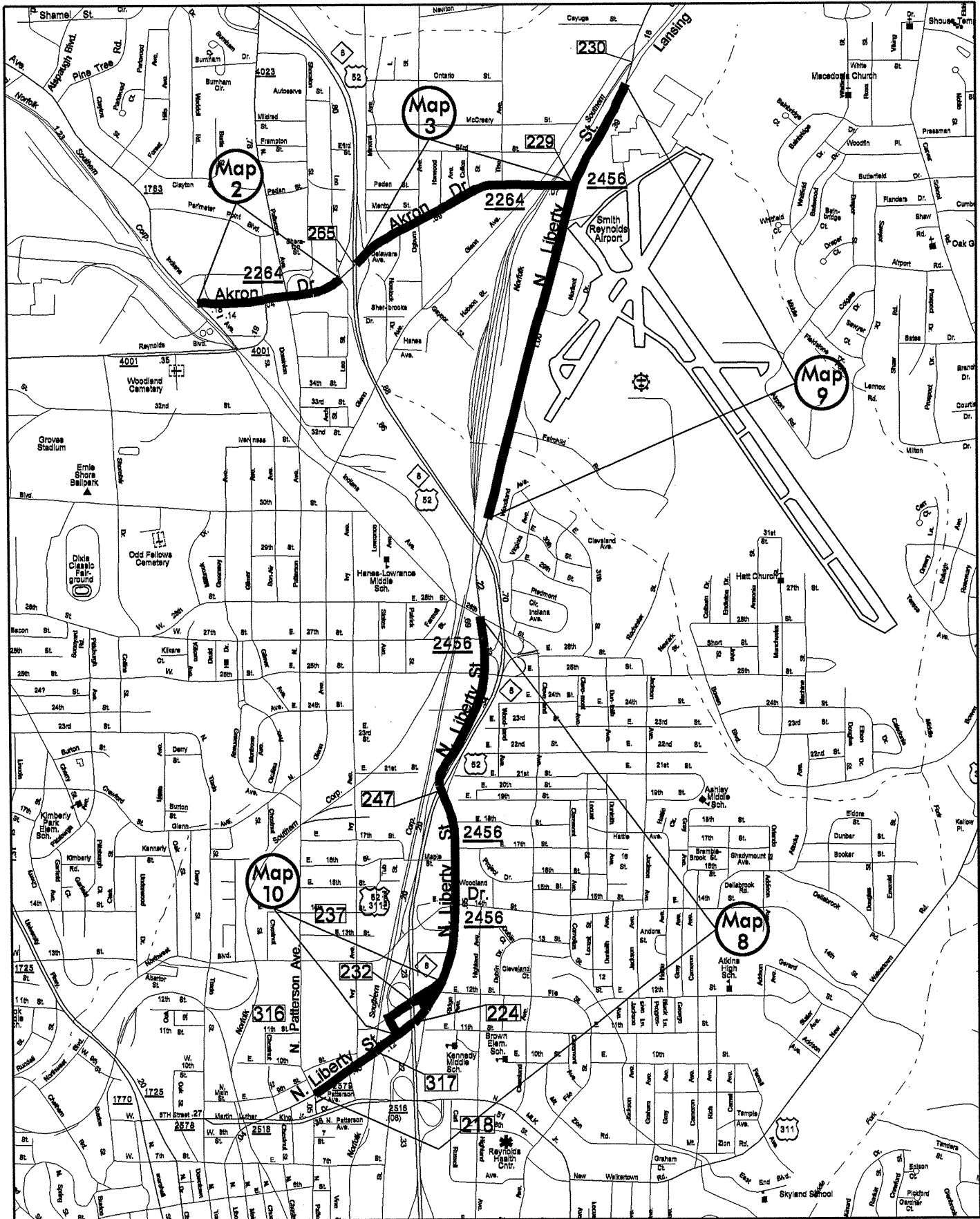


MAP NO. 1
 END MAP AT DEAD END EXTENDED
 INTO DAVIDSON COUNTY

FORSYTH COUNTY
 NORTH CAROLINA



NOTE:

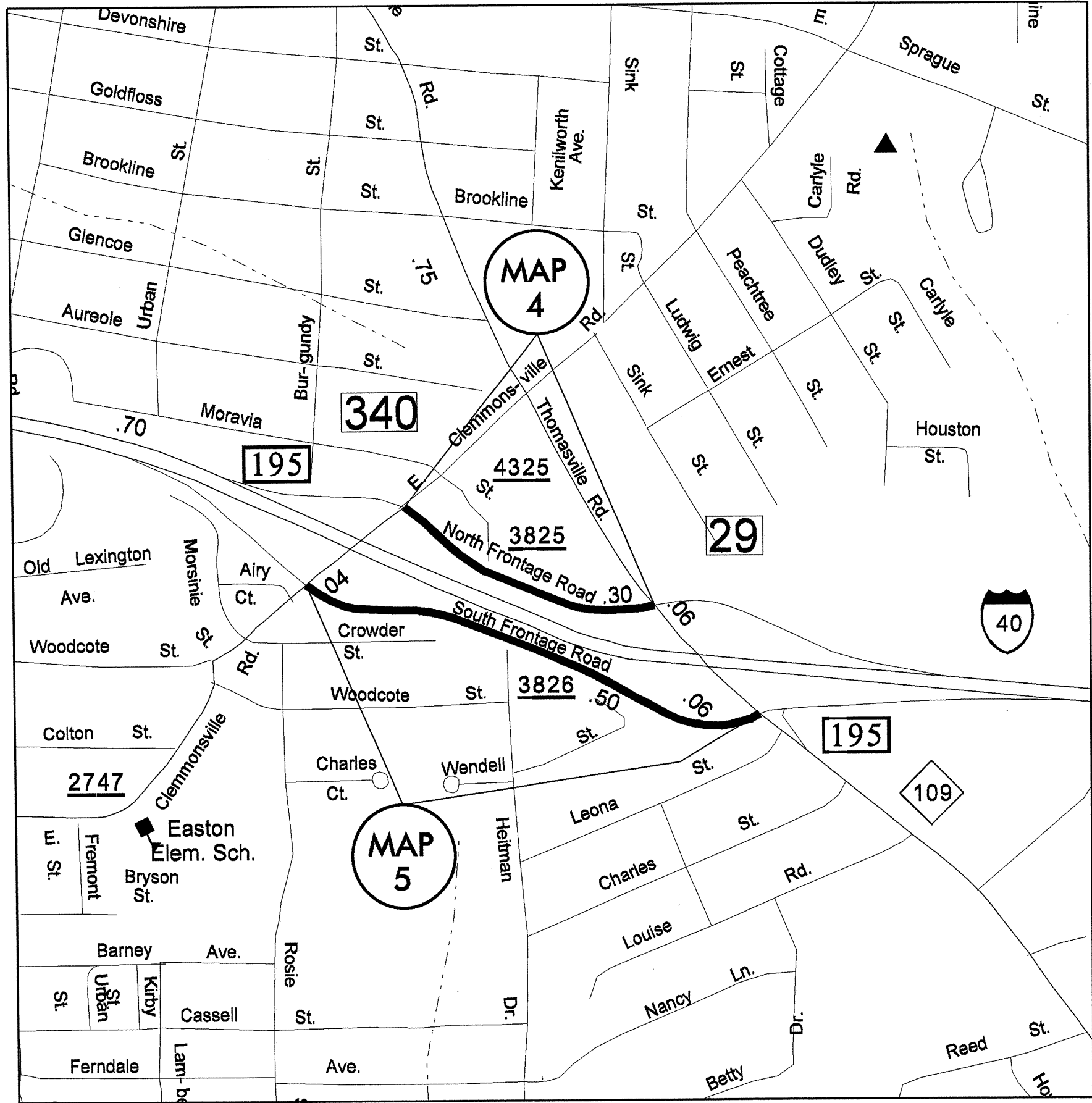
MAP NO. 2- AKRON DR.
 MAP NO. 3- AKRON DR.
 WORK ON THESE MAPS TO BE NIGHT TIME ONLY
 8 P.M. TO 6 A.M.

MAP NO. 3
 MILL TO TIE INTO BRIDGE NO.265-NEW LATEX OVERLAY JOINT
 MILL FROM RADIUS POINT OF NB RAMP TO US 52.
 MILL BOTH NORTH BOUND RAMP LANES TO TO US 52 1½" FULL DEPTH.

MAP NO. 3- FROM BRIDGE NO. 229 OVER NORFOLK SOUTHERN RAILWAY
 MILL FOR APPROX. 150 FEET FROM BRIDGE THROUGH INTERSECTION AT
 OGBURN AVE.

