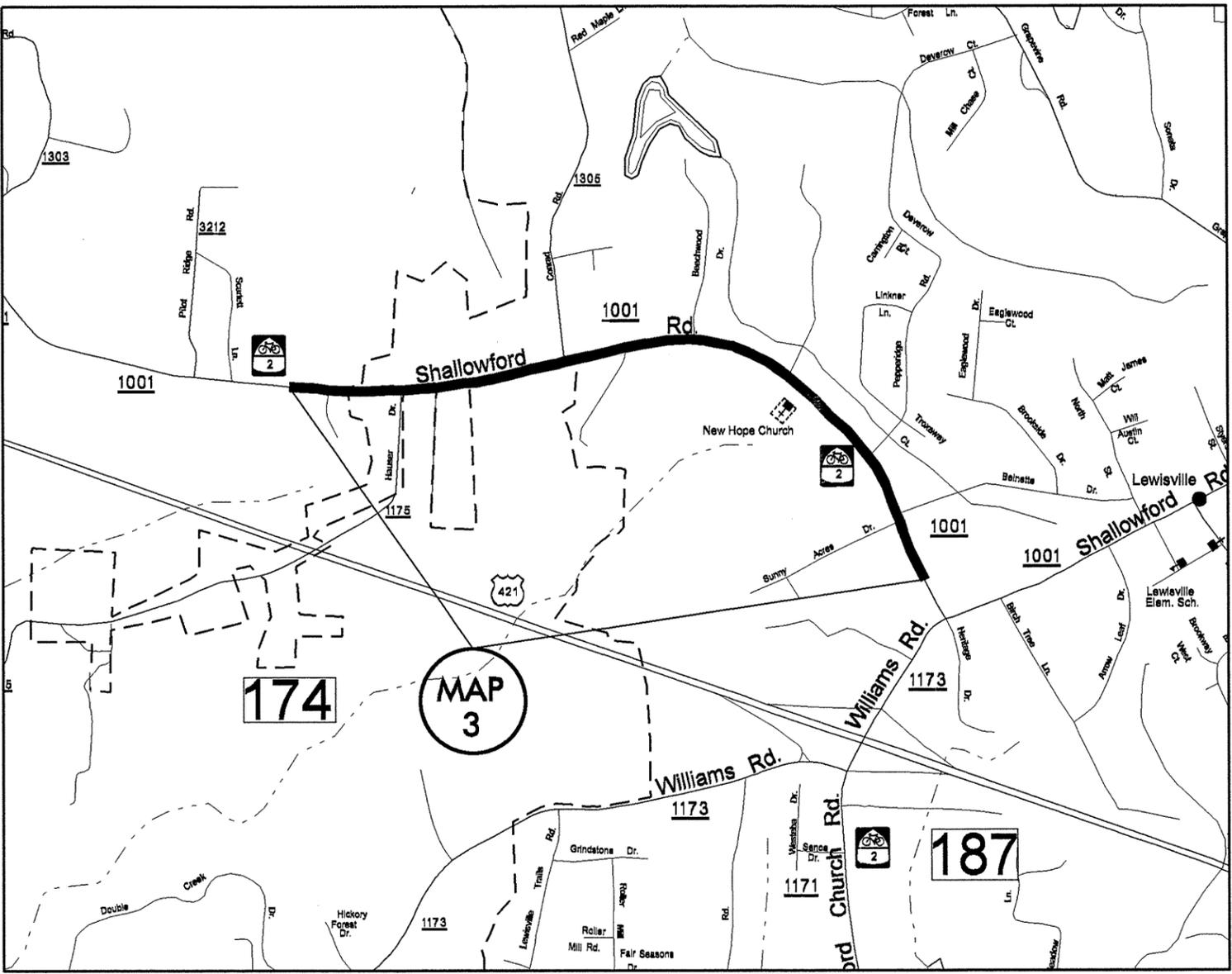


NOTE:

MAP 1
 From NC 66 through intersection of
 Glade St. Mill 1½" depth full width
 of pavement.
 Mill 0-1½" a 12 foot width at all other
 curb and medians.

MAP 12
 Tie-In mill at pavement joint at
 Tobaccoville Rd. (SR 1620)
 Tie-In to new surface at NC 65.
 DO NOT MILL.

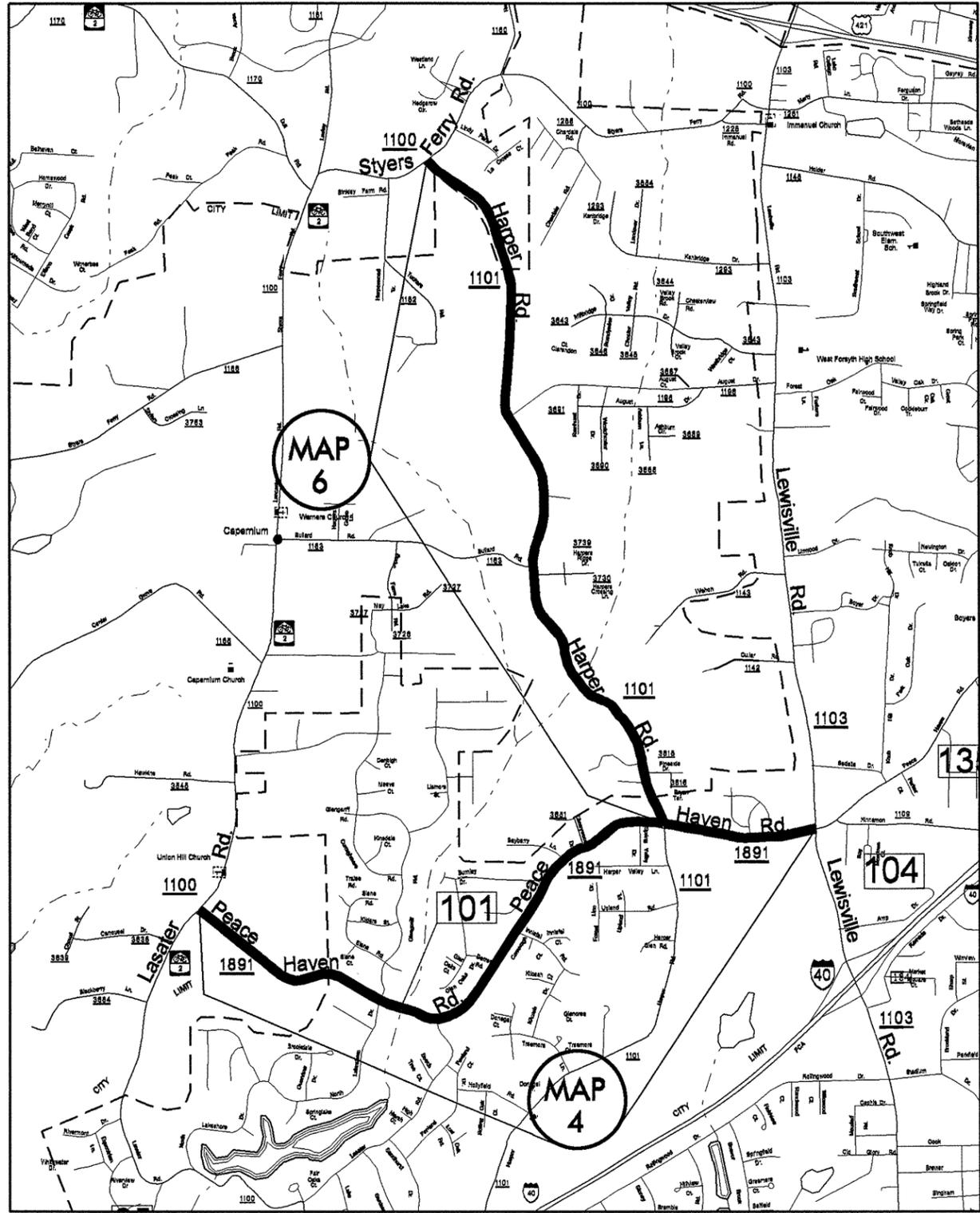
FORSYTH COUNTY
 NORTH CAROLINA



NOTE:
 Tie-In Mill 100 feet, overlap 25 feet into the pavement joint at Lissara Lodge to make a smooth transition.
 Widen 2 feet as directed between Conrad Road and Williams Road.

