FOR INDEX OF SHEETS, SEE SHEET NO. 2



THIS PROJECT IS LOCATED IN CITY OF PARK CITY AND CITY

# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

# **PROPOSED** HIGHWAY PLANS

F.A.U. ROUTE 2706: IL 43 (WAUKEGAN RD.) SOUTH OF MCGAW RD./PULASKI RD. TO US 41 **SECTION: 2019-025-RS** PROJECT: STP-8BYU(384) **DESIGNED OVERLAY AND PEDESTRIAN RAMPS** LAKE COUNTY

C-91-350-19

TRAFFIC DATA:

OF WAUKEGAN

IL 43:

ADT: 20600

SPEED LIMIT = 45 MPH (POSTED)

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.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION

1-800-892-0123

OR 811

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

R 10 E R 11 E R 12 E **PROJECT BEGINS** STA 21+49 Z LOCATION MAP OMISSION: NORTH CHICAGO STA. 59 + 47 TO STA. 62+30 **PROJECT ENDS** STA 73+20

WARREN TOWNSHIP

GROSS LENGTH = 5171 FOOT = 0.98 MILES

NET LENGTH = 4888 FOOT = 0.93 MILES

CONTRACT NO. 62J03

COUNTY TOTAL SHEE LAKE 32 1 2019-025-95 D-91-146-19



STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

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REV. - MS

#### INDEX OF SHEETS

#### STATE STANDARDS

SHEET NO.	DESCRIPTION	STANDARD NO.	DESCRIPTION
1	COVER SHEET	000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
2	INDEX OF SHEETS, STATE STANDARDS & GENERAL NOTES	424001-11	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
3-5	SUMMARY OF QUANTITIES	442201-03	CLASS C AND D PATCHES
6-9	TYPICAL SECTIONS	482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
10-12	ROADWAY AND PAVEMENT MARKING PLANS	701101-05	OFF-RD OPERATIONS, MULTILANE, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
13-16	DETECTOR LOOPS PLANS	701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
17	BD-01: DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 m)	701311-03	LANE CLOSURE 2L, 2W, MOVING OPERATIONS DAY ONLY
18	BD-02: DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5 m)	701411-09	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS >= 45 MPH
19	BD-22: PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT	701426-09	LANE CLOSURE, MULTILANE, FOR SPEEDS >=45 MPH INTERMITTENT OR MOVING OPER.
20	BD-24: CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT	701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
21	BD-32: BUTT JOINT ANDHMA TAPER DETAILS	701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
22	BD-33: HMA TAPER AT EDGE OF P.C.C. PAVEMENT	701606-10	URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
23	BD-34: DETAILS FOR DEPRESSED CURB & GUTTER AND SHOULDER TREATMENT AT TBT TY 1 SPL	701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
24	TC-08: ENTRANCE AND EXIT RAMP CLOSURE DETAILS	701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
25	TC-10: TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS.	701901-08	TRAFFIC CONTROL DEVICES
	INTERSECTIONS AND DRIVEWAYS	780001-05	TYPICAL PAVEMENT MARKINGS
26	TC-11: TYPICAL APPLICATIONS: RAISED REFLECTIVE PAVEMENT MARKERS	781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
	(SNOW-PLOW RESISTANT)	886006-01	DETECTOR LOOP INSTALLATIONS
27	TC-13: DISTRICT ONE TYPICAL PAVEMENT MARKINGS		
28	TC-14: TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)		
29	TC-16: SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS		
30	TC-22: ARTERIAL ROAD INFORMATION SIGN		
31	TS-05: DISTRICT ONE: STANDARD TRAFFIC SIGNAL DESIGN DETAILS (SHEET 2 OF 7)		

# **GENERAL NOTES**

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. (48 HOUR NOTIFICATION REQUIRED)
- 2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE VILLAGE OF WAUKEGAN AND CITY OF PARK CITY
- FRAMES AND GRATES ADJUSTMENT OF PRIVATE UTILITIES WITHIN THE LIMITS OF THE IMPROVEMENTS SHALL BE DONE BY THEIR RESPECTIVE OWNERS AND ARE NOT PART OF THIS CONTRACT.
- THE CONTRACTOR SHALL CONTACT DISTRICT ONE ARTERIAL TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT THE WRITTEN PERMISSION OF THE DEPARTMENT.
- 6. UNLESS OTHER CONDITIONS WARRANT EXTENDED LANE CLOSURE AS DETERMINED AND APPROVED IN WRITING BY THE RESIDENT 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.
- 7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- 8. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- 9. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- 10. ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE RESIDENT ENGINEER/TECHNICIAN.
- 11. THE RESIDENT ENGINEER SHALL CONTACT WALTER CZARNY, ARTERIAL TRAFFIC FIELD ENGINEER, VIA EMAIL AT WALTER.CZARNY@ILLINOIS.GOV. A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- 12. BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE RESIDENT ENGINEER.
- 13. ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE DEPARTMENT.
- 14. ANY PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS OBLITERATED BY MILLING AND RESURFACING OPERATIONS ON SIDE STREETS AND ENTRANCES SHALL BE REPLACED AND PAID FOR IN KIND.
- 15. PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES.
- 16. ANY LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF CURB OR DRAINAGE STRUCTURES, WHICH OBSTRUCTS THE NATURAL FLOW OF WATER, SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. PRIOR TO ACCEPTANCE OF THE IMPROVEMENT, ALL DRAINAGE STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED AS INCIDENTAL.

USER NAME = mesadoj	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/23/2019	DATE -	REVISED -

TS-07: DISTRICT ONE: DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

32

SCALE:

URBAN

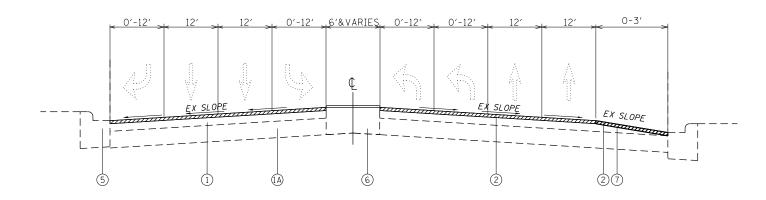
	SUMMARY OF QUANTIT	IEC	URBAN		CONSTRUCTI	ION TYPE C	ODE		CLIMAAA	RY OF QUANTITIES		URBAN		CON	NSTRUCTION	N TYPE COI	DE	
	SUMMART OF QUANTIT	163	TOTAL	0005 80% FED					SUMMAI	RY OF QUANTITIES		TOTAL	0005 80% FED					
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	20% STATE				CODE NO		ITEM	UNIT	TOTAL QUANTITIES	20% STATE					
21101615	TOPSOIL FURNISH AND PLACE, 4"	SO YD	200	200				44201803	CLASS D PATO	CHES, TYPE II, 13 INCH	SO YD	300	300					
25200110	SODDING, SALT TOLERANT	SO YD	200	200				44201807	CLASS D PATO	CHES, TYPE III, 13 INCH	SO YD	500	500					
40600290	BITUMINOUS MATERIALS (TACK COAT	POUND	30588	30588				44201809	CLASS D PATO	CHES, TYPE IV, 13 INCH	SO YD	300	300					
40600400	MIXTURE FOR CRACKS, JOINTS, AND	TON	68	68				48102100	AGGREGATE WE	EDGE SHOULDER, TYPE B	TON	10	10					
	FLANGEWAYS																	
								56109210	WATER VALVES	S TO BE ADJUSTED	EACH	1	1					
40600982	HOT-MIX ASPHALT SURFACE REMOVAL	- BUTT SO YD	269	269														
	JOINT							60257900	MANHOLES TO	BE RECONSTRUCTED	EACH	3	3					
40600985	PORTLAND CEMENT CONCRETE SURFACE	E SO YD	684	684				60300105	FRAMES AND C	GRATES TO BE ADJUSTED	EACH	5	5					
	REMOVAL - BUTT JOINT																	
								60300305	FRAMES AND L	LIDS TO BE ADJUSTED	EACH	5	5					
40603085	LEVELING BINDER (MACHINE METHOD	, N70 TON	5075	5075														
								67000400	ENGINEER'S F	FIELD OFFICE, TYPE A	CAL MO	6	6					
42001300	PROTECTIVE COAT	SO YD	415	415														
								67100100	MOBILIZATION	N	L SUM	1	1					
42400200	PORTLAND CEMENT CONCRETE SIDEWAI	_K 5 S0 FT	75	75														
	INCH							70102620	TRAFFIC CONT	TROL AND PROTECTION.	L SUM	1	1					
									STANDARD 701	1501								
42400800	DETECTABLE WARNINGS	SO FT	30	30														
								70102625	TRAFFIC CONT	TROL AND PROTECTION.	L SUM	1	1					
44000164	HOT-MIX ASPHALT SURFACE REMOVAL	3 SO YD	45315	45315					STANDARD 701	1606								
	3/4"																	
								70102630	TRAFFIC CONT	TROL AND PROTECTION.	L SUM	1	1					
44000600	SIDEWALK REMOVAL	SO FT	75	75					STANDARD 701	1601								
																Ψ - 6	DECTALTY	ITEMS
																	PECIALTY ON-PARTIO ORK (100%	CIPATING
FILE NAME =	USER NAME = mesadoj	DESIGNED -	•	REVISED REVISED	-		STATE OF	ILLIMOIS						F.A.U. RTE.	SECTIO	ON (	COUNTY T	OTAL SHEET HEETS NO.
	PLOT SCALE = 100.0000 ' / In.	CHECKED -		REVISED	<u>-</u>	DI	STATE OF T		TION	SUMM	ARY OF QUANT	TIES		2706	2019-025		LAKE ONTRACT I	32 3 NO. 62JO3
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URBAN

				URBAN		TRUCTION TWDE CODE						URBAN	1			TWDE CODE	
	SUMMAR	Y OF QUANTITIES			0005 CONS	STRUCTION TYPE CODE			SUMMARY OF QU	ANTITIES			0005	CON	12 LKUC LTON	TYPE CODE	
CODE NO		ITEM	UNIT	TOTAL QUANTITIES	80% FED			CODE NO	ITI	EM	UNIT	TOTAL QUANTITIES	0005 80% FED 20% STATE				
70102635	TRAFFIC CONTROL	AND PROTECTION.	L SUM	1	1			* 78000400	THERMOPLASTIC PAVEMEN	NT MARKING - LINE	FOOT	5054	5054				
									<i>c</i> "								
	STANDARD 701701								6"								
70102640	TRAFFIC CONTROL	AND PROTECTION.	L SUM	1	1			* 78000500	THERMOPLASTIC PAVEMEN	NT MARKING - LINE	FOOT	119	119				
	STANDARD 701801								8"								
70300100	SHORT TERM PAVE	MENT MARKING	FOOT	32132	32132			* 78000600	THERMOPLASTIC PAVEMEN	NT MARKING - LINE	FOOT	300	300				
									12"								
70300150	SHORT TERM PAVE	MENT MARKING REMOVAL	SO FT	14875	14875												
								* 78000650	THERMOPLASTIC PAVEMEN	NT MARKING - LINE	FOOT	655	655				
70300210	TEMPORARY PAVEM	ENT MARKING LETTERS AND	SO FT	474	474				24"								
	SYMBOLS																
								* 78100100	RAISED REFLECTIVE PAY	/EMENT MARKER	EACH	351	351				
70300220	TEMPORARY PAVEMI	ENT MARKING - LINE 4"	FOOT	27216	27216												
								78300200	RAISED REFLECTIVE PAY	/EMENT MARKER	EACH	317	317				
70300240	TEMPORARY PAVEMI	ENT MARKING - LINE 6"	FOOT	5054	5054				REMOVAL								
7070055	TEMPORARY ROOM	CHT MADVING	F007		110			* 88600600	DETECTOR LOOP REPLACE	MENT	FOOT	4261	4261				
70300250	IEMPURAKY PAVEMI	ENT MARKING - LINE 8"	FOOT	119	119			00000000	DETECTOR LOOP REPLACE	.wi∟14 1	F001	7201	7201				
70300260	TEMPORARY PAVEM	ENT MARKING - LINE 12"	FOOT	300	300			X2020110	GRADING AND SHAPING S	SHOULDERS	UNIT	4	4				
70300280	TEMPORARY PAVEMI	ENT MARKING - LINE 24"	FOOT	655	655			X4060004	POLYMERIZED HOT-MIX	ASPHALT SURFACE	TON	4441	4441				
									COURSE, STONE MATRIX	ASPHALT, 9.5, N80		_					
70300520	PAVEMENT MARKING	G TAPE, TYPE III 4"	FOOT	16006	16006												
								X4400100	PORTLAND CEMENT CONCE	RETE SURFACE	SO YD	206	206				
78000100	THERMOPLASTIC PA	AVEMENT MARKING -	SQ FT	1385	1385				REMOVAL (VARIABLE DEF	PTH)							
	LETTERS AND SYM	BOLS															
								X5537800	STORM SEWERS TO BE C	EANED 12"	FOOT	300	300				
78000200	THERMOPLASTIC PA	AVEMENT MARKING - LINE	FOOT	27216	27216												
	4"															* = SPFC	IALTY ITEMS
	ı		Lanas:											le !		△ = NON- WORK	PARTICIPATING (100% STATE)
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			URBAN												
	SUMMARY OF QUANTITIES			0005	NSTRUCTION TYPE C	ODE T		SUMMAF	RY OF QUANTITIES		0005	100	NSTRUCTION	TYPE CODE	
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	80% FED				CODE NO	ITEM	UNIT	TOTAL 80% FED 20% STATE				
x6030310	FRAMES AND LIDS TO BE ADJUSTED	EACH	23	23											
	(SPECIAL)														
X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SO FT	18731	18731											
Z0004562	COMBINATION CONCRETE CURB AND GUTTER	FOOT	1200	1200											
	REMOVAL AND REPLACEMENT														
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	5	5											
Z0030850	TEMPORARY INFORMATION SIGNING	SO FT	51.4	51.4											
20030830	TEMPONANT INFORMATION STONING	30 F1	31.4	31.4											
Z0033700	LONGITUDINAL JOINT SEALANT	FOOT	26884	26884											
														* = SPECIA △ = NON-PA WORK (	LTY ITEMS RTICIPATIN 100% STATE
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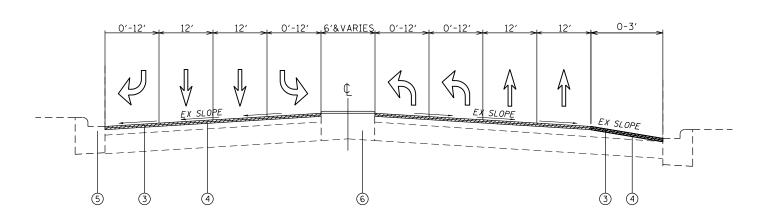
#### F.A.U. 2706



# EXISTING TYPICAL SECTION

STA 21+50 TO STA 36+80 ±

F.A.U. 2706



# PROPOSED TYPICAL SECTION

STA 21+50 TO STA 36+80 ±

# LEGEND:

- 1) EXISTING HMA SURFACE COURSE ±6"
- (1A) EXISTING PCC BASE COURSE ±10"
- 2) PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 33/4"
- 3 PROPOSED POLY HOT-MIX ASPHALT SURFACE COURSE, SMA, 9.5, N80, 1¾"
- 4 LEVELING BINDER (MACHINE METHOD), N70, 2". (IL-9.5 mm)
- 5 EXISTING COMB. CURB AND GUTTER
- 6 EXISTING. P.C.C. MEDIAN
- 7 EXISTING HMA SHOULDER

## NOTES:

- 1) THE CONTRACTOR SHALL MILL FIRST BEFORE PATCHING PER DISTRICT DETAIL BD-22.
- (2) THE LONGITUDINAL JOINT SEALANT SHALL BE PLACED OVER THE LEVELING BINDER.

