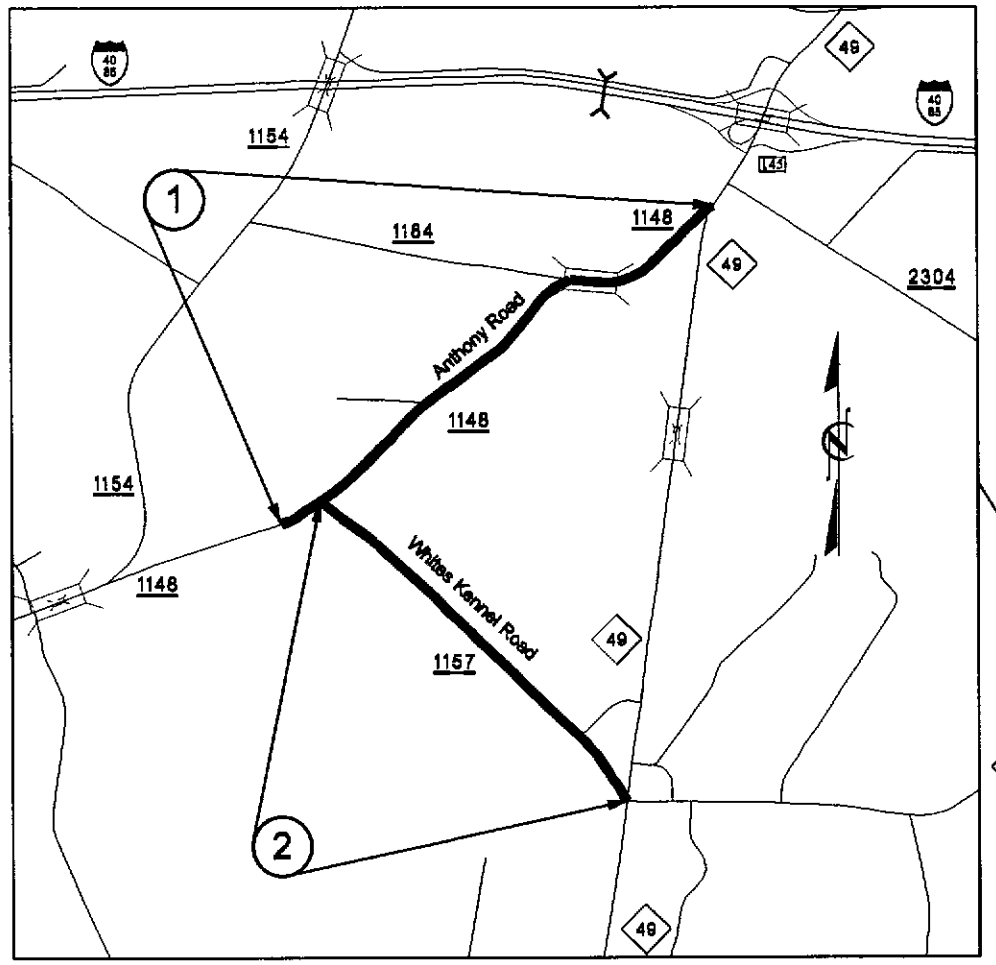
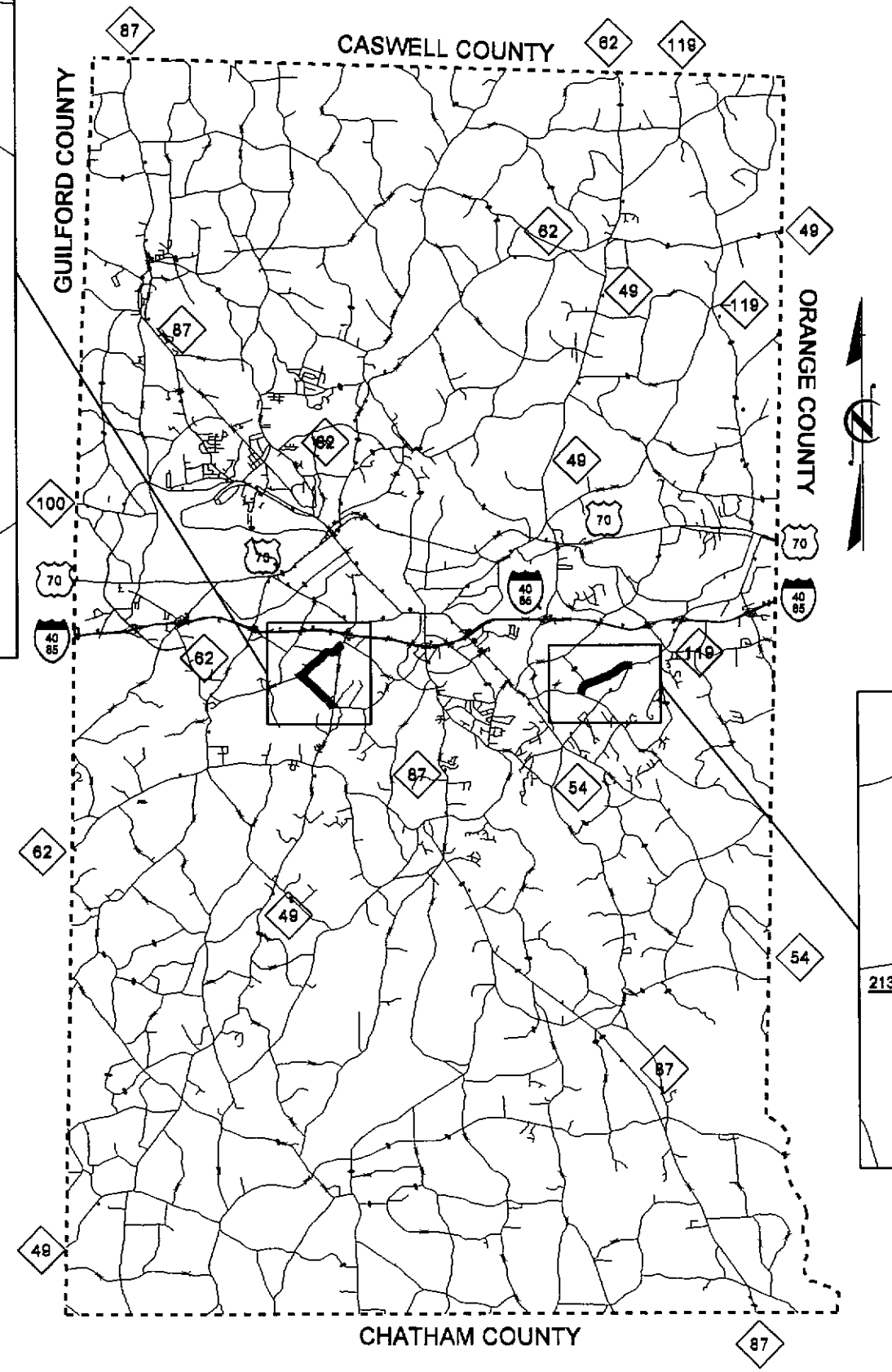
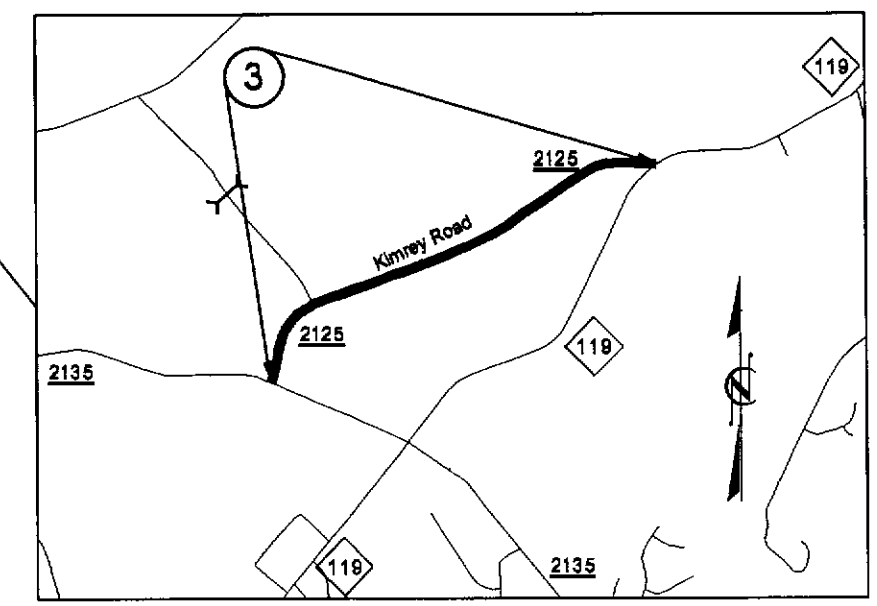
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	7CR.20011.43, etc.	1	6
F.A. PROJ. NO.			

