

STATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ILL.	2019-034-R5	COOK, WILL	20	1
			CONTRACT NO. 62J12	

DEPARTMENT OF TRANSPORTATION

PROPOSED HIGHWAY PLANS

VARIOUS ROUTES
 SECTION: 2019-034-R5
 VARIOUS SOUTH EXPRESSWAY LOCATIONS
 INTERMITTENT RESURFACING
 COOK & WILL COUNTY

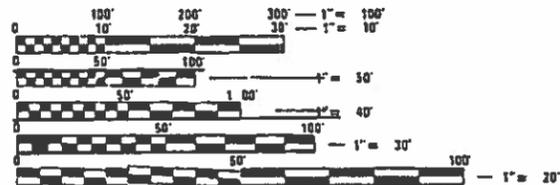
C-91-367-19

FOR GENERAL LOCATION MAP, SEE SHEET NO. 4

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THIS PROJECT IS LOCATED IN:
 THE CITY OF CHICAGO
 THE CITY OF COUNTRY CLUB HILLS
 THE CITY OF JOLIET
 THE VILLAGE OF CHANNAHON
 THE VILLAGE OF MINOOKA
 THE VILLAGE OF NEW LENOX
 THE VILLAGE OF SOUTH HOLLAND

D-91-156-19



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

CONTRACT NO. 62J12

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SUBMITTED March 26, 2019
Anthony J. Danylyk REGIONAL ENGINEER
May 10, 2019
Paul P. [Signature] ENGINEER OF DESIGN AND ENVIRONMENT
May 10, 2019
Paul P. [Signature] DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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 OF THE STATE OF ILLINOIS

URBAN

URBAN

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT		100% STATE COOK COUNTY 0005	100% STATE WILL COUNTY 0005				
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	1832	1022	810				
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	7	4	3				
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	114	69	45				
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SO YD	3809	2269	1540				
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	4	2				
67100100	MOBILIZATION	L SUM	1	0.6	0.4				
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	30	18	12				
70300520	PAVEMENT MARKING TAPE, TYPE III 4"	FOOT	149	124	25				
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	807	672	135				
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	20	20					
* 78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	1213	160	1053				
* 78004355	PERFORMED PLASTIC PAVEMENT MARKING, TYPE D - INLAID - LINE 5"	FOOT	1614	1344	270				

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT		100% STATE COOK COUNTY 0005	100% STATE WILL COUNTY 0005				
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	70	54	16				
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	70	54	16				
* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	100	70	30				
X4060004	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80	TON	428	255	173				
X7010410	SPEED DISPLAY TRAILER	CAL MO	1	0.6	0.4				
X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	L SUM	1	0.6	0.4				
X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SO FT	72	62	10				
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	48		48				
44002212	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 3"	SO YD	284		284				
44001761	CLASS D PATCHES, TYPE I, 10 INCH	SO YD	15		15				
44001765	CLASS D PATCHES, TYPE II, 10 INCH	SO YD	96		96				
44001769	CLASS D PATCHES, TYPE III, 10 INCH	SO YD	40		40				
44001771	CLASS D PATCHES, TYPE IV, 10 INCH	SO YD	107		107				
* SPECIALTY ITEM									

SUMMARY - COOK COUNTY EXPRESSWAY ROUTES		HMA 2" MILL & RESURFACE (SY)
1	BISHOP FORD NB (US 6 / 159TH ST. TO SIBLEY BLVD.)	882
2	BISHOP FORD SB (US 6 / 159TH ST. TO SIBLEY BLVD.)	628
3	I-80 WB (EAST OF SCHOOL ST. NEAR OASIS)	13
4	I-57 NB (ENTRANCE RAMP TO I-80 EB TO END OF RAMP)	722
5	I-80 EB TO I-57 NB ENTRANCE RAMP	24
COOK COUNTY EXPRESSWAY TOTAL =		2,269 SY

SUMMARY - WILL COUNTY EXPRESSWAY ROUTES		HMA 2" MILL & RESURFACE (SY)
6	I-80 WB / EB (BRIGGS STREET TO RICHARDS STREET)	53
7	I-80 WB / EB (RICHARDS STREET TO STEEL TRUSS BRIDGE)	173
8	I-80 WB / EB (STEEL TRUSS BRIDGE TO LARKIN AVE.)	301
9	I-80 WB / EB (LARKIN AVENUE TO HOUBOLT RD.)	427
10	I-80 WB / EB (HOUBOLT ROAD TO I-55)	175
11	I-80 WB / EB (I-55 TO MINOOKA)	411
WILL COUNTY EXPRESSWAY TOTAL =		1,540 SY

SUMMARY - WILL COUNTY EXPRESSWAY ROUTES		CLASS D PATCHES, 10 IN (SY)
11A	I-80 WB/EB (I-55 TO MINOOKA)*	258

* CLASS D PATCHES NOTE:
TOTAL QUANTITY INCLUDES TYPE I, II, III, IV
EXACT LOCATIONS SHALL BE DETERMINED IN THE
FIELD BY THE ENGINEER.

MODEL: Default
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	DRAWN - SB	REVISED -
PLOT SCALE = 100,0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/7/2019	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF INTERMITTENT RESURFACING SCHEDULE
VARIOUS EXPRESSWAY LOCATIONS IN COOK & WILL COUNTY**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2019-034-R5	COOK, WILL	20	6
			CONTRACT NO. 62J12	
		ILLINOIS	FED. AID PROJECT	

LOCATION 4

ROUTE: I-57 NB (Entrance Ramp to I-80 EB to End of Ramp)

CROSS STREET		DIRECTION (EB/WB) (NB/SB)	LANE NO. (1, 2, 3)	PAVEMENT PATCH WIDTH	PAVEMENT PATCH LENGTH	REPAIR AREA (SQ FT)	REPAIR AREA (SQ YD)
FROM	TO						
Start of Ramp	End of Ramp	EB	1	16	6	96	11
Start of Ramp	End of Ramp	EB	1	16	40	640	71
Start of Ramp	End of Ramp	EB	1	16	25	400	44
Start of Ramp	End of Ramp	EB	1	16	20	320	36
Start of Ramp	End of Ramp	EB	1	16	10	160	18
Start of Ramp	End of Ramp	EB	1	16	20	320	36
Start of Ramp	End of Ramp	EB	1	16	275	4400	489
Start of Ramp	End of Ramp	EB	1	16	10	160	18

TOTALS: 406 FT 722 SY

LOCATION 5

ROUTE: I-80 EB to I-57 NB Entrance Ramp

CROSS STREET		DIRECTION (EB/WB) (NB/SB)	LANE NO. (1, 2, 3)	PAVEMENT PATCH WIDTH	PAVEMENT PATCH LENGTH	REPAIR AREA (SQ FT)	REPAIR AREA (SQ YD)
FROM	TO						
Beginning of Ramp	End of Ramp	NB	1	12	6	72	8
Beginning of Ramp	End of Ramp	NB	1	12	6	72	8
Beginning of Ramp	End of Ramp	NB	1	12	6	72	8

TOTALS: 18 FT 24 SY

LOCATION 6

ROUTE: I-80 WB/EB (Briggs Street to Richards Street)

CROSS STREET		DIRECTION (EB/WB) (NB/SB)	LANE NO. (1, 2, 3)	PAVEMENT PATCH WIDTH	PAVEMENT PATCH LENGTH	REPAIR AREA (SQ FT)	REPAIR AREA (SQ YD)
FROM	TO						
Truss Bridge	Richards	EB	2	12	20	240	27
Truss Bridge	Richards	WB	2	12	20	240	27

TOTALS: 40 FT 53 SY

LOCATION 7

ROUTE: I-80 WB/EB (Richards Street to Steel Truss Bridge)

CROSS STREET		DIRECTION (EB/WB) (NB/SB)	LANE NO. (1, 2, 3)	PAVEMENT PATCH WIDTH	PAVEMENT PATCH LENGTH	REPAIR AREA (SQ FT)	REPAIR AREA (SQ YD)
FROM	TO						
Truss Bridge	Richards	EB	2	12	20	240	27
Truss Bridge	Richards	EB	2	12	20	240	27
Truss Bridge	Richards	EB	2	12	30	360	40
Truss Bridge	Richards	WB	2	12	10	120	13
Truss Bridge	Richards	WB	2	12	20	240	27
Truss Bridge	Richards	WB	2	12	30	360	40

TOTALS: 130 FT 173 SY

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USER NAME = bilgramisa	DESIGNED -	REVISED -
	DRAWN -	REVISED -
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PLOT DATE = 3/28/2019	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**INTERMITTENT RESURFACING SCHEDULE
LOCATIONS 4 - 7 (I-57 & I-80)**

SCALE: SHEET 2 OF 4 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2019-034-R5	COOK, WILL	20	8
			CONTRACT NO. 62J12	
		ILLINOIS	FED. AID PROJECT	

LOCATION 10

ROUTE: I-80 WB/EB (Houbolt Road to I-55)

CROSS STREET		DIRECTION (EB/WB) (NB/SB)	LANE NO. (1, 2, 3)	PAVEMENT PATCH WIDTH	PAVEMENT PATCH LENGTH	REPAIR AREA (SQ FT)	REPAIR AREA (SQ YD)
FROM	TO						
I-55	Houbolt	EB	2	12	20	240	27
I-55	Houbolt	EB	2	12	25	300	33
I-55	Houbolt	EB	2	12	10	120	13
I-55	Houbolt	EB	2	12	6	72	8
I-55	Houbolt	EB	2	12	10	120	13
I-55	Houbolt	EB	2	12	20	240	27
I-55	Houbolt	WB	2	12	10	120	13
I-55	Houbolt	WB	2	12	20	240	27
I-55	Houbolt	WB	2	12	10	120	13

TOTALS: 131 FT 175 SY

LOCATION 11

ROUTE: I-80 WB/EB (I-55 to Minooka)

CROSS STREET		DIRECTION (EB/WB) (NB/SB)	LANE NO. (1, 2, 3)	PAVEMENT PATCH WIDTH	PAVEMENT PATCH LENGTH	REPAIR AREA (SQ FT)	REPAIR AREA (SQ YD)
FROM	TO						
I-55	Minooka	WB	2	12	12	144	16
I-55	Minooka	WB	1	12	10	120	13
I-55	Minooka	WB	2	12	12	144	16
I-55	Minooka	WB	2	12	10	120	13
I-55	Minooka	WB	2	12	10	120	13
I-55	Minooka	WB	2	12	6	72	8
I-55	Minooka	WB	2	12	6	72	8
I-55	Minooka	WB	1	12	8	96	11
I-55	Minooka	WB	2	12	8	96	11
I-55	Minooka	WB	1	12	10	120	13
I-55	Minooka	WB	2	12	20	240	27
I-55	Minooka	WB	2	12	8	96	11
I-55	Minooka	EB	1	12	6	72	8
I-55	Minooka	EB	2	12	6	72	8
I-55	Minooka	EB	1	12	8	96	11
I-55	Minooka	EB	2	12	20	240	27
I-55	Minooka	EB	2	12	20	240	27
I-55	Minooka	EB	2	12	25	300	33
I-55	Minooka	EB	2	12	6	72	8
I-55	Minooka	EB	2	12	20	240	27
I-55	Minooka	EB	2	12	25	300	33
I-55	Minooka	WB	1	12	6	72	8
I-55	Minooka	WB	2	12	6	72	8
I-55	Minooka	WB	1	12	6	72	8
I-55	Minooka	WB	2	12	6	72	8
I-55	Minooka	EB	1	12	6	72	8
I-55	Minooka	EB	2	12	7	84	9
I-55	Minooka	EB	1	12	7	84	9
I-55	Minooka	EB	2	12	8	96	11

