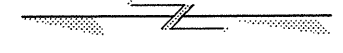




**CLEVELAND COUNTY**  
**NORTH CAROLINA**

12CR.10231.4  
 12CR.20231.5



# CLEVELAND COUNTY NORTH CAROLINA

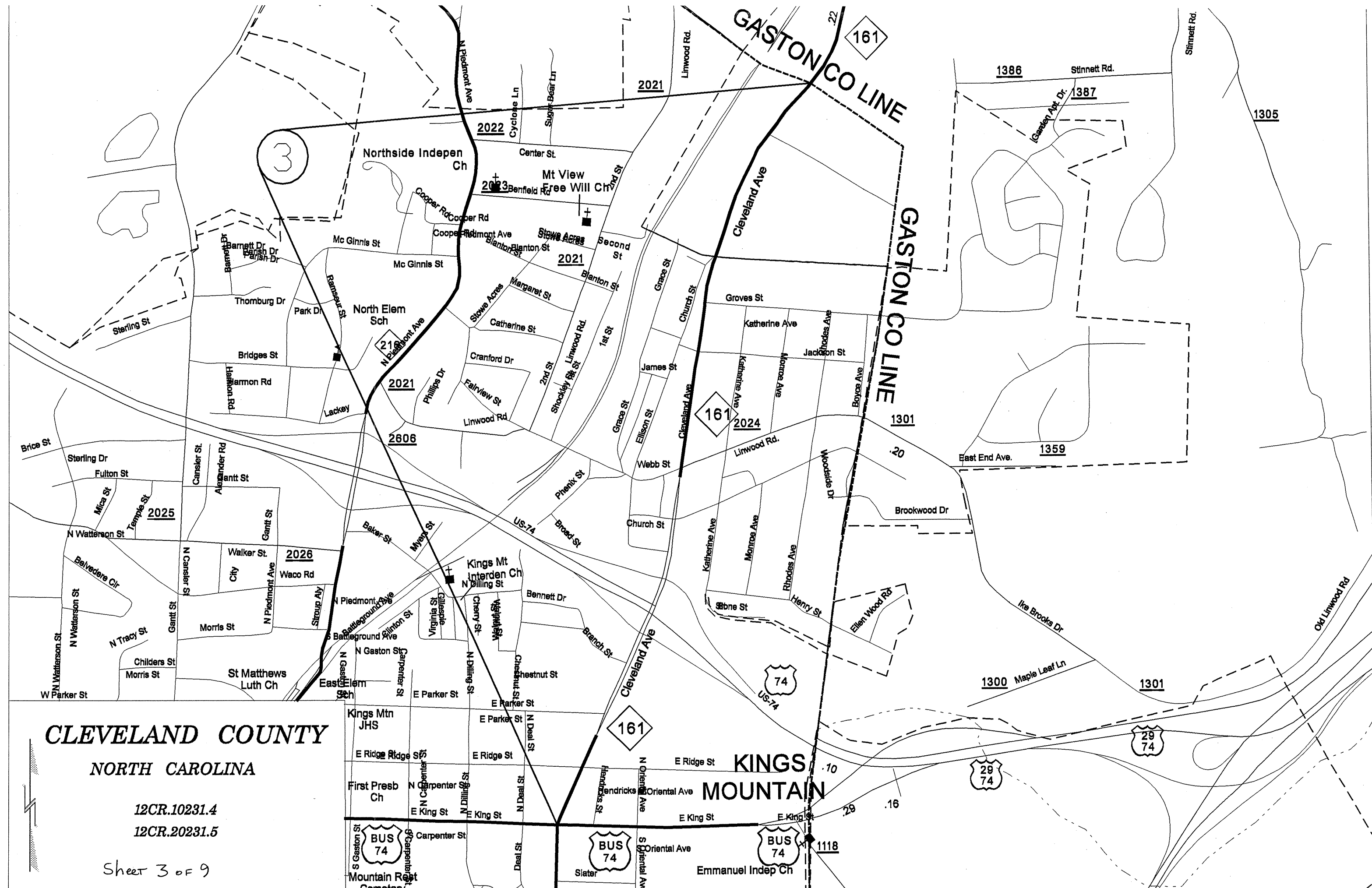
12CR.10231.4

12CR.20231.5

Sheet 2 of 9

SHELBY





**CLEVELAND COUNTY**

NORTH CAROLINA

12CR.10231.4

12CR.20231.5

Sheet 3 of 9

Kings Mtn JHS  
 E Ridge St  
 First Presb Ch  
 N Carpenter St  
 E King St  
 S Gaston St  
 BUS 74  
 Mountain Rest Cemetary  
 S Carpenter St  
 Deal St  
 BUS 74  
 Slater  
 S Oriental Ave  
 BUS 74  
 Emmanuel Indep Ch  
 1118

**KINGS MOUNTAIN**  
 E Ridge St  
 E King St  
 E King St  
 E King St

161

161

161

74  
US-74

29  
74

29  
74

1300 Maple Leaf Ln

1359

1386

1387

1305

2806

2021

2021

2023

2022

2021

3

2025

2026

1301

20

2024

2021

2021

2021

2021

2021

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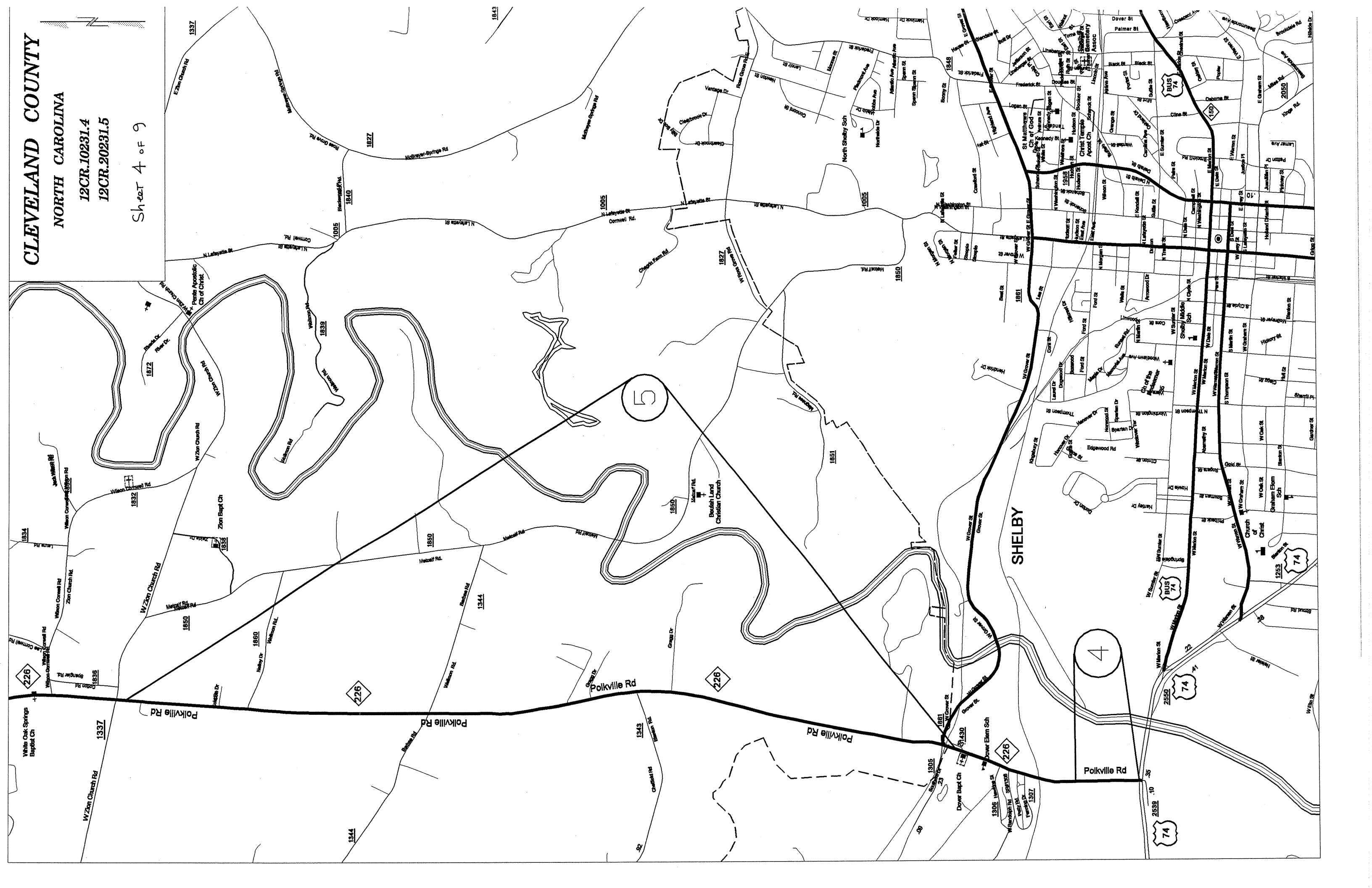
# CLEVELAND COUNTY

