04-29-2022 LETTING ITEM 003

# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

D-91-489-20

SCI.K. SLAND

HERRY

BUREAU

WINTESIDC

LCE

DE GALB

WANTE

GRUNDY

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WA

PROPOSED HIGHWAY PLANS

FAP ROUTE 352: IL 137
BELVIDERE RD TO BUCKLEY RD
SECTION: 2020–090–RS&SW
PROJECT: NHPP–EDT0(503)

DESIGNED OVERLAY, ADA IMPROVEMENTS
LAKE COUNTY

C-91-287-20

R 11 E

SLINSET

GURNEE 131

HARDING

137

GRAND

HARDING

137

LOCATION MAP
(NOT TO SCALE)

PROJECT ENDS

STA. 193 + 77

NORTH CHICAGO

LAKE BLUFF

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THIS PROJECT IS LOCATED IN THE CITY OF WAUKEGAN

#### TRAFFIC DATA:

**ADT (2019)**;

0

STA. 12+66 TO STA. 142+59 (BUCKLEY RD TO 10TH ST): 10,000 STA. 142+59 TO STA. 193+77 (10TH ST TO BELVIDERE RD): 23,000

#### SPEED LIMIT:

STA. 13+21 TO STA. 56+73 (BUCKLEY RD TO MARTIN LUTHER KING JR. DR): 50 MPH STA. 56+73 TO STA. 113+11 (MARTIN LUTHER KING JR. DR TO 14TH ST): 30 MPH STA. 113+11 TO STA. 142+59 (14TH ST TO 10TH ST): 35 MPH STA. 142+59 TO STA. 182+06 (10TH ST TO GENESEE ST): 30 MPH

PROJECT BEGINS STA. 13 + 21

STA. 182 + 06 TO STA. 193 + 77 (GENESEE ST TO BELVIDERE RD): 55 MPH

100' 200' 300' — 1"= 100'

10' 20' 30' — 1"= 10'

0 50' 100'

1"= 40'

1"= 40'

1"= 30'

1"= 20'

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

J.U.L.I.E.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS
1-800-892-0123
OR 811

PROJECT ENGINEER: LUKASZ POCIECHA (847) 705-4255

PROJECT MANAGER: FAWAD AQUEEL

PROJECT LENGTH = 18,056 FT. = 3.42 MILE

SHIELDS & WAUKEGAN TOWNSHIPS

CONTRACT NO. 62L68

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED CAMARY 28 20 22

REGIONAL ENGINEER

March 25

ENGINEER OF DESIGN AND SUUROMMENT

March 29

DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION 2

LOCATION OF SECTION INDICATED THUS: --

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

#### LIST OF STATE STANDARDS

	INDEA OF SHEETS		LIST OF STATE STANDARDS
		STANDARD NO.	DESCRIPTION
SHEET NO.	DESCRIPTION	000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
1	COVERSHEET	420001-10	PAVEMENT JOINTS
2	INDEX OF SHEETS & STANDARDS	420111-04	PCC PAVEMENT ROUNDOUTS
3	GENERAL NOTES	424001-11	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
3		424006-05	DIAGONAL CURB RAMPS FOR SIDEWALKS
4 - 9	SUMMARY OF QUANTITIES	424011-04	CORNER PARALLEL CURB RAMPS FOR SIDEWALKS
10 - 12	TYPICAL SECTIONS	424021-06	DEPRESSED CORNER FOR SIDEWALKS
13 - 19	ROADWAY PLANS	424031-02	MEDIAN PEDESTRIAN CROSSING
20	SIDEWALK CURB RAMP DETAILS	442101-09	CLASS B PATCHES
21 - 45	TRAFFIC SIGNAL MODIFICATION PLANS	442201-03	CLASS C AND D PATCHES
46	BD-01: DRIVEWAY DETAILS - DISTANCE BETWEEN R.OW. AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 M)	602301-04	INLET, TYPE A
47	BD-02: DRIVEWAY DETAILS - DISTANCE BETWEEN R.OW. AND FACE OF CURB & EDGE OF SHOULDER < 15' (4.5 M)	602402-03	PRECAST MANHOLE, TYPE A, 5' (1.52 M) DIAMETER
		604021-04	BASE, FRAME AND LIDS, TYPE 5
48	BD-08: DETAILS FOR FRAMES AND LIDS ADJUSTEMENT WITH MILLING	604046-03	FRAME AND GRATE, TYPE 10
49	BD-22: PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT	604051-04	FRAME AND GRATE, TYPE 11
50	BD-24: CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT	604086-05	FRAME AND GRATE, TYPE 23
51	BD-32: BUTT JOINT AND HMA TAPER DETAILS	606001-08	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
52	TC-08: ENTRANCE AND EXIT RAMP CLOSURE DETAILS	606301-04	PC CONCRETE ISLANDS AND MEDIANS
53	TC-10: TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS	701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE
54	TC-11: TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)	701101-05	OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE
		701301-04 701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS
55 - 56	TC-12: MULTI-LANE FREEWAY PAVEMENT MARKING DETAILS	701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY  LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS ? 45 MPH
57	TC-13: DISTRICT ONE TYPICAL PAVEMENT MARKINGS	701411-09	LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS ? 45 MPH TO 55 MPH
58	TC-14: TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)	701421-00	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS ? 45 MPH
59	TC-16: SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS	701427-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS ? 40 MPH
60	TC-17: TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES	701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
61	TC-22: ARTERIAL ROAD INFORMATION SIGN	701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
62 - 63	TC-23: TYPICAL SUPPLEMENTAL SIGNING AND PAVEMENT MARKING TREATMENT FOR RAILROAD CROSSINGS	701606-10	URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
64	TS-07: DETECTOR LOOP INSTALLATION DETAILS FRO ROADWAY RESURFACING	701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
65	PD-01: PROJECT DETAIL FOR SINGLE PERPENDICULAR CURB RAMPS	701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
		701901-08	TRAFFIC CONTROL DEVICES
66	PD-04: PROJECT DETAIL FOR SINGLE PERPENDICULAR CURB RAMPS WITH TURNING SPACE	720001-01	SIGN PANEL MOUNTING DETAILS
67	PD-06: PROJECT DETAIL FOR PARALLEL CURB RAMPS	720006-04	SIGN PANEL ERECTION DETAILS
68	PD-11: CRACK & JOINT SEALING DETAIL	780001-05	TYPICAL PAVEMENT MARKINGS
		886001-01	DETECTOR LOOP INSTALLATIONS
		886006-01	TYPICAL LAYOUT FOR DETECTION LOOPS

USER NAME = rostkowskir	DESIGNED	-	RR	REVISED -	
	DRAWN	-	RR	REVISED -	
PLOT SCALE = 100.0000 / in.	CHECKED	-	LP	REVISED -	
PLOT DATE = 2/7/2022	DATE	-	2/4/2022	REVISED -	

#### GENERAL NOTES

- 1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.
- 2. TEN (10) FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURBS AND GUTTER AND MEDIANS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.
- 3. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, CITY OF WAUKEGAN, CITY OF NORTH CHICAGO.
- 4. THE CONTRATOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- 5. USE #8 EPOXY-COATED TIE BARS, CONFORMING TO ART. 1006.10 OF THE STANDARD SPECIFICATIONS, FOR ALL TIE BARS. USE THE "LONGITUDINAL CONSTRUCTION JOINT (TIE BAR GROUTED IN PLACE)" DETAIL SHOWN ON HIGHWAY STANDARD 420001 FOR ALL LONGITUDINAL JOINTS.
- 6. ANY PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS OBLITERATED BY MILLING AND RESURFACING OPERATIONS ON SIDE STREETS AND ENTRANCES SHALL BE REPLACED AND PAID FOR IN KIND.
- 7. ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE DEPARTMENT.
- 8. 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 SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- 9. ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 10. LOCATION OF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 11. DRAINAGE ADJUSTEMENT OR RECONSTRUCTION LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 12. FRAMES AND GRATES ADJUSTMENT OF PRIVATE UTILITIES WITHIN THE LIMITS OF THE IMPROVEMENTS SHALL BE DONE BY THEIR RESPECTIVE OWNERS AND ARE NOT PART OF THIS CONTRACT.
- 13. SIDEWALK REMOVAL AND PCC SIDEWALK 5" LOCATIONS SHALL BE DETERMINED BY THE ENGINEER.
- 14. SIDEWALK RAMP MODIFICATIONS WITHIN THE LIMITS OF THE PROJECT SHALL CONFIRM TO THE APPLICABLE HIGHWAY STANDARDS INCLUDED IN THE PLANS.
- 15. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- 16. THE CONTRACTOR SHALL CONTACT THE IDOT DISTRICT ONE ARTERIAL TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- 17. THE RESIDENT ENGINEER SHALL CONTACT FADI SULTAN, AREA TRAFFIC FIELD ENGINEER, VIA EMAIL AT FADI.SULTAN@ILLINOIS.GOV A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- 18. THE THICKNESS OF THE HMA MIXTURE SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULATIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA MIXTURE IS PLACED.
- 19. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTIES AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- 20. 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 SEPERATE PAY ITEM HAS BEEN PROVIDED.
- 21. ALL CLASS B PAVEMENT PATCHING WHICH REQUIRES FRAMES AND GRATES TO BE ADJUSTED SHALL BE CONSTRUCTED UTILIZING "CAST IN PLACE" ALTERNATE ACCORDING TO STATE HIGHWAY STANDARD 420111 FOR "PCC PAVEMENT ROUNDOUTS".
- 22. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- 23. DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" SHOWN IN THE PLANS.

- 24. PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES.
- 25. PROPOSED MODIFIED URETHANE PAVEMENT MARKINGS ARE TO BE PLACED DIRECTLY OVER EXISTING PAVEMENT MARKINGS ON PCC PAVEMENT, UNLESS NOTED OTHERWISE IN THE PLANS.
- 26. THE "ARTERIAL ROAD INFORMATION SIGN (TC-22)" IS APPLICABLE ONLY TO ARTERIAL ROADS AND SHALL NOT BE APPLIED TO EXPRESSWAYS/TOLLWAYS.
- 27. WHEN THE MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES (40 MM) WHERE THE SPEED LIMIT IS 40 MPH (80 KM/H) OR LESS AND 1 INCH (25 MM) WHERE THE SPEED LIMIT IS GREATER THAN 40 MPH (80 KM/H). WITH WRITTEN APPROVAL OF THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES (75 MM) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H) OR A NOTCHED LONGITUDINAL WEDGE IS USED.
- 28. MATERIALS RESULTING FROM THE ROUTING OF CRACKS IN THE EXISTING PAVEMENT MAY BE PLACED, SHAPED AND COMPACTED TO THE SATISFACTION OF THE ENGINEER ALONG EXISTING AGGREGATE SHOULDERS ADJACENT TO THE PAVEMENT. ALL MATERIALS RESULTING FROM THE ROUTING OF CRACKS IN PAVEMENT WITHOUT AGGREGATE SHOULDERS AND SURPLUS MATERIALS RESULTING FROM THE ROUTING OF CRACKS IN PAVEMENTS WITH AGGREGATE SHOULDERS, WHERE ALL MATERIALS ARE NOT PLACED ALONG EXISINT AGGREGATE SHOULDERS, SHALL BE DISPOSED OF AS SPECIFIED IN ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS. OLD SEALANTS REMOVED PRIOR TO ROUTING SHALL BE DISPOSED OF AS SPECIFIED IN ARTICLE 202.03. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT THE COST SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICE FOR THE CONSTRUCTION ITEMS INVOLVED, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 29. WHEN GRADE CROSSINGS EXIST EITHER WITHIN OR IN THE VICINITY OF A TCC ZONE, LANE RESTRICTIONS, FLAGGING, OR OTHER OPERATIONS SHALL NOT CREATE CONDITIONS WHERE VEHICLES CAN BE QUED ACROSS THE TRACKS. IF THE QUEUING OF VEHICLES ACROSS THE TRACKS CANNOT BE AVOIDED, A UNIFORMED LAW ENFORCEMENT OFFICER OR FLAGGER SHALL BE PROVIDED AT THE CROSSING TO PREVENT VEHICLES FROM STOPPING ON THE TRACKS, EVEN IF AUTOMATIC WARNING DEVICES ARE IN PLACE.
- 30. THE CONTRACTOR MUST EXERCISE CAUTION WHEN MILLING AND PAVING UNDER THE RAILROAD STRUCTURE AS TO NOT CHANGE OR NEGATIVELY IMPAC THE MINIMUM VERTICAL CLEARANCE UNDER THE STRUCTURE.
- 31. THE CONTRACTOR IS TO USE UP FOLDER NUMBER (2297-58) WHEN COMMUNICATING WITH UNION PACIFIC RAILROAD.

USER NAME = rostkowskir	DESIGNED	-	RR	REVISED -
	DRAWN	-	RR	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED	-	LP	REVISED -
PLOT DATE = 3/17/2022	DATE		2/4/2022	REVISED -

	SUMMARY OF QUANTITIES		0005	CONSTRUCTION	ON TYPE	CODE		SUMMARY	OF QUANTITIES			0005		ONSTRUCT I	ON TYPE	CODE		
CODE NO	ITEM	UNIT	TOTAL QUANTITIES URBAN	0005 ROADWAY 80% NHPP (FED) 20% STATE LAKE COUNTY	0005 ROADWAY SIGNAL 80% NHPP 100% STATE (FED) 20% STATE LAKE COUNTY COUNTY			CODE NO		ITEM	UNIT	TOTAL QUANTITIES URBAN	0005 ROADWAY 80% NHPP (FED) 20% STATE LAKE COUNTY	0005 ROADWAY 100% STATE LAKE COUNTY	0021 SIGNAL 80% NHPP (FED) 20% STATE LAKE COUNTY			
20200100	EARTH EXCAVATION	CU YD	157	157				40604062	HOT MIX ASPHALT SUR	FACE COURSE, MIX "D",	TON	10095	10095					
									IL-9.5, N70									
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	426	426														
								40605026	POLYMERIZED HOT-MIX	( ASPHALT SURFACE COURSE,	TON	1713	1713					
25200110	SODDING, SALT TOLERANT	SQ YD	426	426					STONE MATRIX ASPHA	LT, 9.5, MIX "F", N80								
25200200	SUPPLEMENTAL WATERING	UNIT	19.2	19.2				42001300	PROTECTIVE COAT		SQ YD	2650	2650					
35501308	HOT-MIX ASPHALT BASE COURSE, 6"	SQ YD	8	8				42300200	PORTLAND CEMENT CO	DNCRETE DRIVEWAY PAVEMENT,	SQ YD	24	24					
									6 INCH									
35501316	HOT-MIX ASPHALT BASE COURSE, 8"	SQ YD	24	24				42300400	PORTLAND CEMENT CO	ONCRETE DRIVEWAY PAVEMENT,	SQ YD	71	71					
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	90914	90914					8 INCH									
40600370	LONGITUDINAL JOINT SEALANT	FOOT	46063	46063				42400200	PORTLAND CEMENT CO	ONCRETE SIDEWALK 5 INCH	SQ FT	13836	13836					
			400	100				40,40000			20.57	007	7.00					
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	180	180				42400800	DETECTABLE WARNING	55	SQ FT	827	827					
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	804	804				44000100	PAVEMENT REMOVAL		SQ YD	74	74					
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	449	449				44000159	HOT-MIX ASPHALT SUR	FACE REMOVAL, 2 1/2"	SQ YD	45626	45626					
40602985	HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N70	TON	8288	8288				44000164	HOT-MIX ASPHALT SUR	FACE REMOVAL, 3 3/4"	SQ YD	73993	73993					
40603200	POLYMERIZED HOT-MIX APSHALT BINDER COURSE,	TON	1885	1885				44000200	DRIVEWAY PAVEMENT	REMOVAL	SQ YD	125	125					
40004000	IL-4.75, N50	TON	4	4				44000600	SIDEWALK REMOVAL		SQ FT	14474	14474					
40604060	HOT MIX ASPHALT SURFACE COURSE, MIX "D",  IL-9.5, N50	TON	4	4				44002210	HOT-MIX ASPHALT REM	IOVAL OVER PATCHES, 2 1/2"	SQ YD	502	502					
																	* SPECIALT	TY ITEM
	USER NAME = rostkowskir  PLOT SCALE = 100.0000 ' / in.  PLOT DATE = 2/8/2022	DRAWN - CHECKED -	AR, RR RR LP 2/4/2022	REVISED REVISED REVISED REVISED	-		STATE OF DEPARTMENT OF T		TION	SUMAR <sup>1</sup> Il 137 (Belvide	Y OF QUAN ERE RD TO			F.A.P RTE. 352		TION D-RS&SW	COUNTY  LAKE  CONTRACT	TOTAL SH SHEETS N 68

	SUMMARY OF QUANTITIES						ON TYPE CODE		SUMM	ARY OF QUANTITIES						ON TYPE	CODE	
CODE NO	ITEM	UNIT	TOTAL QUANTITIES URBAN	0005 ROADWAY 80% NHPP (FED) 20% STATE	0005 ROADWAY	20% STATE		CODE NO	33.11	ITEM	UNIT	TOTAL QUANTITIES URBAN	20% STATE	0005 ROADWAY 100% STATE	0021 SIGNAL 80% NHPP (FED) 20% STATE			
44002212	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 3"	SQ YD	523	LAKE COUNTY 523	LAKE COUNTY	COUNTY		44201771	CLASS D PATCHE	ES, TYPE IV, 10 INCH	SQ YD	382	LAKE COUNTY 382	LAKE COUNTY	LAKE COUNTY			
11002212	THE PROPERTY OF THE PROPERTY O	04.15	325	323														
44002219	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 4 3/4"	SQ YD	1092	1092				44213200	SAW CUTS		FOOT	3928	3928					
44003100	MEDIAN REMOVAL	SQ FT	205	205				44213202	TIE BARS 1"		EACH	239	239					
44200050	WELDED WIRE REINFORCEMENT	SQ YD	211	211				45200100	JOINT OR CRACK	ROUTING (PC CONCRETE PAVEMENT	FOOT	12055	12055					
									AND SHOULDER	)								
44200970	CLASS B PATCHES, TYPE II, 10 INCH	SQ YD	443	443														
								45200300	JOINT OR CRACK	FILLING	POUND	3444	3444					
44200974	CLASS B PATCHES, TYPE III, 10 INCH	SQ YD	69	69				60255500	MANHOLES TO BI	E AD HISTED	EACH	2	2					
44200976	CLASS B PATCHES, TYPE IV, 10 INCH	SQ YD	141	141				60255500	WANHOLES TO BI	E ADJUSTED	EACH	2	2					
								60260100	INLETS TO BE AD	JUSTED	EACH	8	8					
44201299	DOWEL BARS 1 1/2"	EACH	1116	1116														
								60261530	INLETS TO BE AD	JUSTED WITH NEW TYPE 23 FRAME	EACH	4	4					
44201737	CLASS D PATCHES, TYPE I, 8 INCH	SQ YD	10	10					AND GRATE									
44201741	CLASS D PATCHES, TYPE II, 8 INCH	SQ YD	223	223				60266600	VALVE BOXES TO	) BE ADJUSTED	EACH	31	31					
44201745	CLASS D PATCHES, TYPE III, 8 INCH	SQ YD	23	23				60300305	FRAMES AND LID	S TO BE ADJUSTED	EACH	3	3					
44201747	CLASS D PATCHES, TYPE IV, 8 INCH	SQ YD	69	69				60404800	FRAMES AND GR.	ATES, TYPE 11	EACH	5	5					
44201761	CLASS D PATCHES, TYPE I, 10 INCH	SQ YD	51	51				60406100	FRAMES AND LID	S, TYPE 1, CLOSED LID	EACH	10	10					_
44201765	CLASS D PATCHES, TYPE II, 10 INCH	SQ YD	1233	1233				* 66900200	NON-SPECIAL WA	ASTE DISPOSAL	CU YD	157	157					
44201769	CLASS D PATCHES, TYPE III, 10 INCH	SQ YD	128	128				* 66900530	SOIL DISPOSAL A	NALYSIS	EACH	6	6					
																;	<b>♥</b> SPECIALT	Y ITEMS
	USER NAME = rostkowskir  PLOT SCALE = 100.0000 ' / in.	CHECKED -	RR LP	REVISED REVISED REVISED	-			TE OF ILLINOIS T OF TRANSPORTA	ATION	IL 137 (BELVIDE		BUCKLEY RD)		F.A.P. RTE. 352	SEC 2020-090	)-RS&SW	LAKE CONTRACT	TOTAL SHE SHEETS NO 68 S
	PLOT DATE = 2/8/2022	DATE -	2/4/2022	REVISED	-					SCALE: - SHEET 2 OF 6	SHEETS S	ΓΑ	TO STA			ILLINOIS FED. AII	D PROJECT	RFV-SI

	SUMMARY OF QUANTITIES		<u> </u>		CC	ONSTRUCTION TYP	E CODE	1	SLIMM	ARY OF QUANTITIES				CC	ONSTRUCT I	ON TYPE (	CODE	
CODE NO	ITEM	UNIT	TOTAL QUANTITIES URBAN	20% STATE LAKE	0005 ROADWAY 100% STATE	20% STATE LAKE		CODE NO	30141111	ITEM	UNIT	TOTAL QUANTITIES URBAN	20% STATE LAKE	0005 ROADWAY 100% STATE LAKE	20% STATE LAKE			
* 66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1	1	COUNTY	COUNTY		70300100	SHORT TERM PAN	/EMENT MARKING	FOOT	30892	30892	COUNTY	COUNTY			
* 66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION	L SUM	1	1				70300150	SHORT TERM PAN	/EMENT MARKING REMOVAL	SQ FT	17922	17922					
	REPORT																	
								70300211	TEMPORARY PAV	EMENT MARKING LETTERS AND	SQ FT	780	780					
* 66901006	REGULATED SUBSTANCES MONITORING	CAL DA	15	15					SYMBOLS - PAIN	г								
67100100	MOBILIZATION	L SUM	1	1				70300221	TEMPORARY PAV	EMENT MARKING - LINE 4"- PAINT	FOOT	50136	50136					
70100310	TRAFFIC CONTROL AND PROTECTION, STANDARD	L SUM	1	1				70300231	TEMPORARY PAV	EMENT MARKING - LINE 5"- PAINT	FOOT	2092	2092					
	701421																	
								70300241	TEMPORARY PAV	EMENT MARKING - LINE 6"- PAINT	FOOT	3990	3990					
		Γ.																
								70300251	TEMPORARY PAV	EMENT MARKING - LINE 8"- PAINT	FOOT	3343	3343					
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD	L SUM	1	1				70300261	TEMPORARY PAV	EMENT MARKING - LINE 12"- PAINT	FOOT	4936	4936					
	701501							70300281	TEMPORARY RAV	EMENT MARKING - LINE 24"- PAINT	FOOT	822	822					
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD	L SUM	1	1				70000231	TENII SIVAKI I AV	EMENT MANNING - LINE 24 - I AINT	1001	022	022					
- Godin	701606							70306100	TEMPORARY PAV	EMENT MARKING LETTERS AND	SQ FT	623	623					
1920-sht-SO									SYMBOLS - TYPE	III TAPE								
70102630 70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD	L SUM	1	1														
CADData(C	701601							70306120	TEMPORARY PAV	EMENT MARKING - LINE 4" - TYPE	FOOT	5859	5859					
SND148920									III TAPE									
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD	L SUM	1	1														
offices/Distr	701701							70307100	TEMPORARY PAV	EMENT MARKING LETTERS AND	SQ FT	238	238					
ents/IDOT C									SYMBOLS - TYPE	IV TAPE	1							
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD	L SUM	1	1														
v.com:	701801																	
-pw.pentley																1	SPECIALT	Y ITEMS
bow//vidool	USER NAME = rostkowskir		AR, RR	REVISED						SUMA	RY OF QUAN	 TITIES		F.A.P. RTE.	SEC	TION	COUNTY	TOTAL SHEE SHEETS NO
NAME NAME	PLOT SCALE = 100.0000 ' / in.	DRAWN - CHECKED -	RR LP	REVISED REVISED			STATE OF I DEPARTMENT OF TR		TION	IL 137 (BELVIC	ERE RD TO	BUCKLEY RD	)	352			LAKE CONTRACT	68 6
	PLOT DATE = 2/8/2022	DATE -	2/4/2022	REVISED	-					SCALE: - SHEET 3 OF	6 SHEETS S	TA	TO STA			ILLINOIS FED. AID		REV-SI

	SUMMARY OF QUANTITIES			000-		ONSTRUCT I	ON TYPE	CODE		SUMN	 MARY OF QUANTITIES			6005			N TYPE CODE
CODE NO	ITEM	UNIT	TOTAL QUANTITIES URBAN	0005 ROADWAY 80% NHPP (FED) 20% STATE LAKE	0005 ROADWAY 100% STATE LAKE	80% <b>N</b> HPP			CODE NO		ITEM	UNIT	TOTAL QUANTITIES URBAN	0005 ROADWAY 80% NHPP (FED) 20% STATE LAKE	0005 ROADWAY 100% STATE	0021 SIGNAL 80% NHPP (FED) 20% STATE LAKE	
70207420	TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE	FOOT	9858	COUNTY 9858	COUNTY	COUNTY			* 78000650	THEDMODI ASTIC	PAVEMENT MARKING - LINE 24"	FOOT	881	COUNTY 881	COUNTY	COUNTY	
70307120		1001	9000	9000					7800050	THERMOPLASTIC	FAVEWENT WARRING - LINE 24	1001	001	001			
	IV TAPE																
									* 78009000	MODIFIED URETI	HANE PAVEMENT MARKING - LETTERS	SQ FT	171	171			
70307130	TEMPORARY PAVEMENT MARKING - LINE 6" - TYPE	FOOT	977	977						AND SYMBOLS							
	IV TAPE																
									* 78009004	MODIFIED URETI	HANE PAVEMENT MARKING - LINE 4"	FOOT	5819	5819			
70307140	TEMPORARY PAVEMENT MARKING - LINE 8" - TYPE	FOOT	164	164													
	IV TAPE								* 78009005	MODIFIED URETI	HANE PAVEMENT MARKING - LINE 5"	FOOT	386	386			
70307160	TEMPORARY PAVEMENT MARKING - LINE 12"- TYPE	FOOT	518	518					* 78009006	MODIFIED URETI	HANE PAVEMENT MARKING - LINE 6"	FOOT	1310	1310			
	IV TAPE																
									* 78009008	MODIFIED URETI	HANE PAVEMENT MARKING - LINE 8"	FOOT	427	427			
70307210	TEMPORARY PAVEMENT MARKING - LINE 24"- TYPE	FOOT	204	204													
	IV TAPE								* 78009012	MODIFIED URETI	HANE PAVEMENT MARKING - LINE 12"	FOOT	913	913			
									]   1000012					1			
			<u> </u>	_					1 7000004		TANE DAYENER TANABUMA LINE OF	5007	140	140	<u> </u>		
72400500	RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	5	5					* 78009024	MODIFIED UKETI	HANE PAVEMENT MARKING - LINE 24"	FOOT	142	142			
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND	SQ FT	919	919					* 78100100	RAISED REFLECT	TIVE PAVEMENT MARKER	EACH	1382	1382			
	SYMBOLS																
t-S00.dgr									78300200	RAISED REFLEC	TIVE PAVEMENT MARKER REMOVAL	EACH	1382	1382			
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	64003	64003													
Design/D:									78300202	PAVEMENT MAR	KING REMOVAL - WATER BLASTING	SQ FT	30227	30227			
* 78000300	THERMOPLASTIC PAVEMENT MARKING - LINE 5"	FOOT	1706	1706													
\D148920									* 81028200	UNDERGROUND	CONDUIT, GALVANIZED STEEL, 2"	FOOT	309			309	
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	4006	4006						DIA.							
s/District																	
5 * 78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	3061	3061													
uments/IC																	
9 * 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	5307	5307													
W.com:PM									1								
-pw.bentit									1								* SPECIALTY IT
pw://iidot	USER NAME = rostkowskir	DESIGNED -	AR, RR	REVISED	-						A1122.5	A 02 00.22	TITICO		F.A.P. RTE.	SECTION	ON COUNTY TOTAL SHEETS
E NAME:		DRAWN - CHECKED -	RR LP	REVISED REVISED	-		ı	STATE OF DEPARTMENT OF		TION	SUMAR IL 137 (BELVIDE	Y OF QUAN ERE RD TO		)	352		
<u> </u>	PLOT DATE = 2/8/2022	DATE -	2/4/2022	REVISED	-						SCALE: - SHEET 4 OF 6	SHEETS S	TA	TO STA		II	LINOIS FED. AID PROJECT

	SUMMARY OF QUANTITIES		1		TRUCTION TYP	E CODE	T	C1 IMMN/	MARY OF QUANTITIES		I			NSTRUCTI	ON TYPE	CODE	
CODE NO	I TEM	UNIT	TOTAL QUANTITIES	ROADWAY   ROADWAY   S   80% NHPP   100% STATE   (20% STATE   20%	0021 IGNAL % NHPP FED) 6 STATE		CODE NO	301111	ITEM	UNIT	TOTAL QUANTITIES	20% STATE	0005 ROADWAY 100% STATE	0021 SIGNAL 80% NHPP (FED) 20% STATE			
		Γ-	URBAN		LAKE DUNTY		* 88600100	DETECTOR LOOF	P, TYPE I	FOOT	URBAN 3900	LAKE COUNTY	LAKE COUNTY	LAKE COUNTY 3900			
* 0500000	MAINTENANCE OF EVICTING TRAFFIC CIONAL	FACIL	8		0		* 88600600	DETECTOR LOOF	D DEDI ACEMENT	FOOT	270			270			
* 85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL  INSTALLATION	EACH	°		8		88800000	DETECTOR LOOP	REFLACEIVIENT	1001	270			210			
							* 89500100	RELOCATE EXIST	TING SIGNAL HEAD	EACH	1			1			
* 87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	2452		2452												
							* 89500200	RELOCATE EXIST	TING PEDESTRIAN SIGNAL HEAD	EACH	7			7			
* 87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1070		1070		* 89501150	DELOCATE EVIST	TING TRAFFIC SIGNAL POST	EACH				2			
* 87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	430		430		69501150	RELOCATE EXIST	TING TRAFFIC SIGNAL FOST	EACH	2			2			
							* 89502200	MODIFY EXISTING	G CONTROLLER	EACH	1			1			
* 87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT	FOOT	585		585												
	GROUNDING CONDUCTOR, NO. 6 1C						* 89502300	REMOVE ELECTR	RIC CABLE FROM CONDUIT	FOOT	3680			3680			
											<u> </u>						
							* 89502350	CONDUIT	EINSTALL ELECTRIC CABLE FROM	FOOT	40			40			
* 87800100	CONCRETE FOUNDATION, TYPE A	FOOT	8		8												
							* 89502375	REMOVE EXISTIN	NG TRAFFIC SIGNAL EQUIPMENT	EACH	7			7			
* 87900200	DRILL EXISTING HANDHOLE	EACH	17		17												
							* 89502376	REBUILD EXISTIN	NG HANDHOLE	EACH	10			10			
* 88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET  MOUNTED	EACH	1		1		* 89502385	DEMOVE EXISTIN	NG CONCRETE FOUNDATION	EACH	3			3			
	MOUNTED						09302303	NEWOVE EXISTIN	NG CONCILLET CONDITION	LACIT				3			
* 88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM	EACH	1		1		X0320050	CONSTRUCTION	LAYOUT (SPECIAL)	L SUM	1	1					
	MOUNTED																
* 88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET  MOUNTED WITH COUNTDOWN TIMER	EACH	8		8		* X1400367	PEDESTRIAN SIG	SNAL POST 10 FT	EACH	4			4			
									· · · ·					-			
															:	* SPECIALT	
	USER NAME = rostkowskir  PLOT SCALE = 100.0000 ' / in.	DRAWN - CHECKED -	AR, RR RR LP	REVISED - REVISED - REVISED -		STATE OF II		TION	IL 137 (BELVI		BUCKLEY RD		F.A.P. RTE. 352	SEC <sup>-</sup> 2020-090	D-RS&SW	LAKE CONTRACT	TOTAL SHE NO 68 8
	PLOT DATE = 2/8/2022	DATE -	2/4/2022	REVISED -					SCALE: - SHEET 5 OF	6 SHEETS S	IA	TO STA			ILLINOIS FED. AII		REV-SE