TOTALS: 308 FT 411 SY

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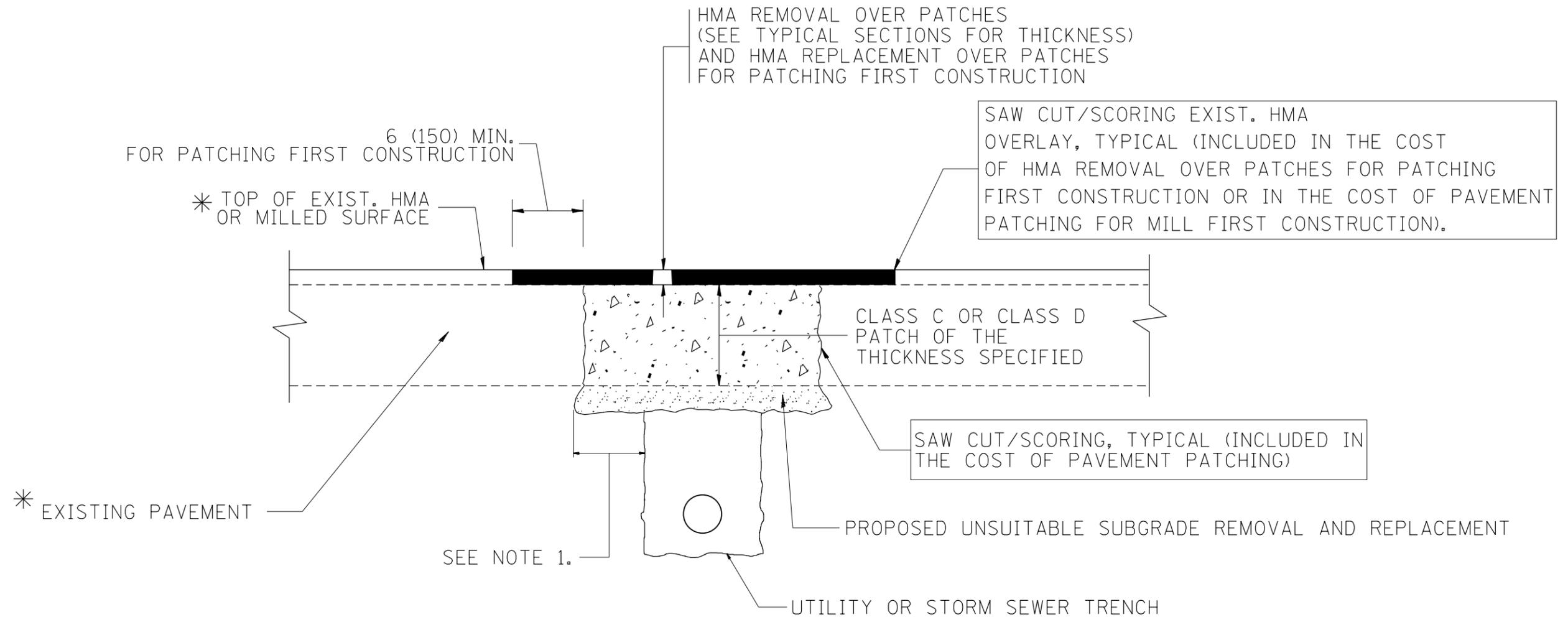
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PLOT DATE = 5/7/2019	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**INTERMITTENT RESURFACING SCHEDULE
LOCATIONS 10 - 11 (I-80)**

SCALE: SHEET 4 OF 4 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2019-034-R5	COOK, WILL	20	10
			CONTRACT NO. 62J12	
		ILLINOIS	FED. AID PROJECT	



* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

NOTES:

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

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

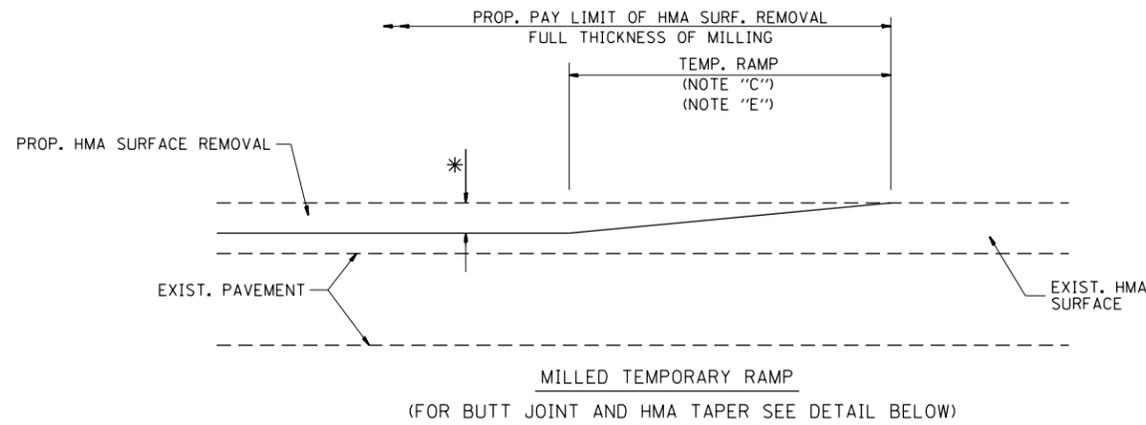
1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

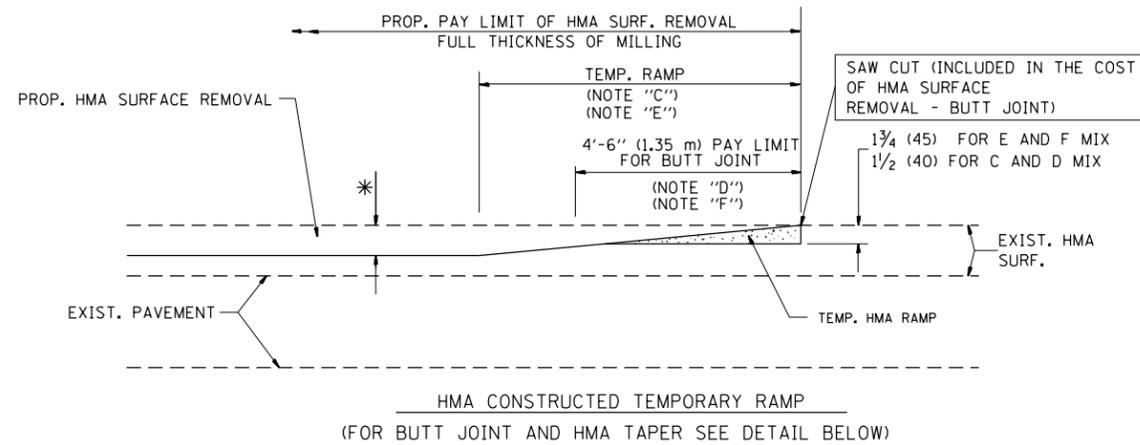
1. MILL HMA FIRST IF THERE IS AT LEAST 4 1/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

FILE NAME =	USER NAME = Bilgiris	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
pw\planroom.dot.illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\Design\Drawn\Design\2019\Patching\HMA\HMA-Exp\Boro\Boro-09-04-07	DRAWN	REVISOR	REVISED - R. BORO 09-04-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	VAR	2019-034-R5	COOK, WILL	20	10A
PLOT SCALE = 100.0000' / 1".	CHECKED -	REVISOR	REVISED - K. ENG 10-27-08					BD400-04 (BD-22)		CONTRACT NO. 62J12			
PLOT DATE = 5/7/2019	DATE - 10-25-94	REVISOR						FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

