

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

F.A.P. ROUTE 330: ILL 21/US 45 (MILWAUKEE AVE)
ILL 60 (TOWNLINER RD.) TO LAKE-COOK RD
SECTION (1&1Y)RS-3
RESURFACING
LAKE COUNTY

C-91-510-12

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	(1&1Y)RS-3	LAKE	60	1
		ILLINOIS	CONTRACT NO. 60V03	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THE IMPROVEMENT IS LOCATED IN THE VILLAGES OF BUFFALO GROVE, RIVERWOODS, LINCOLNSHIRE AND VERNON HILLS.

TRAFFIC DATA

2013 ADT = 37200

POSTED SPEED LIMIT = 35-40-45 MPH



IMPROVEMENT
BEGINS: STA. 34 + 15

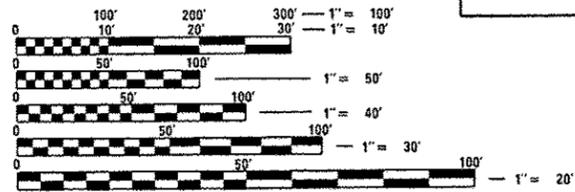
OMISSION
STA. 50 + 33 TO STA. 60 + 86

OMISSION
STA. 181 + 11 TO STA. 192 + 16

OMISSION
STA. 197 + 79 TO STA. 199 + 31



IMPROVEMENT
ENDS: STA. 346 + 13



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 ALAIN MIDY (847) 221-3056
PROJECT MANAGER ISSAM RAYYAN (847) 705-4178

GROSS LENGTH = 31,198 FT = 5.9 MILES
NET LENGTH = 28,888 FT = 5.4 MILES

CONTRACT NO. 60V03

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED July 10 20 14
John Fortman
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Aug 15 20 14
John D. Baranzelli P.E.
ENGINEER OF DESIGN AND ENVIRONMENT

Aug 15 20 14
Omer Osman P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS

INDEX OF SHEETS

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STATE STANDARDS

STANDARD NO	DESCRIPTION
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
424001-07	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
424006-01	DIAGONAL CURB RAMPS FOR SIDEWALKS
424011-01	CORNER PARALLEL CURB RAMPS FOR SIDEWALKS
424016-01	MID BLOCK CURB RAMPS FOR SIDEWALKS
424021-02	DEPRESSED CORNER FOR SIDEWALKS
424026-01	ENTRANCE/ALLEY PEDESTRIAN CROSSINGS
424031-01	MEDIAN PEDESTRIAN CROSSINGS
442201-03	CLASS C AND D PATCHES
606001-05	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701101-04	OFF ROAD OPERATIONS, MULTILANE, LESS THAN 15' (4.5 MO AWAY
701426-06	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATIONS FOR SPEEDS > 45 MPH
701427-02	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATIONS FOR SPEEDS < 40 MPH
701601-09	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701602-07	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701606-09	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-09	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-05	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-03	TRAFFIC CONTROL DEVICES
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
876001-03	PEDESTRIAN PUSH BUTTON POST
878001-09	CONCRETE FOUNDATION DETAILS

GENERAL NOTES:

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 IS REQUIRED).

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE VILLAGES OF BUFFALO GROVE, RIVERWOODS, LINCOLNSHIRE, AND VERNON HILLS.

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

ANY PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS OBLITERATED BY MILLING AND RESURFACING OPERATIONS ON SIDE STREETS AND ENTRANCES SHALL BE REPLACED AND PAID FOR IN KIND.

WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES (40MM) WHERE THE SPEED LIMIT IS 40 MPH (60KM/H) OR LESS AND 1 INCH (25 MM) WHERE THE SPEED LIMIT IS GREATER THAN 40 MPH (60 KM/H), WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES (75 MM) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H) OR A NOTCHED LONGITUDINAL WEDGE IS USED.

BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES AND REVISED 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.

THE ENGINEER SHALL CONTACT WALTER CZARNY, AREA TRAFFIC FIELD ENGINEER AT 847-438-2300 A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

ALL CURB AND GUTTER REMOVAL AND REPLACEMENT WILL BE DETERMINED BY THE ENGINEER.

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

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

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 ACCORDING TO ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

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.

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

THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM THE BUREAU OF CONSTRUCTION.

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

THE CONTRACTOR SHALL COOPERATE WITH THE VILLAGE AND STATE IF ANY UTILITY IMPROVEMENTS ARE REQUIRED BY THE VILLAGE

FILE NAME =	USER NAME = mdyja	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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Default	PLOT SCALE = 100.0000 1/1 in.	CHECKED -	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.			CONTRACT NO. 60V03				
	PLOT DATE = 7/10/2014	DATE -	REVISED -					[ILLINOIS] FED. AID PROJECT				

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE						
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	0005	0021				
21101615	TOPSOIL FURNISH AND PLACE, 4"	SO YD	405	405					
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	7.6	7.6					
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	7.6	7.6					
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	7.6	7.6					
25200110	SODDING, SALT TOLERANT	SO YD	405	405					
35501316	HOT-MIX ASPHALT BASE COURSE, 8"	SO YD	22	22					
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	345	345					
40600827	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	9465	9465					
40600895	CONSTRUCTING TEST STRIP	EACH	1	1					
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	1012	1012					
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	3	3					
40603595	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90	TON	22485	22485					
42001300	PROTECTIVE COAT	SO YD	361	361					
42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SO YD	20	20					
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SO FT	1400	1400					
42400800	DETECTABLE WARNINGS	SO FT	150	150					

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE						
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	0005	0021				
44000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"	SO YD	229435	229435					
44000200	DRIVEWAY PAVEMENT REMOVAL	SO YD	42	42					
44000600	SIDEWALK REMOVAL	SO FT	1777	1777					
44201811	CLASS D PATCHES, TYPE I, 14 INCH	SO YD	500	500					
44201815	CLASS D PATCHES, TYPE II, 14 INCH	SO YD	6000	6000					
44201819	CLASS D PATCHES, TYPE III, 14 INCH	SO YD	1925	1925					
44201821	CLASS D PATCHES, TYPE IV, 14 INCH	SO YD	2120	2120					
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	479	479					
60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	15	15					
60403700	LIDS, TYPE 1, OPEN LID	EACH	15	15					
60403800	LIDS, TYPE 1, CLOSED LID	EACH	50	50					
60404940	FRAMES AND GRATES, TYPE 23	EACH	5	5					
60404950	FRAMES AND GRATES, TYPE 24	EACH	6	6					
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	25	25					
* 66900450	SPECIAL WASTE PLANS AND REPORTS	L SUM	1	1					
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	1	1					

*Specialty Items

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	0005	0021		
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6			
67100100	MOBILIZATION	L SUM	1	1			
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	1			
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1			
70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1	1			
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1			
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1			
70300100	SHORT TERM PAVEMENT MARKING	FOOT	11252	11252			
70300210	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS	SO FT	4114	4114			
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	99215	99215			
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	20326	20326			
70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	728	728			
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	2936	2936			
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	1985	1985			
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	54740	54740			
*78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	4114	4114			

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	0005	0021		
*78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	99215	99215			
*78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	20326	20326			
*78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	728	728			
*78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	2936	2936			
*78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	1985	1985			
*78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	2529	2529			
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	2529	2529			
*81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	11		11		
*85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1		1		
*87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	214		214		
*87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	228		228		
*87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	21		21		
*87500600	TRAFFIC SIGNAL POST, 10 FT.	EACH	1		1		
*87800100	CONCRETE FOUNDATION, TYPE A	FOOT	4		4		
*87900200	DRILL EXISTING HANDHOLE	EACH	1		1		
*88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2		2		

*SPECIALTY ITEMS

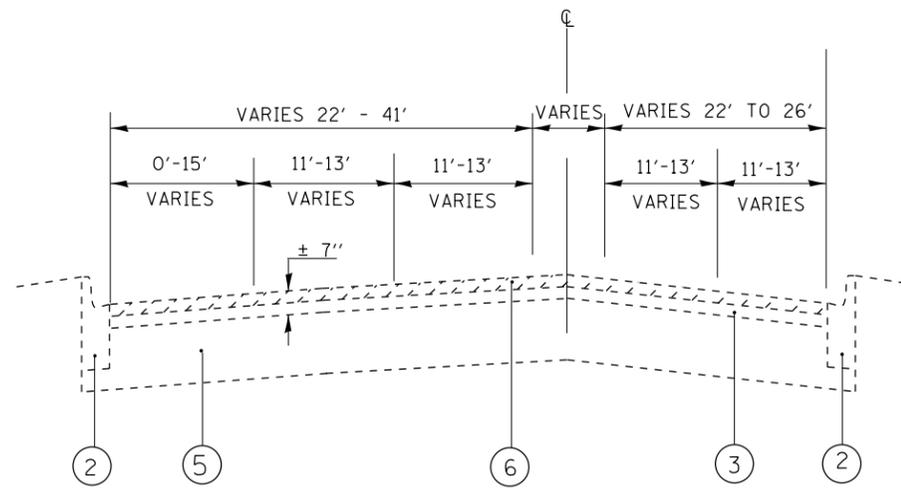
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	PLOT DATE = 7/18/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

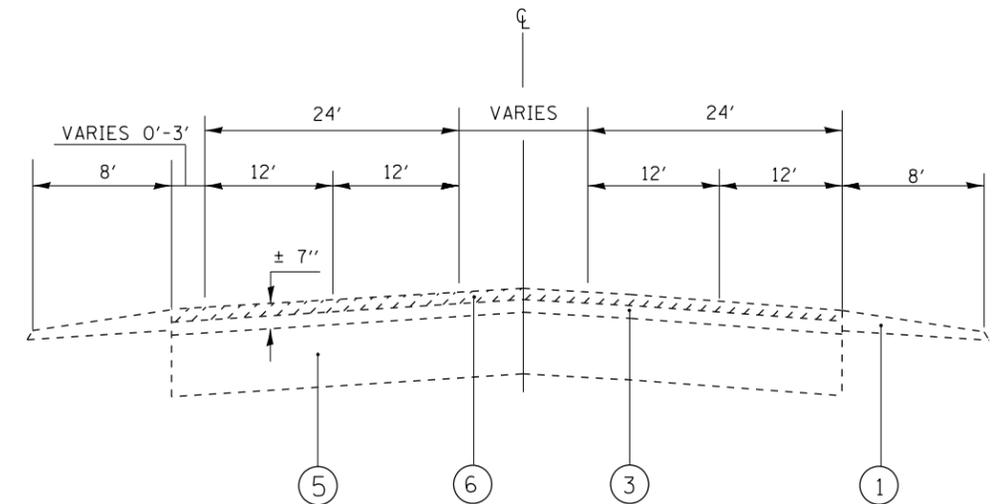
SUMMARY OF QUANTITIES		F.A.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SCALE:	SHEET NO. OF SHEETS STA. TO STA.	330	(I&I)RS-3	LAKE	60	4
		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT CONTRACT NO. 60V03				

LEGEND

- ① EXIST. AGGREGATE SHOULDER
- ② EXIST. CURB AND GUTTER
- ③ EXIST. BITUMINOUS OVERLAY (±) 7"
- ④ EXIST. HMA PAVEMENT AFTER MILLING, ± 4 1/2" MIN.
- ⑤ EXIST. PCC BASE COURSE ± 9"-7"-9"
- ⑥ PROP. HMA SURFACE REMOVAL, 2 1/2 "
- ⑦ PROP. POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1 3/4 "
- ⑧ PROP. POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50, 3/4 "
- ⑨ PROP. AGGREGATE WEDGE SHOULDER, TYPE B
- ⑩ PROP. SHAPING AND GRADING SHOULDERS



EXISTING TYPICAL SECTION
 IL 21 / US 45 (MILWAUKEE AVE)
 STA 34+15 TO STA 79+40
 STA 115+05 TO STA 131+83
 STA 163+65 TO STA 166+70
 STA 173+00 TO STA 296+61



EXISTING TYPICAL SECTION
 IL 21 / US 45 (MILWAUKEE AVE)
 STA 89+69 TO STA 115+05
 STA 131+68 TO STA 143+00

HMA MIXTURE REQUIREMENTS

MIXTURE TYPE		QUALITY MANAGEMENT PROGRAM (QMP)
PAVEMENT AND SHOULDERS	AIR VOIDS @ NDES	
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE MIX "F", N90 (IL 9.5 mm)	4% @ 90 GYR	PFP
POLYMERIZED LEVELING BINDER, (MM), IL 4.75, N50	3.5% @ 50 GYR	PFP
PATCHING		
CLASS D PATCHES (HMA BINDER IL-19 mm)	4% @ 70 GYR	QCP
DRIVEWAY		
HMA SURFACE COURSE, MIX "D", N50, (IL 9.5mm) 2"	4% @ 50 GYR	Qc/Qa
HMA BASE COURSE, (HMA BINDER IL 19mm) 8"	4% @ 50 GYR	Qc/Qa
QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA); QUALITY CONTROL FOR PERFORMANCE (QCP). PAY FOR PERFORMANCE (PFP)		

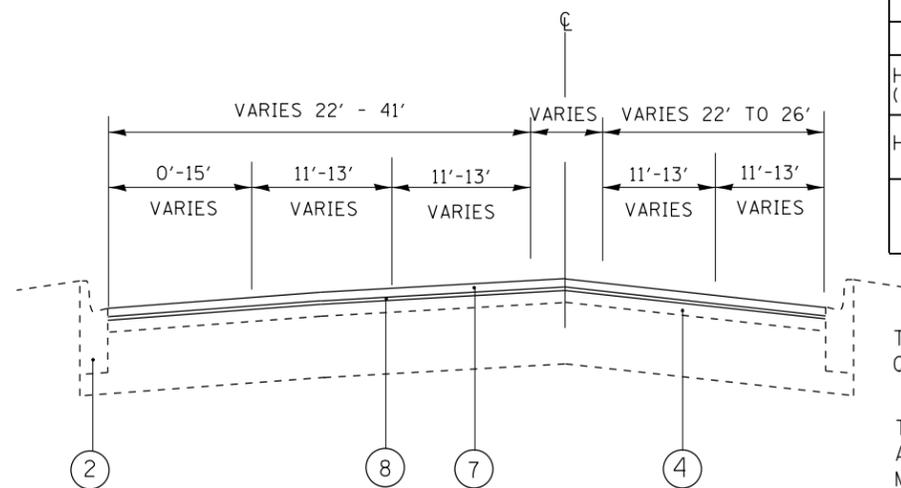
THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/SOYD/IN.

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76 -22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64 -22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.

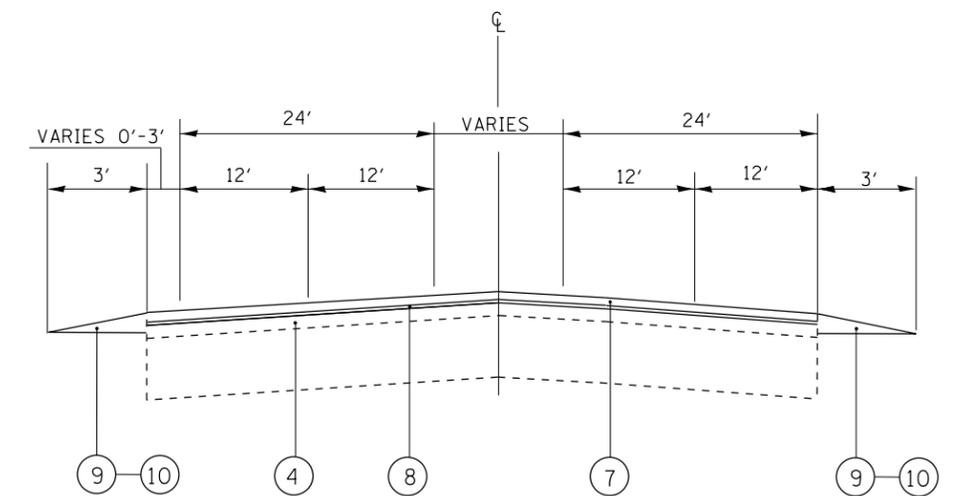
FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.

QUALITY MANAGEMENT PROGRAM (QMP) IDENTIFIES THE PARTICULAR QUANTITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE.

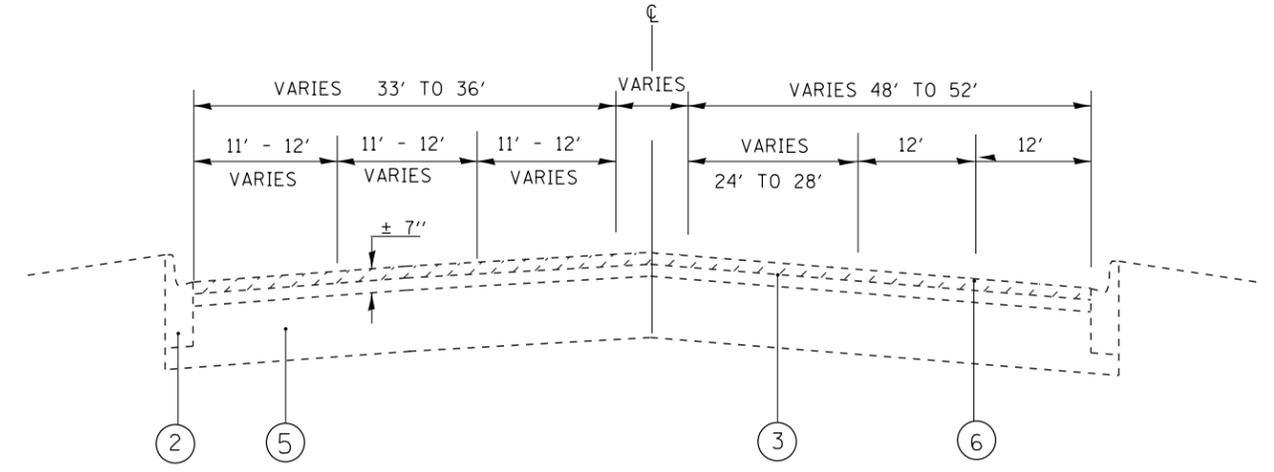
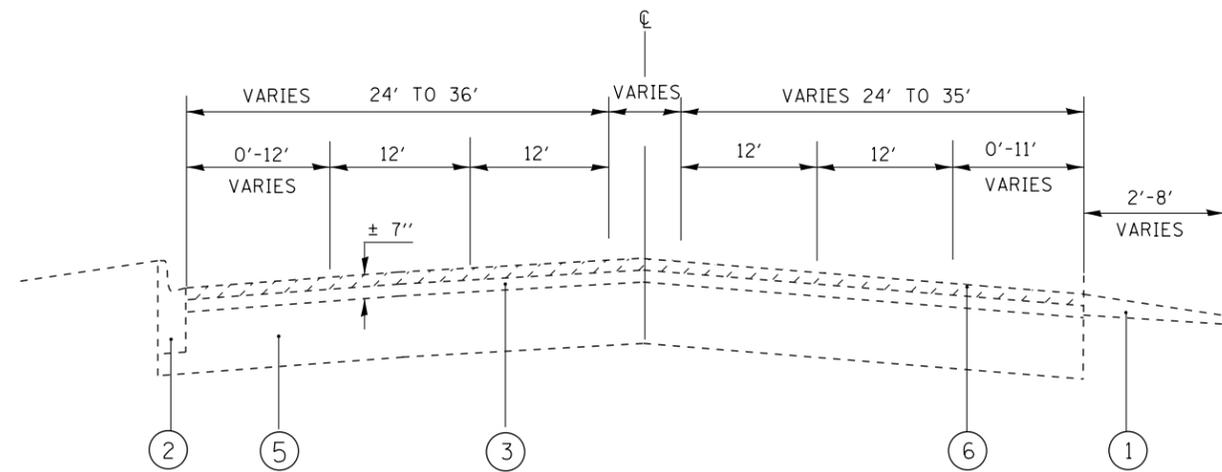
NOTE:
CONTRACTOR SHALL MILL FIRST BEFORE PATCHING



PROPOSED TYPICAL SECTION
 IL 21 / US 45 (MILWAUKEE AVE)
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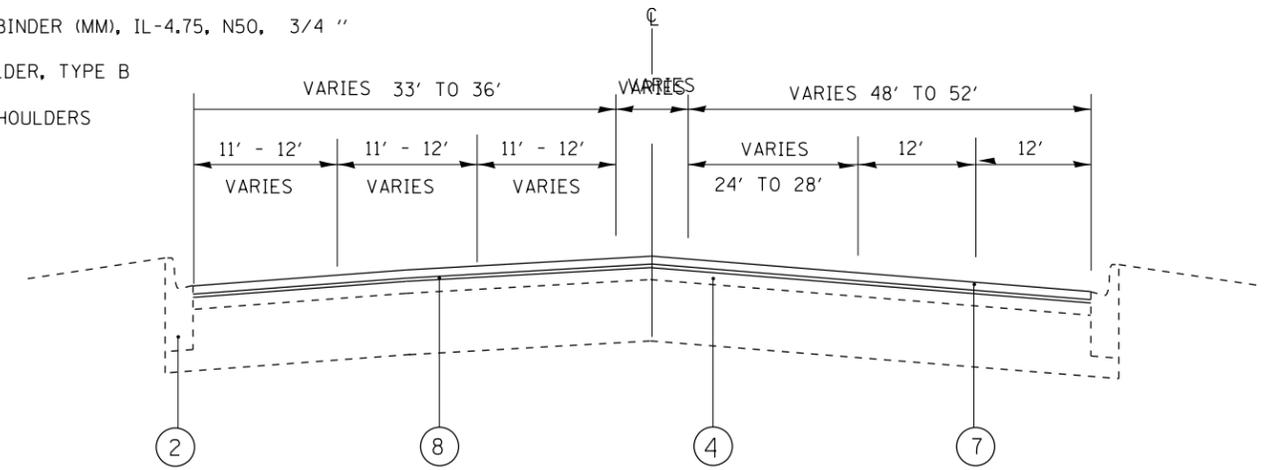
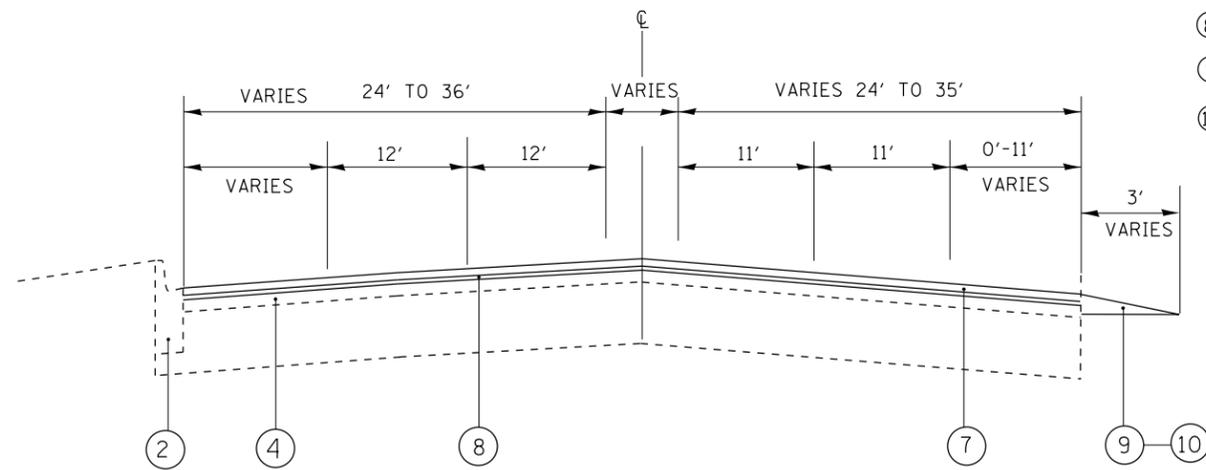


PROPOSED TYPICAL SECTION
 IL 21 / US 45 (MILWAUKEE AVE)
 STA 89+69 TO STA 115+05
 STA 131+68 TO STA 143+00



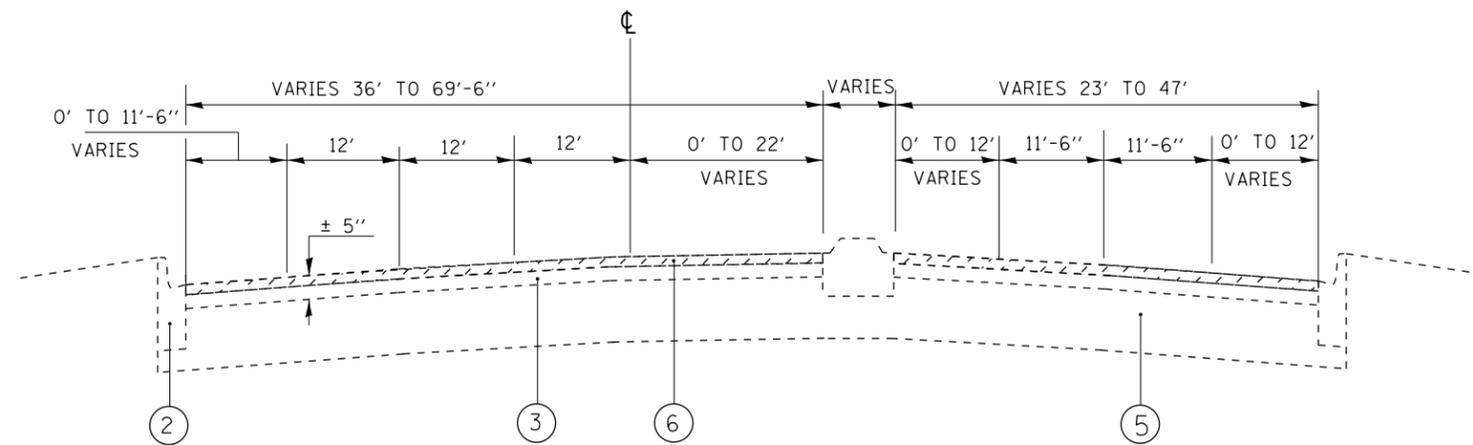
LEGEND

- ① EXIST. AGGREGATE SHOULDER
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- ⑥ PROP. HMA SURFACE REMOVAL, 2 1/2 "
- ⑦ PROP. POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1 3/4 "
- ⑧ PROP. POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50, 3/4 "
- ⑨ PROP. AGGREGATE WEDGE SHOULDER, TYPE B
- ⑩ PROP. SHAPING AND GRADING SHOULDERS



NOTE:
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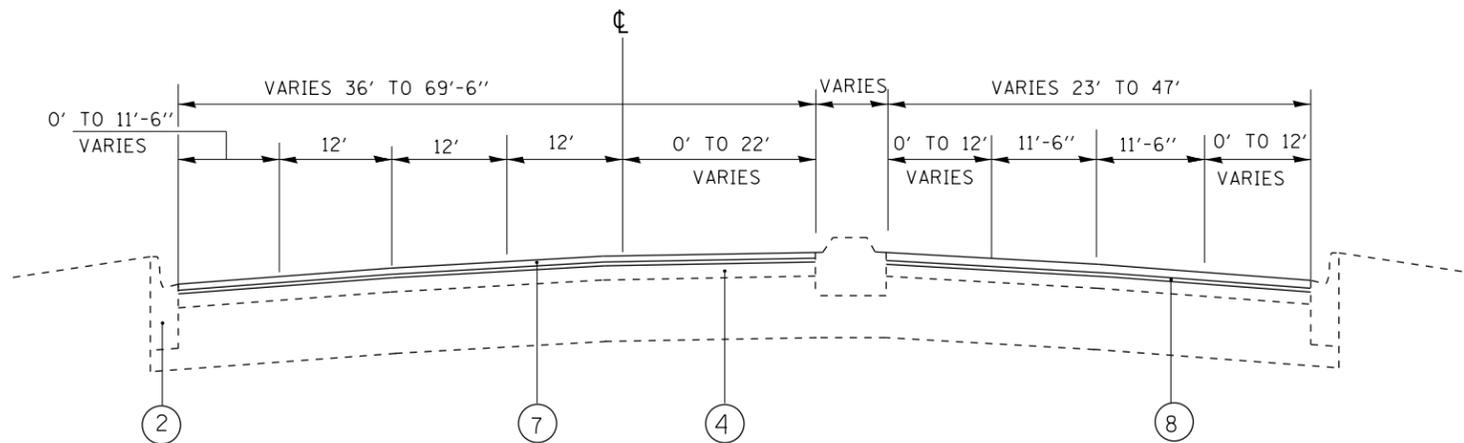
FILE NAME =	USER NAME = hardnetbr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING AND PROPOSED TYPICAL SECTIONS IL. RTE. 21 / U.S. RTE. 45 (MILWAUKEE RD.)	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Default	51012-sh1-plen.dgn	DRAWN -	REVISED -			330	(1&1)RS-3	LAKE	60	7
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -			CONTRACT NO. 60V03			ILLINOIS FED. AID PROJECT	
	PLOT DATE = 7/18/2014	DATE -	REVISED -			SCALE:	SHEET	OF	SHEETS	STA.



EXISTING TYPICAL SECTION
IL 21 / US 45 (MILWAUKEE AVE)
STA 316+13 TO STA 339+49

LEGEND

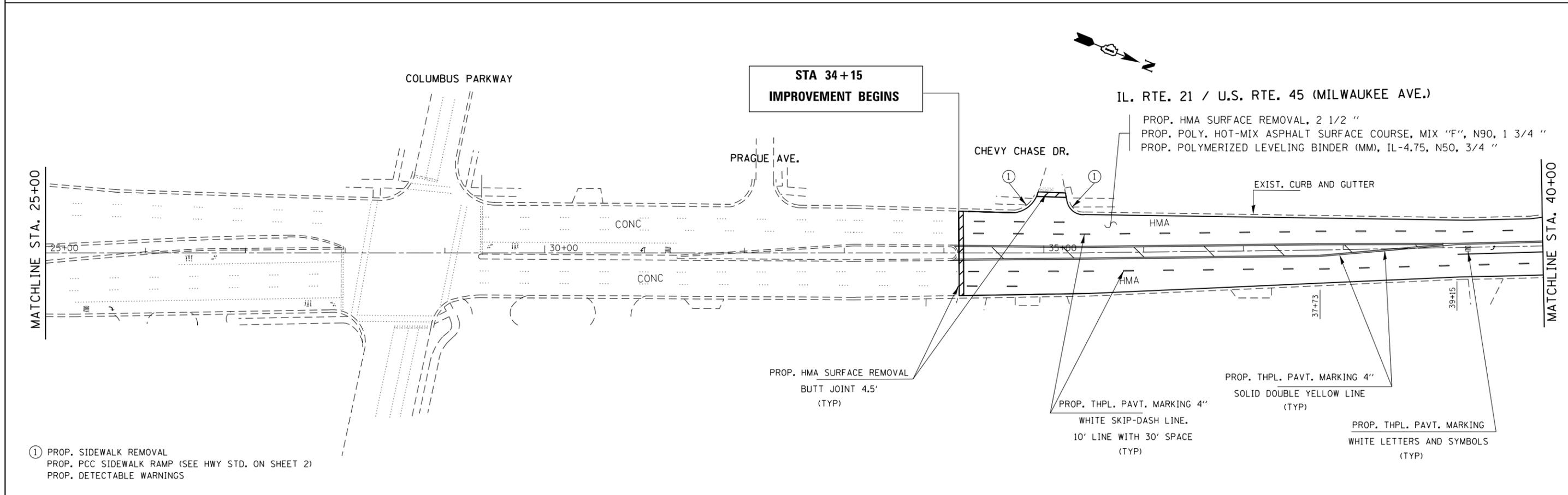
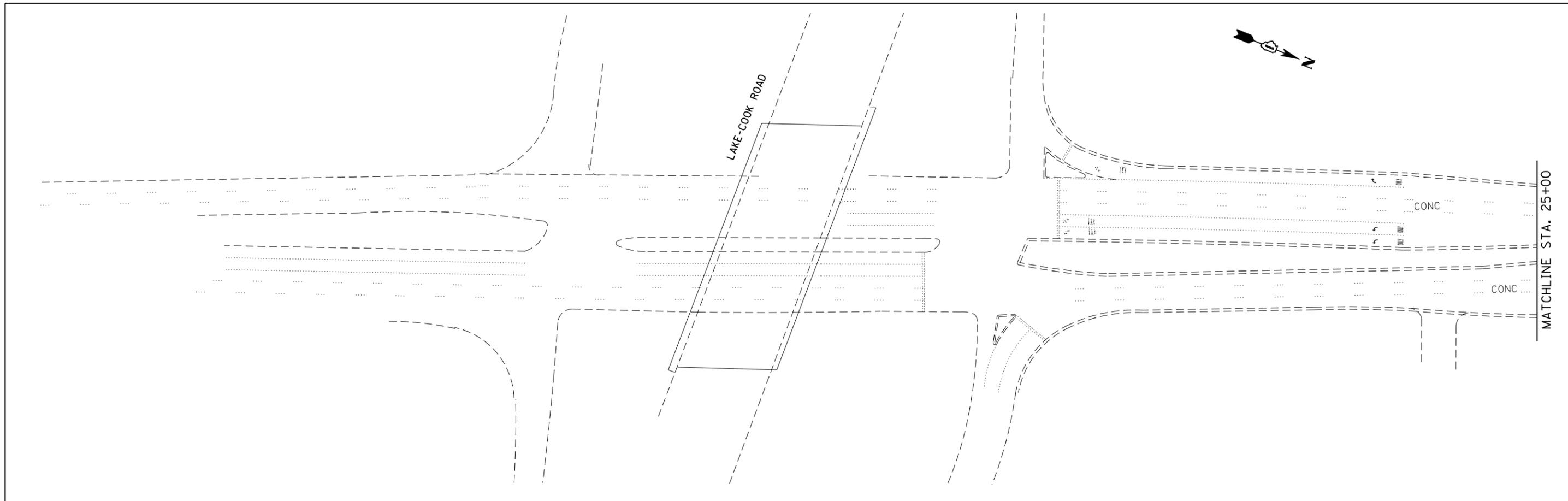
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- ⑥ PROP. HMA SURFACE REMOVAL, 2 1/2 "
- ⑦ PROP. POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1 3/4 "
- ⑧ PROP. POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50, 3/4 "
- ⑨ PROP. AGGREGATE WEDGE SHOULDER, TYPE B
- ⑩ PROP. SHAPING AND GRADING SHOULDERS



PROPOSED TYPICAL SECTION
IL 21 / US 45 (MILWAUKEE AVE)
STA 316+13 TO STA 339+49

NOTE:
CONTRACTOR SHALL MILL FIRST BEFORE PATCHING

FILE NAME = c:\pwork\pwork\hardnettr\d0337694\0	USER NAME = hardnettr 51012-sh1-pln.dgn	DESIGNED - DRAWN -	REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING AND PROPOSED TYPICAL SECTIONS IL. RTE. 21 /U.S. RTE. 45 (MILWAUKEE RD.)	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Default	PLOT SCALE = 100.0000' / in.	CHECKED - DATE -	REVISED - REVISED -			330	(1&1Y)RS-3	LAKE	60	8	
	PLOT DATE = 7/18/2014					CONTRACT NO. 60V03			ILLINOIS FED. AID PROJECT		
						SCALE:	SHEET	OF	SHEETS	STA.	TO