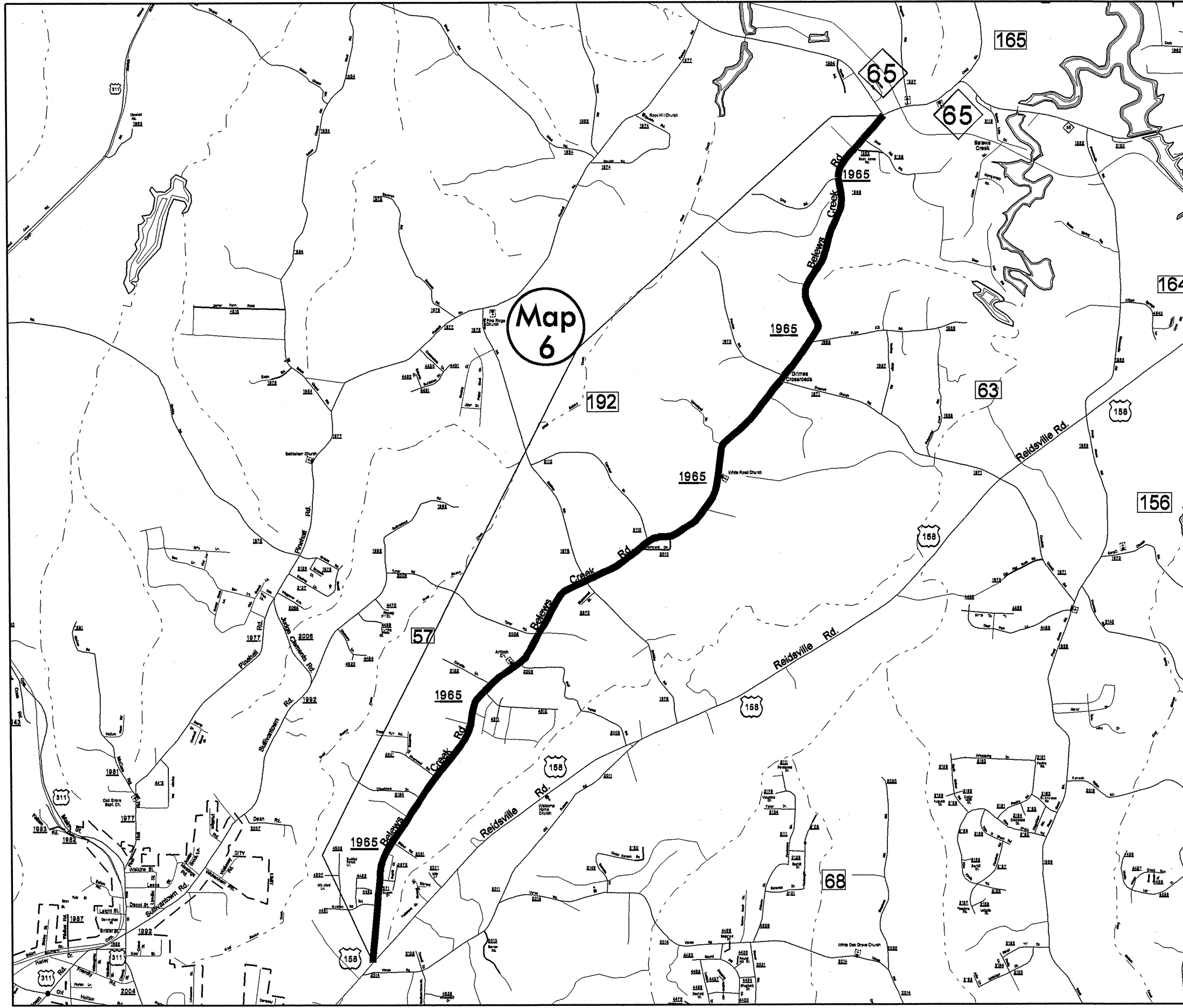
MAP NO. 3- FROM BRIDGE NO. 229 OVER NORFOLK SOUTHERN RAILWAY
 MILL 1½" FULL DEPTH TO LIBERTY ST TIE-IN.

MAP NO.8- LIBERTY ST.
 MAP NO.9- LIBERTY ST.
 MAP NO.10- LIBERTY ST.
 WORK ON THESE MAPS TO BE NIGHT TIME ONLY
 8 P.M. TO 6 A.M.

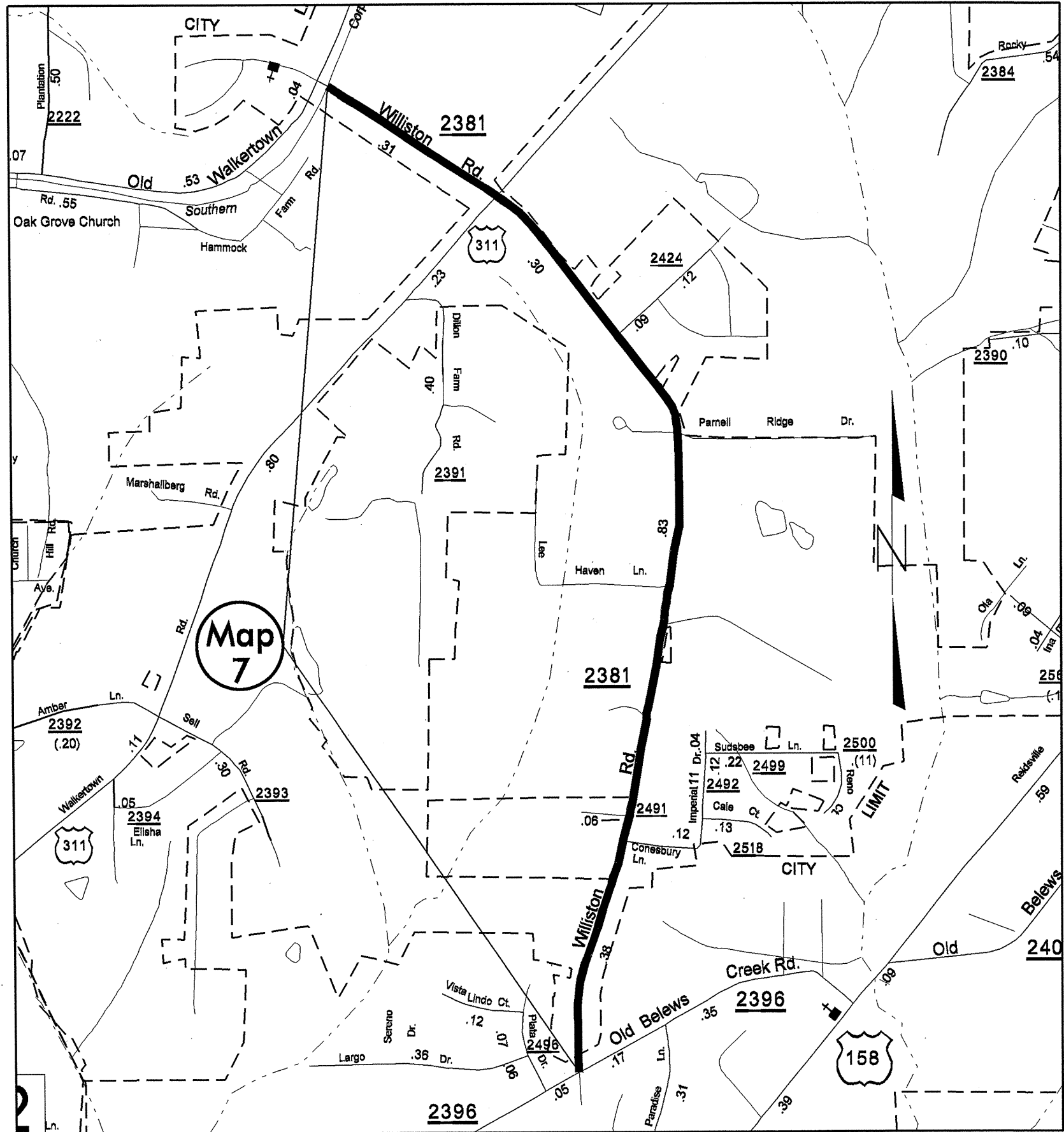


NOTE:
 DO NOT REPLACE
 SNOW PLOWABLE MARKERS
 ON MAPS NO. 4 AND 5

FORSYTH COUNTY
 NORTH CAROLINA

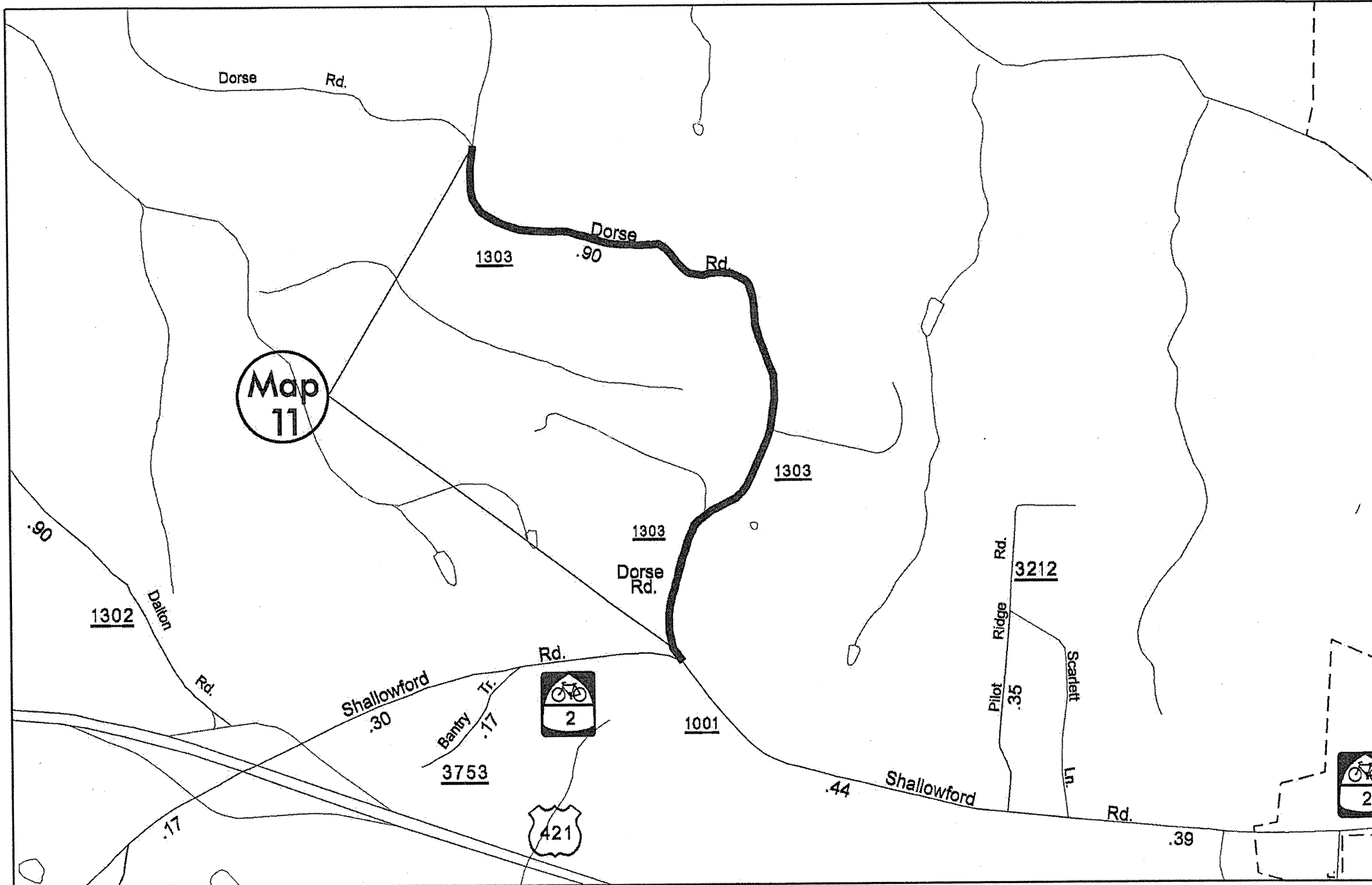


FORSYTH COUNTY
NORTH CAROLINA



NOTE:
TIE IN MILL EAST SIDE OF RXR ONLY.
DO NOT MILL OR PAVE ON OLD WALKERTOWN ROAD SIDE OF RXR. MILL TO TIE INTO PVMT. JOINTS AT NEW WALKERTOWN RD.
DO NOT PAVE THROUGH INTERSECTION AT NEW WALKERTOWN RD.
PAVE ENTIRE MAP WITH 2" S9.5B.

