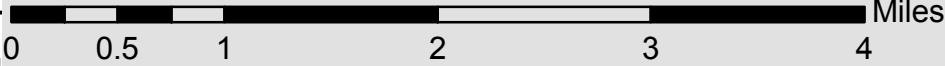
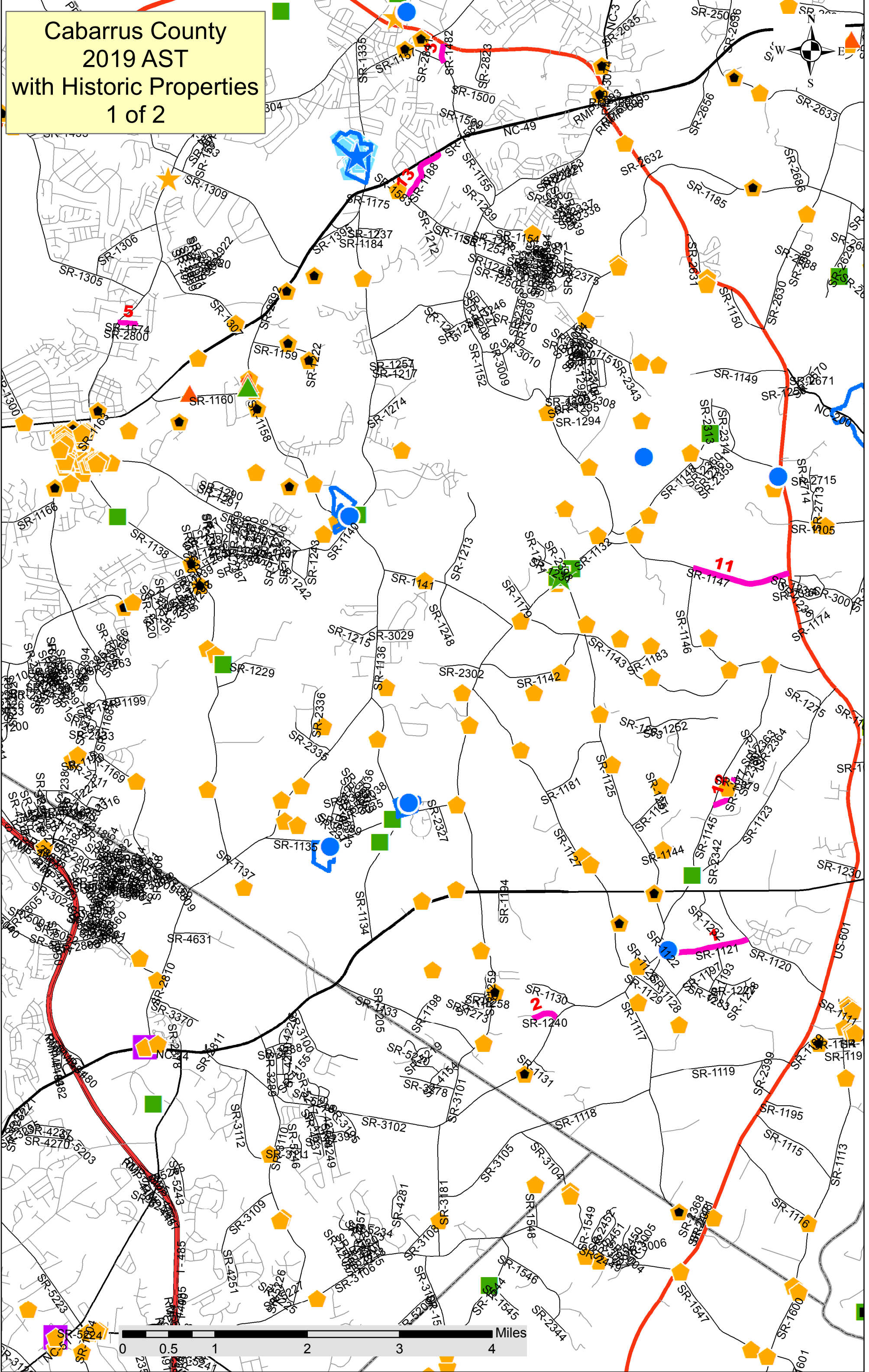
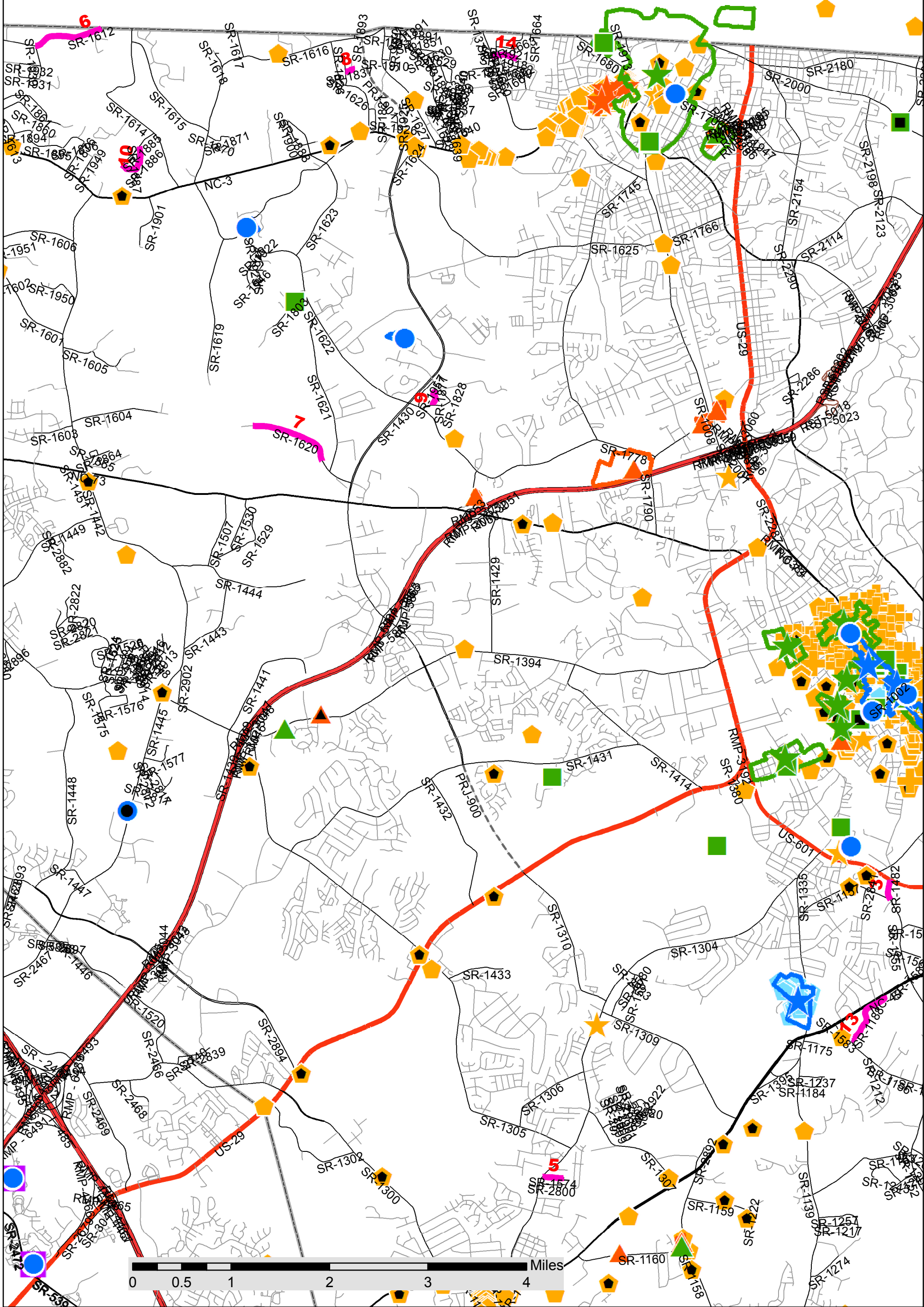
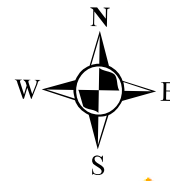


