

04-26-13 LETTING ITEM 017

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3502	49-RS-6	LAKE	33	1
		ILLINOIS	CONTRACT NO. 60N31	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

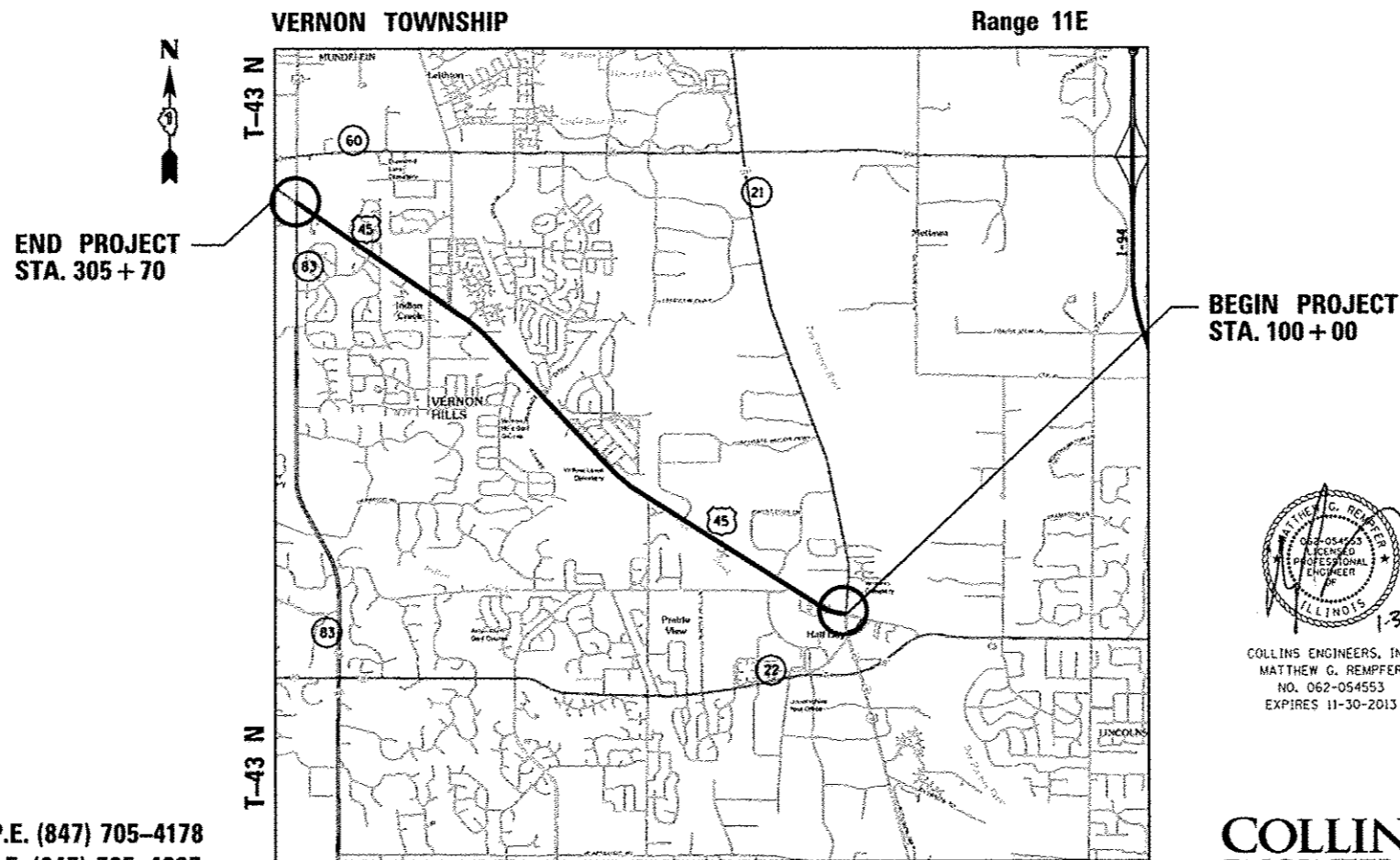
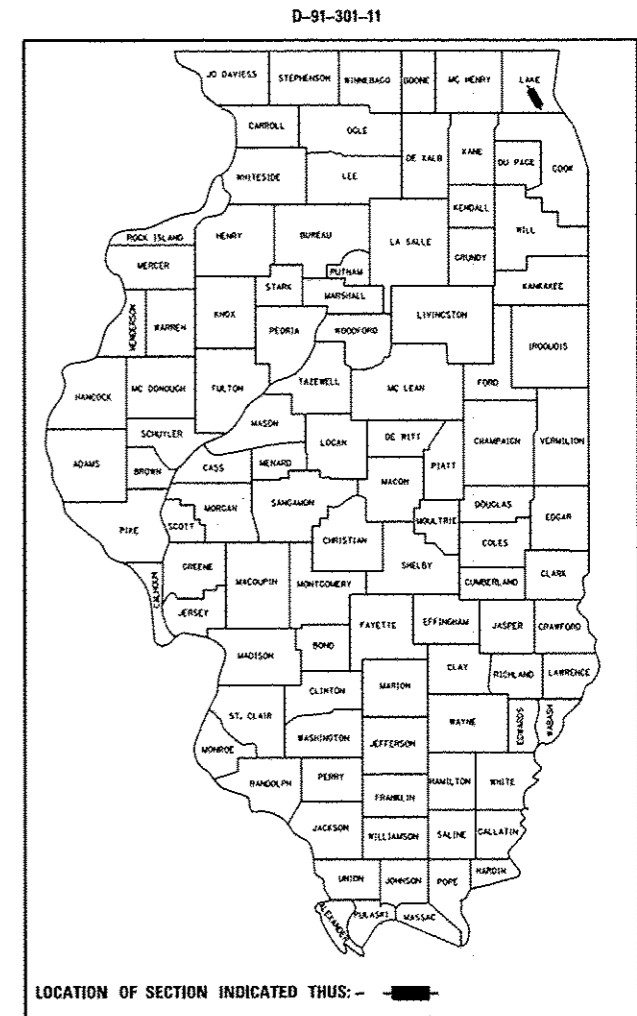
DESIGN DESIGNATION

ADT 19,500 (2009)
SPEED LIMIT 40 MPH

IMPROVEMENT LOCATED IN THE VILLAGES OF MUNDELEIN, VERNON HILLS, INDIAN CREEK, AND LINCOLNSHIRE

**FAU 3502: US ROUTE 45 (OLD HALF DAY ROAD)
SECTION 49-RS-6
IL ROUTE 83 TO
OLD IL ROUTE 22
RESURFACING
LAKE COUNTY**

C-91-301-11



END PROJECT
STA. 305 + 70

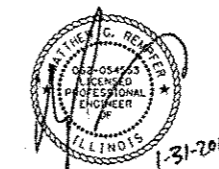
BEGIN PROJECT
STA. 100 + 00

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

PROJECT MANAGER: MR. ISSAM RAYYAN, P.E. (847) 705-4178
PROJECT ENGINEER: MR. ROBERT T. BORO, P.E. (847) 705-4237

CONTRACT NO. 60N31

GROSS LENGTH = 20,570 FT. = 3.90 MILE
NET LENGTH = 20,420 FT. = 3.89 MILE



COLLINS ENGINEERS, INC.
MATTHEW G. REMPPFER
NO. 062-054553
EXPIRES 11-30-2013

COLLINS ENGINEERS
123 N. WACKER DR., SUITE 300
CHICAGO, IL 60606
(312) 704-9300
ILLINOIS PROFESSIONAL DESIGN FIRM
LICENSE NO. 184-000993

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED February 1, 2013

John F. ...
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 22, 2013
John D. Baranzoni, P.E. Jr.
acting ENGINEER OF DESIGN AND ENVIRONMENT

March 22, 2013
Omer Osman, P.E. Jr.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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

INDEX OF SHEETS

1 TITLE SHEET
 2 INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES
 3-4 SUMMARY OF QUANTITIES
 5 TYPICAL SECTIONS
 6-12 ROADWAY AND PAVEMENT MARKING PLANS
 13-21 DETECTOR LOOP REPLACEMENT DETAILS
 22 DETAILS FOR FRAME AND LIDS ADJUSTMENT WITH MILLING (BD-8)
 23 PAVEMENT PATCHING FOR HOT-MIX ASPHALT SURFACED PAVEMENT (BD-22)
 24 CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24)
 25 BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS (BD-32)
 26 TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)
 27 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT) (TC-11)
 28 DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)
 29 TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC (TC-14)
 30 PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING (TC-16)
 31 ARTERIAL ROAD INFORMATION SIGN (TC-22)
 32 DRIVEWAY ENTRANCE SIGNING (TC-26)
 33 DISTRICT ONE DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING (TS-07)

STANDARDS

442201 - 03 CLASS C AND D PATCHES
 482011 - 03 HMA SHLD. STRIPS/SHLDS. WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
 604001 - 03 FRAME AND LIDS TYPE 1
 604091 - 02 FRAME AND GRATE TYPE 24
 606001 - 04 CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
 635006 - 03 REFLECTOR AND TERMINAL MARKER PLACEMENT
 701011 - 03 OFF ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
 701301 - 04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
 701311 - 03 LANE CLOSURE, 2L, 2W, MOVING OPERATIONS-DAY ONLY
 701501 - 04 URBAN, LANE CLOSURE, 2L, 2W, UNDIVIDED
 701606 - 08 URBAN LANE CLOSURE, MULTILANE 2W WITH MOUNTABLE MEDIAN
 701701 - 08 URBAN LANE CLOSURE MULTILANE INTERSECTION
 701901 - 02 TRAFFIC CONTROL DEVICES
 780001 - 03 TYPICAL PAVEMENT MARKINGS

GENERAL NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 1-800-892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. (48 HOUR NOTIFICATION REQUIRED).

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

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

WHEN THE 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 (80 KM/HR) OR LESS AND 1 INCH (25 MM) WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH (80KM/HR). WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES (75MM) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).

UNLESS OTHER CONDITIONS WARRANT EXTENDED LANE CLOSURES 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 MILLING OPERATIONS AND CLASS D PATCHING.

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

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

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

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

LOCATION OF COMBINATION CONCRETE CURB AND GUTTER REPLACEMENT WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

LOCATIONS OF DRAINAGE STRUCTURES AND STORM SEWERS TO BE CLEANED TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

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

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

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

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

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 ON THE PLANS.

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

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, SHOULDERS, CURB, GUTTER, COMBINATION CURB AND GUTTER AND MEDIAN, AND CHAIR SUPPORTS FOR CRC PAVEMENT SHALL BE EPOXY COATED, UNLESS NOTED ON THE PLAN.

FILE NAME *	USER NAME * mramfor	DESIGNED - RG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	US ROUTE 45 (OLD HALF DAY ROAD) INDEX OF SHEETS, LIST OF STATE STANDARDS, AND GENERAL NOTES			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
#FILE#		DRAWN - RG	REVISED -		3502	49-RS-6	LAKE	33	2			
	PLOT SCALE * 100.0000' / in.	CHECKED - MGR	REVISED -					CONTRACT NO. 60N31				
	PLOT DATE * 10/1/2012	DATE - 10/1/2012	REVISED -		SCALE:	SHEET NO. OF SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT			

URBAN
100%
STATE
CONSTR. CODE
0005

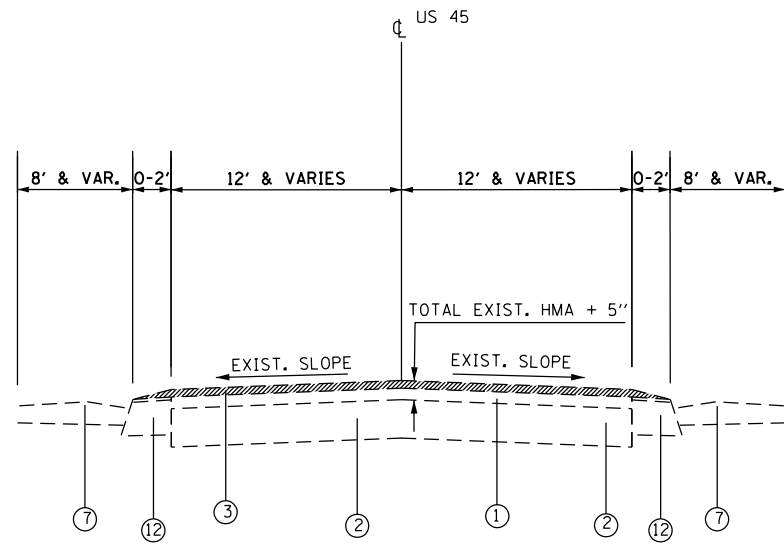
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	79	79
40600300	AGGREGATE (PRIME COAT)	TON	393	393
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	10	10
40600827	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	4017	4017
40600895	CONSTRUCTING TEST STRIP	EACH	2	2
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	1667	1667
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	8295	8295
42001300	PROTECTIVE COAT	SQ YD	79	79
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	97392	97392
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	450	450
44201761	CLASS D PATCHES, TYPE I, 10 INCH	SQ YD	100	100
44201765	CLASS D PATCHES, TYPE II, 10 INCH	SQ YD	580	580
44201769	CLASS D PATCHES, TYPE III, 10 INCH	SQ YD	640	640
44201771	CLASS D PATCHES, TYPE IV, 10 INCH	SQ YD	960	960
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	672	672

URBAN
100%
STATE
CONSTR. CODE
0005

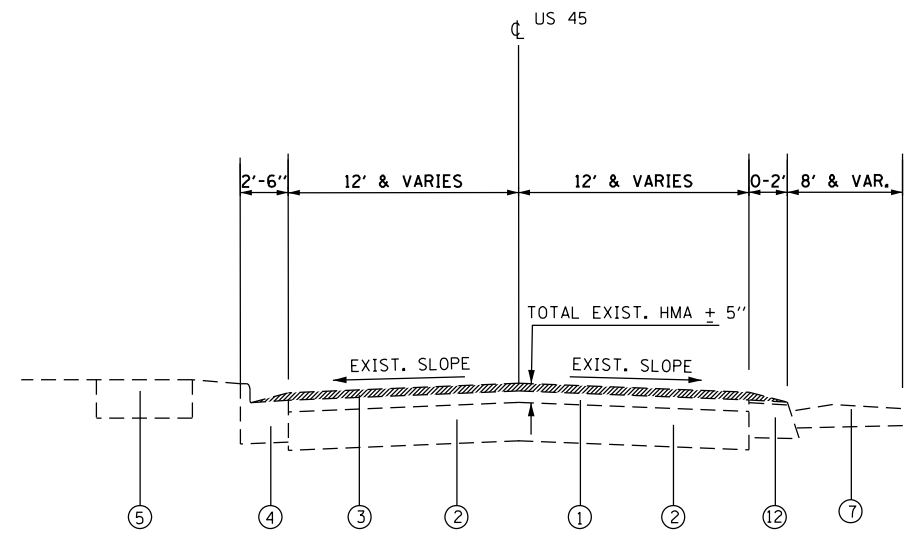
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY
60252800	CATCH BASINS TO BE RECONSTRUCTED	EACH	1	1
60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	12	12
60404950	FRAMES AND GRATES, TYPE 24	EACH	12	12
60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	5	5
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	450	450
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6
67100100	MOBILIZATION	LSUM	1	1
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	LSUM	1	1
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	LSUM	1	1
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	LSUM	1	1
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	8989	8989
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	2546	2546
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	80502	80502
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	10410	10410
70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	213	213

* - SPECIALTY ITEM

FILE NAME	USER NAME	DESIGNED	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		US ROUTE 45 (OLD HALF DAY ROAD) SUMMARY OF QUANTITIES		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
#FILE#		DRAWN	REVISED					3502	49-RS-6	LAKE	33	3			
		CHECKED	REVISED					CONTRACT NO. 60N31							
		DATE	REVISED					ILLINOIS FED. AID PROJECT							
		DATE		SCALE:		SHEET NO. OF SHEETS		STA. TO STA.							

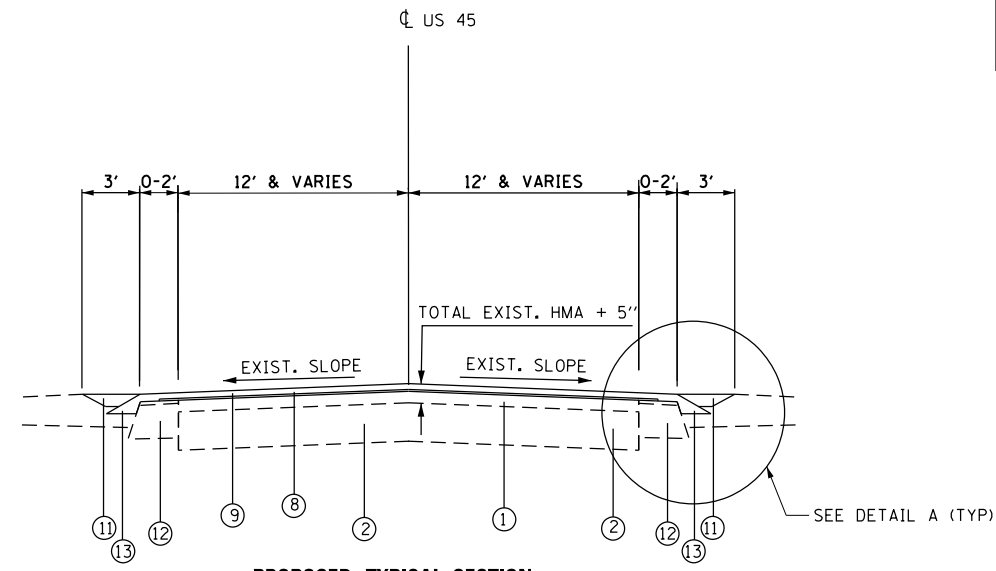


EXISTING TYPICAL SECTION

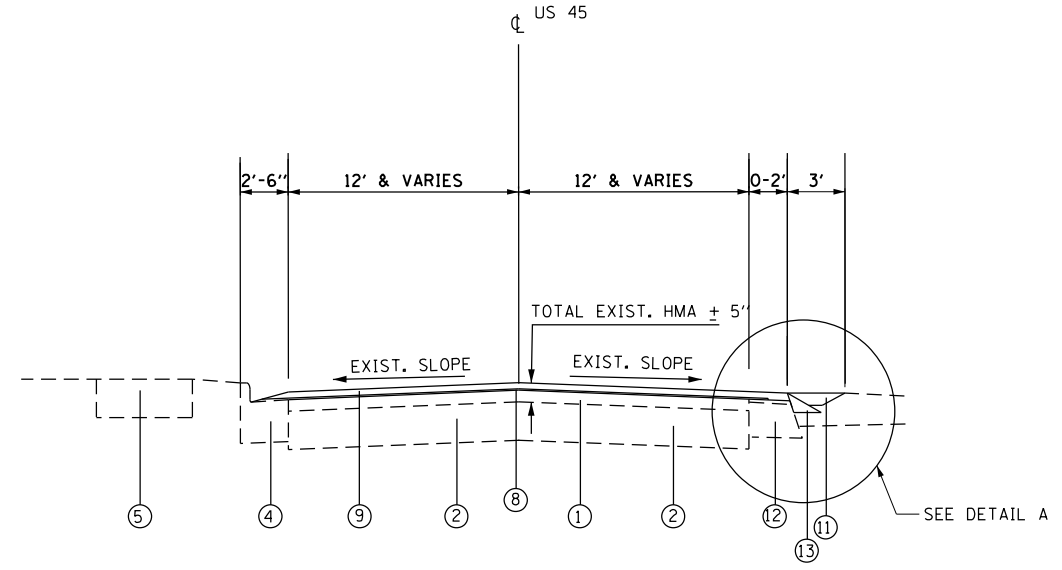


EXISTING TYPICAL SECTION

THE CONTRACTOR SHALL MILL FIRST BEFORE PATCHING



PROPOSED TYPICAL SECTION



PROPOSED TYPICAL SECTION

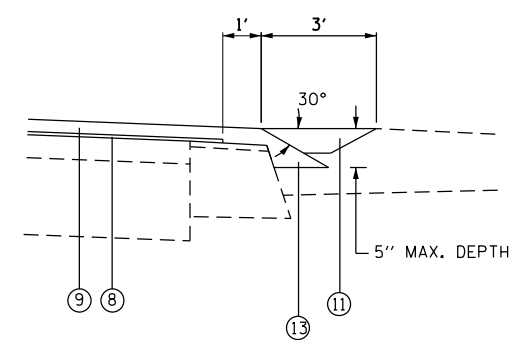
HOT-MIX ASPHALT MIXTURE REQUIREMENTS		AIR VOIDS	Ndes
MIXTURE TYPE			
RESURFACING			
•• HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, (IL 9.5mm)		4% @ 70 GYR.	
POLYMERIZED LEVELING BINDER (MACHINE METHOD) IL-4.75, N50		3.5% @ 50 GYR.	
PATCHING			
CLASS D PATCHES, (HMA BINDER IL-19 mm)		4% @ 70 GYR.	

THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURES IS 112 LBS/SQ YD / IN.

THE "AC TYPE" FOR ALL POLYMERIZED HMA MIXES SHALL BE SBS/SBR PG 70-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG64-22" UNLESS MODIFIED BY THE DISTRICT ONE SPECIAL PROVISIONS.

FOR USE OF RECYCLED MATERIAL, SEE SPECIAL PROVISIONS.

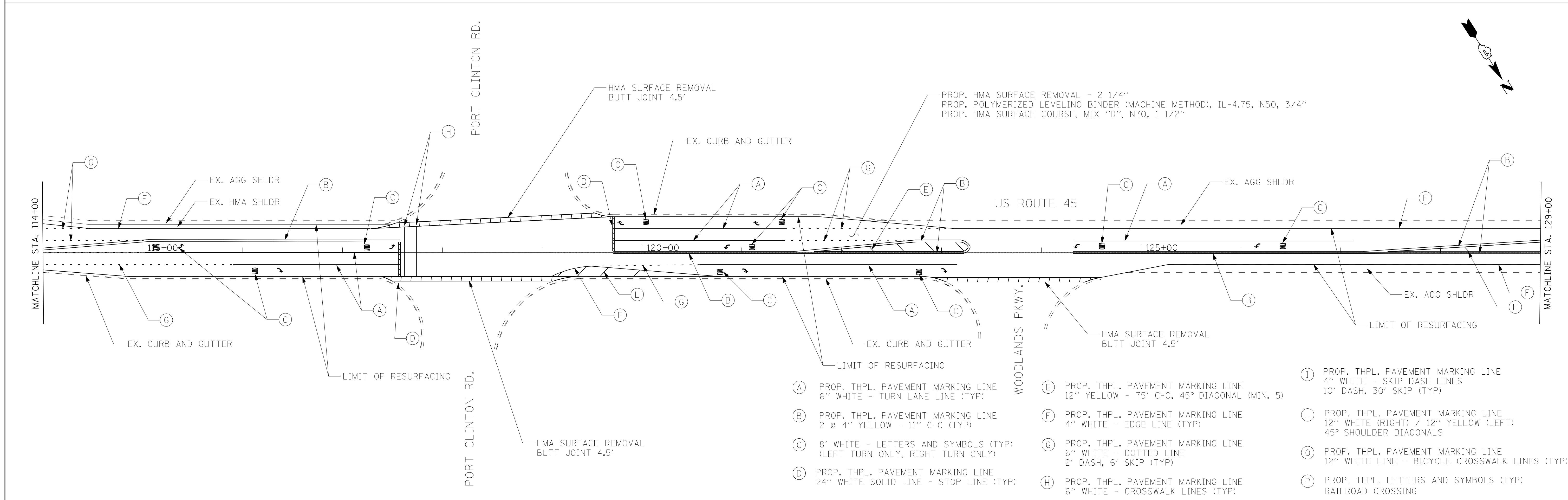
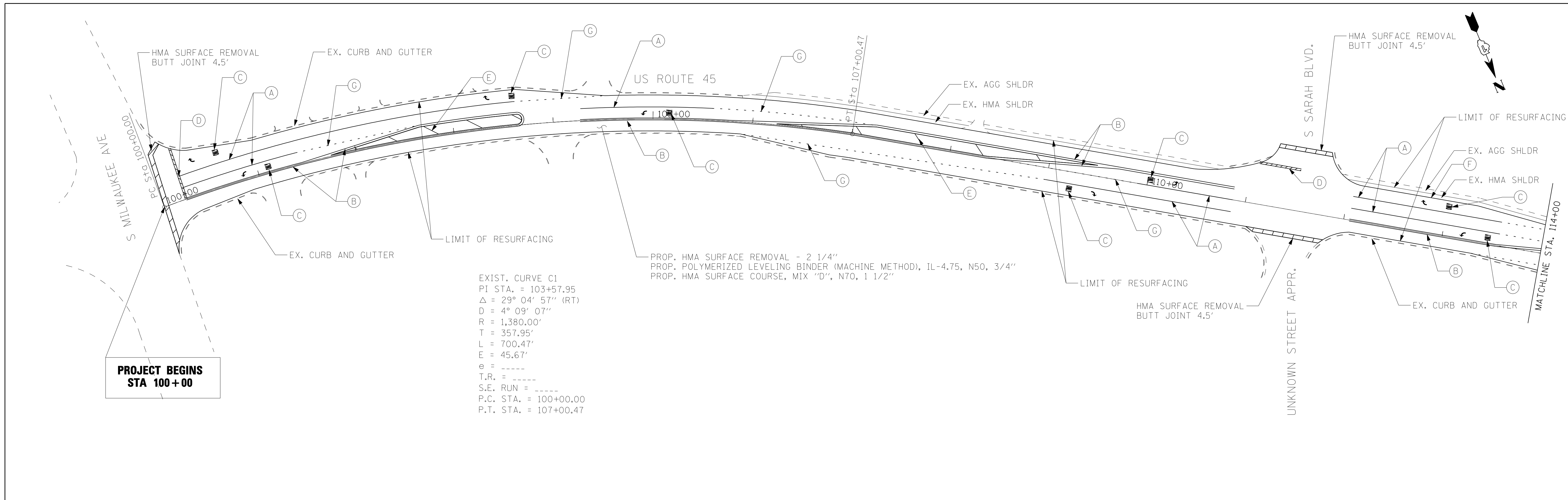
•• PFP SPECIAL PROVISION ONLY APPLIES TO HMA SURFACE COURSE, MIX "D", N70