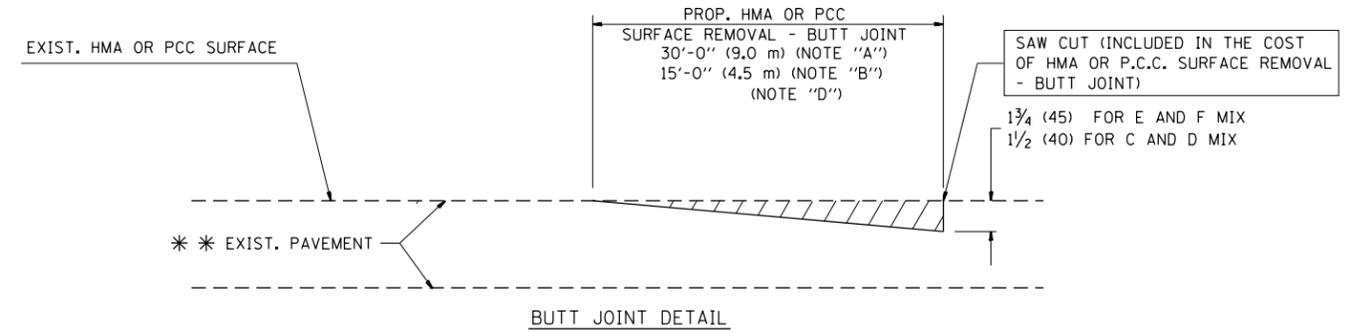


OPTION 1

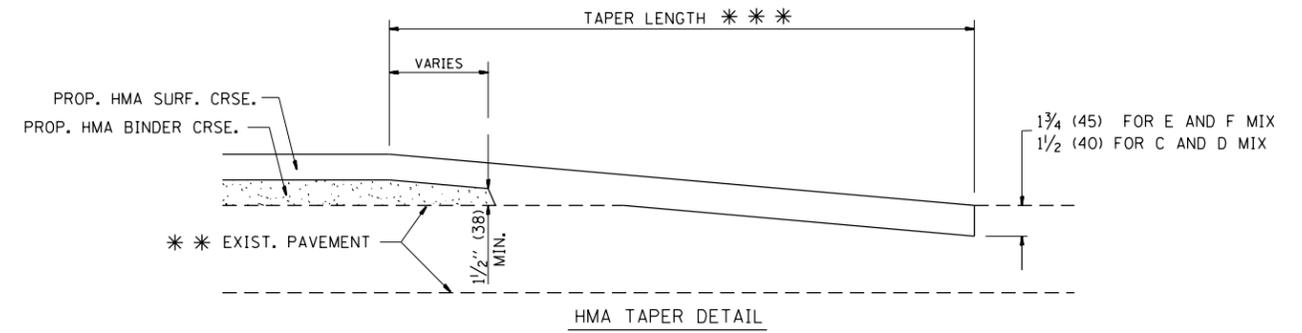


OPTION 2

TYPICAL TEMPORARY RAMP



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

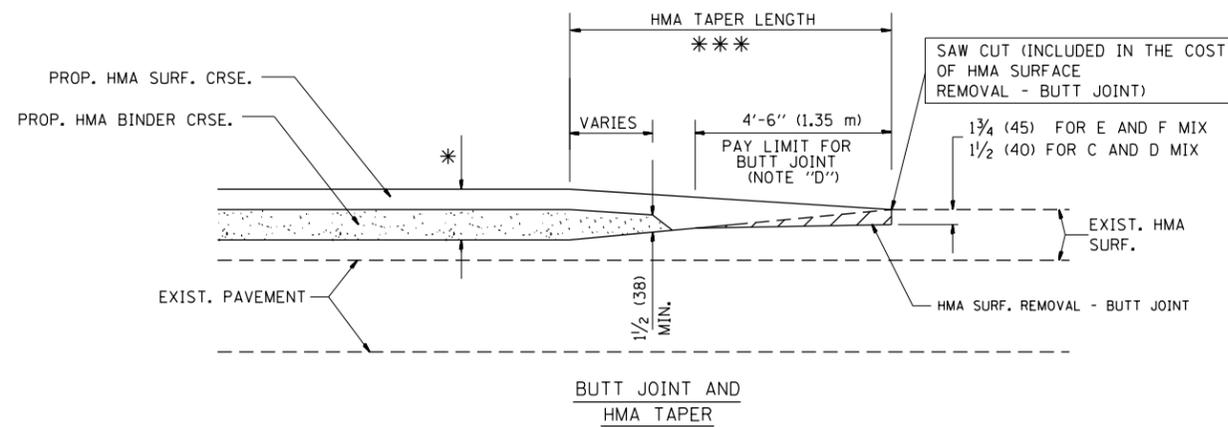
NOTES

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

BASIS OF PAYMENT:

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

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



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

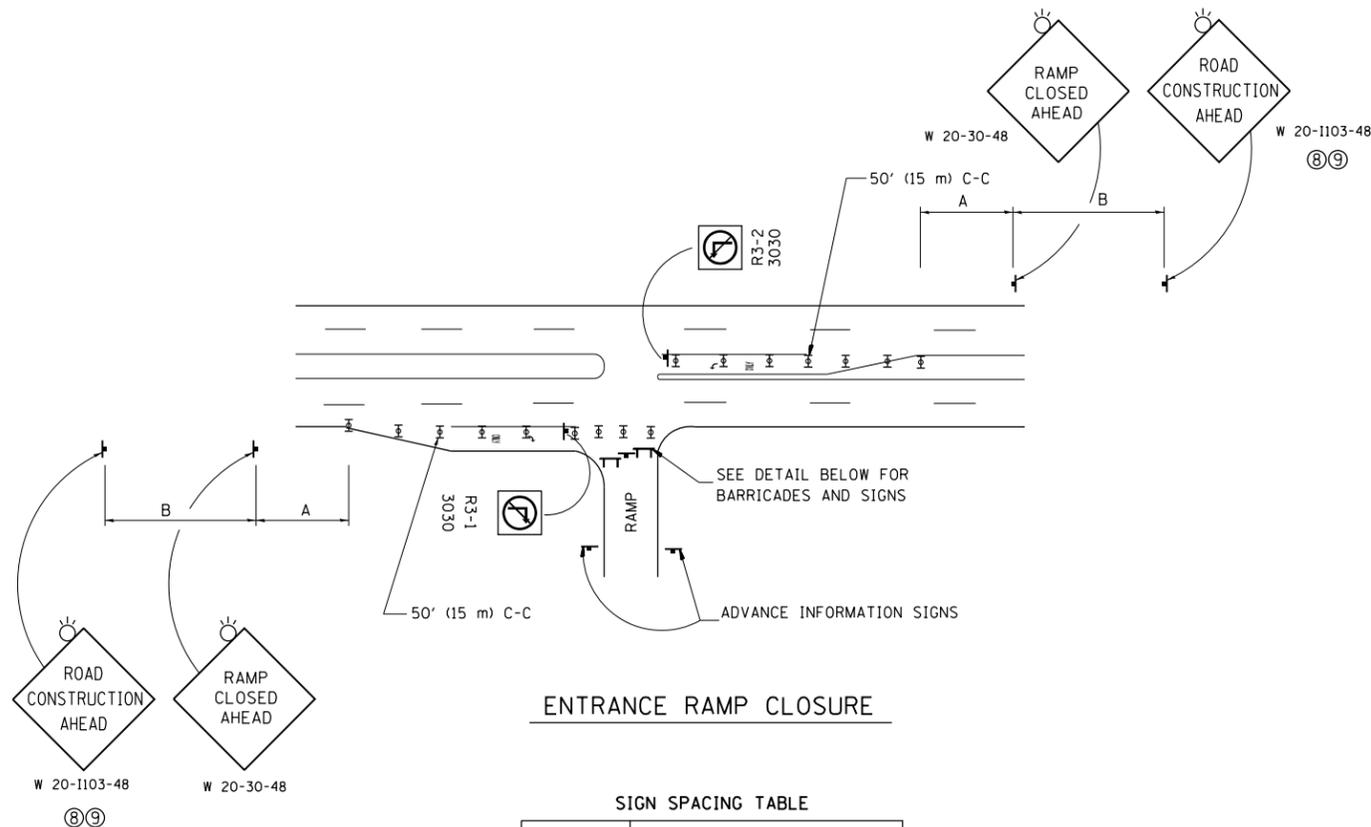
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	PLOT SCALE = 1/8" = 1' / in.	DATE - 06-13-90	REVISED - R. BORO 01-01-07
	PLOT DATE = 3/28/2019		

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BUTT JOINT AND
HMA TAPER DETAILS**

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2019-034-R5	COOK, WILL	20	11
BD400-05 BD32		CONTRACT NO. 62J12		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

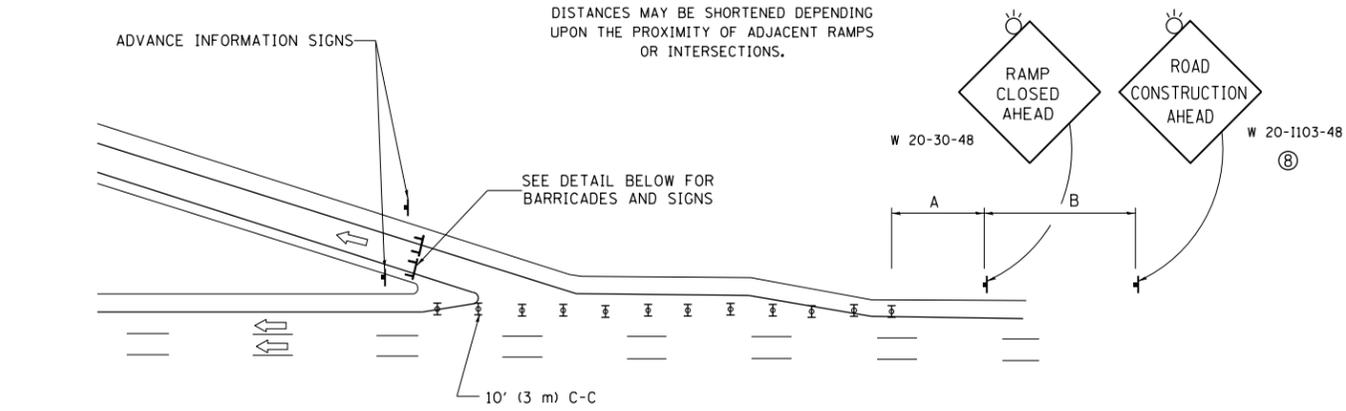


ENTRANCE RAMP CLOSURE

SIGN SPACING TABLE

FACILITY	DISTANCE BETWEEN SIGNS	
	A	B
EXPRESSWAY >24 HOURS	1000' (300 m)	1500' (450 m)
EXPRESSWAY <24 HOURS	500' (150 m)	500' (150 m)
ARTERIAL 55 MPH	500' (150 m)	500' (150 m)
ARTERIAL 50-45 MPH	350' (100 m)	350' (100 m)
ARTERIAL <45 MPH	200' (60 m)	200' (60 m)

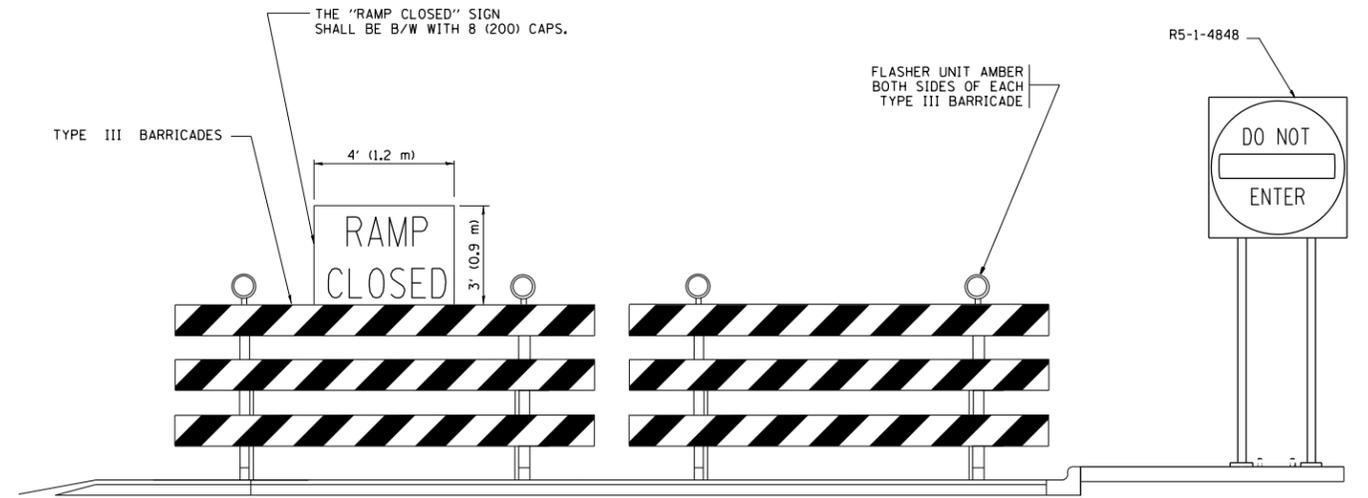
DISTANCES MAY BE SHORTENED DEPENDING UPON THE PROXIMITY OF ADJACENT RAMPS OR INTERSECTIONS.