- ① PROP. SIDEWALK REMOVAL
- PROP. PCC SIDEWALK RAMP (SEE HWY STD. ON SHEET 2)
- PROP. DETECTABLE WARNINGS

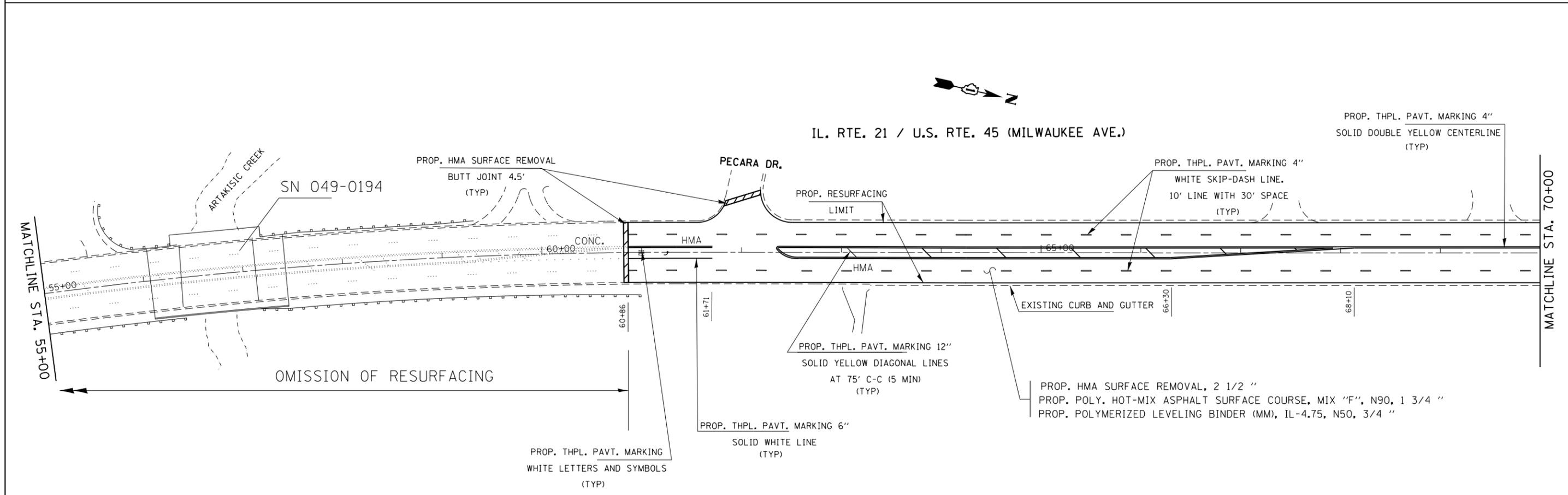
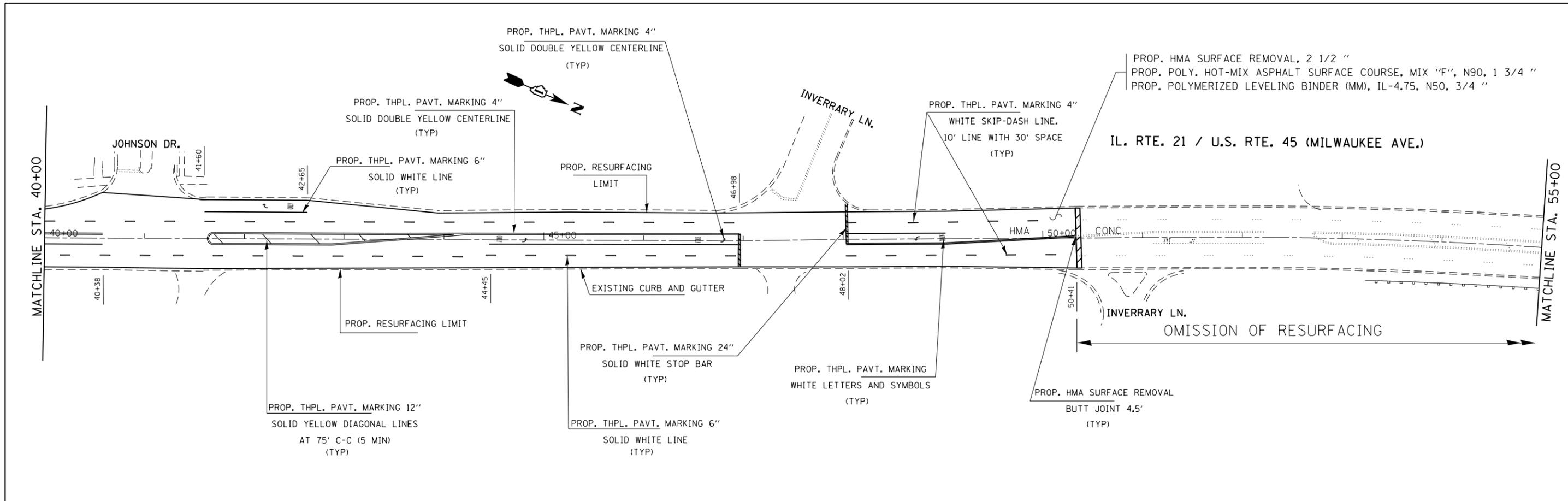
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Default	PLOT DATE = 7/16/2014	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

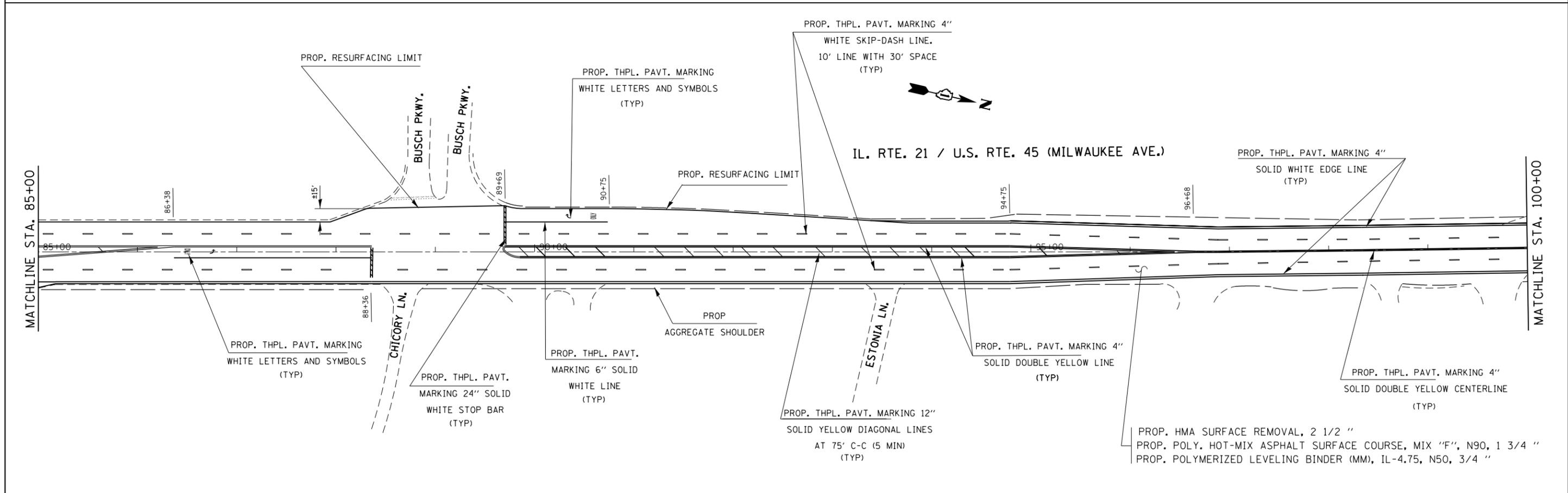
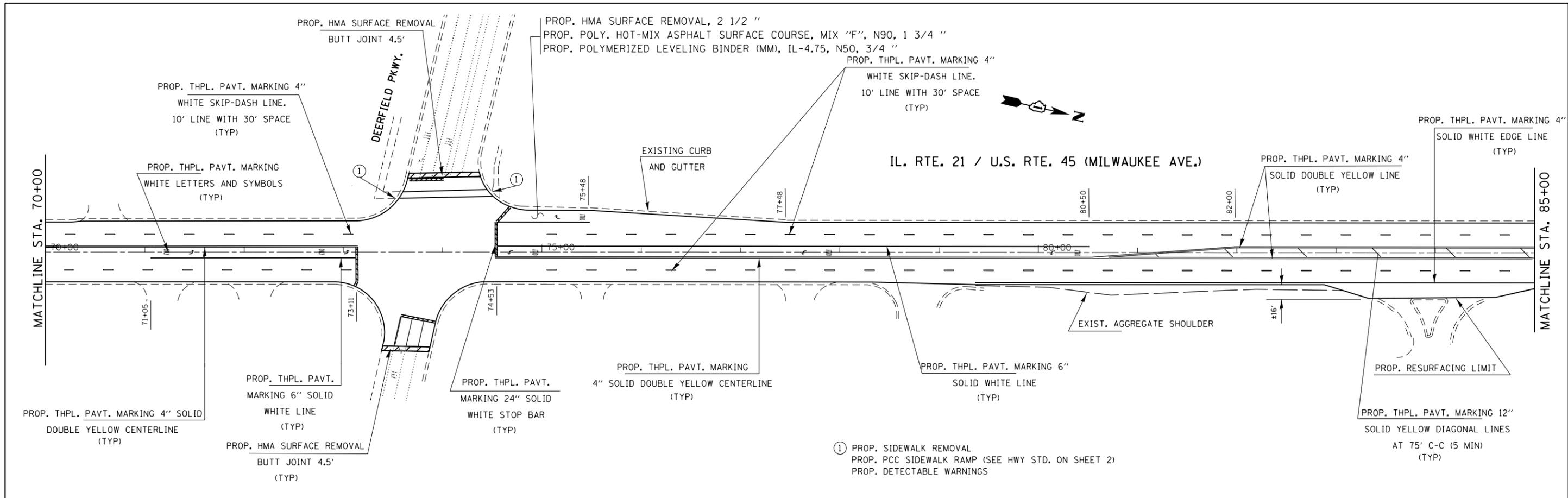
**PROPOSED ROADWAY PLAN
IL. RTE. 21 / U.S. RTE. 45 (MILWAUKEE RD.)**

SCALE: SHEET OF SHEETS STA. TO STA.

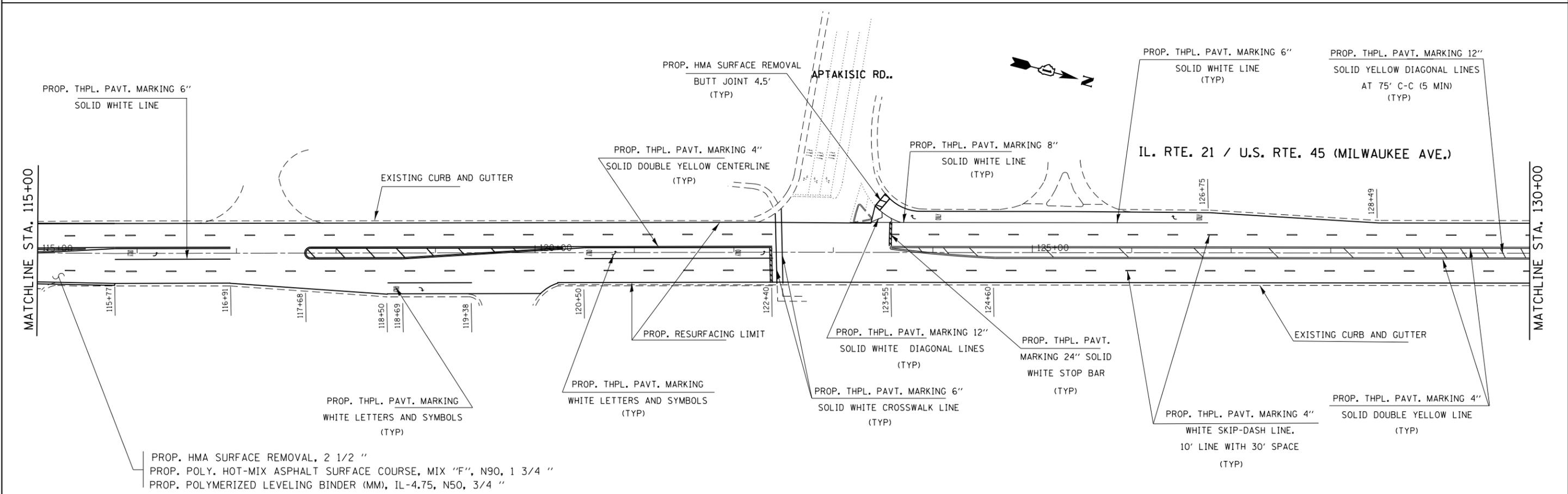
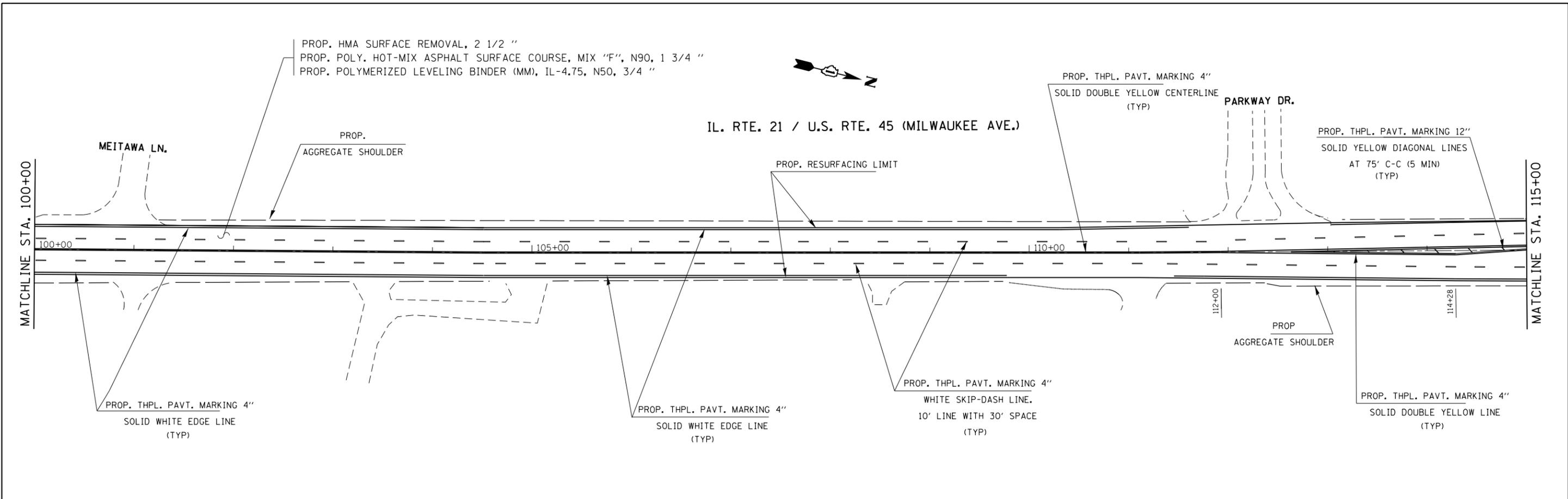
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	(1&1)RS-3	LAKE	60	9
CONTRACT NO. 60V03			ILLINOIS FED. AID PROJECT	



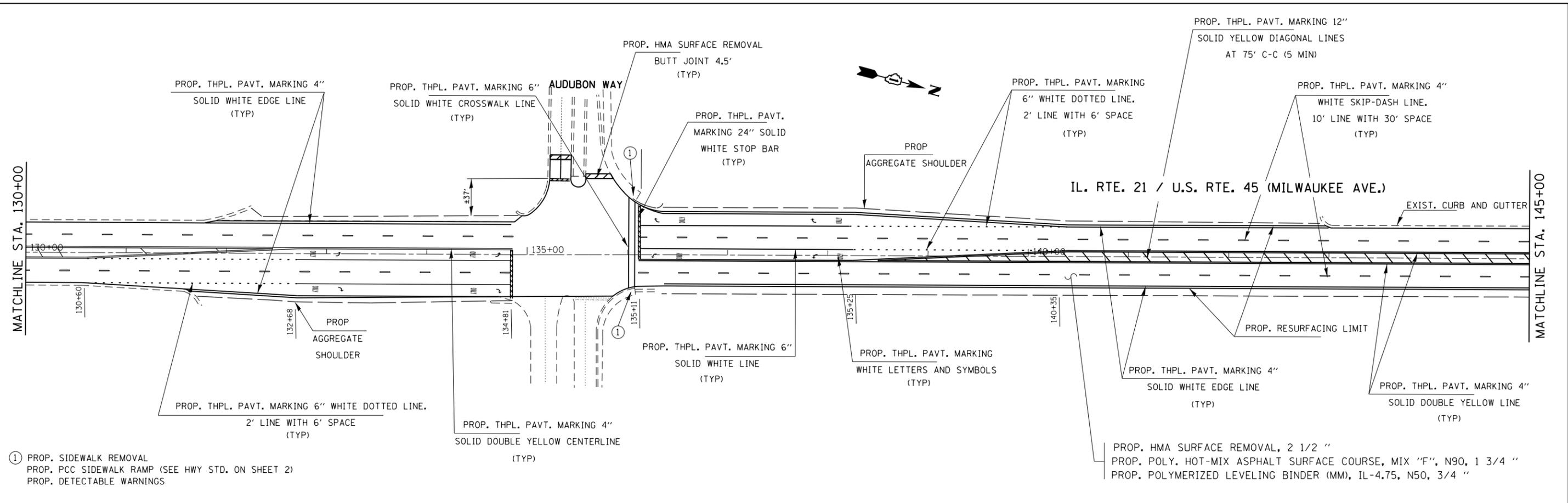
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Default	51012-sh1-plan.dgn	DRAWN -	REVISED -			330	1181YRS-3	LAKE	60	10	
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	PLOT DATE = 7/16/2014	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					



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		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

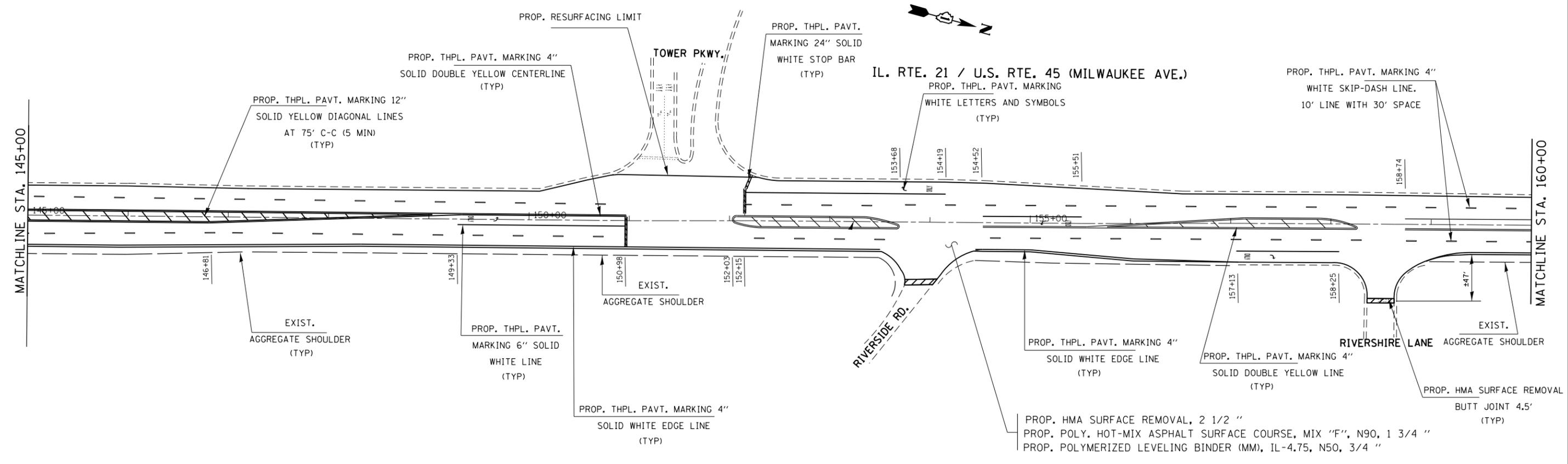


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PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -	SCALE:			SHEET	OF	SHEETS	STA.	TO	STA.	ILLINOIS FED. AID PROJECT
Default	PLOT DATE = 7/16/2014	DATE -	REVISED -			CONTRACT NO. 60V03						



① PROP. SIDEWALK REMOVAL
 PROP. PCC SIDEWALK RAMP (SEE HWY STD. ON SHEET 2)
 PROP. DETECTABLE WARNINGS

PROP. HMA SURFACE REMOVAL, 2 1/2 "
 PROP. POLY. HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1 3/4 "
 PROP. POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50, 3/4 "



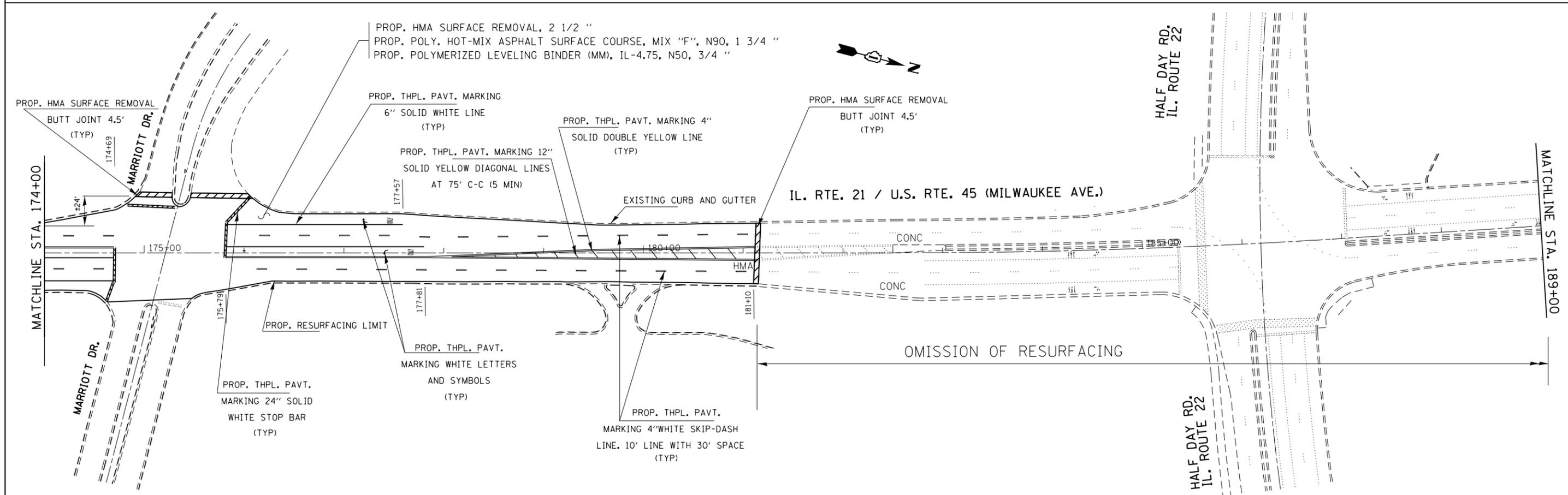
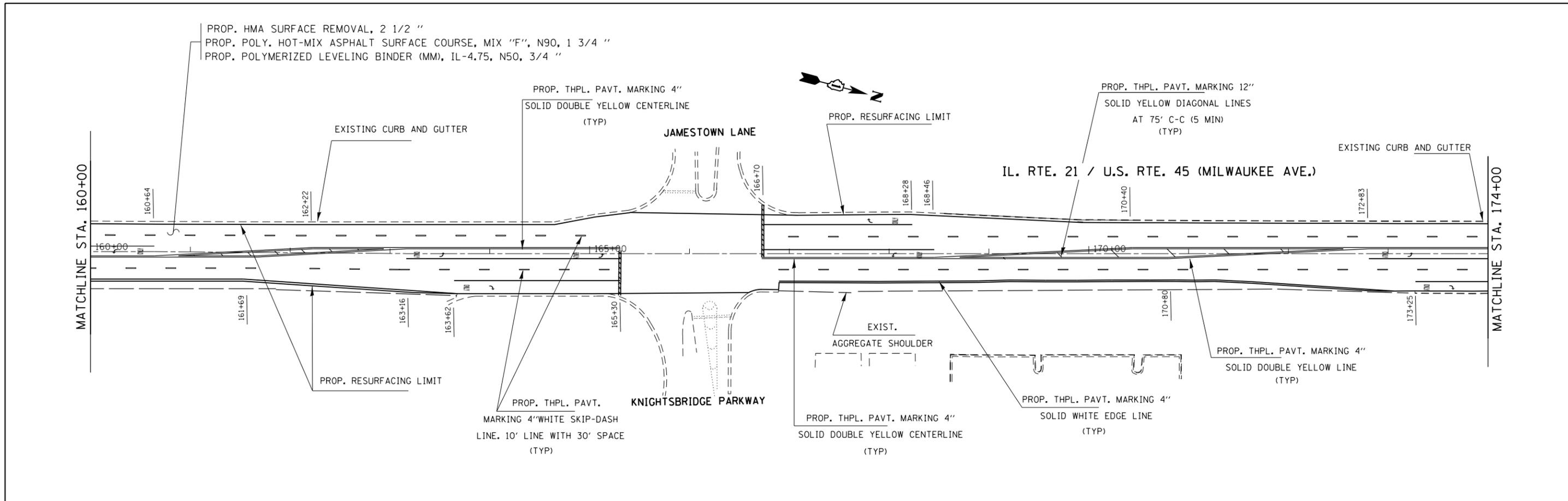
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Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 7/16/2014	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PROPOSED ROADWAY PLAN
 IL. RTE. 21 / U.S. RTE. 45 (MILWAUKEE RD.)**

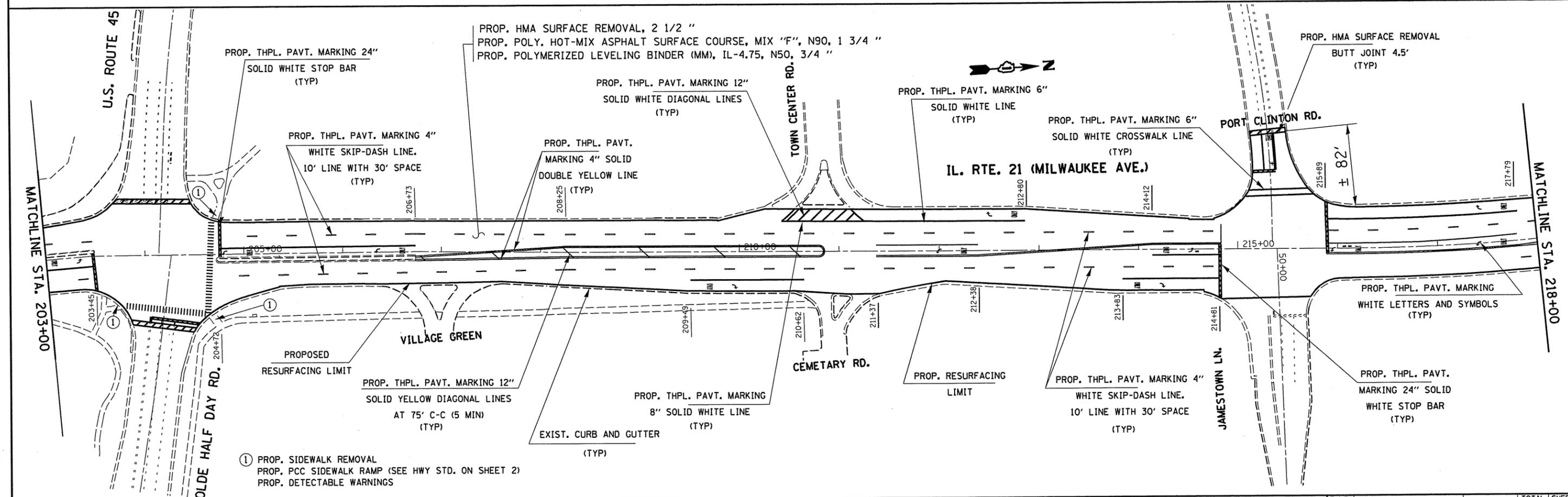
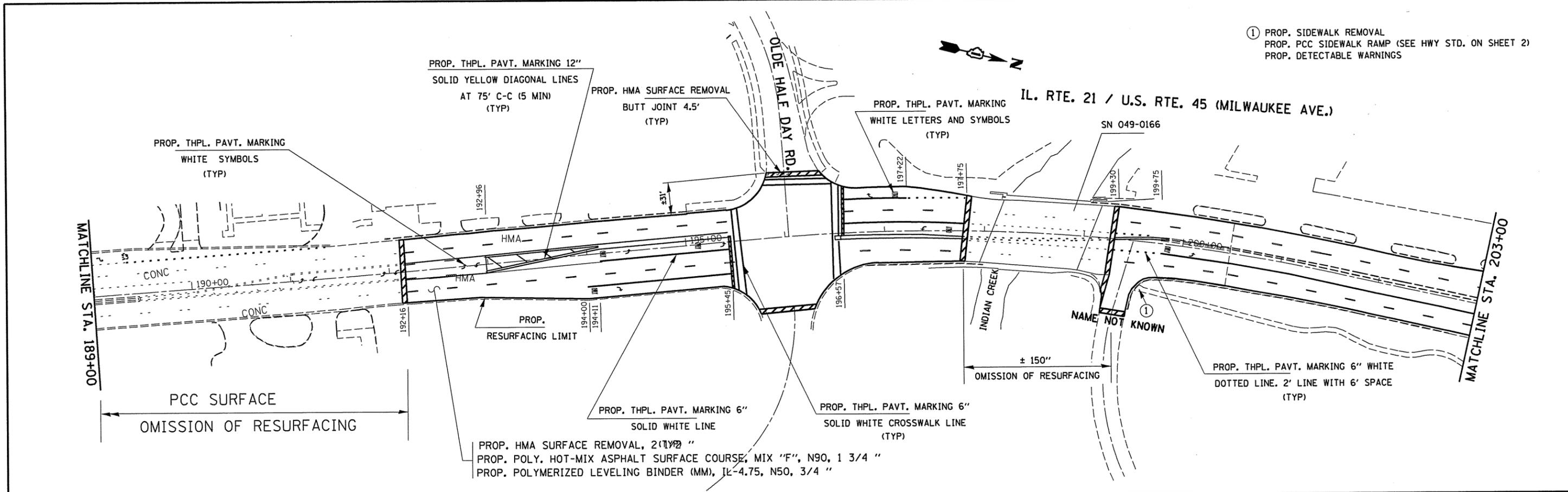
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	(1&1Y)RS-3	LAKE	60	13
CONTRACT NO. 60V03			ILLINOIS FED. AID PROJECT	



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ILLINOIS FED. AID PROJECT												

- ① PROP. SIDEWALK REMOVAL
- PROP. PCC SIDEWALK RAMP (SEE HWY STD. ON SHEET 2)
- PROP. DETECTABLE WARNINGS



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 PLOT SCALE = 100.0000' / in.
 PLOT DATE = 7/17/2014

DESIGNED -
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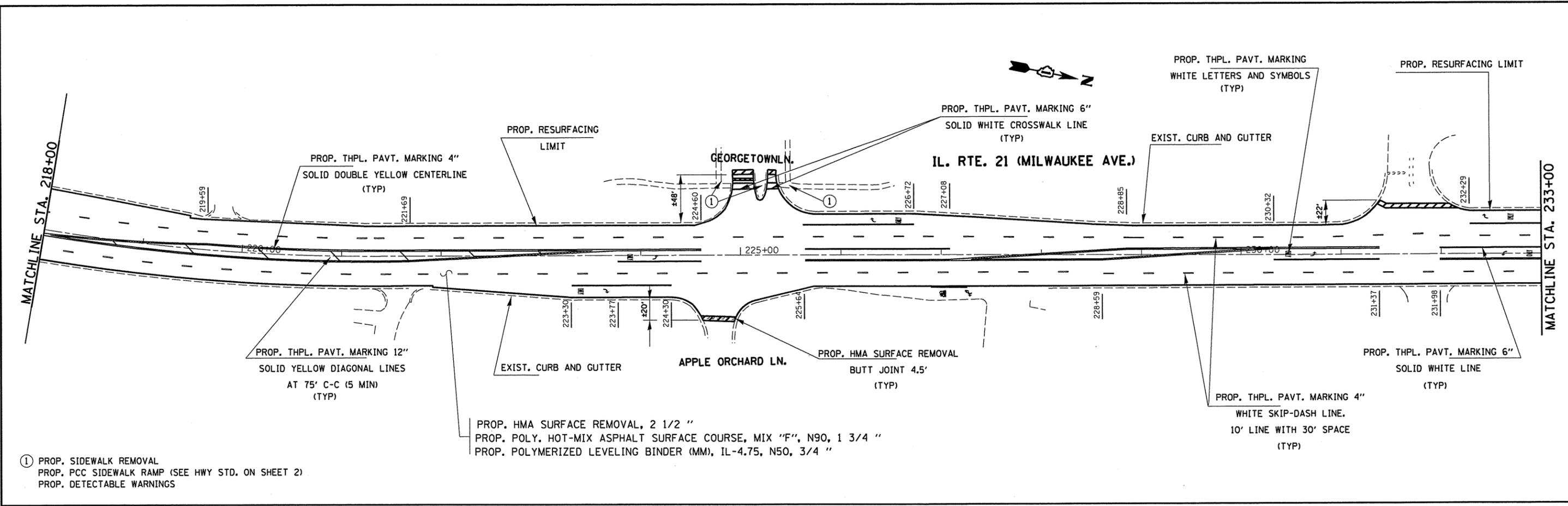
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

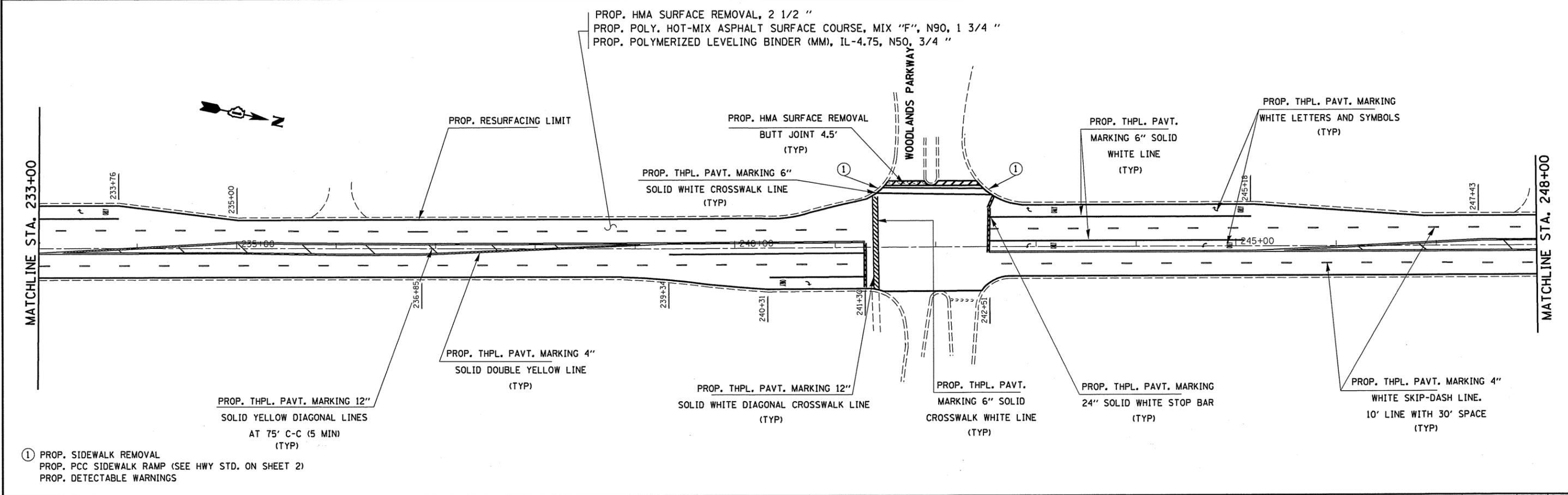
PROPOSED ROADWAY PLAN
 IL. RTE. 21 / U.S. RTE. 45 (MILWAUKEE RD.)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	(1&1)RS-3	LAKE	60	15
CONTRACT NO. 60V03				
ILLINOIS FED. AID PROJECT				

