

03-07-2025 LETTING ITEM 003

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

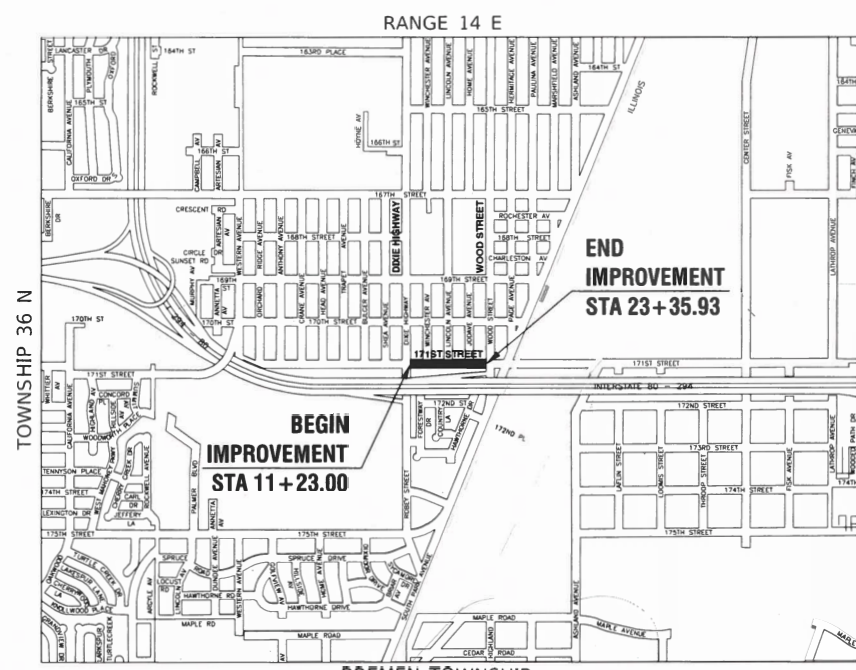
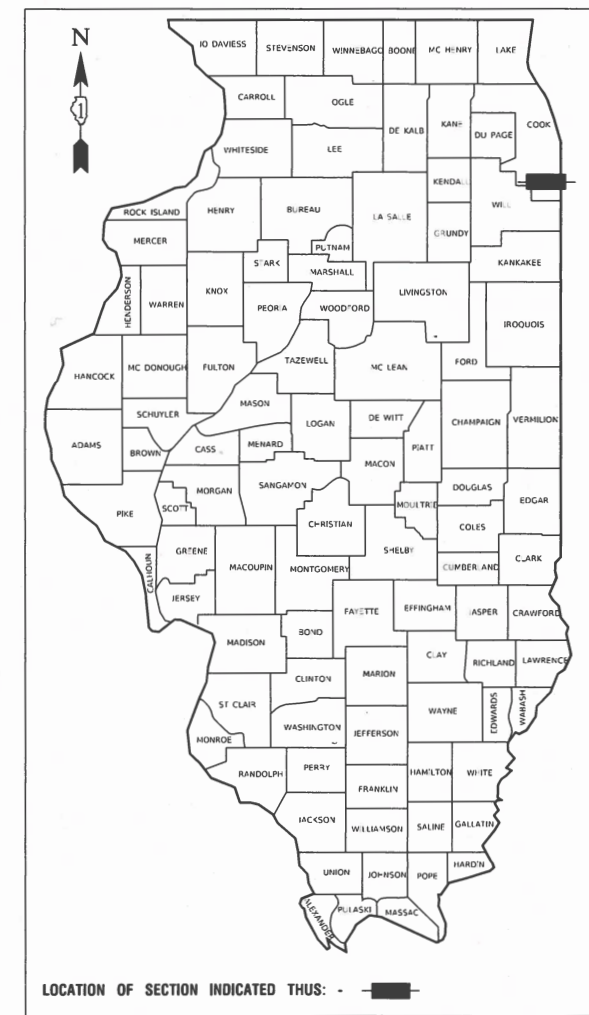
# PLANS FOR PROPOSED FEDERAL AID HIGHWAY

FOR INDEX OF SHEETS, SEE SHEET NO. 2

FOR HIGHWAY STANDARDS, SEE SHEET NO. 2

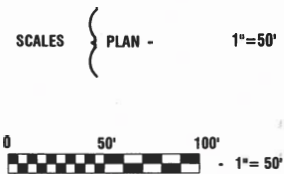
<b>171ST STREET</b>	
<b>DIXIE HIGHWAY TO WOOD STREET</b>	
<b>2022 ADT-</b>	<b>4,500</b>
<b>POSTED SPEED LIMIT-</b>	<b>30 MPH</b>
<b>FUNCTIONAL CLASSIFICATION-</b>	<b>MAJOR COLLECTOR</b>

**FAU ROUTE 0084 (171ST STREET)  
DIXIE HIGHWAY TO WOOD STREET  
ROADWAY RESURFACING  
SECTION NO.: 24-00096-00-RS  
PROJECT NO.: 1CWT(209)  
VILLAGE OF HAZEL CREST  
COOK COUNTY  
JOB NO.: C-91-013-25**



LOCATION MAP  
NOT TO SCALE

GROSS LENGTH= 1,212.93 FEET= 0.23 MILES  
NET LENGTH= 1,212.93 FEET= 0.23 MILES



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

FEDERAL AID PROGRAM ENGINEER: CARMEN RAMOS, PE, SCHAUMBURG, IL  
CONSULTANTS: ROBINSON ENGINEERING, LTD. 708-331-6700

CONTRACT NO. 61L01



*William P. Doan*  
12-15-24

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	
APPROVED	12-15-2024 <i>Vernon L. Albery Jr.</i> VILLAGE OF HAZEL CREST, MAYOR
PASSED	Jan 2, 2025 <i>C. K. ...</i> DISTRICT 1 ENGINEER OF LOCAL ROADS & STREETS
RELEASING FOR BID BASED ON LIMITED REVIEW	1-6-2025 <i>Gene ...</i> REGIONAL ENGINEER

PRINTED BY THE AUTHORITY OF  
THE STATE OF ILLINOIS

## INDEX OF SHEETS

1	COVER SHEET
2	INDEX OF SHEETS, STANDARDS AND GENERAL NOTES
3-6	SUMMARY OF QUANTITIES
7	TYPICAL CROSS SECTIONS
8	ALIGNMENT AND TIES
9	PROPOSED IMPROVEMENT PLAN
10	PAVEMENT MARKING AND SIGNING
11-12	DETECTOR LOOP REPLACEMENT PLAN
13	ADA RAMP DETAILS
14-23	IDOT DISTRICT 1 STANDARDS

## HIGHWAY STANDARDS

000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
424001-12	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
424021-07	DEPRESSED CORNERS FOR SIDEWALKS
442201-03	CLASS C AND D PATCHES
604001-05	FRAMES AND LIDS TYPE 1
606001-08	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5m) AWAY
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5m) TO 24" (600m) FROM PAVEMENT EDGE
701011-04	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-10	TRAFFIC CONTROL DEVICES
780001-05	TYPICAL PAVEMENT MARKINGS
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUTS FOR DETECTION LOOPS

## DISTRICT ONE DETAILS

BD-22	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT
BD-32	BUTT JOINTS AND HMA TAPER
TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS
TC-11	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)
TC-13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
TC-16	SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS
TC-22	ARTERIAL ROAD INFORMATION SIGN
TC-26	DRIVEWAY ENTRANCE SIGNING
TS-05	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS
TS-07	DETECTOR LOOP INSTALLATION DETAIL FOR ROADWAY RESURFACING

## GENERAL NOTES

- ITEMS OF WORK LISTED IN THE SUMMARY OF QUANTITIES NOT SPECIFICALLY CALLED OUT ON THE PLANS SHALL BE PERFORMED AS DIRECTED BY THE ENGINEER.
- THE ROBINSON ENGINEERING, LTD. FIELD OFFICE (708-331-6700), AND THE PUBLIC WORKS DIRECTOR, AT THE VILLAGE OF HAZEL CREST (708-335-9600), SHALL BE NOTIFIED THREE (3) WORKING DAYS BEFORE CONSTRUCTION BEGINS.
- BEFORE STARTING ANY EXCAVATION THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 OR 811 AND (312) 744-7000 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. (48 HOUR NOTIFICATION REQUIRED)
- UTILITIES INDICATED ON THE PLANS ARE PROVIDED FOR THE CONTRACTOR'S USE AND ARE BASED UPON INFORMATION AVAILABLE AT THE TIME OF THE ADVERTISEMENT FOR BIDS. THE OWNER AND ENGINEER DO NOT GUARANTEE THE ACCURACY OF UTILITY INFORMATION.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- THE THICKNESS OF HMA MIXTURE STATED IN THE SPECIFICATIONS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA SURFACE IS PLACED.
- ANY LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF DITCHES, GUTTERS OR OTHER DRAINAGE STRUCTURES SHALL BE REMOVED BY THE END OF EACH DAY BY THE CONTRACTOR.
- CLASS D PATCHING QUANTITIES FOR THIS CONTRACT SHALL BE PERFORMED AT THE DIRECTION OF THE ENGINEER AFTER PAVEMENT MILLING.
- CONTRACTOR SHALL TAKE PRECAUTION BY PRESERVING EXISTING TREES WITHIN THE RIGHT OF WAY. IF ANY DAMAGE OCCURS, TREES SHALL BE REPLACED IN KIND PER ARTICLE 201.07 REPAIR OR REPLACEMENT OF EXISTING PLANT MATERIAL REQUIREMENTS STATED HEREIN.
- ALL EQUIPMENT SHALL BE REMOVED OFF THE VILLAGE STREETS DURING ALL HOLIDAY WEEKENDS AS COORDINATED WITH THE VILLAGE.
- NO PAVEMENT PATCHING SHALL BE PERMITTED AFTER FRIDAY AT 3:00 PM OF EACH AND EVERY WEEK AND NO HOLES WILL BE ALLOWED TO REMAIN OPEN OVERNIGHT OR OVER THE WEEKEND.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT IDOT'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR FOR ALL LOCATES RELATED TO THE TRAFFIC SIGNAL EQUIPMENT.
- HMA PAVING SHALL BE PERFORMED WITH HOT JOINTS.
- THE CONTRACTOR SHALL CONTACT KALPANA KANNAN-HOSADURGA, THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR, AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

FILE NAME = 24R0355-INDX-01 - P01	USER NAME =	DESIGNED -- AL	REVISED --	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	171ST STREET ROADWAY RESURFACING INDEX OF SHEETS, STANDARDS & GENERAL NOTES	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		CHECKED -- WPD	REVISED --			0084	24-00096-00-RS	COOK	23	2	
	PLOT SCALE =	DRAWN -- RG	REVISED --			CONTRACT NO. 61L01					
	PLOT DATE = 12-15-24	CHECKED -- AG	REVISED --			SCALE: NONE	SHEET NO. 2 OF 23 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT

CODE NO.	PAY ITEM	UNIT	TOTAL QUANTITY	FED 100%	FED 100%
				VILLAGE 0%	VILLAGE 0%
				ROADWAY	SAFETY
CONSTRUCTION TYPE CODE					
				0005	0021
20200100	EARTH EXCAVATION	CU YD	10	10	
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	25	25	
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	250	250	
25200110	SODDING, SALT TOLERANT	SQ YD	250	250	
25200200	SUPPLEMENTAL WATERING	UNIT	15	15	
28000510	INLET FILTERS	EACH	36	36	
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	25	25	
35101600	AGGREGATE BASE COURSE, TYPE B 4"	SQ YD	145		145
35800100	PREPARATION OF BASE	SQ YD	100	100	
40201000	AGGREGATE FOR TEMPORARY ACCESS	TON	25	25	
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	3,520	3,520	
40600370	LONGITUDINAL JOINT SEALANT	FOOT	1,730	1,730	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	85	85	
40603200	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, 1L-4.75, N50	TON	220	220	
40604060	HOT-MIX ASPHALT SURFACE COURSE, 1L-9.5, MIX "D", N50	TON	440	440	
42300300	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 7 INCH	SQ YD	40	40	

\* SPECIALTY ITEM

FILE NAME - 24R0355-QUAN-01 - 001	USER NAME -	DESIGNED - AL	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	171ST STREET ROADWAY RESURFACING SUMMARY OF QUANTITIES			F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
	PLOT SCALE -	CHECKED - WPD	REVISED -		SCALE: NONE	SHEET NO. 3	OF 23 SHEETS	STA.	TO STA.	0084	24-00095-00-RS	COOK	23	3
	PLOT DATE - 12-15-24	DRAWN - RG	REVISED -		FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT 1CWTR(209)									
		CHECKED - BG	REVISED -		CONTRACT NO. 61L01									

CODE NO.	PAY ITEM	UNIT	TOTAL QUANTITY	FED 100%	FED 100%
				VILLAGE 0%	VILLAGE 0%
				ROADWAY	SAFETY
				CONSTRUCTION TYPE CODE	
				0005	0021
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	1,360		1,360
42400800	DETECTABLE WARNINGS	SQ FT	75		75
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	5,215	5,215	
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	75	75	
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	600	600	
44000600	SIDEWALK REMOVAL	SQ FT	1,250		1,250
44201773	CLASS D PATCHES, TYPE I, 11 INCH	SQ YD	5	5	
44201777	CLASS D PATCHES, TYPE II, 11 INCH	SQ YD	20	20	
44201781	CLASS D PATCHES, TYPE III, 11 INCH	SQ YD	25	25	
44201783	CLASS D PATCHES, TYPE IV, 11 INCH	SQ YD	50	50	
60266600	VALVE BOXES TO BE ADJUSTED	EACH	4	4	
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	250	250	
60604400	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18	FOOT	350	350	
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	35	35	
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	1	1	
* 66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1	1	

\* SPECIALTY ITEM

FILE NAME - 24R0355-QUIN-01 - 002	USER NAME -	DESIGNED - AL	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	171ST STREET ROADWAY RESURFACING SUMMARY OF QUANTITIES		F.A.U. RTE. 0084	SECTION 24-00096-00-RS	COUNTY COOK	TOTAL SHEETS 23	SHEET NO. 4	
	PLOT SCALE -	CHECKED - WPD	REVISED -		SCALE:	SHEET NO. 4	OF 23 SHEETS	STA.	TO STA.	CONTRACT NO. 61L01		
	PLOT DATE - 12-15-24	DRAWN - RG	REVISED -		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT 1CWT(209)							
		CHECKED - BG	REVISED -									

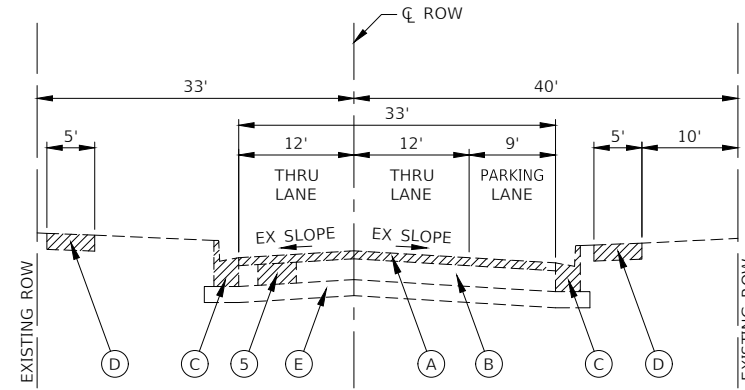
CODE NO.	PAY ITEM	UNIT	TOTAL QUANTITY	FED 100%	FED 100%
				VILLAGE 0%	VILLAGE 0%
				ROADWAY	SAFETY
				CONSTRUCTION TYPE CODE	
				0005	0021
* 66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1	1	
* 66901006	REGULATED SUBSTANCES MONITORING	CAL DA	4	4	
67100100	MOBILIZATION	L SUM	1	1	
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	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	1,225		1,225
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	410		410
70300211	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS - PAINT	SQ FT	225		225
70300221	TEMPORARY PAVEMENT MARKING - LINE 4" - PAINT	FOOT	7,275		7,275
70300241	TEMPORARY PAVEMENT MARKING - LINE 6" - PAINT	FOOT	1,200		1,200
70300261	TEMPORARY PAVEMENT MARKING - LINE 12" - PAINT	FOOT	2,850		2,850
70300281	TEMPORARY PAVEMENT MARKING - LINE 24" - PAINT	FOOT	195		195
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	75		75
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	2,425		2,425
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	400		400

