

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FAP 104 (IL RTE. 59)
SECTION 105W-RS-1
HIGHWOODS DRIVE TO IL RTE. 173
RESURFACING (3P)

LAKE COUNTY
C-91-316-11

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104	105W-RS-1	LAKE	26	1
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 60N46	

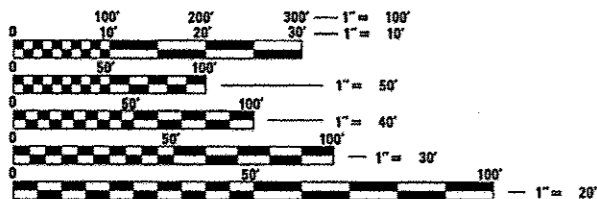
FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT LOCATED IN THE
VILLAGE OF ANTIOCH AND
UNINCORPORATED LAKE COUNTY

DESIGN DESIGNATION:

SPEED LIMIT: 45 M.P.H.

2011 ADT = 13,500



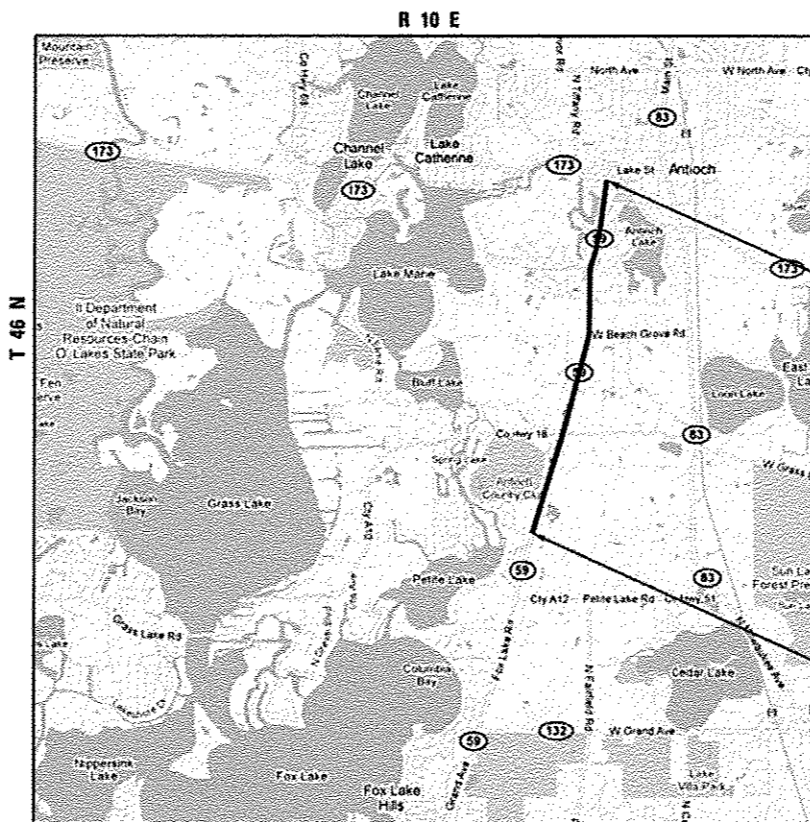
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

(HRGREEN) PROJECT ENGINEER: CHRISTOPHER HARTKE (815) 385-1778

(IDOT) PROJECT MANAGER: KEN ENG (847) 705-4247

CONTRACT NO. 60N46



PROJECT ENDS
STA. 380+80

PROJECT BEGINS
STA. 235+49

GROSS LENGTH OF PROJECT = 14,531 FT. = 2.75 MILE
NET LENGTH OF PROJECT = 14,531 FT. = 2.75 MILE



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED October 15, 2013

John Fortmann
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 22, 2013

John D. Baranzelli, P.E.
ENGINEER OF DESIGN AND ENVIRONMENT

March 22, 2013

Omer Oshman, P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PROFESSIONAL ENGINEER'S SIGN & SEAL

Christopher M. Hartke

EXPIRES: 11/30/2013

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OF THE STATE OF ILLINOIS

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LIST OF STATE STANDARDS

STANDARD NO.	DESCRIPTION
000001 - 06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
424001 - 07	CURB RAMP FOR SIDEWALKS
442201 - 03	CLASS C AND D PATCHES
606001 - 04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701006 - 04	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701011 - 03	OFF-RD OPERATIONS, 2L, 2W, DAY ONLY
701301 - 04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306 - 03	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS ≥ 45 MPH
701311 - 03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701336 - 06	LANE CLOSURE, 2L, 2W, WORK AREA IN SERIES, FOR SPEEDS ≥ 45 MPH
701502 - 05	URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
701701 - 08	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901 - 02	TRAFFIC CONTROL DEVICES

GENERAL NOTES

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" (JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION) AT 8-1-1 OR (800) 892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES (48 HOUR NOTIFICATION IS REQUIRED).
2. 10 FEET TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER ITEMS OF WORK TO EXISTING CURBS AND GUTTERS AND CONDITIONS IN THE FIELD UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.
3. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE VILLAGE OF ANTIOCH.
4. WHEN ARTIFICIAL LIGHTING IS USED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.
5. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
6. SAW CUTTING OF PAVEMENTS, SIDEWALK, CURB & GUTTER, ETC. SHALL BE TO FULL DEPTH AND SHALL RESULT IN A CLEAN STRAIGHT EDGE ON THE PORTION REMAINING. ALL SAW CUTTING SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEM REMOVED.
7. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
8. THE CONTRACTOR SHALL USE CARE IN REMOVING OR EXCAVATING NEAR ALL EXISTING ITEMS WHICH WILL REMAIN. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
9. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1.5 INCHES WHERE THE SPEED LIMIT IS 45 MPH OR LESS AND 1 INCH WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH. WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF MILLING IS SLOPED A MINIMUM OF 1:3 (V:H).
10. UNLESS OTHER CONDITIONS WARRANT EXTENDED LANE CLOSURE AS DETERMINED AND APPROVED IN WRITING BY THE ENGINEER OR AS PROVIDED FOR IN THE CONTRACT SPECIFICATIONS, OVERNIGHT CLOSURES SHALL NOT BE ALLOWED FOR REHABILITATION PROJECTS INVOLVING DAYTIME MILLING AND RESURFACING OPERATIONS AND CLASS D PATCHING.
11. BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE ALL EXISTING PAVEMENT MARKING LINES AND RAISED REFLECTIVE PAVEMENT MARKERS IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKING SHALL BE AS DIRECTED BY THE ENGINEER.
12. MATCH EXISTING PAVEMENT MARKINGS AT THE PROJECT LIMITS.
13. ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.
14. PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES. THE COST OF THE PAVEMENT MARKING TAPE, TYPE III AND ITS REMOVAL SHALL BE INCLUDED IN THE COST OF SHORT TERM PAVEMENT MARKINGS.
15. THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE BEGINNING OF WORK.
16. THE RESIDENT ENGINEER SHALL CONTACT MS. DEBBIE HANLON, THE AREA TRAFFIC FIELD ENGINEER, AT (847) 438-2300 AT LEAST TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
17. LOCATIONS OF PAVEMENT PATCHING AND CURB & GUTTER REMOVAL AND REPLACEMENT WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
18. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE THE "BUTT JOINT AND HMA TAPER DETAILS" INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING OWNERS OF ALL UTILITIES PRIOR TO CONSTRUCTION TO DETERMINE THE LOCATION OF ALL UTILITY EQUIPMENT. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS IF UTILITY RELOCATION, ADJUSTMENT, OR PROTECTION IS NECESSARY.
20. THE LOCATION OF EXISTING DRAINAGE STRUCTURES, STORM SEWERS, WATER MAINS, SANITARY SEWERS, AND ANY OTHER PUBLIC OR PRIVATE UTILITIES AS SHOWN ON THE PLANS IS APPROXIMATE AND THEIR EXACT LOCATION IS TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR.
21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND AND SURFACE UTILITIES EVEN THOUGH THEY MIGHT NOT BE SHOWN ON THE PLANS. ANY UTILITY PROPERTY DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER.
22. ANY LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES, WHICH OBSTRUCTS THE NATURAL FLOW OF WATER SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. PRIOR TO ACCEPTANCE OF THE IMPROVEMENT, ALL DRAINAGE STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT.
23. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.
24. 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.
25. FOR WORK OUTSIDE THE LIMITS OF BRIDGE APPROACH PAVEMENT, ALL REFERENCES IN THE HIGHWAY STANDARDS AND STANDARD SPECIFICATIONS FOR REINFORCEMENT, DOWEL BARS AND TIE BARS IN PAVEMENT, CURB, GUTTER, COMBINATION CURB AND GUTTER AND MEDIAN, AND CHAIR SUPPORTS FOR CRC PAVEMENT, SHALL BE EPOXY COATED, UNLESS NOTED ON THE PLAN.

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 PLOT DATE: 10/24/2012



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	CHECKED: TEH	REVISED:
	DATE: 10/24/2012	REVISED:

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**INDEX OF SHEETS, LIST OF STATE STANDARDS AND GENERAL NOTES
ILLINOIS ROUTE 59 (HIGHWOODS DR. TO IL RTE. 173)**

SCALE: N.T.S. SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104	105W-RS-1	LAKE	26	2
CONTRACT NO. 60N46			ILLINOIS FED. AID PROJECT	

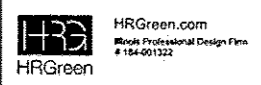
45

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				100% STATE	
				ROADWAY	
21101615	TOPSOIL FURNISH AND PLACE, 4"	SO YD	17	17	
25200110	SODDING, SALT TOLERANT	SO YD	17	17	
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	121	121	
40600300	AGGREGATE (PRIME COAT)	TON	256	256	
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	25	25	
40600827	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	2,542	2,542	
40600895	CONSTRUCTING TEST STRIP	EACH	2	2	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	370	370	
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	5,511	5,511	
42001300	PROTECTIVE COAT	SO YD	33	33	
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SO YD	63,909	63,909	
44201798	CLASS D PATCHES, TYPE I, 13 INCH	SO YD	50	50	
44201803	CLASS D PATCHES, TYPE II, 13 INCH	SO YD	1,034	1,034	
44201807	CLASS D PATCHES, TYPE III, 13 INCH	SO YD	388	388	
44201809	CLASS D PATCHES, TYPE IV, 13 INCH	SO YD	129	129	

* SPECIALTY ITEMS

15

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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

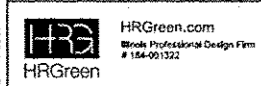
SUMMARY OF QUANTITIES			
ILLINOIS ROUTE 59 (HIGHWOODS DR. TO IL RTE. 173)			
SCALE: N.T.S.	SHEET NO. 1 OF 3 SHEETS	STA. NA	TO STA. NA

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104	105W-RS-1	LAKE	26	3
CONTRACT NO. 60N46			ILLINOIS FED. AID PROJECT	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				100% STATE	ROADWAY
				0005	URBAN
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	1,532	1,532	
60260100	INLETS TO BE ADJUSTED	EACH	3	3	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6	
67100100	MOBILIZATION	L SUM	1	1	
70100600	TRAFFIC CONTROL AND PROTECTION, STANDARD 701336	L SUM	1	1	
70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	L SUM	1	1	
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1	
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	15,855	15,855	
70300210	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS	SQ FT	585	585	
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	60,850	60,850	
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	2,405	2,405	
70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	150	150	
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	880	880	
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	615	615	
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	5,285	5,285	

* SPECIALTY ITEMS

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PLOT DATE: 12/19/2012	DATE - 12/18/2012	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES			
ILLINOIS ROUTE 59 (HIGHWOODS DR. TO IL RTE. 173)			
SCALE: N.T.S.	SHEET NO. 2 OF 3 SHEETS	STA. NA	TO STA. NA

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104	105W-R5-1	LAKE	26	4
CONTRACT NO. 60N46			ILLINOIS FED. AID PROJECT	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				100% STATE	
				ROADWAY	
				0005	
				URBAN	
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	585	585	
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	60,850	60,850	
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	2,405	2,405	
* 78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	150	150	
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	880	880	
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	615	615	
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	650	650	
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	605	605	
* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	1,491	1,491	
X2020110	GRADING AND SHAPING SHOULDERS	UNIT	228	228	
X5537800	STORM SEWERS TO BE CLEANED 12"	FOOT	140	140	
X6030310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	4	4	
Z0004562	COMBINATION CONCRETE CURB & GUTTER REMOVAL AND REPLACEMENT	FOOT	100	100	
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	17	17	
Z0030850	TEMPORARY INFORMATION SIGNING	SO FT	206	206	

* SPECIALTY ITEMS

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HRGreen.com
 1800 Professional Design Firm
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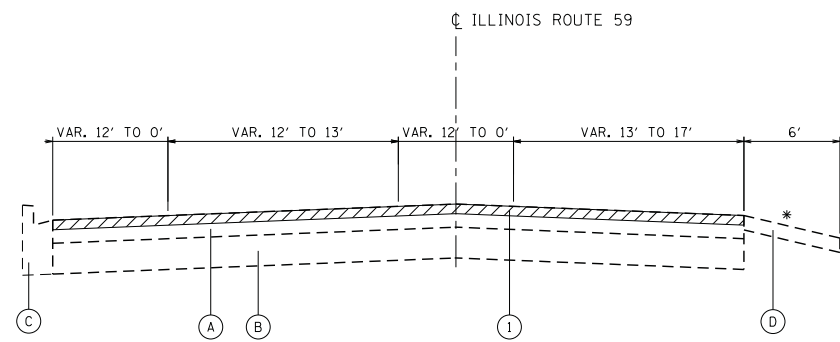
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
 ILLINOIS ROUTE 59 (HIGHWOODS DR. TO IL RTE. 173)

SCALE: N.T.S. SHEET NO. 3 OF 3 SHEETS STA. NA TO STA. NA

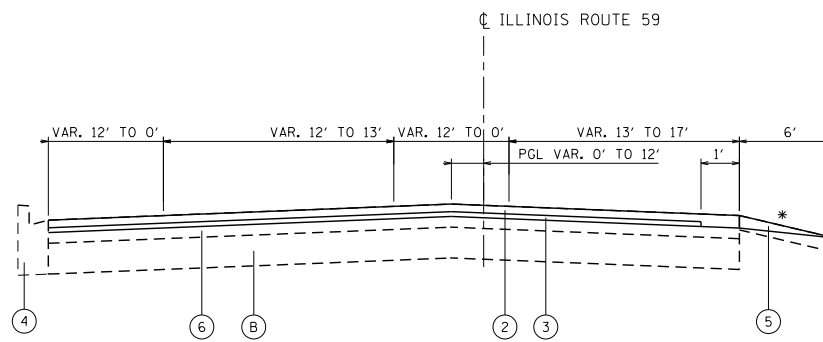
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104	105W-RS-1	LAKE	26	5
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 60N46	



EXISTING TYPICAL SECTION

STA. 256+58 TO STA. 259+59
 STA. 275+84 TO STA. 281+09
 STA. 331+92 TO STA. 350+92
 STA. 376+48 TO STA. 380+80

* 2'-12' HMA SHOULDER - STA. 256+58 TO STA. 259+59
 STA. 333+00 TO STA. 342+25
 COMB CONC CURB & GUTTER - STA. 376+48 TO STA. 380+80