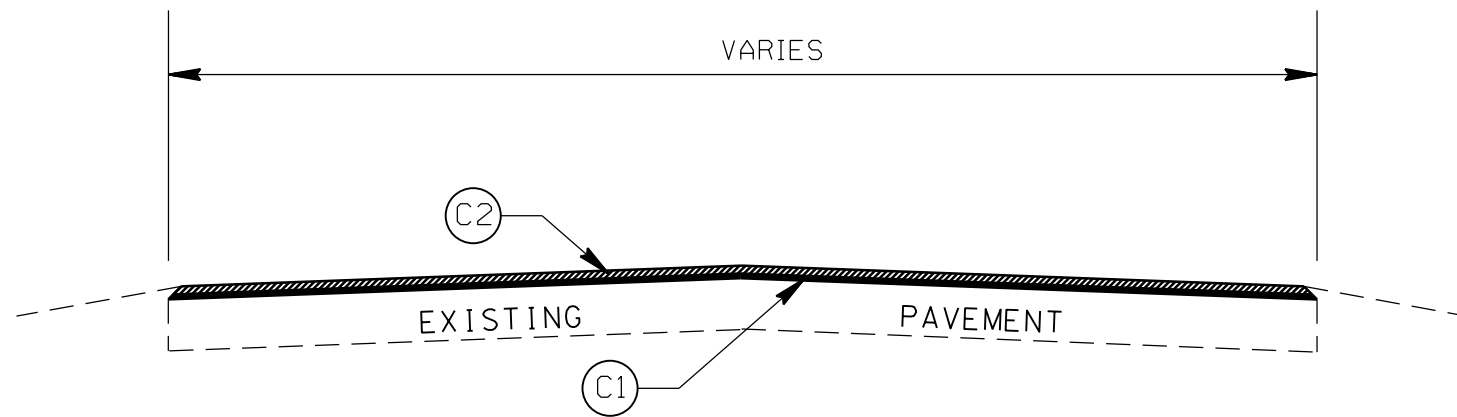
Cabarrus County
2019 AST
with Historic Properties
1 of 2