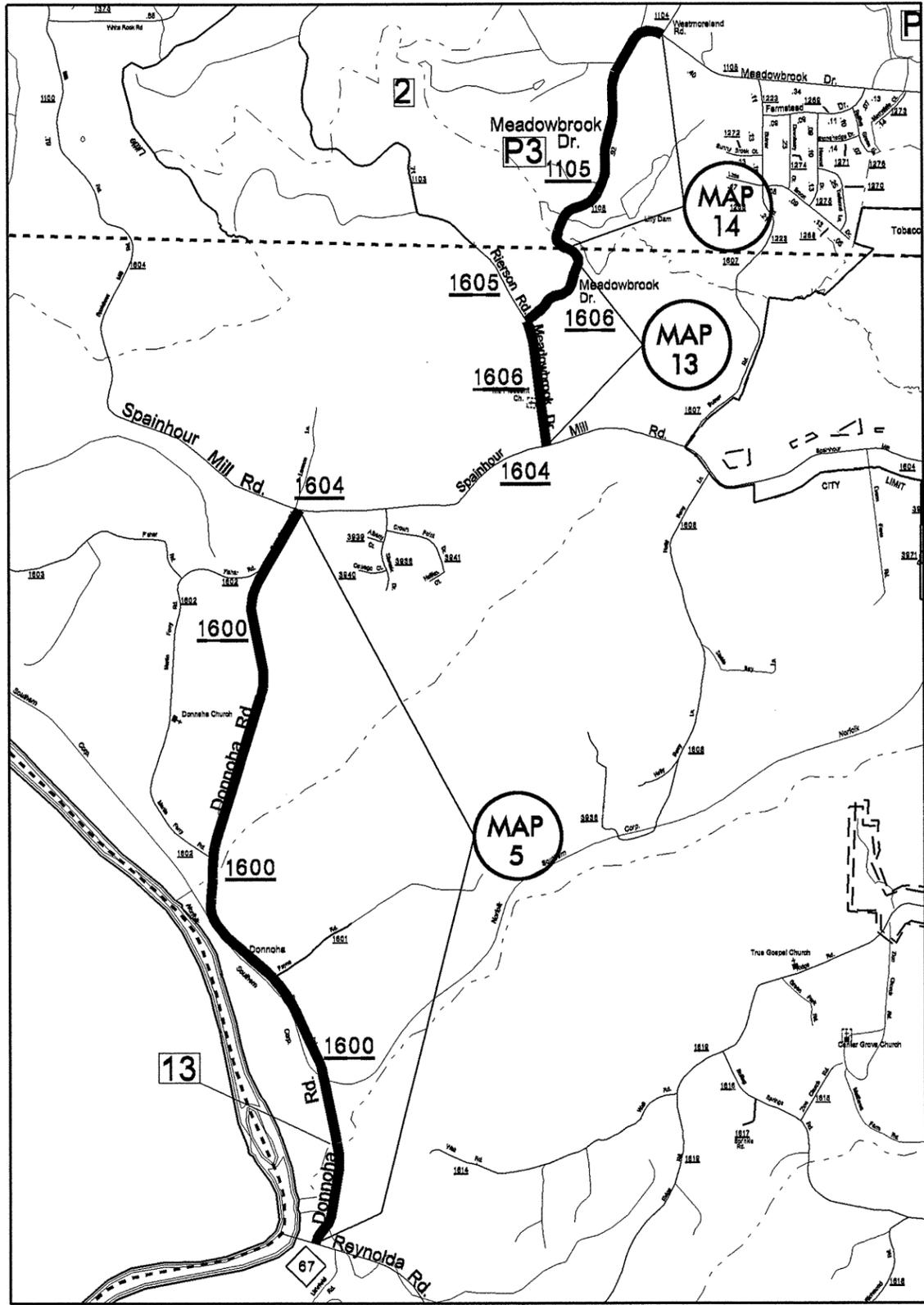
FORSYTH COUNTY
 NORTH CAROLINA

PROJECT REFERENCE NO.	SHEET NO.
9CR.10341.140, 9CR.20341.140 9CR.20851.140	4



FORSYTH COUNTY
NORTH CAROLINA

PROJECT REFERENCE NO.	SHEET NO.
9CR.10341.140, 9CR.20341.140 9CR.20851.140	5



NOTE:

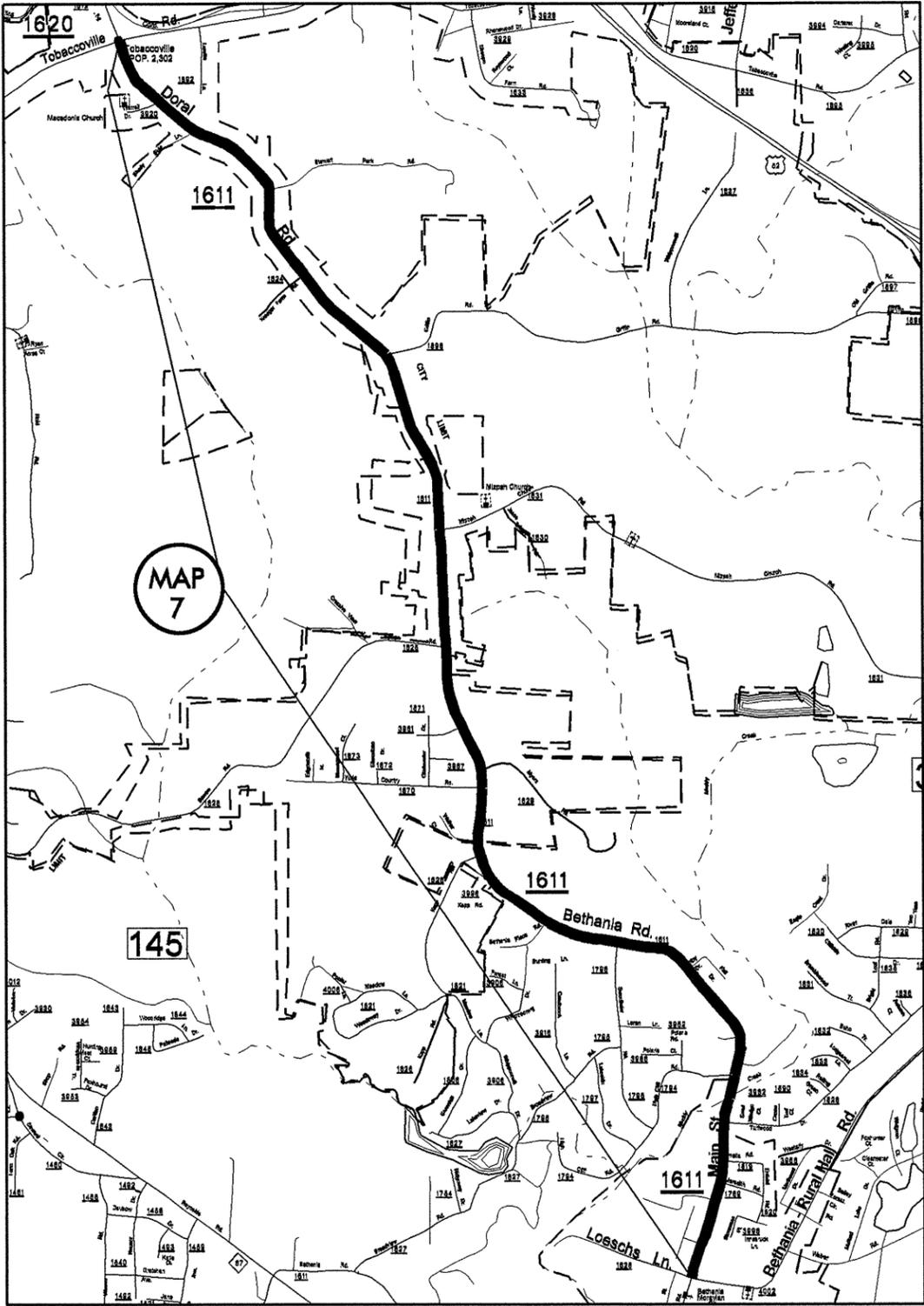
MAP 5 Donnaha Rd.
NO Tie-In MILLING at project ends.

MAP 13 Meadowbrook Dr.
NO Tie-In MILL at intersection of
Riersion Rd.
Tie-In Mill at Spainhour Mill Rd.
DO NOT MILL at County Line Tie-In to
new surface.

MAP 14 Meadowbrook Dr.
Tie-In MILL at pavement jt. at
Westmoreland Rd.
DO NOT MILL at County Line Tie-In to
new surface.

FORSYTH AND STOKES COUNTIES
NORTH CAROLINA

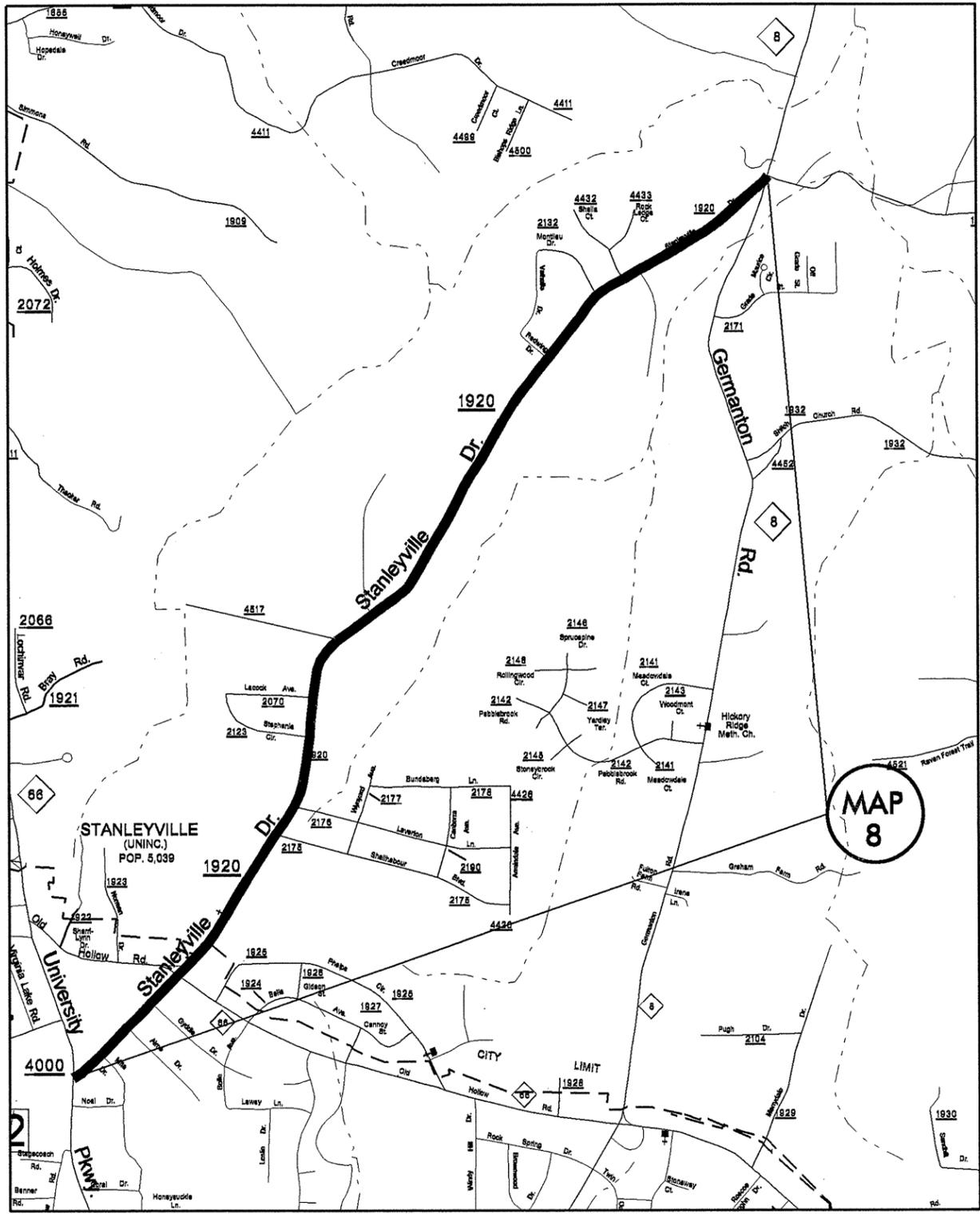
PROJECT REFERENCE NO.	SHEET NO.
9CR.10341.140, 9CR.20341.140 9CR.20851.140	6



NOTE:
Mill Butt Joint to Tie-in to speed
table at Bethania-Rural Hall Rd.

