

022

03-08-2019 LETTING ITEM 022

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
21	2018-026-RS-SW	DUPAGE	64	1
		ILLINOIS	CONTRACT NO. 62G64	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THE IMPROVEMENT IS LOCATED IN THE VILLAGES OF ADDISON, BLOOMINGDALE & ROSELLE

TRAFFIC DATA:

2017

STA 12+27.5 TO STA 70+00

ADT = 31900

STA 70+00 - STA 165+00

ADT = 45000

STA 165+00 - STA 191+54

ADT = 37700

STA 12+27.5 TO STA 51+00

POSTED SPEED LIMIT = 40 MPH

STA 51+00 TO STA 147+00

POSTED SPEED LIMIT = 35 MPH

STA 147+00 TO STA 173+00

POSTED SPEED LIMIT = 45 MPH

STA 173+00 TO STA 191+54

POSTED SPEED LIMIT = 40 MPH



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

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

PROJECT ENGINEER : KARI SMITH (847) 705-4437  
PROJECT MANAGER : FAWAD AQUEEL (847) 705 705-4247

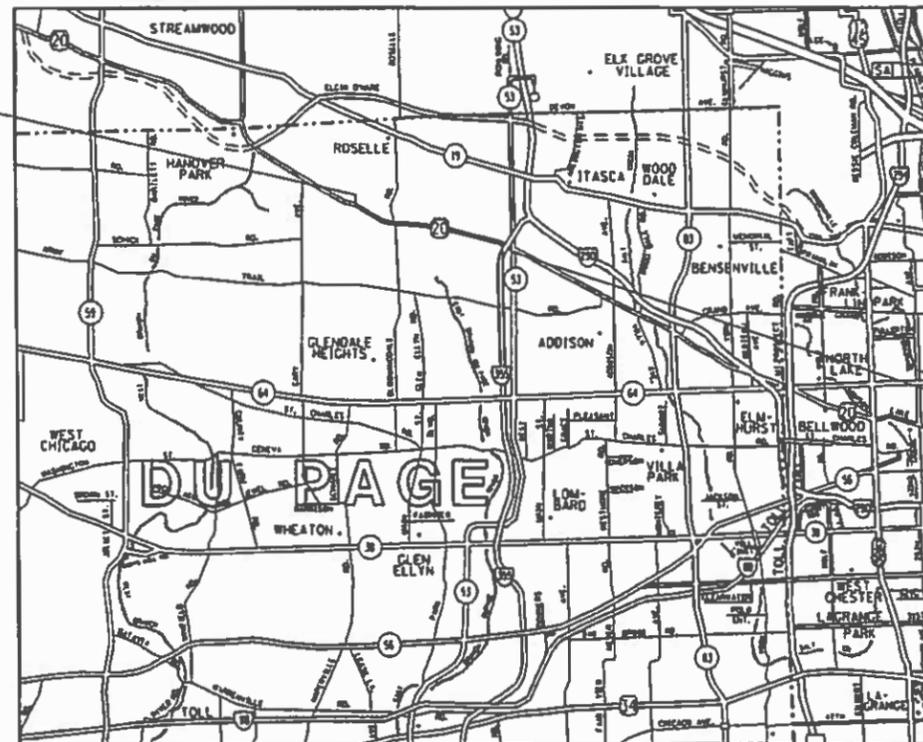
CONTRACT NO. 62G64

PROPOSED  
HIGHWAY PLANS

F.A.P. ROUTE 21 : US 20  
W OF SUMMERFIELD DR. TO I-355  
(VETERANS MEMORIAL TOLLWAY)  
SECTION 2018-026-RS-SW  
PROJECT NHPP-KGG5(618)  
RESURFACING(3P), PEDESTRIAN RAMPS,  
AND PAVEMENT PATCHING  
DUPAGE COUNTY

C-91-248-18

PROJECT BEGINS  
STA 12+27.5



PROJECT ENDS  
STA 191+54

BLOOMINGDALE TOWNSHIP

GROSS LENGTH = 12949 FT. = 2.45 MILE

NET LENGTH = 12949 FT. = 2.45 MILE

D-91-325-18



LOCATION OF SECTION INDICATED THIS: -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED ~~December 6 2018~~

*Anthony J. D'Angelo*  
REGIONAL ENGINEER

Feb 19 2019  
ENGINEER OF DESIGN AND ENVIRONMENT

Feb 20 2019  
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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OF THE STATE OF ILLINOIS

**INDEX OF SHEETS**

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9-12	SCHEDULE OF QUANTITIES
13-19	ROADWAY AND PAVEMENT MARKING PLANS
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59	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)
60	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) (TC-14)
61	PAVEMENT MARKING LETTERS & SYMBOLS FOR TRAFFIC STAGING (TC-16)
62	TRAFFIC CONTROL DETAILS FOR FREE WAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES (TC-17)
63	ARTERIAL ROAD INFORMATION SIGN (TC-22)
64	DISTRICT ONE DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING (TS-07)

**HIGHWAY STANDARDS**

STANDARD NO.	DESCRIPTION
000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
420701-03	PAVEMENT WELDED WIRE REINFORCEMENT
424001-11	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
424006-04	DIAGONAL CURB RAMPS FOR SIDEWALKS
424021-05	DEPRESSED CORNER FOR SIDEWALKS
442101-09	CLASS B PATCHES
442201-03	CLASS C AND D PATCHES
604001-04	FRAMES AND LIDS TYPE 1
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE
701101-05	OFF -RD OPERATION, MULTILANE, 15' (4.5 m) TO 24" (600mm) FROM PAVEMENT EDGE
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306-04	LANE CLOSURE,2L,2W, SLOW MOVING OPERATION DAY ONLY, FOR SPEEDS >= 45 MPH
701311-03	LANE CLOSURE 2L, 2W MOVING OPERATIONS-DAY ONLY
701336-07	LANE CLOSURE,2L,2W, WORK AREAS IN SERIES, FOR SPEEDS>= 45 MPH
701422-10	LANE CLOSURE, MULTILANE INTERMITTENT OR MOVING SPEEDS >= 45MPH TO 55 MPH
701426-09	LANE CLOSURE, MULTILANE INTERMITTENT OR MOVING OPER. FOR SPEED>= 45MPH
701427-05	LANE CLOSURE, MULTILANE INTERMITTENT OR MOVING OPER. FOR SPEED < 40MPH
701501-06	URBAN LANE CLOSURE 2L, 2W, UNDIVIDED
701502-09	URBAN LANE CLOSURE,2L,2W, WITH BIDIRECTIONAL LEFT TURN LANE
701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NON TRAVERSABLE MEDIAN
701606-10	URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-08	TRAFFIC CONTROL DEVICES
886001-01	DETECTOR LOOP INSTALLATIONS

**GENERAL NOTES**

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE VILLAGES OF ADDISON, BLOOMINGDALE AND ROSEDALE.

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

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

TWO WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS THE RESIDENT ENGINEER SHALL CONTACT MR. DON CHIARUGI, ARTERIAL TRAFFIC FIELD ENGINEER, AT don.chiarugi@illinois.gov

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.

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.

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 ENGINEER.

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

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

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

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

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

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES.

WHEN THE MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1/2 INCHES (40 mm) WHERE THE SPEED LIMIT IS 40 MPH (80 km/h) OR LESS AND 1 INCH (25 mm) WHERE THE SPEED LIMIT IS GREATER THAN 40 MPH (80 km/h). WITH WRITTEN APPROVAL OF THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES (75 mm) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).

BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT) ACCORDING TO THE "BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.

THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES DURING CONSTRUCTION

CONTACT ROADSIDE DEVELOPMENT UNIT AT 847.705.4171 AT LEAST 2 WEEKS PRIOR TO BEGINNING LANDSCAPE AND FORESTRY WORK FOR LAYOUT.

ANY DETECTOR LOOPS DAMAGED BY PCC PATCHING OR PCC SURFACE REMOVAL VARIABLE DEPTH SHALL BE REPLACED IN KING. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO QUANTIFY LOOP REPLACEMENTS NEEDED AND PROVIDE THE RESIDENT ENGINEER THIS INFO PRIOR TO REMOVAL.

REV. - MS

FILE NAME =	USER NAME = khans	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>INDEX OF SHEETS, STATE STANDARS AND GENERAL NOTES</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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Default	PLOT SCALE = 100.0000' / in.	DATE -	REVISED -			<b>CONTRACT NO. 62G64</b>					
	PLOT DATE = 12/13/2018	DATE -	REVISED -			SCALE:	SHEET	OF	SHEETS	STA.	TO

ILLINOIS FED. AID PROJECT



URBAN

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	0005 80% FED 20% STATE	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT							
45200100	JOINT OR CRACK ROUTING (PC CONCRETE PAVEMENT AND SHOULDER)	FOOT	405	405					
45200300	JOINT OR CRACK FILLING	POUND	50	50					
60250200	CATCH BASINS TO BE ADJUSTED	EACH	43	43					
60251740	CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 24 FRAME AND GRATE	EACH	2	2					
60252800	CATCH BASINS TO BE RECONSTRUCTED	EACH	4	4					
60255500	MANHOLES TO BE ADJUSTED	EACH	11	11					
60255800	MANHOLES TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	3	3					
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	14	14					
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	15	15					
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	2	2					
* 66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	LSUM	1	1					
* 66901002	ON-SITE MONITORING OF REGULATED SUBSTANCES	CAL DA	2	2					
* 66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	LSUM	1	1					

\* SPECIALTY ITEM

URBAN

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	0005 80% FED 20% STATE	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT							
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	18	18					
67100100	MOBILIZATION	L SUM	1	1					
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1					
70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1	1					
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1					
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1					
70300100	SHORT TERM PAVEMENT MARKING	FOOT	81482	81482					
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	27144	27144					
70300210	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS	SQ FT	1587	1587					
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	17857	17857					
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	11877	11877					
70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	1190	1190					
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	776	776					

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	PLOT DATE = 12/14/2018	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
21	2018-026-RS-SW		64	4
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 62G64	

URBAN

URBAN

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE						
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	0005 80% FED 20% STATE	0005 80% FED 20% STATE				
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	1285	1285					
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	1587	1587					
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	7494	7494					
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	9326	9326					
* 78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	1190	1190					
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	644	644					
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	850	850					
* 78009000	MODIFIED URETHANE PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	16	16					
* 78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	1933	1933					
* 78009006	MODIFIED URETHANE PAVEMENT MARKING - LINE 6"	FOOT	2551	2551					
* 78009012	MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	FOOT	132	132					

\* SPECIALTY ITEM

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE						
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	0005 80% FED 20% STATE					
* 78009024	MODIFIED URETHANE PAVEMENT MARKING - LINE 24"	FOOT	435	435					
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	570	570					
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	285	285					
* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	703	703					
* 89500400	RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	3	3					
K0029614	WEED CONTROL, AQUATIC	GALLON	1	1					
K0029624	WEED CONTROL, TEASEL	GALLON	1	1					
X0320050	CONSTRUCTION LAYOUT (SPECIAL)	L SUM	1	1					
X0326767	PROFILE DIAMOND GRINDING CONCRETE PAVEMENT	SO YD	74706	74706					
X0327611	REMOVE AND REINSTALL BRICK PAVER	SO FT	4580	4580					
X0327772	PRECAST CONCRETE PAVEMENT SLABS 10"	SO FT	8364	8364					
X2503110	MOWING (SPECIAL)	ACRE	1.45	1.45					
X2503318	INTERSEEDING, CLASS 4B (MODIFIED)	ACRE	1.12	1.12					

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>SUMMARY OF QUANTITIES</b>			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
21	2018-026-RS-SW	DUPAGE	64	5
CONTRACT NO. 62G64				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

URBAN

URBAN

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	0005 80% FED 20% STATE	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT							
* X2700004	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 7"	FOOT	8430	8430					
X4060004	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80	TON	7960	7960					
X4400100	PORTLAND CEMENT CONCRETE SURFACE REMOVAL ( VARIABLE DEPTH)	SO YD	18400	18400					
X4405030	LONGITUDINAL PARTIAL DEPTH REMOVAL 3"	FOOT	7020	7020					
X4420900	LONGITUDINAL PARTIAL DEPTH PATCHING	TON	263	263					
X4423015	DOWEL BARS 1 1/2" RETROFIT	EACH	1400	1400					
X5537800	STORM SEWERS TO BE CLEANED 12"	FOOT	1710	1710					
X6030310	FRAMES AND LIDS TO BE ADJUSTED ( SPECIAL)	EACH	19	19					
X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SO FT	15955	15955					
* X7830070	GROOVING FOR RECESSED PAVEMENT MARKING 5"	FOOT	8430	8430					
XZ043900	PREFORMED JOINT FILLER REMOVAL	FOOT	2750	2750					
Z0004562	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	2400	2400					
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	57	57					

SUMMARY OF QUANTITIES			TOTAL QUANTITIES		CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT							
Z0030850	TEMPORARY INFORMATION SIGNING	SO FT	103	103					
Z0033700	LONGITUDINAL JOINT SEALANT	FOOT	28070	28070					
Z0064800	SELECTIVE CLEARING	UNIT	25.6	25.6					
Ø Z0076600	TRAINEES	HOUR	1000	1000					
Ø Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	1000	1000					

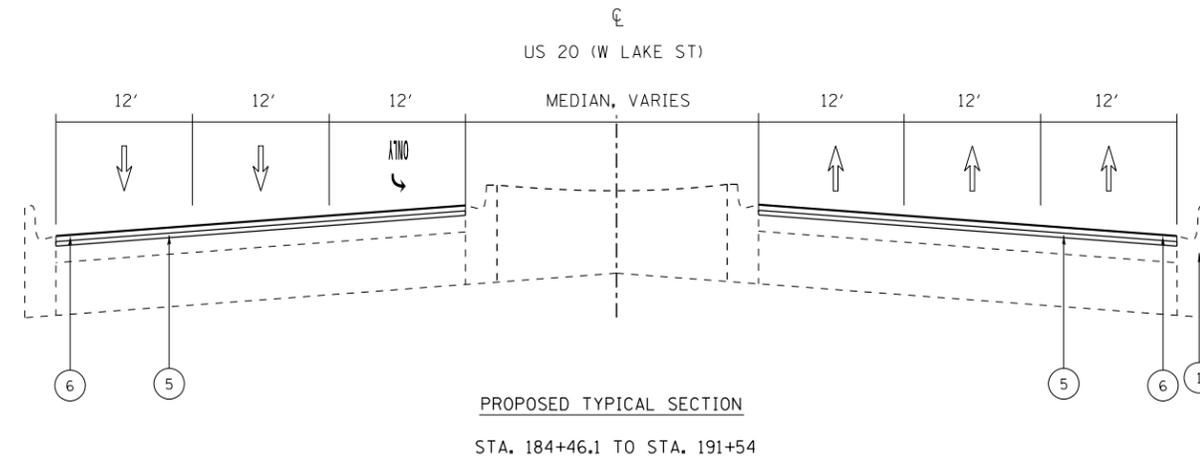
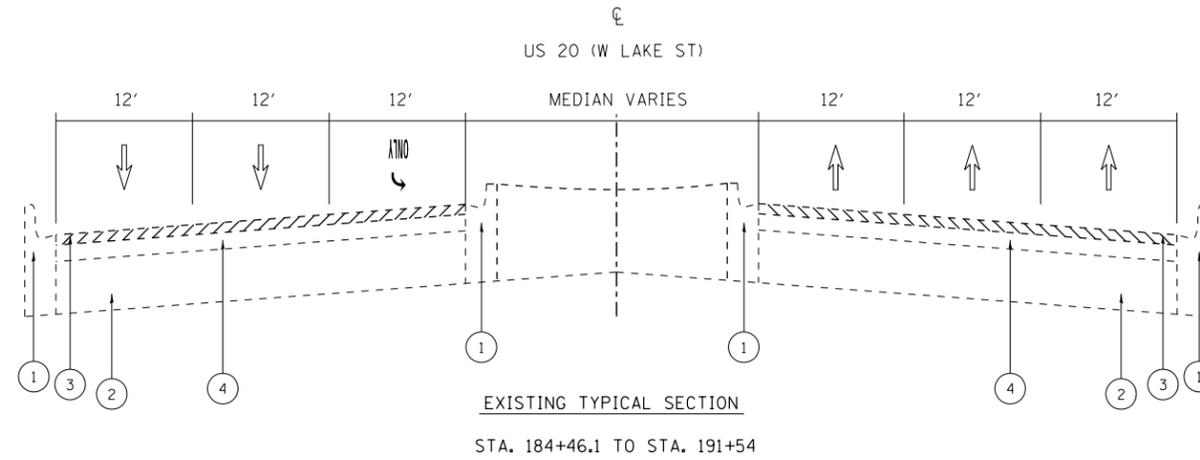
\* SPECIALTY ITEM Ø 0042

REV. - MS



LEGEND

- |  |  |
|--|--|
| <ol style="list-style-type: none"> <li>1. EXISTING COMBINATION CONCRETE CURB AND GUTTER</li> <li>2. EXISTING P.C. CONCRETE PAVEMENT ± 6"</li> <li>3. PROPOSED HMA SURFACE REMOVAL, 2 1/2"</li> <li>4. EXISTING HMA SURFACE 7 1/2" (AFTER MILLING)</li> <li>5. PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"</li> <li>6. PROPOSED POLYMERIZED HMA SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80, 1 3/4"</li> </ol> | <ol style="list-style-type: none"> <li>7. PROPOSED CLASS B PATCHES, 11"</li> <li>8. PROPOSED PRECAST PANELS (SEE SCHEDULE OF QUANTITIES)</li> <li>9. AGGREGATE SUBGRADE 12"</li> <li>10. PORTLAND CEMENT CONCRETE PAVEMENT 10 1/4"</li> <li>11. PROP. PCC SURFACE REMOVAL, VARIABLE DEPTH</li> <li>12. PROPOSED PROFILE DIAMOND GRINDING CONCRETE PAVEMENT, 3/16" TO 1/4"</li> </ol> |
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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

<b>EXISTING TYPICAL SECTION</b>			
<b>US RTE 20 (SUMMERFIELD DR TO I-355)</b>			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
21	2018-026-R5-SW	DUPAGE	64	8
CONTRACT NO. 62G64				
ILLINOIS FED. AID PROJECT				

TREE REMOVAL (6 TO 15 UNITS DIAMETER)	
STATION	QUANTITY
76+80 TO 78+80 LT	30 UNITS
114+30 TO 128+00 LT	50 UNITS
TOTAL	80 UNITS

SEEDING, CLASS 2A	
STATION	QUANTITY
76+80 TO 78+80 LT	2000 SQ FT
114+30 TO 128+00 LT	12000 SQ FT
133+40 TO 137+00 LT	3600 SQ FT
TOTAL	0.4 ACRE

TREE PRUNNING (OVER 10 INCH DIAMETER)	
STATION	QUANTITY
137+00 LT	1 EA

SEEDING, CLASS 4B	
STATION	AREA (SQ FT) TO SPRAY
114+30 TO 128+00 LT	49000 SQ FT
TOTAL	1.12 ACRE

SELECTIVE CLEARING	
STATION	QUANTITY
76+80 TO 78+80 LT	2
114+30 TO 128+00 LT	20
133+40 TO 137+00 LT	3.6
TOTAL	25.6

WEED CONTROL, AQUATIC	
STATION	AREA (SQ FT) TO SPRAY
114+30 TO 128+00 LT	43000 SQ FT
TOTAL	1 GALLON

MOWING (SPECIAL)	
STATION	QUANTITY
114+30 TO 128+00 LT	1.45

WEED CONTROL, TEASEL	
STATION	AREA (SQ FT) TO SPRAY
76+80 TO 78+80 LT	2000 SQ FT
114+30 TO 128+00 LT	2000 SQ FT
TOTAL	1 GALLON

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PLOT DATE = 12/13/2018	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
21	2018-026-R5-SW	DUPAGE	64	9
			CONTRACT NO. 62G64	
		ILLINOIS	FED. AID PROJECT	





CLASS B PATCHES (CONTINUED)								
CROSS STREET		DIRECTION	LANE	PAVEMENT	PAVEMENT	TYPE II	TYPE III	TYPE IV
FROM	TO	EB/WB NB/SB	NO.	PATCH WIDTH	PATCH LENGTH	PATCHES (SQ YD)	PATCHES (SQ YD)	PATCHES (SQ YD)
PRARIE	FAIRFIELD WAY	EB	3	12	6	8		
PRARIE	FAIRFIELD WAY	EB	1	12	6	8		
PRARIE	FAIRFIELD WAY	EB	3	12	6	8		
PRARIE	FAIRFIELD WAY	EB	3	12	22			29
PRARIE	FAIRFIELD WAY	EB	3	12	11	15		
PRARIE	FAIRFIELD WAY	EB	1	12	6	8		
PRARIE	FAIRFIELD WAY	EB	1	12	15		20	
PRARIE	FAIRFIELD WAY	EB	3	12	15		20	
PRARIE	FAIRFIELD WAY	EB	1	12	15		20	
PRARIE	FAIRFIELD WAY	EB	3	12	6	8		
PRARIE	FAIRFIELD WAY	EB	3	12	6	8		
PRARIE	FAIRFIELD WAY	EB	3	12	15		20	
PRARIE	FAIRFIELD WAY	EB	1	12	8	11		
PRARIE	STA 113+67/GLEN ELN	WB	1	12	15		20	
PRARIE	STA 113+67/GLEN ELN	WB	1	12	15		20	
PRARIE	STA 113+67/GLEN ELN	WB	3	12	15		20	
PRARIE	STA 113+67/GLEN ELN	WB	3	12	21			28
PRARIE	STA 113+67/GLEN ELN	WB	1	12	15		20	
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PRARIE	STA 113+67/GLEN ELN	WB	3	12	6	8		
PRARIE	STA 113+67/GLEN ELN	WB	1	12	6	8		
PRARIE	STA 113+67/GLEN ELN	WB	3	12	6	8		
PRARIE	STA 113+67/GLEN ELN	WB	1	12	6	8		
PRARIE	STA 113+67/GLEN ELN	WB	3	12	8	11		
PRARIE	STA 113+67/GLEN ELN	WB	3	12	6	8		
PRARIE	STA 113+67/GLEN ELN	WB	3	12	6	8		
STA 113+67/GLEN ELN	END PCC PATCHING	EB	1	12	15		20	
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STA 113+67/GLEN ELN	END PCC PATCHING	EB	3	12	6	8		
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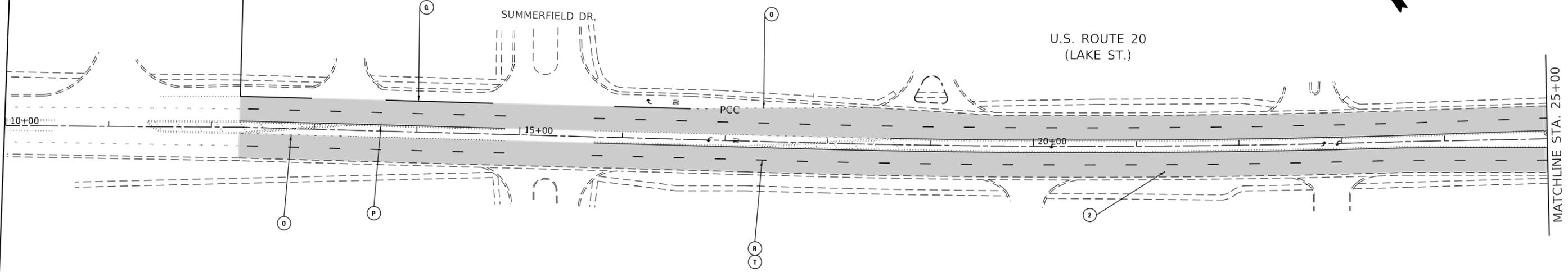
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
21	2018-026-RS-SW	DUPAGE	64	12
CONTRACT NO. 62G64				
		ILLINOIS FED. AID PROJECT		

PROJECT STARTS:  
STA 12+27.5



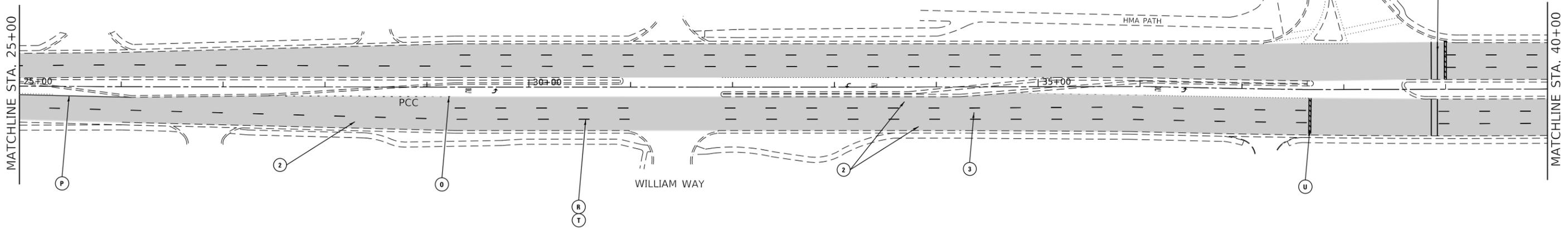
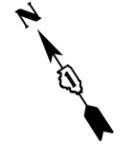
**NOTES**

1. BETWEEN STA 12+27.5 AND STA 113+67, ALL PATCHES SHALL BE CLASS B, WITH EXCEPTION OF LANE 2 (MIDDLE LANE) AND INTERSECTIONS WHICH SHALL USE PRECAST CONCRETE PAVEMENT SLABS. BETWEEN STA 113+67 TO 191+54, ALL PATCHES SHALL BE CLASS D.

**PAVEMENT MARKING LEGEND**

- |  |   |   |
|--|---|---|
| (A) PROP. THERMOPLASTIC PAVEMENT MARKING DOUBLE LINES 4", YELLOW (TYP.)  | (L) PROP. THERMOPLASTIC PAVEMENT MARKING-LINE 6", 2" DASH - 6' SKIP, WHITE (TYP.)     | (1) PROP. POLY HMA ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80 1 3/4"<br>PROP. POLY LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 3/4"<br>PROP. PCC SURFACE REMOVAL, VARIABLE DEPTH<br>PROP. CLASS D PATCHES, 14" |
| (B) PROP. THERMOPLASTIC PAVEMENT MARKING-LINE 12", YELLOW (TYP.)   | (M) PROP. THERMOPLASTIC PAVEMENT MARKING-LINE 12", WHITE (TYP.)                       | (2) PROP. CLASS B PATCHES, 10" (LOCATION TO BE DETERMINED BY ENGINEER)  |
| (C) PROP. THERMOPLASTIC PAVEMENT MARKING DOUBLE LINE 4", YELLOW (TYP.)   | (N) PROP. THERMOPLASTIC PAVEMENT MARKING-LINE 4", YELLOW (TYP.)                       | (3) PROPOSED PRECAST PANELS   |
| (D) PROP. THERMOPLASTIC PAVEMENT TURN LANE MARKING-LINE 6", WHITE (TYP.)   | (O) PROP. MODIFIED URETHANE PAVEMENT MARKING-LINE 6", 2" DASH - 6' SKIP, WHITE (TYP.) | (4) PROP. HMA ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80 1 3/4"<br>PROP. POLY LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 3/4"<br>PROP. HMA SURFACE REMOVAL, 2 1/2"<br>PROP. CLASS D PATCHES, 14"              |
| (E) PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 4", 10' DASH-30' SKIP, WHITE (TYP.)   | (P) PROP. MODIFIED URETHANE PAVEMENT MARKING-LINE 4" YELLOW (TYP.)                    | PROP. PROFILE DIAMOND GRINDING OF PCC PAVEMENT  |
| (F) PROP. THERMOPLASTIC PAVEMENT MARKING-LINE 4", 10' DASH-30'SKIP, YELLOW (TYP.)  | (Q) PROP. MODIFIED URETHANE PAVEMENT MARKING-LINE 6" WHITE (TYP.)                     |   |
| (G) PROP. THERMOPLASTIC PAVEMENT STOP MARKING-LINE 24", WHITE (TYP.)   | (R) PROP. PREFORMED PLASTIC PAVEMENT MARKING TYPE B 7" SKIP, WHITE (TYP.)             |   |
| (H) PROP. THERMOPLASTIC PAVEMENT MARKING-LINE 8", WHITE (TYP.)   | (S) PROP. MODIFIED URETHANE PAVEMENT SCHOOL CROSSWALK MARKING-LINE 12", WHITE (TYP.)  |   |
| (I) PROP. THERMOPLASTIC PAVEMENT PEDESTRIAN CROSSWALK MARKING-LINE 6", WHITE (TYP.)  | (T) PROP. GROOVING FOR RECESSED PAVEMENT MARKING 5"                                   |   |
| (J) PROP. THERMOPLASTIC PAVEMENT SCHOOL CROSSWALK MARKING-LINE 12", WHITE (TYP.)   | (U) PROP. MODIFIED URETHANE STOP MARKING-LINE 24", WHITE (TYP.)                       |   |
| (K) PROP. THERMOPLASTIC PAVEMENT BICYCLE & EQUESTRIAN HORIZONTAL MARKING-LINE 6",<br>DIAGONAL MARKING-LINE 12", WHITE (TYP.) |   |   |

ROSEDALE AVE.



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PLOT DATE = 12/14/2018	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ROADWAY & PAVEMENT MARKING PLAN  
U.S. ROUTE 20 ( SUMMERFIELD DR. - I-355)**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
21	2018-026-RS-SW	DUPAGE	64	13
CONTRACT NO. 62G64				
ILLINOIS FED. AID PROJECT				

PAVEMENT MARKING LEGEND

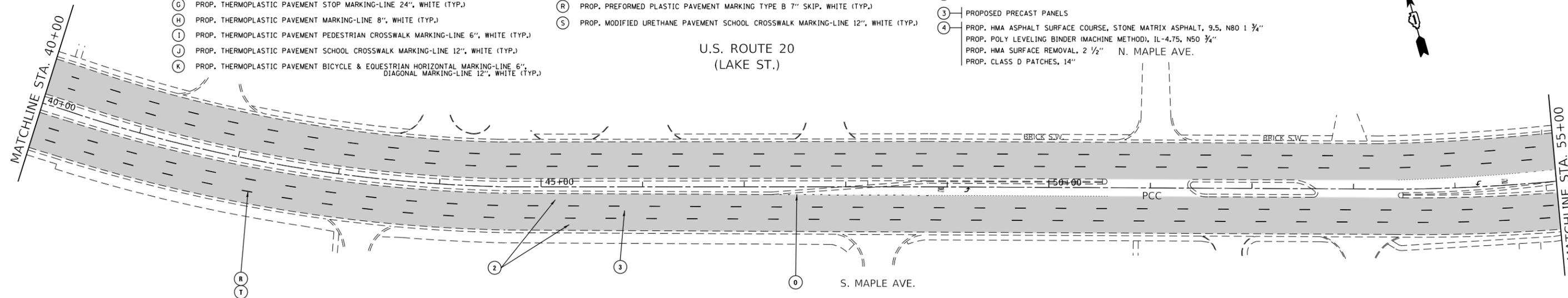
- (A) PROP. THERMOPLASTIC PAVEMENT MARKING DOUBLE LINES 4", YELLOW (TYP.)
- (B) PROP. THERMOPLASTIC PAVEMENT MARKING-LINE 12", YELLOW (TYP.)
- (C) PROP. THERMOPLASTIC PAVEMENT MARKING DOUBLE LINE 4", YELLOW (TYP.)
- (D) PROP. THERMOPLASTIC PAVEMENT TURN LANE MARKING-LINE 6", WHITE (TYP.)
- (E) PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 4", 10' DASH-30' SKIP, WHITE (TYP.)
- (F) PROP. THERMOPLASTIC PAVEMENT MARKING-LINE 4", 10' DASH-30' SKIP, YELLOW (TYP.)
- (G) PROP. THERMOPLASTIC PAVEMENT STOP MARKING-LINE 24", WHITE (TYP.)
- (H) PROP. THERMOPLASTIC PAVEMENT MARKING-LINE 8", WHITE (TYP.)
- (I) PROP. THERMOPLASTIC PAVEMENT PEDESTRIAN CROSSWALK MARKING-LINE 6", WHITE (TYP.)
- (J) PROP. THERMOPLASTIC PAVEMENT SCHOOL CROSSWALK MARKING-LINE 12", WHITE (TYP.)
- (K) PROP. THERMOPLASTIC PAVEMENT BICYCLE & EQUESTRIAN HORIZONTAL MARKING-LINE 6", DIAGONAL MARKING-LINE 12", WHITE (TYP.)

- (L) PROP. THERMOPLASTIC PAVEMENT MARKING-LINE 6", 2" DASH - 6' SKIP, WHITE (TYP.)
- (M) PROP. THERMOPLASTIC PAVEMENT MARKING-LINE 12", WHITE (TYP.)
- (N) PROP. THERMOPLASTIC PAVEMENT MARKING-LINE 4", YELLOW (TYP.)
- (O) PROP. MODIFIED URETHANE PAVEMENT MARKING-LINE 6", 2" DASH - 6' SKIP, WHITE (TYP.)
- (P) PROP. MODIFIED URETHANE PAVEMENT MARKING-LINE 4" YELLOW (TYP.)
- (Q) PROP. MODIFIED URETHANE PAVEMENT MARKING-LINE 6" WHITE (TYP.)
- (R) PROP. PREFORMED PLASTIC PAVEMENT MARKING TYPE B 7" SKIP, WHITE (TYP.)
- (S) PROP. MODIFIED URETHANE PAVEMENT SCHOOL CROSSWALK MARKING-LINE 12", WHITE (TYP.)

- (T) PROP. GROOVING FOR RECESSED PAVEMENT MARKING 5"
- (U) PROP. MODIFIED URETHANE STOP MARKING-LINE 24", WHITE (TYP.)
- (1) PROP. POLY HMA ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80 1 3/4"  
PROP. POLY LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 3/4"  
PROP. PCC SURFACE REMOVAL, VARIABLE DEPTH  
PROP. CLASS D PATCHES, 14"
- (2) PROP. CLASS B PATCHES, 10" (LOCATION TO BE DETERMINED BY ENGINEER)
- (3) PROPOSED PRECAST PANELS
- (4) PROP. HMA ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80 1 3/4"  
PROP. POLY LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 3/4"  
PROP. HMA SURFACE REMOVAL, 2 1/2" N. MAPLE AVE.  
PROP. CLASS D PATCHES, 14"

PROP. PROFILE DIAMOND GRINDED OF PCC PAVEMENT

U.S. ROUTE 20  
(LAKE ST.)

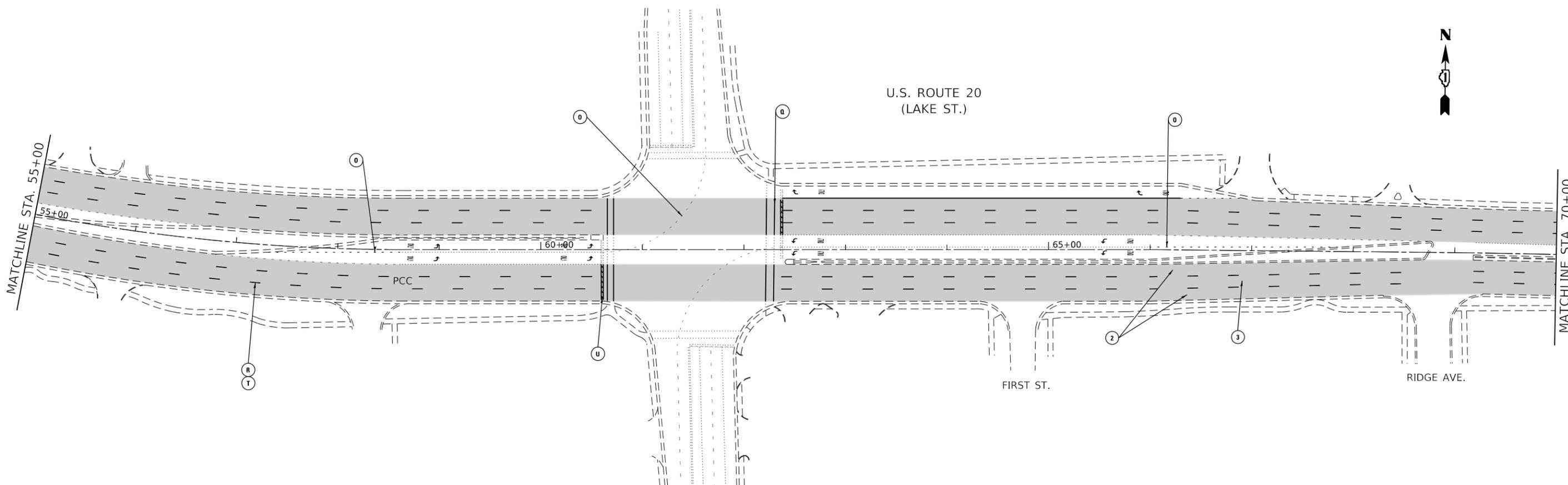


NOTES

1. BETWEEN STA 12+27.5 AND STA 113+67, ALL PATCHES SHALL BE CLASS B, WITH EXCEPTION OF LANE 2 (MIDDLE LANE) AND INTERSECTIONS WHICH SHALL USE PRECAST CONCRETE PAVEMENT SLABS. BETWEEN STA 113+67 TO 191+54, ALL PATCHES SHALL BE CLASS D.

BLOOMINGDALE RD.

U.S. ROUTE 20  
(LAKE ST.)



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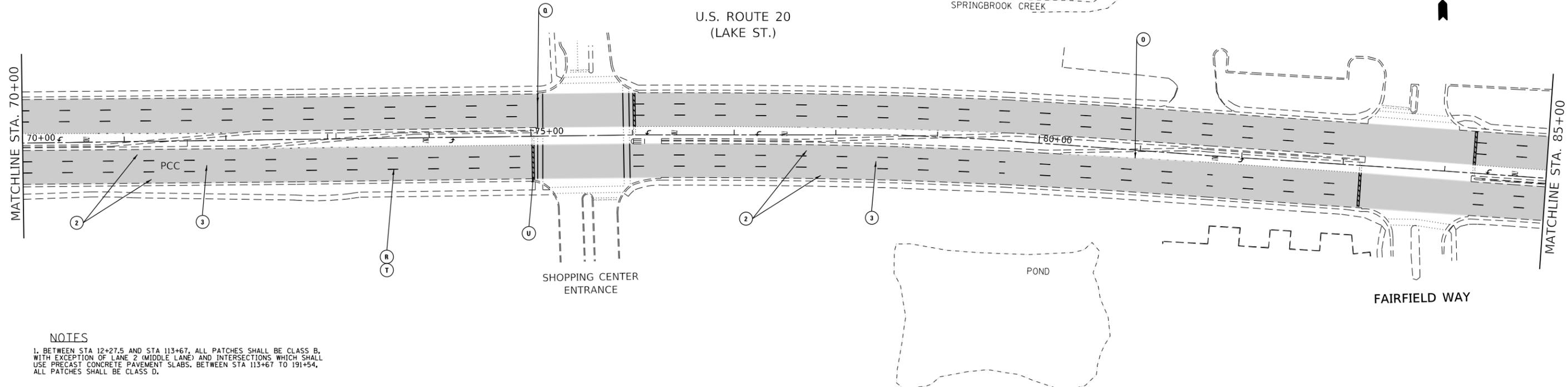
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROADWAY & PAVEMENT MARKING PLAN  
U.S. ROUTE 20 ( SUMMERFIELD DR. - I-355)

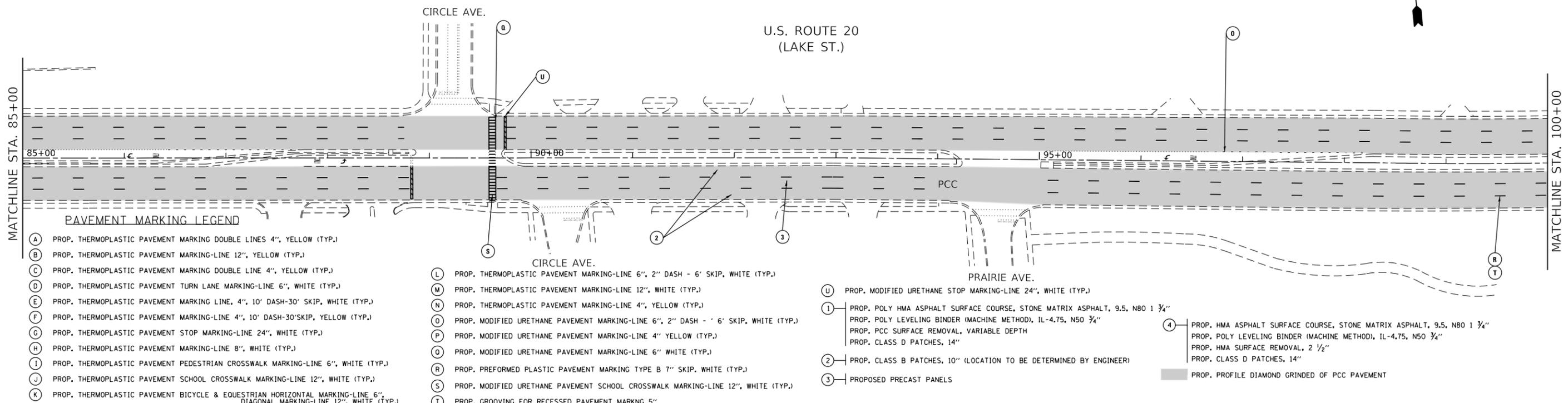
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SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
21	2018-026-R5-SW	DUPAGE	64	14
CONTRACT NO. 62G64				
ILLINOIS FED. AID PROJECT				



**NOTES**  
 1. BETWEEN STA 12+27.5 AND STA 113+67, ALL PATCHES SHALL BE CLASS B, WITH EXCEPTION OF LANE 2 (MIDDLE LANE) AND INTERSECTIONS WHICH SHALL USE PRECAST CONCRETE PAVEMENT SLABS. BETWEEN STA 113+67 TO 191+54, ALL PATCHES SHALL BE CLASS D.