Cabarrus County
2019 AST
with Historic Properties
2 of 2



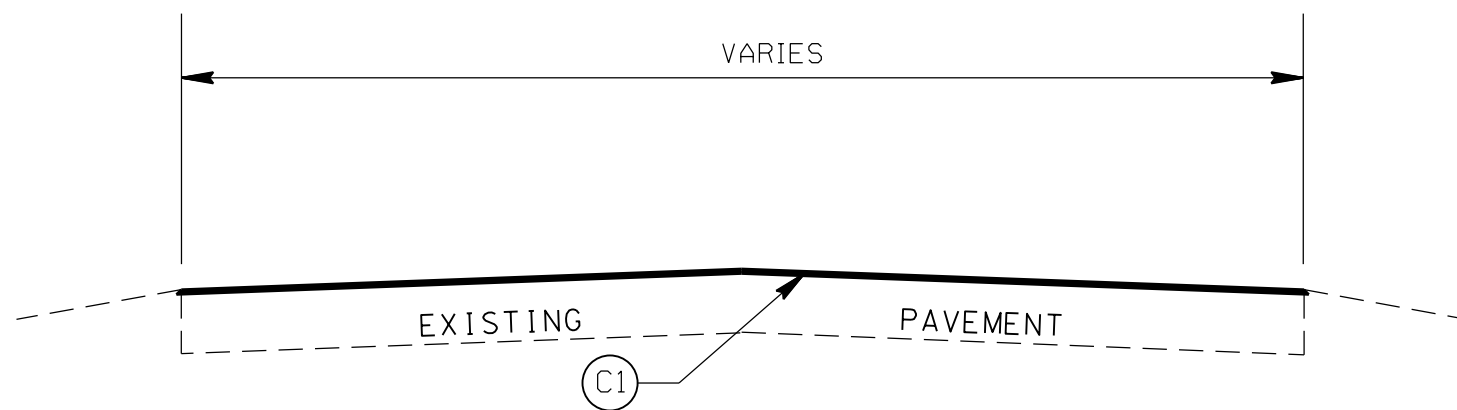
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2018CPT.10.04.20132.1	3	
F.A. PROJECT NO.			



