

**LAND AT M42, JN 10,
TAMWORTH**

**AGRICULTURAL LAND
CLASSIFICATION
AND CIRCUMSTANCES**

January 2021





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1 INTRODUCTION

1.1 This report considers the agricultural land quality of the site to the north-east of Jn 10 of the M42, east of Tamworth, and assesses that in the context of local circumstances and the relevant planning policy.

1.2 The site extends to approximately 32 ha. It is identified on the Google Earth image below. For the detailed boundary please refer to the plans.

Insert 1: The Site (boundary shown approximately)



1.3 The site is bordered by residential development to the north. To the west and south the site is bordered by roads beyond which is commercial development. Agricultural land lies to the east.

1.4 We have carried out a detailed Agricultural Land Classification (ALC) survey of the site and identified the land quality, which is mostly Grade 2 “**very good quality agricultural land**”, with an area of subgrade 3b “**moderate quality**”. This report therefore considers the planning policy and circumstances relevant to an assessment of the weight to be given to the loss of such land in these circumstances.

This Report

1.5 This report:

- sets out the national and local planning policy and guidance of relevance in **Section 2**;
- describes the site and the land quality in **Section 3**;
- assesses the implications of the findings in **Section 4**;
- ending with a summary and conclusions in **Section 5**.

The Author

- 1.6 The ALC survey was carried out by an experienced soil surveyor. This policy review has been carried out by **Tony Kernon**. I am a Chartered Surveyor and a Fellow of the British Institute of Agricultural Consultants. My CV is appended at **Appendix KCC 1**.

2 PLANNING POLICY OF RELEVANCE

National Planning Policy

- 2.1 The National Planning Policy Framework (NPPF) was most recently revised in February 2019, and accordingly forms the starting point.
- 2.2 Paragraph 170 notes that planning policies and decisions should contribute to and 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”**.
- 2.3 The best and most versatile (BMV) agricultural land is defined in Annex 2 of the NPPF as that in grades 1, 2 and 3a of the Agricultural Land Classification.
- 2.4 Paragraph 171 deals with 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 53 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”**.
- 2.5 There is no definition of what constitutes “significant” development. However the “Guide to assessing development proposals on agricultural land” (Natural England, January 2018) advises local planning authorities to **“take account of smaller losses (under 20 hectares) if they’re significant when making your decision”**, suggesting that 20 ha is a suitable threshold for defining “significant” in many cases.

Local Policy

- 2.6 The site lies within North Warwickshire Borough Council’s area. The new Local Plan is still evolving and therefore is only afforded limited weight at the current time.
- 2.7 The adopted Local Plan 2006 policy ENV6, Part 1 identifies that the Council will safeguard and enhance land resources in the Borough by, inter alia, **“protecting the best and most versatile agricultural land”**.
- 2.8 The Core Strategy 2014 does not contain a specific policy governing the non-agricultural development of agricultural land.

3 AGRICULTURAL LAND QUALITY

The ALC System

- 3.1 The Agricultural Land Classification (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 of the ALC is described as being of excellent quality and Grade 5, at the other end of the scale, is described as being of very poor quality. The current guidelines and criteria for ALC were published by the Ministry of Agriculture, Fisheries and Food (MAFF) in 1988 ('Agricultural Land Classification of England and Wales: Revised Guidelines and Criteria for Grading the Quality of Agricultural Land'¹).
- 3.2 The ALC system is described in Natural England's Technical Information Note, reproduced in **Appendix KCC2**.

ALC Survey Results

- 3.3 The ALC survey of the site was carried out on 25th and 26th November 2020. 31 sites were examined over the site and graded in accordance with the revised methodology. Two soil pits were dug to better describe profiles, and three samples were sent for particle size analysis to validate the hand-texturing results.
- 3.4 The factors affecting the ALC are set out in the analysis in **Appendix KCC3**. There are no climatic, gradient or local micro-relief limitations to the quality of land.
- 3.5 Land quality across the majority of the site (29 ha) is limited by a combination of soil wetness and soil droughtiness. Most of the site falls into ALC Grade 2.
- 3.6 Part of the site, in the south-east corner, has slowly permeable soils in wetness class IV where the grade is limited by wetness to ALC sub-grade 3b (2 ha). Part (1 ha) is non-agricultural.
- 3.7 The detailed ALC report is set out in **Appendix KCC3**, and the distribution of grades is provided on **Plan KCC2697/02** at the back of this report.

¹ Agricultural Land Classification of England and Wales: Revised Guidelines and Criteria for Grading the Quality of Agricultural Land', October, 1988. The Ministry of Agriculture, Fisheries and Food (MAFF) was incorporated within the Department for Environment, Food and Rural Affairs (Defra) in June 2001

4 ASSESSMENT

- 4.1 Planning policy in the NPPF sets out that development management decisions should recognise the economic and other benefits of the best and most versatile agricultural land.
- 4.2 In the context of plan making the NPPF sets out that land should be allocated with the least environmental value. The paragraph advises that, where significant development of agricultural land is demonstrated to be necessary, poorer quality land should be used in preference.
- 4.3 Local plan (2006) policy ENV6 seeks to protect BMV land.
- 4.4 In this analysis I consider:
- land quality in the area generally and whether poorer quality land is available;
 - what the economic benefits are and the effects on farm viability;
 - and the weight to be given to the loss of agricultural land in this context.

Land Quality in the Area Generally and Whether Poorer Quality Land is Available

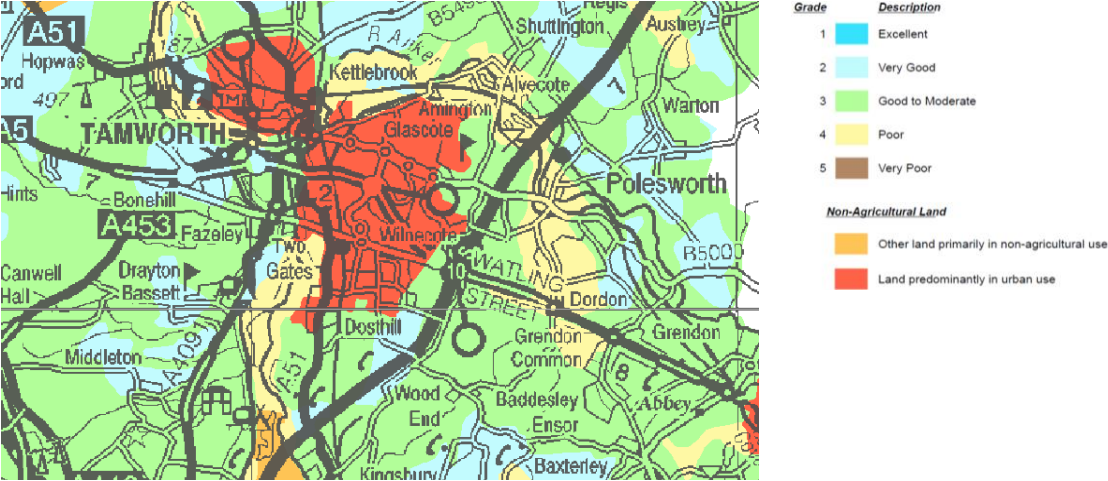
- 4.5 Any assessment of the significance of losing agricultural land needs to be made in context. Across England an estimated 42% of all farmland is within Grades 1, 2 and 3a (see TIN049, **Appendix KCC 2**). Accordingly BMVAL is not a rare resource.
- 4.6 Statistically about 40% of Grade 3 land falls within Sub-grade 3a. However, in parts of the country the proportion is expected to be much higher.
- 4.7 The percentage of agricultural land locally in each grade is shown below, taken from the old “provisional” ALC maps. There is no subdivision of Grade 3. It should be noted that TIN 049 estimates that a slightly higher proportion of agricultural land will fall into Grades 1 and 2 than were shown on the “provisional” maps, so the following figures are an underestimation of the likely areas involved.

