



Agricultural Land Classification (ALC) Report
Land South of Blidworth Lane, Mansfield

March 2026

Mansfield District Council

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Mansfield

Client: Mansfield District Council

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1. Scope & Objectives

The Services	Agricultural Land Classification (ALC) Report	
The Client	Mansfield District Council	
Appointment Details	The Services have been carried out in accordance with the Proposal dated 9 May 2025 and REL's Terms and Conditions of Engagement, (together " the Agreement ") as accepted by the Client on 21 August 2025.	
Site Name	Land South of Blidworth Lane, Mansfield.	
Site Address	Blidworth Lane, Rainworth, Mansfield NG21 0EW (" the Site ").	
Proposed Development	It is understood that the site is to be developed for Economic developments (offices, warehouses and logistics) for the Mansfield Local Plan 2013 – 2033.	
Information Sources (Where appropriate documents are contained in appendices with data extracts provided and summarised within pertinent sections of this report. List not exhaustive)	Online Source	Natural England Provisional Agricultural Land Classification Grade (pre-1988), accessed via Magic Web Mapping Service, DEFRA, 2025.
		Natural England Agricultural Land Classification Grades Post-1988 Surveys (Polygons) Database and Mapping, accessed via Magic Web Mapping Service, DEFRA, 2025.
		British Geological Survey (BGS) Database and Mapping.
		BGS GeoIndex Web Mapping Service.
		BGS 1: 50,000 scale Provisional Series, Geological Map, England and Wales, Sheet 113 (Ollerton), available on the BGS map portal.
		Google Historic Satellite Imagery.
	Documentation Source	National Library of Scotland Historical Ordnance Survey England and Wales, 1830s-1880s Maps.
		Soil Classification for Soil Survey, Monographs on Soil Survey, Butler, B E (1980), Clarendon Press, Oxford.
		Hodgson, J.M (ed.) (2022). <i>Soil Survey Field Handbook</i> . Soil Survey Technical Monograph No. 5, Cranfield.
		Meteorological Office (Met Office), 1989, Climatological Data for Agricultural Land Classification – Gridpoint Datasets of Climatic Variables, at 5km intervals, for England and Wales.
		MAFF, 1988, Agricultural Land Classification of England and Wales – Revised Guidelines and Criteria for Grading the Quality of Agricultural Land.
		Natural England, Technical Information Note TIN049 Second Edition, 2012.
	Previous Reports	Soils and their use in Midland and Western England, 1984, Soil Survey of England and Wales Memoir and accompanying 1:250,000 scale map.
		No previous reports, including Post-1988 ALC surveys, are available for the site. However, following a review of the DEFRA Magic Mapping Portal shows there is a Post-1988 ALC surveys for the land west of the site. See further details in Section 4 .
	Site Works	The site works were undertaken by REL in October 2025.

2. Site Details

National Grid Ref.	The site comprises two separate areas (Area 340 and Area 323), with the area locations defined in Figure 1 below. Together, these areas form the 'site' for the purpose of this assessment, and correspond to HELAA references 340 and 323 respectively, as outlined further below. Approximate centre of Area 340: 457544, 358709. Approximate centre of Area 323: 458391, 358976.
Ground Level Topography	Range 105m-117m AOD, average for Area 340: c.114m AOD. Range 105m-116m AOD, average for Area 323: c.110m AOD.
Site Area	Total 29 hectares (ha), comprising Area 340 (22.6ha) and Area 323 (6.4ha).
HELAA Reference	For the purpose of this report, the 'site' corresponds to the red line boundary outlined in Figure 1 below and incorporates all relevant land parcels identified within the Council's Housing and Economic Land Availability Assessment (HELAA), namely HELAA sites 340 to the south of Southwell Road, and 323 to the north of Southwell Road.
Location	The subject site is located within the outskirts of the village of Rainworth, approximately 4.7km southeast of the town of Mansfield and 19km north of Nottingham city centre. Area 340 is bound by Blidworth lane adjacent to the east and Sherwood Way (E) adjacent to the northwest and the Foulevi Brook (river) is located adjacent to the site in the south. Area 323 is located off Helmsley Road in the northwest.



