

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPOSED  
HIGHWAY PLANS**

FAS ROUTE 2320 (IL 113)  
SECTION 113X-RS-4  
COAL CITY ROAD TO MAIN STREET  
ROADWAY RESURFACING  
WILL COUNTY  
C-91-737-10

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2320	113X-RS-4	WILL	13	1
ILLINOIS CONTRACT NO. 60L59				

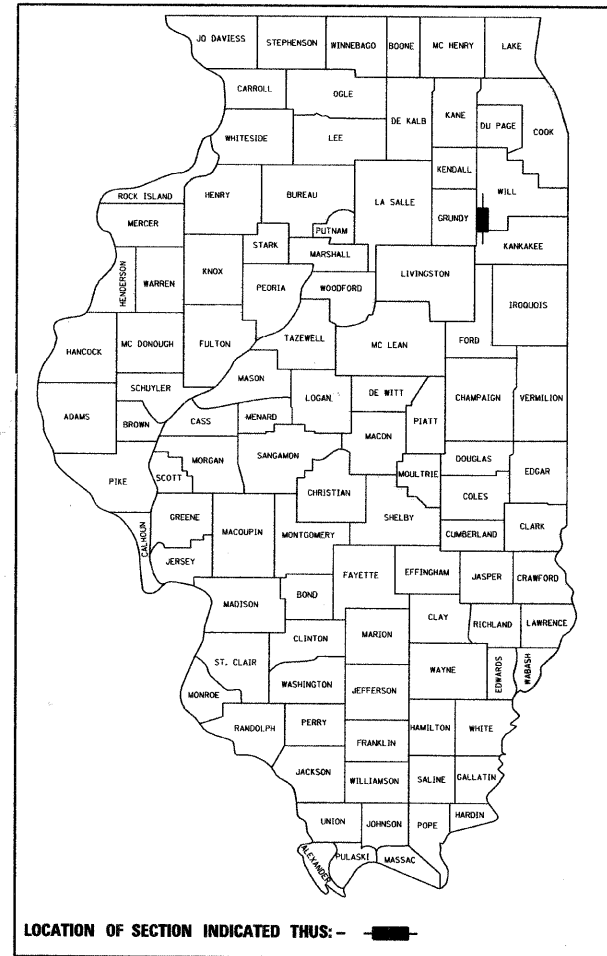
FOR INDEX OF SHEETS, SEE SHEET NO. 2

**TRAFFIC DATA**

EXISTING ADT = 3550 (2007)  
SPEED LIMIT = 35 MPH

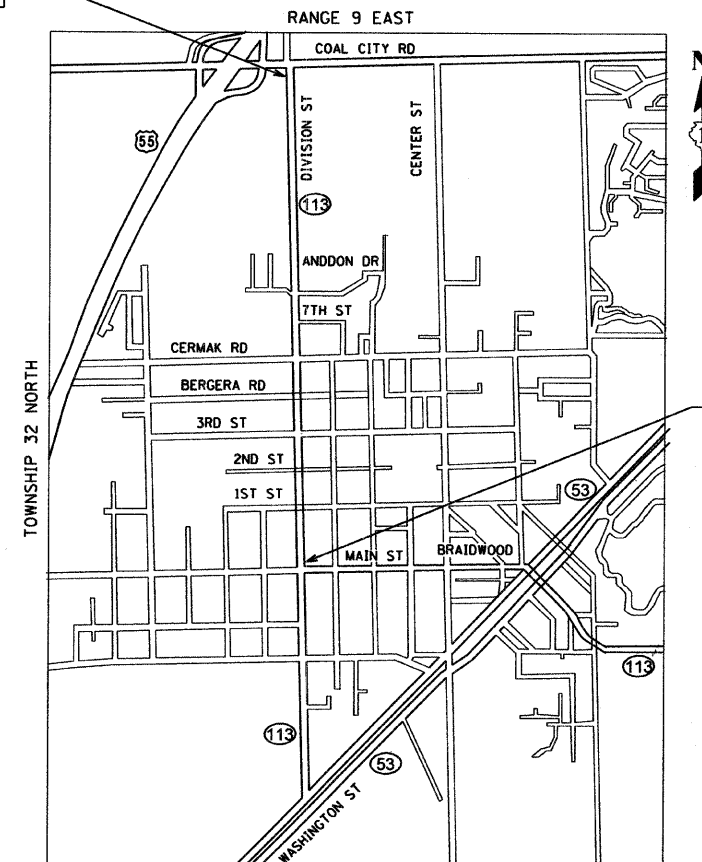
THE IMPROVEMENT IS LOCATED WITHIN  
THE CITY OF BRAIDWOOD

D-91-737-10

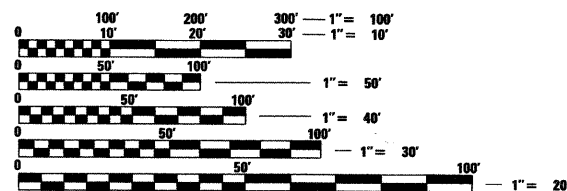


LOCATION OF SECTION INDICATED THUS: - [black rectangle] -

BEGIN IMPROVEMENT  
STA. 0+13



BEGIN ENDS  
STA. 89+69



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: PETER JOHNSTON (GRAEF) 773-399-0112  
PROJECT MANAGER: KEN ENG (IDOT) 847-705-4247

CONTRACT NO. 60L59

GROSS & NET LENGTH = 8,956 FT. = 1.70 MILES

*Peter M. Johnston*  
10-15-10  
PETER M. JOHNSTON  
062-047647  
REGISTERED  
PROFESSIONAL  
ENGINEER  
OF  
ILLINOIS  
Exp. 11-30-11

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
SUBMITTED OCTOBER 18, 2010  
*Diane M. O'Keefe*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER  
December 10, 2010  
*Scott E. Stitt, P.E.*  
acting ENGINEER OF DESIGN AND ENVIRONMENT  
December 10, 2010  
*Christine M. Reed*  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS

**GRAEF** 8501 W. Higgins Road, Suite 280  
Chicago, Illinois 60631  
(773) 399-0112

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	INDEX, GENERAL NOTES AND HIGHWAY STANDARDS
3	SUMMARY OF QUANTITIES
4	TYPICAL SECTIONS
5-7	ROADWAY AND PAVEMENT MARKING PLANS
8	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT (BD22)
9	BUTT JOINTS AND BITUMINOUS TAPER (BD32)
10	TRAFFIC CONTROL AND PROTECTION FOR SIDEROADS, INTERSECTIONS AND DRIVEWAYS (TC10)
11	RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT) (TC11)
12	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC13)
13	ARTERIAL ROAD INFORMATION (TC22)

HIGHWAY STANDARDS

STD. NO.	TITLE
442201-03	CLASS C AND D PATCHES
606001-04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
630001-09	STEEL PLATE BEAM GUARDRAIL
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
701006-03	OFF-ROAD OPERATIONS, 2L, 2W, 4.5 m (16') TO 600 mm (24") FROM PAVEMENT EDGE
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701326-04	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS ≥ 45 MPH
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701901-01	TRAFFIC CONTROL DEVICES
780001-02	TYPICAL PAVEMENT MARKINGS
781001-03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS

GENERAL NOTES

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT 800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED).
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- WHEN ARTIFICIAL LIGHTING IS USED IN NIGHT OPERATIONS THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.
- WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES (40 MM) WHERE THE SPEED LIMIT IS 45 MPH (80 KM/H) OR LESS AND 1 INCH (25 MM) WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH (80 KM/H). WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES (75 MM) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A 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.
- FOR PAVEMENT MARKING AND RAISED REFLECTIVE PAVEMENT MARKERS, REFER TO DISTRICT ONE TYPICAL MARKINGS FOR DETAILS NOT SHOWN.
- THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.
- MATCH EXISTING PAVEMENT MARKINGS AT PROJECT LIMITS.
- THE RESIDENT ENGINEER SHALL CONTACT LAWRENCE HILL, AREA TRAFFIC FIELD ENGINEER, AT (815) 485-6475 AT LEAST (2) WEEKS PRIOR TO PLACING PERMANENT PAVEMENT MARKINGS.
- 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 REESTABLISHED FOR STRIPING, EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.