# **HOT-MIX ASPHALT MIXTURE REQUIREMENTS**

MIXTURE USES	MIXTURE TYPE	AIR VOIDS @ Ndes	QMP
PAVEMENT	POLY HOT-MIX ASPHALT SURFACE COURSE SMA, 9.5, N80, 13/4"	3.5% @ 80 GYR.	QCP
RESURFACING	LEVELING BINDER (MACHINE METHOD), N70, 2". (IL-9.5 mm)	4% <b>©</b> 70 GYR.	QCP
PATCHING	CLASS D PATCH (HMA BINDER IL-19 mm), 14"	4% @ 70 GYR.	QC/QA

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.

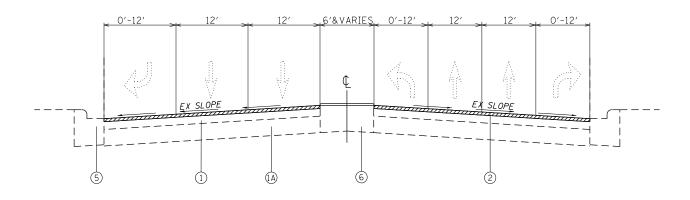
NOTE 3: FOR USE OF RECYCLED MATERIALS SEE DISTRICT ONE SPECIAL PROVISIONS.

NOTE 4: OUALITY MANAGEMENT PROGRAM (OMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE.

USER NAME = mesadoj	DESIGNED -	REVISED -
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PLOT DATE = 5/23/2019	DATE -	REVISED -

	TYPICAL SECTIONS					SEC	ΓΙΟΝ		COUNTY	TOTAL SHEETS	
	IL 43 (WAUKEGAN RD.)				2706	2019-	025-RS		LAKE	32	6
IL 43 (WAUKLUAN ND.)									CONTRACT	F NO. 62	2103
ET	OF	SHEETS	STA.	TO STA.			ILLINOIS	FED. AI	D PROJECT		

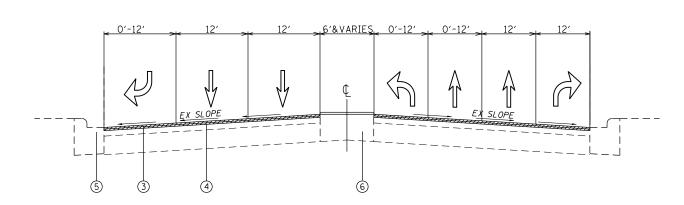
## F.A.U. 2706



# EXISTING TYPICAL SECTION

STA 36+80 TO STA 53+00 ±

F.A.U. 2706



# PROPOSED TYPICAL SECTION

STA 36+80 TO STA 53+00 ±

#### 

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS						SEC.	TION		COUNTY	TOTAL SHEETS	SHEE
IL 43 (WAUKEGAN RD.)					2706	2019-	025-RS		LAKE	32	7
IL 43 (WAORLUAIN ID.)									CONTRACT	NO. 62	2J03
SHEET	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT						

# LEGEND:

- 1) EXISTING HMA SURFACE COURSE ±6"
- (1A) EXISTING PCC BASE COURSE ±10"
- 2) PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 3\(\frac{3}{4}\)''
- 3 PROPOSED POLY HOT-MIX ASPHALT SURFACE COURSE, SMA, 9.5, N80, 13/4"
- 4) LEVELING BINDER (MACHINE METHOD), N70, 2". (IL-9.5 mm)
- 5 EXISTING COMB. CURB AND GUTTER

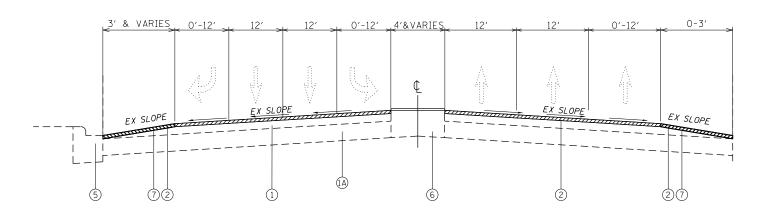
SCALE:

- 6 EXISTING. P.C.C. MEDIAN
- (7) EXISTING HMA SHOULDER

# NOTES:

- 1 THE CONTRACTOR SHALL MILL FIRST BEFORE PATCHING PER DISTRICT DETAIL BD-22.
- 2) THE LONGITUDINAL JOINT SEALANT SHALL BE PLACED OVER THE LEVELING BINDER.

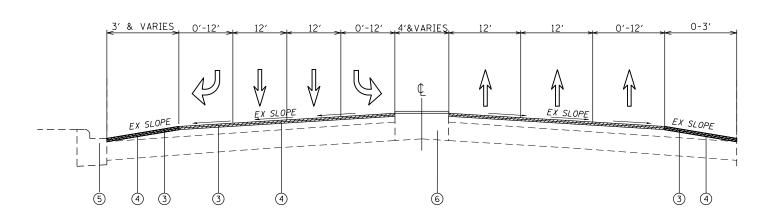
## F.A.U. 2706



# EXISTING TYPICAL SECTION

STA 53+00 TO STA 59+50 ±

F.A.U. 2706



# PROPOSED TYPICAL SECTION

STA 53+00 TO STA 59+50 ±

# LEGEND:

- 1) EXISTING HMA SURFACE COURSE ±6"
- (1A) EXISTING PCC BASE COURSE ±10"
- 2 PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 33/4"
- 3 PROPOSED POLY HOT-MIX ASPHALT SURFACE COURSE, SMA, 9.5, N80, 13/4"
- 4) LEVELING BINDER (MACHINE METHOD), N70, 2". (IL-9.5 mm)
- 5 EXISTING COMB. CURB AND GUTTER

SCALE:

SHEET

- 6 EXISTING. P.C.C. MEDIAN
- 7 EXISTING HMA SHOULDER

# NOTES:

- 1 THE CONTRACTOR SHALL MILL FIRST BEFORE PATCHING PER DISTRICT DETAIL BD-22.
- (2) THE LONGITUDINAL JOINT SEALANT SHALL BE PLACED OVER THE LEVELING BINDER.

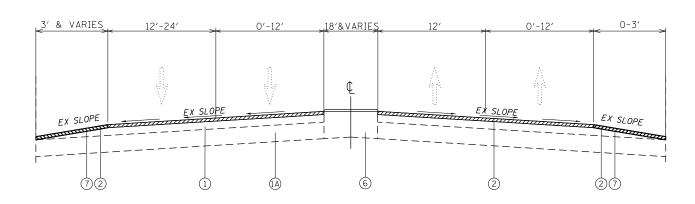
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PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -	
PLOT DATE = 5/23/2019	DATE -	REVISED -	

TYPICAL SECTIONS	F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
IL 43 (WAUKEGAN RD.)	2706	2019-025-RS	LAKE	32	8	
IL 43 (WAOKEGAN IID.)				CONTRACT	NO. 62	2J03
OF SHEETS STA	TO STA		TILLINOIS SED A	ID PROJECT		

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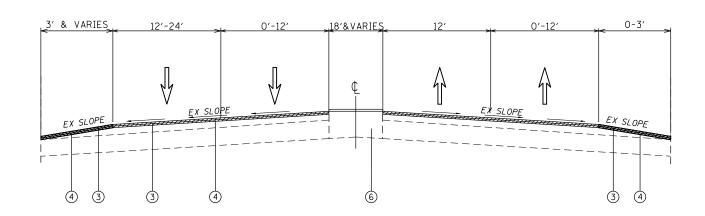
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# EXISTING TYPICAL SECTION

STA 62+30 TO STA 73+20 ±

F.A.U. 2706



# PROPOSED TYPICAL SECTION

STA 62+30 TO STA 73+20 ±

# LEGEND:

- 1) EXISTING HMA SURFACE COURSE ±6"
- (1A) EXISTING PCC BASE COURSE ±10"
- 2) PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 3\(\frac{3}{4}\)''
- 3 PROPOSED POLY HOT-MIX ASPHALT SURFACE COURSE, SMA, 9.5, N80, 13/4"
- 4 LEVELING BINDER (MACHINE METHOD), N70, 2". (IL-9.5 mm)
- 5 EXISTING COMB. CURB AND GUTTER

SCALE:

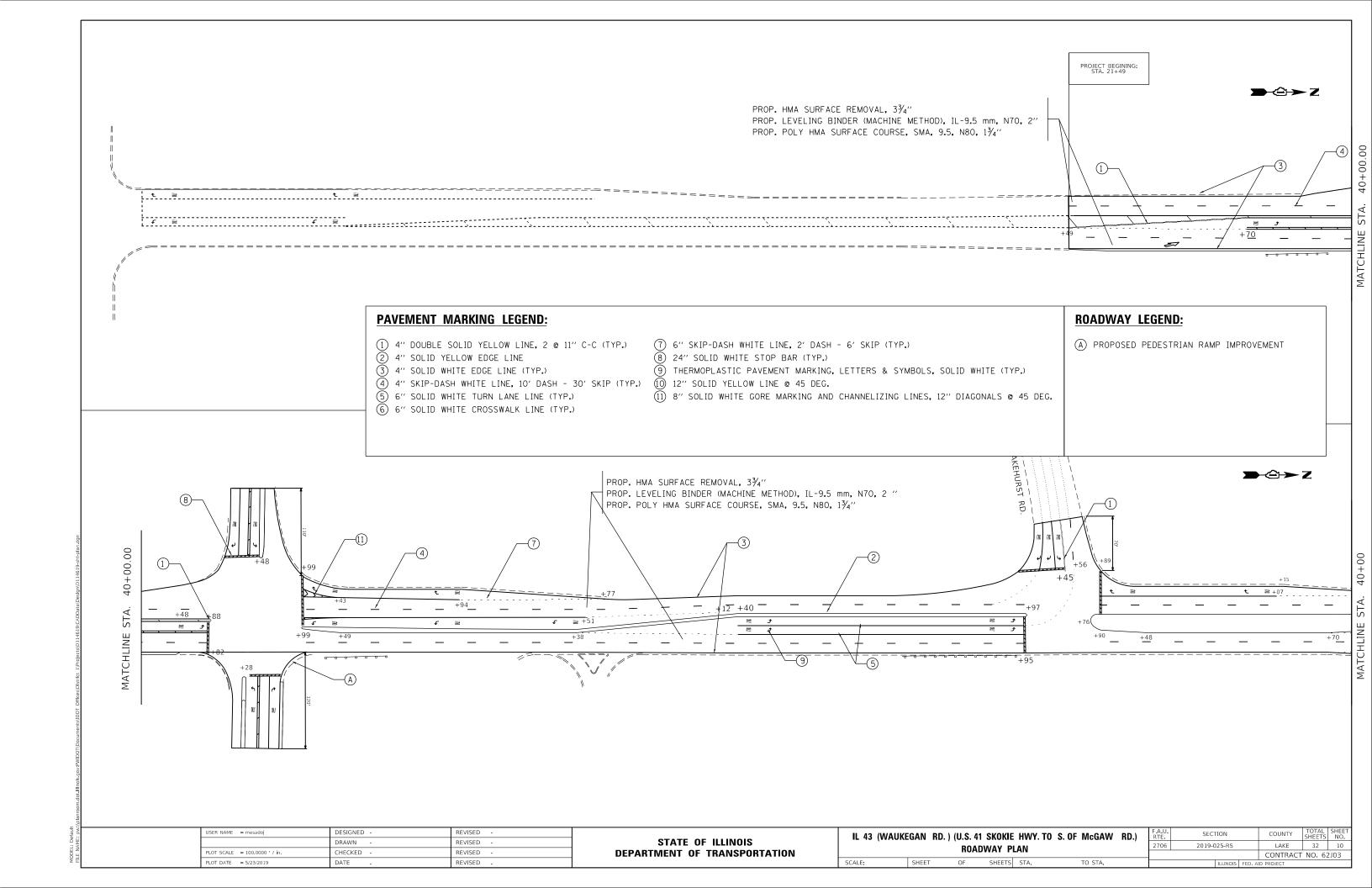
- 6 EXISTING. P.C.C. MEDIAN
- (7) EXISTING HMA SHOULDER