PROPOSED TYPICAL SECTION

STA. 256+58 TO STA. 259+59
 STA. 275+84 TO STA. 281+09
 STA. 331+92 TO STA. 350+92
 STA. 376+48 TO STA. 380+80

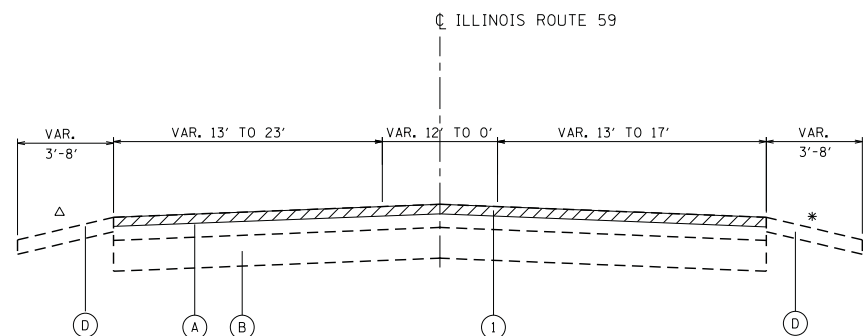
* 2'-12' HMA SHOULDER - STA. 256+58 TO STA. 259+59
 STA. 333+00 TO STA. 342+25
 COMB CONC CURB & GUTTER - STA. 376+48 TO STA. 380+80

EXISTING CONDITIONS

- (A) HOT-MIX ASPHALT PAVEMENT, ±6
- (B) PCC BASE COURSE, ±9"
- (C) COMBINATION CONCRETE CURB AND GUTTER
- (D) AGGREGATE SHOULDERS

PROPOSED IMPROVEMENTS

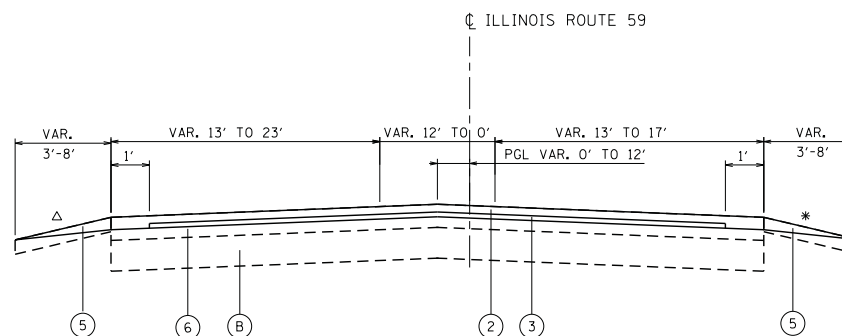
- (1) HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"
- (2) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2"
- (3) POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- (4) COMBINATION CONCRETE CURB & GUTTER REMOVAL AND REPLACEMENT (AT LOCATIONS AS DETERMINED BY THE ENGINEER)
- (5) AGGREGATE WEDGE SHOULDER, TYPE B (TAPER 3" TO 1" THICKNESS) - SEE SAFETY EDGE DETAIL
- (6) EXISTING HOT-MIX ASPHALT SURFACE AFTER PROPOSED SURFACE REMOVAL



EXISTING TYPICAL SECTION

STA. 235+49 TO STA. 256+58
 STA. 259+59 TO STA. 275+84
 STA. 281+09 TO STA. 331+92
 STA. 350+92 TO STA. 376+48

* 4'-12' HMA SHOULDER - STA. 259+59 TO STA. 260+99
 STA. 281+09 TO STA. 283+67
 Δ 4'-12' HMA SHOULDER - STA. 255+11 TO STA. 256+58
 STA. 281+09 TO STA. 283+67



PROPOSED TYPICAL SECTION

STA. 235+49 TO STA. 256+58
 STA. 259+59 TO STA. 275+84
 STA. 281+09 TO STA. 331+92
 STA. 350+92 TO STA. 376+48

* 4'-12' HMA SHOULDER - STA. 259+59 TO STA. 260+99
 STA. 281+09 TO STA. 283+67
 Δ 4'-12' HMA SHOULDER - STA. 255+11 TO STA. 256+58
 STA. 281+09 TO STA. 283+67

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

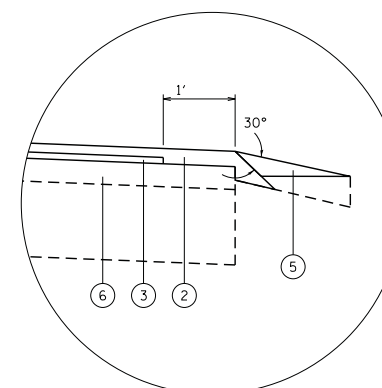
MIXTURE TYPE	AIR VOIDS @ 100s
PAVEMENT & SHOULDER RESURFACING	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL-9.5mm)	4% @ 70 GYR.
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	3.5% @ 50 GYR.
PATCHING	
CLASS D PATCHES (HMA BINDER, IL-19mm)	4% @ 70 GYR.
HMA REPLACEMENT OVER PATCHES (HMA BINDER IL-19mm)	4% @ 70 GYR.

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

NOTE:
 THE CONTRACTOR SHALL MILL FIRST BEFORE PATCHING. SEE DISTRICT 1
 DETAIL PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT.



RESURFACING TREATMENT AT SHOULDER AND SAFETY EDGE DETAILS

N.T.S.

NOTE: INCREASED THICKNESS OF HMA SURFACE COURSE ALONG SHOULDER EDGE SHALL BE INCLUDED IN THE COST OF HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70

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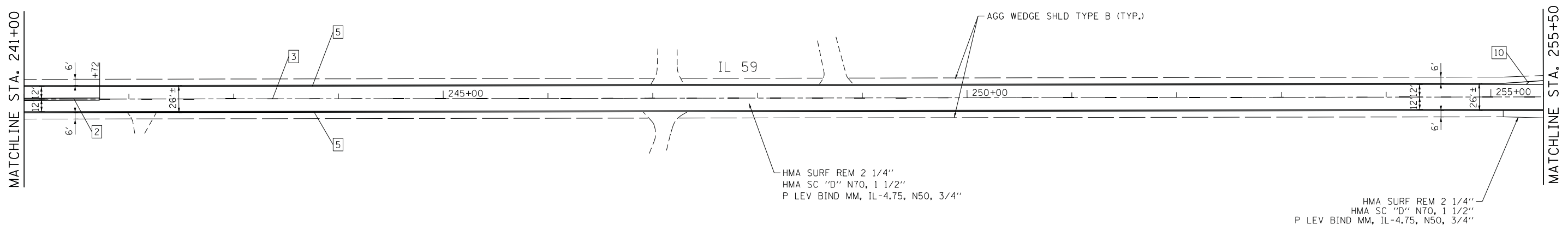
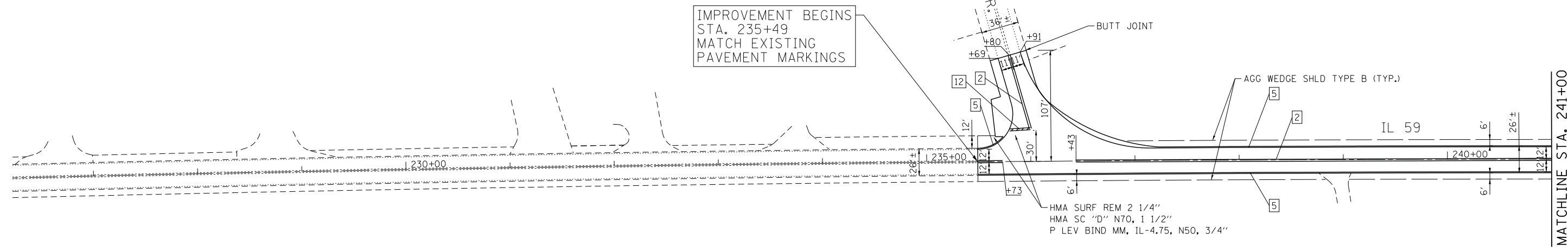
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PLOT DATE = 10/24/2012	DATE - 10/24/2012	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
 ILLINOIS ROUTE 59 (HIGHWOODS DR. TO IL RTE. 173)

SCALE: N.T.S. SHEET NO. 1 OF 1 SHEETS STA. BEGIN TO STA. END

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104	105W-RS-1	LAKE	26	6
CONTRACT NO.			60N46	
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



ROADWAY LEGEND

- EXISTING INLET
- EXISTING CATCH BASIN
- ⊙ EXISTING MANHOLE
- T TELEPHONE (ADJUSTMENTS PERFORMED BY OTHERS)
- ⊕ FRAMES AND LIDS TO BE ADJUSTED, SPECIAL

PAVEMENT MARKING LEGEND

1	LINE 4" (YELLOW SOLID LINE)	5	LINE 4" (WHITE SOLID LINE)	10	LINE 12" (WHITE DIAGONAL LINE)
2	LINE 4" (DOUBLE YELLOW SOLID LINES)	6	LINE 6" (WHITE SOLID LINE)	11	LINE 12" (YELLOW DIAGONAL LINE)
3	LINE 4" (YELLOW - 10' DASH, 30' SKIP)	7	LINE 6" (WHITE LANE LINE - 2' DASH, 6' SKIP)	12	LINE 24" (WHITE STOP BAR)
4	LINE 4" (WHITE LANE LINE - 10' DASH, 30' SKIP)	8	LINE 8" (WHITE SOLID LINE)	13	LETTERS AND SYMBOLS (TYP.)
		9	LINE 12" (WHITE SOLID LINE)		

NOTES:
 1. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC UNLESS OTHERWISE SPECIFIED.
 2. RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE USED THROUGHOUT THE PROJECT LIMITS. SEE DISTRICT DETAIL TC-11.



COMPANY NAME: HRGreen
 PROJECT CONTACT: HRGreen.com
 DATE PLOTTED: 12/19/2012 11:49:03 AM
 FILE NAME: 46100196.LOT-plan-01.dgn
 PLOT DRIVER: pdcfah
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HRGreen
 Illinois Professional Design Firm
 #184-001322

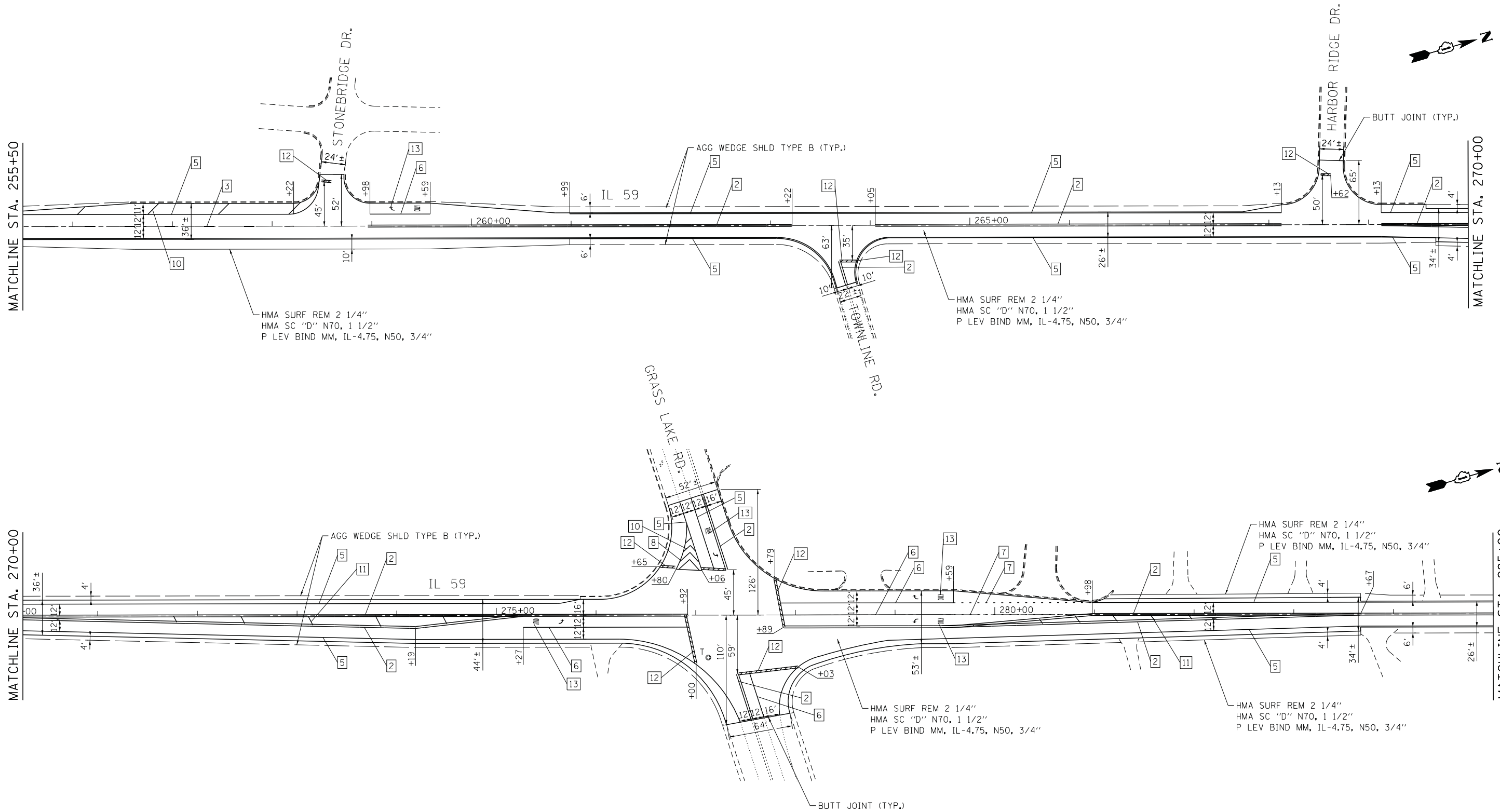
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PLOT DATE = 12/19/2012	CHECKED - TEH	REVISED -
	DATE - 12/18/2012	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ROADWAY AND PAVEMENT MARKING PLAN
 ILLINOIS ROUTE 59 (HIGHWOODS DR. TO IL RTE. 173)**

SCALE: 1" = 50' SHEET NO. 1 OF 6 SHEETS STA. BEGIN TO STA. 255+50

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104	105W-RS-1	LAKE	26	7
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO.	60N46



ROADWAY LEGEND

- EXISTING INLET
- EXISTING CATCH BASIN
- ⊙ EXISTING MANHOLE
- T TELEPHONE (ADJUSTMENTS PERFORMED BY OTHERS)
- ⊕ FRAMES AND LIDS TO BE ADJUSTED, SPECIAL

PAVEMENT MARKING LEGEND

1	LINE 4" (YELLOW SOLID LINE)	5	LINE 4" (WHITE SOLID LINE)	10	LINE 12" (WHITE DIAGONAL LINE)
2	LINE 4" (DOUBLE YELLOW SOLID LINES)	6	LINE 6" (WHITE SOLID LINE)	11	LINE 12" (YELLOW DIAGONAL LINE)
3	LINE 4" (YELLOW - 10' DASH, 30' SKIP)	7	LINE 6" (WHITE LANE LINE - 2' DASH, 6' SKIP)	12	LINE 24" (WHITE STOP BAR)
4	LINE 4" (WHITE LANE LINE - 10' DASH, 30' SKIP)	8	LINE 8" (WHITE SOLID LINE)	13	LETTERS AND SYMBOLS (TYP.)
		9	LINE 12" (WHITE SOLID LINE)		

NOTES:
 1. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC UNLESS OTHERWISE SPECIFIED.
 2. RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE USED THROUGHOUT THE PROJECT LIMITS. SEE DISTRICT DETAIL TC-11.

