

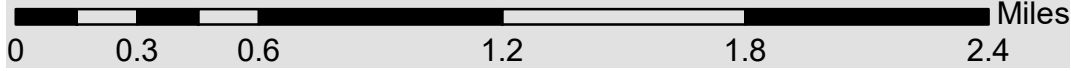
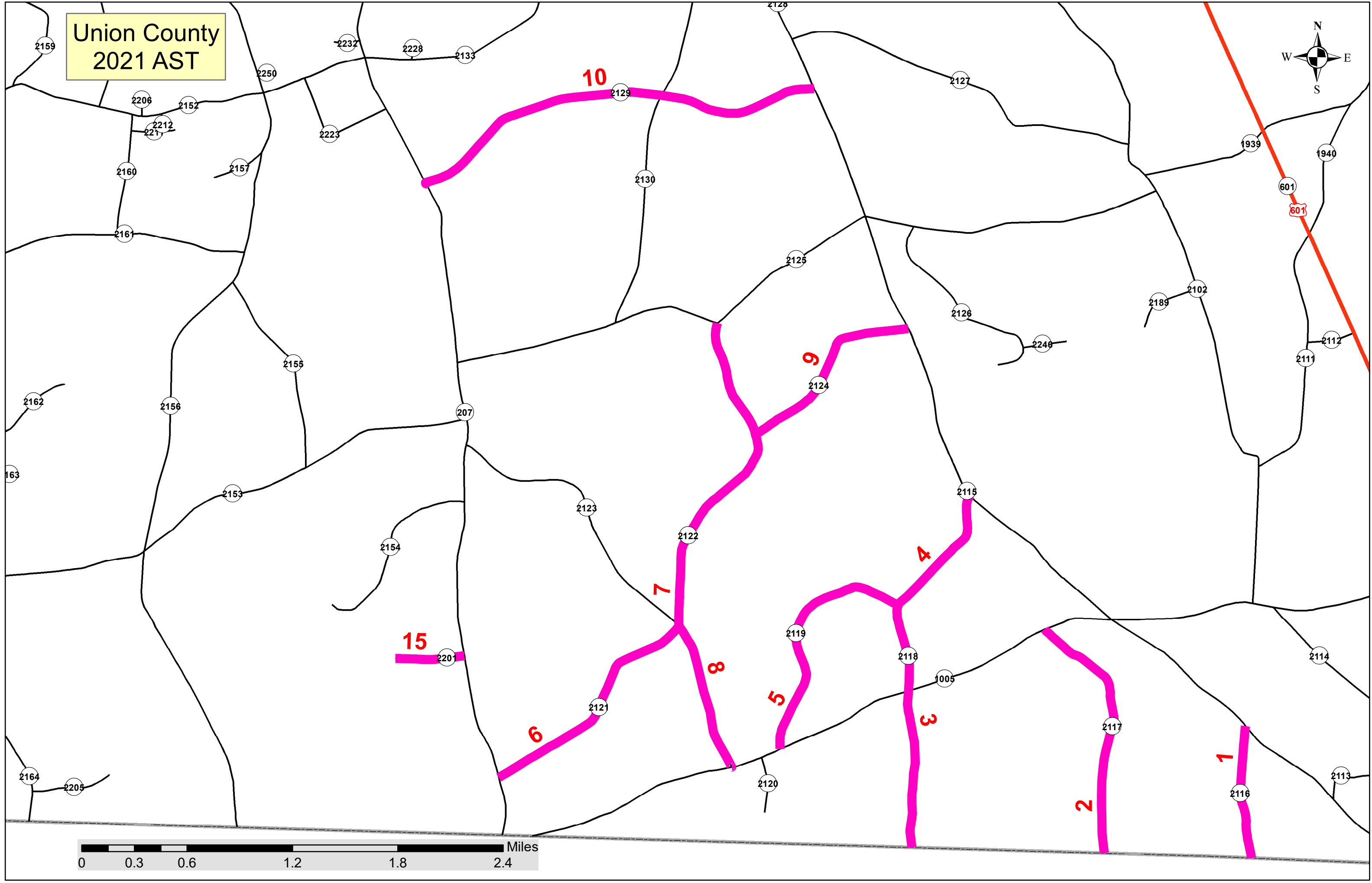
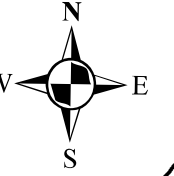
PROJECT NO.	SHEET NO.	TOTAL NO.
2021CPT.10.11.20902	1	6

