09-20-2019 LETTING ITEM 014

014

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2018-035-RS	McHENRY	28	1
	ILLINOIS	CONTRACT NO. 62G56		

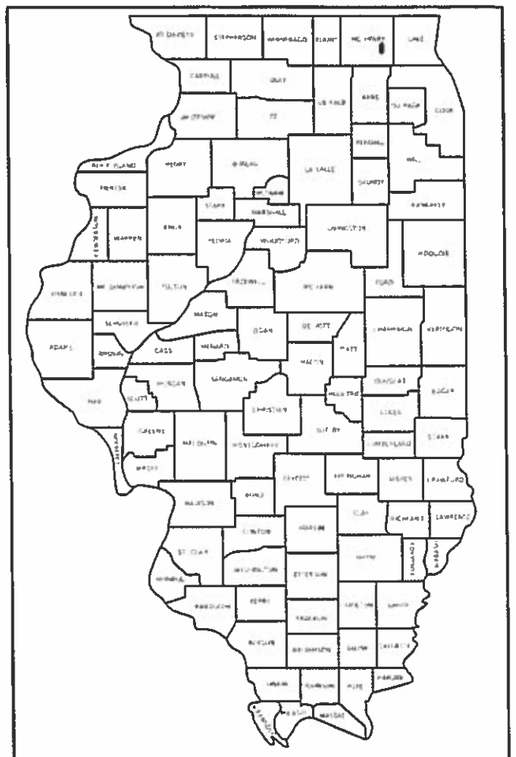
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED
HIGHWAY PLANS

F.A.P. ROUTE 336 (IL 31)
SHAMROCK LN. TO N/O EDGEWOOD RD.
SECTION: 2018-035-RS
PROJECT: NHPP-U11R(477)
SMART OVERLAY, NEW SHOULDERS AND MILLED RUMBLE STRIPS
McHENRY COUNTY

C-91-240-18

D-91-316-18

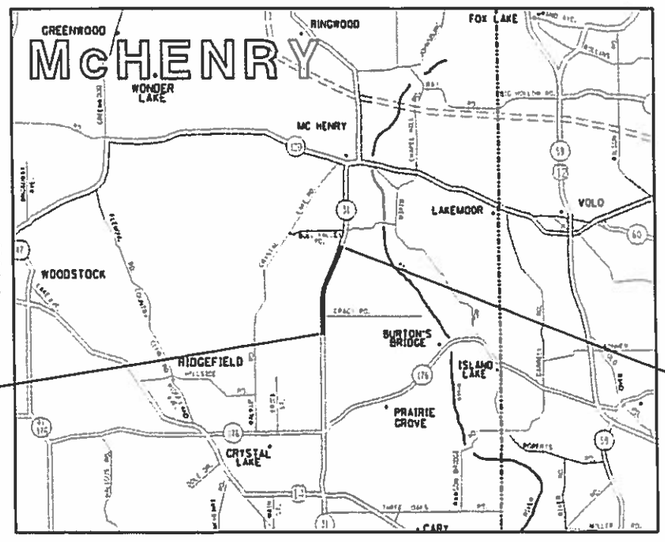


LOCATION OF SECTION INDICATED THUS: –■–

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THIS PROJECT IS LOCATED IN THE CITY OF MCHENRY AND THE VILLAGE OF PRAIRIE GROVE

TRAFFIC DATA:
IL 31
2016 ADT = 22,200
POSTED AND DESIGN SPEED LIMIT = 45-55 MPH

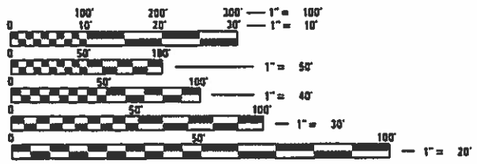


PROJECT BEGINS
STA. 258+95

PROJECT ENDS
STA. 371+58

N

LOCATION MAP
(NOT TO SCALE)



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 EXCAVATORS
1-800-892-0123
OR 811

PROJECT ENGINEER: DAN WILGREEN (847) 705-4240
PROJECT MANAGER: FAWAD AQUEEL (847) 705-4247

CONTRACT NO. 62G56

GROSS & NET LENGTH = 11,263 FT. = 2.13 MILES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED June 20 2019
Aug 16 2019
REGIONAL ENGINEER

Aug 16 2019
ENGINEER OF DESIGN AND ENVIRONMENT

Aug 16 2019
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

3

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INDEX OF SHEETS

HIGHWAY STANDARDS

STANDARD NO.	DESCRIPTION
000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
442201-03	CLASS C AND D PATCHES
482011-03	HMA SHLD. STRIPS/SHLDS. WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
604061-03	FRAME AND GRATE, TYPE 12
606001-07	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
642006	SHOULDER RUMBLE STRIPS, 8 IN.
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24'' (600 mm) FROM PAVEMENT EDGE
701011-04	OFF-RD MOVING OPERATIONS 2L, 2W, DAY ONLY
701301-04	LANE CLOSURE 2L, 2W, SHORT TIME OPERATIONS
701306-04	LANE CLOSURE 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS >= 45 MPH
701311-03	LANE CLOSURE 2L, 2W, MOVING OPERATIONS DAY ONLY
701326-04	LANE CLOSURE 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS >= 45 MPH
701336-07	LANE CLOSURE, 2L, 2W, WORK AREAS IN SERIES FOR SPEEDS >= 45 MPH
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701502-09	URBAN LANE CLOSURE 2L, 2W, W/ BIDIRECTIONAL LEFT TURN LANE
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901-08	TRAFFIC CONTROL DEVICES
780001-05	TYPICAL PAVEMENT MARKINGS
886001-01	DETECTOR LOOP INSTALLATIONS

GENERAL NOTES

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL ''JULIE'' AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. (48 HOUR NOTIFICATION REQUIRED)
2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH THE UTILITY COMPANIES, THE CITY OF MCHENRY, AND THE VILLAGE OF PRAIRIE GROVE.
3. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT THE WRITTEN PERMISSION OF THE DEPARTMENT.
4. BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.
5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
6. ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
7. ALL PAVEMENT PATCHING, CURB AND GUTTER REMOVAL AND REPLACEMENT, AND DRAINAGE ADJUSTMENT/RECONSTRUCTION LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
8. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
9. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
10. TEN (10) FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURBS AND GUTTER AND MEDIANS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.
11. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES WHERE THE SPEED LIMIT IS 40 MPH OR LESS, AND 1 INCH WHERE THE SPEED LIMIT IS OVER 40 MPH. WITH WRITTEN APPROVAL FROM THE RESIDENT ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM OF 1:3 (V:H).
12. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR FOR ARTERIALS AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
13. THE RESIDENT ENGINEER SHALL CONTACT WALTER CZARNY, ARTERIAL TRAFFIC FIELD ENGINEER, AT WALTER.CZARNY@ILLINOIS.GOV A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
14. DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL ''TYPICAL APPLICATIONS - RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)'' SHOWN IN THE PLANS.
15. PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES.
16. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT) IN ACCORDANCE WITH THE ''BUTT JOINT AND HMA TAPER DETAILS'' SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
17. 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.
18. 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.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, HIGHWAY STANDARDS, AND GENERAL NOTES
IL 31 – SHAMROCK LN. TO N/O EDGEWOOD RD.

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2018-035-RS	McHENRY	28	2
		CONTRACT NO. 62G56		
	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES			TOTAL QUANTITIES URBAN	CONSTRUCTION TYPE CODE 80% FED 20% STATE 0005					
CODE NO	ITEM	UNIT							
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	104	104					
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	33	33					
25200110	SODDING, SALT TOLERANT	SQ YD	33	33					
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	22876	22876					
40600400	MIXTURE FOR CRACKS, JOINTS, AND	TON	76	76					
	FLANGEWAYS								
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT	SQ YD	177	177					
	JOINT								
40603565	POLYMERIZED HOT-MIX ASPHALT SURFACE	TON	4934	4934					
	COURSE, MIX "E", N70								
42001300	PROTECTIVE COAT	SQ YD	45	45					
44000156	HOT-MIX ASPHALT SURFACE REMOVAL, 1 3/4"	SQ YD	50338	50338					
44004250	PAVED SHOULDER REMOVAL	SQ YD	530	530					
44201815	CLASS D PATCHES, TYPE II, 14 INCH	SQ YD	716	716					
44201819	CLASS D PATCHES, TYPE III, 14 INCH	SQ YD	430	430					
44201821	CLASS D PATCHES, TYPE IV, 14 INCH	SQ YD	287	287					
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	440	440					
							* SPECIALTY ITEMS		

SUMMARY OF QUANTITIES			TOTAL QUANTITIES URBAN	CONSTRUCTION TYPE CODE 80% FED 20% STATE 0005					
CODE NO	ITEM	UNIT							
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	994	994					
60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	5	5					
64200108	SHOULDER RUMBLE STRIPS, 8 INCH	FOOT	11560	11560					
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6					
67100100	MOBILIZATION	L SUM	1	1					
70100460	TRAFFIC CONTROL AND PROTECTION,	L SUM	1	1					
	STANDARD 701306								
70100500	TRAFFIC CONTROL AND PROTECTION,	L SUM	1	1					
	STANDARD 701326								
70100600	TRAFFIC CONTROL AND PROTECTION,	L SUM	1	1					
	STANDARD 701336								
70102620	TRAFFIC CONTROL AND PROTECTION,	L SUM	1	1					
	STANDARD 701501								
70102622	TRAFFIC CONTROL AND PROTECTION,	L SUM	1	1					
	STANDARD 701502								
70102635	TRAFFIC CONTROL AND PROTECTION,	L SUM	1	1					
	STANDARD 701701								
70300100	SHORT TERM PAVEMENT MARKING	FOOT	10035	10035					
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	3345	3345					

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 31 – SHAMROCK LN. TO N/O EDGEWOOD RD.

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2018-035-RS	McHENRY	28	3
		CONTRACT NO. 62G56		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

	SUMMARY OF QUANTITIES			TOTAL QUANTITIES URBAN	CONSTRUCTION TYPE CODE 80% FED 20% STATE 0005					
	CODE NO	ITEM	UNIT							
	70300210	TEMPORARY PAVEMENT MARKING LETTERS AND	SQ FT	540.8	540.8					
		SYMBOLS								
	70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	44698	44698					
	70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	2555	2555					
	70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	137	137					
	70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	1060	1060					
	70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	312	312					
	70300520	PAVEMENT MARKING TAPE, TYPE III 4"	FOOT	5017	5017					
*	78000100	THERMOPLASTIC PAVEMENT MARKING -	SQ FT	540.8	540.8					
		LETTERS AND SYMBOLS								
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	27275	27275					
*	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	2555	2555					
*	78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	137	137					
*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	1060	1060					
*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	312	312					
*	78008230	POLYUREA PAVEMENT MARKING TYPE I - LINE 6"	FOOT	16	16					
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	474	474					

	SUMMARY OF QUANTITIES			TOTAL QUANTITIES URBAN	CONSTRUCTION TYPE CODE 80% FED 20% STATE 0005					
	CODE NO	ITEM	UNIT							
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	380	380					
*	88600600	DETECTOR LOOP REPLACEMENT	FOOT	1346	1346					
	X0326898	CENTER LINE - RUMBLE STRIP - 16"	FOOT	5759	5759					
	X2020110	GRADING AND SHAPING SHOULDERS	UNIT	176	176					
□	X5420612	PIPE CULVERTS TO BE CLEANED 12"	FOOT	124	124					
	X6030310	FRAMES AND LIDS TO BE ADJUSTED	EACH	2	2					
		(SPECIAL)								
	X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	20165	20165					
*	X7800815	HOT SPRAY THERMOPLASTIC PAVEMENT	FOOT	17423	17423					
		MARKING LINE - 4 INCH								
	Z0004562	COMBINATION CONCRETE CURB AND GUTTER	FOOT	200	200					
		REMOVAL AND REPLACEMENT								
□	Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	5	5					
	Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	51.4	51.4					
	Z0033700	LONGITUDINAL JOINT SEALANT	FOOT	19081	19081					

□ N.P. 100% STATE

* SPECIALTY ITEMS

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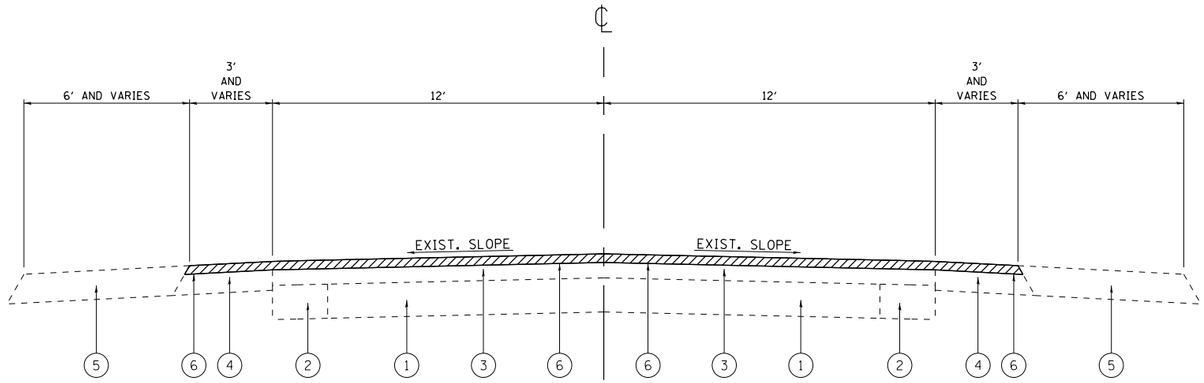
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 31 – SHAMROCK LN. TO N/O EDGEWOOD RD.