5	LINE 4" (WHITE SOLID LINE)	10	LINE 12" (WHITE DIAGONAL LINE)
6	LINE 6" (WHITE SOLID LINE)	11	LINE 12" (YELLOW DIAGONAL LINE)
7	LINE 6" (WHITE LANE LINE - 2' DASH, 6' SKIP)	12	LINE 24" (WHITE STOP BAR)
8	LINE 8" (WHITE SOLID LINE)	13	LETTERS AND SYMBOLS (TYP.)
9	LINE 12" (WHITE SOLID LINE)		



COMPANY NAME: HRGreen
 PROJECT CONTACT: HRGreen.com
 DATE PLOTTED: 12/19/2012 11:40:08 AM
 FILE NAME: 46100196101-plan-02.dgn
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 PEN TABLE: standard-trans.tbl

HRGreen
 Illinois Professional Design Firm
 #184-001322

USER NAME = spernal	DESIGNED - CMH	REVISED -
PLOT SCALE = 1" = 50'	DRAWN - SMP	REVISED -
PLOT DATE = 12/19/2012	CHECKED - TEH	REVISED -
	DATE - 12/18/2012	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ROADWAY AND PAVEMENT MARKING PLAN
 ILLINOIS ROUTE 59 (HIGHWOODS DR. TO IL RTE. 73)**

SCALE: 1" = 50' SHEET NO. 2 OF 6 SHEETS STA. 255+50 TO STA. 285+00

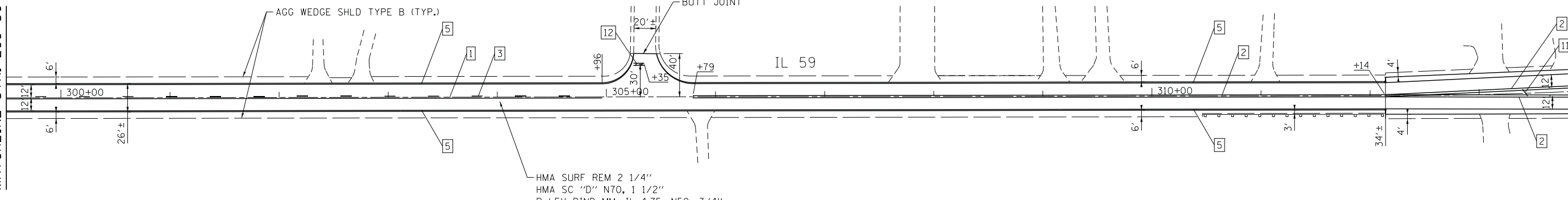
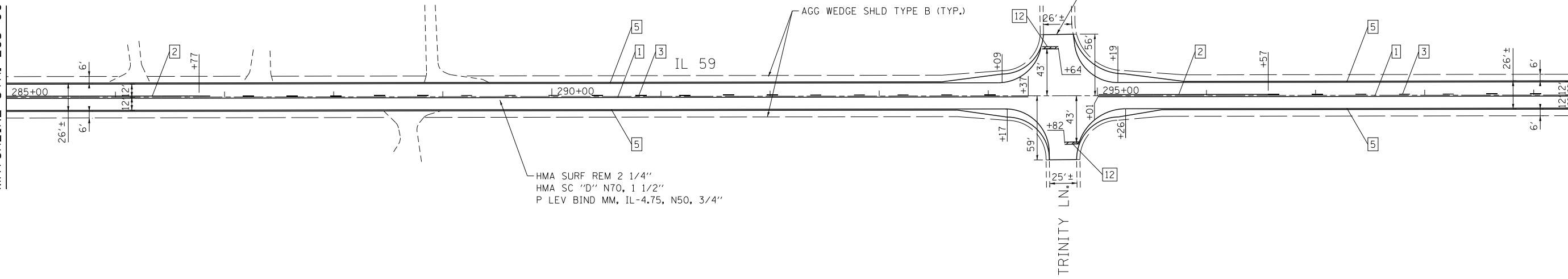
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104	105W-RS-1	LAKE	26	8
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO.	60N46

MATCHLINE STA. 285+00

MATCHLINE STA. 299+50

MATCHLINE STA. 299+50

MATCHLINE STA. 314+00



ROADWAY LEGEND

- EXISTING INLET
- EXISTING CATCH BASIN
- ⊙ EXISTING MANHOLE
- T TELEPHONE (ADJUSTMENTS PERFORMED BY OTHERS)
- ⊕ FRAMES AND LIDS TO BE ADJUSTED, SPECIAL

PAVEMENT MARKING LEGEND

1	LINE 4" (YELLOW SOLID LINE)
2	LINE 4" (DOUBLE YELLOW SOLID LINES)
3	LINE 4" (YELLOW - 10' DASH, 30' SKIP)
4	LINE 4" (WHITE LANE LINE - 10' DASH, 30' SKIP)

5	LINE 4" (WHITE SOLID LINE)	10	LINE 12" (WHITE DIAGONAL LINE)
6	LINE 6" (WHITE SOLID LINE)	11	LINE 12" (YELLOW DIAGONAL LINE)
7	LINE 6" (WHITE LANE LINE - 2' DASH, 6' SKIP)	12	LINE 24" (WHITE STOP BAR)
8	LINE 8" (WHITE SOLID LINE)	13	LETTERS AND SYMBOLS (TYP.)
9	LINE 12" (WHITE SOLID LINE)		

NOTES:
 1. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC UNLESS OTHERWISE SPECIFIED.
 2. RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE USED THROUGHOUT THE PROJECT LIMITS. SEE DISTRICT DETAIL TC-11.



COMPANY NAME: HRGreen
 PROJECT CONTACT: spernel
 DATE PLOTTED: 10/24/2012 9:41:48 AM
 FILE NAME: 86100196107-plan-03.dgn
 PLOT DRIVER: pafact
 PEN TABLE: standard-trans.tbl

HRGreen
 HRGreen.com
 Illinois Professional Design Firm
 #184-001322

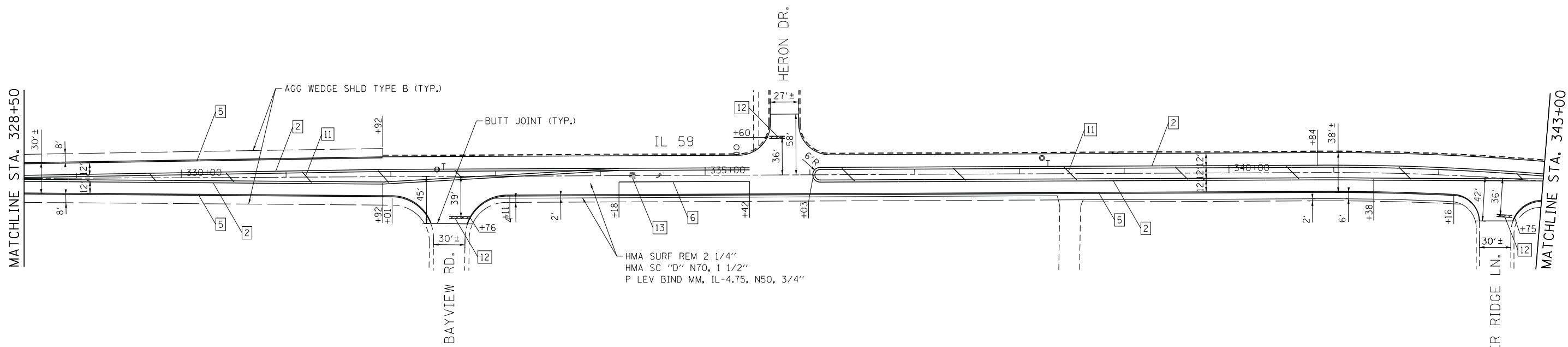
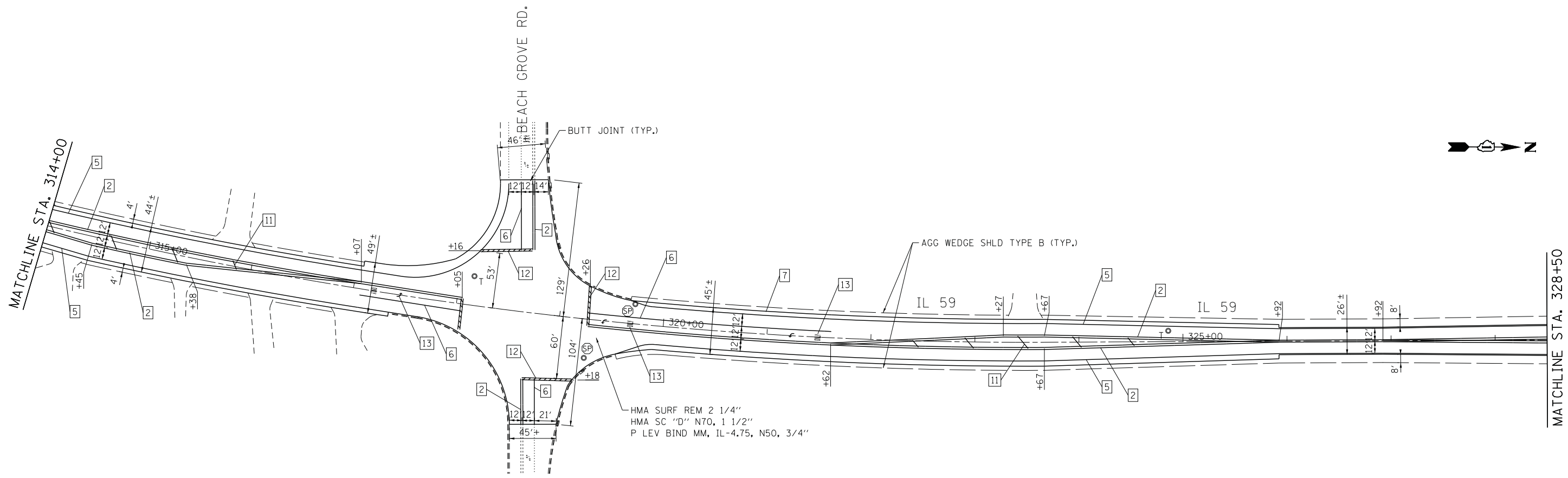
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PLOT DATE = 10/24/2012	DATE - 10/24/2012	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ROADWAY AND PAVEMENT MARKING PLAN
 ILLINOIS ROUTE 59 (HIGHWOODS DR. TO IL RTE. 173)**

SCALE: 1" = 50' SHEET NO. 3 OF 6 SHEETS STA. 285+00 TO STA. 314+00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104	105W-RS-1	LAKE	26	9
CONTRACT NO. 60N46				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



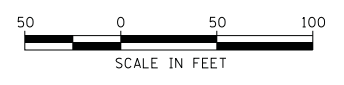
ROADWAY LEGEND

- EXISTING INLET
- EXISTING CATCH BASIN
- ⊙ EXISTING MANHOLE
- T TELEPHONE (ADJUSTMENTS PERFORMED BY OTHERS)
- ⊕ FRAMES AND LIDS TO BE ADJUSTED, SPECIAL

PAVEMENT MARKING LEGEND

- 1 LINE 4" (YELLOW SOLID LINE)
- 2 LINE 4" (DOUBLE YELLOW SOLID LINES)
- 3 LINE 4" (YELLOW - 10' DASH, 30' SKIP)
- 4 LINE 4" (WHITE LANE LINE - 10' DASH, 30' SKIP)
- 5 LINE 4" (WHITE SOLID LINE)
- 6 LINE 6" (WHITE SOLID LINE)
- 7 LINE 6" (WHITE LANE LINE - 2' DASH, 6' SKIP)
- 8 LINE 8" (WHITE SOLID LINE)
- 9 LINE 12" (WHITE SOLID LINE)
- 10 LINE 12" (WHITE DIAGONAL LINE)
- 11 LINE 12" (YELLOW DIAGONAL LINE)
- 12 LINE 24" (WHITE STOP BAR)
- 13 LETTERS AND SYMBOLS (TYP.)

NOTES:
 1. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC UNLESS OTHERWISE SPECIFIED.
 2. RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE USED THROUGHOUT THE PROJECT LIMITS. SEE DISTRICT DETAIL TC-11.



COMPANY NAME: HRGreen
 PROJECT CONTACT: HRGreen.com
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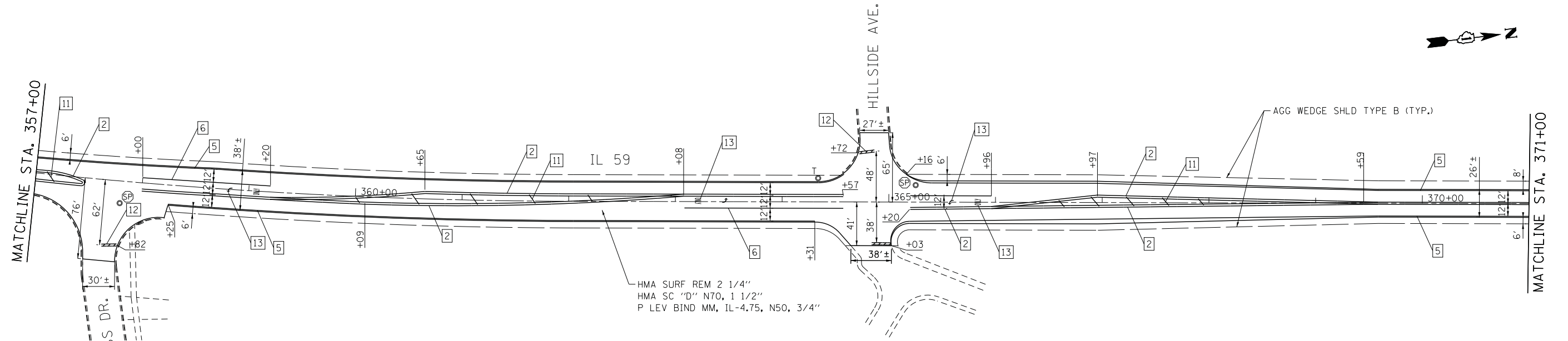
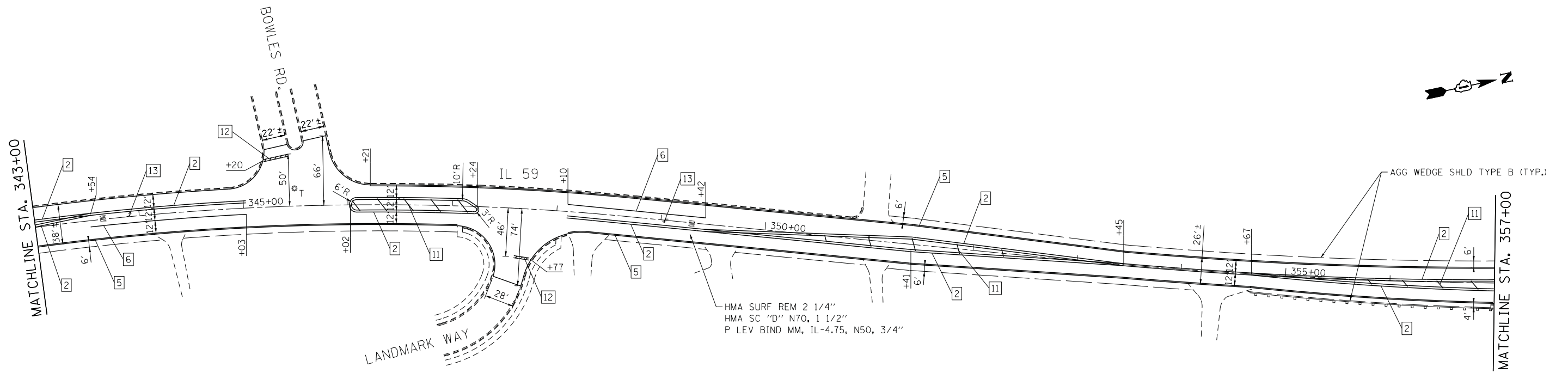
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	DATE - 10/24/2012	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ROADWAY AND PAVEMENT MARKING PLAN
ILLINOIS ROUTE 59 (HIGHWOODS DR. TO IL RTE. 173)**

SCALE: 1" = 50' SHEET NO. 4 OF 6 SHEETS STA. 314+00 TO STA. 343+00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104	105W-RS-1	LAKE	26	10
FED. ROAD DIST. NO.			CONTRACT NO. 60N46	
ILLINOIS FED. AID PROJECT				



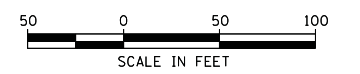
ROADWAY LEGEND

- EXISTING INLET
- EXISTING CATCH BASIN
- ⊙ EXISTING MANHOLE
- T TELEPHONE (ADJUSTMENTS PERFORMED BY OTHERS)
- ⊕ FRAMES AND LIDS TO BE ADJUSTED, SPECIAL

PAVEMENT MARKING LEGEND

- 1 LINE 4" (YELLOW SOLID LINE)
- 2 LINE 4" (DOUBLE YELLOW SOLID LINES)
- 3 LINE 4" (YELLOW - 10' DASH, 30' SKIP)
- 4 LINE 4" (WHITE LANE LINE - 10' DASH, 30' SKIP)
- 5 LINE 4" (WHITE SOLID LINE)
- 6 LINE 6" (WHITE SOLID LINE)
- 7 LINE 6" (WHITE LANE LINE - 2' DASH, 6' SKIP)
- 8 LINE 8" (WHITE SOLID LINE)
- 9 LINE 12" (WHITE SOLID LINE)
- 10 LINE 12" (WHITE DIAGONAL LINE)
- 11 LINE 12" (YELLOW DIAGONAL LINE)
- 12 LINE 24" (WHITE STOP BAR)
- 13 LETTERS AND SYMBOLS (TYP.)

