

8FCS 4250

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A417 BROCKWORTH BY-PASS
AGRICULTURAL LAND CLASSIFICATION
REPORT OF SURVEY

BROCKWORTH BY-PASS EASTERN AND WESTERN ENDS

AGRICULTURAL LAND CLASSIFICATION

REPORT OF SURVEY

Agricultural Land Classification (ALC) information was requested for the length of the Brockworth By-Pass, Gloucester. The majority of the route had been surveyed under the original ALC system in 1982. This area was not field checked under the Revised Guidelines. However two small areas at either end, amounting to 25 ha had not been surveyed. These were surveyed in May 1991. A composite map at a scale of 1:25,000 was produced and the results of the surveys are shown in the table below, and illustrated on the accompanying map.

The ALC provides a frame work for classifying land according to the extent to which its physical or chemical characteristics impose long-term limitations on its use for agriculture.

Table 1 Distribution of Grades

Grade	Area (ha)	% of Survey Area	% of Agricultural Land
3a	95.0	34.5	42.6
3b	122.2	44.3	54.8
4	5.7	2.1	2.6
Urban	34.5	12.5	100% (222.8 ha)
Non Agric	17.6	6.4	
Agric Bdgs	<u>0.6</u>	<u>0.2</u>	
	275.6 ha	100%	

1991 Survey

Sub-Grade 3B

The western area classified as Sub-Grade 3B experiences a wetness limitation. A typical profile has heavy clay loam topsoils to 30 cm with clay subsoils to depth. These soils inhibit free drainage and remain waterlogged for a significant part of the year. This soil wetness regime adversely affects seed germination and inhibits the development of a good root system. It also imposes restrictions on the timing of cultivations or grazing of livestock. The extent of the soil wetness limitation observed in the profiles can be defined as the soil profile being wet within 40 cm depth for more than 210 days in most years (Wetness Classes III and IV).

The Sub-Grade 3B land at the eastern is limited by steep gradients. On these slopes it would not be possible to use some precision seeding and harvesting.

Grade 4

Some of the eastern end of the proposed bypass has more severe gradients, where there is a greater limitation on the use of machinery and there is a greater risk of soil erosion.