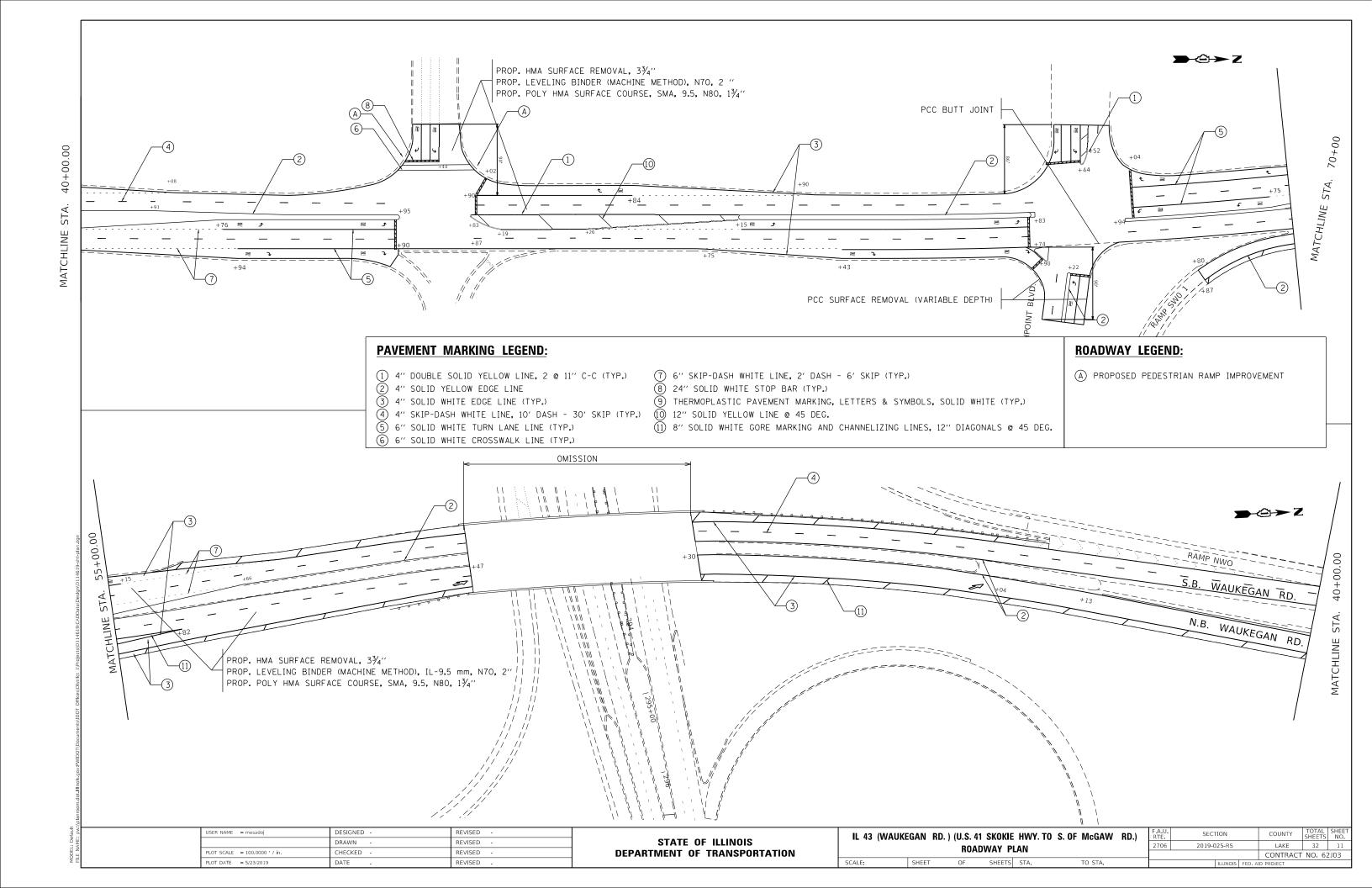
# NOTES:

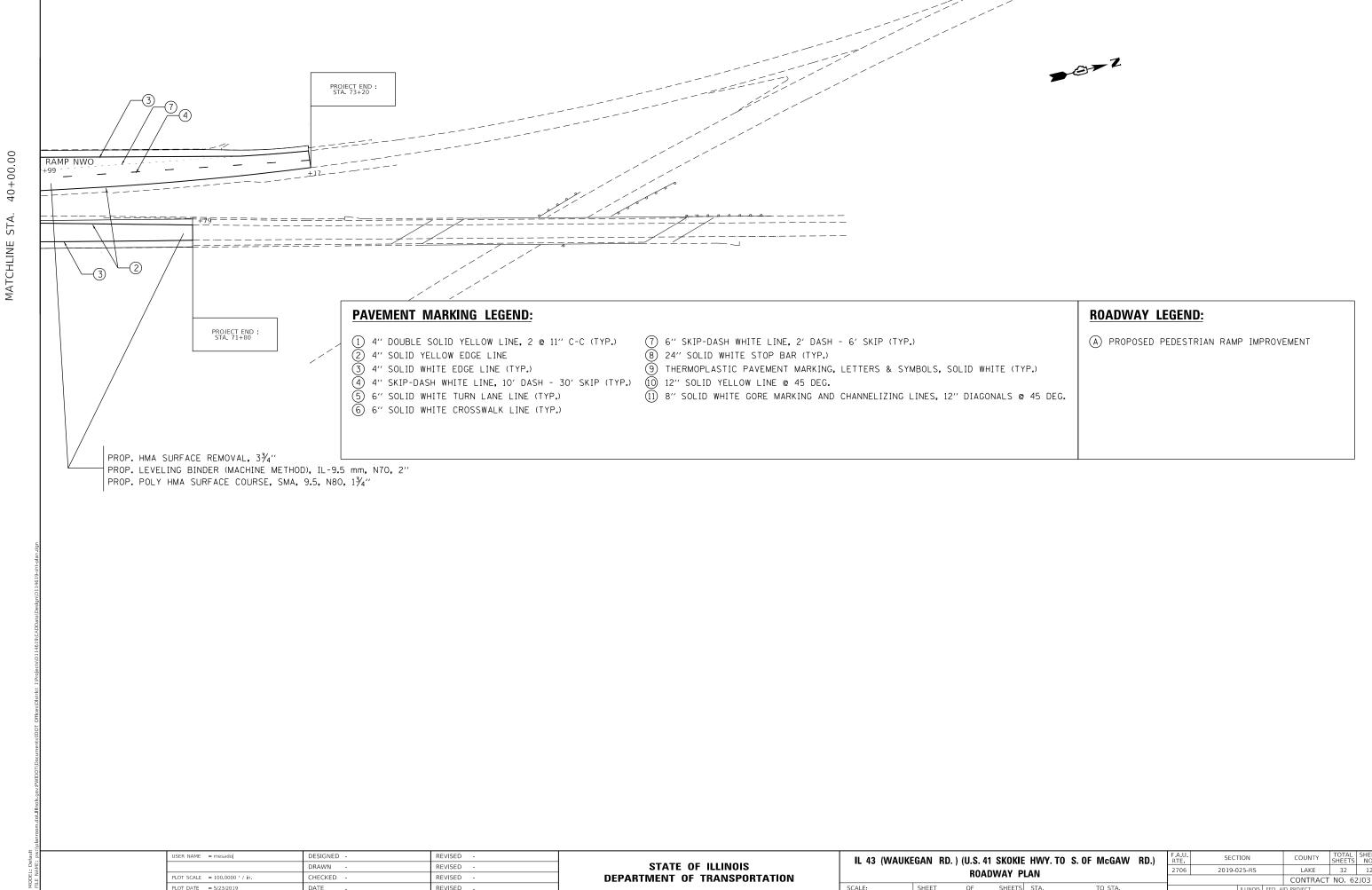
- 1 THE CONTRACTOR SHALL MILL FIRST BEFORE PATCHING PER DISTRICT DETAIL BD-22.
- (2) THE LONGITUDINAL JOINT SEALANT SHALL BE PLACED OVER THE LEVELING BINDER.

USER NAME = mesadoj	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -	
PLOT DATE = 5/23/2019	DATE -	REVISED -	

		TYPIC	AL SECT	IONS		F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		II //3 /V	VAUKEGA	M RD \		2706	2019-025-RS	LAKE	32	9
		IL 73 (V	VAUNLUA	14 110./				CONTRACT	NO. 62	2103
SHEET OF SHEETS STA. TO STA.							ILLINOIS FED. A	ID PROJECT		