**PAVEMENT MARKING LEGEND**

- (A) PROP. THERMOPLASTIC PAVEMENT MARKING DOUBLE LINES 4", YELLOW (TYP.)
- (B) PROP. THERMOPLASTIC PAVEMENT MARKING-LINE 12", YELLOW (TYP.)
- (C) PROP. THERMOPLASTIC PAVEMENT MARKING DOUBLE LINE 4", YELLOW (TYP.)
- (D) PROP. THERMOPLASTIC PAVEMENT TURN LANE MARKING-LINE 6", WHITE (TYP.)
- (E) PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 4", 10' DASH-30' SKIP, WHITE (TYP.)
- (F) PROP. THERMOPLASTIC PAVEMENT MARKING-LINE 4", 10' DASH-30'SKIP, YELLOW (TYP.)
- (G) PROP. THERMOPLASTIC PAVEMENT STOP MARKING-LINE 24", WHITE (TYP.)
- (H) PROP. THERMOPLASTIC PAVEMENT MARKING-LINE 8", WHITE (TYP.)
- (I) PROP. THERMOPLASTIC PAVEMENT PEDESTRIAN CROSSWALK MARKING-LINE 6", WHITE (TYP.)
- (J) PROP. THERMOPLASTIC PAVEMENT SCHOOL CROSSWALK MARKING-LINE 12", WHITE (TYP.)
- (K) PROP. THERMOPLASTIC PAVEMENT BICYCLE & EQUESTRIAN HORIZONTAL MARKING-LINE 6", DIAGONAL MARKING-LINE 12", WHITE (TYP.)
- (L) PROP. THERMOPLASTIC PAVEMENT MARKING-LINE 6", 2" DASH - 6' SKIP, WHITE (TYP.)
- (M) PROP. THERMOPLASTIC PAVEMENT MARKING-LINE 12", WHITE (TYP.)
- (N) PROP. THERMOPLASTIC PAVEMENT MARKING-LINE 4", YELLOW (TYP.)
- (O) PROP. MODIFIED URETHANE PAVEMENT MARKING-LINE 6", 2" DASH - 6' SKIP, WHITE (TYP.)
- (P) PROP. MODIFIED URETHANE PAVEMENT MARKING-LINE 4" YELLOW (TYP.)
- (Q) PROP. MODIFIED URETHANE PAVEMENT MARKING-LINE 6" WHITE (TYP.)
- (R) PROP. PREFORMED PLASTIC PAVEMENT MARKING TYPE B 7" SKIP, WHITE (TYP.)
- (S) PROP. MODIFIED URETHANE PAVEMENT SCHOOL CROSSWALK MARKING-LINE 12", WHITE (TYP.)
- (T) PROP. GROOVING FOR RECESSED PAVEMENT MARKING 5"
- (U) PROP. MODIFIED URETHANE STOP MARKING-LINE 24", WHITE (TYP.)
- (1) PROP. POLY HMA ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80 1 3/4"  
 PROP. POLY LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 3/4"  
 PROP. PCC SURFACE REMOVAL, VARIABLE DEPTH  
 PROP. CLASS D PATCHES, 14"
- (2) PROP. CLASS B PATCHES, 10" (LOCATION TO BE DETERMINED BY ENGINEER)
- (3) PROPOSED PRECAST PANELS
- (4) PROP. HMA ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80 1 3/4"  
 PROP. POLY LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 3/4"  
 PROP. HMA SURFACE REMOVAL, 2 1/2"  
 PROP. CLASS D PATCHES, 14"
- PROP. PROFILE DIAMOND GRIEDED OF PCC PAVEMENT

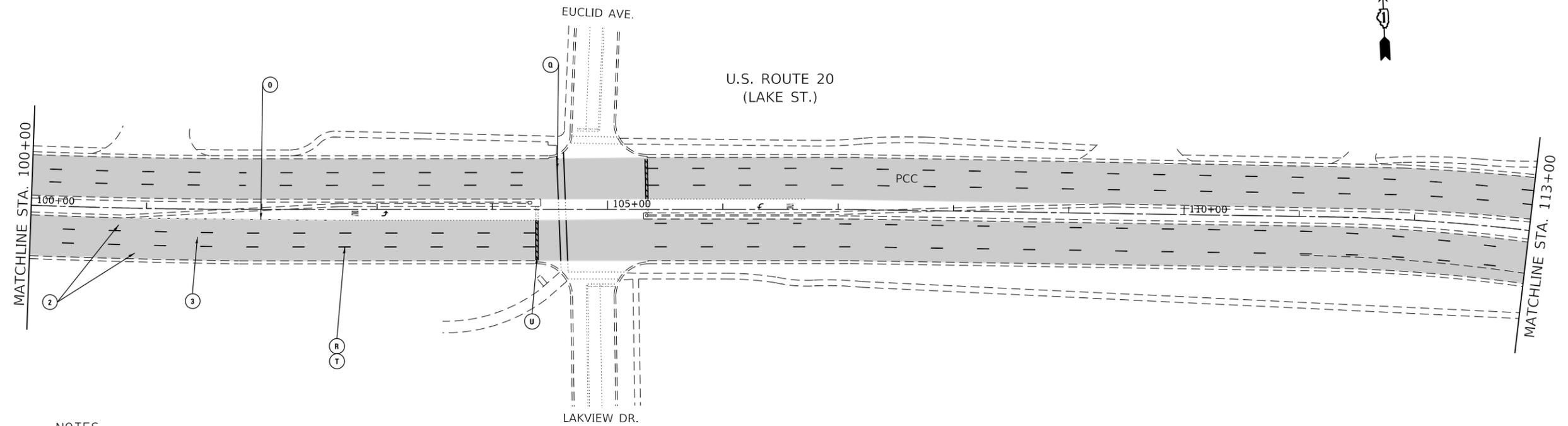
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PLOT DATE = 12/14/2018	DATE -	REVISD -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

<b>ROADWAY &amp; PAVEMENT MARKING PLAN</b>	
<b>U.S. ROUTE 20 ( SUMMERFIELD DR. - I-355)</b>	
SCALE: 1"=50'	SHEET OF SHEETS STA. TO STA.

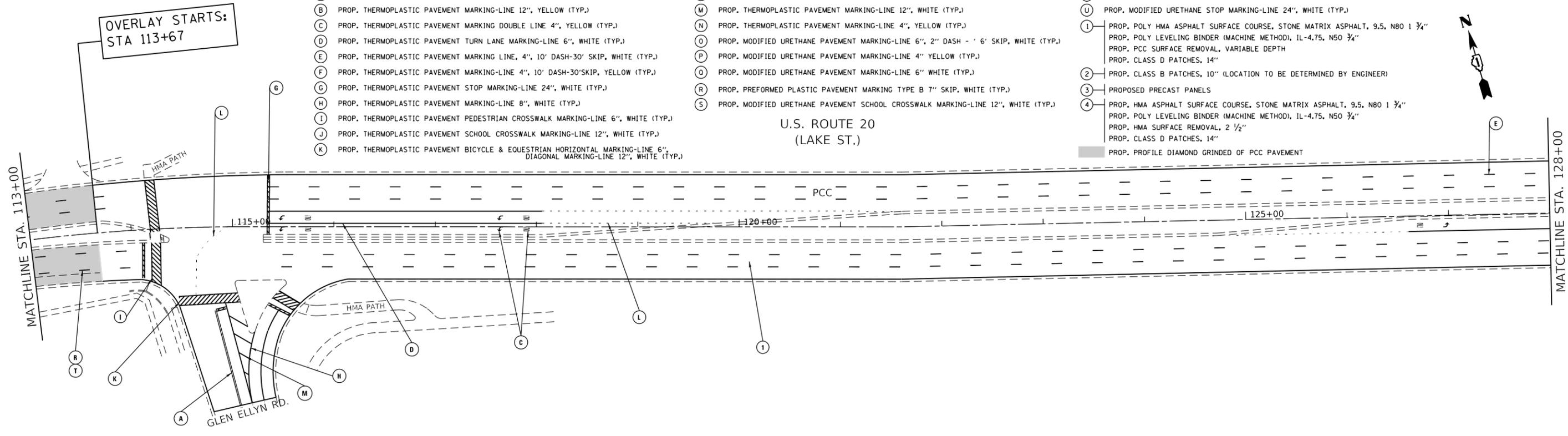
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
21	2018-026-R5-SW	DUPAGE	64	15
CONTRACT NO. 62G64				
ILLINOIS		FED. AID PROJECT		



**NOTES**  
 1. BETWEEN STA 12+27.5 AND STA 113+67, ALL PATCHES SHALL BE CLASS B, WITH EXCEPTION OF LANE 2 (MIDDLE LANE) AND INTERSECTIONS WHICH SHALL USE PRECAST CONCRETE PAVEMENT SLABS. BETWEEN STA 113+67 TO 191+54, ALL PATCHES SHALL BE CLASS D.

**PAVEMENT MARKING LEGEND**

- |   |   |  |
|---|---|--|
| (A) PROP. THERMOPLASTIC PAVEMENT MARKING DOUBLE LINES 4", YELLOW (TYP.)   | (L) PROP. THERMOPLASTIC PAVEMENT MARKING-LINE 6", 2" DASH - 6' SKIP, WHITE (TYP.)     | (T) PROP. GROOVING FOR RECESSED PAVEMENT MARKNG 5"                               |
| (B) PROP. THERMOPLASTIC PAVEMENT MARKING-LINE 12", YELLOW (TYP.)  | (M) PROP. THERMOPLASTIC PAVEMENT MARKING-LINE 12", WHITE (TYP.)                       | (U) PROP. MODIFIED URETHANE STOP MARKING-LINE 24", WHITE (TYP.)                  |
| (C) PROP. THERMOPLASTIC PAVEMENT MARKING DOUBLE LINE 4", YELLOW (TYP.)  | (N) PROP. THERMOPLASTIC PAVEMENT MARKING-LINE 4", YELLOW (TYP.)                       | (1) PROP. POLY HMA ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80 1 3/4" |
| (D) PROP. THERMOPLASTIC PAVEMENT TURN LANE MARKING-LINE 6", WHITE (TYP.)  | (O) PROP. MODIFIED URETHANE PAVEMENT MARKING-LINE 6", 2" DASH - 6' SKIP, WHITE (TYP.) | PROP. POLY LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 3/4"                   |
| (E) PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 4", 10' DASH-30' SKIP, WHITE (TYP.)  | (P) PROP. MODIFIED URETHANE PAVEMENT MARKING-LINE 4" YELLOW (TYP.)                    | PROP. PCC SURFACE REMOVAL, VARIABLE DEPTH  |
| (F) PROP. THERMOPLASTIC PAVEMENT MARKING-LINE 4", 10' DASH-30'SKIP, YELLOW (TYP.)   | (Q) PROP. MODIFIED URETHANE PAVEMENT MARKING-LINE 6" WHITE (TYP.)                     | PROP. CLASS D PATCHES, 14"   |
| (G) PROP. THERMOPLASTIC PAVEMENT STOP MARKING-LINE 24", WHITE (TYP.)  | (R) PROP. PREFORMED PLASTIC PAVEMENT MARKING TYPE B 7" SKIP, WHITE (TYP.)             | (2) PROP. CLASS B PATCHES, 10" (LOCATION TO BE DETERMINED BY ENGINEER)           |
| (H) PROP. THERMOPLASTIC PAVEMENT MARKING-LINE 8", WHITE (TYP.)  | (S) PROP. MODIFIED URETHANE PAVEMENT SCHOOL CROSSWALK MARKING-LINE 12", WHITE (TYP.)  | (3) PROPOSED PRECAST PANELS  |
| (I) PROP. THERMOPLASTIC PAVEMENT PEDESTRIAN CROSSWALK MARKING-LINE 6", WHITE (TYP.)                                       |   | (4) PROP. HMA ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80 1 3/4"      |
| (J) PROP. THERMOPLASTIC PAVEMENT SCHOOL CROSSWALK MARKING-LINE 12", WHITE (TYP.)  |   | PROP. POLY LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 3/4"                   |
| (K) PROP. THERMOPLASTIC PAVEMENT BICYCLE & EQUESTRIAN HORIZONTAL MARKING-LINE 6", DIAGONAL MARKING-LINE 12", WHITE (TYP.) |   | PROP. HMA SURFACE REMOVAL, 2 1/2"  |
|   |   | PROP. CLASS D PATCHES, 14"   |
|   |   | PROP. PROFILE DIAMOND GRINDED OF PCC PAVEMENT                                    |



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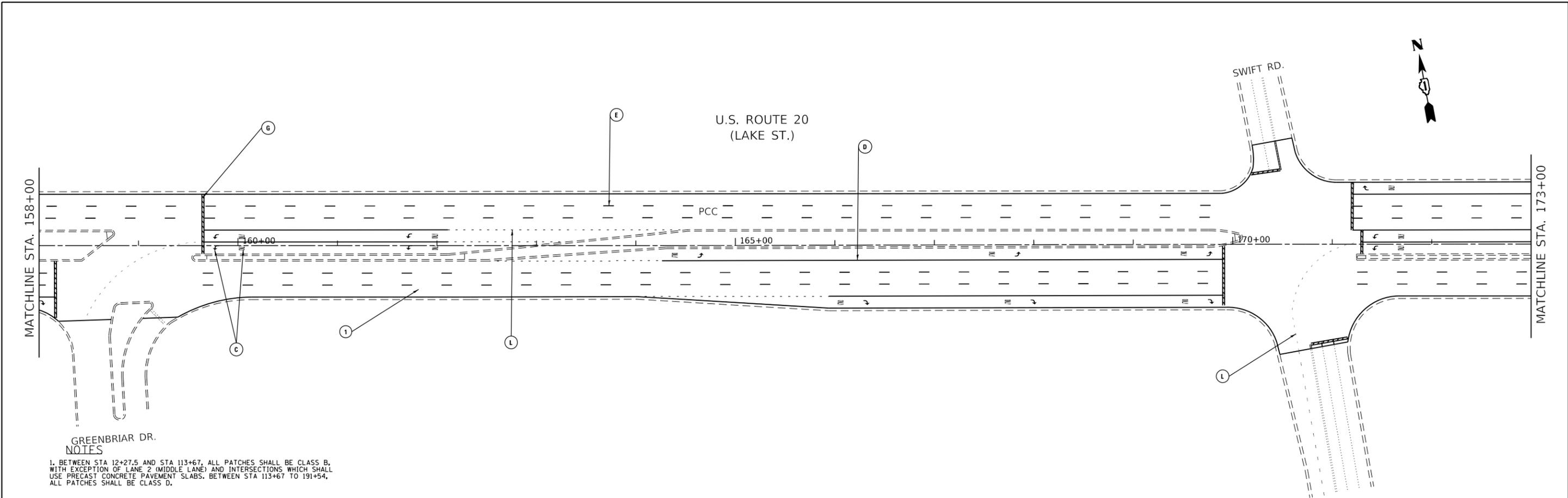
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	DATE -	REVISED -

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

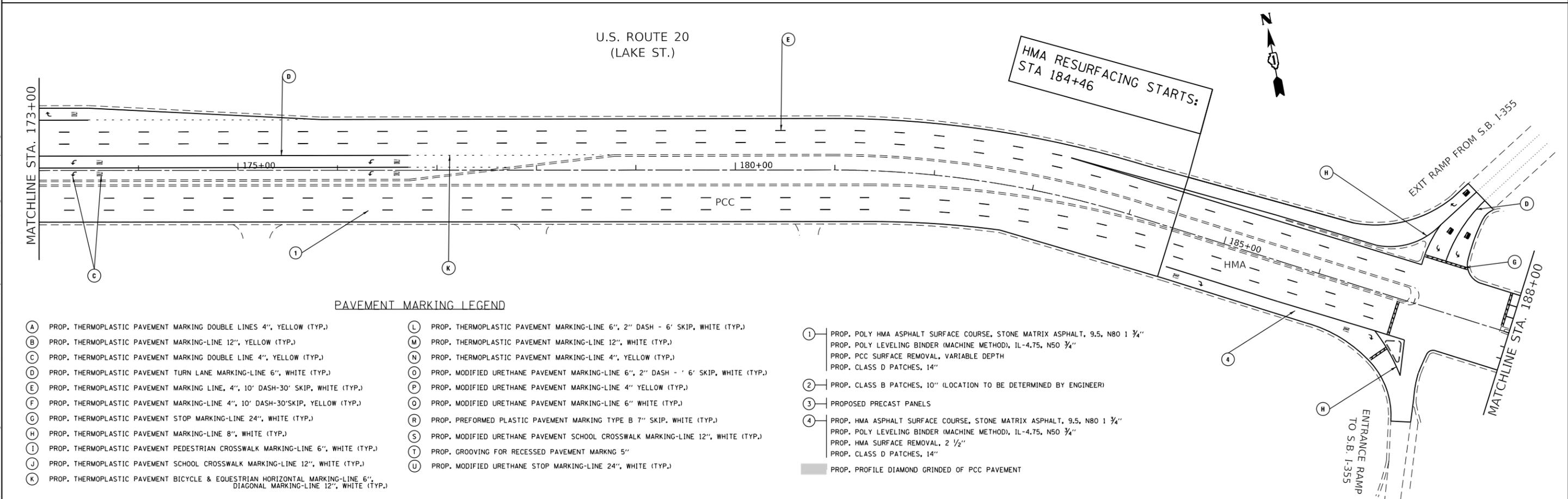
<b>ROADWAY &amp; PAVEMENT MARKING PLAN</b>	
<b>U.S. ROUTE 20 ( SUMMERFIELD DR. - I-355)</b>	
SCALE: 1"=50'	SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
21	2018-026-R5-SW	DUPAGE	64	16
CONTRACT NO. 62G64				
ILLINOIS FED. AID PROJECT				





**NOTES**  
 1. BETWEEN STA 12+27.5 AND STA 113+67, ALL PATCHES SHALL BE CLASS B, WITH EXCEPTION OF LANE 2 (MIDDLE LANE) AND INTERSECTIONS WHICH SHALL USE PRECAST CONCRETE PAVEMENT SLABS. BETWEEN STA 113+67 TO 191+54, ALL PATCHES SHALL BE CLASS D.



**HMA RESURFACING STARTS:**  
 STA 184+46

**PAVEMENT MARKING LEGEND**

- |   |   |  |
|---|---|--|
| (A) PROP. THERMOPLASTIC PAVEMENT MARKING DOUBLE LINES 4", YELLOW (TYP.)   | (L) PROP. THERMOPLASTIC PAVEMENT MARKING-LINE 6", 2" DASH - 6' SKIP, WHITE (TYP.)     | (1) PROP. POLY HMA ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80 1 3/4" |
| (B) PROP. THERMOPLASTIC PAVEMENT MARKING-LINE 12", YELLOW (TYP.)  | (M) PROP. THERMOPLASTIC PAVEMENT MARKING-LINE 12", WHITE (TYP.)                       | PROP. POLY LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 3/4"                   |
| (C) PROP. THERMOPLASTIC PAVEMENT MARKING DOUBLE LINE 4", YELLOW (TYP.)  | (N) PROP. THERMOPLASTIC PAVEMENT MARKING-LINE 4", YELLOW (TYP.)                       | PROP. PCC SURFACE REMOVAL, VARIABLE DEPTH  |
| (D) PROP. THERMOPLASTIC PAVEMENT TURN LANE MARKING-LINE 6", WHITE (TYP.)  | (O) PROP. MODIFIED URETHANE PAVEMENT MARKING-LINE 6", 2" DASH - 6' SKIP, WHITE (TYP.) | PROP. CLASS D PATCHES, 14"   |
| (E) PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 4", 10' DASH-30' SKIP, WHITE (TYP.)  | (P) PROP. MODIFIED URETHANE PAVEMENT MARKING-LINE 4" YELLOW (TYP.)                    | (2) PROP. CLASS B PATCHES, 10" (LOCATION TO BE DETERMINED BY ENGINEER)           |
| (F) PROP. THERMOPLASTIC PAVEMENT MARKING-LINE 4", 10' DASH-30'SKIP, YELLOW (TYP.)   | (Q) PROP. MODIFIED URETHANE PAVEMENT MARKING-LINE 6" WHITE (TYP.)                     | (3) PROPOSED PRECAST PANELS  |
| (G) PROP. THERMOPLASTIC PAVEMENT STOP MARKING-LINE 24", WHITE (TYP.)  | (R) PROP. PREFORMED PLASTIC PAVEMENT MARKING TYPE B 7" SKIP, WHITE (TYP.)             | (4) PROP. HMA ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80 1 3/4"      |
| (H) PROP. THERMOPLASTIC PAVEMENT MARKING-LINE 8", WHITE (TYP.)  | (S) PROP. MODIFIED URETHANE PAVEMENT SCHOOL CROSSWALK MARKING-LINE 12", WHITE (TYP.)  | PROP. POLY LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 3/4"                   |
| (I) PROP. THERMOPLASTIC PAVEMENT PEDESTRIAN CROSSWALK MARKING-LINE 6", WHITE (TYP.)                                       | (T) PROP. GROOVING FOR RECESSED PAVEMENT MARKING 5"                                   | PROP. HMA SURFACE REMOVAL, 2 1/2"  |
| (J) PROP. THERMOPLASTIC PAVEMENT SCHOOL CROSSWALK MARKING-LINE 12", WHITE (TYP.)  | (U) PROP. MODIFIED URETHANE STOP MARKING-LINE 24", WHITE (TYP.)                       | PROP. CLASS D PATCHES, 14"   |
| (K) PROP. THERMOPLASTIC PAVEMENT BICYCLE & EQUESTRIAN HORIZONTAL MARKING-LINE 6", DIAGONAL MARKING-LINE 12", WHITE (TYP.) |   | PROP. PROFILE DIAMOND GRINDED OF PCC PAVEMENT                                    |

MODEL: Default  
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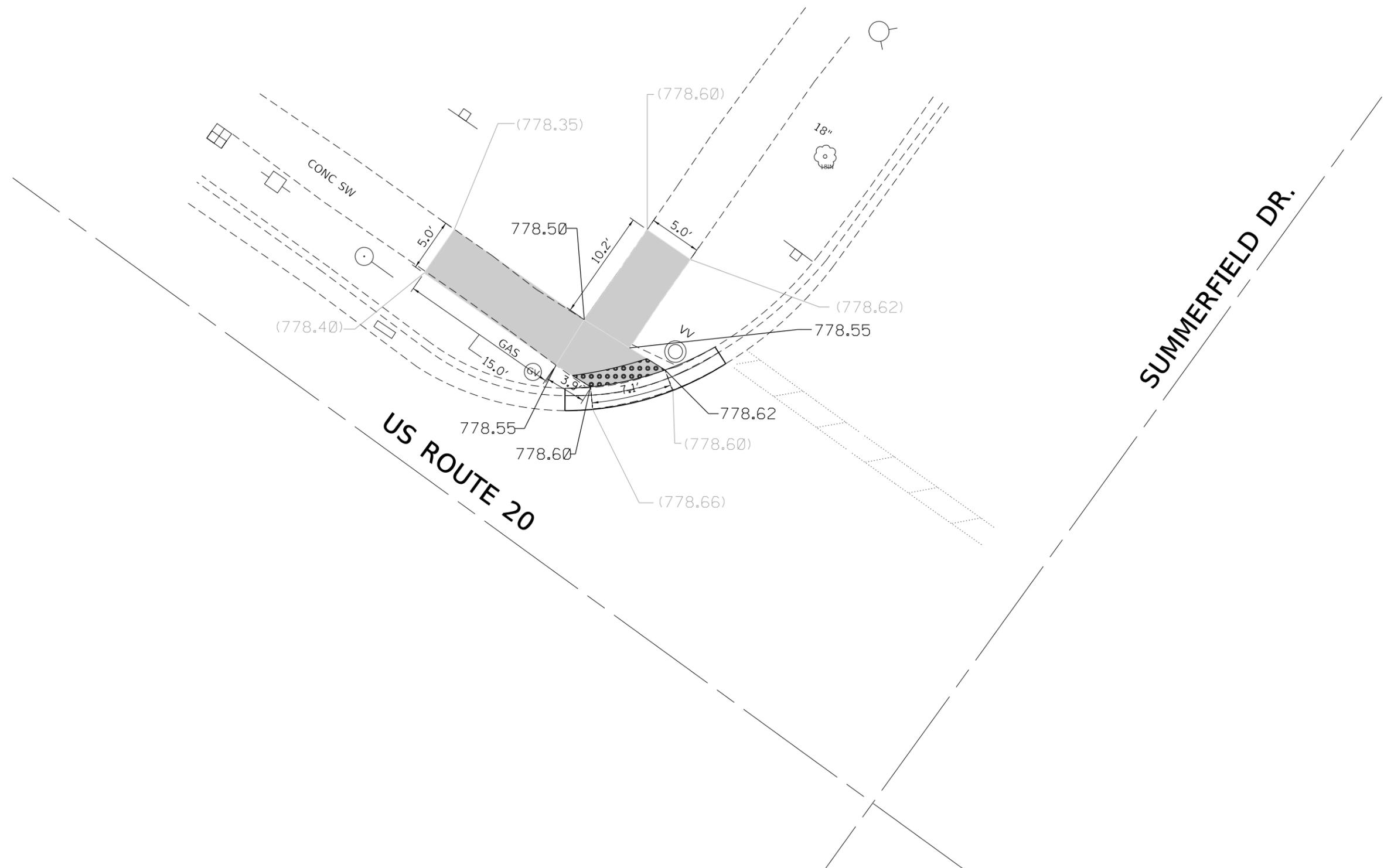
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PLOT DATE = 12/14/2018	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

<b>ROADWAY &amp; PAVEMENT MARKING PLAN</b>	
<b>U.S. ROUTE 20 ( SUMMERFIELD DR. - I-355)</b>	
SCALE: 1"=50'	SHEET OF SHEETS STA. TO STA.

F.A.P. RTE. 21	SECTION 2018-026-R5-SW	COUNTY DUPAGE	TOTAL SHEETS 64	SHEET NO. 18
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				





REFERENCE BENCH MARK ELEV 674.80  
 BENCHMARK: CUT SQUARE SOUTH CORNER BASE OF TRAFFIC SIGNAL WITH ARM  
 LOCATION: NORTH WEST CORNER OF US RTE. 20 AND SUMMERFIELD DR.

**LEGEND**

- xx.xx' EXISTING LENGTH
- PROPOSED SIDE CURB
- ( ) EXISTING ELEVATION/SLOPE
- PROPOSED SIDEWALK
- DETECTABLE WARNINGS
- SIDEWALK REMOVAL  
REPLACE W/TOPSOIL & SOD

MODEL: Default  
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	DRAWN -	REVISED -
PLOT SCALE = 10.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 12/13/2018	DATE -	REVISED -

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

**ADA RAMP DETAILS (US 20 FROM W SUMMER FIELD DR TO I-355 (VETERANS  
 MEMORIAL TOLLWAY))**

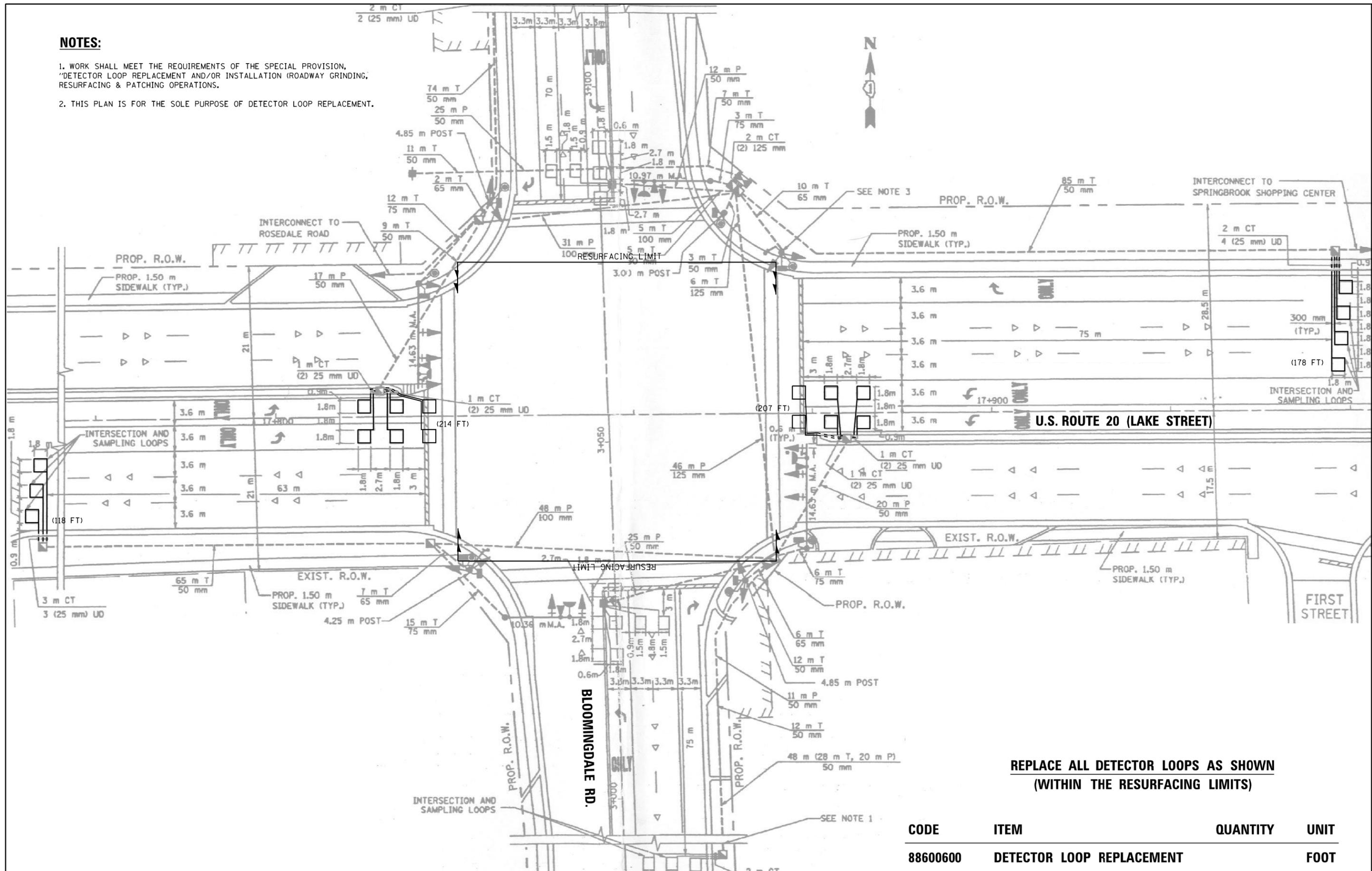
SCALE: NONE    SHEET    OF    SHEETS    STA.    TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
21	2018-026-R5-SW	DUPAGE	64	20
CONTRACT NO. 62G64				
ILLINOIS FED. AID PROJECT				



**NOTES:**

1. WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING & PATCHING OPERATIONS).
2. THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENT.



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

CODE	ITEM	QUANTITY	UNIT
88600600	DETECTOR LOOP REPLACEMENT		FOOT

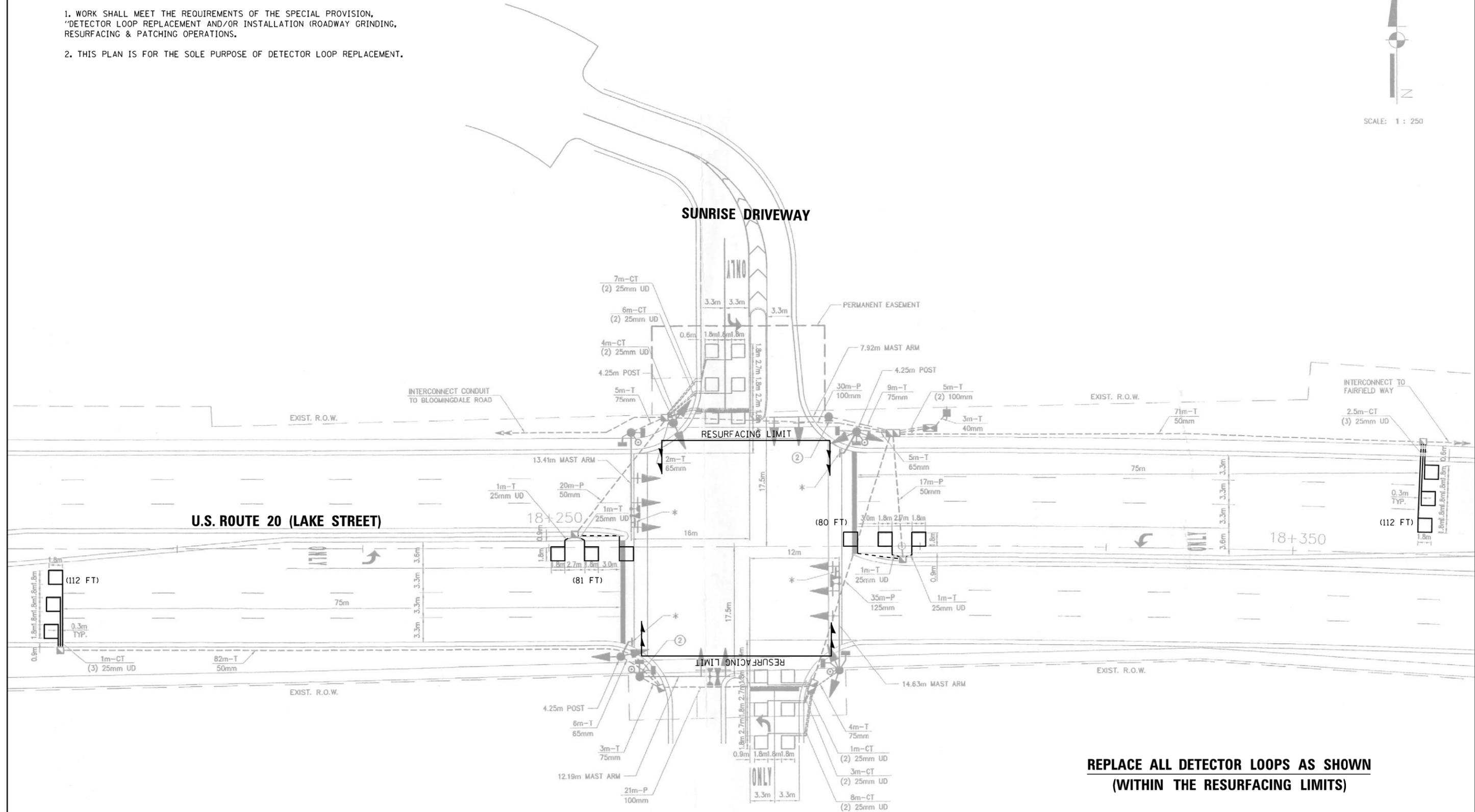
FILE NAME = 62064 -US 20 @ Bloomingdale Rd.dgn	USER NAME = vargaso	DESIGNED - AV	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DETECTOR LOOP REPLACEMENT PLAN U.S. ROUTE (LAKE ST.) AT BLOOMINGDALE RD.</b>	F.A.P. RTE. 21	SECTION 2018-026-RS-SW	COUNTY DUPAGE	TOTAL SHEETS 64	SHEET NO. 22		
Default	PLOT SCALE = 48,0470' / in.	CHECKED - LP	REVISED -			SCALE:	SHEET OF SHEETS STA. TO STA.	ILLINOIS/FED. AID PROJECT				
	PLOT DATE = 7/16/2018	DATE - 07/16/2018	REVISED -									
CONTRACT NO. 62G64												

**NOTES:**

1. WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING & PATCHING OPERATIONS).
2. THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENT.



SCALE: 1 : 250



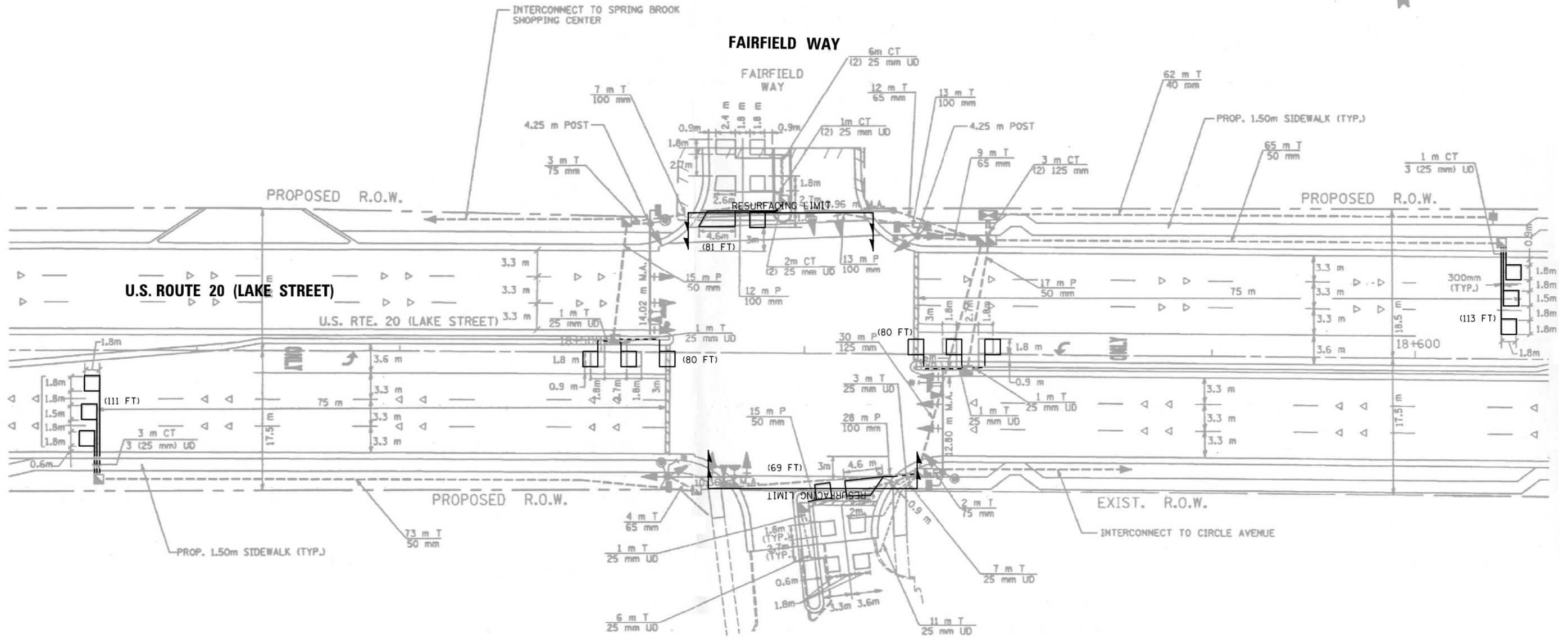
**REPLACE ALL DETECTOR LOOPS AS SHOWN  
(WITHIN THE RESURFACING LIMITS)**

CODE	ITEM	QUANTITY	UNIT
88600600	DETECTOR LOOP REPLACEMENT		FOOT

FILE NAME = 62064 -US 20 @ Shopping Center.dgn	USER NAME = vargeso	DESIGNED - AV	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DETECTOR LOOP REPLACEMENT PLAN U.S. ROUTE (LAKE ST.) AT SPRINGBROOK SHOPPING CENTER.</b>	F.A.P. RTE. 21	SECTION 2018-026-R5-SW	COUNTY DUPAGE	TOTAL SHEETS 64	SHEET NO. 23		
PLOT SCALE = 40.0023' / in.	CHECKED - LP	REVISED -	REVISED -			SCALE:	SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT			
Default	PLOT DATE = 7/16/2018	DATE - 07/16/2018	REVISED -									
CONTRACT NO. 62064												

**NOTES:**

1. WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING & PATCHING OPERATIONS).
2. THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENT.



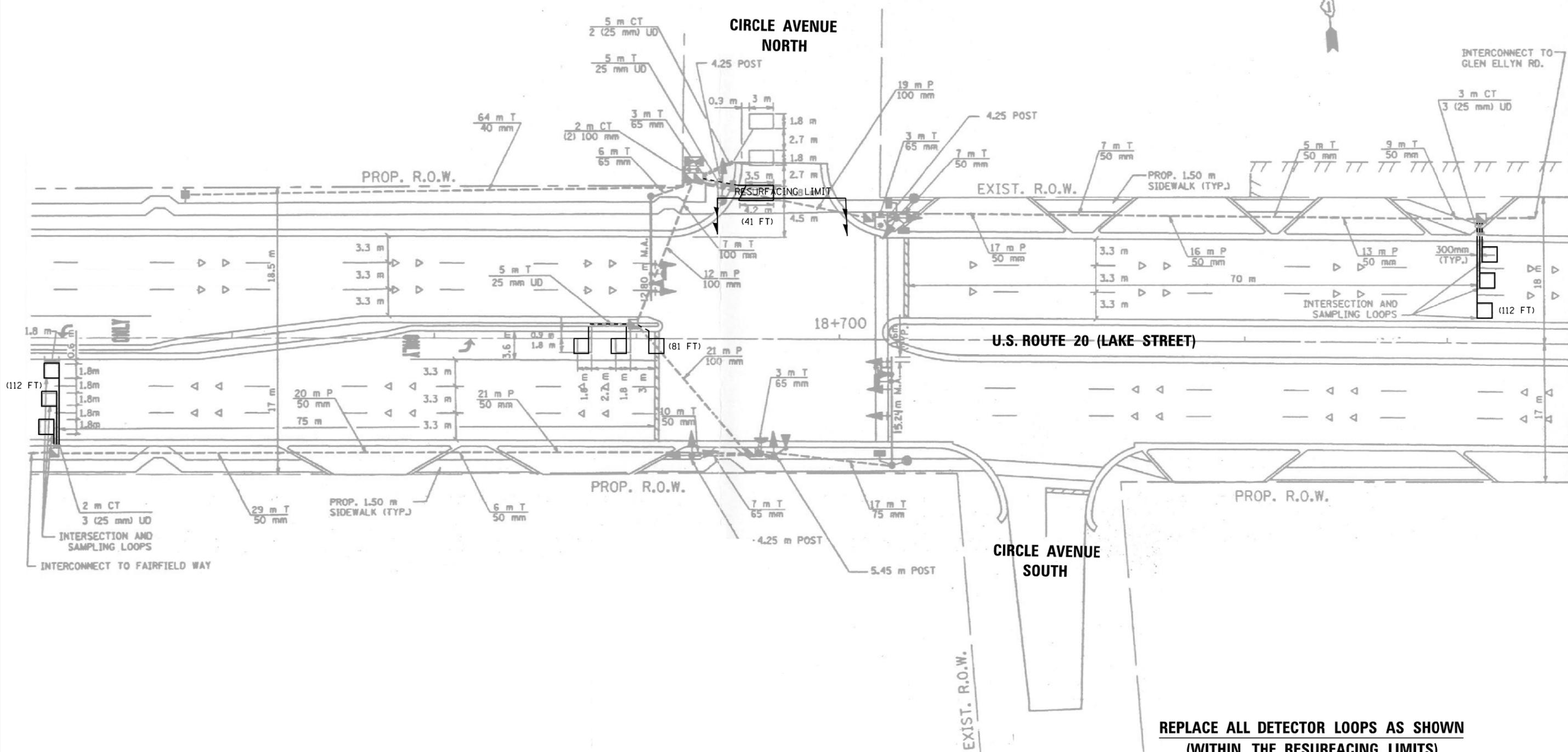
**REPLACE ALL DETECTOR LOOPS AS SHOWN  
(WITHIN THE RESURFACING LIMITS)**

CODE	ITEM	QUANTITY	UNIT
88600600	DETECTOR LOOP REPLACEMENT		FOOT

FILE NAME = 62064 -US 20 @ Fairfield Way.dgn	USER NAME = vargaso	DESIGNED - AV	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DETECTOR LOOP REPLACEMENT PLAN U.S. ROUTE (LAKE ST.) AT FAIRFIELD WAY</b>	F.A.P. RTE. 21	SECTION 2018-026-RS-SW	COUNTY DUPAGE	TOTAL SHEETS 64	SHEET NO. 24		
Default	PLOT SCALE = 48.0292' / in.	CHECKED - LP	REVISED -			SCALE:	SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT			
	PLOT DATE = 7/16/2018	DATE - 07/16/2018	REVISED -			CONTRACT NO. 62G64						

**NOTES:**

1. WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING & PATCHING OPERATIONS).
2. THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENT.



