACE REMOVAL, 2 1/4"
 - ② POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL- 4.75, NSO, 3/4"
 - ③ HMA CONCRETE SURFACE COURSE, MIX "D", N70, 1 1/2"

LEGEND

- ① PROPOSED THERMOPLASTIC PAVEMENT MARKING, 4" DOUBLE SOLID YELLOW LINE AT 11" C-C (TYP.)
- ② PROPOSED THERMOPLASTIC PAVEMENT MARKING, 4" LINE SKIP DASH (10' DASH, 30' SKIP) WHITE
- ③ PROPOSED THERMOPLASTIC PAVEMENT MARKING, 4" YELLOW LINE (TYP.)
- ④ PROPOSED THERMOPLASTIC PAVEMENT MARKING, 4" WHITE EDGE LINE (TYP.)
- ⑤ PROPOSED THERMOPLASTIC PAVEMENT MARKING, 6" WHITE LINE
- ⑥ PROPOSED THERMOPLASTIC PAVEMENT MARKING, 24" WHITE LINE, STOP BAR (TYP.)
- ⑦ PROPOSED THERMOPLASTIC PAVEMENT MARKING, RAILROAD CROSSING
- ⑧ PROPOSED THERMOPLASTIC PAVEMENT MARKING, LETTERS AND SYMBOLS (TYP.)

* NOTE:
RAISED REFLECTIVE PAVEMENT MARKERS AS PER DISTRICT ONE DETAILS (SEE SHEET #12)

* NOTE:
FOR HMA SHOULDER RESURFACING AND AGGREGATE SHOULDER REPAIRS ON TYPICAL CROSS SECTIONS.

EXIST. CURVE E-IL50-1
 PI STA. = 84+08.11
 Δ = 10° 52' 39" (LT)
 = 2° 50' 29"
 = 2,016.56'
 = 192.00'
 = 382.84'
 = 9.12'
 R. = -----
 E. RUN = -----
 C. STA. = 82+16.11
 T. STA. = 85+98.95

EXIST. CURVE E-IL50-2
 PI STA. = 87+46.56
 Δ = 8° 22' 21" (LT)
 D = 2° 50' 28"
 R = 2,016.61'
 T = 147.60'
 L = 294.68'
 E = 5.39'
 e = -----
 T.R. = -----
 S.E. RUN = -----
 P.C. STA. = 85+98.95
 P.T. STA. = 88+93.63

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	PLOT DATE = 4/23/2008	DATE -	REVISED -

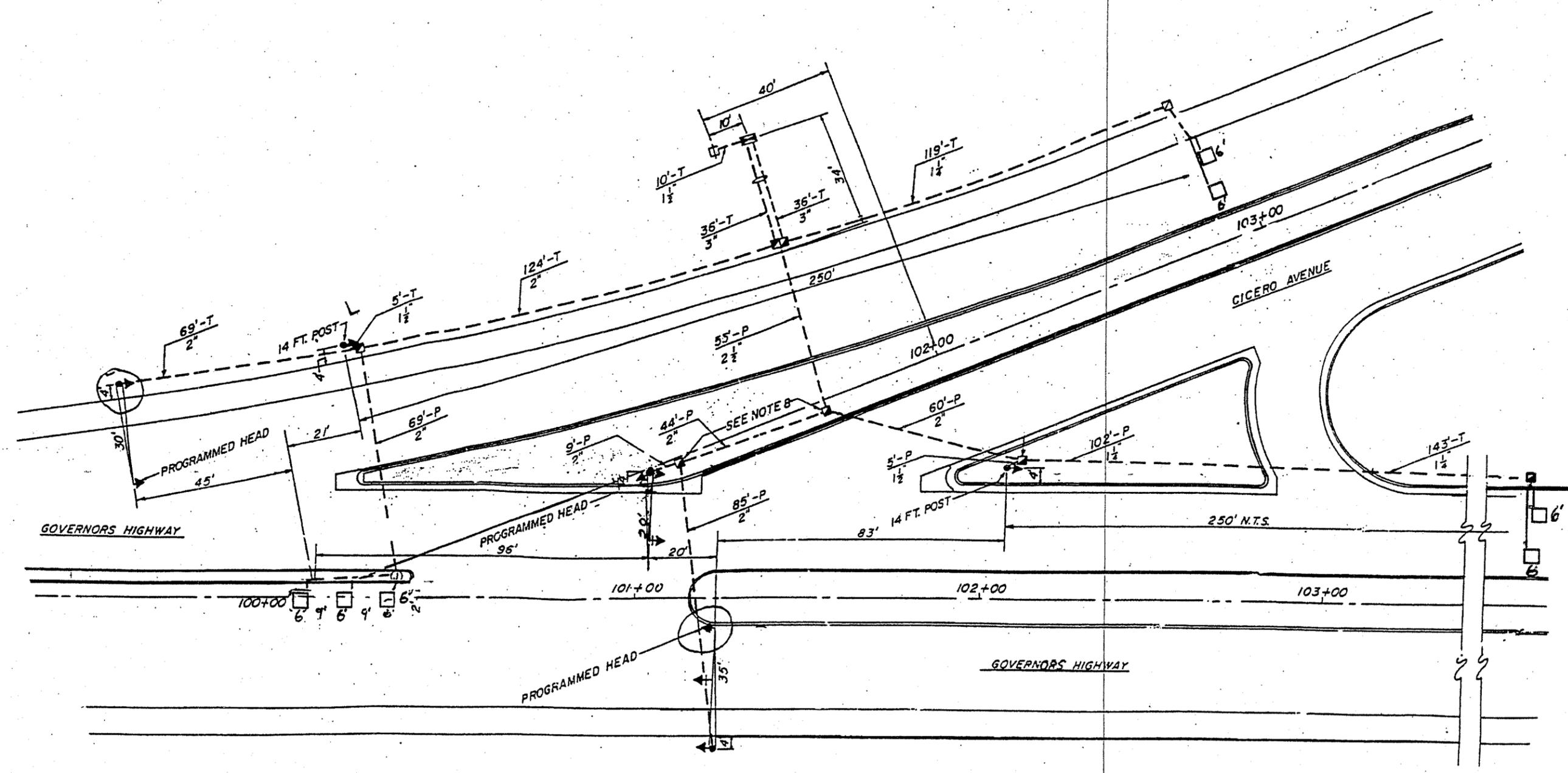
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL. RTE. 50 (CICERO AVENUE TO WILSON ST.)
ROADWAY AND PAVEMENT MARKING PLAN

SCALE: 1" = 50' SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	143RS-4	WILL	16	7
*350 & 840		CONTRACT NO. 62762		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	143RS-4	WILL	16	8
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
#350 & 840			CONTRACT NO. 62762	



REPLACE ALL DETECTOR LOOPS AS SHOWN

(WITHIN THE RESURFACING LIMITS)