	SUMMARY OF QUANTITIES			0005			ON TYPE COD	DE ,			SUMMA	RY OF QUANTITIES			0005		ONSTRUCTI	ON TYPE C	CODE	
CODE NO	ITEM	UNIT	TOTAL QUANTITIE	0005 ROADWAY 80% NHPP S (FED) 20% STATI	100% STATE	0021 SIGNAL 80% NHPP (FED) 20% STATE				CODE NO		ITEM	UNIT	TOTAL QUANTITIES	0005 ROADWAY 80% NHPP (FED) 20% STATE	0005 ROADWAY 100% STATE	0021 SIGNAL 80% NHPP (FED) 20% STATE			
			URBAN	LAKE COUNTY	LAKE COUNTY	LAKE COUNTY								URBAN	LAKE COUNTY	LAKE COUNTY	LAKE COUNTY			1
* X1400378	PEDESTRIAN SIGNAL POST, 5 FT.	EACH	10			10				Z0018500	DRAINAGE STRUC	TURES TO BE CLEANED	EACH	285		285				
X4060995	TEMPORARY RAMP, SPECIAL	SQ YD	88	88						Z0018600	DRAINAGE STRUC	TURES TO BE RECONSTRUCTED	EACH	16	16					
X4400501	COMBINATION CURB AND GUTTER REMOVAL AND	FOOT	409	409						Z0030850	TEMPORARY INFO	RMATION SIGNING	SQ FT	51.4	51.4					
	REPLACEMENT LESS THAN OR EQUAL TO 10 FEET																			
										* Z0033044	RE-OPTIMIZE TRAF	FFIC SIGNAL SYSTEM LEVEL 1	EACH	3			3			
X4401198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE	SQ YD	1831	1831																
	DEPTH									* Z0033046	RE-OPTIMIZE TRAI	FFIC SIGNAL SYSTEM LEVEL 2	EACH	1			1			
X5537800	STORM SEWERS TO BE CLEANED 12"	FOOT	2000		2000					Z0048665	RAILROAD PROTE	CTIVE LIABILITY INSURANCE	L SUM	1	1					
X6026050	SANITARY MANHOLES TO BE ADJUSTED	EACH	19	19					ø	Z0076600	TRAINEES		HOURS	500	500					
									Ø	Z0076604	TRAINEES - TRAININ	IG PROGRAM GRADUATE	HOURS	500	500					
X6026051	SANITARY MANHOLES TO BE RECONSTRUCTED	EACH	16	16																<u> </u>
										88200410	TRAFFIC SIGNAL BA	CKPLATE, LOUVERED, FORMED PLASTIC	EACH	1	1					
X6030310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	168	168	1					89502380	REMOVE EXISTING	HANDHOLF	EACH	1	1					<u> </u>
X6700407	ENGINEERS'S FIELD OFFICE, TYPE A (D1)	CAL MO	12	12						03302300	KEMOVE EXISTING	INADIOLE	LACIT		_					
										X1400388	VIDEO VEHICLE DET	ECTION SYSTEM, SINGLE APPROACH	EACH	4	4					
* X8760200	ACCESSIBLE PEDESTRIAN SIGNALS	EACH	46			46														
* X8780012	CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	56			56														
Z000 4562	COMBINATION CONCRETE CURB AND GUTTER REMOVAL	FOOT	3722	3722																
	AND REPLACEMENT																			
Z0018400	DRAINAGE STRUCTURES TO BE ADJUSTED	EACH	117	117																
																		*	SPECIALT	Y ITE
	USER NAME = rostkowskir	DESIGNED -	AR, RR	REVISE	<u> </u>							CHIARA	DV OF CUAN	ITITICE		F.A.P RTE.	SECT			Ø 004 TOTAL SHEETS
		DRAWN -	RR LP	REVISE	) -		BE B		E OF IL		TION	SUMAF IL 137 (BELV <b>I</b> D	RY OF QUAN ERE RD TO		)	352		D-RS&SW	LAKE	68 (
	<u> </u>		2/4/2022	REVISE			DEP	~n i ivi€i¥ i	OF IR	ANSPORTA	, , , O M		6 SHEETS		TO STA	<u> </u>		ILLINOIS FED. AID	CONTRACT	NO. 62

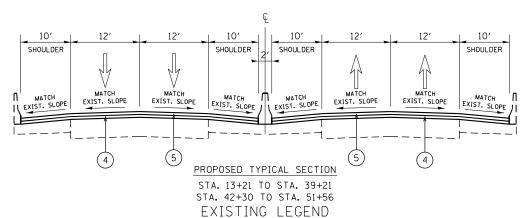
(A4)

(A6)

EXISTING TYPICAL SECTION STA. 13+21 TO STA. 39+21 STA. 42+30 TO STA. 51+56

(A6) (E) (A6)

#### IL 137 (BOBBY E. THOMPSON EXPY)



(A1) HOT-MIX ASPHALT, 21/2" & VARIES

10′

SHOULDER

IL EXIST. SLOPE

(A6)

(A4)

- (B2) P.C.C. BASE COURSE, 10" & VARIES
- HOT-MIX ASPHALT, 3" & VARIES
- COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (A3) HOT-MIX ASPHALT, 43/4" & VARIES
- (C2) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18
- HOT-MIX ASPHALT, 14" & VARIES
- COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- (A5) HOT-MIX ASPHALT, 141/2" & VARIES
- COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.18
- HMA SHOULDER, 10" & VARIES
- P.C.C. SIDEWALK, 5"
- P.C.C. BASE COURSE, 8" & VARIES
- CONCRETE BARRIER

HOT-MIX ASPHALT MIXTURE REQUIREMENTS	5	QUALITY MANAGEMENT
MIXTURE TYPE	AIR VOIDS(%) @ Ndes	PROGRAM (QMP)
PAVEMENT		
POLYMERIZED HMA BINDER COURSE, IL-4.75, N50; 3/4"	3.5% <b>©</b> 50 GYR.	OCP
HMA BINDER COURSE, IL-9.5, N70; 2"	4% @ 70 GYR.	OCP
HMA SURFACE COURSE, MIX "D", IL-9.5, N70; 1¾"	4% @ 70 GYR.	PFP
POLYMERIZED HMA SURFACE COURSE, SMA, 9.5, MIX "F", N80; 13/4"	3.5% @ 80 GYR.	OCP
PATCHING		
CLASS D PATCH (HMA BINDER IL-19 mm)	4% @ 70 GYR.	OC/OA
HMA REPLACEMENT OVER PATCHES (HMA BINDER IL-19 mm)	4% @ 70 GYR.	OC/OA
DRIVEWAYS		
HMA BASE COURSE (HMA BINDER IL-19 mm); PE - 6", CE - 8"	4% @ 50 GYR.	OC/OA
HMA SURFACE COURSE, MIX "D", IL-9.5, N50; 2"	4% @ 50 GYR.	OC/OA
TEMPORARY RAMP, SPECIAL		
HMA BINDER COURSE IL-9.5 N70	4% @ 70 GYR.	OC/OA
OMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA); QUALITY CO	ONTROL FOR PERFORMANCE (QC	CP); PAY FOR PERFORMANCE (PFP)

PORTLAND CEMENT CONCRETE BRIDGE RESURFACING OMISSION STA. 39+21 TO STA. 42+30

PORTLAND CEMENT CONCRETE SEGMENTS

FOR CLASS B PATCHING, CRACK ROUTING & FILLING STA. 51+56 TO STA. 60+25 STA. 77+05 TO STA. 80+10

THE CONTRACTOR SHALL PATCH FIRST BEFORE MILLING

10' 10' 8′ SHOULDER EXIST. SLOPE EXIST. SLOPE EXIST. SLOPE [I] TY [I] (C1) (B2) (A2) EXISTING HMA EXISTING HMA OVER GUTTER OVER GUTTER EXISTING TYPICAL SECTION VARIOUS LOCATIONS FROM: VARIOUS LOCATIONS FROM: STA. 60+25 TO STA. 61+49 STA. 62+49 TO STA. 67+50 STA. 60+25 TO STA. 77+05 STA. 62+82 TO STA. 70+53 NOTE: HMA REMOVAL OVER STA. 71+10 TO STA. 77+00 GUTTER PAID AS HMA SURFACE REMOVAL, NOTE: HMA REMOVAL OVER GUTTER PAID AS HMA VARIABLE DEPTH SURFACE REMOVAL. VARIABLE DEPTH

IL 137 (SHERIDAN RD)

HMA SURFACE REMOVAL

OVER GUTTER

VARIOUS LOCATIONS FROM:

STA. 62+49 TO STA. 67+50

NOTE: HMA OVER

GUTTER INCLUDED WITH

APPROPRIATE SURFACE MIX

LAKE 68 10 CONTRACT NO. 62L68

10' 10' SHOULDER MATCH EXIST. SLOPE EXIST. SLOPE HMA SURFACE COURSE HMA SURFACE COURSE PROPOSED TYPICAL SECTION STA. 60+25 TO STA. 77+05 PROPOSED HMA

IL 137 (SHERIDAN RD)

PROPOSED LEGEND HMA SURFACE REMOVAL, 21/2"

HMA SURFACE REMOVAL, 33/4"

POLYMERIZED HMA BINDER COURSE, IL-4.75, N50; 3/4"

HMA BINDER COURSE, IL-9.5, N70; 2"

HMA SURFACE COURSE, MIX "D", IL-9.5, N70; 13/4"

(6) POLYMERIZED HMA SURFACE COURSE, SMA, 9.5, MIX "F", N80; 13/4"

COMB. CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT & P.C.C. SIDEWALK, 5" (LOCATIONS DETERMINED BY THE ENGINEER)

NOTE 1: THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTATIES IS 112 LBS/SQ YD/IN.

PROPOSED HMA

OVER GUTTER

VARIOUS LOCATIONS FROM:

STA. 60+25 TO STA. 61+49

STA. 62+82 TO STA. 70+53

STA. 71+10 TO STA. 77+00

NOTE: HMA OVER

GUTTER INCLUDED WITH APPROPRIATE SURFACE MIX

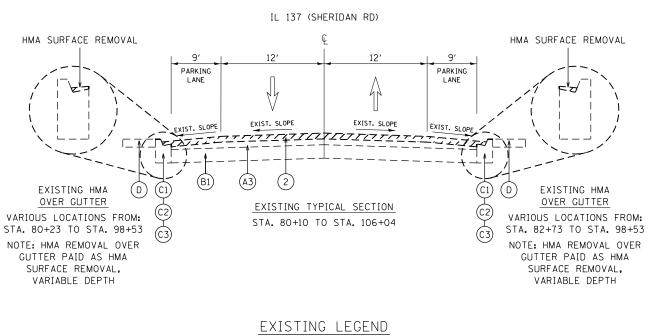
HMA SURFACE REMOVAL

NOTE 2: THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76 -22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64 -22" UNLESS MODIFIED BY RECLAIMED MATERIALS SPECIFICATIONS.

NOTE 3: THE LONGITUDINAL JOINT SEALANT SHALL BE PLACED OVER THE POLY. HMA BC IL-4.75 AND OVER THE HMA BC IL-9.5.

USER NAME = FOSTROWSRIF	DRAWN -	AR	REVISED -	STATE OF ILLINOIS
PLOT SCALE = 100.0000 / in.	CHECKED -	LP	REVISED -	DEPARTMENT OF TRANSPORTATION
PLOT DATE = 3/17/2022	DATE -	2/4/2022	REVISED -	

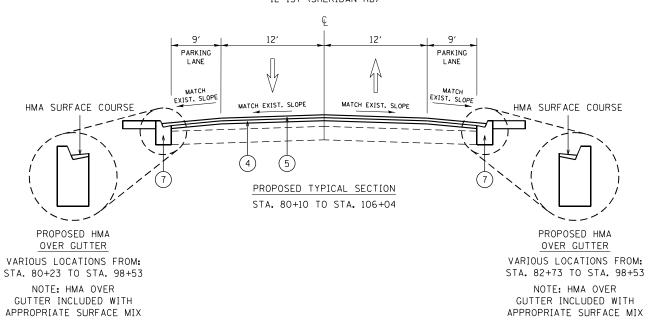
TATE OF ILLINOIS			TYPICA	AL SECT	IONS		F.A.P. RTE	SECTION	1
		II 137 /R	EI VINER	F RN T	O BUCKLEY RD)		352	2020-090-RS	&S1
ENT OF TRANSPORTATION		IL 137 (D	LLVIDLI	יו שוו ב	O DOUNELL HD				
	CCALE	CHEET	O.F.	CHEETC	CTA	TO CTA			



- (A1) HOT-MIX ASPHALT, 21/2" & VARIES
  - HOT-MIX ASPHALT, 3" & VARIES
- (A3) HOT-MIX ASPHALT, 4¾" & VARIES
- A4) HOT-MIX ASPHALT, 14" & VARIES
- (A5) HOT-MIX ASPHALT, 141/2" & VARIES
- (A6) HMA SHOULDER, 10" & VARIES
- (B1) P.C.C. BASE COURSE, 8" & VARIES

- (B2) P.C.C. BASE COURSE, 10" & VARIES
- (C1) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18
- COMPINATION CONCRETE CURR AND CUTTER TYPE R C 24
- C3 COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- (C4) COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.18
- (D) P.C.C. SIDEWALK, 5"
- (E) CONCRETE BARRIER

IL 137 (SHERIDAN RD)



HMA SURFACE REMOVAL HMA SURFACE REMOVAL 10' EXIST. SLOPE EXIST. SLOPE (B2) EXISTING HMA EXISTING HMA OVER GUTTER OVER GUTTER EXISTING TYPICAL SECTION VARIOUS LOCATIONS FROM: VARIOUS LOCATIONS FROM: STA. 106+04 TO STA. 182+79 STA. 109+99 TO STA. 110+69 STA. 118+88 TO STA. 134+82 STA. 113+74 TO STA. 140+34 STA. 147+93 TO STA. 177+45

IL 137 (SHERIDAN RD/GENESEE ST)

(A3)-(2) STA. 106+04 TO STA. 117+54

(A2)-(1) STA. 117+54 TO STA. 142+59 (A1)-(1) STA. 142+59 TO STA. 182+79

PROPOSED LEGEND

- ) HMA SURFACE REMOVAL, 21/2"
- 2) HMA SURFACE REMOVAL, 3¾"

STA. 143+35 TO STA. 176+59

NOTE: HMA REMOVAL OVER

GUTTER PAID AS HMA

SURFACE REMOVAL,

VARIABLE DEPTH

VARIOUS LOCATIONS FROM:

STA. 109+99 TO STA. 110+69 STA. 113+74 TO STA. 140+34

STA. 143+35 TO STA. 176+59

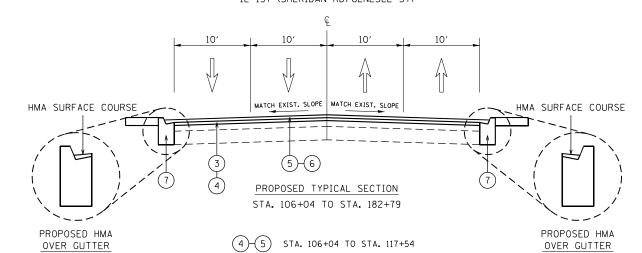
NOTE: HMA OVER

GUTTER INCLUDED WITH

APPROPRIATE SURFACE MIX

- 3) POLYMERIZED HMA BINDER COURSE, IL-4.75, N50; 3/4"
- 4) HMA BINDER COURSE, IL-9.5, N70; 2"
- (5) HMA SURFACE COURSE, MIX "D", IL-9.5, N70; 13/4"
- (6) POLYMERIZED HMA SURFACE COURSE, SMA, 9.5, MIX "F", N80; 1¾"
- 7) COMB. CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT & P.C.C. SIDEWALK, 5" (LOCATIONS DETERMINED BY THE ENGINEER)

IL 137 (SHERIDAN RD/GENESEE ST)



(3)-(5) STA. 117+54 TO STA. 166+21

(3)-(6) STA. 166+21 TO STA. 182+79

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
IL 137 (BELVIDERE RD TO BUCKLEY RD)

VARIOUS LOCATIONS FROM: STA. 118+88 TO STA. 134+82

STA. 147+93 TO STA. 177+45

NOTE: HMA OVER

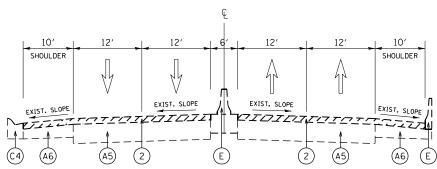
GUTTER INCLUDED WITH

APPROPRIATE SURFACE MIX

NOTE: HMA REMOVAL OVER

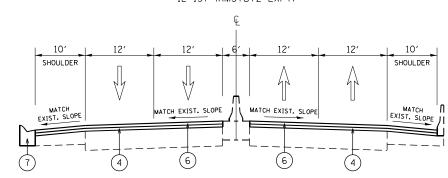
GUTTER PAID AS HMA SURFACE REMOVAL,

VARIABLE DEPTH



EXISTING TYPICAL SECTION
STA. 182+79 TO STA. 193+77

IL 137 (AMSTUTZ EXPY)



PROPOSED TYPICAL SECTION STA. 182+79 TO STA. 193+77

#### EXISTING LEGEND

- (A1) HOT-MIX ASPHALT, 21/2" & VARIES
- (A2) HOT-MIX ASPHALT, 3" & VARIES
- A3) HOT-MIX ASPHALT, 4¾" & VARIES
- 44) HOT-MIX ASPHALT, 14" & VARIES
- A5) HOT-MIX ASPHALT, 141/2" & VARIES
- A6) HMA SHOULDER, 10" & VARIES
- B1) P.C.C. BASE COURSE, 8" & VARIES
- B2) P.C.C. BASE COURSE, 10" & VARIES
- C1) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (C2) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18
- (C3) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- C4 COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.18
- D P.C.C. SIDEWALK, 5"
- (E) CONCRETE BARRIER

#### PROPOSED LEGEND

- 1) HMA SURFACE REMOVAL, 21/2"
- (2) HMA SURFACE REMOVAL, 3¾"
- (3) POLYMERIZED HMA BINDER COURSE, IL-4.75, N50; ¾"
- (4) HMA BINDER COURSE, IL-9.5, N70; 2"
- 5) HMA SURFACE COURSE, MIX "D", IL-9.5, N70; 13/4"
- 6) POLYMERIZED HMA SURFACE COURSE, SMA, 9.5, MIX "F", N80; 13/4"
- 7 COMB. CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT & P.C.C. SIDEWALK, 5" (LOCATIONS DETERMINED BY THE ENGINEER)

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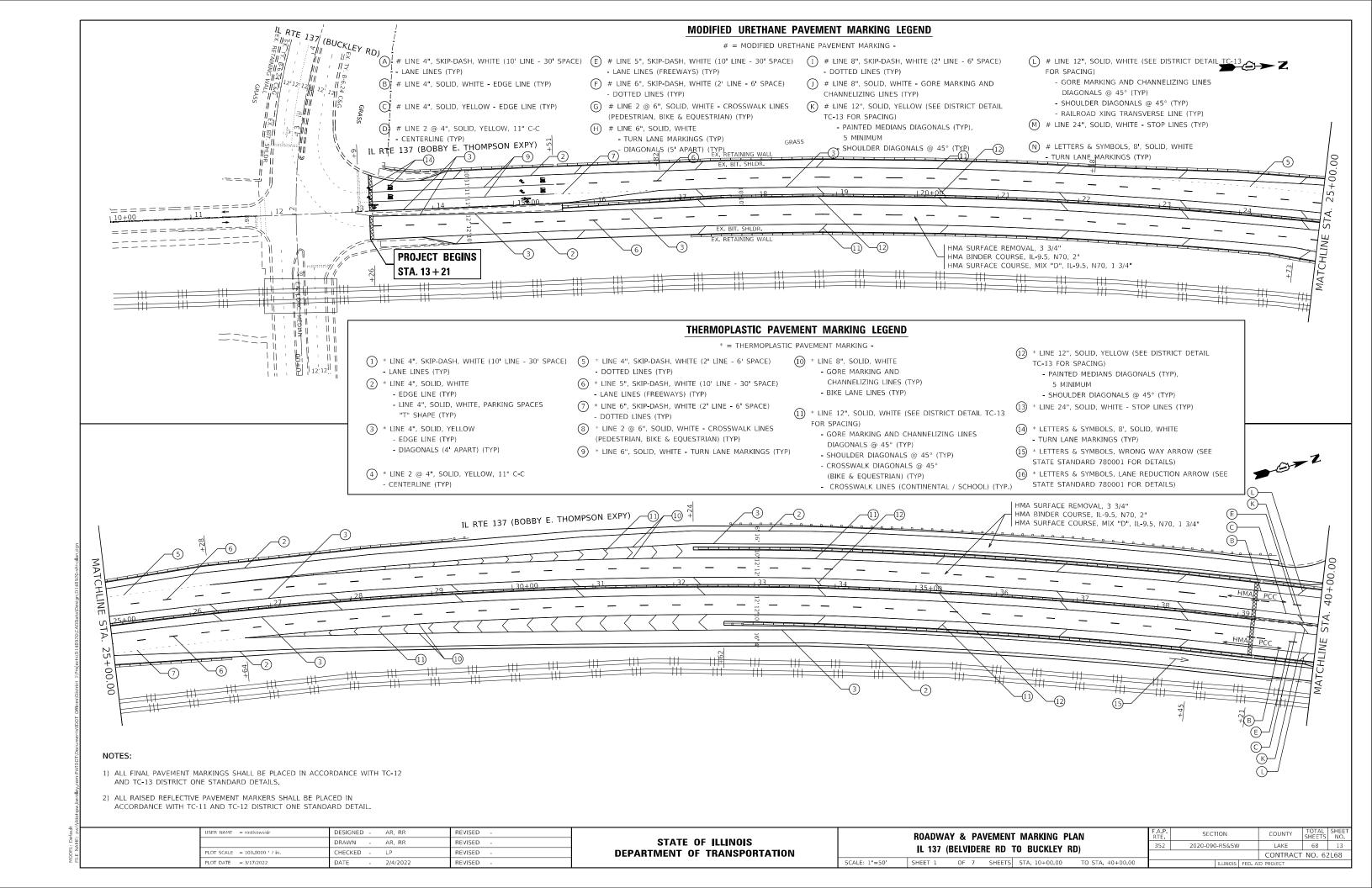
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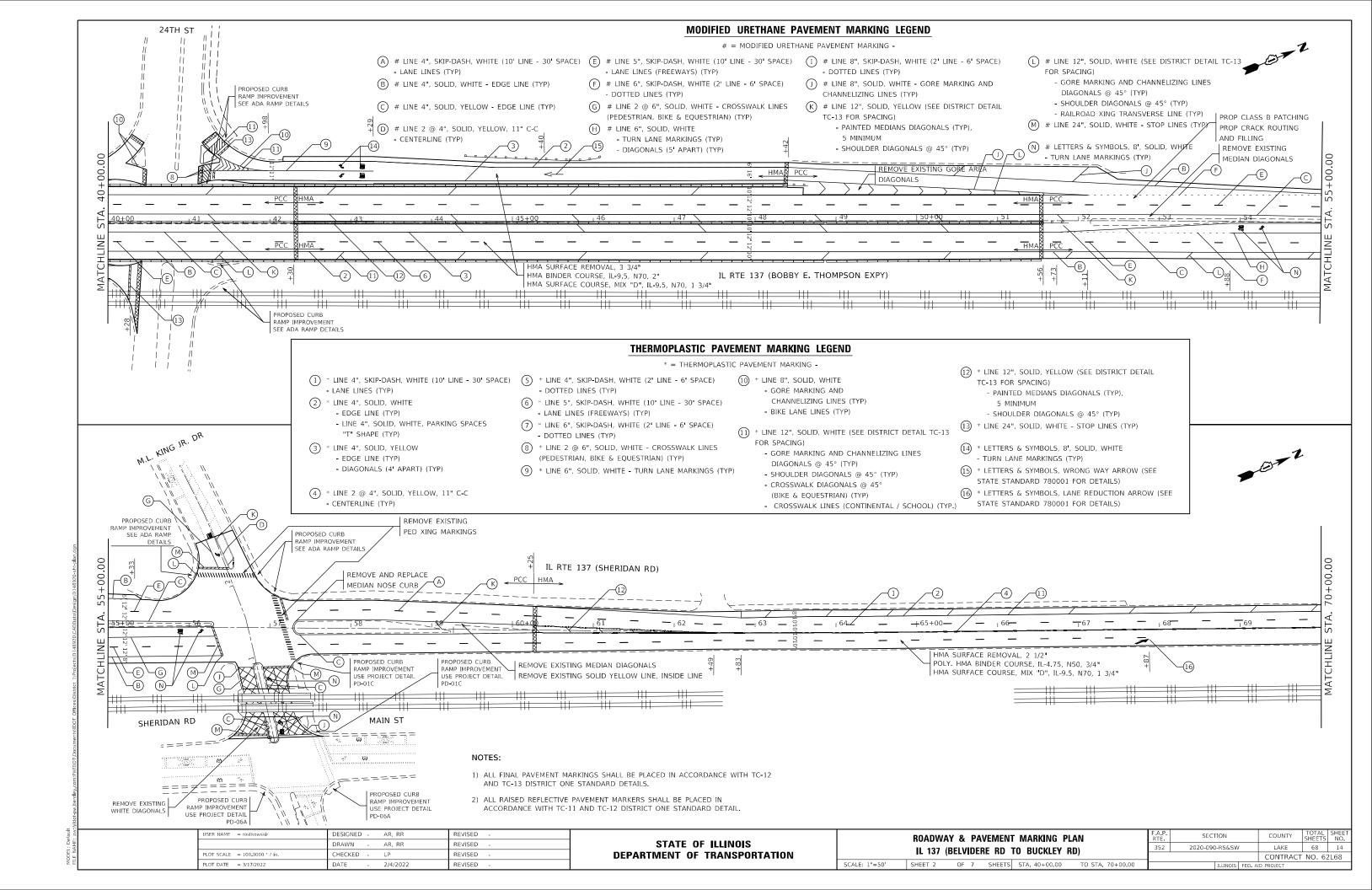
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION TYPICAL SECTIONS

