

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2021-024-RS	MCHENRY	28	1
		ILLINOIS	CONTRACT NO. 62N56	

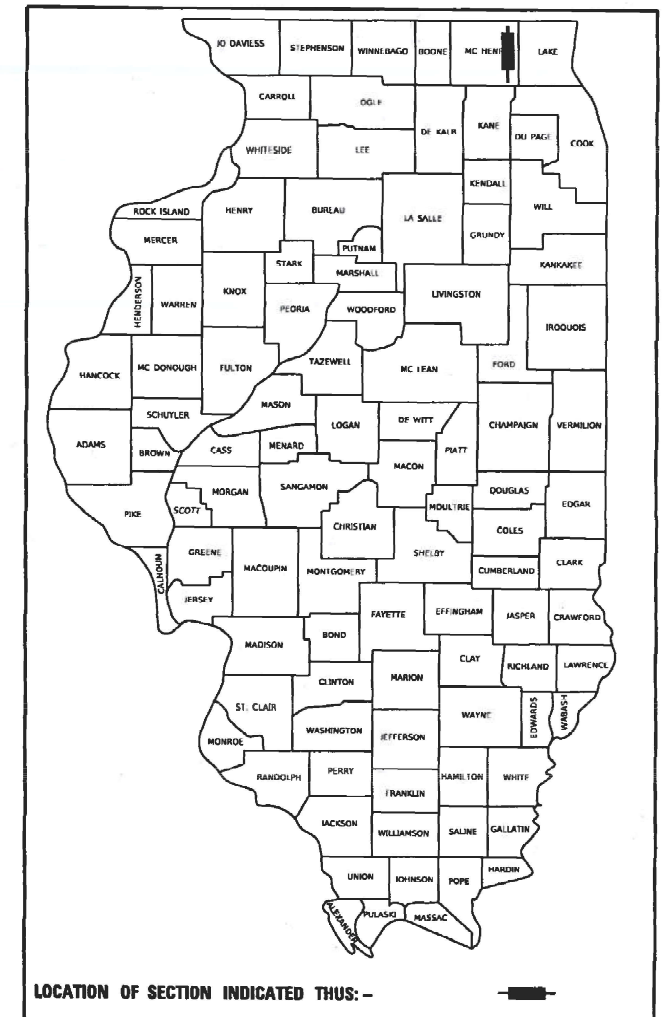
* 28 + 13 = 41 TOTAL SHEETS

FOR INDEX OF SHEETS AND HIGHWAY STANDARDS, SEE SHEET NO. 2

THIS PROJECT IS LOCATED IN THE CITY OF MCHENRY AND VILLAGE OF JOHNSBURG

**PROPOSED
HIGHWAY PLANS**
FAP ROUTE 336: IL-31 (RICHMOND DRIVE)
SOUTH OF McCULLOM LAKE ROAD TO JOHNSBURG DRIVE
SECTION: 2021-024-RS
PROJECT: NHPP-76RF(342)
SMART RESURFACING, ADA IMPROVEMENTS
MCHENRY COUNTY
C-91-129-21

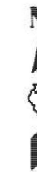
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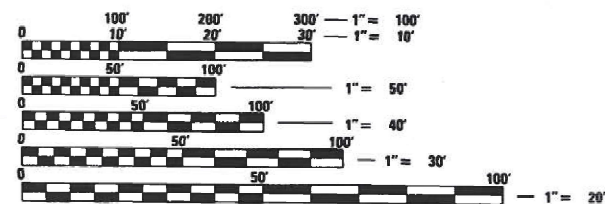
TRAFFIC DATA

2019 ADT = 23,700 VPD
POSTED SPEED LIMIT = 40 MPH (STA 11+35 TO STA 47+00)
50 MPH (STA 47+34 TO STA 107+34)

PROJECT ENDS
STA 105 + 78



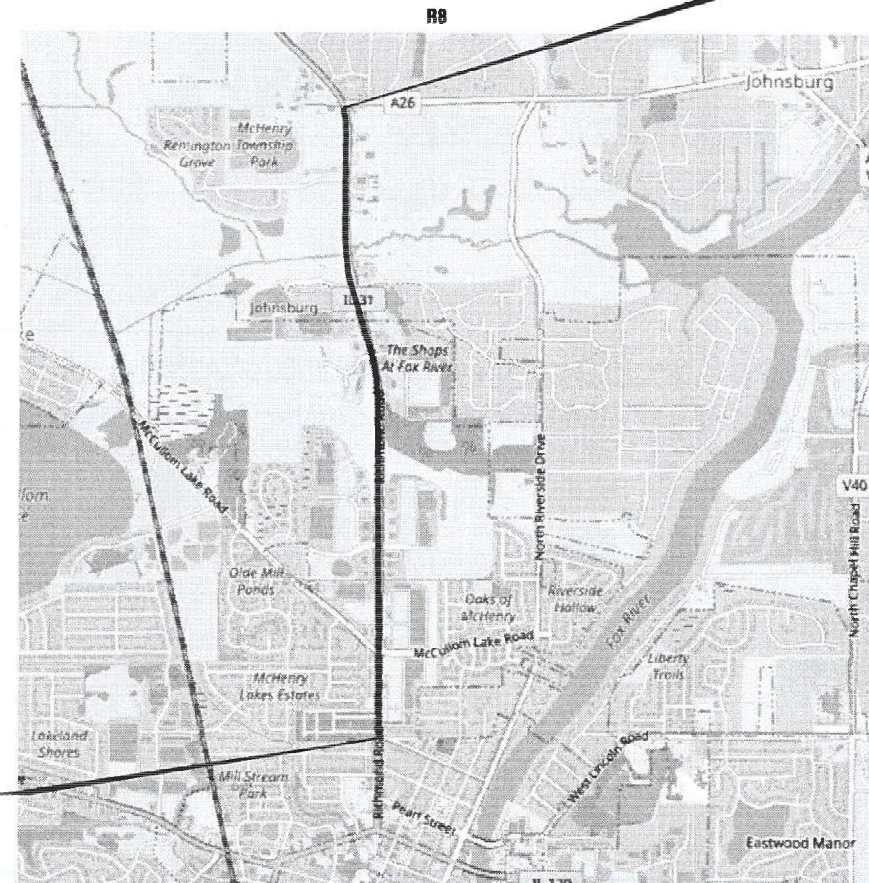
SURFACING OMISSION FROM
STA. 25 + 47 TO STA. 39 + 76



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 BEGINS
STA 11 + 35



MCHENRY TOWNSHIP

GROSS LENGTH = 9,443 FT. = 1.79 MILE
NET LENGTH = 8,014 FT. = 1.52 MILE



Alex Lane
ALEXANDER CARL LANE P.E.
IL LIC. NO. 062-063261
EXP: 11/30/2021
DATE: 10/15/2021

PROJECT ENGINEER: VESELIN VELICHKOV (847) 705-4432
PROJECT MANAGER: FAWAD AQUEEL (847) 705-4247

CONTRACT NO. 62N56

**INFRASTRUCTURE
ENGINEERING** | INCORPORATED
1 South Wacker | Suite 2650 | Chicago, IL 60606
P 312.425.9560 | F 312.425.9561 | www.infrastructure-eng.com
CONTACT: ALEXANDER LANE (312) 477-0620

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED October 18, 2021
Jose Rios LCAS
December 10, 2021
[Signature]
ENGINEER OF DESIGN AND ENVIRONMENT
December 10, 2021
[Signature]
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

INDEX OF SHEETS

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2	INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES
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13-15B	DETECTOR LOOP REPLACEMENT PLAN
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26	ARTERIAL ROAD INFORMATION SIGN (TC-22)
27	DRIVEWAY ENTRANCE SIGNING (TC-26)
28	DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING (TS-07)

STATE STANDARDS

STANDARD NO.	DRAWING NAME
000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
424001-11	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
424031-02	MEDIAN PEDESTRIAN CROSSINGS
442101-09	CLASS B PATCHES
442201-03	CLASS C AND D PATCHES
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE
701101-05	OFF-RD OPERATIONS, MULTILANE, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE 2L, 2W MOVING OPERATIONS-DAY ONLY
701427-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS ≤ 40 MPH
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 NONTRAVERSABLE MEDIAN
701602-10	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
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
780001-05	TYPICAL PAVEMENT MARKINGS
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUTS FOR DETECTION LOOPS

GENERAL NOTES

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. (48 HOUR NOTIFICATION REQUIRED)
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE CITY OF MCHENRY.
- FRAME AND GRATE ADJUSTMENT OF PRIVATE UTILITIES WITHIN THE LIMITS OF THE IMPROVEMENTS SHALL BE DONE BY THEIR RESPECTIVE OWNERS AND ARE NOT PART OF THIS CONTRACT.
- THE CONTRACTOR SHALL CONTACT DISTRICT ONE ARTERIAL TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT THE WRITTEN PERMISSION OF THE DEPARTMENT.
- UNLESS OTHER CONDITIONS WARRANT EXTENDED LANE CLOSURE AS DETERMINED AND APPROVED IN WRITING BY THE RESIDENT ENGINEER OR AS PROVIDED FOR IN THE CONTRACT SPECIFICATIONS, OVERNIGHT CLOSURE SHALL NOT BE ALLOWED FOR REHABILITATION PROJECTS INVOLVING DAYTIME MILLING AND RESURFACING OPERATIONS AND CLASS D AND CLASS B PATCHING.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE RESIDENT ENGINEER / TECHNICIANS.
- LOCATIONS OF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT, WILL BE DETERMINED IN THE FIELD BY THE RESIDENT ENGINEER / TECHNICIAN.
- CATCH BASINS, MANHOLES, INLETS, DRAINAGE STRUCTURES, AND VALVE VAULTS ADJUSTMENT AND/OR RECONSTRUCTION LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE RESIDENT ENGINEER / TECHNICIAN.
- EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR ACCORDING TO ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS, UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.
- WHEN MILLED PAVEMENT OPENS TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1½ INCHES WHERE THE SPEED LIMIT IS 45 MPH OR LESS, AND 1 INCH WHERE THE SPEED LIMIT IS OVER 45 MPH, WITH WRITTEN APPROVAL FROM THE RESIDENT ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM OF 1V:3H.
- BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT) IN ACCORDANCE WITH THE "BUTT JOINT AND HMA TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
- THE RESIDENT ENGINEER SHALL CONTACT WALTER CZARNY, AREA TRAFFIC FIELD ENGINEER, AT WALTER.CZARNY@ILLINOIS.GOV A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE RESIDENT ENGINEER.
- ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE DEPARTMENT.
- ANY PAVEMENT MARKINGS OBLITERATED BY MILLING AND RESURFACING OPERATIONS ON SIDE STRESS AND ENTRANCES SHALL BE REPLACED AND PAID FOR IN KIND.
- PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES.
- WHEN EXISTING SIDEWALK IS TO BE REMOVED WITHOUT PROPOSED SIDEWALK REPLACEMENT, IT SHALL BE REPLACED WITH TOPSOIL AND SOD.
- THE CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATING NEAR ANY AND ALL EXISTING ITEMS THAT WILL NOT BE REMOVED INCLUDING PREVIOUSLY SEEDED AREAS. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S OWN EXPENSE TO THE SATISFACTION OF THE ENGINEER.
- LANDSCAPED AREAS AFFECTED BY SIDEWALK CONSTRUCTION SHALL BE RESTORED WITH 18-INCH WIDE STRIP OF "SODDING, SALT TOLERANT" AND "TOPSOIL FURNISH AND PLACE, 4-INCH" INSTALLED FROM THE BACK OF THE SIDEWALK, OR AS DETERMINED BY THE RESIDENT ENGINEER / TECHNICIAN.
- THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS AT THE TIMES DURING CONSTRUCTION.
- ALL CAST OPEN LIDS FOR FRAMES, TYPE 1, WITHIN CURB RAMPS FOR SIDEWALK, SHALL BE "ADA COMPLIANT" CAST OPEN LIDS PER HIGHWAY STANDARD 604001.
- ANY LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF THE CURB OR DRAINAGE STRUCTURES, WHICH OBSTRUCTS THE NATURAL FLOW OF WATER, SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. PRIOR TO ACCEPTANCE OF THE IMPROVEMENT, ALL DRAINAGE STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED AS INCIDENTAL.
- THE GENERAL CONTRACTOR IS REQUIRED TO HIRE AN ENVIRONMENTAL FIRM TO CONTINUOUSLY MONITOR FOR WORKER SAFETY AND SOIL CONTAMINATION AT SEVERAL LOCATIONS. SEE SPECIAL PROVISION AND SUPPLEMENTAL SPECIFICATIONS FOR DETAILS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF ANY DETECTOR LOOPS DAMAGED DURING CONSTRUCTION.
- ALL EXISTING R.O.W SHOWN IS APPROXIMATE AND MAY NEED TO BE VERIFIED IN THE FIELD. ANY R.O.W. CONFLICTS SHALL BE COORDINATED WITH THE RESIDENT ENGINEER.
- LOCATIONS FOR CLASS B PATCHES TO BE DETERMINED IN THE FIELD BY THE RESIDENT ENGINEER.

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	USER NAME = ALane	DESIGNED - IMU	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES IL-31 (MCCULLOM LAKE RD TO JOHNSBURG RD)	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 20,0000 * / in.	CHECKED - ACL	REVISED -			336	2021-024-R5	MCHENRY	28	2
	PLOT DATE = 11/12/2021	DATE - 08/13/2021					CONTRACT NO. 62N56			
						SCALE: NTS			STA. TO STA.	

PAY ITEM NUMBER	DESIGNATION	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				URBAN	
				80% FEDERAL 20% STATE	100% STATE
20200100	EARTH EXCAVATION	CU YD	39	39	
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	160	160	
25200110	SODDING, SALT TOLERANT	SQ YD	160	160	
25200200	SUPPLEMENTAL WATERING	UNIT	1	1	
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	38	38	
28000510	INLET FILTERS	EACH	30	30	
35101400	AGGREGATE BASE COURSE, TYPE B	TON	26	26	
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	30,827	30,827	
40600370	LONGITUDINAL JOINT SEALANT	FOOT	16,630	16,630	
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	103	103	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	371	371	
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	8	8	
40604060	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50	TON	8	8	
40604172	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "E", N70	TON	6,714	6,714	
42000060	WELDED WIRE REINFORCEMENT	SQ YD	520	520	
42001300	PROTECTIVE COAT	SQ YD	1,638	1,638	
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	4,179	4,179	
42400800	DETECTABLE WARNINGS	SQ FT	550	550	
44000156	HOT-MIX ASPHALT SURFACE REMOVAL, 1 3/4"	SQ YD	68,505	68,505	
44000600	SIDEWALK REMOVAL	SQ FT	4,179	4,179	
44002227	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 6 3/4"	SQ YD	4,179	4,179	
44200994	CLASS B PATCHES, TYPE II, 12 INCH	SQ YD	560	560	
44200998	CLASS B PATCHES, TYPE III, 12 INCH	SQ YD	400	400	

* = SPECIALTY ITEM

PAY ITEM NUMBER	DESIGNATION	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				URBAN	
				80% FEDERAL 20% STATE	100% STATE
44201000	CLASS B PATCHES, TYPE IV, 12 INCH	SQ YD	120	120	
44201299	DOWEL BARS 1 1/2"	EACH	1,860	1,860	
44201741	CLASS D PATCHES, TYPE II, 8 INCH	SQ YD	780	780	
44201745	CLASS D PATCHES, TYPE III, 8 INCH	SQ YD	415	415	
44201747	CLASS D PATCHES, TYPE IV, 8 INCH	SQ YD	750	750	
44213200	SAW CUTS	FOOT	4,968	4,968	
44213204	TIE BARS 3/4"	EACH	45	45	
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	200	200	
60255500	MANHOLES TO BE ADJUSTED	EACH	6	6	
60260100	INLETS TO BE ADJUSTED	EACH	8	8	
60266600	VALVE BOXES TO BE ADJUSTED	EACH	2	2	
60404950	FRAMES AND GRATES, TYPE 24	EACH	2	2	
60406000	FRAMES AND LIDS, TYPE 1, OPEN LID	EACH	2	2	
60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	8	8	
60618320	CONCRETE MEDIAN SURFACE, 6 INCH	SQ FT	417	417	
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	21	21	
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	4	4	
* 66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1	1	
* 66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1	1	
* 66901006	REGULATED SUBSTANCES MONITORING	CAL DA	4	4	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	12	12	
67100100	MOBILIZATION	L SUM	1	1	
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	1	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES
IL-31 (MCCULLOM LAKE RD TO JOHNSBURG RD)**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2021-024-R5	MCHENRY	28	3
CONTRACT NO. 62N56			ILLINOIS FED. AID PROJECT	

SCALE: NTS STA. TO STA.

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INFRASTRUCTURE ENGINEERING
1 South Wacker | Suite 2650 | Chicago, IL 60606
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USER NAME = ALane	DESIGNED - IMU	REVISED - 1
PLOT SCALE = 20,0000 * / in.	DRAWN - IMU	REVISED -
PLOT DATE = 10/21/2021	CHECKED - ACL	REVISED -
	DATE - 08/13/2021	

PAY ITEM NUMBER	DESIGNATION	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				URBAN	
				80% FEDERAL 20% STATE	100% STATE
70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	L SUM	1	1	
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	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	
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	50	50	
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	545	545	
70300211	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS - PAINT	SQ FT	1,677	1,677	
70300221	TEMPORARY PAVEMENT MARKING - LINE 4"- PAINT	FOOT	35,769	35,769	
70300241	TEMPORARY PAVEMENT MARKING - LINE 6"- PAINT	FOOT	7,706	7,706	
70300251	TEMPORARY PAVEMENT MARKING - LINE 8"- PAINT	FOOT	3,268	3,268	
70300261	TEMPORARY PAVEMENT MARKING - LINE 12"- PAINT	FOOT	3,502	3,502	
70300281	TEMPORARY PAVEMENT MARKING - LINE 24"- PAINT	FOOT	602	602	
70306120	TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE III TAPE	FOOT	1,635	1,635	
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	1,677	1,677	
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	35,769	35,769	
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	7,706	7,706	
* 78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	3,268	3,268	
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	3,502	3,502	
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	602	602	
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	318	318	
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	318	318	

* = SPECIALTY ITEM

PAY ITEM NUMBER	DESIGNATION	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				URBAN	
				80% FEDERAL 20% STATE	100% STATE
* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	3,432	3,432	
* 89502376	REBUILD EXISTING HANDHOLE	EACH	3	3	
X0320050	CONSTRUCTION LAYOUT (SPECIAL)	L SUM	1	1	
X2020110	GRADING AND SHAPING SHOULDERS	UNIT	71	71	
X4400501	COMBINATION CURB AND GUTTER REMOVAL AND REPLACEMENT LESS THAN OR EQUAL TO 10 FEET	FOOT	690	690	
X5537800	STORM SEWERS TO BE CLEANED 12"	FOOT	300		300
X6022900	CATCH BASINS TO BE RECONSTRUCTED (SPECIAL)	EACH	2	2	
X6025300	CATCH BASINS TO BE ADJUSTED (SPECIAL)	EACH	4	4	
X6030205	FRAMES AND GRATES TO BE ADJUSTED (SPECIAL)	EACH	6	6	
Z0004562	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	280.0	280.0	
Z0018100	DRAINAGE STRUCTURE ADJUSTMENT (SPECIAL)	EACH	23	23	
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	36		36
Z0076600	TRAINEES	HOURS	500	500	
Z0076604	TRAINEES - TRAINING PROGRAM GRADUATE	HOURS	500	500	

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 <p>INFRASTRUCTURE ENGINEERING INCORPORATED 1 South Wacker Suite 2650 Chicago, IL 60606 P 312.425.9580 F 312.425.9584 www.infrastructure-eng.com</p>	USER NAME = ALane	DESIGNED - IMU	REVISED - 1
	PLOT SCALE = 20.0000" / in.	DRAWN - IMU	REVISED -
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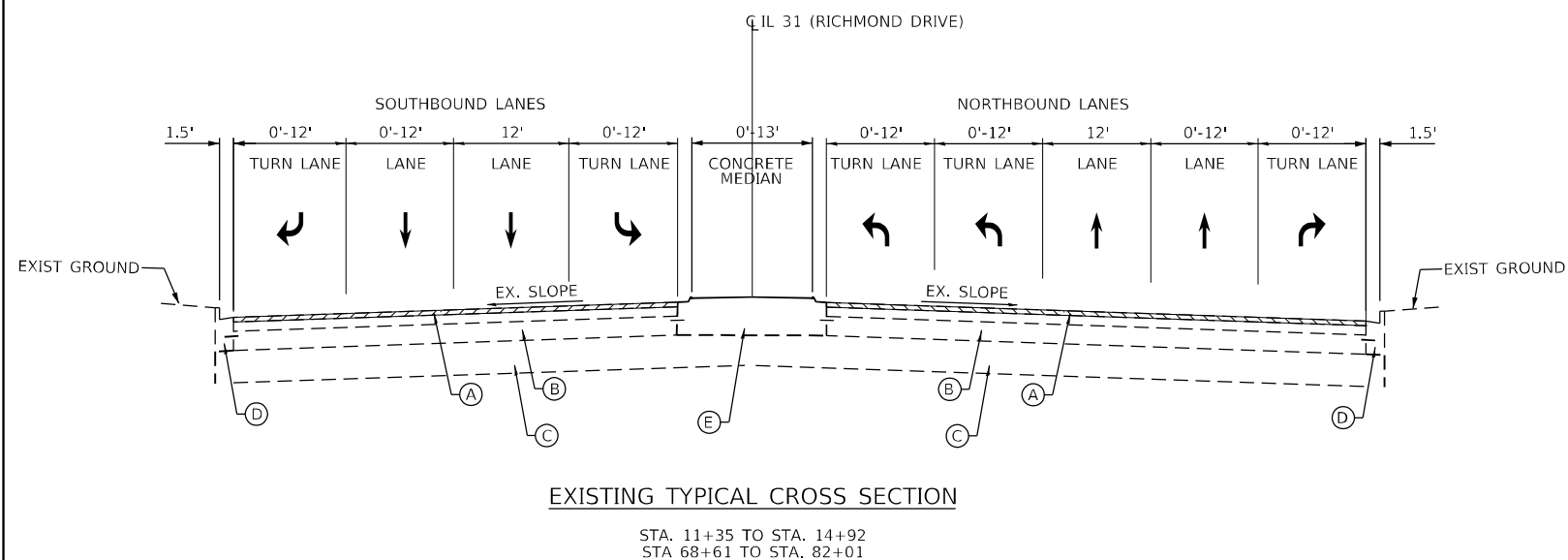
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336	2021-024-R5	MCHENRY	28	4
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62N56	

Ø 0042



LEGEND

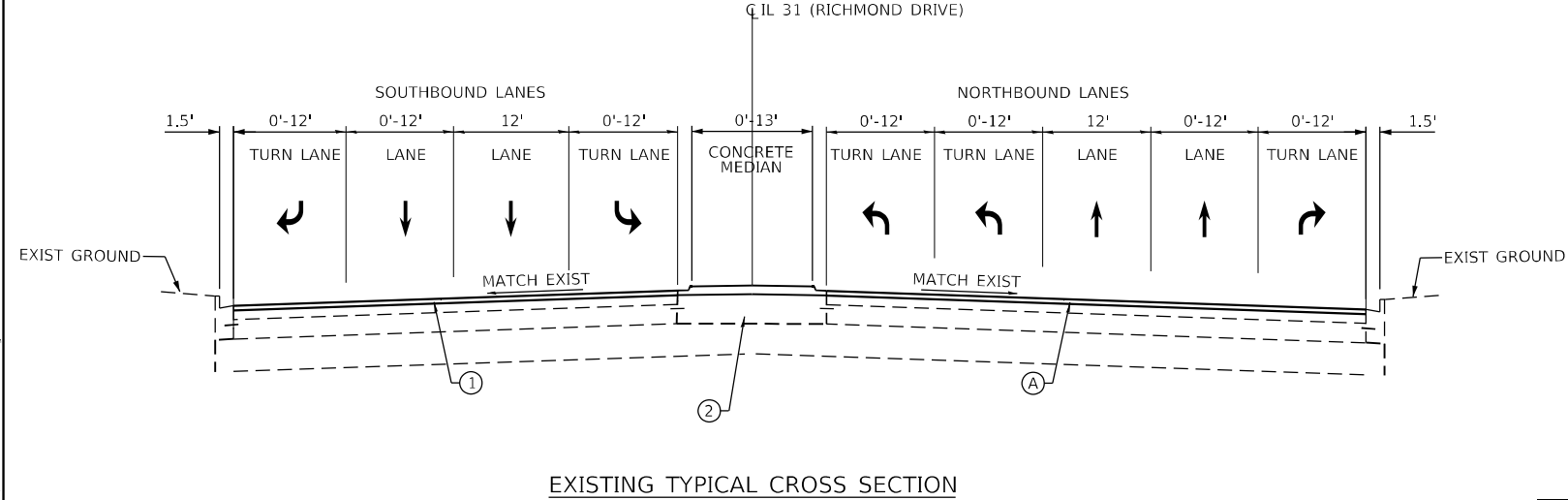
- (A) EXISTING HOT-MIX ASPHALT PAVEMENT 6 3/4"
- (B) EXISTING P.C.C. BASE COURSE 8"
- (C) EXISTING SUB-BASE GRANULAR MATERIAL, TYP B, 4"±
- (D) EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- (E) EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.12
- (F) EXISTING CONCRETE 12"
- (G) PAVED SHOULDER
- (1) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE MIX "E", IL-9.5, N70, 1-3/4"
- (2) HOT-MIX ASPHALT SURFACE COURSE MIX "D", IL-9.5, N50, 2"
- (3) CLASS B PATCHES TYPE (II,III,IV), 12 INCH

LEGEND:

1-1/2" HMA SURFACE REMOVAL

NOTES:

1. THE LONGITUDINAL JOINT SEALANT SHALL BE PLACED OVER THE MILLED SURFACE.
2. THE CONTRACTOR SHALL MILL FIRST THEN PATCH.