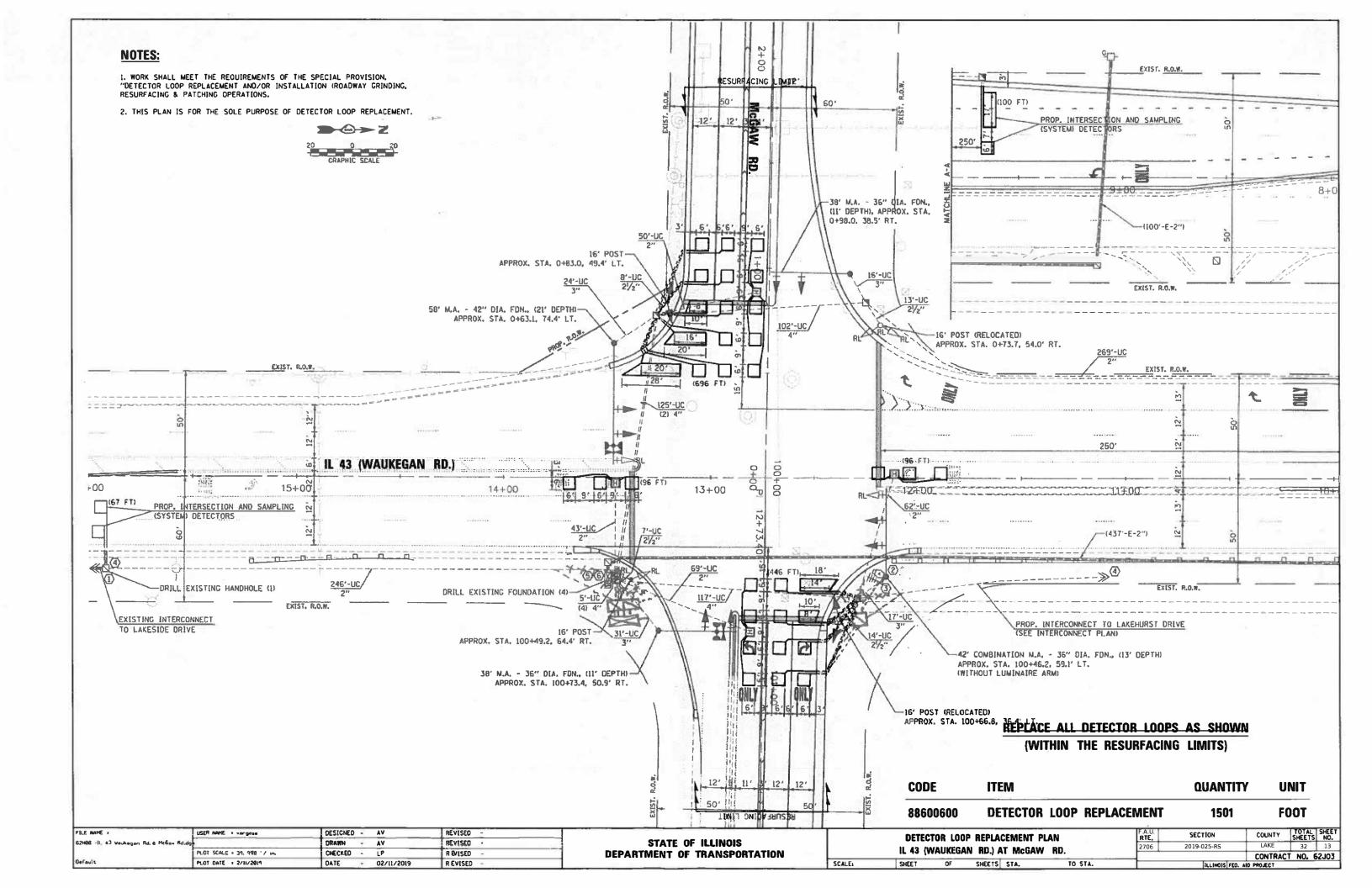


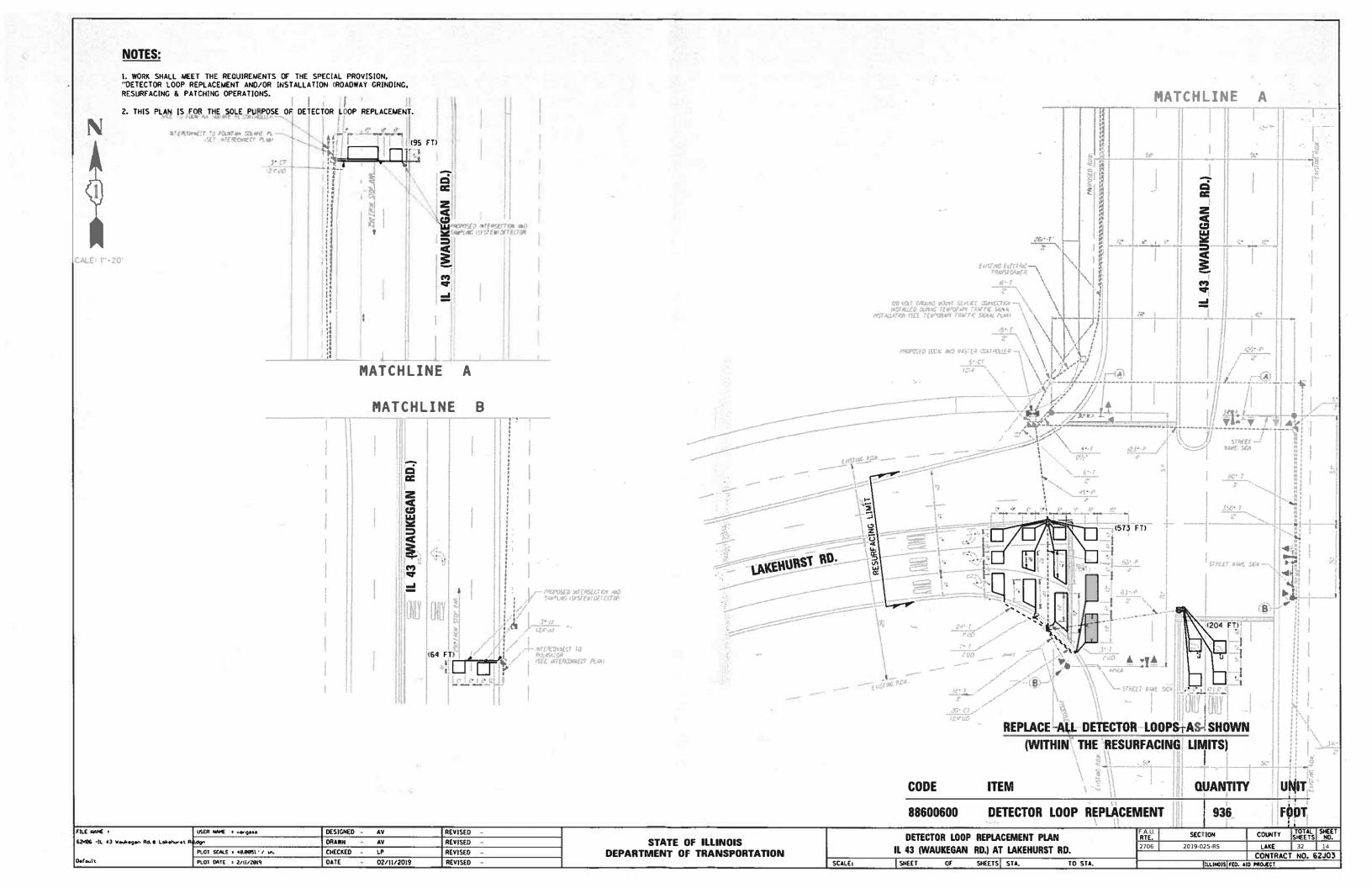


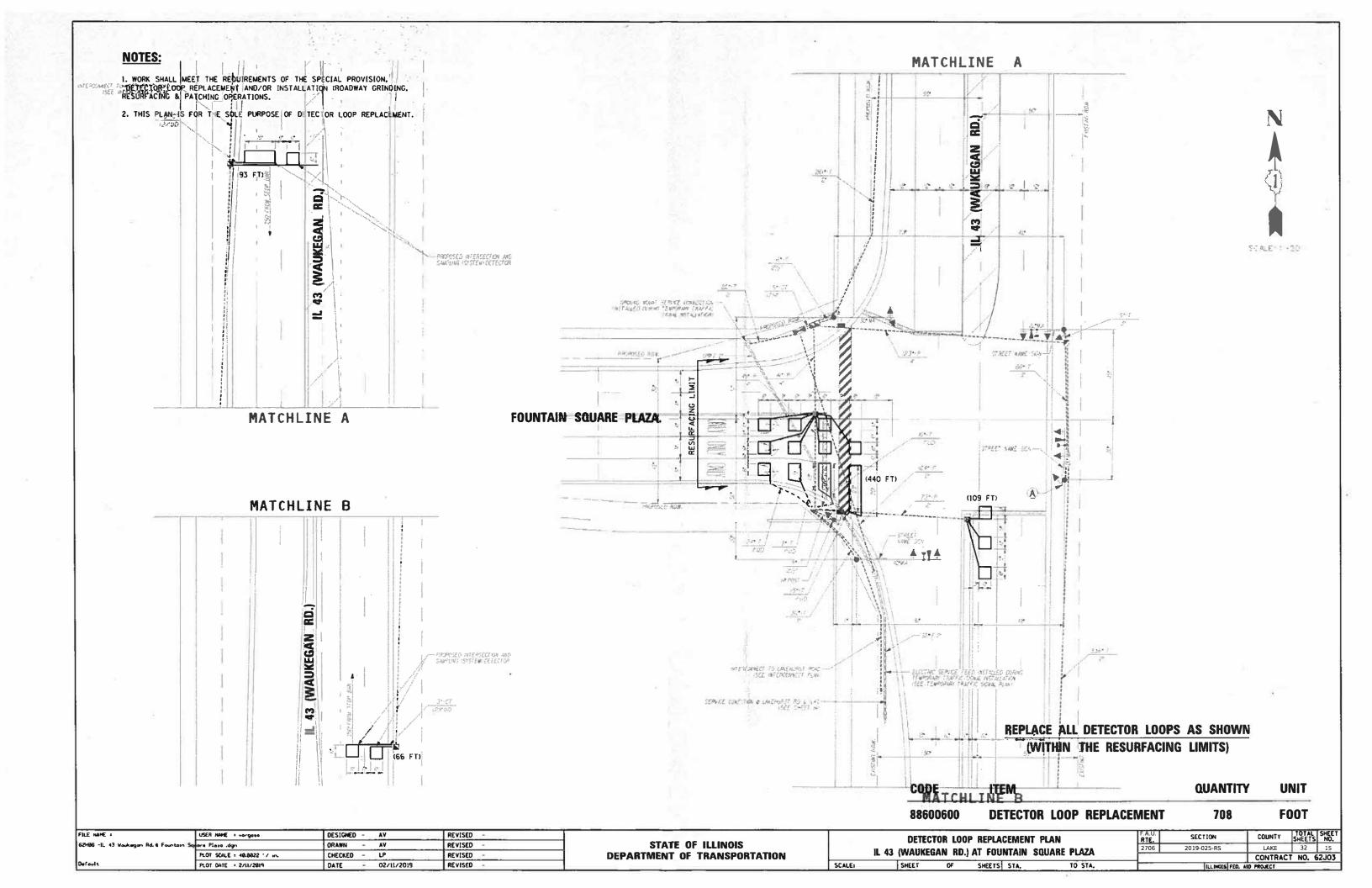


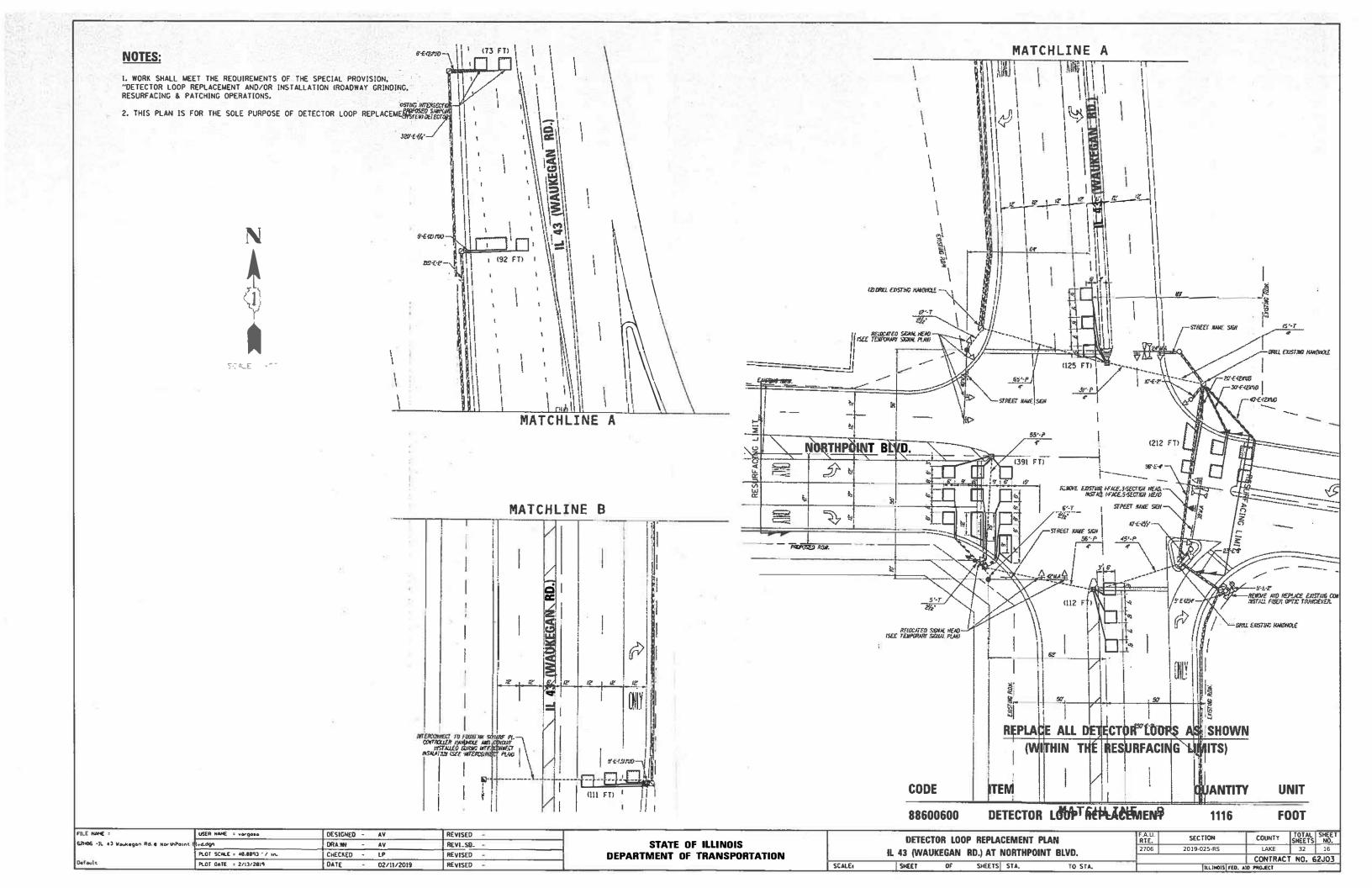
SHEETS STA.

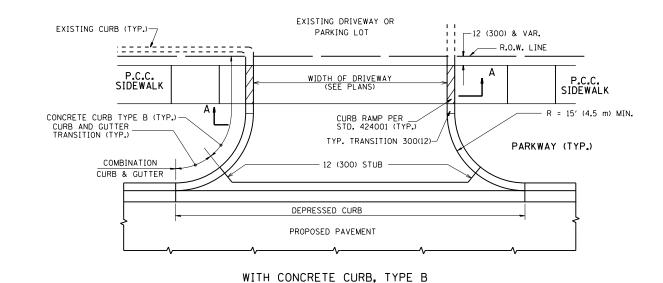
LAKE 32 12 CONTRACT NO. 62J03

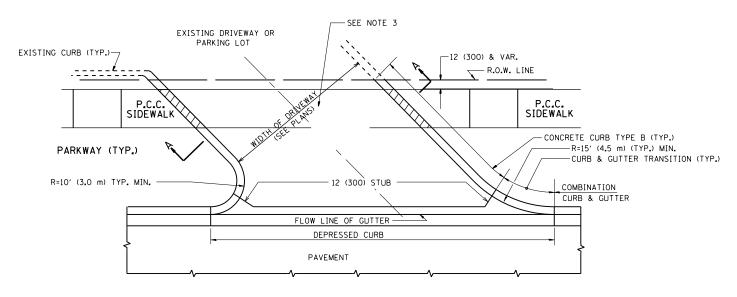




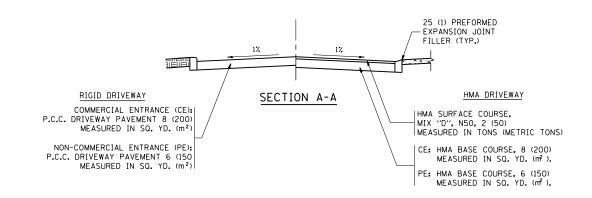


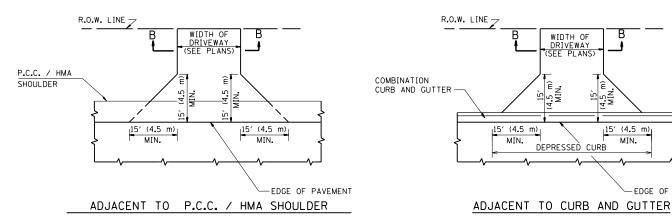


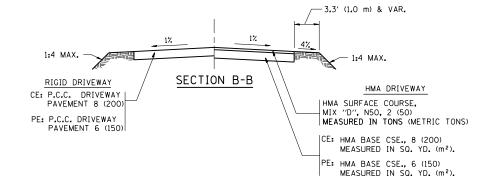




#### WITH CONCRETE CURB, TYPE B







#### RURAL FIELD ENTRANCE (FE)

HMA SURFACE COURSE, MIX "D", N50, 2 (50) MEASURED IN TONS (METRIC TONS)

AGGREGATE BASE CSE., TYPE B, 8 (200) MEASURED IN SQ. YD. (m2).

WIDTH OF DRIVEWAY (SEE PLANS

15' (4.5 m)

MIN.