NORTH CAROLINA

12CR.10231.4

12CR.20231.5

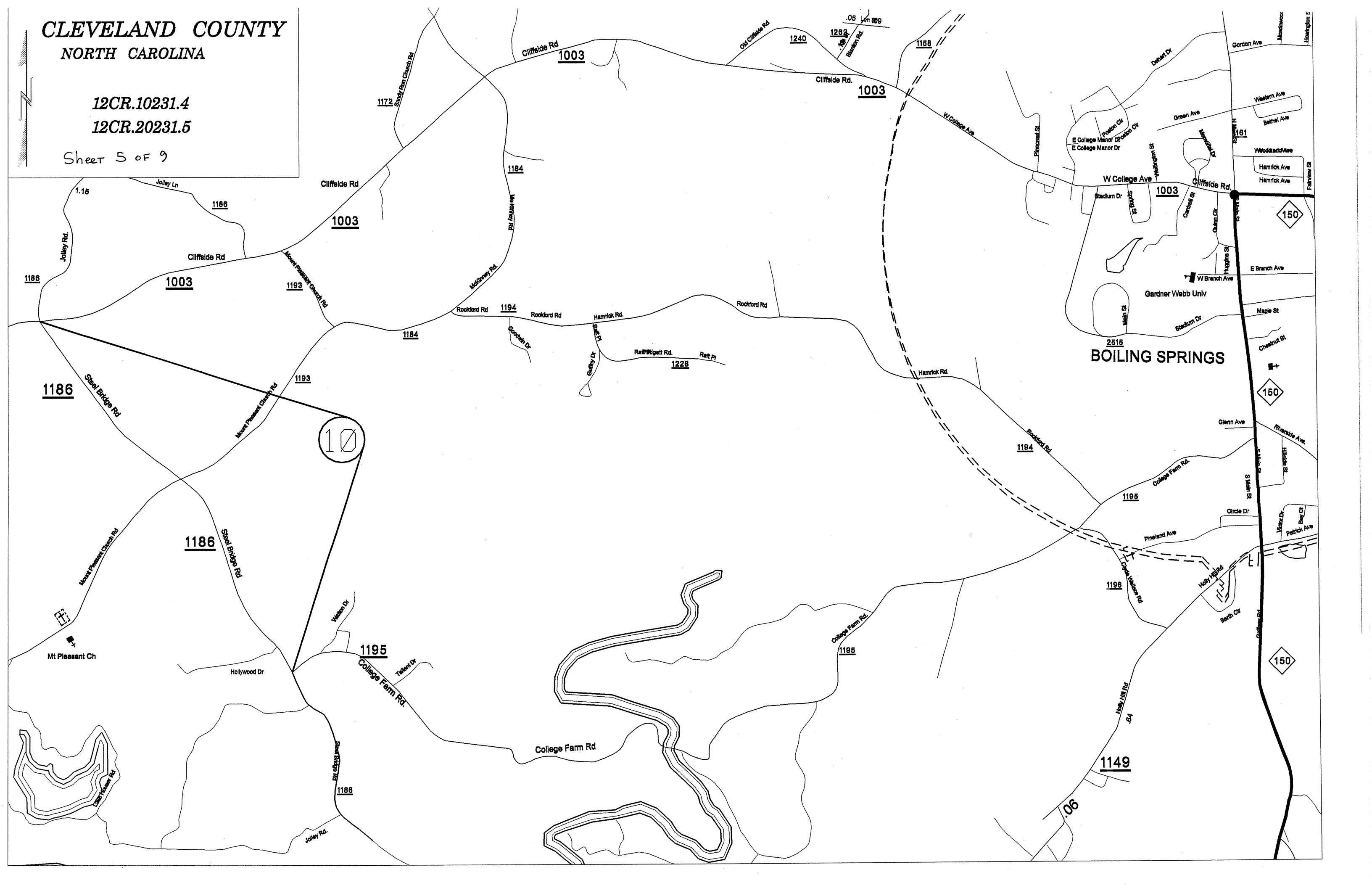
Sheet 4 of 9



**CLEVELAND COUNTY**  
NORTH CAROLINA

12CR.10231.4  
12CR.20231.5

Sheet 5 of 9



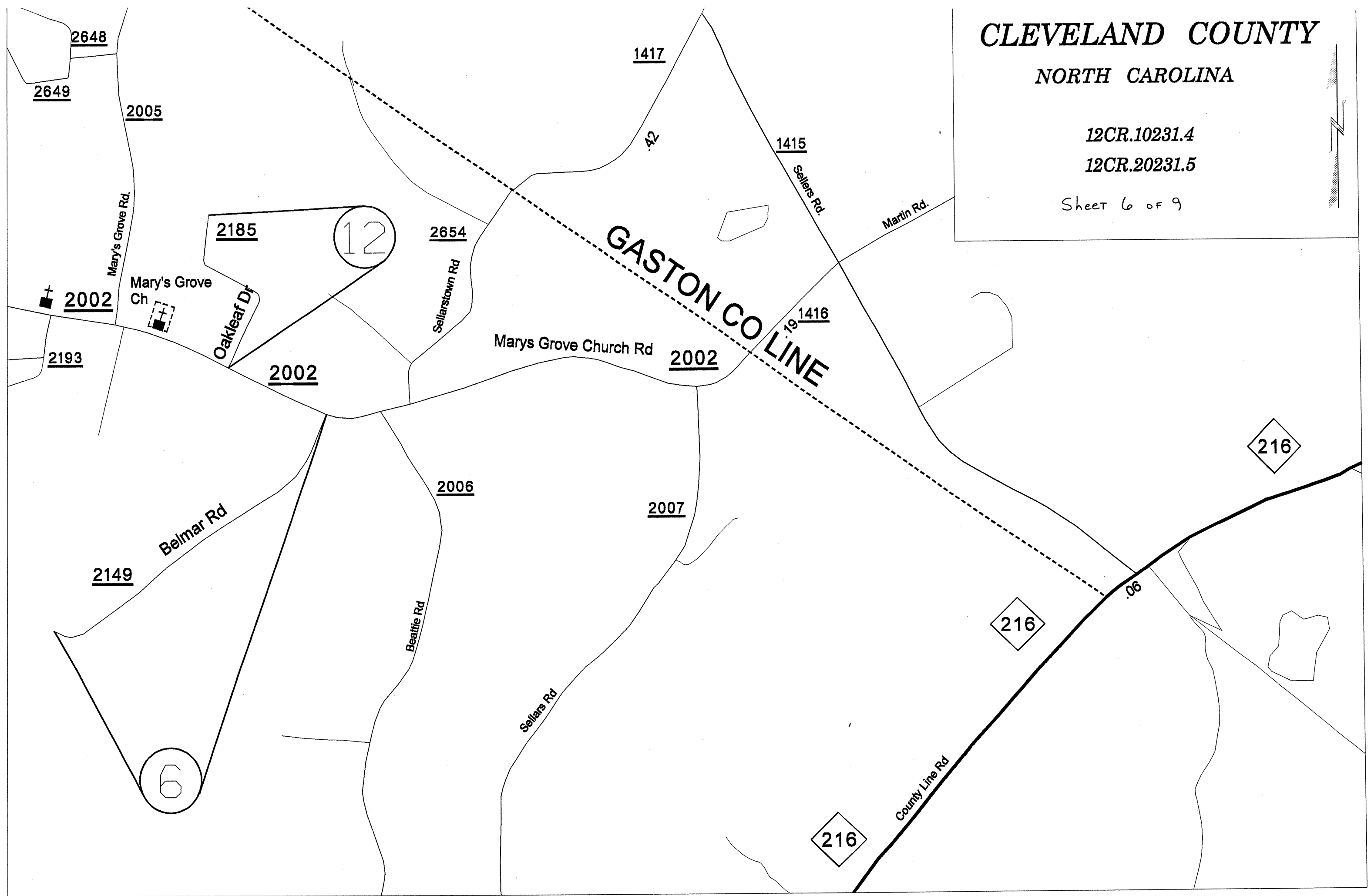
# CLEVELAND COUNTY

NORTH CAROLINA

12CR.10231.4

12CR.20231.5

Sheet 6 of 9



2648

2649

2005

1417

1415

Mary's Grove Rd.