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

CODE	ITEM	QUANTITY	UNIT
88600600	DETECTOR LOOP REPLACEMENT		FOOT

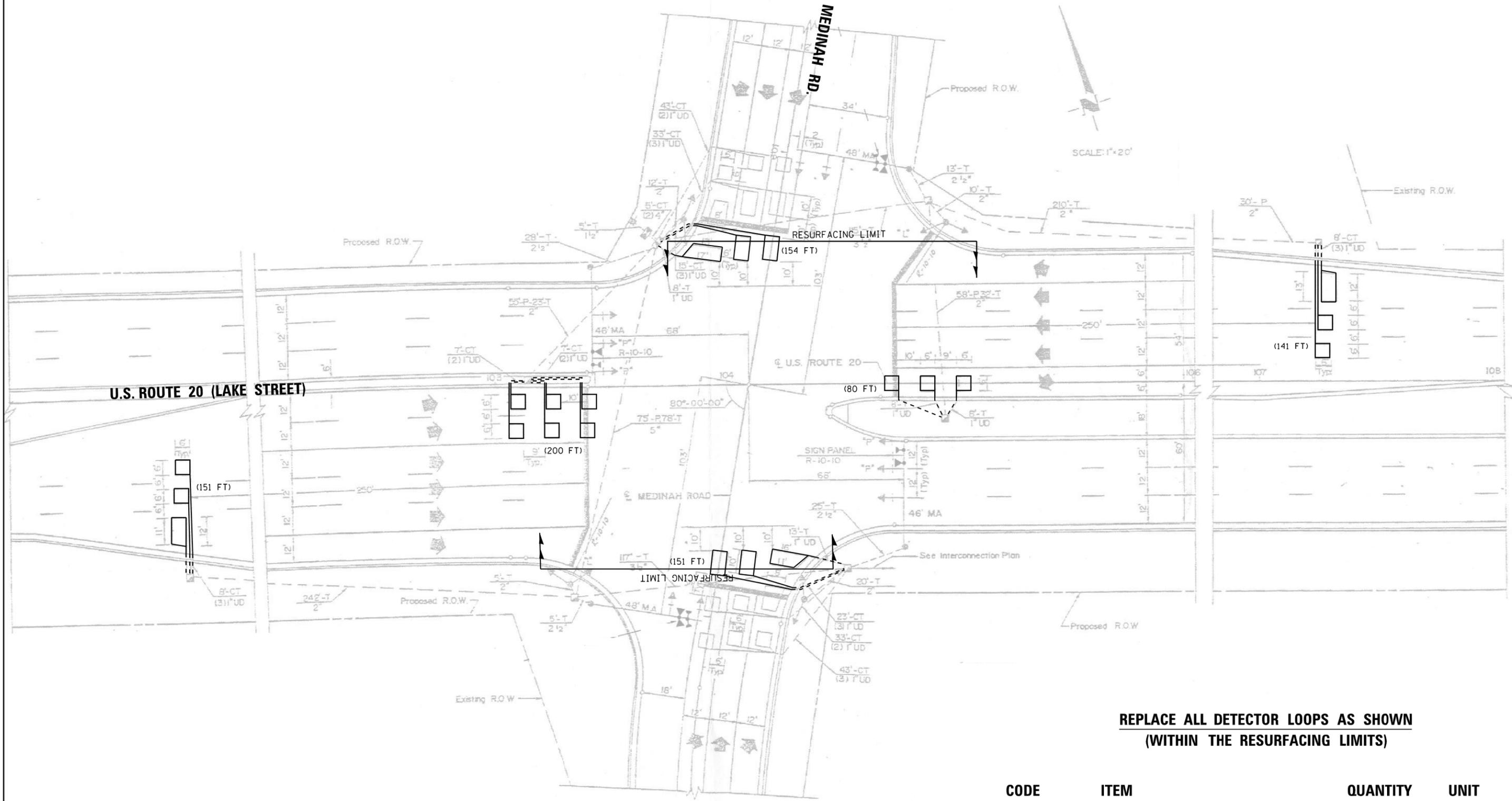
FILE NAME = 62064 -US 20 @ Circle Ave.dgn	USER NAME = vargaso	DESIGNED - AV	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DETECTOR LOOP REPLACEMENT PLAN U.S. ROUTE (LAKE ST.) AT CIRCLE AVENUE</b>	F.A.P. RTE. 21	SECTION 2018-026-RS-SW	COUNTY DUPAGE	TOTAL SHEETS 64	SHEET NO. 25		
Default	PLOT SCALE = 48.0355' / in.	CHECKED - LP	REVISED -			SCALE:	SHEET OF SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT				
	PLOT DATE = 7/16/2018	DATE - 07/16/2018	REVISED -									





**NOTES:**

1. WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING & PATCHING OPERATIONS).
2. THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENT.



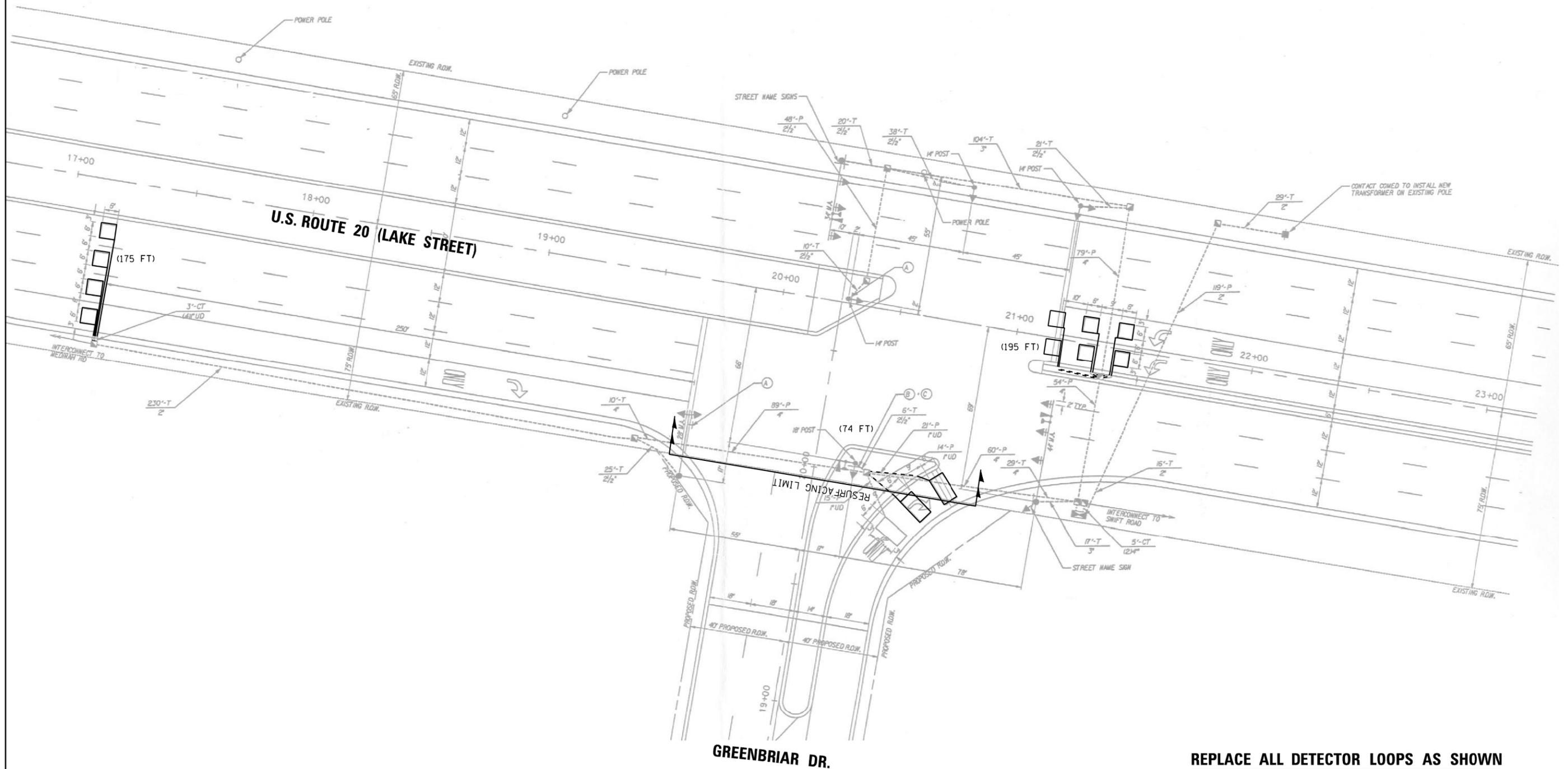
**REPLACE ALL DETECTOR LOOPS AS SHOWN  
(WITHIN THE RESURFACING LIMITS)**

CODE	ITEM	QUANTITY	UNIT
88600600	DETECTOR LOOP REPLACEMENT		FOOT

FILE NAME = 62064 -US 20 @ Medinah Rd.dgn	USER NAME = vargaso	DESIGNED - AV	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DETECTOR LOOP REPLACEMENT PLAN U.S. ROUTE (LAKE ST.) AT MEDINAH RD.</b>	F.A.P. RTE. 21	SECTION 2018-026-RS-SW	COUNTY DUPAGE	TOTAL SHEETS 64	SHEET NO. 28	
Default	PLOT SCALE = 48.0161' / in.	CHECKED - LP	REVISED -			SCALE:	SHEET OF SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT			
	PLOT DATE = 7/18/2018	DATE - 07/18/2018	REVISED -								

**NOTES:**

1. WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING & PATCHING OPERATIONS).
2. THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENT.



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

CODE	ITEM	QUANTITY	UNIT
88600600	DETECTOR LOOP REPLACEMENT		FOOT

FILE NAME = 62064 -US 20 @ Greenbriar Dr.dgn	USER NAME = vargese	DESIGNED - AV	REVISED -
		DRAWN - AV	REVISED -
		CHECKED - LP	REVISED -
		DATE - 07/18/2018	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

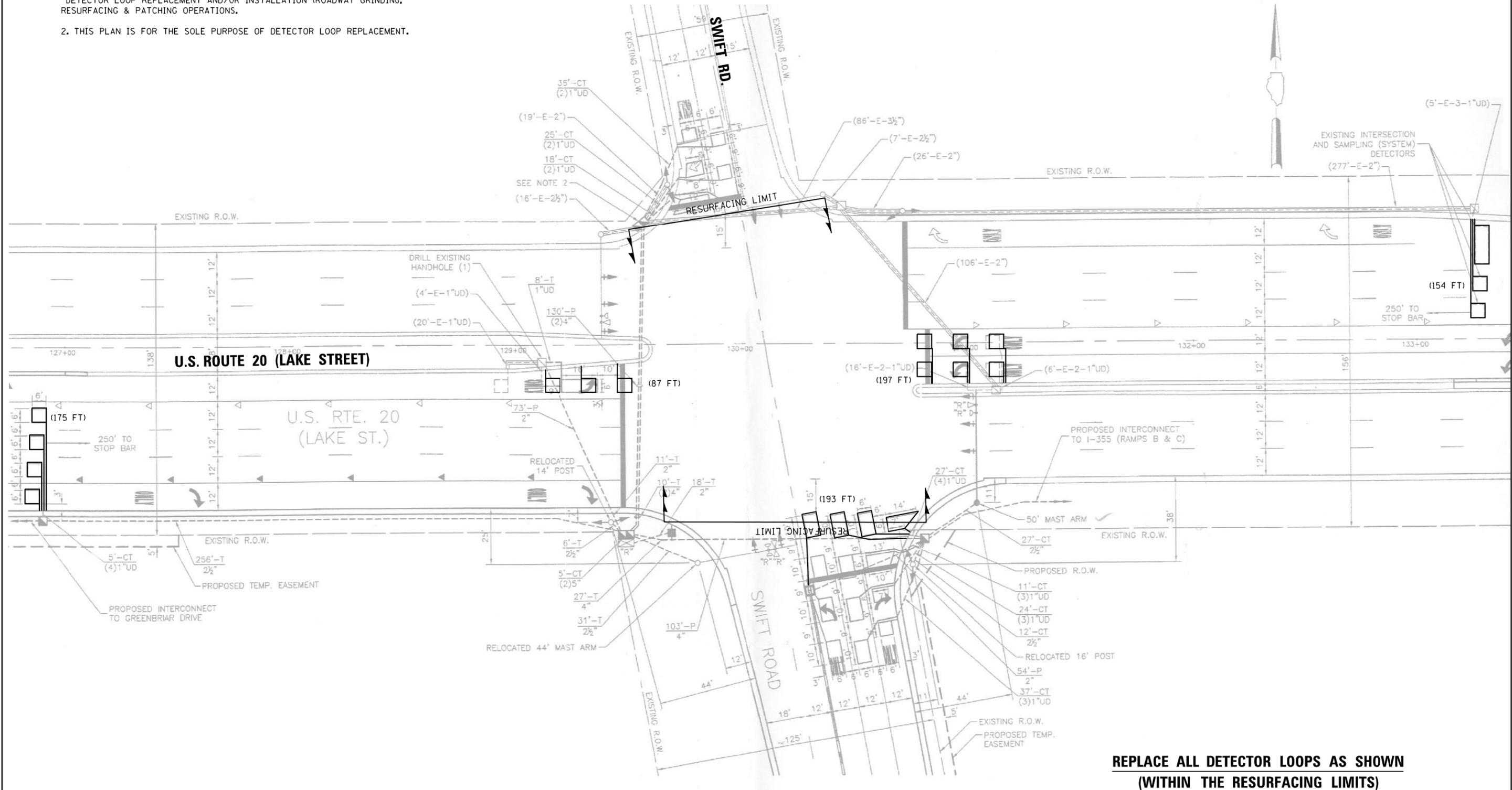
**DETECTOR LOOP REPLACEMENT PLAN  
U.S. ROUTE (LAKE ST.) AT GREENBRIAR DR.**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE. 21	SECTION 2018-026-RS-SW	COUNTY DUPAGE	TOTAL SHEETS 64	SHEET NO. 29
CONTRACT NO. 62064				ILLINOIS FED. AID PROJECT

**NOTES:**

1. WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING & PATCHING OPERATIONS).
2. THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENT.



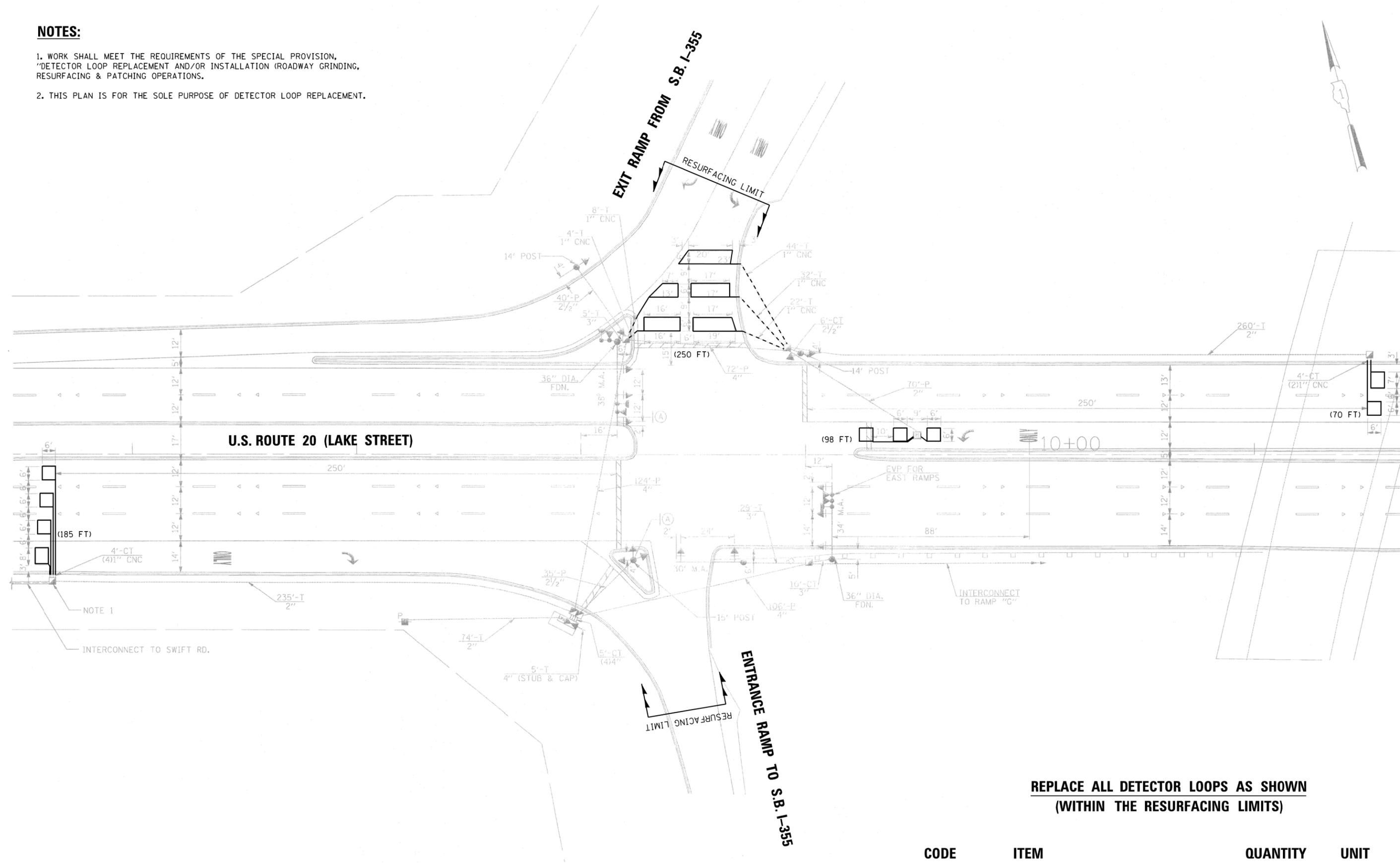
**REPLACE ALL DETECTOR LOOPS AS SHOWN  
(WITHIN THE RESURFACING LIMITS)**

CODE	ITEM	QUANTITY	UNIT
88600600	DETECTOR LOOP REPLACEMENT		FOOT

FILE NAME = 62G64 -US 20 @ Swift Rd.dgn	USER NAME = vargaso	DESIGNED - AV	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DETECTOR LOOP REPLACEMENT PLAN U.S. ROUTE (LAKE ST.) AT SWIFT RD.</b>	F.A.P. RTE. 21	SECTION 2018-026-RS-SW	COUNTY DUPAGE	TOTAL SHEETS 64	SHEET NO. 30		
Default	PLOT SCALE = 40.0315' / in.	CHECKED - LP	REVISED -			SCALE:	SHEET OF SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT				
	PLOT DATE = 7/18/2018	DATE - 07/18/2018	REVISED -									
CONTRACT NO. 62G64												

**NOTES:**

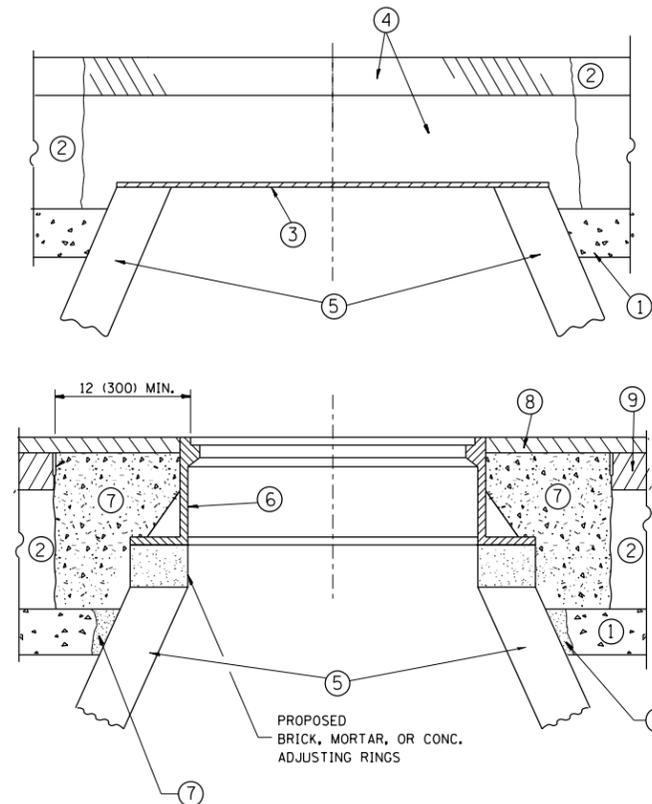
1. WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING & PATCHING OPERATIONS).
2. THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENT.



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

CODE	ITEM	QUANTITY	UNIT
88600600	DETECTOR LOOP REPLACEMENT	603	FOOT

FILE NAME = 62064 -US 20 @ I-355 Ramps.dgn	USER NAME = vargaso	DESIGNED - AV	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DETECTOR LOOP REPLACEMENT PLAN U.S. ROUTE (LAKE ST.) AT I-355 WEST RAMPS</b>	F.A.P. RTE. 21	SECTION 2018-026-R5-SW	COUNTY DUPAGE	TOTAL SHEETS 64	SHEET NO. 51		
Default	PLOT SCALE = 48.0044' / in.	CHECKED - LP	REVISED -			SCALE:	SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT			
	PLOT DATE = 7/19/2018	DATE - 07/19/2018	REVISED -									



**CONSTRUCTION PROCEDURES**

**STAGE 1 (BEFORE PAVEMENT MILLING)**

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1/2 (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

**STAGE 2 (AFTER PAVEMENT MILLING)**

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-1\* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

\* UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER."

**LEGEND**

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

**LOCATION OF STRUCTURES:**

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

**BASIS OF PAYMENT:**

REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."

THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

**NOTES:**

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

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

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

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

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

**DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING**

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

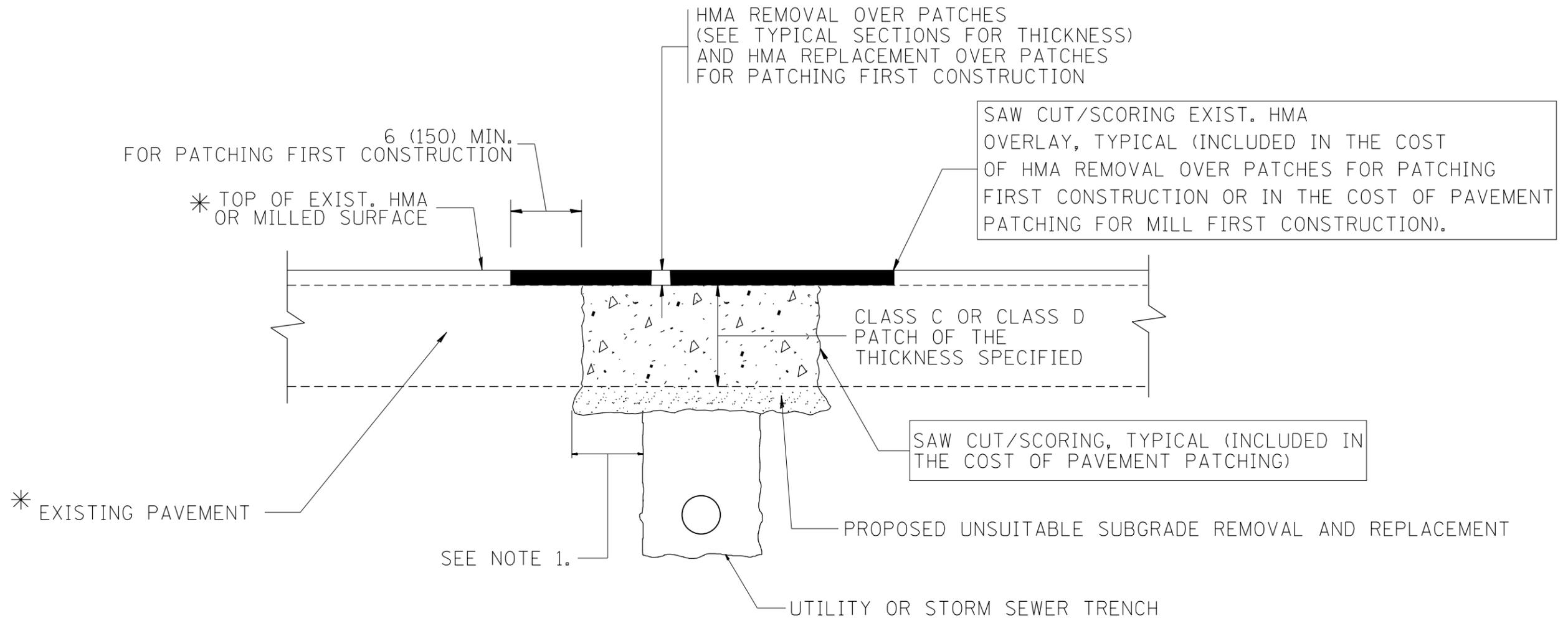
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	PLOT DATE = 12/13/2018	DATE - 10-25-94	REVISED - R. BORO 12-06-11

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETAILS FOR  
FRAMES AND LIDS ADJUSTMENT WITH MILLING**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
21	2018-026-RS-SW	DUPAGE	64	32
<b>BD600-03 (BD-8)</b>			<b>CONTRACT NO. 62G64</b>	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



\* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

**NOTES:**

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

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

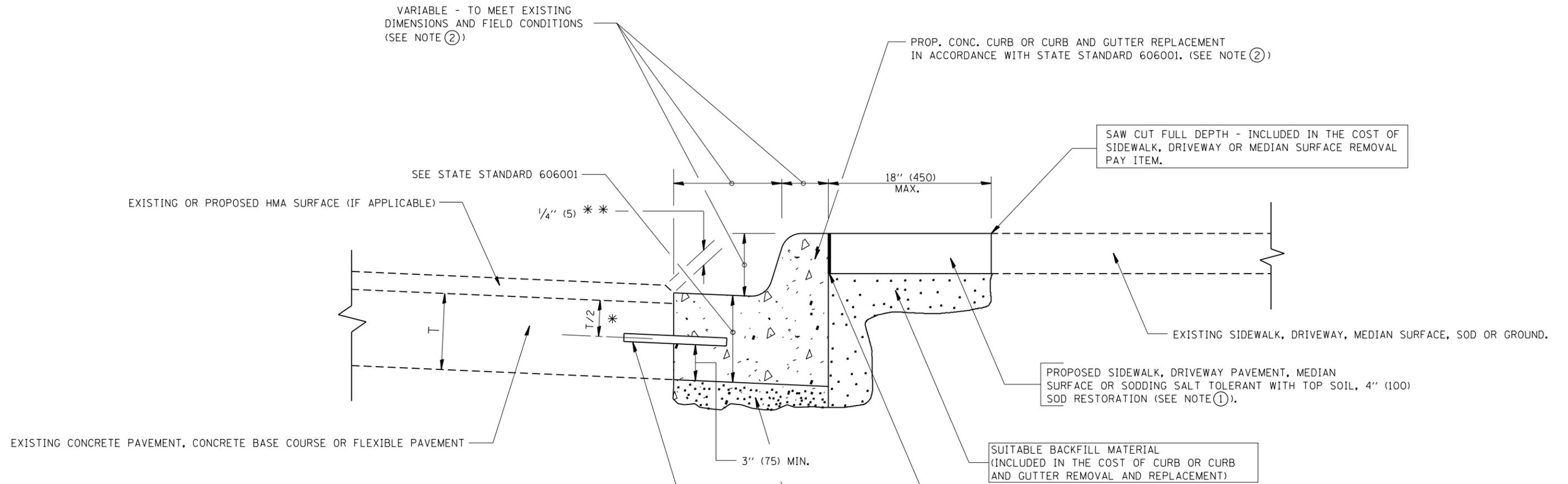
1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

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

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

FILE NAME =	USER NAME = khans	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw\11084EBIDINTEG.illinois.gov\PIWIDOT\Documents\DOT Offices\District 1\Projects\1325\BROWN\Design\DistStd.dgn	PLOT SCALE = 100.0002' / 1in.	CHECKED -	REVISED - R. BORO 01-01-07					21	2018-026-R5-SW	DUPAGE	64	33
	PLOT DATE = 12/13/2018	DATE - 10-25-94	REVISED - R. BORO 09-04-07		BD400-04 (BD-22)			CONTRACT NO. 62G64				
			REVISED - K. ENG 10-27-08		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.		FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT		



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

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

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

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

② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED

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

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

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

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

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

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

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

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

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

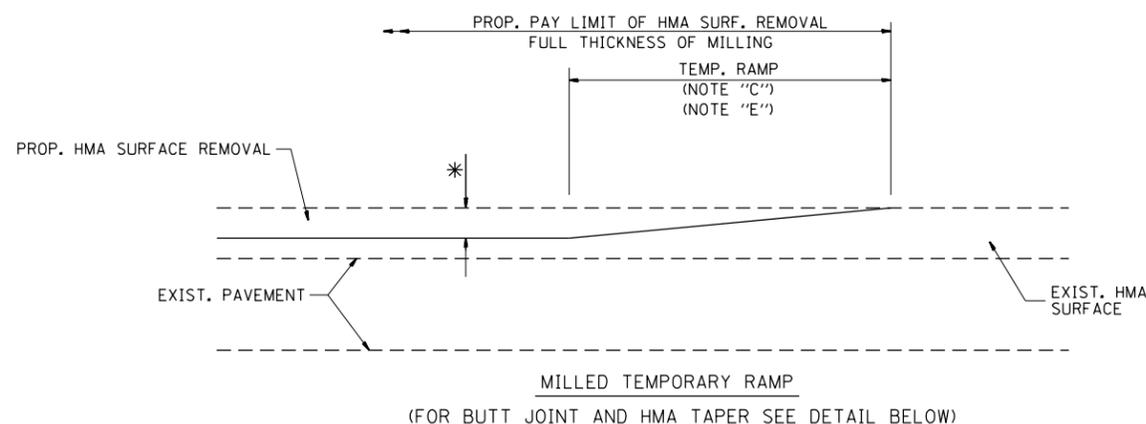
PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USUABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE 3).

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

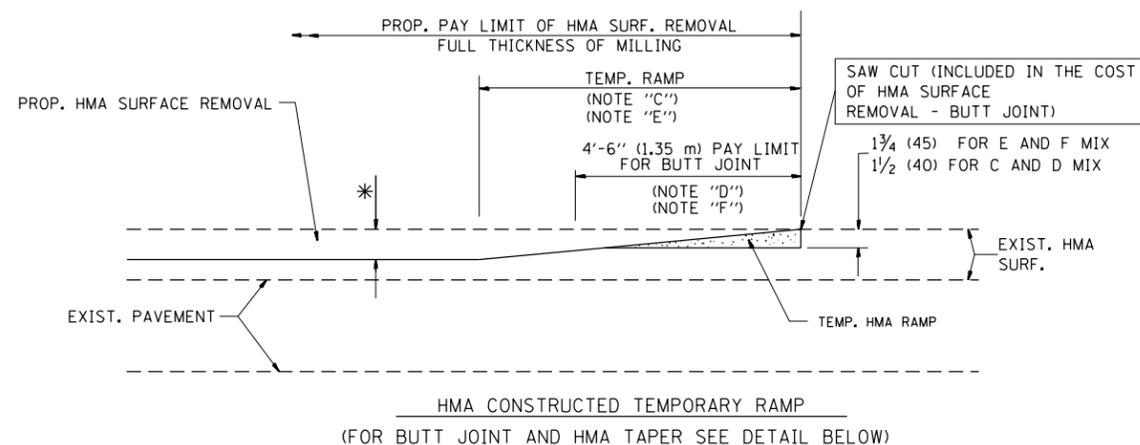
# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

FILE NAME =	USER NAME = khans	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw\1\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\DOT Offices\District 1\Projects\DI325\BROWN\Meta\Design\DistStd.dgn		REVISED - A. ABBAS 03-21-97	REVISED - M. GOMEZ 01-22-01			21	2018-026-RS-SW	DUPAGE	64	34
PLOT SCALE = 100.0002' / in.	CHECKED -	REVISED - R. BORO 12-15-09				<b>BD600-06 (BD-24)</b>		<b>CONTRACT NO. 62G64</b>		
PLOT DATE = 12/13/2018	DATE - 03-11-94					SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

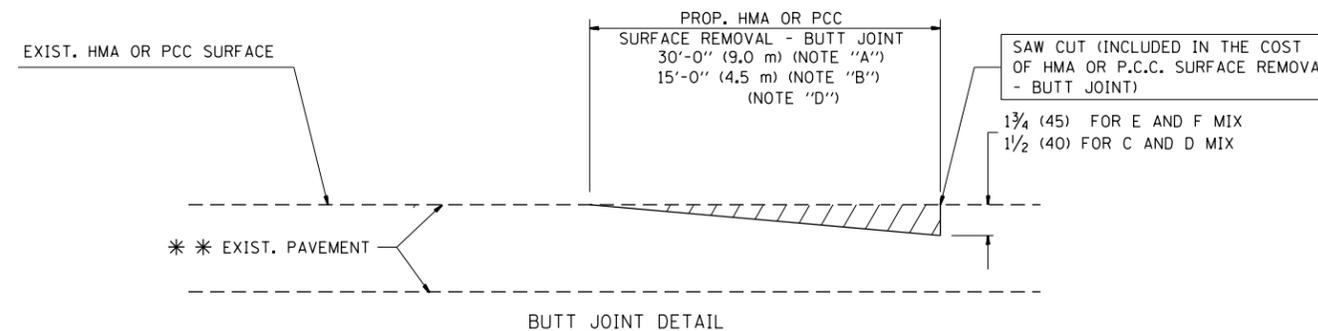


**OPTION 1**

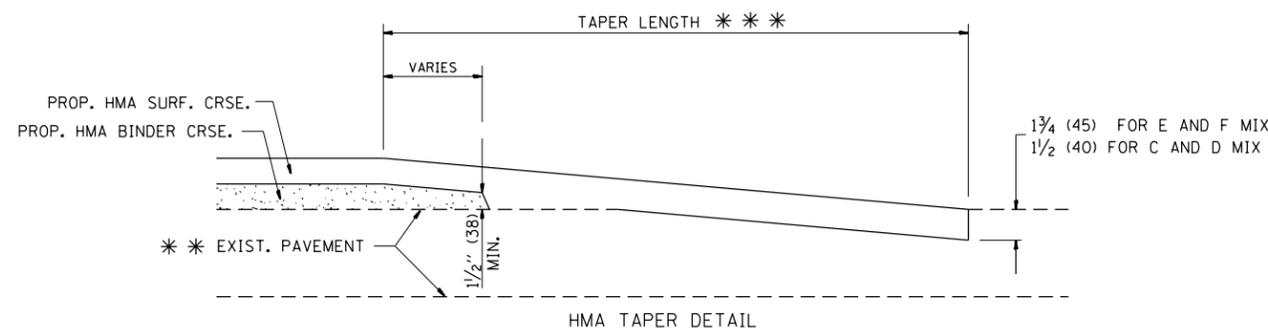


**OPTION 2**

**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.

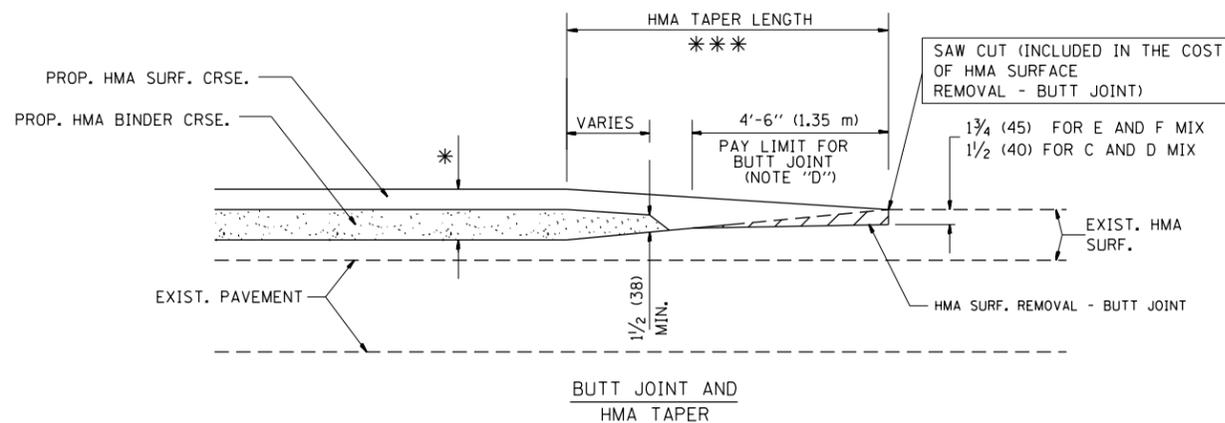
**NOTES**

- 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**

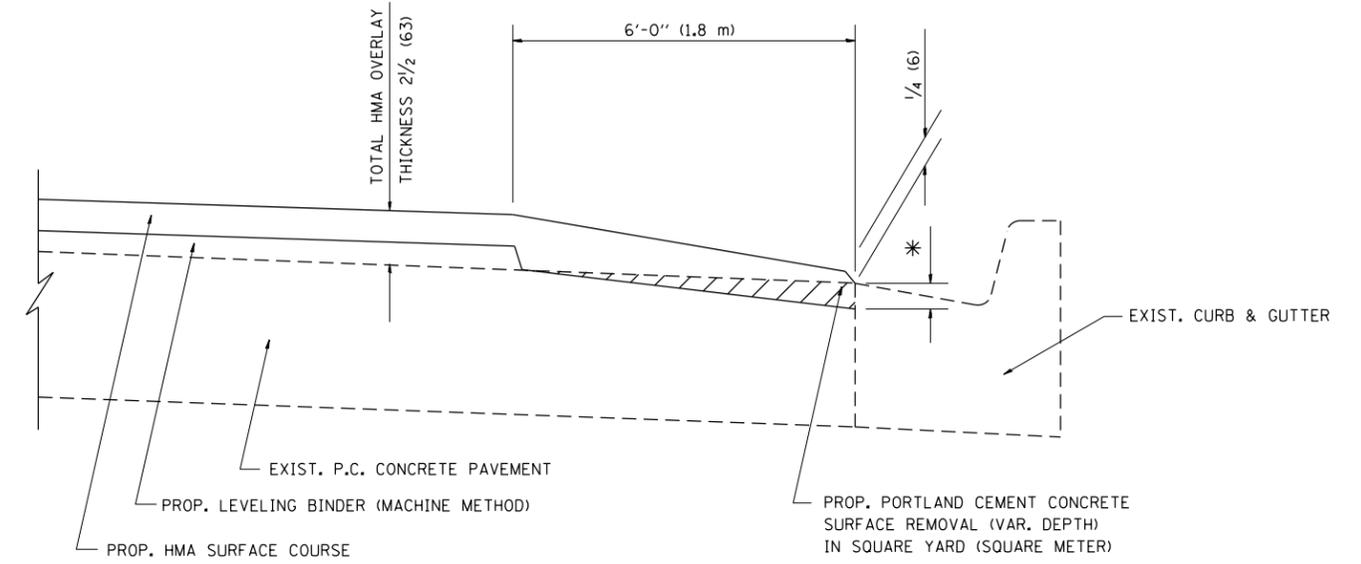
FILE NAME =	USER NAME = khans	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
p:\11084EBID\INTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\DI325\BROWNA\Meta\Design\DistStd.dgn			REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 1/8" = 1' / 1/4"	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 12/13/2018	DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BUTT JOINT AND  
HMA TAPER DETAILS**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
21	2018-026-RS-SW	DUPAGE	64	35
<b>BD400-05 BD32</b>		<b>CONTRACT NO. 62G64</b>		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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

HMA SURFACE	THICKNESS	THICKNESS	* MILLING AT GUTTER FLAG
MIX			
C OR D	1 1/2 (38)	1 (25)	1/4 (33)
E	1 3/4 (44)	3/4 (19)	1/2 (38)

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

FILE NAME =	USER NAME = khans	DESIGNED - R. SHAH	REVISED - A. ABBAS 05-05-9
p:\11\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\DI325\Drawings\Design\11std.dgn			REVISED - E. GOMEZ 12-21-00
Default	PLOT SCALE = 100.0002' / in.	CHECKED - A. ABBAS	REVISED - R. BORO 01-01-07
	PLOT DATE = 12/13/2018	DATE - 09-10-94	REVISED - JP CHANG 07-08-16

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

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

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
21	2018-026-RS-SW	DUPAGE	64	36
BD400-06 (BD33)		CONTRACT NO. 62G64		
ILLINOIS FED. AID PROJECT				

# FABRICATION GENERAL NOTES

**MATERIALS:**

1. EPOXY COATED DOWEL BARS USED SHALL COMPLY WITH ASTM A 615 GRADE 60.
2. ALL EMBEDDED LIFTING HARDWARE USED SHALL BE GALVANIZED.
  - A. FOR LIFTING INSERTS, INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION INCLUDING MINIMUM EDGE DISTANCE AND SPACING REQUIREMENTS. UNLESS THE CONTRACTOR AND FABRICATOR WILL BE USING A LIFTING BEAM OR ROLLING SHEAVE TO ENSURE THAT EACH OF THE FOUR INSERTS WILL SHARE THE LOAD EQUALLY, TWO OF THE FOUR INSERTS MUST BE CAPABLE OF CARRYING THE TOTAL LOAD WITH A 4:1 SAFETY FACTOR WHILE ADJUSTING FOR THE ANGLE OF THE CABLES AND THE STRENGTH OF THE CONCRETE OVER TIME. THE INSERT SHOULD BE RECESSED A MINIMUM OF 1/2" UNLESS THE SLAB IS TO BE OVERLAID IMMEDIATELY AFTER PLACEMENT. THE INSERT SHALL LEAVE A MAXIMUM 1/4" DIAMETER THREADED HOLE TO BE GROUTED AFTER SLAB INSTALLATION. IF THE INSERT IS INSTALLED WITH A FULL SLAB PENETRATION, THE LIFTING INSERT CAN BE USED AS A BEDDING GROUT PORT AT THE CONTRACTOR'S DISCRETION.
  - B. FOR LIFTING PLATES, INSTALLATION MUST BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND HAVE A STANDARD 5:1 SAFETY FACTOR FOR LIFTING HARDWARE. UNLESS A LIFTING BEAM IS USED TO SPACE THE FOUR PICK POINTS DIRECTLY ABOVE THE INSERTS, THE LIFTING HARDWARE MUST BE RATED FOR USE WITH CABLES AT AN ANGLE AND TWO OF THE FOUR DEVICES MUST BE CAPABLE OF LIFTING THE FULL LOAD AS WITH THE INSERTS REFERENCED IN THE PREVIOUS NOTE.
3. REINFORCEMENT USED SHALL BE EPOXY COATED, IN ACCORDANCE WITH ASTM A706 GRADE 60 AND IN COMPLIANCE WITH ARTICLE 1006.10 OF THE STANDARD SPECIFICATIONS.
4. CONCRETE COVER OVER REINFORCEMENT TO BE MAINTAINED USING WIRE OR THERMOPLASTIC CHAIRS OR SPACERS OR AN APPROVED EQUIVALENT.
5. CONCRETE USED SHALL MEET THE FOLLOWING REQUIREMENTS:
  - A. CONCRETE USED SHALL BE CLASS PC (f'c = 4,500 PSI @ 28 DAYS) IN ACCORDANCE WITH SECTION 1020 OF THE STANDARD SPECIFICATIONS.
  - B. MINIMUM STRIPPING STRENGTH OF CONCRETE SHALL BE 3,000 PSI.
  - C. CONCRETE MIX DESIGN TO BE SUBMITTED AND APPROVED PRIOR TO FABRICATION.
  - D. CURING OF CONCRETE SLABS TO BE IN ACCORDANCE WITH THE SPECIFIED METHODS OF SECTION 1020 OF THE STANDARD SPECIFICATIONS. THE CURING PROCEDURE TO BE USED SHALL BE SUBMITTED AND APPROVED PRIOR TO FABRICATION.