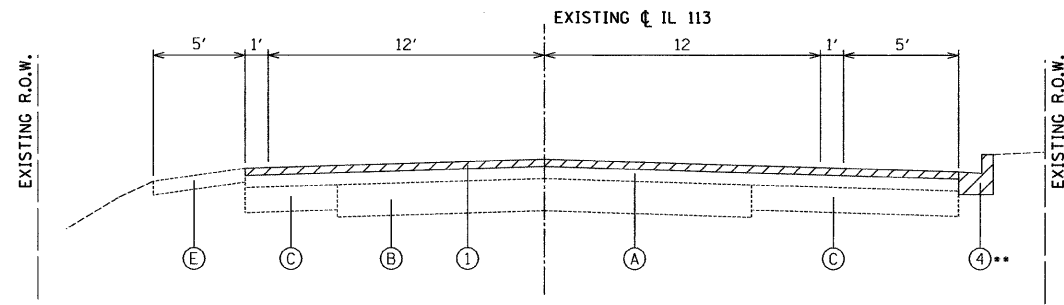
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	PLOT DATE = 9/7/2010	CHECKED - RS	REVISED -			CONTRACT NO. 60L59					
		DATE - 10-16-2010	REVISED -			SCALE:	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT	

SUMMARY OF QUANTITIES

PAY ITEM NUMBER	DESCRIPTION	UNIT	URBAN TOTAL QUANTITY <i>100% STATE</i>	0005 STATE	0031 LANDSCAPING
20200600	EXCAVATING AND GRADING EXISTING SHOULDER	UNIT	4	4	
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	79		79
25000210	SEEDING, CLASS 2A	ACRE	0.02		0.02
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	1		1
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	1		1
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	1		1
25100630	EROSION CONTROL BLANKET	SQ YD	79		79
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	24	24	
40600300	AGGREGATE (PRIME COAT)	TON	118	118	
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	44	44	
40600895	CONSTRUCTING TEST STRIP	EACH	1	1	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	357	357	
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	2,486	2,486	
42001300	PROTECTIVE COAT	SQ YD	33	33	
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	29,591	29,591	
44201789	CLASS D PATCHES, TYPE II, 12 INCH	SQ YD	280	280	
44201794	CLASS D PATCHES, TYPE III, 12 INCH	SQ YD	120	120	
48101500	AGGREGATE SHOULDERS, TYPE B 6"	SQ YD	149	149	
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	589	589	
X6030310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	2	2	
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4	
63200310	GUARDRAIL REMOVAL	FOOT	150	150	
67000400	ENGINEERS FIELD OFFICE, TYPE A	CAL MO	6	6	
67100100	MOBILIZATION	L SUM	1	1	
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	1	
70300100	SHORT TERM PAVEMENT MARKING	FOOT	4,205	4,205	
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	42,046	42,046	
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	582	582	
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	132	132	
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	366	366	
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	1,402	1,402	
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	21,023	21,023	
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	291	291	
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	66	66	
* 78000850	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	183	183	
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	151	151	
* 78200420	GUARDRAIL MARKERS, TYPE B	EACH	10	10	
* 78201000	TERMINAL MARKER-DIRECT APPLIED	EACH	4	4	
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	75	75	
Z0004562	COMBINATION CONCRETE CURB <sup>AND</sup> GUTTER, REMOVAL <sup>AND</sup> REPLACEMENT	FOOT	100	100	
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	15	15	
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	51	51	
X2503100	MOWING	UNIT	14		14
X4060826	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	1,243	1,243	
X2020110	GRADING AND SHAPING SHOULDERS	UNIT	210	210	

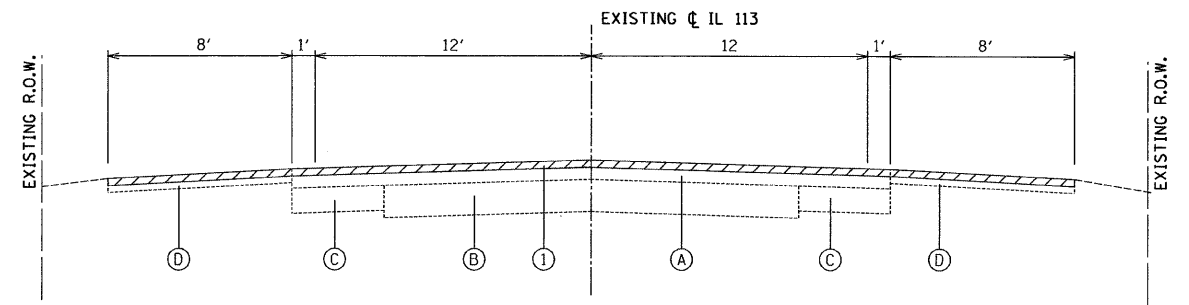
\* DENOTES SPECIALTY ITEM

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	PLOT DATE = 10/14/2010	DATE - 10-15-2010	REVISED -					ILLINOIS FED. AID PROJECT							



