

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	W-RS-3	LAKE	23	1
		ILLINOIS	CONTRACT NO. 60B55	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

# PROPOSED HIGHWAY PLANS

F.A.P. 541: IL-132 (GRAND AVE.)  
IL-59 TO SHEEHAN DR.  
SECTION: W-RS-3  
RESURFACING (3P)

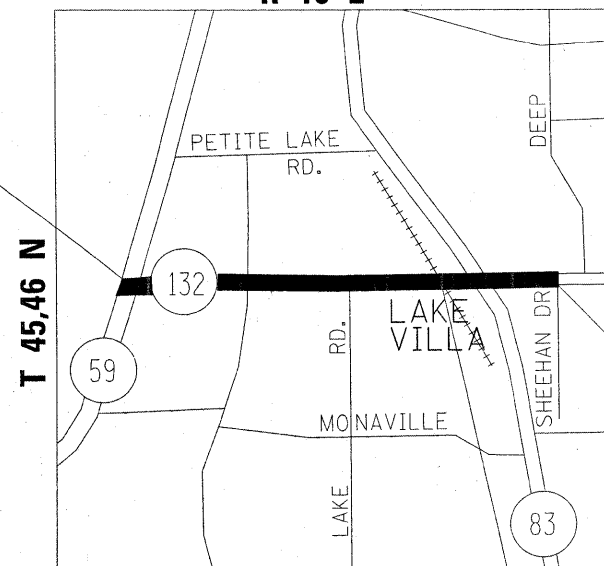
FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT IS LOCATED IN THE  
VILLAGE OF LAKE VILLA



LAKE COUNTY  
C-91-368-06  
R 10 E

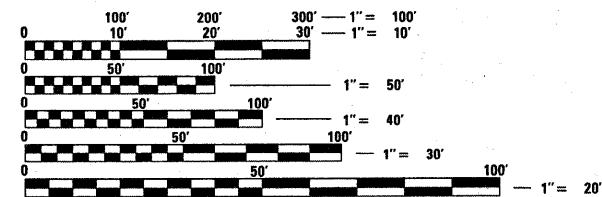
PROJECT BEGINS  
STA. 10 + 19



TRAFFIC DATA  
2007 ADT = 10,800  
SPEED LIMIT = 30, 45, 50 MPH

PROJECT ENDS  
STA. 173 + 71

OMISSION AT  
R.R. X-ING, 22'



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 1-(847) 705-4240  
PROJECT MANAGER: KEN ENG

GROSS LENGTH = 16,352 FT. (3.097 MILES)  
NET LENGTH = 16,330 FT. (3.093 MILES)

CONTRACT NO. 60B55

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED MARCH 30, 2009

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

May 1, 2009  
Charles J. Ingersoll ENGINEER OF DESIGN AND ENVIRONMENT

May 1, 2009  
Christine M. Reed DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS

DIST. 1 DESIGN - PLAN PREPARATION ENGINEER: DANIEL WILGREEN (847) 705-4240

**INDEX OF SHEETS**

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

**STANDARDS**

STD. NO.	DESCRIPTION
000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
442201-03	CLASS C & D PATCHES
606001-04	CONCRETE CURB AND COMBINATION CONCRETE CURB AND GUTTER
701011-02	OFF ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701306-02	LANE CLOSURE, 2L, 2W, SLOW MOVING, OPERATIONS DAYTIME ONLY FOR SPEED 45 MPH
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS, DAY ONLY
701336-05	LANE CLOSURE, 2L, 2W, WORK AREAS IN SERIES FOR SPEED ≥45 MPH
701501-05	LANE CLOSURE, 2L, 2W, UNDIVIDED 45 MPH
701901-01	TRAFFIC CONTROL DEVICES
886001-01	DETECTOR LOOP INSTALLATIONS

**PLAN NOTES**

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 1-800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED)

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, & THE VILLAGE OF LAKE VILLA.

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

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

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

UNLESS OTHER CONDITIONS WARRANT EXTENDED LANE CLOSURE AS DETERMINED AND APPROVED IN WRITING BY THE ENGINEER OR AS PROVIDED FOR IN THE CONTRACT SPECIFICATIONS, OVERNIGHT CLOSURES SHALL NOT BE ALLOWED FOR REHABILITATION PROJECTS INVOLVING DAYTIME MILLING AND RESURFACING OPERATIONS AND CLASS D PATCHING.

THE RESIDENT ENGINEER SHALL CONTACT MS. DEBBIE HANLON, AREA TRAFFIC FIELD ENGINEER AT (847) 438-2300 A MINIMUM OF TWO WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

10 FEET TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURBS & GUTTER AND MEDIANS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL OVERHEAD, SURFACE, AND UNDERGROUND UTILITIES WITHIN THE PROJECT LIMITS WHETHER OR NOT THE UTILITIES ARE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS OWN EXPENSE.

ALL PROPOSED DRIVEWAYS SHALL BE HOT-MIX ASPHALT UNLESS OTHERWISE SPECIFIED AS PORTLAND CEMENT CONCRETE ON THE PLAN SHEETS.

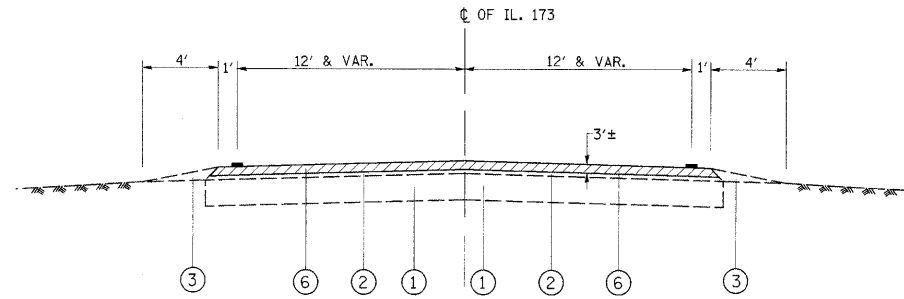
THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TRAFFIC CONTROL DEVICES.

FILE NAME =	USER NAME = ulrichkd	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL RTE. 132 (IL RTE. 59 TO SHEEHAN DR.)</b>				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
01\pwork\PWID00\ULRICHKD\dms92563\DI3806-SHT-PLAN.dgn		DRAWN -	REVISED -		541	W-RS-3	LAKE	23	2				
PLOT SCALE = 50,0000 / IN.		CHECKED -	REVISED -		CONTRACT NO. 60B55								
PLOT DATE = 3/30/2009		DATE -	REVISED -		ILLINOIS FED. AID PROJECT								
				SCALE: NONE	SHEET NO.	OF	SHEETS	STA.	TO STA.				

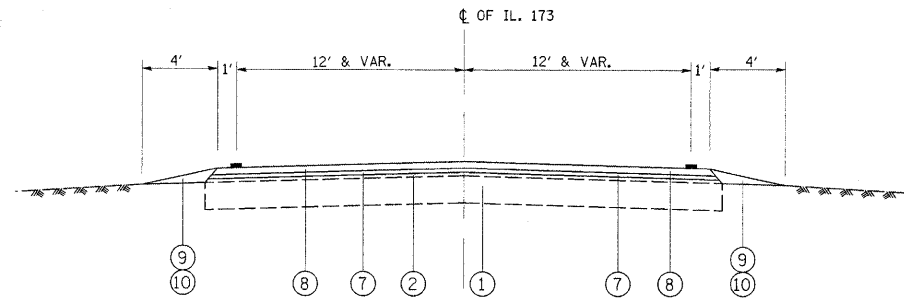
SUMMARY OF QUANTITIES			URBAN 100% STATE TOTAL QUANTITIES					CONSTRUCTION TYPE CODE					SUMMARY OF QUANTITIES			URBAN 100% STATE TOTAL QUANTITIES					CONSTRUCTION TYPE CODE							
CODE NO	ITEM	UNIT	1000								CODE NO	ITEM	UNIT	1000														
20201006	GRADING AND SHAPING SHOULDERS	UNIT	266	266							70100600	TRAFFIC CONTROL AND PROTECTION, STANDARD 701336	L SUM	1	1													
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	50	50							70300100	SHORT-TERM PAVEMENT MARKING	FOOT	9621	9621													
40600300	AGGREGATE (PRIME COAT)	TON	243	243							70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	378	378													
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGWAYS	TON	37	37							70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	42358	42358													
40600895	CONSTRUCTING TEST STRIP	EACH	2	2							70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	853	853													
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	414	414							70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	182	182													
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	120	120							70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	113	113													
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	5086	5086							70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	214	214													
42001300	PROTECTIVE COAT	SQ YD	67	67							70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	3207	3207													
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	60543	60543							* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	378	378													
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	300	300							* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	42358	42358													
44002212	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 3"	SQ YD	711	711							* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	853	853													
44201749	CLASS D PATCHES, TYPE I, 9 INCH	SQ YD	20	20							* 78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	182	182													
44201753	CLASS D PATCHES, TYPE II, 9 INCH	SQ YD	400	400							* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	113	113													
44201757	CLASS D PATCHES, TYPE III, 9 INCH	SQ YD	110	110							* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	214	214													
44201759	CLASS D PATCHES, TYPE IV, 9 INCH	SQ YD	160	160							* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	319	319													
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	900	900							78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	319	319													
60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	28	28							* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	405	405													
60300410	VALVE BOX FRAMES TO BE ADJUSTED WITH NEW FRAMES	EACH	4	4							X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	103	103													
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6							X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	2384	2384													
67100100	MOBILIZATION	L SUM	1	1							Z0018400	DRAINAGE STRUCTURES TO BE ADJUSTED	EACH	1	1													
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1							Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1													

\*Specialty Items

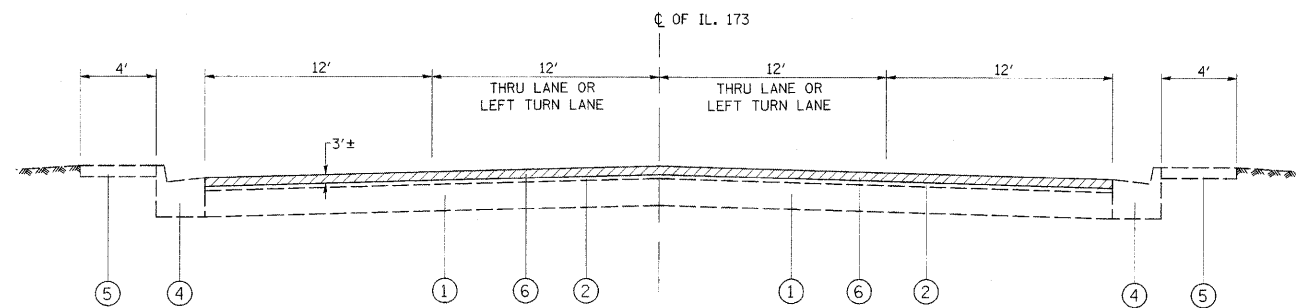
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CONTRACT NO. 60B55	PLOT SCALE = 50,000' / IN.	CHECKED -	REVISED -									SCALE: NONE	SHEET NO.	OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					
	PLOT DATE = 3/30/2009	DATE -	REVISED -																			



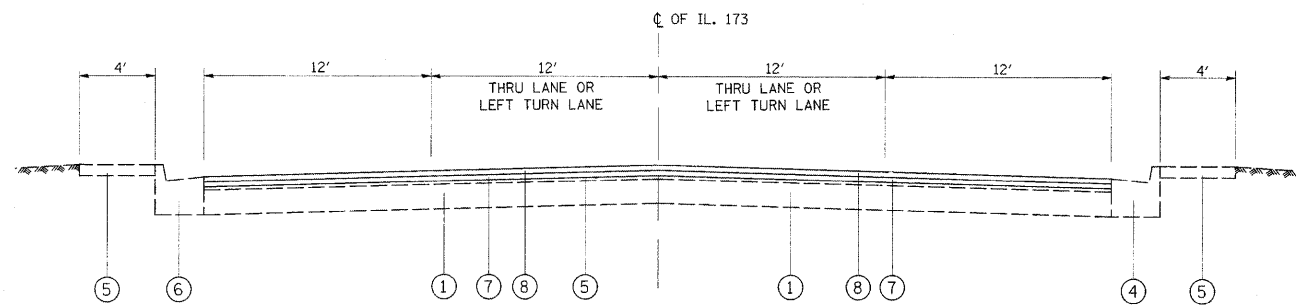
EXISTING TYPICAL SECTION  
STA. 10+19 TO STA. 144+86



