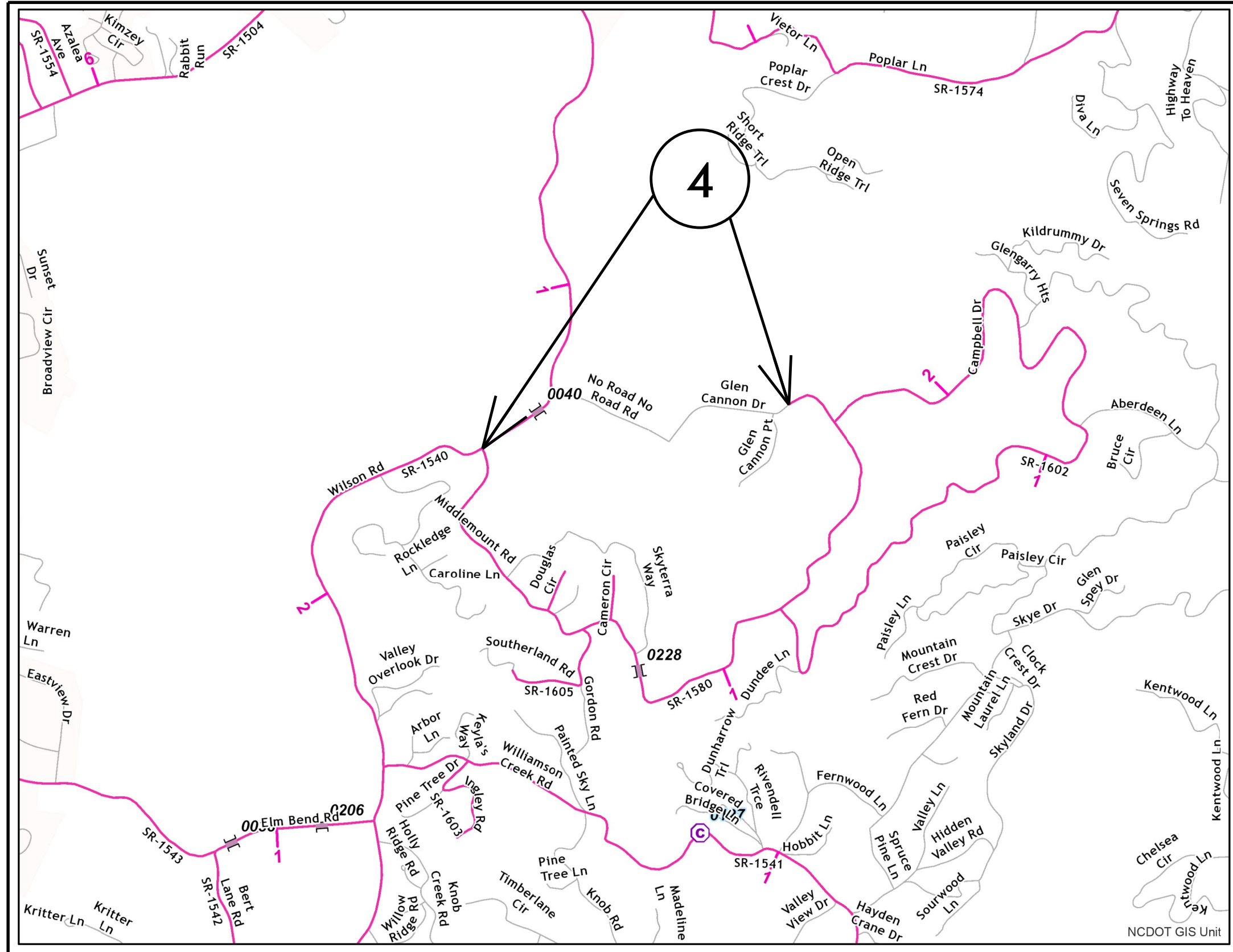


TRANSYLVANIA COUNTY

PROJECT REFERENCE NO.		SHEET NO.
2022CPT.14.07.20881		4
STATE PROJECT	F.A. PROJECT NO.	DESCRIPTION

TIP PROJECT: N/A

CONTRACT: C204681



MAP 4



BEG

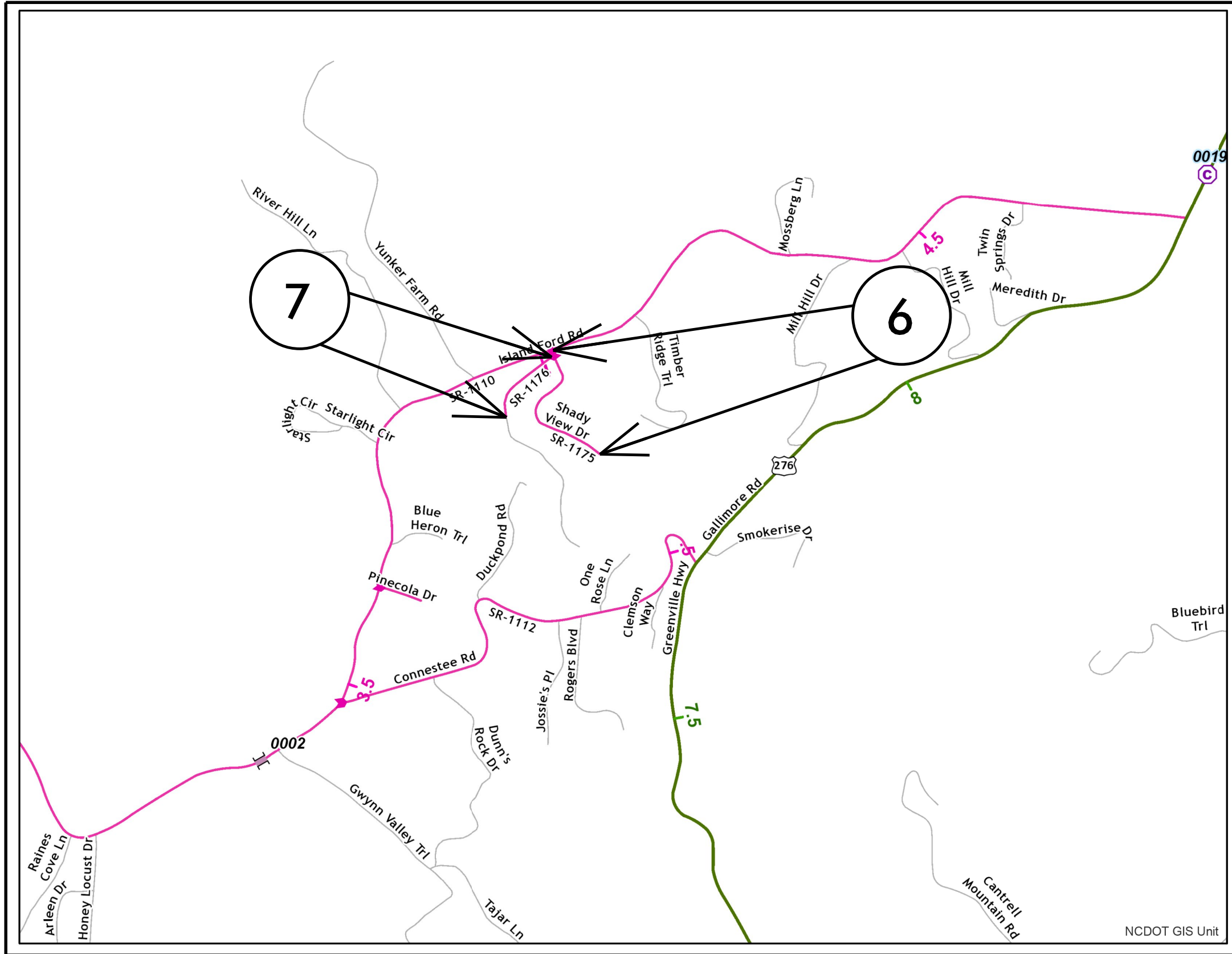
END

TRANSYLVANIA COUNTY

PROJECT REFERENCE NO.		SHEET NO.
2022CPT.14.07.20881		6
STATE PROJECT	F.A. PROJECT NO.	DESCRIPTION

TIP PROJECT: N/A

CONTRACT: C204681



MAP 6



BEG



END

MAP 7



BEG



END

PROJECT REFERENCE NO.	SHEET NO.	
2022CPT.14.07.20881	7	
STATE PROJECT	F.A. PROJECT NO.	DESCRIPTION

TRANSYLVANIA COUNTY

TIP PROJECT: N/A

CONTRACT: C204681



MAP 8



BEG

END

MAP 9



BEG

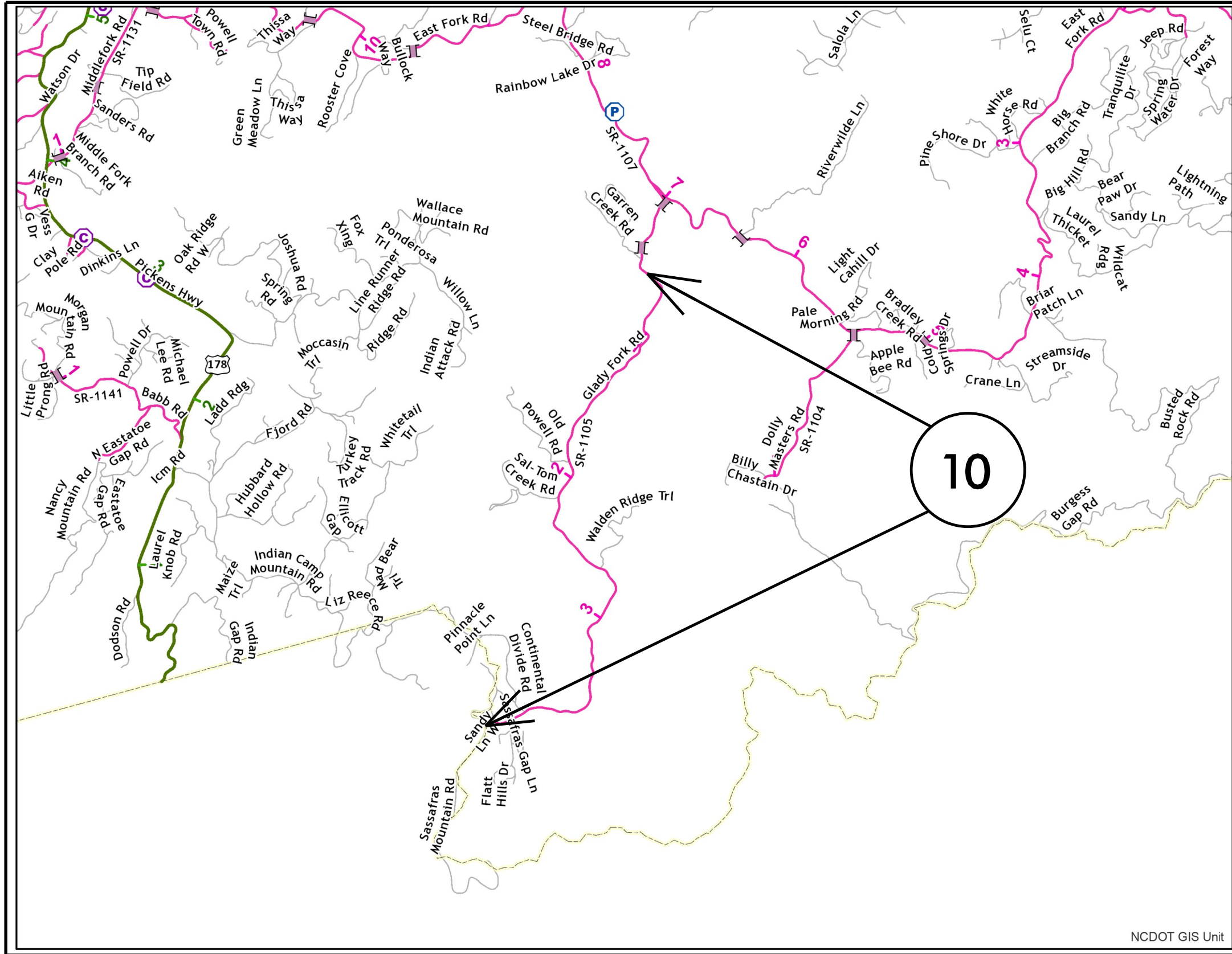
END

PROJECT REFERENCE NO.	SHEET NO.
2022CPT.14.07.20881	8
STATE PROJECT	F.A. PROJECT NO.
	DESCRIPTION

TRANSYLVANIA COUNTY

TIP PROJECT: NA

CONTRACT: C204681



MAP 10



BEG



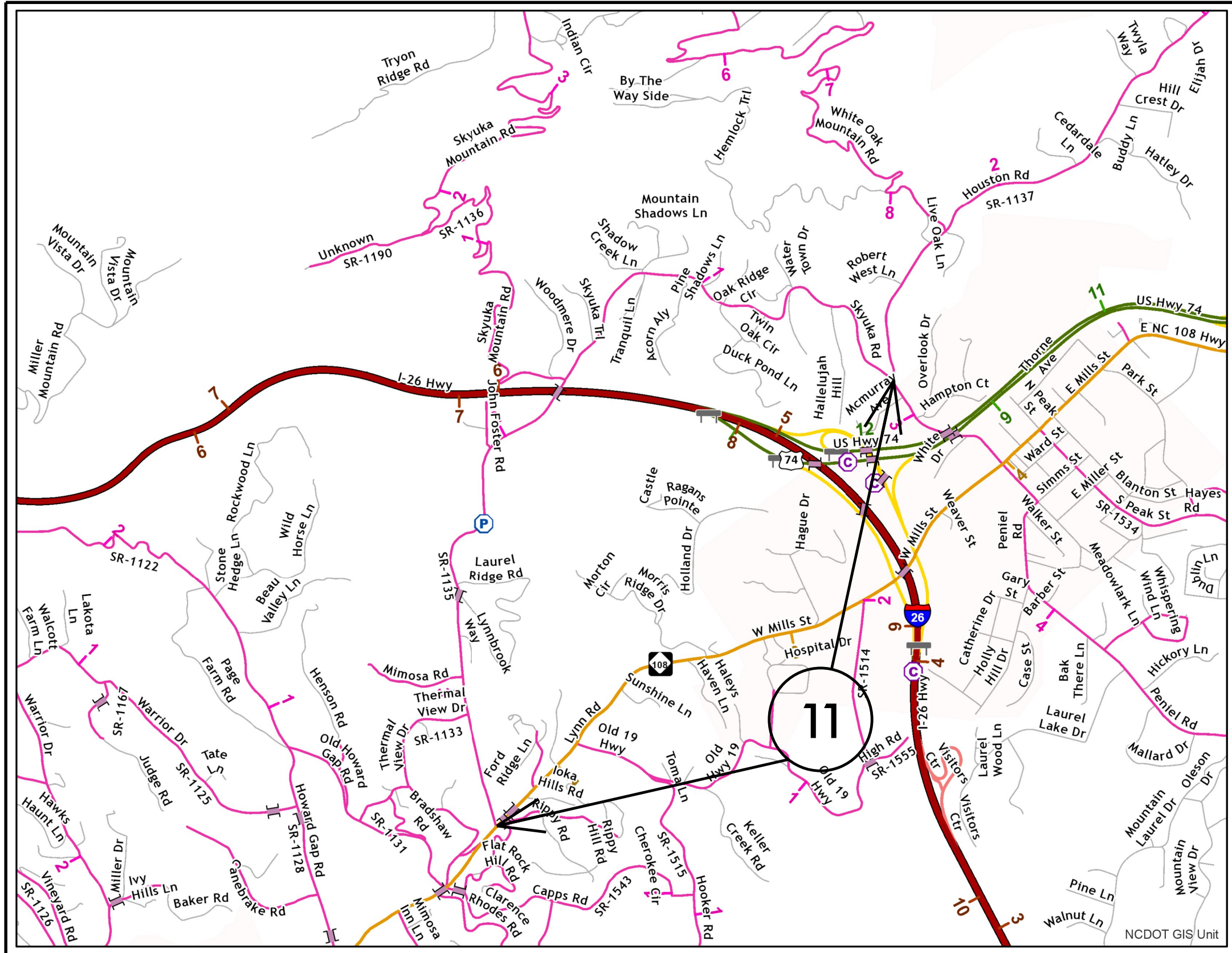
END