EDGE OF PAVEMENT

#### **GENERAL NOTES:**

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

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

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

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

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

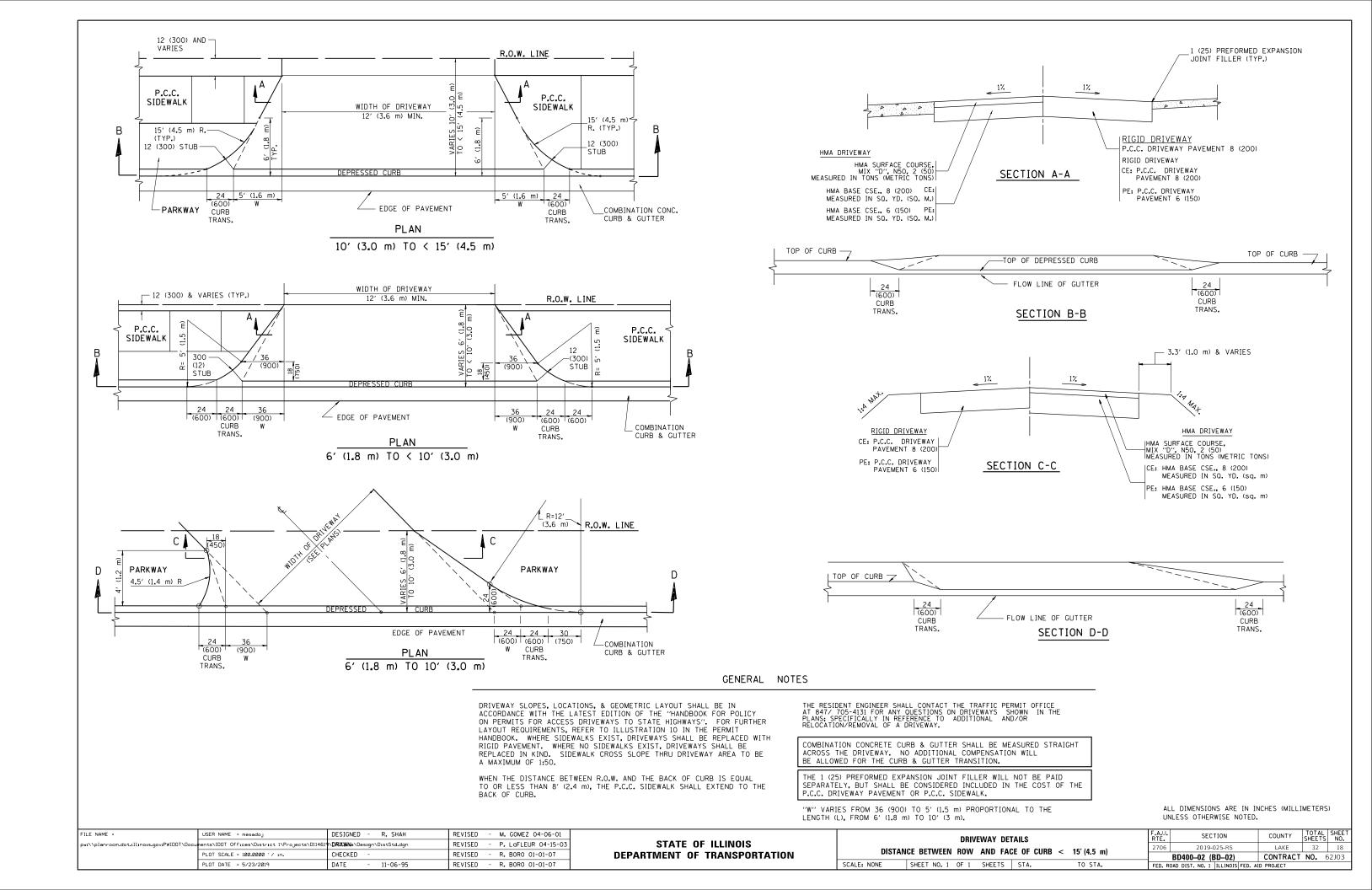
WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

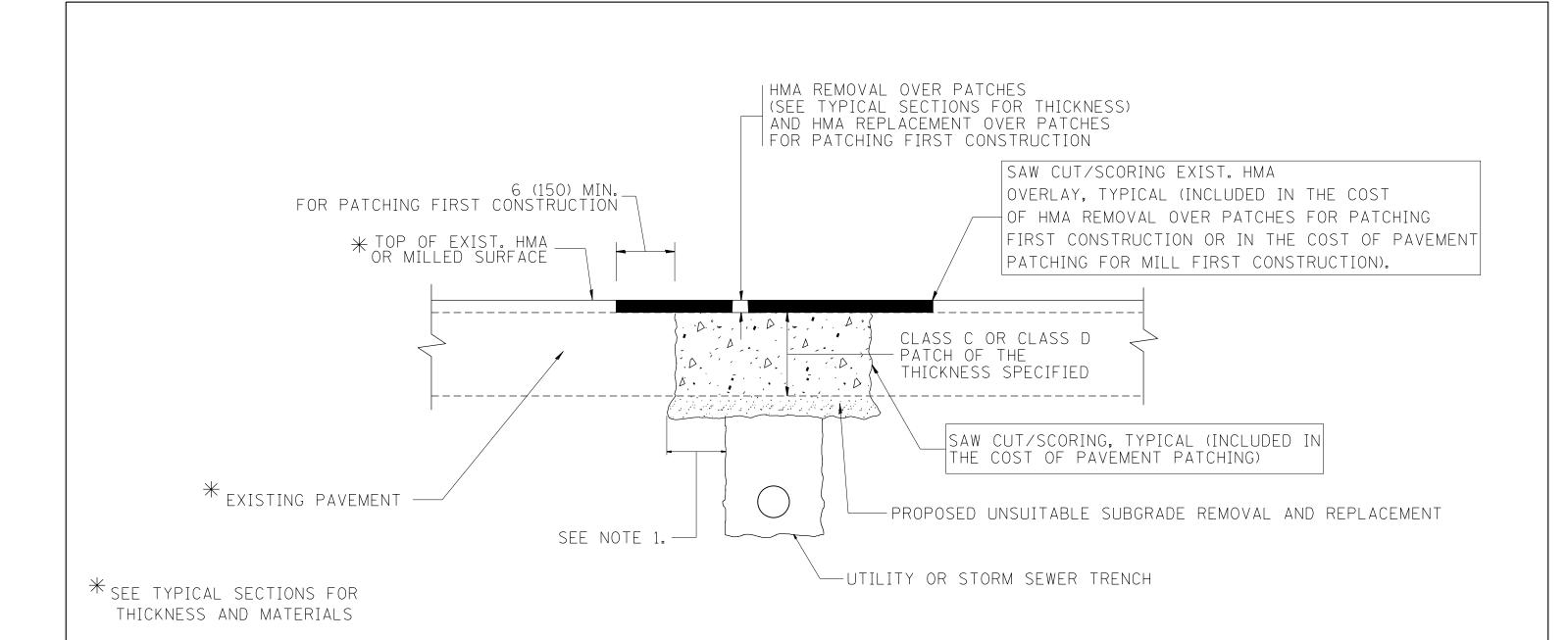
SCALE: NONE

FILE NAME =	USER NAME = mesadoj	DESIGNED - R. SHAH	REVISED - P. LaFLUER 04-15-03
pw:\\planroom.dot.illinois.gov:PWIDOT\Docu	nents\IDOT Offices\District 1\Projects\D114619	N <b>DRDDWN</b> a\Design\DistStd.dgn	REVISED - R. BORO 01-01-07
	PLOT SCALE = 100.0002 ' / in.	CHECKED -	REVISED - R. BORO 06-11-08
	PLOT DATE = 5/23/2019	DATE - 11-04-95	REVISED - R. BORO 09-06-11

#### STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

DRIVEWAY DETAILS – DISTANCE BETWEEN R.O.W.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
AND FACE OF CURB & EDGE OF SHOULDER > = 15' (4.5 m)	2706	2019-025-RS	LAKE	32	17
AND TACE OF CORD & EDGE OF SHOOLDER > = 13 (4.5 III)		BD0156-07 (BD-01)	CONTRACT	NO.	62J03
E SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. R	OAD DIST. NO. 1   ILLINOIS FED. A	D PROJECT		





## 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".

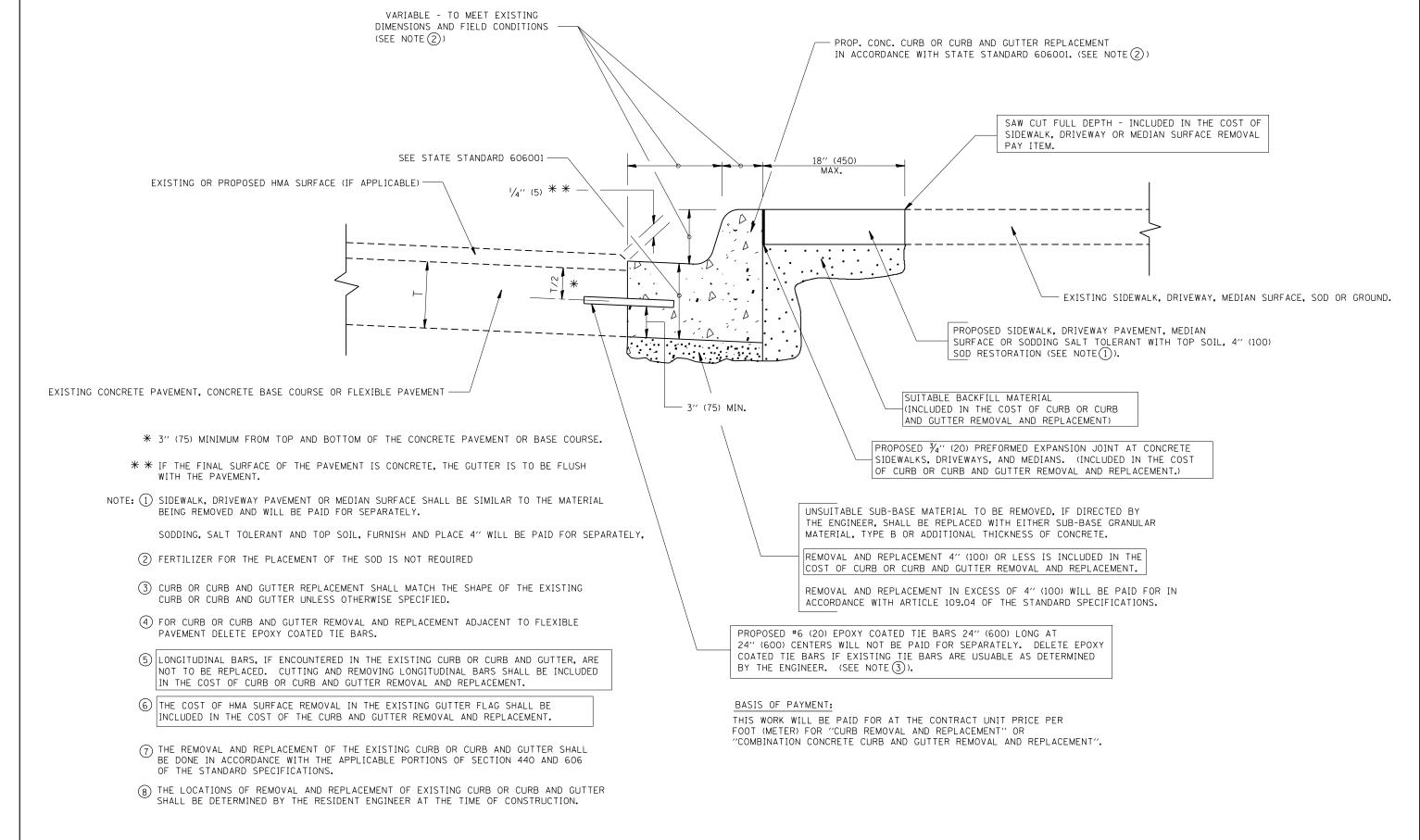
# SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

- 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)

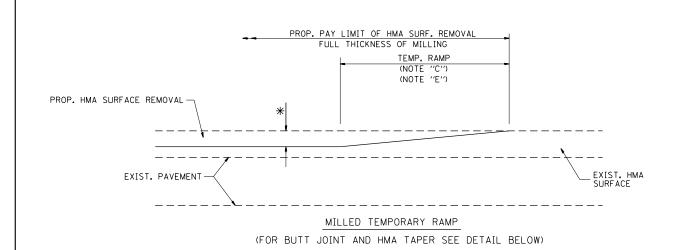
- 1. MILL HMA FIRST IF THERE IS AT LEAST 41/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
- 2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

FILE NAME =	USER NAME = mesadoj	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98		PAVEMENT PATCHING FOR	F.A.U.	SECTION	COUNTY	TOTAL SHEE SHEETS NO.	T
pw:\\planroom.dot.illinois.gov:PWIDOT\Docu	nents\IDOT Offices\District 1\Projects\D1146	61 <b>9\DROOWN</b> b\Design\DistStd.dgn	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS		2706	2019-025-RS	LAKE	32 19	1
	PLOT SCALE = 100.0000 '/ In.		REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION	HMA SURFACED PAVEMENT		BD400-04 (BD-22)	CONTRACT	NO. 62J03	,
	PLOT DATE = 5/23/2019	DATE - 10-25-94	REVISED - K. ENG 10-27-08		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.		<del></del>	AID PROJECT		-

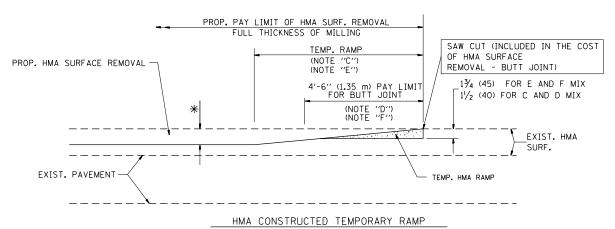


# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

FILE NAME =	USER NAME = mesadoj	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96			CURB OR CURB AND GUTTER	F.A.U.	SECTION	COUNTY	TOTAL	.   SHEE!	
pw:\\planroom.dot.illinois.gov:PWIDOT\Docu	nents\IDOT Offices\District I\Projects\Dil1461	NDRXXWNa\Design\DistStd.dgn	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS			2706	2019-025-RS	LAKE	32	20	
	PLOT SCALE = 100.0000 '/ in.	.OT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - M. GOMEZ 01-22-01	DEPARTMENT OF TRANSPORTATION		REMOVAL AND REPLACEMENT		BD600-06 (BD-24	) CONTRAC	T NO.	62J03
	PLOT DATE = 5/23/2019	DATE - 03-11-94	REVISED - R. BORO 12-15-09		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. RO		IS FED. AID PROJECT			
	PLOT DATE = 5/23/2019	DATE - 03-11-94	REVISED - R. BORO 12-15-09		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. RO					

