LAND AT EYHORNE STREET, HOLLINGBOURNE, KENT

AGRICULTURAL LAND QUALITY CONSIDERATIONS

June 2025

KERNON
COUNTRYSIDE CONSULTANTS LIMITED

LAND AT EYHORNE STREET, HOLLINGBOURNE, KENT

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Authorised By 06/25 EGC

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CONTENTS

Appendices

1 INTRODUCTION

1.1 This report considers the agricultural land quality and other relevant considerations of a Site extending to approximately 1.2ha at Eyhorne Street, Hollingbourne.

1.2 The area is shown outlined in red on the aerial image below.

Insert 1. The Site (boundary approx.)

1.3 This report considers the agricultural land quality of the Site and reviews that in the context of national and local planning policy.

1.4 This report:

(i) describes the Site and the agricultural land quality in Section 2;

(ii) sets out the planning policy of relevance in Section 3;

(iii) provides an assessment in Section 4; and

(iv) summarises the points in Section 5.

1.5 This report has been prepared by Kernon Countryside Consultants Ltd (KCC), who specialise in assessing the effects of development proposals on agricultural land and businesses.

2 THE SITE AND LAND QUALITY

The Site

2.1 The Site extends to approximately 1.2ha of agricultural land and is made up of one land parcel. To the east and west of the Site is the existing residential settlement of Hollingbourne, to the north of the site is woodland and agricultural land and to the south is agricultural land.

Insert 2. Google Earth Aerial of the Site

Land Quality

2.2 The quality of agricultural land is determined by an Agricultural Land Classification (ALC). This considers the long-term physical limitations of land for agricultural use. Factors affecting the quality of agricultural land are climate (temperature, rainfall, aspects, exposure, etc.), site considerations (slope, micro-relief, flood risk) and soil (texture, structure, depth, stoniness, etc.) and the important interactions between them. These factors affect soil wetness and droughtiness and influence the choice of crops that can be grown and the level of consistency of yields.

2.3 The ALC divides land into five Grades, being Grade 1 and Grade 5. The largest graded area is Grade 3, which is divided into subgrades of subgrade 3a “good quality” and

subgrade 3b “moderate quality”. The current guidelines and criteria for the ALC were published by the Ministry of Agriculture, Fisheries and Food (MAFF) in 1988.

2.4 The ALC system is described in Natural England’s Technical Information Note TIN049, reproduced in **Appendix KCC1**. ALC surveys involve sampling soils at a density of one point per hectare.

Published Land Quality Data for the Site and Surrounding Area

2.5 The Site is shown on “provisional” ALC maps from the 1970’s as land of undifferentiated Grade 3 being “good” to “moderate” land quality as can be seen on the insert below.

