

**CHICKLADE SOLAR,
WILTSHIRE**

**AGRICULTURAL LAND
CLASSIFICATION
AND CONSIDERATIONS**

June 2026





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1 INTRODUCTION

Synopsis of the Assessment

- 1.1 The Proposed Development is a solar farm. This is to be located on land at Chicklade, Wiltshire (the Site), to support the approved EV charging point on the land immediately to the south. The Site extends to approximately 13 ha.
- 1.2 The Proposed Development involves the installation of solar PV arrays across the southern part of the field, currently in agricultural use. The proposed panels, and land between them and the hedge, will involve approximately 4 ha of the Site.

This Report

- 1.3 This report reviews the Proposed Development. It examines or provides:
- (i) a description of the Proposed Development in **section 2**;
 - (ii) relevant planning policy and guidance in **section 3**;
 - (iii) a description of the Site and the soils in the context of the proposals in **section 4**;
 - (iv) a description of the land quality and an assessment of the effects of the Proposed Development on that land quality in **section 5**;
 - (v) land loss and land use considerations in **section 6**;
 - (vi) soil management and construction considerations in **section 7**;
 - (vii) the land quality of the land in the wider area in **section 8**;
 - (viii) with a summary and conclusions provided in **section 9**.

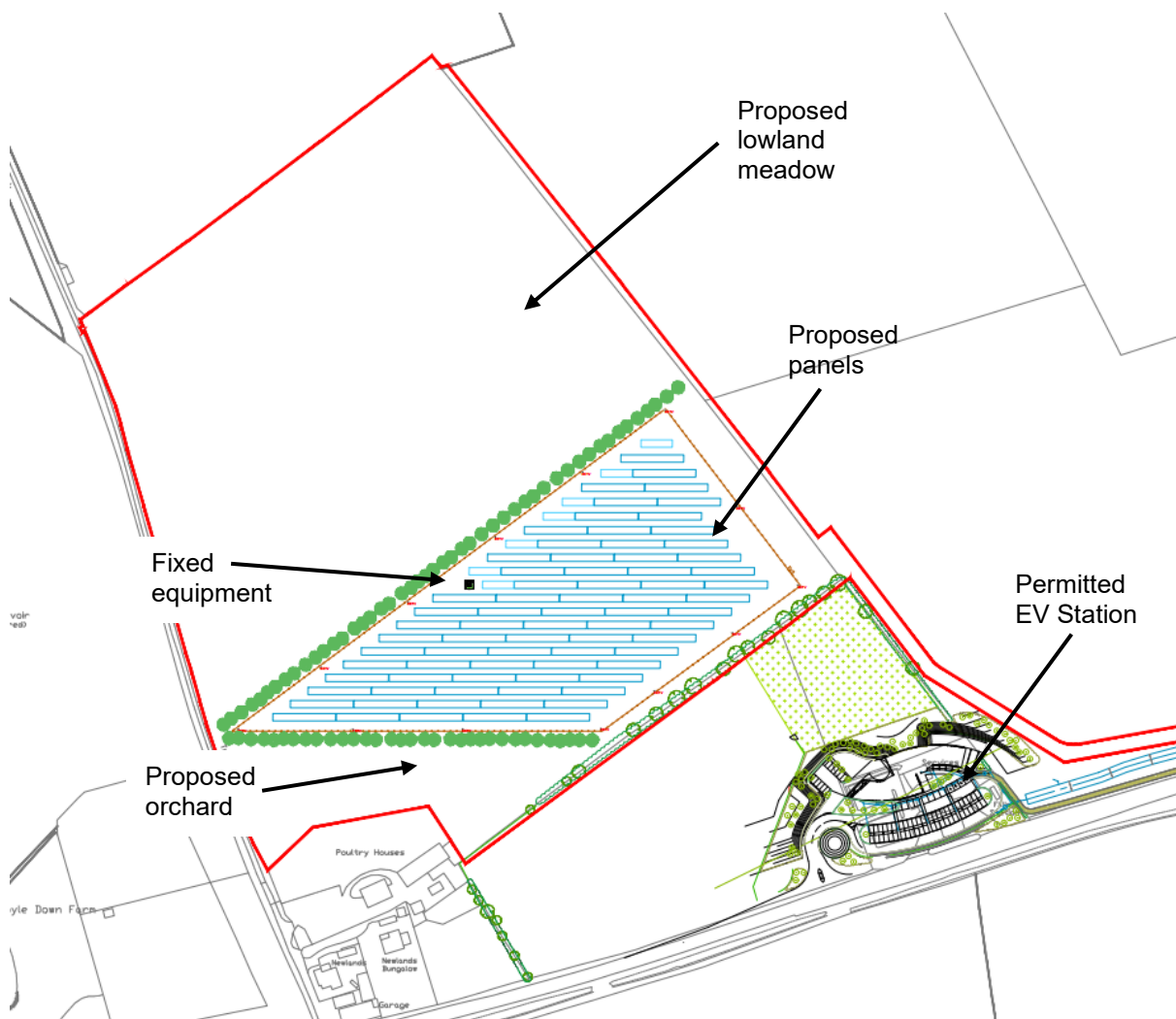
The Author

- 1.4 This report has been prepared by Kernon Countryside Consultants Ltd. We visited the Site in December 2025, and interviewed the farm consultant, as described in this report. The land quality of the Site was assessed on the 2nd December 2025.

2 THE PROPOSED DEVELOPMENT

- 2.1 The development proposed is the installation of a solar farm with associated infrastructure.
- 2.2 The layout is shown on an extract from the site plan below. The layout involves fixed south facing solar PV arrays arranged in strings on an east-west framework. The area for the proposed panels, together with the proposed hedge to the north and west, native woodland to the east, and the space between the fence and the southern boundary, extends to about 4 hectares.

Insert 1: The Proposed Development



- 2.3 The key components of the proposed development are:
- (i) the solar panel modules (solar PV Arrays);
 - (ii) interconnecting internal cabling;
 - (iii) transformers and converters;
 - (iv) fencing and security cameras.

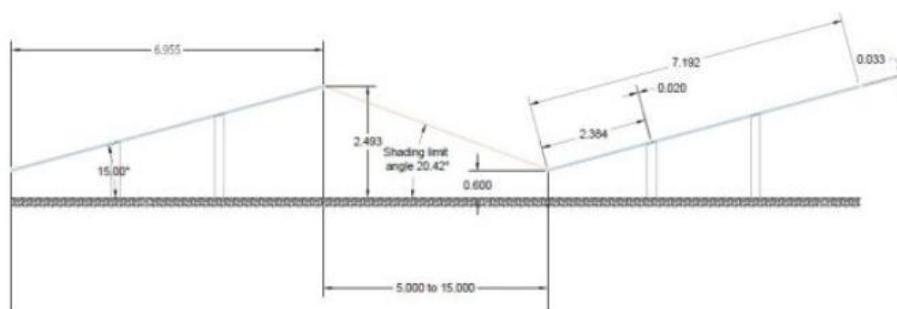
Construction Works

2.4 **Solar Panel Modules:** The PV arrays are installed in four key stages:

- (i) marking out;
- (ii) piling in of posts;
- (iii) bolting together of frames and adding panels;
- (iv) cabling and trenching .

2.5 The panel design is shown below. The panels allow for 900mm clearance below the lower edge (minimum 600mm below any framework) and are therefore suitable for grazing sheep post installation.

Insert 2: Proposed Panels



2.6 **Marking Out.** Marking out is done on foot and is not damaging to soils, as shown below. Small pegs are inserted to identify the position for the posts.

Photo 1: Marking Out in Progress



2.7 **Piling.** The installation of the posts and the framework and photovoltaic (PV) panels is carried out rapidly. The process involves following the marks on the ground and laying out the posts. This stage is non-intrusive. Machinery is used to carry out the posts, however, and should ideally take place when soils are suitably dry. Typically, a tractor and farm trailers are used to transport the posts to the fields, then each post is lifted off by hand.

- 2.8 A team then arrives to knock the posts in. From operations we have observed, it takes only a minute or two to knock the post into the ground and move the machine to the next post. This operation is shown on the photograph below. This was inserting posts into a clay soil. The small size of the machinery (relative to a farm tractor, for example) should be noted. A person carrying a post can also be seen, demonstrating the light weight of the posts.

Photo 2: Posts Being Installed



- 2.9 The design varies between sites, but the limited impact of installing posts on the underlying land is illustrated below, where the lack of soil disturbance or vehicle damage on dry soils is clear.

Photo 3: Posts Installed (this is at Bentham Farm, Purton, Summer 2015)



Photo 4: Installed Posts (this is at Tiln Farm, Retford, in January 2023)



- 2.10 **Assembling Frames and Panels.** The minimal damage, if carried out in suitable conditions, caused during the process of assembling the frames and bolting-on the PV panels onto the frames is evident from the lack of soil damage, as shown below. The only vehicular access needed is to carry the panels in.

Photo 5: After Panels Bolted-On



- 2.11 **Inter-connecting Cabling.** It is necessary to connect electric cables between the panels and to run the cables back to the substation. This involves trenches, dug with a machine. Immediately after digging these works look disruptive to the soil. As they are excavated the topsoil and subsoil are separated, as shown below. The following photograph shows limited effect on soils of internal site cabling installation.

Photo 6: Trenching in Progress



- 2.12 The installation of cables is one of the few operations that involves digging whereby the soil structure could potentially be affected. The trenches within the site are usually narrow, but soil does have to be dug up to install the cable. In areas where there is a clear subsoil and topsoil distinction, the topsoil should be placed on one side of the trench, and the

subsoil on the other. Then once the cable has been laid the subsoil can be added back first, then the topsoil second, to reinstate the soil structure to its original order and state. There are field drains under agricultural fields across the country that have been installed in a similar manner, and which have not affected the ALC grade.

Fixed Equipment

- 2.13 Solar inverter/transformer stations involve a container standing on a concrete base typically around 40 square metres each. An example is shown below. Other structures, such as the spares container, are similarly constructed although sizes will vary according to the function. There will typically be a non-load-bearing gravel/stone base around the unit to prevent muddy conditions for operatives.

Photo 7: A Typical Item of Fixed Equipment



Fencing and Cameras

- 2.14 Fencing is proposed around the whole site, with CCTV covering the boundary of the site.

Construction Compound

- 2.15 A construction compound area may be required. These are short-term construction facilities and are constructed by removing topsoil, placing a permeable matting across the land, then adding the required aggregate surface. An example is shown below.

Photo 8: Example of a Construction Compound (this was for a water pipeline)



Soil Management

- 2.16 An outline Soil Management Plan (oSMP) is set out in **Appendix KCC1**. This sets out the soil resource and basic principles for soil management on the Site.
- 2.17 The oSMP also sets out the key principles involved regarding decommissioning.

3 PLANNING POLICY AND GUIDANCE OF RELEVANCE

3.1 Planning policy and guidance is summarised in this chapter. This chapter:

- (i) describes the ALC system;
- (ii) considers local planning policy;
- (iii) Considers national planning policy;
- (iv) considers national policy statements;
- (v) considers related guidance.

The ALC System

3.2 Agricultural land is measured under a system of Agricultural Land Classification (ALC). This grades land based on the long-term physical limitations of land for agricultural use, including climate (temperature, rainfall, aspect, exposure and frost risk), site (gradient, micro-relief and flood risk) and soil (texture, structure, depth and stoniness) criteria, and the interactions between these factors determining soil wetness, droughtiness and utility. The system is described in Natural England's Technical Information Note TIN049 (2012) (**Appendix KCC2**). The current guidelines and criteria for the ALC were published by the Ministry of Agriculture Fisheries and Food in 1988 and were slightly updated in December 2025 to provide clarity. The update has not changed the results of the ALC Survey.

3.3 Land is divided into five grades, 1 to 5. Grade 3 is divided into two subgrades, 3a and 3b. Land falling into ALC. Grades 1, 2 and Subgrade 3a is the **"best and most versatile"** (BMV) (as defined in the National Planning Policy Framework (2024), Annex 2). Natural England estimate that 42% of agricultural land in England is of BMV quality (see TIN049 in **Appendix KCC2**).

Local Plan

3.4 The Wiltshire Core Strategy (adopted January 2015) refers to the use of BMV agricultural land in Core Policy 42 Standalone renewable energy installations. Core Policy 42 states that **"Proposals for standalone renewable energy schemes will be supported subject to satisfactory resolution of all site specific constraints."** These include the **"Best and most versatile agricultural land."**

3.5 The emerging Wiltshire Local Plan (regulation 19 September 2023) refers to the use of agricultural land in Policy 4 Addressing climate change. Policy 4 states that **"Development proposals must support a move to carbon neutrality and adaptation to climate change in the following ways... protecting high grade agricultural land for future use and to help support food security"**

- 3.6 The emerging Wiltshire Local Plan further refers to the use of BMV agricultural land in Policy 86 Renewable energy. Policy 86 states that proposals for renewable energy schemes **“will be supported in the context of delivering sustainable development”** the proposals will need to demonstrate how impacts have been assessed taking into account the considerations listed in Policy 86 including the **“best and most versatile agricultural land”**.

NPPF

- 3.7 The National Planning Policy Framework (NPPF) (December 2024) sets out at paragraph 187 (b) that the economic and other benefits of the best and most versatile agricultural land should be recognised. It does not set any prohibition on the use, or loss, of such land.
- 3.8 Paragraph 188 and the related footnote 65 are set in the context of plan making. They are therefore aimed at local planning authorities and are not directly relevant for decision making. They require plans to allocate land with the least environmental effect, where consistent with other policies and Framework. Footnote 65 states that **“where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality”**.
- 3.9 Paragraph 168 makes clear that applicants should not be required to demonstrate the overall need for renewable or low-carbon energy, and that significant weight should be given to the benefits.

National Policy Statements

- 3.10 The **Overarching National Policy Statement for Energy (EN-1)** (December 2025) may be a material consideration for all applications.
- 3.11 Paragraph 5.11.4 notes that **“development of land will affect soil resources, including physical loss of and damage to soil resources, through land contamination and structural damage. Indirect impacts may also arise from the changes in the local water regime, organic matter content, soil biodiversity, and soil process”**. Paragraph 5.11.12 notes that **“applicants should seek to minimise impacts on the best and most versatile agricultural land identified as land in Grades 1, 2 and 3a of the Agricultural Land Classification and preferably use land in areas of poorer quality (Grades 3b, 4 and 5)”**.
- 3.12 Paragraph 5.11.34 is aimed at the Secretary of State, this paragraph notes that **“The Secretary of State should ensure that applicants do not site their scheme on the best**

and most versatile agricultural land without justification. Where schemes are to be sited on best and most versatile agricultural land the Secretary of State should take into account the economic and other benefits of that land.”

- 3.13 The **National Policy Statement for Renewable Energy Infrastructure (EN-3)** (December 2025) sets out at 1.1.1 that **“there is an urgent need for new electricity generating capacity to meet our energy objectives”**. Paragraph 1.1.2 notes that **“electricity generation from renewable sources is an essential element of the transition to Clean Power 2030, net zero and meeting our statutory targets”**. The document then sets out the specific guidance for different technologies, with section 2.10 covering “Solar Photovoltaic Generation”.
- 3.14 Paragraph 2.10.21 is set under the subtitle of “Agriculture land classification and land type”. It advises that while land type should not be a predominating factor in determining the suitability of the site’s location, applicants should, where possible use non-agricultural land. Where the use of agricultural land has been shown to be necessary, poorer quality land should be preferred to higher quality land. Paragraph 2.10.22 notes that **“Whilst the development of ground mounted solar arrays is not prohibited on Best and Most Versatile agricultural land, or sites designated for their natural beauty, or recognised for ecological or archaeological importance, the impacts of such are expected to be considered”**
- 3.15 Other guidance in EN-3 includes:
- 2.10.60 recognises that solar panels can be decommissioned easily;
 - 2.10.81 recognises the potential for solar farms to increase biodiversity;
 - 2.10.119 advises on minimising the effect on soil resources.

Guidance

- 3.16 There is no definition of what is “significant” development in the context of footnote 65 of the NPPF. The threshold for consultation with Natural England is where there will be a loss of more than 20 ha of BMV agricultural land (as set out in Schedule 4 (y) of the Town and Country Planning (Development Management Procedure) (England) Order 2015 (DMP Order)).
- 3.17 There is no definition of what is meant by “loss” in the DMP Order. The Institute of Sustainability and Environmental Professionals (ISEP) (formerly known as IEMA) Guide “A New Perspective on Land and Soil in Environmental Impact Assessment” (February 2022) defines impacts for EIA purposes as **“permanent, irreversible loss of one or more**

soil functions or soil volumes (including permanent sealing or land quality downgrading) ...” (Table 3, page 49). The ISEP Guide notes that this can include **“effects from temporary developments”**, which is defined as follows: **“temporary developments can result in a permanent impact if resulting disturbance or land use change causes permanent damage to soils”**.

- 3.18 The Planning Practice Guidance suite from 2015, in the section on “Renewable and Low carbon energy”, advises at paragraph 013 that factors a local planning authority will need to consider will include whether the proposed use of agricultural land has been shown to be necessary and poorer quality land has been used in preference, and the proposed use allows for continued agricultural use.

WMS

- 3.19 The Secretary of State for Energy Security and Net Zero’s Written Ministerial Statement (WMS) of May 2024 “Solar and Protecting our Food Security and Best and Most Versatile (BMV) Land” (issued 15th May 2024 by Claire Coutinho under the last administration) notes in the first paragraph that food security is an essential part of national security and confirms the commitment to maintain the current level of food we produce. The second paragraph sets out concerns about energy security and prices and summarises the Government’s position of racing ahead with the deployment of renewable energy, especially solar.
- 3.20 The WMS explains that **“even in the most ambitious scenarios [solar] would still occupy less than 1% of the UK’s agricultural land”**. The Minister had clearly considered the potential impact of delivering the Government’s objectives for renewable energy by solar. The second paragraph of the WMS confirms that the Government is racing ahead with deployment of renewable energy.
- 3.21 The WMS re-states the Government’s position in respect of the use of BMV land. It does not amend the national policy, nor does it alter the weight to be given to the use of BMV land. Nor does it set out a food-producing policy. It is noted that this WMS is set to be superseded by the draft NPPF (December 2025).

