WBS: 2027CPT.03.04.20671

CONTRACT: DC00512

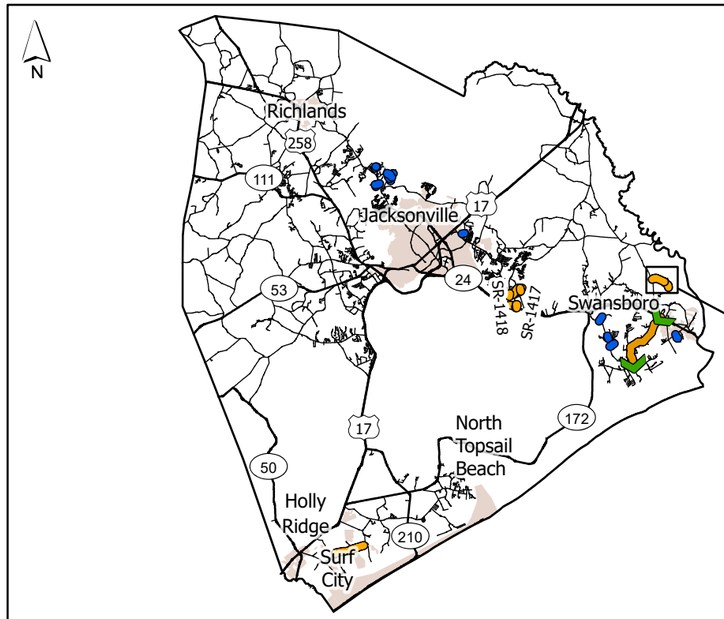
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

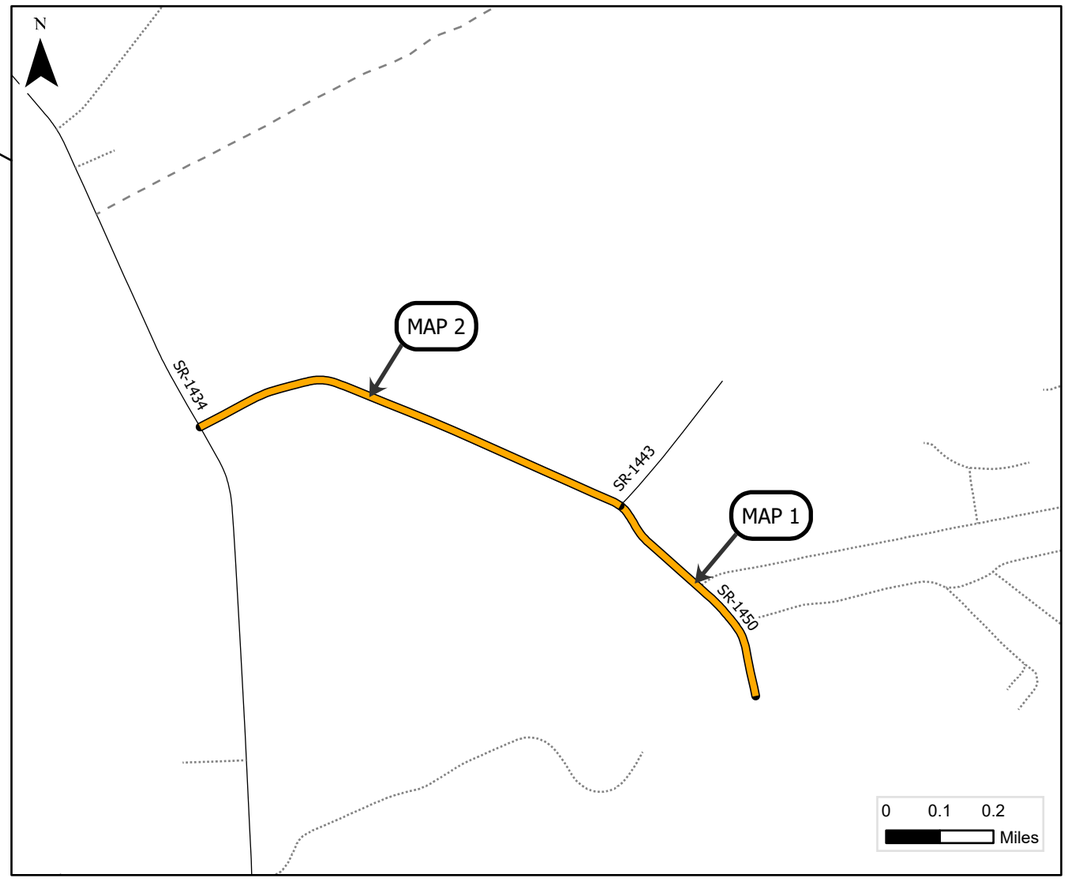
ONSLOW COUNTY

TYPE OF WORK: Resurfacing

STATE	STATE PROJECT REFERENCE NUMBER	SHEET NO.
NC	2027CPT.03.04.20671	1
STATE PROJECT NUMBER		DESCRIPTION

Resurfacing





MAP	ROUTE	DESCRIPTION	TYPE
1	SR-1450 / THOMAS HOLLAND RD	FROM SR 1443 (CURT HOLLAND RD) TO END OF MAINTENANCE [MP 0.00 - MP 0.45]	Resurfacing
2	SR-1443 / CURT HOLLAND RD	FROM SR 1434 (BELGRADE SWANSBORO RD) TO SR 1450 (THOMAS HOLLAND RD) [MP 0.00 - MP 0.85]	Resurfacing

PROJECT LENGTH

MAP	MILES
1	0.45
2	0.85

Prepared in the Office of:

DIVISION OF HIGHWAYS

5501 BARBADOS BLVD., CASTLE HAYNE, NC, 28429

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STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

WBS: 2027CPT.03.04.20671

CONTRACT: DC00512

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

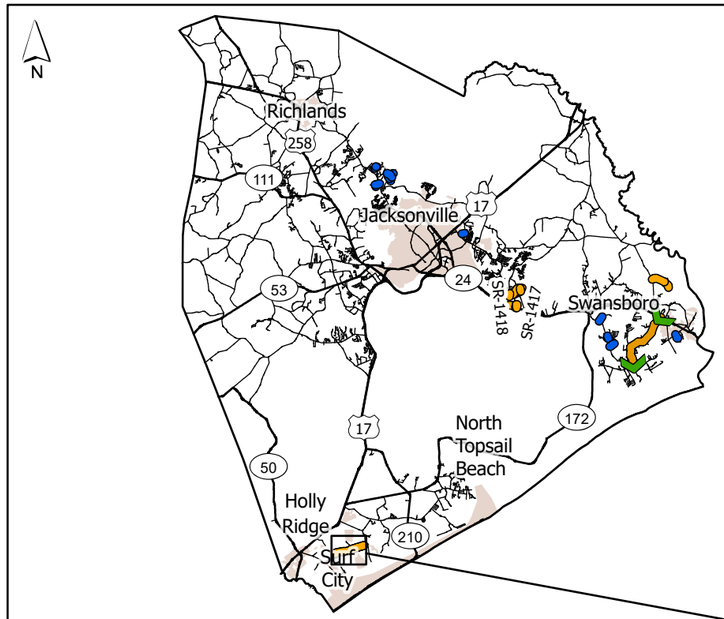
ONSLOW COUNTY

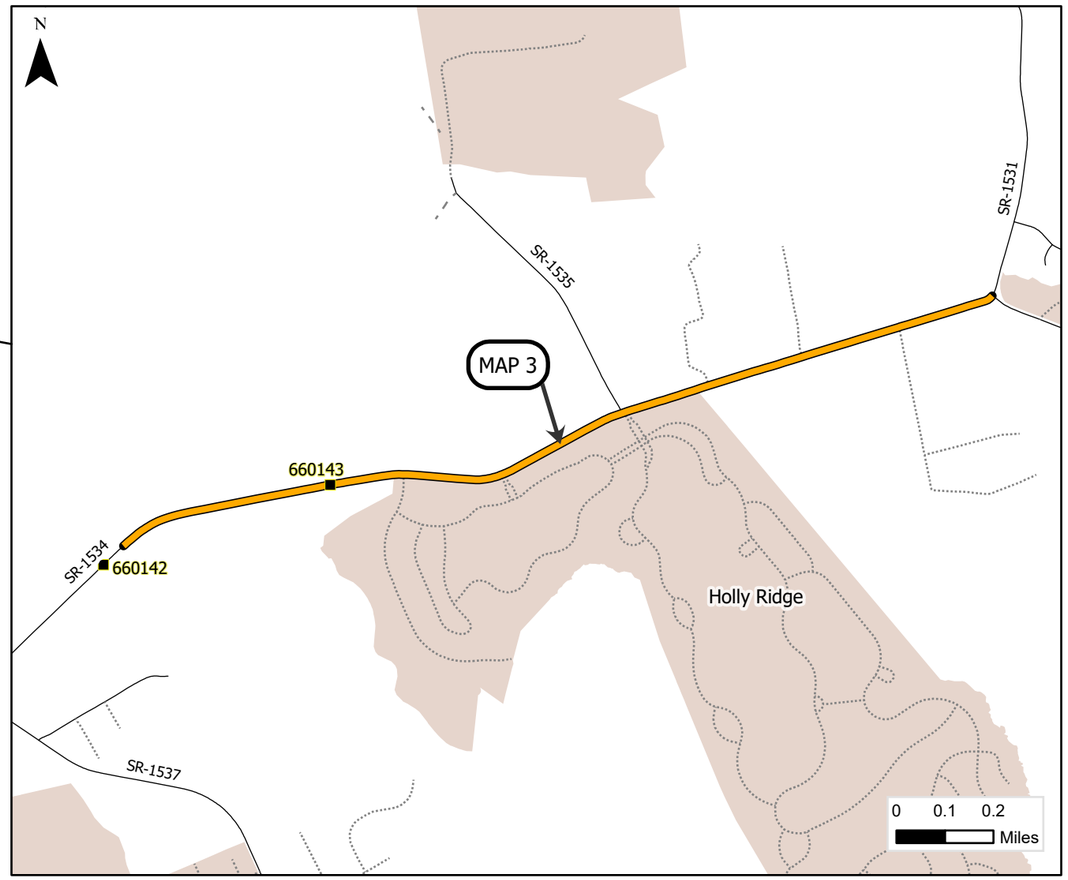
TYPE OF WORK: Resurfacing

STATE	STATE PROJECT REFERENCE NUMBER	SHEET NO.
NC	2027CPT.03.04.20671	2
STATE PROJECT NUMBER	DESCRIPTION	

Resurfacing

Division 3 Bridges





MAP	ROUTE	DESCRIPTION	TYPE
3	SR-1534 / HOLLY RIDGE RD	FROM SR 1531 (TAR LANDING RD) TO BRIDGE JOINT (BRIDGE NO. 0142) [MP 0.00 - MP 1.89]	Resurfacing

PROJECT LENGTH

MAP	MILES
3	1.89

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WBS: 2027CPT.03.04.20671

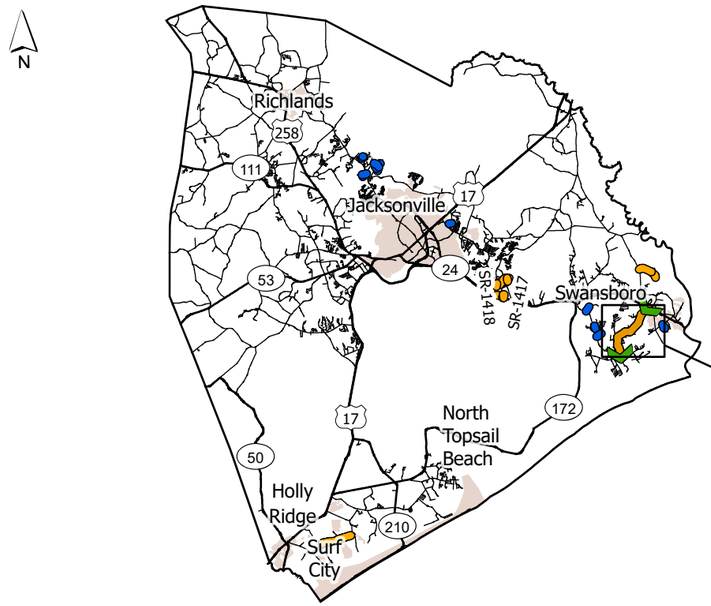
CONTRACT: DC00512

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

ONSLOW COUNTY

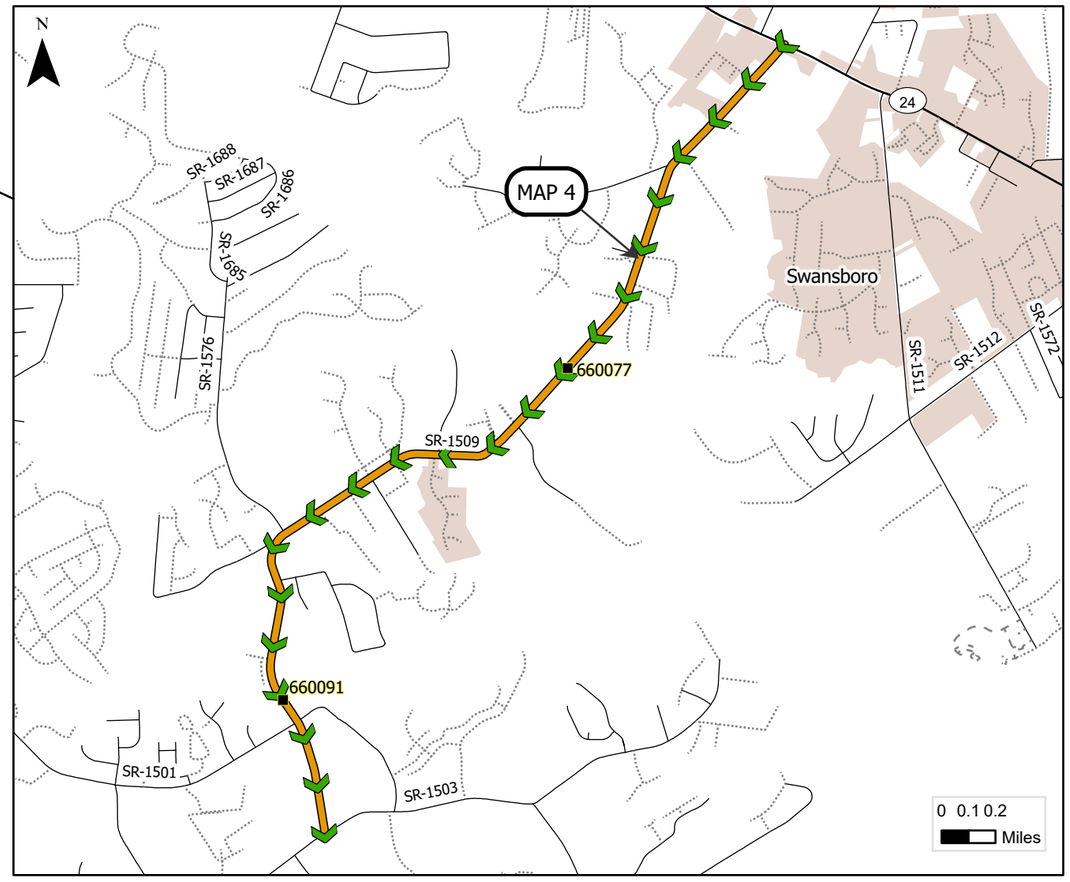
STATE	STATE PROJECT REFERENCE NUMBER	SHEET NO.
NC	2027CPT.03.04.20671	3
STATE PROJECT NUMBER		DESCRIPTION

TYPE OF WORK: Resurfacing, 2' Widening, Rumble Installation (8" EL, 14" CL)



Resurfacing, 2' Widening, 8" EL, 14" CL Rumbles

Division 3 Bridges



MAP	ROUTE	DESCRIPTION	TYPE
4	SR-1509 / QUEENS CREEK RD	FROM NC 24 (W CORBETT AVE) TO SR 1503 (BEAR CREEK RD / GREAT NECK LANDING RD) [MP 0.00 - MP 3.94]	Resurfacing, 2' Widening, 8" EL, 14" CL Rumbles

PROJECT LENGTH

MAP	MILES
4	3.94

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STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

WBS: 2027CPT.03.04.20671

CONTRACT: DC00512

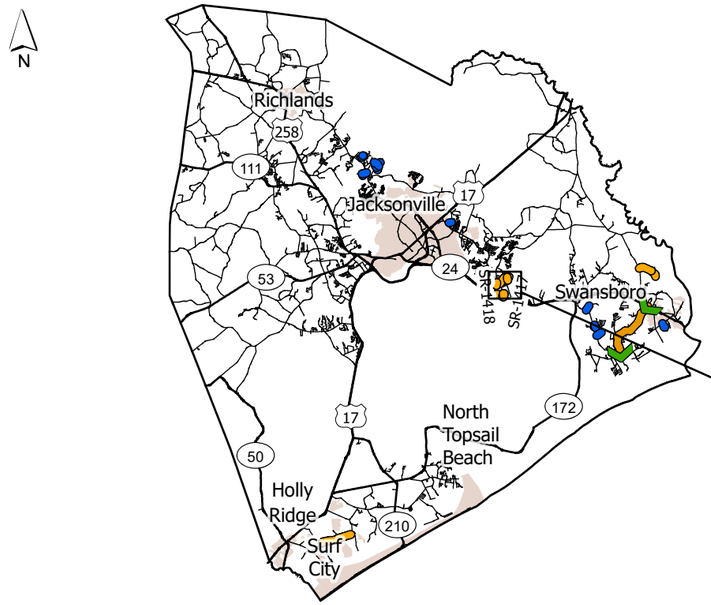
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

