

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333/336	2004-110RS	MCHENRY	18	1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
**PROPOSED
HIGHWAY PLANS**

FOR INDEX OF SHEETS, SEE SHEET NO. 2

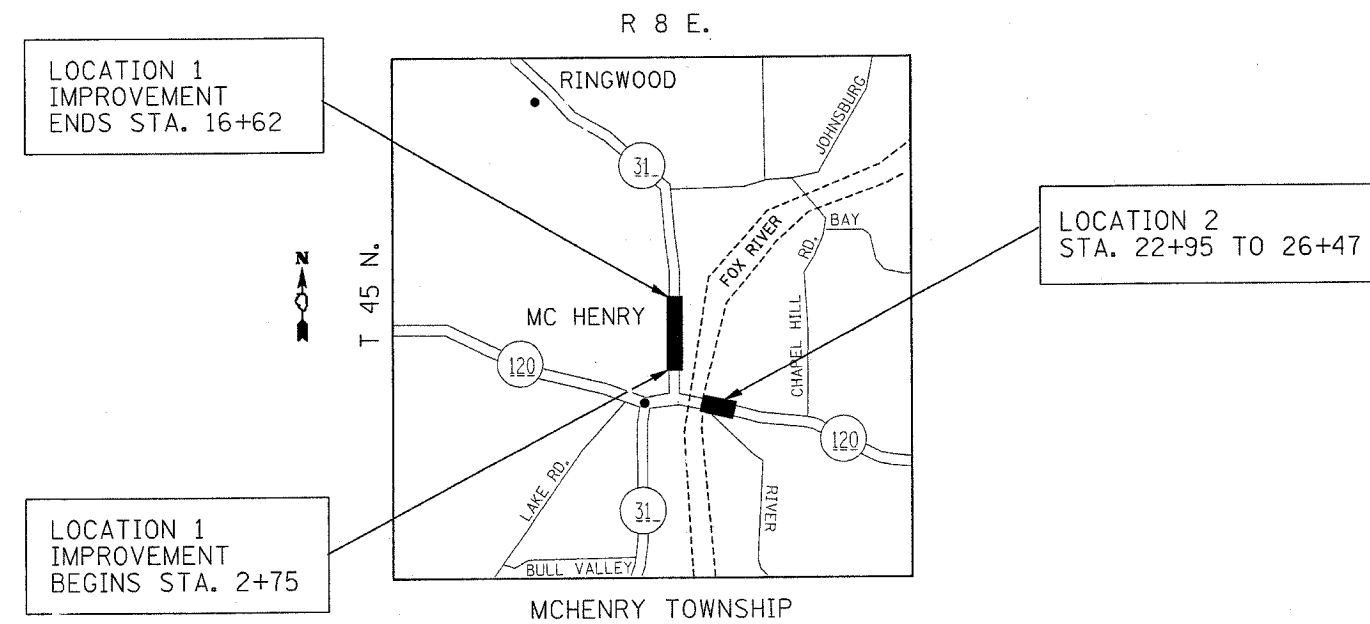
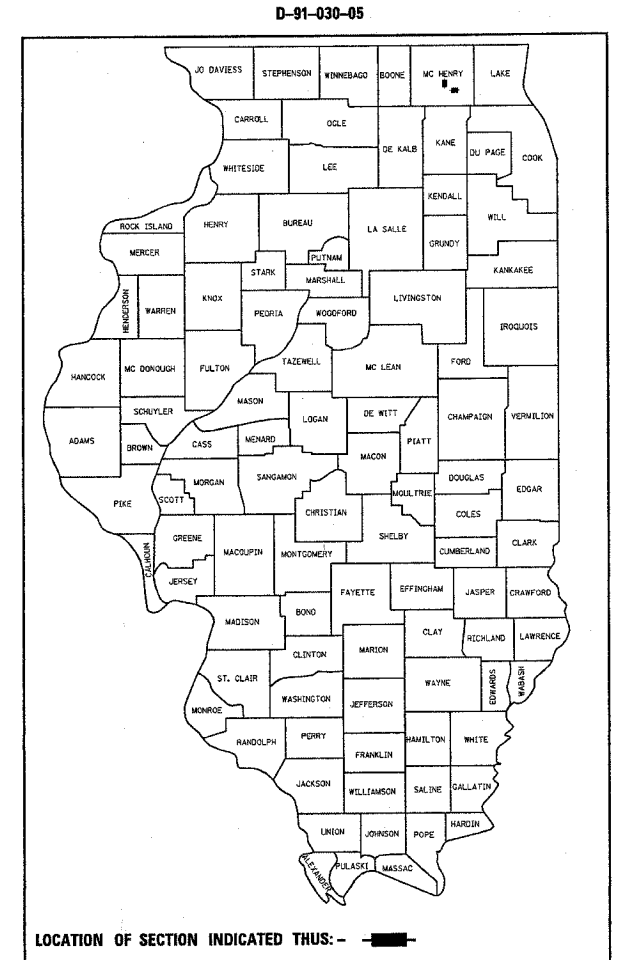
TRAFFIC DATA

LOCATION 1:
ADT = 24,000 (2003)
SPEED LIMIT = 30 MPH

LOCATION 2:
ADT = 19,900 (2003)
SPEED LIMIT = 35 MPH

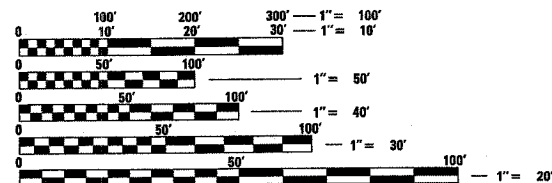
**LOCATION 1: F.A.P ROUTE 336: IL 31 (RICHMOND ROAD)
NORTH OF IL 120**
**LOCATION 2: F.A.P ROUTE 333: IL 120 (ELM STREET)
EAST OF FOX RIVER**
**SECTION: 2004-110RS
RESURFACING
MCHENRY COUNTY
C-91-030-05**

IMPROVEMENT LOCATED IN THE CITY OF MCHENRY



GROSS LENGTH OF IMPROVEMENT
LOCATION 1: 1387 FT = 0.263 MI.
LOCATION 2: 472 FT = 0.089 MI.
TOTAL = 1859 FT = 0.352 MI.

NET LENGTH OF IMPROVEMENT
LOCATION 1: 1387 FT = 0.283 MI.
LOCATION 2: 472 FT = 0.089 MI.
TOTAL = 1859 FT = 0.352 MI.



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

CONTRACT NO. 62855

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED February 18, 20 05
Dina O'Keefe/AP
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 25, 20 05
Mike Hine/ED
ENGINEER OF DESIGN AND ENVIRONMENT

March 25, 20 05
Victor Moderski
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

DISTRICT ONE DESIGN PLAN PREPARATION ENGINEER K. ENG/R. BORO (847) 705-4178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333/336	2004-110RS	MCHENRY	18	2
STA. 2+75		TO STA.16+62		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

INDEX OF SHEETS

1. TITLE SHEET
2. INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES
3. SUMMARY OF QUANTITIES
- 4-7. TYPICAL CROSS SECTIONS
- 8-10. ROADWAY PLANS
11. DETECTOR LOOP DETAIL, IL 120 @ RIVER ROAD
12. DISTRICT 1 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING
13. TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS
14. DISTRICT ONE TYPICAL PAVEMENT MARKINGS
15. BUTT JOINT DETAIL AND BITUMINOUS TAPER DETAIL
16. TYPICAL APPLICATION FOR RAISED REFLECTIVE PAVEMENT MARKERS
17. PAVEMENT MARKING LETTERS AND SYMBOLS
18. PAVEMENT PATCHING FOR BITUMINOUS SURFACED PAVEMENTS

STATE STANDARDS

- | | |
|-----------|--|
| 442201-01 | CLASS D PATCHING |
| 701101-01 | OFF-ROAD OPERATIONS, MULTILANE, 4.5M (15') TO 600MM (24") FROM PAVEMENT EDGE |
| 701301-02 | LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS |
| 701501-03 | URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED |
| 701701-04 | URBAN LANE CLOSURE, MULTILANE INTERSECTION |
| 702001-05 | TRAFFIC CONTROL DEVICES |
| 780001-01 | TYPICAL PAVEMENT MARKINGS |

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 UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.

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

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.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 AT LEAST TWO (2) WEEKS PRIOR TO PLACEMENT OF FINAL PERMANENT PAVEMENT MARKINGS.

THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM FIELD MAINTENANCE ENGINEERS.

THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.

ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKINGS OUTSIDE THE REMOVAL LINES SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

DRAINAGE ADJUSTMENT OR RECONSTRUCTION LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

THE ENGINEER SHALL CONTACT MS. DEBBIE HANLON, TRAFFIC FIELD ENGINEER (OR TECHNICIAN), AT (847) 438-2300 TWO (2) WEEKS PRIOR TO THE START OF THIS PROJECT SO THAT EXACT STATIONING OF NO PASSING ZONES AND OTHER PERMANENT PAVEMENT MARKINGS MAY BE ESTABLISHED.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL FOR TYPICAL APPLICATION OF RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) SHOWN IN THE PLANS.

PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES. THE COST OF THE PAVEMENT MARKING TAPE, TYPE III AND IT'S REMOVAL SHALL BE INCLUDED IN THE COST OF SHORT TERM PAVEMENT MARKING.