2185

12

2654

2002

Mary's Grove Ch

Oakleaf Dr

Sellarstown Rd

GASTON CO LINE

1416

2193

2002

Marys Grove Church Rd

2002

216

2006

2007

2149

Belmar Rd

Beattie Rd

Sellars Rd

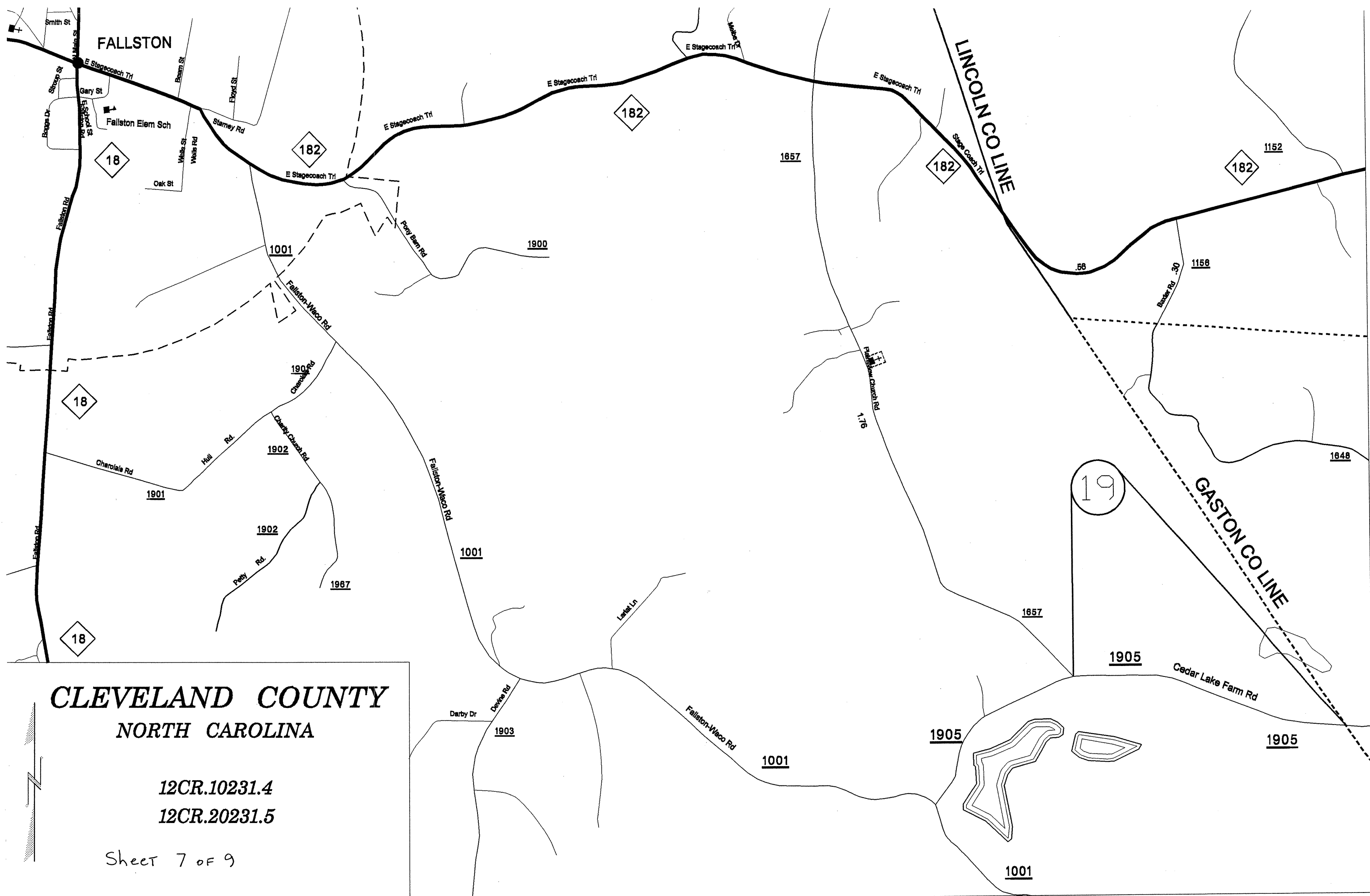
County Line Rd

6

216

216

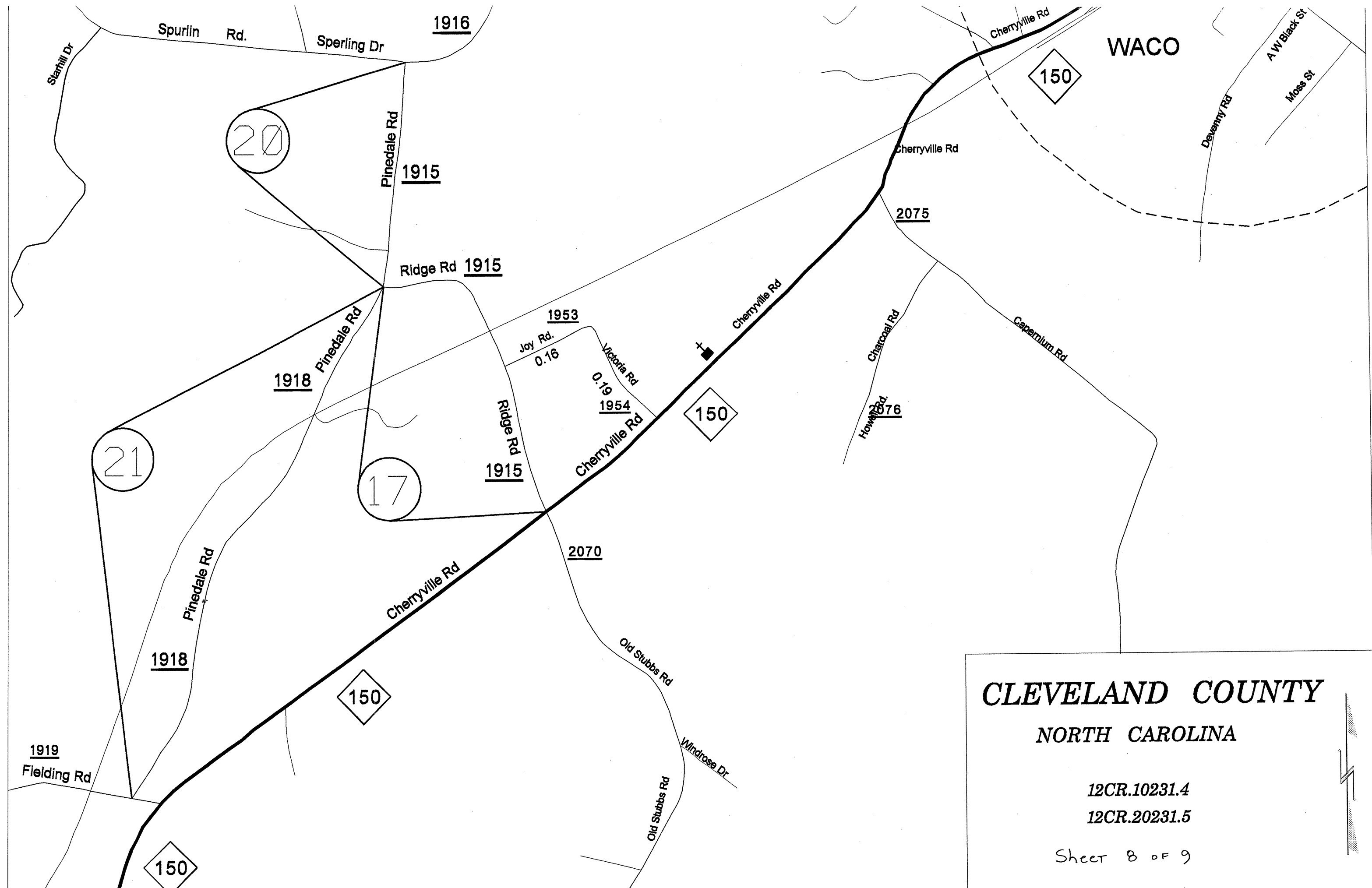
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**CLEVELAND COUNTY  
NORTH CAROLINA**