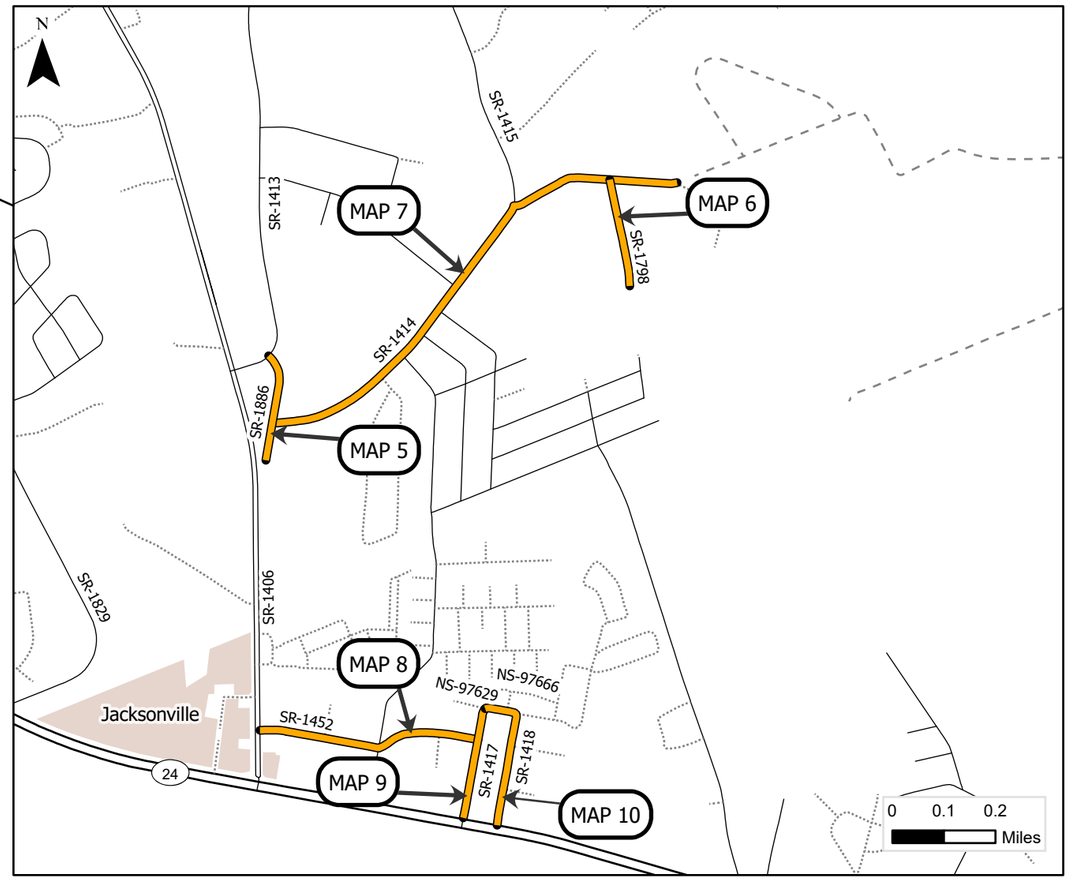
ONSLOW COUNTY

TYPE OF WORK: Resurfacing

STATE	STATE PROJECT REFERENCE NUMBER	SHEET NO.
NC	2027CPT.03.04.20671	4
STATE PROJECT NUMBER		DESCRIPTION

Resurfacing





MAP	ROUTE	DESCRIPTION	TYPE
5	SR-1886 / OLD ROCKY RUN RD	FROM SR 1413 (ROCKY RUN RD) TO END OF MAINTENANCE [MP 0.00 - MP 0.21]	Resurfacing
6	SR-1798 / WHITE OAK LN	FROM SR 1414 (WOOD RD) TO END OF MAINTENANCE [MP 0.00 - MP 0.21]	Resurfacing
7	SR-1414 / LAKE COLE RD / WOOD RD	FROM SR 1886 (OLD ROCKY RUN RD) TO END OF MAINTENANCE [MP 0.00 - MP 0.99]	Resurfacing
8	SR-1452 / BARBARA AVE	FROM SR 1406 (PINEY GREEN RD) TO SR 1417 (TALLMAN CIR) [MP 0.00 - MP 0.43]	Resurfacing
9	SR-1417 / TALLMAN CIR	FROM SR 1418 (TALLMAN CIR) TO NC 24 (FREEDOM WAY) [MP 0.00 - MP 0.21]	Resurfacing
10	SR-1418 / TALLMAN CIR	FROM NC 24 (FREEDOM WAY) TO SR 1417 (TALLMAN CIR) [MP 0.00 - MP 0.28]	Resurfacing

PROJECT LENGTH

MAP	MILES
5	0.21
6	0.21
7	0.99

MAP	MILES
8	0.43
9	0.21
10	0.28

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DIVISION OF HIGHWAYS

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STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

WBS: 2027CPT.03.04.20672

CONTRACT: DC00512

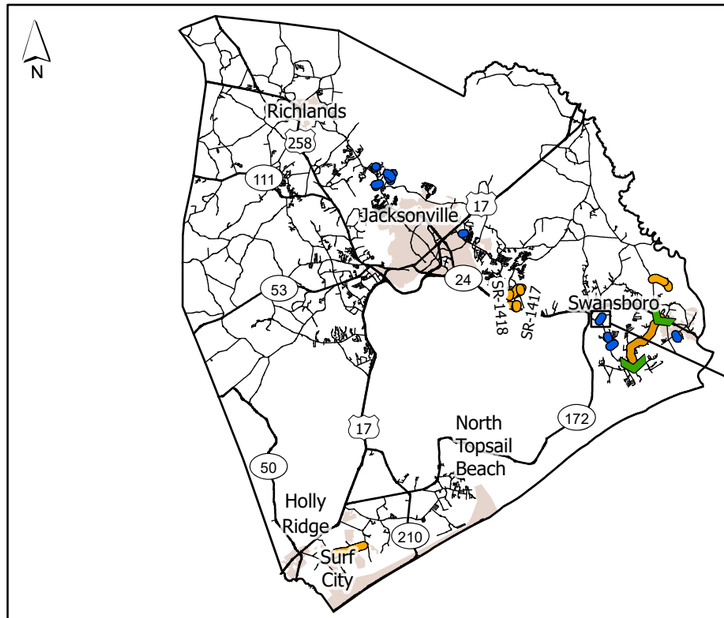
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

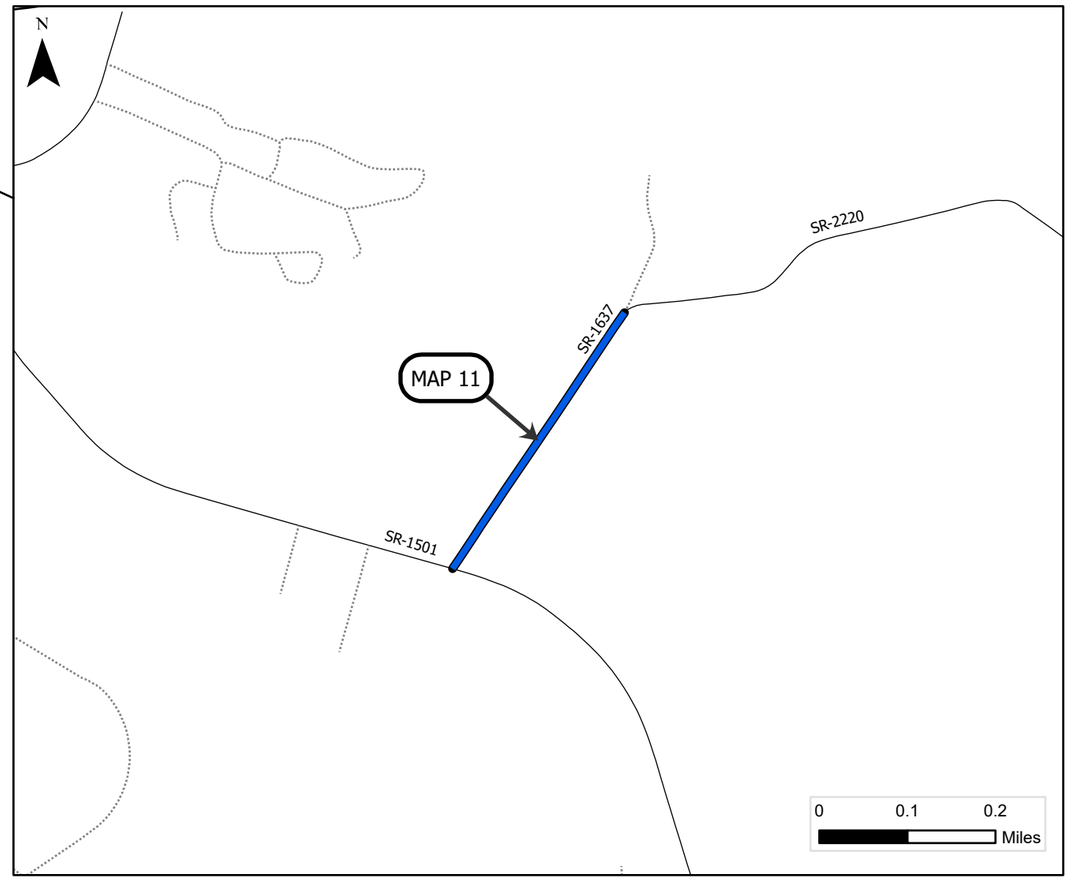
ONSLOW COUNTY

TYPE OF WORK: Preservation

STATE	STATE PROJECT REFERENCE NUMBER	SHEET NO.
NC	2027CPT.03.04.20672	5
STATE PROJECT NUMBER		DESCRIPTION

Preservation





MAP	ROUTE	DESCRIPTION	TYPE
11	SR-1637 / VAN RIGGS RD	FROM SR 1501 (SAND RIDGE RD) TO SR 2220 (FISHING CREEK LN) [MP 0.00 - MP 0.35]	Preservation

PROJECT LENGTH

MAP	MILES
11	0.35

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WBS: 2027CPT.03.04.20672

CONTRACT: DC00512

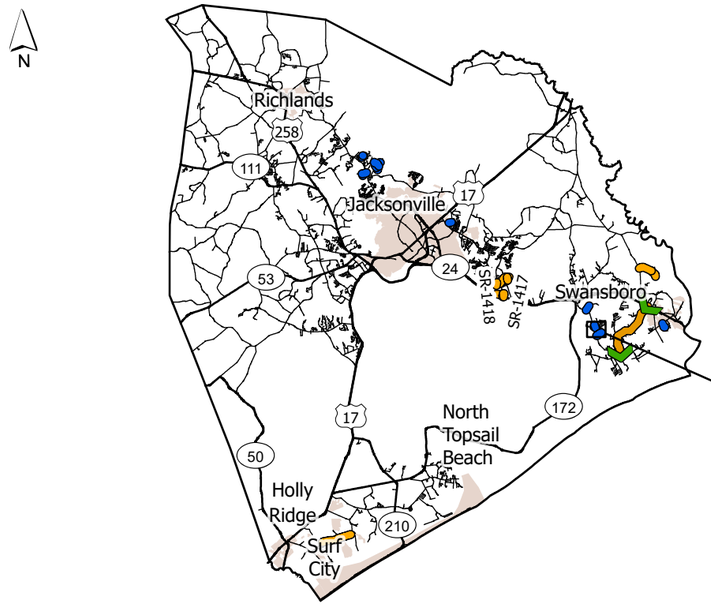
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

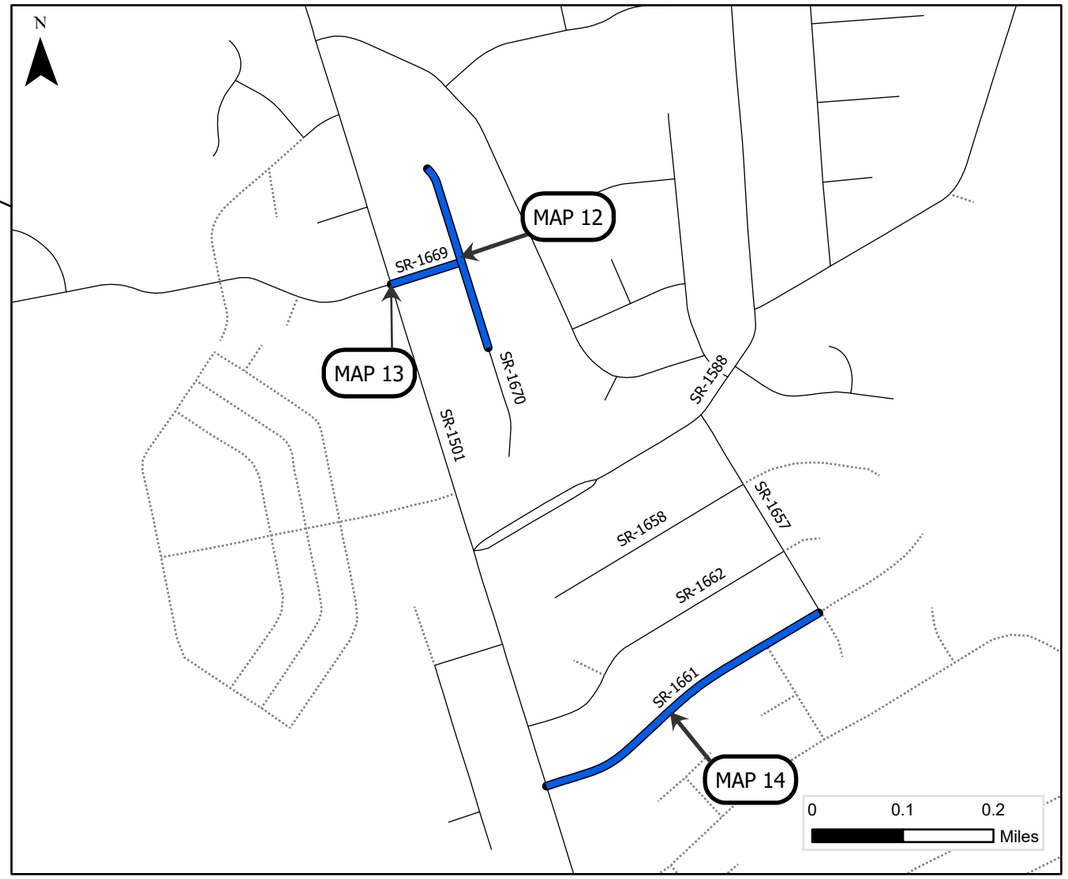
ONSLOW COUNTY

TYPE OF WORK: Preservation

STATE	STATE PROJECT REFERENCE NUMBER	SHEET NO.
NC	2027CPT.03.04.20672	6
STATE PROJECT NUMBER		DESCRIPTION

Preservation





MAP	ROUTE	DESCRIPTION	TYPE
12	SR-1670 / CINNAMON DR	FROM CUL-DE-SAC TO END OF MAINTENANCE [MP 0.00 - MP 0.21]	Preservation
13	SR-1669 / SPICE DR	FROM SR 1501 (SAND RIDGE RD) TO SR 1670 (CINNAMON DR) [MP 0.00 - MP 0.08]	Preservation
14	SR-1661 / FOXTRACE LN	FROM SR 1501 (SAND RIDGE RD) TO SR 1657 (NUTFIELD DR) [MP 0.00 - MP 0.36]	Preservation

PROJECT LENGTH

MAP	MILES
12	0.21
13	0.08
14	0.36

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DEPARTMENT OF TRANSPORTATION

WBS: 2027CPT.03.04.20672

CONTRACT: DC00512

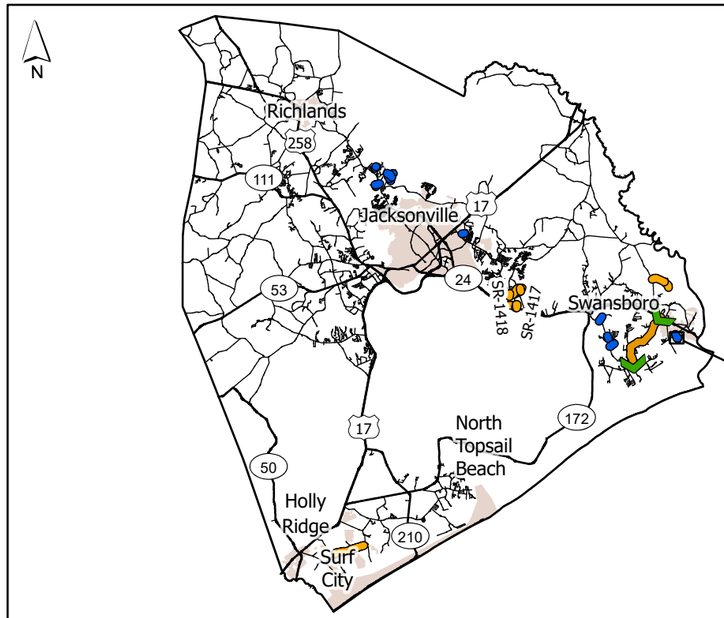
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

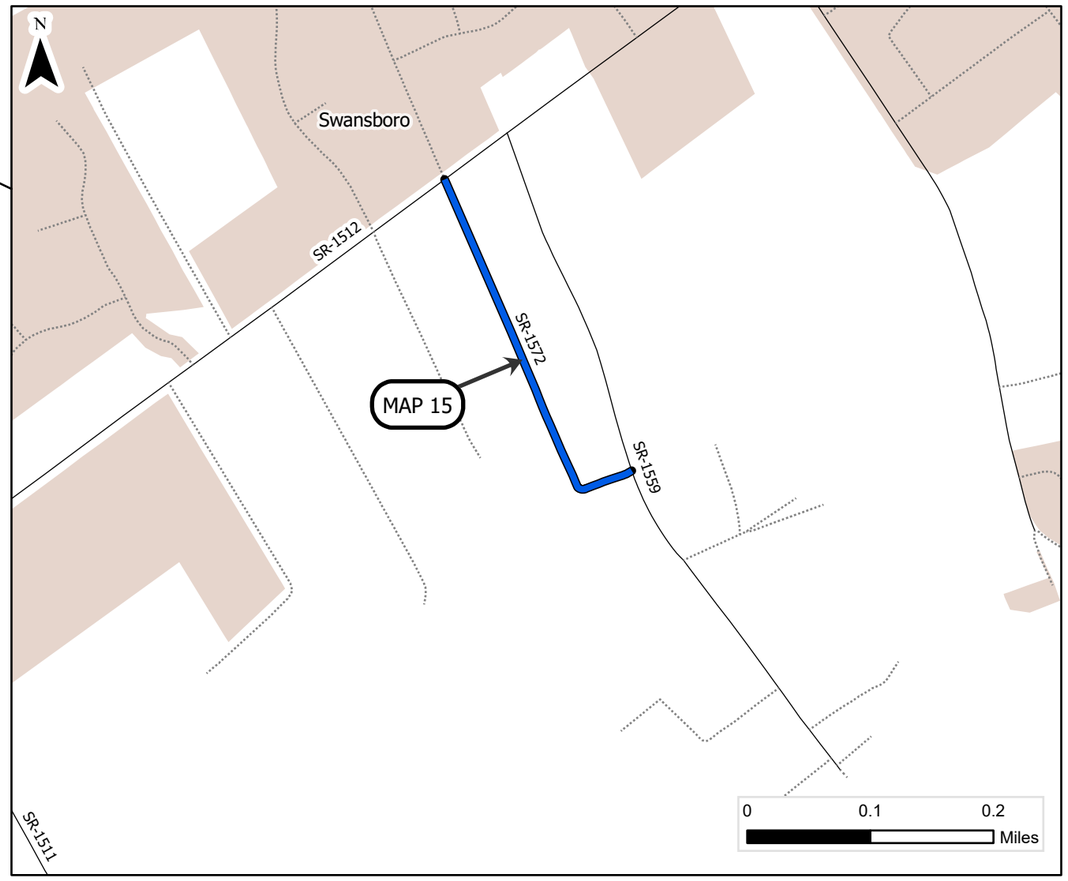
ONSLOW COUNTY

TYPE OF WORK: Preservation

STATE	STATE PROJECT REFERENCE NUMBER	SHEET NO.
NC	2027CPT.03.04.20672	7
STATE PROJECT NUMBER		DESCRIPTION

Preservation





MAP	ROUTE	DESCRIPTION	TYPE
15	SR-1572 / SEASHORE DR	FROM SR 1512 (OLD HAMMOCKS RD) TO SR 1559 (GLANCY RD) [MP 0.00 - MP 0.32]	Preservation