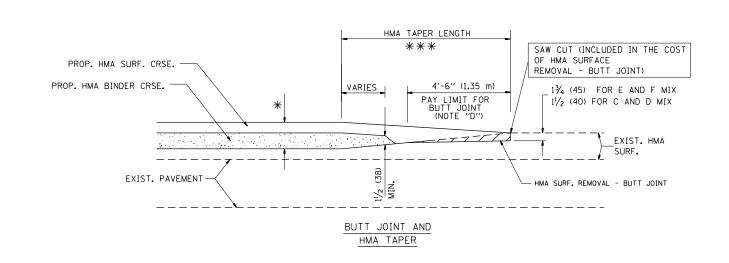


## OPTION 1



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

# OPTION 2 TYPICAL TEMPORARY RAMP



# TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

FILE NAME = USER NAME = mesadoj DESIGNED - M. DE YONG REVISED - R. SHAH 10-25-94

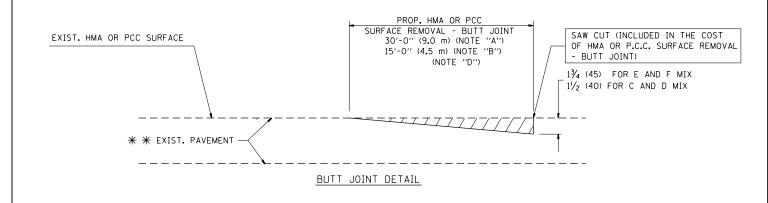
pwi\planroom.dot.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Di1461\*\Data DATE - M. DE YONG REVISED - A. ABBAS 03-21-97

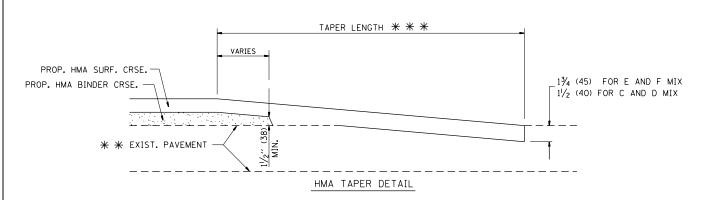
PLOT SCALE = 100.0000 '/ in. CHECKED - REVISED - M. GOMEZ 04-06-01

PLOT DATE = 5/23/2019 DATE - 06-13-90 REVISED - R. BORO 01-01-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| RT | JOINT AND | HMA | TAPER DETAILS | TO STA. | TO STA. | SECTION | COUNTY | SHEET | NO. | 62/03 | STA. | TO STA. | SECTION | COUNTY | SHEET | NO. | COUNTY | SHEET | NO. | SHEET | NO. | 62/03 | STA. | TO STA. | SECTION | COUNTY | SHEET | NO. | GUNTY | SHEET | S





# TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

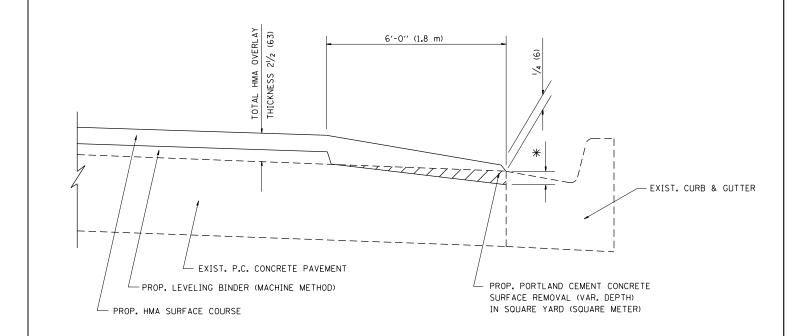
\* \* PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

#### NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- 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".



# HMA TAPER AT EDGE OF P.C.C PAVEMENT

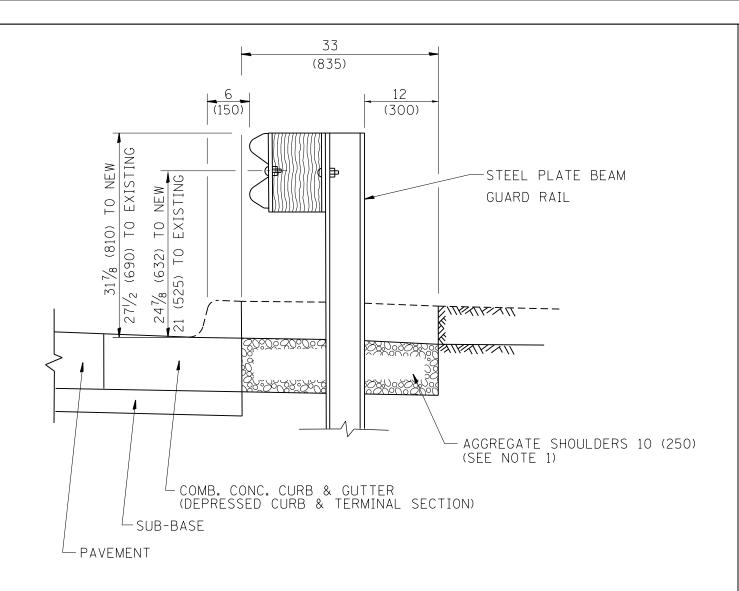
HMA SURFACE		LEVELING BINDER	
MIX	THICKNESS	THICKNESS	★ MILLING AT  GUTTER FLAG
C OR D	11/2 (38)	1 (25)	11/4 (33)
E	13/4 (44)	¾ (19)	11/2 (38)

FILE NAME =	USER NAME = mesadoj	DESIGNED	-	R. SHAH	REVISED	-	A. ABBAS 05-05-9
pw:\\planroom.dot.illinois.gov:PWIDOT\Docu	nents\IDOT Offices\District 1\Projects\Di1461	<b>∖DROOMN</b> a∖De	sign\l	Di <b>ski</b> Std.dgn	REVISED	-	E. GOMEZ 12-21-00
	PLOT SCALE = 100.0000 '/ in.	CHECKED	-	A. ABBAS	REVISED	-	R. BORO 01-01-07
Default	PLOT DATE = 5/23/2019	DATE	-	09-10-94	REVISED	-	JP CHANG 07-08-16

STATI	E OI	FILLINOIS
DEPARTMENT	0F	TRANSPORTATION

			EDGE		MA TAP F P.C.C.		ENT
SCALE: NONE	SHEET	1	OF	1	SHEETS	STA.	TO STA.

F.A.∪ RTE.	SE	CTION	COUNTY	TOTAL SHEETS	SHEET NO.
2706	2019	-025-RS	LAKE	32	22
В	D400-06	(BD33)	CONTRACT	NO. 6	52J03
		ILLINOIS FED. A	AID PROJECT		



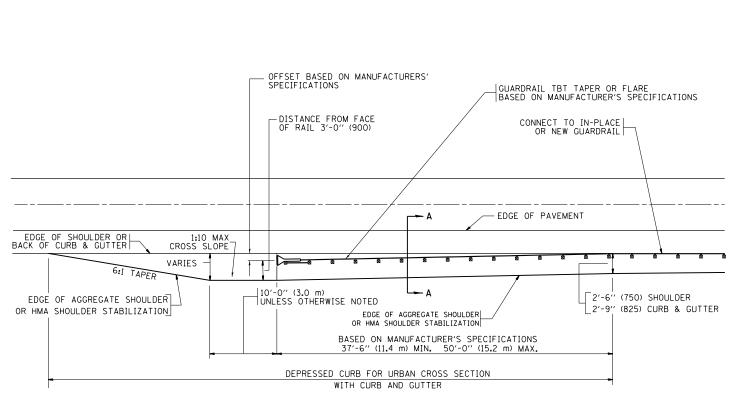
# SECTION A-A

- NOTES: 1. THE AGGREGATE SHOULDER, 10" OR HMA SHOULDER, 6" (IF REQUIRED) SHALL EXTEND UNDER THE TRAFFIC BARRIER TERMINAL.
  - 2. "EXISTING" GUARDRAIL REFERS TO CONNECTING TERMINAL SECTION TO GUARD RAILING PRIOR TO THE MIDWEST GUARDRAIL SYSTEM.
  - 3. THE CONTRACTOR SHALL VERIFY THE TYPE/HEIGHT OF GUARDRAIL IN-PLACE BEFORE ORDERING THE NEW TERMINAL SECTION. COST INCLUDED WITH THE COST OF THE TERMINAL. THE TERMINAL SECTION HEIGHT TO BE PLACED MUST MATCH THE HEIGHT OF THE IN-PLACE GUARDRAIL.

DETAILS FOR STEEL PLATE BEAM

GUARD RAIL ADJACENT TO CURB AND GUTTER

[FOR ROADWAY SPEED 35 MPH (60 kmh) TO 45 MPH (70 kmh)]



# DEPRESSED CURB AND GUTTER AND SHOULDER TREATMENT AT TBT TY. 1 SPL.

BASIS OF PAYMENT: HMA SHOULDERS 6 (150) (IF REQUIRED) WILL BE

PAID FOR AT THE CONTRACT UNIT PRICE
PER SQUARE YARD (SQUARE METER) FOR
"HOT-MIX ASPHALT SHOULDERS 6" (150 mm)".

STEEL PLATE BEAM GUARD RAIL AND TRAFFIC BARRIER TERMINAL, OF THE TYPE SPECIFIED WILL BE PAID FOR SEPARATELY.

TBT = TRAFFIC BARRIER TERMINAL

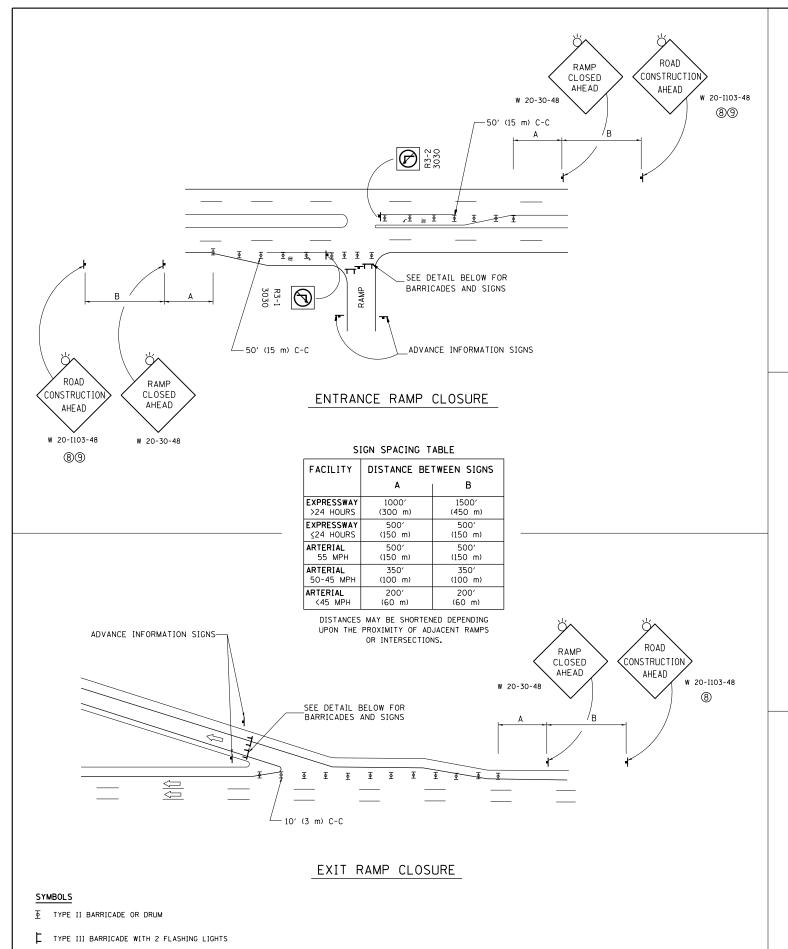
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

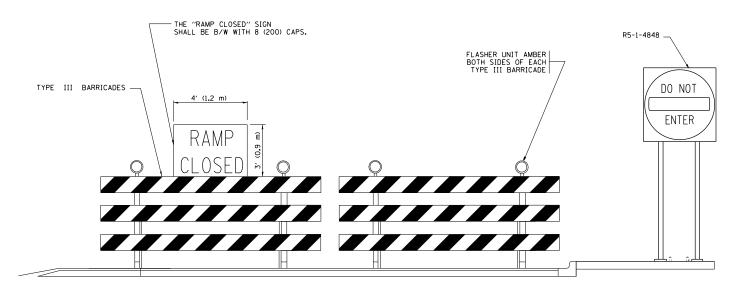
FILE NAME =	USER NAME = mesadoj	DESIGNED -		M. DE YONG	REVISED	-	Ε.	GOMEZ	08-28-00
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	PLOT SCALE = 100.0000 '/ in.	CHECKED -			REVISED	-	R.	BORO 1	2-08-2008
	PLOT DATE = 5/23/2019	DATE -		09-22-90	REVISED	-	R.	BORO C	9-14-2009

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAIL	S F	OR	DEF	PRESSED	CURB	&	GUTTER	AND	
SHO	UL	DER	TR	EATMEN	IT AT 1	ГВТ	TY 1 SI	PL.	
SHEET	NO.	. 1	OF	1 SHEE	TS S	STA.		TC	ST4

SCALE: NONE





DETAIL FOR REQUIRED BARRICADES & SIGNS



RAMP CLOSED 7 8

CLOSED FOR MORE THAN FOUR (4) CONSECUTIVE DAYS.