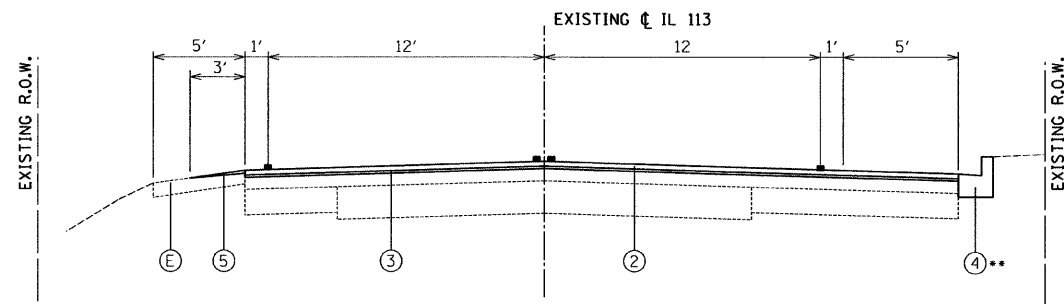
EXISTING TYPICAL SECTION

STA. 0+00 TO STA. 4+00



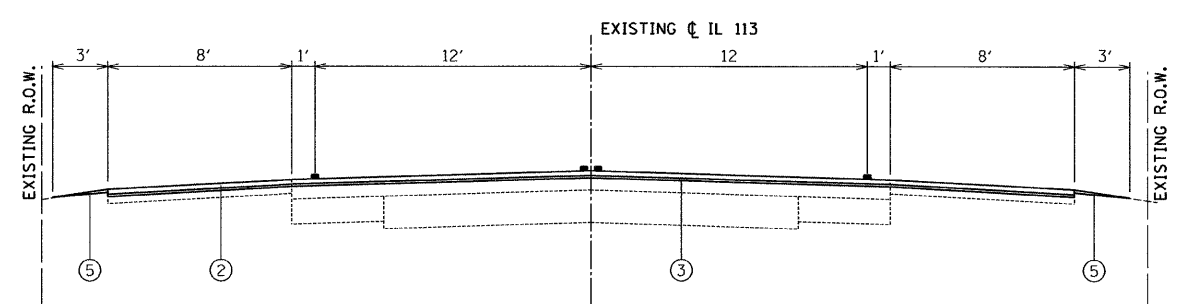
EXISTING TYPICAL SECTION

STA. 4+00 TO STA. 12+08



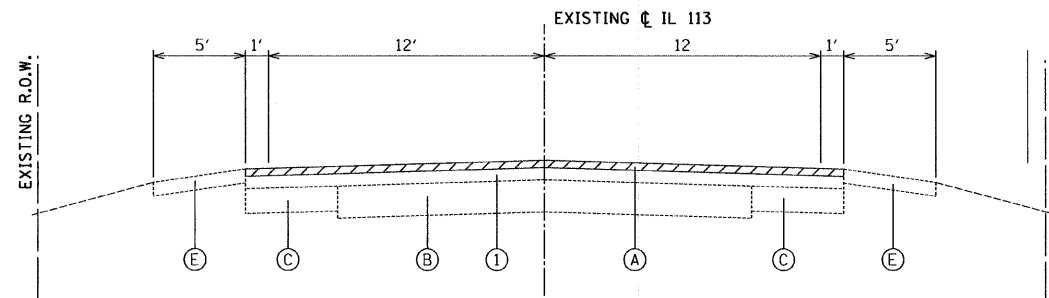
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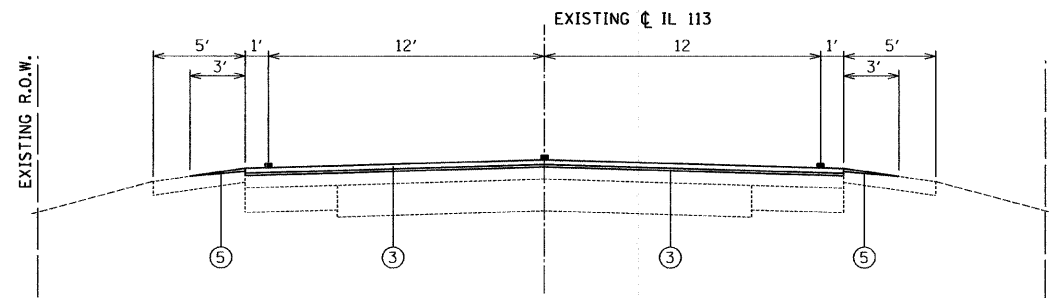
PROPOSED TYPICAL SECTION

STA. 4+00 TO STA. 12+08



EXISTING TYPICAL SECTION

STA. 12+08 TO STA. 89+11



PROPOSED TYPICAL SECTION

STA. 12+08 TO STA. 89+11

EXISTING CONDITIONS:

- (A) HOT-MIX ASPHALT SURFACE COURSE, 5"±
- (B) P.C.C. PAVEMENT, 9"±
- (C) HOT-MIX ASPHALT BASE COURSE, 8"
- (D) HOT-MIX ASPHALT SHOULDERS
- (E) AGGREGATE SHOULDERS

▨ ITEMS TO BE REMOVED

PROPOSED IMPROVEMENTS:

- ① HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"
- ② HOT-MIX ASPHALT SURFACE COURSE, MIX "D" N70, 1 1/2"
- ③ POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- ④ COMBINATION B6.12 CONCRETE CURB AND GUTTER AND REPLACEMENT (AS DETERMINED BY THE ENGINEER)
- ⑤ AGGREGATE WEDGE SHOULDER, TYPE B
  - PAVEMENT MARKING
  - LOCATIONS AS DETERMINED BY THE ENGINEER

THE CONTRACTOR SHALL MILL BEFORE PATCHING

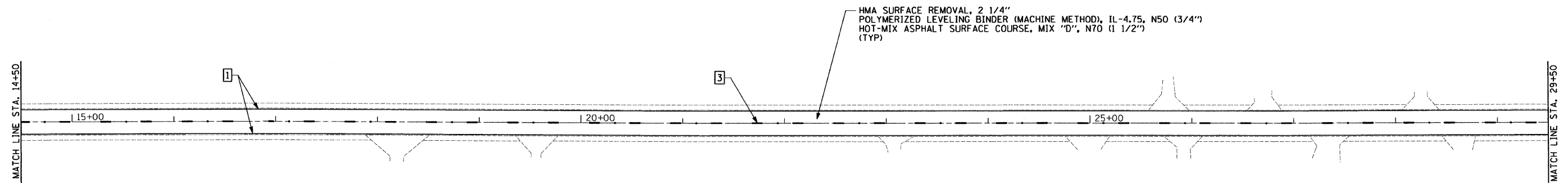
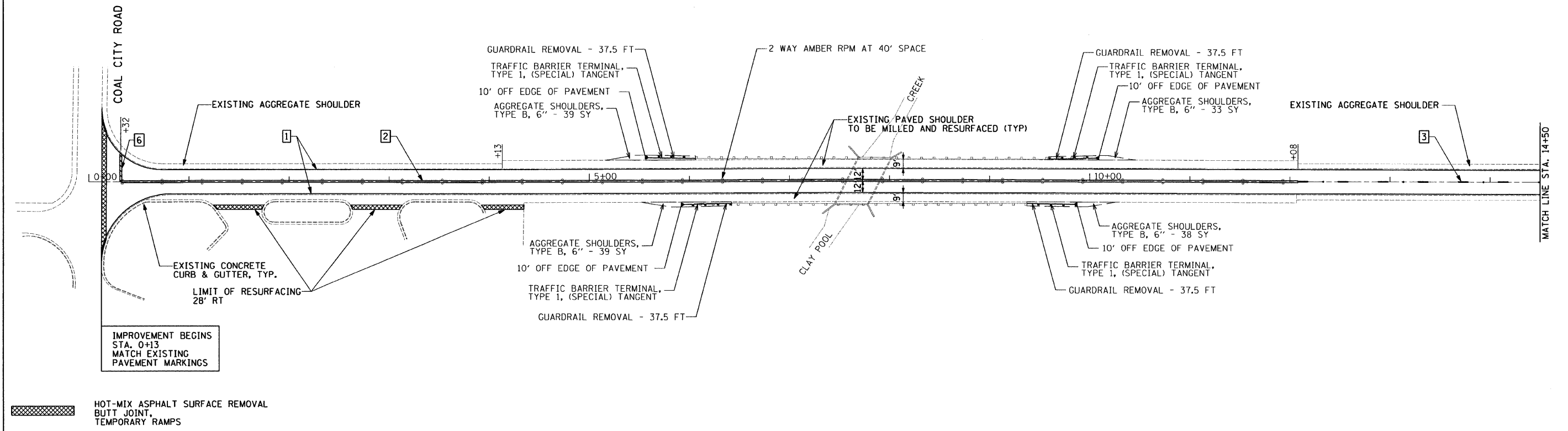
HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
MIXTURE TYPE	AIR VOIDS @ Ndes
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5mm)	4% @ 70 GYR
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL 4.75, N50	4% @ 50 GYR
CLASS D PATCHES (HMA BINDER IL 19mm)	4% @ 70 GYR

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

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 70-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.

FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.