PROJECT REFERENCE NO.	SHEET NO.
2022CPT.14.07.20751	9
STATE PROJECT	F.A. PROJECT NO.
	DESCRIPTION

POLK COUNTY

TIP PROJECT: N/A

CONTRACT: C204681



MAP 11



BEG

END

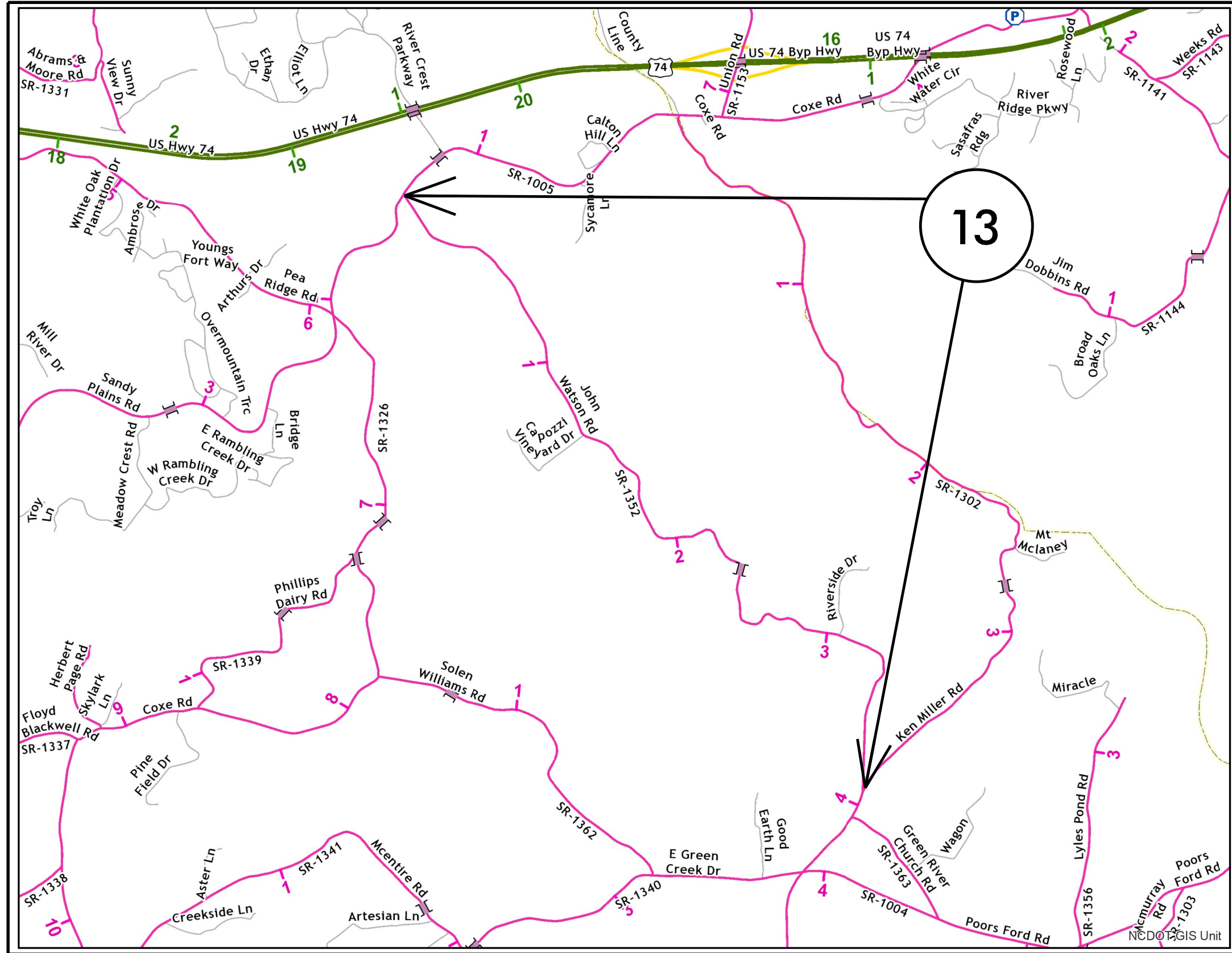
NCDOT GIS Unit

PROJECT REFERENCE NO.	SHEET NO.	
2022CPT.14.07.20751	11	
STATE PROJECT	F.A. PROJECT NO.	DESCRIPTION

POLK COUNTY

TIP PROJECT: NA

CONTRACT: C204681



MAP 13



BEG



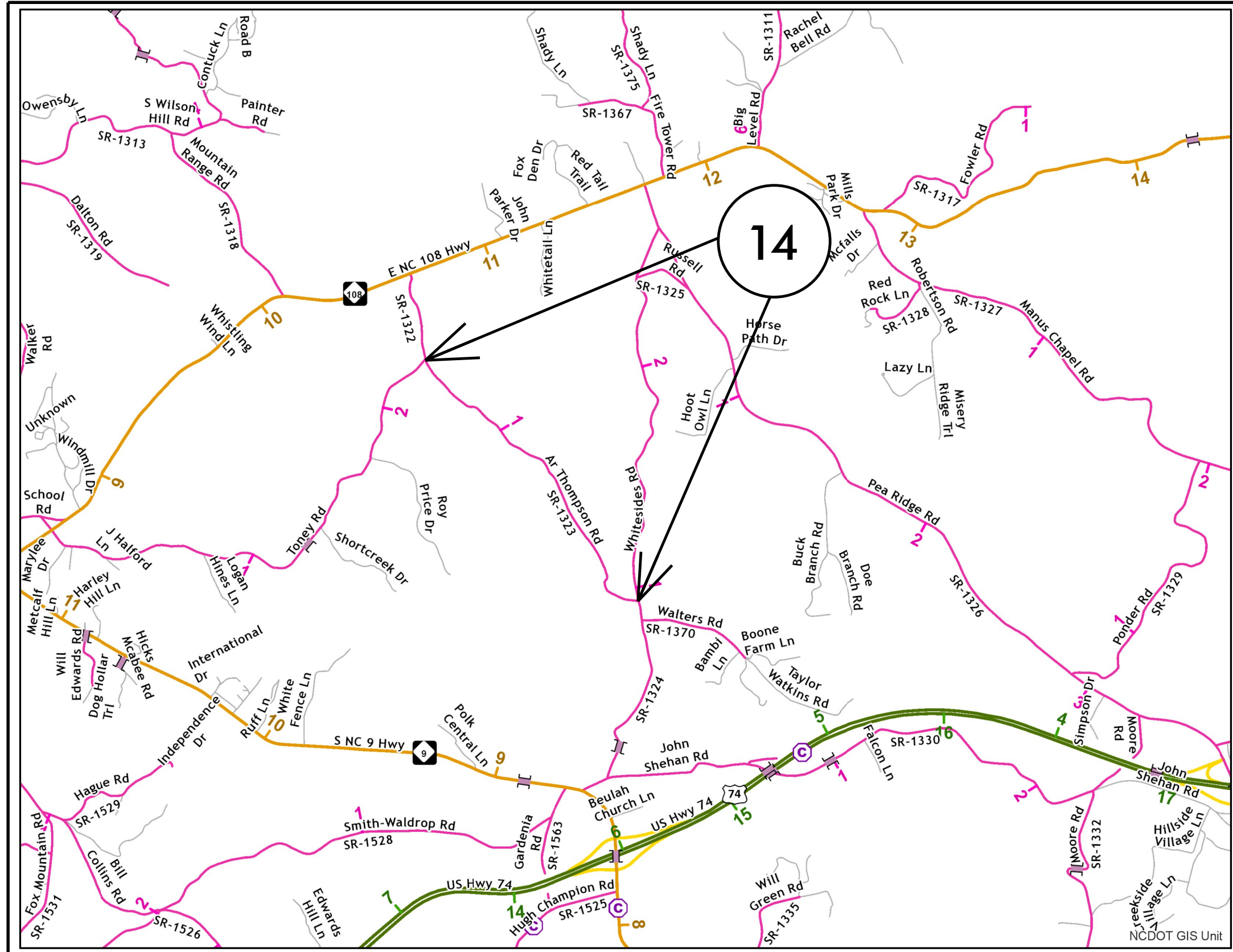
END

PROJECT REFERENCE NO.	SHEET NO.	
2021CPT.14.09.20751	12	
STATE PROJECT	F.A. PROJECT NO.	DESCRIPTION

POLK COUNTY

TIP PROJECT: N/A

CONTRACT: C204681



MAP 14



BEG



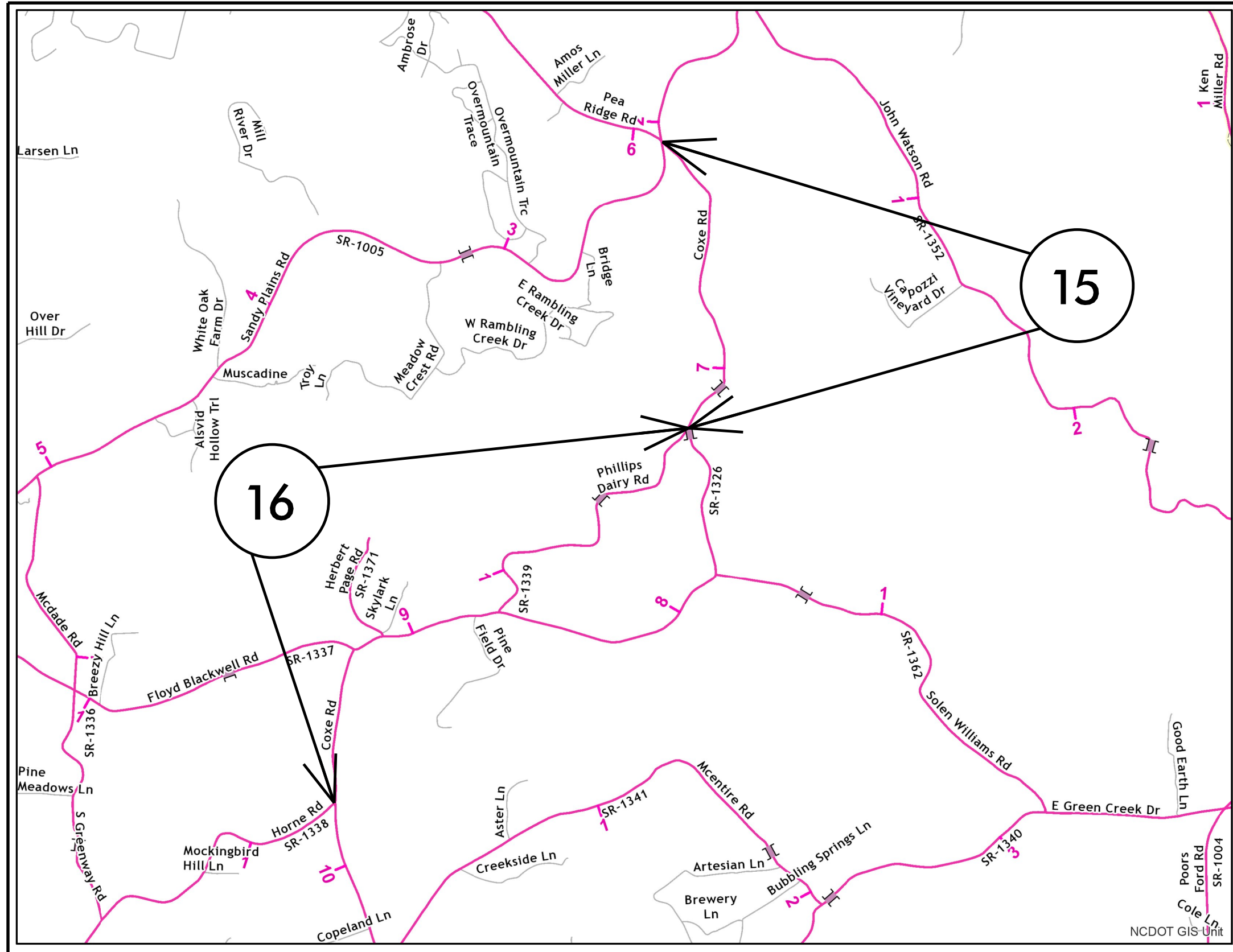
END

PROJECT REFERENCE NO.		SHEET NO.
2021CPT.14.09.20751		13
STATE PROJECT	F.A. PROJECT NO.	DESCRIPTION

POLK COUNTY

TIP PROJECT: N/A

CONTRACT: C204681



MAP 15



BEG



END

MAP 16



BEG



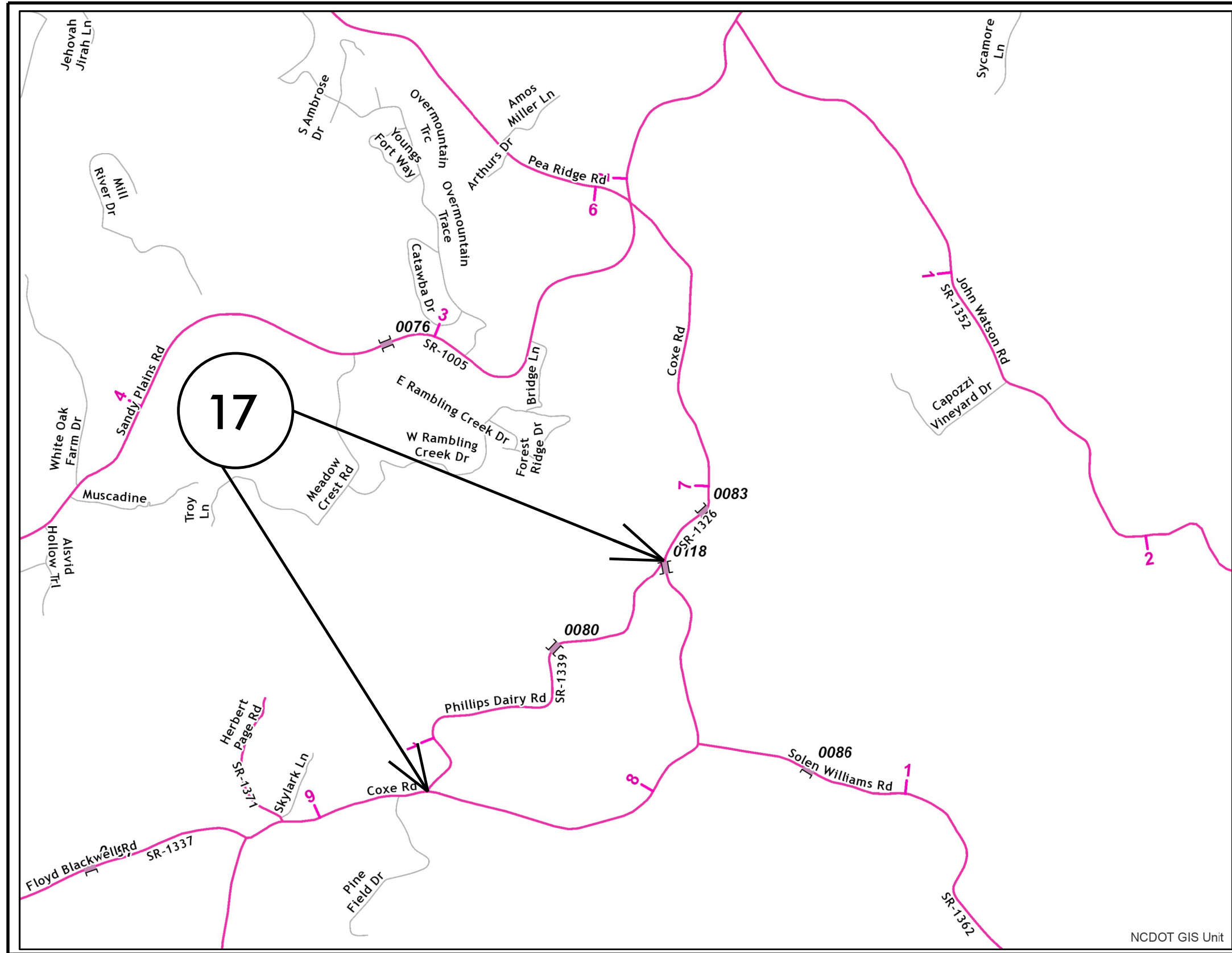
END

PROJECT REFERENCE NO.		SHEET NO.