TYPICAL SECTION NO. 2
MAPS 2,4,5,8,10,12

PAVEMENT SCHEDULE

(C1)	ASPHALT SURFACE TREATMENT
(C2)	FOG SEAL



TYPICAL SECTION NO. 1
MAPS 1,3,6-7,9,11,13-14

CABARRUS COUNTY AST 2019

SCALE	NTS		REVISIONS	
DATE	1-11-2018			
DWG. BY	TBL			
DESIGN BY	TWB			
APPROVED	TWB			

PROJECT NO.	SHEET NO.	TOTAL NO.
2018CPT.10.04.20132.1	4	6

SUMMARY OF QUANTITIES

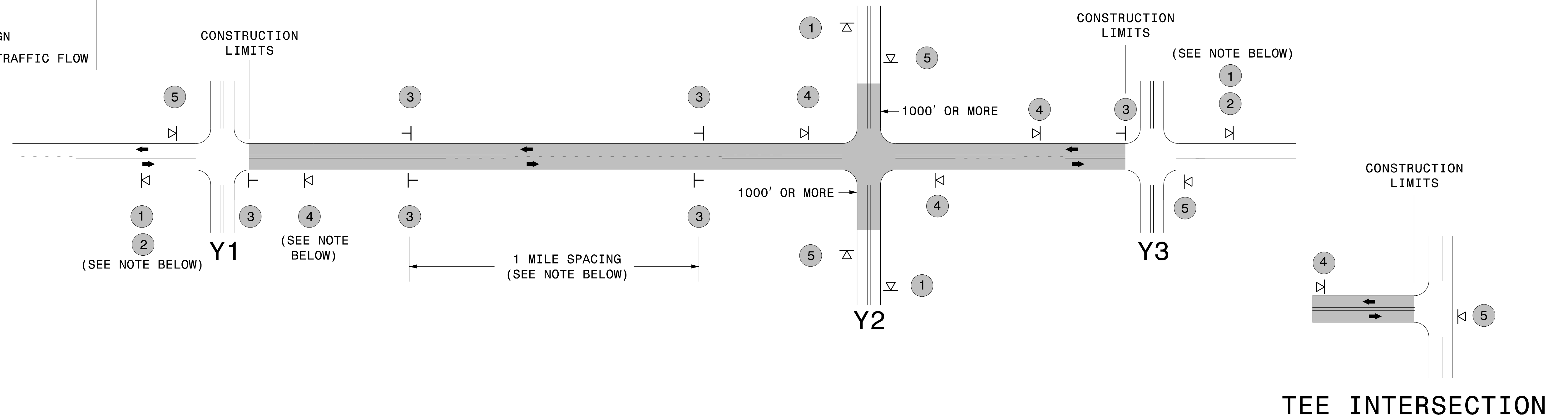
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	BEGIN MP	END MP	TYP NO	LANES	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH		WIDTH		1803500000-E	1820000000-E	1836000000-E	1838000000-E	2143000000-E	4413000000-E	4457000000-N	
											MI	FT	SY	SY	SY	GAL	TON	SF	LS			
2018CPT.10.04.20132.1	Cabarrus	1	MIDLAND RD (SR 1121)	FROM BETHEL CHURCH RD (SR 1123) TO BETHEL SCHOOL RD (SR 1120)	2.50	3.49	1	2	NO	NO	0.99	21			13,530				7,442		64	
TOTAL FOR MAP NO. 1											0.99				13,530				7,442		64	
2018CPT.10.04.20132.1	Cabarrus	2	FAMILY DR (SR 1240)	FROM CABARRUS STATION RD (SR 1121) TO THE DEAD END	0.00	0.28	2	2	NO	NO	0.28	18			2,957	2,957			1,626		64	
TOTAL FOR MAP NO. 2											0.28				2,957	2,957			1,626		64	
2018CPT.10.04.20132.1	Cabarrus	3	ZION CHURCH RD (SR 1482)	FROM ZION CHURCH RD (SR 1155) TO US 601	0.00	0.22	1	2	NO	NO	0.22	23			2,969				1,633		64	
TOTAL FOR MAP NO. 3											0.22				2,969				1,633		64	
2018CPT.10.04.20132.1	Cabarrus	4	STONEWALL RD (SR 1543)	FROM POPLAR TENT RD (SR 1394) TO THE MECKLENBURG CO. LINE	0.00	0.10	2	2	NO	NO	0.1	18			1,056	1,056			581		64	
TOTAL FOR MAP NO. 4											0.1				1,056	1,056			581		64	
2018CPT.10.04.20132.1	Cabarrus	5	MELISSA DR (SR 1574)	FROM ROBERTA RD (SR 1304) TO THE CUL DE SAC	0.00	0.22	2	2	NO	NO	0.22	19			2,452	2,452			1,349		64	
TOTAL FOR MAP NO. 5											0.22				2,452	2,452			1,349		64	
2018CPT.10.04.20132.1	Cabarrus	6	ARCHER RD (SR 1612)	FROM MEADOWVIEW DR (SR 1930) TO ALEXANDER RD (SR 1614)	1.53	2.26	1	2	NO	NO	0.73	21			8,994				4,946		64	
TOTAL FOR MAP NO. 6											0.73				8,994				4,946		64	
