

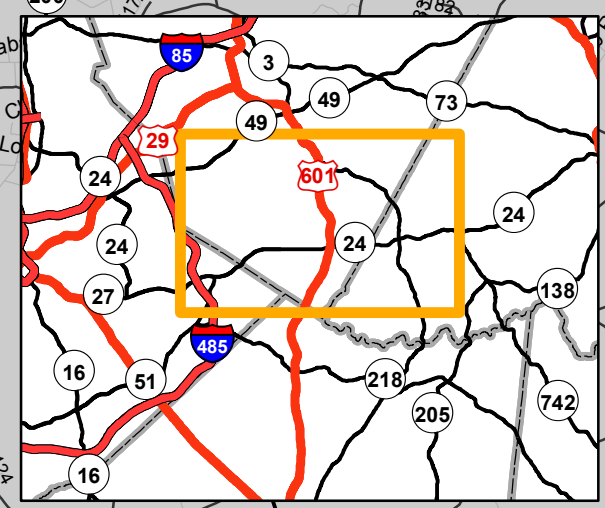
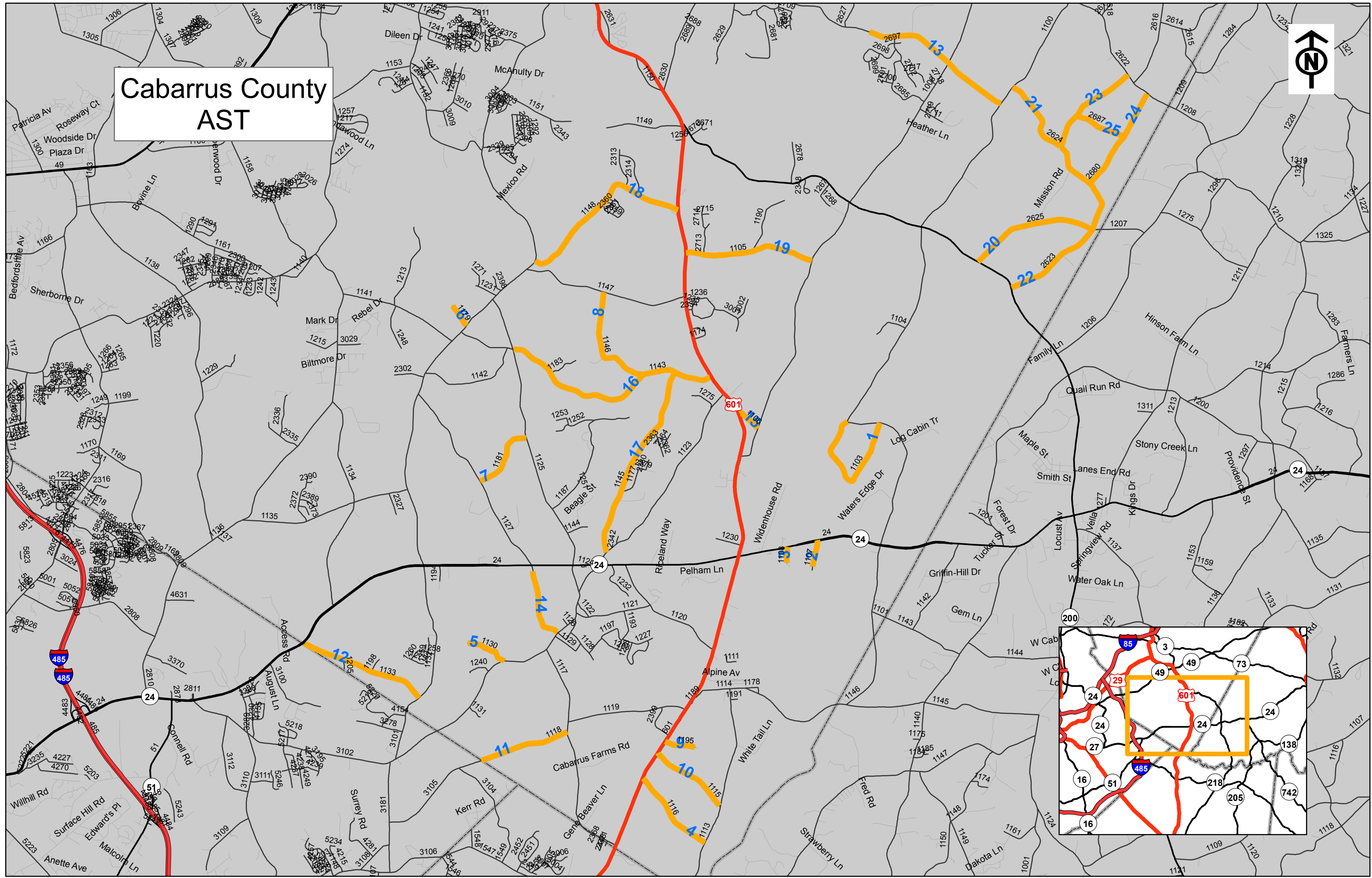
PROJECT NO.	SHEET NO.	TOTAL NO.