\* SPECIALTY ITEM

FILE NAME = 24R0355-QUAN-01 - 003	USER NAME =	DESIGNED -- AL	REVISED --	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	171ST STREET ROADWAY RESURFACING SUMMARY OF QUANTITIES		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
	PLOT SCALE =	CHECKED -- WPD	REVISED --		SCALE:	SHEET NO. 5	OF 23 SHEETS	STA.	TO STA.	0084	24-00096-00-RS	COOK	23	5
	PLOT DATE = 12-15-24	DRAWN -- RG	REVISED --		CONTRACT NO. 61L01									
		CHECKED -- BG	REVISED --		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT 1GWT(209)									

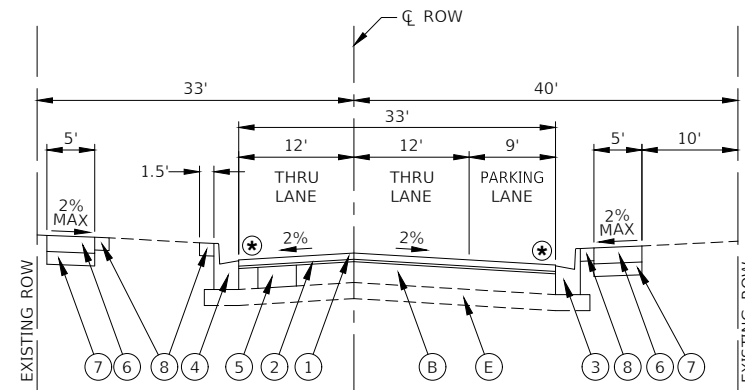
CODE NO.	PAY ITEM	UNIT	TOTAL QUANTITY	FED 100%	FED 100%
				VILLAGE 0%	VILLAGE 0%
				ROADWAY	SAFETY
				CONSTRUCTION TYPE CODE	
				0005	0021
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	950		950
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	65		65
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	60		60
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	60		60
78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	2,000		2,000
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	2	2	
* X8860105	DETECTOR LOOP REPLACEMENT	FOOT	210		210
Z0004514	HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 4"	SQ YD	35	35	
Z0017400	DRAINAGE & UTILITY STRUCTURES TO BE ADJUSTED	EACH	42	42	
Z0017700	DRAINAGE & UTILITY STRUCTURES TO BE RECONSTRUCTED	EACH	1	1	
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	125		125

\* SPECIALTY ITEM



**EXISTING TYPICAL SECTION**

**171ST STREET  
STA 11+23.00 TO STA 23+35.93**



**PROPOSED TYPICAL SECTION**

**171ST STREET  
STA 11+23.00 TO STA 23+35.93**

⊛ FINISHED PAVEMENT SURFACE SHALL BE 1/4" ABOVE TOP OF GUTTER

**EXISTING LEGEND**

- Ⓐ HOT-MIX ASPHALT SURFACE REMOVAL, 2"
- Ⓑ EXISTING HOT-MIX ASPHALT PAVEMENT, 13"
- Ⓒ EXISTING COMBINATION CURB AND GUTTER REMOVAL (AT LOCATIONS AS SHOWN ON PLANS OR DIRECTED BY ENGINEER)
- Ⓓ EXISTING PORTLAND CEMENT CONCRETE SIDEWALK REMOVAL (AT LOCATIONS AS SHOWN ON PLANS OR AS DIRECTED BY ENGINEER)
- Ⓔ EXISTING AGGREGATE SUBBASE, 6"
- ▨ ITEMS TO BE REMOVED (AS DIRECTED BY ENGINEER)

**PROPOSED LEGEND**

- ① HOT-MIX ASPHALT SURFACE COURSE, IL-9.5. MIX "D", N50, 1 1/2"
- ② POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50, 3/4"
- ③ COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (AT LOCATIONS AS SHOWN ON PLANS OR AS DIRECTED BY ENGINEER)
- ④ COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18 (AT LOCATIONS AS SHOWN ON PLANS OR AS DIRECTED BY ENGINEER)
- ⑤ CLASS D PATCHES, 11 INCH PREPARATION OF BASE AGGREGATE SUBGRADE IMPROVEMENT (AT LOCATIONS SHOWN ON PLANS OR AS DIRECTED BY ENGINEER)
- ⑥ PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH (AT LOCATIONS SHOWN ON PLANS OR AS DIRECTED BY ENGINEER)
- ⑦ AGGREGATE BASE COURSE, TYPE B 4"
- ⑧ TOPSOIL FURNISH AND PLACE, 4" AND SODDING, SALT TOLERANT (AT LOCATIONS SHOWN ON PLANS OR AS DIRECTED BY ENGINEER)

**HOT-MIX ASPHALT MIXTURE REQUIREMENTS**

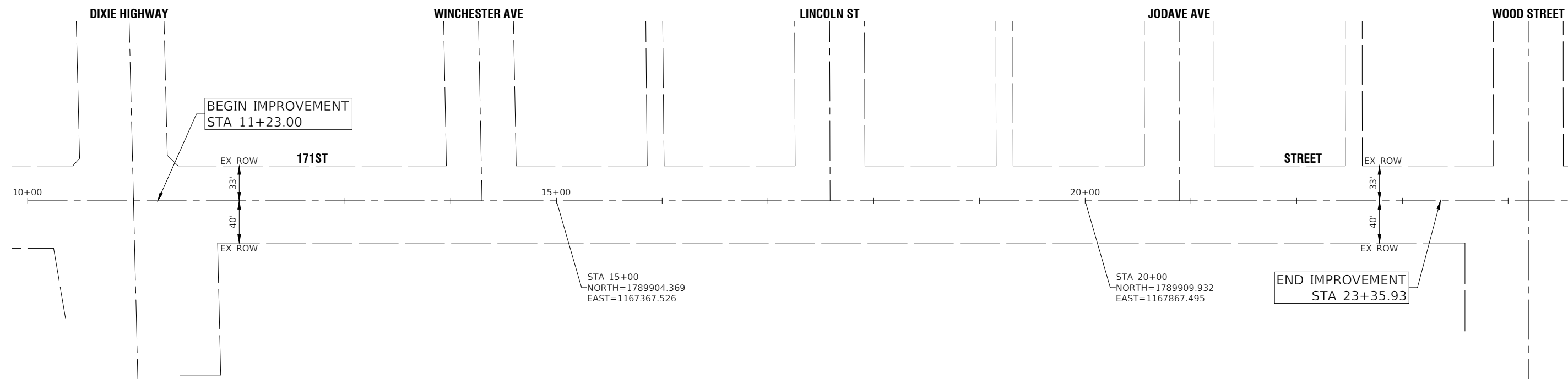
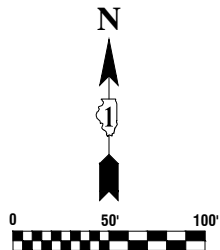
MIXTURE TYPE	AIR VOIDS @ Ndes	QMP
ROADWAY RESURFACING		
HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50, 1 1/2"	4% @ 50 Gyr.	LR 1030-2
POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50, 3/4"	3.5% @ 50 Gyr.	LR 1030-2
HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 4"		
HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50, 1 1/2"	4% @ 50 Gyr.	LR 1030-2
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50, 2 1/2"	4% @ 50 Gyr.	LR 1030-2
PATCHING		
CLASS D PATCHES (HMA BINDER IL-19mm), 11"	4% @ 70 Gyr.	LR 1030-2

QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA) PER LR1030-2

- NOTES:
- THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE IS 112 LBS/SQ/IN.
  - THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG-64-22" UNLESS MODIFIED BY RECLAIMED MATERIALS SPECIFICATIONS.

**NOTE**

- LONGITUDINAL JOINT SEALANT SHALL BE PLACED ON THE POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50 PRIOR TO THE SURFACE COURSE.
- ALL PATCHING OPERATIONS SHALL TAKE PLACE AFTER SURFACE MILLING HAS BEEN COMPLETED.



**NOTES**

1. COORDINATES ARE BASED ON ILLINOIS STATE PLANE EASTERN ZONE NORTH AMERICAN DATUM 1983.
2. SURVEY FEET UNITS WERE USED.
3. ALL ELEVATIONS REFER TO NAVD88 DATUM.

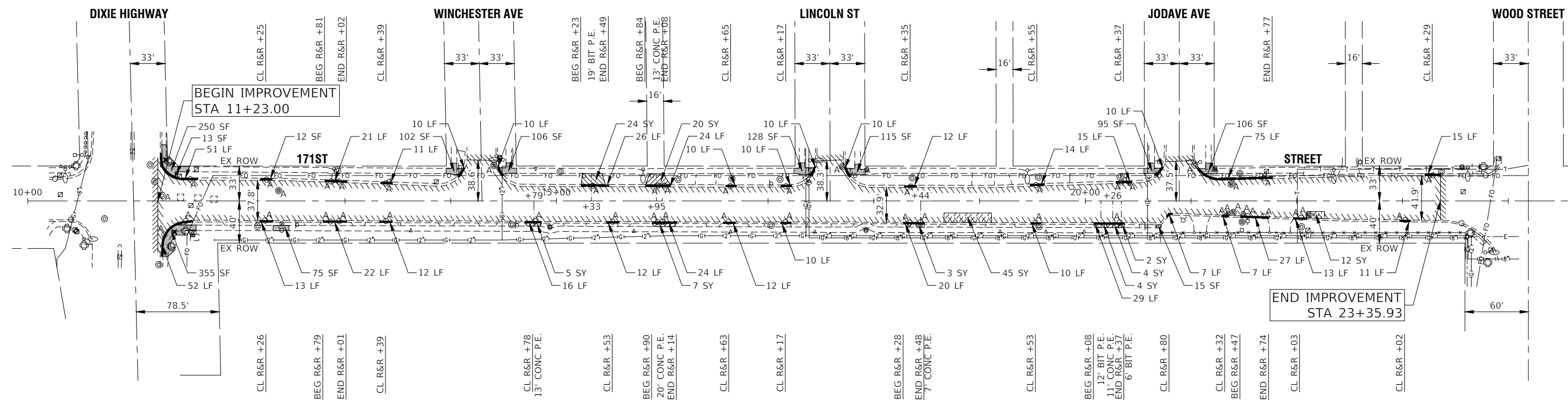
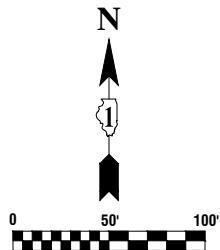
FILE NAME = 24R0355-TIES-01 - P01	USER NAME =	DESIGNED -- AL	REVISED --
		CHECKED -- WPD	REVISED --
	PLOT SCALE =	DRAWN -- RG	REVISED --
	PLOT DATE = 12-15-24	CHECKED -- AG	REVISED --

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

171ST STREET ROADWAY RESURFACING ALIGNMENT AND TIES			
SCALE: 1"=50'	SHEET NO. 8	OF 23 SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0084	24-00096-00-RS	COOK	23	8
CONTRACT NO. 61L01				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	1CW7(209)	





**LEGEND**

- HOT-MIX ASPHALT SURFACE REMOVAL, 2"
- POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50, 3/4"
- HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50, 1.5"
- SIDEWALK REMOVAL
- SIDEWALK REMOVAL
- PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH (7 INCH THRU DRIVEWAYS)
- AGGREGATE BASE COURSE, TYPE B 4"
- CLASS D PATCHES, 11 INCH
- REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL (AS DIRECTED BY ENGINEER)
- AGGREGATE SUBGRADE IMPROVEMENT (AS DIRECTED BY ENGINEER)
- PREPARATION OF BASE
- DRIVEWAY PAVEMENT REMOVAL
- HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 4"
- DRIVEWAY PAVEMENT REMOVAL
- PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 7"
- DETECTABLE WARNINGS - DW
- REMOVE EXISTING CONCRETE FOUNDATION
- COMBINATION CURB AND GUTTER REMOVAL
- COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 OR
- COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18
- "A" DRAINAGE & UTILITY STRUCTURES TO BE ADJUSTED
- "R" DRAINAGE & UTILITY STRUCTURES TO BE RECONSTRUCTED
- EXISTING DETECTOR LOOP
- HMA SURFACE REMOVAL - BUTT JOINT
- BEG R&R +XX BEGIN STATION FOR CURB AND GUTTER REMOVAL AND REPLACEMENT
- END R&R +XX END STATION OF CURB AND GUTTER REMOVAL AND REPLACEMENT
- CL R&R +XX CENTER OF CURB AND GUTTER REMOVAL AND REPLACEMENT (UNDER 20 LINEAL FEET)

**NOTES:**

ALL SIDEWALK RAMPS SHALL BE IN ACCORDANCE WITH THE HIGHWAY STANDARDS REFERENCED ON SHEET 2.

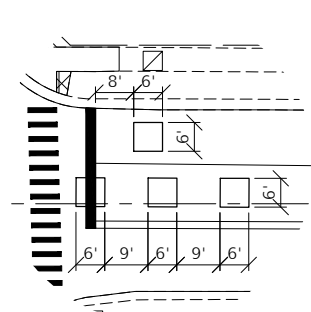
AREAS WHERE SIDEWALK IS TO BE REMOVED AND NOT REPLACED SHALL BE REPLACED WITH "TOPSOIL FURNISH AND PLACE, 4" AND "SODDING, SALT TOLERANT" UNLESS OTHERWISE NOTED.

DRIVEWAY REMOVAL AND REPLACEMENT SHALL BE COMPLETED AS DIRECTED BY THE ENGINEER.

CLASS D PATCHES, 11 INCH SHALL BE COMPLETED AS DIRECTED BY THE ENGINEER.

