

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPOSED  
HIGHWAY PLANS**

FAU ROUTE 3887: IL 31  
McHENRY COUNTY LINE TO STROM DRIVE  
SECTION S-RS-5

**RESURFACING (3P) AND MILLED RUMBLE STRIP  
KANE COUNTY  
C-91-466-11**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	S-RS-5	KANE	33	1
		ILLINOIS	CONTRACT NO. 60P12	

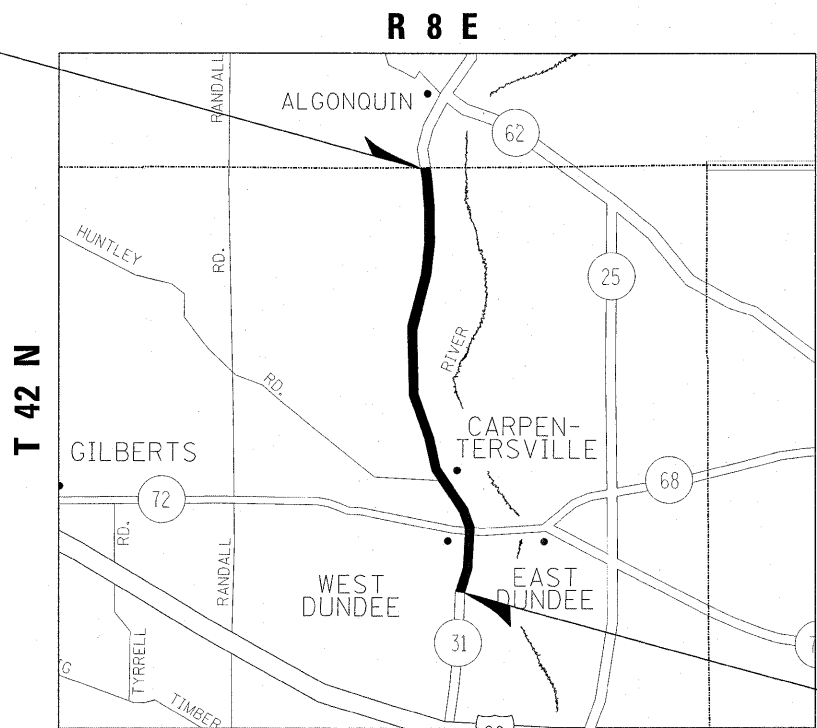
FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT IS LOCATED IN THE VILLAGES OF ALGONQUIN, WEST DUNDEE & CARPENTERSVILLE



PROJECT ENDS:  
STATION 598 + 71

OMISSIONS:  
372 + 82 TO 391 + 29  
420 + 18 TO 426 + 57

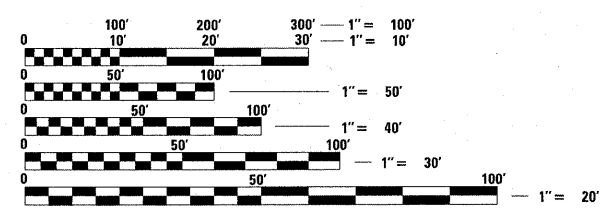


**TRAFFIC DATA:**

IL 31 (NORTH OF HUNTLEY ROAD)  
SPEED LIMIT = 35 - 50 MPH  
2009 ADT = 18,100

IL 31 (SOUTH OF HUNTLEY ROAD)  
SPEED LIMIT = 35 MPH  
2009 ADT = 28,900

PROJECT BEGINS:  
STATION 354 + 00



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

CONTRACT NO. 60P12

GROSS LENGTH = 24,471 FEET = 4.63 MILES  
NET LENGTH = 21,985 FEET = 4.16 MILES

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED OCTOBER 25, 20 11

*Diana M. O'Keefe* DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER  
December 9 20 11

*Scott E. Stitt P.E.* acting ENGINEER OF DESIGN AND ENVIRONMENT  
December 9 20 11

*William R. Fleury* INTERIM DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS**

INDEX OF SHEETS

STATE STANDARDS

GENERAL NOTES

<u>SHEET NO.</u>	<u>DESCRIPTION</u>	<u>STANDARD NO.</u>	<u>DESCRIPTION</u>
1	TITLE SHEET	000001-06	TYPICAL SYMBOLS, ABBREVIATIONS AND PATTERNS
2	INDEX OF SHEETS, STATE STANDARDS & GENERAL NOTES	442201-03	CLASS C AND D PATCHES
3-4	SUMMARY OF QUANTITIES	604001-03	FRAME AND LIDS, TYPE 1
5	SCHEDULE OF SIGN QUANTITIES	604091-02	FRAME AND GRATE, TYPE 24
6-7	EXISTING AND PROPOSED TYPICAL SECTIONS	606001-04	CONCRETE CURB AND COMBINATION CONCRETE CURB AND GUTTER
8-16	ROADWAY AND PAVEMENT MARKING PLANS	635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
17-20	DETECTOR LOOP REPLACEMENT PLANS	701011-02	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
21	DETAILS FOR FRAME AND LIDS ADJUSTMENT WITH MILLING	701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
22	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT	701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS, DAY ONLY
23	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT	701427	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS < 40MPH
24	BUTT JOINT AND HMA TAPER DETAILS	701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
25	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS	701601-07	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
26	TYPICAL APPLICATIONS: RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)	701602-05	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
27	DISTRICT ONE TYPICAL PAVEMENT MARKINGS	701701-08	URBAN LANE CLOSURE, MULTILANE INTERSECTION
28	TRAFFIC CONTROL AND PROTECTION OF TURN BAYS (TO REMAIN OPEN TO TRAFFIC)	701901-02	TRAFFIC CONTROL DEVICES
29	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING	720006-03	SIGN PANEL ERECTION DETAILS
30	ARTERIAL INFORMATION SIGNING	728001-01	TELESCOPING STEEL SIGN SUPPORT
31	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS	886001-01	DETECTOR LOOP INSTALLATION
32	DISTRICT ONE DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING	886006-01	TYPICAL LAYOUT FOR DETECTION LOOPS
33	RUMBLE STRIPES FOR CENTERLINE, NON-FREEWAY		

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

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

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE VILLAGES OF ALGONQUIN, CARPENTERSVILLE & WEST DUNDEE.

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

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 OVER 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 OF 1:3 (V:H).

WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISABILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.

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

BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.

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

THE RESIDENT ENGINEER SHALL CONTACT MR. DON CHIARUGI, AREA TRAFFIC FIELD ENGINEER, AT (847) 741-9857 A MINIMUM OF 2 WEEKS PRIOR TO PLACEMENT OF FINAL PAVEMENT MARKINGS.

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

THE CONTRACTOR IS REQUIRED TO SAMPLE AND TEST THE UNSUITABLE MATERIAL BEING REMOVED FROM STATE PROPERTY PER ART. 669 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THE TESTING OF THE MATERIAL WILL BE PAID FOR PER ART. 109.04.

FILE NAME =	USER NAME = velichkovv	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL 31 (McHENRY COUNTY LINE - STROM DRIVE) INDEX OF SHEETS, STATE STANDARDS &amp; GENERAL NOTES</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct\pw_work\p\eridot\velichkovv\d0270384\146611-shit-plan.dgn	DRAWN -	REVISED -	3887			S-RS-5	KANE	33	2	
PLOT SCALE = 50.0000' / 1"	CHECKED -	REVISED -	CONTRACT NO. 60P12							
PLOT DATE = 11/1/2011	DATE -	REVISED -	ILLINOIS FED. AID PROJECT							
					SCALE: NONE	SHEET NO. 2 OF 33 SHEETS		STA. 354+00 TO STA. 601+09		

SUMMARY OF QUANTITIES			URBAN TOTAL QUANTITIES		CONSTRUCTION TYPE CODE				SUMMARY OF QUANTITIES			URBAN TOTAL QUANTITIES		CONSTRUCTION TYPE CODE			
CODE NO	ITEM	UNIT	URBAN TOTAL QUANTITIES	100% STATE					CODE NO	ITEM	UNIT	URBAN TOTAL QUANTITIES	100% STATE				
				0005									0005				
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	186	186					70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	1				
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	1194	1194					70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1				
21400100	GRADING AND SHAPING DITCHES	FOOT	1000	1000					70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1	1				
25000210	SEEDING, CLASS 2A	ACRE	0.23	0.23					70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1				
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	21	21					70300100	SHORT TERM PAVEMENT MARKING	FOOT	12930	12930				
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	21	21					70300210	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS	SQ FT	697	697				
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	21	21					70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	58437	58437				
25100630	EROSION CONTROL BLANKET	SQ YD	1111	1111					70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	2874	2874				
25200110	SODDING, SALT TOLERANT	SQ YD	83	83					70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	483	483				
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	71	71					70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	412	412				
40600300	AGGREGATE (PRIME COAT)	TON	355	355					70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	1437	1437				
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	133	133					* 72000100	SIGN PANEL - TYPE 1	SQ FT	185	185				
40600827	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	3653	3653					* 72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	39	39				
40600895	CONSTRUCTING TEST STRIP	EACH	2	2					* 72400310	REMOVE SIGN PANEL - TYPE 1	SQ FT	185	185				
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	429	429					* 72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	341	341				
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	4484	4484					* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	697	697				
40603595	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90	TON	3449	3449					* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	58437	58437				
42001300	PROTECTIVE COAT	SQ YD	222	222					* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	2874	2874				
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	53370	53370					* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	483	483				
44000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"	SQ YD	35187	35187					* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	412	412				
44201803	CLASS D PATCHES, TYPE II, 13 INCH	SQ YD	2042	2042					* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	657	657				
44201807	CLASS D PATCHES, TYPE III, 13 INCH	SQ YD	897	897					78200420	GUARDRAIL MARKERS, TYPE B	EACH	83	83				
44201809	CLASS D PATCHES, TYPE IV, 13 INCH	SQ YD	1346	1346					78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	592	592				
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	654	654					* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	1254	1254				
60250200	CATCH BASINS TO BE ADJUSTED	EACH	1	1					X0326898	CENTER LINE - RUMBLE STRIP - 16"	FOOT	8888	8888				
60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	20	20					X2020110	GRADING AND SHAPING SHOULDERS	UNIT	327	327				
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	10	10					X6030310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	20	20				
60404950	FRAMES AND GRATES, TYPE 24	EACH	10	10													
60406000	FRAMES AND LIDS, TYPE 1, OPEN LID	EACH	2	2													
60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	10	10													
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6													
67100100	MOBILIZATION	L SUM	1	1													

SUMMARY OF QUANTITIES			URBAN	CONSTRUCTION TYPE CODE					SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE							
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	100% STATE						CODE NO	ITEM	UNIT	TOTAL QUANTITIES						
				0005															
*X7800815	HOT SPRAY THERMOPLASTIC PAVEMENT MARKING LINE - 4 INCH	FOOT	11944	11944															
Z0004562	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	998	998															
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	30	30															
Z0030850	TEMPORARY INFORMATION SIGNING	SO FT	51.4	51.4															
* SPECIALTY ITEMS																			

SCHEDULE OF QUANTITIES - SIGNS

SIGN	SIGN PANEL ASSEMBLY REMOVAL (EACH)	SIGN ID #	SIZE (inches)			SIGN PANEL TYPE 1 (SQ.FT.)
				x		
Illinois/Adopt-A-Highway	1	I-107	30	x	36	7.5
Speed Limit	8	R2-1	24	x	30	40
Intersection Warning	3	W2-2R	30	x	30	18.75
Intersection Warning	2	W2-2L	30	x	30	12.5
Advance Street Name (1-line)	5	W16-8P	24	x	9	7.5
Stop	5	R1-1	30	x	30	31.25
Object Marker (Type 2)	1	N/A	6	x	12	0.5
Unlawful to Pass School Bus	2	S4-I105	30	x	30	12.5
No Parking (On Shoulder)	1	R8-2a	24	x	30	5
No Passing Zone (pennant)	4	W14-3	48	x	48 x 36	16
Cardinal Direction	1	M3-1	24	x	12	2
Illinois Route Sign (2 digits)	1	M1-I100	24	x	24	4
Truck	1	W11-10	30	x	30	6.25
Horizontal Alignment	1	W1-2L	30	x	30	6.25
Horizontal Alignment	2	W1-4R	30	x	30	12.5
Accident Marker	1	XM-1	18	x	18	2.25
<b>Total</b>	<b>39</b>					<b>184.75</b>

NOTES:

ALL SIGN PANELS AND SIGN SUPPORTS ARE TO BE REPLACED BETWEEN STATION 500+00 AND STATION 592+32.

SIGN LOCATIONS AS SHOWN IN THE PLANS ARE APPROXIMATE AND ARE TO BE FIELD VERIFIED PRIOR TO REMOVAL.

**LEGEND**

- ① EXIST. HOT-MIX ASPHALT BASE COURSE, 8''(±)
- ② EXIST. HOT-MIX ASPHALT SURFACE (BEFORE MILLING), 7''(±)
- ③ EXIST. CONCRETE CURB AND GUTTER TYPE B-6.24
- ④ EXIST. CONCRETE CURB AND GUTTER TYPE M-2.12
- ⑤ EXIST. STABILIZED MEDIAN 12''(±)
- ⑥ EXIST. SUBBASE GRANULAR MATERIAL 4''(±)
- ⑦ PROP. HOT-MIX ASPHALT SURFACE REMOVAL - 2 1/2''
- ⑧ PROP. POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1 3/4''
- ⑨ PROP. POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50, 3/4''
- ⑩ PROP. CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT (LOCATIONS TO BE DETERMINED BY THE RESIDENT ENGINEER)

**NOTES:**

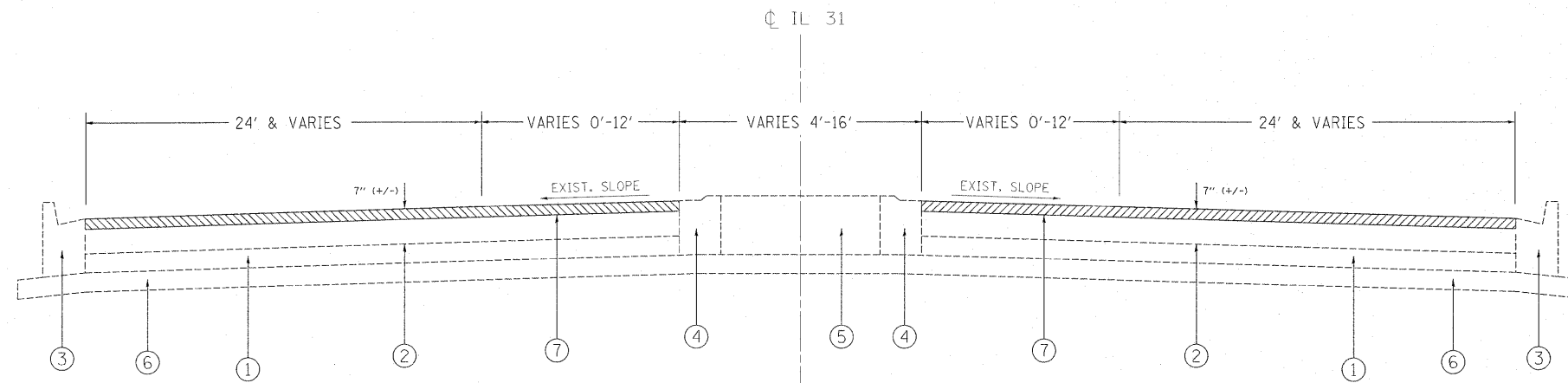
1. SEE ROADWAY AND PAVEMENT MARKING PLAN SHEETS FOR LOCATIONS OF LEFT TURN LANES AND PAINTED MEDIANS.
2. MILLING OF THE ROADWAY SHALL BE DONE PRIOR TO PAVEMENT PATCHING.

**HOT-MIX ASPHALT MIXTURE REQUIREMENTS**

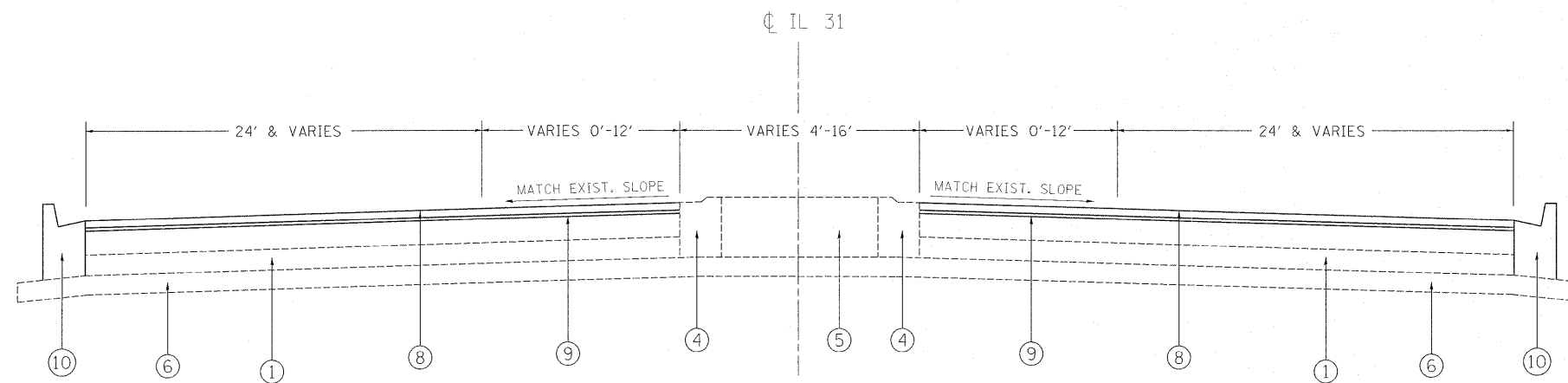
	MIXTURE TYPE	AIR VOIDS (%)
ROADWAY	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, (IL-9.5MM), 1 1/2''	4% @ 70 GYR
	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, (IL-9.5MM), 1 3/4''	4% @ 90 GYR
	POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50, 3/4''	4% @ 50 GYR
PATCHES	CLASS D PATCHES (HMA BINDER IL-19 mm)	4% @ 70 GYR

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

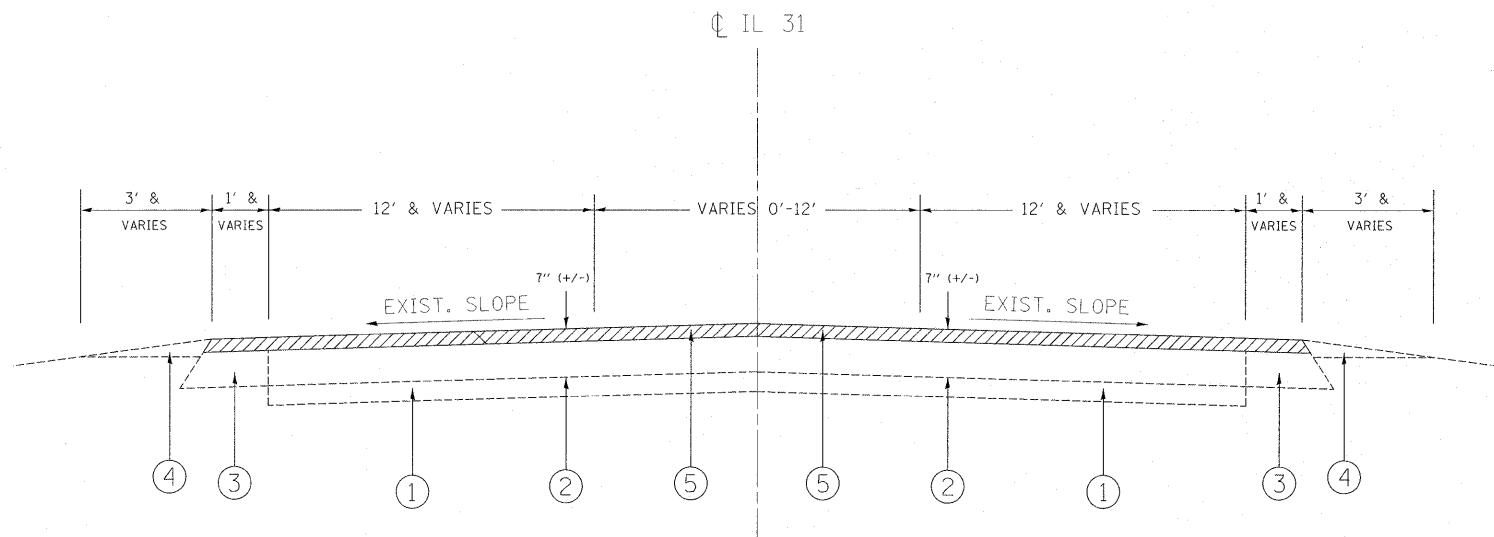
THE "AC TYPE" FOR ALL POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 70-22 AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.