Figure 1: Site Boundaries (highlighted in red)

Current Site Description and Usage	The subject site comprises agricultural fields which are currently used for arable crop (based on observations made during the site visit), with the northern part of Area 323 currently used for horse grazing.
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Surrounding Land Uses	Surrounding land uses comprise agricultural fields around the entire site areas, with Southwell Road (E) (B6020) running between the Area 340 and 323 with urban development situated between the areas. Fields used for livestock are present adjacent north of Area 323.
Site History	From the earliest mapping dated 1830s-1880s, both areas are shown as agricultural land.
Current Grading	The site is currently mapped as Grade 3 , with areas along the eastern boundary of Area 323 mapped as Non-Agricultural on the provisional 1: 250,000 scale ALC map (MAFF, 1983) see Appendix V for key to the gradings.

3. Methodology

Desk Study

This site-specific Agricultural Land Classification (ALC) assessment has been undertaken as part of a wider district-wide ALC study, which established the overarching baseline conditions, datasets, and methodological approach across the district. The desk study information presented within this report draws on that district-level assessment and applies it at a site-specific scale to inform the detailed field survey and subsequent ALC grading. This report therefore presents the findings for the site only, while being informed by the consistent district-wide evidence base.

Using published data sources, an initial desk-based study has been undertaken to provide a reconnaissance of the general site characteristics, including soil type(s) and agricultural classification.

Where available, Post-1988 ALC Surveys (undertaken at varying scales and levels of detail, ranging from 1:5,000 to 1:50,000 scale) have been consulted. Surveys included on this map provide the most detailed and up to date ALC grading following surveys between 1989 and 1999 by MAFF (now part of DEFRA).

Climatological data provided by the Met Office has been used to determine the overriding agroclimatic site limitations, using interpolated values based on the central point of the site.

Intrusive Soil Survey

The intrusive soil survey comprised at least one hand auger boring per hectare to a depth of 1.20m below ground level (where achievable) in accordance with current guidance. These were undertaken to examine the soil profiles, using standard soil survey methods.

In addition, in order to determine subsoil structure, at least one inspection pit has been excavated for each soil type encountered.

ALC Grade Assessment

All potential limiting ALC grade factors (listed in **Appendix V**) have been considered as part of the assessment, including those which pose no limitation on the ALC grading for both parcels of land (Area 340 and Area 323).

Using the information collected during the site survey and the MAFF ALC guidance documents, an ALC grade was then determined for the site, or for each soil type based on the most limiting ALC grade (**Appendix I**). A brief overview of relevant terminology is included in **Appendix V**.

4. Desk Based Reconnaissance

Agricultural Land Classification (ALC) provides a framework for assessing the quality of agricultural land and is briefly outlined below. It is a nationally standardised system used to classify land based on its inherent physical characteristics. The grading is determined by considering a range of baseline factors, including climate, topography, soils, and site drainage, with the most limiting factor governing the final classification. These factors are assessed against the requirements of a standard set of reference crops, such as cereals and root crops, to determine how consistently the land can support agricultural production. The presence and severity of any limitation influence the final ALC grade.

Prior to the intrusive site investigation, a review of available desk-based information was undertaken. Pertinent information has been summarised below.

Climate Data

Using the climatological data set (Met Office, 1989) the following information (**Table 1**) has been calculated for the site. Calculations comprised altitude adjustment and interpolation, using the formula presented within the data set.