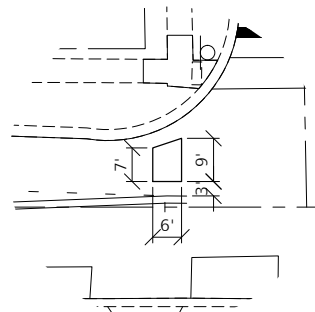
ALL CURB AND GUTTER ON NORTH SIDE OF 171ST STREET WILL BE COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18. ALL CURB AND GUTTER ON SOUTH SIDE OF 171ST STREET WILL BE COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12

FILE NAME = 24R0355-PLAN-01 - P01	USER NAME =	DESIGNED -- AL	REVISED --	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>171ST STREET</b> <b>ROADWAY RESURFACING</b> <b>PROPOSED IMPROVEMENT PLAN</b>	F.A.U. RTE. 0084	SECTION 24-00096-00-RS	COUNTY COOK	TOTAL SHEETS 23	SHEET NO. 9	
		CHECKED -- WPD	REVISED --		SCALE: 1"=50'	SHEET NO. 9 OF 23 SHEETS	CONTRACT NO. 61L01				
		DRAWN -- RG	REVISED --		STA. TO STA.						
		CHECKED -- AG	REVISED --		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT 1CWT(209)						



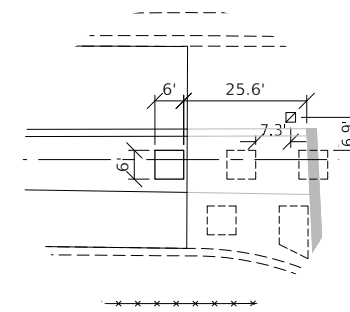
**DETAIL A**

DETECTOR LOOP REPLACEMENT DETAIL  
SCALE: 1"=20'



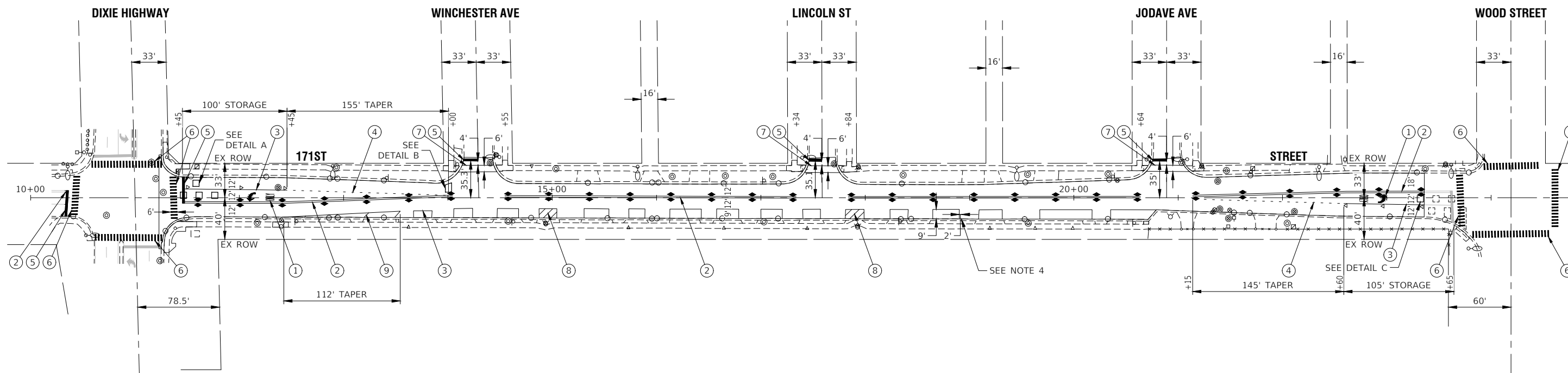
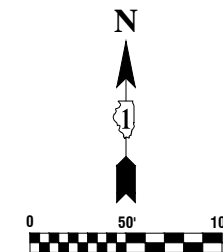
**DETAIL B**

DETECTOR LOOP REPLACEMENT DETAIL  
SCALE: 1"=20'



**DETAIL C**

DETECTOR LOOP REPLACEMENT DETAIL  
SCALE: 1"=20'



**PAVEMENT MARKING LEGEND**

- ① THERMOPLASTIC PAVEMENT MARKING - WHITE LETTERS & SYMBOLS
- ② THERMOPLASTIC PAVEMENT MARKING - LINE 4" DOUBLE YELLOW LINE (11" C-C)
- ③ THERMOPLASTIC PAVEMENT MARKING - LINE 6" WHITE LANE LINE
- ④ THERMOPLASTIC PAVEMENT MARKING - LINE 6" WHITE SKIP DASH (2' LINE-6' SPACE)
- ⑤ THERMOPLASTIC PAVEMENT MARKING - LINE 24" WHITE STOP BAR LINE
- ⑥ THERMOPLASTIC PAVEMENT MARKING - LINE 12" WHITE CROSS-WALK (3' C-C)
- ⑦ THERMOPLASTIC PAVEMENT MARKING - LINE 6" WHITE CROSS-WALK (6' C-C OR AS DIMENSIONED)
- ⑧ THERMOPLASTIC PAVEMENT MARKING - LINE 6" WHITE DIAGONAL LINE (45° ANGLE, C-C)
- ⑨ THERMOPLASTIC PAVEMENT MARKING - LINE 6" WHITE DIAGONAL LINE (45° ANGLE, 20' C-C)
- EXISTING DETECTOR LOOP
- DETECTOR LOOP REPLACEMENT

**RAISED REFLECTIVE PAVEMENT MARKER**

- ◀ ONE-WAY AMBER MARKER  
40' C/C UNLESS OTHERWISE INDICATED
- ◀ ONE-WAY CRYSTAL MARKER  
40' C/C UNLESS OTHERWISE INDICATED
- ◆ TWO-WAY AMBER MARKER  
40' C/C UNLESS OTHERWISE INDICATED

**NOTES**

1. SEE TC-13 DISTRICT ONE TYPICAL PAVEMENT MARKING FOR GUIDANCE.
2. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC UNLESS OTHERWISE SHOWN.
3. SEE TC-11 DISTRICT ONE DETAIL FOR RAISED REFLECTIVE PAVEMENT GUIDANCE.
4. ALL PARKING STALLS WILL START 2' FROM THE EDGE OF A DRIVEWAY APRON AND CONTINUE UNTIL 2' FROM THE EDGE OF THE NEXT DRIVEWAY APRON.

FILE NAME = 24R0355-PVMK-01 - P01

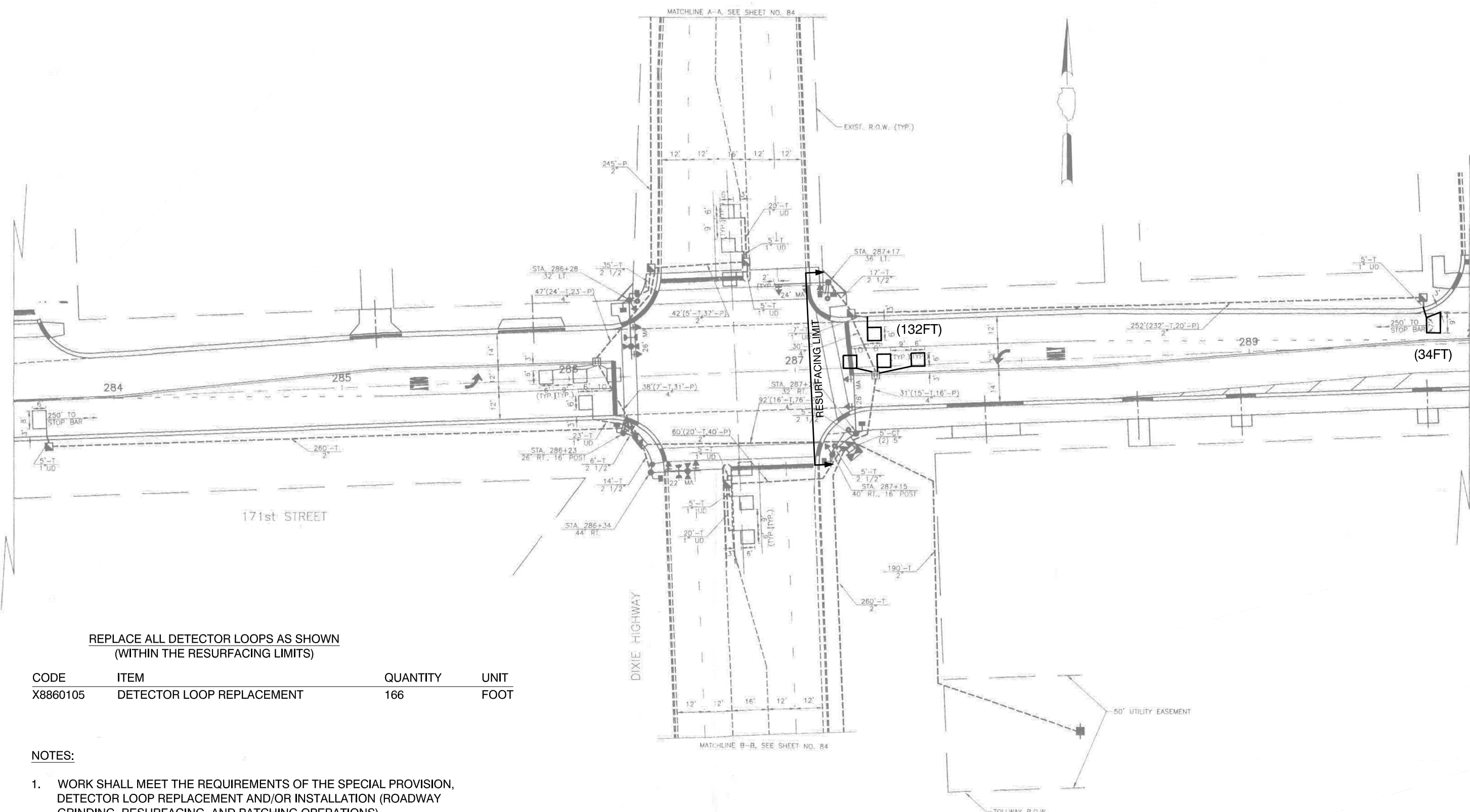
USER NAME =	DESIGNED -- AL	REVISED --
	CHECKED -- WPD	REVISED --
PLOT SCALE =	DRAWN -- RG	REVISED --
PLOT DATE = 12-15-24	CHECKED -- AG	REVISED --

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

171ST STREET  
ROADWAY RESURFACING  
PAVEMENT MARKING & SIGNING

SCALE: 1"=50' SHEET NO. 10 OF 23 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0084	24-00096-00-RS	COOK	23	10
CONTRACT NO. 61L01				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT 1CW7(209)				



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

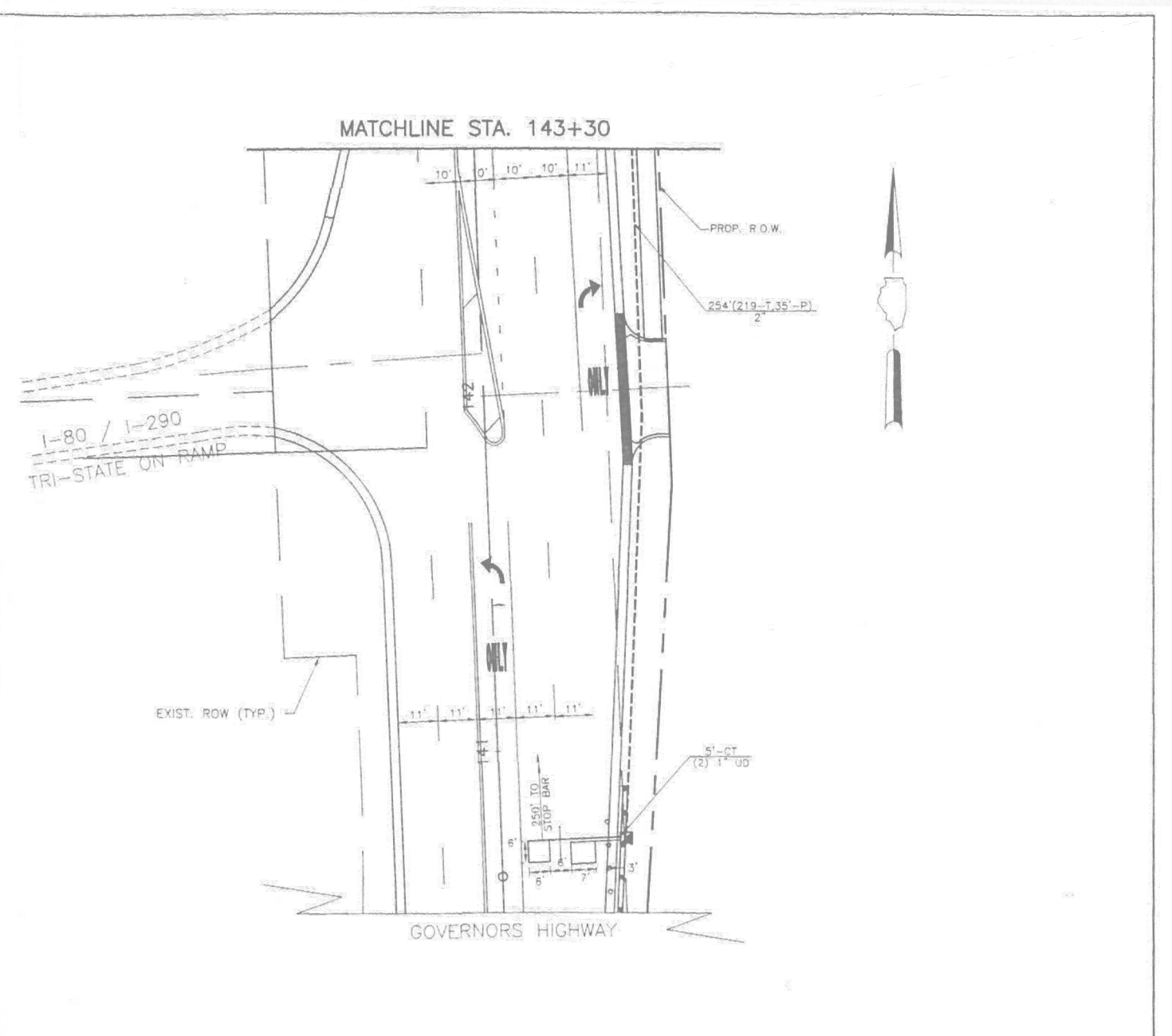
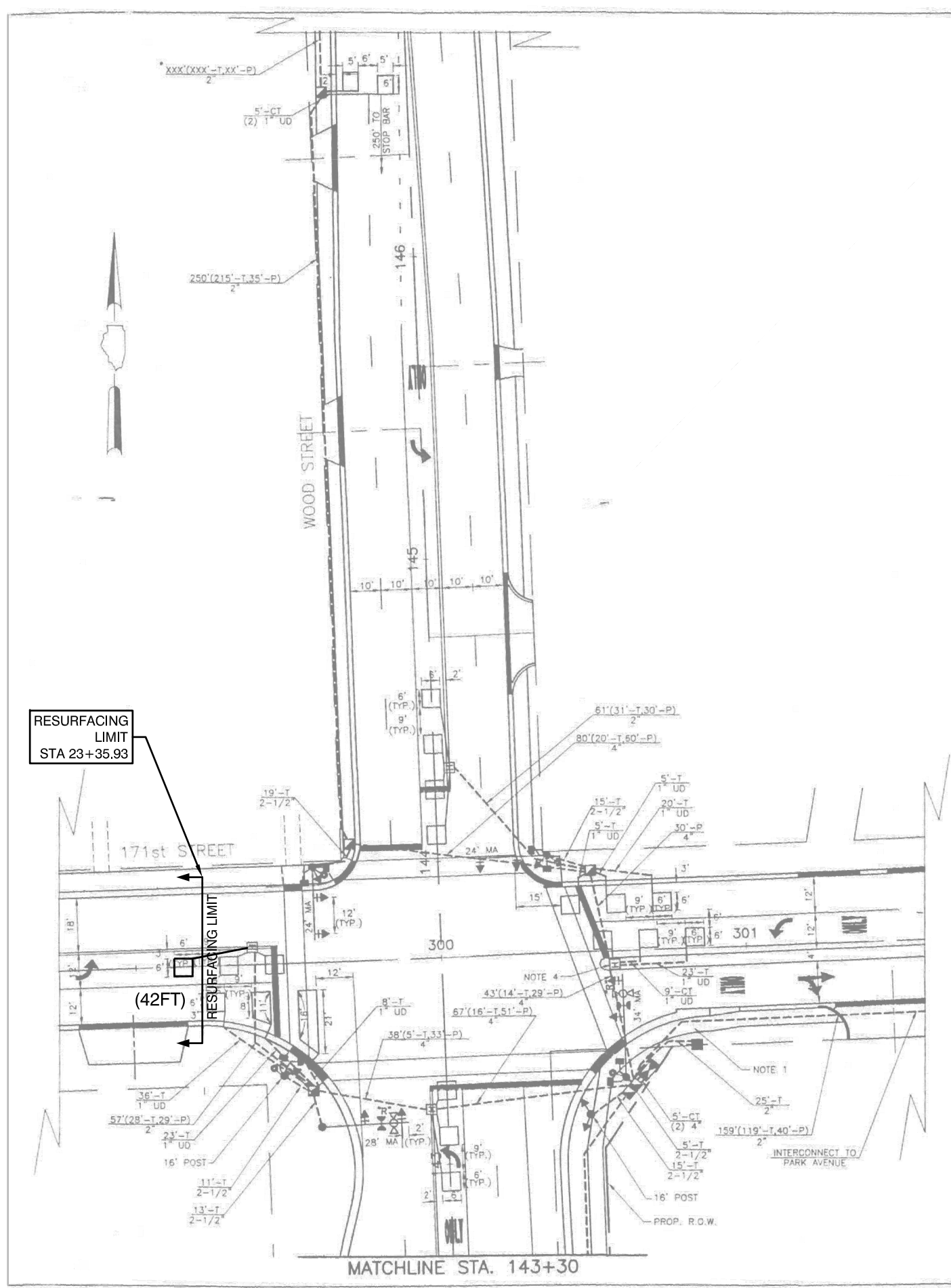
CODE	ITEM	QUANTITY	UNIT
X8860105	DETECTOR LOOP REPLACEMENT	166	FOOT

**NOTES:**

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

TS #48

FILE NAME = 24R0355-SGNL-LOOP-01 - DDME	USER NAME =	DESIGNED -- AL	REVISED --	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETECTOR LOOP REPLACEMENT PLAN DIXIE HIGHWAY AT 171ST STREET	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		CHECKED -- WPD	REVISED --			0084	24-00096-00-RS	COOK	23	11	
	PLOT SCALE =	DRAWN -- RG	REVISED --			CONTRACT NO. 61L01					
	PLOT DATE = 12-15-24	CHECKED -- BG	REVISED --			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT 1CW7(209)					
					SCALE: NONE	SHEET NO. 11 OF 23 SHEETS	STA.	TO STA.			