Government Statement

- 3.22 On 18th July 2024 the Secretary of State made a Statement in the House of Commons under the title of “Clean Energy Superpower Mission”. This reported, inter alia, that:
- “credible external estimates suggest that ground-mounted solar used just 0.1% of our land in 2022. The biggest threat to nature and food security and to our rural communities is not solar panels or onshore wind: it is the climate crisis,**

which threatens our best farmland, food production and the livelihoods of farmers”.

Food Security Report 2024

- 3.23 On 11th December 2024 the Government published the UK Food Security Report 2024. This analyses land use change. From section 2.2.4 (page 178) the analysis is as follows:
- “Looking ahead, based on current government policy framework for incentivising types of land use, it is expected that there will be increases in land use change from agricultural land to other uses. These uses include woodlands, grasslands, and restored peatland, as well as some being devoted to economic infrastructure like energy and housing. The impact this will have on food production will be affected by the kind of land being taken out of production. For instance, the impact is negligible if it is unproductive land which is taken. It is plausible that with continued growth in output and conducive market conditions, food production levels could be maintained or moderately increased alongside the land use change required to meet our Net Zero and Environment Act targets and commitments. However, analysis projecting decades into the future involves significant uncertainties. The government is due to publish a land use framework to guide land managers on the balance of opportunities and risks”.**

Solar Roadmap

- 3.24 The Department for Energy Security and Net Zero published the Solar Roadmap in June 2025. This re-states the position in respect of BMV land on page 20, and notes a number of benefits. It is noted that **“the biggest risk to food security and the natural environment is the climate and nature crisis”**. Annexed to the Solar Roadmap is a document “Solar Misconceptions”. Against the heading “Solar is a threat to food security”, it is noted that **“the biggest threat to food security is crop failure due to climate change and solar farms are helping to tackle this directly”**. The response also states:
- “Recent UK Government analysis shows that even under the most ambitious deployment scenarios set out in the Solar Roadmap, and in the unlikely case that all new capacity coming forward is ground mount, it would only occupy up to around 0.6% of UK Utilised Agricultural Land by 2030 (less than that used by golf courses in Great Britain).**
- Solar farms are a temporary and completely reversible land use with restoration of land at the end of the solar farm’s life usually guaranteed by a planning condition”.**

4 THE SITE AND ITS USE

The Site

- 4.1 The site is 13 ha. The site is a small part of Fonthill Estate. The site is on land west of Chicklade, as shown on the Google Earth extract.

Insert 3: The Site (outlined in red)



- 4.2 The Site is an arable field. At the time of the ALC survey was in oilseed rape.

Photo 9: looking east over the Site



- 4.3 The land is mostly flat bar the northeast of the Site where land quality is limited to Subgrade 3b by gradient, as shown in photo 9.

Farming Circumstances

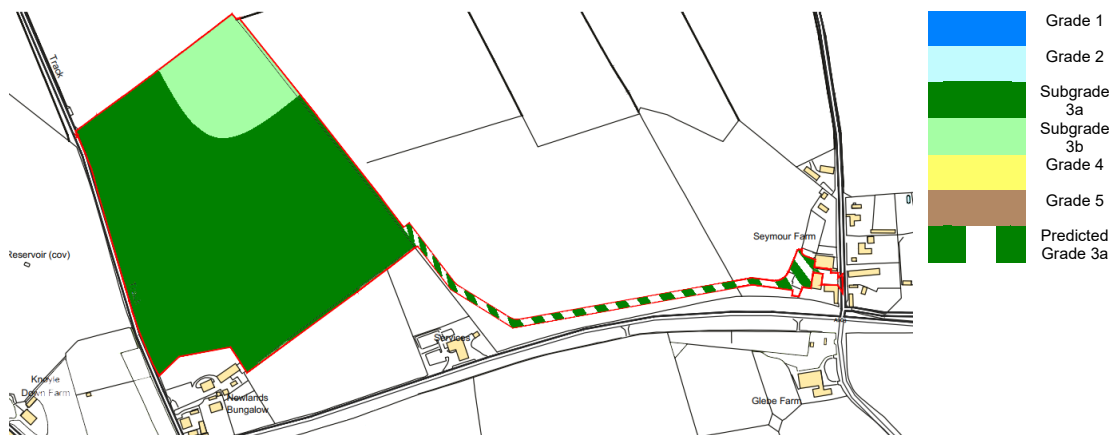
- 4.4 The farm covers an area of 3,300 ha which is owned by Fonthill Estate. They do not rent out any land to other farmers. Approximately half of the estate runs as an arable enterprise of combinable crops, the rest of the farm comprises of grassland for the circa 800 head of ewes, woodland and environmental schemes.
- 4.5 The farm's arable rotation consists of a rotation of (usually) oilseed rape (OSR), winter wheat, spring barley, oats, winter wheat and winter barley.
- 4.6 The farm runs on a minimum tillage approach allowing soil disturbance to be kept to a minimum.
- 4.7 Fertiliser is applied to the land as either digestate or inorganic fertiliser.
- 4.8 None of the enterprises the farm has added through diversification will be affected by the Proposed Development.
- 4.9 The farm is farmed by contract farmers.

5 AGRICULTURAL LAND QUALITY

Land Quality

- 5.1 The agricultural land quality of this site has been determined by a detailed field survey. That was carried out on 2nd December 2025.
- 5.2 The survey involved sampling the site on a regular 100-metre grid, sampling down to 1.2m where possible using a handheld soil auger. The ALC report is in **Appendix KCC3**.
- 5.3 As described in the ALC report, the climate in the area does not limit land quality. The average rainfall for the area (for ALC purposes) is 661mm per annum, and field capacity days are 215. There are gradient limitations on land quality in the northeast of the Site where the gradient exceeds 7°.
- 5.4 The soils were found to be calcareous, medium clay loams or heavy clay loams.
- 5.5 Agricultural land classification calculates the most limiting factor. Across the site the grading is limited by wetness and droughtiness. Soils found to be Subgrade 3a were limited by wetness class I. Soils found to be Subgrade 3b were found to be limited by gradient.
- 5.6 Access to the Site has not been surveyed, the predictive ALC maps show the access to be of Subgrade 3a quality, for the purposes of this report we have assumed this to be the correct grading.
- 5.7 The grading is shown on the ALC plan extract below.

Insert 4: ALC Plan for the Site



5.8 The results are show in Table 1.

Table 1: ALC results

ALC Grade	Area (Ha)	Area (% of Total Site)
Grade 1 (Excellent)	0.0	0
Grade 2 (Very Good)	0.0	0
Subgrade 3a (Good)	10.0	77
Subgrade 3b (Moderate)	2.0	15
Grade 4 (Poor)	0.0	0
Grade 5 (Very Poor)	0.0	0
Non-agricultural / Other land	0.0	0
Predicted Subgrade 3a (Good)	1.0	8
Total	13.0	100

Soils

5.9 The soils are described in the ALC report **Appendix KCC3** as being predominantly brown. Most soils were found to be very calcareous medium silty clay loam topsoils over a medium silty clay upper subsoil over chalk.

5.10 As described in section 2, any soil disturbance for the construction of fixed equipment, will involve only disturbance to the topsoil. Purely for the purpose of illustrating the boundary between topsoil and upper subsoil, supplementing the photographs in the ALC, the following pit and soil profile show Subgrade 3a soils, as identified in the ALC survey.

Photos 10 and 11: Subgrade 3a Land



- 5.11 In a normal year it is advised that access to the fields with machinery may be limited between October and late February, and soils would need to be assed prior to entry (see the outline Soil Management Plan, **Appendix KCC1**).

6 THE EFFECTS ON AGRICULTURAL LAND QUALITY AND THE USE OF BMV LAND

- 6.1 This section of the report reviews the land quality and land use considerations, notably:
- (i) whether land quality is “lost”, temporarily or permanently;
 - (ii) the land use considerations of relevance, including food production;
 - (iii) the economic and other considerations.

The Agricultural Land Quality and Whether the Land is Lost

- 6..2 The site is a mixture of Subgrade 3a and Subgrade 3b. As described in the ALC report (**Appendix KCC3**) some sample points were limited to subgrade 3b by gradient.
- 6.3 The process of installing solar PV arrays is not generally disturbing to land, as described in section 2. The posts make little to no impact and do not involve the movement of any soils, they do not alter land quality, the land is not ‘lost’. As noted earlier, the area for panels, fencing and woodland planting is only approximately 4 hectares within the wider Site.
- 6.4 The installing of posts is not dissimilar to the installation of frameworks for numerous farming activities, such as polytunnels, hops, orchards and vineyards, as the examples below show.

Photos 12 - 15: Other Agricultural Activities



- 6.5 Only in the areas where there is the removal of soils is there a risk of agricultural land quality being affected. There is only one very small item of fixed equipment proposed in this scheme.
- 6.6 Any areas that will be affected are all capable of being restored back to a comparable grade to what they were previously. Therefore the 'loss' is temporary and after decommissioning the land can be reverted back to its original state. This is not a permanent 'loss'
- 6.7 There is widespread recognition that across the great majority of the solar farm site land is not "lost" in these circumstances, as per the following recent planning decisions, selected from a wide choice of appeals:
- (i) in the planning appeal decision on 27th June 2023 for land south of the Leeming Bar substation, the Inspector considered whether or not land was Grade 2 or Subgrade 3b. In her decision (APP/G2713/W/23/3315877) the inspector noted that agricultural use could continue during the operational phase (para 20). She concluded in paragraph 25 as follows:

"As such, the proposal would not result in either the temporary or permanent loss of BMV land as the land would continue to be used for some agricultural purposes whilst also being used to produce solar energy. Nor would the proposal be detrimental to the soil quality, so a return to arable production at a later date would still be possible";
 - (ii) in the decision on land west of Thaxted of 18th December 2023 (APP/C1570/W/23/3319421), which involved 55 ha of BMV, the Inspector was clear that the land would not be adversely affected except for areas of tracks and fixed infrastructure, and any woodland planting that is not removed at decommissioning. The Inspector noted in paragraph 112:

"Accordingly, I am satisfied that the agricultural land quality of the majority of the BMV on the site would not be harmed and the loss of production from the site would not cause notable harm to food security. Any permanent loss of BMV would be small and not significant";
 - (iii) in the decision at Great Wymondley (APP/X1925/V/23/3323321), 11 March 2024, the Secretary of State agreed with his Inspector on a site of 85 ha of wholly BMV quality (Grades 2 and 3a) that BMV land would not be adversely affected (IR 12.57) and could be farmed, and that there was no policy to require land to be farmed in a particular way (IR 12.57);

- (iv) in the decision at Penhale Moor (APP/D0840/W/23/3334658), 18 July 2024, the Inspector concluded in paragraph 30 that “the proposal would not lead to either the temporary or permanent loss of agricultural land”;
- (v) in the decision at Burcot Farm (APP/Q3115/W/24/3350890), 4 March 2025, the Inspector concluded in paragraph 32 that “overall the proposal would not result in either the temporary or permanent loss of BMV land for agriculture as the land would continue to be used for some agricultural purposes whilst also being used to produce solar energy”.

The Use of BMV Land: Economic and other Benefits

- 6.8 Having concluded that the land will not be lost, and that agricultural land will not be downgraded, I now consider the extent to which policy prevents the use of BMV land for solar farm installations. If the resource is not lost, then the assessment becomes a land use consideration instead.
- 6.9 Policy has long set out a preference for using poorer quality land to that of a higher quality. That is not, however, a bar to the use of BMV land. Further, as explained above, in the case of solar farms the BMV land is not lost. In reality this is a land-use decision rather than a decision about the protection of the BMV asset.
- 6.10 Planning policy in the NPPF does not preclude the use of BMV. Policy requires planning policies and decisions to “recognise” the economic and other benefits of BMV land. It does not prohibit its loss, and far less dictate its active agricultural use.
- 6.11 On the topic of the use of BMV land, Inspectors have recently said the following:
 - (i) in the planning appeal for land south of Leeming Bar the Inspector concluded that local policy (in that case) nor national policy prevent the use of BMV land. They require that the benefits justify the loss (paragraph 19);
 - (ii) in the planning appeal for land at Thaxted the Inspector considered the local plan, NPPF, Planning Practice Guidance, the WMS (2015) and draft NPS, and concluded that **“whilst careful consideration needs to be given to the use of BMV, none of the policy or guidance set out above prohibits its use for large scale solar farms”**;
 - (iii) in the Kemberton decision the Inspector concluded at paragraph 60 that **“Overall, I consider that the proposal would not result in the loss of either agricultural land or an agricultural enterprise. Nor would it have an unacceptable impact on either agricultural land or an agricultural enterprise. The land could continue to be**

used for agricultural purposes alongside the production of renewable energy and could return fully to agricultural use at the end of the lifetime of the development. Accordingly, there would be no conflict with Policies CS13 and CS6 of the CS or with the Framework outlined above”.

Quantifying the Land Use Considerations

- 6.12 For completeness, this report now considers the potential economic implications and the reduction in food production from the land. There is no suggestion that non-agricultural land could be used for the deployment of solar at this scale. Accordingly, the effect on food production of relevance is not that of absolute production, but the relative benefits of BMV land over non-BMV land (i.e. what the difference would be if the solar farm was placed on non-BMV land rather than on BMV land).
- 6.13 The actual impacts on this farm are very small. The Proposed Development will involve approximately 13 ha from the farm of 3,300 ha, a reduction of much less than 1%. It will not affect labour, the use of buildings, or access to land. It will provide the farm with a steady and reliable income which will be a benefit.
- 6.14 We are not aware of any research that explicitly compares production and economics between BMV and non-BMV land. Therefore, as a crude measure, we have used the difference between “average” and “high” performance enterprises in the Nix Farm Management Pocketbook, September 2025, to compare the potential difference.
- 6.15 In the absence of any empirical data, an economic assessment is inevitably crude. Taking standard budgeting textbooks, such as the Nix Farm Management Pocketbook (extracts from which have been reproduced in **Appendix KCC4**), it is possible to show the difference between moderate and high yields as an illustration between crops.
- 6.16 Taking that crude measure and applying it to winter wheat and oilseed rape, the differences are shown below.

Table 2: Assessment of Economics of Farmed Land

Item	Winter Feed Wheat		Winter Oilseed Rape	
	Average	High	Average	High
Yield (t/ha)	8.2	9.4	3.5	4.0
Output (£)	£1,667	£1,889	£1,435	£1,640
Gross margin (£)	£988	£1,210	£825	£1,030
Uplift (£)	-	£222	-	£205

Nix Farm Management Pocketbook 2026 (September 2025)

- 6.17 Based on the economic benefits of the 11 ha of BMV land to non-BMV land would be around £2,400 per annum ($11 \text{ ha} \times £222 = £2,442$) (£2,250 - £2,400 based on 2026 budgets). Hence the economic benefits of a land parcel of this size are limited. The other benefits of the 11 ha of BMV land would be food production. When comparing the site with non BMV land there would be a production boost of about 13.2 tonnes per annum for wheat ($11 \text{ ha} \times 1.2 \text{ tonnes} = 13.2 \text{ tonnes per annum}$). In terms of oilseed rape there would be an increase in yield of 5.5 tonnes per annum. As described earlier, the panel area and associated planting is only 4 ha, an even smaller reduction in agricultural potential.
- 6.18 That annual impact of 13.2 tonnes can be considered against UK annual production. The UK produced just over 20 million tonnes of cereals and oilseeds in 2025, of which 12 million tonnes were wheat. (Defra, cereal and oilseed production in the United Kingdom 2025, 20th January 2026).
- 6.19 Food production is not lost in any event. The panels can be grazed by sheep. Accordingly agricultural production can continue throughout the operational phase. The amount of time required to manage sheep exceeds that of managing crops, so there would be a net increase in the need for agricultural labour.
- 6.20 Grazing under and around panels with sheep is common practice. Sheep can move around easily, and can see easily, underneath panels.

Photos 16 and 17: Sheep Grazing Solar Panel Areas





- 6.21 In the Department of Environment, Food and Rural Affairs (Defra) statistical publication “Agricultural Land Use in England at 1 June 2025 (25th September 2025) they recorded, for the first time in 2024, the use of solar panel areas on farms at 1st June. Of 9,500 ha of solar panels recorded on farms in 2025, 4,900 ha of solar panels were also being used for grazing. Clearly grazing is a common activity.

Land Use Balancing

- 6.22 The WMS (15th May 2024) sets out that “**even in the most ambitious scenarios**” meeting the renewable targets through solar “**would still occupy less than 1% of the Uks agricultural land**”. The following statistics are presented to provide some context for this figure:
- (i) the Utilised Agricultural Area (UAA) of land in England in 2025 was 8.8 million hectares (Agricultural Land Use in England at 1 June 2025, Defra, 25th September 2025);
 - (ii) the estimated proportion of BMV land in England is 42% (Technical Information Note TIN049, Natural England, **Appendix KCC2**). Applying that to the UAA means 3.7 million ha of BMV land was utilised in 2024;
 - (iii) if the 1% of agricultural land figure referenced in the WMS came into effect it would amount to about 88,000 ha of agricultural land, of which (on a straight statistical application) 37,000 ha (42%) could be BMV;
 - (iv) according to the latest Agricultural Land Use in England at 1 June 2025 (**Appendix KCC5**) statistics (Defra, 26th September 2024) the area of uncropped arable land decreased by 6% to 545,000 ha. Of this 100,000 ha were left as bare fallow and 445,000 ha were used for environmental benefit;
 - (v) The dataset identified that 4,900 ha were used for solar panels and also used for grazing production in 2025, and a further 5,000 ha were used for solar panels but not used for agricultural production;

- (vi) Currently there are of the order of 900,000 horses in the UK. The split between England and the other countries is not known exactly, but in terms of sports horses about two thirds are in England. If that applied to the total, then some 590,000 horses are in England, which if each requires 0.4 ha of land for grassland (grazing and hay) means about 240,000 ha of land is used for horses grazing and feeding. If 42% of that is BMV, some 100,000 ha of BMV is used for grazing or feeding horses. This I include only to illustrate the land use choices we make and the land potentially available.