7C.001131
7C.001132

2014 ALAMANCE COUNTY



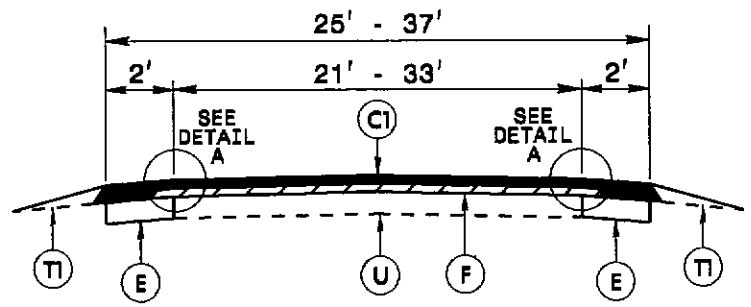




10-APR-2014 13:58
S:\DOC\Resurfacing Projects\2014 PO Contracts\Alamance\7CR.20011.43\CADD\vicinity.dgn
sdking1 AT h7CAM02570084

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	7CR.20011.43, etc.	2	6

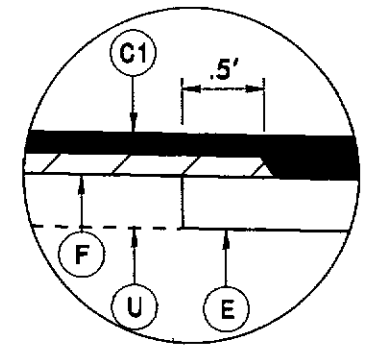
7C.001131,
7C.001132



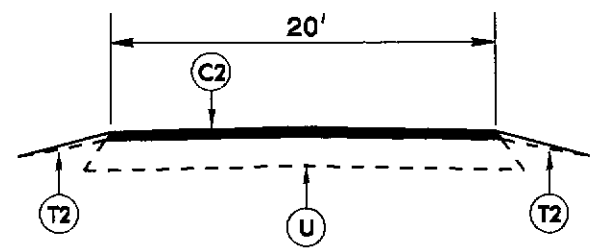
*NOTE: BRIDGE #166 CONSTRUCTION SEQUENCE:
MILL 1.5" AND FILL WITH 1.5" OF
SURFACE COURSE, TYPE S9.5B

TYPICAL SECTION NO. 1

TO BE USED ON MAPS 1 AND 2



DETAIL A



TYPICAL SECTION NO. 2

TO BE USED ON MAP 3

PAVEMENT SCHEDULE

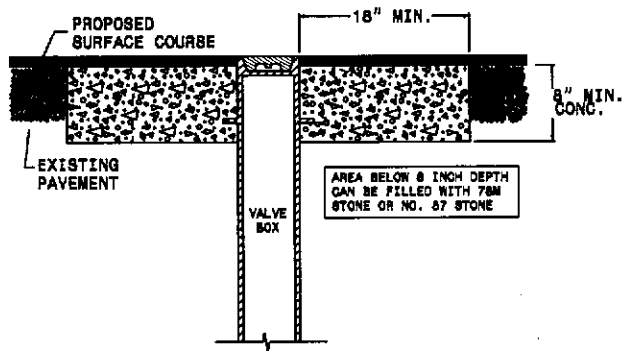
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
E	PROP. APPROX. 8" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD. IN EACH OF TWO LAYERS
F	AST MAT COAT, #67 STONE
U	EXISTING PAVEMENT.
T1	SHOULDER RECONSTRUCTION, AS DIRECTED BY THE ENGINEER.
T2	INCIDENTAL STONE BASE IN LOW SHOULDER AREAS, AS DIRECTED BY THE ENGINEER

10-APR-2014 13:58
S:\DOC\Resurfacing Projects\2014 PO Contracts\Alamance\7CR.20011.43\CADD\typicall.dgn
sakinal AT DICADD257084

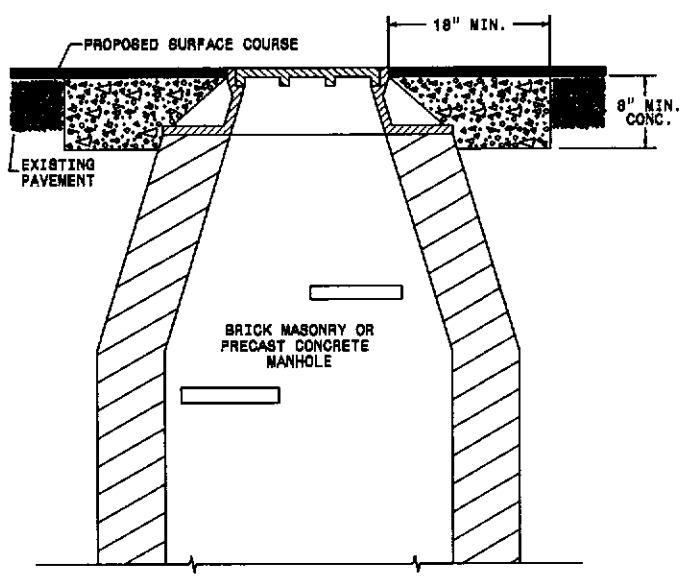
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	7CR.20011.43, etc.	3	6

7C.001131,
7C.001132

STANDARD CONCRETE ENCASEMENT FOR MANHOLE & VALVE CASTINGS IN PAVEMENT
DETAIL DRAWING NO. 858.01

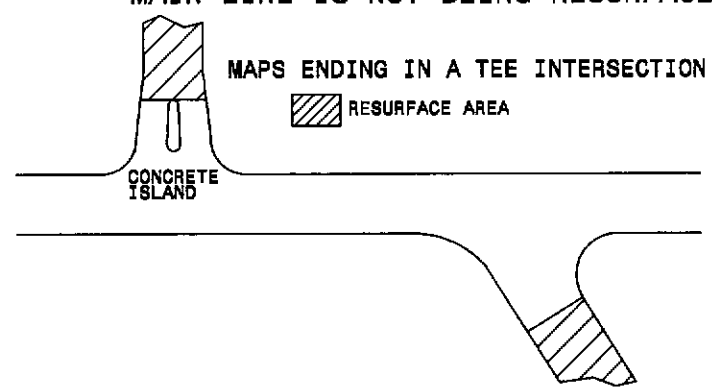


USE RAPID SET GROUT, MORTAR, OR CONCRETE CLASS B CONCRETE MAY BE USED WHEN ADJUSTMENTS ARE NOT IN THE TRAVEL LANE.