2021CPT.14.09.20751		14
STATE PROJECT	F.A. PROJECT NO.	DESCRIPTION

POLK COUNTY

TIP PROJECT: N/A

CONTRACT: C204681



MAP 17



BEG



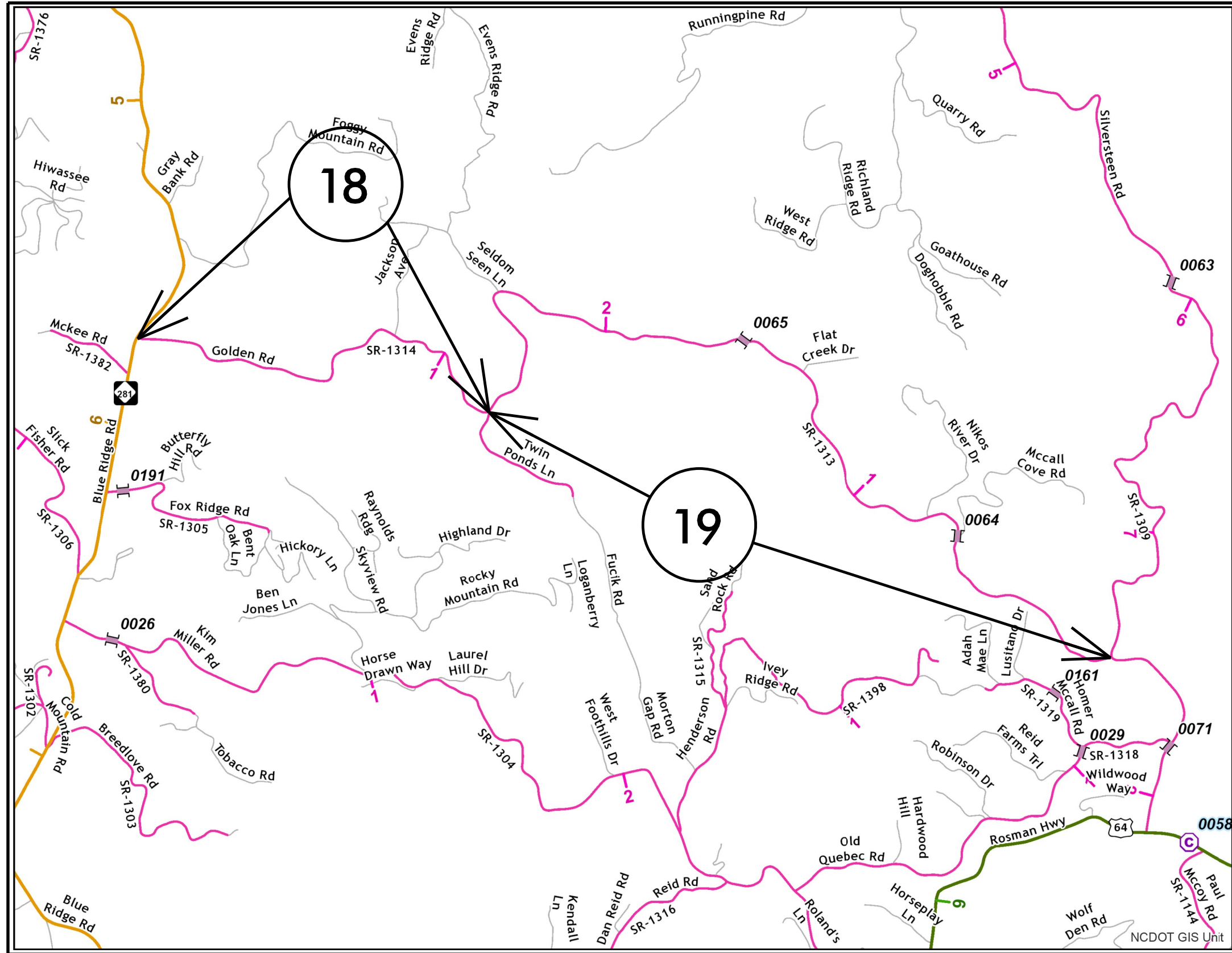
END

TRANSYLVANIA COUNTY

PROJECT REFERENCE NO.		SHEET NO.
2021CPT.14.09.20881		15
STATE PROJECT	F.A. PROJECT NO.	DESCRIPTION

TIP PROJECT: N/A

CONTRACT: C204681



MAP 18



BEG



END

MAP 19



BEG



END



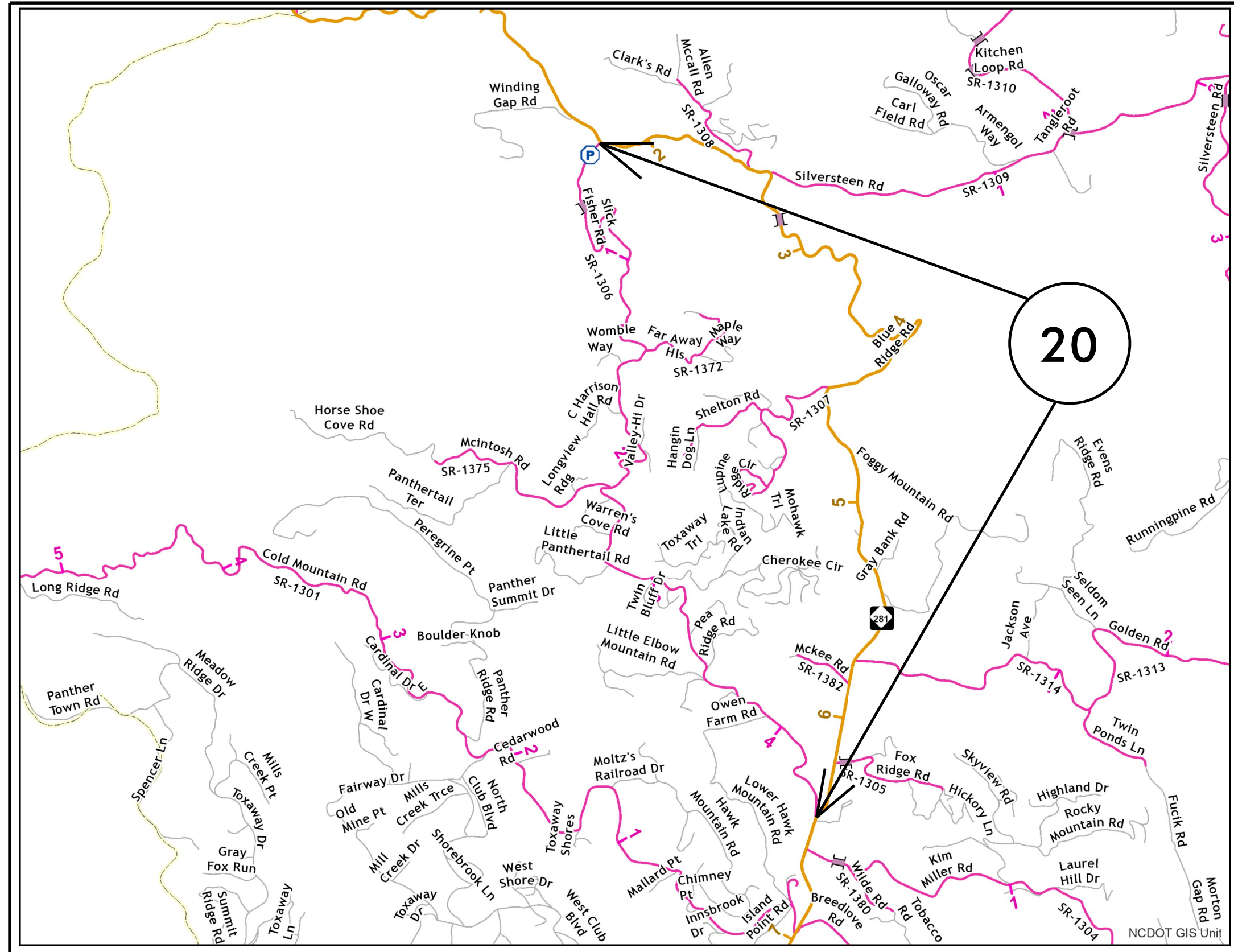
NCDOT GIS Unit

PROJECT REFERENCE NO.	SHEET NO.	
2021CPT.14.09.20881	16	
STATE PROJECT	F.A. PROJECT NO.	DESCRIPTION

TRANSYLVANIA COUNTY

TIP PROJECT: N/A

CONTRACT: C204681



MAP 20

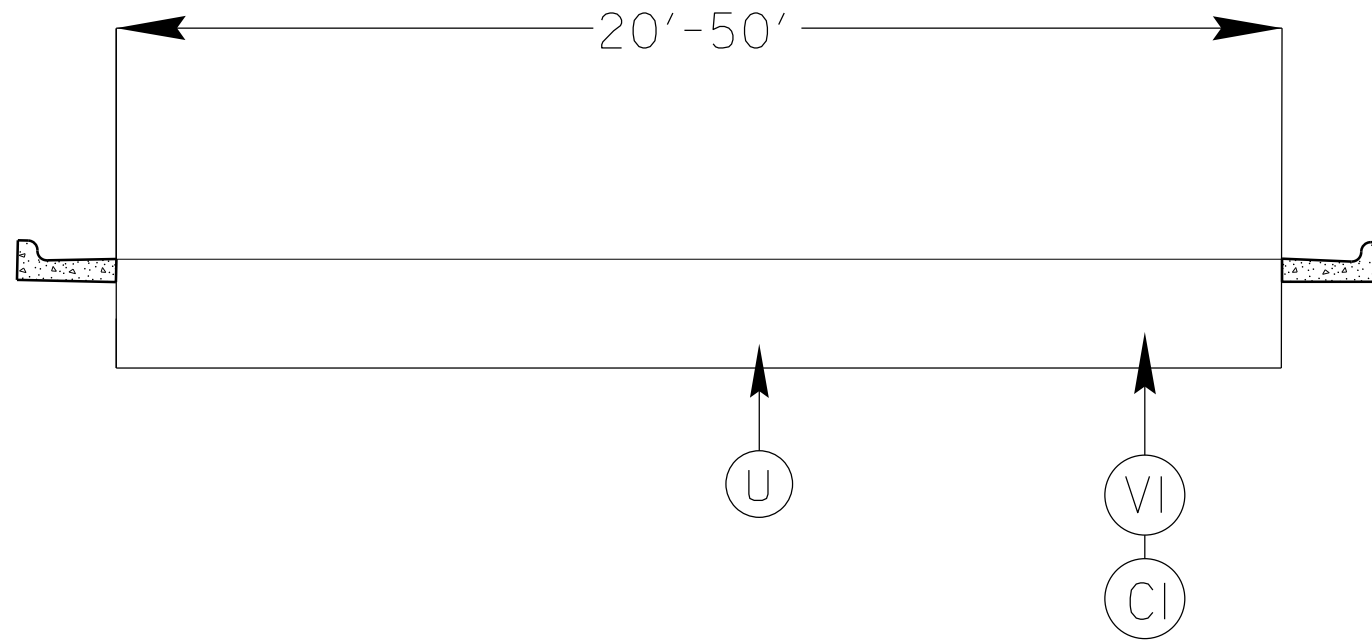


BEG



END

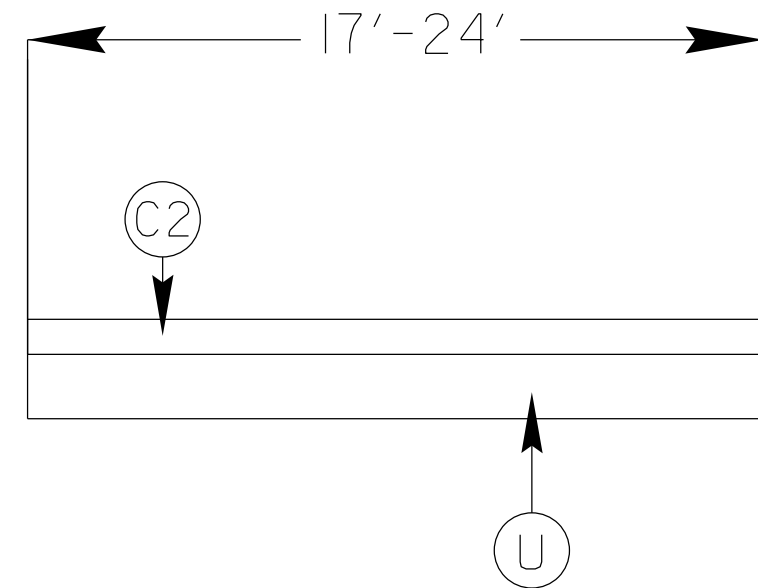
TYPICAL 1



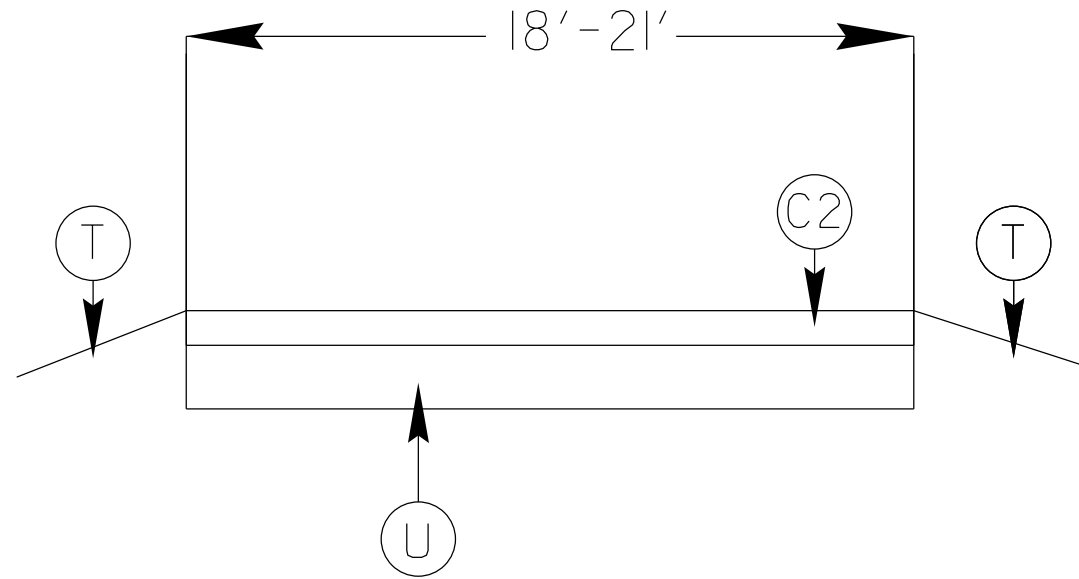
SURFACING SCHEDULE

ITEM NO	DESCRIPTION
C1	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 165 LBS.PER.SQ.YD