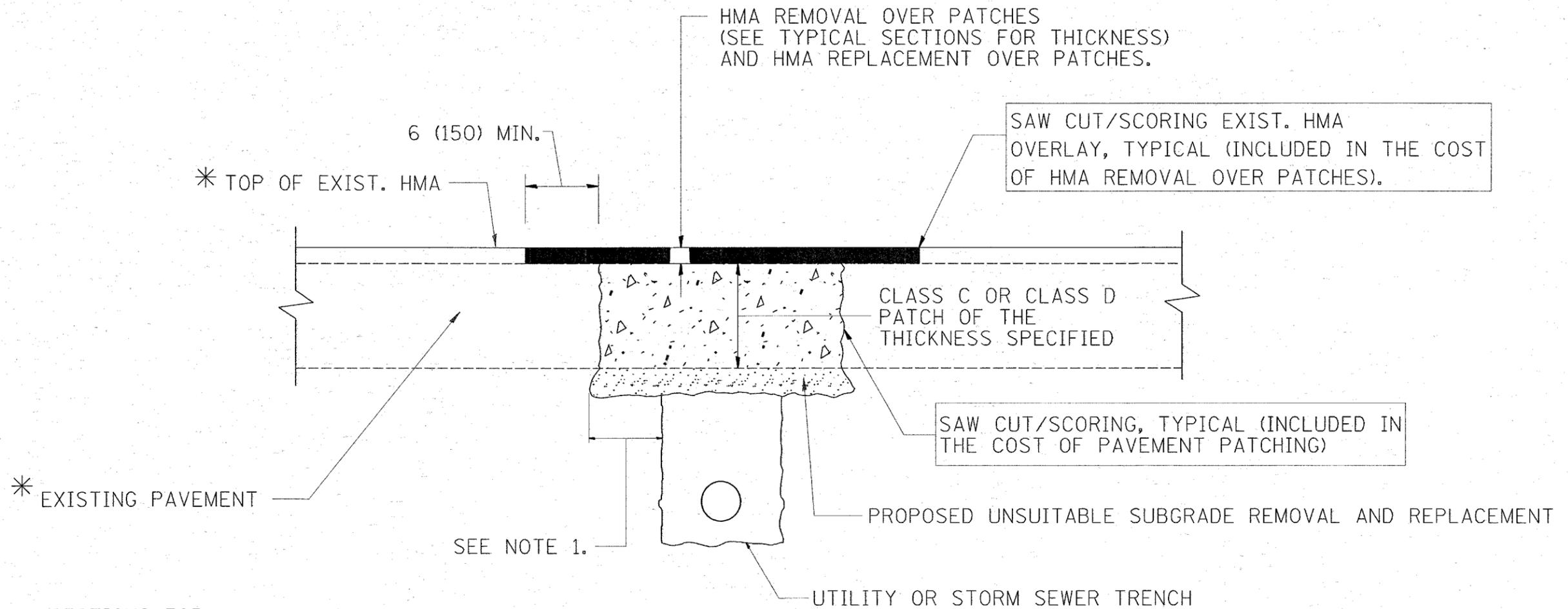
CODE NO.	QUANTITY	UNIT	ITEM
88600600	213'	FOOT	DETECTOR LOOP REPLACEMENT

NOTE:
THIS PLAN IS FOR THE PURPOSE OF REPLACING THE DETECTOR LOOPS. ALL OTHER INFORMATION SHOWN IS NOT RELATED AND WILL BE DISREGARDED.



ILLINOIS DEPARTMENT OF TRANSPORTATION
DETECTOR LOOPS AT:
L RT 50 (CICERO AVE.)
& GOVERNORS HIGHWAY

SCALE: 1" = 40'
DATE: _____
DESIGNED BY: _____
DRAWN BY: _____
CHECKED BY: _____



* 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".

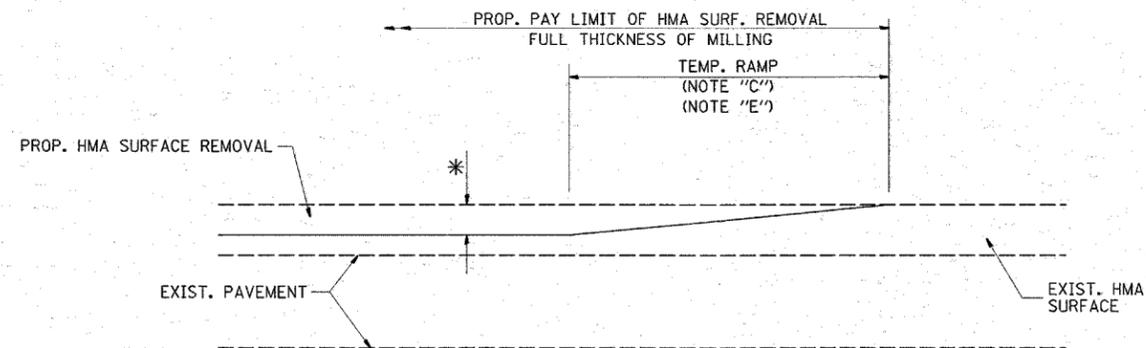
SEQUENCE OF CONSTRUCTION

1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE FULL DEPTH PATCHES
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

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

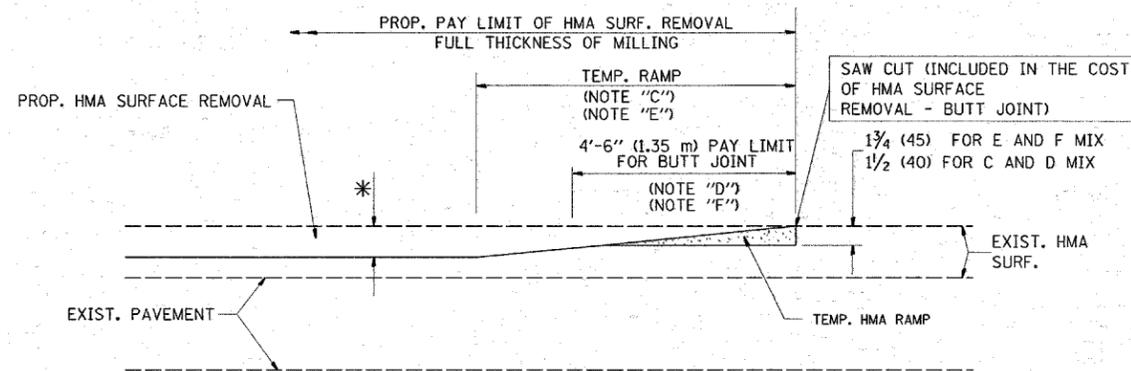
FILE NAME = W:\diststd\22x34\bd22.dgn	USER NAME = ouky	DESIGNED - R. SHAH	REVISED - A. ABBAS 01-20-98	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT			F.A. RTE. *	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN -	REVISED - A. ABBAS 04-27-98		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	* 143RS-4	WILL	16	9	
		CHECKED -	REVISED - R. BORO 01-01-07						BD400-04 (BD-22)				CONTRACT NO. 02762
		DATE - 10-25-94	REVISED - R. BORO 09-04-07						FED. ROAD DIST. NO. 1	ILLINOIS FED. AID PROJECT			