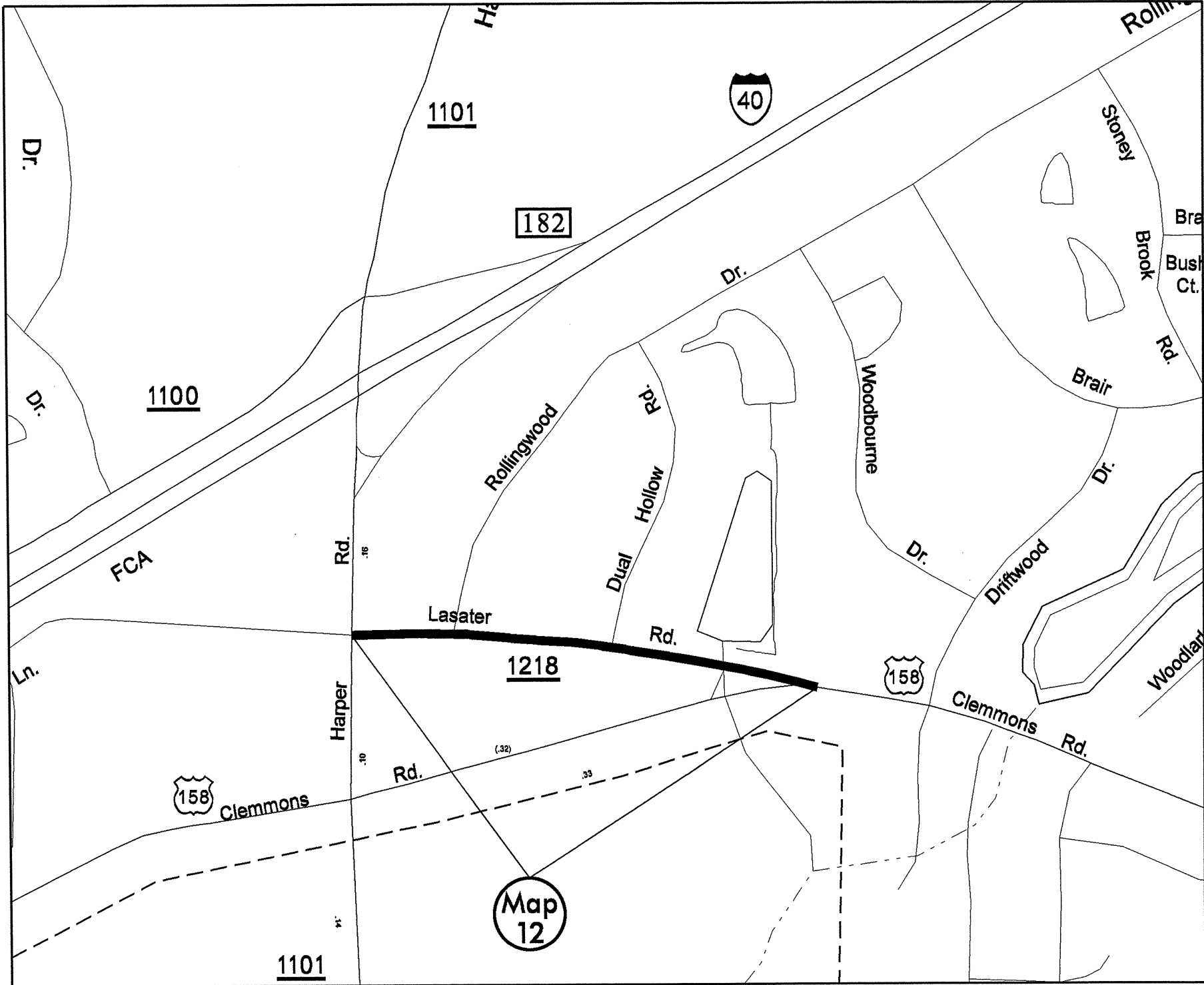
FORSYTH COUNTY
NORTH CAROLINA



NOTE:

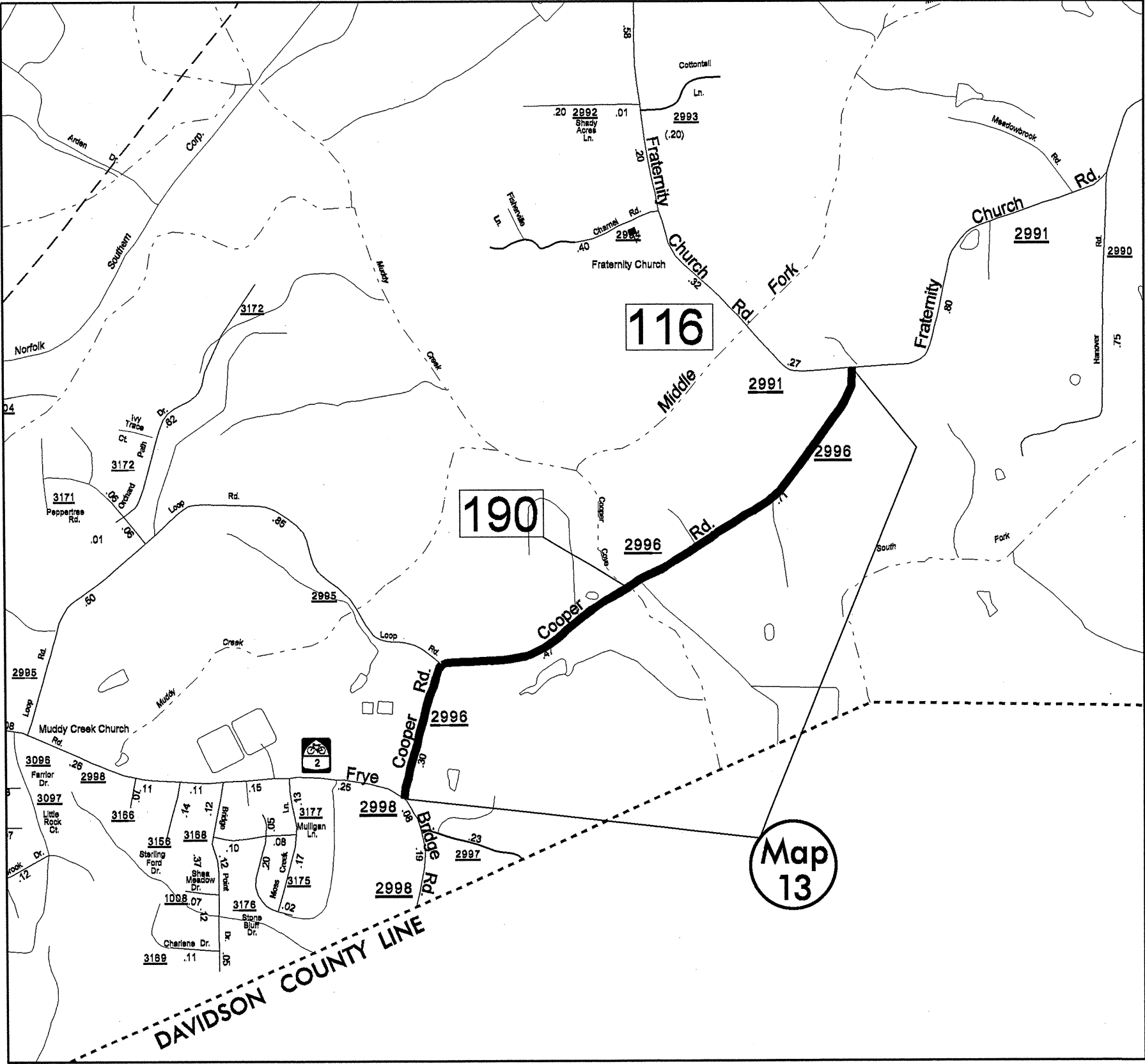
2' WIDENING-
 THE SIDE TO BE WIDENED WILL VARY.
 WIDEN AS DIRECTED BY ENGINEER.
 PAVE OVER ENTIRE WIDTH WITH
 2.5" 119.0B.
 NO PAVEMENT MARKINGS TO
 BE PUT ON THIS MAP.
 NCDOT ROAD OIL TO
 FOLLOW WITH SPLIT SEAL.