EXIT RAMP CLOSURE

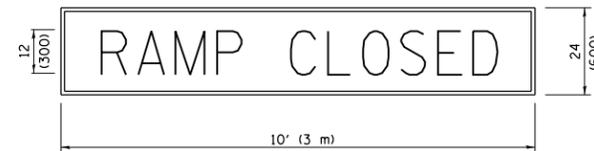
SYMBOLS

- ⊥ TYPE II BARRICADE OR DRUM
- ⊥ TYPE III BARRICADE WITH 2 FLASHING LIGHTS



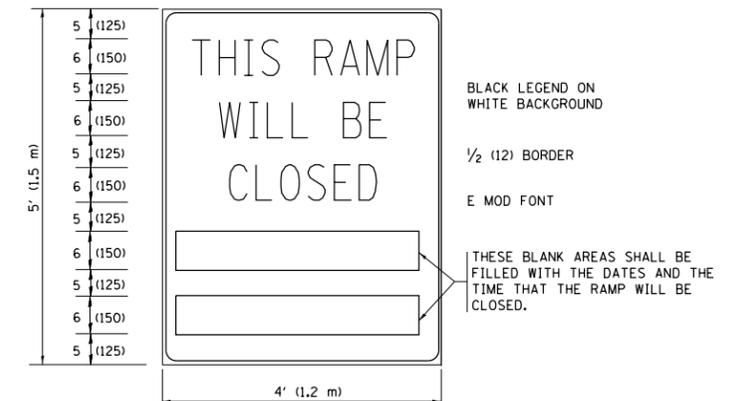
DETAIL FOR REQUIRED BARRICADES & SIGNS

RAMP CLOSURE ADVANCE WARNING SIGN



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 CLOSED FOR MORE THAN FOUR (4) CONSECUTIVE DAYS.

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, PRECEDED 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.
- ⑨ ARTERIAL ROAD CONSTRUCTION AHEAD SIGNS SHALL BE INSTALLED ON THE LEFT SIDE OF TRAFFIC IF THE MEDIAN IS MORE THAN 10 FT WIDE.

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

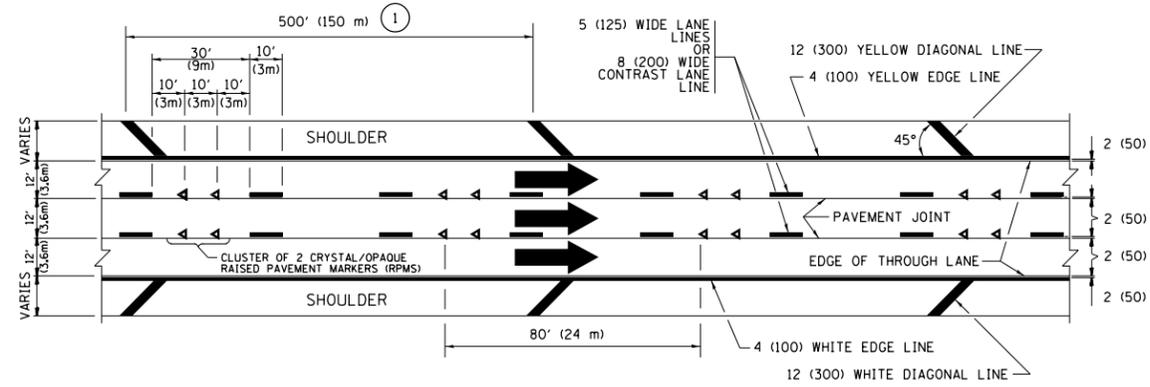
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Default	PLOT SCALE = 100.0000' / in.	DATE - 02-83	REVISED - M.D. 01-18
	PLOT DATE = 3/28/2019		

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ENTRANCE AND EXIT RAMP
CLOSURE DETAILS**

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

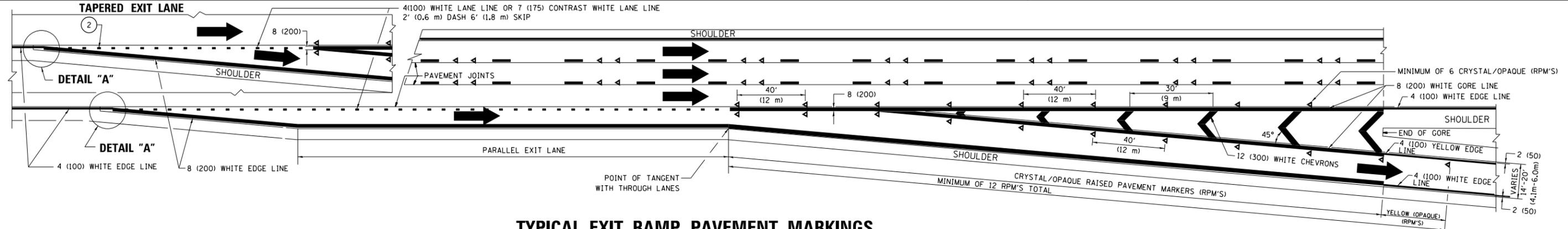
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2019-034-R5	COOK, WILL	20	12
TC-08		CONTRACT NO. 62J12		
ILLINOIS FED. AID PROJECT				



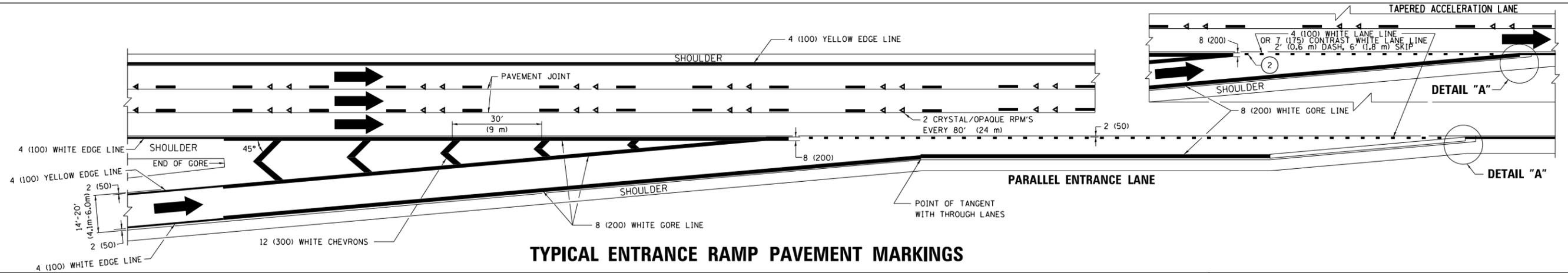
TYPICAL EDGE LINES & LANE LINES

PAVEMENT MARKING MATERIALS

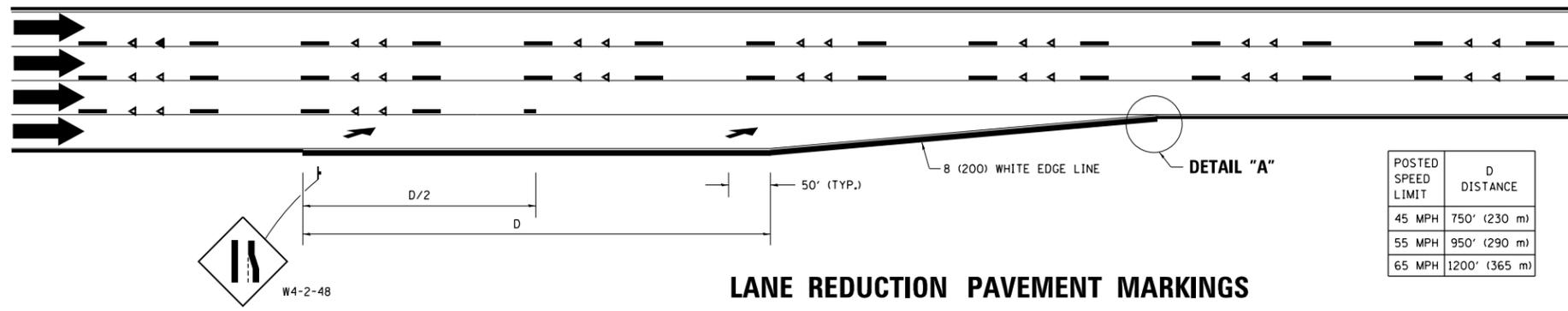
1. THERMOPLASTIC PAVEMENT MARKING LINE SHALL BE USED FOR ALL EDGE LINES, GORE LINES, AND DIAGONAL LINES ON HMA PAVEMENTS.
2. POLYUREA OR MODIFIED URETHANE PAVEMENT MARKING LINE SHALL BE USED FOR ALL EDGE LINES, GORE LINES, AND DIAGONAL LINES ON PCC PAVEMENTS.
3. PREFORMED PLASTIC PAVEMENT MARKING LINE TYPE B, INLAID OR GROOVE IN, SHALL BE USED FOR ALL LANE LINES ON HMA PAVEMENTS.
4. CONTRAST PREFORMED PLASTIC PAVEMENT MARKING LINE TYPE B, GROOVE IN, SHALL BE USED FOR ALL LANE LINES ON PCC PAVEMENT.



TYPICAL EXIT RAMP PAVEMENT MARKINGS

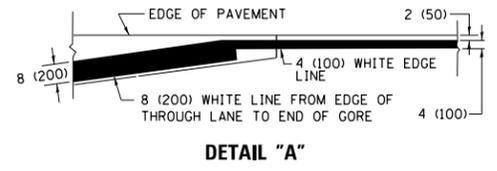


TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS

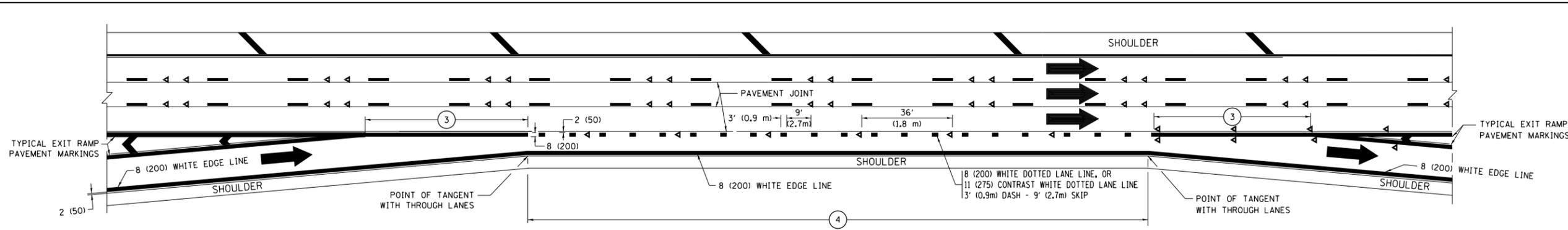


LANE REDUCTION PAVEMENT MARKINGS

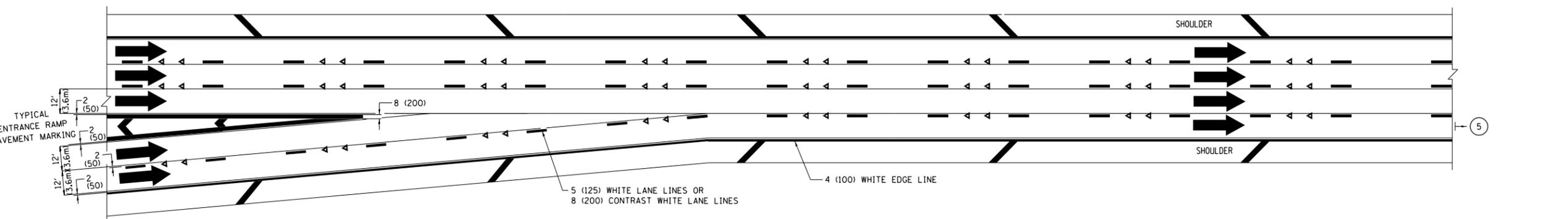
POSTED SPEED LIMIT	D DISTANCE
45 MPH	750' (230 m)
55 MPH	950' (290 m)
65 MPH	1200' (365 m)