NOTES:
 1. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC UNLESS OTHERWISE SPECIFIED.
 2. RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE USED THROUGHOUT THE PROJECT LIMITS. SEE DISTRICT DETAIL TC-11.



COMPANY NAME: HRGreen
 PROJECT CONTACT: HRGreen.com
 DATE PLOTTED: 12/19/2012 11:42:23 AM
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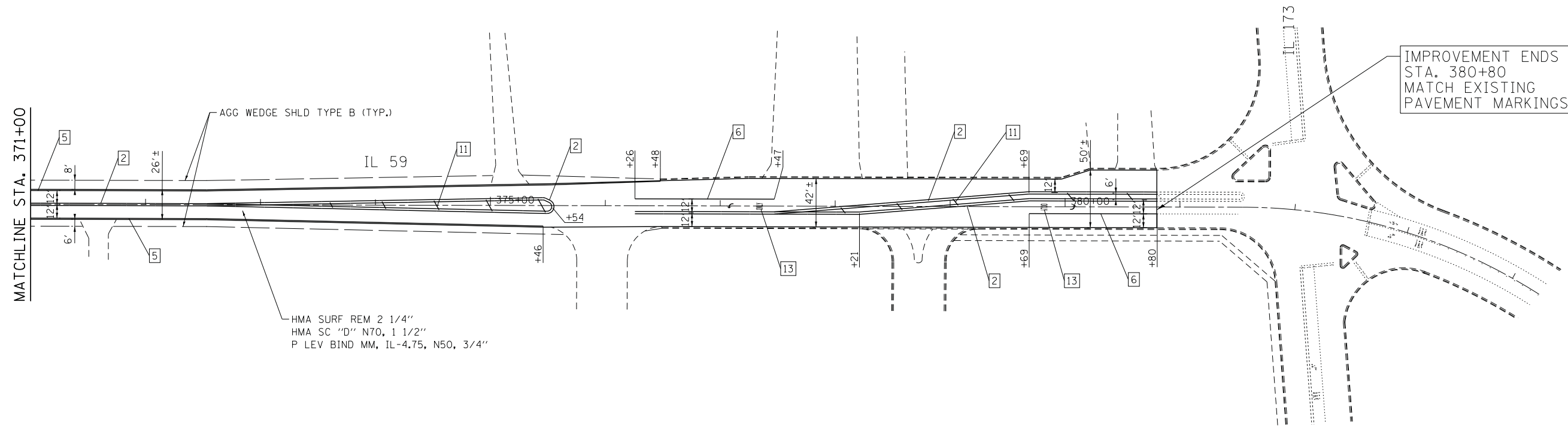
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PLOT DATE = 12/19/2012	DATE - 12/18/2012	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ROADWAY AND PAVEMENT MARKING PLAN
 ILLINOIS ROUTE 59 (HIGHWOODS DR. TO IL RTE. 173)**

SCALE: 1" = 50' SHEET NO. 5 OF 6 SHEETS STA. 343+00 TO STA. 371+00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104	105W-RS-1	LAKE	26	11
CONTRACT NO. 60N46				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



IMPROVEMENT ENDS
STA. 380+80
MATCH EXISTING
PAVEMENT MARKINGS

HMA SURF REM 2 1/4"
HMA SC "D" N70, 1 1/2"
P LEV BIND MM, IL-4.75, N50, 3/4"

ROADWAY LEGEND

- EXISTING INLET
- EXISTING CATCH BASIN
- ⊙ EXISTING MANHOLE
- T TELEPHONE (ADJUSTMENTS PERFORMED BY OTHERS)
- ⊕ FRAMES AND LIDS TO BE ADJUSTED, SPECIAL

PAVEMENT MARKING LEGEND

- | | | |
|--|--|------------------------------------|
| 1 LINE 4" (YELLOW SOLID LINE) | 5 LINE 4" (WHITE SOLID LINE) | 10 LINE 12" (WHITE DIAGONAL LINE) |
| 2 LINE 4" (DOUBLE YELLOW SOLID LINES) | 6 LINE 6" (WHITE SOLID LINE) | 11 LINE 12" (YELLOW DIAGONAL LINE) |
| 3 LINE 4" (YELLOW - 10' DASH, 30' SKIP) | 7 LINE 6" (WHITE LANE LINE - 2' DASH, 6' SKIP) | 12 LINE 24" (WHITE STOP BAR) |
| 4 LINE 4" (WHITE LANE LINE - 10' DASH, 30' SKIP) | 8 LINE 8" (WHITE SOLID LINE) | 13 LETTERS AND SYMBOLS (TYP.) |
| | 9 LINE 12" (WHITE SOLID LINE) | |

NOTES:

1. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC UNLESS OTHERWISE SPECIFIED.
2. RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE USED THROUGHOUT THE PROJECT LIMITS. SEE DISTRICT DETAIL TC-11.



COMPANY NAME: HRGreen
 PROJECT CONTACT: HRGreen.com
 DATE PLOTTED: 12/19/2012 11:41:28 AM
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 PEN TABLE: standard-trans.tbl

HRGreen.com
 Illinois Professional Design Firm
 #184-001322

USER NAME = spenel	DESIGNED - CMH	REVISED -
	DRAWN - SMP	REVISED -
PLOT SCALE = 1" = 50'	CHECKED - TEH	REVISED -
PLOT DATE = 12/19/2012	DATE - 12/18/2012	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ROADWAY AND PAVEMENT MARKING PLAN
ILLINOIS ROUTE 59 (HIGHWOODS DR. TO IL RTE. 173)**

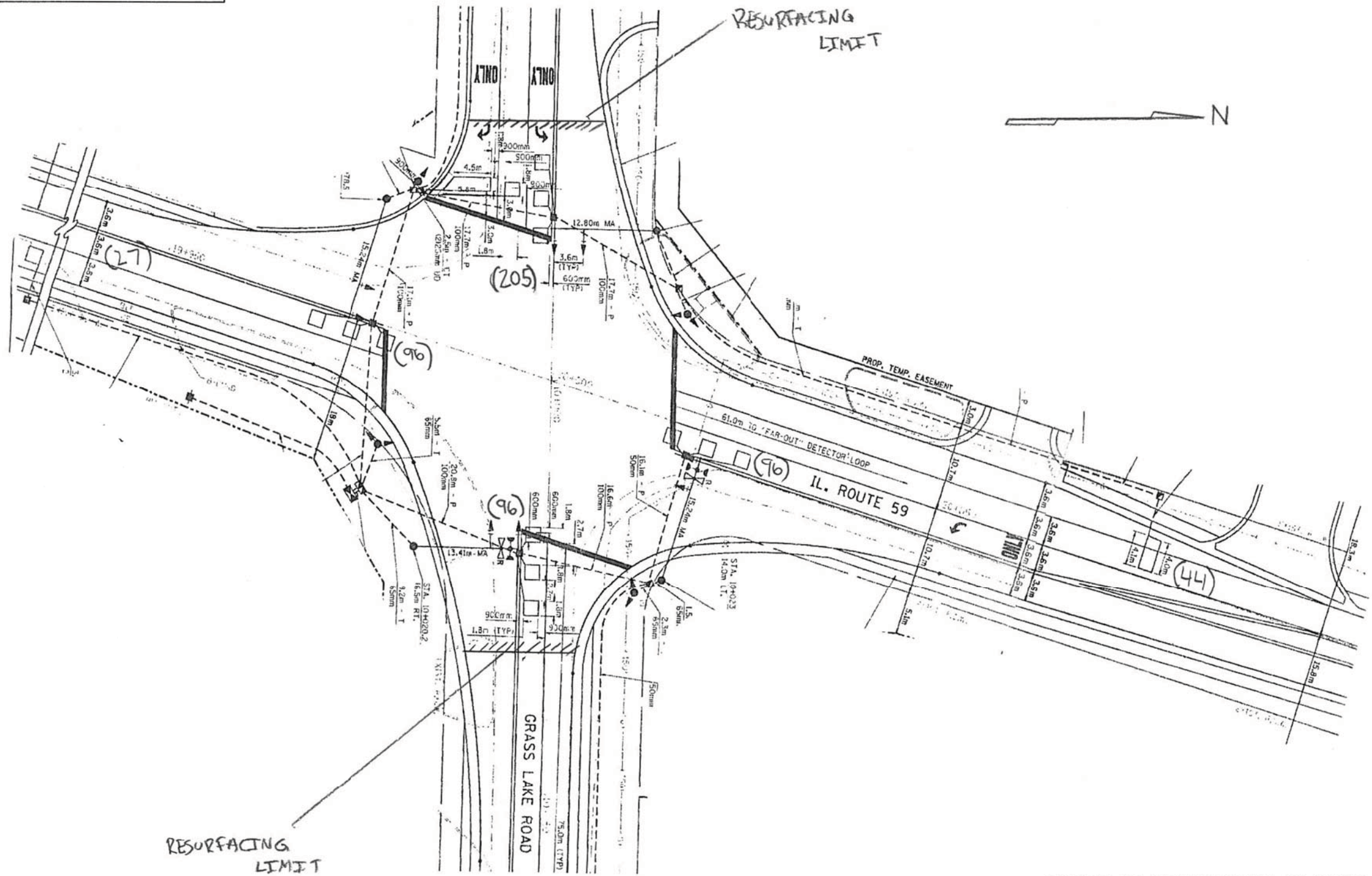
SCALE: 1" = 50' SHEET NO. 6 OF 6 SHEETS STA. 371+00 TO STA. END

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104	105W-RS-1	LAKE	26	12
CONTRACT NO. 60N46				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

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

TRAFFIC SIGNAL LEGEND

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



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

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

CODE	QUANTITY	UNIT	ITEM
88600600	564	FOOT	DETECTOR LOOP, REPLACEMENT

COMPANY NAME: HRGreen
 PROJECT CONTACT: HRGreen.com
 DATE PLOTTED: 10/12/2012 9:01:02 PM
 FILE NAME: 86100196.LOT-sig-01.dwg
 PLOT DRIVER: pdcfat
 PEN TABLE: standard-trans.tbl



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PLOT SCALE = N.T.S.	DRAWN -	REVISED -
PLOT DATE = 10/12/2012	CHECKED -	REVISED -
	DATE = 10/12/2012	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**DISTRICT 1 - DETECTOR LOOP REPLACEMENT
 ILLINOIS ROUTE 59 AT GRASS LAKE RD.**

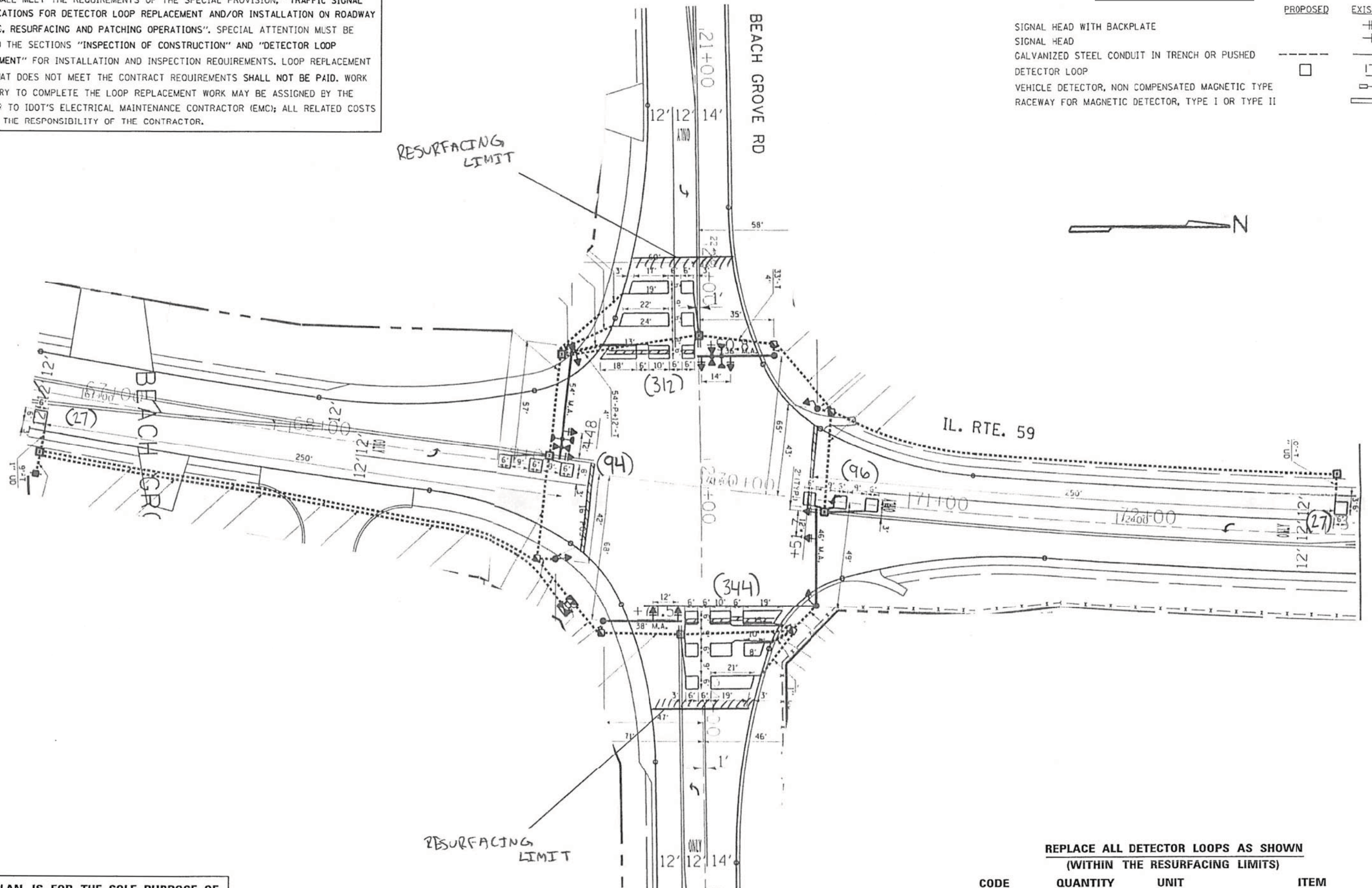
SCALE: N.T.S. SHEET NO. 1 OF 3 SHEETS STA. TO STA.