MIXTURE REQUIREMENTS

MIXTURE USE	AC/PG	VOIDS	RAP % (MAX)	THICKNESS
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70	PG 64-22	4.0% @ 70 GYR	10	1.5"
POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50	SBS/SBR PG 76-28	2.5% @ 50 GYR	0	0.75"
BITUMINOUS REPLACEMENT OVER PATCHES, IL 19.0MM	PG 64-22	4.0% @ 70 GYR	15	1.5"
CLASS D PATCH, IL 19.0MM	PG 64-22	4.0% @ 70 GYR	15	10"

NOTE: THE UNIT WEIGHT USED FOR ALL BITUMINOUS SURFACE MIXTURES IS 112 LBS./SQ.YD./IN.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		INDEX OF SHEETS GENERAL NOTES STATE STANDARDS
SCALE: VERT. DATE	HORIZ.	DRAWN BY CHECKED BY

62855

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336,333	2004-110RS	MCHENRY	18	3
FED. ROAD DIST. NO. 1		ILLINOIS	HIGHWAY PROJECT	

SUMMARY OF QUANTITIES			URBAN 1000 TOTAL QUANTITIES	CONSTRUCTION TYPE CODE 1000				
CODE NO.	ITEM	UNIT		LOC. 1 IL 31	LOC. 2 IL 120			
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	17	12	5			
40600300	AGGREGATE (PRIME COAT)	TON	17	12	5			
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	17	12	5			
40600895	CONSTRUCTING TEST STRIP	EACH	1	1				
40600980	BITUMINOUS SURFACE REMOVAL - BUTT JOINT	SQ YD	103.5	43.5	60			
40601000	BITUMINOUS REPLACEMENT OVER PATCHES	TON	6	6				
44000006	BITUMINOUS SURFACE REMOVAL 1 1/2"	SQ YD	5970	5970				
44000112	BITUMINOUS REMOVAL OVER PATCHES 3"	SQ YD	34	34				
44201769	CLASS D PATCHES, TYPE III, 10 INCH	SQ YD	30	30				
60252800	CATCH BASINS TO BE RECONSTRUCTED	EACH	1	1				
60265700	VALVE VAULTS TO BE ADJUSTED	EACH	2	1	1			
60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	6	6				
60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	5	4	1			
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	2	1	1			
67100100	MOBILIZATION	L SUM	1	0.5	0.5			
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	1				
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1		1			
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	2802	2276	526			
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	328	255	73			
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	4510	3814	696			
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	860	670	190			
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	170	160	10			
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	120	48	72			
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	328	255	73			
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	4510	3814	696			
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	860	670	190			

SUMMARY OF QUANTITIES			URBAN 1000 TOTAL QUANTITIES	CONSTRUCTION TYPE CODE 1000				
CODE NO.	ITEM	UNIT		LOC. 1 IL 31	LOC. 2 IL 120			
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	170	160	10			
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	120	48	72			
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	151	101	50			
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	151	101	50			
* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	426		426			
X0322467	TEMPORARY INFORMATION SIGNING FOR LANE CLOSURE	SQ FT	96	48	48			
X4066426	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70	TON	1201	699	502			
X4067100	POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50	TON	140		140			
X4409410	BITUMINOUS SURFACE REMOVAL 2 1/4"	SQ YD	2350		2350			

*SPECIALTY ITEMS

Rev.

REVISIONS	
NAME	DATE

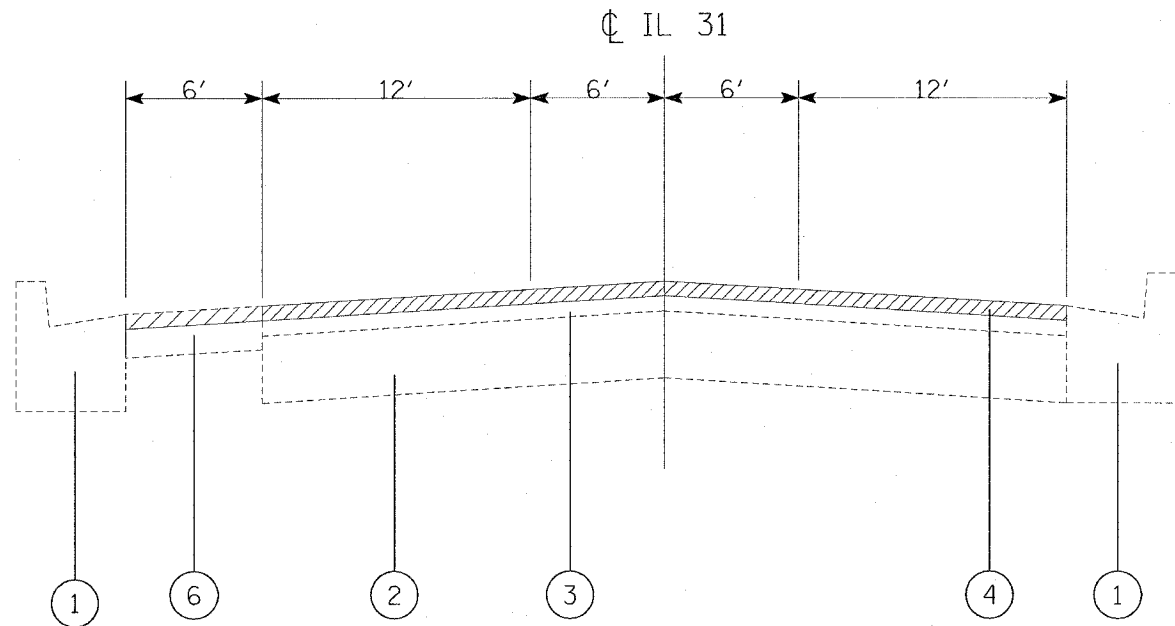
ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES

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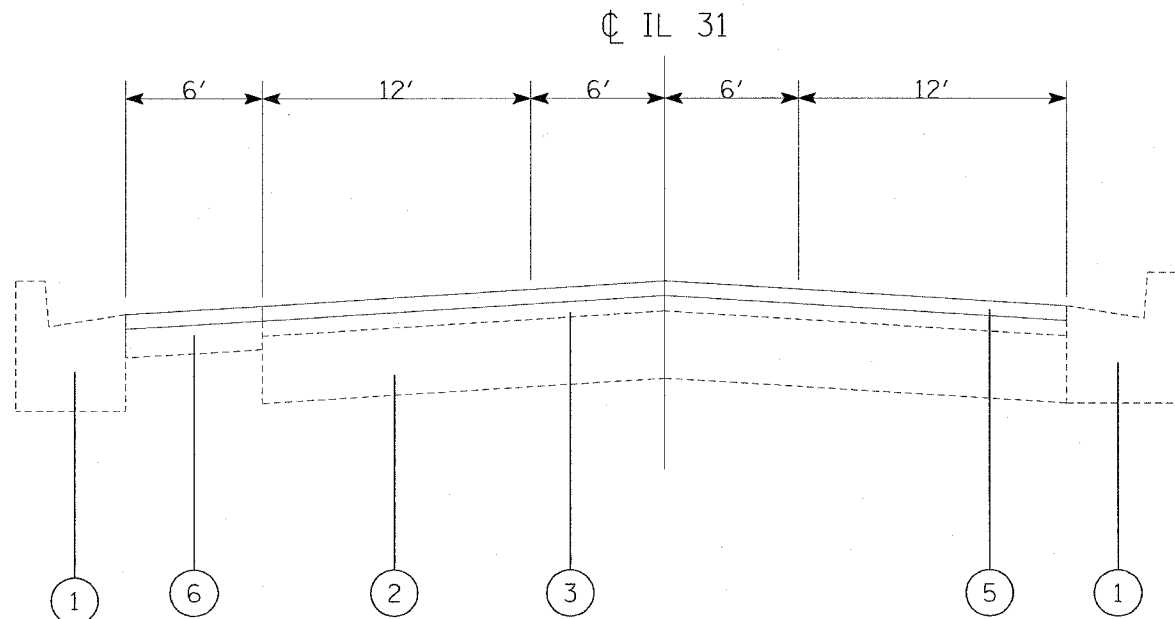
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333/336	2004-110RS	MCHENRY	18	5
STA. 2+75		TO STA. 16+62		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



EXISTING TYPICAL CROSS SECTION
IL 31 (RICHMOND ROAD)
STA. 5+56 TO 7+18

- ① EXISTING CURB AND GUTTER, TYPE B-6.12
- ② EXISTING CONCRETE PAVEMENT, 10"
- ③ EXISTING BITUMINOUS SURFACE, 3"
- ④ PROPOSED BITUMINOUS CONCRETE SURFACE REMOVAL, 1 1/2"
- ⑤ PROPOSED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70, 1 1/2"
- ⑥ EXISTING BITUMINOUS SHOULDER



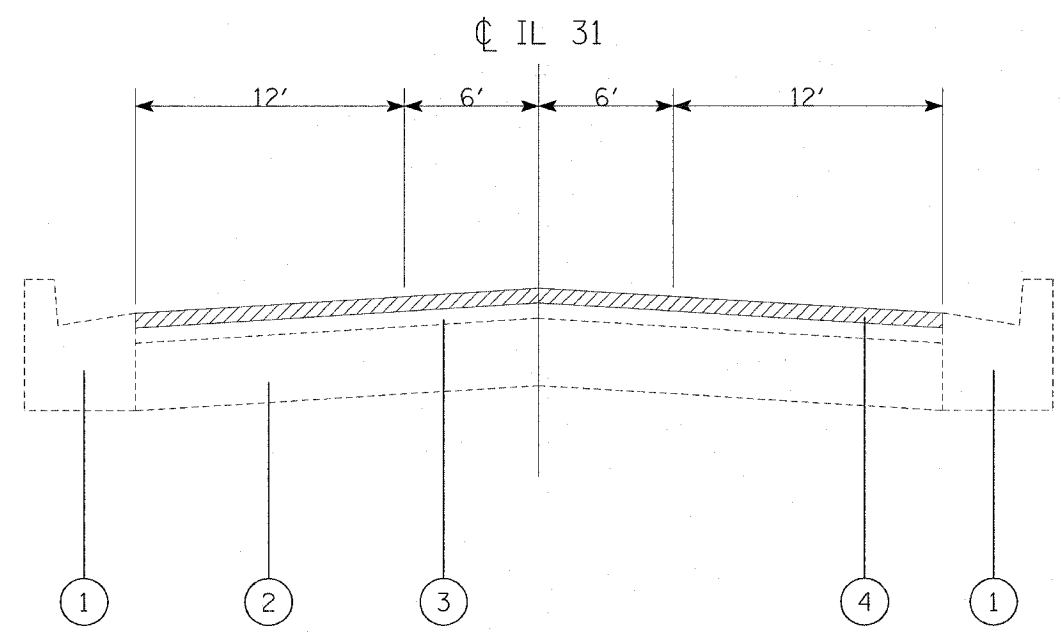
PROPOSED TYPICAL CROSS SECTION
IL 31 (RICHMOND ROAD)
STA. 5+56 TO 7+18

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		LOCATION 1, IL 31 TYPICAL SECTIONS