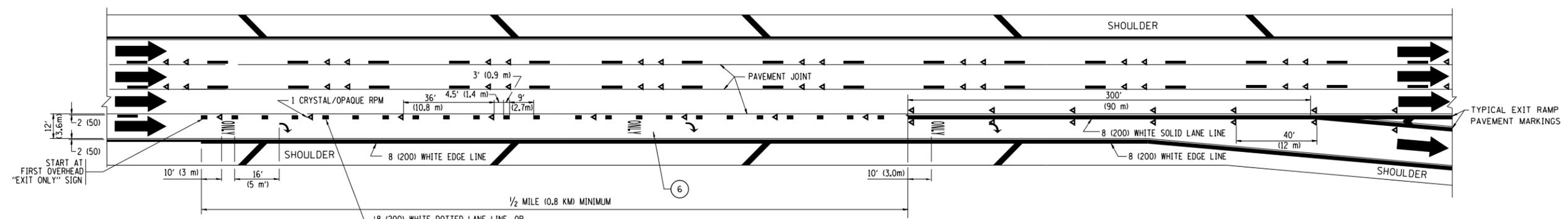
- NOTES:**
- ① THE DIAGONAL LINES SHALL BE SPACED AT 40' (12 m) C-C ACROSS ALL STRUCTURES WHICH ARE 500' (150 m) OR LESS IN LENGTH. THE DIAGONAL LINES ARE NOT REQUIRED ON SHOULDERS WHICH ARE 6' (1.8 m) OR LESS IN WIDTH.
 - ② 4" (2' DASH, 6' SKIP) MARKING ON TAPERED ENTRANCE AND EXIT RAMP SHALL BE OMITTED ON TANGENT SECTIONS.



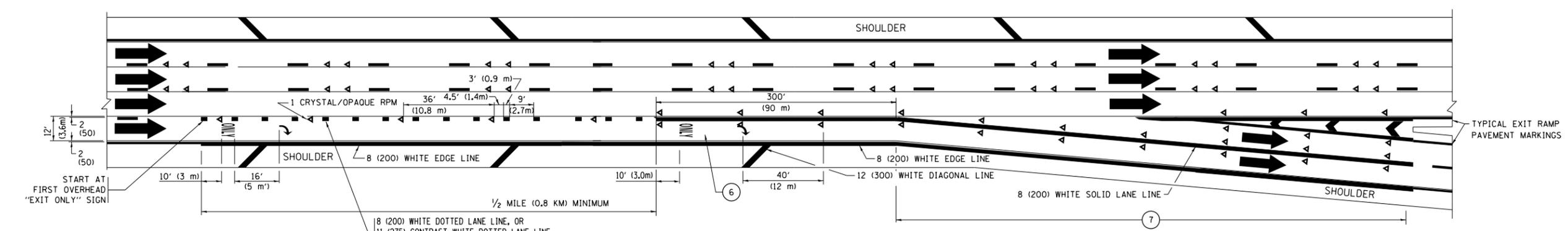
AUXILIARY LANE MARKINGS



TWO LANE ENTRANCE RAMP WITH MERGE MARKINGS



EXIT ONLY LANE MARKINGS

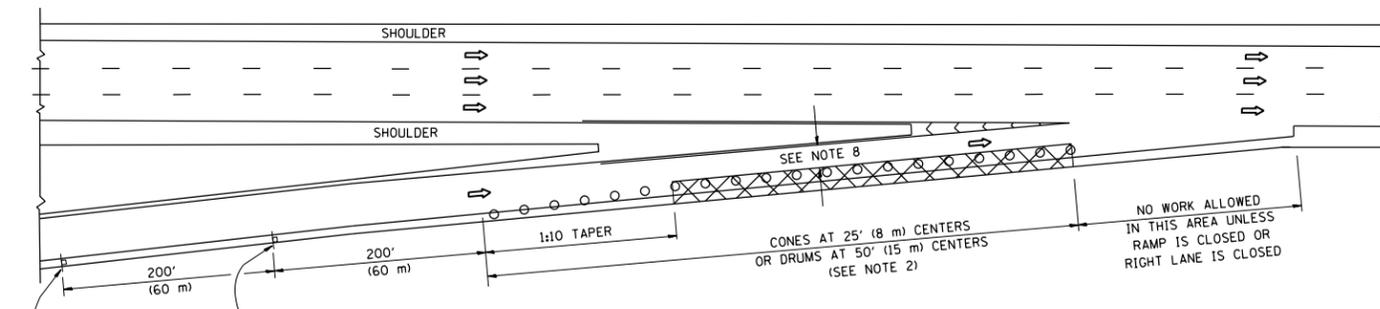


EXIT ONLY WITH OPTION LANE MARKINGS

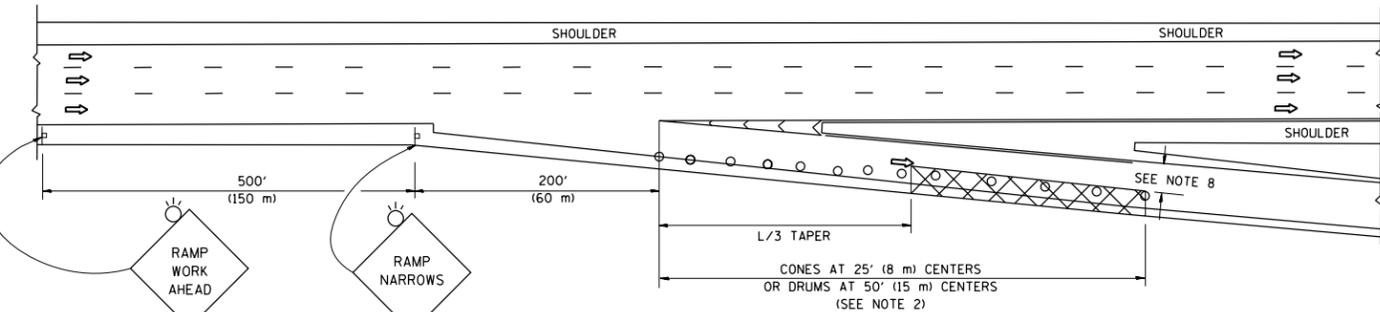
- NOTES:**
- ③ OMIT WHEN LENGTH OF AUXILIARY LANE IS LESS THAN 500' (150 m).
 - ④ 8-INCH WIDE DOTTED LANE LINE MARKINGS SHALL BE USED WHEN THE LENGTH OF THE AUXILIARY LANE IS 2 MILES OR LESS.
 - ⑤ FOR TWO-LANE ENTRANCE RAMP, IF RIGHT LANE ENDS, USE TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS.
 - ⑥ ONLY AND ARROWS EQUALLY SPACED, 500' (150 m) MAXIMUM SPACING. FULL SIZE LETTERS AND ARROW SHALL BE USED.
 - ⑦ CONTINUE 8" SOLID LANE LINE THROUGH EXIT TO END OF PAVED GORE.

FILE NAME =	USER NAME = Bilgiris	DESIGNED - D.W.S.	REVISED - J.A.F. 02-06	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MULTI-LANE FREEWAY PAVEMENT MARKING DETAILS			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
pw:\planroom.dot.illinois.gov\PIWOT\Documents\IDOT Offices\District 1\Projects\Design\Drawn\Design\2019\Patching\HMA\HMA-Exp\Bouth-Cook\SPB\01-10\Std.dgn	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - S.P.B. 01-10		SCALE: NONE	SHEET 2	OF 2 SHEETS	STA.	TO STA.	2019-034-R5	COOK, WILL	20	15
Default	PLOT DATE = 3/28/2019	DATE - 01-90	REVISED - M.D. 09-17					TC-12		CONTRACT NO. 62J12			
								ILLINOIS FED. AID PROJECT					

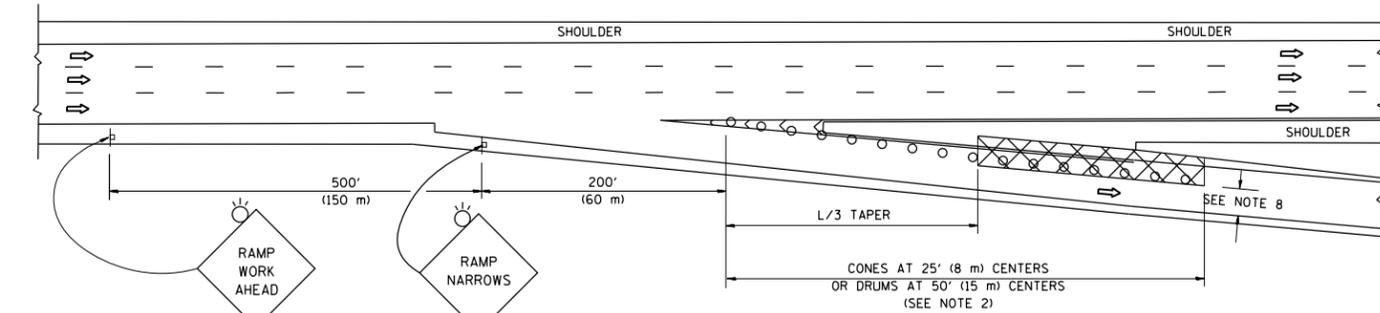
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

SYMBOLS

- ACTIVE WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE OR DRUM
- CONE, DRUM OR BARRICADE
- IMPACT ATTENUATOR OF TYPE AND TEST LEVEL SPECIFIED