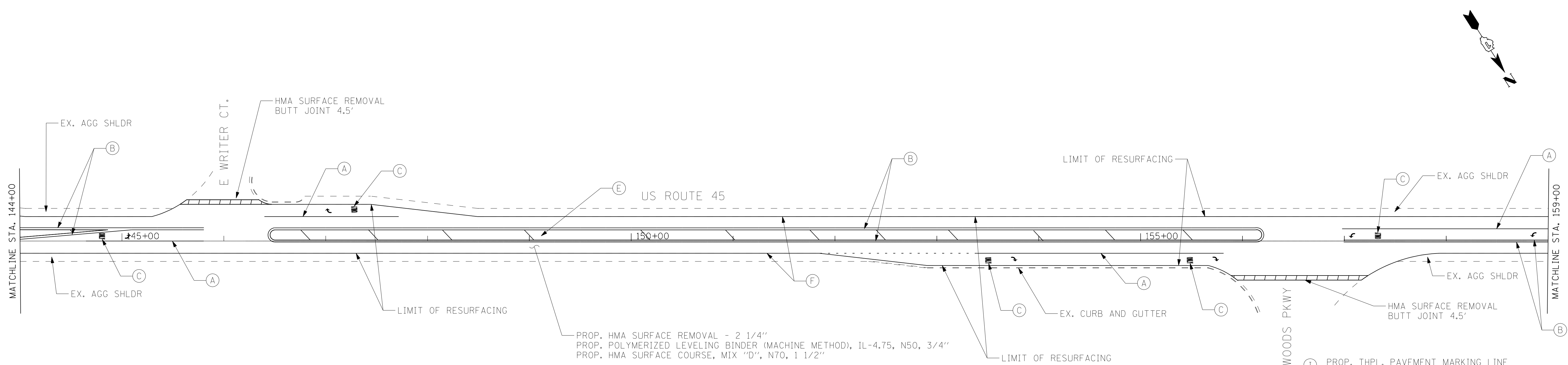
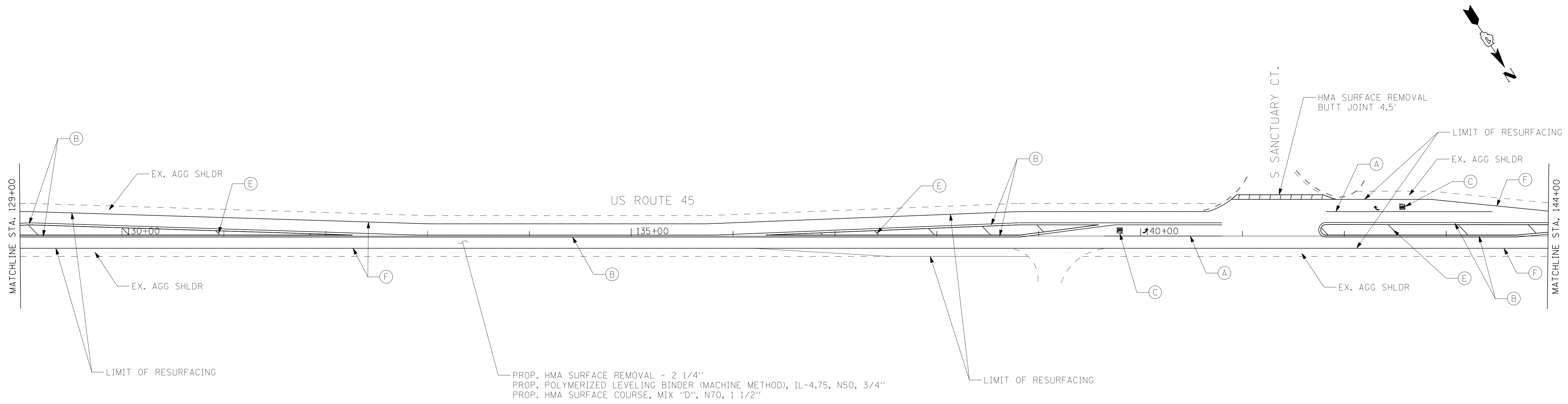
DETAIL A

LEGEND

- ① EXISTING HMA SURFACE COURSE +/- 5"
- ② EXISTING CONCRETE PAVEMENT FROM +/- 7" TO +/- 9"
- ③ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL - 2 -1/4"
- ④ EXISTING COMBINATION CONC. CURB & GUTTER TYPE B 6.24
- ⑤ EXISTING PCC SIDEWALK, 5"
- ⑥ EXISTING CORRUGATED CONCRETE MEDIAN
- ⑦ EXISTING AGGREGATE SHOULDER
- ⑧ PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- ⑨ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1-1/2"
- ⑩ PROP. CONCRETE MEDIAN REMOVAL, PARTIAL DEPTH
- ⑪ PROP. AGGREGATE WEDGE SHOULDER, TYPE B
- ⑫ EXISTING HMA SHOULDER
- ⑬ SAFETY EDGE



FILE NAME = \$FILEL\$	USER NAME = mremper	DESIGNED - RG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	US ROUTE 45 (OLD HALF DAY ROAD) PROPOSED ROADWAY PLAN			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
	PLOT SCALE = 50.0000' / IN.	DRAWN - RG	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	3502	49-RS-6	LAKE	33	6
	PLOT DATE = 10/27/2011	CHECKED - MGR	REVISED -								CONTRACT NO. 60N31				
		DATE - 10/27/2011	REVISED -								ILLINOIS FED. AID PROJECT				



- (A) PROP. THPL. PAVEMENT MARKING LINE
6" WHITE - TURN LANE LINE (TYP)
- (B) PROP. THPL. PAVEMENT MARKING LINE
2 @ 4" YELLOW - 11" C-C (TYP)
- (C) 8' WHITE - LETTERS AND SYMBOLS (TYP)
(LEFT TURN ONLY, RIGHT TURN ONLY)
- (D) PROP. THPL. PAVEMENT MARKING LINE
24" WHITE SOLID LINE - STOP LINE (TYP)
- (E) PROP. THPL. PAVEMENT MARKING LINE
12" YELLOW - 75' C-C, 45° DIAGONAL (MIN. 5')
- (F) PROP. THPL. PAVEMENT MARKING LINE
4" WHITE - EDGE LINE (TYP)
- (G) PROP. THPL. PAVEMENT MARKING LINE
6" WHITE - DOTTED LINE
2' DASH, 6' SKIP (TYP)
- (H) PROP. THPL. PAVEMENT MARKING LINE
6" WHITE - CROSSWALK LINES (TYP)
- (I) PROP. THPL. PAVEMENT MARKING LINE
4" WHITE - SKIP DASH LINES
10' DASH, 30' SKIP (TYP)
- (L) PROP. THPL. PAVEMENT MARKING LINE
12" WHITE (RIGHT) / 12" YELLOW (LEFT)
45° SHOULDER DIAGONALS
- (O) PROP. THPL. PAVEMENT MARKING LINE
12" WHITE LINE - BICYCLE CROSSWALK LINES (TYP)
- (P) PROP. THPL. LETTERS AND SYMBOLS (TYP)
RAILROAD CROSSING

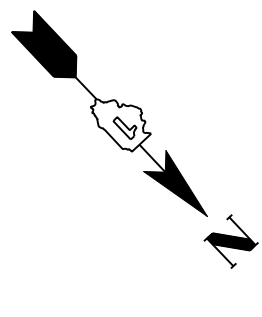
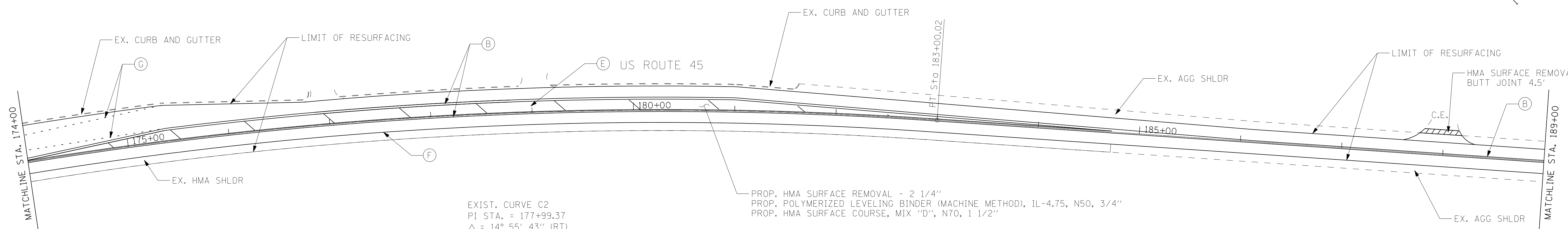
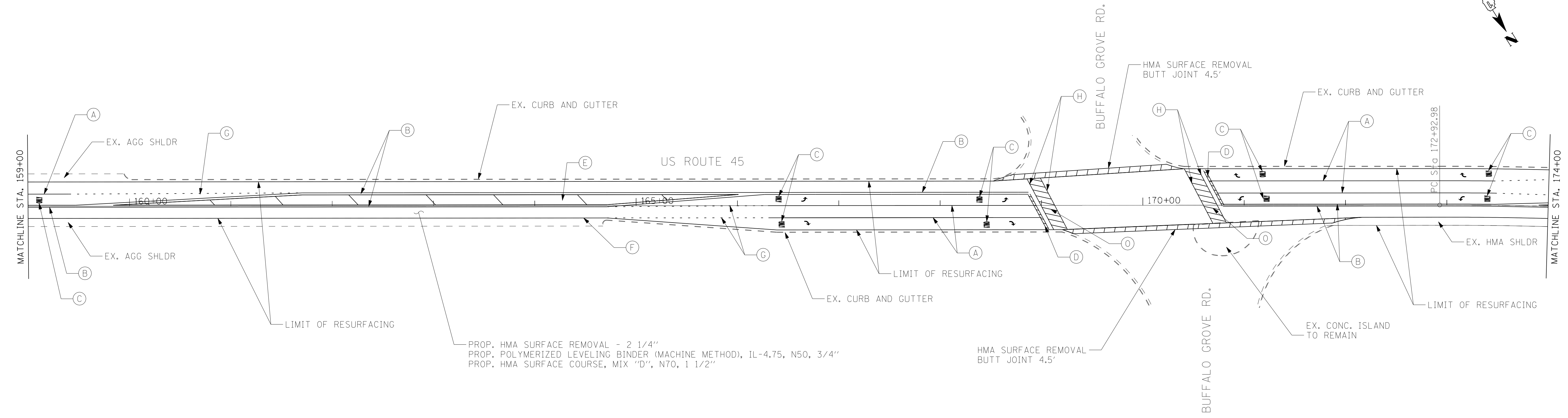
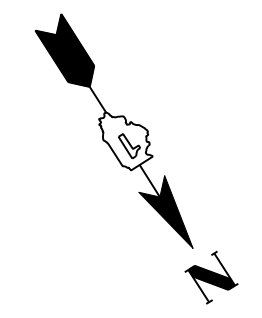
FILE NAME = \$FILEL\$	USER NAME = mrempfer	DESIGNED - RG	REVISED -
		DRAWN - RG	REVISED -
	PLOT SCALE = 50.0000' / IN.	CHECKED - MGR	REVISED -
	PLOT DATE = 10/27/2011	DATE - 10/27/2011	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US ROUTE 45 (OLD HALF DAY ROAD)
PROPOSED ROADWAY PLAN**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3502	49-RS-6	LAKE	33	7
CONTRACT NO. 60N31				
ILLINOIS FED. AID PROJECT				



EXIST. CURVE C2
 PI STA. = 177+99.37
 $\Delta = 14^\circ 55' 43''$ (RT)
 $D = 1^\circ 28' 57''$
 $R = 3,865.00'$
 $T = 506.38'$
 $L = 1,007.03'$
 $E = 33.03'$
 $e = \text{-----}$
 $T.R. = \text{-----}$
 $S.E. \text{ RUN} = \text{-----}$
 P.C. STA. = 172+92.98
 P.T. STA. = 183+00.02

- (A) PROP. THPL. PAVEMENT MARKING LINE
6" WHITE - TURN LANE LINE (TYP)
- (B) PROP. THPL. PAVEMENT MARKING LINE
2 @ 4" YELLOW - 11" C-C (TYP)
- (C) 8' WHITE - LETTERS AND SYMBOLS (TYP)
(LEFT TURN ONLY, RIGHT TURN ONLY)
- (D) PROP. THPL. PAVEMENT MARKING LINE
24" WHITE SOLID LINE - STOP LINE (TYP)
- (E) PROP. THPL. PAVEMENT MARKING LINE
12" YELLOW - 75' C-C, 45° DIAGONAL (MIN. 5)
- (F) PROP. THPL. PAVEMENT MARKING LINE
4" WHITE - EDGE LINE (TYP)
- (G) PROP. THPL. PAVEMENT MARKING LINE
6" WHITE - DOTTED LINE
2' DASH, 6' SKIP (TYP)
- (H) PROP. THPL. PAVEMENT MARKING LINE
6" WHITE - CROSSWALK LINES (TYP)
- (I) PROP. THPL. PAVEMENT MARKING LINE
4" WHITE - SKIP DASH LINES
10' DASH, 30' SKIP (TYP)
- (L) PROP. THPL. PAVEMENT MARKING LINE
12" WHITE (RIGHT) / 12" YELLOW (LEFT)
45° SHOULDER DIAGONALS
- (O) PROP. THPL. PAVEMENT MARKING LINE
12" WHITE LINE - BICYCLE CROSSWALK LINES (TYP)
- (P) PROP. THPL. LETTERS AND SYMBOLS (TYP)
RAILROAD CROSSING

FILE NAME = \$FILEL\$	USER NAME = mremper	DESIGNED - RG	REVISED -
		DRAWN - RG	REVISED -
	PLOT SCALE = 50.0000' / IN.	CHECKED - MGR	REVISED -
	PLOT DATE = 10/27/2011	DATE - 10/27/2011	REVISED -

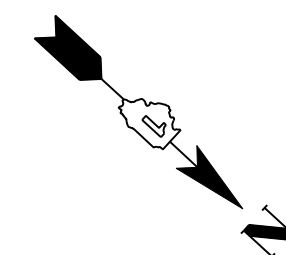
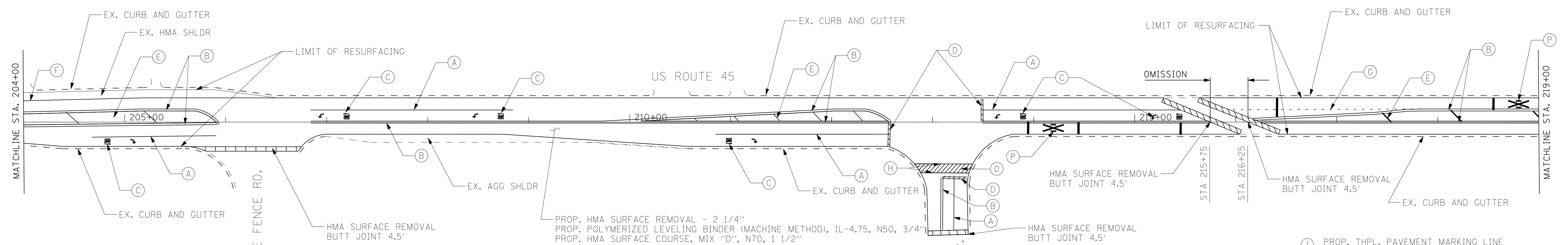
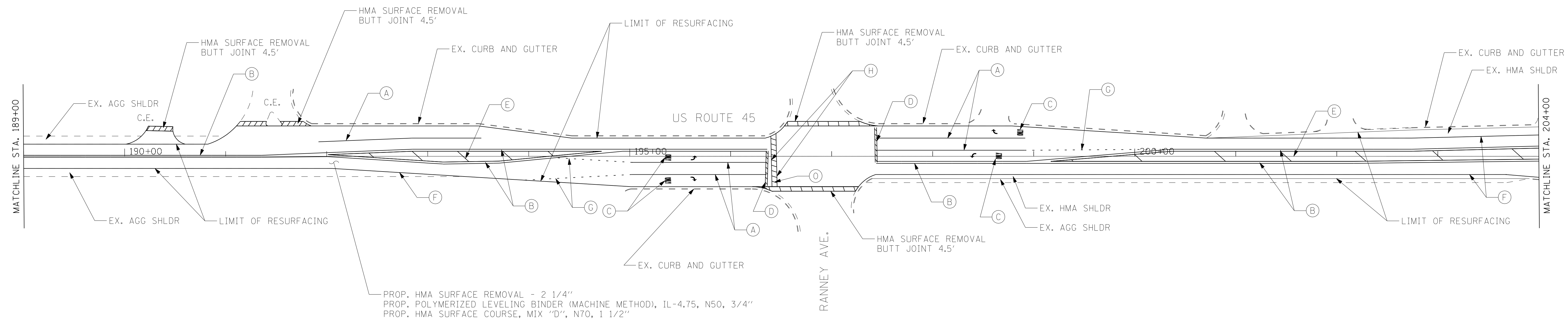
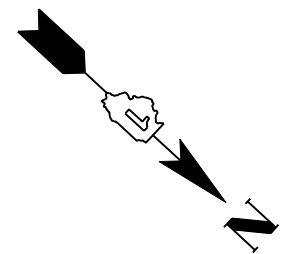
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US ROUTE 45 (OLD HALF DAY ROAD)
PROPOSED ROADWAY PLAN**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3502	49-RS-6	LAKE	33	8
CONTRACT NO. 60N31				

ILLINOIS FED. AID PROJECT



- (A) PROP. THPL. PAVEMENT MARKING LINE
6" WHITE - TURN LANE LINE (TYP)
- (B) PROP. THPL. PAVEMENT MARKING LINE
2 @ 4" YELLOW - 11" C-C (TYP)
- (C) 8' WHITE - LETTERS AND SYMBOLS (TYP)
(LEFT TURN ONLY, RIGHT TURN ONLY)
- (D) PROP. THPL. PAVEMENT MARKING LINE
24" WHITE SOLID LINE - STOP LINE (TYP)
- (E) PROP. THPL. PAVEMENT MARKING LINE
12" YELLOW - 75' C-C, 45° DIAGONAL (MIN. 5)
- (F) PROP. THPL. PAVEMENT MARKING LINE
4" WHITE - EDGE LINE (TYP)
- (G) PROP. THPL. PAVEMENT MARKING LINE
6" WHITE - DOTTED LINE
2' DASH, 6' SKIP (TYP)
- (H) PROP. THPL. PAVEMENT MARKING LINE
6" WHITE - CROSSWALK LINES (TYP)
- (I) PROP. THPL. PAVEMENT MARKING LINE
4" WHITE - SKIP DASH LINES
10' DASH, 30' SKIP (TYP)
- (L) PROP. THPL. PAVEMENT MARKING LINE
12" WHITE (RIGHT) / 12" YELLOW (LEFT)
45° SHOULDER DIAGONALS
- (O) PROP. THPL. PAVEMENT MARKING LINE
12" WHITE LINE - BICYCLE CROSSWALK LINES (TYP)
- (P) PROP. THPL. LETTERS AND SYMBOLS (TYP)
RAILROAD CROSSING

FILE NAME = \$FILEL\$	USER NAME = mremper	DESIGNED - RG	REVISED -
		DRAWN - RG	REVISED -
	PLOT SCALE = 50.0000' / IN.	CHECKED - MGR	REVISED -
	PLOT DATE = 10/27/2011	DATE - 10/27/2011	REVISED -

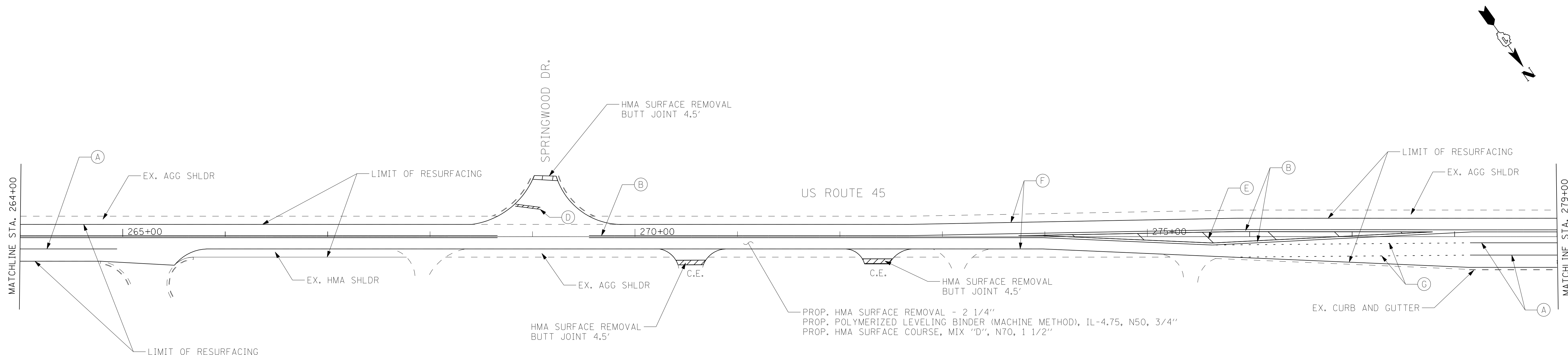
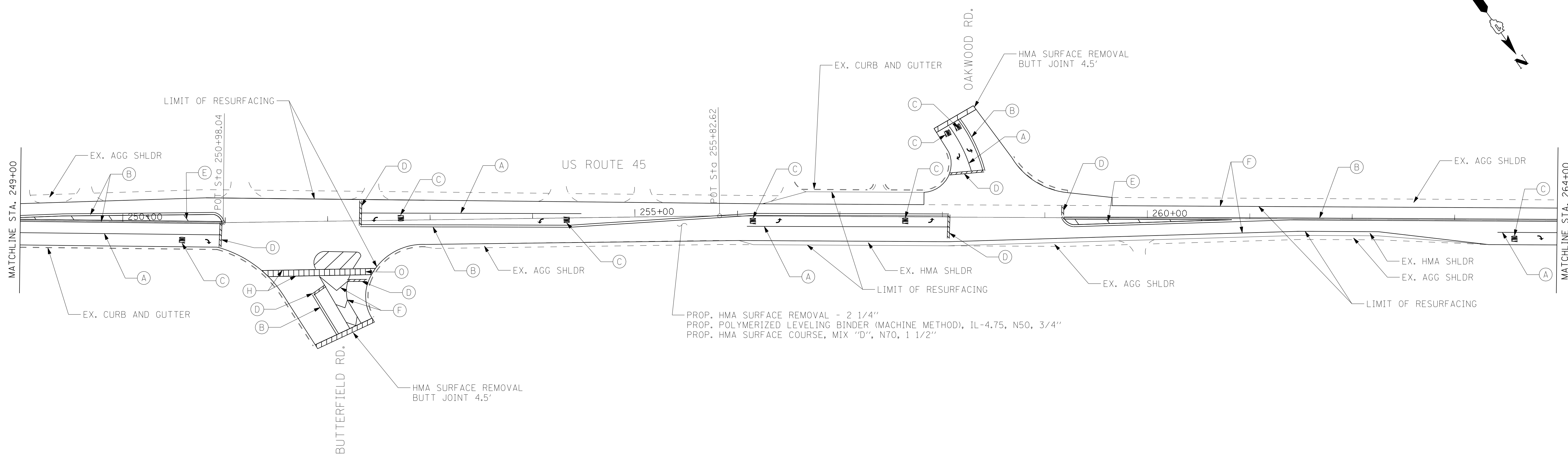
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US ROUTE 45 (OLD HALF DAY ROAD)
PROPOSED ROADWAY PLAN**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3502	49-RS-6	LAKE	33	9
CONTRACT NO. 60N31				

ILLINOIS FED. AID PROJECT



- (A) PROP. THPL. PAVEMENT MARKING LINE
6" WHITE - TURN LANE LINE (TYP)
- (B) PROP. THPL. PAVEMENT MARKING LINE
2 @ 4" YELLOW - 11" C-C (TYP)
- (C) 8' WHITE - LETTERS AND SYMBOLS (TYP)
(LEFT TURN ONLY, RIGHT TURN ONLY)
- (D) PROP. THPL. PAVEMENT MARKING LINE
24" WHITE SOLID LINE - STOP LINE (TYP)
- (E) PROP. THPL. PAVEMENT MARKING LINE
12" YELLOW - 75° C-C, 45° DIAGONAL (MIN. 5)
- (F) PROP. THPL. PAVEMENT MARKING LINE
4" WHITE - EDGE LINE (TYP)
- (G) PROP. THPL. PAVEMENT MARKING LINE
6" WHITE - DOTTED LINE
2' DASH, 6' SKIP (TYP)
- (H) PROP. THPL. PAVEMENT MARKING LINE
6" WHITE - CROSSWALK LINES (TYP)
- (I) PROP. THPL. PAVEMENT MARKING LINE
4" WHITE - SKIP DASH LINES
10' DASH, 30' SKIP (TYP)
- (L) PROP. THPL. PAVEMENT MARKING LINE
12" WHITE (RIGHT) / 12" YELLOW (LEFT)
45° SHOULDER DIAGONALS
- (O) PROP. THPL. PAVEMENT MARKING LINE
12" WHITE LINE - BICYCLE CROSSWALK LINES (TYP)
- (P) PROP. THPL. LETTERS AND SYMBOLS (TYP)
RAILROAD CROSSING

FILE NAME = \$FILEL\$	USER NAME = mrempfer	DESIGNED - RG	REVISED -
		DRAWN - RG	REVISED -
	PLOT SCALE = 50.0000' / IN.	CHECKED - MGR	REVISED -
	PLOT DATE = 10/27/2011	DATE - 10/27/2011	REVISED -