PROJECT LENGTH

MAP	MILES
15	0.32

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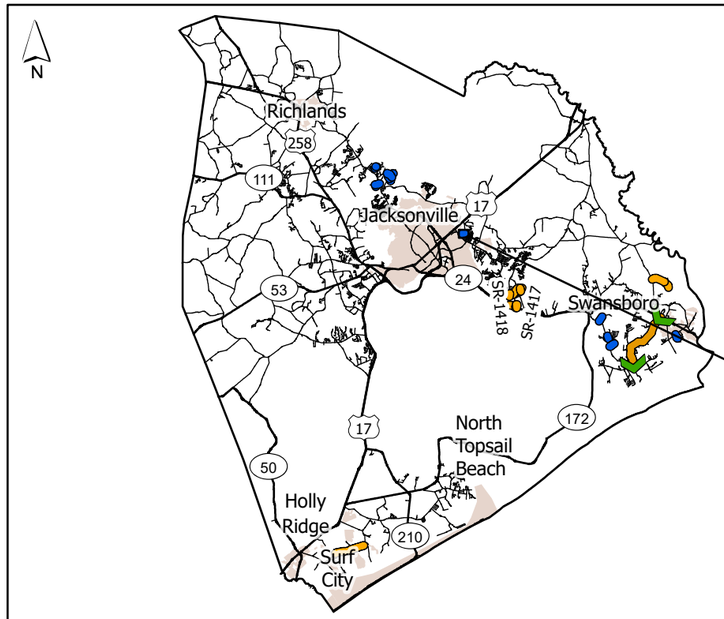
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

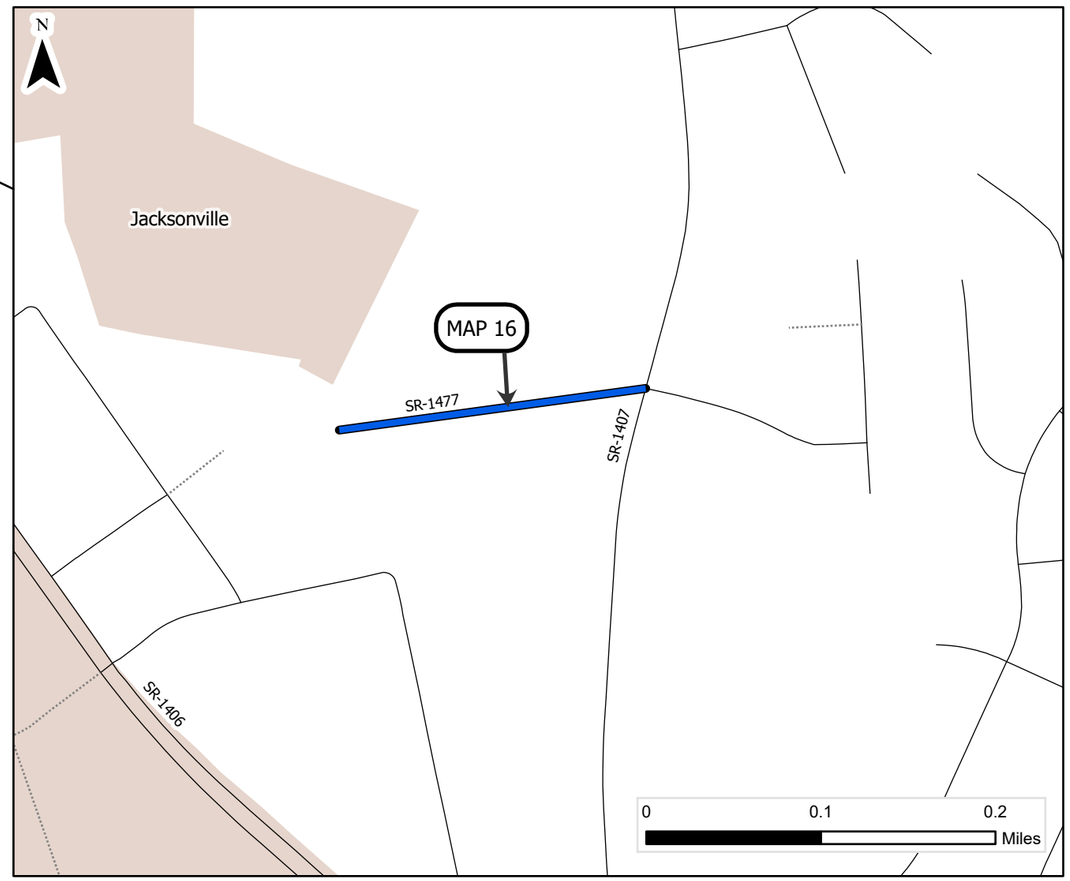
ONSLOW COUNTY

TYPE OF WORK: Preservation

STATE	STATE PROJECT REFERENCE NUMBER	SHEET NO.
NC	2027CPT.03.04.20672	8
STATE PROJECT NUMBER		DESCRIPTION

Preservation





MAP	ROUTE	DESCRIPTION	TYPE
16	SR-1477 / N PARKER RD	FROM SR 1407 (WOLF SWAMP RD) TO CUL-DE-SAC [MP 0.00 - MP 0.18]	Preservation

PROJECT LENGTH

MAP	MILES
16	0.18

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STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

WBS: 2027CPT.03.04.20672

CONTRACT: DC00512

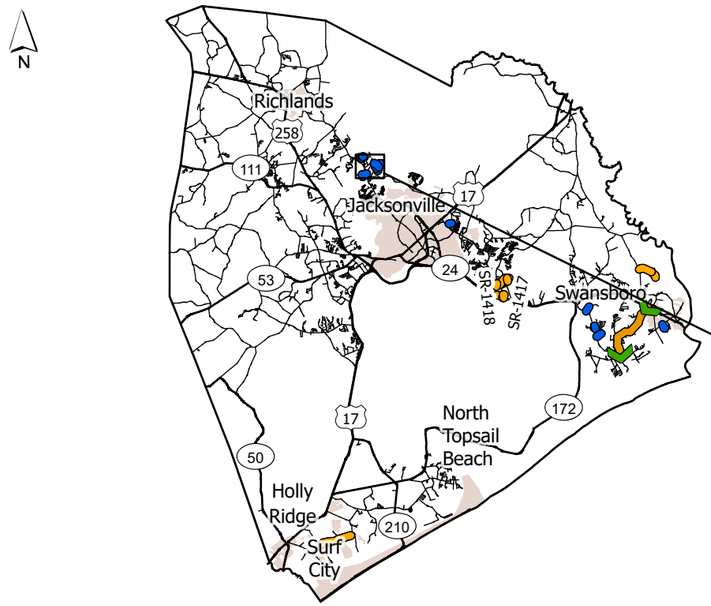
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

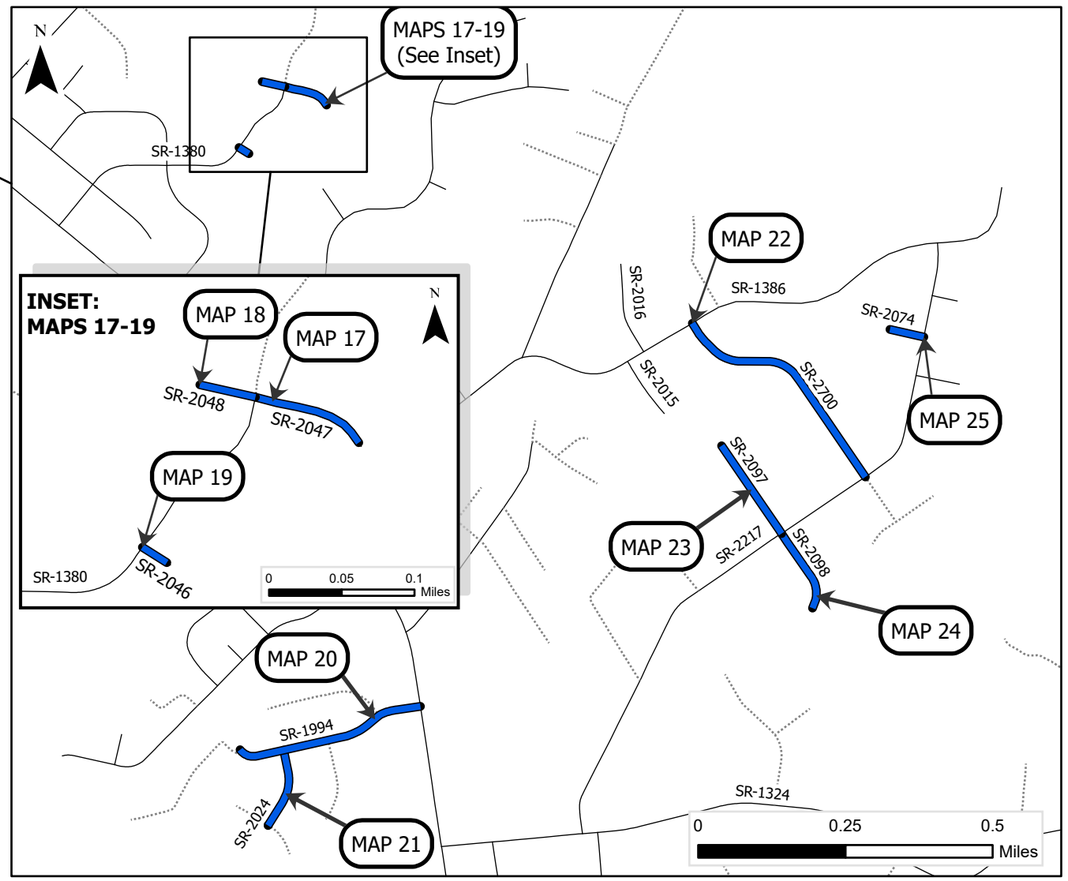
ONSLOW COUNTY

TYPE OF WORK: Preservation

STATE	STATE PROJECT REFERENCE NUMBER	SHEET NO.
NC	2027CPT.03.04.20672	9
STATE PROJECT NUMBER		DESCRIPTION

Preservation





MAP	ROUTE	DESCRIPTION	TYPE
17	SR-2047 / E REGENT CT	FROM SR 1380 (BATCHELORS TRL) TO CUL-DE-SAC [MP 0.00 - MP 0.08]	Preservation
18	SR-2048 / W REGENT CT	FROM SR 1380 (BATCHELORS TRL) TO CUL-DE-SAC [MP 0.00 - MP 0.04]	Preservation
19	SR-2046 / PAWN CT	FROM SR 1380 (BATCHELORS TRL) TO CUL-DE-SAC [MP 0.00 - MP 0.02]	Preservation
20	SR-1994 / BAYSDEN DR	FROM SR 1308 (GUM BRANCH RD) TO CUL-DE-SAC [MP 0.00 - MP 0.33]	Preservation
21	SR-2024 / BEVERLY DR	FROM SR 1994 (BAYSDEN DR) TO END OF MAINTENANCE [MP 0.00 - MP 0.14]	Preservation
22	SR-2700 / CHISHOLM TRL	FROM SR 1386 (N BRYAN RD) TO SR 2217 (MAREADY RD) [MP 0.00 - MP 0.42]	Preservation
23	SR-2097 / N STAGE COACH TRL	FROM SR 2217 (MAREADY RD) TO CUL-DE-SAC [MP 0.00 - MP 0.18]	Preservation
24	SR-2098 / S STAGE COACH TRL	FROM SR 2217 (MAREADY RD) TO CUL-DE-SAC [MP 0.00 - MP 0.15]	Preservation
25	SR-2074 / SAN ANTONIO TRL	FROM SR 2217 (MAREADY RD) TO CUL-DE-SAC [MP 0.00 - MP 0.06]	Preservation

PROJECT LENGTH

MAP	MILES
17	0.08
18	0.04
19	0.02

MAP	MILES
20	0.33
21	0.14
22	0.42

MAP	MILES
23	0.18
24	0.15
25	0.06

Prepared in the Office of:

DIVISION OF HIGHWAYS

5501 BARBADOS BLVD., CASTLE HAYNE, NC, 28429

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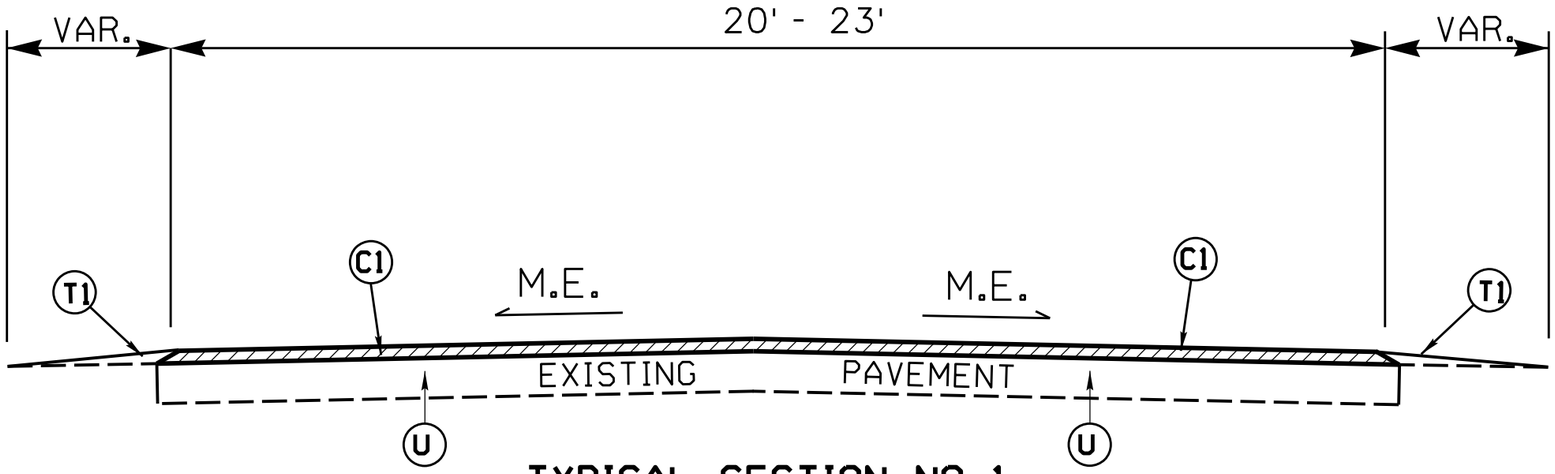
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

8/17/99

REVISIONS



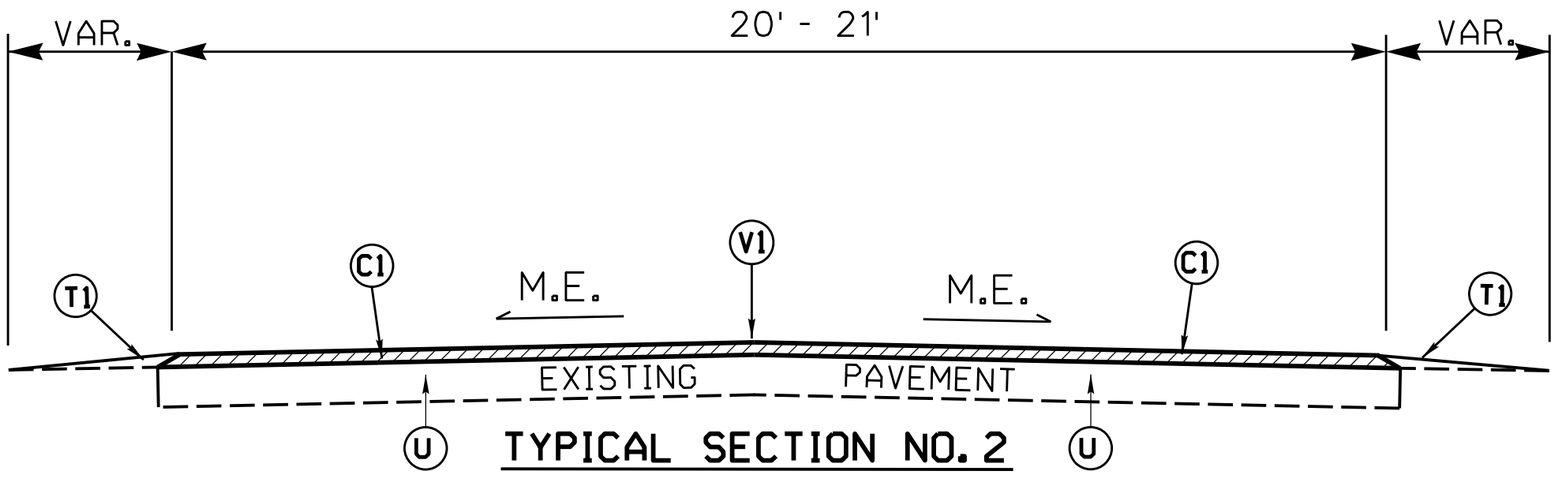
TYPICAL SECTION NO. 1

MAP NO. 1
SR 1450 (THOMAS HOLLAND RD)
MP 0.00 - MP 0.45

MAP NO. 2
SR 1443 (CURT HOLLAND RD)
MP 0.00 - MP 0.85

MAP NO. 5
SR 1886 (OLD ROCKY RUN RD)
MP 0.00 - MP 0.21

MAP NO. 7
SR 1414 (LAKE COLE RD/WOOD RD)
MP 0.00 - MP 0.99



TYPICAL SECTION NO. 2

MAP NO. 3
SR 1534 (HOLLY RIDGE RD)
MP 0.00 - MP 1.89

MAP NO. 8
SR 1452 (BARBARA AVE)
MP 0.00 - MP 0.43

MAP NO. 9
SR 1417 (TALLMAN CIR)
MP 0.00 - MP 0.21

MAP NO. 10
SR 1418 (TALLMAN CIR)
MP 0.00 - MP 0.28

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.50" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ.YD.
C2	PROP. APPROX. 1.25" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ.YD.
E1	PROP. APPROX. 4" DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ.YD.
R1	EXISTING CONCRETE/ASPHALT VALLEY CURB & GUTTER
R2	EXISTING CONCRETE GUARDRAIL
T1	EARTH MATERIAL (SHOULDER RECONSTRUCTION)
U	EXISTING PAVEMENT
V1	MILLING, 1.50" DEPTH
V2	VARIABLE MILLING, 0" - 1.25" DEPTH
V3	8" SINUSOIDAL MILLED RUMBLE STRIPE, EDGELINE
V4	14" SINUSOIDAL MILLED RUMBLE STRIPE, CENTERLINE

NOTES: MILL A SINGLE LANE AND PAVE BACK BY THE END OF EACH WORK DAY.

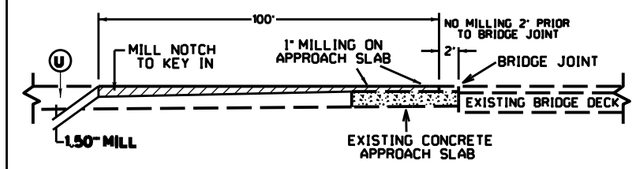
SHOULDER WORK ON MAP NO. 1 - 5 & 7 - 10 AS NEEDED, TO BE DETERMINED BY ENGINEER.

THE CONTRACTOR SHALL RETAIN EXISTING LANE WIDTHS.

REINSTALL PAVEMENT MARKINGS PER 2024 STANDARDS.

