11-17-2023 **LETTING ITEM** 011

 \bigcirc

 \bigcirc

FOR INDEX OF SHEETS, SEE SHEET 2

FOR LIST OF APPICABLE HIGHWAY STANDARDS SEE SHEET 2

TRAFFIC DATA (191ST STREET) **FUNCTIONAL CLASSIFICATION: MINOR ARTERIAL** POSTED SPEED = 40 MPH (191ST STREET)

ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS

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

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

FAU 3754 (191ST STREET) WOLF ROAD TO US 45 (LAGRANGE ROAD) RESURFACING SECTION 21-00034-00-RS **PROJECT NO: M267(569) VILLAGE OF MOKENA WILL COUNTY**

JOB NO: C-91-153-23 END PROJECT STA. 201 + 09.77 START PROJECT STA. 101 + 10.87 191ST ST PROJECT OMISSION STA. 183 + 13.75 TO STA. 183 + 65.23 FRANKFORT TOWNSHIP

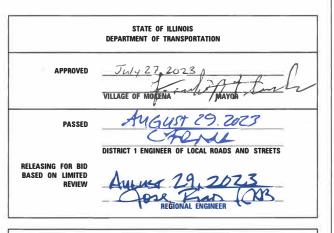
> GROSS LENGTH = 9,998.90 FT. = 1.89 MILE NET LENGTH = 9,947.42 FT. = 1.88 MILE



CHRISTOPHER B. BURKE ENGINEERING, LTD. 16221 W. 159th Street, Suite 201 16221 W. 159th Street, Lockport, Illinois 60441 (815) 770-2850 PROFESSIONAL DESIGN FIRM NO. 184-001175

SECTION. COUNTY W]LL LLINOIS CONTRACT NO. 61J78





PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

ADT = 14,300 (2019, WOLF RD TO 104TH ST) ADT = 18,400 (2019, 104TH ST TO US RTE 45)

ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

CONTRACT NO. 61J78

INDEX OF SHEETS

DESCRIPTION COVER SHEET	SHEET NO.
INDEX OF SHEETS, HIGHWAY STANDARDS, D1 STANDARDS, COMMITMENTS & GENERAL NOTES	2
SUMMARY OF QUANTITIES	3 – 7
TYPICAL SECTIONS	8
REMOVAL PLANS	9 – 19
PROPOSED PLAN	20 – 30
FRAMES AND LIDS ADJUSTMENT WITH MILLING (BD-08)	31
PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT (BD-22)	32
CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24)	33
BUTT JOINTS AND HMA TAPER (BD-32)	34
TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS (TC-10)	35
TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) (TC-11)	36
DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)	37
SHORT-TERM PAVEMENT MARKING LETTERS AND SYMBOLS (TC-16)	38
ARTERIAL ROAD INFORMATION SIGN (TC-22)	39
DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN (TS-05)	40
DISTRICT 1 – DETECTOR LOOP INSTALLATION DETAIL FOR ROADWAY RESURFACING (TS-07)	41

HIGHWAY STANDARDS

000001-08 – STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS

424001-11 - PERPENDICULAR CURB RAMPS FOR SIDEWALKS

424011-04 - CORNER PARALLEL CURB RAMPS FOR SIDEWALKS

424016-05 - MID-BLOCK CURB RAMPS FOR SIDEWALKS

424021-06 - DEPRESSED CORNER FOR SIDEWALKS

442201-03 – CLASS C & D PATCHES

604001-05 - FRAME AND LIDS TYPE 1

604091-05 – FRAME AND GRATE TYPE 24

606001-08 – CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER

701006-05 – OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE

701101-05 – OFF-RD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE

701301-04 - LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS

701311-03 - LANE CLOSURE 2L, 2W MOVING OPERATIONS – DAY ONLY

701427-05 – LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER. FOR SPEEDS \leq 40 MPH

701601-09 - URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NON-TRAVERSABLE MEDIAN

 $701602\text{-}10 - \mathsf{URBAN} \ \mathsf{LANE} \ \mathsf{CLOSURE}, \mathsf{MULTILANE}, \mathsf{2W} \ \mathsf{WITH} \ \mathsf{BIDIRECTIONAL} \ \mathsf{LEFT} \ \mathsf{TURN} \ \mathsf{LANE}$

701701-10 – URBAN LANE CLOSURE, MULTILANE INTERSECTION

701801-06 – SIDEWALK, CORNER OR CROSSWALK CLOSURE

701901-08 – TRAFFIC CONTROL DEVICES

DISTRICT 1 STANDARD DETAILS

BD-08 – FRAMES AND LIDS ADJUSTMENT WITH MILLING

BD-22 - PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT

BD-24 - CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

BD-32 - BUTT JOINT AND HMA TAPER DETAILS

TC-10 - TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

TC-11 - TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

TC-13 – TYPICAL PAVEMENT MARKINGS

TC-16 – SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS

TC-22 - ARTERIAL ROAD INFORMATION SIGN

TS-05 – STANDARD TRAFFIC SIGNAL DESIGN DETAILS

TS-07 – DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

COMMITMENTS

NONE

GENERAL NOTES

UTILITIES

- 1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 8-1-1 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, GAS AND CABLE TELEVISION FACILITIES (48 HOURS NOTIFICATIONS IS REQUIRED).
- THE CONTRACTOR SHALL CONTACT IDOT'S BUREAU OF MATERIALS (PHONE 847-705-4337) AT LEAST 24 HOURS BEFORE PLACING HOT MIX ASPHALT OR PORTLAND CEMENT CONCRETE.

WATER, STORM SEWER AND SANITARY SEWER

3. THE CONTRACTOR SHALL NOT OPEN OR SHUT ANY WATER VALVES OR FIRE HYDRANTS. CONTACT THE VILLAGE OF MOKENA PUBLIC WORKS DEPARTMENT (TEL. (708) 479-3900) FOR THEM TO TURN VALVES OR OPERATE HYDRANTS. UNAUTHORIZED USE SHALL SUBJECT THE OFFENDER TO ARREST AND PROSECUTION.

MISCELLANEOUS

- 4. LIMITS OF PATCHING, CURB AND GUTTER REMOVAL AND REPLACEMENT, SIDEWALK REMOVAL AND REPLACEMENT, DRIVEWAY REMOVAL AND REPLACEMENT AND STRUCTURES TO BE ADJUSTED WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.
- DETECTABLE WARNINGS SHALL BE INSTALLED AT ALL INTERSECTING STREETS IN ACCORDANCE WITH IDOT HIGHWAY STANDARDS AND AS DIRECTED BY THE ENGINEER.
- 6. RELOCATING EXISTING SIGNS: EXISTING SIGNS WHICH ARE IN CONFLICT WITH PROPOSED IMPROVEMENTS SHALL BE REMOVED AND REINSTALLED UPON COMPLETION OF CONFLICTING IMPROVEMENTS IN ACCORDANCE WITH THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" AND THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION". STOP SIGNS, SPEED LIMIT SIGNS, AND STREET NAME SIGNS SHALL BE UP AND VISIBLE AT ALL TIMES.
- ALL UNDERGROUND, DRIVEWAY, CONCRETE, AND LANDSCAPE RESTORATION WORK IS TO BE COMPLETED BEFORE THE SURFACE COURSE CAN BE INSTALLED.
- 8. FRESH OIL SIGNS SHALL BE POSTED AT BOTH ENDS OF THE ROADWAY AND ALL SIDE STREETS AS DIRECTED BY THE ENGINEER. CONSTRUCTION AHEAD SIGNS SHALL BE PLACED AT ALL SIDE STREETS AND BOTH ENDS OF THE ROADWAY WHILE CONSTRUCTION IS IN PROGRESS.
- 9. NO CONSTRUCTION SHALL BEGIN UNTIL ALL PROPER TEMPORARY SIGNS AND BARRICADES HAVE BEEN INSTALLED.
- SOIL EROSION PROTECTION SHALL BE IN ACCORDANCE WITH IEPA STANDARDS AND SPECIFICATIONS FOR SOIL EROSION
 AND SEDIMENT CONTROL. ALL DISTURBED AREAS (NOT IMPERVIOUS IN NATURE) SHALL BE FINE GRADED, TOPSOIL
 RESTORED (MINIMUM 4 INCHES) AND SEED & BLANKET APPLIED UNLESS OTHERWISE SPECIFIED ON THE PLANS.
- 11. THE CONTRACTOR SHALL KEEP ONE LANE IN EACH DIRECTION OPEN TO TRAFFIC AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR SHALL COMPLETE ALL MILLING OPERATIONS BEFORE INSTALLING ANY HOT-MIX ASPHALT PAVEMENT.
- 12. AT THE END OF EACH DAY, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASSURE THAT ALL STREETS ADJACENT TO THE PROJECT ARE FREE OF ALL CONSTRUCTION RELATED DEBRIS INCLUDING DIRT, STONE, NAILS, ETC. THE WORK SHALL BE DONE TO THE SATISFACTION OF THE FINGINFER.
- 13. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO COORDINATE WITH THE METRA RAILROAD WHENEVER CONSTRUCTION ACTIVITY IS WITHIN 25 FEET OF THE RAILROAD ROW. THE CONTRACTOR SHALL RETAIN FLAGMEN EMPLOYED AND DESIGNATED BY THE METRA RAILROAD TO MONITOR ON-COMING TRAIN TRAFFIC, AND ADVISE CONTRACTOR PERSONNEL WHEN ACTIVITY ON OR NEAR THE RAILROAD RIGHT-OF-WAY MAY PROCEED. THIS ITEM WILL BE PAID FOR ACCORDING TO ARTICLE 107.12 AND WILL BE REIMBURSED ACCORDING TO ARTICLE 109.05.
- 14. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN A CONCRETE WASHOUT FACILITY FOR THE DURATION OF CONSTRUCTION IN ACCORDANCE WITH THE DETAIL ON THE PLANS. AT THE END OF CONSTRUCTION, THE CONCRETE WASHOUT FACILITY SHALL BE REMOVED FROM THE SITE.
- 15. THE CONTRACTOR SHALL TAKE PRECAUTION BY PRESERVING EXISTING TREES WITHIN THE RIGHT OF WAY. IF ANY DAMAGE OCCURS, TREES SHALL BE REPAIRED OR REPLACED IN KIND PER ARTICLE 201.07.
- 16. ALL PROPOSED PAVEMENT MARKINGS SHALL BE GROOVED INTO THE PAVEMENT IN ACCORDANCE WITH ARTICLE 780.05.
- 17. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- 18. THE ENGINEER SHALL CONTACT PATRICE HARRIS, IDOT'S AREA TRAFFIC FIELD TECH, VIA E-MAIL AT PATRICE.HARRIS@ILLINOIS.GOV, OR AT (815)485-6475 A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

FILE NAME =	USER NAME = aschaefer	DESIGNED -	-	GR	REVISED -
N:\Mokena\210365\Civil\GEN_210365.sht		DRAWN -	-	ELA	REVISED -
	PLOT SCALE = 20'	CHECKED -	-	AJS	REVISED -
Default	PLOT DATE = 8/31/2023	DATE -	-		REVISED -

	FUNDING SOURCE			80%	FED
	CONSTRUCTION TYPE CODE			20% L 0005	0042
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY	<u> </u>
20101400	NITROGEN FERTILIZER NUTRIENT	POUND	45	45	
20101500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	45	45	
20101600	POTASSIUM FERTILIZER NUTRIENT	POUND	45	45	
20200100	EARTH EXCAVATION	CU YD	150	150	
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	60	60	
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	2420	2420	
25000110	SEEDING, CLASS 1A	ACRE	0.5	0.5	
25100630	EROSION CONTROL BLANKET	SQ YD	2420	2420	
28000510	INLET FILTERS	EACH	156	156	
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	60	60	
35101600	AGGREGATE BASE COURSE, TYPE B 4"	SQ YD	825	825	
40201000	AGGREGATE FOR TEMPORARY ACCESS	TON	25	25	
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	51905	51905	
40600370	LONGITUDINAL JOINT SEALANT	FOOT	32000	32000	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	521	521	
40603200	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50	TON	3172	3172	
40604062	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70	TON	8613	8613	
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	6880	6880	

FILE NAME =	USER NAMe = aschaofor	DESIGNED -	GR	REVISED -							MH	SECTION	COUNTY	SHEETS	SHEET NO.
N:\Mokena\210365\C;v;1\500_01_210365.sh.		DRAWN -	ELA	REVISED -	STATE OF ILLINOIS		5	SUMMARY	OF QUANTITIES		3754	21-00034-00-RS	WILL	41	3
	PLOT SCALE = 20'	CHECKED -	AJS	REVISED -	DEPARTMENT OF TRANSPORTATION								CONTRACT	T NO.	61J78
Default	PLOT CATE 4 B/31/2023	DATE -		REVISED -		SCALE: N.T.S.	SHEET 1	OF 5	SHEETS STA.	TO STA.		ILLINOIS FED. A	ID PROJECT		

	FUNDING SOURCE			ST 80%	
				20% L	
	CONSTRUCTION TYPE CODE			0005	0042
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY	TRAINEES
42400800	DETECTABLE WARNINGS	SQ FT	450	450	
44000100	PAVEMENT REMOVAL	SQ YD	95	95	
44000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"	SQ YD	76896	76896	
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	4800	4800	
44000600	SIDEWALK REMOVAL	SQ FT	6280	6280	
44201785	CLASS D PATCHES, TYPE I, 12 INCH	SQ YD	385	385	
44201789	CLASS D PATCHES, TYPE II, 12 INCH	SQ YD	580	580	
44201794	CLASS D PATCHES, TYPE III, 12 INCH	SQ YD	575	575	
44201796	CLASS D PATCHES, TYPE IV, 12 INCH	SQ YD	200	200	
60257900	MANHOLES TO BE RECONSTRUCTED	EACH	3	3	
60262700	INLETS TO BE RECONSTRUCTED	EACH	3	3	
60266600	VALVE BOXES TO BE ADJUSTED	EACH	8	8	
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	155	155	
60404950	FRAMES AND GRATES, TYPE 24	EACH	8	8	
60406000	FRAMES AND LIDS, TYPE 1, OPEN LID	EACH	3	3	
60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	5	5	
60600605	CONCRETE CURB, TYPE B	FOOT	480	480	
67100100	MOBILIZATION	LSUM	1	1	

FILE NAME =	USER NAME = exchaefer	DESIGNED	-	GR	REVISED	-	
N:\Mokene\210365\C;v:1\S00_02_210365.sht		DRAWN		ELA	REVISED	_	' STATE OF ILLINOIS
	PLOT SCALE = 20'	CHECKED	-	AJS	REVISED	-	DEPARTMENT OF TRANSPORTATION
Default	PLOT DATE = 8/31/2023	DATE			REVISED	-	

ION	
	SC.

				SUMMARY	OF QU	IANTITIES	i .
ALE:	N.T.S.	SHEET	2	OF 5	SHEETS		TO STA.

	MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.						
ſ	3754	21-00034-00-RS	WILL	41	4						
ſ			CONTRACT	NO. (61J78						
r	ILLINOIS FED. AID PROJECT										

		FUNDING SOURCE			ST	Ъ
		FUNDING SOURCE			80% 20 % L	
		CONSTRUCTION TYPE CODE			0005	0042
	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY	TRAINEES
	70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	LSUM	1	1	
	70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1	1	
	70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1	
	70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	LSUM	1	1	
	70107025	CHANGEABLE MESSAGE SIGN	CAL DA	370	370	
	70300100	SHORT TERM PAVEMENT MARKING	FOOT	5000	5000	
	70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	1667	1667	
	70300211	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS - PAINT	SQ FT	2460	2460	
	70300221	TEMPORARY PAVEMENT MARKING - LINE 4"- PAINT	FOOT	86060	86060	
	70300241	TEMPORARY PAVEMENT MARKING - LINE 6"- PAINT	FOOT	10040	10040	
	70300261	TEMPORARY PAVEMENT MARKING - LINE 12"- PAINT	FOOT	5000	5000	
	70300281	TEMPORARY PAVEMENT MARKING - LINE 24"- PAINT	FOOT	1310	1310	
~	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	1230	1230	
~	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	43030	43030	
~	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	5020	5020	
~	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	2500	2500	
~	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	655	655	
~	78008200	POLYUREA PAVEMENT MARKING TYPE I - LETTERS AND SYMBOLS	SQ FT	32	32	

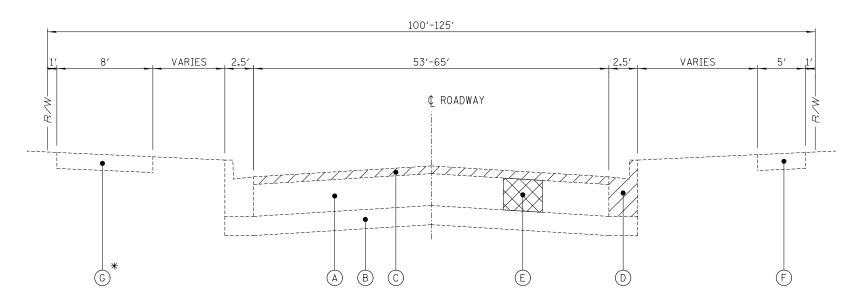
FILE NAME =	USER NAME = aschaofor	DESIGNEO -	GR	REVISED								MUN	SECTION	COUNTY	TOTAL SH	EET
N:\Makena\2(0365\C1v1\\$90_03_213365.sht		DRAWN -	ELA	REVISED -	STATE OF ILLINOIS		SI	UMMARY	OF QUAN	ITITIES		3754	21-00034-00-RS	WILL	41	5
	PLOT SCALE = 20'	CHECKED -	AJS	REVISED -	DEPARTMENT OF TRANSPORTATION									CONTRACT	T NO. 61	78
Default	PLOT DATE 4 B/31/2023	DATE -		REVISED -		SCALE: N.T.S.	SHEET 3	OF 5	SHEETS S	TA.	TO STA.		ILLINOIS FED. A	ID PROJECT		

		FUNDING SOURCE			ST	'P
		TONDING SOUNCE			80% 20% L	
		CONSTRUCTION TYPE CODE			0005	0042
	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY	TRAINEES
2	78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	101	101	
~	78008230	POLYUREA PAVEMENT MARKING TYPE I - LINE 6"	FOOT	23	23	
~	78008270	POLYUREA PAVEMENT MARKING TYPE I - LINE 24"	FOOT	33	33	
~	78011000	GROOVING FOR RECESSED PAVEMENT MARKING, LETTERS AND SYMBOLS	SQ FT	1262	1262	
~	78011025	GROOVING FOR RECESSED PAVEMENT MARKING 5"	FOOT	43131	43131	
~	78011035	GROOVING FOR RECESSED PAVEMENT MARKING 7"	FOOT	5043	5043	
~	78011065	GROOVING FOR RECESSED PAVEMENT MARKING 13"	FOOT	2500	2500	
~	78011125	GROOVING FOR RECESSED PAVEMENT MARKING 25"	FOOT	688	688	
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	1050	1050	
	78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	150	150	
	X6026050	SANITARY MANHOLES TO BE ADJUSTED	EACH	29	29	
	X6030310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	20	20	
	X6060052	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 (SPECIAL)	FOOT	4800	4800	
~	X7810300	RECESSED REFLECTIVE PAVEMENT MARKER	EACH	1050	1050	
~	X8860105	DETECTOR LOOP REPLACEMENT	FOOT	2030	2030	
	XX006947	HOT-MIX ASPHALT DRIVEWAY REMOVAL AND REPLACEMENT	SQ YD	75	75	
	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1	
	Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	104	104	