PROPOSED TYPICAL SECTION  
STA. 10+19 TO STA. 144+86



EXISTING TYPICAL SECTION  
STA. 144+86 TO STA. 173+70.6



PROPOSED TYPICAL SECTION  
STA. 144+86 TO STA. 173+70.6

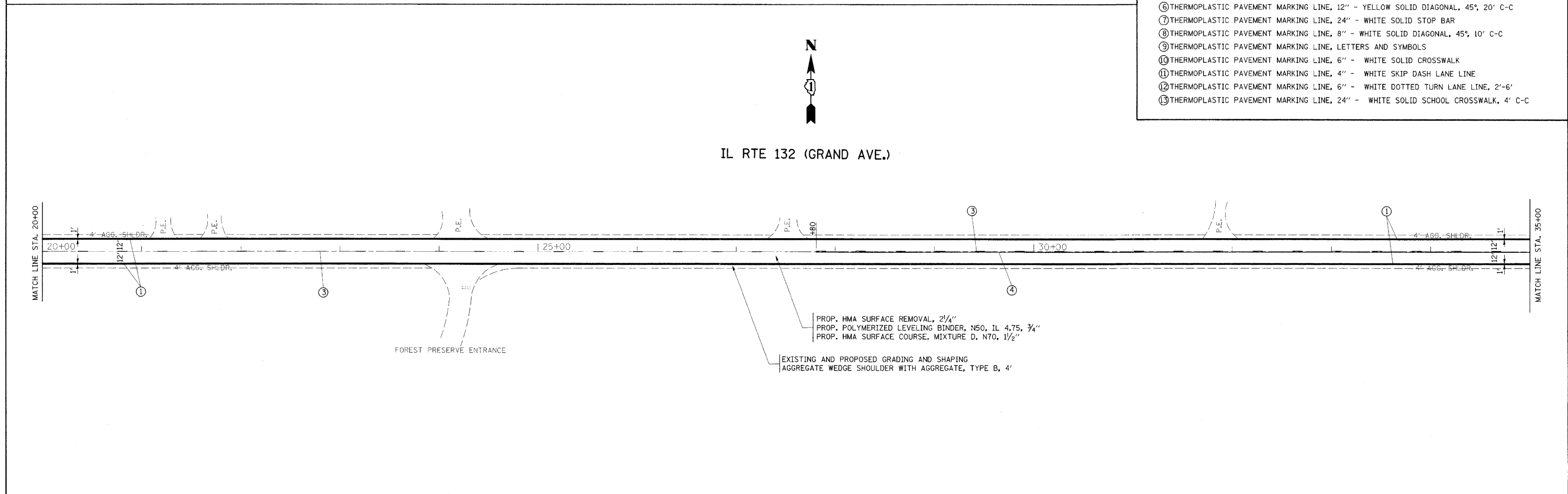
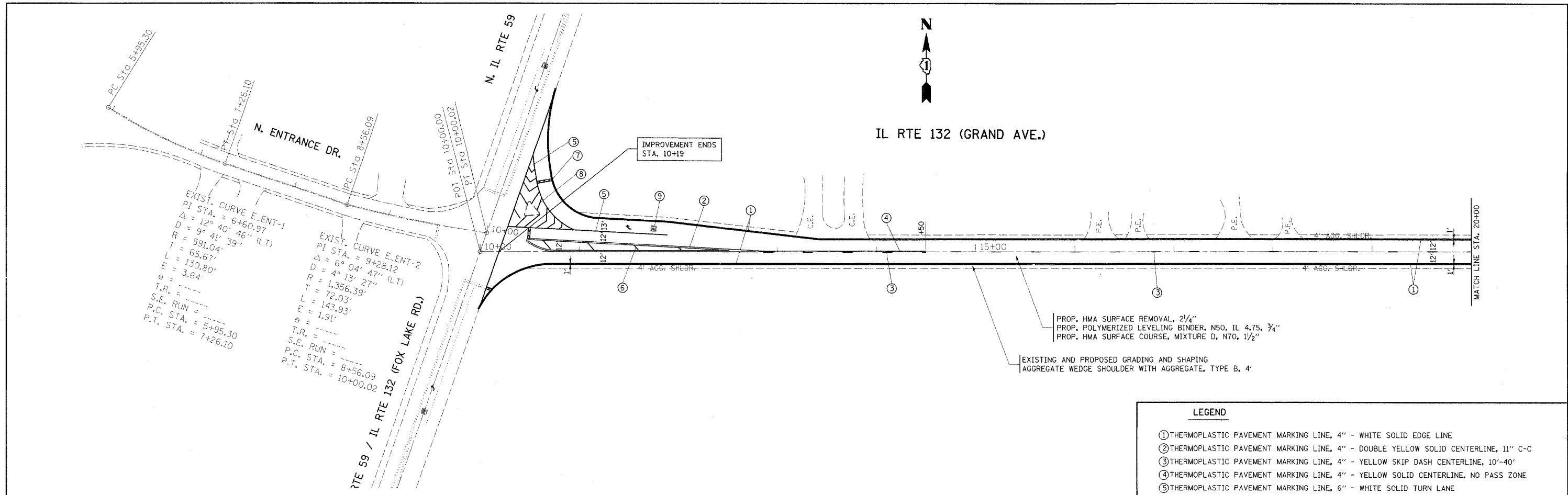
MIXTURE USE	AC/PG	DESIGN AIR VOIDS
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2" IL-9.5 MM	PG 64-22	4% @ 70 GYR.
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"	SBS/SBR PG 76-28/-22	4% @ 50 GYR.
HMA REPLACEMENT OVER PATCHES, 7.5" BINDER IL-19 MM	PG 64-22*	4% @ 70 GYR.
CLASS "D" PATCHES BINDER IL-19MM	PG 64-22*	4% @ 70 GYR.

- ① EXISTING P.C.C. PAVEMENT, 9"
- ② EXISTING HMA SURFACE REMAINING AFTER SURFACE REMOVAL, 3"±
- ③ EXISTING AGGREGATE SHOULDER
- ④ EXISTING TYPE B-6.12 CURB & GUTTER
- ⑤ EXISTING SIDEWALK
- ⑥ PROPOSED HMA SURFACE REMOVAL, 2 1/4"
- ⑦ PROPOSED POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50, 3/4"
- ⑧ PROPOSED HMA SURFACE COURSE, MIX D, N70, 1 1/2"
- ⑨ PROPOSED GRADING AND SHAPING SHOULDERS
- ⑩ PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B

NOTE: "THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ.YD./IN"  
"WHEN RAP EXCEEDS 20%, THEN NEW ASPHALT BINDER IN THE MIX SHALL BE PG58-22"

\*NOTE: CONTRACTOR IS TO PATCH PRIOR TO MILLING.

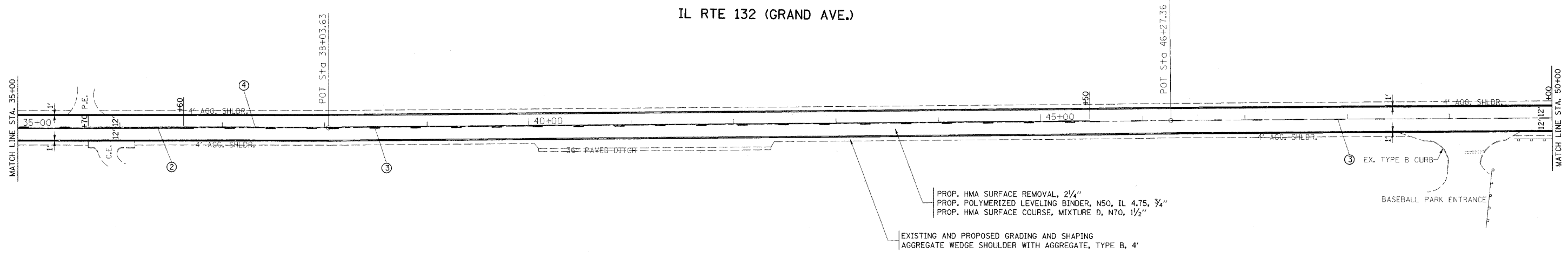
\*\*NOTE: STA. 150+78.59 TO STA. 154+63 DRY LAND BRIDGE. NO PATCHING IS ALLOWED ON THE DRY-LAND BRIDGE. ALSO NO ADDITIONAL LOAD SHOULD BE PLACED ON THE DRY-LAND BRIDGE WITHOUT CONSULTING A STRUCTURAL ENGINEER FIRST.



FILE NAME =	USER NAME = ulrichkd	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL RTE. 132 IL RTE. 59 TO SHEEHAN DR.</b>			F.A.P. RTE. 541	SECTION W-RS-3	COUNTY LAKE	TOTAL SHEETS 23	SHEET NO. 5
c:\pwork\pwork\DOT\ULRICHKD\dms92563\DL36886-SHT-PLAN.dgn	PLOT SCALE = 50.0000 / IN.	DRAWN -	REVISED -		SCALE: 1"=50'	SHEET NO.	OF	SHEETS	STA. 10+19	TO STA. 35+00	CONTRACT NO. 60B55	
	PLOT DATE = 3/30/2009	CHECKED -	REVISED -		ILLINOIS FED. AID PROJECT							
		DATE	REVISED									



IL RTE 132 (GRAND AVE.)



PROP. HMA SURFACE REMOVAL, 2 1/4"  
 PROP. POLYMERIZED LEVELING BINDER, N50, IL 4.75, 3/4"  
 PROP. HMA SURFACE COURSE, MIXTURE D, N70, 1 1/2"

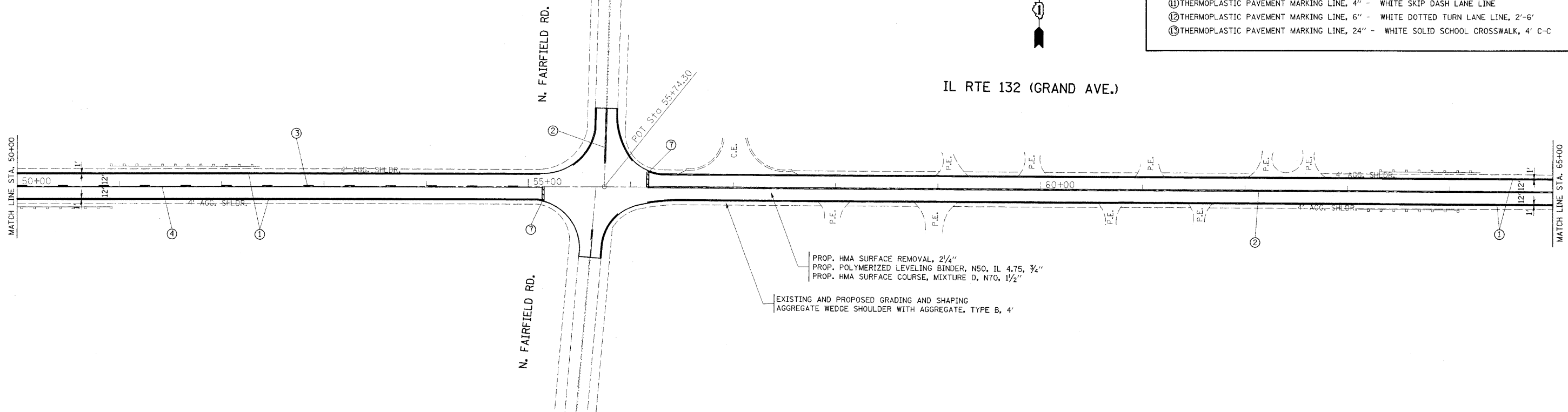
EXISTING AND PROPOSED GRADING AND SHAPING  
 AGGREGATE WEDGE SHOULDER WITH AGGREGATE, TYPE B, 4'

LEGEND

- ① THERMOPLASTIC PAVEMENT MARKING LINE, 4" - WHITE SOLID EDGE LINE
- ② THERMOPLASTIC PAVEMENT MARKING LINE, 4" - DOUBLE YELLOW SOLID CENTERLINE, 11" C-C
- ③ THERMOPLASTIC PAVEMENT MARKING LINE, 4" - YELLOW SKIP DASH CENTERLINE, 10'-40'
- ④ THERMOPLASTIC PAVEMENT MARKING LINE, 4" - YELLOW SOLID CENTERLINE, NO PASS ZONE
- ⑤ THERMOPLASTIC PAVEMENT MARKING LINE, 6" - WHITE SOLID TURN LANE
- ⑥ THERMOPLASTIC PAVEMENT MARKING LINE, 12" - YELLOW SOLID DIAGONAL, 45°, 20' C-C
- ⑦ THERMOPLASTIC PAVEMENT MARKING LINE, 24" - WHITE SOLID STOP BAR
- ⑧ THERMOPLASTIC PAVEMENT MARKING LINE, 8" - WHITE SOLID DIAGONAL, 45°, 10' C-C
- ⑨ THERMOPLASTIC PAVEMENT MARKING LINE, LETTERS AND SYMBOLS
- ⑩ THERMOPLASTIC PAVEMENT MARKING LINE, 6" - WHITE SOLID CROSSWALK
- ⑪ THERMOPLASTIC PAVEMENT MARKING LINE, 4" - WHITE SKIP DASH LANE LINE
- ⑫ THERMOPLASTIC PAVEMENT MARKING LINE, 6" - WHITE DOTTED TURN LANE LINE, 2'-6'
- ⑬ THERMOPLASTIC PAVEMENT MARKING LINE, 24" - WHITE SOLID SCHOOL CROSSWALK, 4' C-C



IL RTE 132 (GRAND AVE.)



PROP. HMA SURFACE REMOVAL, 2 1/4"  
 PROP. POLYMERIZED LEVELING BINDER, N50, IL 4.75, 3/4"  
 PROP. HMA SURFACE COURSE, MIXTURE D, N70, 1 1/2"

EXISTING AND PROPOSED GRADING AND SHAPING  
 AGGREGATE WEDGE SHOULDER WITH AGGREGATE, TYPE B, 4'

FILE NAME =  
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USER NAME = ulrichkd  
 PLOT SCALE = 58.0000' / IN.  
 PLOT DATE = 3/30/2009

DESIGNED -  
 DRAWN -  
 CHECKED -  
 DATE -

REVISED -  
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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

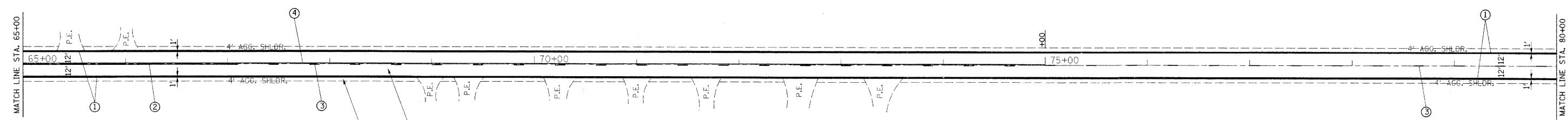
IL RTE 132  
 IL RTE 59 TO SHEEHAN DR.

SCALE: 1"=50' SHEET NO. OF SHEETS STA. 35+00 TO STA. 65+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	W-RS-3	LAKE	23	6
CONTRACT NO. 60B55				
ILLINOIS FED. AID PROJECT				



IL RTE 132 (GRAND AVE.)