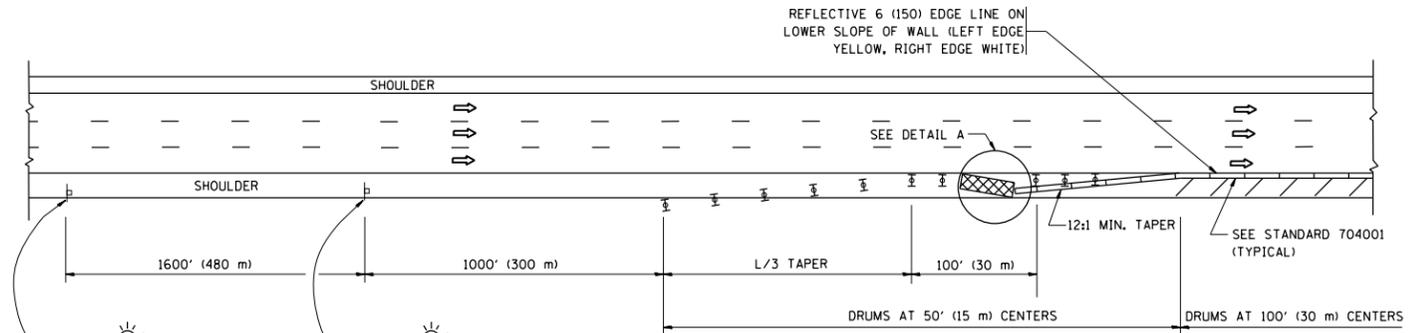
GENERAL NOTES

1. THE "L" DISTANCE EQUALS:

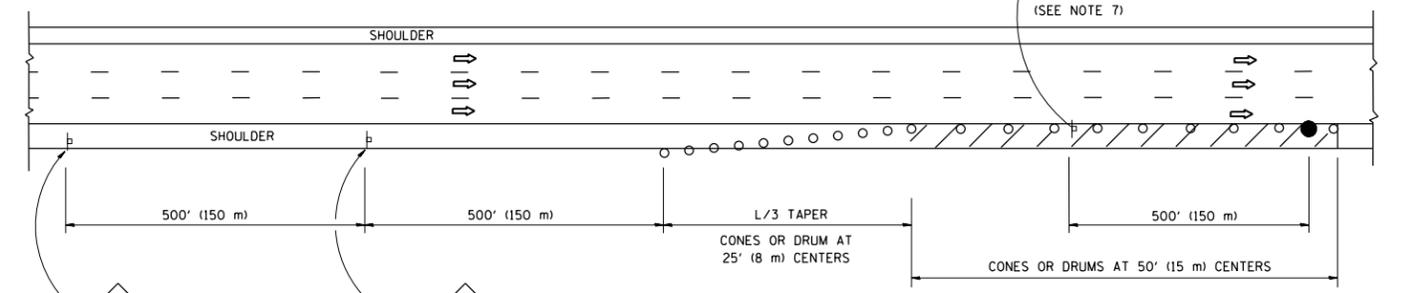
SPEED LIMIT	FORMULAS
45 mph (80 km/h)	METRIC ENGLISH
OR GREATER:	$L=0.65(W)(S)$ $L=(W)(S)$

W = WIDTH OF OFFSET IN FEET (METERS)
 S = NORMAL POSTED SPEED MPH (KM/H)
2. TYPE II BARRICADES OR DRUMS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES. TYPE II BARRICADES OR DRUMS WITH MONODIRECTIONAL STEADY BURN LIGHTS ARE REQUIRED FOR DELINEATING OBSTACLES, EXCAVATIONS, OR HAZARDS EXCEEDING 100 FT (30m) IN LENGTH AT NIGHT.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.

SHOULDER CLOSURE DETAILS

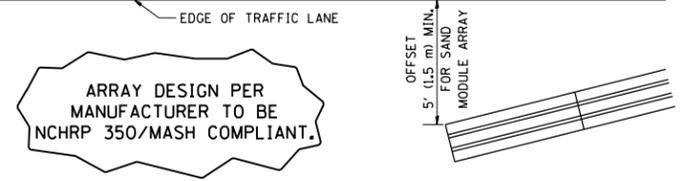


PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

THIS DETAIL IS USED WHERE:
 1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCRANCH IN AN AREA CLOSER THAN 15' (4.5 m) TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.



DETAIL "A"
 IMPACT ATTENUATOR, TEMPORARY
 (SEE NOTE 5)

5. THE IMPACT ATTENUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS PROTECTED BY OR IS TIED INTO THE EXISTING GUARDRAIL. IF OFFSET IS LESS THAN 5 FEET USE NARROW USE TYPE DEVICE TO MEET NCHRP350/MASH.
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.
7. THE FLAGGER AND FLAGGER SIGN ARE REQUIRED AT THE ABOVE WORK SITES WHEN:
 - a. FOUR OR MORE WORK VEHICLES ENTER THE TRAFFIC LANES IN A ONE HOUR PERIOD.
 - b. THE WORK AVTIVITY REQUIRES FREQUENT ENCRACHMENT INTO THE LANE OPEN TO TRAFFIC.
 THE FLAGGER SHALL BE STATIONED APPROXIMATELY 100' (30 m) TO 200' (60 m) IN ADVANCE OF THE WORKERS.
8. 12' MIN. WIDTH TANGENT SECTION
 16' MIN. WIDTH CURVE SECTION.

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

FILE NAME =	USER NAME = Bilgiris	DESIGNED -	REVISED - S.P.B. 01-07
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Default	PLOT SCALE = 100.0000' / in.	DATE - 11-96	REVISED - M.D. 01-18

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

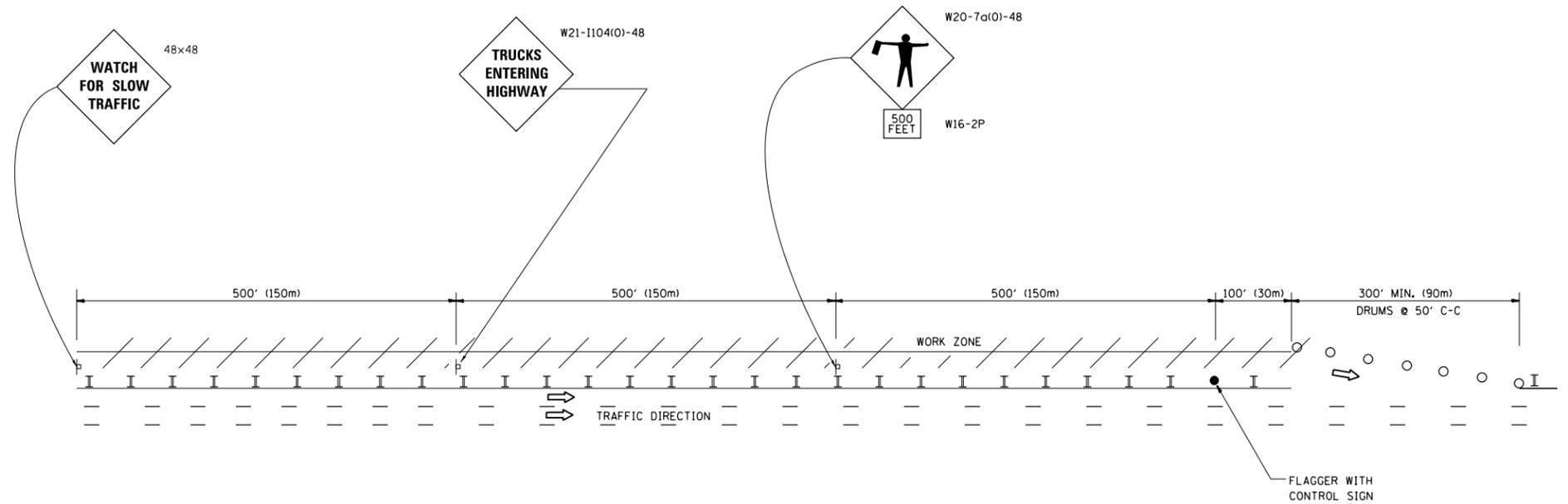
TRAFFIC CONTROL DETAILS FOR FREEWAY
 SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES

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

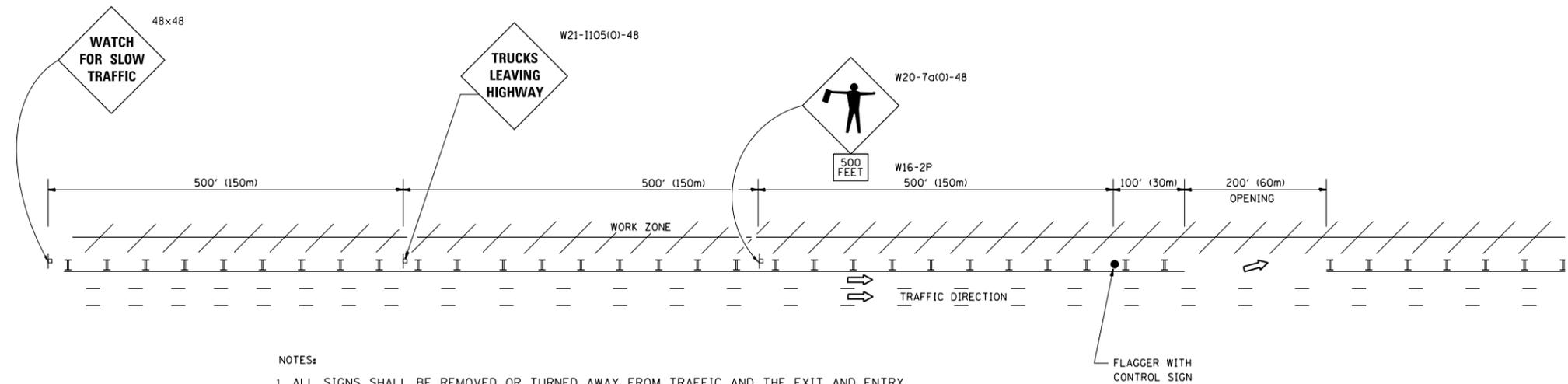
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2019-034-R5	COOK, WILL	20	16
TC-17		CONTRACT NO. 62J12		
ILLINOIS FED. AID PROJECT				

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



WORK ZONE ENTRY OPENING



NOTES:

1. ALL SIGNS SHALL BE REMOVED OR TURNED AWAY FROM TRAFFIC AND THE EXIT AND ENTRY OPENINGS SHALL BE CLOSED WHEN THE FLAGGING OPERATION CEASES. NON OPERATING EQUIPMENT SHALL COMPLY WITH ARTICLE 701.11
2. WORK ZONE OPENINGS SHALL BE A MINIMUM OF ONE HALF MILE APART AND A MINIMUM OF ONE QUARTER MILE FROM ALL ENTRANCE AND EXIT RAMPS.
3. EXITING THE WORK ZONE AT ANY PLACE OTHER THAN AT A WORK ZONE EXIT OPENING WILL BE PROHIBITED.
4. ALL VEHICLES SHALL ENTER THE WORK ZONE AT ENTRY OPENINGS, USING THEIR TURN SIGNALS TO WARN MOTORISTS
5. FLAGGERS SHALL NOT STOP TRAFFIC OR DIRECT TRAFFIC INTO AN ADJACENT LANE.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = Bilgromiso	DESIGNED -	REVISED - J.A.F. 02-06
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PLOT DATE = 3/28/2019			