* 350 & 840



MILLED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

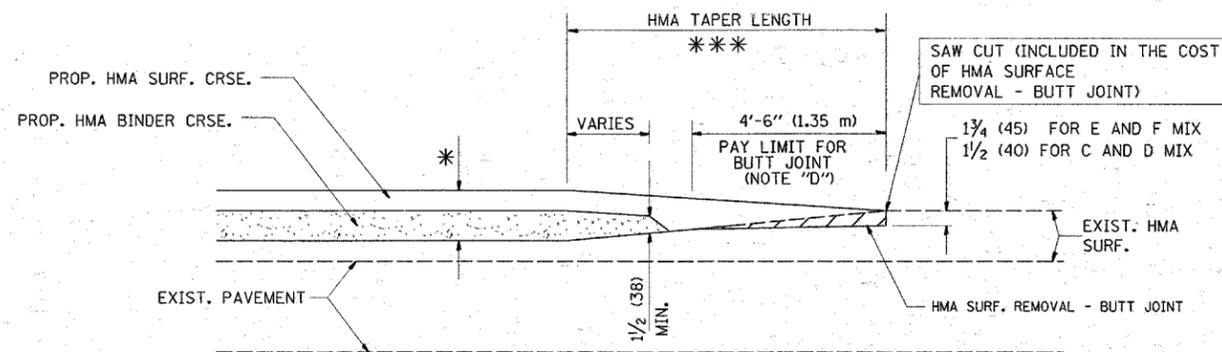
OPTION 1



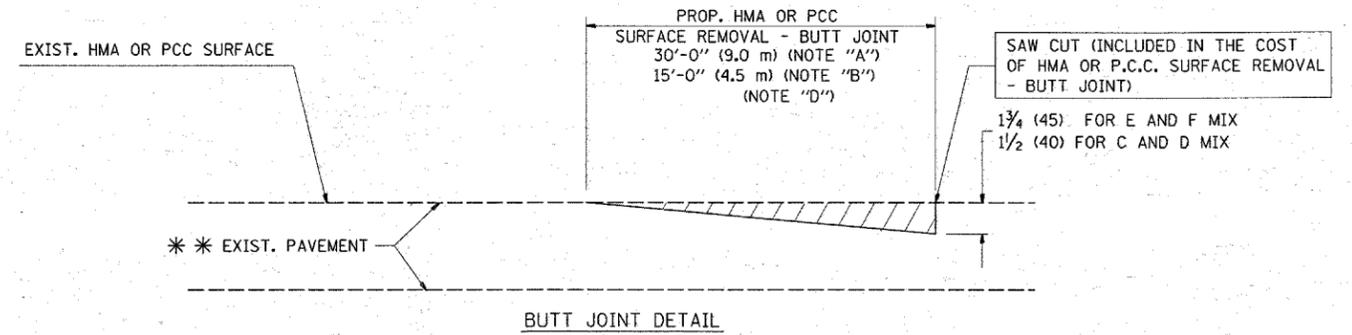
HMA CONSTRUCTED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 2

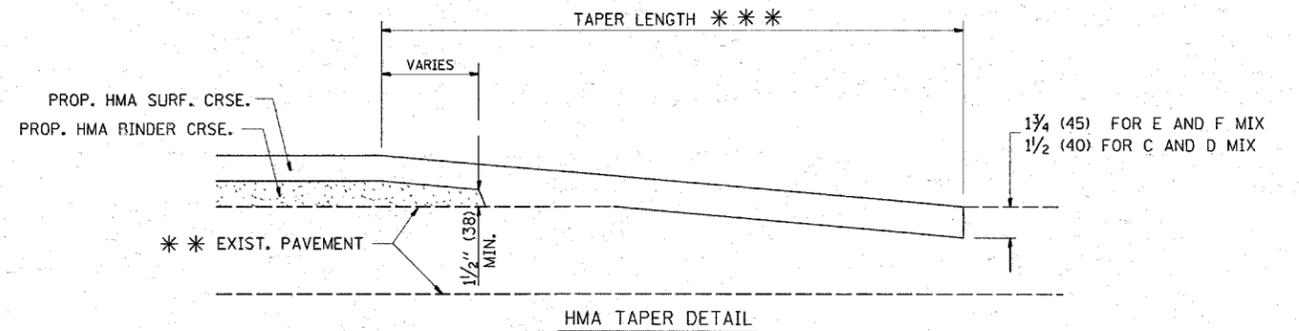
TYPICAL TEMPORARY RAMP



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



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.

FILE NAME =	USER NAME = ouky
W:\dst\std\22x34\bd32.dgn	
PLOT SCALE = 50.0000' / IN.	
PLOT DATE = 3/28/2008	

DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
DRAWN -	REVISED - A. ABBAS 03-21-97
CHECKED -	REVISED - M. GOMEZ 04-06-01
DATE - 06-13-90	REVISED - R. BORO 01-01-07