12CR.10231.4  
12CR.20231.5

Sheet 7 of 9



WACO

**CLEVELAND COUNTY**  
**NORTH CAROLINA**

12CR.10231.4

12CR.20231.5

Sheet 8 of 9





PROJECT NO.	SHEET NO.	TOTAL NO.
12CR.10231.4, 12CR.20231.5	1	2

### SUMMARY OF QUANTITIES

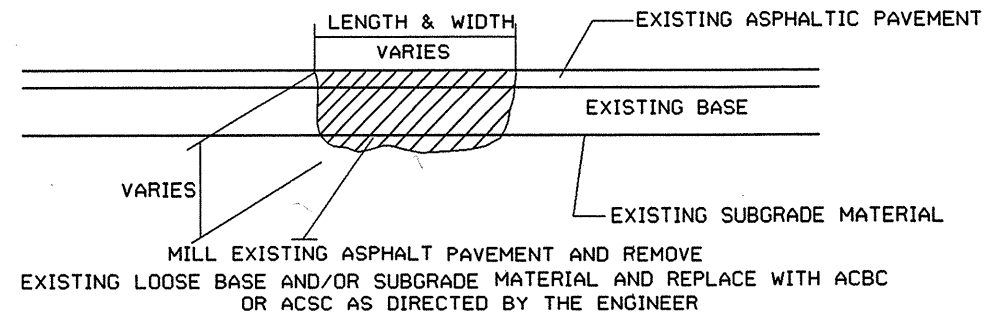
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LENGTH MI	WIDTH FT	INCIDENTAL STONE TONS	SHOULDER RECONSTRUCTION SMI	5" MILLING SY	1½" MILLING SY	0" TO 2" MILLING SY	1.5" TO 3" MILLING SY	INCIDENTAL MILLING SY	BASE COURSE, B25.0C TONS	SURFACE COURSE, S9.5B TONS	LEVELING COURSE, S9.5B TONS	SURFACE COURSE, S12.5C TONS	LEVELING COURSE, S12.5C TONS	PG 64-22 PLANT MIX TONS	PG 70-22 PLANT MIX TONS	PATCHING EXISTING PAVEMENT TONS	WHEEL CHAIR RAMP EA	ADJUST CATCH BASIN EA	ADJUST MANHOLE EA	ADJUST METER OR VALVE BOX EA	
12CR.10231.4	Cleveland	1	NC 180 (N POST RD)	NC 150 TO NC 18 N	1	2.30	VAR 24-45	200	4.80					530.00		3,150	157			199		315					
12CR.10231.4	Cleveland	2	NC 150 (S DEKALB ST)	TEXTILE ST TO RXR TRACKS	2	0.82	VAR. 42-60				21,000.00			640.00		1,910	96			120		191	1		11	5	
12CR.10231.4	Cleveland	3	NC 161 (CLEVELAND AVE)	US 74 BUS TO GASTON CO LINE	3 4 5 1	0.13 0.41 0.22 0.41	VAR. 36-43 VAR. 44-65 VAR. 64-77 24	30	0.82				24,000.00			2,800	140			177		280		3	7	3	
12CR.10231.4	Cleveland	4	NC 226 (POLKVILLE RD)	US 74 TO CHG IN PAVEMENT	8	0.25	VAR. 24-53	20	0.50	1,200.00					372			574	30	16	33	43					
12CR.10231.4	Cleveland	5	NC 226 (POLKVILLE RD)	0.07 MI S OF SR 1305 TO 0.12 MI S OF SR 1337	6 7 1	0.15 0.08 2.79	VAR. 36-60 24 24	150	5.60	600.00	1,200.00	1,800.00			170	3,300	165	687	35	216	40	382					
<b>TOTAL FOR PROJ NO. 12CR.10231.4</b>						<b>7.64</b>		<b>400</b>	<b>11.52</b>	<b>1,800.00</b>	<b>22,200.00</b>	<b>1,800.00</b>	<b>24,000.00</b>	<b>1170.00</b>	<b>542</b>	<b>11,160</b>	<b>558</b>	<b>1,261</b>	<b>65</b>	<b>728</b>	<b>73</b>	<b>1,211</b>	<b>1</b>	<b>3</b>	<b>18</b>	<b>8</b>	
12CR.20231.5	Cleveland	6	SR 2149 (BELMAR RD)	SR 2002 TO DEAD END	9	0.56	18	60								550	55			37		28					
12CR.20231.5	Cleveland	7	SR 1827 (MCBRAYER SPRINGS RD)	SR 1337 TO SR 1824	9	1.84	18	120								1,800	100			115		150					
12CR.20231.5	Cleveland	8	SR 2376 (LESLIE HORSETRAIL HOMEPLACE DR)	SR 1107 TO SR 2415	9	0.85	20	140								922	93			61		70					
12CR.20231.5	Cleveland	9	SR 2415 (SOUTHERN SPRINGS DR)	SR 2376 TO SR 2376	9	0.09	20	25								98	10			7		10					
12CR.20231.5	Cleveland	10	SR 1186 (STEEL BRIDGE RD)	SR 1003 TO SR 1195	9	1.37	18	100								1,340	70			85		150					
12CR.20231.5	Cleveland	11	SR 2322 (VALENTINE DR)	SR 2325 TO DEAD END	9	0.60	18	50								585	58			39		30					
12CR.20231.5	Cleveland	12	SR 2185 (OAKLEAF DR)	SR 2002 TO DEAD END	9	0.27	VAR. 15-18	15								260	26			17		13					
12CR.20231.5	Cleveland	13	SR 1925 (HOPEWELL CH RD)	NC 18 TO NC 180	9	0.23	22	20								275	14			17		28			1	2	
12CR.20231.5	Cleveland	14	SR 2406 (GREENVALLEY DR)	SR 1106 TO SR 2408	9	0.39	22	20								465	60			32		30					
12CR.20231.5	Cleveland	15	SR 2408 (POWER LINE DR)	SR 2406 TO SR 2407	9	0.15	22	15								180	25			12		15					
12CR.20231.5	Cleveland	16	SR 2407 (GOLDWATER ST)	SR 2408 TO SR 2406	9	0.10	22	15								120	15			8		10					
12CR.20231.5	Cleveland	17	SR 1915 (RIDGE RD)	NC 150 TO SR 1918	9	0.54	18	40						400.00		527	27			33		53					
12CR.20231.5	Cleveland	18	SR 1949 (CARSON RD)	SR 1908 TO DEAD END	9	0.56	18	30								547	55			36		27					
12CR.20231.5	Cleveland	19	SR 1905 (CEDAR LAKE RD)	SR 1857 TO GASTON CO LINE	9	0.75	20	40								813	82			54		41					
12CR.20231.5	Cleveland	20	SR 1915 (PINEDALE RD)	SR 1916 TO SR 1918	9	0.38	20	30								412	130			33		30					
12CR.20231.5	Cleveland	21	SR 1918 (PINEDALE RD)	SR 1915 TO SR 1919	9	0.88	20	50						400.00		954	300			77		70					
<b>TOTAL FOR PROJ NO. 12CR.20231.5</b>						<b>9.56</b>		<b>770</b>						<b>800.00</b>		<b>9,848</b>	<b>1,120</b>			<b>663</b>		<b>755</b>			<b>1</b>	<b>2</b>	
<b>GRAND TOTAL</b>						<b>17.2</b>		<b>1,170</b>	<b>11.52</b>	<b>1,800.00</b>	<b>22,200.00</b>	<b>1,800.00</b>	<b>24,000.00</b>	<b>1970.00</b>	<b>542</b>	<b>21,008</b>	<b>1,678</b>	<b>1,261</b>	<b>65</b>	<b>1,391</b>	<b>73</b>	<b>1,966</b>	<b>1</b>	<b>3</b>	<b>19</b>	<b>10</b>	



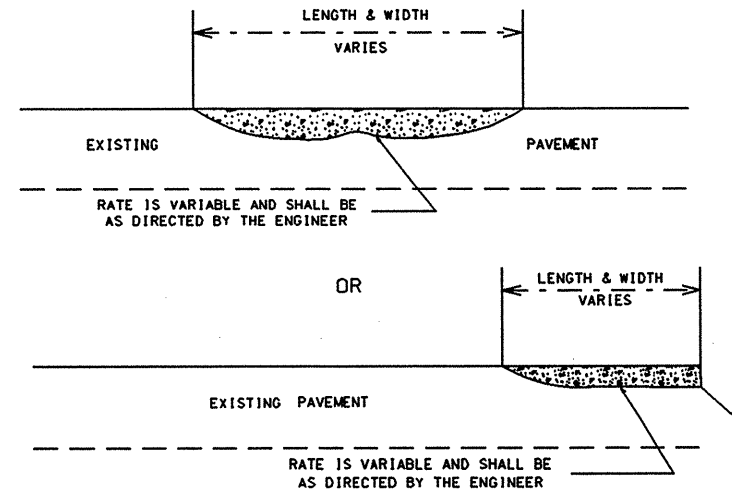
PROJ. REFERENCE NO.	SHEET NO.	TOTAL SHEETS
CLEVELAND COUNTY	1 OF 2	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
12CR.10231.4		
12CR.20231.5		