- 6.23 The Solar Roadmap, published June 2025, sets out that the biggest threat to food production is climate change. Even under the most ambitious deployment scenarios ground-mounted solar would only occupy around 0.6% of the Utilised Agricultural Land by 2030. See section 3.22 above.

Inspectors' Decisions

- 6.24 Recent appeal decisions where food production was an issue for consideration concluded as follows.

- (i) in a decision at Thaxted in December 2023 (APP/C1570/W/23/3319421) the Inspector at paragraph 102 stated:

"I heard no compelling evidence that taking out of production almost 55ha of BMV on the appeal site, for a 40 year duration, would have a significant negative impact on food security either on its own or cumulatively with other BMV losses, nor that it would be likely to increase imports from other countries. The Government Food Strategy, published in 2022, stated that the UK is largely self-sufficient in wheat, most meats, eggs, and some sectors of vegetable production. Nothing in the Government food strategy policy paper changes the Government's policy towards the development of BMV as set out above".

- (ii) in a decision of June 2025 at Overton, Wakefield (APP/X4725/W/24/3354032) the Inspector considered absolute production, not just the incremental benefits of BMV, and concluded as follows in paragraph 38:

"The appellant's evidence indicates that the average yield of wheat on the farm is around 7.5 tonnes per ha, which over a 54.5 ha site would equate to around 408 tonnes per annum. Given nationally cereal production is in the region of 20 – 25 million tonnes per annum, the impact of the loss of this land for arable production would be negligible. Even if the crops were not used for livestock feed, this level of loss would not have an adverse impact on food security. Whilst I note the Council's concern regarding the cumulative impact of such developments, given the government estimate of solar farms occupying less than 1% of agricultural land, the cumulative impact would still be limited".

6.25 Similar conclusions have been reached at a larger, regional scale. Recent NSIP decisions have considered the effects on agricultural land and on food and other benefits. They have concluded as follows:

- (i) EN010127 Mallard Pass Solar Farm. There are 360 ha of BMV within the Order Limits. In the Secretary of State's decision letter of 12th July 2024 he reviewed (in isolation and in combination) the impacts on food production (sections 4.87 to 4.103). In 4.100 he concludes that the project and others in the region **"would represent around 0.5% of the BMV land across Lincolnshire and Rutland. The Secretary of State agrees with the ExA that the impact of the Proposed Development in relation to food production in the national context is negligible"**.
- (ii) EN010132 West Burton Energy Park, consented on 24th January 2025. The **"Secretary of State considers the fixed-term, reversible loss of land for food production is a negative impact of the Proposed Development, but the impact is small when considered against the total agricultural land available for food production in Lincolnshire"**;

Conclusion

- 6.26 There is no policy limitation to the use of BMV or non BMV land. Whilst this site contains BMV, the land and the BMV status will not be lost. The ALC grading will not be altered by the proposed development. Therefore, the policy that seeks to protect the resource rather than require its use is not harmed.
- 6.27 Policy does not prevent the use of BMV land for renewable energy. The NPPF and emerging local policy requires that the economic and other benefits should be **"recognised"** (these are considered in subsequent sections).
- 6.28 As per the various appeal decisions referred to, the use of BMV for solar development is not contrary to policy in principle.

7 SOIL CONSIDERATIONS

- 7.1 Soil is an important resource, and the installation of a solar farm needs to take account of the underlying resource. As described in section 4, the land and soil is not generally disturbed by the installation process.

The Soil Resource

- 7.2 As described in the ALC, the topsoil is generally a calcareous silty clay loam.

Effects on Soil

- 7.3 The benefits to soils from being rested from continual arable use are many.
- 7.4 The land will be put to grass and can be managed by the grazing of sheep. This is a common place practice and is entirely feasible.
- 7.5 What we know about soils in the UK is that continual arable production, as has been practiced on the site in the past, is generally not good for soils, and that conversion to grassland is generally good for soils and the biological functions within.
- 7.6 Some of the known benefits are summarised below:
- (i) soil is an important natural capital resource, but our understanding is limited by a lack of data. In the Environment agency's "summary of the state of the environment: soil" report of January 2023, (Research and analysis: Summary of the state of the environment: soils, Environment Agency (26 January 2023), they note that UK soils currently store about 10 billion tonnes of carbon, equal to 80 years of annual greenhouse gas emissions (GHG)
 - (ii) the report notes that soil biodiversity and the many biological processes and the soil functions that they support **"are thought to be under threat"** the statistics are concerning;
 - almost 4 million ha of soil are at risk of compaction
 - over 2 million hectares of soil are at risk of erosion
 - intensive agriculture has caused arable soils to lose about 40 – 60% of their organic carbon
 - (iii) the state of soil biology is poorly researched, but the report identifies that intensive agriculture reduced soil biodiversity. A recent study, 'Soil Health Pilot Study in England: Outcomes from an on-farm earth worm survey' (February 2019), identified that 42% of fields may have been overworked, as evidenced by an absence or scarcity of earthworms. It is noted that **"tillage had a negative impact on**

earthworm populations, and organic matter management did not mitigate tillage impacts”

- (iv) the UK food security report 2021, also notes that whilst grain is generally the most efficient form of production in terms of calories per hectare, it has significant environmental impacts. **“due to the lack of biodiversity in conventional grain fields, damage to soils through ploughing, environmental harms caused by fertilisers and pesticides, and the oil used embedded in fertilisers and field operations”**.
- (v) the Environmental Agency ‘State of the Environment: soil’ report 2019 notes that bare soils, reduced hedgerows and increased field sizes mean that, in England and Wales, an estimated 2.9 million tonnes of topsoil is lost to erosion every year. Erosion regularly exceeds the rate of formation of new soils (which is about 1 tonne per hectare per year) on many soils, with 40% of arable soils at risk, especially lighter soils on hillslopes and peats in upland areas. **“Significant decreases in erosion risk occurred when fields changed from winter cereal use to permanent grassland”** the EA reported. Management practices in arable land can make a big difference, but the constant vegetation cover of grassland reduces erosion significantly.
- (vi) organic matter in soils act like a sponge and can hold up to 20 times its weight in water. Most arable soils have lost 40-60% of their organic carbon (EA, *ibid*, page 8) The British Society of Soil Science Record (Science Note: Soil Carbon, BSSS (2021)) the declining state of soil carbon (soil organic carbon and soil inorganic carbon) and note that the greatest and most rapid soil carbon gains can be achieved through land use change, e.g. converting arable land to grassland. Sustainable soil management practices are needed for all soils.
- (vii) the role of soil organic carbon in soils is complex, as described in the British Society of Soil Science Note “Soil Carbon” (2021). As described under the heading “Soil Carbon Functions” on page 4, **“a soil with a greater SOC content has a more stable structure, is less prone to runoff and erosion, has greater water infiltration and retention, increased biological activity and improved nutrient supply compared to the same soils with a smaller SOC content. Even small increases in SOC can markedly influence and improve these properties”**.
- (viii) it is noted in that same report at the top of page 5 that **“Significant long-term land use change (e.g. conversion of arable land to grassland or woodland) has by far the biggest impact on SOC, but is unrealistic on a large scale because of the continued need to meet food security challenges”**.

- (ix) biodiversity across farms is also in a poor state. The 2019 State of Nature Report (The State of Nature 2019, The State of Nature Partnership (2019)) recorded increases and decreases in different species, but overall a decline in the abundance and distribution of the UK's species since 1970, continuing a trend started hundreds of years earlier. The House of Commons Environmental Audit Committee (House of Commons Environmental Audit Committee: Biodiversity in the UK, bloom or bust?, First report of session 2021-22 (23 June 2021)) recorded this in stark terms. The Summary started as follows: **“the world is witnessing a colossal decline in global biodiversity”**.

7.7 These benefits are recorded in the decisions of the of the inspectors at Thaxted referred to earlier. They are also recognised in the sector-specific National Policy Statement for Renewable Energy Infrastructure (EN-3, adopted 17th January 2024) at paragraph 2.10.89, which notes that **“solar farms have the potential to increase the biodiversity value of a site, especially if the land was previously intensively managed”**.

7.8 The benefits have been recognised by many Inspectors in appeal decisions. A few references are:

- (i) in the decision on the Nationally Significant Infrastructure Project at Little Crow, Lincolnshire, which included 36.6 ha of Subgrade 3a, the Secretary of State agreed with his Inspector that the effect would be **“medium term, reversible, local in extent and of negligible significance during the operational phase with a moderate beneficial effect for the quality of soils because intensive cropping would be replaced with the growing of grass”** (para 4.50) (reference EN010101);
- (ii) in the appeal decision for a solar farm at Bramley, Hampshire (APP/H1705/W/22/3304561) the inspector, noting that 53% of the site was of BMV, (paragraph 58) and going on to say that **“The agricultural land would not be permanently or irreversibly lost, particularly as pasture grazing would occur between the solar panels. This would allow the land to recover from intensive use, and the soil condition and structure to improve. The use of the soils for grassland under solar panels should serve to improve soil health and biodiversity and the proposed LEMP, which could be secured by a condition attached to any grant of planning permission, includes measures to improve biodiversity of the land under and around the panels”**;
- (iii) in the planning appeal decision on 27th June 2023 for land south of the Leeming Bar substation (APP/G2713/W/23/3315877) the inspector noted **“I am satisfied from the evidence before me that resting the land from intensive agriculture would be likely to improve soil health by increasing the organic matter in the soil and**

improving soil structure and drainage, even if a return to arable farming would then start to reverse this improvement” (paragraph 21);

- (iv) in the decision for a 47MW solar farm at Little Cheveney Farm, Marden (APP/U2235/W/23/3321094), a site containing 47% BMV, the Inspector noted the benefits for soil, commenting in paragraph 51 that **“there is nothing to contradict the Appellant’s evidence that the land would benefit from a change in the nature of its use – essentially that a ‘rest’ from intensive arable production would enhance land quality”** (note: this is soil quality, not ALC grade).

- 7.9 There will be significantly reduced use of chemicals (e.g. Pesticides, insecticides) for the duration of the operational phase compared to continual arable cropping.

Conclusion

- 7.10 By adhering to good practice, soils will not be damaged during the installation process. Any damage that does occur is readily rectifiable.
- 7.11 Long term the soil will benefit from being in grassland.

8 WHETHER POORER QUALITY LAND COULD BE USED IN PREFERENCE

Introduction

- 8.1 This report now considers land quality in the wider area. It does so in the context that planning policy does not set a sequential test.

Planning Policy

- 8.2 The NPPF sets out a preference for using poorer quality land, but that is not a sequential test. In a case such as a solar farm, where the underlying land quality resource is not affected (i.e. there is neither sealing nor land quality down grading), the BMV resource is protected. The decision therefore comes down to a land use decision.

- 8.3 There is no policy or initiative that requires agricultural land, or BMV land, to be used for productive agricultural purposes.

- 8.4 Three recent appeal decisions address this point, second post-dates the 2024 WMS:

- in the Little Cheveney Farm decision (APP/U2235/W/23/3321094) the inspector reported as follows in paragraph 43:

“On behalf of the Council it was suggested that the expressed preference for the use of lower quality land should be interpreted as giving precedence to the use of that land. In turn it was argued that this would require an assessment akin to a sequential assessment to enable the best choice to be made. That is not an interpretation accepted by the Appellant, and I also do not agree that preference can be equated with precedence in this context. In support of the position the Appellant quotes from the advice of NPS EN-3, which states that *“While land type should not be a predominating factor in determining the suitability of the site location applicants should, where possible, utilise suitable previously developed land, brownfield land, contaminated land and industrial land.”* Although this advice is primarily intended for use in the considerations of NSIP schemes, as I have noted above the contents of NPSs can be a material consideration in other casework. I consider that to be the case here, in part because the proposed output of the solar farm is close to the NSIP threshold”;

- in the Berden Hall Farm decision (S62A/22/0006) the Inspector considered, in a wholly case, the effects including the effects on food production. He then turned to consider alternative sites in paragraph 58, as follows:

“That brings me to how one should approach this matter in the light of the Framework, the Written Ministerial Statements and the PPG. Notwithstanding all this material, the Courts have set out that the PPG does not mandate the consideration of alternatives and still less does it require a sequential test to be adopted (Bramley Solar Farm Residents Group v Secretary of State 2023 EWHC 2842 Admin (Paragraph 179)). There is nothing in the 2015 Written Ministerial Statement or the 2024 Written Ministerial Statement that requires anything of that sort and neither does footnote 62 to the Framework. As was pointed out in the Court case referred to above, where the Framework requires a sequential test, for example in relation to flood risk, this is clearly set out”;

- in the New Hall appeal decision (APP/X4725/W/24/3354032) the Inspector noted at paragraph 16 that the WMS dated 25th March 2015 in respect of **“most compelling evidence”** is **“out of date”**. She noted in paragraph 40 that:

“However, a recent High Court judgement, subsequent to that at Lullington concluded that the preference for the use of poorer quality agricultural land in the PPG and other documents does not mandate the consideration of alternative sites. Moreover, it is a well-established legal principle that if a development of a site is acceptable in planning terms, the fact that other land exists that may be more acceptable does not justify the refusal of planning permission. ...”.

Land Quality in the Area

- 8.5 This report now turns to assess land quality in the wider area. This can only be done at a fairly high level. To determine land quality accurately it is necessary to access the land and sample, usually on a regular 100-meter grid. A surveyor can normally sample 20 – 25 points per day. This is described in Natural England’s TIN049 (**Appendix KCC2**).
- 8.6 To set all of this in context, BMV land is not a rare resource. Natural England estimate in TIN049 (**Appendix KCC2**) that 42% of agricultural land is BMV. Taking just the area of agricultural land in active agricultural use, which was 8.8 million hectares on 1st June 2025 (Agricultural Land Use in England at 1 June 2025, Defra (25 September 2025)), this means some 3.7 million hectares of BMV is in active agricultural use. Once large areas of poorer quality land, such as the various moors, Lake District, Pennines etc are taken into account, generally gentle sloping or level areas on the eastern side of England have a higher proportion of BMV than 42%.

- 8.7 Reference is often made to the provisional ALC maps, published at a scale of 1:250,000. These have now been digitised, which means that you can zoom in and seemingly collect ALC data for whole or parts of fields. However, as explained by Natural England in TIN049 **(Appendix KCC2)** these maps are not intended for such use. They are not the result of field survey and were published under an old ALC methodology. Therefore, they do not allow site-specific analysis.
- 8.8 Further they do not attempt to identify subgrades of Grade 3, as the plans were produced before Grade 3 was subdivided. Statistically about 40% of Grade 3 land falls within Subgrade 3a. However, in parts of the country the proportion of Subgrade 3a is expected to be much higher.
- 8.9 On the published “provisional” ALC maps from the 1970s the land on-site is shown as undifferentiated Grade 3, as is most of the land around the Site. Land Surrounding Chicklade had been identified as provisional Grade 2, the Site is in the poorer quality land according to the provisional mapping.

Insert 5: Provisional ALC Map



- 8.10 The predictive likelihood BMV likelihood maps predict that the land is of high likelihood of BMV land (>60% area BMV). This can be seen on the predictive map below.

Insert 6: Predictive Likelihood of BMV Map



- 8.11 The provisional map does not identify any land of lower agricultural quality in the locality. The site is located within an area of high likelihood of BMV land. The Site can not be moved from the location proposed due to a need to connect to the National Grid.
- 8.12 The Department for the Environment, Food and Rural Affairs (Defra) has now published a new “Predictive Agricultural Land Classification Map for England”, which predicts, under the 1988 ALC methodology, the grading of land, including subgrades.
- 8.13 This map is still a prediction and detailed field survey is needed for site specific analysis. The new mapping estimates that more than half of agricultural land in England will be of BMV quality, as follows.