F.A. RTE. 104	SECTION 105W-RS-1	COUNTY LAKE	TOTAL SHEETS 26	SHEET NO. 13
CONTRACT NO. 60N46			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

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

TRAFFIC SIGNAL LEGEND

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



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

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

CODE	QUANTITY	UNIT	ITEM
88600600	900	FOOT	DETECTOR LOOP, REPLACEMENT

COMPANY NAME: HRGreen
 PROJECT CONTACT: HRGreen.com
 DATE PLOTTED: 10/12/2012 9:05:08 AM
 FILE NAME: 86100196.017-sig-02.dgn
 PLOT DRIVER: default
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USER NAME = spenel	DESIGNED -	REVISED -
PLOT SCALE = N.T.S.	DRAWN -	REVISED -
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

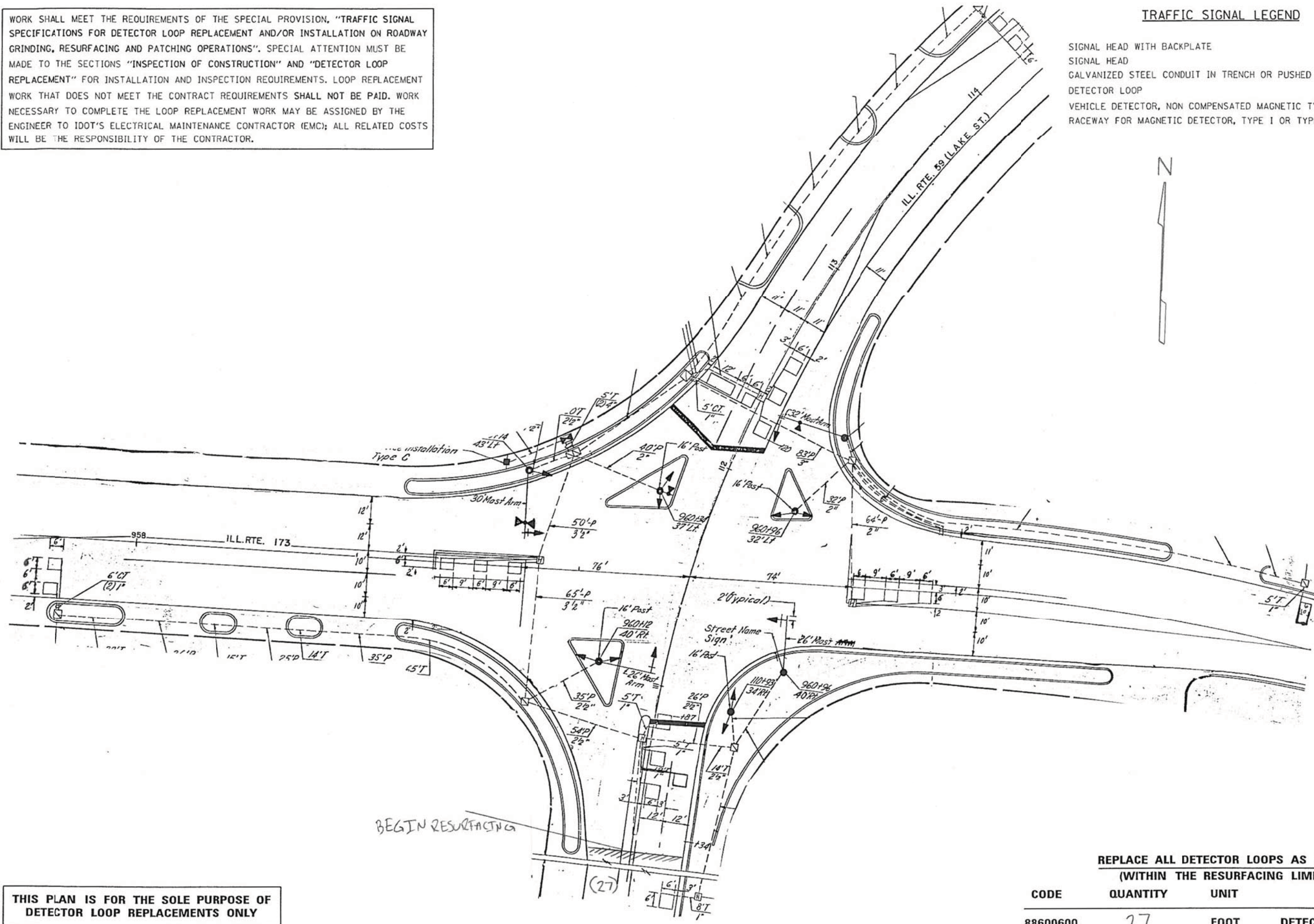
DISTRICT 1 - DETECTOR LOOP REPLACEMENT
 ILLINOIS ROUTE 59 AT BEACH GROVE RD.
 SCALE: N.T.S. SHEET NO. 2 OF 3 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104	105W-RS-1	LAKE	26	14
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO.	60N46	

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	27	FOOT	DETECTOR LOOP, REPLACEMENT

COMPANY NAME: HRGreen
 PROJECT CONTACT: HRGreen.com
 DATE PLOTTED: 10/12/2012 9:06:10 PM
 FILE NAME: 86100196.LOT-sig-03.dwg
 PLOT DRIVER: pplot
 PEN TABLE: standard-trans.tbl



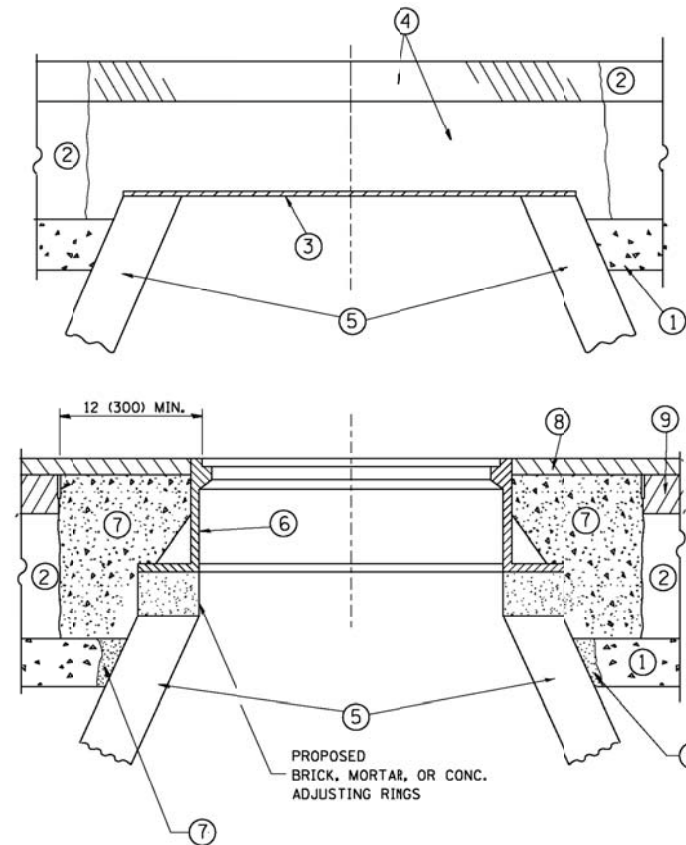
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PLOT DATE = 10/12/2012	CHECKED -	REVISED -
	DATE = 10/12/2012	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**DISTRICT 1 - DETECTOR LOOP REPLACEMENT
 ILLINOIS ROUTE 59 AT ILLINOIS ROUTE 173**

SCALE: N.T.S. SHEET NO. 3 OF 3 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104	105W-RS-1	LAKE	26	15
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60N46	



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 109.24 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

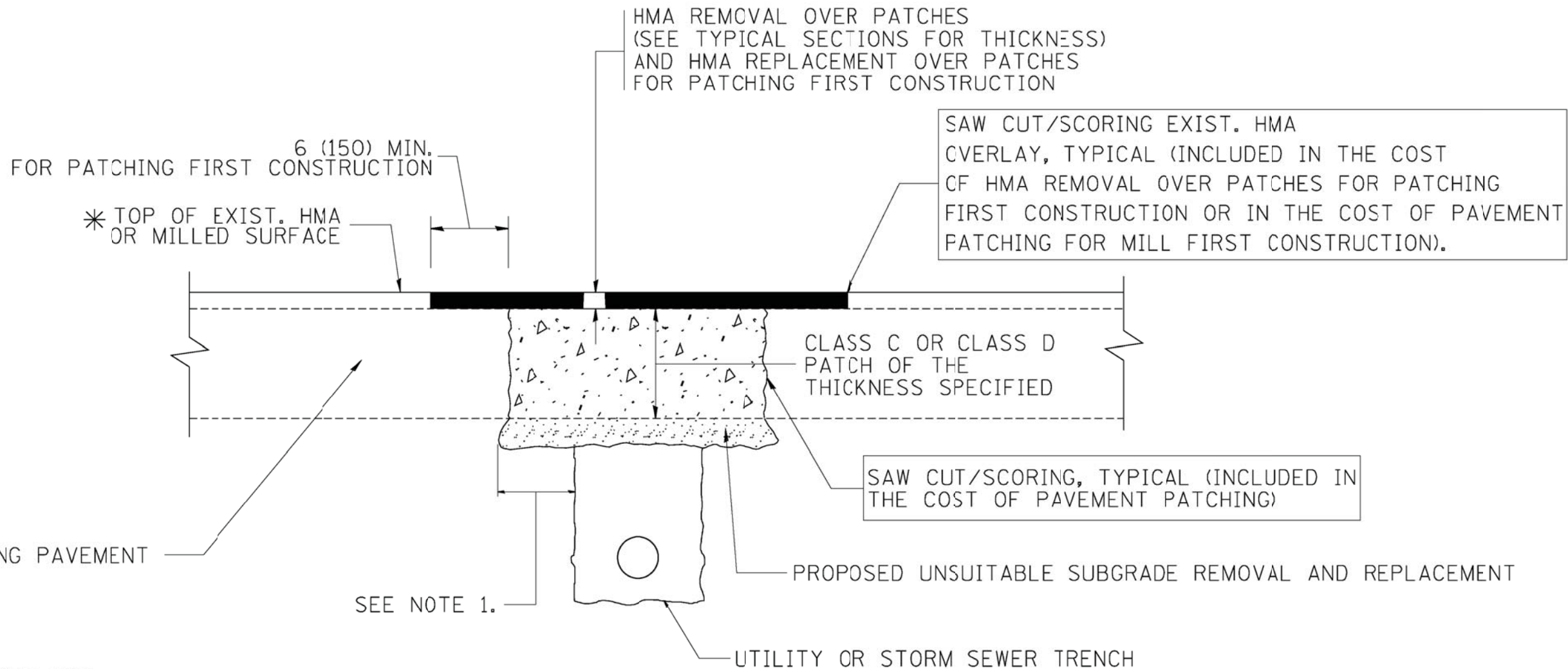
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

COMPANY NAME: HRGreen
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		DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 1/8" = 1'-0"	CHECKED -	REVISED - R. BORO 03-09-11
	PLOT DATE = 12/6/2011	DATE - 10-25-94	REVISED - R. BORO 12-06-11

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCALE: NONE		SHEET NO. OF SHEETS		STA. TO STA.	
DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING					
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
104	105W-RS-1	LAKE	26	16	
BD600-03 (BD-8)			CONTRACT NO. 60N46		
FED. ROAD DIST. NO. 1 ILLINOIS/FED. AID PROJECT					



* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

NOTES:

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

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

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

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

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

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

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 PROJECT CONTACT: HRGreen.com
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PAVEMENT PATCHING FOR
 HMA SURFACED PAVEMENT

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104	105W-RS-1	LAKE	26	17
BD400-04 (BD-22)			CONTRACT NO.	60N46
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

T/2 *

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

3" (75) MIN.

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.

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,

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

② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED

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

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

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

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

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

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

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

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

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

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

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PROJECT CONTACT: HRGreen.com
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PEN TABLE: standard-trans.tbl



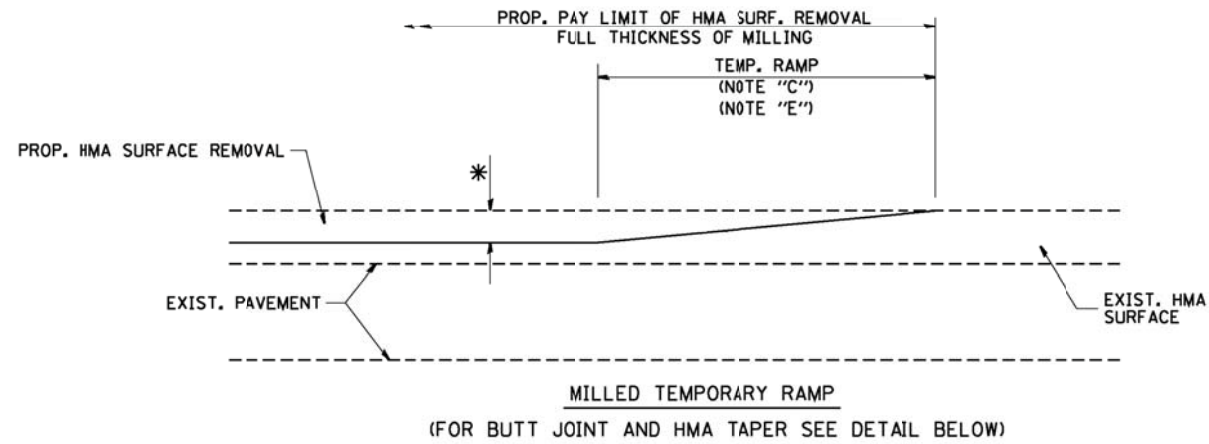
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	DRAWN -	REVISED - A. ABBAS 03-21-97
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PLOT DATE = 12/19/2009	DATE - 03-11-94	REVISED - R. BORO 12-15-09

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CURB OR CURB AND GUTTER
REMOVAL AND REPLACEMENT

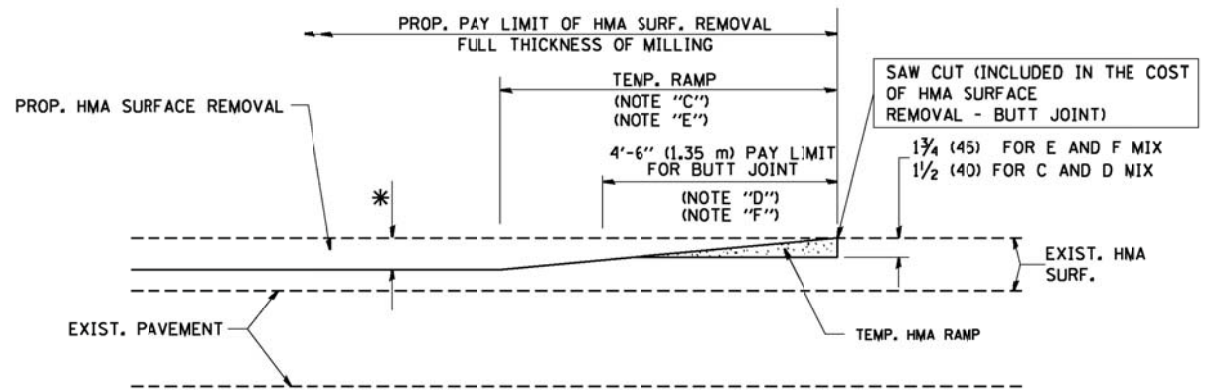
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BD600-06 (BD-24)			CONTRACT NO.	60N46
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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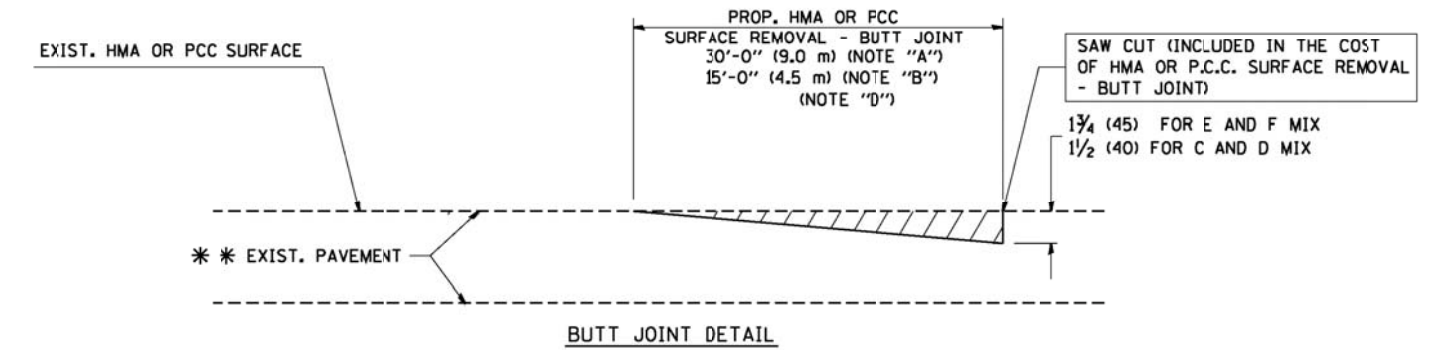
MILLED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