Table 1 : Percentage of Agricultural Land by Grade

	England	North Warwickshire
1	2.7	0.4
2	14.2	19.7
3	48.2	67.3
4	14.1	7.1
5	8.4	0.0
Non-agricultural	5.0	3.9
Urban	7.3	1.6

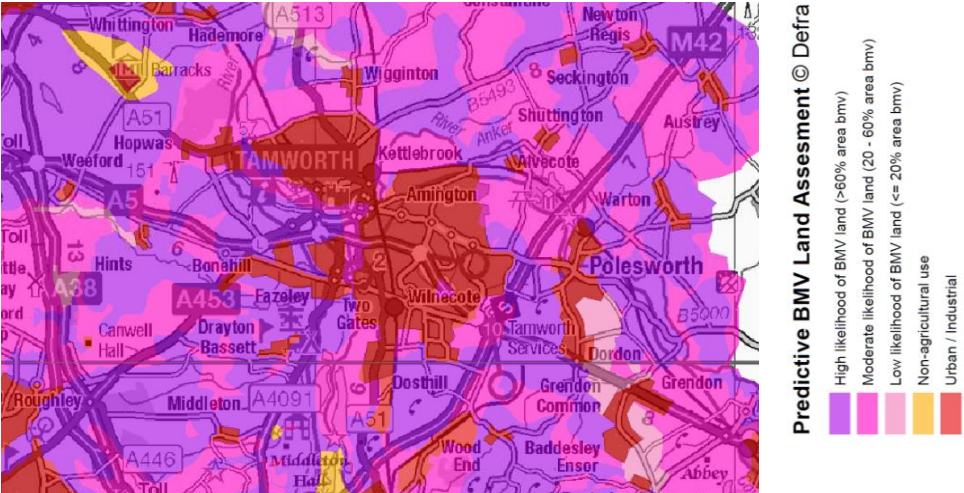
- 4.8 It can be seen that, based on the old “provisional” ALC maps, the District contains a slightly higher proportion of Grade 2, and a likely higher proportion of subgrade 3a, than the national proportion.
- 4.9 At the northern edge of the District the old “provisional” ALC maps show that along the M42 corridor much of the land is shown as undifferentiated Grade 3, with an area of Grade 4 to the East.

Insert 2: The Provisional MAFF ALC



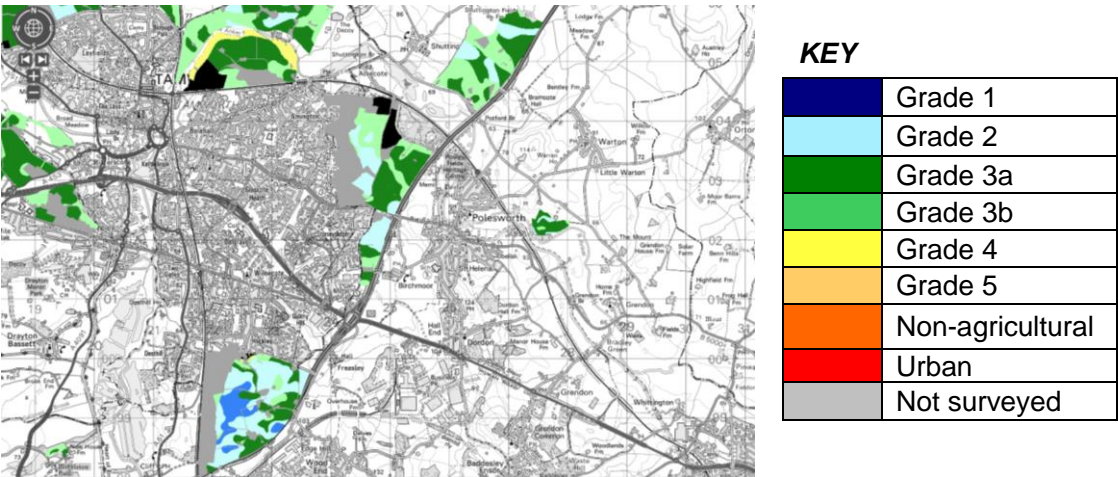
- 4.10 Recognising the limitations of the “provisional” maps from the 1970s, as described in TIN049 (Appendix KCC2) Natural England has now produced “predictive best and most versatile” land quality maps. This estimates the proportion of land within an area that is of BMV quality. There are three categories: low (<20% area bmv), moderate (20-60% area bmv), and high (>60% area bmv). For this area the map shows as follows:

Insert 3: Predictive BMV Land Assessment



- 4.11 These maps show that the site is in the high likelihood category. Almost all of the local area is predicted to contain a moderate (20-60%) or mostly high (>60%) proportion of BMV land. Therefore development near this junction is very likely to involve BMV land.
- 4.12 Along the M42 there is detailed ALC survey data available for much of land west of the motorway, as reproduced in **Appendix KCC4**. An extract from the survey data available from www.magic.gov.uk, is shown below. This shows the land to comprise a mixture of grades, but mostly BMV including grades 1, 2 and 3a.

Insert 4: Extract Available Detailed ALC



- 4.13 Detailed ALC Survey was carried out for the development of the St Modwen commercial site to the immediate south east of Junction 10, which comprised a mixture of Grades 2 and subgrade 3a. Agricultural land quality was not a constraint to the development of this area. The Environmental Statement (PAP/2014/0648) Chapter 14 identifies the site to comprise 25 ha, of which 4.6 ha was Grade 2 and 18.8 ha was subgrade 3a. The Board Report does not identify this as an issue of concern. The Inspector’s report at paras 82 and 83 concludes that the loss must be considered in the context of the lack of adverse impact on agricultural land in the wider area, and balanced against the socio-economic benefits the proposals would provide.
- 4.14 Therefore it can be concluded that, in terms of land quality in the local area:
 - most is predicted to be >60% area bmv on the BMV likelihood maps;
 - detailed survey data, where available, shows that the land is >60% area bmv;
 - and near to the junction the land is similarly of BMV quality.

Economic and Other Benefits

- 4.15 There is no research that we are aware of that seeks to analyse the productive or economic advantages of BMV to non-BMV land. Grade 2 land is described in the ALC as

capable of growing a wide range of crops. Subgrade 3b is described as producing moderate yields of a narrow range of crops, principally cereals or grass, or lower yields of a wider range of crops.

4.16 In the absence of any empirical data, any economic assessment is inevitably crude. Taking standard budgeting text books, such as the John Nix Farm Management Pocketbook (extracts from which are reproduced in **Appendix KCC5**), it is possible to show the difference between moderate and high yields, as an illustration, between crops.

4.17 Taking that crude measure for winter wheat and oilseed rape, the differences are shown below.

Table 2: Assessment of Economics of Farmed Land

Item	Winter Wheat		Oilseed Rape	
	Average	High	Average	High
Yield	8.7t/ha	10.0t/ha	3.5t/ha	4.0t/ha
Gross Margin / £/ha	£815	£1010	£776	£951
Fixed costs ¹ £/ha	£715	£715	£715	£715
Profit (loss) /ha before labour	£100	£295	(£61)	£236
Unpaid labour £/ha	£220	£220	£220	£220
Profit (loss) after unpaid labour	(£120)	£75	(£159)	(£26)
Uplift £/ha	--	£195	--	£185

¹Mainly cereals, under 200 ha, excluding unpaid labour

4.18 For this 32 ha site of which 29.9 ha are BMV, the economic benefits of BMV land to non-BMV land would be £5,530 to £5,830. Hence the economic benefits are fairly limited.

4.19 The land comprises one of two fields collectively extending to 41.7 ha, farmed by the Applicant. The land is in arable use, and the work is carried out by contractors.

4.20 There are no buildings owned within the holding.

4.21 The Proposed Development will consequently not have an adverse effect on a full-time farm business, nor will it result in any other agricultural land being affected or becoming unfarmable. Other land can continue to be managed as it is now.