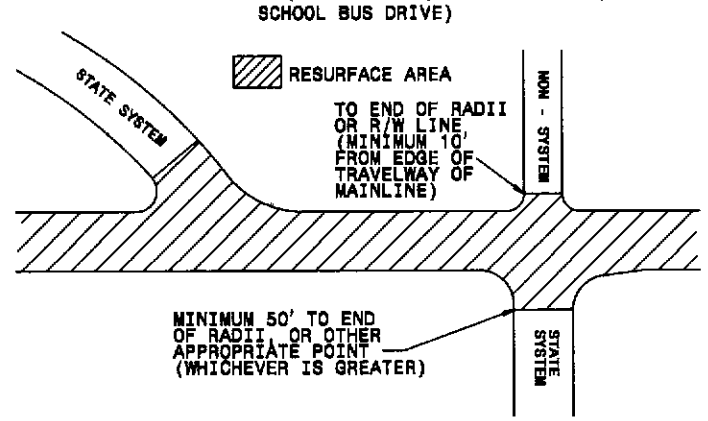
NOTES:
1. MORTAR SHALL BE MIXED TO NCDOT SPECIFICATIONS.
2. ALL FAULTY EXISTING BRICKWORK TO BE REMOVED AND REPLACED WITH NEW BRICK MASONRY.
3. EXCAVATION FOR THE ADJUSTMENT SHALL BE SHEER CUT ON ALL SIDES.
4. RAPID SET GROUT, MORTAR, OR CONCRETE SHALL BE USED

PAVING DETAIL 1
MAIN LINE IS NOT BEING RESURFACED

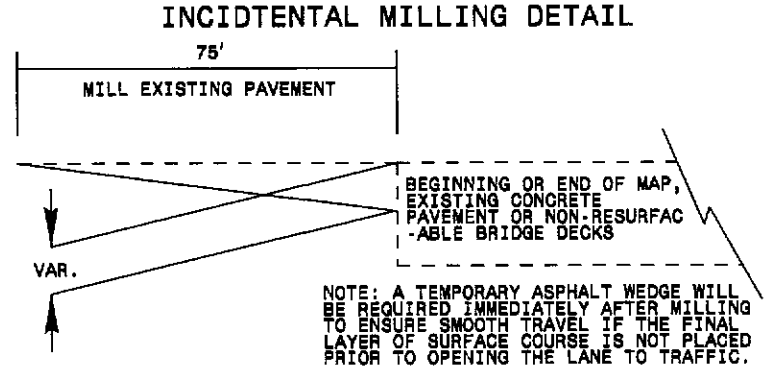


PAVING DETAIL 2
MAIN LINE IS BEING RESURFACED

NOTE: NON-SYSTEM (CITY STREET, PRIVATE DRIVE, SCHOOL BUS DRIVE)

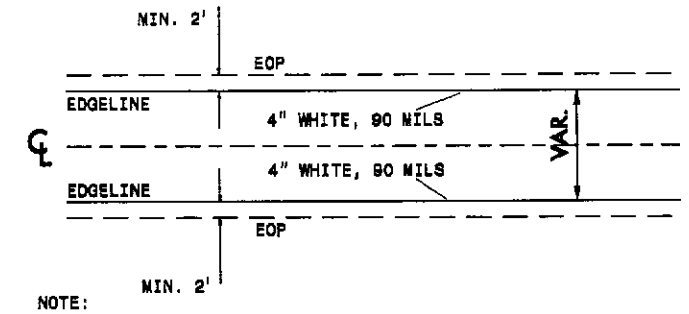


INCIDTENTAL MILLING DETAIL



NOTE: A TEMPORARY ASPHALT WEDGE WILL BE REQUIRED IMMEDIATELY AFTER MILLING TO ENSURE SMOOTH TRAVEL IF THE FINAL LAYER OF SURFACE COURSE IS NOT PLACED PRIOR TO OPENING THE LANE TO TRAFFIC.