RESURFACING LIMIT  
STA 23+35.93

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

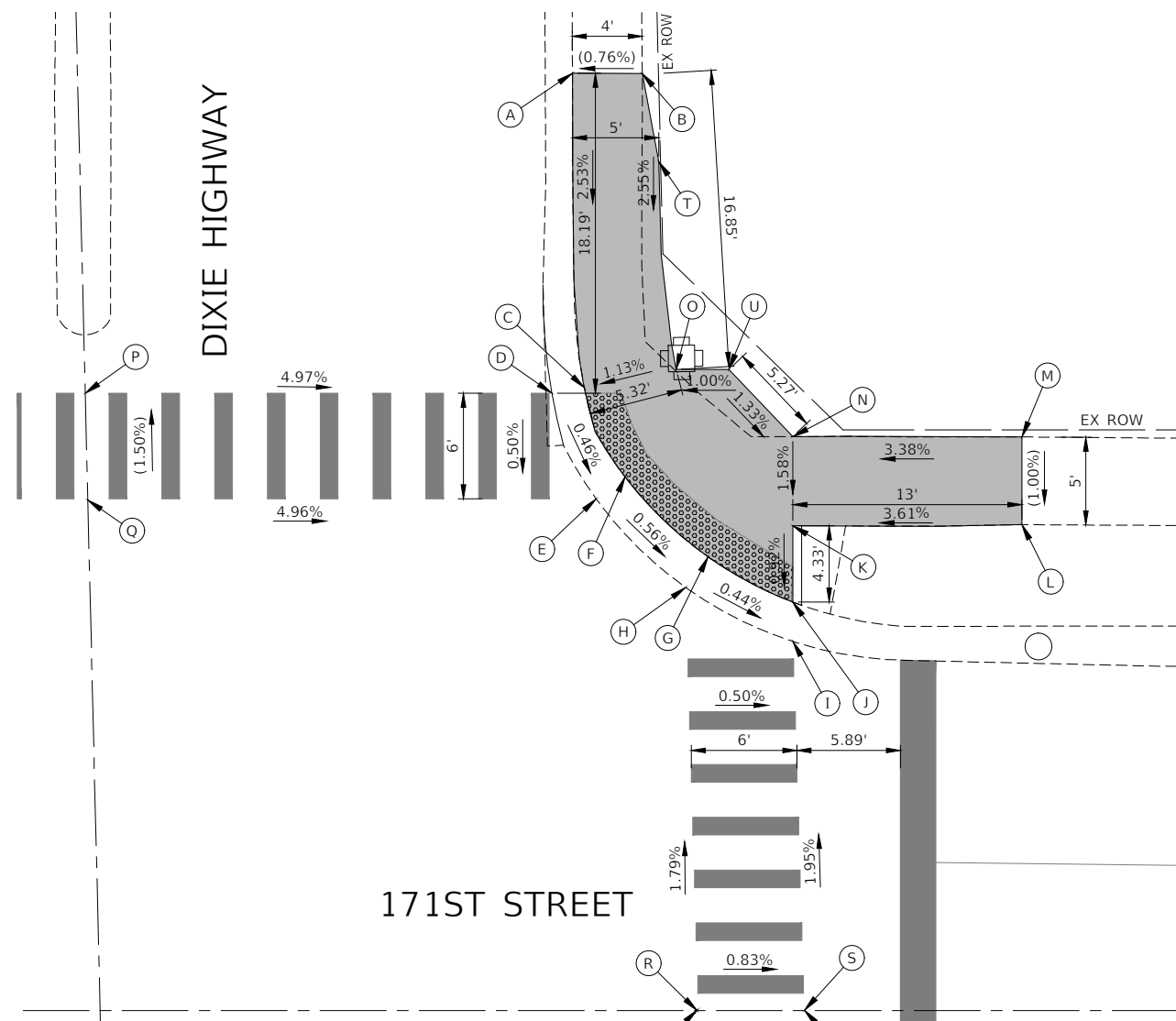
CODE	ITEM	QUANTITY	UNIT
X8860105	DETECTOR LOOP REPLACEMENT	42	FOOT

NOTES:

1. WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING, AND PATCHING OPERATIONS).
2. THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENT.
3. DETECTOR LOOP MUST BE RAN TO THE HANDHOLE BY MEANS OF A SAWCUT JOINT IN THE SURFACE WHEN PAST THE RESURFACING LIMIT.

TS #5965

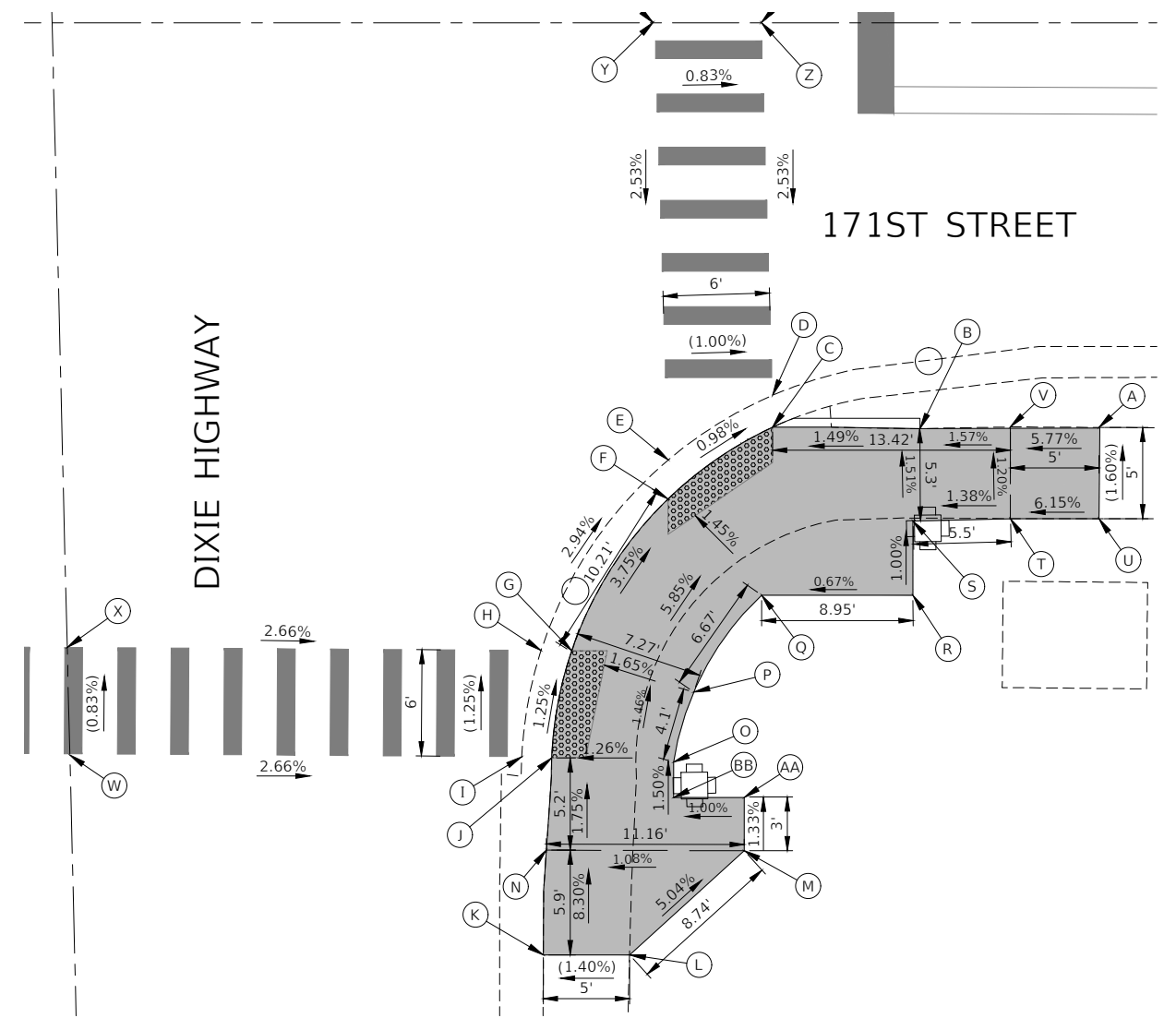
FILE NAME = 24R0355-SGNL-LOOP-01 - WOOD	USER NAME =	DESIGNED -- AL	REVISED --	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETECTOR LOOP REPLACEMENT PLAN 171ST STREET AT WOOD STREET	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		CHECKED -- WPD	REVISED --			0084	24-00096-00-RS	COOK	23	12	
		DRAWN -- RG	REVISED --			CONTRACT NO. 61L01					
		CHECKED -- BG	REVISED --			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT 1CW7(209)					
	PLOT SCALE =			SCALE: NONE	SHEET NO. 12 OF 23 SHEETS	STA.	TO STA.				



**FIGURE 1 NE CORNER**

	STATION	OFFSET	ELEVATION	DESCRIPTION
A	11+26.86	47.10' LT	(619.10)	CW
B	11+30.77	47.10' LT	(619.13)	CW
C	11+27.54	35.34' LT	618.64	TC
D	11+25.56	35.16' LT	618.64	EP
E	11+28.30	28.92' LT	618.61	EP
F	11+29.39	30.18' LT	618.61	TC
G	11+34.71	25.64' LT	618.57	TC
H	11+33.37	23.96' LT	618.57	EP
I	11+39.29	21.00' LT	618.54	EP
J	11+39.31	23.23' LT	618.54	TC
K	11+39.36	27.57' LT	618.58	CW
L	11+52.27	27.57' LT	(619.05)	CW
M	11+52.27	32.57' LT	(619.10)	CW
N	11+39.42	32.62' LT	618.66	CW
O	11+32.98	35.86' LT	618.70	CW

	STATION	OFFSET	ELEVATION	DESCRIPTION
P	10+99.18	35.10' LT	(619.96)	CL
Q	10+99.18	29.03' LT	(620.05)	CL
R	11+33.98	0.00' LT	619.00	CL
S	11+39.98	0.00' LT	618.95	CL
T	11+31.75	48.24' LT	619.00	CL
U	11+36.62	34.66' LT	618.73	CW



**FIGURE 2 SE CORNER**

	STATION	OFFSET	ELEVATION	DESCRIPTION
A	11+59.13	22.83' RT	(619.38)	CW
B	11+49.07	22.89' RT	619.01	CW
C	11+39.16	23.58' RT	618.89	TC
D	11+38.26	22.20' RT	618.89	EP
E	11+32.21	27.19' RT	618.96	EP
F	11+32.21	28.69' RT	618.96	TC
G	11+29.06	35.77' RT	619.34	TC
H	11+27.47	35.77' RT	619.34	EP
I	11+26.48	41.83' RT	619.42	EP
J	11+28.18	41.84' RT	619.42	TC

	STATION	OFFSET	ELEVATION	DESCRIPTION
K	11+27.79	51.86' RT	(620.00)	CW
L	11+32.61	51.89' RT	(620.07)	CW
M	11+39.05	46.70' RT	619.63	CW
N	11+27.89	46.63' RT	619.51	CW
O	11+35.07	41.70' RT	619.52	CW
P	11+35.96	37.68' RT	619.46	CW
Q	11+40.05	32.30' RT	619.07	CW
R	11+48.66	24.28' RT	619.13	CW
S	11+48.66	28.28' RT	619.09	CW
T	11+54.13	27.97' RT	619.15	CW
U	11+59.13	27.97' RT	(619.46)	CW
V	11+54.13	22.88' RT	619.09	CW
W	11+01.01	41.49' RT	(620.10)	CL
X	11+00.80	35.49' RT	(620.05)	CL
Y	11+33.98	0.00' RT	619.00	CL
Z	11+39.98	0.00' RT	618.95	CL
AA	11+39.05	43.70' RT	619.59	CW
BB	11+35.05	43.70' RT	619.55	CW

**LEGEND**

(xxx.xx)	EXISTING SPOT ELEVATION		PROPOSED SIDE CURB
xxx.xx	PROPOSED SPOT ELEVATION		PROPOSED SIDEWALK
CW	CONCRETE WALK		DETECTABLE WARNING
TC	TOP OF CURB		
EP	EDGE OF PAVEMENT		

NOTE:  
SEE PROPOSED IMPROVEMENT  
PLAN FOR EXISTING ROW.

FILE NAME = 24R0355-ADA-01 - P01	USER NAME =	DESIGNED -- AL	REVISED --
		CHECKED -- WPD	REVISED --
	PLOT SCALE =	DRAWN -- RG	REVISED --
	PLOT DATE = 12-15-24	CHECKED -- AG	REVISED --

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

171st STREET  
ROADWAY RESURFACING  
ADA RAMP DETAILS  
SCALE: 1"=5'  
SHEET NO. 13 OF 23 SHEETS STA. TO STA.