Table 1: Summary of Agroclimatic Data for the Site

(Area 340 Site Centre Grid Reference: 457544, 358709)		
Average Annual Rainfall (mm)	AAR	699.72
Accumulated Temperature (°C)	ATO	1315.15
Field Capacity Duration (Days)	FCD	157.95
Moisture Deficit Wheat (mm)	MDWHT	96.01
Moisture Deficit Potatoes (mm)	MDPOT	83.81
(Area 323 Site Centre Grid Reference: 458391, 358976)		
Average Annual Rainfall (mm)	AAR	696.82
Accumulated Temperature (°C)	ATO	1319.71
Field Capacity Duration (Days)	FCD	157.53
Moisture Deficit Wheat (mm)	MDWHT	96.31
Moisture Deficit Potatoes (mm)	MDPOT	84.20

Both areas are identified to have average AAR and FCD, with a below average ATO when compared to the mapped values for the area south of Mansfield (Soils and their Use in Midland and Western England, 1984).

Using the AAR and ATO values within Table 1, area 340 and 323 are **ALC Grade 1** according to climate (Figure 1, MAFF 1988). Therefore, climate is not considered to be a potential limiting factor on the site and is not taken forward for further consideration.

Topography

Both sites were identified to have a gradient between 0° and 1°, therefore topography is identified to not be a limiting factor of the ALC grade of the site (Table 1, MAFF 1988).

BGS Published Data

A review of BGS information has identified that no Made Ground areas are indicated across the sites.

Both Area 340 and 323 are situated within an area free of superficial deposits.

The bedrock geology for both Area 340 and 323 is indicated as the Chester Formation, comprising pebbly (gravelly) sandstone.

Published Soils Data

Soils mapping for the area as shown on *Soils and their use in Midland and Western England* 1984, Soil Survey of England and Wales Memoir and accompanying 1:250,000 scale map has been reviewed as part of this assessment. The location of the site is shown in the soils mapping extract below in **Figure 2**.

The soils mapping suggests the soils on site comprise the Flint Association in the south (Area 340) and Delamere Association in the north (Area 323). The soils are described as follows:

- **Flint Association (572L)** - Reddish fine loamy over clayey soils with slowly permeable subsoils and slight seasonal waterlogging. Some similar fine loamy soils and some slowly permeable seasonally waterlogged fine loamy over clayey soils.
- **Delamere Association (631b)** - Well drained sandy soils commonly with a bleached subsurface horizon over sandstone. Occasional deeper soils. Very acid where uncultivated.