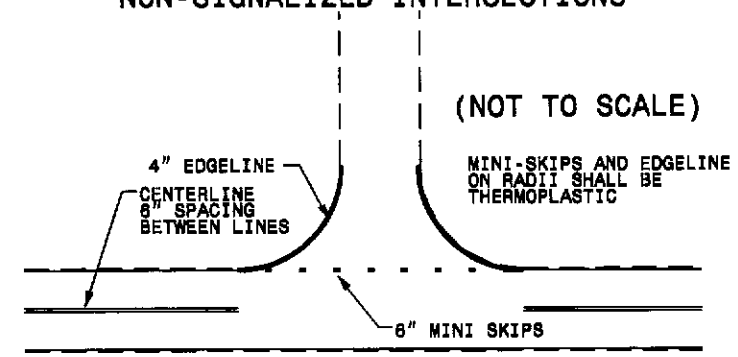
STRIPING DETAIL 1
GENERAL STRIPING DETAIL FOR ENTIRE PROJECT



NOTE:
1. TO BE USED IN CONJUNCTION WITH TYPICAL SECTION NO. 1
2. USE IN CONJUNCTION WITH THE EXISTING PAVEMENT MARKINGS TO ESTABLISH THE STRIPING.
3. USE IN CONJUNCTION WITH THE NCDOT STANDARD DRAWINGS.

TO BE USED AT ALL NON-SIGNALIZED INTERSECTIONS

(NOT TO SCALE)



NOTE: MINI SKIPS SHALL BE PLACED ON A 8' CYCLE, CONTAINING AN 6' AND 2' SKIP, THE WIDTH OF THE SKIP SHALL BE 6".

PAVEMENT SCHEDULE

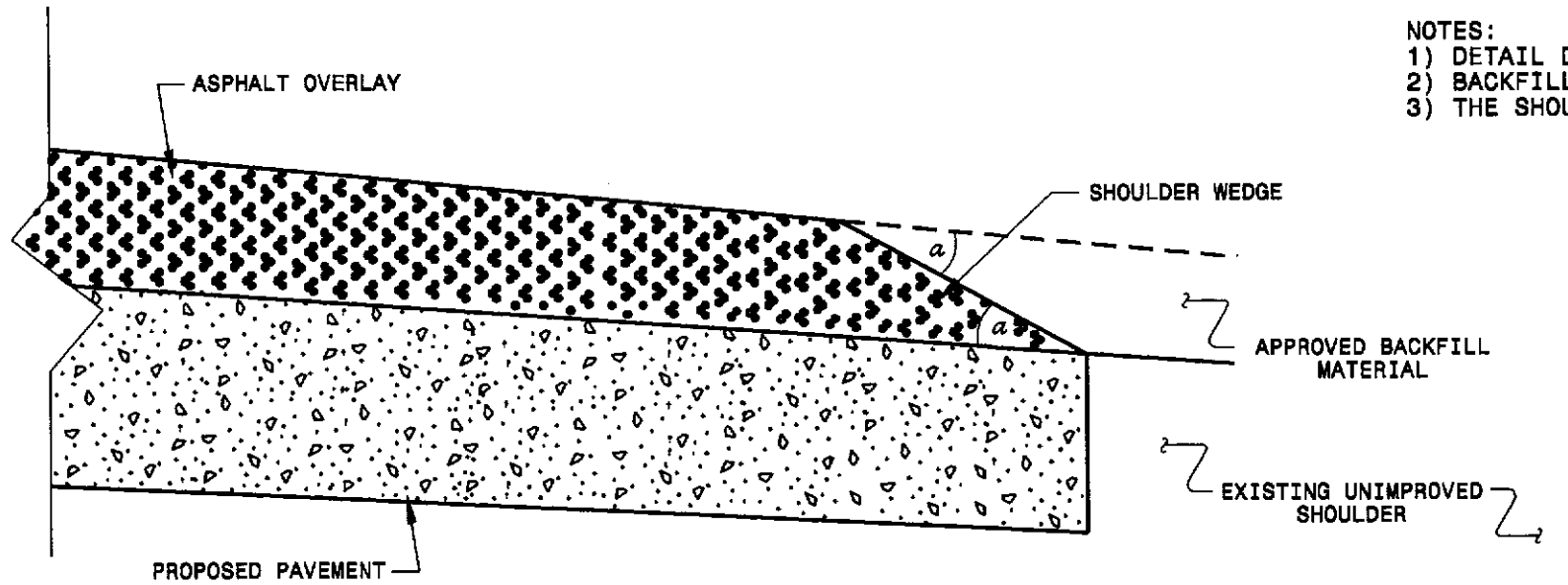
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
E	PROP. APPROX. 8" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD. IN EACH OF TWO LAYERS
F	AST MAT COAT, #67 STONE
U	EXISTING PAVEMENT.
T1	SHOULDER RECONSTRUCTION, AS DIRECTED BY THE ENGINEER.
T2	INCIDENTAL STONE BASE IN LOW SHOULDER AREAS, AS DIRECTED BY THE ENGINEER

10-APR-2014 13:58
S:\ODC\Resurfacing Projects\2014 PO Contracts\Alamance\7CR.20011.43\CADD\typical1.dgn
sdkpol, al hicamm257064