SUMMARY OF QUANTITIES

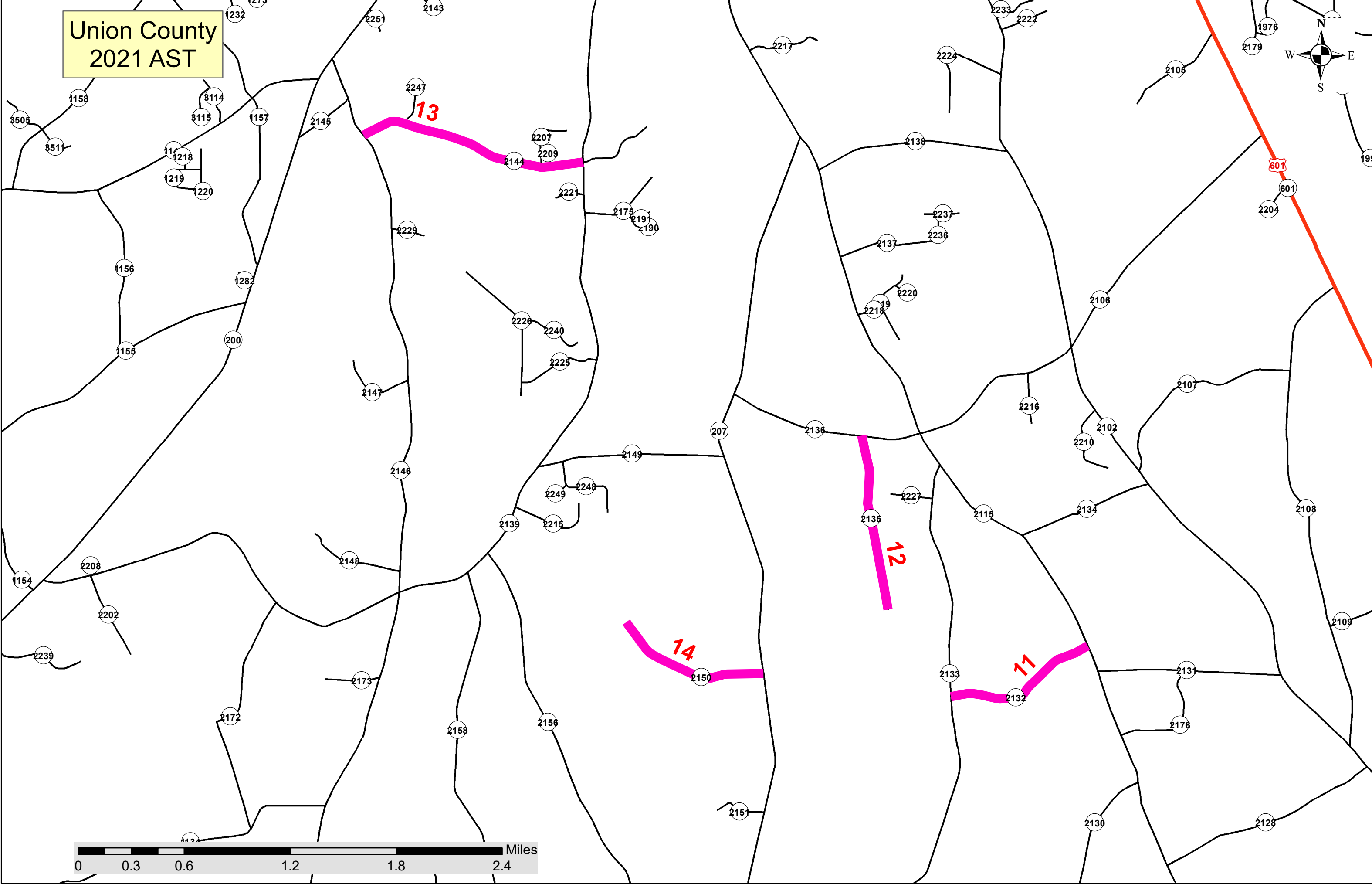
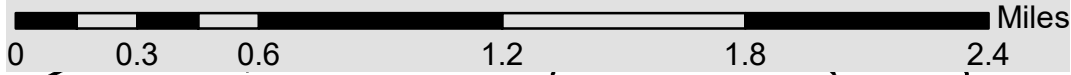
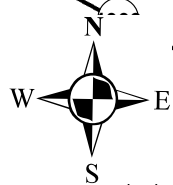
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	1803500000-E	1838000000-E	1838500000-N	2143000000-E	4413000000-E	4457000000-N		
												ASPHALT SURFACE TREATMENT, DOUBLE SEAL	EMULSION FOR ASPHALT SURFACE TREATMENT	VACUUM TRUCK	BLOTTING SAND	WORK ZONE ADVANCE/GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL		
												MI	FT	SY	GAL	WK	TON	SF	LS
2021CPT.10.11.20902	Union	1	BUD PLYLER RD (SR 2116)	FROM SC LINE TO STACK RD (SR 2115)		2		NO	NO	0.75	18	8,316	4,574			40			
TOTAL FOR MAP NO. 1												0.75		8,316	4,574			40	
2021CPT.10.11.20902	Union	2	ARANT RD (SR 2117)	FROM SC LINE TO LANDSFORD RD (SR 2254)		2		NO	NO	1.46	20	17,987	9,893			40			
TOTAL FOR MAP NO. 2												1.46		17,987	9,893			40	
2021CPT.10.11.20902	Union	3	DUDLEY RD (SR 2118)	FROM SC LINE TO LANDSFORD RD (SR 2254)		2		NO	NO	0.9	20	11,088	6,098			40			
TOTAL FOR MAP NO. 3												0.9		11,088	6,098			40	
2021CPT.10.11.20902	Union	4	DUDLEY RD (SR 2118)	FROM LANDSFORD RD (SR 2254) TO STACK RD (SR 2115)		2		NO	NO	1.28	20	15,770	8,674			80			
TOTAL FOR MAP NO. 4												1.28		15,770	8,674			80	
2021CPT.10.11.20902	Union	5	WALTERS RD (SR 2119)	FROM LANDSFORD RD (SR 2254) TO DUDLEY RD (SR 2118)		2		NO	NO	1.42	18	15,745	8,660			40			
TOTAL FOR MAP NO. 5												1.42		15,745	8,660			40	
2021CPT.10.11.20902	Union	6	EUBANKS RD (SR 2121)	FROM NC 207 TO WALTERS MILL RD (SR 2122)		2		NO	NO	1.39	18	15,412	8,477			40			
TOTAL FOR MAP NO. 6												1.39		15,412	8,477			40	
2021CPT.10.11.20902	Union	7	RAPE RD (SR 2122)	FROM JACK DAVIS RD (SR 2125) TO WALTERS MILL RD (SR 2122)		2		NO	NO	1.95	18	21,622	11,892			40			