SCALE: VERT. _____
HORIZ. _____
DATE _____

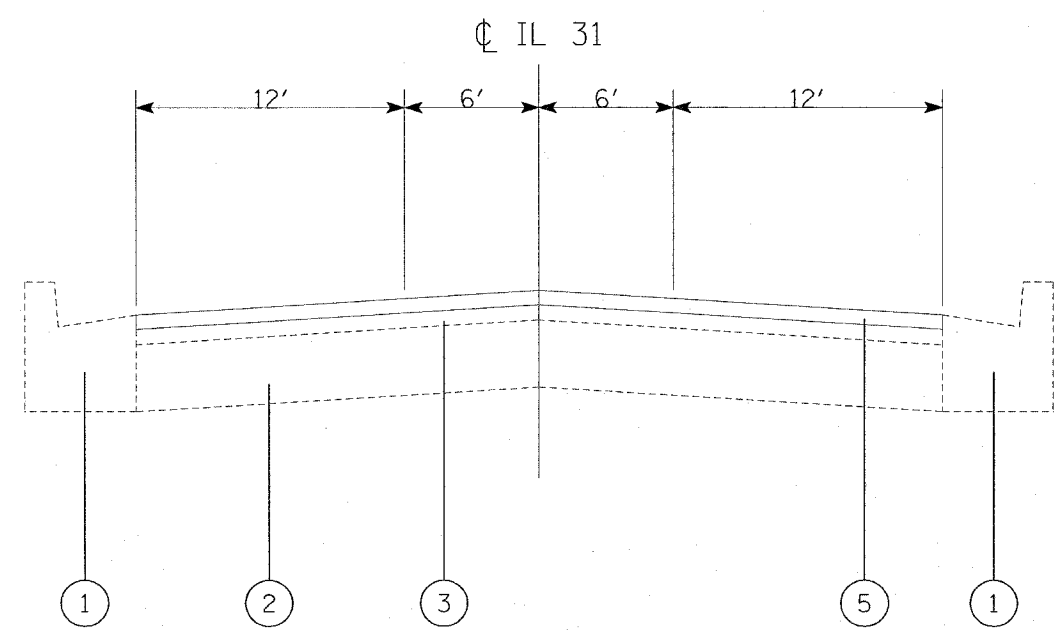
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333/336	2004-110RS	MCHENRY	18	6
STA. 2+75		TO STA. 16+62		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		



EXISTING TYPICAL CROSS SECTION
IL 31 (RICHMOND ROAD)
STA. 7+18 TO 16+62

- ① EXISTING CURB AND GUTTER, TYPE B-6.12 & B-6.24
- ② EXISTING CONCRETE PAVEMENT, 10"
- ③ EXISTING BITUMINOUS SURFACE, 3"
- ④ PROPOSED BITUMINOUS CONCRETE SURFACE REMOVAL, 1 1/2"
- ⑤ PROPOSED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70, 1 1/2"



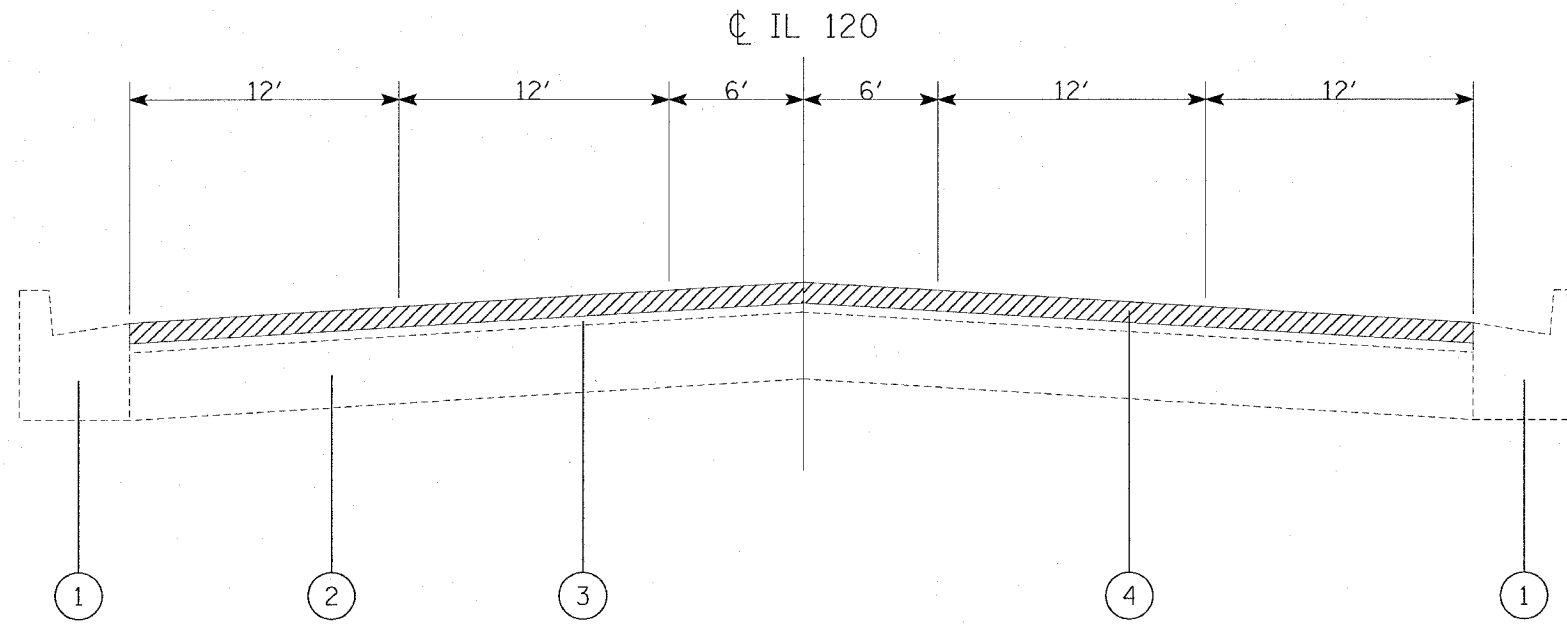
PROPOSED TYPICAL CROSS SECTION
IL 31 (RICHMOND ROAD)
STA. 7+18 TO 16+62

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		LOCATION 1, IL 31 TYPICAL SECTIONS

SCALE: VERT. _____
HORIZ. _____
DATE _____

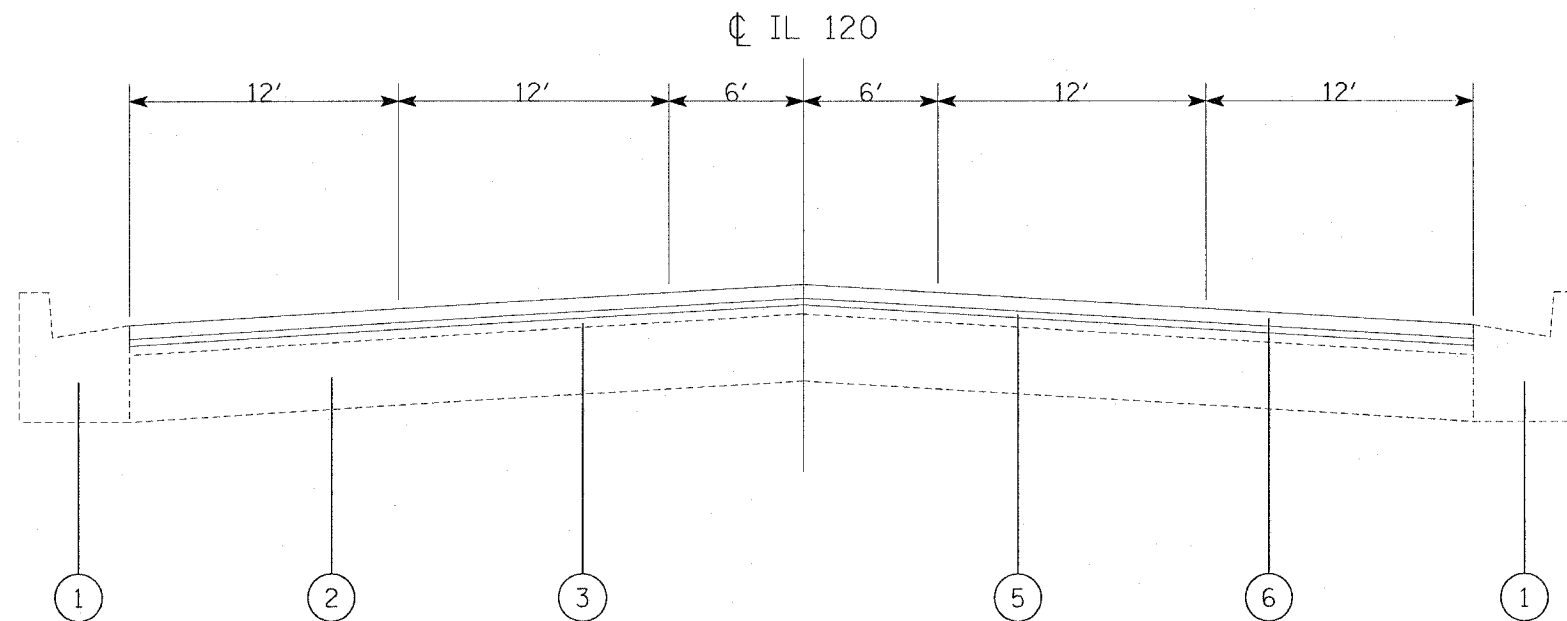
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333/336	2004-110RS	MCHENRY	18	7
STA. 2+75		TO STA. 16+62		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		