2016CPT.10.06.20132.01	1	4

## SUMMARY OF QUANTITIES

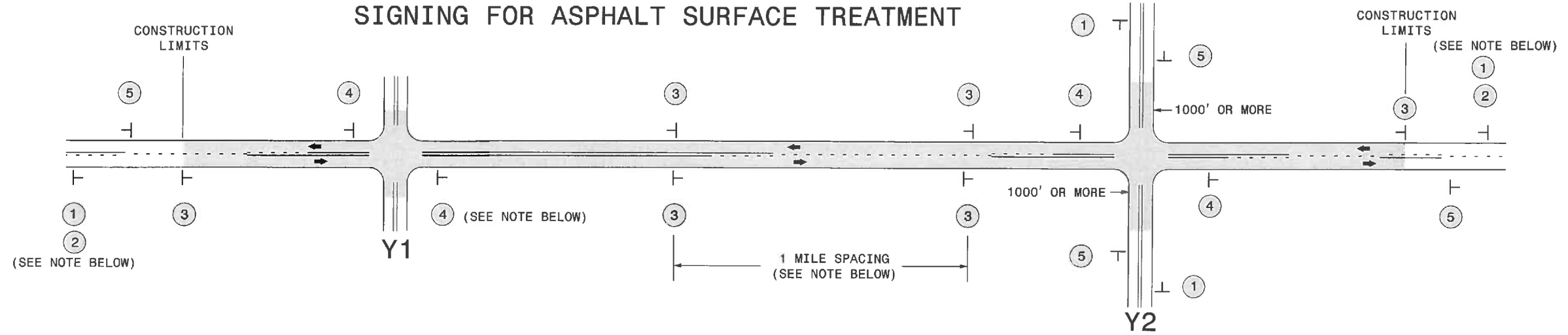
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	LANES	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	ASPHALT SURFACE TREATMENT, DOUBLE SEAL SY	EMULSION FOR ASPHALT SURFACE TREATMENT GAL	BLOTTING SAND TON	WORK ZONE ADVANCE/GENERAL WARNING SIGNING SF	TEMPORARY TRAFFIC CONTROL LS
2016CPT.10.06.20132.01		1	HARTSELL RD. (SR 1103)	FROM REED MINE RD (SR 1100) TO REED MINE RD (SR 1100)	2	NO	NO	1.78	18	18,797	10,338		112	
<b>TOTAL FOR MAP NO. 1</b>								<b>1.78</b>		<b>18,797</b>	<b>10,338</b>		<b>112</b>	
2016CPT.10.06.20132.01	Cabarrus	2	MCMANUS RD (SR 1107)	FROM NC 24/27 TO THE DEAD END	2	NO	NO	0.36	20	4,224	2,323		56	
<b>TOTAL FOR MAP NO. 2</b>								<b>0.36</b>		<b>4,224</b>	<b>2,323</b>		<b>56</b>	
2016CPT.10.06.20132.01	Cabarrus	3	LOVING RD (SR1108)	FROM NC 24/27 TO THE DEAD END	2	NO	NO	0.2	18	2,112	1,162		56	
<b>TOTAL FOR MAP NO. 3</b>								<b>0.2</b>		<b>2,112</b>	<b>1,162</b>		<b>56</b>	
2016CPT.10.06.20132.01	Cabarrus	4	DRAKE RD (SR 1116)	FROM US 601 TO HOPEWELL CHURCH RD (SR 1113)	2	NO	NO	1.17	20	13,728	7,550		112	
<b>TOTAL FOR MAP NO. 4</b>								<b>1.17</b>		<b>13,728</b>	<b>7,550</b>		<b>112</b>	
2016CPT.10.06.20132.01	Cabarrus	5	SLEEPY HOLLOW RD (SR 1130)	FROM CABARRUS STATION RD (SR 1121) TO THE DEAD END	2	NO	NO	0.56	20	6,571	3,614		56	
<b>TOTAL FOR MAP NO. 5</b>								<b>0.56</b>		<b>6,571</b>	<b>3,614</b>		<b>56</b>	
2016CPT.10.06.20132.01	Cabarrus	6	HARVELL RD (SR 1179)	FROM FLOWES STORE RD (SR 1132) TO THE DEAD END	2	NO	NO	0.31	20	3,637	2,001		56	
<b>TOTAL FOR MAP NO. 6</b>								<b>0.31</b>		<b>3,637</b>	<b>2,001</b>		<b>56</b>	
2016CPT.10.06.20132.01	Cabarrus	7	HELMDALE RD (SR 1181)	FROM SAM BLACK RD (SR 1127) TO BETHEL CHURCH RD (SR 1125)	2	NO	NO	0.91	20	10,677	5,873		112	