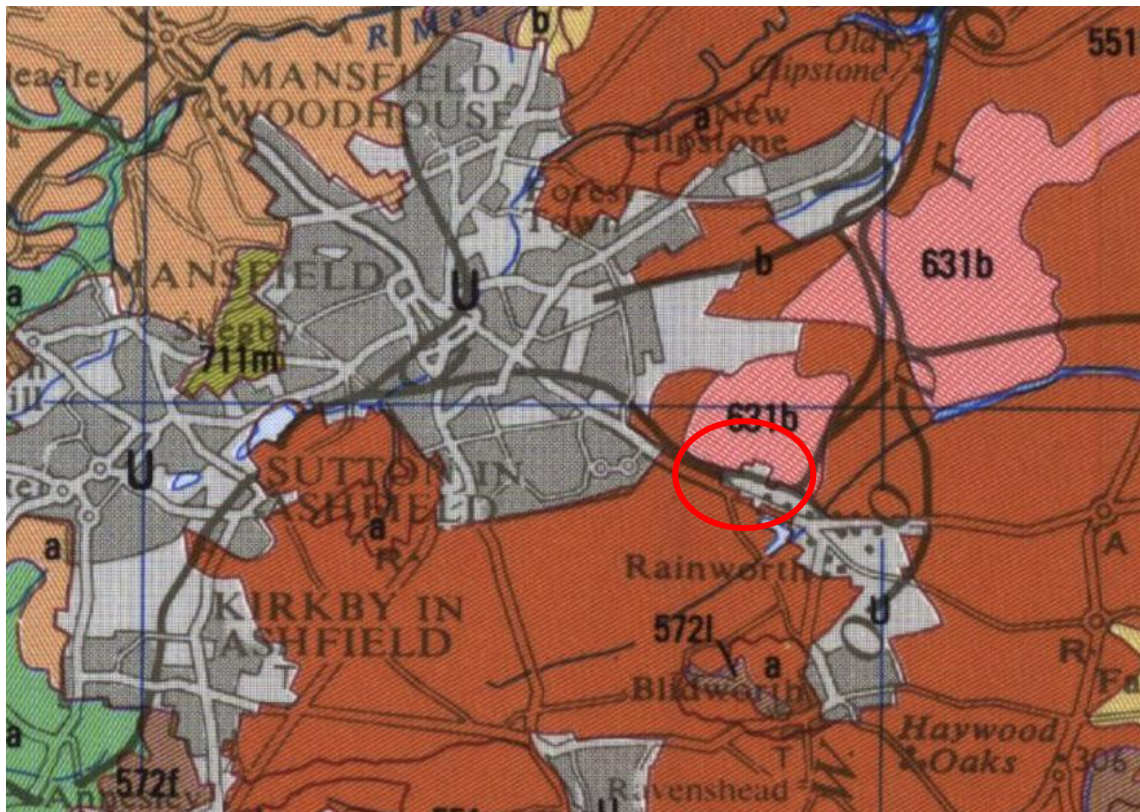


Figure 2: Soils Mapping for the Site and Surrounding Area (site location indicated in red)

Previous Reports

No previous ALC reports are available for Area 323 and the majority of Area 340, however, a Post-1988 ALC map is available for a site adjacent west of Area 340 on the DEFRA MAGIC mapping. The majority of which are ALC Grade 3a, with discrete areas ALC Grade 2 and 3b.

Flood Risk Assessment

A preliminary assessment of the potential flood risk on site is provided overleaf.

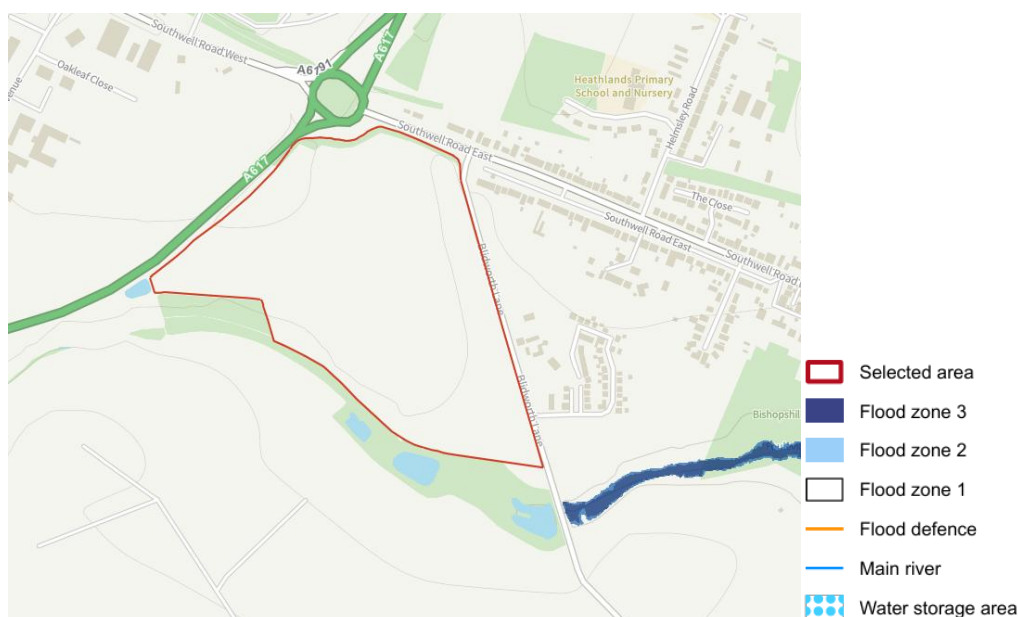


Figure 3: Flood Risk Present from Rivers and the Sea for Area 340 (site boundary defined in red)