FILE NAME =	USER NAME = aschaefer	DESIGNED GR	REVISED -			MUN SECTION	COUNTY TOTAL SHEET
N:\Mokene\210365\C:v:1\500_04_210365.sht		DRAWN - ELA	REVISED -	STATE OF ILLINOIS	SUMMARY OF QUANTITIES	3754 21-00034-00-RS	SHEETS NO.
	PLOT SCALE = 20'	CHECKED - AJS	REVISED -	DEPARTMENT OF TRANSPORTATION		3754 21-00034-00-RS	CONTRACT NO. 61J78
Default	PLOT DATE = 9/19/2023	DATE -	REVISED ~		SCALE: N.T.S. SHEET 4 OF S SHEETS STA. TO STA.	ILLINOIS FE	, AID PROJECT

	FUNDING SOURCE						
	CONSTRUCTION TYPE CODE			0005	0042		
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY	TRAINEES		
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1			
Z0076600	TRAINEES	HOUR	500		500		
Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500		500		
İ					l		

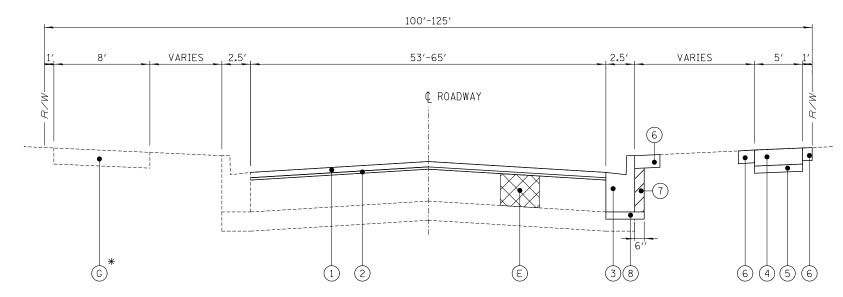
FILE NAME =	USER NAME = aschaefer	DESIGNED - GR	REVISED -			MUN SECTION	COUNTY	TOTAL SHEET
N:\Mokene\218365\Czvz1\500_85_218365.sht		DRAWN - ELA	REVISED -	STATE OF ILLINOIS	SUMMARY OF QUANTITIES	3754 21-00034-00-RS	WILL	41 7
	PLOT SCALE = 28'	CHECKED AJS	REVISED -	DEPARTMENT OF TRANSPORTATION			CONTRACT	NO. 61J78
Default	PLOT DATE = 8/31/2023	DATE	REVISED -		SCALE: N.T.S. SHEET 5 OF 5 SHEETS STA. TO STA.	ILLINOIS FED.	AID PROJECT	



* STA. 158+00 TO STA. 173+05

EXISTING TYPICAL SECTION

191s+ STREET STA, 101+10.87 TO STA, 183+13.75 & 191s+ STREET STA, 183+65.23 TO STA, 201+09.77



PROPOSED TYPICAL SECTION

191s+ STREET STA. 101+10.87 TO STA. 183+13.75 & 191s+ STREET STA. 183+65.23 TO STA. 201+09.77

NOTES:

- . LOCATIONS FOR THE FOLLOWING ITEMS DETERMINED IN THE FIELD BY THE ENGINEER:
 - * COMB. CONCRETE CURB AND GUTTER REMOVE AND REPLACE
 - * CLASS D PATCHING
 - * PCC SIDEWALK REMOVE AND REPLACE
 - * SEEDING. TOPSOIL LIMITED TO 24"
 - ADJACENT TO SIDEWALK AND CURB AND GUTTER
- 2. PAVEMENT REMOVAL ADJACENT TO PROPOSED CURB AND GUTTER SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL. CONTRACTOR SHALL SAW CUT PAVEMENT PRIOR TO REMOVING CURB.
- 3. THE LONGITUDINAL JOINT SEALANT SHALL BE PLACED ON THE POLYMERIZED HMA BINDER COURSE IL-4.75 N50.

FILE NAME =	USER NAME = aschaefer	DESIGNED -	GR	REVISED -	_
N:\Mokena\210365\Civil\TYP_210365_01.sht		DRAWN -	ELA	REVISED -	
	PLOT SCALE = 20'	CHECKED -	AJS	REVISED -	
Default	PLOT DATE = 8/31/2023	DATE -		REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING:

- (A) EXISTING HOT-MIX ASPHALT PAVEMENT
- (B) EXISTING AGGREGATE SUBBASE
- (C) HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2" (44000159)

LEGEND

- COMB. CONCRETE CURB AND GUTTER REMOVAL (44000500), LOCATIONS DETERMINED BY ENGINEER
- E) CLASS D PATCHES, 12 INCH (44201785, 44201789, 44201794, 44201796), LOCATIONS DETERMINED BY ENGINEER
- (F) SIDEWALK REMOVAL (44000600), LOCATIONS DETERMINED BY ENGINEER
- (G) EXISTING BIKE PATH

PROPOSED:

- (1) HOT-MIX ASPHALT SURFACE COURSE, IL-9.5 MIX D N70, 2" (40604062)
- (2) POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75 N50, 3/4" (40603200)
- 3) COMB. CONCRETE CURB AND GUTTER, TYPE B-6.24 (SPECIAL) (X6060052), LOCATIONS DETERMINED BY ENGINEER
- (4) PCC SIDEWALK 5 INCH (42400200), LOCATIONS DETERMINED BY ENGINEER
- (5) AGGREGATE BASE COURSE, TYPE B 4" (35101600), LOCATIONS DETERMINED BY ENGINEER
- (6) SEEDING, CLASS 1A (25000110), TOPSOIL FURNISH AND PLACE, 4" (21101615), EROSION CONTROL BLANKET (25100630)
- (7) EXCAVATION AND SUITABLE BACKFILL (INCLUDED IN COST OF PROPOSED CURB & GUTTER)
- 8 SUBBASE GRANULAR MATERIAL, TYPE B, 4"
 (INCLUDED IN COST OF PROPOSED CURB & GUTTER)

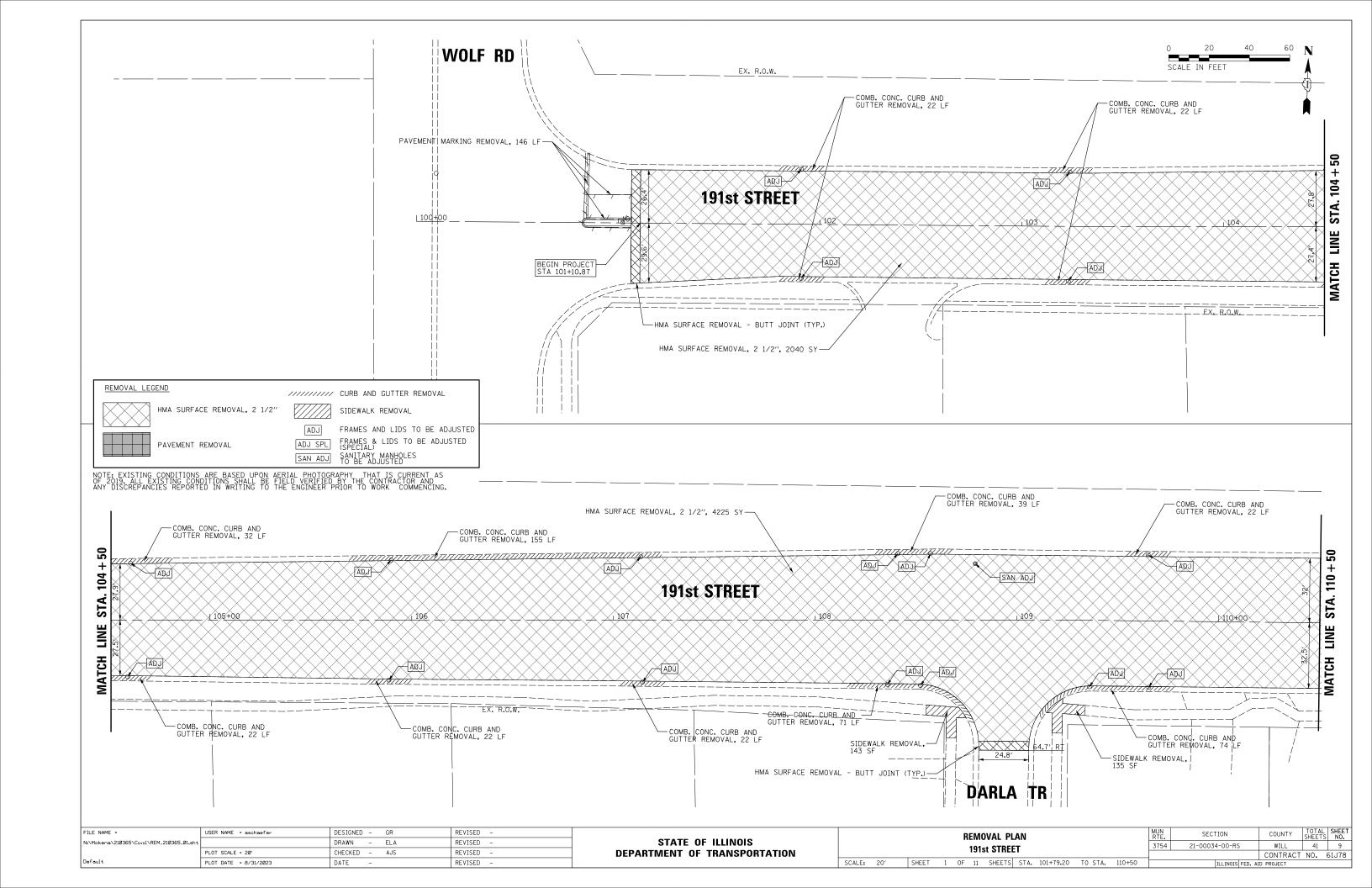
HOT-MIX ASPHALT MIXTURE REQUIREME	NTS	
MIXTURE TYPE	AIR VOIDS @ NDES	QMP
MAINLINE RESURFACING HMA SURFACE COURSE, IL-9.5 MIX "D", N70, 2" POLYMERIZED HMA BINDER COURSE, IL-4.75 N50, 3/4"	4.0% @ 70 GYR. 3.5% @ 50 GYR.	LR 1030-2 LR 1030-2
HMA DRIVEWAY REMOVE AND REPLACE RESIDENTIAL ENTRANCE HMA SURFACE COURSE, MIX "D", N50 (IL 9.5mm), 3" (IN 2 LIFTS)	4.0% © 50 GYR.	LR 1030-2
CLASS D PATCHES HMA BINDER COURSE, IL-19, N70, 12"	4.0% @ 70 GYR.	LR 1030-2
QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURAN	ICE PER LR 1030-2	

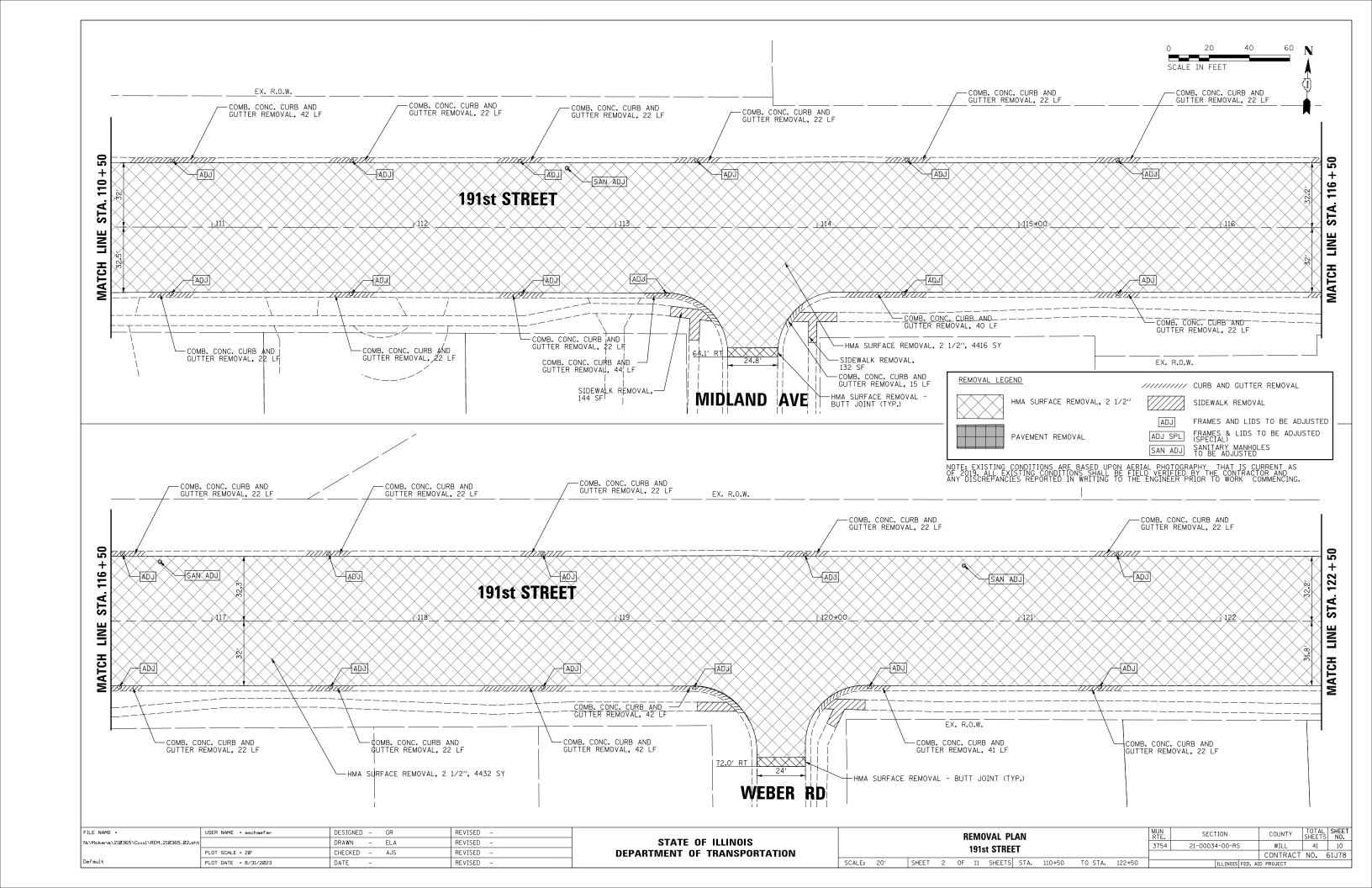
NOTES:

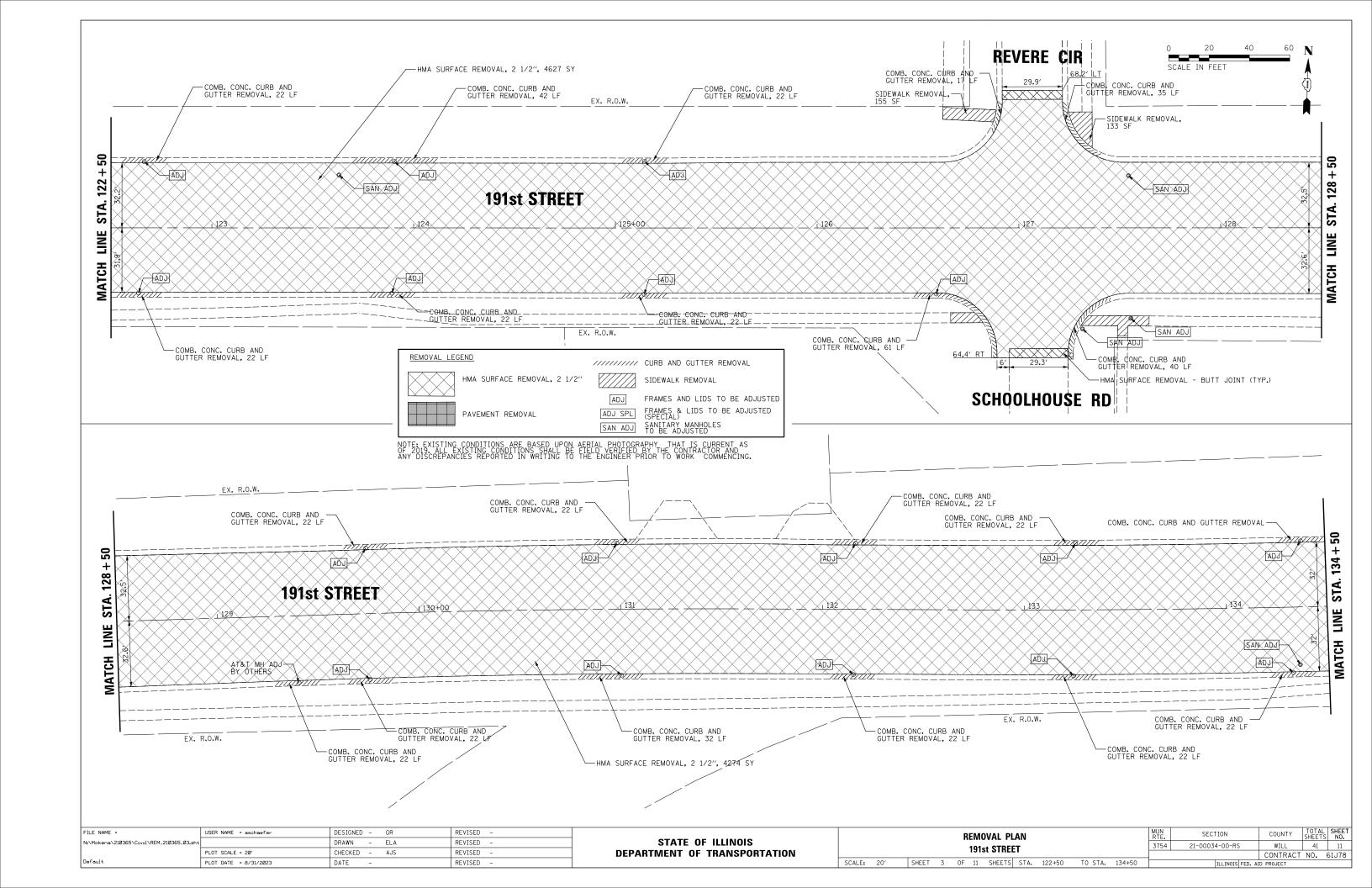
- 1. THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE QUANTITIES IS 112 LBS/SQ YD/IN.
- 2. THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY RECLAIMED MATERIALS SPECIFICATIONS.