Insert 3. Provisional Mapping

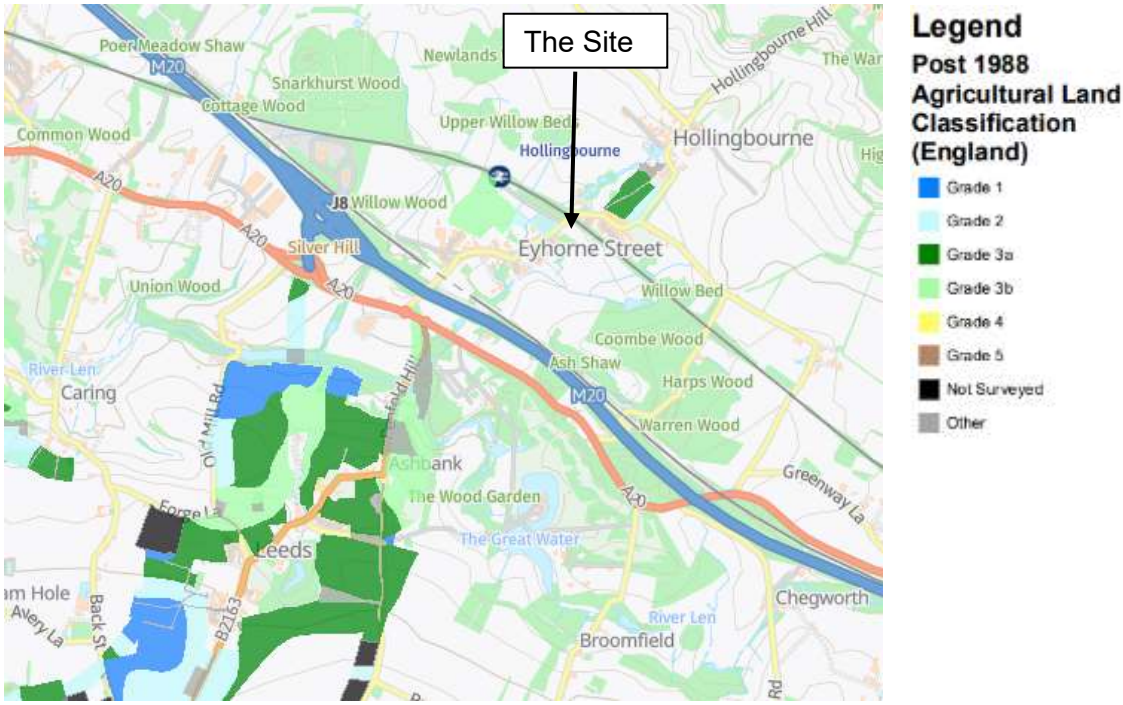
2.6 There are limitations with the provisional maps, which are described in TIN049 (**Appendix KCC1**). In 2017 Natural England produced predictive best and most versatile maps which estimate the proportion of land within an area that is of BMV quality. There are three categories, which are low (<20% area BMV), moderate (20-60% area BMV), and high (>60% area BMV). For this area the map shows a low likelihood of BMV land.

Insert 4. Predictive Mapping

2.7 Land to the north and south of the Site is mapped as containing land with a moderate and high likelihood of BMV land quality.

2.8 The Site itself has not been previously surveyed however two sites in close proximity have been previously surveyed and found to contain Grade 2, Subgrade 3a and Subgrade 3b land quality. The available results that have been identified, as published on www.magic.gov.uk are reproduced below.

Insert 5. Previously surveyed areas



2.9 Survey data for land further afield is also available. This has found that land to the south west of the Site has been found to contain Grade 1, Grade 2, Subgrade 3a and Subgrade 3b land quality. Thus suggesting that BMV land quality is not a rare resource within the area.

3 PLANNING POLICY AND GUIDANCE

National Planning Policy Framework

3.1 The National Planning Policy Framework (NPPF) (2024), paragraph 187 notes that planning policies and decisions should contribute to enhance the natural and local environment by, inter alia, recognising **"the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land"**.

3.2 The best and most versatile (BMV) agricultural land is defined in Annex 2 of the NPPF as land which is of Grade 1, 2 and Subgrade 3a of the Agricultural Land Classification.

3.3 Paragraph 188 of the NPPF discusses plan making. It requires plans to, inter alia, allocate land with the least environmental or amenity value, where consistent with other policies in the Framework. Footnote 65 of the NPPF identifies 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"**.

3.4 There is no definition of what constitutes "significant" development. However, the "Guide to assessing development proposals on agricultural land" (Natural England, February 2021) advises local planning authorities to **"take account of smaller losses (under 20 ha) if they're significant when making your decision"**, suggesting that 20ha is a suitable threshold for defining "significant" in many cases.

Local Planning Policy

3.5 There are no policies of relevance that refer to the use of best and most versatile agricultural land and the Proposed Development within the Maidstone Borough Local Plan (2021-2038).

Guidance

3.6 Natural England's "Guide to Assessing Development Proposals on Agricultural Land" (February 2021) describes the ALC process and sets out guidance on managing soils. It advises on the consultation process where more than 20ha of BMV land is involved. Extracts of this can be found in **Appendix KCC2**.

3.7 The Institute of Environmental Management and Assessment (IEMA) produces a Guide "A New Perspective on Land and Soil in Environmental Impact Assessments" in February 2022. Whilst that refers to EA development, it identifies in table 3 (page 49) the magnitude

of impacts on soil resources. Losses of less than 5ha are minor and losses of 5-20ha are considered to be moderate. Losses of over 20ha are considered to be major losses.

4 ASSESSMENT

4.1 Planning policy requires the economic and other benefits of the best and most versatile agricultural land to be recognised. In the context of plan making, where significant development of agricultural land is demonstrated to be necessary, poorer quality land should be used in preference to areas of higher quality.