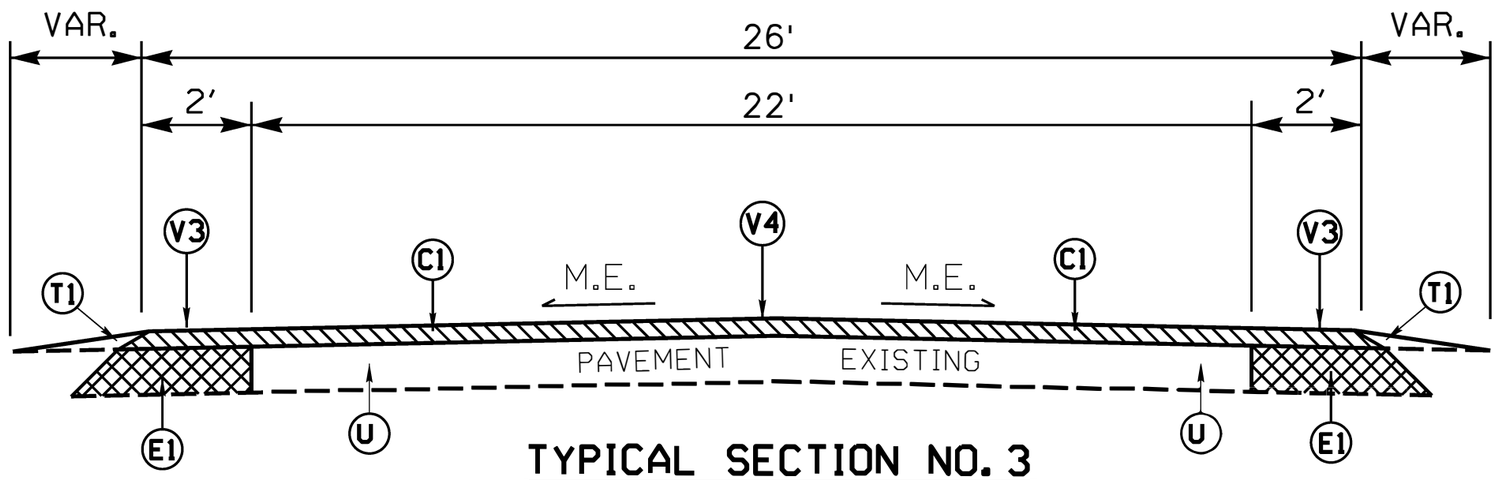
PAVEMENT EDGE SLOPES ARE 1:1, EXCEPT FINAL SURFACE COURSE. SEE SHOULDER WEDGE DETAIL.

INCIDENTAL MILLING DETAIL FOR BRIDGE APPROACHES



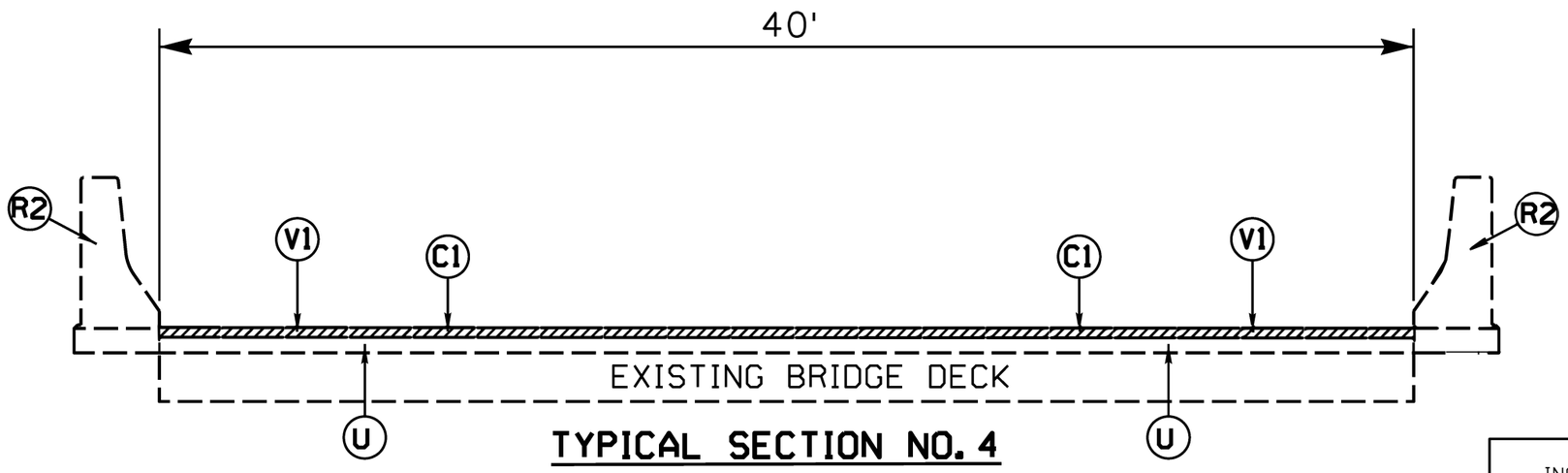
MAP 3: BRIDGE #0143 - SR 1534 (HOLLY RIDGE RD)

$$$$$$$SYSTIME$$$$$$
$$$$$$$



TYPICAL SECTION NO. 3

MAP NO. 4
SR 1509 (QUEENS CREEK RD)
MP 0.00 - MP 3.94



TYPICAL SECTION NO. 4

MAP NO. 4
SR 1509 (QUEENS CREEK RD)
BRIDGE NO. 091
MP 3.40 - MP 3.42

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.50" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ.YD.
E1	PROP. APPROX. 4" DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ.YD.
R2	EXISTING CONCRETE GUARDRAIL
T1	EARTH MATERIAL (SHOULDER RECONSTRUCTION)
U	EXISTING PAVEMENT
V1	MILLING, 1.50" DEPTH
V3	8" SINUSOIDAL MILLED RUMBLE STRIPE, EDGELINE
V4	14" SINUSOIDAL MILLED RUMBLE STRIPE, CENTERLINE

NOTES: MILL A SINGLE LANE AND PAVE BACK BY THE END OF EACH WORK DAY.

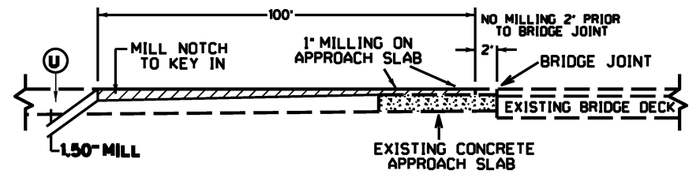
SHOULDER WORK ON MAP NO. 1 - 5 & 7 - 10 AS NEEDED, TO BE DETERMINED BY ENGINEER.

THE CONTRACTOR SHALL RETAIN EXISTING LANE WIDTHS.

REINSTALL PAVEMENT MARKINGS PER 2024 STANDARDS.

PAVEMENT EDGE SLOPES ARE 1:1, EXCEPT FINAL SURFACE COURSE. SEE SHOULDER WEDGE DETAIL.

INCIDENTAL MILLING DETAIL FOR BRIDGE APPROACHES

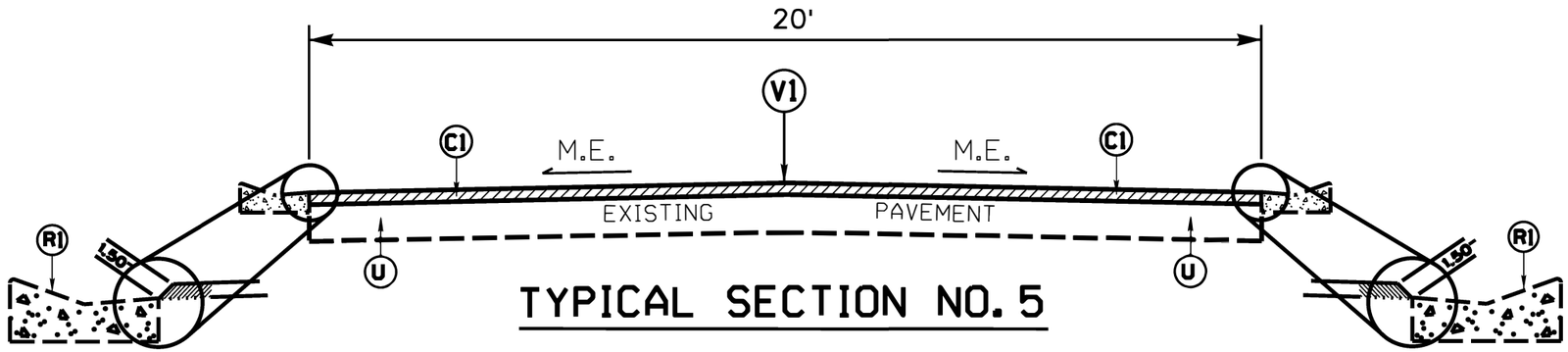


MAP 4: BRIDGE #0077 - SR 1509 (QUEENS CREEK RD)

REVISIONS

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
2027CPT.03.04.20671,ETC.	12



TYPICAL SECTION NO. 5

MAP NO. 6
SR 1798 (WHITE OAK LN)
MP 0.00 - MP 0.21

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.50" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ.YD.
C2	PROP. APPROX. 1.25" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ.YD.
R1	EXISTING CONCRETE/ASPHALT VALLEY CURB & GUTTER
U	EXISTING PAVEMENT
V1	MILLING, 1.50" DEPTH
V2	VARIABLE MILLING, 0" - 1.25" DEPTH

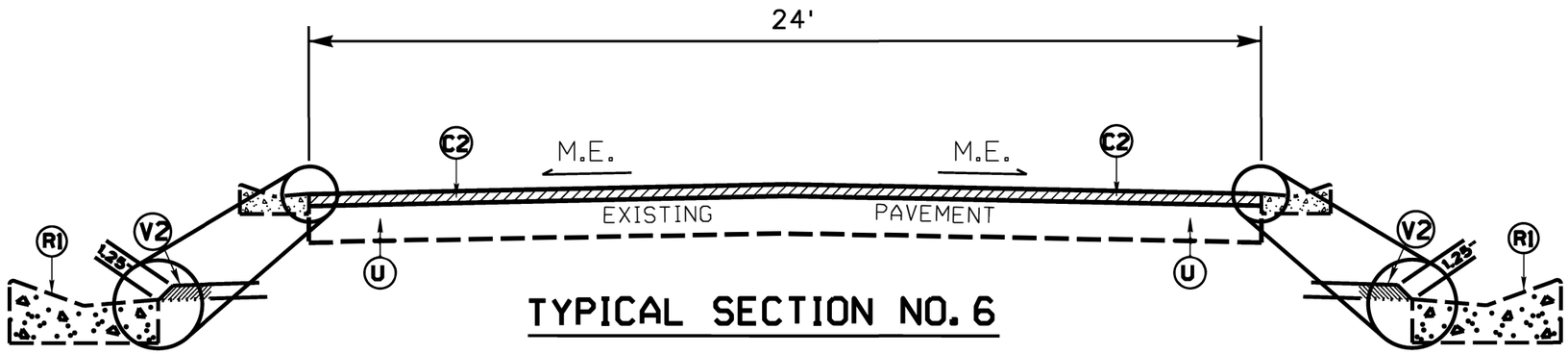
NOTES: MILL A SINGLE LANE AND PAVE BACK BY THE END OF EACH WORK DAY.

SHOULDER WORK ON MAP NO. 1 - 5 & 7 - 10 AS NEEDED, TO BE DETERMINED BY ENGINEER.

THE CONTRACTOR SHALL RETAIN EXISTING LANE WIDTHS.

REINSTALL PAVEMENT MARKINGS PER 2024 STANDARDS.

PAVEMENT EDGE SLOPES ARE 1:1, EXCEPT FINAL SURFACE COURSE. SEE SHOULDER WEDGE DETAIL.



TYPICAL SECTION NO. 6

MAP NO. 20
SR 1994 (BAYSDEN DR)
MP 0.00 - MP 0.33

MAP NO. 21
SR 2024 (BEVERLY DR)
MP 0.00 - MP 0.14

8/17/99

REVISIONS

$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$$$$$$$$$$$$$$$$$$

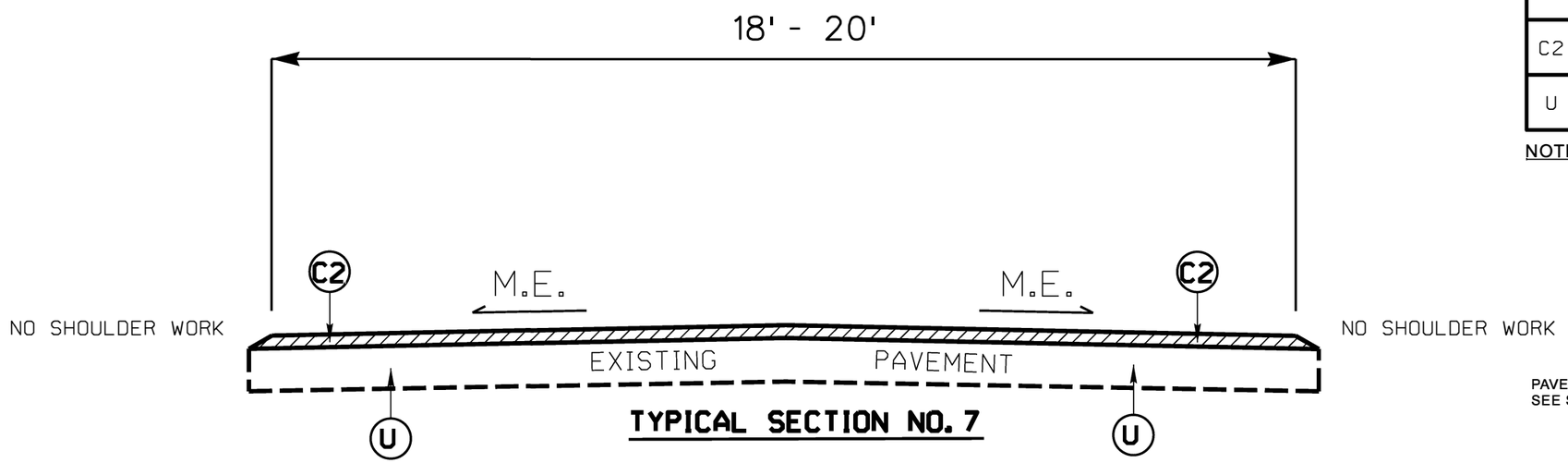
PAVEMENT SCHEDULE	
C2	PROP. APPROX. 1.25" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ.YD.
U	EXISTING PAVEMENT

NOTES: MILL A SINGLE LANE AND PAVE BACK BY THE END OF EACH WORK DAY.

THE CONTRACTOR SHALL RETAIN EXISTING LANE WIDTHS.

REINSTALL PAVEMENT MARKINGS PER 2024 STANDARDS.

PAVEMENT EDGE SLOPES ARE 1:1, EXCEPT FINAL SURFACE COURSE. SEE SHOULDER WEDGE DETAIL.



TYPICAL SECTION NO. 7

MAP NO. 11
SR 1637 (VAN RIGGS RD)
MP 0.00 - MP 0.35

MAP NO. 12
SR 1670 (CINNAMON DR)
MP 0.00 - MP 0.21

MAP NO. 13
SR 1669 (SPICE DR)
MP 0.00 - MP 0.08

MAP NO. 14
SR 1661 (FOXTRACE LN)
MP 0.00 - MP 0.36

MAP NO. 15
SR 1572 (SEASHORE DR)
MP 0.00 - MP 0.32

MAP NO. 16
SR 1477 (N PARKER RD)
MP 0.00 - MP 0.18

MAP NO. 17
SR 2047 (E REGENT CT)
MP 0.00 - MP 0.08

MAP NO. 18
SR 2048 (W REGENT CT)
MP 0.00 - MP 0.04

MAP NO. 19
SR 2046 (PAWN CT)
MP 0.00 - MP 0.02

MAP NO. 22
SR 2700 (CHISHOLM TRL)
MP 0.00 - MP 0.42

MAP NO. 23
SR 2097 (N STAGE COACH TRL)
MP 0.00 - MP 0.18

MAP NO. 24
SR 2098 (S STAGE COACH TRL)
MP 0.00 - MP 0.15

MAP NO. 25
SR 2074 (SAN ANTONIO TRL)
MP 0.00 - MP 0.06

EFF.01-16-2024
REV.

2024 ROADWAY ENGLISH STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N.C.Department of Transportation - Raleigh,N.C.,Dated January,2024 are applicable to this project and by reference hereby are considered a part of these plans:

STD.NO. TITLE

DIVISION 8 - INCIDENTALS
846.01 Concrete Curb, Gutter and Curb & Gutter

DIVISION 12 - PVMT MARKING, MARKERS AND DELINEATION
1205.01 Pavement Markings
1205.08 Pavement Markings - Symbols & Word Messages
1251.01 Raised Pavement Markers - Permanent and Temporary

REVISIONS

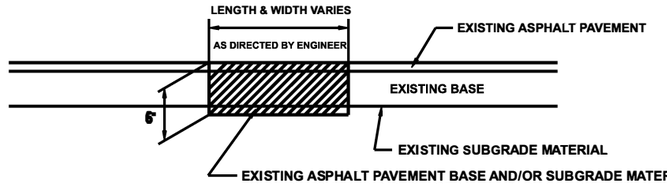
8/17/99

PROJECT REFERENCE NO.	SHEET NO.
2027CPT.03.04.20671, ETC.	14

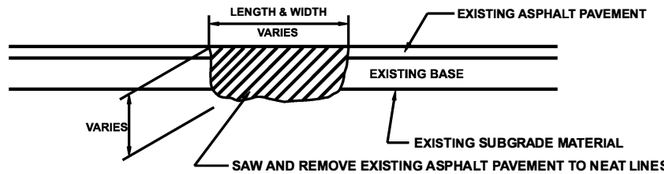
8/17/99

REVISIONS

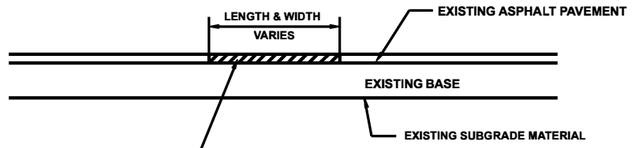
DETAILS OF REPAIRING EXISTING PAVEMENT PRIOR TO RESURFACING FOR FULL DEPTH AND MILLING



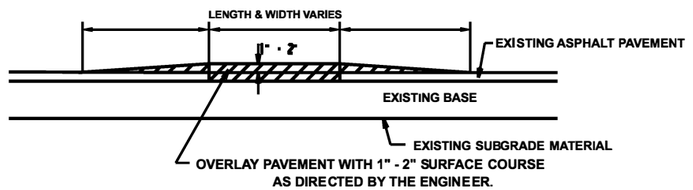
DETAIL NO. 1



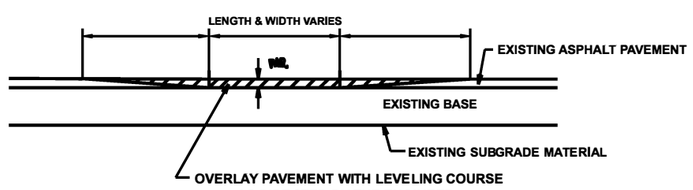
DETAIL NO. 2



DETAIL NO. 3



DETAIL NO. 4

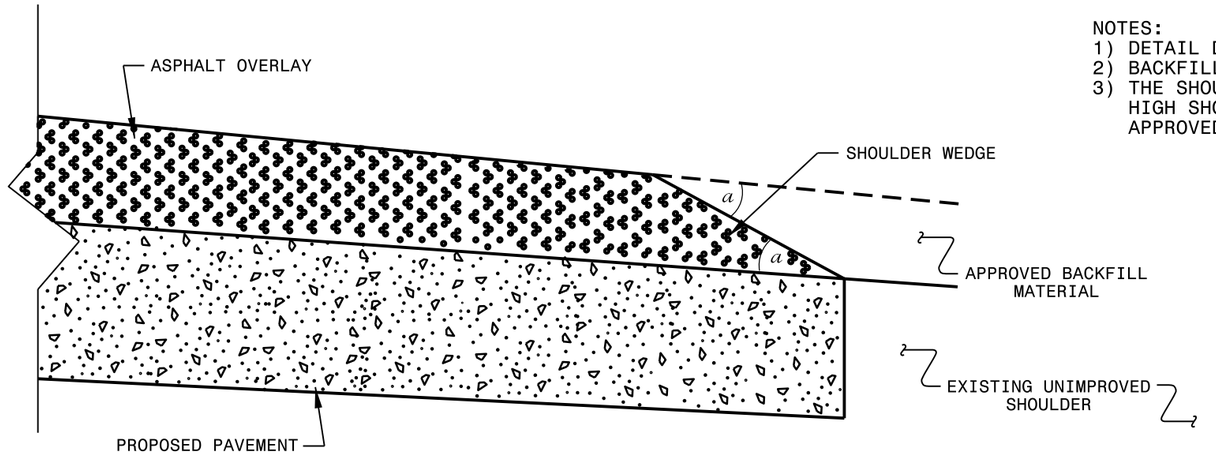


DETAIL NO. 5

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$

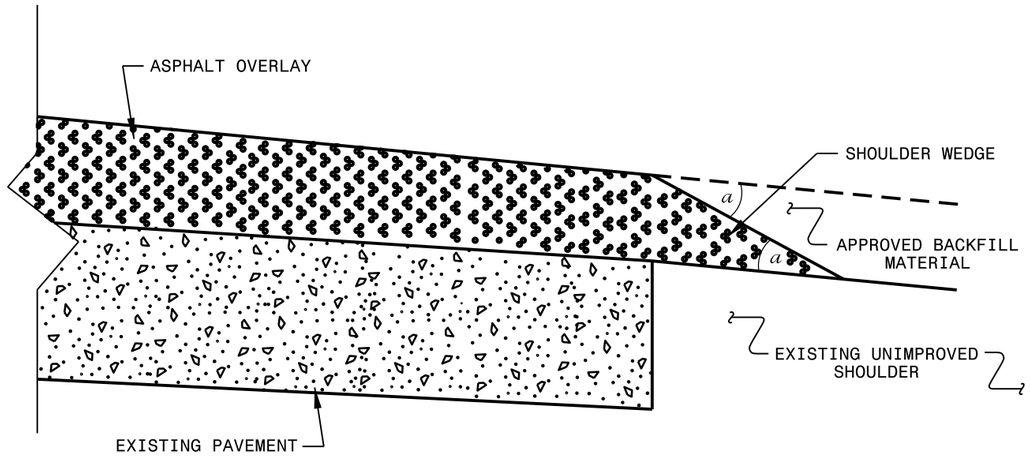
PROJECT REFERENCE NO.	SHEET NO.
2027CPT.03.04.20671, ETC.	15

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.