BLACK LEGEND ON ORANGE
BACKGROUND MOUNTED
DIAGONALLY
E MOD FONT
1 (25) BORDER
THESE SIGNS ARE REQUIRED ON ALL THE EXIT
GUIDE SIGNS FOR EXIT RAMPS THAT WILL BE

5 (125)
6 (150)
5 (125)
6 (150)
7 HIS RAMP
WHITE BACK LEGEND ON WHITE BACKGROUND

1/2 (12) BORDER
E MOD FONT

THESE BLANK AREAS SHALL BE FILLED WITH THE DATES AND THE TIME THAT THE RAMP WILL BE CLOSED.

4' (1.2 m)

RAMP CLOSURE ADVANCE INFORMATION SIGN

THESE SIGNS ARE REQUIRED ON BOTH SIDES OF THE RAMP, MINIMUM OF 1 WEEK IN ADVANCE OF THE CLOSURE.

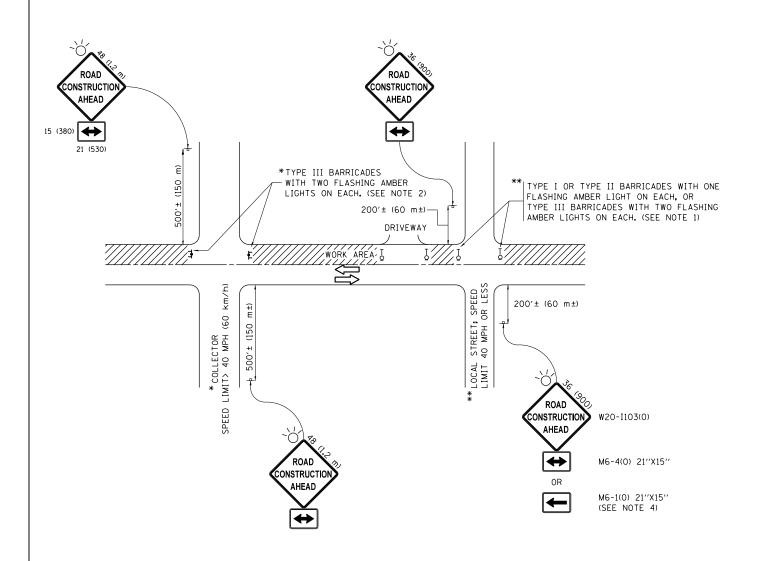
THESE SIGNS SHALL BE FABRICATED AND PAID FOR ACCORDING TO THE TEMPORARY INFORMATION SIGNING SPECIAL PROVISION

#### GENERAL NOTES:

- ① CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II
  BARRICADES DURING DAY OPERATIONS. CONES SHALL BE
  A MINIMUM OF 28 (700) HIGH.
- (2) VERTICAL BARRICADES SHALL NOT BE USED FOR RAMP CLOSURES.
- (3) A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES, PRECEEDED BY A W20-7 FLAGGER WARNING SIGN.
- 4 ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED WHEN THE RAMP IS CLOSED FOR MORE THAN FOUR (4) DAYS.
- (5) THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).

- 6 AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
- (7) THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS. ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED FOUR (4) DAYS IN LENGTH
- (8) ROAD CONSTRUCTION AHEAD SIGNS MAY BE OMITTED WHEN THIS DETAIL IS USED IN CONJUNCTION WITH OTHER TRAFFIC CONTROL THAT ALREADY INCLUDES A ROAD CONSTRUCTION AHEAD SIGN.
- ARTERIAL ROAD CONSTRUCTION AHEAD SIGNS SHALL BE INSTALLED ON THE LEFT SIDE OF TRAFFIC IF THE MEDIAN IS MORE THAN 10 FT WIDE.

FILE NAME =	USER NAME = mesadoj	DESIGNED - D.W.S.	REVISED - S.P.B. 01-07		ENTRANCE AND EXIT RAMP	F.A.U RTF	SECTION	COUNTY	TOTAL	SHEET
pw:\\planroom.dot.illinois.gov:PWIDOT\Docu	ments\IDOT Offices\District 1\Projects\Dil461	<b>\DROWN</b> b\Design\DistStd.dgn	REVISED - S.P.B. 12-09	STATE OF ILLINOIS		2706	2019-025-RS	LAKE	32	24
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - M.D. 06-13	DEPARTMENT OF TRANSPORTATION	CLOSURE DETAILS		TC-08	CONTRACT	NO. E	2J03
Default	PLOT DATE = 5/23/2019	DATE - 02-83	REVISED - M.D. 01-18		SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.	<b>—</b>	TILL INDIS FED.	AID PROJECT		



#### **NOTES:**

- 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 HEICHT
- 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).

SCALE: NONE

- 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 ENGINFER.
- 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.

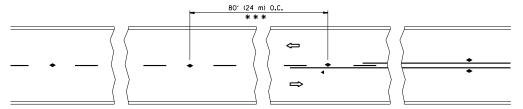
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = mesadoj	DESIGNED - L.H.A.	REVISED	- A. HOUSEH 10-15-96
pw:\\planroom.dot.illinois.gov:PWIDOT\Docu	nents\IDOT Offices\District 1\Projects\D114619	\ <b>DROXWN</b> a\Design\DistStd.dgn	REVISED	-T. RAMMACHER 01-06-00
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED	- A. SCHUETZE 07-01-13
Default	PLOT DATE = 5/23/2019	DATE - 06-89	REVISED	- A. SCHUETZE 09-15-16

STATI	E OF	ILLINOIS
DEPARTMENT	0F	TRANSPORTATION

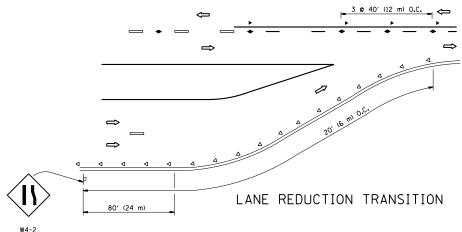
SI	DE ROADS	S, INT	ERS	SECTIONS	S, AND	TION FOR DRIVEWAYS
	SHEET 1	OF	1	SHEETS	STA.	TO STA.

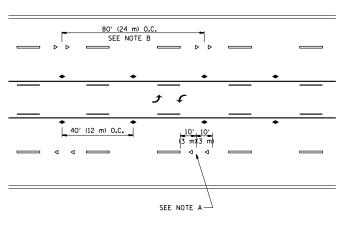
F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEE1		
2706	2019-025-RS	LAKE	32	25		
	TC-10	CONTRACT	NO. 6	52J03		
	ILLINOIS F	ED.	AID PROJECT			



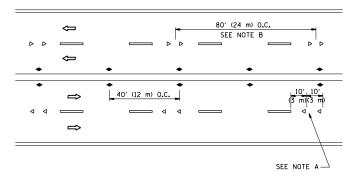
\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

TWO-LANE/TWO-WAY

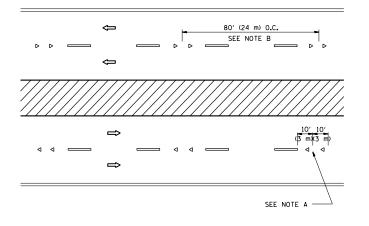




TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

## GENERAL NOTES

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

# LANE MARKER NOTES

A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

## SYMBOLS

---- YELLOW STRIPE

WHITE STRIPE

- ONE-WAY AMBER MARKER
- ONE-WAY CRYSTAL MARKER (₩/O)
- ◆ TWO-WAY AMBER MARKER

# DESIGN NOTES

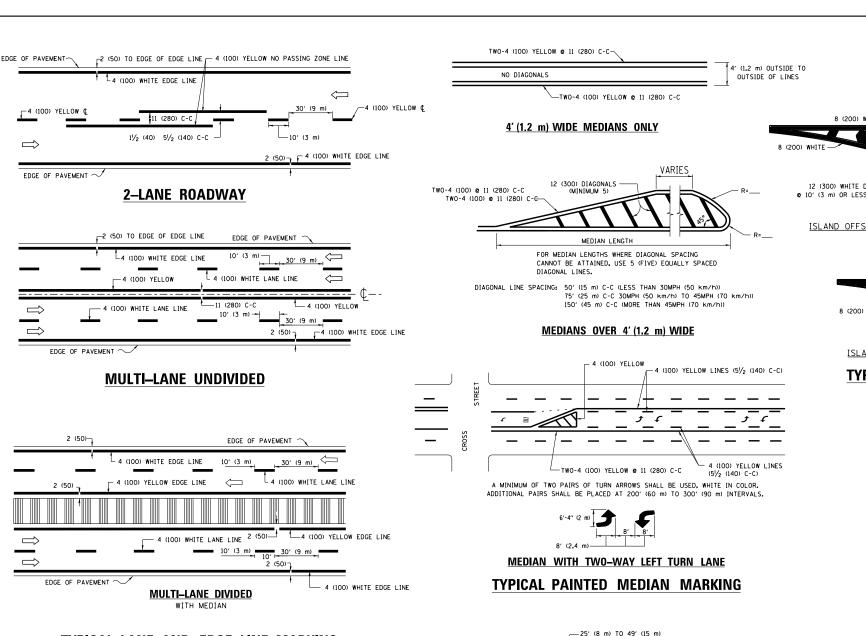
- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- 2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD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

3 e 80' (24 m) 0.C. * 0.C. * 40' (12 m) * 0.C. *	MINIMUM OF 3 W  EQUALLY SPACED
→ → → → → → → → → → → → → → → → → → →	* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE  ** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS  USE TWO-WAY MARKERS.

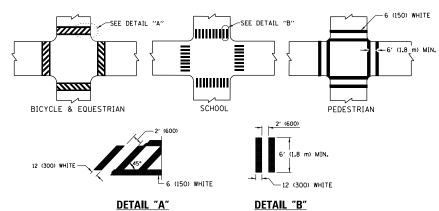
LEFT TURN

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

	FILE NAME =	USER NAME = mesadoj	DESIGNED -	REVISED	-T. RAMMACHE	ER 09-19-94			TVPIC	CAL APPLICA	ATIONS		F.A.U.	SECTION	COUNTY	SHEETS NO.
	pw:\\planroom.dot.illinois.gov:PWIDOT\Docum	ents\IDOT Offices\District I\Projects\Dil461	\DRXX\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	REVISED	-T. RAMMACHE	ER 03-12-99	STATE OF ILLINOIS	DAICED I				M/ DECICEANT	2706	2019-025-RS	LAKE	32 26
PLOT SCALE = 100.0000 '/ in.		CHECKED -	REVISED -T. RAMMACHER 01-06-00	DEPARTMENT OF TRANSPORTATION	RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)			W RESISTANT)	TC-11		CONTRACT NO. 62JC					
		PLOT DATE = 5/23/2019	DATE -	REVISED	- C. JUCIUS	09-09-09		SCALE: NONE	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FED. ROAD	DIST. NO. 1   ILLINOIS   FED	AID PROJECT	

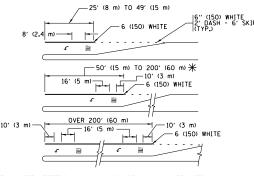


#### TYPICAL LANE AND EDGE LINE MARKING



# TYPICAL CROSSWALK MARKING

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

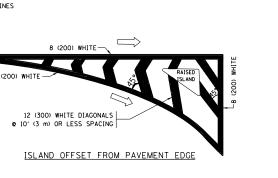


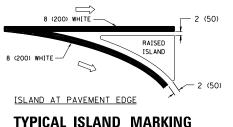
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.6 SO. FT. (1.5 m<sup>2</sup> ) ONLY AREA = 20.8 SO. FT. (1.9 m<sup>2</sup>)

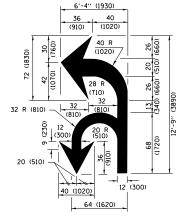
\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

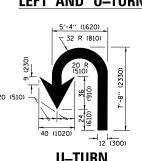
TYPICAL TURN LANE MARKING

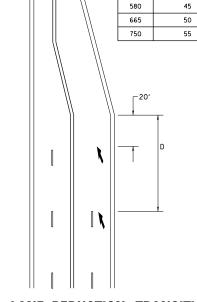






# COMBINATION LEFT AND U-TURN





D(FT)

345

425

500

SPEED LIMIT

# 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	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 CROSSMALK, IF PRESENT, OTHERMISE, 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	DIACONALS: 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 m²) EACH "X"=54.0 SQ. FT. (5.0 m²)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS > 8')	12 (300) <b>@</b> 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.

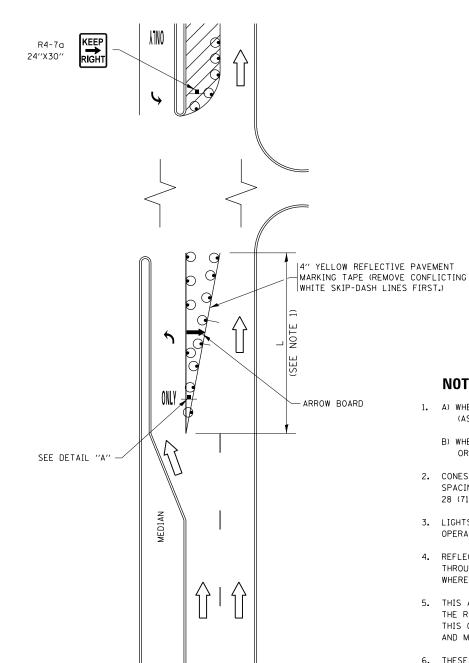
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME = DESIGNED - EVERS REVISED - C. JUCIUS 09-09-09 USER NAME = mesadoj ents\IDOT Offices\District 1\Projects\D11461 \DROOWNs\Design\DistStd.dgn REVISED -C. JUCIUS 07-01-13 CHECKED REVISED -C. JUCIUS 12-21-15 PLOT DATE = 5/23/2019 DATE REVISED -C. JUCIUS 04-12-16

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

DISTRICT ONE	F.A.U RTE.	SECTION	COUNTY	TOTAL SHE			
TYPICAL PAVEMENT MARKINGS	2706	2019-025-RS	LAKE	32	27		
TITIOAL LAVEWENT WANKINGS		TC-13	CONTRACT	NO.	62J03		
SCALE: NONE   SHEET 1 OF 1 SHEETS   STA. TO STA.	ILLINOIS FED. AID PROJECT						

# TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER



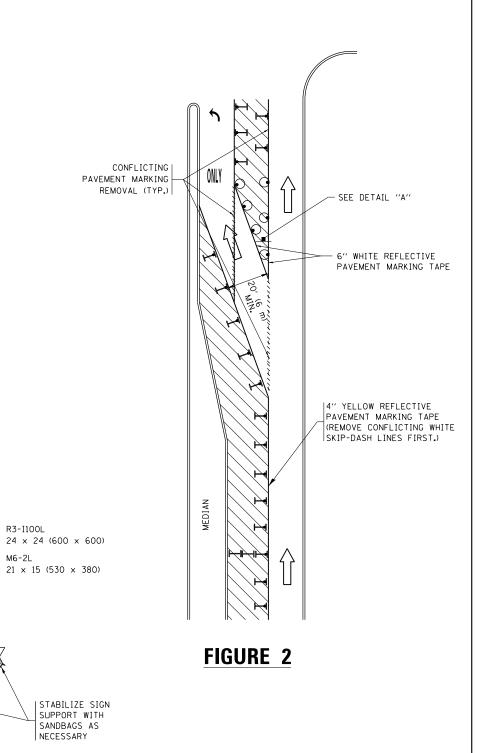
# FIGURE 1

# **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-I100R 24 x 24 (600 x 600) AND M6-2R 21  $\times$  15 (530  $\times$  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.