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

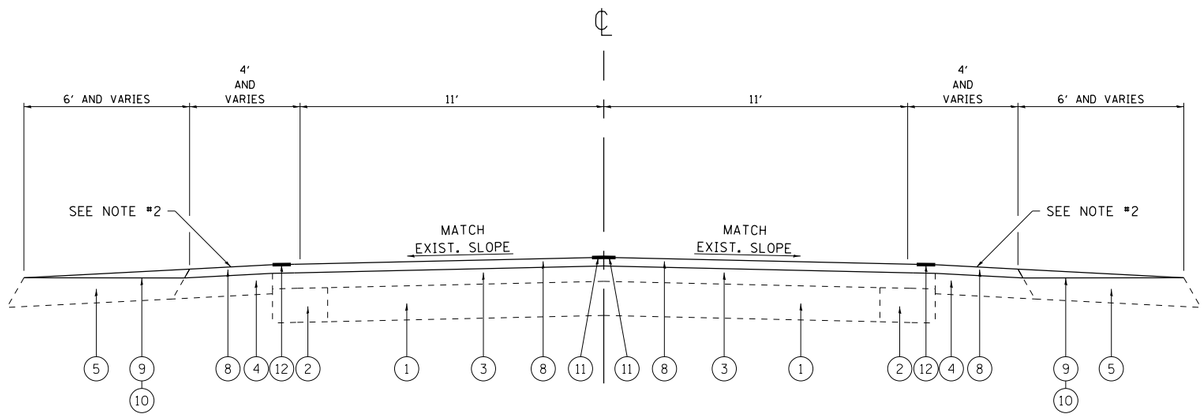
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2018-035-RS	McHENRY	28	4
		CONTRACT NO. 62G56		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



IL 31

EXISTING TYPICAL SECTION

STA. 258+95 TO STA. 317+30



IL 31

PROPOSED TYPICAL SECTION

STA. 258+95 TO STA. 317+30

LEGEND:

1. EXISTING PCC BASE COURSE, ± 9''
2. EXISTING HMA BASE COURSE, ± 9''
3. EXISTING HMA SURFACE COURSE, ± 7''
4. EXISTING HMA SHOULDER, 8''
5. EXISTING AGGREGATE SHOULDER, 8''
6. PROPOSED HMA SURFACE REMOVAL, 1¾''
7. PROPOSED PAVED SHOULDER REMOVAL
8. PROPOSED POLYMERIZED HMA SURFACE COURSE, MIX "E", N70, 1¾''
9. PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B
10. PROPOSED GRADING AND SHAPING SHOULDERS
11. PROPOSED CENTER LINE - RUMBLE STRIP - 16''
12. PROPOSED SHOULDER RUMBLE STRIPS, 8 INCH
13. PROPOSED HMA SHOULDERS, 8'' (INCLUDES POLYMERIZED HMA SURFACE COURSE, MIX "E", N70, 1¾'' AND HMA BASE COURSE, 6¼'')
14. REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL

NOTES:

1. THE CONTRACTOR SHALL MILL FIRST BEFORE PATCHING.
2. MAINTAIN A MINIMUM OF 3' SHOULDER WIDTH OUTSIDE SHOULDER RUMBLE STRIPE. SEE RUMBLE STRIPE DETAIL.
3. LONGITUDINAL JOINT SEALANT SHALL BE PLACED OVER THE MILLED SURFACE WHERE THE SURFACE JOINT WILL BE LOCATED.

HMA MIXTURE REQUIREMENTS			
MIXTURE USES	MIXTURE TYPE	AIR VOIDS @ Ndes	QUALITY MANAGEMENT PROGRAM (QMP)
PAVEMENT AND SHOULDER RESURFACING	POLYMERIZED HMA SURFACE COURSE, MIX "E", N70 (IL 9.5 mm); 1¾''	4% @ 70 GYR.	QCP
SHOULDER RECONSTRUCTION (HMA SHOULDERS, 8'')	POLYMERIZED HMA SURFACE COURSE, MIX "E", N70 (IL 9.5 mm); 1¾''	4% @ 70 GYR.	QC/QA
	HMA BASE COURSE, (HMA BINDER IL-19 mm); 6¼''	4% @ 70 GYR.	QC/QA
PATCHING	CLASS D PATCHES (HMA BINDER IL-19.0 mm)	4% @ 70 GYR	QC/QA
QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA); QUALITY CONTROL FOR PERFORMANCE (QCP)			

NOTE 1: THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.

NOTE 2: 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 DISTRICT ONE SPECIAL PROVISIONS.

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

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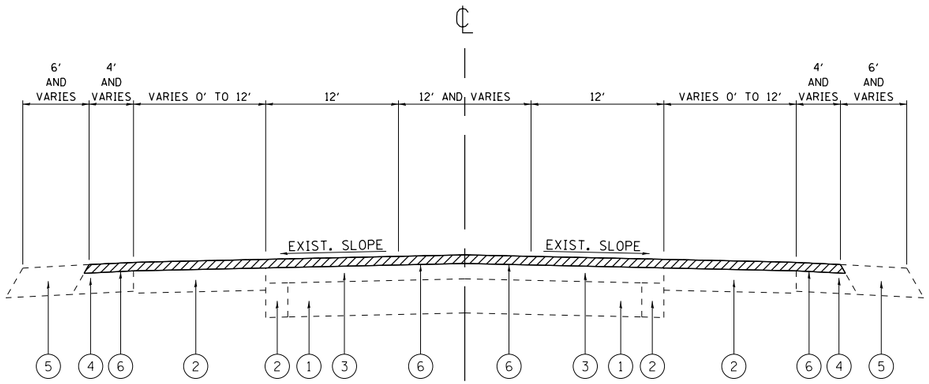
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING AND PROPOSED TYPICAL SECTIONS
IL 31 – SHAMROCK LN. TO N/O EDGEWOOD RD.

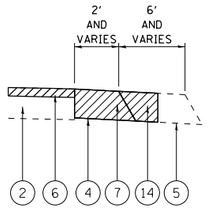
SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2018-035-RS	McHENRY	28	5
		CONTRACT NO. 62G56		
	ILLINOIS	FED. AID PROJECT		



IL 31
EXISTING TYPICAL SECTION

STA. 317+30 TO STA. 330+89
STA. 333+20 TO STA. 371+58



IL 31
EXISTING TYPICAL DETAIL

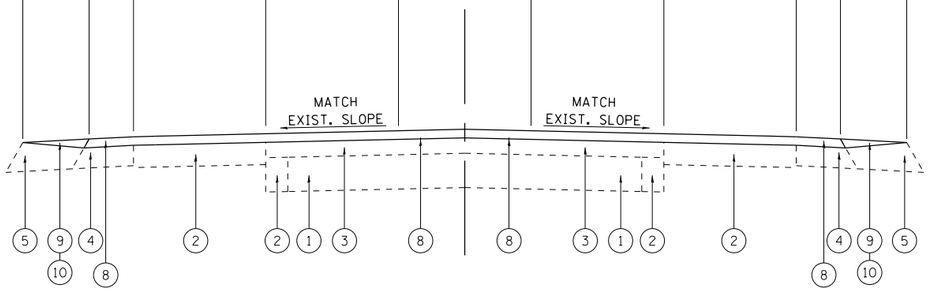
STA. 334+45 TO STA. 335+86 (LT)
STA. 337+24 TO STA. 340+33 (RT)
STA. 340+03 TO STA. 341+15 (LT)
STA. 344+92 TO STA. 349+77 (RT)
STA. 345+05 TO STA. 352+24 (LT)
STA. 353+05 TO STA. 355+41 (RT)
STA. 356+62 TO STA. 358+98 (RT)

LEGEND:

1. EXISTING PCC BASE COURSE, ± 9''
2. EXISTING HMA BASE COURSE, ± 9''
3. EXISTING HMA SURFACE COURSE, ± 7''
4. EXISTING HMA SHOULDER, 8''
5. EXISTING AGGREGATE SHOULDER, 8''
6. PROPOSED HMA SURFACE REMOVAL, 1¾''
7. PROPOSED PAVED SHOULDER REMOVAL
8. PROPOSED POLYMERIZED HMA SURFACE COURSE, MIX ''E'', N70, 1¾''
9. PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B
10. PROPOSED GRADING AND SHAPING SHOULDERS
11. PROPOSED CENTER LINE - RUMBLE STRIP - 16''
12. PROPOSED SHOULDER RUMBLE STRIPS, 8 INCH
13. PROPOSED HMA SHOULDERS, 8'' (INCLUDES POLYMERIZED HMA SURFACE COURSE, MIX ''E'', N70, 1¾'' AND HMA BASE COURSE, 6¼'')
14. REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL

NOTES:

1. THE CONTRACTOR SHALL MILL FIRST BEFORE PATCHING.
2. LONGITUDINAL JOINT SEALANT SHALL BE PLACED OVER THE MILLED SURFACE WHERE THE SURFACE JOINT WILL BE LOCATED.



IL 31
PROPOSED TYPICAL SECTION

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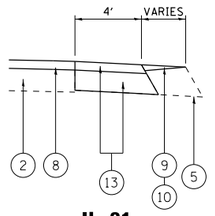
STA. 333+20 TO STA. 371+58



IL 31
PROPOSED TYPICAL DETAIL

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STA. 353+05 TO STA. 355+41 (RT)
STA. 356+62 TO STA. 358+98 (RT)

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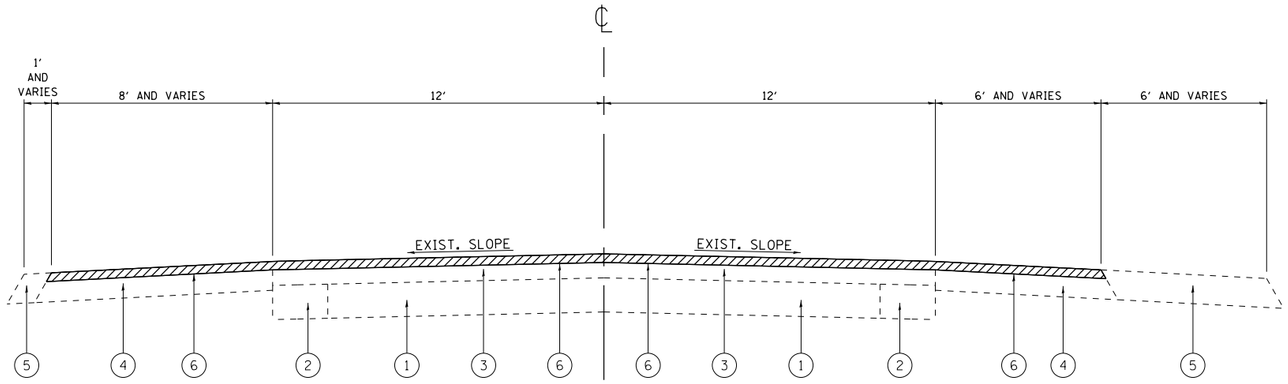
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING AND PROPOSED TYPICAL SECTIONS
IL 31 – SHAMROCK LN. TO N/O EDGEWOOD RD.

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2018-035-RS	McHENRY	28	6
		CONTRACT NO. 62G56		
	ILLINOIS	FED. AID PROJECT		



IL 31

EXISTING TYPICAL SECTION

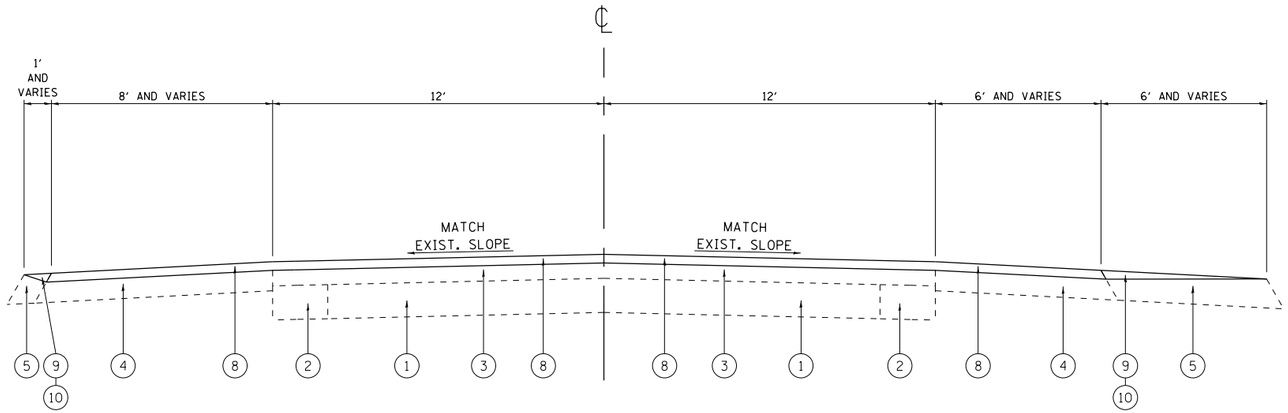
STA. 330+89 TO STA. 333+20

LEGEND:

1. EXISTING PCC BASE COURSE, ± 9''
2. EXISTING HMA BASE COURSE, ± 9''
3. EXISTING HMA SURFACE COURSE, ± 7''
4. EXISTING HMA SHOULDER, 8''
5. EXISTING AGGREGATE SHOULDER, 8''
6. PROPOSED HMA SURFACE REMOVAL, 1¾''
7. PROPOSED PAVED SHOULDER REMOVAL
8. PROPOSED POLYMERIZED HMA SURFACE COURSE, MIX ''E'', N70, 1¾''
9. PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B
10. PROPOSED GRADING AND SHAPING SHOULDERS
11. PROPOSED CENTER LINE - RUMBLE STRIP - 16''
12. PROPOSED SHOULDER RUMBLE STRIPS, 8 INCH
13. PROPOSED HMA SHOULDERS, 8'' (INCLUDES POLYMERIZED HMA SURFACE COURSE, MIX ''E'', N70, 1¾'' AND HMA BASE COURSE, 6¼'')
14. REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL

NOTES:

1. THE CONTRACTOR SHALL MILL FIRST BEFORE PATCHING.
2. LONGITUDINAL JOINT SEALANT SHALL BE PLACED OVER THE MILLED SURFACE WHERE THE SURFACE JOINT WILL BE LOCATED.



IL 31

PROPOSED TYPICAL SECTION

STA. 330+89 TO STA. 333+20

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PLOT DATE = 6/26/2019	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING AND PROPOSED TYPICAL SECTIONS
IL 31 – SHAMROCK LN. TO N/O EDGEWOOD RD.