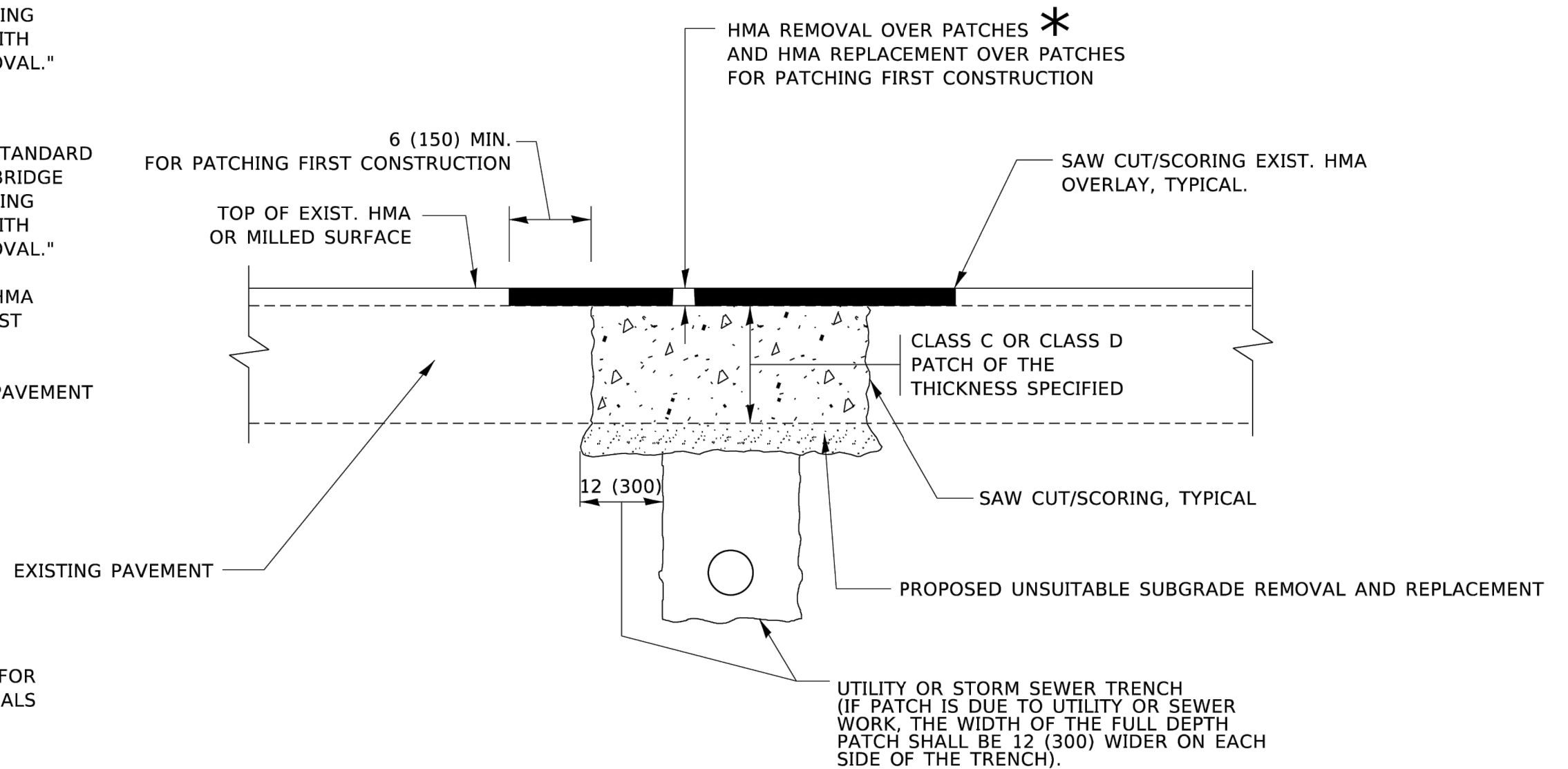
F.A.1 RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0084	24-00098-00-RS	COOK	23	13
CONTRACT NO. 61L01				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT 1CW(209)				

**METHOD OF MEASUREMENT**

REFER TO SECTION 442 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL."

**BASIS OF PAYMENT**

1. REFER TO SECTION 442 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL."
2. SAW CUT/SCORING OF EXISTING HMA OVERLAY IS INCLUDED IN THE COST OF PAVEMENT PATCHING.
3. SAW CUT/SCORING OF EXISTING PAVEMENT IS INCLUDED IN THE COST OF PAVEMENT PATCHING.



\* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

**SEQUENCE OF CONSTRUCTION (PATCHING FIRST)**

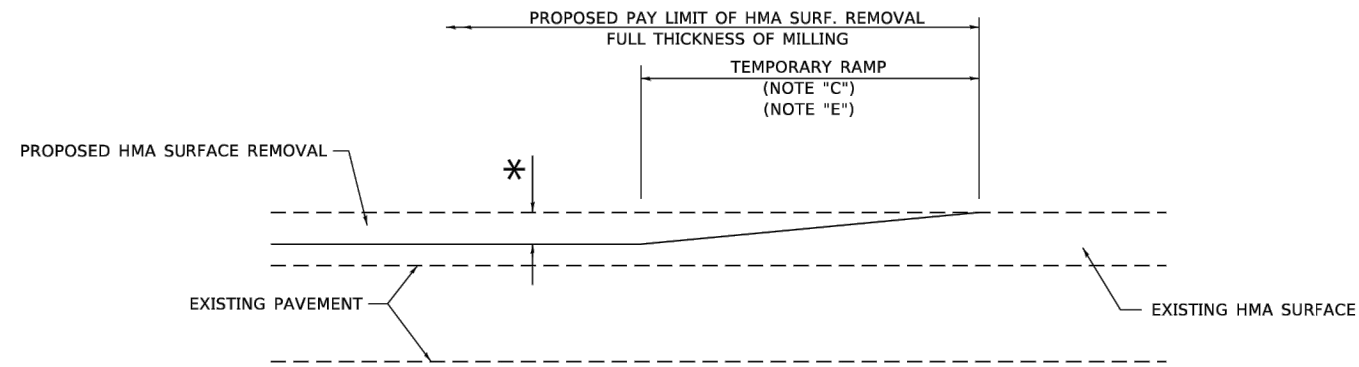
1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

**SEQUENCE OF CONSTRUCTION (MILLING FIRST)**

1. MILL HMA FIRST IF THERE IS AT LEAST 4½ 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.

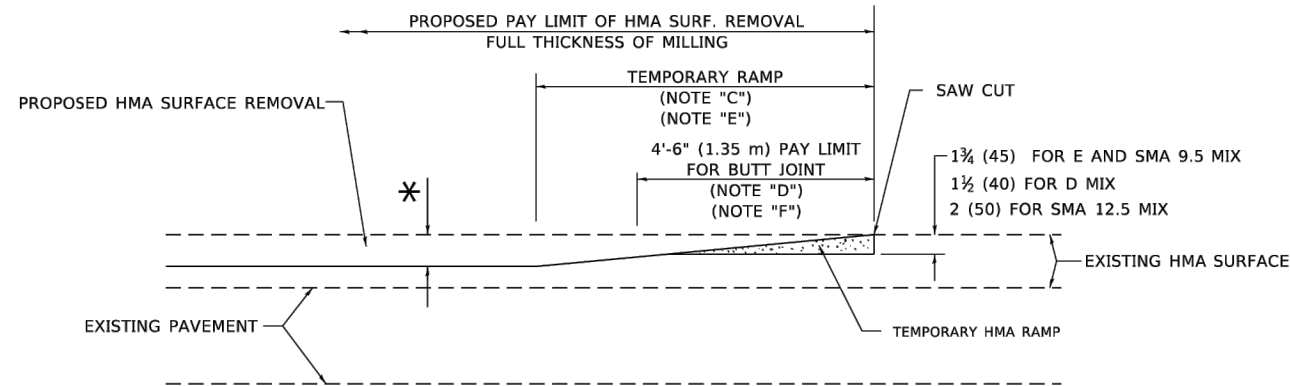
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

USER NAME = Lawrence.DeManche	DESIGNED - R. SHAH	REVISED - R. BORO 01-01-07	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT</b>			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = 100.0000' / in.	DRAWN -	REVISED - R. BORO 09-04-07					0084	24-00096-00-RS	COOK	23	14
PLOT DATE = 11/18/2022	CHECKED -	REVISED - K. ENG 10-27-08		BD400-04 (BD-22)			CONTRACT NO. 61L01				
	DATE - 10-25-94	REVISED - K. SMITH 11-18-22		SCALE: NONE	SHEET 1	OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT 1CWT(209)



**MILLED TEMPORARY RAMP**  
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

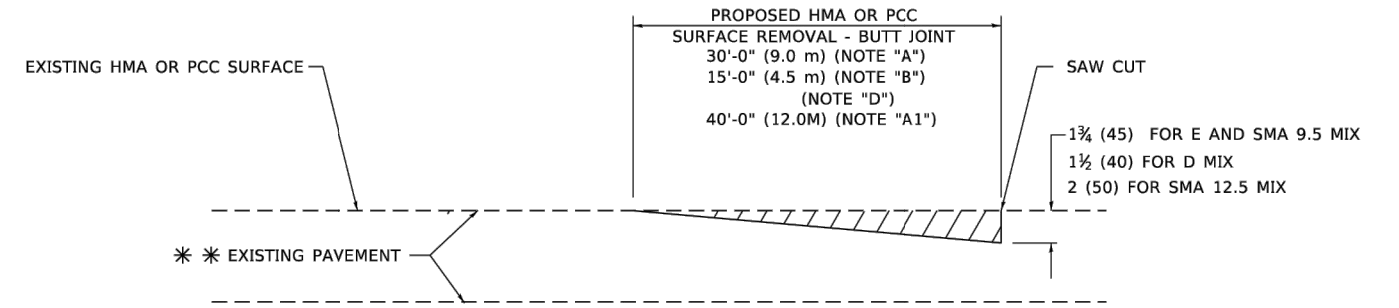
**OPTION 1**



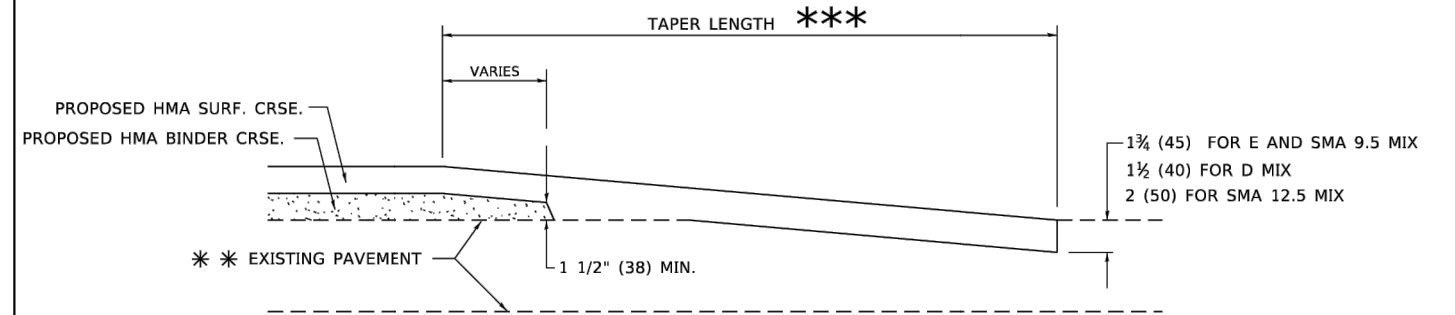
**HMA CONSTRUCTED TEMPORARY RAMP**  
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

**OPTION 2**

**TYPICAL TEMPORARY RAMP**



**BUTT JOINT DETAIL**



**HMA TAPER DETAIL**

**TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY**

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

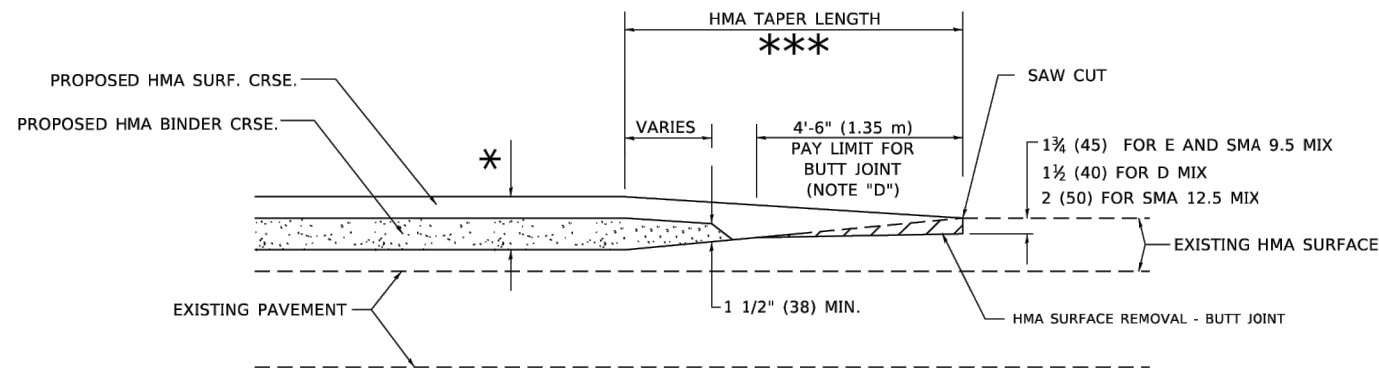
**GENERAL NOTES**

- A. MAINLINE ARTERIAL ROADWAYS AND MAJOR SIDE ROADS.
- A1. INTERSTATES
- 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' - 4" (1.02m) PER 1 INCH (25 mm) OF MILLING THICKNESS.  
\* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- F. SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".  
\*\*\* 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**

- 1. 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".
- 2. THE TEMPORARY RAMP AND SAW CUT SHALL BE INCLUDED IN THE UNIT COST FOR HMA OR PCC SURFACE REMOVAL-BUTT JOINT.

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



**BUTT JOINT AND HMA TAPER**

**TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING**

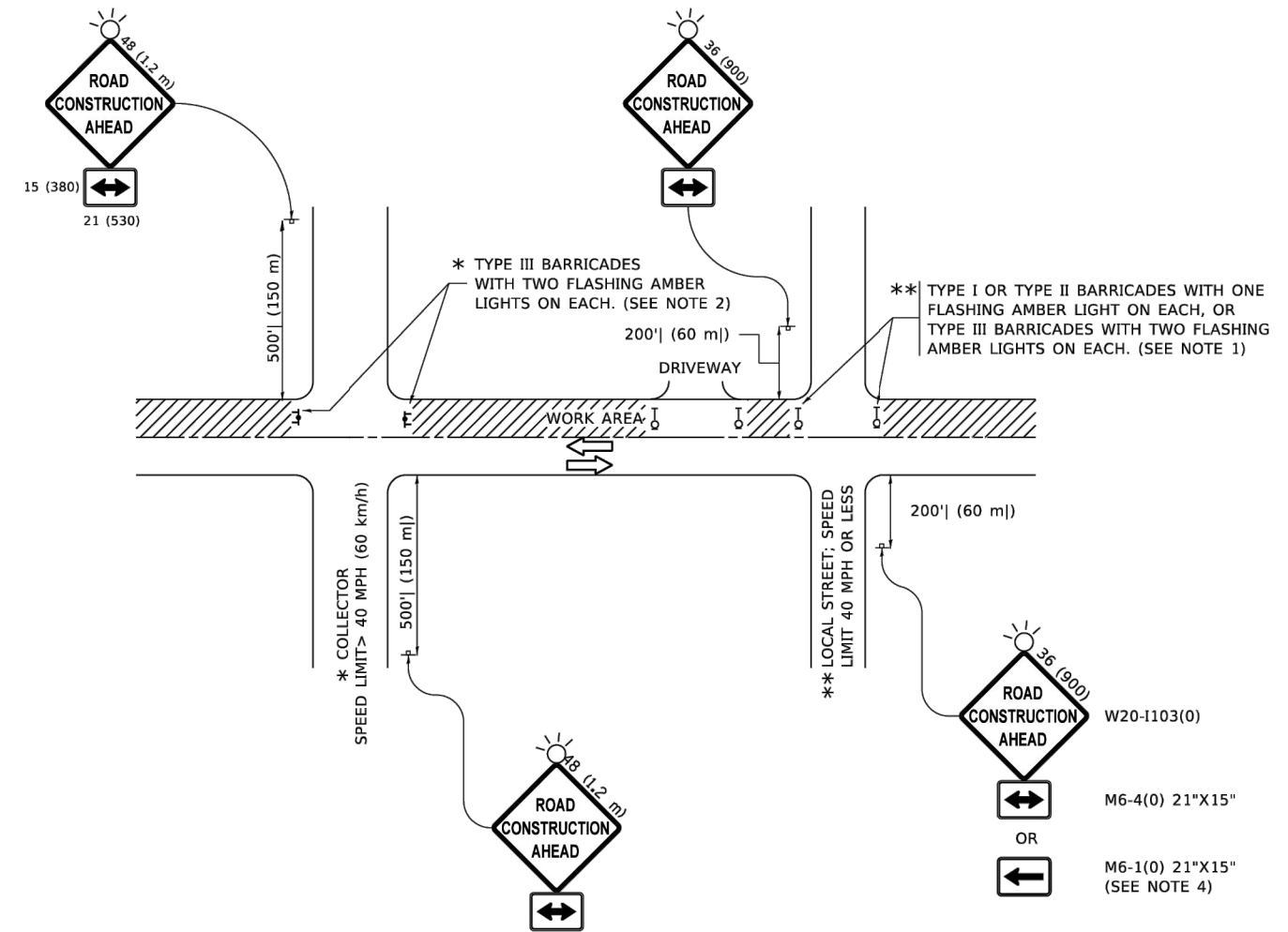
USER NAME = Lawrence.DeManche	DESIGNED - M. DE YONG	REVISED - A. ABBAS 03-21-97
	DRAWN -	REVISED - M. GOMEZ 04-06-01
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - R. BORO 01-01-07
PLOT DATE = 11/18/2022	DATE - 06-13-90	REVISED - K. SMITH 11-18-22