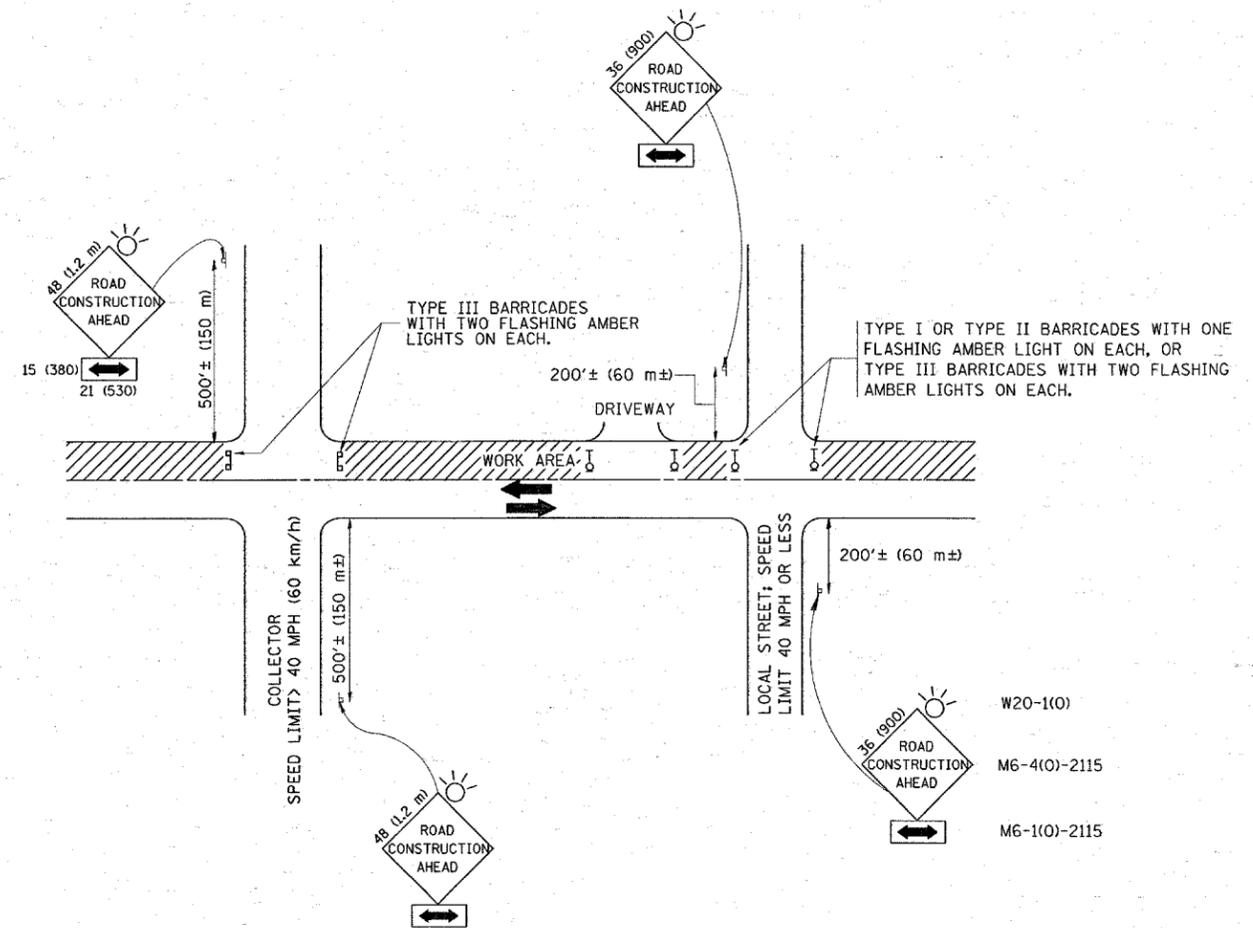
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BUTT JOINT AND
HMA TAPER DETAILS**

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	KSR-4	WILL	16	10
BD400-05 BD32			CONTRACT NO. 62762	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

* 350 & 840



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:
 - a) 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 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. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

 - C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
 - D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

FILE NAME =	USER NAME = aukj	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
W:\distatd\22x34\1010.dgn		DRAWN -	REVISED - A. HOUSEH 03-06-96
		PLOT SCALE = 50.000 "/ IN.	REVISED - A. HOUSEH 10-15-96
		PLOT DATE = 3/28/2008	REVISED - T. RAMMACHER 01-06-00
		DATE - 06-89	

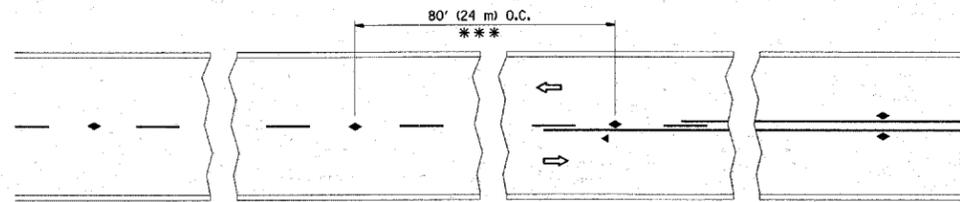
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

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

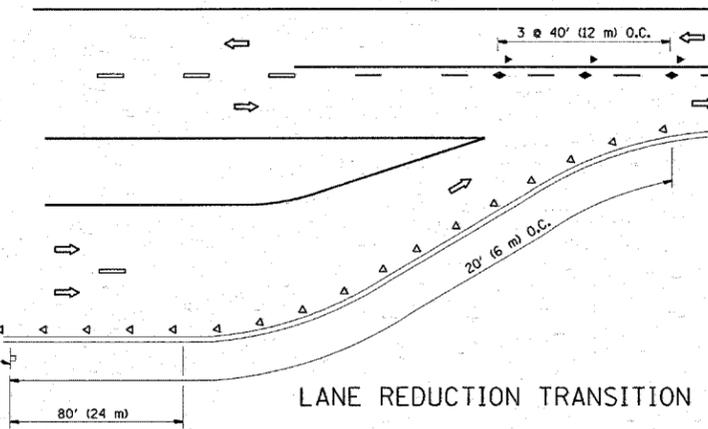
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	143RS-4	WILL	16	11
TC-10			CONTRACT NO. 62762	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