<b>TOTAL FOR MAP NO. 7</b>								<b>0.91</b>		<b>10,677</b>	<b>5,873</b>		<b>112</b>	
2016CPT.10.06.20132.01	Cabarrus	8	JOHN WHITE RD (SR 1146)	FROM CAL BOST RD (SR 1143) TO FLOWES STORE RD (SR 1147)	2	NO	NO	1.43	20	16,779	9,228		112	
<b>TOTAL FOR MAP NO. 8</b>								<b>1.43</b>		<b>16,779</b>	<b>9,228</b>		<b>112</b>	
2016CPT.10.06.20132.01	Cabarrus	9	WHITLEY RD (SR 1195)	FROM US 601 TO END OF MAINTENANCE	2	NO	NO	0.4	20	4,693	2,581		56	
<b>TOTAL FOR MAP NO. 9</b>								<b>0.4</b>		<b>4,693</b>	<b>2,581</b>		<b>56</b>	
2016CPT.10.06.20132.01	Cabarrus	10	KISER RD (SR 1115)	FROM US 601 TO HOPEWELL CHURCH RD (SR 1113)	2	NO	NO	1.06	18	11,194	6,156		112	
<b>TOTAL FOR MAP NO. 10</b>								<b>1.06</b>		<b>11,194</b>	<b>6,156</b>		<b>112</b>	
2016CPT.10.06.20132.01	Cabarrus	11	BEN BLACK RD (SR 1118)	FROM BETHEL AVE (SR 1117) TO THE MECK. COUNTY LINE	2	NO	NO	1.21	20	14,197	7,809		112	
<b>TOTAL FOR MAP NO. 11</b>								<b>1.21</b>		<b>14,197</b>	<b>7,809</b>		<b>112</b>	
2016CPT.10.06.20132.01	Cabarrus	12	ALVIN HOUGH RD (SR 1133)	FROM NC 24/27 TO OLD CAMDEN RD (SR 1132)	2	NO	NO	1.66	18	17,530	9,641		176	
<b>TOTAL FOR MAP NO. 12</b>								<b>1.66</b>		<b>17,530</b>	<b>9,641</b>		<b>176</b>	
2016CPT.10.06.20132.01	Cabarrus	13	OLD CAMDEN RD (SR 1132)	FROM NC 24/27 TO THE MECK. COUNTY LINE	2	NO	NO	2.01	19	22,405	12,323		144	
<b>TOTAL FOR MAP NO. 13</b>								<b>2.01</b>		<b>22,405</b>	<b>12,323</b>		<b>144</b>	
2016CPT.10.06.20132.01	Cabarrus	14	SAM BLACK RD (SR 1127)	FROM THE PAVEMENT JOINT AT NC 24/27 TO CABARRUS STATION RD (SR 1121)	2	NO	NO	0.91	19	10,143	5,579		112	
<b>TOTAL FOR MAP NO. 14</b>								<b>0.91</b>		<b>10,143</b>	<b>5,579</b>		<b>112</b>	
2016CPT.10.06.20132.01	Cabarrus	15	CARRIKER RD (SR 1106)	FROM MT. PLEASANT RD (SR 1006) TO US 601	2	NO	NO	0.32	18	3,379	1,859		112	