TOTAL FOR MAP NO. 7												1.95		21,622	11,892			40	
2021CPT.10.11.20902	Union	8	WALTERS MILL RD (SR 2122)	FROM LANDSFORD RD (SR 2254) TO RAPE RD (SR 2122)		2		NO	NO	0.85	18	9,425	5,184			40			
TOTAL FOR MAP NO. 8												0.85		9,425	5,184			40	
2021CPT.10.11.20902	Union	9	SARA HINSON RD (SR 2124)	FROM STACK RD (SR 2115) TO RAPE RD (SR 2122)		2		NO	NO	1.14	18	12,038	6,621			40			
TOTAL FOR MAP NO. 9												1.14		12,038	6,621			40	
2021CPT.10.11.20902	Union	10	JUG BROOME RD (SR 2129)	FROM STACK RD (SR 2115) TO NC 207		2		NO	NO	2.4	20	28,160	15,488			120			
TOTAL FOR MAP NO. 10												2.4		28,160	15,488			120	
2021CPT.10.11.20902	Union	11	BRUCE THOMAS RD (SR 2132)	FROM STACK RD (SR 2115) TO E SANDY RIDGE RD (SR 2133)		2		NO	NO	0.88	18	9,293	5,111			40			
TOTAL FOR MAP NO. 11												0.88		9,293	5,111			40	
2021CPT.10.11.20902	Union	12	WG MEDLIN RD (SR 2135)	FROM MACEDONIA CH RD (SR 2136) TO EOM		2		NO	NO	0.94	18	9,926	5,459			40			
TOTAL FOR MAP NO. 12												0.94		9,926	5,459			40	
2021CPT.10.11.20902	Union	13	HELMS SHORTCUT RD (SR 2144)	FROM PLYLER MILL RD (SR 2136) TO GRIFFITH RD (SR 2139)		2		NO	NO	1.3	20	15,253	8,389			40			
TOTAL FOR MAP NO. 13												1.3		15,253	8,389			40	
2021CPT.10.11.20902	Union	14	JOE COLLINS RD (SR 2150)	FROM NC 207 TO EOM		2		NO	NO	0.89	20	10,443	5,744			40			
TOTAL FOR MAP NO. 14												0.89		10,443	5,744			40	
2021CPT.10.11.20902	Union	15	BAKER RD (SR 2201)	FROM NC 207 TO EOM		2		NO	NO	0.39	18	4,118	2,265			40			
TOTAL FOR MAP NO. 15												0.39		4,118	2,265			40	
TOTAL FOR PROJ NO. 2021CPT.10.11.20902												17.94		204,596	112,529	2.00	10.00	720	1
GRAND TOTAL												17.94		204,596	112,529	2.00	10.00	720	1