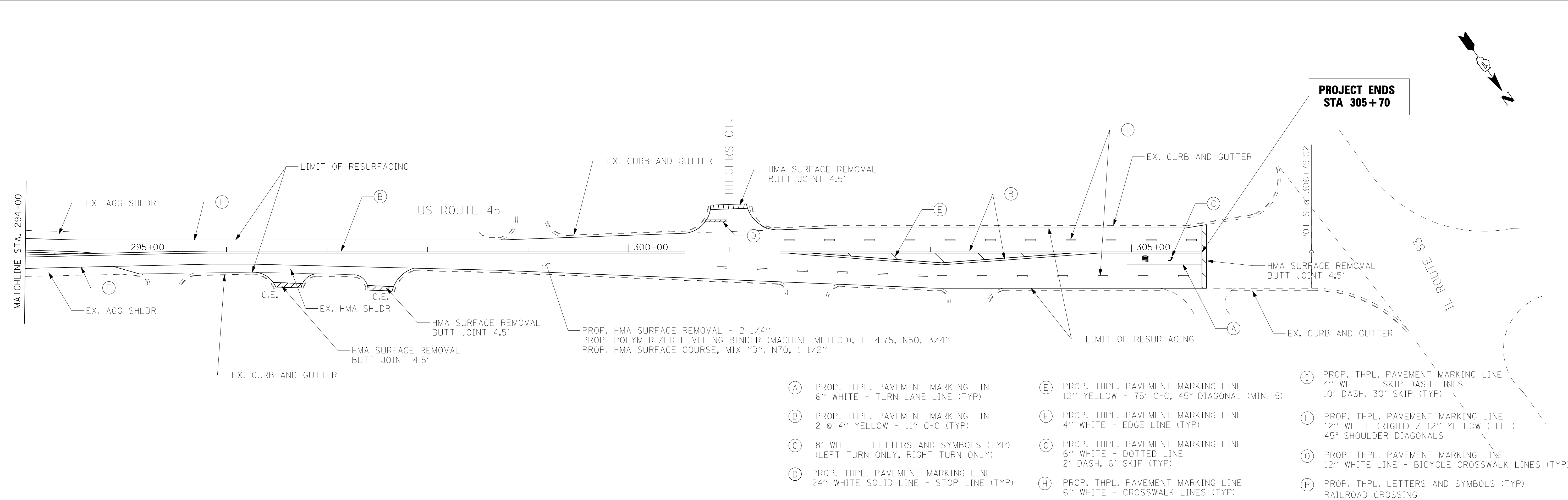
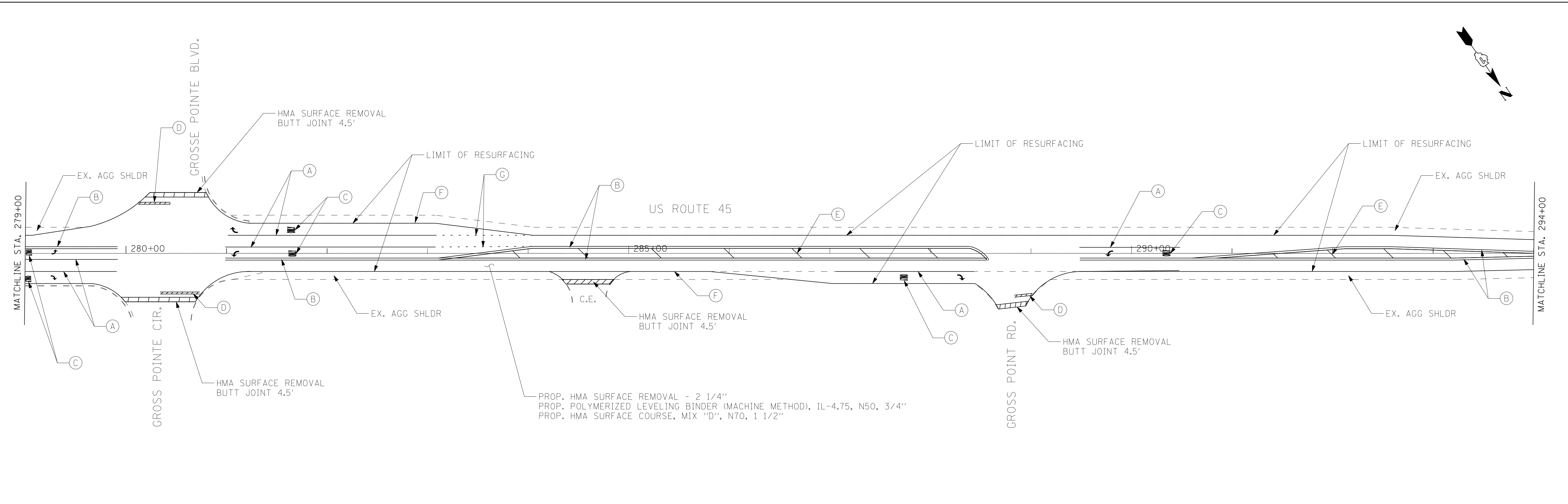
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US ROUTE 45 (OLD HALF DAY ROAD)
PROPOSED ROADWAY PLAN**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3502	49-RS-6	LAKE	33	11
CONTRACT NO. 60N31				

ILLINOIS FED. AID PROJECT



- (A) PROP. THPL. PAVEMENT MARKING LINE
6" WHITE - TURN LANE LINE (TYP)
- (B) PROP. THPL. PAVEMENT MARKING LINE
2 @ 4" YELLOW - 11" C-C (TYP)
- (C) 8' WHITE - LETTERS AND SYMBOLS (TYP)
(LEFT TURN ONLY, RIGHT TURN ONLY)
- (D) PROP. THPL. PAVEMENT MARKING LINE
24" WHITE SOLID LINE - STOP LINE (TYP)
- (E) PROP. THPL. PAVEMENT MARKING LINE
12" YELLOW - 75° C-C, 45° DIAGONAL (MIN. 5)
- (F) PROP. THPL. PAVEMENT MARKING LINE
4" WHITE - EDGE LINE (TYP)
- (G) PROP. THPL. PAVEMENT MARKING LINE
6" WHITE - DOTTED LINE
2' DASH, 6' SKIP (TYP)
- (H) PROP. THPL. PAVEMENT MARKING LINE
6" WHITE - CROSSWALK LINES (TYP)
- (I) PROP. THPL. PAVEMENT MARKING LINE
4" WHITE - SKIP DASH LINES
10' DASH, 30' SKIP (TYP)
- (L) PROP. THPL. PAVEMENT MARKING LINE
12" WHITE (RIGHT) / 12" YELLOW (LEFT)
45° SHOULDER DIAGONALS
- (O) PROP. THPL. PAVEMENT MARKING LINE
12" WHITE LINE - BICYCLE CROSSWALK LINES (TYP)
- (P) PROP. THPL. LETTERS AND SYMBOLS (TYP)
RAILROAD CROSSING

FILE NAME = \$FILEL\$	USER NAME = mremper	DESIGNED - RG	REVISED -
		DRAWN - RG	REVISED -
	PLOT SCALE = 50.0000' / IN.	CHECKED - MGR	REVISED -
	PLOT DATE = 10/27/2011	DATE - 10/27/2011	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US ROUTE 45 (OLD HALF DAY ROAD)
PROPOSED ROADWAY PLAN**

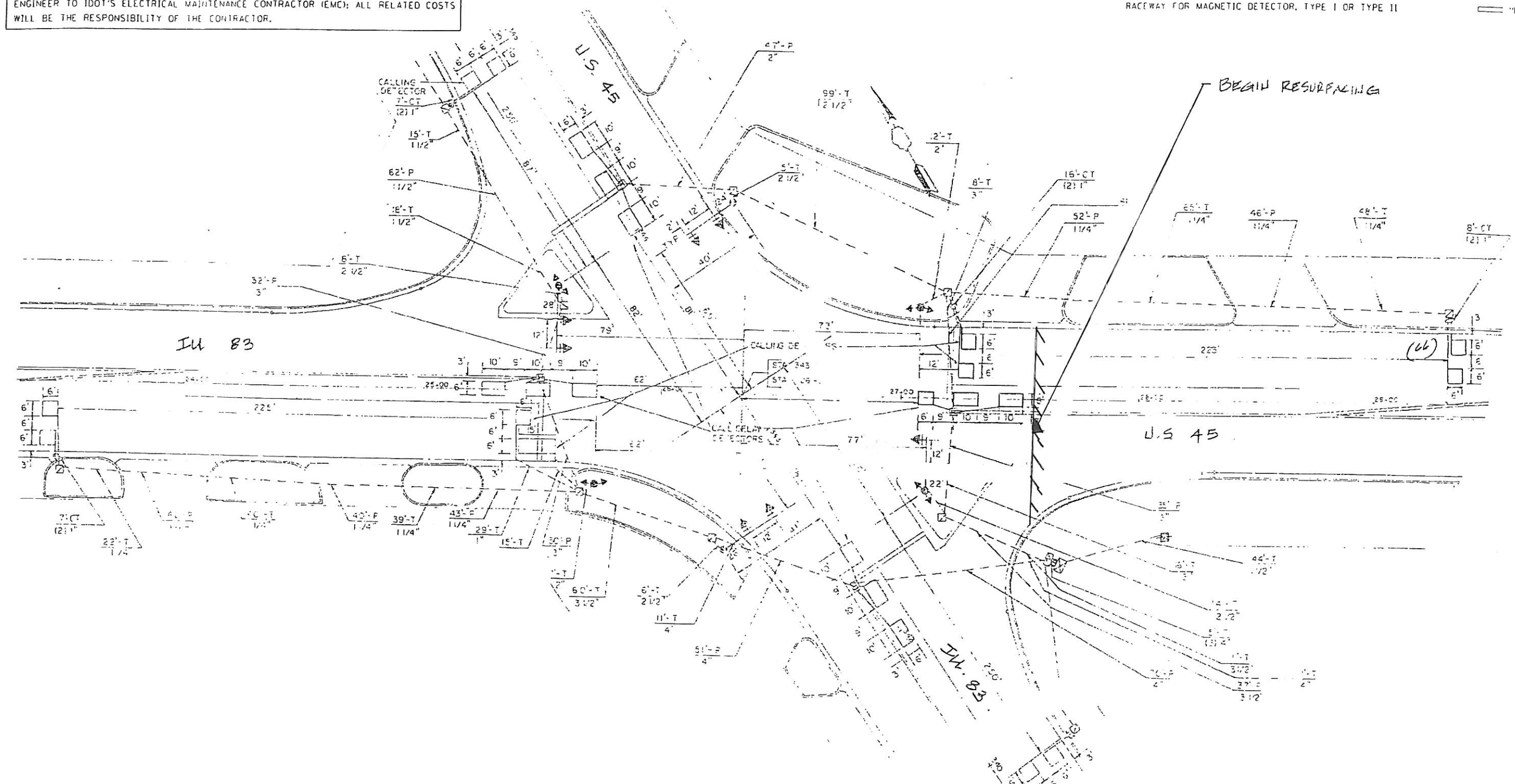
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3502	49-RS-6	LAKE	33	12
CONTRACT NO. 60N31				
ILLINOIS FED. AID PROJECT				

WORK SHALL MEET THE REQUIREMENTS OF THE DETECTOR HOUSING, 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	186	FOOT	DETECTOR LOOP, REPLACEMENT

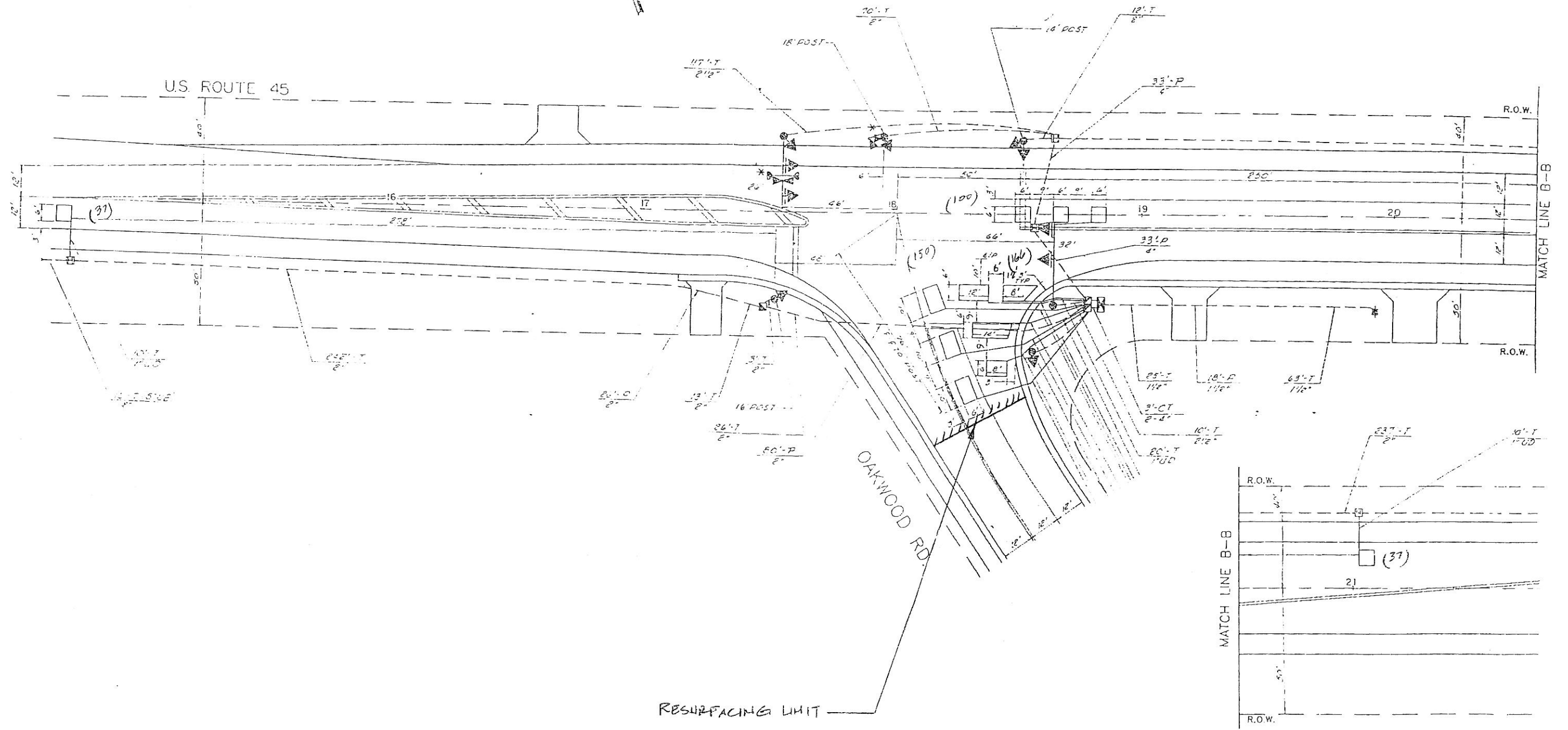
FILE NAME	USER NAME	DESIGNED	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE - DETECTOR LOOP REPLACEMENT U.S. ROUTE 45 @ ILL. RTE 83	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
CLIP WORKSPACE\DOT\eng\enr\1212618\files	er_dgn	DRAWN	REVISED			3502	49-RS-6	LANE	33	13	
		CHECKED	REVISED			CONTRACT NO. 60N31					
		DATE	REVISED			FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT					

12/1/2010 1:21:56 PM User:eng\enr

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)

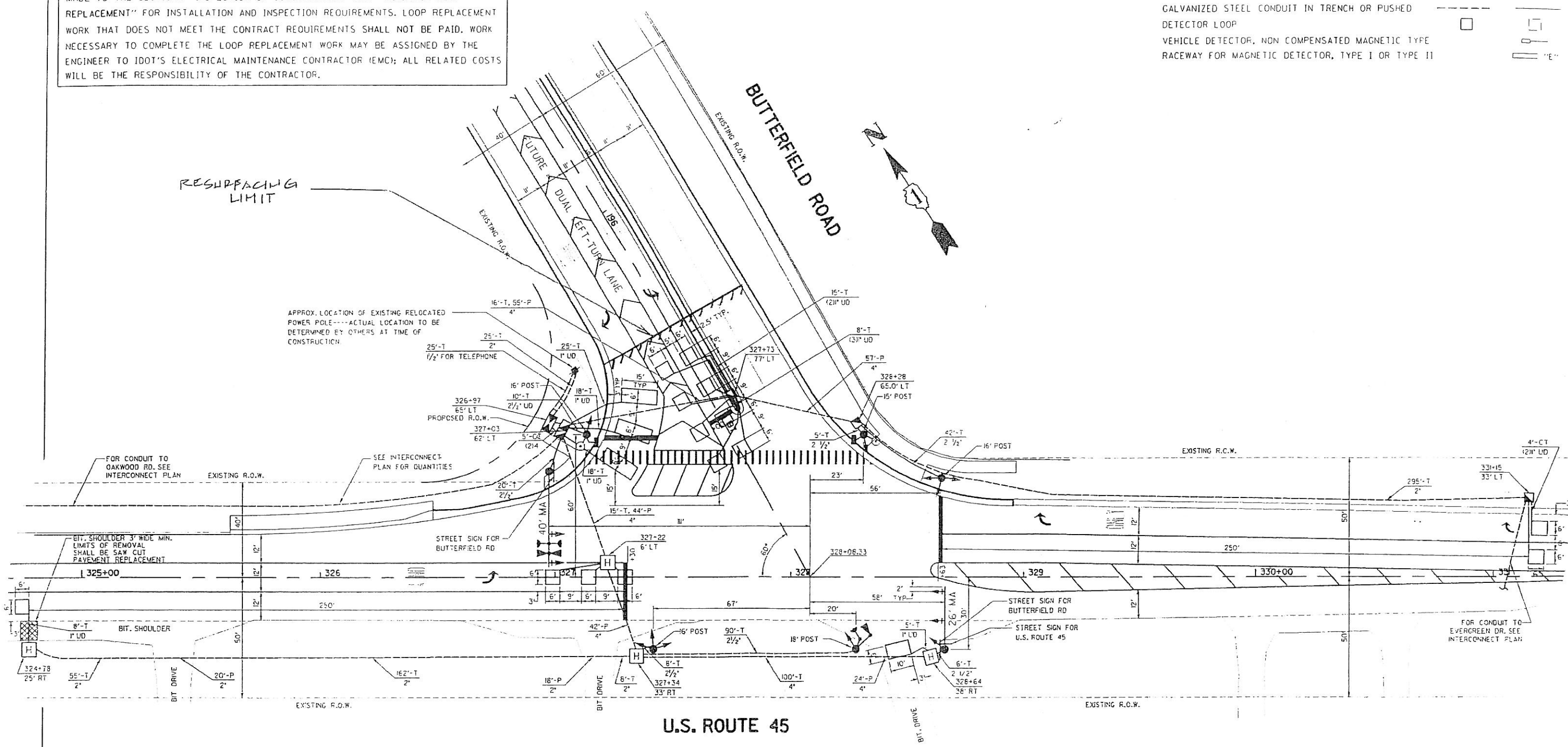
CODE	QUANTITY	UNIT	ITEM
88600600	490	FOOT	DETECTOR LOOP, REPLACEMENT

FILE NAME: c:\pwork\p\idot\nguyensm\d01126181\1301er.dgn	USER NAME: nguyensm	DESIGNED: -	REVISED: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE - DETECTOR LOOP REPLACEMENT U.S. ROUTE 45 @ OAKWOOD ROAD	F.A. RTE.:	SECTION:	COUNTY:	TOTAL SHEETS:	SHEET NO.:	
		DRAWN: -	REVISED: -			3502	49-RS-6	LAKE	33	14	
		CHECKED: -	REVISED: -			CONTRACT NO. 60N31					
		DATE: -	REVISED: -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					
				SCALE:	SHEET NO. OF 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)

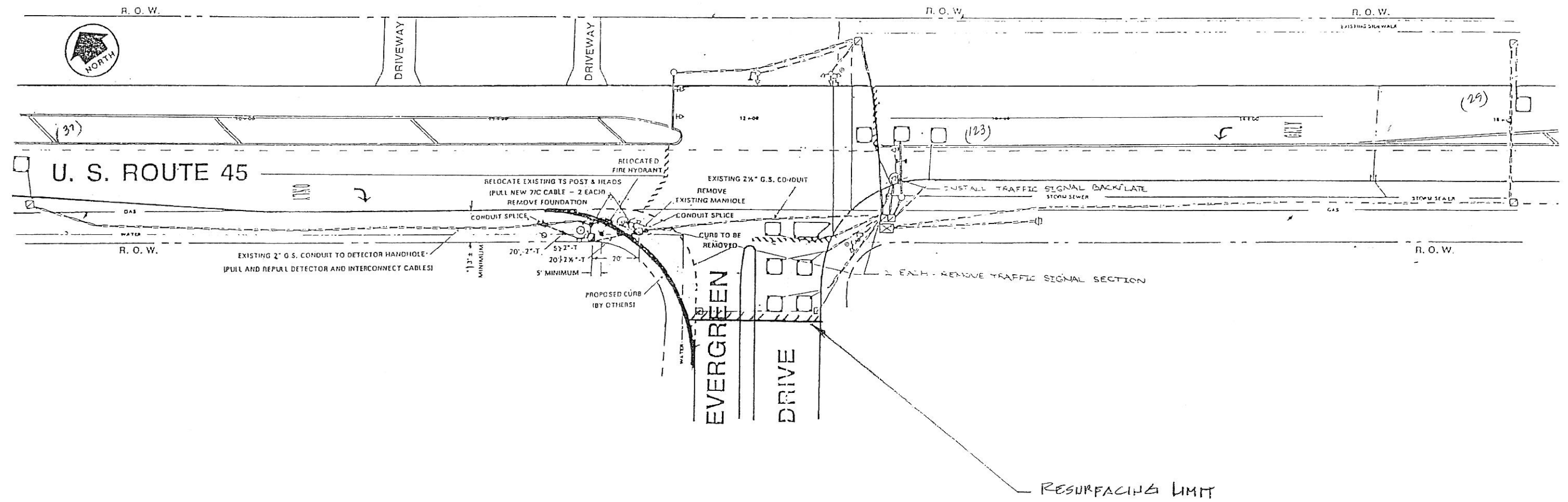
CODE	QUANTITY	UNIT	ITEM
88600600	688	FOOT	DETECTOR LOOP REPLACEMENT

FILE NAME: c:\p\work\idot\nguyen\m\0112618\1101\er.dgn	USER NAME: nguyenm	DESIGNED: -	REVISED: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE - DETECTOR LOOP REPLACEMENT U.S. ROUTE 45 @ BUTTERFIELD RD.	F.A. RTE.:	SECTION:	COUNTY:	TOTAL SHEETS:	SHEET NO.:	
	PLOT SCALE: 100.0000 / 1" = 100'	CHECKED: -	REVISED: -			3502	49-RS-6	LAKE	33	15	
	PLOT DATE: 12/1/2010	DATE: -	REVISED: -			CONTRACT NO. 60N31					
						SCALE:	SHEET NO. OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT

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		FOOT	DETECTOR LOOP, REPLACEMENT

FILE NAME: c:\p\work\idot\nguyensm\0112618\1131131131.dgn	USER NAME: nguyensm	DESIGNED: -	REVISED: -
PLOT SCALE: 100.0000 / IN	DATE: 12/12/2010	DRAWN: -	REVISED: -
		CHECKED: -	REVISED: -
		DATE: -	REVISED: -

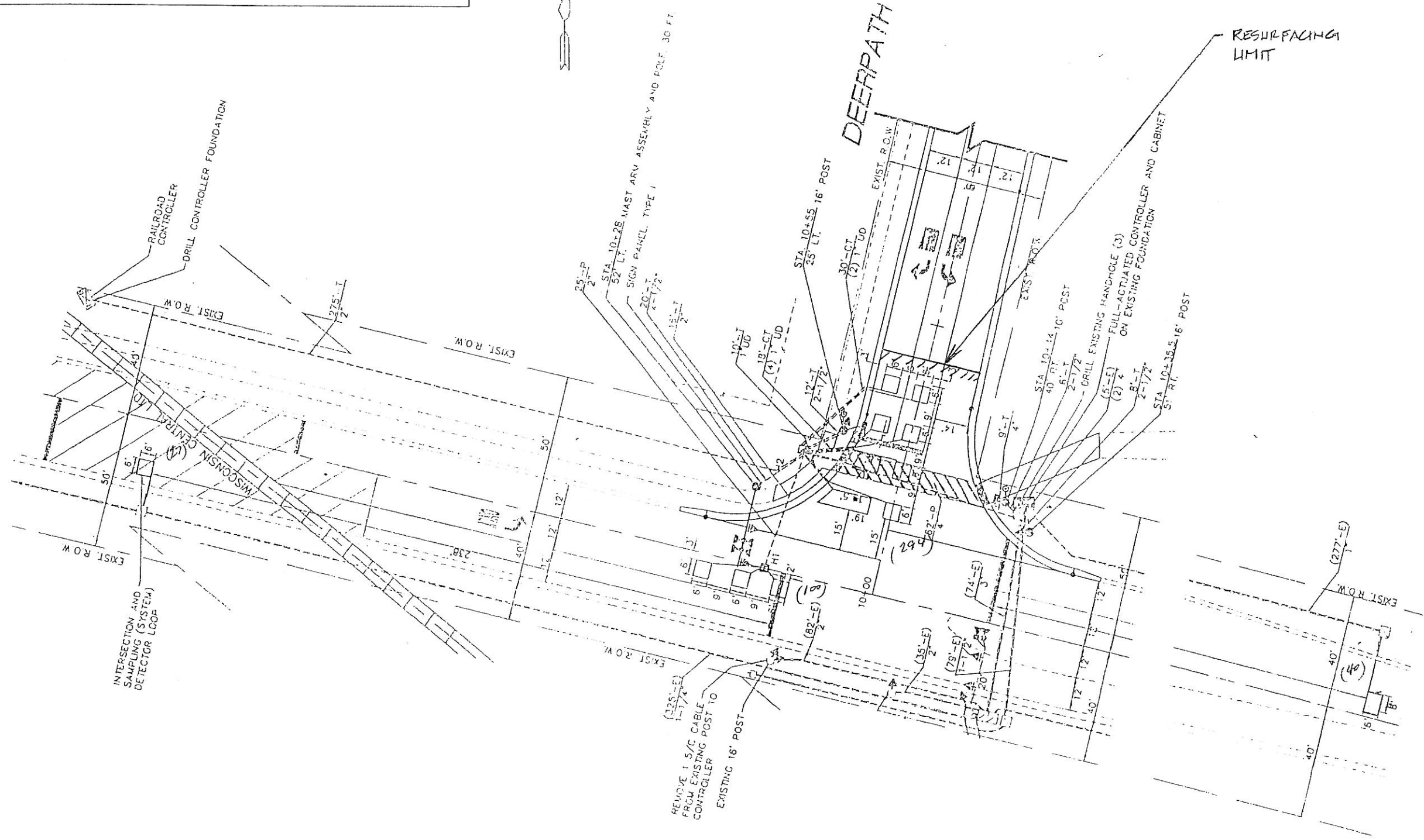
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE - DETECTOR LOOP REPLACEMENT
U.S. ROUTE 45 @ EVERGREEN DR.**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3502	49-RS-6	LAKE	33	16
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 60N31	

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			— "E"



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

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

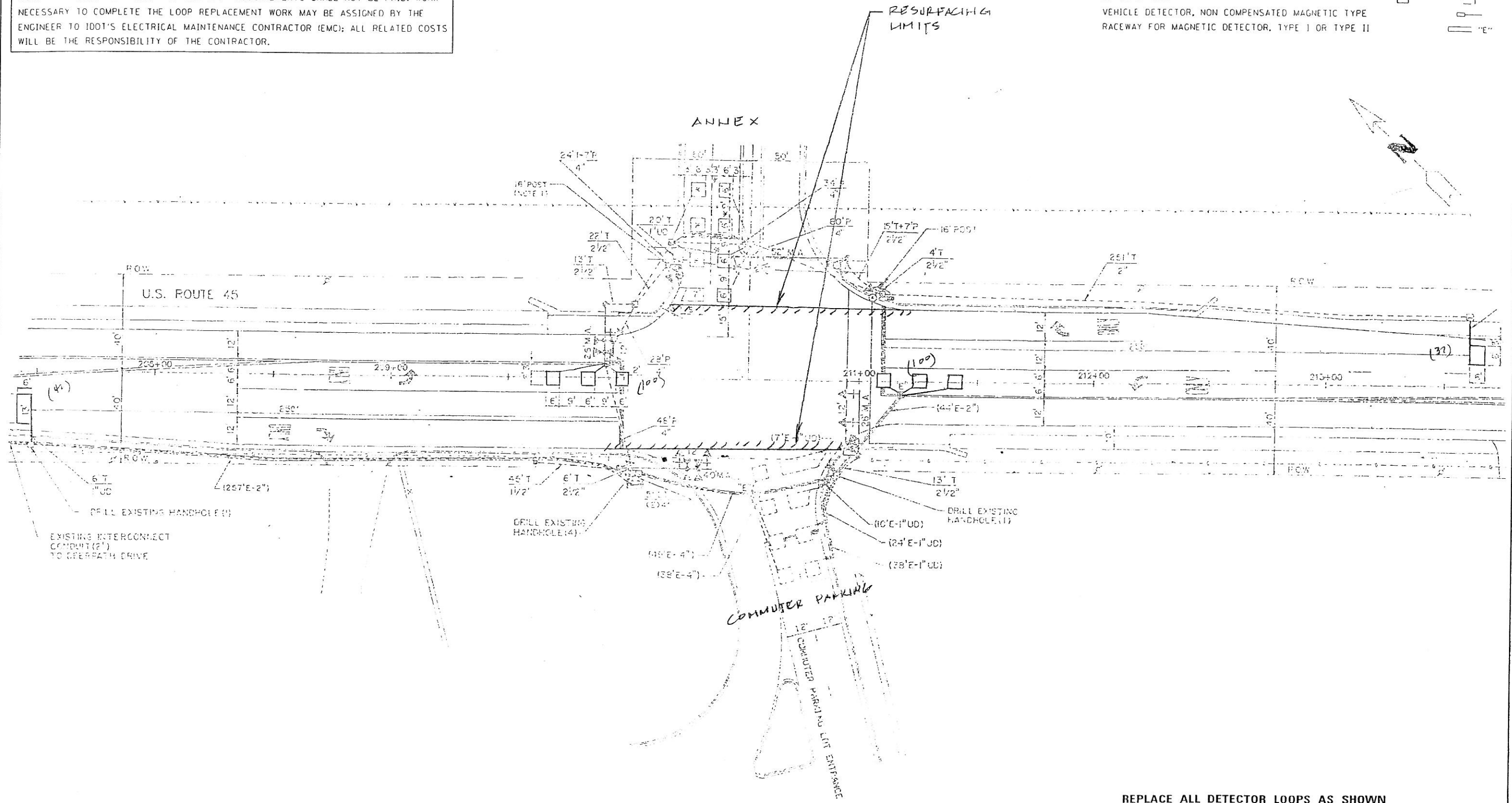
CODE	QUANTITY	UNIT	ITEM
88600600	467	FOOT	DETECTOR LOOP, REPLACEMENT

FILE NAME: c:\p-work\12112010\nguyensm\01126181101.dgn	USER NAME: nguyensm	DESIGNED: -	REVISED: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE - DETECTOR LOOP REPLACEMENT U.S. ROUTE 45 @ DEERPATH RD.	F.A. RTE.:	SECTION:	COUNTY:	TOTAL SHEETS:	SHEET NO.:
PLOT SCALE: 100.0000 / 111	CHECKED: -	REVISED: -	3502			49-RS-6	LAKE	33	17	
PLOT DATE: 12/11/2010	DATE: -	REVISED: -	CONTRACT NO. 60N31							
SCALE: SHEET NO. OF SHEETS STA. 10 STA.		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)**

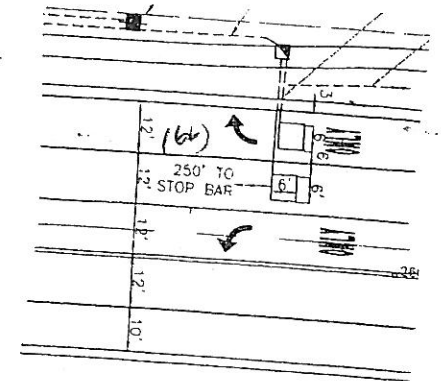
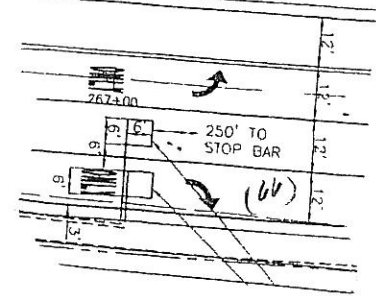
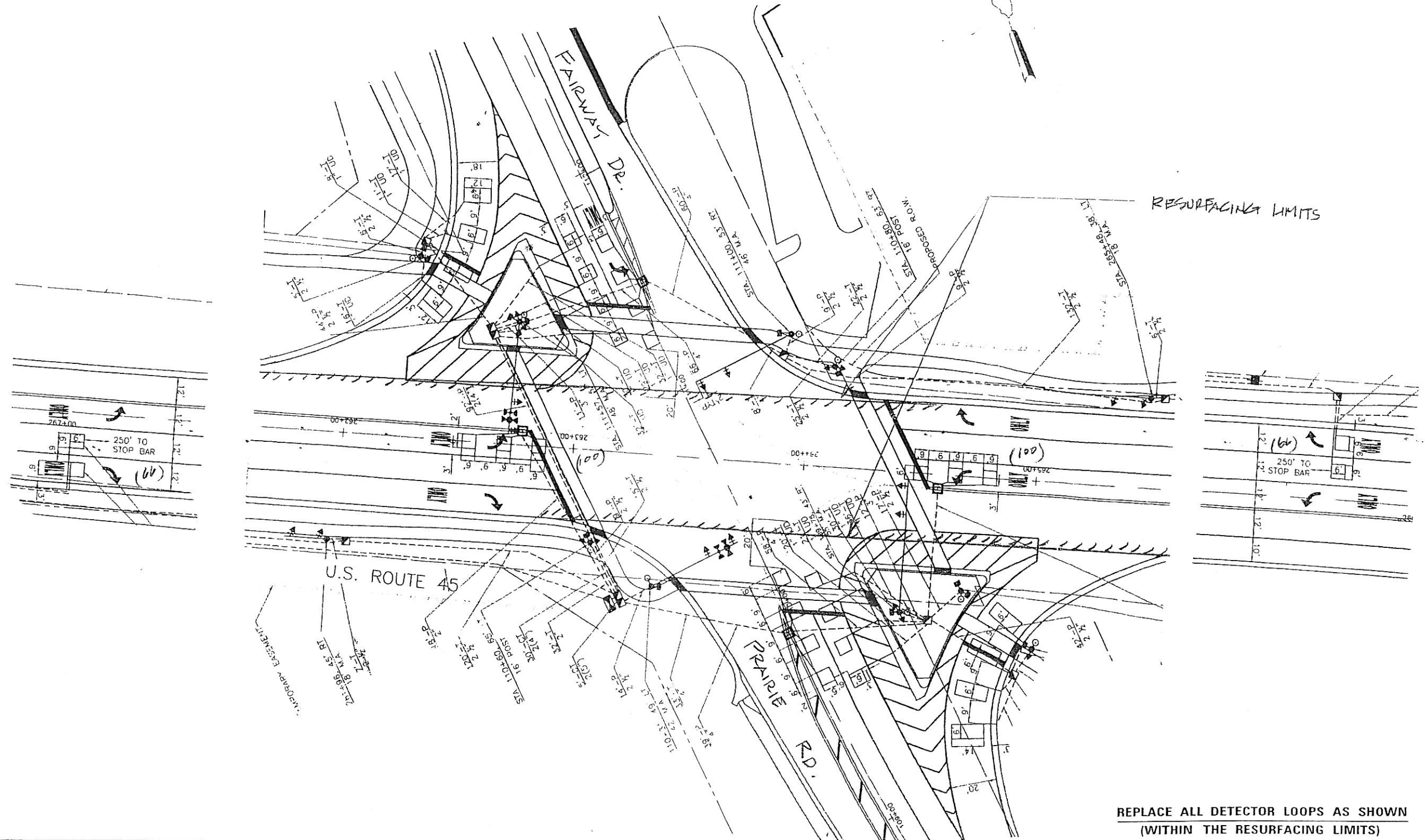
CODE	QUANTITY	UNIT	ITEM
88600600	279	FOOT	DETECTOR LOOP, REPLACEMENT

FILE NAME: c:\p\work\p\dct\nguyen\m\0112618\11a1\er.dgn	USER NAME: nguyen	DESIGNED: -	REVISED: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE - DETECTOR LOOP REPLACEMENT U.S. ROUTE 45 @ COMPUTER LOT	F.A. RTE.:	SECTION:	COUNTY:	TOTAL SHEETS:	SHEET NO.:
		DRAWN: -	REVISED: -			3502	49-RS-6	LAKE	33	18
		CHECKED: -	REVISED: -			SCALE:		FED. ROAD DIST. NO.:	ILLINOIS FED. AID PROJECT	
		DATE: -	REVISED: -			SHEET NO. OF SHEETS		CONTRACT NO. 60N31		

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		⊥ "E"



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

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

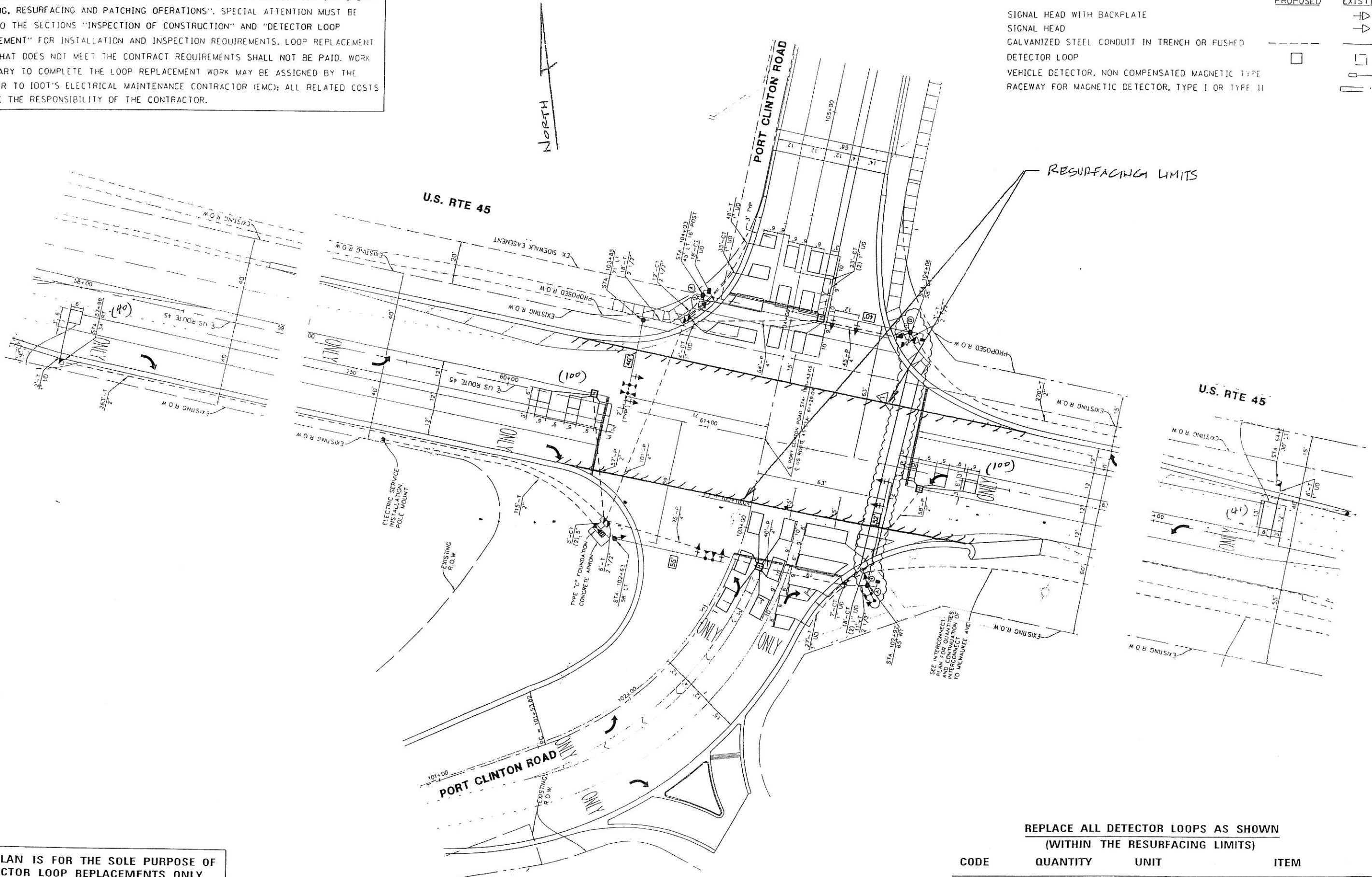
CODE	QUANTITY	UNIT	ITEM
88600600	332	FOOT	DETECTOR LOOP, REPLACEMENT

FILE NAME : c:\p\work\p\dot\nguyensm\08112618\1105	USER NAME : nguyensm	DESIGNED : er.dgn	REVISED : -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE - DETECTOR LOOP REPLACEMENT U.S. ROUTE 45 @ PRAIRIE RD.	F.A. RTE. 3502	SECTION 49-RS-6	COUNTY LAKE	TOTAL SHEETS 33	SHEET NO. 19	
	PLOT SCALE : 100.0000 / IN.	CHECKED : -	REVISED : -			SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 60N31
	PLOT DATE : 12/1/2010	DATE : -	REVISED : -								

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

TRAFFIC SIGNAL LEGEND

PROPOSED	EXISTING
SIGNAL HEAD WITH BACKPLATE	
SIGNAL HEAD	
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)

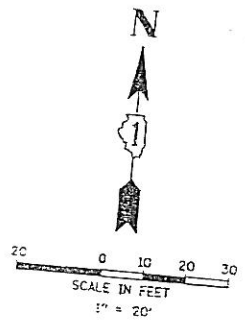
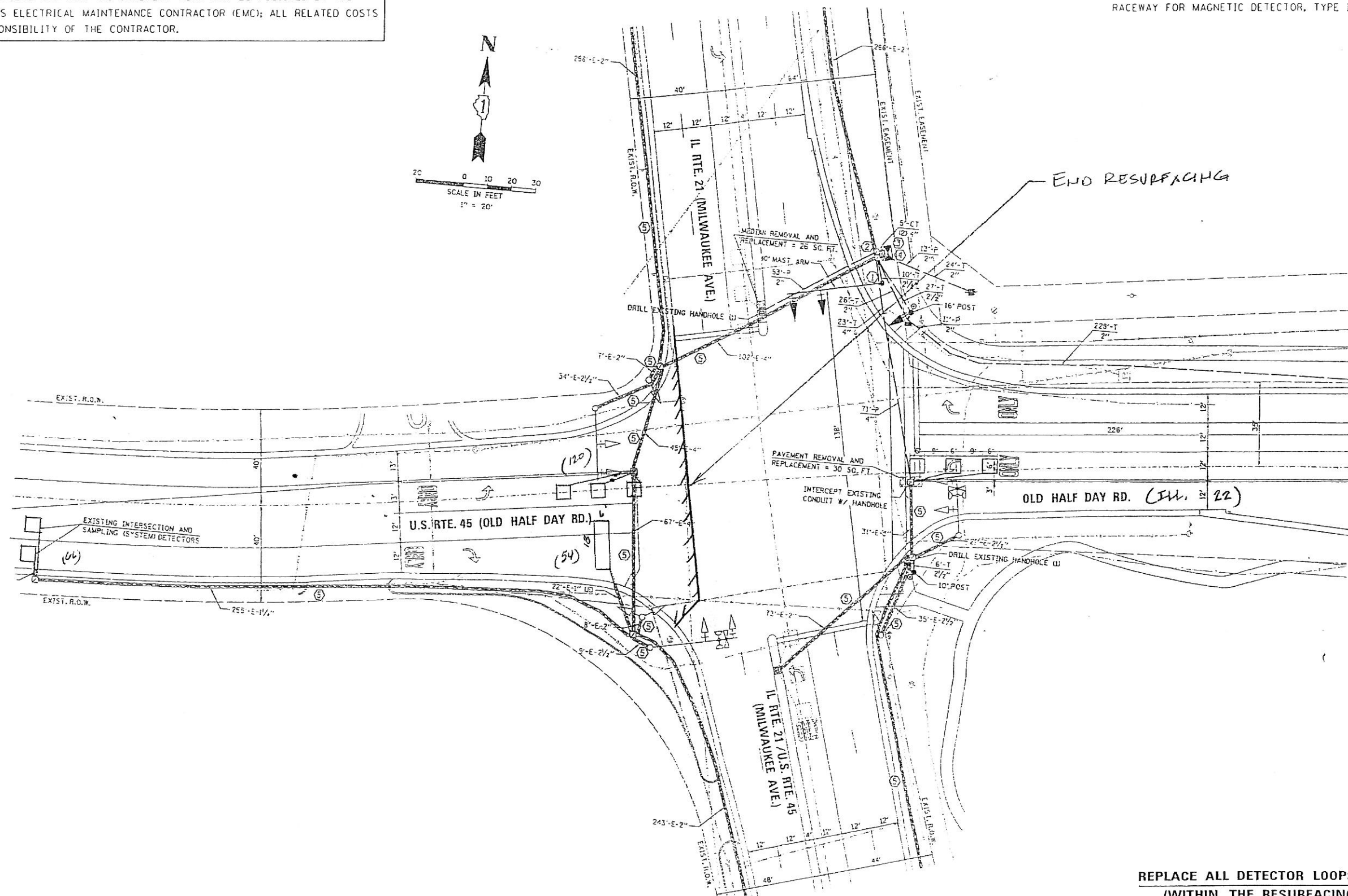
CODE	QUANTITY	UNIT	ITEM
88600600	281	FOOT	DETECTOR LOOP, REPLACEMENT

FILE NAME : c:\p\work\p\d\dot\nguyensm\d012616\11as	USER NAME : nguyensm	DESIGNED : er dgm	REVISED : REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE - DETECTOR LOOP REPLACEMENT U.S. ROUTE 45 @ PORT CLINTON RD.	F.A. RTE. : 3502	SECTION : 49-RS-6	COUNTY : LAKE	TOTAL SHEETS : 33	SHEET NO. : 20	
	PLT SCALE : 100.0000 / IN.	CHECKED : DATE	REVISED : DATE			SCALE :	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO	ILLINOIS FED. AID PROJECT	CONTRACT NO. : 60N31

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		

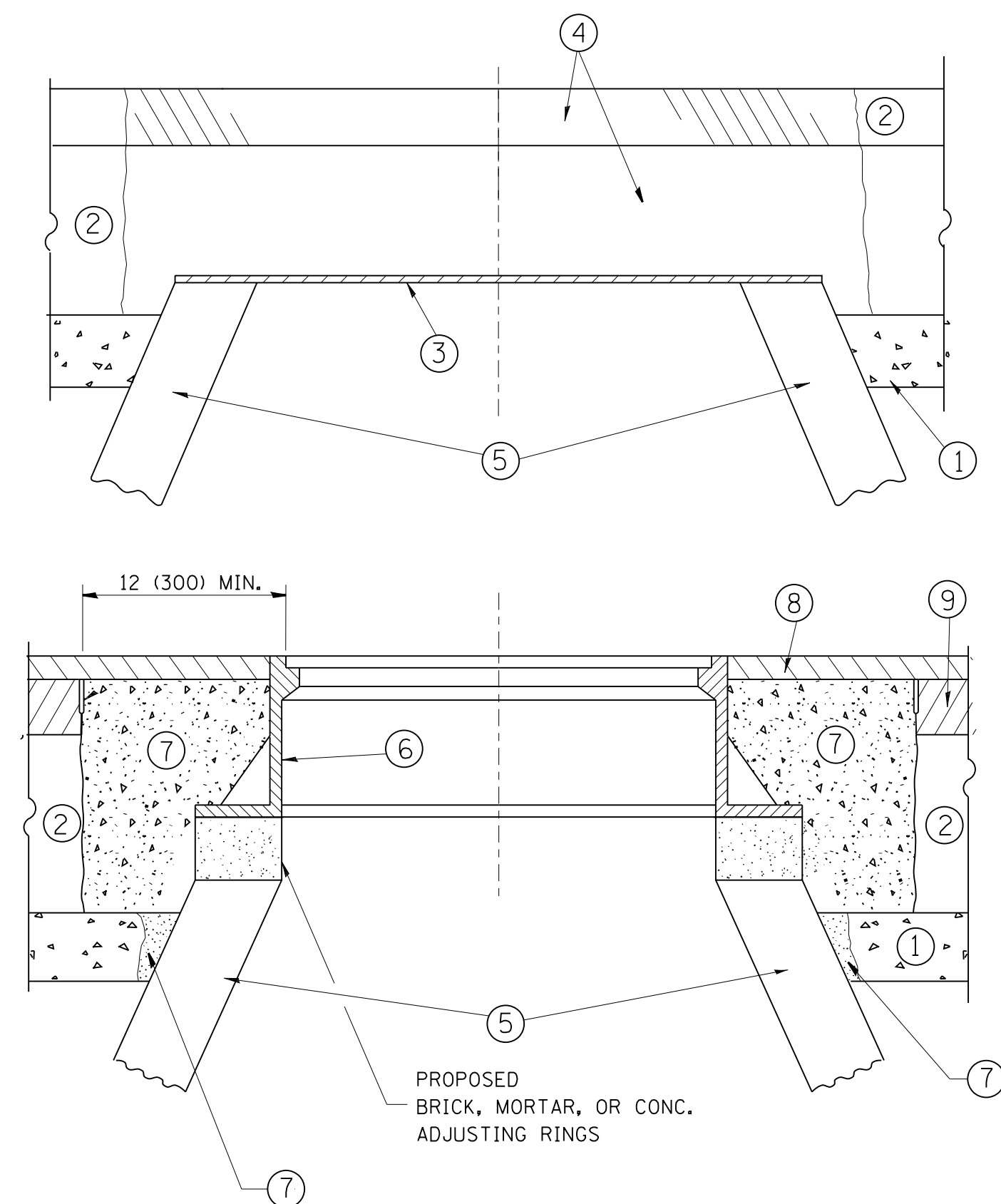


THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENTS ONLY

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

CODE	QUANTITY	UNIT	ITEM
88600600	240	FOOT	DETECTOR LOOP, REPLACEMENT

FILE NAME: c:\p-work\p1\dot\nguyenm\12112618\11\er.dgn	USER NAME: nguyenm	DESIGNED: -	REVISED: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE - DETECTOR LOOP REPLACEMENT U.S. ROUTE 45 @ OLD IL. RTE. 22	F.A. RTE.:	SECTION:	COUNTY:	TOTAL SHEETS:	
		DRAWN: -	REVISED: -			3502	49-RS-6	LAPE	33	21
		CHECKED: -	REVISED: -			CONTRACT NO. 60N31				
		DATE: -	REVISED: -			SCALE:	SHEET NO. OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.



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.

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

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.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

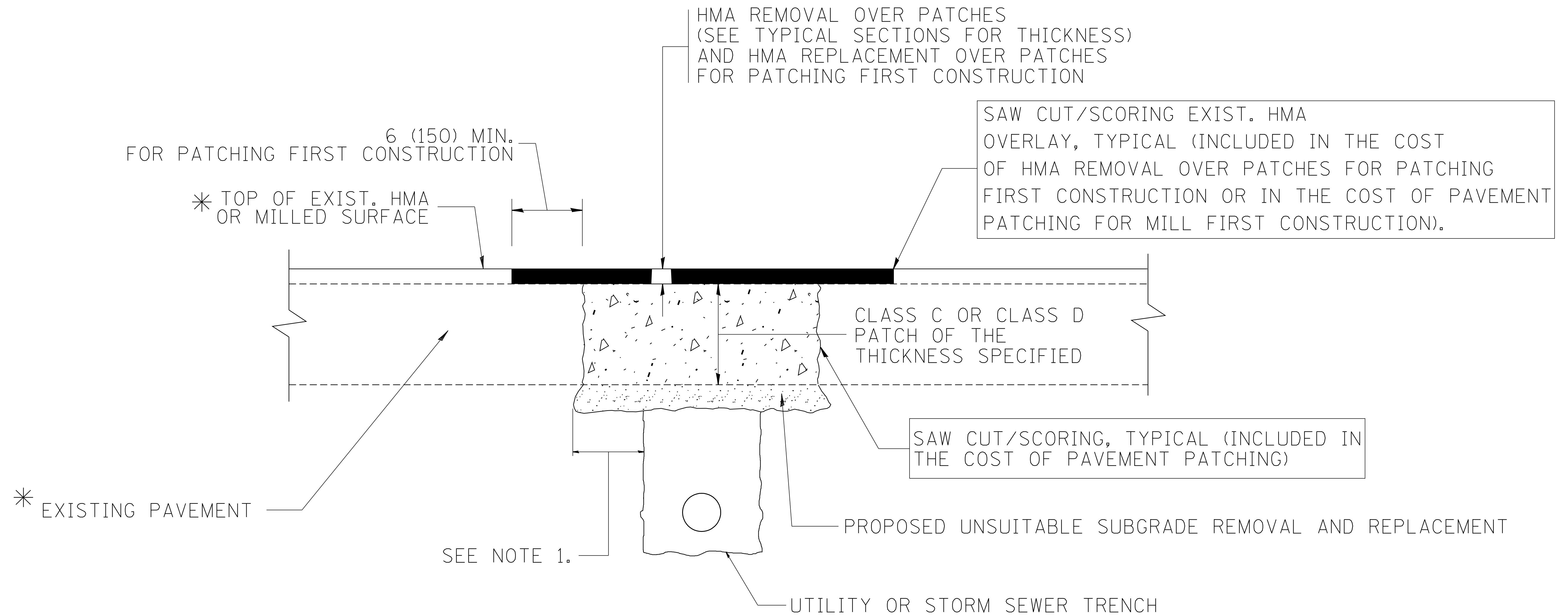
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - R. WIEDEMAN 05-14-04
et:\pw_work\pwork\baerd1\d0108315\bd08.dgn		DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 1/968.5000 1/ m	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**

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3502	49-RS-6	LAKE	33	22
BD600-03 (BD-8)			CONTRACT NO.	
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 = c:\projects\diststd22x34\bd22.dgn	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98
		DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - R. BORO 09-04-07
	PLOT DATE = 10/27/2008	DATE - 10-25-94	REVISED - K. ENG 10-27-08

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT PATCHING FOR
HMA SURFACED PAVEMENT**

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3502	49-RS-6	LAKE	33	23
BD400-04 (BD-22)			CONTRACT NO. 60N31	
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".

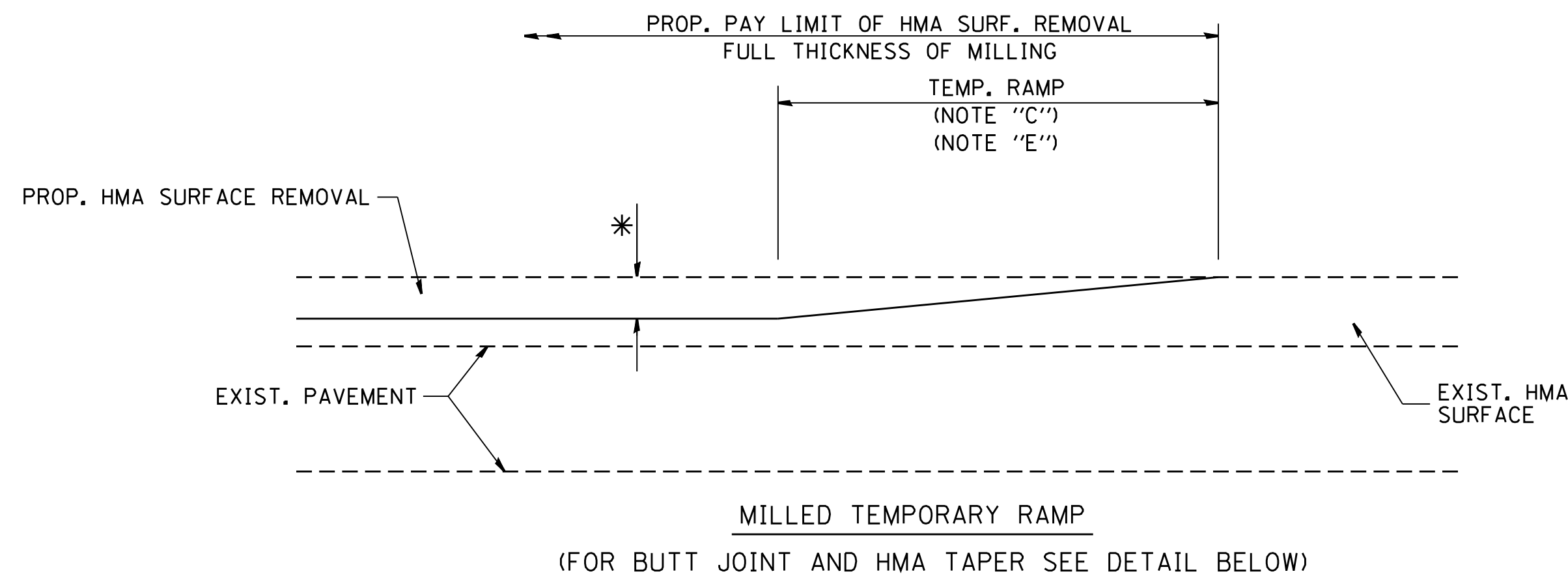
⑦ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.

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.

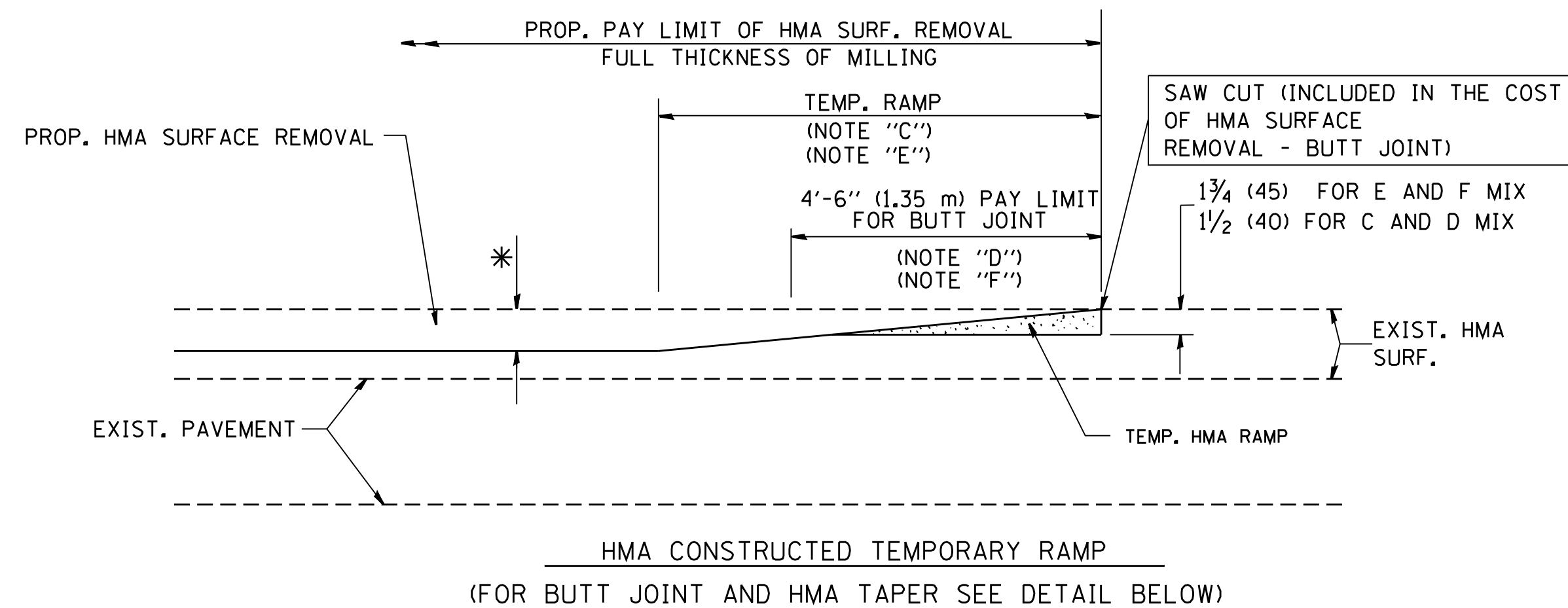
CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

FILE NAME =	USER NAME = drvakosgn	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. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw\work\p\dot\drvakosgn\0108315\bd24.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97			3502	49-RS-6	LAKE	33	24
PLOT SCALE = 50.000' / IN.		CHECKED -	REVISED - M. GOMEZ 01-22-01			BD600-06 (BD-24)		CONTRACT NO. 60N31		
PLOT DATE = 12/15/2009		DATE - 03-11-94	REVISED - R. BORO 12-15-09			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
					SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.		

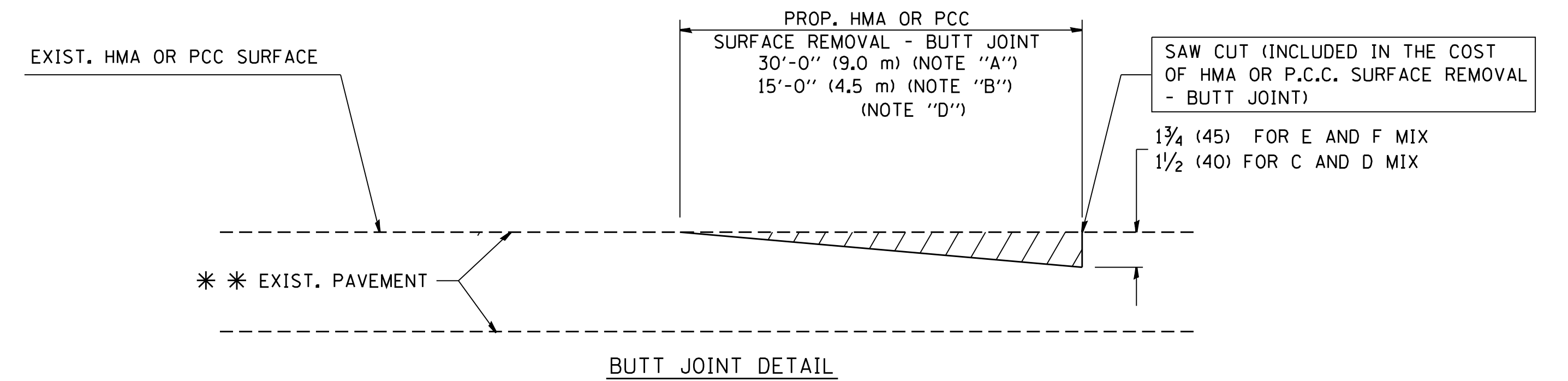


OPTION 1

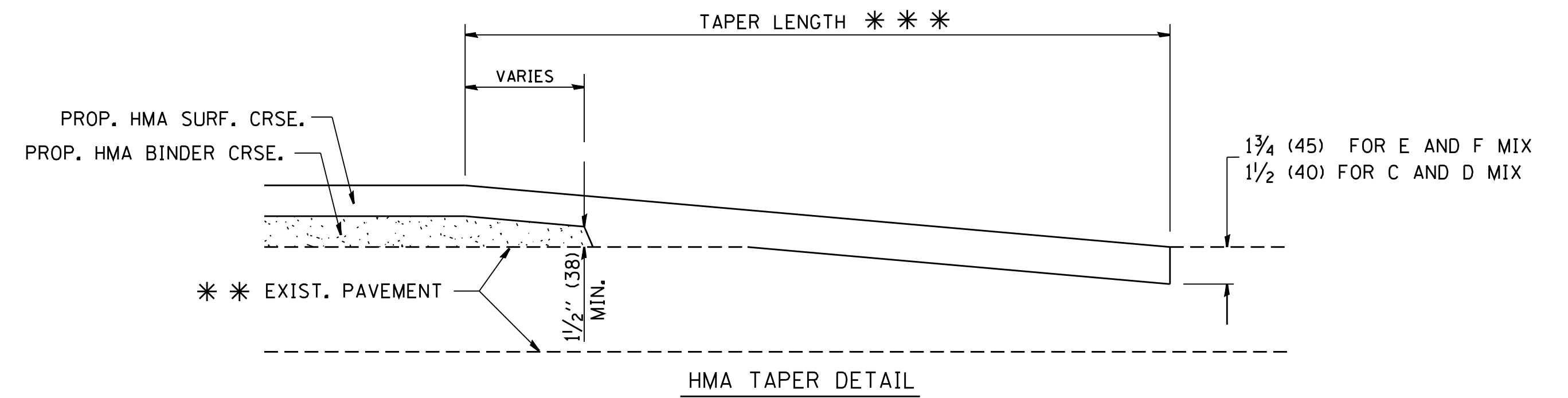


OPTION 2

TYPICAL TEMPORARY RAMP



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

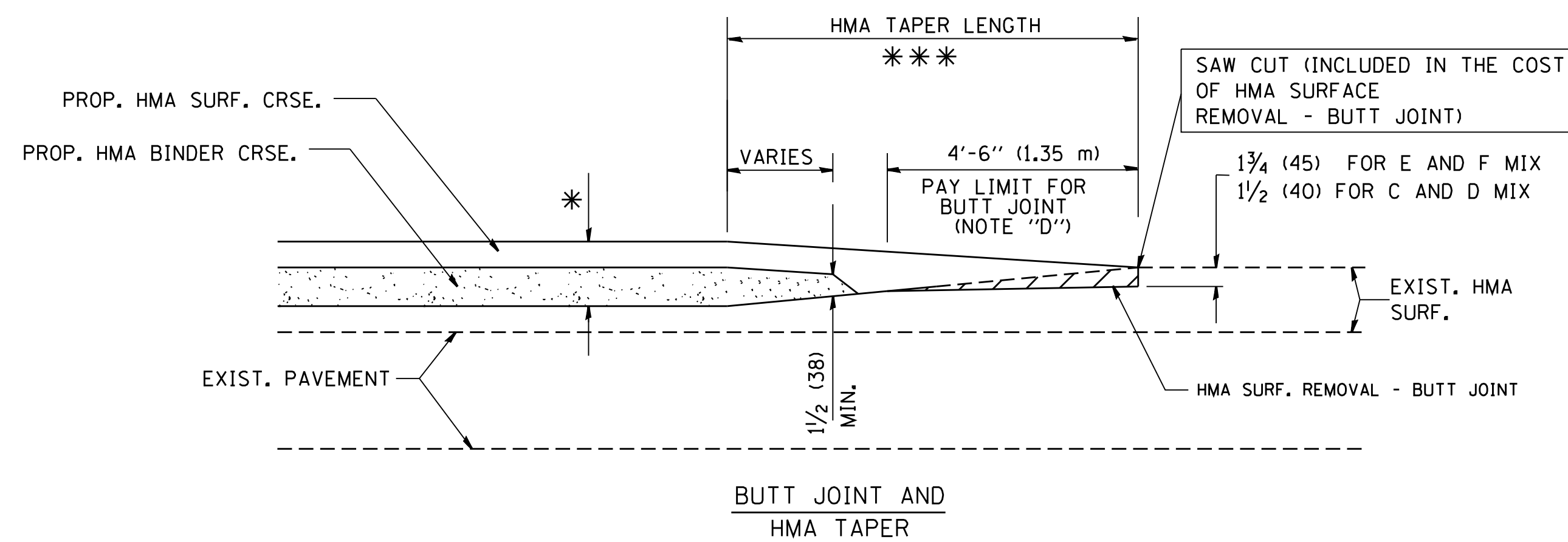
NOTES

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

BASIS OF PAYMENT:

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

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



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

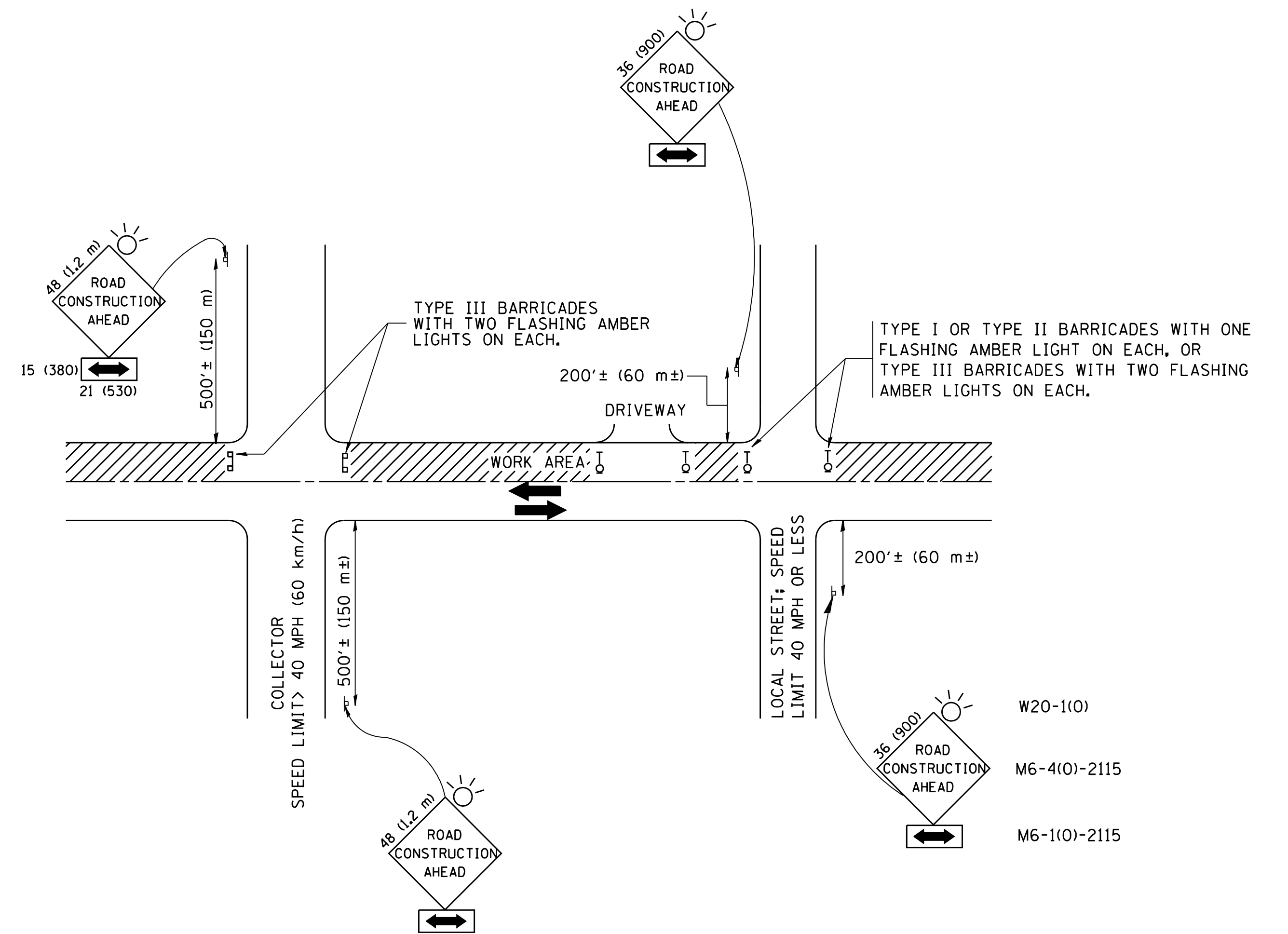
FILE NAME = W:\diststd\22x34\bd32.dgn	USER NAME = gaglionobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BUTT JOINT AND
HMA TAPER DETAILS**

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3502	49-RS-6	LAKE	33	25
BD400-05 BD32			CONTRACT NO. 60N31	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



W20-1(0)
M6-4(0)-2115
M6-1(0)-2115

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.

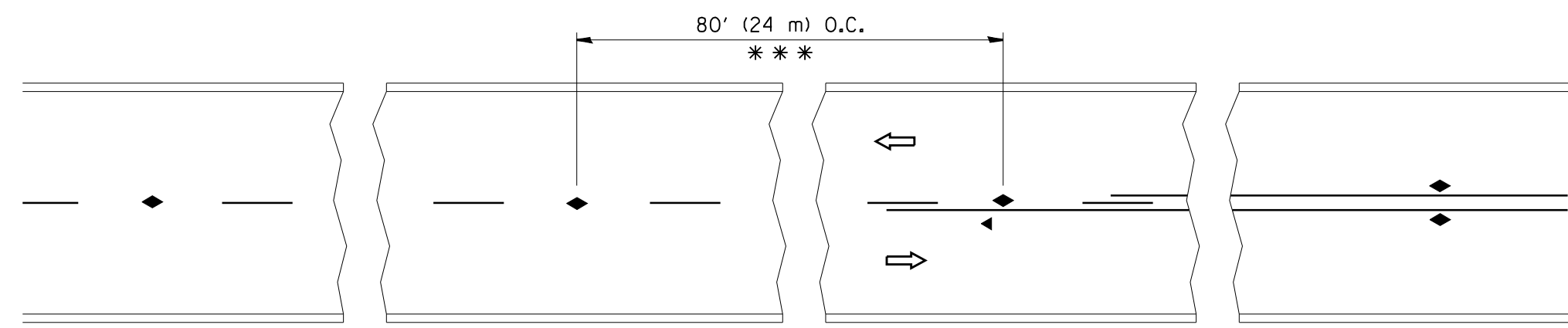
FILE NAME = W:\diststd\22x34\tc10.dgn	USER NAME = gaglonebt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

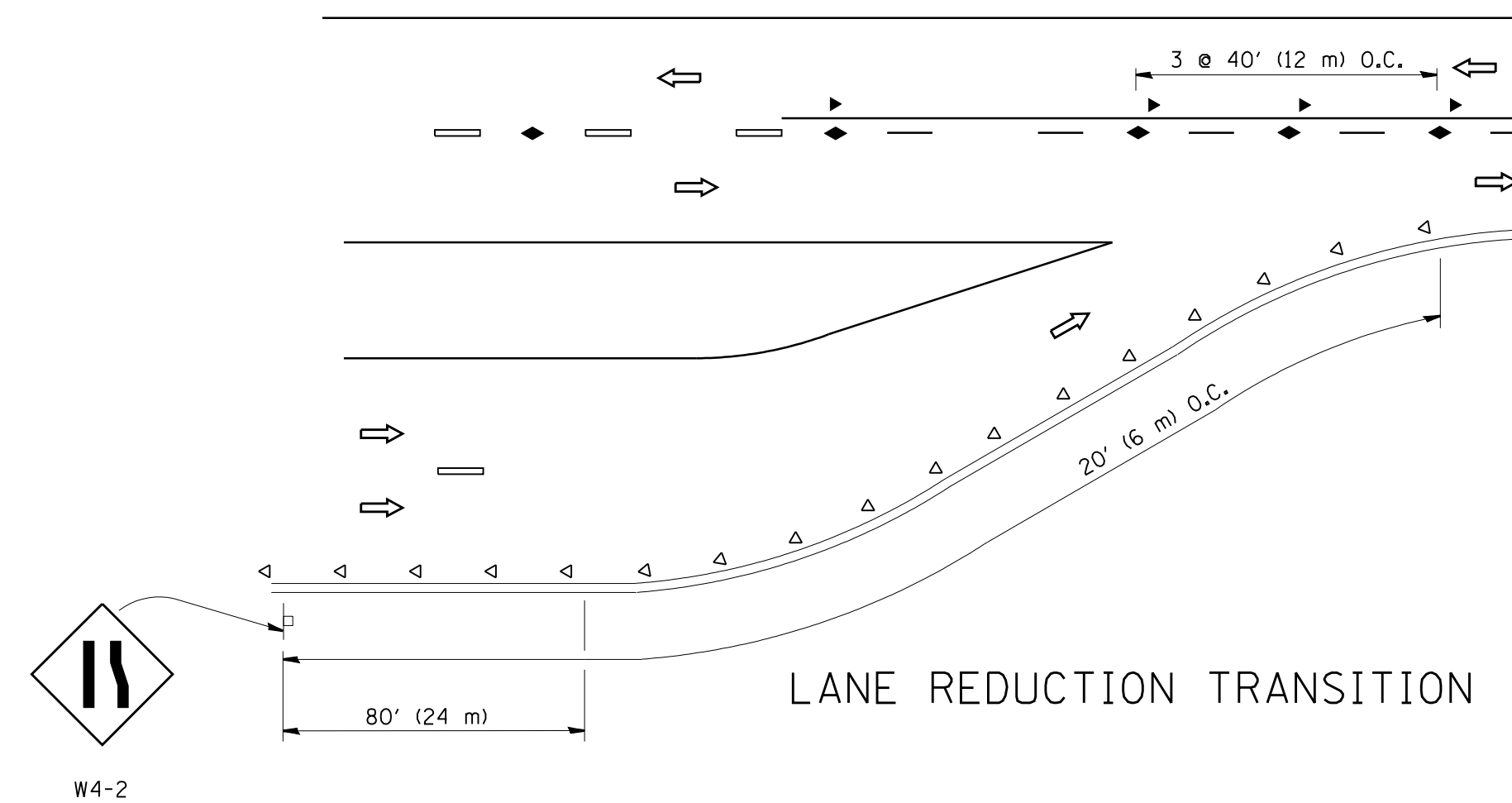
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3502	49-RS-6	LAKE	33	26
TC-10			CONTRACT NO. 60N31	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

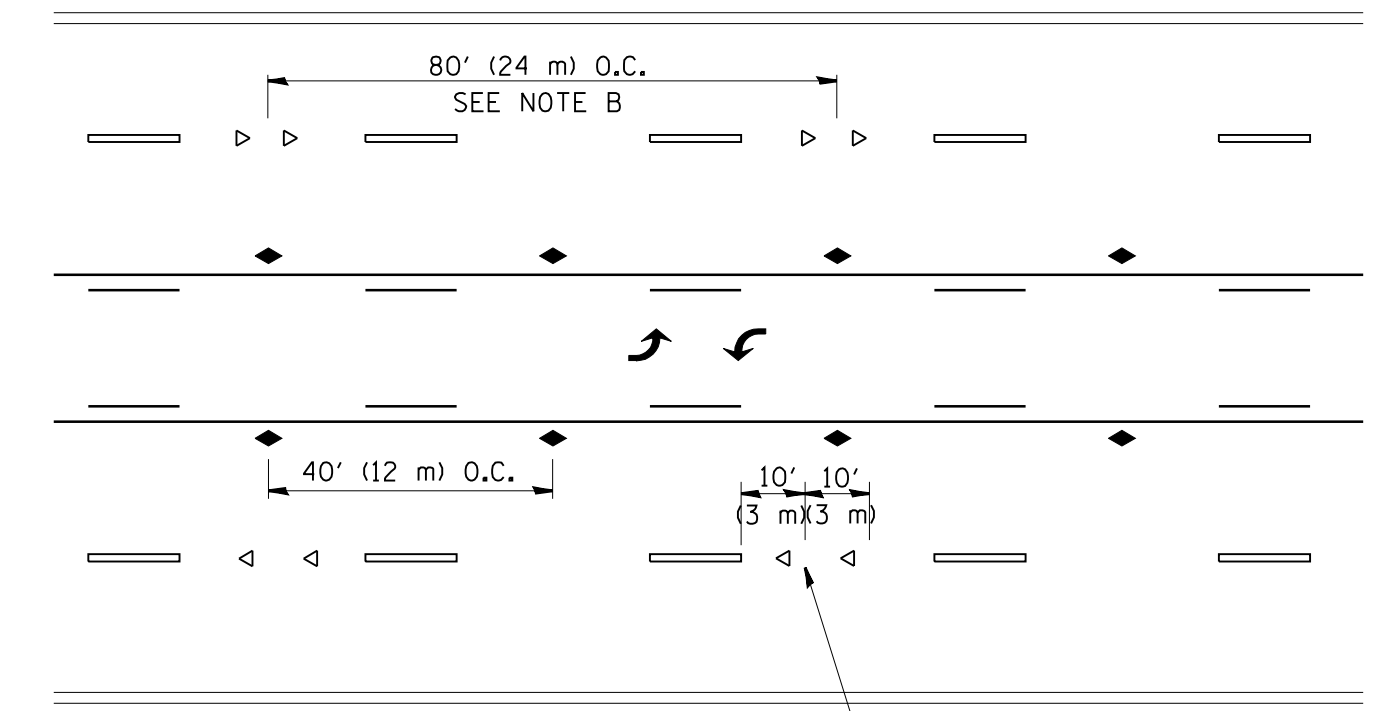


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

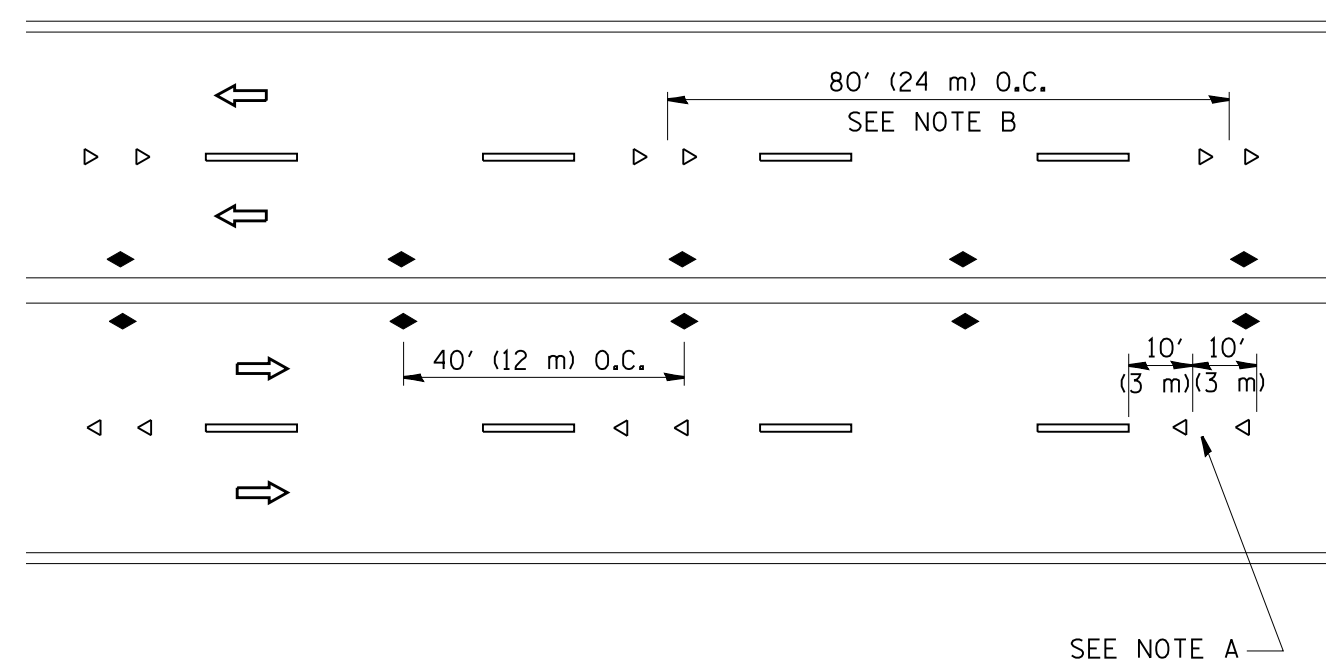
TWO-LANE/TWO-WAY



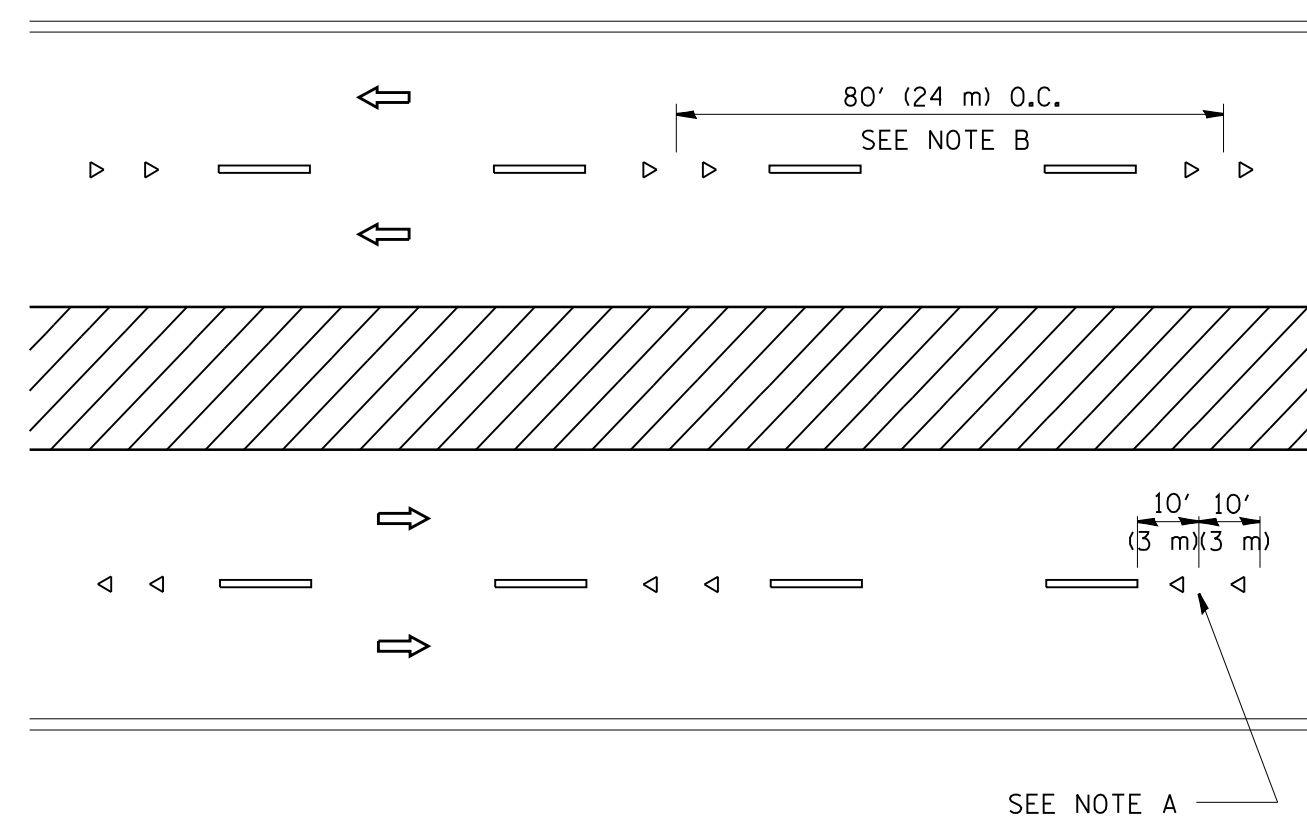
LANE REDUCTION TRANSITION



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

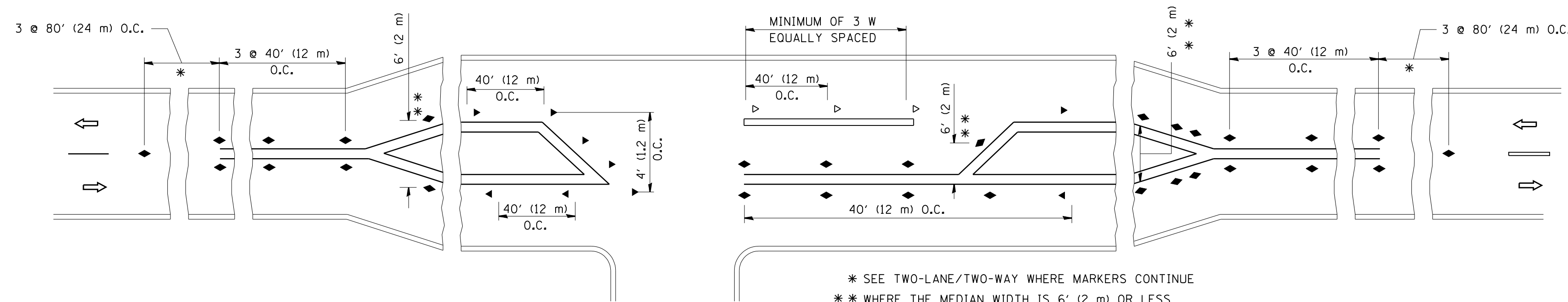
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

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 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.

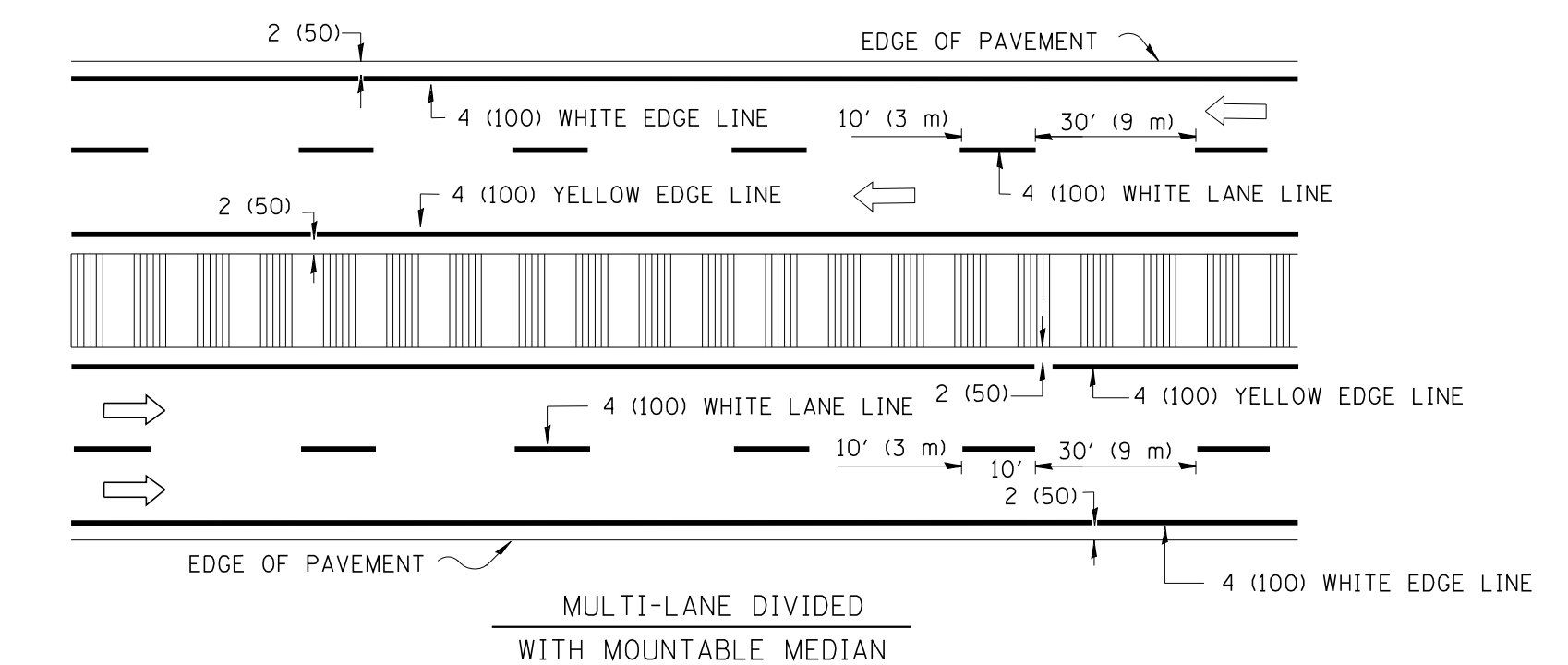
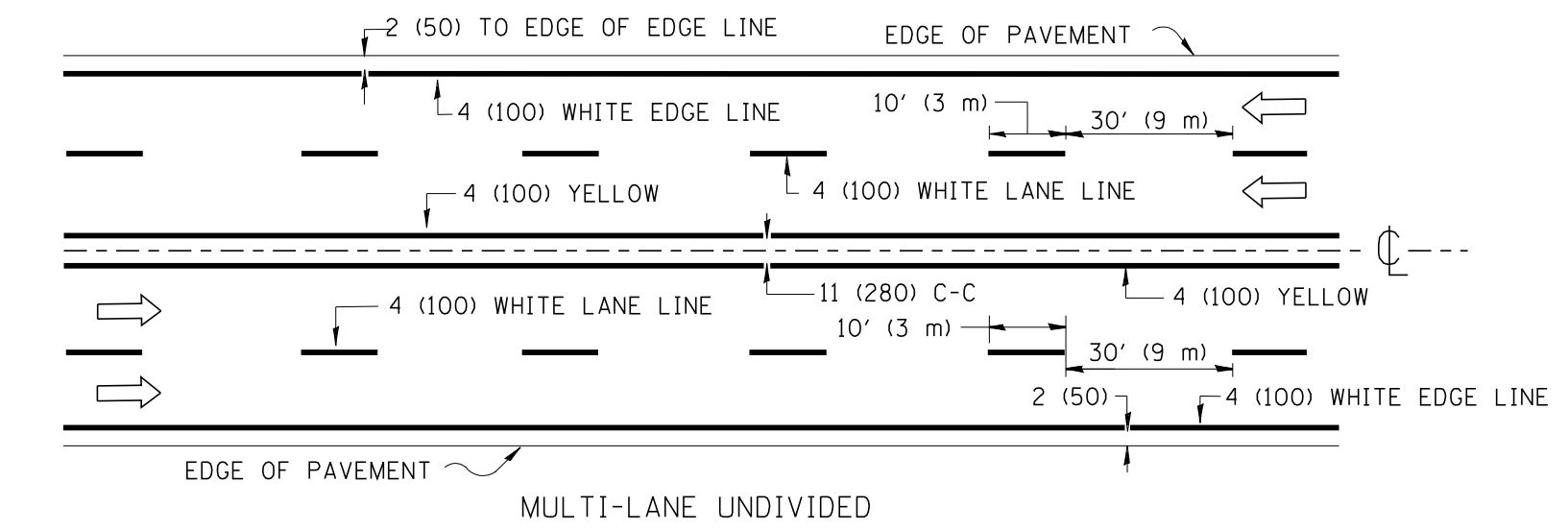
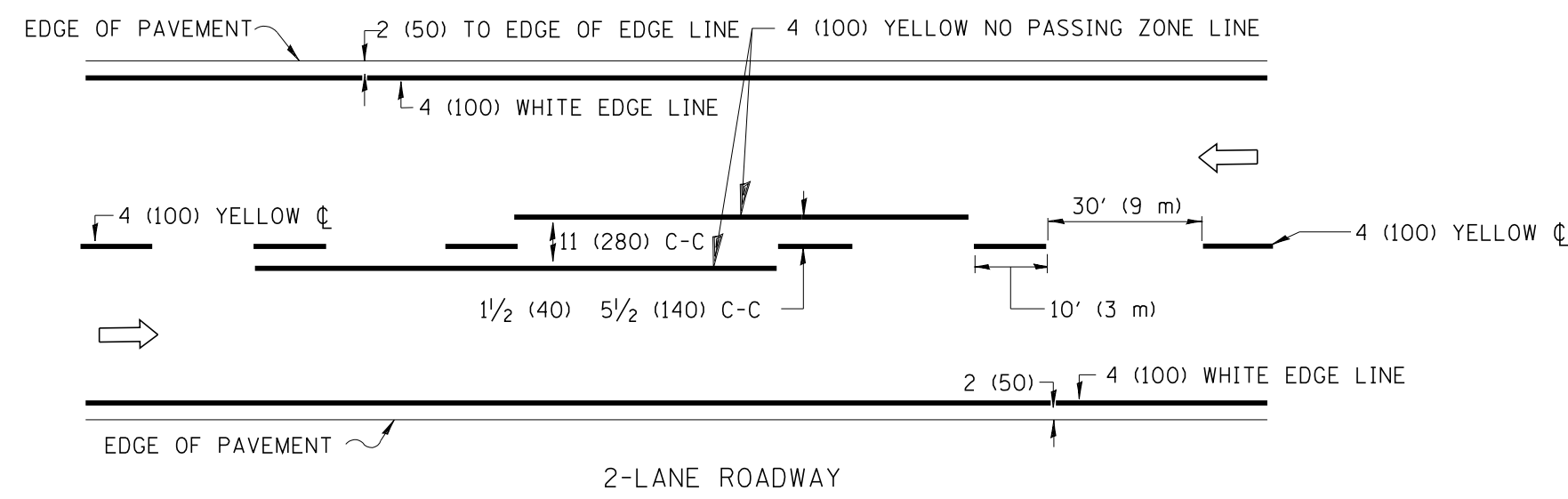
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME = c:\pwwork\pwwork\1eysa\d0108315\11.dgn	USER NAME = 1eysa	DESIGNED - DRAWN -	REVISED - T. RAMMACHER 09-19-94 REVISED - T. RAMMACHER 03-12-99
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - T. RAMMACHER 01-06-00
	PLOT DATE = 3/2/2011	DATE -	REVISED - C. JUCIUS 09-09-09

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

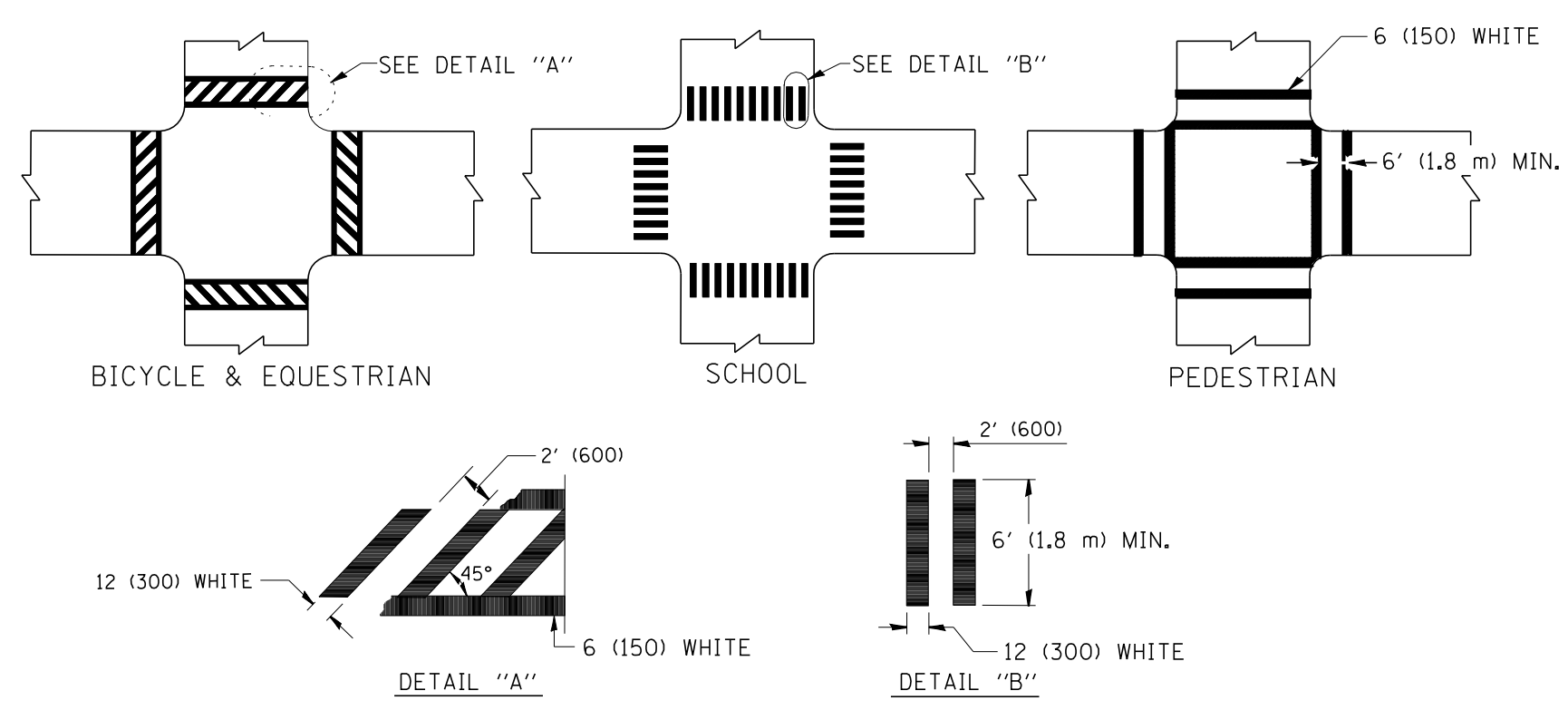
TYPICAL APPLICATIONS			
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3502	49-RS-6	LAKE	33	27
TC-11		CONTRACT NO. 60N31		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

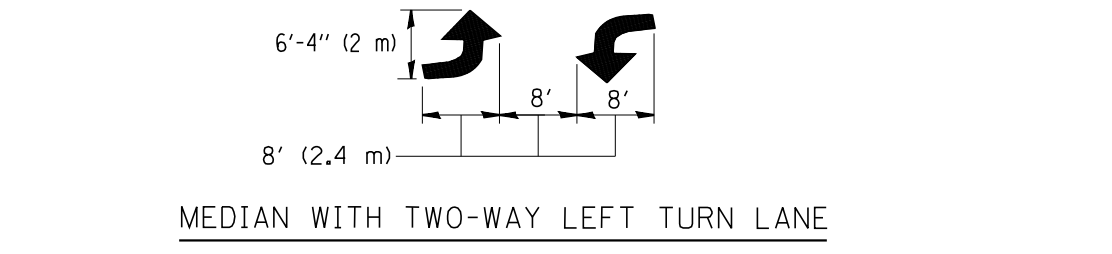
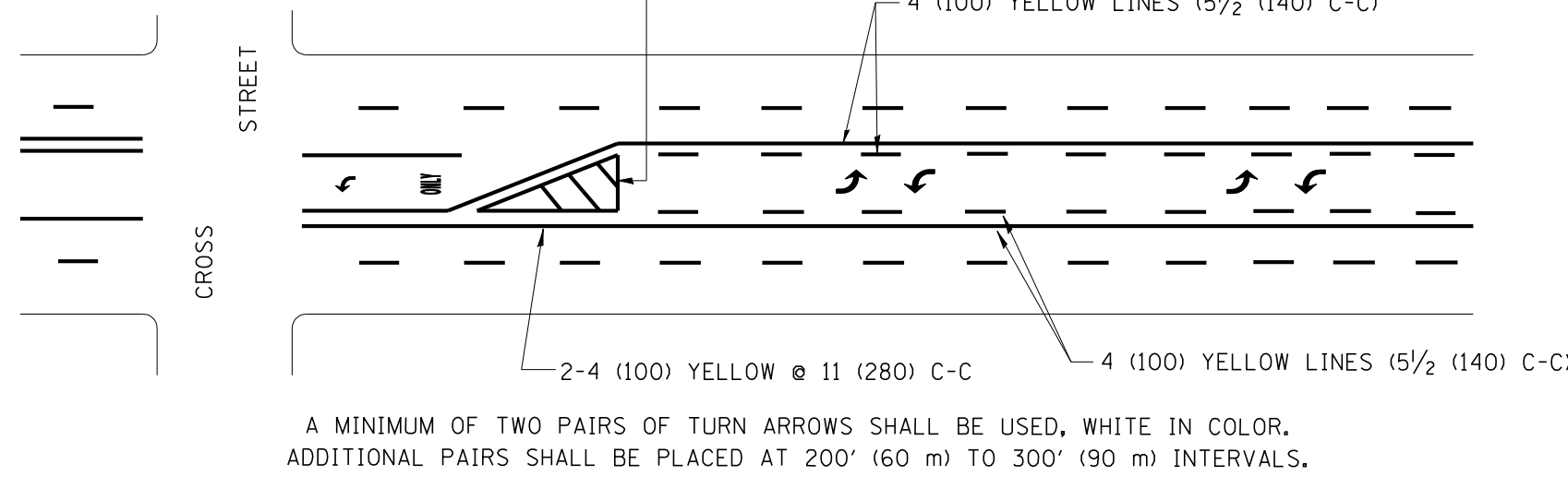
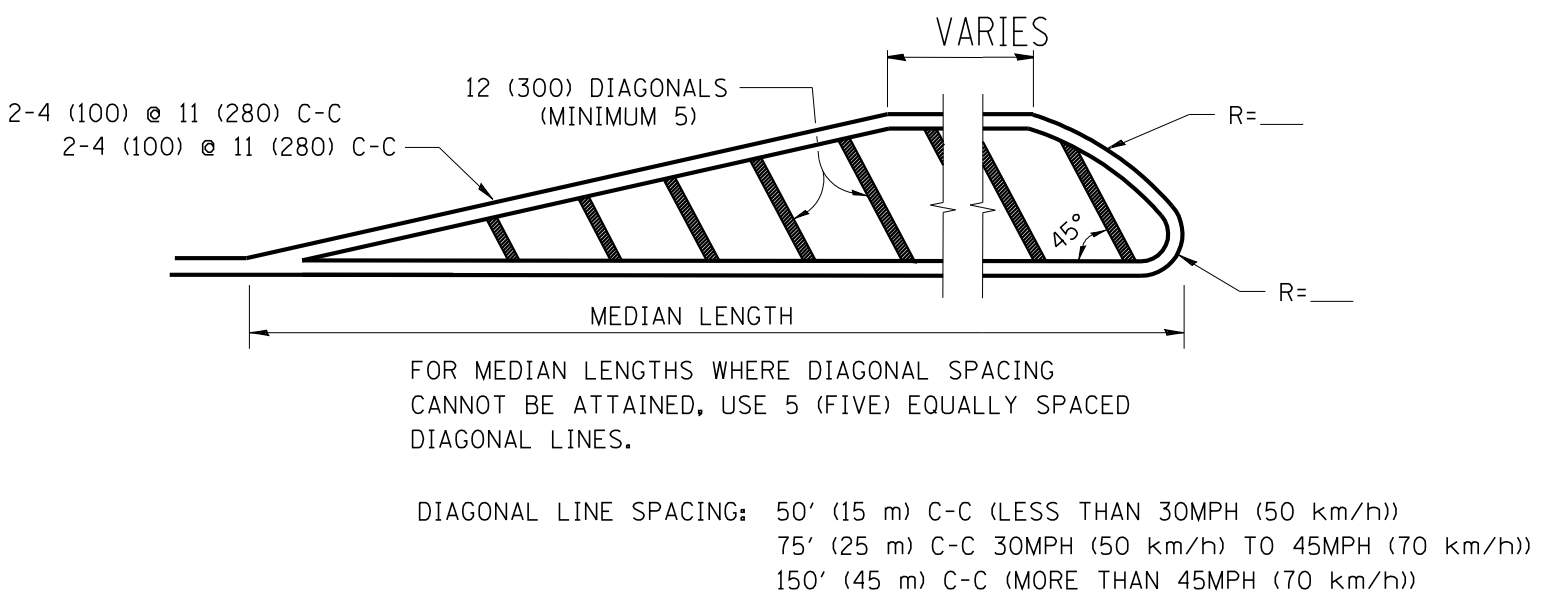
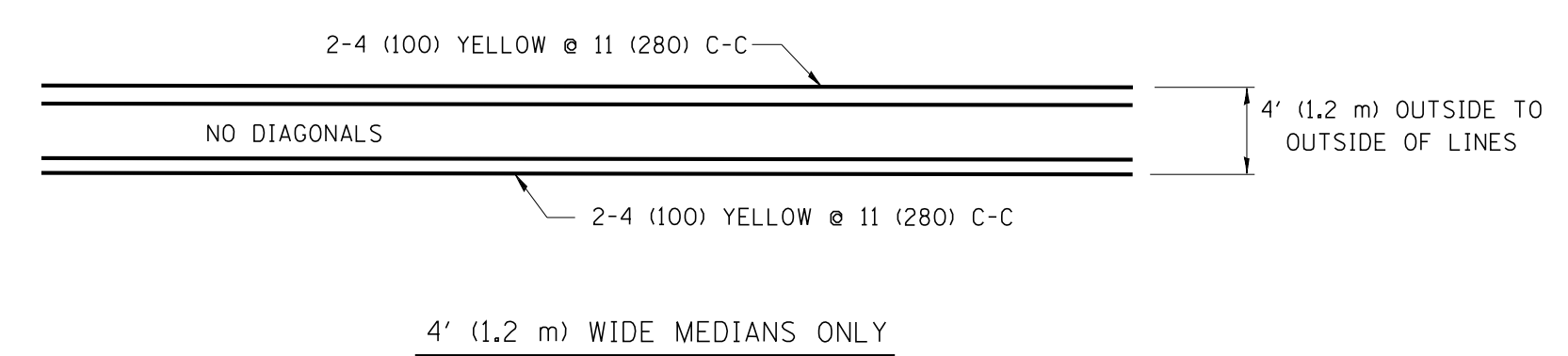


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

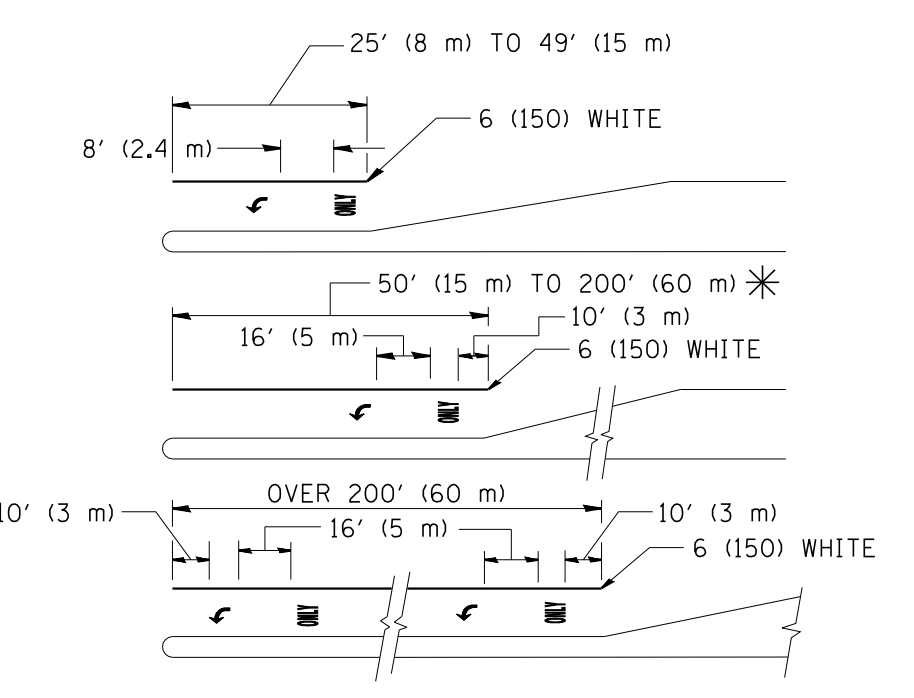
TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING



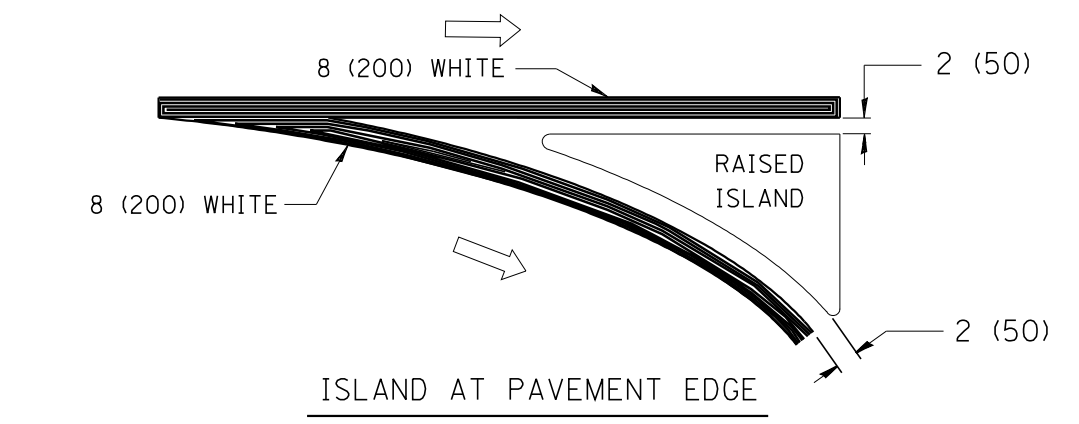
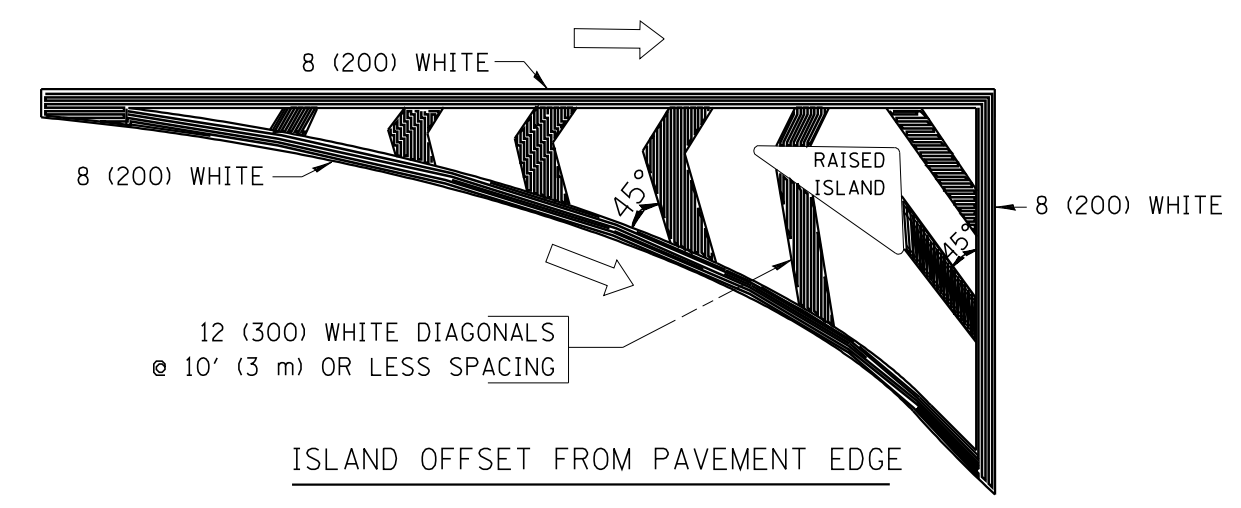
TYPICAL PAINTED MEDIAN MARKING



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

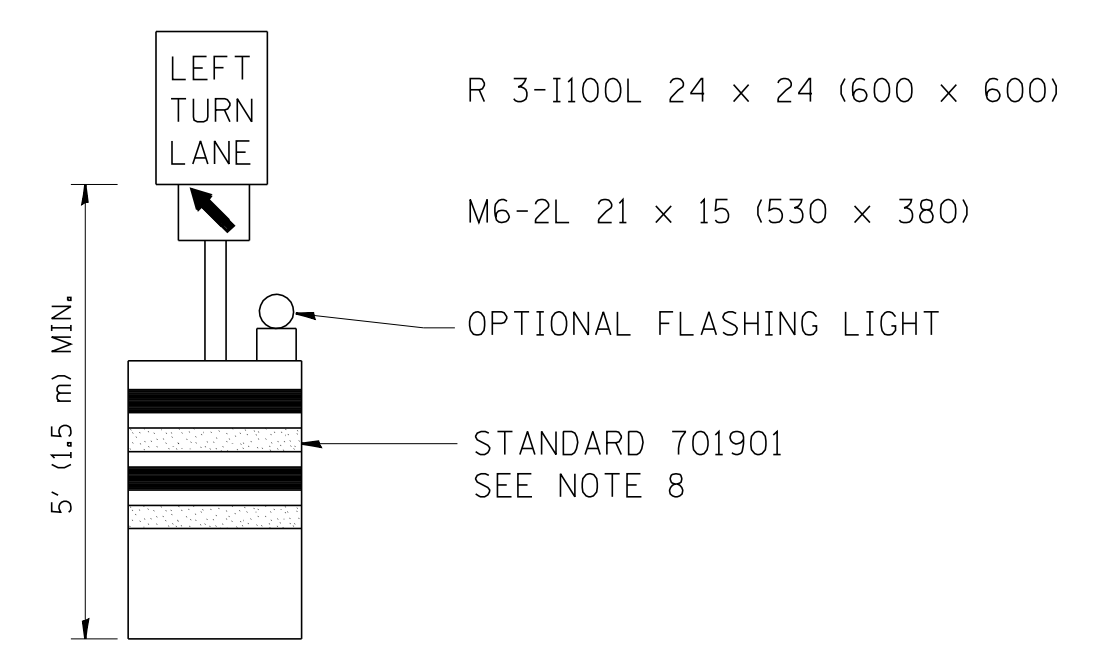
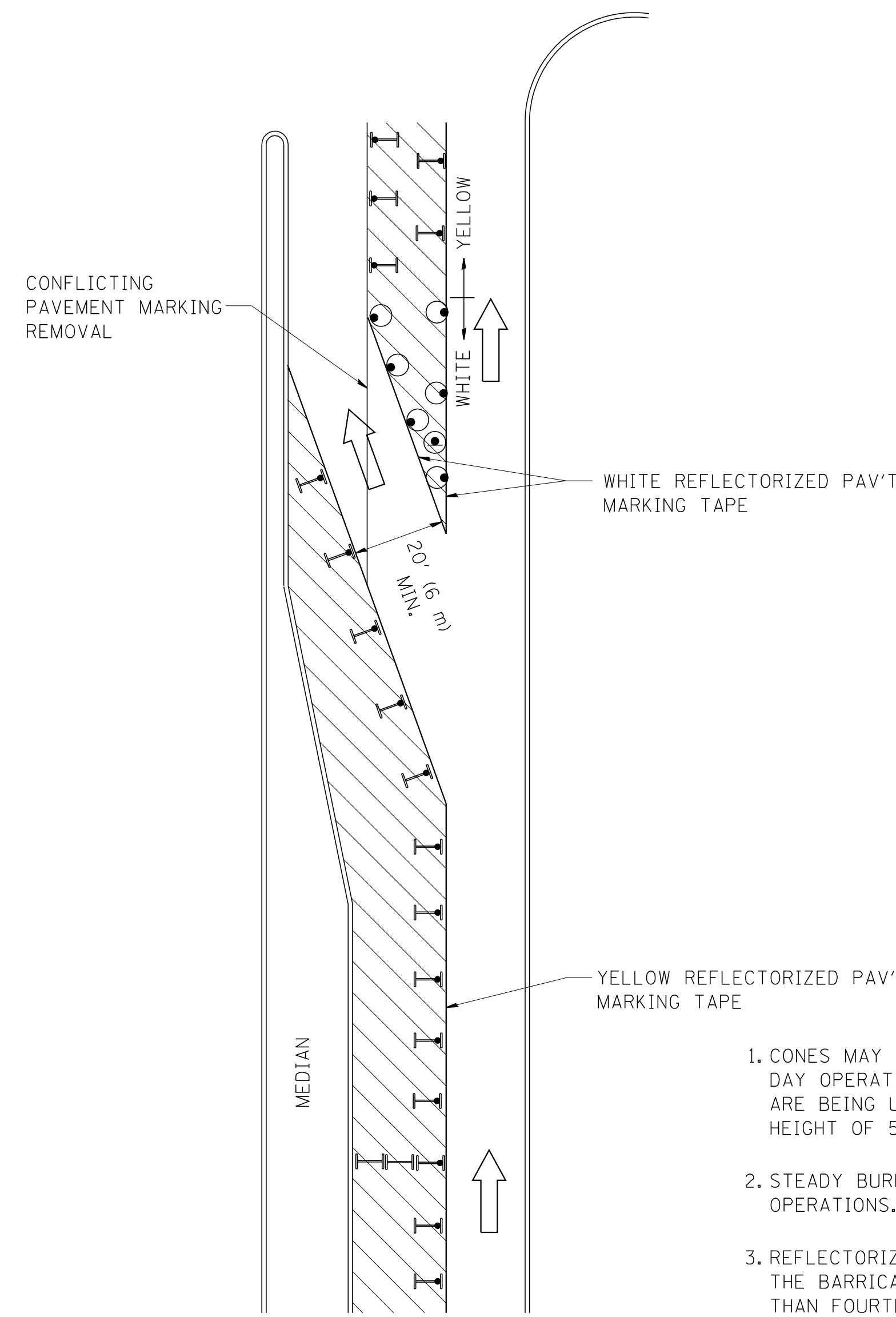
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = drivakosgn	DESIGNED - EVERS	REVISED - T. RAMMACHER 10-27-94
et:\pw_work\pwi\dot\drivakosgn\d0108315\te3.dgn		DRAWN -	REVISED - C. JUCIUS 09-09-09
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED -
	PLOT DATE = 9/9/2009	DATE - 03-19-90	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE			
TYPICAL PAVEMENT MARKINGS			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3502	49-R5-6	LAKE	33	28
TC-13		CONTRACT NO. 60N31		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



GENERAL NOTES

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

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

LEGEND

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

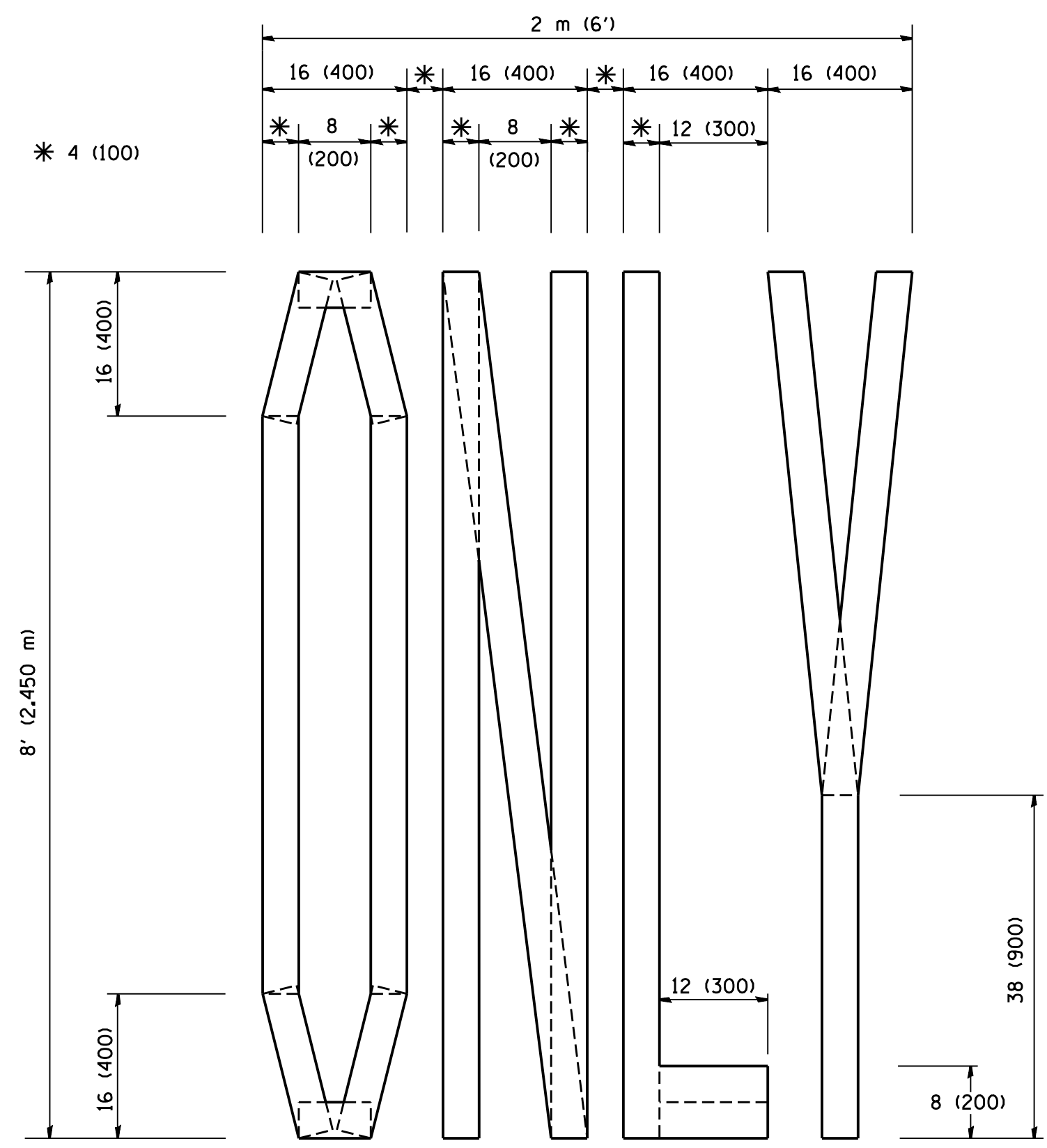
FILE NAME =	USER NAME = drivakosgn	REVISED -T, RAMMACHER 09-08-94	REVISED - R, BORO 09-14-09
et:\pw\work\PWIDOT\DRIVAKOSGN\d0108315\14.dgn		REVISED - A. HOUSEH 11-07-95	REVISED -
	PLOT SCALE = 49.9999' / IN.	REVISED - A. HOUSEH 10-12-96	REVISED -
	PLOT DATE = 9/14/2009	REVISED -T, RAMMACHER 01-06-00	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

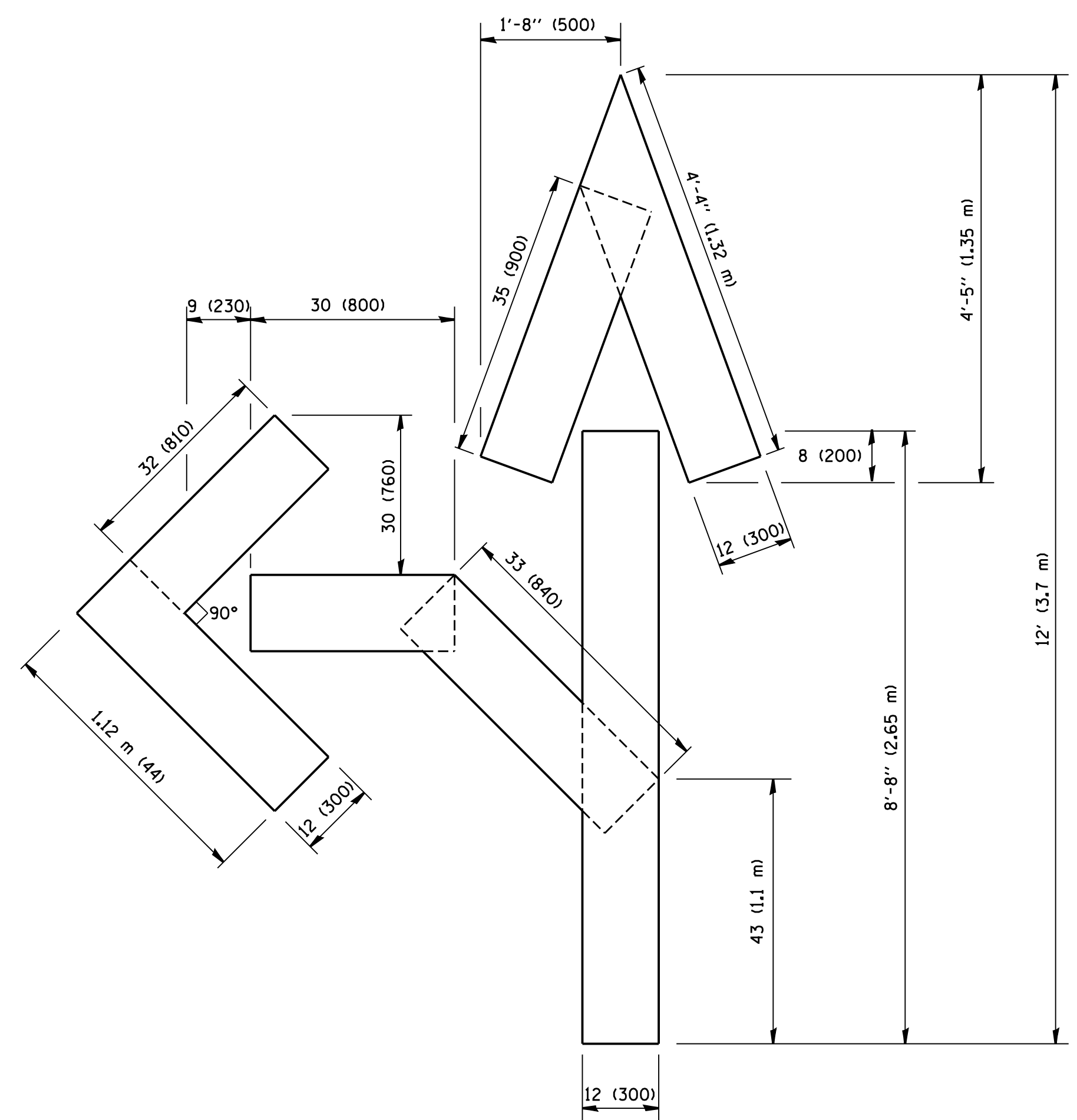
**TRAFFIC CONTROL AND PROTECTION AT TURN BAYS
(TO REMAIN OPEN TO TRAFFIC)**

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

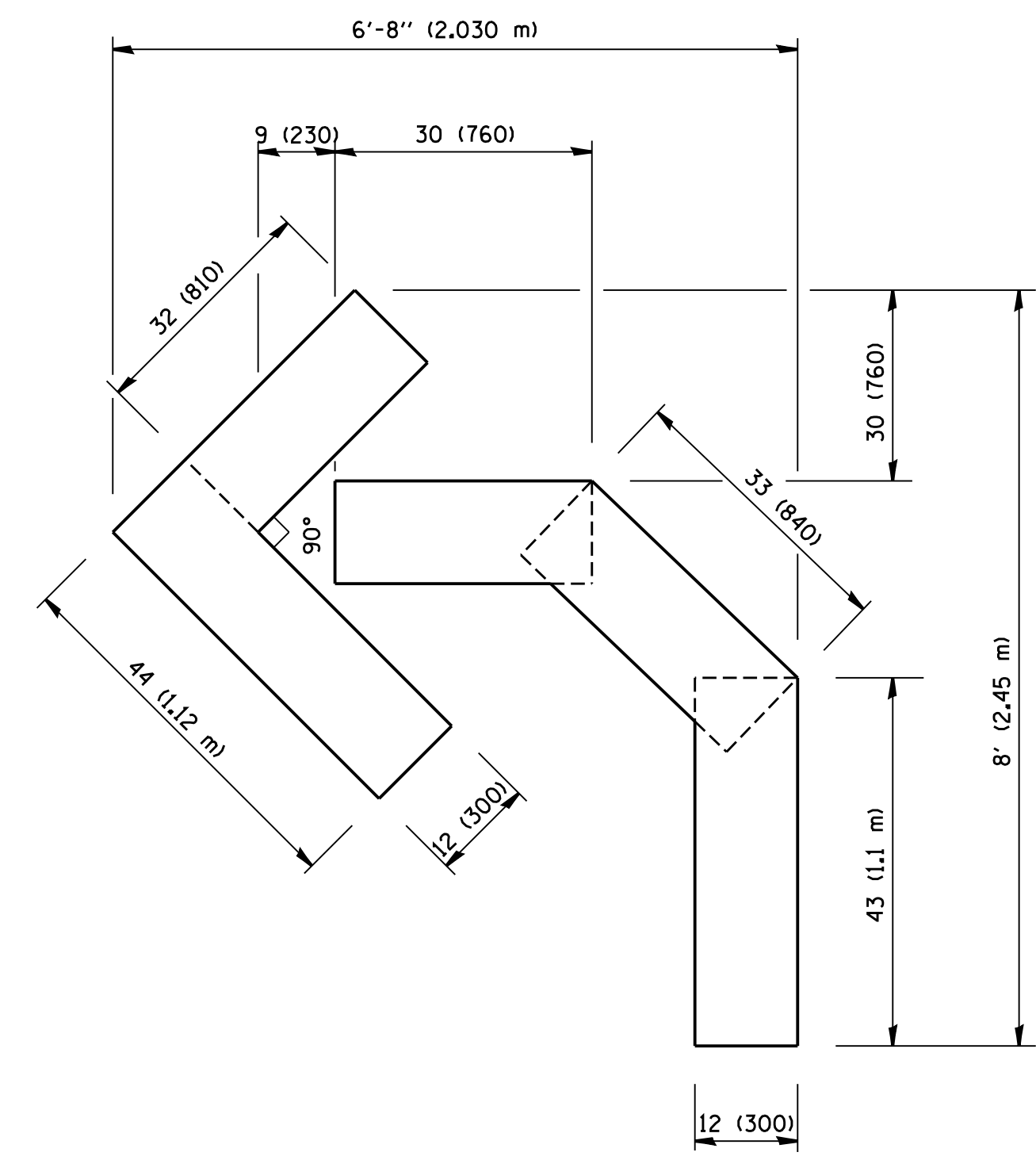
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3502	49-RS-6	LAKE	33	29
TC-14		CONTRACT NO. 60N31		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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)