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2018-035-RS	McHENRY	28	7
		CONTRACT NO. 62G56		
		ILLINOIS	FED. AID PROJECT	

PAVEMENT MARKING LEGEND

1. HOT SPRAY THERMOPLASTIC PAVEMENT MARKING, 4'' DOUBLE SOLID YELLOW CENTERLINE, 2 @ 11'' C-C (TYP.)
2. THERMOPLASTIC PAVEMENT MARKING, 4'' SOLID WHITE EDGE LINE (TYP.)
3. HOT SPRAY THERMOPLASTIC PAVEMENT MARKING, 4'' SKIP-DASH YELLOW CENTERLINE, 10' DASH - 30' SKIP (TYP.)
4. HOT SPRAY THERMOPLASTIC PAVEMENT MARKING, 4'' SOLID YELLOW NO PASSING ZONE LINE FOR ONE DIRECTION, 5½'' C-C FROM SKIP-DASH CENTERLINE (TYP.)
5. THERMOPLASTIC PAVEMENT MARKING, 12'' SOLID WHITE SHOULDER DIAGONAL LINE (TYP.)
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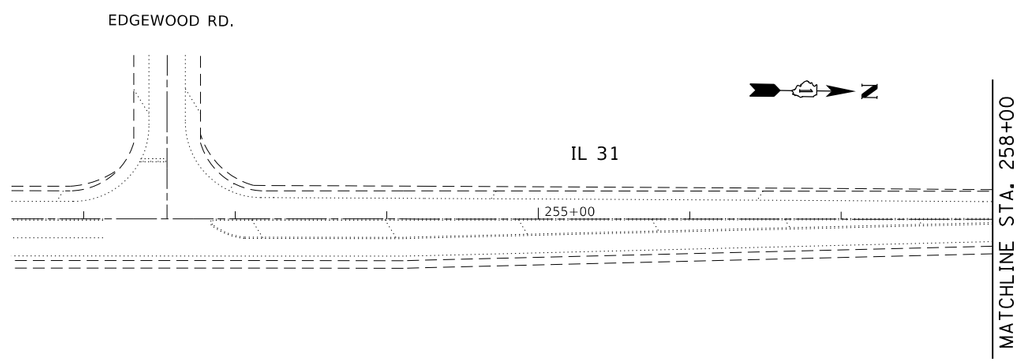
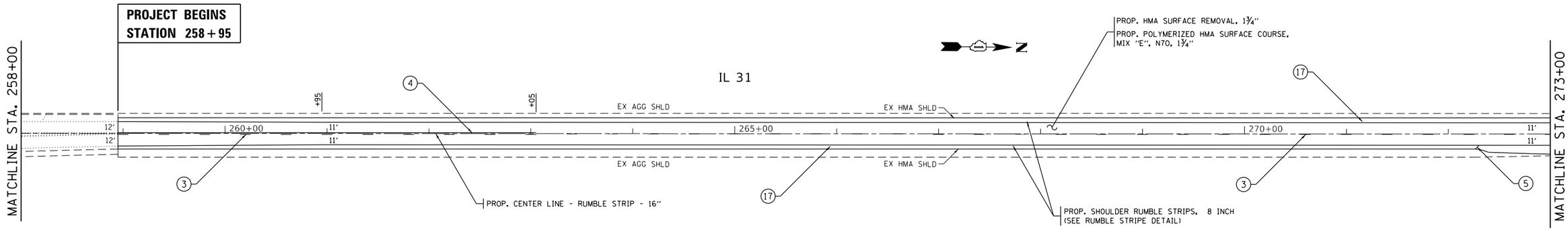
8. THERMOPLASTIC PAVEMENT MARKING, 6'' DOTTED WHITE LINE, 2' DASH - 6' SKIP (TYP.)
9. THERMOPLASTIC PAVEMENT MARKING, LETTERS & SYMBOLS, SOLID WHITE (TYP.)
10. THERMOPLASTIC PAVEMENT MARKING, 6'' SOLID WHITE TURN LANE LINE (TYP.)
11. THERMOPLASTIC PAVEMENT MARKING, 24'' SOLID WHITE STOP BAR (TYP.)
12. THERMOPLASTIC PAVEMENT MARKING, 6'' SOLID WHITE CROSSWALK LINE, 2 @ 10' C-C
13. THERMOPLASTIC PAVEMENT MARKING, 12'' SOLID WHITE DIAGONAL LINE, SPACED 2' APART (TYP.)
14. THERMOPLASTIC PAVEMENT MARKING, 12'' SOLID WHITE GORE DIAGONAL LINE (TYP.)
15. THERMOPLASTIC PAVEMENT MARKING, 8'' SOLID WHITE GORE LINE (TYP.)
16. POLYUREA PAVEMENT MARKING, 6'' DOTTED WHITE LINE, 2' DASH - 6' SKIP (TYP.)
17. HOT SPRAY THERMOPLASTIC PAVEMENT MARKING, 4'' SOLID WHITE EDGE LINE (TYP.)





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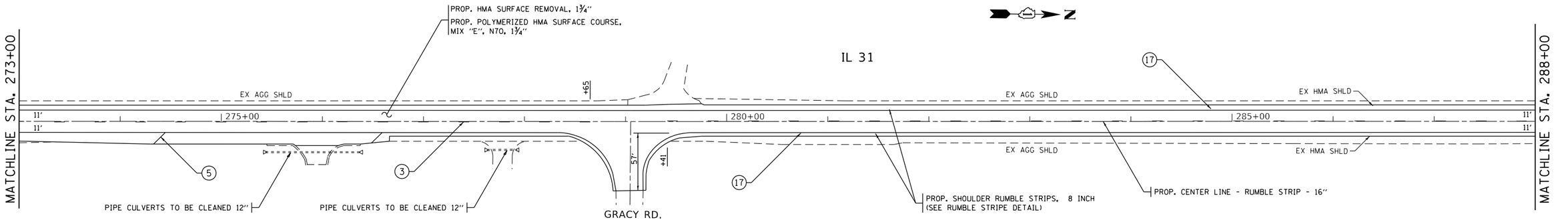
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY AND PAVEMENT MARKING PLAN
IL 31 – SHAMROCK LN. TO N/O EDGEWOOD RD.

SCALE: 1"=50' | SHEET OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2018-035-RS	McHENRY	28	8
		CONTRACT NO. 62G56		
	ILLINOIS FED. AID PROJECT			



PAVEMENT MARKING LEGEND

1. HOT SPRAY THERMOPLASTIC PAVEMENT MARKING, 4" DOUBLE SOLID YELLOW CENTERLINE, 2 @ 11" C-C (TYP.)
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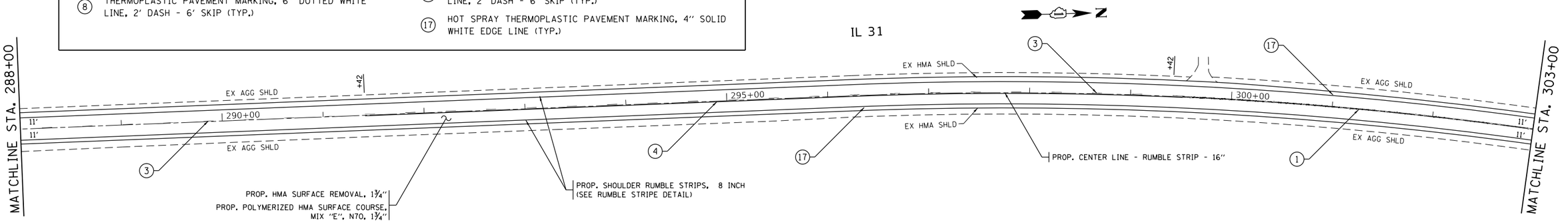

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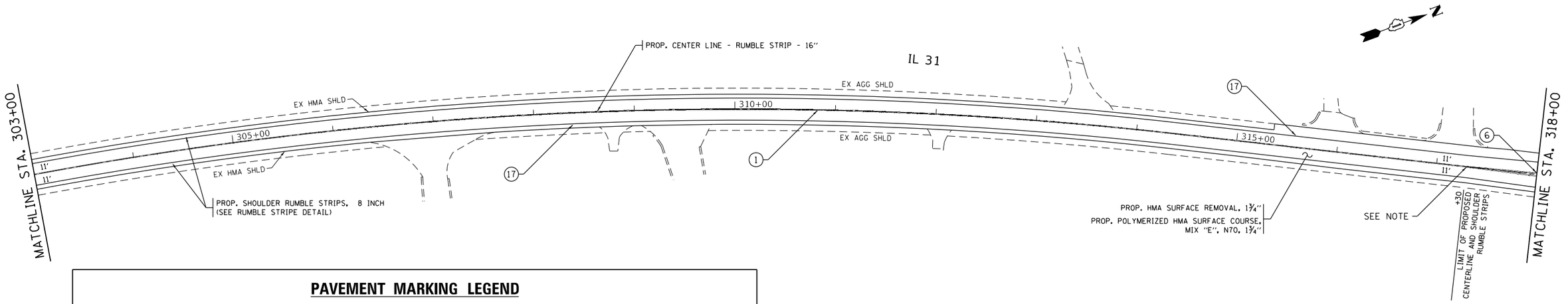
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY AND PAVEMENT MARKING PLAN
IL 31 – SHAMROCK LN. TO N/O EDGEWOOD RD.

SCALE: 1"=50' | SHEET OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2018-035-RS	McHENRY	28	9
		CONTRACT NO. 62G56		
	ILLINOIS	FED. AID PROJECT		



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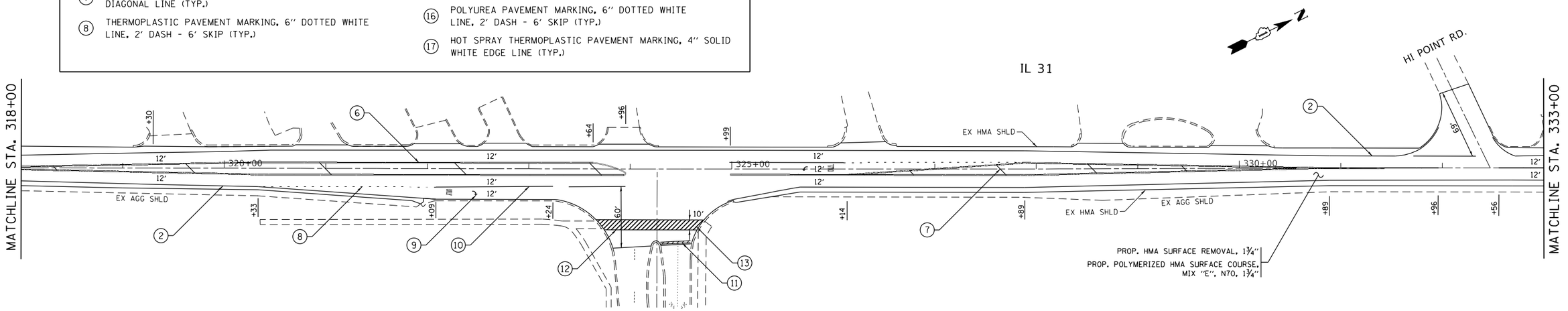
17. HOT SPRAY THERMOPLASTIC PAVEMENT MARKING, 4" SOLID WHITE EDGE LINE (TYP.)

NOTE:

ALONG THE CENTERLINE AND EDGE LINES, HOT SPRAY THERMOPLASTIC PAVEMENT MARKING SHALL BE PLACED FROM STA. 258+95 TO STA. 317+30 AND THERMOPLASTIC PAVEMENT MARKING SHALL BE PLACED FROM STA. 317+30 TO STA. 371+58.



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY AND PAVEMENT MARKING PLAN
IL 31 – SHAMROCK LN. TO N/O EDGEWOOD RD.

SCALE: 1"=50' | SHEET OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2018-035-RS	McHENRY	28	10
		CONTRACT NO. 62G56		
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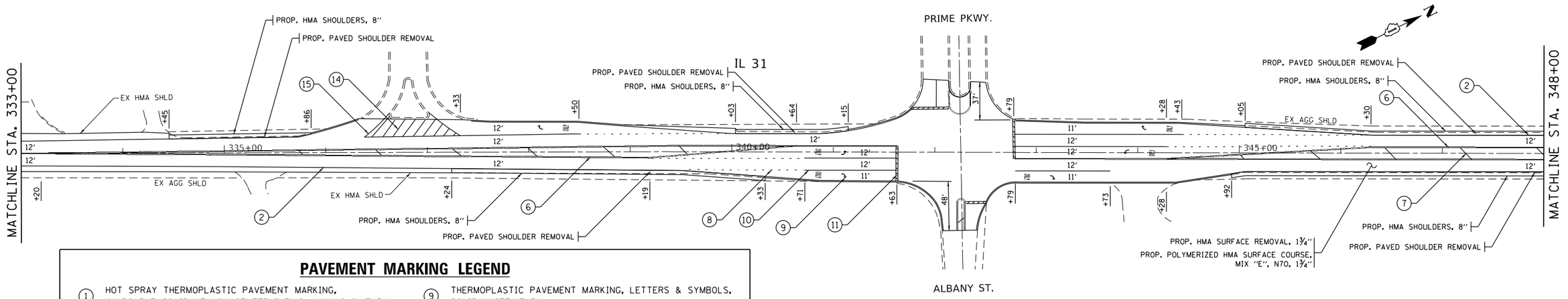

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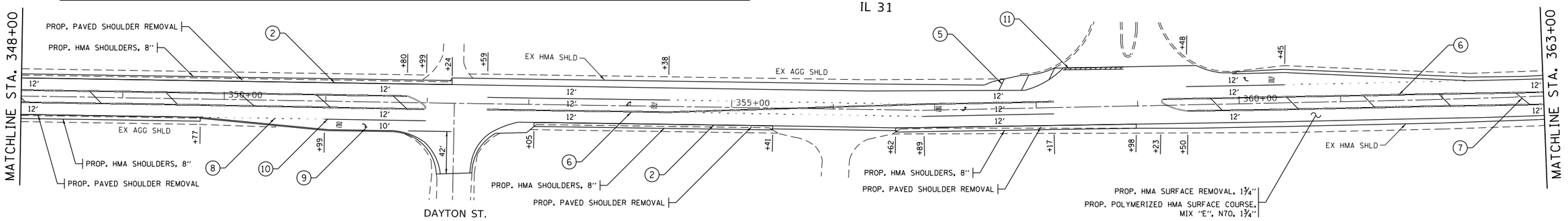

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY AND PAVEMENT MARKING PLAN
IL 31 – SHAMROCK LN. TO N/O EDGEWOOD RD.

