

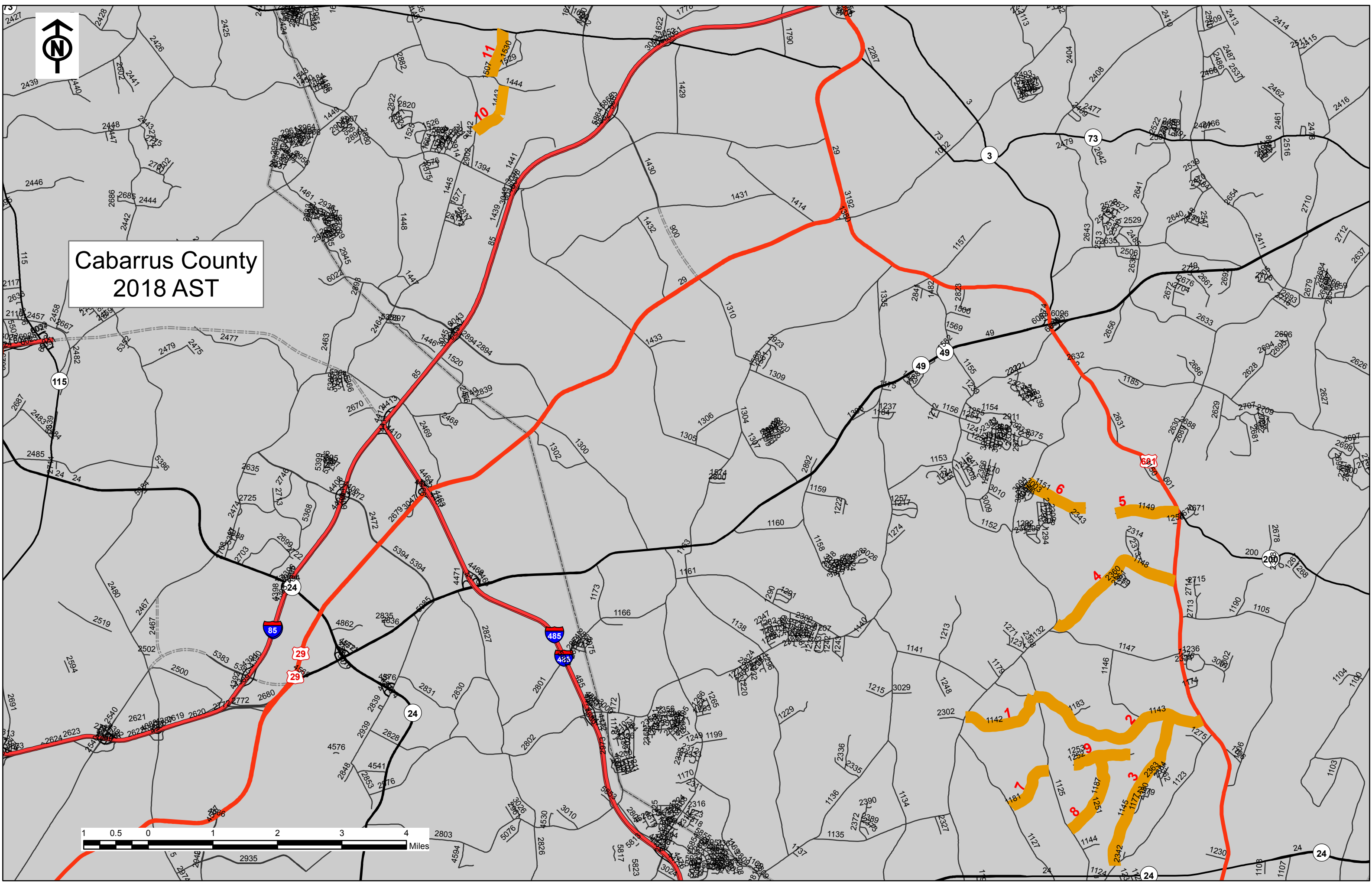
PROJECT NO.	SHEET NO.	TOTAL NO.
2017CPT.10.13.20132.1	1	4