4.2 This assessment considers the Site against the following:

(i) the land quality and losses involved;
(ii) is this significant development, in plan making terms?
(iii) what are the economic benefits of the Site?
(iv) if it is significant development, is poorer quality land available in the area?
(v) the weight that should be given to the land quality

Land Quality

4.3 The Site has not been previously surveyed. Land within close proximity to the Site has been previously surveyed and found to contain Grade 2, Subgrade 3a and Subgrade 3b land quality. It is indicated from the provisional mapping that the Site is undifferentiated Grade 3 land quality with a low likelihood of BMV land.

Significant Development

4.4 There is no definition on what constitutes **"significant"** development of agricultural land.

4.5 Paragraphs 187 and 188 of the NPPF consider whether poorer quality land is available with the trigger for assessments being that the proposal involves **"significant development of agricultural land"**. What is **"significant development"** is not defined in the NPPF. One threshold for determination of what is significant is the threshold for consultation with Natural England, which is set at the loss of 20ha or more of BMV land (see TIN049 in **Appendix KCC1**). This has been the threshold for consultation with MAFF since 1987.

4.6 There is no definition within the Local Plan which sets out what is considered **"significant"**.

4.7 Natural England describes the loss of less than 20ha "smaller losses", thus also suggesting that 20ha is a suitable threshold.

4.8 In February 2023 the Institute of Environmental Management and Assessment (IEMA) produced a guide "A New Perspective on Land and Soil in Environmental Impact Assessment". This set the thresholds for "major" magnitude development at 20ha, for "moderate" magnitude development at 5-20ha and "minor" magnitude development at less than 5ha.

4.9 At 1.2ha the possible quantum of BMV within the Site is 6% of the threshold for consultation with Natural England. Therefore, this quantum is not "significant" development.

4.10 BMV agricultural land is not particularly a rare resource. As identified in Natural England's TIN049 (**Appendix KCC1**), some 42% of England is predicted to be of BMV quality. As there are extensive areas of poorer quality land around the country (e.g. Exmoor, Pennines, Lake District etc.) in many lowland areas the proportion of BMV is much higher.

4.11 To put this into context, the amount of Utilised Agricultural Area (UAA) in England, meaning the amount of agricultural land that is in use, in 2024 was 8.7 million hectares, with croppable land covering 57%. If 42% of the UAA is BMV, that represents almost 3.7 million hectares.

Economic Benefits

4.12 The NPPF paragraph 187 requires planning decisions to recognise that economic and other benefits of best and most versatile agricultural land.

4.13 There is no research, that we are aware of, that seeks to analyse the productive or economic advantages of BMV to non-BMV land. In the absence of any empirical data, any economic assessment is inevitably crude.

4.14 Taking standard budgeting textbooks, such as John Nix Pocketbook for Farm Management (extracts which have been reproduced in **Appendix KCC3**), it is possible to show the difference between moderate and high yields, as an illustration. We have taken a cereal crop and a break crop for illustrative purposes.

4.15 Taking that crude measure for Winter Wheat and Oilseed Rape, the differences are shown below. This assumed, for the purposes of this report that the Site is of BMV land quality.

Table 1. Assessment of Economic Farmed Land

Item	Winter Wheat		Oilseed Rape	
	Average	**High**	**Average**	**High**
Yield (t/ha)	8.3t/ha	9.5t/ha	3.5t/ha	4.0t/ha
Output (£)	£1,765/ha	£1,993/ha	£1,488/ha	£1,700/ha
Gross Margin (£)	£1,100/ha	£1,338/ha	£906/ha	£1,118/ha
Uplift (£)	-	£228/ha	-	£212/ha

John Nix Pocketbook for Farm Management, September 2024

4.16 Based on this, the economic benefits of the 1.2ha of BMV land to non-BMV land would be £274 per annum (£254 - £274 based on 2025 budgets). Hence the economic benefits for a land parcel of this size are limited.

Is Poorer Quality Land Available?

4.17 Footnote 65 of the NPPF is in the context of plan making and states that where significant development of agricultural land is necessary, it is preferable that poorer quality land be used in preference.