PAVEMENT SCHEDULE	
A	PROP. APPROX. 5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
B	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S12.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
D	SHOULDER RECONSTRUCTION
E	MILL ASPHALT PAVEMENT APPROX. 1 1/2"
F	MILL ASPHALT PAVEMENT APPROX. 5" AS DIRECTED BY ENGINEER
G	MILL ASPHALT PAVEMENT APPROX. 0" - 2" (10'-0 WIDE FROM CURB)
H	MILL ASPHALT PAVEMENT APPROX. 1 1/2" - 3" AS DIRECTED BY ENGINEER

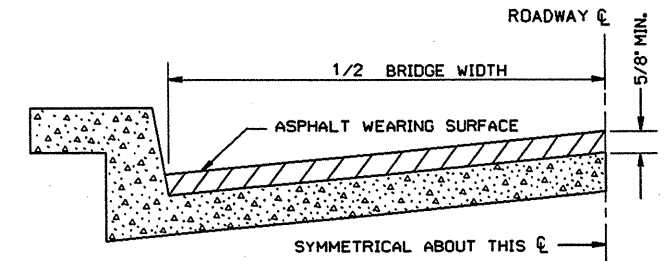
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.  
MILL BRIDGE APPROACHES 100' TO PROVIDE A SMOOTH TRANSITION AS DIRECTED.



PATCHING EXISTING PAVEMENT



ASPHALT CONCRETE SURFACE COURSE  
TYPE S9.5B. (LEVELING COURSE)



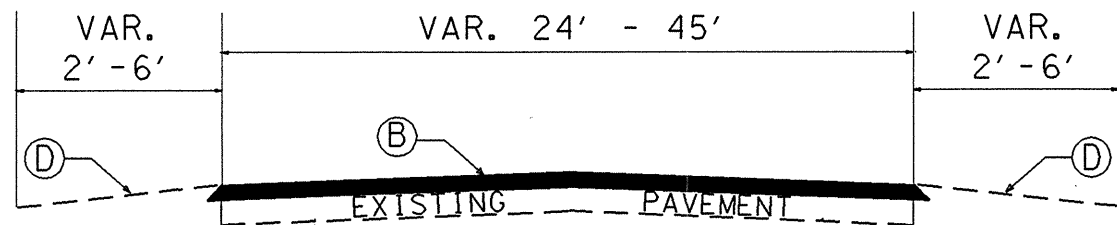
BRIDGE HALF TYPICAL SECTION

FOR BRIDGES WITH FLOOR DRAINS, CARE SHALL BE EXERCISED IN PLACING THE WEARING SURFACE AROUND FLOOR DRAINS SO AS NOT TO HINDER EFFECTIVE DRAINAGE. ALL DRAINS SHALL BE LEFT OPEN.

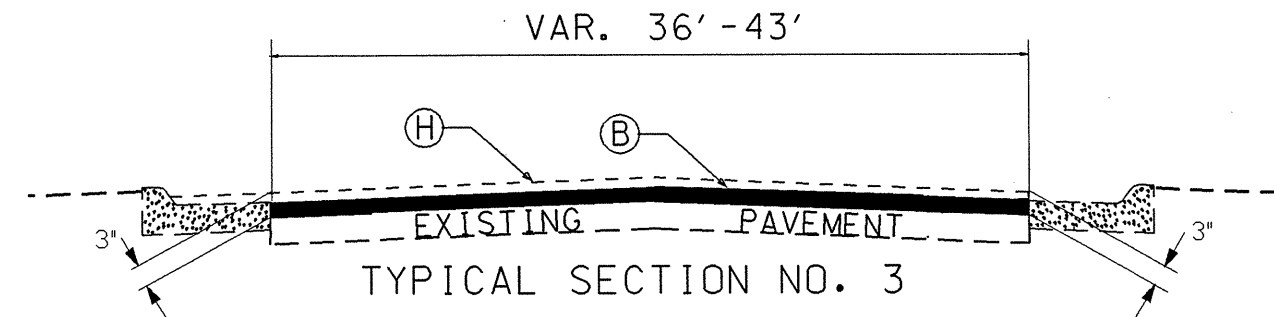
THE PROPOSED WEARING SURFACE SHALL VARY IN THICKNESS AS NECESSARY TO PROVIDE A SMOOTH RIDING SURFACE. A THICKNESS OF NOT LESS THAN 5/8" SHALL BE PROVIDED. THE MAXIMUM THICKNESS SHALL PREFERABLY BE 1-1/2" UNLESS IT IS IMPRACTICAL TO PROVIDE A SMOOTH RIDING SURFACE OTHERWISE.

NOTES

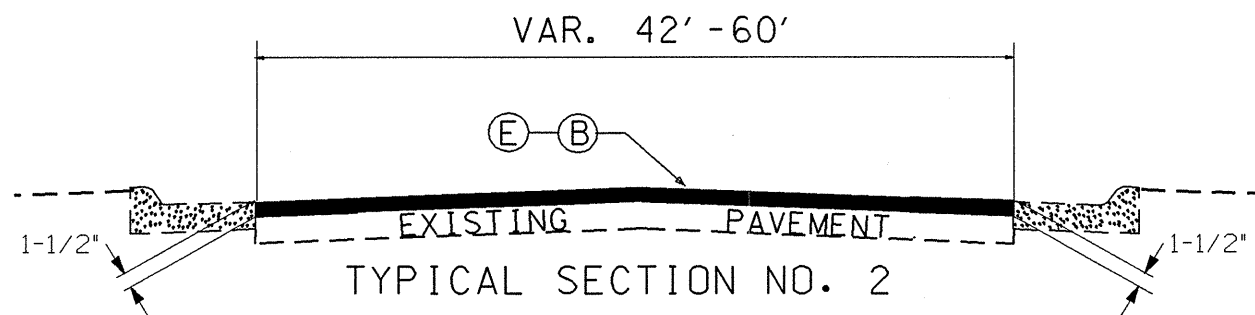
ALL UNPAVED S.R. ROADS TO BE SURFACED 50' FROM EDGE OF PAVEMENT OF MAIN PROJECT.  
ALL PAVED S.R. ROADS TO BE RESURFACED TO THE ENDS OF THE RADII, OR AS DIRECTED BY THE ENGINEER.  
EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE TABLE OF QUANTITIES.  
SHOULDERS AND DITCHES ARE TO BE CONSTRUCTED BY OTHERS UNLESS OTHERWISE NOTED.  
BRIDGES TO BE RESURFACED AT LOCATIONS AND TO DEPTH AS DIRECTED BY THE ENGINEER.