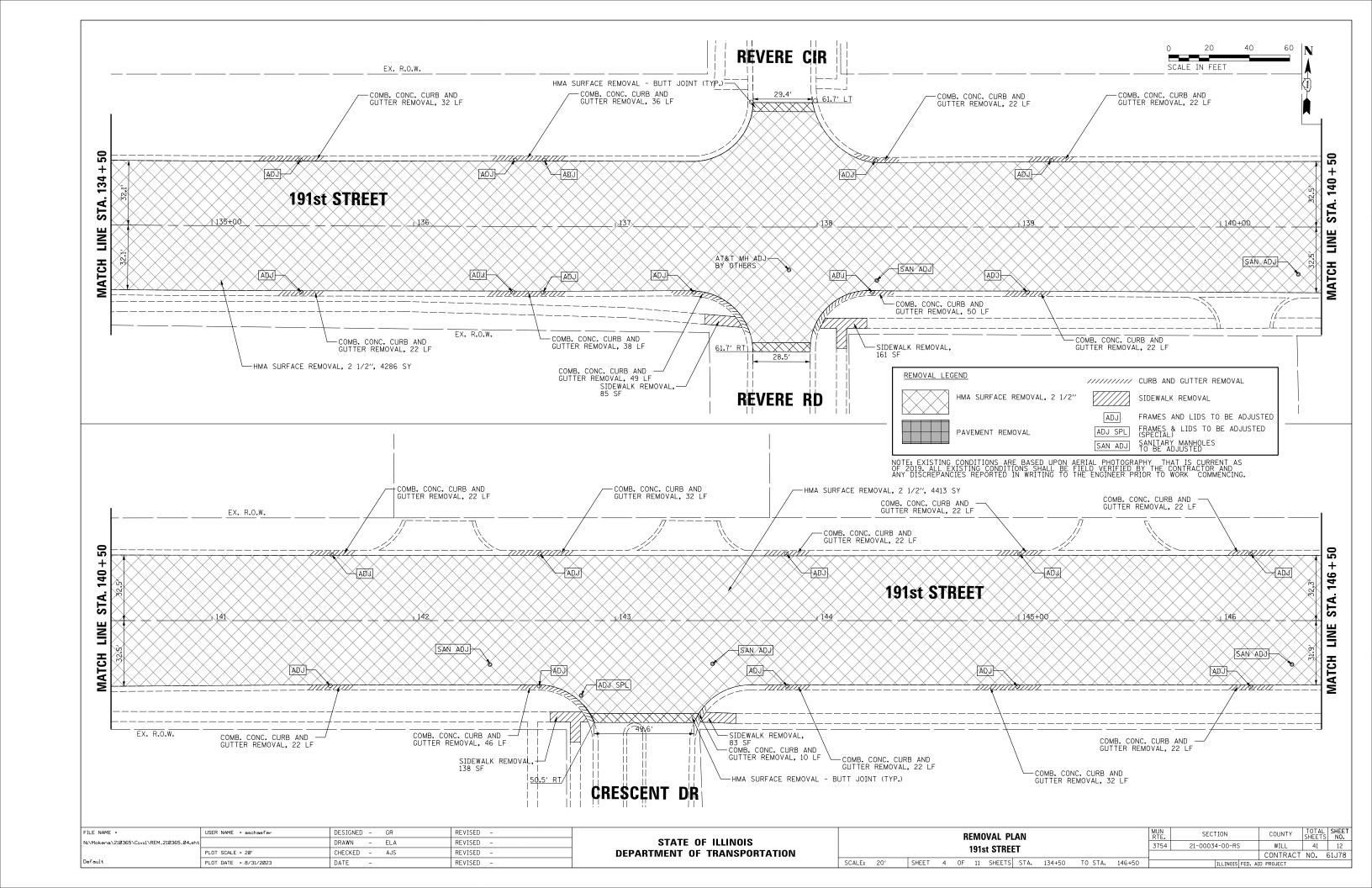
191st STREET CORE DETAILS:											
CORE No.	1	2	3	4	5	6	7	8	9	10	
STATION/OFFSET	108+25 26′ LT	117+90 15′ LT	128+75 O'LT	139+00 15′ RT		159+00 25′ LT	169+00 15′ LT		189+00 15′ RT	199+00 25′ RT	
TOTAL BITUMINOUS THICKNESS (INCH)	13 1/4	14	18 1/2	15 1/4	15 3/4	13	13 1/4	11 1/4	15 1/2	14	
AGGREGATE BASE COURSE THICKNESS (INCH)	16 3/4	28	23	27	4	29	29	31	9	12	

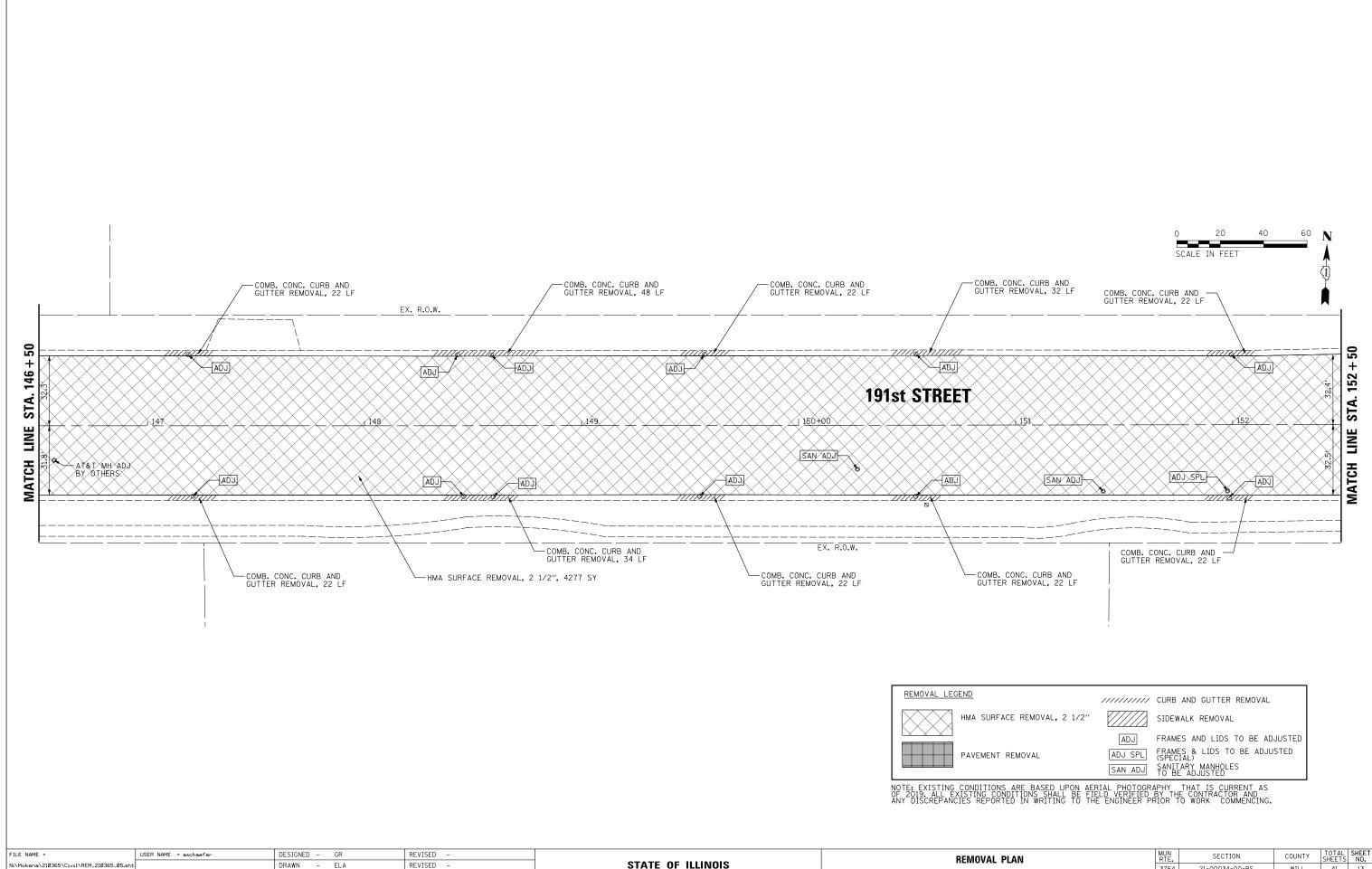
		MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
	TYPICAL SECTI		3754	21-00034-00-RS	WILL	41	8	
						CONTRACT	NO.	61J78
SCALE: N.T.S. SHEET 1	OF 1 SHEETS	STA.	TO STA.		TILINOIS FED AT	D PROJECT		