## SUMMARY OF QUANTITIES

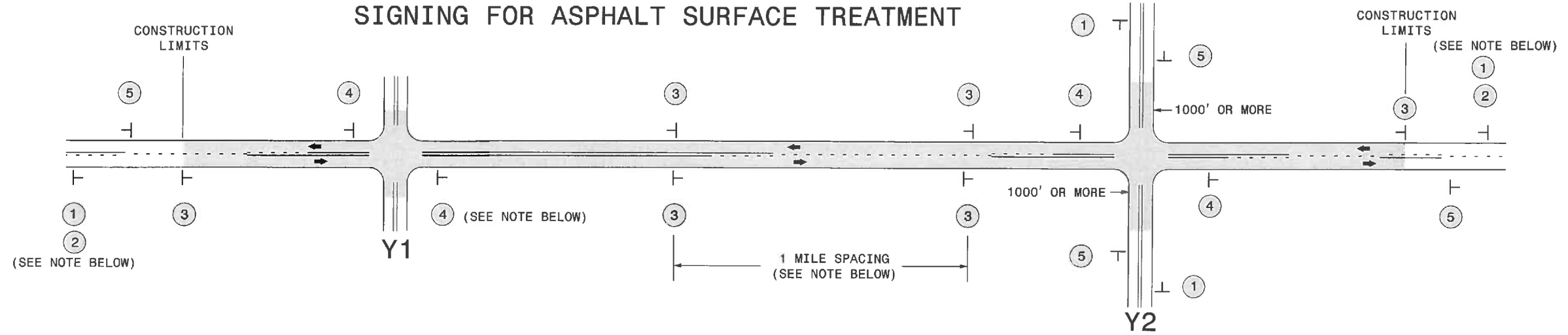
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	LANES	BEGIN MP	END MP	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	ASPHALT SURFACE TREATMENT, DOUBLE SEAL SY	EMULSION FOR ASPHALT SURFACE TREATMENT GAL	BLOTTING SAND TON	WORK ZONE ADVANCE/GENERAL WARNING SIGNING SF	TEMPORARY TRAFFIC CONTROL LS
2017CPT.10.13.20132.1	Cabarrus	1	RUNNING BROOK RD (SR 1142)	FROM JIM KISER RD (SR 1143) TO FLOWES STORE RD (SR 1132)	2	0.65	2.01	NO	NO	1.36	18	14,362	7,899		112	
<b>TOTAL FOR MAP NO. 1</b>										<b>1.36</b>		<b>14,362</b>	<b>7,899</b>		<b>112</b>	
2017CPT.10.13.20132.1	Cabarrus	2	CAL BOST RD (SR 1143)	FROM JIM KISER RD (SR 1142) TO US 601	2	0.00	3.03	NO	NO	3.03	18	31,997	17,598		150	
<b>TOTAL FOR MAP NO. 2</b>										<b>3.03</b>		<b>31,997</b>	<b>17,598</b>		<b>150</b>	
2017CPT.10.13.20132.1	Cabarrus	3	TROUTMAN RD (SR 1145)	FROM JIM SOSSOMAN RD (SR 1123) TO CAL BOST RD (SR 1143)	2	0.00	2.54	NO	NO	2.54	19	28,313	15,572		112	
<b>TOTAL FOR MAP NO. 3</b>										<b>2.54</b>		<b>28,313</b>	<b>15,572</b>		<b>112</b>	
2017CPT.10.13.20132.1	Cabarrus	4	PARKS LAFFERTY RD (SR 1148)	FROM US 601 TO FLOWES STORE RD (SR 1132)	2	0.00	2.39	NO	NO	2.39	22	30,847	16,966		144	
<b>TOTAL FOR MAP NO. 4</b>										<b>2.39</b>		<b>30,847</b>	<b>16,966</b>		<b>144</b>	
2017CPT.10.13.20132.1	Cabarrus	5	BIGGERS RD (SR 1149)	FROM US 601 TO CUL DE SAC	2	0.00	0.99	NO	NO	0.99	20	11,616	6,389		56	
<b>TOTAL FOR MAP NO. 5</b>										<b>0.99</b>		<b>11,616</b>	<b>6,389</b>		<b>56</b>	