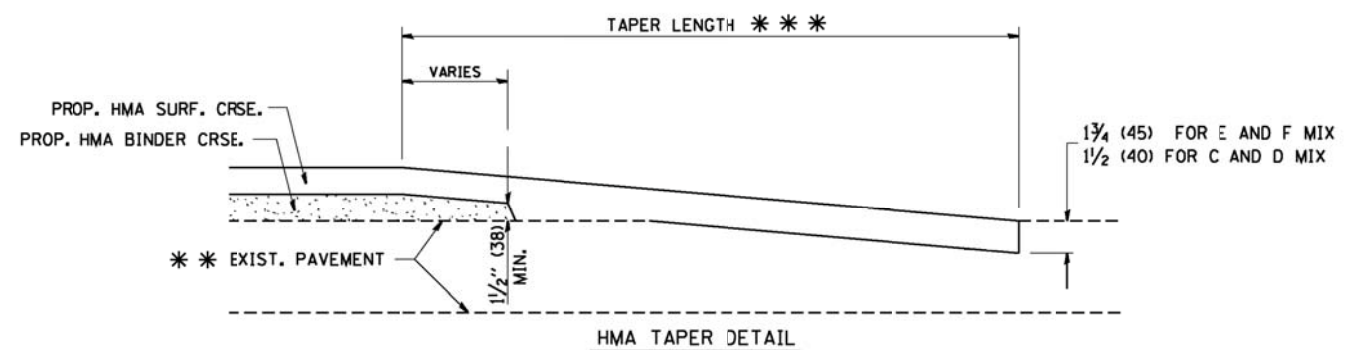


HMA CONSTRUCTED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 2
TYPICAL TEMPORARY RAMP



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

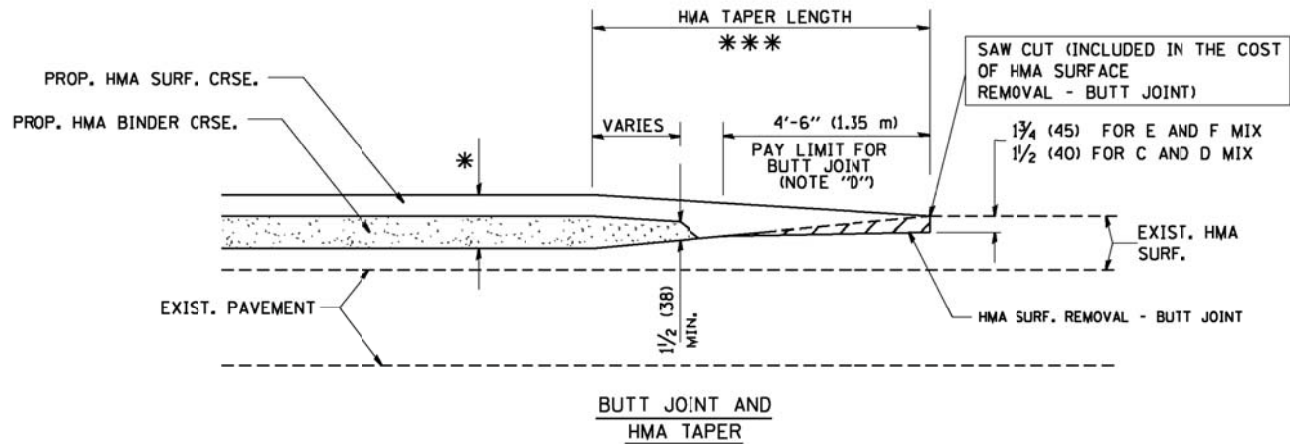
NOTES

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

BASIS OF PAYMENT:

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

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



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

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 PROJECT CONTACT: HRGreen.com
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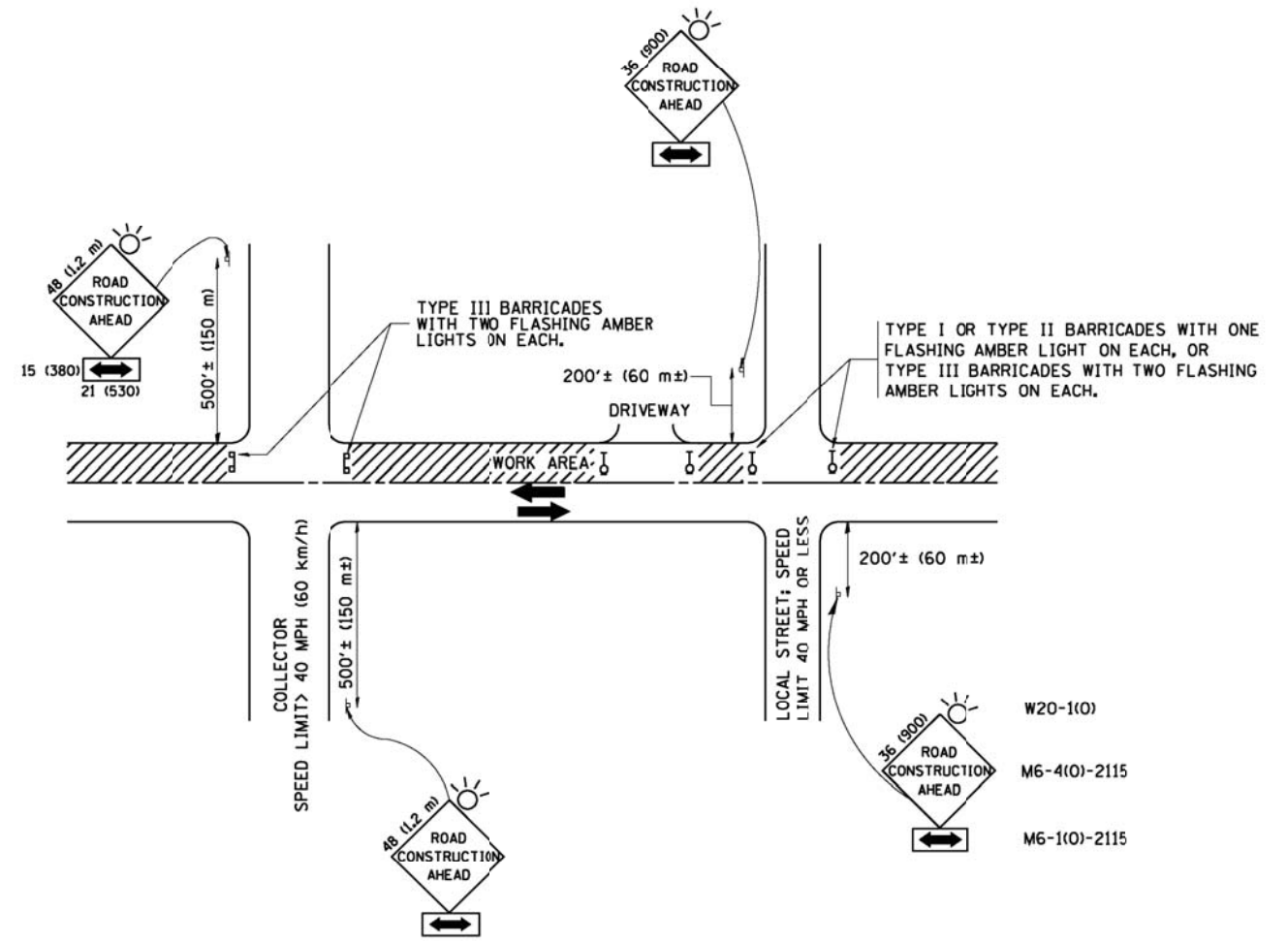


USER NAME = geglennob	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
PLOT SCALE = 50.0000' / IN.	DRAWN -	REVISED - A. ABBAS 03-21-97
PLOT DATE = 1/4/2008	CHECKED -	REVISED - M. GOMEZ 04-06-01
	DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

BUTT JOINT AND HMA TAPER DETAILS	
SCALE: NONE	SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104	105W-RS-1	LAKE	26	19
BD400-05 BD32		CONTRACT NO.	60N46	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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

NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

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 PROJECT CONTACT: HRGreen.com
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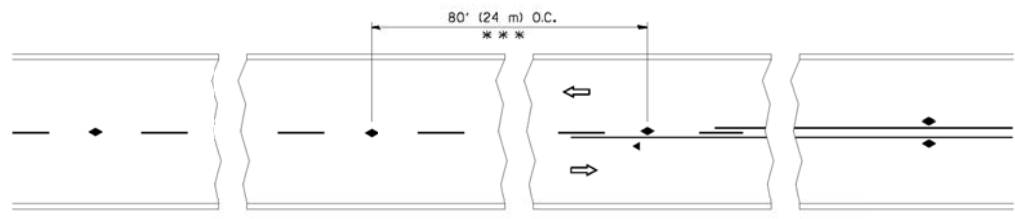
HRGreen
 HRGreen.com
 Illinois Professional Design Firm
 #184-001322

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	DRAWN -	REVISED - A. HOUSEH 03-06-96
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

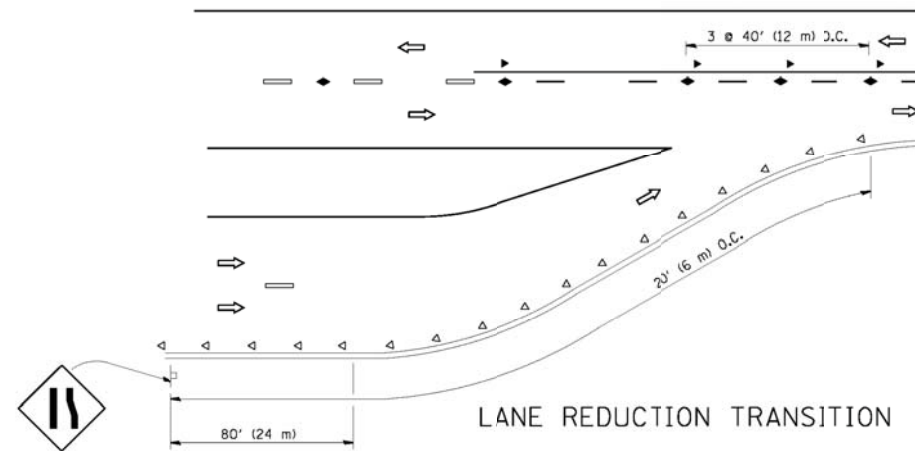
TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS			
SCALE: NONE	SHEET NO. OF SHEETS	STA. TO STA.	

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TC-10		CONTRACT NO.	60N46	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

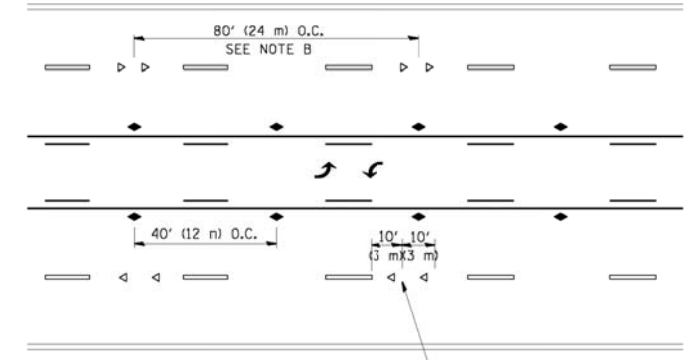


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

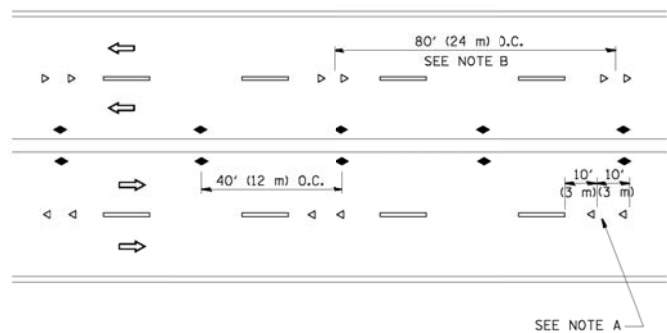
TWO-LANE/TWO-WAY



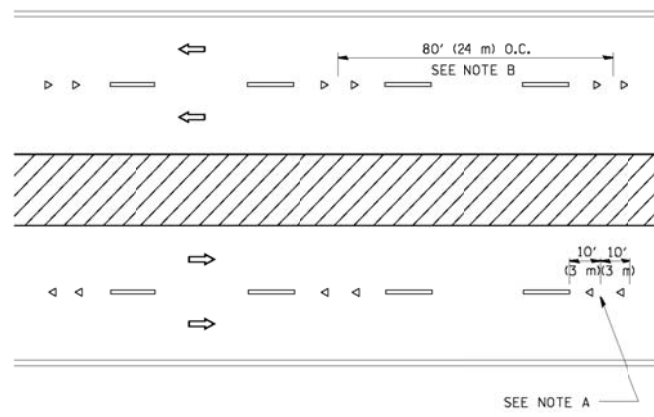
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

SYMBOLS

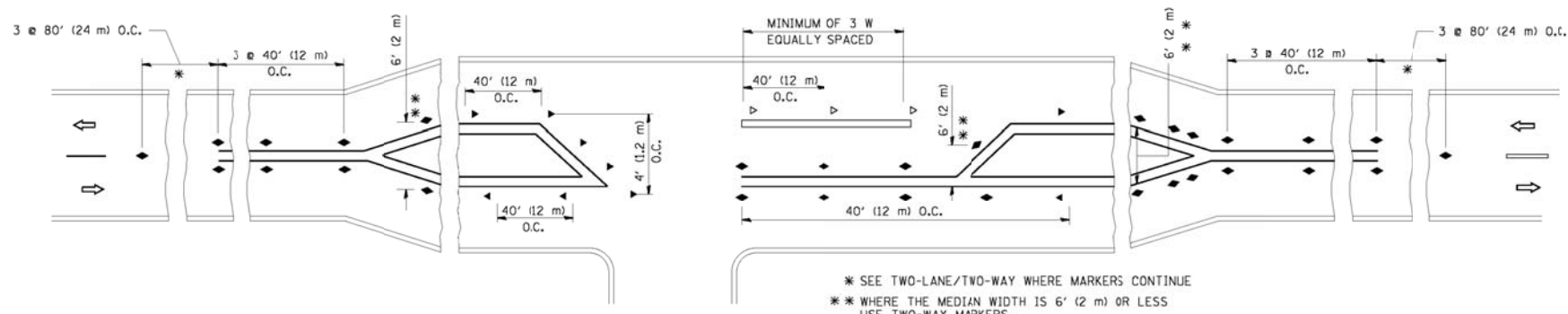
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