* 350 & 840

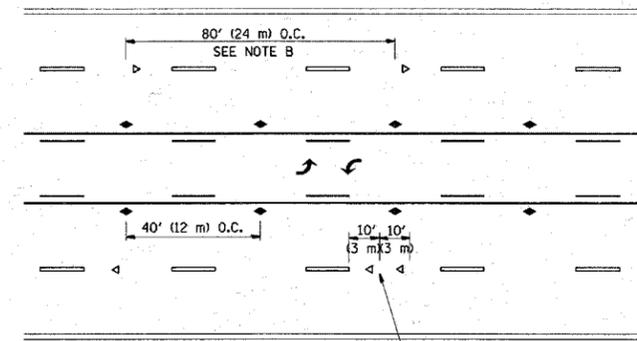


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

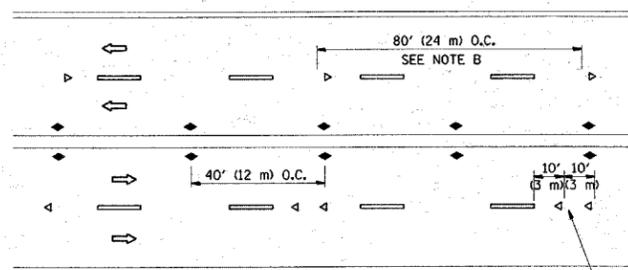
TWO-LANE/TWO-WAY



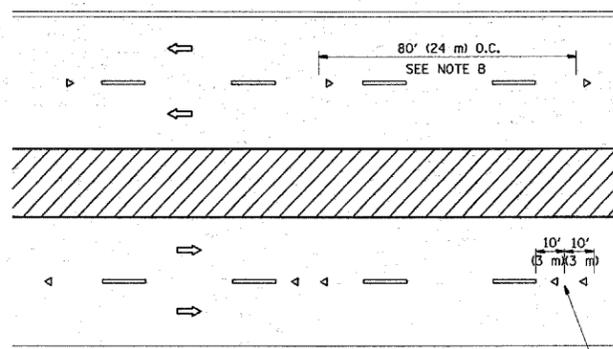
LANE REDUCTION TRANSITION



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

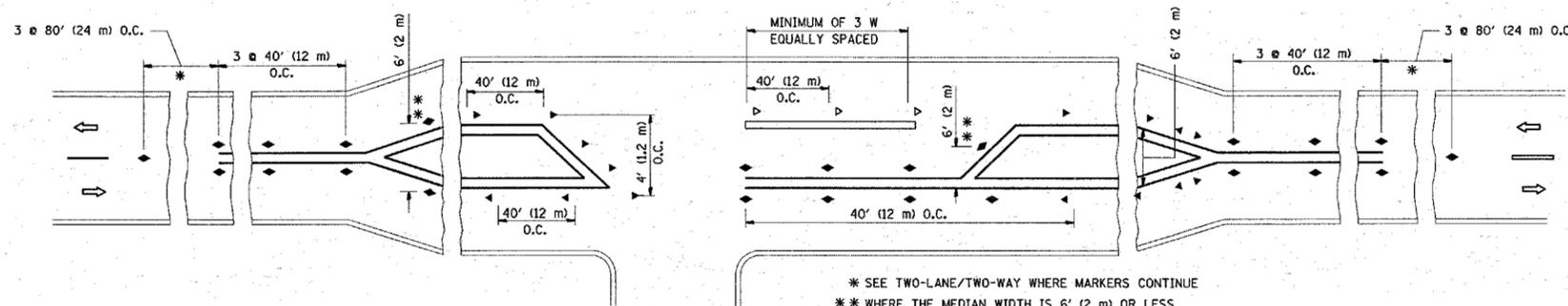
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- 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.

DESIGN NOTES

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



LEFT TURN

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

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

FILE NAME = W:\dst\std\22x34\to11.dgn	USER NAME = ouky	DESIGNED -	REVISED - T. RAMMACHER 09-19-94
		DRAWN -	REVISED - T. RAMMACHER 03-12-99
	PLOT SCALE = 50,000 "/ IN.	CHECKED -	REVISED - T. RAMMACHER 01-06-00
	PLOT DATE = 3/28/2008	DATE -	REVISED -

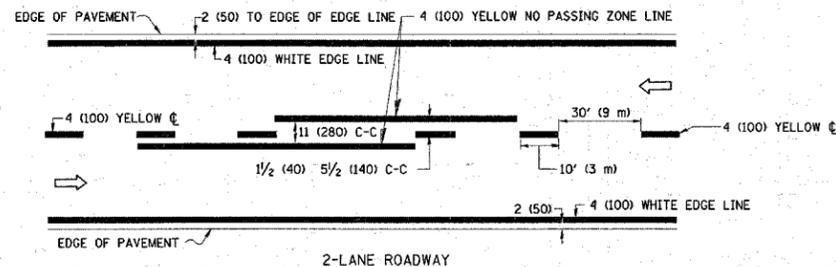
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

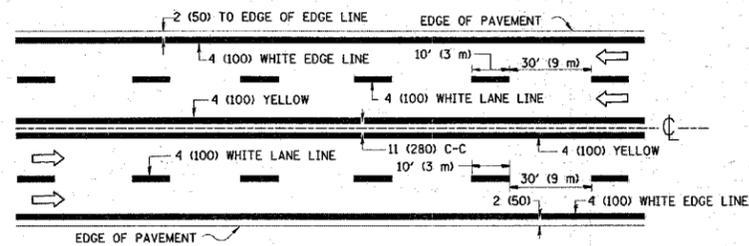
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F.A. RTE. *	SECTION 143RS-4	COUNTY WILL	TOTAL SHEETS 16	SHEET NO. 12
	TC-11	CONTRACT NO. 02762		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

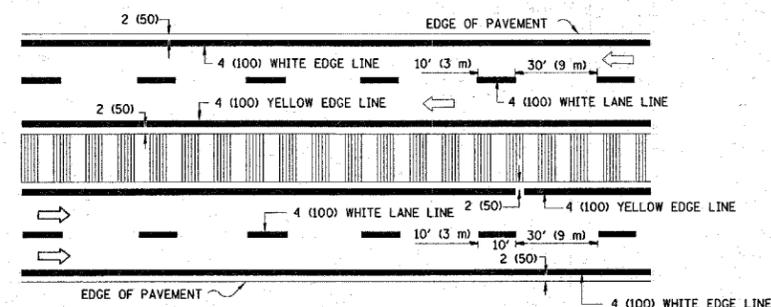
* 350 & 840



2-LANE ROADWAY



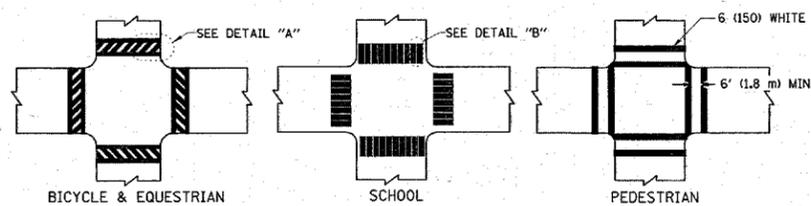
MULTI-LANE UNDIVIDED



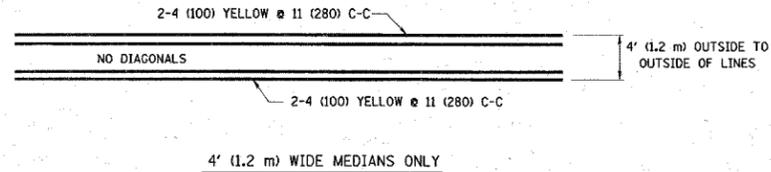
MULTI-LANE DIVIDED WITH MOUNTABLE MEDIAN

NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

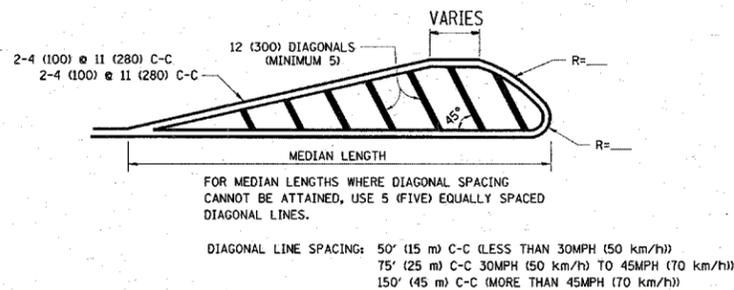
TYPICAL LANE AND EDGE LINE MARKING



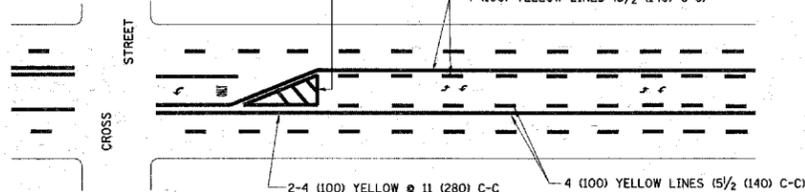
TYPICAL CROSSWALK MARKING



4' (1.2 m) WIDE MEDIANS ONLY

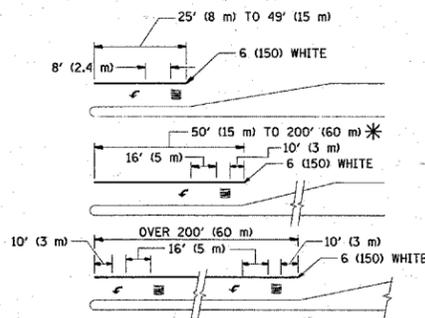


MEDIANS OVER 4' (1.2 m) WIDE



MEDIAN WITH TWO-WAY LEFT TURN LANE

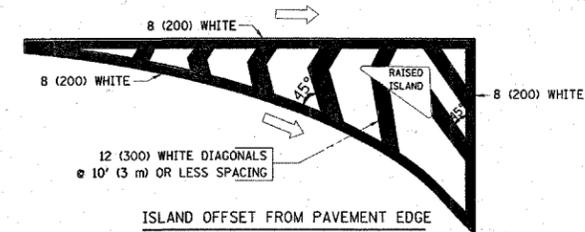
TYPICAL PAINTED MEDIAN MARKING



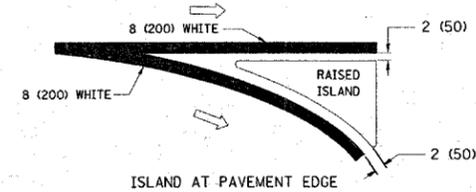
TYPICAL LEFT (OR RIGHT) TURN LANE

FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
 * 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

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 MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW 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.
CORE 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: "RR"=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.

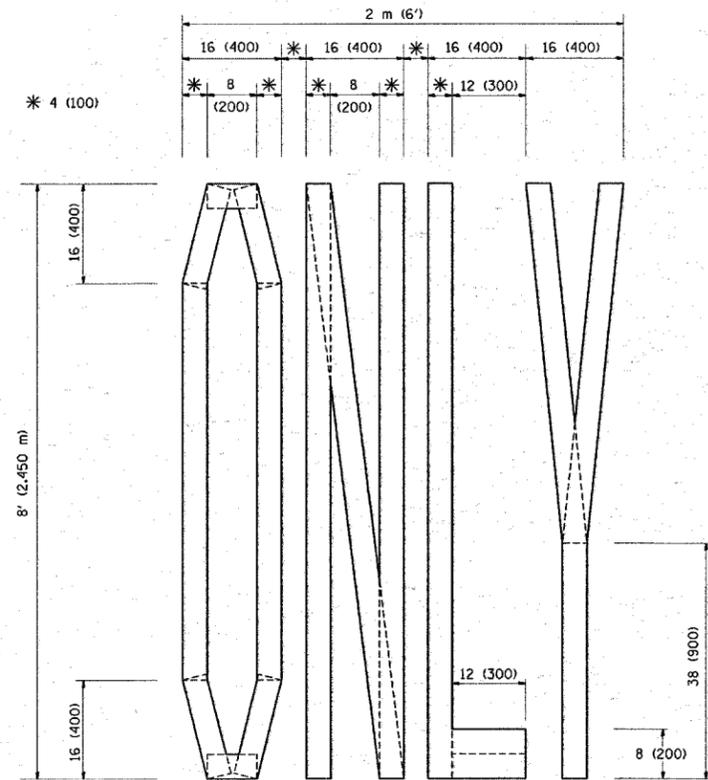
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		DRAWN -	REVISED - A. HOUSEH 10-09-96
	PLOT SCALE = 50,000' / IN.	CHECKED -	REVISED - A. HOUSEH 10-17-96
	PLOT DATE = 3/28/2008	DATE - 03-19-90	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

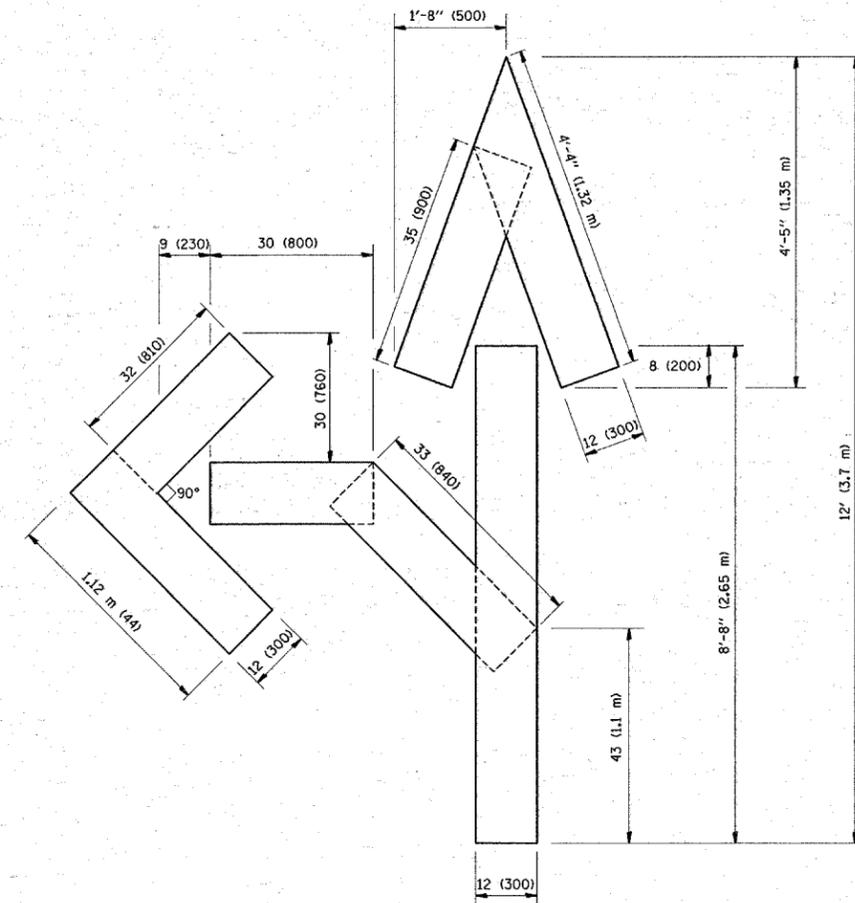
DISTRICT ONE TYPICAL PAVEMENT MARKINGS

SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	F.A. RTE. *	SECTION H3RS-4	COUNTY WILL	TOTAL SHEETS 16	SHEET NO. 13
			TC-13		CONTRACT NO. 62762		
			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