2017CPT.10.13.20132.1	Cabarrus	6	SIMPLICITY RD (SR 1151)	FROM FLOWES STORE RD (SR 1132) TO THE DEAD END	2	0.00	1.01	NO	NO	1.01	20	11,851	6,518		56	
<b>TOTAL FOR MAP NO. 6</b>										<b>1.01</b>		<b>11,851</b>	<b>6,518</b>		<b>56</b>	
2017CPT.10.13.20132.1	Cabarrus	7	HELMDALE RD (SR 1181)	FROM SAM BLACK RD (SR 1127) TO BETHEL CH RD (SR 1125)	2	0.00	0.91	NO	NO	0.91	20	10,677	5,872		112	
<b>TOTAL FOR MAP NO. 7</b>										<b>0.91</b>		<b>10,677</b>	<b>5,872</b>		<b>112</b>	
2017CPT.10.13.20132.1	Cabarrus	8	ROBERT BOST RD (SR 1187)	FROM BETHEL CH RD (SR 1125) TO CUL DE SAC	2	0.00	1.78	NO	NO	1.78	20	20,885	11,487		56	
<b>TOTAL FOR MAP NO. 8</b>										<b>1.78</b>		<b>20,885</b>	<b>11,487</b>		<b>56</b>	
2017CPT.10.13.20132.1	Cabarrus	9	BARKLEY RD (SR 1252)	FROM ROBERT BOST RD (SR 1187) TO THE DEAD END	2	0.00	0.54	NO	NO	0.54	20	6,336	3,485		56	
<b>TOTAL FOR MAP NO. 9</b>										<b>0.54</b>		<b>6,336</b>	<b>3,485</b>		<b>56</b>	
2017CPT.10.13.20132.1	Cabarrus	10	CESSNA RD (SR 1443)	FROM ODELL SCHOOL RD (SR 1442) TO UNTZ RD (SR 1444)	2	0.00	0.91	NO	NO	0.91	20	10,677	5,872		112	
<b>TOTAL FOR MAP NO. 10</b>										<b>0.91</b>		<b>10,677</b>	<b>5,872</b>		<b>112</b>	
2017CPT.10.13.20132.1	Cabarrus	11	LA FOREST LN (SR 1507)	FROM NC 73 TO UNTZ RD (SR 1444)	2	0.00	0.75	NO	NO	0.75	20	8,800	4,840		112	
<b>TOTAL FOR MAP NO. 11</b>										<b>0.75</b>		<b>8,800</b>	<b>4,840</b>		<b>112</b>	
<b>TOTAL FOR PROJ NO. 2017CPT.10.13.20132.1</b>										<b>16.21</b>		<b>186,361</b>	<b>102,498</b>	<b>20</b>	<b>1,078</b>	<b>1</b>
<b>GRAND TOTAL</b>										<b>16.21</b>		<b>186,361</b>	<b>102,498</b>	<b>20</b>	<b>1,078</b>	<b>1</b>