FORSYTH COUNTY
 NORTH CAROLINA

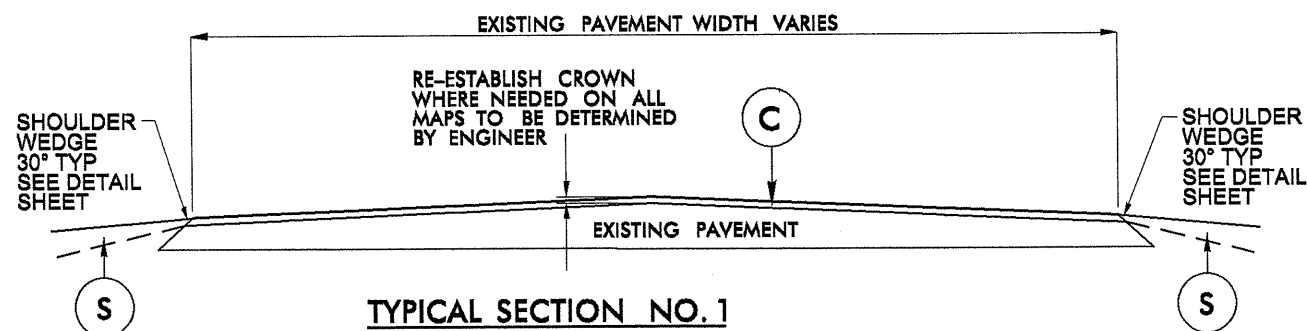


NOTE:
DO NOT PUT THERMOPLASTIC
MARKINGS ON THIS MAP.

FORSYTH COUNTY
NORTH CAROLINA



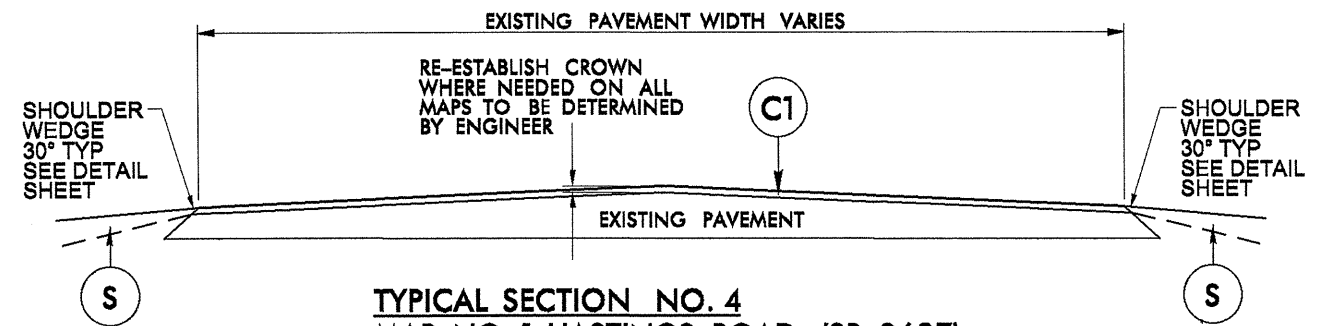
FORSYTH COUNTY
NORTH CAROLINA



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

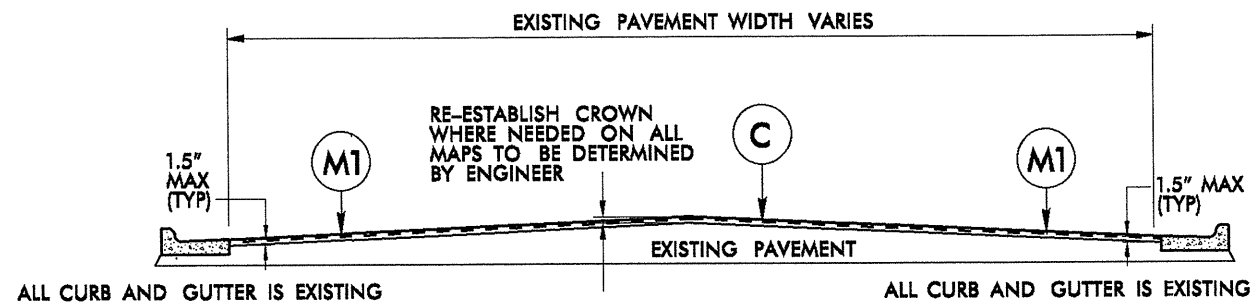
TYPICAL SECTION NO. 1
MAP NO. 12 LASATER ROAD SR 1218
MAP NO. 6 BELEWS CREEK ROAD (SR 1965)
MAP NO. 13 COOPER ROAD (SR 2996)

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

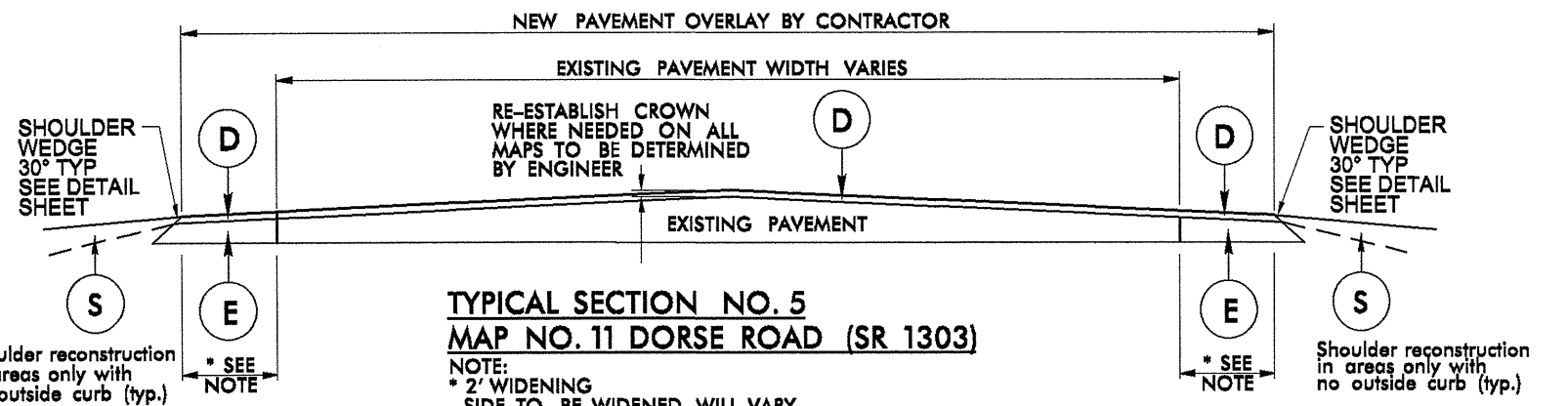


Shoulder reconstruction in areas only with no outside curb (typ.)

TYPICAL SECTION NO. 4
MAP NO. 1 HASTINGS ROAD (SR 2687)
MAP NO. 7 WILLISTON ROAD (SR 2381)

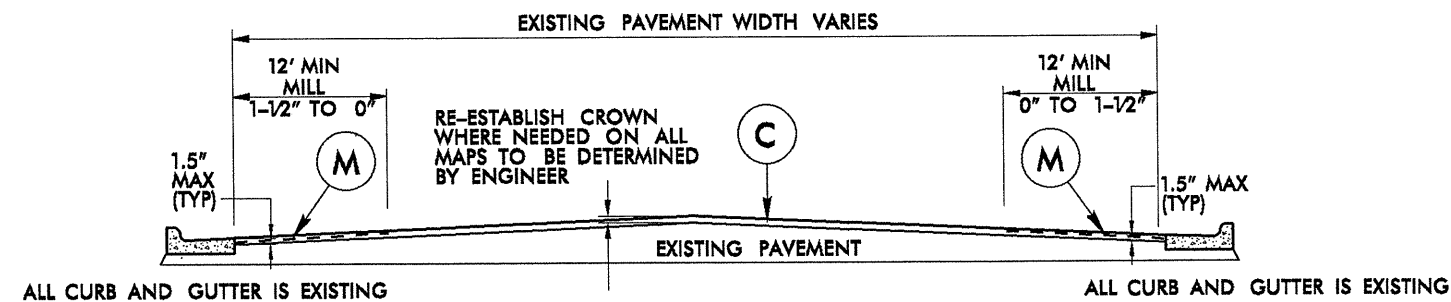


TYPICAL SECTION NO. 2
MAP NO. 4 NORTH FRONTAGE RD. (SR 3825)
MAP NO. 5 SOUTH FRONTAGE RD. (SR 3826)



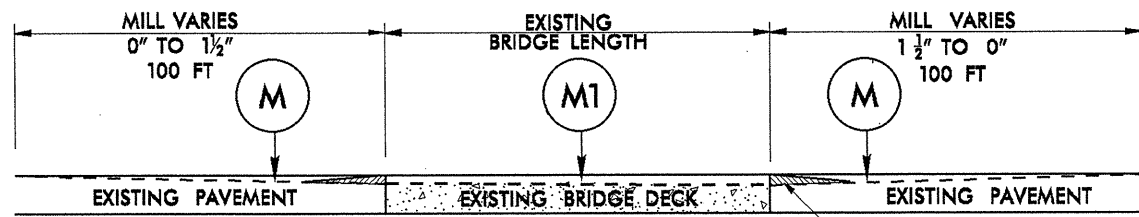
TYPICAL SECTION NO. 5
MAP NO. 11 DORSE ROAD (SR 1303)

NOTE:
 * 2' WIDENING SIDE TO BE WIDENED WILL VARY AS DIRECTED BY ENGINEER



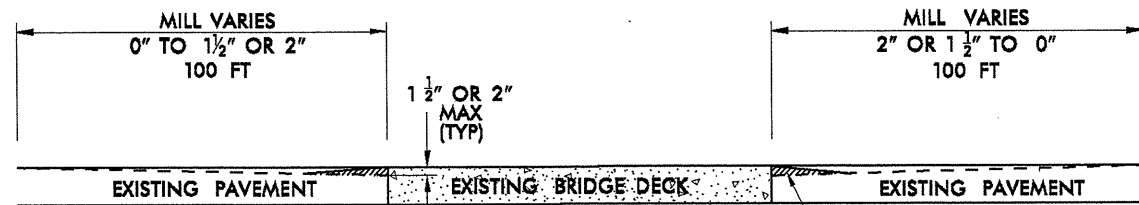
TYPICAL SECTION NO. 3
MAP NO. 2 AKRON DR. (SR 2264)
MAP NO. 3 AKRON DR. (SR 2264)
MAP NO. 8 LIBERTY ST. (SR 2456)
MAP NO. 9 LIBERTY ST. (SR 2456)
MAP NO. 10 LIBERTY ST. (SR 2456)