**SLAB DESIGN:**

6. FOR STANDARD SLABS:
  - A. USE SLAB DIMENSIONS SHOWN ON THE DISTRICT STANDARD DRAWINGS FOR DESIGN SLAB THICKNESS, WIDTH, AND LENGTH. ACTUAL WIDTH TO BE MODIFIED WITH ON-SITE SAW CUTS TO FIT THE OPENING.
  - B. USE TWO LAYERS OF REINFORCEMENT WITH A MINIMUM STEEL AREA RATIO OF 0.2%.
  - C. SIZE ANY PREFORMED SLOTS THAT ARE DESIGNED FOR CONSECUTIVE STANDARD SLABS CONSISTENT WITH THE THICKNESS OF THE SLAB SUCH THAT THE BOTTOM OF THE OPENING IS AT LEAST 2 1/2" (±1/4") WIDE AND AT LEAST 1/2" OF GROUT COVER IS PROVIDED UNDER THE DOWEL.

- D. FOR STANDARD SLABS WITH WIDE OPEN SLOTS AND/OR EMBEDDED DOWEL BARS, IT SHALL BE THE CONTRACTOR'S OPTION TO EITHER PRE-INSTALL/EMBED THE DOWEL BARS INTO THE SLABS AT THE PRECAST PLANT AND PARTIALLY RETROFIT THE EMBEDDED DOWELS INTO ADJACENT PAVEMENT SLABS IN THE FIELD, OR TO FULLY RETROFIT THE DOWEL BARS INTO BOTH THE INSTALLED PRECAST SLAB AND ANY ADJACENT SLAB IN THE FIELD DURING PLACEMENT IN ACCORDANCE WITH CONTRACT SPECIFICATIONS AND THE GENERAL NOTES FOR INSTALLATION. THE LOCATIONS AND SPACING OF THE DOWEL BARS IN THE STANDARD SLABS SHALL BE SHOWN ON THE DISTRICT STANDARD DRAWINGS AND WITHIN THE SPECIFIED TOLERANCES FOR ALIGNMENT. FOR DOWEL BAR RETROFITTING WITH STANDARD SLAB INSTALLATION, A STANDARD TEMPLATE SHALL BE USED TO LOCATE THE CUTS AND POSITION THE DOWEL SLOTS CONSISTENTLY.
- E. FOR STANDARD ISOLATED SLABS WITH NARROW ELONGATED PREFORMED DOWEL SLOTS, THE CENTERPOINT BETWEEN THE WHEEL PATH SLOTS SHALL BE MARKED.

7. FOR CUSTOM SLABS:

- A. USE SLAB DIMENSIONS SHOWN ON THE DISTRICT STANDARD DRAWINGS FOR DESIGN SLAB THICKNESS, LENGTHS AND WIDTHS OF EACH CUSTOM SLAB SHALL BE ACCURATE DIMENSIONS BASED ON FIELD SURVEY DATA COLLECTED BY THE CONTRACTOR TO DEVELOP WORKING DRAWINGS FOR THE SLAB. MINIMUM AND MAXIMUM DIMENSIONS FOR LENGTHS AND WIDTHS ARE NOTED ON THE STANDARD DRAWINGS.
- B. FOR ANY CUSTOM SLAB FABRICATED TO REPLACE EXISTING WARPED PAVEMENT AT AN ISOLATED LOCATION, THE CUSTOM SLAB SHALL BE FABRICATED ON A SINGLE PLANE. THE SLAB THICKNESS OR BEDDING MATERIAL SHALL BE ADJUSTED TO ALLOW FOR THE ELEVATION OF ALL FOUR (4) CORNERS OF THE CUSTOM SLAB TO BE FLUSH OR HIGHER THAN THE EXISTING OR ADJOINING PAVEMENT WHEN INSTALLED. THE SURFACE OF ALL CUSTOM SLABS REPLACING WARPED PAVEMENT SHALL RECEIVE A COMPLETE PROFILE DIAMOND GRIND AFTER INSTALLATION AND GROUTING TO PROVIDE A SMOOTH SURFACE AND LEAVE ALL EDGES FLUSH WITH THE ADJOINING PAVEMENTS. THE PROFILE GRINDING OPERATION FOR CUSTOM SLABS REPLACING ANY WARPED PAVEMENTS, ON CURVED RAMPS OR SUPERELEVATED MAINLINE SECTIONS, SHALL BE IN ACCORDANCE WITH CONTRACT SPECIAL PROVISIONS FOR PROFILE DIAMOND GRINDING PRECAST CONCRETE PAVEMENT SLABS AND PAID FOR SEPARATELY. FOR CONSECUTIVELY PLACED CUSTOM SLABS FABRICATED TO REPLACE EXISTING WARPED PAVEMENT, FULL SURVEYS FOR X, Y, AND Z DIMENSIONS SHALL BE TAKEN BY THE CONTRACTOR BEFORE FABRICATION IN ORDER TO MATCH EXISTING GRADES AT ALL CORNERS DURING INSTALLATION.
- C. FOR ALL CUSTOM SLABS WITH WIDE OPEN SLOTS, THE DOWEL BARS SHALL BE FULLY RETROFITTED INTO ADJACENT PAVEMENT SLABS DURING FIELD INSTALLATION OF THE PRECAST SLAB IN ACCORDANCE WITH CONTRACT SPECIFICATIONS AND GENERAL NOTES FOR INSTALLATION.
- D. FOR ALL CUSTOM SLABS WITH NARROW ELONGATED PREFORMED DOWEL SLOTS, THE DOWEL BARS SHALL BE SLID INTO PREDRILLED HOLES IN THE ADJACENT PAVEMENT SLABS DURING FIELD INSTALLATION OF THE PRECAST SLAB IN ACCORDANCE WITH CONTRACT SPECIFICATIONS AND GENERAL NOTES FOR INSTALLATION.

8. ALL FABRICATED SLABS:

- A. THE MAXIMUM ALLOWABLE JOINT WIDTH CAN NOT BE LESS THAN THE TOTAL OF THE ALLOWABLE SLAB FABRICATION TOLERANCES.
- B. BEDDING GROUT PORT HOLES SHALL BE LOCATED ON TRANSVERSE LINES ACROSS THE SLAB THAT ARE PARALLEL WITH EXISTING TRANSVERSE JOINTS. EACH PORT HOLE SHALL BE EVENLY DISTRIBUTED ON EACH LINE. THE DISTANCE BETWEEN BEDDING GROUT PORT HOLES SHALL NOT EXCEED 4'-0", WITH THE PORT HOLES AT THE END OF THE TRANSVERSE LINES TO BE NO LESS THAN 1'-8" AND NO MORE THAN 3'-0" OFF A LONGITUDINAL JOINT. THE TRANSVERSE LINES FOR PORT HOLES SHALL BE NO MORE THAN 4'-0" APART, AND NO LESS THAN 1'-8" AND NO MORE THAN 2'-6" OFF OF A TRANSVERSE JOINT.
- C. RECESS LIFTING DEVICES 1" MINIMUM BELOW THE SURFACE OF THE SLAB TO ALLOW FOR A MINIMUM GROUT COVER OF 1" ON SLABS THAT WILL NOT BE OVERLAID.

**FABRICATION:**

9. PREPARE WORKING DRAWINGS THAT SHALL INCLUDE THE FOLLOWING INFORMATION:

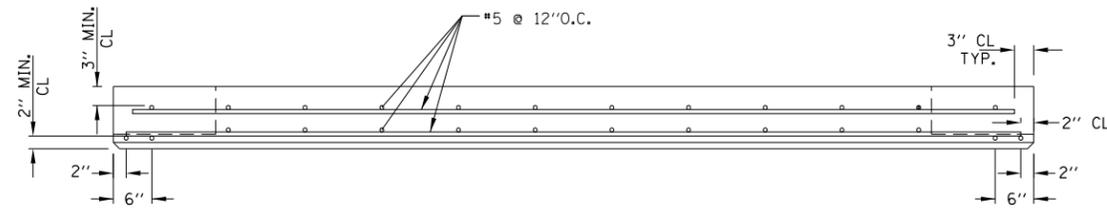
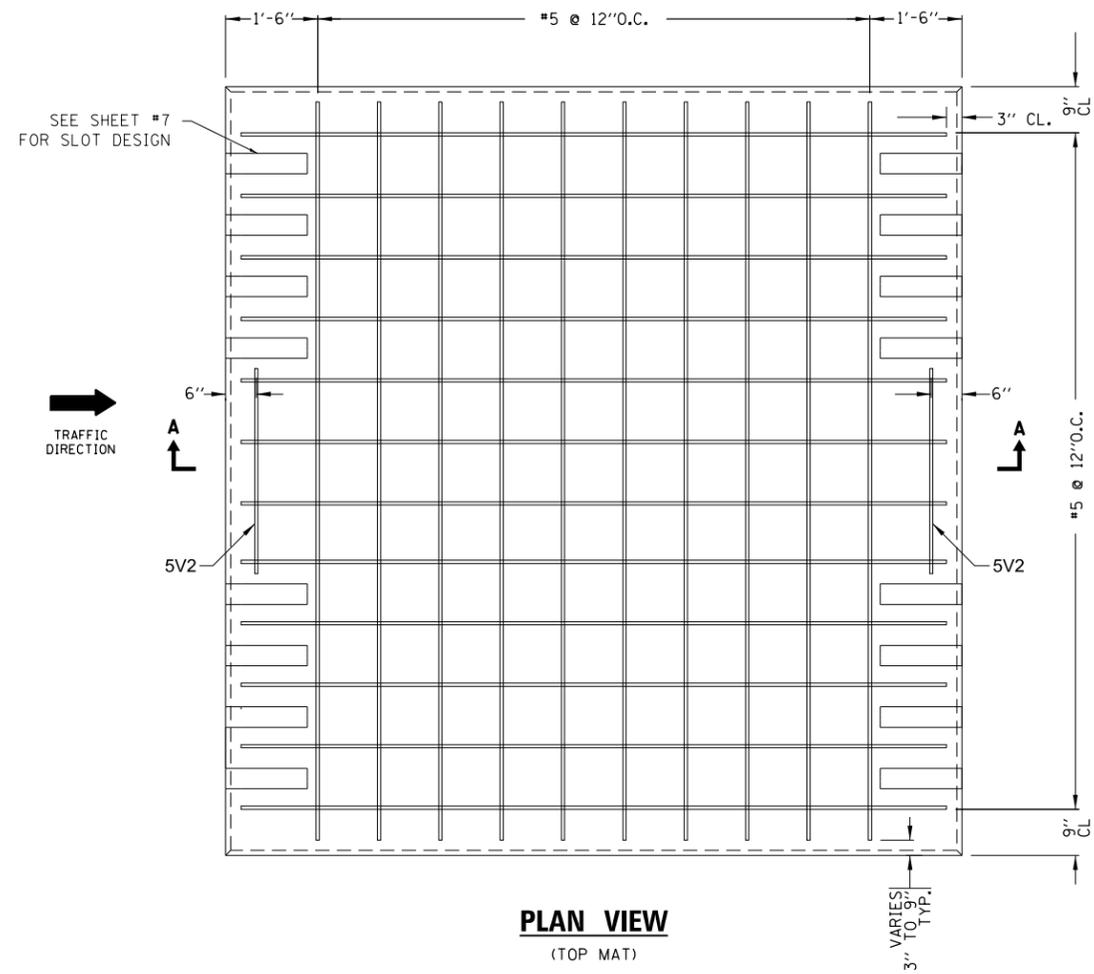
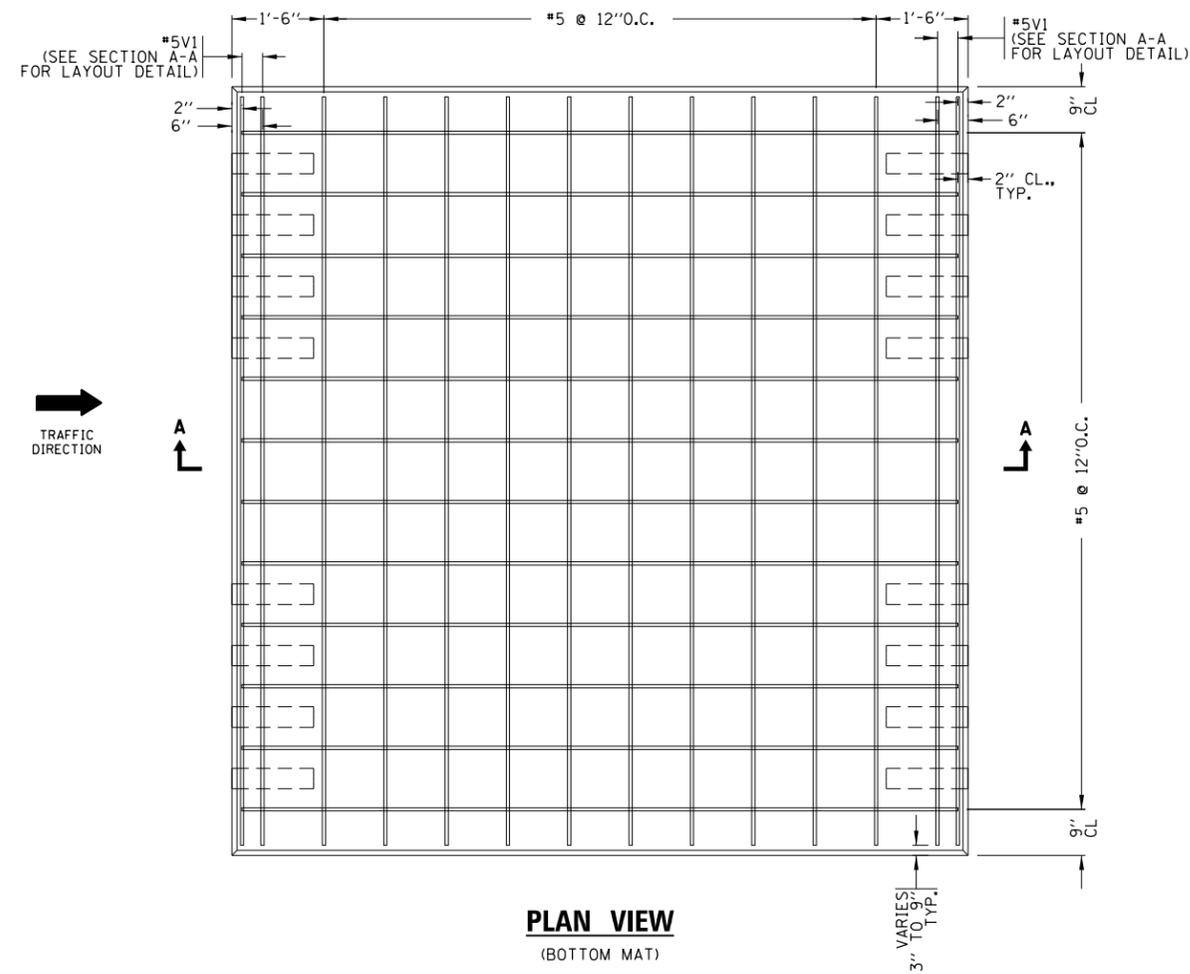
- A. SLAB LAYOUT DRAWING FOR TYPICAL STANDARD SLABS AND FOR EACH CUSTOM SLAB TO BE FABRICATED, WITH ACCURATE DIMENSIONS CITED.
- B. REINFORCEMENT SIZES, SPACING, NUMBER OF MATS, AND METHOD OF MAINTAINING CONCRETE COVER.
- C. SIZES AND LOCATIONS FOR EMBEDDED DOWELS, OF DOWEL BARS TO BE RETROFITTED AFTER PLACEMENT OF THE SLAB, AND OF PREFORMED SLOTS AT THE FEMALE END OF STANDARD SLABS FOR CONSECUTIVE PLACEMENT.
- D. SIZE AND LOCATION OF GROUT PORTS, LIFTING ANCHORS, AND GROUT SEAL GASKETS.
- E. COMPRESSIVE STRENGTH AND AIR CONTENT OF CONCRETE.
- F. CONCRETE CURING METHOD TO BE USED.
- G. MARKING LEGEND FOR EACH SLAB TO INDICATE PRECAST MANUFACTURER, AND DATE OF PRODUCTION; AND FOR EACH CUSTOM SLAB TO INCLUDE CONTRACT NUMBER AND MARK NUMBER OF THE SLAB.
- H. WEIGHT OF EACH SLAB.

10. PERFORM A PRE-POUR INSPECTION OF THE FORMS TO CONFIRM THAT THEY ARE ASSEMBLED IN ACCORDANCE WITH THE FOLLOWING TOLERANCES:

LENGTH AND WIDTH	±1/8"
DIAGONALS	±3/16"
DOWEL VARIANCE FROM LEVEL, SQUARENESS TO EDGE OF SLAB, AND LOCATION.	±1/8"
EDGE SQUARENESS -1/8" IN 10" (IN RELATION TO TOP AND BOTTOM SURFACES).	

11. INCLUDE A 1 INCH CHAMFER ALONG ALL BOTTOM EDGES OF SLABS. AND A STONED EDGE TO ALL TOP EDGES OF THE SLAB.
12. THE EXPOSED SURFACES OF ALL PREFORMED SLOTS FOR DOWEL BARS SHALL BE SANDBLASTED.
13. ACCURATELY SCREED TOP OF SLAB TO MEET SURFACE AND THICKNESS TOLERANCES.
14. THE FINAL FINISH SHALL MATCH THE SURROUNDING PAVEMENT WITH EITHER AN ARTIFICIAL TURF DRAG FINISH TO TOP OF SLAB IN ACCORDANCE WITH ARTICLE 420.09(e)(2) OF THE STANDARD SPECIFICATIONS, OR A TINED FINISH IN ACCORDANCE WITH ARTICLE 420.09(e)(1) OF THE STANDARD SPECIFICATIONS.
15. AFTER REMOVAL OF FORMS AND ANY BLOCKOUTS, NO SPALLS OF THE FINISHED SURFACE WILL BE ALLOWED.

FILE NAME =	USER NAME = khans	DESIGNED - O. PATEL	REVISED - D.G. 6-14	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PRECAST CONCRETE PAVEMENT SLABS</b>	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
			REVISED - D.G. 9-16			21	2018-026-RS-SW	DUPAGE	64	37	
		PLOT SCALE = 100.0002' / in.	CHECKED -			REVISED -	<b>BD 57</b>		<b>CONTRACT NO. 62G64</b>		
Default		PLOT DATE = 12/13/2018	DATE - 10-25-2013			REVISED -	SCALE: NONE	SHEET 1	OF 19 SHEETS	STA.	TO STA.



ALL BARS ARE TRIM TO FIT #5 BAR  
SAW CUTS OFF LONGITUDINAL EDGES SHALL BE NO MORE THAN 6" OFF THE EDGES

## STANDARD SLAB TYPICAL REINFORCEMENT DETAIL

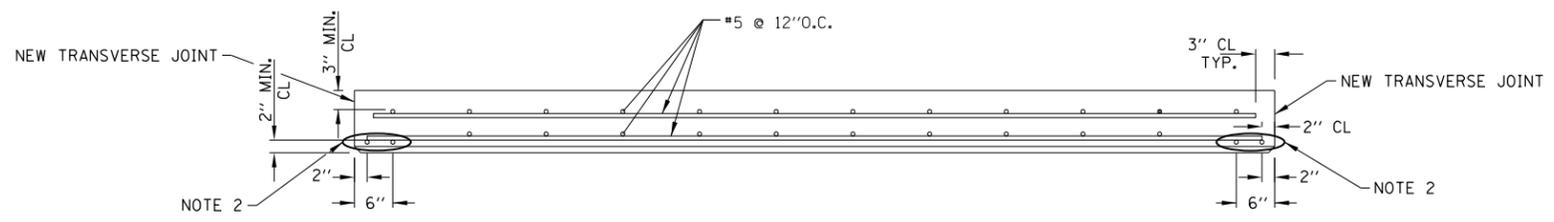
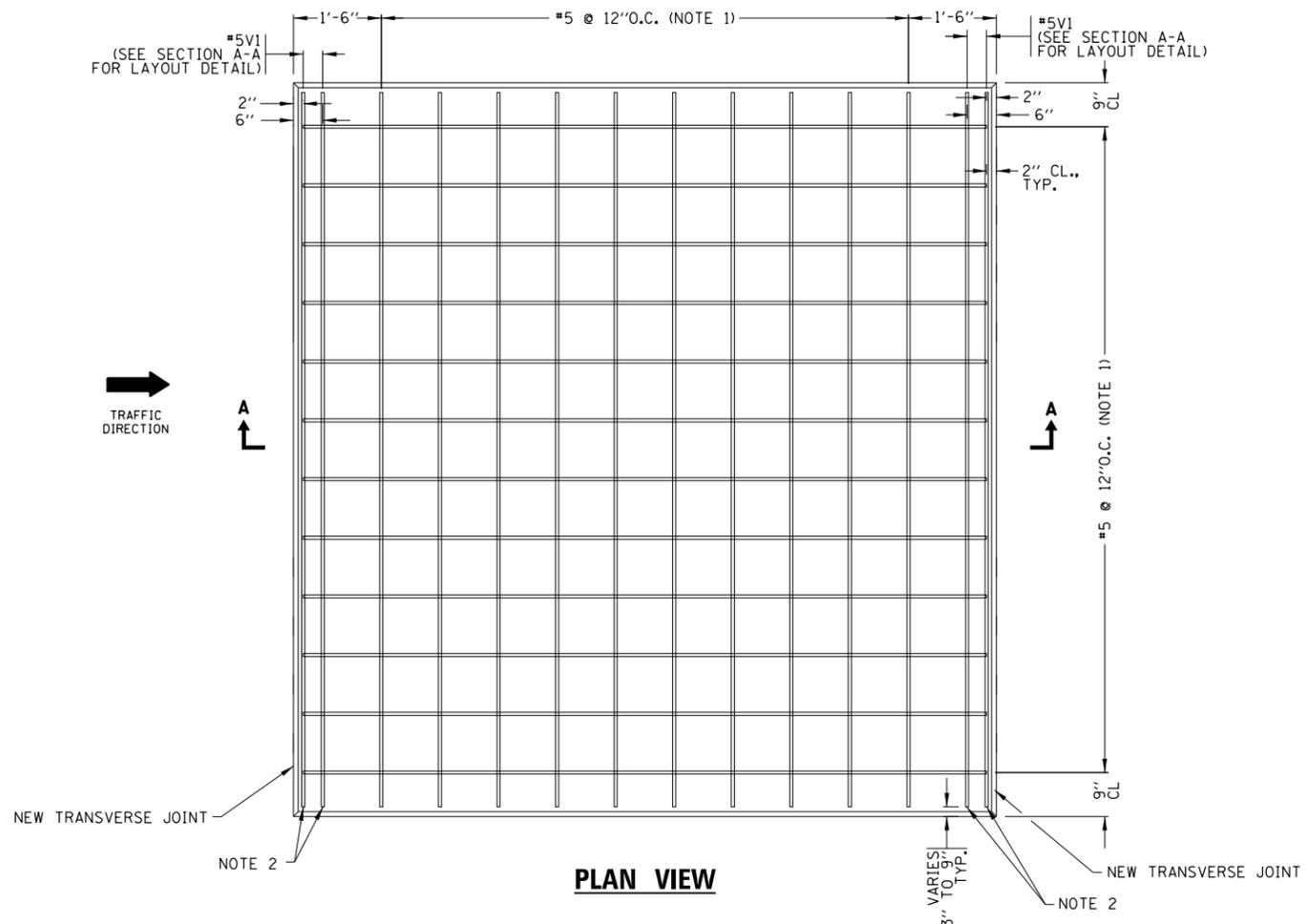
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p:\11\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\DI325\Drawings\Design\DistStd.dgn			REVISED - D.G. 9-16
Default	PLOT SCALE = 100.0002' / in.	CHECKED -	REVISED -
	PLOT DATE = 12/13/2018	DATE - 10-25-2013	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PRECAST CONCRETE PAVEMENT SLABS

SCALE: NONE SHEET 2 OF 19 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
21	2018-026-R5-SW	DUPAGE	64	38
BD 57		CONTRACT NO. 62G64		
ILLINOIS FED. AID PROJECT				

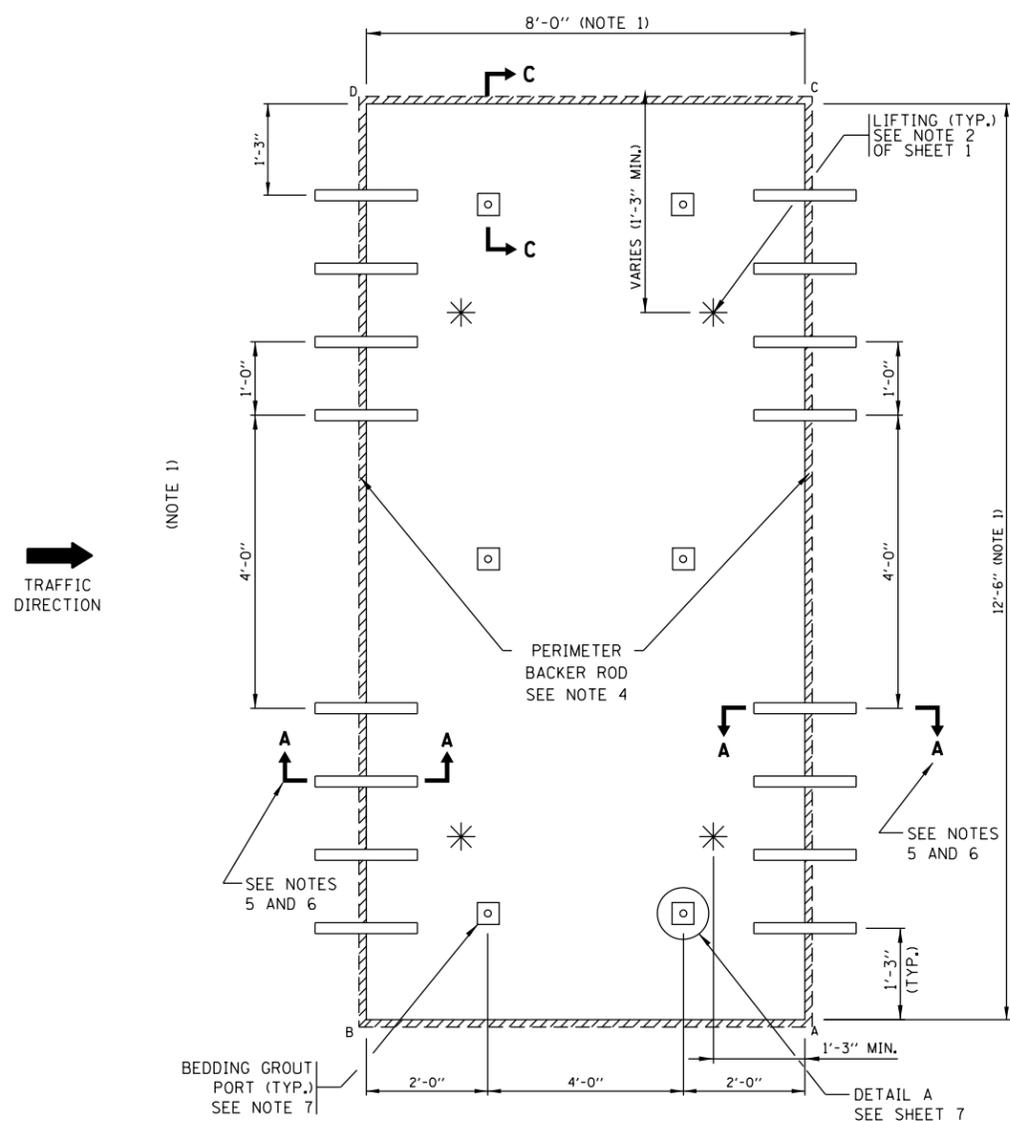


ALL BARS ARE TRIM TO FIT #5 BAR  
 SAW CUTS OFF LONGITUDINAL EDGES SHALL BE NO MORE THAN 6" OFF THE EDGES

- NOTES:**
1. FOR ALL CUSTOM SLABS OF TRAPEZOID SHAPES, THIS REINFORCEMENT SHALL BE LAID OUT IN A PERPENDICULAR GRID PATTERN, NOT SKEWED.
  2. THIS REINFORCEMENT SHALL BE PARALLEL TO THE NEW TRANSVERSE JOINT.

## CUSTOM SLAB TYPICAL REINFORCEMENT DETAIL

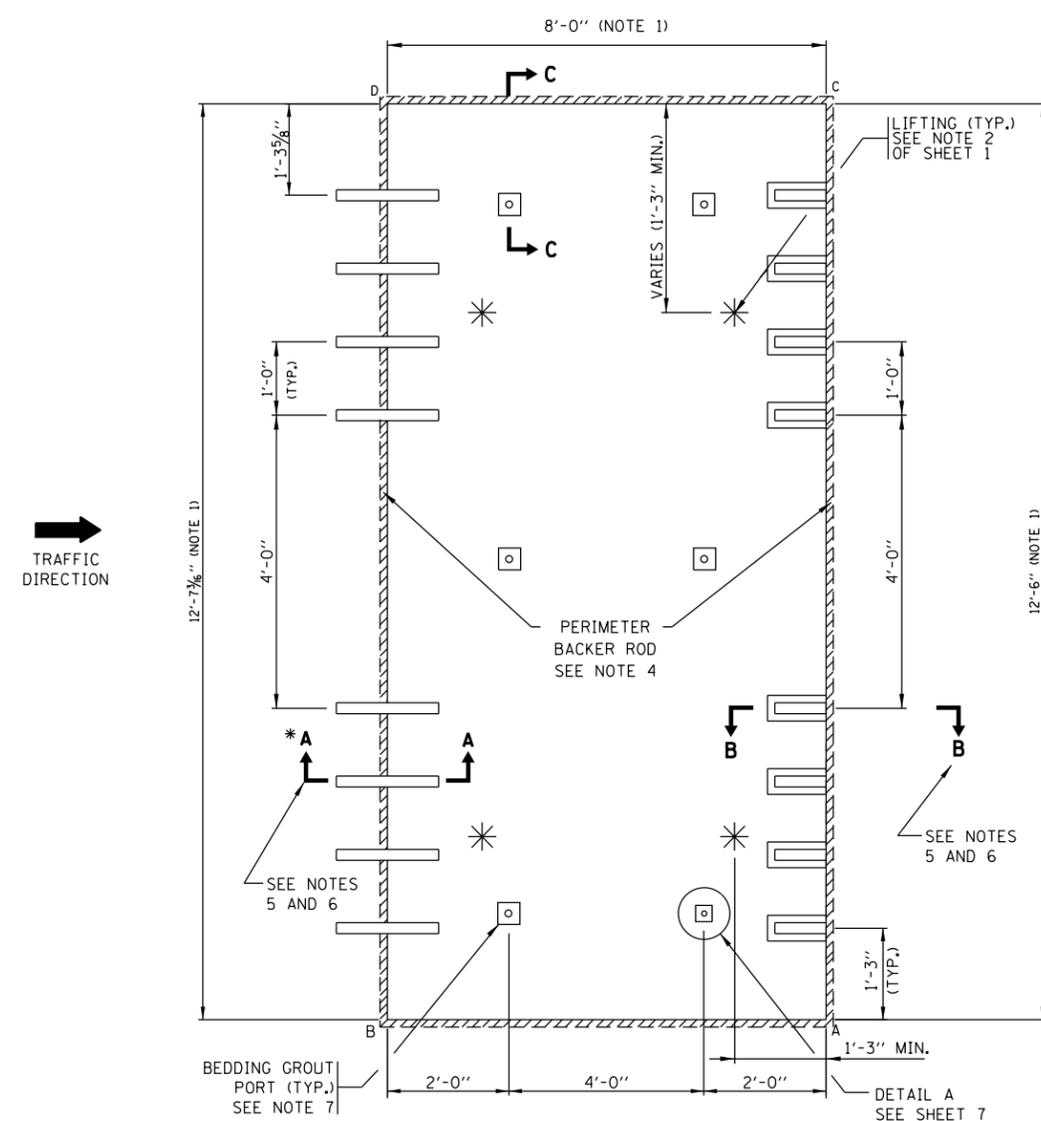
FILE NAME =	USER NAME = khans	DESIGNED - O. PATEL	REVISED - D.G. 6-14	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PRECAST CONCRETE PAVEMENT SLABS</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			REVISED - D.G. 9-16			21	2018-026-R5-SW	DUPAGE	64	39
			REVISED -			<b>BD 57</b>		CONTRACT NO. 62G64		ILLINOIS FED. AID PROJECT
Default	PLOT SCALE = 100.0002' / in.	CHECKED -	REVISED -		SCALE: NONE	SHEET 3	OF 19 SHEETS	STA.	TO STA.	
	PLOT DATE = 12/13/2018	DATE - 10-25-2013	REVISED -							



**STANDARD 12'-6" WIDE PANEL LAYOUT FOR ISOLATED PLACEMENT  
WITH EMBEDDED DOWELS FOR PRECAST WIDE MOUTH  
SLOTS IN ADJACENT PAVEMENT**

**NOTES:**

1. THE WIDTH AND LENGTH OF PRODUCED SLABS SHALL BE THE INDICATED DIMENSIONS  $\pm 1/8"$ .
2. FOR MIDDLE LANE SLAB OPENINGS/PATCHES LESS THAN 12'-6" IN WIDTH AND GREATER THAN 11'-6" IN WIDTH, THE STANDARD PERCAST SLAB CAN BE SAW CUT ON-SITE TO FIT THE OPENING AND TO MAINTAIN ALIGNMENT WITH EXISTING LONGITUDINAL JOINTS. OTHERWISE, THE SLAB PATCH LOCATION MUST BE PRESURVEYED BY THE CONTRACTOR AND THE SLAB FABRICATED AS A CUSTOM SLAB.
3. SLAB THICKNESS SHALL BE AS INDICATED IN THE PLANS.
4. A FOAM BACKER ROD SHALL BE PLACED AROUND THE OUTSIDE PERIMETER OF THE SLAB AT THE BOTTOM OF THE JOINTS BEFORE THE SLAB HAS BEEN SET AND BEFORE BEDDING GROUT OR POLYURETHANE LEVELING FILL IS APPLIED. THE BACKER ROD SHALL NOT BE REQUIRED WHEN ANY SLAB IS LEVELLED WITH FLOWABLE FILL.
5. SEE SHEET 7 FOR SECTION DETAILS.
6. IT SHALL BE THE CONTRACTOR'S OPTION TO REPLACE ANY EMBEDDED DOWEL BARS OR PREFORMED SLOTS AS SHOWN ON THESE DRAWINGS WITH FULLY RETROFITTED DOWEL BARS FIELD INSTALLED IN ACCORDANCE WITH "DETAIL C" OF SHEET 13. THE CONTRACTOR SHALL USE AN APPROVED TEMPLATE TO LOCATE THE SAW CUTS REQUIRED FOR PROPER SPACING AND RETROFITTING OF THE DOWEL BARS IN ACCORDANCE WITH THESE DRAWINGS. DIAMOND BLADED GANG SAWS SHALL BE USED TO MAKE SAW CUTS PERPENDICULAR TO THE TRANSVERSE (NONSKewed) JOINT LINE TO ALLOW FOR DOWEL BAR PLACEMENTS WITHIN THE SPECIFIED TOLERANCES.
7. SEE NOTE 8 ON SHEET 1 FOR LOCATING BEDDING GROUT PORTS.



**STANDARD 12'-6" WIDE PANEL LAYOUT FOR CONSECUTIVE PLACEMENT**

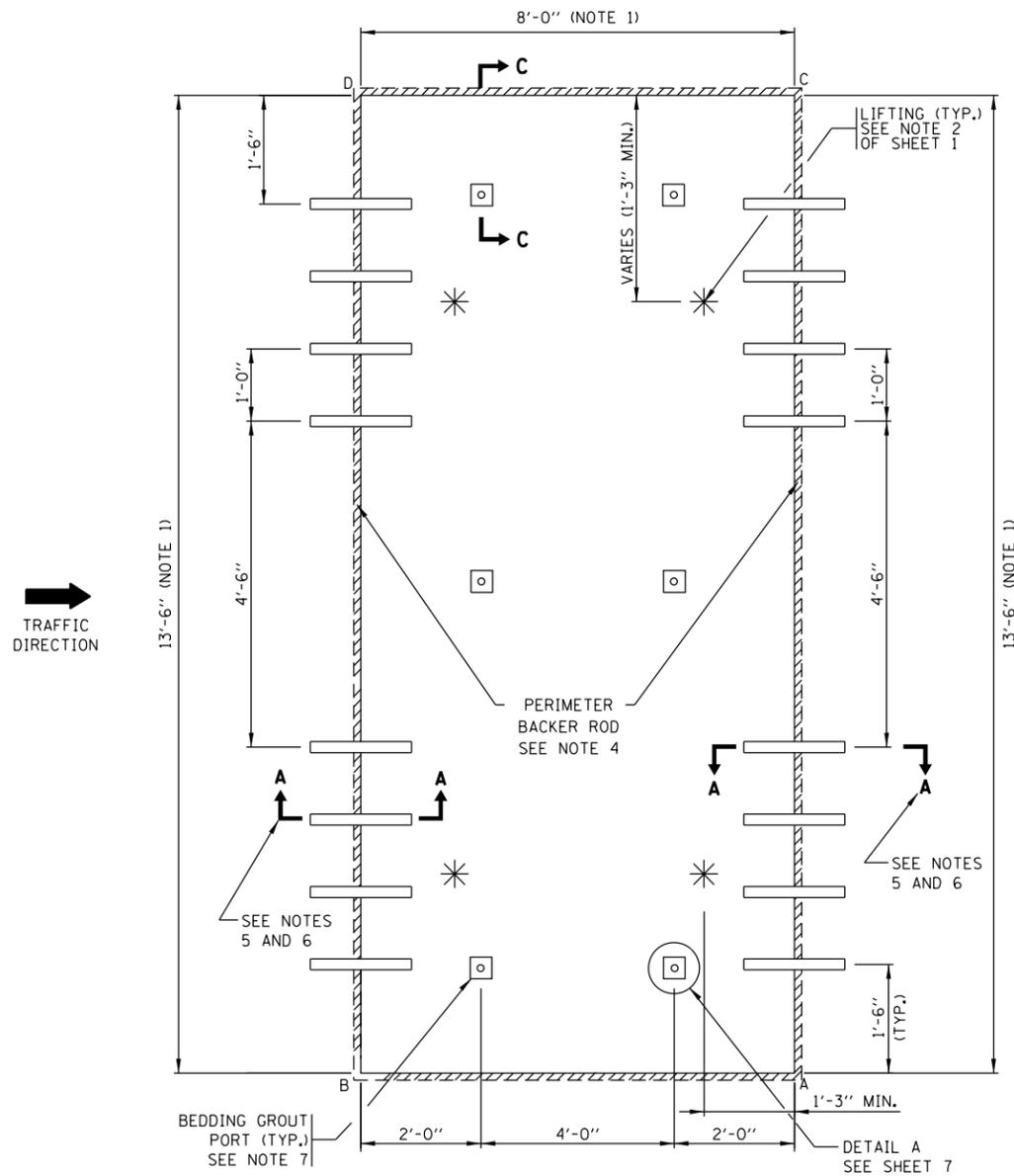
\* FOR INTERNAL CONSECUTIVE SLABS, PREFORMED SLOTS IN ACCORDANCE WITH SECTION B-B OF SHEET 4 MAY BE USED IN-PLACE OF EMBEDDED DOWELS OR OF FIELD RETROFITTED DOWEL BARS WITH SAWCUT SLOTS. ALL PREFORMED SLOTS MUST BE FILLED BEFORE BEING OPENED TO TRAFFIC.