# Cabarrus County 2018 AST



## SIGNING FOR ASPHALT SURFACE TREATMENT



LEGEND	
	STATIONARY SIGN
←	DIRECTION OF TRAFFIC FLOW

### MAINLINE (-L-) SIGNING

### -Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	 	<p>PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.</p> <p>#2 SIGN ONLY USED WHEN RESURFACING LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO NEXT WHOLE NUMBER. (NO FRACTIONAL OR DECIMAL NUMBERS)</p>
	 	<p>ALTERNATE THE FOLLOWING TWO SIGNS:</p> <p>STARTING WITH "LOOSE GRAVEL" (W8-7) FOLLOWED BY "UNMARKED PAVEMENT".</p> <p>PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACED 1 MILE APART THEREAFTER. IF NO -Y- LINES EXIST, PLACE 2ND SET 1/2 MILE FROM THE CONSTRUCTION LIMITS AND THEN SPACE 1 MILE THEREAFTER.</p>
		<p>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.</p>
		<p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.</p>

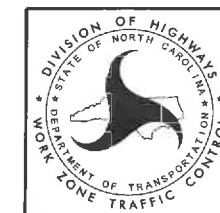
NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:

- 1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE
- 2) SUBDIVISION ROADS
- 3) DEAD END ROADS

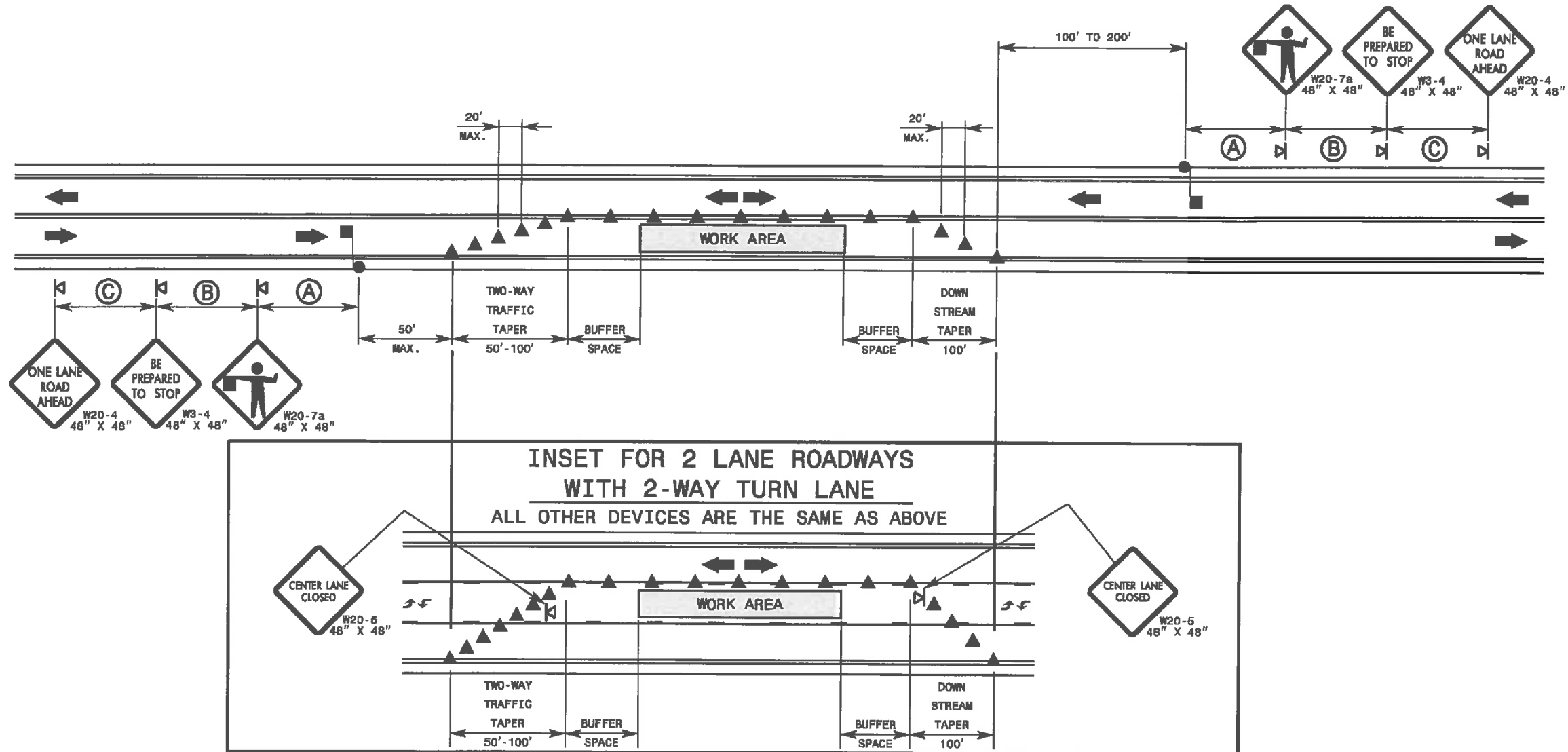
WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, ADVANCE WARNING PORTABLE SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.



PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.



ADVANCE WARNING SIGNS  
FOR  
ASPHALT SURFACE TREATMENTS  
2 LANE ROADWAYS



**GENERAL NOTES FOR FLAGGER OPERATIONS**

- 1- REFER TO STD. 1101.11 SHEET 4 FOR 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 STD. 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 ROADWAY STANDARD DRAWING 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 RECOMMEND THE USE OF LAW ENFORCEMENT.
- 9- REFER TO 2009 MUTCD, CHAPTER 6, 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.

**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.

**LEGEND**

- FLAGGER
- CONE
- PORTABLE SIGN
- DIRECTION OF TRAFFIC FLOW