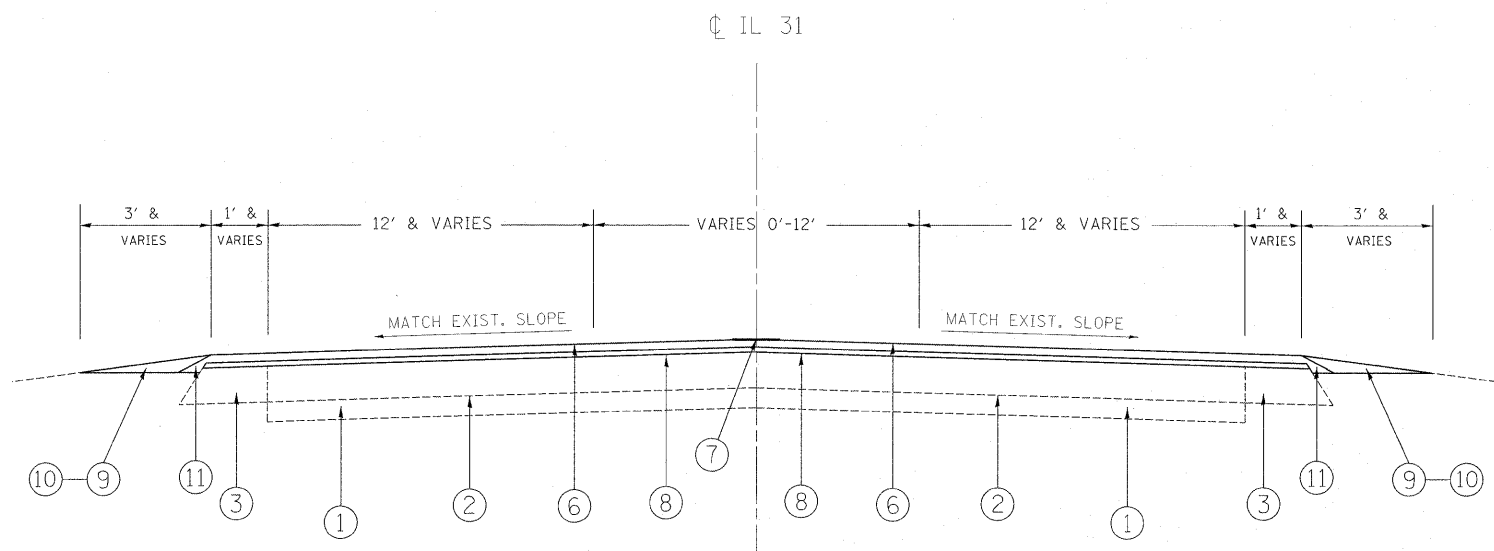
**EXISTING TYPICAL SECTION  
IL 31  
STATION:  
354+00 TO 372+82  
391+29 TO 420+18**



**PROPOSED TYPICAL SECTION  
IL 31  
STATION:  
354+00 TO 372+82  
391+29 TO 420+18**



EXISTING TYPICAL SECTION  
IL 31  
STATION:  
426+57 TO 598+71



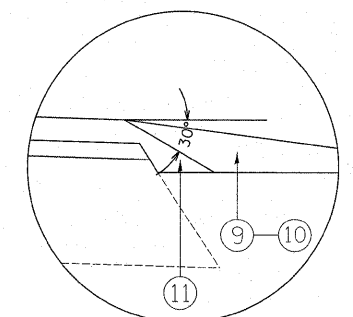
PROPOSED TYPICAL SECTION  
IL 31  
STATION:  
426+57 TO 598+71

**LEGEND**

- ① EXIST. PCC BASE COURSE, 8''(±)
- ② EXIST. HOT-MIX ASPHALT SURFACE COURSE, 7''(±)
- ③ EXIST. HOT-MIX ASPHALT SHOULDER
- \* ④ EXIST. AGGREGATE SHOULDER
- ⑤ PROP. HOT-MIX ASPHALT SURFACE REMOVAL - 2 1/4''
- ⑥ PROP. HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2''
- \*\* ⑦ PROP. CENTERLINE RUMBLE STRIPES
- ⑧ PROP. POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50, 3/4''
- ⑨ PROP. GRADING AND SHAPING SHOULDERS
- ⑩ PROP. AGGREGATE WEDGE SHOULDERS, TYPE B
- \*\*\* ⑪ SAFETY EDGE

**NOTES:**

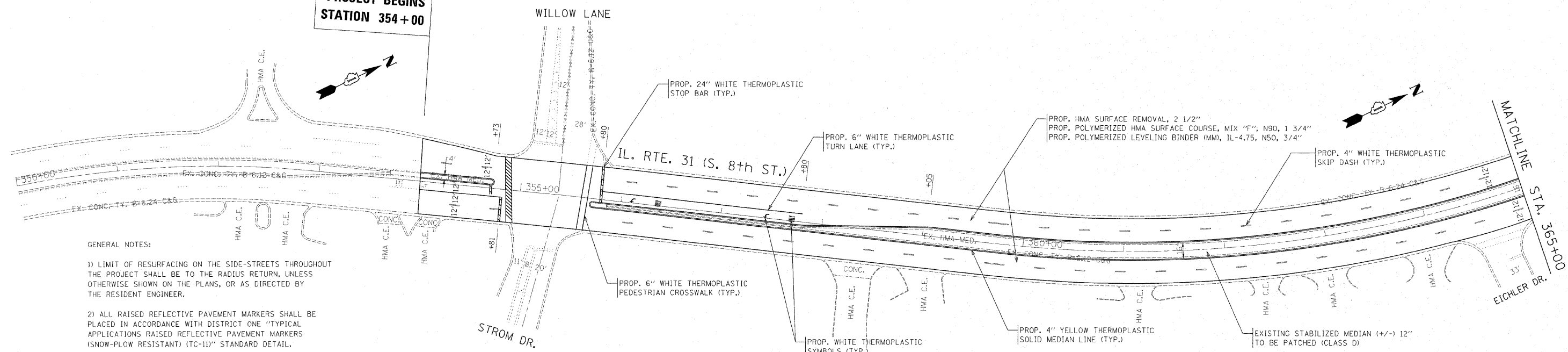
- \* ① EXISTING CURB & GUTTER IS BETWEEN STA. 596+49 AND STA. 598+71.
- \*\* ② CENTERLINE RUMBLE STRIPES TO BE INSTALLED BETWEEN STA. 500+00 AND STA. 592+32 ONLY.
- \*\*\* ③ SAFETY EDGE TO BE INSTALLED IN AREAS BETWEEN STA. 537+00 AND STA. 596+49 ONLY.



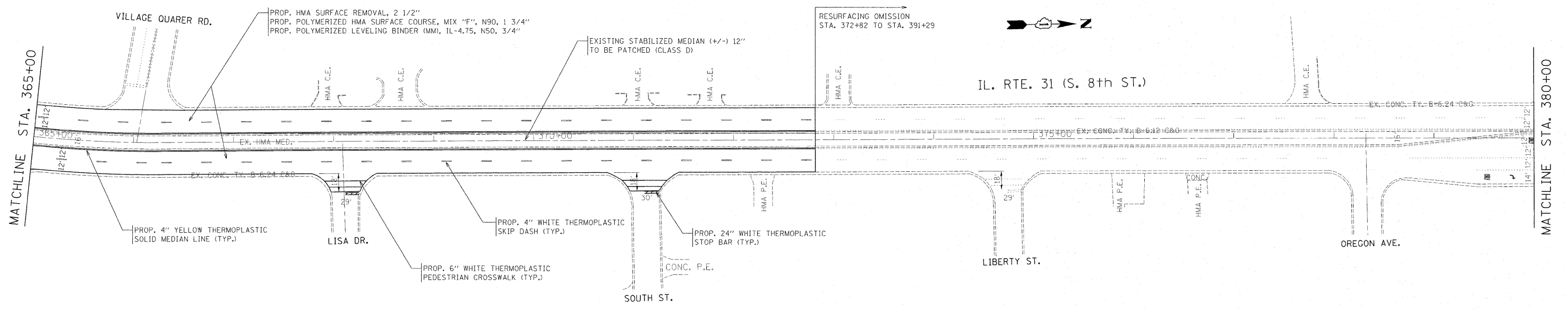
SAFETY EDGE DETAIL  
NTS

FILE NAME =	USER NAME = baskinm	DESIGNED - M. BASKIN	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL 31 (McHENRY COUNTY LINE - STROM DRIVE) EXISTING AND PROPOSED TYPICAL SECTIONS</b>	F.A.U. RTE. 3887	SECTION S-RS-5	COUNTY KANE	TOTAL SHEETS 33	SHEET NO. 7		
ct:\pw_work\pwwork\baskinm\d0270384\0146611-sht-plan.dgn	PLT SCALE = 50.0000' / 1"	CHECKED -	REVISED -			SCALE: N/A	SHEET NO. 7 OF 33 SHEETS	STA. 354+00 TO STA. 598+71	CONTRACT NO. 60P12			
	PLT DATE = 10/25/2011	DATE -	REVISED -			FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT						

**PROJECT BEGINS  
STATION 354+00**

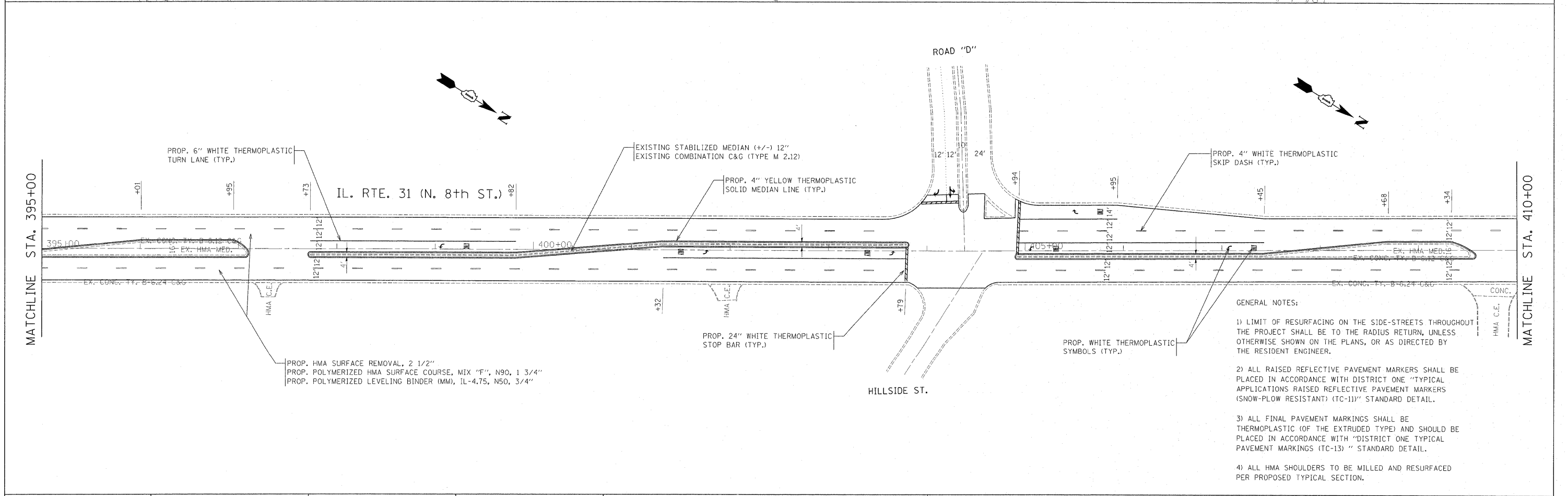
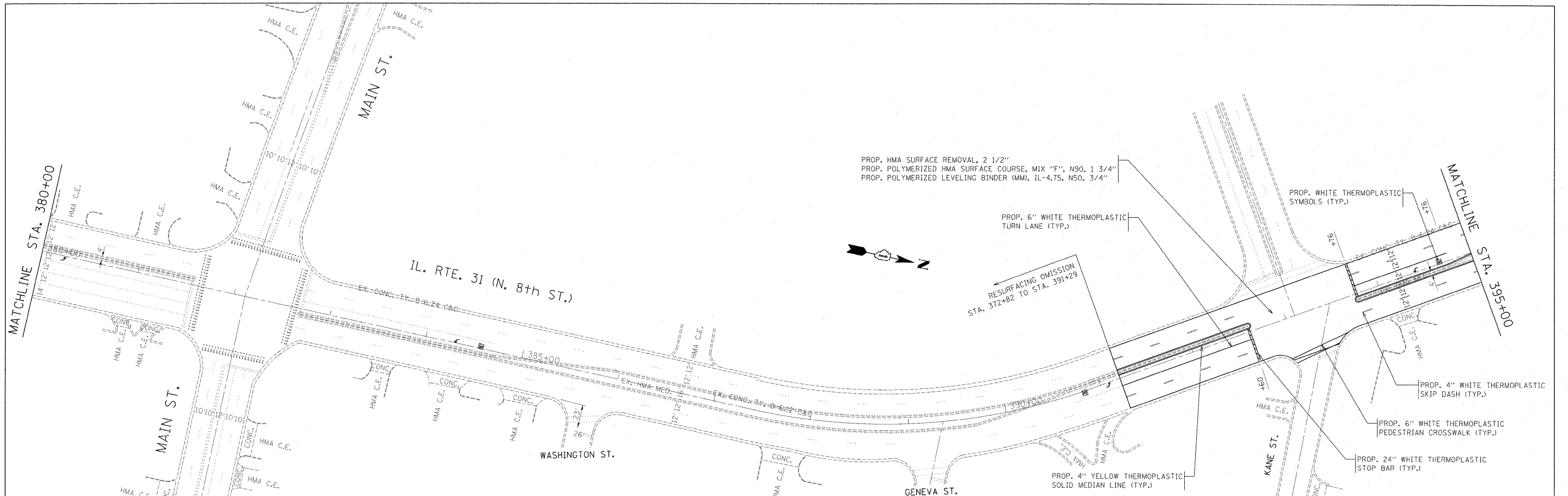


- GENERAL NOTES:**
- 1) LIMIT OF RESURFACING ON THE SIDE-STREETS THROUGHOUT THE PROJECT SHALL BE TO THE RADIUS RETURN, UNLESS OTHERWISE SHOWN ON THE PLANS, OR AS DIRECTED BY THE RESIDENT ENGINEER.
  - 2) ALL RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH DISTRICT ONE TYPICAL APPLICATIONS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



FILE NAME =	USER NAME = beakrmi	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL 31 (McHENRY COUNTY LINE - STROM DRIVE) ROADWAY &amp; PAVEMENT MARKINGS PLANS</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
et:\pwwork\pwwork\beakrmi\d0270384\014611-sht-plan.dgn	PLOT SCALE = 50.0000' / 1" =	DRAWN -	REVISED -			3887	S-RS-5	KANE	33	8	
PLOT DATE = 10/25/2011	CHECKED -	REVISED -	SCALE: 1" = 50'			SHEET NO. 8 OF 33 SHEETS	STA. 354+00 TO STA. 598+71	CONTRACT NO. 60P12			
	DATE -	REVISED -	ILLINOIS FED. AID PROJECT								





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

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USER NAME = besk\m  
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 PLOT DATE = 10/25/2011

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 DATE -

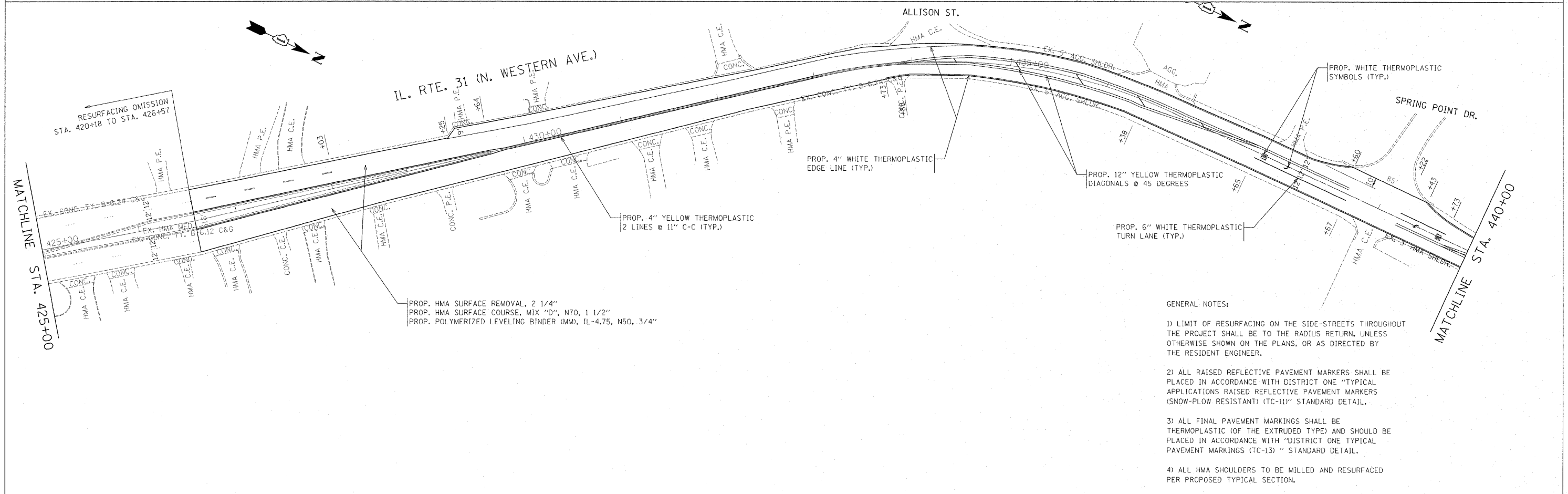
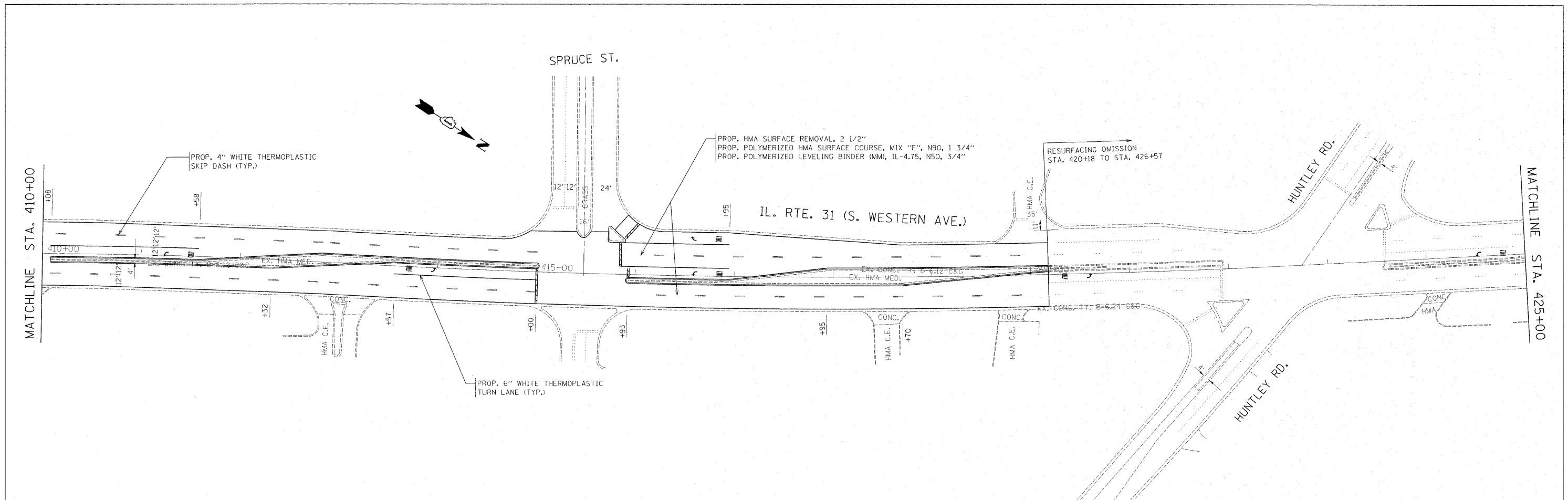
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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**IL 31 (McHENRY COUNTY LINE - STROM DRIVE)  
 ROADWAY & PAVEMENT MARKINGS PLANS**