EXISTING TYPICAL CROSS SECTION
IL 120 @ RIVER ROAD
STA. 22+95 TO 26+47

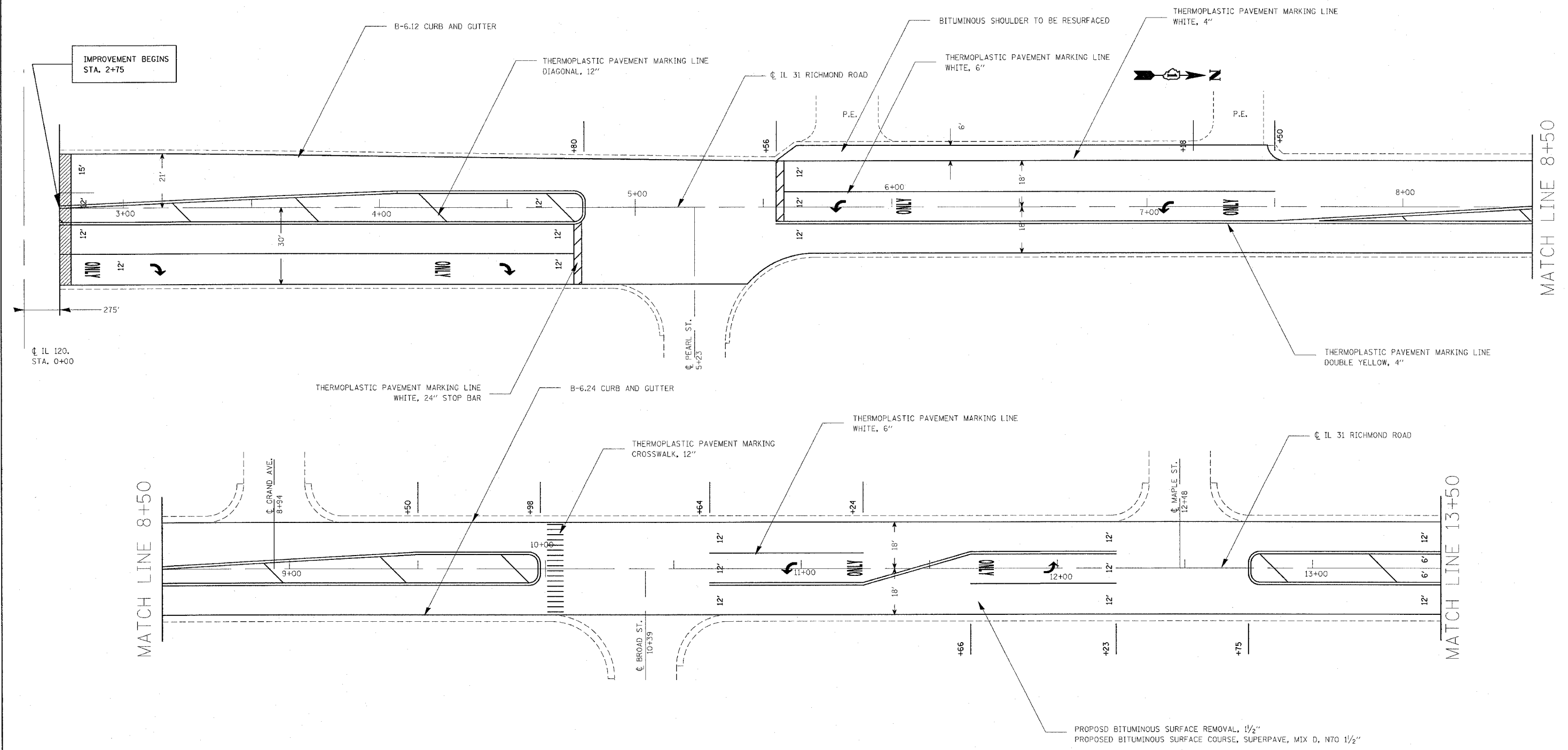
- ① EXISTING CURB AND GUTTER, TYPE B-6.24
- ② EXISTING CONCRETE PAVEMENT, 10"
- ③ EXISTING BITUMINOUS SURFACE, 3"
- ④ PROPOSED BITUMINOUS CONCRETE SURFACE REMOVAL, 2 1/4"
- ⑤ PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50, 3/4"
- ⑥ PROPOSED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70 1 1/2"



PROPOSED TYPICAL CROSS SECTION
IL 120 @ RIVER ROAD
STA. 22+95 TO 26+47

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		LOCATION 2, IL 120 TYPICAL SECTIONS
SCALE:	VERT. DATE	DRAWN BY CHECKED BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333/336	2004-110RS	MCHENRY	18	8
STA. 2+75		TO STA.13+50		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

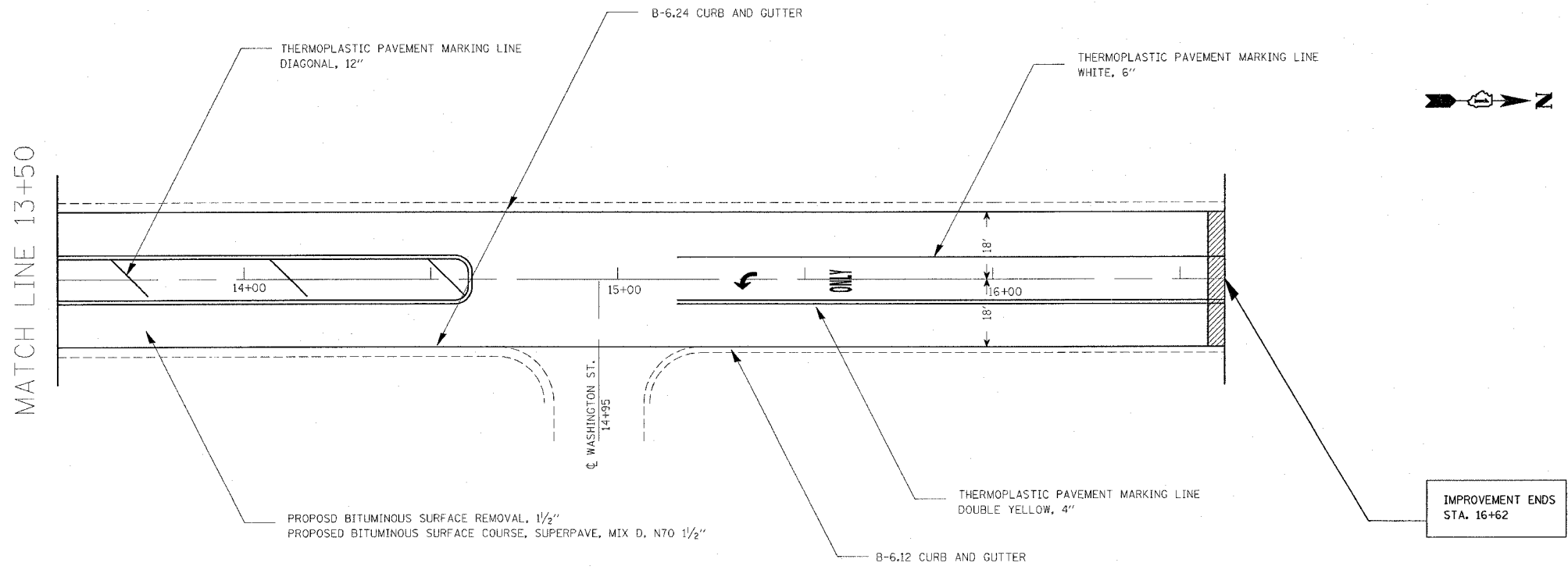
PROPOSED ROADWAY IMPROVEMENTS
LOCATION 1, IL 31

SCALE: VERT. _____
HORIZ. _____

DATE _____

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333/336	2004-110RS	MCHENRY	18	9
STA. 13+50		TO STA. 16+62		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



 PROPOSED BUTT JOINT

IMPROVEMENT ENDS
STA. 16+62

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

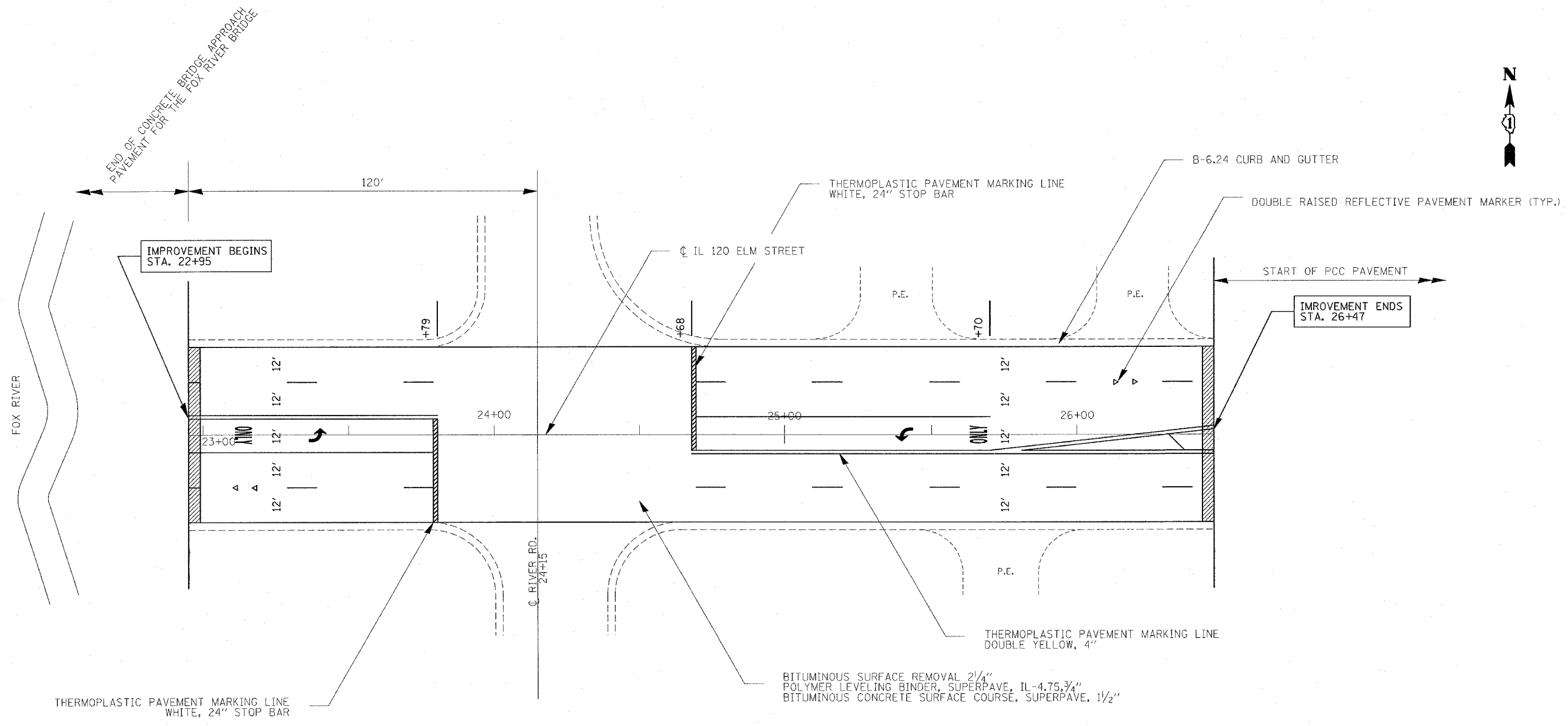
PROPOSED ROADWAY IMPROVEMENTS
LOCATION 1, IL 31

SCALE: VERT. _____
HORIZ. _____

DATE _____

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333/336	2004-110RS	MCHENRY	18	10
STA. 22+95		TO STA. 26+47		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		