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

DESIGN NOTES

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



LEFT TURN

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

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

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 PROJECT CONTACT: HRGreen.com
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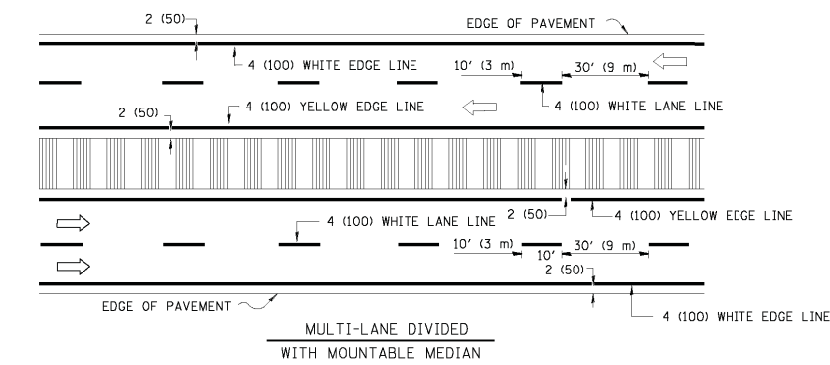
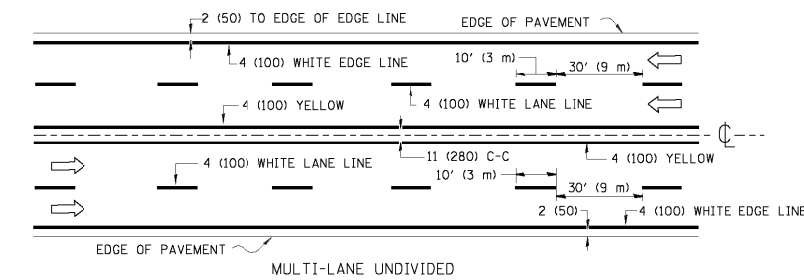
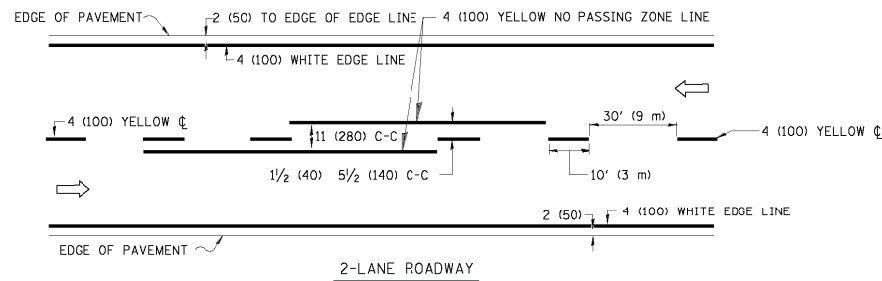


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	DRAWN: -	REVISED: - T. RAMMACHER 03-12-99
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

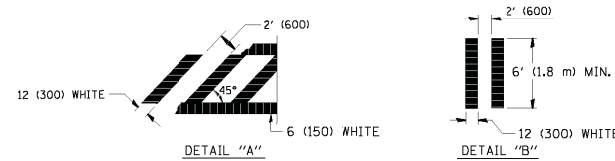
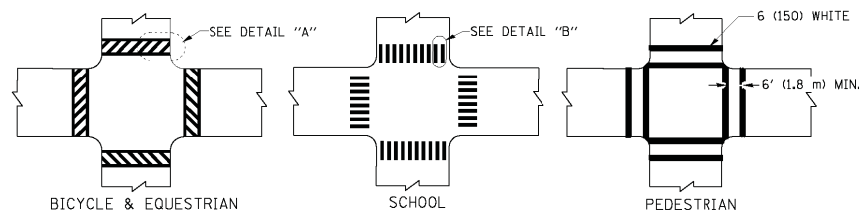
TYPICAL APPLICATIONS	
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS
STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104	105W-RS-1	LAKE	26	21
TC-11			CONTRACT NO.	60N46
FED. ROAD DIST. NO. 1 ILLINOIS/FED. AID PROJECT				

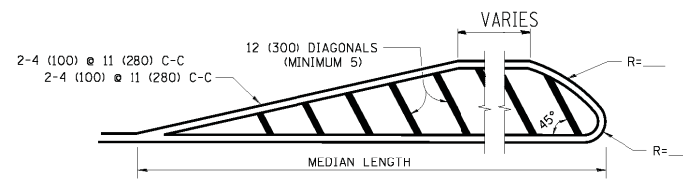
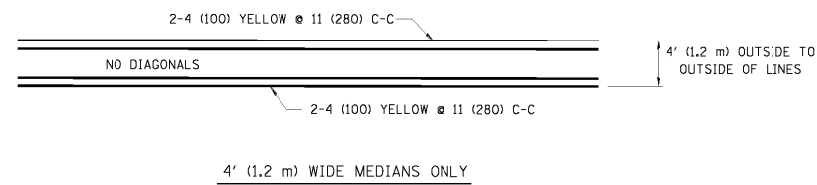


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING



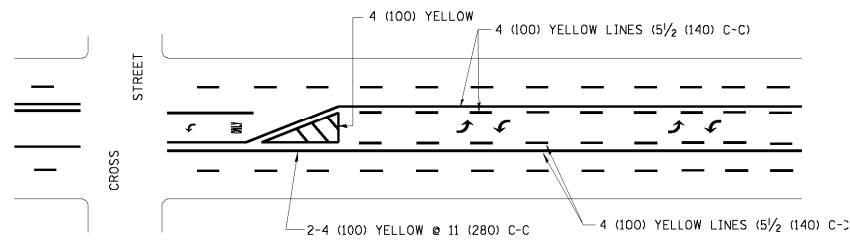
TYPICAL CROSSWALK MARKING



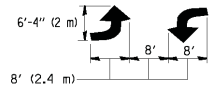
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

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

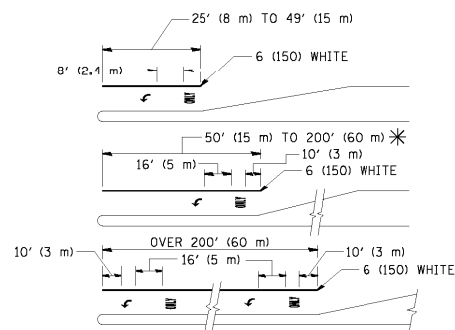


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

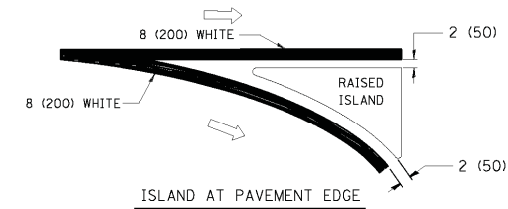
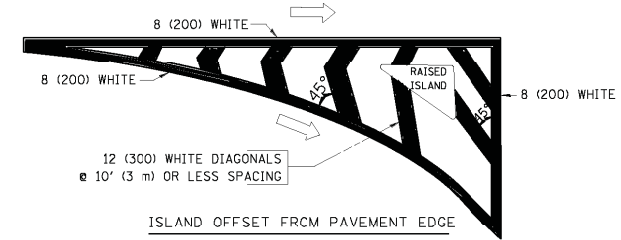


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

* 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 FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5 1/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIK & EQUESTRIAN) B. LONGITUDINAL (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
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.

COMPANY NAME: HRGreen
PROJECT CONTACT: HRGreen.com
DATE PLOTTED: 10/12/2012 7:55:17 PM
FILE NAME: 86100196101-de+10.dgn
PLOT DRIVER: pafcah
PEN TABLE: standard-trans.tbl

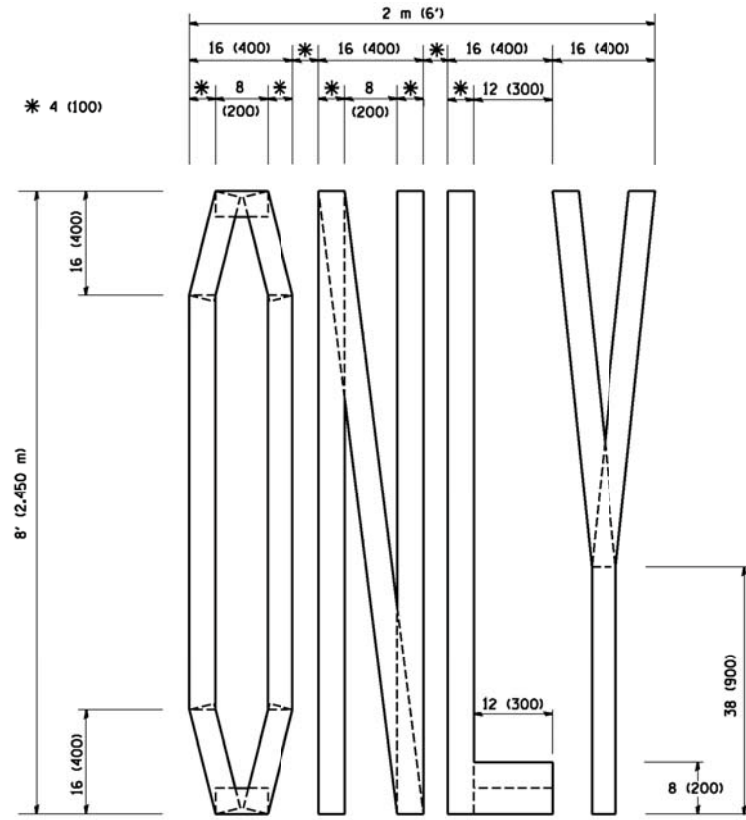


USER NAME = drvakosgn	DESIGNED - EVERS	REVISED - T. RAMMACHER 10-27-94
PLOT SCALE = 50.0000' / IN.	DRAWN -	REVISED - C. JUCIUS 09-09-09
PLOT DATE = 9/9/2009	CHECKED -	REVISED -
	DATE - 03-19-90	REVISED -

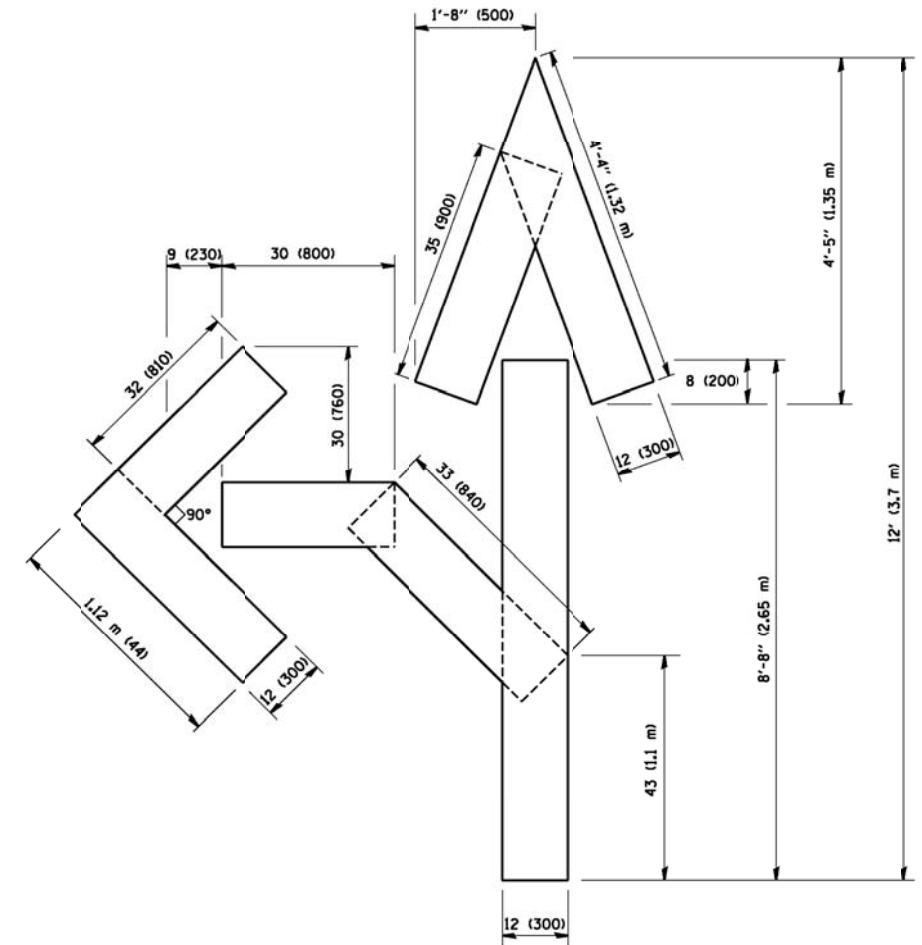
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE			
TYPICAL PAVEMENT MARKINGS			
SCALE: NONE	SHEET NO.	OF SHEETS	STA. TO STA.

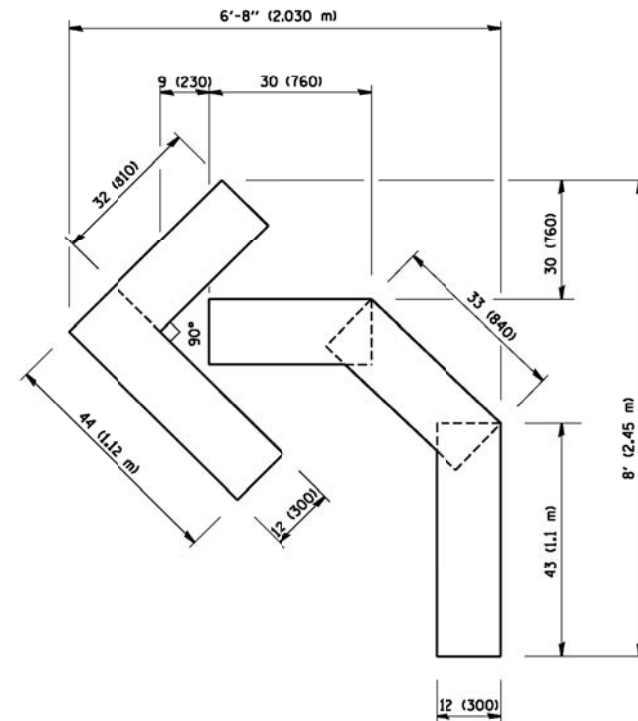
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104	105W-RS-1	LAKE	26	22
TC-13		CONTRACT NO.	60N46	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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



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



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

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

COMPANY NAME: HRGreen
 PROJECT CONTACT: HRGreen.com
 DATE PLOTTED: 10/12/2012 2:57:55 PM
 FILE NAME: 86100196101-det-11.dgn
 PLOT DRIVER: pafcah
 PEN TABLE: standard-trans.tbl