HOT-MIX ASPHALT MIXTURE REQUIREMENTS		QUALITY MANAGEMENT PROGRAM (QMP)
MIXTURE TYPE	AIR VOIDS @ Ndes	
PAVEMENT RESURFACING		
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "E", IL-9.5, N70, 1-3/4"	4.0% @ 70 GYR	QCP
MEDIAN RESURFACING		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N50, 2"	4.0% @ 50 GYR	QC/QA
PATCHING		
CLASS D PATCHES, TYPE (II,III,IV) 8" (HMA BINDER IL-19)	4.0% @ 70 GYR	QC/QA
QMP DESIGNATION: QUALITY CONTROL / QUALITY ASSURANCE (QC/QA); QUALITY CONTROL FOR PERFORMANCE (QCP); PAY FOR PERFORMANCE (PFP)		

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

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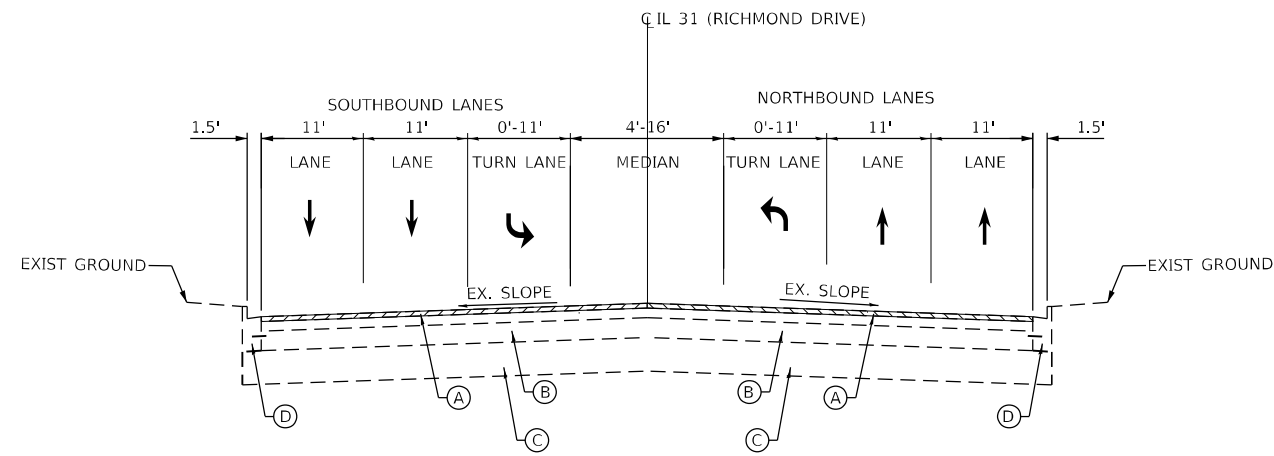
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	DATE - 08/13/2021	

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**TYPICAL SECTIONS
 IL-31 (MCCULLOM LAKE RD TO JOHNSBURG RD)**

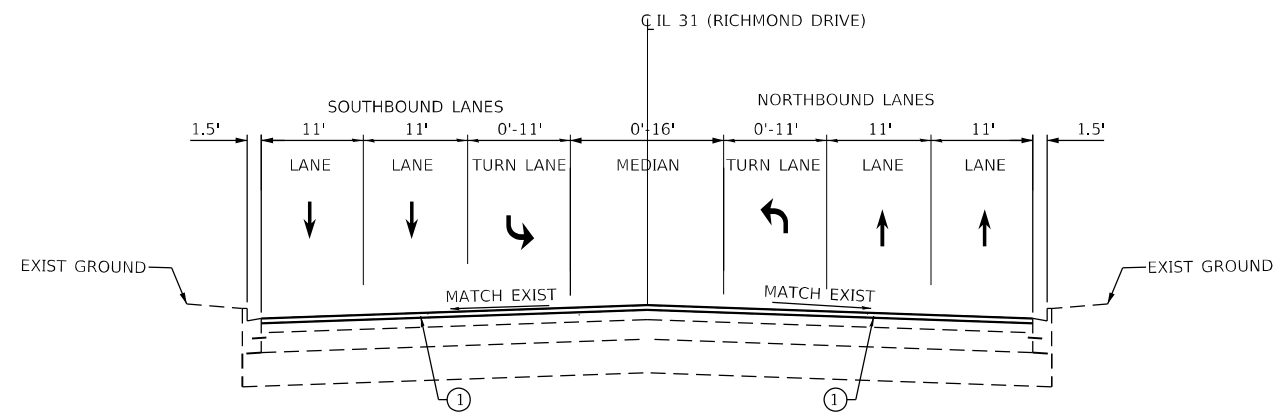
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F.A.P. RTE. 336	SECTION 2021-024-R5	COUNTY MCHENRY	TOTAL SHEETS 28	SHEET NO. 5
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62N56	



EXISTING TYPICAL CROSS SECTION

STA. 14+92 TO STA. 25+47
STA. 39+76 TO STA. 68+61



PROPOSED TYPICAL CROSS SECTION

STA. 14+92 TO STA. 25+47
STA. 39+76 TO STA. 68+61

LEGEND

- (A) EXISTING HOT-MIX ASPHALT PAVEMENT 6 3/4"
- (B) EXISTING P.C.C. BASE COURSE 8"
- (C) EXISTING SUB-BASE GRANULAR MATERIAL, TYP B, 4"±
- (D) EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- (E) EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.12
- (F) EXISTING CONCRETE 12"
- (G) PAVED SHOULDER
- (1) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE MIX "E", IL-9.5, N70, 1-3/4"
- (2) HOT-MIX ASPHALT SURFACE COURSE MIX "D", IL-9.5, N50, 2"
- (3) CLASS B PATCHES TYPE (II,III,IV), 12 INCH

LEGEND:

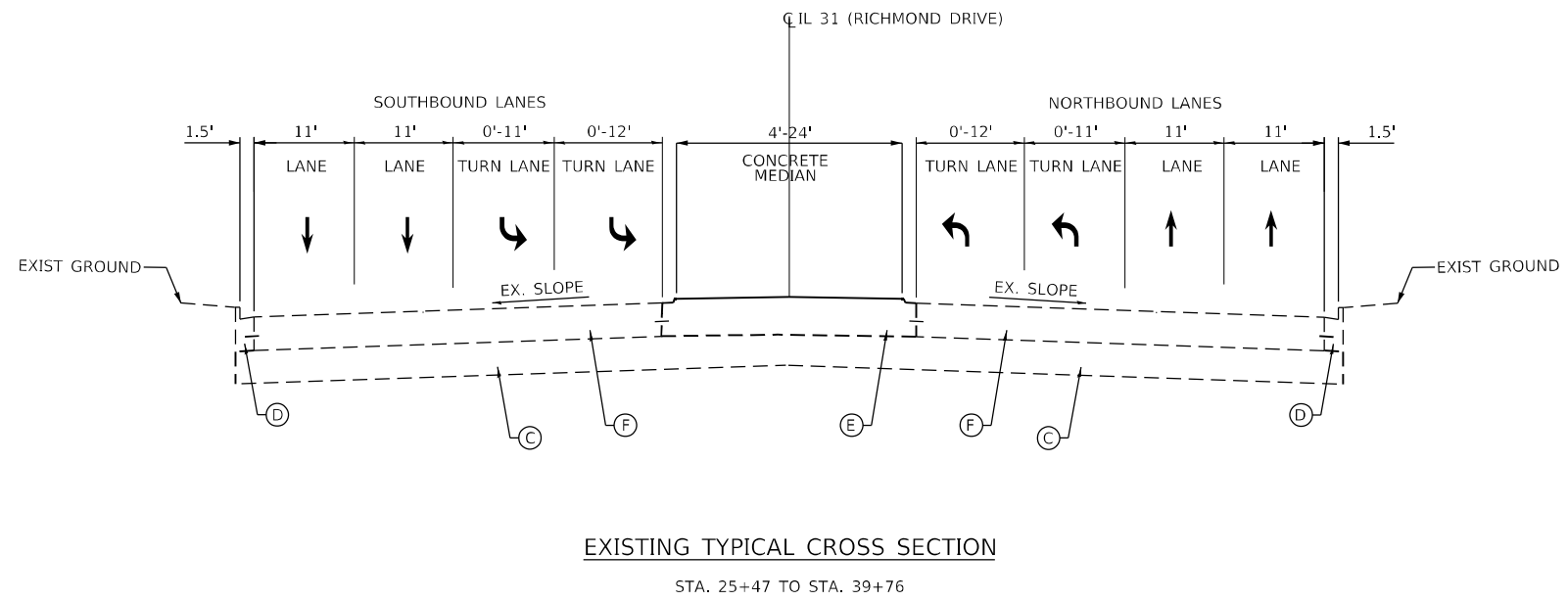
1-1/2" HMA SURFACE REMOVAL

NOTES:

1. THE LONGITUDINAL JOINT SEALANT SHALL BE PLACED OVER THE MILLED SURFACE.
2. THE CONTRACTOR SHALL MILL FIRST THEN PATCH.

MODEL Path: J:\... INFRASTRUCTURE ENGINEERING INCORPORATED

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	DATE - 08/13/2021	



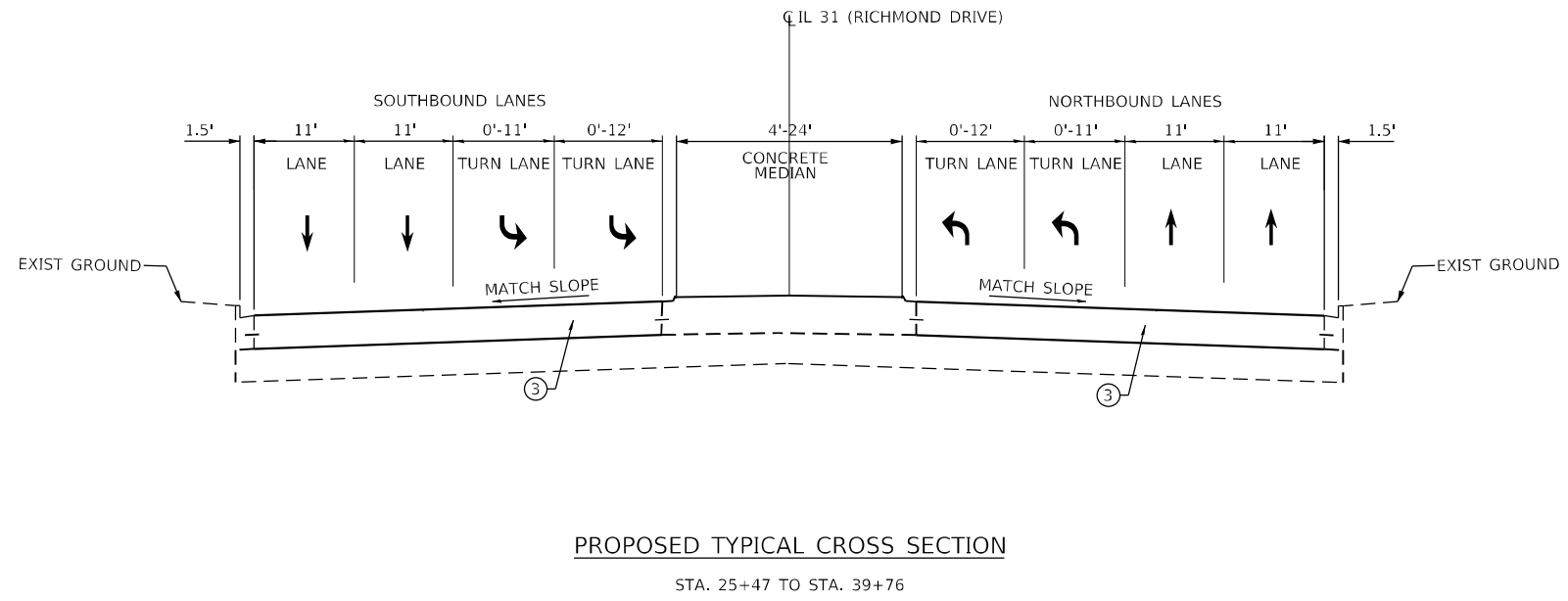
EXISTING TYPICAL CROSS SECTION
STA. 25+47 TO STA. 39+76

LEGEND

- (A) EXISTING HOT-MIX ASPHALT PAVEMENT 6 3/4"
- (B) EXISTING P.C.C. BASE COURSE 8"
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- (3) CLASS B PATCHES TYPE (II,III,IV), 12 INCH

NOTES:

1. THE LONGITUDINAL JOINT SEALANT SHALL BE PLACED OVER THE MILLED SURFACE.
2. THE CONTRACTOR SHALL MILL FIRST THEN PATCH.



PROPOSED TYPICAL CROSS SECTION
STA. 25+47 TO STA. 39+76

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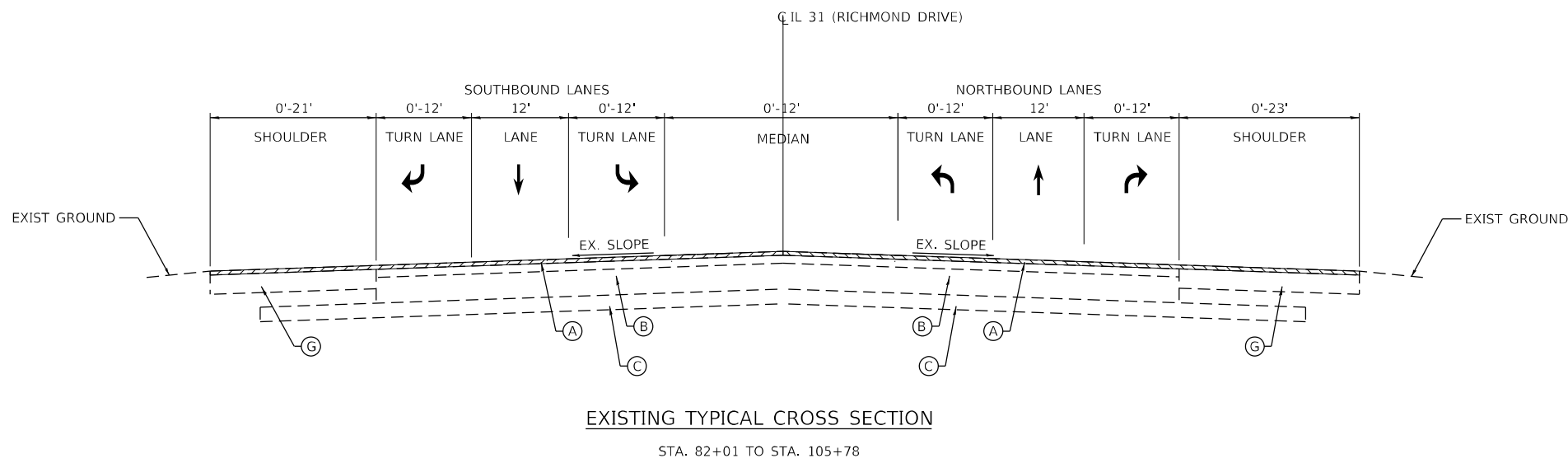
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DESIGNED - IMU	REVISED -
DRAWN - IMU	REVISED -
CHECKED - ACL	REVISED -
DATE - 08/13/2021	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TYPICAL SECTIONS	
IL-31 (MCCULLOM LAKE RD TO JOHNSBURG RD)	
SCALE: NTS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2021-024-R5	MCHENRY	28	7
CONTRACT NO. 62N56				
ILLINOIS		FED. AID PROJECT		



LEGEND

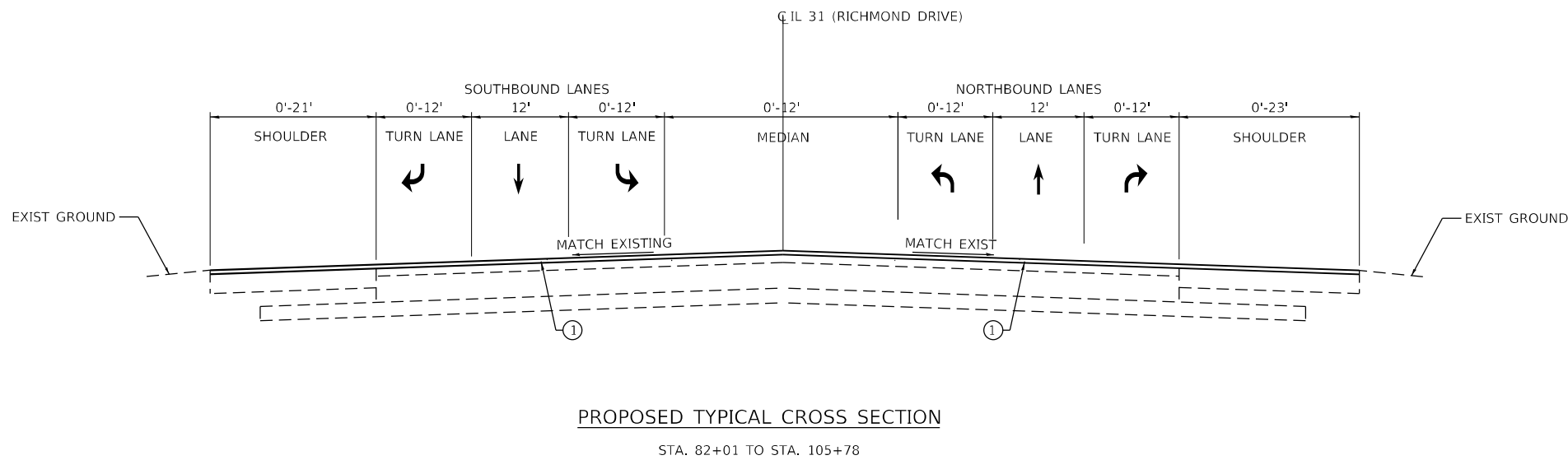
- (A) EXISTING HOT-MIX ASPHALT PAVEMENT 6 3/4"
- (B) EXISTING P.C.C. BASE COURSE 8"
- (C) EXISTING SUB-BASE GRANULAR MATERIAL, TYP B, 4"±
- (D) EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- (E) EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.12
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- (3) CLASS B PATCHES TYPE (II,III,IV), 12 INCH

LEGEND:

- 1-1/2" HMA SURFACE REMOVAL

NOTES:

1. THE LONGITUDINAL JOINT SEALANT SHALL BE PLACED OVER THE MILLED SURFACE.
2. THE CONTRACTOR SHALL MILL FIRST THEN PATCH.



MODEL Path: \\... \15\DOT_Vendor_Phase 2 (ITB) 106 Item 16\Work Order 15\DOT\CLADD_Sheets\162\NS&S\TYPICAL-04.dgn

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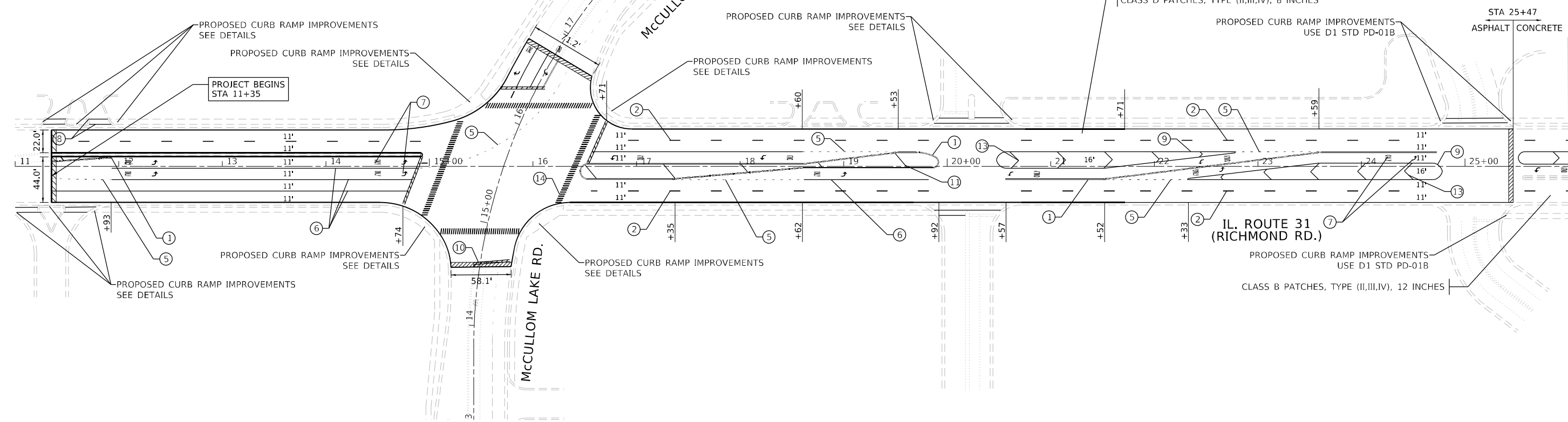
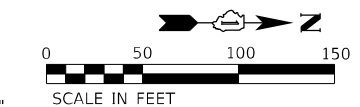
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	DATE - 08/13/2021	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TYPICAL SECTIONS
IL-31 (MCCULLOM LAKE RD TO JOHNSBURG RD)**

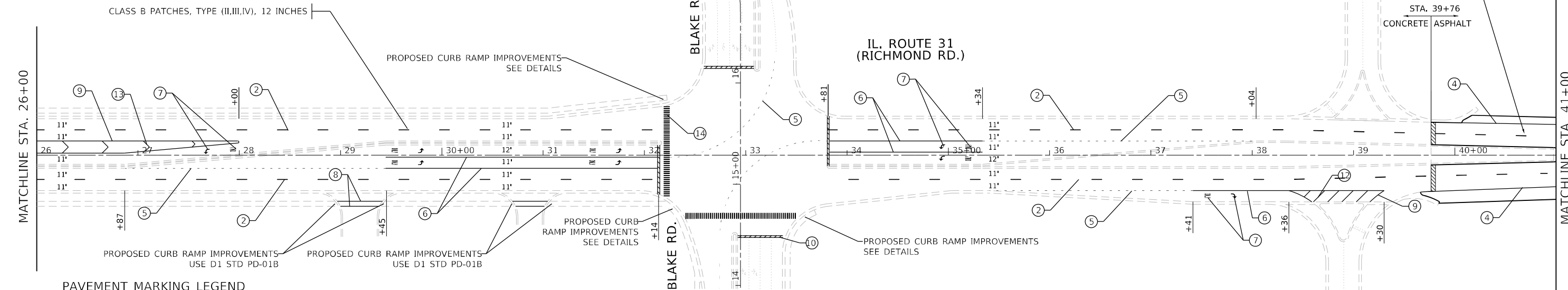
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2021-024-R5	MCHENRY	28	8
CONTRACT NO. 62N56				
ILLINOIS FED. AID PROJECT				



LEGEND

HMA SURFACE REMOVAL BUTT JOINT, 4.5'



PAVEMENT MARKING LEGEND

- ① LINE 2 @ 4" SOLID YELLOW, 11" C-C - CENTERLINE (TYP)
- ② LINE 4", SKIP-DASH, WHITE (10' LINE - 30' SPACE) - LANE LINES
- ③ LINE 4", SOLID, YELLOW - EDGE LINE (TYP)
- ④ LINE 4", SOLID WHITE - EDGE LINE (TYP)
- ⑤ LINE 6", SKIP-DASH, WHITE (2' LINE - 6' SPACE) - DOTTED LINES (TYP)
- ⑥ LINE 6", SOLID WHITE - TURN LANE MARKING (TYP)
- ⑦ LETTERS & SYMBOLS, 8", SOLID, WHITE - TURN LANE MARKINGS (TYP)
- ⑧ LINE 2 @ 6", SOLID, WHITE - CROSSWALK LINES (PEDESTRIAN) (TYP)
- ⑨ LINE 8", SOLID, WHITE - GORE MARKING AND CHANNELIZING LINES (TYP)
- ⑩ LINE 24", SOLID, WHITE - STOP LINES (TYP)
- ⑪ LINE 12", SOLID, YELLOW - PAINTED MEDIANS DIAGONALS (TYP) (SEE DISTRICT DETAIL TC-13 FOR SPACING)
- ⑫ LINE 12", SOLID, WHITE - SHOULDER DIAGONALS @ 45° (TYP) (SEE DISTRICT TC-13 FOR SPACING)
- ⑬ LINE 12", SOLID, WHITE - CHANNELIZATION LINES 45° (TYP) (SEE DISTRICT TC-13 FOR SPACING)
- ⑭ LINE 12", SOLID, WHITE - CONTINENTAL CROSSWALK (TYP)

MODEL Path: \\p1\infrastructure\projects\2020\2020-04-04-00_IDOT_Vulnicus_Phase 2 (TYP)_106 from 161Work Order 1510261CADD_Sheets\162\AS-SHT-PLN\01.dgn
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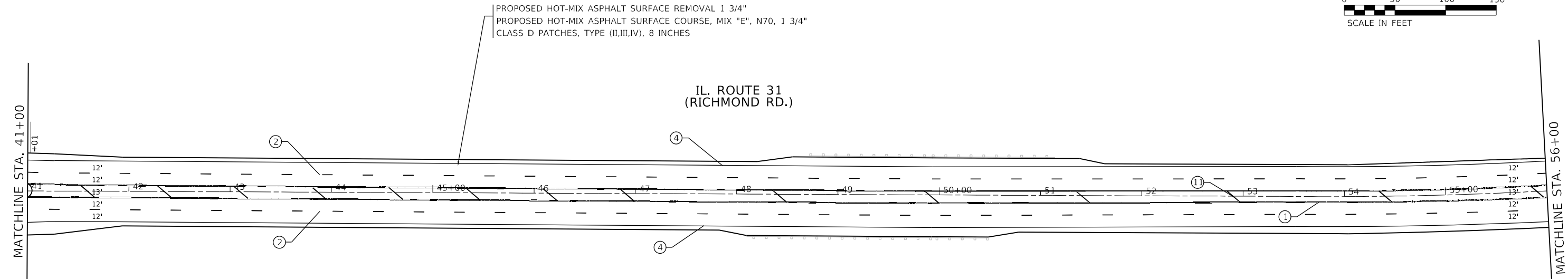
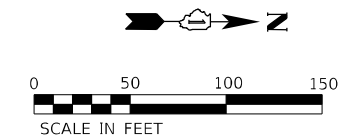
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USER NAME = ALane	DESIGNED - IMU	REVISED -
PLOT SCALE = 100,0000' / in.	DRAWN - IMU	REVISED -
PLOT DATE = 10/22/2021	CHECKED - ACL	REVISED -
	DATE - 08/13/2021	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

ROADWAY AND PAVEMENT MARKING PLANS
IL-31 (MCCULLOM LAKE RD TO JOHNSBURG RD)
 SCALE: 1" = 50'

F.A.P. RTE. 336	SECTION 2021-024-R5	COUNTY MCHENRY	TOTAL SHEETS 28	SHEET NO. 9
CONTRACT NO. 62N56			ILLINOIS FED. AID PROJECT	

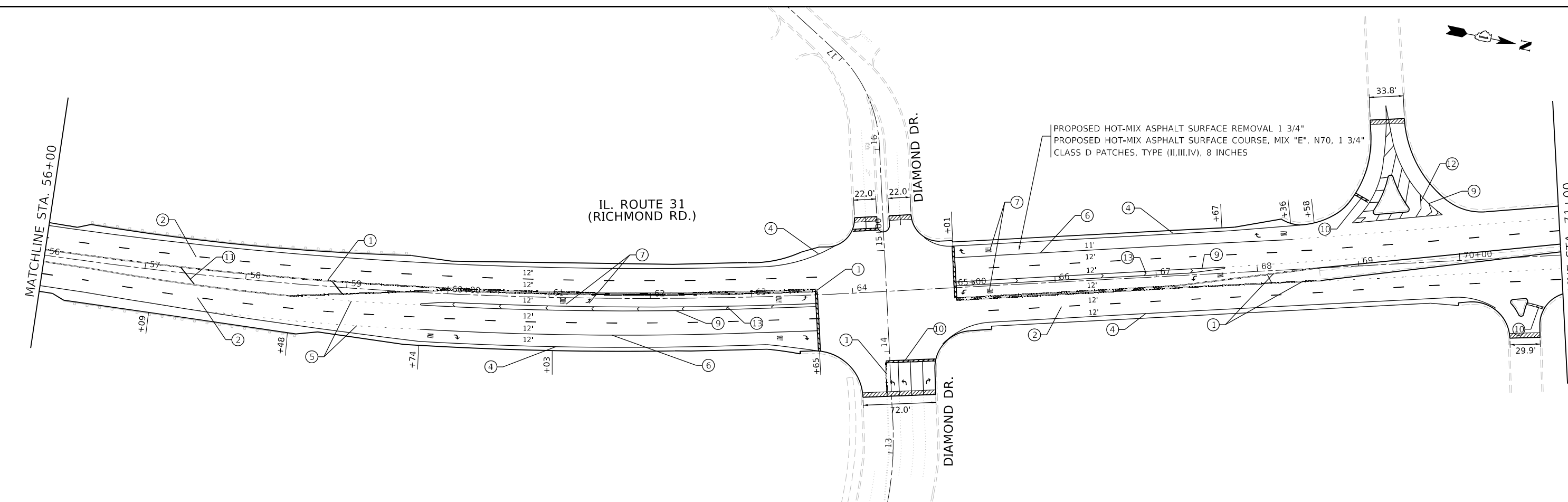


PAVEMENT MARKING LEGEND

- ① LINE 2 @ 4" SOLID YELLOW, 11" C-C - CENTERLINE (TYP)
- ② LINE 4", SKIP-DASH, WHITE (10' LINE - 30' SPACE) - LANE LINES
- ③ LINE 4", SOLID, YELLOW - EDGE LINE (TYP)
- ④ LINE 4", SOLID WHITE - EDGE LINE (TYP)
- ⑤ LINE 6", SKIP-DASH, WHITE (2' LINE - 6' SPACE) - DOTTED LINES (TYP)
- ⑥ LINE 6", SOLID WHITE - TURN LANE MARKING (TYP)
- ⑦ LETTERS & SYMBOLS, 8", SOLID, WHITE - TURN LANE MARKINGS (TYP)
- ⑧ LINE 2 @ 6", SOLID, WHITE - CROSSWALK LINES (PEDESTRIAN) (TYP)
- ⑨ LINE 8", SOLID, WHITE - GORE MARKING AND CHANNELIZING LINES (TYP)
- ⑩ LINE 24", SOLID, WHITE - STOP LINES (TYP)
- ⑪ LINE 12", SOLID, YELLOW - PAINTED MEDIANS DIAGONALS (TYP) (SEE DISTRICT DETAIL TC-13 FOR SPACING)
- ⑫ LINE 12", SOLID, WHITE - SHOULDER DIAGONALS @ 45° (TYP) (SEE DISTRICT TC-13 FOR SPACING)
- ⑬ LINE 12", SOLID, WHITE - CHANNELIZATION LINES 45° (TYP) (SEE DISTRICT TC-13 FOR SPACING)
- ⑭ LINE 12", SOLID, WHITE - CONTINENTAL CROSSWALK (TYP)