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND  
HMA TAPER DETAILS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0084	24-00096-00-RS	COOK	23	15
BD400-05 BD-32		CONTRACT NO. 61L01		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT 1CW7(209)		



**NOTES:**

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

USER NAME = Lawrence.DeManche	DESIGNED - L.H.A.	REVISED - T. RAMMACHER 01-06-00
	DRAWN -	REVISED - A. SCHUETZE 07-01-13
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - A. SCHUETZE 09-15-16
PLOT DATE = 5/3/2024	DATE - 06-89	REVISED - D. SENDERAK 05-03-24

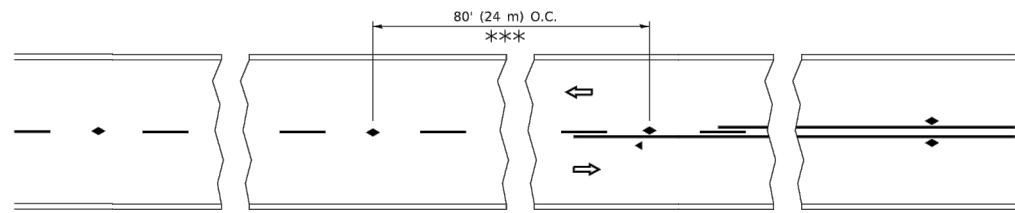
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

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

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

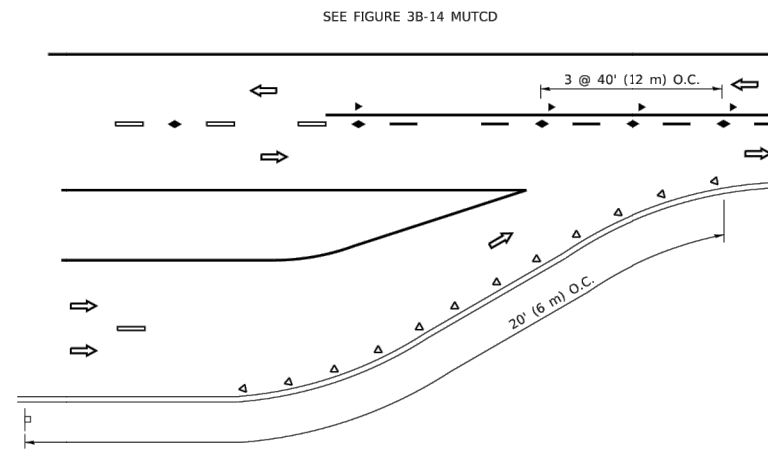
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0084	24-00096-00-RS	COOK	23	16
<b>TC-10</b>			CONTRACT NO. 61L01	
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	TCWT(209)	



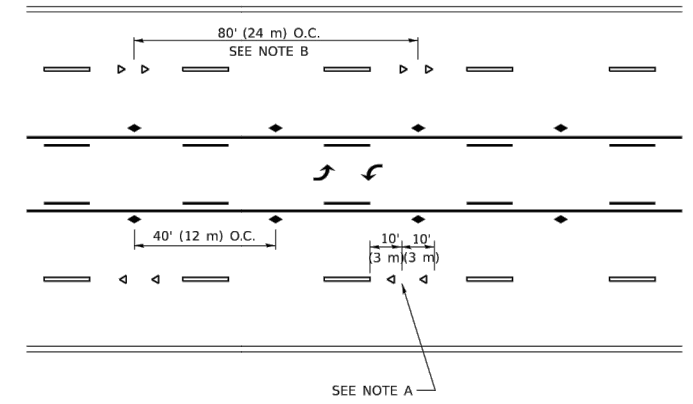


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

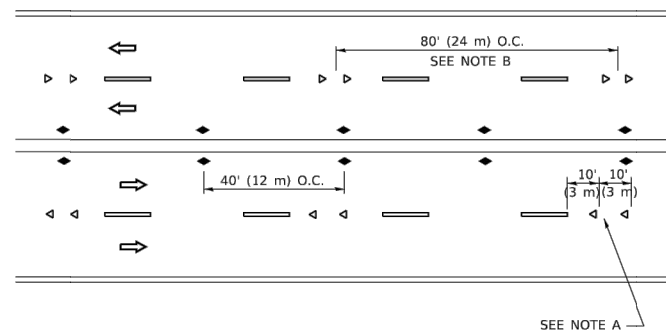
**TWO-LANE/TWO-WAY**



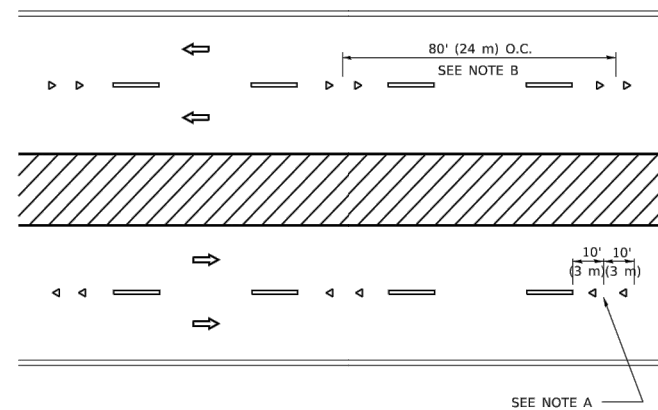
**LANE REDUCTION TRANSITION**



**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.
4. MARKERS ARE TO BE USED ADJACENT TO BOTH SOLID WHITE LINES IN DUAL LEFT TURN LANES

**SYMBOLS**

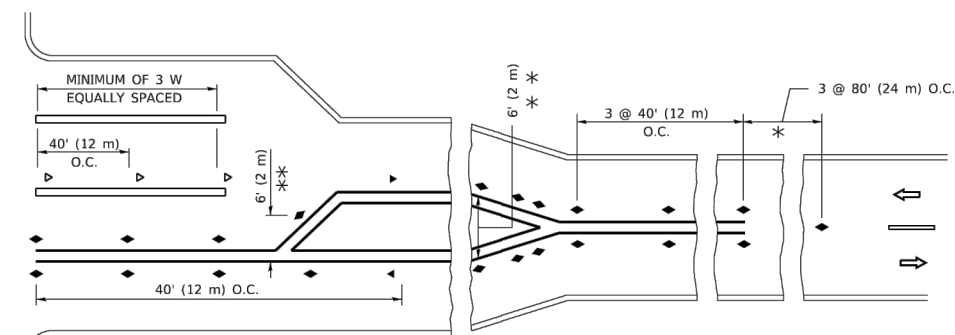
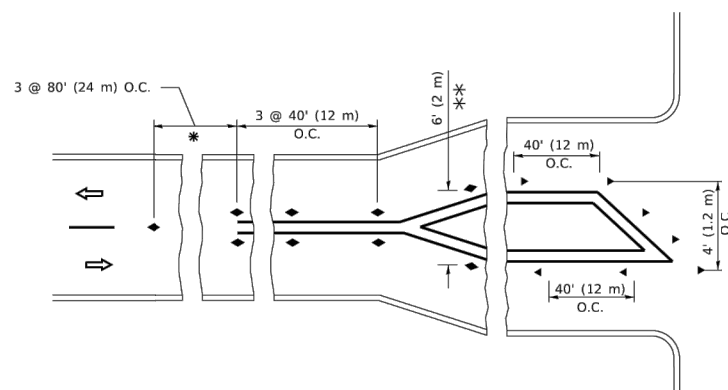
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◀ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

**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.

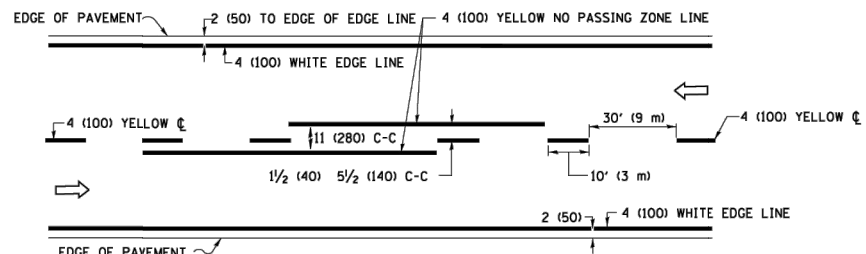


**TURN LANES**

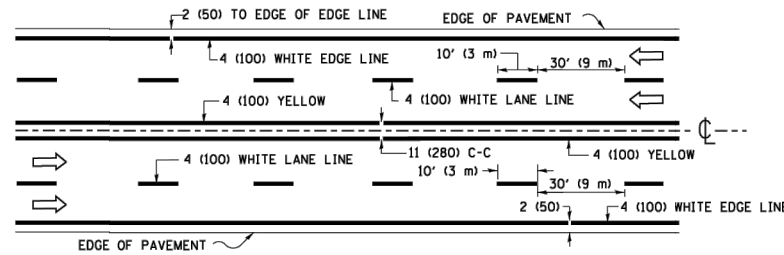
\* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE  
 \*\* WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

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

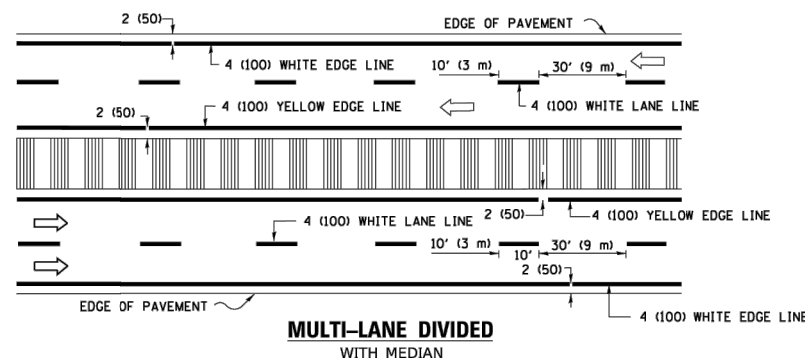
USER NAME = footem	DESIGNED -	REVISED - T. RAMMACHER 03-12-99	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)</b>			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = 50.0000' / in.	CHECKED -	REVISED - T. RAMMACHER 01-06-00					0084	24-00096-00-RS	COOK	23	17
PLOT DATE = 3/4/2019	DATE -	REVISED - C. JUCIUS 09-09-09		SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.			TC-11 CONTRACT NO. 61L01				
		REVISED - C. JUCIUS 07-01-13		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT 1CWT(209)							



**2-LANE ROADWAY**

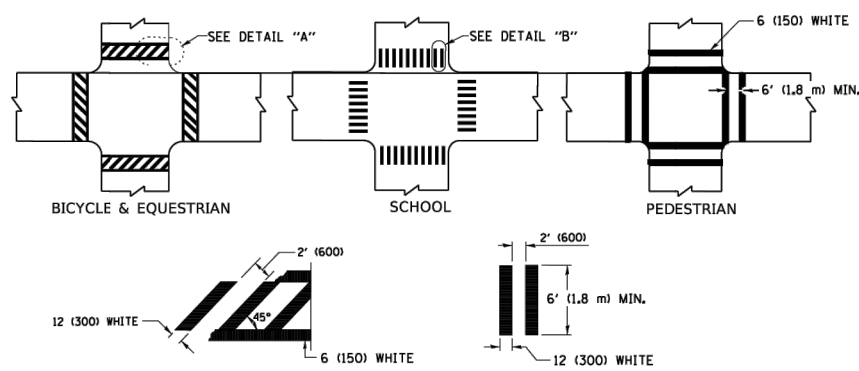


**MULTI-LANE UNDIVIDED**



**MULTI-LANE DIVIDED WITH MEDIAN**

**TYPICAL LANE AND EDGE LINE MARKING**

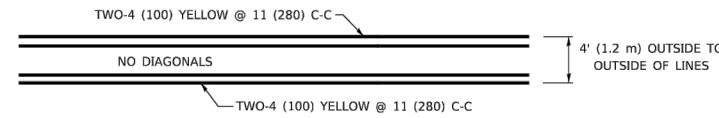


**DETAIL "A"**

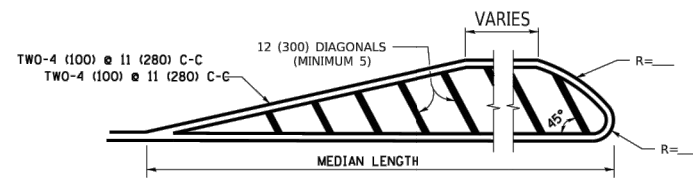
**DETAIL "B"**

**TYPICAL CROSSWALK MARKING**

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

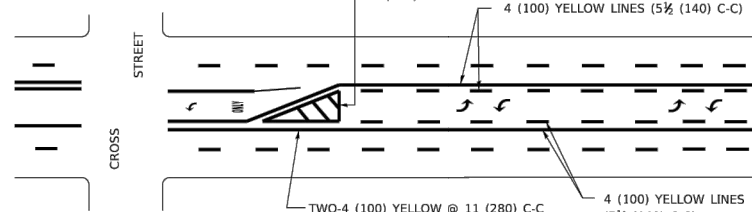


**4' (1.2 m) WIDE MEDIANS ONLY**

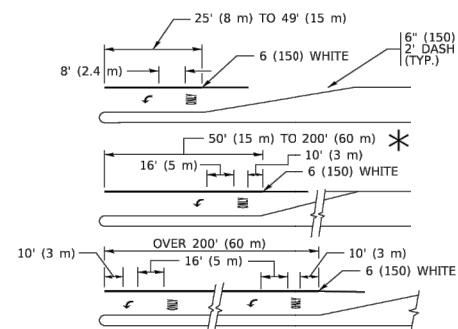


**MEDIANS OVER 4' (1.2 m) WIDE**

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))



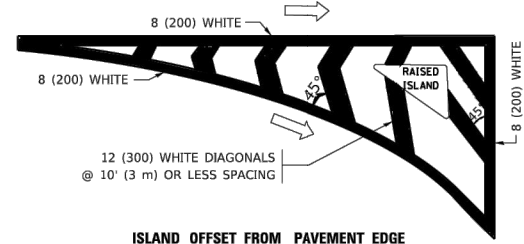
**MEDIAN WITH TWO-WAY LEFT TURN LANE  
TYPICAL PAINTED MEDIAN MARKING**



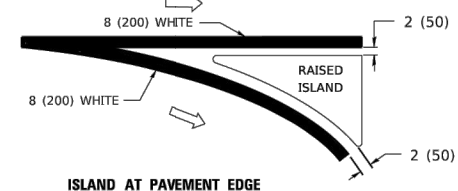
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)  
\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - \*ONLY\* INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - \*ONLY\*.