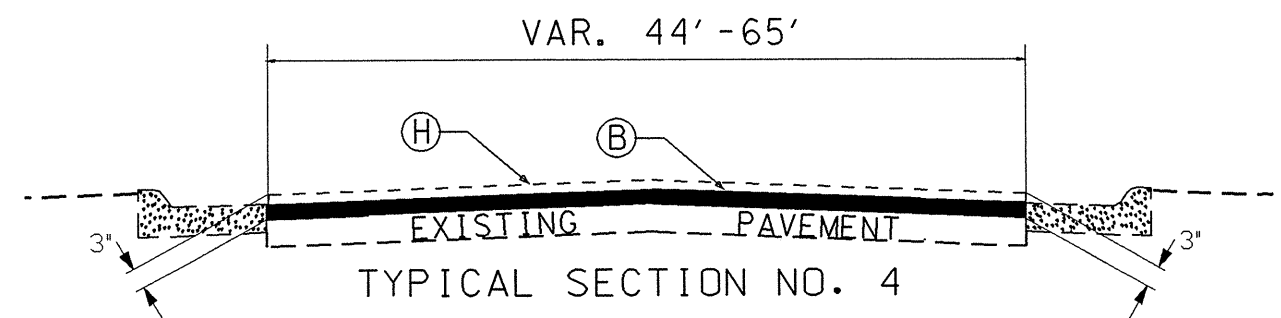
TYPICAL SECTION NO. 1



TYPICAL SECTION NO. 3



TYPICAL SECTION NO. 2



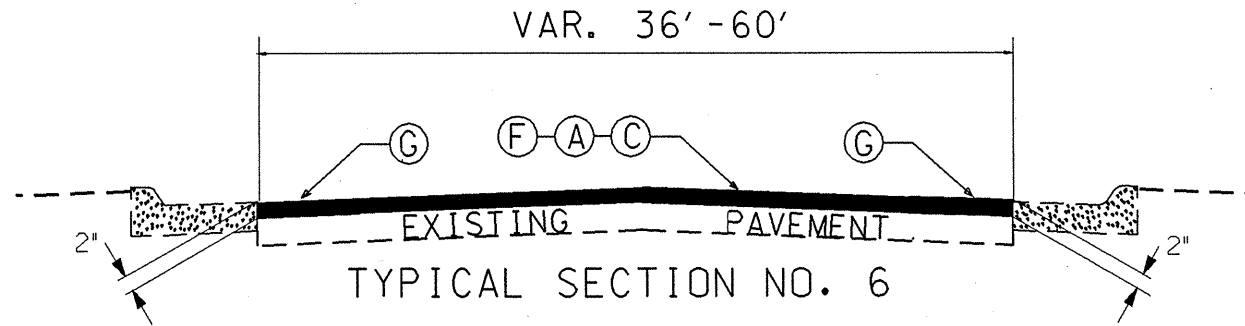
TYPICAL SECTION NO. 4

PROJ. REFERENCE NO.	SHEET NO.	TOTAL SHEETS
CLEVELAND COUNTY	2 OF 2	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
12CR. 10231.4		
12CR. 20231.5		

PAVEMENT SCHEDULE	
A	PROP. APPROX. 5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
B	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S12.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
D	SHOULDER RECONSTRUCTION
E	MILL ASPHALT PAVEMENT APPROX. 1½"
F	MILL ASPHALT PAVEMENT APPROX. 5" AS DIRECTED BY ENGINEER
G	MILL ASPHALT PAVEMENT APPROX. 0" - 2" (10'-0 WIDE FROM CURB)
H	MILL ASPHALT PAVEMENT APPROX. 1½" - 3" AS DIRECTED BY ENGINEER

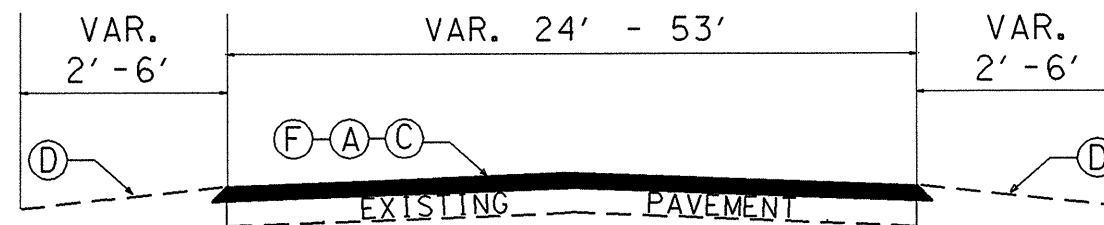
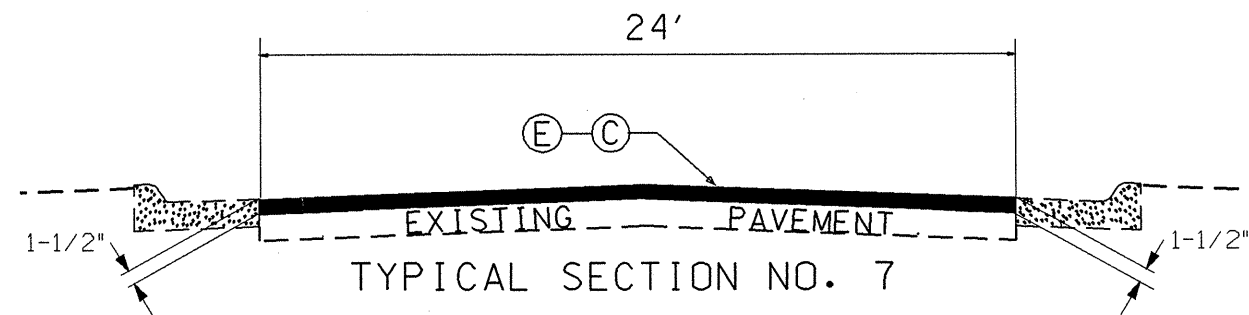
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

MILL BRIDGE APPROACHES 100' TO PROVIDE A SMOOTH TRANSITION AS DIRECTED.

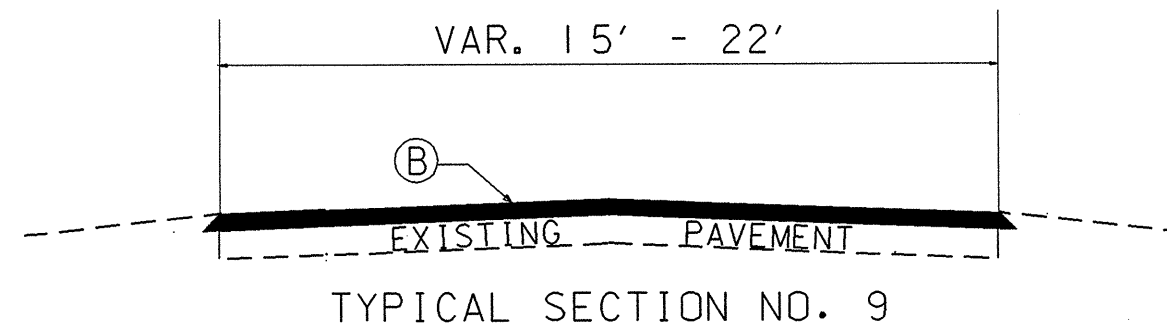
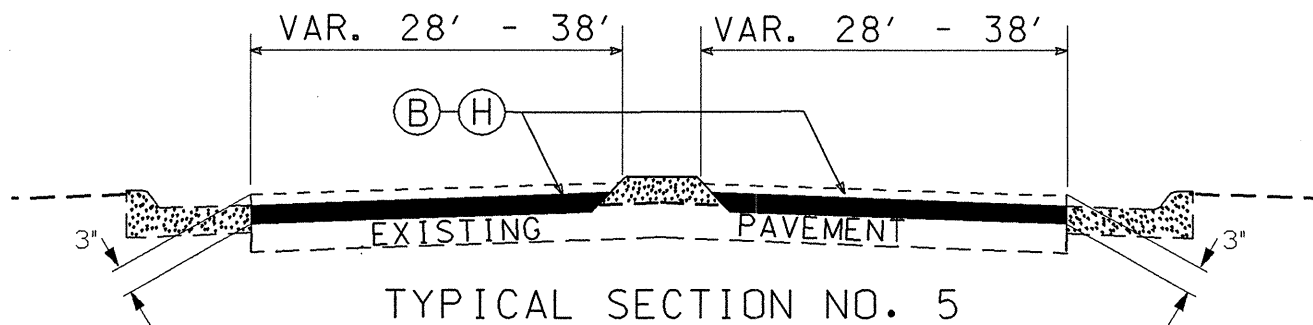