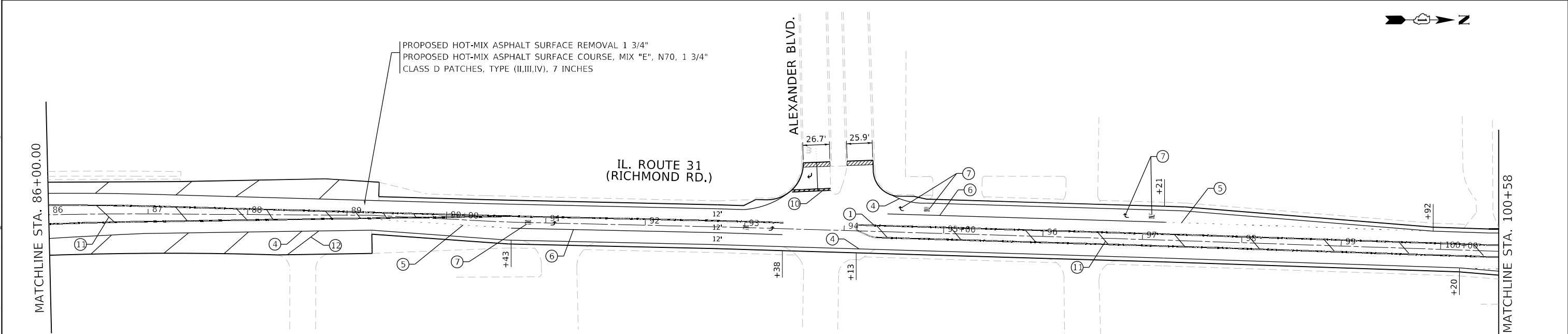
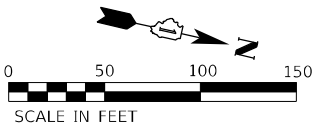
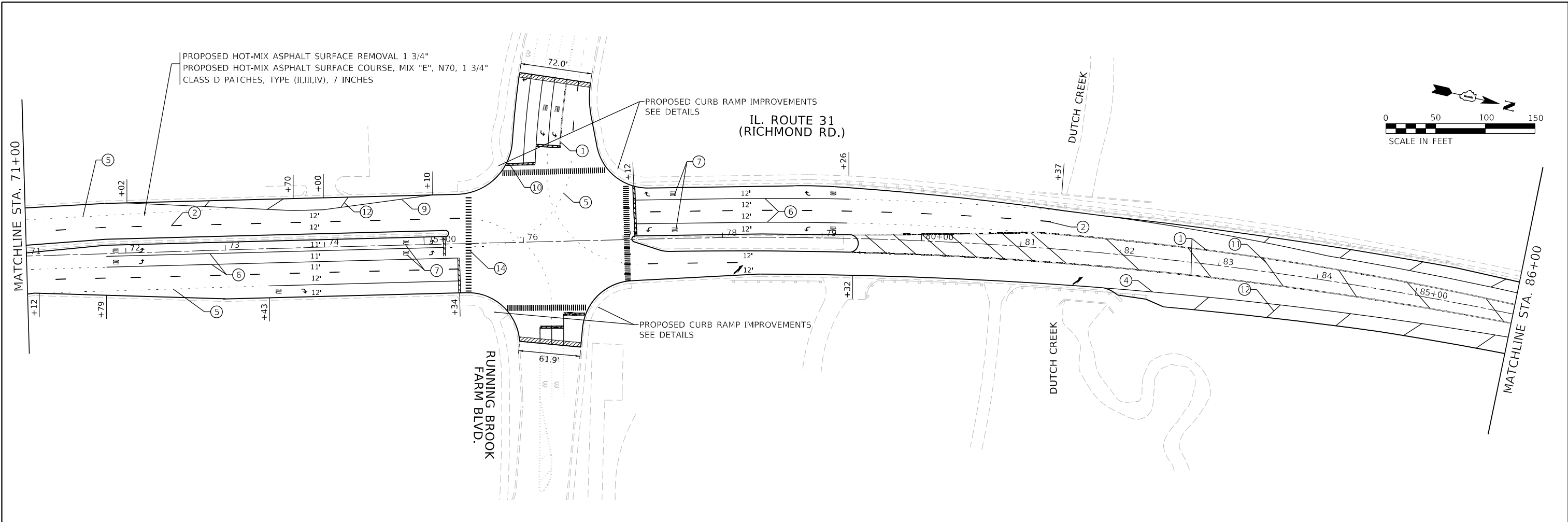
LEGEND

- HMA SURFACE REMOVAL BUTT JOINT, 4.5'



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	USER NAME = ALane	DESIGNED - IMU	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ROADWAY AND PAVEMENT MARKING PLANS IL-31 (MCCULLOM LAKE RD TO JOHNSBURG RD)	F.A.P. RTE. 336	SECTION 2021-024-R5	COUNTY MCHENRY	TOTAL SHEETS 28	SHEET NO. 10
	PLOT SCALE = 100,0000' / in.	CHECKED - ACL	REVISED -			SCALE: 1" = 50'	STA. TO STA.	CONTRACT NO. 62N56 ILLINOIS FED. AID PROJECT		
1 South Wacker Suite 2650 Chicago, IL 60606 P 312.425.9598 F 312.425.9594 www.infrastructure-eng.com	PLOT DATE = 10/22/2021	DATE - 08/13/2021								



PAVEMENT MARKING LEGEND

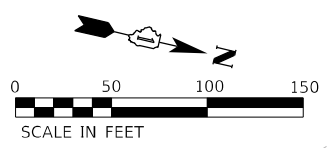
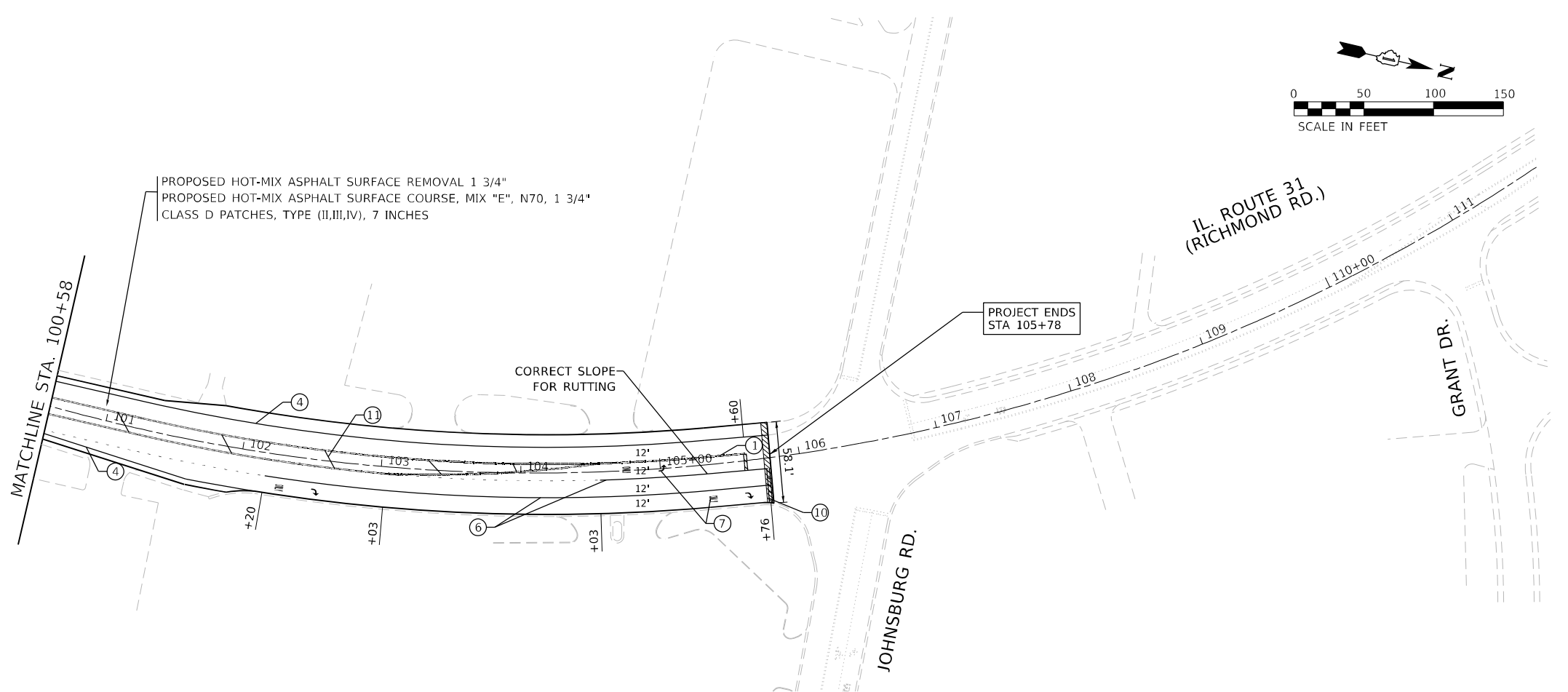
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- ② LINE 4", SKIP-DASH, WHITE (10' LINE - 30' SPACE) - LANE LINES
- ③ LINE 4", SOLID, YELLOW - EDGE LINE (TYP)
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- ⑥ LINE 6", SOLID WHITE - TURN LANE MARKING (TYP)
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- ⑬ LINE 12", SOLID, WHITE - CHANNELIZATION LINES 45° (TYP) (SEE DISTRICT TC-13 FOR SPACING)
- ⑭ LINE 12", SOLID, WHITE - CONTINENTAL CROSSWALK (TYP)

LEGEND



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<p>INFRASTRUCTURE ENGINEERING 1 South Wacker Suite 2650 Chicago, IL 60606 P: 312.425.9598 F: 312.425.9594 www.infrastructure-eng.com</p>	USER NAME = ALane PLOT SCALE = 100,0000' / in. PLOT DATE = 10/22/2021	DESIGNED - IMU DRAWN - IMU CHECKED - ACL DATE - 08/13/2021	REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ROADWAY AND PAVEMENT MARKING PLANS IL-31 (MCCULLOM LAKE RD TO JOHNSBURG RD)	F.A.P. RTE. 336 SECTION 2021-024-R5	COUNTY MCHENRY	TOTAL SHEETS 28 SHEET NO. 11	CONTRACT NO. 62N56 ILLINOIS FED. AID PROJECT
	SCALE: 1" = 50' STA. TO STA.								



PAVEMENT MARKING LEGEND

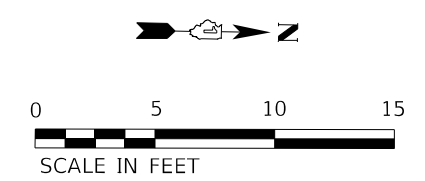
- ① LINE 2 @ 4" SOLID YELLOW, 11" C-C - CENTERLINE (TYP)
- ② LINE 4", SKIP-DASH, WHITE (10' LINE - 30' SPACE) - LANE LINES
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- ⑭ LINE 12", SOLID, WHITE - CONTINENTAL CROSSWALK (TYP)

LEGEND

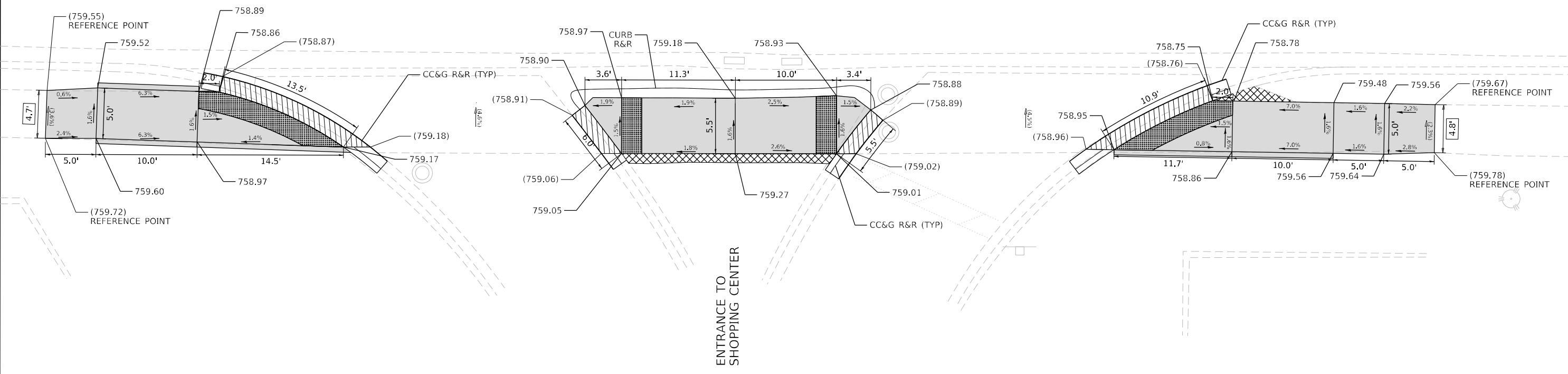
- HMA SURFACE REMOVAL BUTT JOINT, 4.5'

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	USER NAME = Alane	DESIGNED - IMU	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ROADWAY AND PAVEMENT MARKING PLANS IL-31 (MCCULLOM LAKE RD TO JOHNSBURG RD)	F.A.P. RTE. 336	SECTION 2021-024-R5	COUNTY MCHENRY	TOTAL SHEETS 28	SHEET NO. 12
	PLOT SCALE = 100,0000' / in.	CHECKED - ACL	REVISED -			SCALE: 1" = 50'	STA. TO STA.	CONTRACT NO. 62N56		
	PLOT DATE = 10/22/2021	DATE = 08/13/2021				ILLINOIS FED. AID PROJECT				



IL. ROUTE 31 (RICHMOND RD.)



REFERENCE BENCHMARK: 5710-6234, ELEV. 761.64
 BENCHMARK: TAG BOLT ON FIRE HYDRANT
 LOCATION: 112' SOUTH OF SW CORNER

LEGEND

- xx.xx' EXISTING LENGTH
- () EXISTING ELEVATION / SLOPE
- PROPOSED SIDEWALK
- DETECTABLE WARNINGS
- SIDEWALK REMOVAL REPLACE WITH TOPSOIL AND SOD
- DEPRESSED CURB AND GUTTER
- PROPOSED SIDE CURB

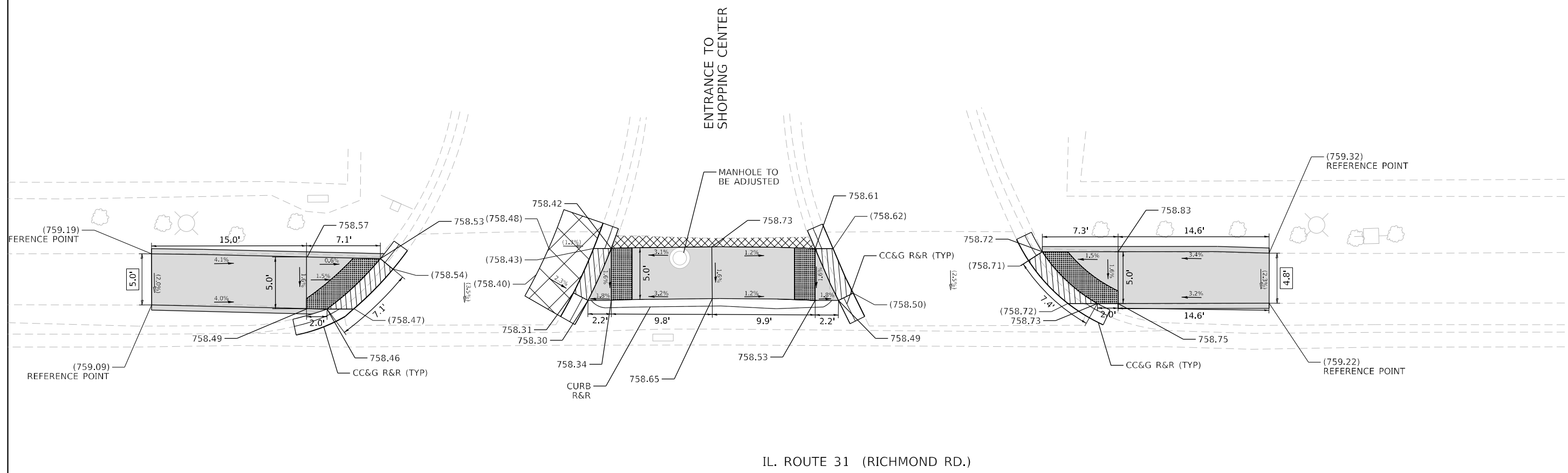
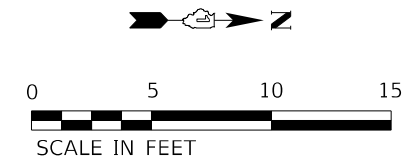
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ADA RAMP DETAILS
 IL-31 AT COMMERCIAL ENTRANCE**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2021-024-RS	MCHENRY	28	12A
CONTRACT NO. 62N56				

 INFRASTRUCTURE ENGINEERING 1 South Wacker Suite 2650 Chicago, IL 60606 P 312.402.9999 F 312.415.8994 www.infrastructureeng.com	USER NAME = Alarie	DESIGNED - IMU	REVISED -
	PLOT SCALE = 10.0184' / in.	DRAWN - IMU	REVISED -
	PLOT DATE = 11/12/2021	CHECKED - ACL	REVISED -
		DATE - 10/29/2021	REVISED -

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IL. ROUTE 31 (RICHMOND RD.)

REFERENCE BENCHMARK: 5710-6234, ELEV. 761.64
 BENCHMARK: TAG BOLT ON FIRE HYDRANT
 LOCATION: 112' SOUTH OF SW CORNER

LEGEND

- xx.xx' EXISTING LENGTH
- () EXISTING ELEVATION / SLOPE
- [Solid Grey Box] PROPOSED SIDEWALK
- [Cross-hatched Box] DETECTABLE WARNINGS
- [Diagonal Lines Box] SIDEWALK REMOVAL REPLACE WITH TOPSOIL AND SOD
- [Hatched Box] DEPRESSED CURB AND GUTTER
- [Dashed Line Box] PROPOSED SIDE CURB

MODEL: P:\d\11\111111.dwg
 FILE NAME: P:\111111\111111.dwg
 IDOT Various Phase 2 (11/11/2021)

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USER NAME = Alane	DESIGNED - IMU	REVISED -
DRAWN - IMU	REVISIONS -	
PLOT SCALE = 10.0000 * / in.	CHECKED - ACL	REVISED -
PLOT DATE = 11/12/2021	DATE - 10/29/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

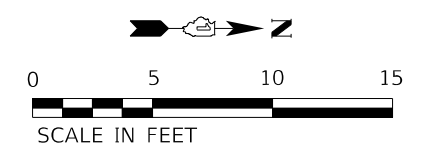
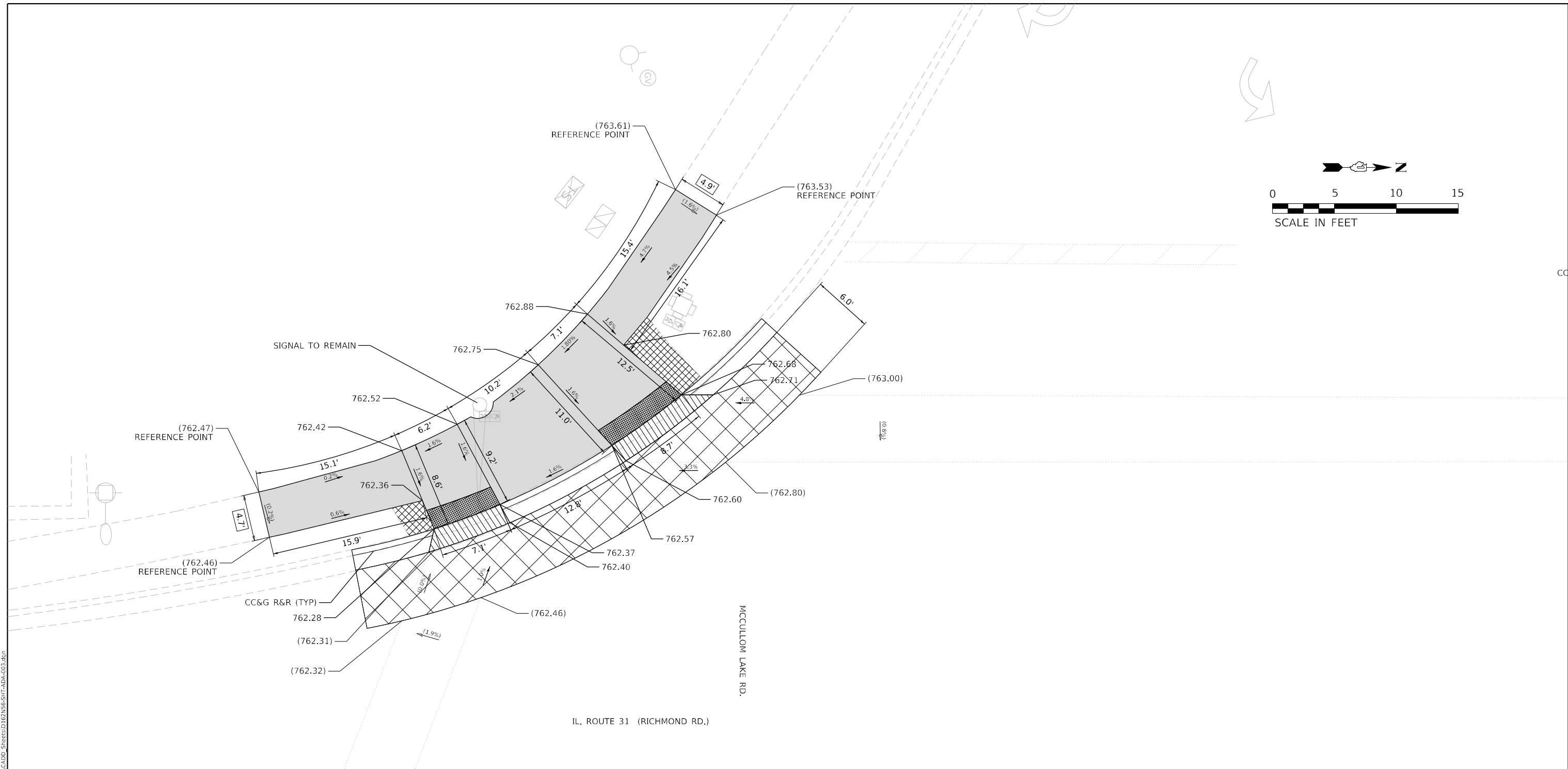
**ADA RAMP DETAILS
 IL-31 AT COMMERCIAL ENTRANCE**

SCALE: 1" = 5'

STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2021-024-R5	MCHENRY	28	12B
CONTRACT NO. 62N56				
ILLINOIS FED. AID PROJECT				

MODEL Path: \\...
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REFERENCE BENCHMARK: 5000-5689, ELEV. 762.43
 BENCHMARK: FACE OF CANTILEVERED TRAFFIC SIGNAL FOUNDATION
 LOCATION: SE CORNER OF RICHMOND AND MCCULLOM LAKE ROAD

LEGEND

- xx.xx' EXISTING LENGTH
- () EXISTING ELEVATION / SLOPE
- PROPOSED SIDEWALK
- DETECTABLE WARNINGS
- SIDEWALK REMOVAL REPLACE WITH TOPSOIL AND SOD
- DEPRESSED CURB AND GUTTER
- PROPOSED SIDE CURB

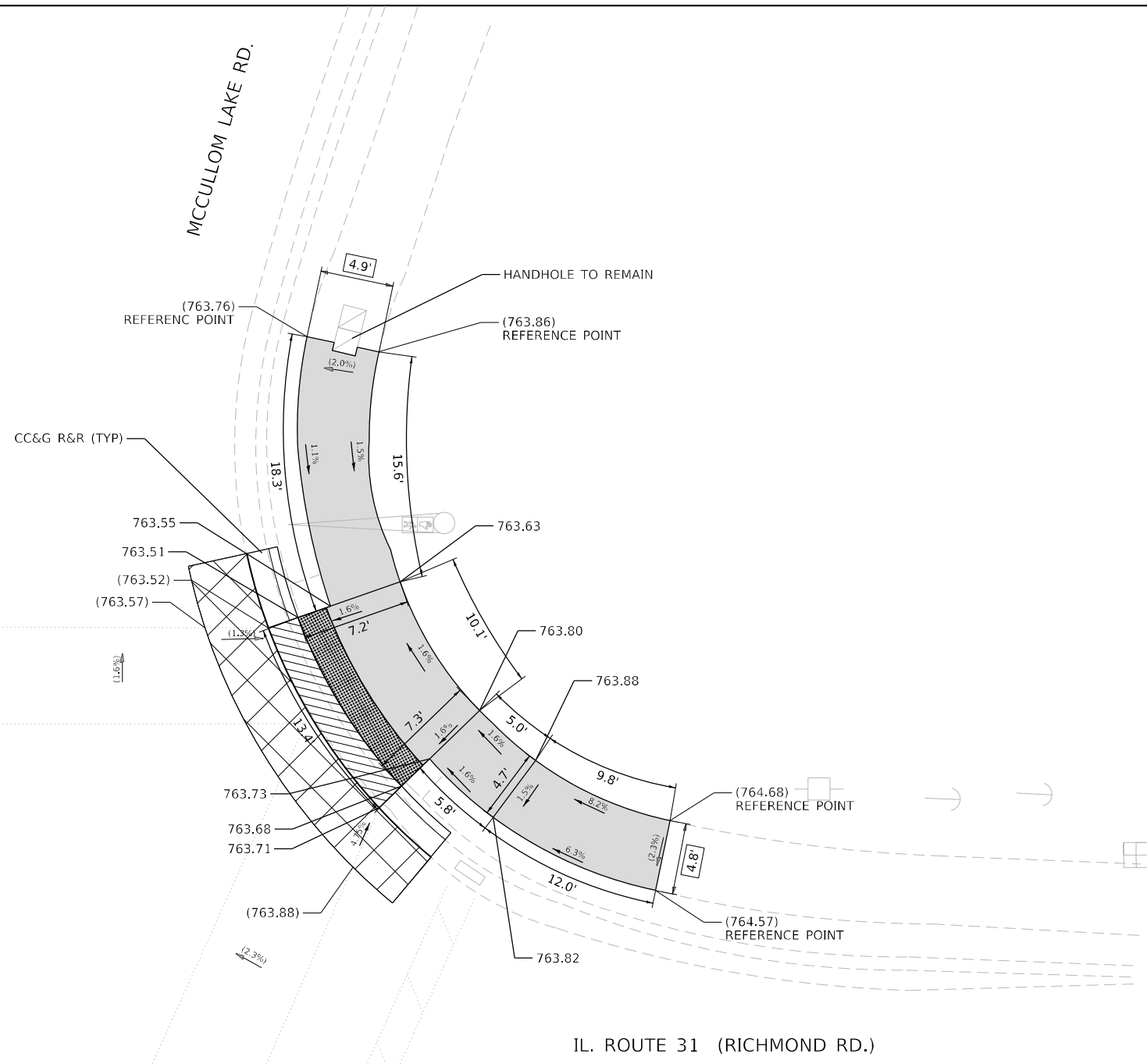
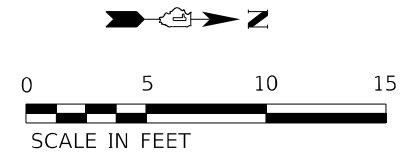
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ADA RAMP DETAILS
IL-31 AT MCCULLOM LAKE RD.