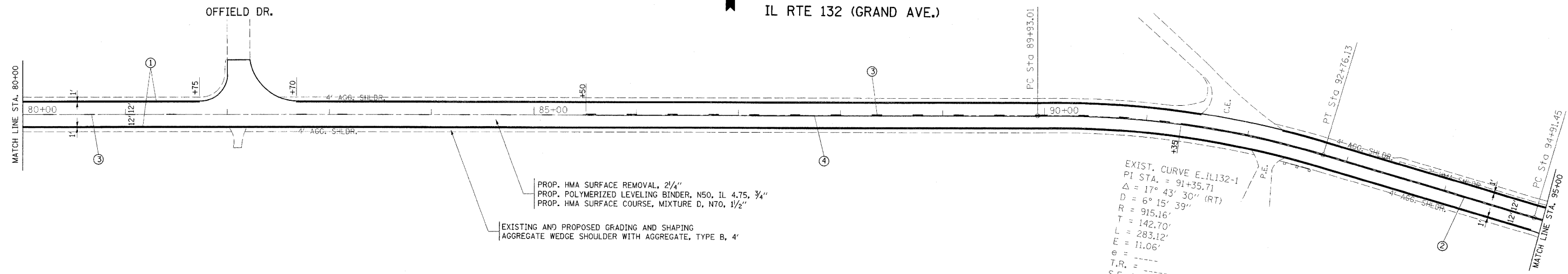


PROP. HMA SURFACE REMOVAL, 2 1/4"  
 PROP. POLYMERIZED LEVELING BINDER, N50, IL 4.75, 3/4"  
 PROP. HMA SURFACE COURSE, MIXTURE D, N70, 1 1/2"  
 EXISTING AND PROPOSED GRADING AND SHAPING  
 AGGREGATE WEDGE SHOULDER WITH AGGREGATE, TYPE B, 4'

LEGEND	
①	THERMOPLASTIC PAVEMENT MARKING LINE, 4" - WHITE SOLID EDGE LINE
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⑬	THERMOPLASTIC PAVEMENT MARKING LINE, 24" - WHITE SOLID SCHOOL CROSSWALK, 4' C-C



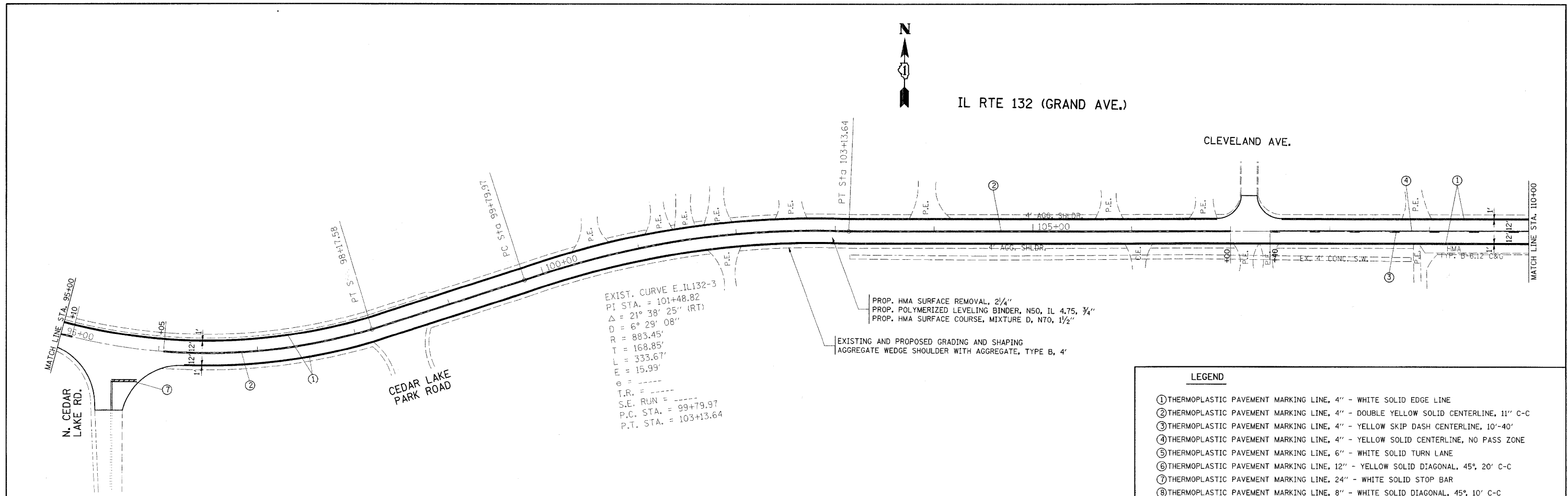
IL RTE 132 (GRAND AVE.)



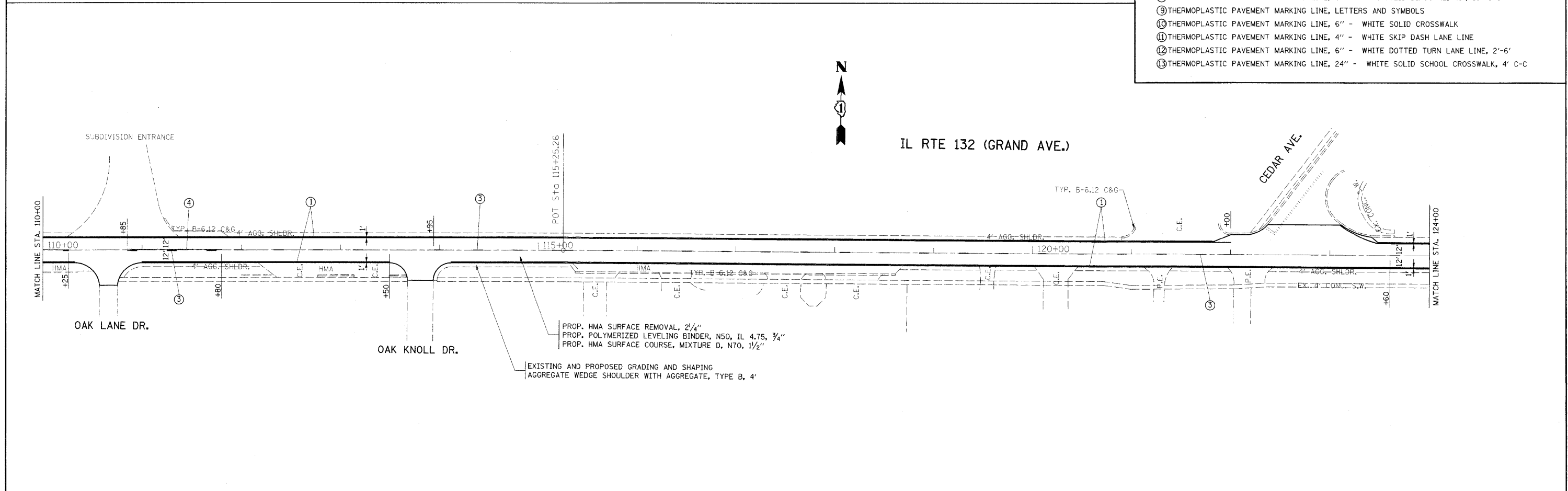
PROP. HMA SURFACE REMOVAL, 2 1/4"  
 PROP. POLYMERIZED LEVELING BINDER, N50, IL 4.75, 3/4"  
 PROP. HMA SURFACE COURSE, MIXTURE D, N70, 1 1/2"  
 EXISTING AND PROPOSED GRADING AND SHAPING  
 AGGREGATE WEDGE SHOULDER WITH AGGREGATE, TYPE B, 4'

EXIST. CURVE E-IL132-1  
 PI STA. = 91+35.71  
 $\Delta = 17^\circ 43' 30''$  (RT)  
 $D = 6^\circ 15' 39''$   
 $R = 915.16'$   
 $T = 142.70'$   
 $L = 283.12'$   
 $E = 11.06'$   
 $e =$   
 $T.R. =$   
 $S.E. RUN =$   
 $P.C. STA. = 89+93.01$   
 $P.T. STA. = 92+76.13$

FILE NAME =	USER NAME = ulrichkd	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL RTE. 132 IL RTE. 59 TO SHEEHAN DR.</b>			F.A.P. RTE. 541	SECTION W-RS-3	COUNTY LAKE	TOTAL SHEETS 23	SHEET NO. 7
ct:\pwwork\FWIDOT\ULRICHK\das92863\DI3806-SHT-PLAN.dgn		DRAWN -	REVISED -		SCALE: 1"=50'	SHEET NO. OF	SHEETS	STA. 65+00	TO STA. 95+00	CONTRACT NO. 60B55		
		CHECKED -	REVISED -							(ILLINOIS) FED. AID PROJECT		
		DATE -	REVISED -									



LEGEND	
①	THERMOPLASTIC PAVEMENT MARKING LINE, 4" - WHITE SOLID EDGE LINE
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④	THERMOPLASTIC PAVEMENT MARKING LINE, 4" - YELLOW SOLID CENTERLINE, NO PASS ZONE
⑤	THERMOPLASTIC PAVEMENT MARKING LINE, 6" - WHITE SOLID TURN LANE
⑥	THERMOPLASTIC PAVEMENT MARKING LINE, 12" - YELLOW SOLID DIAGONAL, 45°, 20' C-C
⑦	THERMOPLASTIC PAVEMENT MARKING LINE, 24" - WHITE SOLID STOP BAR
⑧	THERMOPLASTIC PAVEMENT MARKING LINE, 8" - WHITE SOLID DIAGONAL, 45°, 10' C-C
⑨	THERMOPLASTIC PAVEMENT MARKING LINE, LETTERS AND SYMBOLS
⑩	THERMOPLASTIC PAVEMENT MARKING LINE, 6" - WHITE SOLID CROSSWALK
⑪	THERMOPLASTIC PAVEMENT MARKING LINE, 4" - WHITE SKIP DASH LANE LINE
⑫	THERMOPLASTIC PAVEMENT MARKING LINE, 6" - WHITE DOTTED TURN LANE LINE, 2'-6'
⑬	THERMOPLASTIC PAVEMENT MARKING LINE, 24" - WHITE SOLID SCHOOL CROSSWALK, 4' C-C

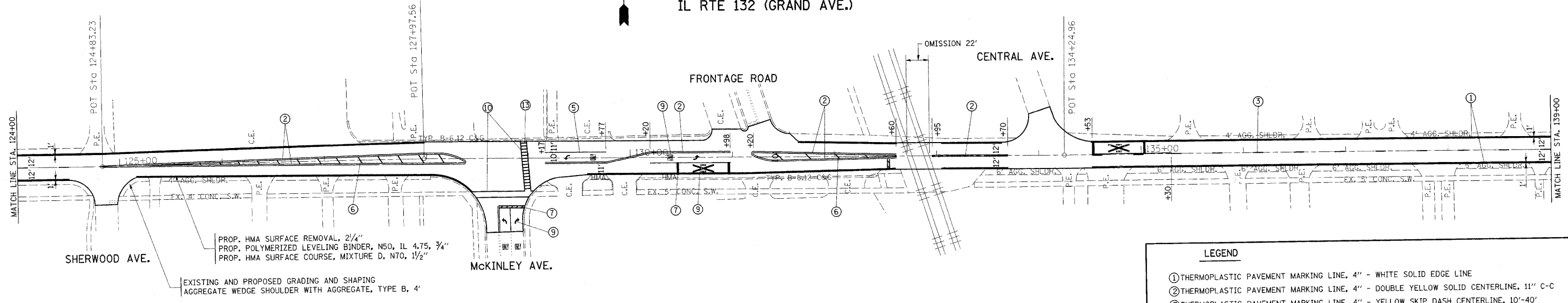


FILE NAME =	USER NAME = ulrichkd	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL RTE. 132 IL RTE. 59 TO SHEEHAN DR.</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ca:\pwwork\pwidot\jlr\richk\dms92563\DI3806-SHT-PLAN.dgn		DRAWN -	REVISED -		541	W-RS-3	LAKE	23	8			
PLOT SCALE = 50,0000 1/ IN.		CHECKED -	REVISED -		SCALE: 1"=50'			SHEET NO. OF SHEETS		STA. 95+00 TO STA. 124+00		
PLOT DATE = 3/30/2009		DATE -	REVISED -		CONTRACT NO. 60B55			ILLINOIS FED. AID PROJECT				





IL RTE 132 (GRAND AVE.)



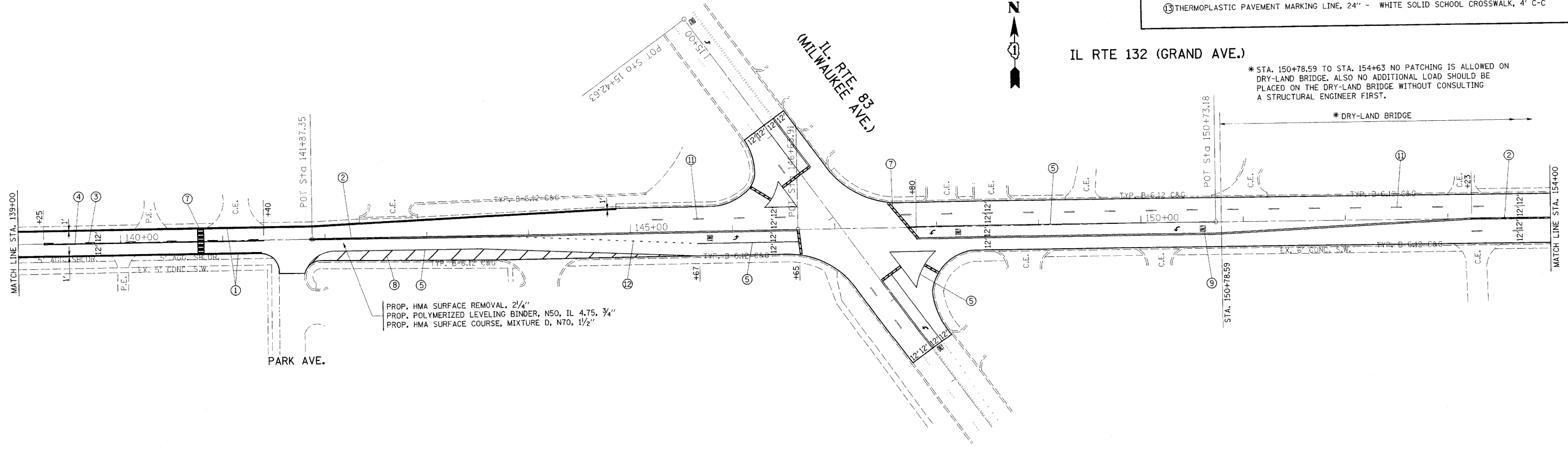
PROP. HMA SURFACE REMOVAL, 2/4"  
 PROP. POLYMERIZED LEVELING BINDER, N50, IL 4.75, 3/4"  
 PROP. HMA SURFACE COURSE, MIXTURE D, N70, 1/2"

EXISTING AND PROPOSED GRADING AND SHAPING  
 AGGREGATE WEDGE SHOULDER WITH AGGREGATE, TYPE B, 4'

- LEGEND**
- ① THERMOPLASTIC PAVEMENT MARKING LINE, 4" - WHITE SOLID EDGE LINE
  - ② THERMOPLASTIC PAVEMENT MARKING LINE, 4" - DOUBLE YELLOW SOLID CENTERLINE, 11" C-C
  - ③ THERMOPLASTIC PAVEMENT MARKING LINE, 4" - YELLOW SKIP DASH CENTERLINE, 10'-40'
  - ④ THERMOPLASTIC PAVEMENT MARKING LINE, 4" - YELLOW SOLID CENTERLINE, NO PASS ZONE
  - ⑤ THERMOPLASTIC PAVEMENT MARKING LINE, 6" - WHITE SOLID TURN LANE
  - ⑥ THERMOPLASTIC PAVEMENT MARKING LINE, 12" - YELLOW SOLID DIAGONAL, 45°, 20' C-C
  - ⑦ THERMOPLASTIC PAVEMENT MARKING LINE, 24" - WHITE SOLID STOP BAR
  - ⑧ THERMOPLASTIC PAVEMENT MARKING LINE, 8" - WHITE SOLID DIAGONAL, 45°, 10' C-C
  - ⑨ THERMOPLASTIC PAVEMENT MARKING LINE, LETTERS AND SYMBOLS
  - ⑩ THERMOPLASTIC PAVEMENT MARKING LINE, 6" - WHITE SOLID CROSSWALK
  - ⑪ THERMOPLASTIC PAVEMENT MARKING LINE, 4" - WHITE SKIP DASH LANE LINE
  - ⑫ THERMOPLASTIC PAVEMENT MARKING LINE, 6" - WHITE DOTTED TURN LANE LINE, 2'-6"
  - ⑬ THERMOPLASTIC PAVEMENT MARKING LINE, 24" - WHITE SOLID SCHOOL CROSSWALK, 4' C-C



IL RTE 132 (GRAND AVE.)