PAVEMENT SCHEDULE	
C	PROP. APPROX. 1½" 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
D	PROP. APPROX. 2½" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, TO BE APPLIED AT AN AVERAGE RATE OF 285 LBS PER SQ YD
E	PROP. APPROX. 5½" ASPHALT CONCRETE BASE COURSE, TYPE B25.0, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
M	MILL ASPHALT PAVEMENT, 0" TO 1½"
M1	MILL ASPHALT PAVEMENT, 1½" DEPTH
S	SHOULDER RECONSTRUCTION (SEE DETAIL)
U	EXISTING PAVEMENT



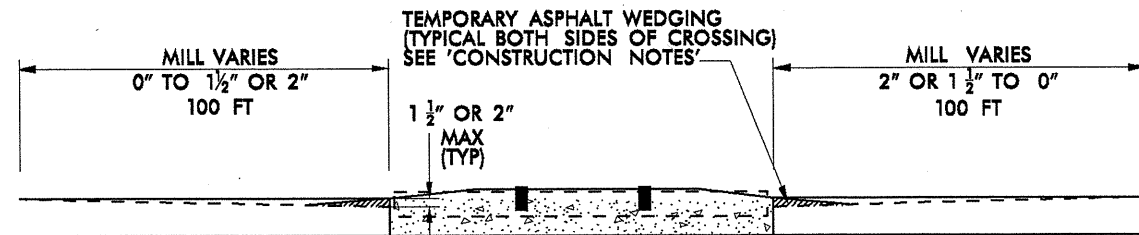
**MILLING
BRIDGE DECK
AND APPROACHES**
(SEE BRIDGE DATA SHEET)

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



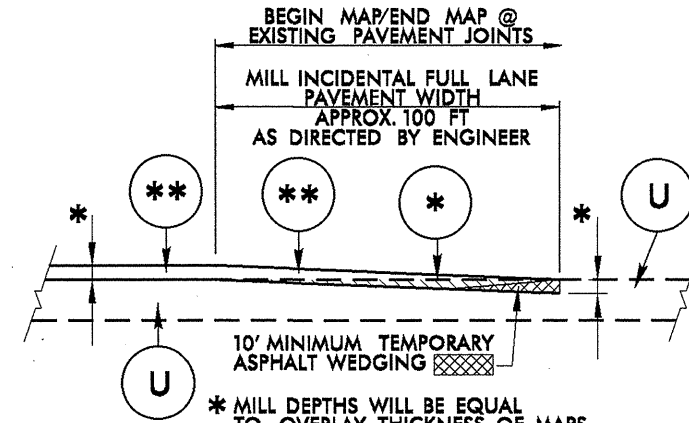
**INCIDENTAL MILLING
BRIDGE APPROACHES**
(SEE BRIDGE DATA SHEET)

TEMPORARY ASPHALT WEDGING
(TYPICAL BOTH SIDES OF BRIDGE)



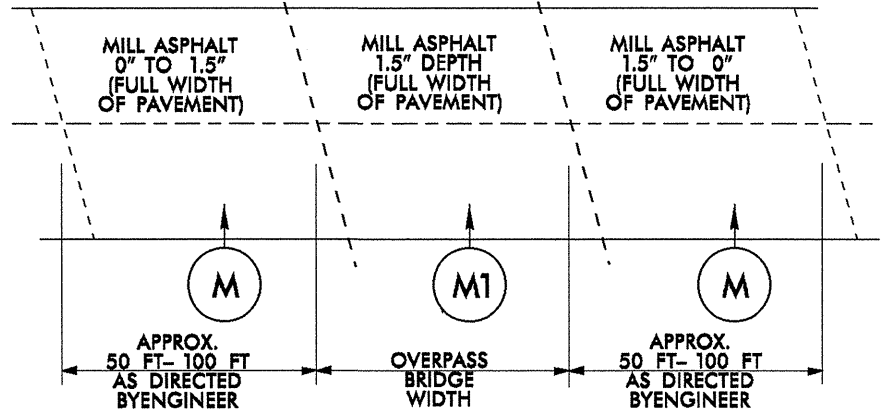
**INCIDENTAL MILLING
RAILROAD CROSSING
APPROACHES**

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

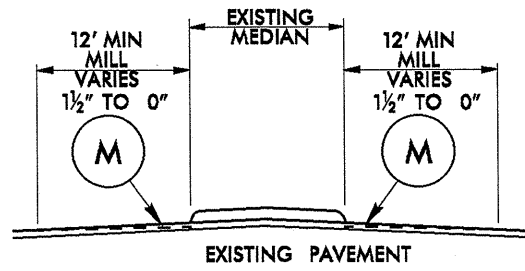


INCIDENTAL MILLING AT TIE-IN DETAIL

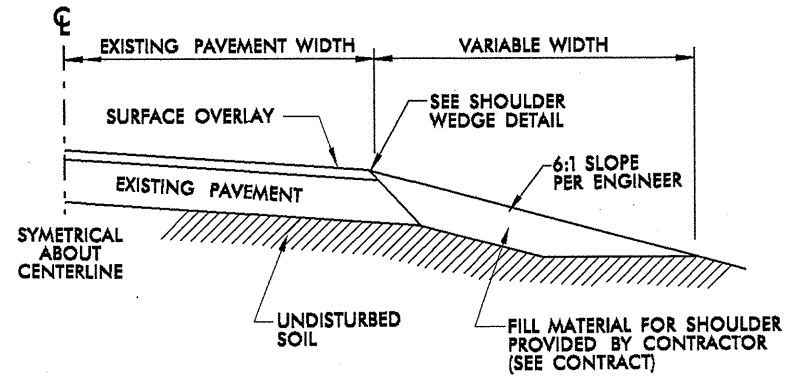
* MILL DEPTHS WILL BE EQUAL
TO OVERLAY THICKNESS OF MAPS
SEE TYPICALS AND BRIDGE DATA SHEETS
** SEE TYPICALS FOR MIX TYPE



**PLAN VIEW-
MILLING ASPHALT PAVEMENT UNDER OVERPASS**

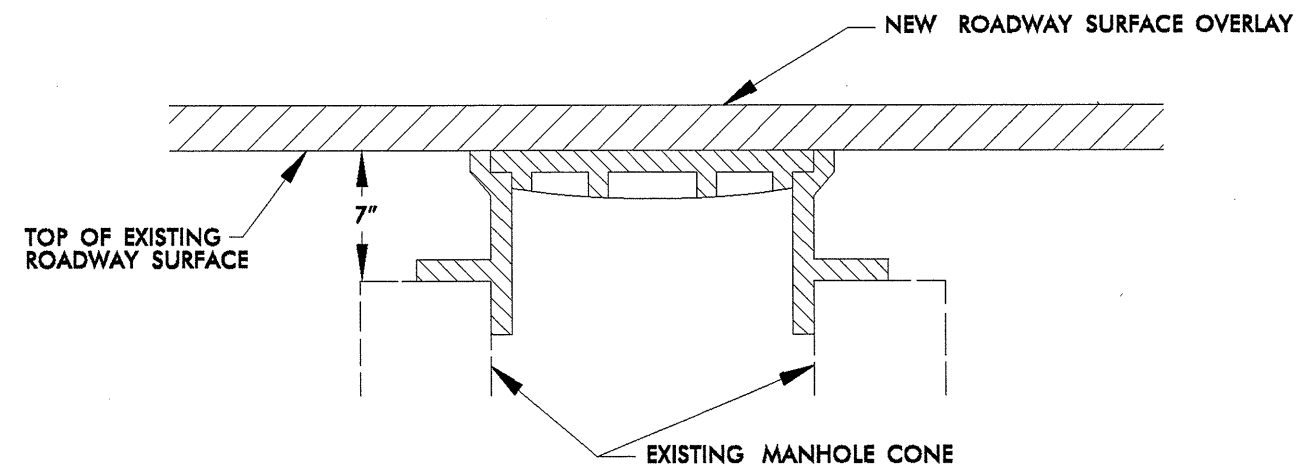
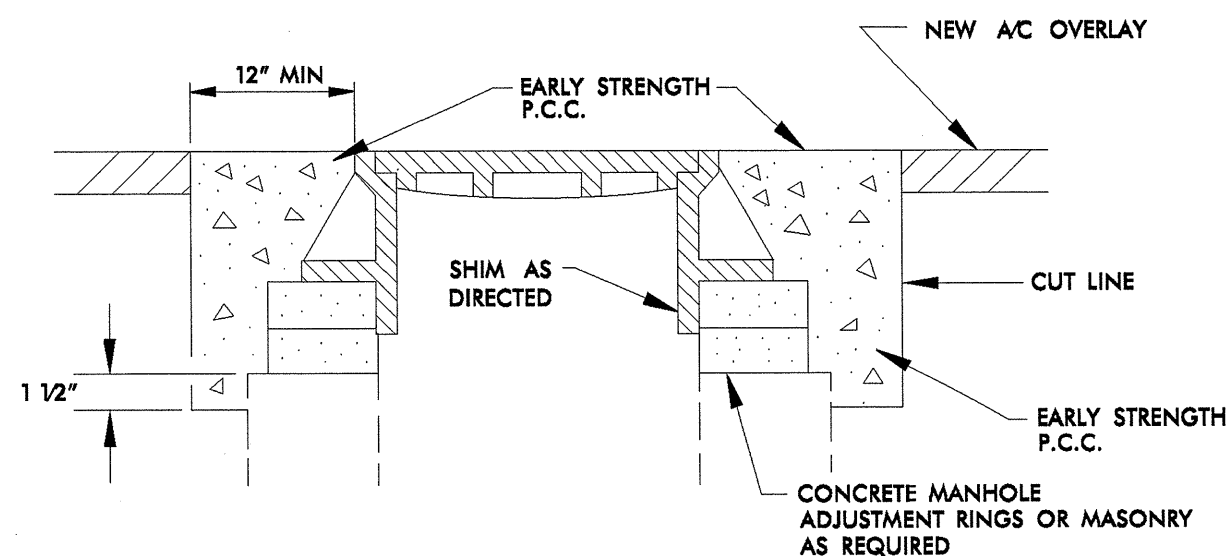