USER NAME = Alane	DESIGNED - IMU	REVISED -
PLOT SCALE = 10.0000' / in.	DRAWN - IMU	REVISED -
PLOT DATE = 11/12/2021	CHECKED - ACL	REVISED -
	DATE - 10/29/2021	REVISED -

SCALE: 1" = 5' STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2021-024-R5	MCHENRY	28	12C
CONTRACT NO. 62N56				
ILLINOIS FED. AID PROJECT				



LEGEND

xx.xx'	EXISTING LENGTH
()	EXISTING ELEVATION / SLOPE
[Solid Gray Box]	PROPOSED SIDEWALK
[Grid Pattern Box]	DETECTABLE WARNINGS
[Cross-hatch Pattern Box]	SIDEWALK REMOVAL REPLACE WITH TOPSOIL AND SOD
[Diagonal Line Pattern Box]	DEPRESSED CURB AND GUTTER
[Dashed Line]	PROPOSED SIDE CURB

MODEL: P:\p\inf\...
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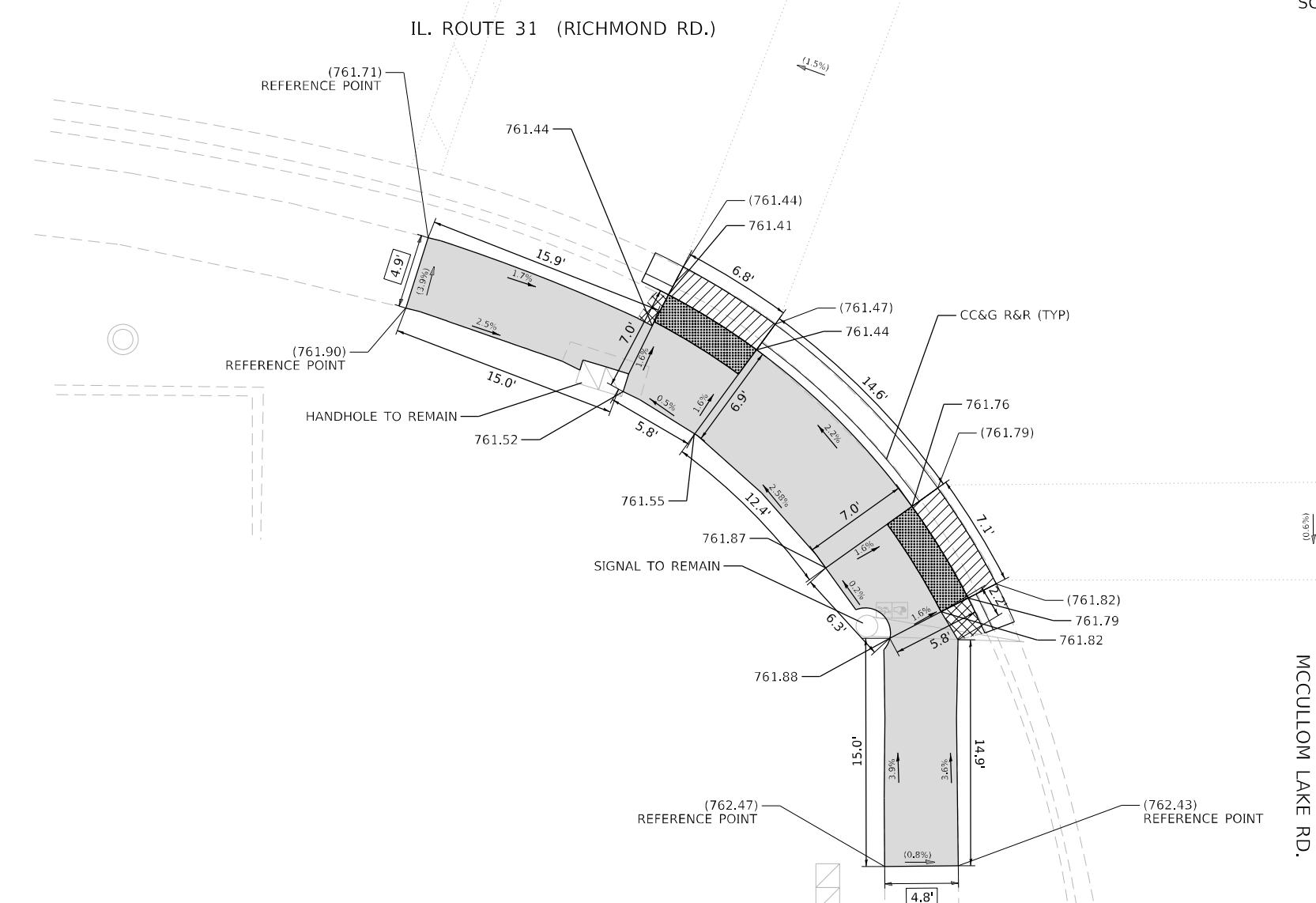
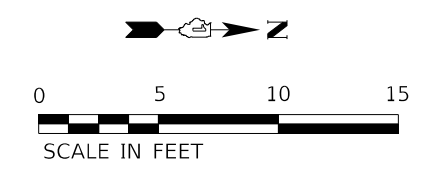
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PLOT DATE = 11/12/2021	CHECKED - ACL	REVISED -
	DATE - 10/29/2021	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ADA RAMP DETAILS
IL-31 AT MCCULLOM LAKE RD.**

SCALE: 1" = 5' STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2021-024-R5	MCHENRY	28	12D
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62N56	

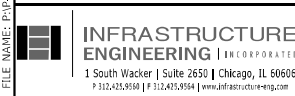


REFERENCE BENCHMARK: 5000-5689, ELEV. 762.43
 BENCHMARK: FACE OF CANTILEVERED TRAFFIC SIGNAL FOUNDATION
 LOCATION: SE CORNER OF RICHMOND AND MCCULLOM LAKE ROAD

LEGEND

xx.xx'	EXISTING LENGTH
()	EXISTING ELEVATION / SLOPE
[Solid Grey]	PROPOSED SIDEWALK
[Cross-hatched]	DETECTABLE WARNINGS
[Diagonal Lines]	SIDEWALK REMOVAL REPLACE WITH TOPSOIL AND SOD
[Hatched]	DEPRESSED CURB AND GUTTER
[Dashed Line]	PROPOSED SIDE CURB

MODEL: C:\pfs\h\...
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USER NAME = ALane	DESIGNED - IMU	REVISED -
PLOT SCALE = 10.0000 * / in.	DRAWN - IMU	REVISED -
PLOT DATE = 11/12/2021	CHECKED - ACL	REVISED -
	DATE - 10/29/2021	REVISED -

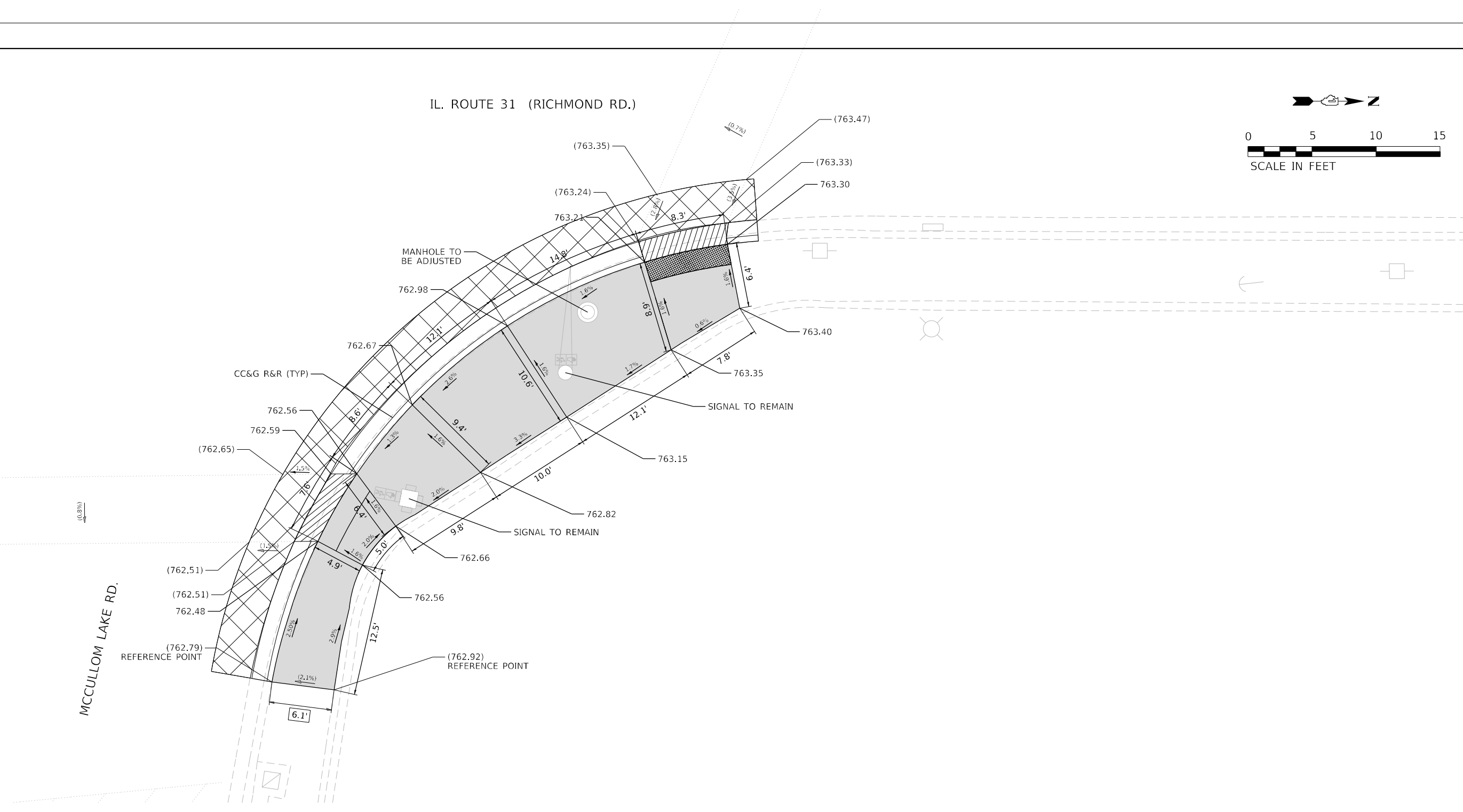
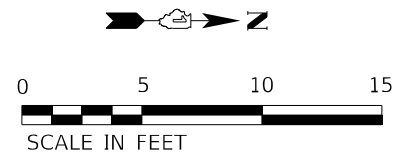
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ADA RAMP DETAILS
 IL-31 AT MCCULLOM LAKE RD.**

SCALE: 1" = 5' STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 62N56			ILLINOIS FED. AID PROJECT	

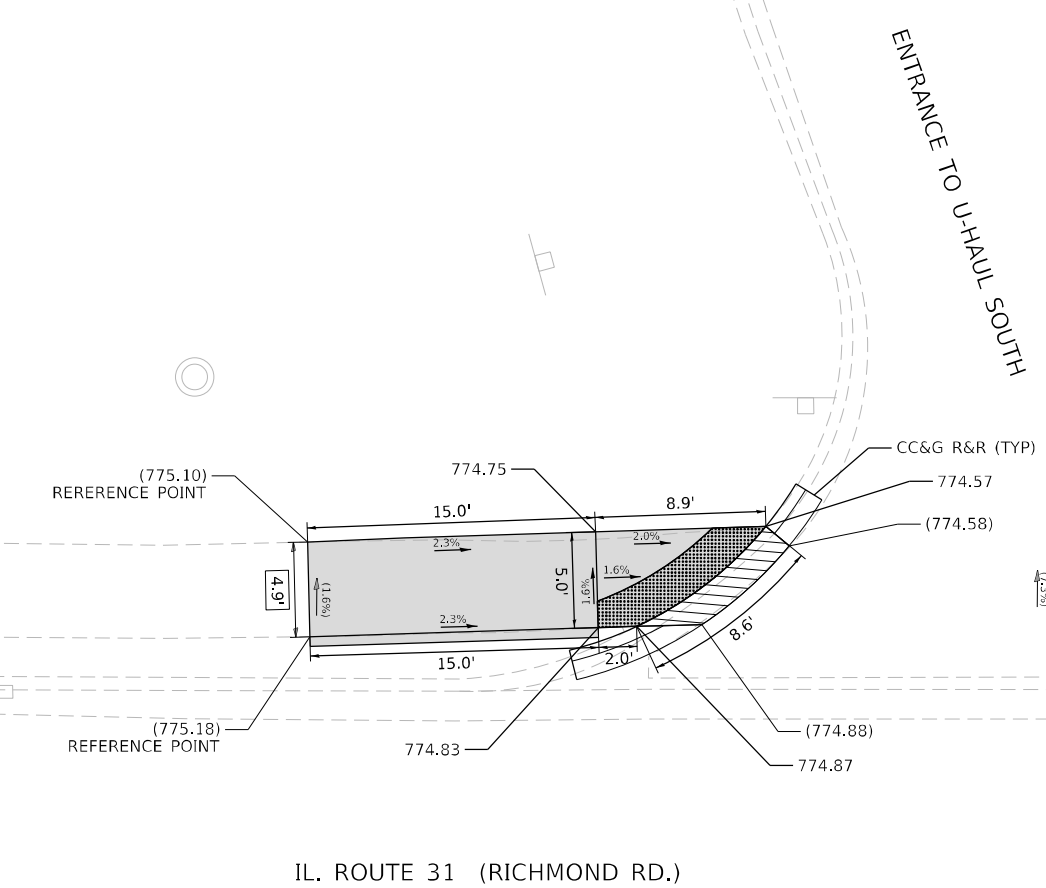
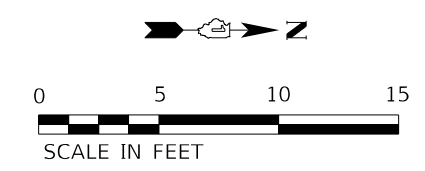
IL. ROUTE 31 (RICHMOND RD.)



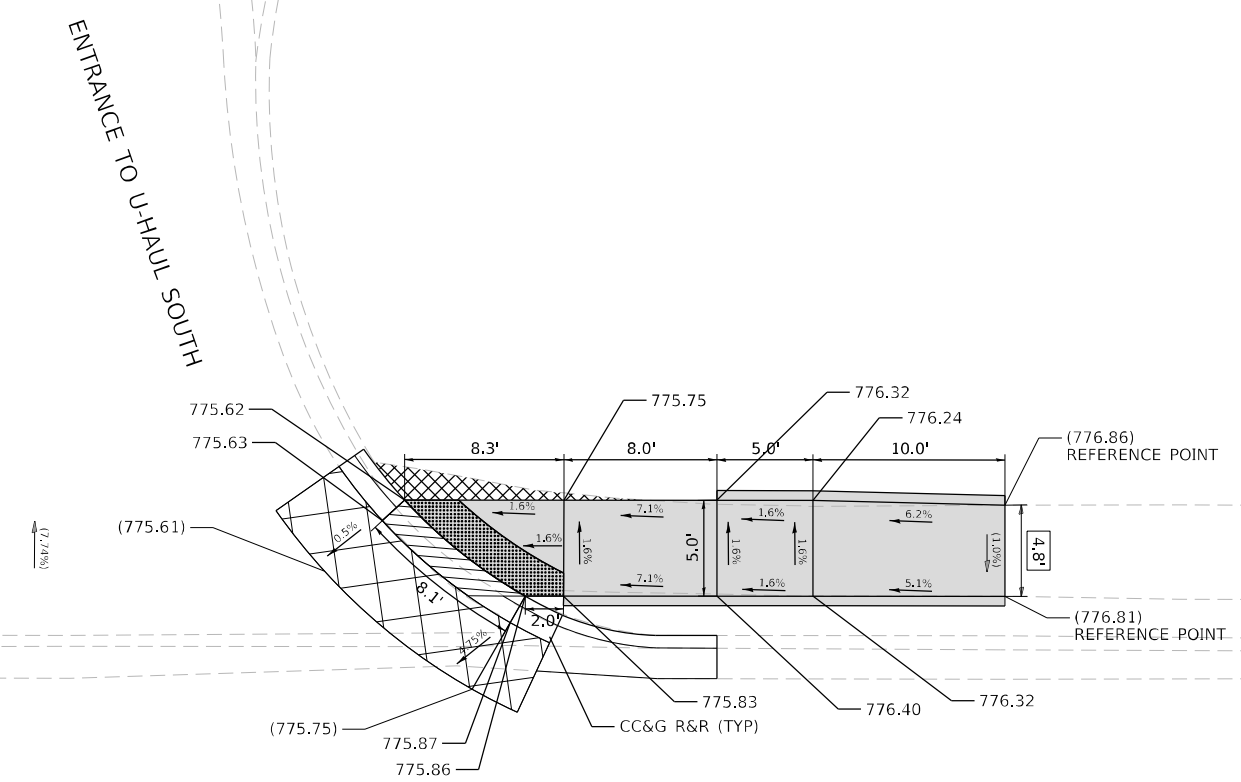
REFERENCE BENCHMARK: 5000-5689, ELEV. 762.43
 BENCHMARK: FACE OF CANTILEVERED TRAFFIC SIGNAL FOUNDATION
 LOCATION: SE CORNER OF RICHMOND AND MCCULLOM LAKE ROAD

LEGEND

- xx.xx' EXISTING LENGTH
- () EXISTING ELEVATION / SLOPE
- PROPOSED SIDEWALK
- DETECTABLE WARNINGS
- SIDEWALK REMOVAL REPLACE WITH TOPSOIL AND SOD
- DEPRESSED CURB AND GUTTER



IL. ROUTE 31 (RICHMOND RD.)



IL. ROUTE 31 (RICHMOND RD.)

REFERENCE BENCHMARK: 1852, ELEV. 774.805
 BENCHMARK: FACE OF CANTILEVERED TRAFFIC SIGNAL FOUNDATION
 LOCATION: SE CORNER OF RICHMOND AND MCCULLOM LAKE ROAD

LEGEND	
xx.xx'	EXISTING LENGTH
()	EXISTING ELEVATION / SLOPE
[Solid Grey]	PROPOSED SIDEWALK
[Cross-hatched]	DETECTABLE WARNINGS
[Diagonal Lines]	SIDEWALK REMOVAL REPLACE WITH TOPSOIL AND SOD
[Hatched]	DEPRESSED CURB AND GUTTER
[Dashed Line]	PROPOSED SIDE CURB

MODEL: P:\6461\...
 FILE NAME: P:\6461\...
 IDOT Various Phase 2 (PFB_106 Item 16) Work Order 151DCNCLDD-Sheets\162N56-SHT-ADA-C07.dgn

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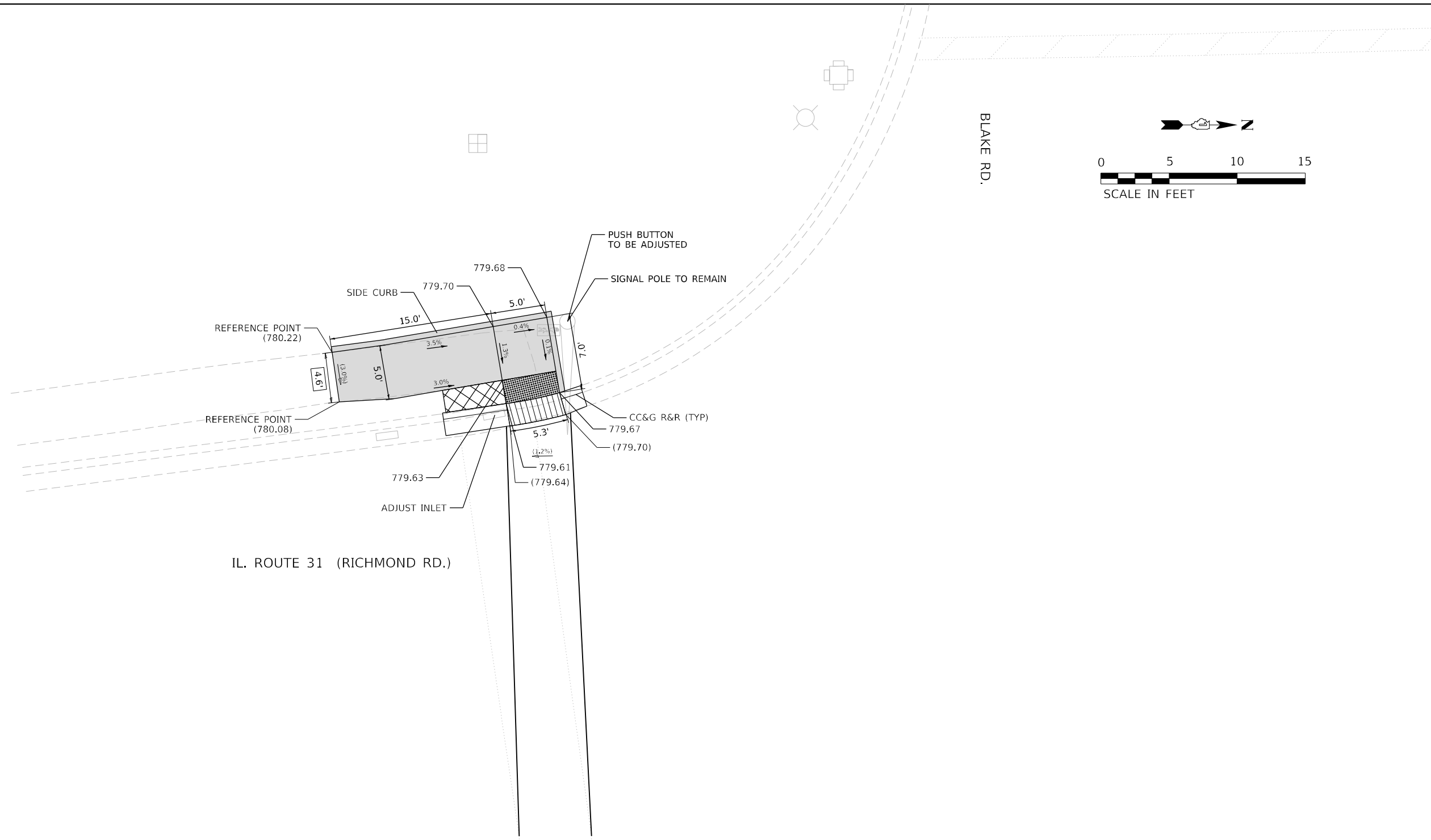
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PLOT DATE = 11/12/2021	CHECKED - ACL	REVISED -
	DATE - 10/29/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ADA RAMP DETAILS
 IL-31 AT U-HAUL ENTRANCE**

SCALE: 1" = 5' STA. TO STA.

F.A.P. RTE. 336	SECTION 2021-024-R5	COUNTY MCHENRY	TOTAL SHEETS 28	SHEET NO. 12G
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62N56	



REFERENCE BENCHMARK: 1000 , ELEV. 782.292
 BENCHMARK: CUT SQUARE ON TRAFFIC CONTROL BOX
 LOCATION: NORTH EAST CONNER OF RICHMOND RD. AND BLAKE BLVD.

LEGEND

- xx.xx' EXISTING LENGTH
- () EXISTING ELEVATION / SLOPE
- PROPOSED SIDEWALK
- DETECTABLE WARNINGS
- SIDEWALK REMOVAL REPLACE WITH TOPSOIL AND SOD
- DEPRESSED CURB AND GUTTER
- PROPOSED SIDE CURB

MODEL: P:\d\h\h
 FILE NAME: P:\2020\2020-09-04-00 IDOT Various Phase 2 (PFB_106 Item 16)Work Order 151DCN\CADD_Sheets\162\NS5-SHT_ADA-C08.dgn

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USER NAME = ALane	DESIGNED - IMU	REVISED -
PLOT SCALE = 10.0000 * / in.	DRAWN - IMU	REVISED -
PLOT DATE = 11/12/2021	CHECKED - ACL	REVISED -
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

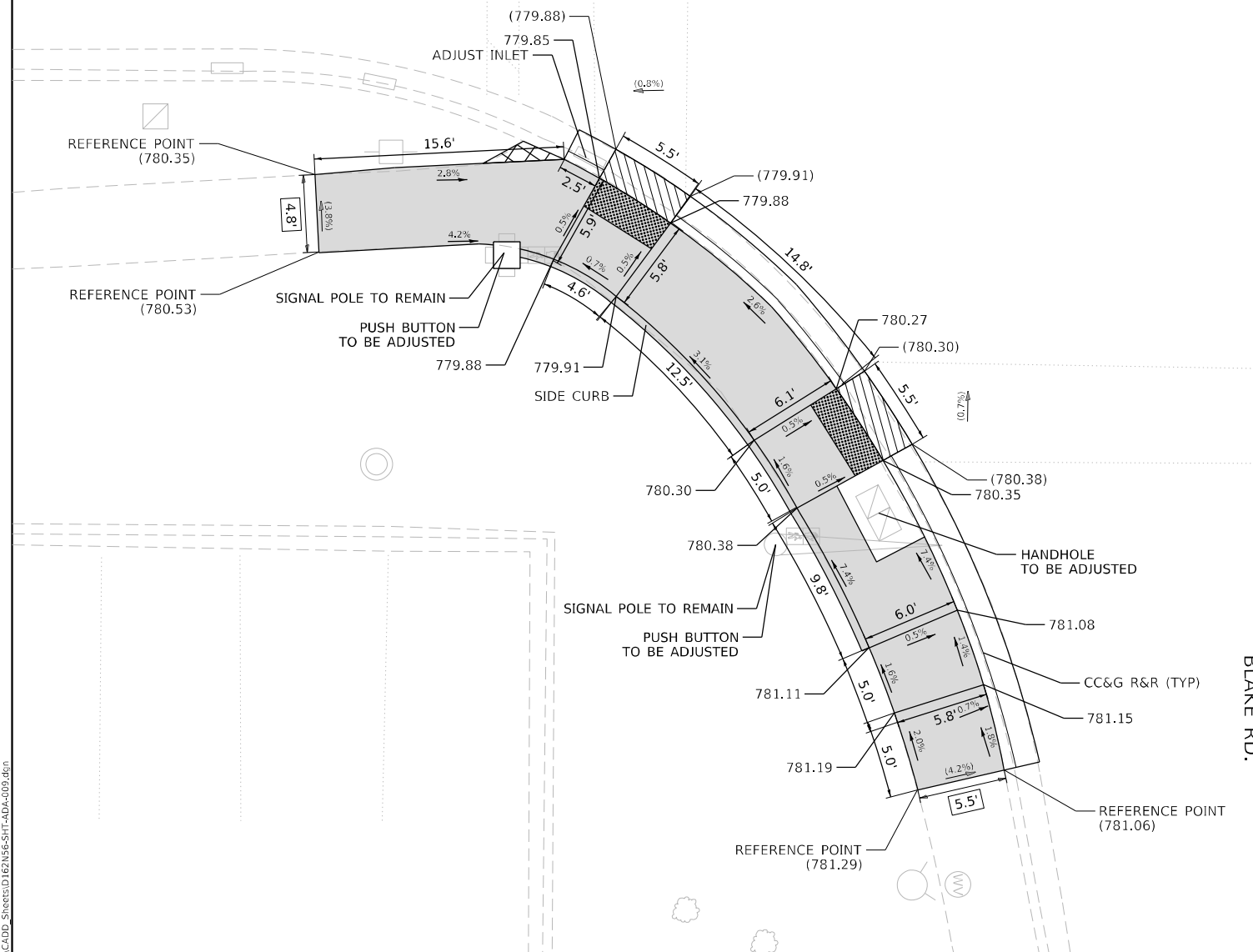
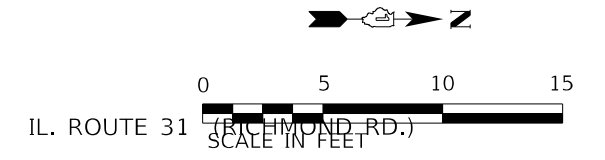
**ADA RAMP DETAILS
 IL-31 AT BLAKE RD.**

SCALE: 1" = 5'

STA. TO STA.

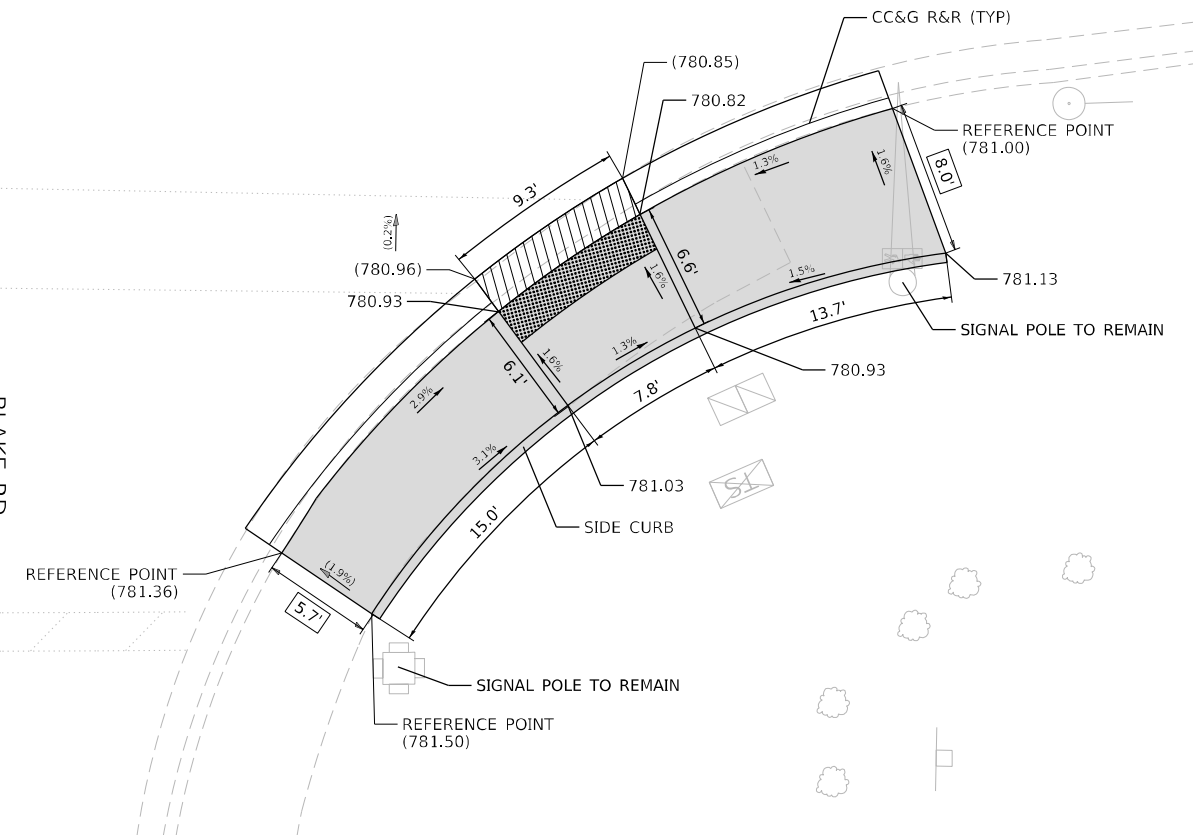
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2021-024-R5	MCHENRY	28	12H
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62N56	

IL. ROUTE 31 (RICHMOND RD.)



BLAKE RD.