<b>TOTAL FOR MAP NO. 15</b>								<b>0.32</b>		<b>3,379</b>	<b>1,859</b>		<b>112</b>	
2016CPT.10.06.20132.01	Cabarrus	16	CAL BOST RD (SR 1143)	FROM US 601 TO BETHEL CHURCH RD (SR 1125)	2	NO	NO	2.93	19	32,660	17,963		123	
<b>TOTAL FOR MAP NO. 16</b>								<b>2.93</b>		<b>32,660</b>	<b>17,963</b>		<b>123</b>	
2016CPT.10.06.20132.01	Cabarrus	17	TROUTMAN RD (SR 1145)	FROM JIM SOSSOMAN RD (SR 1123) TO CAL BOST RD (SR 1143)	2	NO	NO	2.54	18	26,822	14,752		123	
<b>TOTAL FOR MAP NO. 17</b>								<b>2.54</b>		<b>26,822</b>	<b>14,752</b>		<b>123</b>	
2016CPT.10.06.20132.01	Cabarrus	18	PARKS LAFFERTY RD (SR 1148)	FROM FLOWES STORE RD (SR 1132) TO US 601	2	NO	NO	2.38	20	27,925	15,359		182	
<b>TOTAL FOR MAP NO. 18</b>								<b>2.38</b>		<b>27,925</b>	<b>15,359</b>		<b>182</b>	
2016CPT.10.06.20132.01	Cabarrus	19	JOYNER RD (SR 1105)	FROM MT. PLEASANT RD (SR 1006) TO US 601	2	NO	NO	1.67	20	19,595	10,777		176	
<b>TOTAL FOR MAP NO. 19</b>								<b>1.67</b>		<b>19,595</b>	<b>10,777</b>		<b>176</b>	
2016CPT.10.06.20132.01	Cabarrus	20	MAUNEY RD (SR 2625)	FROM NC 200 TO COUNTY LINE RD (SR 2623)	2	NO	NO	1.67	19	18,615	10,238		120	
<b>TOTAL FOR MAP NO. 20</b>								<b>1.67</b>		<b>18,615</b>	<b>10,238</b>		<b>120</b>	
2016CPT.10.06.20132.01	Cabarrus	21	CRAYTON RD (SR 2624)	FROM BARRIER GEORGEVILLE RD (SR 1100) TO COUNTY LINE RD (SR 2623)	2	NO	NO	1.06	20	12,437	6,841		56	
<b>TOTAL FOR MAP NO. 21</b>								<b>1.06</b>		<b>12,437</b>	<b>6,841</b>		<b>56</b>	
2016CPT.10.06.20132.01	Cabarrus	22	COUNTY LINE RD (SR 2623)	FROM NC 200 TO CRAYTON RD (SR 2624)	2	NO	NO	2.6	18	27,456	15,101		56	
<b>TOTAL FOR MAP NO. 22</b>								<b>2.6</b>		<b>27,456</b>	<b>15,101</b>		<b>56</b>	