The Planning Balance

- 4.22 The NPPF requires the economic and other benefits of BMV land to be considered. In plan making, where development is necessary poorer quality land should be used in preference.
- 4.23 In this case the economic benefits are limited. There is no research to determine the crop advantages of BMV land over non-BMV land, but taking high and average yields figures from farm management budget books the benefits across the site could potentially be less than £6,000 per annum.
- 4.24 If non-agricultural development on this site of Tamworth, near to the M42, is needed then the land is all generally of equal grading, being a mix of mostly BMV land. Some sites may be more of a mix of different grades, but all will be mostly BMV, as this site.
- 4.25 Therefore there are no areas of poorer quality land locally to which development could otherwise be directed.
- 4.26 In such circumstances non-agricultural development accords with planning policy.

5 SUMMARY AND CONCLUSIONS

- 5.1 This report considers the agricultural land quality of land to the north-east of junction 10 of the M42, and then assesses the planning considerations relevant to the non-agricultural development of that site.

Land Quality

- 5.2 The land was surveyed in November 2020. This identified the site to comprise of 29 ha of Grade 2 and 2 ha of Subgrade 3b land.

Planning Policy

- 5.3 Planning policy requires that the economic and other benefits of best and most versatile land be recognised. In plan making the Framework advises that where significant development of agricultural land is necessary, poorer quality land should be used in preference.
- 5.4 The site comprises BMV agricultural land mixed with a small area of poorer quality land.
- 5.5 Predictive likelihood of BMV maps show most of this land in this general area likely to comprise 60% or more of BMV land. Available ALC data for nearby areas confirms that the land quality is mostly BMV.
- 5.6 The NPPF requires that the economic and other benefits of BMV land be considered. In this case the economic benefits are estimated to be less than £6,000 per annum. This is a fairly modest sum, therefore.
- 5.7 There are no adverse effects on any active farming business, as whilst the land is farmed it is managed by contractors. There is no knock-on implication for any other land farmed.
- 5.8 In the circumstances of limited economic benefit, it is evident that any development in this general area, if shown to be required, will involve land of BMV quality. There is no large area of poorer quality land available in preference.
- 5.9 Therefore the economic benefits of the land have been considered, and poorer quality land is not available. In those circumstances the non-agricultural development of the area is in accordance with the planning policy.

APPENDIX KCC1
Curriculum Vitae Tony Kernon



CURRICULUM VITAE

ANTHONY PAUL KERNON

SPECIALISMS

- Agricultural buildings and dwelling assessments
- Equestrian building and dwelling assessments (racing, sports, rehabilitation, recreational enterprises)
- Farm and estate diversification and development
- Assessing the impacts of major development proposals on rural businesses
- Land resources and impacts of development
- Expert witness work



SYNOPSIS

Tony is a rural surveyor with 30 years experience in assessing agricultural and equestrian businesses and farm diversification proposals, and the effects of development proposals on them. Brought up in rural Lincolnshire and now living on a small holding in Wiltshire, he has worked widely across the UK and beyond. He is recognised as a leading expert nationally in this subject area. Married with two children. Horse owner.

QUALIFICATIONS

Bachelor of Science Honours degree in Rural Land Management, University of Reading (BSc(Hons)). 1987. Awarded 2:1.

Diploma of Membership of the Royal Agricultural College (MRAC).

Professional Member of the Royal Institution of Chartered Surveyors (MRICS) (No. 81582). (1989).

OTHER PROFESSIONAL ACTIVITIES

Co-opted member of the Rural Practice Divisional Council of the Royal Institution of Chartered Surveyors. (1994 - 2000)

Member of the RICS Planning Practice Skills Panel (1992-1994)

Member of the RICS Environmental Law and Appraisals Practice Panel (1994 - 1997).

Fellow of the British Institute of Agricultural Consultants (MBIAC) (1998 onwards, Fellow since 2004).

Secretary of the Rural Planning Division of the British Institute of Agricultural Consultants (BIAC) (1999 – present).

EXPERIENCE AND APPOINTMENTS

1997 -----> **Kernon Countryside Consultants.** Principal of agricultural and rural planning consultancy specialising in research and development related work. Specialisms include essential dwelling and building assessments, assessing the effects of development on land and land-based businesses, assessing the effects of road and infrastructure proposals on land and land-based businesses, and related expert opinion work.

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- 1987 - 1996 **Countryside Planning and Management**, Cirencester. In nearly ten years with CPM Tony was involved in land use change and environmental assessment studies across the UK and in Europe. From 1995 a partner in the business, work covered included feasibility studies for possible grant schemes, evaluation of planning controls and existing environmental schemes, assessments of the need for farm dwellings and related agricultural developments, Environmental Assessments and planning studies, and expert witness work.
- 1983 - 1984 **Dickinson Davy and Markham**, Brigg. Assistant to the Senior Partner covering valuation and marketing work, compulsory purchase and compensation, and livestock market duties at Brigg and Louth.

RECENT RELEVANT EXPERIENCE

TRAINING COURSES

- Landspreading of Non Farm Wastes.** Fieldfare training course, 24 – 25 November 2009
Foaling Course. Twemlows Hall Stud Farm, 28 February 2010
Working with Soil: Agricultural Land Classification. 1 – 2 November 2017

TRANSPORT ENVIRONMENTAL ASSESSMENT CONTRIBUTIONS

- 1992 Port Wakefield Channel Tunnel Freight Terminal, Yorkshire
 1993 A1(M) Widening, Junctions 1-6 (Stage 2)
 1994 - 1995 A55 Llanfairpwll to Nant Turnpike, Anglesey (Stage 3)
 1994 - 1995 A479(T) Talgarth Bypass, Powys (Stage 3)
 1995 Kilkhampton bypass (Stage 2)
 1997 A477 Bangeston to Nash improvement, Pembroke
 2000 Ammanford Outer Relief Road
 2001 A421 Great Barford Bypass
 2001 Boston Southern Relief Road
 2003 A40 St Clears - Haverfordwest
 2003 A470 Cwmbrach – Newbridge on Wye
 2003 A11 Attleborough bypass
 2003 - 2008 A487 Porthmadog bypass (Inquiry 2008)
 2004 A55 Ewloe Bypass
 2004 A40 Witney – Cogges link
 2005 – 2007 A40 Robeston Wathen bypass (Inquiry 2007)
 2005 – 2007 East Kent Access Road (Inquiry 2007)
 2006 M4 widening around Cardiff
 2007 – 2008 A40 Cwymbach to Newbridge (Inquiry 2008)
 2007 A483 Newtown bypass
 2008 – 2009 A470/A483 Builth Wells proposals
 2009 – 2017 A487 Caernarfon-Bontnewydd bypass (Inquiry 2017)
 2009 – 2010 North Bishops Cleeve extension
 2009 – 2010 Land at Coombe Farm, Rochford
 2009 – 2011 A477 St Clears to Red Roses (Inquiry 2011)
 2010 – 2011 Streethay, Lichfield
 2010 – 2012 A465 Heads of the Valley Stage 3 (Inquiry 2012)
 2013 – 2016 A483/A489 Newtown Bypass mid Wales (Inquiry 2016)
 2013 - 2016 High Speed 2 (HS2) rail link, Country South and London: Agricultural Expert for HS2 Ltd
 2015 – 2017 A487 Dyfi Bridge Improvements
 2016 – 2018 A465 Heads of the Valley Sections 5 and 6 (Inquiry 2018)
 2017 - 2018 A40 Llanddewi Velfrey to Penblewin
 2017 – 2018 A4440 Worcester Southern Relief Road