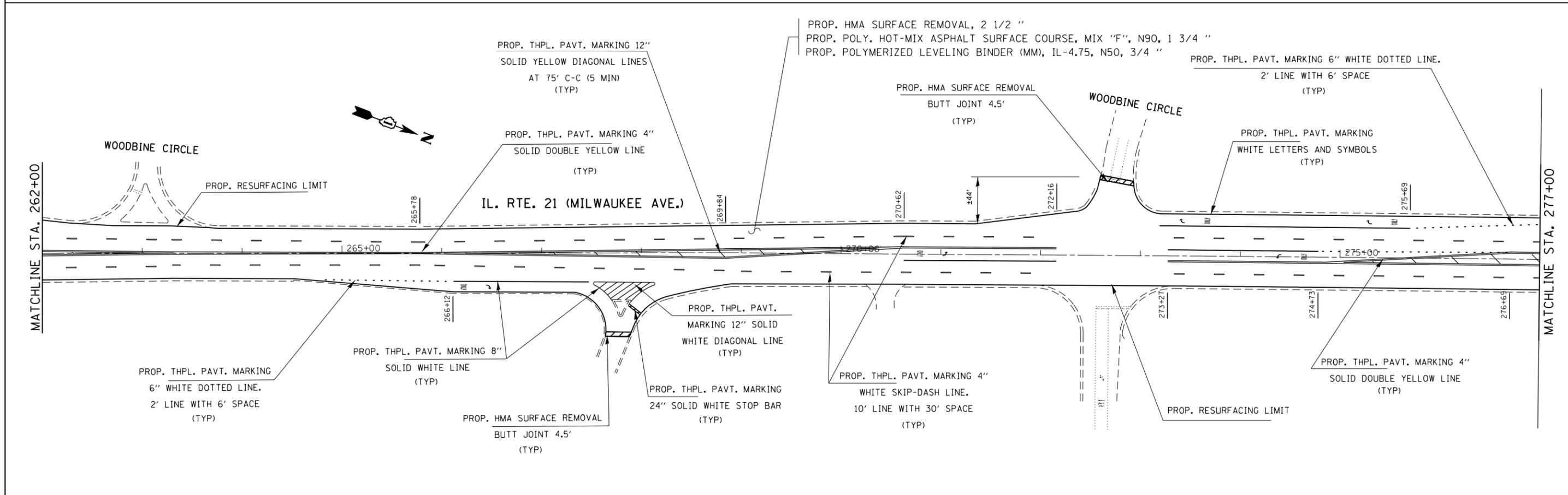
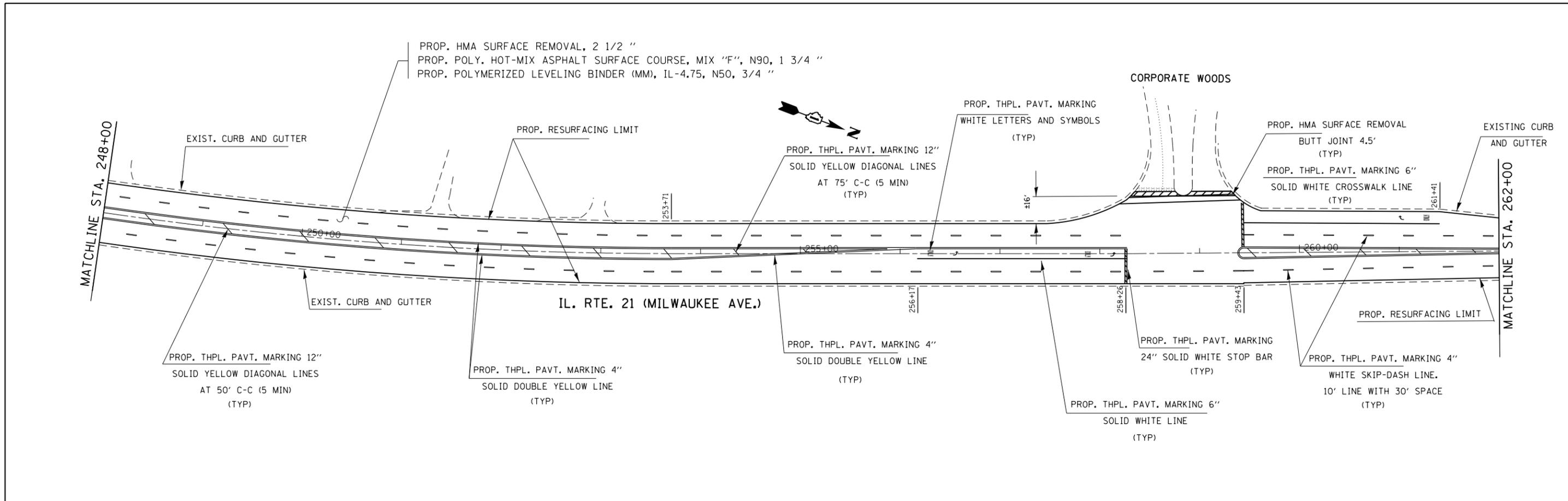


- ① PROP. SIDEWALK REMOVAL
- PROP. PCC SIDEWALK RAMP (SEE HWY STD. ON SHEET 2)
- PROP. DETECTABLE WARNINGS

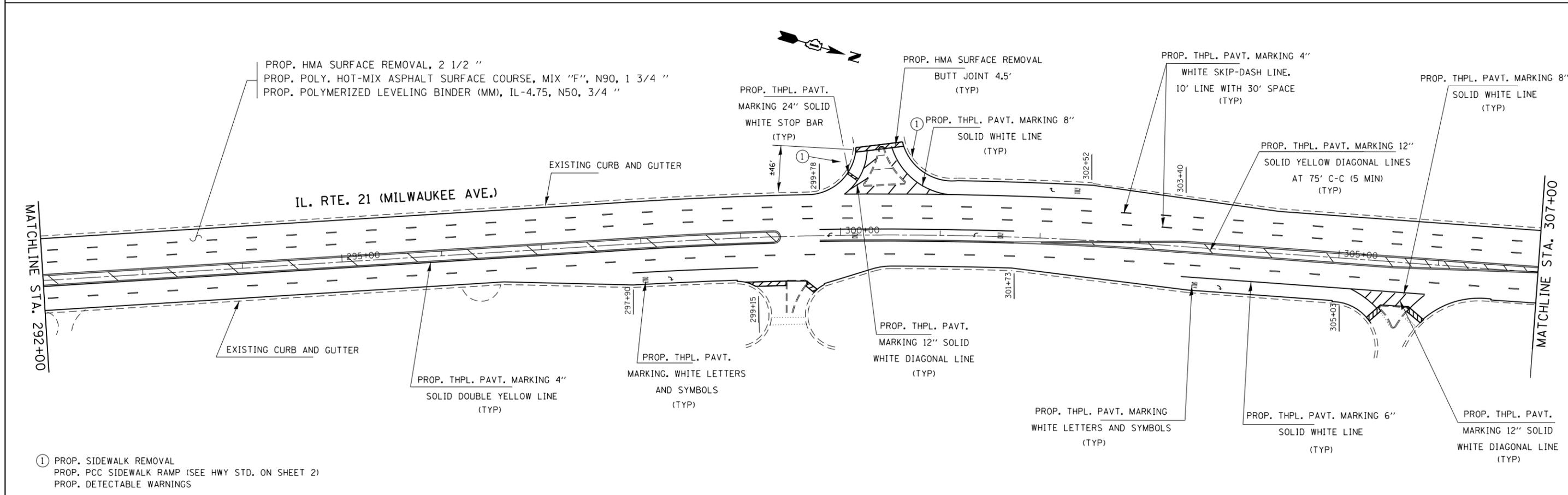
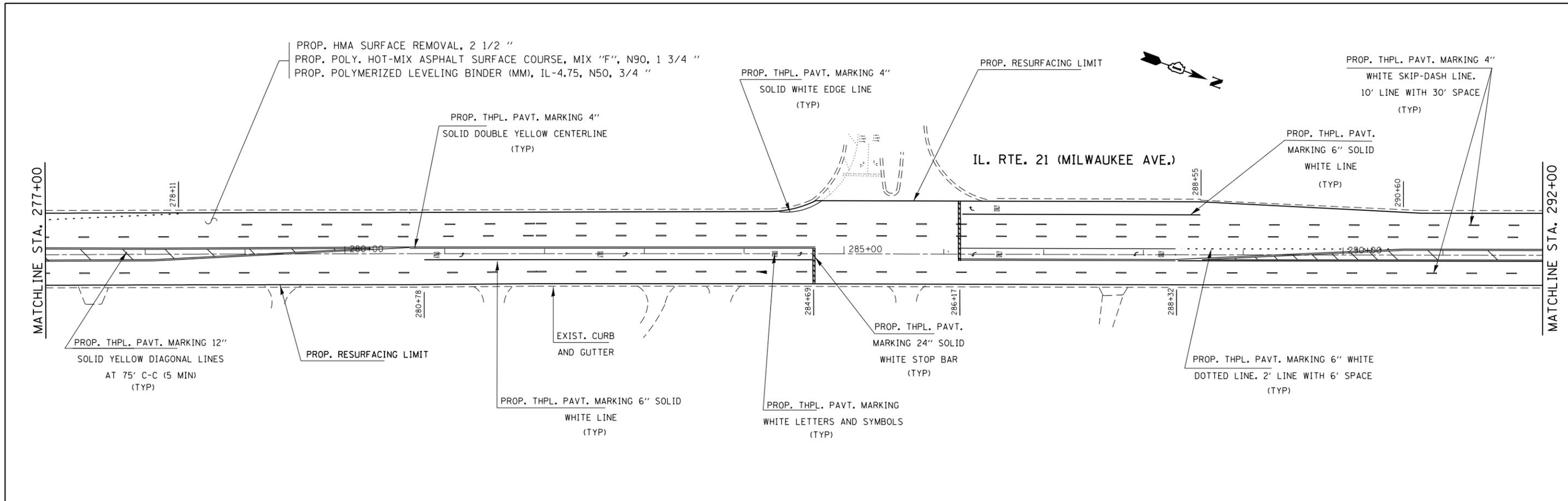


- ① PROP. SIDEWALK REMOVAL
- PROP. PCC SIDEWALK RAMP (SEE HWY STD. ON SHEET 2)
- PROP. DETECTABLE WARNINGS

FILE NAME =	USER NAME = hardnetbr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED ROADWAY PLAN IL. RTE. 21 (MILWAUKEE RD.)	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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Default	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -			CONTRACT NO. 60V03					
	PLOT DATE = 7/17/2014	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

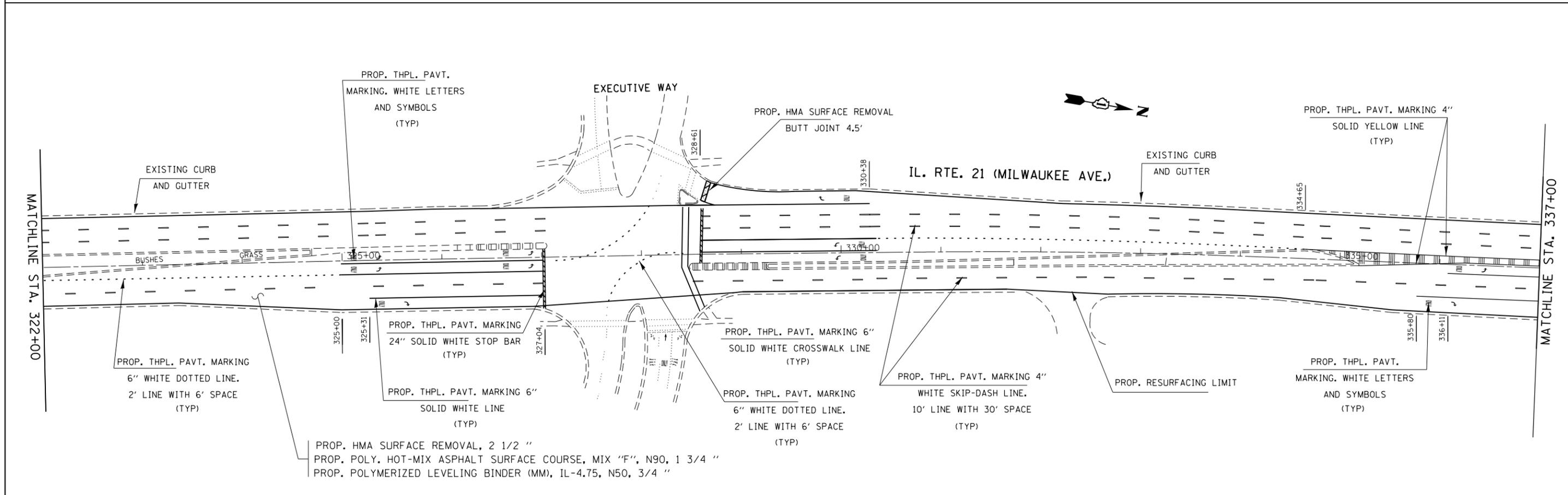
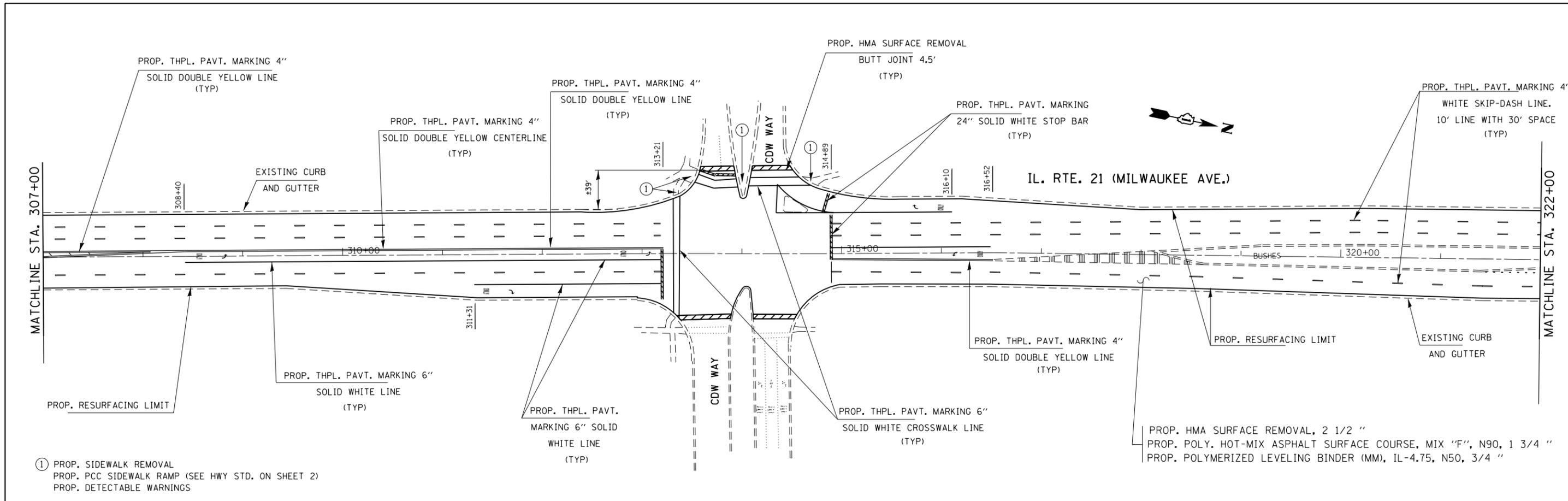


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Default	51012-sh1-plen.dgn	DRAWN -	REVISED -			330	(1&1Y)RS-3	LAKE	60	17	
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -			CONTRACT NO. 60V03					
	PLOT DATE = 7/16/2014	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					



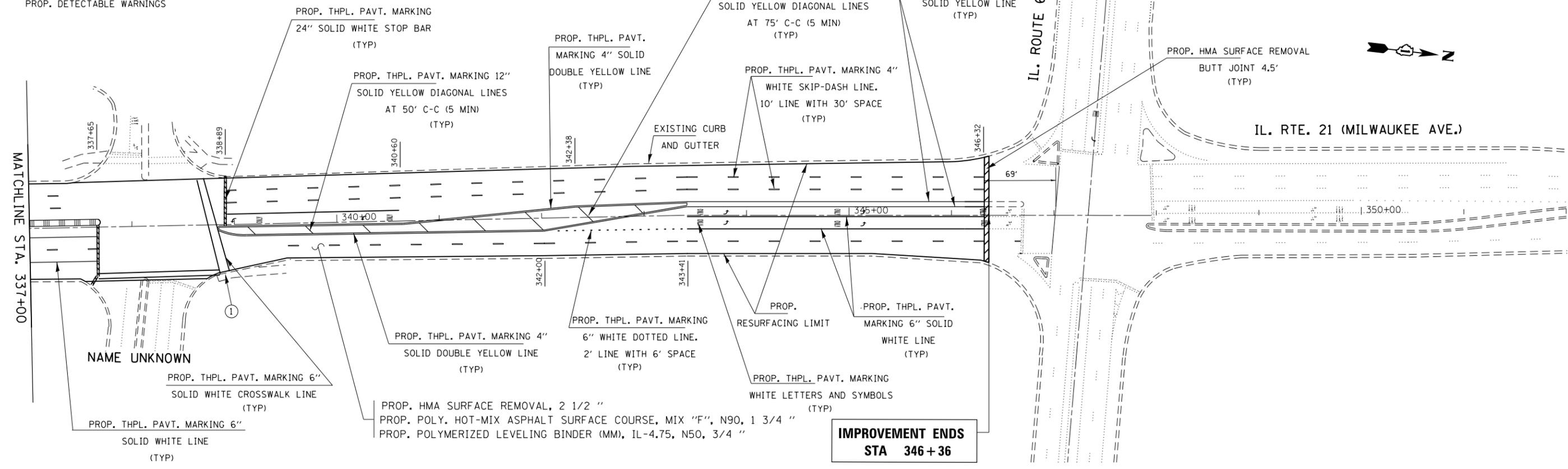
- ① PROP. SIDEWALK REMOVAL
- PROP. PCC SIDEWALK RAMP (SEE HWY STD. ON SHEET 2)
- PROP. DETECTABLE WARNINGS

FILE NAME =	USER NAME = hardnettbr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED ROADWAY PLAN IL. RTE. 21 (MILWAUKEE RD.)	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ci:\pw_work\pwidot\hardnettbr\d0337694\051012-sh1-plen.dgn	PLOT SCALE = 100.0000' / in.	DRAWN -	REVISED -			330	(1&1)YRS-3	LAKE	60	18	
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		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					



FILE NAME =	USER NAME = hardnettbr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED ROADWAY PLAN IL. RTE. 21 (MILWAUKEE RD.)	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ei:\pw\work\p\midot\hardnettbr\d0337694\051012-sh1-plan.dgn	PLOT SCALE = 100.0000' / in.	DRAWN -	REVISED -			330	(1&1)RS-3	LAKE	60	19	
Default	PLOT DATE = 7/16/2014	CHECKED -	REVISED -			CONTRACT NO. 60V03					
		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

- ① PROP. SIDEWALK REMOVAL
- PROP. PCC SIDEWALK RAMP (SEE HWY STD. ON SHEET 2)
- PROP. DETECTABLE WARNINGS



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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

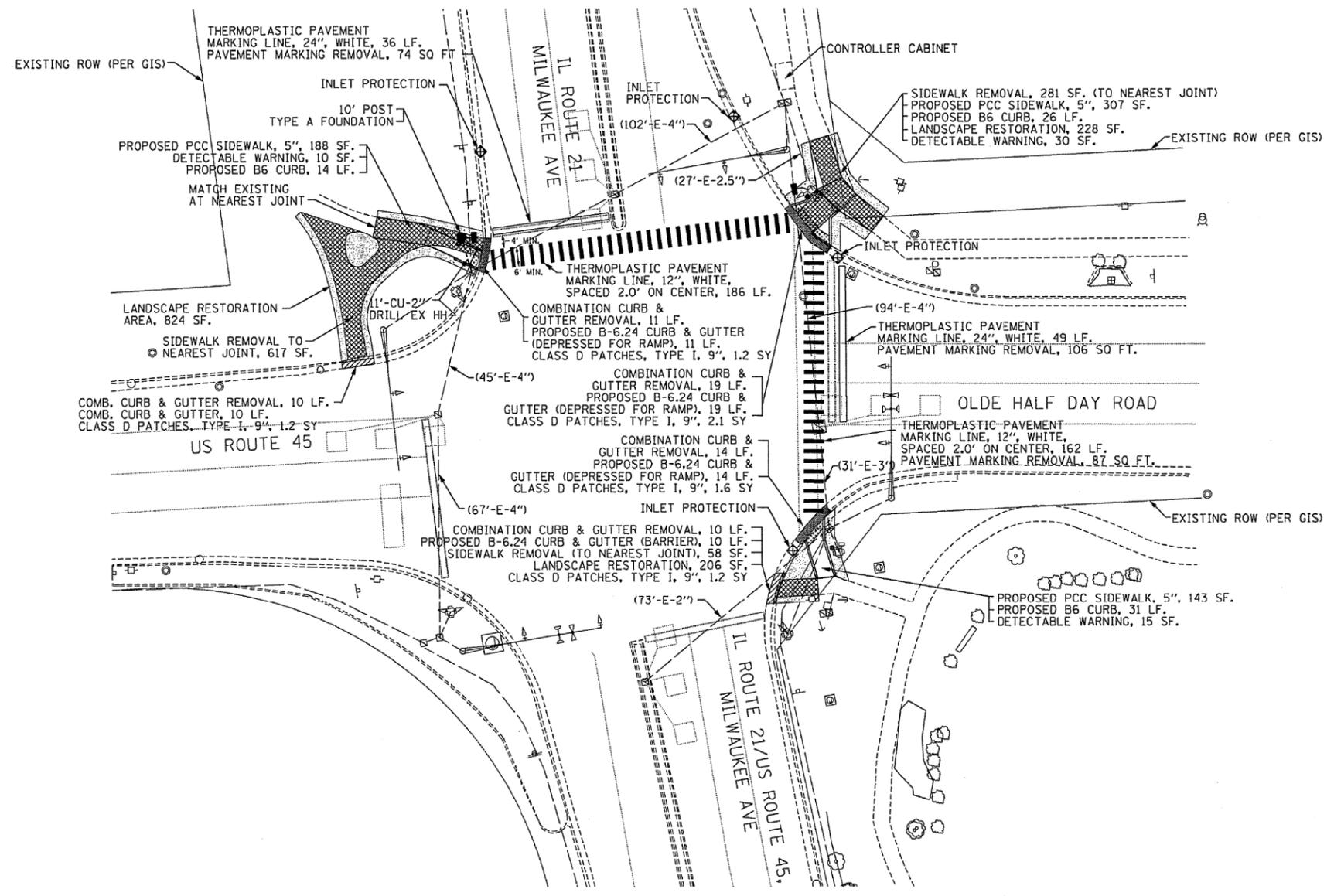
**PROPOSED ROADWAY PLAN
IL. RTE. 21 (MILWAUKEE RD.)**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	(1&1)RS-3	LAKE	60	20
CONTRACT NO. 60V03				
ILLINOIS FED. AID PROJECT				



NOTE:
PEDESTRIAN PUSH BUTTON AND SIGNAGE SHALL BE INSTALLED PER
STANDARD 876001-03. DETAIL IS INCLUDED.



LEGEND

- COMBINATION CURB AND GUTTER REMOVAL
- TOPSOIL FURNISH AND PLACE, 6" SODDING, SALT TOLERANT AND FERTILIZER
- SIDEWALK REMOVAL
- REMOVE AND REPLACE CURB AND GUTTER WITH BARRIER B-6.24
- REMOVE AND REPLACE CURB AND GUTTER WITH DEPRESSED BARRIER B-6.24
- DETECTABLE WARNING
- INLET FILTERS

ITEM	QTY
NITROGEN FERTILIZER NUTRIENT	60X0.02=1.74LB
PHOSPHORUS FERTILIZER NUTRIENT	60X0.02=1.74LB
POTASSIUM FERTILIZER NUTRIENT	60X0.02=1.74LB

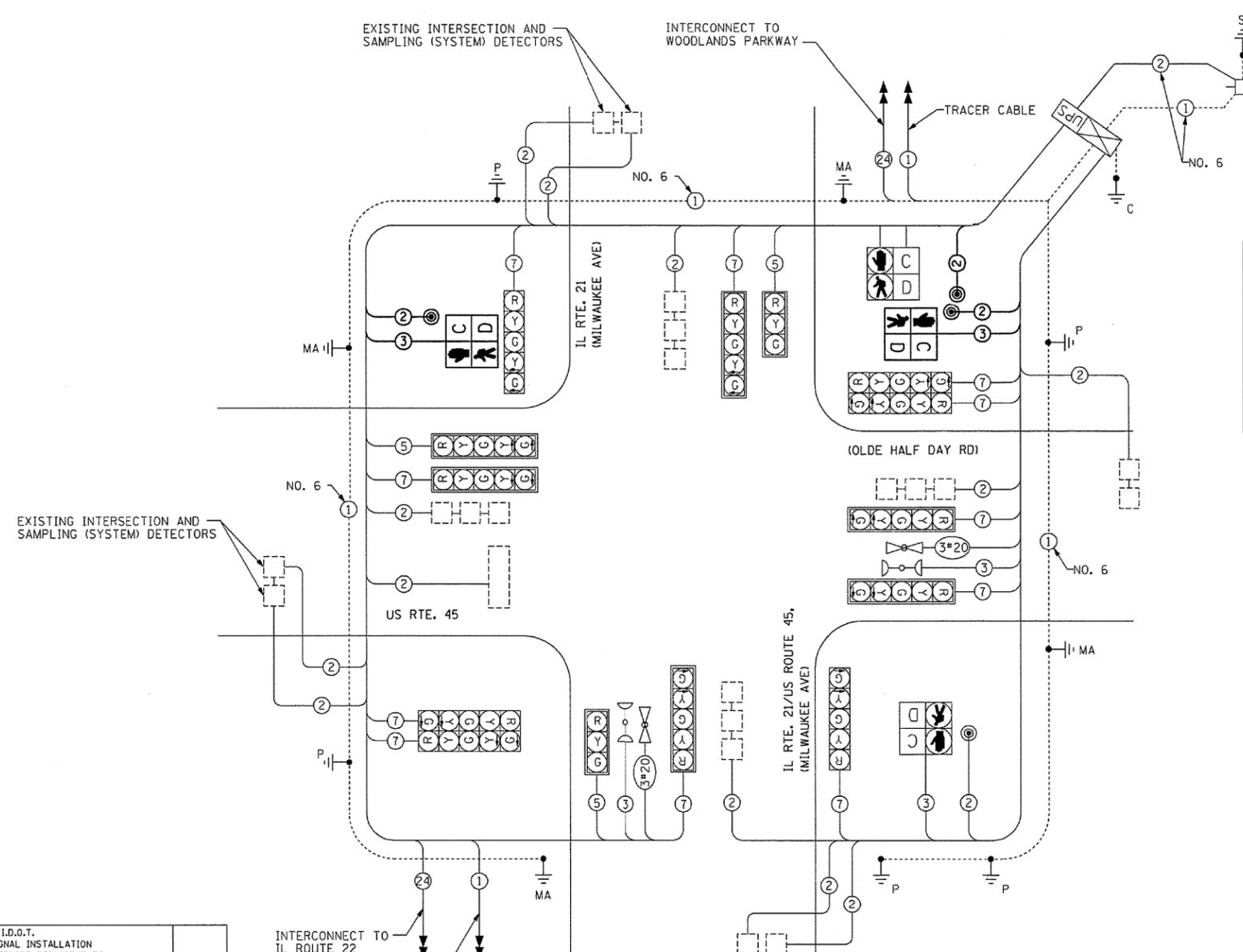
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Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 7/16/2014	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**OLDE HALF DAY RD AT IL RTE 21/US ROUTE 45 (MILWAUKEE AVE)
TRAFFIC SIGNAL MODIFICATION PLAN**

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	1181YRS-3	LAKE	60	21
CONTRACT NO. 60V03			ILLINOIS FED. AID PROJECT	



SCHEDULE OF QUANTITIES

ITEM	UNIT	QTY
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	11
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, EQUIP. GROUNDING CONDUCTOR, NO. 6 1C	FOOT	21
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	214
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	228
TRAFFIC SIGNAL POST, 10 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
DRILL EXISTING HANDHOLE	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN PUSH-BUTTON	EACH	2

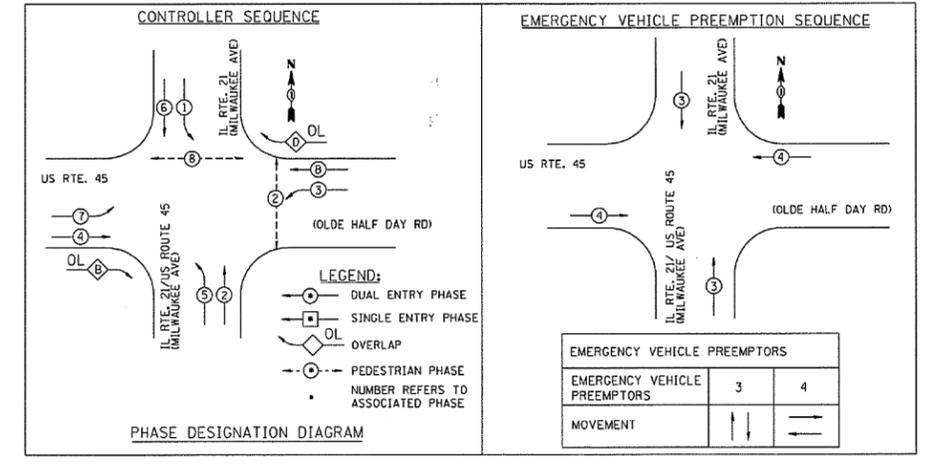
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE		% OPERATION	
SIGNAL (RED)	14	-	17	0.50	119.0
(YELLOW)	14	-	25	0.25	87.5
(GREEN)	14	-	15	0.25	52.5
ARROW	22	-	12	0.10	26.4
PED. SIGNAL	4	-	25	1.00	100
CONTROLLER	1	-	100	1.00	100
ILLUM. SIGN	-	-	25	0.05	-
FLASHER	-	-	-	0.50	-
TOTAL					485.4

ENERGY COSTS TO:
VILLAGE OF LINCOLNSHIRE
 ONE OLDE HALF DAY ROAD
 LINCOLNSHIRE, IL 60069
 ENERGY SUPPLY: CONTACT: **TERRI BLECK**
 PHONE: **847-816-5239**
 COMPANY: **COMED**

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

CABLE PLAN
NOT TO SCALE

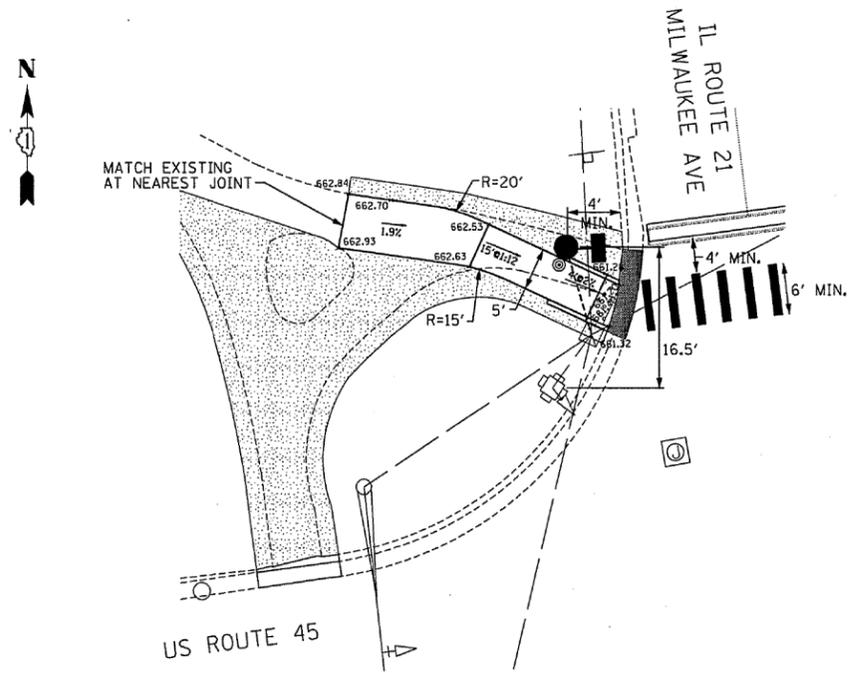


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Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
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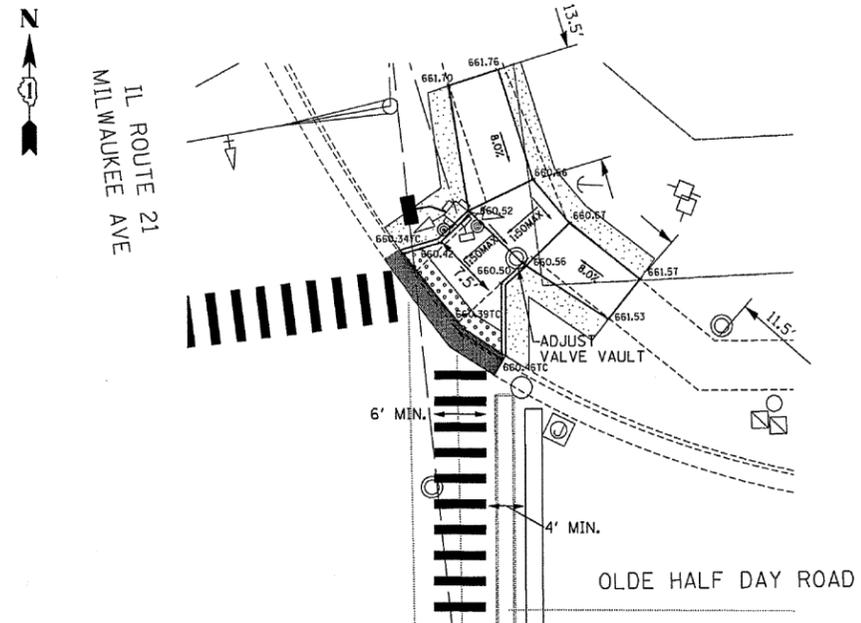
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
US 45 (OLDE HALF DAY RD) AT US 21 (MILWAUKEE AVE)
 SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