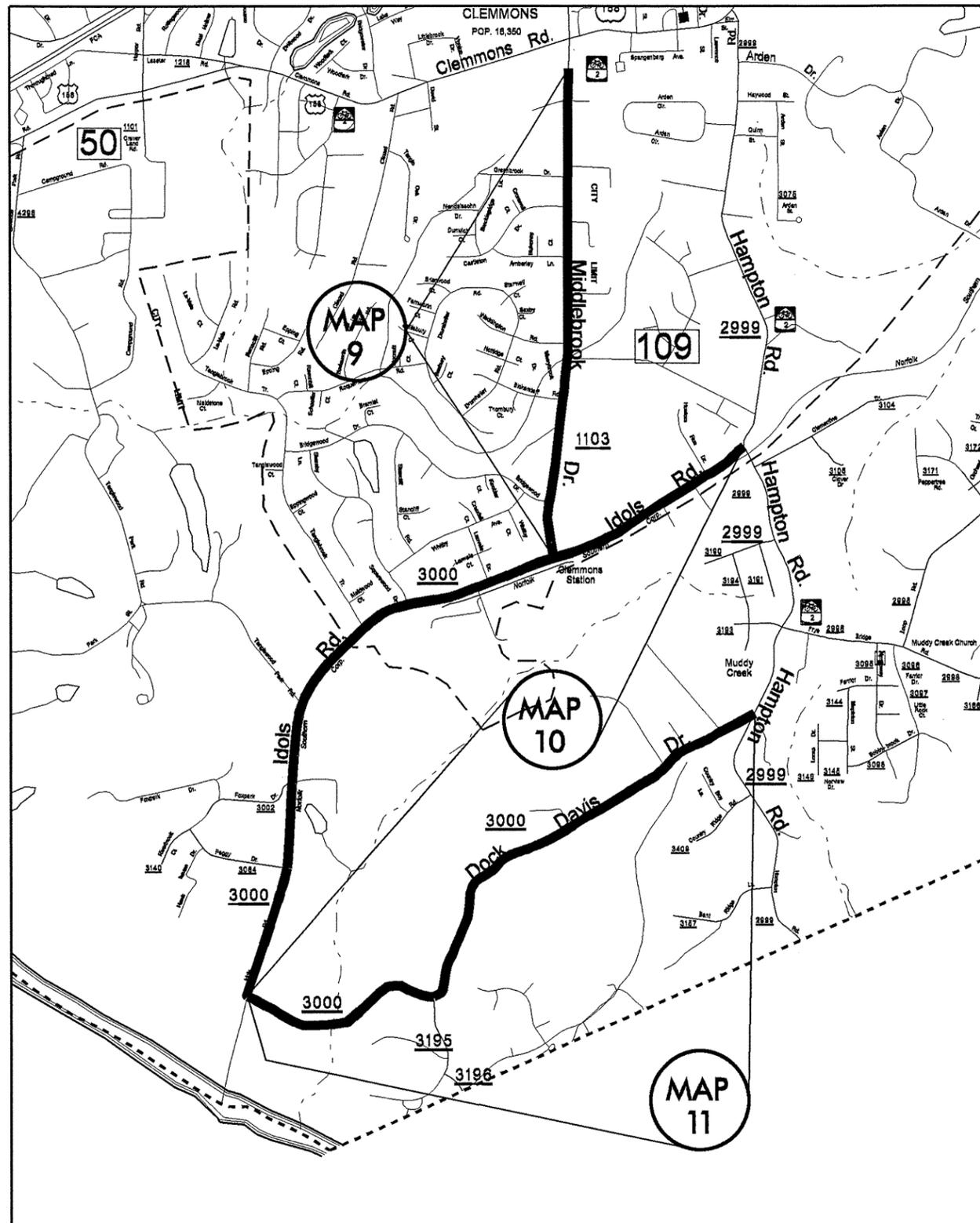
FORSYTH COUNTY
NORTH CAROLINA

PROJECT REFERENCE NO.	SHEET NO.
9CR.10341.140, 9CR.20341.140 9CR.20851.140	7



NOTE:
 Mill to Tie-in to NC 66 at Edge of pavement.
 DO NOT MILL OR PAVE THROUGH NC 66.

FORSYTH COUNTY
 NORTH CAROLINA

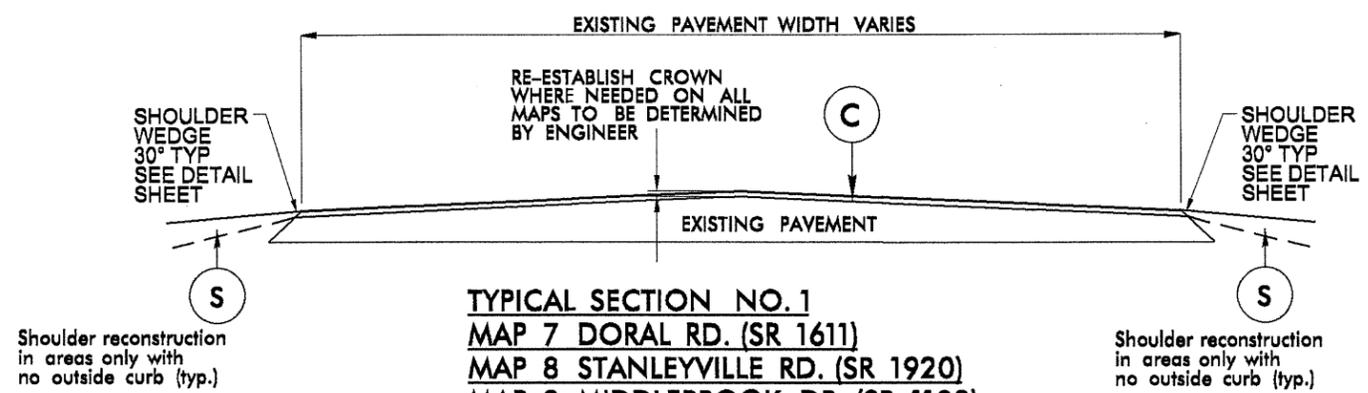


NOTE:
 MAP 9 Middlebrook Dr.
 Mill at Tie-in at nose of island near
 US 158, DO NOT MILL at Idols Rd.,
 Tie-in to new surface.
 Mill 2½" depth 12 feet wide in areas
 of ribbon pavement in the south bound
 lane only, pave back with
 2½" I19.0 B, overlay entire surface
 with 1½" S9.5B.

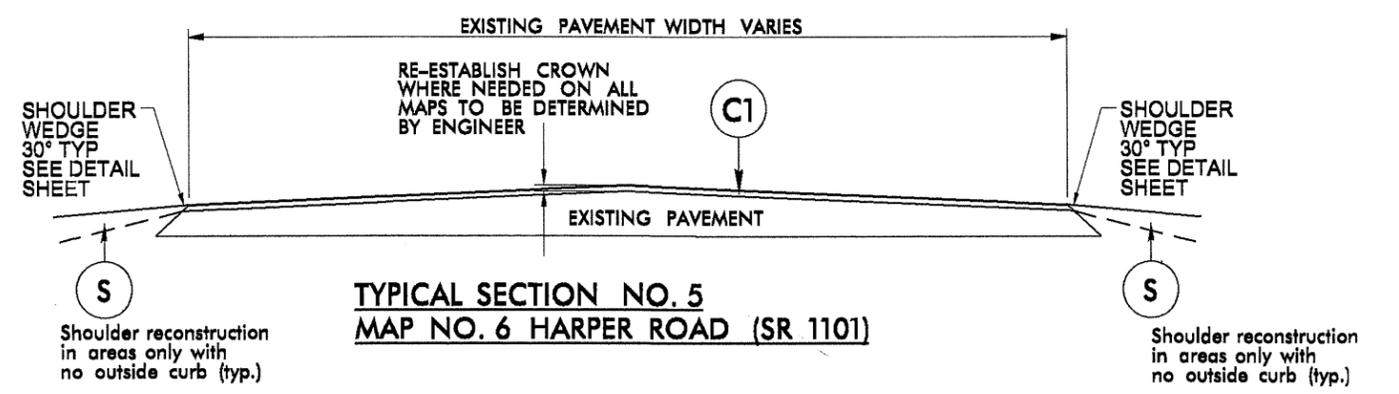
MAP 10 Idols Rd.
 Tie-In Mill at RxR.

MAP 11 Dock Davis Rd.
 Tie-In Mill at RxR.

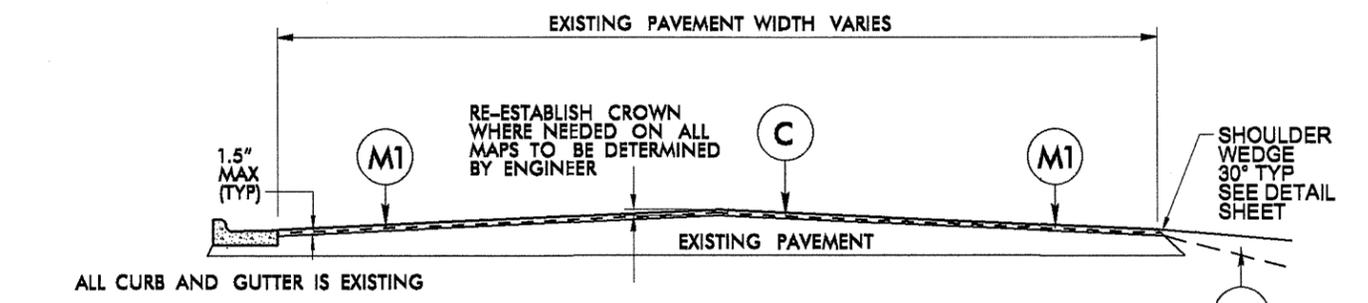
FORSYTH COUNTY
 NORTH CAROLINA



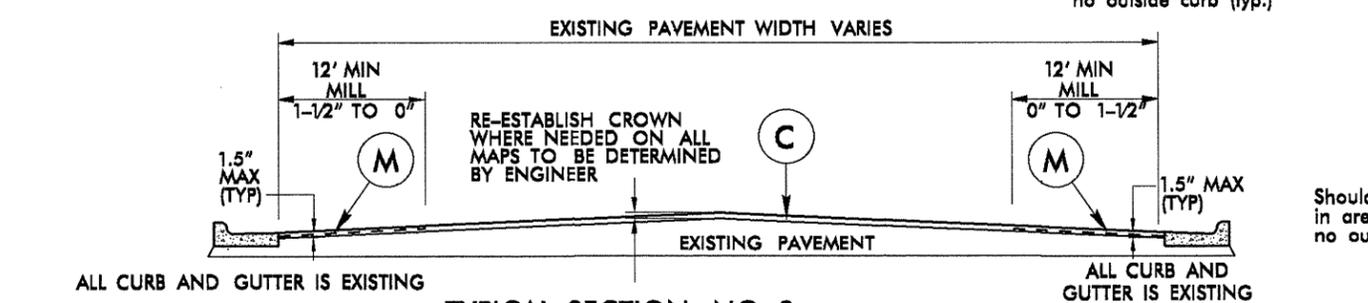
TYPICAL SECTION NO. 1
MAP 7 DORAL RD. (SR 1611)
MAP 8 STANLEYVILLE RD. (SR 1920)
MAP 9 MIDDLEBROOK DR. (SR 1103)
MAP 10 IDOLS RD. (SR 3000)
MAP 11 DOCK DAVIS RD. (SR 3000)
MAP 12 TOBACCOVILLE RD. (SR 1632)
MAP 13 MEADOWBROOK DR. (SR 1606)
MAP 14 MEADOWBROOK DR. (SR 1105)