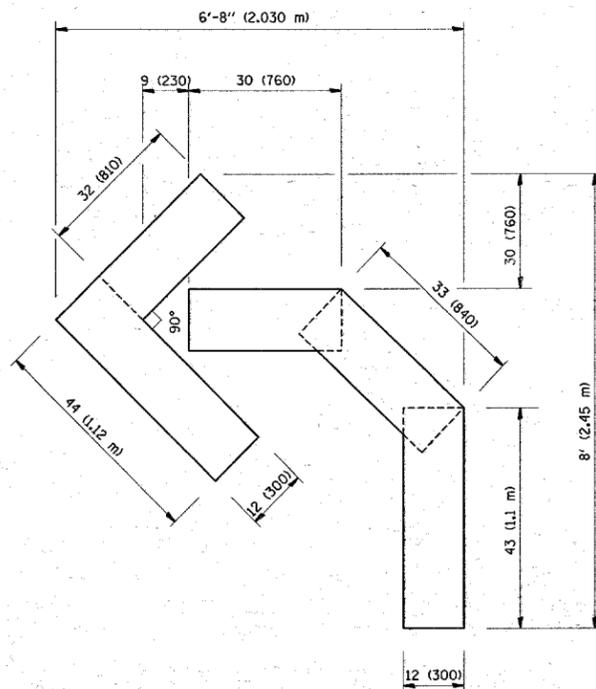
* 350 & 840



QUANTITY
 4 (100) LINE = 64.1 ft. (19.7 m)
 21.1 sq. ft. (1.97 sq. m)



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



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

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

FILE NAME = W:\d\sta\td\22x34\td16.dgn	USER NAME = aukj	DESIGNED -	REVISED -T. RAMMACHER 06-05-96
		DRAWN -	REVISED -T. RAMMACHER 11-04-97
		CHECKED -	REVISED -T. RAMMACHER 03-02-98
		DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

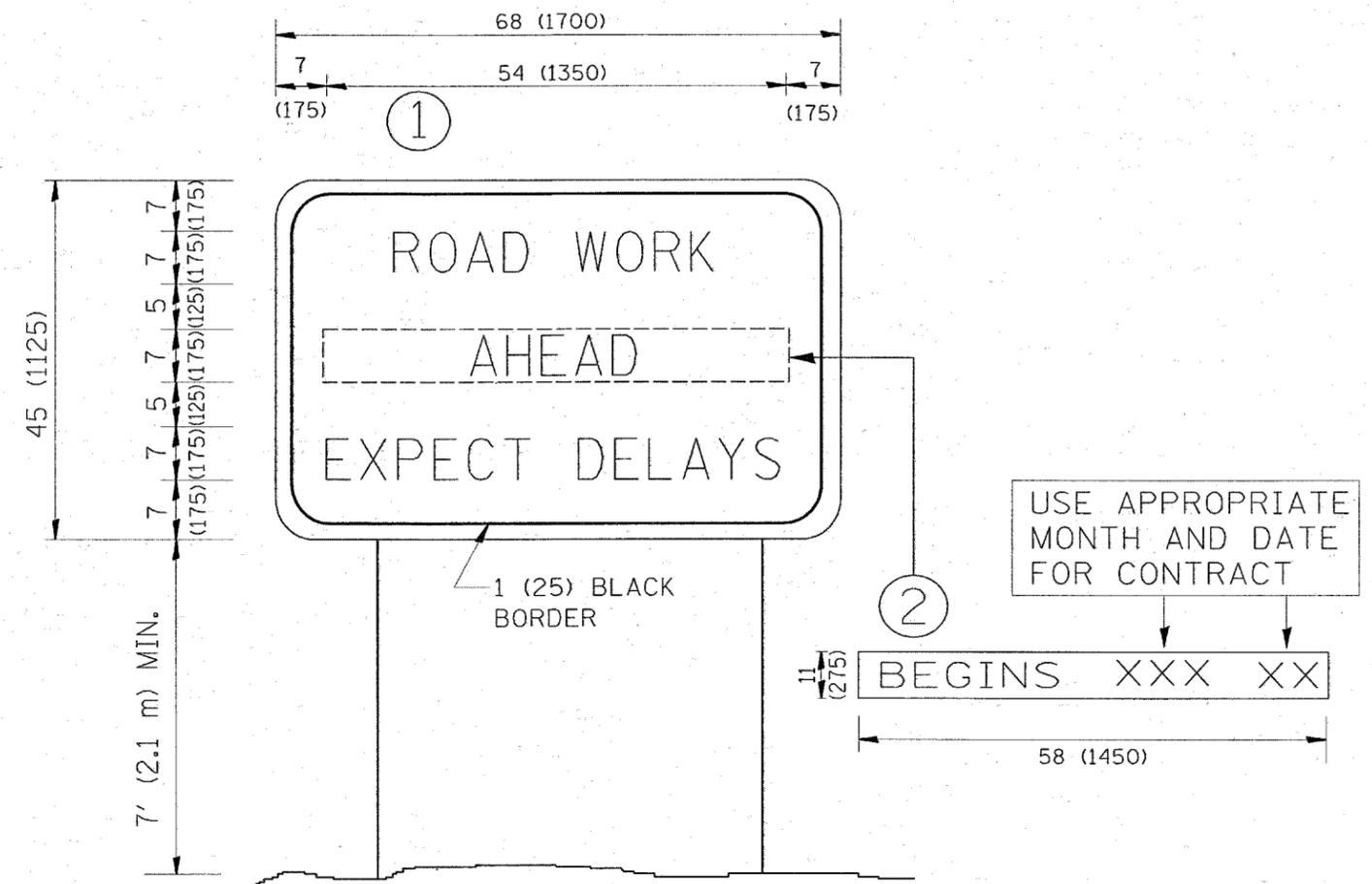
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS
 FOR TRAFFIC STAGING

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

F.A. RTE. *	SECTION K3RS-4	COUNTY WILL	TOTAL SHEETS 10	SHEET NO. 14
TC-16		CONTRACT NO. 62702		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

* 350 8840



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 = W:\diststd\22x34\to22.dgn	USER NAME = ouky	DESIGNED -	REVISED - R. MIRS 09-15-97
		DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 50.000 "/ IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 3/28/2008	DATE -	REVISED - C. JUCIUS 01-31-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ARTERIAL ROAD
INFORMATION SIGN