BLAKE RD.



REFERENCE BENCHMARK: 1000 , ELEV. 782.292
 BENCHMARK: CUT SQUARE ON TRAFFIC CONTROL BOX
 LOCATION: NORTH EAST CONNER OF RICHMOND RD. AND BLAKE BLVD.

LEGEND

- xx.xx' EXISTING LENGTH
- () EXISTING ELEVATION / SLOPE
- PROPOSED SIDEWALK
- DETECTABLE WARNINGS
- SIDEWALK REMOVAL REPLACE WITH TOPSOIL AND SOD
- DEPRESSED CURB AND GUTTER
- PROPOSED SIDE CURB

MODEL: P:\d4\11... FILE NAME: P:\2020\4094-00 IDOT Various Phase 2 (17)B_106 Item: 16\Work Order: 15\DC\CLC\DD_Sheets\162\NS5-SHT_ADA-C09.dgn

INFRASTRUCTURE ENGINEERING INCORPORATED
 1 South Wacker | Suite 2650 | Chicago, IL 60606
 P: 312.475.9598 | F: 312.475.9594 | www.infrastructure-eng.com

USER NAME =	Alane
DESIGNED -	IMU
DRAWN -	IMU
CHECKED -	ACL
DATE -	10/31/2021
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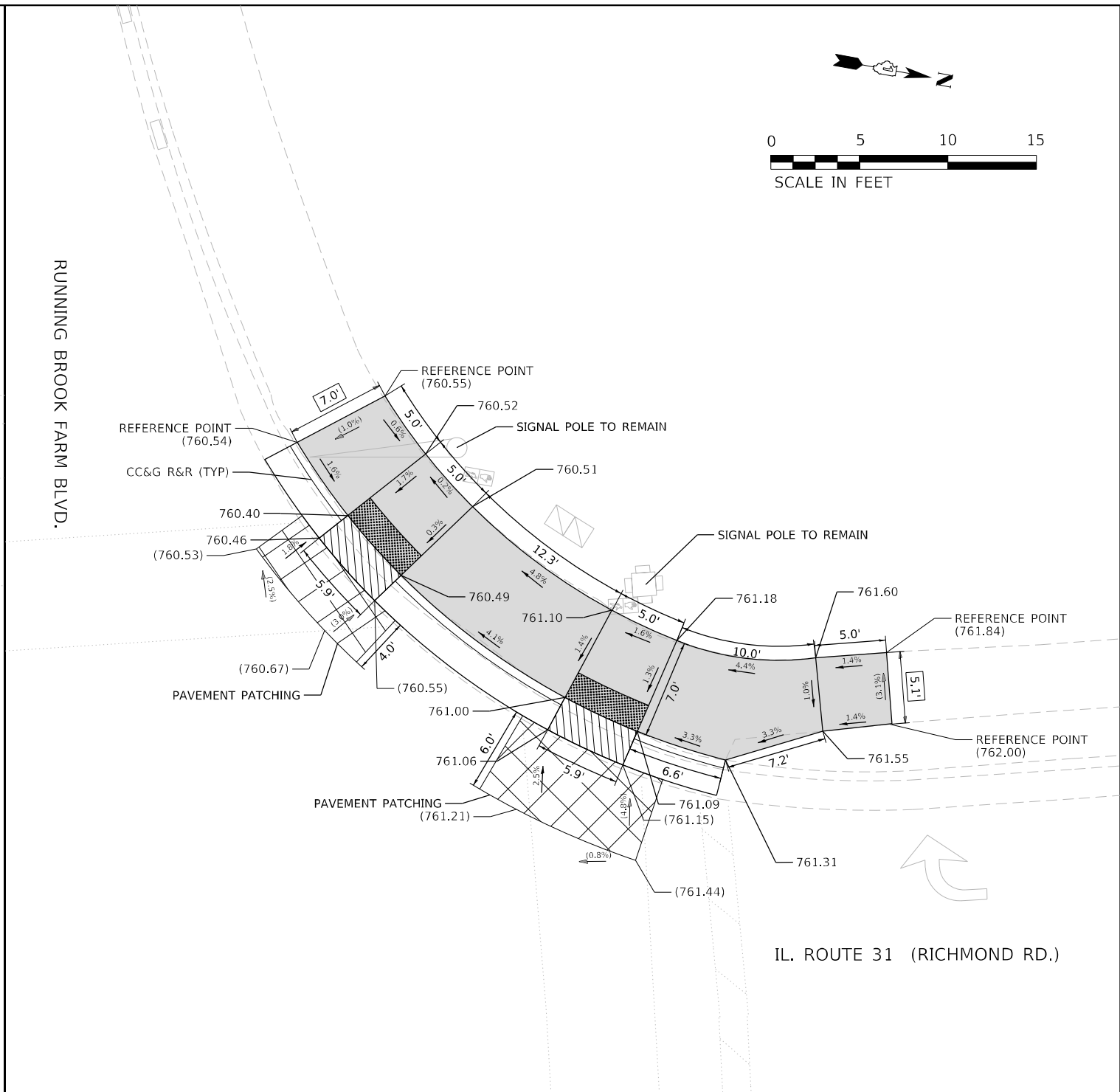
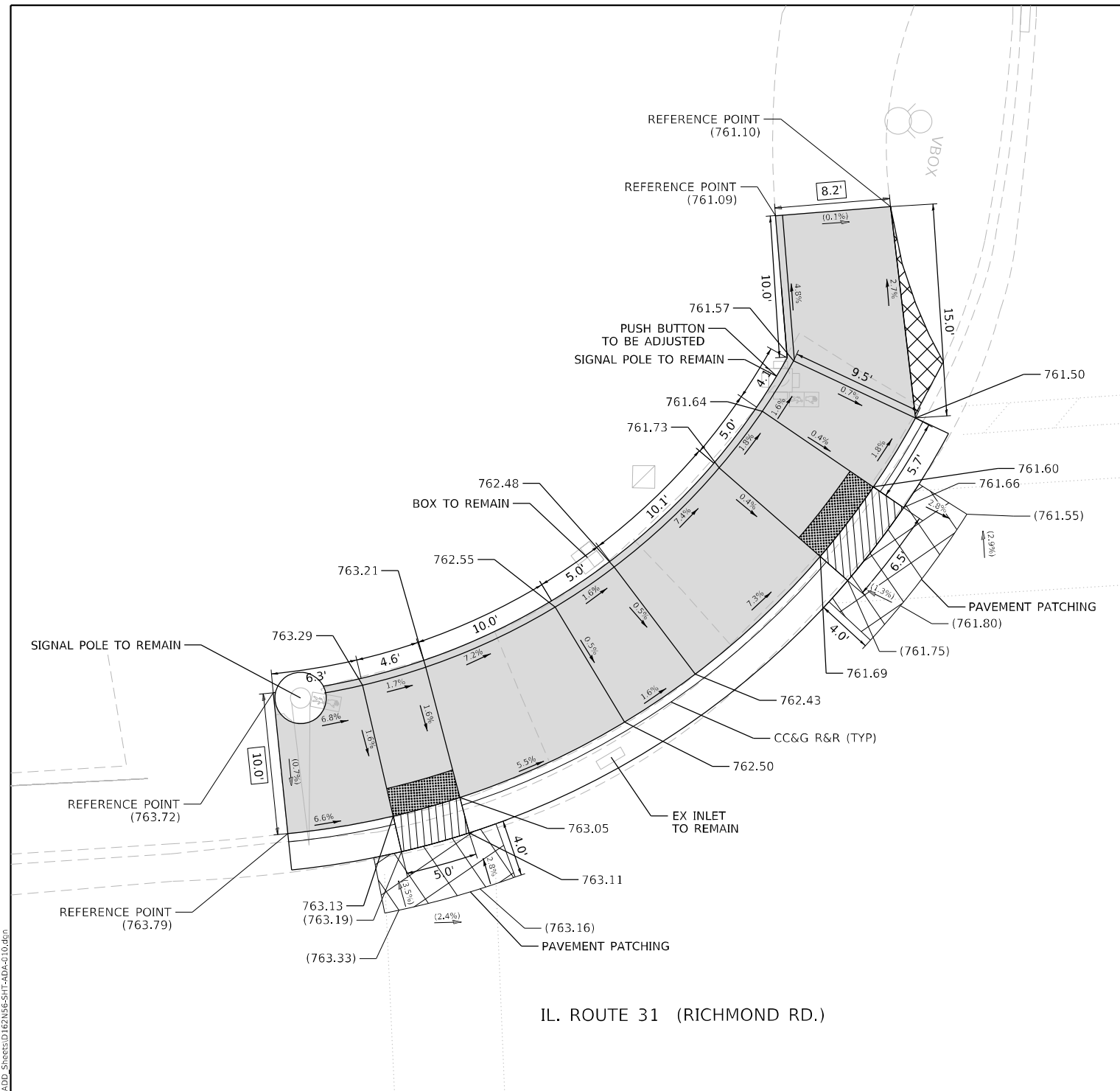
REVISED -	
REVISED -	
REVISED -	
REVISED -	

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

ADA RAMP DETAILS IL-31 AT BLAKE RD.

SCALE: 1" = 5' STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2021-024-R5	MCHENRY	28	121
CONTRACT NO. 62N56				
ILLINOIS FED. AID PROJECT				



REFERENCE BENCHMARK ELEV. 761.73
 BENCHMARK: CUT SQUARE IN SW CORNER OF TCB PAD
 LOCATION: NE OF IL ROUTE 31 AND RUNNING BROOK FARM BLVD

LEGEND

- xx.xx' EXISTING LENGTH
- () EXISTING ELEVATION / SLOPE
- PROPOSED SIDEWALK
- DETECTABLE WARNINGS
- SIDEWALK REMOVAL REPLACE WITH TOPSOIL AND SOD
- DEPRESSED CURB AND GUTTER
- PROPOSED SIDE CURB

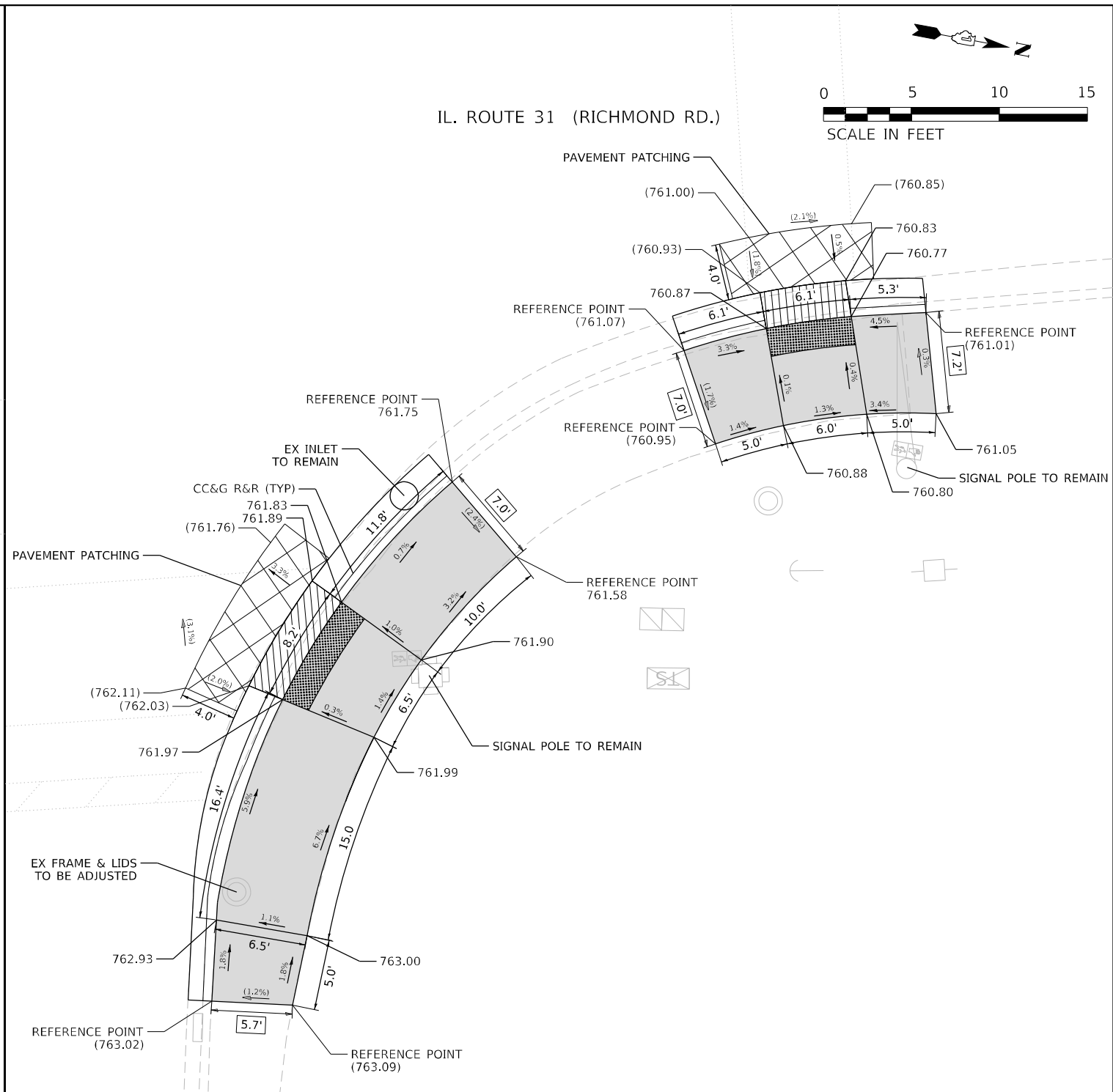
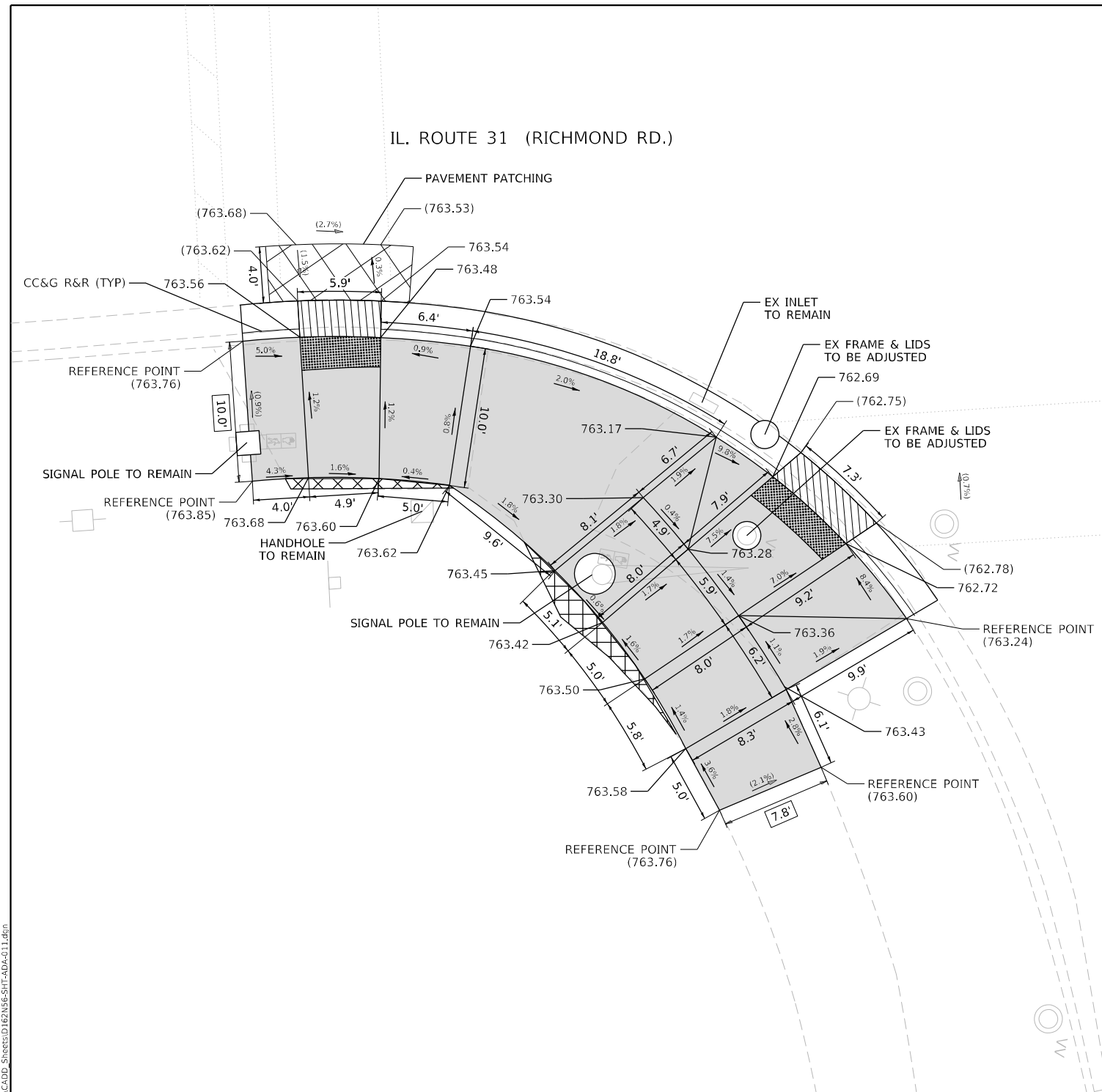
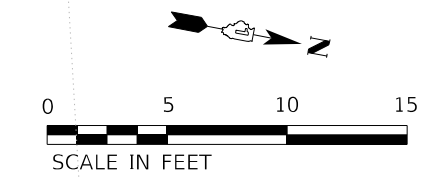
 INFRASTRUCTURE ENGINEERING INCORPORATED 1 South Wacker Suite 2650 Chicago, IL 60606 P: 312.425.9558 F: 312.475.9554 www.infrastructure-eng.com	USER NAME = Alane	DESIGNED - IMU	REVISED -
	PLOT SCALE = 10.0000' / in.	DRAWN - IMU	REVISED -
	PLOT DATE = 11/12/2021	CHECKED - ACL	REVISED -
		DATE - 11/01/2021	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ADA RAMP DETAILS
IL-31 AT RUNNING BROOK FARM BLVD**

SCALE: 1" = 5' STA. TO STA.

F.A.P. RTE. 336	SECTION 2021-024-R5	COUNTY MCHENRY	TOTAL SHEETS 28	SHEET NO. 121
CONTRACT NO. 62N56				
ILLINOIS FED. AID PROJECT				



REFERENCE BENCHMARK ELEV. 761.73
 BENCHMARK: CUT SQUARE IN SW CORNER OF TCB PAD
 LOCATION: NE OF IL ROUTE 31 AND RUNNING BROOK FARM BLVD

LEGEND

xx.xx'	EXISTING LENGTH
()	EXISTING ELEVATION / SLOPE
[Solid Gray Box]	PROPOSED SIDEWALK
[Grid Pattern Box]	DETECTABLE WARNINGS
[Cross-hatch Pattern Box]	SIDEWALK REMOVAL REPLACE WITH TOPSOIL AND SOD
[Diagonal Hatch Pattern Box]	DEPRESSED CURB AND GUTTER
[Double Line]	PROPOSED SIDE CURB

MODEL: P:\d\inf\...
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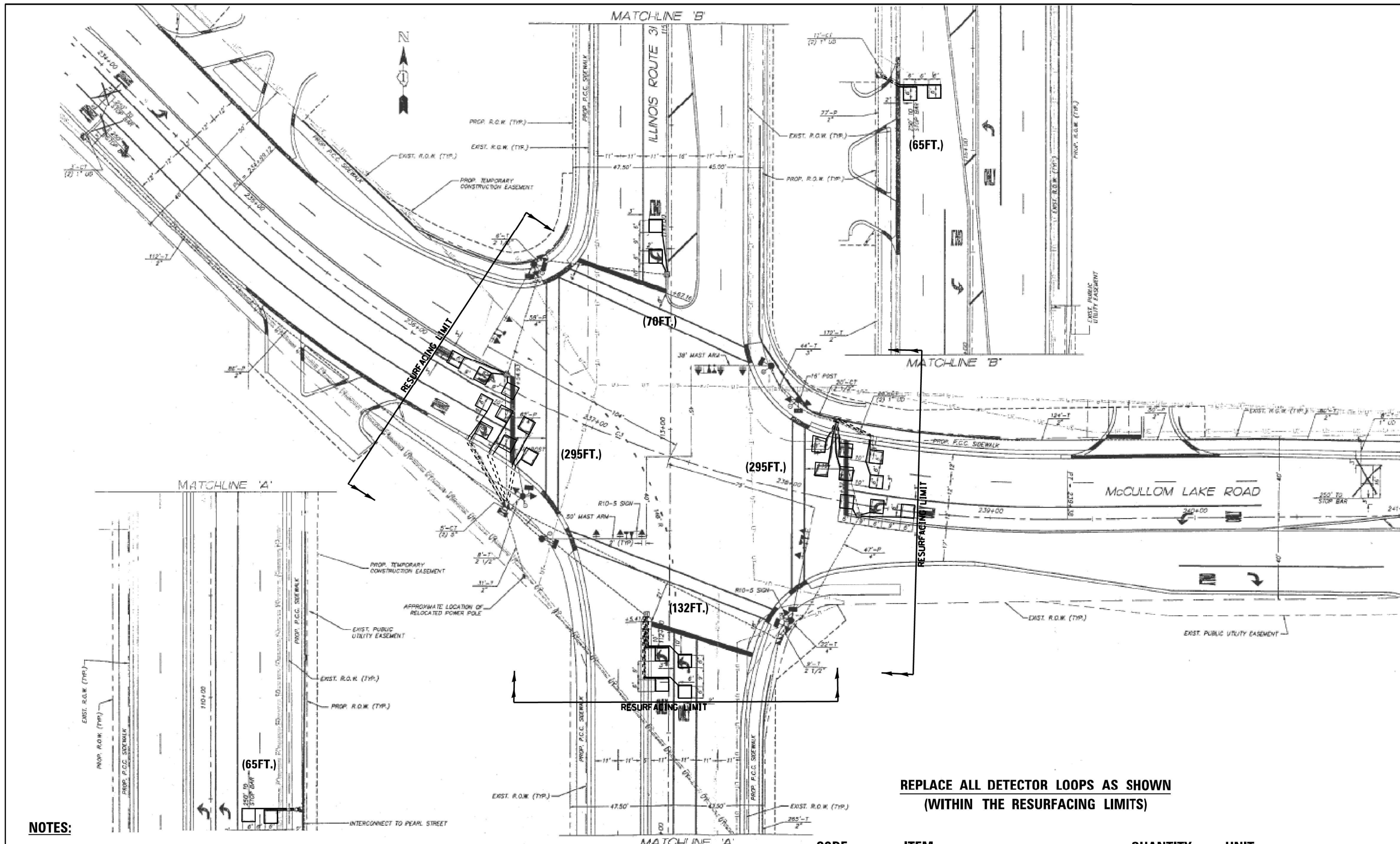
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	DATE - 11/02/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ADA RAMP DETAILS
 IL-31 AT RUNNING BROOK FARM BLVD**

SCALE: 1" = 5' STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2021-024-R5	MCHENRY	28	12K
			CONTRACT NO. 62N56	
ILLINOIS FED. AID PROJECT				



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

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.

CODE	ITEM	QUANTITY	UNIT
88600600	DETECTOR LOOP REPLACEMENT	922	FOOT

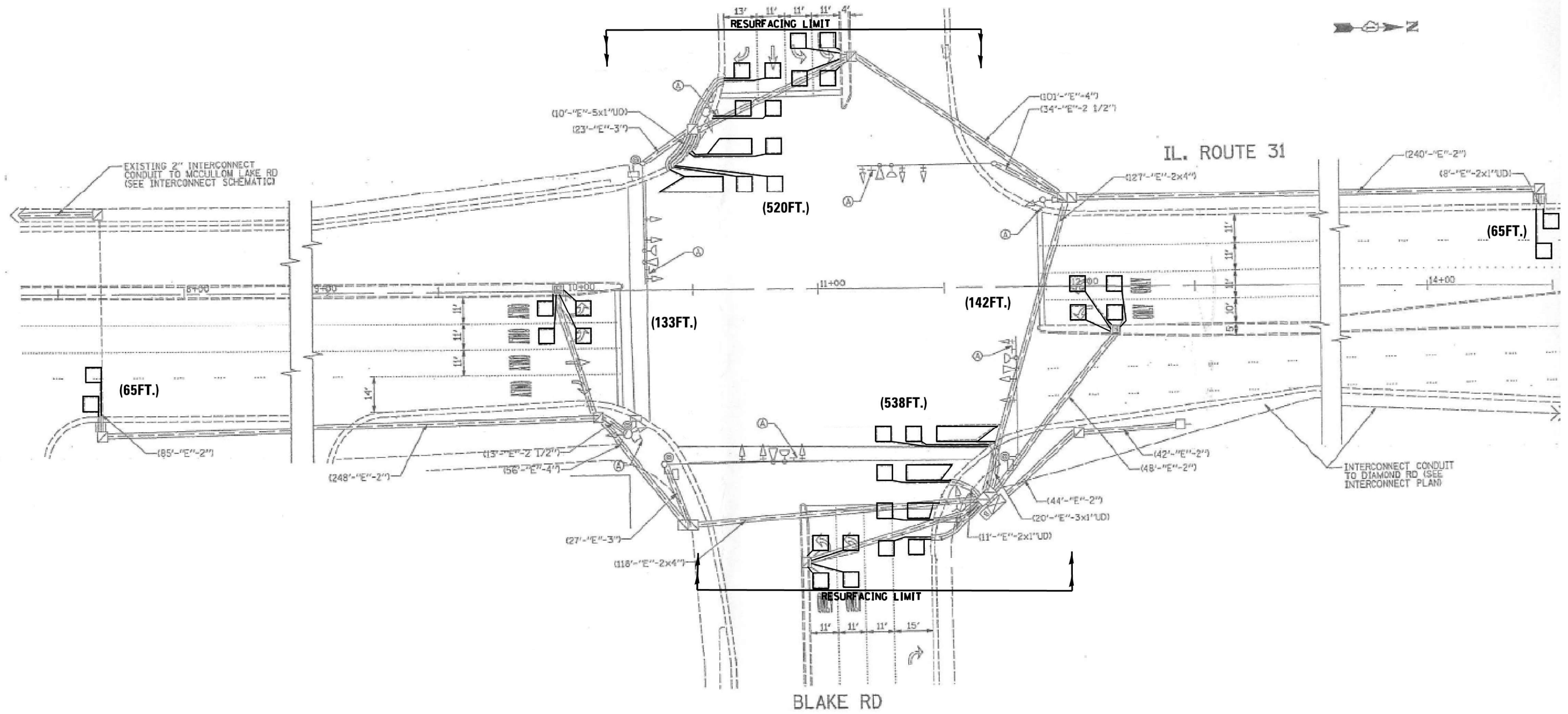
TS#11895

FILE NAME =	USER NAME = mezag	DESIGN - Steven M. Nguyen	REVISED -
P:\Detector Loops\2021\62N56 IL31-McHenr	\CADD\ITS\11895 IL ROUTE 31 @ McCullom Lak	DRAWN - Gonzalo Meza	REVISED -
Default	PLOT SCALE = 48,0000 sf / in.	CHECKED - Steven M. Nguyen	REVISED -
	PLOT DATE = 5/11/2021	DATE - 05/11/2021	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DETECTOR LOOP REPLACEMENT PLAN			
IL ROUTE 31 (RICHMOND RD.) AT McCULLOM LAKE RD.			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2021-024-R5	MCHENRY	28	13
			CONTRACT NO. 62N56	
ILLINOIS FED. AID PROJECT				



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

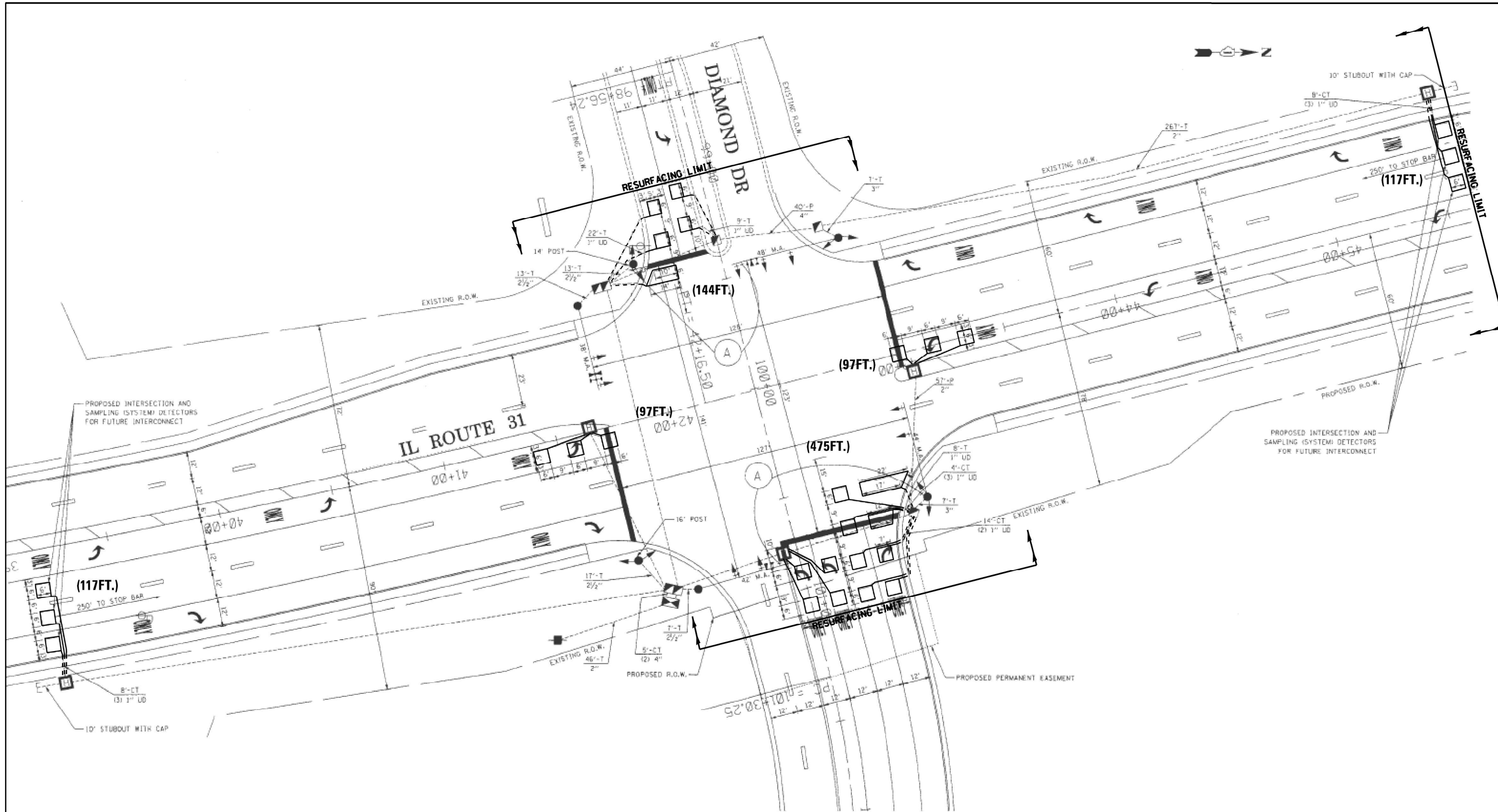
NOTES:

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.