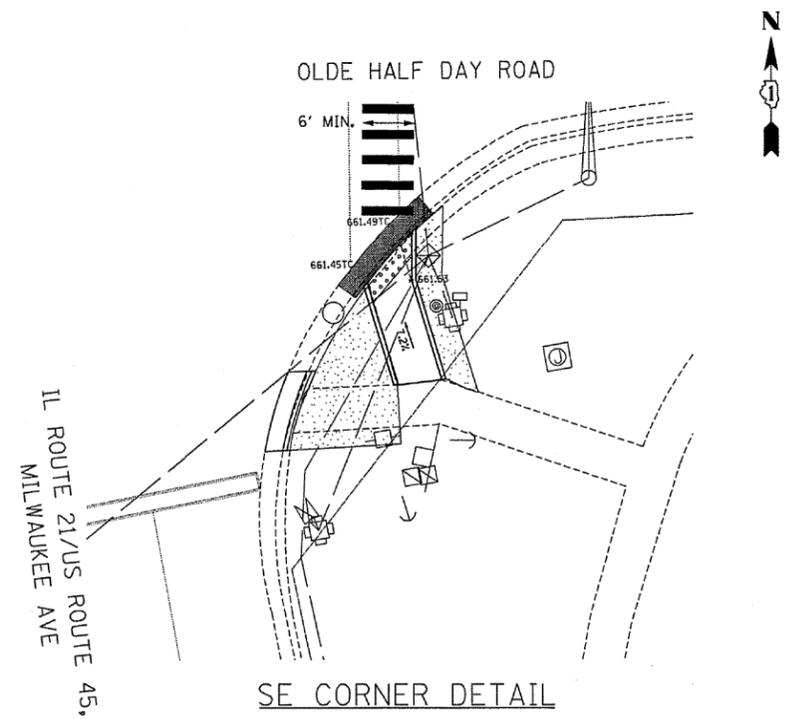
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	(181Y)RS-3	LAKE	60	22
CONTRACT NO. 60V03				
ILLINOIS FED. AID PROJECT				



NW CORNER DETAIL



NE CORNER DETAIL



SE CORNER DETAIL

FILE NAME =	USER NAME = hardnettbr	DESIGNED -	REVISED -
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Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 7/16/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OLDE HALF DAY RD AT IL 21/US ROUTE 45 (MILWAUKEE AVE)
SIDEWALK RAMP DETAILS

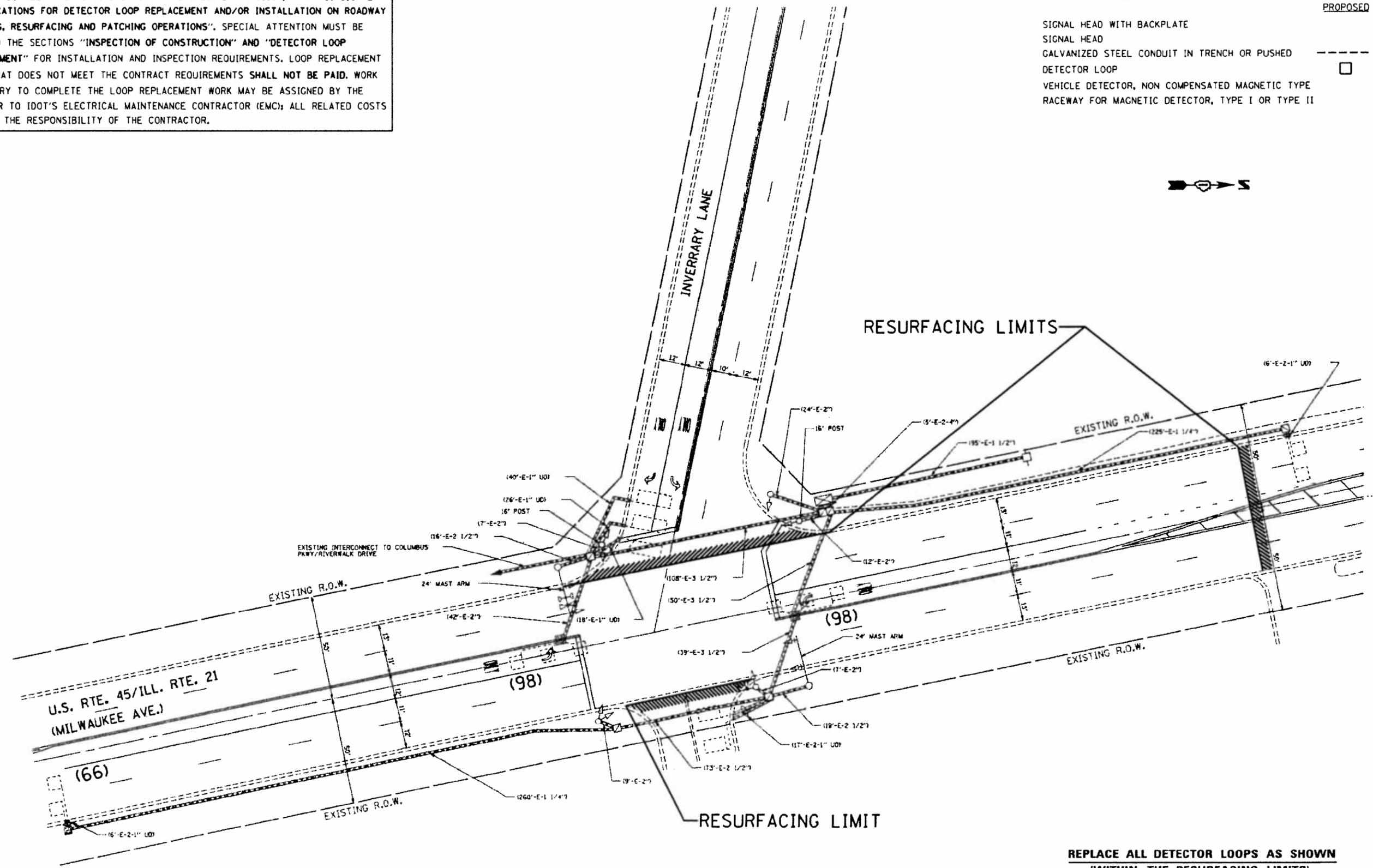
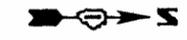
SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	1181YRS-3	LAKE	60	23
CONTRACT NO. 60V03				
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	262	FOOT	DETECTOR LOOP REPLACEMENT

FILE NAME =	USER NAME = hardnettbr	DESIGNED -	REVISED -
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Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 7/16/2014	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE - DETECTOR LOOP REPLACEMENT
IL RTE 21 (MILWAUKEE AVE)/US RTE 45 AT INVERRARY LN**

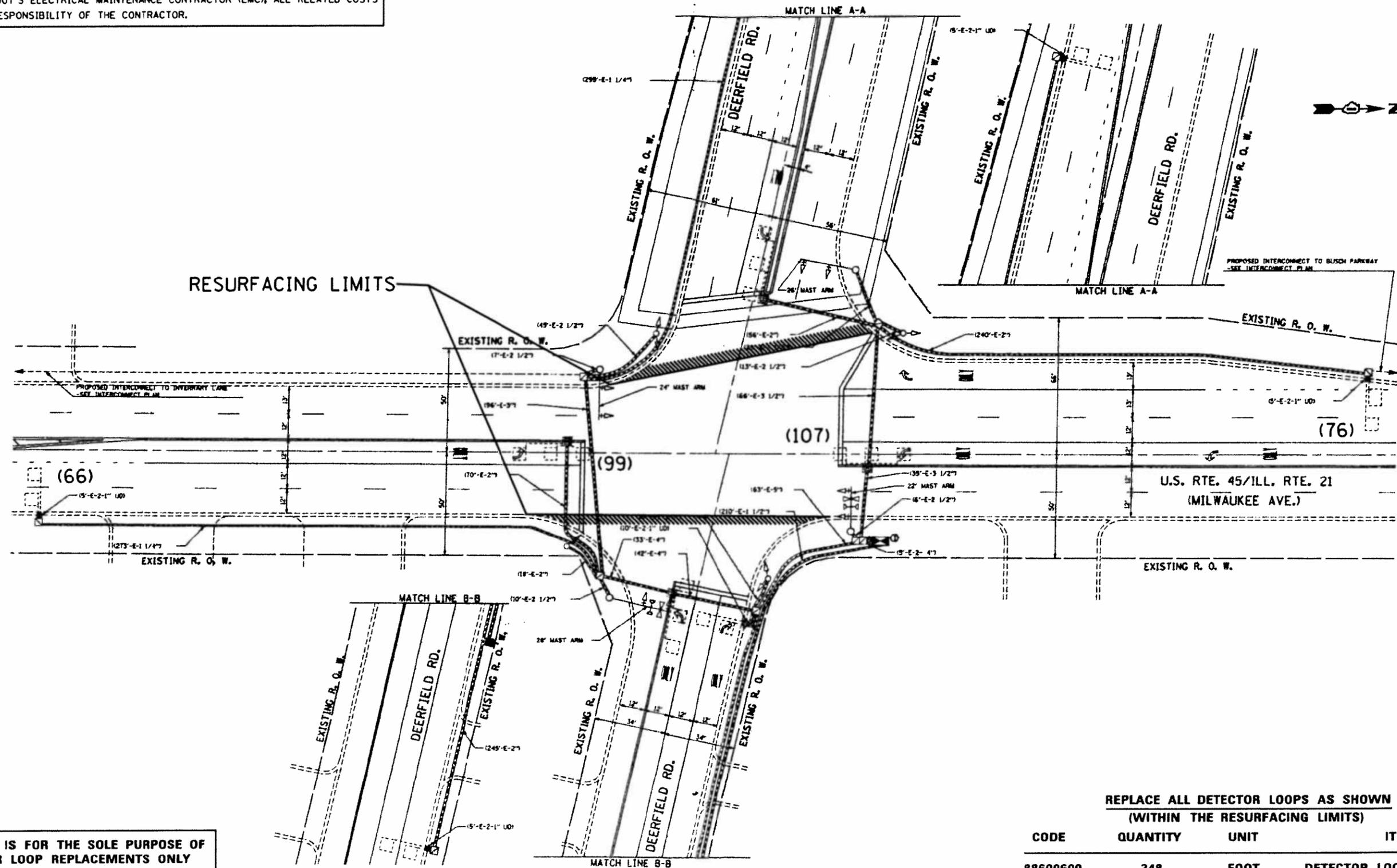
SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	1181YRS-3	LAKE	60	24
CONTRACT NO. 60V03			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	348	FOOT	DETECTOR LOOP REPLACEMENT

FILE NAME =	USER NAME = hardnettbr	DESIGNED -	REVISED -
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Default	PLOT DATE = 7/16/2014	CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE - DETECTOR LOOP REPLACEMENT
IL RTE 21 (MILWAUKEE AVE)/US RTE 45 AT DEERFIELD RD**

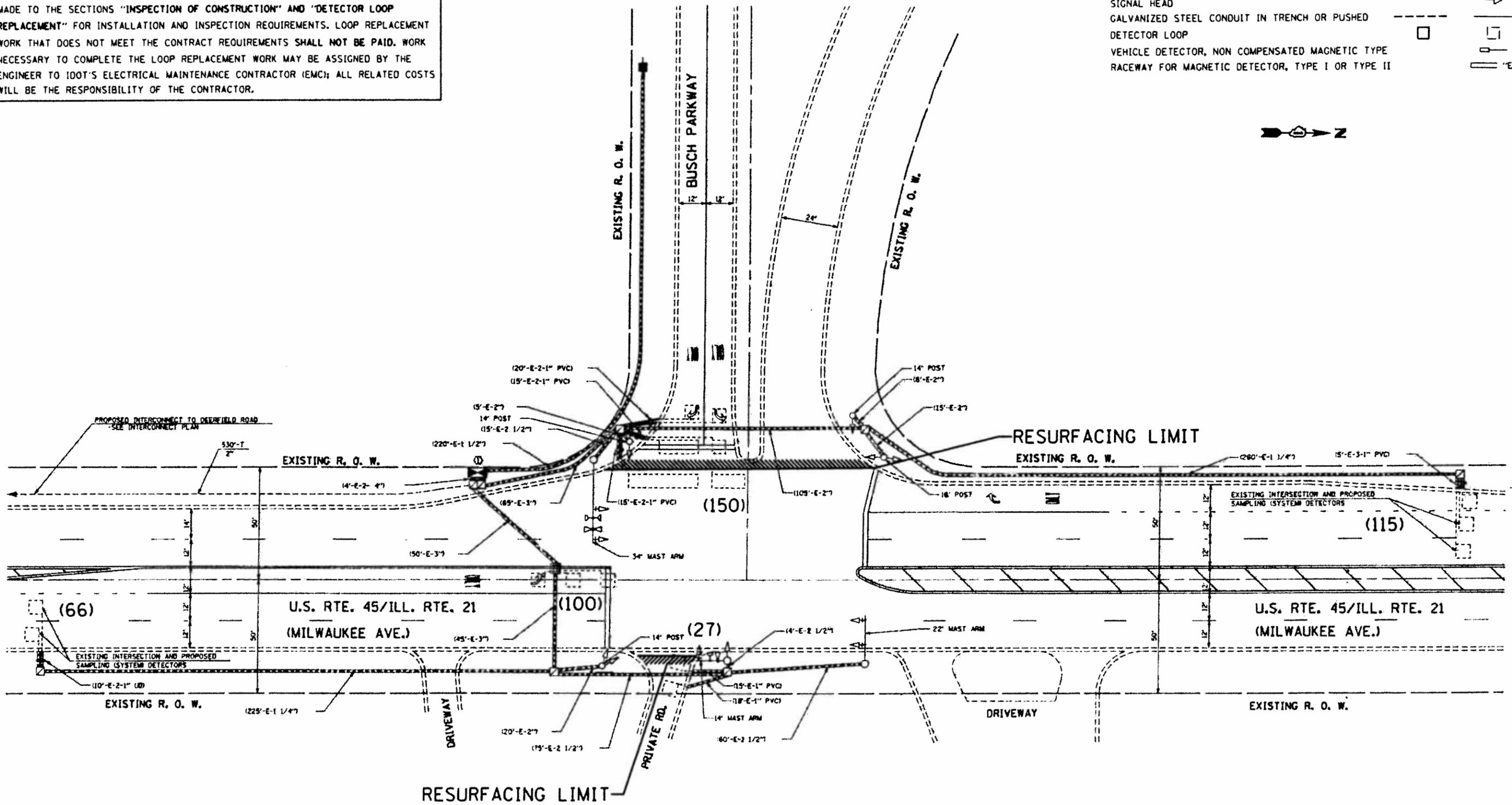
SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	1181YRS-3	LAKE	60	25
CONTRACT NO. 60V03				
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	458	FOOT	DETECTOR LOOP REPLACEMENT

FILE NAME =
c:\p\work\p\dot\hardnettr\dot\337694\

USER NAME = hardnettr
51812.sht-plan.dgn
PLOT SCALE = 100.0000 1/1 in.
PLOT DATE = 7/17/2014

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

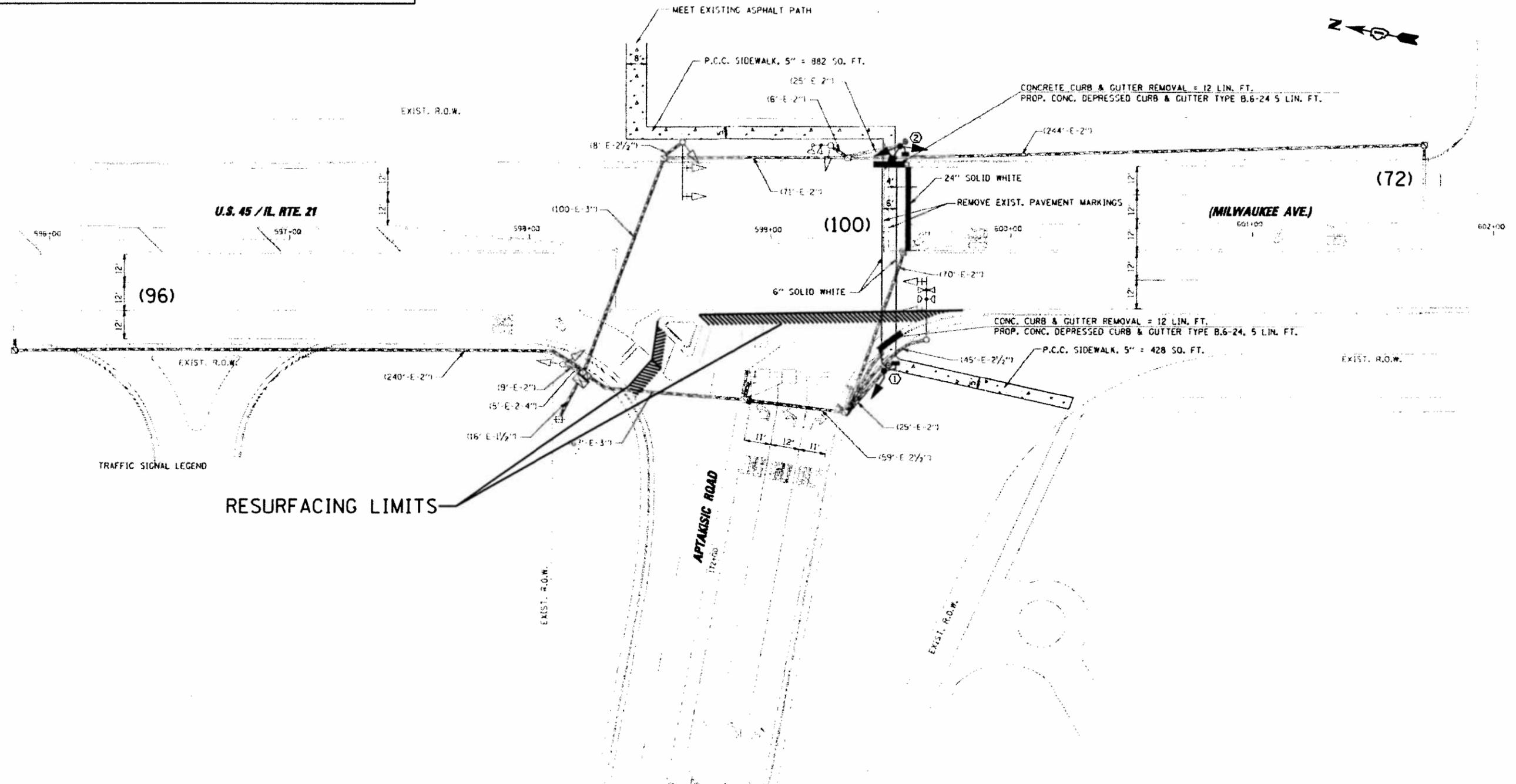
**DISTRICT ONE - DETECTOR LOOP REPLACEMENT
IL RTE 21 (MILWAUKEE AVE)/US RTE 45 AT BUSCH PARKWAY**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	11&1YRS-3	LAKE	60	26
CONTRACT NO. 60V03				
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)

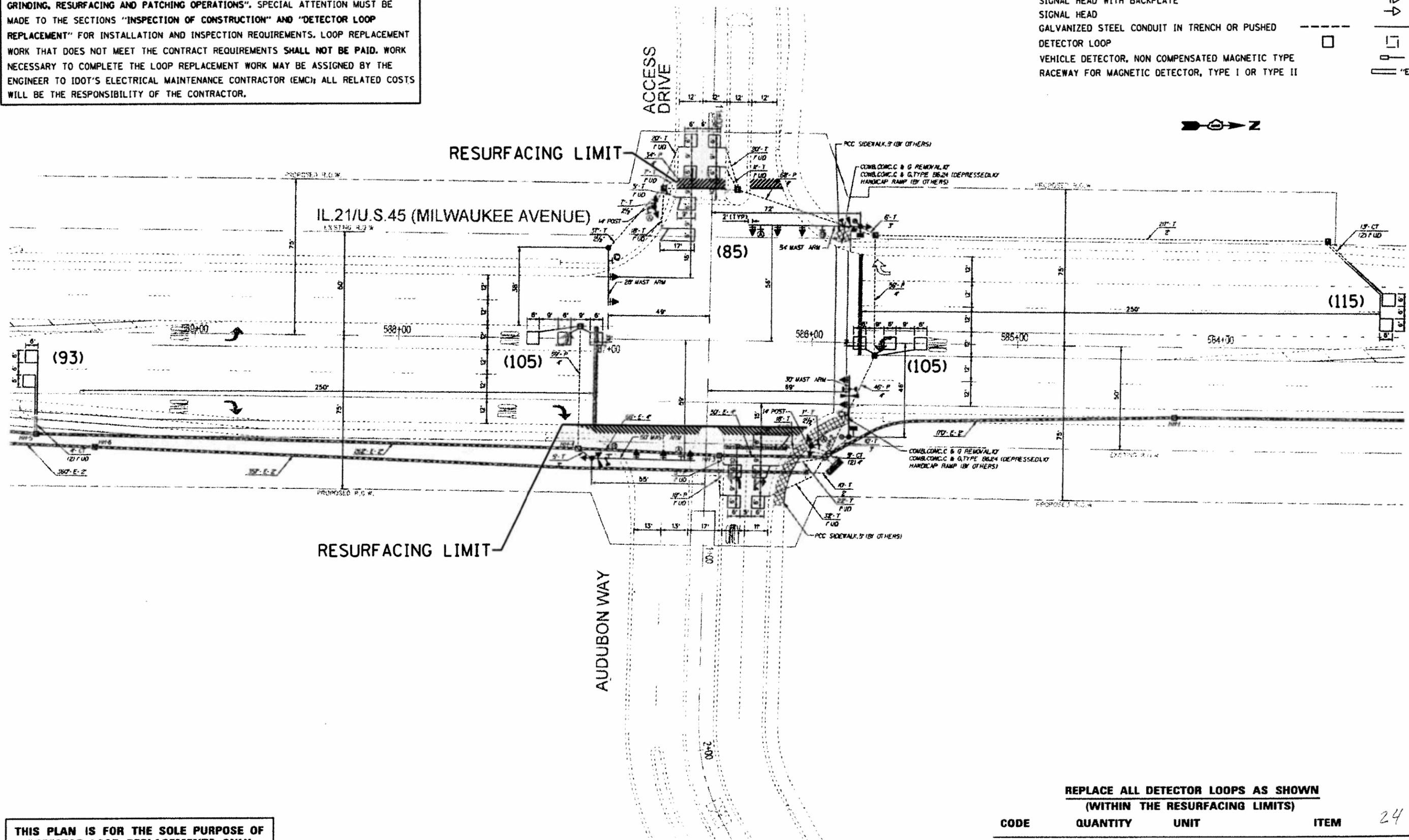
CODE	QUANTITY	UNIT	ITEM
88600600	268	FOOT	DETECTOR LOOP REPLACEMENT

FILE NAME =	USER NAME = hardnettbr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE - DETECTOR LOOP REPLACEMENT IL RTE 21 (MILWAUKEE AVE)/US RTE 45 AT APTAKISIC RD	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Default	51012-sh1-plan.dgn	DRAWN -	REVISED -			330	1181YRS-3	LAKE	60	27	
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -			CONTRACT NO. 60V03					
	PLOT DATE = 7/16/2014	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

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		



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	503	FOOT	DETECTOR LOOP REPLACEMENT

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Default	PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED -
	PLOT DATE = 7/16/2014	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE - DETECTOR LOOP REPLACEMENT
IL RTE 21 (MILWAUKEE AVE)/US RTE 45 AT AUDUBON WAY/PARKWAY DR**

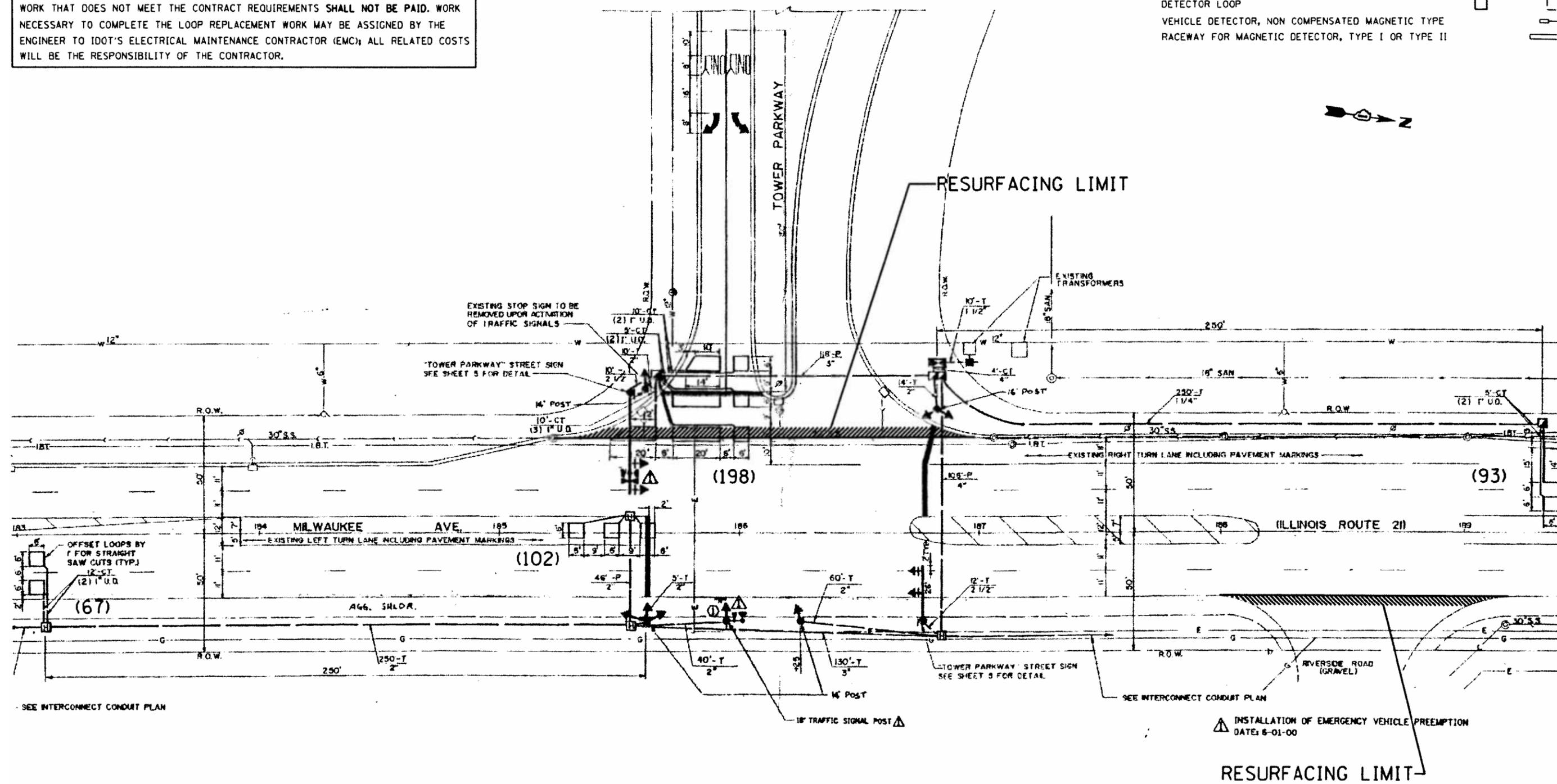
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	1181YRS-3	LAKE	60	28
CONTRACT NO. 60V03			ILLINOIS FED. AID PROJECT	

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

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	460	FOOT	DETECTOR LOOP REPLACEMENT

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Default	PLOT SCALE = 100.0000' / 1" =	CHECKED -	REVISED -
	PLOT DATE = 7/16/2014	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE - DETECTOR LOOP REPLACEMENT
IL RTE 21 (MILWAUKEE AVE)/US RTE 45 AT TOWER PKWY**

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	1181YRS-3	LAKE	60	29
CONTRACT NO. 60V03				
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.

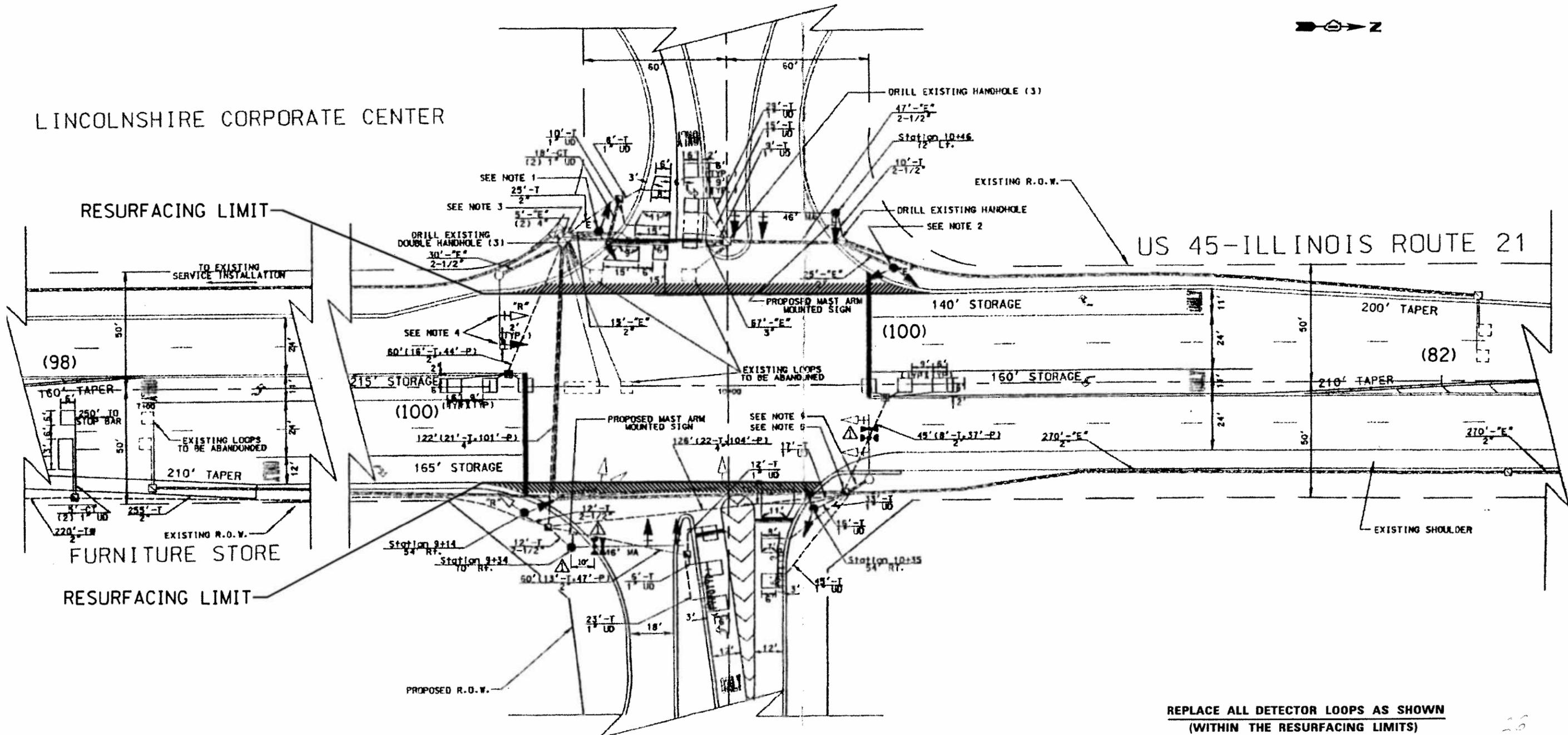
TRAFFIC SIGNAL LEGEND

	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		

KNIGHTSBRIDGE PARKWAY



LINCOLNSHIRE CORPORATE CENTER



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	380	FOOT	DETECTOR LOOP REPLACEMENT

FILE NAME =	USER NAME = hardnettbr	DESIGNED -	REVISED -
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Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 7/16/2014	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

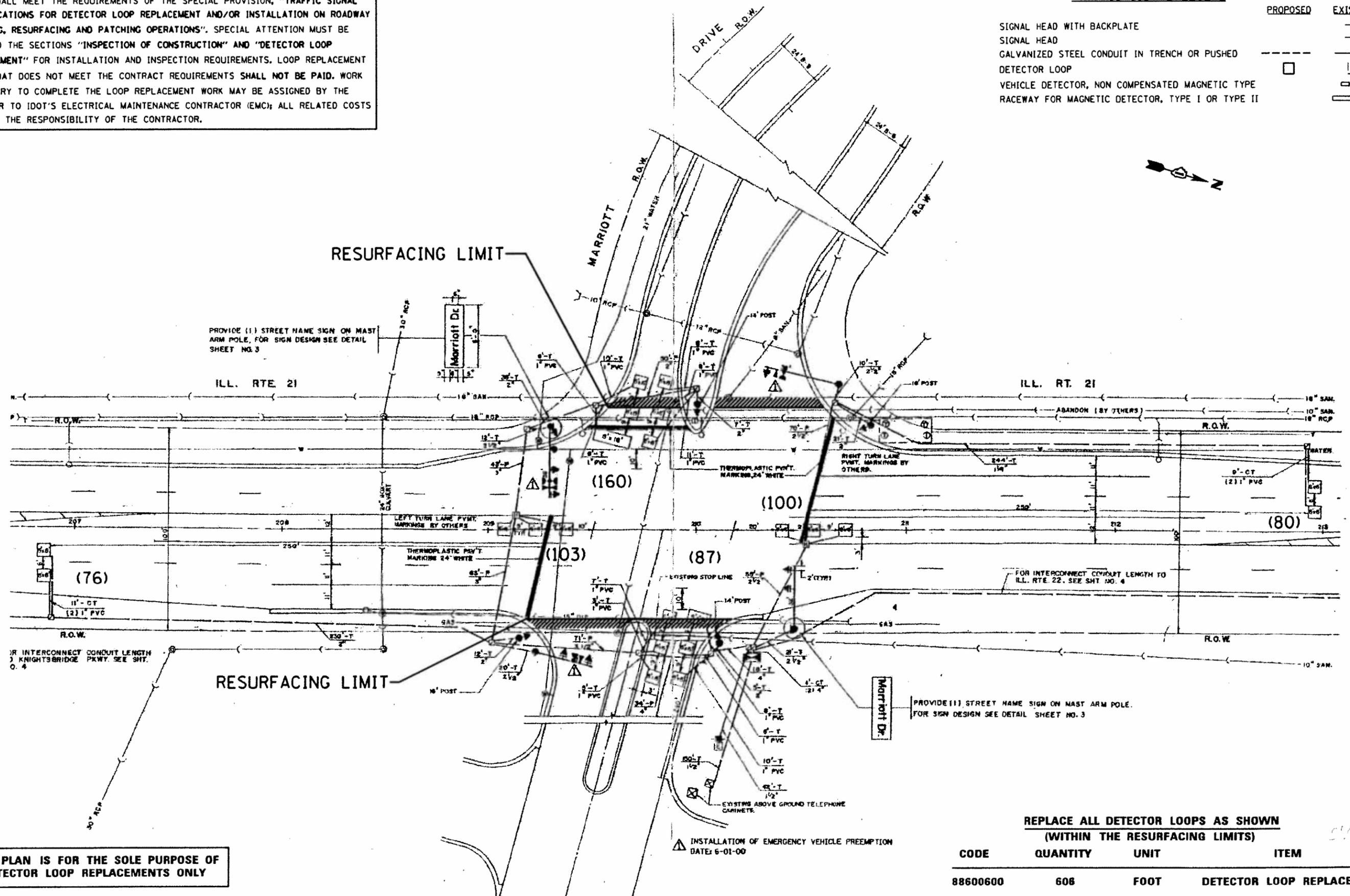
**DISTRICT ONE - DETECTOR LOOP REPLACEMENT
IL 21 (MILWAUKEE AVE) US 45 AT KNIGHTSBRIDGE PKWY/JAMESTOWN LN**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	1181YRS-3	LAKE	60	30
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V03	