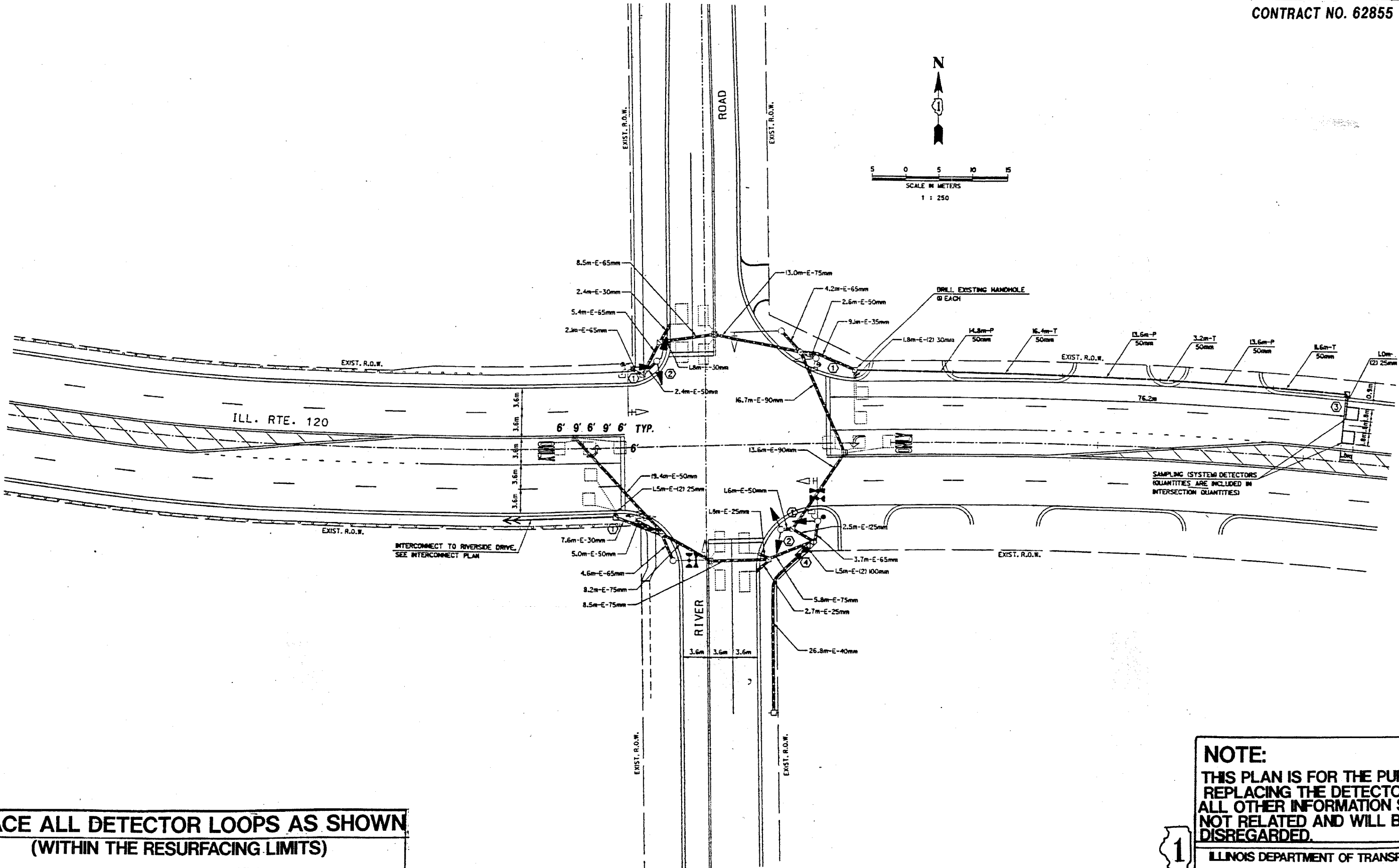
PROPOSED BUTT JOINT

BITUMINOUS SURFACE REMOVAL 2 1/4"
 POLYMER LEVELING BINDER, SUPERPAVE, IL-4.75, 3/4"
 BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, 1 1/2"

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		PROPOSED ROADWAY IMPROVEMENTS LOCATION 2, IL 120 SCALE: VERT. / HORIZ. DATE / DRAWN BY / CHECKED BY

F.A.P. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
333/336	2004-110RS	McHENRY	18	11
STA. 2+75 TO		STA. 16+62		
FED. RD. DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62855



REPLACE ALL DETECTOR LOOPS AS SHOWN

(WITHIN THE RESURFACING LIMITS)

CODE NO.	QUANTITY	UNIT	ITEM
88600600	(129.9) METERS 426 FEET		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.

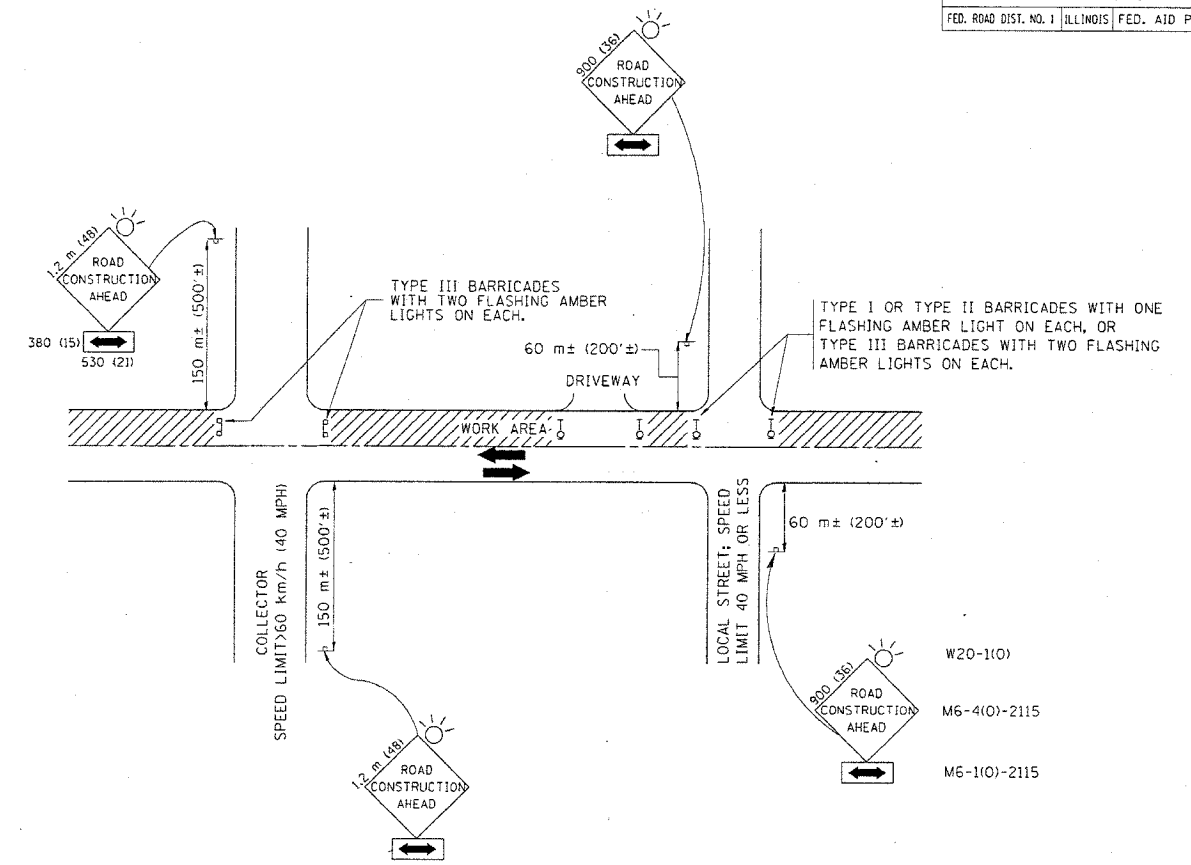


ILLINOIS DEPARTMENT OF TRANSPORTATION
DETECTOR LOOPS AT:
IL RT 120 & RIVER ROAD
McHENRY CITY

SCALE: 1" =
DATE
DESIGNED BY:
DRAWN BY:
CHECKED BY:

62855

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			18	13
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		



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

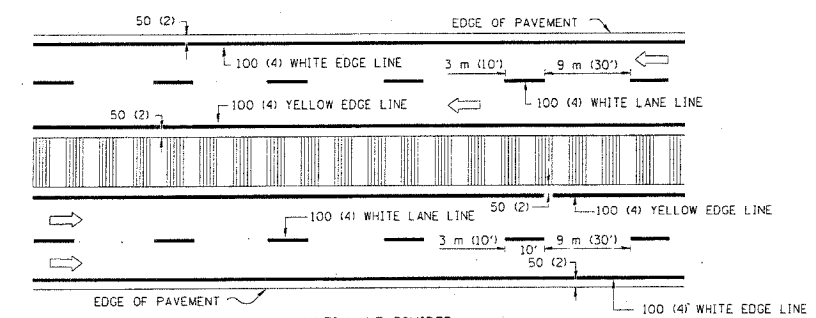
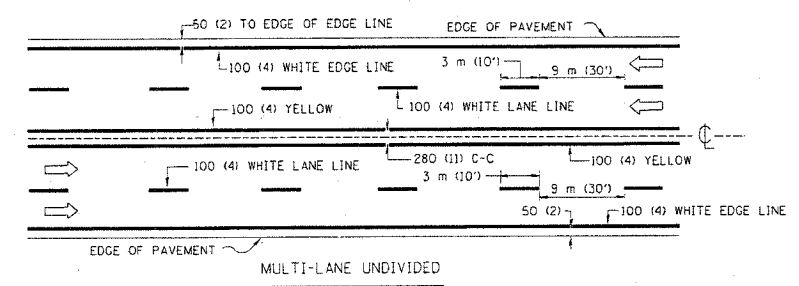
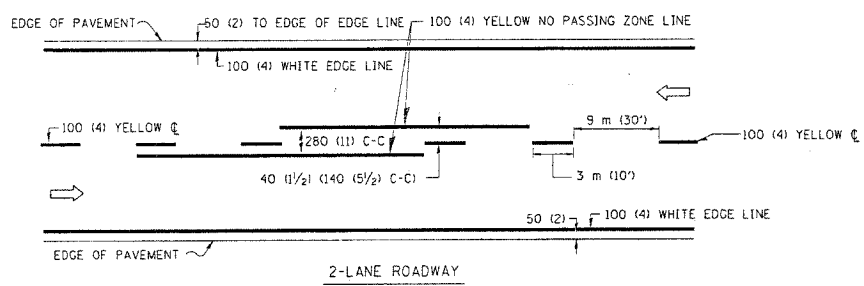
NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
 - 1. SIDE ROAD WITH A SPEED LIMIT OF 60 km/h (40 MPH) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE ROAD CONSTRUCTION AHEAD SIGN 900x900 (36x36) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 60 m (200') 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 60 km/h (40 MPH) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE ROAD CONSTRUCTION AHEAD SIGN 1.2 m x 1.2 m (48x48) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 150 m (500') 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.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION	
NAME	DATE	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS	
LHA	6/89		
T. RAMMACHER	09/08/94		
J. OBERLE	10/18/95		
A. HOUSEH	03/06/96		
A. HOUSEH	10/15/96		
T. RAMMACHER	01/06/00		