FILE NAME =	USER NAME = khans	DESIGNED - O. PATEL	REVISED - D.G. 6-14
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Default	PLOT SCALE = 100.0002' / in.	DATE - 10-25-2013	REVISED -
	PLOT DATE = 12/13/2018		

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>PRECAST CONCRETE PAVEMENT SLABS</b>			
SCALE: NONE	SHEET 4 OF 19 SHEETS	STA.	TO STA.

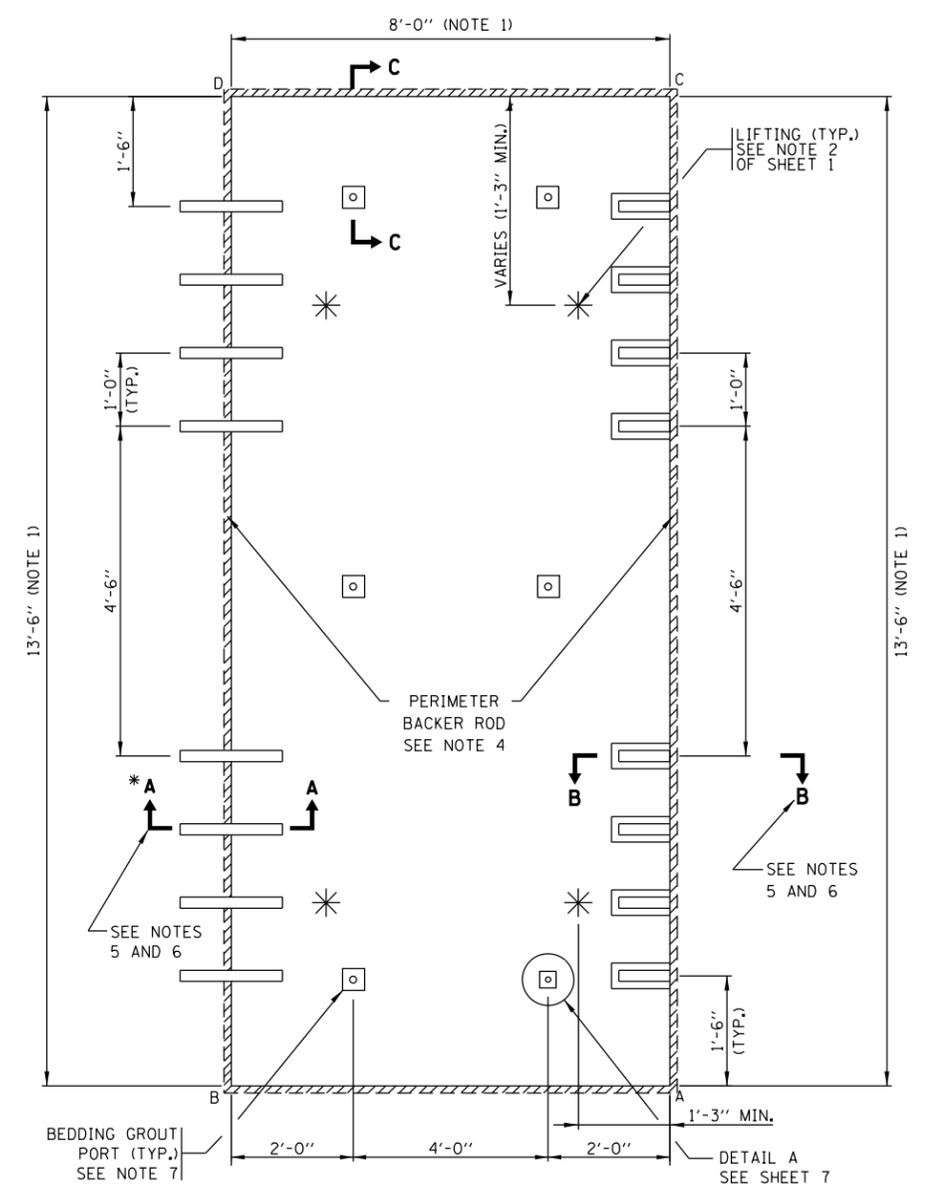
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
21	2018-026-RS-SW	DUPAGE	64	40
<b>BD 57</b>		<b>CONTRACT NO. 62G64</b>		
ILLINOIS FED. AID PROJECT				



**STANDARD 13'-6" WIDE PANEL LAYOUT FOR ISOLATED PLACEMENT WITH EMBEDDED DOWELS FOR PRECUT WIDE MOUTH SLOTS IN ADJACENT PAVEMENT.**

**NOTES:**

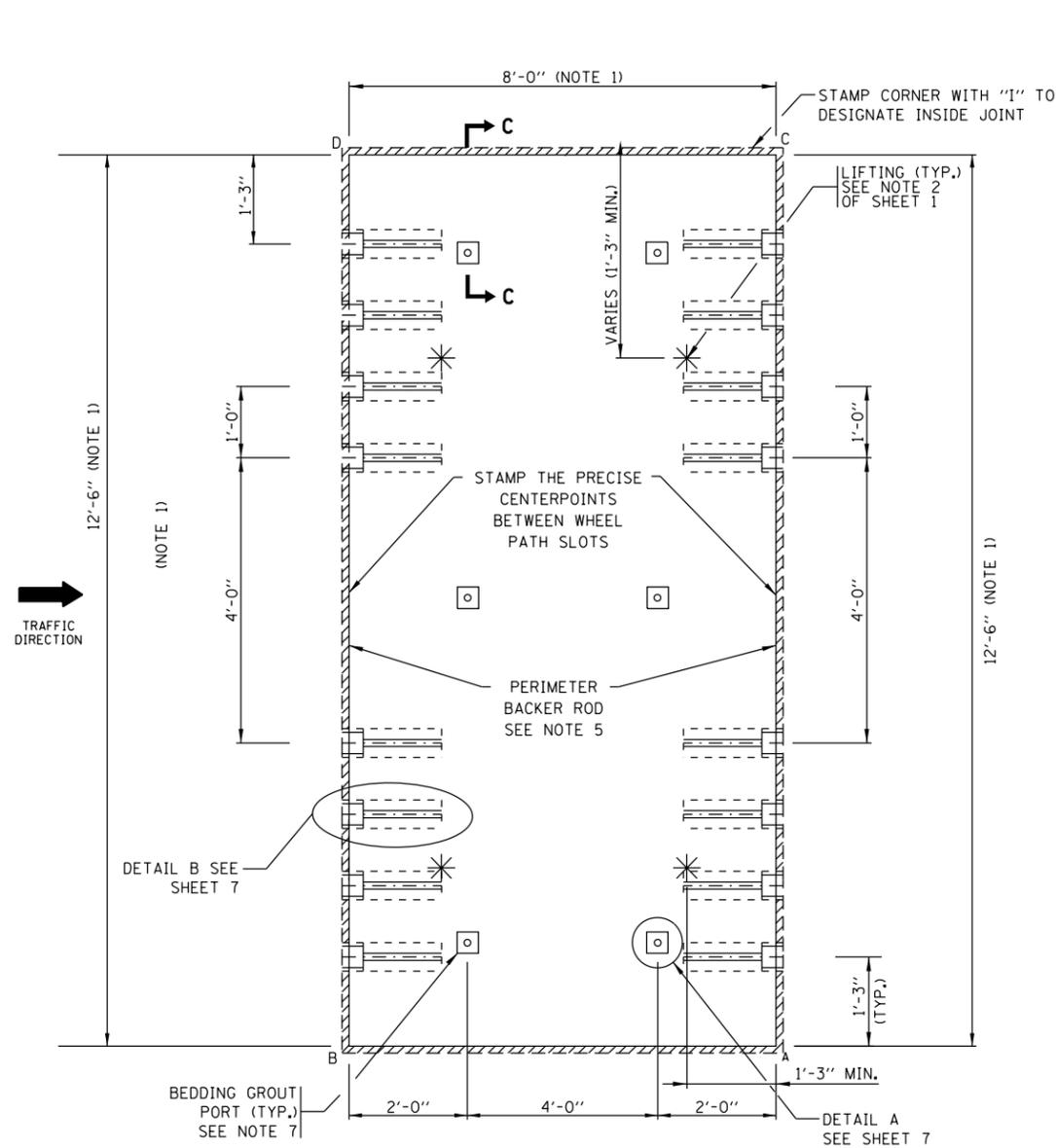
1. THE WIDTH AND LENGTH OF PRODUCED SLABS SHALL BE THE INDICATED DIMENSIONS  $\pm 1/8"$ .
2. FOR MIDDLE LANE SLAB OPENINGS/PATCHES LESS THAN 13'-6" IN WIDTH AND GREATER THAN 12'-6" IN WIDTH, THE STANDARD PERCAST SLAB CAN BE SAW CUT ON-SITE TO FIT THE OPENING AND TO MAINTAIN ALIGNMENT WITH EXISTING LONGITUDINAL JOINTS. OTHERWISE, THE SLAB PATCH LOCATION MUST BE PRESURVEYED BY THE CONTRACTOR AND THE SLAB FABRICATED AS A CUSTOM SLAB.
3. SLAB THICKNESS SHALL BE AS INDICATED IN THE PLANS.
4. A FOAM BACKER ROD SHALL BE PLACED AROUND THE OUTSIDE PERIMETER OF THE SLAB AT THE BOTTOM OF THE JOINTS BEFORE THE SLAB HAS BEEN SET AND BEFORE BEDDING GROUT OR POLYURETHANE LEVELING FILL IS APPLIED. THE BACKER ROD SHALL NOT BE REQUIRED WHEN ANY SLAB IS LEVELED WITH FLOWABLE FILL.
5. SEE SHEET 7 FOR SECTION DETAILS.
6. IT SHALL BE THE CONTRACTOR'S OPTION TO REPLACE ANY EMBEDDED DOWEL BARS OR PREFORMED SLOTS AS SHOWN ON THESE DRAWINGS WITH FULLY RETROFITTED DOWEL BARS FIELD INSTALLED IN ACCORDANCE WITH "DETAIL C" OF SHEET 13. THE CONTRACTOR SHALL USE AN APPROVED TEMPLATE TO LOCATE THE SAW CUTS REQUIRED FOR PROPER SPACING AND RETROFITTING OF THE DOWEL BARS IN ACCORDANCE WITH THESE DRAWINGS. DIAMOND BLADED GANG SAWS SHALL BE USED TO MAKE SAW CUTS PERPENDICULAR TO THE TRANSVERSE (NONSKEWED) JOINT LINE TO ALLOW FOR DOWEL BAR PLACEMENTS WITHIN THE SPECIFIED TOLERANCES.
7. SEE NOTE 8 ON SHEET 1 FOR LOCATING BEDDING GROUT PORTS.



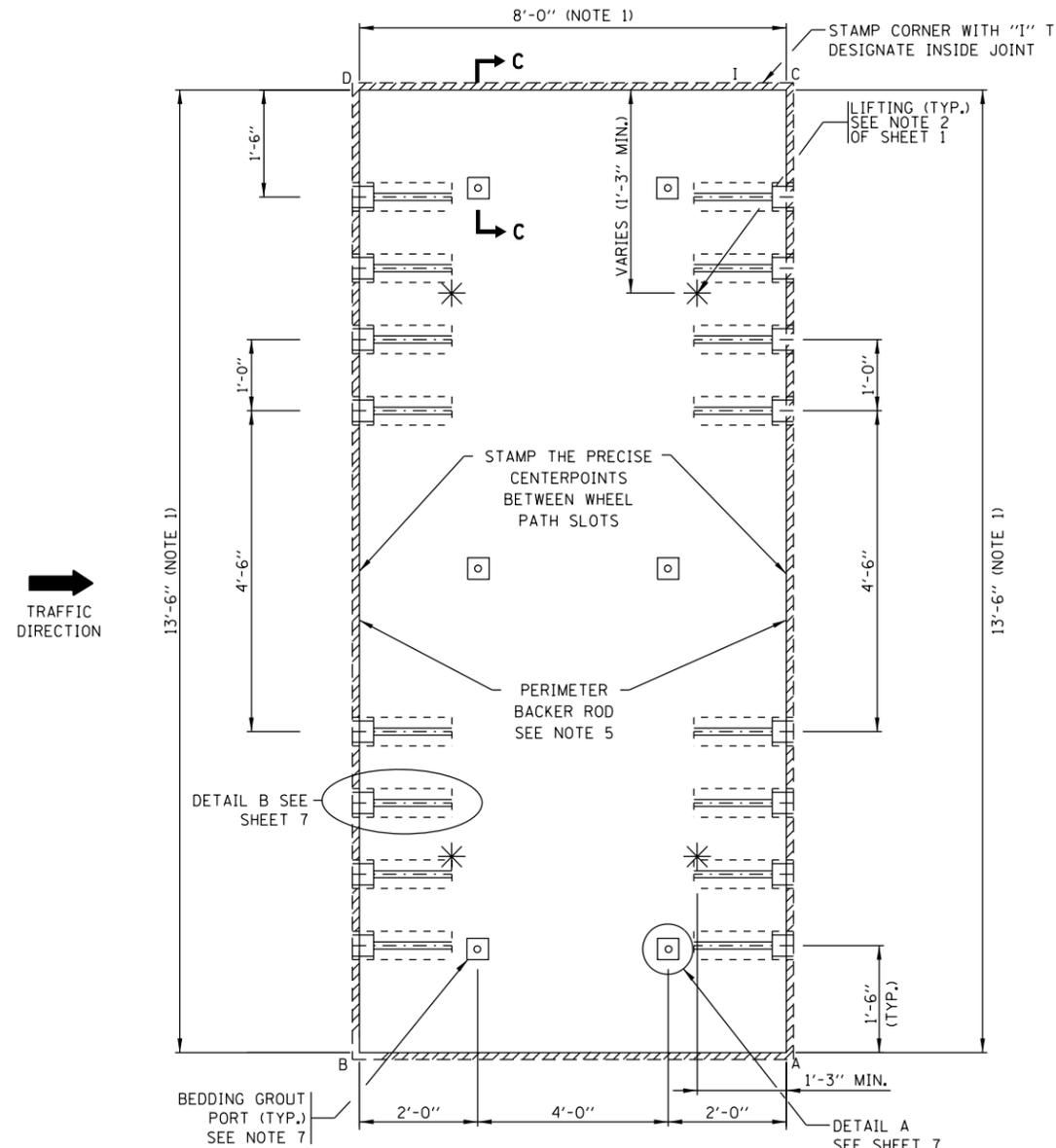
**STANDARD 13'-6" WIDE PANEL LAYOUT FOR CONSECUTIVE PLACEMENT**

\* FOR INTERNAL CONSECUTIVE SLABS, PREFORMED SLOTS IN ACCORDANCE WITH SECTION B-B OF SHEET 5 MAY BE USED IN-PLACE OF EMBEDDED DOWELS OR OF FIELD RETROFITTED DOWEL BARS WITH SAWCUT SLOTS. ALL PREFORMED SLOTS MUST BE FILLED BEFORE BEING OPENED TO TRAFFIC.

FILE NAME =	USER NAME = khans	DESIGNED - O. PATEL	REVISED - D.G. 6-14	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PRECAST CONCRETE PAVEMENT SLABS</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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Default	PLOT DATE = 12/13/2018	DATE - 10-25-2013	REVISED -		<b>BD 57</b>			<b>CONTRACT NO. 62G64</b>				
					SCALE: NONE	SHEET 5 OF 19 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT			



**STANDARD 12'-6" WIDE PANEL LAYOUT FOR ISOLATED PLACEMENT WITH NARROW MOUTH PREFORMED DOWEL SLOTS TO ALIGN WITH PREDRILLED HOLES IN ADJACENT PAVEMENT.**



**STANDARD 13'-6" WIDE PANEL LAYOUT FOR ISOLATED PLACEMENT WITH NARROW MOUTH PREFORMED DOWEL SLOTS TO ALIGN WITH PREDRILLED HOLES IN ADJACENT PAVEMENT.**

**NOTES:**

1. THE WIDTH AND LENGTH OF PRODUCED SLABS SHALL BE THE INDICATED DIMENSIONS  $\pm 1/8"$ .
2. FOR MIDDLE LANE SLAB OPENINGS/PATCHES LESS THAN 12'-6" IN WIDTH AND GREATER THAN 11'-6" IN WIDTH, THE 12'-6" WIDE STANDARD PERCAST SLAB CAN BE SAW CUT ON-SITE TO FIT THE OPENING AND TO MAINTAIN ALIGNMENT WITH EXISTING LONGITUDINAL JOINTS. OTHERWISE, THE SLAB PATCH LOCATION MUST BE PRESURVEYED BY THE CONTRACTOR AND THE SLAB FABRICATED AS A CUSTOM SLAB.
3. FOR MIDDLE LANE SLAB OPENINGS/PATCHES LESS THAN 13'-6" IN WIDTH AND GREATER THAN 12'-6" IN WIDTH, THE 13'-6" WIDE STANDARD PERCAST SLAB CAN BE SAW CUT ON-SITE TO FIT THE OPENING AND TO MAINTAIN ALIGNMENT WITH EXISTING LONGITUDINAL JOINTS. OTHERWISE, THE SLAB PATCH LOCATION MUST BE PRESURVEYED BY THE CONTRACTOR AND THE SLAB FABRICATED AS A CUSTOM SLAB.
4. SLAB THICKNESS SHALL BE AS INDICATED IN THE PLANS.
5. A FOAM BACKER ROD SHALL BE PLACED AROUND THE OUTSIDE PERIMETER OF THE SLAB AT THE BOTTOM OF THE JOINTS BEFORE THE SLAB HAS BEEN SET AND BEFORE BEDDING GROUT OR POLYURETHANE LEVELING FILL IS APPLIED. THE BACKER ROD SHALL NOT BE REQUIRED WHEN ANY SLAB IS LEVELED WITH FLOWABLE FILL.
6. SEE SHEET 7 FOR SECTION DETAILS.
7. SEE NOTE 8 ON SHEET 1 FOR LOCATING BEDDING GROUT PORTS.

FILE NAME =	USER NAME = khans	DESIGNED - O. PATEL	REVISED - D.G. 6-14	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PRECAST CONCRETE PAVEMENT SLABS</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
px:\IL084EBIDINTEG.illinois.gov\PWIDOT\Documents\IDOT Offices\District 1\Projects\DI325\Browns\Design\DistStd.dgn	PLOT SCALE = 100.0002' / in.	CHECKED -	REVISED - D.G. 9-16					21	2018-026-RS-SW	DUPAGE	64	42
Default	PLOT DATE = 12/13/2018	DATE - 10-25-2013	REVISED -		<b>BD 57</b>			<b>CONTRACT NO. 62G64</b>				
					SCALE: NONE	SHEET 6 OF 19 SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT				



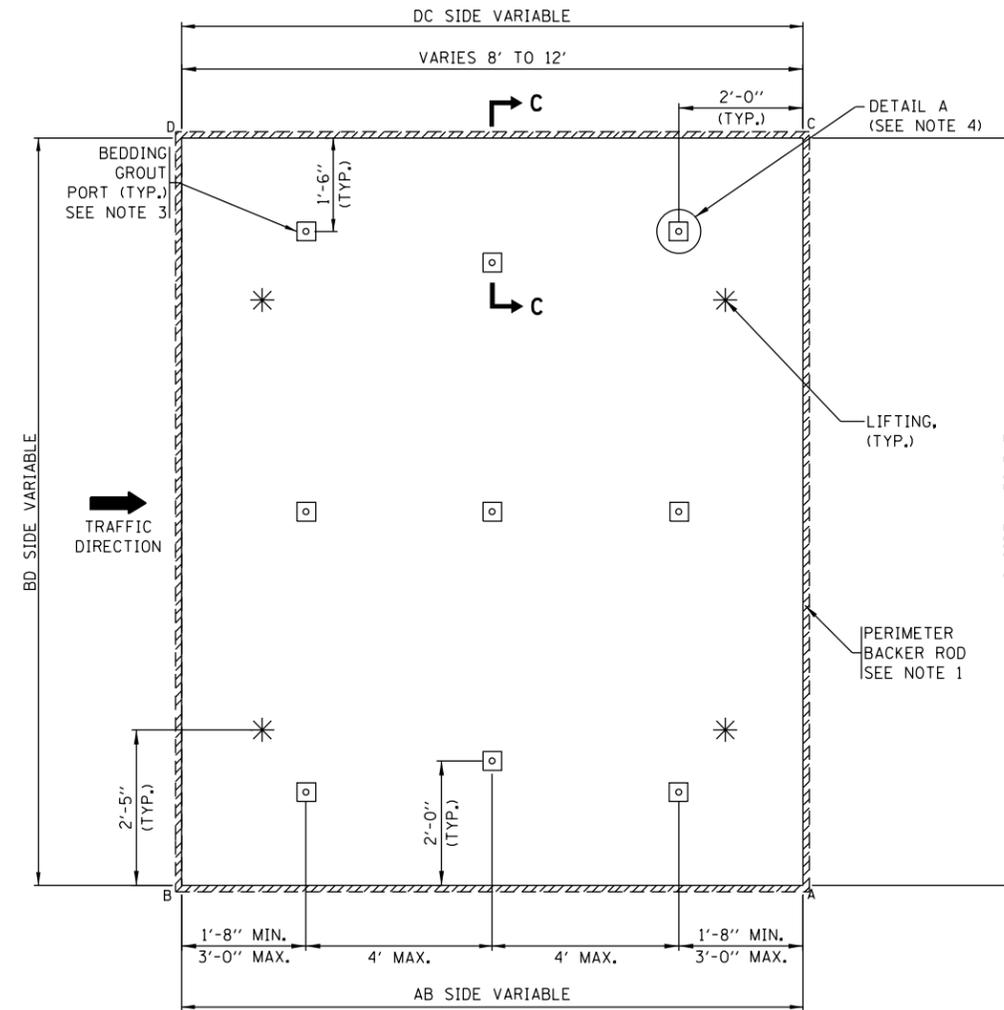
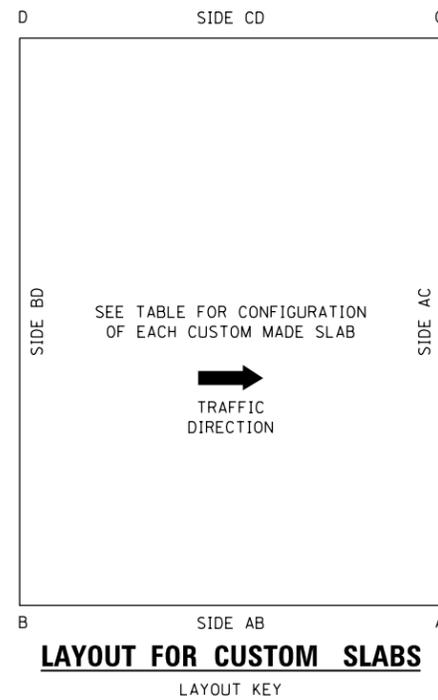
FOR NON STANDARD SLABS, UPON COMPLETION BY THE CONTRACTOR A SLAB LAYOUT WILL BE ADDED WITH SLAB DIMENSIONS TO INCLUDE BUT NOT BE LIMITED TO THE TABLE SHOWN BELOW.

EXAMPLE	ROUTE	STATION NUMBER	MAINLINE LANE NO.	RAMP ID.	RAMP LANE NO.	MARK NO.	LANE TYPE	VARIABLES (FT.)				AB* SIDE	BD* SIDE	CD* SIDE	AC* SIDE	AREA (SQ.FT.)	VOLUME (CU. FT.)	WEIGHT (TONS)	DIAGONALS (FT.)	
								AB (FT.)	AC (FT.)	BD (FT.)	CD (FT.)								AD	BC

MAINLINE LANE NO.: LANE NO. 1 IS ADJACENT TO MEDIAN SHOULDER.  
 RAMP LANE NO.: LANE NO. 1 IS ADJACENT TO INSIDE SHOULDER  
 MARK NO.: EACH PANEL SHALL BE INDIVIDUALLY MARKED FOR CORRECT PLACEMENT.  
 LANE TYPE: "OUT" IN THIS COLUMN INDICATES OUTSIDE LANE.  
 "MID" IN THIS COLUMN INDICATES MIDDLE LANE.  
 "IN" IN THIS COLUMN INDICATES INSIDE LANE

**\*LEGEND**

DB= DOWEL BAR EMBEDDED  
 DS= DOWEL SLOT  
 ST= SLOT OR HOLE FOR STITCHED TIE BAR  
 RD= FIELD RETROFITTED DOWEL BARS



**NOTES:**

1. A FOAM BACKER ROD SHALL BE PLACED AROUND THE OUTSIDE PERIMETER OF THE SLAB AT THE BOTTOM OF THE JOINTS BEFORE THE SLAB HAS BEEN SET AND BEFORE BEDDING GROUT OR POLYURETHANE LEVELING FILL IS APPLIED. THE BACKER ROD SHALL NOT BE REQUIRED WHEN ANY SLAB IS LEVELED WITH A FLOWABLE FILL.
2. EITHER SINGLE DIAMOND BLADED SAWS OR DIAMOND BLADED GANG SAWS SHALL BE USED TO MAKE THE SAW CUTS PERPENDICULAR TO THE TRANSVERSE (NONSKEWED) JOINT LINE TO ALLOW FOR DOWEL BAR PLACEMENTS WITHIN THE SPECIFIED TOLERANCES.
3. SEE NOTE 8 ON SHEET 1 FOR LOCATING BEDDING GROUT PORTS.
4. SEE SHEET 7 FOR SECTION DETAILS.

FILE NAME =	USER NAME = khans	DESIGNED - O. PATEL	REVISED - D.G. 6-14
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	PLOT DATE = 12/13/2018	DATE - 10-25-2013	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PRECAST CONCRETE PAVEMENT SLABS**

SCALE: NONE SHEET 8 OF 19 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
21	2018-026-RS-SW	DUPAGE	64	44
<b>BD 57</b>		<b>CONTRACT NO. 62G64</b>		
ILLINOIS FED. AID PROJECT				

# INSTALLATION GENERAL NOTES

**ALIGNMENT:**

1. WHEN THE TRANSVERSE JOINTS OF ANY PRECAST SLAB CAN NOT BE ALIGNED WITH TRANSVERSE JOINTS IN ADJACENT LANES, A MINIMUM 2'-0" OFFSET BETWEEN JOINTS SHALL BE PROVIDED.
2. THE LONGITUDINAL JOINT OF ANY ISOLATED OR CONSECUTIVE STANDARD PRECAST SLAB MUST BE ALIGNED TO BE PARALLEL WITH EXISTING LONGITUDINAL JOINTS. NO LONGITUDINAL OFFSETS SHALL BE ALLOWED. THE WIDTH OF ANY OF THE STANDARD PRECAST SLABS SHALL BE SAW CUT ON-SITE TO BE ALIGNED WITH THE EXISTING LONGITUDINAL JOINTS IN ADJACENT LANES OF EXISTING CONCRETE PAVEMENTS. THE WIDTH OF THE PRECAST SLAB SHALL BE NO MORE THAN 1/2 INCH LESS THAN THE WIDTH OF THE EXISTING SLAB BEING REPLACED. IF A STANDARD SLAB DOES NOT COMPLY WITH TOLERANCES FOR MAXIMUM AND MINIMUM WIDTHS FOR A DESIGNATED LOCATION, THEN A CUSTOM SLAB SHALL BE REQUIRED TO BE PRODUCED AND PLACED.
3. THE TRANSVERSE JOINT OF ANY PRECAST SLAB SHALL BE NO LESS THAN 4'-0" DISTANCE FROM AN EXISTING TRANSVERSE JOINT THAT REMAINS, OR NO LESS THAN 2'-0" DISTANCE PAST ANY EXISTING TRANSVERSE JOINT THAT IS REMOVED AND REPLACED WITH A PRECAST SLAB.
4. PRIOR TO THE PLACEMENT OF AN ISOLATED STANDARD PRECAST SLAB IN A MIDDLE LANE, THE WIDTH BETWEEN EXISTING LONGITUDINAL CONCRETE PAVEMENT JOINTS SHALL BE MEASURED BY THE CONTRACTOR UNDER MAINTENANCE OF TRAFFIC PROVIDED BY THE CONTRACTOR. ONLY APPROXIMATE WIDTHS SHALL BE MEASURED BY AND PROVIDED BY THE DESIGNER FOR BIDDING PURPOSES. THE CONTRACTOR'S WIDTH MEASUREMENTS SHALL BE USED TO DETERMINE THE NEED FOR ANY ON-SITE SAWCUTS OF THE LONGITUDINAL EDGES TO FIT THE OPENING AND TO ALIGN THE SAW CUT EDGE(S) WITH ANY EXISTING LONGITUDINAL JOINTS. THE LONGITUDINAL EDGES OF ANY STANDARD SLAB SHALL NOT BE SAW CUT MORE THAN 6 INCHES OFF THE ORIGINAL EDGE. NO NEW LONGITUDINAL JOINT SHALL BE ALLOWED INSIDE THE EXISTING JOINT BY MORE THAN 3/8 INCH. IF THESE TOLERANCES CAN NOT BE MET, THEN A CUSTOM SLAB SHALL BE REQUIRED. FOR ISOLATED STANDARDS SLABS PLACED IN THE OUTSIDE OR INSIDE LANES, THE NEW CONCRETE LONGITUDINAL JOINT SHALL MATCH THE EXISTING JOINT. THE STANDARD PRECAST SLAB MAY EXTEND INTO THE EXISTING HMA SHOULDERS NO MORE THAN 6 INCHES TO ALLOW FOR PROPER ALIGNMENT OF THE CONCRETE JOINTS. THE ONLY ALTERNATIVE TO ON-SITE SAW CUTTING OF ISOLATED STANDARD SIZES PRE-FABRICATED SLABS IS TO DESIGN AND FABRICATE EACH SLAB, TAKING WIDTH MEASUREMENTS AT THE BEGINNING OF A PROJECT AND THEN FABRICATING THE SLAB TO FIT THE SPECIFIC OPENING DIMENSIONS.
5. FOR STANDARD SLAB PLACEMENTS, A TEMPLATE SUPPLIED BY THE PRECAST FABRICATOR SHALL BE USED TO LOCATE THE PERIMETER SAW CUTS FOR THE SLAB. THE TEMPLATE MAY BE USED TO MARK LONGITUDINAL EDGE SAW CUT LOCATIONS ON A PRECAST SLAB TO FIT THE SAME PATCH OPENING THAT THE TEMPLATE WAS USED FOR TO LOCATE A PERIMETER SAW CUT. IF THE SLAB DOWEL BAR IS RETROFITTED OR FABRICATED FOR INSERTED DOWELS, THE TEMPLATE MAY ALSO BE USED FOR THE EMBEDDED /SLOTTED DOWEL BAR LOCATIONS TO BE RETROFITTED OR INSERTED INTO EXISTING PAVEMENT.

**LOAD TRANSFER:**

6. ACROSS STANDARD SLABS
  - A. THE EMBEDDED DOWEL BARS OF ISOLATED STANDARD PRECAST SLABS SHALL BE RETROFITTED INTO EXISTING CONCRETE PAVEMENT IN ACCORDANCE WITH DETAIL D (SEE SHEET 14).
  - B. THE EMBEDDED DOWEL BARS OF CONSECUTIVE STANDARD SLABS SHALL BE:
    - i) RETROFITTED INTO THE EXISTING CONCRETE PAVEMENT AT THE LOCATION OF THE FIRST SLAB PLACEMENT IN ACCORDANCE WITH DETAIL D (SEE SHEET 14).
    - ii) RETROFITTED INTO THE PREFORMED SLOTS OF ADJACENT PRECAST SLABS IN ACCORDANCE WITH DETAIL E (SEE SHEET 15).
    - iii) EITHER FULLY RETROFITTED INTO THE PREFORMED SLOT OF THE LAST INSTALLED CONSECUTIVE PRECAST SLAB AND THE ADJACENT CONCRETE PAVEMENT IN ACCORDANCE WITH DETAIL F (SEE SHEET 16), OR PARTIALLY RETROFIT AN EMBEDDED DOWEL BAR OF A STANDARD ISOLATED SLAB INTO ADJACENT PAVEMENT AS THE LAST INSTALLED CONSECUTIVE PRECAST SLAB IN ACCORDANCE WITH DETAIL D (SEE SHEET 14).
  - C. FOR PRECAST STANDARD SLABS WITH NO EMBEDDED DOWEL BARS AND WITHOUT NARROW MOUTH PREFORMED SLOTS FOR DOWEL INSERTIONS, THE DOWEL BARS SHALL BE FULLY RETROFITTED ACROSS ALL TRANSVERSE JOINTS IN THE FIELD IN ACCORDANCE WITH DETAIL C (SEE SHEET 13). THE LOCATIONS AND SPACING OF ALL FIELD RETROFITTED DOWEL BARS SHALL COMPLY WITH THE SPECIFIED TOLERANCES AS SHOWN ON SHEETS 4 AND 5.

- D. FOR PRECAST STANDARD SLABS WITH LONG AND NARROW MOUTH PREFORMED SLOTS AS SHOWN ON SHEET 6, THE LOCATIONS FOR PREDRILLED HOLES FOR DOWEL BAR INSERTIONS SHALL BE ALIGNED WITH THE PREFORMED SLOTS IN THE SPECIFIC PANEL BEING PLACED. ONLY GANG DRILLS WILL BE USED TO DRILL THE HOLES. THE HOLES SHALL BE PARALLEL TO THE GRADE AND CENTERLINE OF THE PAVEMENT WITH A TOLERANCE OF 1/8 INCH IN 12 INCHES. THE DRILLING OPERATION SHALL NOT CRACK OR SPALL THE PAVEMENT. BEFORE SLAB PLACEMENT, THE DOWEL BARS SHALL BE PLACED WITHIN THE ELONGATED SLOTS AND THE PREDRILLED HOLES THOROUGHLY CLEANED OF DRILLING DEBRIS. AFTER SLAB PLACEMENT, THE DOWEL BARS WILL BE SLID INTO THE PREDRILLED HOLES AND EPOXIED IN ACCORDANCE WITH ARTICLE 442.06 (a)(2) OF THE STANDARD SPECIFICATIONS WITH RETENTION DISKS OR WASHERS PLACED AGAINST THE FACE OF THE SLAB. SEE DETAIL G OF SHEET 17. IMMEDIATELY PRIOR TO FILLING THE PREFORMED SLOT WITH BACKFILL GROUT, THE EXPOSED ENDS OF THE DOWEL BARS SHALL BE CLEANED AND LIGHTLY OILED IN SUCH A MANNER AS TO NOT CONTAMINATE THE SURFACE OF ANY CLEANED SLOT AND THE FOAM CORE BOARD SHALL BE INSERTED AT THE FACE OF THE ADJACENT SLAB.

**7. ACROSS CUSTOM MADE SLABS**

- A. THE DOWEL BARS OF CUSTOM DESIGNED PRECAST SLABS PLACED CONSECUTIVELY, PLACED ON WARPED GRADES, OR PLACED ON RAMPS SHALL BE FULLY RETROFITTED ACROSS THE JOINT IN THE FIELD IN ACCORDANCE WITH DETAIL C (SEE SHEET 13). FOR ALL SUCH CUSTOM SLABS, THE DOWELS BETWEEN ANY EXISTING CONCRETE PAVEMENT AND ANY ADJACENT PRECAST SLABS, AND BETWEEN CONSECUTIVELY PLACED CUSTOM PRECAST SLABS SHALL BE 1'-0" ON CENTER ACROSS THE ENTIRE JOINT.
- B. THE DOWEL BARS OF CUSTOM DESIGNED ISOLATED PRECAST SLABS PLACED ON TANGENT MAINLINE PAVEMENT FOR MID SLAB CRACK REPAIR OR FOR JOINT REPLACEMENT CAN BE EITHER RETROFITTED ACROSS THE JOINT IN ACCORDANCE WITH DETAIL C (SEE SHEET 13), OR FULLY INSERTED INTO THE ADJACENT PAVEMENT IN ACCORDANCE WITH DETAIL G (SEE SHEET 17). THE LOCATIONS AND SPACING OF ALL FIELD RETROFITTED OR FIELD INSERTED DOWEL BARS SHALL COMPLY WITH THE SPECIFIED TOLERANCES AS SHOWN ON SHEETS 4 AND 5. FIELD INSERTION OF DOWEL BARS SHALL BE IN ACCORDANCE WITH NOTE 6(D) ABOVE.
- C. NO END DOWEL BARS SHALL BE RETROFITTED OR INSERTED WITHIN 8" OR NO MORE THAN 1'-7" FROM THE CORNER OF THE PRECAST SLAB OR ADJOINING CONCRETE PAVEMENT SLAB THAT EXISTS.

**LONGITUDINAL TIE BAR STITCHING:**

8. THE LOCATIONS OF LONGITUDINAL TIE BARS SHALL BE DETERMINED BASED ON THE CRITERIA THAT LONGITUDINAL TIES SHALL BE REQUIRED FOR ANY CLASS B FULL DEPTH REPAIR AND PRECAST REPAIR GREATER THAN 20 FT. IN LENGTH OR WITH ANY PRECAST REPAIR THAT REQUIRES MORE THAN 3 CONSECUTIVE PRECAST SLABS.
9. THE SPACING BETWEEN TIE BARS SHALL BE NO LESS THAN 24 INCHES. TIE BAR INSERTIONS SHALL BE NO LESS THAN 24 INCHES FROM ANY EXISTING TRANSVERSE JOINT OR FROM THE LOAD TRANSFER JOINTS OF ANY PLACED PRECAST SLAB OR CAST-IN-PLACE CONCRETE PATCH IN EITHER LANE ADJACENT TO THE LONGITUDINAL JOINT. THE PROCEDURE AND LOCATIONS FOR TIE BAR STITCHING SHALL BE IN ACCORDANCE WITH DETAIL H (SEE SHEET 19).

**MATERIALS:**

10. FOR GRADE SUPPORTED PRECAST SLABS, THE BEDDING AND UNDERSEALING MATERIAL FOR LEVELING AND SUPPORT SHALL CONSIST OF:
  - A. LEVELING SAND SHALL BE 100% CRUSHED FINE AGGREGATE OF AN FA-6, FA-20, OR FA-21 GRADATION AS SPECIFIED IN SECTION 1003 OF THE STANDARD SPECIFICATIONS. THE FINE AGGREGATE SHALL BE REASONABLY FREE FROM AN EXCESS OF SOFT AND UNSOUND PARTICLES AND OTHER OBJECTIONABLE MATTER. THE TYPICAL THICKNESS OF THE LEVELING SAND LAYER SHALL BE APPROXIMATELY 1/4 INCH WITH A MAXIMUM THICKNESS OF 1 INCH.
  - B. FOR GRADE SUPPORTED SLABS, UNDERSEALING GROUT SHALL BE USED AFTER SLAB INSTALLATION TO FILL ALL VOIDS BENEATH THE PRECAST PANELS. THE MIXTURE USED FOR UNDERSEALING GROUT SHALL CONSIST OF PORTLAND CEMENT, FLY ASH, GROUND GRANULATED BLAST FURNACE SLAG (OPTIONAL), A SUPERPLASTICIZER, AND WATER ALL IN ACCORDANCE WITH DIVISION 1000 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL SUBMIT THE PROPOSED MIX DESIGN FOR UNDERSEALING GROUT TO THE ENGINEER FOR DEPARTMENT APPROVAL PRIOR TO PLACEMENT. THE UNDERSEALING GROUT PRODUCED SHALL BE IN ACCORDANCE WITH THE FOLLOWING:
    - i) THE UNDERSEALING GROUT SHALL REMAIN FLUID AND NOT EXHIBIT A RESISTANCE TO FLOW FOR A MINIMUM OF ONE HOUR. THE GROUT MIXTURE SHALL HAVE A FLOW RATE OF 15 TO 25 SECONDS AS MEASURED BY ASTM C 939 TO ENSURE FLUIDITY.

- i) THE UNDERSEALING GROUT SHALL ACHIEVE AN INITIAL SET IN LESS THAN 4 HOURS AND A COMPRESSIVE STRENGTH AS MEASURED BY ASTM C 942 OF 300 PSI BEFORE OPENING THE SLAB TO TRAFFIC AND A COMPRESSIVE STRENGTH OF 500 PSI IN 12 HOURS.