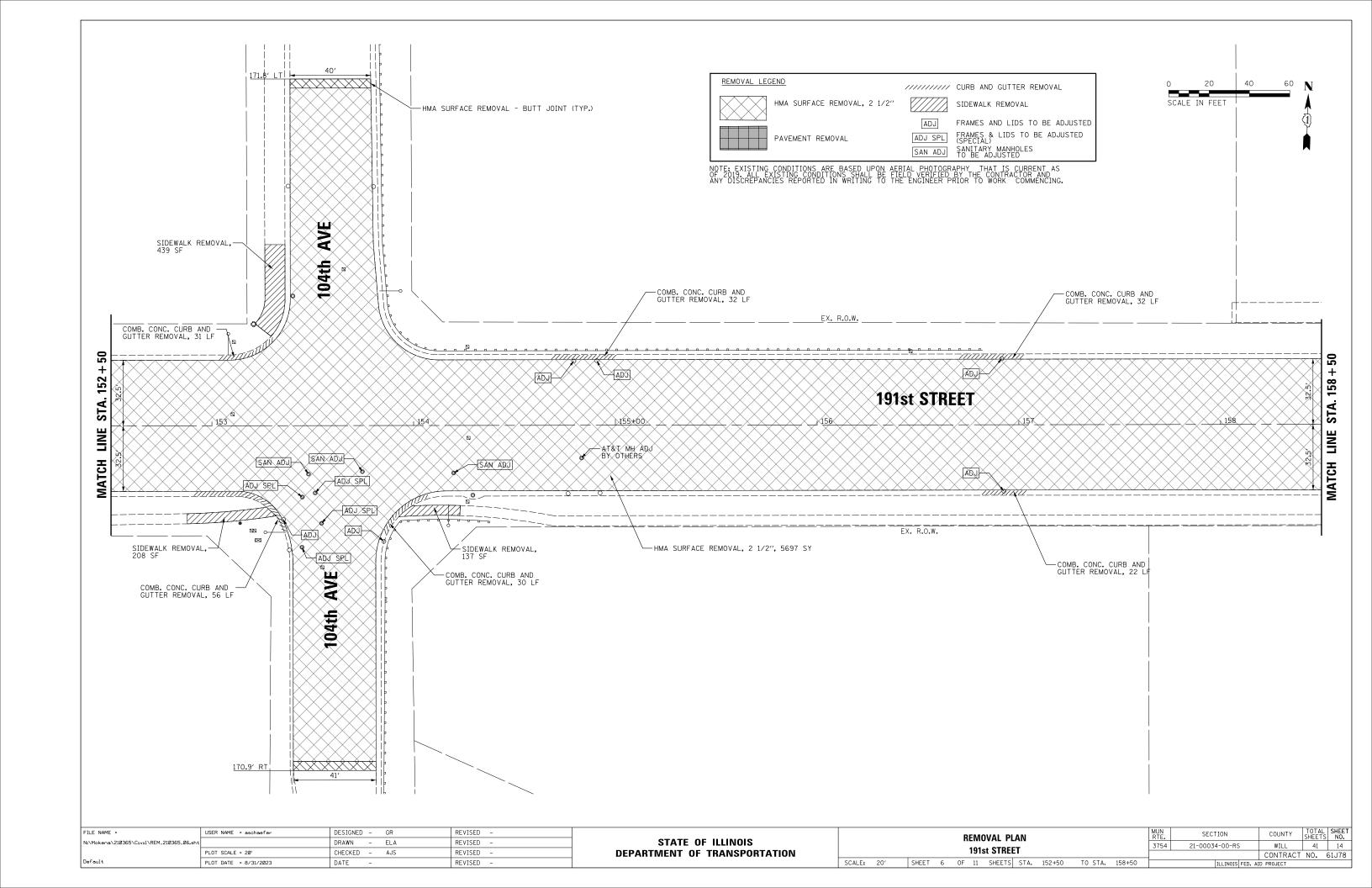


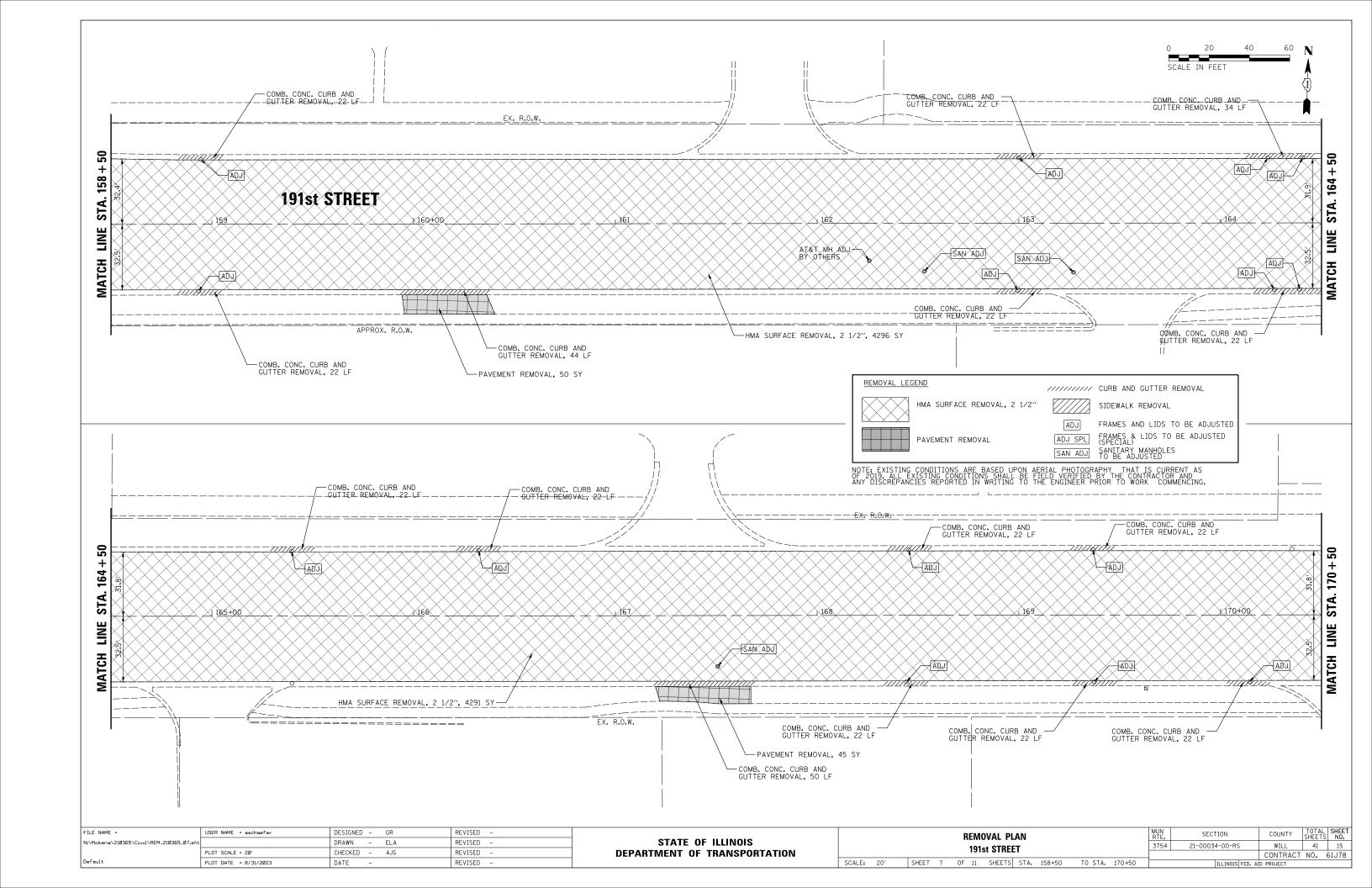


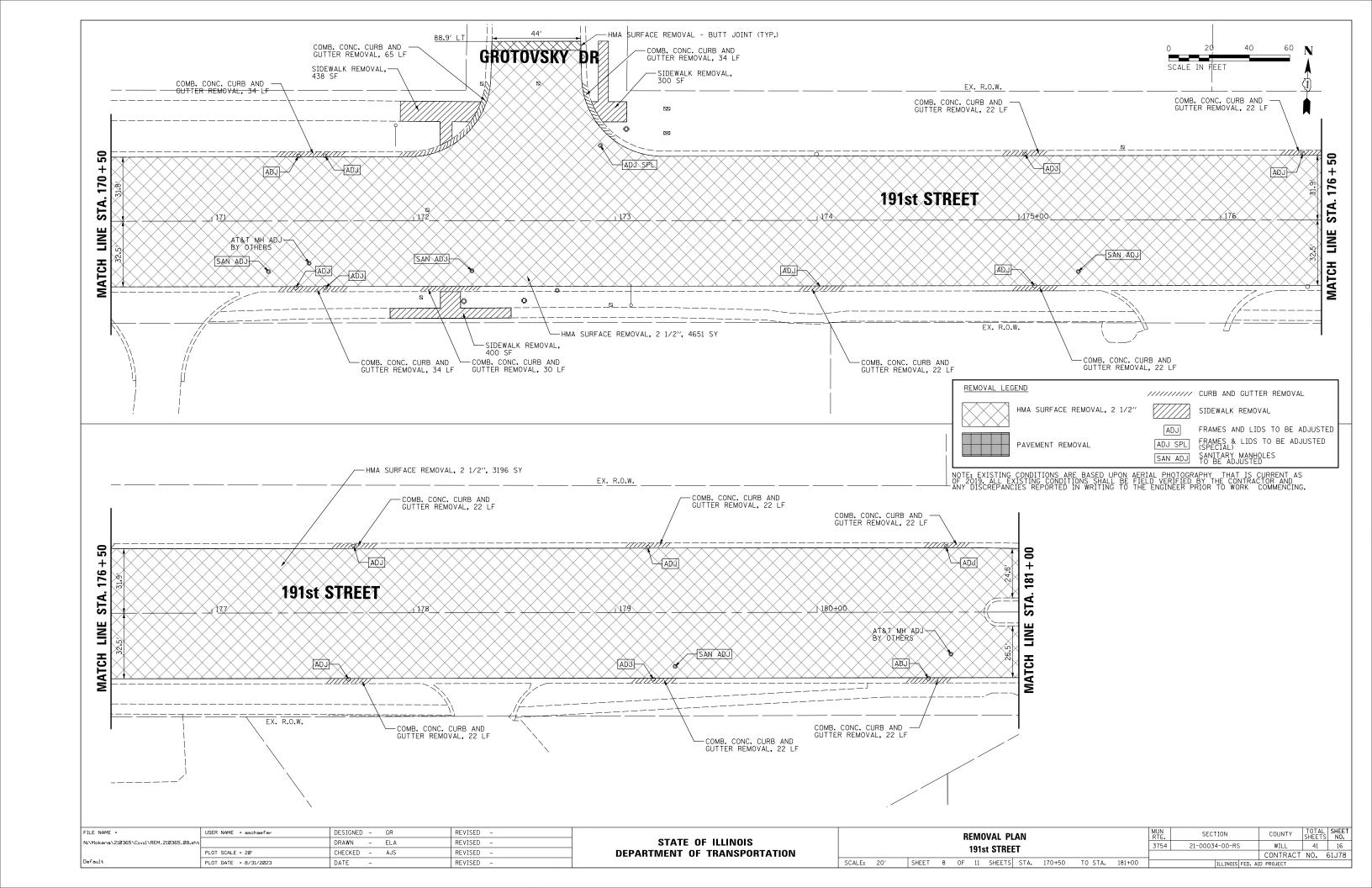


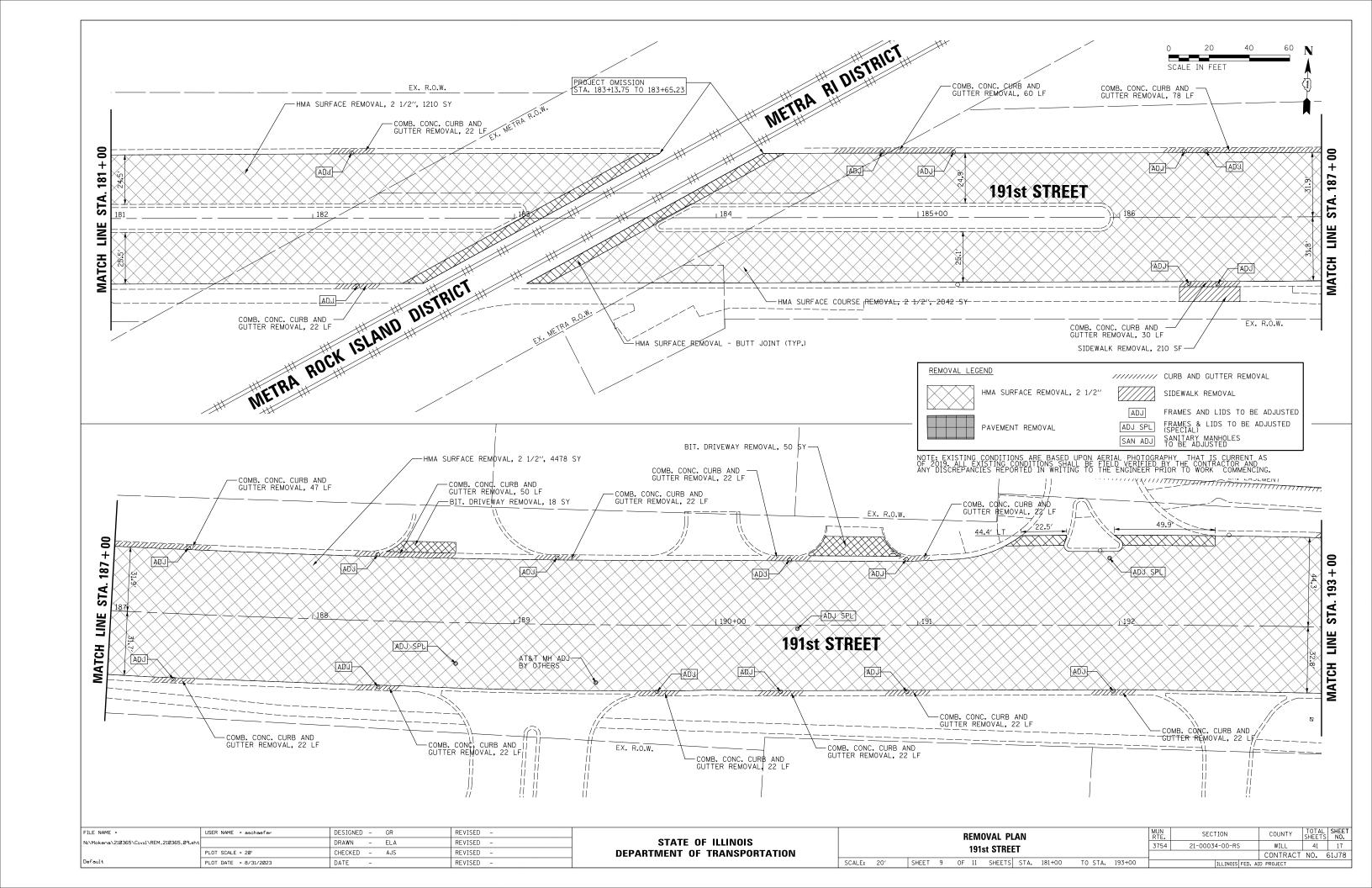


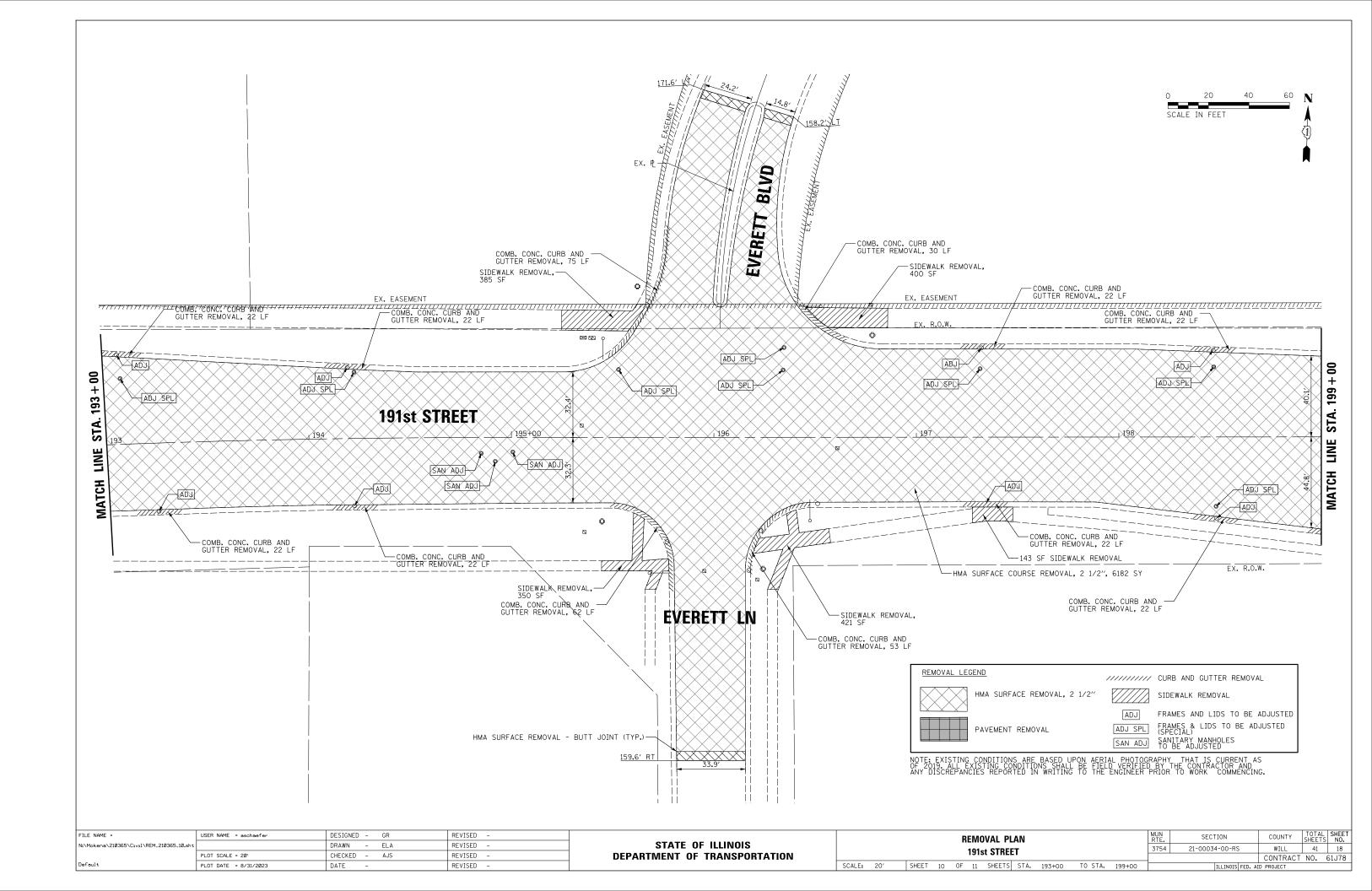
FILE NAME =	USER NAME = aschaefer	DESIGNED - GR	REVISED -			REMOVAL PLAN	MUN	SECTION	COUNTY	TOTAL SHEET
N:\Mokena\210365\C1v1\REM_210365_05.sh	t	DRAWN - ELA	REVISED -	STATE OF ILLINOIS			3754	21-00034-00-RS	WILL	41 13
	PLOT SCALE = 20'	CHECKED - AJS	REVISED -	DEPARTMENT OF TRANSPORTATION	191st STREET				CONTRACT	NO. 61J78
Default	PLOT DATE = 8/31/2023	DATE -	REVISED -		SCALE: 20' SHEET 5 OF 11 SHEETS STA. 146+50 TO STA. 152+50			ILLINOIS FED.	AID PROJECT	
	-	·		•		•				