PROP. HMA SURFACE REMOVAL, 2/4"  
 PROP. POLYMERIZED LEVELING BINDER, N50, IL 4.75, 3/4"  
 PROP. HMA SURFACE COURSE, MIXTURE D, N70, 1/2"

\* STA. 150+78.59 TO STA. 154+63 NO PATCHING IS ALLOWED ON DRY-LAND BRIDGE. ALSO NO ADDITIONAL LOAD SHOULD BE PLACED ON THE DRY-LAND BRIDGE WITHOUT CONSULTING A STRUCTURAL ENGINEER FIRST.

\* DRY-LAND BRIDGE

FILE NAME =  
 c:\pwwork\pwwid01\ULRICHK\dms92563\013806-SHT-PLAN.dgn

USER NAME = ulrichk  
 806-SHT-PLAN.dgn  
 PLOT SCALE = 50.0000' / IN.  
 PLOT DATE = 3/31/2009

DESIGNED -  
 DRAWN -  
 CHECKED -  
 DATE -

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

IL RTE. 137  
 IL RTE. 59 TO SHEEHAN DR.  
 SCALE: 1"=50'  
 SHEET NO. OF SHEETS STA. 124+00 TO STA. 154+00

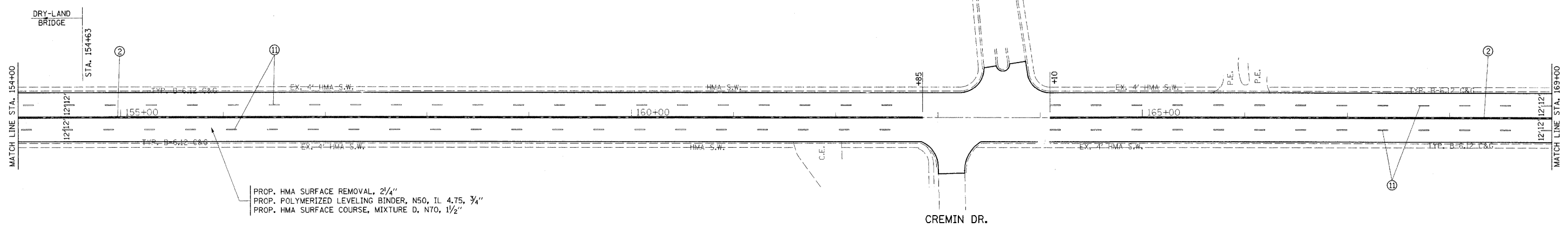
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	W-RS-3	LAKE	23	9
CONTRACT NO. 60B55			ILLINOIS FED. AID PROJECT	

\* STA. 150+78.59 TO STA. 154+63 NO PATCHING IS ALLOWED ON DRY-LAND BRIDGE. ALSO NO ADDITIONAL LOAD SHOULD BE PLACED ON THE DRY-LAND BRIDGE WITHOUT CONSULTING A STRUCTURAL ENGINEER FIRST.

IL RTE 132 (GRAND AVE.)



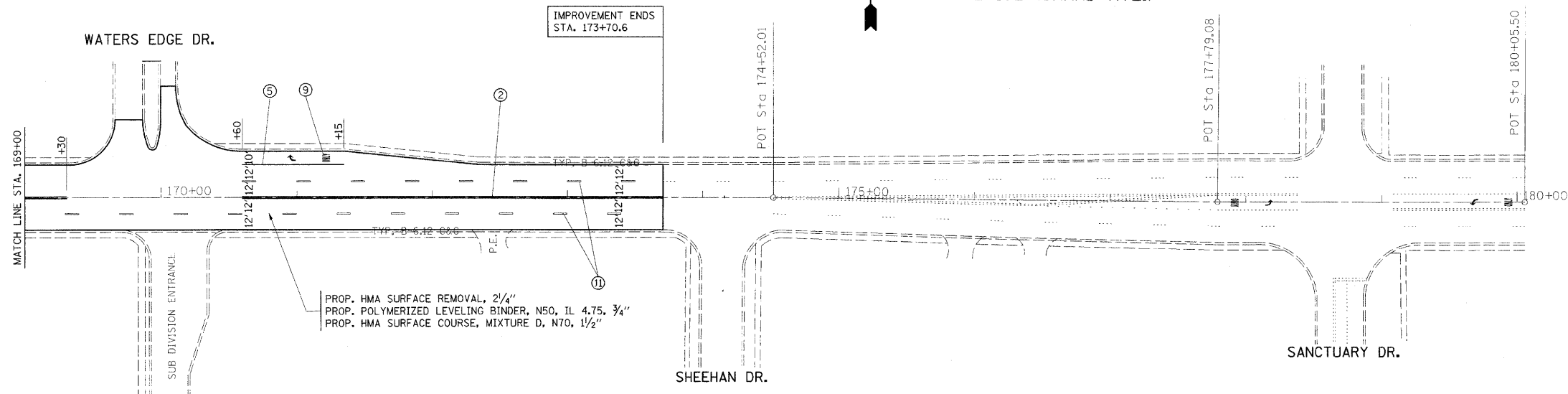
SHOSHONI TRAIL



PROP. HMA SURFACE REMOVAL, 2/4"  
 PROP. POLYMERIZED LEVELING BINDER, N50, IL 4.75, 3/4"  
 PROP. HMA SURFACE COURSE, MIXTURE D, N70, 1/2"

LEGEND	
①	THERMOPLASTIC PAVEMENT MARKING LINE, 4" - WHITE SOLID EDGE LINE
②	THERMOPLASTIC PAVEMENT MARKING LINE, 4" - DOUBLE YELLOW SOLID CENTERLINE, 11" C-C
③	THERMOPLASTIC PAVEMENT MARKING LINE, 4" - YELLOW SKIP DASH CENTERLINE, 10'-40'
④	THERMOPLASTIC PAVEMENT MARKING LINE, 4" - YELLOW SOLID CENTERLINE, NO PASS ZONE
⑤	THERMOPLASTIC PAVEMENT MARKING LINE, 6" - WHITE SOLID TURN LANE
⑥	THERMOPLASTIC PAVEMENT MARKING LINE, 12" - YELLOW SOLID DIAGONAL, 45°, 20' C-C
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⑬	THERMOPLASTIC PAVEMENT MARKING LINE, 24" - WHITE SOLID SCHOOL CROSSWALK, 4' C-C

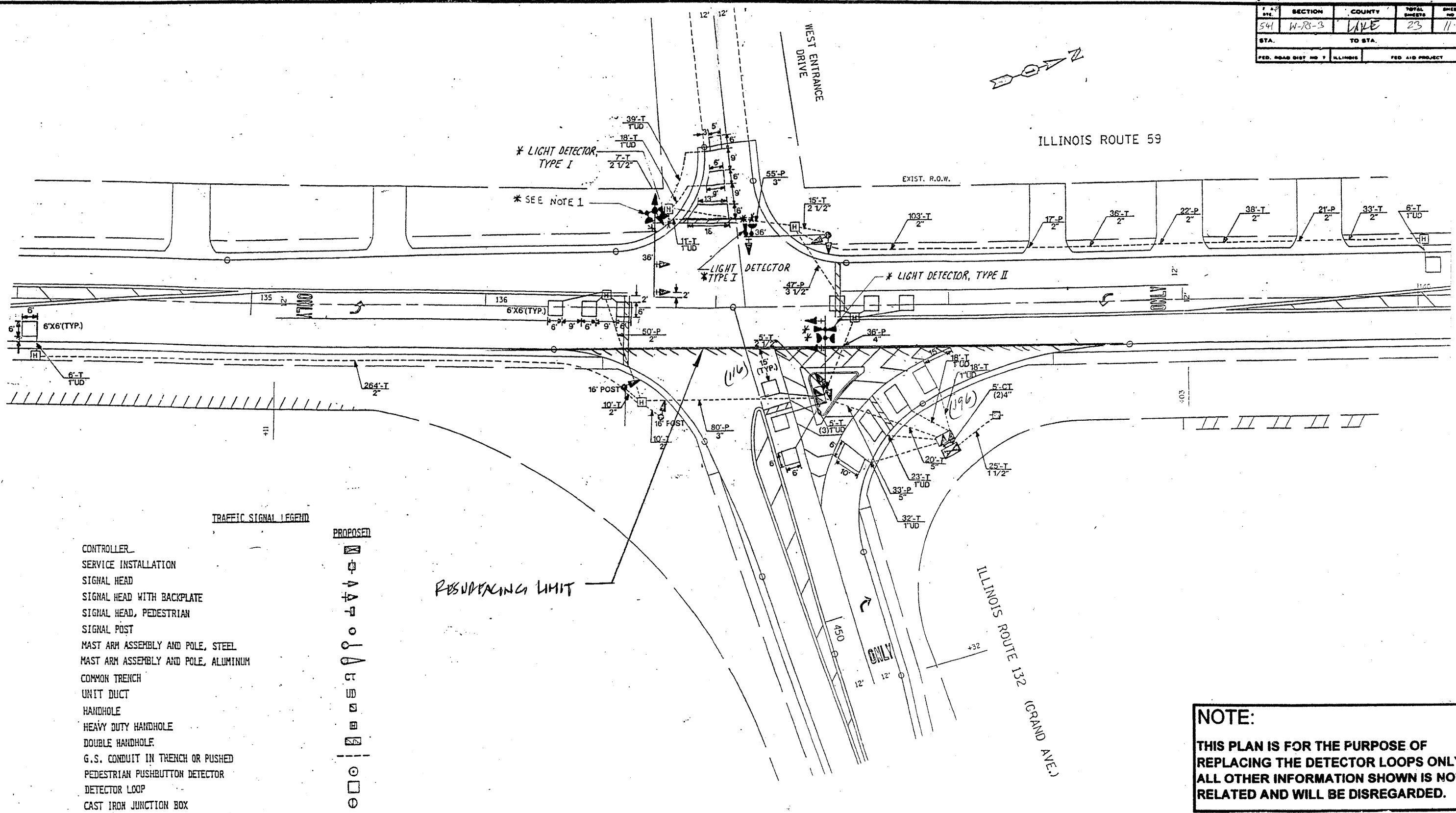
IL RTE 132 (GRAND AVE.)



PROP. HMA SURFACE REMOVAL, 2/4"  
 PROP. POLYMERIZED LEVELING BINDER, N50, IL 4.75, 3/4"  
 PROP. HMA SURFACE COURSE, MIXTURE D, N70, 1/2"

FILE NAME =	USER NAME = ul-richkd	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL RTE. 132 IL RTE. 59 TO SHEEHAN DR.</b>		F.A.P. RTE. 541	SECTION W-RS-3	COUNTY LAKE	TOTAL SHEETS 23	SHEET NO. 10	CONTRACT NO. 60B55
ca:\pwwork\p\w\DOT\ULRICHK\dm92563\0138006-SHT-PLAN.dgn	PLOT SCALE = 50.0000' / 1" IN.	DRAWN -	REVISED -		SCALE: 1"=50'	SHEET NO. OF	SHEETS	STA. 154+00	TO STA. 173+70.6	ILLINOIS FED. AID PROJECT		
	PLOT DATE = 3/31/2009	CHECKED -	REVISED -									
		DATE -	REVISED -									

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
W-RS-3	LAKE	23	11
STA. TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS	
		FED. AID PROJECT	



**TRAFFIC SIGNAL LEGEND**

- CONTROLLER
- SERVICE INSTALLATION
- SIGNAL HEAD
- SIGNAL HEAD WITH BACKPLATE
- SIGNAL HEAD, PEDESTRIAN
- SIGNAL POST
- MAST ARM ASSEMBLY AND POLE, STEEL
- MAST ARM ASSEMBLY AND POLE, ALUMINUM
- COMMON TRENCH
- UNIT DUCT
- HANDHOLE
- HEAVY DUTY HANDHOLE
- DOUBLE HANDHOLE
- G.S. CONDUIT IN TRENCH OR PUSHED
- PEDESTRIAN PUSHBUTTON DETECTOR
- DETECTOR LOOP
- CAST IRON JUNCTION BOX
- EMERGENCY VEHICLE SYSTEM DETECTOR



RESURFACING LIMIT

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

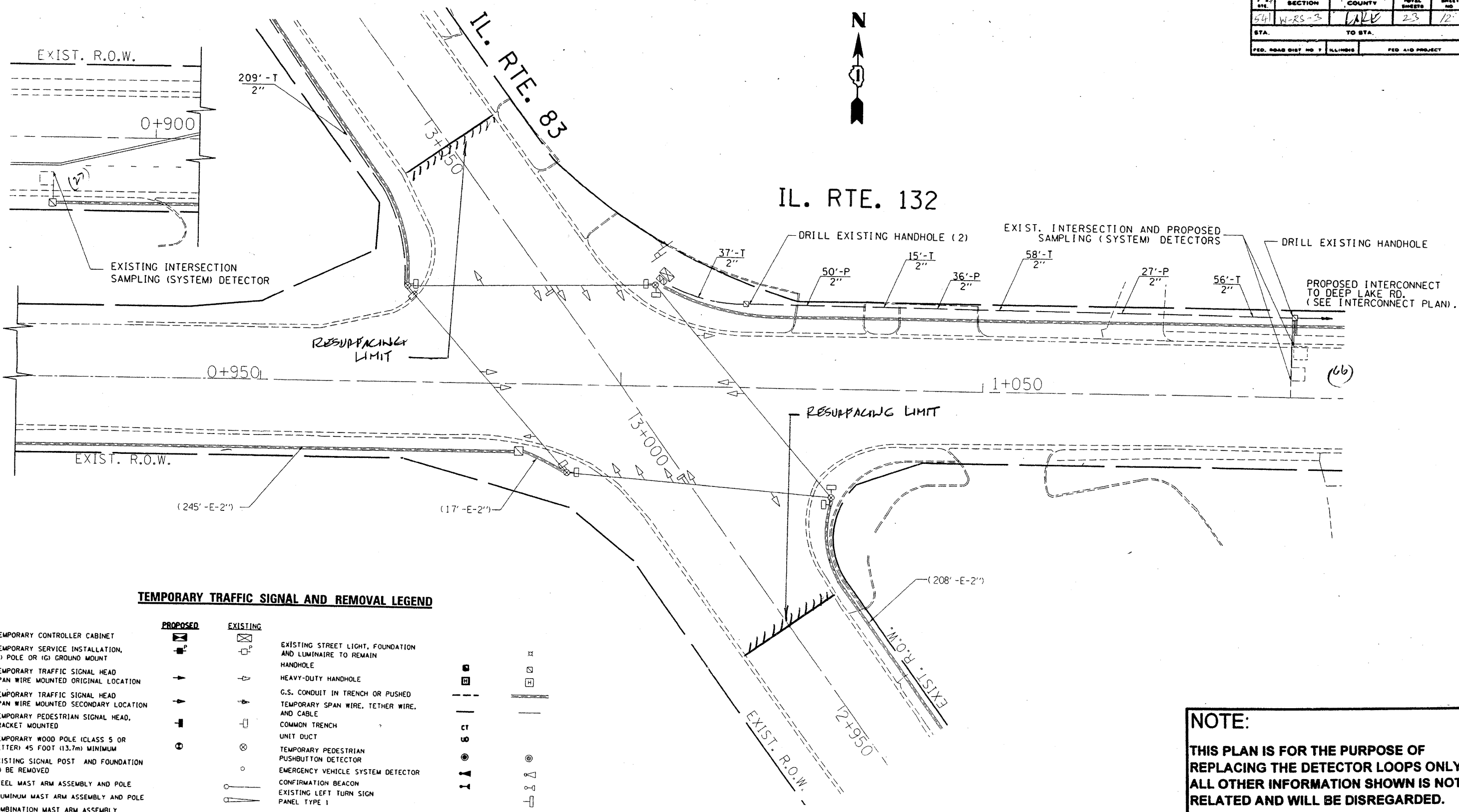
**REPLACE ALL DETECTOR LOOPS AS SHOWN**  
 (WITHIN THE RESURFACING LIMITS)