C2	PROP. APPROX. 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 137.5 LBS.PER.SQ.YD
C3	PROP. APPROX. 3/4" ASPHALT CONCRETE SURFACE COURSE, (LEVELING) TYPE S9.5B AT AN AVERAGE RATE OF 82.5 LBS.PER.SQ.YD
VI	MILLED ASPHALT PAVEMENT 1 1/2" IN DEPTH IN LOCATIONS AS DIRECTED BY PROJECT ENGINEER
T	SHOULDER RECONSTRUCTION
U	EXISTING ASPHALT

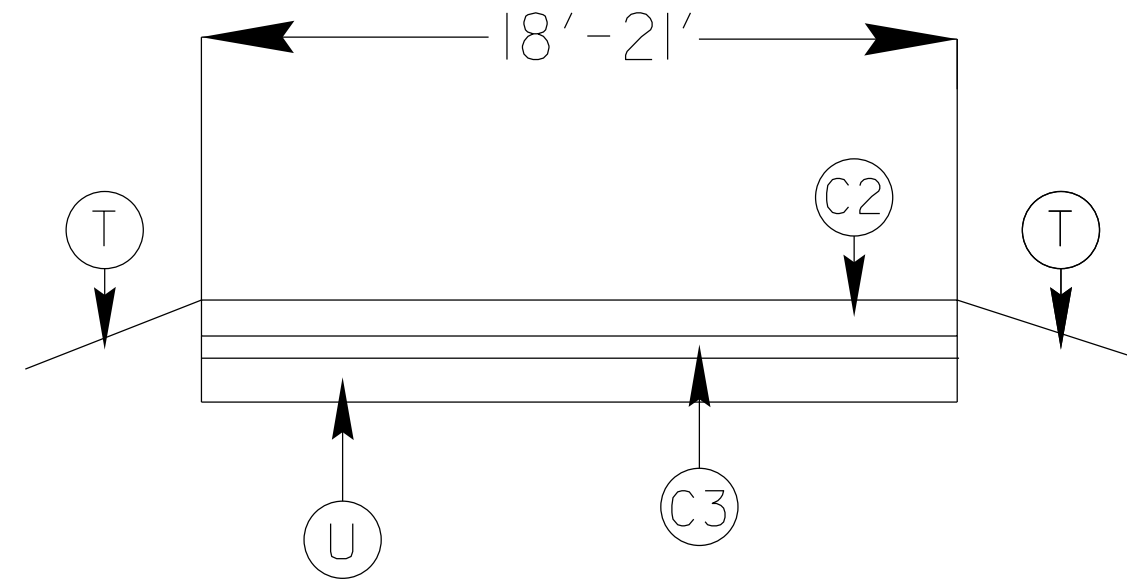
TYPICAL 2



TYPICAL 3



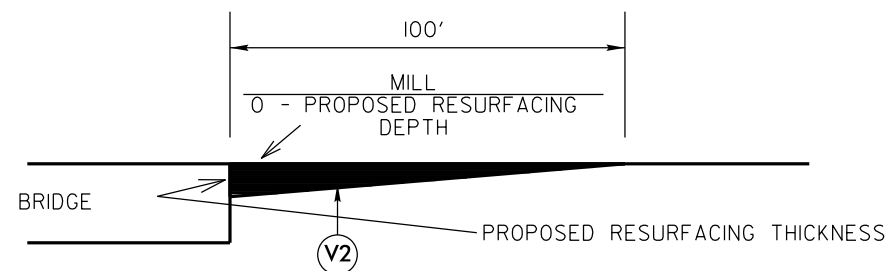
TYPICAL 4



SURFACING SCHEDULE

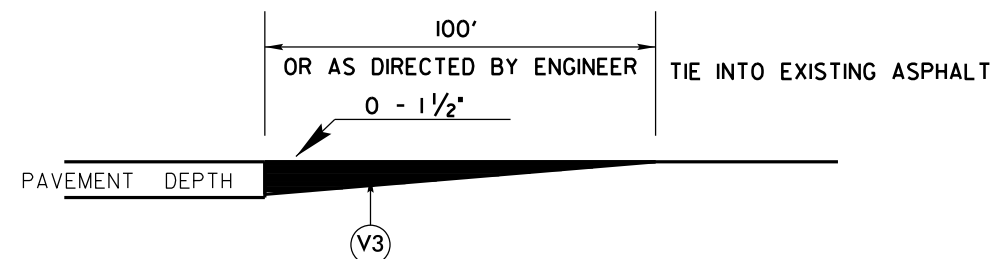
ITEM NO	DESCRIPTION
C1	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 165 LBS.PER.SQ.YD
C2	PROP. APPROX. 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 137.5 LBS.PER.SQ.YD
C3	PROP. APPROX. 3/4" ASPHALT CONCRETE SURFACE COURSE, (LEVELING) TYPE S9.5B AT AN AVERAGE RATE OF 82.5 LBS.PER.SQ.YD
V1	MILLED ASPHALT PAVEMENT 1 1/2" IN DEPTH IN LOCATIONS AS DIRECTED BY PROJECT ENGINEER
T	SHOULDER RECONSTRUCTION
U	EXISTING ASPHALT