SCALE: 1"=50' | SHEET OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2018-035-RS	McHENRY	28	11
		CONTRACT NO. 62G56		
	ILLINOIS FED. AID PROJECT			

PAVEMENT MARKING LEGEND

1. HOT SPRAY THERMOPLASTIC PAVEMENT MARKING, 4" DOUBLE SOLID YELLOW CENTERLINE, 2 @ 11" C-C (TYP.)
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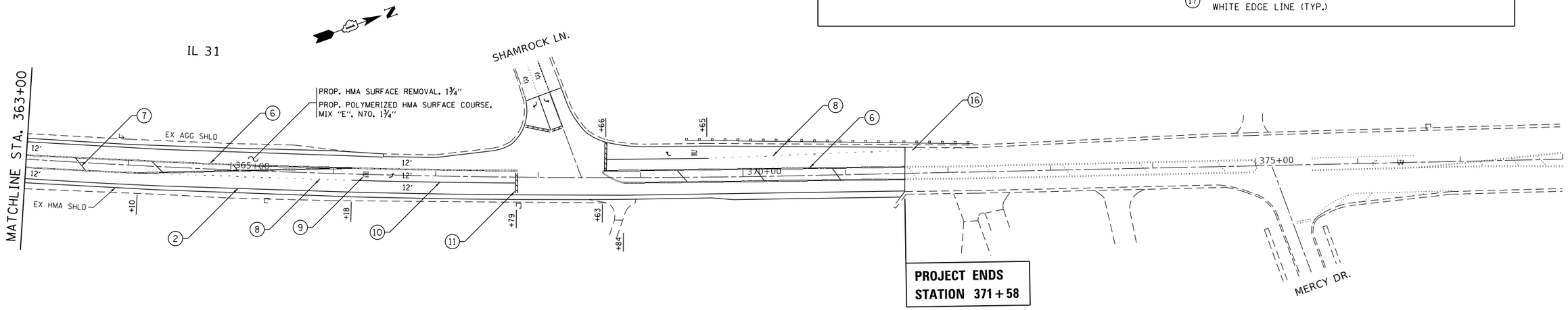

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY AND PAVEMENT MARKING PLAN
IL 31 – SHAMROCK LN. TO N/O EDGEWOOD RD.

SCALE: 1"=50' | SHEET OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2018-035-RS	McHENRY	28	12
		CONTRACT NO. 62G56		
	ILLINOIS	FED. AID PROJECT		

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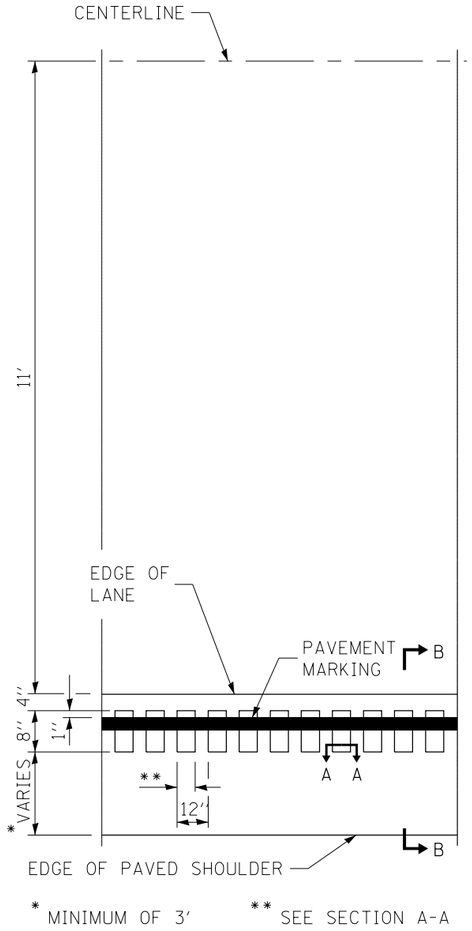
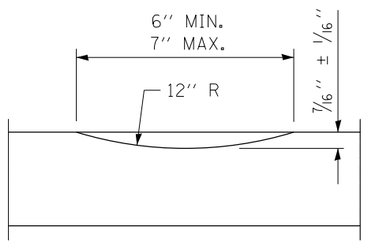
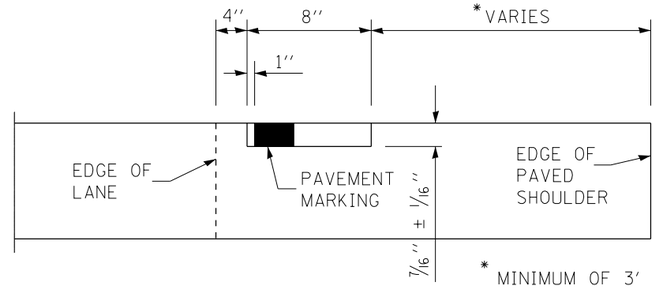


* MINIMUM OF 3' ** SEE SECTION A-A

PLAN FOR RUMBLE STRIPE



SECTION A-A



SECTION B-B

NOTES:

1. REFER TO HIGHWAY STANDARD 642006 FOR ADDITIONAL DETAILS.
2. SHOULDER RUMBLE STRIPES SHALL BE PAID FOR AS SHOULDER RUMBLE STRIPS, 8 INCH AND HOT SPRAY THERMOPLASTIC PAVEMENT MARKING LINE - 4 INCH.
3. OMIT SHOULDER RUMBLE STRIPS ACROSS STRUCTURES AND AT MAILBOX TURNOUTS.

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	DRAWN -	REVISED -	
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PLOT DATE = 6/26/2019	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RUMBLE STRIPE DETAIL
IL 31 – SHAMROCK LN. TO N/O EDGEWOOD RD.

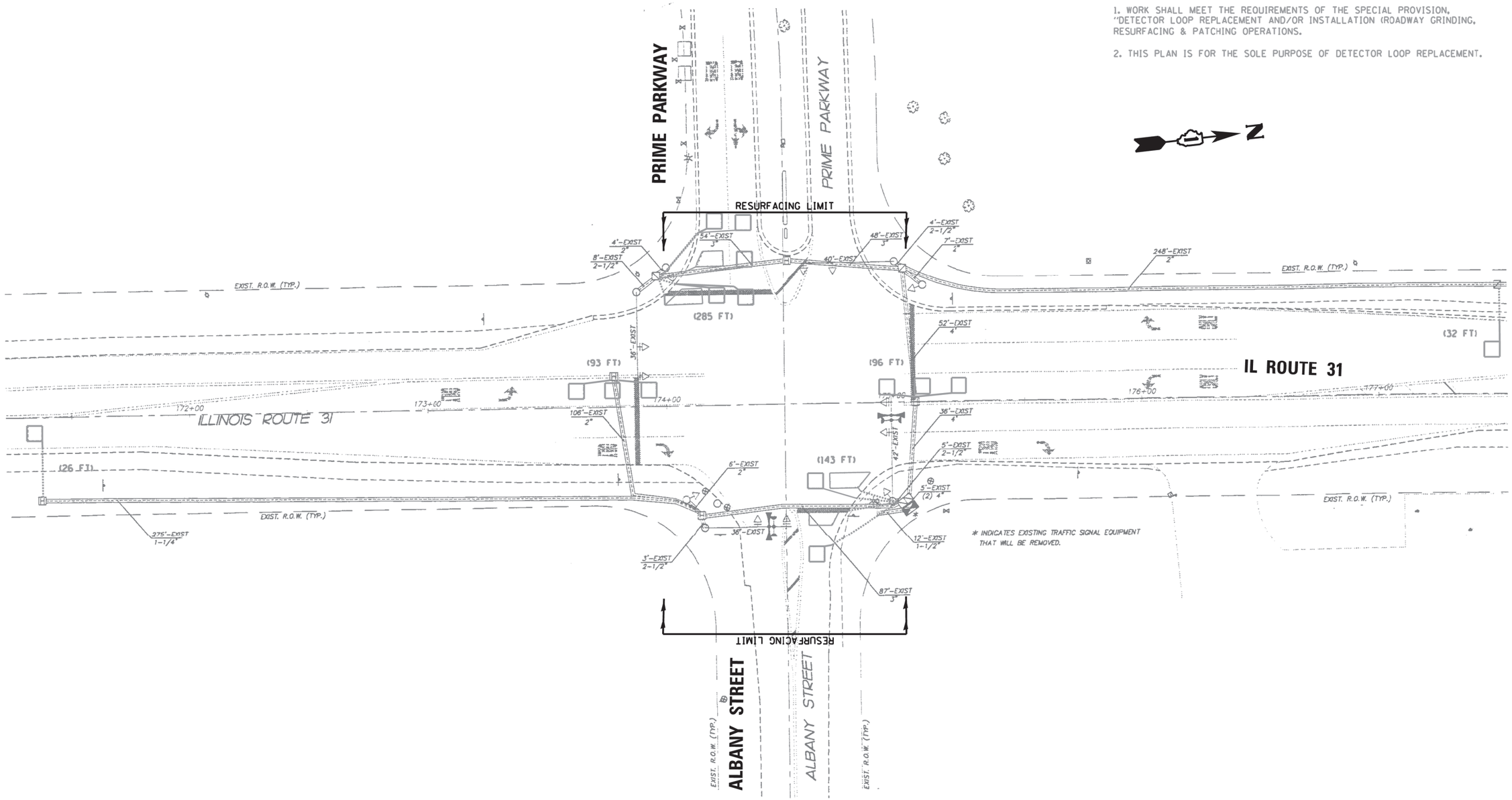
SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2018-035-RS	McHENRY	28	13
		CONTRACT NO. 62G56		
	ILLINOIS	FED. AID PROJECT		

NOTES:

1. WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING & PATCHING OPERATIONS.

2. THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENT.



* INDICATES EXISTING TRAFFIC SIGNAL EQUIPMENT THAT WILL BE REMOVED.

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

CODE	ITEM	QUANTITY	UNIT
88600600	DETECTOR LOOP REPLACEMENT	872	FOOT

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		DATE - 1/31/2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETECTOR LOOP REPLACEMENT PLAN
IL 31 AT PRIME PKWY/ALBANY ST.

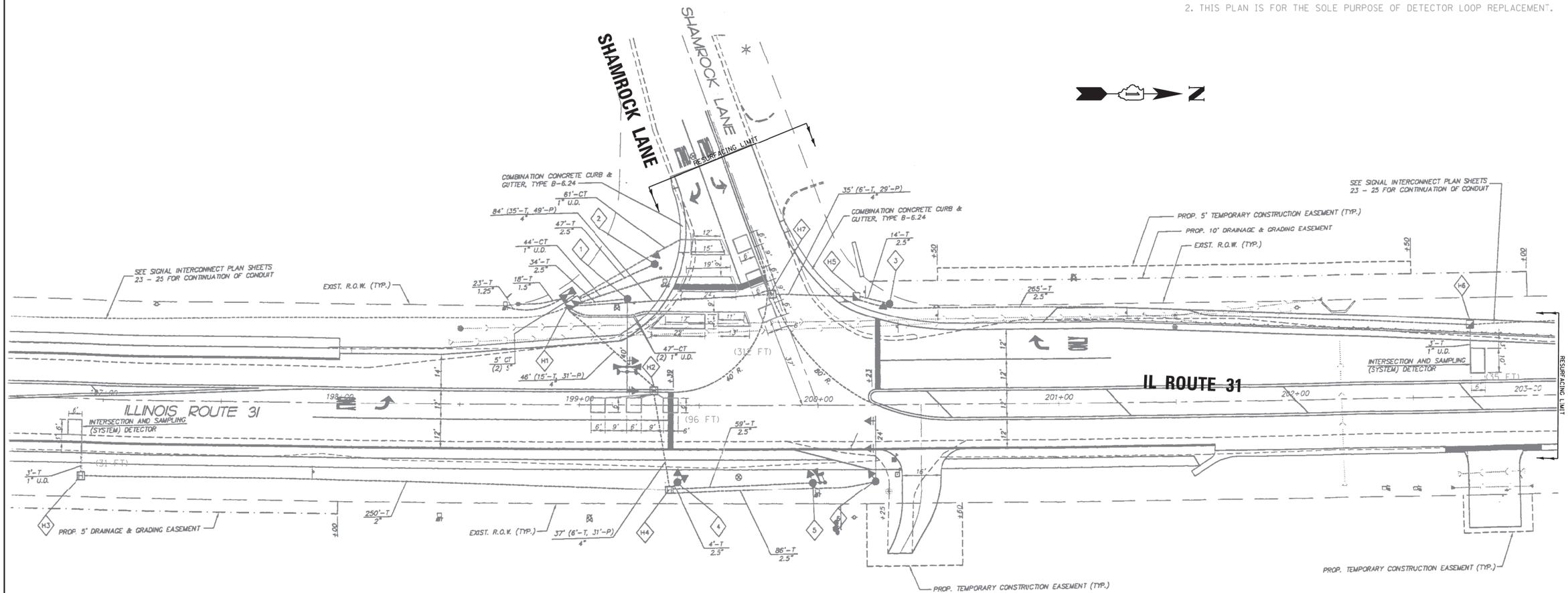
SCALE: _____ SHEET ___ OF ___ SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2018-035-RS	McHENRY	28	14
		CONTRACT NO. 62G56		
	ILLINOIS FED. AID PROJECT			

Detector .dgn 3/4/2019 10:38:50 AM User=jiangj

1. WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING & PATCHING OPERATIONS.

2. THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENT".



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

CODE	ITEM	QUANTITY	UNIT
88600600	DETECTOR LOOP REPLACEMENT	474	FOOT

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		DRAWN - JJ	REVISED -
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Default	PLOT DATE = 3/14/2019	DATE - 1/31/2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETECTOR LOOP REPLACEMENT PLAN
IL 31 AT SHAMROCK LN.