2018CPT.10.04.20132.1	Cabarrus	7	MACEDONIA CHURCH RD (SR 1620)	FROM THE PAVEMENT JOINT TO THE END OF MAINTENANCE	0.40	1.25	1	2	NO	NO	0.86	18			9,082				4,995		64	
TOTAL FOR MAP NO. 7											0.86				9,082				4,995		64	
2018CPT.10.04.20132.1	Cabarrus	8	ALDWICK ST (SR 1837)	FROM KENTWOOD DR (SR 1836) TO THE DEAD END	0.00	0.11	2	2	NO	NO	0.11	16			1,033	1,033			568		64	
TOTAL FOR MAP NO. 8											0.11				1,033	1,033			568		64	
2018CPT.10.04.20132.1	Cabarrus	9	TROJAN DR (SR 1877)	FROM NW CABARRUS DR (SR 1828) TO THE DEAD END	0.00	0.57	1	2	NO	NO	0.57	23			7,691				4,230		64	
TOTAL FOR MAP NO. 9											0.57				7,691				4,230		64	
2018CPT.10.04.20132.1	Cabarrus	10	LYNCHBURG DR (SR 1886)	FROM WINCHESTER DR (SR 1885) TO WINCHESTER DR (SR 1885)	0.00	0.40	2	2	NO	NO	0.4	19			4,459				2,452		64	
TOTAL FOR MAP NO. 10											0.4				4,459				2,452		64	
2018CPT.10.04.20132.1	Cabarrus	11	FLOWES STORE RD EAST (SR 1147)	FROM JOHN WHITE RD (SR 1146) TO US 601	1.08	2.16	1	2	NO	NO	1.08	21						13,306	11,310		64	
TOTAL FOR MAP NO. 11											1.08							13,306	11,310		64	
2018CPT.10.04.20132.1	Cabarrus	12	GRAYBARK RD (SR 1177)	FROM TROUTMAN RD (SR 1145) TO THE END OF PAVEMENT	0.00	0.42	2	2	NO	NO	0.42	17					4,189	4,189	3,560		64	
TOTAL FOR MAP NO. 12											0.42						4,189	4,189	3,560		64	
2018CPT.10.04.20132.1	Cabarrus	13	CENTRAL CABARRUS HIGH SCHOOL RD (SR 1188)	FROM NC 49 TO CENTRAL HEIGHTS DR (SR 1156)	0.00	0.63	1	2	NO	NO	0.63	18					6,653	5,655			64	
TOTAL FOR MAP NO. 13											0.63						6,653	5,655			64	
2018CPT.10.04.20132.1	Cabarrus	14	KENLOUGH DR (SR 1918)	FROM RAINBOW DR (SR 1643) TO THE DEAD END	0.00	0.27	1	2	NO	NO	0.27	18					2,851	2,424			64	
TOTAL FOR MAP NO. 14											0.27						2,851	2,424			64	
TOTAL FOR PROJ NO. 2018CPT.10.04.20132.1											6.88				54,223	11,687	26,999	52,771	10.00	896	1	
GRAND TOTAL											6.88				54,223	11,687	26,999	52,771	10.00	896	1	

NOTE: The contractor shall not park equipment or work outside the existing right of way in Historic Areas