PROJECT REFERENCE NO.		SHEET NO.
2022CPT.14.07.10881		19
STATE PROJECT	F.A. PROJECT NO.	DESCRIPTION
2022CPT.14.07.20881		
2022CPT.14.07.20751		



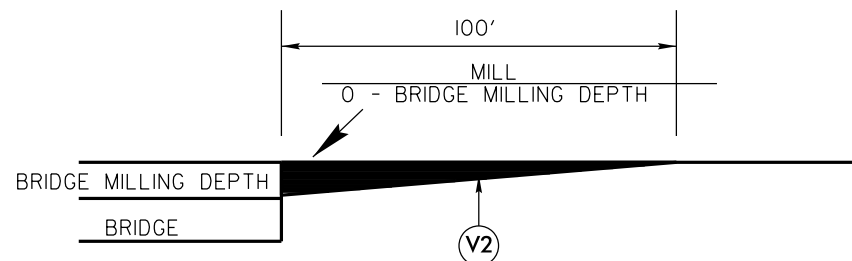
MILLING DETAIL AT BRIDGE APPROACHES

**WHERE BRIDGES WILL NOT BE RESURFACED.
THIS WILL BE PAID FOR AS INCIDENTAL MILLING.**



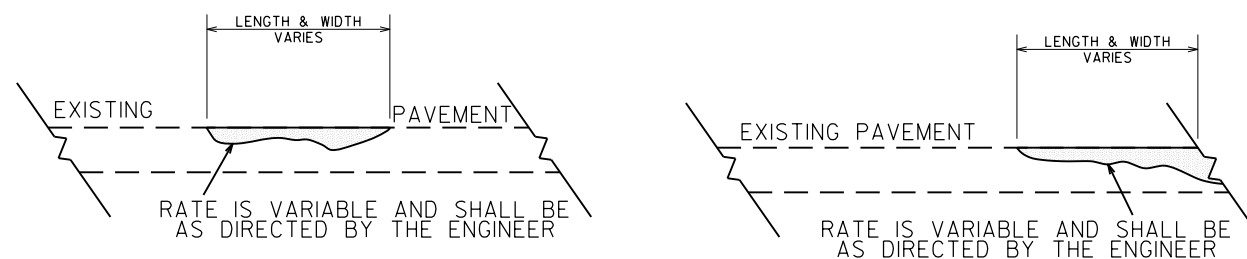
DETAIL TO TIE INTO EXIST PAVEMENT

THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT HE WILL BE REQUIRED TO MILL THE EXISTING ASPHALT PAVEMENT TO ENSURE A PROPER TIE-IN WITH THE EXISTING SURFACE AT THE BEGINNING, END AND Y LINES OF EACH MAP TO BE RESURFACED WITH ASPHALT CONC SURFACE COURSE, TYPE S9.5B. THIS WILL BE PAID FOR AS INCIDENTAL MILLING.



MILLING DETAIL AT BRIDGE APPROACHES

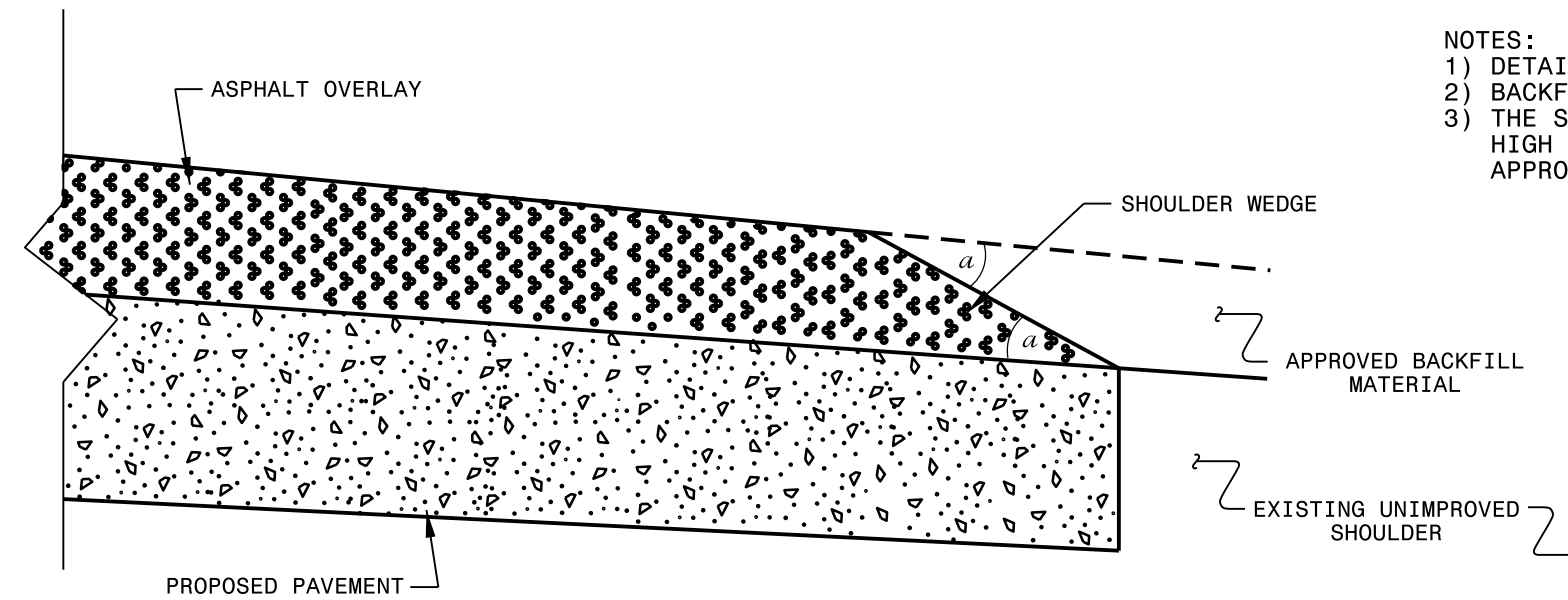
**WHERE BRIDGES WILL BE MILLED THEN RESURFACED.
THIS WILL BE PAID FOR AS INCIDENTAL MILLING.**



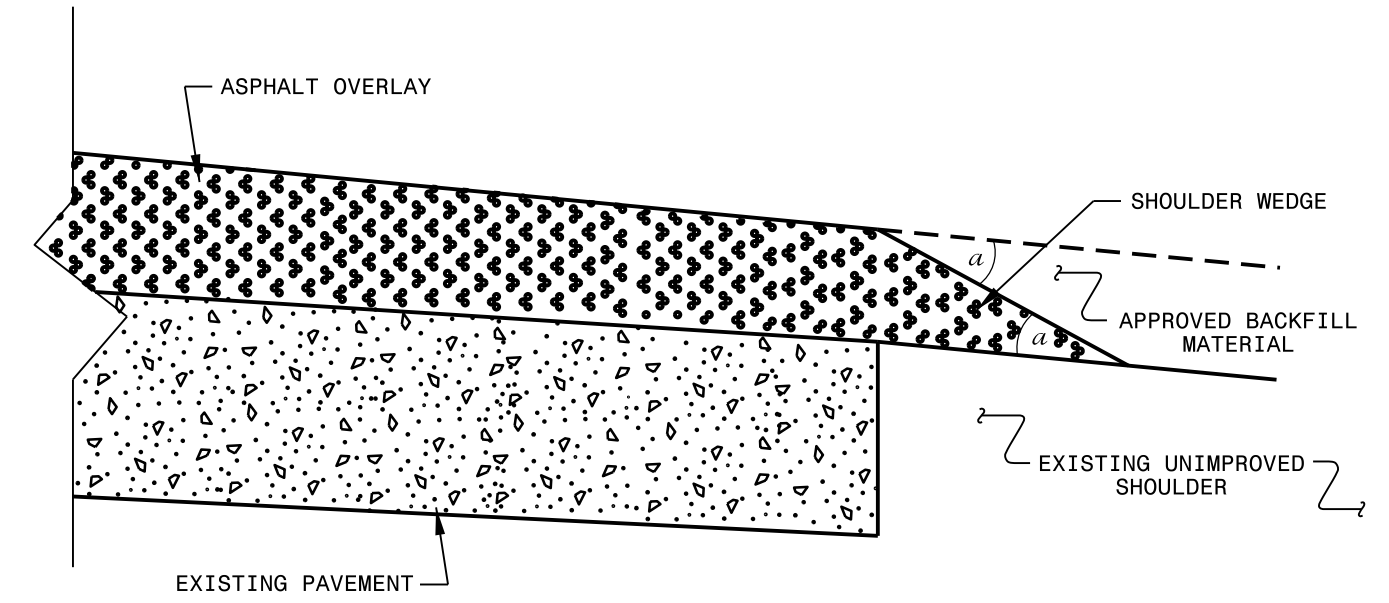
DETAIL SHOWING METHOD OF WEDGING

Bridge Milling Table					
Map #	Bridge #	Bridge Milling	Bridge Approach Milling	Pave Across Bridge	Posted
2	107	No	Yes	No	No
4	228	Yes	Yes	Yes	SV 24, TT 33
5	129	No	Yes	No	No
11	96	No	Yes	No	No
13	75	No	No	Yes	No
15	83	No	No	Yes	No
16	118	No	No	Yes	No
17	80	No	No	Yes	No
19	64	No	Yes	No	No
19	65	No	No	Yes	No
20	158	No	Yes	No	No

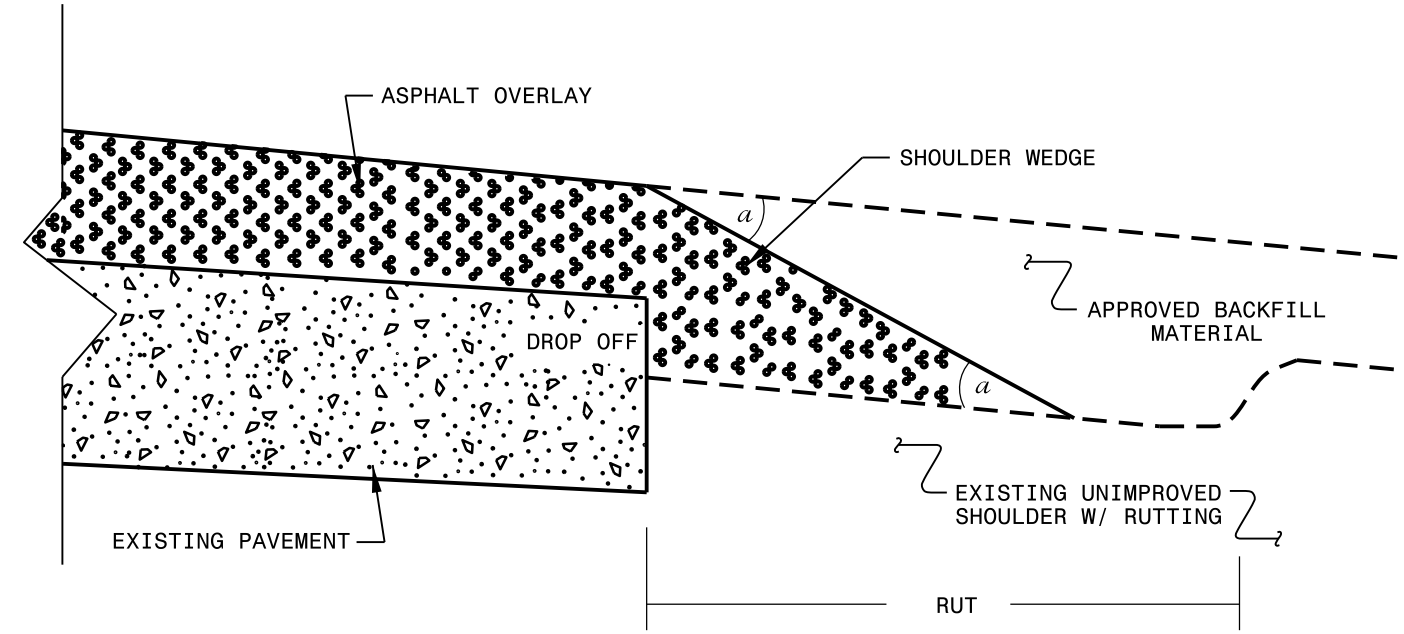
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFc AND ULTRA-THIN BONDED WEARING COURSE.
 - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS, SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT AS APPROVED BY THE ENGINEER.