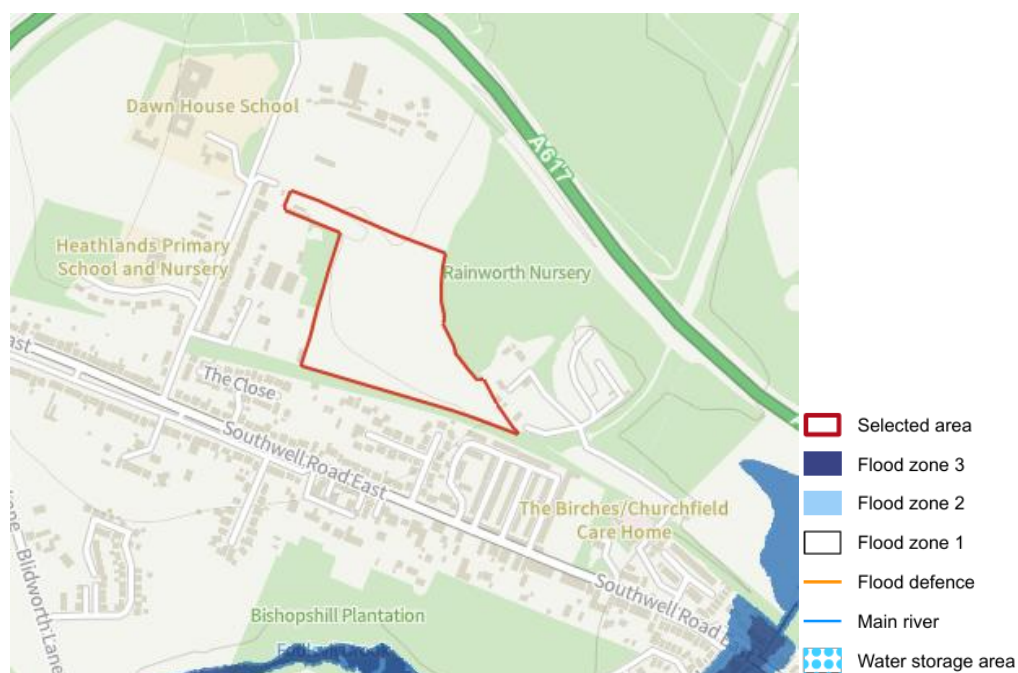


Figure 4: Flood Risk Present from Rivers and the Sea for Area 323 (site boundary defined in red)

The interactive EA Flood Map for Planning on the UK Government website identifies both areas to be within a Flood Zone 1 (Low Probability) area (**Figure 3** and **Figure 4**). After reviewing the flood risk map, REL considers that the site is not in an area of risk from flooding.

The impact of flood risk is assessed to confirm if it can pose a limitation to the ALC grade of the site, in accordance with the guidance available in Tables 2 and 3 (MAFF, 1988).

The mapping identifies a Low risk of flooding within the boundary of the site and as such, the flood risk is not considered to pose enough of a limitation to the cultivation of the site to reduce the overall site ALC Grade.

5. Intrusive Survey Findings

The survey identified One Soil Type across the entire site. Generalised profiles of the soil types encountered have been described as below (**Table 2**) however, please note some localised variations were recorded. Complete soil logs are provided in **Appendix II** and photographs of the surveyed soils are presented in **Appendix III**.

