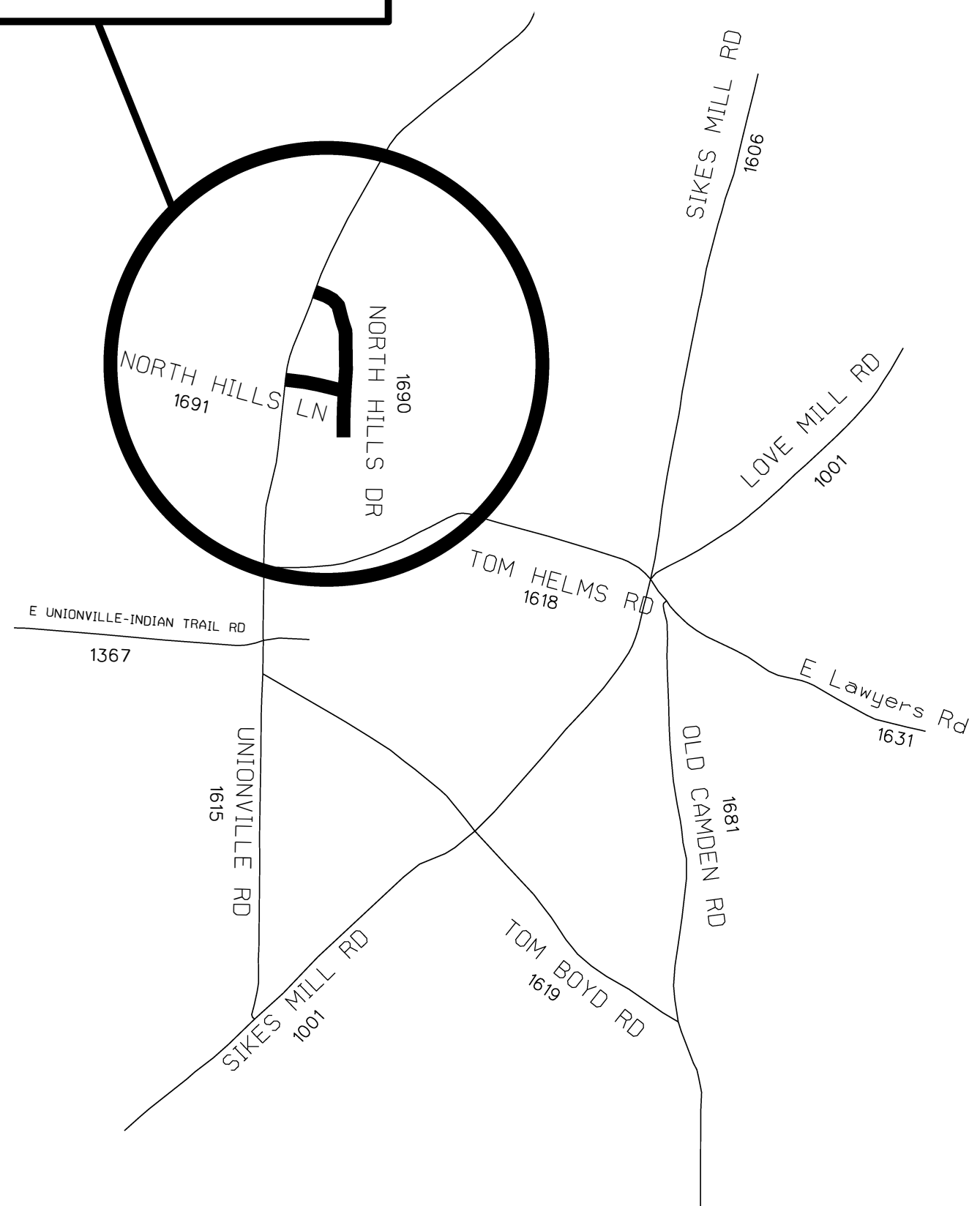
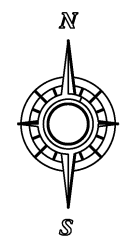


1 AND # 2



STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
	2021CPT.10.12.20901	1	
F.A. PROJECT NO.			



ENLARGED MUNICIPAL AND SUBURBAN AREAS
UNION COUNTY
 NORTH CAROLINA
PREPARED BY THE
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS - DIVISION 10 DISTRICT 3

MAP #1 SR 1690 NORTH HILLS DRIVE
 0.30 MILES
 FROM SR 1615 UNIONVILLE ROAD
 TO END OF MAINTENANCE

MAP #2 SR 1691 NORTH HILLS LANE
 0.11 MILES
 FROM SR 1615 UNIONVILLE ROAD
 TO SR 1690 NORTH HILLS DRIVE

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2021CPT.10.12.20901	2	
F.A. PROJECT NO.			



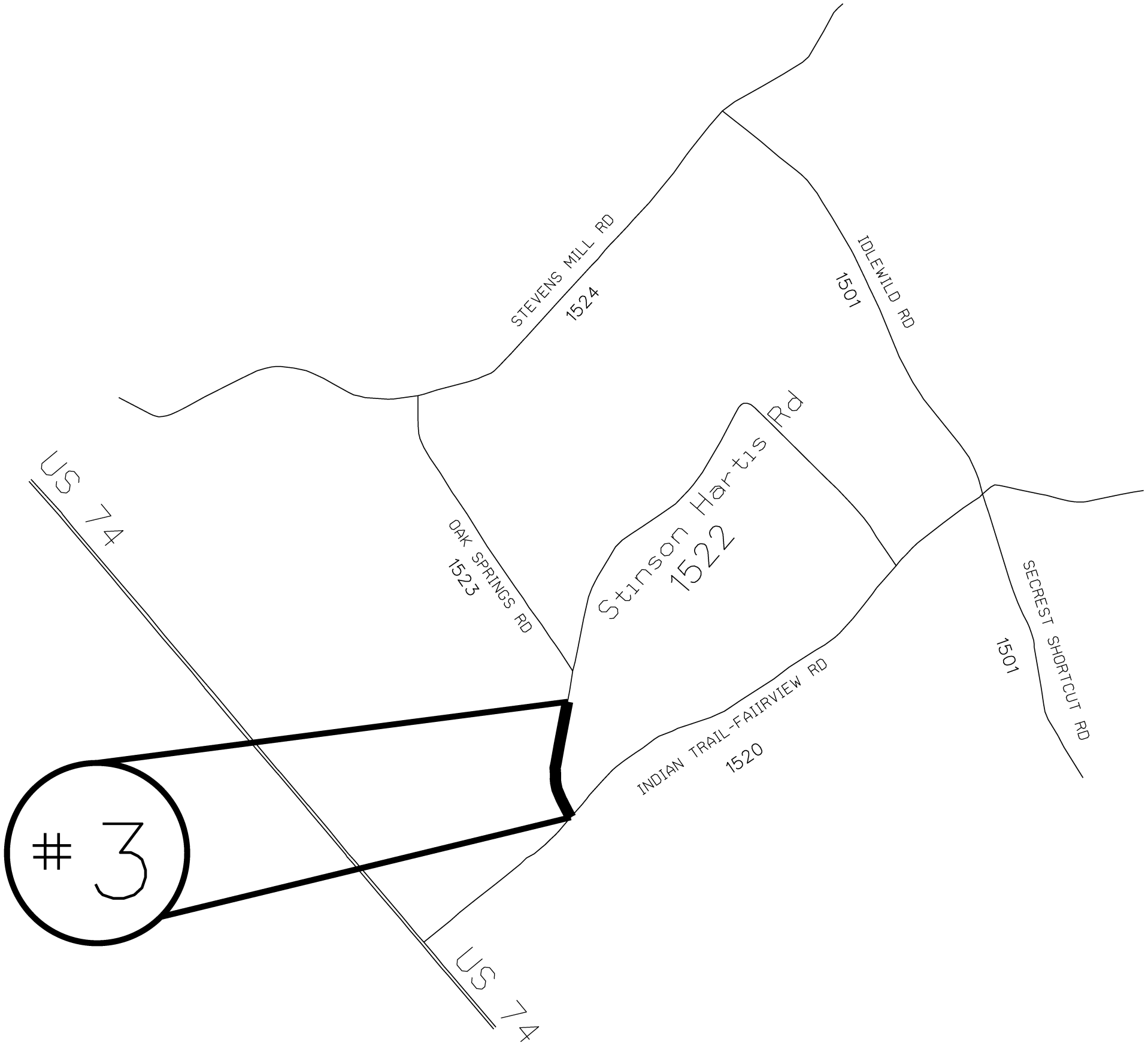
ENLARGED MUNICIPAL AND SUBURBAN AREAS

UNION COUNTY

NORTH CAROLINA

PREPARED BY THE
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS - DIVISION 10 DISTRICT 3

MAP #3 SR 1522 STINSON HARTIS ROAD
 0.35 MILES
 FROM PAVEMENT JOINT AT NEW BRIDGE
 TO SR 1520 INDIAN TRAIL-FAIRVIEW ROAD



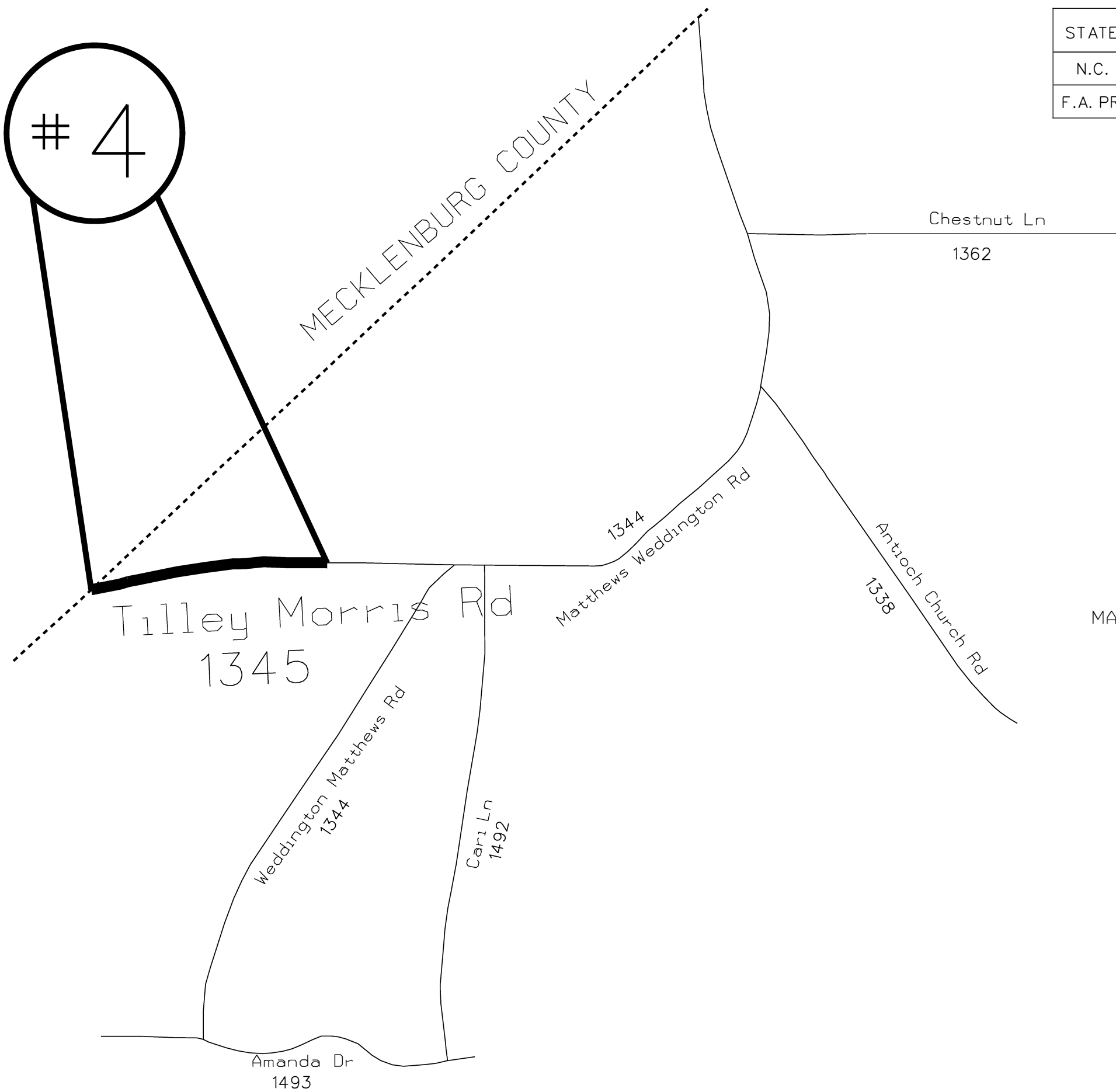
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MECKLENBURG COUNTY

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2021CPT.10.12.20901	3	
F.A. PROJECT NO.			