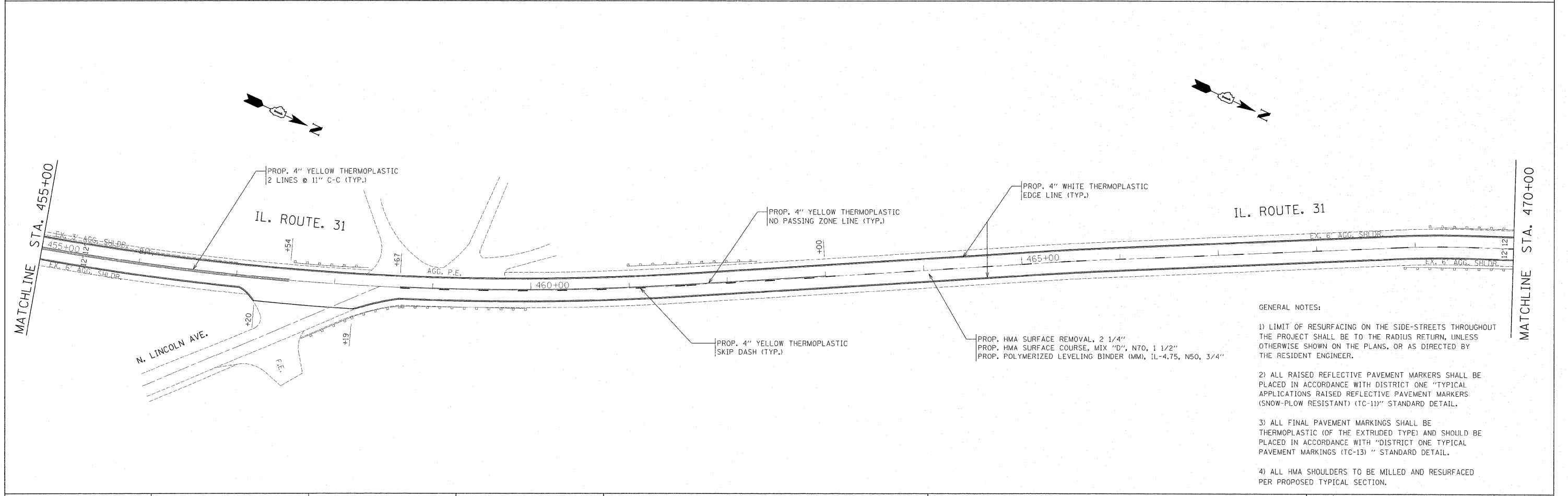
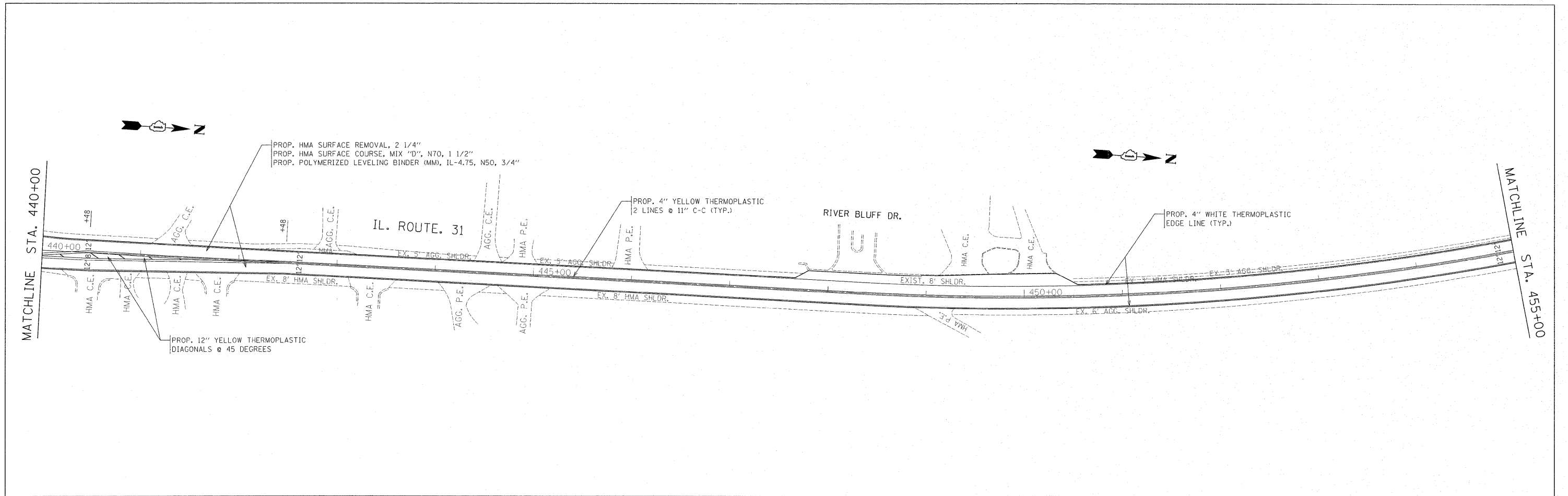
SCALE: 1" = 50' SHEET NO. 9 OF 33 SHEETS STA. 354+00 TO STA. 598+71

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	S-RS-5	KANE	33	9
				CONTRACT NO. 60P12
ILLINOIS FED. AID PROJECT				



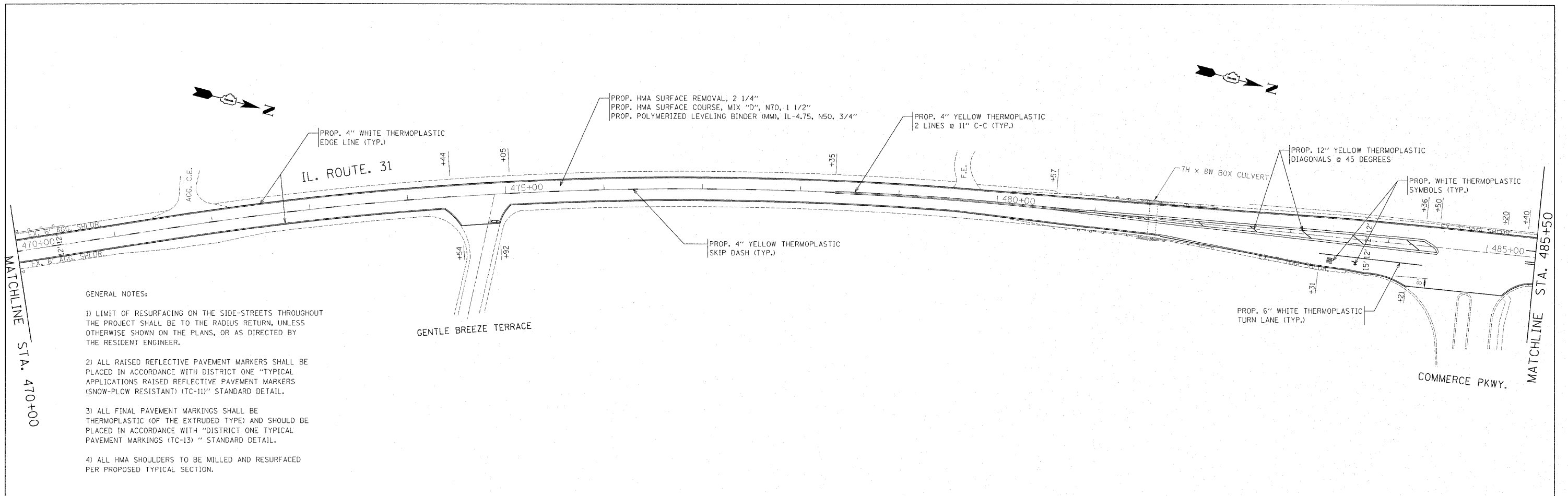
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  - 4) ALL HMA SHOULDERS TO BE MILLED AND RESURFACED PER PROPOSED TYPICAL SECTION.

FILE NAME =	USER NAME = baskinm	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL 31 (McHENRY COUNTY LINE - STROM DRIVE) ROADWAY &amp; PAVEMENT MARKINGS PLANS</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pw\work\pwr\dot\baskinm\0270384\0146	111-sht-plan.dgn	DRAWN -	REVISED -			3887	S-RS-5	KANE	33	10
PLOT SCALE = 50.0000' / 1"		CHECKED -	REVISED -			CONTRACT NO. 60P12				
PLOT DATE = 10/25/2011		DATE -	REVISED -			ILLINOIS FED. AID PROJECT				

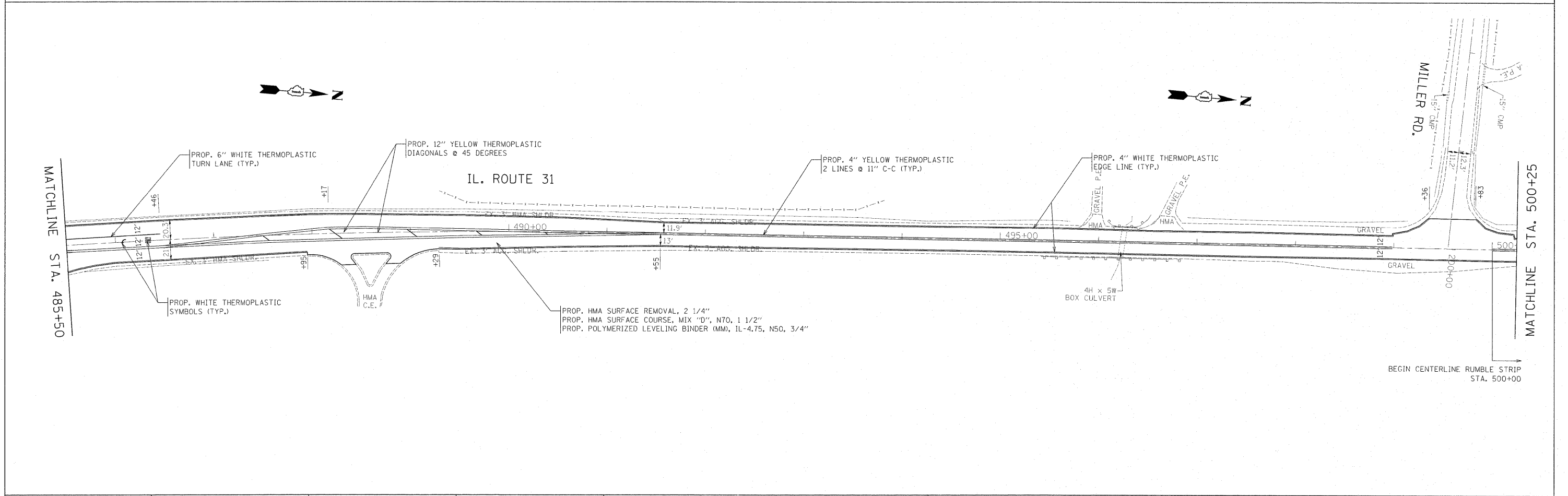


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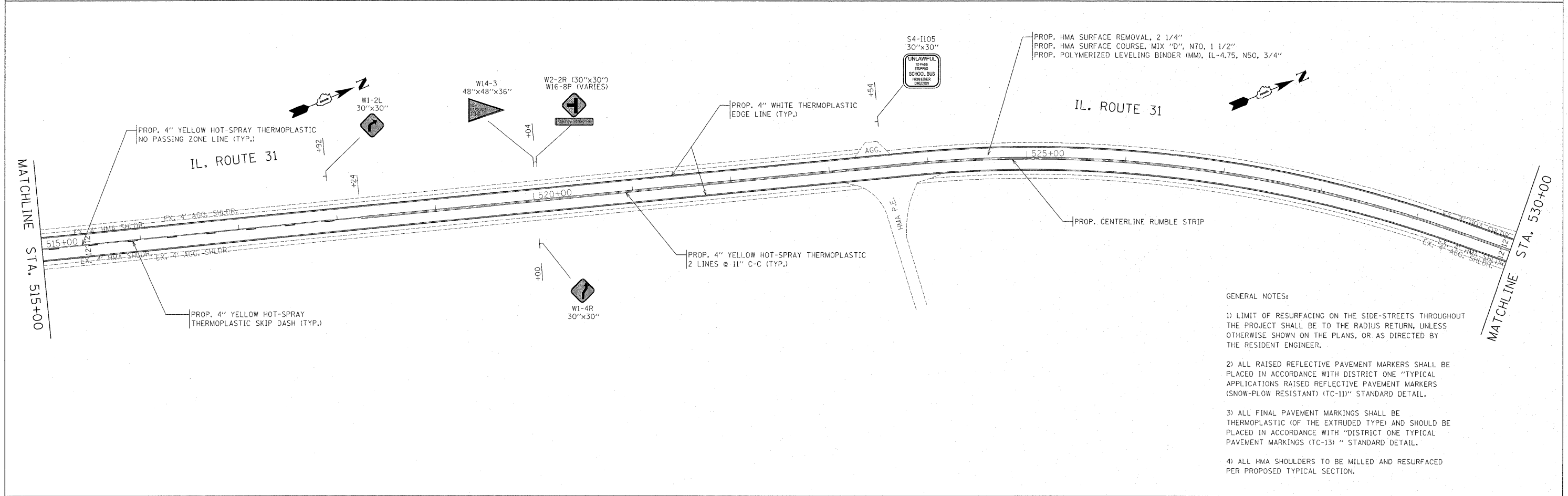
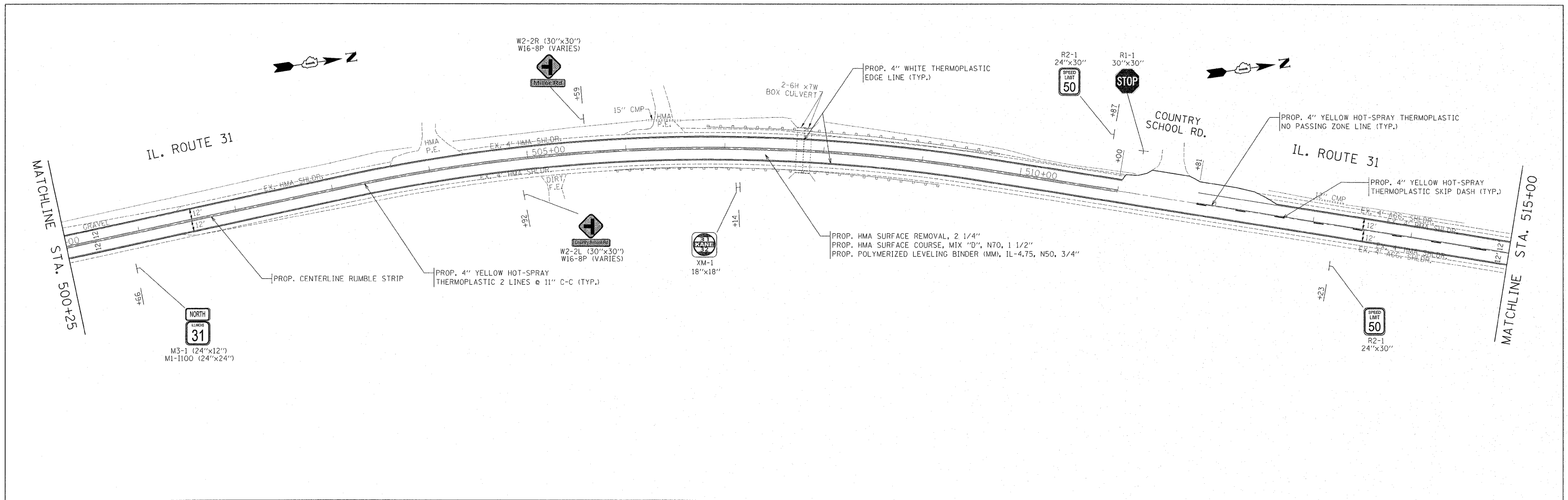
FILE NAME =	USER NAME = baskinm	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL 31 (McHENRY COUNTY LINE - STROM DRIVE) ROADWAY &amp; PAVEMENT MARKINGS PLANS</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pw_work\pwork\baskinm\d0270384\0146511-shp-plan.dgn	PLOT SCALE = 50,0000' / 1"	DRAWN -	REVISED -			3887	S-RS-5	KANE	33	11	
PLOT DATE = 10/25/2011	DATE -	CHECKED -	REVISED -			SCALE: 1" = 50'		SHEET NO. 11 OF 33 SHEETS		STA. 354+00 TO STA. 598+71	
						CONTRACT NO. 60P12					



- GENERAL NOTES:
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  - 4) ALL HMA SHOULDERS TO BE MILLED AND RESURFACED PER PROPOSED TYPICAL SECTION.

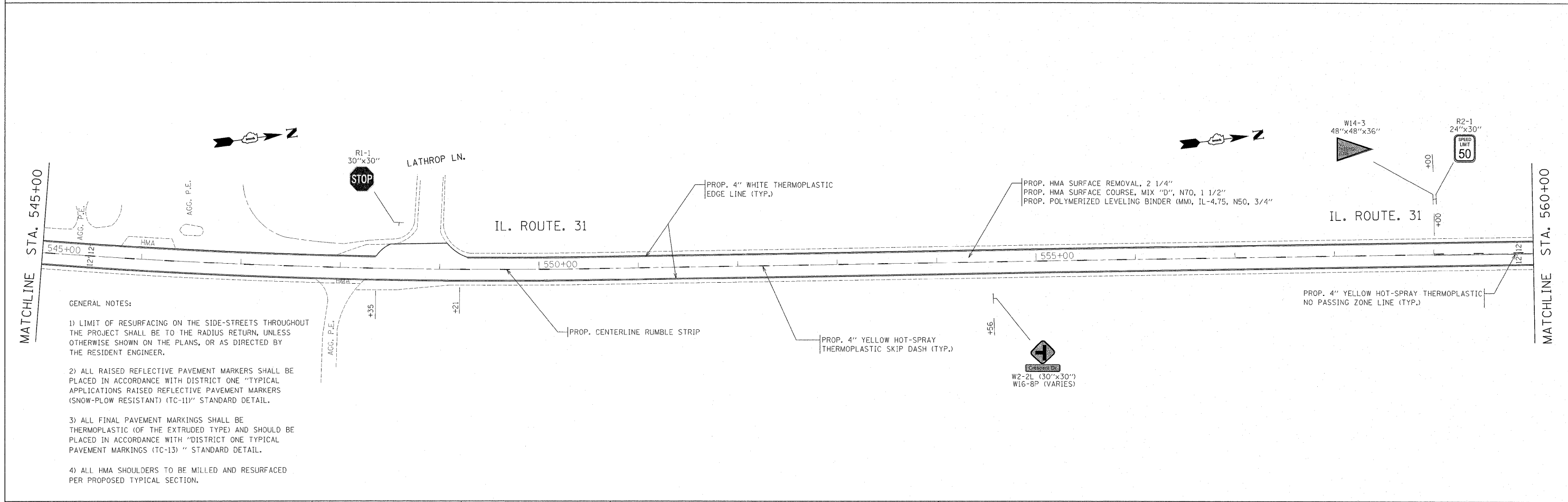
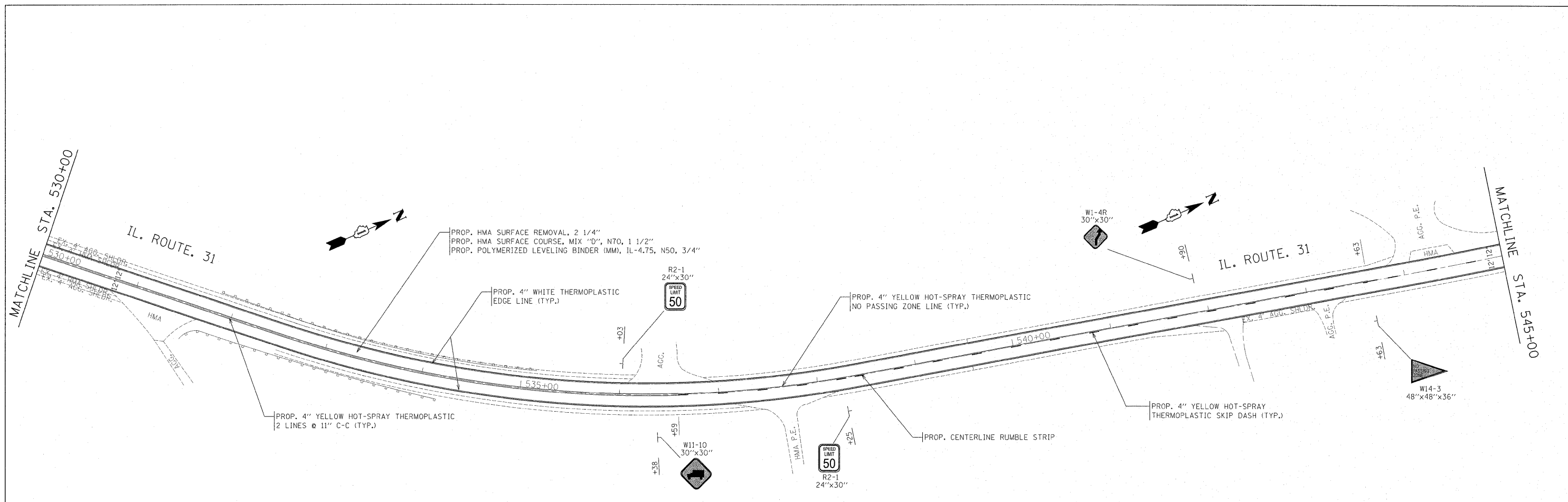