NOTE: The Contractor shall not park equipment or work outside of the Right of Way in Historic Areas

Union County
2021 AST



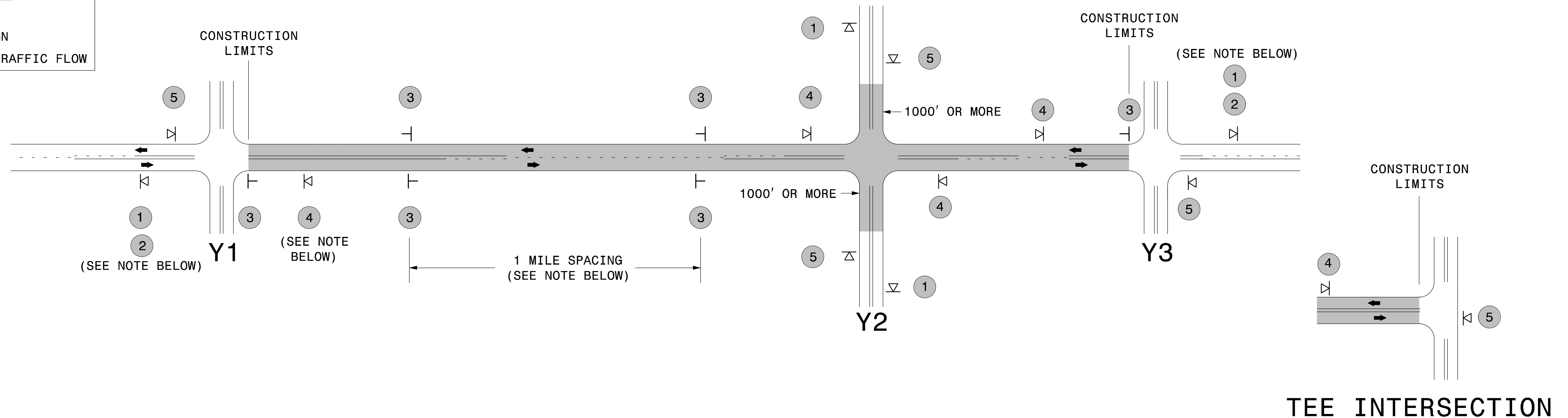
Union County
2021 AST



SIGNING FOR ASPHALT SURFACE TREATMENT

LEGEND

- ◻ PORTABLE SIGN
- └ STATIONARY SIGN
- ← DIRECTION OF TRAFFIC FLOW



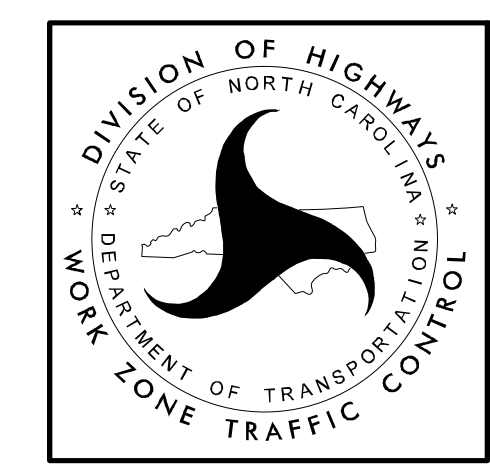
MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

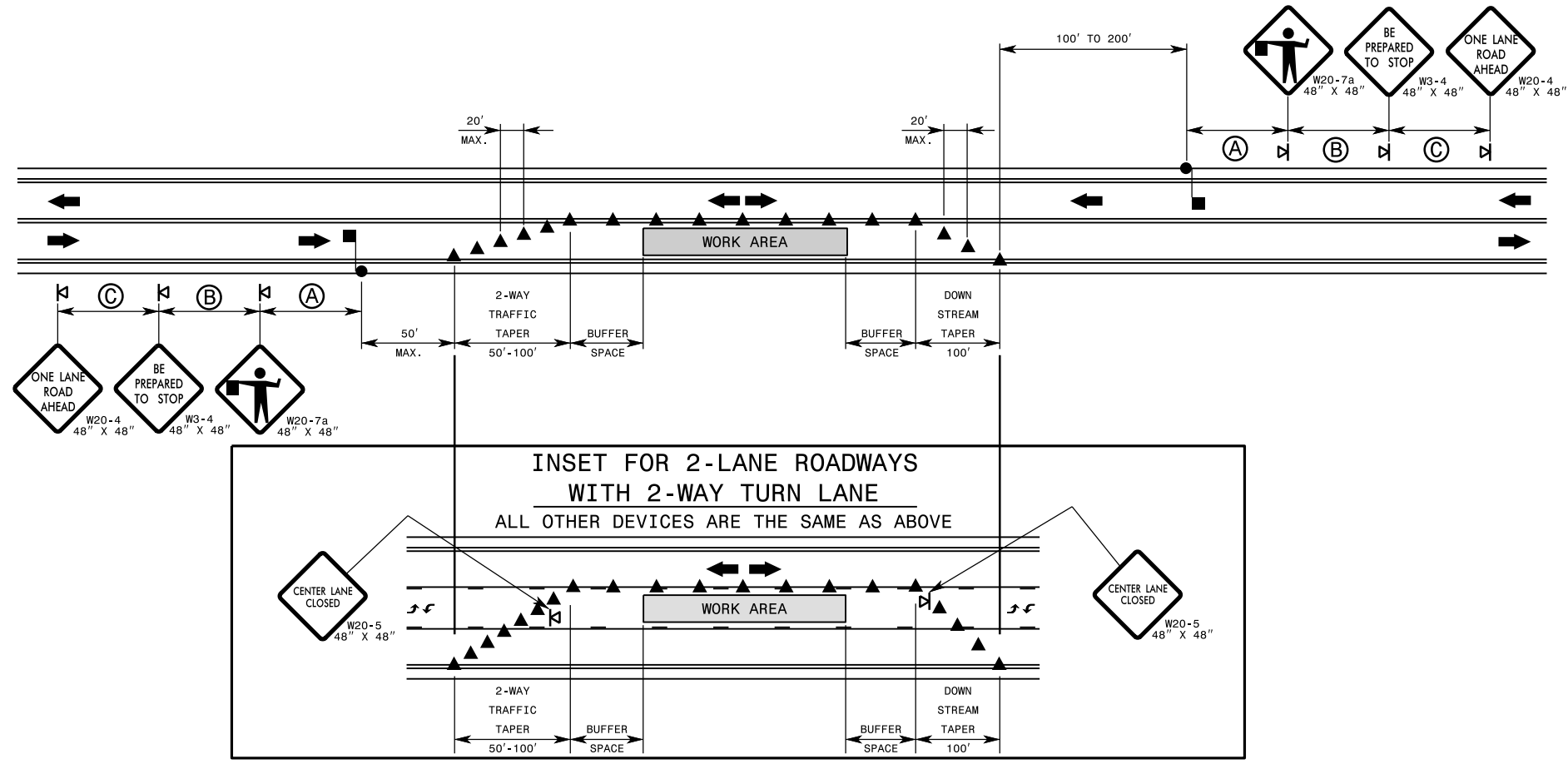
SIGNING NOTES AND PLACEMENT PER DIRECTION	1	 	<ul style="list-style-type: none"> - PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE. - SIGN #2 ONLY USED WHEN RESURFACING LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO THE NEAREST WHOLE NUMBER. DO NOT USE FRACTIONAL OR DECIMAL NUMBERS. 	<p>STATIONARY SIGNING NOT REQUIRED FOR THE FOLLOWING -Y- LINE CONDITIONS:</p> <ol style="list-style-type: none"> 1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE 2) SUBDIVISION ROADS 3) DEAD END ROADS <p>WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, PORTABLE ADVANCE WARNING SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <small>W20-1 48" X 48"</small> PLACED 500' IN ADVANCE OF FLAGGER. </div> <div style="text-align: center;"> <small>W20-7 A 48" X 48"</small> PLACED 250' IN ADVANCE OF FLAGGER. </div> </div>
	3	 	<ul style="list-style-type: none"> - ALTERNATE THE FOLLOWING TWO SIGNS: - STARTING WITH "LOOSE GRAVEL" (W8-7) FOLLOWED BY "UNMARKED PAVEMENT". - PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACED 1 MILE APART THEREAFTER. - AT TEE INTERSECTIONS INSTALL INITIALLY 0.5 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER. 	
	4		<ul style="list-style-type: none"> - THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS. DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS. - INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE. - FOR MULTIPLE -Y- LINES THAT ARE SEPARATED BY 0.25 MILES OR LESS, TREAT AS A SINGLE UNIT AND INSTALL WITHIN 500' OF EACH APPROACH. - A MAXIMUM OF 2 SIGN SETS PER MILE. DO NOT INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN. 	
	5		<ul style="list-style-type: none"> PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION. 	
	<p>THE ABOVE SIGNS ARE ALL THAT ARE REQUIRED FOR A CONTRACTOR TO BEGIN A RESURFACING CONTRACT. ANY ADDITIONAL SIGNS REQUESTED BY NCDOT DIVISIONS SHALL BE INSTALLED WITHIN 7 BUSINESS DAYS OF THE START OF CONTRACT WORK.</p>			