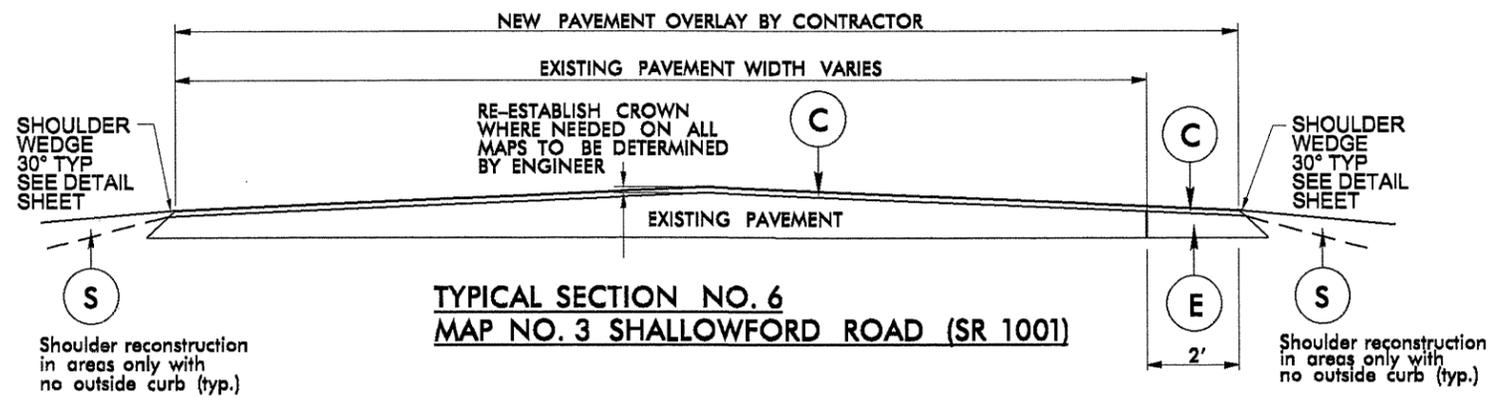
TYPICAL SECTION NO. 5
MAP NO. 6 HARPER ROAD (SR 1101)



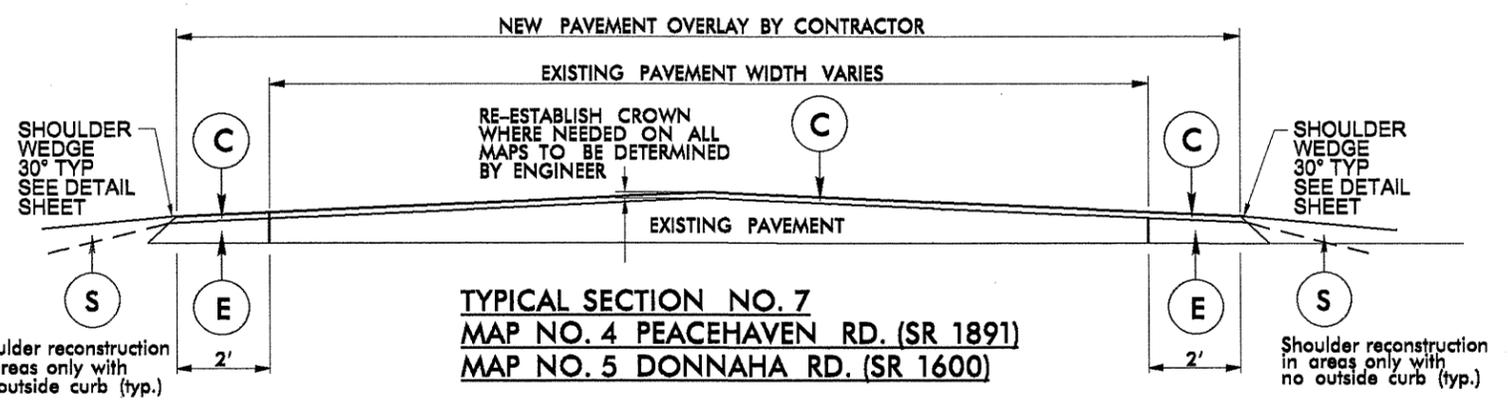
TYPICAL SECTION NO. 2
MAP NO. 1 NC 65



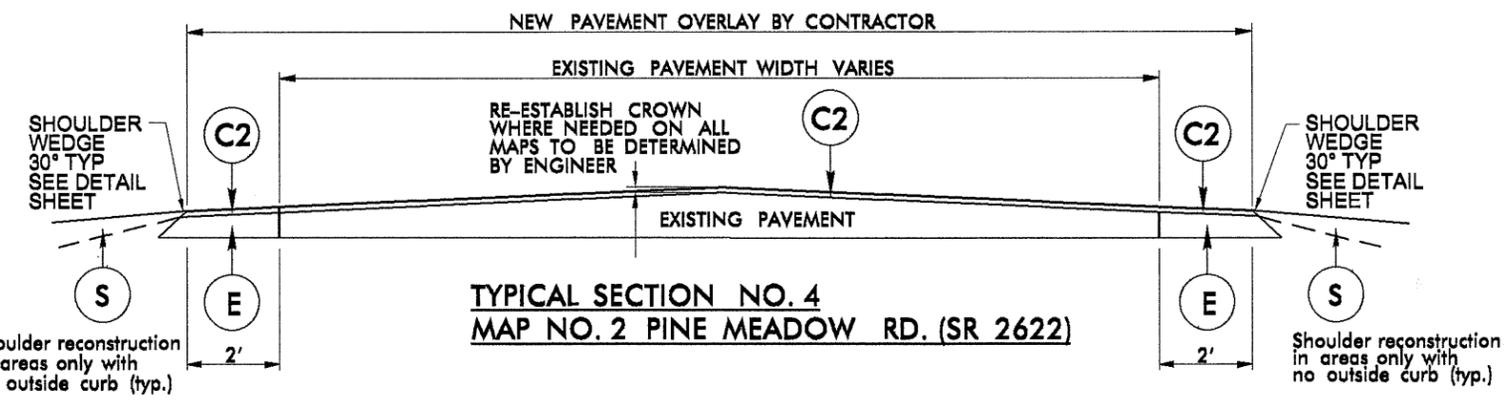
TYPICAL SECTION NO. 3
MAP NO. 1 NC 65



TYPICAL SECTION NO. 6
MAP NO. 3 SHALLOWFORD ROAD (SR 1001)

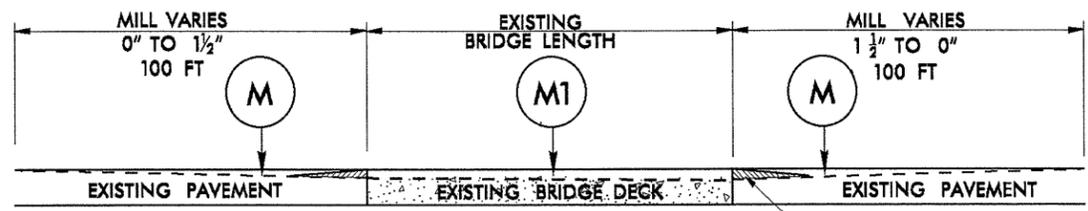


TYPICAL SECTION NO. 7
MAP NO. 4 PEACEHAVEN RD. (SR 1891)
MAP NO. 5 DONNAHA RD. (SR 1600)



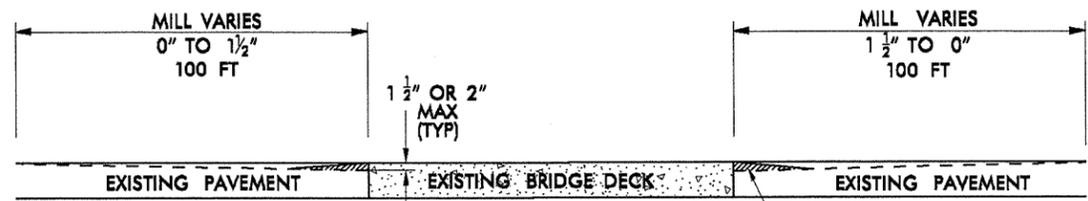
TYPICAL SECTION NO. 4
MAP NO. 2 PINE MEADOW RD. (SR 2622)

PAVEMENT SCHEDULE	
C	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, TO BE APPLIED AT AN AVERAGE RATE OF 168 LBS PER SQ YD
C1	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, TO BE APPLIED AT AN AVERAGE RATE OF 224 LBS PER SQ YD
C2	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE SP9.5A, TO BE APPLIED AT AN AVERAGE RATE OF 165 LBS PER SQ YD
E	PROP. APPROX. 5 1/2" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
D	PROP. APPROX. 2 1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, TO BE APPLIED AT AN AVERAGE RATE OF 285 LBS PER SQ YD
M	MILL ASPHALT PAVEMENT, 0" TO 1 1/2"
M1	MILL ASPHALT PAVEMENT, 1 1/2" DEPTH
M2	MILL ASPHALT PAVEMENT, 2 1/2" DEPTH
S	SHOULDER RECONSTRUCTION (SEE DETAIL)
U	EXISTING PAVEMENT



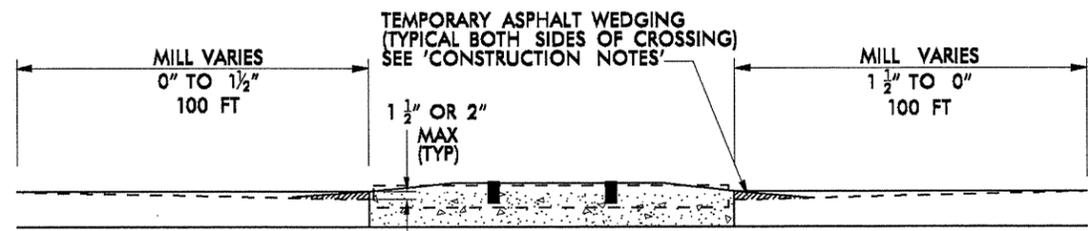
MILLING BRIDGE DECK AND APPROACHES
(SEE BRIDGE DATA SHEET)