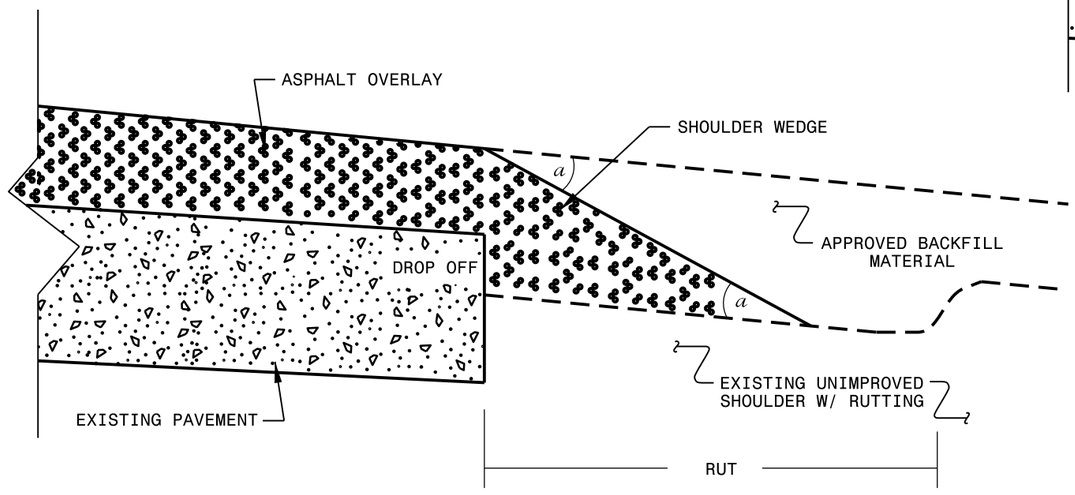
SHOULDER WEDGE DETAIL

(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

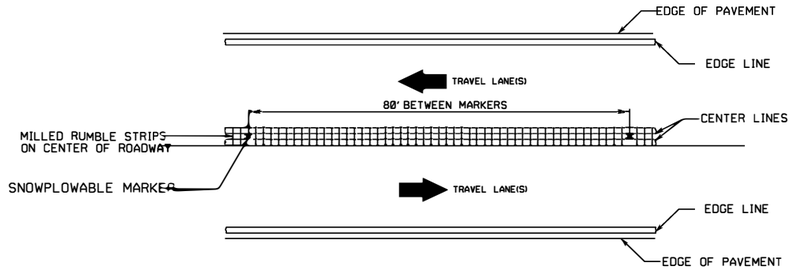
ORIGINAL BY: T.SPELL DATE: 7-19-11
MODIFIED BY: DATE: 2/2/16
CHECKED BY: DATE:
FILE SPEC.: s:usr/details/stand/shoulderwedgedetail.dgn

27-JUN-2018 13:52
S:\Contracts\Contracts\Resurfacing Projects\Division 3\Sampson August 2018\Revised Shoulder Wedge Detail.dgn
pjporter AT CSD-292592

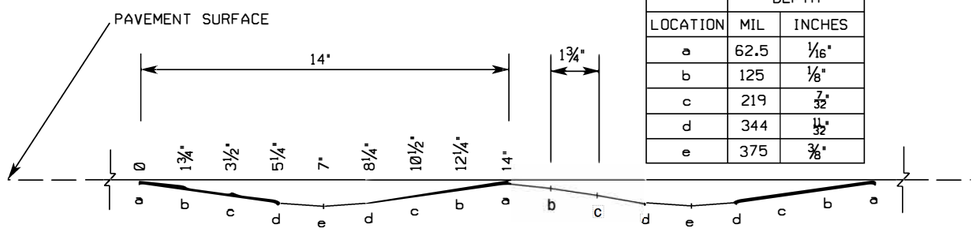
PROJECT REFERENCE NO.	SHEET NO.
2027CPT.03.04.20671, ETC	16

See Table 2 within Rumble Strip Policy for Design Guidance

LANE TREATMENT



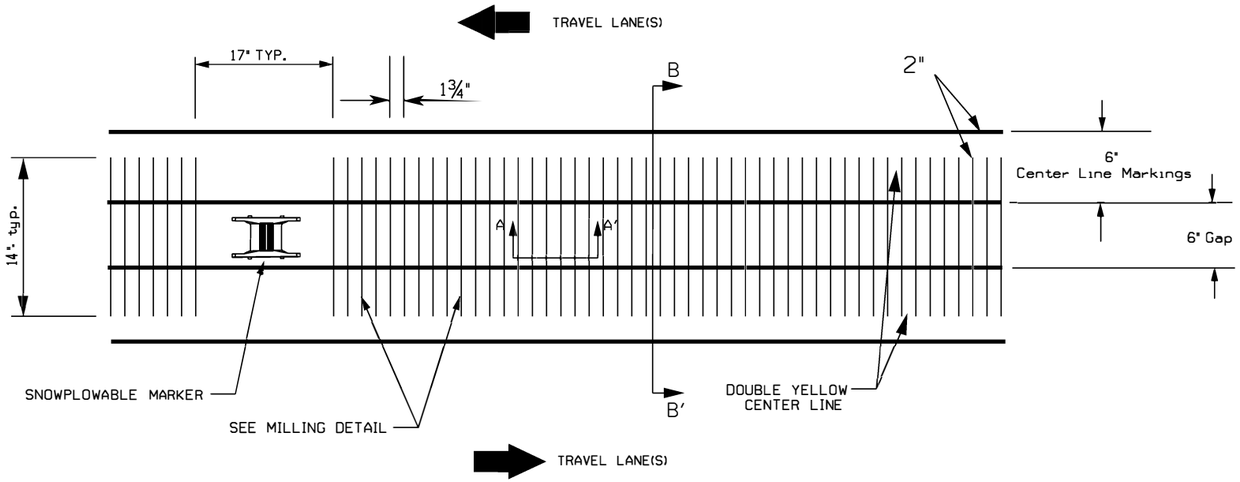
PROFILE:



	DEPTH	
LOCATION	MIL	INCHES
a	62.5	1/16"
b	125	1/8"
c	219	7/32"
d	344	11/32"
e	375	3/8"

SECTION A-A'

CENTER LINE



MILLING DETAIL

SECTION B-B'

REFERENCE DRAWING ID: S1n.CL with Snowplowable Markers

NOTES:

1) USING A VACUUM, REMOVE ALL DEBRIS FROM THE MILLINGS JUST PRIOR TO PLACING ANY PAVEMENT MARKINGS.
2) ENSURE GLASS BEADS ARE SPREAD UNIFORMLY OVER THE ENTIRE SURFACE OF THE PAVEMENT MARKING MATERIAL.
3) INSTALL SNOWPLOWABLE MARKERS AT APPROXIMATELY 80' INCREMENTS. DO NOT MILL RUMBLE STRIPS IN SECTION WHERE SNOWPLOWABLE MARKERS ARE INSTALLED.

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

ROADWAY DETAIL DRAWING FOR RUMBLE STRIPS / STRIPES

SNUSODAL CENTERLINE RUMBLE STRIPE WITH SNOWPLOWABLE MARKERS

SHEET 8 OF 9

DocuSigned by:
Jessi Leonard
4D590D07E47C40F...

NORTH CAROLINA PROFESSIONAL SEAL 42568 ENGINEER JESSICA L. LEONARD

CONTRACTS STANDARDS AND DEVELOPMENT UNIT
Office 919-707-8950 FAX 919-250-4119

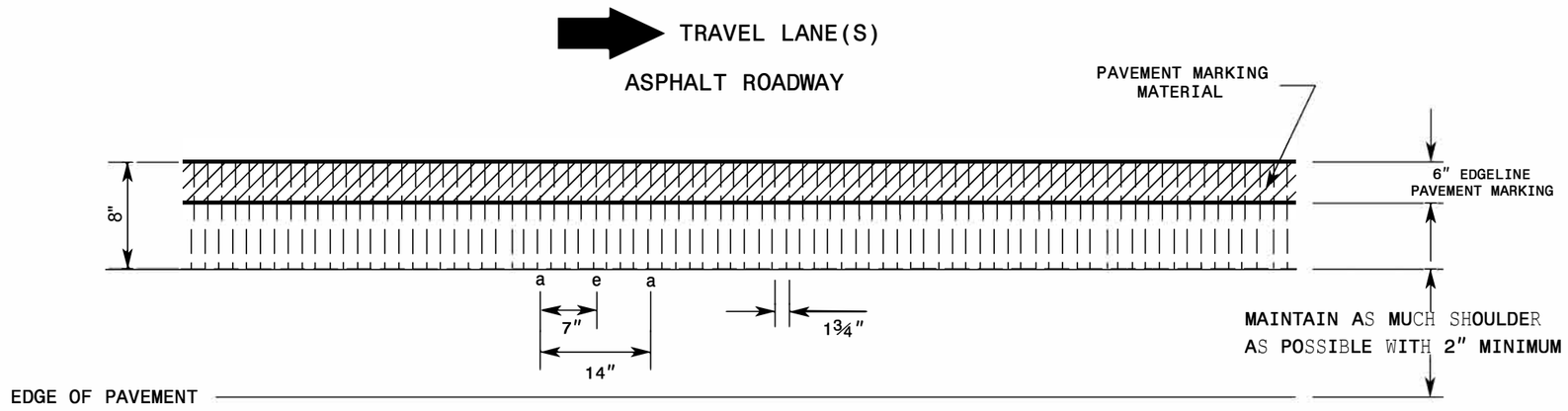
SEE TITLE BLOCK

ORIGINAL BY: C. SIMPSON DATE: 04-24-2025
MODIFIED BY: DATE:
CHECKED BY: DATE:
FILE SPEC.:

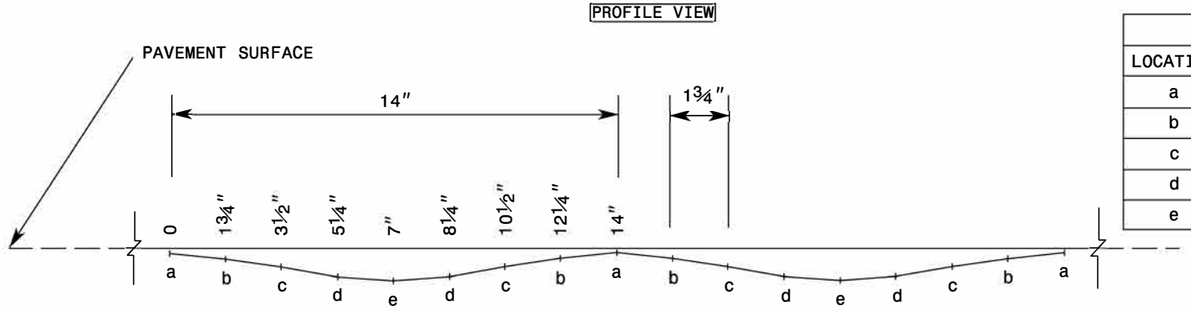
PROJECT REFERENCE NO.	SHEET NO.
2027CPT.03.04.20671, ETC.	17

See Table 1 within Rumble Strip Policy for Design Guidance

PLAN VIEW



PROFILE VIEW



	DEPTH	
LOCATION	MIL	INCHES
a	62.5	1/16"
b	125	1/8"
c	219	7/32"
d	344	11/32"
e	375	3/8"

REFERENCE DRAWING ID: Sin.Stripe

NOTES:

1) Specification in table taken from MNDOT Research Project Final Report 2016-23: *Sinusoidal Rumble Strip Design Optimization Study By: Terhaar et al, June 2016*
2) USING A VACUUM, REMOVE ALL DEBRIS FROM THE MILLINGS JUST PRIOR TO PLACING ANY PAVEMENT MARKINGS.
3) ENSURE GLASS BEADS ARE SPREAD UNIFORMLY OVER THE ENTIRE SURFACE OF THE PAVEMENT MARKING MATERIAL.

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

ROADWAY DETAIL DRAWING FOR

RUMBLE STRIPS / STRIPES

SINUSOIDAL EDGELINE RUMBLE STRIPE

SHEET 4 OF 9

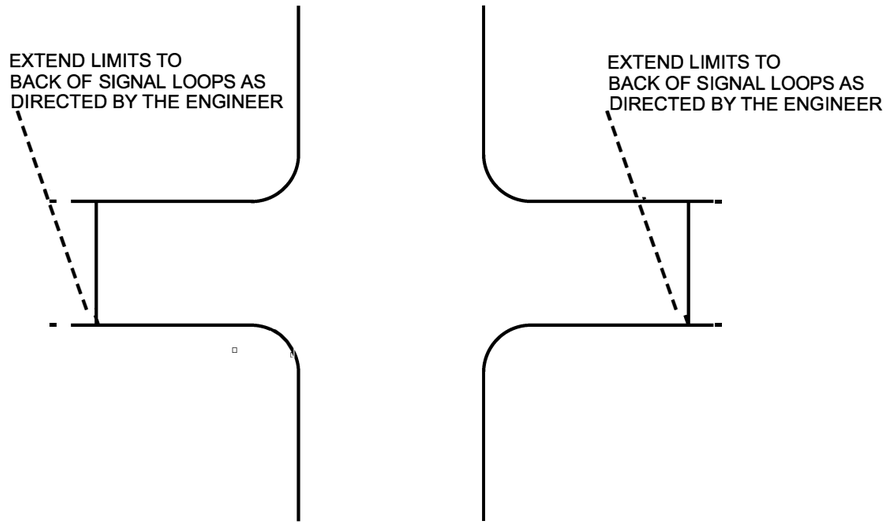
DocuSigned by:
Jessi Leonard
4D590D07E47C40F...

NORTH CAROLINA PROFESSIONAL SEAL 42568 ENGINEER JESSICA L. LEONARD

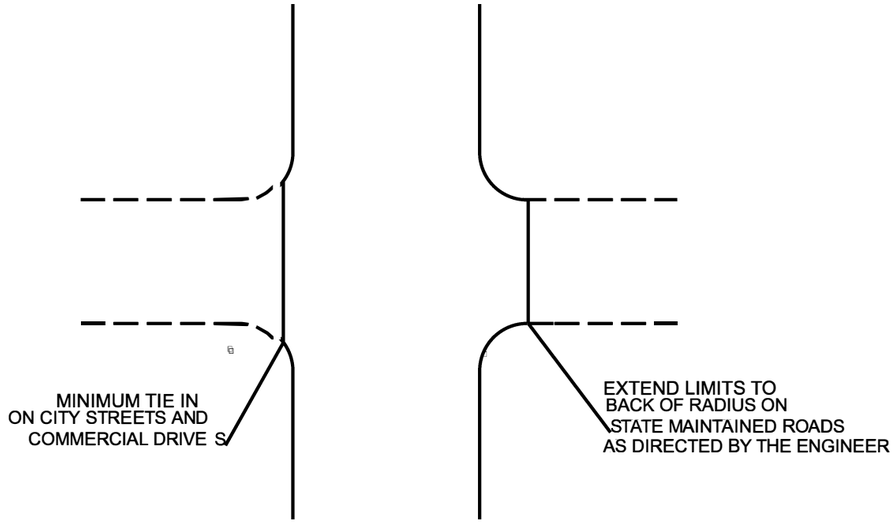
CONTRACTS STANDARDS AND DEVELOPMENT UNIT
Office 919-707-8950 FAX 919-250-4119

SEE TITLE BLOCK

ORIGINAL BY: C. SIMPSON DATE: 04-24-2025
MODIFIED BY: _____ DATE: _____
CHECKED BY: _____ DATE: _____
FILE SPEC.: _____



TYPICAL DETAIL OF PROJECT LIMITS AT SIGNALIZED Y LINES



TYPICAL DETAIL OF PROJECT LIMITS AT UNSIGNALIZED Y LINES

ADDITIONAL INTERSECTIONS (NON-TYPICAL)

Extend paving limits to back of radius
or loop on the following Intersections:

MAP#	STREET NAME	COMMENTS

PROJECT NO.	SHEET NO.
2027CPT.03.04.20671, ETC.	19

SUMMARY OF QUANTITIES

													0106000000-E	1220000000-E	1245000000-E	1297000000-E	1308000000-E	1330000000-E	1491000000-E	1519000000-E	1520000000-E	1575000000-E	1705000000-E
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP		BORROW EXCAVATION	INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTION	1.5" MILLING	0" - 1.25" MILLING	INCIDENTAL MILLING	BASE COURSE, B25.0C	SURFACE COURSE, S9.5B	LEVELING COURSE, S9.5B	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT (FULL DEPTH)
								MI	FT				CY	TON	SMI	SY	SY	SY	TONS	TON	TON	TON	TON
2027CPT.03.04.20671	Onslow	1	SR-1450 / THOMAS HOLLAND RD	FROM SR 1443 (CURT HOLLAND RD) TO END OF MAINTENANCE [MP 0.00 - MP 0.45]	1	2	2WU	0.45	20	0.00	0.45		53	18	0.86					437	10	31	
TOTAL FOR MAP NO. 1								**0.45**					**53**	**18**	**0.86**					**437**	**10**	**31**	
2027CPT.03.04.20671	Onslow	2	SR-1443 / CURT HOLLAND RD	FROM SR 1434 (BELGRADE SWANSBORO RD) TO SR 1450 (THOMAS HOLLAND RD) [MP 0.00 - MP 0.85]	1	2	2WU	0.85	23	0.00	0.85		140	38	2.28			111		1,196		83	
TOTAL FOR MAP NO. 2								**0.85**					**140**	**38**	**2.28**			**111**		**1,196**		**83**	
2027CPT.03.04.20671	Onslow	3	SR-1534 / HOLLY RIDGE RD	FROM SR 1531 (TAR LANDING RD) TO BRIDGE JOINT (BRIDGE NO. 0142) [MP 0.00 - MP 1.89]	2	2	2WU	1.89	21	0.00	1.89		193	40	3.78	24,450		234		2,032	10	137	53
TOTAL FOR MAP NO. 3								**1.89**					**193**	**40**	**3.78**	**24,450**		**234**		**2,032**	**10**	**137**	**53**
2027CPT.03.04.20671 / 52336	Onslow	4	SR-1509 / QUEENS CREEK RD	FROM NC 24 (W CORBETT AVE) TO SR 1503 (BEAR CREEK RD / GREAT NECK LANDING RD) [MP 0.00 - MP 3.94]	3, 4	2	2WU	3.94	26	0.00	3.94		472	164	7.72	2,300		4,800	2,711	6,168		530	
TOTAL FOR MAP NO. 4								**3.94**					**472**	**164**	**7.72**	**2,300**		**4,800**	**2,711**	**6,168**		**530**	
2027CPT.03.04.20671	Onslow	5	SR-1886 / OLD ROCKY RUN RD	FROM SR 1413 (ROCKY RUN RD) TO END OF MAINTENANCE [MP 0.00 - MP 0.21]	1	2	2WU	0.21	20	0.00	0.21		24	18	0.38					196		14	
TOTAL FOR MAP NO. 5								**0.21**					**24**	**18**	**0.38**					**196**		**14**	
2027CPT.03.04.20671	Onslow	6	SR-1798 / WHITE OAK LN	FROM SR 1414 (WOOD RD) TO END OF MAINTENANCE [MP 0.00 - MP 0.21]	5	2	2WU	0.21	20	0.00	0.21					2,911				273		19	
TOTAL FOR MAP NO. 6								**0.21**								**2,911**				**273**		**19**	
2027CPT.03.04.20671	Onslow	7	SR-1414 / LAKE COLE RD / WOOD RD	FROM SR 1886 (OLD ROCKY RUN RD) TO END OF MAINTENANCE [MP 0.00 - MP 0.99]	1	2	2WU	0.99	20	0.00	0.99		121		1.98			111		1,006		65	
TOTAL FOR MAP NO. 7								**0.99**					**121**		**1.98**			**111**		**1,006**		**65**	
2027CPT.03.04.20671	Onslow	8	SR-1452 / BARBARA AVE	FROM SR 1406 (PINEY GREEN RD) TO SR 1417 (TALLMAN CIR) [MP 0.00 - MP 0.43]	2	2	2WU	0.43	20	0.00	0.43		50		0.82	4,330		160		396		27	
TOTAL FOR MAP NO. 8								**0.43**					**50**		**0.82**	**4,330**		**160**		**396**		**27**	
2027CPT.03.04.20671	Onslow	9	SR-1417 / TALLMAN CIR	FROM SR 1418 (TALLMAN CIR) TO NC 24 (FREEDOM WAY) [MP 0.00 - MP 0.21]	2	2	2WU	0.21	20	0.00	0.21		35	30	0.56	3,285		115		299		21	
TOTAL FOR MAP NO. 9								**0.21**					**35**	**30**	**0.56**	**3,285**		**115**		**299**		**21**	
2027CPT.03.04.20671	Onslow	10	SR-1418 / TALLMAN CIR	FROM NC 24 (FREEDOM WAY) TO SR 1417 (TALLMAN CIR) [MP 0.00 - MP 0.28]	2	2	2WU	0.28	20	0.00	0.28		26	36	0.42	2,464		117		224		16	
TOTAL FOR MAP NO. 10								**0.28**					**26**	**36**	**0.42**	**2,464**		**117**		**224**		**16**	
TOTAL FOR PROJ NO. 2027CPT.03.04.20671 / 52336								**9.46**					**1,114**	**344**	**18.80**	**39,740**		**5,648**	**2,711**	**12,227**	**20**	**943**	**53**
2027CPT.03.04.20672	Onslow	11	SR-1637 / VAN RIGGS RD	FROM SR 1501 (SAND RIDGE RD) TO SR 2220 (FISHING CREEK LN) [MP 0.00 - MP 0.35]	7	2	2WU	0.35	20	0.00	0.35			18				222		319		22	
TOTAL FOR MAP NO. 11								**0.35**						**18**				**222**		**319**		**22**	
2027CPT.03.04.20672	Onslow	12	SR-1670 / CINNAMON DR	FROM CUL-DE-SAC TO END OF MAINTENANCE [MP 0.00 - MP 0.21]	7	2	2WU	0.21	18	0.00	0.21									120		9	
TOTAL FOR MAP NO. 12								**0.21**												**120**		**9**	

PROJECT NO.	SHEET NO.
2027CPT.03.04.20671, ETC.	20

SUMMARY OF QUANTITIES

													0106000000-E	1220000000-E	1245000000-E	1297000000-E	1308000000-E	1330000000-E	1491000000-E	1519000000-E	1520000000-E	1575000000-E	1705000000-E
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP		BORROW EXCAVATION	INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTION	1.5" MILLING	0" - 1.25" MILLING	INCIDENTAL MILLING	BASE COURSE, B25.0C	SURFACE COURSE, S9.5B	LEVELING COURSE, S9.5B	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT (FULL DEPTH)
								MI	FT				CY	TON	SMI	SY	SY	SY	TONS	TON	TON	TON	TON
2027CPT.03.04.20672	Onslow	13	SR-1669 / SPICE DR	FROM SR 1501 (SANDRIDGE RD) TO SR 1670 (CINNAMON DR) [MP 0.00 - MP 0.08]	7	2	2WU	0.08	20	0.00	0.08							111		60		5	
TOTAL FOR MAP NO. 13								**0.08**										**111**		**60**		**5**	
2027CPT.03.04.20672	Onslow	14	SR-1661 / FOXTRACE LN	FROM SR 1501 (SAND RIDGE RD) TO SR 1657 (NUTFIELD DR) [MP 0.00 - MP 0.36]	7	2	2WU	0.36	20	0.00	0.36							111		446		30	
TOTAL FOR MAP NO. 14								**0.36**										**111**		**446**		**30**	
2027CPT.03.04.20672	Onslow	15	SR-1572 / SEASHORE DR	FROM SR 1512 (OLD HAMMOCKS RD) TO SR 1559 (GLANCY RD) [MP 0.00 - MP 0.32]	7	2	2WU	0.32	20	0.00	0.32							222		268		19	
TOTAL FOR MAP NO. 15								**0.32**										**222**		**268**		**19**	
2027CPT.03.04.20672	Onslow	16	SR-1477 / N PARKER RD	FROM SR 1407 (WOLF SWAMP RD) TO CUL-DE-SAC [MP 0.00 - MP 0.18]	7	2	2WU	0.18	20	0.00	0.18			6				111		155		11	
TOTAL FOR MAP NO. 16								**0.18**						**6**				**111**		**155**		**11**	
2027CPT.03.04.20672	Onslow	17	SR-2047 / E REGENT CT	FROM SR 1380 (BATCHELORS TRL) TO CUL-DE-SAC [MP 0.00 - MP 0.08]	7	2	2WU	0.08	20	0.00	0.08							100		92		7	
TOTAL FOR MAP NO. 17								**0.08**										**100**		**92**		**7**	
2027CPT.03.04.20672	Onslow	18	SR-2048 / W REGENT CT	FROM SR 1380 (BATCHELORS TRL) TO CUL-DE-SAC [MP 0.00 - MP 0.04]	7	2	2WU	0.04	20	0.00	0.04							100		66		5	
TOTAL FOR MAP NO. 18								**0.04**										**100**		**66**		**5**	
2027CPT.03.04.20672	Onslow	19	SR-2046 / PAWN CT	FROM SR 1380 (BATCHELORS TRL) TO CUL-DE-SAC [MP 0.00 - MP 0.02]	7	2	2WU	0.02	20	0.00	0.02									42		3	
TOTAL FOR MAP NO. 19								**0.02**												**42**		**3**	
2027CPT.03.04.20672	Onslow	20	SR-1994 / BAYSDEN DR	FROM SR 1308 (GUM BRANCH RD) TO CUL-DE-SAC [MP 0.00 - MP 0.33]	6	2	2WU	0.33	24	0.00	0.33						2,041	380		354		25	
TOTAL FOR MAP NO. 20								**0.33**									**2,041**	**380**		**354**		**25**	
2027CPT.03.04.20672	Onslow	21	SR-2024 / BEVERLY DR	FROM SR 1994 (BAYSDEN DR) TO END OF MAINTENANCE [MP 0.00 - MP 0.14]	6	2	2WU	0.14	24	0.00	0.14						845	266		124		10	
TOTAL FOR MAP NO. 21								**0.14**									**845**	**266**		**124**		**10**	
2027CPT.03.04.20672	Onslow	22	SR-2700 / CHISHOLM TRL	FROM SR 1386 (N BRYAN RD) TO SR 2217 (MAREADY RD) [MP 0.00 - MP 0.42]	7	2	2WU	0.42	20	0.00	0.42							222		386		27	
TOTAL FOR MAP NO. 22								**0.42**										**222**		**386**		**27**	
2027CPT.03.04.20672	Onslow	23	SR-2097 / N STAGE COACH TRL	FROM SR 2217 (MAREADY RD) TO CUL-DE-SAC [MP 0.00 - MP 0.18]	7	2	2WU	0.18	20	0.00	0.18							100		213		16	
TOTAL FOR MAP NO. 23								**0.18**										**100**		**213**		**16**	
2027CPT.03.04.20672	Onslow	24	SR-2098 / S STAGE COACH TRL	FROM SR 2217 (MAREADY RD) TO CUL-DE-SAC [MP 0.00 - MP 0.15]	7	2	2WU	0.15	20	0.00	0.15							111		166		12	
TOTAL FOR MAP NO. 24								**0.15**										**111**		**166**		**12**	
2027CPT.03.04.20672	Onslow	25	SR-2074 / SAN ANTONIO TRL	FROM SR 2217 (MAREADY RD) TO CUL-DE-SAC [MP 0.00 - MP 0.06]	7	2	2WU	0.06	20	0.00	0.06							111		43		4	
TOTAL FOR MAP NO. 25								**0.06**										**111**		**43**		**4**	
TOTAL FOR PROJ NO. 2027CPT.03.04.20672								**2.92**						**24**			**2,886**	**2,167**		**2,854**		**205**	
GRAND TOTAL								**12.38**					**1,114**	**368**	**18.80**	**39,740**	**2,886**	**7,815**	**2,711**	**15,081**	**20**	**1,148**	**53**

PROJECT NO.	SHEET NO.
2027CPT.03.04.20671, ETC.	21

SUMMARY OF QUANTITIES

													1705500000-E	1881000000-E		2830000000-N	2845000000-N	6000000000-E	6036000000-E	6071010000-E	6084000000-E	6117000000-N	7444000000-E
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP		PATCHING EXISTING PAVEMENT (MILL)	SINUSOIDAL MILLED RUMBLE STRIP, EDGELINE (8)	SINUSOIDAL MILLED RUMBLE STRIP, CENTERLINE (14")	ADJUSTMENT OF MANHOLES	ADJUSTMENT OF METER OR VALVE BOX	TEMPORARY SILT FENCE	MATTING FOR EROSION CONTROL	WATTLE	SEED & MULCHING	RESPONSE FOR EROSION CONTROL	INDUCTIVE LOOP SAWCUT
								MI	FT				TON	LF	LF	EA	EA	LF	SY	LF	AC	EA	LF
2027CPT.03.04.20671	Onslow	1	SR-1450 / THOMAS HOLLAND RD	FROM SR 1443 (CURT HOLLAND RD) TO END OF MAINTENANCE [MP 0.00 - MP 0.45]	1	2	2WU	0.45	20	0.00	0.45		50								0.43		
TOTAL FOR MAP NO. 1								**0.45**					**50**										
2027CPT.03.04.20671	Onslow	2	SR-1443 / CURT HOLLAND RD	FROM SR 1434 (BELGRADE SWANSBORO RD) TO SR 1450 (THOMAS HOLLAND RD) [MP 0.00 - MP 0.85]	1	2	2WU	0.85	23	0.00	0.85		101								0.81		
TOTAL FOR MAP NO. 2								**0.85**					**101**										
2027CPT.03.04.20671	Onslow	3	SR-1534 / HOLLY RIDGE RD	FROM SR 1531 (TAR LANDING RD) TO BRIDGE JOINT (BRIDGE NO. 0142) [MP 0.00 - MP 1.89]	2	2	2WU	1.89	21	0.00	1.89		46								1.80		
TOTAL FOR MAP NO. 3								**1.89**					**46**										
2027CPT.03.04.20671 / 52336	Onslow	4	SR-1509 / QUEENS CREEK RD	FROM NC 24 (W CORBETT AVE) TO SR 1503 (BEAR CREEK RD / GREAT NECK LANDING RD) [MP 0.00 - MP 3.94]	3, 4	2	2WU	3.94	26	0.00	3.94		154	41,606	20,803	1	9	150	10	10	3.77	1	1,500
TOTAL FOR MAP NO. 4								**3.94**					**154**	**41,606**	**20,803**	**1**	**9**	**150**	**10**	**10**	**3.77**	**1**	**1,500**
2027CPT.03.04.20671	Onslow	5	SR-1886 / OLD ROCKY RUN RD	FROM SR 1413 (ROCKY RUN RD) TO END OF MAINTENANCE [MP 0.00 - MP 0.21]	1	2	2WU	0.21	20	0.00	0.21		28								0.20		
TOTAL FOR MAP NO. 5								**0.21**					**28**								**0.20**		
2027CPT.03.04.20671	Onslow	6	SR-1798 / WHITE OAK LN	FROM SR 1414 (WOOD RD) TO END OF MAINTENANCE [MP 0.00 - MP 0.21]	5	2	2WU	0.21	20	0.00	0.21		23								0.20		
TOTAL FOR MAP NO. 6								**0.21**					**23**								**0.20**		
2027CPT.03.04.20671	Onslow	7	SR-1414 / LAKE COLE RD / WOOD RD	FROM SR 1886 (OLD ROCKY RUN RD) TO END OF MAINTENANCE [MP 0.00 - MP 0.99]	1	2	2WU	0.99	20	0.00	0.99		23								0.95		
TOTAL FOR MAP NO. 7								**0.99**					**23**								**0.95**		
2027CPT.03.04.20671	Onslow	8	SR-1452 / BARBARA AVE	FROM SR 1406 (PINEY GREEN RD) TO SR 1417 (TALLMAN CIR) [MP 0.00 - MP 0.43]	2	2	2WU	0.43	20	0.00	0.43		28								0.41		
TOTAL FOR MAP NO. 8								**0.43**					**28**								**0.41**		
2027CPT.03.04.20671	Onslow	9	SR-1417 / TALLMAN CIR	FROM SR 1418 (TALLMAN CIR) TO NC 24 (FREEDOM WAY) [MP 0.00 - MP 0.21]	2	2	2WU	0.21	20	0.00	0.21		30								0.20		
TOTAL FOR MAP NO. 9								**0.21**					**30**								**0.20**		
2027CPT.03.04.20671	Onslow	10	SR-1418 / TALLMAN CIR	FROM NC 24 (FREEDOM WAY) TO SR 1417 (TALLMAN CIR) [MP 0.00 - MP 0.28]	2	2	2WU	0.28	20	0.00	0.28		30								0.27		
TOTAL FOR MAP NO. 10								**0.28**					**30**								**0.27**		
TOTAL FOR PROJ NO. 2027CPT.03.04.20671 / 52336								**9.46**					**513**	**41,606**	**20,803**	**1**	**9**	**150**	**10**	**10**	**9.04**	**1**	**1,500**
2027CPT.03.04.20672	Onslow	11	SR-1637 / VAN RIGGS RD	FROM SR 1501 (SAND RIDGE RD) TO SR 2220 (FISHING CREEK LN) [MP 0.00 - MP 0.35]	7	2	2WU	0.35	20	0.00	0.35		28				1							
TOTAL FOR MAP NO. 11								**0.35**					**28**				**1**						
2027CPT.03.04.20672	Onslow	12	SR-1670 / CINNAMON DR	FROM CUL-DE-SAC TO END OF MAINTENANCE [MP 0.00 - MP 0.21]	7	2	2WU	0.21	18	0.00	0.21		26										
TOTAL FOR MAP NO. 12								**0.21**					**26**										