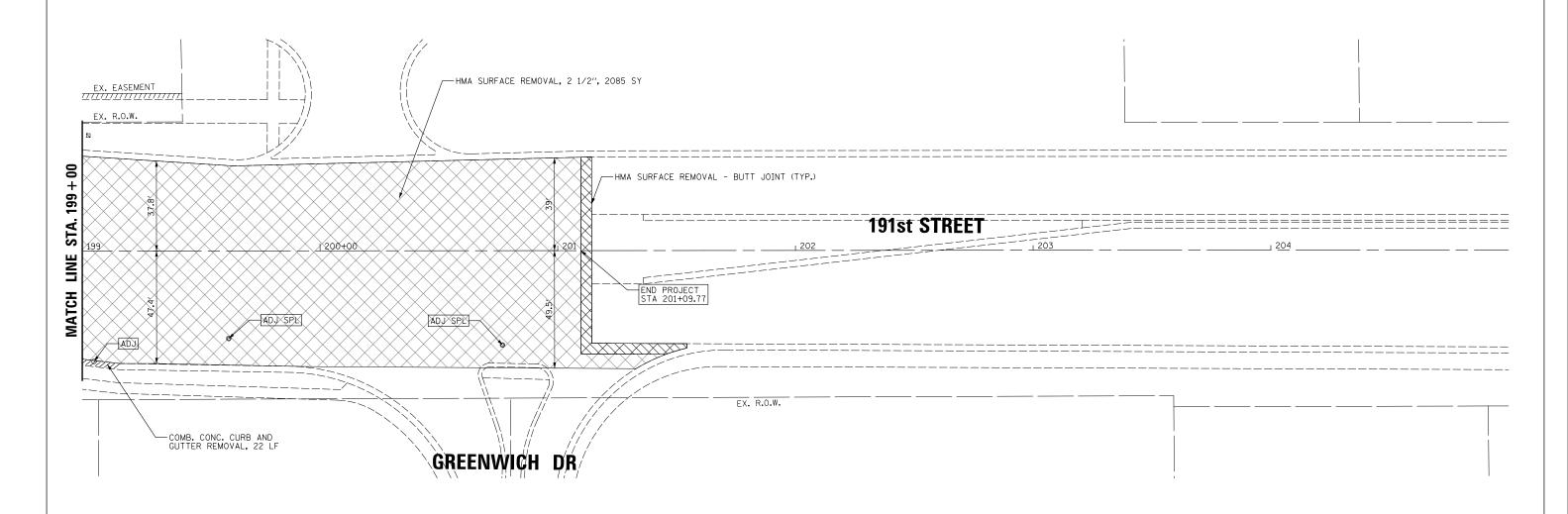


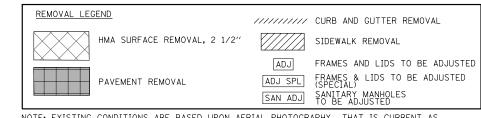






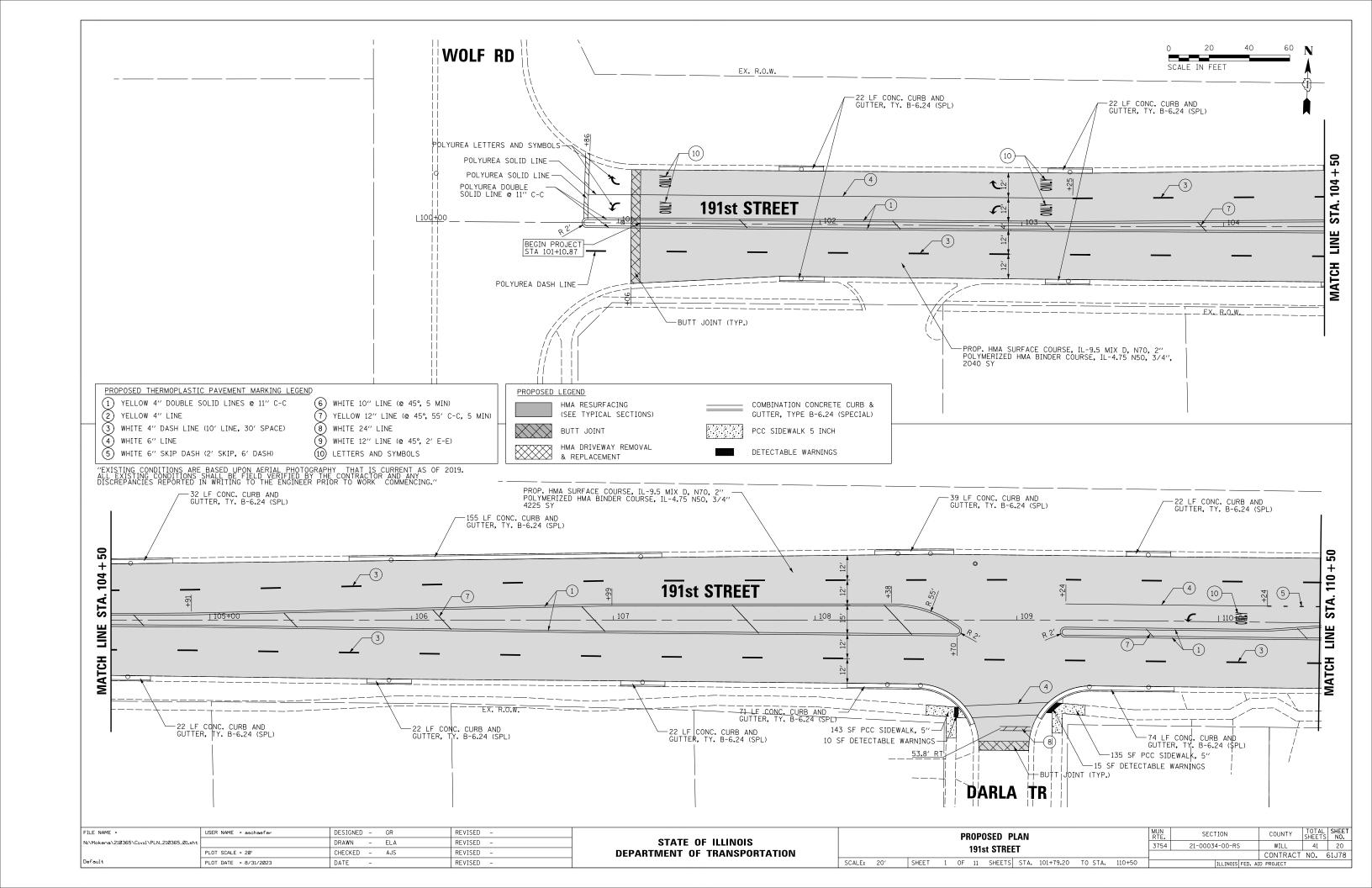


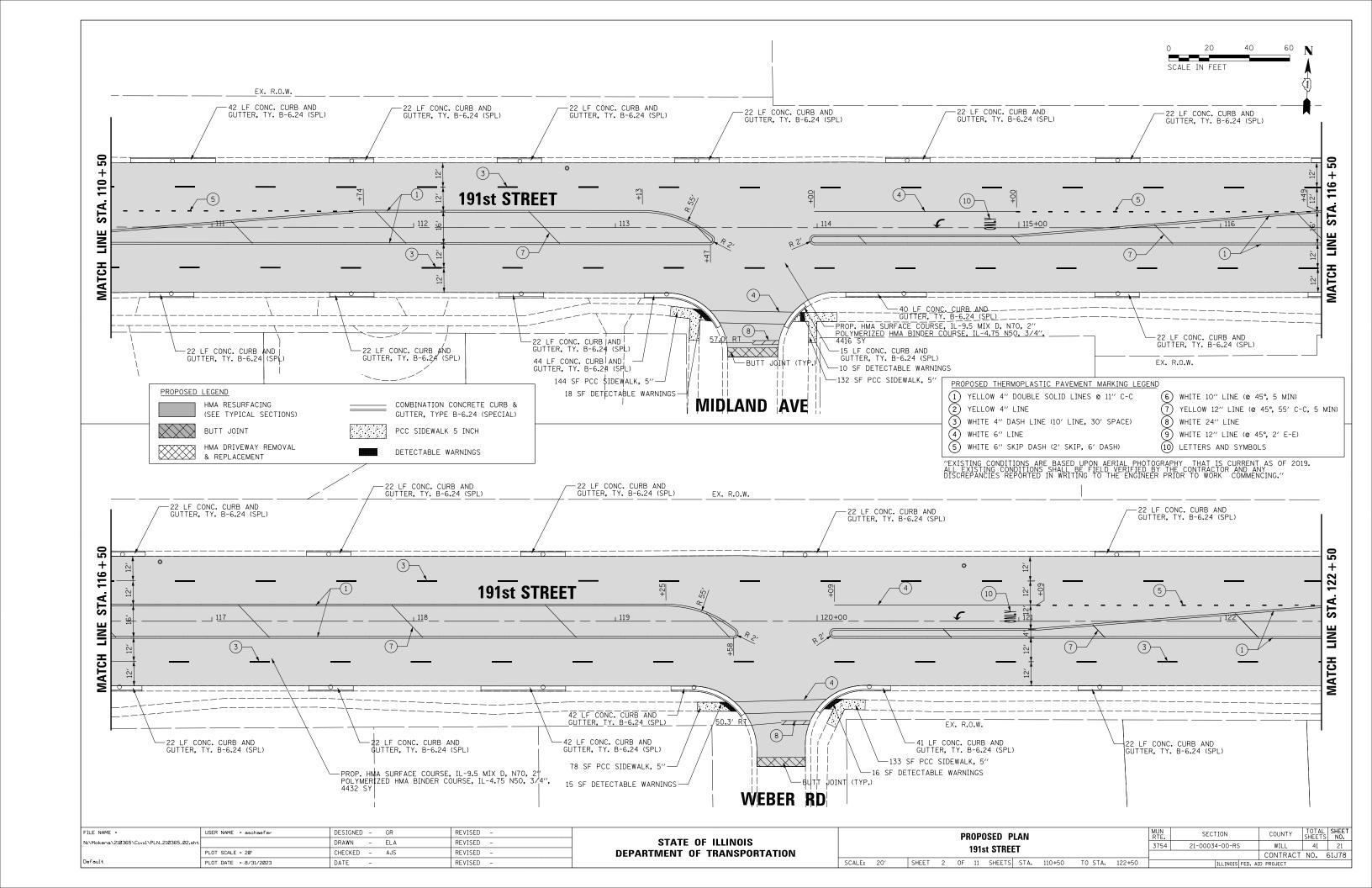


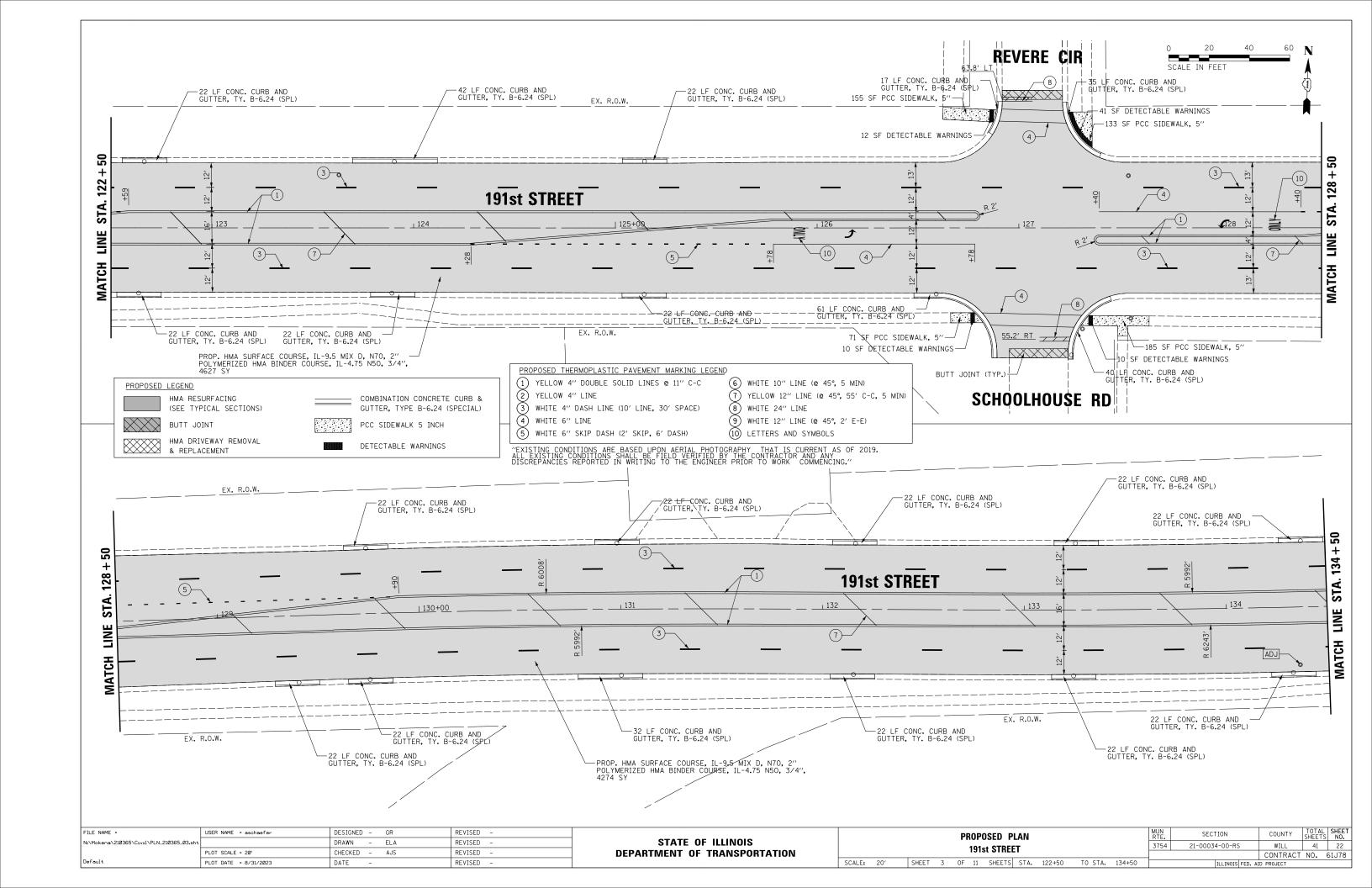


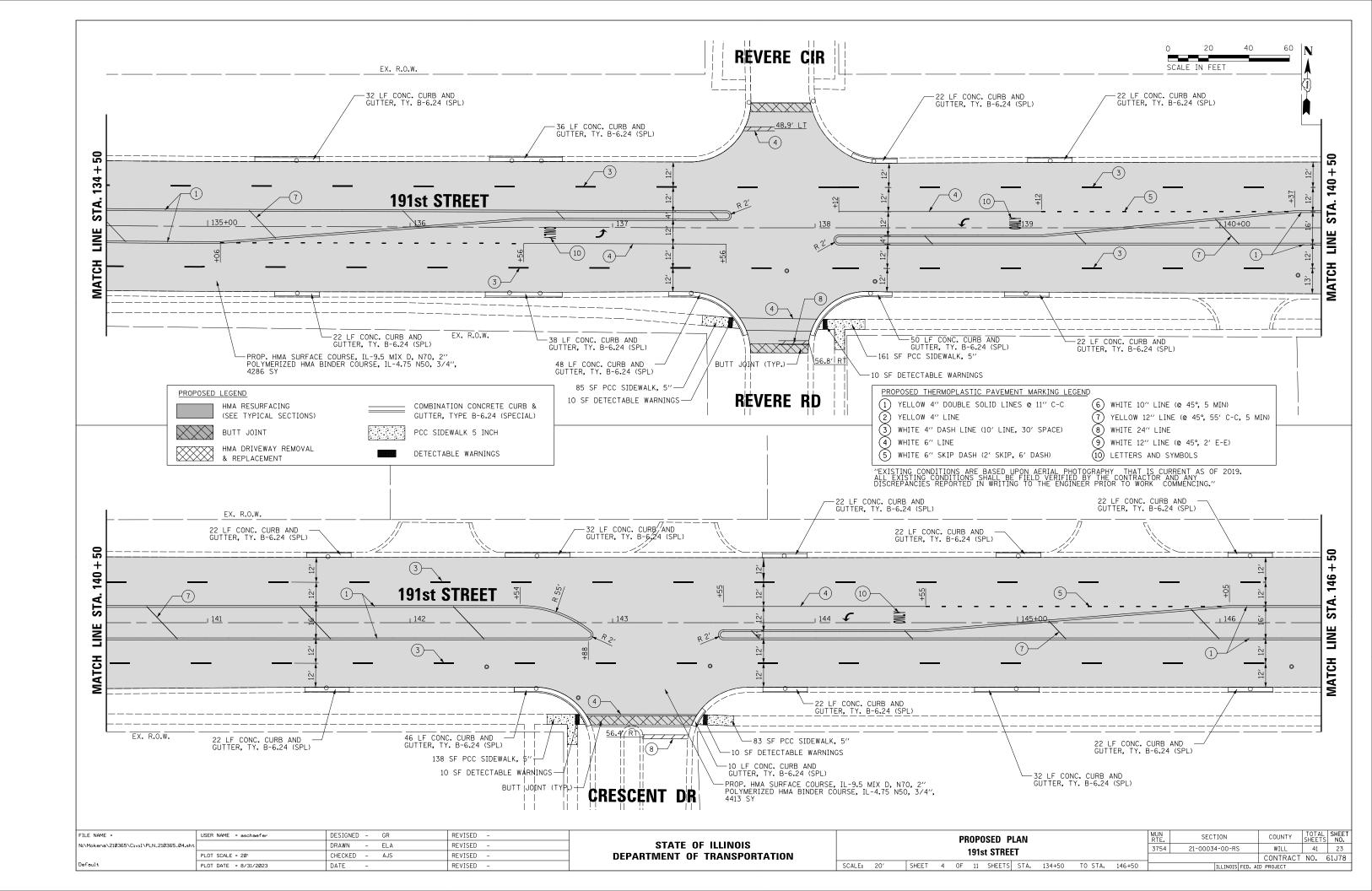
NOTE: EXISTING CONDITIONS ARE BASED UPON AERIAL PHOTOGRAPHY THAT IS CURRENT AS OF 2019, ALL EXISTING CONDITIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND ANY DISCREPANCIES REPORTED IN WRITING TO THE ENGINEER PRIOR TO WORK COMMENCING.

FILE NAME =	USER NAME = aschaefer	DESIGNED - GR	REVISED -			REMOVAL PLAN	MUN RTF.	SECTION	COUNTY SHE	JIAL SHEET
N:\Mokena\210365\C1v1\REM_210365_11.sht		DRAWN - ELA	REVISED -	STATE OF ILLINOIS		191st STREET	3754	21-00034-00-RS	WILL 4	41 19
	PLOT SCALE = 20'	CHECKED - AJS	REVISED -	DEPARTMENT OF TRANSPORTATION		ISIST STREET			CONTRACT NO	IO. 61J78
Default	PLOT DATE = 8/31/2023	DATE -	REVISED -		SCALE: 20'	SHEET 11 OF 11 SHEETS STA. 199+00 TO STA. 201+14.27		ILLINOIS FED.	AID PROJECT	



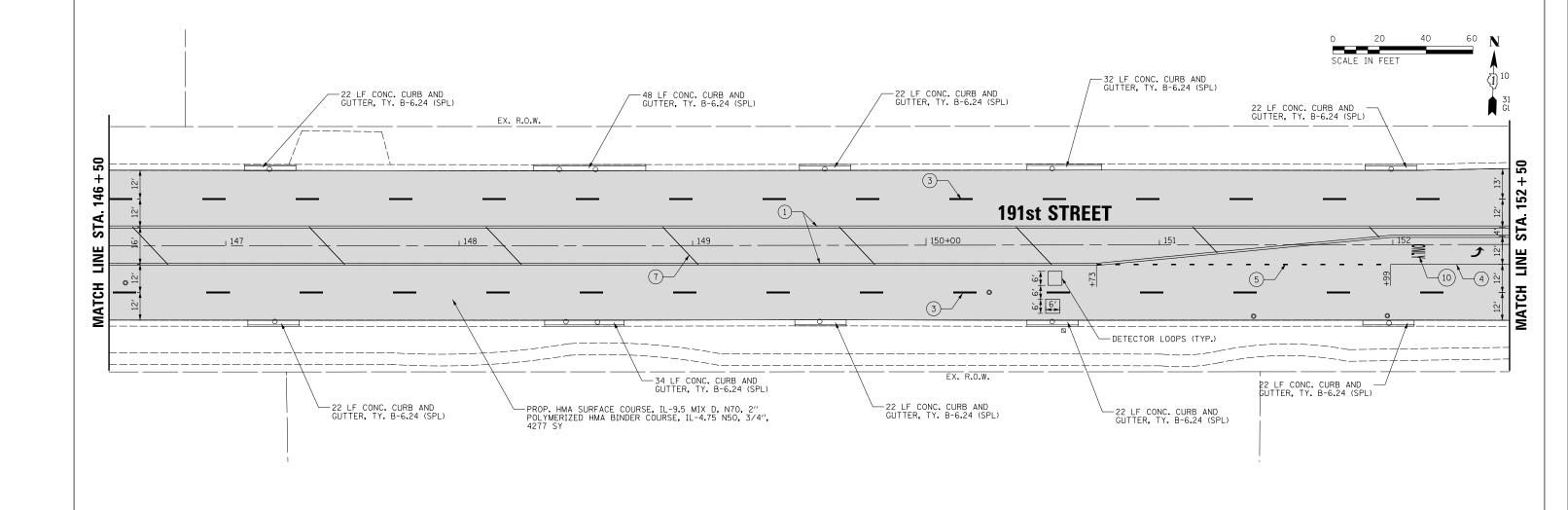




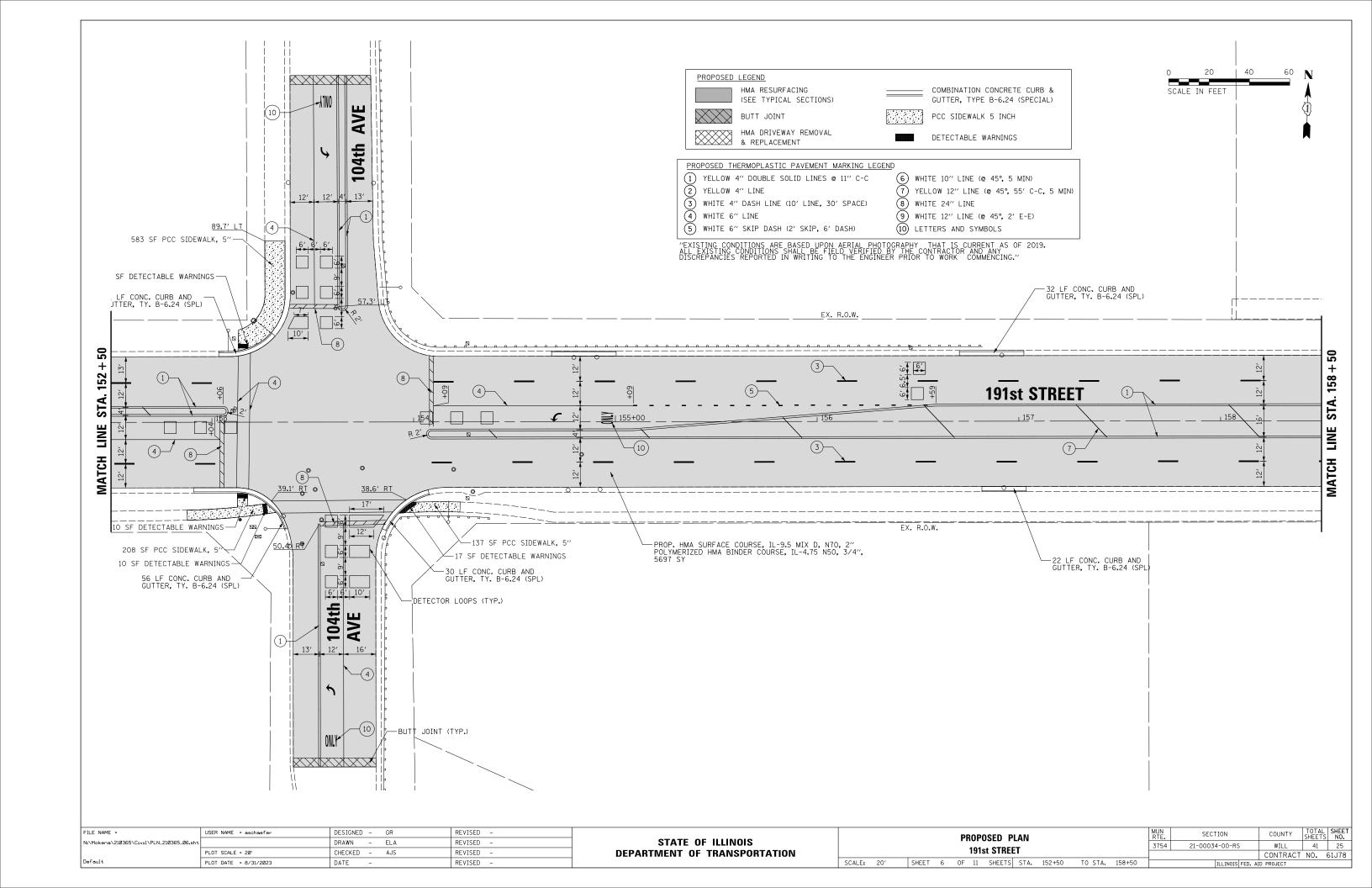


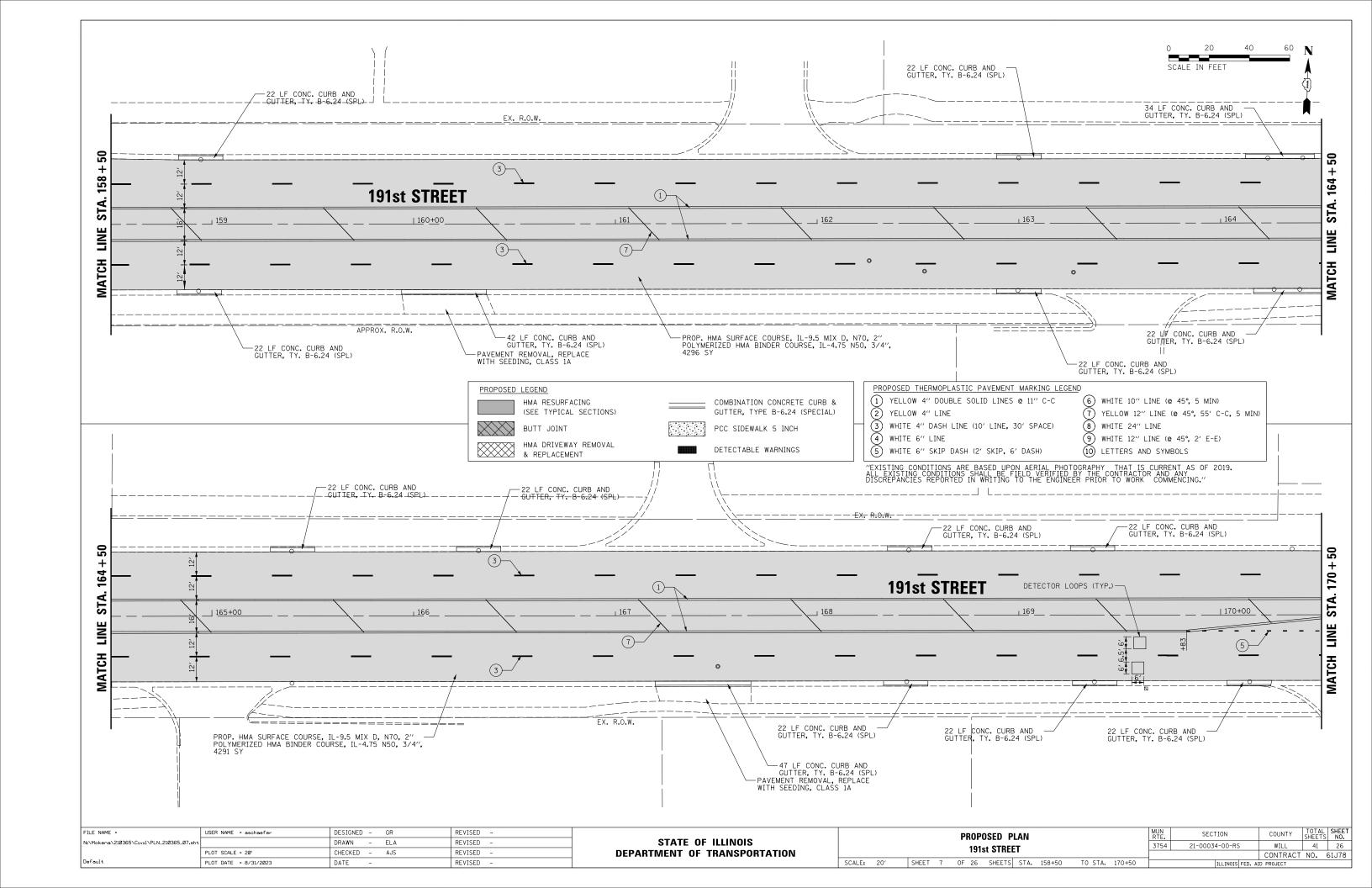
PROPOSED THERMOPLASTIC PAVEMENT MARKING LEGEND PROPOSED LEGEND 1) YELLOW 4" DOUBLE SOLID LINES @ 11" C-C 6 WHITE 10" LINE (@ 45°, 5 MIN) HMA RESURFACING COMBINATION CONCRETE CURB & 2 YELLOW 4" LINE
3 WHITE 4" DASH LINE (10' LINE, 30' SPACE) YELLOW 12" LINE (@ 45°, 55' C-C, 5 MIN) (SEE TYPICAL SECTIONS) GUTTER, TYPE B-6,24 (SPECIAL) (8) WHITE 24" LINE PCC SIDEWALK 5 INCH 9) WHITE 12" LINE (@ 45°, 2' E-E) HMA DRIVEWAY R
& REPLACEMENT HMA DRIVEWAY REMOVAL (5) WHITE 6" SKIP DASH (2' SKIP, 6' DASH) (10) LETTERS AND SYMBOLS DETECTABLE WARNINGS