Table 3. Breakdown of Predictive ALC in England

ALC Grade	Percentage of all land (%)	Percentage of agricultural land (%)
1	3.5	4.4
2	15.2	19.0
3a	21.9	27.3
3b	24.5	30.5
4	7.6	9.5
5	7.5	9.3
Non-ag	8.4	-
Urban	11.4	-

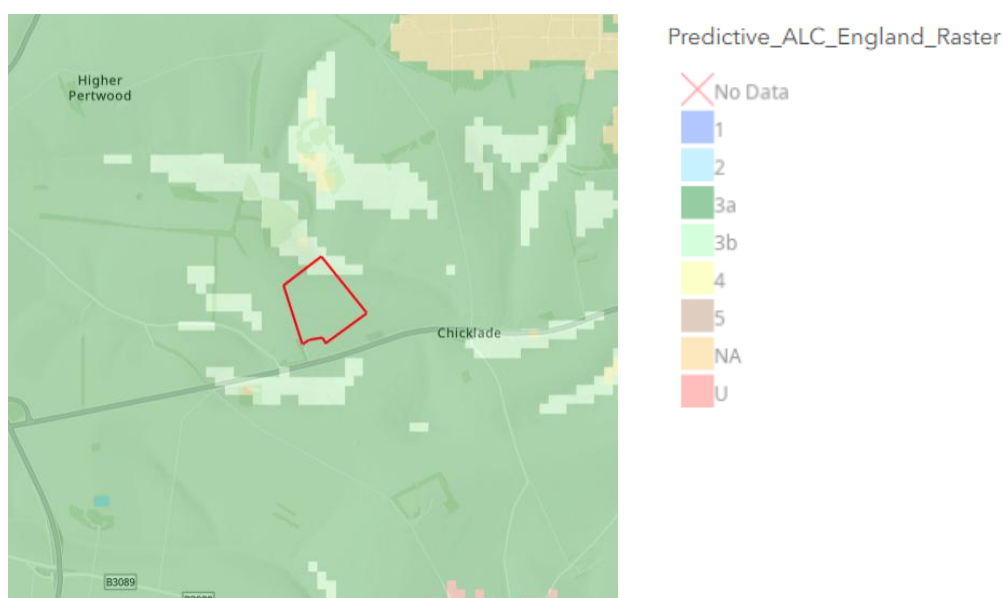
Total	100.0	100.0
-------	-------	-------

Source: RDE118 Development of a Predictive Agricultural Land Map for England, Cranfield Environmental Centre (2025)

8.14 The proportion of agricultural land falling into ALC Grades 1, 2 and 3a is therefore 50.7%.

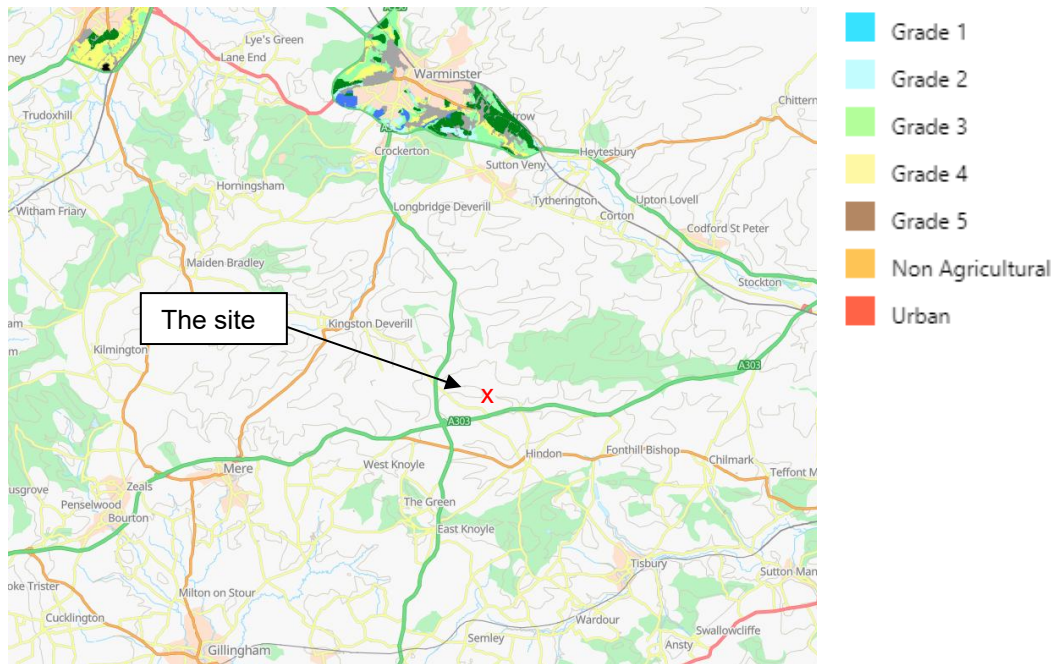
8.15 Around the Site land is shown on the predictive map as mostly being of Subgrade 3a quality, whilst there are smaller pockets of Subgrade 3b land quality present on the predictive map these areas would not be able to contain the Site. There is limited evidence that another area within the vicinity of the Site would contain a lesser percentage of BMV than that of the Site.

Insert 7. New Predictive ALC Map (2026)



8.16 Where sites have been surveyed in the past, mostly by MAFF or its agencies between 1989 and 1995, the results are available on www.magic.gov.uk. As shown below, no sites nearby have been surveyed.

Insert 7: Surveyed Land in the Area



- 8.17 Therefore there is no evidence of sites of lower quality in the locality, and particularly on the western side of Chicklade.
- 8.18 Based on this, it can be concluded that, in terms of land quality in the local area:
- (i) the land is shown on provisional mapping as undifferentiated Grade 3;
 - (ii) the predictive likelihood of BMV maps show the Site to be located within an area of agricultural land with a high likelihood of being BMV land (>60%);
 - (iii) land near to the Site is predicted to be Grade 2 or undifferentiated Grade 3, and further afield is predicted to be in the 20-60% or <20% likelihood of BMV;
 - (iv) therefore, there is little evidence of poorer quality land in the wider area.
- 8.19 The Site itself is a mixture of Subgrade 3a and Subgrade 3b land quality. When considering whether poorer quality land is available, it is evident from the provisional, predictive and surveyed sites, that the land around the Site is considered likely to be of a similar quality to that of the Site.

Balancing Considerations

- 8.20 Policy does not dictate where land use changes should occur. Policy does not prevent the use of agricultural land. Policy, as read in the context of the whole NPPF, requires consideration of the economic and other benefits of BMV land. Policy in the context of plan making, notes that where significant development of agricultural land is demonstrated to be necessary, poorer quality land should be used in preference (NPPF).

8.21 Accordingly;

- policy does not place a bar on the development of BMV land;
- the economic benefits of BMV must be considered;
- only small areas of BMV are being altered by the creation of the associated infrastructure of the solar farm, and these areas are capable of full restoration on decommissioning.

8.22 The disturbance is limited to very small areas of the site namely bases for the solar farm and its associated infrastructure. The “loss” is only temporary. These areas can be restored upon decommissioning of the site. There will be no permanent loss.

9 SUMMARY AND CONCLUSIONS

- 9.1 The application seeks planning consent for a solar farm and associated infrastructure on agricultural land near Chicklade. The proposed panels will cover an area, including woodland planting and hedges, of about 4 ha. The rest of the Site will be agricultural land managed for BNG purposes.
- 9.2 The development is located adjacent to an approved EV charging station which is under construction.
- 9.3 The part of the large site proposed for the solar panels is Subgrade 3a “good” quality agricultural land.
- 9.4 There is no bar to the use of land of BMV quality. There is a preference to using land of poorer quality, but there is no sequential test, nor is an applicant obliged to show either need for the development (significant weight in favour should be given, the NPPF advises) or that this is the lowest quality land available.
- 9.5 There is, nevertheless, a preference to using land of the of the lowest quality available.
- 9.6 The land has been classified as comprising 10.3 ha (83.7%) Subgrade 3a agricultural land and 2 ha (16.3%) Subgrade 3b agricultural land. The area of Subgrade 3b land lies on sloping land to the north and so is less suitable for locating solar panels. It would also be detached from the EV charging station for which the panels will generate energy. Therefore there is no potential to micro-site the proposed development onto poorer quality land within the Site.
- 9.7 Only a very small area of land quality will be temporarily affected for the creation of bases for the associated infrastructure. This area can be restored after decommissioning.
- 9.8 The Site may be used for pastoral farming where that compliments the majority of the Site being used for BNG purposes, for the lifetime of the development. The soil resource is not harmed. Land quality is not lost.
- 9.9 Neither is there any significant effect on land use. There is no planning policy, no other policy, no initiative and no requirement, for land to be used for active agricultural use or for food production. Large areas are funded for agri-environmental and tree planting. Many decisions, including Secretary of State decisions relating to large NSIP solar farms, have identified that food production will overall not be significantly harmed. The recent Ministerial Statements make that clear.

- 9.10 Agricultural land quality should not be a constraint to development. The NPPF requires that it be recognised, but does not constrain development, which is significant development, and in any case, there is no evidence that poorer quality land is available within the locality.
- 9.11 The Wiltshire Council Core Strategy requires assessment to justify the development on BMV land. This has been competed by quantifying the economic and other benefits of the BMV land within the Site, local farming considerations, and why the development cannot be placed on poorer quality land, a small amount of which is within the wider Site.
- 9.12 Agricultural matters should not prevent development for a solar farm in this case.

Appendix KCC1
Outline Soil Management Plan

**CHICKLADE SOLAR,
WILTSHIRE**

**OUTLINE SOIL
MANAGEMENT PLAN**

January 2026





**CHICKLADE SOLAR,
WILTSHIRE**

**OUTLINE SOIL
MANAGEMENT PLAN**

January 2026

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CONTENTS

- 1 Introduction
- 2 Soil Resources
- 3 Soil Testing
- 4 Principles for Construction
- 5 Principles for Operation
- 6 Principles for Decommissioning

1 INTRODUCTION

- 1.1 This outline soil management plan (oSMP) sets out the principles for soil management for the construction of a solar farm and associated infrastructure on the Site at Chicklade extending to approximately 13 ha.
- 1.2 The proposed development is the installation of a solar farm and associated infrastructure. The layout is shown on the extract from the site plan below.

The Proposed Development



- 1.3 The layout involves fixed south facing solar PV arrays arranged in strings on an east – west frame work.
- 1.4 This oSMP:
- describes the soils;
 - sets out general principles for soil testing;
 - sets out general principles for the construction phase;
 - sets out general principles for the operational phase;
 - sets out general principles for decommissioning.

2 SOIL RESOURCES

- 2.1 The topsoil across the Site is a mixture of heavy silty clay loams and medium silty clay loams. The texture is consistent.
- 2.2 The subsoils across the site are also a medium or heavy silty clay loam with a consistent amount of stones found within. Heavy silty clay loam subsoils can be found in the south of the Site, whilst the medium silty clay loam subsoils are located to the north of the Site.
- 2.3 Across the site from depths of 22cm to 70cm chalk stones can be found. Any ground works will need to take note of this as the soil profile will need to be restored as closely as possible to the original after any ground works have taken place.
- 2.4 Topsoil depth across the site varies from 22 – 27cm. There is no clear change in colour, for any stripping of soils the two soils (topsoil and subsoil) need to be kept separate. Topsoil colours are Munsell colour 10YR4/4 and 10YR4/3 over a very pale brown Subsoil 10YR7/3.
- 2.5 The soils on the site on the 2nd December 2025, were found to be mostly dry and had no clear colour differences between the topsoil and the upper subsoil. These are illustrated below.

Soils on Site, 2nd December 2025



3 SOIL TESTING

- 3.1 The most important consideration when handling soil, or when travelling across soils, is to minimise or avoid activity when the soils are too wet. Some of the soils on this site are silty clay, which are more resilient to being handled when wet than heavy clays but still need to be handled with care.
- 3.2 For clayey soils, soils should not be handled if the soil fails the consistency test. Those working the Site need to be familiar with, and apply, this test.
- 3.3 In short if the soils can be rolled into a ball or thread, and that thread holds its shape, the soils are too wet. An example is shown below.

Clay Soils on the Cusp of Suitability, generally keep shape (not from this site)



- 3.4 If the soils crumble and the thread does not hold its shape the soils are suitable for being handled such as the example below.

Clay Soils Suitable, crumble when rubbed



- 3.5 If the soils are not holding a thread, the examination method should also be attempted. This involves rolling the soil into a ball. If water cannot be squeezed out, and the soil darkens on adding water, it is suitable for being handled.

Sandy Loam Soils, Examination Test



- 3.6 Soils are least likely to be suitable for handling between October and late February, in a normal year, but with unseasonal rainfall patterns in recent years there may be more suitable times within that period when soils will be sufficiently dry.

4 PRINCIPLES FOR CONSTRUCTION

- 4.1 Soil management principles are set out in a number of documents, but those of most relevance are:
- Code of Practice for the Sustainable Use of Soils on Construction Sites, Defra (March 2011).
 - Working with Soil Guidance Note on Benefitting from Soil Management in Development and Construction, British Society of Soil Science (v 3 January 2022).
 - Good Practice Guide for Handling Soils in Mineral Workings, The Institute of Quarrying (July 2021).
 - Building on Soil Sustainability: principles for soils in planning and construction, Cornwall Council and others (September 2022).
 - Planning and Aftercare Advice for Reclaiming Land to Agricultural Use, Natural England (April 2022), especially in respect of soil bund management.
 - BRE Agricultural Practice Guide for Solar Farms (2015).
 - Agricultural and Horticultural Development Board "Field Drainage Guide, (2024).

Overview

- 4.2 For much of the installation process there is no requirement to move or disturb soils. Soils will need to be moved and disturbed to create any temporary working compounds and the one small fixed infrastructure base. Soils will need to be disturbed to enable cables to be laid, but these soils will be reinstated shortly after they are lifted out (i.e. this is a swift process).
- 4.3 In that very small area where soil needs to be disturbed to create the base for the fixed equipment, the soil will be stored in in a shallow mound adjacent to the equipment. The soil needs to be looked after because it will be needed at the decommissioning phase to restore the land under the base back to agricultural use.
- 4.4 It is unlikely that subsoil will need to be removed to create the shallow base, but if subsoil does need to be moved and stored, it will be stored separately to the topsoil and clearly marked. The ALC has identified that all the topsoil is between 22 and 70cm deep across the whole site.
- 4.5 For most of the proposed development soils do not need to be disturbed. The effects on agricultural land quality and soil structure are therefore limited to the effects of vehicle passage. Therefore, the key consideration is to ensure that soils are passed over by vehicles (trafficked) when the soils are in a suitable condition, and that if any localised

damage or compaction occurs (which is common with normal farming operations too), it is ameliorated suitably.

4.6 The key principles for avoiding damage to soils are:

- timing.
- retaining soil profiles.
- avoiding compaction.
- ameliorating compaction.

Timing

4.7 The most important management decision/action to avoid adverse effects on soils is the timing of works. If the construction work takes place when soil conditions are sufficiently dry, then damage from vehicle trafficking and trenching will be minimal. This is good practice and is to be aimed-for, so far as possible.

4.8 Vehicle travel over soils creating limited impact is shown below.

Soils Suitable for Trafficking



4.9 Poor practice is shown below. If this type of soil disturbance occurs it can be rectified, as set out below, but as a point of principle if soils are rutting as shown below, they are not well suited to being trafficked. Work should, so far as possible, be delayed until soils dry out.

Soils Not Suitable for Trafficking



- 4.10 Soils on this Site are not suitable for being moved or trafficked extensively when they are wet. The soils on this site are medium silty clay loams and heavy silty clay loams. Clays have small particles and bind together and moving them when they are wet not only has a damaging effect on the soils, but it is also very likely to be very difficult to work.
- 4.11 In localised instances where it is not possible to avoid undertaking construction activities when soils are wet and topsoil damage occurs then soils can be recovered by normal agricultural management, using normal agricultural cultivation equipment (subsoiler, harrows, power harrows etc) once soils have dried adequately for this to take place. There may be localised wet areas in otherwise dry fields, for example, which are difficult to avoid.

Retaining Soil Profiles

- 4.12 The successful installation of cabling at depths of >60cm requires a trench to be dug into the ground. Topsoil coverage is generally about 25cm, with subsoils below that being deeper in depth. As set out in the BRE Agricultural Good Practice Guidance for Solar Farms:
- “When excavating cable trenches, storing and replacing topsoil and subsoil separately and in the right order is important to avoid long-term unsightly impacts on soil and vegetation structure. Good practice at this stage will yield longer-term benefits in terms of productivity and optimal grazing conditions”.**
- 4.13 In those areas where the soil is dug up (principally for cable trenching), the soils should be returned in as close to the same order, and in similar profiles, as it was removed.

Avoiding Compaction

- 4.14 This oSMP sets out when soils should generally be suitable for being trafficked. There may be periods within this window, however, when periodic rainfall events result in soils becoming liable to damage from being trafficked or worked. In these (likely rare) situations, work should only continue with care, to minimise structural effects on the soils, until soils have dried, usually within 48 hours of heavy rain stopping.

Ameliorating Compaction

- 4.15 If localised compaction occurs during construction, it should be ameliorated. This can normally be achieved with standard agricultural cultivation equipment, such as subsoilers (if required), power harrows and rolls.
- 4.16 The amount of restorative work will vary depending upon the localised impact. Consequently, where the surface has become muddy, this can be recovered once the soil has dried, with a tine harrow and, as needed, a roller or crumbler bar.
- 4.17 If there are any areas where there has been localised damage to the soils due to vehicle passage, for example, a low wet area within a field which despite best efforts could not be avoided, this should be made good and reseeded at the end of the installation stage, when conditions are suitable. This is illustrated below.

Localised Restoration



- 4.18 The soils across the site, provided they have dried sufficiently, will readily restore. The ruts need to be harrowed level when the ground is dry, and then they will naturally restore.
- 4.19 Accordingly the ground surface should be generally levelled prior to any seeding or reseeded.

5 PRINCIPLES FOR OPERATION

- 5.1 The land around the Solar PV Arrays will be managed including potentially by the grazing of sheep.

- 5.2 Panels grazed by sheep tend to be free of weeds, as shown below.

Sheep Grazing Under Panels



- 5.3 Any localised weed treatment can be carried out at the appropriate time of the year using a quad-mounted sprayer, or by hand using a strimmer or knapsack sprayer.

Ongoing Maintenance

- 5.4 There are many different cleaners on the market, some tractor based and some operated from smaller machines, such as below.

Cleaning of Solar Arrays



- 5.5 The normal cleaning period is early summer, so that panels are clean for the maximum light period, so damage is unlikely.

- 5.6 If vehicles, including farm vehicles, cause ruts in the soil these will naturally repair in time, especially as the land is grazed by sheep and their feet are excellent at levelling land. Alternatively, a light harrow or rolling will restore the ruts, when the soil is still soft enough to roll but hard enough to not rut more.