4.18 In this case, the development is not significant development of BMV agricultural land. Therefore, the requirement to consider if poorer quality land is available, under footnote 65, is not triggered. For completeness, however, we now turn to assess that.

4.19 Within immediate proximity of the Site there are no obvious areas of poorer quality land available. This is shown on the provisional map in Insert 3, which shows the Site and land within the immediate proximity mapped as undifferentiated Grade 3. Land to the north east of the Site can be seen to be mapped as potentially containing Grade 2 land quality.

4.20 When looking at the provisional mapping further afield, it indicates that land to the northeast and land to the west has the potential to contain Grade 2 land quality. Therefore, of higher quality land than the Proposed Development Site.

Insert 6. Provisional Grading around the Site

4.21 It is noted much further north east of the Site is an area of Grade 4 land quality however, when reviewing this area on Google Earth it was noted that this area of land is on a slope. Gradient is one of the considerations in ALC surveys on the land quality and therefore, it is a possibility that this land would be downgraded as a result of the gradient of the Site. The gradient can be seen on the Insert from Google Earth Street View below.

Insert 7. Google Earth Street View of the gradient of the Site.

4.22 The predictive mapping indicates that the Site is in an area of low likelihood of BMV quality land. The mapping shows that land directly to the north east and south west of the Site is considered to have a mixture of moderate and high likelihood of containing BMV land quality.

4.23 When looking at the predictive mapping further afield it remains that the Proposed Development Site sits in an area of narrow low likelihood of BMV quality land, with the

remaining mapped as moderate and high likelihood of containing BMV quality land. This can be seen on the insert below.

Insert 8. BMV Likelihood Around the Site

4.24 When taking into consideration all of the data available it is noted that provisional and predictive mapping indicate that the Site could contain undifferentiated Grade 3 land quality and have a low likelihood of BMV land quality.

4.25 The predictive and provisional mapping indicates land at either side of the Proposed Development Site and further afield could contain higher quality land. This is supported by survey data further afield which found land containing Grade 1, Grade 2, Subgrade 3a and Subgrade 3b quality land.

4.26 Whilst the mapping does indicate a small area of potential poorer quality land to the north east, which has been mapped as Grade 4, it is not considered that this would be suitable for development due to the gradient of the land.

4.27 Therefore, based on the available information, it is not considered that there is poorer quality land available within the area.

5 CONCLUSION

5.1 The Site extends to approximately 1.2 ha of agricultural land.

5.2 The Site has not been previously surveyed. Predictive and provisional maps indicate that there is a low likelihood that the Site would comprise BMV land quality of undifferentiated Grade 3 land.

5.3 Should the Site be found to contain BMV land quality the economic benefits of the Site would be in the order of £274 per annum.

5.4 However, as a result of the minimal size of the Site even if BMV quality land was to be identified, it would not be classified as “significant” development of agricultural land and therefore, poorer quality land would not need to be considered as an alternative.

Appendix KCC1
Natural England's Technical Information Note TIN 049

Natural England Technical Information Note TIN049

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

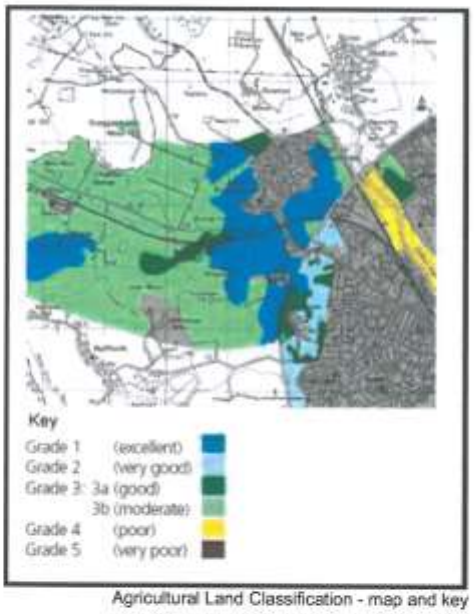
Most of our land area is in agricultural use. How this important natural resource is used is vital to sustainable development. This includes taking the right decisions about protecting it from inappropriate development.

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

NATURAL ENGLAND

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**. 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

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.