PROJECT REFERENCE NO.	SHEET NO.
7CR.20011.43, etc	4

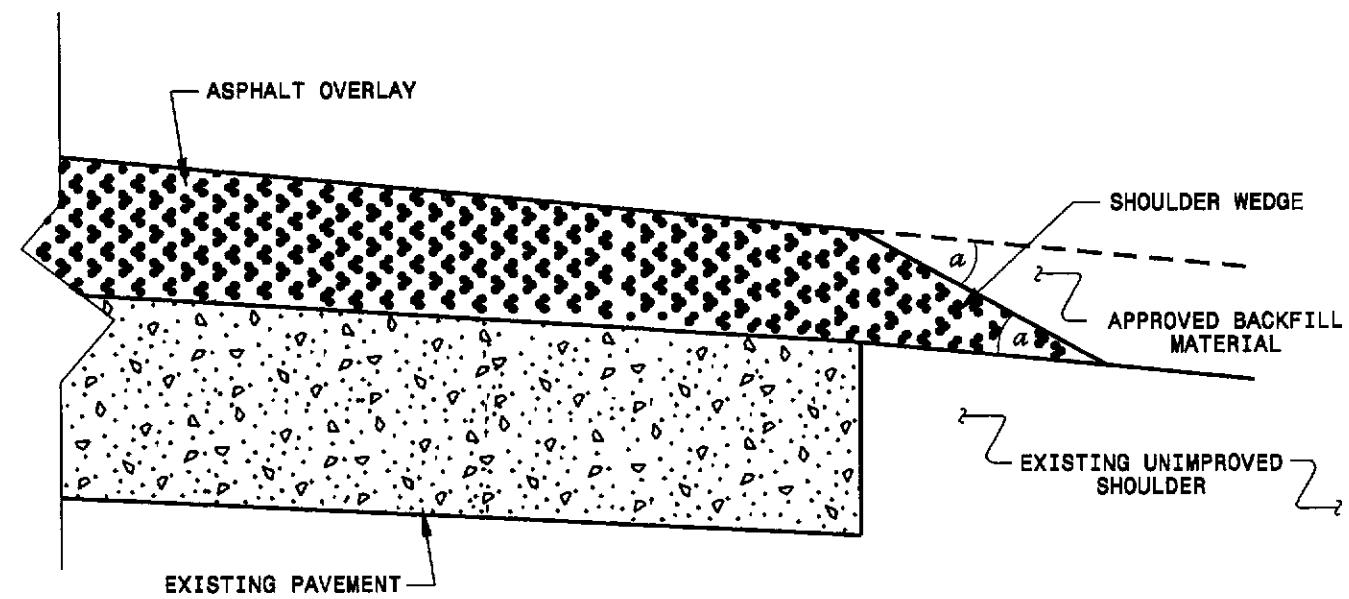
7C.001131,
7C.001132

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 AND SIDE STREETS.