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

PROVIDE (1) STREET NAME SIGN ON MAST ARM POLE. FOR SIGN DESIGN SEE DETAIL SHEET NO. 3

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

CODE	QUANTITY	UNIT	ITEM
88600600	606	FOOT	DETECTOR LOOP REPLACEMENT

INSTALLATION OF EMERGENCY VEHICLE PREEMPTION DATE: 6-01-00

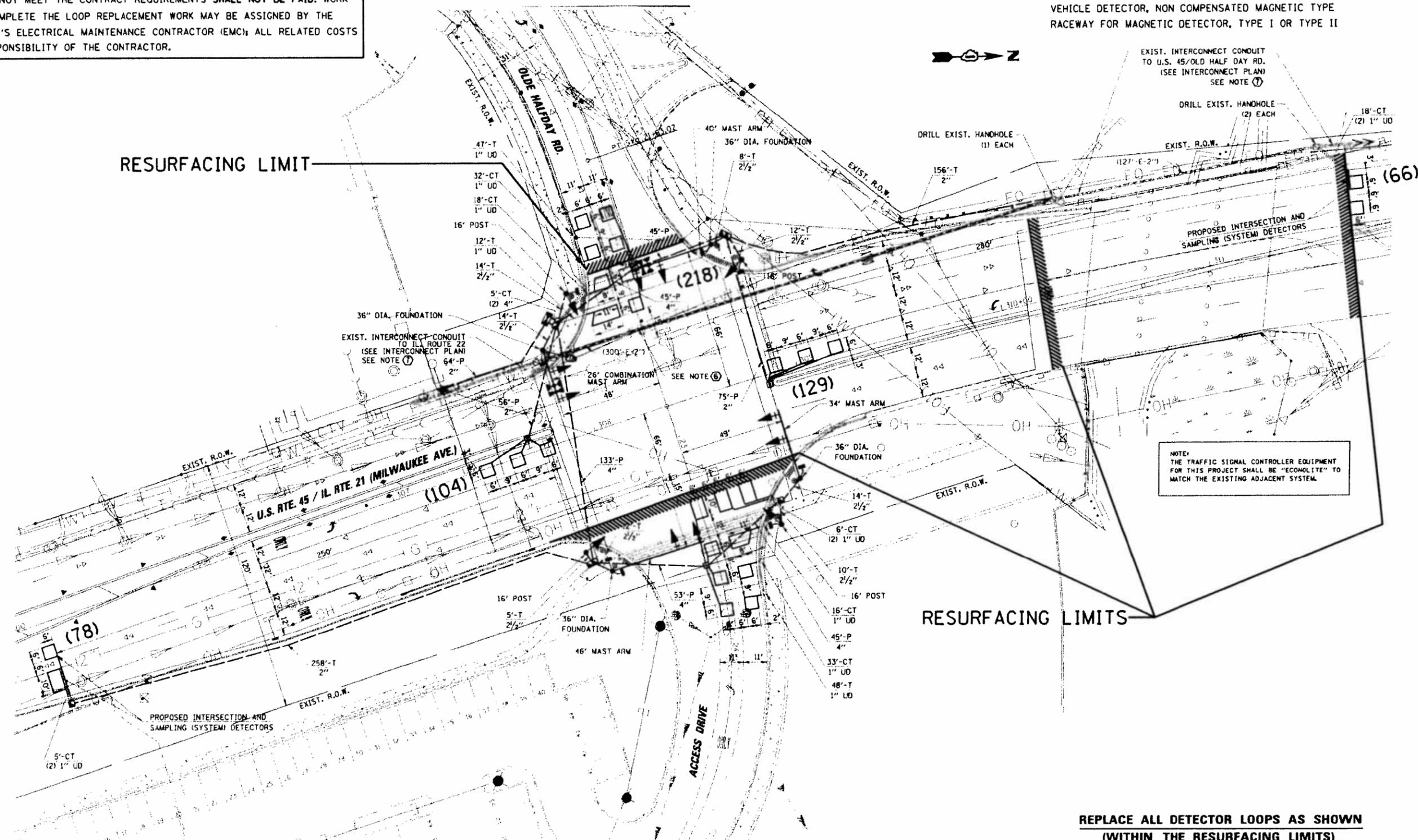
WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "TRAFFIC SIGNAL SPECIFICATIONS FOR DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION ON ROADWAY GRINDING, RESURFACING AND PATCHING OPERATIONS". SPECIAL ATTENTION MUST BE MADE TO THE SECTIONS "INSPECTION OF CONSTRUCTION" AND "DETECTOR LOOP REPLACEMENT" 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	

RESURFACING LIMIT

RESURFACING LIMITS



NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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	595	FOOT	DETECTOR LOOP REPLACEMENT

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Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 7/16/2014	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE - DETECTOR LOOP REPLACEMENT
IL RTE 21 (MILWAUKEE AVE)/US RTE 45 AT OLDE HALF DAY RD**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	1181YRS-3	LAKE	60	32
CONTRACT NO. 60V03				
ILLINOIS FED. AID PROJECT				

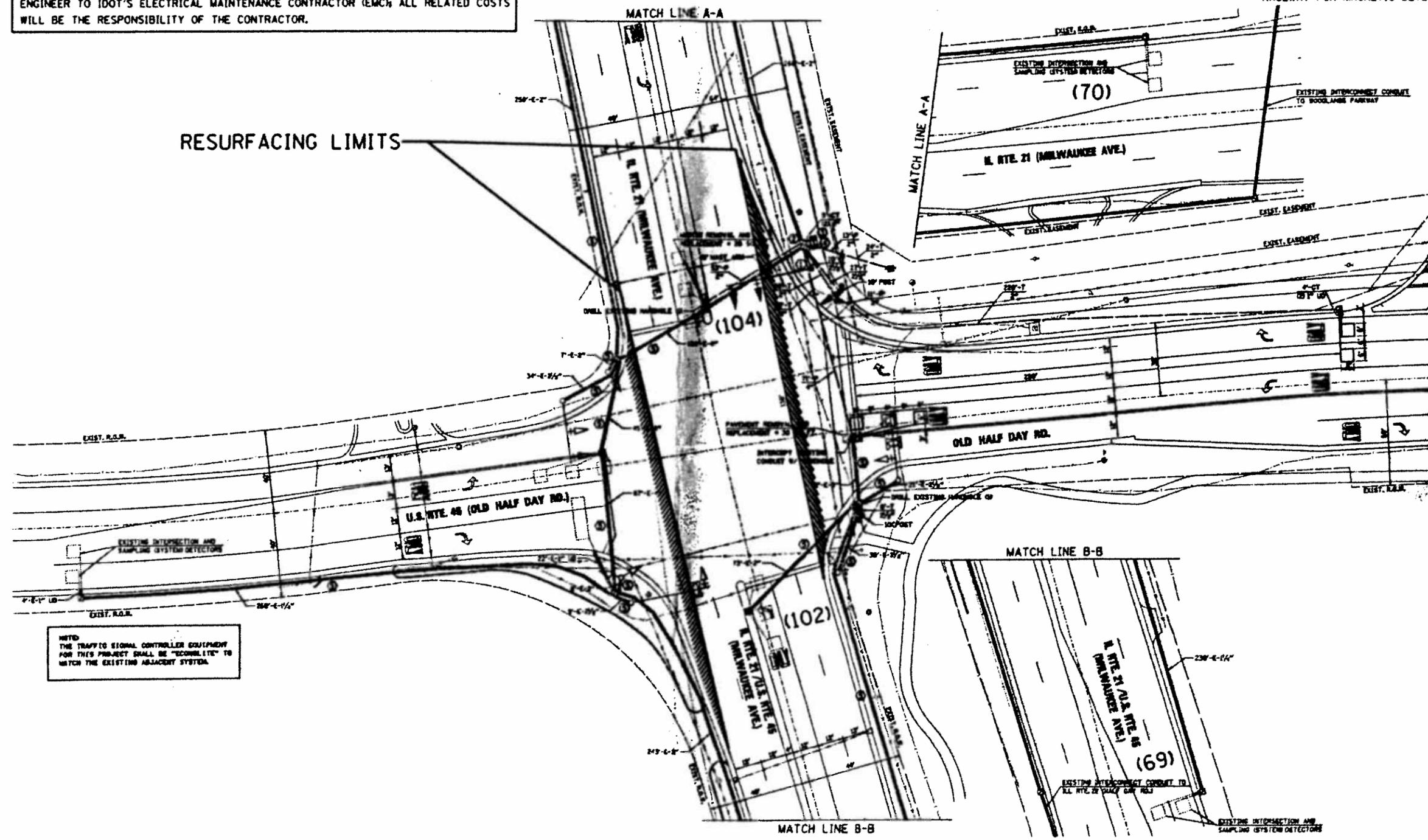
SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

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 (EMCH) 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	

RESURFACING LIMITS



NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "RECONFIGURED" TO MATCH THE EXISTING ADJACENT SYSTEM.

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

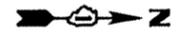
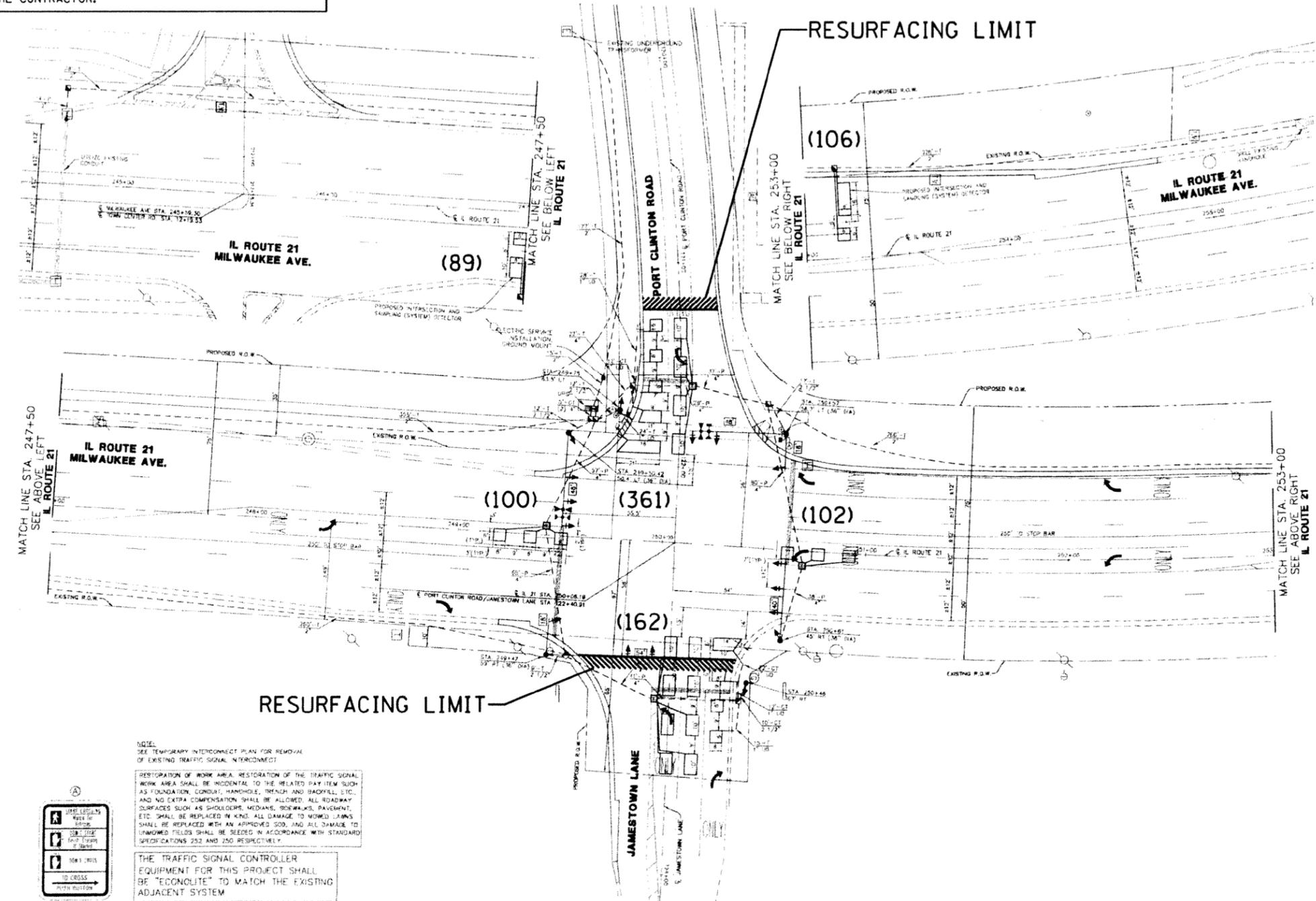
REPLACE ALL DETECTOR LOOPS AS SHOWN (WITHIN THE RESURFACING LIMITS)

CODE	QUANTITY	UNIT	ITEM
88600600	345	FOOT	DETECTOR LOOP REPLACEMENT

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		



NOTE:
SEE TEMPORARY INTERCONNECT PLAN FOR REMOVAL OF EXISTING TRAFFIC SIGNAL INTERCONNECT

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS: FOUNDATION, CONDUIT, HANDHOLE, TRENCH, AND BACKFILL, ETC. AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOG. AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM



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

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

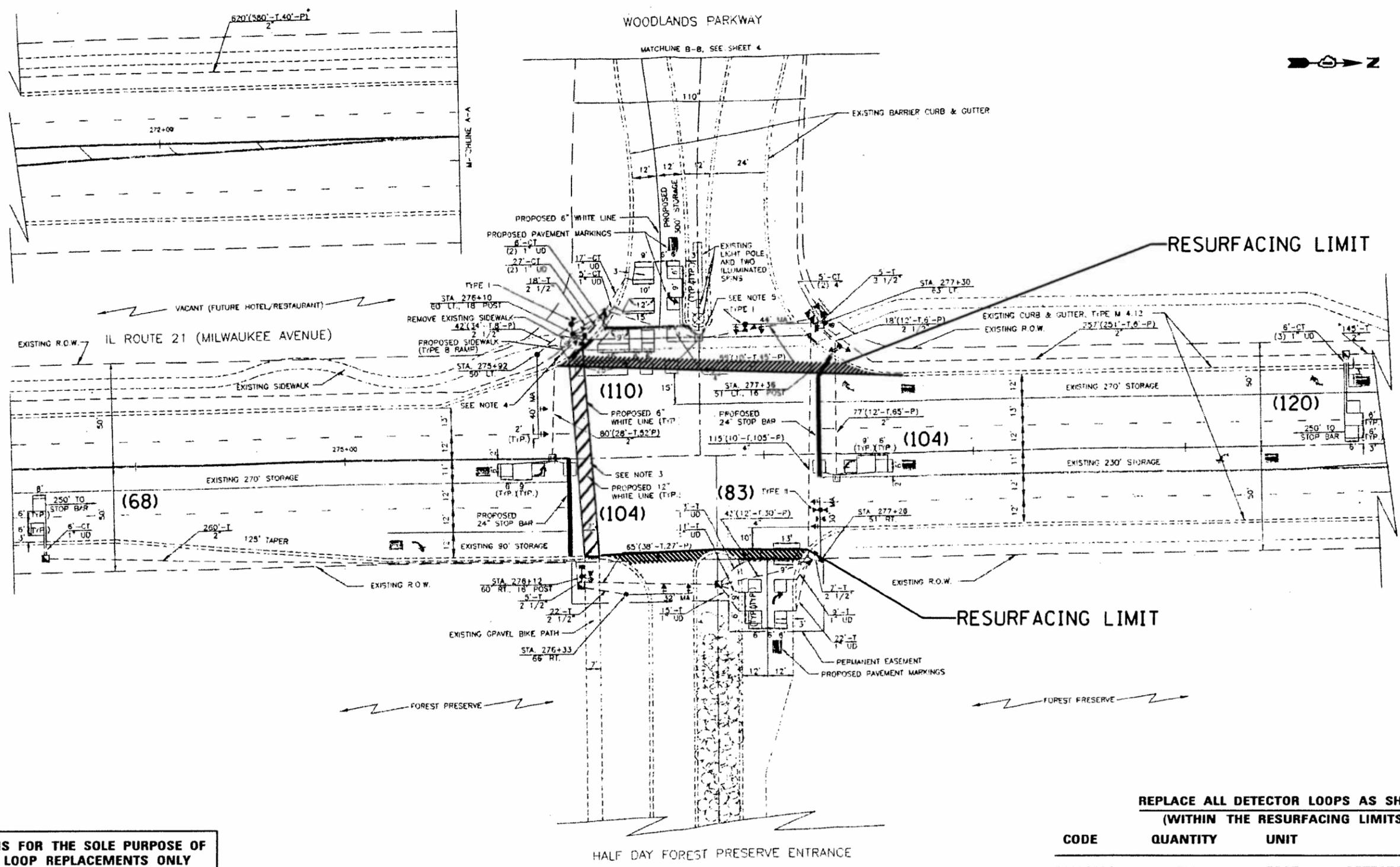
CODE	QUANTITY	UNIT	ITEM
88600600	920	FOOT	DETECTOR LOOP REPLACEMENT

FILE NAME =	USER NAME = hardnettbr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE - DETECTOR LOOP REPLACEMENT IL RTE 21 (MILWAUKEE AVE) AT PORT CLINTON RD/JAMESTOWN LN	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
et:\pw\work\p\dot\hardnettbr\d0337694\0	51012-sh1-plen.dgn	DRAWN -	REVISED -			330	(181Y)RS-3	LAKE	60	34	
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -			CONTRACT NO. 60V03					
	PLOT DATE = 7/16/2014	DATE -	REVISED -			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

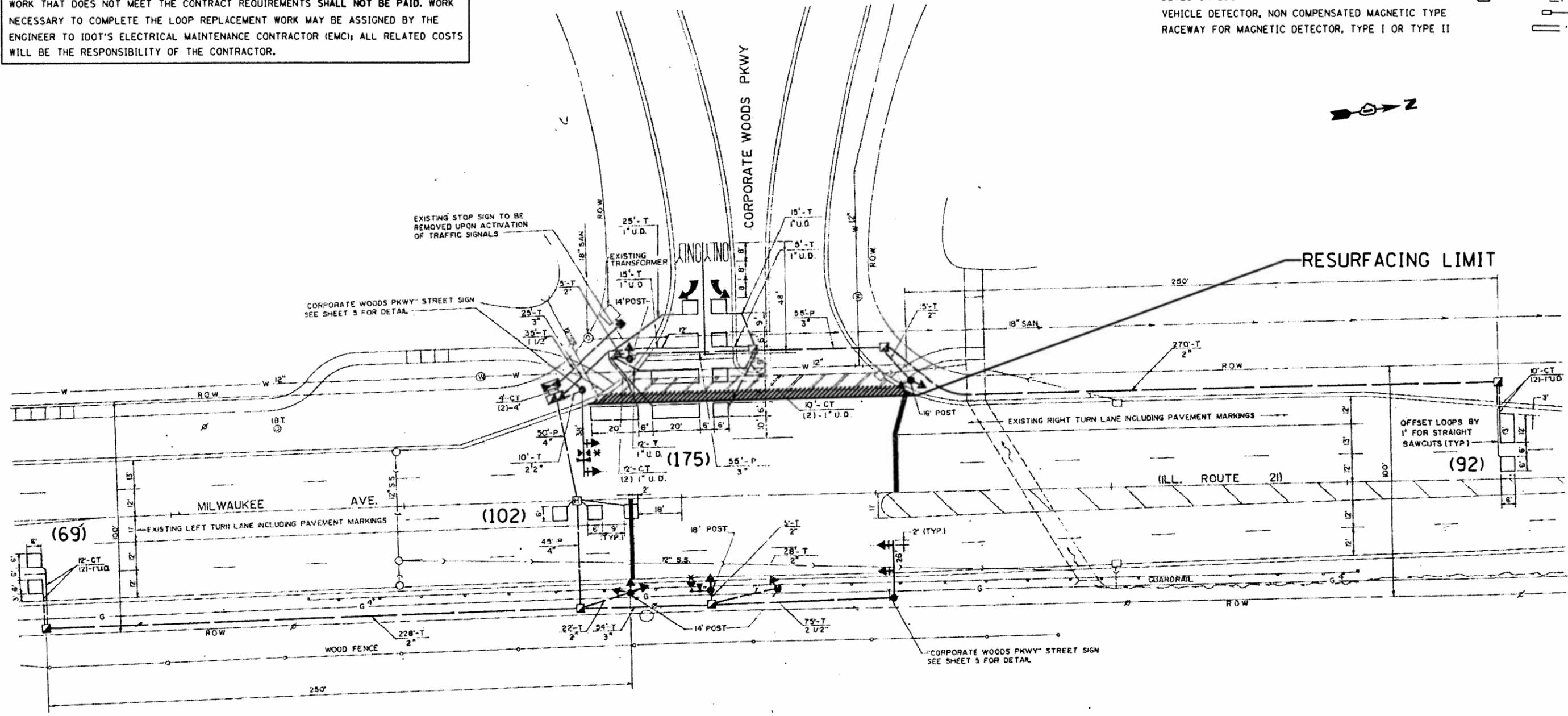
REPLACE ALL DETECTOR LOOPS AS SHOWN (WITHIN THE RESURFACING LIMITS)

CODE	QUANTITY	UNIT	ITEM
88600600	589	FOOT	DETECTOR LOOP REPLACEMENT

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		



* THESE ITEMS INCLUDED IN CONTRACT FOR INSTALLATION OF EMERGENCY VEHICLE PREEMPTION EQUIPMENT

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	438	FOOT	DETECTOR LOOP REPLACEMENT

FILE NAME =	USER NAME = hardnettbr	DESIGNED -	REVISED -
ct:\pw\work\p\dot\hardnettbr\d0337694\0	51012-sh1-plen.dgn	DRAWN -	REVISED -
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 7/16/2014	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE - DETECTOR LOOP REPLACEMENT
ILL RTE 21 (MILWAUKEE AVE) AT CORPORATE WOODS PKWY**

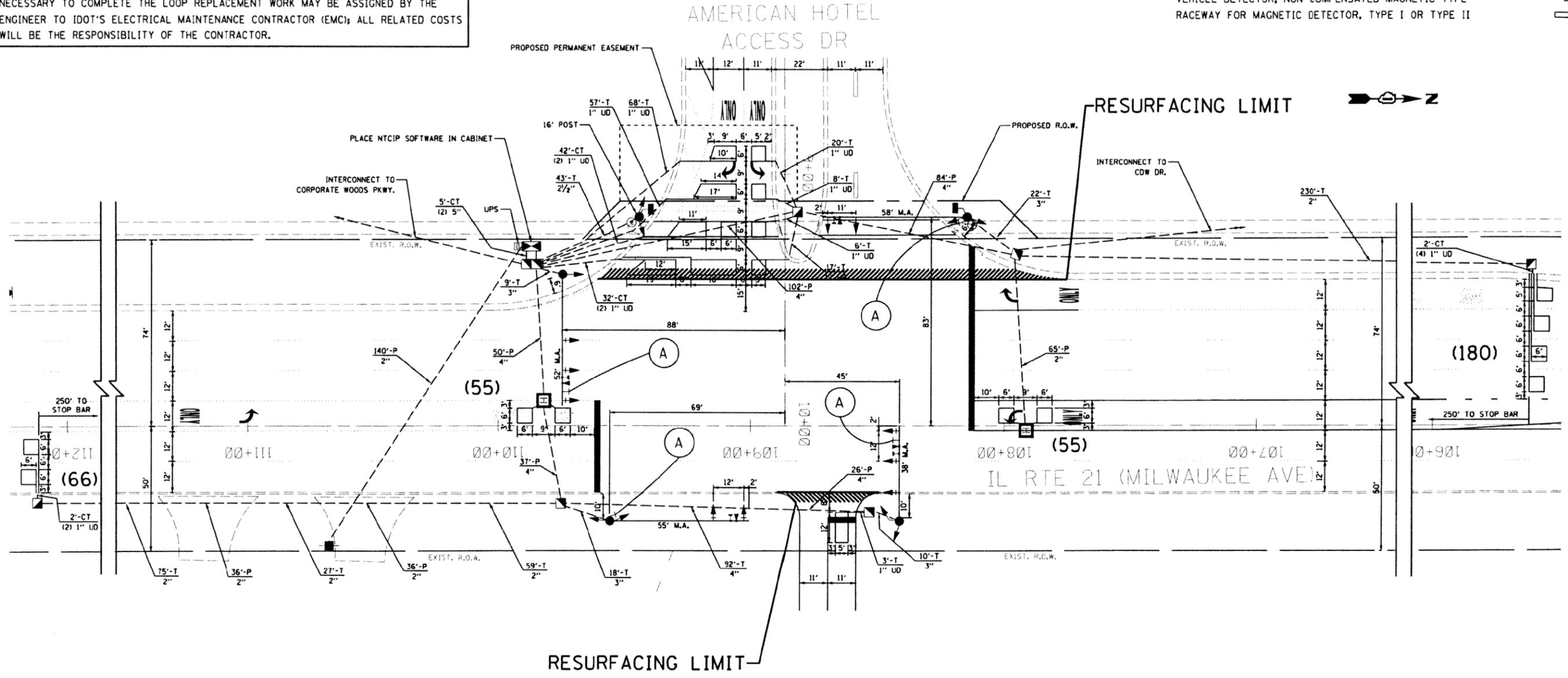
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	1181YRS-3	LAKE	60	36
CONTRACT NO. 60V03				
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

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		



(A) - LEFT ON GREEN ARROW ONLY
 R10-5 SIGN
 24"X30"
 (4 EACH)

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

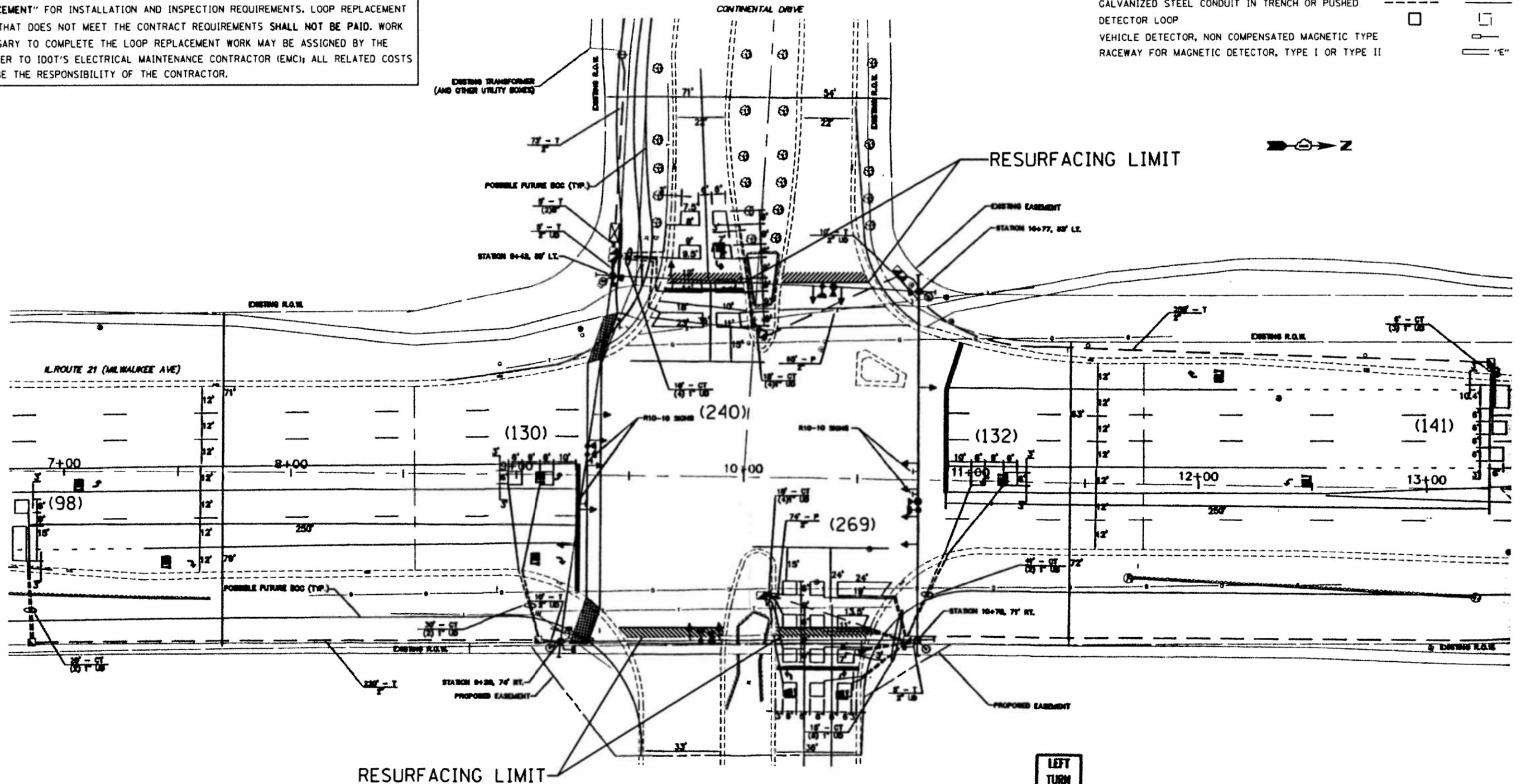
REPLACE ALL DETECTOR LOOPS AS SHOWN (WITHIN THE RESURFACING LIMITS)

CODE	QUANTITY	UNIT	ITEM
88600600	351	FOOT	DETECTOR LOOP REPLACEMENT

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		



LEFT TURN SIGNAL
R10-10
24"x30"

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

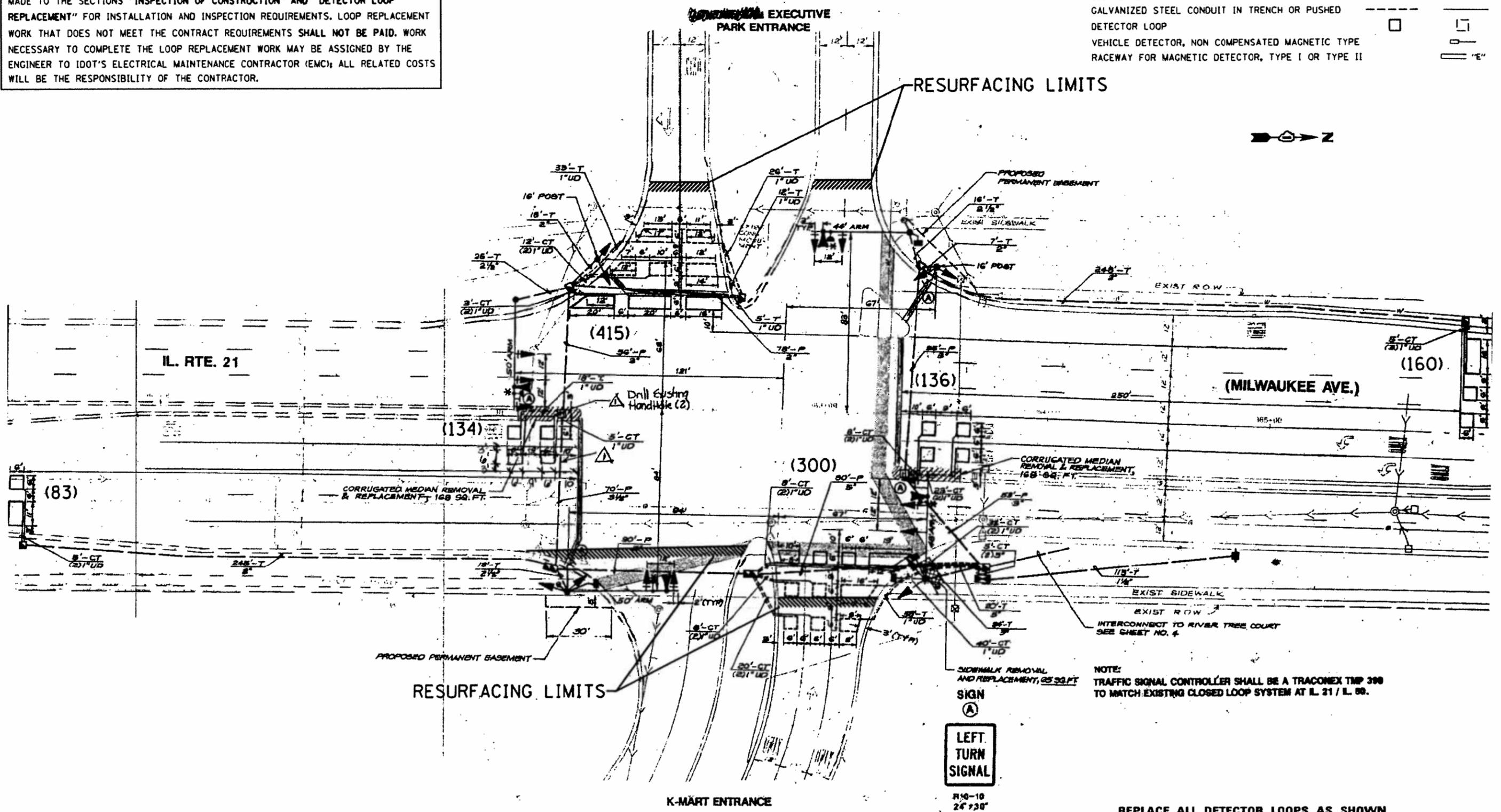
CODE	QUANTITY	UNIT	ITEM
88600600	1010	FOOT	DETECTOR LOOP REPLACEMENT