CODE NO.	QUANTITY	UNIT	ITEM
86600600	312	Foot	Detector Loop Replacement

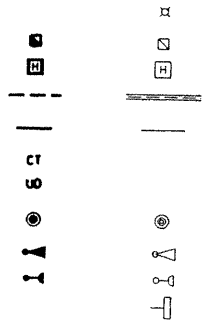
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**DETECTOR LOOP REPLACEMENT**  
 ILL. RTE. 132 @ ILL. RTE. 59  
 SCALE: NONE  
 DATE: FEB. 2009  
 DRAWN BY: JHE  
 DESIGNED BY: JHE  
 CHECKED BY: DAD

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
W-RS-3	LAKE	23	12
STA. TO STA.		FED. ROAD DIST NO 7 ILLINOIS	
		FED AID PROJECT	



PROPOSED	EXISTING	
TEMPORARY CONTROLLER CABINET	EXISTING STREET LIGHT, FOUNDATION AND LUMINAIRE TO REMAIN	
TEMPORARY SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT	HANDHOLE	
TEMPORARY TRAFFIC SIGNAL HEAD	HEAVY-DUTY HANDHOLE	
SPAN WIRE MOUNTED ORIGINAL LOCATION	G.S. CONDUIT IN TRENCH OR PUSHED	
TEMPORARY TRAFFIC SIGNAL HEAD	TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE	
SPAN WIRE MOUNTED SECONDARY LOCATION	COMMON TRENCH	
TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED	UNIT DUCT	
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM	TEMPORARY PEDESTRIAN PUSHBUTTON DETECTOR	
EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED	EMERGENCY VEHICLE SYSTEM DETECTOR	
STEEL MAST ARM ASSEMBLY AND POLE	CONFIRMATION BEACON	
ALUMINUM MAST ARM ASSEMBLY AND POLE	EXISTING LEFT TURN SIGN PANEL TYPE 1	
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE		



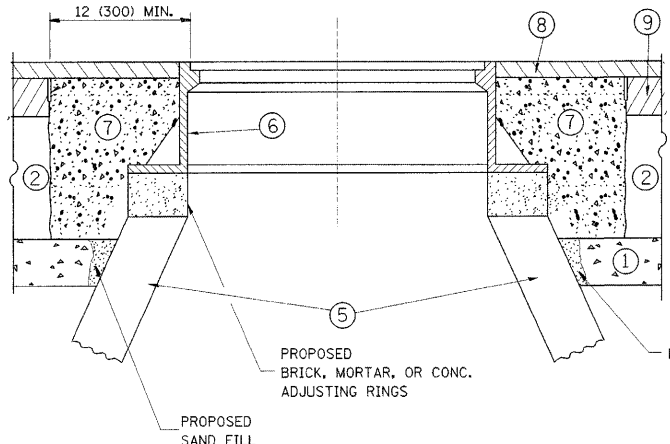
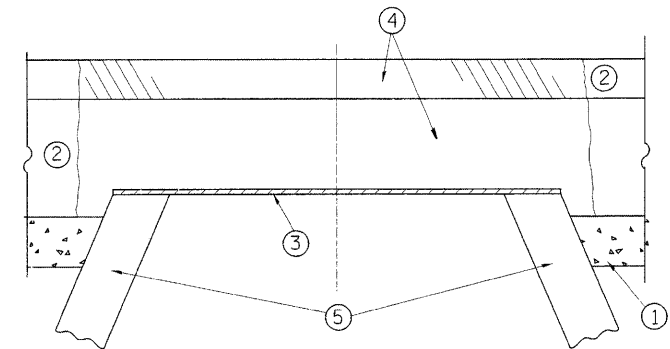
**NOTE:**  
 THIS PLAN IS FOR THE PURPOSE OF REPLACING THE DETECTOR LOOPS ONLY. ALL OTHER INFORMATION SHOWN IS NOT RELATED AND WILL BE DISREGARDED.

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

CODE NO.	QUANTITY	UNIT	ITEM
86600600	93	Foot	Detector Loop Replacement

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**DETECTOR LOOP REPLACEMENT**  
 IL. RTE. 83 @ IL. RTE. 132  
 SCALE: NONE  
 DATE: FEB. 2009  
 DRAWN BY: JHE  
 DESIGNED BY: JHE  
 CHECKED BY: DAD



**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 1/2 (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 SI CONCRETE, OR HMA SURFACE COURSE OR HMA BINDER COURSE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

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 SI CONCRETE, HMA SURFACE COURSE OR HMA BINDER COURSE
- ⑧ PROPOSED HMA SURFACE COURSE
- ⑨ PROPOSED HMA BINDER COURSE

**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.

**LOCATION OF STRUCTURES:**

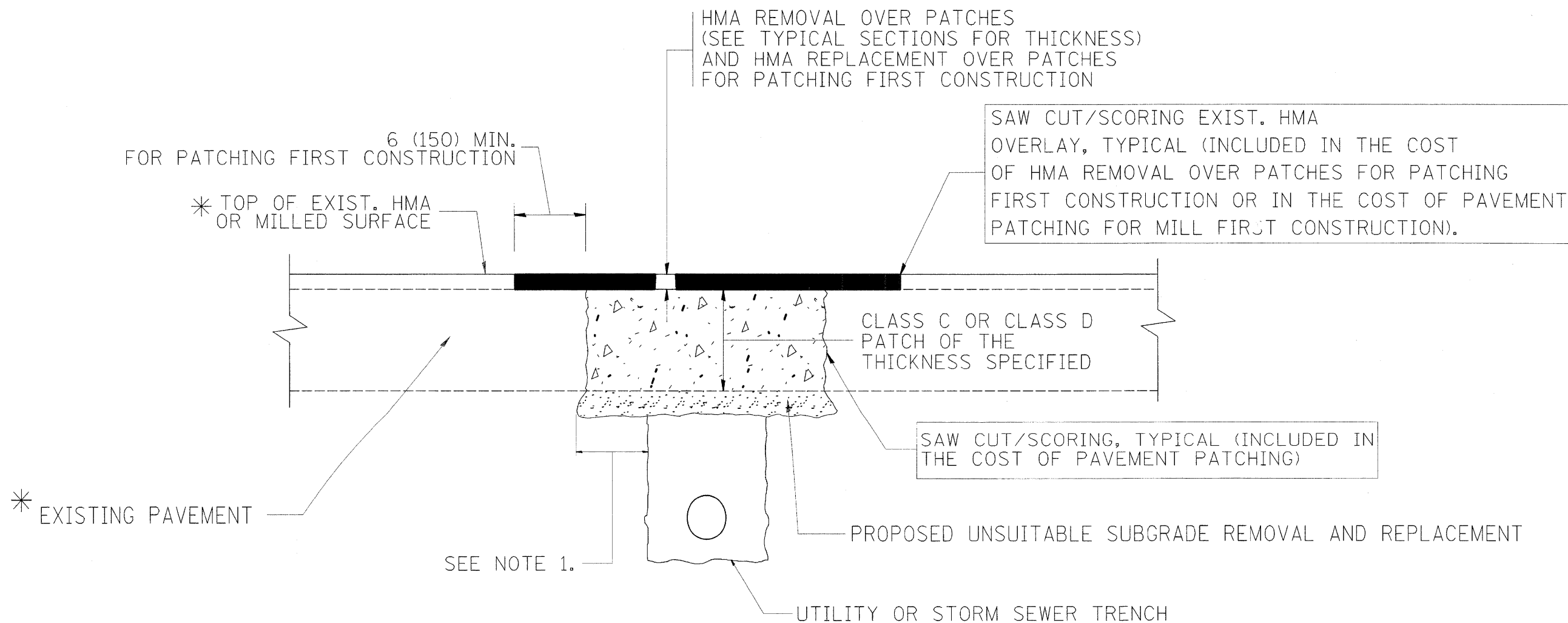
THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

**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.

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

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME = W:\distatd\22x34\bd08.dgn	USER NAME = ulrichkd	DESIGNED - R. SHAH	REVISED - R. SHAH 03-10-95	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING</b>		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN -	REVISED - A. ABBAS 03-21-97		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	BD600-03 (BD-8)	CONTRACT NO. 00000	23	13
		PLOT SCALE = 50.0000' / 1" IN.	REVISED - R. WIEDEMAN 05-14-04									
		PLOT DATE = 3/18/2009	REVISED - R. BORO 01-01-07									



\* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

**NOTES:**

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

**SEQUENCE OF CONSTRUCTION (PATCHING FIRST)**

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

**SEQUENCE OF CONSTRUCTION (MILLING FIRST)**

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

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

FILE NAME = W:\diststd\22x34\bd22.dgn	USER NAME = ulrtchkd	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED - R. BORO 01-01-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	8D400-04 (BD-22)	CONTRACT NO.	23	14
		PLOT SCALE = 50.000' / IN.	REVISED - R. BORO 09-04-07									
		PLOT DATE = 3/18/2009	REVISED - K. ENG 10-27-08						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 OR GROUND.

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

EXISTING CONCRETE PAVEMENT, CONCRETE BASE COURSE OR FLEXIBLE PAVEMENT

3" (75) MIN.

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

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

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

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

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

SALT TOLERANT SOD AND TOP SOIL, 4" (100) RESTORATION WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

② CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

③ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

④ 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.

⑤ 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.

⑥ 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.

⑦ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

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

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

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

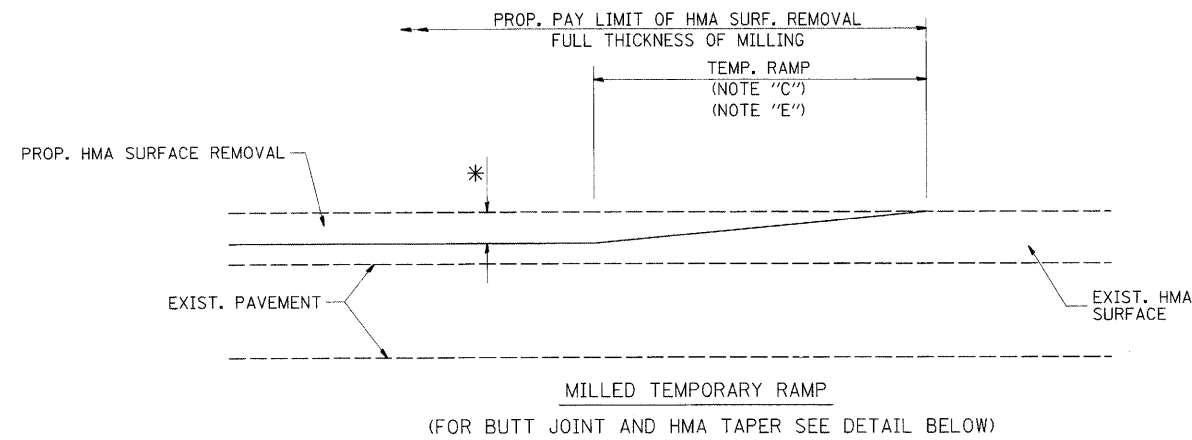
PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USUABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

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

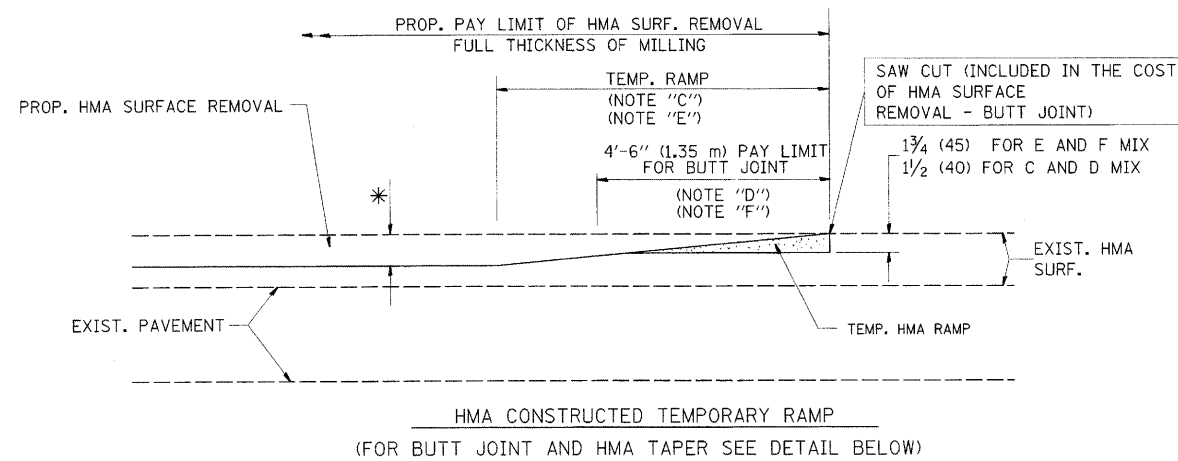
# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

FILE NAME = W:\diststd\22x34\bd24.dgn	USER NAME = ulrshkd	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT</b>			F.A.C. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED - A. ABBAS 03-21-97		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	BD600-06 (BD-24)	CONTRACT NO. 00800	23	15
		CHECKED -	REVISED - M. GOMEZ 01-22-01									
		DATE - 03-11-94	REVISED - R. BORO 01-01-07									