CODE	ITEM	QUANTITY	UNIT
88600600	DETECTOR LOOP REPLACEMENT	1463	FOOT

TS#11897

FILE NAME =	USER NAME = mezag	DESIGN - Steven M. Nguyen	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETECTOR LOOP REPLACEMENT PLAN IL ROUTE 31 (RICHMOND RD.) AT BLAKE RD.	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
P:\Detector Loops\2021\62N56 IL31-McHenry	\CADD\21S*11897 IL ROUTE 31 @ Blake Rd.dgn	DRAWN - Gonzalo Meza	REVISED -			336	2021-024-R5	MCHENRY	28	14	
Default	PLOT SCALE = 48.0000 sf / in.	CHECKED - Steven M. Nguyen	REVISED -			CONTRACT NO. 62N56					
	PLOT DATE = 5/12/2021	DATE - 05/11/2021	REVISED -			ILLINOIS FED. AID PROJECT					



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

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.

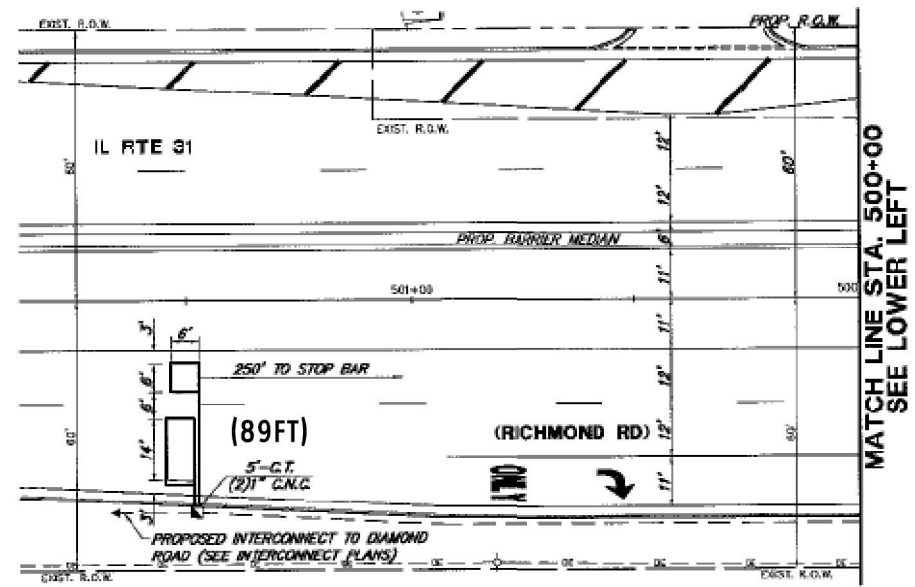
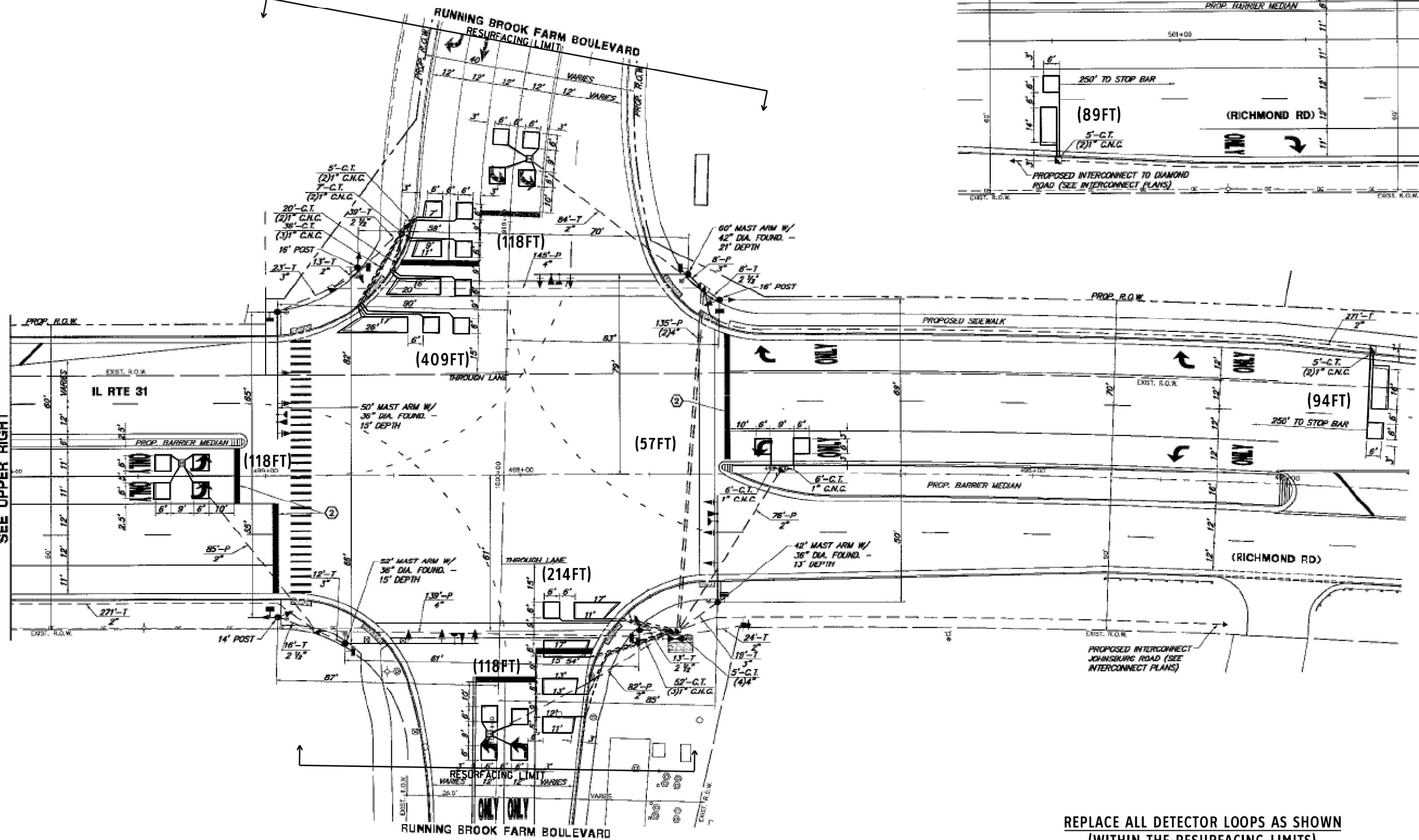
CODE	ITEM	QUANTITY	UNIT
88600600	DETECTOR LOOP REPLACEMENT	1047	FOOT

TS#11896

FILE NAME =	USER NAME = mezag	DESIGN - Steven M. Nguyen	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETECTOR LOOP REPLACEMENT PLAN IL. ROUTE 31 (RICHMOND RD.) AT DIAMOND DR.	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
P:\Detector Loops\2021\62N56 IL31-McHenry	\CADD\3TS*11896 IL ROUTE 31 @ Diamond Dr.dwg	DRAWN - Gonzalo Meza	REVISED -			336	2021-024-RS	MCHENRY	28	15	
Default	PLOT SCALE = 48,0000 sf / in.	CHECKED - Steven M. Nguyen	REVISED -			CONTRACT NO. 62N56					
	PLOT DATE = 5/12/2021	DATE - 05/11/2021	REVISED -			ILLINOIS FED. AID PROJECT					

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MATCH LINE STA. 500+00
 SEE UPPER RIGHT



MATCH LINE STA. 500+00
 SEE LOWER LEFT

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	1217	FOOT

USER NAME = mezag	DESIGNED - Steven M. Nguyen	REVISED -
	DRAWN - Gonzalo Meza	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - Steven M. Nguyen	REVISED -
PLOT DATE = 10/20/2021	DATE - 10/19/2021	REVISED -

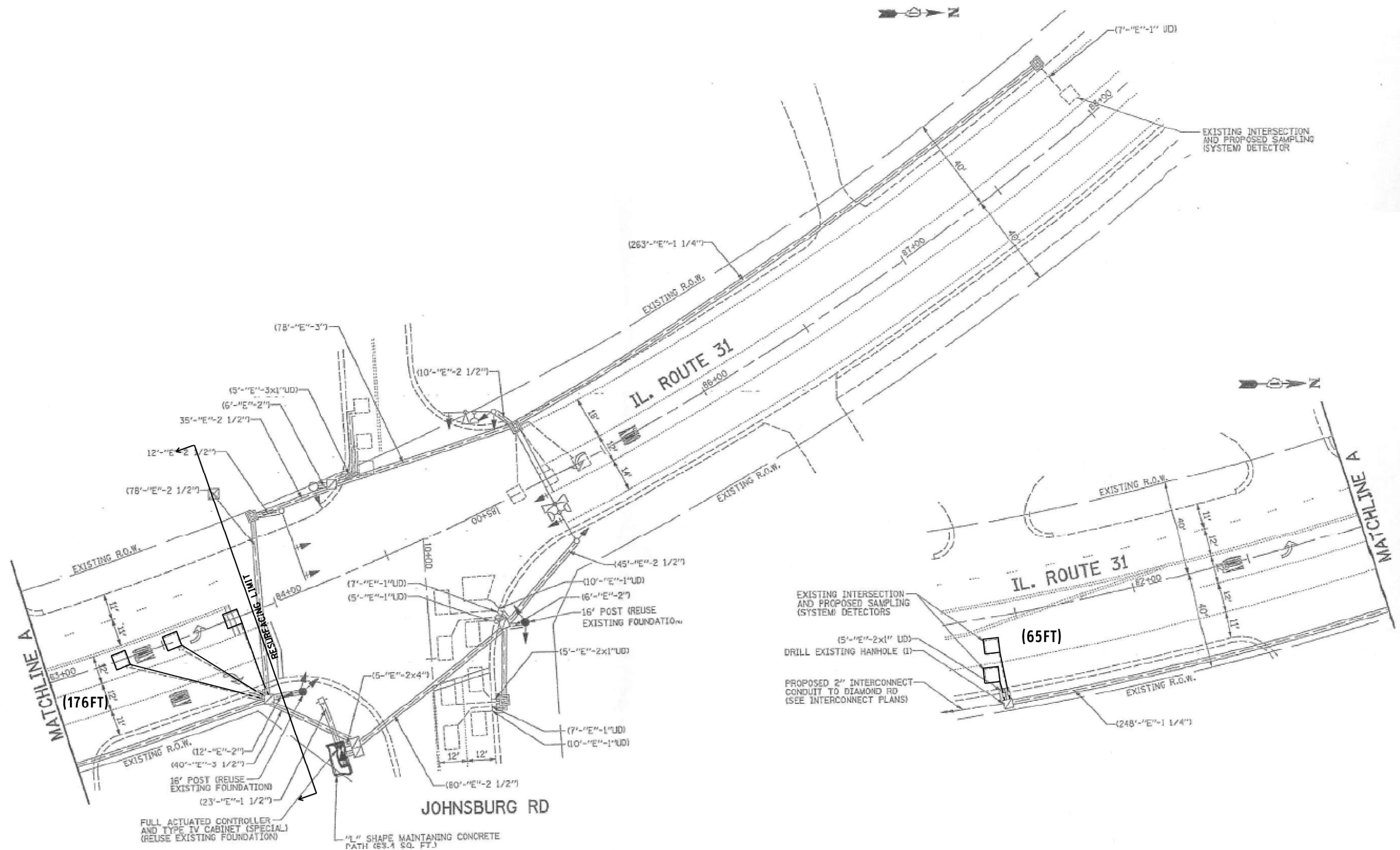
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**DETECTOR LOOP REPLACEMENT PLAN
 IL 31 AT RUNNING BROOK FARM BLVD.**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.S. RTE. 336	SECTION 2021-024-RS	COUNTY McHenry	TOTAL SHEETS 28	SHEET NO. 15A
CONTRACT NO. 62N56			ILLINOIS FED. AID PROJECT	

TS#7311



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	241	FOOT

TS#7310

MODEL: Default
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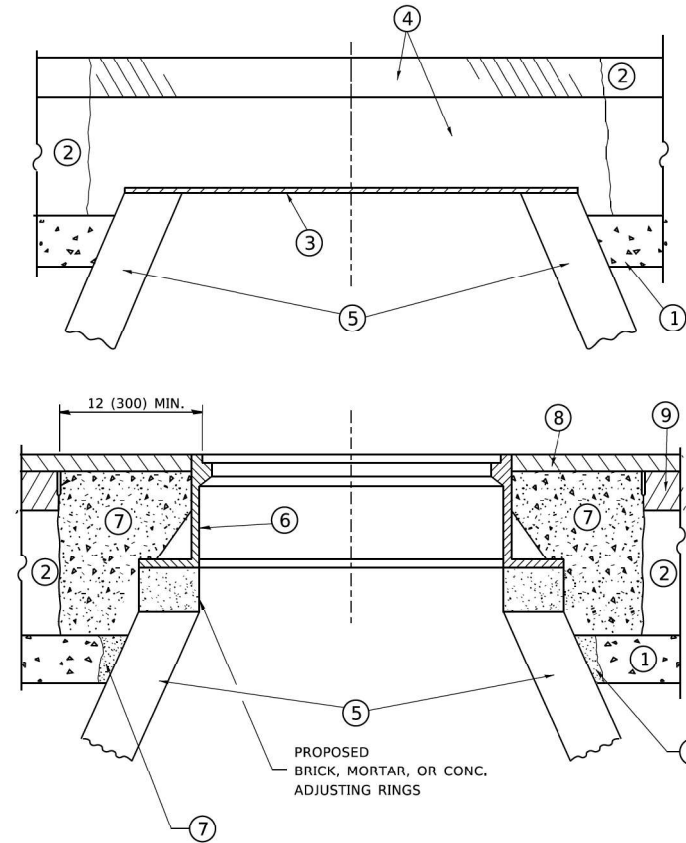
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	DRAWN - Gonzalo Meza	REVISED -
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PLOT DATE = 10/29/2021	DATE - 10/19/2021	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DETECTOR LOOP REPLACEMENT PLAN
IL 31 AT RUNNING JOHNSBURG RD.**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2021-024-RS	McHenry	28	15B
			CONTRACT NO. 62N56	
		ILLINOIS FED. AID PROJECT		



CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1½ (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

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

* UNLESS OTHERWISE SPECIFIED IN THE PLANS.

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

LEGEND

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

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

MODEL Path: J:\2020\2020-09-04-00 IDOT Various Phase 2 (PBE) 106 Item 16\Work Order 15\DCIN\CADD_Sheets\62N56-SHT-STANDARD-RDS-01.dgn

<p>INFRASTRUCTURE ENGINEERING INCORPORATED 1 South Wacker Suite 2650 Chicago, IL 60606 P 312.425.9598 F 312.425.9594 www.infrastructure-eng.com</p>	USER NAME = lumer	DESIGNED - IMU	REVISED -
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		DATE - 08/13/2021	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

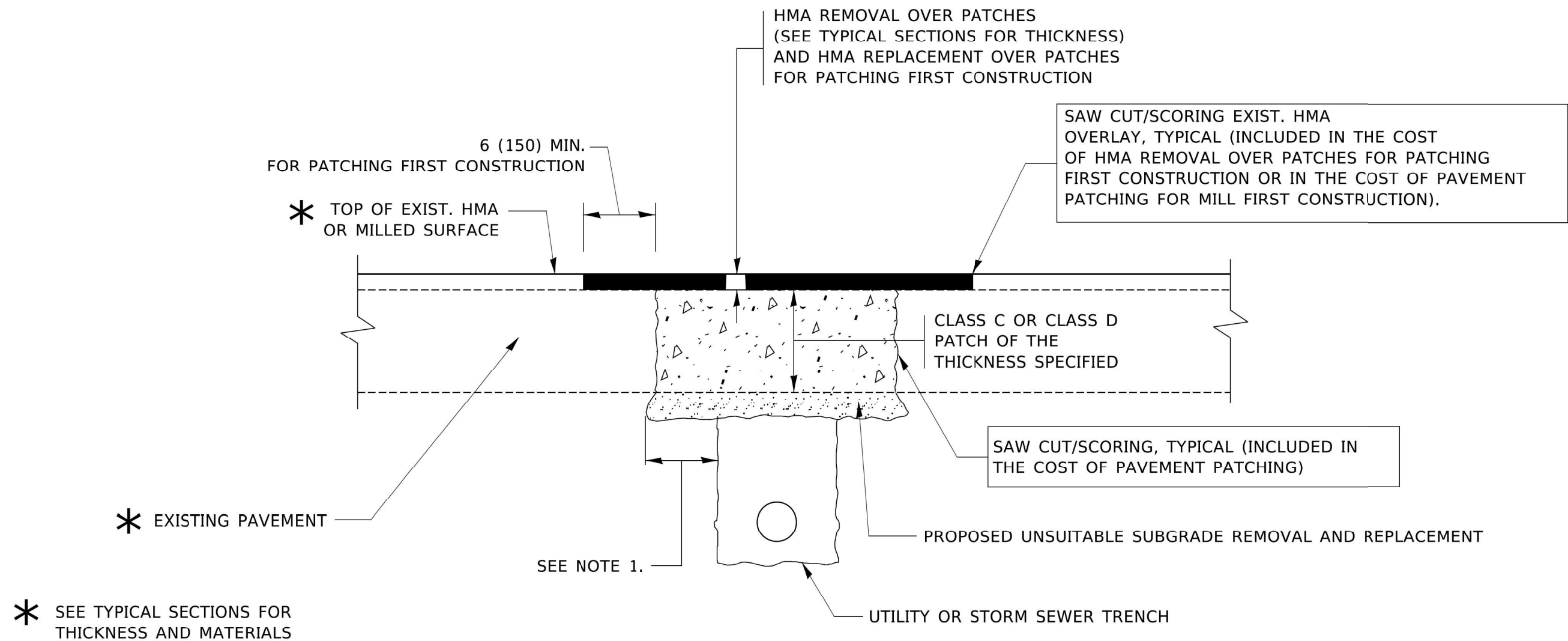
**DISTRICT ONE - DETAILS FOR
FRAMES AND LIDS ADJUSTMENT WITH MILLING (BD-08)**

SCALE: NTS

STA.

TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2021-024-R5	MCHENRY	28	16
			CONTRACT NO. 62N56	
		ILLINOIS	FED. AID PROJECT	



NOTES:

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

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

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

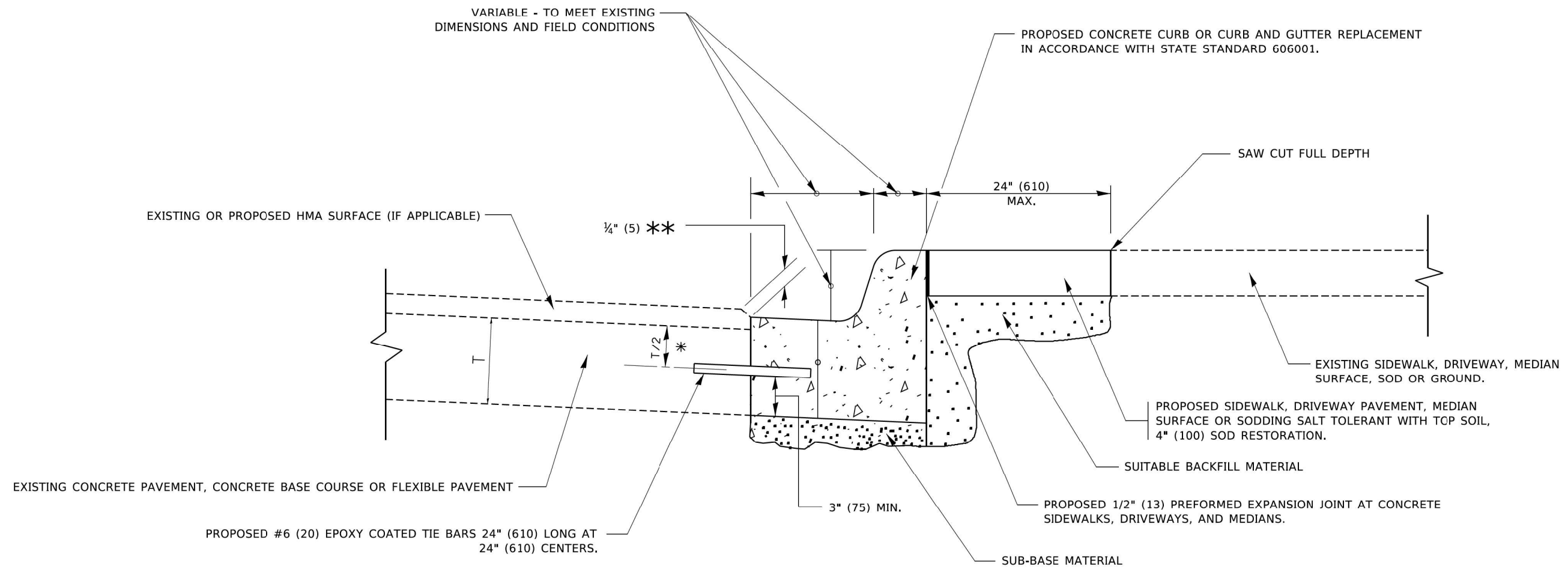
SEQUENCE OF CONSTRUCTION (MILLING FIRST)

1. MILL HMA FIRST IF THERE IS AT LEAST 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.

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



- * 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.

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

MODEL Path: \\... \PLOT DATE = 10/15/2021

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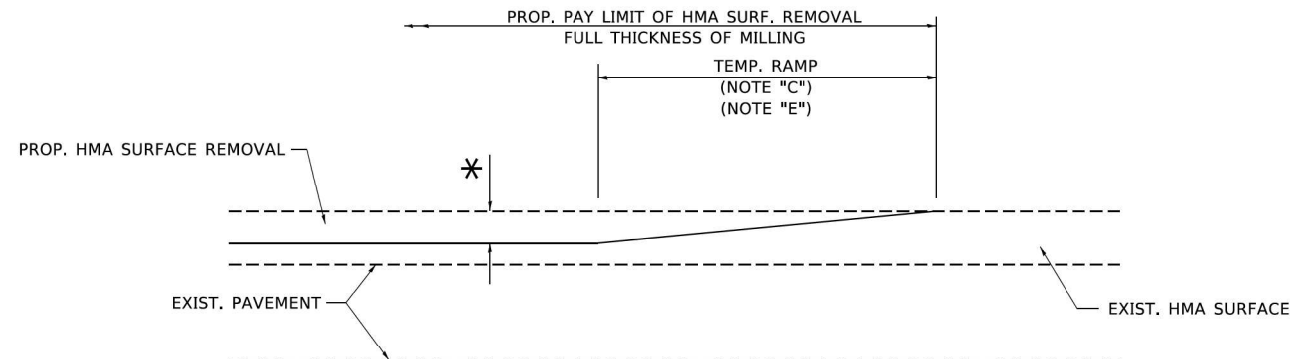
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE - CURB OR CURB AND GUTTER
REMOVAL AND REPLACEMENT (BD-24)**

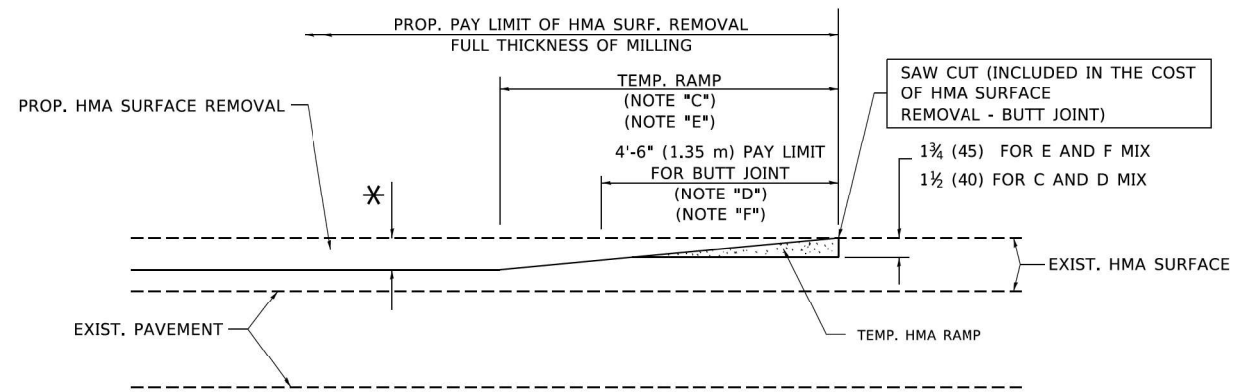
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2021-024-R5	MCHENRY	28	18
			CONTRACT NO. 62N56	
		ILLINOIS	FED. AID PROJECT	



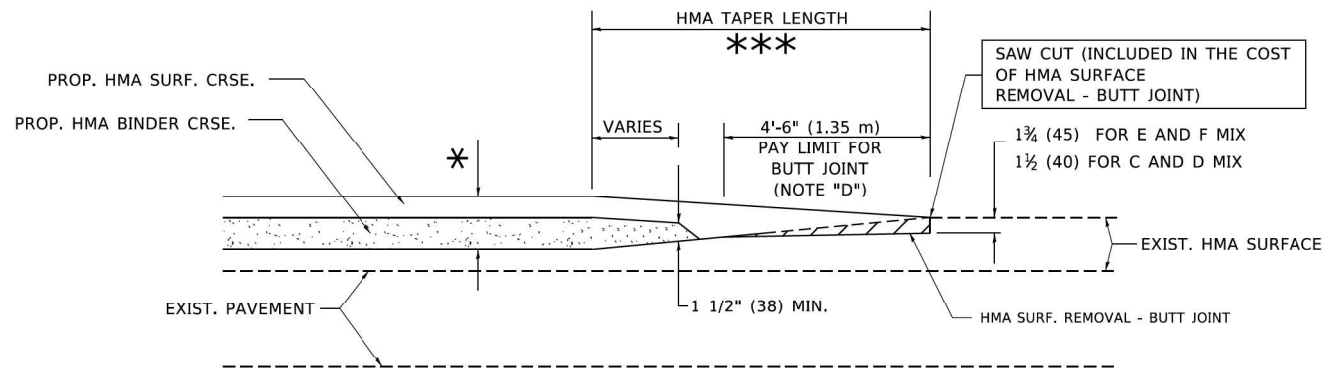
MILLED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1