TEMPORARY ASPHALT WEDGING (TYPICAL BOTH SIDES OF BRIDGE) IF APPROACHES ARE MILLED PRIOR TO MILLING BRIDGE DECK



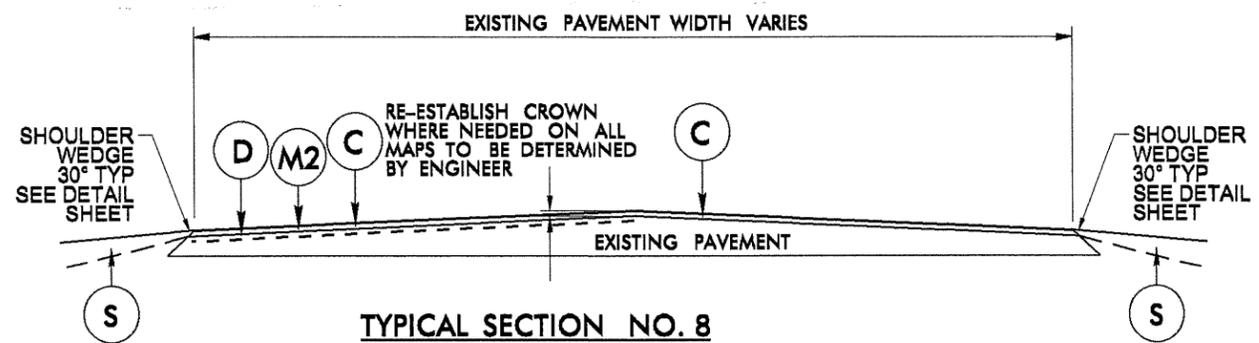
INCIDENTAL MILLING BRIDGE APPROACHES
(SEE BRIDGE DATA SHEET)

TEMPORARY ASPHALT WEDGING (TYPICAL BOTH SIDES OF BRIDGE)



INCIDENTAL MILLING RAILROAD CROSSING APPROACHES

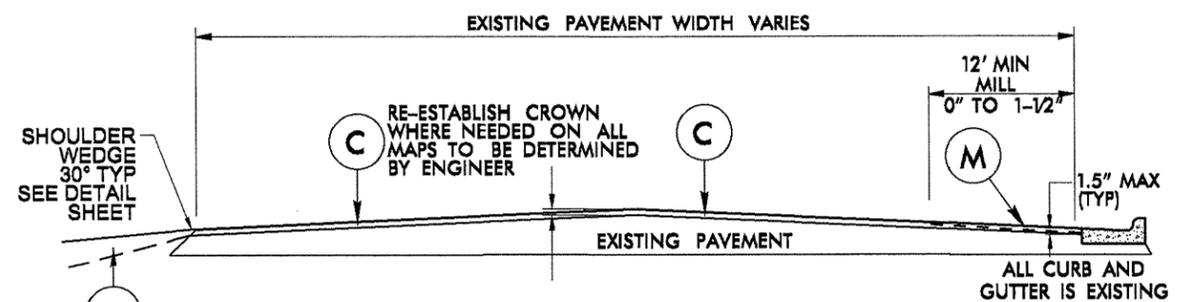
TEMPORARY ASPHALT WEDGING (TYPICAL BOTH SIDES OF CROSSING) SEE 'CONSTRUCTION NOTES'



TYPICAL SECTION NO. 8
MAP NO. 9 MIDDLEBROOK DR.

Shoulder reconstruction in areas only with no outside curb (typ.)

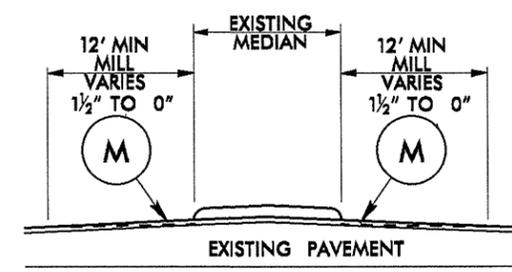
Shoulder reconstruction in areas only with no outside curb (typ.)



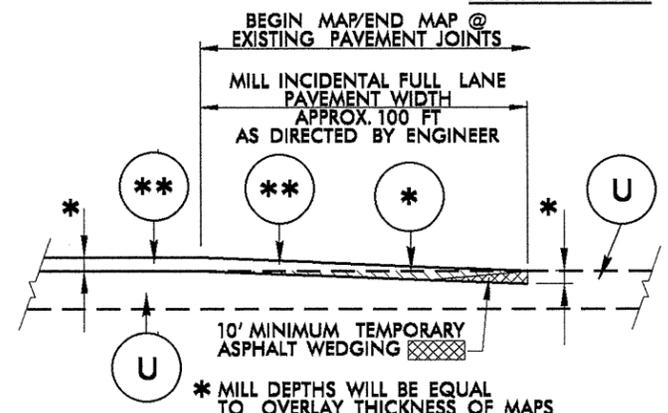
TYPICAL SECTION NO. 9
MAP NO. 9 MIDDLEBROOK DR.

Shoulder reconstruction in areas only with no outside curb (typ.)

ALL CURB AND GUTTER IS EXISTING

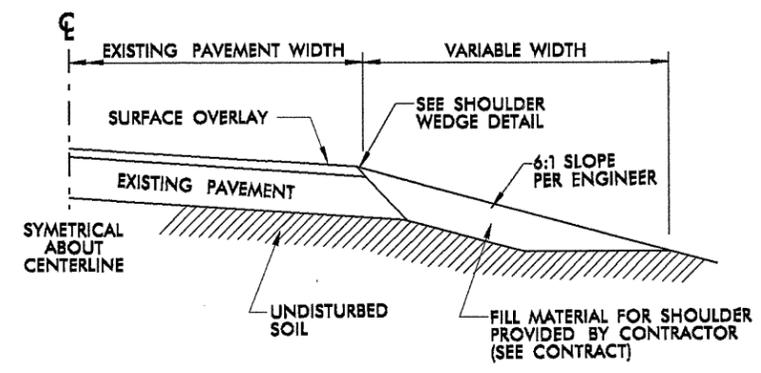


MILLING AT MEDIANS



* MILL DEPTHS WILL BE EQUAL TO OVERLAY THICKNESS OF MAPS SEE TYPICALS AND BRIDGE DATA SHEETS
** SEE TYPICALS FOR MIX TYPE

INCIDENTAL MILLING AT TIE-IN DETAIL

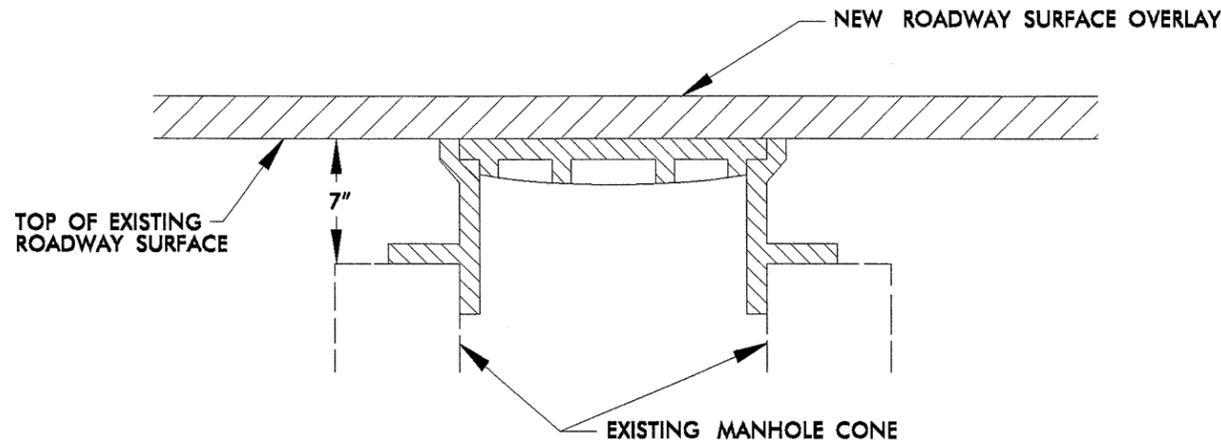


SHOULDER RECONSTRUCTION

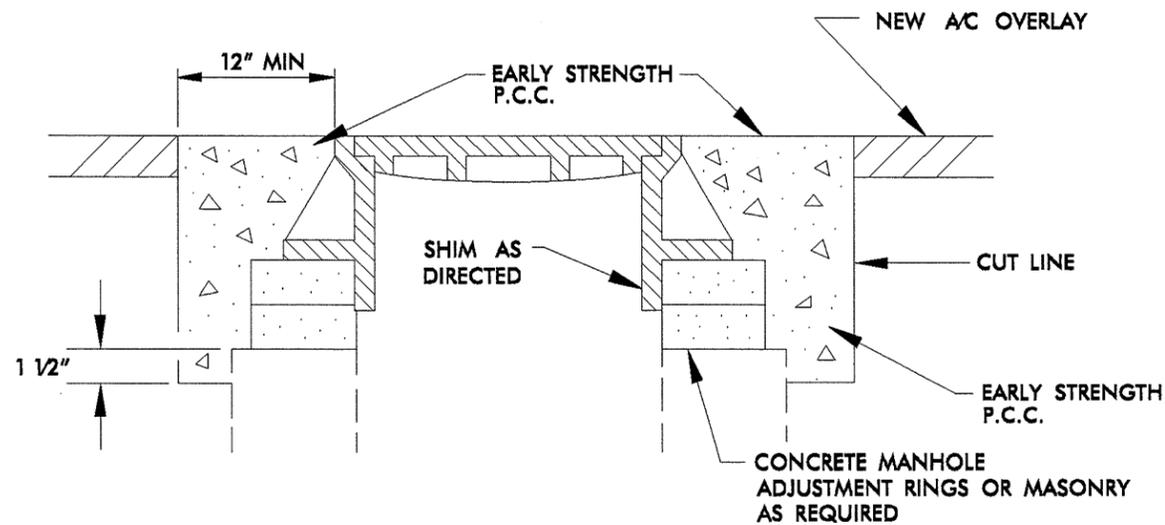
PAVEMENT SCHEDULE	
C	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, TO BE APPLIED AT AN AVERAGE RATE OF 168 LBS PER SQ YD
C1	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, TO BE APPLIED AT AN AVERAGE RATE OF 224 LBS PER SQ YD
C2	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5A, TO BE APPLIED AT AN AVERAGE RATE OF 165 LBS PER SQ YD
E	PROP. APPROX. 5 1/2" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
D	PROP. APPROX. 2 1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, TO BE APPLIED AT AN AVERAGE RATE OF 285 LBS PER SQ YD
M	MILL ASPHALT PAVEMENT, 0" TO 1 1/2"
M1	MILL ASPHALT PAVEMENT, 1 1/2" DEPTH
M2	MILL ASPHALT PAVEMENT, 2 1/2" DEPTH
S	SHOULDER RECONSTRUCTION (SEE DETAIL)
U	EXISTING PAVEMENT