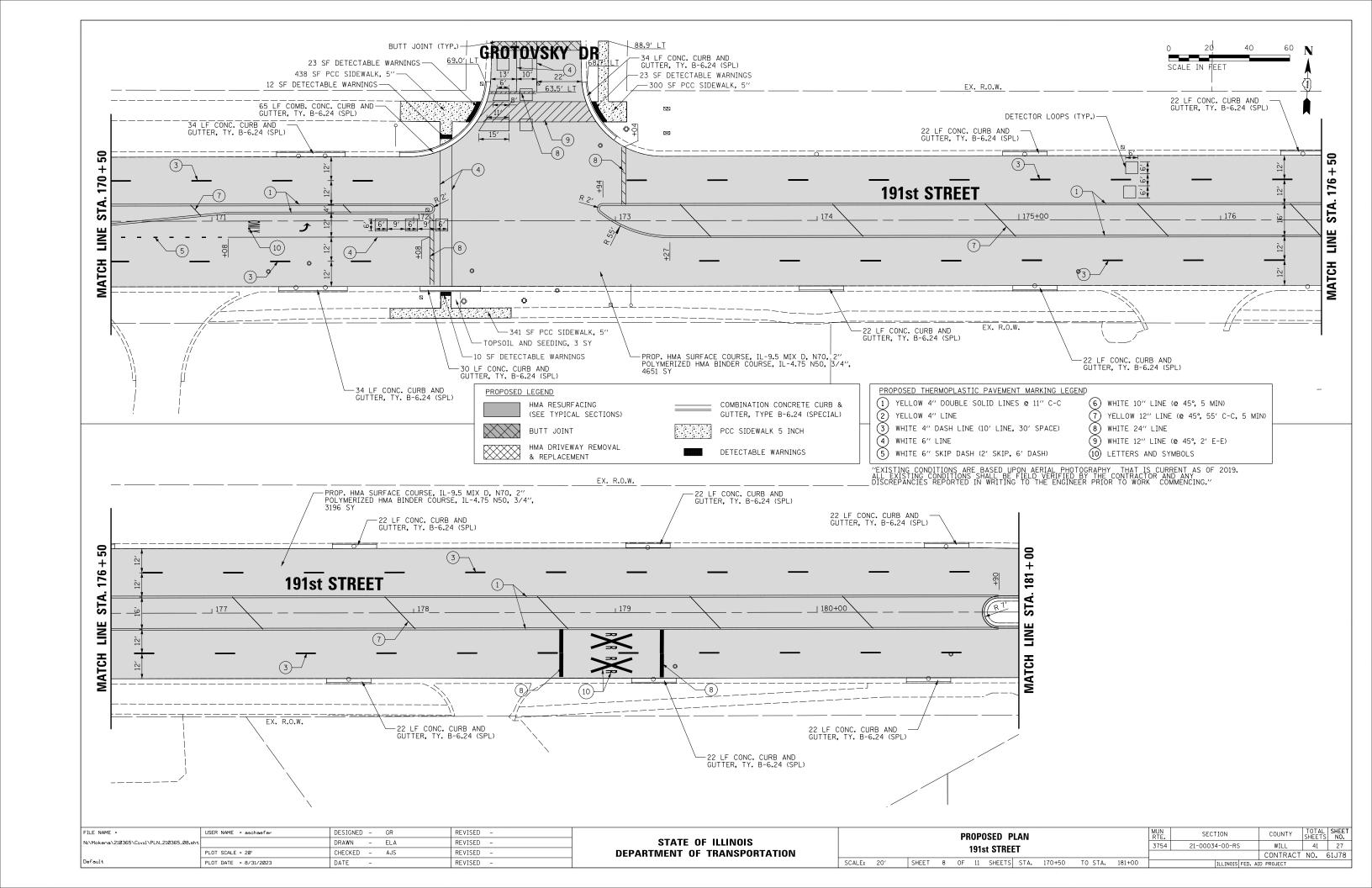
"EXISTING CONDITIONS ARE BASED UPON AERIAL PHOTOGRAPHY THAT IS CURRENT AS OF 2019. ALL EXISTING CONDITIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND ANY DISCREPANCIES REPORTED IN WRITING TO THE ENGINEER PRIOR TO WORK COMMENCING."

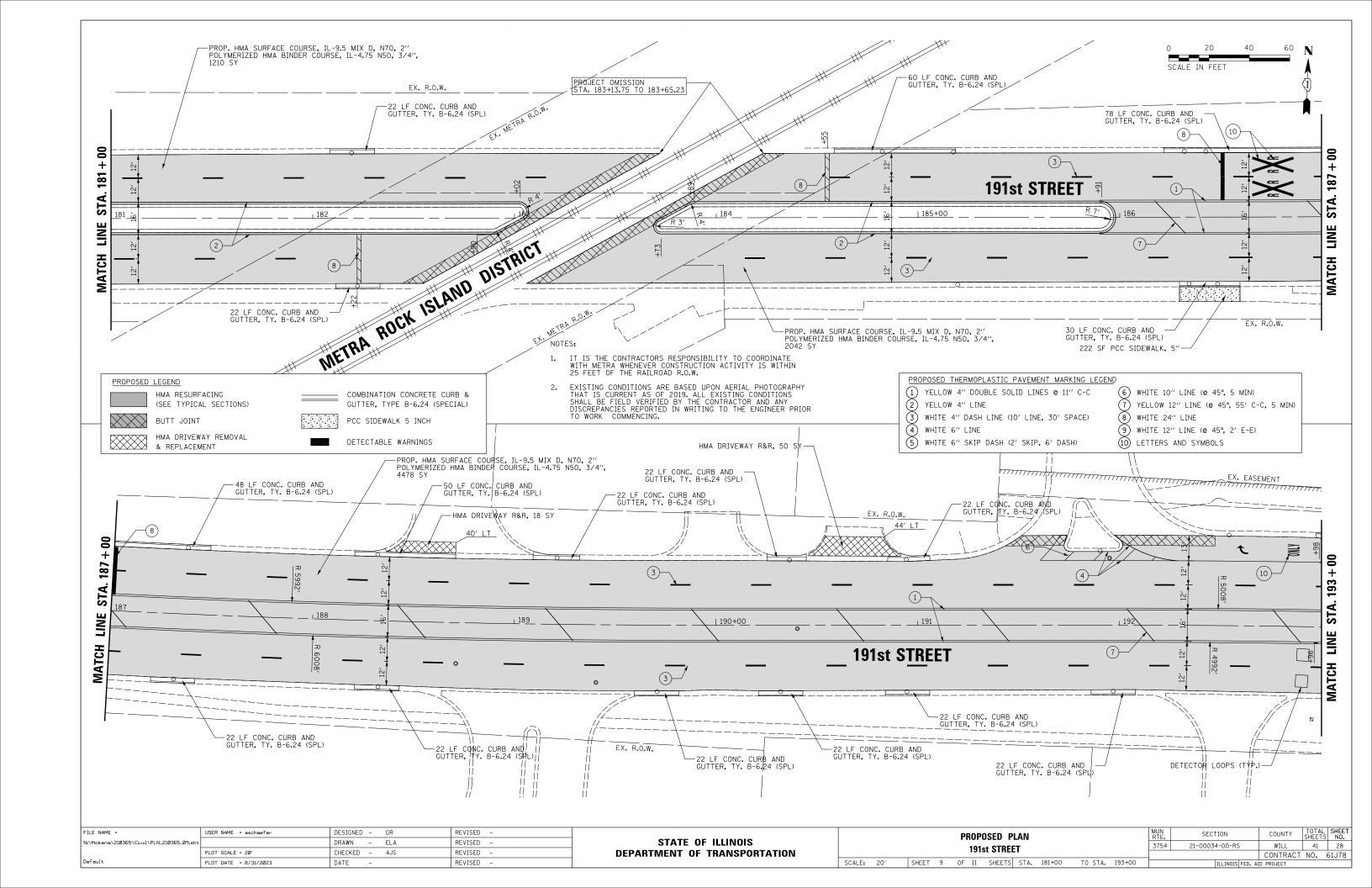


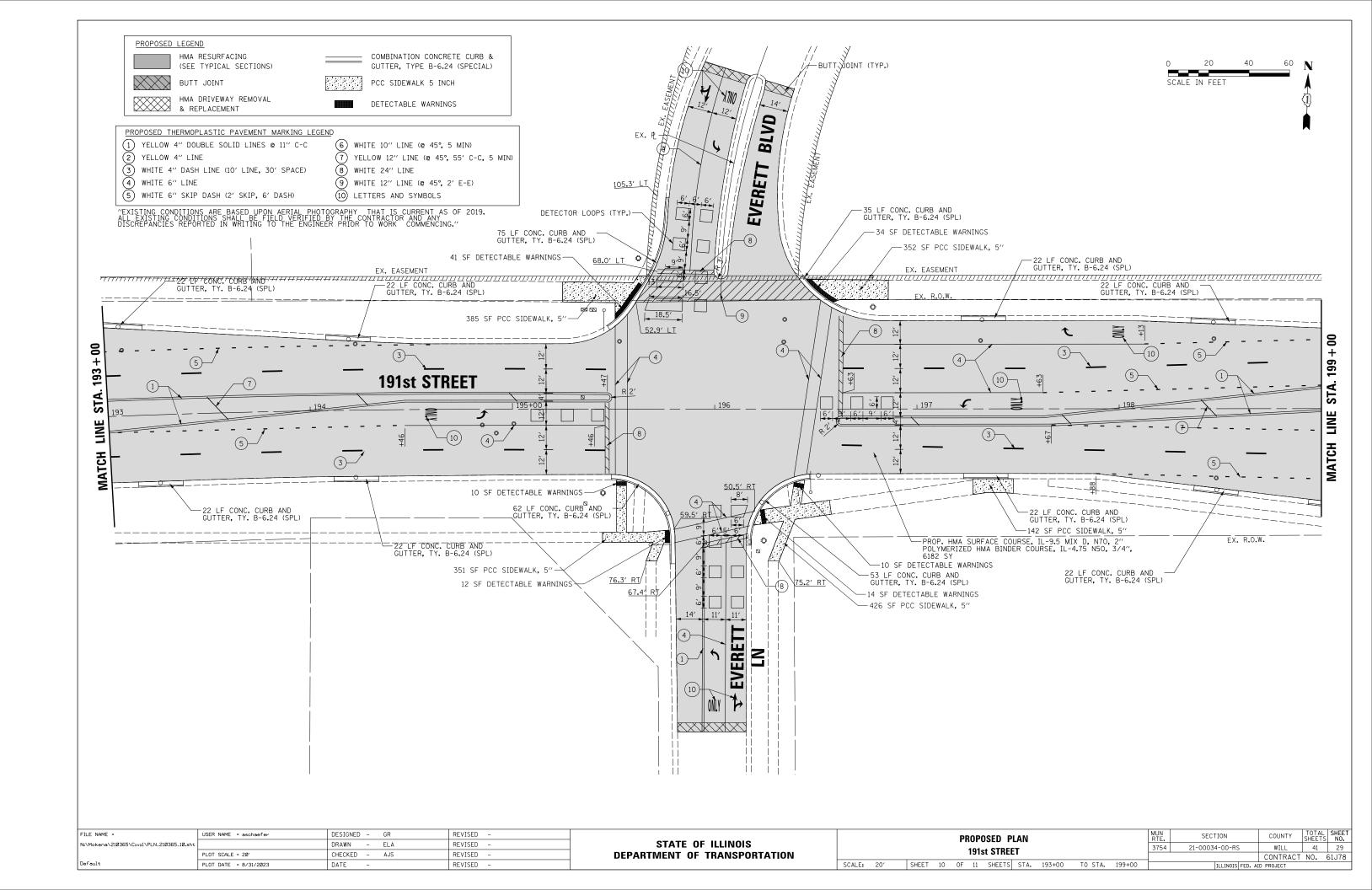
FILE NAME =	USER NAME = aschaefer	DESIGNED - GR	REVISED -			PROPOSED PLAN		MUN	SECTION	COUNTY	TOTAL SHEET
N:\Mokena\210365\C1v1\PLN_210365_05.sht		DRAWN - ELA	REVISED -	STATE OF ILLINOIS	l F		3754	21-00034-00-RS	WILL	41 24	
	PLOT SCALE = 20'	CHECKED - AJS	REVISED -	DEPARTMENT OF TRANSPORTATION	1915f 91MEET					CONTRACT	NO. 61J78
Default	PLOT DATE = 8/31/2023	DATE -	REVISED -		SCALE: 20' SHEET 5 OF 11 SHEETS STA. 146+50 TO STA. 152+50				ILLINOIS FED.		

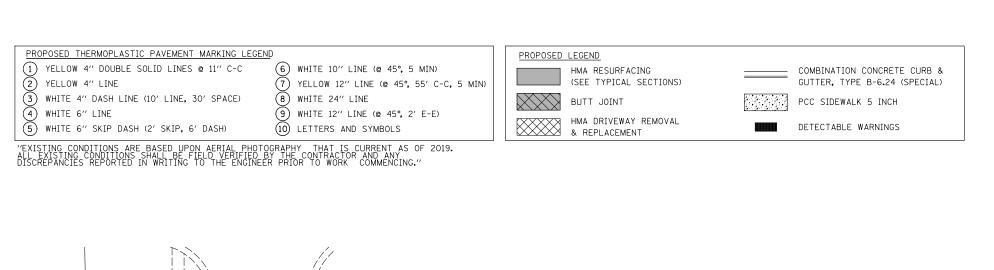


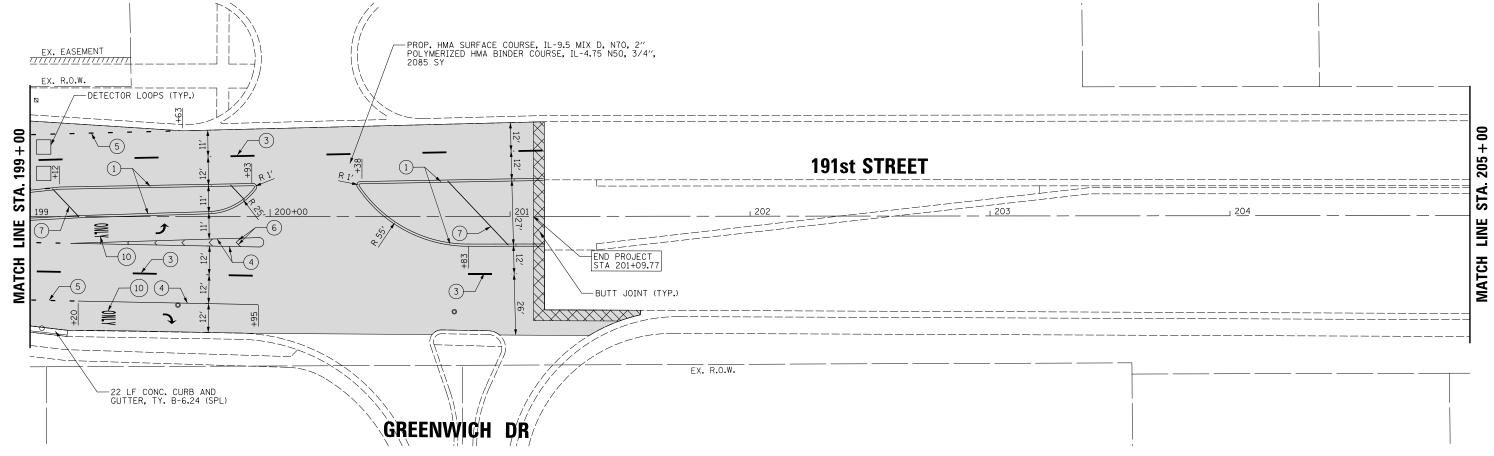




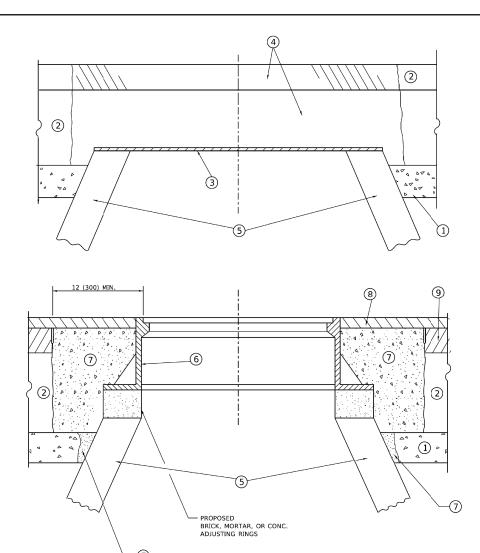








FILE NAME =	USER NAME = aschaefer	DESIGNED - GR	REVISED -			PROPOSED PLAN	MUN	SECTION	COUNTY	TOTAL S	SHEET
N:\Mokena\210365\Civil\PLN_210365_11.sht		DRAWN - ELA	REVISED -	STATE OF ILLINOIS			3754	21-00034-00-RS	WILL	41	30
	PLOT SCALE = 20'	CHECKED - AJS	REVISED -	DEPARTMENT OF TRANSPORTATION	191st STREET				CONTRACT		51J78
Default	PLOT DATE = 8/31/2023	DATE -	REVISED -		SCALE: 20' SHEET 11 OF 11 SHEETS STA. 199+00 TO STA. 201+14.27			ILLINOIS FED.	AID PROJECT		



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
- (5) EXISTING STRUCTURE
- 9 PROPOSED HMA BINDER COURSE

LOCATION OF STRUCTURES

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

BASIS OF PAYMENT

- 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

wd:	USER NAME = Lawrence.DeManche	DESIGNED - R. SHAH	REVISED - R. BORO 01-01-07			DETAILS FOR	F.A.	SECTION	COUNTY	TOTAL SHEET
AME.		DRAWN -	REVISED - R. BORO 03-09-11	STATE OF ILLINOIS			IXIE.			STILLETS NO.
E E	PLCT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - R. BORO 12-06-11	DEPARTMENT OF TRANSPORTATION	FK/	AMES AND LIDS ADJUSTMENT WITH MILLING		BD600-03 (BD-08)	CONTRACT	T NO.
žĒ	PLOT DATE = 11/18/2022	DATE - 10-25-94	REVISED - K. SMITH 11-18-22		SCALE: NONE	SHEET 1 OF 1 SHEETS STA. TO STA.		ILLINOIS FED. A	AID PROJECT	

FILE NAME = USER NAME = aschaefer DESIGNED - GR N:\Mokena\210365\Civil\D1_DET_01_210365.et DRAWN - ELA PLDT SCALE = 34' CHECKED - AJS															
	FILE NAME =	USER NAME = aschaefer	DESIGNED - GR	REVISED -							F.A.U.	SECTION	COUNTY	TOTAL SI	EET
	$N:\\ \begin{tabular}{ll} N:\\ \begin{tabular}{ll} Mokena\\ \begin{tabular}{ll} 210365\\ \begin{tabular}{ll} C_{1}v_{1}\\ \begin{tabular}{ll} D1_DET_01_210365.s \\ \begin{tabular}{ll} S_{1}v_{1}\\ \begin{tabular}{ll} S_{2}v_{1}\\ \begin{tabular}{ll} S_{1}v_{2}\\ \begin{tabular}{ll} S_{2}v_{1}\\ \begin{tabular}{ll} S_{2}v_{2}\\	nt	DRAWN - ELA	REVISED -	STATE OF ILLINOIS			DISTRIC	T ONE DETAILS		3754	21-00034-00-RS	WTLL	41	31
		PLOT SCALE = 34'	CHECKED - AJS	REVISED -	DEPARTMENT OF TRANSPORTATION						0.01	21 00001 00 110	CONTRACT	NO. 61	J78
	Default	PLOT DATE = 8/31/2023	DATE -	REVISED -		SCALE: N.T.S.	SHEET	OF	SHEETS STA.	TO STA.		ILLINOIS FED. A	ID PROJECT		

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."
- 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.