SCALE: _____ | SHEET ___ OF ___ SHEETS | STA. _____ | TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2018-035-RS	McHENRY	28	15
		CONTRACT NO. 62G56		
	ILLINOIS FED. AID PROJECT			

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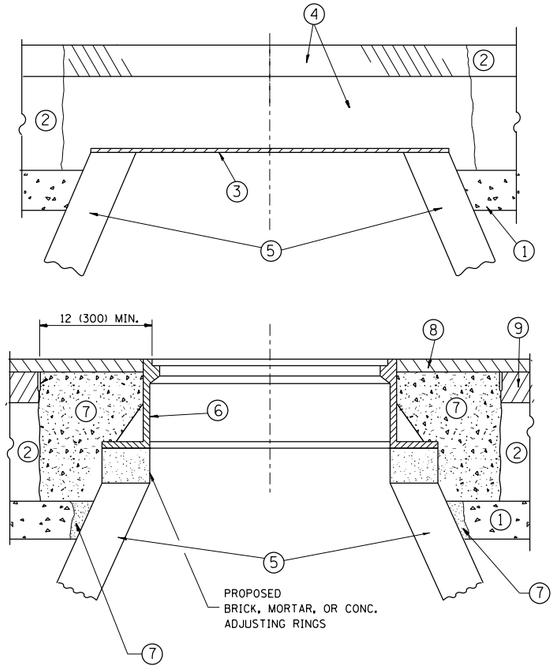

CONSTRUCTION PROCEDURES

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 1½ (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

NOTES:

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

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

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

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

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

LOCATION OF STRUCTURES:

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

BASIS OF PAYMENT:

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 = pw:\\planroom.dot.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\D1316181\Drawings\Design\DistStd.dgn	USER NAME = tariqfm	DESIGNED - R. SHAH	REVISED - R. WIEDEMAN 05-14-04
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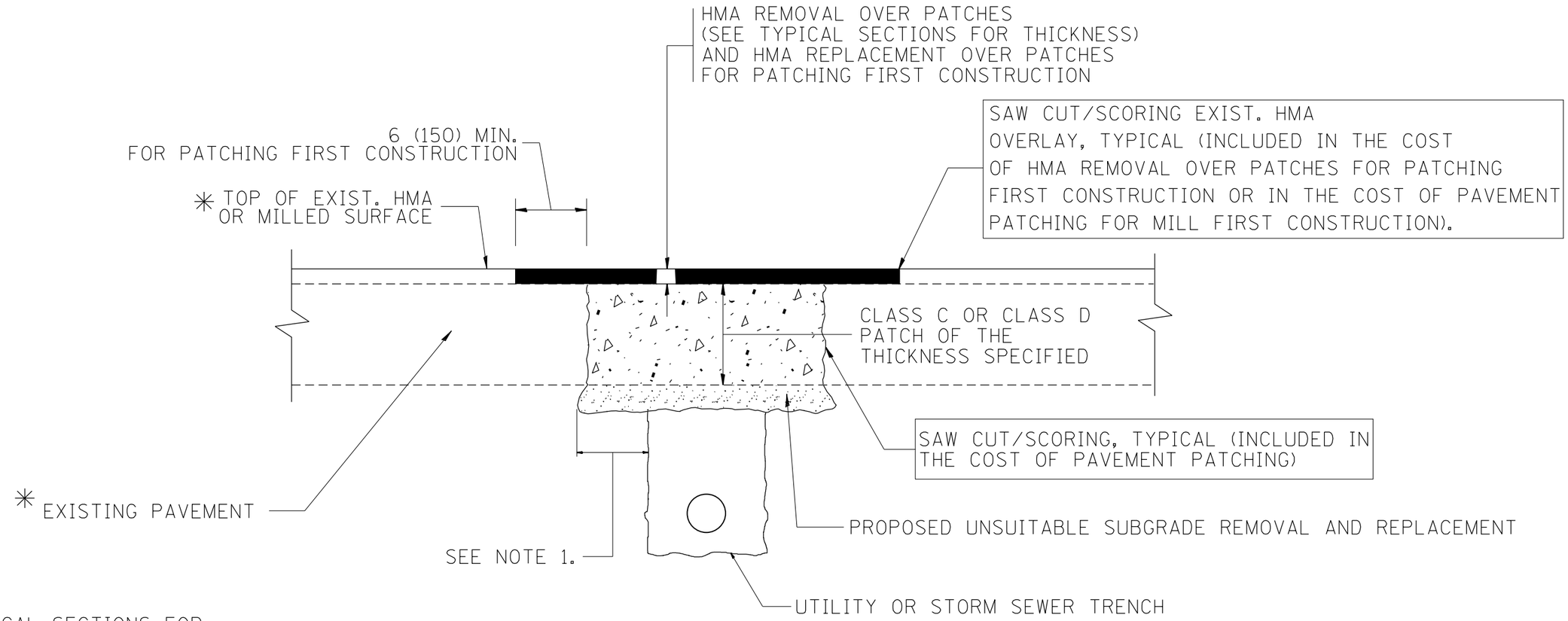
	PLOT DATE = 6/26/2019	CHECKED -	REVISED - R. BORO 03-09-11
		DATE - 10-25-94	REVISED - R. BORO 12-06-11

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2018-035-RS	McHENRY	28	16
	BD600-03 (BD-8)	CONTRACT NO. 62G56		
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 $4\frac{1}{2}$ 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 = pw:\\planroom.dot.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\D1316181\Drawings\Design\DistStd.dgn	USER NAME = tariqfm	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98
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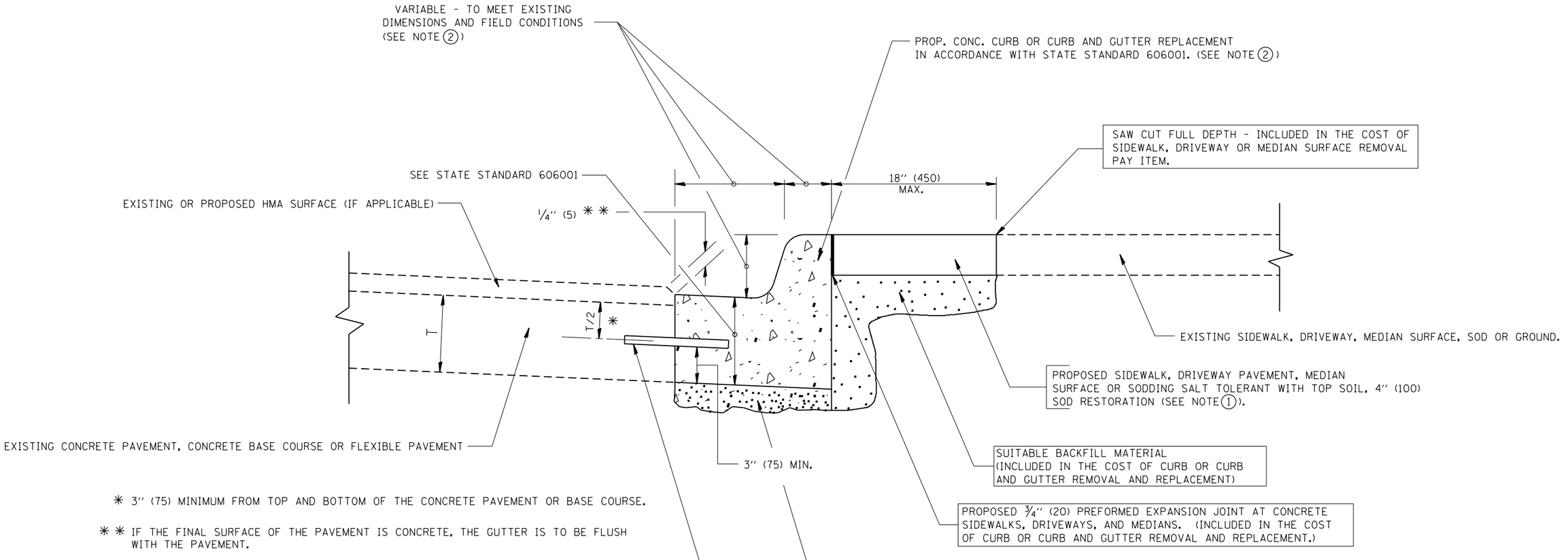
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - R. BORO 09-04-07
	PLOT DATE = 6/26/2019	DATE - 10-25-94	REVISED - K. ENG 10-27-08

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2018-035-RS	McHENRY	28	17
	BD400-04 (BD-22)	CONTRACT NO. 62G56		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



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

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

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

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

(2) FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED

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

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

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

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

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

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

BASIS OF PAYMENT:

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

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

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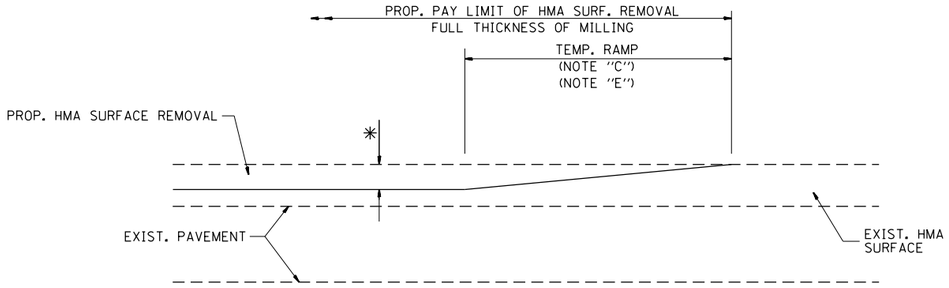
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - M. GOMEZ 01-22-01
	PLOT DATE = 6/26/2019	DATE - 03-11-94	REVISED - R. BORO 12-15-09

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

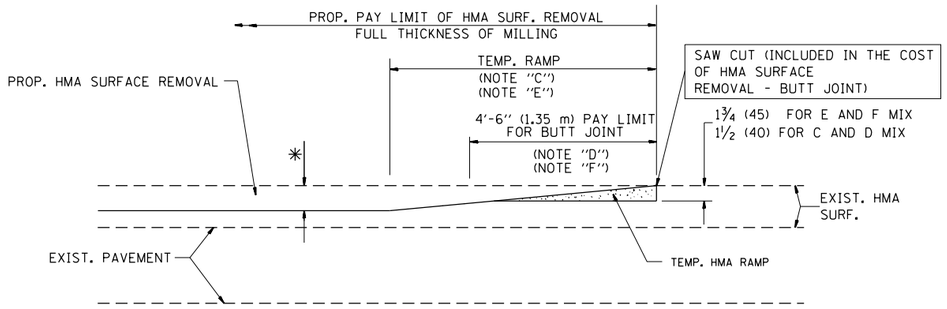
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2018-035-RS	McHENRY	28	18
	BD600-06 (BD-24)	CONTRACT NO. 62G56		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

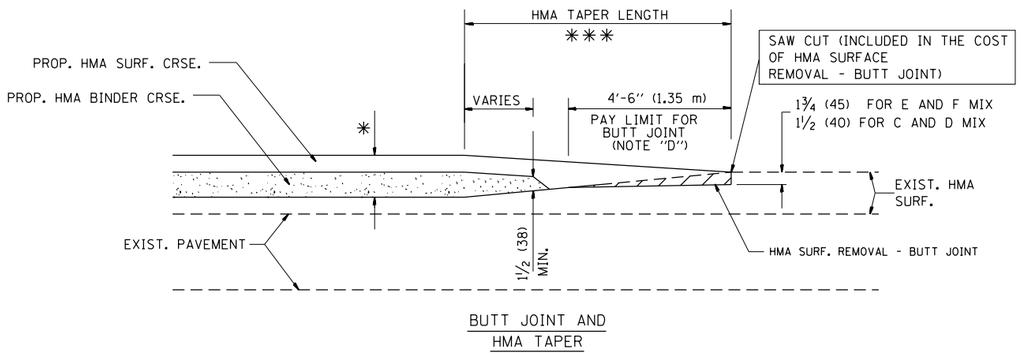


HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

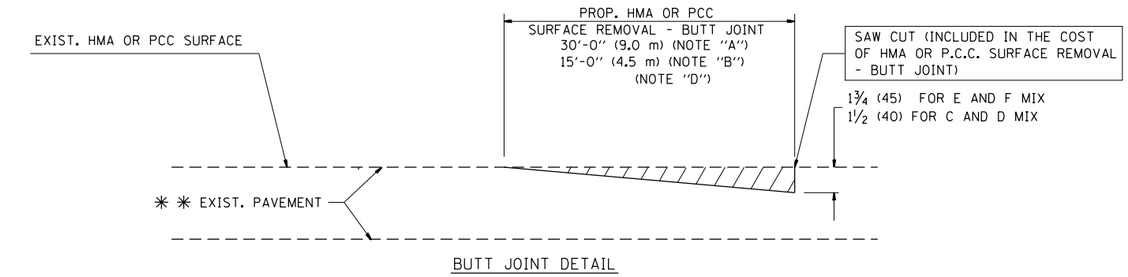
OPTION 2

TYPICAL TEMPORARY RAMP

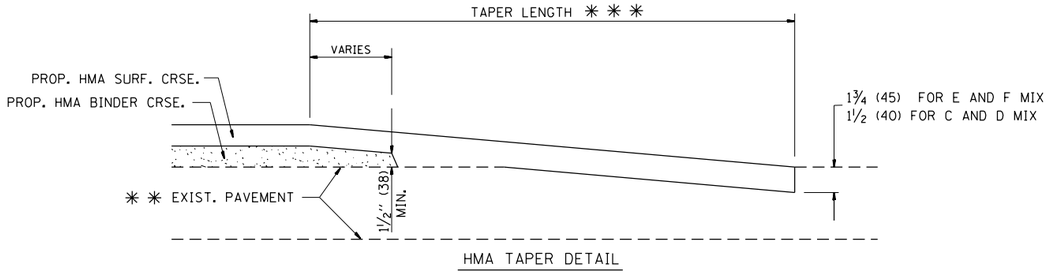


BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



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.

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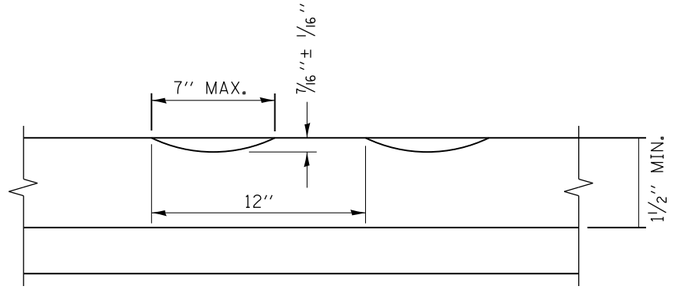
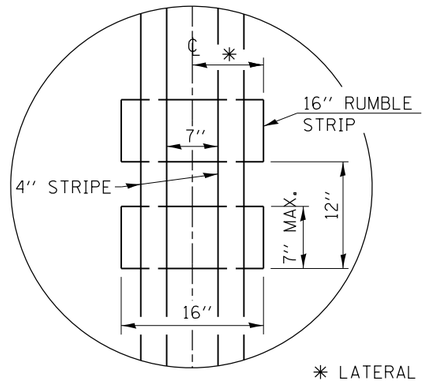
	PLOT SCALE = 100.0000 '/ in.	CHECKED -	REVISED - A. ABBAS 03-21-97		
	PLOT DATE = 6/26/2019	DATE - 06-13-90	REVISED - M. GOMEZ 04-06-01		
			REVISED - R. BORO 01-01-07		SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2018-035-RS	McHENRY	28	19
	BD400-05 BD32	CONTRACT NO. 62G56		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