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 KCC2
Natural England's "Guide to Assessing Development Proposals on Agricultural Land"

GOV.UK

Home > Agricultural land: assess proposals for development

(https://www.gov.uk/government/organisations/natural-england)

Guidance

Guide to assessing development proposals on agricultural land

Updated 5 February 2021

Applies to England

Contents

This publication is available at https://www.gov.uk/government/publications/agricultural-land-assess-proposals-for-development/guide-to-assessing-development-proposals-on-agricultural-land

1. Policies to protect agricultural land and soil

Developers and local planning authorities (LPAs) should refer to the following government policies and legislation when considering development proposals that affect agricultural land and soils. They aim to protect:

- the best and most versatile (BMV) agricultural land from significant, inappropriate or unsustainable development proposals
- all soils by managing them in a sustainable way

Natural England uses these policies to advise on development proposals as a statutory consultee (https://www.gov.uk/guidance/consultation-and-pre-decision-matters#Statutory-consultees) in the planning process.

1.1 A Green Future: Our 25 Year Plan to improve the Environment 2018

A Green Future: Our 25 Year Plan to Improve the Environment (https://www.gov.uk/government/publications/25-year-environment-plan) sets out the government's 25-year plan to improve the health of the environment by using natural resources more sustainably and efficiently. It plans to:

- protect the best agricultural land
- put a value on soils as part of our natural capital
- manage soils in a sustainable way by 2030
- restore and protect peatland

1.2 National Planning Policy Framework (NPPF)

LPAs should use the NPPF to make decisions about the natural and local environment to:

- protect and enhance landscapes, biodiversity, geology and soils
- recognise soils as a natural capital asset that provide important ecosystem services
- consider the economic and other benefits of BMV agricultural land, and try to use areas of poorer quality land instead of higher quality land
- prevent soil, air, water, or noise pollution, or land instability from new and existing development

Read Chapter 15: Conserving and enhancing the natural environment (https://www.gov.uk/guidance/national-planning-policy-framework/15-conserving-and-enhancing-the-natural-environment) for full details.

1.3 Town and Country Planning (Development Management Procedure (England) Order) (DMPO) 2015

Planning authorities must consult Natural England on all non-agricultural applications that result in the loss of more than 20 hectares (ha) of BMV land if the land is not included in a development plan (https://www.gov.uk/guidance/national-planning-policy-framework/3-plan-making). For example, this includes the likely cumulative loss of BMV land from the proposed development if it's part of a phased development.

This is required by schedule 4(y) of the Order (http://www.legislation.gov.uk/uksi/2015/595/schedule/4/made).

1.4 Planning Practice Guidance for the Natural Environment

Paragraphs 001 and 002: Planning Practice Guidance for the Natural Environment (https://www.gov.uk/guidance/natural-environment#brownfield-land-soils-and-agricultural-land) explain why planning decisions should take account of the value of soils and agricultural land classification (ALC) to enable informed choices on the future use of agricultural land within the planning system.

2. LPAs: consult Natural England

You must consult Natural England for development proposals that are both:

- likely to cause the loss (or likely cumulative loss) of 20ha or more of BMV land
- not in accordance with an approved development plan

Natural England will advise you on the level of impact the proposal may have on BMV agricultural land. Natural England will take into account the type of development and its likely long-term effects.

Email consultations@naturalengland.org.uk or write to:

> Natural England consultation service
> Hornbeam House
> Electra Way
> Crewe Business Park
> Crewe
> Cheshire
> CW1 6GJ

3. LPAs: how to use agricultural land classification (ALC)

You can use ALC to help inform decisions on the appropriate sustainable development of land.

ALC uses a grading system to enable you to assess and compare the quality of agricultural land in England and Wales.

A combination of climate, topography and soil characteristics and their unique interaction determines the limitation and grade of the land. These affect the:

- range of crops that can be grown
- yield of crop
- consistency of yield
- cost of producing the crop

4. About ALC grades

ALC is graded from 1 to 5.

The highest grade goes to land that:

- gives a high yield or output
- has the widest range and versatility of use
- produces the most consistent yield
- requires less input

BMV agricultural land is graded 1 to 3a.

4.1 Grade 1 – excellent quality agricultural land

Land with no or very minor limitations. A very wide range of agricultural and horticultural crops can be grown and commonly includes:

- top fruit, for example tree fruit such as apples and pears
- soft fruit, such as raspberries and blackberries
- salad crops
- winter harvested vegetables

Yields are high and less variable than on land of lower quality.