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	PLOT SCALE = 50.0000' / 1" =	CHECKED -	REVISED -			SCALE: 1" = 50'	SHEET NO. 12 OF 33 SHEETS	STA. 354+00 TO STA. 598+71	CONTRACT NO. 60P12	
PLOT DATE = 10/25/2011	DATE -	REVISED -	REVISED -							



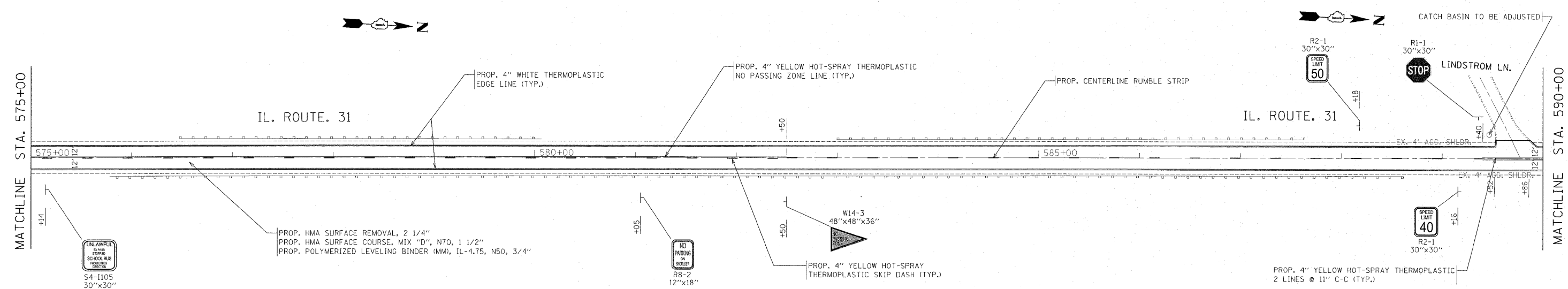
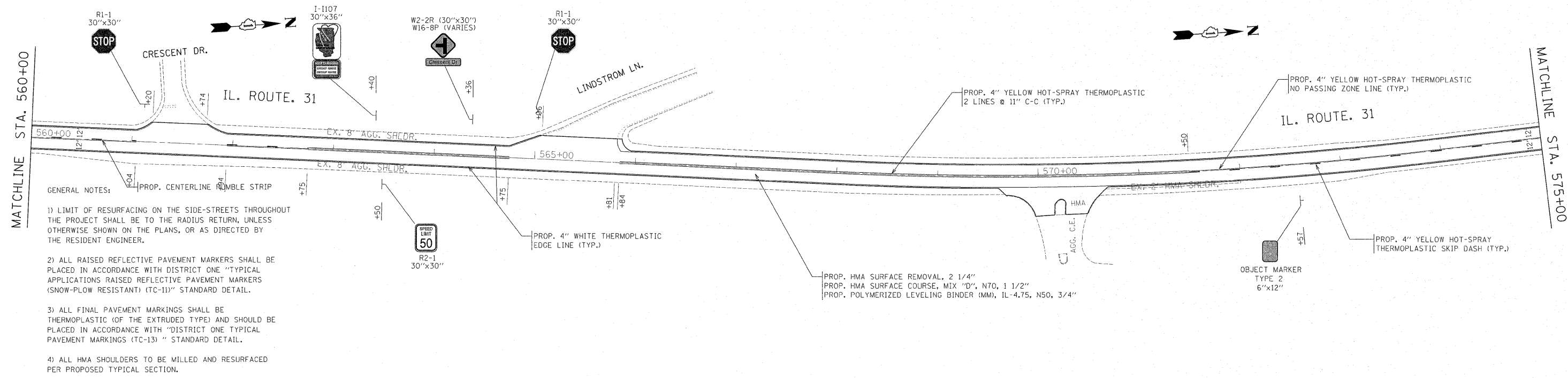
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  - 4) ALL HMA SHOULDERS TO BE MILLED AND RESURFACED PER PROPOSED TYPICAL SECTION.

FILE NAME =	USER NAME = basknm	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL 31 (McHENRY COUNTY LINE - STROM DRIVE) ROADWAY &amp; PAVEMENT MARKINGS PLANS</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
es:\pw_work\pwsdot\basknm\d0270384\0146611-sht-plan.dgn	PLOT SCALE = 50.0000' / 1" =	DRAWN -	REVISED -			3887	S-RS-5	KANE	33	13	
PLOT DATE = 10/25/2011	DATE -	CHECKED -	REVISED -			CONTRACT NO. 60P12					
						ILLINOIS FED. AID PROJECT					

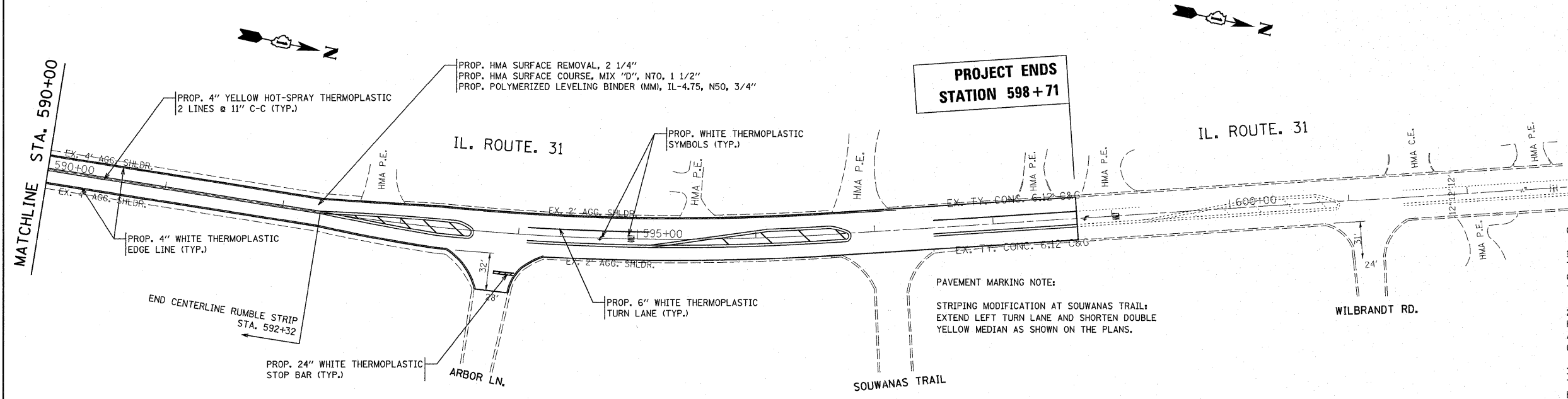


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  - 4) ALL HMA SHOULDERS TO BE MILLED AND RESURFACED PER PROPOSED TYPICAL SECTION.

FILE NAME =	USER NAME = baskrnmj	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL 31 (McHENRY COUNTY LINE - STROM DRIVE) ROADWAY &amp; PAVEMENT MARKINGS PLANS</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwwork\pwwork\pwwork\pwwork\d0270384\0146611-sht-plen.dgn	PLOT SCALE = 50.0000' / in.	DRAWN -	REVISED -			3887	S-RS-5	KANE	33	14	
PLOT DATE = 10/25/2011	DATE -	CHECKED -	REVISED -			CONTRACT NO. 60P12		ILLINOIS FED. AID PROJECT			
						SCALE: 1" = 50'	SHEET NO. 14 OF 33 SHEETS	STA. 354+00 TO STA. 598+71			



FILE NAME =	USER NAME = baskinn	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL 31 (McHENRY COUNTY LINE - STROM DRIVE) ROADWAY &amp; PAVEMENT MARKINGS PLANS</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwwork\p1\dot\baskinn\d270384\014	b11-sh1-plan.dgn	DRAWN -	REVISED -			3887	S-RS-5	KANE	33	15	
	PLOT SCALE = 50.0000' / 1" =	CHECKED -	REVISED -			CONTRACT NO. 60P12					
	PLOT DATE = 10/25/2011	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					
					SCALE: 1" = 50'	SHEET NO. 15 OF 33 SHEETS	STA. 354+00 TO STA. 598+71				



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**PROJECT ENDS  
STATION 598+71**

**PAVEMENT MARKING NOTE:**  
STRIPING MODIFICATION AT SOUWANAS TRAIL:  
EXTEND LEFT TURN LANE AND SHORTEN DOUBLE  
YELLOW MEDIAN AS SHOWN ON THE PLANS.

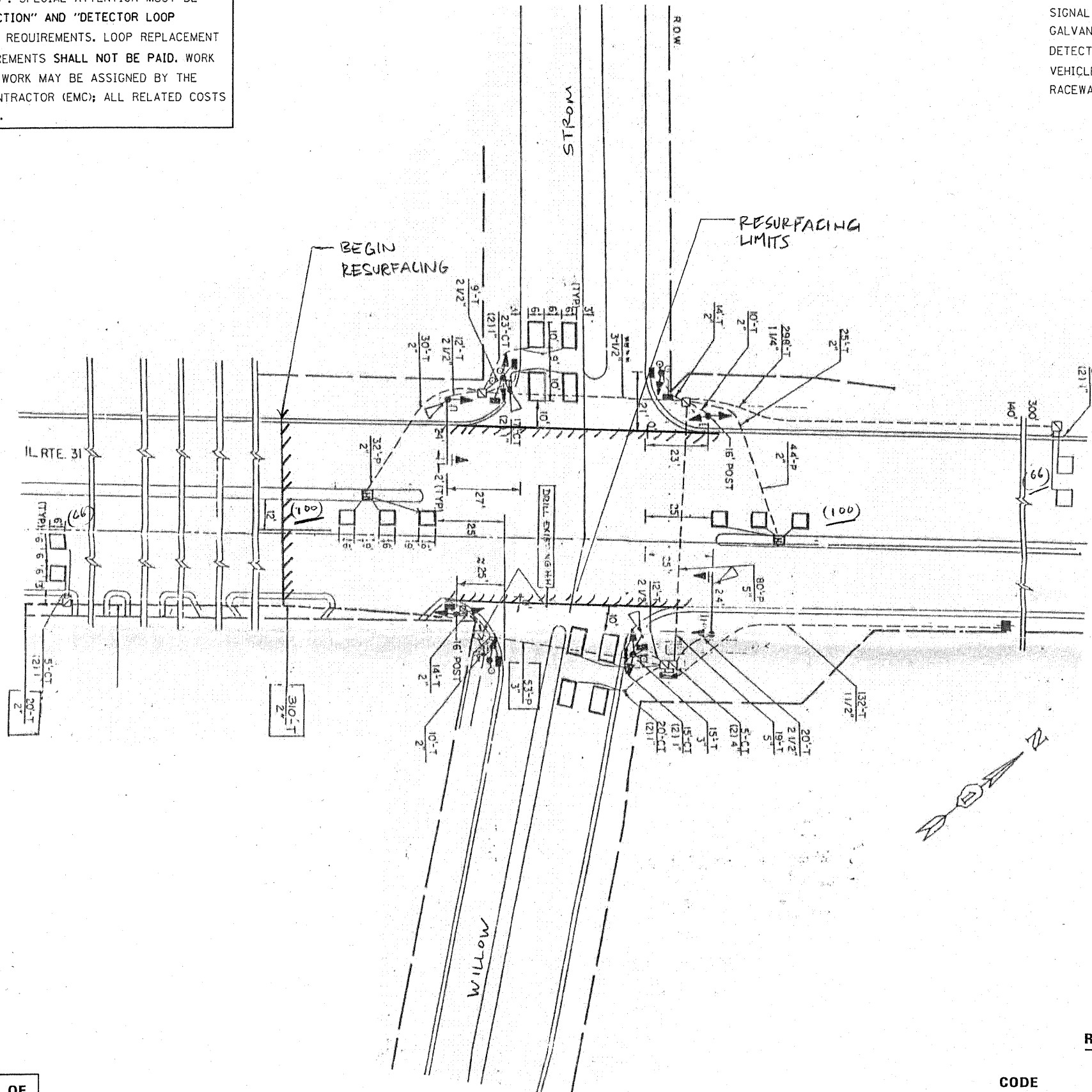
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et:\pw_work\pwwork\velichkovv\d0270384\146611-sh1-plan.dgn	146611-sh1-plan.dgn	DRAWN -	REVISED -			3887	S-RS-5	KANE	33	16
PLOT SCALE = 50.0000' / in.		CHECKED -	REVISED -			CONTRACT NO. 60P12				
PLOT DATE = 11/1/2011		DATE -	REVISED -			ILLINOIS FED. AID PROJECT				
					SCALE: 1" = 50'	SHEET NO. 16 OF 33 SHEETS	STA. 354+00 TO STA. 598+71			



WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "TRAFFIC SIGNAL SPECIFICATIONS FOR DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION ON ROADWAY GRINDING, RESURFACING AND PATCHING OPERATIONS". SPECIAL ATTENTION MUST BE MADE TO THE SECTIONS "INSPECTION OF CONSTRUCTION" AND "DETECTOR LOOP REPLACEMENT" FOR INSTALLATION AND INSPECTION REQUIREMENTS. LOOP REPLACEMENT WORK THAT DOES NOT MEET THE CONTRACT REQUIREMENTS SHALL NOT BE PAID. WORK NECESSARY TO COMPLETE THE LOOP REPLACEMENT WORK MAY BE ASSIGNED BY THE ENGINEER TO IDOT'S ELECTRICAL MAINTENANCE CONTRACTOR (EMC); ALL RELATED COSTS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

**TRAFFIC SIGNAL LEGEND**

	PROPOSED	EXISTING
SIGNAL HEAD WITH BACKPLATE	▬	▬
SIGNAL HEAD	▬	▬
GALVANIZED STEEL CONDUIT IN TRENCH OR PUSHED	▬	▬
DETECTOR LOOP	□	□
VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE	▬	▬
RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II	▬	▬



**REPLACE ALL DETECTOR LOOPS AS SHOWN  
(WITHIN THE RESURFACING LIMITS)**

CODE	QUANTITY	UNIT	ITEM
88600600	266	FOOT	DETECTOR LOOP, REPLACEMENT

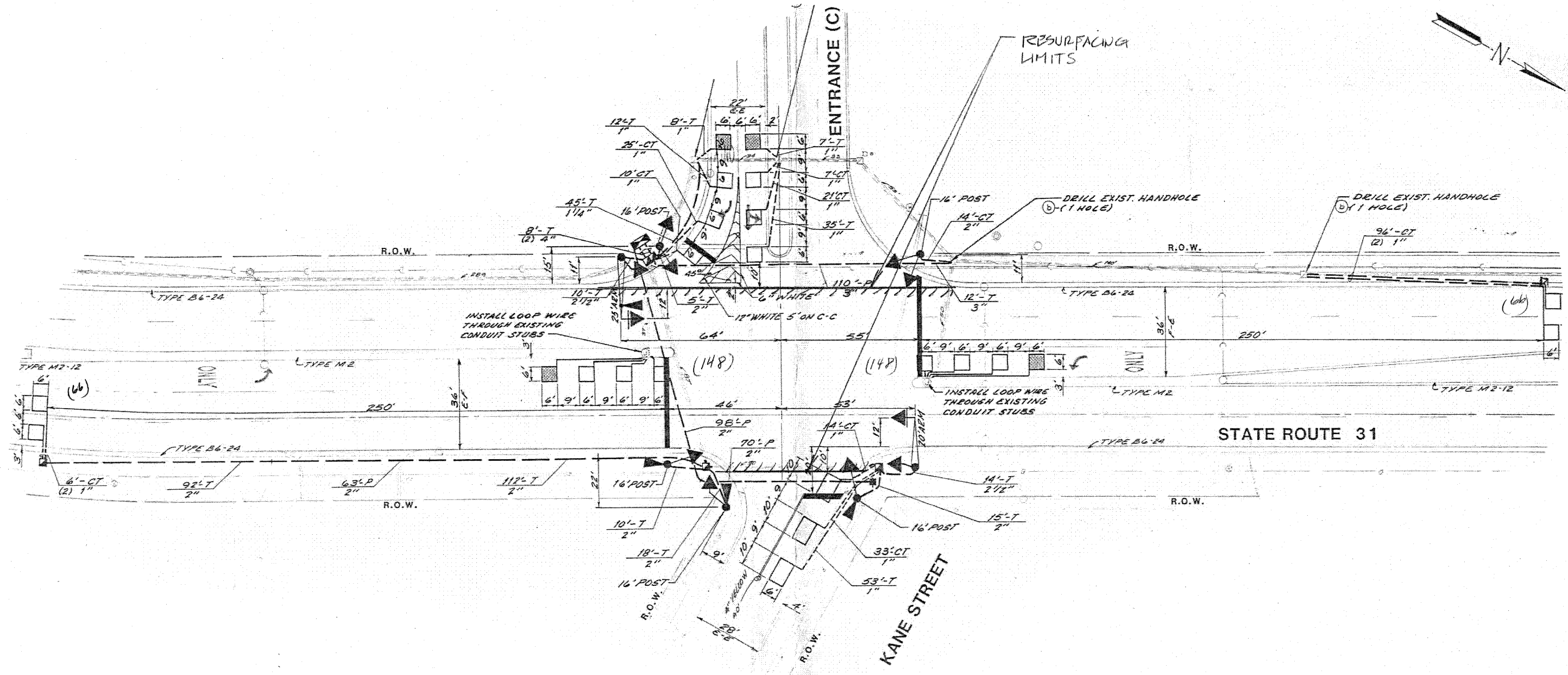
**THIS PLAN IS FOR THE SOLE PURPOSE OF  
DETECTOR LOOP REPLACEMENTS ONLY**

FILE NAME =	USER NAME = plascencia	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT ONE - DETECTOR LOOP REPLACEMENT ILL. RTE. 31 @ STROM/WILLOW</b>	F.A.U. RTE. 3887	SECTION 5-RS-5	COUNTY KANE	TOTAL SHEETS 33	SHEET NO. 17	
c:\pwork\pwidot\plascencia\112618\1\asher.dgn		DRAWN -	REVISED -			SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 6042
PLOT SCALE = 100.0000' / 1"		CHECKED -	REVISED -								
PLOT DATE = 6/22/2011		DATE -	REVISED -								

WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "TRAFFIC SIGNAL SPECIFICATIONS FOR DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION ON ROADWAY GRINDING, RESURFACING AND PATCHING OPERATIONS". SPECIAL ATTENTION MUST BE MADE TO THE SECTIONS "INSPECTION OF CONSTRUCTION" AND "DETECTOR LOOP REPLACEMENT" FOR INSTALLATION AND INSPECTION REQUIREMENTS. LOOP REPLACEMENT WORK THAT DOES NOT MEET THE CONTRACT REQUIREMENTS SHALL NOT BE PAID. WORK NECESSARY TO COMPLETE THE LOOP REPLACEMENT WORK MAY BE ASSIGNED BY THE ENGINEER TO IDOT'S ELECTRICAL MAINTENANCE CONTRACTOR (EMC); ALL RELATED COSTS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

**TRAFFIC SIGNAL LEGEND**

	PROPOSED	EXISTING
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD		
CALVANIZED STEEL CONDUIT IN TRENCH OR PUSHED		
DETECTOR LOOP		
VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE		
RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		



**THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENTS ONLY**

**REPLACE ALL DETECTOR LOOPS AS SHOWN (WITHIN THE RESURFACING LIMITS)**

CODE	QUANTITY	UNIT	ITEM
88600600	428	FOOT	DETECTOR LOOP, REPLACEMENT

FILE NAME =	USER NAME = pascencia	DESIGNED -	REVISED -
o:\pwork\pudot\pascencia\d0112618\flasher.dgn		DRAWN -	REVISED -
PLOT SCALE = 100.0000' / 1"		CHECKED -	REVISED -
PLOT DATE = 6/22/2011		DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

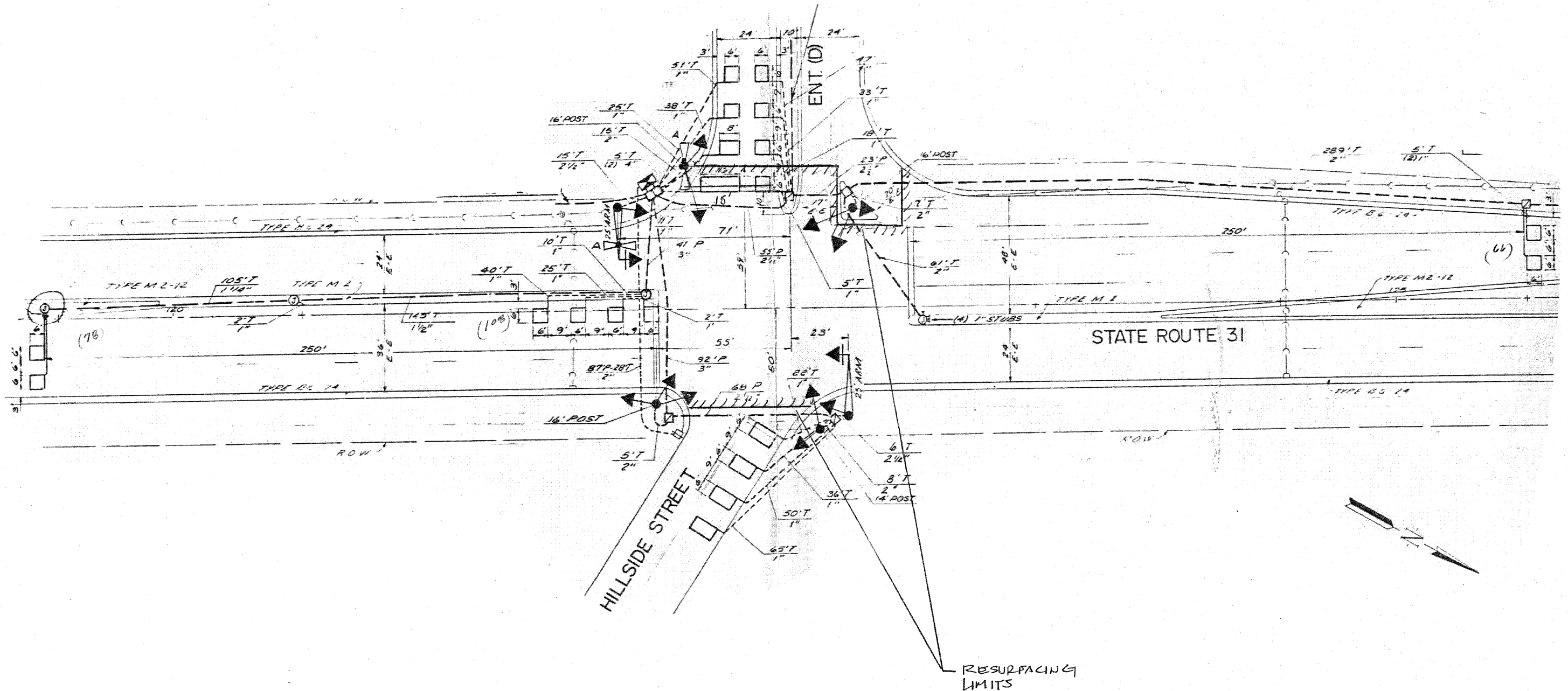
**DISTRICT ONE - DETECTOR LOOP REPLACEMENT  
ILL. RTE. 31 @ KANE STREET**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3987	S-RS-5	KANE	33	18
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "TRAFFIC SIGNAL SPECIFICATIONS FOR DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION ON ROADWAY GRINDING, RESURFACING AND PATCHING OPERATIONS". SPECIAL ATTENTION MUST BE MADE TO THE SECTIONS "INSPECTION OF CONSTRUCTION" AND "DETECTOR LOOP REPLACEMENT" FOR INSTALLATION AND INSPECTION REQUIREMENTS. LOOP REPLACEMENT WORK THAT DOES NOT MEET THE CONTRACT REQUIREMENTS SHALL NOT BE PAID. WORK NECESSARY TO COMPLETE THE LOOP REPLACEMENT WORK MAY BE ASSIGNED BY THE ENGINEER TO IDOT'S ELECTRICAL MAINTENANCE CONTRACTOR (EMC); ALL RELATED COSTS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

**TRAFFIC SIGNAL LEGEND**

	PROPOSED	EXISTING
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD		
GALVANIZED STEEL CONDUIT IN TRENCH OR PUSHED		
DETECTOR LOOP		
VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE		
RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		



**THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENTS ONLY**

**REPLACE ALL DETECTOR LOOPS AS SHOWN (WITHIN THE RESURFACING LIMITS)**

CODE	QUANTITY	UNIT	ITEM
88600600	347	FOOT	DETECTOR LOOP, REPLACEMENT

FILE NAME =	USER NAME = plascencia	DESIGNED -	REVISED -
es:\pw\work\p\idot\plascencia\120112618\1\1\asher.dgn		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE - DETECTOR LOOP REPLACEMENT  
ILL. RTE. 31 @ HILLSIDE STREET**

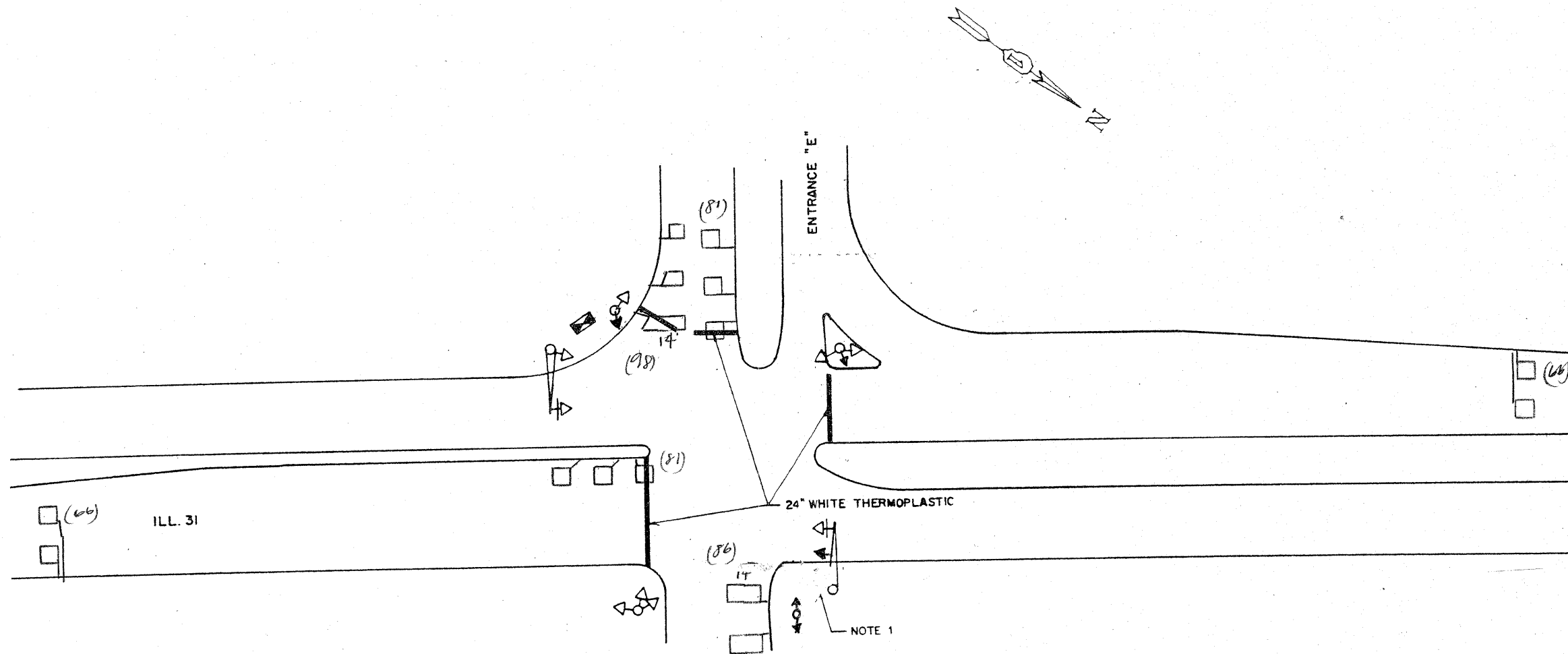
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	S-RS-5	KANE	33	19
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
		CONTRACT NO. 60P12		

WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "TRAFFIC SIGNAL SIGNAL SPECIFICATIONS FOR DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION ON ROADWAY GRINDING, RESURFACING AND PATCHING OPERATIONS". SPECIAL ATTENTION MUST BE MADE TO THE SECTIONS "INSPECTION OF CONSTRUCTION" AND "DETECTOR LOOP REPLACEMENT" FOR INSTALLATION AND INSPECTION REQUIREMENTS. LOOP REPLACEMENT WORK THAT DOES NOT MEET THE CONTRACT REQUIREMENTS SHALL NOT BE PAID. WORK NECESSARY TO COMPLETE THE LOOP REPLACEMENT WORK MAY BE ASSIGNED BY THE ENGINEER TO IDOT'S ELECTRICAL MAINTENANCE CONTRACTOR (EMC); ALL RELATED COSTS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

**TRAFFIC SIGNAL LEGEND**

	PROPOSED	EXISTING
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD		
GALVANIZED STEEL CONDUIT IN TRENCH OR PUSHED		
DETECTOR LOOP		
VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE		
RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		



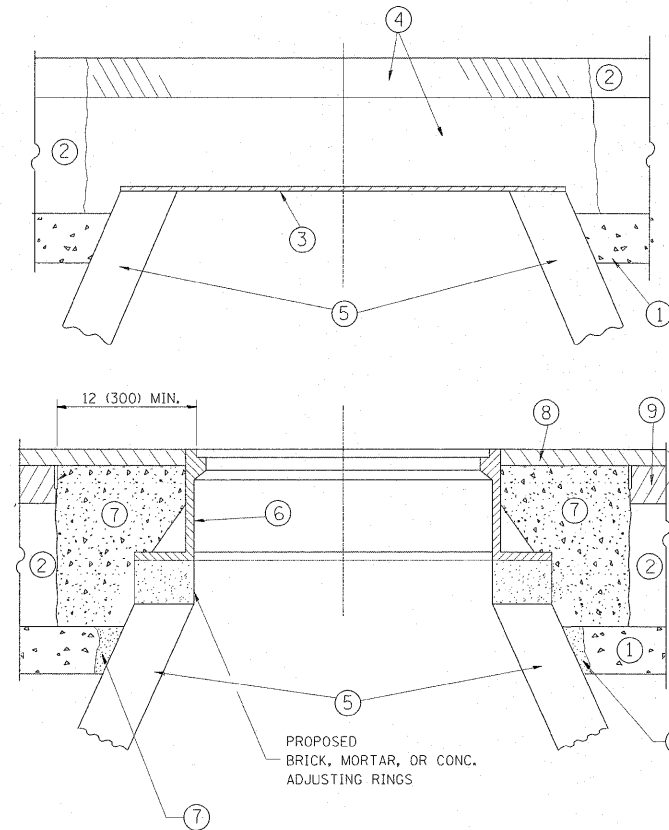
THE R. ENGINEER VISUALLY VERIFY LOOPS SEE THE ATTACHED INVENTORY SHEET SHOWING (6) AMPLIFIER CHANNEL. WHAT IS MARKED ON THE PLAN IS ONLY SUGGESTED, NOT CONFIRMED.

**REPLACE ALL DETECTOR LOOPS AS SHOWN (WITHIN THE RESURFACING LIMITS)**

CODE	QUANTITY	UNIT	ITEM
88600600	213	FOOT	DETECTOR LOOP, REPLACEMENT

**THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENTS ONLY**

FILE NAME =	USER NAME = plascencia1	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT ONE - DETECTOR LOOP REPLACEMENT ILL. RTE. 31 @ SPRUCE STREET</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pw_work\pwsdot\plascencia1\20112618\1\psher.dgn		DRAWN -	REVISED -			3887	S-RS-S	KANE	33	20
PLOT SCALE = 100.0000' / 1"		CHECKED -	REVISED -			CONTRACT NO. 60P12				
PLOT DATE = 6/22/2011		DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



**CONSTRUCTION PROCEDURES**

**STAGE 1 (BEFORE PAVEMENT MILLING)**

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1 1/2 (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

**STAGE 2 (AFTER PAVEMENT MILLING)**

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-1\* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

\* UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS.

**LEGEND**

- ① SUB-BASE GRANULAR MATERIAL
- ② EXISTING PAVEMENT
- ③ 36 (900) DIAMETER METAL PLATE
- ④ PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- ⑤ EXISTING STRUCTURE
- ⑥ FRAME AND LID (SEE NOTES)
- ⑦ CLASS PP-1\* CONCRETE
- ⑧ PROPOSED HMA SURFACE COURSE
- ⑨ PROPOSED HMA BINDER COURSE

**LOCATION OF STRUCTURES:**

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

**BASIS OF PAYMENT:** THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "FRAMES AND LIDS TO BE ADJUSTED, SPECIAL" NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

**NOTES:**

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

**DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING**

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

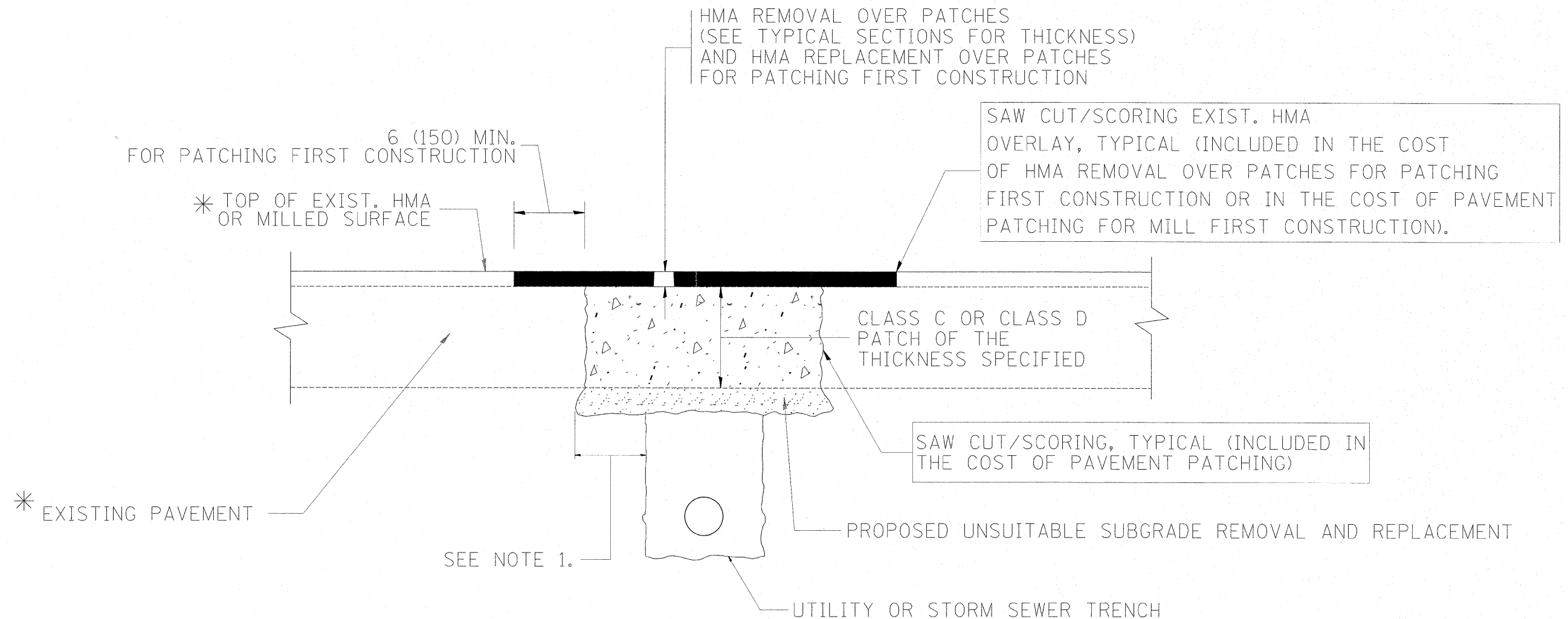
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PLOT DATE = 10/25/2011	DATE - 10-25-94	REVISED - R. BORO 03-09-11	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETAILS FOR  
FRAMES AND LIDS ADJUSTMENT WITH MILLING**

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	S-RS-5	KANE	33	21
BD600-03 (BD-8)			CONTRACT NO. 60P12	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



\* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

**NOTES:**

1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

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

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

1. MILL HMA FIRST IF THERE IS AT LEAST 4 1/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

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PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - R. BORO 09-04-07	
PLOT DATE = 10/25/2011	DATE - 10-25-94	REVISED - K. ENG 10-27-08	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT PATCHING FOR  
HMA SURFACED PAVEMENT**

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	S-RS-5	KANE	33	22
BD400-04 (BD-22)			CONTRACT NO. 60P12	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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

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

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

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

18" (450) MAX.

1/4" (5) \*\*

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

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

EXISTING CONCRETE PAVEMENT, CONCRETE BASE COURSE OR FLEXIBLE PAVEMENT

3" (75) MIN.