MILL 2" @ CURB TO 0" @ 10'-0

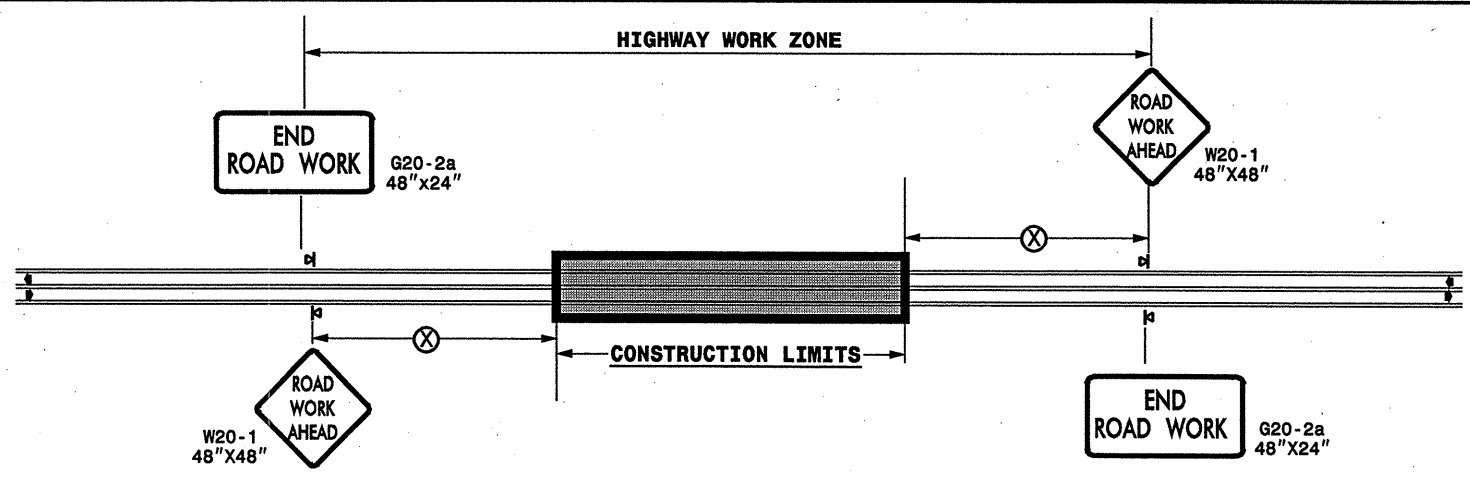
MILL 5" WHERE RUTTED AS DIRECTED BY THE ENGINEER



MILL 5" WHERE RUTTED AS DIRECTED BY THE ENGINEER



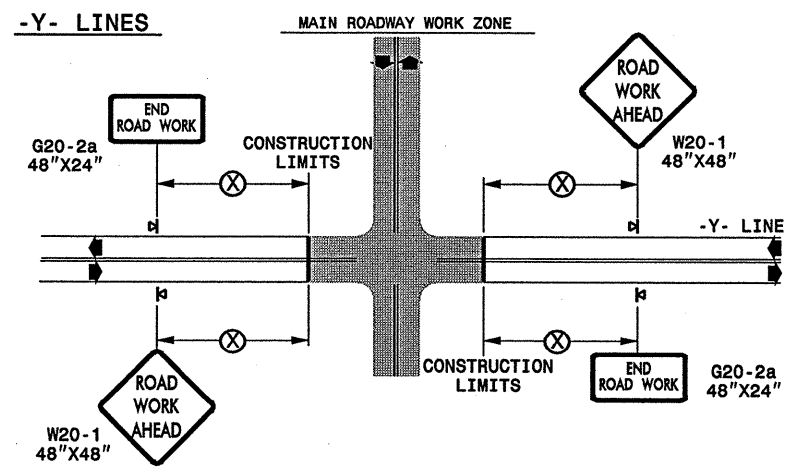
**TWO-WAY UNDIVIDED \*\* (L-LINES)**



POSTED SPEED LIMIT (M.P.H.)	RECOMMENDED MINIMUM SIGN SPACING
≤ 50	500'
≥ 55	1000'

STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

**ROADWAYS INTERSECTING ALONG 2 WAY UNDIVIDED WORK ZONE (Y-LINES)**



**GENERAL NOTES**

- USE FLUORESCENT ORANGE SHEETING (TYPE VII OR HIGHER) ON ALL ADVANCED WORK ZONE SIGNS.
- DO NOT INSTALL ADVANCE WARNING SIGNS MORE THAN 3 DAYS PRIOR TO BEGINNING OF WORK.
- ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE, FIELD ADJUST AS NECESSARY OR AS DIRECTED.
- USE PORTABLE WORK ZONE SIGNS ONLY WITH PORTABLE WORK ZONE SIGN STANDS SPECIFICALLY DESIGNED FOR ONE ANOTHER. PORTABLE WORK ZONE SIGNS MAY BE ROLL UP OR APPROVED COMPOSITE.
- PROVIDE PORTABLE WORK ZONE SIGN STANDS, PORTABLE SIGNS AND SIGN SHEETING WHICH ARE LISTED ON THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION'S APPROVED PRODUCT LIST OR ACCEPTED AS TRAFFIC QUALIFIED BY THE TRAFFIC CONTROL UNIT.
- \*\* TWO-WAY UNDIVIDED ADVANCE WARNING SIGN CONFIGURATION MAY BE USED ON URBAN MULTI-LANE FACILITIES WHERE CONDITIONS LIMIT THE USE OF DUAL MOUNTED SIGNS AS DETERMINED BY THE ENGINEER.


**LEGEND**

◀ PORTABLE SIGN

➡ DIRECTION OF TRAFFIC FLOW

DETAIL DRAWING  
FOR TWO-WAY UNDIVIDED  
WORK ZONE WARNING SIGNS

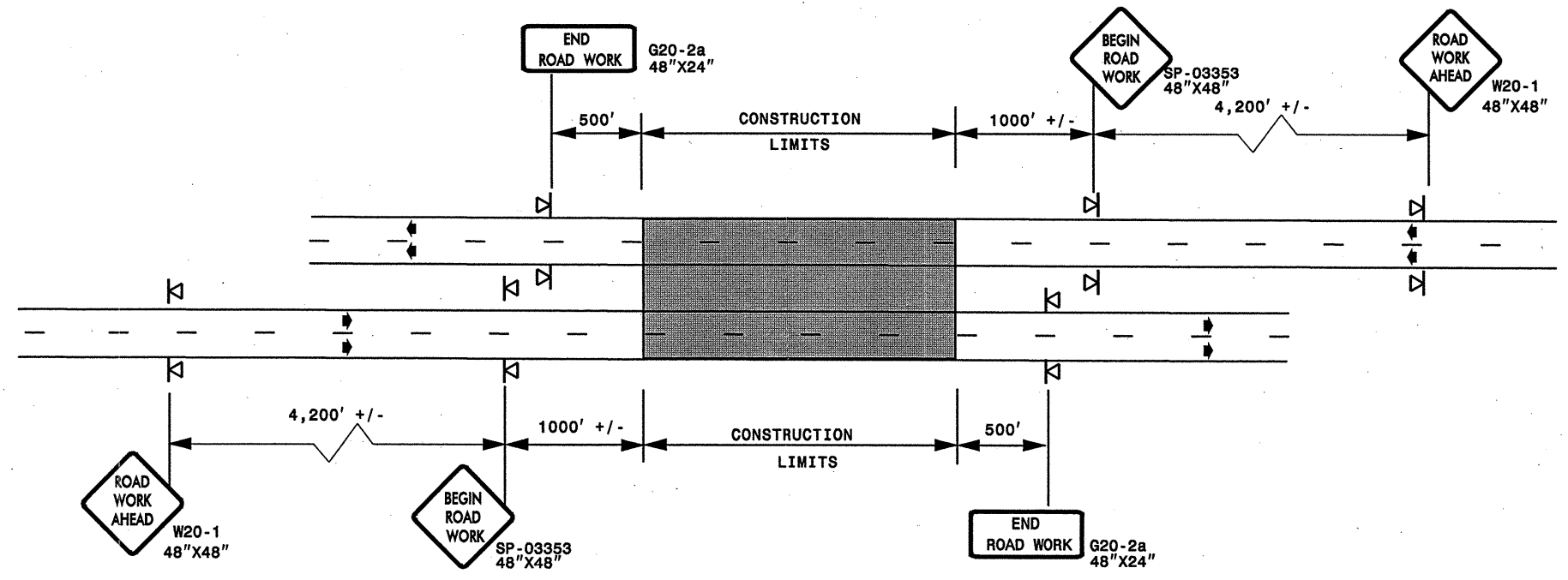
SHEET 1 OF 1

APPROVED: _____ DATE: _____	DETAIL DRAWING FOR TWO-WAY UNDIVIDED ADVANCED WORK ZONE WARNING SIGNS	
SEAL	SCALE: NONE	REVISIONS
	DATE: _____	7-98 10/01
	DWG. BY: _____	10-98 03/04
	DESIGN BY: _____	01/01 11/04
REVIEWED BY: _____		

28-NOV-2006 17:02 C:\DOT\OFFICE\SR0101\GROUPS-WZ\TCC\design\group4\resurfacing\resurfacing2006\div12\12cr102314\etccoleveland\2cr102314\_2\woyundivurbtr\wys\july2006.dgn  
 desymar AT WZTC2603