EXPERT EVIDENCE GIVEN AT PUBLIC INQUIRIES AND HEARINGS

1992	Brooklands Farm: Buildings reuse Chase Farm, Maldon: Removal of condition	Bonehill Mill Farm: New farm building
1993	Haden House: Removal of condition	Manor Farm: New farm dwelling
1994	Brooklands Farm: 2 nd Inquiry (housing) Barr Pound Farm: Enforcement appeal Fortunes Farm Golf Course: Agric effects	Cameron Farm: Mobile home Land at Harrietsham: Enforcement appeal
1995	Village Farm: New farm dwelling Claverdon Lodge: Building reuse Harelands Farm: Barn conversion Castle Nurseries: Alternative site presentation	Attlefield Farm: Size of farm dwelling Bromsgrove Local Plan: Housing allocation Lichfield Local Plan: Against MAFF objection Hyde Colt: Mobile home / glasshouses Highmoor Farm: New farm dwelling Gwenfa Fields: Removal of restriction Yatton: Horse grazing on small farm Newbury Local Plan: Effects of development
1996	Church View Farm: Enforcement appeal Flecknoe Farm: Second farm dwelling	
1997	Basing Home Farm: Grain storage issue Viscar Farm: Need for farm building / viability Lane End Mushroom Farm: Need for dwelling	
1998	Moorfields Farm: New farm dwelling Maidstone Borough LPI: Effects of dev'ment Glenfield Cottage Poultry Farm: Bldg reuse	Two Burrows Nursery: Building retention Dunball Drove: Need for cattle incinerator
1999	Holland Park Farm: Farm dwelling / calf unit Northington Farm: Existing farm dwelling	Lambriggan Deer Farm: Farm dwelling
2000	Twin Oaks Poultry Unit: Traffic levels Meadows Poultry Farm: Farm dwelling Hazelwood Farm: Beef unit and farm dwelling Shardeloes Farm: Farm buildings Aylesbury Vale Local Plan: Site issues Deptford Farm: Buildings reuse	Coldharbour Farm: Buildings reuse Heathey Farm: Mobile home Wheal-an-Wens: Second dwelling Apsley Farm: Buildings reuse Home Farm: Size of grainstore A34/M4 Interchange: Agricultural evidence Weyhill Nursery: Second dwelling Mannings Farm: Farm dwelling Land Adj White Swan: Access alteration Happy Bank Farm: Lack of need for building Lower Park Farm: Building reuse / traffic Stourton Hill Farm: Diversification
2001	Lambriggan Deer Farm: Farm dwelling Blueys Farm: Mobile home	
2002	A419 Calcutt Access: Effect on farms Cobweb Farm: Buildings reuse / diversification Philips Farm: Farm dwelling West Wilts Local Plan Inquiry: Dev site Manor Farm: Building reuse	Darren Farm: Impact of housing on farm Greenways Farm: Farm diversification Land at Four Marks: Dev site implications
2003	Fairtrough Farm: Equine dev and hay barn Hollies Farm: Manager's dwelling Land at Springhill: Certificate of lawfulness Oak Tree Farm: Mobile home	
2004	Chytane Farm: Objector to farm dwelling Crown East: Visitor facility and manager's flat Swallow Cottage: Widening of holiday use Etchden Court Farm: New enterprise viability Attleborough Bypass: On behalf of Highways Agency	Oldberrow Lane Farm: Relocation of buildings Forestry Building, Wythall: Forestry issues Lower Dadkin Farm: Mobile home Villa Vista: Viability of horticultural unit
2005	Howells School: Use of land for horses Otter Hollow: Mobile home Springfield Barn: Barn conversion Ashley Wood Farm: Swimming pool The Hatchery: Mobile home Stockfields Farm: Building reuse	Newton Lane: Enforcement appeal Manor Farm: Change of use class South Hatch Stables: RTE refurbishment Trevaskis Fruit Farm: Farm dwelling Tregased: Enforcement appeal
2006	Manor Farm: Replacement farmhouse Sough Lane: Farm dwelling Whitewebbs Farm: Enforcement appeal Land at Condicote: Farm dwelling Rye Park Farm: Enforcement appeal	Bhaktivedanta Manor: Farm buildings Military Vehicles: Loss of BMV land Ermine Street Stables: Enforcement appeal Featherstone Farm: Replacement buildings Flambards: Mobile home and poultry unit

	Woodrow Farm: Buildings reuse	Manor Farm: Effect of housing on farm
	Rectory Farm: Retention of unlawful bldg	Goblin Farm: Arbitration re notice to quit
	Walltree Farm: Retention of structures	Terrys Wood Farm: Farm dwelling
	Weeford Island: Land quality issues	Etchden Court Farm: Mobile home
	College Farm: Relocation of farmyard	Hollowshot Lane: Farm dwelling and buildings
2007	Woolly Park Farm: Manager's dwelling	Barcroft Hall: Removal of condition
	Park Gate Nursery: Second dwelling	Kent Access Road: Effect on farms
	Penyrheol Ias: Retention of bund	Greys Green Farm: Enforcement appeal
	Hucksholt Farm: New beef unit in AONB	A40 Robeston Wathen bypass: Underpass
	The Green, Shrewley: Mobile home	Woodland Wild Boar: Mobile homes
	Brook Farm: Retention of polytunnels	
2008	Weights Farm: Second dwelling	Whitegables: Stud manager's dwelling
	Hill Farm: Mobile home	Balaton Place: Loss of paddock land
	Relocaton of Thame Market: Urgency issues	Point to Point Farm: Buildings / farm dwelling
	Spinney Bank Farm: Dwelling / viability issues	Norman Court Stud: Size of dwelling
	Higham Manor: Staff accommodation	High Moor: Temporary dwelling
	Robeston Watham bypass: Procedures Hearing	Land at St Euny: Bldg in World Heritage Area
	Monks Hall: Covered sand school	
	Porthmadog bypass: Road scheme inquiry	Baydon Meadow: Wind turbine
2009	Claverton Down Stables: New stables	Meadow Farm: Building conversion
	Hailsham Market: Closure issues	Bishop's Castle Biomass Power Station: Planning issues
	Gambledown Farm: Staff dwelling	Foxhills Fishery: Manager's dwelling
	Oak Tree Farm: Farm dwelling	Bryn Gollen Newydd: Nuisance court case
	A470 Built Wells: Off line road scheme	Swithland Barn: Enforcement appeal
	Hill Top Farm: Second dwelling	Woodrow Farm: Retention of building
	Sterts Farm: Suitability / availability of dwelling	
2010	Poultry Farm, Christmas Common: Harm to AONB	Stubwood Tankers: Enforcement appeal
	Wellsprings: Rention of mobile home	Meridian Farm: Retention of building
	Redhouse Farm: Manager's dwelling	Swithland Barn: Retention of building
	Lobbington Fields Farm: Financial test	
2011	Fairtrough Farm: Enforcement appeal	A477 Red Roses to St Clears: Public Inquiry
	Etchden Court Farm: Farm dwelling	Upper Bearfield Farm: Additional dwelling
	Trottiscliffe Nursery: Mobile home	North Bishops Cleeve: Land quality issues
2012	Tickbridge Farm: Farm dwelling	Langborrow Farm: Staff dwellings
	Blaenanthir Farm: Stables and sandschool	Heads of the Valley S3: Improvements
	Land at Stonehill: Eq dentistry / mobile home	Seafeld Pedigrees: Second dwelling
	Cwmcoedlan Stud: Farm dwelling with B&B	Beedon Common: Permanent dwelling
2013	Barnwood Farm: Farm dwelling	Upper Youngs Farm: Stables / log cabin
	Spring Farm Barn: Building conversion	Tithe Barn Farm: Enforcement appeal
	Baydon Road: Agricultural worker's dwelling	Lower Fox Farm: Mobile home / building
	Stapleford Farm: Building reuse	Tewinbury Farm: Storage barn
	Meddler Stud: Residential development	Church Farm: Solar park construction
	Deer Barn Farm: Agricultural worker's dwelling	
2014	Land at Stow on the Wold: Housing site	Land at Elsfield: Retention of hardstanding
	Allspheres Farm: Cottage restoration	Queensbury Lodge: Potential development
	Land at Stonehill: Equine dentistry practice	Kellygreen Farm: Solar park development
	Spring Farm Yard: Permanent dwelling	Spring Farm Barn: Building conversion
	Land at Valley Farm: Solar park	Land at Willaston: Residential development
	Land at Haslington: Residential development	Bluebell Cottage: Enforcement appeal
	Manor Farm: Solar farm on Grade 2 land	Clemmit Farm: Mobile home
	Penland Farm: Residential development	Honeycrook Farm: Farmhouse retention
	Sandyways Nursery: Retention of 23 caravans	The Mulberry Bush: Farm dwelling
2015	The Lawns: Agricultural building / hardstanding	Redland Farm: Residential dev issues