Table 2: Summary of Soils Identified on Site

	Depth (cm)	Texture	Colour	Stones (%)	Mottles	Structure
Soil Type 1	0-35	Medium Sandy Silty Loam (MSZL)	Very Dark Brown (7.5YR 2.5/2)	10	No	Medium Subangular Blocky
	35-70	Medium Sandy Loam	Strong Brown (7.5YR 4/6)	0	Few Fine Ochreous Mottles (7.5YR 5/8)	Medium Subangular Blocky
	70-120	Medium Sand (CS)	Brown (7.5YR 5/4)	5	No	Fine Subangular Blocky

Soil Descriptions

The soils on site comprise deep, stony sandy soils with profiles varying in depth to bedrock. The soils were observed to have a very dark brown sandy silt loam (7.5YR 2.5/2) Ap horizon of the medium textured classification, slightly stony with no mottling visible. The topsoil extended to a depth of c.35cm bgl. Topsoil texture remained homogenous across the site. Areas in the southern extent of the site were characterised with many large stones >6cm in size comprising ~10% of the topsoil.

The subsoil was observed c.35-70cm bgl. This soil was identified as strong brown sandy loam (7.5YR 4/6) of the medium textured classification, stoneless with few distinct mottles of Ochreous colours. Two of the samples in Area 323 had no mottling visible. The structure was moderately developed medium subangular blocky, to coarse or fine subangular blocky in places, of friable consistency. Distinct areas of this soil type have been identified with the absence of subsoils due to the presence of shallow bedrock at a depth of c.20-50cm bgl.

From c.70-120cm bgl, a second subsoil was identified as brown sand (7.5YR 5/4) of the medium textured classification, slightly stony to moderately stony in places, and no visible mottling. One sample in Area 340 had few distinct mottles of Ochreous and Grey colours. The structure was

moderately developed medium subangular blocky, to fine and coarse subangular blocky in places, of friable consistency.

Soil Calcium Carbonate determinations

The soils on site were observed with a negative test for Calcium Carbonate.

The general profiles for the soil types identified on the Site has been used to assess the Wetness Class (WC) for the Soil Type (see **Appendix V** for the MAFF decision flow chart). The general profile is reflective of the findings in the soil pit associated with the Soil Type identified on site. The assessment process and results of the in-field wetness assessment is provided within **Table 3** below with a plan of the distribution of the soil types across the site shown in **Appendix I**.

Table 3: Wetness Class Assessment for Soil Types Encountered on Site

Soil Type	Parameters (Figure 6, MAFF)						Wetness Class
	Disturbed	FCD	SPL (depth cm) Justification	Colour	Gleying (depth cm) Justification	Ref	
Soil Type 1	No	<175	No SPL layer was identified to be present within the top 120cm.	Other	Gleying was not identified to be present within the top 120cm.	N/A	I

Notes: This Table follows the flow chart of Figure 6 of the MAFF ALC guidance to identify the wetness classification per Soil Type.

Soil interactive Limitations

Soil Wetness

The combination of the topsoil texture (Medium Sandy Silt Loam), Wetness Class (I) and the number of Field Capacity Days (<175), results in ALC Grade 1, as such, some soils on site have no limitations to cultivation.

Soil Stoniness Limitation

The presence of stones larger than 6cm in the top 25cm of soil at a density of c.10% result in ALC grade 3a for some soils on site.

The presence of stones larger than 2cm in the top 25cm of soil at a density of c.10% result in ALC grade 2 for some soils on site.

Soil Droughtiness Limitation

The combination of the topsoil texture (Medium Sandy Silt Loam), Wetness Class (I) and the number of Field Capacity Days (<175), together with the climate calculations results in ALC Grade 3b due to droughtiness limitation for wheat.

Within Area 323, a total of 0.9ha has been identified with the combination of the topsoil texture (Medium Sandy Silt Loam), Wetness Class (I) and the number of Field Capacity Days (<175), which when assessed alongside the climate calculations, results in ALC Grade 3a due to droughtiness limitation for wheat. However, it is noted that this section of the site is not managed differently to the wider site area and there were no visual differences between this area and the higher graded adjacent land. As such, it is justifiable to group the singular sample of Grade 3a into the surrounding Grade 2 land.