PROJECT NO.	SHEET NO.
2027CPT.03.04.20671, ETC.	22

SUMMARY OF QUANTITIES

													1705500000-E	1881000000-E		2830000000-N	2845000000-N	6000000000-E	6036000000-E	6071010000-E	6084000000-E	6117000000-N	7444000000-E
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP		PATCHING EXISTING PAVEMENT (MILL)	SINUSOIDAL MILLED RUMBLE STRIP, EDGELINE (8)	SINUSOIDAL MILLED RUMBLE STRIP, CENTERLINE (14")	ADJUSTMENT OF MANHOLES	ADJUSTMENT OF METER OR VALVE BOX	TEMPORARY SILT FENCE	MATTING FOR EROSION CONTROL	WATTLE	SEED & MULCHING	RESPONSE FOR EROSION CONTROL	INDUCTIVE LOOP SAWCUT
								MI	FT				TON	LF	LF	EA	EA	LF	SY	LF	AC	EA	LF
2027CPT.03.04.20672	Onslow	13	SR-1669 / SPICE DR	FROM SR 1501 (SANDRIDGE RD) TO SR 1670 (CINNAMON DR) [MP 0.00 - MP 0.08]	7	2	2WU	0.08	20	0.00	0.08		15										
TOTAL FOR MAP NO. 13								**0.08**					**15**										
2027CPT.03.04.20672	Onslow	14	SR-1661 / FOXTRACE LN	FROM SR 1501 (SAND RIDGE RD) TO SR 1657 (NUTFIELD DR) [MP 0.00 - MP 0.36]	7	2	2WU	0.36	20	0.00	0.36		12			5	2						
TOTAL FOR MAP NO. 14								**0.36**					**12**			**5**	**2**						
2027CPT.03.04.20672	Onslow	15	SR-1572 / SEASHORE DR	FROM SR 1512 (OLD HAMMOCKS RD) TO SR 1559 (GLANCY RD) [MP 0.00 - MP 0.32]	7	2	2WU	0.32	20	0.00	0.32		31				2						
TOTAL FOR MAP NO. 15								**0.32**					**31**				**2**						
2027CPT.03.04.20672	Onslow	16	SR-1477 / N PARKER RD	FROM SR 1407 (WOLF SWAMP RD) TO CUL-DE-SAC [MP 0.00 - MP 0.18]	7	2	2WU	0.18	20	0.00	0.18		22										
TOTAL FOR MAP NO. 16								**0.18**					**22**										
2027CPT.03.04.20672	Onslow	17	SR-2047 / E REGENT CT	FROM SR 1380 (BATCHELORS TRL) TO CUL-DE-SAC [MP 0.00 - MP 0.08]	7	2	2WU	0.08	20	0.00	0.08		30										
TOTAL FOR MAP NO. 17								**0.08**					**30**										
2027CPT.03.04.20672	Onslow	18	SR-2048 / W REGENT CT	FROM SR 1380 (BATCHELORS TRL) TO CUL-DE-SAC [MP 0.00 - MP 0.04]	7	2	2WU	0.04	20	0.00	0.04		18										
TOTAL FOR MAP NO. 18								**0.04**					**18**										
2027CPT.03.04.20672	Onslow	19	SR-2046 / PAWN CT	FROM SR 1380 (BATCHELORS TRL) TO CUL-DE-SAC [MP 0.00 - MP 0.02]	7	2	2WU	0.02	20	0.00	0.02		15										
TOTAL FOR MAP NO. 19								**0.02**					**15**										
2027CPT.03.04.20672	Onslow	20	SR-1994 / BAYSDEN DR	FROM SR 1308 (GUM BRANCH RD) TO CUL-DE-SAC [MP 0.00 - MP 0.33]	6	2	2WU	0.33	24	0.00	0.33		33				1						
TOTAL FOR MAP NO. 20								**0.33**					**33**				**1**						
2027CPT.03.04.20672	Onslow	21	SR-2024 / BEVERLY DR	FROM SR 1994 (BAYSDEN DR) TO END OF MAINTENANCE [MP 0.00 - MP 0.14]	6	2	2WU	0.14	24	0.00	0.14		33										
TOTAL FOR MAP NO. 21								**0.14**					**33**										
2027CPT.03.04.20672	Onslow	22	SR-2700 / CHISHOLM TRL	FROM SR 1386 (N BRYAN RD) TO SR 2217 (MAREADY RD) [MP 0.00 - MP 0.42]	7	2	2WU	0.42	20	0.00	0.42		46										
TOTAL FOR MAP NO. 22								**0.42**					**46**										
2027CPT.03.04.20672	Onslow	23	SR-2097 / N STAGE COACH TRL	FROM SR 2217 (MAREADY RD) TO CUL-DE-SAC [MP 0.00 - MP 0.18]	7	2	2WU	0.18	20	0.00	0.18		36										
TOTAL FOR MAP NO. 23								**0.18**					**36**										
2027CPT.03.04.20672	Onslow	24	SR-2098 / S STAGE COACH TRL	FROM SR 2217 (MAREADY RD) TO CUL-DE-SAC [MP 0.00 - MP 0.15]	7	2	2WU	0.15	20	0.00	0.15		28										
TOTAL FOR MAP NO. 24								**0.15**					**28**										
2027CPT.03.04.20672	Onslow	25	SR-2074 / SAN ANTONIO TRL	FROM SR 2217 (MAREADY RD) TO CUL-DE-SAC [MP 0.00 - MP 0.06]	7	2	2WU	0.06	20	0.00	0.06		20										
TOTAL FOR MAP NO. 25								**0.06**					**20**										
TOTAL FOR PROJ NO. 2027CPT.03.04.20672								**2.92**					**393**			**5**	**6**						
GRAND TOTAL								**12.38**					**906**	**41,606**	**20,803**	**6**	**15**	**6**	**150**	**10**	**9.04**	**1**	**1,500**

PROJECT NO.	SHEET NO.
2027CPT.03.04.20671, ETC.	23

THERMOPLASTIC AND PAINT QUANTITIES

												4413000000-E	4457000000-N	4685000000-E		4688000000-E		4695000000-E	4700000000-E		4709000000-E
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	WORK ZONE ADVANCE/ GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL	4" X 90 M WHITE THERMO	4" X 90 M YELLOW THERMO	6" X 90 M WHITE THERMO	6" X90 M YELLOW THERMO	8" X 90 M YELLOW THERMO	12" X 90 M WHITE THERMO	12" X 90 M YELLOW THERMO	THERMOPLASTIC PAVEMENT MARKING LINES (24" X 90 MILS)
								MI	FT			SF	LS	LF	LF	LF	LF	LF	LF	LF	LF
2027CPT.03.04.20671	Onslow	1	SR-1450 / THOMAS HOLLAND RD	FROM SR 1443 (CURT HOLLAND RD) TO END OF MAINTENANCE [MP 0.00 - MP 0.45]	1	2	2WU	0.45	20	0.00	0.45		0.04	4,540	4,540						
TOTAL FOR MAP NO. 1								**0.45**					**0.04**	**4,540**	**4,540**						
2027CPT.03.04.20671	Onslow	2	SR-1443 / CURT HOLLAND RD	FROM SR 1434 (BELGRADE SWANSBORO RD) TO SR 1450 (THOMAS HOLLAND RD) [MP 0.00 - MP 0.85]	1	2	2WU	0.85	23	0.00	0.85		0.07	12,056	4,638						
TOTAL FOR MAP NO. 2								**0.85**					**0.07**	**12,056**	**4,638**						
2027CPT.03.04.20671	Onslow	3	SR-1534 / HOLLY RIDGE RD	FROM SR 1531 (TAR LANDING RD) TO BRIDGE JOINT (BRIDGE NO. 0142) [MP 0.00 - MP 1.89]	2	2	2WU	1.89	21	0.00	1.89	215	0.15	19,960	19,967			360	95		
TOTAL FOR MAP NO. 3								**1.89**				**215**	**0.15**	**19,960**	**19,967**			**360**	**95**		
2027CPT.03.04.20671 / 52336	Onslow	4	SR-1509 / QUEENS CREEK RD	FROM NC 24 (W CORBETT AVE) TO SR 1503 (BEAR CREEK RD / GREAT NECK LANDING RD) [MP 0.00 - MP 3.94]	3, 4	2	2WU	3.94	26	0.00	3.94	448	0.31			42,756	20,749		220	1,603	360
TOTAL FOR MAP NO. 4								**3.94**				**448**	**0.31**			**42,756**	**20,749**		**220**	**1,603**	**360**
2027CPT.03.04.20671	Onslow	5	SR-1886 / OLD ROCKY RUN RD	FROM SR 1413 (ROCKY RUN RD) TO END OF MAINTENANCE [MP 0.00 - MP 0.21]	1	2	2WU	0.21	20	0.00	0.21		0.02	2,260	2,260						
TOTAL FOR MAP NO. 5								**0.21**					**0.02**	**2,260**	**2,260**						
2027CPT.03.04.20671	Onslow	6	SR-1798 / WHITE OAK LN	FROM SR 1414 (WOOD RD) TO END OF MAINTENANCE [MP 0.00 - MP 0.21]	5	2	2WU	0.21	20	0.00	0.21		0.02								
TOTAL FOR MAP NO. 6								**0.21**					**0.02**								
2027CPT.03.04.20671	Onslow	7	SR-1414 / LAKE COLE RD / WOOD RD	FROM SR 1886 (OLD ROCKY RUN RD) TO END OF MAINTENANCE [MP 0.00 - MP 0.99]	1	2	2WU	0.99	20	0.00	0.99		0.08	10,652	7,255						
TOTAL FOR MAP NO. 7								**0.99**					**0.08**	**10,652**	**7,255**						
2027CPT.03.04.20671	Onslow	8	SR-1452 / BARBARA AVE	FROM SR 1406 (PINEY GREEN RD) TO SR 1417 (TALLMAN CIR) [MP 0.00 - MP 0.43]	2	2	2WU	0.43	20	0.00	0.43		0.03		200						
TOTAL FOR MAP NO. 8								**0.43**					**0.03**		**200**						
2027CPT.03.04.20671	Onslow	9	SR-1417 / TALLMAN CIR	FROM SR 1418 (TALLMAN CIR) TO NC 24 (FREEDOM WAY) [MP 0.00 - MP 0.21]	2	2	2WU	0.21	20	0.00	0.21		0.02								
TOTAL FOR MAP NO. 9								**0.21**					**0.02**								
2027CPT.03.04.20671	Onslow	10	SR-1418 / TALLMAN CIR	FROM NC 24 (FREEDOM WAY) TO SR 1417 (TALLMAN CIR) [MP 0.00 - MP 0.28]	2	2	2WU	0.28	20	0.00	0.28		0.02								
TOTAL FOR MAP NO. 10								**0.28**					**0.02**								
TOTAL FOR PROJ NO. 2027CPT.03.04.20671 / 52336								**9.46**				**663**	**0.76**	**49,468**	**38,860**	**42,756**	**20,749**	**360**	**315**	**1,603**	**360**
														88,328		**63,505**			**1,918**		
2027CPT.03.04.20672	Onslow	11	SR-1637 / VAN RIGGS RD	FROM SR 1501 (SAND RIDGE RD) TO SR 2220 (FISHING CREEK LN) [MP 0.00 - MP 0.35]	7	2	2WU	0.35	20	0.00	0.35		0.03								
TOTAL FOR MAP NO. 11								**0.35**					**0.03**								
2027CPT.03.04.20672	Onslow	12	SR-1670 / CINNAMON DR	FROM CUL-DE-SAC TO END OF MAINTENANCE [MP 0.00 - MP 0.21]	7	2	2WU	0.21	18	0.00	0.21		0.02								
TOTAL FOR MAP NO. 12								**0.21**					**0.02**								

PROJECT NO.	SHEET NO.
2027CPT.03.04.20671, ETC.	24

THERMOPLASTIC AND PAINT QUANTITIES

												4413000000-E	4457000000-N	4685000000-E		4688000000-E		4695000000-E	4700000000-E		4709000000-E
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	WORK ZONE ADVANCE/ GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL	4" X 90 M WHITE THERMO	4" X 90 M YELLOW THERMO	6" X 90 M WHITE THERMO	6" X90 M YELLOW THERMO	8" X 90 M YELLOW THERMO	12" X 90 M WHITE THERMO	12" X 90 M YELLOW THERMO	THERMOPLASTIC PAVEMENT MARKING LINES (24" X 90 MILS)
								MI	FT			SF	LS	LF	LF	LF	LF	LF	LF	LF	LF
2027CPT.03.04.20672	Onslow	13	SR-1669 / SPICE DR	FROM SR 1501 (SANDRIDGE RD) TO SR 1670 (CINNAMON DR) [MP 0.00 - MP 0.08]	7	2	2WU	0.08	20	0.00	0.08		0.03								
TOTAL FOR MAP NO. 13								**0.08**					**0.03**								
2027CPT.03.04.20672	Onslow	14	SR-1661 / FOXTRACE LN	FROM SR 1501 (SAND RIDGE RD) TO SR 1657 (NUTFIELD DR) [MP 0.00 - MP 0.36]	7	2	2WU	0.36	20	0.00	0.36		0.03								
TOTAL FOR MAP NO. 14								**0.36**					**0.03**								
2027CPT.03.04.20672	Onslow	15	SR-1572 / SEASHORE DR	FROM SR 1512 (OLD HAMMOCKS RD) TO SR 1559 (GLANCY RD) [MP 0.00 - MP 0.32]	7	2	2WU	0.32	20	0.00	0.32		0.03								
TOTAL FOR MAP NO. 15								**0.32**					**0.03**								
2027CPT.03.04.20672	Onslow	16	SR-1477 / N PARKER RD	FROM SR 1407 (WOLF SWAMP RD) TO CUL-DE-SAC [MP 0.00 - MP 0.18]	7	2	2WU	0.18	20	0.00	0.18		0.01								
TOTAL FOR MAP NO. 16								**0.18**					**0.01**								
2027CPT.03.04.20672	Onslow	17	SR-2047 / E REGENT CT	FROM SR 1380 (BATCHELORS TRL) TO CUL-DE-SAC [MP 0.00 - MP 0.08]	7	2	2WU	0.08	20	0.00	0.08		0.01								
TOTAL FOR MAP NO. 17								**0.08**					**0.01**								
2027CPT.03.04.20672	Onslow	18	SR-2048 / W REGENT CT	FROM SR 1380 (BATCHELORS TRL) TO CUL-DE-SAC [MP 0.00 - MP 0.04]	7	2	2WU	0.04	20	0.00	0.04		0.01								
TOTAL FOR MAP NO. 18								**0.04**					**0.01**								
2027CPT.03.04.20672	Onslow	19	SR-2046 / PAWN CT	FROM SR 1380 (BATCHELORS TRL) TO CUL-DE-SAC [MP 0.00 - MP 0.02]	7	2	2WU	0.02	20	0.00	0.02		0.01								
TOTAL FOR MAP NO. 19								**0.02**					**0.01**								
2027CPT.03.04.20672	Onslow	20	SR-1994 / BAYSDEN DR	FROM SR 1308 (GUM BRANCH RD) TO CUL-DE-SAC [MP 0.00 - MP 0.33]	6	2	2WU	0.33	24	0.00	0.33		0.03								
TOTAL FOR MAP NO. 20								**0.33**					**0.03**								
2027CPT.03.04.20672	Onslow	21	SR-2024 / BEVERLY DR	FROM SR 1994 (BAYSDEN DR) TO END OF MAINTENANCE [MP 0.00 - MP 0.14]	6	2	2WU	0.14	24	0.00	0.14		0.01								
TOTAL FOR MAP NO. 21								**0.14**					**0.01**								
2027CPT.03.04.20672	Onslow	22	SR-2700 / CHISHOLM TRL	FROM SR 1386 (N BRYAN RD) TO SR 2217 (MAREADY RD) [MP 0.00 - MP 0.42]	7	2	2WU	0.42	20	0.00	0.42		0.03								
TOTAL FOR MAP NO. 22								**0.42**					**0.03**								
2027CPT.03.04.20672	Onslow	23	SR-2097 / N STAGE COACH TRL	FROM SR 2217 (MAREADY RD) TO CUL-DE-SAC [MP 0.00 - MP 0.18]	7	2	2WU	0.18	20	0.00	0.18		0.01								
TOTAL FOR MAP NO. 23								**0.18**					**0.01**								
2027CPT.03.04.20672	Onslow	24	SR-2098 / S STAGE COACH TRL	FROM SR 2217 (MAREADY RD) TO CUL-DE-SAC [MP 0.00 - MP 0.15]	7	2	2WU	0.15	20	0.00	0.15		0.01								
TOTAL FOR MAP NO. 24								**0.15**					**0.01**								
2027CPT.03.04.20672	Onslow	25	SR-2074 / SAN ANTONIO TRL	FROM SR 2217 (MAREADY RD) TO CUL-DE-SAC [MP 0.00 - MP 0.06]	7	2	2WU	0.06	20	0.00	0.06		0.01								
TOTAL FOR MAP NO. 25								**0.06**					**0.01**								
TOTAL FOR PROJ NO. 2027CPT.03.04.20672								**2.92**					**0.24**								
GRAND TOTAL								**12.38**				**663**	**1**	**49,468**	**38,860**	**42,756**	**20,749**	**360**	**315**	**1,603**	**360**
														88,328		**63,505**			**1,918**		

PROJECT NO.	SHEET NO.
2027CPT.03.04.20671, ETC.	25

THERMOPLASTIC AND PAINT QUANTITIES

												4720000000-E	4725000000-E			4890000000-E	1891000000-E	4895000000-N
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	THERMO MSG SCHOOL (90 MIL)	THERMO RT ARROW (90 MIL)	THERMO LT ARROW (90 MIL)	THERMO STR ARROW (90 MIL)	COLD APPLIED CONTRAST PLASTIC PAVEMENT MARKING LINES (9")	ASPHALT PAVEMENT REJUVENATOR	POLYCARBONATE H-SHAPED MARKER (Y/Y)
								MI	FT			EA	EA	EA	EA	LF	SY	EA
2027CPT.03.04.20671	Onslow	1	SR-1450 / THOMAS HOLLAND RD	FROM SR 1443 (CURT HOLLAND RD) TO END OF MAINTENANCE [MP 0.00 - MP 0.45]	1	2	2WU	0.45	20	0.00	0.45							
TOTAL FOR MAP NO. 1								**0.45**										
2027CPT.03.04.20671	Onslow	2	SR-1443 / CURT HOLLAND RD	FROM SR 1434 (BELGRADE SWANSBORO RD) TO SR 1450 (THOMAS HOLLAND RD) [MP 0.00 - MP 0.85]	1	2	2WU	0.85	23	0.00	0.85							
TOTAL FOR MAP NO. 2								**0.85**										
2027CPT.03.04.20671	Onslow	3	SR-1534 / HOLLY RIDGE RD	FROM SR 1531 (TAR LANDING RD) TO BRIDGE JOINT (BRIDGE NO. 0142) [MP 0.00 - MP 1.89]	2	2	2WU	1.89	21	0.00	1.89		4	15		106		190
TOTAL FOR MAP NO. 3								**1.89**					**4**	**15**		**106**		**190**
2027CPT.03.04.20671 / 52336	Onslow	4	SR-1509 / QUEENS CREEK RD	FROM NC 24 (W CORBETT AVE) TO SR 1503 (BEAR CREEK RD / GREAT NECK LANDING RD) [MP 0.00 - MP 3.94]	3, 4	2	2WU	3.94	26	0.00	3.94	12	10	21	6	528	4,625	300
TOTAL FOR MAP NO. 4								**3.94**				**12**	**10**	**21**	**6**	**528**	**4,625**	**300**
2027CPT.03.04.20671	Onslow	5	SR-1886 / OLD ROCKY RUN RD	FROM SR 1413 (ROCKY RUN RD) TO END OF MAINTENANCE [MP 0.00 - MP 0.21]	1	2	2WU	0.21	20	0.00	0.21							
TOTAL FOR MAP NO. 5								**0.21**										
2027CPT.03.04.20671	Onslow	6	SR-1798 / WHITE OAK LN	FROM SR 1414 (WOOD RD) TO END OF MAINTENANCE [MP 0.00 - MP 0.21]	5	2	2WU	0.21	20	0.00	0.21							
TOTAL FOR MAP NO. 6								**0.21**										
2027CPT.03.04.20671	Onslow	7	SR-1414 / LAKE COLE RD / WOOD RD	FROM SR 1886 (OLD ROCKY RUN RD) TO END OF MAINTENANCE [MP 0.00 - MP 0.99]	1	2	2WU	0.99	20	0.00	0.99							
TOTAL FOR MAP NO. 7								**0.99**										
2027CPT.03.04.20671	Onslow	8	SR-1452 / BARBARA AVE	FROM SR 1406 (PINEY GREEN RD) TO SR 1417 (TALLMAN CIR) [MP 0.00 - MP 0.43]	2	2	2WU	0.43	20	0.00	0.43							
TOTAL FOR MAP NO. 8								**0.43**										
2027CPT.03.04.20671	Onslow	9	SR-1417 / TALLMAN CIR	FROM SR 1418 (TALLMAN CIR) TO NC 24 (FREEDOM WAY) [MP 0.00 - MP 0.21]	2	2	2WU	0.21	20	0.00	0.21							
TOTAL FOR MAP NO. 9								**0.21**										
2027CPT.03.04.20671	Onslow	10	SR-1418 / TALLMAN CIR	FROM NC 24 (FREEDOM WAY) TO SR 1417 (TALLMAN CIR) [MP 0.00 - MP 0.28]	2	2	2WU	0.28	20	0.00	0.28							
TOTAL FOR MAP NO. 10								**0.28**										
TOTAL FOR PROJ NO. 2027CPT.03.04.20671 / 52336								**9.46**				**12**	**14**	**36**	**6**	**634**	**4,625**	**490**
													56			**634**	**4,625**	
2027CPT.03.04.20672	Onslow	11	SR-1637 / VAN RIGGS RD	FROM SR 1501 (SAND RIDGE RD) TO SR 2220 (FISHING CREEK LN) [MP 0.00 - MP 0.35]	7	2	2WU	0.35	20	0.00	0.35							
TOTAL FOR MAP NO. 11								**0.35**										
2027CPT.03.04.20672	Onslow	12	SR-1670 / CINNAMON DR	FROM CUL-DE-SAC TO END OF MAINTENANCE [MP 0.00 - MP 0.21]	7	2	2WU	0.21	18	0.00	0.21							
TOTAL FOR MAP NO. 12								**0.21**										