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

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

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

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

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

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

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

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

② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED

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

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

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

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

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

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

**BASIS OF PAYMENT:**

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

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

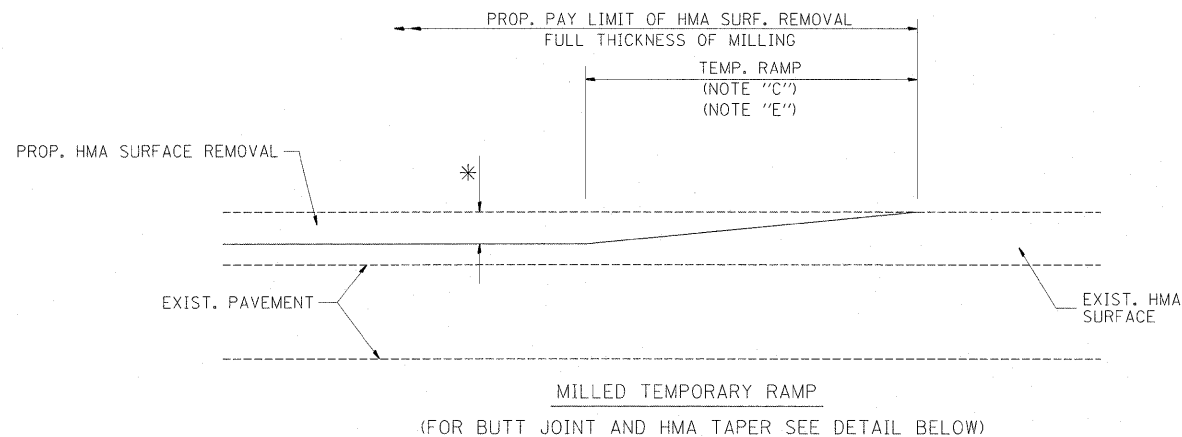
⑧ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

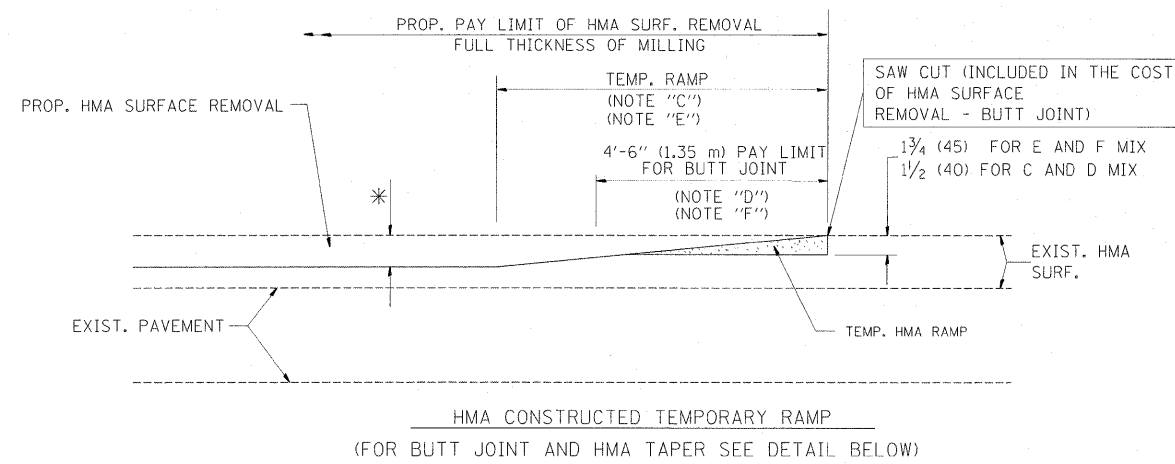
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

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	PLOT SCALE = 50.0000 1/4" = 1'	CHECKED -	REVISED - M. GOMEZ 01-22-01		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							
	PLOT DATE = 10/25/2011	DATE - 03-11-94	REVISED - R. BORO 12-15-09									



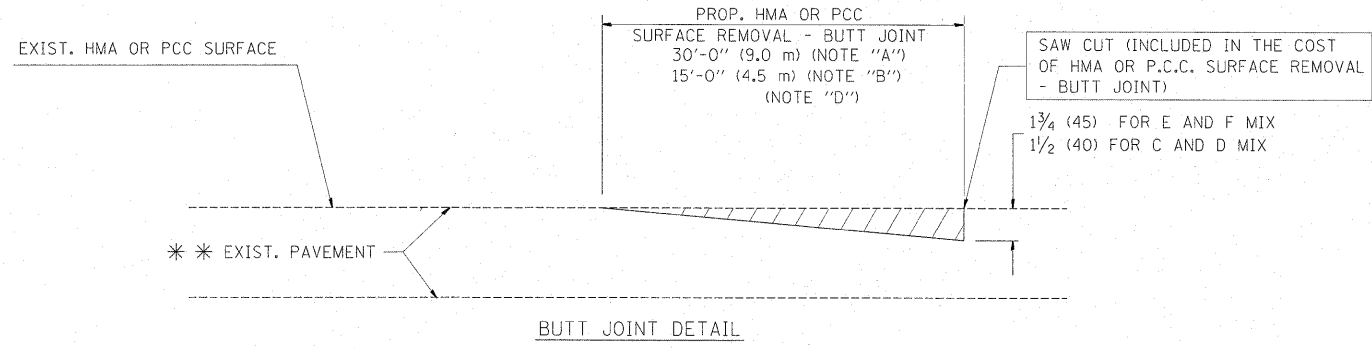


OPTION 1

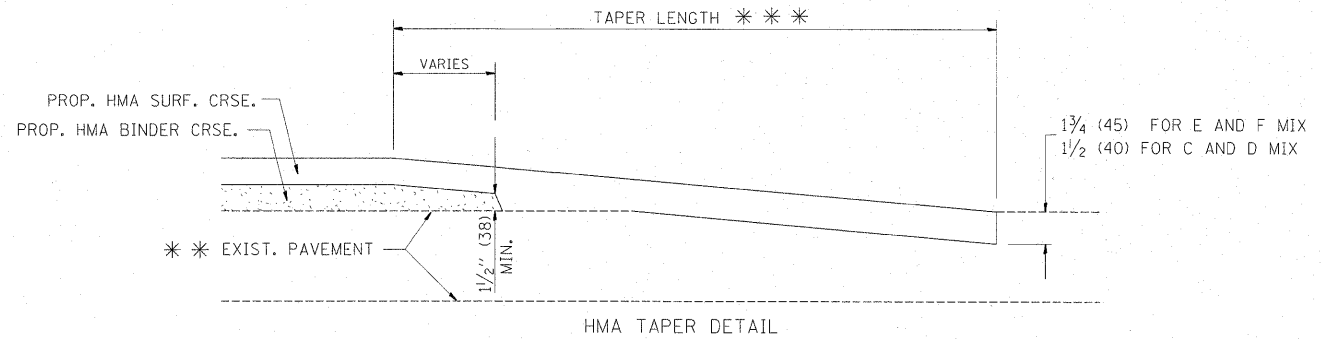


OPTION 2

TYPICAL TEMPORARY RAMP



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

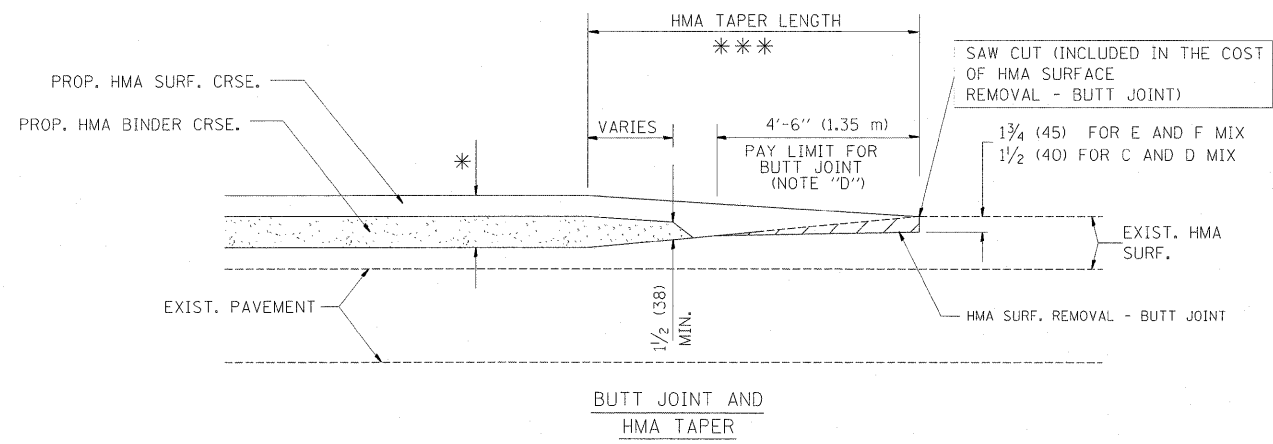
NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
  - B: MINOR SIDE ROADS.
  - C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
  - D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
  - E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
  - F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
  - G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- \* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- \* \* \* 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")  
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

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



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

FILE NAME =	USER NAME = basknm	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
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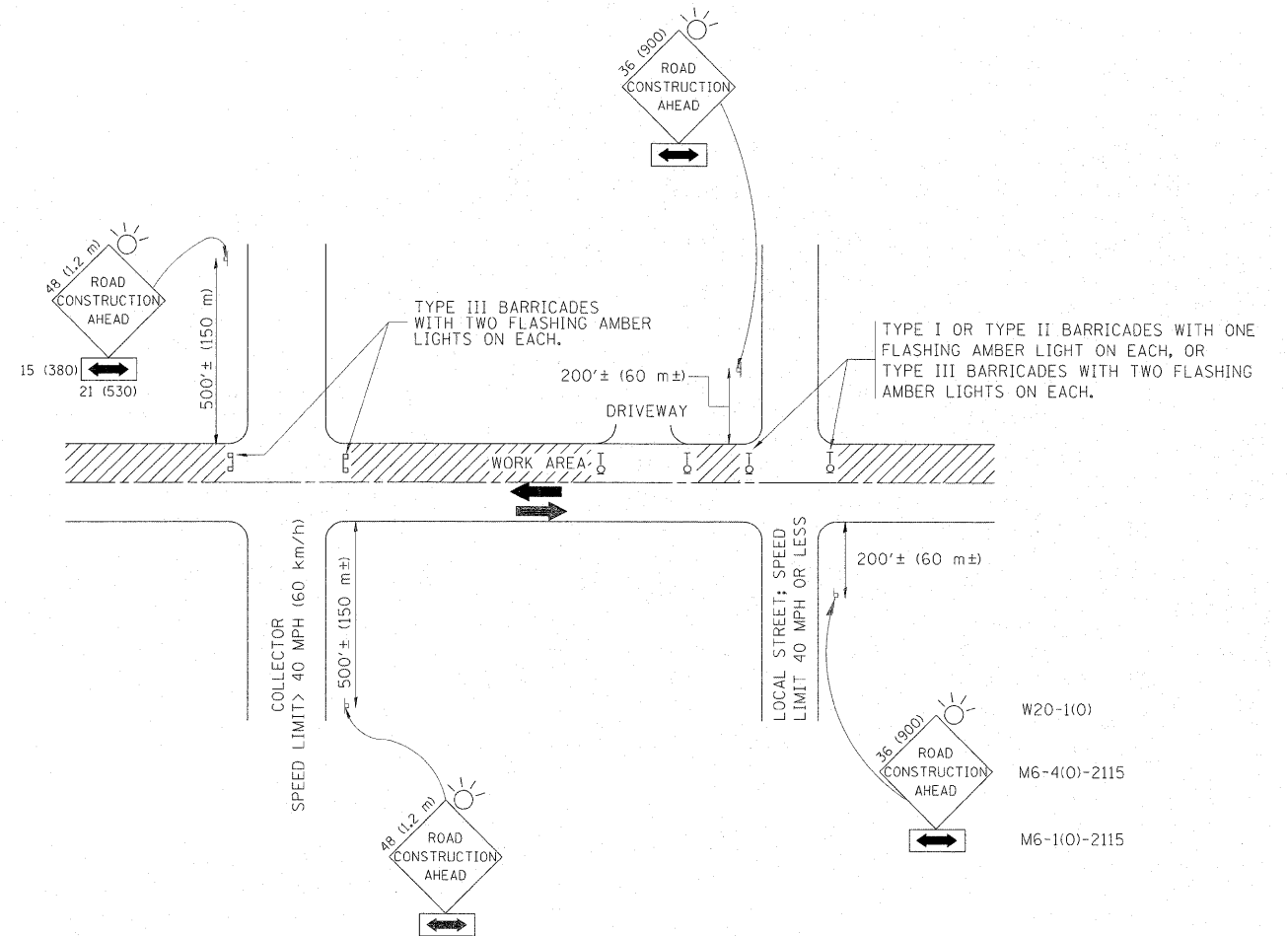
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

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.
3887	S-RS-5	KANE	33	24
BD400-05 BD32			CONTRACT NO. 60P12	
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.

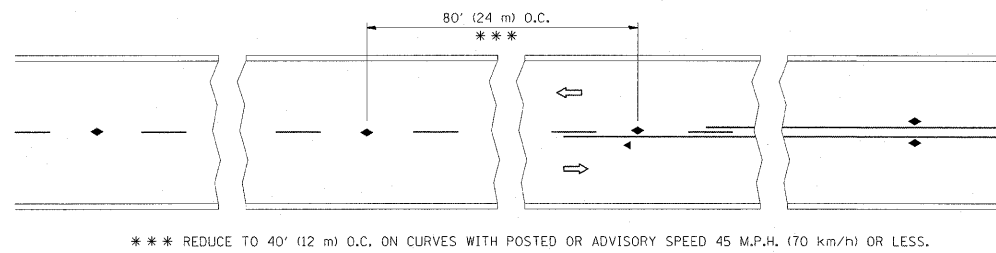
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

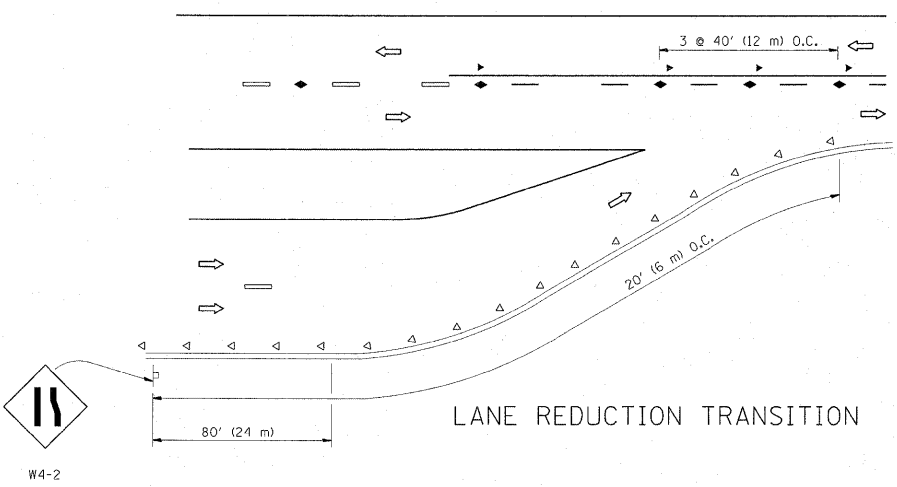
TRAFFIC CONTROL AND PROTECTION FOR  
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

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

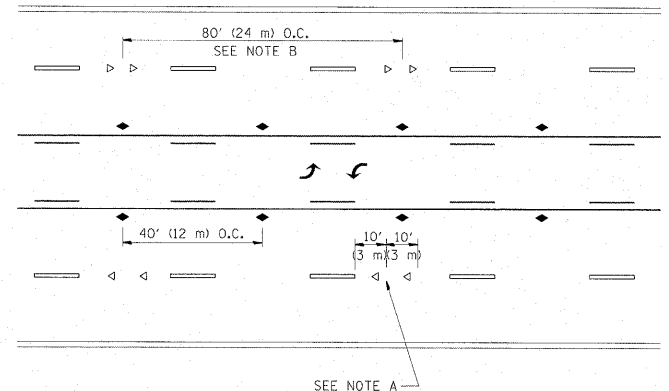
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TC-10		CONTRACT NO. 60P12		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



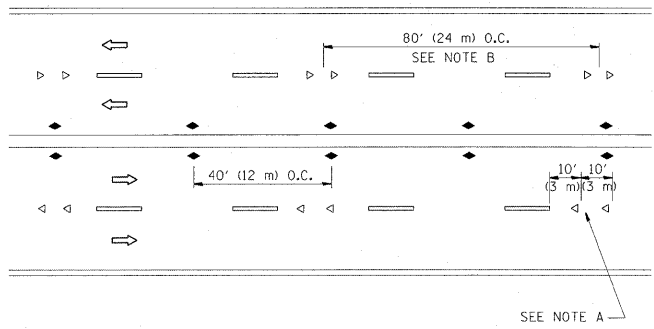
TWO-LANE/TWO-WAY



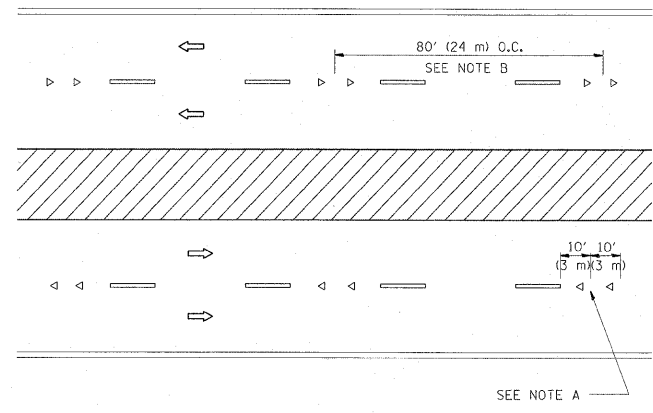
LANE REDUCTION TRANSITION



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

SYMBOLS

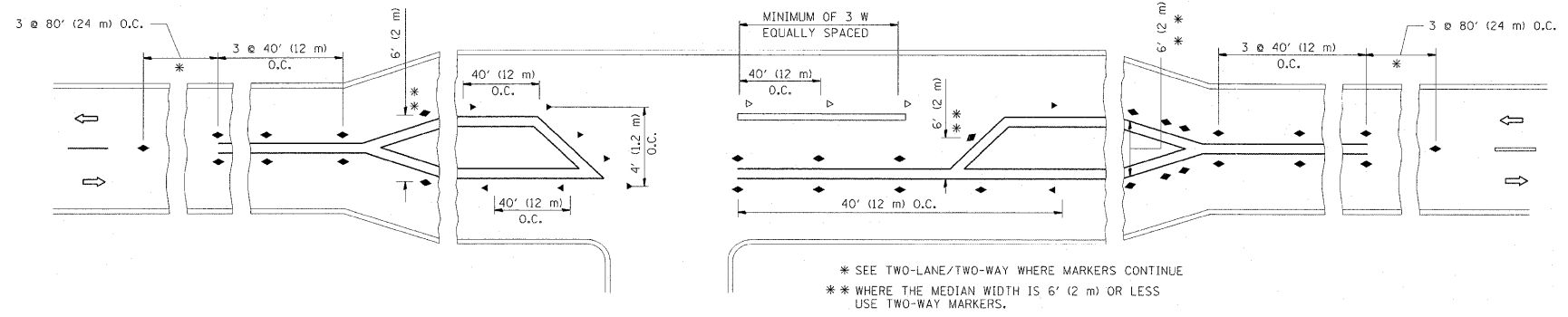
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

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

DESIGN NOTES

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

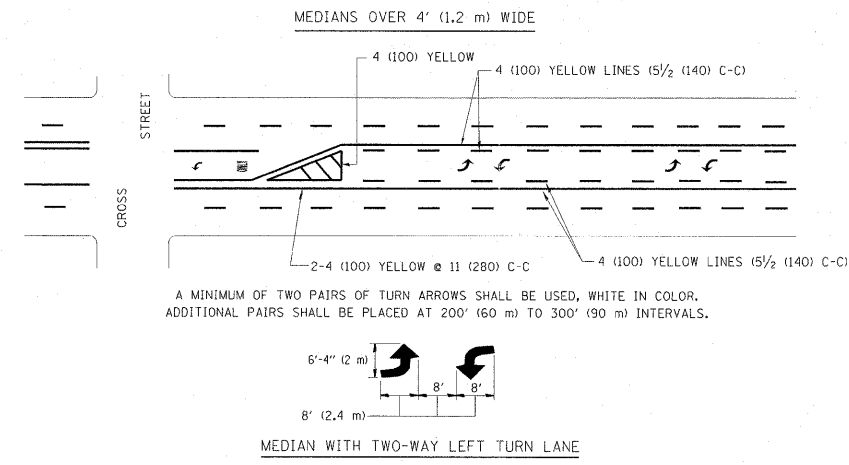
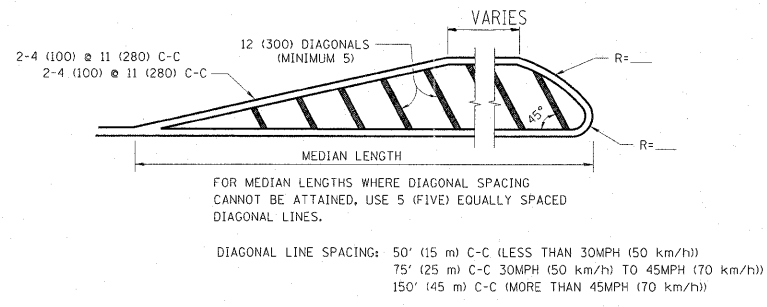
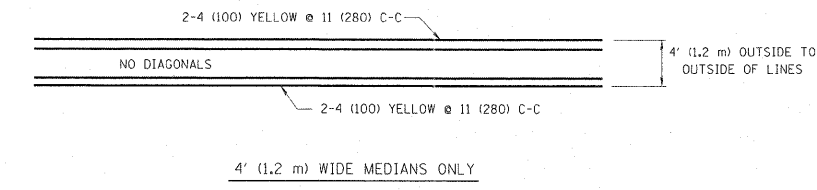
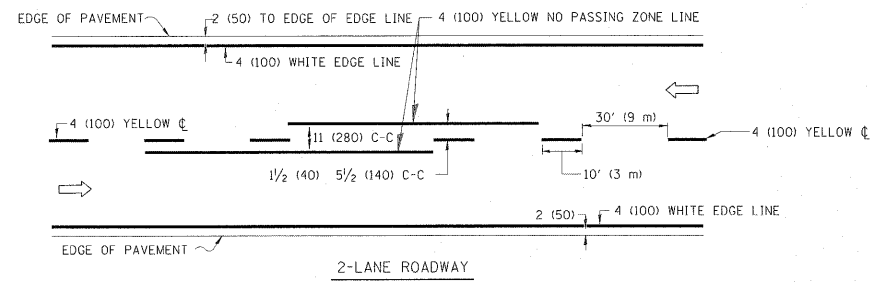