CONSTRUCTION NOTES:

1. ALL QUANTITIES ARE "ESTIMATED" AS INDICATED IN THE "SUMMARY OF QUANTITIES".
2. CONSTRUCTION SHALL PROGRESS IN PHASES, IN THE ORDER INDICATED BELOW:
 - PHASE 1 - MILLING AND PATCHING (WHEN REQUIRED)
 - PHASE 2 - SURFACE OVERLAY
 - PHASE 3 - SHOULDER DROP-OFF REPAIR (AS NEEDED AND DIRECTED BY ENGINEER)
 - PHASE 4 - UTILITY ADJUSTMENTS (MANHOLE RING/COVER, VALVE/METER BOX RING/COVER, CATCH BASIN GRATE/COVER, DROP INLET GRATE/COVER, ETC.) WHEN REQUIRED.
3. BRIDGES THAT HAVE FLOOR DRAINS, SHALL HAVE ALL FLOOR DRAINS LEFT OPEN. EXTRA CARE SHALL BE EXERCISED IN MILLING (IF REQUIRED) AND IN PLACING THE WEARING SURFACE AROUND FLOOR DRAINS SO AS NOT TO HINDER EFFECTIVE DRAINAGE.
4. TEMPORARY ASPHALT WEDGING SHALL BE PLACED ON THE SAME DAY THAT BRIDGE AND/OR RAILROAD APPROACHES ARE MILLED (AND IF APPROACHES ARE MILLED PRIOR TO BRIDGE DECK).
5. FOR TWO-LANE ROADWAYS - IT SHALL BE UNDERSTOOD THAT TYPICALLY ON A ROADWAY MEASURING 20 FEET OR LESS IN WIDTH, THE CENTER OF THE WHITE EDGELINE SHALL BE LOCATED SIX INCHES FROM THE EDGE OF PAVEMENT ON EITHER SIDE OF THE ROADWAY; ON A ROADWAY MEASURING 22 FEET IN WIDTH, TRAVEL LANES SHALL MEASURE 10 FEET AND THE WHITE EDGELINE SHALL BE LOCATED ONE FOOT FROM THE EDGE OF PAVEMENT ON EITHER SIDE; ON A ROADWAY MEASURING 24 FEET IN WIDTH, TRAVEL LANES SHALL MEASURE 11 FEET AND THE WHITE EDGELINE SHALL BE LOCATED ONE FOOT FROM THE EDGE OF PAVEMENT ON EITHER SIDE; ON A ROADWAY MEASURING 26 FEET OR MORE IN WIDTH, TRAVEL LANES SHALL MEASURE 12 FEET AND THE WHITE EDGELINE SHALL BE LOCATED NO LESS THAN ONE FOOT FROM THE EDGE OF PAVEMENT ON EITHER SIDE. THIS SHALL BE STANDARD PRACTICE UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
6. PAPER JOINTS ARE TO BE PLACED BETWEEN DAYS OF PAVING OPERATIONS AS SPECIFIED IN THE STANDARD SPECIFICATIONS SECTION 610-11.
7. ALL MILLED AREAS WILL BE PAVED WITHIN 72 HOURS UNLESS APPROVED BY THE ENGINEER.
8. REPLACE ANY PORTION OF STOP BARS AND OTHER PAVEMENT MARKINGS AT ANY INTERSECTION INCLUDING Y-LINES NOT ACTUALLY BEING PAVED OVER, THAT ARE OBLITERATED BY THE PAVING OPERATION EITHER BY HAULING WHEEL TRACKS OR TACK TRUCK BY THE END OF EACH RESURFACING OPERATION



STEP 1



STEPS 2,3, & 4

- STEP 1 COVER EXISTING MANHOLE WITH APPROVED MATERIAL AND CONSTRUCT OVERLAY ACROSS TOP OF MANHOLE
- STEP 2 SAW CUT EXCAVATION AROUND MANHOLE 12" MIN. FROM MANHOLE FRAME.
- STEP 3 RAISE MANHOLE FRAME RINGS TO FINISH PAVEMENT PROFILE AND CROSS SLOPE.
- STEP 4 BACKFILL WITH EARLY STRENGTH P.C.C. TO DEPTHS AS DIRECTED.

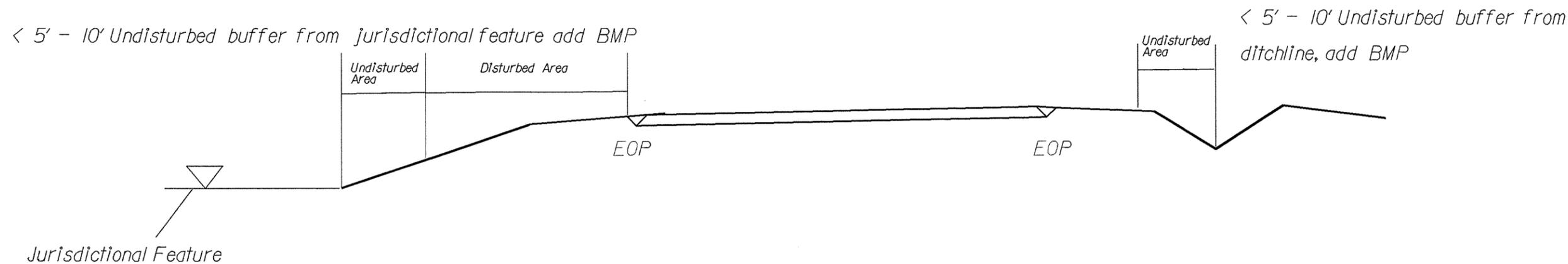
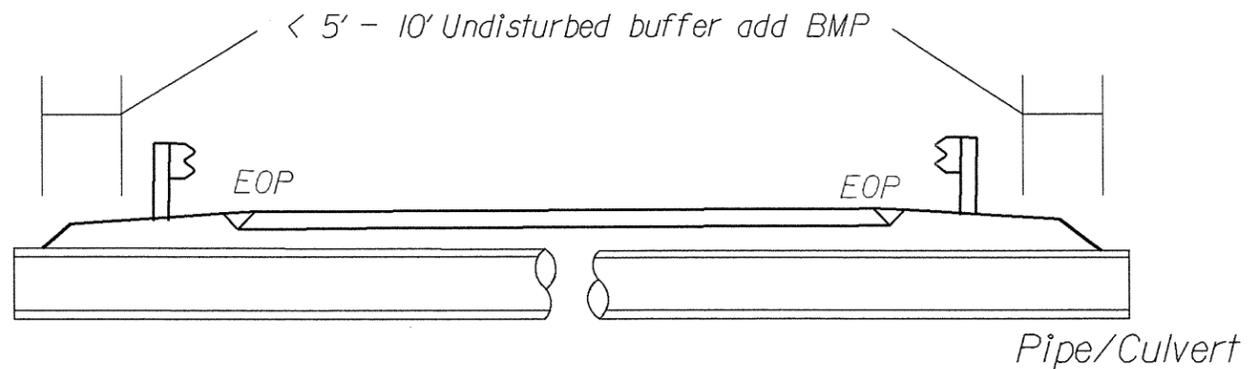
MANHOLE ADJUSTMENT DETAIL

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

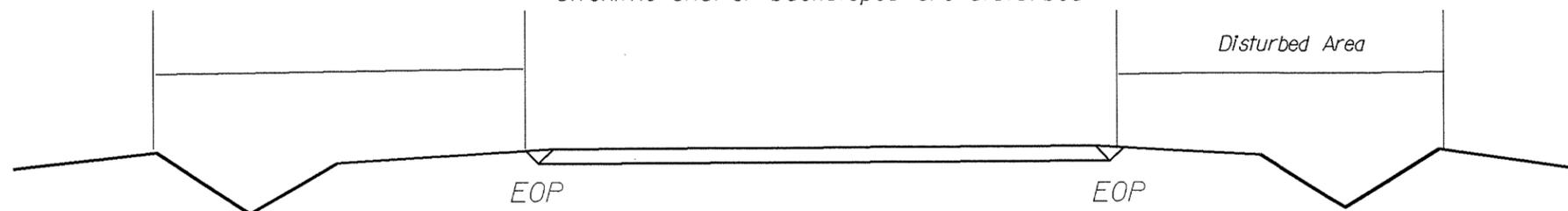
BMP Options: Wattle or Silt Fence

EROSION CONTROL DETAIL

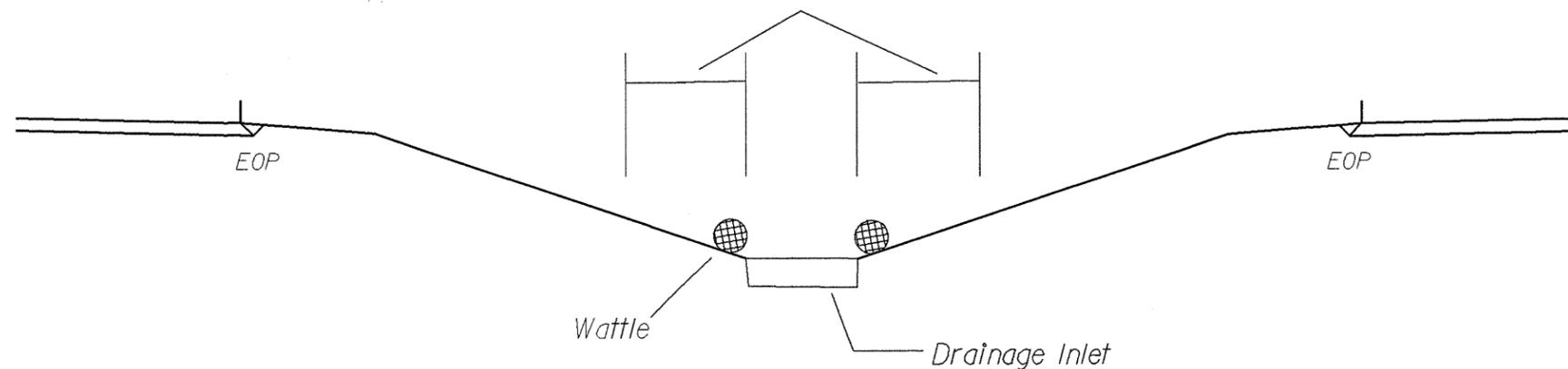
PROJECT REFERENCE NO.	SHEET NO.
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Use BMP's if shoulders and/or frontslopes and/or ditchline and/or backslopes are disturbed