11. FOR PRECAST SLABS SUPPORTED AND LEVELED BY FLOWABLE FILL PLACED BEFORE SLAB INSTALLATION, THE FLOWABLE FILL SHALL CONSIST OF PORTLAND CEMENT, FLY ASH, COARSE AND/OR FINE AGGREGATES, WATER, AND AIR ENTRAINING ADMIXTURE (OPTIONAL). THE CONTRACTOR SHALL SUBMIT THE PROPOSED MIX DESIGN FOR FLOWABLE FILL TO THE ENGINEER FOR DEPARTMENT APPROVAL PRIOR TO PLACEMENT. THE FLOWABLE FILL PRODUCED SHALL BE IN ACCORDANCE WITH THE FOLLOWING:
  - i) PORTLAND CEMENT SHALL BE TYPE 1 CEMENT IN ACCORDANCE WITH SECTION 1001 OF THE STANDARD SPECIFICATIONS.
  - ii) FLY ASH SHALL BE IN ACCORDANCE WITH SECTION 1010 OF THE STANDARD SPECIFICATIONS.
  - iii) FINE AGGREGATE SHALL BE IN ACCORDANCE WITH SECTION 1003 OF THE STANDARD SPECIFICATIONS.
  - iv) COARSE AGGREGATE, IF USED, SHALL BE IN ACCORDANCE WITH SECTION 1004 OF THE STANDARD SPECIFICATIONS WITH A MAXIMUM AGGREGATE SIZE OF 1/2 INCH.
  - v) IF AN AIR ENTRAINMENT ADMIXTURE IS USED, THE AIR CONTENT OF THE FLOWABLE FILL SHALL NOT EXCEED 35% OF THE FLOWABLE FILL VOLUME.
  - vi) THE COMPRESSIVE STRENGTH OF THE FLOWABLE FILL MIXTURE SHALL NOT BE LESS THAN 50 PSI AT 3 DAYS, NOR LESS THAN 75 PSI OR GREATER THAN 150 PSI AT 28 DAYS.
  - vii) THE FINAL SET TIME SHALL BE DETERMINED IN ACCORDANCE WITH ASTM C403 ON A TRIAL BATCH SPECIMEN.
  - viii) THE MAXIMUM THICKNESS OF THE LEVELING FILL SHALL BE 1 INCH

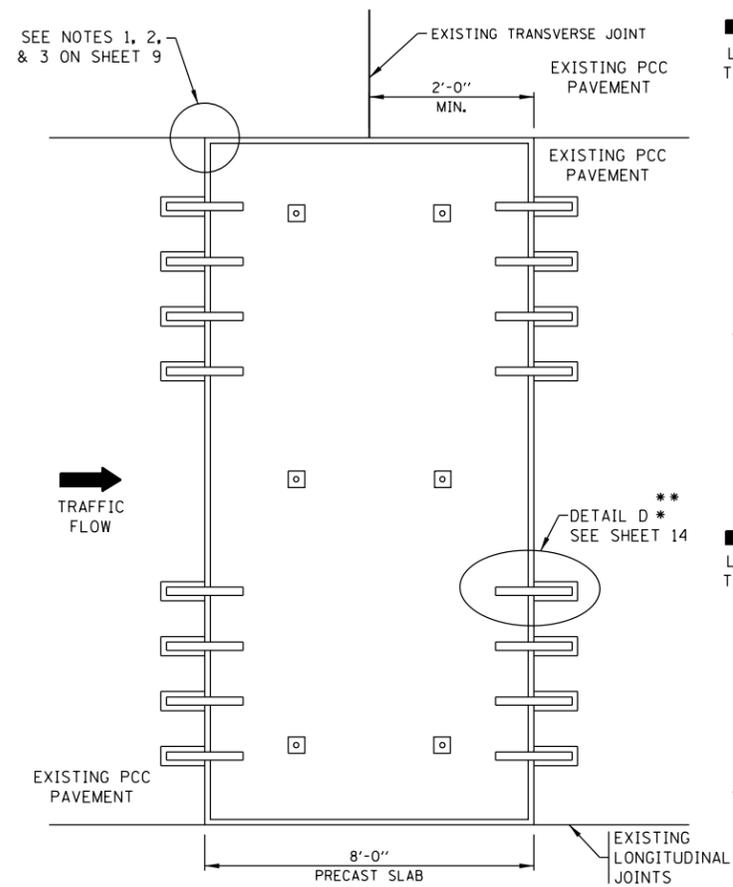
12. FOR PRECAST SLABS SUPPORTED AND LEVELED BY HIGH-DENSITY FOAM PLACED AFTER SLAB INSTALLATION, THE HIGH-DENSITY FOAM SHALL BE EXPANDING POLYURETHANE FOAM HAVING A WATER INSOLUBLE DILUENT AND SHALL BE IN ACCORDANCE WITH THE FOLLOWING:
  - i) DENSITY (LBS./CU. FT.)-AIR RISE 6.0 MIN.
  - TENSILE STRENGTH (PSI) ASTM D 1623 100 MIN.
  - ELONGATION (%) 5.1
  - COMPRESSIVE STRENGTH (PSI) ASTM D 1621 (AT YIELD) 100 MIN.
  - VOLUME CHANGE (% OF ORIGINAL) 0
  - THE MANUFACTURER SHALL PROVIDE DOCUMENTATION THAT THE LOT(S) OF FOAM MEETS THE SPECIFIED PROPERTIES. MANUFACTURER'S CERTIFICATION SHALL LIST LOT NUMBER(S) AND DOCUMENTATION OF COMPLIANCE WITH THE SPECIFICATION.
  - ii) THE MAXIMUM THICKNESS OF THE HIGH DENSITY FOAM SHALL BE 1 INCH.

**13. HARDWARE GROUT/ADHESIVES**

- A. FOR DOWEL BAR RETROFITS OR INSERTIONS, FOR THE FILLING OF ANY GROUT PORT HOLES USED FOR HIGH DENSITY FOAM INJECTIONS, FOR THE FILLING OF DOWEL SLOTS AND FOR THE FILLING OF RECESSED LIFTING DEVICES, THE BACKFILL MATERIAL SHALL BE:
  - 1) FIVE STAR HIGHWAY PATCH AS MANUFACTURED BY FIVE STAR PRODUCTS INC. FAIRFIELD, CONNECTICUT.
  - 2) HIGHWAY DB RETROFIT MORTAR AS MANUFACTURED BY DAYTON SUPERIOR, MIAMISBURG, OHIO.
  - 3) A DEPARTMENT APPROVED EQUIVALENT THAT HAS BEEN TESTED AS A RAPID SET CONCRETE PATCHING MATERIAL PER THE AASHTO NATIONAL TRANSPORTATION PRODUCT EVALUATION PROGRAM (NTP), WHICH CONFORMS TO ASTM C 928. THE GROUT MATERIAL IS REQUIRED TO PROVIDE A COMPRESSIVE STRENGTH OF 4,000 PSI IN 24 HOURS (OPENING TO TRAFFIC AFTER 3,000 PSI) PER ASTM C 39. EXHIBITS EXPANSION OF LESS THAN 0.10 PERCENT PER ASTM C 531, AND HAS A CALCULATED DURABILITY FACTOR OF 90.0 PERCENT MINIMUM AT THE END OF 300 FREEZE-THAW CYCLES PER ASTM C 666. THE PROPOSED MATERIAL SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO ANY PLACEMENT.
- B. FOR TIE BAR STITCHING AN APPROVED CHEMICAL ADHESIVE IN ACCORDANCE WITH ARTICLE 1027.01 OF THE STANDARD SPECIFICATIONS SHALL BE USED AS THE ANCHORING MATERIAL FOR STITCHED TIE BARS.
- C. FOR DOWEL BAR INSERTIONS, AN APPROVED CHEMICAL ADHESIVE OR EPOXY IN ACCORDANCE WITH ARTICLE 1027.01 OF THE STANDARD SPECIFICATIONS SHALL BE USED WITH PLACEMENT IN ACCORDANCE WITH ARTICLE 442.06 (a)(2) OF THE STANDARD SPECIFICATIONS WITH RETENTION DISCS OR WASHERS PLACED AGAINST THE FACE OF THE SLAB.

FILE NAME =	USER NAME = khans	DESIGNED - O. PATEL	REVISED - D.G. 6-14	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PRECAST CONCRETE PAVEMENT SLABS</b>				F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ph2\ILL084EBIDINTEG\Illinois.gov\PID001\Documents\IDOT Offices\District 1\Projects\01325\BROW\Brow\Design\DistStd.dgn		CHECKED -	REVISED - D.G. 9-16			21	2018-026-R5-SW	DUPAGE	64	45			
Default	PLOT SCALE = 100.0002' / in.	DATE - 10-25-2013	REVISED -		SCALE: NONE	SHEET 9	OF 19 SHEETS	STA. TO STA.	<b>BD 57</b>		<b>CONTRACT NO. 62G64</b>		
											ILLINOIS FED. AID PROJECT		





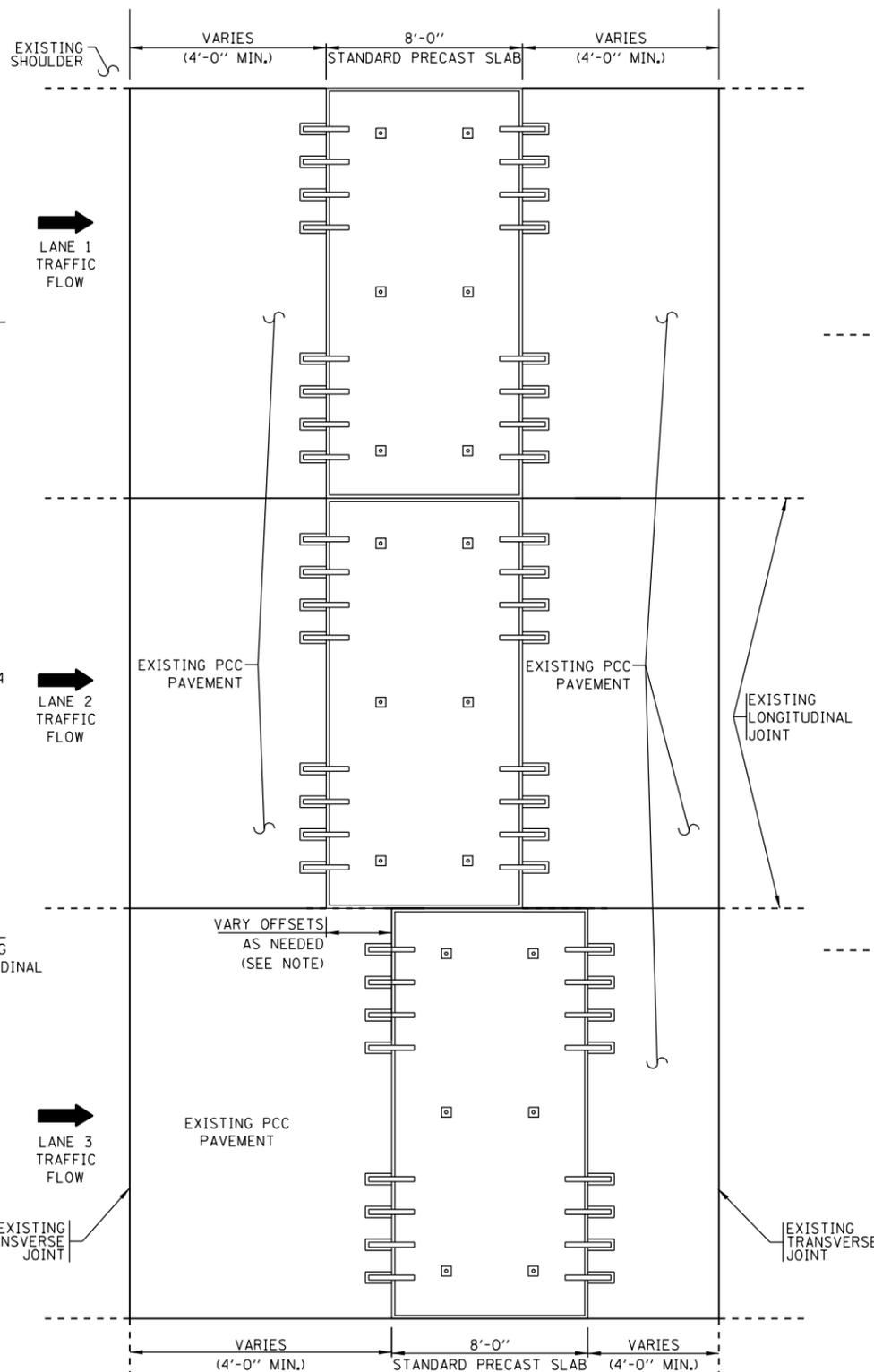
**SINGLE LANE JOINT REPLACEMENT  
DROP IN PANEL FOR STANDARD  
PRECAST SLABS**

**NOTE:**

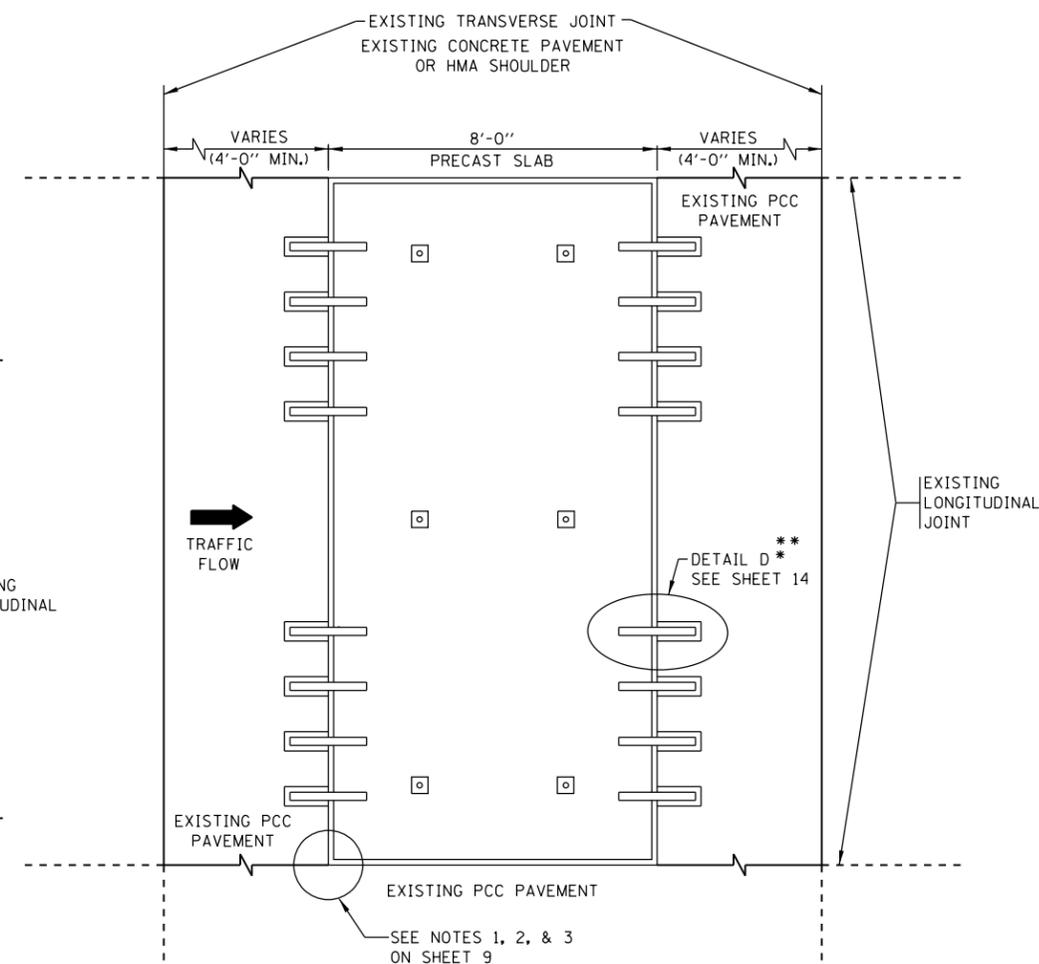
WHEN THE TRANSVERSE JOINTS OF ANY PRECAST SLAB CANNOT BE ALIGNED WITH TRANSVERSE JOINTS IN ADJACENT LANES, A MAXIMUM 2'-0" OFFSET BETWEEN JOINTS SHALL BE PROVIDED.

\* FOR DOWEL BARS FULLY RETROFITTED IN THE FIELD, REFER TO DETAIL C ON SHEET 13.

\*\* FOR DOWEL BARS TO BE SLID INTO PRE-DRILLED HOLES IN THE FIELD, REFER TO DETAIL G ON SHEET 17.



**MULTIPLE LANE MID SLAB DROP IN PANEL  
FOR STANDARD PRECAST PANELS**



**SINGLE LANE MID SLAB DROP  
IN PANEL FOR STANDARD  
PRECAST PANELS**

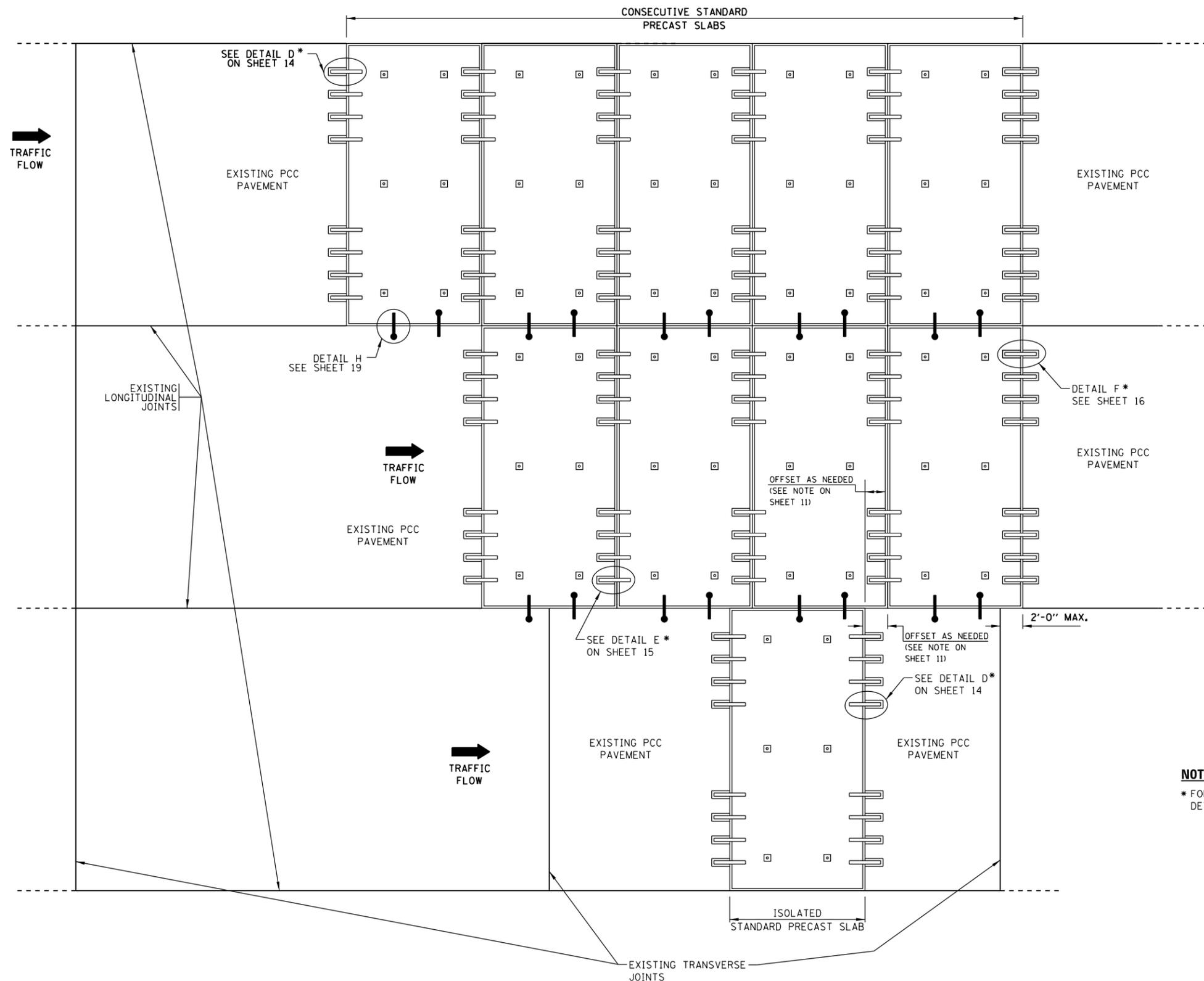
# INSTALLATION OF ISOLATED STANDARD PRECAST SLABS

FILE NAME =	USER NAME = khans	DESIGNED - O. PATEL	REVISED - D.G. 6-14
p:\11\084EBIDINTEG\illinois.gov\PIWIDOT\Documents\DOT Offices\District 1\Projects\DI325\Drawings\Design\DistStd.dgn			REVISED - D.G. 9-16
Default	PLOT SCALE = 100.0002' / in.	CHECKED -	REVISED -
	PLOT DATE = 12/13/2018	DATE - 10-25-2013	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

PRECAST CONCRETE PAVEMENT SLABS			
SCALE: NONE	SHEET 11	OF 19 SHEETS	STA. TO STA.

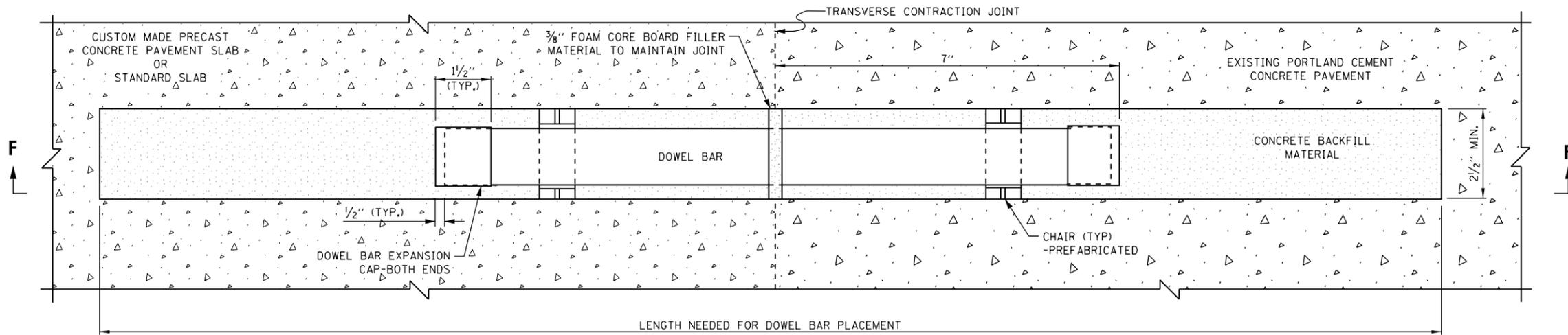
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
21	2018-026-RS-SW	DUPAGE	64	47
<b>BD 57</b>			<b>CONTRACT NO. 62G64</b>	
ILLINOIS FED. AID PROJECT				



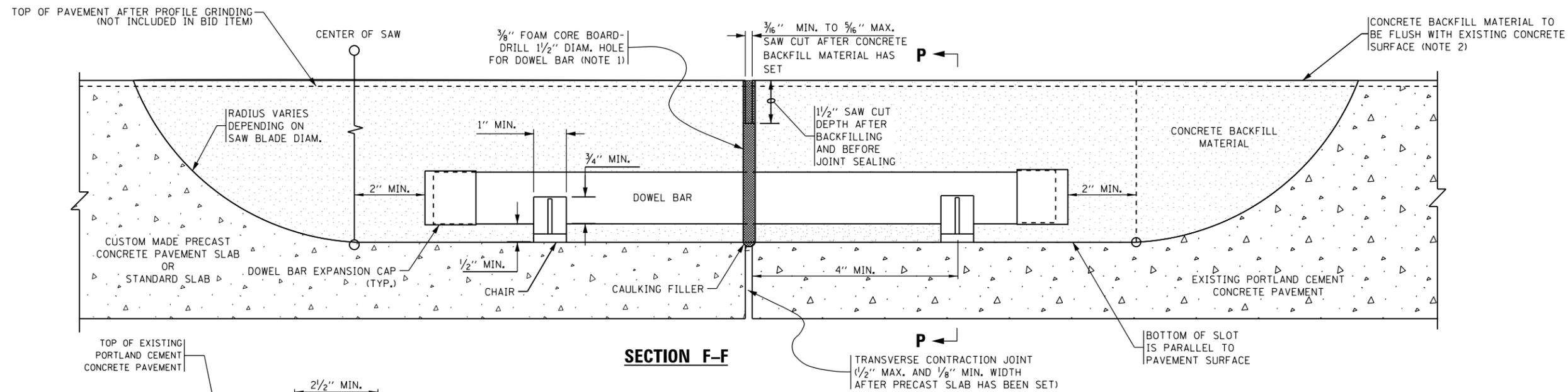
**NOTE:**  
 \* FOR DOWEL BARS FULLY RETROFITTED IN THE FIELD, REFER TO DETAIL C ON SHEET 13.

# INSTALLATION OF CONSECUTIVE STANDARD PRECAST SLABS

FILE NAME =	USER NAME = khans	DESIGNED - O. PATEL	REVISED - D.G. 9-16	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PRECAST CONCRETE PAVEMENT SLABS</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
pw:\IL\084EBIDINTEG\Illinois.gov\PI\DOT\Documents\DOT Offices\District 1\Projects\DI325\Meta\Design\DistStd.dgn			REVISED -		SCALE: NONE	SHEET 12 OF 19 SHEETS	STA.	TO STA.	21	2018-026-RS-SW	DUPAGE	64	48
Default	PLOT SCALE = 100.0002' / in.	CHECKED -	REVISED -					<b>BD 57</b>		<b>CONTRACT NO. 62G64</b>			
	PLOT DATE = 12/13/2018	DATE - 10-25-2013	REVISED -		ILLINOIS FED. AID PROJECT								

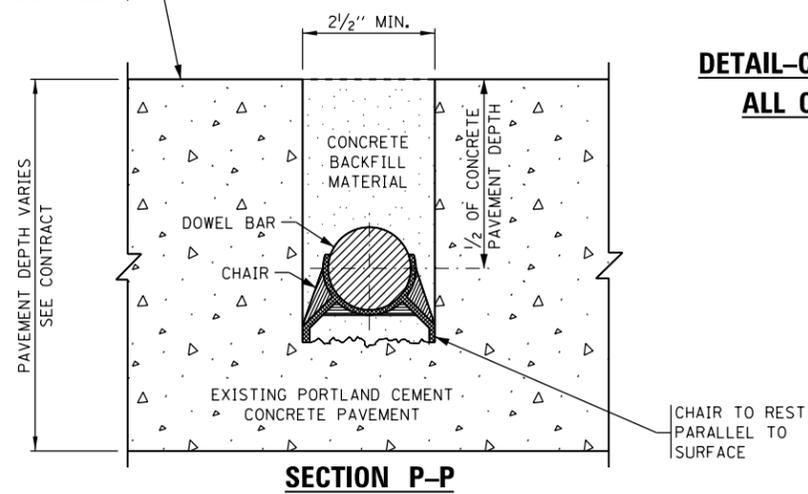


**PLAN VIEW**

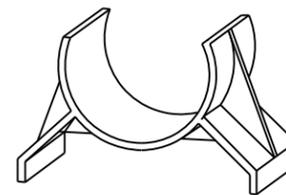


**SECTION F-F**

**DETAIL-C, WIDE MOUTH DOWEL BAR PLACEMENT DETAIL FOR ALL CUSTOM MADE PRECAST PANELS AND OPTIONAL FOR STANDARD SLABS**



**SECTION P-P**



**CHAIR DETAIL**

**NOTES:**

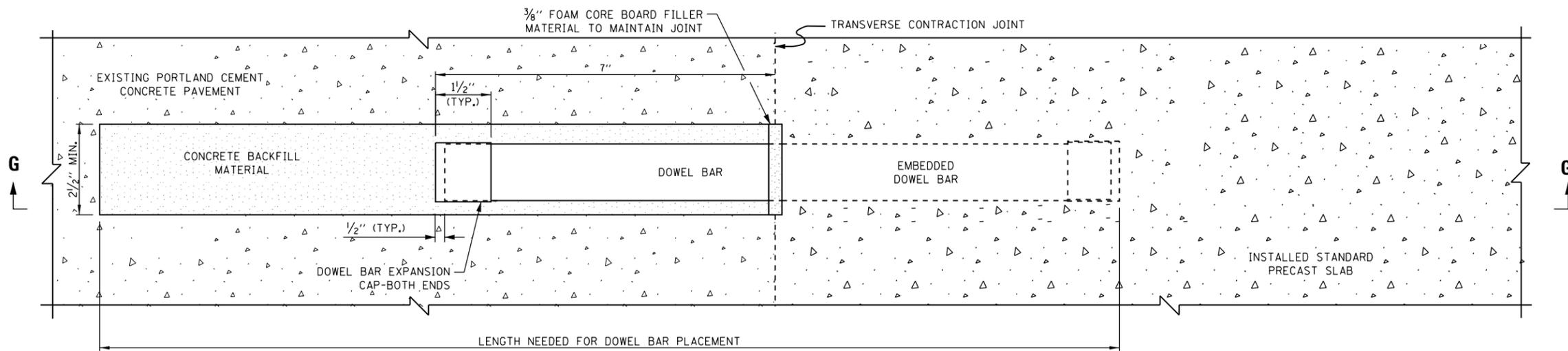
1. PLACE FOAM CORE BOARDS TO THE TOP OF PATCH.
2. UPON COMPLETION, THE FINISHED SURFACE OF THE CONCRETE BACKFILL MATERIAL SHALL NOT BE BELOW EXISTING CONCRETE SURFACE.

FILE NAME =	USER NAME = khans	DESIGNED - O. PATEL	REVISED - D.G. 9-16
pw:\IL\084EBID\INTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\DI325\Drawings\Design\DistStd.dgn		CHECKED -	REVISED -
Default	PLOT SCALE = 100.0002' / in.	DATE - 10-25-2013	REVISED -
	PLOT DATE = 12/13/2018		

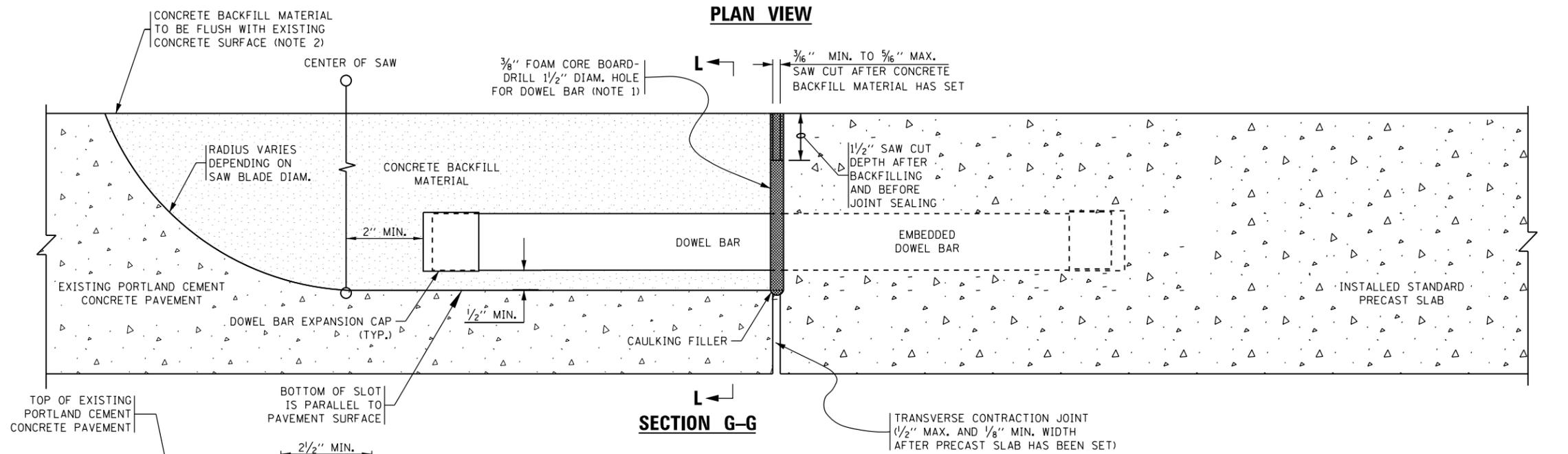
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>PRECAST CONCRETE PAVEMENT SLABS</b>			
SCALE: NONE	SHEET 13 OF 19 SHEETS	STA.	TO STA.

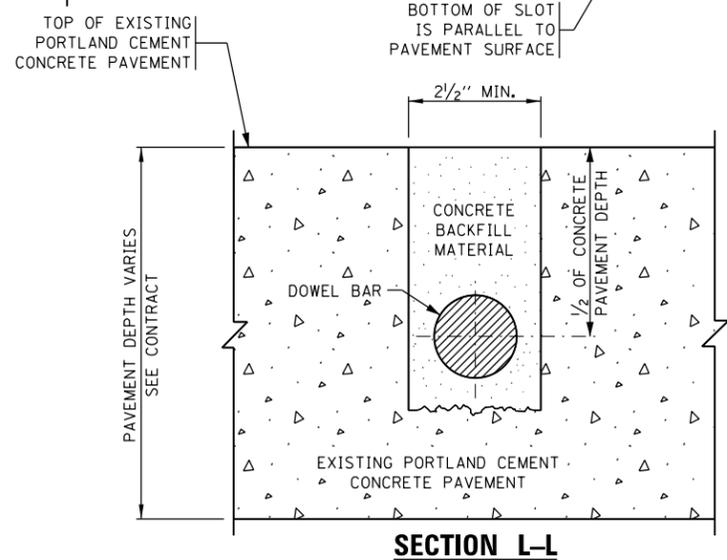
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
21	2018-026-RS-SW	DUPAGE	64	49
<b>BD 57</b>		<b>CONTRACT NO. 62G64</b>		
ILLINOIS FED. AID PROJECT				



**PLAN VIEW**



**SECTION G-G**



**SECTION L-L**

**DETAIL D - WIDE MOUTH DOWEL BAR PLACEMENT**

**DETAIL FOR STANDARD PRECAST PANELS**

(FOR APPLICATION WITH ALL ISOLATED STANDARD SLABS AND WITH INITIAL PLACEMENT OF CONSECUTIVE STANDARD SLABS)

**NOTES:**

1. PLACE FOAM CORE BOARDS TO THE TOP OF PATCH.
2. UPON COMPLETION, THE FINISHED SURFACE OF THE CONCRETE BACKFILL MATERIAL SHALL NOT BE BELOW EXISTING CONCRETE SURFACE.

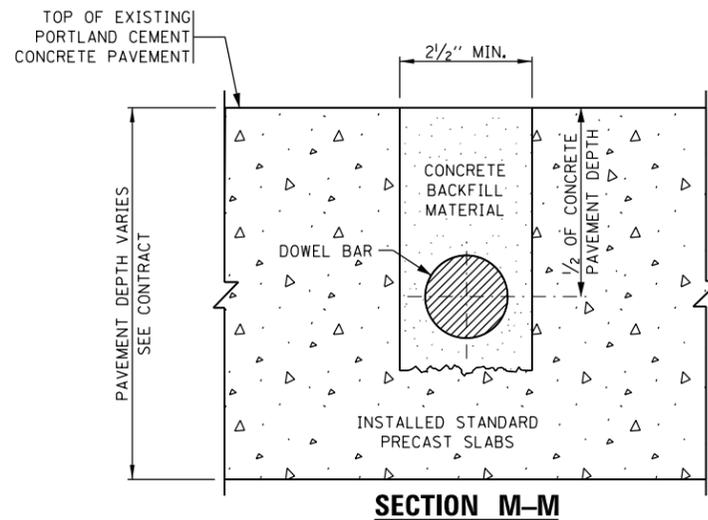
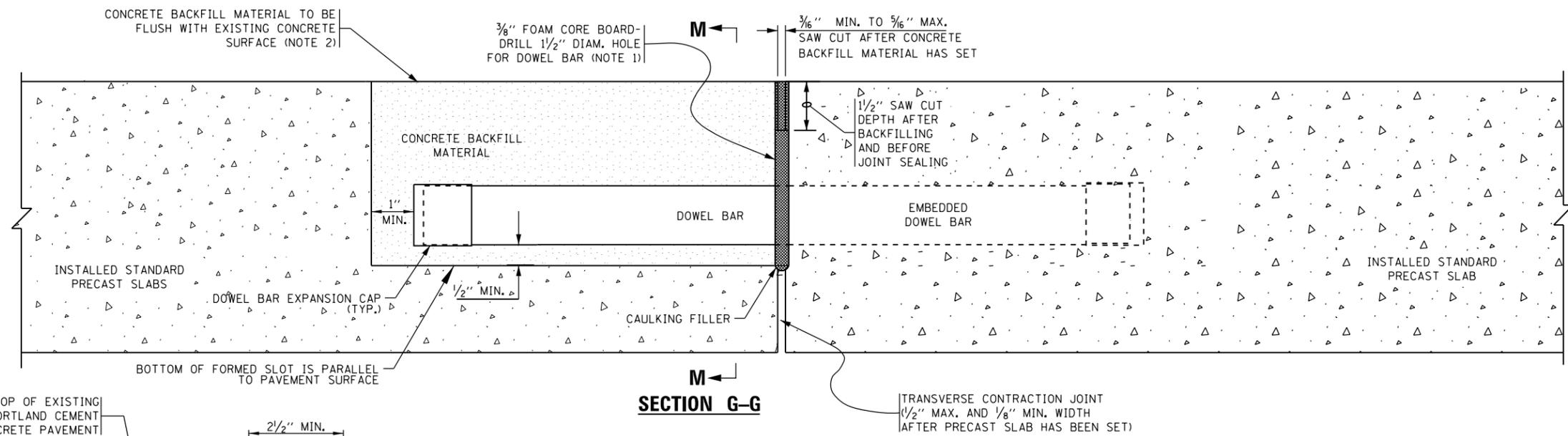
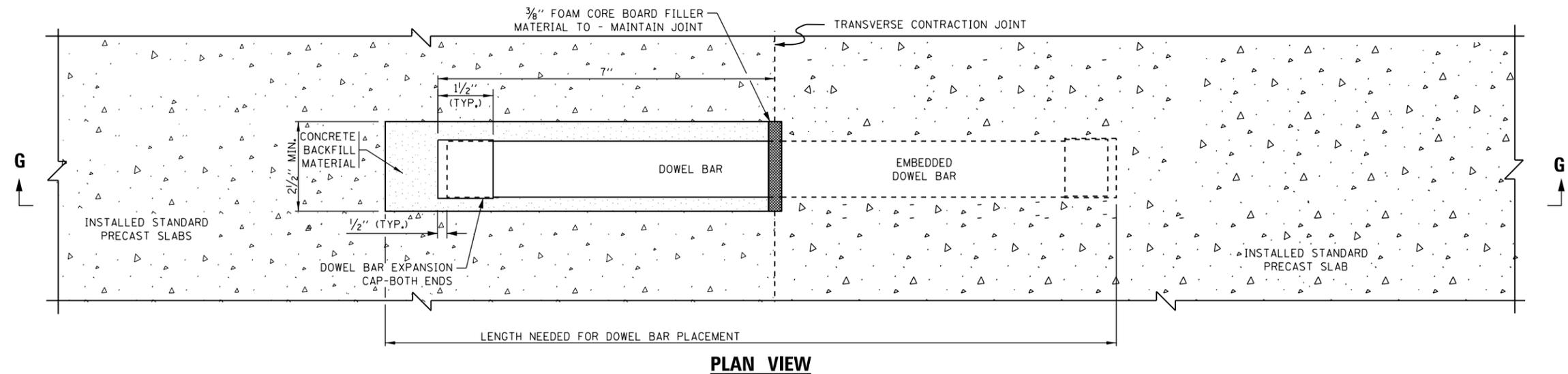
FILE NAME =	USER NAME = khans	DESIGNED - O. PATEL	REVISED - D.G. 9-16
pw\1\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\DI325\Drawings\Design\DistStd.dgn		CHECKED -	REVISED -
Default	PLOT SCALE = 100.0002' / in.	DATE - 10-25-2013	REVISED -
	PLOT DATE = 12/13/2018		

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PRECAST CONCRETE PAVEMENT SLABS**

SCALE: NONE SHEET 14 OF 19 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
21	2018-026-RS-SW	DUPAGE	64	50
<b>BD 57</b>			<b>CONTRACT NO. 62G64</b>	
ILLINOIS FED. AID PROJECT				

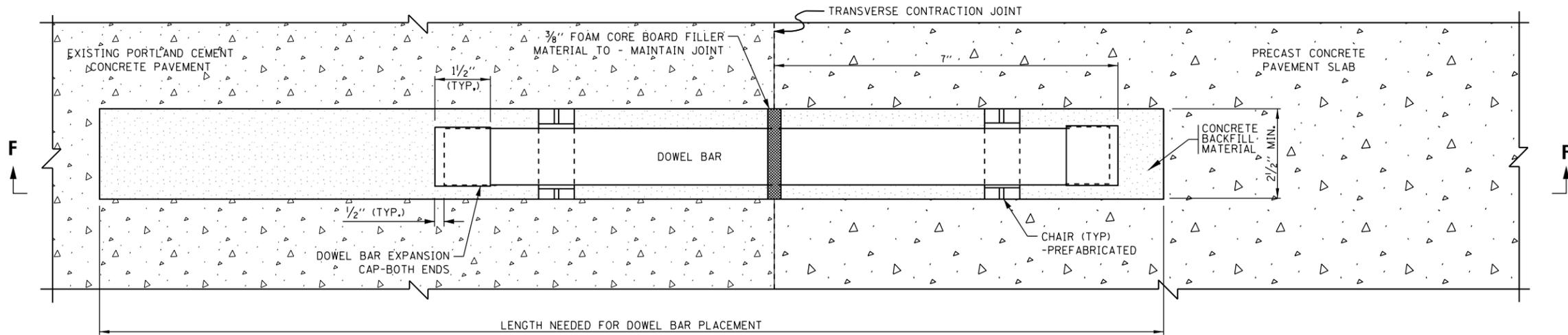


**DETAIL E - WIDE MOUTH DOWEL BAR PLACEMENT DETAIL FOR CONSECUTIVE STANDARD PRECAST PANELS**

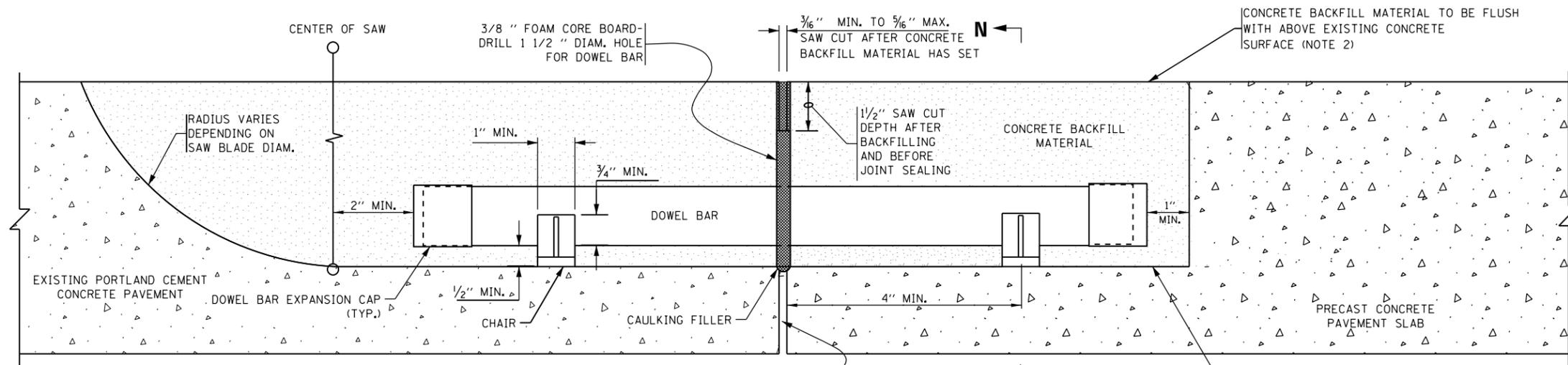
**NOTES:**

1. PLACE FOAM CORE BOARDS TO THE TOP OF PATCH.
2. UPON COMPLETION, THE FINISHED SURFACE OF THE CONCRETE BACKFILL MATERIAL SHALL NOT BE BELOW THE EXISTING CONCRETE SURFACE.