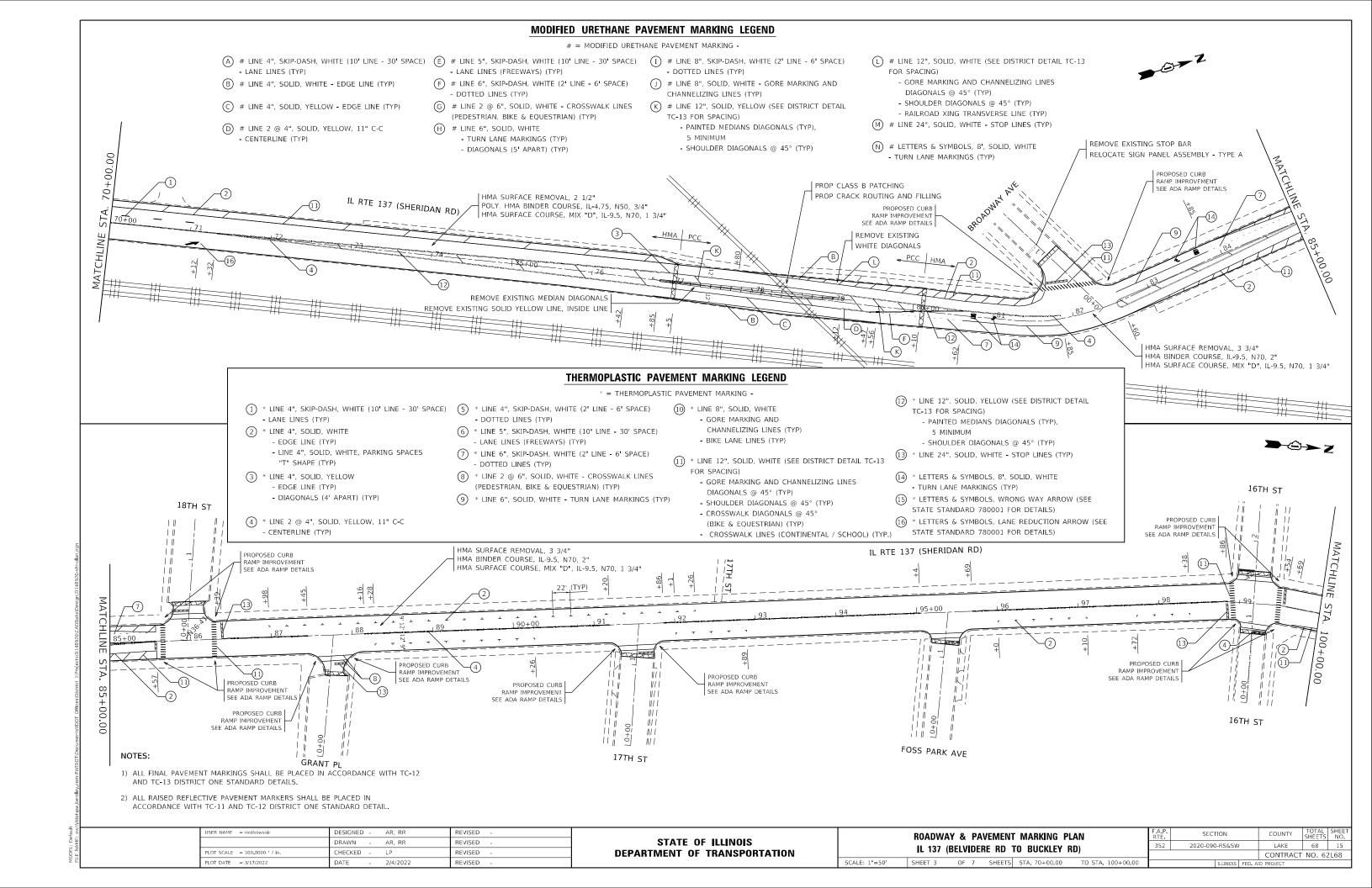
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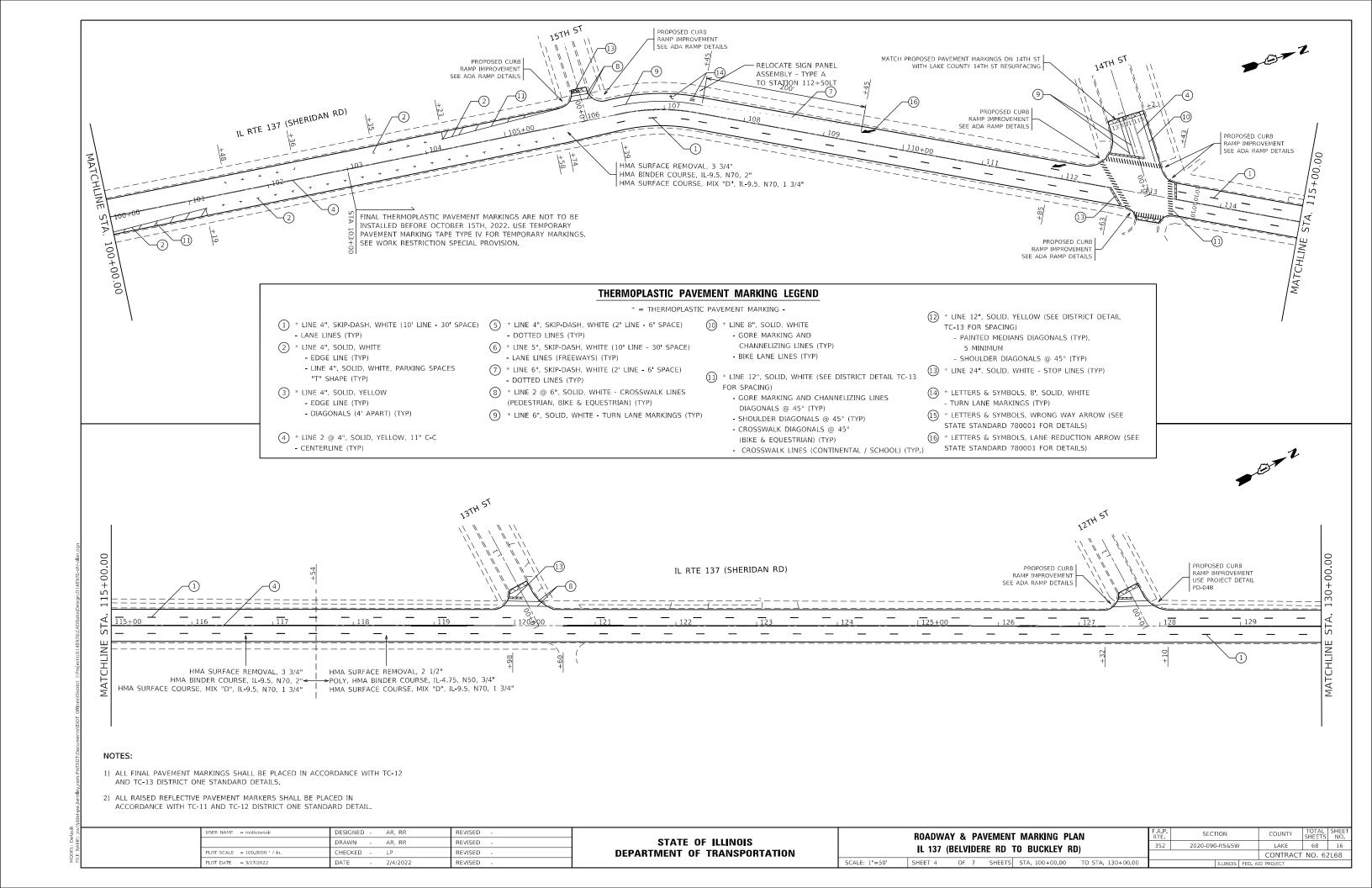
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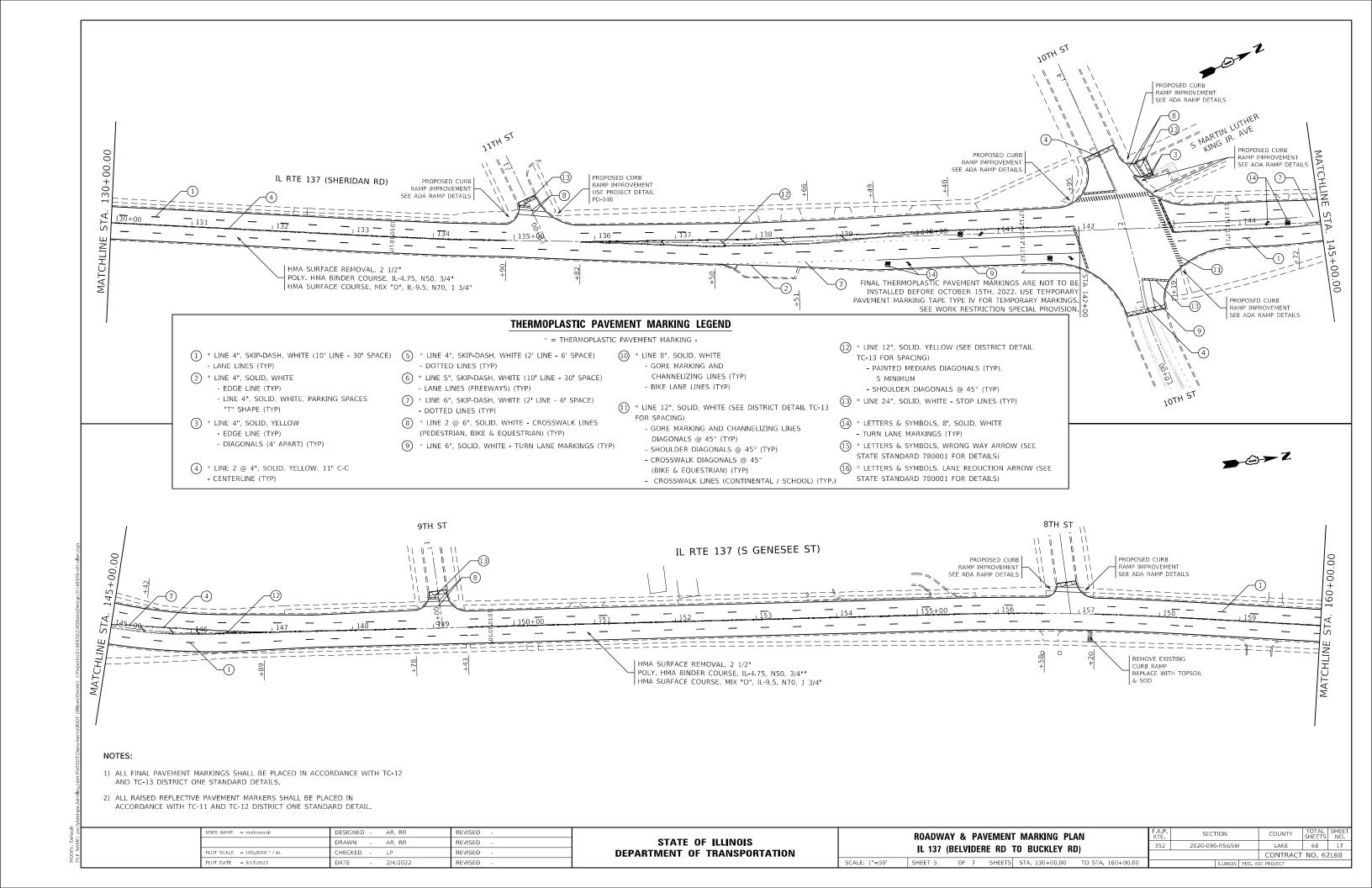
A.P. SECTION COUNTY TOTAL SHEETS NO. 352 2020-090-RS&SW LAKE 68 12 CONTRACT NO. 62L68

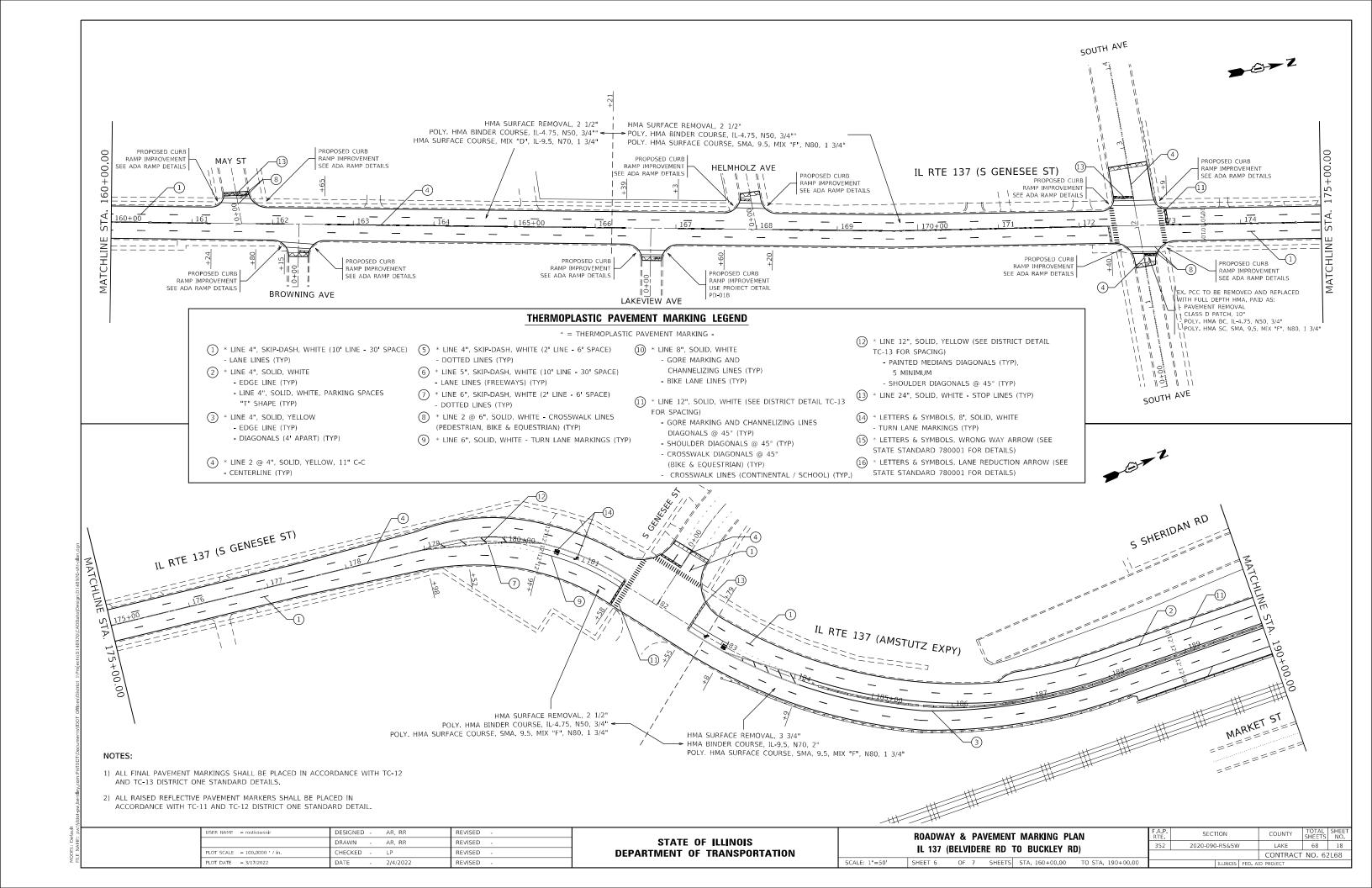


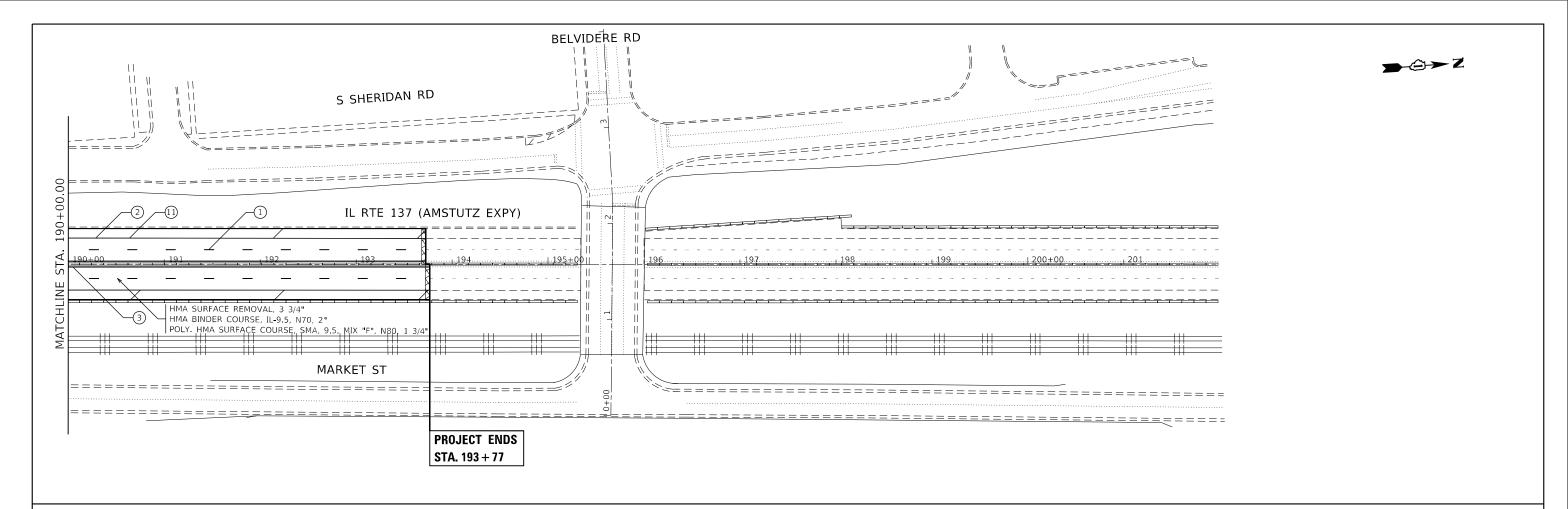












#### THERMOPLASTIC PAVEMENT MARKING LEGEND

\* = THERMOPLASTIC PAVEMENT MARKING -

- LANE LINES (TYP)
- 2 \* LINE 4", SOLID, WHITE
  - EDGE LINE (TYP)
  - LINE 4", SOLID, WHITE, PARKING SPACES "T" SHAPE (TYP)
- (3) \* LINE 4", SOLID, YELLOW
  - EDGE LINE (TYP)
  - DIAGONALS (4' APART) (TYP)
- 4 \* LINE 2 @ 4", SOLID, YELLOW, 11" C-C - CENTERLINE (TYP)

- 1 \* LINE 4", SKIP-DASH, WHITE (10' LINE 30' SPACE) 5 \* LINE 4", SKIP-DASH, WHITE (2' LINE 6' SPACE) - DOTTED LINES (TYP)
  - 6 \* LINE 5", SKIP-DASH, WHITE (10' LINE 30' SPACE)
  - LANE LINES (FREEWAYS) (TYP)
  - 7 \* LINE 6", SKIP-DASH, WHITE (2' LINE 6' SPACE)
  - DOTTED LINES (TYP)
  - \* LINE 2 @ 6", SOLID, WHITE CROSSWALK LINES (PEDESTRIAN, BIKE & EQUESTRIAN) (TYP)
  - 9 \* LINE 6", SOLID, WHITE TURN LANE MARKINGS (TYP)
- (10) \* LINE 8", SOLID, WHITE
  - GORE MARKING AND
  - CHANNELIZING LINES (TYP)
  - BIKE LANE LINES (TYP)
- $^{\ast}$  LINE 12", SOLID, WHITE (SEE DISTRICT DETAIL TC-13 FOR SPACING)
  - GORE MARKING AND CHANNELIZING LINES DIAGONALS @ 45° (TYP)
  - SHOULDER DIAGONALS @ 45° (TYP)
  - CROSSWALK DIAGONALS @ 45° (BIKE & EQUESTRIAN) (TYP)
  - CROSSWALK LINES (CONTINENTAL / SCHOOL) (TYP.)

SCALE: 1"=50"

- 12 \* LINE 12", SOLID, YELLOW (SEE DISTRICT DETAIL TC-13 FOR SPACING)
  - PAINTED MEDIANS DIAGONALS (TYP), 5 MINIMUM
  - SHOULDER DIAGONALS @ 45° (TYP)
- \* LINE 24", SOLID, WHITE STOP LINES (TYP)
- \* LETTERS & SYMBOLS, 8', SOLID, WHITE
- TURN LANE MARKINGS (TYP)
- \* LETTERS & SYMBOLS, WRONG WAY ARROW (SEE STATE STANDARD 780001 FOR DETAILS)
- (16) \* LETTERS & SYMBOLS, LANE REDUCTION ARROW (SEE STATE STANDARD 780001 FOR DETAILS)

- 1) ALL FINAL PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH TC-12 AND TC-13 DISTRICT ONE STANDARD DETAILS.
- ALL RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH TC-11 AND TC-12 DISTRICT ONE STANDARD DETAIL.

USER NAME = rostkowskir	DESIGNED	-	AR, RR	REVISED -	
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STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  **ROADWAY & PAVEMENT MARKING PLAN** IL 137 (BELVIDERE RD TO BUCKLEY RD) OF 7 SHEETS STA. 190+00.00 TO STA. 201+98.29

SECTION 2020-090-RS&SW LAKE 68 19 CONTRACT NO. 62L68

# **BLANK SHEET**

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STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SIDEWALK CURB RAMP DETAILS IL 137 (BELVIDERE RD TO BUCKLEY RD) SHEET 1 OF 1 SHEETS STA. -

SECTION 2020-090-RS&SW LAKE 68 20 CONTRACT NO. 62L68

#### TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

				(NUT TO SCALE)				
<u>ITEM</u>	<u>EXISTING</u>	<u>PROPOSED</u>	ITEM	<u>EXISTING</u>	<u>PROPOSED</u>	ITEM	<u>EXISTING</u>	PROPOSED
CONTROLLER CABINET		×	HANDHOLE -SQUARE -ROUND			SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD		R
COMMUNICATION CABINET	ECC	СС	HEAVY DUTY HANDHOLE					G G ←Y ←Y ←G
MASTER CONTROLLER	EMC	МС	-SQUARE -ROUND		⊞ 19		<b>(</b> •©) (•©) P	<del>≰</del> G <del>≰</del> G P
MASTER MASTER CONTROLLER	ЕММС	ммс	DOUBLE HANDHOLE			SIGNAL HEAD WITH BACKPLATE		
UNINTERRUPTABLE POWER SUPPLY	<b>₹</b>	<b>9</b>	JUNCTION BOX			-(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE		Y Y G G G
SERVICE INSTALLATION -(P) POLE MOUNTED	-D- P	- <b>⊞</b> -P	RAILROAD CANTILEVER MAST ARM	$X \longrightarrow X$	X <del>CX X</del>			<b>4 4 4 4 4 4 4 6 4 6 4 6</b>
SERVICE INSTALLATION			RAILROAD FLASHING SIGNAL	<del>∑⊙</del> X	¥◆X		P RB	P RB
-(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED	$\boxtimes^G \boxtimes^{GM}$	<b>⊠</b> <sup>G</sup> <b>⊠</b> <sup>GM</sup>	RAILROAD CROSSING GATE	<del>202</del>	X•X-	PEDESTRIAN SIGNAL HEAD	<b>(</b>	<u> •</u>
TELEPHONE CONNECTION	ET	Т	RAILROAD CROSSBUCK	¥ [	*	AT RAILROAD INTERSECTIONS	Ø	Ŕ
STEEL MAST ARM ASSEMBLY AND POLE	0——	•—	RAILROAD CONTROLLER CABINET  UNDERGROUND CONDUIT (UC),		<b>&gt;</b> ∢	PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER	<b>(</b>	<b>₽</b> C <b>★</b> D
ALUMINUM MAST ARM ASSEMBLY AND POLE			GALVANIZED STEEL			ILLUMINATED SIGN		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE	o-¤—	•*	TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			"NO LEFT TURN"/"NO RIGHT TURN"		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY	0	<ul> <li>● BM</li> </ul>	SYSTEM ITEM	S	SP	NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE.		
		0	INTERSECTION ITEM	I	IP	ALL DETECTOR LOOP CABLE TO BE SHIELDED	$\sim$	
WOOD POLE GUY WIRE	⊗ <b>≻</b>	<b>⊕</b> ≻	REMOVE ITEM		R	GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)	1#6	1#6
SIGNAL HEAD	-1>	<b>→</b>	RELOCATE ITEM		RL	ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C		
SIGNAL HEAD WITH BACKPLATE	+t>	+►	ABANDON ITEM  CONTROLLER CABINET AND		Α	COAXIAL CABLE	<u> </u>	<u> </u>
SIGNAL HEAD OPTICALLY PROGRAMMED	-⊳ <sup>P</sup> +⊳ <sup>P</sup>	→ P + P	FOUNDATION TO BE REMOVED		RCF		,	
FLASHER INSTALLATION	ot> <sup>F</sup> ot> <sup>FS</sup>	•► FS	MAST ARM POLE AND FOUNDATION TO BE REMOVED		RMF	VENDOR CABLE		
-(FS) SOLAR POWERED	or⊳ <sup>F</sup> or⊳ <sup>FS</sup>	■→ FS	SIGNAL POST AND FOUNDATION TO BE REMOVED		RPF	COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED	<u>(6#18)</u>	<u>(6#18)</u>
PEDESTRIAN SIGNAL HEAD	-0	-1	DETECTOR LOOP, TYPE I			FIBER OPTIC CABLE -NO. 62.5/125, MM12F	12F	12F
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON			PREFORMED DETECTOR LOOP	P P	P P	-NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F		
RADAR DETECTION SENSOR	R 1	R	SAMPLING (SYSTEM) DETECTOR	s s	s s			
VIDEO DETECTION CAMERA	V 1	<b>V</b> ■	INTERSECTION AND SAMPLING (SYSTEM) DETECTOR	IS (IS)	IS (IS)			
RADAR/VIDEO DETECTION ZONE	<b>III</b>	<b>=</b>	QUEUE AND SAMPLING (SYSTEM) DETECTOR	QS QS	QS QS	GROUND ROD -(C) CONTROLLER -(M) MAST ARM	<u> </u>	$\dot{\bar{\uparrow}}^{C} \dot{\bar{\uparrow}}^{M} \dot{\bar{\uparrow}}^{P} \dot{\bar{\uparrow}}^{S}$
PAN, TILT, ZOOM (PTZ) CAMERA	PTZ1	PTZ	WIRELESS DETECTOR SENSOR	<b>®</b>	<b>®</b>	-(P) POST -(S) SERVICE		
EMERGENCY VEHICLE LIGHT DETECTOR	$\bowtie$	<b>~</b>	WIRELESS ACCESS POINT					
CONFIMATION BEACON	$\circ - \bigcirc$	••						
WIRELESS INTERCONNECT	∘ <del>-   </del>	<del>•-1   </del>						
WIRELESS INTERCONNECT RADIO REPEATER	ERR	RR						

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

COUNTY TOTAL SHEETS NO.

LAKE 68 21

CONTRACT NO. 62L68

SECTION

TS-05 CON I K

DISTRICT ONE

STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SHEET 1 OF 7 SHEETS STA.

DESIGNED - IP

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CHECKED - LP
DATE - 9/29/2016

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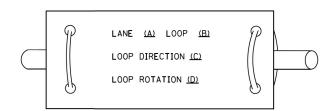
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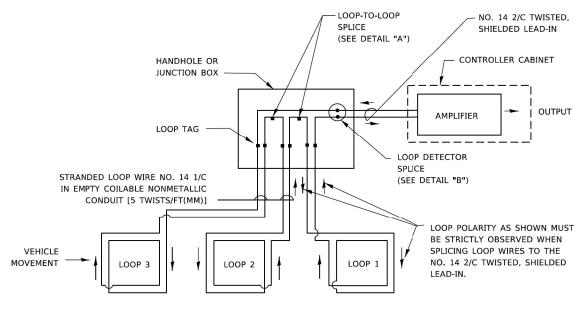
PLOT DATE = 12/23/2021

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

#### LOOP LEAD-IN CABLE TAG

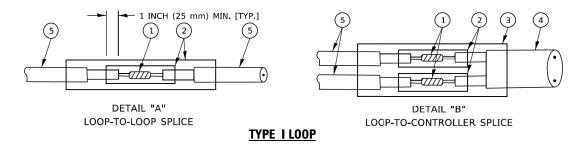


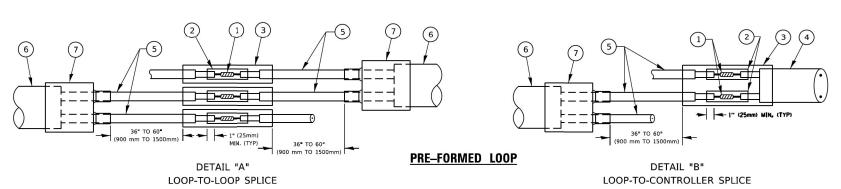
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



#### **DETECTOR LOOP WIRING SCHEMATIC**

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





#### **LOOP DETECTOR SPLICE**

- (1) WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- (2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- (3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.

SCALE: NONE

(4) NO. 14 2/C TWISTED, SHIELDED CABLE.

- 5 LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE. PRE-FORMED LOOP
- (6) XL POLYOLEFIN 2 CONDUCTOR
- (7) BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

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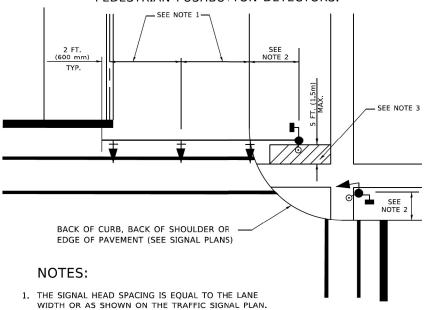
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

DISTRICT ONE LAKE 68 STANDARD TRAFFIC SIGNAL DESIGN DETAILS CONTRACT NO. 62L68 TS-05 SHEET 2 OF 7 SHEETS STA.

#### TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

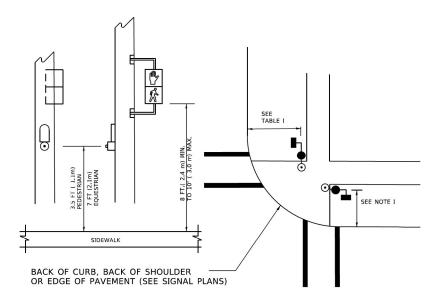
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND

PEDESTRIAN PUSHBUTTON DETECTORS.



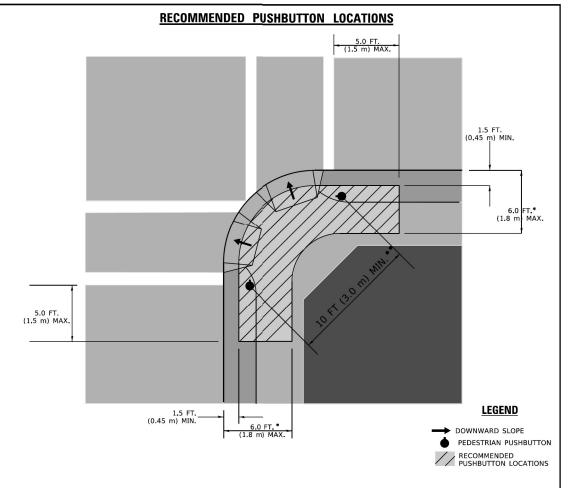
- 2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- 3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK. ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR
- 4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
- 5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES.

#### PEDESTRIAN SIGNAL POST PEDESTRIAN PUSH BUTTON POST



#### NOTES:

- 1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- 2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST
- 3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
- 4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR



- \* WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT ( 1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- \*\* WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

#### NOTES:

- 1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
- 2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
- 3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
- 4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
- 5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

#### TRAFFIC SIGNAL EQUIPMENT OFFSET

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)					
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)					
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)					
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)					
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)					
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)					
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.					
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.					

#### NOTES:

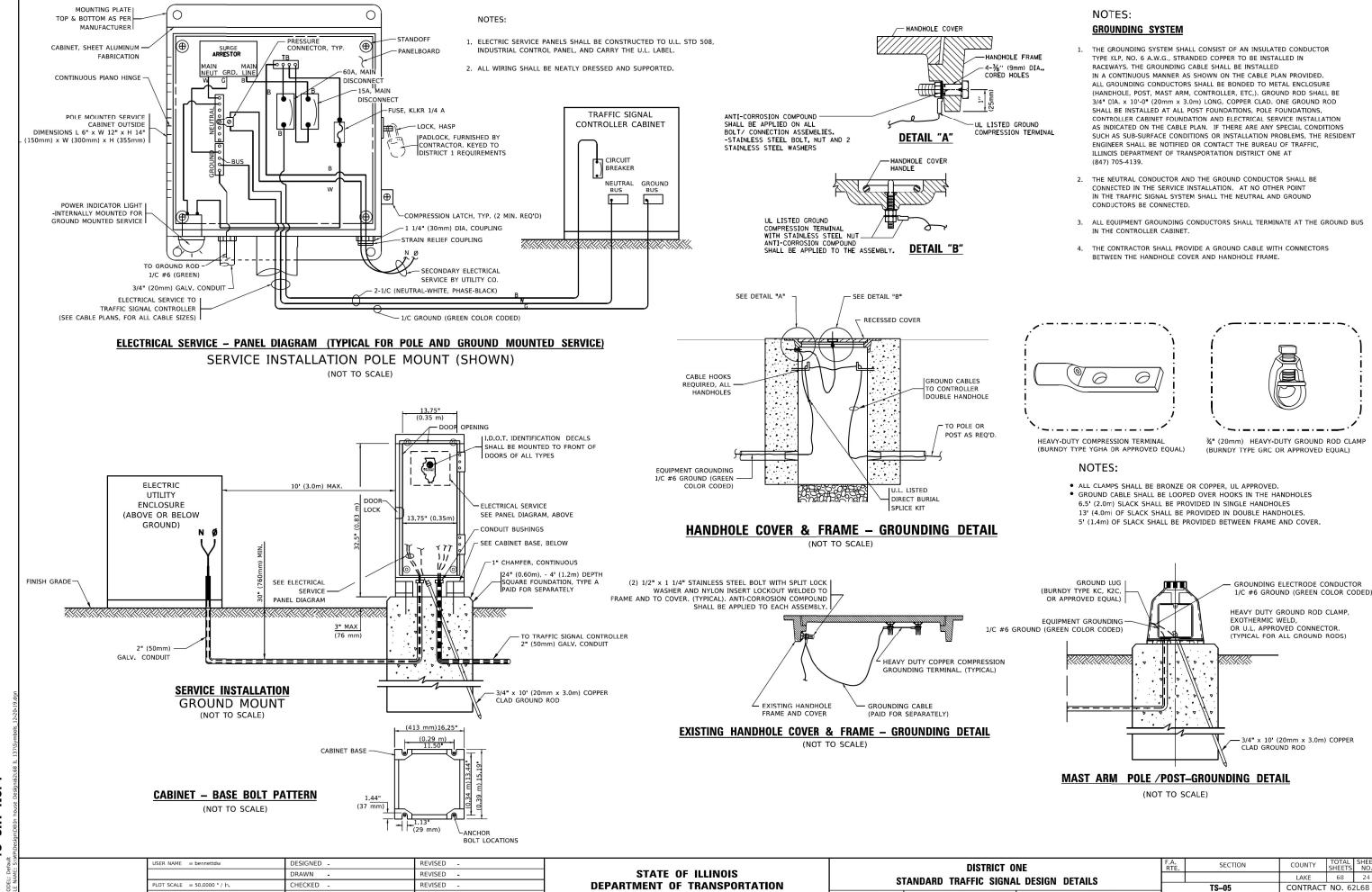
- 1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
- 2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
- 3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TOTHE ROADWAY SIDE OF THE FOUNDATION.
- 4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

SCALE: NONE

USER NAME = bennettdw	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 50,0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 12/23/2021	DATE -	REVISED -

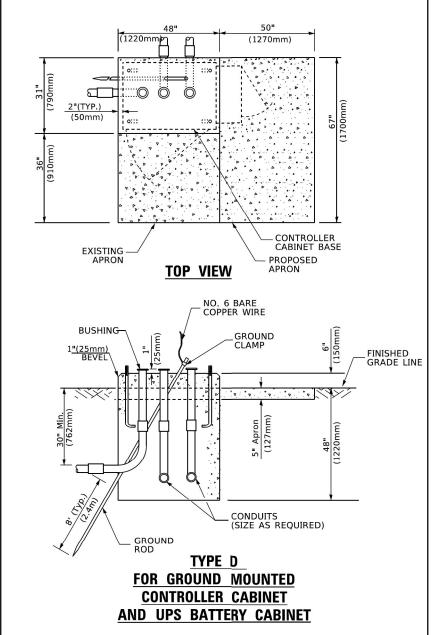
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

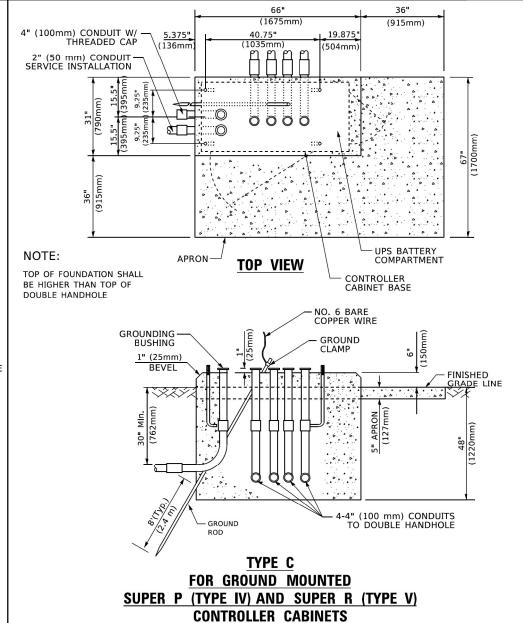
	DISTRICT ONE					F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STANDARD TRAFFIC SIGNAL DESIGN DETAILS							LAKE	68	23	
STANDARD TRAFFIC SIGNAL DESIGN DETAILS						TS-05	CONTRACT	NO. 62	2L68	
	SHEET 3	OF 7	SHEETS	STA.	TO STA.		ILLINOIS FED. A	ID PROJECT		



REVISED

OF 7 SHEETS STA.