2016CPT.10.06.20132.01	Cabarrus	23	COUNTY LINE RD (SR 2623)	FROM CRAYTON RD (SR 2624) TO BARRIER STORE RD (SR 2622)	2	NO	NO	1.29	16	12,109	6,660		56	
<b>TOTAL FOR MAP NO. 23</b>								<b>1.29</b>		<b>12,109</b>	<b>6,660</b>		<b>56</b>	
2016CPT.10.06.20132.01	Cabarrus	24	SMITH LAKE RD (SR 2680)	FROM COUNTY LINE RD (SR 2623) TO BARRIER STORE RD (SR 2622)	2	NO	NO	1.38	20	16,192	8,906		56	
<b>TOTAL FOR MAP NO. 24</b>								<b>1.38</b>		<b>16,192</b>	<b>8,906</b>		<b>56</b>	
2016CPT.10.06.20132.01	Cabarrus	25	COX RD (SR 2687)	FROM COUNTY LINE RD (SR 2623) TO SMITH LAKE RD (SR 2680)	2	NO	NO	0.67	20	7,861	4,324		56	
<b>TOTAL FOR MAP NO. 25</b>								<b>0.67</b>		<b>7,861</b>	<b>4,324</b>		<b>56</b>	
<b>TOTAL FOR PROJ NO. 2016CPT.10.06.20132.01</b>								<b>32.48</b>		<b>361,738</b>	<b>198,958</b>	<b>20</b>	<b>2,500</b>	<b>1</b>
<b>GRAND TOTAL</b>								<b>32.48</b>		<b>361,738</b>	<b>198,958</b>	<b>20</b>	<b>2,500</b>	<b>1</b>



# Cabarrus County 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	1	 <small>W20-1 48" X 48"</small>	<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>
	2	 <small>W7-30P 24" X 18"</small>	
	3	 <small>W8-7 48" X 48"</small>   <small>SP 48" X 48"</small>	<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>
	4	 <small>SP 13106 48" X 48"</small>	<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>
	5	 <small>G20-2 A 48" X 24"</small>	<p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.</p>

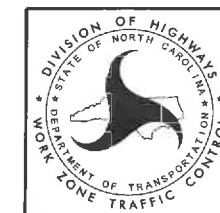
NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:

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

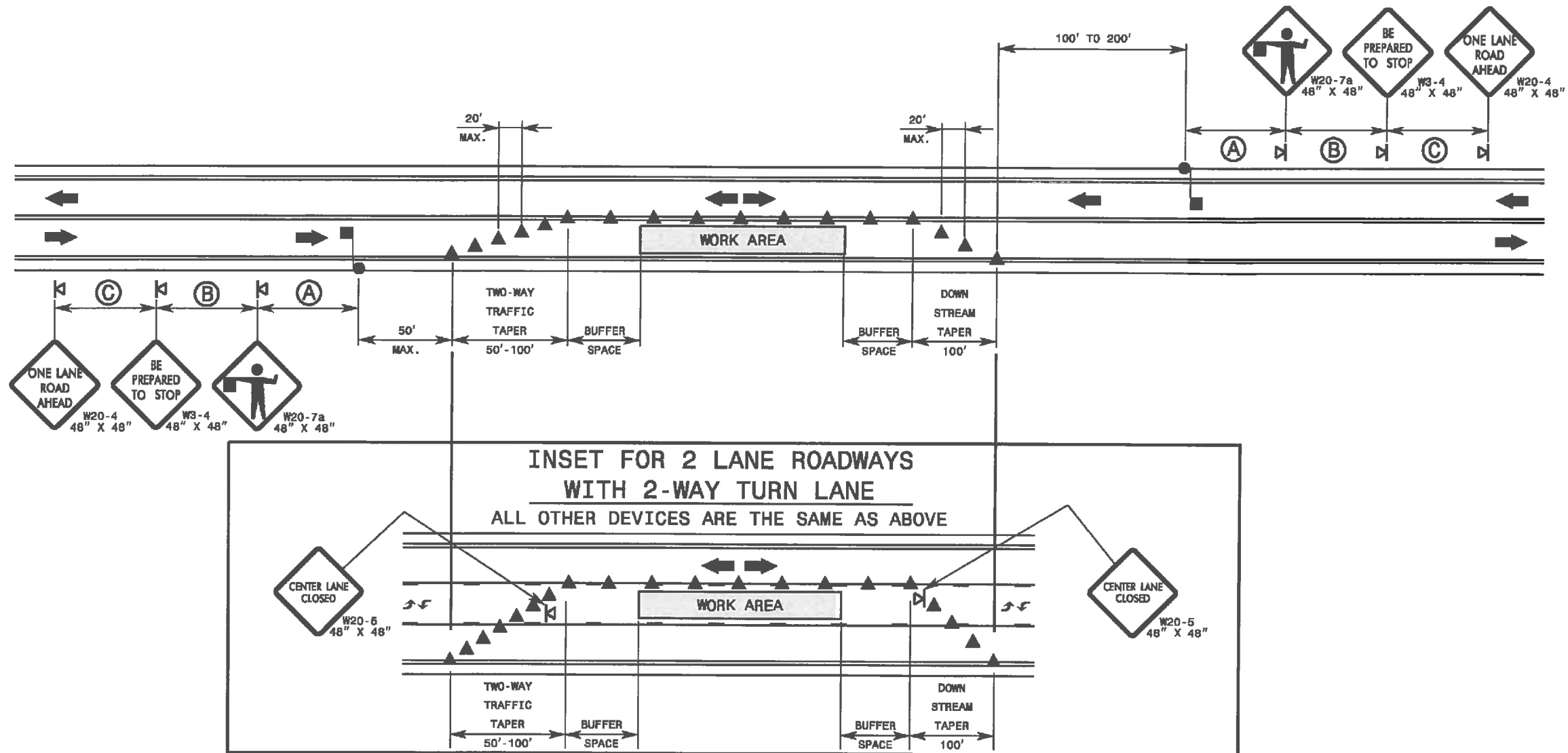
WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, ADVANCE WARNING PORTABLE SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.



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