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

**TYPICAL TURN LANE MARKING**

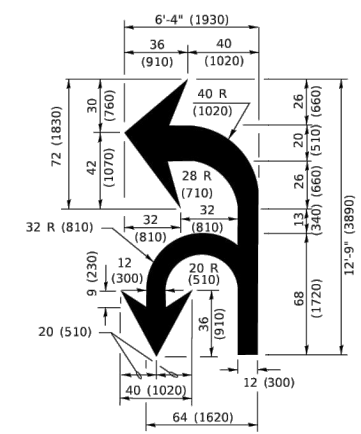


**ISLAND OFFSET FROM PAVEMENT EDGE**

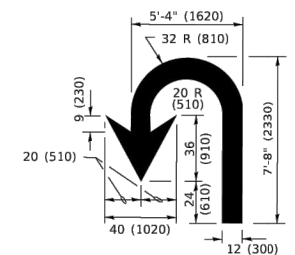


**ISLAND AT PAVEMENT EDGE**

**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 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE.
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES: "RR" 15' 6" (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m <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.

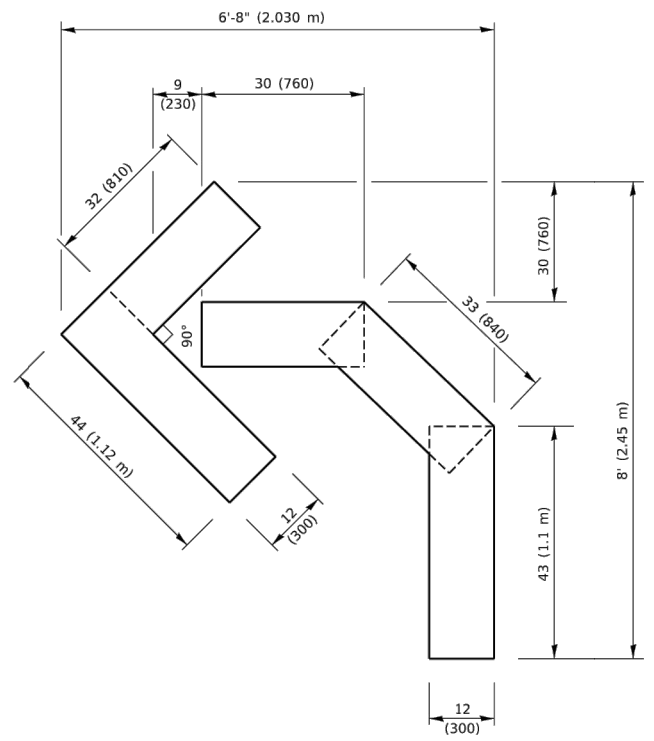
USER NAME = footem	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09
	DRAWN -	REVISED - C. JUCIUS 07-01-13
PLOT SCALE = 50.0000' / in.	CHECKED -	REVISED - C. JUCIUS 12-21-15
PLOT DATE = 3/4/2019	DATE - 03-19-90	REVISED - C. JUCIUS 04-12-16

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

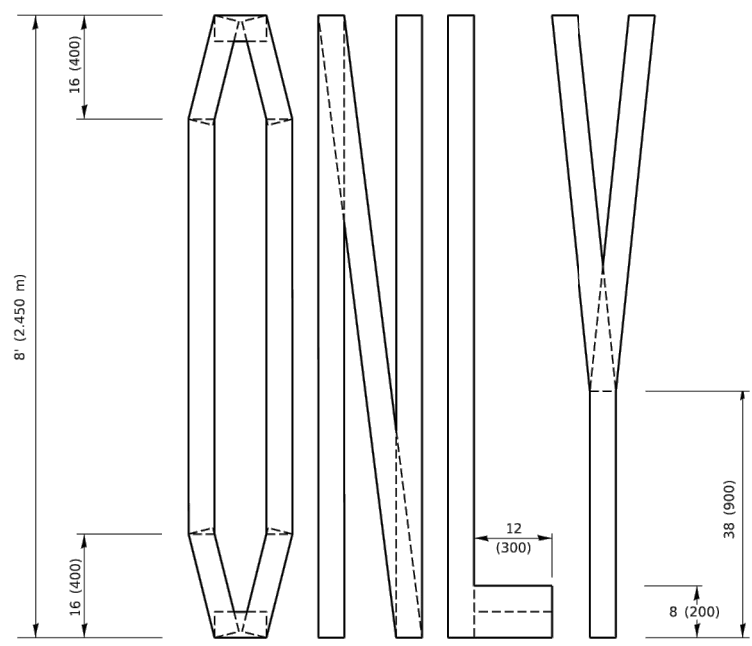
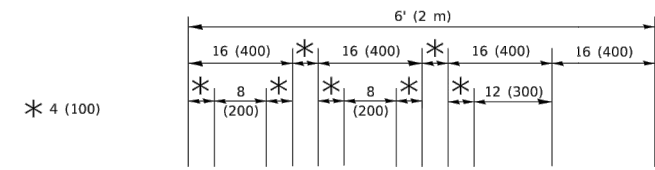
**DISTRICT ONE  
TYPICAL PAVEMENT MARKINGS**

SCALE: NONE SHEET 1 OF 2 SHEETS STA. TO STA.

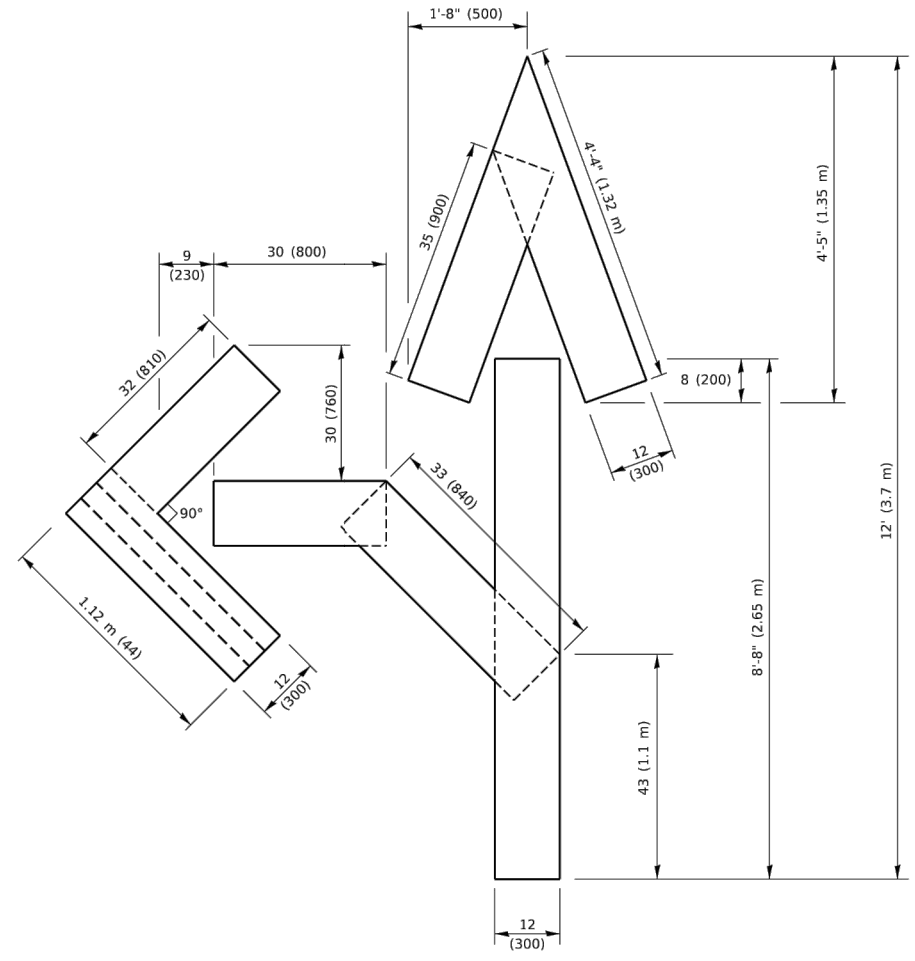
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0084	24-00096-00-RS	COOK	23	18
<b>TC-13</b>		CONTRACT NO. 61L01		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT 1CW7(209)		



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

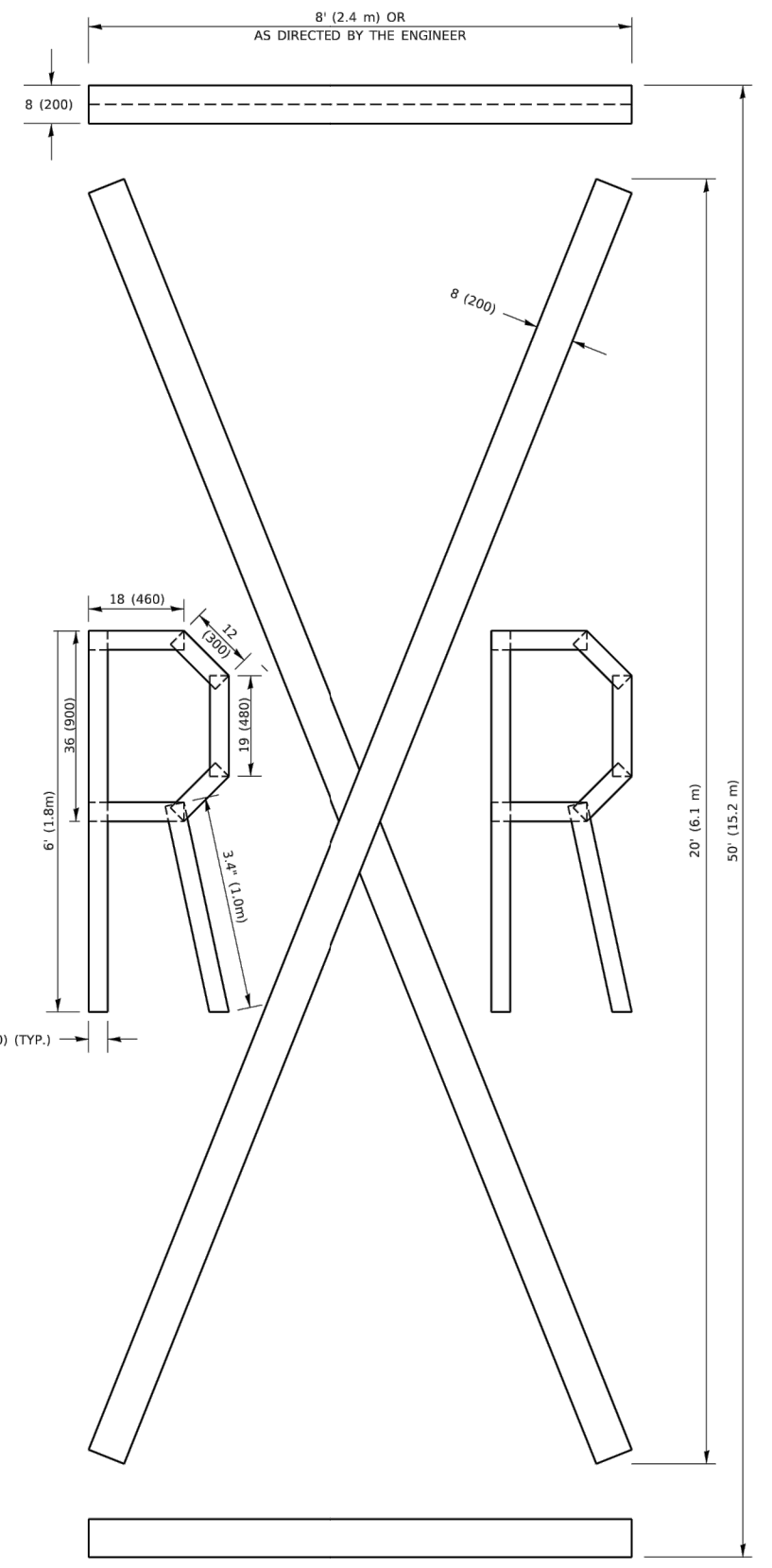


**QUANTITY**  
 4 (100) LINE = 64.1 ft. (19.5 m)  
 21.4 sq. ft. (1.99 sq. m)



**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.

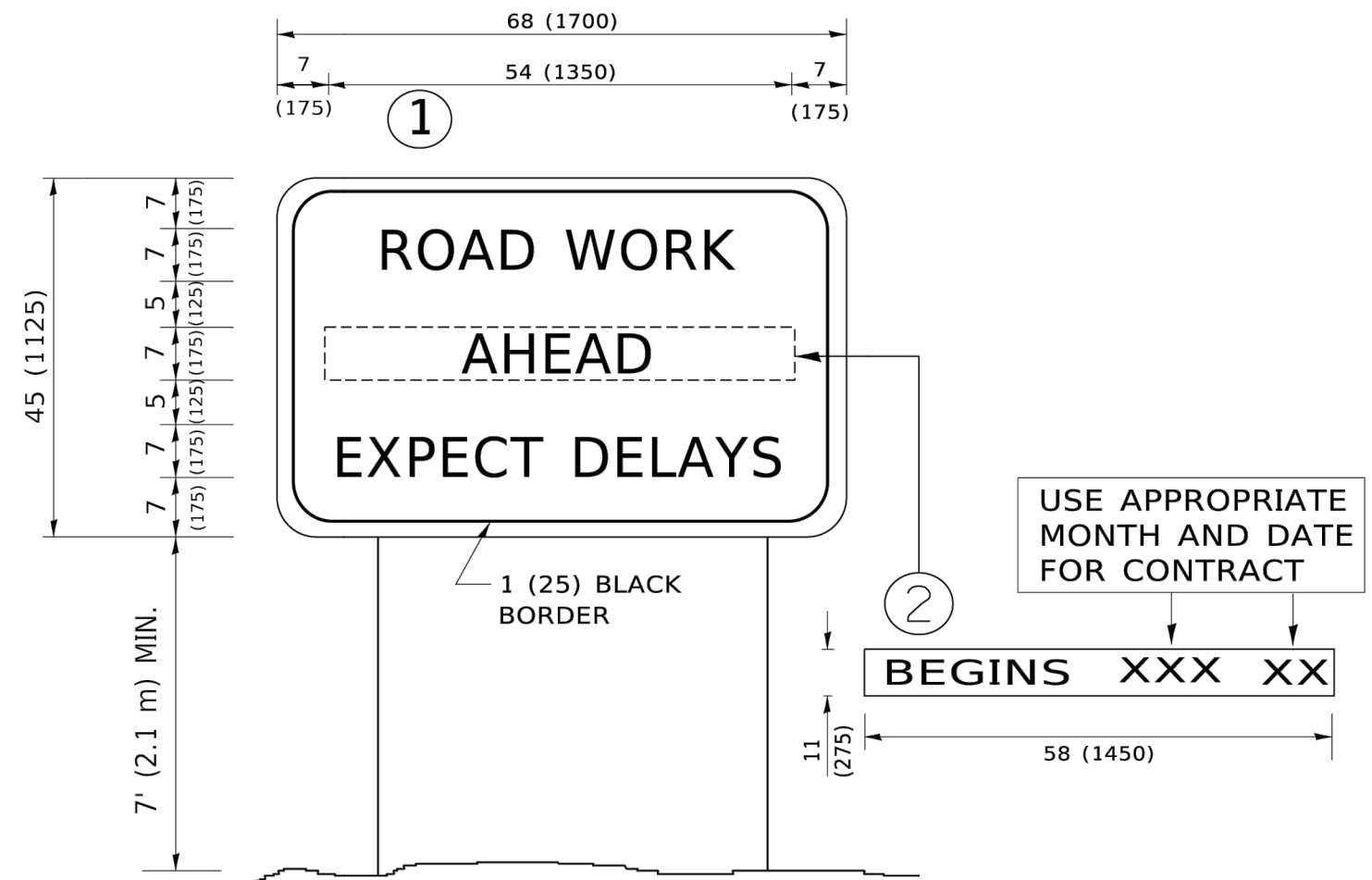
USER NAME = footem	DESIGNED -	REVISED - T. RAMMACHER 03-02-98
	DRAWN -	REVISED - E. GOMEZ 08-28-00
PLOT SCALE = 50.0068 ' / in.	CHECKED -	REVISED - E. GOMEZ 08-28-00
PLOT DATE = 3/4/2019	DATE - 09-18-94	REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0084	24-00096-00-RS	COOK	23	19
TC-16		CONTRACT NO. 61L01		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT 1CW7(209)				