2½" " " " " " " " " " " " " " " " " " "
2" × 6" (51mm x 152mm) WOOD FRAMING (TYP.)
===7
TRAFFIC SIGNAL CONTROLLER CABINET
¾" (19mm) TREATED PHYWOOD DECK
2" x 6" (51mm x 152mm) TREATED WOOD
305 mm)
### ### ##############################
NOTES: TREATED WOOD POSTS
<ol> <li>BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm).     ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED</li> </ol>
<ol> <li>BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm).         ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.</li> </ol>
3. PLATFORM SIZE FOR CONTROLLER CARINET TYPE IV

SEE NOTE 5-

- $\ensuremath{\mathtt{3}}_{\scriptscriptstyle\bullet}$  PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
- 4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
- 5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
- 6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION..

#### **TEMPORARY SIGNAL CONTROLLER WOOD SUPPORT PLATFORM**

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

**CABLE SLACK** 

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE ( MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

	VERI	ICAL	CABLE	LENG	Ш
--	------	------	-------	------	---

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

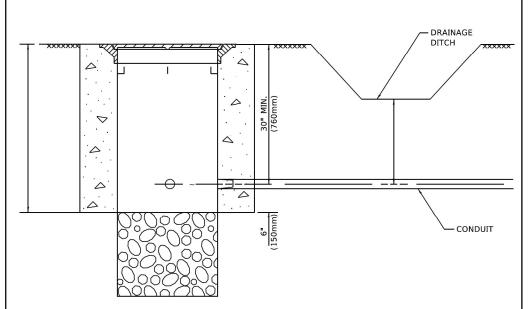
#### **DEPTH OF FOUNDATION**

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30′ (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to	13'-6" (4 <sub>-</sub> 1 m)	30" (750mm)	24" (600mm)	8	6(19)
30' (9.1 m) and less than 40' (12.2 m)	11'-0'' (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0'' (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0'' (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0'' (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7 <b>.</b> 6 m)	42" (1060mm)	36" (900mm)	16	8(25)

- 1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Ou) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & structures should be contacted for a revised design if other conditions are encountered.
- 2. Combination mast arm assemblies under 55 feet (16.8 m) shall use  $36^{\prime\prime}$  (900 mm) diameter foundations.
- 3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations
- 4. For most arm assemblies with dual arms refer to state standard 878001..

#### DEPTH OF MAST ARM FOUNDATIONS, TYPE E

USER NAME = bennettdw	DESIGNED -	REVISED -	<u>.</u>			DIST	RICT O	NF		F.A. RTF	SECTION	C	COUNTY	TOTAL S	SHEET NO.
	DRAWN -	REVISED -	STATE OF ILLINOIS	.	TANDADD 3				ETAU C				LAKE	68	25
PLOT SCALE = 50,0000 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	3	TANDARD 1	IKAFFIC	SIGNA	L DESIGN DI	E I AILS	-	TS-05	CO	ONTRACT N	NO. 62	L68
PLOT DATE = 12/23/2021	DATE -	REVISED -		SCALE: NONE	SHEET 5	OF 7	SHEETS	STA.	TO STA.		ILLING	IOIS FED. AID PRO	OJECT		



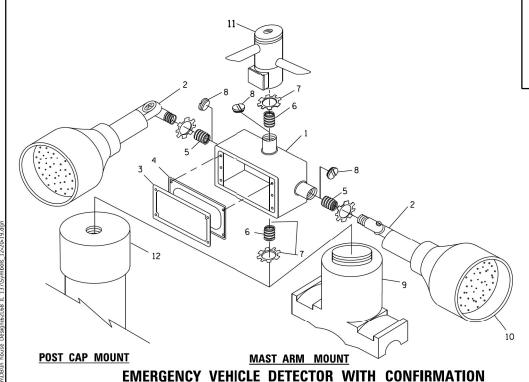
#### NOTES:

- CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
- THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
- THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

USER NAME = bennettdy

PLOT SCALE = 50,0000 ' / in.

### HANDHOLE WITH MINIMUM CONDUIT DEPTH (NOT TO SCALE)



**BEACON MOUNTING DETAIL** 

DESIGNED -

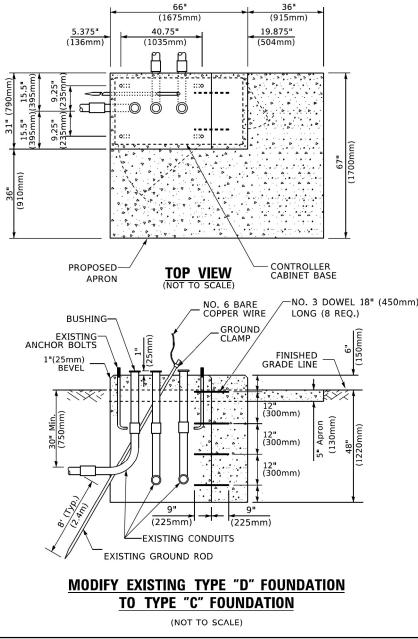
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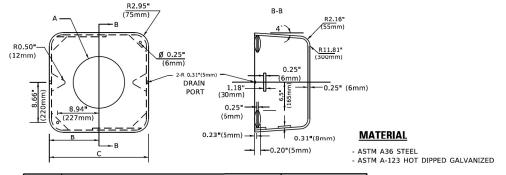
REVISED



# ITEM NO. IDENTIFICATION 1 OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M) 2 LAMP HOLDER AND COVER 3 OUTLET BOX COVER 4 RUBBER COVER GASKET 5 REDUCING BUSHING 6 %"(19 mm) CLOSE NIPPLE 7 %"(19 mm) LOCKNUT 8 %"(19 mm) HOLE PLUG 9 SADDLE BRACKET - GALV. 10 6 WATT PAR 38 LED FLOOD LAMP 11 DETECTOR UNIT 12 POST CAP [18 FT. (5.4 m) POST MIN.]

#### NOTES:

- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
- 2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
- 3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4 "(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.

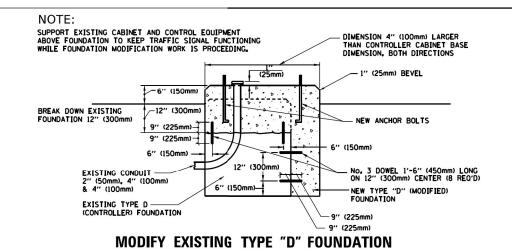


Δ	7	В	С	HEIGHT	WEIGHT
VAR	IES	9.5"(241mm)	19"(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VAR	IES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VAR	IES	13.0"(330mm)	26"(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VAR	IES	18.5"(470mm)	37"(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

#### **SHROUD**

#### NOTES:

- DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD.
  THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
- 2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
- 3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.



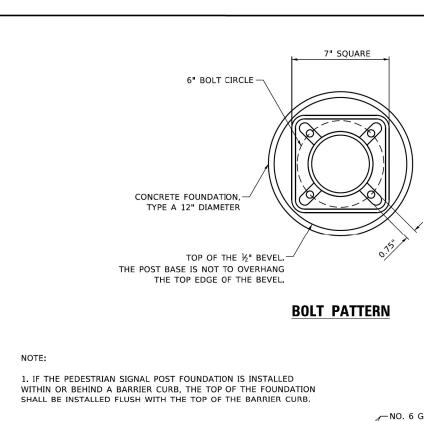
# CAL VANIZED STEEL HOOKS 21 1/2 MIN. (545mm) CONDUIT BUSHING EXISTING CONDUIT TO BE REMOVED CONDUIT TO REMAIN PLAN ELEVATION

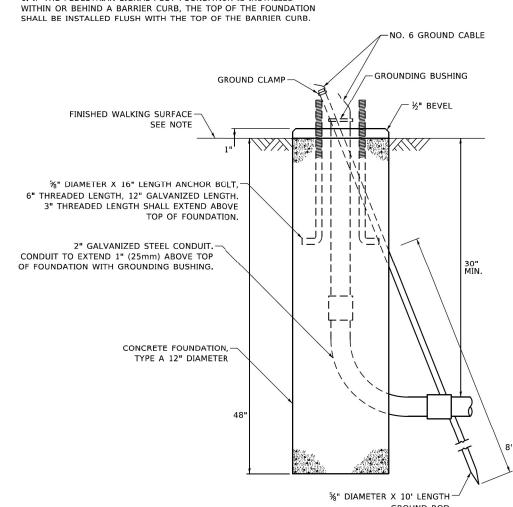
#### NOTES

- 1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
- 2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

#### HANDHOLE TO INTERCEPT EXISTING CONDUIT

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION





# TY

#### PEDESTRIAN SIGNAL POST, 10 FT.

10

#### PEDESTRIAN SIGNAL POST, 5 FT.

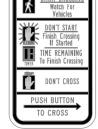
COUNTDOWN PEDESTRIAN SIGNAL HEADS ARE NOT TO BE USED AT RAILROAD INTERSECTIONS ALUMINUM OR GALVANIZED STEEL POST CAP SIGN (SEE SIGN TABLE) -ALUMINUM-PUSH-BUTTON STATION PEDESTRIAN PUSH-BUTTON-ALUMINUM OR-GALVANIZED STEEL POST, 4.5" OUTSIDE DIAMETER ALUMINUM OR-CAST IRON GALVANIZED BASE 36" CENTERED ON FOUNDATION DRILLED AND TAPPED -GROUNDING HOLE

-FINISHED WALKING SURFACE-

PEDESTRIAN SIGNAL HEAD

DON'T START Finish Crossing If Started DON'T CROSS PUSH BUTTON
PUSH BUTTON
TO CROSS





R10-3e

R10-3b

R10-3d

#### SIGN TABLE

SIGN	DIMENSIONS
R10-3b (RAILROAD ONLY)	9" X 12"
R10-3d (RAILROAD ONLY)	9" X 12"
R10-3e	9" X 15"

#### NOTES:

- THE SIGN PANELS SHALL BE TYPE AP SHEETING.
   THE ARROW ON SIGNS FOR PUSH-BUTTONS SERVING TWO DIRECTIONS ON THE SAME PHASE SHALL BE BI-DIRECTIONAL.
- 3. THE SIGN FOR DUAL-CALL PUSH-BUTTONS SHALL HAVE NO ARROW.

'PE A 12	Z-INCH	DIAME	<u>I E K</u>
/DE A 44	INIOII	DIABACT	- FFD
CONCRET	TE FOUN	IDATION	۷,
		GROU	IND ROD
	/8 DIAM	LILK X 10	LLINGTIT

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

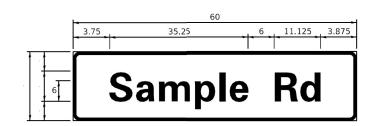
DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS SHEET 7 OF 7 SHEETS STA.

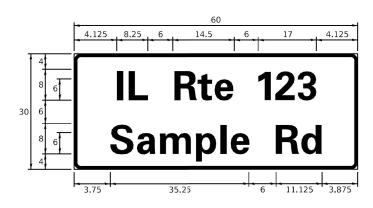
LAKE 68 27 TS-05 CONTRACT NO. 62L68

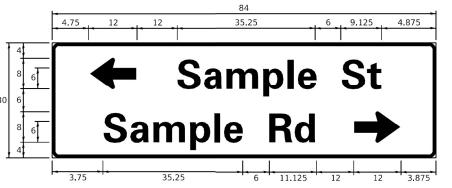
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USER NAME = bennettdw REVISED -DESIGNED - IP DRAWN -REVISED -PLOT SCALE = 50,0000 ' / in. CHECKED -REVISED

#### SIGN PANEL - TYPE 1 OR TYPE 2







DESIGN	AREA	SIGN PANEL	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D OR C	-	1 OR 2	ZZ	

#### **COMMON STREET NAME ABBREVIATIONS** AND WIDTHS

NAME	ARRDEVATION	WIDTH	(INCH)				
INAME	ABBREVATION  Ave Blvd CIr Ct Dr Hwy IL Ln Pkwy PI Rd Rte St Ter	SERIES "C"	SERIES "D"				
AVENUE	Ave	15.000	18.250				
BOULEVARD	Blvd	17.125	20.000				
CIRCLE	Cir	11.125	13.000				
COURT	Ct	8. 250	9. 625				
DRIVE	Dr	8.625	10.125				
HIGHWAY	Hwy	18.375	22.000				
ILLINOIS	IL	7.000	8. 250				
LANE	Ln	9. 125	10.750				
PARKWAY	Pkwy	23. 375	27.375				
PLACE	PΙ	7. 125	7. 750				
ROAD	Rd	9.625	11.125				
ROUTE	Rte	12.625	14.500				
STREET	St	8.000	9.125				
TERRACE	Ter	12.625	14.625				
TRAIL	Tr	7. 750	9.125				
UNITED STATES	US	10.375	12.250				

#### **GENERAL NOTES**

- WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
- 2. ALL SIGNS SHALL CONSIST OF A WHITE LEGEND AND BORDER (TYPE ZZ SHEETING) ON A GREEN BACKGROUND (TYPE ZZ
- 3. THE SIGN LENGTH SHALL BE IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHALL NOT EXCEED 8'-0". ALL BORDERS IF POSSIBLE, BUT MAY BE REDUCED TO 5" WHEN SPACING IS CRITICAL. A MINIMUM OF 2-1/2" SHALL BE INCLUDED BETWEEN THE WORD AND THE RIGHT AND LEFT EDGES OF THE SIGN.
- 4. A PREFERRED METHOD FOR THE SIGN DESIGN IS TO USE SERIES "D" LETTER ON A ONE-LINE SIGN 18" IN HEIGHT AND A MAXIMUM OF 8'-0" IN WIDTH. IF SERIES "D" DOES NOT FIT ON A 8"-0" SIGN, THEN SERIES "C" SHOULD BE TRIED. IF SERIES "C" DOES NOT FIT ON A 8'-0" SIGN, A 30" HIGH TWO-LINE SIGN CAN BE USED. THE CROSSROAD DESIGNATION AS TO STREET, AVENUE, ETC. SHOULD BE SPELLED OUT ON THE SECOND LINE, IF THE ABBREVIATION CANNOT FIT ON THE FIRST LINE.
- 5. LED ILLUMINATED STREET NAME SIGNS CAN BE USED IN PLACE OF REGULAR SIGN PANELS BUT ANY SPECIAL WORDING AND SYMBOLOGY MUST BE APPROVED BY THE DEPARTMENT. GENERAL DESIGN REQUIREMENT AS LISTED ABOVE (COLOR, FONT, SIZE, ETC.) MUST BE FOLLOWED.
- 6. SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS.

LOCAL SUPPLIERS: PARTS LISTING:

- J.O. HERBERT COMPANY, INC. MIDLOTHIAN, VA

- WESTERN REMAC, INC.

WOODRIDGE, IL

SIGN CHANNEL SIGN SCREWS **BRACKETS** 

PART #HPN053 (MED. CHANNEL) 1/4" x 14 x 1" H.W.H. #3 SELF TAPPING WITH NEOPRENE WASHER

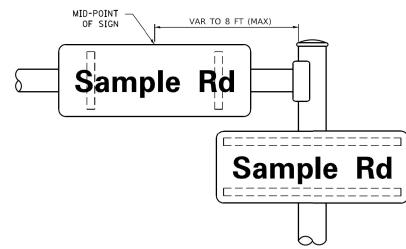
PART #HPN034 (UNIVERSAL)

CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

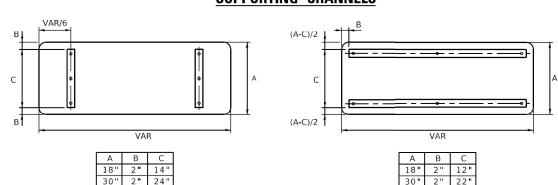
OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.

#### **MOUNTING LOCATION**

ARM OR POLE MOUNTED



#### **SUPPORTING CHANNELS**



#### STANDARD ALPHABETS SPACING CHART

(8") UPPER CASE AND (6") LOWER CASE

	F10V4 6=	2156 "6"			510VA 655	N.EC "S"					
	FHWA SE	RIES "C"		FHWA SERIES "D"							
CHARACTER	(INCH)	WIDTH (INCH)	(INCH)	CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)				
Α	0.240	5.122	0.240	Α	0.240	6.804	0.240				
В	0.880	4.482	0.480	В	0.960	5.446	0.400				
С	0.720	4.482	0.720	C D	0.800	5.446	0.800				
D E	0.880 0.880	4.432	0.720 0.480	E	0.960 0.960	4. 962	0.800 0.400				
F	0.880	4.082	0.480	F	0.960	4. 962	0.240				
G	0.720	4.482	0.720	G	0.800	5.446	0.800				
Н	0.880	4. 432	0.880	Н	0.960	5.446	0.960				
I	0.880	1.120	0.880	I	0.960	1.280	0.960				
J	0.240	4.082	0.880	J	0.240	5.122	0.960				
K	0.880	4.482	0.480	K	0.960	5.604	0.400				
L	0.880	4.082	0.240	L	0.960	4.962	0.240				
М	0.880	5. 284	0.880	М	0.960	6. 244	0.960				
N	0.880	4.482	0.880	N	0.960	5.446	0.960				
0	0.720	4.722	0.720	0	0.800	5.684	0.800				
P	0.880	4.482	0.720	P	0.960	5.446	0.240				
Q	0.720	4.722	0.720	Q	0.800	5.684	0.800				
R S	0.880 0.480	4.432	0.480	R S	0.960 0.400	5.446 5.446	0.400				
	0.480	4.482	0.480	5 T	0.400	4. 962	0. 400				
U	0.880	4.482	0.880	U	0.240	5.446	0. 960				
V	0.240	4, 962	0.240	V	0. 300	6, 084	0.240				
W	0.240	6.084	0.240	W	0. 240	7, 124	0. 240				
Х	0.240	4.722	0.240	Х	0.400	5.446	0.400				
Υ	0.240	5.122	0.240	Y	0.240	6.884	0.240				
Z	0.480	4.482	0.480	Z	0.400	5.446	0.400				
а	0.320	3.842	0.640	a	0.400	4.562	0.720				
Ь	0.720	4.082	0.480	b	0.800	4.802	0.480				
С	0.480	4.002	0.240	С	0.480	4.722	0.240				
d	0.480	4.082	0.720	d	0.480	4.802	0.800				
е	0.480	4.082	0.320	e	0.480	4.722	0.320				
f	0.320	2.480	0.160	f	0.320	2.882	0.160				
g h	0.480 0.720	4.082 4.082	0.720 0.640	g h	0.480 0.800	4.802 4.722	0.800 0.720				
i	0.720	1.120	0.720	i	0.800	1. 280	0.800				
i	0.000	2. 320	0.720	i	0.000	2.642	0.800				
k	0.720	4. 322	0.160	k	0.800	5.122	0.160				
ı	0.720	1.120	0.720	ï	0.800	1.280	0.800				
m	0.720	6. 724	0.640	m	0.800	7. 926	0.720				
n	0.720	4.082	0.640	n	0.800	4.722	0.720				
0	0.480	4.082	0.480	0	0.480	4.882	0.480				
р	0.720	4.082	0.480	р	0.800	4.802	0.480				
q	0.480	4.082	0.720	q	0.480	4.802	0.800				
r	0.720	2.642	0.160	r	0.800	3.042	0.160				
S	0.320	3. 362	0.240	S	0.320	3. 762	0.240				
†	0.080	2.882	0.080	t	0.080	3. 202	0.080				
u	0.640 0.160	4.082 4.722	0.720 0.160	u	0.720	4.722 5.684	0.800 0.160				
w	0.160	7. 524	0.160	w	0.160 0.160	9.046	0.160				
×	0.000	5. 202	0.000	X	0.180	6. 244	0.000				
У	0.160	4.962	0.160	у	0.160	6.004	0.160				
Z	0.240	3. 362	0.240	Z	0.240	4.002	0.240				
1	0.720	1.680	0.880	1	0.800	2.000	0.960				
2	0.480	4.482	0.480	2	0.800	5.446	0.800				
3	0.480	4.482	0.480	3	1.440	5.446	0.800				
4	0.240	4.962	0.720	4	0.160	6.004	0.960				
5	0.480	4.482	0.480	5	0.800	5.446	0.800				
6	0.720	4.482	0.720	6	0.800	5.446	0.800				
7	0.240	4.482	0.720	7	0.560	5.446	0.560				
8	0.480	4.482	0.480	8	0.800	5.446	0.800				
9	0.480	4.482	0.480	9	0.800	5.446	0.800				
0 -	0.720	4. 722 2. 802	0.720	0 -	0.800	5.684	0.800				
-	0.240	2.802	0.240	_	0.240	2.802	0. 240				

LAKE

68

CONTRACT NO. 62L68

REVISED - LP 07/01/2015 JSER NAME = bennettdw DESIGNED - LP/IP DRAWN - LP REVISED -PLOT SCALE = 50,0000 ' / in. CHECKED -REVISED PLOT DATE = 12/23/2021 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SECTION DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGNS TS-02 SHEETS STA.



**LEGEND:** 

\* PROTECTED PHASE

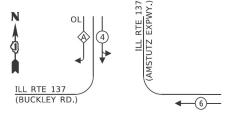
◆-(\*)- ▶ PEDESTRIAN PHASE

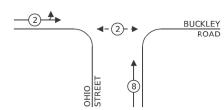
♦ OL OVERLAP

← -(\*)- - PROTECTED/PERMITTED PHASE

TRACER CABLE >

INTERCONNECT TO ~ ILLINOIS STREET





#### **RIGHT TURN OVERLAP PHASE DESIGNATION:**

OVERLAP PERMISSIVE PROTECTED 

#### TRAFFIC SIGNAL **ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE	
SIGNAL (RED)	17	11	50	93.5	
(YELLOW)	17	20	5	17.0	
(GREEN)	17	12	45	91.8	
PERMISSIVE ARROW	9	10	10	9.0	
PED. SIGNAL	2	20	100	40.0	
CONTROLLER	1	100	100	100.0	
UPS	1	25	100	25.0	
VIDEO SYSTEM	н	150	100	-	
BLANK-OUT SIGN	-	25	5	-	
FLASHER	-	-	50	-	
STREET NAME SIGN	-	120	50	-	
LUMINAIRE	-	-	-	-	
			TOTAL =	376.3	

ENERGY COSTS TO:

ILLINOIS DEPARTMENT OF TRANSPORTATION

201 WEST CENTER COURT

SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY: CONTACT: TERRI BLECK

PHONE: (847) 816-5239 COMPANY: COMMONWEALTH EDISON

ACCOUNT NUMBER:

DESIGNED - DB REVISED -DRAWN DB REVISED PLOT SCALE = 40.0000 ' / in. CHECKED -KK REVISED -PLOT DATE = 2/7/2022

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE BUCKLEY ROAD AT IL ROUTE 137 (AMSTUZ EXPWY.)/OHIO STREET SHEETS STA.

2020-090-RS&SW LAKE 68 30 CONTRACT NO. 62L68

TOTAL QTY

270

**ILL. RTE. 137** (BUCKLEY RD) 

**BUCKLEY ROAD** 

- EXISTING INTERCONNECT TO 22ND STREET

TRACER CABLE

(MARTIN LUTHER KING JR DR)

**SCHEDULE OF QUANTITIES** 

ITEM DESCRIPTION UNITS DETECTOR LOOP REPLACEMENT FOOT

**CABLE PLAN** 

TS 21010 LAKE COUNTY CENTRACS

N0. SHT IS

**DEPARTMENT OF TRANSPORTATION** 

2020-090-RS&SW

IL ROUTE 137 (SHARIDAN RD) AT 22ND ST ∕MARTIN LUTHER KING DR
SCALE: SHEET OF SHEETS STA. TO STA.

LAKE

CONTRACT NO. 62L68

NO. SHT

CHECKED

DATE

PLOT SCALE = 40.0000 ' / in

PLOT DATE = 2/7/2022

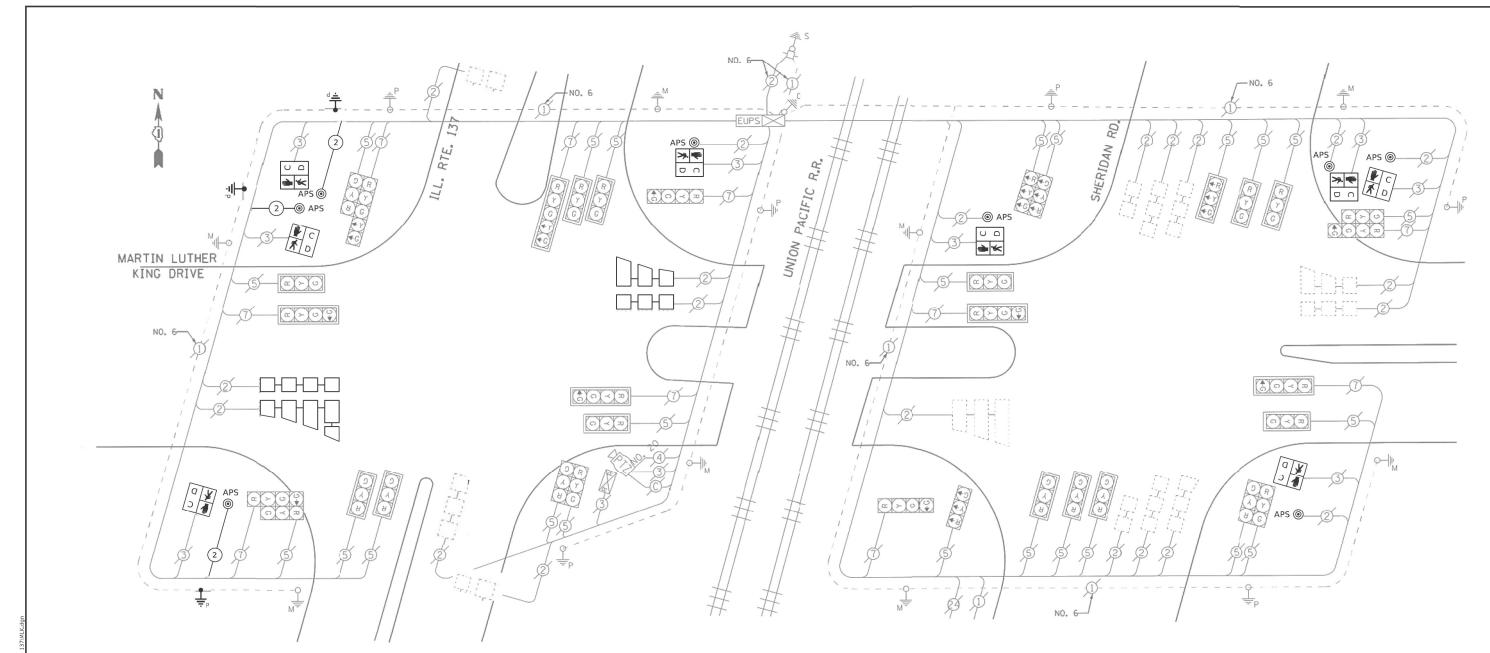
KK

12/21/2021

REVISED

REVISED





#### TRAFFIC SIGNAL **ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED % WATTAGE OPERATION		TOTAL WATTAGE
SIGNAL (RED)	34	11	50	187.0
(YELLOW)	34	20	5	34.0
(GREEN)	42	12	45	266.8
PERMISSIVE ARROW	4	10	10	4
PED. SIGNAL	8	20	100	160
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
			TOTAL =	886.8

ENERGY COSTS TO:

## CITY OF NORTH CHICAGO 1850 LEWIS AVE

NORTH CHICAGO, IL 60064

ENERGY SUPPLY: CONTACT: TERRI BLECK
PHONE: (847) 816-5239
COMPANY: COMMONWEALTH EDISON

PLOT SCALE = 40.0000 ' / in.

ACCOUNT NUMBER:

#### **SCHEDULE OF QUANTITIES**

	ITEM DESCRIPTION	UNITS	TOTAL QTY
	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	70
	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	562
	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	60
	DRILL EXISTING HANDHOLE	EACH	3
	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
*	DETECTOR LOOP, TYPE I	FOOT	1000
	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	600
	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
	PEDESTRIAN SIGNAL POST, 5 FT.	FOOT	3
	ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8
	CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	12

\* NOMINAL QUANTITY TO BE USED AS NEEDED WHEN LOOPS DAMAGED BY CURB OR ADA RAMP REMOVAL.