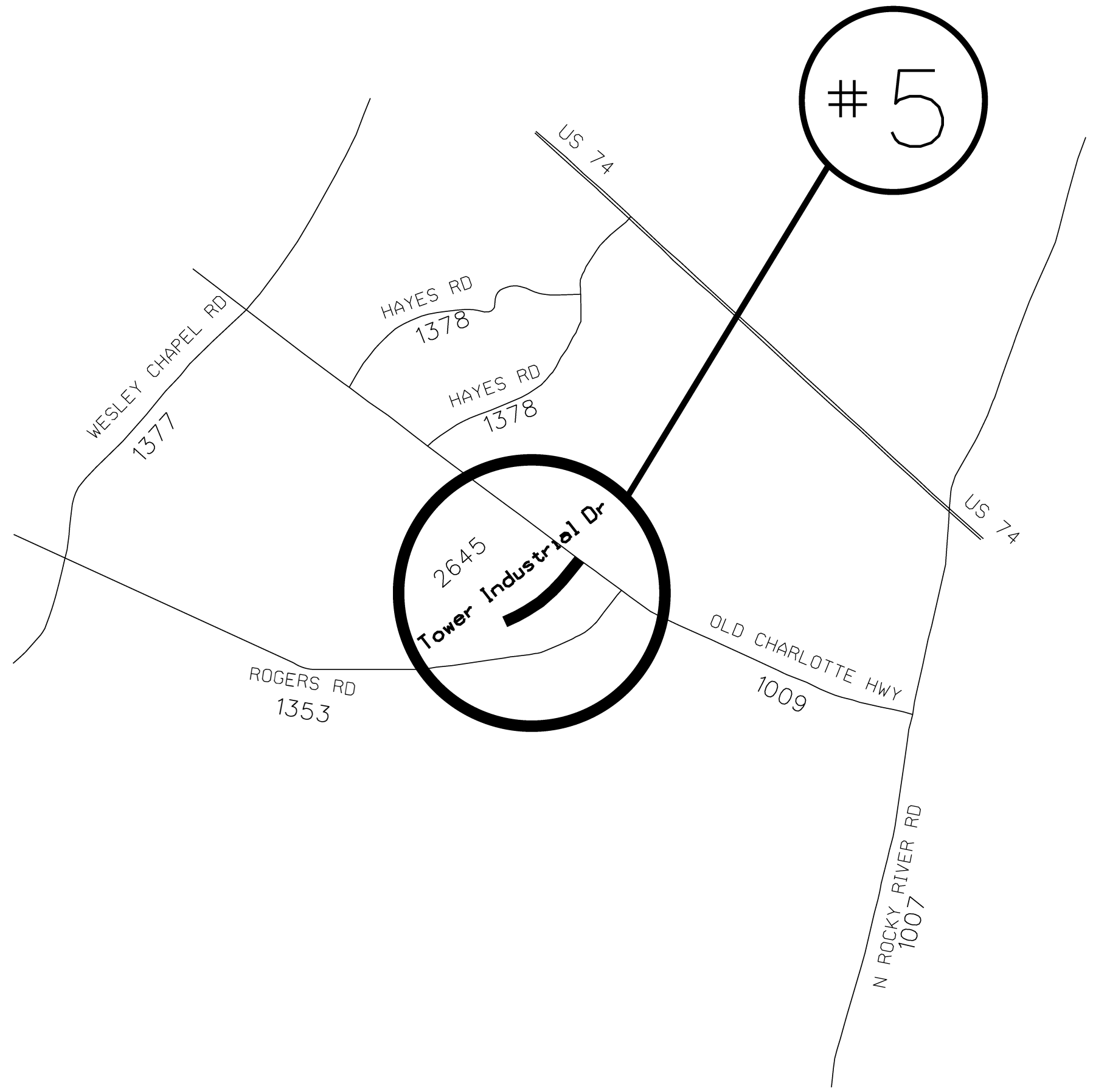
ENLARGED MUNICIPAL AND SUBURBAN AREAS
 UNION COUNTY
 NORTH CAROLINA
PREPARED BY THE
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS - DIVISION 10 DISTRICT 3



MAP #4 SR 1345 TILLEY MORRIS ROAD
 0.25 MILES
 FROM PAVEMENT JOINT TO
 MECKLENBURG COUNTY LINE

Amanda Dr 1493

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
	2021CPT.10.12.20901	4	
F.A. PROJECT NO.			



ENLARGED MUNICIPAL AND SUBURBAN AREAS
UNION COUNTY
 NORTH CAROLINA
PREPARED BY THE
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS - DIVISION 10 DISTRICT 3

MAP #5 SR 2645 TOWER INDUSTRIAL DRIVE
 0.34 MILES
 FROM SR 1009 OLD CHARLOTTE HWY
 TO END OF MAINTENANCE

6 - # 9

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2021CPT.10.12.20901	5	
F.A. PROJECT NO.			

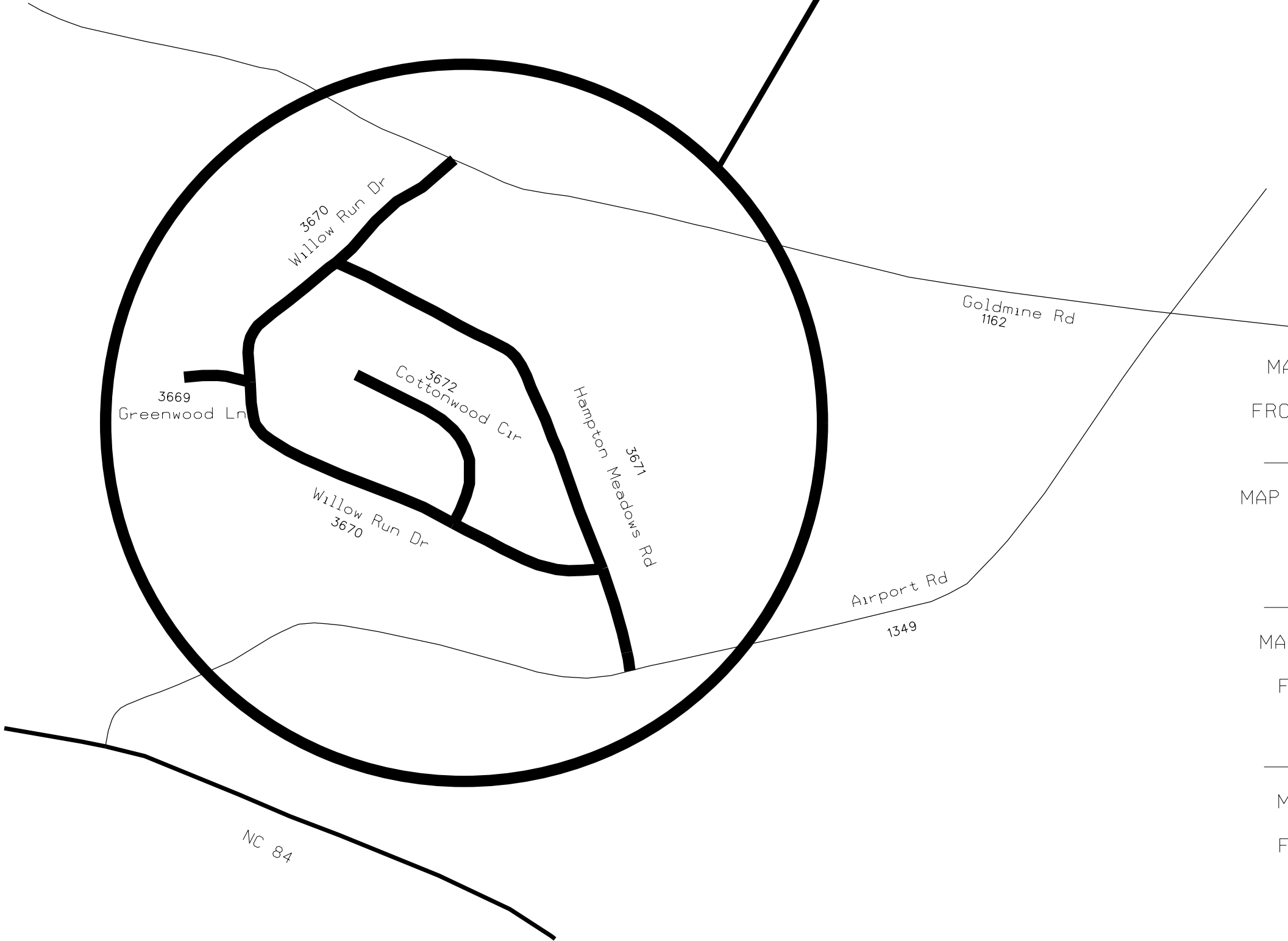


ENLARGED MUNICIPAL AND SUBURBAN AREAS

UNION COUNTY

NORTH CAROLINA

PREPARED BY THE
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS - DIVISION 10 DISTRICT 3



MAP #6 SR 3670 WILLOW RUN DRIVE
0.83 MILES
FROM SR 3671 HAMPTON MEADOWS ROAD
TO SR 1162 GOLDMINE ROAD

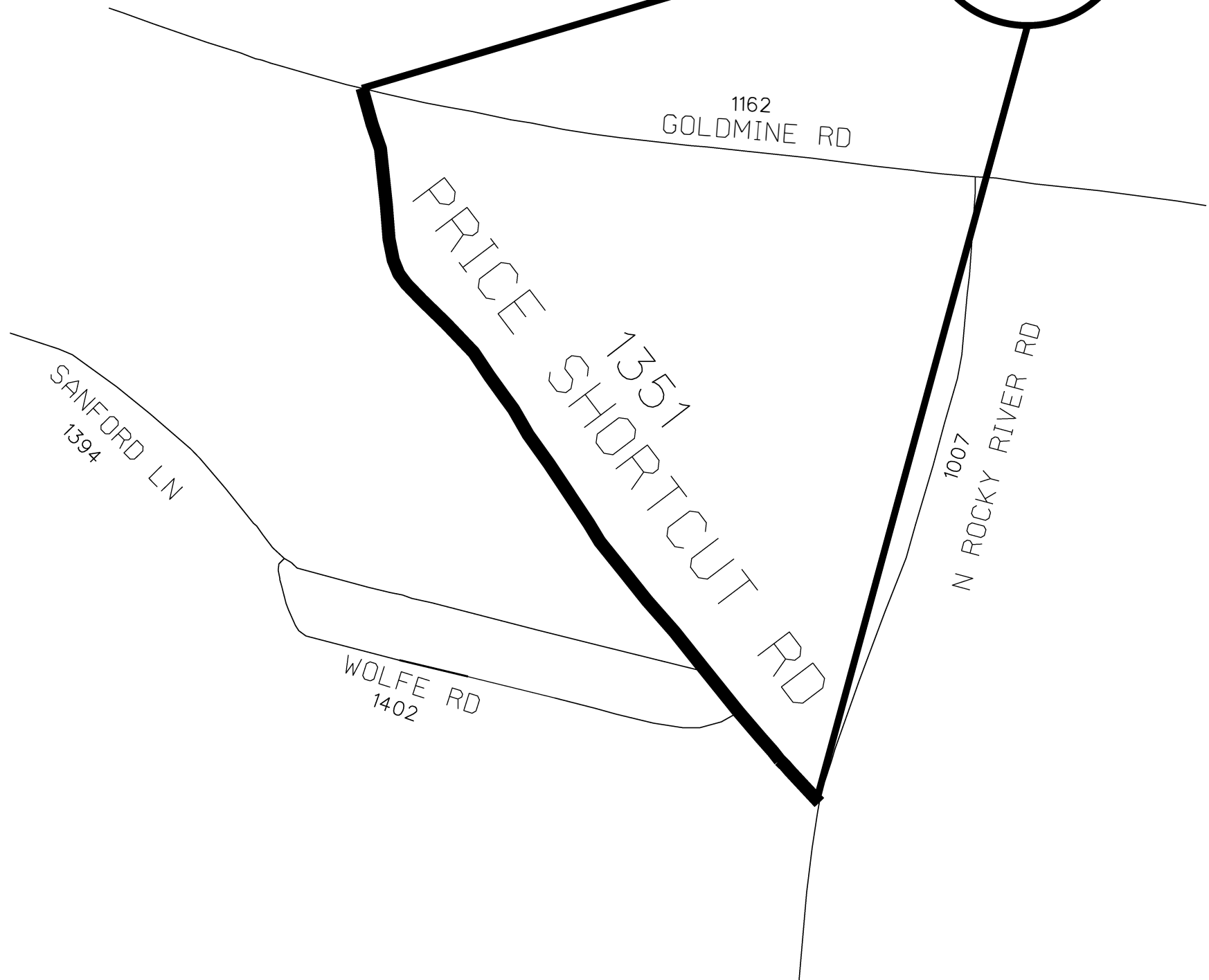
MAP #7 SR 3671 HAMPTON MEADOWS ROAD
0.58 MILES
FROM SR 1349 AIRPORT ROAD
TO SR 3670 WILLOW RUN DRIVE

MAP #8 SR 3672 COTTONWOOD CIRCLE
0.25 MILES
FROM SR 3670 WILLOW RUN DRIVE
TO END OF MAINTENANCE

MAP #9 SR 3669 GREENWOOD LANE
0.08 MILES
FROM SR 3670 WILLOW RUN DRIVE
TO END OF MAINTENANCE

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2021CPT.10.12.20901	6	
F.A. PROJECT NO.			