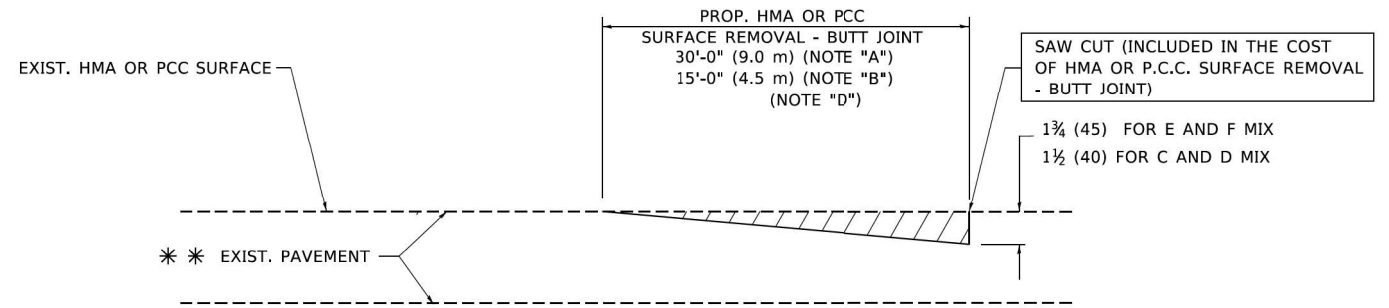
HMA CONSTRUCTED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 2
TYPICAL TEMPORARY RAMP

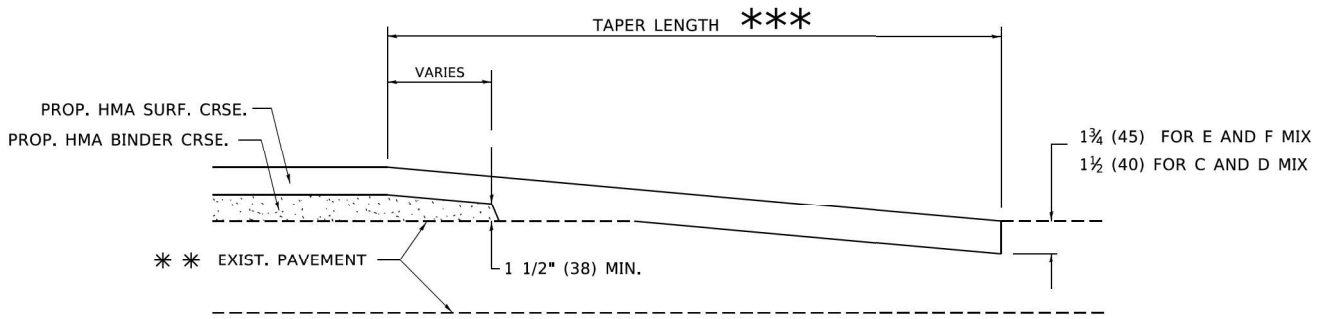


BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

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

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

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

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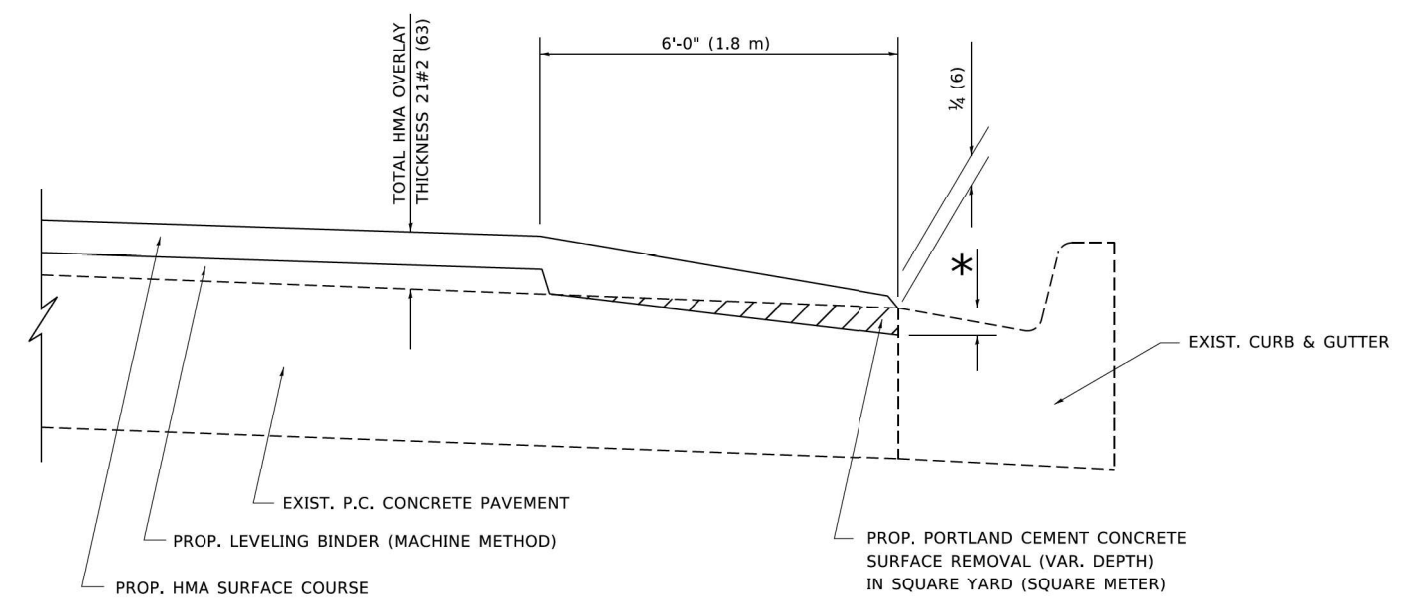
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	DATE - 08/13/2021	

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE - BUTT JOINT AND HMA TAPER DETAILS (BD-32)

SCALE: NTS TO STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2021-024-R5	MCHENRY	28	19
CONTRACT NO. 62N56				
ILLINOIS FED. AID PROJECT				



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

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

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

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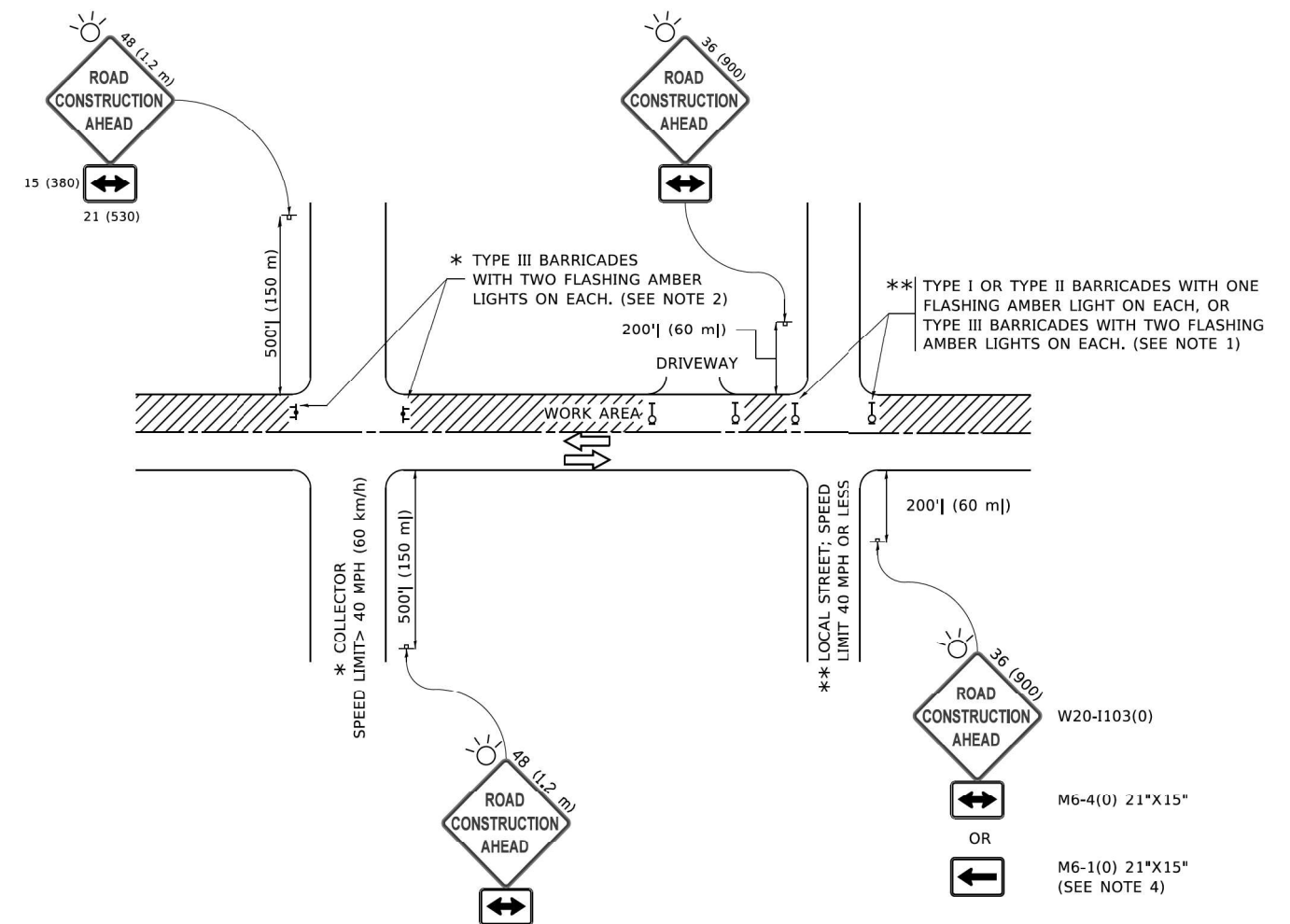
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PLOT DATE = 10/15/2021	CHECKED - ACL	REVISED -
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE - HMA TAPER AT
EDGE OF PCC PAVEMENT (BD-33)**

SCALE: NTS STA. TO STA.

F.A.P. RTE. 336	SECTION 2021-024-R5	COUNTY MCHENRY	TOTAL SHEETS 28	SHEET NO. 20
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62N56	



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 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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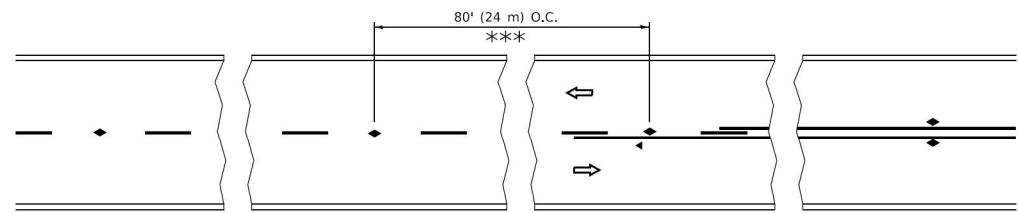
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE – TRAFFIC CONTROL AND PROTECTION FOR
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)**

SCALE: NTS

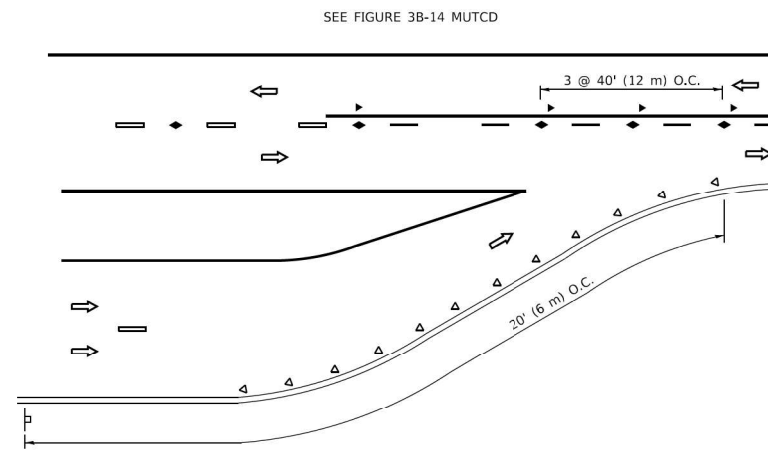
STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2021-024-R5	MCHENRY	28	21
			CONTRACT NO. 62N56	
ILLINOIS FED. AID PROJECT				

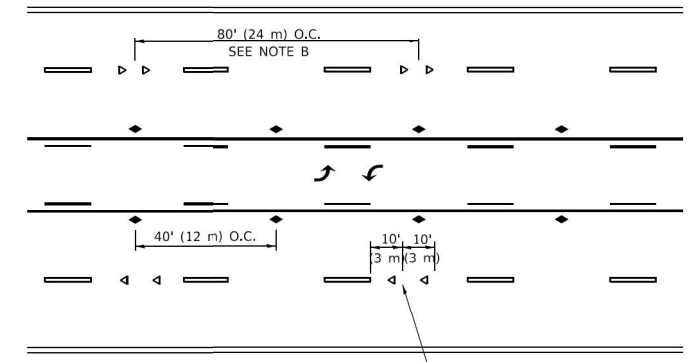


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

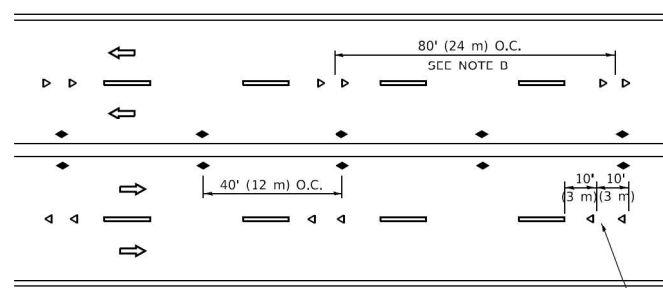
TWO-LANE/TWO-WAY



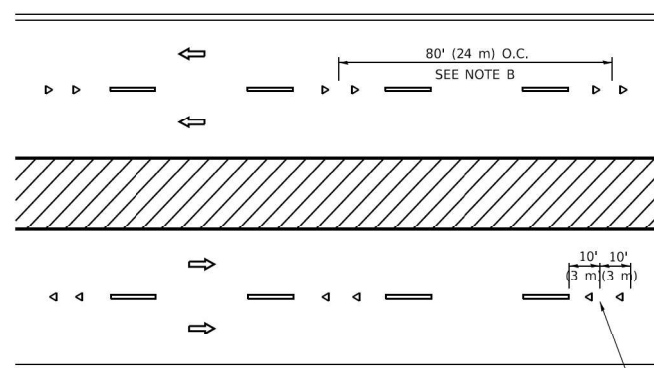
LANE REDUCTION TRANSITION



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

SYMBOLS

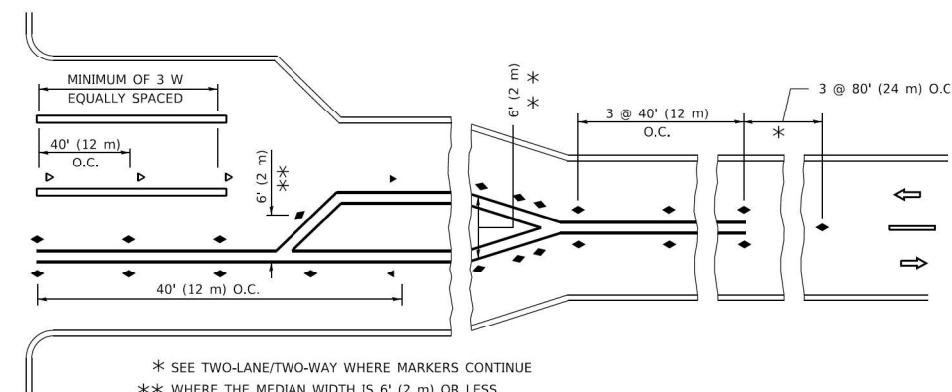
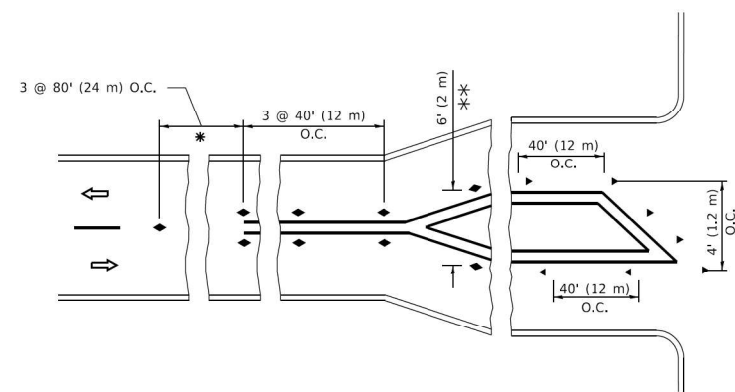
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◀ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

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.



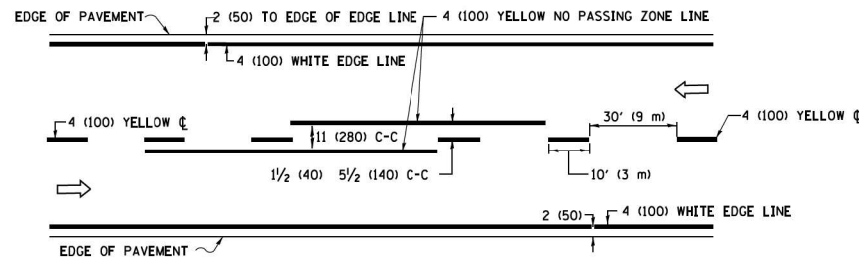
* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE
 *** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

TURN LANES

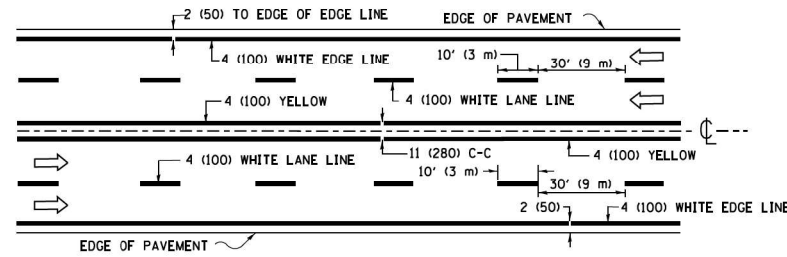
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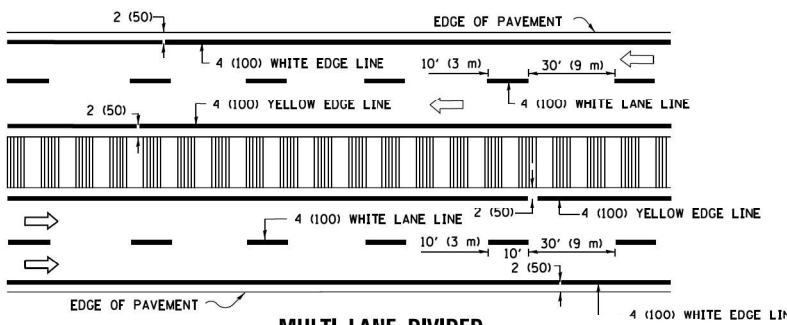
INFRASTRUCTURE ENGINEERING 1 South Wacker Suite 2650 Chicago, IL 60606 P 312.425.9598 F 312.475.9598 www.infrastructure-eng.com	USER NAME = jumer DESIGNED - IMU DRAWN - IMU CHECKED - ACL DATE - 08/13/2021	REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE – TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) (TC-11)	F.A.P. RTE. = 336 SECTION = 2021-024-R5 COUNTY = MCHENRY ILLINOIS FED. AID PROJECT	TOTAL SHEETS = 28 SHEET NO. = 22 CONTRACT NO. 62N56
	PLOT SCALE = 20,0000 * / in. PLOT DATE = 10/15/2021	SCALE: NTS STA. TO STA.				



2-LANE ROADWAY

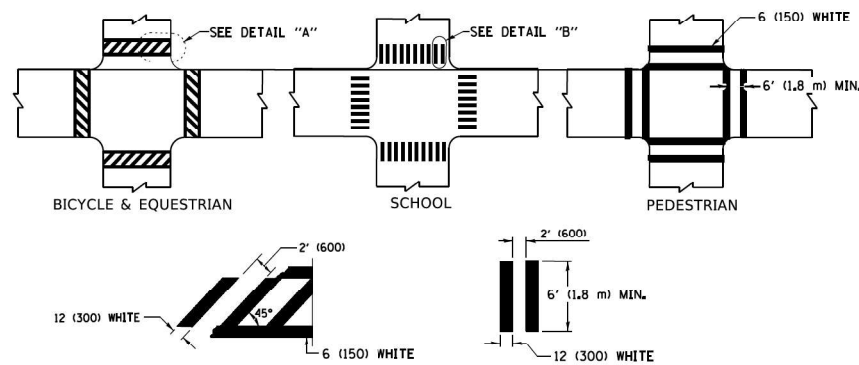


MULTI-LANE UNDIVIDED



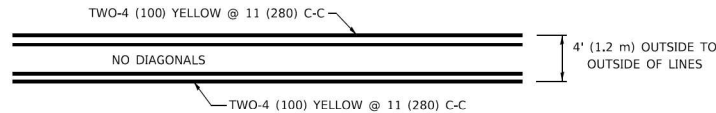
MULTI-LANE DIVIDED WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING

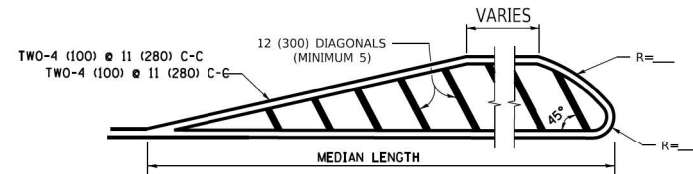


TYPICAL CROSSWALK MARKING

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

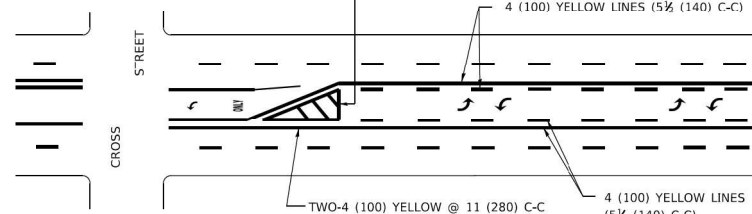


4' (1.2 m) WIDE MEDIANS ONLY



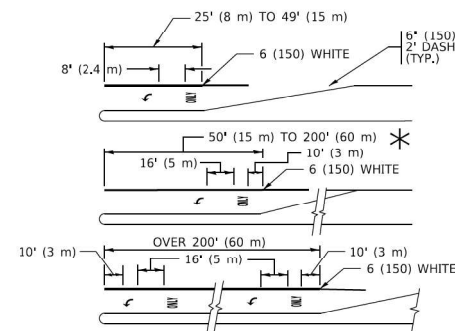
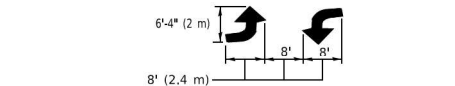
MEDIANS OVER 4' (1.2 m) WIDE

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**

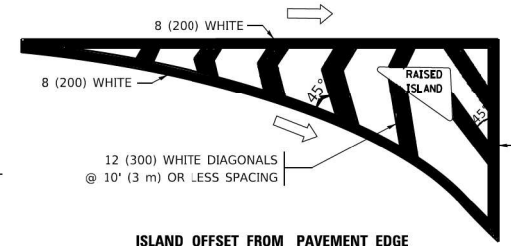
A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



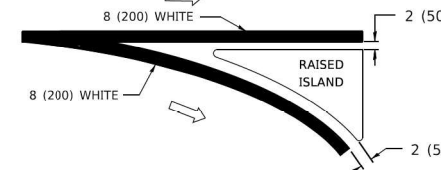
TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)
* 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*.

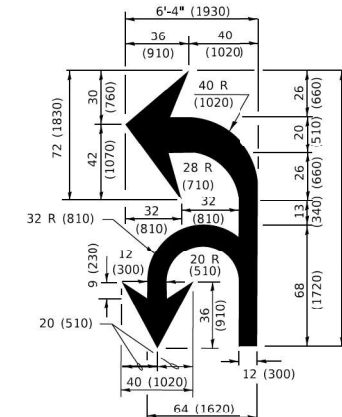


ISLAND OFFSET FROM PAVEMENT EDGE

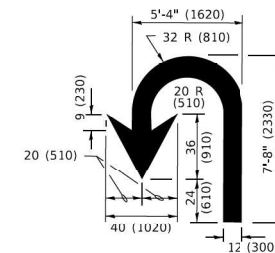


ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING



COMBINATION LEFT AND U-TURN



U-TURN

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

LANE REDUCTION TRANSITION

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

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES; FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW/ YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	7 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW/ WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE.
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; *RR* IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR *X*	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: *R*=3.6 SQ. FT. (0.33 m ²) EACH *X*=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

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

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

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE – TYPICAL PAVEMENT MARKINGS
(TC-13)**

SCALE: NTS

STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2021-024-R5	MCHENRY	28	23

CONTRACT NO. 62N56

USER NAME = IMUmer	DESIGNED - IMU	REVISED -
PLOT SCALE = 20,0000 * / in.	DRAWN - IMU	REVISED -
PLOT DATE = 10/15/2021	CHECKED - ACL	REVISED -
	DATE - 08/13/2021	

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

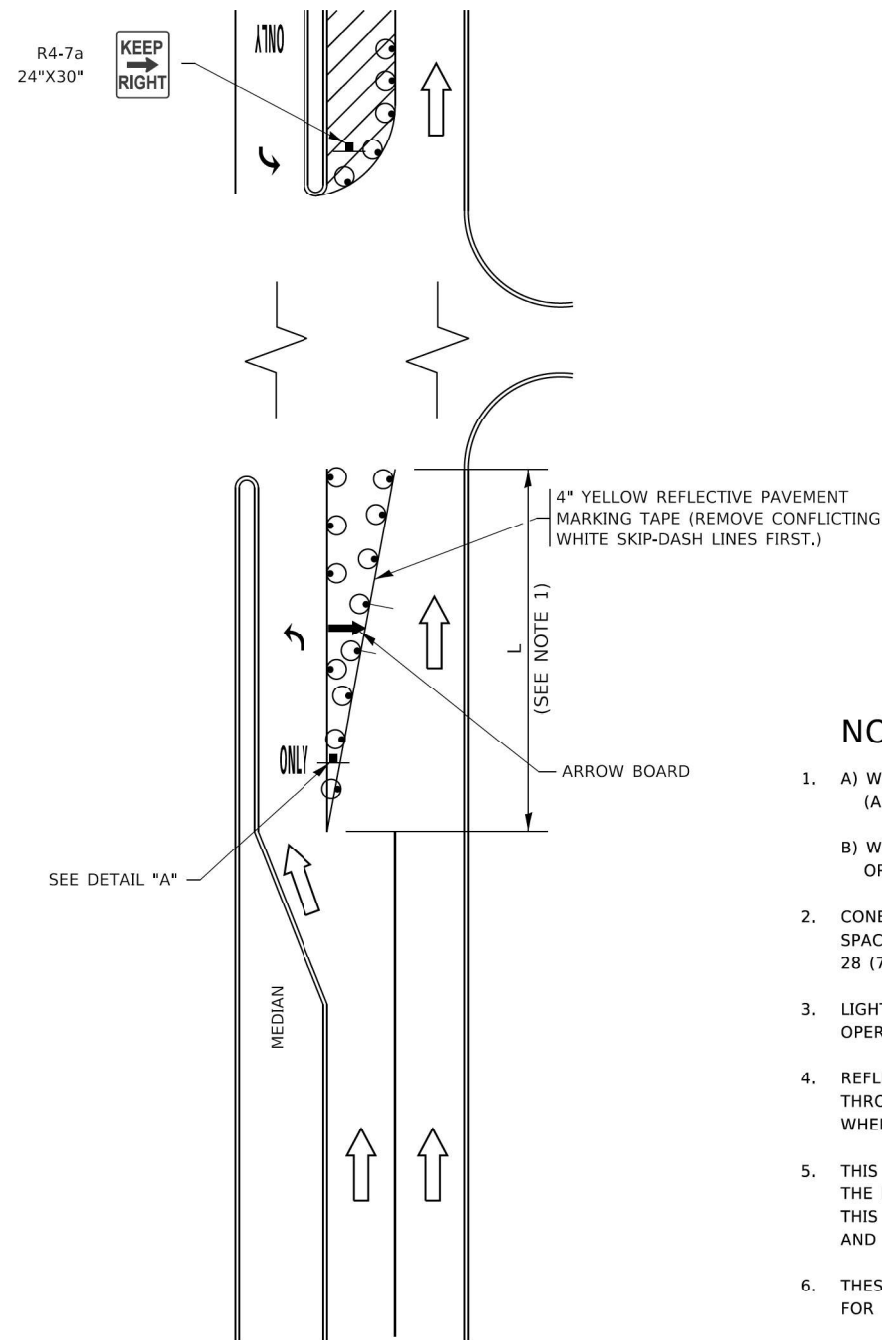


FIGURE 1

TURN BAY ENTRANCE WITHIN A LANE CLOSURE

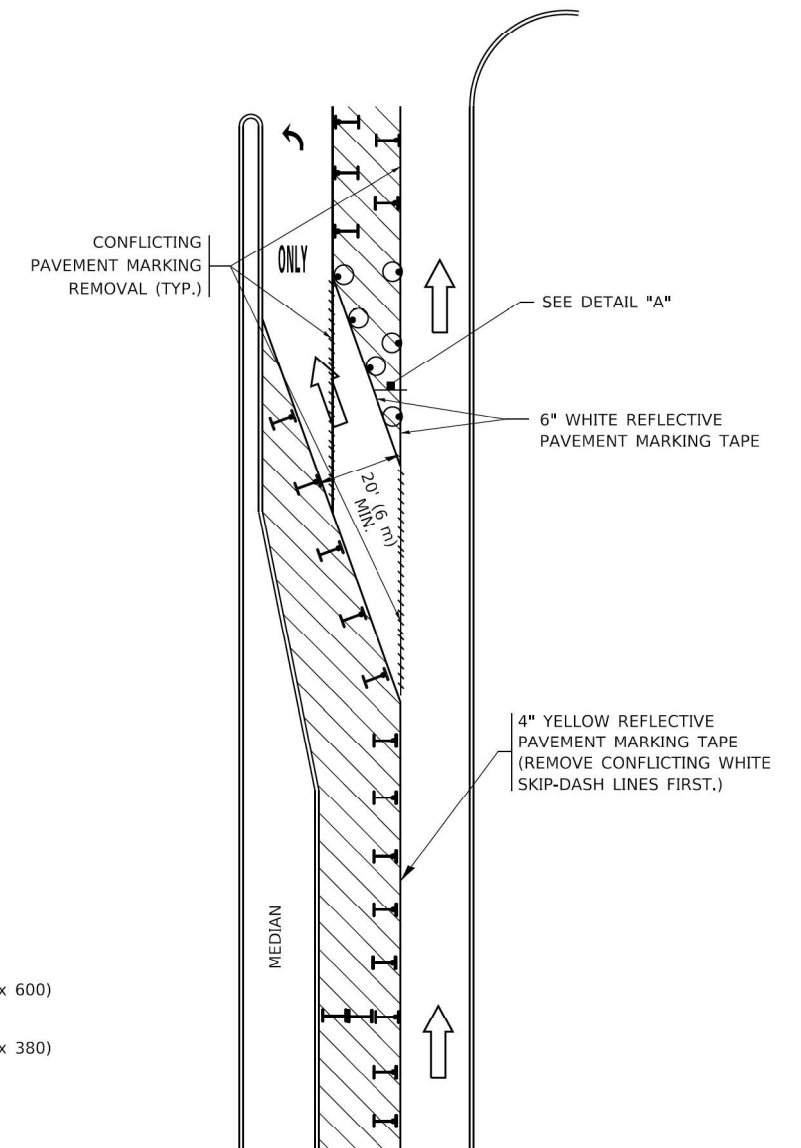


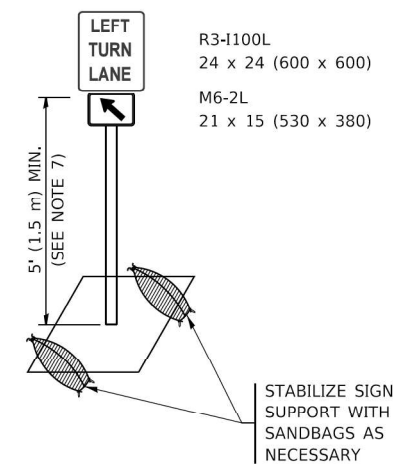
FIGURE 2

LEGEND

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

NOTES:

1. A) WHEN "L" IS \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 REQUIREMENTS.
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.