4.2 Grade 2 – very good quality agricultural land

Land with minor limitations that affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown. On some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops, such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than grade 1.

4.3 Grade 3 – good to moderate quality agricultural land

Land with moderate limitations that affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in grades 1 and 2.

4.4 Subgrade 3a – good quality agricultural land

Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of crops including:

- cereals
- grass
- oilseed rape
- potatoes
- sugar beet
- less demanding horticultural crops

4.5 Subgrade 3b – moderate quality agricultural land

Land capable of producing moderate yields of a narrow range of crops, principally:

- cereals and grass
- lower yields of a wider range of crops
- high yields of grass which can be grazed or harvested over most of the year

4.6 Grade 4 – poor quality agricultural land

Land with severe limitations which significantly restrict the range of crops or level of yields. It is mainly suited to grass with occasional arable crops (for example cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties using the land. The grade also includes arable land that is very dry because of drought.

4.7 Grade 5 – very poor quality agricultural land

Land with very severe limitations that restrict use to permanent pasture or rough grazing, except for occasional pioneer forage crops.

5. LPAs: carry out ALC assessments to support your planning decisions

For an overview of ALC use:

- 1:250,000 scale regional ALC maps (http://publications.naturalengland.org.uk/category/5954148537204736) (grade 3 land is not divided into subgrades 3a and 3b)
- 1:250,000 scale regional maps predicting the likelihood of BMV agricultural land (http://publications.naturalengland.org.uk/category/5208993007403008)

These maps are not at a scale suitable or accurate for assessment of individual fields or sites.

You can assess if a development proposal is likely to affect BMV agricultural land by using the post 1988 ALC Magic map (http://magic.defra.gov.uk/MagicMap.aspx?chosenLayers=dudleystampIndex,backdropDIndex,backdropIndex,europeIndex,vmlBWIndex,25kBWIndex,50kBWIndex,250kBWIndex,miniscaleBWIndex,baseIndex&box=449447:459357:467834:470294&useDefaultbackgroundMapping=false) and detailed site survey reports (http://publications.naturalengland.org.uk/category/6249382855835648).

If no site survey reports are available, a new detailed survey may be necessary.

6. Use ALC to support your planning decisions

Use ALC survey data to assess the loss of land or quality of land from a proposed development. You should take account of smaller losses (under 20ha) if they're significant when making your decision. Your decision should avoid unnecessary loss of BMV land.

6.1 Protect soil

You should make sure development proposals include plans to:

- manage soils in a sustainable way during construction (https://www.gov.uk/government/publications/code-of-practice-for-the-sustainable-use-of-soils-on-construction-sites)

- avoid peat extraction
- protect soils from contamination
- reclaim land after mineral working or landfilling (https://www.gov.uk/government/publications/reclaim-minerals-extraction-and-landfill-sites-to-agriculture)

6.2 Carry out new surveys

If there's not enough information from previous data, you may need to have a new field survey to plan for development or to inform a planning decision. You should use soil scientists or experienced soil specialists to carry out new surveys. They should be:

- members of the British Society of Soil Science, the British Institute of Agricultural Consultants or similar professional body
- knowledgeable about the ALC 1988 guidelines (http://publications.naturalengland.org.uk/publication/6257050620264448)
- experienced in soil description and ALC assessments

6.3 Survey requirements

For a detailed ALC assessment, a soil specialist should normally make boreholes:

- every hectare on a regular grid on agricultural land in the proposed development area
- up to 1.2m deep using a hand-held auger

They should:

- dig small inspection pits by hand to a minimum depth of 1m to add supporting evidence to the borehole data
- dig pits where there's a change in main soil type and ALC grade to provide a good depiction of the site
- combine the survey results with local climate and site data to plot on an Ordnance Survey (OS) base map
- use a base map at an appropriate scale for detailed work, such as 1:10,000 scale

7. Developers: check if your proposal affects agricultural land

Use the post 1988 ALC Magic map (http://magic.defra.gov.uk/MagicMap.aspx?chosenLayers=dudleystampIndex,backdropDIndex,backdropIndex,europeIndex,vmlBWIndex,25kBWIndex,50kBWIndex,250kBWIndex,miniscaleBWIndex,baseIndex&box=449447:459357:467834:470294&useDefaultbackgroundMapping=false) and detailed site survey reports (http://publications.naturalengland.org.uk/category/6249382855835648) to help you assess whether a development proposal is likely to affect BMV agricultural land. If no suitable data exists, you may need to carry out a detailed survey to support your planning application.