LEFT TURN

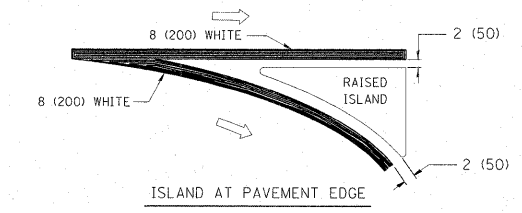
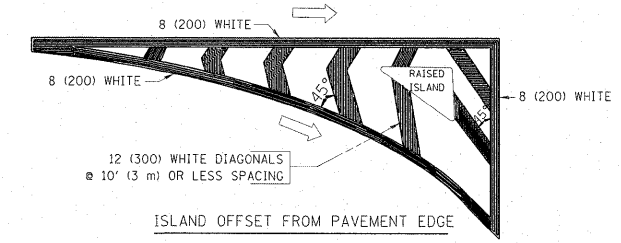
\* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE  
 \*\* WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

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

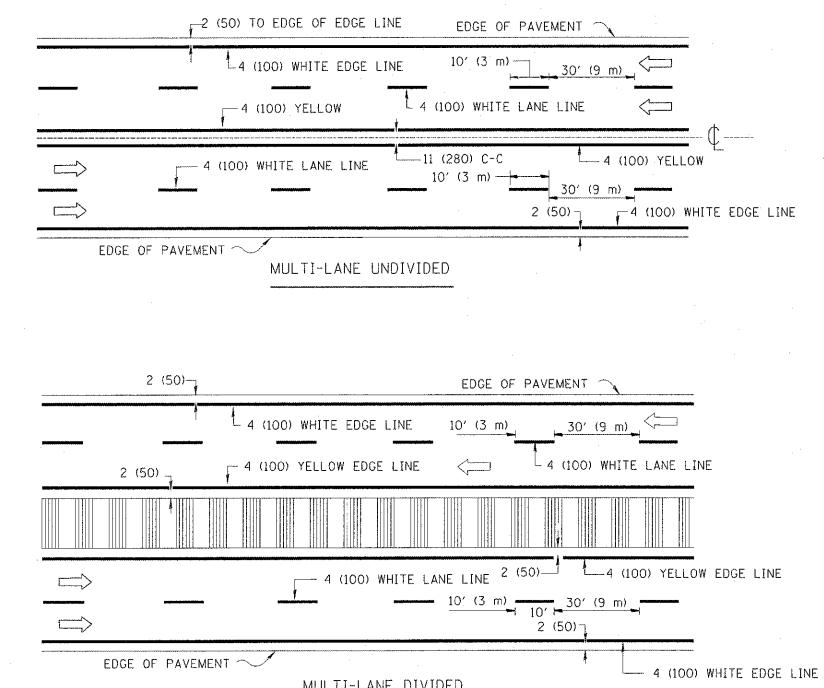
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		CHECKED -	REVISED - T. RAMMACHER 01-06-00		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	<b>TC-11</b>			
		DATE -	REVISED - C. JUCCIUS 09-09-09		CONTRACT NO. 60P12							



TYPICAL PAINTED MEDIAN MARKING

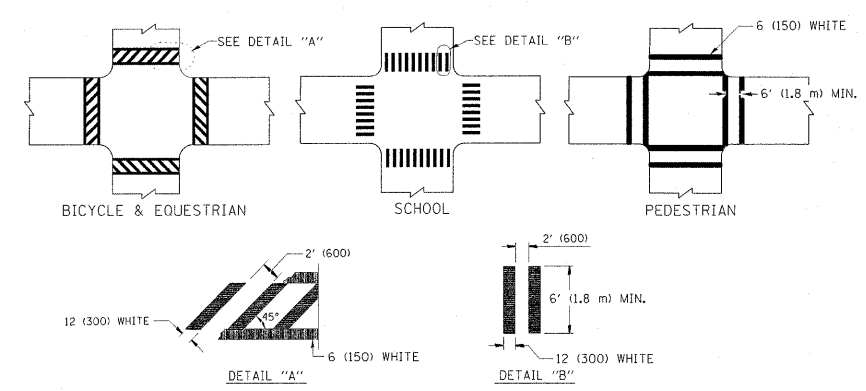


TYPICAL ISLAND MARKING

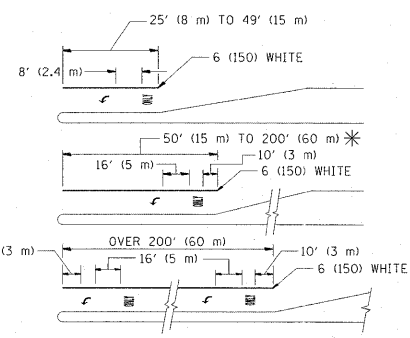


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK 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

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	5/2 (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; 5/2 (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 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE. SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m <sup>2</sup> ) EACH "X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS	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.

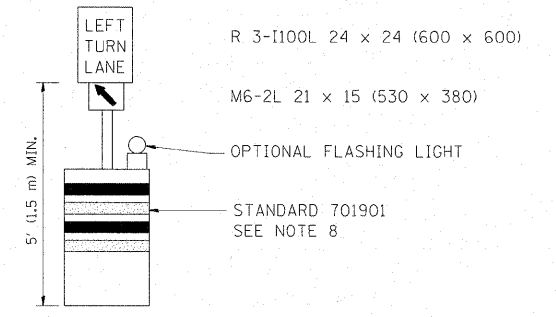
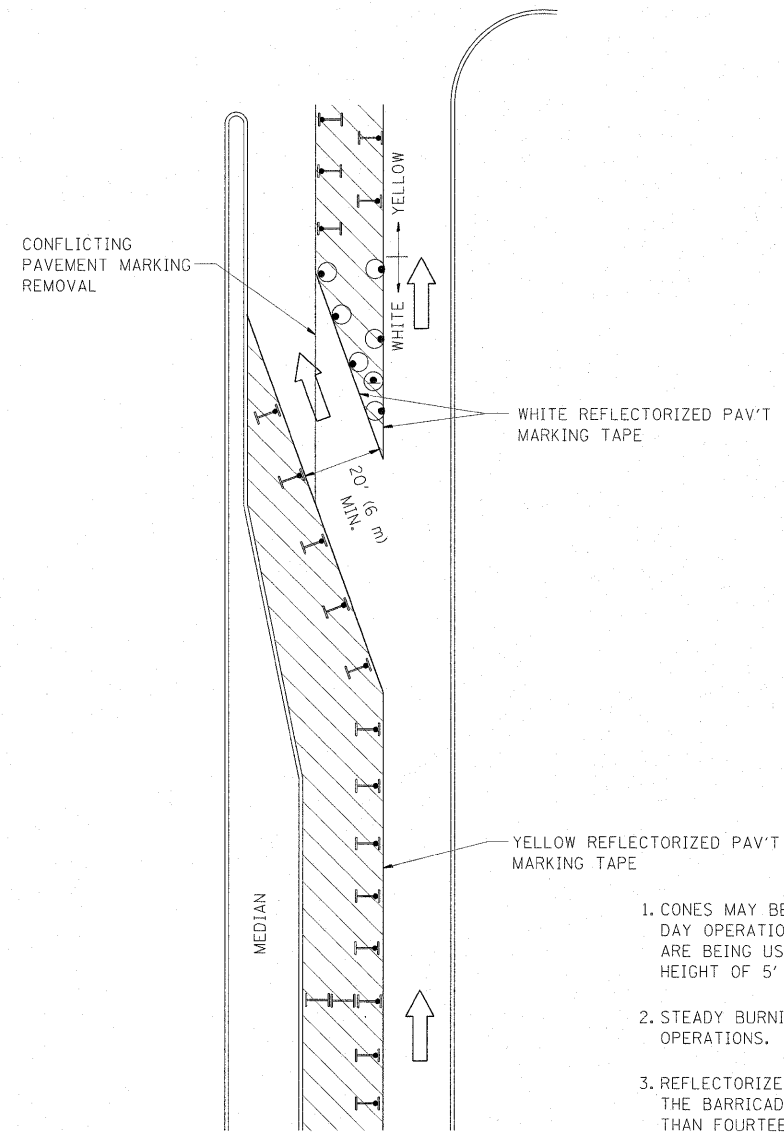
All dimensions are in inches (millimeters) unless otherwise shown.

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PLOT SCALE = 50.0000' / 1in.		CHECKED -	REVISED -
PLOT DATE = 10/25/2011		DATE - 03-19-90	REVISED -

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. 3887	SECTION S-RS-5	COUNTY KANE	TOTAL SHEETS 33	SHEET NO. 27
			TC-13		CONTRACT NO. 60P12		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							

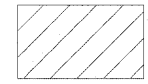







**GENERAL NOTES**

1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM OPER 725 IS REQUIRED.
8. IF A DRUM OR TYPE II BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 PREQUIREMENTS.
9. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

**LEGEND**

-  WORK AREA
-  LANE OPEN TO TRAFFIC
-  TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
-  DRUM WITH STEADY BURN LIGHT
-  DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
-  TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

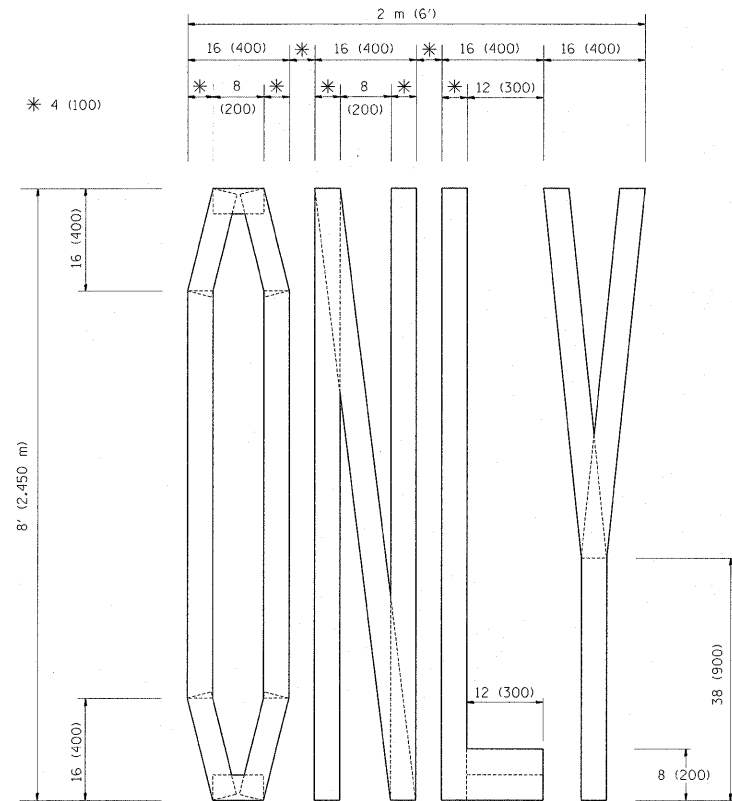
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ct:\pw_work\pwsdot\baskinm\d0270384\Dis	std.dgn	REVISED - A. HOUSEH 11-07-95	REVISED -
	PLOT SCALE = 50.0000' / 1" =	REVISED - A. HOUSEH 10-12-96	REVISED -
	PLOT DATE = 10/25/2011	REVISED - T. RAMMACHER 01-06-00	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

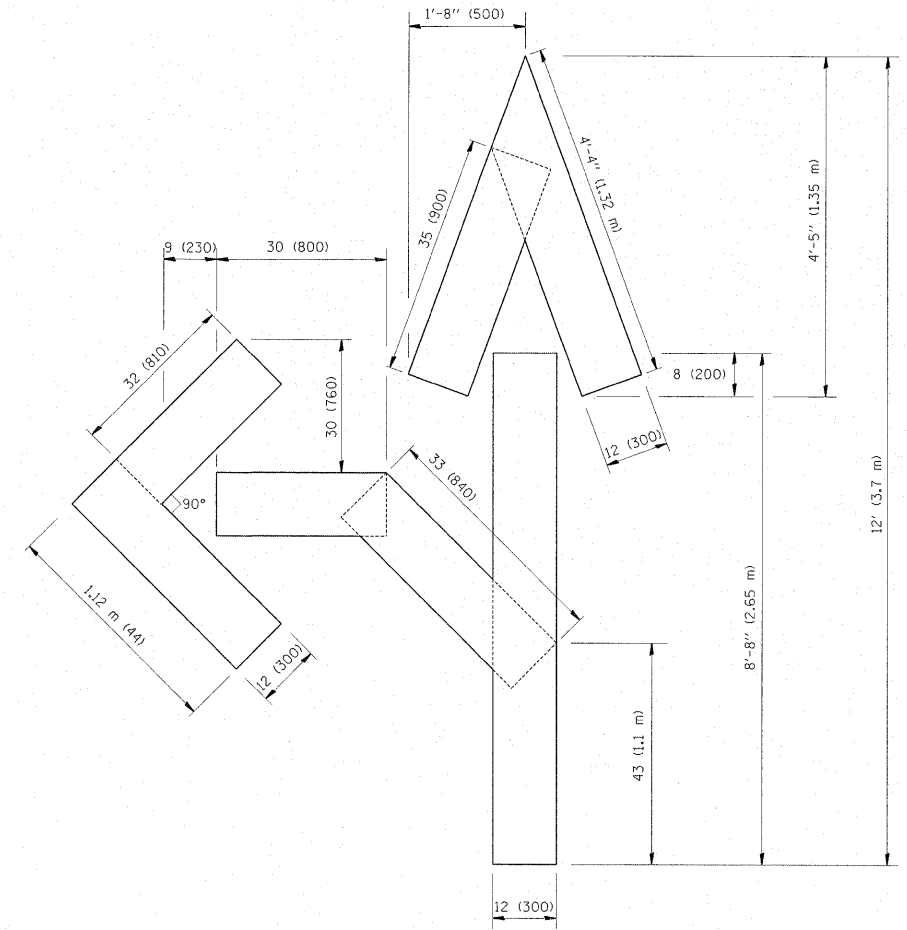
**TRAFFIC CONTROL AND PROTECTION AT TURN BAYS  
(TO REMAIN OPEN TO TRAFFIC)**

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

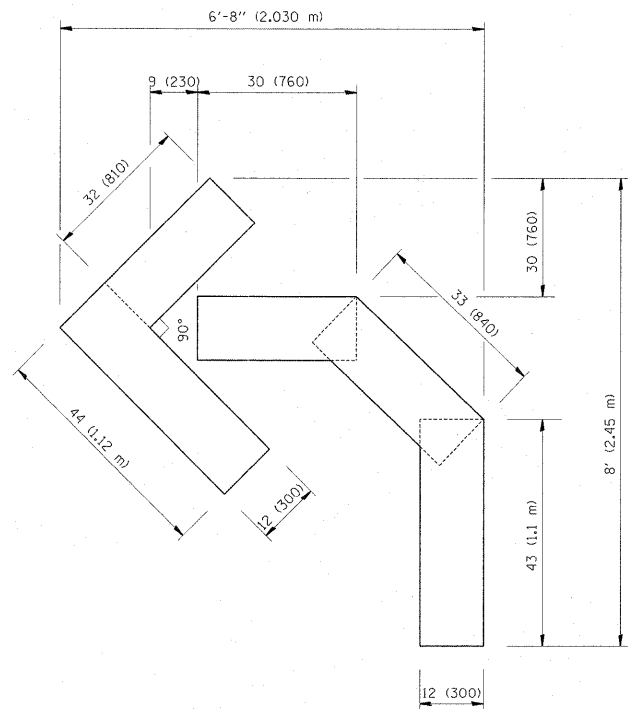
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	S-RS-5	KANE	33	28
<b>TC-14</b>		CONTRACT NO. 60P12		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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.

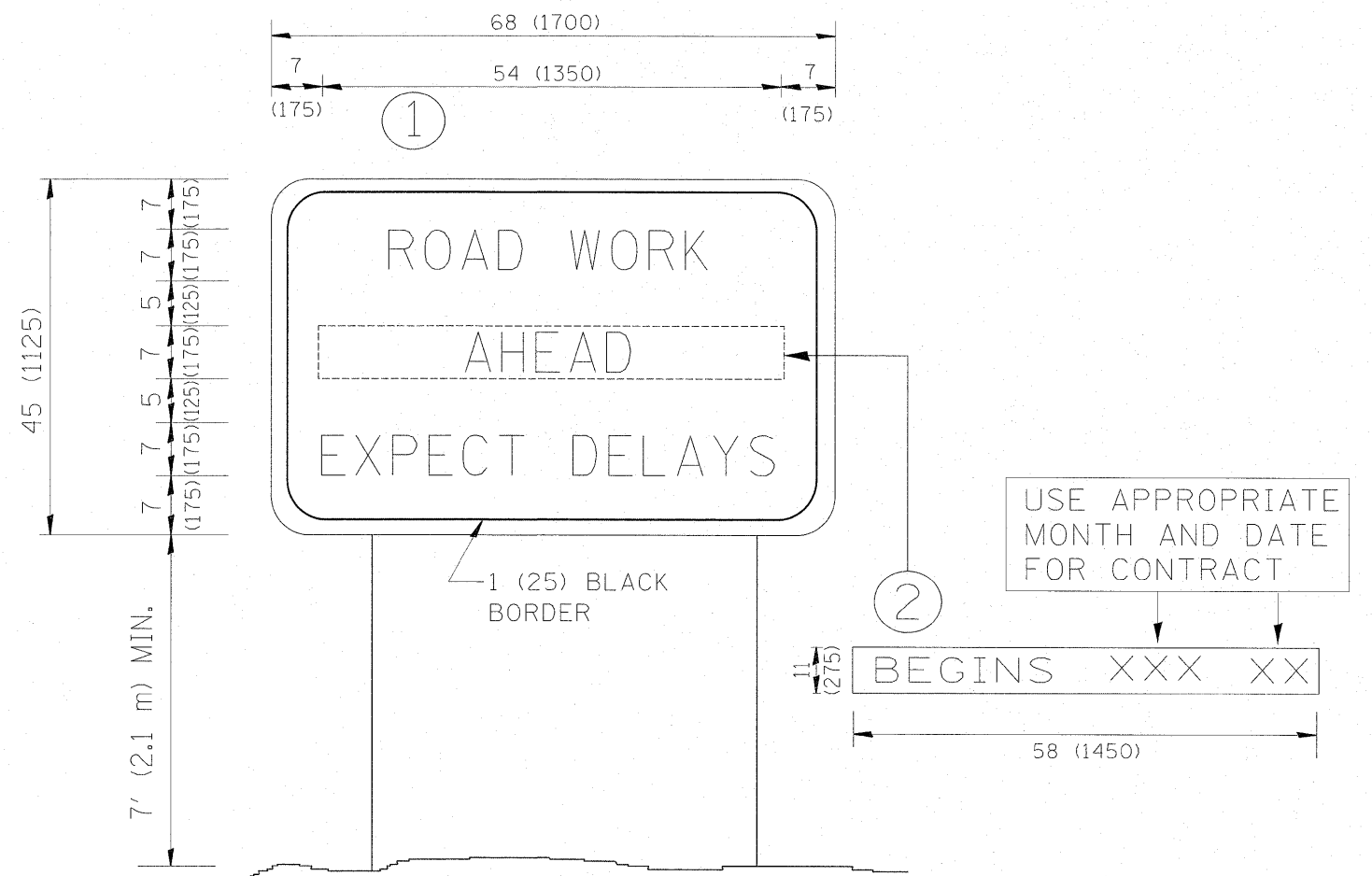
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PLOT SCALE = 50.0000 ' / in.		CHECKED -	REVISED -T. RAMMACHER 03-02-98
PLOT DATE = 10/25/2011		DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