Ruts Caused by Vehicles



- 5.7 If vehicles have caused rutting it is probably, as per the example above, only localised. In the photograph above this is a wet spot, and on the land either side of the ruts within the row there is no evidence of wheel indentation. If these areas are not levelled, they will tend to sit with water in them.
- 5.8 Localised, small rutting should be repaired by either treading-in the edges with feet, by light rolling or harrowing, or adding a small amount of soil simply to fill-in the depression so that water does not collect there.
- 5.9 Deeper rutting will require either light harrowing in the drier period, or some soil adding, or both, before reseeding.

Emergency Repairs

- 5.10 For the duration of the operational phase there should be only localised and infrequent need to disturb soils, such as for repair of a cable. Any works involving trenching should be carried out, ideally, when the soils are dry but recognising that any works will be those of emergency repair, that may not be possible.
- 5.11 Accordingly if new cabling is needed and must be installed in wet periods, it can be expected that the trench will look unsightly initially, such as the example below.

Trench During Wet Period



- 5.12 Any area disturbed should be harrowed or raked level once the soils have dried and be reseeded. These areas will be small, and this can probably be done by hand.

6 PRINCIPLES FOR DECOMMISSIONING

- 6.1 It is not possible to predict the effects of climate change on soils and seasons, and therefore prior to decommissioning a fresh soil assessment will be required to develop a detailed plan for the decommissioning phase. The assessment will need to focus on the appropriate timing of activities.

Removal of Panels

- 6.2 At an appropriate time when soils are sufficiently dry, the panels should be unbolted and removed from the site for recycling.
- 6.3 Once the panels have been unbolted and removed, the framework will then be a series of legs, as shown below.

The Framework



- 6.4 These will be removed by low-ground pressure machines, in a reverse operation to the installation. These machines will provide a pneumatic tug-tug-tug vertically upwards. This will break the seal between soil and leg, and once that surface tension is released the leg will come out easily.
- 6.5 The legs will be loaded onto trailers and removed.
- 6.6 There will be no significant damage to the soils, and no significant compaction.

Removal of Cables

- 6.7 Cables buried will be removed. This is likely to need a trench to be dug. This will be done is done mostly with either a mini digger or a trenching machine. An example trench, with the topsoil placed one side and subsoil on the other (below 20 - 30cm), is shown below, and with the soil put back after cable installation. The type of machinery used for trenching is shown below, taken from the BRE National Solar Centre “Agricultural Good Practice Guidance for Solar Farms” (2013).

Machinery Used for Trenching



Cable trenching, showing topsoil stripped and set to one side, with subsoil placed on the other side ready for reinstatement (photo courtesy of British Solar Renewables)

- 6.8 Once the trench has been backfilled it can be left for cultivation with the rest of the field post removal of panels.

Removal of Fixed Infrastructure

- 6.9 Fixed equipment, such as that shown below, will need to be removed. Low ground pressure vehicles, and cranes, will be needed to lift the decommissioned units onto trailers, and removed from site. There is only one small item of such equipment within this scheme.

Fixed Equipment



- 6.10 Any concrete bases will need to be broken up. This will most likely involve breaking with a pneumatic drill to crack the concrete, after which it can be dug up and loaded onto trailers and removed.
- 6.11 The ground beneath the base may then benefit from being subsoiled, to break any compaction. This can be done by standard tractor-mounted equipment, such as the following examples.

Example of Tractor Mounted Equipment



Reinstatement of Soils

- 6.12 Topsoil from the storage areas will then be returned and spread to the depth removed. The area will then be cultivated, probably in combination with the whole of each field.

Fences and Gates, and CCTV Cabling

- 6.13 The cabling will be removed in the summer months, after the panels have been removed. This will involve a tractor and trailer. The CCTV cabling is shallow buried and will probably pull out without the need for trenching, but if required trenches will be dug, as described above, and replaced in order once the cables have been removed.

- 6.14 Fences and gates will be rocked by machinery and pulled out. The holes are generally small and will fill in easily, but the bucket could be used to loosen the surface so that soil fills the void, if there is a risk of injury from the small holes.

Cultivation

- 6.15 The fields will be handed back to the farmers. Whether they are handed back as grassland or sprayed off and cultivated, will be determined in discussions with each landowner.

APPENDIX KCC2
Natural England's Technical
Information Note TIN049

Agricultural Land

Classification: protecting the best and most versatile agricultural land

Most of our land area is in agricultural use. How this important natural resource is used is vital to sustainable development. This includes taking the right decisions about protecting it from inappropriate development.

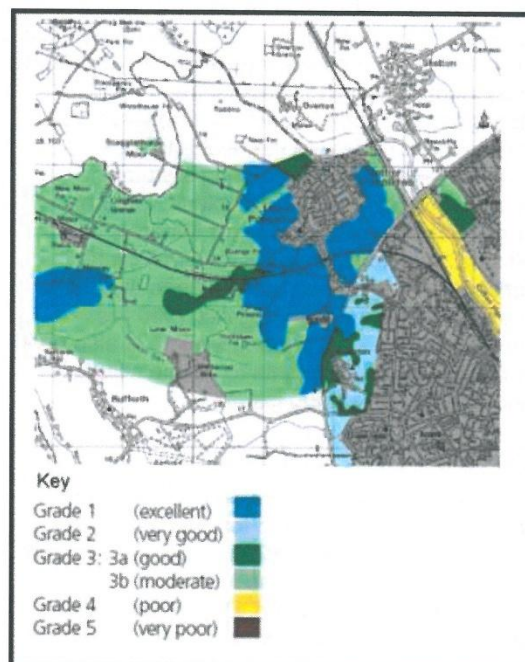
Policy to protect agricultural land

Government policy for England is set out in the National Planning Policy Framework (NPPF) published in March 2012 (paragraph 112). Decisions rest with the relevant planning authorities who should take into account the economic and other benefits of the best and most versatile agricultural land. Where significant development of agricultural land is demonstrated to be necessary, local planning authorities should seek to use areas of poorer quality land in preference to that of higher quality. The Government has also re-affirmed the importance of protecting our soils and the services they provide in the Natural Environment White Paper The Natural Choice:securing the value of nature (June 2011), including the protection of best and most versatile agricultural land (paragraph 2.35).

The ALC system: purpose & uses

Land quality varies from place to place. The Agricultural Land Classification (ALC) provides a method for assessing the quality of farmland to enable informed choices to be made about its future use within the planning system. It helps

underpin the principles of sustainable development.



Agricultural Land Classification - map and key

Second edition 19 December 2012

www.naturalengland.org.uk



Agricultural Land Classification: protecting the best and most versatile agricultural land

The ALC system classifies land into five grades, with Grade 3 subdivided into Subgrades 3a and 3b. The best and most versatile land is defined as Grades 1, 2 and 3a by policy guidance (see Annex 2 of NPPF). This is the land which is most flexible, productive and efficient in response to inputs and which can best deliver future crops for food and non food uses such as biomass, fibres and pharmaceuticals. Current estimates are that Grades 1 and 2 together form about 21% of all farmland in England; Subgrade 3a also covers about 21%.

The ALC system is used by Natural England and others to give advice to planning authorities, developers and the public if development is proposed on agricultural land or other greenfield sites that could potentially grow crops. The Town and Country Planning (Development Management Procedure) (England) Order 2010 (as amended) refers to the best and most versatile land policy in requiring statutory consultations with Natural England. Natural England is also responsible for Minerals and Waste Consultations where reclamation to agriculture is proposed under Schedule 5 of the Town and Country Planning Act 1990 (as amended). The ALC grading system is also used by commercial consultants to advise clients on land uses and planning issues.

Criteria and guidelines

The Classification is based on the long term physical limitations of land for agricultural use. Factors affecting the grade are climate, site and soil characteristics, and the important interactions between them. Detailed guidance for classifying land can be found in: *Agricultural Land Classification of England and Wales: revised guidelines and criteria for grading the quality of agricultural land* (MAFF, 1988):

- **Climate:** temperature and rainfall, aspect, exposure and frost risk.
- **Site:** gradient, micro-relief and flood risk.
- **Soil:** texture, structure, depth and stoniness, chemical properties which cannot be corrected.

The combination of climate and soil factors determines soil wetness and droughtiness.

Wetness and droughtiness influence the choice of crops grown and the level and consistency of yields, as well as use of land for grazing livestock. The Classification is concerned with the inherent potential of land under a range of farming systems. The current agricultural use, or intensity of use, does not affect the ALC grade.

Versatility and yield

The physical limitations of land have four main effects on the way land is farmed. These are:

- the range of crops which can be grown;
- the level of yield;
- the consistency of yield; and
- the cost of obtaining the crop.

The ALC gives a high grading to land which allows more flexibility in the range of crops that can be grown (its 'versatility') and which requires lower inputs, but also takes into account ability to produce consistently high yields of a narrower range of crops.

Availability of ALC information

After the introduction of the ALC system in 1966 the whole of England and Wales was mapped from reconnaissance field surveys, to provide general strategic guidance on land quality for planners. This Provisional Series of maps was published on an Ordnance Survey base at a scale of One Inch to One Mile in the period 1967 to 1974. These maps are not sufficiently accurate for use in assessment of individual fields or development sites, and should not be used other than as general guidance. They show only five grades: their preparation preceded the subdivision of Grade 3 and the refinement of criteria, which occurred after 1976. They have not been updated and are out of print. A 1:250 000 scale map series based on the same information is available. These are more appropriate for the strategic use originally intended and can be downloaded from the Natural England [website](http://magic.defra.gov.uk/). This data is also available on 'Magic', an interactive, geographical information website <http://magic.defra.gov.uk/>.

Since 1976, selected areas have been re-surveyed in greater detail and to revised

Agricultural Land Classification: protecting the best and most versatile agricultural land

guidelines and criteria. Information based on detailed ALC field surveys in accordance with current guidelines (MAFF, 1988) is the most definitive source. Data from the former Ministry of Agriculture, Fisheries and Food (MAFF) archive of more detailed ALC survey information (from 1988) is also available on <http://magic.defra.gov.uk/>. Revisions to the ALC guidelines and criteria have been limited and kept to the original principles, but some assessments made prior to the most recent revision in 1988 need to be checked against current criteria. More recently, strategic scale maps showing the likely occurrence of best and most versatile land have been prepared. Mapped information of all types is available from Natural England (see *Further information* below).

New field survey

Digital mapping and geographical information systems have been introduced to facilitate the provision of up-to-date information. ALC surveys are undertaken, according to the published Guidelines, by field surveyors using handheld augers to examine soils to a depth of 1.2 metres, at a frequency of one boring per hectare for a detailed assessment. This is usually supplemented by digging occasional small pits (usually by hand) to inspect the soil profile. Information obtained by these methods is combined with climatic and other data to produce an ALC map and report. ALC maps are normally produced on an Ordnance Survey base at varying scales from 1:10,000 for detailed work to 1:50 000 for reconnaissance survey

There is no comprehensive programme to survey all areas in detail. Private consultants may survey land where it is under consideration for development, especially around the edge of towns, to allow comparisons between areas and to inform environmental assessments. ALC field surveys are usually time consuming and should be initiated well in advance of planning decisions. Planning authorities should ensure that sufficient detailed site specific ALC survey data is available to inform decision making.

Consultations

Natural England is consulted by planning authorities on the preparation of all development

plans as part of its remit for the natural environment. For planning applications, specific consultations with Natural England are required under the Development Management Procedure Order in relation to best and most versatile agricultural land. These are for non agricultural development proposals that are not consistent with an adopted local plan and involve the loss of twenty hectares or more of the best and most versatile land. The land protection policy is relevant to all planning applications, including those on smaller areas, but it is for the planning authority to decide how significant the agricultural land issues are, and the need for field information. The planning authority may contact Natural England if it needs technical information or advice.

Consultations with Natural England are required on all applications for mineral working or waste disposal if the proposed afteruse is for agriculture or where the loss of best and most versatile agricultural land agricultural land will be 20 ha or more. Non-agricultural afteruse, for example for nature conservation or amenity, can be acceptable even on better quality land if soil resources are conserved and the long term potential of best and most versatile land is safeguarded by careful land restoration and aftercare.

Other factors

The ALC is a basis for assessing how development proposals affect agricultural land within the planning system, but it is not the sole consideration. Planning authorities are guided by the National Planning Policy Framework to protect and enhance soils more widely. This could include, for example, conserving soil resources during mineral working or construction, not granting permission for peat extraction from new or extended mineral sites, or preventing soil from being adversely affected by pollution. For information on the application of ALC in Wales, please see below.

Agricultural Land Classification: protecting the best and most versatile agricultural land

Further information

Details of the system of grading can be found in: *Agricultural Land Classification of England and Wales: revised guidelines and criteria for grading the quality of agricultural land* (MAFF, 1988).

Please note that planning authorities should send all planning related consultations and enquiries to Natural England by e-mail to consultations@naturalengland.org.uk. If it is not possible to consult us electronically then consultations should be sent to the following postal address:

Natural England
Consultation Service
Hornbeam House
Electra Way
Crewe Business Park
CREWE
Cheshire
CW1 6GJ

ALC information for Wales is held by Welsh Government. Detailed information and advice is available on request from Ian Rugg (ian.rugg@wales.gsi.gov.uk) or David Martyn (david.martyn@wales.gsi.gov.uk). If it is not possible to consult us electronically then consultations should be sent to the following postal address:

Welsh Government
Rhodfa Padarn
Llanbadarn Fawr
Aberystwyth
Ceredigion
SY23 3UR

Natural England publications are available to download from the Natural England website: www.naturalengland.org.uk.

For further information contact the Natural England Enquiry Service on 0300 060 0863 or e-mail enquiries@naturalengland.org.uk.

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APPENDIX KCC3
Agricultural Land Classification

AGRICULTURAL LAND CLASSIFICATION

- 1 This section of the report provides the findings of a detailed Agricultural Land Classification (ALC). It is based on a desktop study of relevant published information on climate, topography, geology, and soil, in conjunction with a soil survey. The approximately 12.3-hectare (ha) Study Area is shown in **Plan KCC4102/01**.
- 2 The work has been carried out by a Chartered Scientist (CSci), who is a Fellow (F. I. Soil Sci) of the British Society of Soil Science (BSSS). This ALC survey has been carried out by a soil scientist who meets the BSSS Professional Competency Standard (PSC) scheme requirements for ALC (see BSSS PCS Document 2 '*Agricultural Land Classification of England and Wales*'¹). The BSSS PSC scheme is endorsed, amongst others, by the Department for Environment, Food and Rural Affairs (Defra), Natural England, the Science Council, and the Institute of Sustainability and Environmental Professionals (ISEP)
- 3 This assessment is based upon the findings of a study of published information on climate, geology and soil in combination with a soil investigation carried out in accordance with the Ministry of Agriculture, Fisheries and Food (MAFF) ² '*Agricultural Land Classification of England and Wales: Guidelines for Grading the Quality of Agricultural Land*', (Updated 2025).
- 4 The ALC system provides a framework for classifying land according to the extent to which its physical or chemical characteristics impose long-term limitations on agricultural use. The ALC system divides agricultural land into five grades (Grade 1 'Excellent' to Grade 5 'Very Poor'), with Grade 3 subdivided into Subgrade 3a 'Good' and Subgrade 3b 'Moderate'. Agricultural land classified as Grade 1, 2 and Subgrade 3a falls in the '*best and most versatile*' category in Paragraphs 187 and 188 of the National Planning Policy Framework (NPPF), revised on the 12th of December 2024. Further details of the ALC system and national planning policy implications are set out in Natural England's '*Guide to assessing development proposals on agricultural land*' online³.
- 5 A detailed ALC survey of the Study Area was carried out on the 2nd of December 2025. The ALC survey involved examination of the soil's physical properties at twelve auger-bores

¹ British Society of Soil Science. Professional Competency Scheme Document 2 '*Agricultural Land Classification of England and Wales*'. Available online @ <https://www.soils.org.uk/sites/default/files/events/flyers/ipss-competency-doc2.pdf> Last accessed January 2026

² The Ministry of Agriculture, Fisheries and Food (MAFF) was incorporated within the Department for Environment, Food and Rural Affairs (Defra) in June 2001

³ Natural England (2022) '*Guide to assessing development proposals on agricultural land*'. Available online at <https://www.gov.uk/government/publications/agricultural-land-assess-proposals-for-development/guide-to-assessing-development-proposals-on-agricultural-land> Last accessed January 2026

within the Study Area at a density of one auger-bore per hectare (ha). One soil pit, i.e., Pit 1 located near auger bore location 11, was excavated with a spade to examine certain soil physical properties, such as stone content and subsoil structure, in more detail. See **Plan KCC4102/01** for the location of auger bores and soil pits.

- 6 The sample locations were located using a hand-held Garmin E-Trec Geographic Information System (GIS) to enable the sample locations to be relocated for verification, if necessary.
- 7 The soil profile at each sample location was examined to a maximum depth of approximately 1.2 m by hand using a 5 cm diameter Dutch (Edleman) soil auger. The soil profile at each sample location was described using the '*Soil Survey Field Handbook: Describing and Sampling Soil Profiles*' (Ed. J.M. Hodgson, Cranfield University, 1997). Each soil profile was ascribed a grade following the ALC Guidelines. A log of the soil profiles examined and described on-site is given in **Attachment 1**, and a description of the soil pit is given in **Attachment 2**.
- 8 A topsoil sample was collected at auger bore locations 4 and 9, as shown in **Plan KCC4102/01**. The samples were sent to an accredited laboratory for particle size analysis, i.e., sand, silt, and clay proportions. This is to determine the definitive texture class of the topsoil, especially regarding distinguishing between medium clay loams (i.e., <27% clay) and heavy clay loams (27% to 35% clay). The results of the laboratory particle size (texture) analysis are given in Section 3.0, and a laboratory report is given in **Attachment 3**.
- 9 As described in the ALC Guidelines, the main physical factors influencing agricultural land quality are:
 - climate;
 - site;
 - soil; and
 - interactive limitations.
- 10 These factors are considered in turn below.