	Harefield Stud: Stud farm / ag worker's dwelling	Emlagh Wind Farm: Effect on equines
	Newtown Bypass: Compulsory purchase orders	Fox Farm: Building conversion to 2 dwellings
	Barn Farm: Solar farm	Wadborough Park Farm: Farm buildings
	Hollybank Farm: Temporary dwelling renewal	Delamere Stables: Restricted use
	Five Oaks Farm: Change of use of land and temporary dwelling	
2016	Clemmit Farm: Redetermination	Meddler Stud: RTE and up to 63 dwellings
	The Lawns: Replacement building	Land off Craythorne Road: Housing dev
	Land at the Lawns: Cattle building	Berkshire Polo Club: Stables / accomm
2017	Low Barn Farm: Temporary dwelling	Harcourt Stud: Temporary dwelling
	High Meadow Farm: Building conversion	Clemmit Farm: Second redetermination
	Windmill Barn: Class Q conversion	Stonehouse Waters: Change of use of lake
	Land at Felsted: Residential development	
2018	Thorney Lee Stables: Temporary dwelling	Watlington Road: Outline app residential
	Benson Lane: Outline app residential	A465 Heads of the Valley 5/6: Agric effects
	Park Road, Didcot: Outline app residential	The Old Quarry: Permanent dwelling
	Coalpit Heath: Residential development	Chilaway Farm: Removal of condition
2019	Mutton Hall Farm: Agric worker's dwelling	Leahurst Nursery: Temporary dwelling
	Clemmit Farm: Third redetermination	Icomb Cow Pastures: Temp mobile home
	Ten Acre Farm: Enforcement appeal	

APPENDIX KCC2
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.

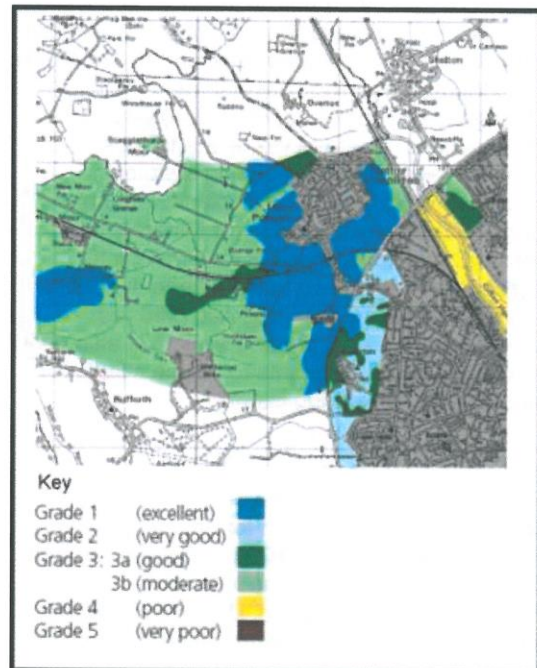
Policy to protect agricultural land

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

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

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 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 sets out 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 ALC study area, which measures approximately 32 ha in area, as shown in **Plan KCC2967/02**, respectively.

Methodology

- 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 (BPSS). In addition, this ALC survey has been carried out by a soil scientist who meets the requirements of the BSSS Professional Competency Standard (PSC) scheme for ALC (see BSSS PCS Document 2 '*Agricultural Land Classification of England and Wales*'²). 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 Environmental Assessment and Management (IEMA).
- 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) 3 '*Agricultural Land Classification of England and Wales: Revised Guidelines and Criteria for Grading the Quality of Agricultural Land*', October 1988 (henceforth referred to as the 'the ALC Guidelines').
- 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 170 and 171 of the National Planning Policy Framework (NPPF), revised February 2019. Further details of the ALC system and national planning policy implications are set out by Natural England in its Technical Information Note 049⁴.
- 5 A detailed ALC survey was carried out on the 25th and 26th of November 2020. The survey involved examination of the soil's physical properties at 32 auger bore locations on a 100m by 100m grid. Two soil pits (Pit 1 and Pit 2) were hand-excavated with a spade to examine certain soil physical properties, such as stone content and subsoil structure, in more detail.
- 6 A sample of topsoil was collected at three auger-bore locations, i.e. 5, 10 and 28. All auger bore locations, pits and topsoil locations are shown on **Plan KCC2967/01**. The samples were sent to an accredited laboratory for particle size analysis, i.e. the proportions of sand, silt and clay. This is to determine the definitive texture class of the topsoil.
- 7 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.
- 8 The soil profile was examined at each sample location to a maximum depth of approximately 1.2 m by hand with the use of a 5 cm diameter Dutch (Edleman) soil auger. The soil profile at each sample location was described using the '*Soil Survey Field*

² 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 December 2020

³ The Ministry of Agriculture, Fisheries and Food (MAFF) was incorporated within the Department for Environment, Food and Rural Affairs (Defra) in June 2001

⁴ Natural England (December, 2012). '*Agricultural Land Classification: protecting the best and most versatile agricultural land (TIN049)*'. Available online @ <http://publications.naturalengland.org.uk/publication/35012> Last accessed December 2020

Handbook: Describing and Sampling Soil Profiles' (Ed. J.M. Hodgson, Cranfield University, 1997). Each soil profile was ascribed a grade following the ALC Guidelines.

- 9 As described in the ALC Guidelines, the main physical factors influencing agricultural land quality are:
- climate;
 - site;
 - soil; and
 - interactive limitations.

2.10 These factors are considered in turn below.

Climate

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

Table 1: ALC Climate Data for Tamworth, Staffs

Climate Parameter	Grid Ref: SK 2483 0098
Average Altitude (m)	99
Average Annual Rainfall (mm)	659
Accumulated Temperature above 0°C (January – June)	1365
Moisture Deficit (mm) Wheat	100
Moisture Deficit (mm) Potatoes	90
Field Capacity Days (FCD)	147
Grade according to climate	1

- 2.12 Agricultural land quality at the Site is not limited by climate with reference to Figure 1 'Grade according to climate' on page 6 of the ALC Guidelines.

- 2.13 Due to the average annual rainfall, agricultural land at the Site is predicted to be at field capacity (i.e. near saturation point) for approximately 147 days per year, mainly over the late autumn, winter and early spring. Moisture Deficit (MD) values range between approximately 100mm for wheat, and 90mm for potatoes. The climate interacts with soil physical properties, i.e. soil texture and wetness class, and can limit agricultural land quality due to soil wetness, and/or soil droughtiness, as described under 'interactive limitations' below.

Site

- 2.14 As shown on **Plan KCC2967/01**, the Site is located south east of Tamworth, Staffordshire. The approximate centre of the study area is located at British National Grid (BNG) reference SK 2483 0098. The Site is bordered by non-agricultural land on three sides, with the M42 to the west, the A5 to the south, and by urban development at Birchmoor to the north. The land to the east is agricultural.

- 2.15 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

- 2.16 The land within the Site is located on a gentle slope which ranges in altitude from approximately 103 metres (m) Above Ordnance Datum (AOD) in the northeast, to approximately 92 mAOD in the southwest. The quality of agricultural land over the Site is not limited by gradient, which does not exceed 7°.

- 2.17 No part of the Site is limited by micro-relief (i.e. complex changes in slope angle and direction over short distances).