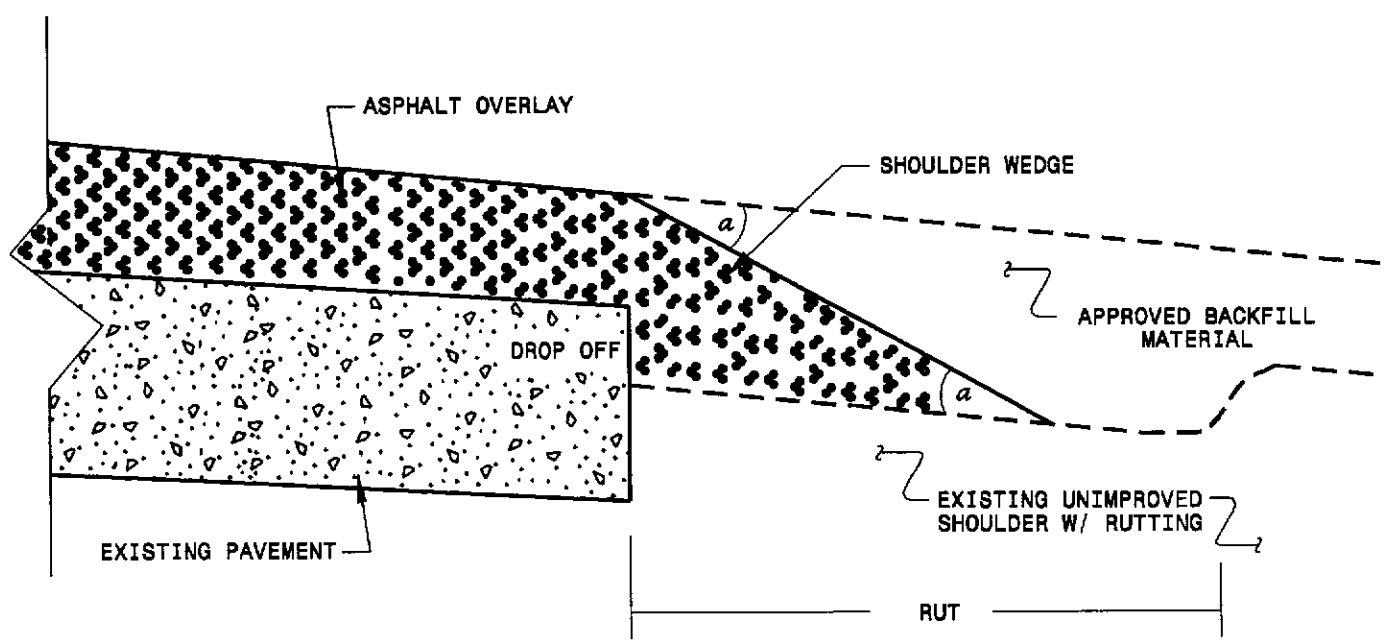
SHOULDER WEDGE DETAIL

(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

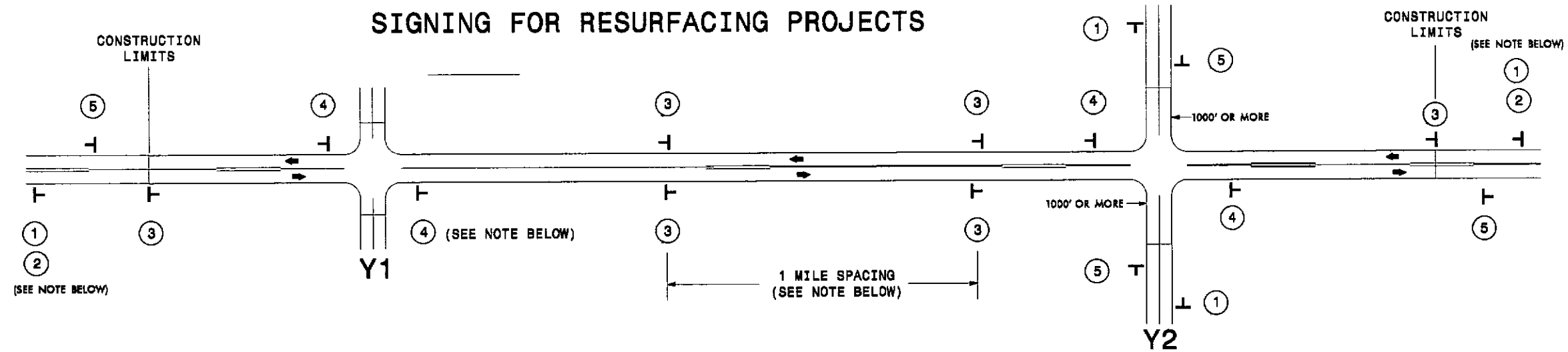
ORIGINAL BY:	T.SPELL	DATE:	7-19-11
MODIFIED BY:		DATE:	10/16/12
CHECKED BY:		DATE:	
FILE SPEC.:	s:\cur/details/stand/shoulderwedgedetail.dgn		

10-APR-2014 13:58
V:\2014 PD Contracts\Alignance\7CR.20011.43\CADD\Revised Shoulder Wedge Detail.dgn
.sdking! AT D7CADD25/D84

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	7CR.20011.43, etc	5	6

7C.001131,
7C.001132

SIGNING FOR RESURFACING PROJECTS



LEGEND
- ⊢ STATIONARY SIGN
- ← DIRECTION OF TRAFFIC FLOW

MAINLINE (-L-) 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 RESURFACING 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 SPACED 1 MILE APART THEREAFTER. IF NO -Y- LINES EXIST, PLACE 2ND SET ½ MILE FROM THE CONSTRUCTION LIMITS AND THEN SPACE 1 MILE 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.
5	END ROAD WORK G20-2 A 48" X 24"	PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.

-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, ADVANCE WARNING PORTABLE 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

RESURFACING
ADVANCE WARNING SIGNS
FOR
RURAL AND SUBURBAN
2 LANE ROADWAYS

10-APR-2014 13:59
Y:\2014 PO Contracts\Alamance\7CR.20011.43\CADD\Resurfacing_AdvWarn_2Ln.dgn
sdkinal AT DTCADD257084