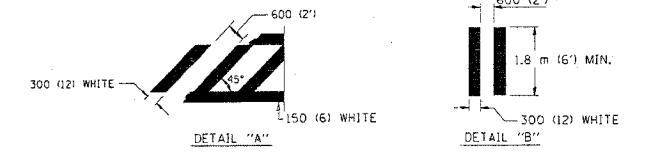
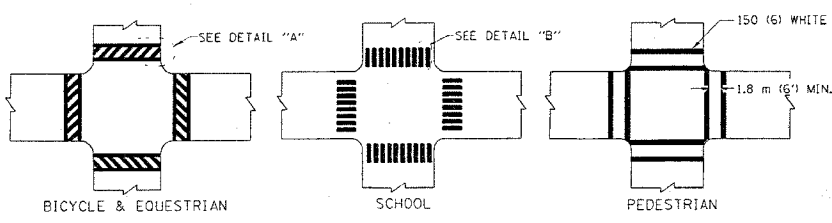
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				TC-10

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		18	14
STA. TO STA.		FED. ROAD DIST. NO.	
		ILLINOIS	
		FED. AID PROJECT	

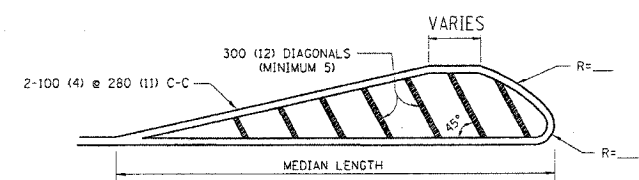
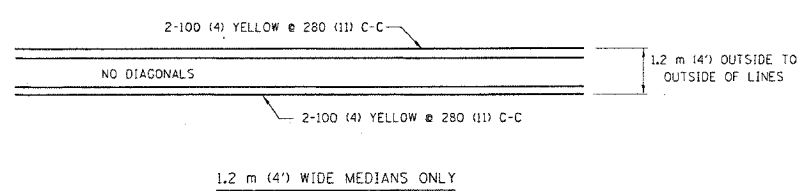


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING

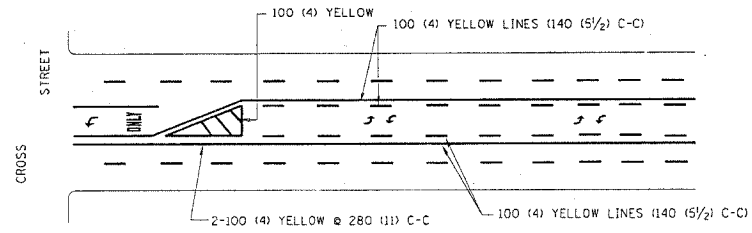


TYPICAL CROSSWALK MARKING

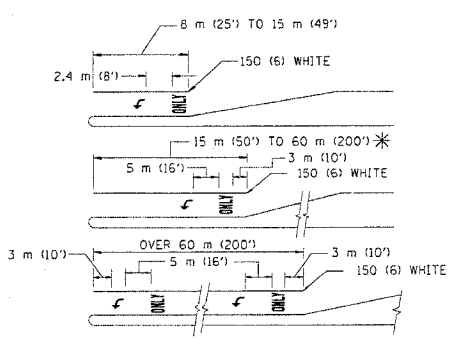


FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.
 DIAGONAL LINE SPACING: 15 m (50') C-C (LESS THAN 50 km/h (30 MPH))
 25 m (75') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH))
 45 m (150') C-C (MORE THAN 70 km/h (45 MPH))

MEDIANS OVER 1.2 m (4') WIDE



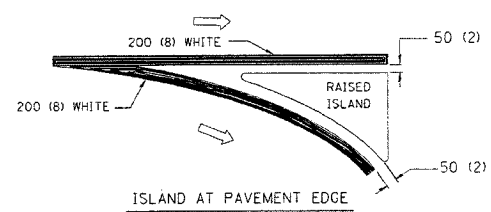
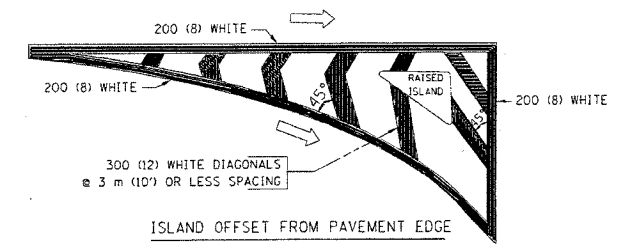
TYPICAL PAINTED MEDIAN MARKING



* TURN LANES IN EXCESS OF 120 m (400') 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	100 (4)	SKIP-DASH	YELLOW	3 m (10') LINE WITH 9 m (30') SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 100 (4)	SOLID	YELLOW	280 (11) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	100 (4) 2 @ 100 (4)	SOLID SOLID	YELLOW YELLOW	140 (5 1/2) C-C FROM SKIP-DASH CENTERLINE 280 (11) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	100 (4) 125 (5) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	3 m (10') LINE WITH 9 m (30') SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	600 (2') LINE WITH 1.8 m (6') SPACE
EDGE LINES	100 (4)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	150 (6) LINE; FULL SIZE LETTERS & SYMBOLS (2.4 m (8'))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 100 (4) EACH DIRECTION 2.4 m (8') LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	3 m (10') LINE WITH 9 m (30') SPACE FOR SKIP-DASH; 140 (5 1/2) 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 @ 150 (6) 300 (12) @ 45° 300 (12) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 1.8 m (6') APART 600 (2') APART 600 (2') APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	600 (24)	SOLID	WHITE	PLACE 1.2 m (4') IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 100 (4) WITH 300 (12) DIAGONALS @ 45° NO DIAGONALS USED FOR 1.2 m (4') WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	280 (11) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
CORE MARKING AND CHANNELIZING LINES	200 (8) WITH 300 (12) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 4.5 m (15') C-C (LESS THAN 50 km/h (30 MPH)) 6 m (20') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 9 m (30') C-C (OVER 70 km/h (45 MPH))
RAILROAD CROSSING	600 (24) TRANSVERSE LINES; "RR" IS 1.8 m (6') LETTERS; 400 (16) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 78001 AREA OF: "R"=0.33m² (3.6 SQ. FT.) EACH "X"=5.0 m² (54.0 SQ. FT.)
SHOULDER DIAGONALS	300 (12) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	15 m (50') C-C (LESS THAN 50 km/h (30 MPH)) 25 m (75') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 45 m (150') C-C (OVER 70 km/h (45 MPH))

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

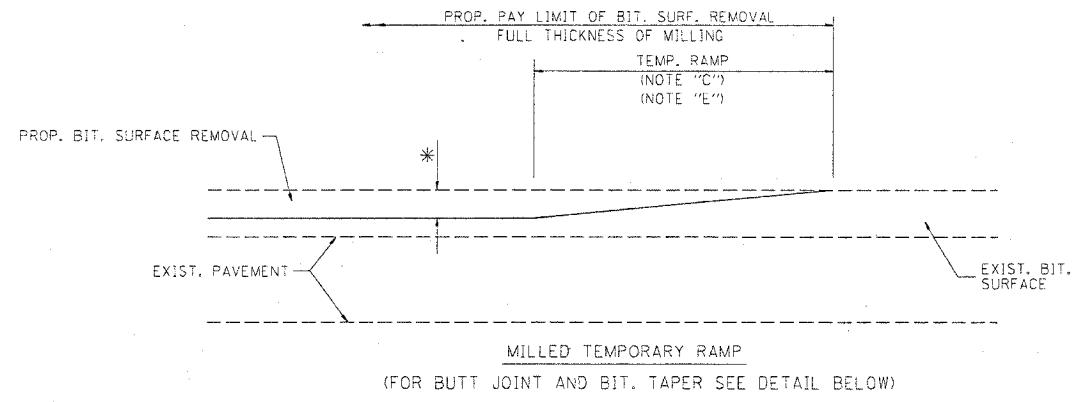
All dimensions are in millimeters (inches) unless otherwise shown.

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DISTRICT ONE
 TYPICAL PAVEMENT MARKINGS

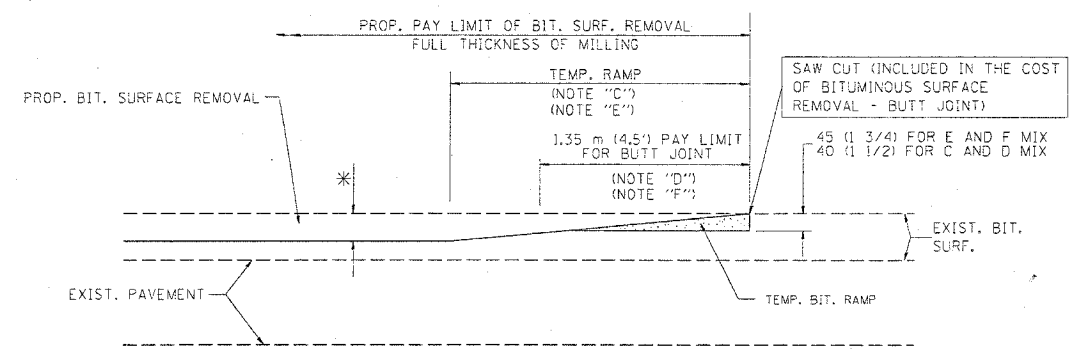
REVISIONS	
NAME	DATE
EVERS	03-19-90
T. RAMMACH	10-27-94
ALEX HOUSEH	10-09-96
ALEX HOUSEH	10-17-96
T. RAMMACH	01-06-00

SCALE: NONE
 DATE 10/18/2002
 DRAWN BY CADD
 CHECKED BY
 TC-13

F.A. FILE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
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STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