10



ENLARGED MUNICIPAL AND SUBURBAN AREAS
 UNION COUNTY
 NORTH CAROLINA
REMOVED
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS - DIVISION 10 DISTRICT 3

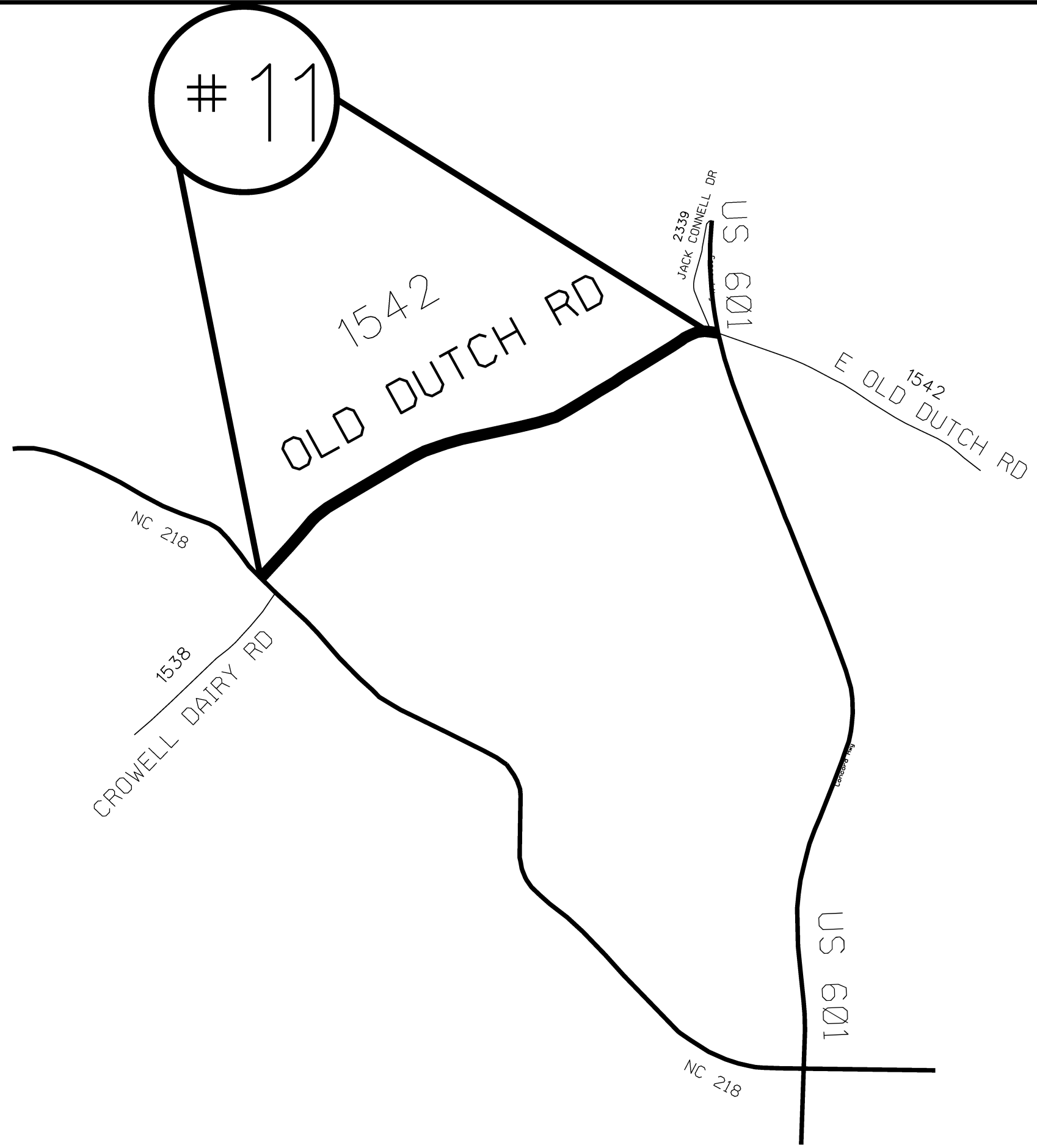
MAP #10 SR 1351 PRICE SHORTCUT ROAD
 1.1 MILES
 FROM SR 1162 GOLDMINE ROAD
 TO SR 1007 N ROCKY RIVER ROAD

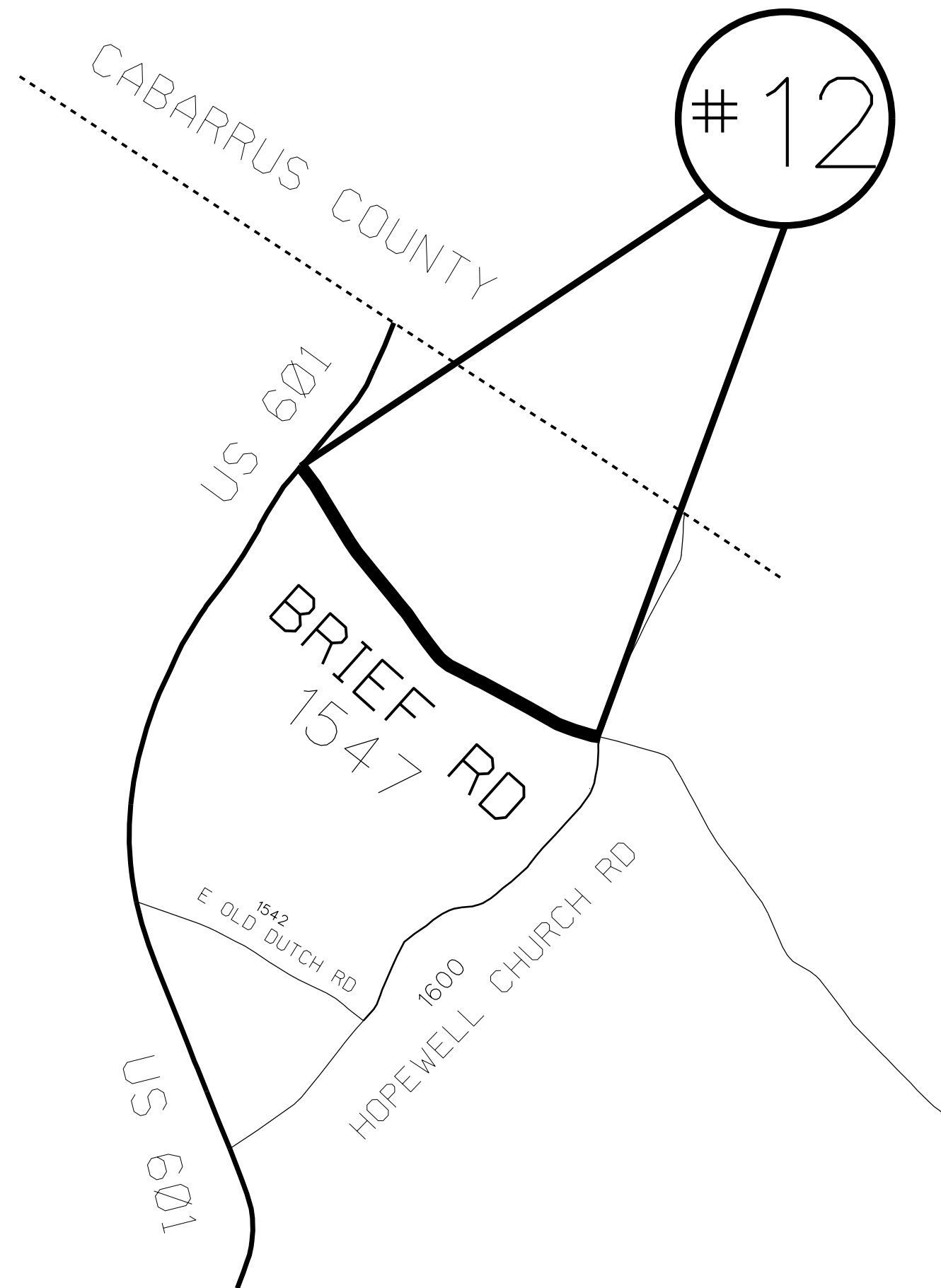
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2021CPT.10.12.20901	7	
F.A. PROJECT NO.			



ENLARGED MUNICIPAL AND SUBURBAN AREAS
UNION COUNTY
 NORTH CAROLINA
PREPARED BY THE
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS - DIVISION 10 DISTRICT 3

MAP #11 SR 1542 OLD DUTCH ROAD
 1.49 MILES
 FROM US 601 NORTH TO NC 218





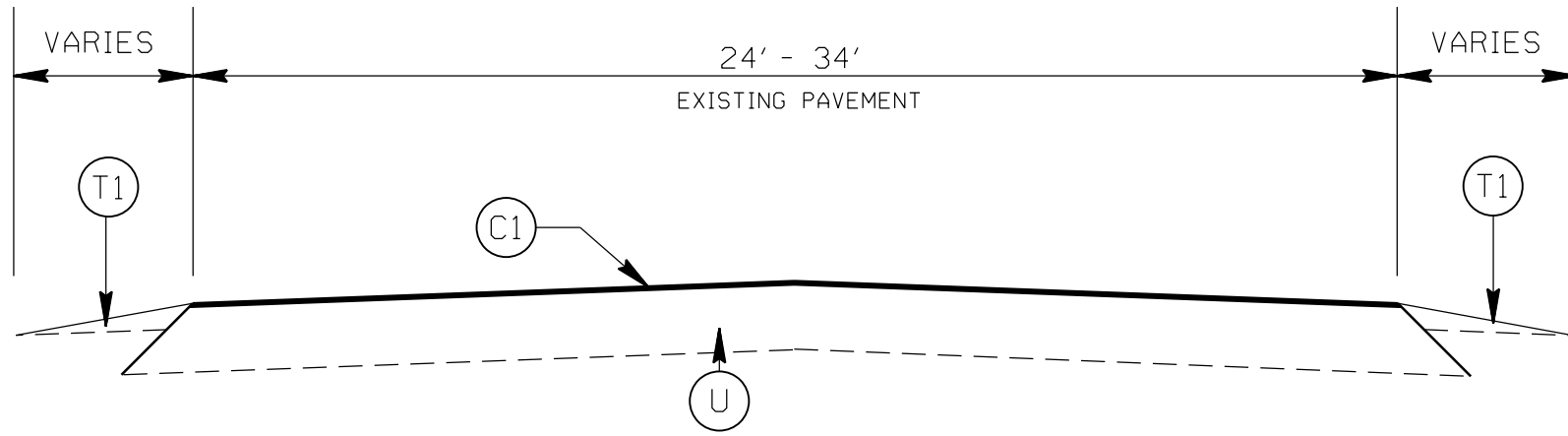
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2021CPT.10.12.20901	8	
F.A. PROJECT NO.			



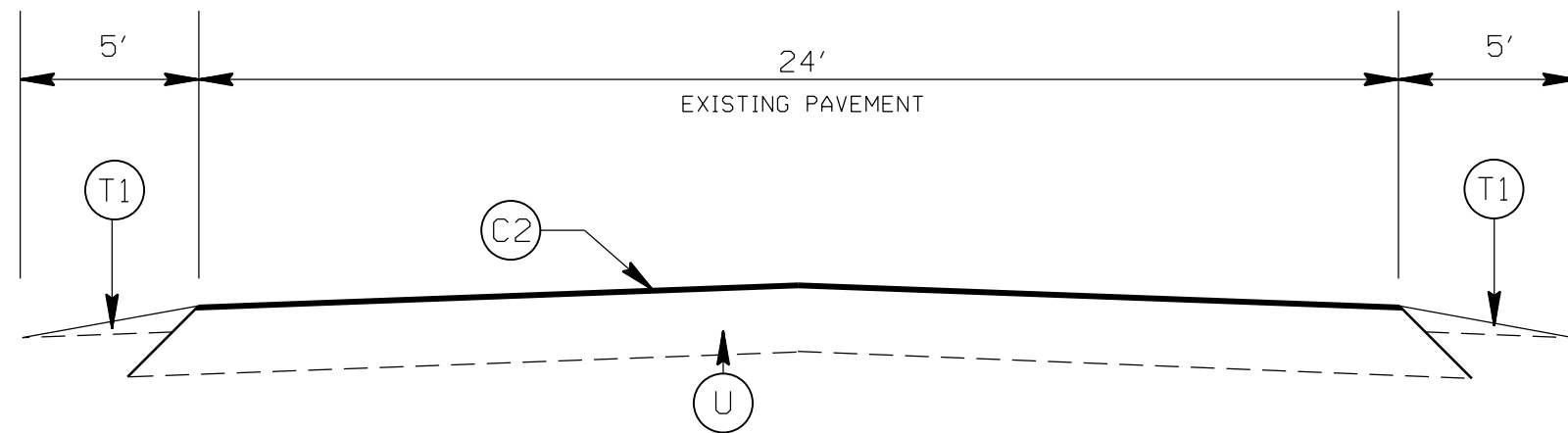
ENLARGED MUNICIPAL AND SUBURBAN AREAS
UNION COUNTY
 NORTH CAROLINA
PREPARED BY THE
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS - DIVISION 10 DISTRICT 3

MAP #12 SR 1547 BRIEF ROAD
 1.36 MILES
 FROM US 601 NORTH
 TO SR 1600 HOPEWELL CHURCH ROAD

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2021CPT.10.12.20901	9	
F.A. PROJECT NO.			