TS 21085 LAKE COUNTY CENTRACS FORMER ECON 77

_				_						I c a I			LTOTAL	CUEET
	DESIGNED - DB	REVISED -		C	ABLE PLAN	, PHASE I	DESIGN	ATION DI <i>A</i>	GRAM,	PTE	SECTION	COUNTY	SHEETS	SHEET
	DRAWN - DB	REVISED -	STATE OF ILLINOIS	AND	<b>EMERGEN</b> (	CY VEHIC	E PRE	EMPTION :	SEQUENCE	352	2020-090-RS&SW	LAKE	68	32
	CHECKED - DB	REVISED -	DEPARTMENT OF TRANSPORTATION	IL ROUTE 137	(SHARIDAN	RD) AT	22ND	ST /MARTII	I LUTHER KING DR			CONTRAC	T NO.621	68
	DATE - 12/21/2021	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FED.	AID PROJECT		

										SE	QUI	ENC	E_0	)F_(	PER	RAT	ION																			l
MOVEMENT  ILL. RYE. 137 AND MLK JR DR.  MLK JR DR. AND SHERIDAN RD.		P	74,	11/4		#	P	1-1/	<b>,</b> p		****	1		#	<b>^</b>		1/4		##	-J.	4	774	##	14	/	1		##	th.	P	_	<del>+</del>	#	#	÷ .	F L A
PHASE					1							2						3					4					5			_	_	5		$\exists$	
INTERVAL		1	2	3A	38	44	4B	4C	4D	5	6.4	6B	7A	78	70	70	а	9A	98	9C	90	10	n	12	13	14	15A	158	164	168	17	18A	188	180	18D	S
CHANGE TO		1	/	2 06 3	3		4 OF	8 5		Λ	3			4 0	R 5				4 OF	8 5		/	/	5	Λ	Λ	I, 0	R	,	3		ı.	2. 3.	4 OR	5	н
MARTIN LUTHER KING JR. DR. FAR RIGHT MAST ARM AND NEAR RIGHT SIGNALS (EAST OF TRACKS)		С	C	Y	R	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
MARTIN LUTHER KING. JR. DR. N/B		G	G C	۲	R	Y	R	R	R	R	R	R	R	R	R	н,	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
END MAST ARM AND FAR LEFT SIGNALS (EAST OF TRACKS) MARTIN LUTHER KING JR. OR. FAR RIGHT MAST ARM SIGNAL (WEST OF TRACKS)		G	G	G	C	C	G	Y	R	C	G	G	G	G	Y	R	G	G	G	Υ	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
MARTIN LUTHER KING JR. DR. END MAST ARM AND FAR LEFT SIGNALS IWEST OF TRACKSI		G G	C G		G G	G	G	Y	R	90	0	G C	G	-G	Y	Я	G	G	C C	Υ	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Ŗ	R
MARTIN LUTHER KING JR. DR. FAR RICHT MAST ARM SIGNAL (EAST OF TRACKS)	-	R	R	R.	R	R	R	R	Я	R	R	R	R	R	R	A	R	R	R	R	R	R	R	R	R	R	R	R	R	R	6	G	G	Y	R	R
MARTIN LUTHER KING JR. DR. END MAST ARM AND FAR LEFT SIGNALS (EAST OF TRACKS)		R	R	R	R	R	R	R	R	R	R	R	R	R	R	Я	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-G	-40	G	Y	R	R
MARTIN LUTHER KING JR. DR. E/E FAR RIGHT MAST ARM AND NEAR RIGHT SIGNAL (WEST OF TRACKS)	1	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	я	R	R	R	R	R	R	R	R	R	R	R	R	R	C	Y	R	R	R	R
MARTIN LUTHER KING JR. DR. END MAST ARM AND FAR LEFT SIGNALS (WEST OF TRACKS)	3	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	8	Ŗ	R
SHERIDAN ROAD NEAR RIGHT, FAR RIGHT AND MID MAST ARM SIGNALS		R	R	R	R	R	R	R	R	G	G	G	C	G	G	C	G	G	G	G	C	G	C	G	C	G	۲	R	G	C	R	R	R	R	R	R
SHERIDAN ROAD END MAST ARM AND FAR LEFT SIGNALS	1	⇒R	→R	-R	→R	→R	→R	→R	⊸R	⊸G	-Y	→R	⊸Y	→R	→R	⊸R	R	⊸R	⊸R	→R	⊸R	→R	→R	→R	→R	→R	→R	→R	⊸R	-1	R	<b>→</b> F	- R	→R	R	⊸R
SHERIDAN ROAD MID MAST ARM, END MAST ARM, AND FAR LEFT SIGNALS	В	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	G	G	G	G	G	G	G	Y	R	G	G	R	R	R	R	R	R
SHERIDAN ROAD NEAR RIGHT AND FAR RIGHT SIGNALS	B	-	R-	R=	R-	R=	R=	R=	R	R=	R=	R =	R=	R	R ===	R=	G-	Y-	R=	R=	R-	R-	R=	R-	R-	R=	R-	R	R	Ra	R	R=	R=	R=	n-	R-
ILL. RTE. 137 N/I	В	R	R	R	R	R	R	R	R	R	R	R	R	R	a	R	R	R	R	R	R	G ⊸4G	G	G	C	G	Y	R	Y	R	R	R	R	R	R	R
END MAST ARM AND FAR LEFT SIGNALS  ILL RTE. 137  N/I	В	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	G	G	Y	R	Y	R	R	R	R	R	R	R
FAR RIGHT MAST ARM AND NEAR RIGHT SIGNAL  ILL. RTE. 137  S/1	В	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	C	G	Y	R	r	R	R	R	R	R	R	R
ALL SIGNALS PEDESTRIAN SIGNAL CROSSING MARTIN LUTHER KING JR. DR.	+	н	н	н	н	н	н	н	Н	н	н	н	н	н	н	н	н	В	н	н	н	p*	FH	н	P	FH	н	н	н	н	н	н	н	н	н	н
ON EAST SIDE OF SHERIDAN RD. PEDESTRIAN SIGNAL CROSSING SHERIDAN RD.	1	p°	FH	н	Н	н	н	н	н	н	н	н	н	н	н	Н	н	Н	Н	н	Н	н	н	Н	н	н	н	н	н	Н	н	н	н	н	К	н
ON NORTH SIDE OF MARTIN LUTHER KING JR. DR. PEDESTRIAN SIGNAL CROSSING IL. RTE. 137	+	p*	ѓн	н	н	н	н	н	К	н	н	н	Н	Н	н	н	н	н	н	Н	н	н	н	н	н	н	н	н	н	н	H	Н	Н	В	Н	н
ON NORTH SIDE OF MARTIN LUTHER KING JR. DR.  PEDESTRIAN SIGNALS CROSSING MARTIN LUTHER KING JR. DR.  ON WEST SIDE OF IL. RTE. 137	$\dashv$	н	н	H	н	н	н	н	н	Н	н	к	н	н	н	Н	н	н	н	н	н	н	н	н	P	FĤ	н	н	н	н	н	н	Н	н	н.	н
OH HEST SIDE OF RESIDER 151			_	_	_	_	-	_	_	_	_	_	_	_		-		_	_	-	-	-	-		_	_			_	_	_					

TO APPEAR ONLY UPON PUSHBUTTON ACTUATION.
 FLASHING IS TO TERMINATE AT THE COMPLETION OF THE PEDESTRIAN INTERVAL CLEARANCE.
 P = ILLUMINATED PERSON = WALK
 FH = ILLUMINATED FLASHING HAND = FLASHING DON'T WALK
 H = ILLUMINATED SOLID HAND = DON'T WALK

PHASE 5 SHALL BE PLACED ON RECALL

RAILROAD PREEMPT	ON	SEO	UEN	CE	OF	OPE	RAT	100					PREEMPTOR NUMBER 2				
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1		5		8		10		13	3	17	7	1000				
RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	14	18	ıc	tD	1E	1F	10	1H	IJ	1K	1L	144	2	3	4	5	CLEAR
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	18	2	10	2	15	2	1H	2	1K	2	1М	2	3	4	5		NORMAL SEQUENCE
MARTIN LUTHER KING JR. DR. W/B FAR RIGHT MAST ARM AND NEAR RIGHT SIGNALS (EAST OF TRACKS)	Y	R	R	R	R	Я	R	R	R	R	R	R	R	. R	R	R	Δ
MARTIN LUTHER KING JR. DR. END MAST ARM AND FAR LEFT SIGNALS (EAST OF TRACKS)	٧	R	R	R	R	n	R	R	R	R	R	R	R	R	R	R	Δ
MARTIN LUTHER KING JR. DR. W/B FAR RIGHT MAST ARM SIGNAL (WEST OF TRACKS)	G	C	G	G	G	G	R	R	R	R	R	R	G	۲	R	В	Δ
MARTIN LUTHER KING JR. DR. END MAST ARM AND FAR LEFT SIGNALS (WEST OF TRACKS)	-c	<b>~</b> c	<del>-</del> 6	c	-6	-c	R	R	R	R	R	R	⊸c	Y	R	R	Δ
MARTIN LUTHER KING JR. DR. E/B FAR RIGHT MAST ARM SIGNAL IEAST OF TRACKS)	R	R	R	R	R	R	R	R	R	R	G	C	G	Y	R	R	Δ
MARTIN LUTHER KING JR. DR. END MAST ARM AND FAR LEFT SIGNALS (EAST OF TRACKS)	R	R	R	R	R	R	R	R	R	R	G →C	G →G	G	۲	R	R	Δ
MARTIN LUTHER KING JR. DR. E/B FAR RIGHT MAST ARM AND NEAR RIGHT SIGNAL (WEST OF TRACKS)	R	R	R	R	R	R	R	R	R	R	Υ	R	R	R	R	R	Δ
MARTIN LUTHER KING JR. DR., END MAST ARM AND FAR LEFT SIGNALS (WEST OF TRACKS)  N/B	R	R	R	R	Ŕ	R	R	R.	R	Ŕ	Y	R	R	R	R	R	Δ.
MEAR RIGHT, FAR RIGHT AND MID MAST ARM SIGNALS	R	R	Y	R	Y.	R	Y	R	Υ	R	R	R	R	R	R	G	Δ
SHERIDAN ROAD END MAST ARM AND FAR LEFT SIGNALS	⊸R	→ R	<b>⊸</b> Y	⊸≉R	⊸R	⊸R	⊸R	→R	→R	→R	→R	⊸R	→R	→R	→R	⊸R	
SHERIDAN ROAD  MID MAST ARM, END MAST ARM, AND FAR LEFT SIGNALS	R	R	R	R	Ÿ	R	Υ	R	Y	R	R	R	R	R	8	G-	Δ
SHERIDAN ROAD  NEAR RIGHT AND FAR RIGHT SIGNALS  S/8	R-	R=	R=-	R-	Y=	R=	R=	R=	R-	R-	R-	R-	R=	R-	R←	R-	Δ
ILL RTE. 13T N/B END MAST ARM AND FAR LEFT SIGNALS	R	R	R	R	R	R	Y	R	Y	R	R	R	R	R	R	G	Δ
ILL. RTE. 137 FAR RIGHT MAST ARM SIGNAL AND NEAR RIGHT SIGNAL	R	R	R	R	R	R	Y	R	Y	R	R	R	R	R	R	G.	Δ
ILL, RTE. 137 S/B ALL SIGNALS	R	R	R	R	R	R	R	R	Y	8	R	R	R	R	R	G	Δ
PEDESTRIAN SIGNAL CROSSING MARTIN LUTHER KING JR. DR. ON EAST SIDE OF SHERIDAN RD.	Н	Н	Н	H	Н	Н	FH	н	FH	Н	н	Н	H	н	н	н	Δ
PEDESTRIAN SIGNAL CROSSING SHERIDAN RD. ON NORTH SIDE OF MARTIN LUTHER KING JR. DR.	FH	Н	н	н	Н	Н	н	Н	н	Н	н	н	н	н	н	н	Δ
PEDESTRIAN SIGNAL CROSSING IL. RTE. 137 ON NORTH SIDE OF MARTIN LUTHER KING JR. DR.	FH	н	н	н	н	Н	н	н	н	Н	н	н	н	н	н	н	Δ
PEDESTRIAN SIGNALS CROSSING MARTIN LUTHER KING JR. DR. ON WEST SIDE OF IL. RTE. 137	Н	Н	н	Н	н	Н	н	н	FH	н	н	н	н	Н	Н	н	Δ

RECORD DRAWINGS
HECKER AND COMPANY, INC.

By fame following Bate 8/6/13

A RAILROAD PREEMPTION SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERVAL TO DISPLAY AN EMERGENCY VEHICLE INTERVAL (IF APPLICABLE) AFTER RAILROAD PREEMPTION INTERVAL 5 IS TERMINATED.

TS# 210 NORTH C TS 21085
LAKE COUNTY CENTRACS
FORMER ECON 77

USER NAME = dbennett	DESIGNED	-	DB	REVISED	-
	DRAWN	-	DB	REVISED	=
PLOT SCALE = 40.0000 ' / in.	CHECKED	-	KK	REVISED	-
PLOT DATE = 2/7/2022	DATE	-	12/21/2021	REVISED	a.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 137 Sequen	ICE OF OPE	RATION	AND	ST /MARTIN RAILROAD F ERATION		NG DR	
SCALE:	SHEET	OF	SHEETS	STA.	TO STA.		ı

F.A. RTE.	SECT	TON		COUNTY	TOTAL SHEETS	SHEE NO.
352	2020-090	-RS&SW	,	LAKE	68	33
				CONTRACT	NO. 62	2L68
		ILLINOIS	FED. Al	ID PROJECT		

		TS	9425
<b>LAKE</b>	COUNTY	CENT	RACS

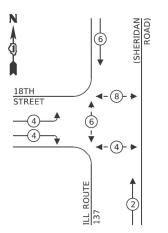
EXISTING INTERCONNECT

TO 16TH STREET

USER NAME = dbennett DESIGNED -DB REVISED SECTION TRAFFIC SIGNAL PLANS
18TH STREET AT ILL ROUTE 137 (SHERIDAN ROAD) DRAWN DB REVISED STATE OF ILLINOIS 2020-090-RS&SW LAKE 68 CHECKED KK REVISED **DEPARTMENT OF TRANSPORTATION** PLOT SCALE = 40.0000 ' / in CONTRACT NO. 62L68 SHEET OF SHEETS STA. PLOT DATE = 2/7/2022 DATE 12/14/2021 REVISED

**TS SHT NO. 14** 

#### **EXISTING CONTROLLER SEQUENCE**



#### **LEGEND**:

\* PROTECTED PHASE

← -(\*)- - PROTECTED/PERMITTED PHASE

**◄-**(\*)- ► PEDESTRIAN PHASE

OL OVERLAP

# TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

LLLOTTIOA	L OLII	VIOL IIL	COMPLINE	1410
TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	11	50	66.0
(YELLOW)	12	20	5	12.0
(GREEN)	12	12	45	64.8
PERMISSIVE ARROW		10	10	-
PED. SIGNAL	6	20	100	120.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	н	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	Ε.	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
			TOTAL =	387.8

ENERGY COSTS TO:

#### ILLINOIS DEPARTMENT OF TRANSPORTATION

201 WEST CENTER COURT

SCHAUMBURG, IL 60196-1096
ENERGY SUPPLY: CONTACT: TERRI BLECK

PHONE: (847) 816-5239

COMPANY: COMMONWEALTH EDISON

ACCOUNT NUMBER: ---

#### SCHEDULE OF QUANTITIES

18TH ST

4-1/C, NO.6 (GREEN)-

ITEM DESCRIPTION	UNITS	TOTAL QTY
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	20
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	55
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	55
DRILL EXISTING HANDHOLE	EACH	1
DETECTOR LOOP, TYPE I	FOOT	205
HODIN EMOTING COMMORES.		
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	55
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
PEDESTRIAN SIGNAL POST, 5 FT.	FOOT	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	6
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	4

#### TS 9425 LAKE COUNTY CENTRACS

CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE 18TH STREET AT ILL ROUTE 137 (SHERIDAN ROAD) DESIGNED - DB REVISED -STATE OF ILLINOIS DRAWN DB REVISED 2020-090-RS&SW LAKE 68 35 PLOT SCALE = 40.0000 ' / in. CHECKED -KK REVISED -**DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 62L68 PLOT DATE = 2/7/2022 SHEETS STA.

PROPOSED CABLE PLAN

TRACER CABLE-

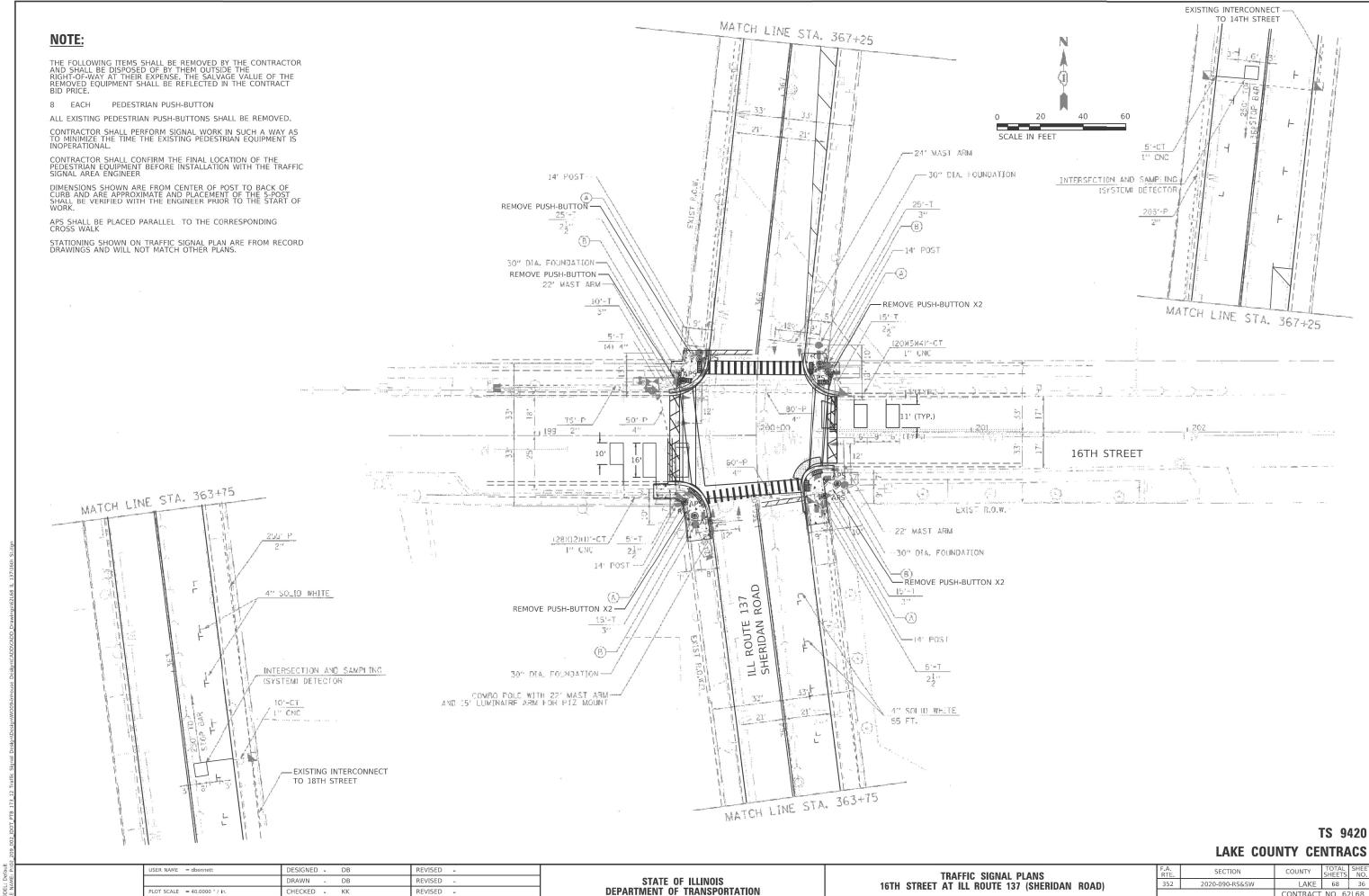
n ≺ z --5-

G ≺ R 5

EXISTING INTERCONNECT

TO 16TH STREET

- EXISTING INTERCONNECT



SCALE:

SHEET

SHEETS STA.

N0. SHT TS

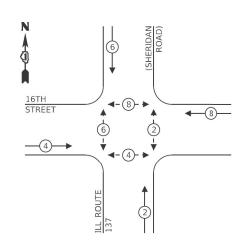
PLOT DATE = 2/7/2022

DATE

REVISED

LAKE 68 36 CONTRACT NO. 62L68

#### **EXISTING CONTROLLER SEQUENCE**



#### **LEGEND:**

**◆** PROTECTED PHASE

← -(\*)- - PROTECTED/PERMITTED PHASE

√-(\*)- ► PEDESTRIAN PHASE

OL OVERLAP

#### SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
DETECTOR LOOP, TYPE I	FOOT	270
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8

#### TRAFFIC SIGNAL **ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	13	11	50	71.5
(YELLOW)	13	20	5	13.0
(GREEN)	13	12	45	11.7
PERMISSIVE ARROW	-	10	10	-
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	Ε.	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	Ε.	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
			TOTAL =	381.2

ENERGY COSTS TO:

ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY: CONTACT: TERRI BLECK PHONE: (847) 816-5239

COMPANY: COMMONWEALTH EDISON ACCOUNT NUMBER:

> USER NAME = dbennett DESIGNED - DB REVISED -DRAWN DB REVISED PLOT SCALE = 40.0000 ' / in. CHECKED -KK REVISED -PLOT DATE = 2/7/2022 REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE 16TH STREET AT ILL ROUTE 137 (SHERIDAN ROAD) SHEETS STA.

TRACER CABLE -

-TRACER CABLE

EXISTING INTERCONNECT -TO 14TH STREET

> LAKE COUNTY CENTRACS LAKE 68 37 2020-090-RS&SW

TS 9420

- EXISTING INTERCONNECT

TO 18TH STREET

1#6 **CABLE PLAN** 

N0. SHT TS

CONTRACT NO. 62L68

TS 9415 LAKE COUNTY CENTRACS

\*VERIFY HANDHOLE HAS NO OTHER

250' TO

STOP BAR

----

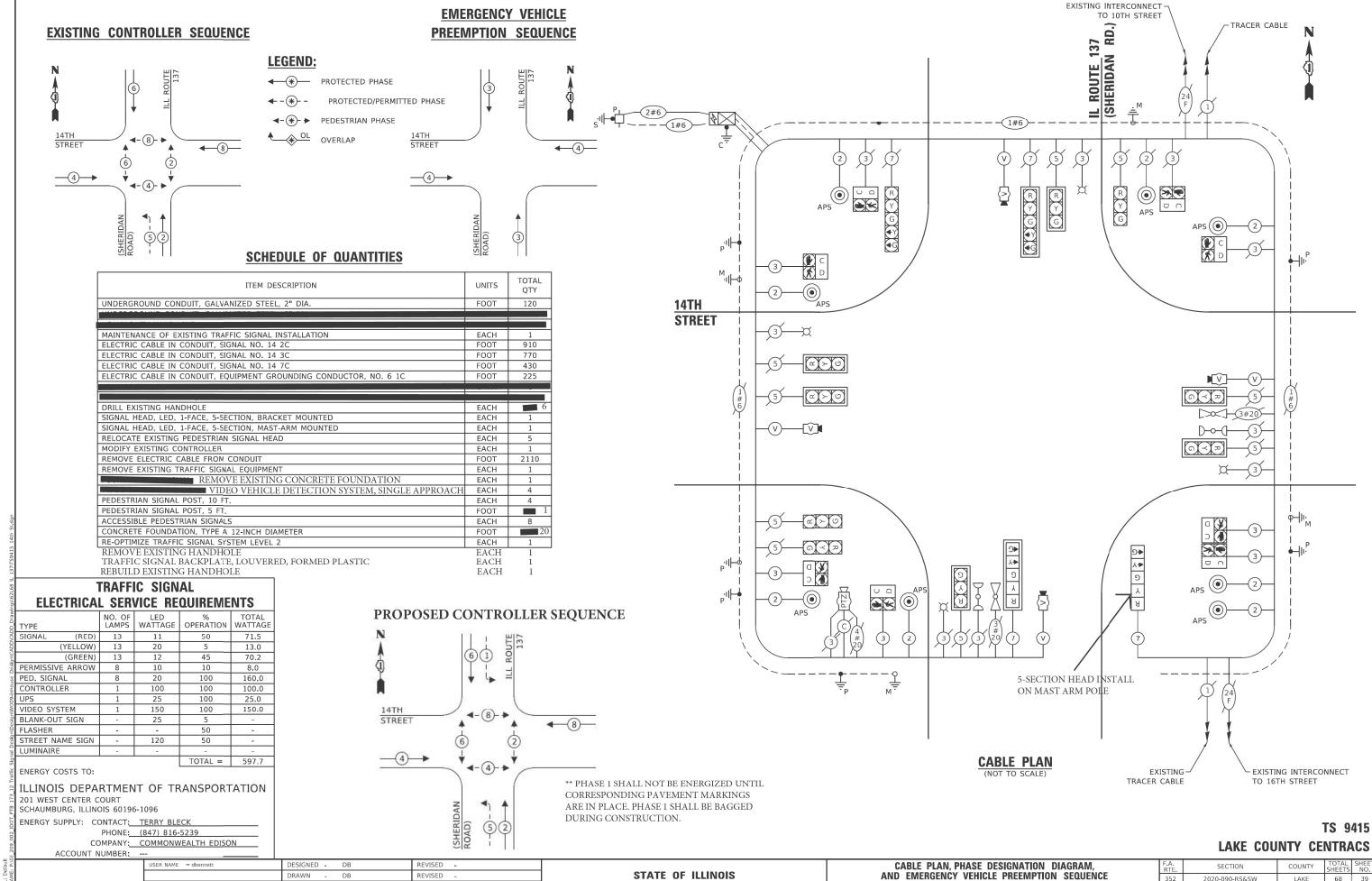
CABLES AND CAN BE REMOVED.

115 + 00

-270'-E-2"

USER NAME = dbennett	DESIGNED -	DB	REVISED -				TDAEEIC	SIGNAL PL	AN		F.A RTF	SECTION	COUNTY	TOTAL	SHEET
	DRAWN -	DB	REVISED -	STATE OF ILLINOIS	14TH				.AN (SHERIDAN R	nΔD)	352	2020-090-RS&SW	LAKE	68	38
PLOT SCALE = 40.0000 ' / in.	CHECKED -	DB	REVISED -	DEPARTMENT OF TRANSPORTATION	1411	JINLLI A	AT ILL. I	HOUTE 137 (	SILIIDAN II	UADI			CONTRAC	Г NO. 67	2168
PLOT DATE = 2/7/2022	DATE -	02/04/2022	REVISED -		SCALE:	SHEET	OF	SHEETS STA	A.	TO STA.		ILLINOIS FED. A	ID PROJECT		

WHERE TRAFFIC SIGNAL EQUIPMENT WAS REMOVED THE EXISTING ELECTRICAL CABLE SHALL BE REMOVED FROM CONDUIT



STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

352

14TH STREET AT ILL. ROUTE 137 (SHERIDAN ROAD)

SHEETS STA.

2020-090-RS&SW

LAKE 68 39

CONTRACT NO. 64L68

DRAWN

CHECKED -

PLOT SCALE = 40.0000 ' / in.