FILE NAME =	USER NAME = _USER_	DESIGNED - AR/EF	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL 113 - COAL CITY RD TO MAIN ST. TYPICAL SECTIONS</b>	F.A.S. RTE. 2320	SECTION 113X-RS-4	COUNTY WILL	TOTAL SHEETS 13	SHEET NO. 4		
*FILE#	PLOT SCALE = 50.0000' / IN.	DRAWN - AR/EF	REVISED -			SCALE:	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	CONTRACT NO. 60L59		
	PLOT DATE = 9/7/2010	CHECKED - RS	REVISED -			ILLINOIS FED. AID PROJECT						
		DATE - 10-16-2010	REVISED -									



**LEGEND**

- 1 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE SOLID LANE LINE)
- 2 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW SOLID, 2 @ 11" C-C W/2 AMBER 2 WAY RPM'S)
- 3 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW LANE LINE - 10' DASH, 30' SKIP W/ 2 WAY AMBER @ 80' RPM'S)
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- 6 THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE STOP LINE)

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PLOT DATE = 9/7/2010		

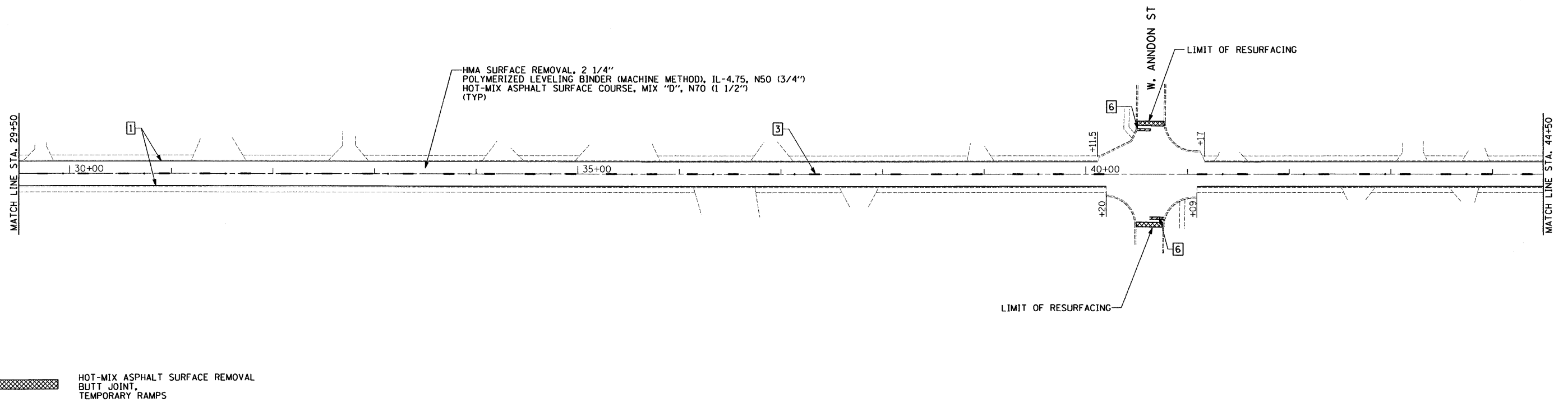
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**


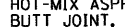
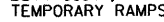
**IL 113 - COAL CITY RD TO MAIN ST  
ROADWAY AND PAVEMENT MARKING PLANS**

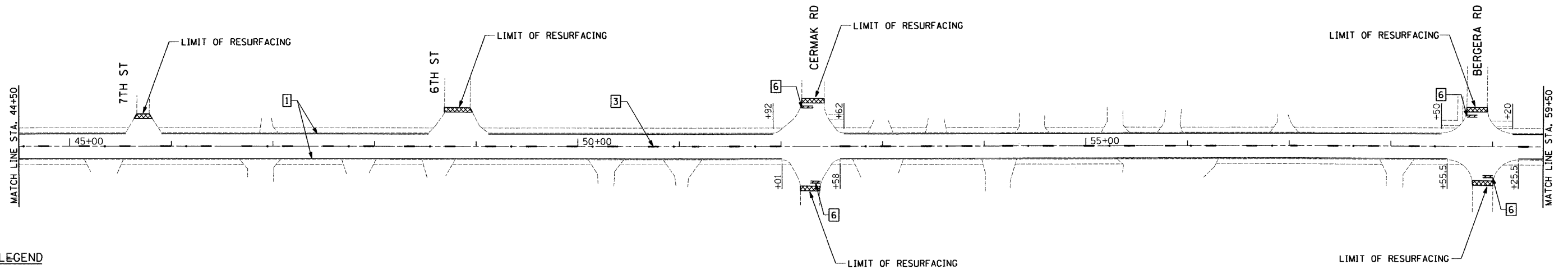
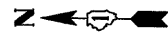
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F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2320	113X-RS-4	WILL	13	5
CONTRACT NO. 60L59			ILLINOIS FED. AID PROJECT	

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 HOT-MIX ASPHALT SURFACE REMOVAL  
 BUTT JOINT,  
 TEMPORARY RAMPS



**LEGEND**

- 1 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE SOLID LANE LINE)
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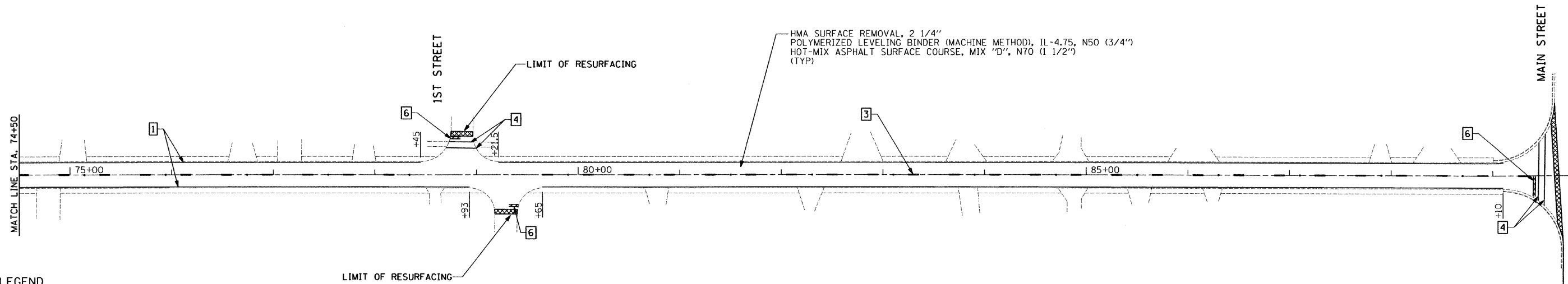
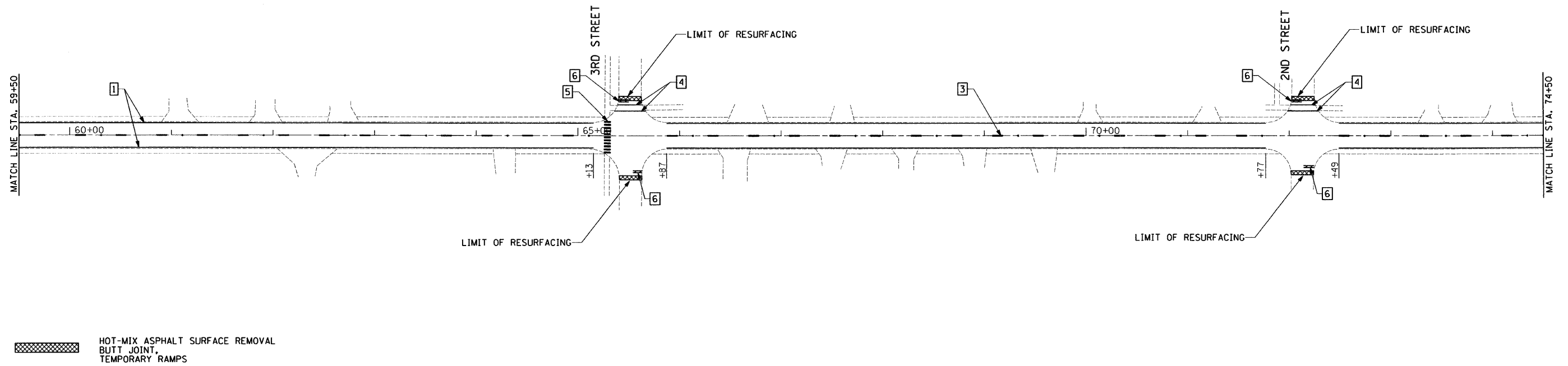
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**IL 113 - COAL CITY RD TO MAIN ST  
ROADWAY AND PAVEMENT MARKING PLANS**