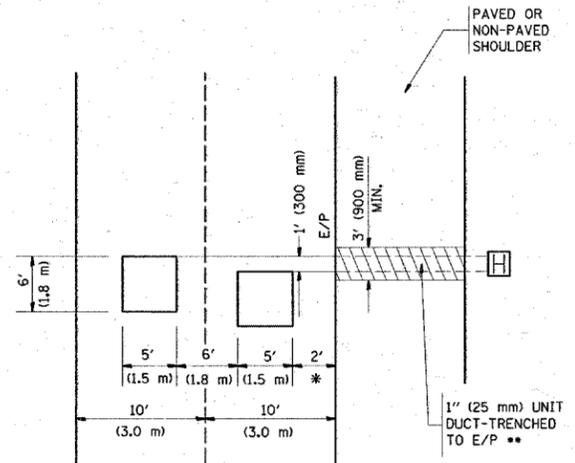
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE. *	SECTION 143RS-4	COUNTY WILL	TOTAL SHEETS 16	SHEET NO. 15
TC-22		CONTRACT NO. 02762		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

* 350 & 840

LOOPS NEXT TO SHOULDERS

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

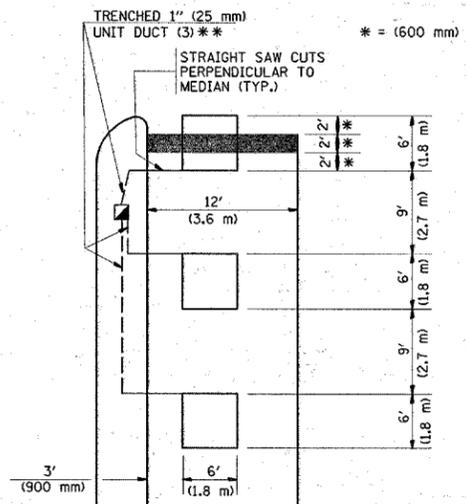


* = (600 mm)
 ** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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

(PROTECTED / PERMITTED LEFT TURN PHASING)

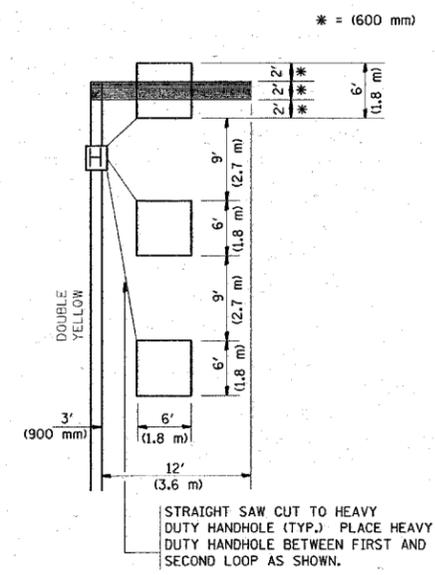
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



** 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)



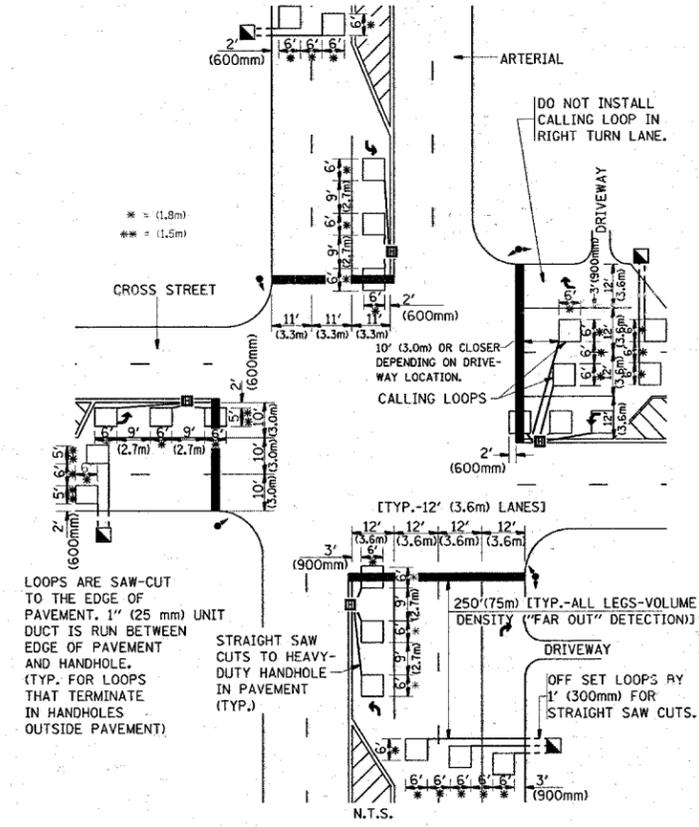
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

NOTES:

VEHICLES LOOP DETECTORS

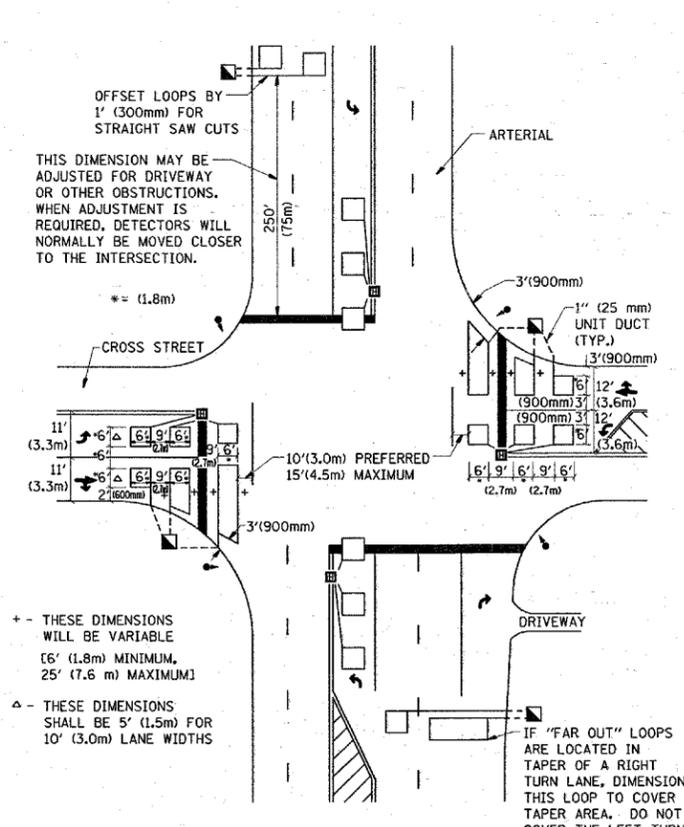
- * ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST 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.

**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.

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 = W:\diststd\22x34\td07.dgn	USER NAME = aukq	DESIGNED -	REVISIONS -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING	F.A. RTE. *	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = 50.0000' / IN.	CHECKED - R.K.F.	REVISIONS -	143 RS-4			WILL	16	10		
PLOT DATE = 3/28/2008	DATE -	REVISIONS -	TS-07			CONTRACT NO. 62762				
			FED. ROAD DIST. NO. 1			ILLINOIS	FED. AID PROJECT			