MILLING AT MEDIANS



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.
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.
E	PROP. APPROX. 5 1/2" ASPHALT CONCRETE BASE COURSE, TYPE B25.0, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
M	MILL ASPHALT PAVEMENT, 0" TO 1 1/2"
M1	MILL ASPHALT PAVEMENT, 1 1/2" DEPTH
S	SHOULDER RECONSTRUCTION (SEE DETAIL)
U	EXISTING PAVEMENT

**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.

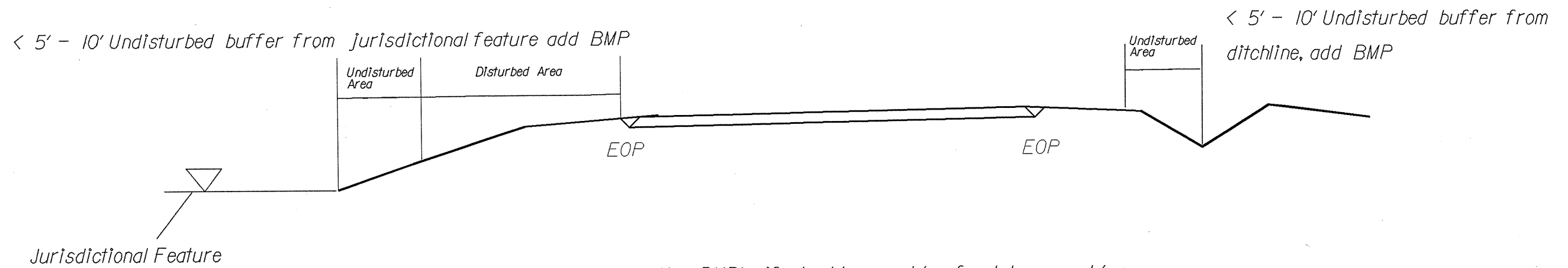
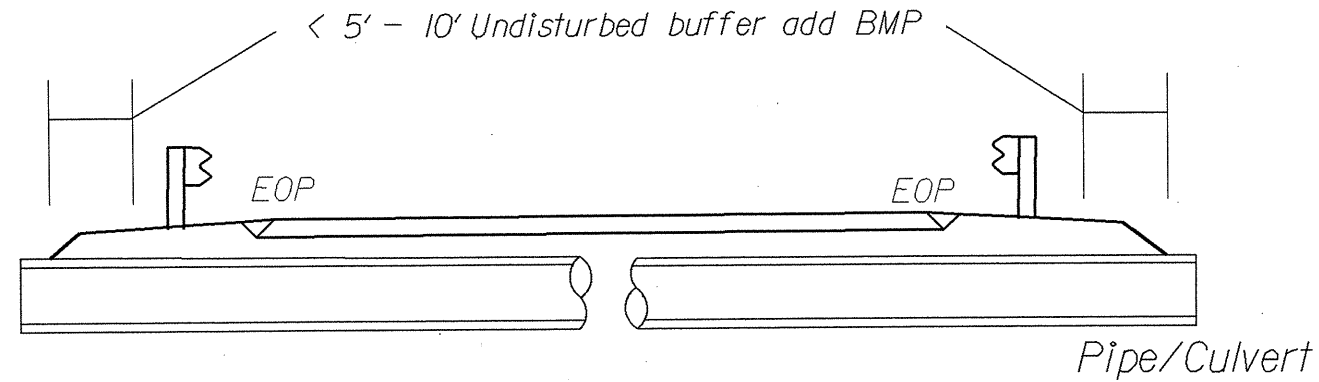
MANHOLE ADJUSTMENT DETAIL**CONSTRUCTION NOTES:**

- ALL QUANTITIES ARE "ESTIMATED" AS INDICATED IN THE "SUMMARY OF QUANTITIES".
- 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.
- 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.
- 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).
- 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.
- PAPER JOINTS ARE TO BE PLACED BETWEEN DAYS OF PAVING OPERATIONS AS SPECIFIED IN THE STANDARD SPECIFICATIONS SECTION 610-11.
- ALL MILLED AREAS WILL BE PAVED WITHIN 72 HOURS UNLESS APPROVED BY THE ENGINEER.
- 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

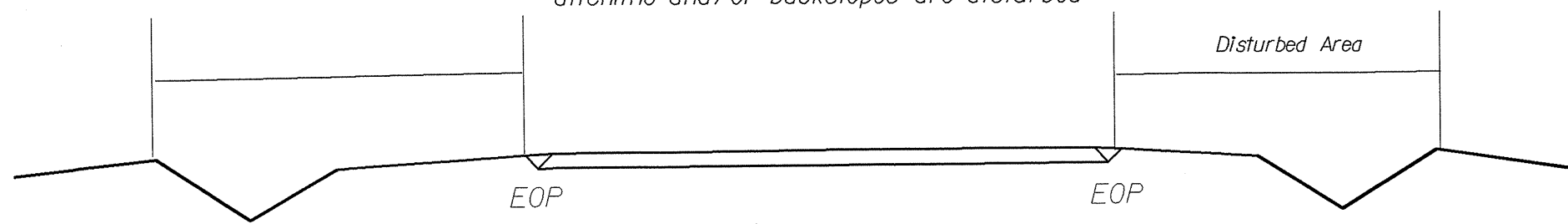
NOTES: Less than 5' - 10' undisturbed buffer from ROW, ditchline, water feature, or drainage inlet, add BMP.