PLOT DATE = 2/7/2022

DB

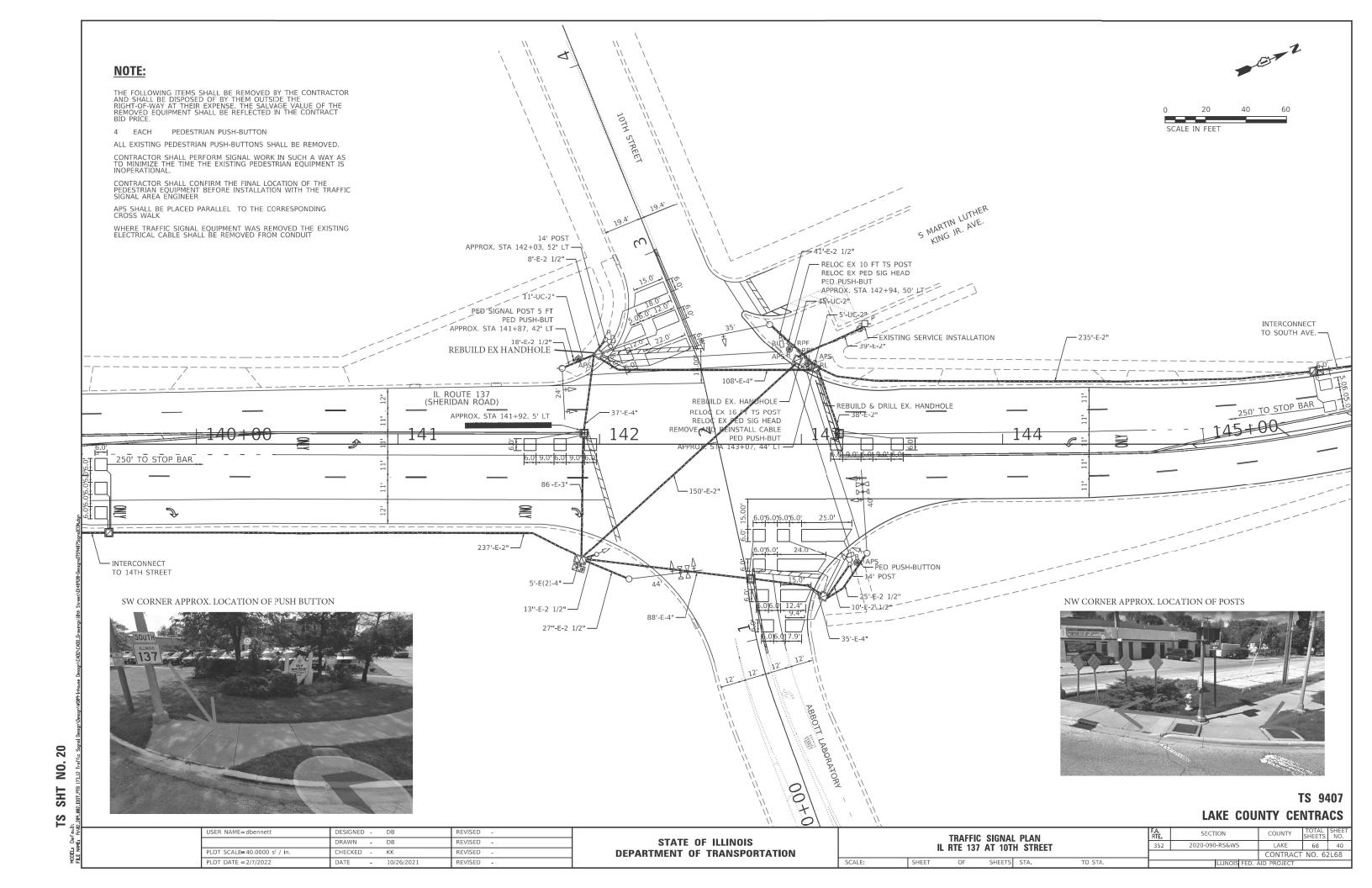
KK

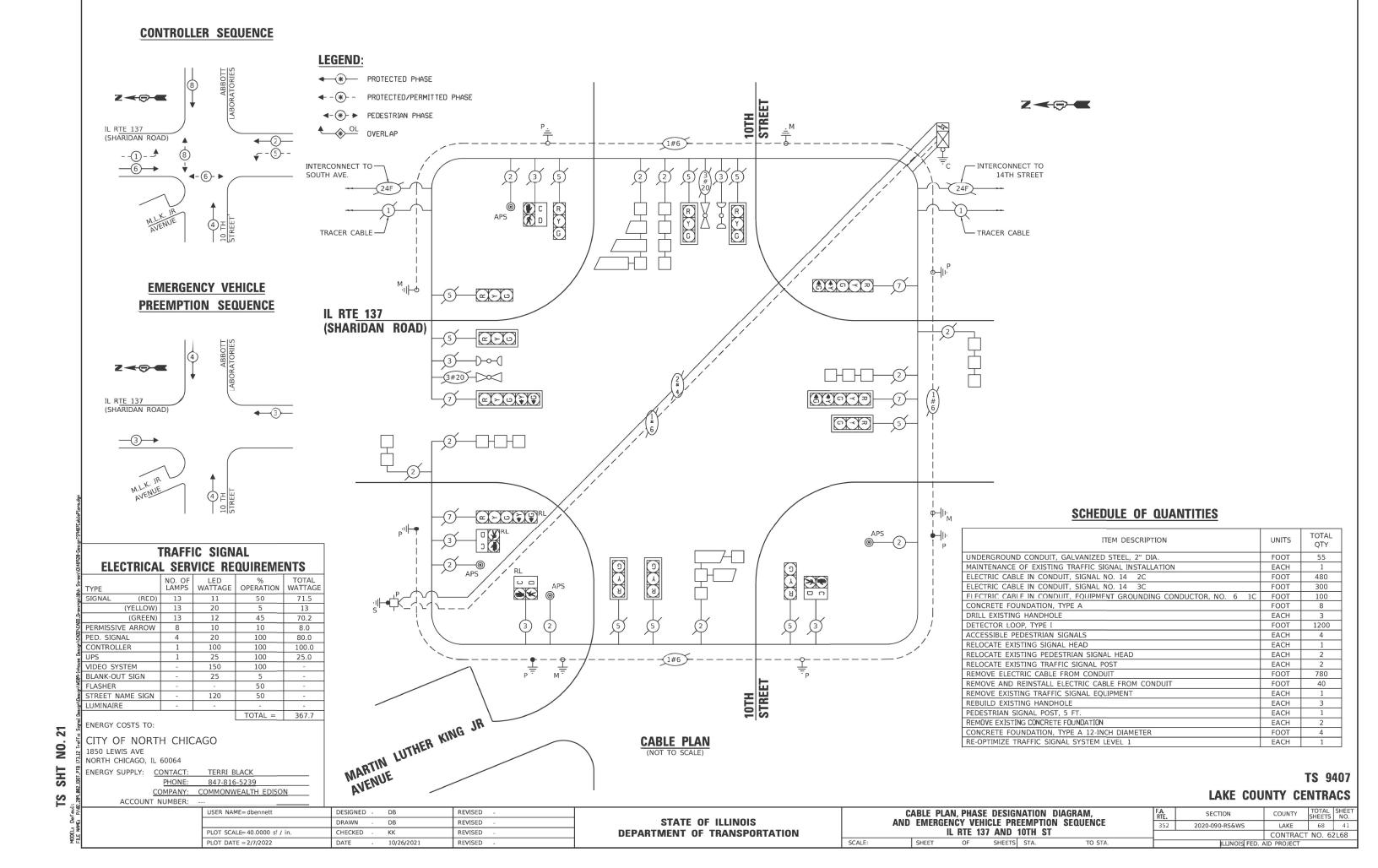
12/21/2021

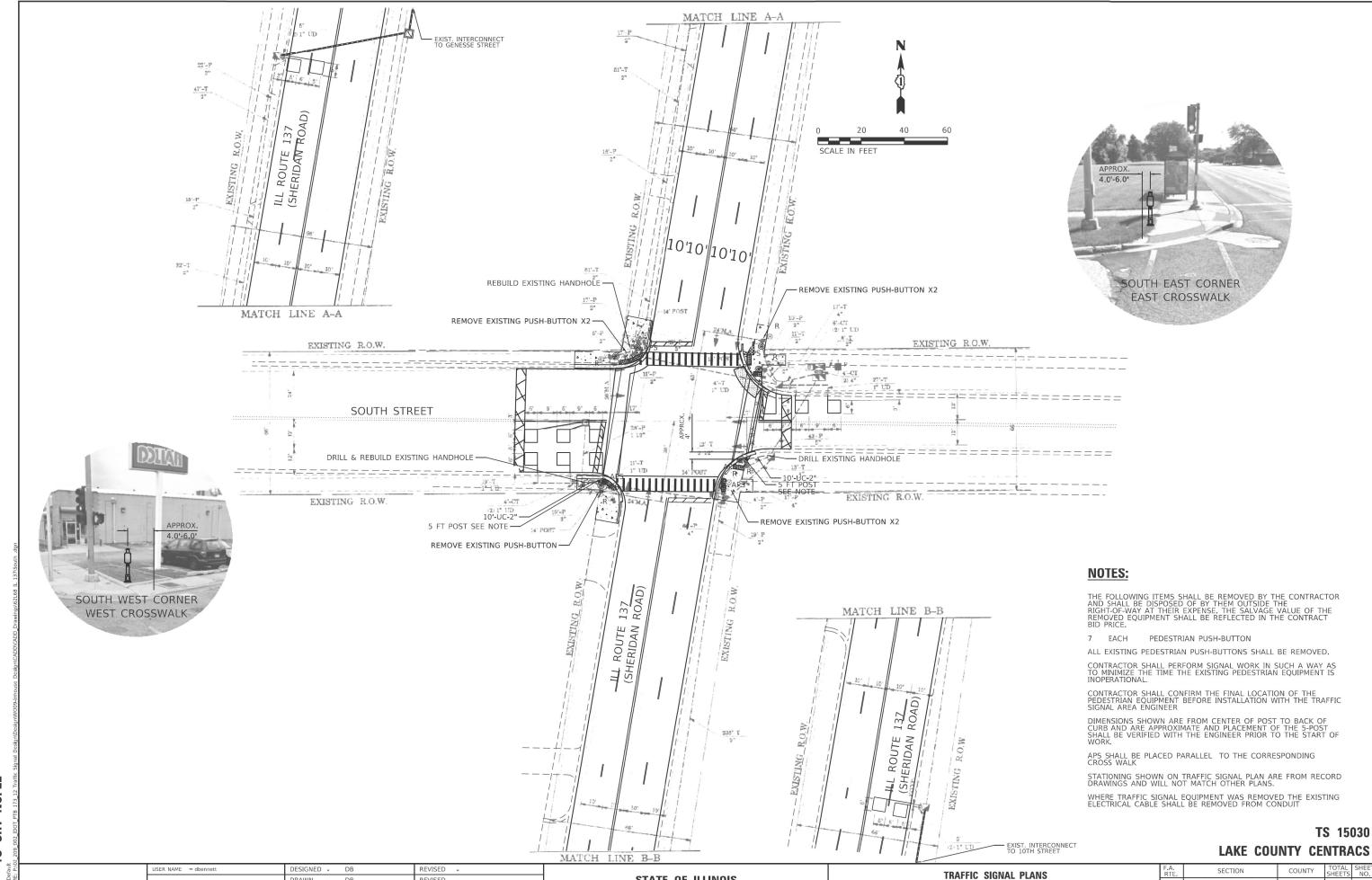
REVISED

REVISED

REVISED







STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

SOUTH STREET AT ILL ROUTE 137 (SHERIDAN ROAD)

2020-090-RS&SW

LAKE 68 42

CONTRACT NO. 62L68

N0. SHT IS

DRAWN

CHECKED -

PLOT SCALE = 40.0000 ' / in.

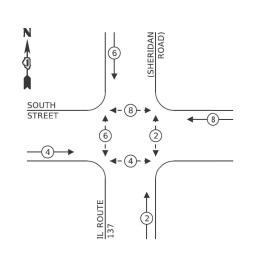
DB

REVISED

REVISED

REVISED -

#### **EXISTING CONTROLLER SEQUENCE**



#### **LEGEND:**

\* PROTECTED PHASE

← - \*\* - PROTECTED/PERMITTED PHASE

**◄-**\*- ► PEDESTRIAN PHASE

OL OVERLAP

#### SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	20
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	245
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	105
DRILL EXISTING HANDHOLE	EACH	2
DETECTOR LOOP, TYPE I	FOOT	500
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	90
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REBUILD EXISTING HANDHOLE	EACH	2
PEDESTRIAN SIGNAL POST, 5 FT.	FOOT	2
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	8
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1

TI	RAFFIC	SIGNAL
<b>ELECTRICAL</b>	<b>SERVIC</b>	E REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (REI	0) 12	11	50	66.0
(YELLOV	V) 12	20	5	12.0
(GREEI	N) 12	12	45	64.8
PERMISSIVE ARRO	W -	10	10	0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	1-1
STREET NAME SIG	N -	120	50	-
LUMINAIRE	-	-	-	-
			TOTAL =	427.8

ENERGY COSTS TO:

CITY OF WAUKEGAN

ENERGY SUPPLY: CONTACT: TERRI BLECK

PHONE: (847) 816-5239

COMPANY: COMMONWEALTH EDISON

ACCOUNT NUMBER: ---

 USER NAME
 = dbennett
 DESIGNED
 - DB
 REVISED

 DRAWN
 - DB
 REVISED

 PLOT SCALE
 = 40.0000 ' / in.
 CHECKED
 - KK
 REVISED

 PLOT DATE
 = 2/7/2022
 DATE
 - 12/14/2021
 REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM,
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
SOUTH STREET AT ILL ROUTE 137 (SHERIDAN ROAD)

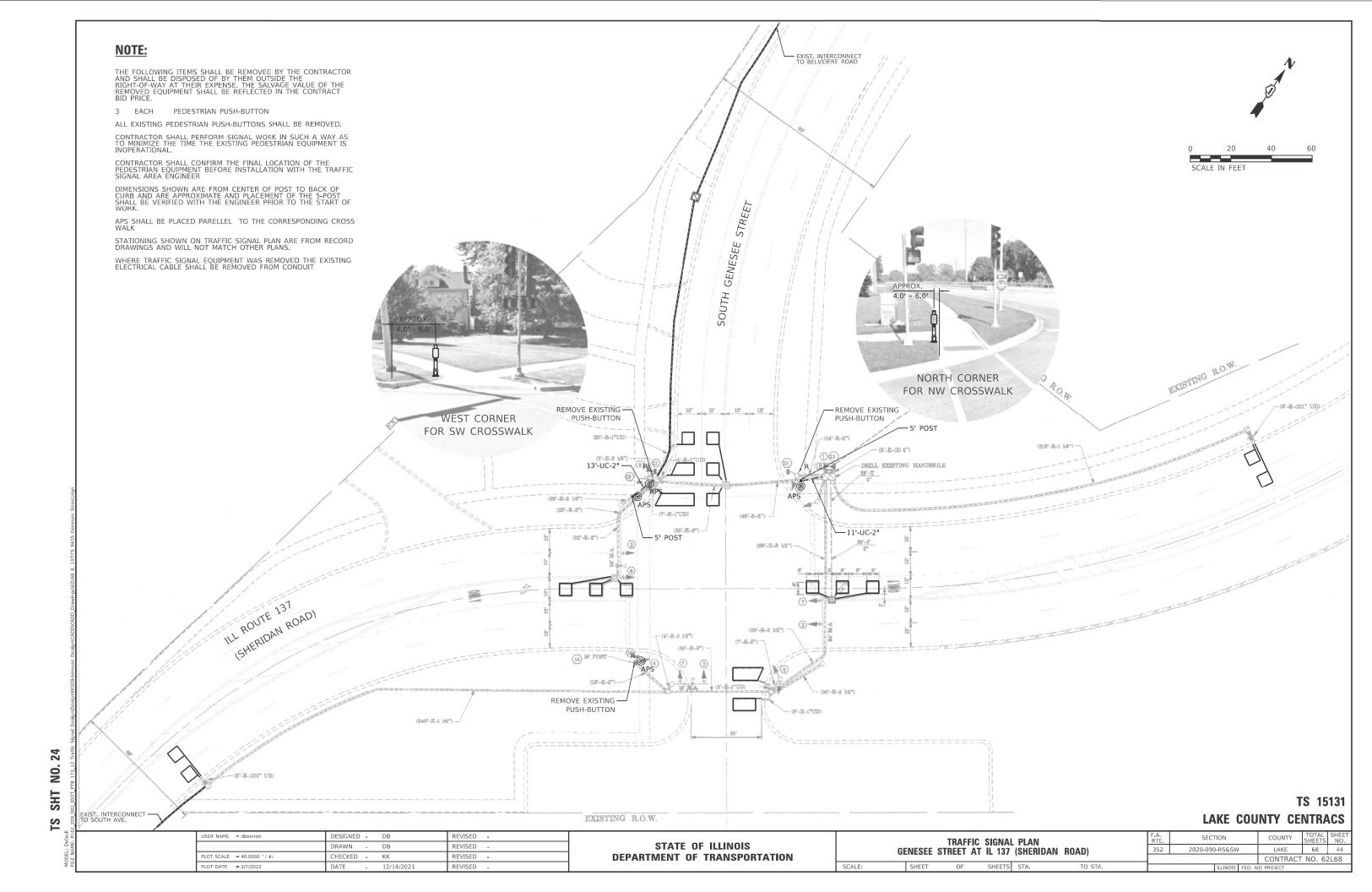
SHEET OF SHEETS STA. TO STA.

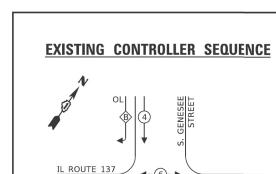
 F.A. RTE.
 SECTION
 COUNTY
 SHEETS NO.

 352
 2020-090-RS&SW
 LAKE
 68
 43

 CONTRACT NO. 62L68

P= 2 1#6 APS @ U APS R Y G	EXISTING INTERCONNECT TO GENESEE STREET  APS  APS  APS  APS  APS  APS  APS  APS
SOUTH STREET	2 1 (#) (6) (7) (#) (6)
131 APS ® APS	APS (1) (2) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1
CABLE PLAN (NOT TO SCALE)	TRACER CABLE EXISTING INTERCONNECT TO 10TH STREET  TS 15030





## **EXISTING EMERGENCY VEHICLE**

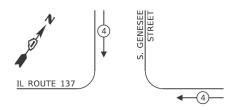
#### PREEMPTION SEQUENCE

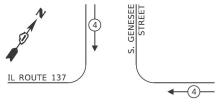


**LEGEND**:

(SHERIDAN

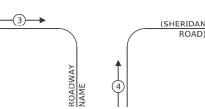
OL OVERLAP







OVERLAP		PERMISSIVE		PROTECTE
LETTER		PHASE		PHASE
В	=	4	+	5



4	
(SHERIDAN ROAD)	

EXISTING INTERCONNECT -TO BELVIDERE ROAD

IL ROUTE 137

#### **SCHEDULE OF QUANTITIES**

ITEM DESCRIPTION	UNITS	TOTAL QTY
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	24
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	200
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	40
DRILL EXISTING HANDHOLE	EACH	2
DETECTOR LOOP, TYPE I	FOOT	725
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	45
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
PEDESTRIAN SIGNAL POST, 5 FT.	FOOT	2
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	4
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	8
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1

1	2			(SHERIDAN ROAD)
EXISTING TRACER CABLE			(S) (A) (B)	↓ ↓ ↓ ↓ ↓ ↓
EXISTING INTERCONNECT	APS Q Q Y			
TO SOUTH AVE.	2 3 7	7 (3) (2) (5) (2)	5	,,
	φ p= M=	. — — — — — (1#6)— — — — — —	<del>-</del>	

- EXISTING TRACER CABLE

#### TRAFFIC SIGNAL **ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	13	11	50	71.5
(YELLOW)	13	20	5	13
(GREEN)	13	12	45	70.2
PERMISSIVE ARROW	12	10	10	12.0
PED. SIGNAL	8	20	100	80
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	н.	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	Ε.	50	1-1
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
			TOTAL =	371.7

ENERGY COSTS TO:

CITY OF WAUKEGAN

ENERGY SUPPLY: CONTACT: TERRI BLECK

COMPANY: COMMONWEALTH EDISON ACCOUNT NUMBER:

PHONE: (847) 816-5239

DESIGNED - DB REVISED -DRAWN DB REVISED PLOT SCALE = 40.0000 ' / in. CHECKED -KK REVISED -PLOT DATE = 2/7/2022 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE GENESEE STREET AT IL 137 (SHERIDAN ROAD) SHEETS STA.

**CABLE PLAN** 

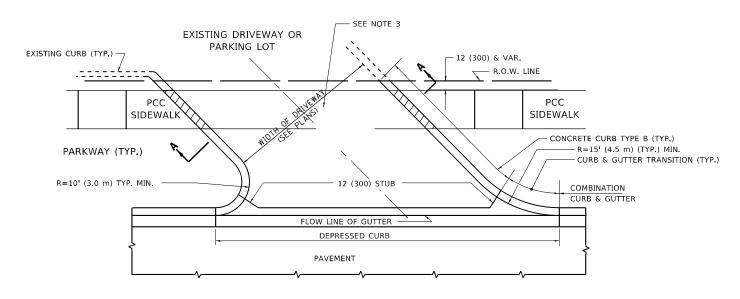
S. GENESEE STREET

LAKE COUNTY CENTRACS 2020-090-RS&SW LAKE 68 45 CONTRACT NO. 62L68

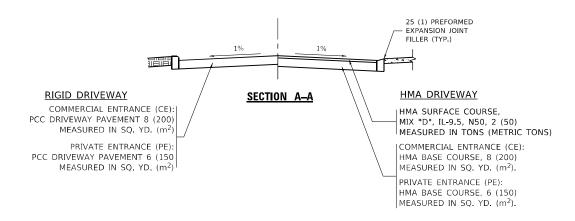
TS 15131

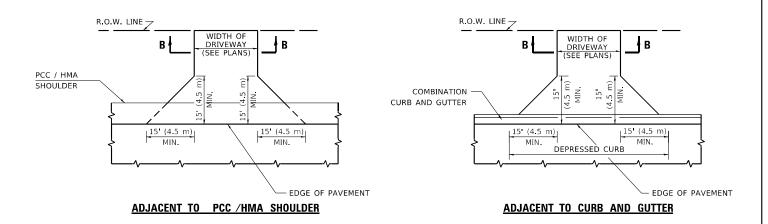
N0. SHT TS

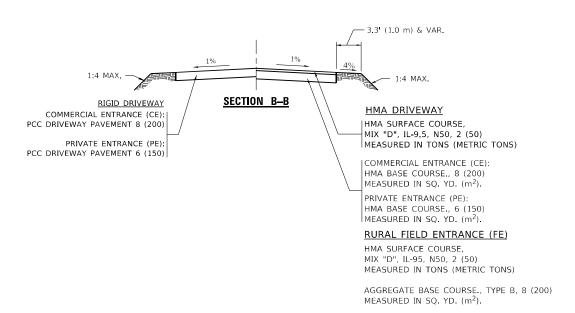
#### WITH CONCRETE CURB, TYPE B











#### **GENERAL NOTES**

- DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.
- COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

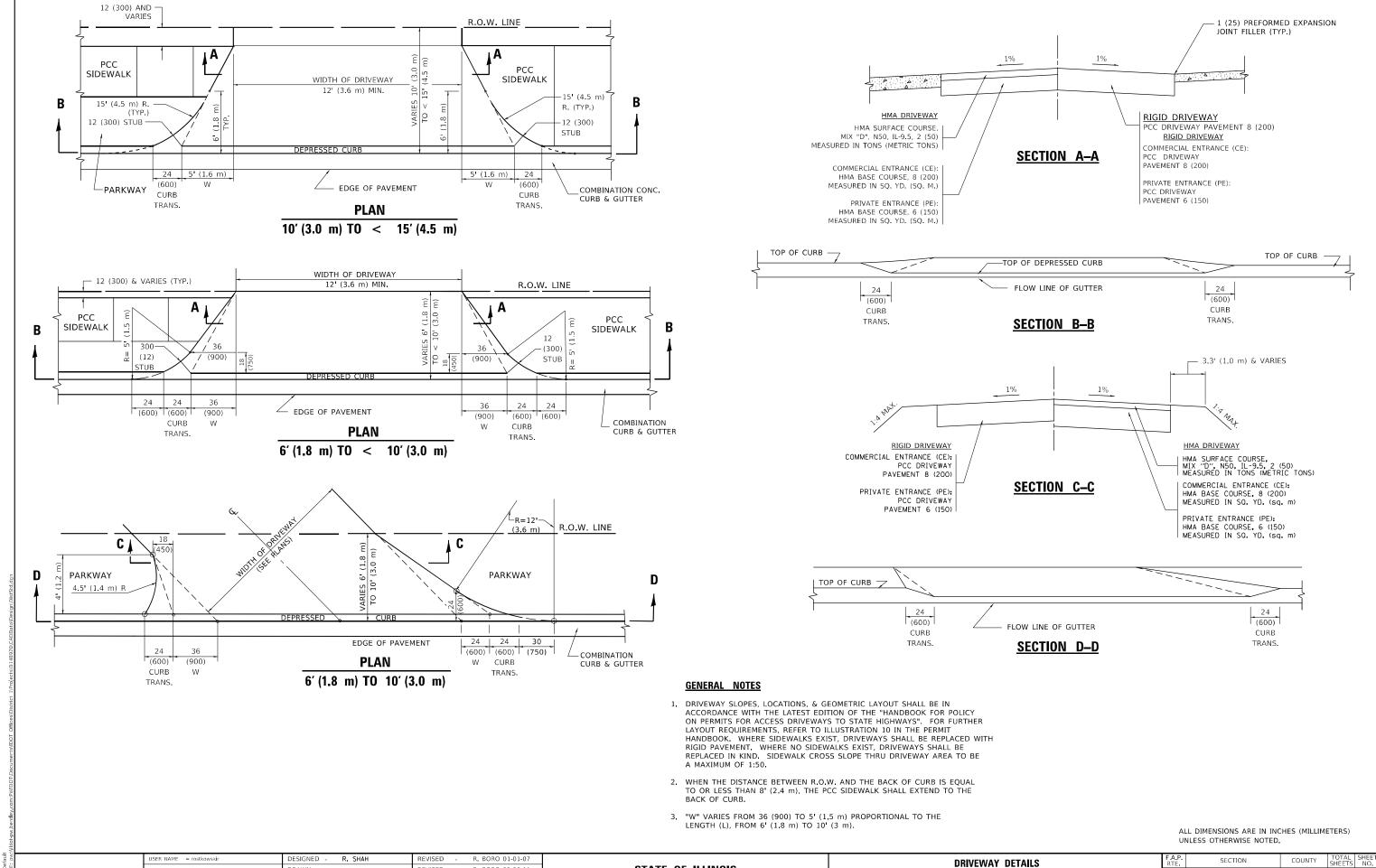
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED.

USER NAME = rostkowskir	DESIGNED - R. SHAH	REVISED	-	R. BORO 06-11-08
	DRAWN -	REVISED	-	R. BORO 09-06-11
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED	-	K. SMITH 08-28-19
PLOT DATE = 2/7/2022	DATE 11-04-95	REVISED.		K SMITH 02-01-22

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS – DISTANCE BETWEEN R.O.W.										
AND I	ACE OF CL	JRB &	EDGE OF	SHOULDER	<u>&gt;</u> 15′(4.5m)					
SCALE: NONE	SHEET 1	OF 1	SHEETS	STA.	TO STA.					

F.A.P. RTE	SEC.	TION	COUNTY	TOTAL SHEETS	SHEET NO.	
352	2020-090	D-RS&SW	LAKE	68	46	
В	D400-01 (BD	<b>–</b> 01)	CONTRACT	NO. 62	2L68	
		ILLINOIS	FED. A	D PROJECT		



STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

2020-090-RS&SW

BD400-02 (BD-02)

DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5m)

OF 1 SHEETS STA.

LAKE

CONTRACT NO. 62L68

68 47

MODEL: Default

DRAWN

DATE

PLOT DATE = 2/7/2022

HECKED

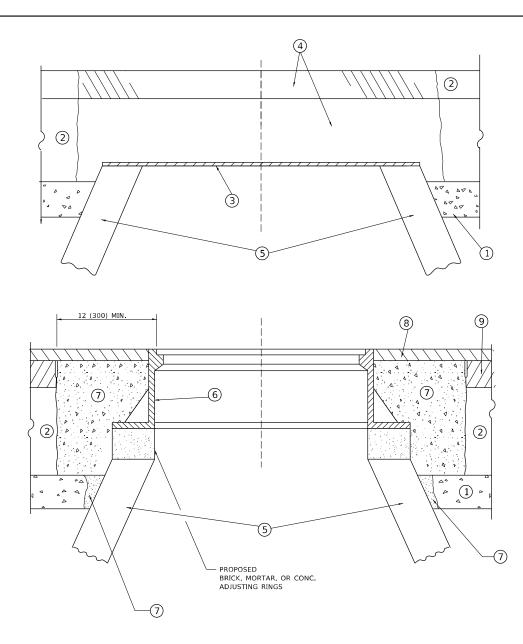
11-06-95

REVISED

REVISED

R. BORO 09-06-11

K. SMITH 02-01-22



## DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

#### **NOTES**

- 1. 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.
- 3. CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.
- 4. THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

#### 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 HMA SURFACE MIX APPROVED BY THE ENGINEER. (MIN. 1 1/2 (40) HMA TO REMAIN AFTER MILLING).

#### 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

(6) FRAME AND LID (SEE NOTES)

(2) EXISTING PAVEMENT

(7) CLASS\*PP-1 CONCRETE

3 36 (900) DIAMETER METAL PLATE

(8) PROPOSED HMA SURFACE COURSE

4 PROPOSED CRUSHED STONE AND HMA SURFACE MIX

(9) PROPOSED HMA BINDER COURSE

(5) EXISTING STRUCTURE

#### 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**

- 1. 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.
- 3. NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.
- 4. 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.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

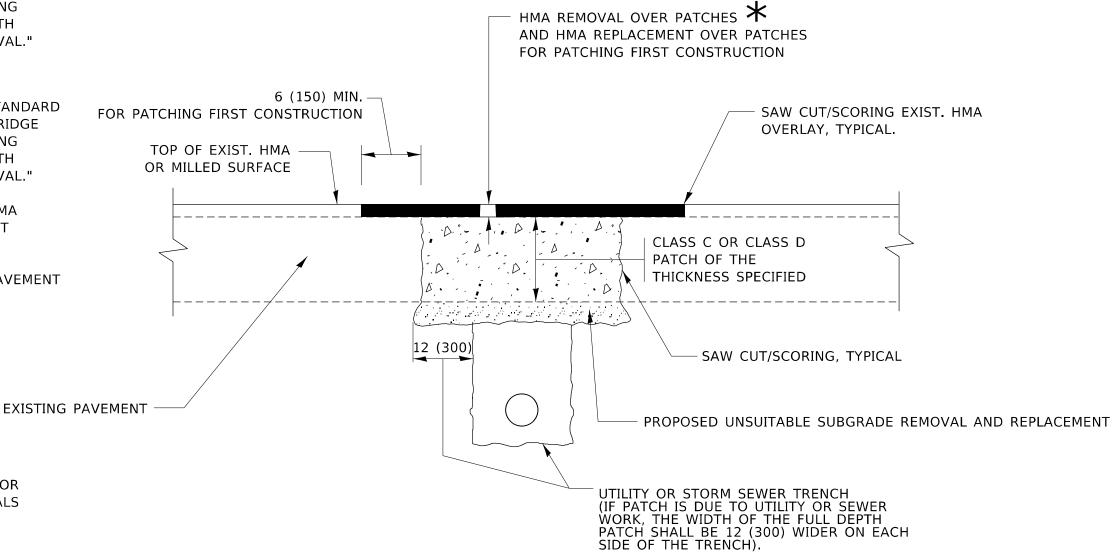
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

#### 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.



#### **SEQUENCE OF CONSTRUCTION (PATCHING FIRST)**

1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEE TYPICAL SECTIONS FOR

THICKNESS AND MATERIALS

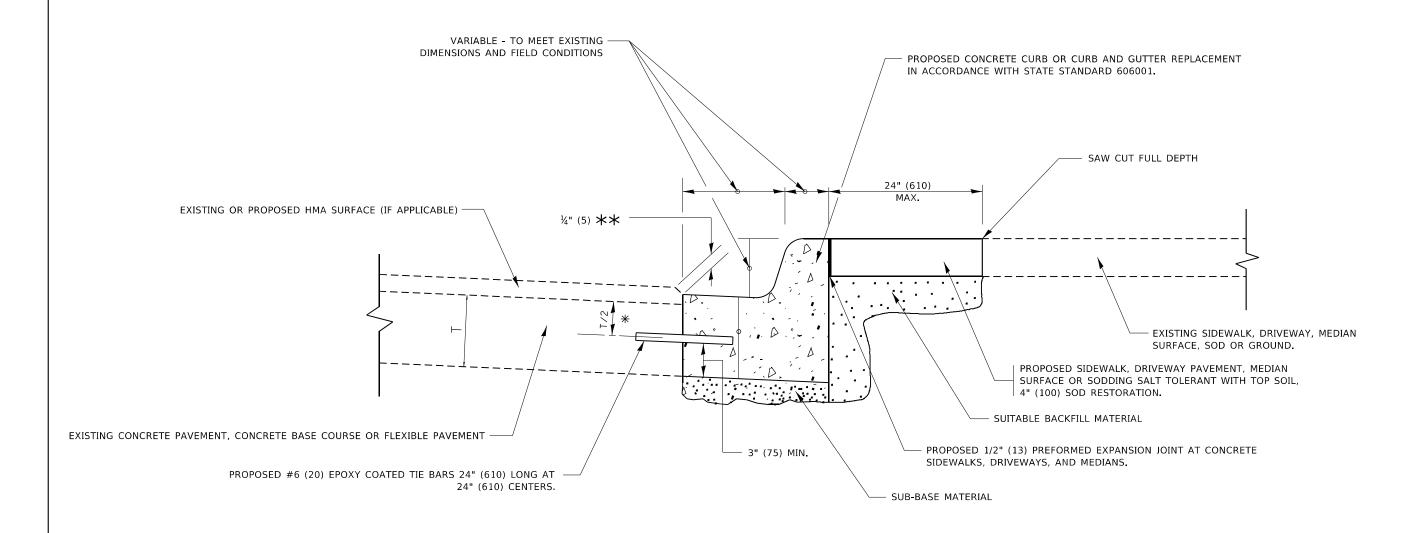
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

#### **SEQUENCE OF CONSTRUCTION (MILLING FIRST)**

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

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

USER NAME = rostkowskir	DESIGNED - R. SHAH	REVISED - R. BORO 01-01-07		PAVEMENT PATCHING FOR	F.A.P. BTF	SECTION	COUNTY	TOTAL	SHEET NO.
	DRAWN -	REVISED - R. BORO 09-04-07	STATE OF ILLINOIS	HMA SURFACED PAVEMENT	352	2020-090-RS&SW	LAKE	68	49
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED - K. ENG 10-27-08	DEPARTMENT OF TRANSPORTATION	HIVIA SUKFACED PAVEIVIENT		BD400-04 (BD-22)	CONTRACT	NO. 62	L68
PLOT DATE = 2/7/2022	DATE - 10-25-94	REVISED - K, SMITH 02-01-22		SCALE: NONE   SHEET 1 OF 1 SHEETS   STA. TO STA.		TILLINOIS FED.	AID PROJECT		



- 💥 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.
- $\star\star$  if the final surface of the pavement is concrete, the gutter is to be flush WITH THE PAVEMENT.