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

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

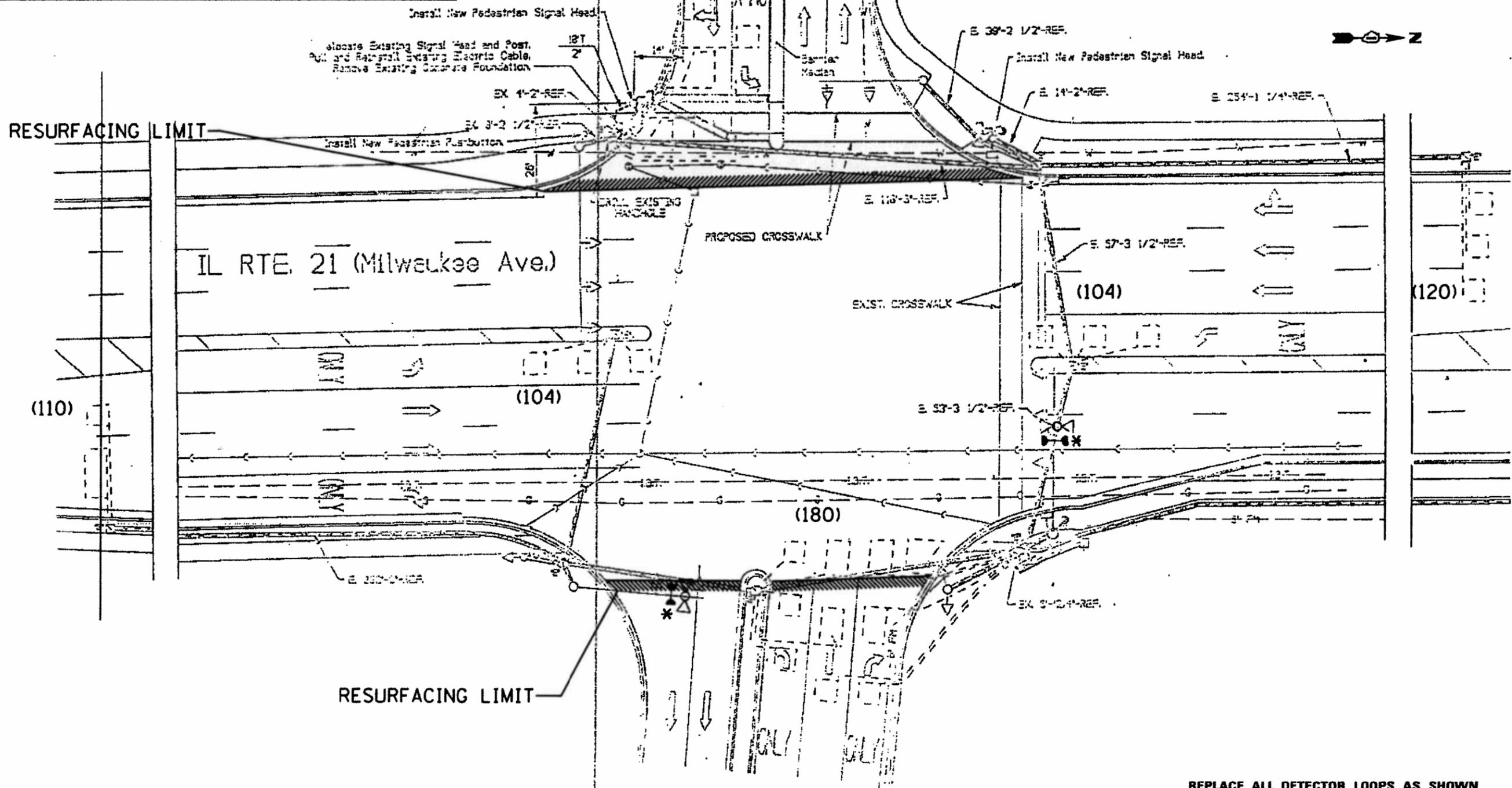
REPLACE ALL DETECTOR LOOPS AS SHOWN (WITHIN THE RESURFACING LIMITS)

CODE	QUANTITY	UNIT	ITEM
88600600	1228	FOOT	DETECTOR LOOP REPLACEMENT

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

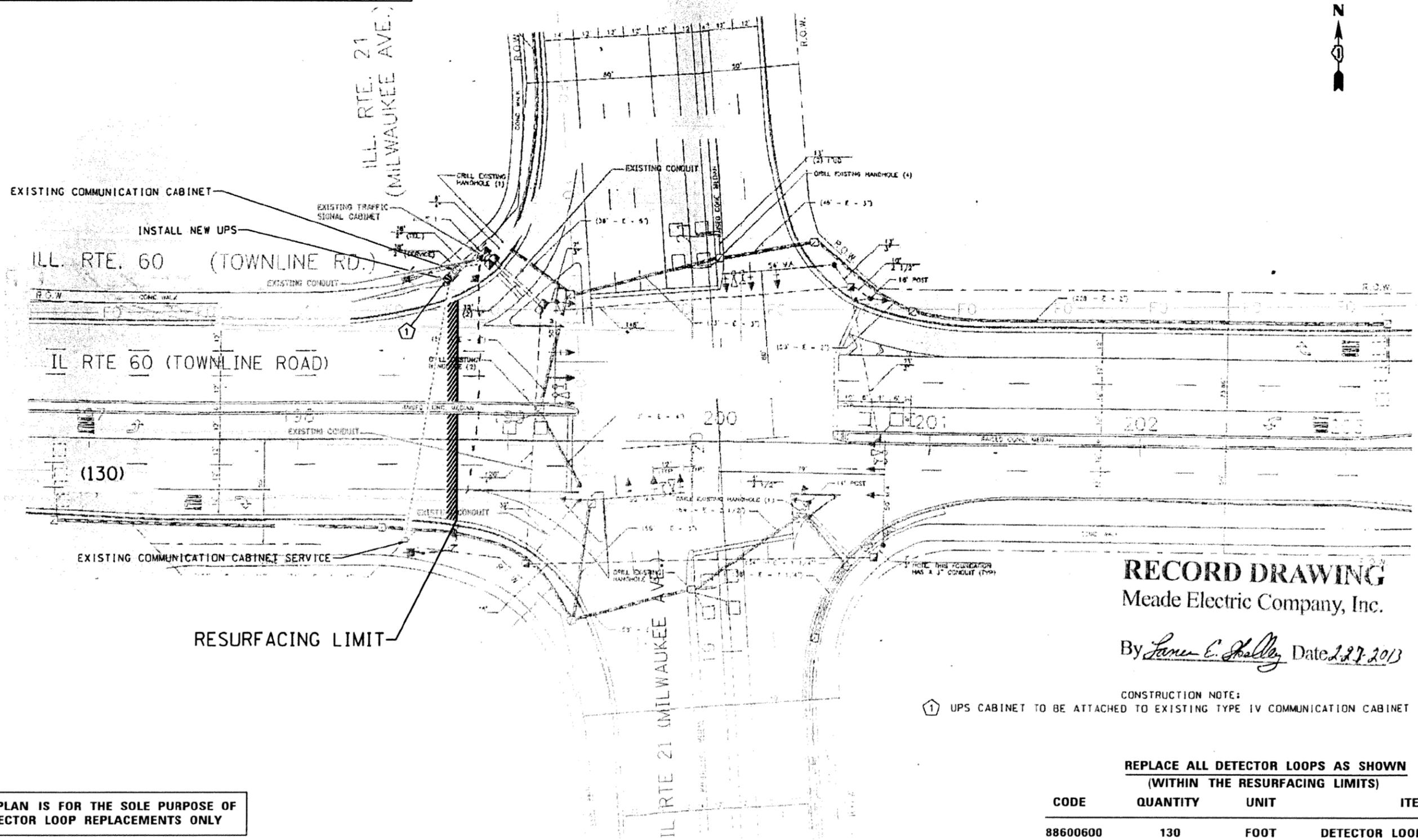
REPLACE ALL DETECTOR LOOPS AS SHOWN (WITHIN THE RESURFACING LIMITS)

CODE	QUANTITY	UNIT	ITEM
88600600	618	FOOT	DETECTOR LOOP REPLACEMENT

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	—	—



RECORD DRAWING
Meade Electric Company, Inc.

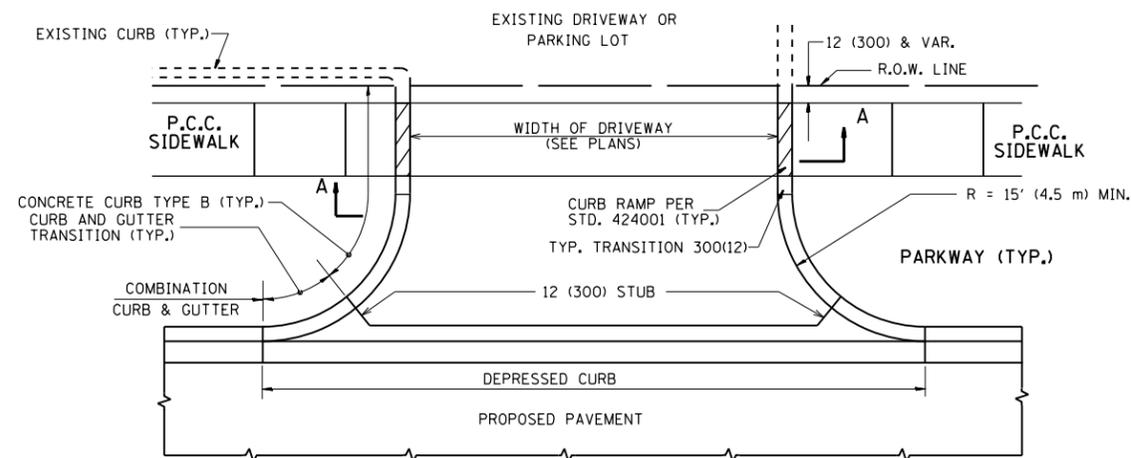
By *James E. Shalley* Date *2.27.2013*

CONSTRUCTION NOTE:
① UPS CABINET TO BE ATTACHED TO EXISTING TYPE IV COMMUNICATION CABINET

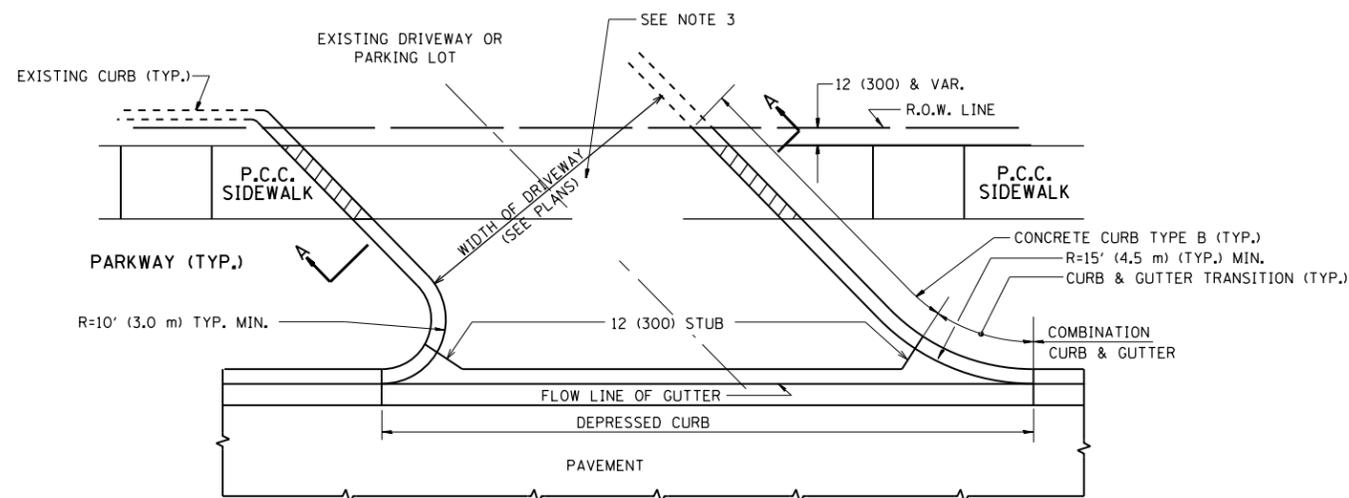
**REPLACE ALL DETECTOR LOOPS AS SHOWN
(WITHIN THE RESURFACING LIMITS)**

CODE	QUANTITY	UNIT	ITEM
88600600	130	FOOT	DETECTOR LOOP REPLACEMENT

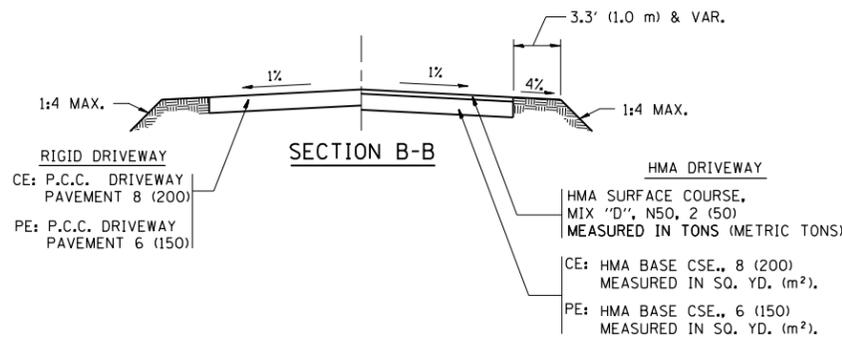
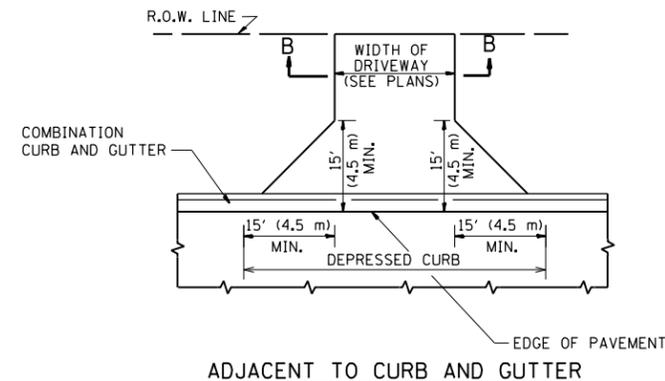
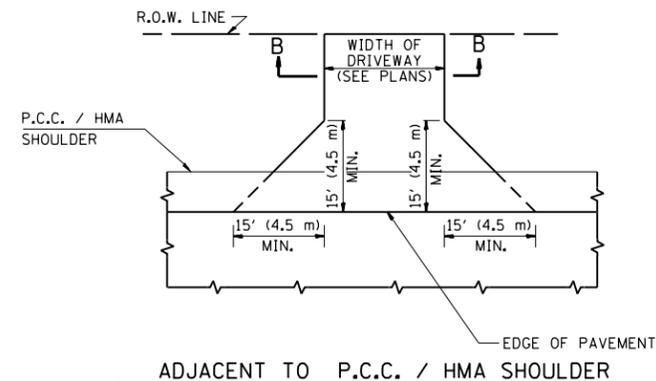
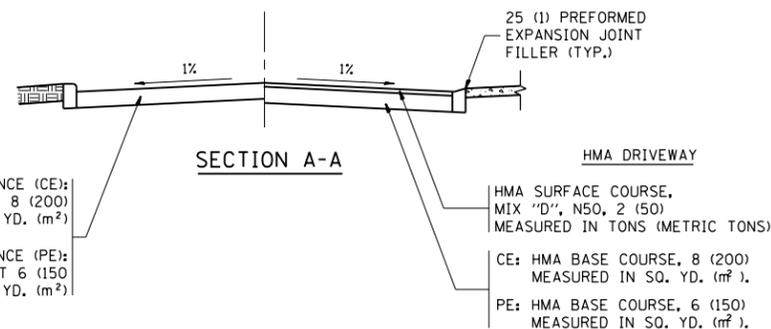
**THIS PLAN IS FOR THE SOLE PURPOSE OF
DETECTOR LOOP REPLACEMENTS ONLY**



WITH CONCRETE CURB, TYPE B



WITH CONCRETE CURB, TYPE B



RURAL FIELD ENTRANCE (FE)
HMA SURFACE COURSE,
MIX "D", N50, 2 (50)
MEASURED IN TONS (METRIC TONS)
AGGREGATE BASE CSE., TYPE B, 8 (200)
MEASURED IN SQ. YD. (m²).

GENERAL NOTES:

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

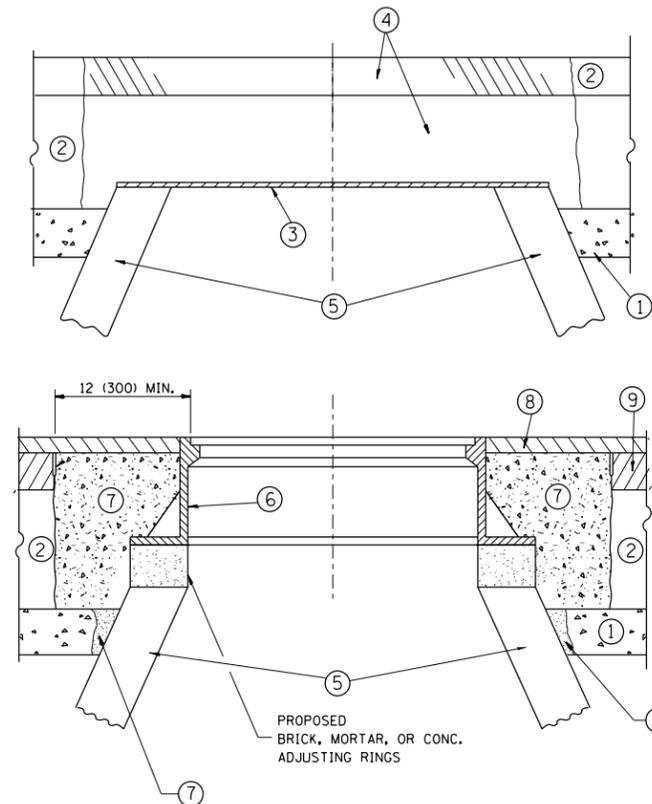
WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

FILE NAME =	USER NAME = hardnettr	DESIGNED - R. SHAH	REVISED - P. LoFLUER 04-15-03
ca:\pw\work\p\dot\hardnettr\d0337694\d	stStd.dgn	DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 100.3876' / 1"	CHECKED -	REVISED - R. BORO 06-11-08
	PLOT DATE = 7/16/2014	DATE - 11-04-95	REVISED - R. BORO 09-06-11

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 m)			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	(1&1)RS-3	LAKE	60	42
BD0156-07 (BD-01)			CONTRACT NO.60V03	
FED. ROAD DIST. NO. 1 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 1/2 (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 EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER."

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:

REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."

THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.

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

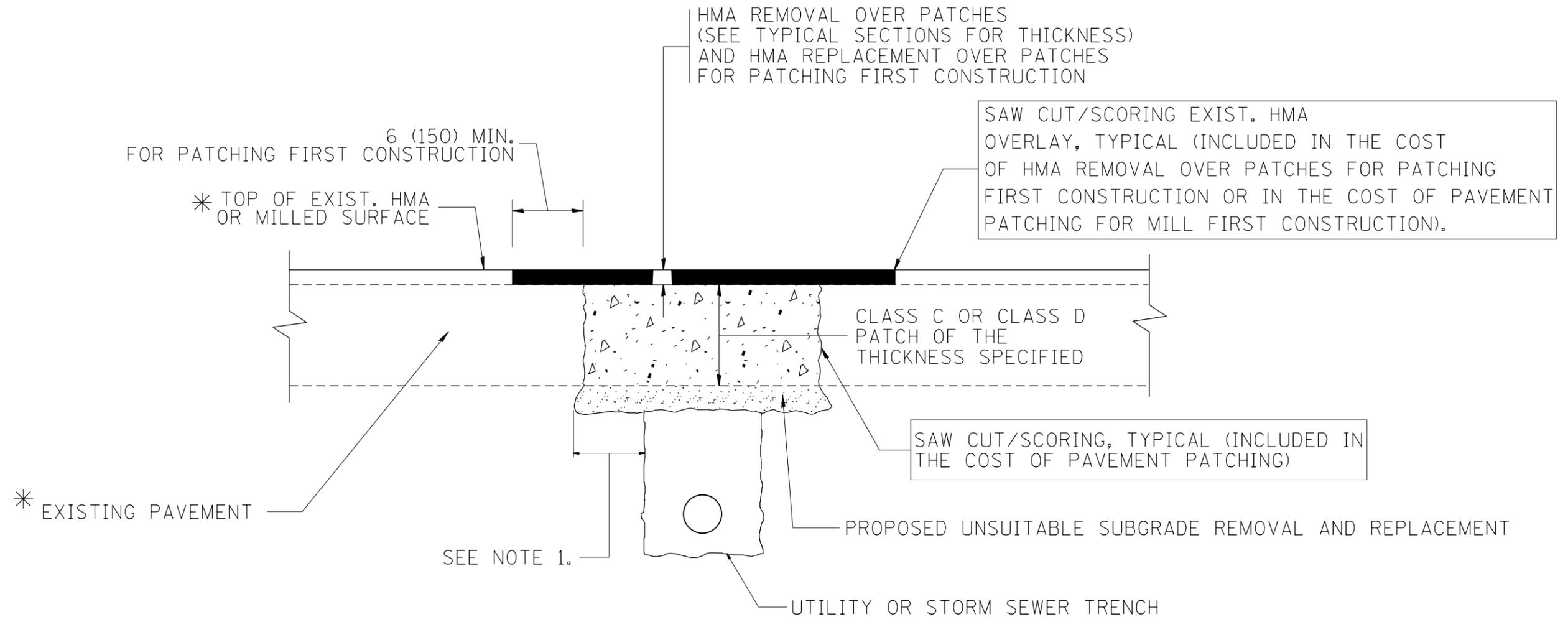
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = hardnettbr	DESIGNED - R. SHAH	REVISED - R. WIEDEMAN 05-14-04
c:\pwork\pwork\hardnettbr\d0337694\0	stStd.dgn	DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED - R. BORO 03-09-11
	PLOT DATE = 7/16/2014	DATE - 10-25-94	REVISED - R. BORO 12-06-11

**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.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	(1&1Y)RS-3	LAKE	60	43
BD600-03 (BD-8)		CONTRACT NO.60V03		
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.

FILE NAME =	USER NAME = hardnettbr	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98
ci:\pwork\pwork\hardnettbr\d0337694\dstStd.dgn		DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED - R. BORO 09-04-07
	PLOT DATE = 7/16/2014	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. P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	(1&1)RS-3	LAKE	60	44
BD400-04 (BD-22)		CONTRACT NO. 60V03		
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)

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.

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.

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.

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.

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

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.

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.

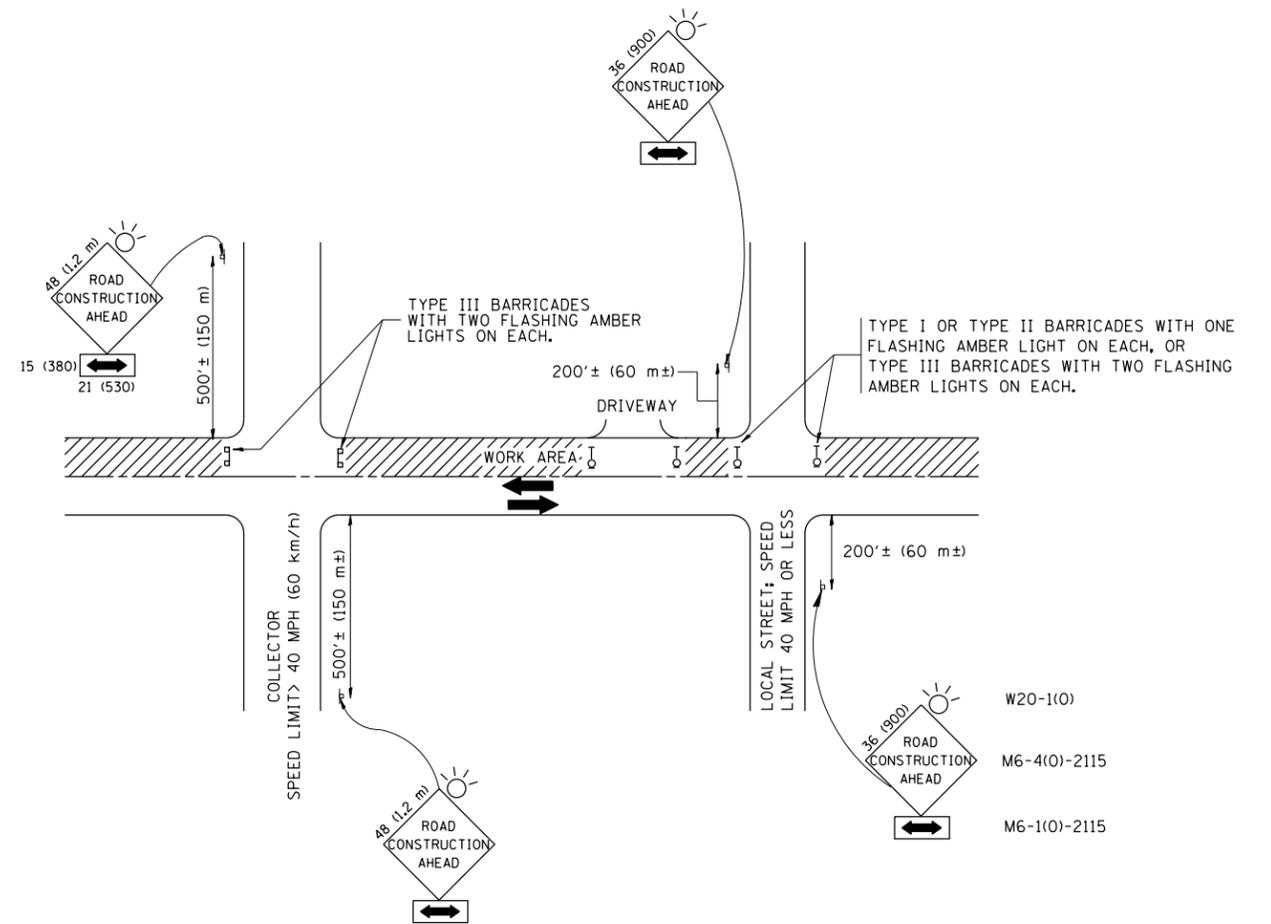
PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USUABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

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 =	USER NAME = hardnettr	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT			F.A.R. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pw\work\p\idot\hardnettr\d0337694\dstStd.dgn	DRAWN -	REVISED - A. ABBAS 03-21-97	REVISED - M. GOMEZ 01-22-01					330	(1&1Y)RS-3	LAKE	60	45
PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED - M. GOMEZ 01-22-01	REVISED - R. BORO 12-15-09		BD600-06 (BD-24)			CONTRACT NO.60V03				
PLOT DATE = 7/16/2014	DATE - 03-11-94	REVISED - R. BORO 12-15-09	SCALE: NONE		SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 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:
 - 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.
 - 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.
 - SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - 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.
 - 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.
 - WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

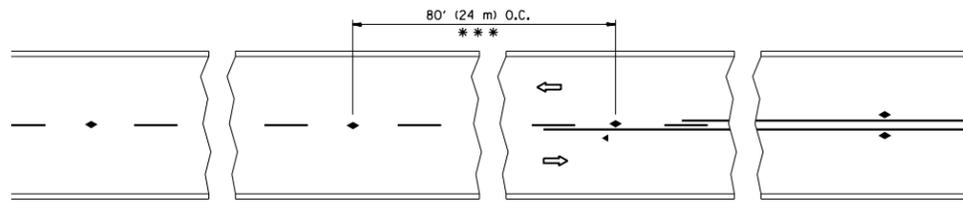
FILE NAME =	USER NAME = hardnettr	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
c:\pwork\pwork\hardnettr\d0337694\	stStd.dgn	DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 7/16/2014	DATE - 06-89	REVISED - T. RAMMACH 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

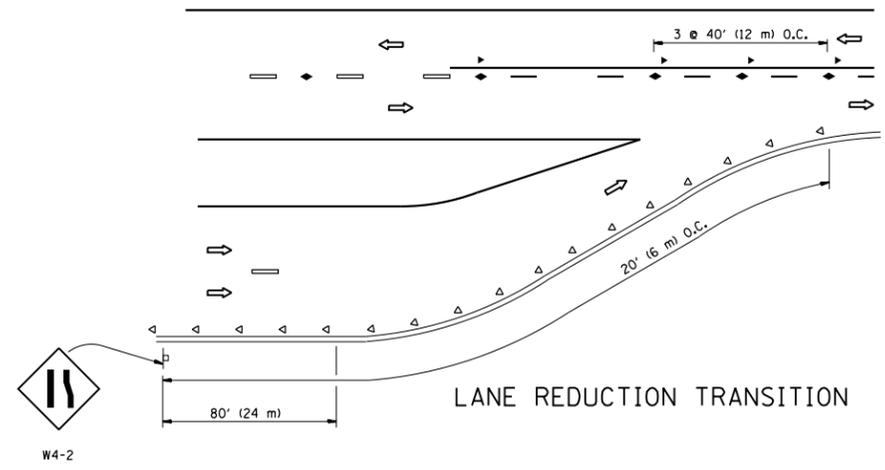
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	(181Y)RS-3	LAKE	60	46
TC-10			CONTRACT NO. 60V03	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

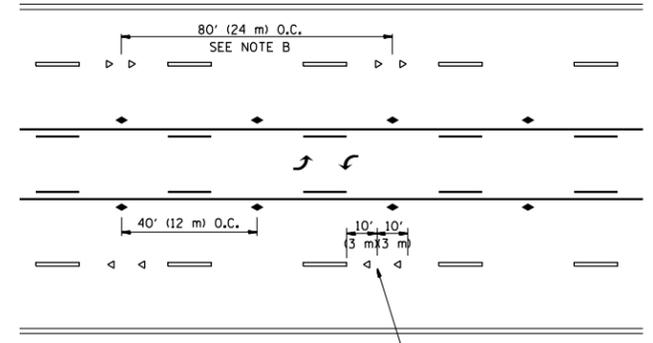


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

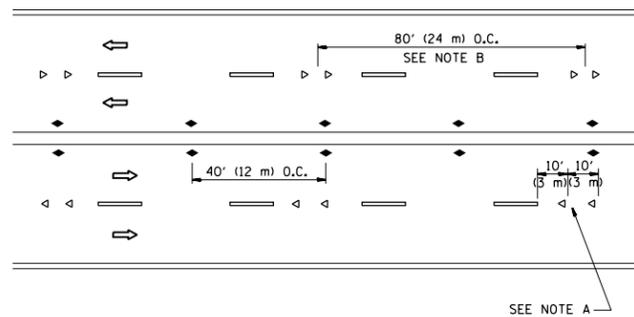
TWO-LANE/TWO-WAY



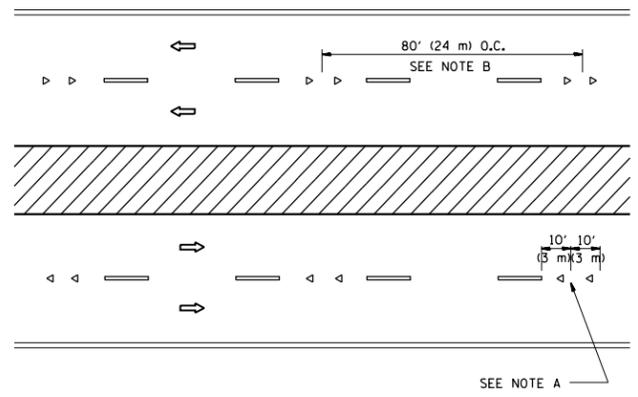
LANE REDUCTION TRANSITION



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.

LANE MARKER NOTES

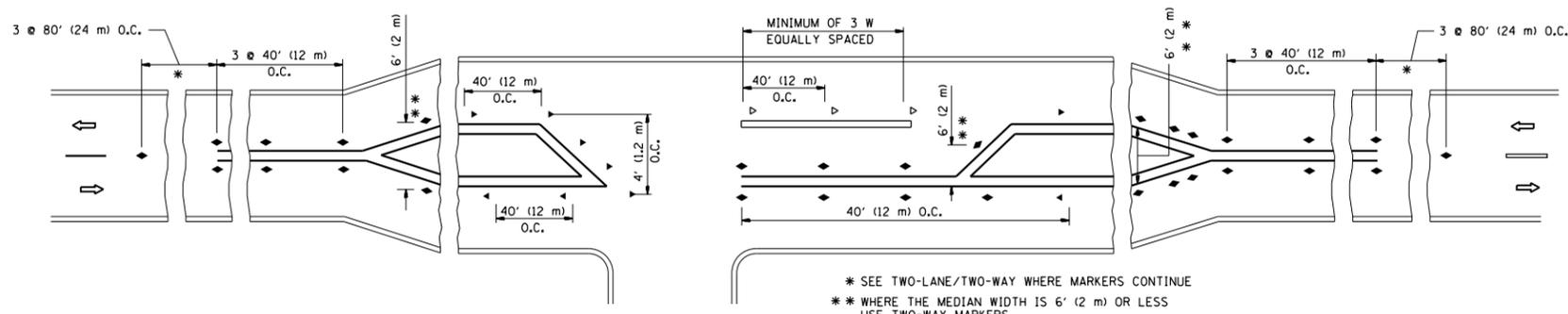
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

SYMBOLS

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

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.