SIGNING FOR ASPHALT SURFACE TREATMENT

LEGEND

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



MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

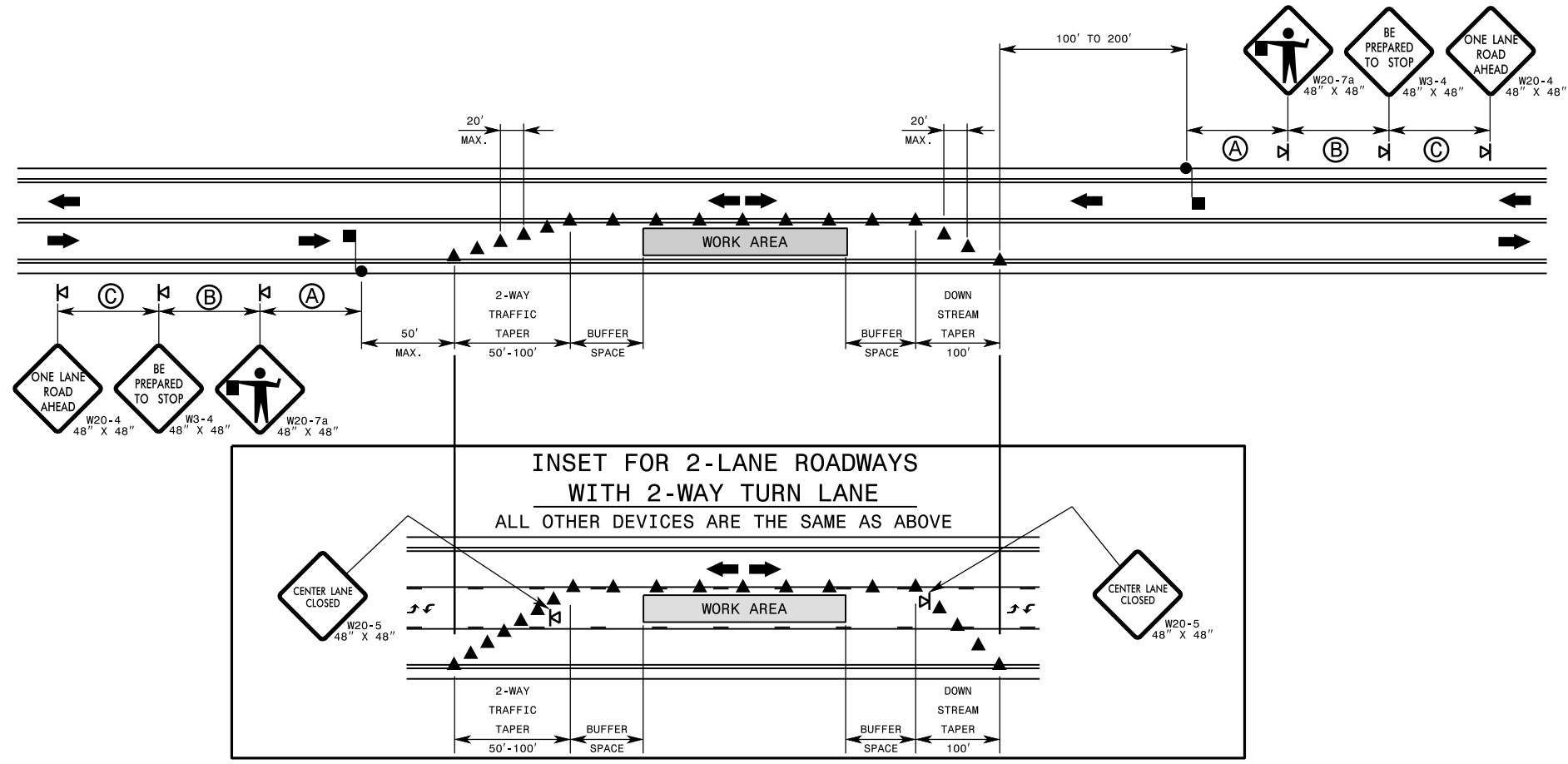
SIGNING NOTES AND PLACEMENT PER DIRECTION	1	 	<ul style="list-style-type: none"> - PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE. - SIGN #2 ONLY USED WHEN RESURFACING LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO THE 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.