SHOULDER WEDGE DETAIL
 (Resurfacing Projects w/ Widening or
 with Existing Paved Shoulder having no dropoffs)



SHOULDER WEDGE DETAIL
 (Resurfacing Projects w/ NO Widening)



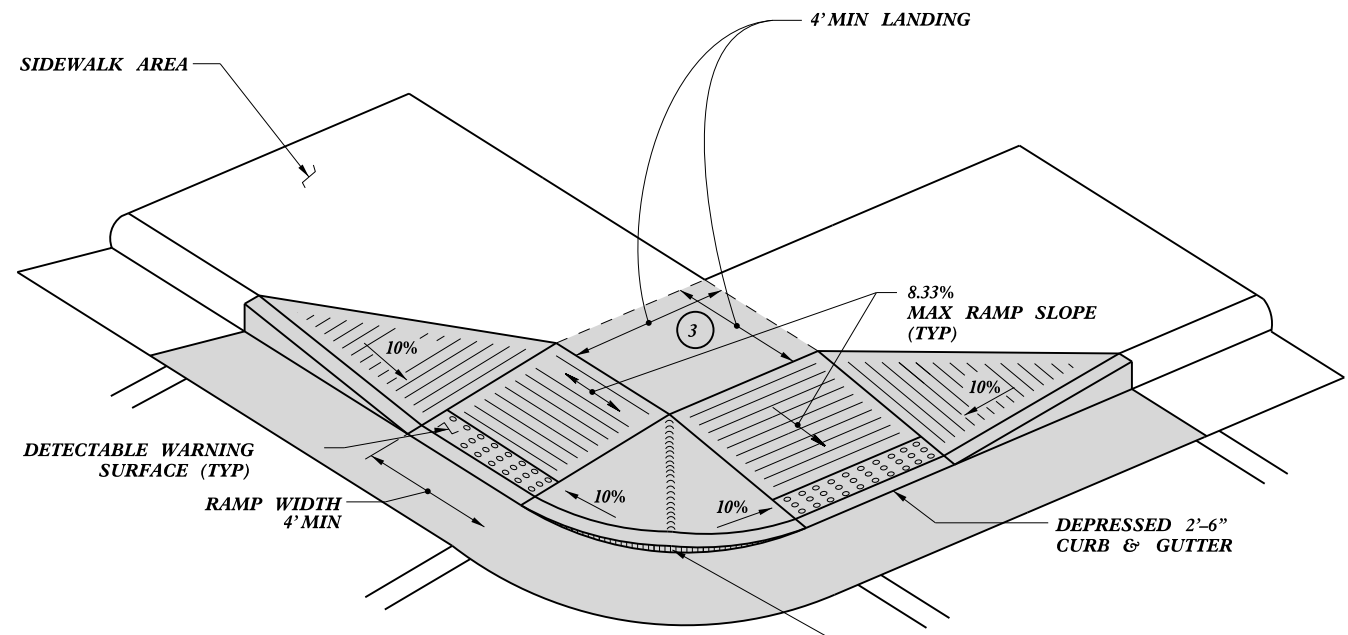
SHOULDER WEDGE DETAIL
 (Resurfacing Adjacent to
 Rutted Shoulder)

- SHOULDER WEDGE ANGLE = 30°

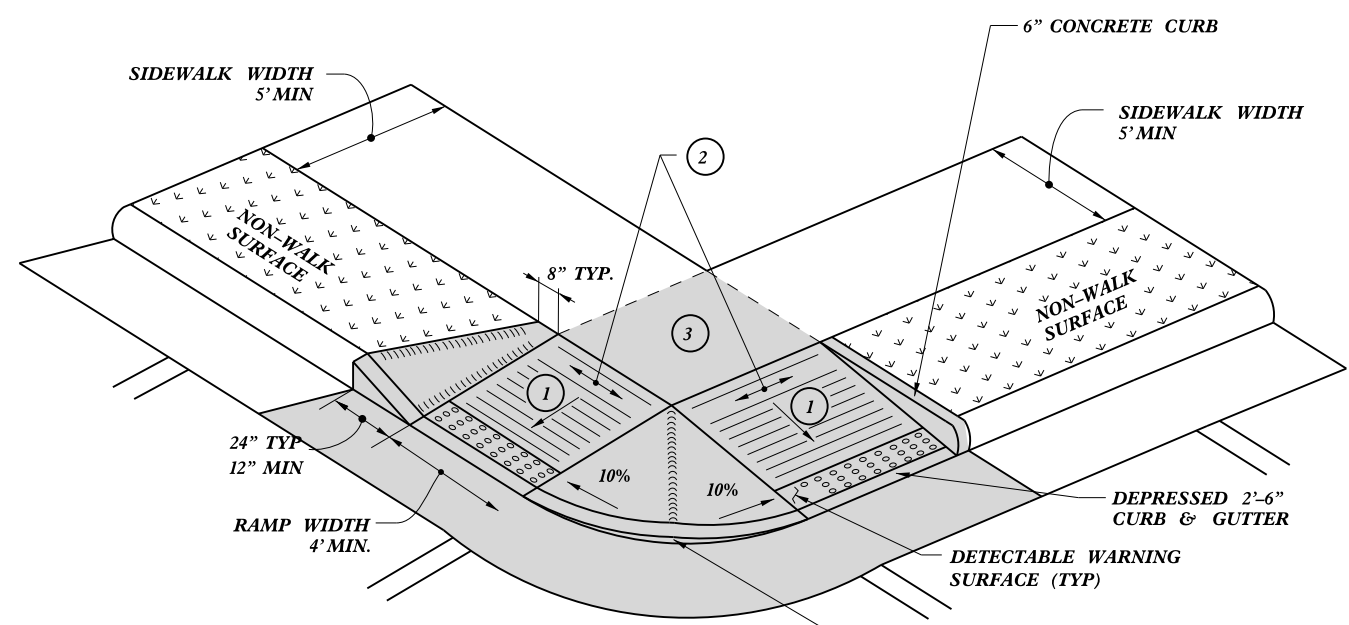
CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950 FAX 919-250-4119	
SHOULDER WEDGE DETAILS	
ORIGINAL BY: T.SPELL	DATE: 7-19-11
MODIFIED BY:	DATE: 2/2/16
CHECKED BY:	DATE:
FILE SPEC.: s:\usr\detatl1s\stand\shoulderwedgedetatl1.dgn	

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

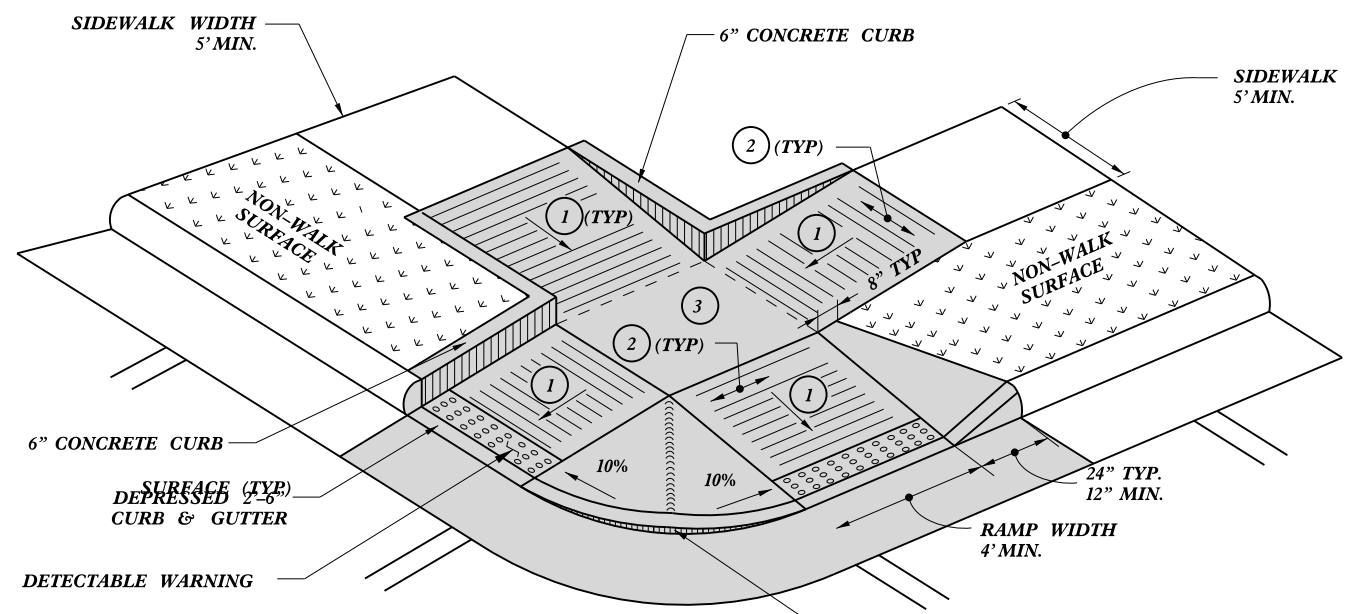
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 \$\$\$USERNAME\$\$\$



TYPE 4



TYPE 4A

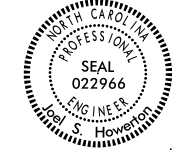


TYPE 5

PAY LIMITS FOR 2 CURB RAMPS

- 1 8.33% (12:1) MAX RAMP SLOPE
- 2 CROSS SLOPE: 2.00%
- 3 CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.

DocuSigned by:
Joel S Howerton
449E8E25522144F...



11/18/2015

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

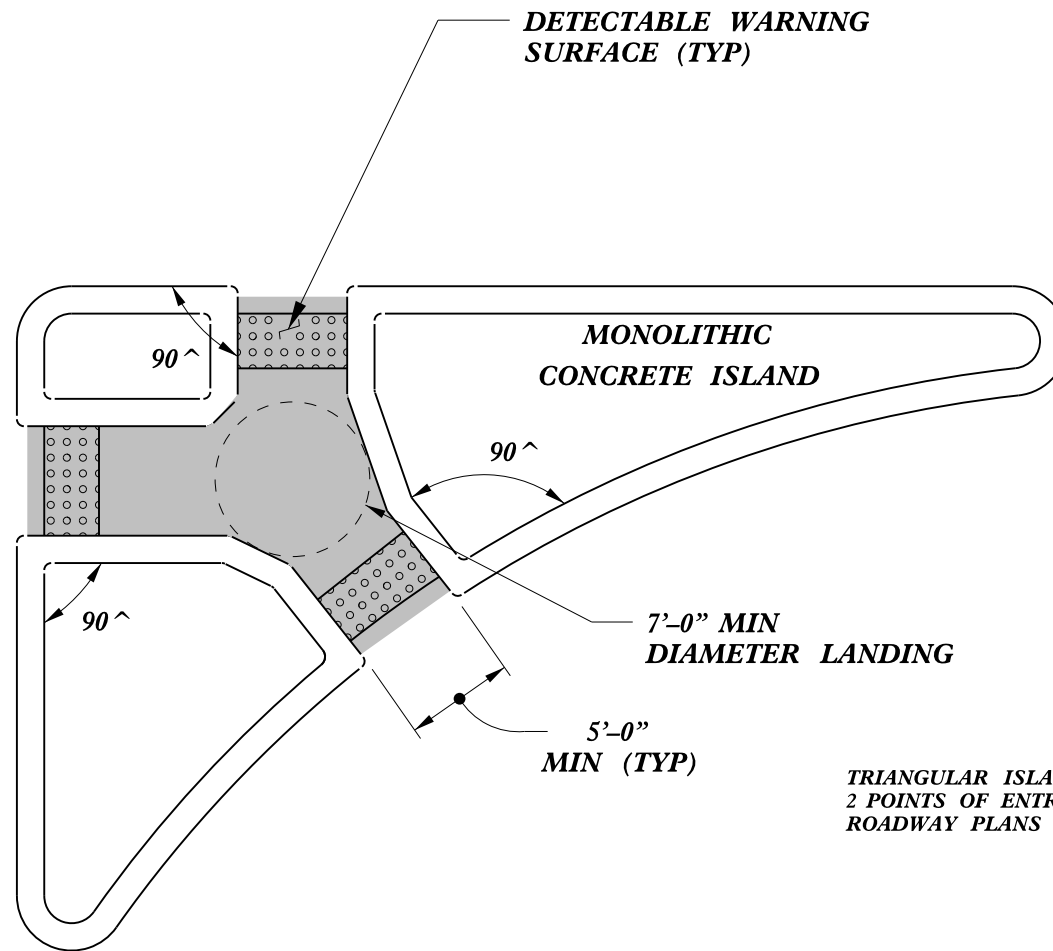
CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950	FAX 919-250-4119
CURB RAMPS	
Shared Landing	
ORIGINAL BY: J.S. HOWERTON	DATE: 7/7/11
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC. :stds/2012CurbRamp/CurbRampDetails.dwg	

REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES

5/14/99
SYTIME\$CON\$US\$RNAME\$
\$\$\$\$\$

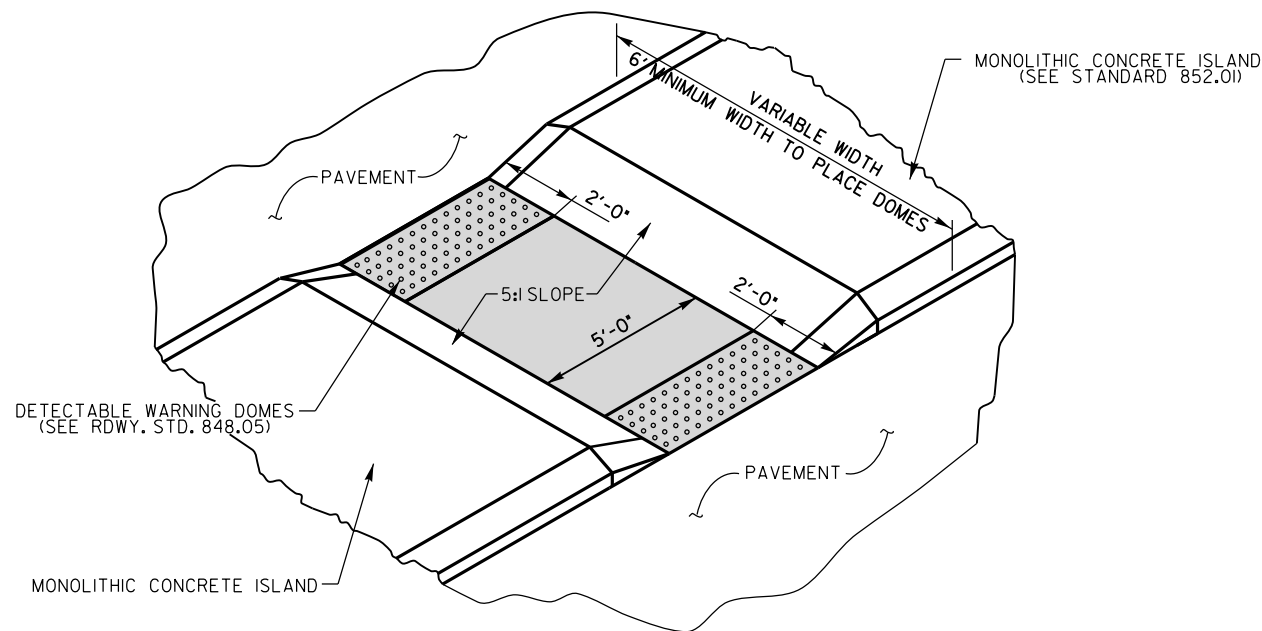
ETC.

PAY LIMITS FOR 2 OR 3 CURB RAMPS
(CALCULATE BASED ON NUMBER OF
SETS OF TRUNCATED DOMES)

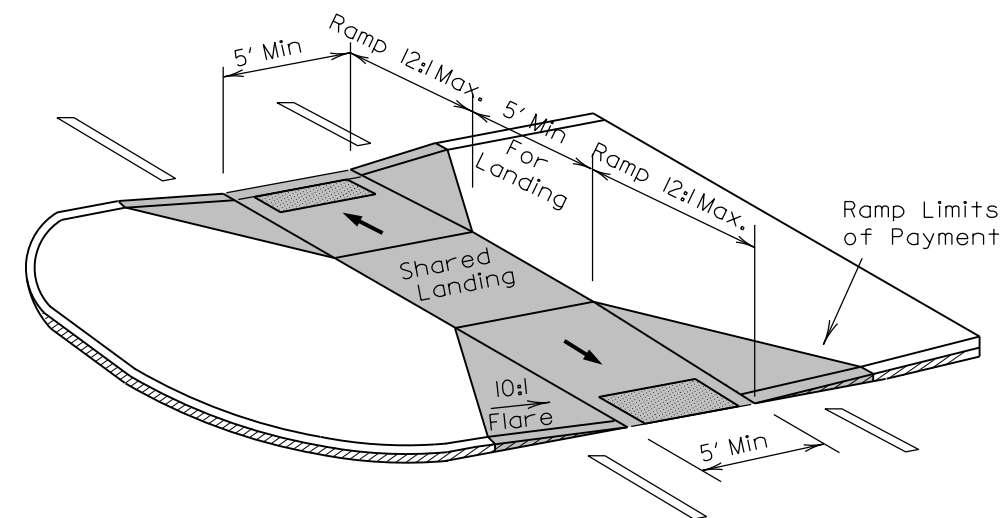


TRIANGULAR ISLANDS MAY BE CONSTRUCTED WITH ONLY
2 POINTS OF ENTRY AND EXIT AS SHOWN IN THE
ROADWAY PLANS OR AS DIRECTED BY THE ENGINEER.

**TRIANGULAR ISLAND
WITH CUT THROUGH**



**MEDIAN ISLAND
WITH CUT THROUGH**



**MEDIAN ISLAND
CURB RAMPS**

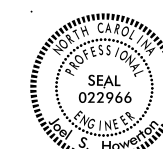
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

**CONTRACT STANDARDS
AND DEVELOPMENT UNIT**
Office 919-707-6950 FAX 919-250-4119

CURB RAMPS

Median or Turn Lane Islands

ORIGINAL BY: J.S. HOWERTON DATE: 7/7/11
MODIFIED BY: _____ DATE: _____
CHECKED BY: _____ DATE: _____
FILE SPEC: stds/2012CurbRamp/CurbRampDetails.dwg



DocuSign
Joel S. Howerton

11/18/2015

449E8E25522144F...

5/14/99
SYTIME
SERIAL
C:\PROGRAMS\AUTOCAD\ACAD\PLT\PLTNAME
\$\$\$\$

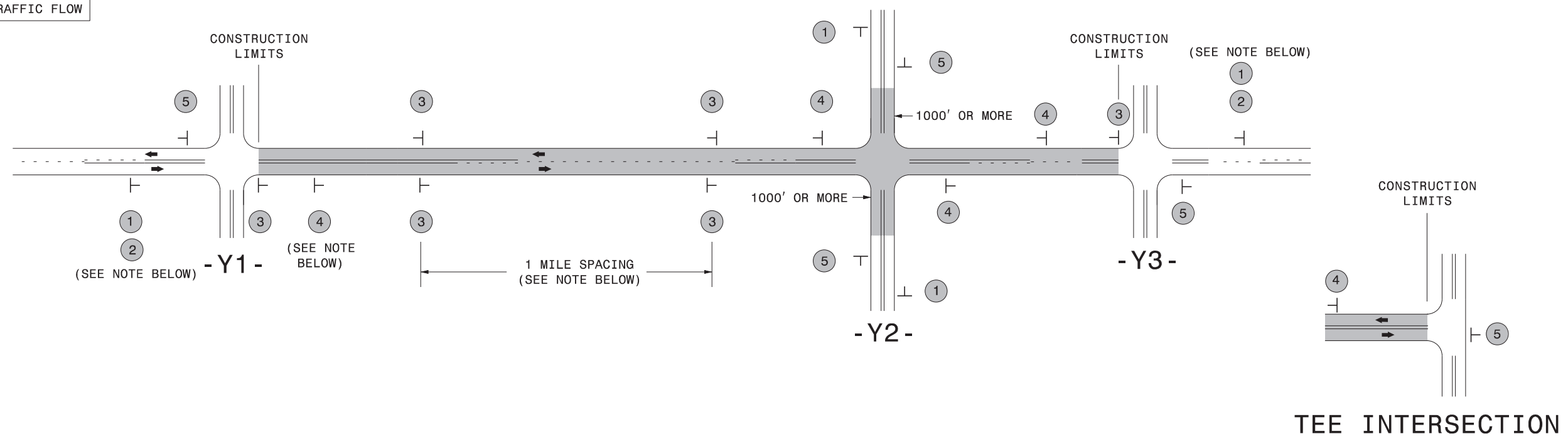
PROJECT NO.	SHEET NO.	TOTAL NO.
2022CPT.14.07.10881, 2022CPT.14.07.20881 2022CPT.14.07.20751, ETC.	27	

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	4413000000-E	4447000000-E	4457000000-N	4695000000-E	4725000000-E				4810000000-E		4835000000-E	4845000000-N		4890000000-E		4891000000-E	4720000000-E	4895000000-N								
										WORK ZONE ADVANCE/GENERAL WARNING SIGNING	PEDESTRIAN CHANNELIZING DEVICES	TEMPORARY TRAFFIC CONTROL	8" X 90 M WHITE THERMO	THERMO LT ARROW 90 M	THERMO STR & RT ARROW 90 M	THERMO STR ARROW 90 M	THERMO RT ARROW 90 M	4" WHITE PAINT	4" YELLOW PAINT	24" WHITE PAINT	PAINT LT ARROW	PAINT STR & RT ARROW	GENERIC PAVE. MARK ITEM 4" X 50 MIL WHITE HOT SPRAY THERMO	GENERIC PAVE. MARK ITEM 4" X 50 MIL YELLOW HOT SPRAY THERMO.	GENERIC PAVEMENT MARKING ITEM 24" 90MIL THERMO MARKING LINE	THERMO CHARACTERS 90 MIL MSG "SCHOOL"	NON-CAST IRON SNOWPLOWABLE PAVEMENT MARKERS								
									MI	FT	SF	LF	LS	LF	EA	EA	EA	EA	LF	LF	LF	EA	EA	LF	LF	LF	EA	EA							
2022CPT.14.07.10881	Transylvania	1	US 276	FROM SR-1118 TO US 64	1	3	MU	0.8	40	126	50	*	600	12	3	2	5			300					4,056	8,448	900	6	12						
TOTAL FOR MAP NO. 1									0.8		126	50	*	600	12	3	2	5			300					4,056	8,448	900	6	12					
TOTAL FOR PROJ NO. 2022CPT.14.07.10881									0.8		126	50	*	600	12	3	2	5			300						4,056	8,448	900	6	12				
														22								12,504													
2022CPT.14.07.20881	Transylvania	2	SR-1207 (BARCLAY) BRIDGE	FROM US 276 TO SR-1113	2	2	2WU	1.81	20	185										38,951	38,951														
TOTAL FOR MAP NO. 2									1.81		185												38,951	38,951											
2022CPT.14.07.20881	Transylvania	3	SR-1195 (CALVERT RD)	FROM SR-1388 TO SR-1388	2	2	2WU	1.16	20	184										24,963	24,963														
TOTAL FOR MAP NO. 3									1.16		184													24,963	24,963										
2022CPT.14.07.20881	Transylvania	4	SR-1580 (GLEN CANNON) BRIDGE	FROM SR-1540 TO END OF MAINT.	2	2	2WU	1.81	20	185										38,951	38,951														
TOTAL FOR MAP NO. 4									1.81		185														38,951	38,951									
2022CPT.14.07.20881	Transylvania	5	SR-1116 (NORTH COUNTRY CLUB)	FROM SR-1207 TO SR-1121	2	2	2WU	0.98	20	102										21,090	21,090														
TOTAL FOR MAP NO. 5									0.98		102														21,090	21,090									
2022CPT.14.07.20881	Transylvania	6	SR-1175 (SHADY VIEW)	FROM SR-1110 TO END OF MAINT.	2	2	2WU	0.13	17	13																									
TOTAL FOR MAP NO. 6									0.13		13																								
2022CPT.14.07.20881	Transylvania	7	SR-1176 (WHIPPOORWILL ROAD)	FROM SR-1175 TO EOM	2	2	2WU	0.14	17	13																									
TOTAL FOR MAP NO. 7									0.14		13																								
2022CPT.14.07.20881	Transylvania	8	SR-1349 (W MAIN STREET)	FROM US 64 TO CALDWELL ST	1	3	MU	0.052	50	12										1,119	1,119	120	1	1			950								
TOTAL FOR MAP NO. 8									0.052		12													1,119	1,119	120	1	1			950				
2022CPT.14.07.20881	Transylvania	9	SR-1349 (W MAIN STREET)	FROM CALDWELL STREET TO OAKLAWN STREET	1	4	MU	0.15	50	12												2	2												
TOTAL FOR MAP NO. 9									0.15		12															2	2								
2022CPT.14.07.20881	Transylvania	10	SR-1105 (GLADY FORK ROAD)	FROM .6 MILES SOUTH OF SR-1107 TO SC LINE	3	2	2WU	3.6	21	367										77,472	77,472														
TOTAL FOR MAP NO. 10									3.6		367														77,472	77,472									
TOTAL FOR PROJ NO. 2022CPT.14.07.20881									9.832		1,073				*										202,546	202,546	120	3	3			950			
														405,092								6													
2022CPT.14.07.20751	Polk	11	SR-1135 (SKYUKA)	FROM NC 108 TO SR-1137	4	2	MU	3.49	18	349										73,168	73,168														
TOTAL FOR MAP NO. 11									3.49		349														73,168	73,168									
2022CPT.14.07.20751	Polk	12	SR 1360 (PHILLIP HENDERSON RD)	SR SR 1004 TO EOM	3	2	2WU	0.78	18	185										16,786	10,296														
TOTAL FOR MAP NO. 12									0.78		185														16,786	10,296									
2022CPT.14.07.20751	Polk	13	SR 1352 (JOHN WATSON RD)	SR 1005 TO SR 1302	3	2	2WU	3.84	18	349										82,637	50,688														
TOTAL FOR MAP NO. 13									3.84		349														82,637	50,688									
TOTAL FOR PROJ NO. 2022CPT.14.07.20751									8.11		883				*											172,591	134,152								
														306,743																					
2021CPT.14.09.20751	Polk	14	SR-1323 (AR THOMPSON)	FROM SR-1322 TO SR-1324	4	2	2WU	1.4	20	143										30,128	30,128														
TOTAL FOR MAP NO. 14									1.4		143														30,128	30,128									
2021CPT.14.09.20751	Polk	15	SR-1326 (COXE ROAD)	FROM SR-1005 TO SR-1339	2	2	2WU	2.6	18	265										55,952	55,952														
TOTAL FOR MAP NO. 15									2.6		265														55,952	55,952									
2021CPT.14.09.20751	Polk	16	SR-1326 (COXE ROAD)	FROM SR-1339 TO SR-1338	2	2	2WU	1	18	102										21,520	21,520														
TOTAL FOR MAP NO. 16									1		102														21,520	21,520									
2021CPT.14.09.20751	Polk	17	SR-1339 (PHILLIPS DAIRY ROAD)	FROM SR-1326 TO SR-1326	4	2	2WU	1.19	21	114										24,318	24,318														
TOTAL FOR MAP NO. 17									1.19		114														24,318	24,318									
TOTAL FOR PROJ NO. 2021CPT.14.09.20751									6.19		624				*										131,918	131,918									
														263,836																					
2021CPT.14.09.20881	Transylvania	18	SR-1314 (GOLDEN ROAD)	FROM NC 281 TO SR-1313	3	2	2WU	1.23	20	126										26,470	26,470														
TOTAL FOR MAP NO. 18									1.23		126														26,470	26,470									
2021CPT.14.09.20881	Transylvania	19	SR-1313 (GOLDEN ROAD)	FROM SR-1314 TO SR-1309	3	2	2WU	2.62	20	267										56,382	56,364														
TOTAL FOR MAP NO. 19									2.62		267														56,382	56,364									
2021CPT.14.09.20881	Transylvania	20	SR-1306 (SLICK FISHER)	FROM NC 281 TO NC 281	2	2	2WU	4.38	20	448										94,258	94,258														
TOTAL FOR MAP NO. 20									4.38		448														94,258	94,258									
TOTAL FOR PROJ NO. 2021CPT.14.09.20881									8.23		841				*										177,110	177,092									
														354,202																					
GRAND TOTAL									33.162		3,547	50	1	600	12	3	2	5	684,165	645,708	420	3	3	4,056	8,448	1,850	6	12							
														22								1,329,873													