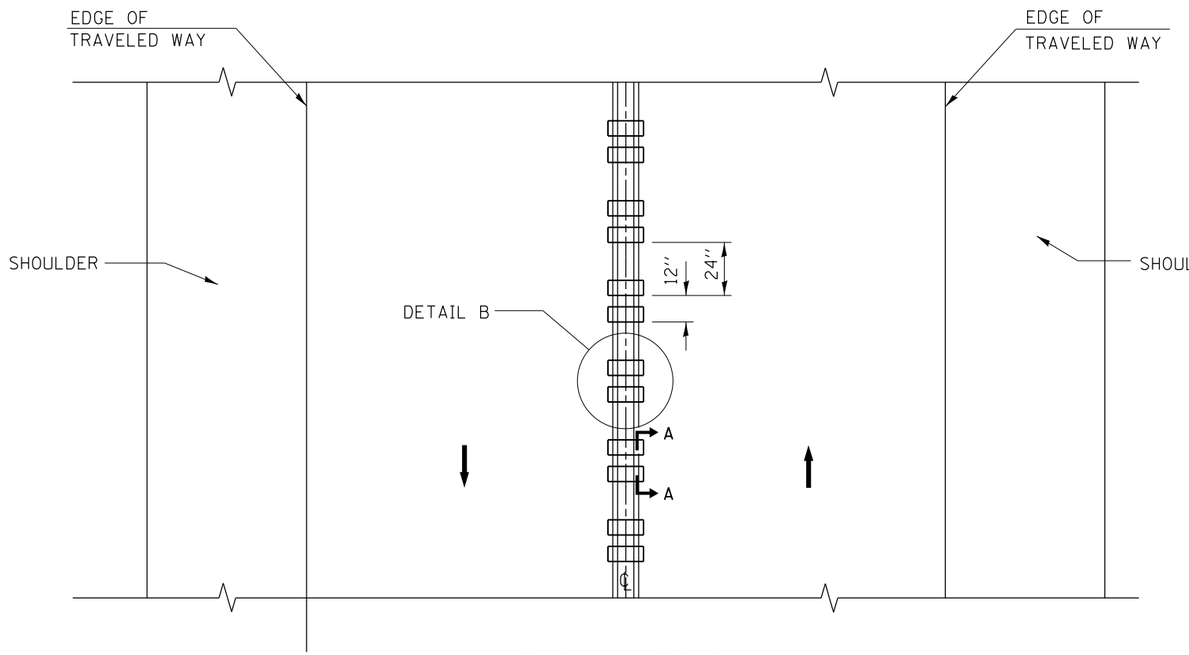


SECTION A-A



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

DETAIL B



TWO-WAY ROAD

GENERAL NOTES

CENTERLINE RUMBLE STRIPS SHALL BE CONSTRUCTED ACCORDING TO SECTION 642 ALONG THE CENTERLINE OF PAVEMENT.

SEE STANDARD 780001 FOR OTHER STRIPING LAYOUTS.

RUMBLE STRIPS SHALL NOT BE PLACED ON BRIDGES.

ALL RUMBLE STRIPS SHALL BE MILLED.

CENTERLINE RUMBLE STRIPS SHALL BE CONTINUOUS THROUGH CONNECTIONS OF SIDEROADS WITH NO LEFT TURN LANES.

DISCONTINUE CENTERLINE RUMBLE STRIPS THROUGH THE LIMITS OF ALL LEFT TURN LANES, INCLUDING ANY LANE TAPER SECTIONS.

AFTER RUMBLE STRIPS ARE INSTALLED, THE PAVEMENT SURFACE SHALL BE SWEPT CLEAN PRIOR TO THE PLACEMENT OF THE NEW PAVEMENT MARKINGS.

WHERE USED, ADJUST SPACING OF RAISED REFLECTIVE PAVEMENT MARKERS TO FALL IN WIDER GAP BETWEEN RUMBLE STRIPS.

BASIS OF PAYMENT

THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR CENTERLINE-RUMBLE STRIP OF THE WIDTH SPECIFIED.

HOT-SPRAY THERMOPLASTIC PAVEMENT MARKING WILL BE USED OVER THE RUMBLE STRIPS, AND WILL BE PAID FOR SEPARATELY.

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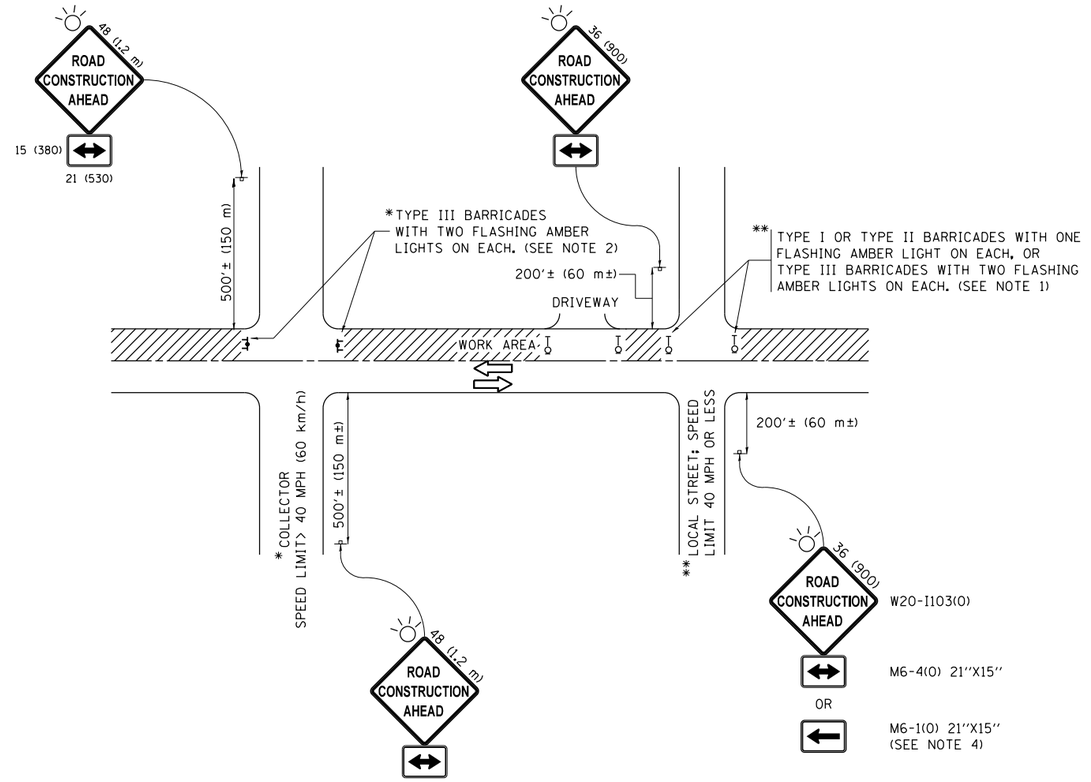
			REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 6/26/2019	DATE - 08-06-2012	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RUMBLE STRIPES FOR CENTERLINE, NON-FREEWAY

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2018-035-RS	McHENRY	28	20
	BD 55	**CONTRACT NO. 62G56**		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTES:

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 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. 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.
4. 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).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

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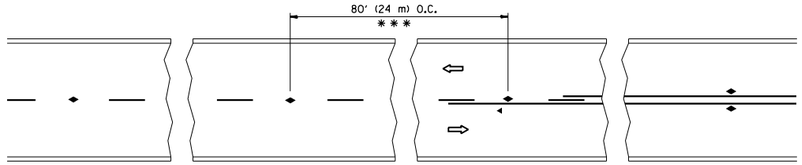
		DRAWN -	REVISED -T. RAMMACHER 01-06-00
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - A. SCHUETZE 07-01-13
Default	PLOT DATE = 6/26/2019	DATE - 06-89	REVISED - A. SCHUETZE 09-15-16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

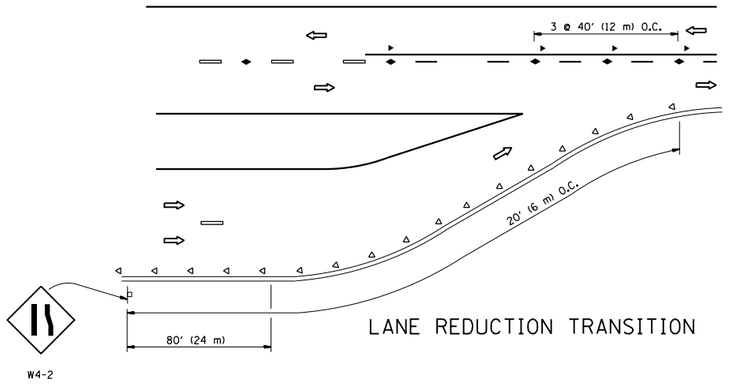
SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2018-035-RS	McHENRY	28	21
	TC-10	CONTRACT NO. 62G56		
	ILLINOIS FED. AID PROJECT			

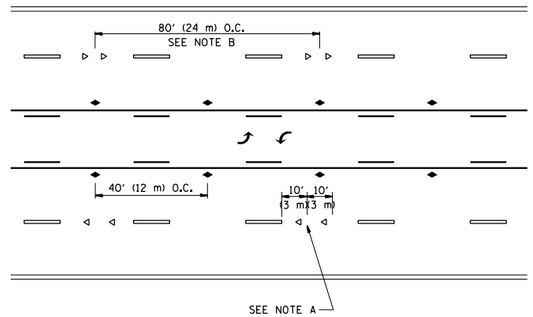


* * * REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

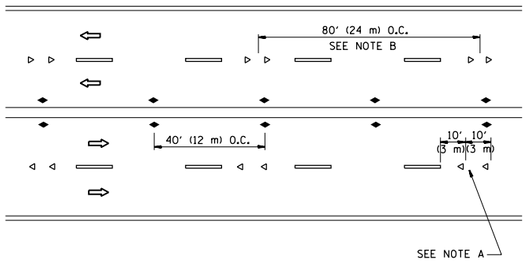
TWO-LANE/TWO-WAY



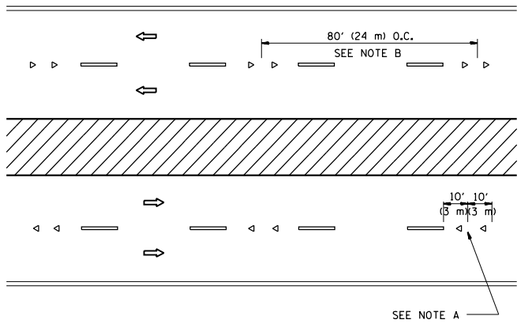
LANE REDUCTION TRANSITION



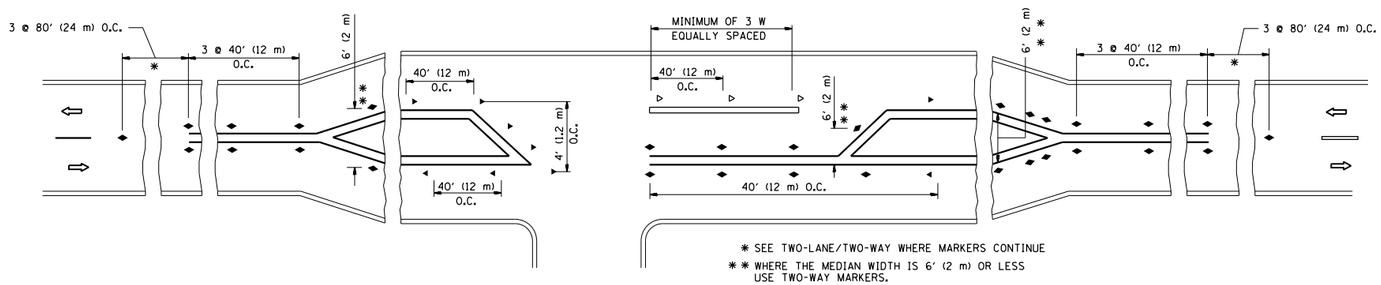
TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED



LEFT TURN

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.

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

FILE NAME = pw:\\planroom.dot.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\D1316181\Drawings\Design\DistStd.dgn	USER NAME = tariqfm	DESIGNED -	REVISED - T. RAMMACHER 09-19-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)
	PLOT SCALE = 100.0000 ' / in.	DRAWN -	REVISED - T. RAMMACHER 03-12-99		
	PLOT DATE = 6/26/2019	CHECKED -	REVISED - T. RAMMACHER 01-06-00		
		DATE -	REVISED - C. JUCIUS 09-09-09		SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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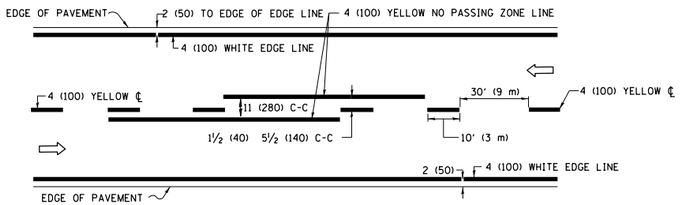
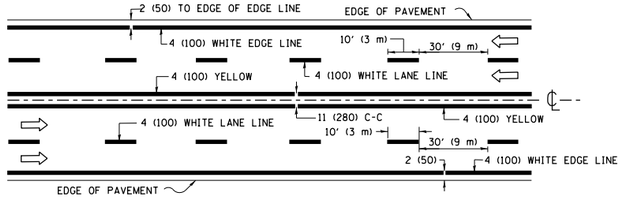
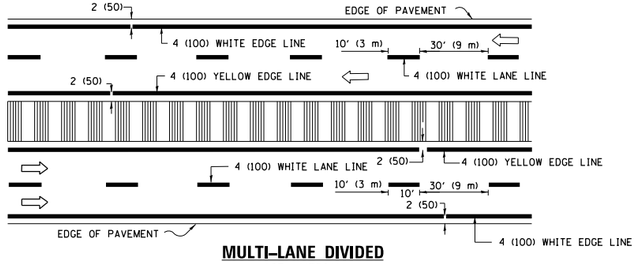
	TC-11	CONTRACT NO. 62G56		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



2–LANE ROADWAY

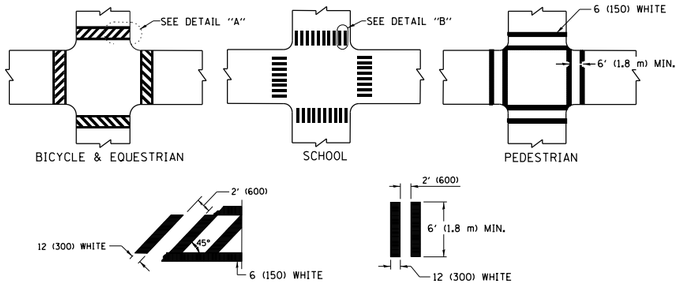


MULTI–LANE UNDIVIDED



MULTI–LANE DIVIDED
WITH MEDIAN

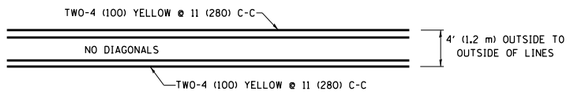
TYPICAL LANE AND EDGE LINE MARKING



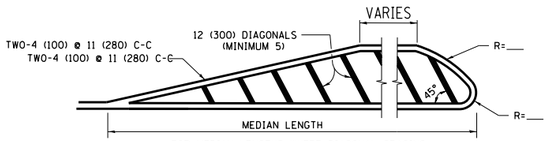
DETAIL "A" **DETAIL "B"**

TYPICAL CROSSWALK MARKING

✳ MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES



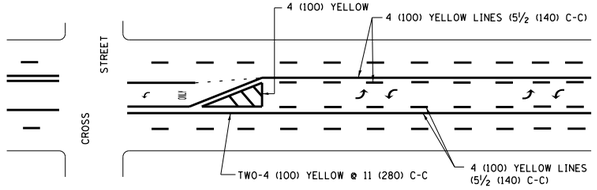
4' (1.2 m) WIDE MEDIANS ONLY



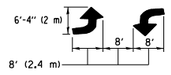
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