TYPICAL SECTION NO. 1
 SR 1522 STINSON HARTIS ROAD (MAP 3)
 SR SR 1345 TILLEY MORRIS ROAD (MAP 4)



TYPICAL SECTION NO. 2
 SR 1690 NORTH HILLS DRIVE (MAP 1)
 SR 1691 NORTH HILLS LANE (MAP 2)

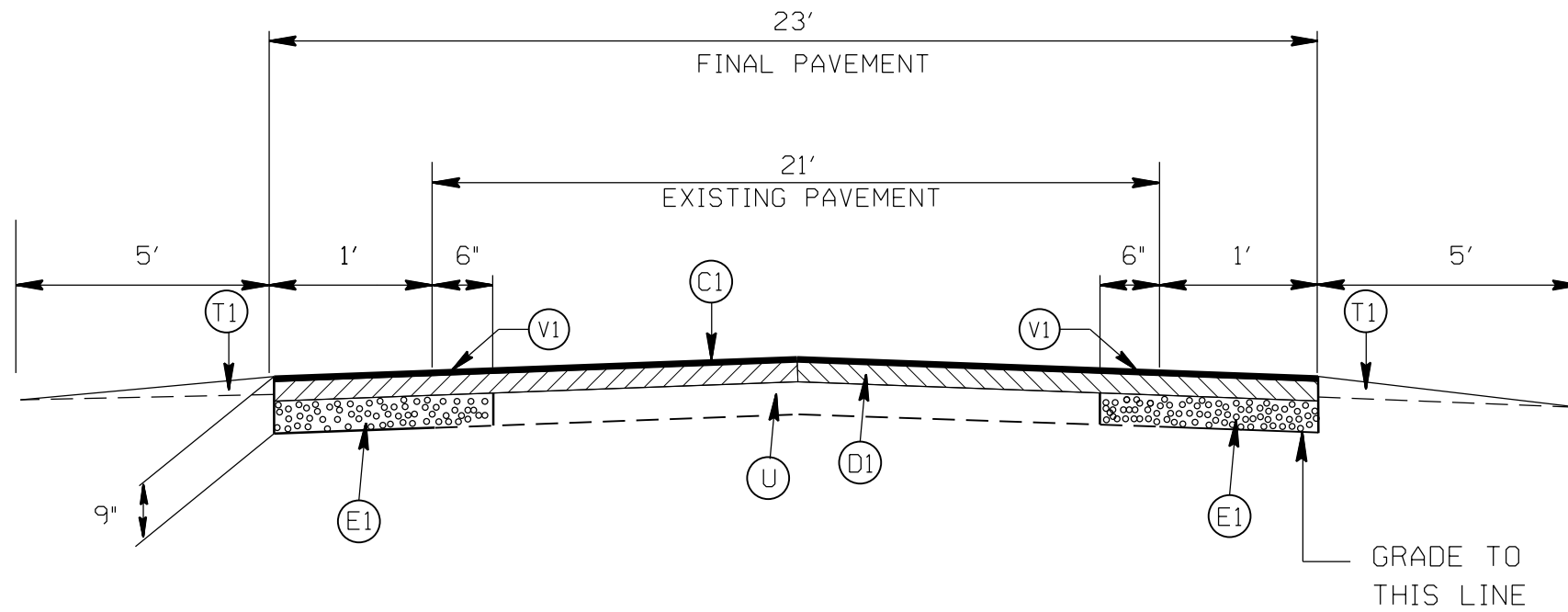
PAVEMENT SCHEDULE

(C1)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C2)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
(C3)	PROP. APPROX. 1.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS PER SQ. YD.
(C4)	ASPHALT SURFACE TREATMENT, MAT COAT # 78M STONE
(C5)	ASPHALT SURFACE TREATMENT, DOUBLE SEAL
(D1)	PROPOSED 2.5" ASPHALT CONC. INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
(E1)	PROPOSED 5" OF ASPHALT CONC. BASE COURSE, B25.0C, AT AN AVERAGE RATE 570 LBS. PER SQ. YD.
(T1)	SHOULDER RECONSTRUCTION
(U)	EXISTING PAVEMENT
(V1)	MILLING 6" OF EXISTING ASPHALT PAVEMENT, 5" DEPTH. (SEE S.P. TRENCHING FOR BASE COURSE BY MILLING.)
(Z)	FULL DEPTH RECLAMATION

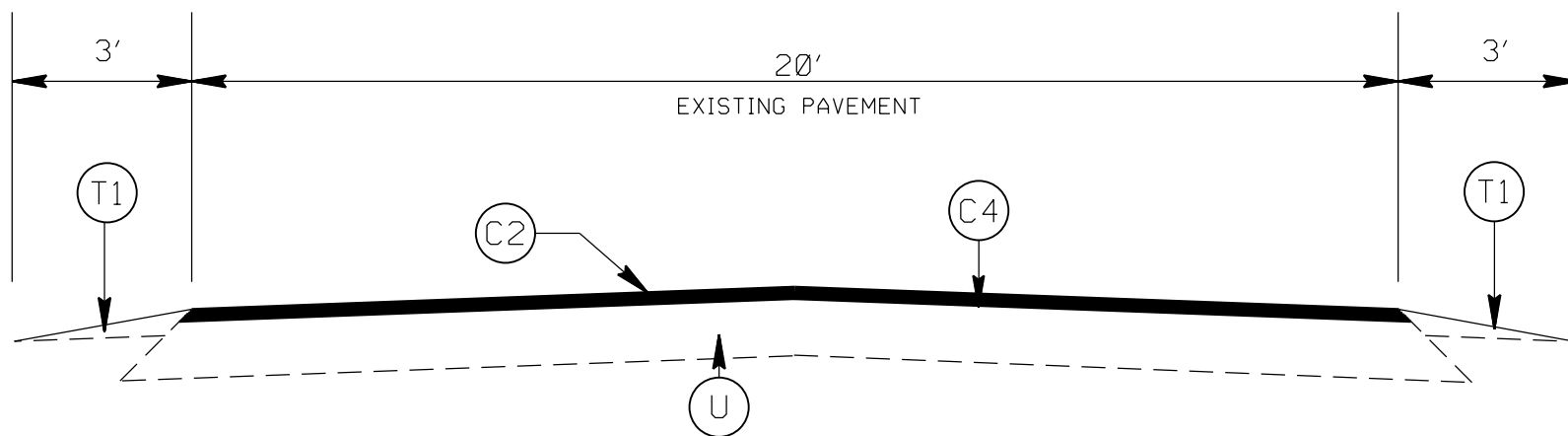
2021-2022
 UNION COUNTY RESURFACING

SCALE	-NA-		REVISIONS
DATE	1/20		
DWG. BY	AMO		
DESIGN BY	AMO		
APPROVED	CLA		

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2021CPT.10.12.20901	10	
F.A. PROJECT NO.			



TYPICAL SECTION NO. 3
SR 2645 TOWER INDUSTRIAL DRIVE (MAP 5)



TYPICAL SECTION NO. 4
SR 3670 WILLOW RUN DRIVE (MAP 6)
SR 3671 HAMPTON MEADOW ROAD (MAP 7)
SR 3672 COTTONWOOD CIRCLE (MAP 8)
SR 3669 GREENWOOD LANE (MAP 9)

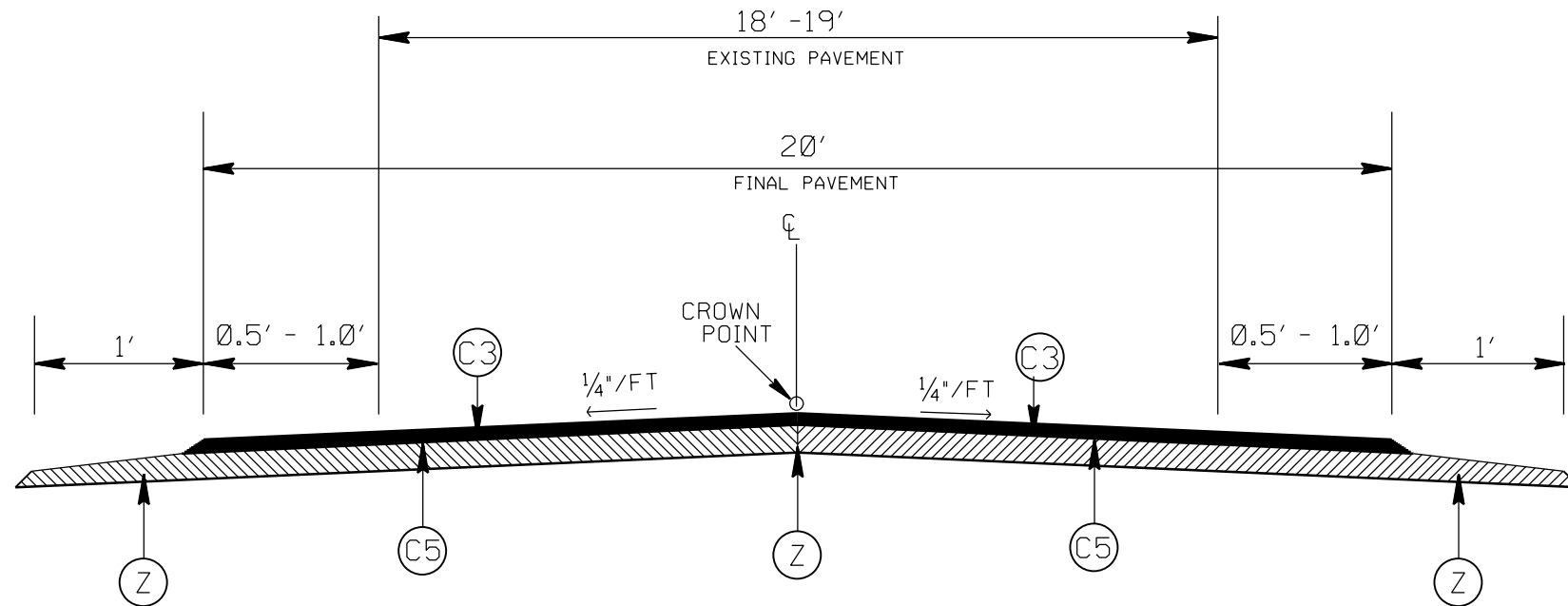
PAVEMENT SCHEDULE

(C1)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C2)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
(C3)	PROP. APPROX. 1.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
(C4)	ASPHALT SURFACE TREATMENT, MAT COAT # 78M STONE
(C5)	ASPHALT SURFACE TREATMENT, DOUBLE SEAL
(D1)	PROPOSED 2.5" ASPHALT CONC. INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
(E1)	PROPOSED 5" OF ASPHALT CONC. BASE COURSE, B25.0C, AT AN AVERAGE RATE 570 LBS. PER SQ. YD.
(T1)	SHOULDER RECONSTRUCTION
(U)	EXISTING PAVEMENT
(V1)	MILLING 6" OF EXISTING ASPHALT PAVEMENT, 5" DEPTH. (SEE S.P. TRENCHING FOR BASE COURSE BY MILLING.)
(Z)	FULL DEPTH RECLAMATION

2021-2022
UNION COUNTY RESURFACING

SCALE	-NA-		REVISIONS
DATE	1/20		
DWG. BY	AMO		
DESIGN BY	AMO		
APPROVED	CLA		

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2021CPT.10.12.20901		
F.A. PROJECT NO.			