SIGNING FOR RESURFACING PROJECTS

LEGEND
 ┆ STATIONARY SIGN
 ← DIRECTION OF TRAFFIC FLOW



MAINLINE (-L-) SIGNING

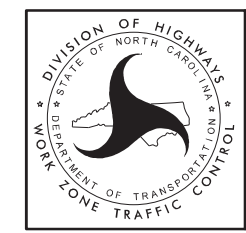
-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	1		PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.	<p>NO REQUIRED STATIONARY SIGNING 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;"> <div style="text-align: center;"> W20-1 48" X 48" PLACED 500' IN ADVANCE OF FLAGGER. </div> <div style="text-align: center;"> W20-7 A 48" X 48" PLACED 250' IN ADVANCE OF FLAGGER. </div> </div>
	2		#2 SIGN ONLY USED WHEN CONSTRUCTION LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO NEXT WHOLE NUMBER. (NO FRACTIONAL OR DECIMAL NUMBERS)	
	3		<ul style="list-style-type: none"> - PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER. - AT TEE INTERSECTIONS INSTALL INITIALLY 1/2 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. - FOR TEE INTERSECTIONS, INSTALL WITHIN 500' +/- OF THE INTERSECTION ALONG -L- LINE. 	
	5		PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.	

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.

MAPS LESS THAN 2 MILES

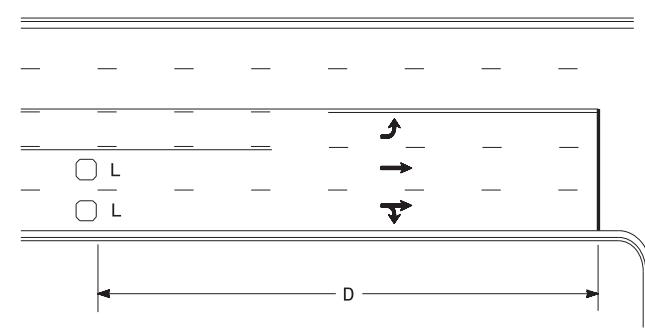
FOR RESURFACING MAPS WITH CONSTRUCTION LIMITS LESS THAN 2 MILES IN LENGTH, NO STATIONARY SIGNS ARE REQUIRED. USE PORTABLE "ROAD UNDER CONSTRUCTION" OR "ROAD WORK AHEAD" SIGNS IN LIEU OF STATIONARY ADVANCE WARNINGS SIGNS.



ADVANCE WARNING SIGNS FOR RURAL AND SUBURBAN 2-LANE ROADWAY RESURFACING

5/15/2017 S:\TMU\WZTC\Resurfacing\2L2W & AST Resurfacing Details\Resurfacing_AdvWarn_2Ln.dgn User:kedais

High Speed Detection (≥40 mph)

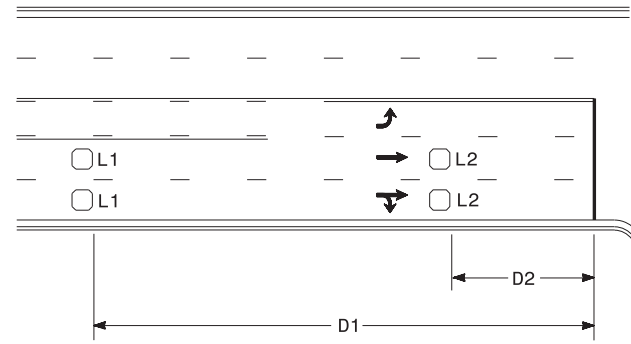


Speed Limit mph	D ft
40	250
45	300
50	355
55	420

L = 6ft X 6ft
Wired separately

Volume Density Operation

OR

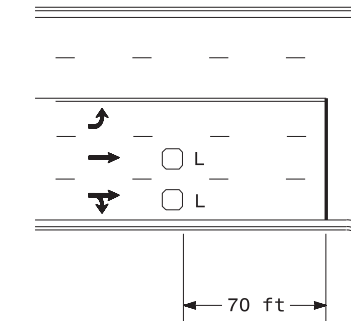


Speed Limit mph	D1 ft	D2 ft
40	250	80
45	300	90
50	355	100
55	420	110

L1 = 6ft X 6ft
Wired in series
L2 = 6ft X 6ft
Wired in series

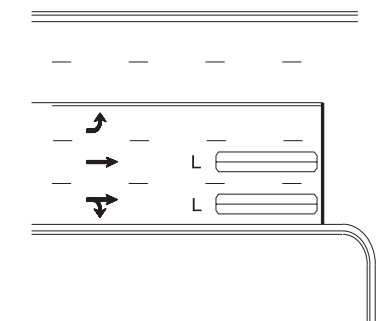
"Stretch" Operation

Low Speed Detection (≤35 mph)



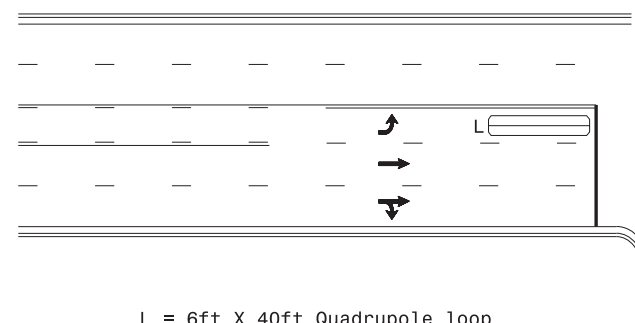
L = 6ft X 6ft
Wired in series

OR



L = 6ft X 40ft
Quadrupole loop, wired separately

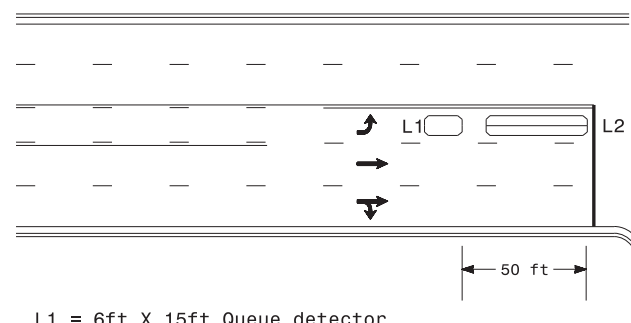
Left Turn Lane Detection



L = 6ft X 40ft Quadrupole loop

Presence Loop Detection

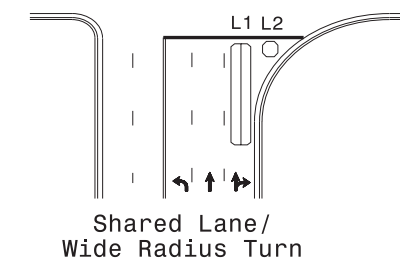
OR



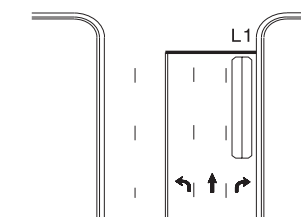
L1 = 6ft X 15ft Queue detector
L2 = 6ft X 40ft Quadrupole loop

Queue Loop Detection

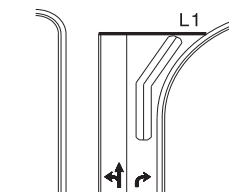
Right Turn Lane Detection



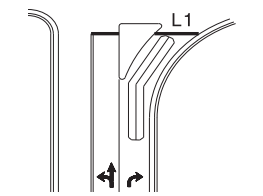
L1 = 6ft X 40ft Quadrupole loop
L2 = 6ft X 6ft [Minimum] Presence loop
Wired separately



Standard Turn

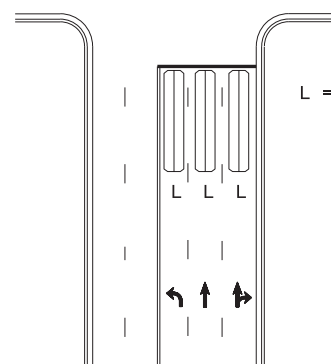


Wide Radius Turn



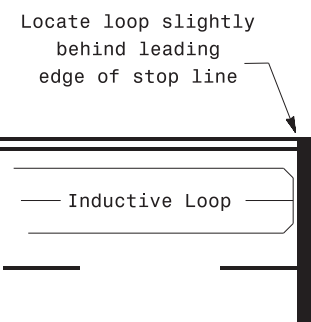
Channelized Turn

Side Street Detection



L = 6ft X 40ft
Quadrupole loop
Wired to separate
detectors/channels

Presence Loop Placement at Stop Lines



Note:
Loop may be located in advance of stop line under any of the following conditions:
1) stop line is greater than 15' from edge of intersecting roadway
2) loop detects a permissive or protected/permissive left turn
3) for an exclusive right turn lane

Recommended Number of Turns

Single 6' X 6' loop
(when wired separately):

Length of Lead-in ft	Number of Turns
< 250	3
250-375	4
375-525	5
> 525	6

Quadrupole loops: Use 2-4-2 turns

6' X 15' Loops:
Lead-in < 150', use 2 turns
Lead-in > 150', use 3 turns

750 N. Greenfield Pkwy, Garner, NC 27529

Prepared in the Offices of:

Typical Signal Loop Locations	
PLAN DATE: September 2020	REVIEWED BY: JPG
PREPARED BY: PLA	REVIEWED BY:
SCALE: N/A	DATE:
REVISIONS:	INIT. DATE:

9/8/2020
DATE

SIG. INVENTORY NO.