Climate

- 11 Interpolated climate data relevant to determining the ALC grade of land at the Site is given in Table 1 below.

Table 1: ALC Climate Data

Climate Parameter	Grid Ref: ST901346
Average Altitude (m)	169
Average Annual Rainfall (mm)	1027
Accumulated Temperature above 0°C (January – June)	1336
Field Capacity Days (FCD)	215
Moisture Deficit (mm) Wheat	77
Moisture Deficit (mm) Potatoes	61
Grade according to climate	2

- 12 Parameters used for assessing overall climate are accumulated temperature, a measure of relative warmth, and average annual rainfall, a measure of overall wetness. Regarding Figure 1 ‘*Grade according to climate*’ on page 6 of the ALC Guidelines, there is no overall climatic limitation to the quality of agricultural land at the Site. This means that agricultural land at the Site cannot be graded any higher than ALC Grade 2 in overall climatic terms, even in the absence of any other limiting factor, i.e., site, soil, and/or interactive limitations.
- 13 The soil profiles across the Study Area are predicted to be at field capacity (i.e., the amount of soil moisture or water content held in the soil after excess water has drained away) for approximately 215 Field Capacity Days (FCD) per year, mainly over the late autumn, winter and early spring. The climate interacts with soil physical properties, i.e., soil texture and wetness class, and can limit agricultural land quality due to soil wetness as per Table 6 of the ALC Guideline ‘Grade according to soil wetness’. It should be noted that the number of FCD at this Site just falls in the FCD category 176-225 for determining the grade according to wetness.

Site

- 14 As shown in **Plan KCC4102/01**, the Study Area is located to the northwest of Chicklade. The approximate centre of the Site is located at British National Grid (BNG) reference ST901346. The Study Area is bordered by agricultural land to the north, south, east and west.
- 15 With regard to the ALC Guidelines, agricultural land quality can be limited by one or more of three main site factors as follows:
- gradient;
 - micro-relief (i.e., complex change in slope angle over short distances); and
 - risk of flooding.

Gradient and Micro-Relief

- 16 The Study Area is located on a gentle, southeast-facing slope at approximately 182 metres (m) Above Ordnance Datum (AOD) at the highest point in the northwest at auger bore 3 and approximately 156m AOD at the lowest elevation in the south at auger bore 11.
- 17 The quality of agricultural land within the Study Area is limited by gradient in the north east of the site, where the gradient exceeds 7° (refer to Table 1 of ALC Guidelines). The quality of agricultural land in the Study Area is not limited by micro-relief, i.e., where complex changes in slope angle and direction over short distances, or the presence of boulders or rock outcrops, even on level ground or gentle slopes, can severely limit the use of agricultural machinery.

Risk of Flooding

- 18 According to the Government Flood Map for Planning website⁴, the land in the Study Area is in Flood Zone 1 at a low risk of flooding. The MAFF ALC Guidelines (1988) take account of the frequency, duration, and timing of flooding in the summer and winter (re Table 2 '*Grade according to flood risk in summer*' and/or Table 3 '*Grade according to flood risk in winter*'). There is no evidence the grade of agricultural land in the Study Area is limited by flood risk during the summer or winter following the ALC Guidelines.

Soil

- 19 **Geology/Soil Parent Material.** British Geological Survey (BGS) online⁵ information has been utilised to identify the Bedrock underlying the Study Area and any Superficial (Drift) Deposits over the Bedrock. This information helps to determine the parent material⁶ from and within which a soil has formed.
- 20 From the BGS information, the Study Area is underlain by chalk in the Seaford Chalk Formation. The bedrock is not covered by any superficial deposits.
- 21 **Published Information on Soil.** Soil information on the National Soil Map⁷ indicates that land at the Site is predominantly covered by soils grouped in the Andover 1 Association. As described by the Soil Survey of England and Wales (SSEW)⁸, the Andover 1 association is

⁴ Government/Environment Agency. 'Get flood risk information for planning in England'. Available online at <https://flood-map-for-planning.service.gov.uk/> Last accessed January 2026

⁵ British Geological Survey 'Geology of Britain Viewer'. Available online @ <http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html> Last accessed January 2026

⁶ British Geological Survey. A 'parent material' is a soil-science name for a weathered rock or deposit from and within which a soil has formed. In the UK, parent materials provide the basic foundations and building blocks of the soil, influencing their texture, structure, drainage and chemistry. Available online @ [Soil Parent Material Model - British Geological Survey \(bgs.ac.uk\)](http://www.bgs.ac.uk/soilparentmaterial/) Last accessed January 2026

⁷ Cranfield University (2025) Soil site report, Soil Report for location 390172E, 134741N, 1km x 1km, Cranfield University.

⁸ Soil Survey of England and Wales, National Soil Resource Institute, Cranfield University (2023). *The Soils Guide*. Available online at https://www.landis.org.uk/soilsguide/mapunit_list.cfm Last accessed January 2026

found on undulating chalkland dissected by narrow dry valleys. The most common soils belong to Andover series, variably flinty and chalky fine silty brown rendzinas, over chalk. They are associated with Panholes and Coombe series, fine silty typical calcareous brown earths in rubbly chalk and chalky drift respectively on footslopes and valley floors. Upton soils, extremely calcareous loamy grey rendzinas, are restricted to the steeper slopes where cultivation and subsequent erosion have removed much of the original topsoil and incorporated some chalk into the plough layer. Fine silty typical argillic brown earths (Charity series) are developed locally in non-calcareous flinty drift on valley floors. In places striped patterns, shown by differences in soil colour or by differences in crop ripening, reflect the variable soil thickness over chalk. All the soils are well drained (Wetness Class I) and rest on permeable chalk. The Andover series (variably flinty and chalky fine silty brown rendzinas, over chalk) is the most common soil for this association. In addition, the Site is partially covered, in the northwest, by soils grouped in the Carstens Association. As described by the Soil Survey of England and Wales (SSEW)⁹, the Carstens association is extensive in southern England where the Chalk is covered by silty aeolian drift over Clay-with-flints and Plateau Drift, and in Lincolnshire where it occurs on chalky till. The principal soils are deep and well drained, usually with reddish clayey subsoils. Carstens soils are fine silty over clayey typical paleo-argillic brown earths that constitute more than half of the association. Of smaller extent are similar but clayey soils of the Winchester and Givendale series, the former occurring where chalk is within moderate depth. Carstens, Givendale, Charity and Winchester soils have well structured clayey subsoil horizons which allow good drainage to the underlying chalk, so they are rarely waterlogged (Wetness Class I). Surface run-off is negligible and the presence of permeable soils on valley sides ensures good acceptance of winter rain.

- 22 **Soil Survey.** The soil profiles recorded at each auger-bore location are given in **Attachment 1**. A detailed description of Soil Pit 1 is given in **Attachment 2**.
- 23 The soil survey determined predominantly brown (Munsell colour 10YR4/3) medium or heavy clay loam topsoil over brown (10YR 4/3) heavy clay loam with approximately 40% chalk upper subsoil, over weathered chalk. The soil profiles show no signs of gley and are therefore classed as well drained (Wetness Class I). These soil profiles are similar to those described by the SSEW as belonging to the Andover 1 Association.
- 24 **Topsoil Particle Size Analysis.** To substantiate topsoil texture determined during the ALC survey by hand-texturing, two topsoil samples were collected over the Study Area, i.e., from

⁹ Soil Survey of England and Wales, National Soil Resource Institute, Cranfield University (2023). *The Soils Guide*. Available online at https://www.landis.org.uk/soilsguide/mapunit_list.cfm Last accessed January 2026

auger bore locations 4 and 9, see **Plan KCC4102/01**. The topsoil samples were sent to an accredited laboratory for analysis of particle size distribution (PSD), based on the British Standard Institution particle size grades. The certificate of analysis is provided as **Attachment 3**. The findings of the PSD analysis are shown in Table 2 below:

Table 2: Topsoil Particle Size Analysis

Topsoil Sample Location (See Fig. 1)	% sand 0.063-2.0 mm	% silt 0.002- 0.063 mm	% clay <0.002 mm	ALC Soil Texture Class
4	14	63	23	Medium Clay Loam
9	18	51	31	Heavy Clay Loam

Interactive Limitations

25 From the information above, together with the findings of the detailed soil survey (see Soil Profile Log given in **Attachment 1**), it has been determined that the quality of agricultural land at the Site is limited by soil wetness and soil droughtiness, as described below.

26 **Soil Wetness.** From the ALC Guidelines, a soil wetness limitation exists where ‘*the soil water regime adversely affects plant growth or imposes restrictions on cultivations or grazing by livestock*’. Agricultural land quality at the Site is limited by soil wetness as per Table 3 below (based on Table 6 ‘Grade According to Soil Wetness – Mineral Soils’ in the ALC Guidelines):

Table 3: ALC Grade According to Soil Wetness

Wetness Class	Texture of the Top 25 cm	176-225 Field Capacity Days
I	Sand, Loamy Sand, Sandy Loam, Sandy Silt Loam Sandy Clay Loam/Medium Silty Clay Loam /Medium Clay Loam* Heavy Clay Loam** Sandy Clay/Silty Clay/Clay	1 2 3a 3b
II	Sand, Loamy Sand, Sandy Loam, Sandy Silt Loam Sandy Clay Loam/Medium Silty Clay Loam /Medium Clay Loam* Heavy Clay Loam** Sandy Clay/Silty Clay/Clay	2 3a 3a 3b
III	Sand, Loamy Sand, Sandy Loam, Sandy Silt Loam Sandy Clay Loam/Medium Silty Clay Loam /Medium Clay Loam* Heavy Clay Loam** Sandy Clay/Silty Clay/Clay	3a 3a 3b 4
IV	Sand, Loamy Sand, Sandy Loam, Sandy Silt Loam Sandy Clay Loam/Medium Silty Clay Loam /Medium Clay Loam* Heavy Clay Loam** Sandy Clay/Silty Clay/Clay	3b 3b 4 4
Key * <27% clay; and ** >27% clay		

27 In a climate area with 215 FCD, profiles that are well drained (Wetness Class I) are limited by soil wetness to Subgrade 3a where the topsoil texture is heavy clay loam.

28 **Soil Droughtiness.** From the ALC Guidelines, a soil droughtiness limitation exists '*in areas with relatively low rainfall or high evapotranspiration, or where the soil holds only small reserves of moisture available to plant roots.*' The ALC grade according to soil droughtiness is shown in Table 4 below (based on Table 8 'Grade According to Droughtiness' in the ALC Guidelines). To be eligible for Grades 1 to 3b the moisture balances (MBs) must be equal to, or exceed, the stated minimum values for both wheat and potatoes. If the MB for either crop is less (i.e., more negative) than that shown for Subgrade 3b, the soil is Grade 4 on droughtiness):

Table 4: ALC Grade According to Soil Droughtiness

Grade/Subgrade	Moisture Balance (MB) Limits (mm)	
	Wheat	Potatoes
1	+30	+10
2	+5	-10
3a	-20	-30
3b	-50	-55
4	<-50	<-55

29 The Moisture Balance (MB) values and ALC grade according to soil droughtiness per auger-bore are shown in **Attachment 1**. It has been determined that soil droughtiness is sufficient to limit the quality of agricultural land at some parts within the Study Area to Subgrade 3a.

ALC Grading at the Site

30 By detailed ALC survey, it has been determined that the quality of agricultural land at the Site is limited by several limiting factors as follows:

- (i) Soil wetness to Subgrade 3a where the profiles are well drained (Wetness Class I) with a heavy clay loam topsoil;
- (ii) Soil droughtiness to Subgrade 3a where the chalk is present shallower; and
- (iii) Gradient to Subgrade 3b in the north-eastern part of the Site.

31 As described on page 7 of the ALC Guidelines '*...a degree of variability in physical characteristics within a discrete area is to be expected. If the area includes a small proportion of land of different quality, the variability can be considered as a function of the mapping scale.*' By convention, two or more contiguous auger bores of the same grade are

mapped as a single unit. Where a single auger bore has a different ALC grade from those surrounding it, it is included in the predominant ALC grade. Accordingly, an isolated auger bore (5) that has been determined to be Grade 2 has been included in the predominant Subgrade 3a mapping unit (see **Attachment 1**).

- 32 The area and proportion of agricultural land in each ALC grade have been measured from an ALC map given in **Plan KCC4102/02**. The findings are reported in Table 5 below.

Table 5: Agricultural Land Classification

ALC Grade	Area (Ha)	Area (% of Total Site)
Grade 1 (Excellent)	0	0
Grade 2 (Very Good)	0	0
Subgrade 3a (Good)	10.0	77
Subgrade 3b (Moderate)	2.0	15
Grade 4 (Poor)	0	0
Grade 5 (Very Poor)	0	0
Non-agricultural / Other land	0	0
Predicted Subgrade 3a	1	8
Total	13	100

Attachment 1
Soil Profile Log

Point	Grid ref.			Alt (m)	Slope °	Aspect	Land use	Depth (cm)			Matrix	Ochreous Mottles		Grey Mottles		Gley	Texture	Stones - type 1			Stones - type 2			Ped			SUBS STR	CaCO3	Mn C	SPL	Drought			Wet	Final ALC							
	NGR	X	Y					Top	Btm	Thick		Form	Munsell colour	Form	Munsell colour			%	> 2cm	> 6cm	Type	%	> 2cm	> 6cm	Type	Strength					Size	Shape	MBw		MBp	Gd	WC	I	Gw	Limitation 1	Limitation 2	Limitation 3
1	ST 90100 34800	390100	134800	177	≤7	Level	CER	0	24	24	10YR4/3					No	MZCL - Silty clay loam (medium)	10	6	2	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)				Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	9	22	2	WC I 2	Gradient				3b	
								24	45	21	10YR4/3					No	MZCL - Silty clay loam (medium)	40			CH - Chalk or chalk stones								Moderate	VC - Very calcareous (>10% CaCO3)	No	No										
								45	75	30	WHITE					No	CHK - Chalk	15			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No										
2	ST 90200 34800	390200	134800	169	≤7	Level	CER	0	27	27	10YR4/3					No	MZCL - Silty clay loam (medium)	14	6	2	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)				Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	8	21	2	WC I 2	Gradient				3b	
								27	45	18	10YR4/3					No	MZCL - Silty clay loam (medium)	40			CH - Chalk or chalk stones								Moderate	VC - Very calcareous (>10% CaCO3)	No	No										
								45	75	30	WHITE					No	CHK - Chalk	18			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No										
3	ST 90000 34700	390000	134700	182	≤7	Level	CER	0	24	24	10YR4/3					No	MZCL - Silty clay loam (medium)	10	6	2	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)				Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	3	19	3a	WC I 2	Droughtiness				3a	
								24	40	16	10YR4/3					No	MZCL - Silty clay loam (medium)	40			CH - Chalk or chalk stones								Moderate	VC - Very calcareous (>10% CaCO3)	No	No										
								40	70	30	WHITE					No	CHK - Chalk	15			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No										
4	ST 90100 34700	390100	134700	177	≤7	Level	CER	0	22	22	10YR4/4					No	MZCL - Silty clay loam (medium)	12	7	2	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)				Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	3	18	3a	WC I 2	Droughtiness				3a	
								22	42	20	10YR4/3					No	MZCL - Silty clay loam (medium)	40			CH - Chalk or chalk stones								Moderate	VC - Very calcareous (>10% CaCO3)	No	No										
								42	72	30	WHITE					No	CHK - Chalk	15			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No										
5	ST 90200 34700	390200	134700	169	≤7	Level	CER	0	26	26	10YR4/3					No	MZCL - Silty clay loam (medium)	8	6	2	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)				Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	11	24	2	WC I 2	Wetness	Droughtiness				2
								26	45	19	10YR4/3					No	MZCL - Silty clay loam (medium)	40			CH - Chalk or chalk stones								Moderate	VC - Very calcareous (>10% CaCO3)	No	No										
								45	75	30	WHITE					No	CHK - Chalk	15			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No										
6	ST 90300 34700	390300	134700	169	≤7	Level	CER	0	22	22	10YR4/3					No	MZCL - Silty clay loam (medium)	10	6	2	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)				Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	2	18	3a	WC I 2	Droughtiness				3a	
								22	40	18	10YR4/3					No	MZCL - Silty clay loam (medium)	40			CH - Chalk or chalk stones								Moderate	VC - Very calcareous (>10% CaCO3)	No	No										
								40	70	30	WHITE					No	CHK - Chalk	15			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No										
7	ST 90100 34600	390100	134600	177	≤7	Level	CER	0	22	22	10YR4/3					No	HZCL - Silty clay loam (heavy)	10	6	2	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)				Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	30	37	2	WC I 3a	Wetness				3a	
								22	70	48	10YR4/3					No	HZCL - Silty clay loam (heavy)	40			CH - Chalk or chalk stones								Moderate	VC - Very calcareous (>10% CaCO3)	No	No										
								70	100	30	WHITE					No	CHK - Chalk	15			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No										
8	ST 90200 34600	390200	134600	169	≤7	Level	CER	0	24	24	10YR4/3					No	HZCL - Silty clay loam (heavy)	10	6	2	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)				Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	5	20	2	WC I 3a	Wetness				3a	
								24	42	18	10YR4/3					No	HZCL - Silty clay loam (heavy)	40			CH - Chalk or chalk stones								Moderate	VC - Very calcareous (>10% CaCO3)	No	No										
								42	72	30	WHITE					No	CHK - Chalk	15			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No										
9	ST 90300 34600	390300	134600	169	≤7	Level	CER	0	26	26	10YR4/3					No	HZCL - Silty clay loam (heavy)	12	6	2	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)				Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	30	38	2	WC I 3a	Wetness				3a	
								26	70	44	10YR4/3					No	HZCL - Silty clay loam (heavy)	40			CH - Chalk or chalk stones								Moderate	VC - Very calcareous (>10% CaCO3)	No	No										
								70	100	30	WHITE					No	CHK - Chalk	20			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No										
10	ST 90400 34600	390400	134600	165	≤7	Level	CER	0	24	24	10YR4/3					No	HZCL - Silty clay loam (heavy)	10	6	2	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)				Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	3	19	3a	WC I 3a	Wetness				3a	
								24	40	16	10YR4/3					No	HZCL - Silty clay loam (heavy)	40			CH - Chalk or chalk stones								Moderate	VC - Very calcareous (>10% CaCO3)	No	No										
								40	70	30	WHITE					No	CHK - Chalk	15			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No										
11	ST 90100 34500	390100	134500	161	≤7	Level	CER	0	26	26	10YR4/3					No	HZCL - Silty clay loam (heavy)	12	6	2	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)				Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	30	38	2	WC I 3a	Wetness				3a	
								26	70	44	10YR4/3					No	HZCL - Silty clay loam (heavy)	40			CH - Chalk or chalk stones								Moderate	VC - Very calcareous (>10% CaCO3)	No	No										
								70	100	30	WHITE					No	CHK - Chalk	20			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No										
12	ST 90200 34500	390200	134500	156	≤7	Level	CER	0	24	24	10YR4/3					No	HZCL - Silty clay loam (heavy)	10	6	2	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)				Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	3	19	3a	WC I 3a	Wetness				3a	
								24	40	16	10YR4/3					No	HZCL - Silty clay loam (heavy)	40			CH - Chalk or chalk stones								Moderate	VC - Very calcareous (>10% CaCO3)	No	No										
								40	70	30	WHITE					No	CHK - Chalk	15			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No										
END																																										

Attachment 2
Soil Pit Description

Soil Survey				Surveyor			
Easting (X)	390100	Northing (Y)	134500	Alt (m)	161	Grid Reference	ST 90100 34500
Land Use	CER	Reference	11 (Pit 1)	Slope °	≤7	Date	02/12/2025
Bedrock	Seaford Chalk Formation	Superficial	None Recorded	Aspect	Level		

Layer		Topsoil	2	3	4	5	6	7
Lower Depth (cm)		26	70	100				
Texture		HZCL - Silty clay	HZCL - Silty clay loam (hea	CHK - Chalk				
Matrix Colour		10YR4/3	10YR4/3	WHITE				
Gley (Y/N)		No	No	No				
Ochreous Mottles	Form							
	Munsell Colour							
Grey Mottles	Form							
	Munsell Colour							
Manganese (Y/N)		No	No	No				
% Stones (type 1)		12	40	20				
Stones > 2cm		6						
Stones > 6cm		2						
Stone Type		HR - All hard rock	CH - Chalk or chalk stones	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger)				
% Stones (type 2)			10					
Stones > 2cm								
Stones > 6cm								
Stone Type			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)					
CaCO ₃		VC - Very calcareous	VC - Very calcareous (>10%	VC - Very calcareous (>10% CaCO ₃)				
Shape of Peds.		SAB - Subangular	AB - Angular Blocky	AB - Angular Blocky				
Size of Peds.		M - Medium	M - Medium	C - Coarse				
Subsoil Structure		Not Applicable	Moderate	Moderate				
Soil or Ped. Strength		Firm	Firm	Firm				
Degree of Ped. Development		M - Moderate	M - Moderate	M - Moderate				
Slowly Permeable Layer (Y/N)		No	No	No				

MDw	MDp	FCD
77	61	215

Wetness	Class (WC)	WC I
	Grade (WE)	3a

Notes	Moisture Balance (MB): Wheat = 30mm; Potatoes = 38mm (Grade 2 according to soil droughtiness)
-------	---

Attachment 3
Laboratory Analysis

ANALYTICAL REPORT										
Report Number	32045-25	P248	SARAH KERNON							
Date Received	05-DEC-2025		KERNON COUNTRYSIDE							
Date Reported	15-DEC-2025		CONSULTANTS LTD							
Project	KCC4102		GREENACRES BARN							
Reference	CHICKLADE		PURTON STOKE							
Order Number	KCC4102		WILTSHIRE SN5 4LL							
Laboratory Reference		SOIL777033	SOIL777034							
Sample Reference		AB4	AB9							
Determinand	Unit	SOIL	SOIL							
Sand 2.00-0.063mm	% w/w	14	18							
Silt 0.063-0.002mm	% w/w	63	51							
Clay <0.002mm	% w/w	23	31							
Textural Class **		MZCL	HZCL							
Notes										
Analysis Notes	The sample submitted was of adequate size to complete all analysis requested. The results as reported relate only to the item(s) submitted for testing. The results are presented on a dry matter basis unless otherwise stipulated.									
Document Control	This test report shall not be reproduced, except in full, without the written approval of the laboratory.									
Reported by	** Please see the attached document for the definition of textural classes. <i>Teresa Clyne</i> Natural Resource Management, a trading division of Cawood Scientific Ltd. Coopers Bridge, Braziers Lane, Bracknell, Berkshire, RG42 6NS Tel: 01344 886338 Fax: 01344 890972 email: enquiries@nrm.uk.com									

ADAS (UK) Textural Class Abbreviations

The texture classes are denoted by the following abbreviations:

Class	Code
Sand	S
Loamy sand	LS
Sandy loam	SL
Sandy Silt loam	SZL
Silt loam	ZL
Sandy clay loam	SCL
Clay loam	CL
Silt clay loam	ZCL
Clay	C
Silty clay	ZC
Sandy clay	SC

For the *sand*, *loamy sand*, *sandy loam* and *sandy silt loam* classes the predominant size of sand fraction may be indicated by the use of prefixes, thus:

vf	Very Fine (more than 2/3's of sand less than 0.106 mm)
f	Fine (more than 2/3's of sand less than 0.212 mm)
c	Coarse (more than 1/3 of sand greater than 0.6 mm)
m	Medium (less than 2/3's fine sand and less than 1/3 coarse sand).

The subdivisions of *clay loam* and *silty clay loam* classes according to clay content are indicated as follows:

M	medium (less than 27% clay)
H	heavy (27-35% clay)

Organic soils i.e. those with an organic matter greater than 10% will be preceded with a letter O.

Peaty soils i.e. those with an organic matter greater than 20% will be preceded with a letter P.

Plan KCC4102/01
Auger Points Plan



KEY

- Auger sample location
- Topsoil sample

PLAN	KCC4102/01		
TITLE	Auger Points Plan		
SITE	Chicklade Service Station		
CLIENT	Envriomena		
NUMBER	KCC4102/01 01/26hr		
DATE	January 2026	SCALE	NTS

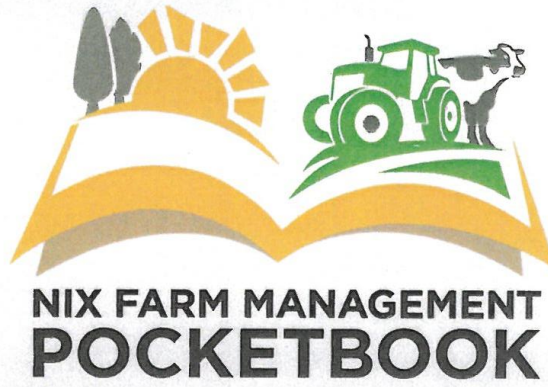
KERNON COUNTRYSIDE CONSULTANTS LTD
GREENACRES BARN, PURTON STOKE, SWINDON,
WILTSHIRE SN5 4LL
Tel 01793 771 333 Email: info@kernon.co.uk
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Plan KCC4102/02
Agricultural Land Classification Plan

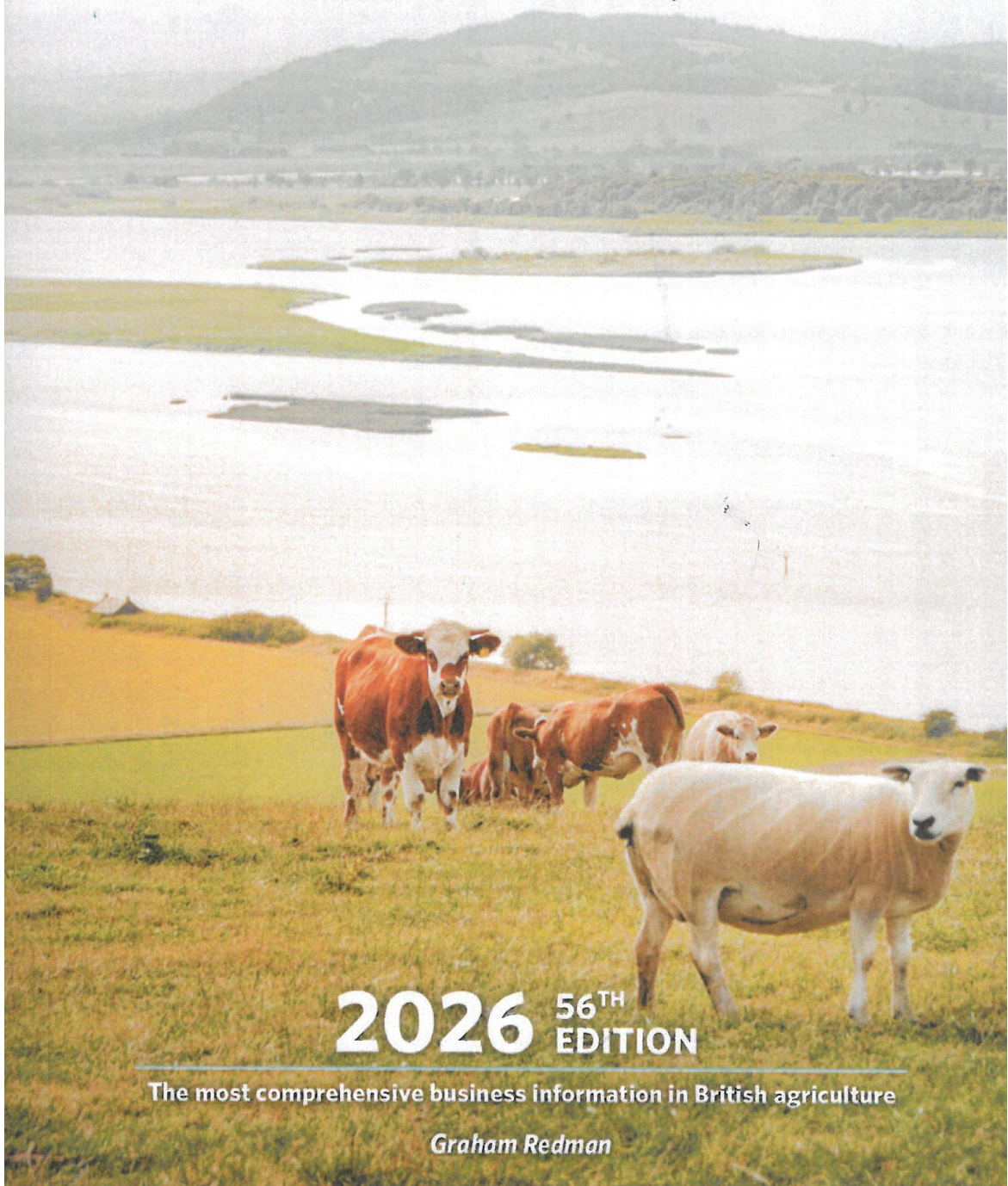


KEY		Ha	%	PLAN	KCC4102/02		
	Grade 1			TITLE	Agricultural Land Classification Plan		
	Grade 2			SITE	Chicklade Service Station		
	Grade 3a	10.0	77	CLIENT	Enviromena		
	Grade 3b	2.0	15	NUMBER	KCC4102/02A 05/26dm		
	Grade 4			DATE	January 2026	SCALE	NTS
	Grade 5			KERNON COUNTRYSIDE CONSULTANTS LTD GREENACRES BARN, PURTON STOKE, SWINDON, WILTSHIRE, SN5 4LL Tel 01793 771 333 Email: info@kernon.co.uk This plan is reproduced from the Ordnance Survey under copyright license 100015226			
	Non-agricultural						
	Urban						
	Not surveyed						
	Predicted Subgrade 3a	1	8				
	TOTAL	13	100				

APPENDIX KCC4
Extracts from Nix Farm Management
Pocketbook



NIX FARM MANAGEMENT POCKETBOOK



2026 56TH
EDITION

The most comprehensive business information in British agriculture

Graham Redman

WHEAT

Feed Winter Wheat

Production level	Low	Average	High	
Yield: t/ha (t/ac)	7.0 (2.8)	8.2 (3.3)	9.4 (3.8)	
	£/ha (ac)	£/ha (ac)	£/ha (ac)	£/t
Grain at £185/t	1,295 (524)	1,517 (614)	1,739 (704)	
Straw in Swath	150 (61)	150 (61)	150 (61)	
Total Output	1,445 (585)	1,667 (675)	1,889 (765)	203
Variable Costs £/ha (£/ac):				
Seed.....		81 (33)		10
Fertiliser.....		297 (120)		36
Sprays.....		301 (122)		37
Total Variable Costs		679 (275)		83
Gross Margin £/ha (ac)	766 (310)	988 (400)	1,210 (490)	120

Fertiliser Basis 8.2t/ha				Seed:	Sprays £/ha:		
Nutrient	Kg/t	Kg/Ha	£/Ha	£/t C2	£510	Herbicides	£131
N	23	190	£187	Kg/Ha	175	Fungicides	£115
P	7.0	57	£60	% HSS	30%	Insecticides	£4
K	10.5	86	£49	£/t HSS	£353	PGRs	£19
						Other	£33

1. *Yields.* The average yield is for all winter feed wheat, i.e. all varieties and 1st and subsequent wheats. See over for First and Second Wheats. The whole wheat yield including feed and milling, winter and spring crops is 8.06t/ha (10-year average *Defra*).

The table below offers a weighted estimate of yield variations according to wheat type based on a national 10-year average yield of 8.06t/ha. Percentages compare yield categories with 'all wheat'. These yields are used in the gross margins.

Calculation of spread of 'average yields depending on wheat type –

	Yield					
	Adjustment	Winter	1st WW	2nd WW	spring	Total
t/ha		101%	102%	93%	85%	100%
Total	100%	8.14	8.27	7.49		8.06
Feed	101%	8.22	8.35	7.57		8.14
Bread	93%	7.57	7.69	6.97	5.92	7.49
Biscuit	99%	8.06	8.19	7.42		7.98

2. *Straw* is sold in the swath. Assume half the baled value is swath value £70/tonne at 4.2t/Ha winter and 3.8t/ha spring wheat (rounded up).
3. *Seed* is costed with a single purpose dressing. Up to a third of growers require additional seed treatments, specifically to suppress BYDV. This can add £175/t of seed (£31/ha) or more. This has not been added in the gross margins.
4. This schedule does not account for severe *grass weed infestations* such as Black Grass or Sterile Brome. Costs associated with managing such problems can amount to up to £200/hectare additional agrochemical costs. Yield losses increase as infestation rises:

OILSEED RAPE

Winter Oilseed Rape

Production level	Low	Average	High	
Yield: t/ha (t/ac)	3.0 (1.2)	3.50 (1.4)	4.0 (1.6)	
	£/ha (ac)	£/ha (ac)	£/ha (ac)	£/t
Output at £410/t	1230 (498)	1,435 (581)	1,640 (664)	410
Variable Costs £/ha (£/ac):				
Seed.....		73 (29)		21
Fertiliser.....		261 (106)		75
Sprays.....		277 (112)		79
Total Variable Costs		610 (247)		174
Gross Margin £/ha (ac)	620 (251)	825 (334)	1,030 (417)	236

Fertiliser Basis 3.5t/ha				Seed:		Sprays £/ha:	
Nutrient	Kg/t	Kg/Ha	£/Ha	£/Ha C	43	Herbicides	£135
N	54	190	£187	£/Ha Hy	88	Fungicides	£71
P	14	49	£52	£/Ha HSS	29	Insecticides	£18
K	11	39	£22	C:Hy:HSS	20:20:60	PGRs	£0
	Seed write-off	8%		Kg/Ha	5.5	Other	£53

Spring Oilseed Rape

Production level	Low	Average	High	
Yield: t/ha (t/ac)	1.9 (0.8)	2.25 (0.9)	2.6 (1.1)	
	£/ha (ac)	£/ha (ac)	£/ha (ac)	£/t
Output at £410/t	779 (315)	923 (374)	1,066 (432)	410
Variable Costs £/ha (£/ac):				
Seed.....		69 (28)		31
Fertiliser.....		117 (47)		52
Sprays.....		145 (59)		64
Total Variable Costs		331 (134)		147
Gross Margin £/ha (ac)	448 (181)	592 (240)	735 (298)	263

1. *Prices.* The price used is £390/t plus oil bonuses at 44% oil content making £410/. The bonus is paid on the percentage of oil over 40%, at 1.5 times the sale value of the crop and an equal but opposite penalty below 40%. For example, in this case, the bonus is on 4% oil x £410 x 1.5 = £25.
2. *Spring OSR Inputs:* Seed as per WOSR, but 35% conventional, 5% HSS, 60% hybrid. Fertiliser: N/P/K at 70/32/25 kg/ha. Sprays, Herbicides. £55, Fungicides, £43, Insecticides £14, and Others £33/ha
3. *Winter Versus Spring:* As little as 6,000 hectares of spring OSR are grown in the UK which is 2.5% of the entire crop. The financial reward is slim compared with other combinable crops.

Appendix KCC5
Agricultural Land Use in England
at 1 June 2025



Department
for Environment,
Food & Rural Affairs

Accredited official statistics

Agricultural land use in England at 1 June 2025

Updated 25 September 2025

Applies to England

Contents

Key points

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Section 2 About these statistics

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This publication is available at <https://www.gov.uk/government/statistics/agricultural-land-use-in-england/agricultural-land-use-in-england-at-1-june-2025>

This release contains the estimates of crop areas, land use and land ownership on commercial agricultural holdings in England on 1 June 2025 from the June Survey of Agriculture. Cereal and oilseed areas were published on 28 August. They are included here for completeness and remain unchanged.

All results tables are available in the datasets at

[Agricultural land use in England at 1 June](https://www.gov.uk/government/statistics/agricultural-land-use-in-england)

(<https://www.gov.uk/government/statistics/agricultural-land-use-in-england>)

[Agricultural land ownership and tenure structure in England at 1 June](https://www.gov.uk/government/statistical-data-sets/agricultural-land-ownership-in-england)

(<https://www.gov.uk/government/statistical-data-sets/agricultural-land-ownership-in-england>)

This year we have simplified the way we collect some of the crop area information through the June Survey of Agriculture. One key change is that we no longer collect oilseed rape broken down by winter and spring varieties, instead, this is now reported under the single category of oilseed rape. See [section 2](#) for further details.

Key points

Agricultural land use

- The utilised agricultural area (UAA) is 8.8 million hectares in 2025 and accounts for 68% of the total area of England. This area has stayed relatively consistent over the past decade.
- The total croppable area accounts for just over half (56%) of UAA whilst permanent grassland accounts for an additional 39%.

Crops

- The total area of arable crops saw a 1.6% decrease to 3.4 million hectares between 2024 and 2025. This fall was primarily due to a continued long-term decrease in the areas of oilseed crops as well as a fall in other arable crops which together make up almost one quarter of the overall arable crop area.

- The area of uncropped arable land decreased by 6.2% to 545 thousand hectares. Of this area, 101 thousand hectares were left as bare fallow and the remaining 444 thousand hectares were used for environmental benefit.
- The area of wheat increased by 8.8% to 1.5 million hectares in 2025, slightly exceeding the five-year average. This increase has halted a two-year decline and is largely due to generally better weather conditions when planting in the autumn compared to the previous year.
- The total English barley area decreased by 13% between 2024 and 2025 to 742 thousand hectares, this area is below the five-year average. Winter and spring barley sown crops both saw a decrease, with winter barley falling by 7.2% to 302 thousand hectares, the lowest area since 2020 and spring barley decreasing by 16% to 439 thousand hectares.
- The area of oilseed crops decreased by 18% to 223 thousand hectares in 2025. Oilseed rape accounts for 91% of this area and fell by 18% to 204 thousand hectares in 2025.
- Potatoes increased by 7.7%, rising to 90 thousand hectares in 2025.
- The area of horticultural crops covers 117 thousand hectares of land in 2025, an increase of 3.9% reversing the trend of decreases seen in recent years.

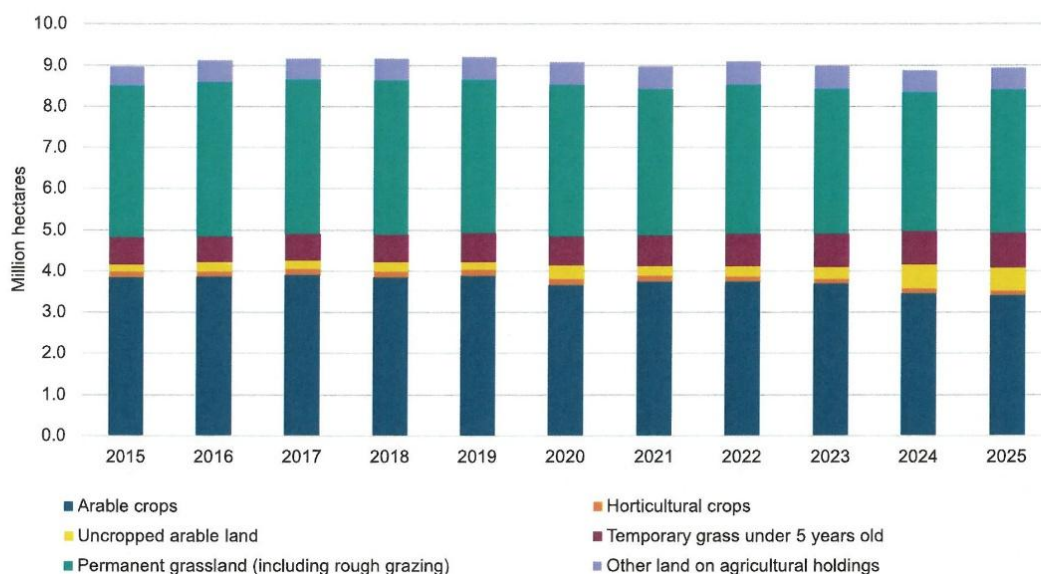
Land ownership

- The area of agricultural land owned in England was little changed at 6.1 million hectares in 2025. Land rented in for a year or more remained at 2.9 million hectares.

Section 1 Detailed results

1.1 Utilised agricultural area

The utilised agricultural area in England is 8.8 million hectares in 2025 and accounts for 68% of the total England area. This area includes all arable and horticultural crops, uncropped arable land including bare fallow and arable land used for environmental benefit, land used for outdoor pigs, temporary and permanent grassland and common rough grazing. UAA has stayed relatively consistent over recent years. (Figure 1).

Figure 1 - Agricultural land use areas in England at 1 June

1.2 Croppable area

The area of land available for cropping decreased by 0.9% to 4.9 million hectares and accounts for 56% of UAA. The croppable area consists of cereals, oilseeds, potatoes, other arable crops, horticultural crops, uncropped arable land and temporary grassland.

Figure 2 shows that in 2025, the proportion of croppable land used for each purpose remained similar to those in 2024; however, some categories did see changes. In particular, cereal crops saw an increase in area as a result of generally better weather conditions which allowed drilling to proceed without major disruption and aided crop establishment. Oilseed crops and uncropped arable land both saw decreases in 2025. Oilseed rape accounts for 91% of the oilseed crops area and fell by 18% to 204 thousand hectares in 2025, continuing the long-term downward trend. The area of uncropped arable land decreased by 6.2% to 545 thousand hectares. Of this area, 101 thousand hectares were left as bare fallow and the remaining 444 thousand hectares were used for environmental benefit. Arable land used for environmental benefit but not in production includes pollen and nectar flower mixes, winter bird food, buffer strips on arable land, flower rich margins and in field strips.

Figure 2 - Total croppable area in England at 1 June

Year	Cereals	Oilseeds	Temporary grass	Other arable crops	Uncropped arable land (1)	Horticult
2021	55%	6%	16%	13%	5%	3%
2022	54%	7%	16%	13%	5%	3%
2023	52%	8%	16%	14%	6%	2%
2024	49%	6%	17%	13%	12%	2%
2025	50%	5%	17%	12%	11%	2%

(1) From 2024 uncropped arable land was collected as two separate categories: bare fallow and arable land used for environmental benefit but not in production. Areas for both are available in the agricultural land use dataset that accompanies this publication.

1.3 Arable crops

The total area of arable crops saw a 1.6% decrease between 2024 and 2025, falling to 3.4 million hectares. This was largely due to a decrease in the oilseed crops and other arable crops areas, which together account for almost one quarter of arable crops.

The wheat area increased by 8.8% to 1.5 million hectares in 2025. This is the first increase in wheat area since 2022 but is still lower than the area recorded that year, although slightly ahead of the five-year average. The generally better weather conditions in autumn allowed drilling to proceed without major disruption and aided crop establishment. The barley area decreased by 13%, from 849 thousand hectares in 2024 to 742 thousand hectares in 2025. Wet weather in September impacted on the planting of winter barley and is the lowest area since 2020. Spring barley also saw a fall and decreased by 16% to 439 thousand hectares (Figure 3).

The total area of oilseed rape decreased by 18%, from 250 thousand hectares in 2024 to 204 thousand hectares in 2025. This continues the overall downward trend since the peak in 2012 and is the lowest area of land used for oilseed rape since the early 1980's. Over the past decade winter sown varieties have consistently made up 98% or more of the total area used to grow oilseed rape, as a result the area of oilseed rape has been collected as a single category from 2025 onwards.

For more detailed information please go to the full [Cereal and oilseed areas in England release \(https://www.gov.uk/government/collections/crops\)](https://www.gov.uk/government/collections/crops).

Figure 3 - Area of wheat, barley and oilseed rape in England at 1 June (thousand hectares)

year	2023	2024	2025
wheat	1,580	1,402	1,525
barley	799	849	742
oilseed rape	342	250	204

The total potato area increased by 7.7% to 90 thousand hectares in 2025. This rise was driven by an 8.6% increase in main crop potatoes, while the area of early crop potatoes saw a smaller increase of 1.6%.

Other arable crops covered 604 thousand hectares in 2025, a decrease of 6.8% since 2024 and this is the second consecutive year to see a fall in overall area. Peas for harvesting dry saw the largest area change, decreasing by 32% to 60 thousand hectares. Maize accounts for over a third of the other arable crops area and increased by 1.9% to 241 thousand hectares in 2025.

1.4 Horticultural crops

Horticultural crops covered 117 thousand hectares in June 2025, increasing by 3.9% since 2024. This area is mostly used to grow fruit and vegetables, which covers 90% of the total horticultural area.

The total area of orchards and small fruit decreased by 4.2% between 2024 and 2025 to 27 thousand hectares, with orchards covering 17 thousand hectares in 2025 and small fruit grown on the remaining 9.3 thousand hectares. Although slight changes in some categories the proportions remain steady (Figure 4).

Figure 4 - Breakdown of small fruit areas in England at 1 June

Year	Stawberries	Blackcurrants	Wine grapes	Raspberries	Other small fruit	To sn fru
2021	26%	24%	29%	11%	10%	10

Year	Stawberries	Blackcurrants	Wine grapes	Raspberries	Other small fruit	Total
2022	22%	23%	32%	12%	11%	100%
2023	21%	21%	36%	10%	12%	100%
2024	19%	22%	37%	9%	12%	100%
2025	21%	23%	35%	10%	11%	100%

The area used to grow vegetables and salad for human consumption increased by 7.8%, to 79 thousand hectares in 2025. This was largely due to higher areas of other peas and beans and other vegetables and salad, which together cover 66% of the total area used to grow vegetable and salads for human consumption. Other peas and beans saw the largest proportional increase, rising by 43%, but still only accounts for 3.5% of the total vegetable and salad area. Whilst vining peas for processing saw the largest proportional decrease, falling by 14% (Figure 5).

Figure 5 - Breakdown of vegetable and salad areas in England at 1 June

Year	All other vegetables and salad (incl. carrots & onions)	Vining peas for processing	Culinary plants for human consumption (incl. herbs)	Other peas and beans	Total vegetables and salad
2021	59%	33%	5%	3%	100%
2022	59%	34%	4%	3%	100%
2023	59%	34%	4%	3%	100%
2024	56%	36%	6%	3%	100%
2025	63%	29%	5%	4%	100%

1.5 Land ownership

The total area of land owned in 2025 remained stable at 6.1 million hectares. Land rented in for a year or more has seen little change in recent years and remained at 2.9 million hectares in 2025. Farm Business Tenancies account for 44% of this area and saw an increase of 1.4%, rising to 1.3 million hectares in 2025. Land under Full Agricultural Tenancies has continued to decline, falling by 0.8% to 1.1 million hectares. Land covered by other agreements of a year or more decreased by 5.2% in 2025 (Figure 6).

Figure 6 - Breakdown of area of land rented in for a year or more in England at 1 June (hectares)

Rented land	2023	2024	2025
Full Agricultural Tenancy	1,153,136	1,128,836	1,119,590
Farm Business Tenancy	1,257,789	1,253,753	1,271,014
Other agreement	487,940	493,492	468,019

Section 2 About these statistics

2.1 Survey methodology

Full details of the survey methodology are available on the [Structure of the agricultural industry guidance web page \(https://www.gov.uk/structure-of-the-agricultural-industry-survey-notes-and-guidance\)](https://www.gov.uk/structure-of-the-agricultural-industry-survey-notes-and-guidance).

The June Survey of Agriculture and Horticulture has been run predominantly online since 2011, with an option for farmers to complete a paper form if they prefer. The survey is annual and samples around 30,000 holdings most years, with a full census run once a decade. The last census was run in 2021.

The June 2025 survey was sent to a sample of 55,000 commercial holdings and responses were received from 27,000 holdings, representing a response rate of 51%. This is a larger sample than usual which will enable us to provide detailed geographical breakdowns later in the year and help to understand changes currently happening within the farming sector, e.g. changes in land use following the introduction of ELM schemes. Commercial holdings are defined as those with more than five hectares of

agricultural land, one hectare of orchards, 0.5 hectares of vegetables or 0.1 hectares of protected crops, or more than 10 cows, 50 pigs, 20 sheep, 20 goats or 1,000 poultry.

Table 1 provides details of the sample survey population broken down by farm size. The size of a farm is determined by its Standard Labour Requirement (SLR) which is the typical number of full-time workers required on the holding based on its activity.

Table 1: June 2025 population size and sampling rate

Stratum	Description	Sampling rate (%)	Population size
1	SLR < 0.5	35%	56,109
2	SLR >= 0.5 and < 1	55%	13,020
3	SLR >= 1 and < 2	78%	12,020
4	SLR >= 2 and < 3	78%	5,652
5	SLR >= 3 and < 5	78%	5,411
6	SLR >= 5	78%	5,710
10	SLR unknown	97%	3,968
	All	52%	101,890

For pig and poultry sectors, an additional data collection exercise was run to collect data from a central point for some of the largest companies. Cattle results are sourced from the Cattle Tracing System (CTS). The data include returns from all holdings with cattle so are not subject to survey error.

2.2 Data analysis

The data are subject to rigorous validation checks which identify inconsistencies within the data or large year-on-year changes. Any records that have not been cleaned by the results production stage are excluded from the analysis.

Population totals are estimated for each question on the survey to account for the non-sampled and non-responding holdings. This survey uses the technique known as ratio raising, in which the trend between the sample

data and base data (previous year's data) is calculated for each stratum. The calculated ratio is then applied to the previous year's population data to give England level estimates. For holdings where we do not have base data (new holdings or long-term non-responders) the sample estimates are raised according to the inverse sampling fraction.

2.3 Confidence indicators

Confidence intervals and tick based indicators are shown alongside all of our estimated figures and can be found in the data tables within the [dataset \(https://www.gov.uk/government/statistics/agricultural-land-use-in-england\)](https://www.gov.uk/government/statistics/agricultural-land-use-in-england). These both help to show where there is more variability around results and highlight whether year-on-year changes are statistically significant or not. Whilst these are a useful indicator, they do not take into account any other sources of survey errors, such as non-response bias or administrative data errors.

2.4 Survey changes

Since the June 2024 Survey of Agriculture, we've made changes to how we collect some data, including simplifying the survey form and reducing the number of questions asked. Certain crops are now grouped together instead of being collected separately for example, stock feeding crops, oilseed rape and maize. Consequently, we no longer split oilseed rape into winter and spring varieties. Instead, all figures are now shown under one category, oilseed rape.

2.5 Data notes

- All figures relate to commercial holdings.
- All percentage changes are based on unrounded figures.
- Totals may not necessarily agree with the sum of their components due to rounding.
- Proportional breakdown rounding may be adjusted to add up to 100%.

2.6 Data uses and users

Results from the June Survey of Agriculture and Horticulture have a wide range of uses and users with requests for data being made on a frequent basis. A document providing information of specific uses and users can be found on our [guidance and notes \(https://www.gov.uk/guidance/structure-of-the-agricultural-industry-survey-notes-and-guidance\)](https://www.gov.uk/guidance/structure-of-the-agricultural-industry-survey-notes-and-guidance).

2.7 Other survey results and publications

The next releases from the June Survey will be UK results and are expected to be in December. The definitive publication date will be announced on the [research and statistics \(https://www.gov.uk/search/research-and-statistics\)](https://www.gov.uk/search/research-and-statistics) webpage on gov.uk.

More detailed results from the June Survey can be found on our [Structure of the agricultural industry in England and the UK at June web page \(https://www.gov.uk/government/statistical-data-sets/structure-of-the-agricultural-industry-in-england-and-the-uk-at-june\)](https://www.gov.uk/government/statistical-data-sets/structure-of-the-agricultural-industry-in-england-and-the-uk-at-june). This includes various time series of crop areas and livestock numbers dating back as early as 1866 and detailed geographical breakdowns of the results.

2.8 Feedback

We welcome feedback and any thoughts to improve the publication further. Please send any feedback to: farming-statistics@defra.gov.uk.

Section 3 - What you need to know about this release

3.1 Contact details

Responsible statistician: Sarah Thompson

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3.2 Accredited official statistics

Accredited official statistics are called National Statistics in the Statistics and Registration Service Act 2007. An explanation can be found on the [Office for Statistics Regulation website](https://osr.statisticsauthority.gov.uk/accredited-official-statistics/) (<https://osr.statisticsauthority.gov.uk/accredited-official-statistics/>).

Our statistical practice is regulated by the Office for Statistics Regulation (OSR). OSR sets the standards of trustworthiness, quality and value in the Code of Practice for Statistics that all producers of official statistics should adhere to.

These accredited official statistics were independently reviewed by the Office for Statistics Regulation in 2014. They comply with the standards of trustworthiness, quality and value in the Code of Practice for Statistics and should be labelled accredited official statistics .

You are welcome to contact us directly with any comments about how we meet these standards (see [contact details](#)). Alternatively, you can contact OSR by emailing regulation@statistics.gov.uk or via the OSR website.

Since the latest review by the Office for Statistics Regulation, we have continued to comply with the Code of Practice for Statistics, and have made the following improvements:

- Reviewed and amended the validation checks carried out on response data including validation against new administrative data sources to better assure ourselves of the quality of the statistics.
- Enhanced trustworthiness by removing pre-release access.



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