MAPS LESS THAN 2 MILES

FOR AST RESURFACING MAPS WITH CONSTRUCTION LIMITS LESS THAN 2 MILES IN LENGTH, USE A STATIONARY "LOOSE GRAVEL" SIGN AT THE BEGINNING CONSTRUCTION LIMIT FOLLOWED BY AN "UNMARKED PAVEMENT" SIGN MIDWAY THROUGH AND AN "END ROAD WORK" SIGN AT THE END CONSTRUCTION LIMIT.



ADVANCE WARNING SIGNS FOR 2-LANE ROADWAY ASPHALT SURFACE TREATMENT



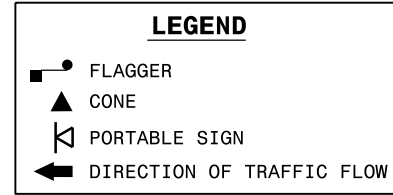
GENERAL NOTES FOR FLAGGING OPERATIONS

- 1- REFER TO RSD. 1101.11, SHEETS 1 & 4, FOR "L" DISTANCE AND SIGN SPACING.
- 2- INSTALL LANE CLOSURES WITH THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE UPSTREAM SIDE OF TRAFFIC.
- 3- REMOVE LANE CLOSURES AGAINST THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE DOWNSTREAM SIDE OF TRAFFIC.
- 4- PLACE CONES THRU THE WORK AREA AT THE MAXIMUM SPACING EQUAL IN FEET TO 2 TIMES THE POSTED SPEED LIMIT.
- 5- EXTEND LANE CLOSURES AT THE BUFFER SPACE SUCH THAT STOPPING SIGHT DISTANCE IS PROVIDED TO THE FLAGGER (REFER TO RSD. 1101.11, SHEET 2).
- 6- DO NOT STOP TRAFFIC IN ANY ONE DIRECTION FOR MORE THAN 5 MINUTES AT A TIME.
- 7- DRUMS OR SKINNY DRUMS MAY BE USED IN LIEU OF CONES. REFER TO RSD. 1180.01 FOR SKINNY DRUM REQUIREMENTS.
- 8- USE FLAGGERS TO CONTROL TRAFFIC AT INTERSECTIONS AFFECTED BY THE LANE CLOSURE. SUPPLEMENT FLAGGERS LOCATED AT INTERSECTIONS WITH FLAGGER AHEAD SIGNS (W20-7a) PLACED APPROXIMATELY 250 FT. IN ADVANCE OF THE FLAGGER. FOR SIGNALIZED INTERSECTIONS PLACE SIGNALS IN THE FLASH MODE AND USE LAW ENFORCEMENT.
- 9- REFER TO THE CURRENT MUTCD FOR FLAGGER CONTROL, REQUIREMENTS, AND PROCEDURES.
- 10- DO NOT EXCEED A 1 MILE LANE CLOSURE LENGTH UNLESS OTHERWISE SHOWN IN THE TMP OR AS DIRECTED BY THE ENGINEER.

- 11- IF VEHICLE QUEUES WILL REACH WITHIN 15' OF EITHER SIDE OF ACTIVE RAILROAD TRACKS, PROVIDE A UNIFORMED LAW ENFORCEMENT OFFICER OR FLAGGER TO PREVENT VEHICLES FROM STOPPING WITHIN THE GRADE CROSSING. PROVIDE OFFICER OR FLAGGER EVEN IF AUTOMATIC WARNING MEASURES ALREADY EXIST.