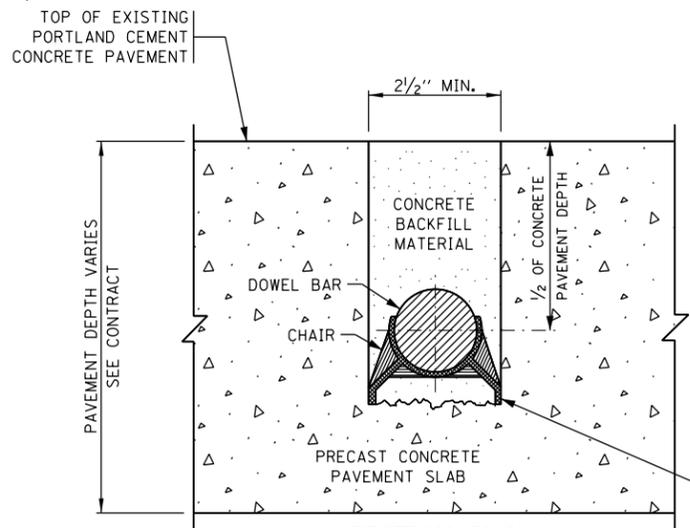
FILE NAME =	USER NAME = khans	DESIGNED - O. PATEL	REVISED - D.G. 9-16	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PRECAST CONCRETE PAVEMENT SLABS</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Default		DATE - 10-25-2013	REVISED -					21	2018-026-RS-SW	DUPAGE	64	51
	PLOT SCALE = 100.0002' / in.	CHECKED -	REVISED -		<b>BD 57</b>			CONTRACT NO. 62G64				
	PLOT DATE = 12/13/2018	DATE - 10-25-2013	REVISED -	SCALE: NONE SHEET 15 OF 19 SHEETS STA. TO STA.			ILLINOIS FED. AID PROJECT					



**PLAN VIEW**

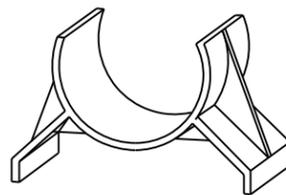


**SECTION F-F**



**SECTION N-N**

**DETAIL-F, WIDE MOUTH DOWEL BAR PLACEMENT DETAIL FOR THE LAST TRANSFER JOINT OF CONSECUTIVELY PLACED STANDARD PRECAST PANELS**



**CHAIR DETAIL**

**NOTES:**

1. PLACE FOAM CORE BOARDS TO THE TOP OF PATCH.
2. UPON COMPLETION, THE FINISHED SURFACE OF THE CONCRETE BACKFILL MATERIAL SHALL NOT BE BELOW THE EXISTING CONCRETE SURFACE.

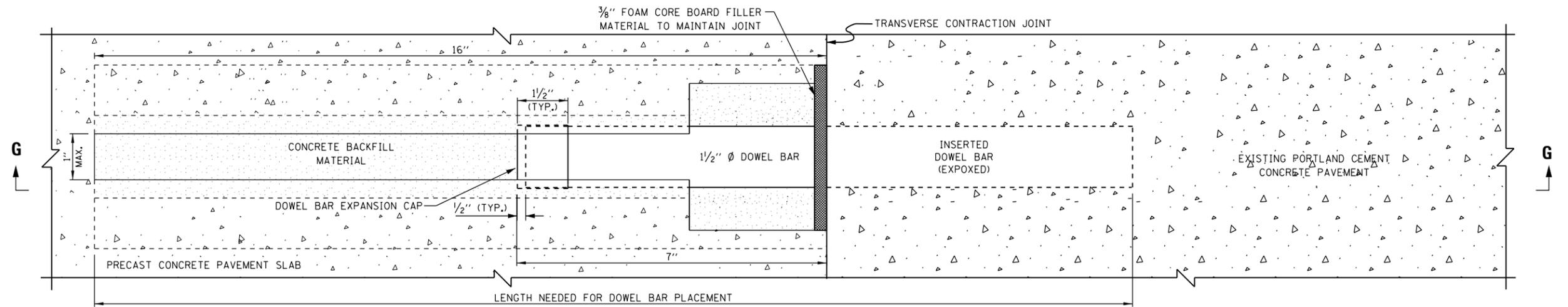
FILE NAME =	USER NAME = khans	DESIGNED - O. PATEL	REVISED - D.G. 6-14
pw\1\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\DOT Offices\District 1\Projects\01325\BROWNS\Design\DistStd.dgn			REVISED - D.G. 9-16
Default	PLOT SCALE = 100.0002' / in.	CHECKED -	REVISED -
	PLOT DATE = 12/13/2018	DATE - 10-25-2013	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

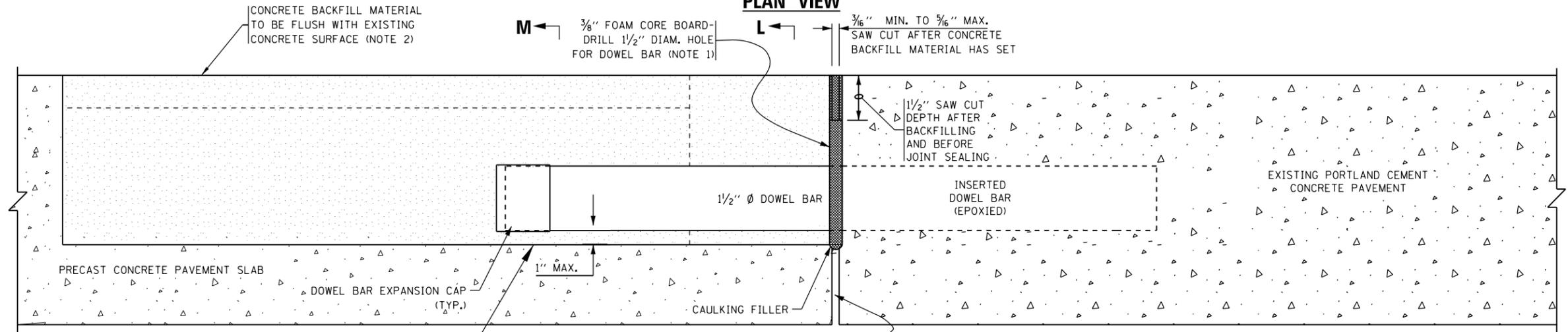
**PRECAST CONCRETE PAVEMENT SLABS**

SCALE: NONE SHEET 16 OF 19 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
21	2018-026-RS-SW	DUPAGE	64	52
<b>BD 57</b>		<b>CONTRACT NO. 62G64</b>		
ILLINOIS FED. AID PROJECT				



**PLAN VIEW**

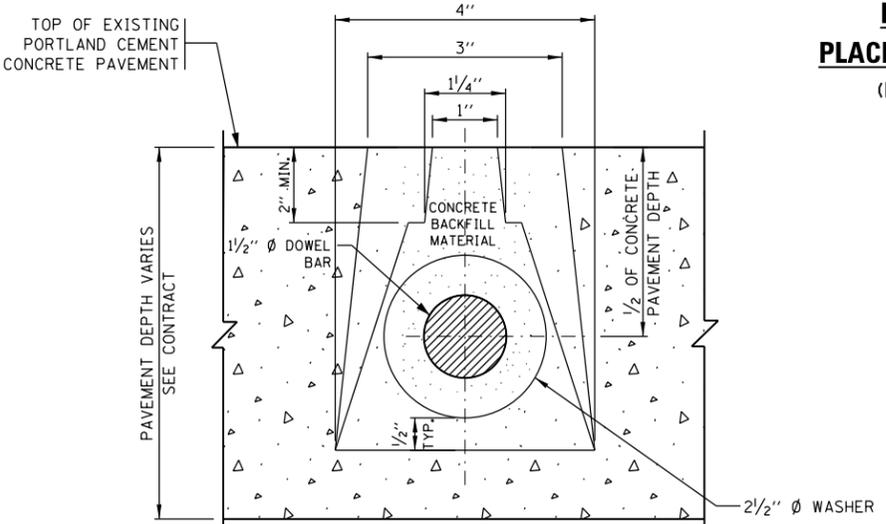


**SECTION G-G**

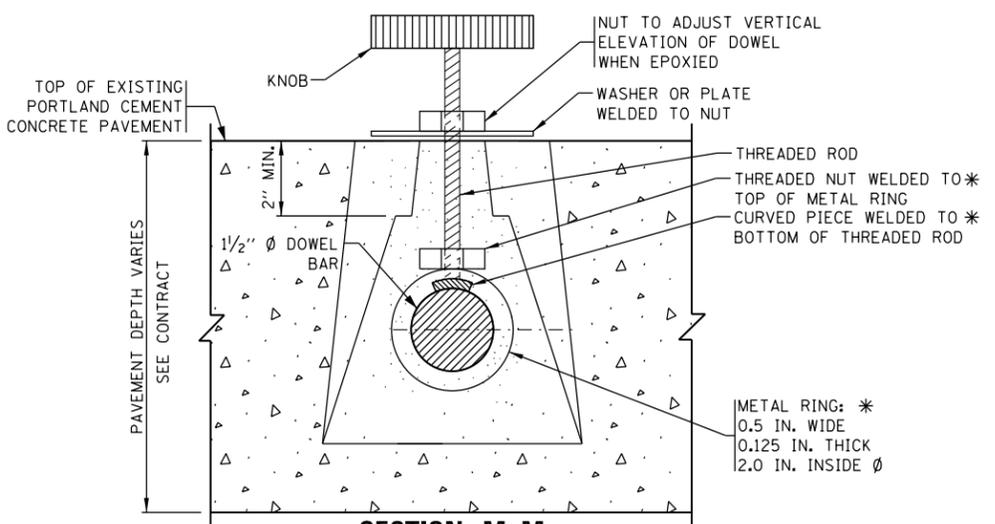
**DETAIL G - NARROW MOUTH DOWEL BAR  
PLACEMENT DETAIL FOR ISOLATED PRECAST PANELS**

(FOR OPTIONAL APPLICATION WITH ALL ISOLATED  
SLABS IN PLACE OF FULL RETROFITS)

- NOTES:**
1. PLACE FOAM CORE BOARDS TO THE TOP OF PATCH.
  2. UPON COMPLETION, THE FINISHED SURFACE OF THE CONCRETE BACKFILL MATERIAL SHALL NOT BE BELOW EXISTING CONCRETE SURFACE.



**SECTION L-L**



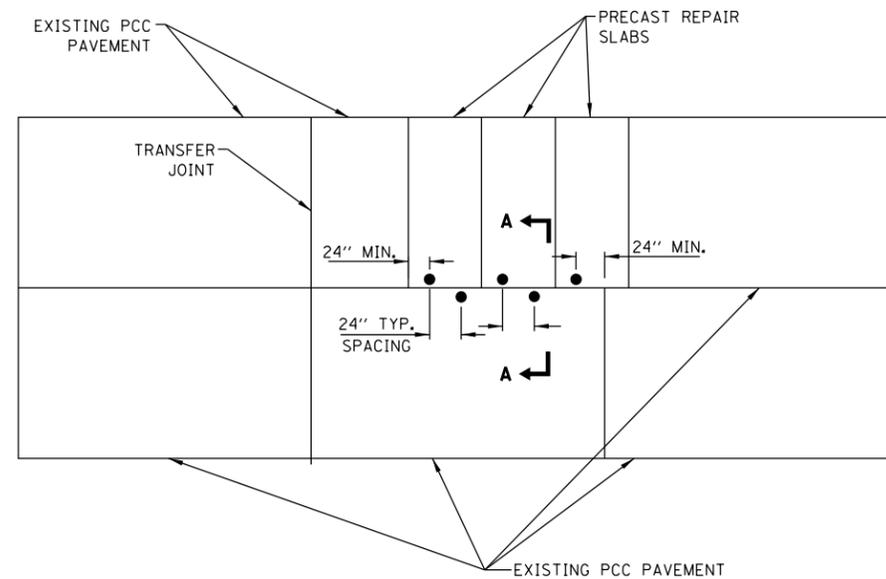
**SECTION M-M**

**CLAMP DETAIL FOR SLIDING DOWEL BAR SLOTS**

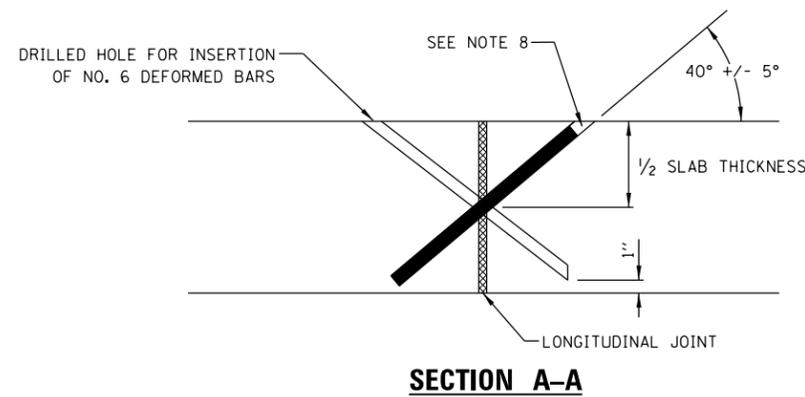
\* METAL RING MAY BE REPLACED WITH A STRONG MAGNET WELDED TO THE THREADED ROD. AT LEAST ONE CLAMP WILL BE NEEDED FOR EACH INSERTED DOWEL BAR TO MAINTAIN ALIGNMENT.

FILE NAME =	USER NAME = khans	DESIGNED - O. PATEL	REVISED - D.G. 6-14	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PRECAST CONCRETE PAVEMENT SLABS</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
p:\1\084EBIDINTEG.illinois.gov\PIWDDocuments\DOT Offices\District 1\Projects\01325\Drawings\Design\DistStd.dgn	PLOT SCALE = 100.0002' / in.	CHECKED -	REVISED - D.G. 9-16					21	2018-026-RS-SW	DUPAGE	64	53
Default	PLOT DATE = 12/13/2018	DATE - 10-25-2013	REVISED -		SCALE: NONE	SHEET 17 OF 19 SHEETS	STA. TO STA.	<b>BD 57</b> CONTRACT NO. 62G64				
							ILLINOIS FED. AID PROJECT					





**DETAIL H – LONGITUDINAL TIE BAR  
STITCHING FOR PRECAST PANELS**

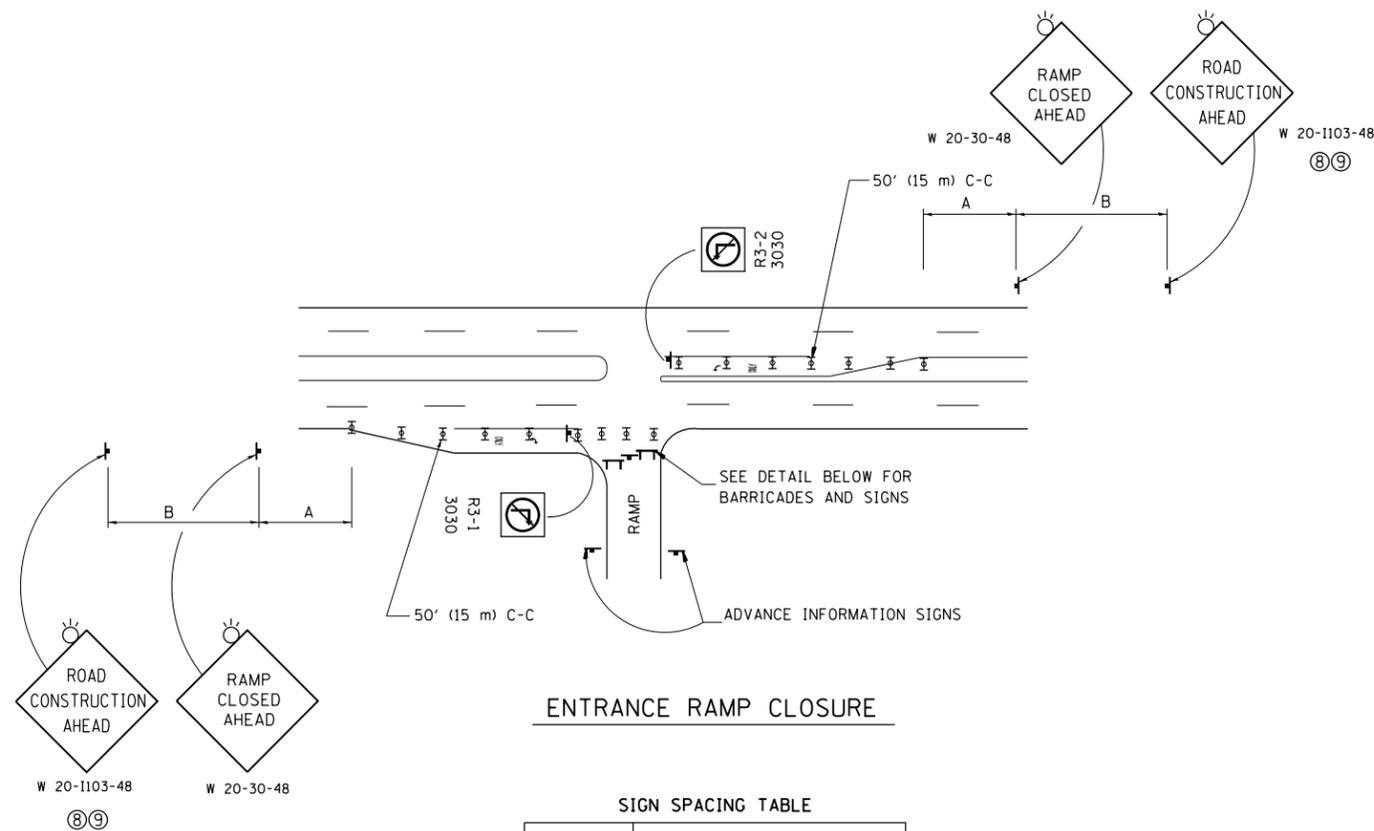


**SECTION A-A**

**NOTES FOR TIE BAR STITCHING:**

1. DRILL HOLES THAT ARE ORIENTED AT  $40^\circ \pm 5^\circ$  ANGLE TO THE PAVEMENT SURFACE SO THAT THEY INTERSECT THE LONGITUDINAL CRACK OR JOINT AT ABOUT MID-DEPTH. (IT IS IMPORTANT TO START DRILLING THE HOLE AT A CONSISTENT DISTANCE FROM THE JOINT, IN ORDER TO CONSISTENTLY CROSS AT THE MID-DEPTH OF THE SLAB.)
2. HOLE CENTERLINES ARE PERPENDICULAR TO THE JOINT (IN PLAN VIEW) AT EACH LOCATION BEING DRILLED.
3. SELECT A DRILL THAT MINIMIZES DAMAGE TO THE CONCRETE SURFACE, SUCH AS A HYDRAULIC POWERED DRILL. SELECT A DRILL DIAMETER NO MORE THAN 0.375 IN. LARGER THAN THE TIE-BAR DIAMETER. CHOOSE A GANG-MOUNTED DRILL IF A HIGHER PRODUCTIVITY IS NEEDED.
4. DRILL HOLES WITH NO LESS THAN A 24 INCH BAR SPACING. ADJACENT HOLES ARE DRILLED IN OPPOSITE DIRECTIONS ACROSS THE JOINT. THE HOLES AND INSERTED TIE BAR SHALL BE NO LESS THAN 24 INCHES FROM ANY EXISTING TRANSVERSE JOINT OR ANY PRECAST OR REPAIR TRANSFER JOINT.
5. HOLE BOTTOMS ARE NO MORE THAN 1 INCH FROM THE SLAB BOTTOM.
6. AIR BLOW THE HOLES TO REMOVE DUST AND DEBRIS AFTER DRILLING.
7. INJECT ADHESIVE INTO THE HOLE, LEAVING SOME VOLUME FOR THE BAR TO OCCUPY THE HOLE. (POURING THE ADHESIVE IS ACCEPTABLE FOR SMALL QUANTITIES.)
8. INSERT THE NO. 6 EPOXY COATED DEFORMED TIE BAR INTO THE HOLE, LEAVING ABOUT 1 IN. FROM THE TOP OF BAR TO THE PAVEMENT SURFACE. DEFORMED TIE BARS SHALL BE EPOXY COATED.
9. REMOVE EXCESS ADHESIVE AND FINISH FLUSH WITH THE PAVEMENT SURFACE.

FILE NAME =	USER NAME = khans	DESIGNED - O. PATEL	REVISED - D.G. 9-16	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PRECAST CONCRETE PAVEMENT SLABS</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
p:\11084EBIDINTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\DI325\BROWNS\Meta\Design\DistStd.dgn		CHECKED -	REVISED -		21	2018-026-RS-SW	DUPAGE	64	55			
Default	PLOT SCALE = 100.0002' / in.	DATE - 10-25-2013	REVISED -		<b>BD 57</b>			CONTRACT NO. 62G64				
	PLOT DATE = 12/13/2018	DATE - 10-25-2013	REVISED -		SCALE: NONE	SHEET 19 OF 19 SHEETS	STA.	TO STA.		ILLINOIS FED. AID PROJECT		

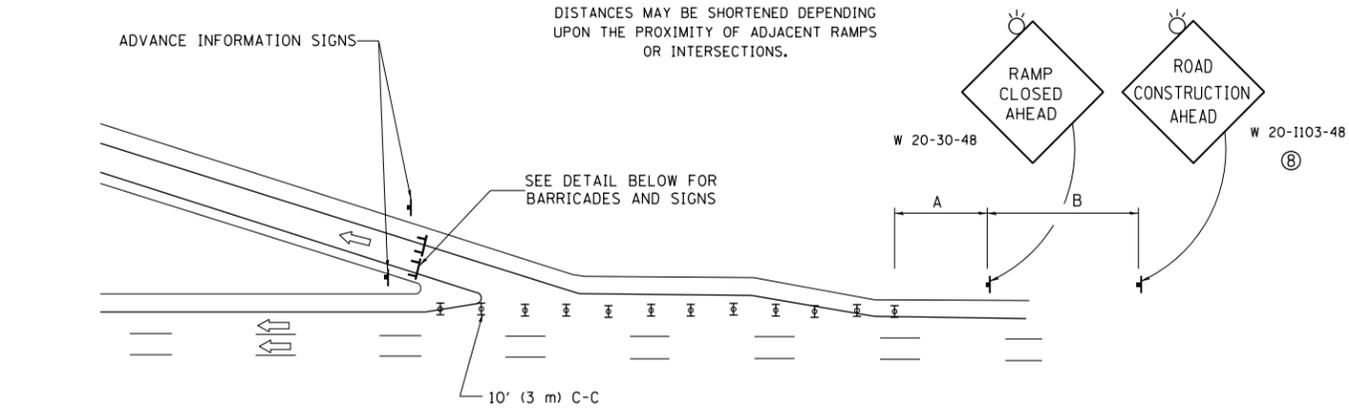


**ENTRANCE RAMP CLOSURE**

**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)

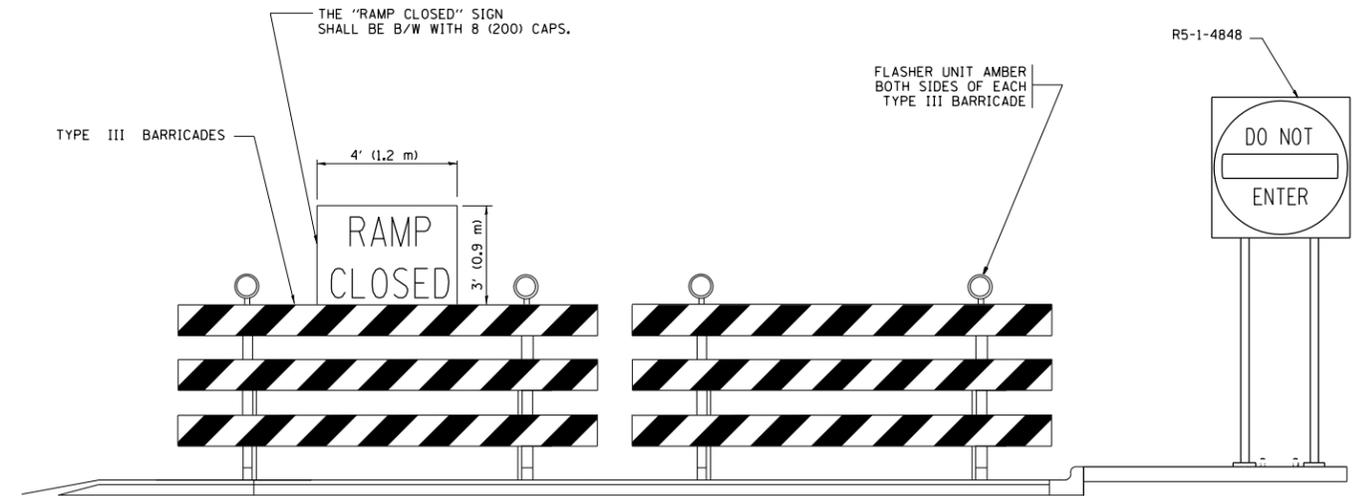
DISTANCES MAY BE SHORTENED DEPENDING UPON THE PROXIMITY OF ADJACENT RAMPS OR INTERSECTIONS.



**EXIT RAMP CLOSURE**

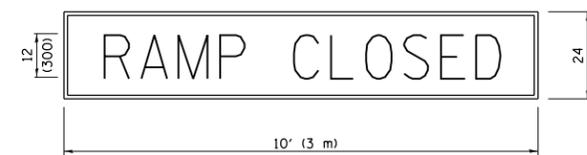
**SYMBOLS**

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



**DETAIL FOR REQUIRED BARRICADES & SIGNS**

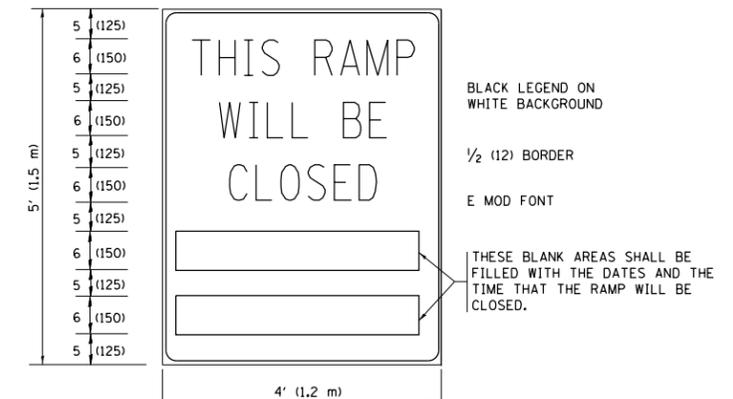
**RAMP CLOSURE ADVANCE WARNING SIGN**



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**



BLACK 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.

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.

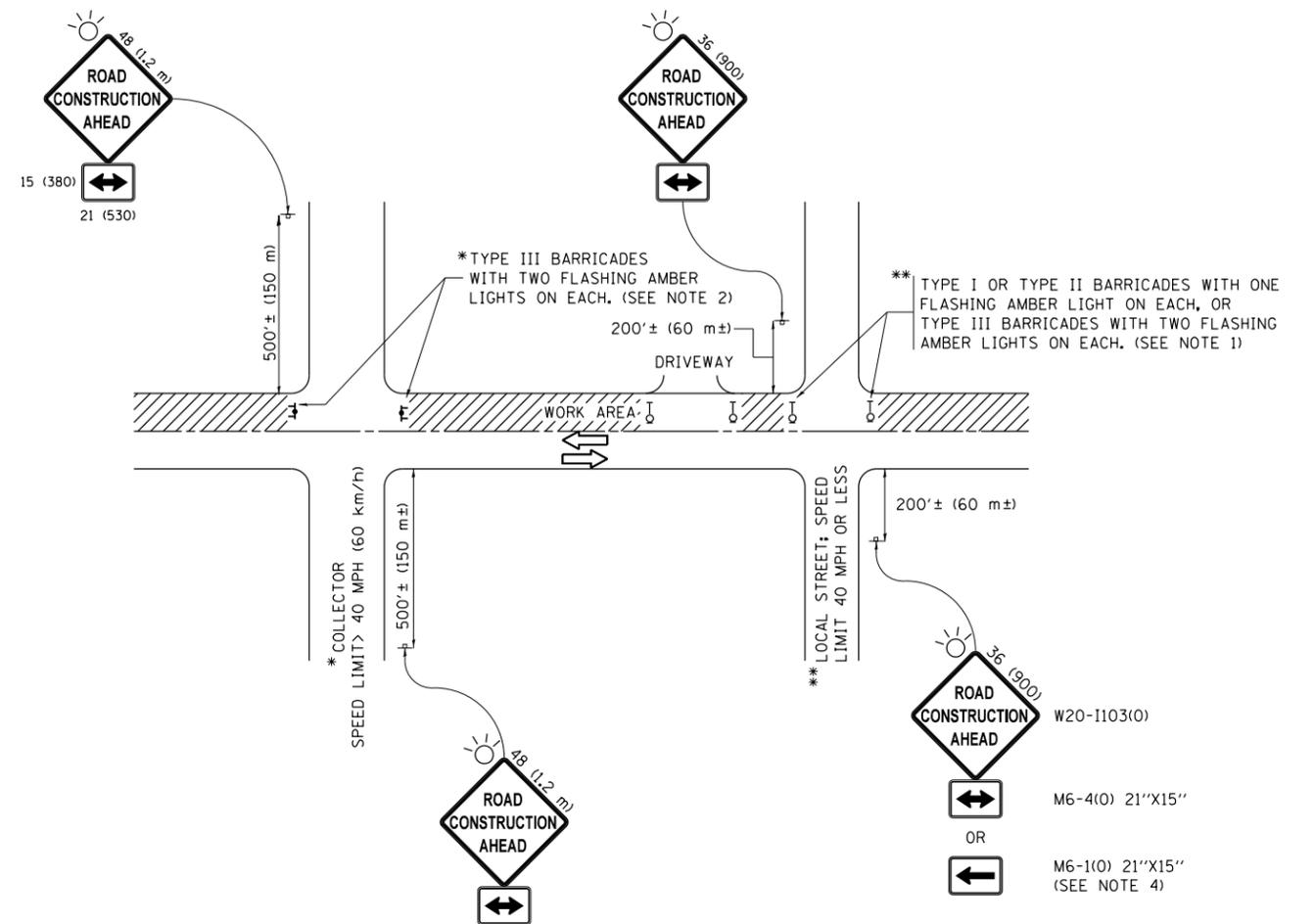
FILE NAME =	USER NAME = khans	DESIGNED - D.W.S.	REVISED - S.P.B. 01-07
p:\1\084EBIDINTEG\illinois.gov\PI\DOT\Documents\IDOT Offices\District 1\Projects\1325\Barricade\Design\DistStd.dgn		REVISION	REVISED - S.P.B. 12-09
Default	PLOT SCALE = 100.0002' / 1in.	CHECKED -	REVISED - M.D. 06-13
	PLOT DATE = 12/13/2018	DATE - 02-83	REVISED - M.D. 01-18

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ENTRANCE AND EXIT RAMP  
CLOSURE DETAILS**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
21	2018-026-R5-SW	DUPAGE	64	56
<b>TC-08</b>			<b>CONTRACT NO. 62G64</b>	
ILLINOIS 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:
  - 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.
  - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
  - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
- WHEN 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).
- 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.
- ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
- THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

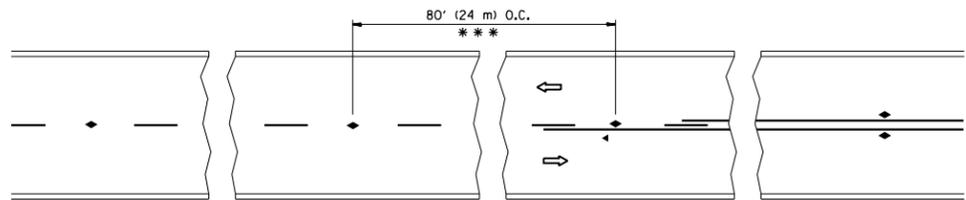
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pw:\IL\084EBIDINTEG\illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\DI325\Drawings\Design\DistStd.dgn			REVISED - T. RAMMACHER 01-06-00
Default	PLOT SCALE = 100.0002' / in.	CHECKED -	REVISED - A. SCHUETZE 07-01-13
	PLOT DATE = 12/13/2018	DATE - 06-89	REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

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

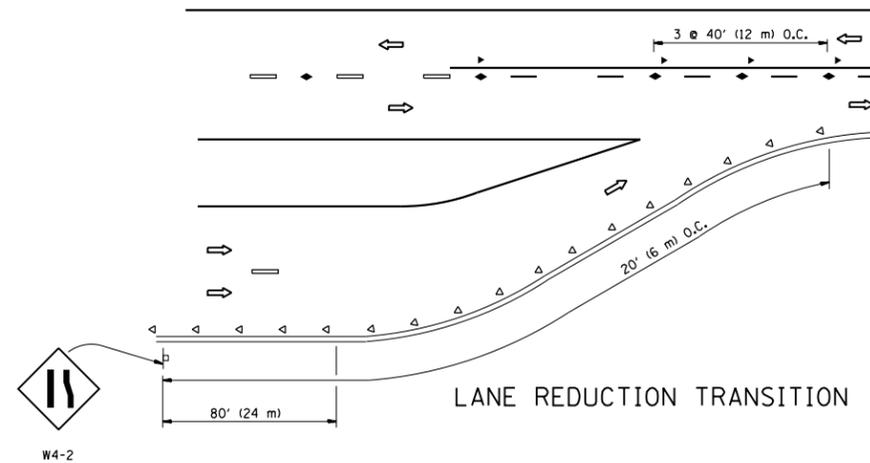
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
21	2018-026-RS-SW	DUPAGE	64	57
<b>TC-10</b>			<b>CONTRACT NO. 62G64</b>	
ILLINOIS FED. AID PROJECT				

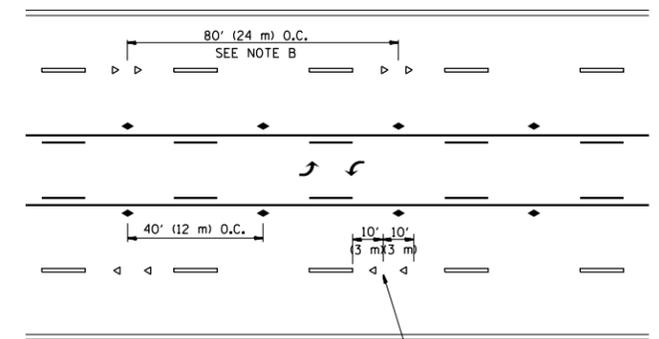


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

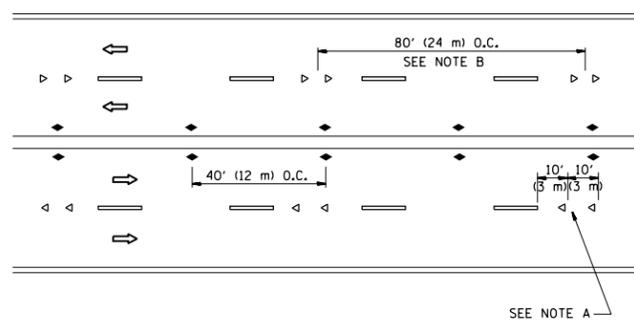
TWO-LANE/TWO-WAY



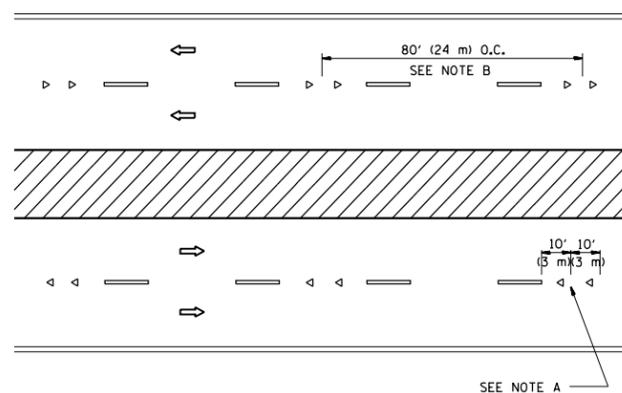
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

SYMBOLS

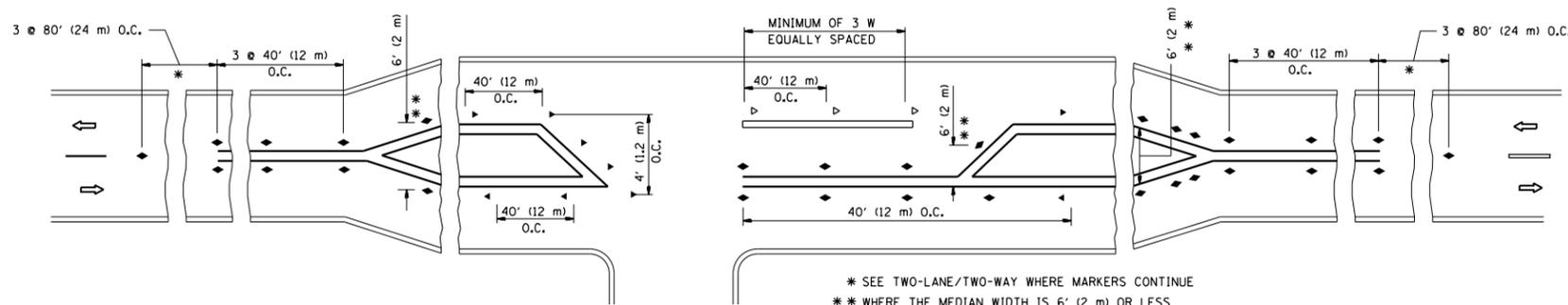
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

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

DESIGN NOTES

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



LEFT TURN

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

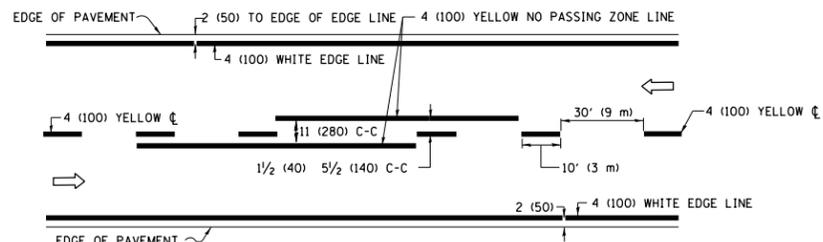
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = khans	DESIGNED -	REVISED - T. RAMMACHER 09-19-94
pw:\IL\084EBIDINTEG\illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\DI325\BROWN\Meta\Design\DistStd.dgn		CHECKED -	REVISED - T. RAMMACHER 03-12-99
		DATE -	REVISED - T. RAMMACHER 01-06-00
			REVISED - C. JUCIUS 09-09-09

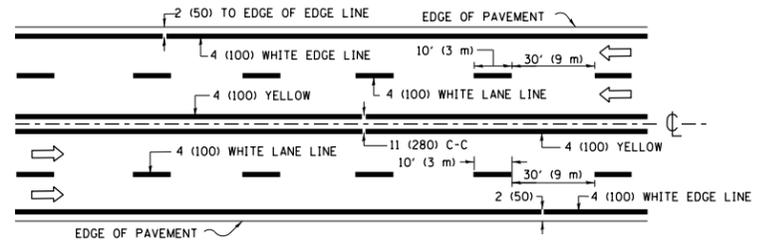
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

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

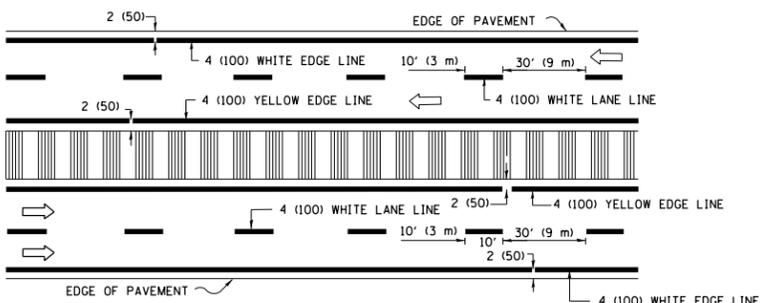
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
21	2018-026-RS-SW	DUPAGE	64	58
TC-11		CONTRACT NO. 62G64		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**2-LANE ROADWAY**

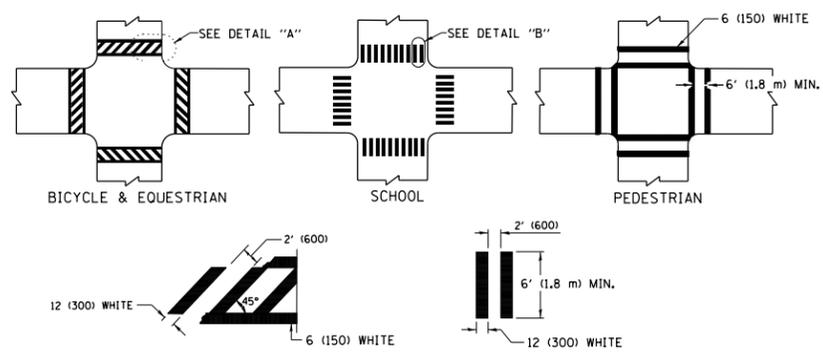


**MULTI-LANE UNDIVIDED**



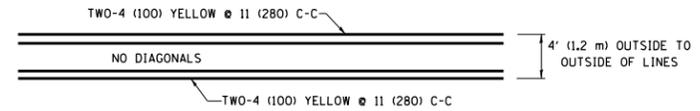
**MULTI-LANE DIVIDED WITH MEDIAN**

**TYPICAL LANE AND EDGE LINE MARKING**

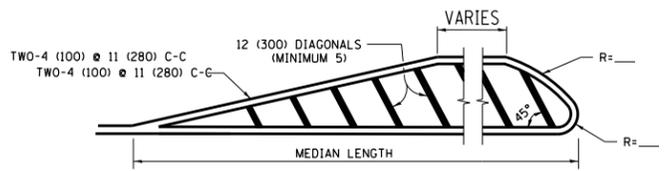


**TYPICAL CROSSWALK MARKING**

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

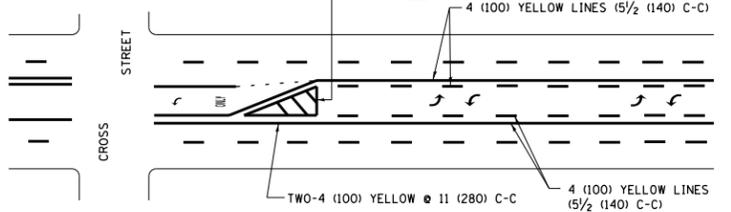


**4' (1.2 m) WIDE MEDIANS ONLY**

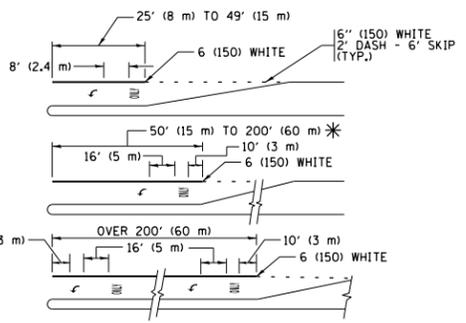


**MEDIANS OVER 4' (1.2 m) WIDE**

DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))  
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)  
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