TYPICAL SECTION NO. 5
 SR 1351 PRICE SHORTCUT ROAD (MAP 10)
 SR 1542 OLD DUTCH ROAD (MAP 11)
 SR SR 1547 BRIEF ROAD (MAP 12)
 *SEE NOTES 3 AND 4

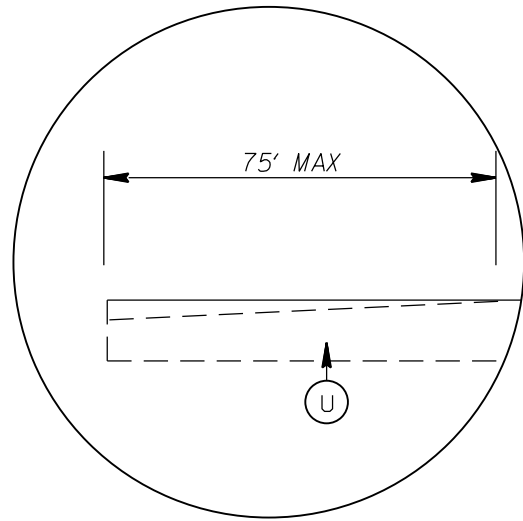
PAVEMENT SCHEDULE

(C1)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C2)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
(C3)	PROP. APPROX. 1.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS PER SQ. YD.
(C4)	ASPHALT SURFACE TREATMENT, MAT COAT # 78M STONE
(C5)	ASPHALT SURFACE TREATMENT, DOUBLE SEAL
(D1)	PROPOSED 2.5" ASPHALT CONC. INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
(E1)	PROPOSED 5" OF ASPHALT CONC. BASE COURSE, B25.0C, AT AN AVERAGE RATE 570 LBS. PER SQ. YD.
(T1)	SHOULDER RECONSTRUCTION
(U)	EXISTING PAVEMENT
(V1)	MILLING 6" OF EXISTING ASPHALT PAVEMENT, 5" DEPTH. (SEE S.P. TRENCHING FOR BASE COURSE BY MILLING.)
(Z)	FULL DEPTH RECLAMATION

2021-2022
 UNION COUNTY RESURFACING

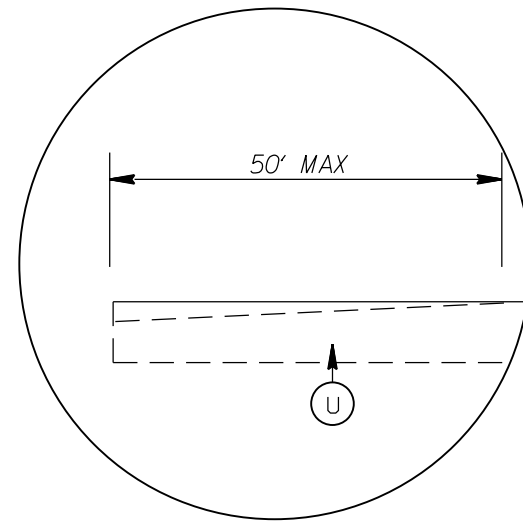
SCALE	-NA-		REVISIONS
DATE	1/20		
DWG. BY	AMO		
DESIGN BY	AMO		
APPROVED	CLA		

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2021CPT.10.12.20901	12	
F.A. PROJECT NO.			



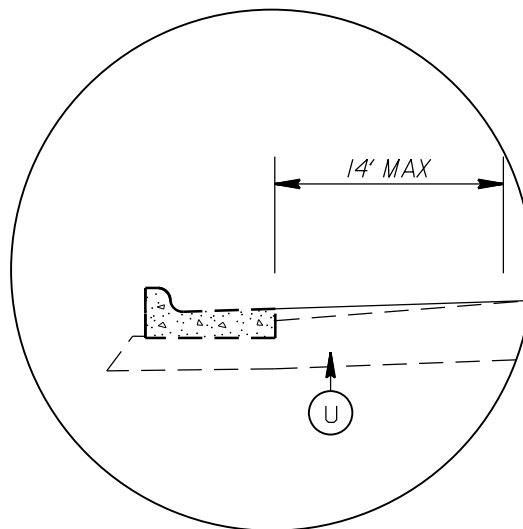
DETAIL FOR INCIDENTAL MILLING (0" TO 1.5")

TIE-IN



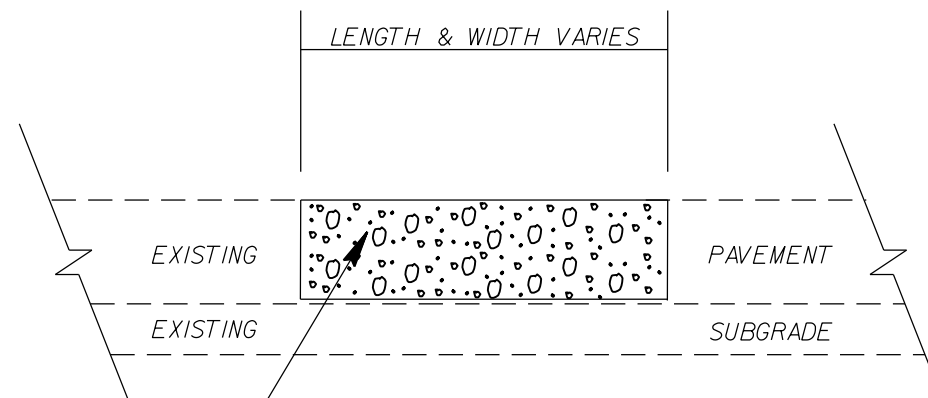
DETAIL FOR INCIDENTAL MILLING (0" TO 1.0")

TIE-IN



DETAIL FOR PROFILE MILLING (0- 1.5")
MAPS 3 AND 4

PATCHING DETAIL



RATE IS VARIABLE AND SHALL BE AS DIRECTED BY THE ENGINEER. ASPHALT TYPE 119.0C SHALL BE PLACED.

PAVEMENT SCHEDULE

(C1)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C2)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
(C3)	PROP. APPROX. 1.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS PER SQ. YD.
(C4)	ASPHALT SURFACE TREATMENT, MAT COAT # 78M STONE
(C5)	ASPHALT SURFACE TREATMENT, DOUBLE SEAL
(D1)	PROPOSED 2.5" ASPHALT CONC. INTERMEDIATE COURSE, TYPE 119.0C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
(E1)	PROPOSED 5" OF ASPHALT CONC. BASE COURSE, B25.0C, AT AN AVERAGE RATE 570 LBS. PER SQ. YD.
(T1)	SHOULDER RECONSTRUCTION
(U)	EXISTING PAVEMENT
(V1)	MILLING 6" OF EXISTING ASPHALT PAVEMENT, 5" DEPTH. (SEE S.P. TRENCHING FOR BASE COURSE BY MILLING.)
(Z)	FULL DEPTH RECLAMATION


2021-2022
UNION COUNTY RESURFACING

SCALE	-NA-		REVISIONS
DATE	1/20		
DWG. BY	AMO		
DESIGN BY	AMO		
APPROVED	CLA		

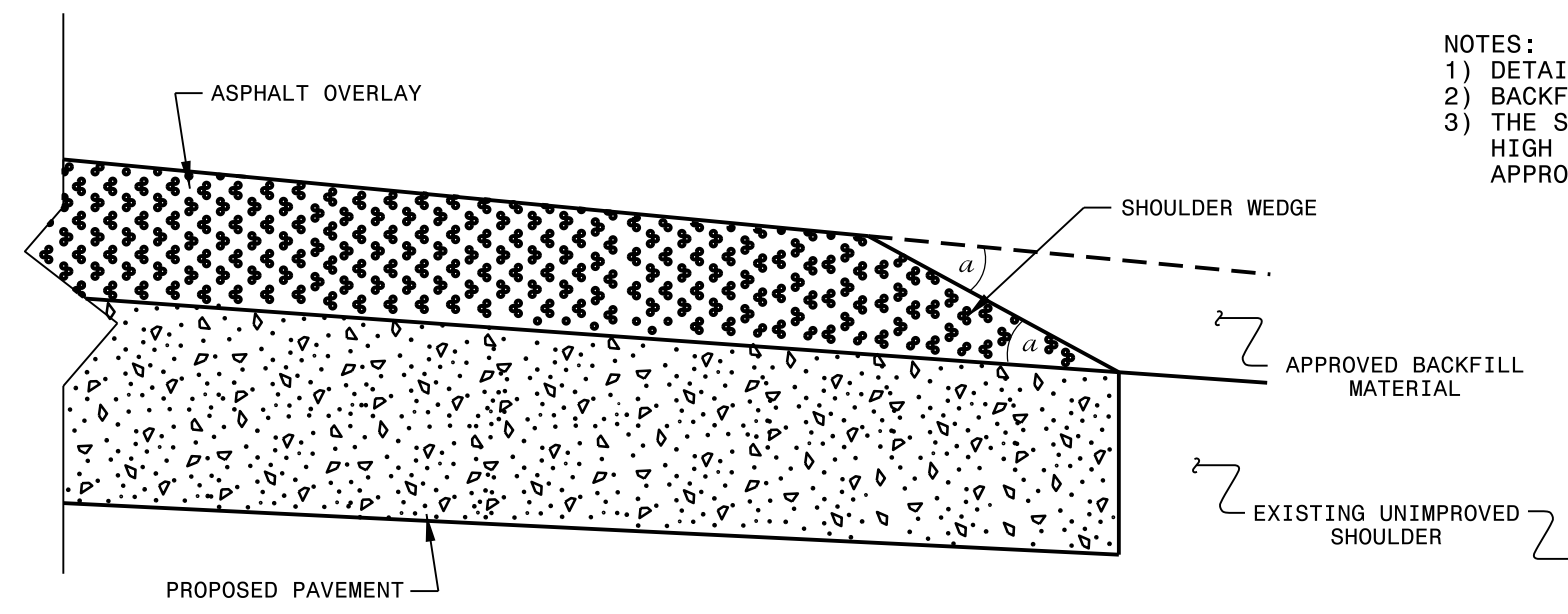
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2021CPT.10.12.20901	13	
F.A. PROJECT NO.			

NOTES:

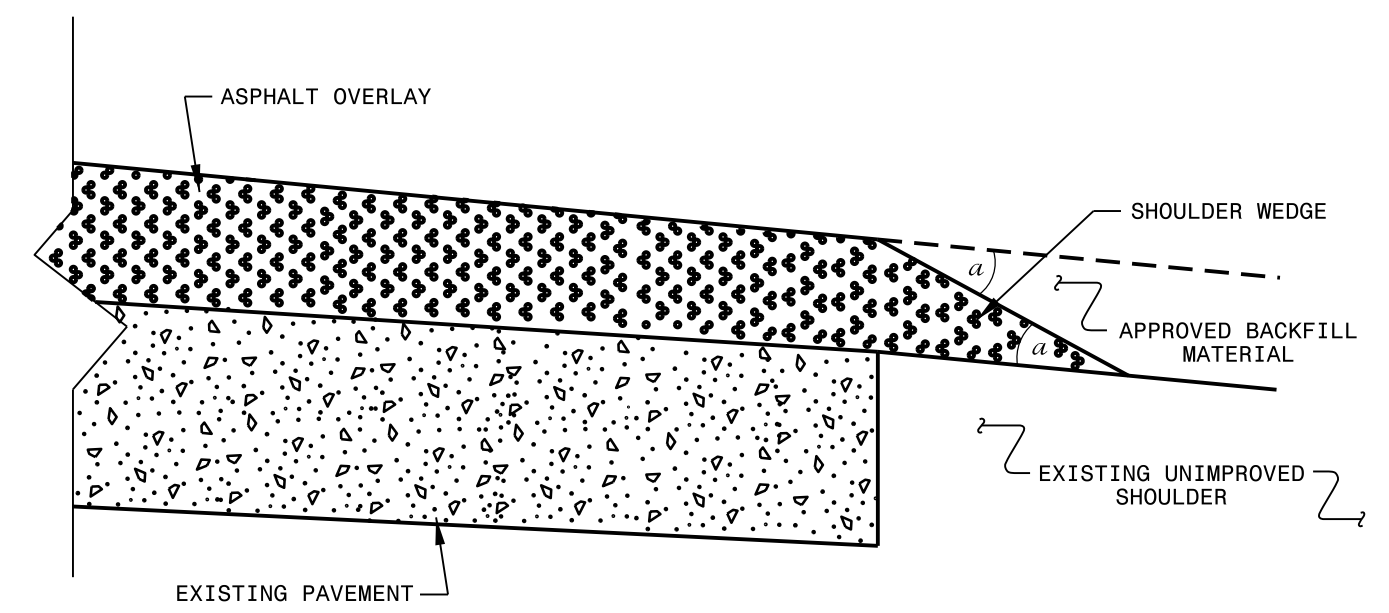
1. DEPTH OF PATCHING WILL BE AS DIRECTED BY THE ENGINEER.
2. SHOULDER RECONSTRUCTION WILL BE AS DIRECTED BY THE ENGINEER.
3. FULL DEPTH RECLAMATION AND AST SHALL BE COMPLETED, ON MAPS 10, 11 AND 12, PRIOR TO THE ASPHALT OVERLAY.
4. WIDENING WITH ABC, ON FULL DEPTH RECLAMATION MAPS 10, 11, AND 12, WILL BE DONE BY STATE FORCES.