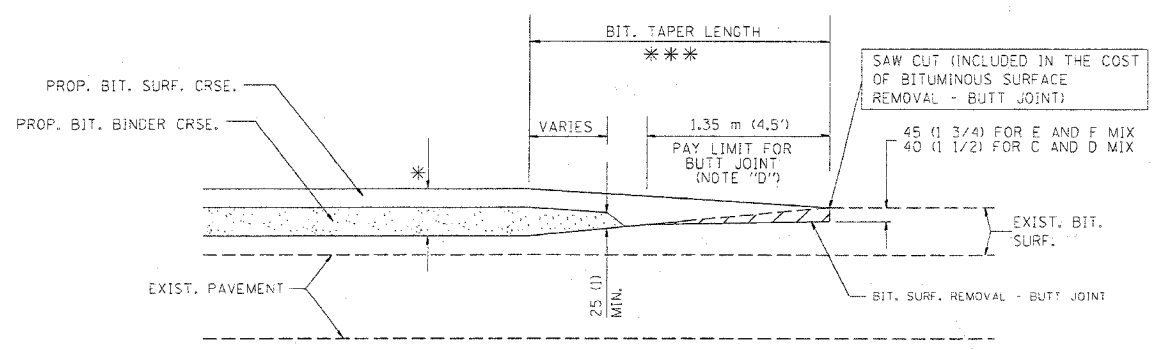


OPTION 1

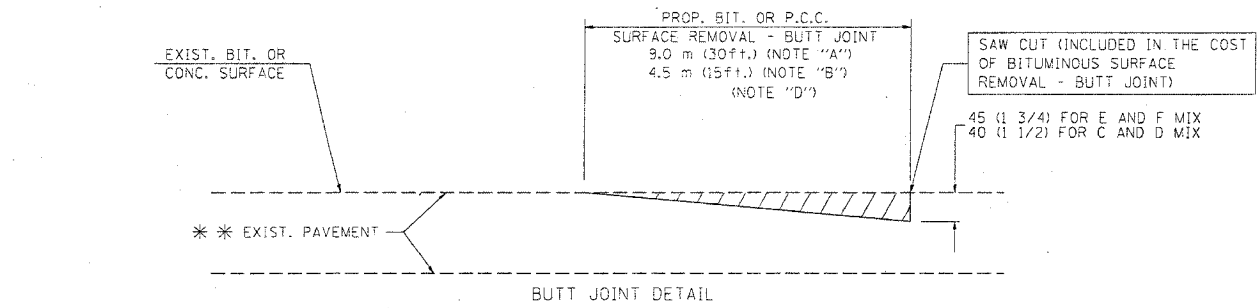


BITUMINOUS CONSTRUCTED TEMPORARY RAMP (FOR BUTT JOINT AND BIT. TAPER SEE DETAIL BELOW)

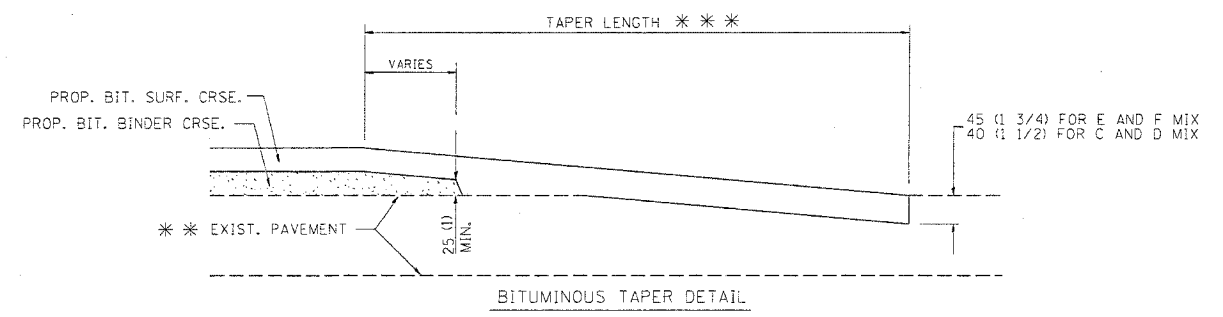
OPTION 2
TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND BITUMINOUS TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



BITUMINOUS TAPER DETAIL

TYPICAL BUTT JOINT AND BITUMINOUS TAPER FOR RESURFACING ONLY

*** PC CONCRETE, BITUMINOUS OR BITUMINOUS 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 BITUMINOUS SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED BITUMINOUS COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 900 (3 ft.) PER INCH OF MILLING THICKNESS.
- F: INSTALLATION AND REMOVAL OF THE 1.35 m (4.5') TEMP. BIT. RAMP WILL BE PAID AS "BITUMINOUS SURFACE REMOVAL - BUTT JOINT".
- G: SEE ARTICLE 406.18 AND 406.24 OF THE STANDARD SPECIFICATIONS FOR "BITUMINOUS AND PCC SURFACE REMOVAL, BUTT JOINT".
- * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- *** 6.1 m (20') PER 25 (1) RESURFACING (NOTE "A")
3.0 m (10') PER 25 (1) RESURFACING (NOTE "B")

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

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR PER SQUARE METER (SQUARE YARD.) AS "BITUMINOUS SURFACE REMOVAL - BUTT JOINT" OR AS "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

REVISIONS	
NAME	DATE
M. DE YONG	6-13-90
M. DE YONG	7-3-90
M. DE YONG	3-27-92
R. SHAH	09/09/94
R. SHAH	10/25/94
A. ABBAS	03/21/97
M. COMEZ	04/06/01

ILLINOIS DEPARTMENT OF TRANSPORTATION

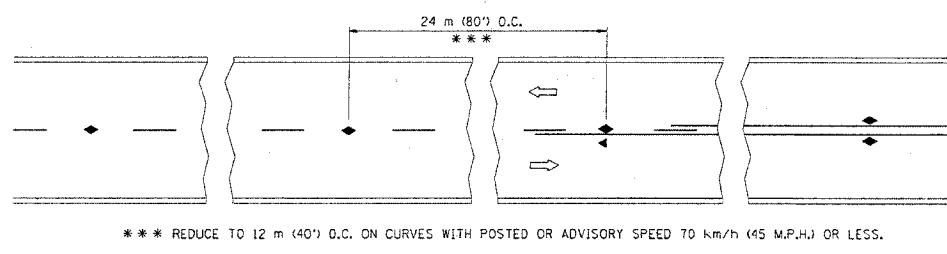
BUTT JOINT AND BITUMINOUS TAPER DETAILS

SCALE: NONE
DATE PLOTTED: 10/18/2002

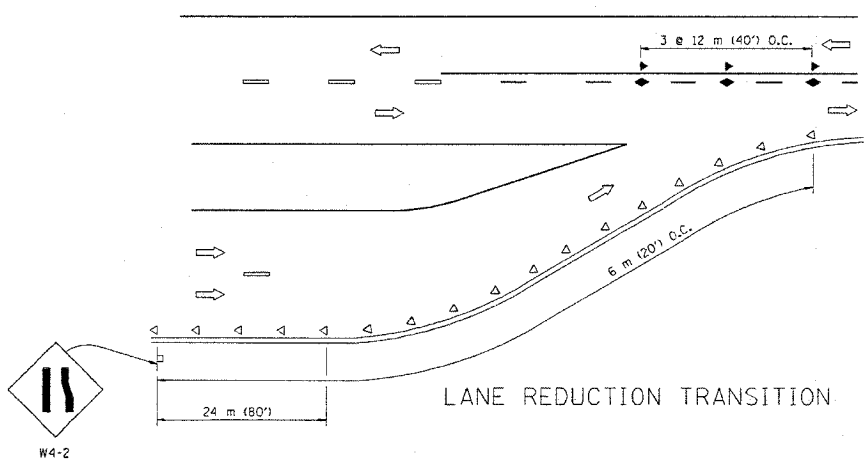
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CHECKED BY

62855

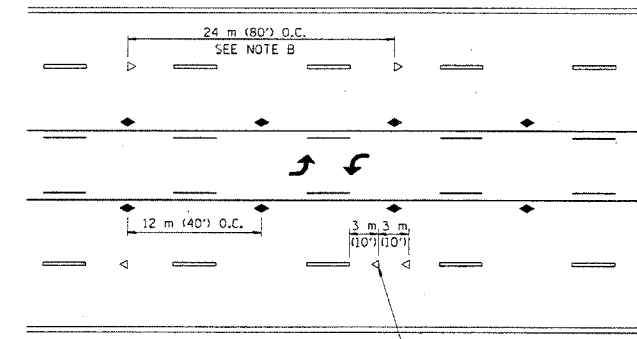
F.A. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.		TO STA.		
FED. ROAD DIST. NO.	ALTIMETER	FED. AID PROJECT		



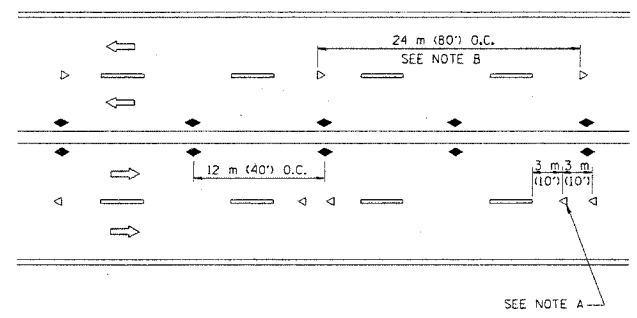
TWO-LANE/TWO-WAY



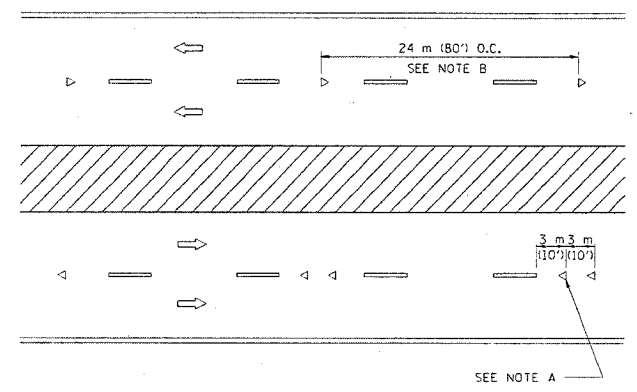
LANE REDUCTION TRANSITION



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 50 TO 75 (2 TO 3) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 150 m (500') IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

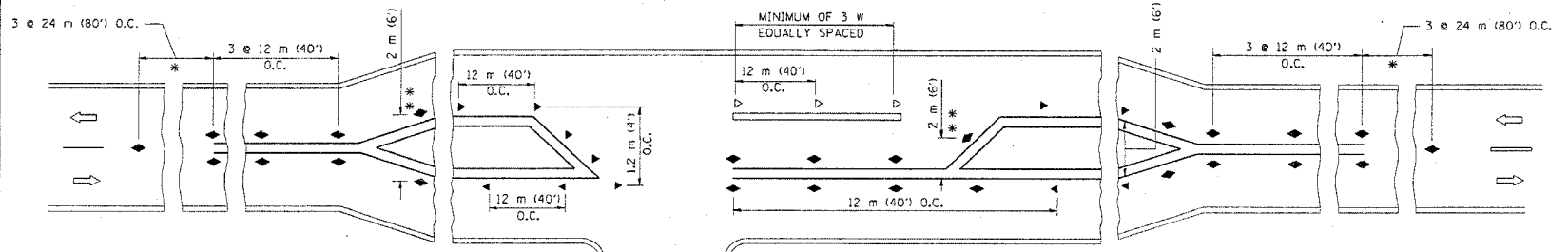
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- B. REDUCE TO 12 m (40') O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 20 km/h (10 M.P.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 2 m (6') OR LESS USE TWO-WAY MARKERS.