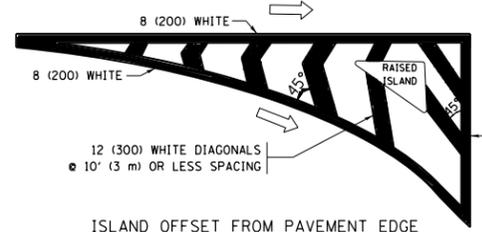


**MEDIAN WITH TWO-WAY LEFT TURN LANE TYPICAL PAINTED MEDIAN MARKING**

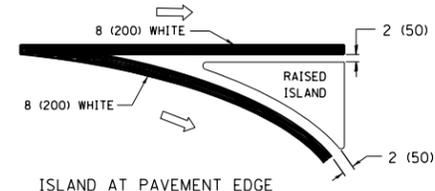


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)  
\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

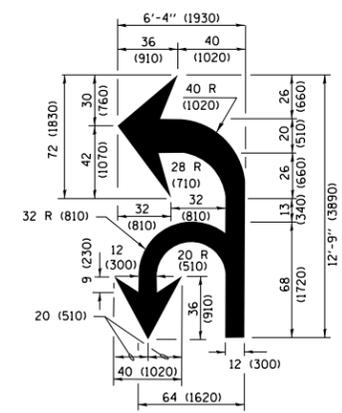
**TYPICAL LEFT (OR RIGHT) TURN LANE TYPICAL TURN LANE MARKING**



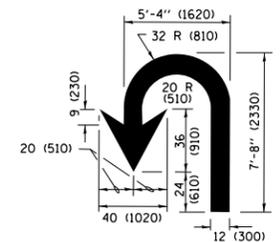
**ISLAND OFFSET FROM PAVEMENT EDGE**



**ISLAND AT PAVEMENT EDGE TYPICAL ISLAND MARKING**



**COMBINATION LEFT AND U-TURN**



**U-TURN**

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

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

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5 1/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (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 SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE.
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m <sup>2</sup> ) EACH "X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

FILE NAME =	USER NAME = khans	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09
pw\1\084EBIDINTEG\illinois.gov\PIWIDOT\Documents\DOT Offices\District 1\Projects\01325\01325\01325\Design\DistStd.dgn			REVISED - C. JUCIUS 07-01-13
Default	PLOT SCALE = 100.0002' / in.	CHECKED -	REVISED - C. JUCIUS 12-21-15
	PLOT DATE = 12/13/2018	DATE - 03-19-90	REVISED - C. JUCIUS 04-12-16

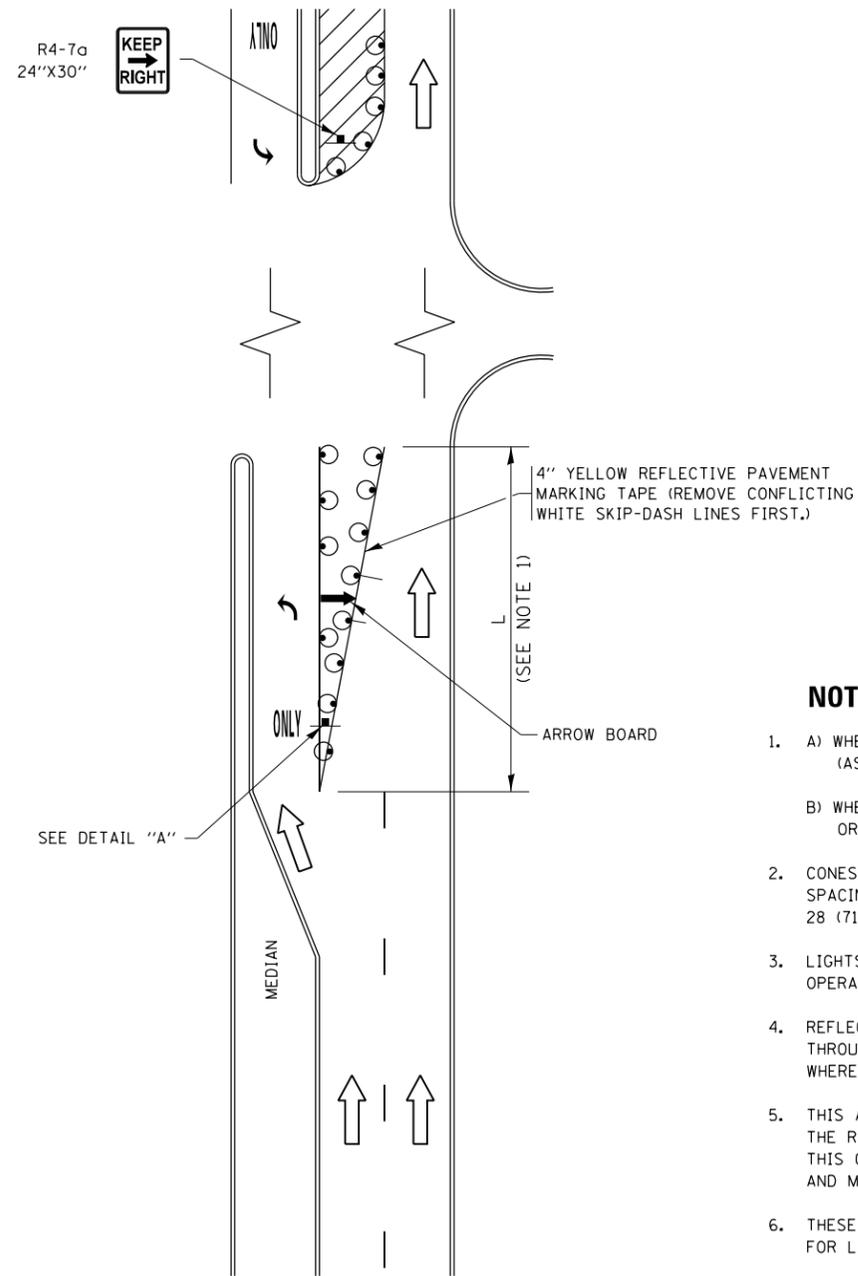
**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE TYPICAL PAVEMENT MARKINGS**

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

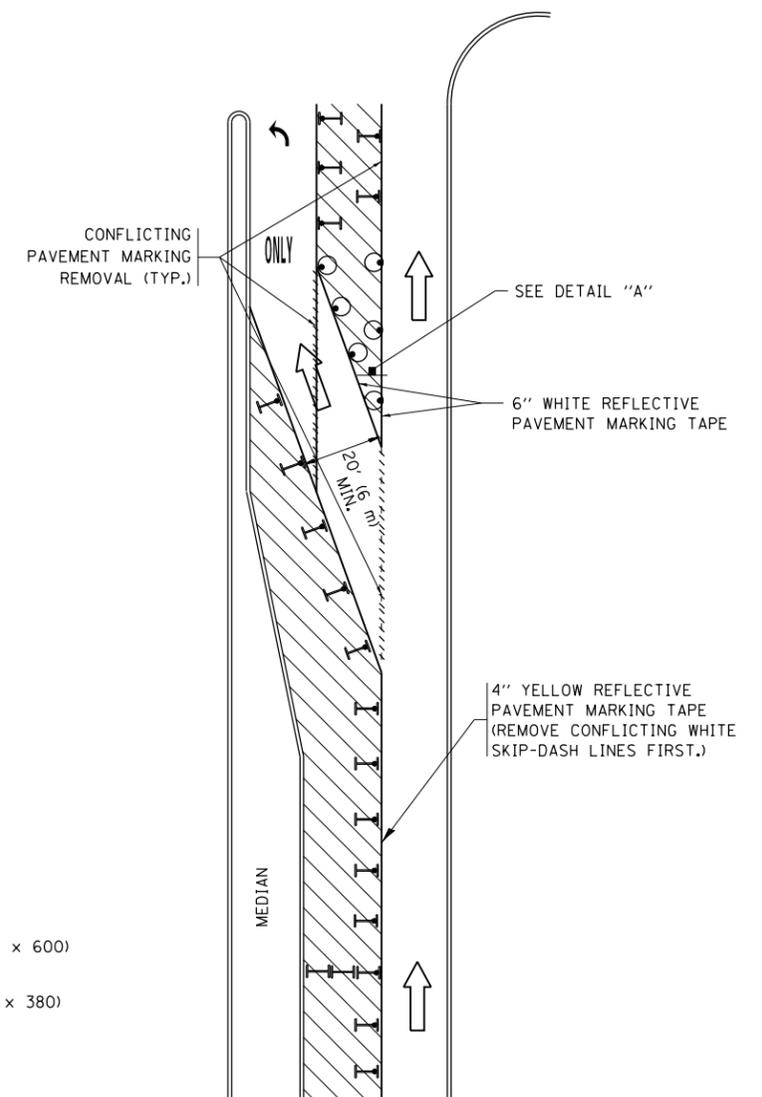
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
21	2018-026-RS-SW	DUPAGE	64	59
<b>TC-13</b>		<b>CONTRACT NO. 62G64</b>		
ILLINOIS FED. AID PROJECT				

# TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

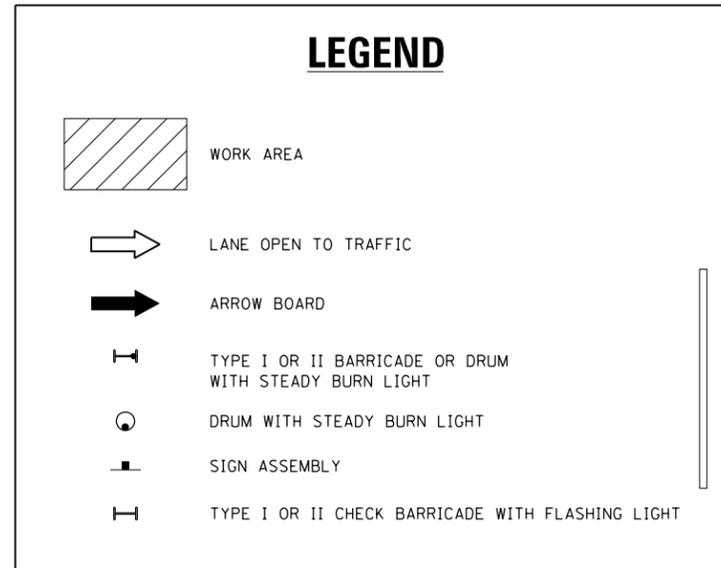


**FIGURE 1**

# TURN BAY ENTRANCE WITHIN A LANE CLOSURE

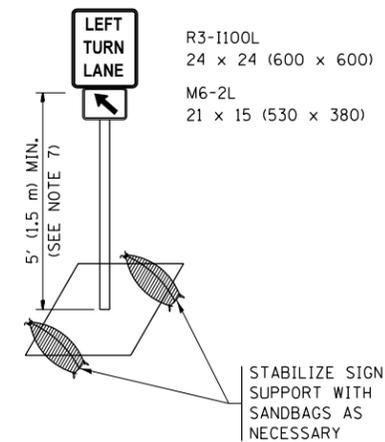


**FIGURE 2**



### NOTES:

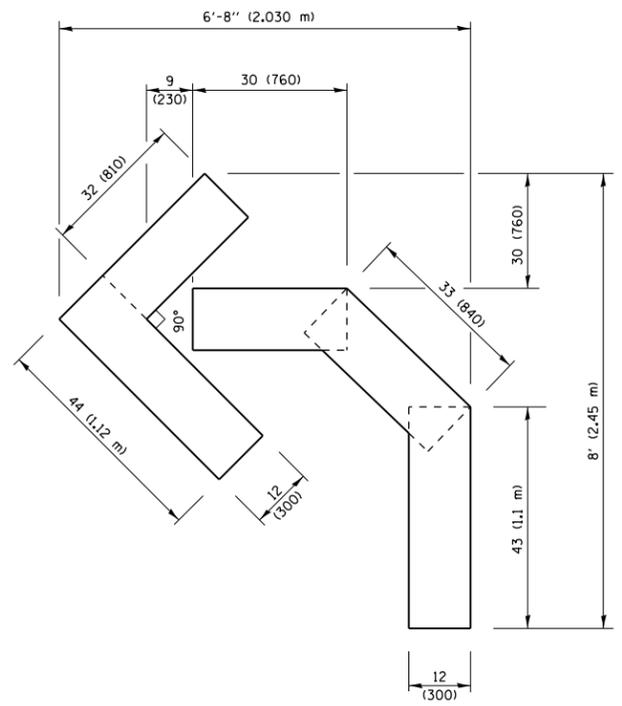
1. A) WHEN "L" IS  $\leq$  THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.  
B) WHEN "L" IS  $>$  THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
2. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. 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" R3-1100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH PREQUIREMENTS.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.



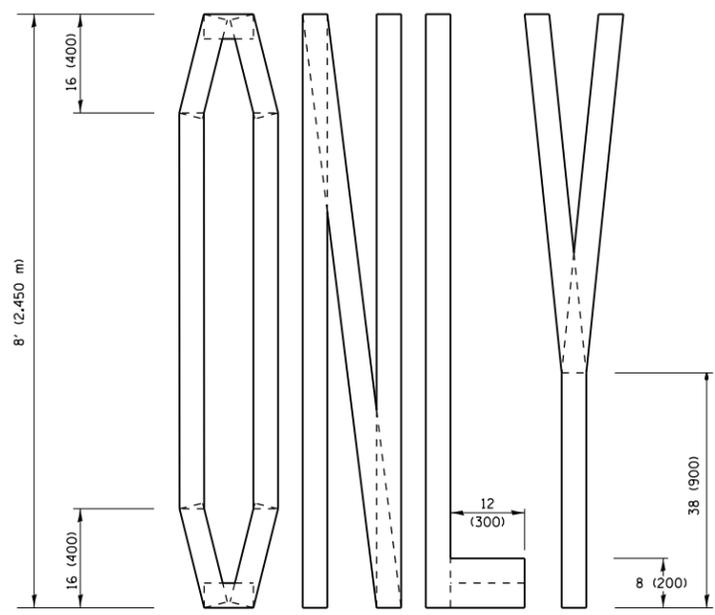
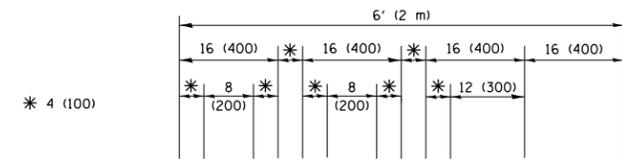
**DETAIL A**

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

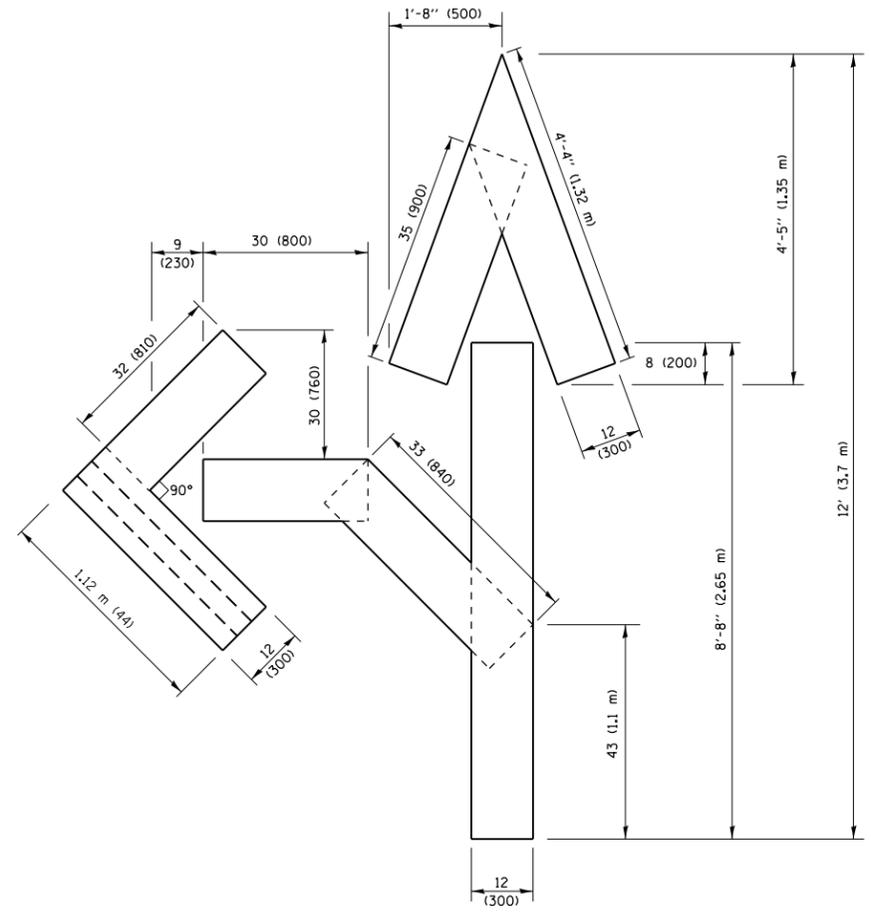
FILE NAME =	USER NAME = khans	REVISED - T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw\1\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\01325\REVISED Design\HOUSEH 11-07-95	REVISED - A. HOUSEH 11-07-95	REVISED - A. SCHUETZE 07-01-13	REVISED - A. SCHUETZE 07-01-13			21	2018-026-R5-SW	DUPAGE	64	60
Default	PLOT SCALE = 100.0002' / in.	REVISED - A. HOUSEH 10-12-96	REVISED - A. SCHUETZE 09-15-16			<b>TC-14</b>		<b>CONTRACT NO. 62G64</b>		
	PLOT DATE = 12/13/2018	REVISED - T. RAMMACHER 01-06-00	REVISED -			ILLINOIS FED. AID PROJECT				
					SCALE: NONE	SHEET 1 OF 1 SHEETS		STA.	TO STA.	



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

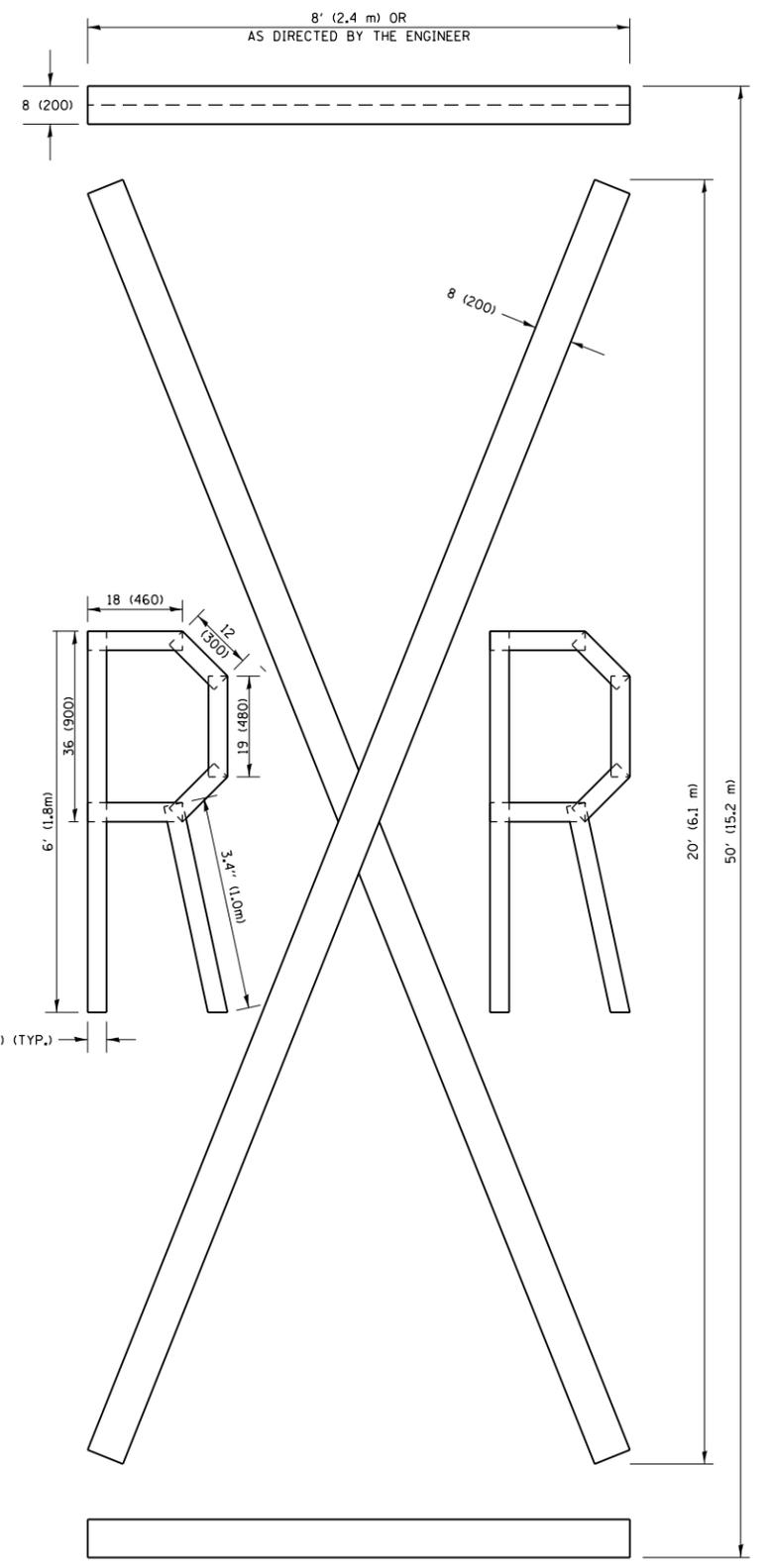


**QUANTITY**  
 4 (100) LINE = 64.1 ft. (19.5 m)  
 21.4 sq. ft. (1.99 sq. m)



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

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



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

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

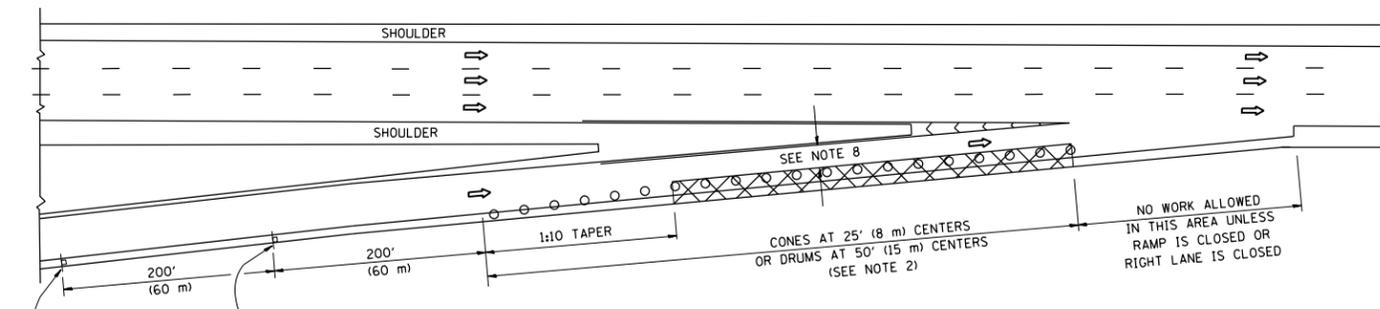
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		DATE - 09-18-94	REVISED - E. GOMEZ 08-28-00
			REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

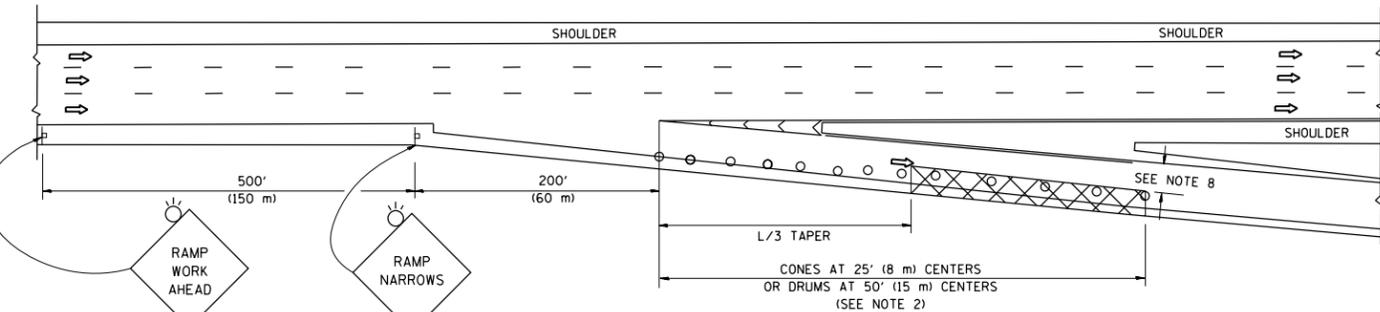
<b>SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS</b>			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
21	2018-026-RS-SW	DUPAGE	64	61
<b>TC-16</b>		<b>CONTRACT NO. 62G64</b>		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

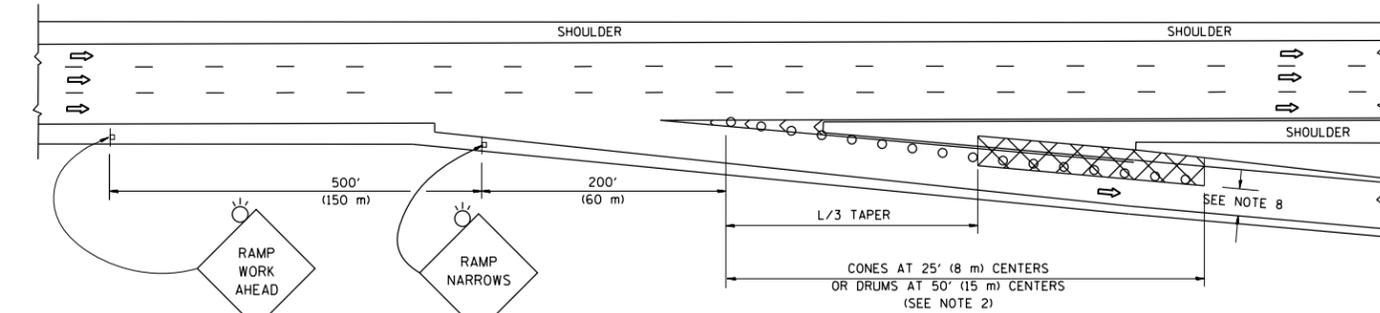
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

SYMBOLS

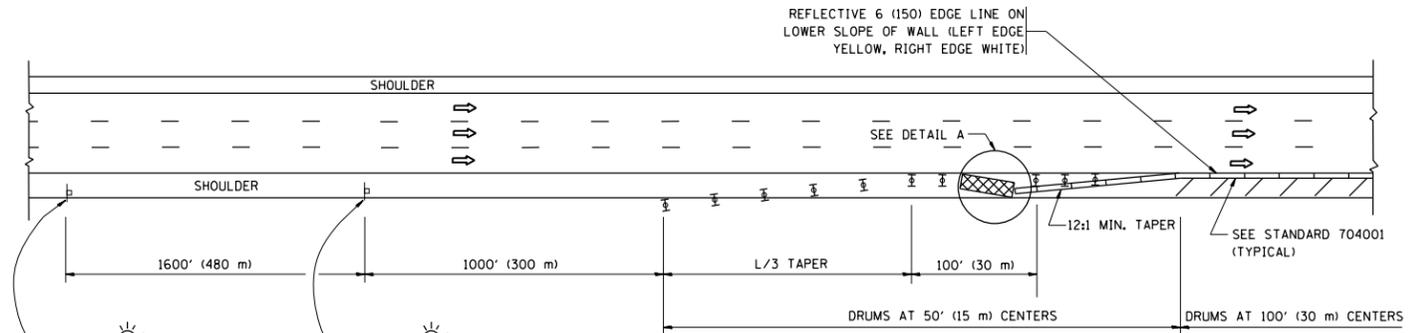
- ACTIVE WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE OR DRUM
- CONE, DRUM OR BARRICADE
- IMPACT ATTENUATOR OF TYPE AND TEST LEVEL SPECIFIED

GENERAL NOTES

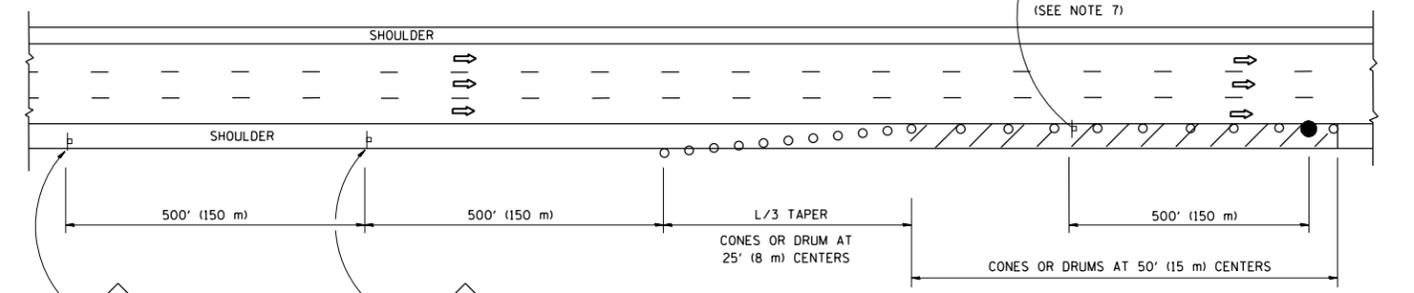
1. THE "L" DISTANCE EQUALS:  

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

SHOULDER CLOSURE DETAILS



PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

THIS DETAIL IS USED WHERE:  
 1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH 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)

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

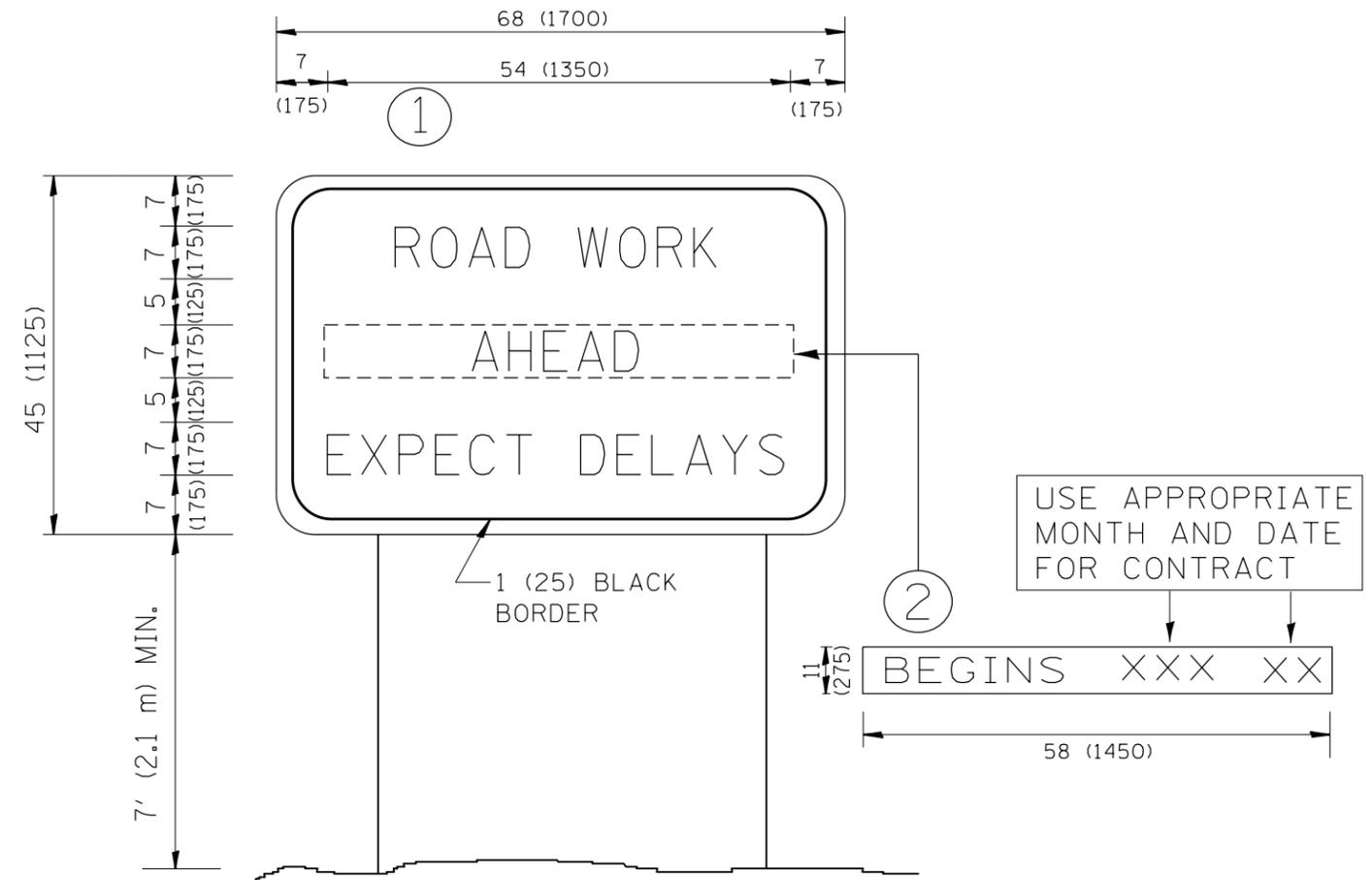
FILE NAME =	USER NAME = khans	DESIGNED -	REVISED - S.P.B. 01-07
pw:\IL\084EBIDINTEG\illinois.gov\PI\DOT\Documents\DOT Offices\District 1\Projects\1325\Drawings\Design\DWG\Std.dgn		DESIGNED -	REVISED - S.P.B. 12-09
Default	PLOT SCALE = 100.0002' / 1in.	CHECKED -	REVISED - M.D. 06-13
	PLOT DATE = 12/13/2018	DATE -	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.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
21	2018-026-RS-SW	DUPAGE	64	62
TC-17		CONTRACT NO. 62G64		
ILLINOIS FED. AID PROJECT				



**NOTES:**

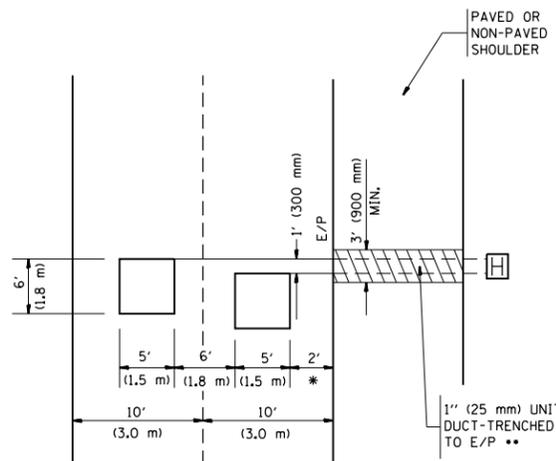
1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.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

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

FILE NAME =	USER NAME = khans	DESIGNED -	REVISED - R. MIRS 09-15-97	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ARTERIAL ROAD INFORMATION SIGN</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
p:\11\084EBIDINTEG.illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\1325\Drawings\Design\DistStd.dgn		REVISED - R. MIRS 12-11-97	REVISED - T. RAMMACHER 02-02-99			21	2018-026-R5-SW	DUPAGE	64	63	
PLOT SCALE = 100.0002' / in.	CHECKED -	REVISED - C. JUCIUS 01-31-07	SCALE: NONE			SHEET NO. 1 OF 1 SHEETS		STA. TO STA.		TC-22 CONTRACT NO. 62G64	
PLOT DATE = 12/13/2018	DATE -		FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT								

LOOPS NEXT TO SHOULDERS

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



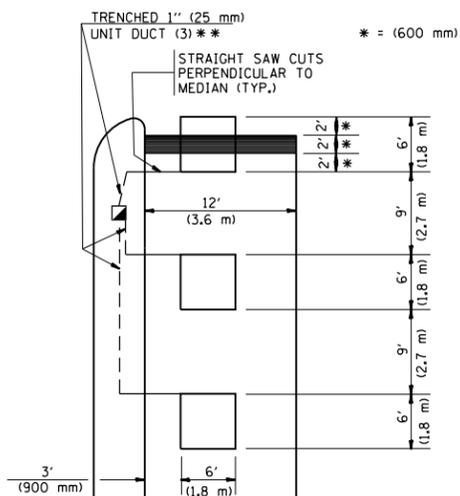
\* = (600 mm)

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

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

(PROTECTED / PERMITTED LEFT TURN PHASING)

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

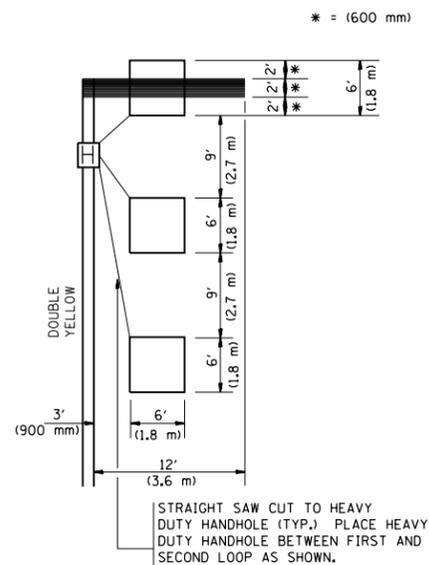


\*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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

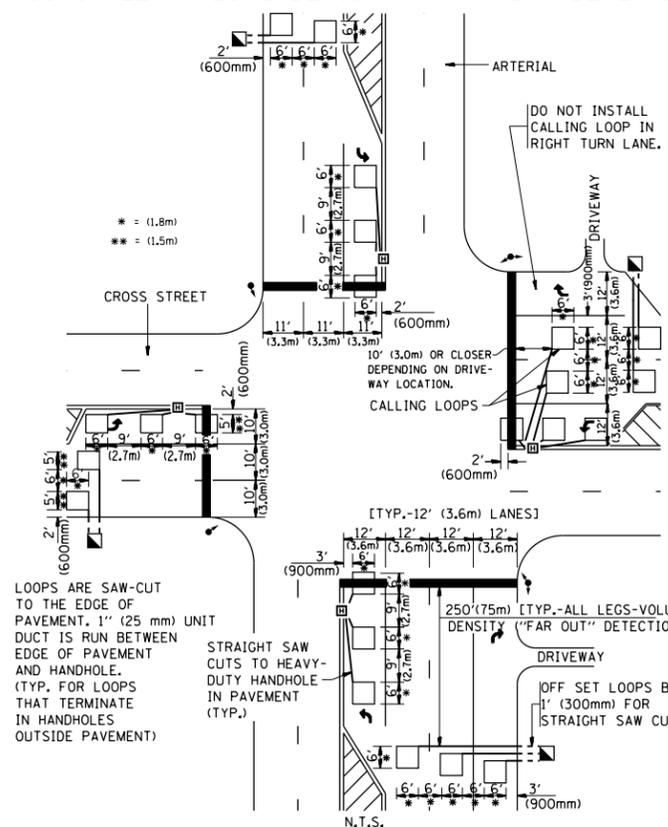
LEFT TURN LANES WITHOUT MEDIANS  
VOLUME DENSITY ("FAR OUT" DETECTION)  
ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)



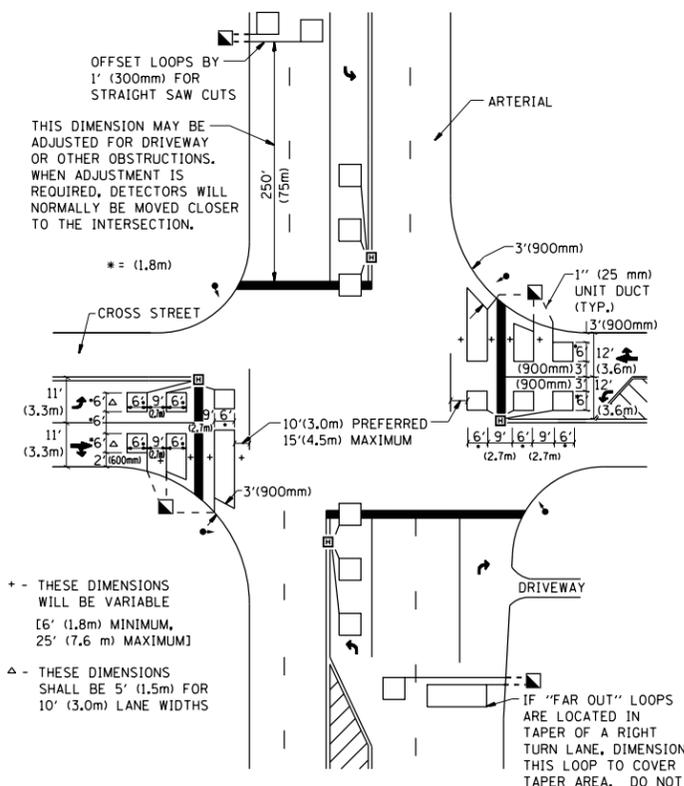
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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 = khans	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
p:\11\084EBID\INTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\DI325\Design\DistStd.dgn		CHECKED - R.K.F.	REVISED -		21	2018-026-RS-SW	DUPAGE	64	64			
PLOT SCALE = 100.0002' / in.		DATE -	REVISED -		<b>TS-07</b>			<b>CONTRACT NO. 62G64</b>				
PLOT DATE = 12/13/2018			REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				