2021-2022 UNION COUNTY RESURFACING			
SCALE	-NA-		REVISIONS
DATE	01/20		
DWG. BY	AMO		
DESIGN BY	AMO		
APPROVED	CLA		

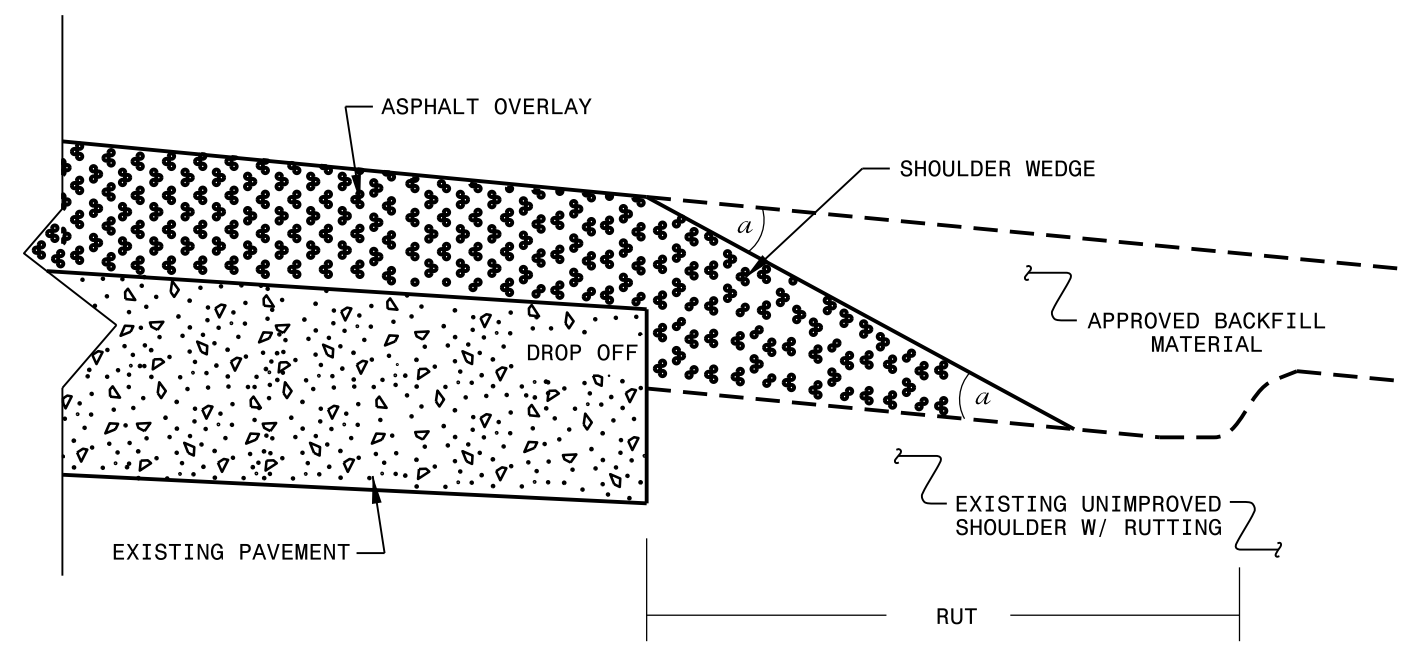
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.
 - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS, SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT AS APPROVED BY THE ENGINEER.



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°

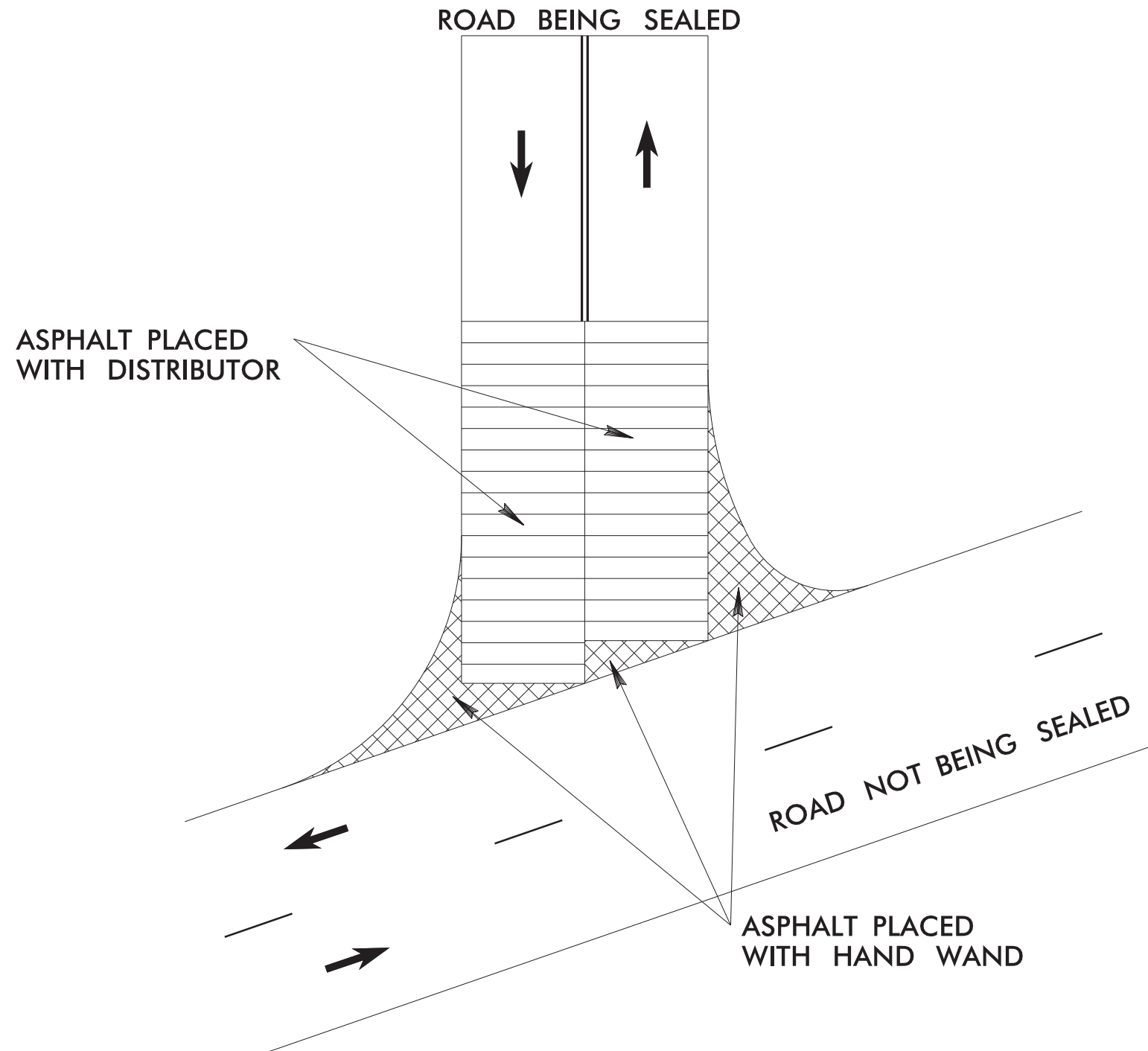
CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950 FAX 919-250-4119	
SHOULDER WEDGE DETAILS	
ORIGINAL BY: T.SPELL	DATE: 7-19-11
MODIFIED BY:	DATE: 2/2/16
CHECKED BY:	DATE:
FILE SPEC.: s:\usr\detatl1s\stand\shoulderwedgedeta11.dgn	

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

\$\$\$\$SYTIME\$\$\$\$
 \$\$\$SERVTIME\$\$\$
 \$\$\$USERNAME\$\$\$

INTERSECTION EMULSION PLACEMENT TWO LANE TWO WAY ROADWAY

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2021CPT.10.12.20901	15	
F.A. PROJECT NO.			



LEGEND

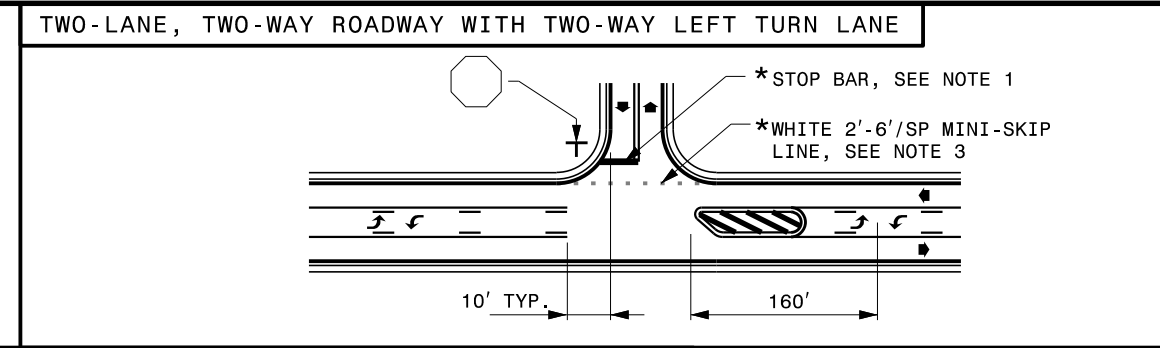
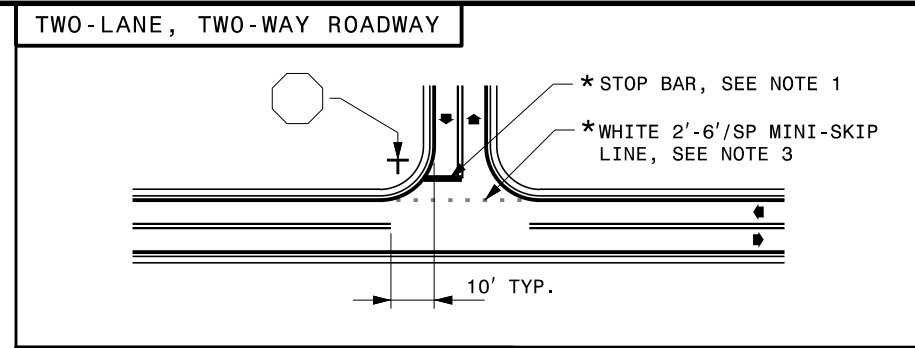
- ➔ DIRECTION OF TRAFFIC FLOW
- SKIP LINES
- === DOUBLE YELLOW LINES

<i>INTERSECTION EMULSION PLACEMENT</i>		
SCALE	N/A	REVISIONS
DATE	9-2019	
DWG. BY	TBL	
DESIGN BY	TBL	
APPROVED	TWB	



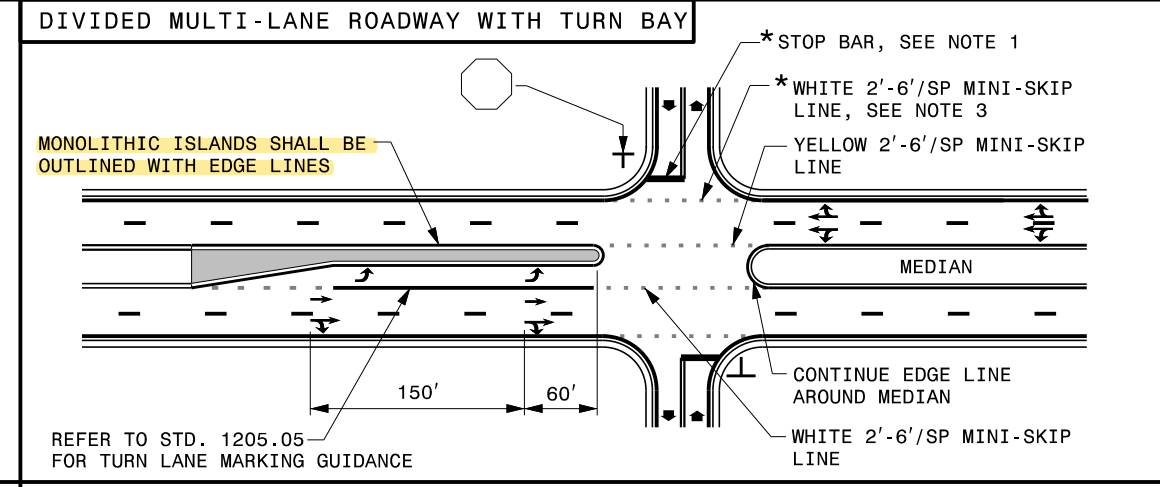
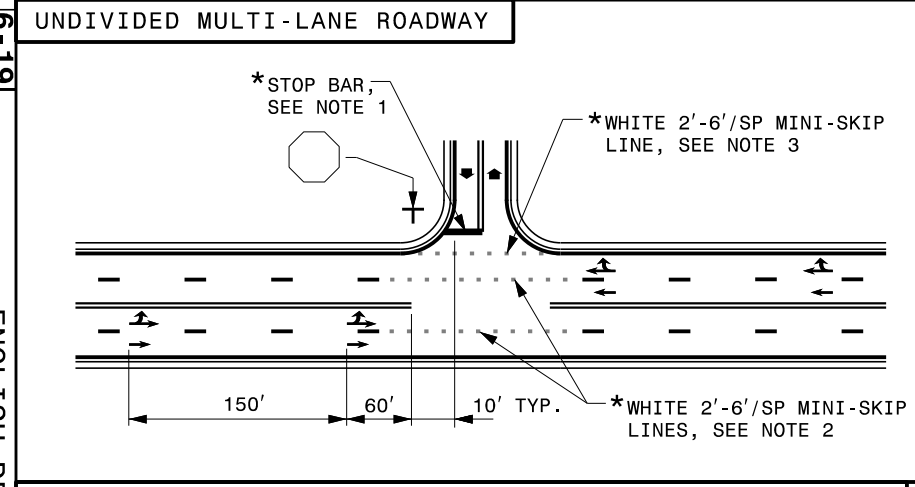
TIP NO.	SHEET NO.
DocuSigned by: <i>Matthew V. Springer</i>	
APPROVED:	6/19/2019
DATE:	07667068584403...
SEAL	