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

ILLINOIS DEPARTMENT OF TRANSPORTATION
TYPICAL APPLICATIONS
RAISED REFLECTIVE PAVEMENT MARKERS
(SNOW-PLOW RESISTANT)

REVISIONS	
NAME	DATE
T. RAMMACHER	09-19-94
T. RAMMACHER	03-12-99
T. RAMMACHER	01-06-00

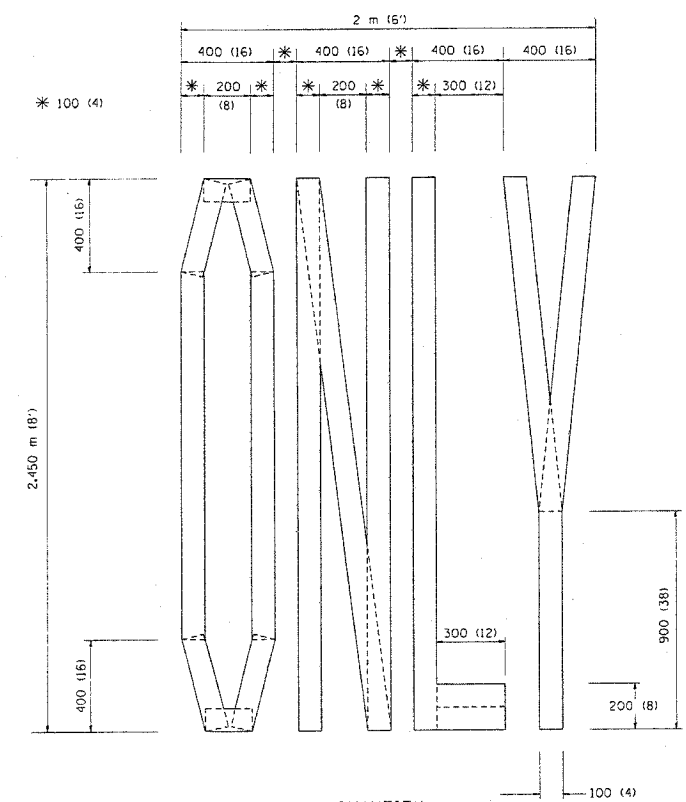
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DATE: 10/18/2002

DRAWN BY CADD
CHECKED BY
TC-11

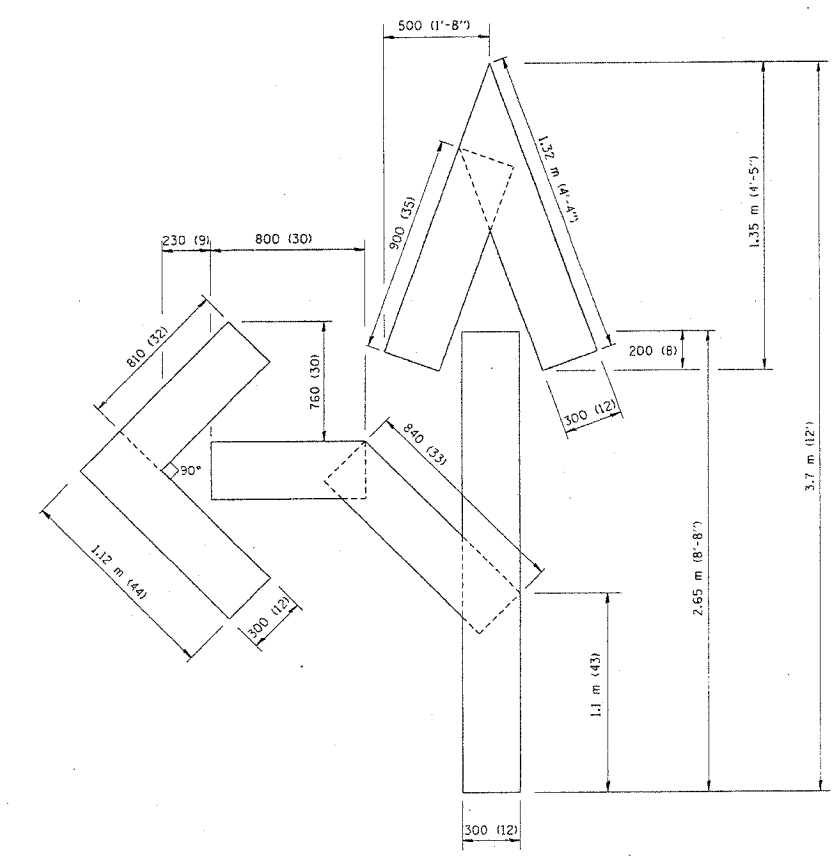
REVISION DATE: 01/06/00

62855

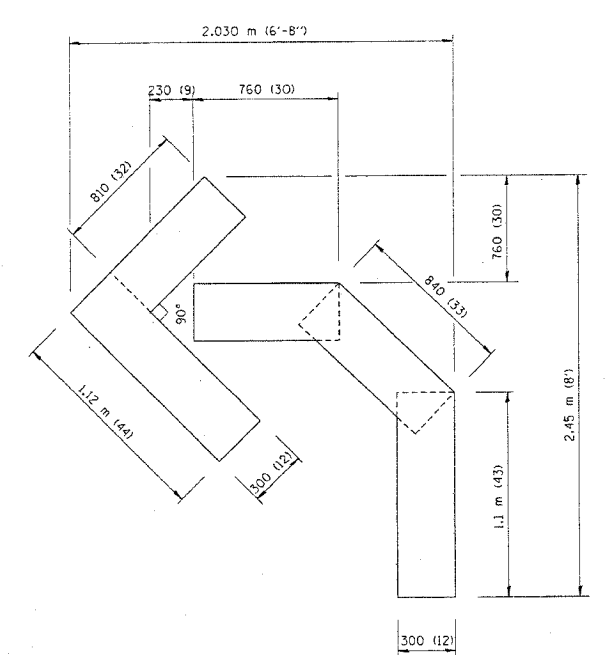
F. A. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			18	17
STA.		TO STA.		
FED. AID DIST. NO.	SUBMIT	FED. AID PROJECT		



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



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



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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING

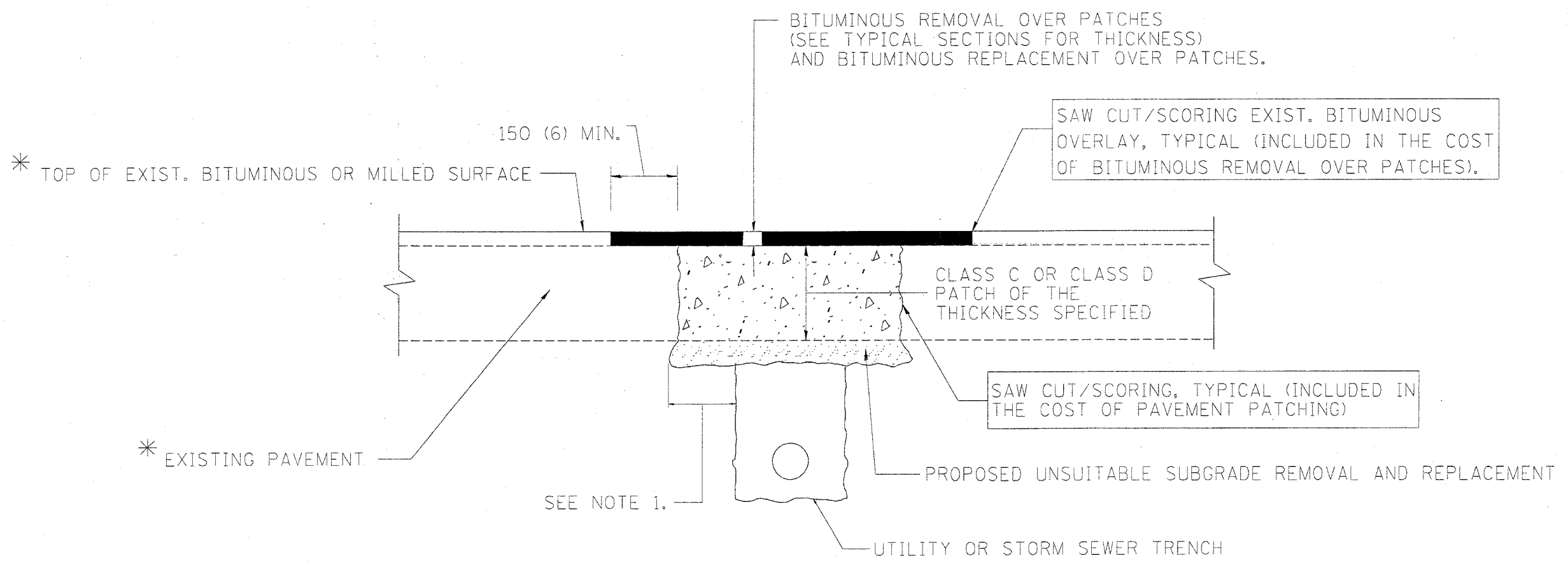
REVISIONS	
NAME	DATE
T. RAMMACHER	09/18/94
J. OBERLE	06/01/96
T. RAMMACHER	06/05/96
T. RAMMACHER	11/04/97
T. RAMMACHER	03/02/98
E. GOMEZ	08/28/00

SCALE: NONE
 DATE 10/18/2002

DRAWN BY CADD
 CHECKED BY TC-16

62855

F. N. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			18	18
STA.	TO STA.			
FED. ROAD DIST. NO.	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 300 (12) WIDER ON EACH SIDE OF THE TRENCH.
2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE SPECIAL PROVISION "PATCHING WITH BITUMINOUS OVERLAY REMOVAL".

SEQUENCE OF CONSTRUCTION

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT PATCHING FOR BITUMINOUS SURFACED PAVEMENT

REVISIONS		REVISIONS	
NAME	DATE	NAME	DATE
R. SHAH	10/25/94	ART ABBAS	04/27/98
R. SHAH	01/14/95		
R. SHAH	03/23/95		
R. SHAH	04/24/95		
A. HOUSEH	03/15/96		
A. ABBAS	03/21/97		
A. ABBAS	01/20/98		

SCALE: NONE
DATE 10/18/2002

DRAWN BY
CHECKED BY

BD400-04 (BD-22)
REVISION DATE: 04/27/98