EROSION CONTROL DETAIL

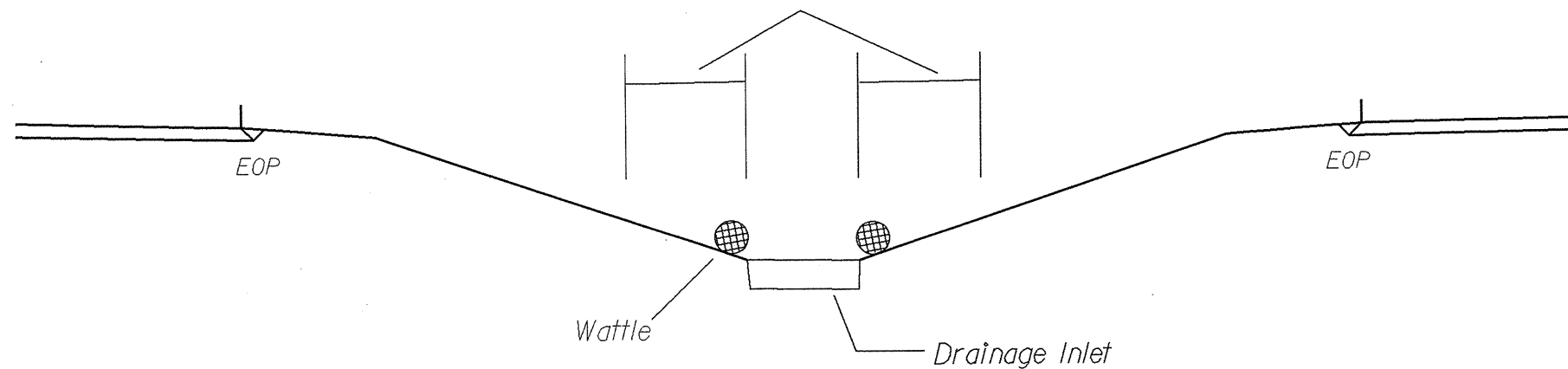
BMP Options: Wattle or Silt Fence



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

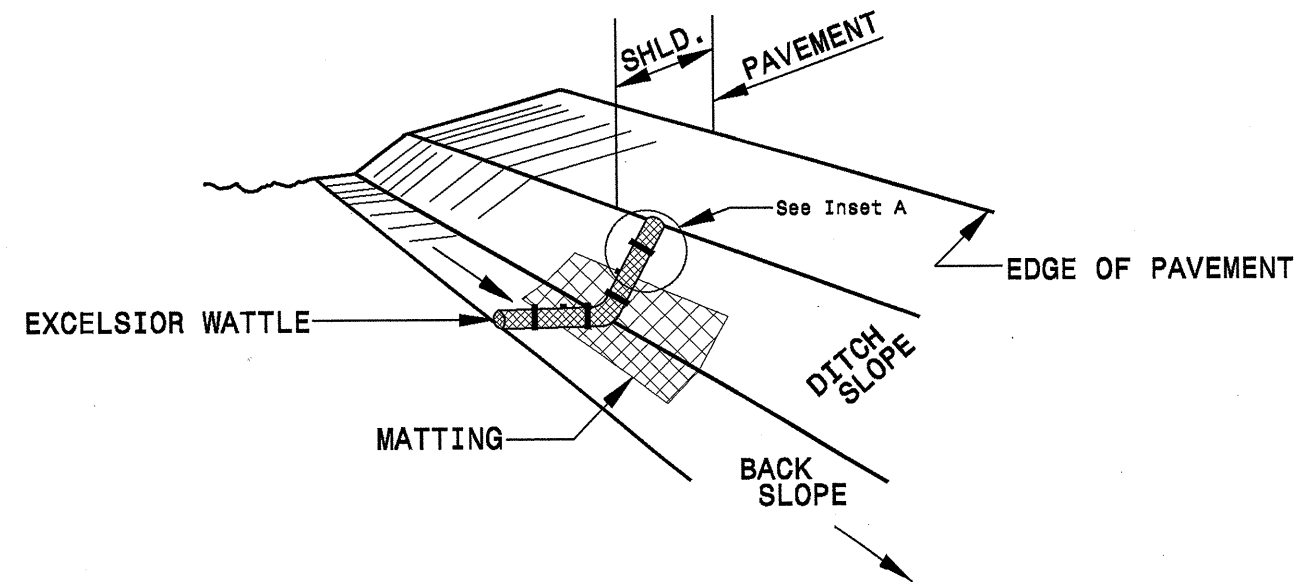


< 5' - 10' Undisturbed buffer from inlet, add wattle

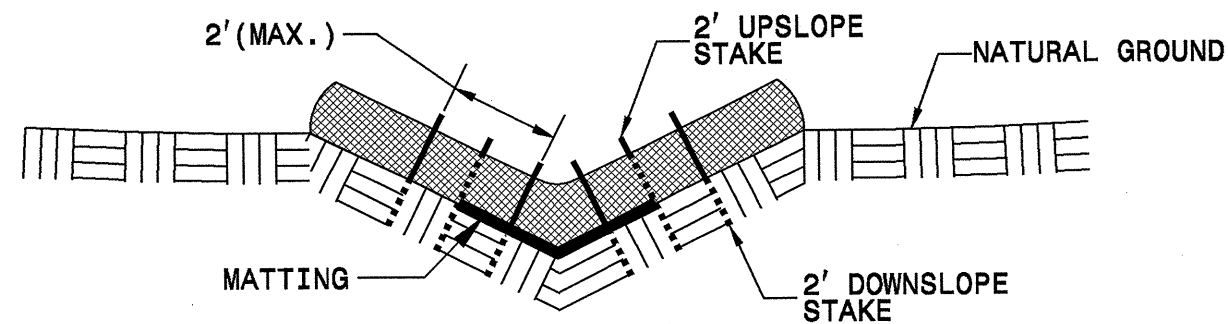


NOT TO SCALE

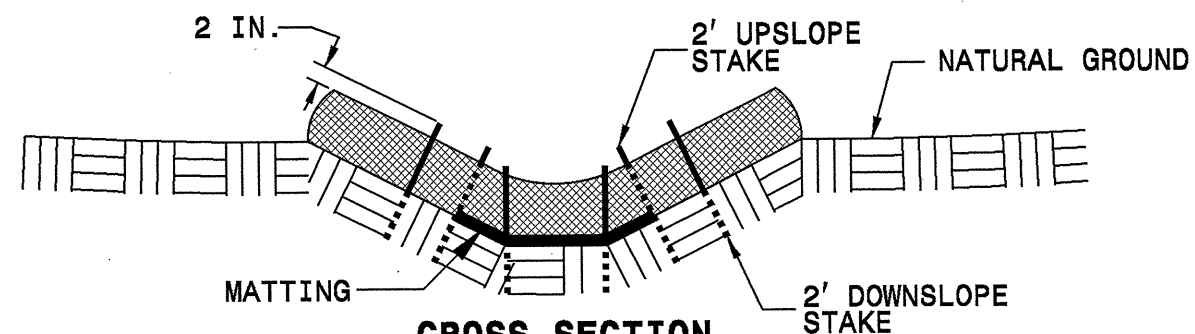
WATTLE DETAIL



ISOMETRIC VIEW



**CROSS SECTION
VEE DITCH**



**CROSS SECTION
TRAPEZOIDAL DITCH**

NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

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

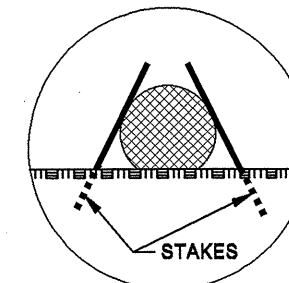
ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

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

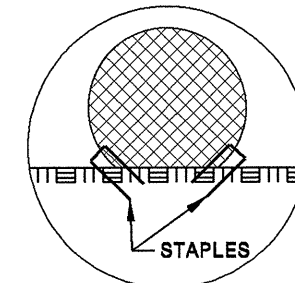
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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

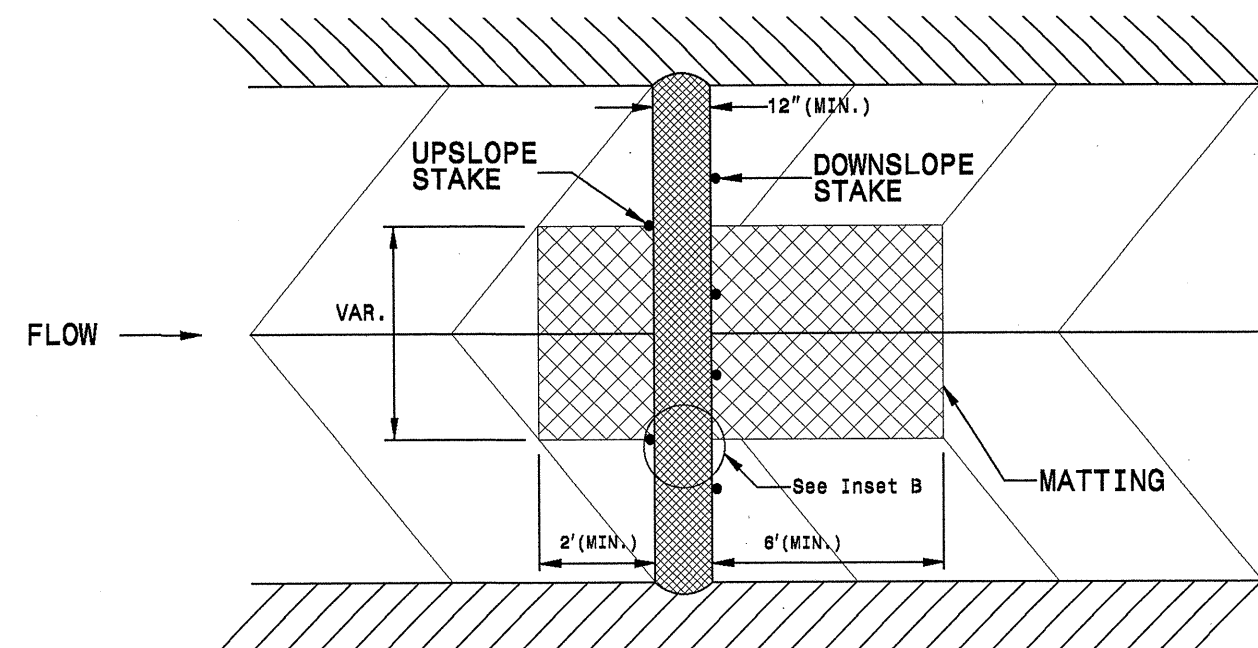
INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.