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

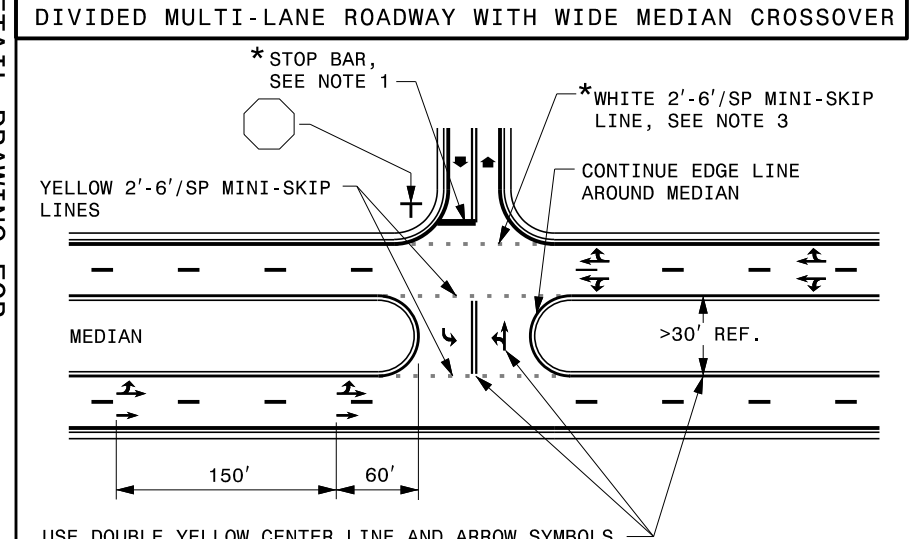


STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

6-19
ENGLISH DETAIL DRAWING FOR
PAVEMENT MARKINGS
INTERSECTIONS



6-19
ENGLISH DETAIL DRAWING FOR
PAVEMENT MARKINGS
INTERSECTIONS



- GENERAL NOTES:
- 1- PLACEMENT OF STOP BARS AT NON-SIGNALIZED INTERSECTIONS IS OPTIONAL AND USED WHERE IT IS IMPORTANT TO INDICATE THE POINT WHICH VEHICLES ARE REQUIRED TO STOP. PLACE STOP BARS NO LESS THAN 4 FEET AND NO MORE THAN 30 FEET FROM THE NEAREST EDGE OF THE INTERSECTING ROADWAY. USE 10 FEET AS THE TYPICAL SETBACK DISTANCE OR AS DIRECTED BY THE ENGINEER.
 - 2- MINI-SKIP LANE LINE EXTENSIONS SHOULD BE USED AT INTERSECTIONS THAT HAVE REDUCED VISIBILITY CONDITIONS SUCH AS OFFSET, SKEWED, OR CURVED ROADWAYS.
 - 3- MINI-SKIP EDGE LINE EXTENSIONS MAY BE PLACED THROUGH INTERSECTIONS AND MAJOR DRIVEWAYS.
 - 4- REFER TO ROADWAY STANDARD DRAWINGS 1205.01, 1205.02, 1205.05, 1205.08 AND 1205.09 FOR ADDITIONAL PAVEMENT MARKING GUIDANCE.

LEGEND	
	STOP SIGN
	STATIONARY SIGN
	DIRECTION OF TRAFFIC FLOW
	PAVEMENT MARKING SYMBOLS
*	OPTIONAL

SHEET 2 OF 2
1205D04

SHEET 2 OF 2
1205D04

**REVISED PAVEMENT MARKING
ROADWAY STANDARD DRAWING**

PROJECT NO.	SHEET NO.	TOTAL NO.
2021CPT.10.12.20901	18	

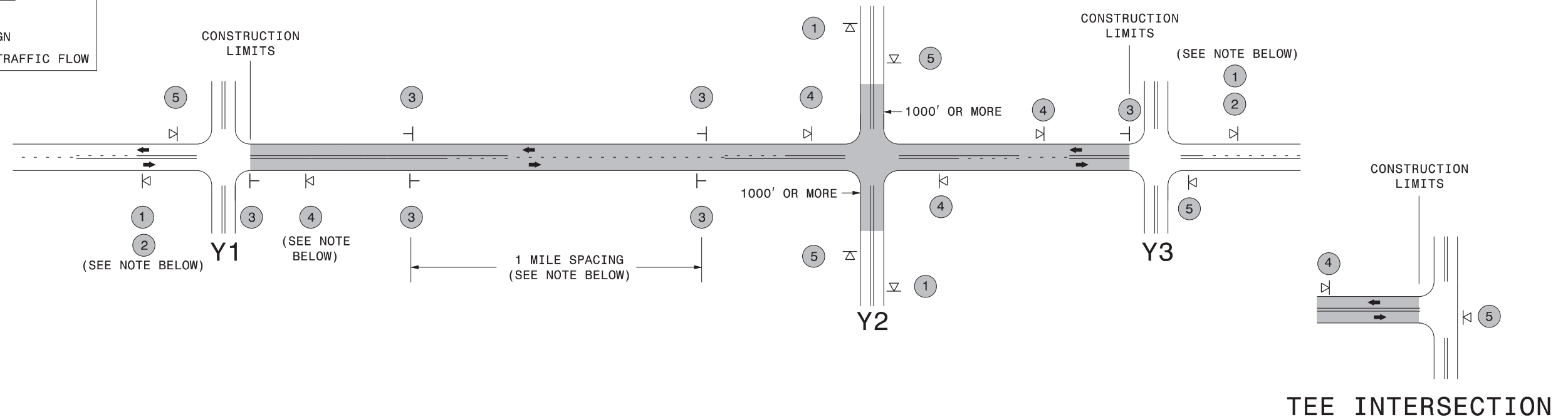
SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	261200000-E	283000000-N	284500000-N	525500000-N	600000000-E	600900000-E	601200000-E	607101000-E	607102000-E	
												6" CONCRETE DRIVEWAYS	ADI. OF MANHOLES	ADI. OF METER OR VALVE BOX	PORTABLE LIGHTING	TEMPORARY SILT FENCE	STONE FOR EROSION CONTROL, CLASS B	SEDIMENT CONTROL STONE	WATTLE	POLYACRYLAMIDE (PAM)	
												MI	EA	EA	LS	LF	TN	TN	LF	LB	
2021CPT.10.12.20901	Union	1	SR 1690 NORTH HILLS DRIVE	FROM SR 1615 UNIONVILLE ROAD TO END OF MAINTENANCE MILEPOST 0-0.30		2	2	ZWU	NO	NO	0.3	24					45	6	3	45	
TOTAL FOR MAP NO. 1											0.3						45	6	3	45	
2021CPT.10.12.20901	Union	2	SR 1691 NORTH HILLS LANE	FROM SR 1615 UNIONVILLE ROAD TO SR 1690 NORTH HILLS DRIVE MILEPOST 0 - 0.11		2	2	ZWU	NO	NO	0.11	24					15	2	1	15	
TOTAL FOR MAP NO. 2											0.11						15	2	1	15	
2021CPT.10.12.20901	Union	3	SR 1522 STINSON HARTIS ROAD	FROM PAVEMENT JOINT AT NEW BRIDGE TO SR 1520 INDIAN TRAIL-FAIRVIEW ROAD MILEPOST 1.07 - 1.42		1	2	ZWU	NO	NO	0.35	24-30					53	7	3	53	
TOTAL FOR MAP NO. 3											0.35						53	7	3	53	
2021CPT.10.12.20901	Union	4	SR 1345 TILLEY MORIS ROAD	FROM PAVEMENT JOINT TO MECKLENBURG COUNTY LINE MILEPOST 0.14 - 0.39		1	2	ZWU	NO	NO	0.25	25-34					1	38	5	2	38
TOTAL FOR MAP NO. 4											0.25						1	38	5	2	38
2021CPT.10.12.20901	Union	5	SR 2645 TOWER INDUSTRIAL DRIVE	FROM SR 1009 OLD CHARLOTTE HIGHWAY TO END OF MAINTENANCE MILEPOST 0-0.34		3	2	ZWU	NO	NO	0.34	23	400	1			102	10	5	102	1
TOTAL FOR MAP NO. 5											0.34		400	1			102	10	5	102	1
2021CPT.10.12.20901	Union	6	SR 3670 WILLOW RUN DRIVE	FROM SR 3671 HAMPTON MEADOWS ROAD TO SR 1162 GOLDMINE ROAD MILEPOST 0-0.83		4	2	ZWU	NO	NO	0.83	20					124	17	8	124	
TOTAL FOR MAP NO. 6											0.83						124	17	8	124	
2021CPT.10.12.20901	Union	7	SR 3671 HAMPTON MEADOWS ROAD	FROM SR 1349 AIRPORT ROAD TO SR 3670 WILLOW RUN DRIVE MILEPOST 0-0.58		4	2	ZWU	NO	NO	0.58	20					87	12	6	87	
TOTAL FOR MAP NO. 7											0.58						87	12	6	87	
2021CPT.10.12.20901	Union	8	SR 3672 COTTONWOOD CIRCLE	FROM DR 3670 WILLOW RUN DRIVE TO END OF MAINTENANCE MILEPOST 0-0.25		4	2	ZWU	NO	NO	0.25	20					37	5	2	37	
TOTAL FOR MAP NO. 8											0.25						37	5	2	37	
2021CPT.10.12.20901	Union	9	SR 3669 GREENWOOD LANE	FROM SR 3670 WILLOW RUN DRIVE TO END OF MAINTENANCE MILEPOST 0-0.08		4	2	ZWU	NO	NO	0.08	20					12	2	1	12	
TOTAL FOR MAP NO. 9											0.08						12	2	1	12	
2021CPT.10.12.20901	Union	10	SR 1351 PRICE SHORTCUT ROAD	FROM SR 1162 GOLDMINE ROAD TO SR 1007 ROCKY RIVER ROAD MILEPOST 0-1.10		5	2	ZWU	NO	NO	1.1	20	100				330	33	16	330	1
TOTAL FOR MAP NO. 10											1.1		100				330	33	16	330	1
2021CPT.10.12.20901	Union	11	SR 1542 OLD DUTCH ROAD	FROM US 601 NORTH TO NC 218 MILEPOST 0-1.49		5	2	ZWU	NO	NO	1.49	20	50				447	45	22	447	1
TOTAL FOR MAP NO. 11											1.49		50				447	45	22	447	1
2021CPT.10.12.20901	Union	12	SR 1547 BRIEF ROAD	FROM US 601 NORTH TO SR 1600 HOPEWELL CHURCH ROAD MILEPOST 5.25-6.61		5	2	ZWU	NO	NO	1.36	20	75				408	41	20	408	1
TOTAL FOR MAP NO. 12											1.36		75				408	41	20	408	1
TOTAL FOR PROJ NO. 2021CPT.10.12.20901											7.04		625	1	6	1	1,698	185	89	1,698	4
GRAND TOTAL											7.04		625	1	6	1	1,698	185	89	1,698	4

SIGNING FOR ASPHALT SURFACE TREATMENT

LEGEND

- ⏏ PORTABLE SIGN
- ┆ STATIONARY SIGN
- ➔ DIRECTION OF TRAFFIC FLOW



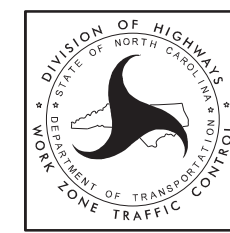
MAINLINE (-L-) SIGNING

-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

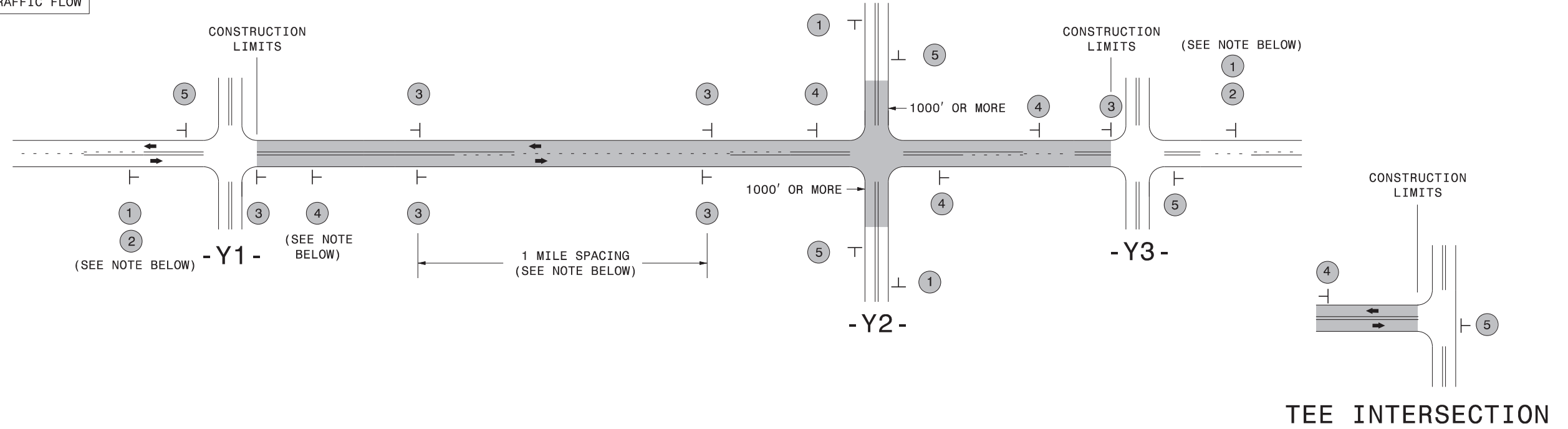
FOR AST RESURFACING MAPS WITH CONSTRUCTION LIMITS LESS THAN 2 MILES IN LENGTH, USE A STATIONARY "LOOSE GRAVEL" SIGN AT THE BEGINNING CONSTRUCTION LIMIT FOLLOWED BY AN "UNMARKED PAVEMENT" SIGN MIDWAY THROUGH AND AN "END ROAD WORK" SIGN AT THE END CONSTRUCTION LIMIT.