Risk of Flooding

- 2.18 From the Government Flood Map for Planning website⁵, the study area is within Flood Zone 1. Overall, the agricultural land within the study area is not limited by flooding (re Table 2 'Grade according to flood risk in summer' and/or Table 3 'Grade according to flood risk in winter' of the ALC Guidelines).

Soil

Geology/Soil Parent Material

- 2.19 From British Geological Survey (BGS) maps at 1:50,000 scale, the study area is underlain by the Halesowen Formation (mudstone, siltstone and sandstone). The bedrock is not covered by any superficial deposits.

Published Information on Soil

- 2.20 Soil information is available only at a scale of 1:250,000 on the National Soil Map published by the Soil Survey of England and Wales (SSEW) in 1983. This provisional soil map indicates that land at the Site is covered soils grouped in the Bardsey Association.

- 2.21 As described by the SSEW, the Bardsey Association is composed mainly of slowly permeable soils over Carboniferous mudstones and shales, with some well drained soils over sandstones. The soils are seasonally waterlogged because of their slowly permeable subsoil at shallow depth. The degree of waterlogging varies with drainage treatment, climate and cropping. Undrained land with a wet climate may be severely waterlogged (Wetness Class V). In low rainfall areas, appropriately drained land is in Wetness Class III but is in Wetness Class IV in much of the wetter northern districts.

Soil Survey

- 2.22 The detailed soil survey determined most well drained (Wetness Class I) or slightly seasonally waterlogged (Wetness Class II) soil profiles with a range of topsoil textures, from medium sandy loam, to sandy clay loam and medium clay loam. There are some isolated seasonally waterlogged and slowly permeable soil profiles in Wetness Class IV which have medium clay topsoil located in the southeast corner of the Site. The soils are comparable to those described by the SSEW as belonging to the Bardsey Association.

- 2.23 A log of all the soil profiles recorded on site is given as **Plan KCC2967/02**. A description of two soil pits are given as **Plan KCC2967/01**.

- 2.24 In order to substantiate topsoil texture determined during the ALC survey by hand-texturing, three samples of topsoil were collected over the study area (i.e. auger locations 5, 10 and 28, **Plan KCC2967/01**). 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 **Appendix 3**. The findings of the PSD analysis are shown in Table 2 below:

Table 2: Topsoil Texture (re Table 10, ALC Guidelines)

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
5	61	22	17	Sandy Loam
10	60	23	17	Sandy Loam
28	48	26	26	Medium Clay Loam

⁵ Government Flood Map for Planning website. Available online @ <https://flood-map-for-planning.service.gov.uk/> Last accessed December 2020

Interactive Limitations

- 2.25 From the information above, together with the findings of the detailed soil survey (see Soil Profile Log given as **Plan KCC2967/01**), it has been determined that the quality of agricultural land over the study area is limited mainly by soil wetness. Some lighter (sandier) and well-drained (WCI) soils are limited by soil droughtiness.

Soil Wetness

- 2.26 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 2.3 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	126 - 150 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 1 2 3a (2)
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	1 2 3a (2) 3b (3a)
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	2 3a (2) 3b (3a) 3b (3a)
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	3a 3b 3b 3b
Key * <27% clay; and ** >27% clay		

- 2.27 In a climate area with 147 field capacity days (see Table 1), slightly seasonally waterlogged soil profiles in Wetness Class II, with sandy clay loam topsoil, are limited by soil wetness to Grade 2. In the southeast corner of the Site, a few soil profiles in WCIV with medium clay loam topsoil are limited by soil wetness to Subgrade 3b.

Soil Droughtiness

- 2.28 Soil profiles which consist of sandy loam well-drained (WC I) sandy loam to sandy clay loam subsoils are limited by soil droughtiness to Grade 2. These soil have a slight shortage of water in the soil for optimum growth of crops during the growing season. Calculated Moisture Balance (MB) values for two reference crops, i.e. wheat and potatoes, are given in the Soil Profile Log given as Appendix 1.

Published ALC

- 2.29 MAFF Provisional ALC information (1:250,000) indicates that agricultural land to the east of Tamworth is in Grade 3 (not differentiated between Subgrade 3a and Subgrade 3b).

There is no detailed (post-1988) ALC survey information covering the Site. However, there is survey data showing Subgrade 3a, Grade 2 and a smaller proportion of Subgrade 3b to the north of the Site.

ALC Grading at the Site

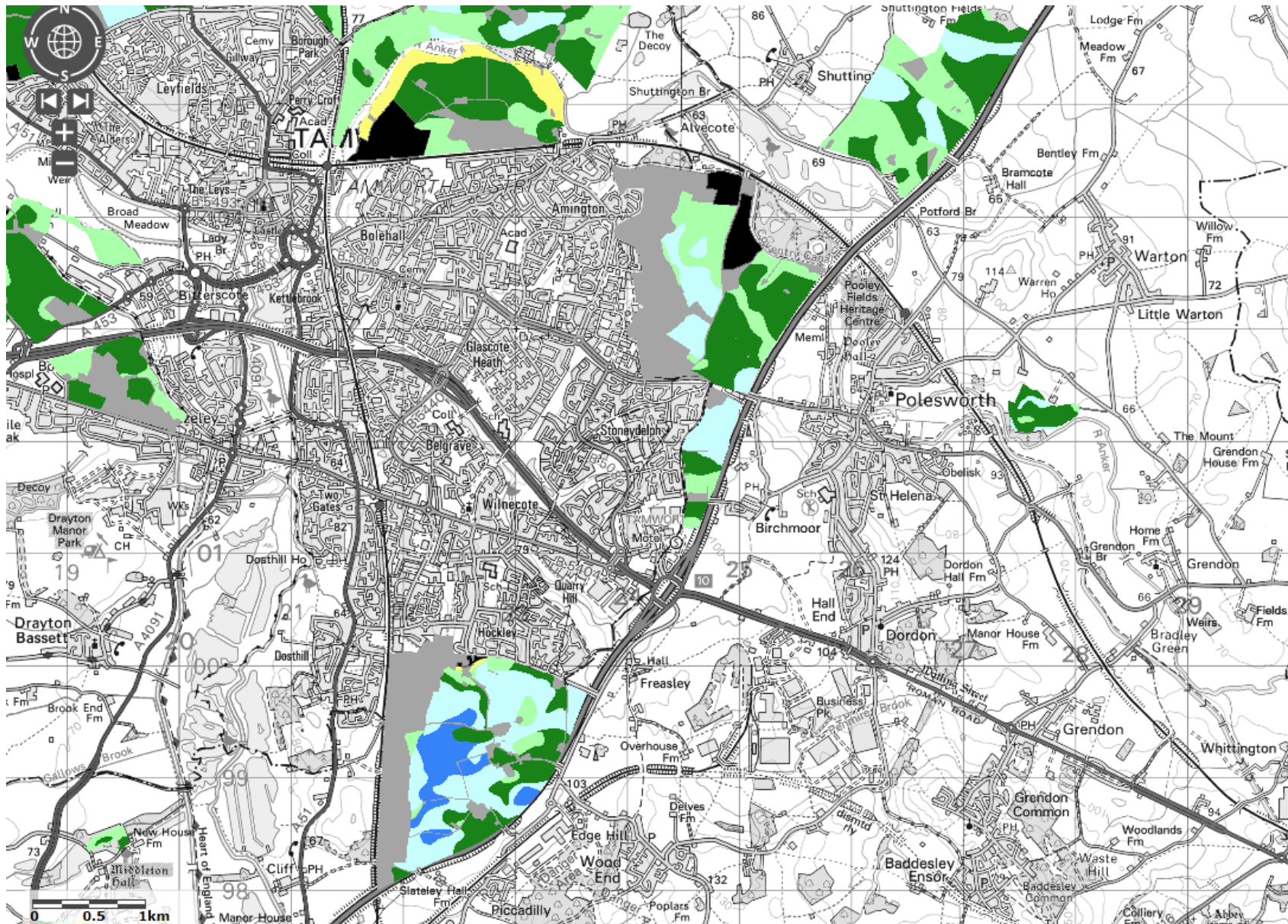
2.30 The agricultural land within the study area has been classified as mainly Grade 2, being limited by soil wetness and / or soil droughtiness. A small area of slowly permeable and seasonally waterlogged soils in WC IV in the southeast corner of the Site are limited by soil wetness to Subgrade 3b.