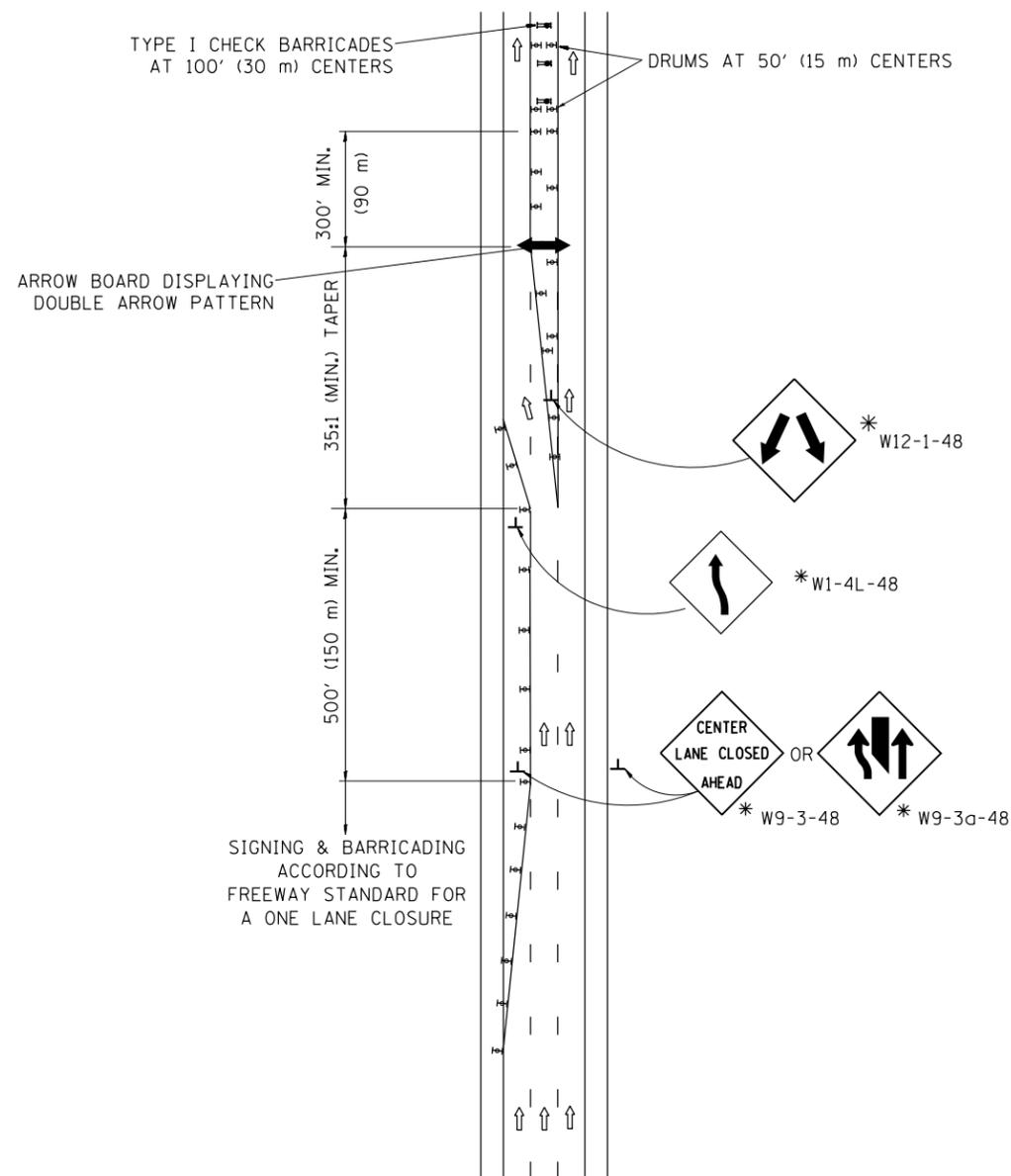
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**FREEWAY/EXPRESSWAY SIGNING FOR FLAGGING OPERATIONS
AT WORK ZONE OPENINGS ON FREEWAYS/EXPRESSWAYS**

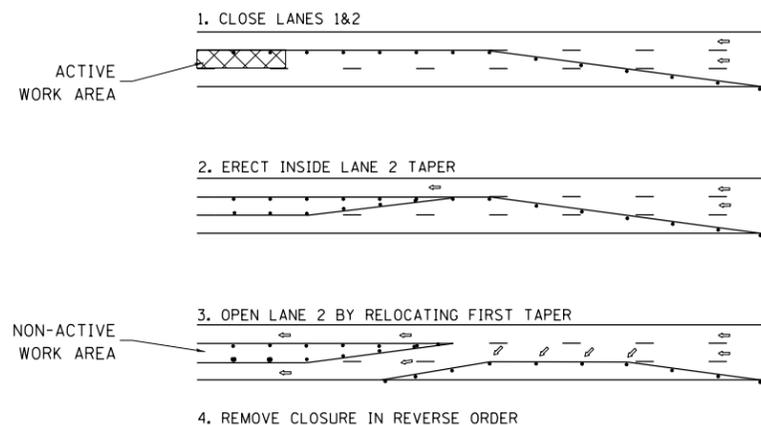
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2019-034-R5	COOK, WILL	20	17
TC-18		CONTRACT NO. 62J12		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

CENTER LANE CLOSURE



INSTALLATION SEQUENCE

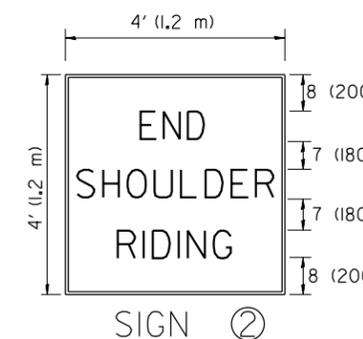
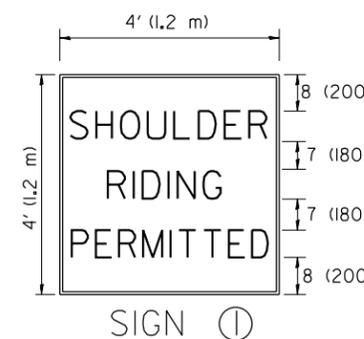
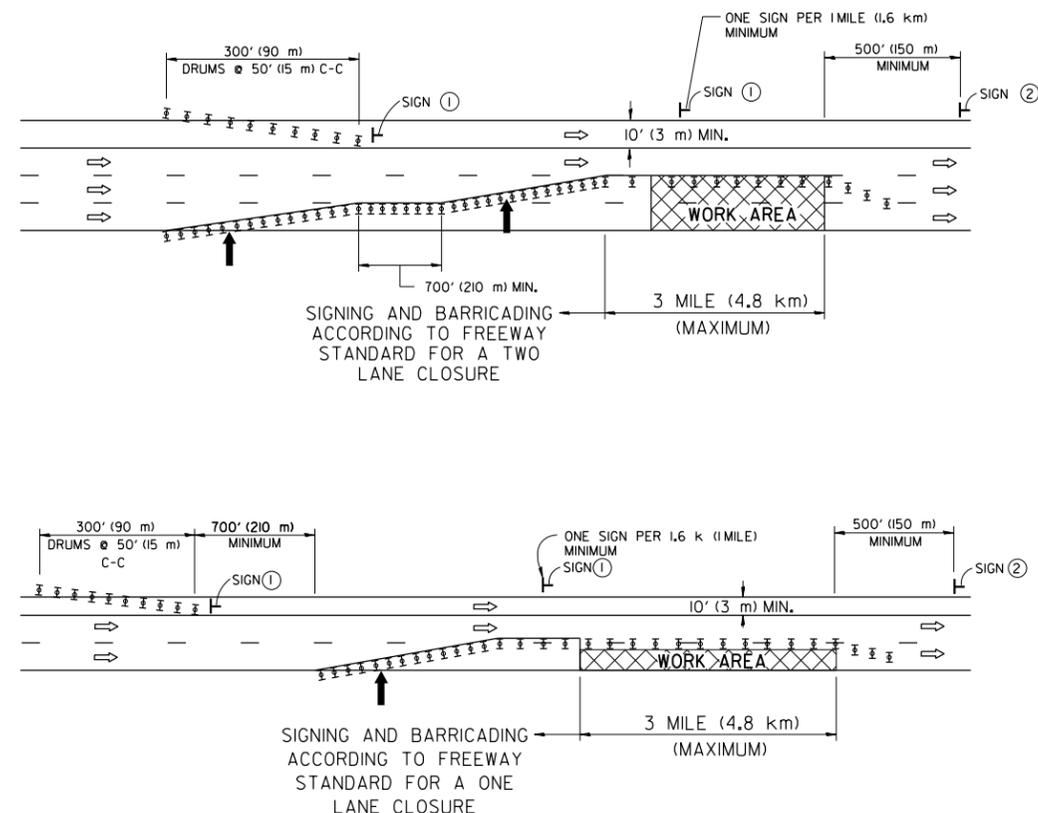


NOTES

1. DRUMS WITH STEADY BURN LIGHTS SHALL BE USED AT 50' (15 m) CENTERS ON ALL TAPERS AND TANGENTS IN ADVANCE OF WORK AREA.
2. CLOSURE SHALL BE USED ONLY FOR OPERATIONS LASTING 72 HOURS OR LESS.
3. CENTER LANE CLOSURE CONFIGURATION IS NOT TO BE USED WITH WORKERS PRESENT.

SHOULDER LANE

NOTE: CLOSURE SHALL BE USED ONLY FOR OPERATIONS LASTING 72 HOURS OR LESS.



6 (150) SERIES "C" LEGEND
BLACK LEGEND
WHITE REFLECT. BACKGROUND
1(25) BORDER

SYMBOLS

- ↑ DIRECTION OF TRAFFIC
- ➔ ARROWBOARD
- ▣ ACTIVE WORK AREA
- ⊥ SIGN ON PORTABLE OR PERMANENT SUPPORT *
- ⊥ TYPE II BARRICADE, OR DRUM WITH MONO-DIRECTIONAL STEADY BURN LIGHT

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

* ALL SIGNS SHALL BE MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).

FILE NAME =	USER NAME = Bilgromiso	DESIGNED -	REVISED - J.A.F. 04-03
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		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

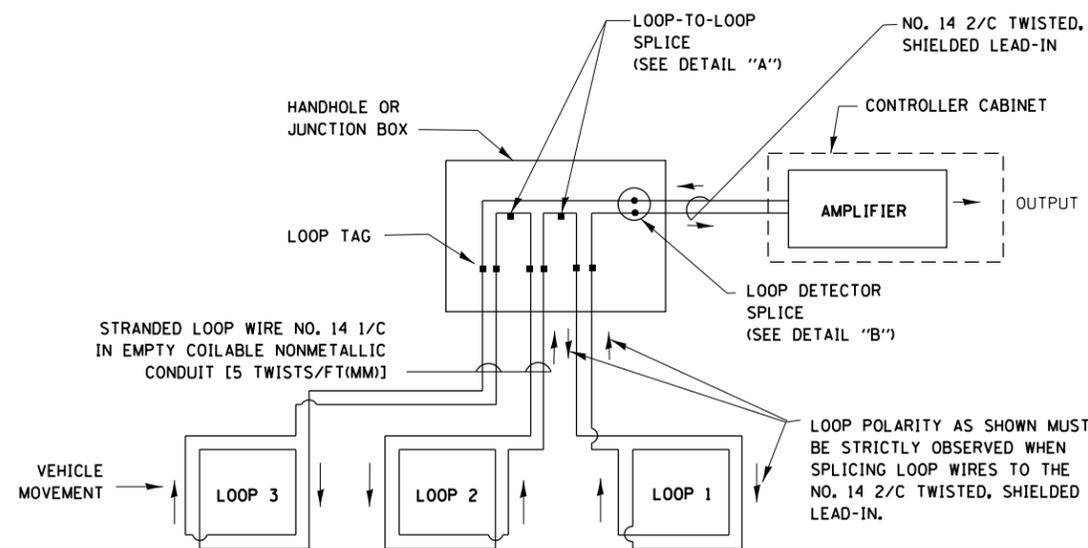
TRAFFIC CONTROL DETAILS FOR FREEWAY
CENTER LANE CLOSURE SHOULDER LANE

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2019-034-R5	COOK, WILL	20	18
TC-25		CONTRACT NO. 62J12		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

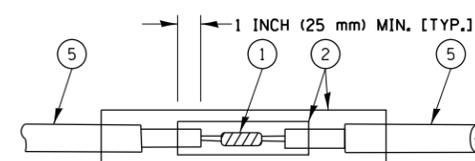
LOOP DETECTOR NOTES

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.