ADVANCE WARNING SIGNS FOR 2-LANE ROADWAY ASPHALT SURFACE TREATMENT

SIGNING FOR RESURFACING PROJECTS

LEGEND
 ┆ STATIONARY SIGN
 ← DIRECTION OF TRAFFIC FLOW



MAINLINE (-L-) SIGNING

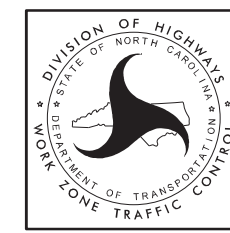
-Y- LINE SIGNING

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		- 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		- 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.

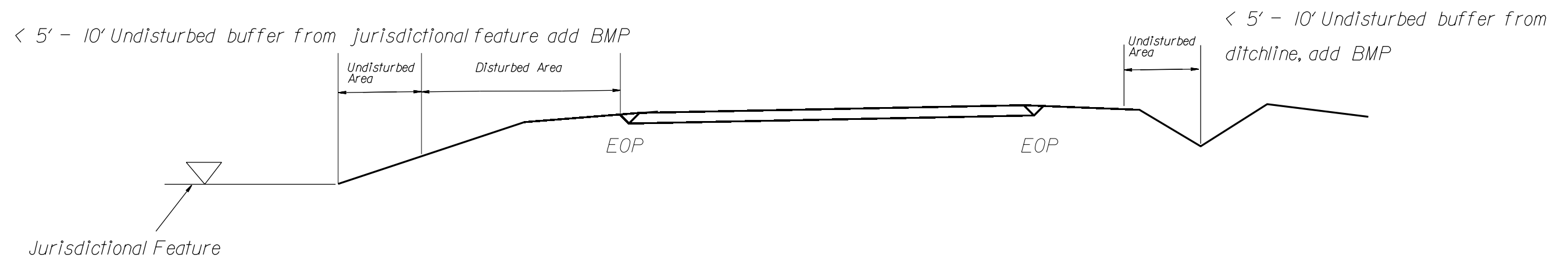
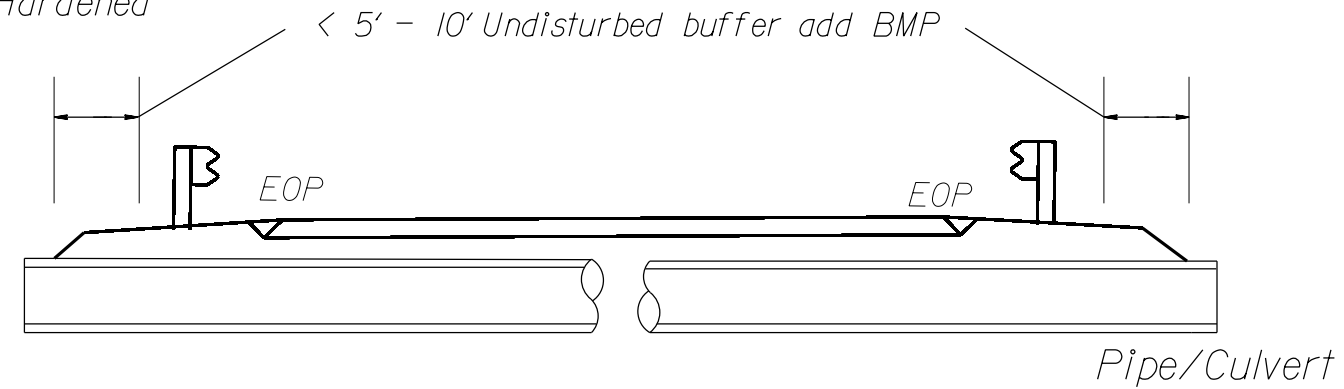


ADVANCE WARNING SIGNS FOR RURAL AND SUBURBAN 2-LANE ROADWAY RESURFACING

NOTES: Less than 5' - 10' undisturbed buffer from ROW, ditchline, water feature, or drainage inlet, add BMP.

BMP Options: Wattle, Silt Fence or Hardened Aggregate.

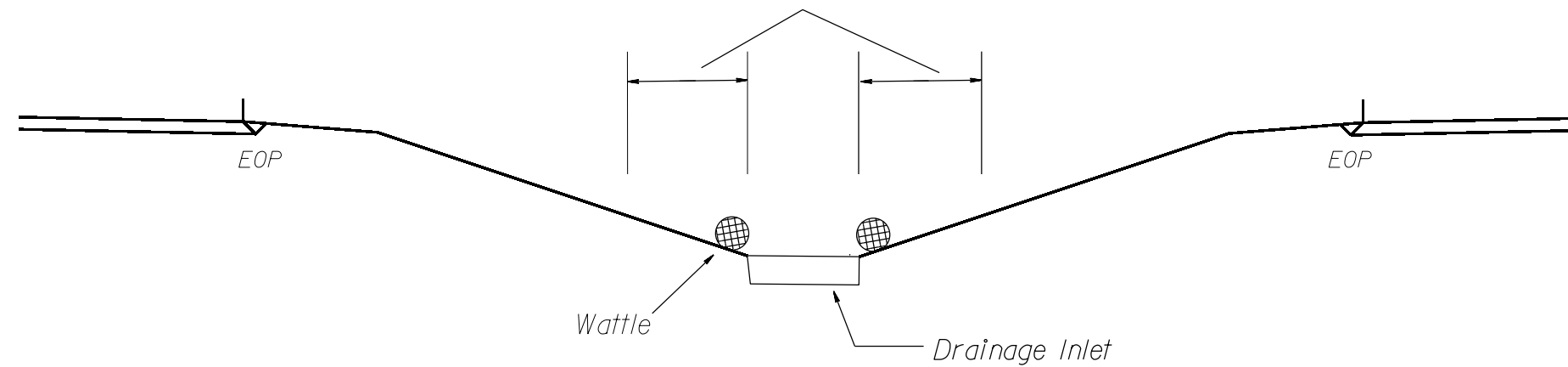
EROSION CONTROL DETAIL



Use BMP's if shoulders and/or frontslopes and/or ditchline and/or backslopes are disturbed

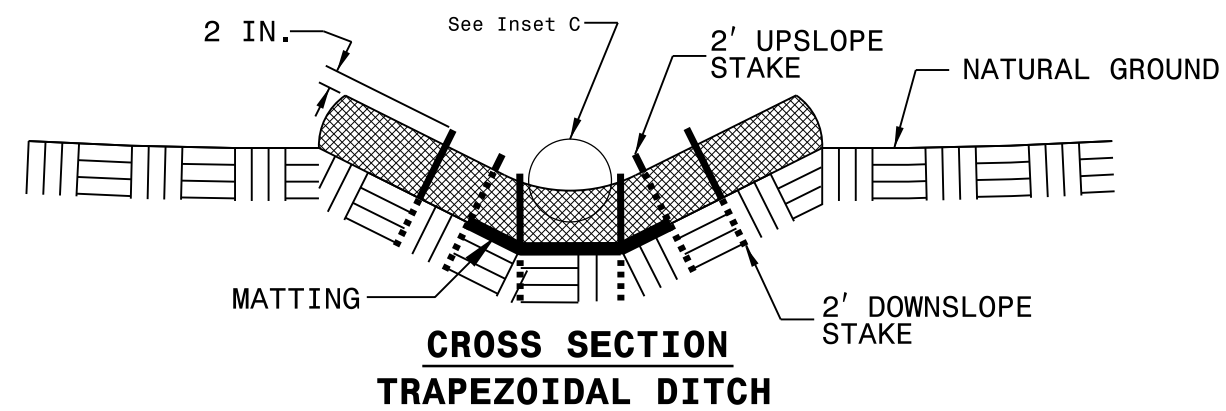
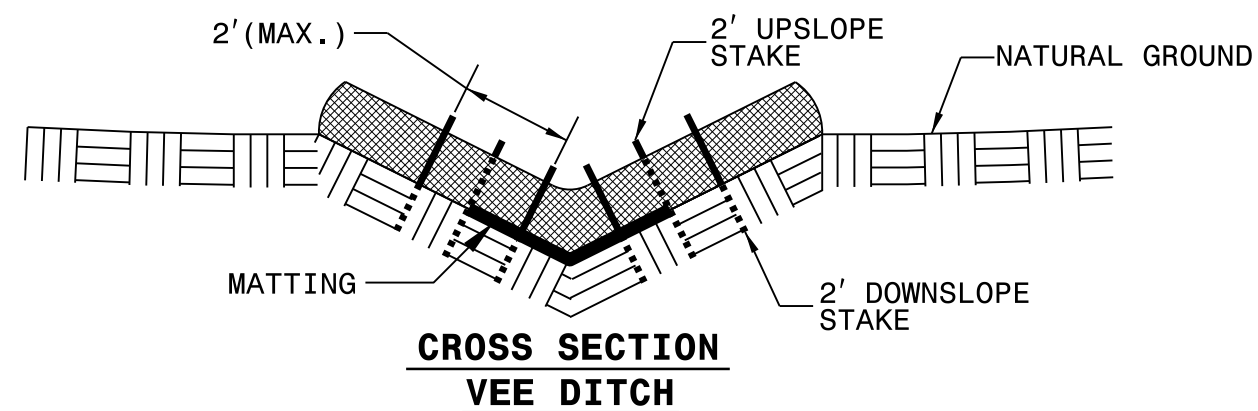
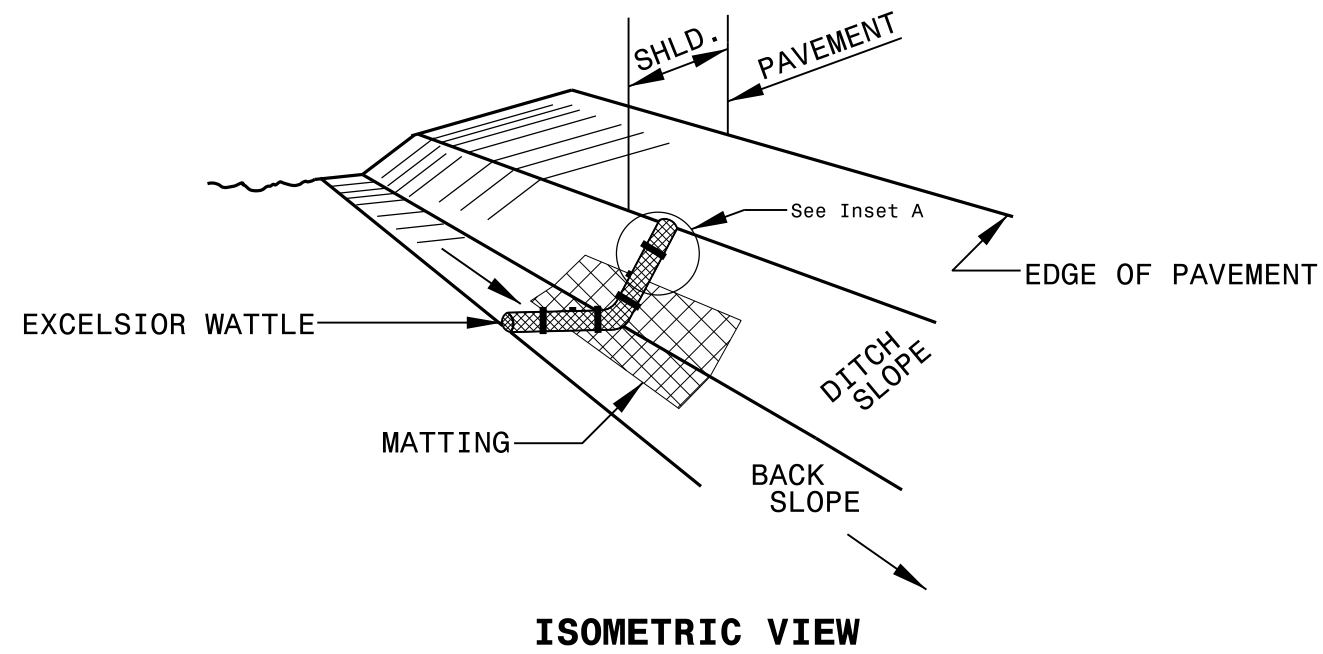


< 5' - 10' Undisturbed buffer from inlet, add wattle



NOT TO SCALE

WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



NOTES:

- USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.
- USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.
- ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.
- INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.
- PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.
- INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.
- INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.
- PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.
- INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON MATTING ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.