# **TURN BAY ENTRANCE** WITHIN A LANE CLOSURE

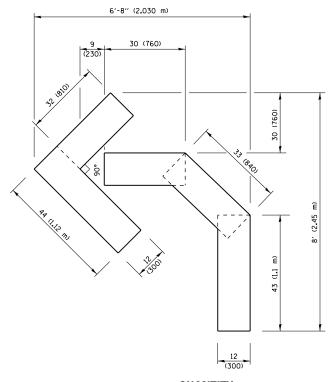


# **DETAIL A**

TURN

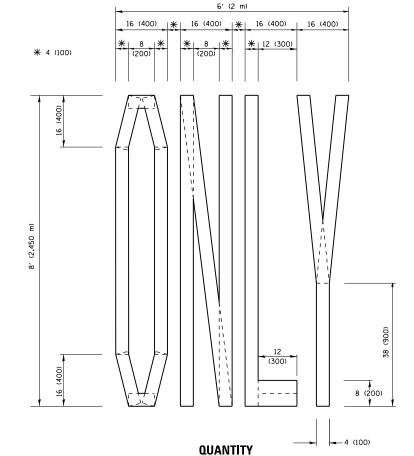
All dimensions are in inches (millimeters) unless otherwise shown.

F	FILE NAME =	USER NAME = mesadoj	REVISED -T. RAMMACHER 09-08-94 REVISED - R. BORO 09-14-09		TRAFFIC CONTROL AND PROTECTION AT TURN BAYS	RTE.	SECTION	COUNTY SHEETS	S NO.
F	pw://planroom.dot.illinois.gov:PWIDOT/Docu	ments\IDOT Offices\District 1\Projects\Dil461	RENGESODesign\Di4.S##OUESEH 11-07-95 REVISED - A. SCHUETZE 07-01-13		(TO REMAIN OPEN TO TRAFFIC)	2706	2019-025-RS	LAKE 32	28
		PLOT SCALE = 100.00000 '/ in.	REVISED - A. HOUSEH 10-12-96 REVISED - A. SCHUETZE 09-15-16	DEPARTMENT OF TRANSPORTATION	(TO REIVIAIN OPEN TO TRAFFIC)		TC-14	CONTRACT NO. 6	62J03
L	Default	PLOT DATE = 5/23/2019	REVISED -T. RAMMACHER 01-06-00 REVISED -		SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.		ILLINOIS FED. A	AID PROJECT	

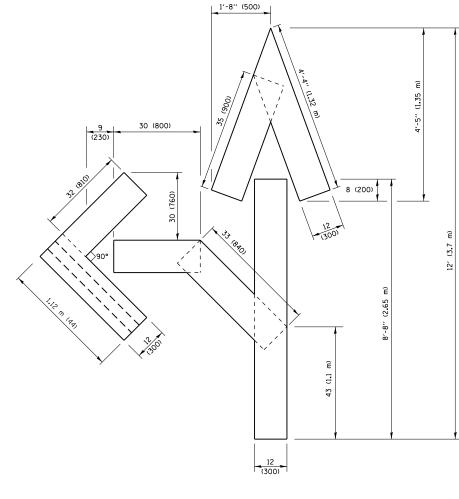


# QUANTITY

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



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

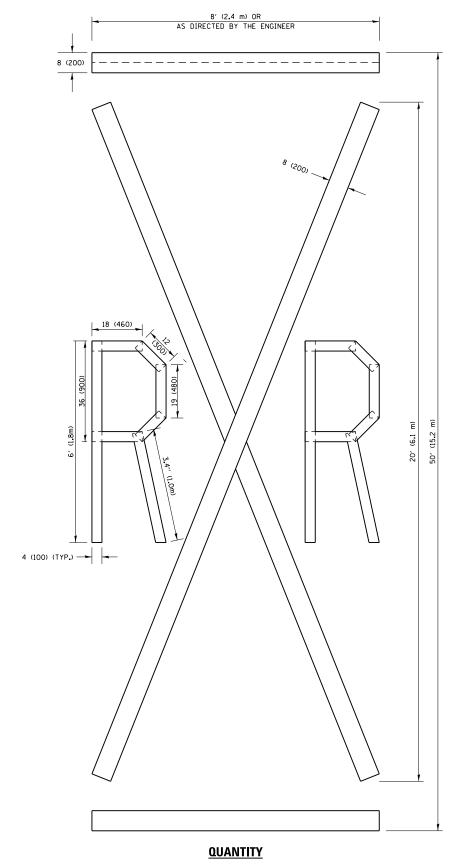


# **QUANTITY**

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.



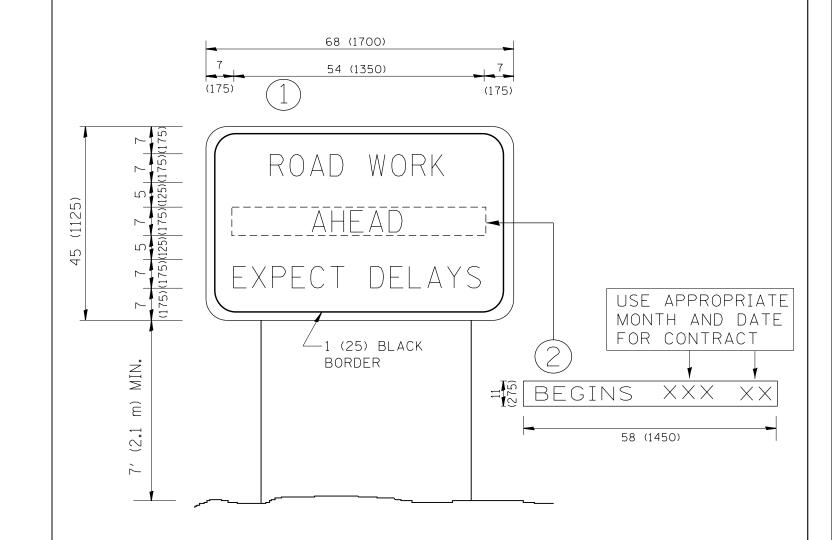
4 (100) LINE = 225.9 ft. (68.9 m) 75.3 sq. ft. (6.99 sq. m)

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

FILE NAME =	USER NAME = mesadoj	DESIGNED -	REVISED	-T. RAMMACHER 03-02-98
pw:\\planroom.dot.illinois.gov:PWIDOT\Docu	nents\IDOT Offices\District l\Projects\Dil461	\ <b>DRXXWN</b> a\Design\DistStd.dgn	REVISED	-E. GOMEZ 08-28-00
	PLOT SCALE = 100.0000 '/ in.	CHECKED -	REVISED	-E. GOMEZ 08-28-00
	PLOT DATE = 5/23/2019	DATE - 09-18-94	REVISED	- A. SCHUETZE 09-15-16

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

			F.A.U RTE.		COUNTY	TOTAL SHEETS	SHEET NO.	
SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS		270	6 2019-025-RS	LAKE	32	29		
	1				TC-16	CONTRACT	NO.	62J03
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	EED	ROAD DIST NO 1 ILLINOIS FED A	ID PROJECT		



# NOTES:

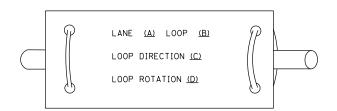
- 1. USE BLACK LETTERING ON ORANGE BACKGROUND.
- 2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 3. ERECT SIGN (1) WITH INSTALLED PANEL (2) ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
- 4. REMOVE PANEL 2 SOON AFTER THE START 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.

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Р	pw:\\planroom.dot.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\DI1466\DAXWNa\Design\DistStd.dgn		REVISED - R. MIRS 12-11-97		STATE OF ILLINOIS	INFORMATION SIGN				2019-025-RS	LAKE	32	30	
		PLOT SCALE = 100.0000 ' / in.	CHECKED -		MMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION					TC-22	CONTRACT N	NO. 62J	J3
		PLOT DATE = 5/23/2019	DATE -	REVISED - C.	JUCIUS 01-31-07		SCALE: NONE   SHEET NO. 1 OF 1 SHEETS   STA. TO STA.			FED. ROAD	DIST. NO. 1 ILLINOIS FED. AI	PROJECT		$\neg$

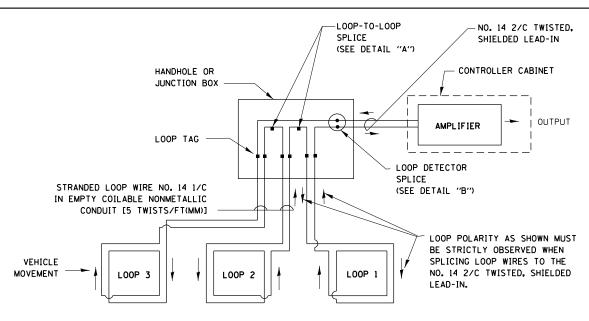
#### LOOP DETECTOR NOTES

- 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

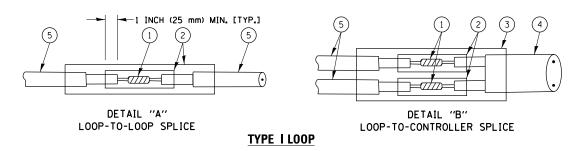


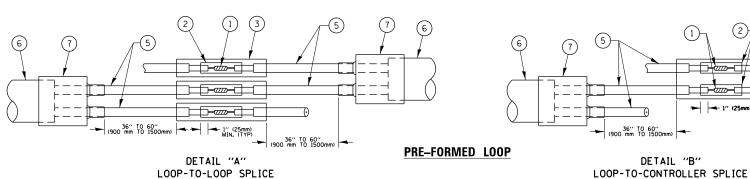
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP \*1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



#### **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.





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

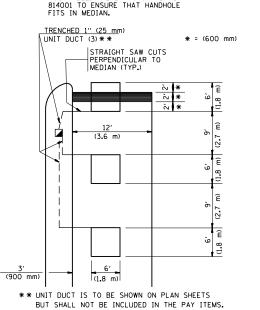
→ 1" (25mm) MIN, (TYP)

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Default	PLOT DATE = 5/23/2019	DATE -	REVISED -		SCALE: NONE SHEET 2 OF 7 SHEETS STA. TO STA.					ILLINOIS FED. AID PROJECT				

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

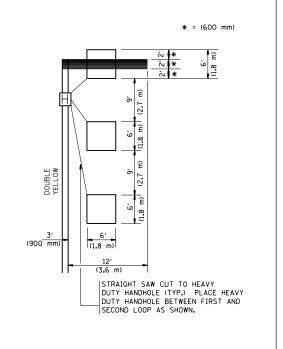


NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO

PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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

(PROTECTED / PERMITTED LEFT TURN PHASING)

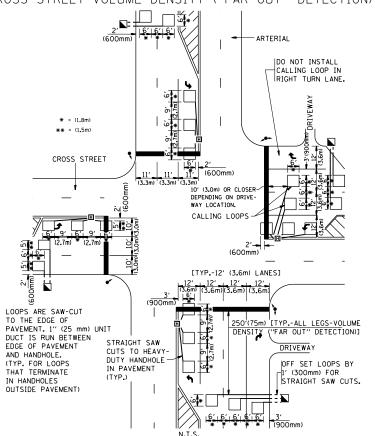


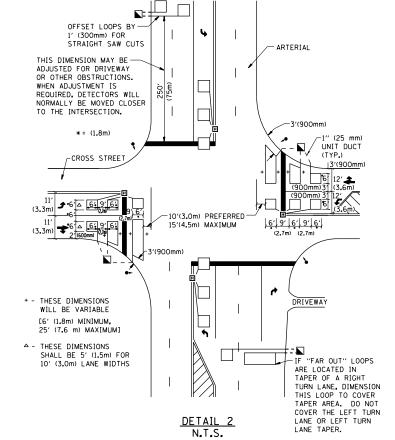
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

SCALE: NONE

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

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





#### NOTES:

## VEHICLES LOOP DETECTORS

- \* ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIFLDED.
- \* 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 <u>ALL</u> 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.

#### JOTE.

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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N.T.S.

DETAIL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 - DETECTOR LOOP INSTALLATION						F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEE NO.			
DETAILS FOR ROADWAY RESURFACING							2019-025-RS	LAKE	32	32			
	DETAIL	.5 101	NUADW/	AT NESUNI			TS-07	CONTRACT	NO.	62J03			
	SHEET NO. 1	OF 1	SHEETS	STA.	TO STA.	FED. R	FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT						