AGRICULTURAL LAND CLASSIFICATION SUMMARY – MILTON HILL, CLAPHAM

Wardell Armstrong was commissioned to undertake a soil survey and Agricultural Land Classification (ALC) to support the promotion of a new housing development within the Neighbourhood Development Plan, for a site at Milton Hill, Clapham. This document provides a summary of the results from the soil survey and ALC assessment.

The ALC was devised by the Ministry of Agriculture, Fisheries and Food (MAFF) in 1966 and updated in 1988. It is the standard method for determining the quality of agricultural land in England and Wales according to the type and range of crops; and level of agricultural production the land can potentially support.

The assessment places land into one of five grades: Grade 1 (excellent); Grade 2 (very good); Grade 3 (good to moderate) which is divided into Subgrades 3a (good) and 3b (moderate); Grade 4 (poor); and Grade 5 (very poor). Best and Most Versatile (BMV) agricultural land is defined as land of excellent (Grade 1), very good (Grade 2) and good (Subgrade 3a) agricultural quality and is afforded a degree of protection in the National Planning Policy Framework (NPPF).

METHODOLOGY

The Provisional 1:250,000 ALC mapping data (as shown in Figure 1 below) provides an indication of the principal ALC quality in the area and indicates that the Site is Grade 2 (very good, BMV). However, this mapping is not accurate at the field level, as it does not pick up variations in agricultural grade for areas less than approximately 80 ha. As a result, a detailed soil survey was undertaken to establish the ALC for the Site itself.

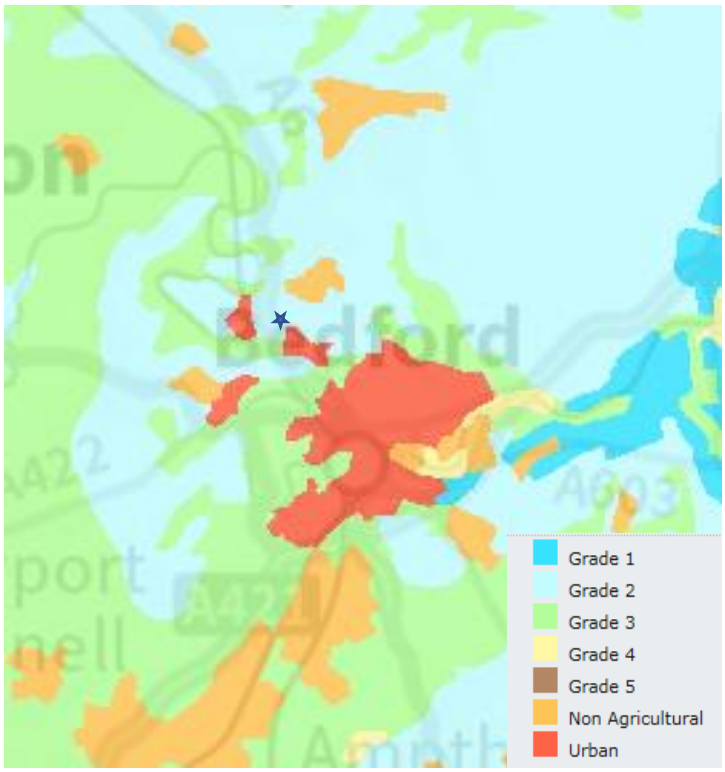

Figure 1: Provisional ALC Mapping (Reproduced from www.Magic.gov.uk; star indicates approximate site location.)

A detailed soil survey was undertaken on the 10th January 2018 and 25th April 2018 using a combination of soil cores and soil profile pits across the four agricultural fields comprising the Site; three large fields, and one small triangular field. The survey points were distributed evenly across the Site, as per recommendations set out in the standard soil survey and ALC guidance and methodology. The purpose of the survey was to provide details of soil profile characteristics and to inform the ALC assessment.

RESULTS

The majority of the soils at the Site are clay-rich with a low to moderate stone content. The topsoil clay content generally increases towards the northern section of the Site, where the soils were also calcareous (chalk-rich). Increasing clay content can reduce water permeability down the soil profile, through the occurrence of a slowly permeable layer which can lead to waterlogging. Calcareous soils typically display better soil structure, facilitating better drainage despite high clay contents. The detailed soil survey showed the ALC grading across the Site to range from Grade 2 to Subgrade 3b, as outlined in Table 1 below.

Table 1: Summary of ALC and land use at the Site

ALC or other land category	Area (ha)	Percentage of agricultural land	Percentage of total site area
Grade 2 (very good)	5.30	24.11	22.33
Subgrade 3a (good)	14.22	64.70	59.90
Subgrade 3b (moderate)	2.26	10.28	9.52
Non-survey agricultural land (assigned as Subgrade 3a)	0.2	0.91	0.84
Not surveyed non-agricultural land: caravan storage; business and residential areas; woodland/scrub.	1.76	—	7.41
Total	23.74	100	100

The survey identified that the main limitation to agricultural land quality at the Site is soil wetness resulting from the presence of a slowly permeable layer in the subsoil (beneath the topsoil). The depth to this slow draining layer varies and, generally, the deeper they occur the less the soil wetness limits the quality of the agricultural land. This limited agricultural land quality to between Grade 2 to Subgrade 3b, depending largely on the depth to the slowly permeable layer. The amount of stones within the topsoil and the amount of water available to a crop (droughtiness) also limits the land quality to Grade 2 and Subgrade 3a in places.

CONCLUSION

Development of the Site would result in permanent loss of 19.72 ha of BMV land (83.07% of the total Site area) and 2.26 ha of non-BMV land (9.52% of the total Site area). Although the Site is predominantly BMV agricultural land, 16.68 ha (75.90 %) of the Site was graded as Subgrades 3a or 3b, which is lower quality than indicated on the Provisional ALC mapping (Figure 1) and hence could be considered to be of lower quality for the area. Additionally, it should be noted that although the small triangular field is graded as Subgrade 3a (BMV), in reality its small size and awkward shape limits the use of conventional agricultural practices and machinery, therefore this area could also be considered to be of lower agricultural value. It can therefore be concluded that delivery of a similar residential development elsewhere in the local area would result in similar loss of good to very good quality agricultural land.