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

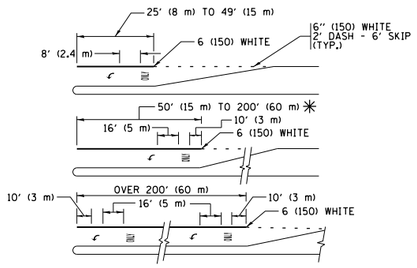


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO–WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

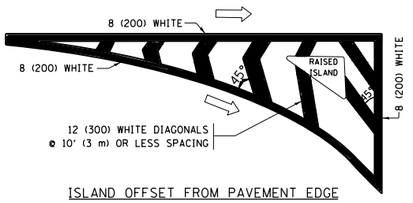


FULL SIZE LETTERS 8' (2,4 m) AND ARROWS SHALL BE USED.
↰ AREA = 15.6 SQ. FT. (1.5 m^2) **ONLY** AREA = 20.8 SQ. FT. (1.9 m^2)

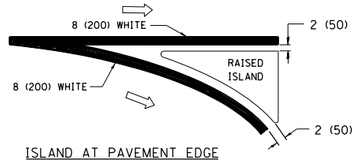
✳ TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

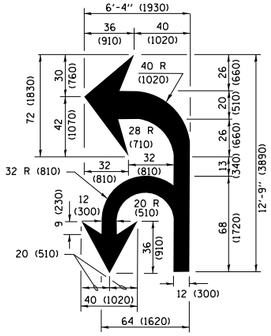


ISLAND OFFSET FROM PAVEMENT EDGE

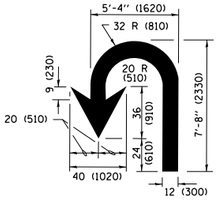


ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

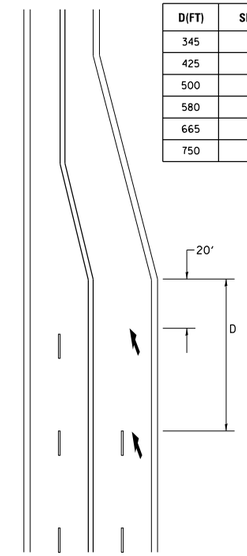


COMBINATION LEFT AND U–TURN



U–TURN

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55



LANE REDUCTION TRANSITION

✳ LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

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	5½ (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 MEDIANS IN YELLOW
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; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 ⌀ 6 (150) 12 (300) ⌀ 45° 12 (300) ⌀ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 ⌀ 4 (100) WITH 12 (300) DIAGONALS ⌀ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS ⌀ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m^2) EACH "X"=54.0 SQ. FT. (5.0 m^2)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	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))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

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 = pw:\\planroom.dot.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\D1316185\Drawings\Design\DistStd.dgn Default	USER NAME = tariqfm	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - C. JUCIUS 07-01-13
	PLOT DATE = 6/26/2019	DATE - 03-19-90	REVISED - C. JUCIUS 12-21-15 REVISED - C. JUCIUS 04-12-16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2018-035-RS	McHENRY	28	23
	TC–13	CONTRACT NO. 62G56		
	ILLINOIS FED. AID PROJECT			

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

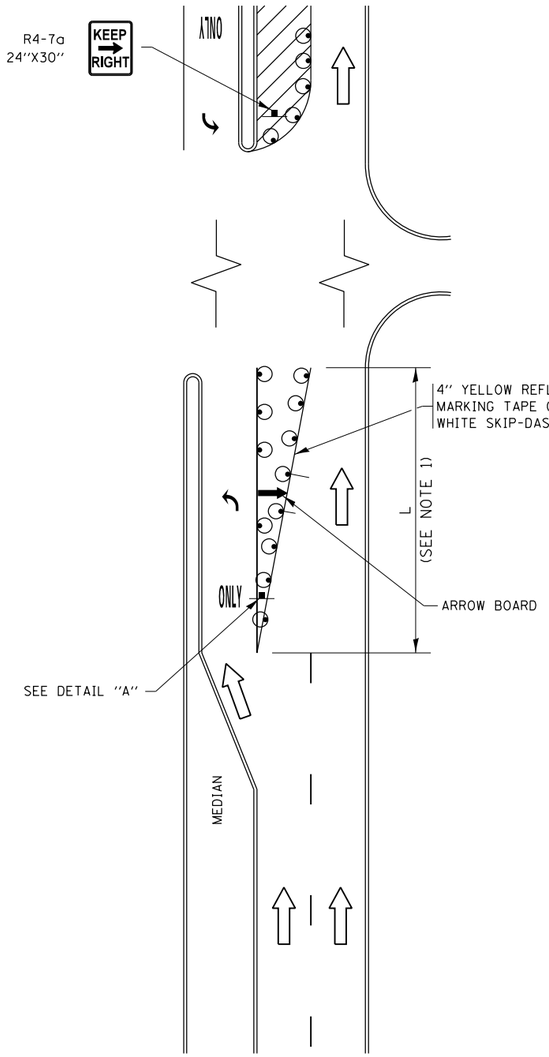


FIGURE 1

LEGEND

- WORK AREA
- LANE OPEN TO TRAFFIC
- ARROW BOARD
- TYPE I OR II BARRICADE OR DRUM WITH STEADY BURN LIGHT
- DRUM WITH STEADY BURN LIGHT
- SIGN ASSEMBLY
- TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

NOTES:

1. A) WHEN "L" IS ≤ THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.

   B) WHEN "L" IS > THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.

2. 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.

3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.

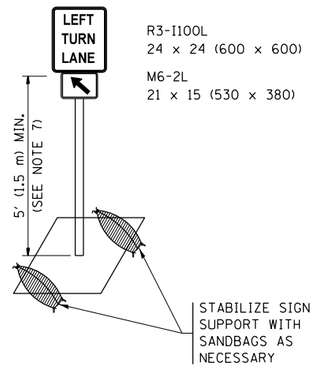
4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.

5. 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" R3-110OR 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.

6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.

7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH PREQUIREMENTS.

8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.



DETAIL A

TURN BAY ENTRANCE WITHIN A LANE CLOSURE

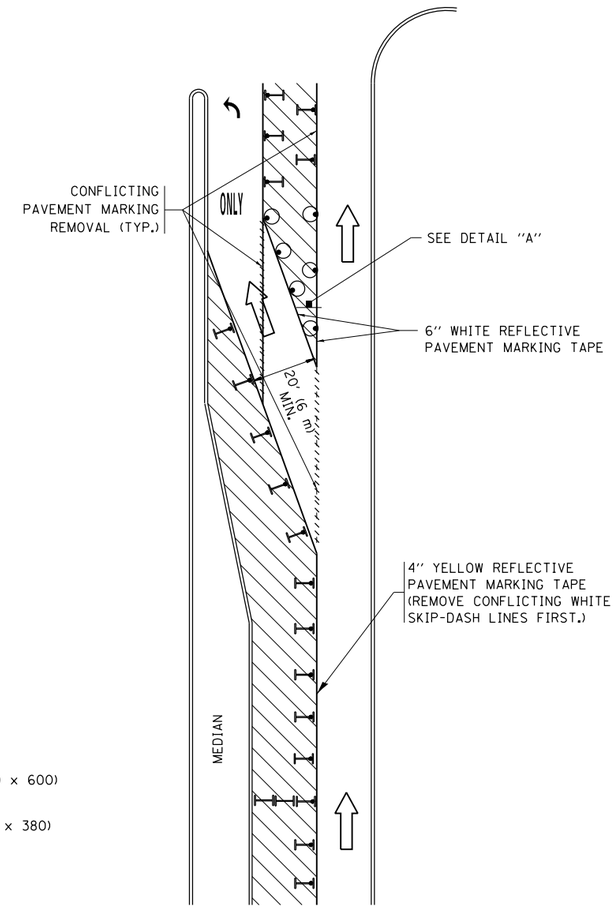


FIGURE 2

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

FILE NAME =	USER NAME = tariqfm	REVISED -T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)					
pw:\\planroom.dot.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\D1316[illegible]\Design\Dist Stds		REVISED - A. HOUSEH 11-07-95	REVISED - A. SCHUETZE 07-01-13							
	PLOT SCALE = 100.0000 ' / in.	REVISED - A. HOUSEH 10-12-96	REVISED - A. SCHUETZE 09-15-16							
Default	PLOT DATE = 6/26/2019	REVISED -T. RAMMACHER 01-06-00	REVISED -		SCALE: NONE	SHEET 1 OF 1 SHEETS	STA. TO STA.			

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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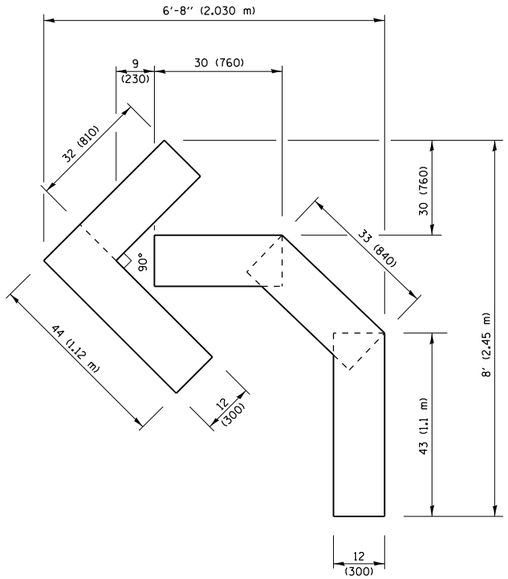
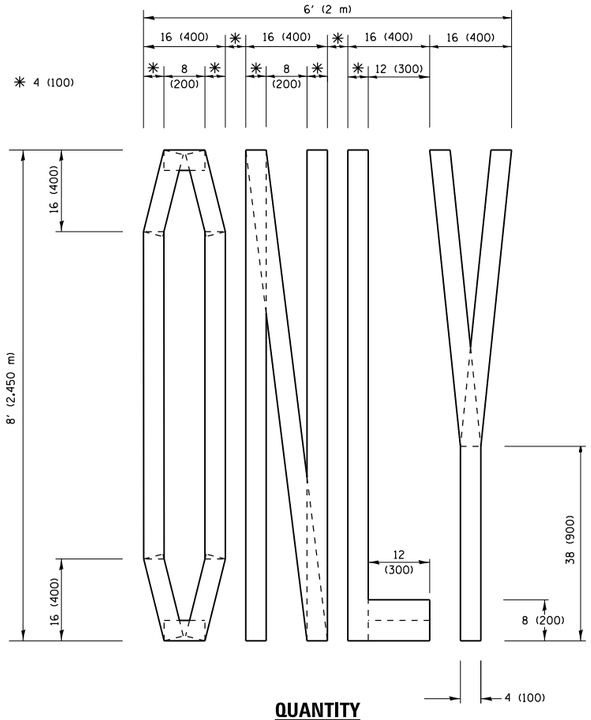
	TC-14	CONTRACT NO. 62G56		
	ILLINOIS FED. AID PROJECT			



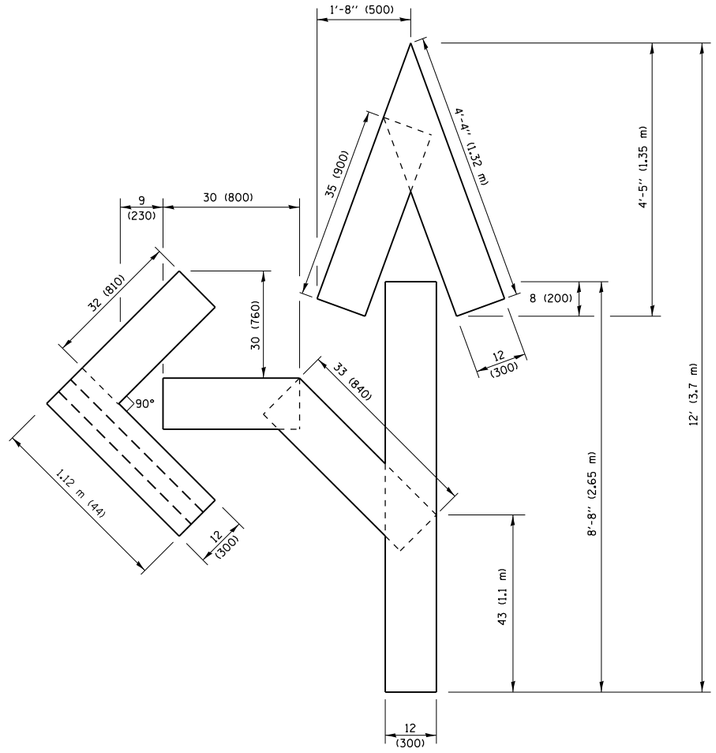
QUANTITY

4 (100) LINE = 45.5 ft. (13.9 m)
15.2 sq. ft. (1.41 sq. m)



QUANTITY

4 (100) LINE = 64.1 ft. (19.5 m)
21.4 sq. ft. (1.99 sq. m)