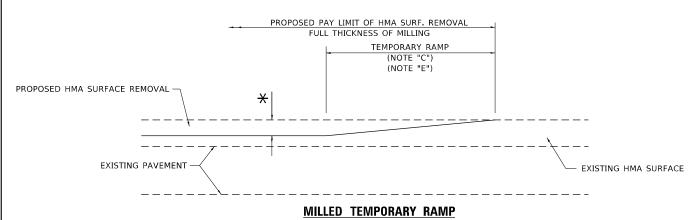
## **CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT**

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

USER NAME = FOSTROWSKIF	DESIGNED - A. HOUSEH	REVISED - A. ABBAS 03-21-97	
	DRAWN -	REVISED - M. GOMEZ 01-22-01	STATE OF ILLING
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED - R. BORO 12-15-09	DEPARTMENT OF TRANS
PLOT DATE = 2/7/2022	DATE - 03-11-94	REVISED - K. SMITH 07-11-19	

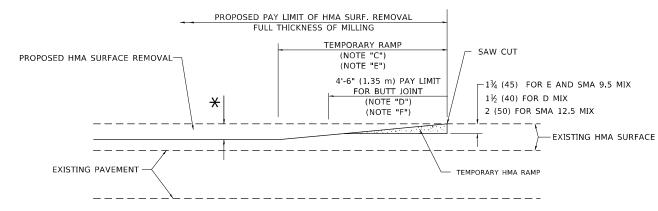
SCALE: NONE

CUR	URB OR CURB AND GUTTER						F.A.P. SECTION COUNTY			SHEET NO.
2EM	EMOVAL AND REPLACEMENT						352 2020-090-RS&SW LAKE			50
SEIVIUVAL AND REPLAGEIVIENT							BD600-06 (BD-24)	CONTRACT	NO. 62	2L68
1	OF	1	SHEETS	STA.	TO STA.		ILLINOIS FED.	AID PROJECT		



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

#### OPTION 1

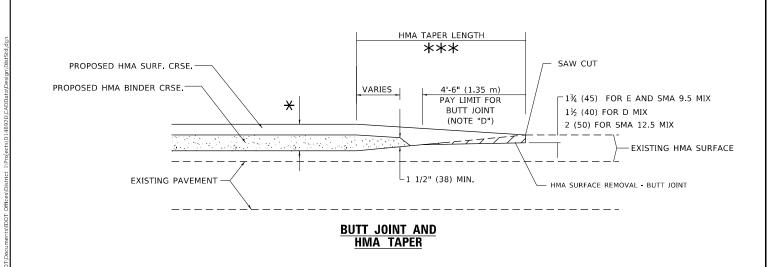


#### HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

#### OPTION 2

#### TYPICAL TEMPORARY RAMP



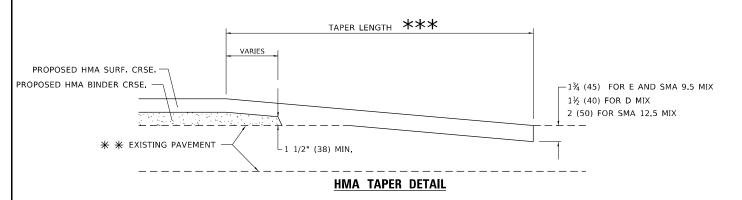
# TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

# \* EXISTING PAVEMENT 

| 30'-0" (9.0 m) (NOTE "A") | 15'-0" (4.5 m) (NOTE "B") | (NOTE "B") | (NOTE "A1") | 1½ (40) FOR E AND SMA 9.5 MIX | 1½ (40) FOR SMA 12.5 MIX | (2 (50) FOR SMA

PROPOSED HMA OR PCC

SURFACE REMOVAL - BUTT JOINT



## 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.
  - igstar 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**

- 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.

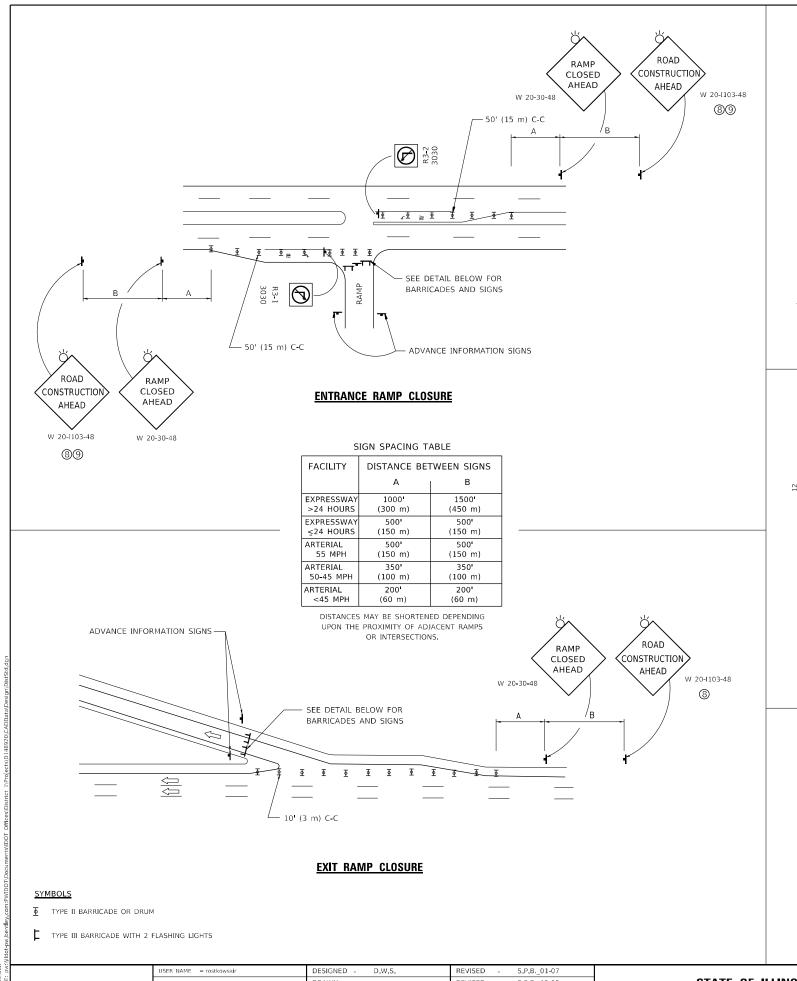
68

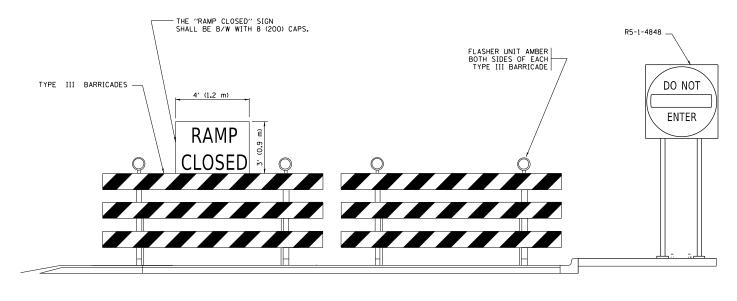
CONTRACT NO. 62L68

2020-090-RS&SW

BD400-05 BD-32

USER NAME = FOSTKOWSKIF	DESIGNED - M. DE YONG	REVISED - A. ABBAS U3-21-97				BUTT 、	JOINT .	AND		RTF
	DRAWN -	REVISED - M. GOMEZ 04-06-01	STATE OF ILLINOIS							352
PLOT SCALE = 100.0000 / in	CHECKED -	REVISED - R. BORO 01-01-07	DEPARTMENT OF TRANSPORTATION			HMA TA	PER D	ETAILS		
PLOT DATE = 2/7/2022	DATE - 06-13-90	REVISED - K. SMITH 02-01-22		SCALE: NONE	SHEET 1	OF 1	SHEETS	STA.	TO STA.	





#### **DETAIL FOR REQUIRED BARRICADES & SIGNS**

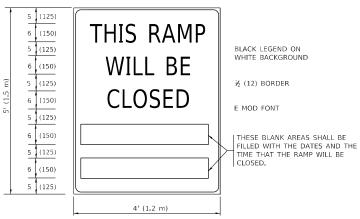
## RAMP CLOSED 10' (3 m)

RAMP CLOSURE ADVANCE WARNING SIGN

BACKGROUND MOUNTED DIAGONALLY E MOD FONT 1 (25) BORDER

THESE SIGNS ARE REQUIRED ON ALL THE EXIT GUIDE SIGNS FOR EXIT RAMPS THAT WILL BE CLOSED FOR MORE THAN FOUR (4) CONSECUTIVE DAYS.

BLACK LEGEND ON ORANGE



RAMP CLOSURE ADVANCE INFORMATION SIGN

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

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

#### GENERAL NOTES:

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

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

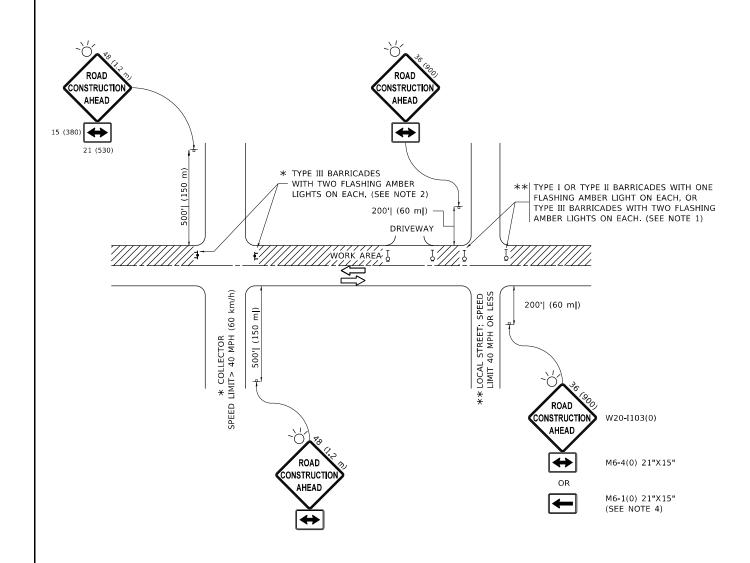
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

LAKE

68 CONTRACT NO. 62L68

SECTION 2020-090-RS&SW

USER NAME = FOSTROWSKIF	DRAWN -	REVISED - S.P.B12-09	STATE OF ILLINOIS		EN			XIT_RAMP		RTE.
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED - M.D06-13	DEPARTMENT OF TRANSPORTATION			CLUS	URE_DE	IAILS		
PLOT DATE = 2/7/2022	DATE - 02-83	REVISED - M.D01-18		SCALE: NONE	SHEET 1	OF 1	SHEETS	STA.	TO STA.	



#### 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,
- THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY
  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
- WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE
  4. SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL
  BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

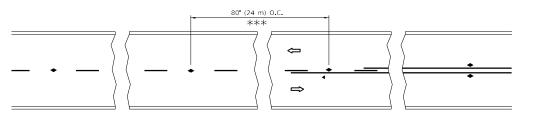
- 5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
- 6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER
- 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 = rostkowskir	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96
	DRAWN -	REVISED - T. RAMMACHER 01-06-00
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED - A. SCHUETZE 07-01-13
PLOT DATE = 2/7/2022	DATE - 06-89	REVISED _ A. SCHUETZE 09-15-16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

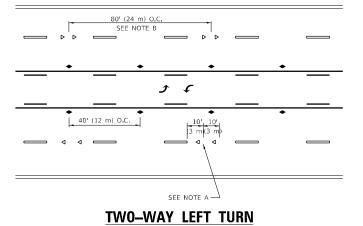
						TION FOR DRIVEWAYS
SCALE: NONE	SHEET	1 OF	1	SHEETS	STA.	TO STA.



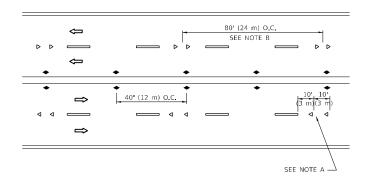
\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

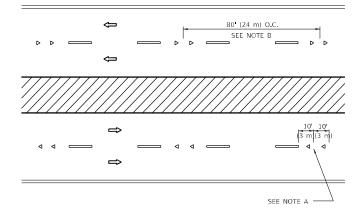
# $\Rightarrow$ LANE REDUCTION TRANSITION

SEE FIGURE 3B-14 MUTCD



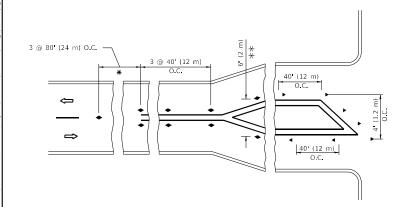
#### TW0-LANE/TW0-WAY

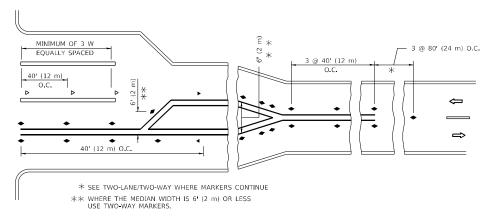




#### MULTI-LANE/UNDIVIDED







#### **TURN LANES**

#### **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

#### 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.

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

DESIGNED REVISED - T. RAMMACHER 03-12-99 DRAWN REVISED - T. RAMMACHER 01-06-00 CHECKED REVISED PLOT DATE = 2/7/2022 C. JUCIUS 07-01-13 DATE REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) SHEET 1 OF 1 SHEETS STA.

SECTION 2020-090-RS&SW LAKE 68 54 TC-11 CONTRACT NO. 62L68

**SYMBOLS** 

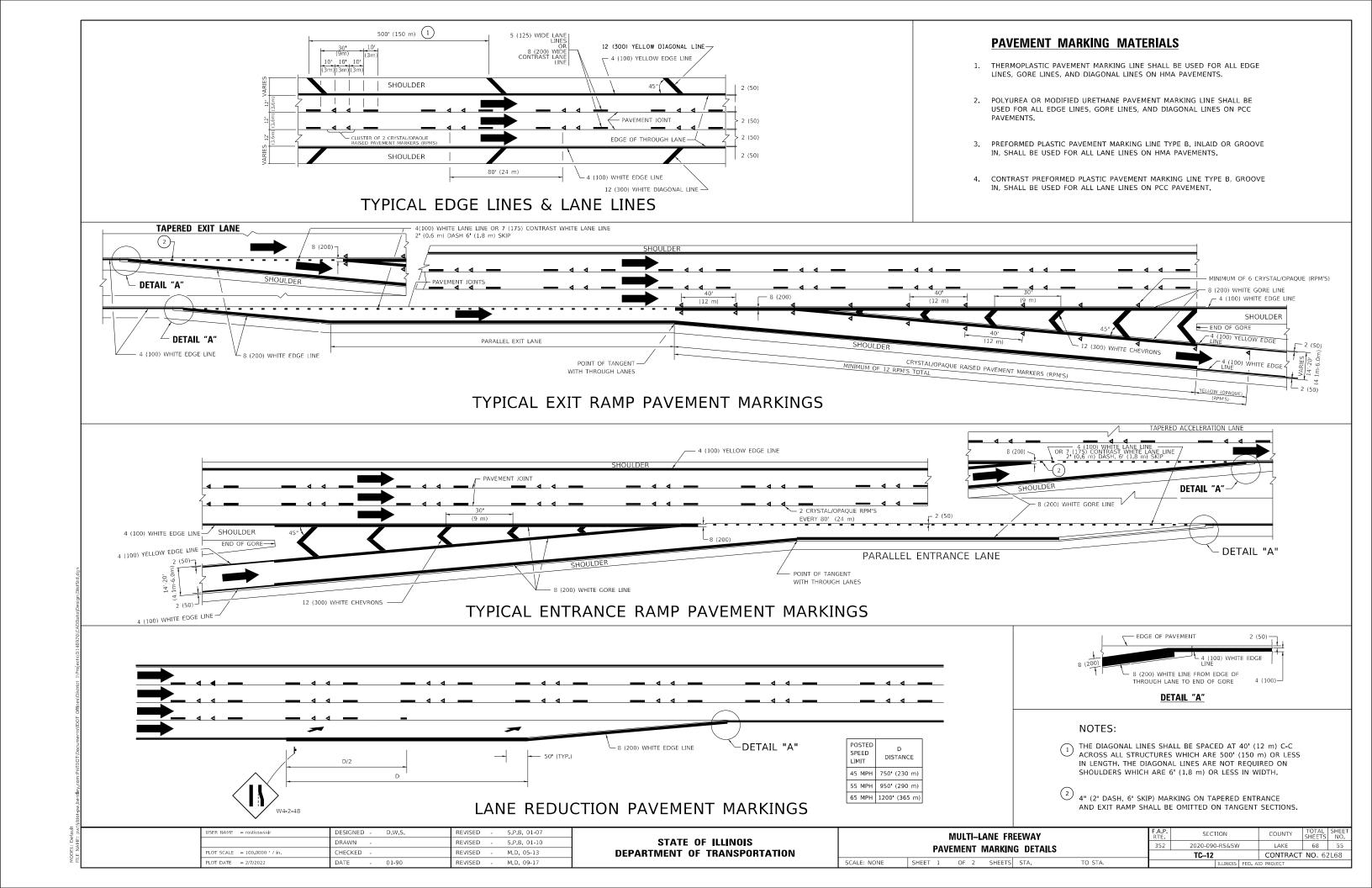
ONE-WAY AMBER MARKER

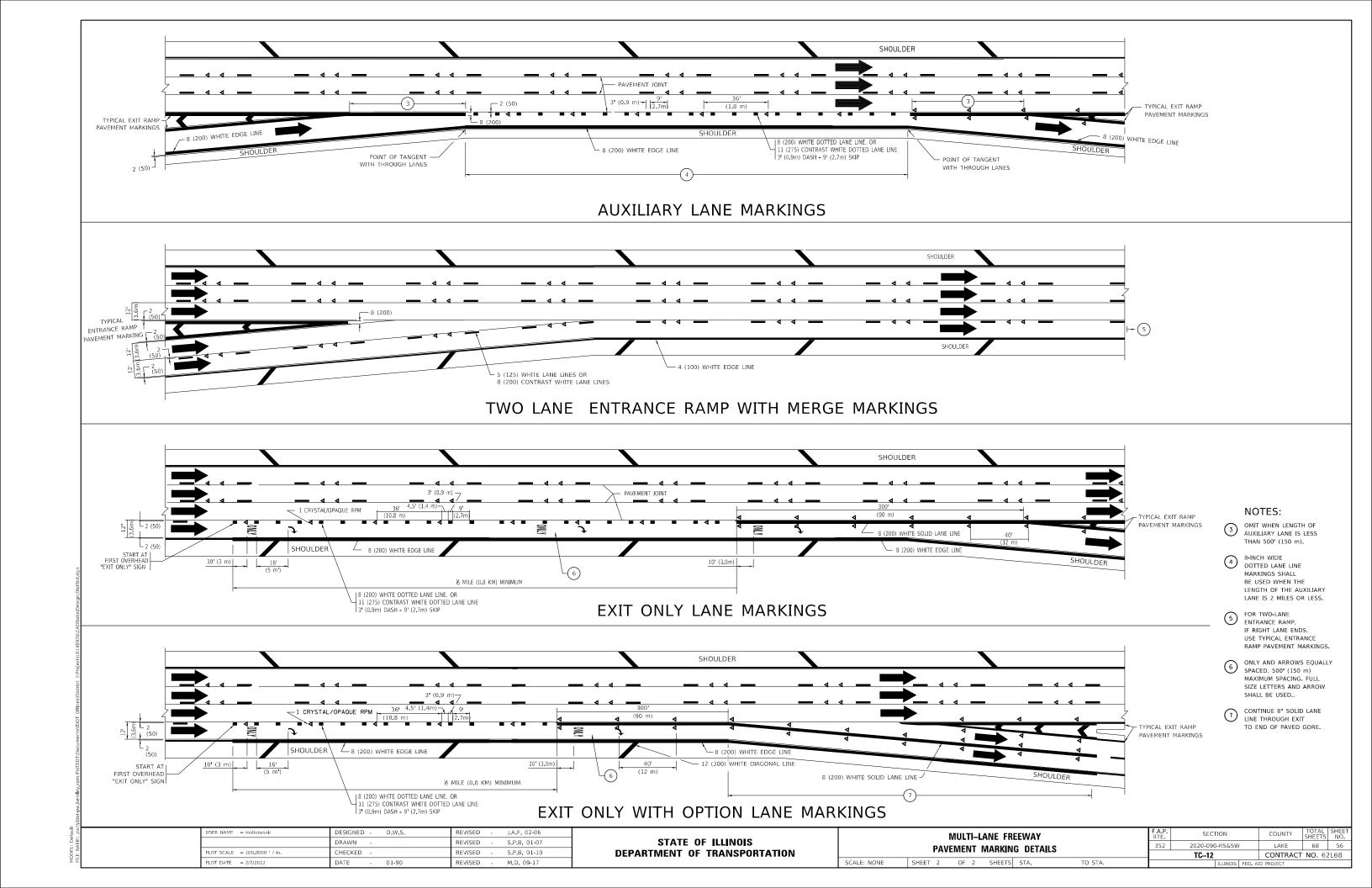
TWO-WAY AMBER MARKER

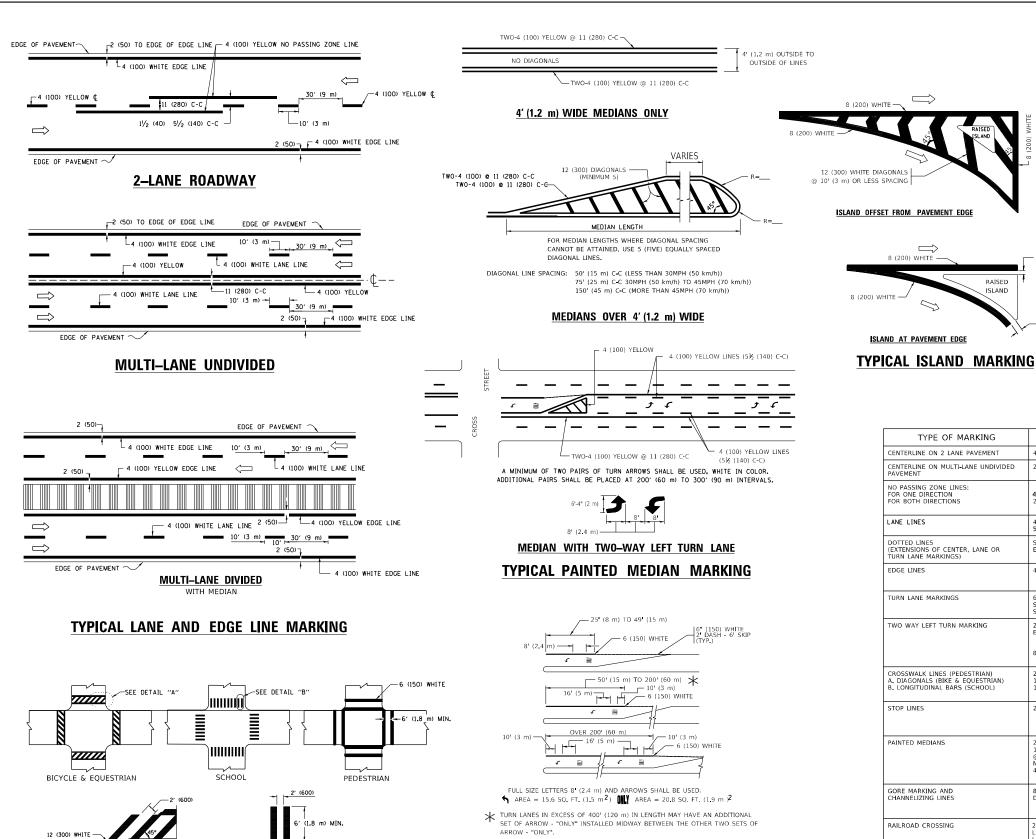
ONE-WAY CRYSTAL MARKER (W/O)

YELLOW STRIPE

■ WHITE STRIPE







TYPICAL TURN LANE MARKING

TYPICAL LEFT (OR RIGHT) TURN LANE

D(FT) SPEED LIMIT 50 **COMBINATION** LEFT AND U-TURN 5'-4" (1620) √ 32 R (810) LANE REDUCTION TRANSITION \* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS. **U-TURN** 

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	<b>4 (100)</b> 2 @ <b>4</b> (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART 5EE 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 PEACH "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.

8 (200) WHITE -

RAISED

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

USER NAME = rostkowskir	DESIGNED	-	EVERS	REVISED	-	C. JUCIUS 09-09-09
	DRAWN	-		REVISED	-	C. JUCIUS 07-01-13
PLOT SCALE = 100.0000 / in.	CHECKED	-		REVISED	-	C. JUCIUS 12-21-15
PLOT DATE = 2/7/2022	DATE	-	03-19-90	REVISED	-	C. JUCIUS 04-12-16

─12 (300) WHITE

DETAIL "B"

- 6 (150) WHITE

TYPICAL CROSSWALK MARKING

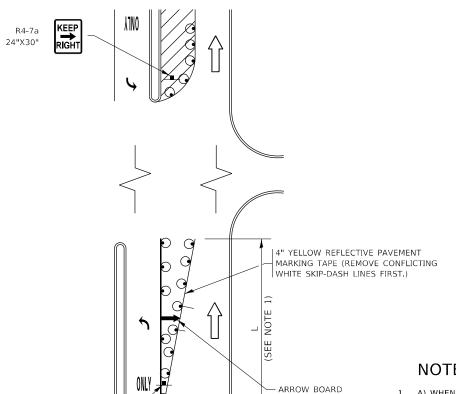
\* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF

DETAIL "A"

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

DISTRICT ONE TYPICAL PAVEMENT MARKINGS		F A P. SECTION C		COUNTY	TOTAL SHEETS	SHEET NO.
		352	2020-090-RS&SW	LAKE	68	57
TITIOAL TAVENENT MAININGS	TC-13 CONTRACT NO.			NO. 62	2L68	
SHEET 1 OF 2 SHEETS STA	TO STA		TILINOIS SED A	ID DOOLEGE		

### TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER





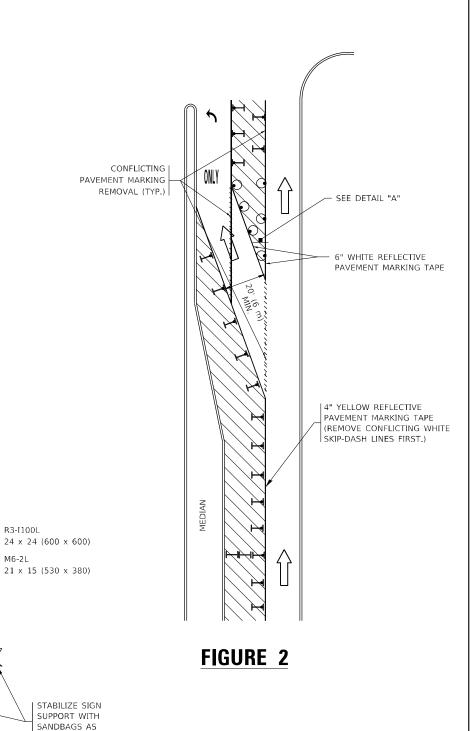
SEE DETAIL "A"

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

#### NOTES:

- 1. A) WHEN "L" IS ≤ THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.
  - B) WHEN "L" IS > THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
- 2. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
- 3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
- 4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
- 5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-I100R 24 x 24 (600 x 600) AND M6-2R 21 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 PREOUIREMENTS.
- 8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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



#### **DETAIL A**

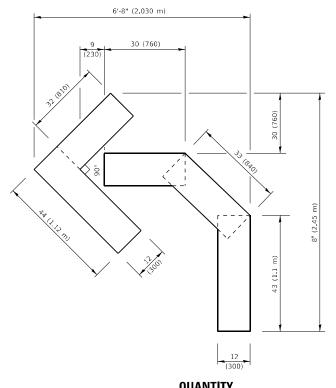
TURN

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

USEK NAME = FOSTKOWSKIF	DESIGNED	- 1.	RAMMACHER 09-08-94	KENIZED	-	R. BORO 09-14-09
	DRAWN	-	A. HOUSEH 11-07-95	REVISED	- A.	SCHUETZE 07-01-13
PLOT SCALE = 100.0000 / in.	CHECKED	-	A. HOUSEH 10-12-96	REVISED	- A.	SCHUETZE 09-15-16
PLOT DATE = 2/7/2022	DATE	- T.	RAMMACHER 01-06-00	REVISED	-	

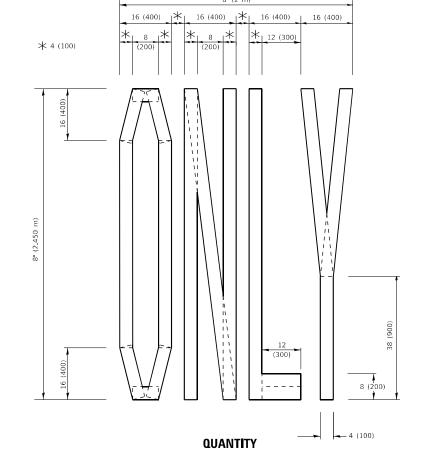
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

	TRAF	FIC CONTROL AND	PROTEC	CTION AT TURN	BAYS	F.A.P. RTE	SEC.	TION		COUNTY	TOTAL SHEETS	
ı		/TO REMAIN	UDEN .	IN TRAFFIC		352	2020-090	D-RS&SW	/	LAKE	68	58
ı	(TO REMAIN OPEN TO TRAFFIC)						TC-14	ļ		CONTRACT	NO. 62	2L68
ı	SCALE: NONE	SHEET 1 OF 1	SHEETS	STA.	TO STA.			ILLINOIS	FED. AI	D PROJECT		

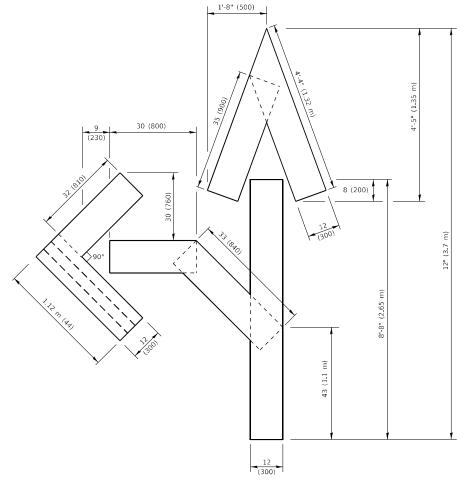


#### QUANTITY

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



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

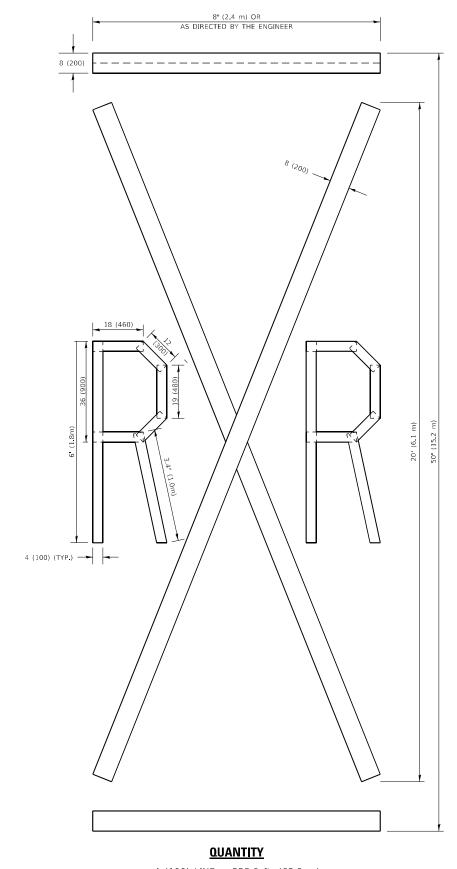


#### QUANTITY

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

#### NOTE:

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



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

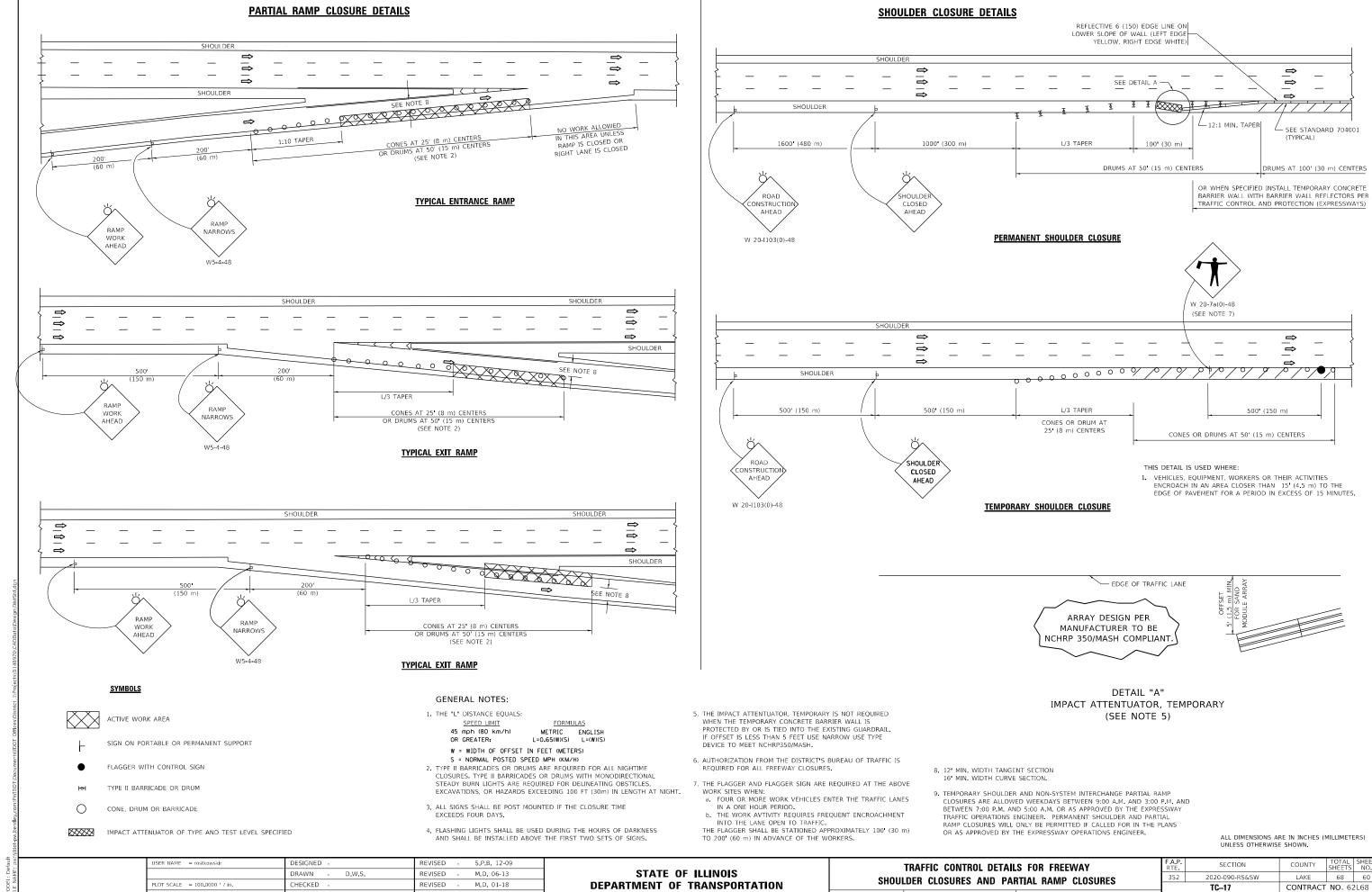
> All dimensions are in inches (millimeters) unless otherwise shown.