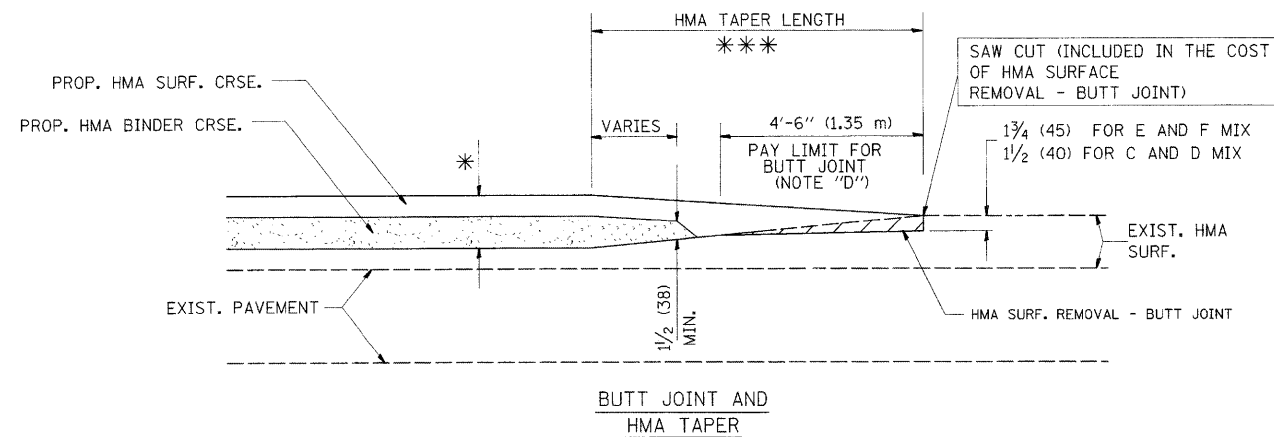


**OPTION 1**

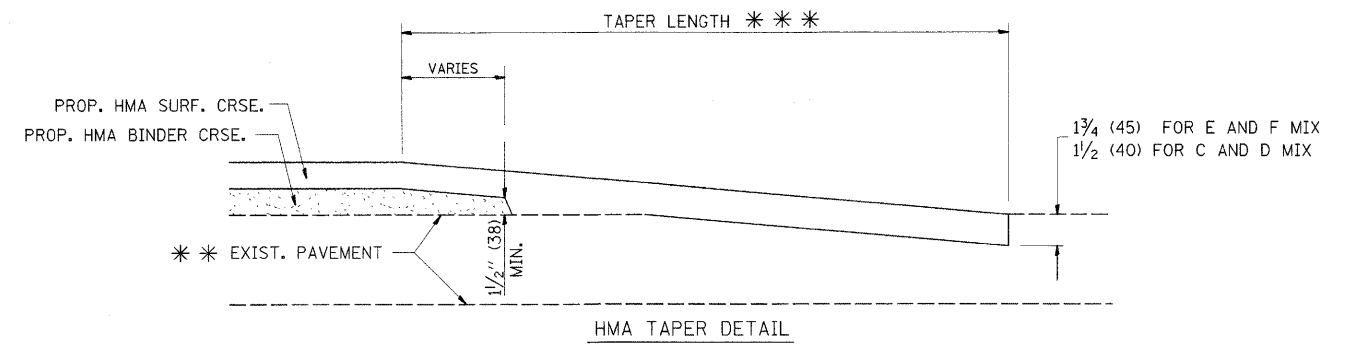
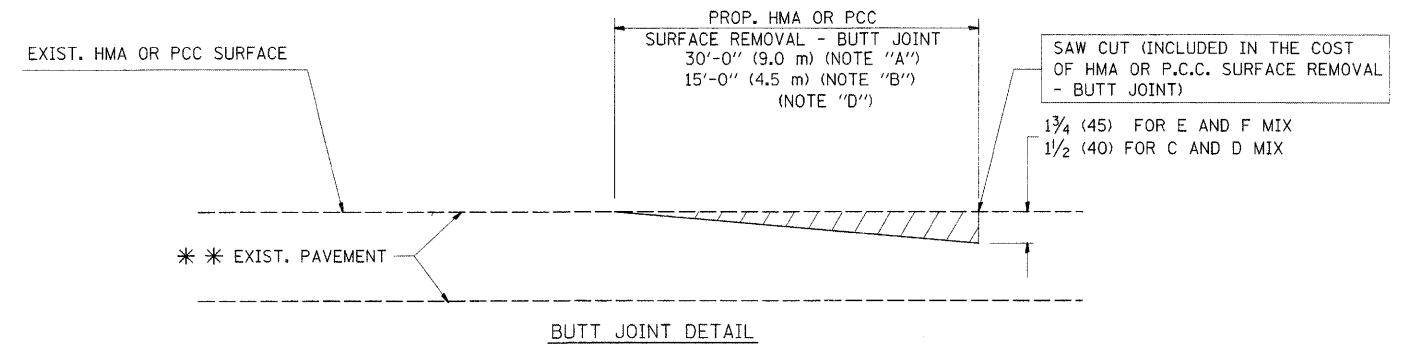


**OPTION 2**

**TYPICAL TEMPORARY RAMP**



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



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

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

**NOTES**

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

**BASIS OF PAYMENT:**

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

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

FILE NAME =	USER NAME = ulrichkd
W:\diststd\22x34\bd32.dgn	

DESIGNED - M. DE YONG	REVISD - R. SHAH 10-25-94
DRAWN -	REVISD - A. ABBAS 03-21-97
PLLOT SCALE = 50.0000' / IN.	REVISD - M. GOMEZ 04-06-01
PLLOT DATE = 3/18/2009	REVISD - R. BORO 01-01-07

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

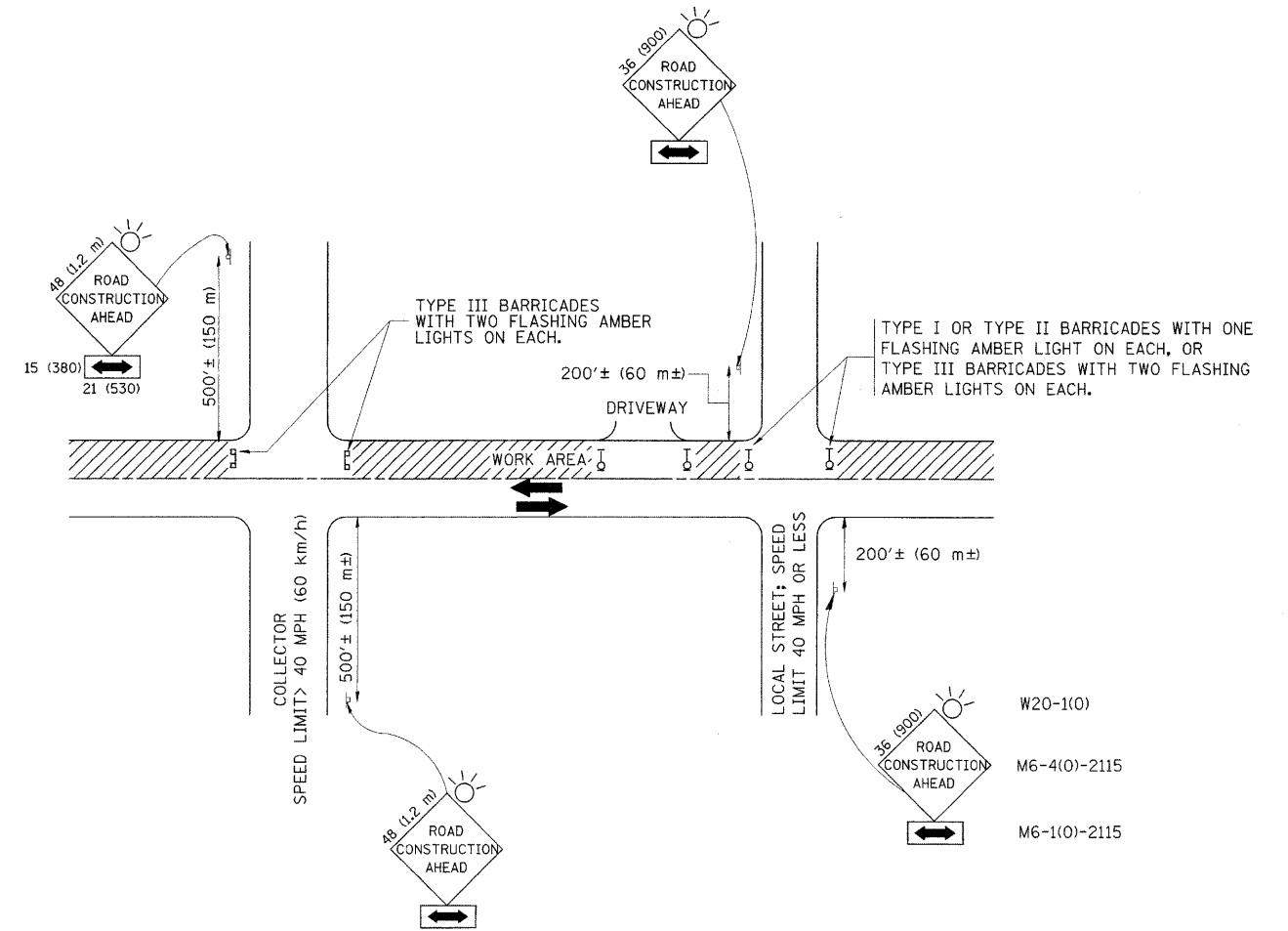
DESIGNED - M. DE YONG	REVISD - R. SHAH 10-25-94
DRAWN -	REVISD - A. ABBAS 03-21-97
CHECKED -	REVISD - M. GOMEZ 04-06-01
DATE - 06-13-90	REVISD - R. BORO 01-01-07

<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	
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<b>BUTT JOINT AND HMA TAPER DETAILS</b>	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS
STA.	TO STA.

F.A.F. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
54	11-R-3	LAKE	25	16
<b>BD400-05 BD32</b>			<b>CONTRACT NO. 5085</b>	
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.

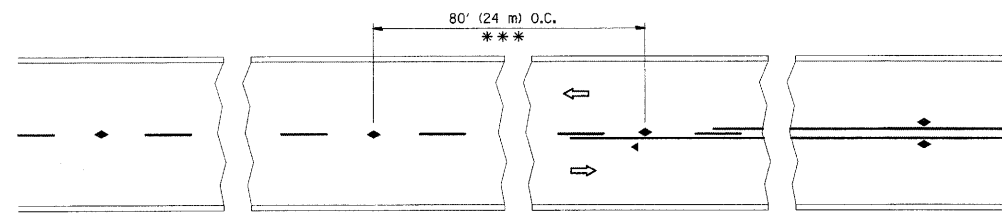
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		DRAWN -	REVISED - A. HOUSEH 03-06-96
		CHECKED -	REVISED - A. HOUSEH 10-15-96
		DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

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

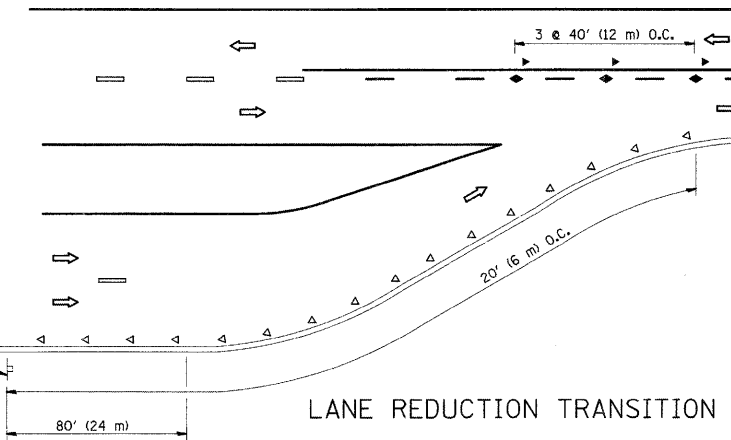
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TC-10			CONTRACT NO. 60885	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

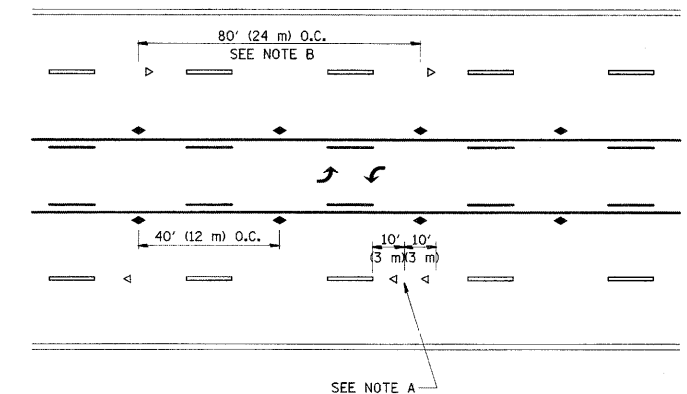


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

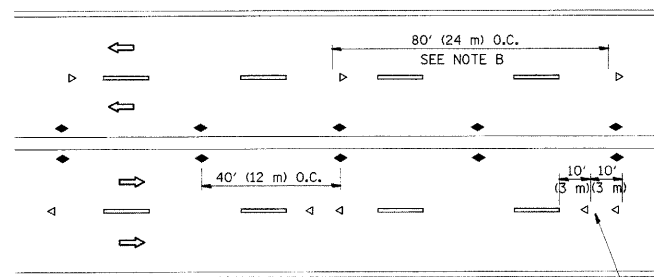
TWO-LANE/TWO-WAY



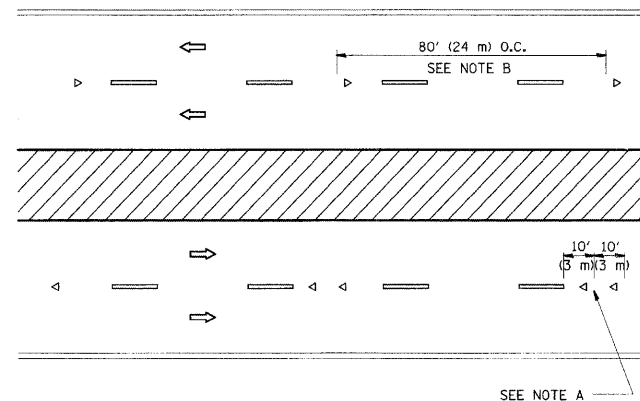
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

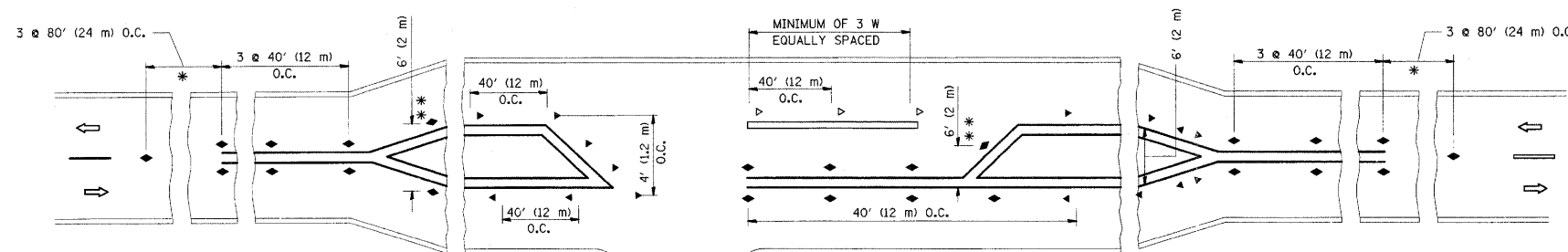
1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