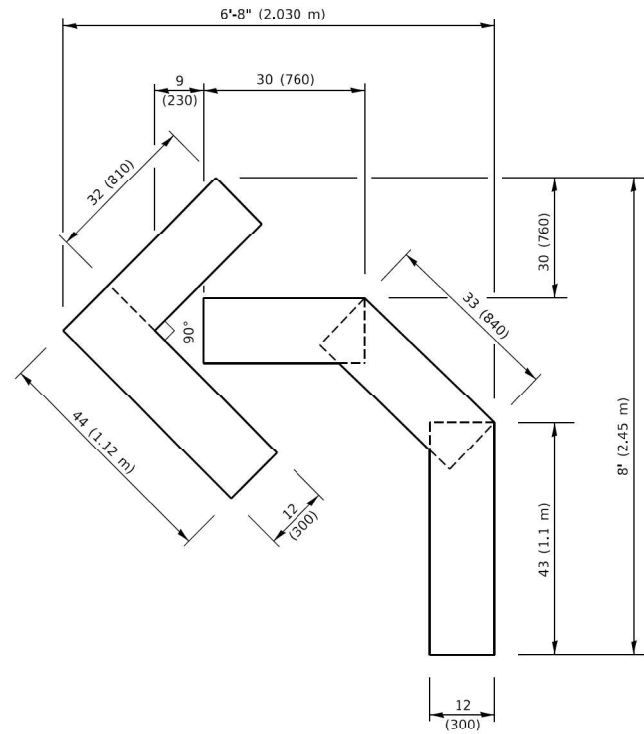


DETAIL A

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

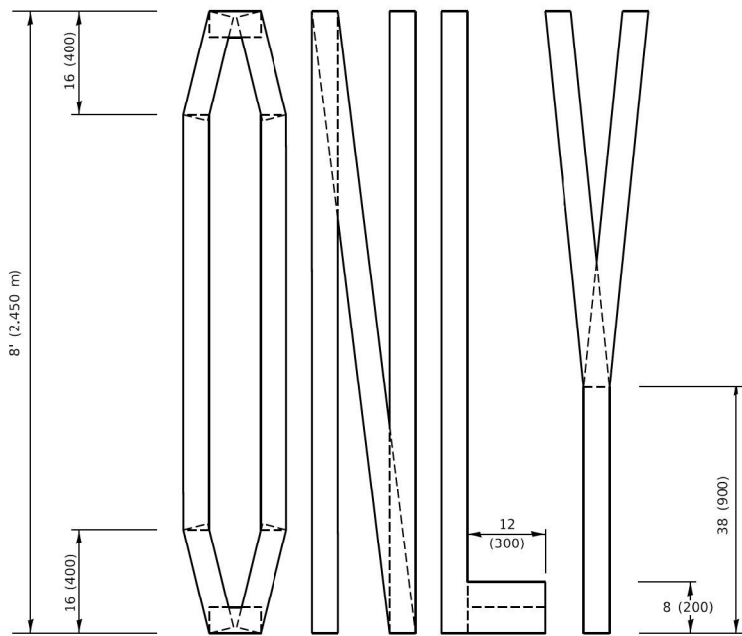
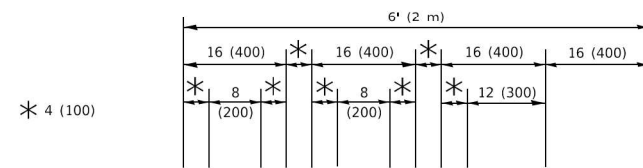
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INFRASTRUCTURE ENGINEERING INCORPORATED 1 South Wacker Suite 2650 Chicago, IL 60606 P 312.425.8588 F 312.425.8588 www.infrastructure-eng.com	USER NAME = jumer DESIGNED - IMU DRAWN - IMU CHECKED - ACL DATE - 08/13/2021	REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE – TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) (TC-14)	F.A.P. RTE. = 336 SECTION = 2021-024-R5 COUNTY = MCHENRY CONTRACT NO. 62N56	TOTAL SHEETS = 28 SHEET NO. = 24
	PLOT SCALE = 20,0000 * / in. PLOT DATE = 10/15/2021	SCALE: NTS STA. TO STA.			ILLINOIS FED. AID PROJECT	



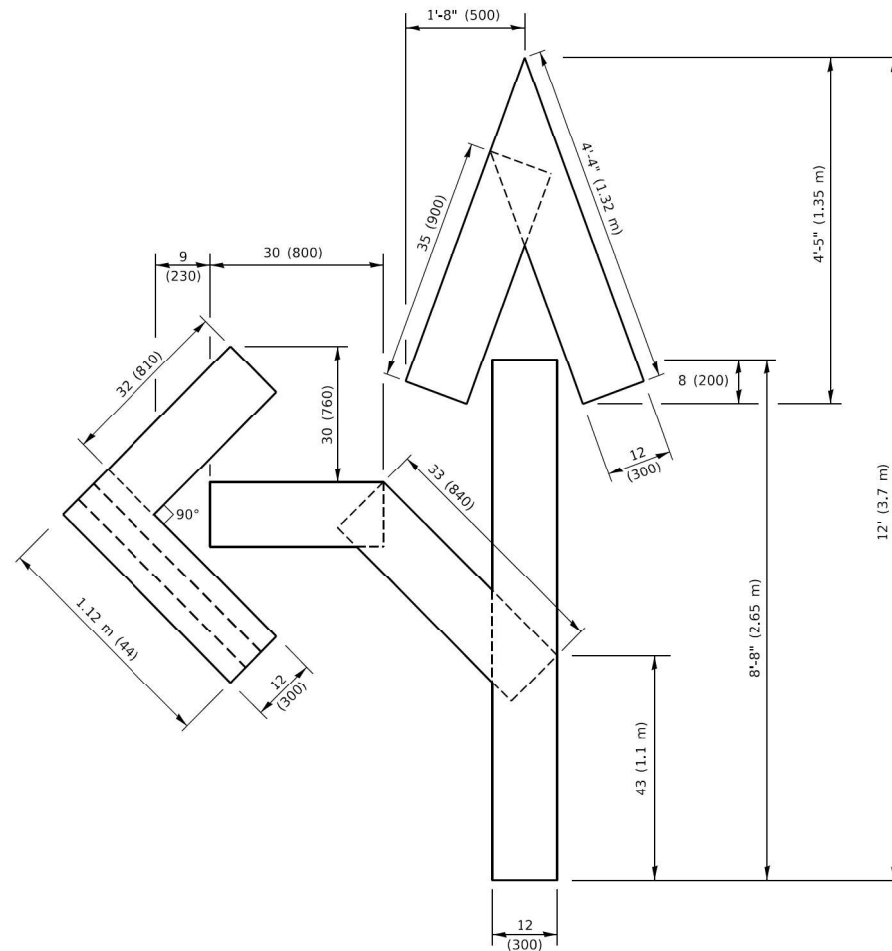
QUANTITY

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



QUANTITY

1 (100) LINE = 61.1 ft. (19.5 m)
21.4 sq. ft. (1.99 sq. m)

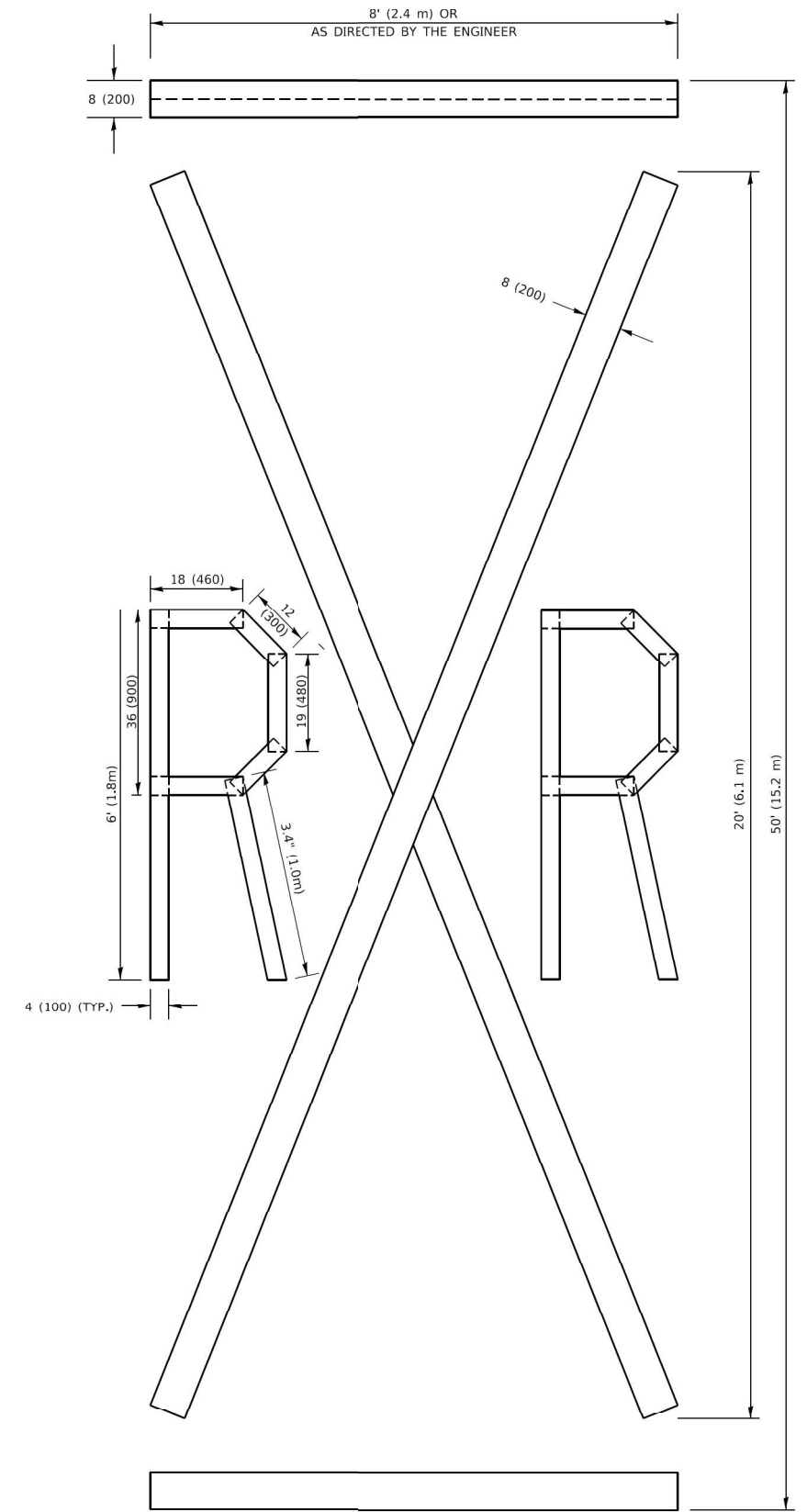


QUANTITY

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.

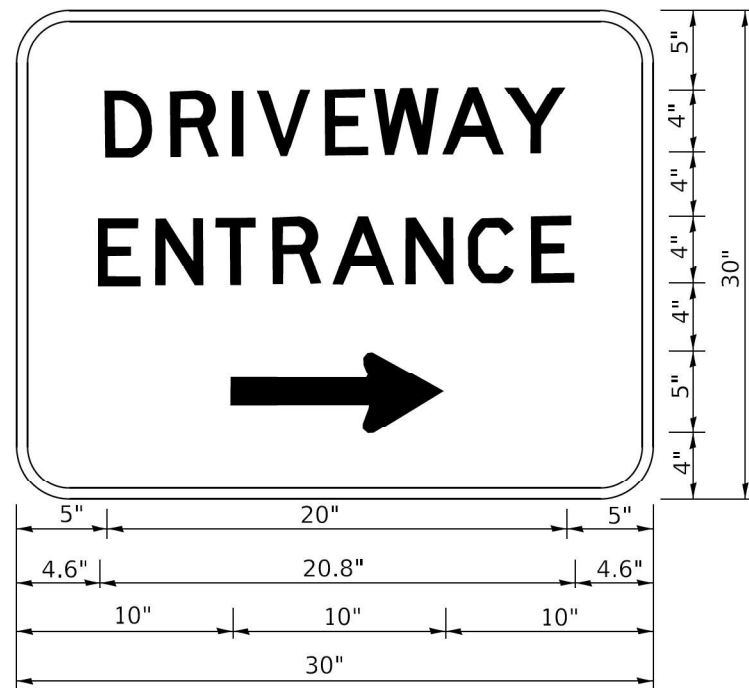


QUANTITY

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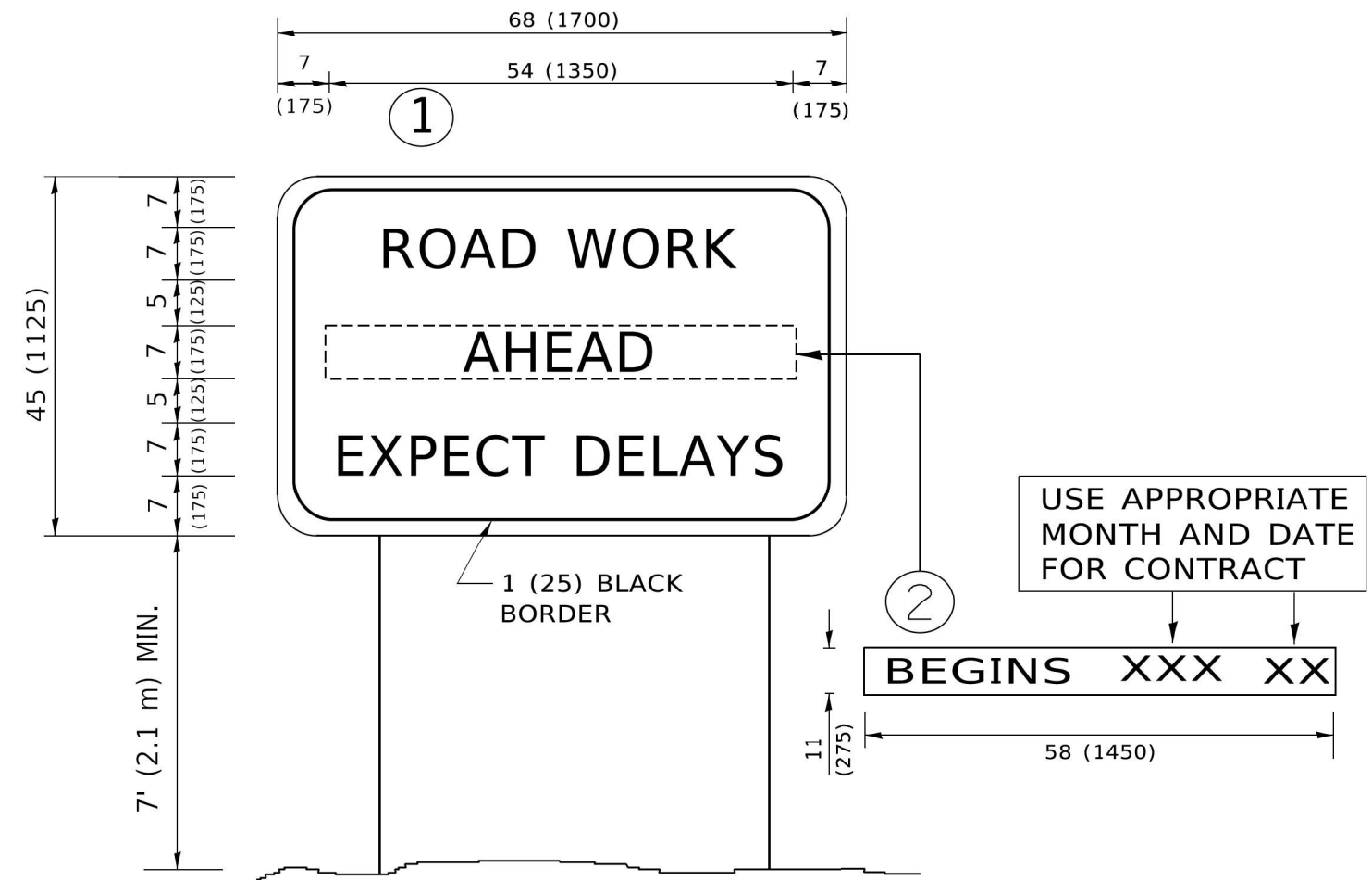
3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED
 "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

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".

MODEL Path.dwg
 FILE NAME: P:\2020\20-0094-00 IDOT Various Phase 2 (ITB) 106 Item 16\Work Order 15\DCM\CADD-Sheets\162\NS&S-SHT-STANDARD\RD5-14.dwg

INFRASTRUCTURE ENGINEERING <small>1 South Wacker Suite 2650 Chicago, IL 60606 P 312.425.8588 F 312.425.8588 www.infrastructure-eng.com</small>	USER NAME = lumer DESIGNED - IMU DRAWN - IMU CHECKED - ACL DATE - 08/13/2021	REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE – DRIVEWAY ENTRANCE SIGNING (TC-26)	F.A.P. RTE. = 336 SECTION = 2021-024-R5 COUNTY = MCHENRY TOTAL SHEETS = 28 SHEET NO. = 27	CONTRACT NO. 62N56 ILLINOIS FED. AID PROJECT
	PLOT SCALE = 20,0000 * / in. PLOT DATE = 10/15/2021	SCALE: NTS STA. TO STA.				



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.

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 DATE: 10/15/2021

INFRASTRUCTURE ENGINEERING <small>1 South Wacker Suite 2650 Chicago, IL 60606 P 312.475.8588 F 312.475.8588 www.infrastructure-eng.com</small>	USER NAME = lumer	DESIGNED - IMU	REVISED -
	PLOT SCALE = 20,0000 * / in.	DRAWN - IMU	REVISED -
	PLOT DATE = 10/15/2021	CHECKED - ACL	REVISED -
		DATE - 08/13/2021	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

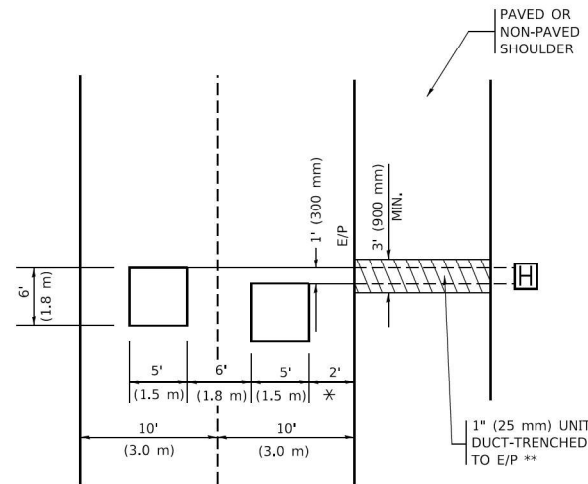
DISTRICT ONE - ARTERIAL ROAD
INFORMATION SIGN (TC-22)

SCALE: NTS STA. TO STA.

F.A.P. RTE. 336	SECTION 2021-024-R5	COUNTY MCHENRY	TOTAL SHEETS 28	SHEET NO. 26
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62N56	

LOOPS NEXT TO SHOULDERS

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



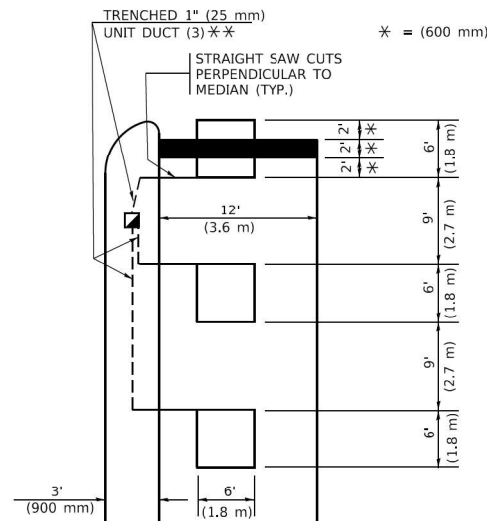
* = (600 mm)

** 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.

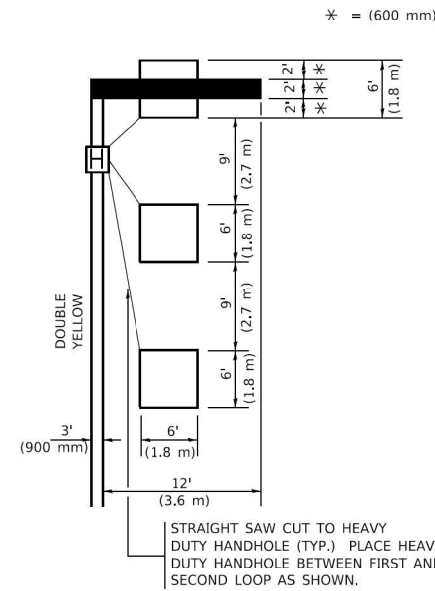


** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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

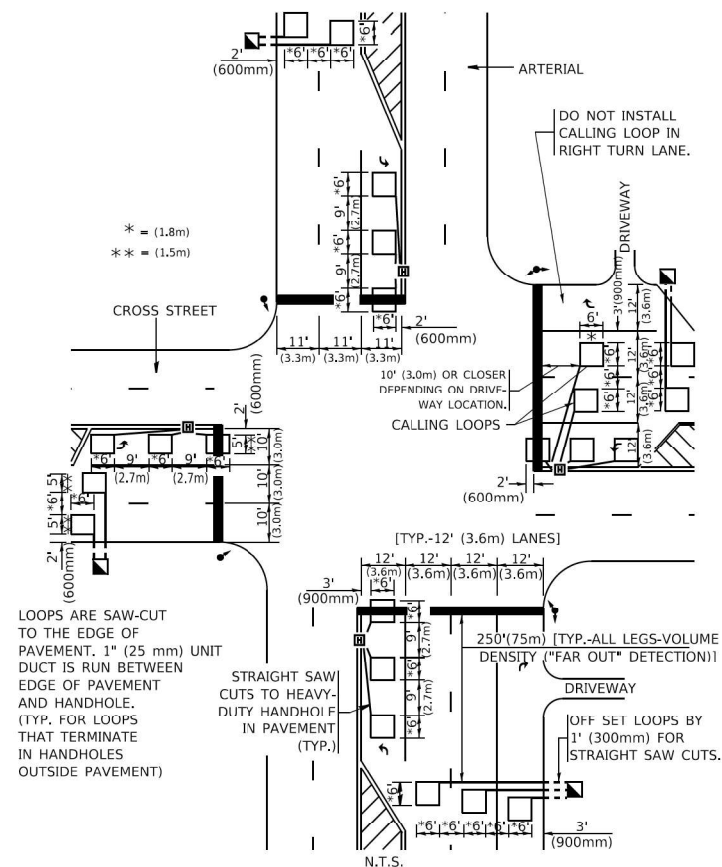
LEFT TURN LANES WITHOUT MEDIANS

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



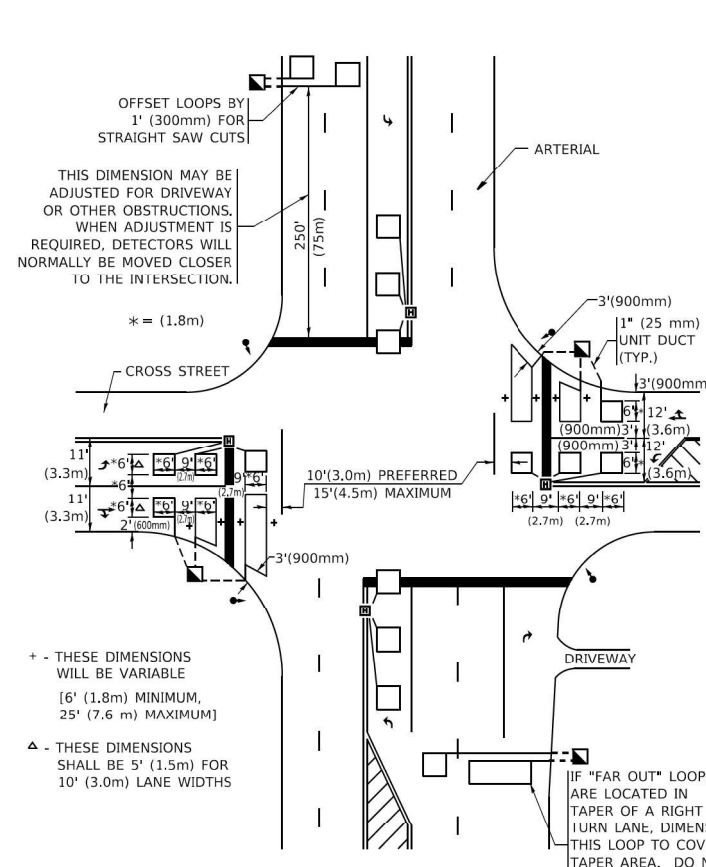
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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 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.

MODEL: P:\d\inf\... FILE NAME: P:\2020\2020-04-04-00_IDOT_Vehicle Phase 2 (TBE)_106 Item 16\Work Order 15102\CLCADD_Sheets\162\AS5-SHT-STANDARD-RS-15.dwg

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PLOT DATE = 10/15/2021	CHECKED - ACL	REVISED -
	DATE - 08/13/2021	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

SCALE: NTS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	2021-024-R5	MCHENRY	28	28
CONTRACT NO. 62N56				
ILLINOIS FED. AID PROJECT				