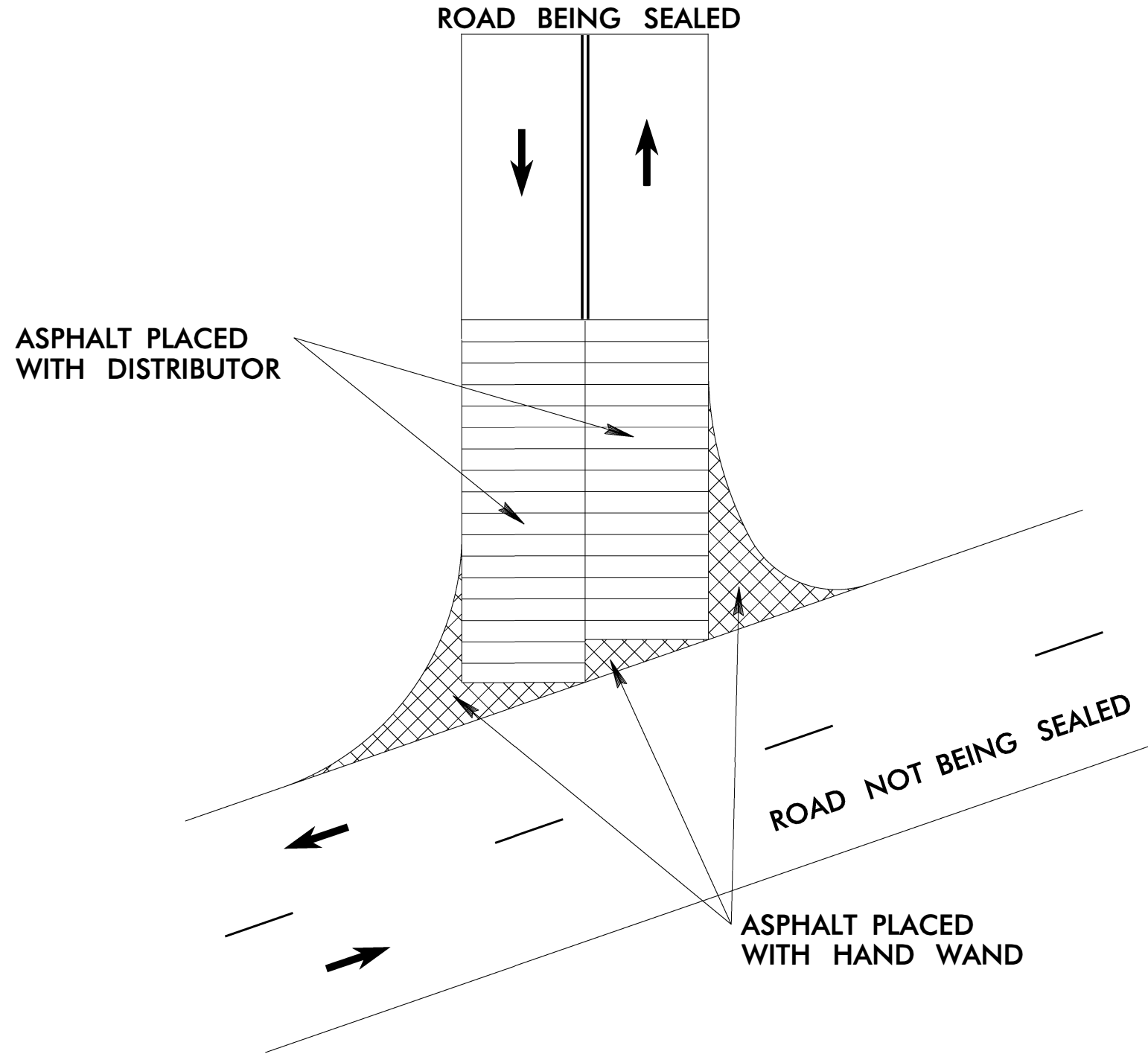
GENERAL NOTES FOR PILOT CAR OPERATIONS

- 1- USE PILOT CARS WHEN DIRECTED BY THE ENGINEER.
- 2- IF ROADWAY WIDTH IS LESS THAN 22 FEET (EOP TO EOP), CONES MAY NOT BE REQUIRED ALONG WORK AREA, AND AT THE DISCRETION OF THE ENGINEER, CONES MAY BE OMITTED ALONG THE WORK AREA IF USING A PILOT CAR.
- 3- CONES ARE ALWAYS REQUIRED IN THE UPSTREAM AND DOWNSTREAM TAPERS.
- 4- MOUNT SIGN G20-4 "PILOT CAR FOLLOW ME" AT A CONSPICUOUS POSITION ON THE REAR OF THE PILOT VEHICLE.
- 5- DO NOT INSTALL MORE THAN ONE (1) MILE OF LANE CLOSURE, MEASURED FROM THE BEGINNING OF THE MERGE TAPER TO THE END OF THE LANE CLOSURE.
- 6- ADVISE RESIDENTS AND BUSINESSES WITHIN THE LANE CLOSURE LIMITS ABOUT METHODS OF SAFE EGRESS AND INGRESS FROM DRIVEWAYS DURING FLAGGING AND PILOT CAR OPERATIONS.



INTERSECTION EMULSION PLACEMENT TWO LANE TWO WAY ROADWAY

PROJECT NO.	SHEET NO.
202ICPT.10.11.20042	6
F.A. PROJECT NO.	



LEGEND

- ➔ DIRECTION OF TRAFFIC FLOW
- SKIP LINES
- === DOUBLE YELLOW LINES

INTERSECTION EMULSION PLACEMENT

SCALE	N/A
DATE	9-2019
DWG. BY	TBL
DESIGN BY	TBL
APPROVED	TWB



REVISIONS	