**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.

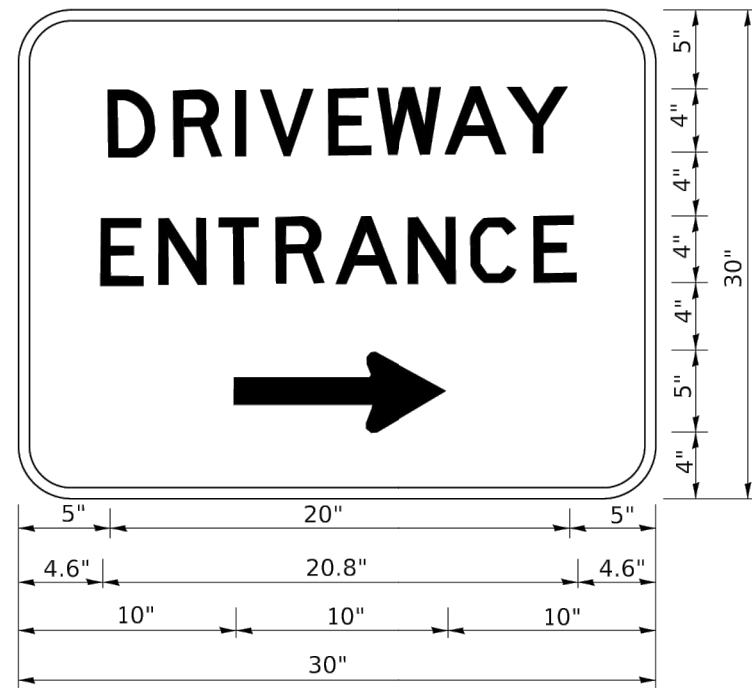
USER NAME = footemj	DESIGNED -	REVISED - R. MIRS 09-15-97
	DRAWN -	REVISED - R. MIRS 12-11-97
PLOT SCALE = 50.0000' / in.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
PLOT DATE = 3/4/2019	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD  
INFORMATION SIGN**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0084	24-00096-00-RS	COOK	23	20
TC-22		CONTRACT NO. 61L01		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT 1CW7(209)		



3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED  
 "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

NOTES:

1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE PLACED BACK-TO-BACK: ONE WITH A RIGHT HAND ARROW (SHOWN) SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE FAR LEFT SIDE OF THE DRIVEWAY.
3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

USER NAME = leysa	DESIGNED -	REVISED - C. JUCIUS 02-15-07
	DRAWN -	REVISED -
PLOT SCALE = 50.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 8/6/2021	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

DRIVEWAY ENTRANCE SIGNING

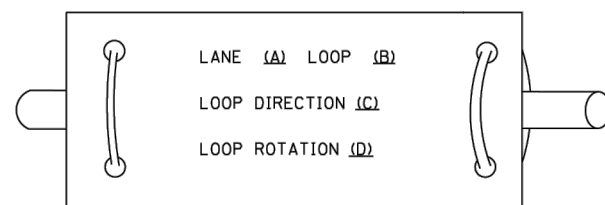
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0084	24-00096-00-RS	COOK	23	21
TC-26			CONTRACT NO. 61L01	
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	1CW(209)	

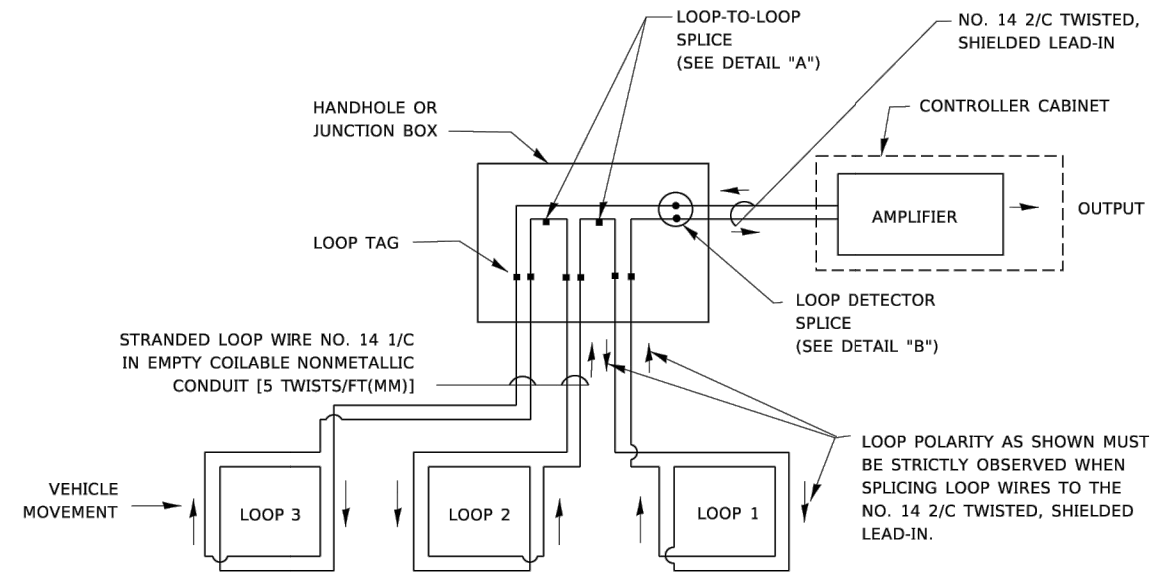
**LOOP DETECTOR NOTES**

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

**LOOP LEAD-IN CABLE TAG**

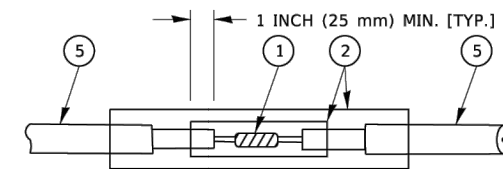


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

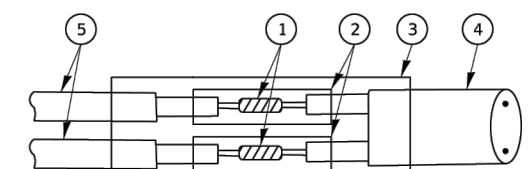


**DETECTOR LOOP WIRING SCHEMATIC**

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

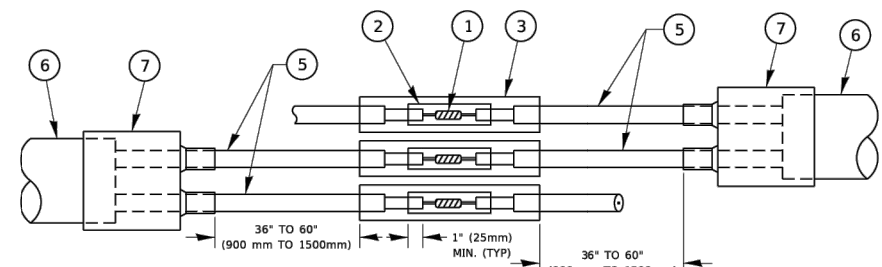


DETAIL "A"  
LOOP-TO-LOOP SPLICE

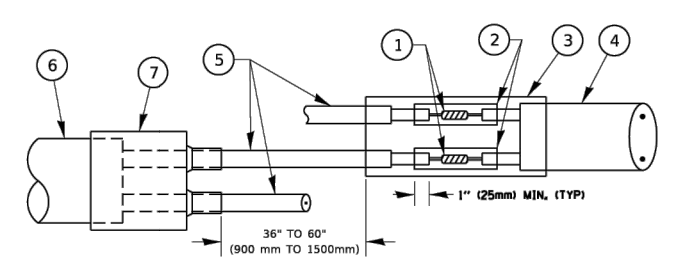


DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

**TYPE I LOOP**



DETAIL "A"  
LOOP-TO-LOOP SPLICE



DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

**PREFORMED LOOP**

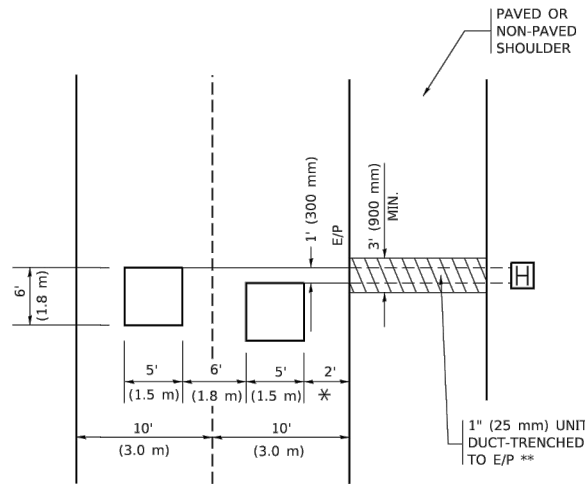
**LOOP DETECTOR SPLICE**

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

USER NAME = footemj	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
PLOT SCALE = 50.0000' / in.	DRAWN -	REVISED -			0084	24-00096-00-RS	COOK	23	22	
PLOT DATE = 3/4/2019	CHECKED -	REVISED -			<b>TS-05</b>		CONTRACT NO. 61L01			
	DATE -	REVISED -			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT 1CW(209)					

**LOOPS NEXT TO SHOULDERS**

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

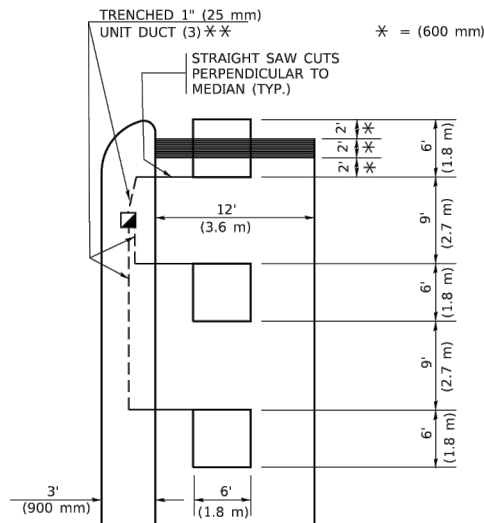


\* = (600 mm)

\*\* 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)**

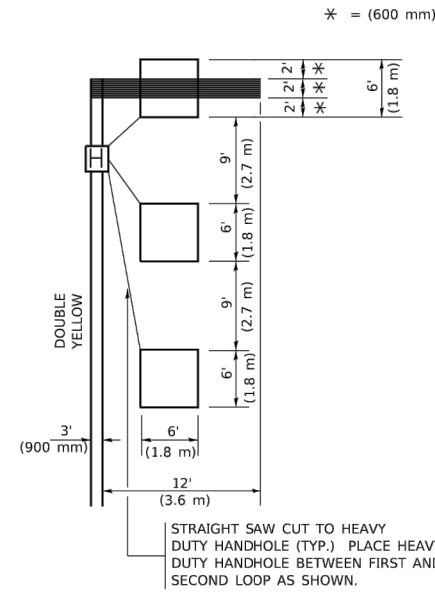
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



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

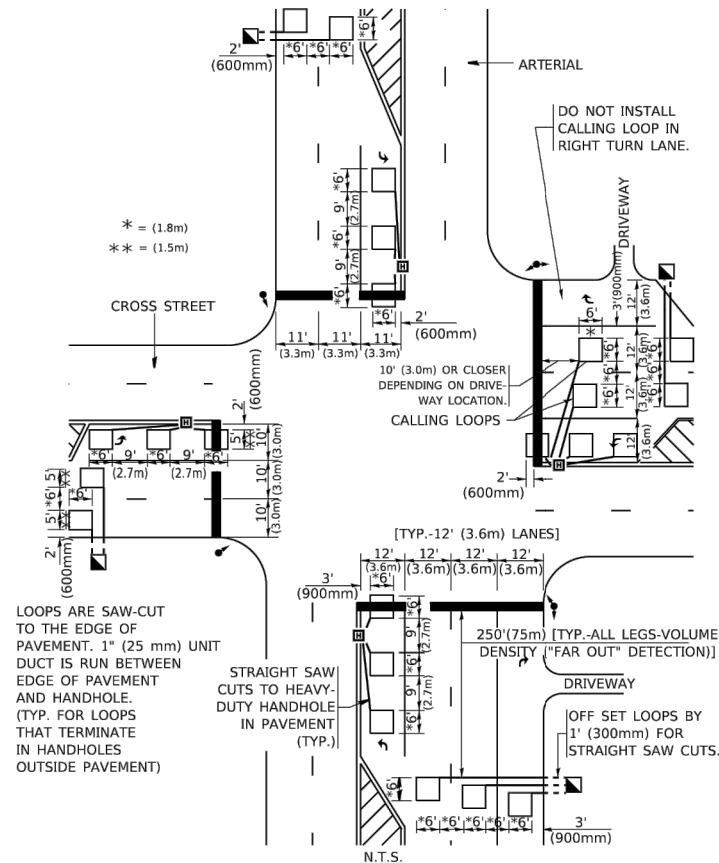
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



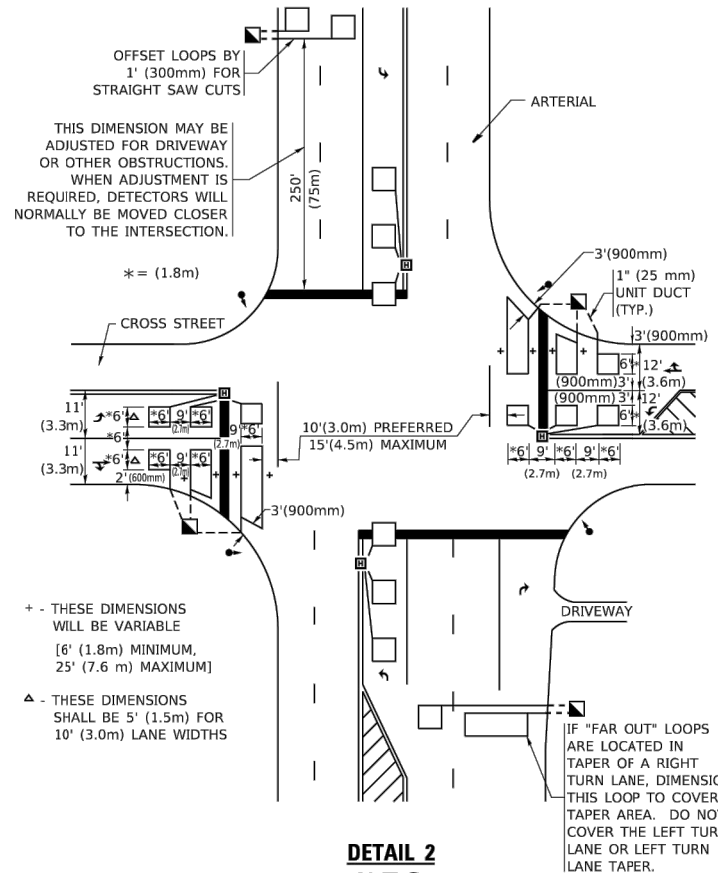
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



**DETAIL 1**  
N.T.S.

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



**DETAIL 2**  
N.T.S.

NOTES:

VEHICLES LOOP DETECTORS

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

PLACEMENT OF DETECTORS

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

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

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

NOTE:

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

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

USER NAME = footem	DESIGNED -	REVISED -
PLOT SCALE = 50.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 3/4/2019	CHECKED - R.K.F.	REVISED -
	DATE -	REVISED -

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

<b>DISTRICT 1 - DETECTOR LOOP INSTALLATION</b>			
<b>DETAILS FOR ROADWAY RESURFACING</b>			
SCALE: NONE	SHEET 1	OF 1 SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0084	24-00096-00-RS	COOK	23	23
TS-07		CONTRACT NO. 61L01		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	1CW7(209)	