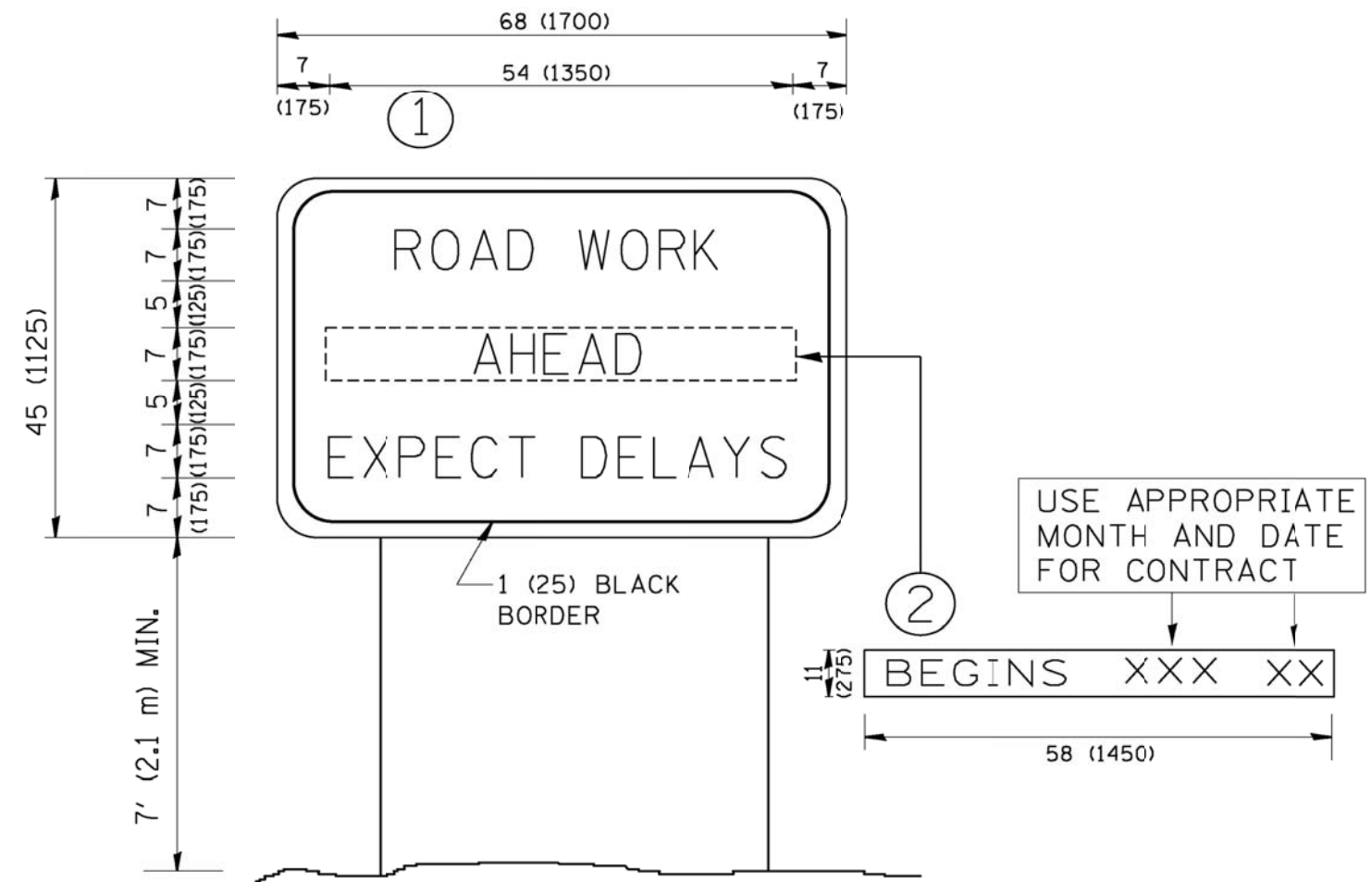
USER NAME = geglennob	DESIGNED -	REVISED - T. RAMMACHER 06-05-96
	DRAWN -	REVISED - T. RAMMACHER 11-04-97
PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - T. RAMMACHER 03-02-98
PLOT DATE = 1/4/2008	DATE = 09-18-94	REVISED - E. GOMEZ 08-28-00

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS
 FOR TRAFFIC STAGING

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104	105W-RS-1	LAKE	26	23
TC-16		CONTRACT NO.	60N46	
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.

COMPANY NAME: HRGreen
 PROJECT CONTACT: HRGreen.com
 DATE PLOTTED: 10/15/2012 3:15:24 PM
 FILE NAME: 86100196.L07-def-12.dgn
 PLOT DRIVER: default
 PEN TABLE: standard-trans.tbl

HRGreen
 HRGreen.com
 Illinois Professional Design Firm
 #184-001322

USER NAME = gegljenobt	DESIGNED -	REVISED - R. MIRS 09-15-97
	DRAWN -	REVISED - R. MIRS 12-11-97
PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

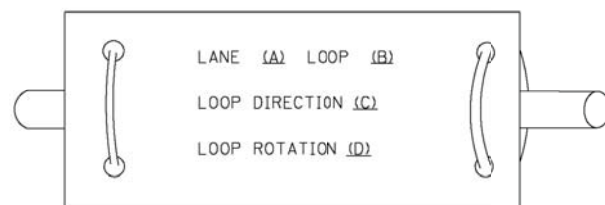
ARTERIAL ROAD INFORMATION SIGN	
SCALE: NONE	SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TC-22		CONTRACT NO.	60N46	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

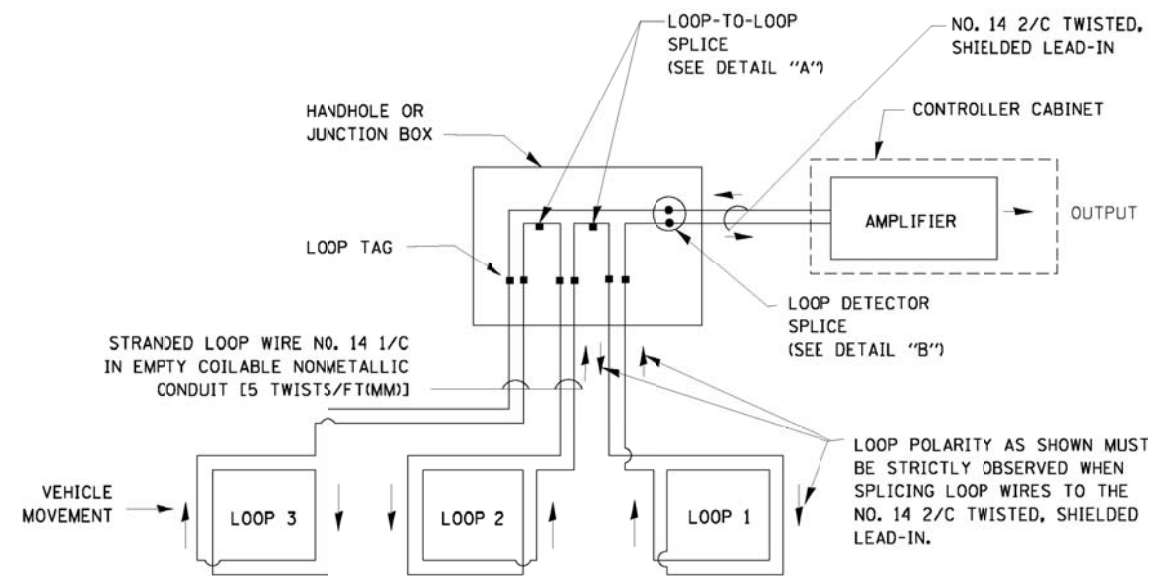
LOOP DETECTOR NOTES

- 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.
- 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.
- 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.
- ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- 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.
- 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.
- PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

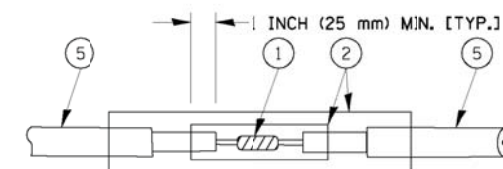


- LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

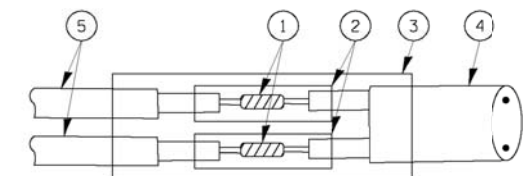


DETECTOR LOOP WIRING SCHEMATIC

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

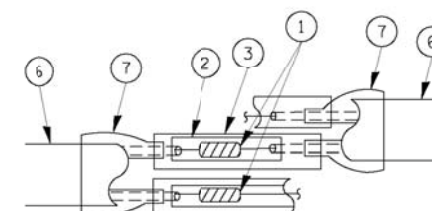


DETAIL "A"
LOOP-TO-LOOP SPLICE

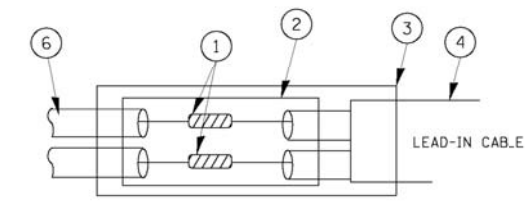


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

- WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- NO. 14 2/C TWISTED, SHIELDED CABLE.
- LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- PREFORMED LOOP
- XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. T²CO CBR-2 OR APPROVED EQUAL

COMPANY NAME: HRGreen
PROJECT CONTACT: HRGreen.com
DATE PLOTTED: 10/12/2012 8:25:32 PM
FILE NAME: 86100196107-dst-11.dgn
PLOT DRIVER: pdfcut
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PLOT DATE: 11/4/2009	DATE: 10-28-09	REVISED:

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

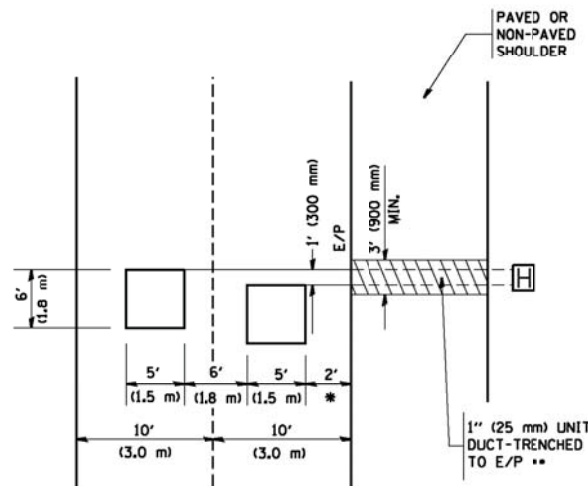
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104	105W-RS-1	LAKE	26	25
TS-05			CONTRACT NO.	60N46
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.



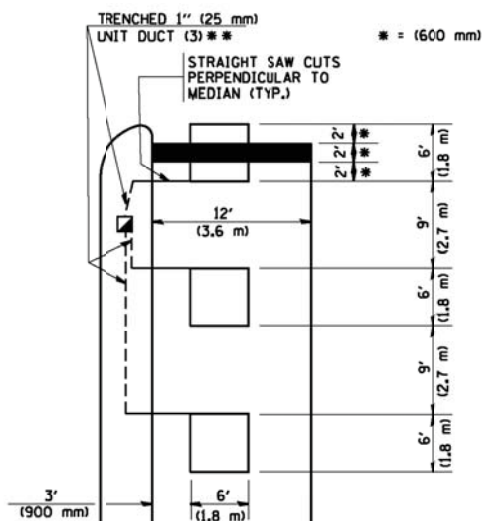
* = (600 mm)

** 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 314001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.

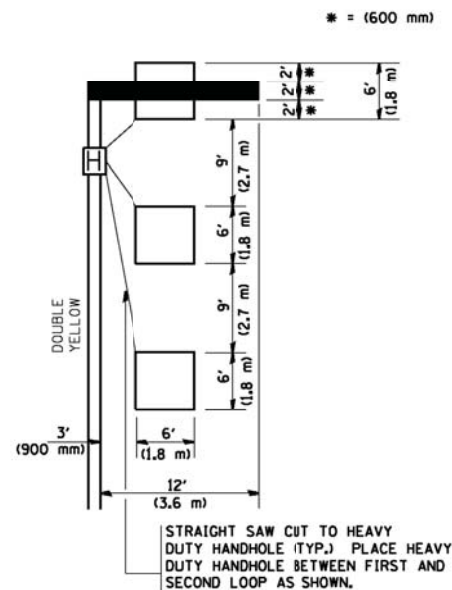


** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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)



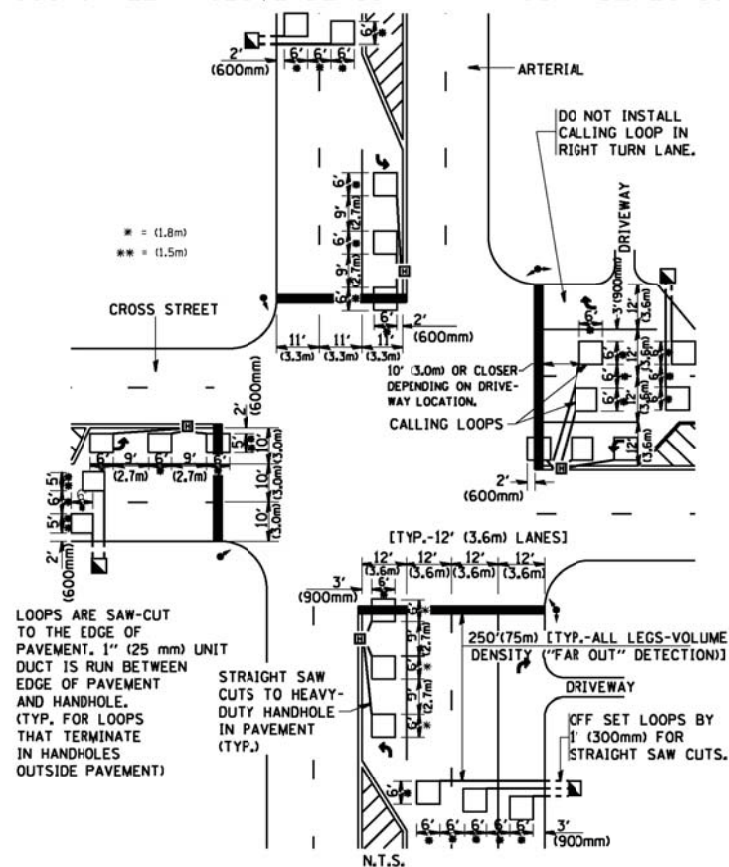
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

NOTES:

VEHICLES LOOP DETECTORS

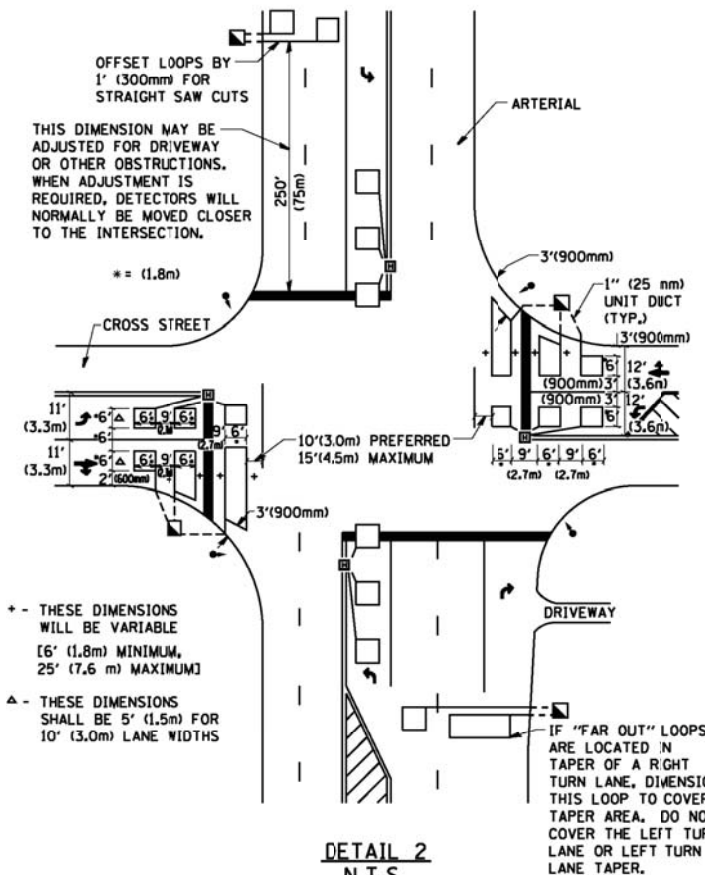
- * ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST 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.

**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.**

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.

COMPANY NAME: HRGreen
PROJECT CONTACT: HRGreen.com
DATE PLOTTED: 10/15/2012 2:56:02 PM
FILE NAME: 86100196107-de+14.dgn
PLOT DRIVER: pdcfat
PEN TABLE: standard-trans.tbl



USER NAME = geglennobt
PLOT SCALE = 50.0000' / IN.
PLOT DATE = 1/4/2008

DESIGNED -
DRAWN -
CHECKED - R.K.F.
DATE -

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104	105W-RS-1	LAKE	26	26
TS-07			CONTRACT NO.	60N46
FED. ROAD DIST. NO. 1 ILLINOIS/FED. AID PROJECT				