HMA REMOVAL OVER PATCHES * AND HMA REPLACEMENT OVER PATCHES FOR PATCHING FIRST CONSTRUCTION 6 (150) MIN. – SAW CUT/SCORING EXIST. HMA FOR PATCHING FIRST CONSTRUCTION OVERLAY, TYPICAL. TOP OF EXIST. HMA OR MILLED SURFACE CLASS C OR CLASS D PATCH OF THE THICKNESS SPECIFIED 12 (300) SAW CUT/SCORING, TYPICAL **EXISTING PAVEMENT** PROPOSED UNSUITABLE SUBGRADE REMOVAL AND REPLACEMENT UTILITY OR STORM SEWER TRENCH (IF PATCH IS DUE TO UTILITY OR SEWER WORK, THE WIDTH OF THE FULL DEPTH PATCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH).

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.

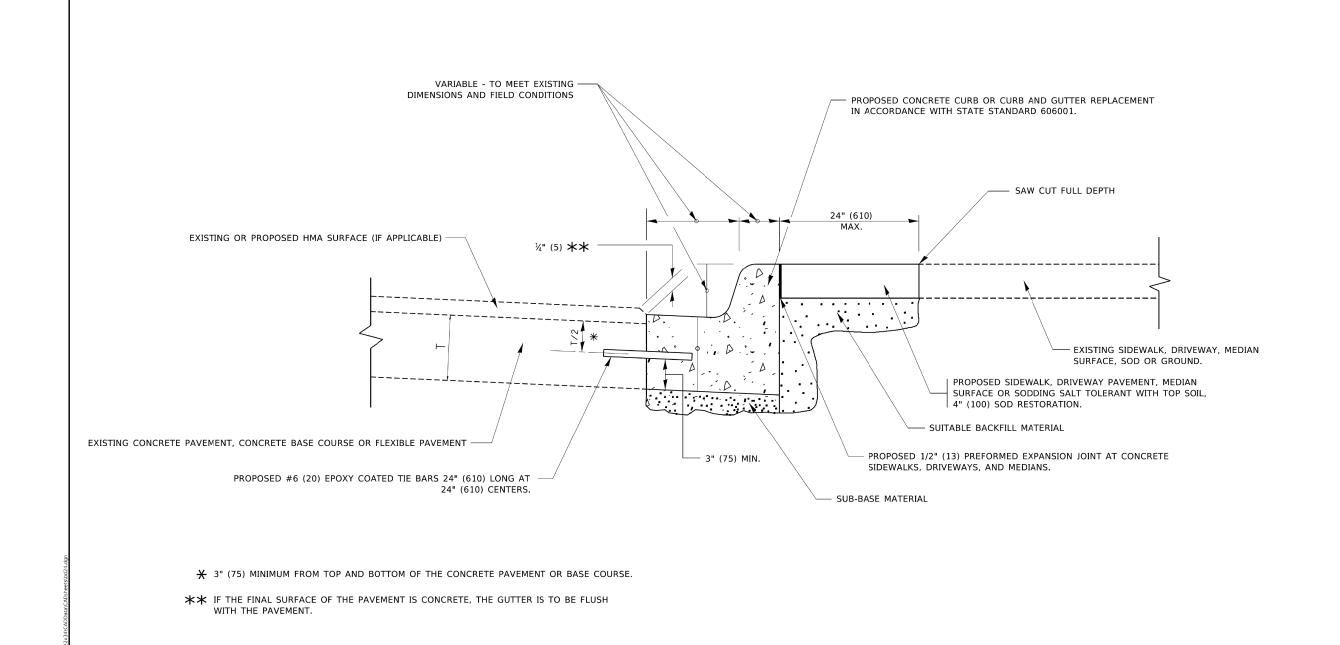
SEQUENCE OF CONSTRUCTION (MILLING FIRST)

- 1. MILL HMA FIRST IF THERE IS AT LEAST 4½ INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
- 2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

USER NAME = Lawrence.DeManche	DESIGNED - R. SHAH	REVISED - R. BORO 01-01-07		PAVEMENT PATC	HING FOR	F.A.	SECTION	COUNTY	TOTAL SHEET
	DRAWN -	REVISED - R. BORO 09-04-07	STATE OF ILLINOIS	HMA SURFACED PAVEMENT					SHEETS NO.
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - K. ENG 10-27-08	DEPARTMENT OF TRANSPORTATION				BD400-04 (BD-22)		NO.
PLOT DATE = 11/18/2022	DATE - 10-25-94	REVISED - K. SMITH 11-18-22		SCALE: NONE SHEET 1 OF 1 SHEETS	STA. TO STA.	<u> </u>	ILLINOIS FED. AII	D PROJECT	

DESIGNED - GR REVISED FILE NAME = USER NAME = aschaefer SECTION COUNTY STATE OF ILLINOIS N:\Mokena\210365\Civil\D1_DET_02_210365.s DRAWN - ELA REVISED **DISTRICT ONE DETAILS** 3754 21-00034-00-RS WILL 41 32 CHECKED - AJS REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 61J78 SCALE: N.T.S. SHEET SHEETS STA. TO STA. PLOT DATE = 8/31/2023 DATE REVISED

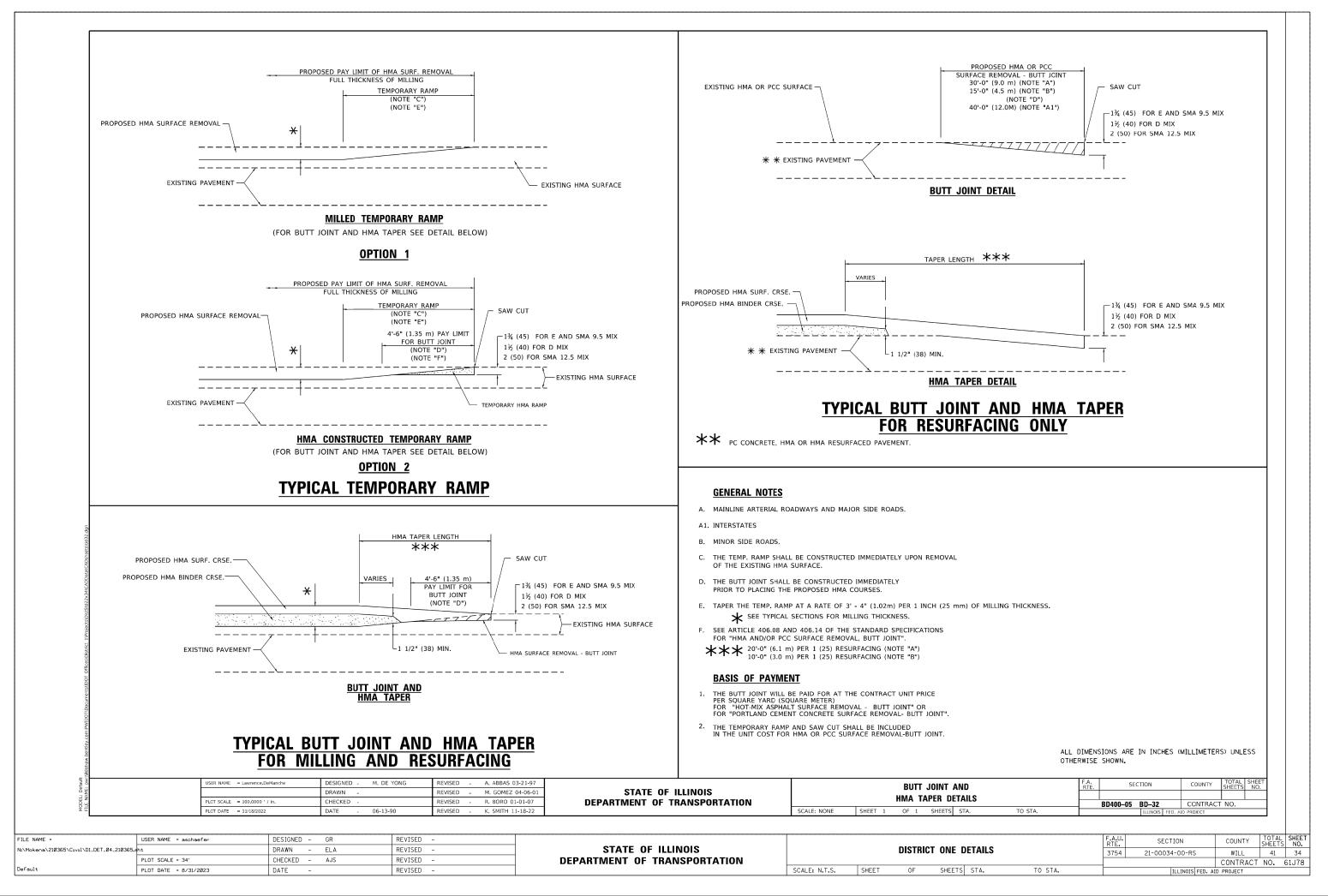


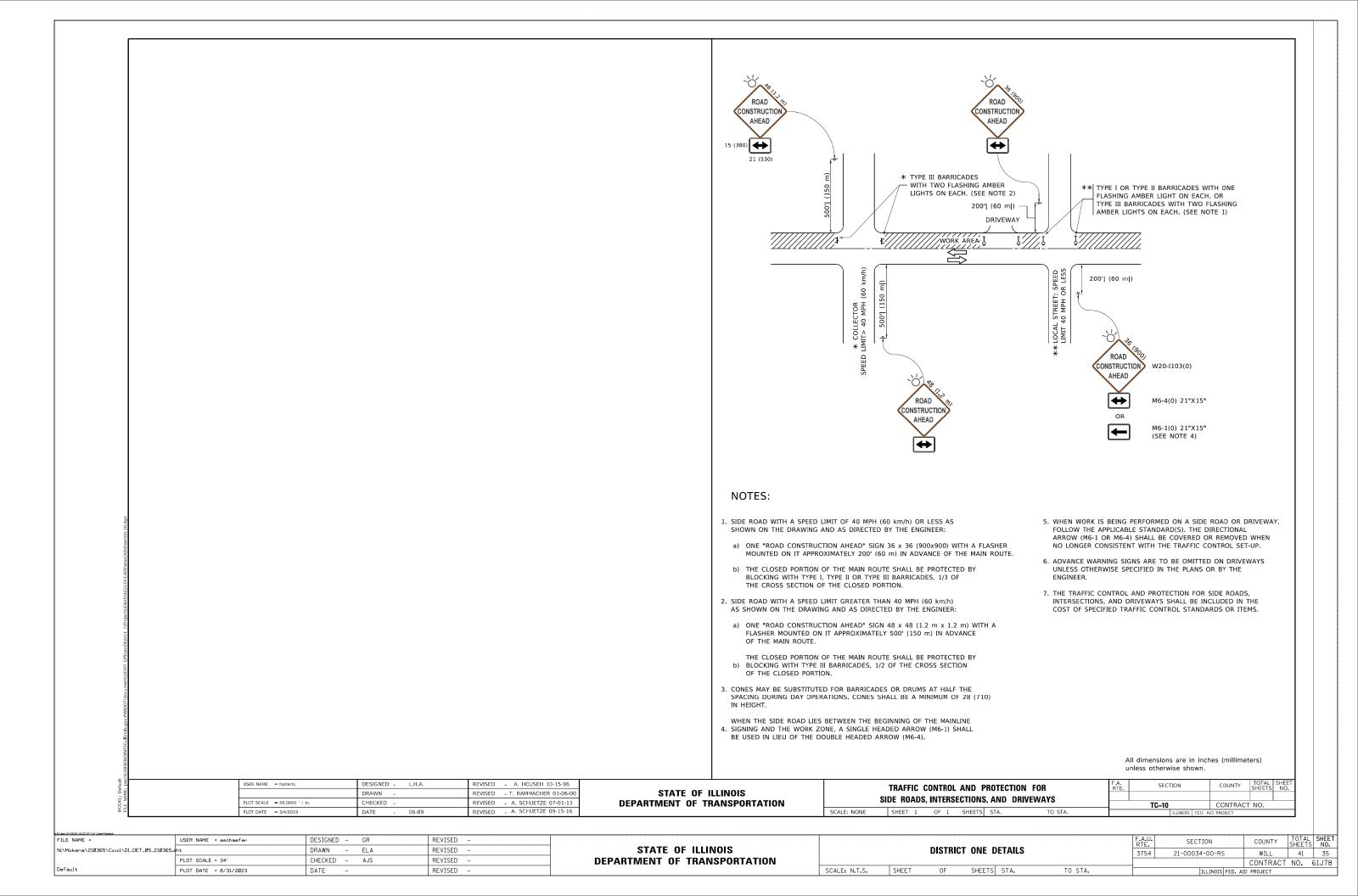
CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

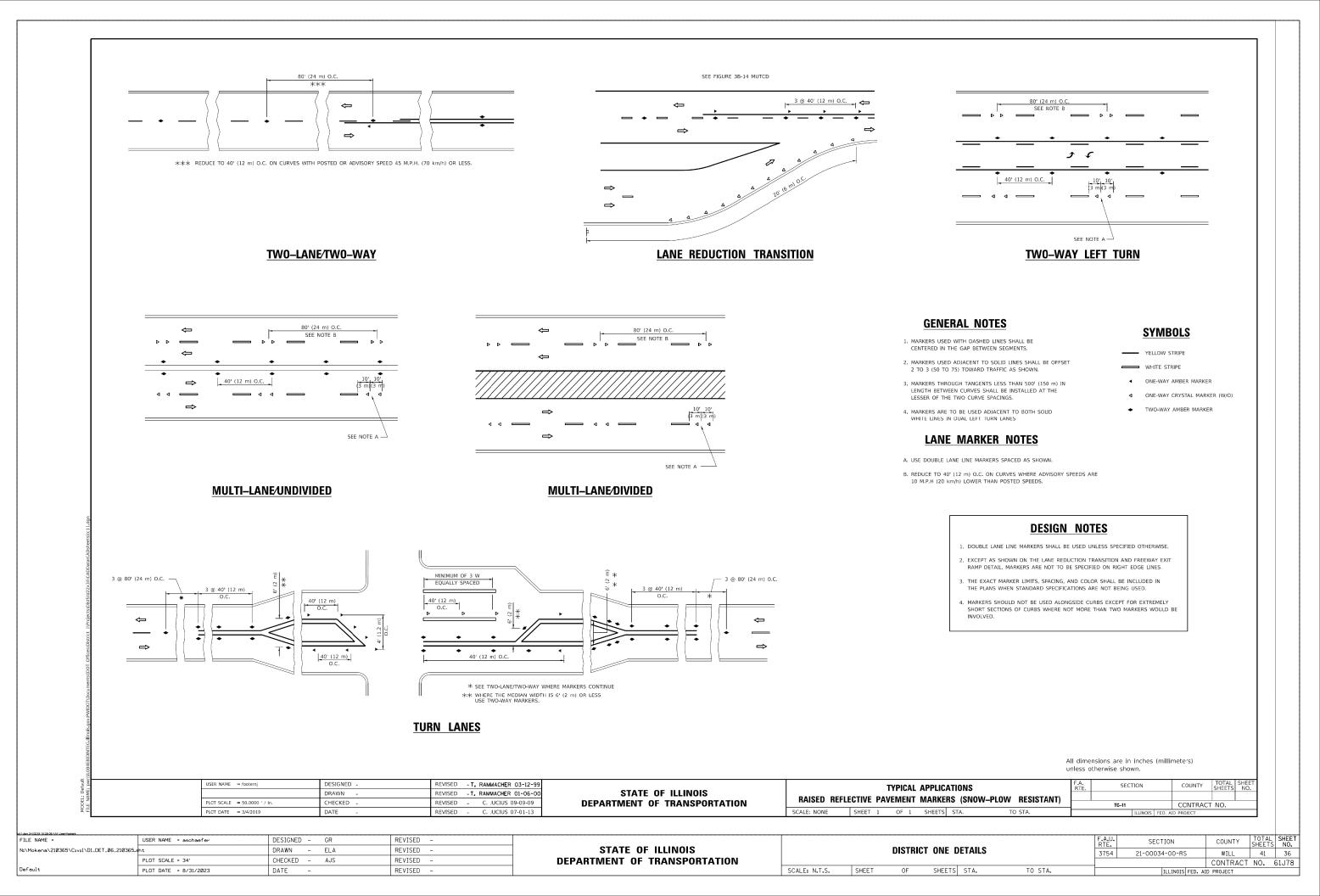
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