USER NAME = rostkowskir	DESIGNED -	REVISED	- T. RAMMACHER 03-02-98
	DRAWN -	REVISED	- E. GOMEZ 08-28-00
PLOT SCALE = 100.0010 / in.	CHECKED -	REVISED	- E. GOMEZ 08-28-00
PLOT DATE = 2/7/2022	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.

SECTION 2020-090-RS&SW LAKE 68 59 TC-16 CONTRACT NO. 62L68



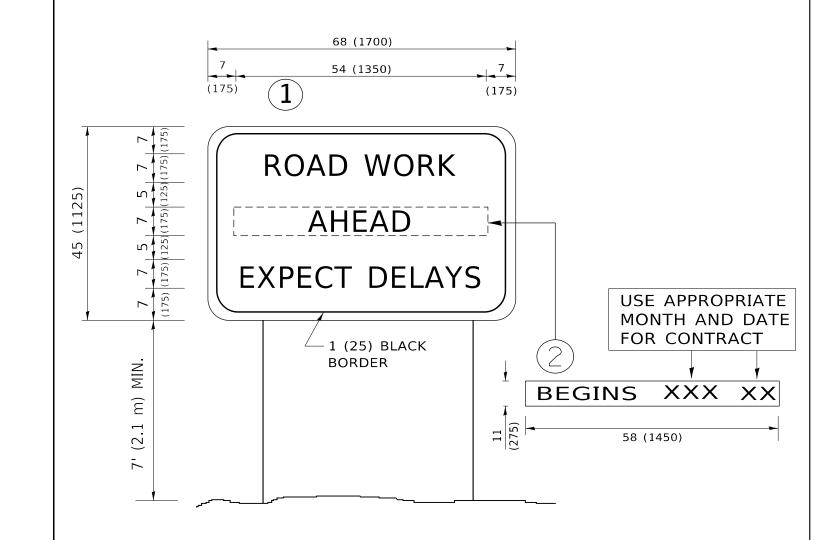
M.D. 10-20

REVISED

SHEET 1 OF 1 SHEETS STA.

PLOT DATE = 2/7/2022

DATE



#### 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.)

SCALE: NONE

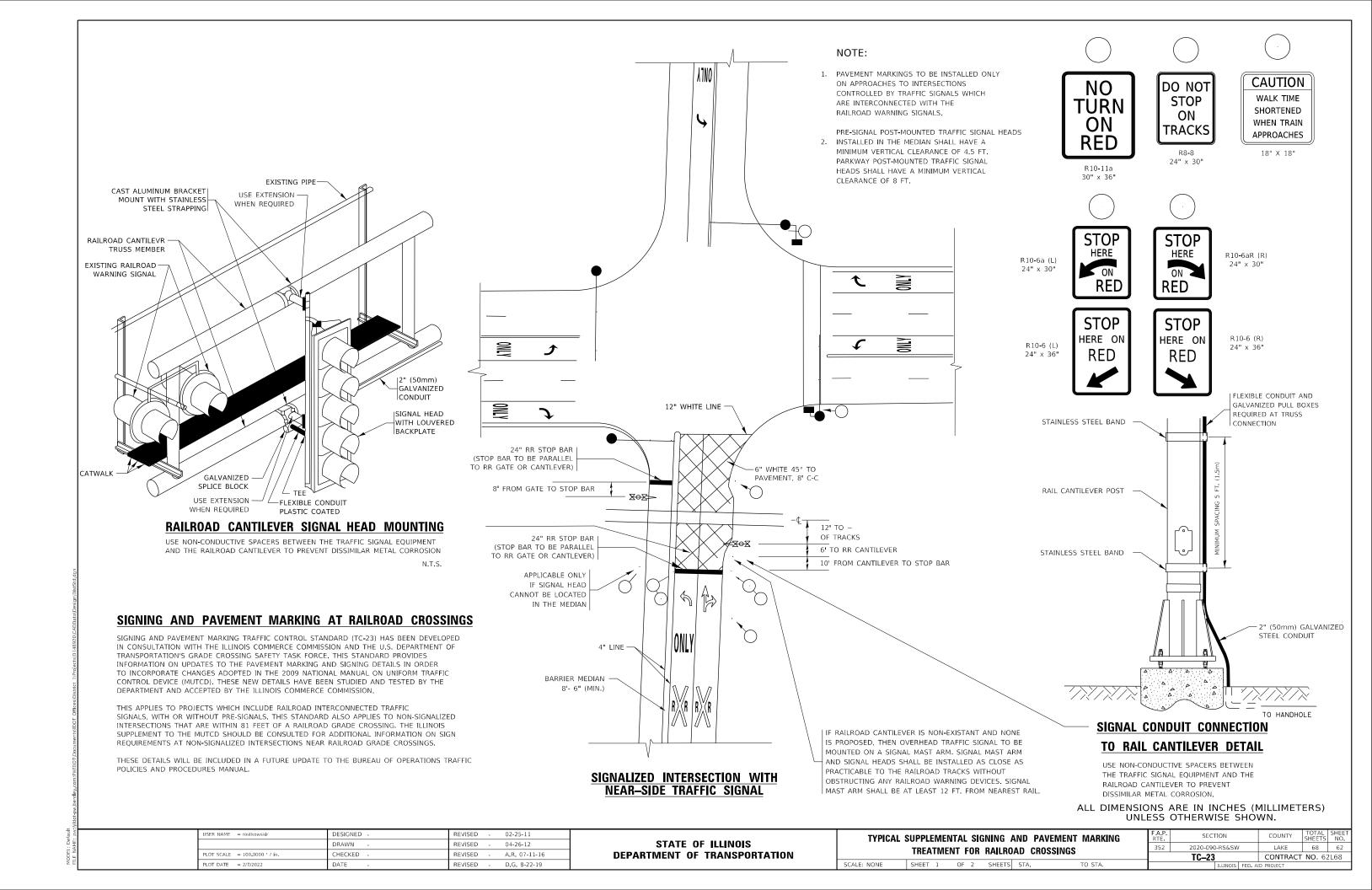
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

USER NAME = rostkowskir	DESIGNED -	REVISED	-	R. MIRS 09-15-97
	DRAWN -	REVISED	-	R. MIRS 12-11-97
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED	- T.	RAMMACHER 02-02-
PLOT DATE = 2/7/2022	DATE -	REVISED	-	C. JUCIUS 01-31-07

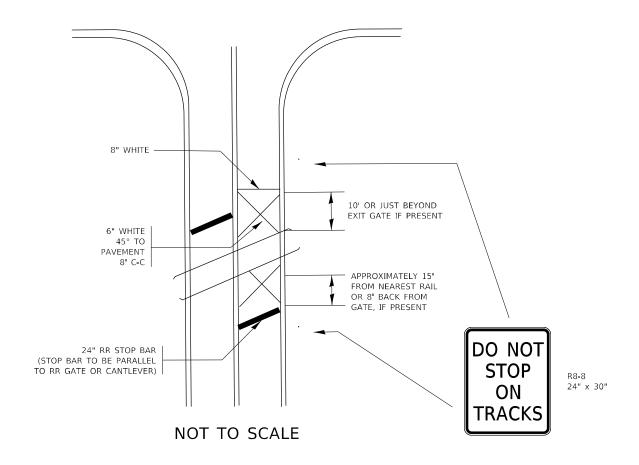
STATE (	OF ILLINOIS
DEPARTMENT O	TRANSPORTATION

ARTERIAL ROAD						SEC.		COUNTY		
	INFORMATION SIGN				352	2020-090	LAKE			
					TC-22					
1	OF 1	SHEETS	STA.	TO STA.			ILLINOIS	FED. A	ID PROJECT	



# TYPICAL SUPPLEMENTAL SIGNING AND PAVEMENT MARKING TREATMENT FOR RAILROAD CROSSINGS

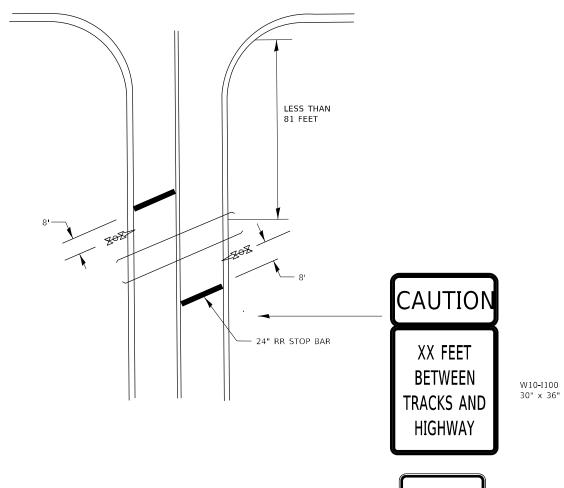
#### WITH SIGNALIZED INTERSECTION



#### NOTE:

- PAVEMENT MARKINGS TO BE INSTALLED ONLY ON APPROACHES TO INTERSECTIONS CONTROLLED BY TRAFFIC SIGNALS WHICH ARE INTERCONNECTED WITH THE RAILROAD WARNING SIGNALS.
- 2. WHERE NEAR-SIDE TRAFFIC SIGNALS ARE USED THE PAVEMENT MARKINGS EXTEND TO THE INTERSECTION. (SEE DETAIL FOR PRE-SIGNALS).

### WITH NON-SIGNALIZED INTERSECTION 81' OR LESS TO CLOSEST RAIL



#### NOTE:

- 1. DISTANCE TO BE SHOWN ON SIGN MEASURED FROM A POINT 6 FEET FROM THE RAIL CLOSEST TO THE INTERSECTION OR FROM THE CLOSEST POINT ALONG THE EXIT GATE IF PRESENT OVER THE ROADWAY WHEN IN THE LOWERED POSITION TO THE STOP BAR OR CROSSWALK, WHICHEVER IS CLOSEST, ROUNDED DOWN TO THE NEAREST 5 FEET. WHERE THERE IS NO STOP LINE, MEASURE TO POINT WHERE DRIVER HAS A VIEW OF APPROACHING TRAFFIC.
- 2. THE CLEARANCE SIGN IS ALSO TO BE USED AS AN INTERIM MEASURE AT LOCATIONS WITH INTERCONNECTED INTERSECTION TRAFFIC SIGNALS WHERE IT IS PLANNED TO CHANGE THEM TO NEAR-SIDE SIGNALS AT A FUTURE TIME. IN THIS CASE, THE DISTANCE TO BE SHOWN ON THE SIGN IS MEASURED FROM THE EDGE OF THE STRIPED-OUT AREA INSTEAD OF 6 FEET FROM THE RAIL. THE SIGN IS TO BE REMOVED WHEN THE NEAR-SIDE SIGNALS ARE INSTALLED AND THE PAVEMENT MARKING EXTEND TO THE INTERSECTION.

DO NOT STOP ON TRACKS

R8-8 24" x 30"

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

USER NAME = rostkowskir	DESIGNED -	REVISED -		TYPICAL SUPPLEMENTAL SIGNING AND PAVEMENT MARKING	F.A.P.	SECTION	COUNTY	TOTAL SHEET
	DRAWN -	REVISED -	STATE OF ILLINOIS		352	2020-090-RS&SW	LAKE	68 63
PLOT SCALE = 100.0001 / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	TREATMENT FOR RAILROAD CROSSINGS		<b>TC-23</b> CO		NO. 62L68
PLOT DATE = 2/7/2022	DATE -	REVISED -		SCALE: NONE SHEET 2 OF 2 SHEETS STA. TO STA.		ILLINOIS FED.	AID PROJECT	

MODEL: Default FILE NAME: ow:Vildot-ow.bent

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

(3.0 m)

\* = (600 mm) \* \* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS

IN HANDHOLES

OUTSIDE PAVEMENT)

PLOT DATE = 2/7/2022

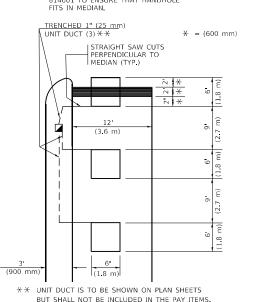
(3.0 m)

#### LEFT TURN LANES WITH MEDIANS

#### VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

#### (PROTECTED / PERMITTED LEFT TURN PHASING)

HANDHOLF 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 HANDHOLL



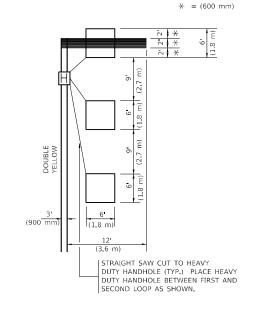
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO

PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

#### LEFT TURN LANES WITHOUT MEDIANS

VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)



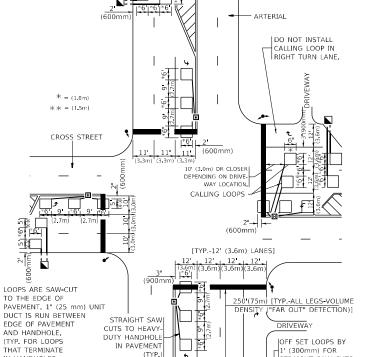
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

SCALE: NONE

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

11" (25 mm) UNIT

DUCT-TRENCHED



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

DRAWN

DATE

HECKED

R.K.F

STRAIGHT SAW CUTS.

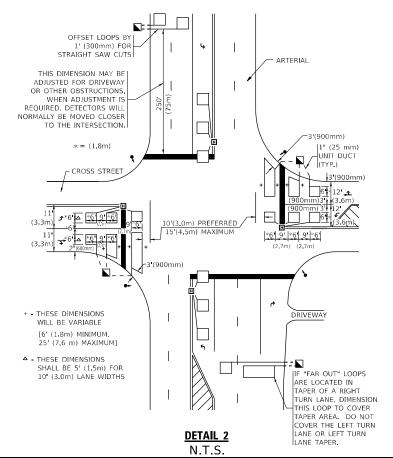
REVISED

REVISED

REVISED

REVISED

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



#### VEHICLES LOOP DETECTORS

- st ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED,
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE
- \* 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.

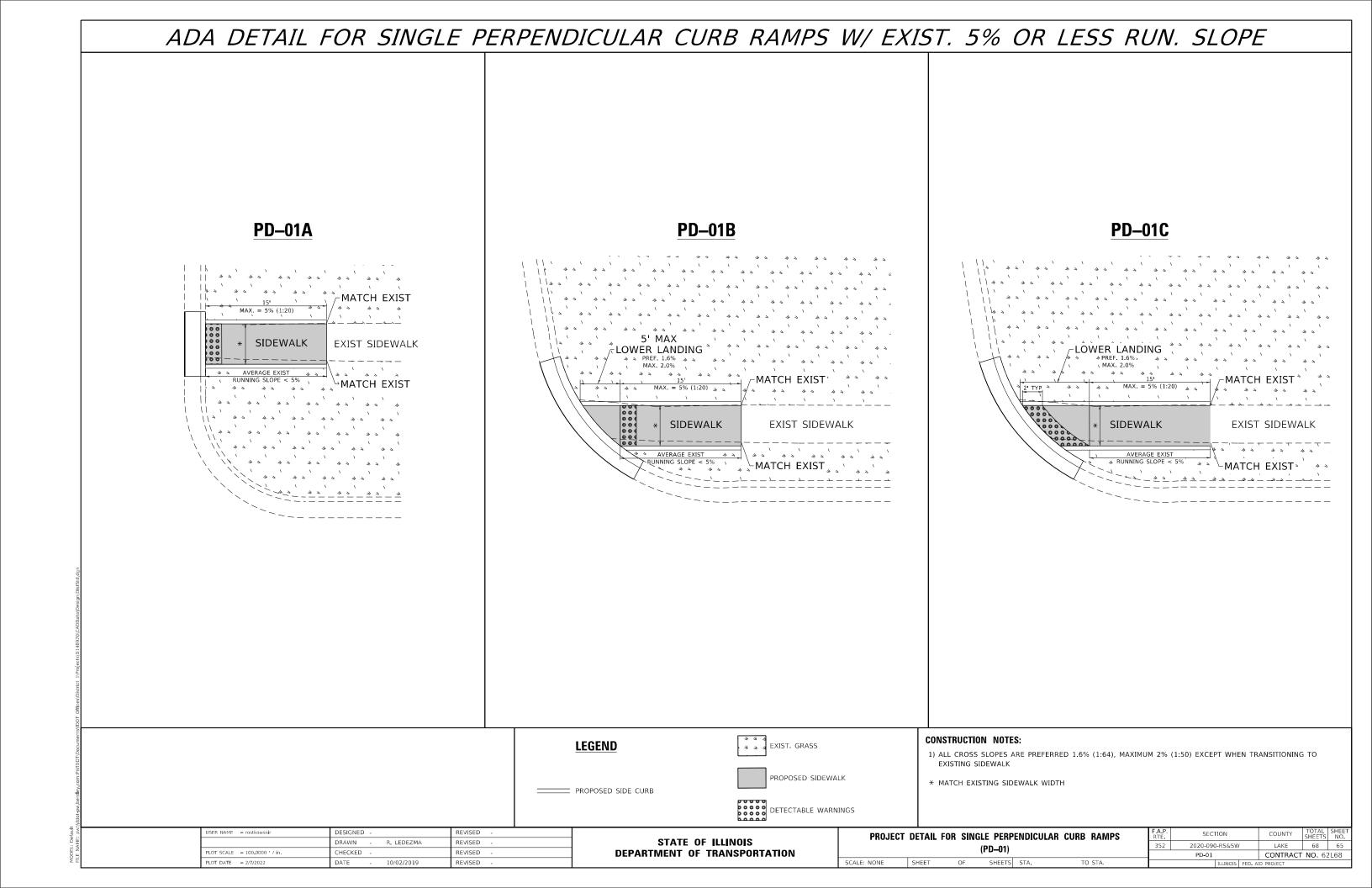
#### NOTE:

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

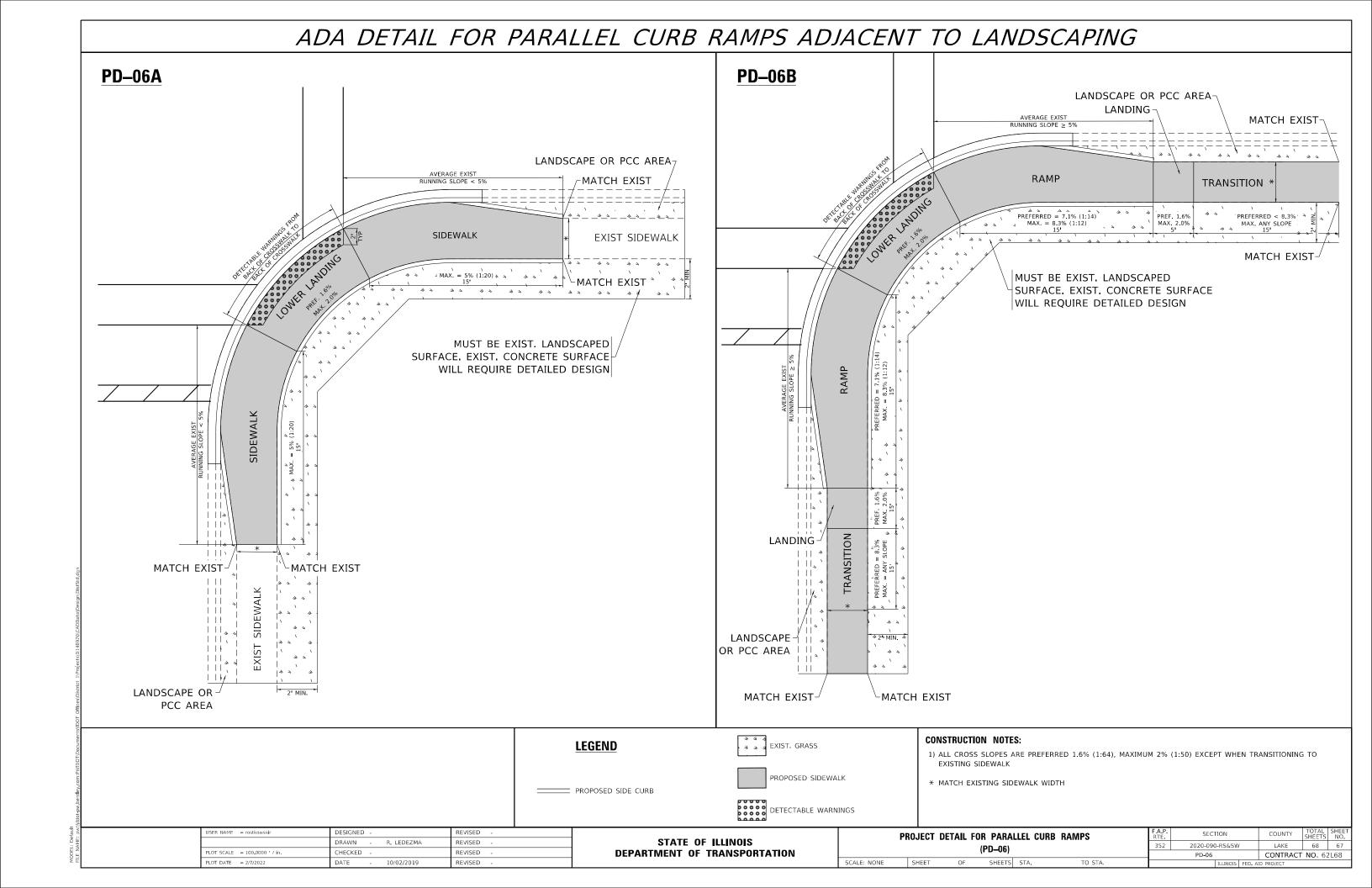
THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

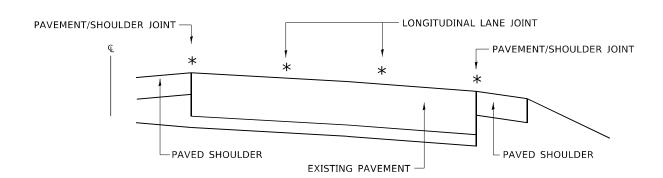
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING SHEET 1 OF 1 SHEETS STA. TO STA.

SECTION COUNTY 352 2020-090-RS&SW LAKE 68 64 CONTRACT NO. 62L68 TS-07

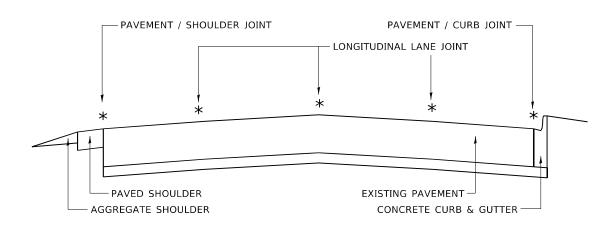


#### ADA DETAIL FOR SINGLE PERPENDICULAR CURB RAMPS W/ TURNING SPACE PD-04A **PD-04B** LOWER LANDING LOWER LANDING PREF. 1.6% MAX. 2.0% MAX. 2.0% TRANSITION TRANSITION EXIST SIDEWALK EXIST SIDEWALK CURB RAMP-CURB RAMP-PREFERRED = 7.1% (1:14)PREFERRED = 7.1% (1:14)MAX. ANY SLOPE 15 <sup>©</sup>MATCH EXIST <sup>®</sup> <sup>©</sup>MATCH EXIST Š 4 4 4 4 4 MATCH EXIST √ ¦ MATCH EXIST ⊢MATCH EXIST EXIST SIDEWALK EXIST SIDEWALK **⊢MATCH EXIST** \* \* \* \* EXIST. GRASS **CONSTRUCTION NOTES: LEGEND** 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50) EXCEPT WHEN TRANSITIONING TO EXISTING SIDEWALK PROPOSED SIDEWALK \* MATCH EXISTING SIDEWALK WIDTH ─ PROPOSED SIDE CURB DETECTABLE WARNINGS DESIGNED REVISED PROJECT DETAIL FOR SINGLE PERPENDICULAR CURB RAMPS WITH STATE OF ILLINOIS DRAWN R. LEDEZMA REVISED 352 2020-090-RS&SW LAKE 68 66 TURNING SPACE (PD-04) HECKED REVISED **DEPARTMENT OF TRANSPORTATION** PD-04 CONTRACT NO. 62L68 SCALE: NONE

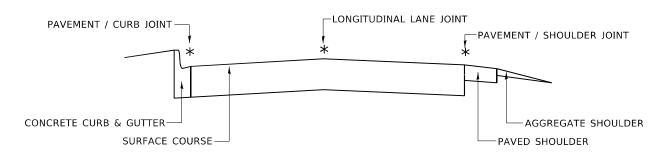




#### MULTI-LANE DIVIDED PAVEMENT



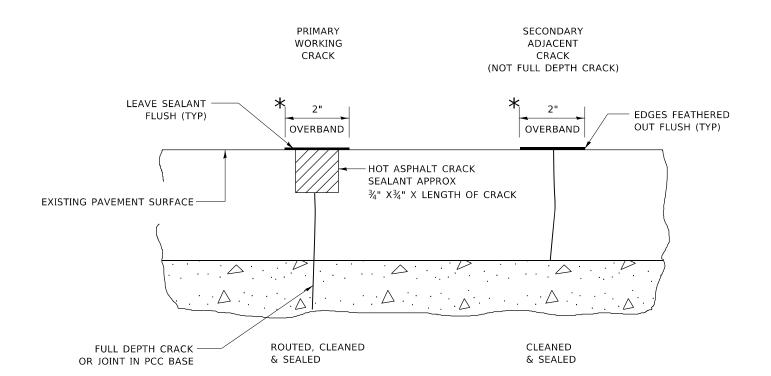
#### MULTI-LANE UNDIVIDED PAVEMENT



#### TWO-LANE PAVEMENT

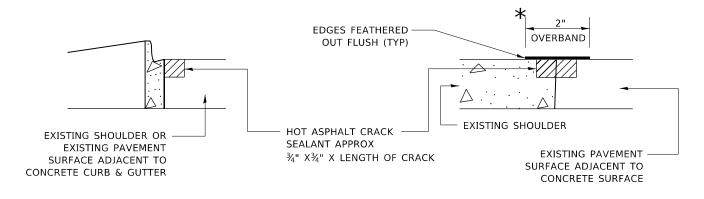
\* PROPOSED LONGITUDINAL CRACK ROUTING (PAVEMENT) & CRACK FILLING LOCATIONS

GENERAL EXISTING TYPICAL SECTIONS (APPLIES TO HMA AND PCC PAVEMENTS)



\* IN ALL LOCATIONS WHERE THE LONGITUDINAL CRACK CONFLICTS WITH EXISTING PAVEMENT MARKINGS (EITHER EDGE LINE OR LANE LINE) THE CRACK SHALL BE ROUTED & THE RESULTING RESERVOIR FILLED WITH SEALANT. ALL DAMAGES TO EXISTING RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR. ALL EXISTING PAVEMENT MARKINGS WITHIN THE PROJECT LIMITS SHALL BE RESTORED WITH MODIFIED URETHANE PAVEMENT MARKINGS.

#### LONGITUDINAL JOINT



#### CRACK & JOINT SEALING DETAIL

USER NAME = rostkowskir	DESIGNED	-	F. Aqueel / A. Midy	REVISED	-
	DRAWN	-		REVISED	-
PLOT SCALE = 100.0000 / in.	CHECKED	-		REVISED	-
PLOT DATE = 2/7/2022	DATE	-	10/08/2020	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

 CRACK & JOINT SEALING DETAIL (PD-11)
 F.A.P. RTE.
 SECTION

 352
 2020-090-RS&SW

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