SCALE: 50 SHEET NO. 2 OF 3 SHEETS STA. 29+50 TO STA. 59+50

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2320	113X-RS-4	WILL	13	6
CONTRACT NO. 60L59			ILLINOIS FED. AID PROJECT	

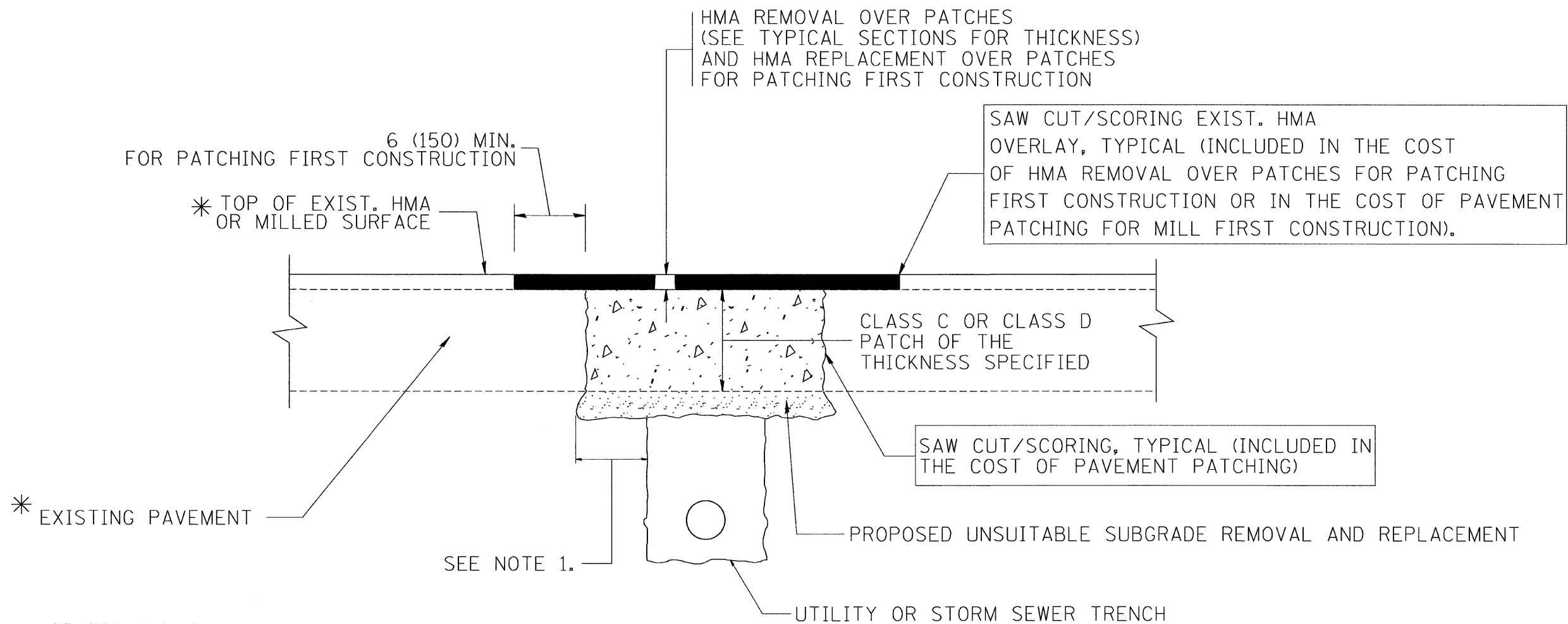


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IMPROVEMENT ENDS  
STA. 89+69  
MATCH EXISTING  
PAVEMENT MARKINGS

FILE NAME =	USER NAME = .USER.	DESIGNED - AR/EF	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL 113 - COAL CITY RD TO MAIN ST ROADWAY AND PAVEMENT MARKING PLANS</b>		F.A.S. RTE. 2320	SECTION 113X-RS-4	COUNTY WILL	TOTAL SHEETS 13	SHEET NO. 7
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	PLOT DATE = 9/7/2010	CHECKED - RS	REVISED -								
		DATE - 10-16-2010	REVISED -								



\* 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.

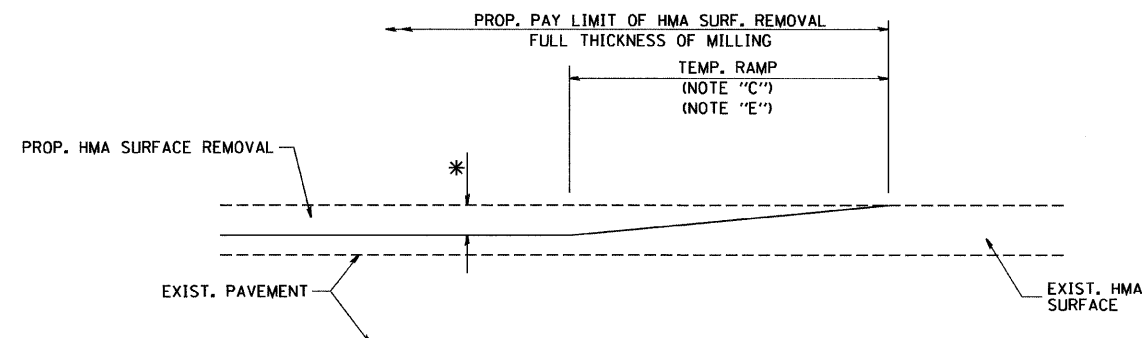
**SEQUENCE OF CONSTRUCTION (MILLING FIRST)**

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.