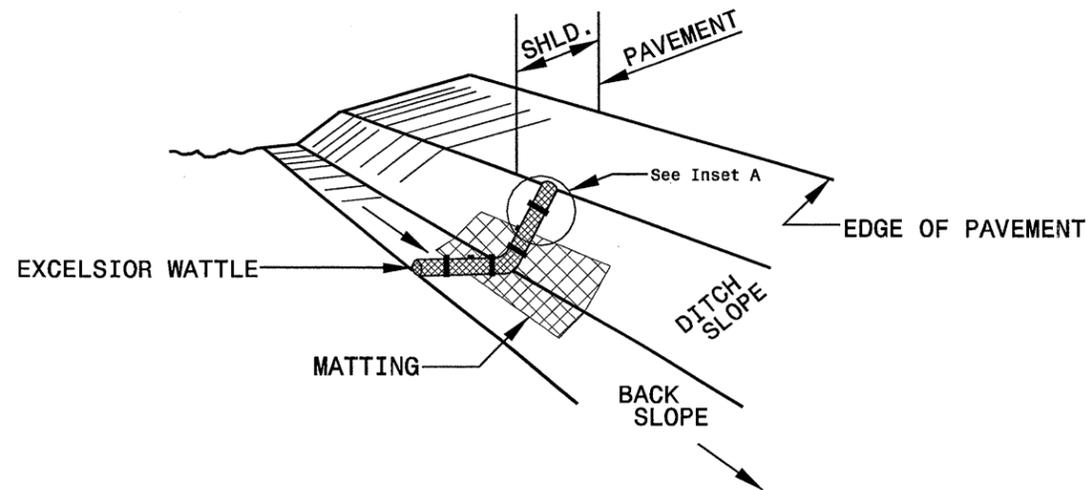
< 5' - 10' Undisturbed buffer from inlet, add wattle



NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
9CR.10341.140, 9CR.20341.140 9CR.20851.140	13

WATTLE DETAIL



NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

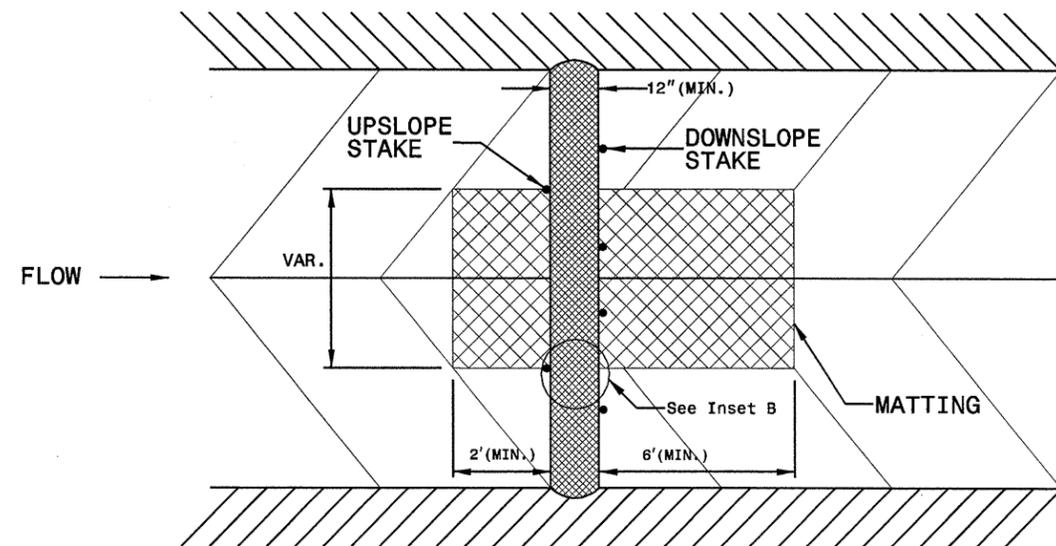
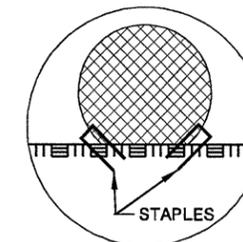
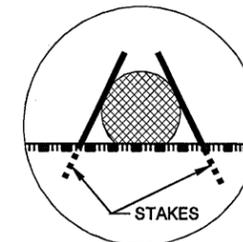
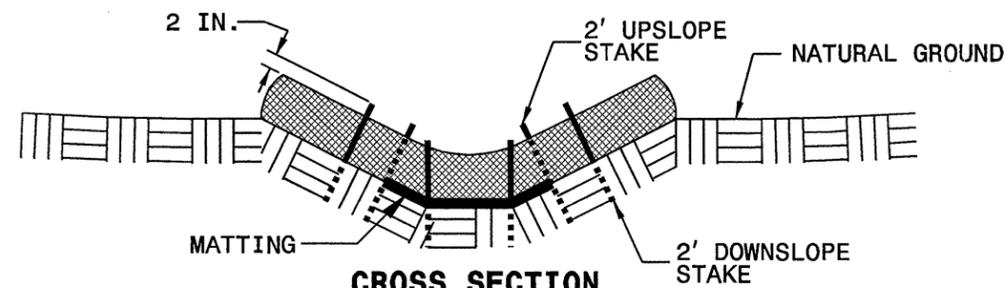
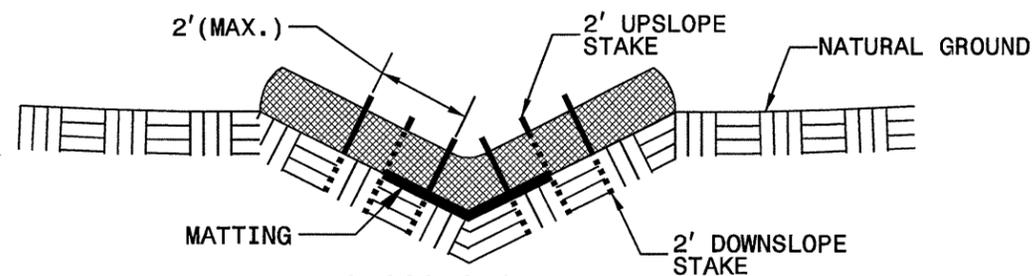
ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

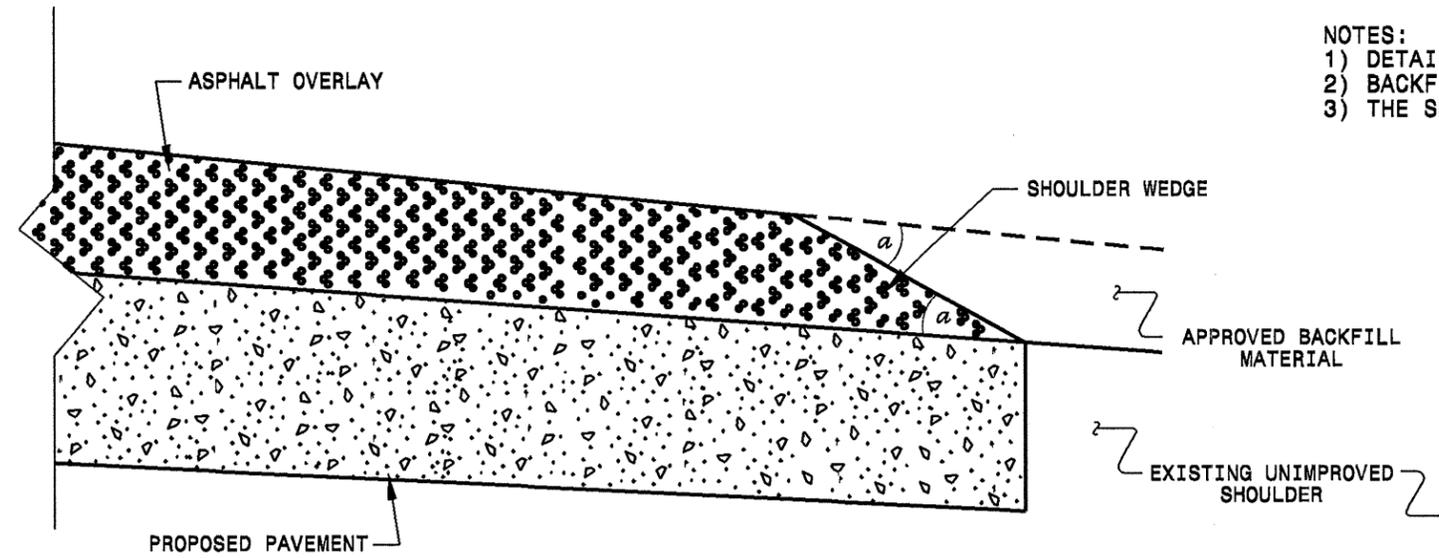
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

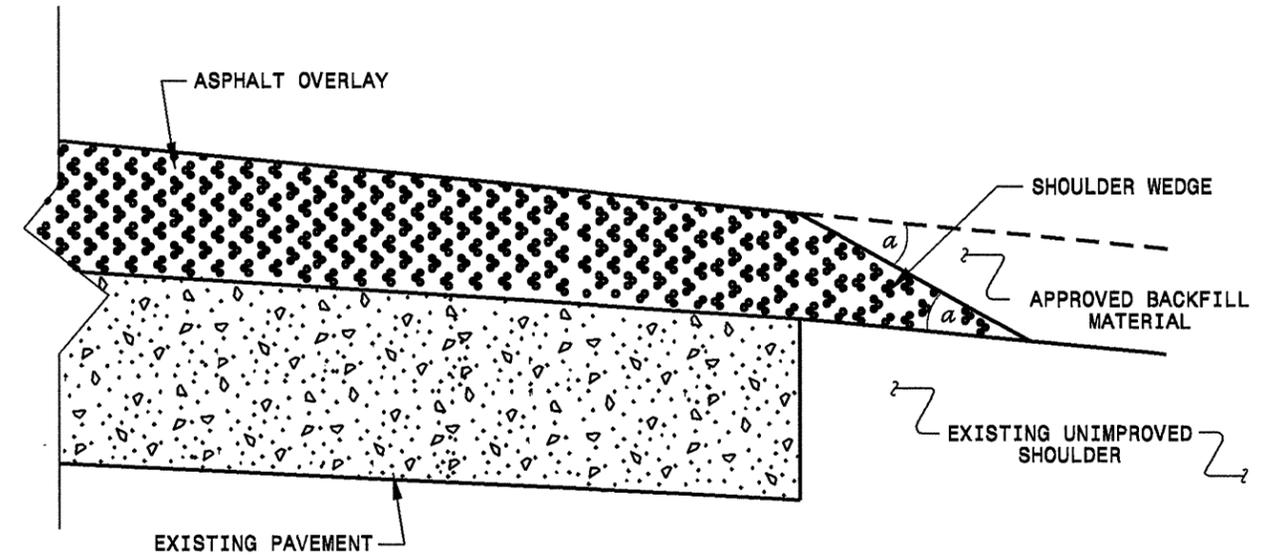
INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.