PROJECT NO.	SHEET NO.
2027CPT.03.04.20671, ETC.	26

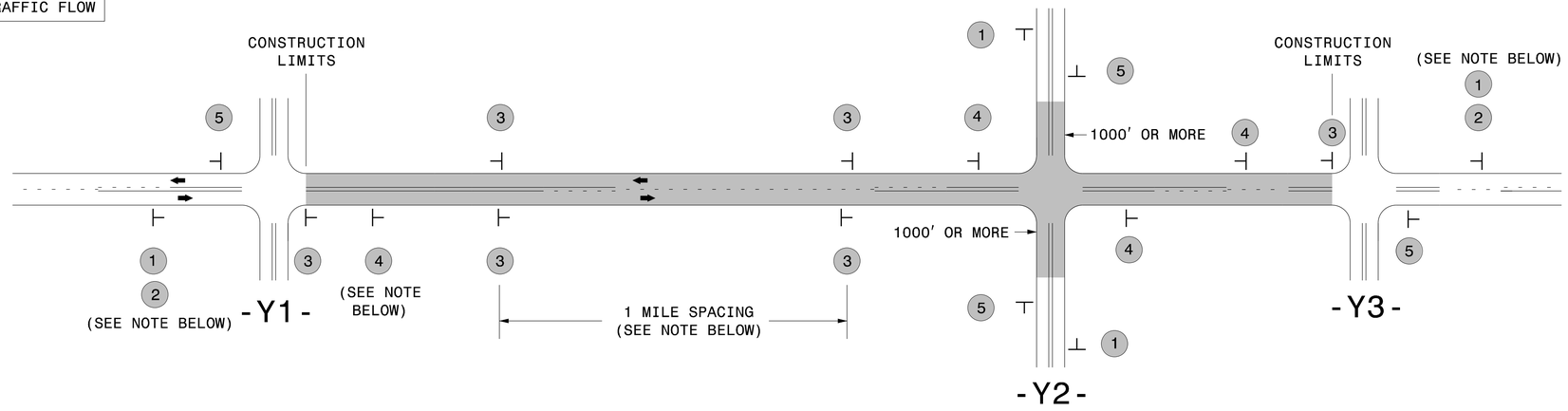
THERMOPLASTIC AND PAINT QUANTITIES

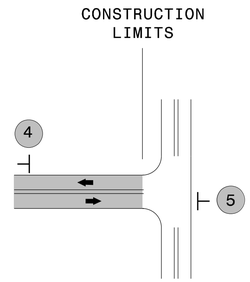
												4720000000-E	4725000000-E			4890000000-E	1891000000-E	4895000000-N
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	THERMO MSG SCHOOL (90 MIL)	THERMO RT ARROW (90 MIL)	THERMO LT ARROW (90 MIL)	THERMO STR ARROW (90 MIL)	COLD APPLIED CONTRAST PLASTIC PAVEMENT MARKING LINES (9")	ASPHALT PAVEMENT REJUVENATOR	POLYCARBONATE H-SHAPED MARKER (Y/Y)
								MI	FT			EA	EA	EA	EA	LF	SY	EA
2027CPT.03.04.20672	Onslow	13	SR-1669 / SPICE DR	FROM SR 1501 (SANDRIDGE RD) TO SR 1670 (CINNAMON DR) [MP 0.00 - MP 0.08]	7	2	2WU	0.08	20	0.00	0.08							
TOTAL FOR MAP NO. 13								**0.08**										
2027CPT.03.04.20672	Onslow	14	SR-1661 / FOXTRACE LN	FROM SR 1501 (SAND RIDGE RD) TO SR 1657 (NUTFIELD DR) [MP 0.00 - MP 0.36]	7	2	2WU	0.36	20	0.00	0.36							
TOTAL FOR MAP NO. 14								**0.36**										
2027CPT.03.04.20672	Onslow	15	SR-1572 / SEASHORE DR	FROM SR 1512 (OLD HAMMOCKS RD) TO SR 1559 (GLANCY RD) [MP 0.00 - MP 0.32]	7	2	2WU	0.32	20	0.00	0.32							
TOTAL FOR MAP NO. 15								**0.32**										
2027CPT.03.04.20672	Onslow	16	SR-1477 / N PARKER RD	FROM SR 1407 (WOLF SWAMP RD) TO CUL-DE-SAC [MP 0.00 - MP 0.18]	7	2	2WU	0.18	20	0.00	0.18							
TOTAL FOR MAP NO. 16								**0.18**										
2027CPT.03.04.20672	Onslow	17	SR-2047 / E REGENT CT	FROM SR 1380 (BATCHELORS TRL) TO CUL-DE-SAC [MP 0.00 - MP 0.08]	7	2	2WU	0.08	20	0.00	0.08							
TOTAL FOR MAP NO. 17								**0.08**										
2027CPT.03.04.20672	Onslow	18	SR-2048 / W REGENT CT	FROM SR 1380 (BATCHELORS TRL) TO CUL-DE-SAC [MP 0.00 - MP 0.04]	7	2	2WU	0.04	20	0.00	0.04							
TOTAL FOR MAP NO. 18								**0.04**										
2027CPT.03.04.20672	Onslow	19	SR-2046 / PAWN CT	FROM SR 1380 (BATCHELORS TRL) TO CUL-DE-SAC [MP 0.00 - MP 0.02]	7	2	2WU	0.02	20	0.00	0.02							
TOTAL FOR MAP NO. 19								**0.02**										
2027CPT.03.04.20672	Onslow	20	SR-1994 / BAYSDEN DR	FROM SR 1308 (GUM BRANCH RD) TO CUL-DE-SAC [MP 0.00 - MP 0.33]	6	2	2WU	0.33	24	0.00	0.33							
TOTAL FOR MAP NO. 20								**0.33**										
2027CPT.03.04.20672	Onslow	21	SR-2024 / BEVERLY DR	FROM SR 1994 (BAYSDEN DR) TO END OF MAINTENANCE [MP 0.00 - MP 0.14]	6	2	2WU	0.14	24	0.00	0.14							
TOTAL FOR MAP NO. 21								**0.14**										
2027CPT.03.04.20672	Onslow	22	SR-2700 / CHISHOLM TRL	FROM SR 1386 (N BRYAN RD) TO SR 2217 (MAREADY RD) [MP 0.00 - MP 0.42]	7	2	2WU	0.42	20	0.00	0.42							
TOTAL FOR MAP NO. 22								**0.42**										
2027CPT.03.04.20672	Onslow	23	SR-2097 / N STAGE COACH TRL	FROM SR 2217 (MAREADY RD) TO CUL-DE-SAC [MP 0.00 - MP 0.18]	7	2	2WU	0.18	20	0.00	0.18							
TOTAL FOR MAP NO. 23								**0.18**										
2027CPT.03.04.20672	Onslow	24	SR-2098 / S STAGE COACH TRL	FROM SR 2217 (MAREADY RD) TO CUL-DE-SAC [MP 0.00 - MP 0.15]	7	2	2WU	0.15	20	0.00	0.15							
TOTAL FOR MAP NO. 24								**0.15**										
2027CPT.03.04.20672	Onslow	25	SR-2074 / SAN ANTONIO TRL	FROM SR 2217 (MAREADY RD) TO CUL-DE-SAC [MP 0.00 - MP 0.06]	7	2	2WU	0.06	20	0.00	0.06							
TOTAL FOR MAP NO. 25								**0.06**										
TOTAL FOR PROJ NO. 2027CPT.03.04.20672								**2.92**										
GRAND TOTAL								**12.38**				**12**	**14**	**36**	**6**	**634**	**4,625**	**490**
														56		**634**	**4,625**	

PROJ. REFERENCE NO.	SHEET NO.
2027CPT.03.04.20671, ETC.	TCP-1

SIGNING FOR RESURFACING PROJECTS

LEGEND
- ├ STATIONARY SIGN
- ← DIRECTION OF TRAFFIC FLOW





TEE INTERSECTION

MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION

1	ROAD WORK AHEAD W20-1 48" X 48"	PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.
2	NEXT XX MILES W7-3aP 24" X 18"	#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	LOW/SOFT SHOULDER SP 13107 48" X 48"	- PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER. - AT TEE INTERSECTIONS INSTALL INITIALLY ½ MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.
4	ROAD UNDER CONST SP 13106 48" X 48"	- 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	END ROAD WORK G20-2 A 48" X 24"	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.

-Y- LINE SIGNING

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, PORTABLE ADVANCE WARNING SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.

ROAD WORK AHEAD W20-1 48" X 48"
PLACED 500' IN ADVANCE OF FLAGGER.

W20-7 A 48" X 48"
PLACED 250' IN ADVANCE OF FLAGGER.

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

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

PROJECT REFERENCE NO.	SHEET NO.
2027CPT.03.04.20671, ETC.	EC-1

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.

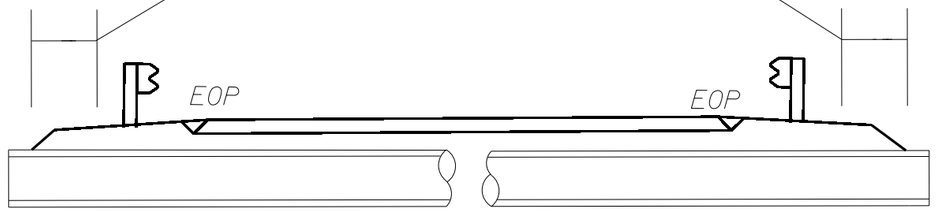
PROJECT REFERENCE NO.	SHEET NO.
2027CPT.03.04.20671, ETC.	EC-2

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

BMP Options: Wattle or Silt Fence

EROSION CONTROL DETAIL

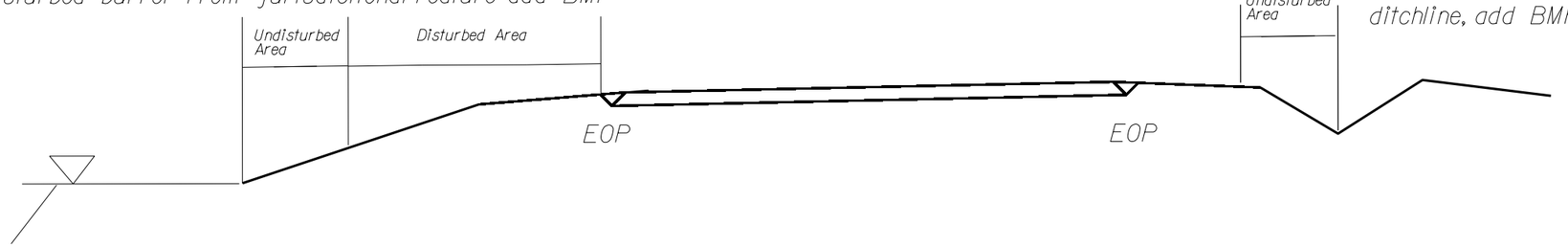
< 5' – 10' Undisturbed buffer add BMP



Pipe/Culvert

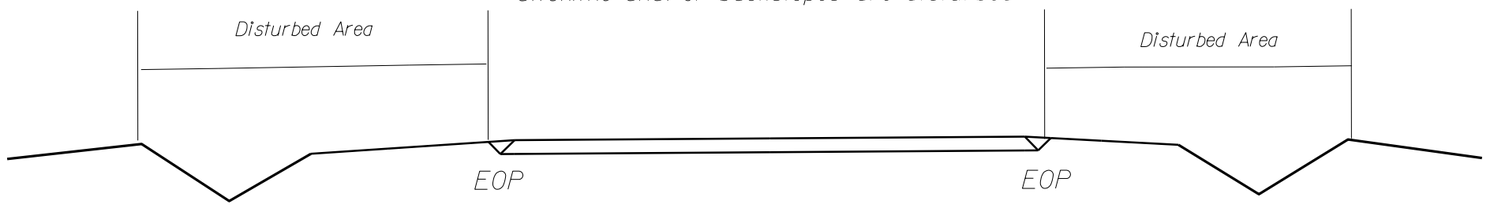
< 5' – 10' Undisturbed buffer from jurisdictional feature add BMP

< 5' – 10' Undisturbed buffer from ditchline, add BMP

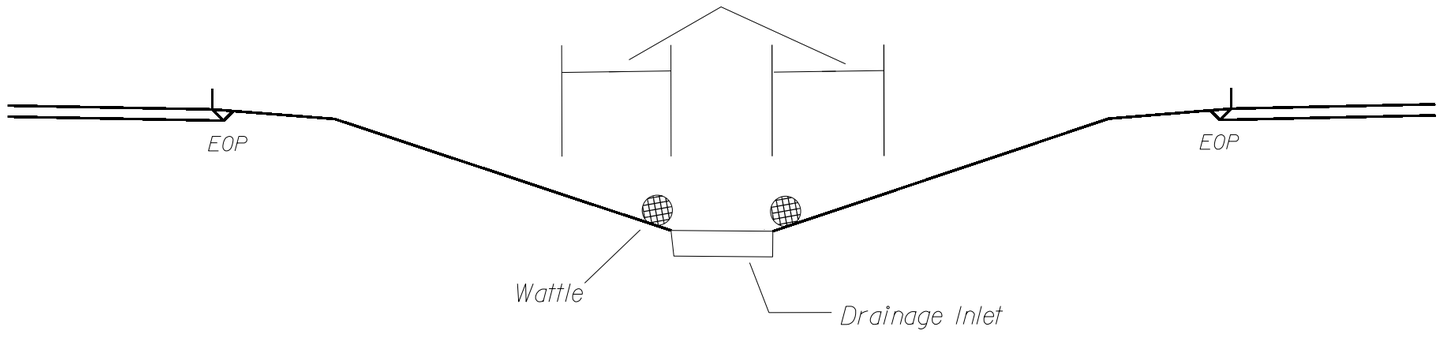


Jurisdictional Feature

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



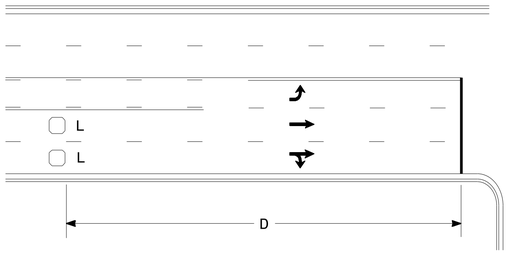
< 5' – 10' Undisturbed buffer from inlet, add wattle



NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
2027CPT.03.04.20671, ETC.	SIG1

High Speed Detection
(≥35 mph)

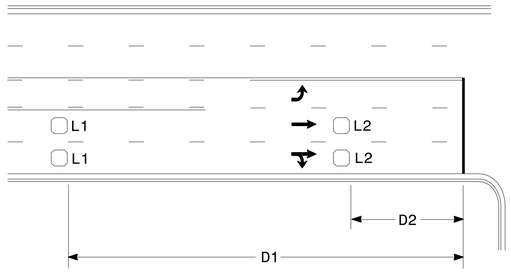


Speed Limit mph	D ft
35	200
40	250
45	300
50	355
55	420
60	475
65	550

L = 6ft X 6ft
Wired separately

Volume Density Operation

OR



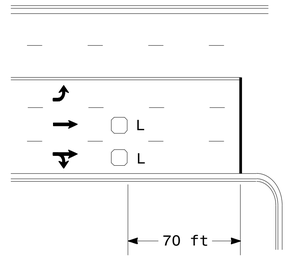
Speed Limit mph	D1 ft	D2 ft
40	250	80
45	300	90
50	355	100
55	420	110
60	475	120
65	550	130

L1 = 6ft X 6ft
Wired in series

L2 = 6ft X 6ft
Wired in series

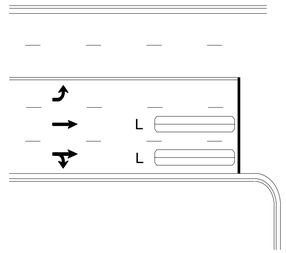
"Stretch" Operation

Low Speed Detection
(≤35 mph)



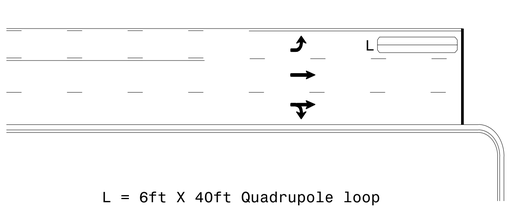
L = 6ft X 6ft
Wired in series

OR



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

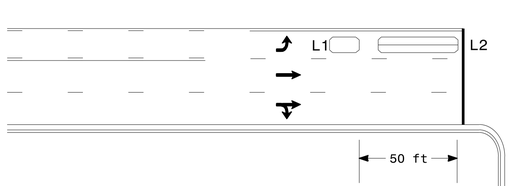
Left Turn Lane Detection



L = 6ft X 40ft Quadrupole loop

Presence Loop Detection

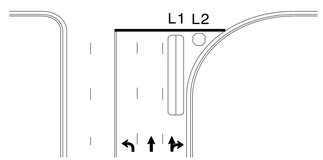
OR



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

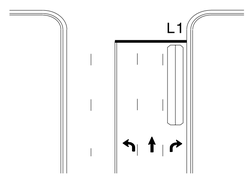
Queue Loop Detection

Right Turn Lane Detection

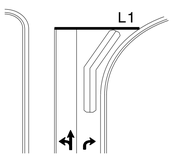


Shared Lane/
Wide Radius Turn

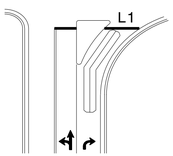
L1 = 6ft X 40ft Quadrupole loop
L2 = 6ft X 6ft [Minimum] Presence loop
Wired separately



Standard Turn

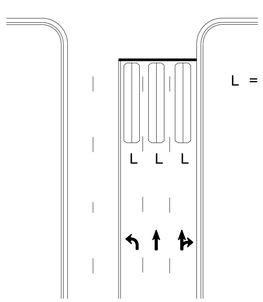


Wide Radius Turn



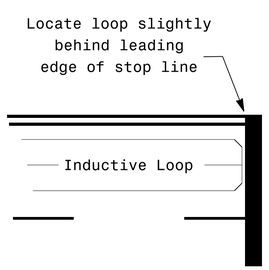
Channelized Turn

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

Prepared In the Offices of:
Transportation Mobility and Safety Division
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

Typical Signal Loop Locations

PLAN DATE: September 2025 | REVIEWED BY:
PREPARED BY: J.A. Lohr | REVIEWED BY:

SCALE
N/A

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA
PROFESSIONAL
SEAL 026486
ENGINEER
ROBERT J. ZIEMBA
DocuSigned by: 11/25/2025
DATE

SIG. INVENTORY NO.

17-NOV-2025 07:35
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jalohr