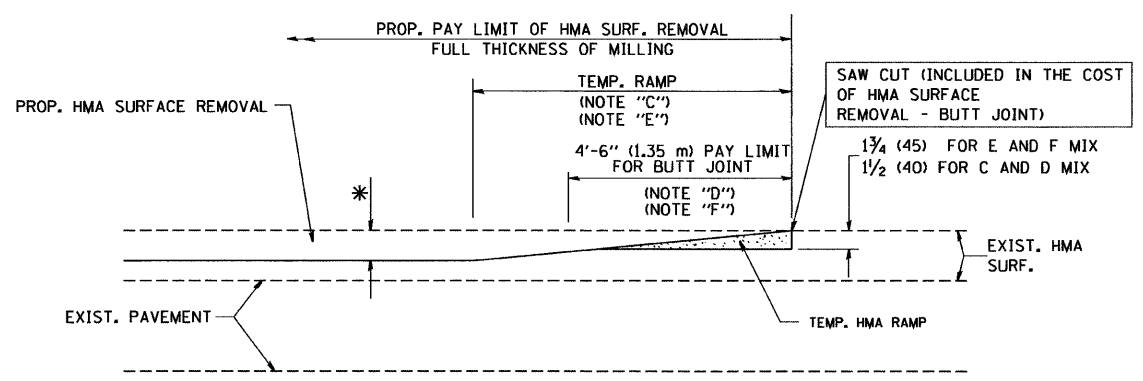
FILE NAME = c:\projects\dist\td22x34\bd22.dgn	USER NAME = baverdl	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT</b>		F.A.S. RTE. 2320	SECTION 113X-RS-4	COUNTY WILL	TOTAL SHEETS 13	SHEET NO. 8
	PLOT SCALE = 50,000' / IN.	DRAWN -	REVISED - R. BORO 01-01-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	<b>BD400-04 (BD-22)</b>		CONTRACT NO. 60L59
	PLOT DATE = 10/27/2008	CHECKED -	REVISED - R. BORO 09-04-07		FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT						
		DATE - 10-25-94	REVISED - K. ENG 10-27-08								





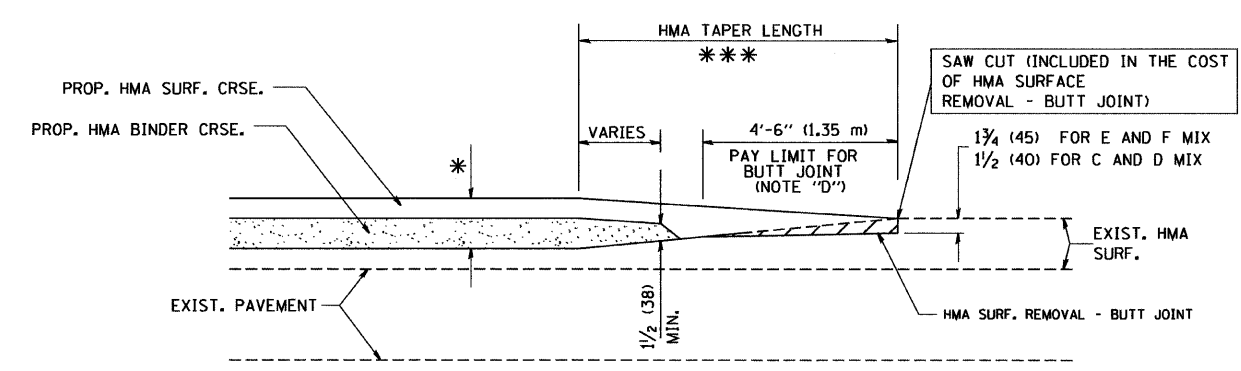
MILLED TEMPORARY RAMP  
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

**OPTION 1**

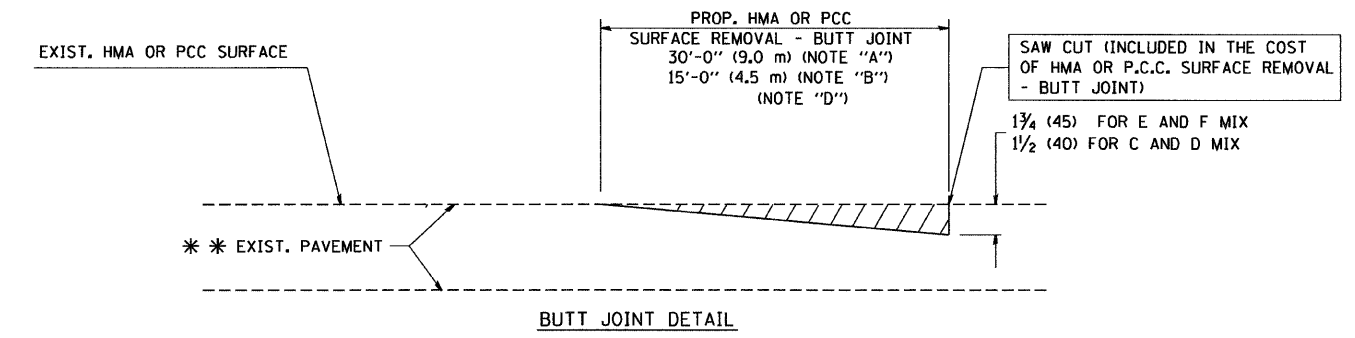


HMA CONSTRUCTED TEMPORARY RAMP  
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

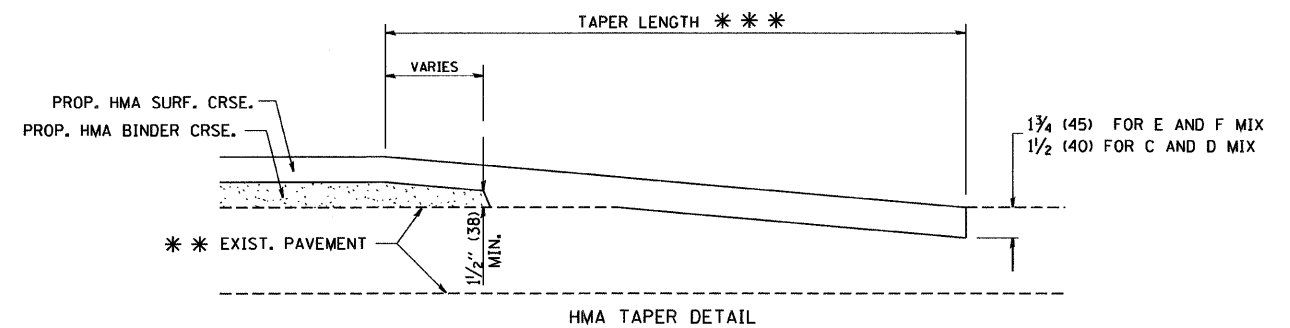
**OPTION 2**  
**TYPICAL TEMPORARY RAMP**