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

LANE MARKER NOTES

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



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

LEFT TURN

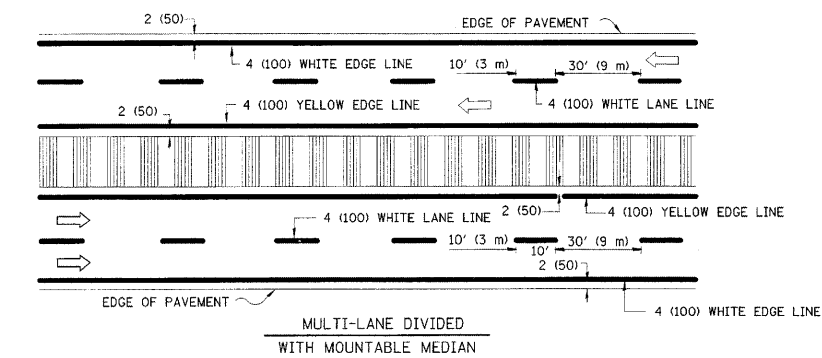
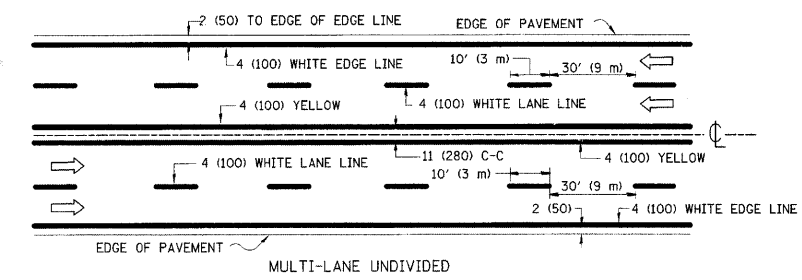
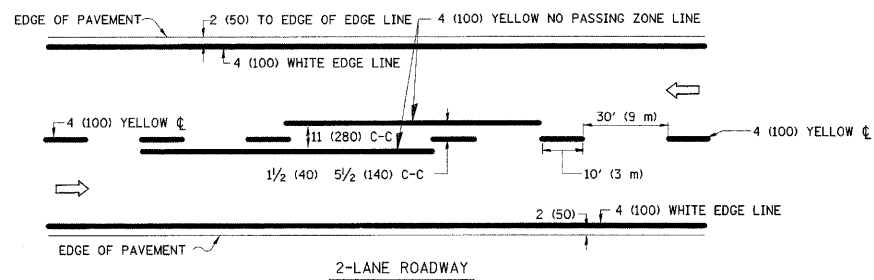
All dimensions are in inches (millimeters) unless otherwise shown.

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		DRAWN -	REVISED - T. RAMMACHER 03-12-99
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - T. RAMMACHER 01-06-00
	PLOT DATE = 3/18/2009	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

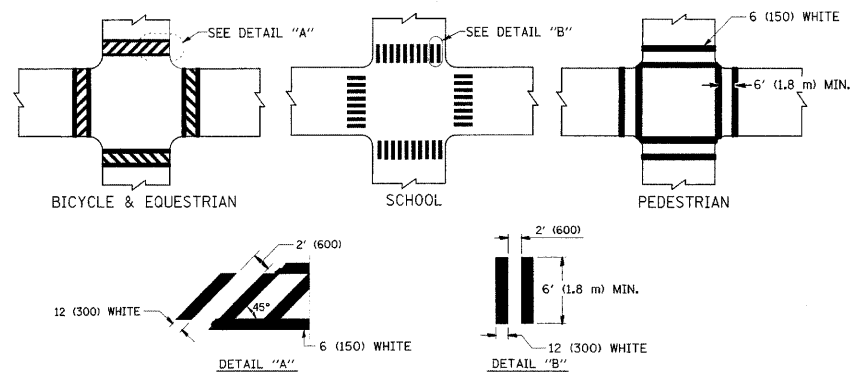
TYPICAL APPLICATIONS	
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS
STA.	TO STA.

F.A.F. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5	11-10	LAKE	23	18
TC-11			CONTRACT NO.	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

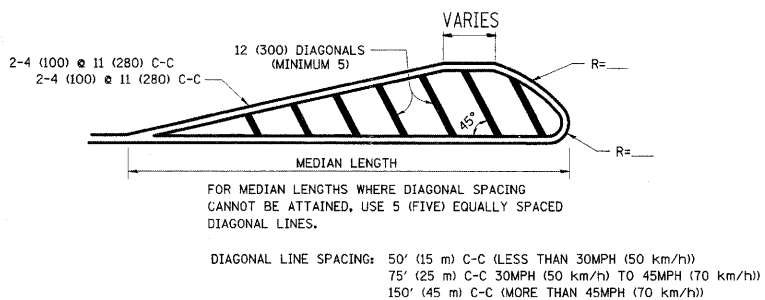
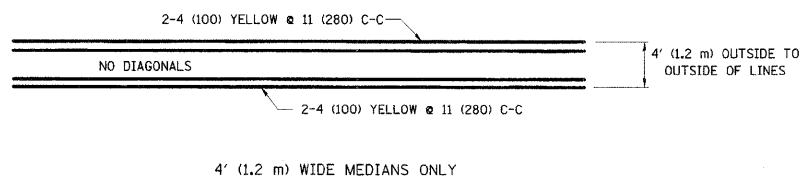


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

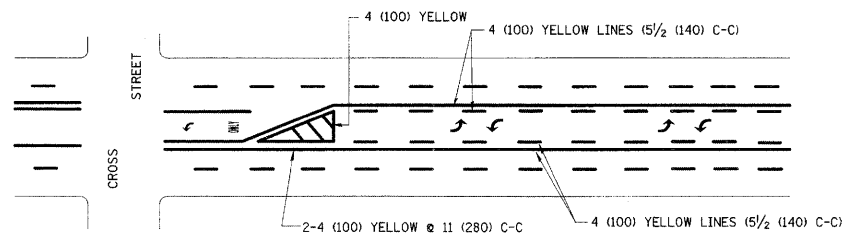
### TYPICAL LANE AND EDGE LINE MARKING



### TYPICAL CROSSWALK MARKING



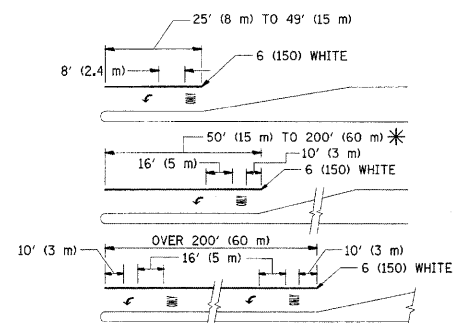
### MEDIANS OVER 4' (1.2 m) WIDE



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

### MEDIAN WITH TWO-WAY LEFT TURN LANE

### TYPICAL PAINTED MEDIAN MARKING

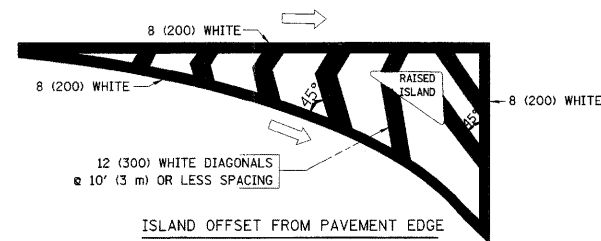


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)

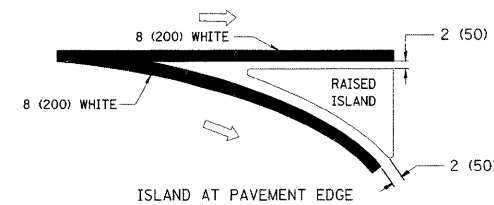
\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

### TYPICAL LEFT (OR RIGHT) TURN LANE

### TYPICAL TURN LANE MARKING



### ISLAND OFFSET FROM PAVEMENT EDGE



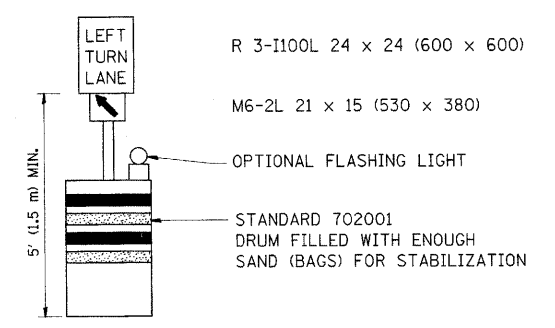
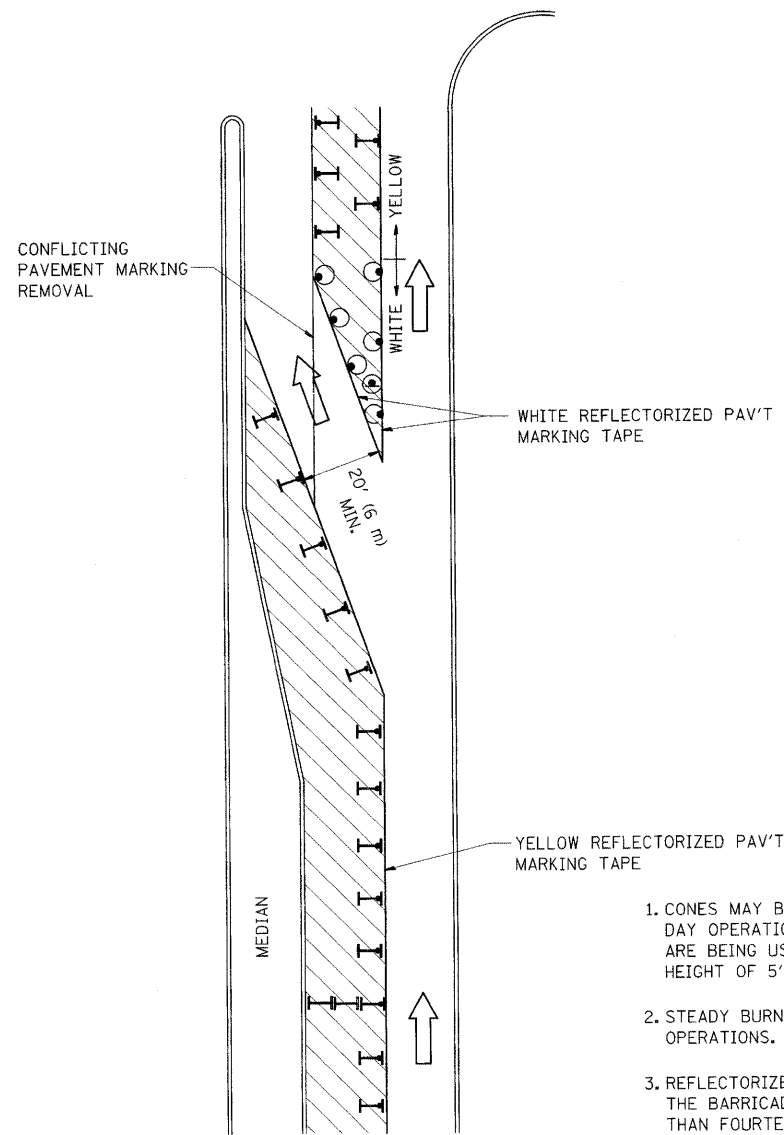
### ISLAND AT PAVEMENT EDGE

### TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5 1/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW. EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
CORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "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.

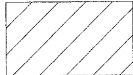
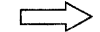






**GENERAL NOTES**

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 BT 725 IS REQUIRED.
8. 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

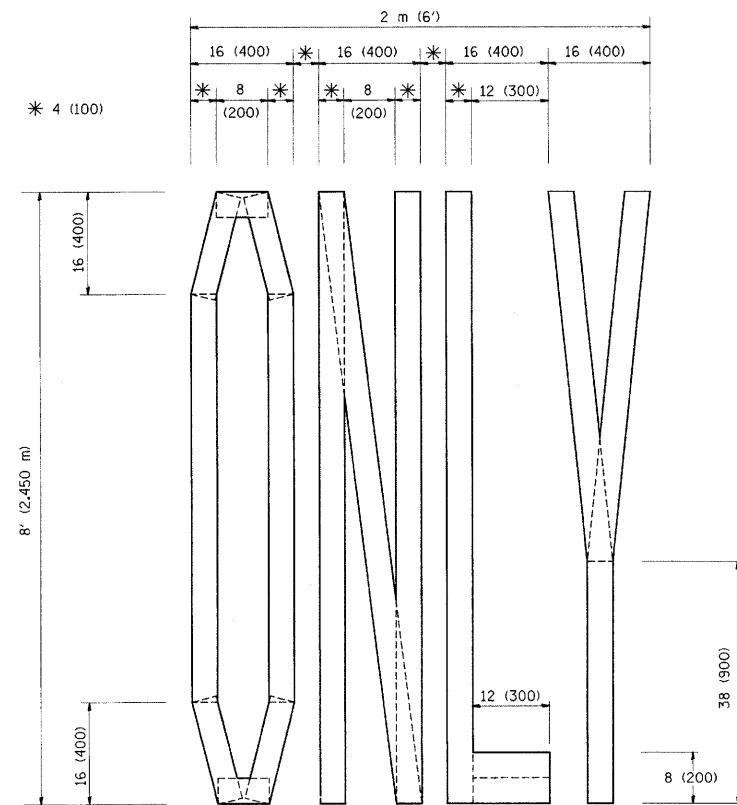
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

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

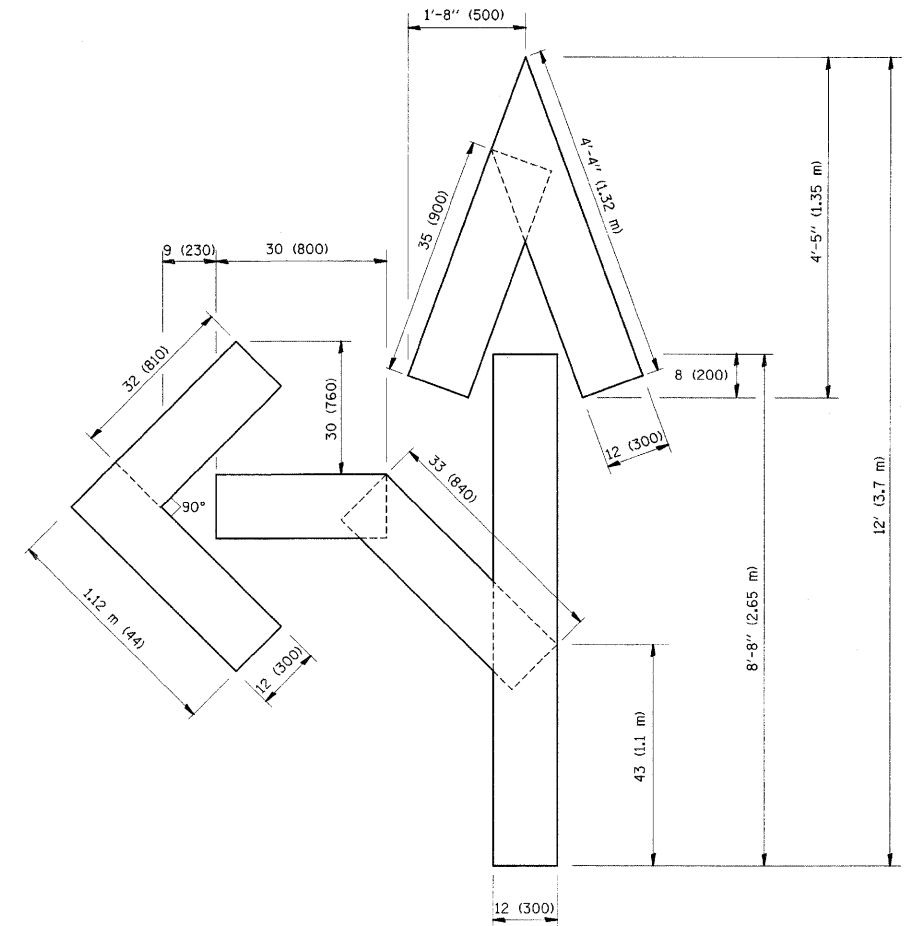
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	PLOT SCALE = 49,9999 / 1 IN.	CHECKED -	REVISED - A. HOUSEH 10-12-96
	PLOT DATE = 3/18/2009	DATE -	REVISED - T. RAMMACHER 01-06-00

SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.
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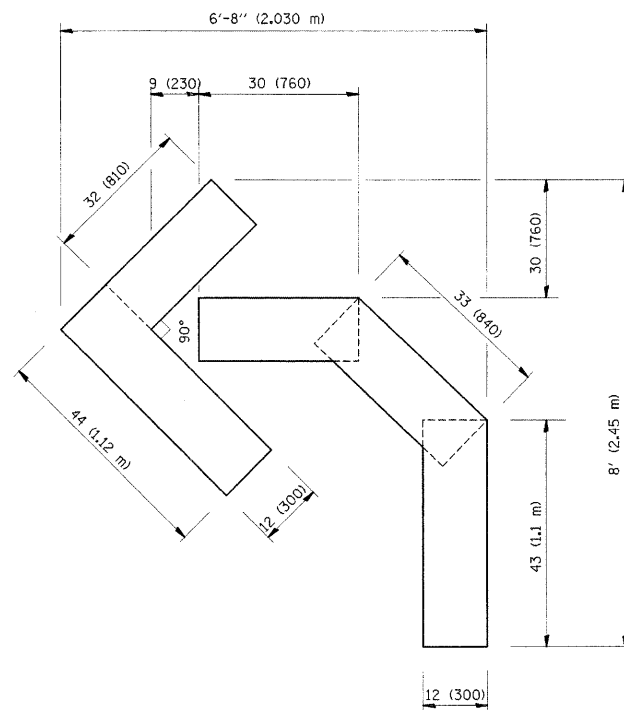
F.A.F. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
544	W-85-2	LAKE	23	20
TC-14			CONTRACT NO. 00265	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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.

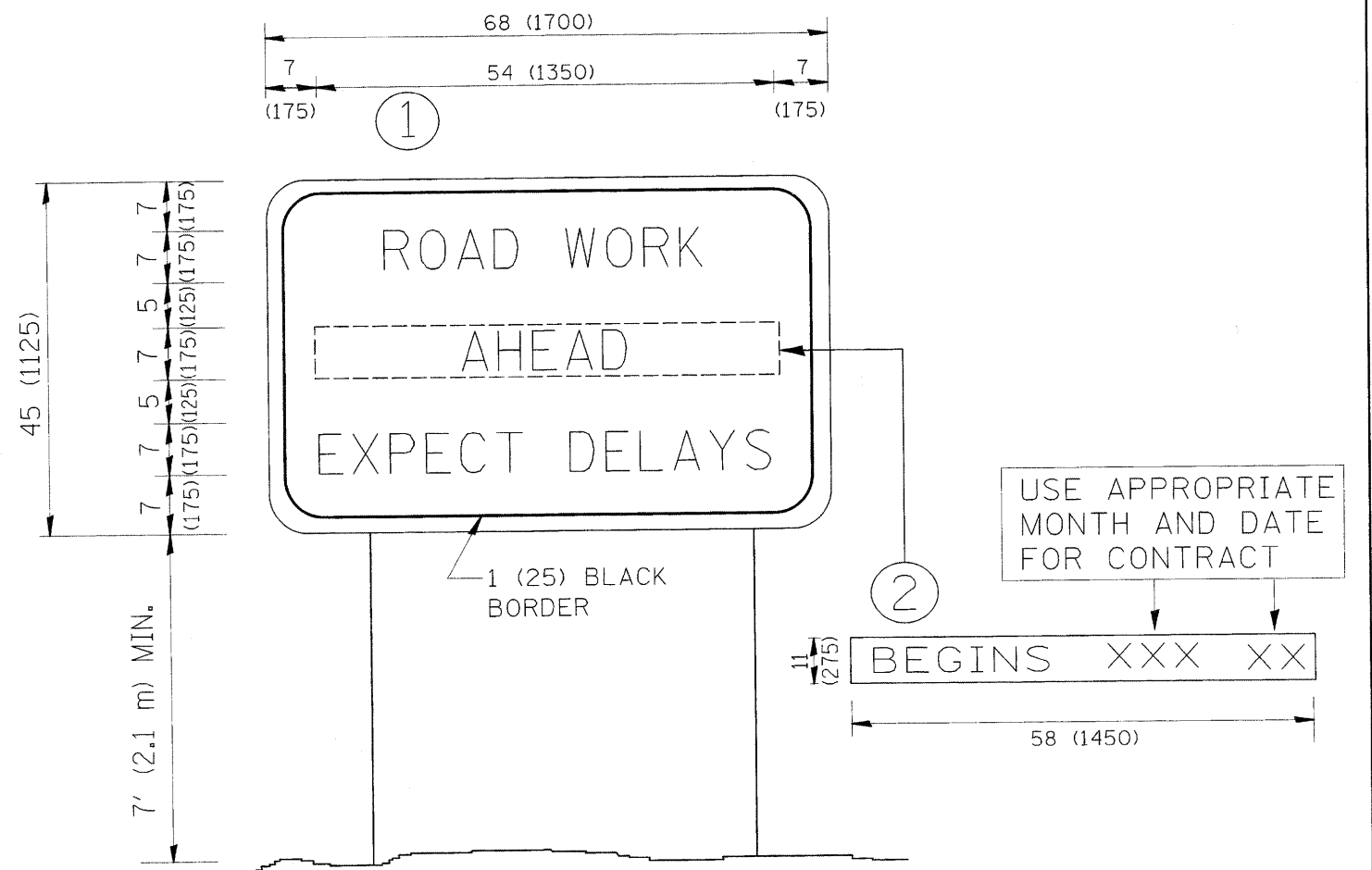
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		CHECKED -	REVISED - T. RAMMACHER 03-02-98
		DATE - 09-18-94	REVISED - E. GOMEZ 08-28-00

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS  
 FOR TRAFFIC STAGING

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

F.A.F. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TC-16			CONTRACT NO. 80801	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**NOTES:**

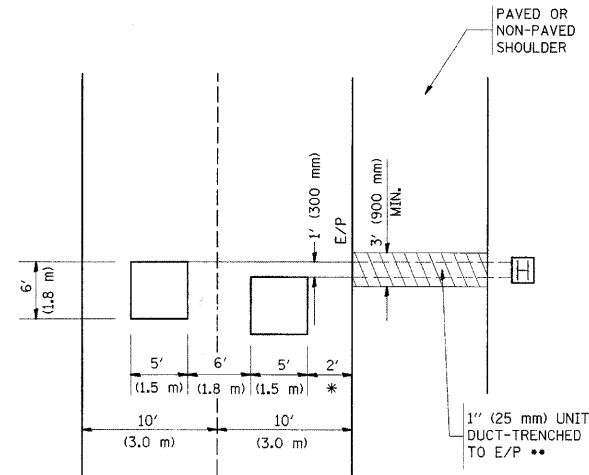
1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
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 = W:\distsd\22x34\to22.dgn	USER NAME = ulrichkd	DESIGNED -	REVISED - R. MIRS 09-15-97	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ARTERIAL ROAD INFORMATION SIGN</b>		F.A.F. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50.000' / IN.	DRAWN -	REVISED - R. MIRS 12-11-97		541	W-ROCS	LAME	23	22		
PLOT DATE = 3/18/2009	CHECKED -	REVISED - T. RAMMACHER 02-02-99	SCALE: NONE    SHEET NO. 1 OF 1 SHEETS    STA.    TO STA.		TC-22		CONTRACT NO. 60828				
	DATE -	REVISED - C. JUCIUS 01-31-07	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT								

**LOOPS NEXT TO SHOULDERS**

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

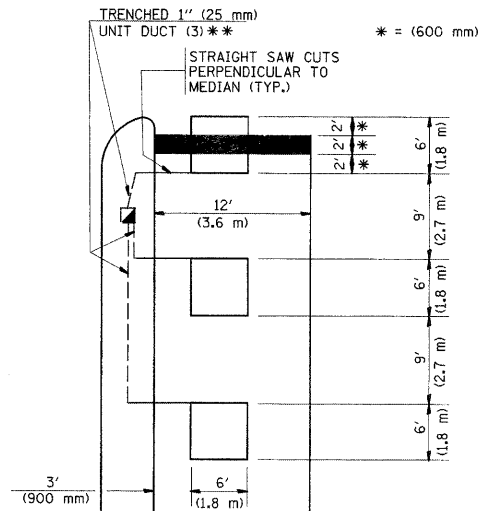


\* = (600 mm)

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

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

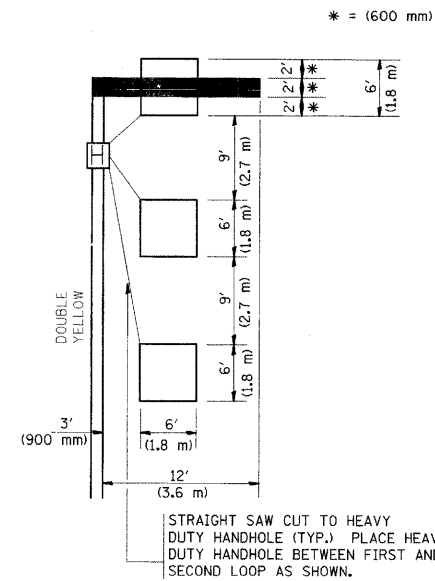
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



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

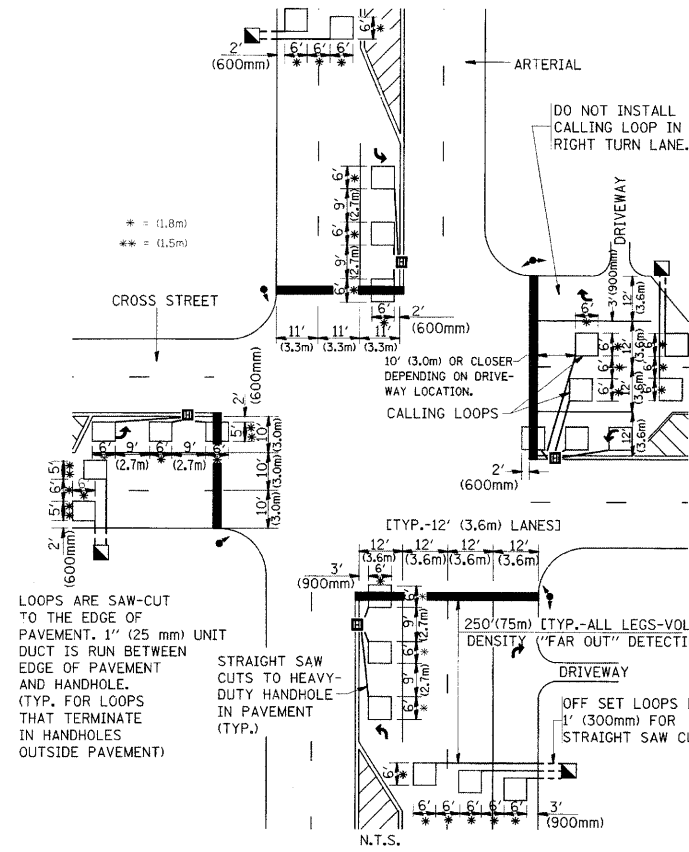
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



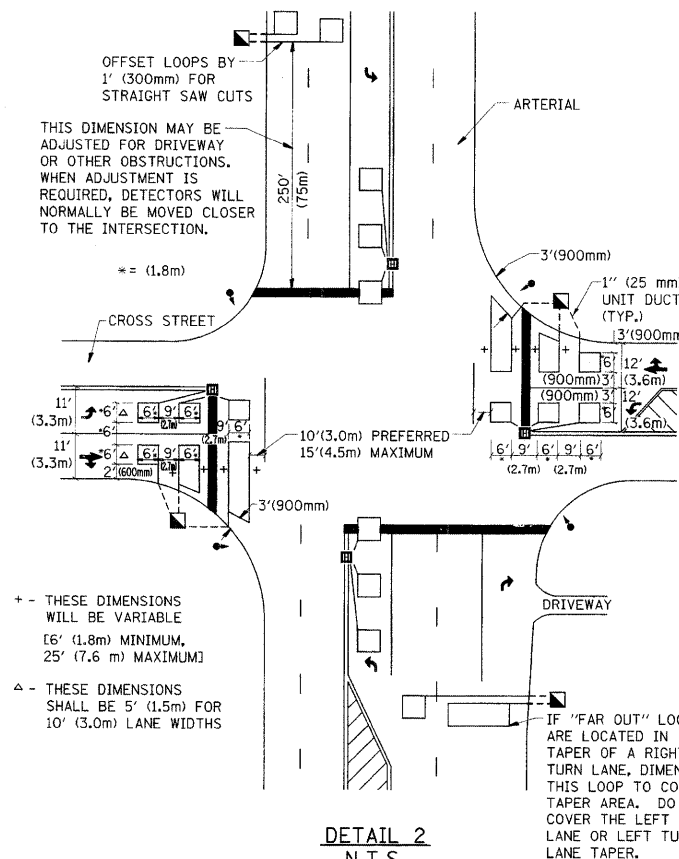
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



DETAIL 1  
N.T.S.

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



DETAIL 2  
N.T.S.

**NOTES:**

**VEHICLES LOOP DETECTORS**

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

**PLACEMENT OF DETECTORS**

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

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

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

**NOTE:**

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

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

FILE NAME = W:\data\22x34\ts07.dgn

USER NAME = ulrichkd	DESIGNED -	REVISED -
PLOT SCALE = 50.0000 / IN.	DRAWN -	REVISED -
PLOT DATE = 3/18/2009	CHECKED - R.K.F.	REVISED -
	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.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	W-R-3	LAKE	23	23
TS-07		CONTRACT NO. 60355		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				