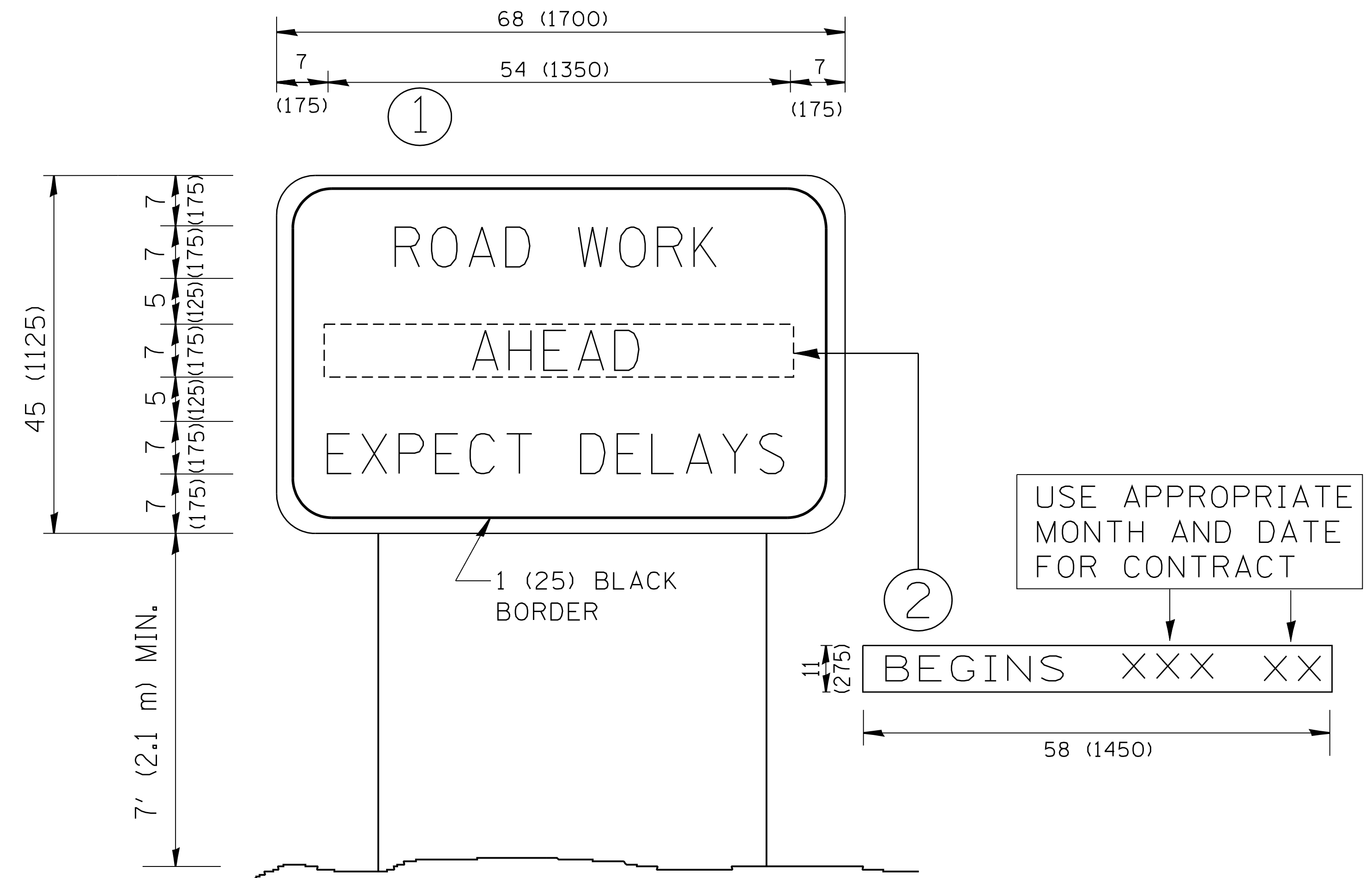
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME = W:\diststd\22x34\tbl6.dgn	USER NAME = gaglionobt	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. 1 OF 1 SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3502	49-RS-6	LAKE	33	30
TC-16			CONTRACT NO. 60N31	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

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

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

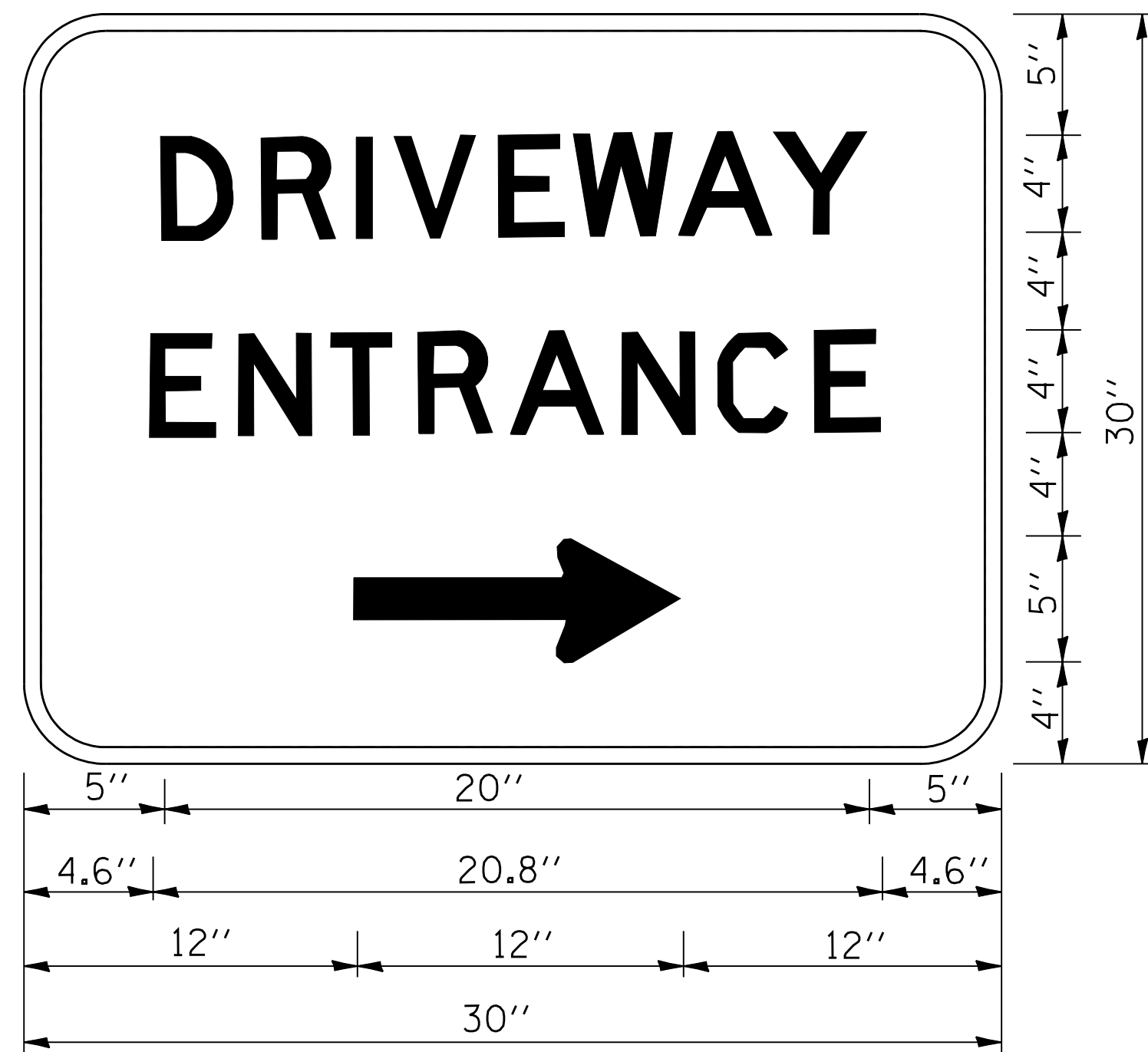
FILE NAME = W:\diststd\22x34\tc22.dgn	USER NAME = geglonebt	DESIGNED -	REVISED - R. MIRS 09-15-97
		DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD
INFORMATION SIGN**

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3502	49-R5-6	LAKE	33	31
TC-22		CONTRACT NO. 60N31		
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".

FILE NAME = W:\diststd\22x34\ts26.dgn	USER NAME = goglionobt	DESIGNED -	REVISED - C. JUCIUS 02-15-07
		DRAWN -	REVISED -
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/4/2008	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

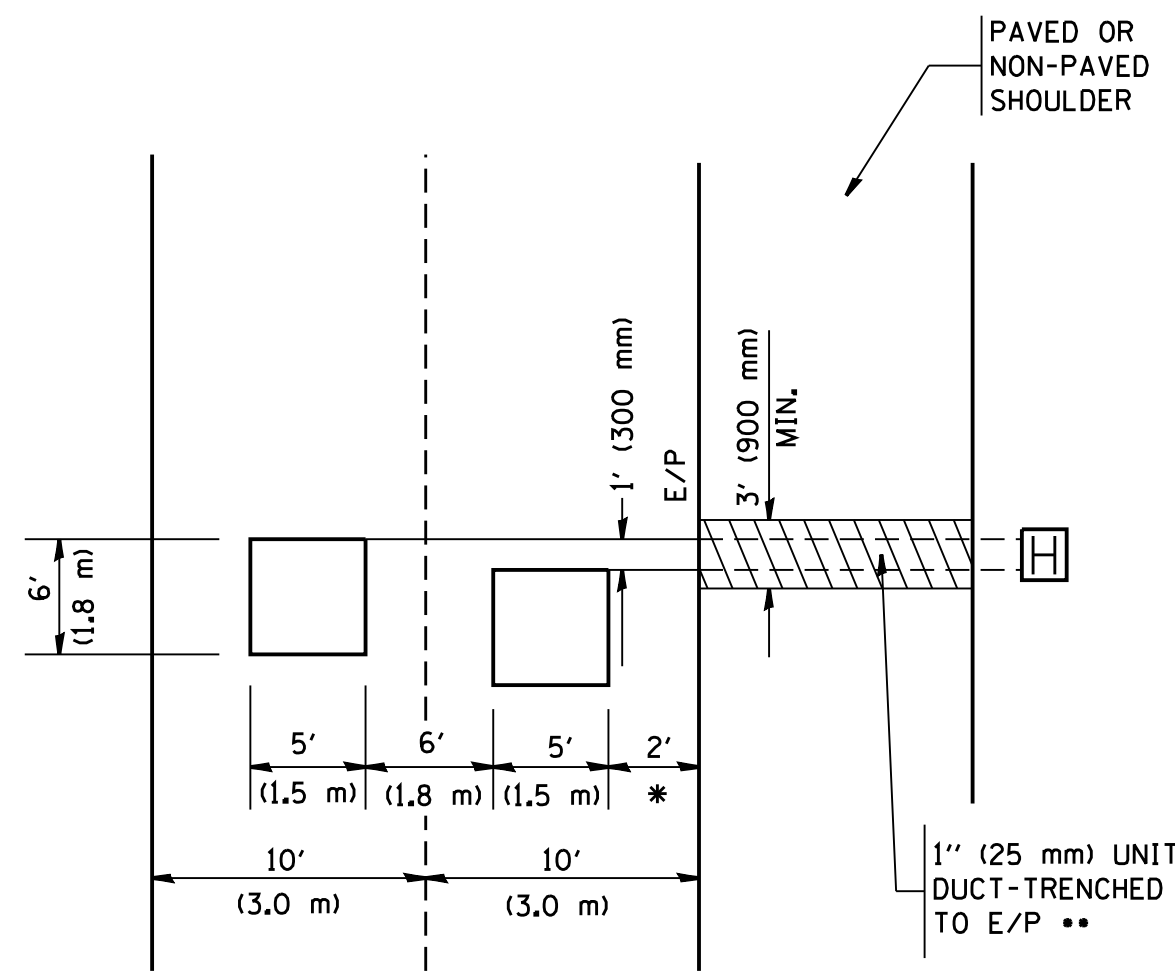
DRIVEWAY ENTRANCE SIGNING

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3502	49-RS-6	LAKE	33	32
TC-26			CONTRACT NO. 60N31	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

LOOPS NEXT TO SHOULDERS

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



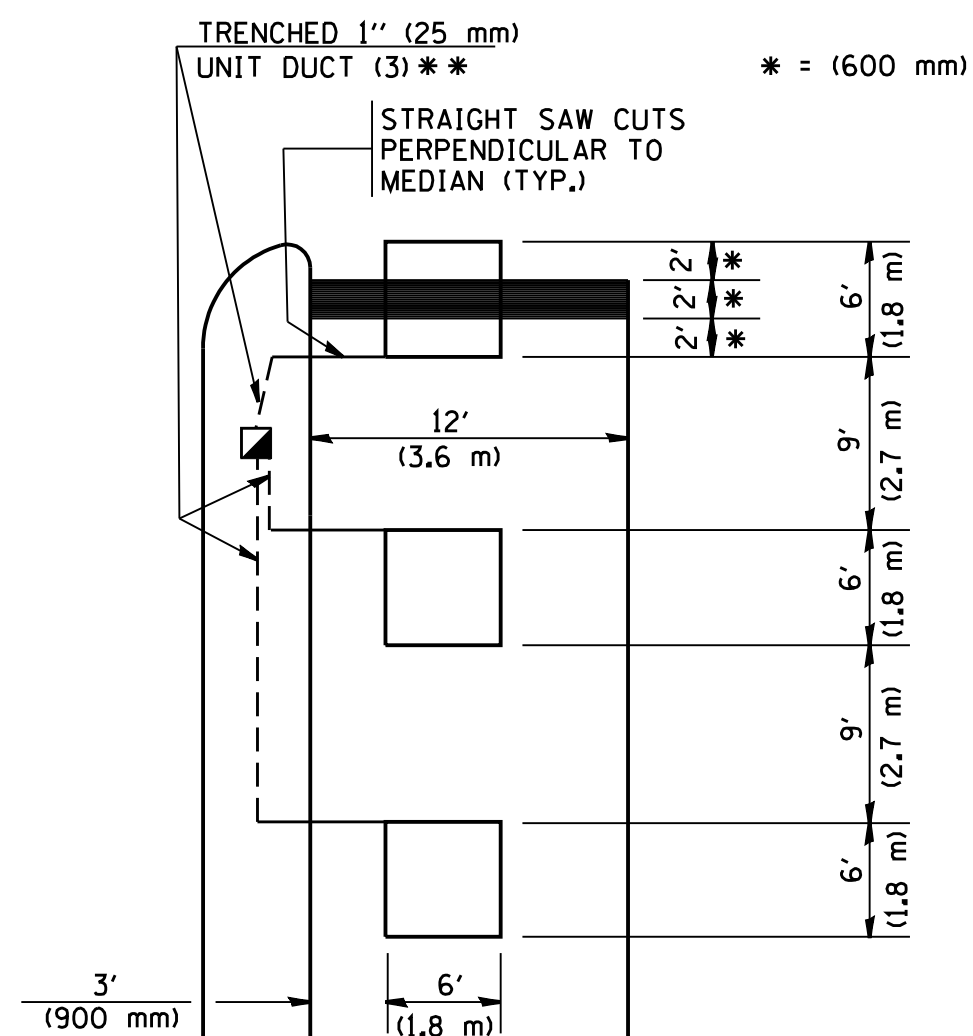
* = (600 mm)

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

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

(PROTECTED / PERMITTED LEFT TURN PHASING)

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



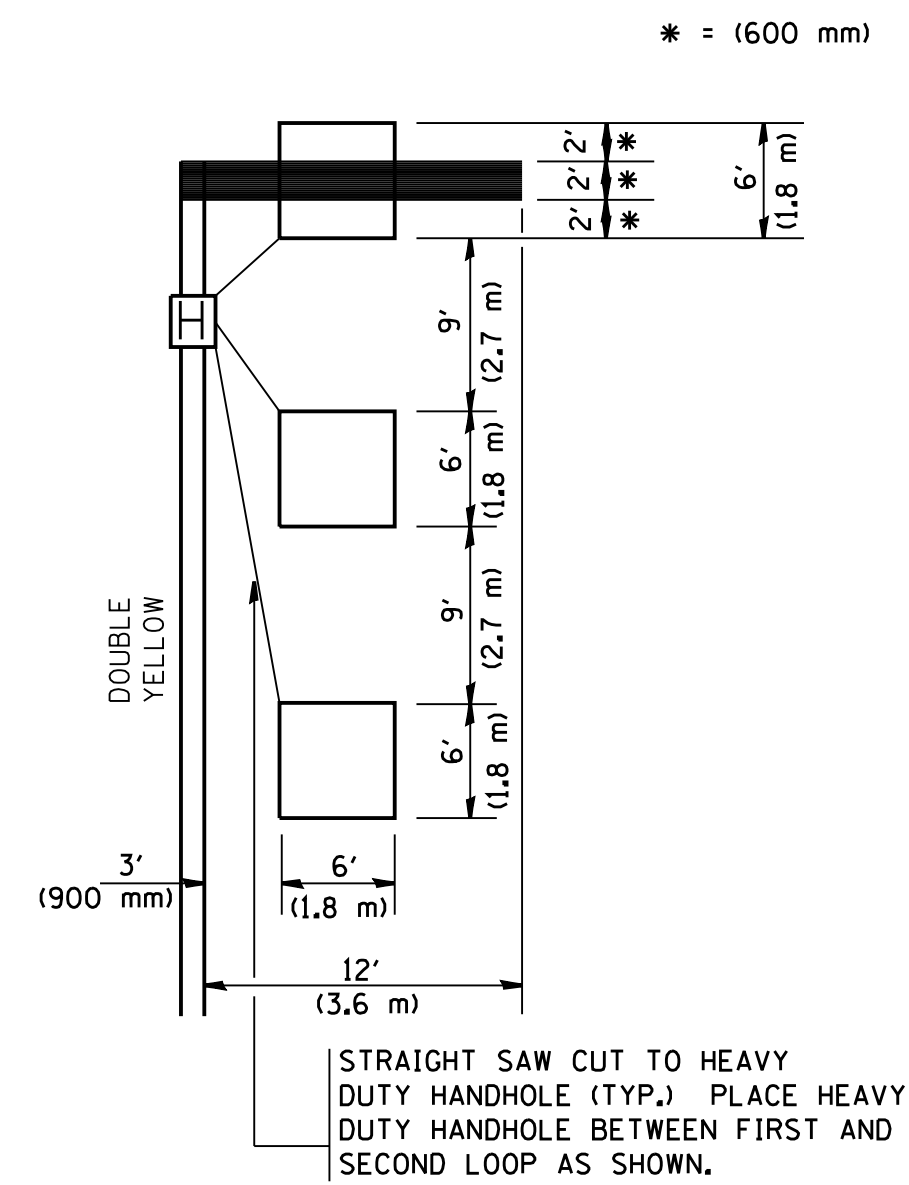
* = (600 mm)

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

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

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

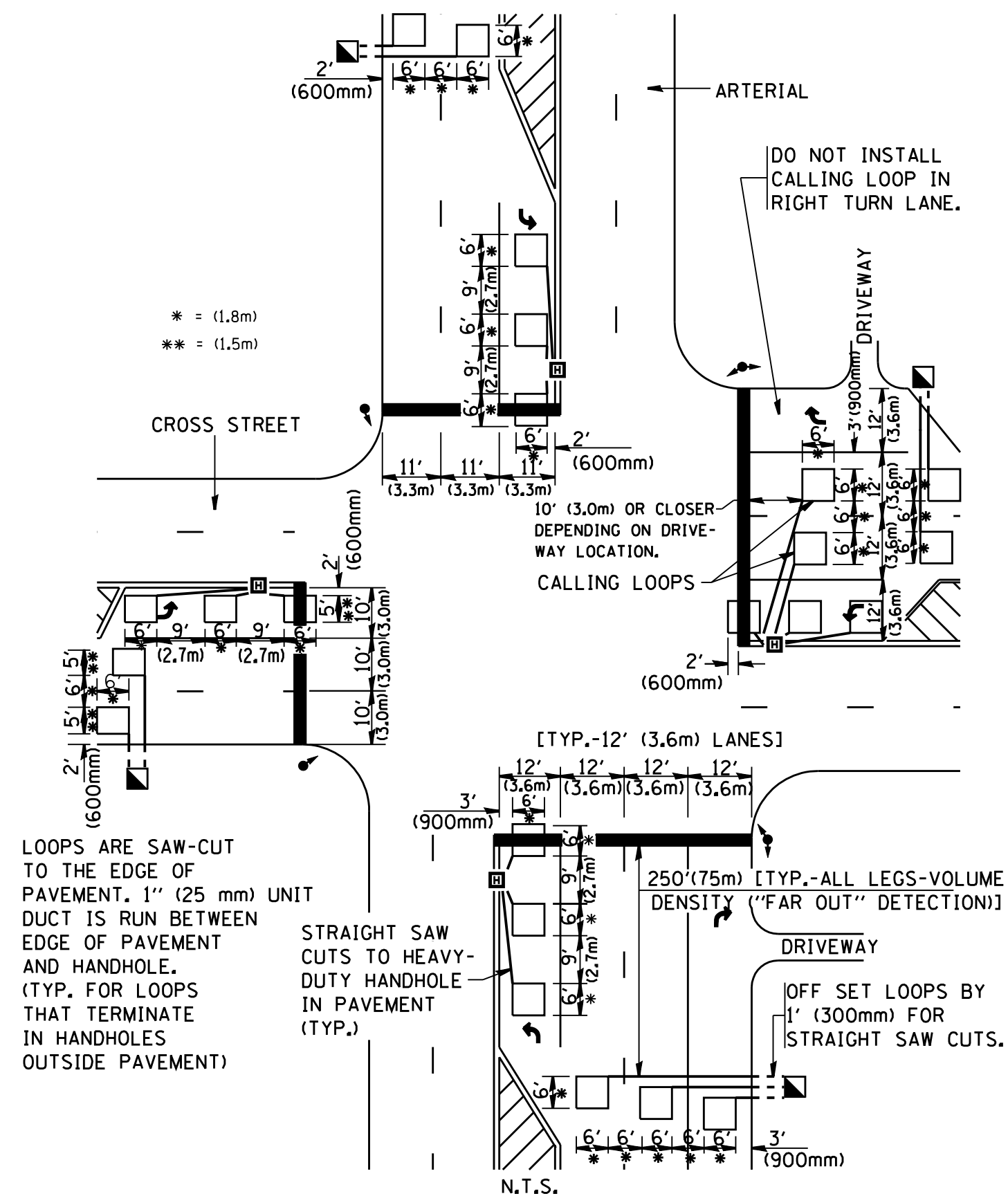
(PROTECTED / PERMITTED LEFT TURN PHASING)



* = (600 mm)

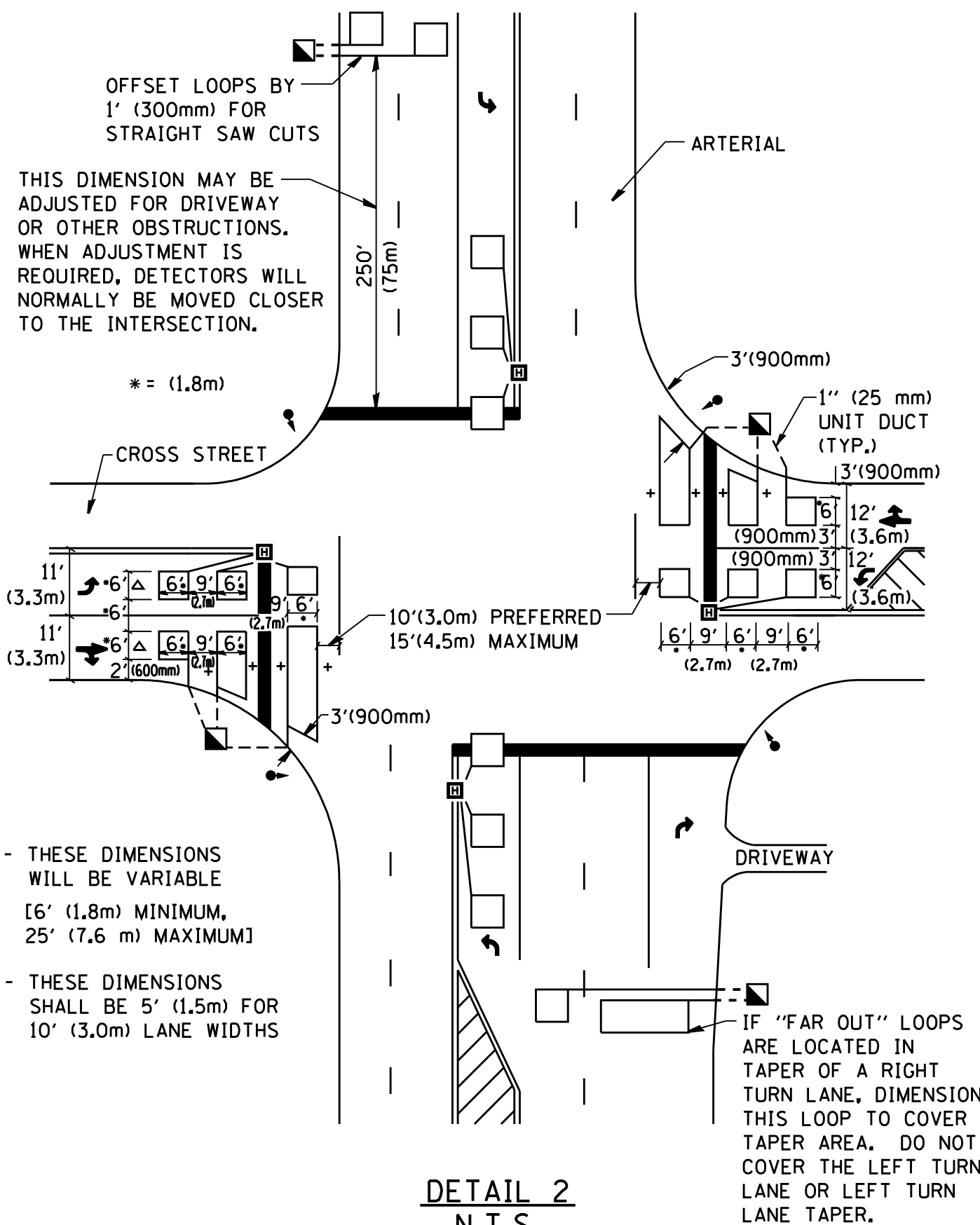
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



DETAIL 1
N.T.S.

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



DETAIL 2
N.T.S.

NOTES:

VEHICLES LOOP DETECTORS

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

PLACEMENT OF DETECTORS

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

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

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

NOTE:

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

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

FILE NAME = W:\diststd\22x34\ts07.dgn	USER NAME = gagi1nabt	DESIGNED -	REVISED -
		DRAWN -	REVISED -
		CHECKED - R.K.F.	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3502	49-RS-6	LAKE	33	33
TS-07		CONTRACT NO. 60N31		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				