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**

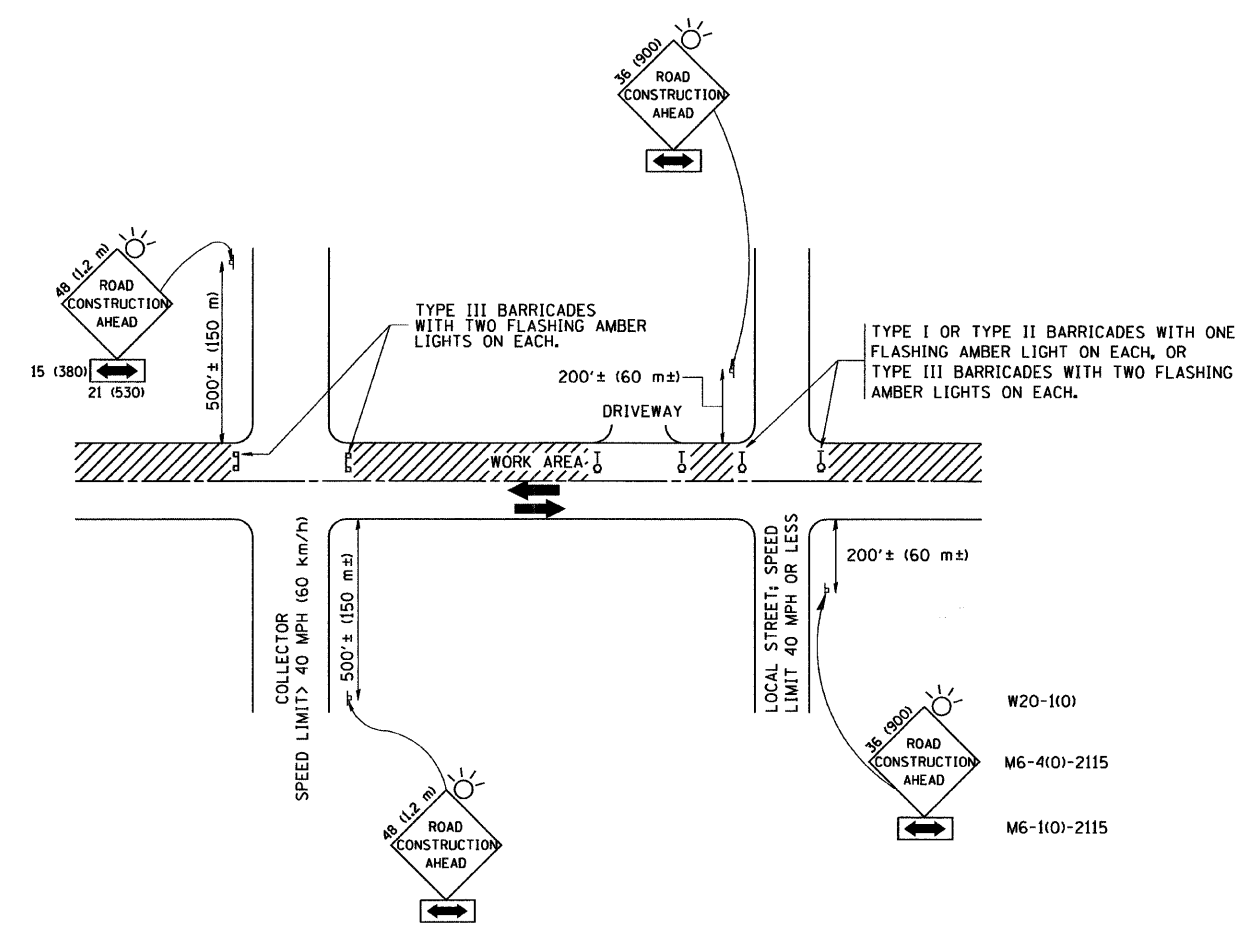
- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
  - B: MINOR SIDE ROADS.
  - C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
  - D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
  - E: TAPER THE TEMP. RAMP AT A RATE 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 = W:\dists\d\22x34\bd32.dgn	USER NAME = gaglionobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>BUTT JOINT AND HMA TAPER DETAILS</b>		F.A.S. RTE. 2320	SECTION 113X-RS-4	COUNTY WILL	TOTAL SHEETS 13	SHEET NO. 9	
PLOT SCALE = 50,0000' / IN.	CHECKED -	DRAWN -	REVISED - A. ABBAS 03-21-97		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.		CONTRACT NO. 60159		
PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISOR - M. GOMEZ 04-06-01	REVISED - R. BORO 01-01-07		BD400-05 BD32							
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT												



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

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
  - 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
    - 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.

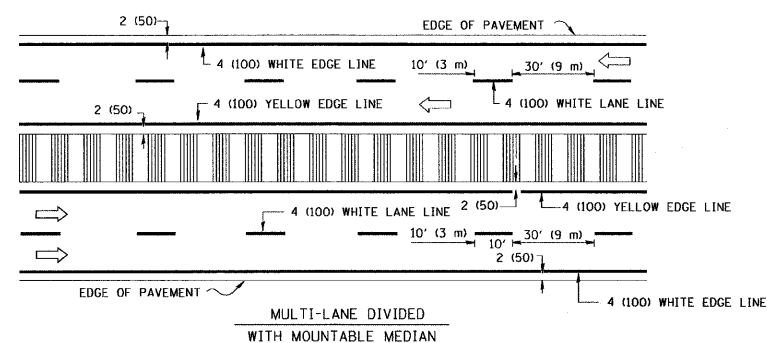
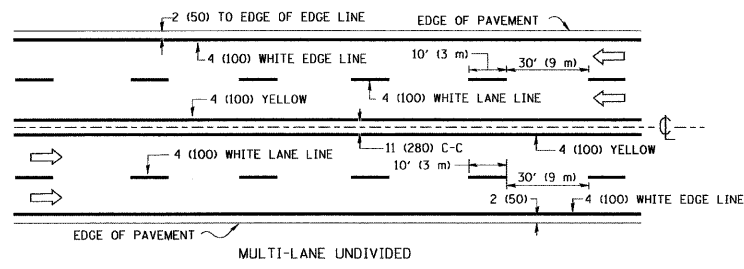
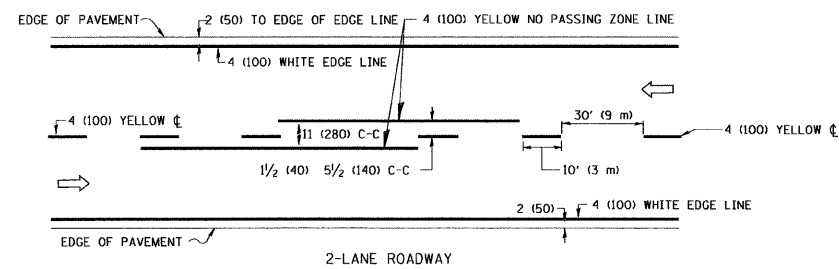
FILE NAME = W:\diststd\22x34\td10.dgn	USER NAME = gglianobt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLDT SCALE = 50,000' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLDT DATE = 1/4/2008	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

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.

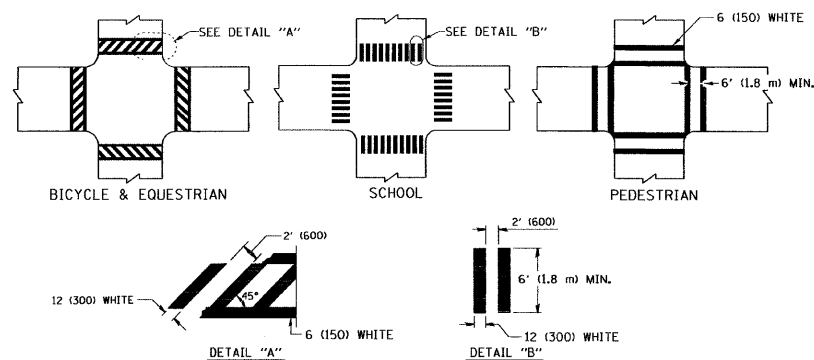
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2320	113X-RS-4	WILL	13	10
TC-10			CONTRACT NO. 60L59	
FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT				



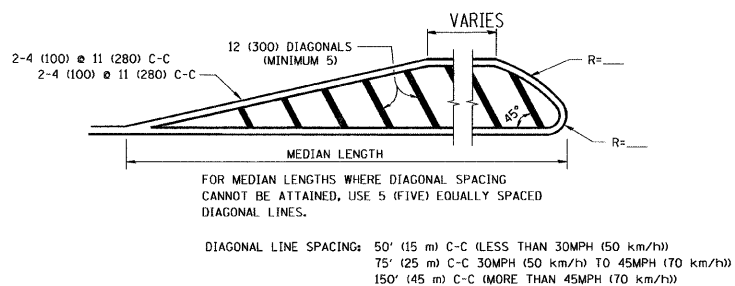
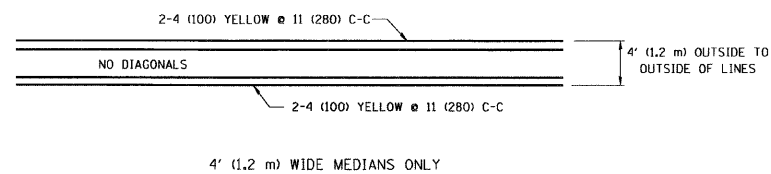