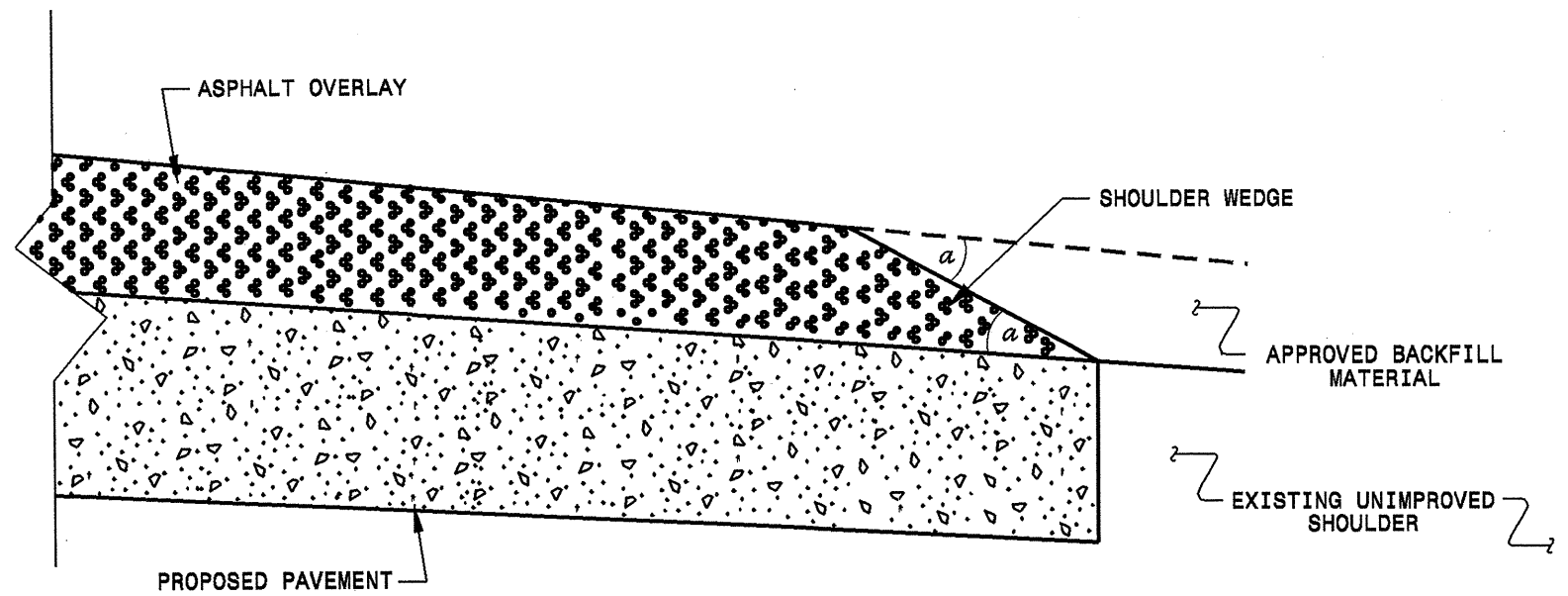
INSET A



INSET B

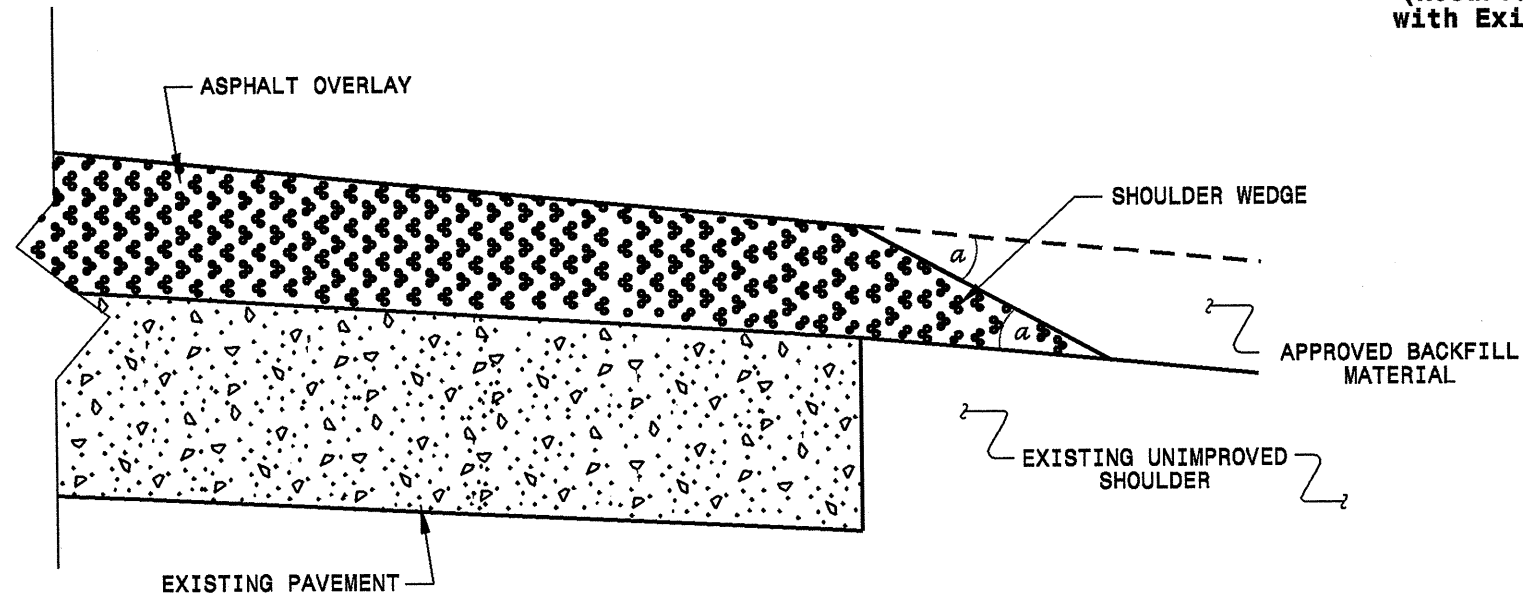


TOP VIEW



SHOULDER WEDGE DETAIL

(Resurfacing Projects w/ Widening or with Existing Paved Shoulder > 2 ft.)



SHOULDER WEDGE DETAIL

(Resurfacing Projects w/ NO Widening)

NOTES:

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

a - 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\shoulderwedgedetail.dgn	

2013_Resurfacing_FORSYTH

									PROJECT NO.				SHEET NO.
									9CR.20341.131				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	SR 2687	HASTINGS ROAD	401	US 311	8 RC SLAB	36	NA	NA	NA	279	NA	MILL APPROACHES, DO NOT PAVE ON BRIDGE	
2	SR 2264	AKRON DR.	206	PATTERSON AVE.	8 1/2 RC SLAB	64	NA	NA	NA	132	NA	MILL APPROACHES, DO NOT PAVE ON BRIDGE	
3	SR 2264	AKRON DR.	265	US 52	6.5 R/3 AWS	56	NA	NA	NA	224	NA	MILL APPROACHES, DO NOT PAVE ON BRIDGE	
3	SR 2264	AKRON DR.	229	NORFOLK & WESTERN RR	10.5 RC SLAB	30	NA	NA	NA	272	NA	MILL APPROACHES, DO NOT PAVE ON BRIDGE	
8	SR 2456	LIBERTY ST.	317	SOUTHERN RXR	2'4 RC 4 AWS	44	NA	NA	NA	68	NA	MILL APPROACHES, MILL DECK AND REPAVE	
8	SR 2456	LIBERTY ST.	224	US 52 & NC 8	7.25 RC, 1.0 AWS	86	44	14 FT 06 IN	NA	175	NA	MILL APPROACHES, AND MILL UNDER BRIDGE MAINTAIN CLEARANCE	
10	SR 2456	LIBERTY ST. CONNEC	232	US 52	7.25 RC, 1.0 AWS	86	44	14.79 FT	NA	123	NA	MILL APPROACHES, AND MILL UNDER BRIDGE MAINTAIN CLEARANCE	
8	SR 2456	LIBERTY ST.	247	US 52	7" RC SLAB	40	NA	NA	NA	188	NA	MILL APPROACHES, DO NOT PAVE ON BRIDGE	
9	SR 2456	LIBERTY ST.	230	NORFOLK & WESTERN RR	6.75" RC SLAB	64	NA	NA	NA	274	NA	MILL APPROACH, DO NOT PAVE ON BRIDGE	
13	SR 2996	COOPER RD.	190	MUDDY CREEK	PPCCS, 2.0 AWS	24	NA	NA	NA	235	NA	MILL APPROACHES, MILL DECK AND REPAVE	

PROJECT NO.	SHEET NO.	TOTAL NO.
9CR.20341.131	16	17

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	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, 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	ASPHALT BINDER FOR PLANT MIX TONS	PATCHING EXISTING PAVEMENT TONS	ADJ. OF MANHOLES EA	ADJ. OF METER OR VALVE BOX EA	TEMPORARY SILT FENCE LF	WATTLE LF		
9CR.20341.131	Forsyth	1	SR 2687 HASTINGS ROAD	FROM HIGHPOINT ROAD (SR 1003) TO END	4	NO	NO	1.934	20	232	147	3.87			1,022			2,862	172	20			774	77		
9CR.20341.131	Forsyth	2	SR 2264 AKRON DRIVE SECTION A	FROM SR 1763 INDIANA AVE. TO PAVEMENT JT AT LEO ST.	3	NO	NO	0.353	48					5,014	2,711			1,084	65	20	1	2				
9CR.20341.131	Forsyth	3	SR 2264 AKRON DRIVE SECTION B	PAVEMENT JT. AT EAST SIDE US 52 BRIDGE APPROACH TO LIBERTY STREET (SR 2456)	3	NO	NO	0.581	24-36	4		0.05	467	8,187	2,482			1,254	75	20	16	4				
9CR.20341.131	Forsyth	4	SR 3825 NORTH FRONTAGE ROAD	FROM THOMASVILLE ROAD TO CLEMMONSVILLE ROAD	2	NO	NO	0.256	24				3,605					335	20	20						
9CR.20341.131	Forsyth	5	SR 3826 SOUTH FRONTAGE ROAD	FROM CLEMMONSVILLE ROAD TO THOMASVILLE ROAD	2	NO	NO	0.455	24				6,940					644	39	20						
9CR.20341.131	Forsyth	6	SR 1965 BELEWS CREEK ROAD	FROM US 158 TO NC 65 PAVEMENT JOINT	1	NO	NO	5.852	22	702	381	11.70			489			7,087	425	20		3	2,341	234		
9CR.20341.131	Forsyth	7	SR 2381 WILLISTON ROAD	RXR AT OLD WALKETOWN ROAD (SR 2456) TO OLD BELEWS CREEK ROAD (SR 2396)	4	NO	NO	1.851	24	222	144	3.70			689			3,466	208	20			740	74		
9CR.20341.131	Forsyth	8	SR 2456 LIBERTY STREET- SECTION A	FROM PATTERSON AVE. (SR 2579) TO 28TH ST	3	NO	NO	1.486	34				2,128	21,883	6,777			3,147	189	20	56	98				
9CR.20341.131	Forsyth	9	SR 2456 LIBERTY STREET- SECTION B	FROM PAVEMENT JT. NEAR BROOKWOOD BUSINESS PARK DR. TO LANSING ROAD (NS)	3	NO	NO	1.285	44					18,093	1,134			3,422	205	20	40	15				
9CR.20341.131	Forsyth	10	SR 2456 LIBERTY STREET-SECTION C - E. 11TH ST_ E. 12TH ST_ LINDEN ST_ SB US52 N LIBERTY ST RAMP	E. 11TH ST_ E. 12TH ST_ LINDEN ST_ SB US52 N LIBERTY ST RAMP	3	NO	NO	0.18	24				4,426					410	25	20	4					
9CR.20341.131	Forsyth	11	SR 1303 DORSE ROAD	FROM PVMT JT AT SHALLOWFORD RD. (SR 1001) TO DEAD END AT RIVERWAY RD.	5	NO	NO	0.875	20	105	81	1.75			222	435	1,626		97	20			350	35		
9CR.20341.131	Forsyth	12	SR 1218 LASATER ROAD	FROM PVMT. JT. AT US 158 TO HARPER ROAD (SR 1101)	1	NO	NO	0.27	20	32	6	0.54			444			295	18	20			108	11		
9CR.20341.131	Forsyth	13	SR 2996 COOPER ROAD	FROM PVMT. JT. AT FRATERNITY CHURCH RD (SR 2991) TO PVMT. JT AT FRYE BRIDGE RD. (SR 2998)	1	NO	NO	1.47	23	176	39	2.94	627		511			1,843	111	20			588	59		
TOTAL FOR PROJ NO. 9CR.20341.131																										
GRAND TOTAL																										
								16.848		1,473	798	24.55	18,193	53,177	16,481	435	1,626	25,849	1,649	260	117	122	4,901	490		