2.35 The area and proportion of agricultural land in each ALC grade has been measured from an ALC map given as **Plan KCC2967/02**. The findings are reported in Table 3 below.

Table 3: Agricultural Land Classification – Tamworth, Staffs

ALC Grade	Area (Ha)	Area (% of Total Site)
Grade 1 (Excellent)	0	0
Grade 2 (Very Good)	29	91
Subgrade 3a (Good)	0	0
Subgrade 3b (Moderate)	2	6.
Grade 4 (Poor)	0	0
Grade 5 (Very Poor)	0	0
Non-agricultural / Other land	1	3
Total	32.0	100

Appendix KCC4
Available ALC Nearby



APPENDIX KCC5
Extracts from Farm Management
Pocketbook



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II. ENTERPRISE DATA

1. CROPS

WHEAT

Feed Winter Wheat

Production level	Low	Average	High	
Yield: t/ha (t/ac)	7.25 (2.9)	8.60 (3.5)	10.00 (4.1)	
	£	£	£	£/t
Output at £150/t	1,088 (441)	1,290 (522)	1,500 (608)	150
Variable Costs £/ha:				
Seed.....		63 (26)		7
Fertiliser.....		211 (85)		25
Sprays.....		255 (103)		30
Total Variable Costs		529 (214)		62
Gross Margin £/ha (ac)	559 (226)	761 (308)	971 (393)	88

Fertiliser Basis 8.6t/ha				Seed:		Sprays £/ha:	
Nutrient	Kg/t	Kg/Ha	£/Ha	£/t C2	£400	Herbicides	£103
N	22	190	£143	Kg/Ha	175	Fungicides	£121
P	7.8	67	£45	% HSS	35%	Insecticides	£8
K	5.6	48	£22	£/t HSS	£282	PGRs	£18
						Other	£6

- Yields.* The average yield is for all winter feed wheat, i.e. all varieties and 1st and subsequent wheats. See over for more on First and Second Wheats. The overall yield used for feed and milling wheats including spring varieties calculates as 8.53t/ha.
- Straw* is costed as incorporated. Average yield and price is approximately 3.5 tonnes per hectare at £67/tonne (£5 more in small bales); variable costs (string) approx. £3.60 per tonne. Unbaled straw (sold for baling): anything from £50/ha (£20/acre) to £180/ha (£73/acre), national average around £85/ha (£34/acre). Account for minerals and organic matter taken from soil if removing straw.
- Seed* is costed with a single purpose dressing. Farm saved percentages as according to pesticide survey 2010 & recent updates. Up to a third of growers have an increasing requirement for additional seed treatments, in particular to suppress BYDV. This can add around £140 per tonne of seed (£24.80/ha). This has not been added in the gross margins so should be considered.
- 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 £160/hectare additional agrochemical costs. Yield losses increase as infestation rises:

Yield losses from Black Grass Infestations

Grass plants/m ²	Yield loss t/Ha	% yield loss	References:
8-12	0.2-0.4	2-5%	Roebuck, J.F. (1987).
12-25	0.4-0.8	5-15%	B.C.P.C. and
100	1-2	15-25%	Blair A, Cussans J,
>300	+3	37%	Lutman P (1999).

OILSEED RAPE

Winter Oilseed Rape

Production level	Low	Average	High	
Yield: t/ha (t/ac)	3.00 (1.2)	3.50 (1.4)	4.00 (1.6)	
	£	£	£	£/t
Output at £320/t	960 (389)	1,120 (454)	1,280 (518)	320
Variable Costs:				
Seed.....		56 (23)		16
Fertiliser.....		194 (79)		55
Sprays.....		234 (95)		67
Total Variable Costs		484 (196)		138
Gross Margin £/ha (ac)	476 (193)	636 (258)	796 (322)	182

Fertiliser Basis 3.5t/ha				Seed:		Sprays:	
Nutrient	Kg/t	Kg/Ha	£/Ha	£/Ha C		Herbicides	£113
N	54	190	£143	£/Ha Hy	70	Fungicides	£80
P	14	49	£33	£/Ha HSS	40	Insecticides	£8
K	11	39	£18	C:Hy:HSS	35:25:40	PGRs	£18
				Kg/Ha	5.5	Other	£15

1. *Prices.* The price used for the 2020 crop is £300/tonne plus oil bonuses at 44% oil content. The oil bonus is paid on the percentage of oil over 40 percent, at 1.5 times the sale value of the crop. For example, in this case, the bonus is on 4% oil x £300 x 1.5 = £18.00. (Figures are rounded to the nearest £5.00)

Spring Oilseed Rape

Production level	Low	Average	High	
Yield: t/ha (t/ac)	2.00 (0.8)	2.25 (0.9)	2.50 (1.0)	
	£	£	£	£/t
Output at £320/t	640 (259)	720 (292)	800 (324)	320
Variable Costs:				
Seed.....		55 (22)		24
Fertiliser.....		94 (38)		42
Sprays.....		152 (61)		67
Total Variable Costs		301 (122)		134
Gross Margin £/ha (ac)	339 (137)	419 (170)	499 (202)	186

2. *Inputs:* Seed as per WOSR, but 50% conventional, 20% HSS, 30% hybrid. *Fertiliser:* N/P/K at 80/32/25 kg/ha. *Sprays,* Herbicides. £54, Fungicides, £57, Insecticides £8, PGRs £18 and Others £15/ha
3. *Winter Versus Spring:* As little as 8,000 hectares of spring OSR are grown in the UK which is 1.5 percent of the entire crop. As can be seen, the financial reward is slim compared with other combinable crops.