**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	COUNTY	TOTAL SHEETS	SHEET NO.
3887	S-RS-5	KANE	33	29
<b>TC-16</b>			CONTRACT NO. 60P12	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

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

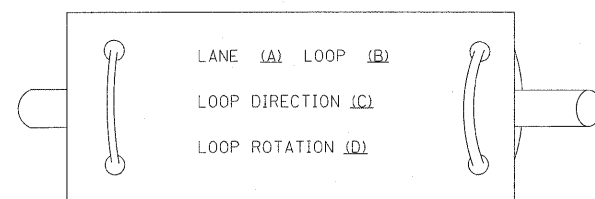
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = baskinm	DESIGNED -	REVISED - R. MIRS 09-15-97	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ARTERIAL ROAD INFORMATION SIGN</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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	PLOT DATE = 10/25/2011	DATE -	REVISED - C. JUCIUS 01-31-07			SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT	

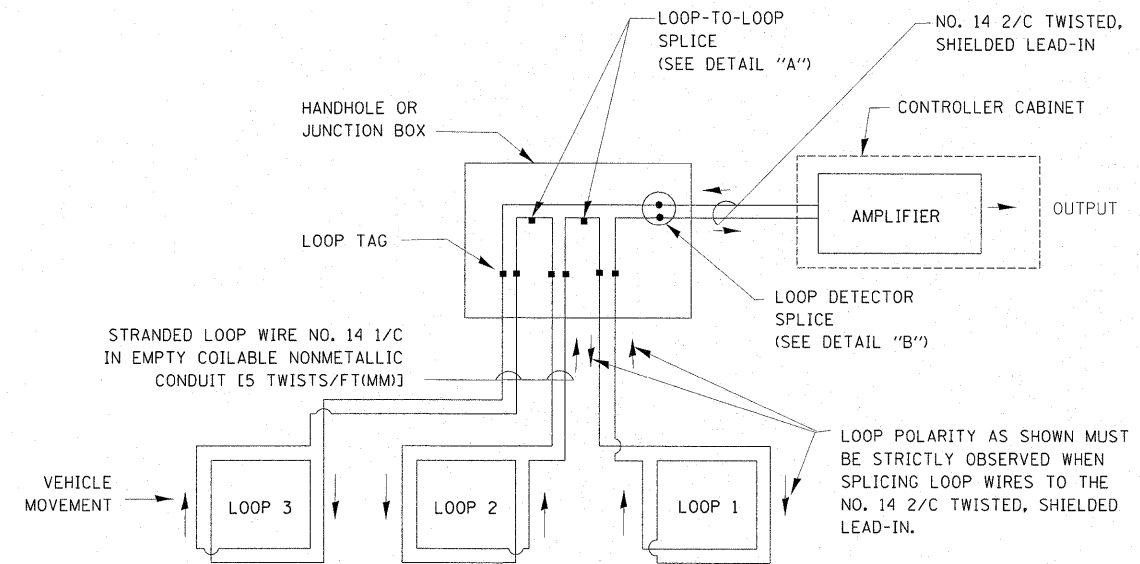
**LOOP DETECTOR NOTES**

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVESHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

**LOOP LEAD-IN CABLE TAG**

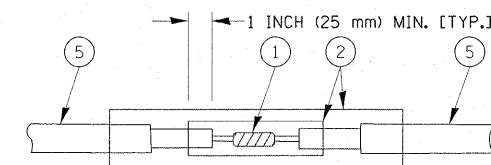


- A. LANE #1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

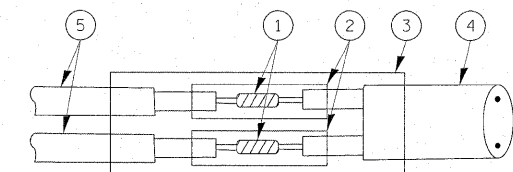


**DETECTOR LOOP WIRING SCHEMATIC**

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.

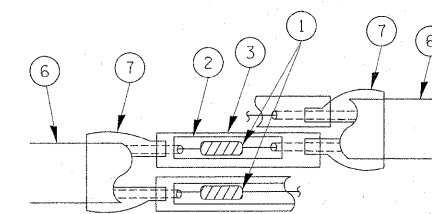


**DETAIL "A" LOOP-TO-LOOP SPLICE**

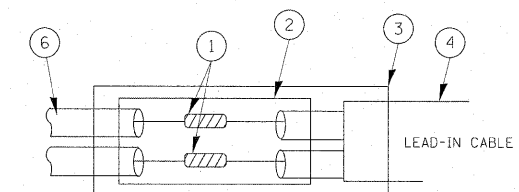


**DETAIL "B" LOOP-TO-CONTROLLER SPLICE**

**TYPE I LOOP**



**DETAIL "A" LOOP-TO-LOOP SPLICE**



**DETAIL "B" LOOP-TO-CONTROLLER SPLICE**

**LOOP DETECTOR SPLICE**

- 1 WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- 2 WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- 3 WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- 4 NO. 14 2/C TWISTED, SHIELDED CABLE.
- 5 LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- 6 PRE-FORMED LOOP
- 7 XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

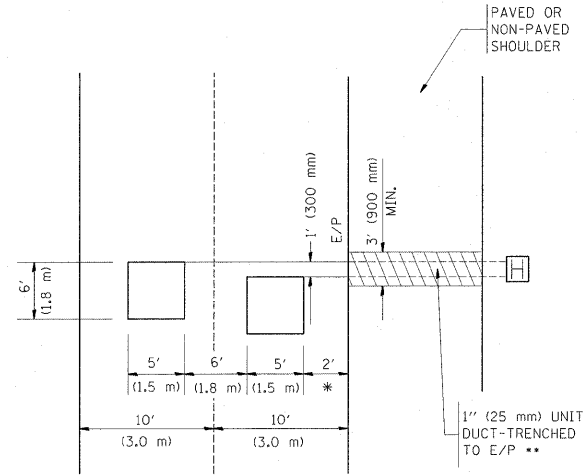
**DISTRICT ONE  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET NO. 1 OF 6 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	S-RS-5	KANE	33	31
<b>TS-05</b>		CONTRACT NO. 60P12		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

**LOOPS NEXT TO SHOULDERS**

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

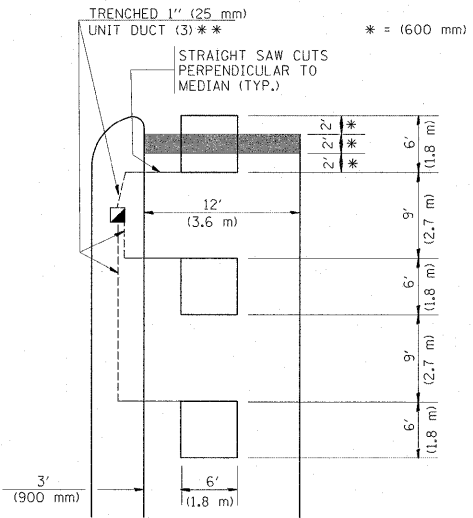


\* = (600 mm)

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

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

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



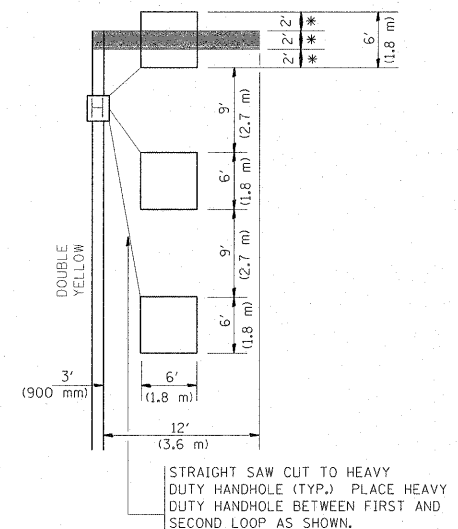
\* = (600 mm)

\*\* 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

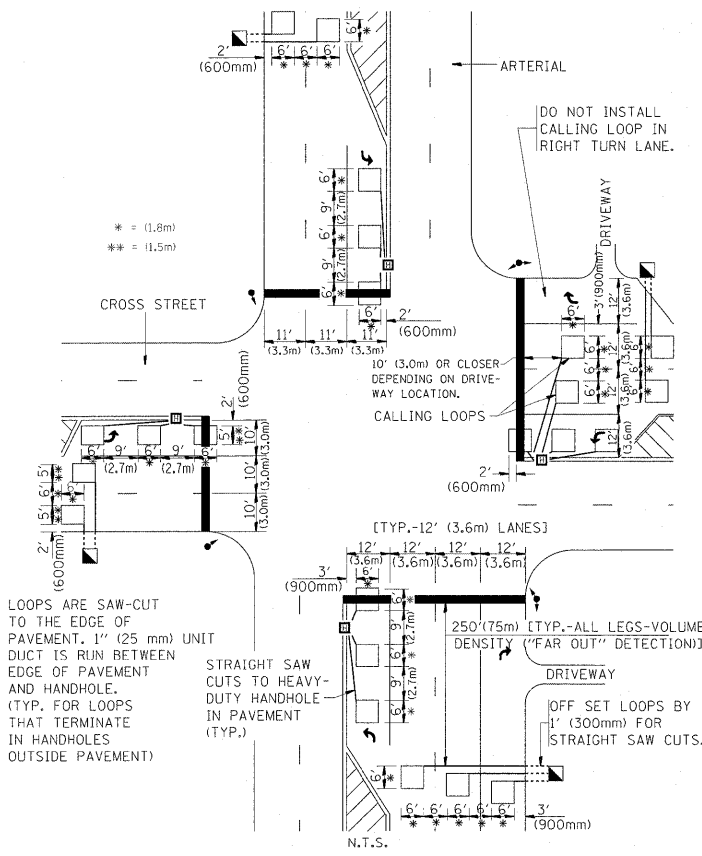
**LEFT TURN LANES WITHOUT MEDIANS  
VOLUME DENSITY ("FAR OUT" DETECTION)  
ON SAME APPROACH  
(PROTECTED / PERMITTED LEFT TURN PHASING)**

\* = (600 mm)



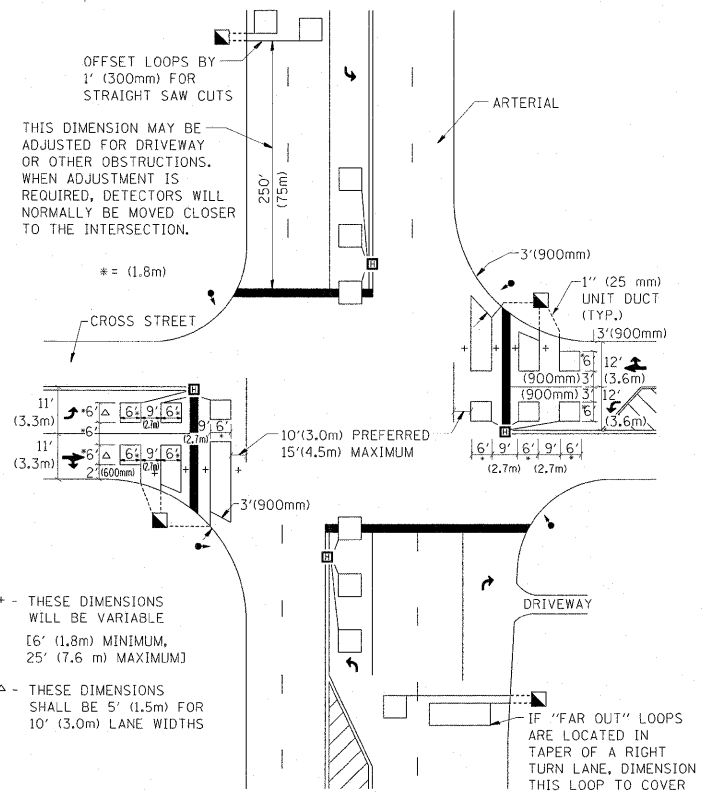
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO  
PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



**DETAIL 1**  
N.T.S.

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



**DETAIL 2**  
N.T.S.

**NOTES:**

**VEHICLES LOOP DETECTORS**

- \* ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATELY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- \* ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- \* EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- \* WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).
- \* WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

**PLACEMENT OF DETECTORS**

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DEMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

**NOTE:**

ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

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

FILE NAME =	USER NAME = basknm	DESIGNED -	REVISED -
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PLOT SCALE = 50.0000 / 1"		CHECKED - R.K.F.	REVISED -
PLOT DATE = 10/25/2011		DATE -	REVISED -

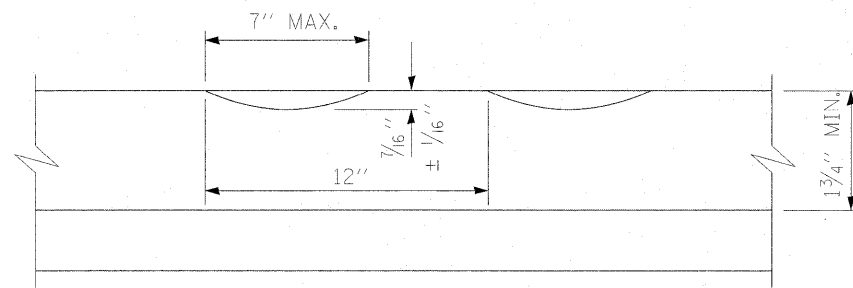
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DISTRICT 1 - DETECTOR LOOP INSTALLATION  
DETAILS FOR ROADWAY RESURFACING**

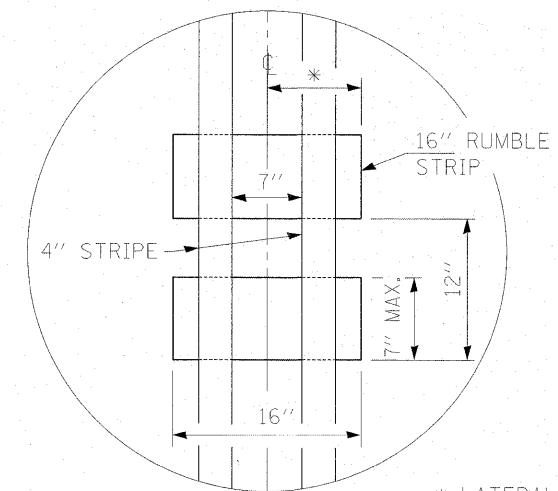
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	S-RS-5	KANE	33	32
<b>TS-07</b>		CONTRACT NO. 60P12		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



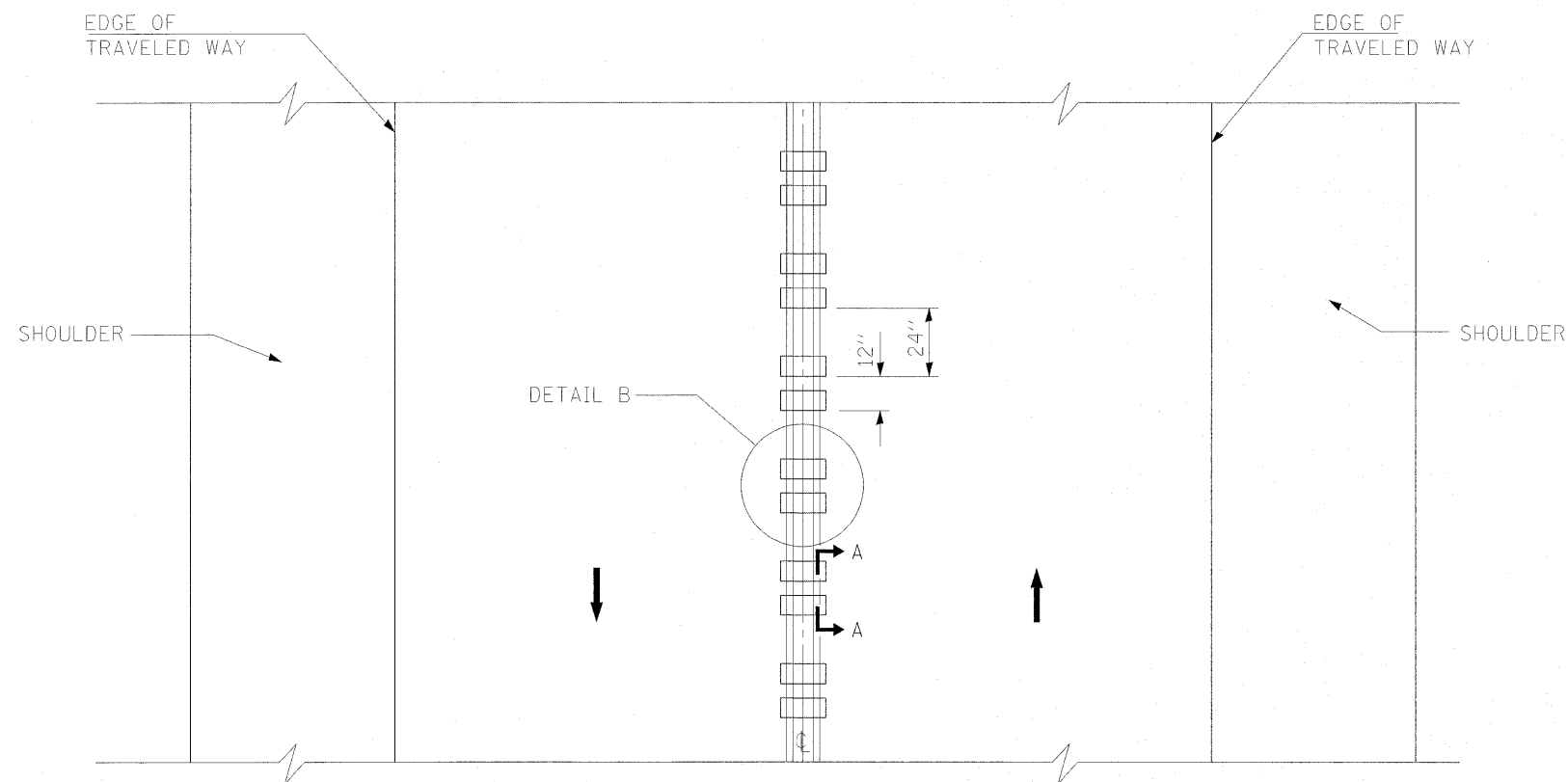


SECTION A-A



DETAIL B

\* LATERAL DEVIATION SHALL NOT EXCEED ONE INCH IN 100 FEET.



TWO-WAY ROAD

GENERAL NOTES

- SEE STANDARD 780001 FOR OTHER STRIPING LAYOUTS.
- RUMBLE STRIPS SHALL NOT BE PLACED ON BRIDGES.
- ALL RUMBLE STRIPS SHALL BE MILLED.
- CENTERLINE RUMBLE STRIPS SHALL BE CONTINUOUS THROUGH CONNECTIONS OF SIDEROADS WITH NO LEFT TURN LANES.
- DISCONTINUE CENTERLINE RUMBLE STRIPS THROUGH THE LIMITS OF ALL LEFT TURN LANES, INCLUDING ANY LANE TAPER SECTIONS.
- WHERE USED, ADJUST SPACING OF RAISED REFLECTIVE PAVEMENT MARKERS TO FALL IN WIDER GAP BETWEEN RUMBLE STRIPS.
- HOT-SPRAY THERMOPLASTIC PAVEMENT MARKING WILL BE USED OVER THE RUMBLE STRIPS FROM STATION 500+00 TO STATION 592+32.

RUMBLE STRIPES FOR  
CENTERLINE,  
NON-FREEWAY