7.1 Free and chargeable advice

Natural England offers advice for proposals. Some initial advice is free. More detailed advice is chargeable (https://www.gov.uk/guidance/developers-get-environmental-advice-on-your-planning-proposals#when-you-can-pay-for-agency-advice), for example if your proposal is 20ha or more and requires more detailed advice.

Email: consultations@naturalengland.org.uk

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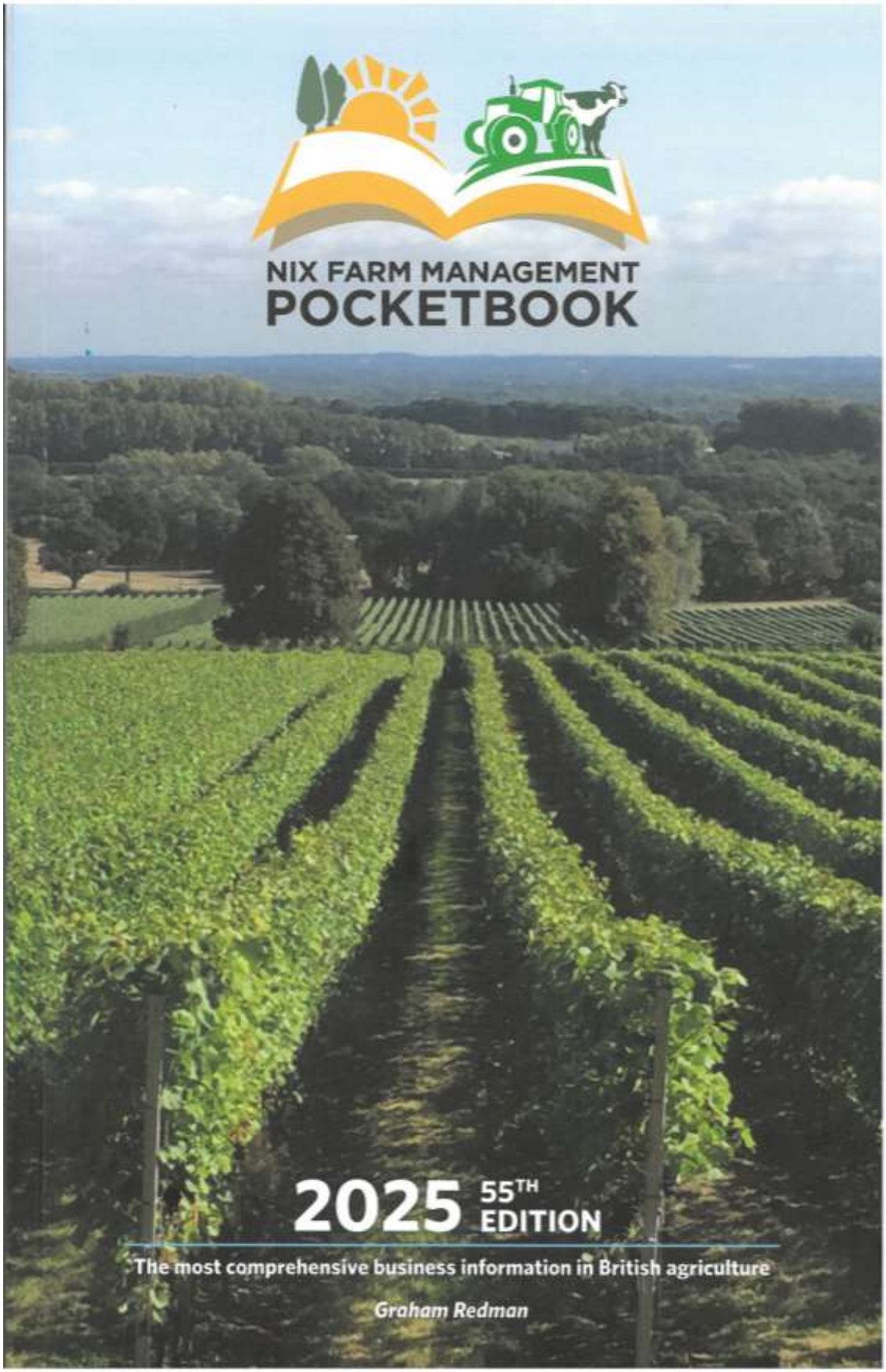
Appendix KCC3