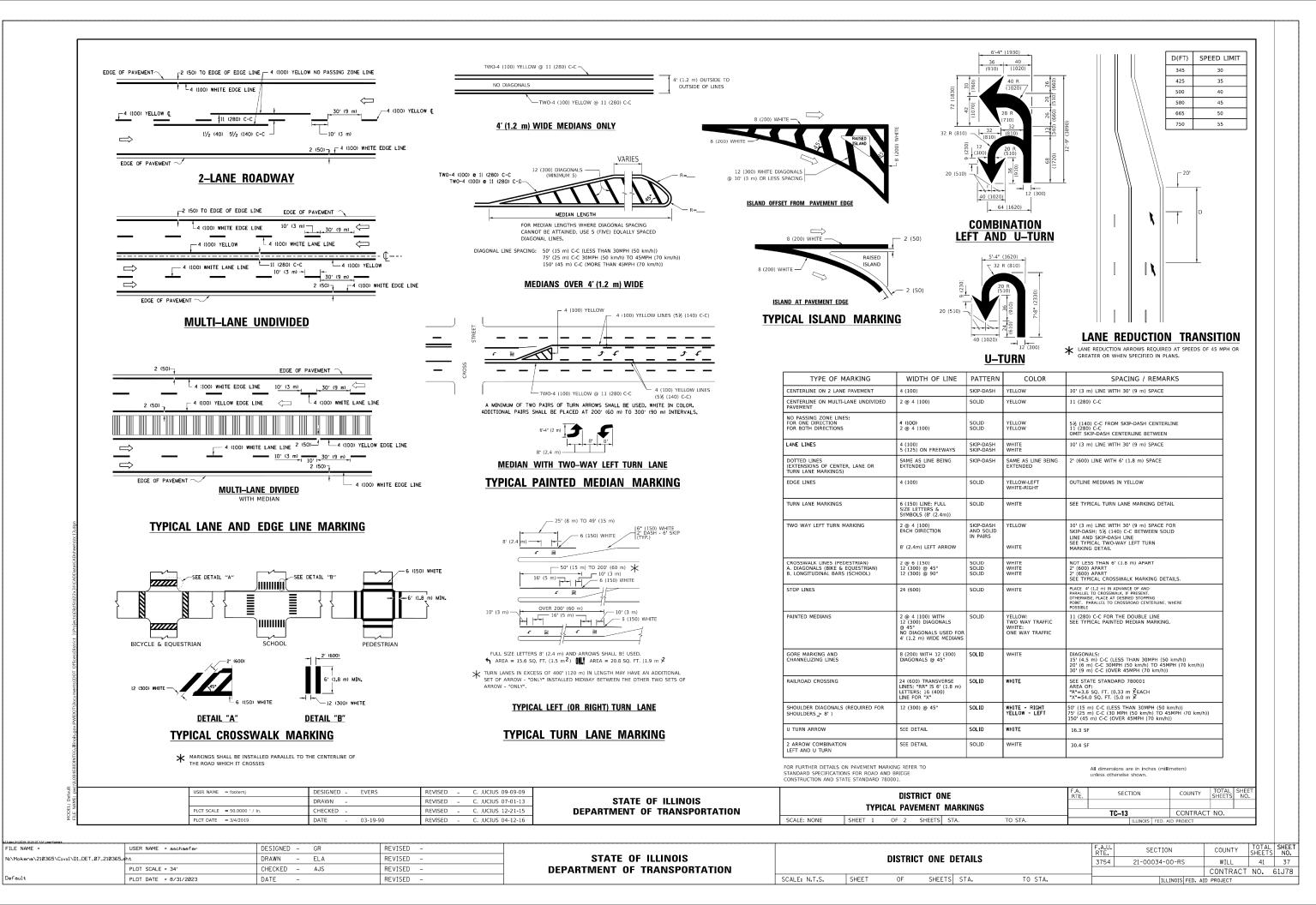
USER NAME = footemj	DESIGNED - A. HOUSEH	REVISED - A. ABBAS 03-21-97 REVISED - M. GOMEZ 01-22-01	STATE OF ILLINOIS	CURB OR CURB AND GUTTER	F.A. SECTION	COUNTY TOTAL SHEET NO.
PLCT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - M. GOMEZ 01-22-01 REVISED - R. BORO 12-15-09	DEPARTMENT OF TRANSPORTATION SCALE: NONE	REMOVAL AND REPLACEMENT	BD600-06 (BD-24)	CONTRACT NO.
PLOT DATE = 7/11/2019	DATE - 03-11-94	REVISED - K. SMITH 07-11-19		SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.	ILLINOIS FED. A	AID PROJECT

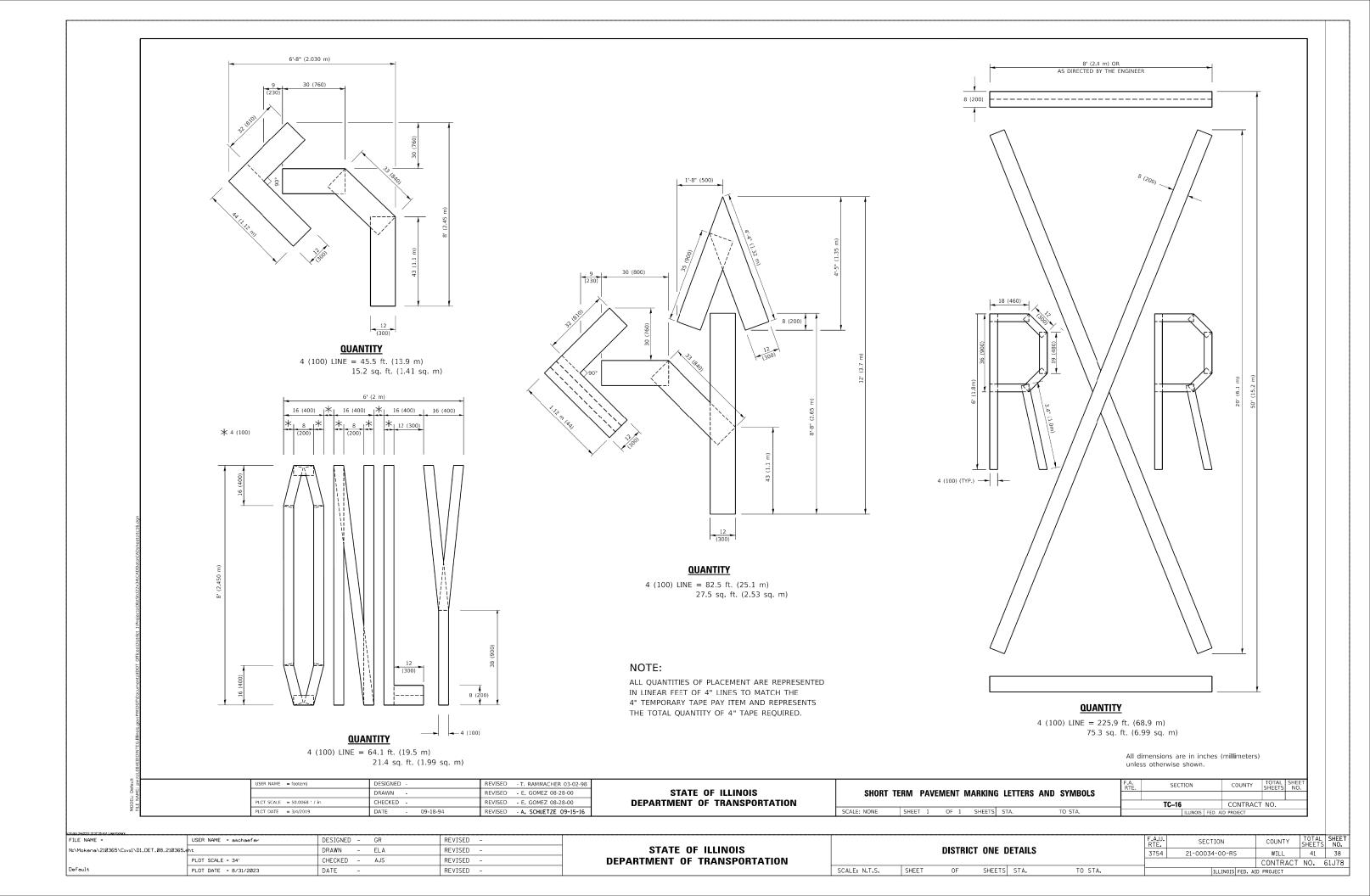
	FILE NAME =	USER NAME = aschaefer	DESIGNED - GR	REVISED -							F.A.U.	SECTION	COUNTY	SHEETS	SHEET
	N:\Mokena\210365\C1v1\D1_DET_03_210365.s	ht	DRAWN - ELA	REVISED -	STATE OF ILLINOIS		DISTRICT ONE DETAILS				3754	21-00034-00-RS	WILL	41	33
		PLOT SCALE = 34'	CHECKED - AJS	REVISED -	DEPARTMENT OF TRANSPORTATION						CONTRACT NO.		JJ78		
L	Default	PLOT DATE = 8/31/2023	DATE -	REVISED -		SCALE: N.T.S. SHEET OF SHEETS STA. TO STA.		TO STA.		ILLINOIS FED. AID PROJECT					
L												12211010 1201	7120 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		_

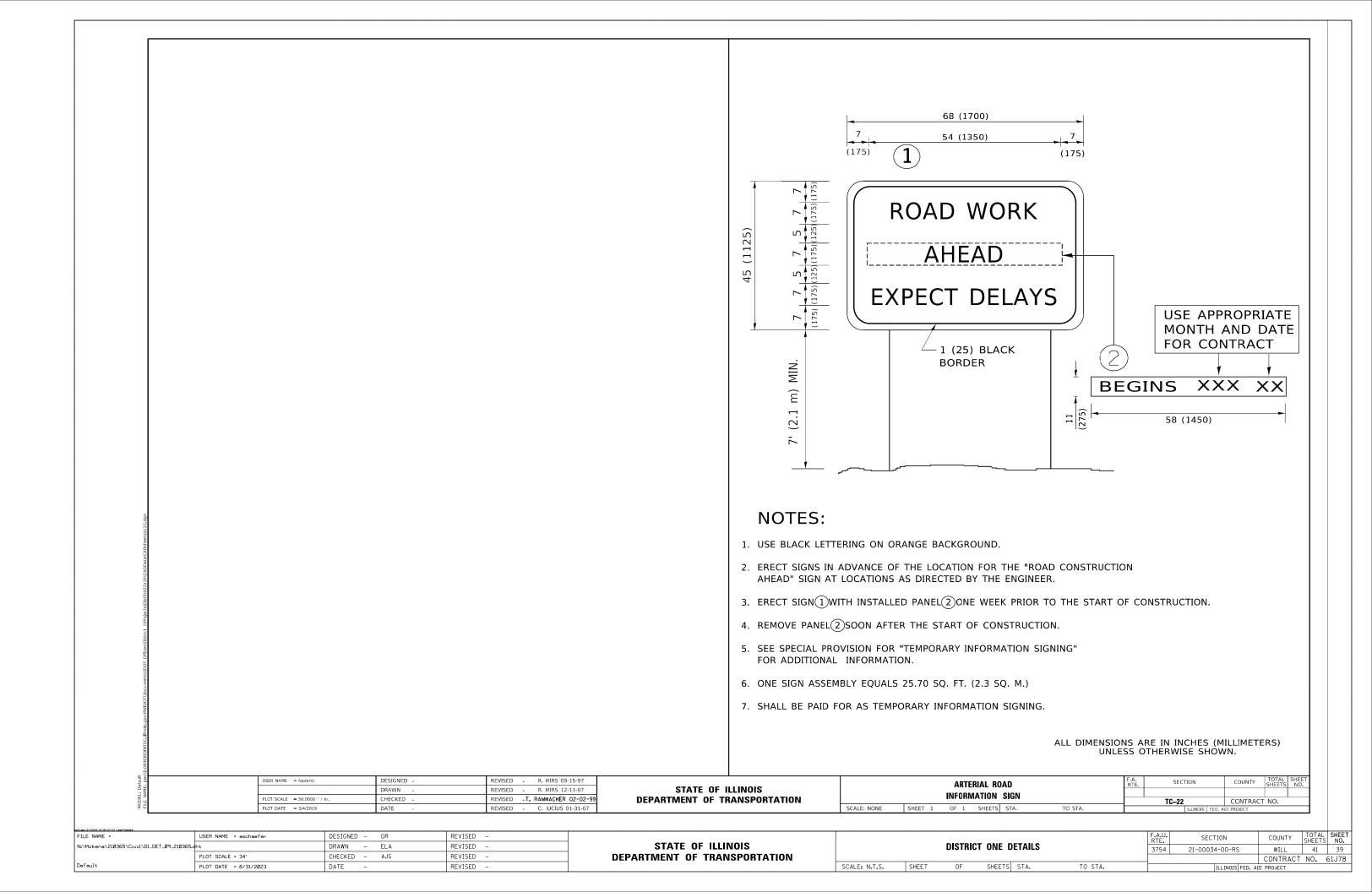








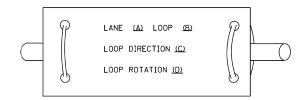




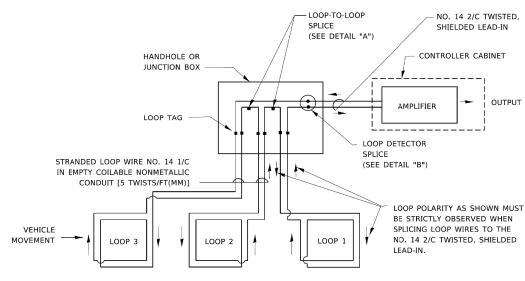
LOOP DETECTOR NOTES

- 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.
- 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.
- 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

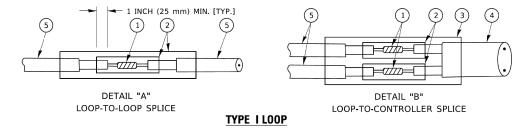


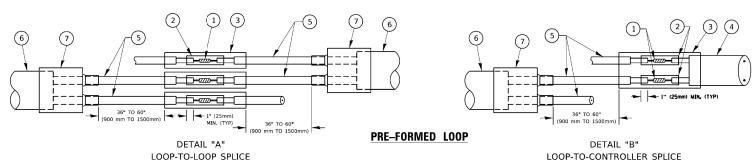
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



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.
- 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

TS-05

CONTRACT NO.

USER NAME = footemj	DESIGNED -	REVISED -		DISTRICT ONE								
	DRAWN -	REVISED -	STATE OF ILLINOIS	STANDARD TRAFFIC SIGNAL DESIGN DETAILS								
PLCT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION									
PLCT DATE = 3/4/2019	DATE -	REVISED -		SCALE: NONE	SHEET 2	OF 7 SHEETS	STA.	TO STA.				

FILE NAME =	USER NAME = aschaefer	DESIGNED - GR	REVISED -			F.A.U.	SECTION	COUNTY	TOTAL SHEET
N:\Mokena\210365\Civil\D1_DET_10_210365.s	nt	DRAWN - ELA	REVISED -	STATE OF ILLINOIS	DISTRICT ONE DETAILS	3754	21-00034-00-RS	WTLI	41 40
	PLOT SCALE = 807.S.	CHECKED - AJS	REVISED -	DEPARTMENT OF TRANSPORTATION		0.01	21 00001 00 110	CONTRACT	NO. 61J78
Default	PLOT DATE = 8/31/2023	DATE -	REVISED -		SCALE: N.T.S. SHEET OF SHEETS STA. TO STA.		ILLINOIS FED. A	ID PROJECT	

LOOPS NEXT TO SHOULDERS PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER. PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER. PAVED OR NON-PAVED SHOULDER PAVED OR NON-PAVED SHOULDER 1' (25 mm) UNIT DUCT-TRENCHED TO E/P ** W UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS. ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION) CROSS STREET-NON VOLUME DENSITY ("FAR OUT" DETECTION)

CROSS STREET

LOOPS ARE SAW-CUT

EDGE OF PAVEMENT

OUTSIDE PAVEMENT)

SER NAME = footem

PLOT SCALE = 50.0000 ' / ir

AND HANDHOLE

IN HANDHOLES

DUCT IS RUN BETWEEN

VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH (PROTECTED / PERMITTED LEFT TURN PHASING) HANDHOLE LOCATION MAY VARY DEPRONING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN. TRENCHED 1' (25 mm) VARY 12' (3.6 m) ** = (600 mm) ** | (6 m) ** | (12 m) ** | (12 m) ** | (12 m) ** | (12 m) ** | (13 m) ** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS. NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

CALLING LOOP IN

RIGHT TURN LANE

) [TYP.-ALL LEGS-VOLUME ("FAR OUT" DETECTION)]

OFF SET LOOPS BY

STRAIGHT SAW CUTS.

REVISED

REVISED

REVISED

REVISED

WAY LOCATIO

[TYP.-12' (3.6m) LANES]

CALLING LOOPS

DETAIL 1

N.T.S.

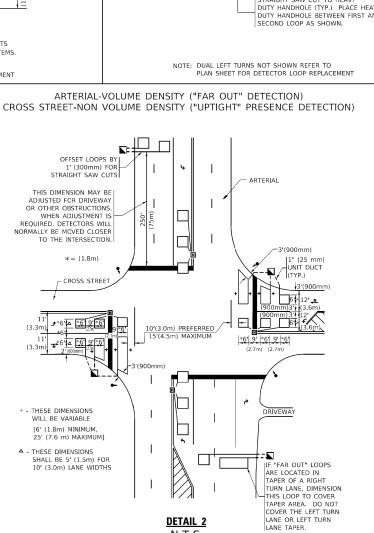
DESIGNED

CHECKED - R.K.F.

DRAWN

LEFT TURN LANES WITH MEDIANS

VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH (PROTECTED / PERMITTED LEFT TURN PHASING) * = (600 mm) *



SCALE: NONE

SCALE: N.T.S.

SHEET

NOTES:

VEHICLES LOOP DETECTORS

- * ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATLY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- * ONE DIMENSION OF <u>ALL</u> 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. <u>EACH</u> ONE OF THESE TYPE OF LOOPS REQUIRES A <u>SEPARATE</u> TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A <u>SEPARATE</u> 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:

DISTRICT 1 – DETECTOR LOOP INSTALLATION

DETAILS FOR ROADWAY RESURFACING

SHEET 1 OF 1 SHEETS STA.

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.

te07.don 3/4/2019 12:50:18 PM User=footeni					
FILE NAME =	USER NAME = aschaefer	DESIGNED -	GR	REVISED -	
N:\Mokena\210365\C1v1\D1_DET_11_210365.sht D			ELA	REVISED -	
	PLOT SCALE = 20'	CHECKED -	AJS	REVISED -	
Default	PLOT DATE = 8/31/2023	DATE -		REVISED -	

STRAIGHT SAW

CUTS TO HEAVY-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

					A.U. SECTION COUNTY				SHEET NO.
DISTRICT ONE DETAILS				3754	21-00034-00-RS		WILL	41	41
							CONTRACT	NO.	61J78
OF.	CHEETC	AT2	TO STA		TI L THOTE		D DDG IFOT		

TS-07

CONTRACT NO.