### ADVANCED WORK ZONE WARNING SIGNING FOR FREEWAYS (4 LANES OR GREATER)

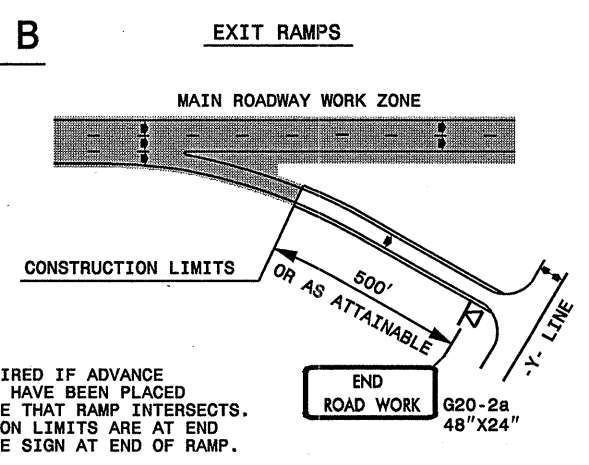
**DETAIL A**



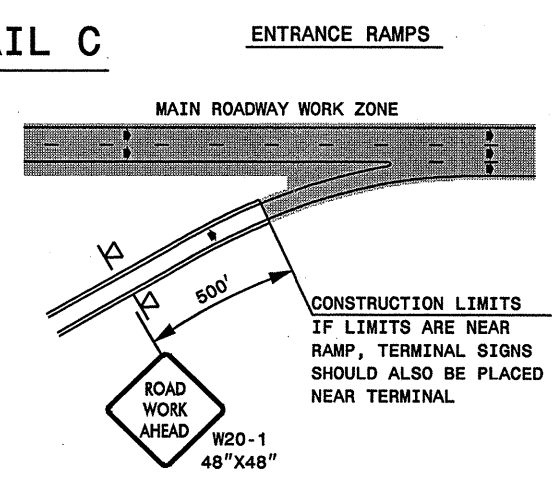
STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

### ROADWAYS INTERSECTING ALONG FREEWAY WORK ZONE (Y-LINES)

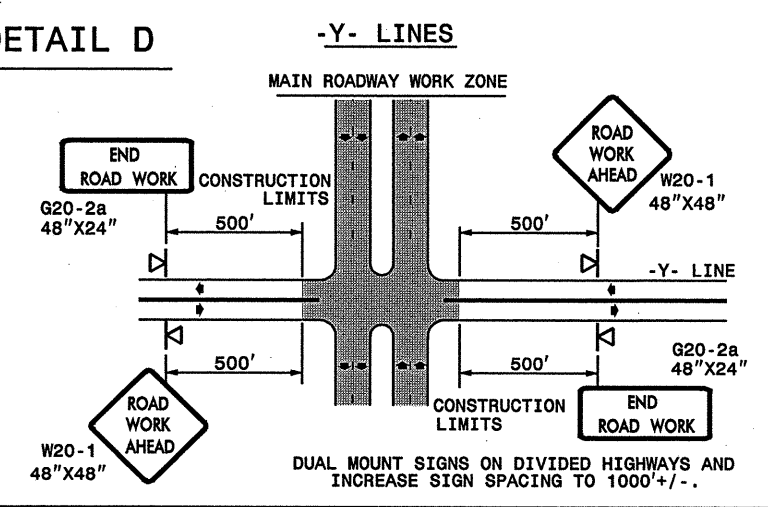
**DETAIL B**



**DETAIL C**



**DETAIL D**



DETAIL DRAWING  
FOR FREEWAYS  
WORK ZONE WARNING SIGNS  
(SHORT-DURATION LANE CLOSURES)

### GENERAL NOTES

- USE FLUORESCENT ORANGE SHEETING (TYPE VII OR HIGHER) ON ALL ADVANCED WORK ZONE SIGNS.
- DO NOT INSTALL ADVANCE WARNING SIGNS MORE THAN 3 DAYS PRIOR TO BEGINNING OF WORK.
- ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE, FIELD ADJUST AS NECESSARY OR AS DIRECTED.
- USE PORTABLE WORK ZONE SIGNS ONLY WITH PORTABLE WORK ZONE SIGN STANDS SPECIFICALLY DESIGNED FOR ONE ANOTHER. PORTABLE WORK ZONE SIGNS MAY BE ROLL UP OR APPROVED COMPOSITE.
- PROVIDE PORTABLE WORK ZONE SIGN STANDS, PORTABLE SIGNS AND SIGN SHEETING WHICH ARE LISTED ON THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION'S APPROVED PRODUCT LIST OR ACCEPTED AS TRAFFIC QUALIFIED BY THE TRAFFIC CONTROL UNIT.
- \*\* TWO-WAY UNDIVIDED ADVANCE WARNING SIGN CONFIGURATION MAY BE USED ON MULTI-LANE FACILITIES WHERE CONDITIONS LIMIT THE USE OF DUAL MOUNTED SIGNS AS DETERMINED BY THE ENGINEER.

**LEGEND**

◀ PORTABLE SIGN

➡ DIRECTION OF TRAFFIC FLOW

SHEET 1 OF 1

APPROVED: _____	DATE: _____	DETAIL DRAWING FOR FREEWAYS WORK ZONE WARNING SIGNS							
SEAL	SCALE: NONE								
	DATE: _____								
	DWG. BY: _____								
	DESIGN BY: _____								
REVIEWED BY: _____	<table border="1" style="width: 100%;"> <thead> <tr> <th colspan="2">REVISIONS</th> </tr> </thead> <tbody> <tr> <td>7-98</td> <td>10/01</td> </tr> <tr> <td>10-98</td> <td>03/04</td> </tr> <tr> <td>01/01</td> <td>11/04</td> </tr> </tbody> </table>	REVISIONS		7-98	10/01	10-98	03/04	01/01	11/04
REVISIONS									
7-98	10/01								
10-98	03/04								
01/01	11/04								

28 NOV 2006 17:04  
C:\WORK\PROJECTS\12CR10231\GROUPS-WZTCCC\design\12cr10231\resurfacing\resurfacing.dwg  
DESIGNED BY: AT WZTCCC

SP 03353

PROJ. REFERENCE NO. SHEET NO.  
 12CR.10231.4 & TCP-3  
 12CR.20231.5

SIGN NUMBER: SP-03353 BACKG COLOR: Fluorescent Orange DESIGN BY: CL DOWNEY CHECKED BY: CHECKED STD #: W20-1  
 TYPE: A COPY COLOR: Black PROJECT ID: ALL PROJECTS DIV: DIV DATE: Aug 20, 2003  
 QUANTITY: 1

SYMBOL	X	Y	WID	HT

SIGN WIDTH: 4'-0"  
 HEIGHT: 4'-0"  
 TOTAL AREA: 16.0 Sq.Ft.  
 BORDER TYPE: FLUSH  
 RECESS: 0.59"  
 WIDTH: 0.75"  
 RADII: 1.38"  
 NO. Z BARS: N/A MAT'L:  
 LENGTH: N/A

BORDER  
 R=1.38"  
 TH=0.75"  
 IN=0.59"

LETTER POSITIONS

Letter spacings are to start of next letter

	B	E	G	I	N	W		Series/Size
22.4	5.3	4.6	5.4	2.8	3.8	22.4		C7
	R	O	A	D				21.6
23.4	8	5.2	5.8	3.8	23.4			C7
	W	O	R	K				19.8
22.8	6.4	5.6	5.2	4	22.8			C7
								21.2

Spacing Factor is 1 unless specified otherwise  
 FILENAME: SP03353AK NORTH CAROLINA D.O.T. SIGN DETAIL

STATE OF NORTH CAROLINA  
 DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 RALEIGH, N.C.

DETAIL DRAWING FOR  
 WORK ZONE SIGNS  
 BEGIN ROAD WORK

GENERAL NOTES FOR SIGN SP-03353 "BEGIN ROAD WORK"

- SIGN SP-03353 "BEGIN ROAD WORK" ONLY APPLIES TO FULL CONTROL AND PARTIAL CONTROL OF ACCESS ROADWAYS
- WHEN USED, INSTALL SIGN SP-03353 "BEGIN ROAD WORK" ACCORDING TO DETAIL FOR FREEWAY WORK ZONE SIGNS

SHEET 1 OF 1

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

SEAL

DETAIL DRAWING FOR  
 ADVANCED WORK ZONE WARNING  
 SIGN DESIGNS

SCALE: NONE	REVISIONS
DATE: 0803	0404
DWG. BY:	1104
DESIGN BY:	
REVIEWED BY:	

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