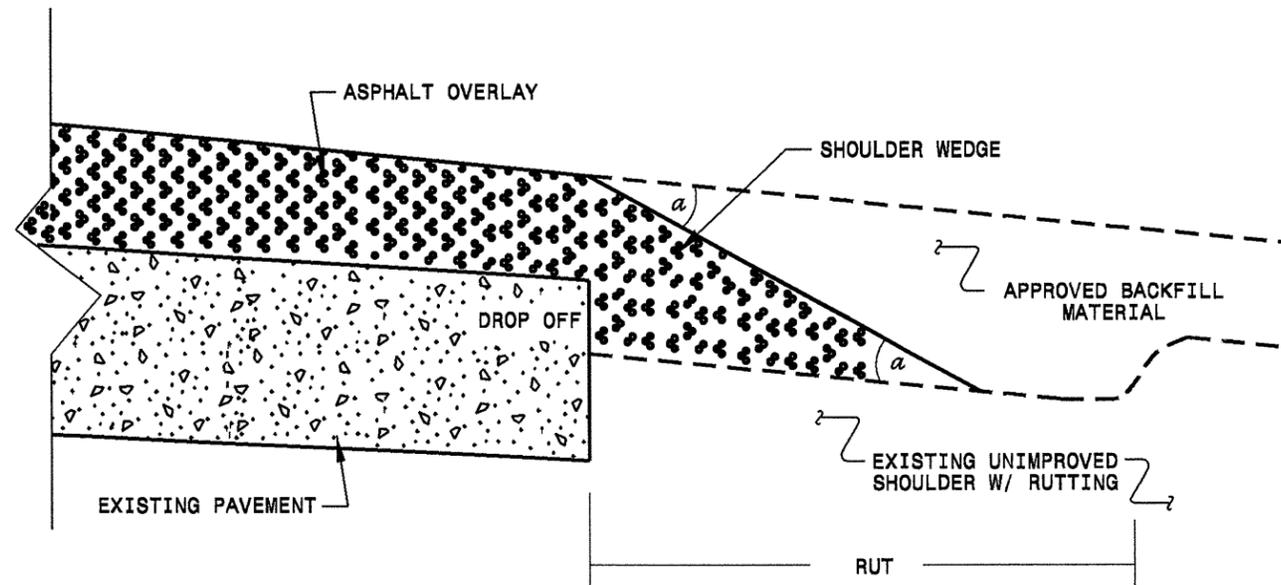
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.
 - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



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:	10/18/12
CHECKED BY:		DATE:	
FILE SPEC.:	s:\user\details\stand\shoulderwedgestd1.dgn		

2014_Resurfacing_FORSYTH

										PROJECT NO.		SHEET NO.	
										9CR.10341.140, 9CR.20341.140, 9CR.20851.140		15	
Map No.	Route No.	Route Name	Bridge No.	Feature Intersected	Floor Construction	Clear Roadway Width (Ft)	Horizontal Clearance Under (Ft.)	Vertical Clearance Under	2nd Opening Clearance Under	Length (Ft)	Posting	Recommended Treatment, From Bridge Maintenance	
1	NC 65	NC 65	92	SOUTHERN RXR	PPCCS, 5.2 AWS	32	NA	NA	NA	128	NA	MILL DECK AND REPAVE	
2	SR 2622	PINE MEADOW DR.	398	US 311	7 3/8 RC SLAB	30	NA	NA	NA	315	NA	MILL APPROACHES, DO NOT PAVE ON BRIDGE	
4	SR 1891	PEACEHAVEN RD.	101	BLANKET CREEK	5 GA. STL. DK, 6 WS	24.1	NA	NA	NA	42	NA	MILL APPROACHES, MILL DECK AND REPAVE	
5	SR 1600	DONNAHA RD.	13	OLD RICHMOND CREEK	7GA. STL., 4 AWS	34.2	NA	NA	NA	90	SV 20 TTST 24	MILL APPROACHES, MILL DECK AND REPAVE	
7	SR 1611	DORAL RD.	16	MUDDY CREEK	10GA. STL., 3.5 AWS	30.1	NA	NA	NA	90	NA	MILL APPROACHES, MILL DECK AND REPAVE	

PROJECT NO.	SHEET NO.	TOTAL NO.
9CR.10341.140, 9CR.20341.140, 9CR.20851.140	16	

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	LANES	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	AGGREGATE SHOULDER BORROW ALLOWED	LENGTH MI	WIDTH FT	BORROW EXCAVATION CY	INCIDENTAL STONE BASE TONS	SHOULDER RECONSTRUCTION SMI	MILLING ASPHALT PAVEMENT, 1-1/2" DEPTH SY	MILLING ASPHALT PAVEMENT, 2-1/2" DEPTH SY	MILLING ASPHALT PAVEMENT, 0" TO 1-1/2" DEPTH SY	INCIDENTAL MILLING SY	BASE COURSE, B25.0B TONS	INTERMEDIATE COURSE, I19.0B TONS	SURFACE COURSE, S9.5B TONS	SURFACE COURSE, SF9.5A TONS	ASPHALT BINDER FOR PLANT MIX TONS	PATCHING EXISTING PAVEMENT TONS	ADJ. OF MAN-HOLES EA	ADJ. OF METER OR VALVE BOX EA	TEMPORARY SILT FENCE LF	WATTLE LF	
9CR.10341.140	Forsyth	1	NC 65	FROM NC 66 TO RUNNINGBROOK LANE	2,3	2	NO	NO	YES	1.762	24-36	73	30	0.61	3,692		20,172	511			3,468		208		6	17	244	24	
TOTAL FOR PROJ NO. 9CR.10341.140										1.762		73	30	0.61	3,692		20,172	511			3,468		208		6	17	244	24	
	Forsyth	2	SR 2622 PINE MEADOW DR.	FROM WATKINS FORD ROAD (SR 2624) TO HIGH POINT ROAD (SR 1003)		4	2	NO	NO	YES	2.1	24	252	102	4.20				1,112	1,894			2,697	264	20			840	84
	Forsyth	3	SR 1001 SHALLOWFORD RD.	FROM EAST RADIUS PT. OF FOOD LION ENTRANCE DRIVE TO LISSARA LODGE TIE-IN		6	2	NO	NO	YES	1.392	21	167	78	2.78				467	472			1,703	123	20		4	557	56
	Forsyth	4	SR 1891 PEACE HAVEN RD.	FROM PVMT. JT. AT LEWISVILLE-CLEMMONS RD. TO PVMT. JT. AT LASATER RD.		7	2	NO	NO	YES	2.273	25	273	12	4.55	112		393	1,000	2,925			3,330	328	20	3	3	909	91
	Forsyth	5	SR 1600 DONNAHA RD.	FROM SPAINHOUR MILL RD. (SR 1604) TO NC 67		7	2	NO	NO	YES	2.507	24	301	141	5.01	340			444	2,261			3,279	296	20			1,003	100
	Forsyth	6	SR 1101 HARPER RD.	FROM PEACE HAVEN RD. (SR 1891) TO STYERS FERRY RD. (SR 1100)		5	2	NO	NO	YES	2.288	24	275	69	4.58				533				3,996	240	20	1	2	915	92
	Forsyth	7	SR 1611 DORAL DR.	(SR 1620) TO SPEED TABLE LOCATED AT INTERSECTION TO BETHANIA-RURAL HALL RD. (SR 4002)		1	2	NO	NO	YES	4.82	22	578		9.64	403							5,855	351	20			1,928	193
	Forsyth	8	SR 1920 STANLEYVILLE RD.	FROM PVMT. JT @ UNIVERSITY PKWY. (SR 4000) TO NC 8		1	2	NO	NO	YES	2.847	20	342	105	5.69			500	1,022				3,242	195	20			1,139	114
	Forsyth	9	SR 1103 MIDDLEBROOK DR.	FROM SOUTH OF NOSE OF ISLAND @ US 158 TO IDOLS RD. (SR 3000)	1,8,9	2	NO	NO	YES	1.504	24-36	180		3.01		6,209	4,379	267		990			2,228	181	20	1	13	602	60
	Forsyth	10	SR 3000 IDOLS RD.	FROM HAMPTON RD. (SR 2999) TO RXR CROSSING AT DOCK DAVIS RD. (SR 3000)		1	2	NO	NO	YES	2.488	22	299	63	4.98				489				2,984	179	20			995	100
	Forsyth	11	SR 3000 DOCK DAVIS RD.	FROM HAMPTON RD. (SR 2999) TO RXR CROSSING AT IDOLS RD. (SR 3000)		1	2	NO	NO	YES	2.005	22	241	99	4.01				489				2,405	144	20			802	80
	Stokes	12	SR 1632 TOBACCOVILLE RD.	FROM NC 65 TO PVMT JT NEAR ROUND ABOUT AT TOBACCOVILLE RD. (SR 1620)		1	2	NO	NO	YES	1.035	25	124	45	2.07			453	278				1,474	88	20			414	41
	Forsyth	13	SR 1606 MEADOWBROOK DR.	FROM STOKES COUNTY LINE TO SPAINHOUR MILL RD. (SR 1604)		1	2	NO	NO	YES	0.678	22	81	36	1.36				244				813	49	20			271	27
TOTAL FOR PROJ NO. 9CR.20341.140										25.937		3,113	750	51.88	855	6,209	5,725	7,323	7,552	990	31,309	2,697	2,438	240	5	22	10,375	1,038	
9CR.20851.140	Stokes	14	SR 1105 MEADOWBROOK DR.	LINE TO W. WESTMORELAND (SR1104)		1	2	NO	NO	YES	0.87	22	104	36	1.74				244				1,043	63	20			348	35
TOTAL FOR PROJ NO. 9CR.20851.140										0.87		104	36	1.74				244				1,043	63	20			348	35	
GRAND TOTAL										28.569		3,290	816	54.23	4,547	6,209	25,897	8,078	7,552	990	35,820	2,697	2,709	260	11	39	10,967	1,097	