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

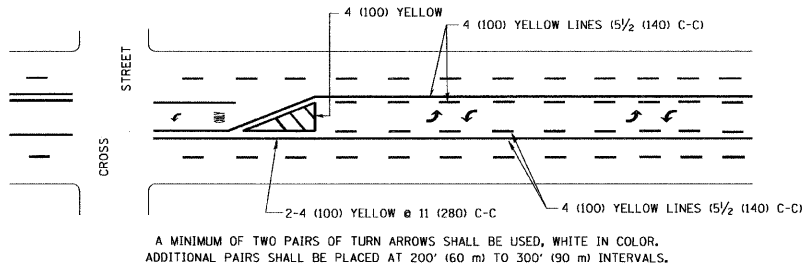
TYPICAL LANE AND EDGE LINE MARKING



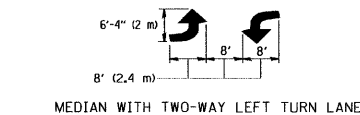
TYPICAL CROSSWALK MARKING



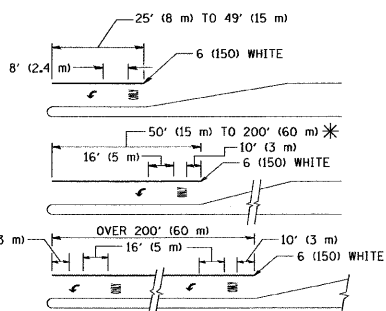
MEDIANS OVER 4' (1.2 m) WIDE



TYPICAL PAINTED MEDIAN MARKING



TYPICAL PAINTED MEDIAN MARKING

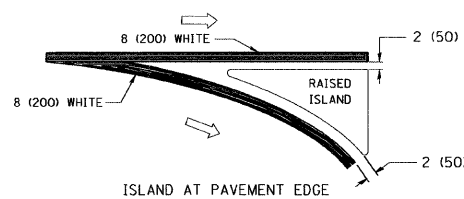
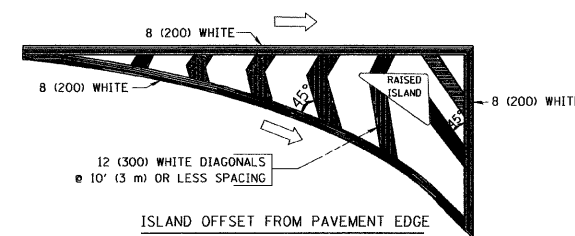


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)

\* 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 LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



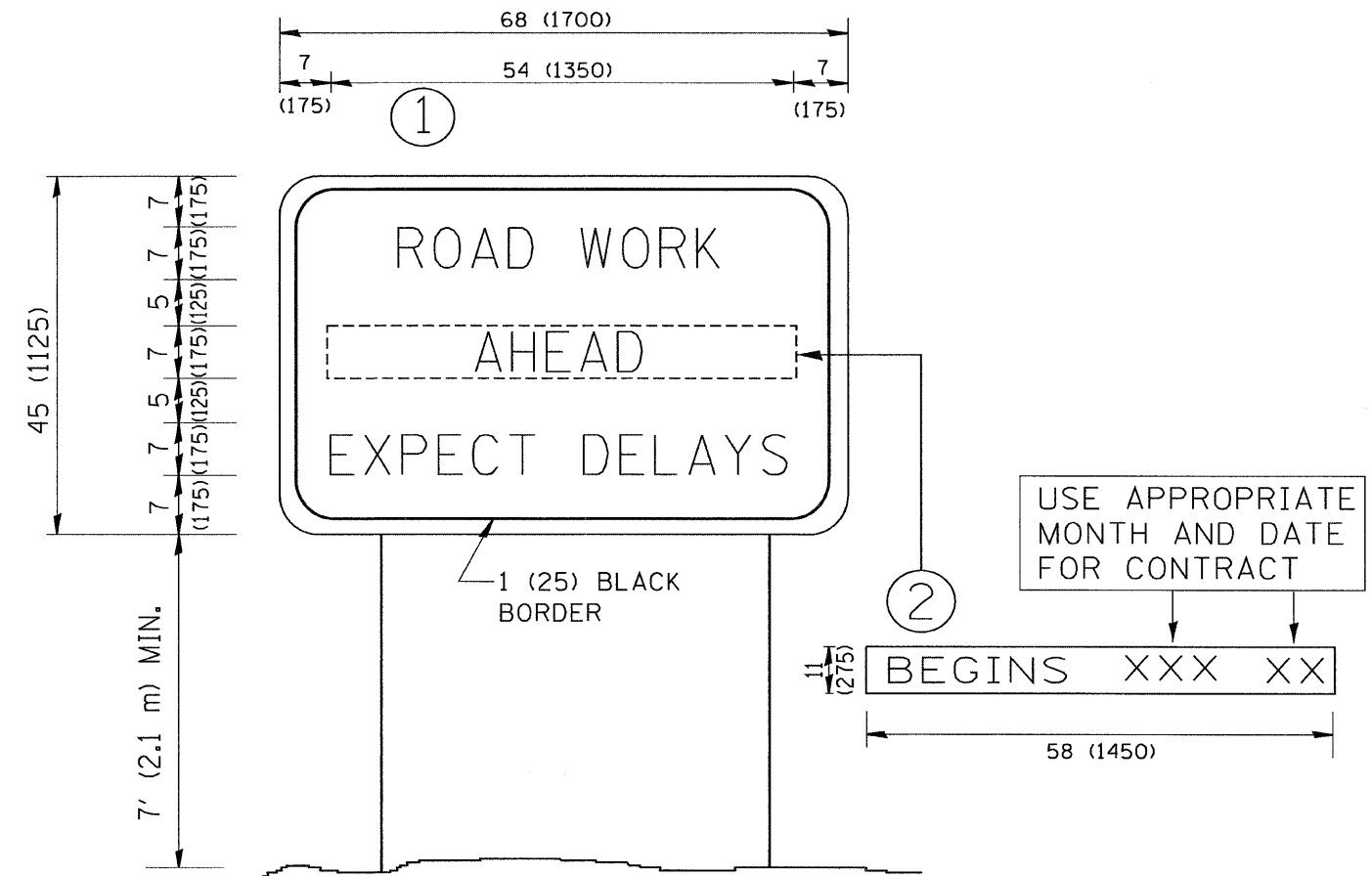
TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE 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.
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) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 78001 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	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

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

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

FILE NAME =	USER NAME = drivakosgn	DESIGNED - EVERS	REVISED - T. RAMMACHER 10-27-94	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT ONE TYPICAL PAVEMENT MARKINGS</b>	F.A.S. RTE. 2320	SECTION 113X-RS-4	COUNTY WILL	TOTAL SHEETS 13	SHEET NO. 12	
ca:\pw_work\p\d\drivakosgn\d0108315\to3.dgn	DRAWN -	REVISED - C. JUCIUS 09-09-09	SCALE: NONE			SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			
PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED -	TC-13 CONTRACT NO. 60159								
PLOT DATE = 9/9/2009	DATE - 03-19-90	REVISED -									



**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 = geglionobt	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 = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>ARTERIAL ROAD INFORMATION SIGN</b>	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.S. RTE. 2320	SECTION 113-RS-4	COUNTY WILL	TOTAL SHEETS 13	SHEET NO. 13
<b>TC-22</b>		CONTRACT NO. 60159		
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				