VI OTHER FIXED COSTS

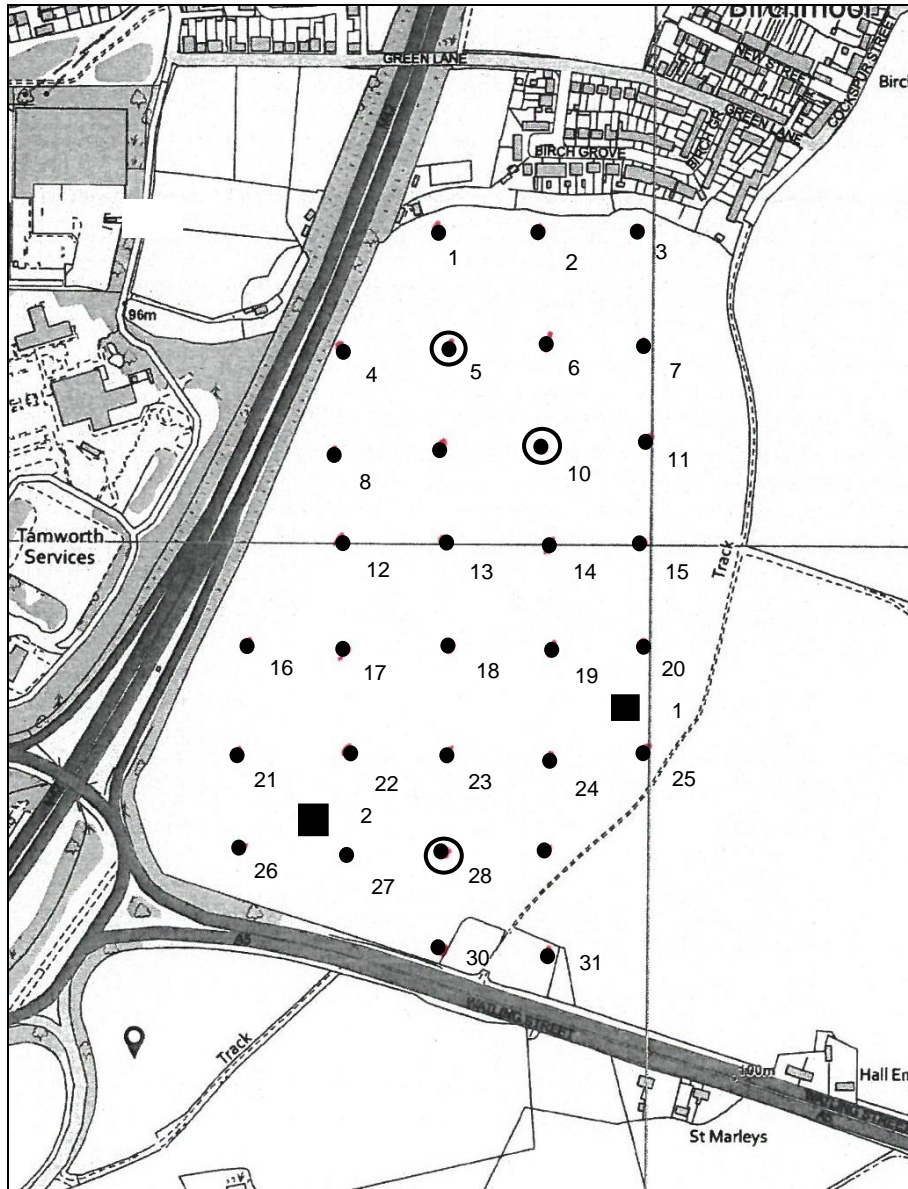
Mainly Cereals						
£/ha (£/acre)	Under 200 ha		200 - 300 ha		Over 300 ha	
	(Under 490 acres)		(490 - 740 acres)		(Over 740 acres)	
Regular Labour (paid)	50	(20)	80	(32)	90	(36)
Regular Labour (unpaid)	210	(85)	130	(53)	105	(42)
Casual Labour	10	(4)	15	(6)	15	(6)
Total Labour	270	(109)	225	(91)	210	(85)
Machinery Depreciation	120	(49)	125	(51)	130	(53)
Machinery Running Costs	110	(45)	100	(40)	110	(45)
Contract	95	(38)	80	(32)	65	(26)
Total Power & Machinery	325	(132)	305	(123)	305	(123)
Farm Maintenance	35	(14)	35	(14)	30	(12)
Water & Electricity	65	(26)	65	(26)	60	(24)
General Overhead Expenses ..	95	(38)	80	(32)	80	(32)
Total Overheads	195	(79)	180	(73)	170	(69)
Rent & Interest	100	(40)	125	(51)	135	(55)
Total Fixed Costs	890	(360)	835	(338)	820	(332)

Large-Scale Cereal Farms (over 500 ha (1,250 acres))

Data from the Farm Business Survey indicates there are further economies of scale for cereals farms at even larger farm sizes. There are likely to be wide variations depending on the precise scale of these businesses (some of which are very large). The following figures may be used as a guide; Labour - £170 per ha (of which paid labour £100); Power & Machinery - £260 per ha; Other Overheads - £155 per ha; Rent & Interest - £130 per ha. This totals £715 per ha (£290 per acre).

Data for larger-scale General Cropping farms (see below) is not so conclusive. Costs on a 'per ha' basis do not necessarily seem to fall as farm size increases. This may be due to the larger proportion of (higher cost) root crops and vegetables seen on larger farm sizes.

Plan KCC2976
Auger Point Plan



KEY

- Auger sample location
- Topsoil texture sample
- Soil Pit

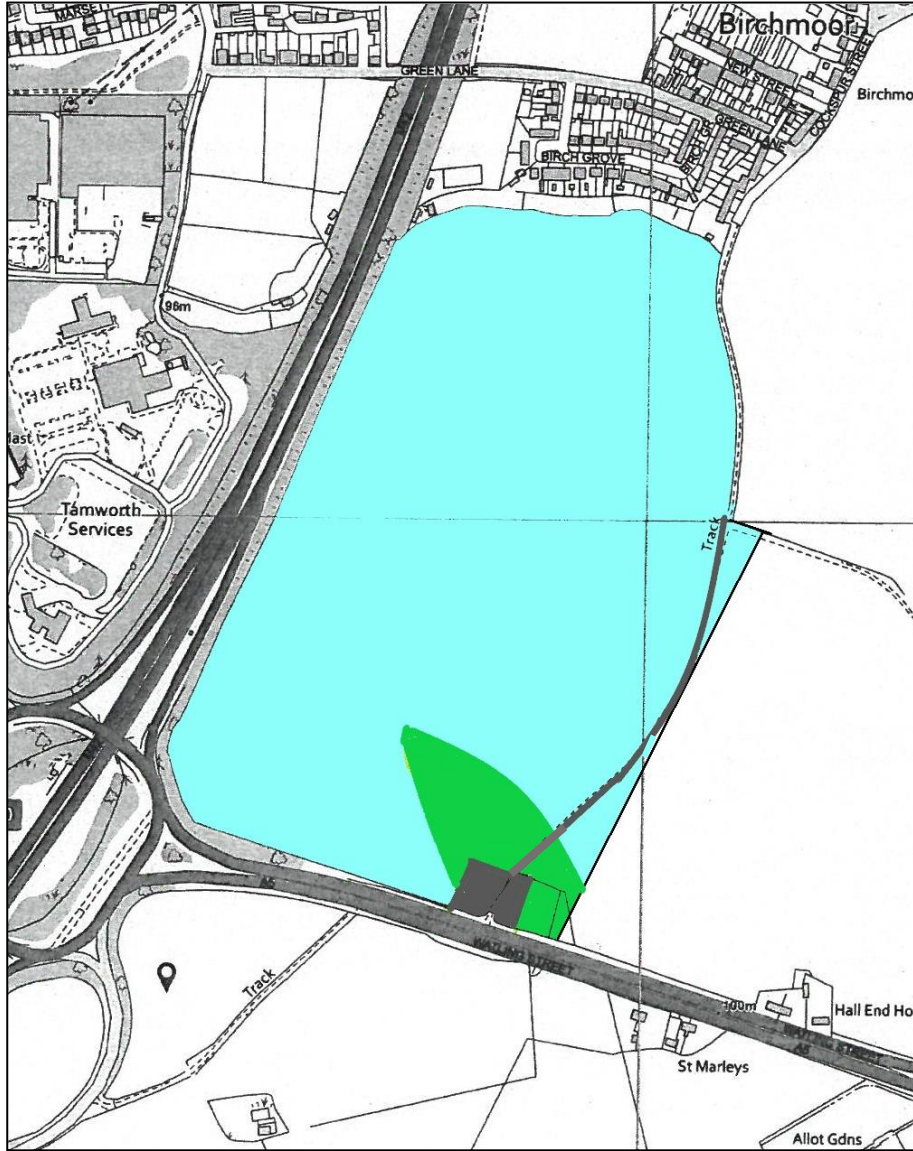
PLAN	KCC2967/01		
TITLE	Auger Points Plan		
SITE	J10, M42, Tamworth		
CLIENT	Hodgetts Estates		
NUMBER	KCC2967/01 01/21hr		
DATE	January 2021	SCALE	NTS

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**Plan KCC2967/02
Agricultural Land
Classification Plan**



KEY		Ha	%	PLAN	KCC2967/02		
	Grade 1			TITLE	Agricultural Land Classification Plan		
	Grade 2	29	91	SITE	J10, M42, Tamworth		
	Grade 3a			CLIENT	Hodgetts Estates		
	Grade 3b	2	6	NUMBER	KCC2967/02 01/21hr		
	Grade 4			DATE	January 2021	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	1	3				



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