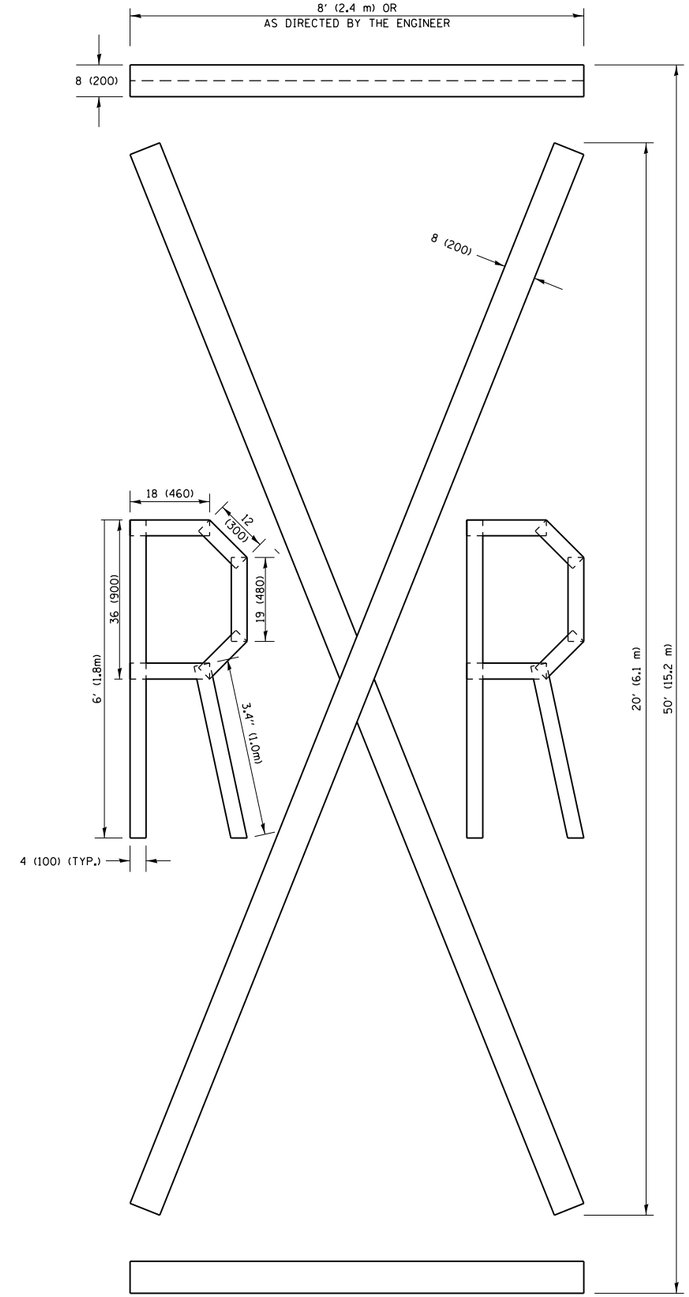


QUANTITY

4 (100) LINE = 82.5 ft. (25.1 m)
27.5 sq. ft. (2.53 sq. m)

NOTE:

ALL QUANTITIES OF PLACEMENT ARE REPRESENTED IN LINEAR FEET OF 4" LINES TO MATCH THE 4" TEMPORARY TAPE PAY ITEM AND REPRESENTS THE TOTAL QUANTITY OF 4" TAPE REQUIRED.



QUANTITY

4 (100) LINE = 225.9 ft. (68.9 m)
75.3 sq. ft. (6.99 sq. m)

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

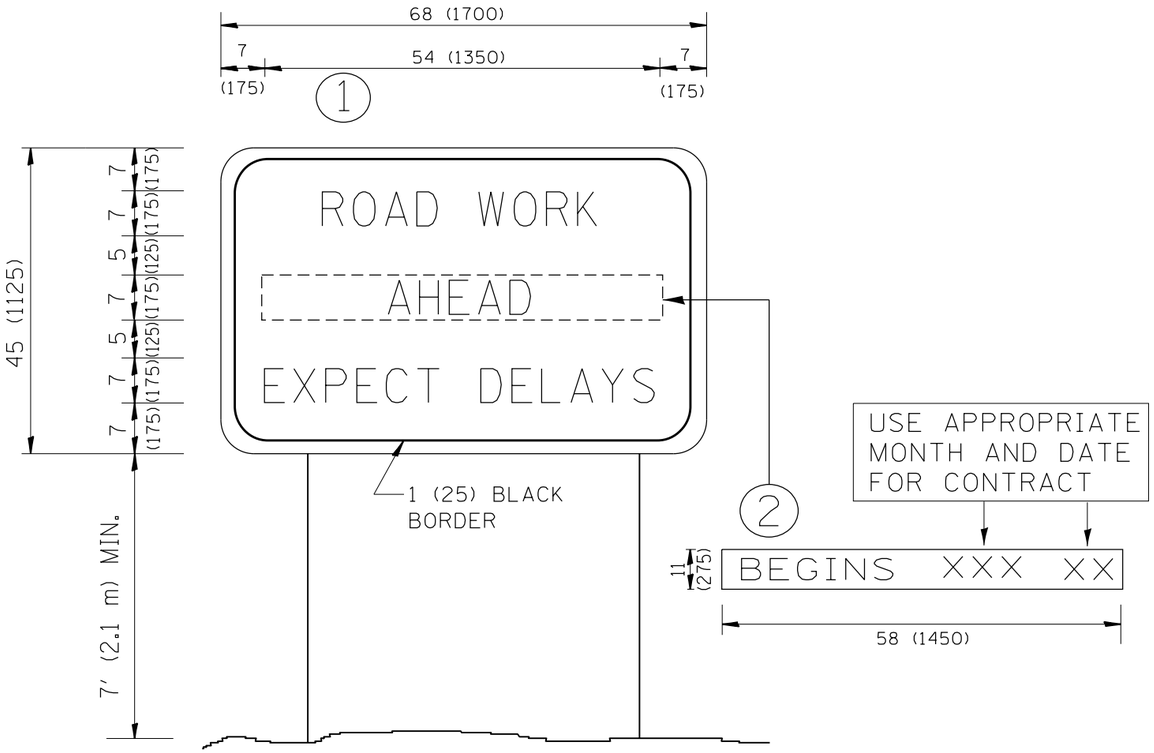
FILE NAME = pw:\\planroom.dot.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\D1316181\Drawings\Design\DistStd.dgn	USER NAME = tariqfm	DESIGNED -	REVISED - T. RAMMACHER 03-02-98
		DRAWN -	REVISED - E. GOMEZ 08-28-00
	PLOT SCALE = 100.0010 ' / in.	CHECKED -	REVISED - E. GOMEZ 08-28-00
	PLOT DATE = 6/26/2019	DATE - 09-18-94	REVISED - A. SCHUETZE 09-15-16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2018-035-RS	McHENRY	28	25
	TC-16	CONTRACT NO. 62C56		
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 = pw:\\planroom.dot.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\D1316181\Drawings\Design\DistStd.dgn	USER NAME = tariqfm	DESIGNED -	REVISED - R. MIRS 09-15-97
		DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 6/26/2019	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.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2018-035-RS	McHENRY	28	26
	TC-22	CONTRACT NO. 62G56		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

LOOP DETECTOR NOTES

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.

2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.

3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.

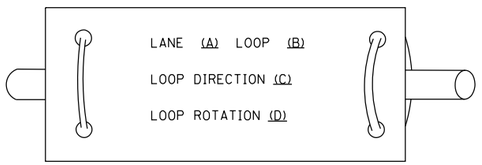
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.

6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.

7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

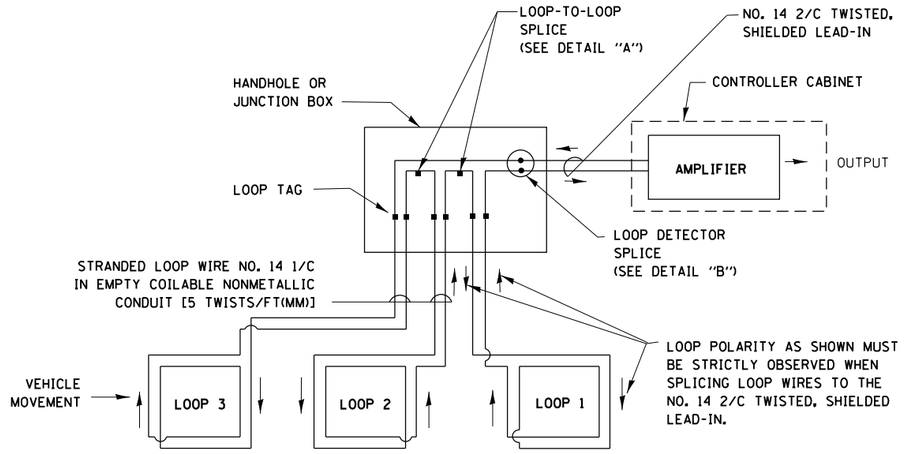


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.

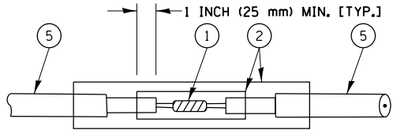
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

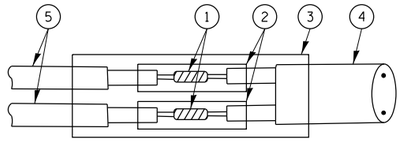


DETECTOR LOOP WIRING SCHEMATIC

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

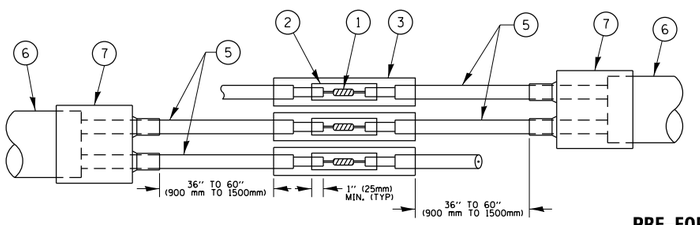


DETAIL "A"
LOOP-TO-LOOP SPLICE



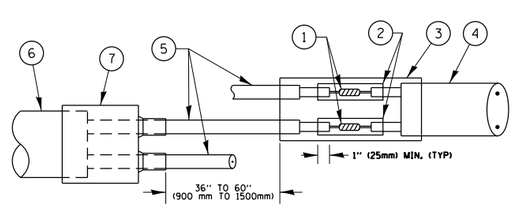
DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE

PRE-FORMED LOOP



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

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

(2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.

(3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.

(4) NO. 14 2/C TWISTED, SHIELDED CABLE.

(5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

(6) PRE-FORMED LOOP

(7) XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

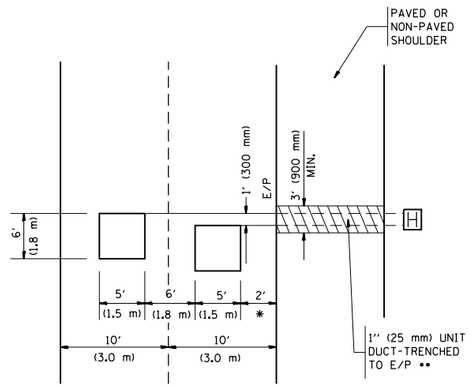
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET 2 OF 7 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2018-035-RS	McHENRY	28	27
	TS-05	CONTRACT NO. 62G56		
	ILLINOIS FED. AID PROJECT			

LOOPS NEXT TO SHOULDERS

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

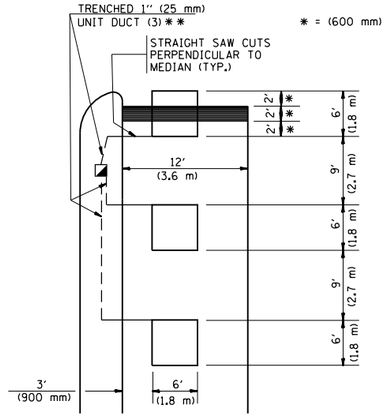


* = (600 mm)

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

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

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

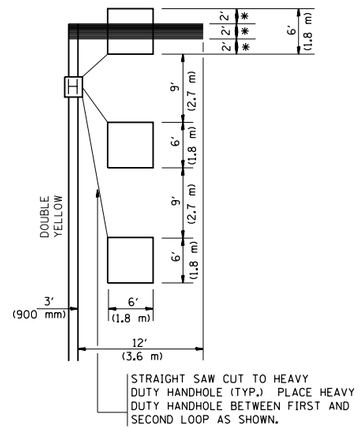


** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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

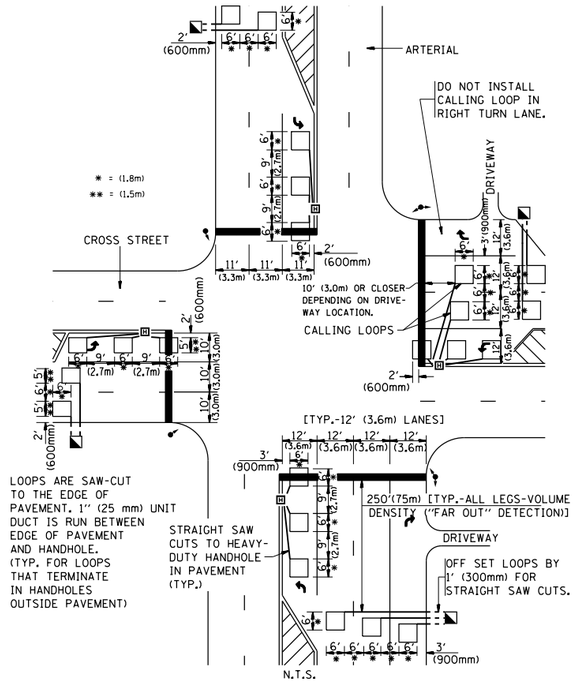
LEFT TURN LANES WITHOUT MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH
(PROTECTED / PERMITTED LEFT TURN PHASING)

* = (600 mm)



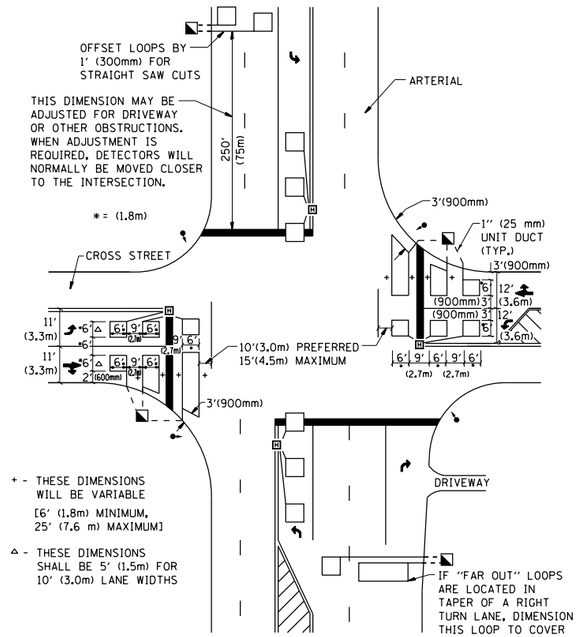
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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 SEPARATLY. 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.

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	PLOT DATE = 6/26/2019	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.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2018-035-RS	McHENRY	28	28
	TS-07	CONTRACT NO. 62G56		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		