John Nix Pocketbook for Farm Management (55th Ed) Extracts


NIX FARM MANAGEMENT
POCKETBOOK
2025 55TH 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)	7.1 (2.9)	8.3 (3.4)	9.5 (3.8)	
	£	£	£	£/t
Grain at £190/t	1,349	1,577 (639)	1,805 (731)	
Straw in Swath	188 (76)	188 (76)	188 (76)	
Total Output	**1,537 (622)**	**1,765 (715)**	**1,993 (807)**	***213***
Variable Costs £/ha *(£/ac)*:				
Seed.....		82 (33)		*10*
Fertiliser.....		295 (119)		*36*
Sprays.....		278 (112)		*33*
Total Variable Costs		655 (265)		*79*
Gross Margin £/ha (ac)	**882** (357)	**1110** (449)	**1,338** (542)	***134***

Fertiliser Basis 8.3t/ha

Nutrient	Kg/t	Kg/Ha	£/Ha
N	*23*	190	£184
P	7.0	58	£58
K	10.5	87	£52

Seed:

£/t C2	£515
Kg/Ha	175
% HSS	30%
£/t HSS	£354

prays £/ha:

Herbicides	£121
Fungicides	£110
Insecticides	£3
PGRs	£16
Other	£27

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 yield used for feed and milling wheats including spring varieties is 8.18t/ha (overall 10-year average *Defra)*.

   The table below offers a weighted estimate of yield variations according to wheat type based on a national yield of 8.4t/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%	8.27	8.40	7.61		**8.18**
Feed	101%	8.35	8.48	7.69		8.27
Bread	93%	7.69	7.81	7.08	6.02	7.61
Biscuit	99%	8.18	8.32	7.54		8.10

2. *Straw* is sold in the swath. Assuming 1 hectare is worth 2.5 tonnes baled straw at 4.2t/ha. So £75/tonne baled = £188/ha for winter wheat.
3. *Seed* is costed with a single purpose dressing. Up to a third of growers require additional seed treatments, specifically to supress BYDV. This can add £170/t of seed (£30/ha). 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 £190/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)	
	£	£	£	£/t
Output at £425/t	1275 (516)	1,488 (602)	1,700 (689)	*425*
Variable Costs £/ha *(£/ac)*:				
Seed		73 (29)		*21*
Fertiliser		257 (104)		*73*
Sprays		252 (102)		*72*
Total Variable Costs		582 (236)		*166*
Gross Margin £/ha (ac)	**693** (281)	**906** (367)	**1,118** (453)	***259***

Fertiliser Basis 3.5t/ha				**Seed:**		**Sprays:**	
Nutrient	Kg/t	Kg/Ha	£/Ha	£/Ha C	43	Herbicides	£124
N	54	190	£184	£/Ha Hy	88	Fungicides	£68
P	14	49	£49	£/Ha HSS	29	Insecticides	£16
K	11	39	£23	C:Hy:HSS	20:20:60	PGRs	£0
	Seed write-off		8%	Kg/Ha	5.5	Other	£44

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)	
	£	£	£	£/t
Output at £425/t	808 (327)	956 (387)	1,105 (448)	*425*
Variable Costs £/ha *(£/ac)*:				
Seed		69 (28)		*31*
Fertiliser		115 (47)		*51*
Sprays		131 (53)		*58*
Total Variable Costs		316 (128)		*140*
Gross Margin £/ha (ac)	**492** (199)	**641** (259)	**789** (320)	***285***

1. *Prices*. The price used is £399/t plus oil bonuses at 44% oil content making £425/. 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. £50, Fungicides, £41, Insecticides £13, and Others £27/ha
3. *Winter Versus Spring*: As little as 8,000 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.

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