PROJECT NO.	SHEET NO.	TOTAL NO.
7CR.20011.43	6	6

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	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, 1½" DEPTH SY	INCIDENTAL MILLING SY	ASPHALT CONC BASE COURSE, TYPE B25.0B TONS	ASPHALT CONC SURFACE COURSE, TYPE S9.5B TONS	ASPHALT CONC SURFACE COURSE, TYPE SF9.5A TONS	ASPHALT BINDER FOR PLANT MIX TONS	GENERIC PAVING ITEM - ASPHALT SURFACE TREATMENT, MAT COAT, #67 STONE SY	ADJ. OF MANHOLES EA	ADJUSTMENT OF METER BOXES OR VALVE BOXES EA	SEEDING & MULCHING AC	RESIDENTIAL SEEDING ACR	TRENCHING (UNPAVED) (1)(2") LF	JUNCTION BOX (STANDARD SIZE) EA	2" RISER W/ WEATHERHEAD EA	INDUCTIVE LOOP SAW CUT LF	LEAD-IN CABLE (14-2) LF
7CR.20011.43	Alamance	1	SR 1148 (ANTHONY ROAD)	FROM NC 49 - 0.00 TO 415' WEST OF SR 1157 (WHITE KENNEL ROAD) - 1.22	1	2	2WU	NO	NO	0.293	21	20	38	2.41		350	366	405		40	3,777			0.44	0.44	60	1	1	200	60
				BRIDGE #168	1	2	2WU	NO	NO	0.022	25				323			27		2										
					1	2	2WU	NO	NO	0.656	21					175	819	916		91	8,470	1	1							
					1	2	2WU	NO	NO	0.123	26						154	183		18	1,914									
					1	2	2WU	NO	NO	0.067	30						84	153		13	1,223									
					1	2	2WU	NO	NO	0.063	26					217	79	94		9	986									
TOTAL FOR MAP NO. 1										1.224		20	38	2.41	323	742	1,502	1,778		173	16,370	1	1	0.44	0.44	60	1	1	200	60
7CR.20011.43	Alamance	2	SR 1157 (WHITES KENNEL ROAD)	FROM NC 49 - 0.00 TO SR 1148 (ANTHONY ROAD) - 0.99	1	2	2WU	NO	NO	0.605	21	20	50	1.97		175	755	793		81	7,810			0.36	0.36					
					1	2	2WU	NO	NO	0.038	27						47	79		7	622									
					1	2	2WU	NO	NO	0.128	33						160	255		22	2,550									
					1	2	2WU	NO	NO	0.036	27						45	55		5	591									
					1	2	2WU	NO	NO	0.071	21						89	88		9	917									
					1	2	2WU	NO	NO	0.061	27						76	94		9	996									
					1	2	2WU	NO	NO	0.046	33					275	57	84		8	926									
TOTAL FOR MAP NO. 2										0.985		20	50	1.97		450	1,229	1,448		141	14,412			0.36	0.36					
7CR.20011.43	Alamance	3	SR 2125 (KIMREY ROAD)	FROM SR 2135 (JIM MINOR ROAD) - 1.39 TO NC 119 - 0.00	2	2	2WU	NO	NO	1.386	20		131			333			1,380	92										
TOTAL FOR MAP NO. 3										1.386			131			333			1,380	92										
TOTAL FOR PROJ NO. 7CR.20011.43										3.595		40	219	4.38	323	1,525	2,731	3,226	1,380	406	30,782	1	1	0.80	0.80	60	1	1	200	60
GRAND TOTAL										3.595		40	219	4.38	323	1,525	2,731	3,226	1,380	406	30,782	1	1	0.80	0.80	60	1	1	200	60

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	4399000000-E TEMPORARY TRAFFIC CONTROL LS	4400000000-E WORK ZONE SIGNS (STATIONARY) SF	4450000000-N FLAGGER HR	4685000000-E 4" X 90 M WHITE THERMO LF	4686000000-E 4" X 120 M WHITE THERMO LF	4686000000-E 4" X 120 M YELLOW THERMO LF	4690000000-E 6" X 120 M WHITE THERMO LF	4695000000-E 8" X 90 M WHITE THERMO LF	4695000000-E 8" X 90 M YELLOW THERMO LF	4710000000-E 24" X 120 M WHITE THERMO LF	4725000000-E THERMO LT ARROW 90 M EA	4810000000-E 4" WHITE PAINT LF	4810000000-E 4" YELLOW PAINT LF
7CR.20011.43	Alamance	1	SR 1148 (ANTHONY ROAD)	FROM NC 49 - 0.00 TO 415' WEST OF SR 1157 (WHITE KENNEL ROAD) - 1.22	1	2	2WU	1.224	21-30	1	137	113	12,930	179	14,980	122	290	290	15	2		
TOTAL FOR MAP NO. 1								1.224		1	137	113	12,930	179	14,980	122	290	290	15	2		
7CR.20011.43	Alamance	2	SR 1157 (WHITES KENNEL ROAD)	FROM NC 49 - 0.00 TO SR 1148 (ANTHONY ROAD) - 0.99	1	2	2WU	0.985	21-33		111	93	10,400	588	12,261	42		620	72	4		
TOTAL FOR MAP NO. 2								0.985			111	93	10,400	588	12,261	42		620	72	4		
7CR.20011.43	Alamance	3	SR 2125 (KIMREY ROAD)	FROM SR 2135 (JIM MINOR ROAD) - 1.39 TO NC 119 - 0.00	2	2	2WU	1.386	20		156	111	75			34					29,130	26,840
TOTAL FOR MAP NO. 3								1.386			156	111	75			34					29,130	26,840
TOTAL FOR PROJ NO. 7CR.20011.43								3.595		1	404	317	23,405	767	27,241	198	290	910	87	6	29,130	26,840
														28,008			1,200				55,970	
GRAND TOTAL								3.595		1	404	317	23,405	767	27,241	198	290	910	87	6	29,130	26,840
														28,008			1,200				55,970	