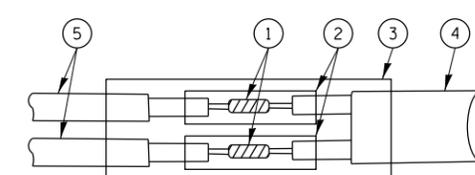


DETECTOR LOOP WIRING SCHEMATIC

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



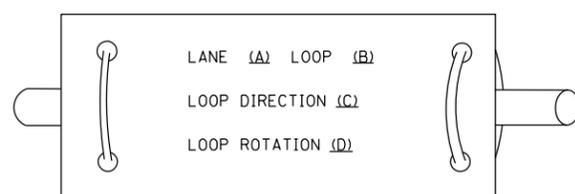
**DETAIL "A"
LOOP-TO-LOOP SPLICE**



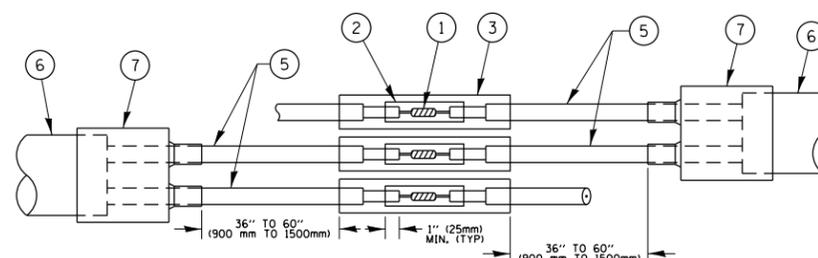
**DETAIL "B"
LOOP-TO-CONTROLLER SPLICE**

TYPE I LOOP

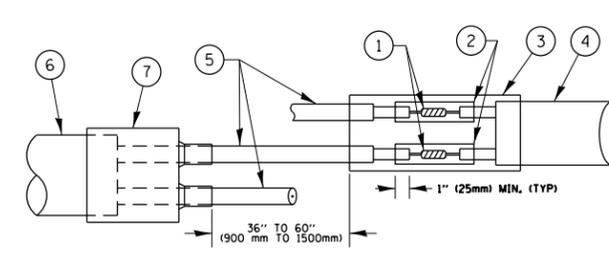
LOOP LEAD-IN CABLE TAG



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



**DETAIL "A"
LOOP-TO-LOOP SPLICE**



**DETAIL "B"
LOOP-TO-CONTROLLER SPLICE**

PRE-FORMED LOOP

LOOP DETECTOR SPLICE

- ① WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH, THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- ② WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- ③ WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- ④ NO. 14 2/C TWISTED, SHIELDED CABLE.
- ⑤ LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- ⑥ PRE-FORMED LOOP
- ⑦ XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS, TYCO CBR-2 OR APPROVED EQUAL

FILE NAME =	USER NAME = Bilgramisa	DESIGNED -	REVISED -
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

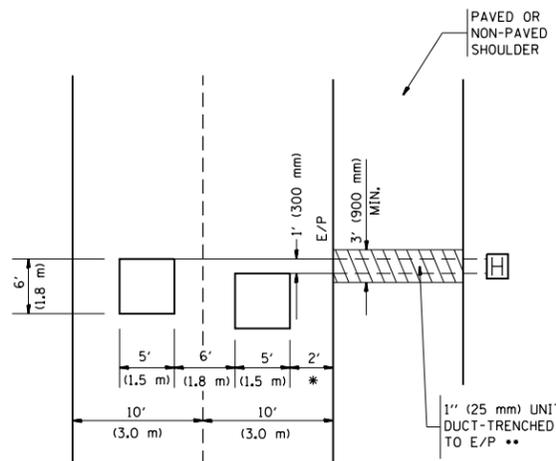
**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2019-034-R5	COOK, WILL	20	19
	TS-05	CONTRACT NO. 62J12		
ILLINOIS FED. AID PROJECT				

LOOPS NEXT TO SHOULDERS

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

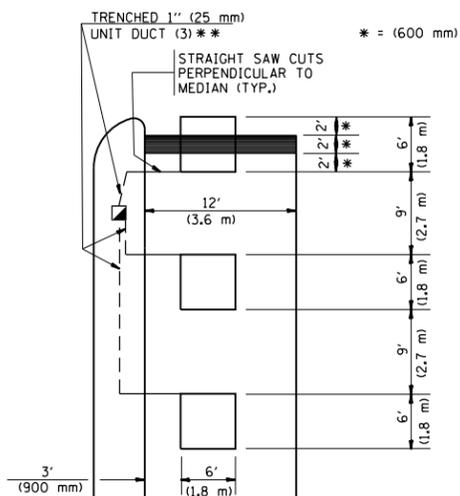


* = (600 mm)

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

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

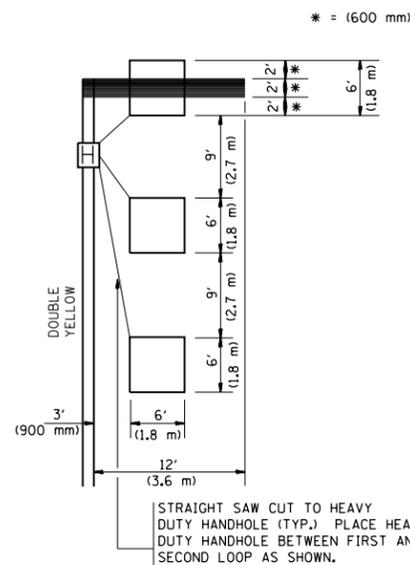
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



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

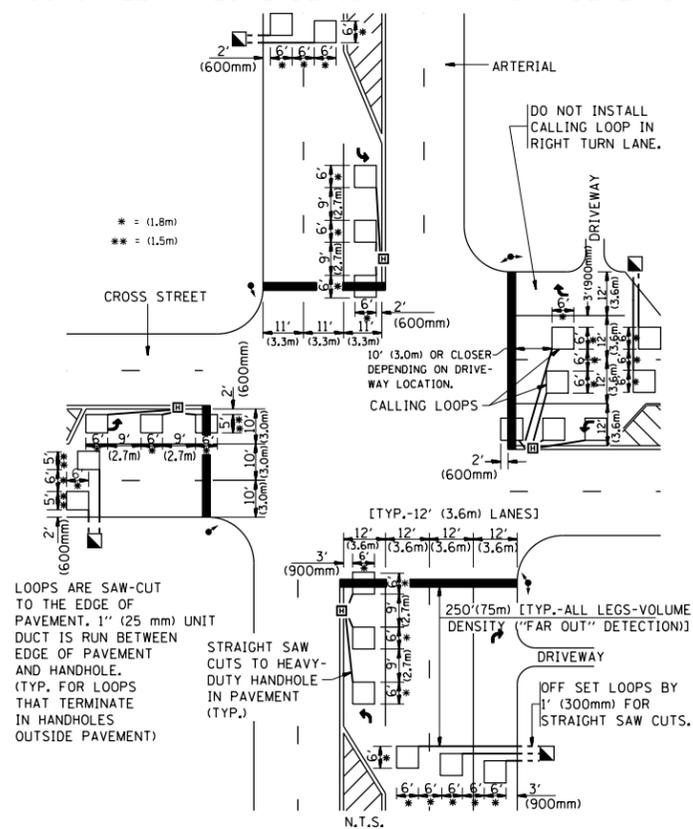
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



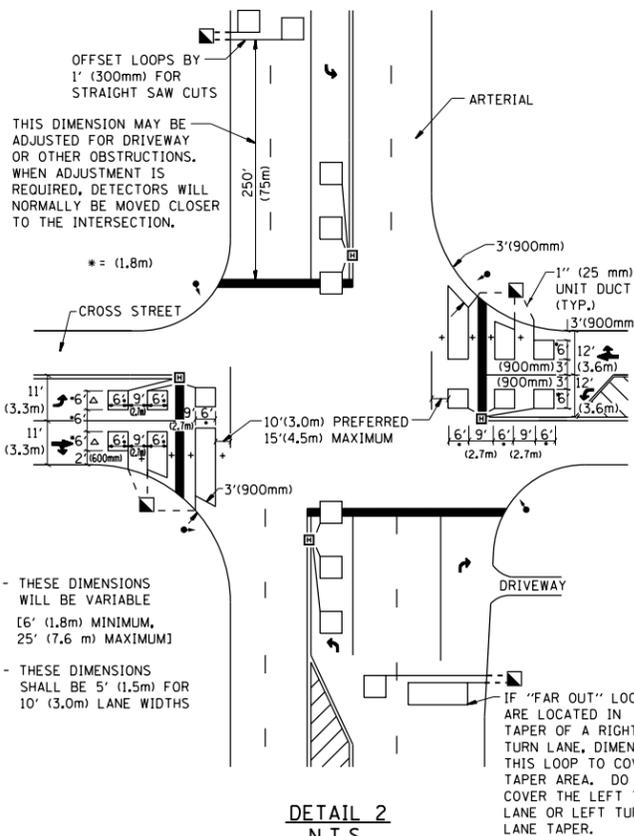
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



DETAIL 1
N.T.S.

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



DETAIL 2
N.T.S.

NOTES:

VEHICLES LOOP DETECTORS

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

PLACEMENT OF DETECTORS

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

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

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

NOTE:

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

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

FILE NAME =	USER NAME = Bilgiris	DESIGNED -	REVISED -
pw:\planroom.dot.illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\Design\DRAWN\Design\2019\Patching\HMA\HMA-Exp\South Cook and Will-DistStd.dgn		CHECKED - R.K.F.	REVISED -
PLOT SCALE = 100.0000' / in.		DATE -	REVISED -
PLOT DATE = 3/28/2019			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 - DETECTOR LOOP INSTALLATION
DETAILS FOR ROADWAY RESURFACING

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2019-034-R5	COOK, WILL	20	20
TS-07		CONTRACT NO. 62J12		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				