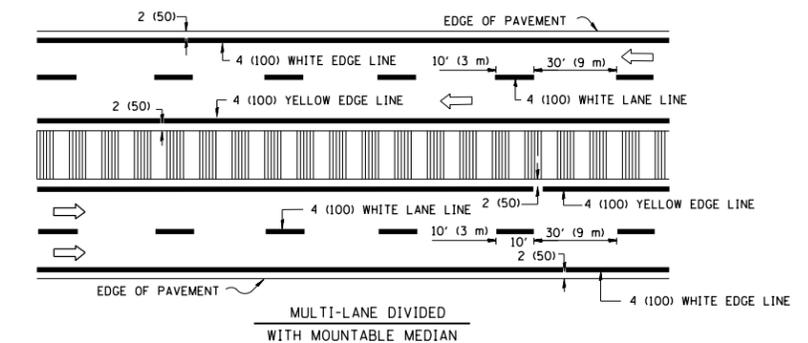
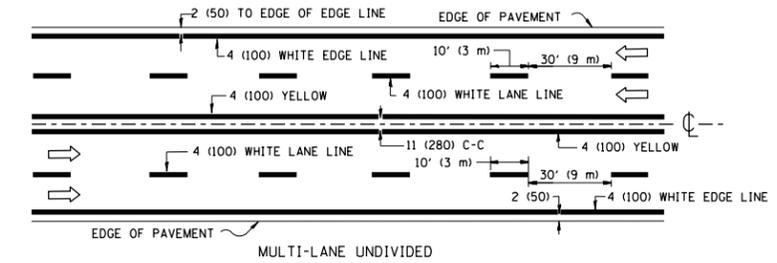
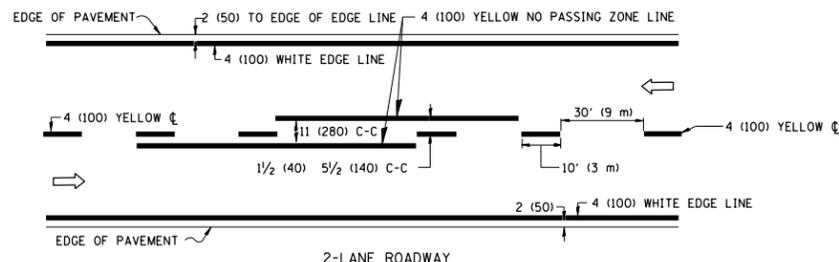


LEFT TURN

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

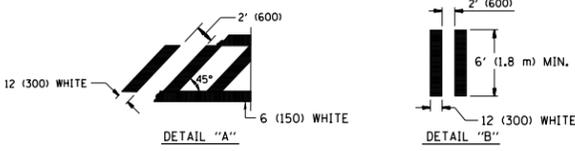
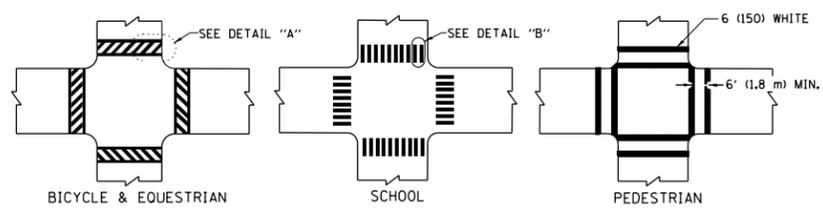
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = hardnetbr	DESIGNED -	REVISED - T. RAMMACHER 09-19-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ei:\pw\work\p\midot\hardnetbr\d0337694\dstStd.dgn	PLOT SCALE = 100.0000' / in.	DRAWN -	REVISED - T. RAMMACHER 03-12-99					330	(181Y)RS-3	LAKE	60	47
	PLOT DATE = 7/16/2014	CHECKED -	REVISED - T. RAMMACHER 01-06-00		TC-11			CONTRACT NO.60V03				
		DATE -	REVISED - C. JUCIUS 09-09-09		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							

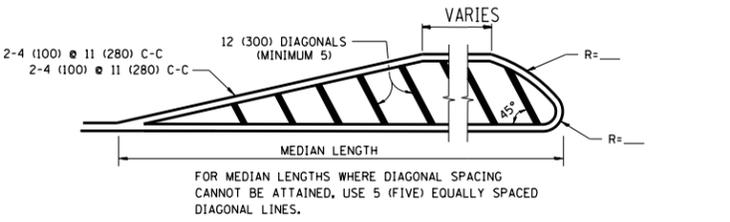
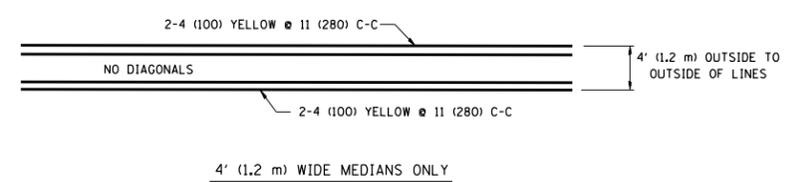


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING



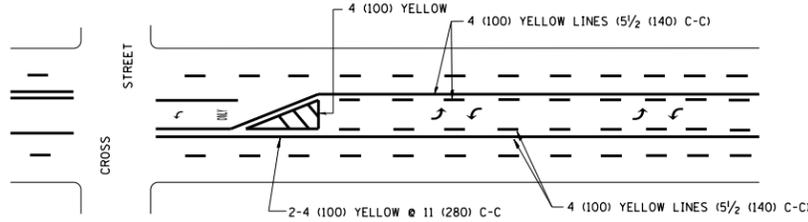
TYPICAL CROSSWALK MARKING



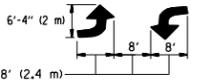
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

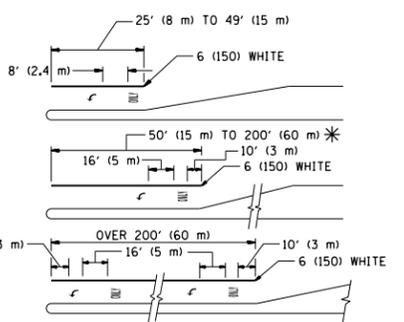


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

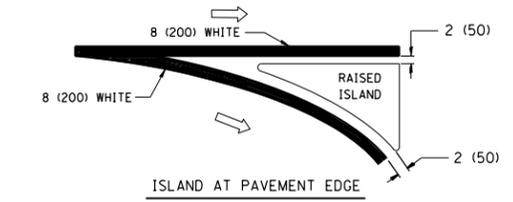
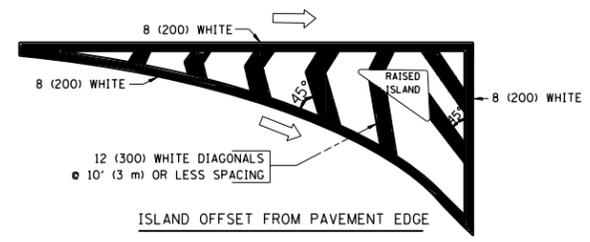


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

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

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

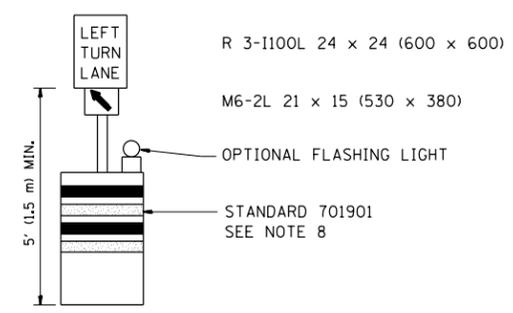
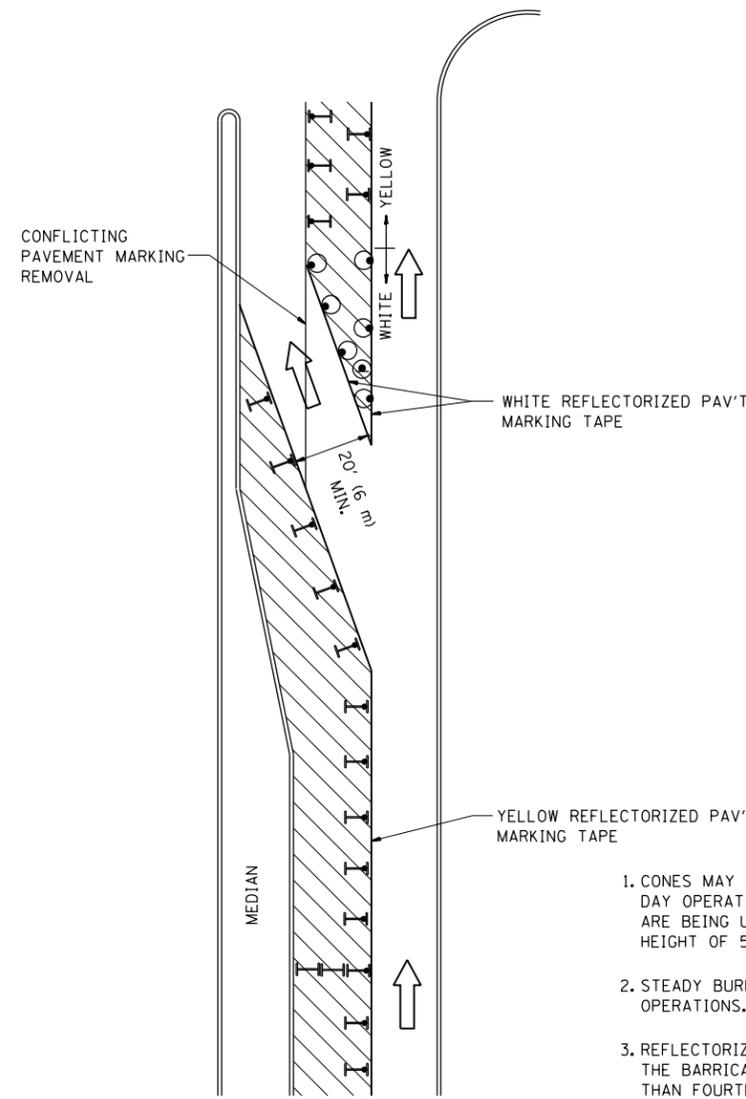


TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION	4 (100)	SOLID	YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE
NO PASSING ZONE LINES: FOR BOTH DIRECTIONS	2 @ 4 (100)	SOLID	YELLOW	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" 15 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 ²) EACH "X": 54.0 SQ. FT. (5.0 m ²) EACH
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 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

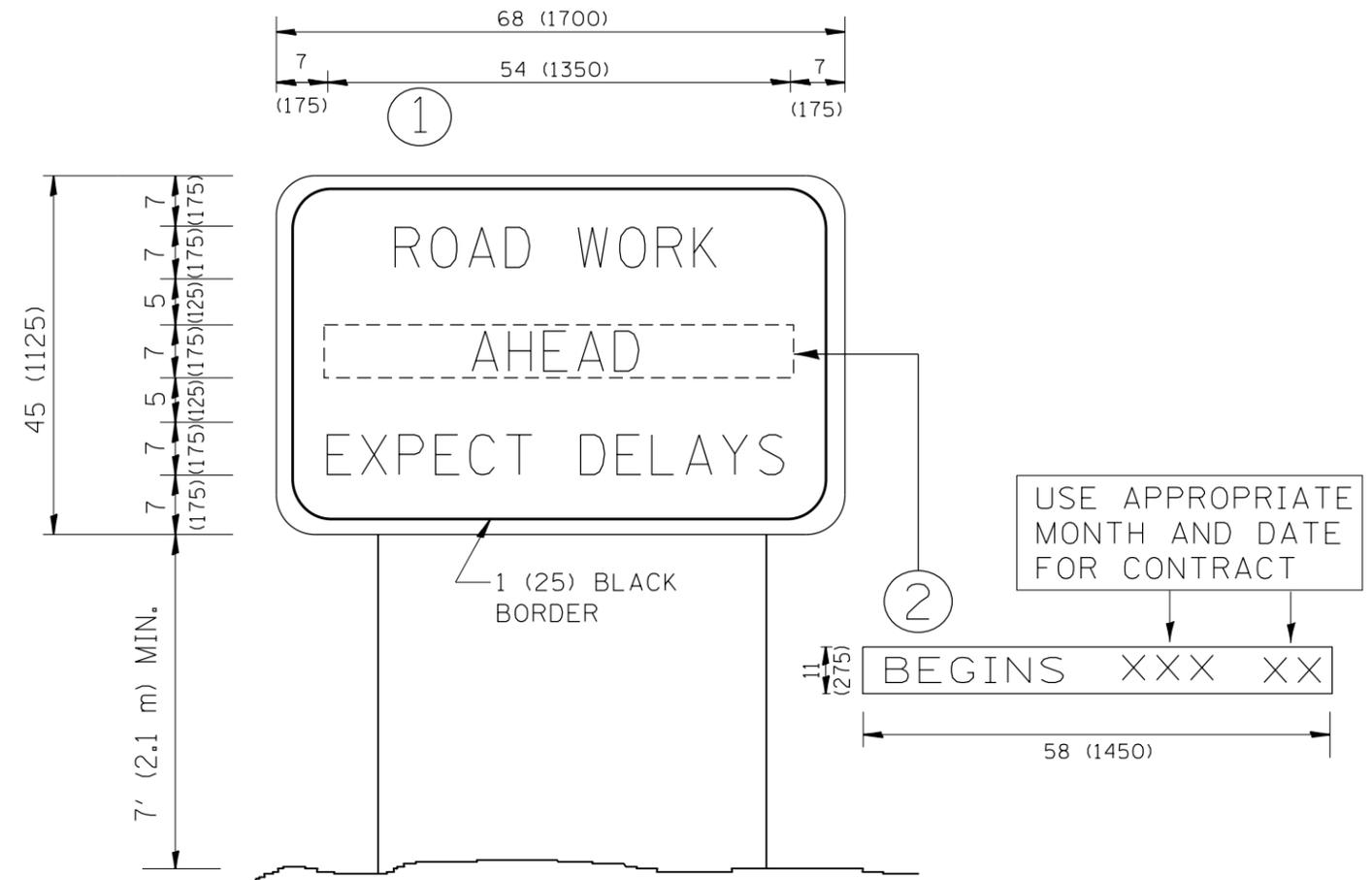
-  WORK AREA
-  LANE OPEN TO TRAFFIC
-  TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
-  DRUM WITH STEADY BURN LIGHT
-  DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
-  TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

FILE NAME =	USER NAME = hardnettbr	REVISED -T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09
ct:\pw\work\p\dot\hardnettbr\d0337694\0	stStd.dgn	REVISED - A. HOUSEH 11-07-95	REVISED -
	PLOT SCALE = 100.0000' / in.	REVISED - A. HOUSEH 10-12-96	REVISED -
	PLOT DATE = 7/16/2014	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. P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	(1&1Y)RS-3	LAKE	60	49
TC-14			CONTRACT NO. 60V03	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

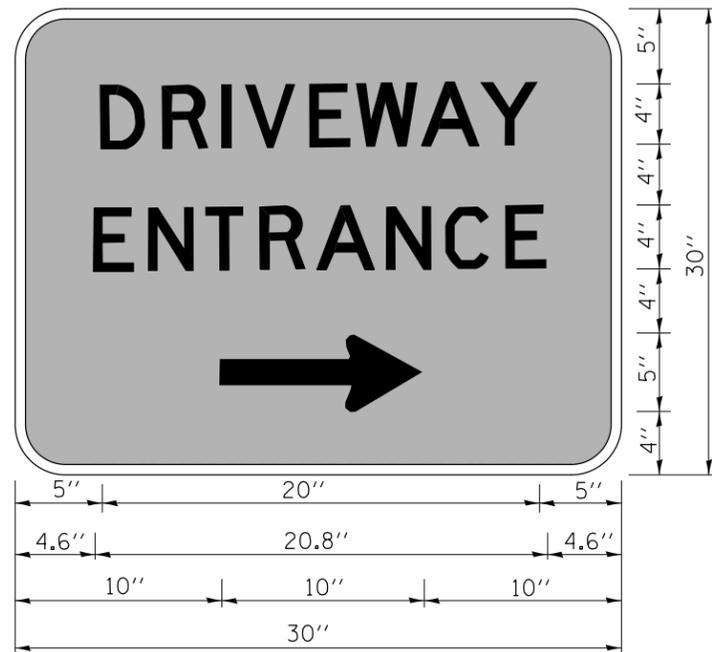


NOTES:

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 = hardnettbr	DESIGNED -	REVISED - R. MIRS 09-15-97	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ARTERIAL ROAD INFORMATION SIGN	F.A.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pw\work\pwidot\hardnettbr\d0337694\dstStd.dgn	DRAWN -	REVISED - R. MIRS 12-11-97	330			(1&1Y)RS-3	LAKE	60	50	
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - T. RAMMACHER 02-02-99	TC-22			CONTRACT NO.60V03				
PLOT DATE = 7/16/2014	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	



3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED
 "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

NOTES:

1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE
 PLACED BACK-TO-BACK; ONE WITH A RIGHT HAND ARROW (SHOWN)
 SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY
 AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE
 FAR LEFT SIDE OF THE DRIVEWAY.
3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

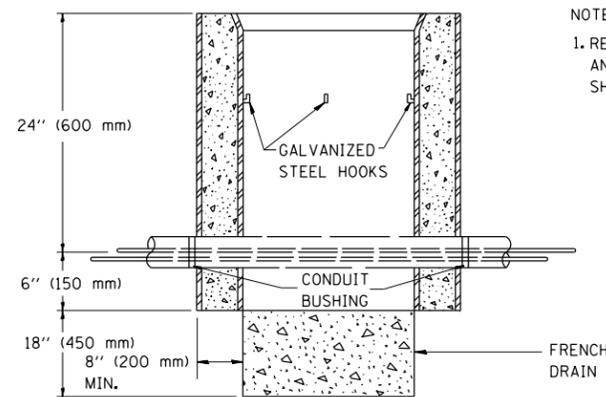
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ct:\pw\work\p\dot\hardnettbr\d0337694\0	stStd.dgn	DRAWN -	REVISED -
	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED -
	PLOT DATE = 7/16/2014	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

DRIVEWAY ENTRANCE SIGNING

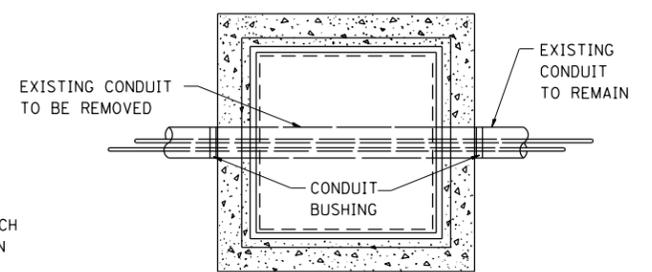
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	(I&I)RS-3	LAKE	60	51
TC-26			CONTRACT NO.60V03	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

- 1. REMOVAL OF EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHING SHALL BE INCIDENTAL TO THE HANDHOLE.



ELEVATION

PLAN

DETAIL
HANDHOLE TO INTERCEPT EXISTING CONDUIT

FILE NAME =	USER NAME = hardnettbr	DESIGNED -	REVISED - 10-01-00
c:\pwork\pwork\hardnettbr\d0337694\0	stStd.dgn	DRAWN -	REVISED -
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 7/16/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HANDHOLE TO INTERCEPT EXISTING CONDUIT

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	(I&I)RS-3	LAKE	60	52
TS-03		CONTRACT NO.60V03		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

TRAFFIC SIGNAL LEGEND

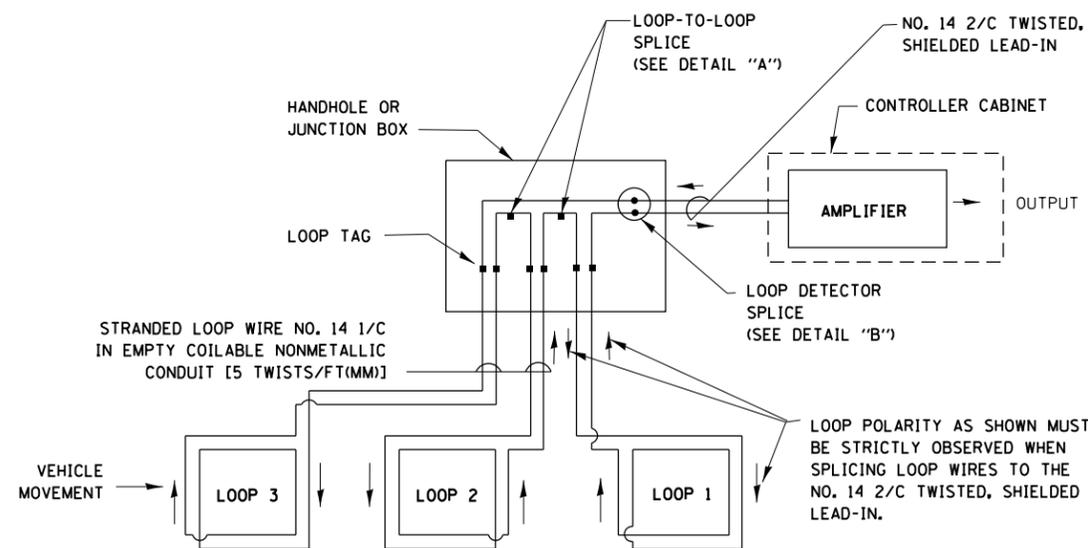
ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED
CONTROLLER CABINET				EMERGENCY VEHICLE LIGHT DETECTOR				ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE			
RAILROAD CONTROL CABINET				CONFIRMATION BEACON				COAXIAL CABLE			
COMMUNICATIONS CABINET				HANDHOLE				VENDOR CABLE FOR CAMERA			
MASTER CONTROLLER				HEAVY DUTY HANDHOLE				COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED			
MASTER MASTER CONTROLLER				DOUBLE HANDHOLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F			
UNINTERRUPTABLE POWER SUPPLY				JUNCTION BOX				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F			
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT				UNDERGROUND CONDUIT, GALVANIZED STEEL (UC)				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F			
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT				TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F			
STEEL MAST ARM ASSEMBLY AND POLE				COMMON TRENCH				GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE			
ALUMINUM MAST ARM ASSEMBLY AND POLE				COILABLE NONMETALLIC CONDUIT (EMPTY)				CONTROLLER CABINET AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE				SYSTEM ITEM				STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM				ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED			
SIGNAL POST				REMOVE ITEM				STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED			
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM				RELOCATE ITEM				SIGNAL POST AND FOUNDATION TO BE REMOVED			
GUY WIRE				ABANDON ITEM				INTERSECTION & SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD				12" (300mm) TRAFFIC SIGNAL SECTION				SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)				12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				QUEUE DETECTOR			
SIGNAL HEAD WITH BACKPLATE				SIGNAL FACE				PREFORMED QUEUE DETECTOR			
SIGNAL HEAD OPTICALLY PROGRAMMED				SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD				PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
FLASHER INSTALLATION (S DENOTES SOLAR POWER)				"RB" INDICATES REFLECTIVE BACKPLATE				PREFORMED SAMPLING (SYSTEM) DETECTOR			
PEDESTRIAN SIGNAL HEAD				12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL							
PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED							
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID							
ILLUMINATED SIGN "NO LEFT TURN"				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER							
ILLUMINATED SIGN "NO RIGHT TURN"				RADIO INTERCONNECT							
DETECTOR LOOP, TYPE I				RADIO REPEATER							
PREFORMED DETECTOR LOOP				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED							
MICROWAVE VEHICLE SENSOR				GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)							
VIDEO DETECTION CAMERA											
VIDEO DETECTION ZONE											
PAN, TILT, ZOOM CAMERA											
WIRELESS DETECTOR SENSOR											
WIRELESS ACCESS POINT											

RAILROAD SYMBOLS

	EXISTING	PROPOSED
RAILROAD CONTROL CABINET		
RAILROAD CANTILEVER MAST ARM		
FLASHING SIGNAL		
CROSSING GATE		
CROSSBUCK		

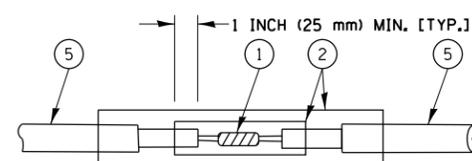
LOOP DETECTOR NOTES

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 DIVEHOLES 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.

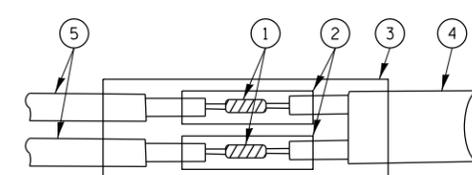


DETECTOR LOOP WIRING SCHEMATIC

- 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.



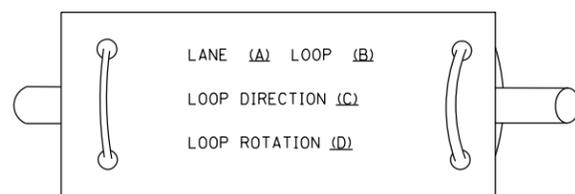
DETAIL "A"
LOOP-TO-LOOP SPLICE



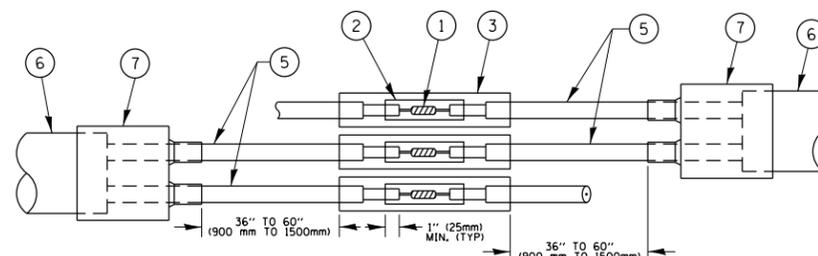
DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP

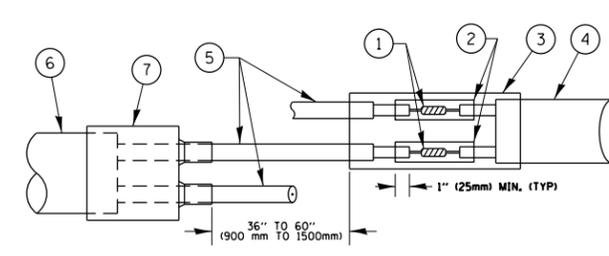
LOOP LEAD-IN CABLE TAG



- 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.



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

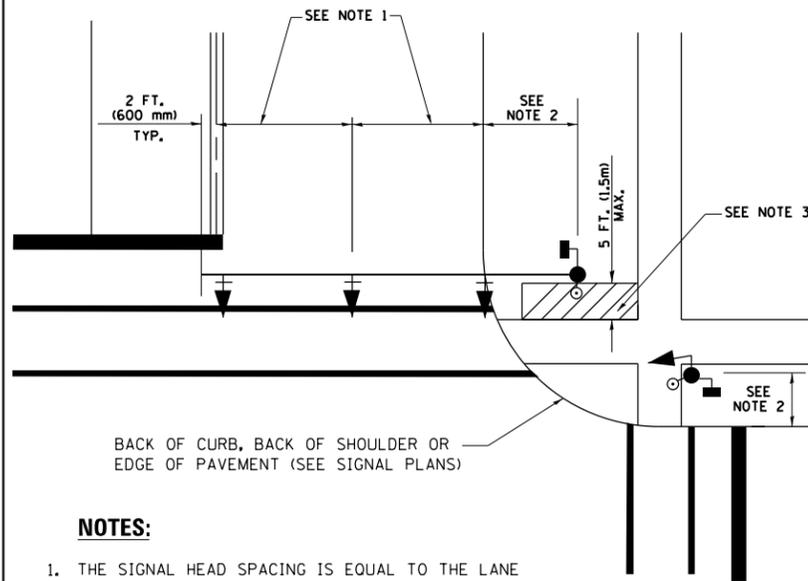
PRE-FORMED LOOP

LOOP DETECTOR SPLICE

- ① WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH, THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- 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

FILE NAME =	USER NAME = hardnettr	DESIGNED - DAD	REVISED - DAG 1-1-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS		F.A.P. RTE. 330	SECTION (I&I)RS-3	COUNTY LAKE	TOTAL SHEETS 60	SHEET NO. 54
et:\pw\work\p\dot\hardnettr\d0337694\dstStd.dgn		DRAWN - BCK	REVISED -		SCALE: NONE	SHEET NO. 2 OF 7 SHEETS	STA. TO STA.	TS-05		CONTRACT NO.60V03	
		CHECKED - DAD	REVISED -				FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
		DATE - 10-28-09	REVISED -								

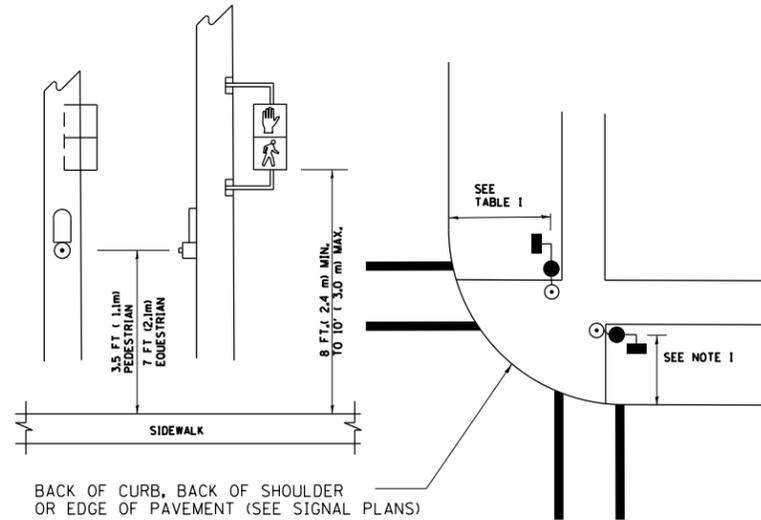
**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR
FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN
WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.**



NOTES:

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

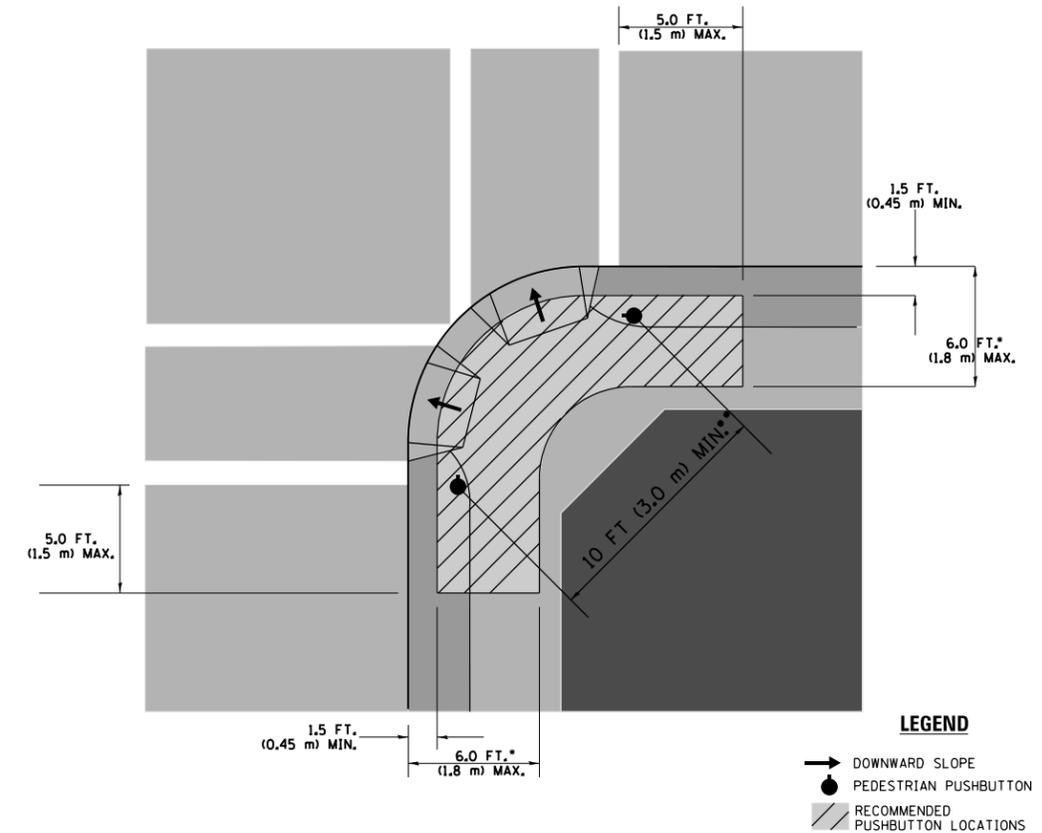
**PEDESTRIAN SIGNAL POST
AND
PEDESTRIAN PUSH BUTTON POST**



NOTES:

1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

RECOMMENDED PUSHBUTTON LOCATIONS



- WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

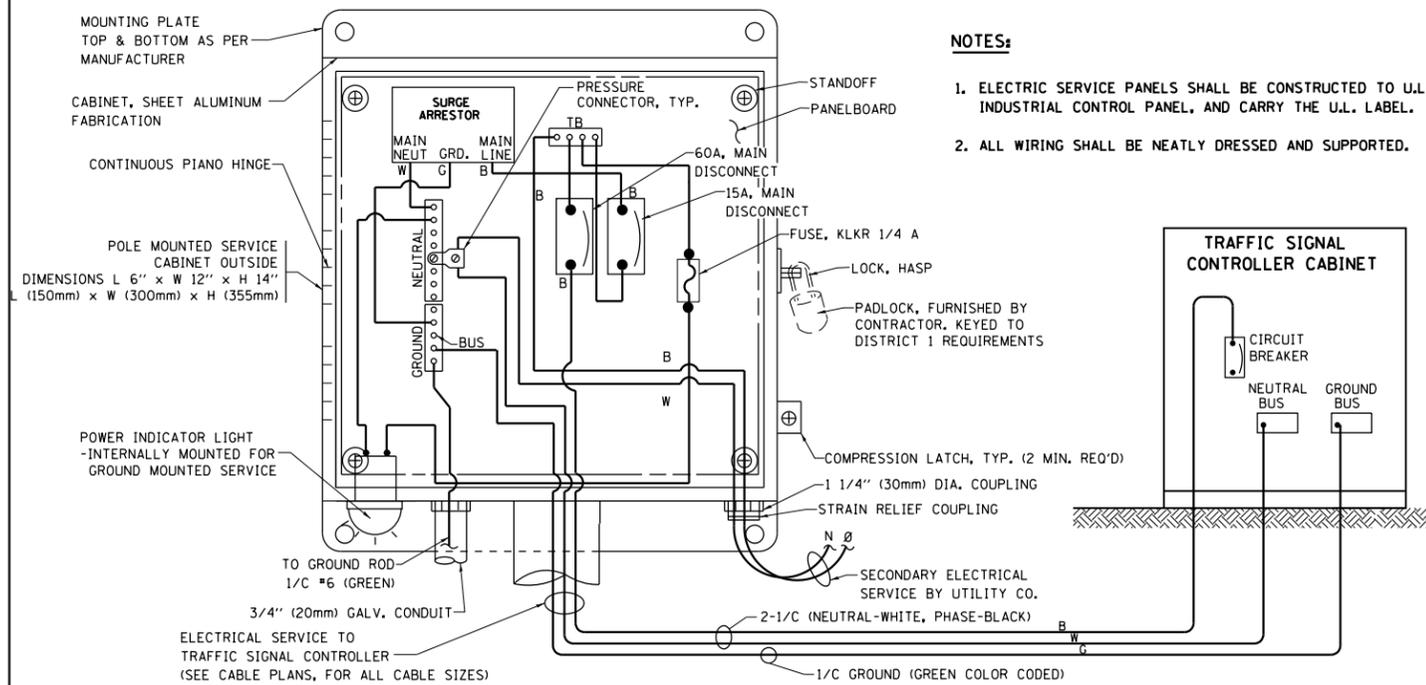
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

TRAFFIC SIGNAL EQUIPMENT OFFSET

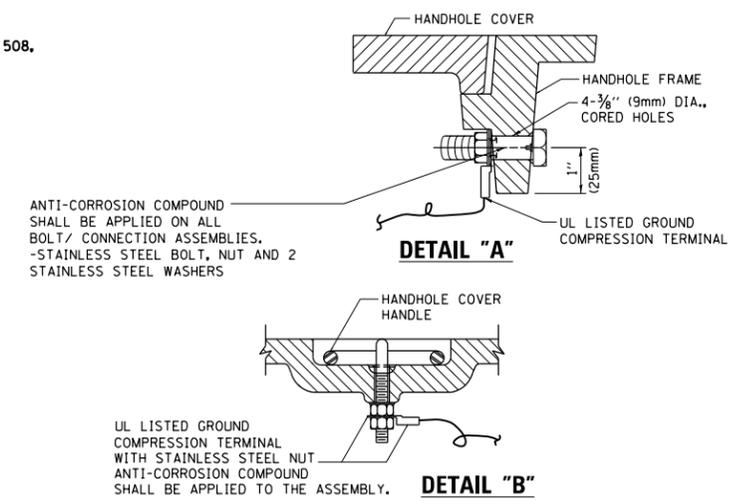
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

NOTES:

1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

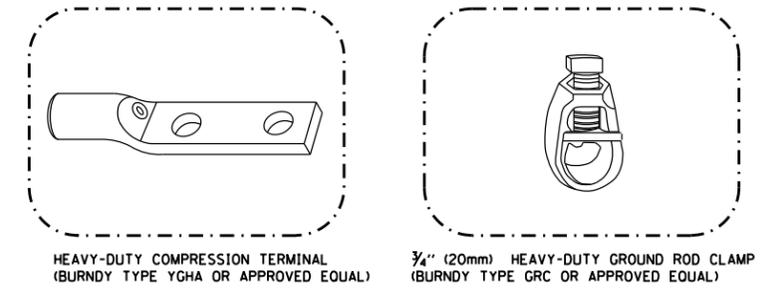
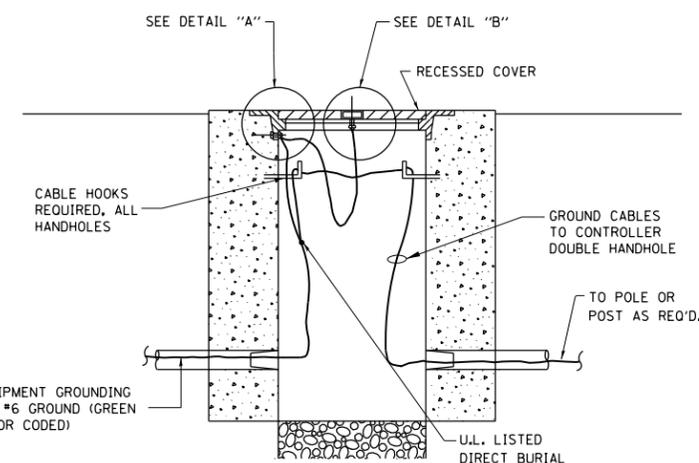


**ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
(NOT TO SCALE)**

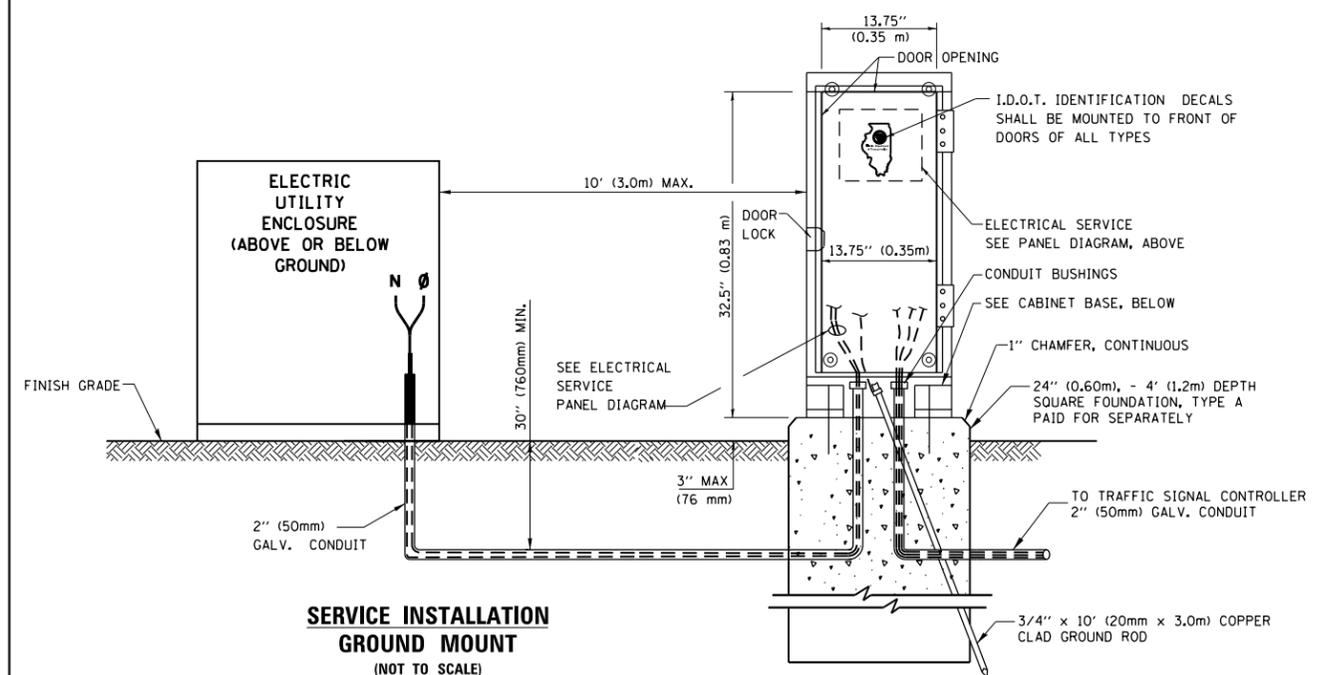
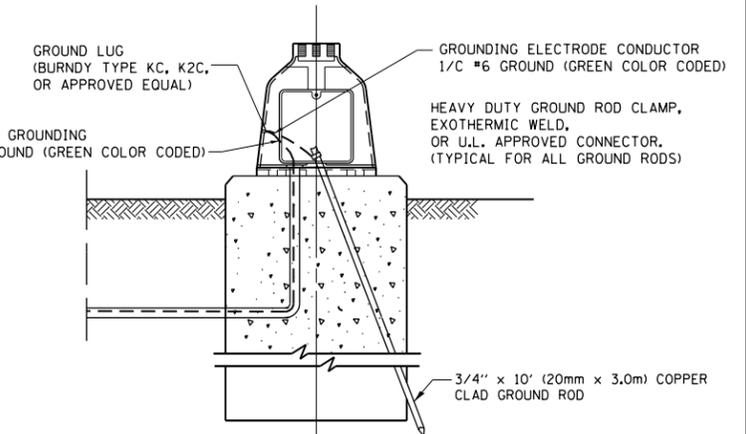
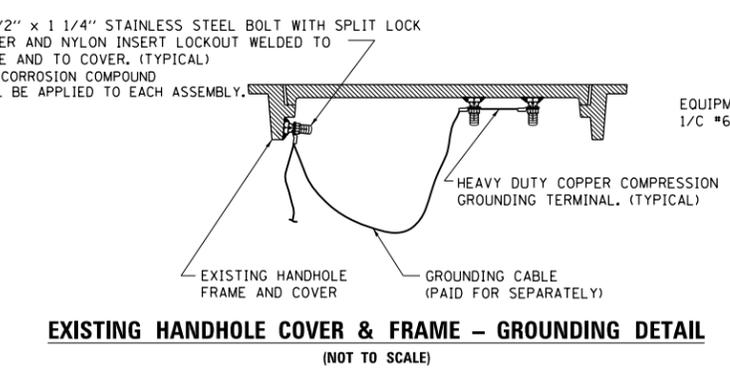


**NOTES:
GROUNDING SYSTEM**

- THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN ENCLOSED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
- THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
- ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



- NOTES:**
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
 - GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.

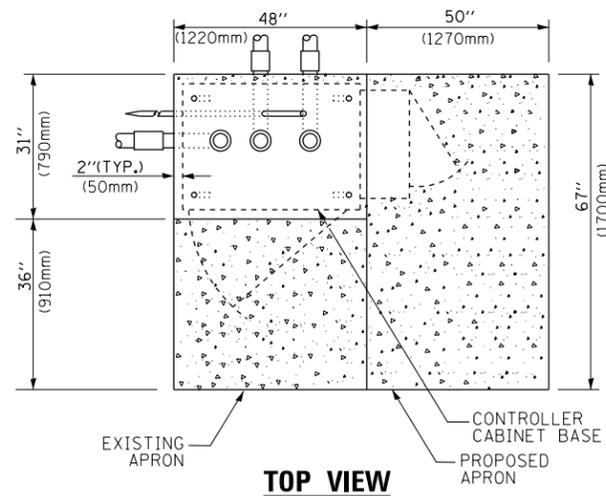


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et:\pwork\pwork\hardnettr\d0337694\d	stStd.dgn	DRAWN - BCK	REVISED -
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	PLOT DATE = 7/16/2014	DATE - 10-28-09	REVISED -

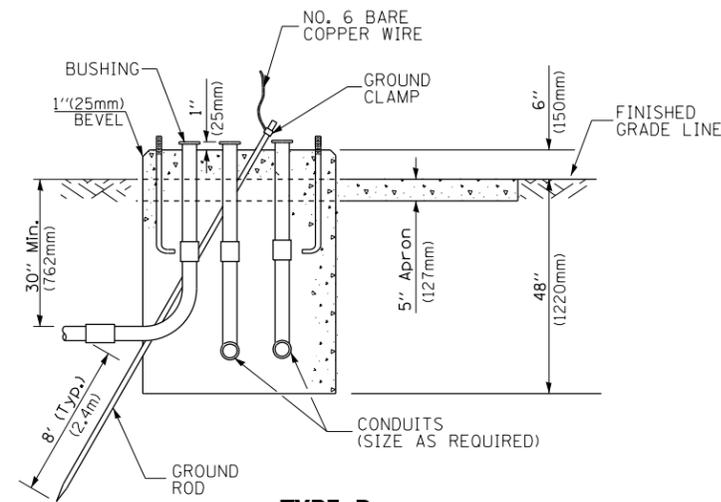
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE			
STANDARD TRAFFIC SIGNAL DESIGN DETAILS			
SCALE: NONE	SHEET NO. 4 OF 7 SHEETS	STA.	TO STA.

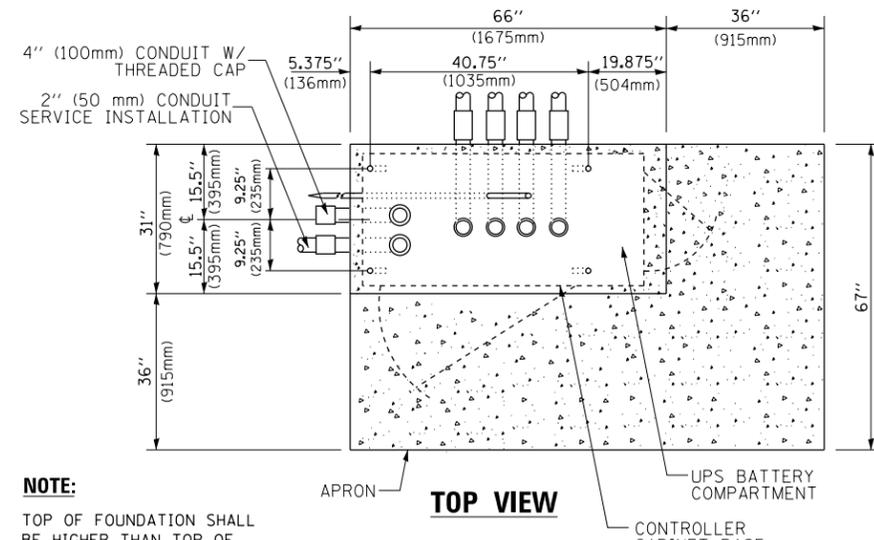
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	(181Y)RS-3	LAKE	60	56
TS-05		CONTRACT NO.60V03		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



TOP VIEW



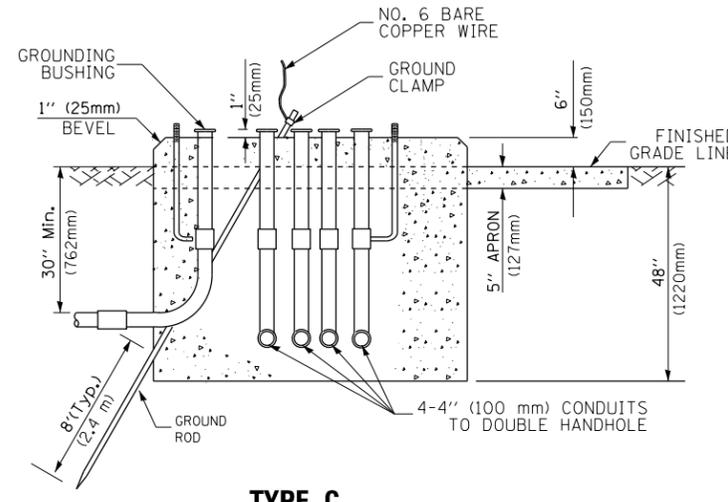
**TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**



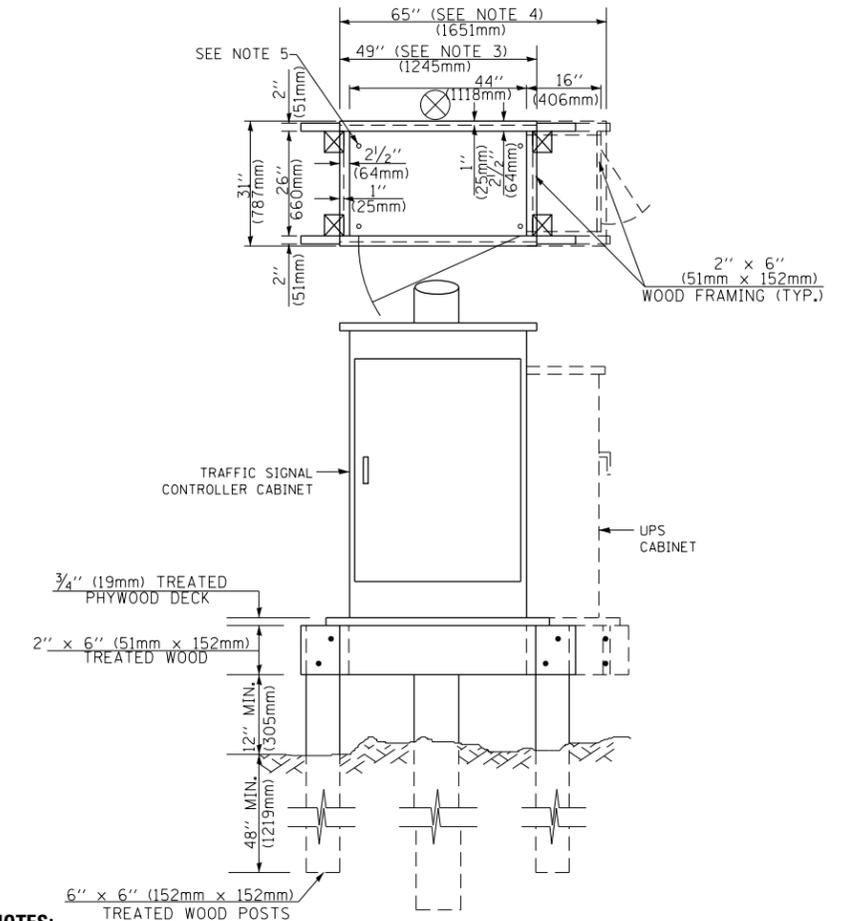
TOP VIEW

NOTE:

TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE



**TYPE C
FOR GROUND MOUNTED
SUPER P (TYPE IV) AND SUPER R (TYPE V)
CONTROLLER CABINETS**



NOTES:

- BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
- BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
- PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
- PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
- DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
- FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

**TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM**

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

CABLE SLACK

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

VERTICAL CABLE LENGTH

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

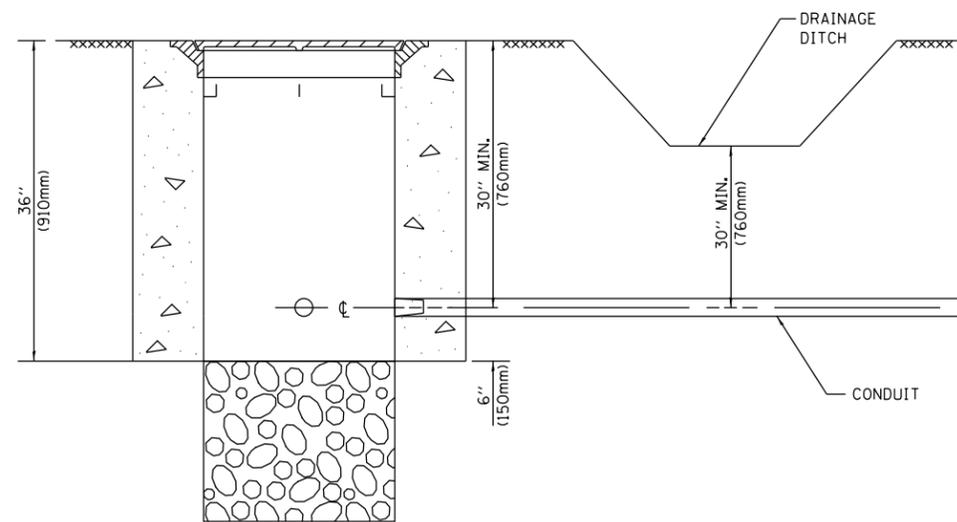
DEPTH OF FOUNDATION

MAST ARM LENGTH	① FOUNDATION DEPTH	FOUNDATION DIAMETER	SPIRAL DIAMETER	QUANTITY OF REBARS	SIZE OF REBARS
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 55' (16.8 m) and less than 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 75' (22.9 m) and up to 85' (25.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

NOTES:

- These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average unconfined compressive strength (qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & Structures should be contacted for a revised design if other conditions are encountered.
- Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
- Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
- For mast arm assemblies with dual arms refer to state standard 878001..

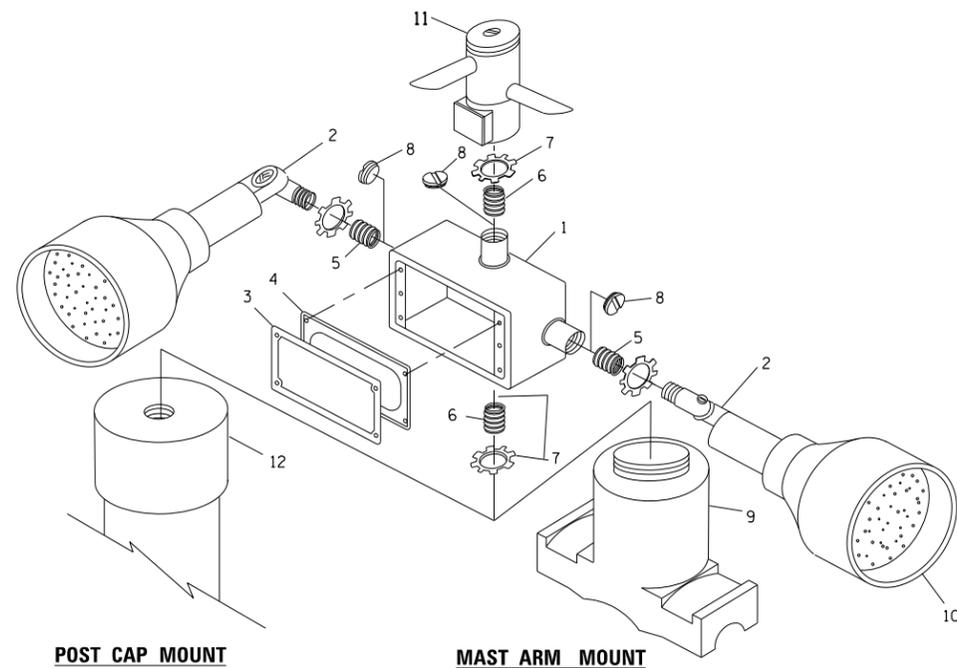
DEPTH OF MAST ARM FOUNDATIONS, TYPE E



NOTES:

1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

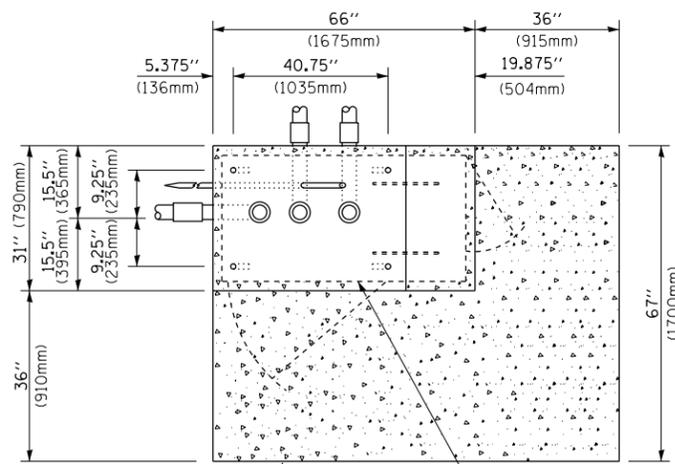
HANDHOLE WITH MINIMUM CONDUIT DEPTH
(NOT TO SCALE)



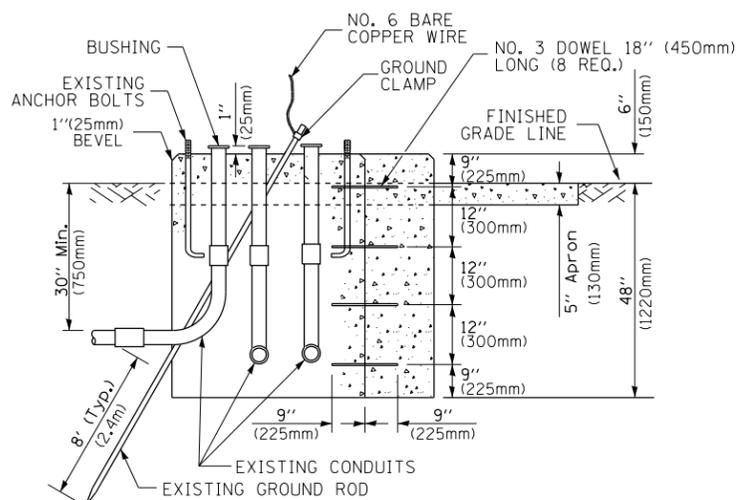
POST CAP MOUNT

MAST ARM MOUNT

EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL



TOP VIEW
(NOT TO SCALE)

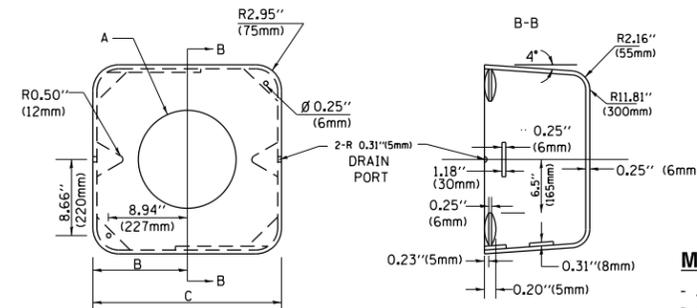


MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION
(NOT TO SCALE)

ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4" (19 mm) CLOSE NIPPLE
7	3/4" (19 mm) LOCKNUT
8	3/4" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

NOTES:

1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4" (19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



MATERIAL:

- ASTM A36 STEEL
- ASTM A-123 HOT DIPPED GALVANIZED

A	B	C	HEIGHT	WEIGHT
VARIABLES	9.5" (241mm)	19" (483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIABLES	10.75" (273mm)	21.5" (546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIABLES	13.0" (330mm)	26" (660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIABLES	18.5" (470mm)	37" (940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

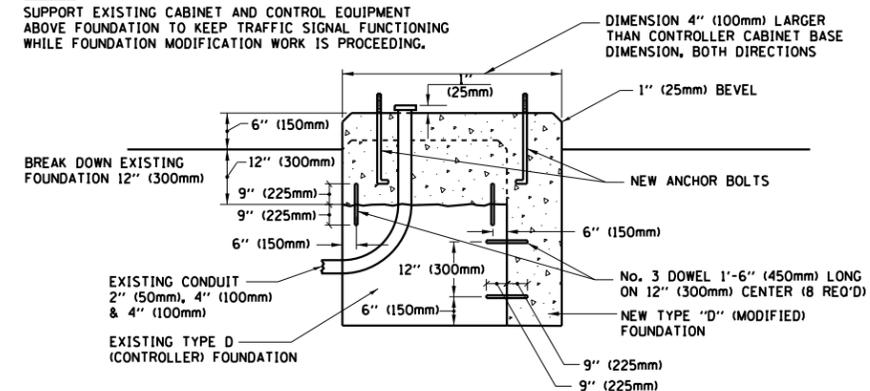
SHROUD

NOTES:

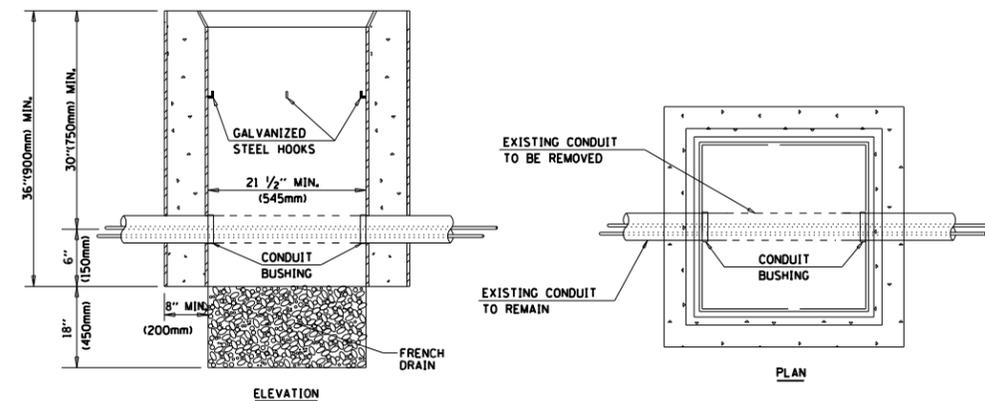
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

NOTE:

SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



MODIFY EXISTING TYPE "D" FOUNDATION



NOTES:

1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

HANDHOLE TO INTERCEPT EXISTING CONDUIT

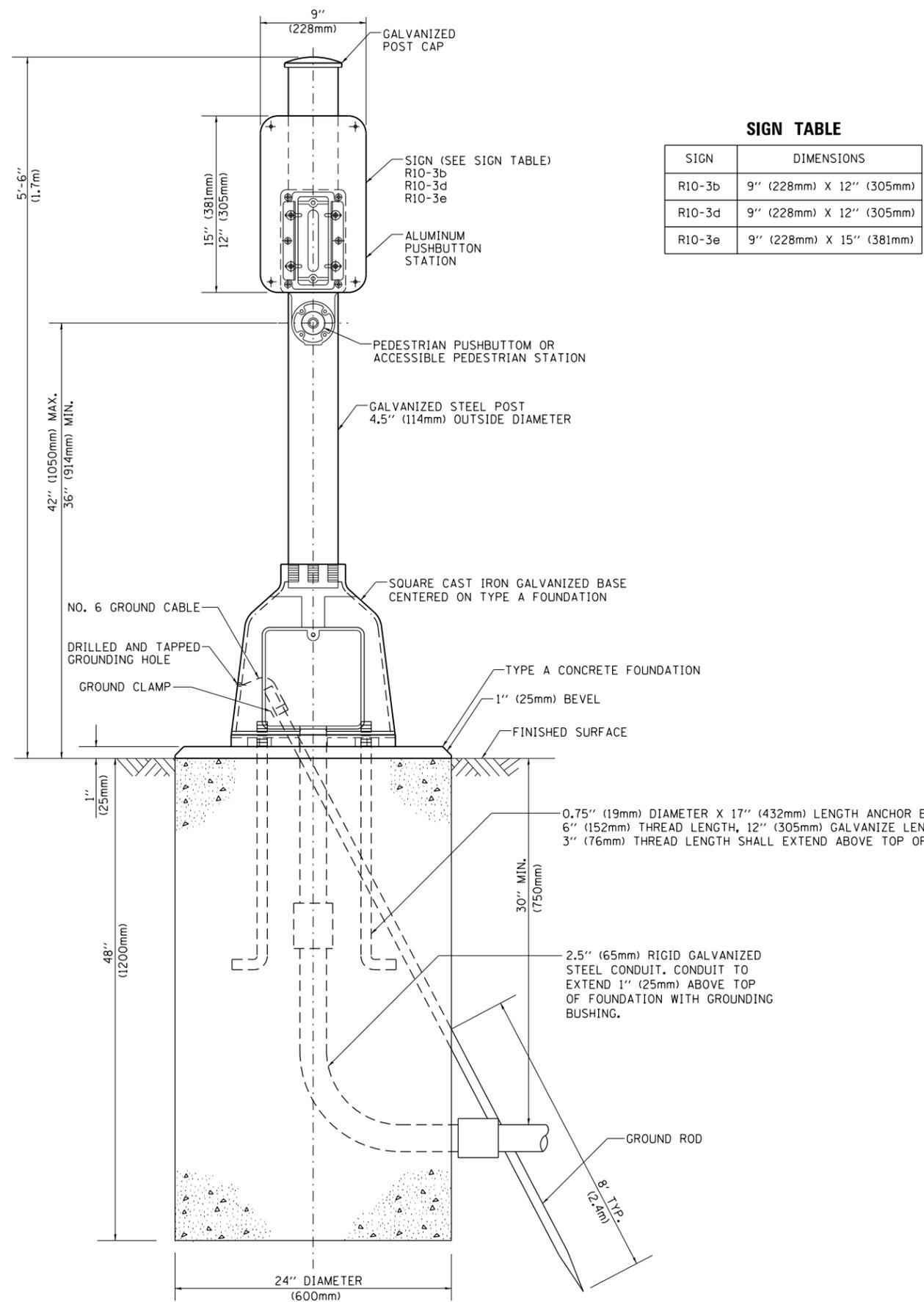
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	PLOT DATE = 7/16/2014	DATE - 10-28-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

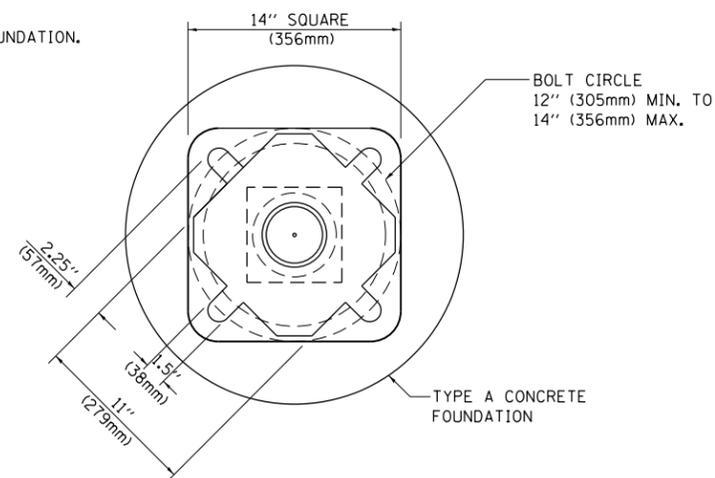
SCALE: NONE SHEET NO. 6 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	(1&1Y)RS-3	LAKE	60	58
TS-05		CONTRACT NO.60V03		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



SIGN TABLE

SIGN	DIMENSIONS
R10-3b	9" (228mm) X 12" (305mm)
R10-3d	9" (228mm) X 12" (305mm)
R10-3e	9" (228mm) X 15" (381mm)



BOLT PATTERN

PEDESTRIAN PUSH BUTTON POST, TYPE A

FILE NAME =	USER NAME = hardnettr	DESIGNED - DAG	REVISED - DAG 1-1-14
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PLOT DATE = 7/16/2014		DATE - 10/1/2012	REVISED -

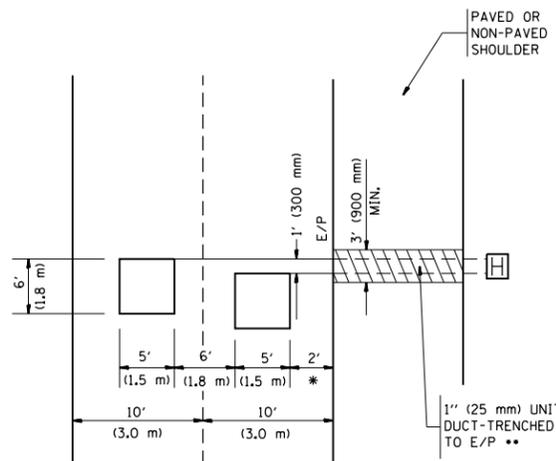
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS			
SCALE: NONE	SHEET NO. 7 OF 7 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	(1&1Y)RS-3	LAKE	60	59
TS-05		CONTRACT NO.60V03		
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.



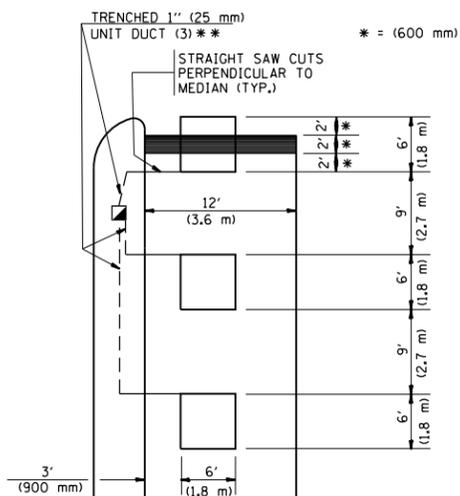
* = (600 mm)

** 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.

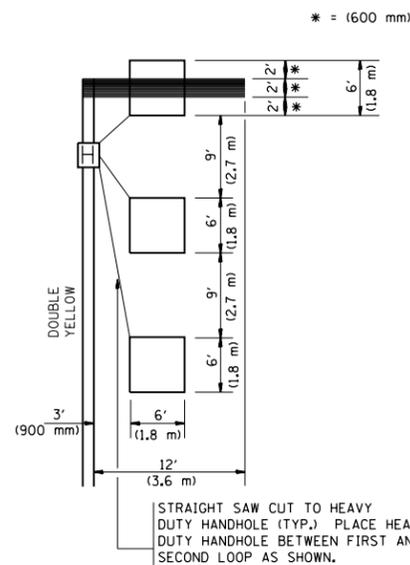


** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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

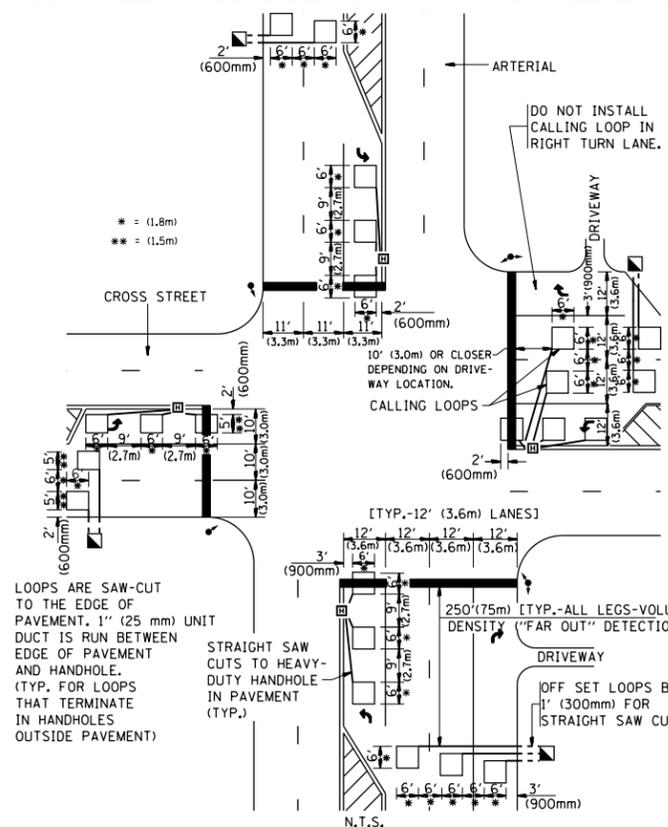
**LEFT TURN LANES WITHOUT MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH**

(PROTECTED / PERMITTED LEFT TURN PHASING)



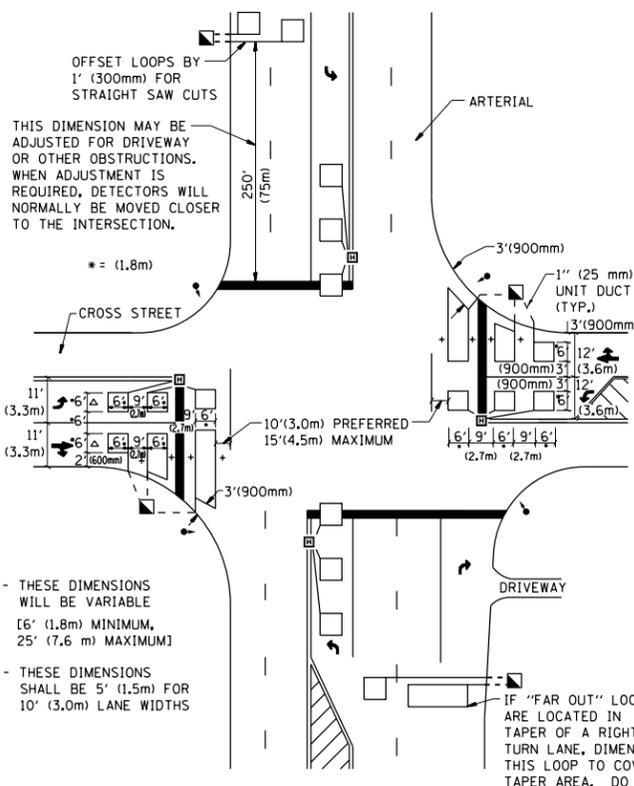
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

**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 = c:\pwwork\pwwork\hardnettr\d0337694\dstStd.dgn	USER NAME = hardnettr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING		F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100.0000' / 1in.	CHECKED - R.K.F.	REVISED -				330	(1&1Y)RS-3	LAKE	60	60
PLOT DATE = 7/16/2014	DATE -	REVISED -	REVISED -	SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	TS-07		CONTRACT NO.60V03		
							FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				