Within Area 340, a total of 2.4ha has been identified with the combination of the topsoil texture (Medium Sandy Silt Loam), Wetness Class (I) and the number of Field Capacity Days (<175), which when assessed alongside the climate calculations results in ALC Grade 4 due to droughtiness limitation for wheat. However, approximately 0.8ha of the site is noted to not be managed differently to the wider site area and there were no visual differences between this area and the higher graded adjacent land. As such, it is justifiable to group the singular sample of Grade 4 into the surrounding Grade 3b land.

Soil Calcium Carbonate determinations

The topsoils (Medium Sandy Silty Loam) demonstrated a negative test for calcium carbonate content.

6. Conclusions

The ALC grading for the two site areas is summarised below within **Table 4**, overall findings of this assessment can be found in **Appendix IV**. The table below identifies the grades of the areas of agricultural land present across the site (**Appendix I**).

Table 4: ALC Classification

ALC Grade	Area (Ha)	Percentage
Grade 1	3.05	10.52%
Grade 2	12.56	43.31%
Subgrade 3a	6.3	21.72%
Subgrade 3b	5.0	17.24%
Grade 4	1.59	5.48%
Grade 5	0.0	0.0%
Non-Agricultural	0.5	1.72%
Total BMV	21.9	75.5%
Total Non-BMV	7.1	24.5%
Total Site Area	29.0	100%

Overall Site ALC Grade and Conclusions

The majority of land surveyed as part of this assessment has been identified as **ALC Grade 2**, with 5.0ha along the eastern boundary of Area 340 identified as **ALC Grade 3b**, and 1.59ha in the north of Area 340 identified as **ALC Grade 4** and as such, BMV land has been identified on 75.5% of the overall site area.

APPENDIX I

SITE PLANS



Legend

- Site Boundary
- Auger Sample
- ALC Grade 1
- ALC Grade 2
- ALC Grade 3a
- ALC Grade 3b
- ALC Grade 4
- Non-Agricultural

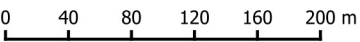
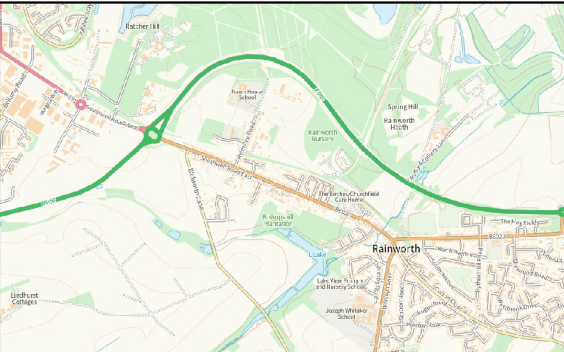


Figure Auger Samples and ALC Grades		
Job Land off Bidworth Lane		
Client Mansfield District Council		
Figure No. 1	Revision 1	Date 27 March 2026
Drawn by SS	Checked by EH	Scale 1:4,800
Job No. 250905.07		



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Legend

-  Site Boundary
-  HELAA 323
-  HELAA 340
-  ALC Grade 1
-  ALC Grade 2
-  ALC Grade 3a
-  ALC Grade 3b
-  ALC Grade 4
-  Non-Agricultural

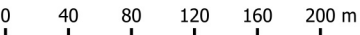


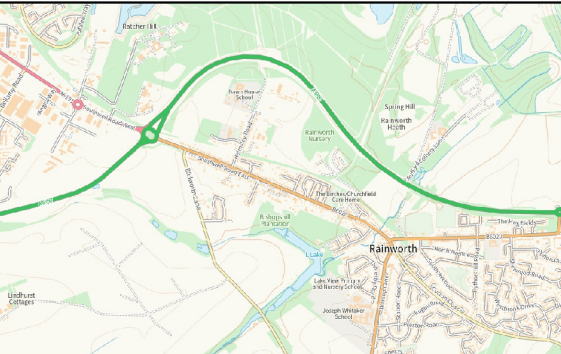
Figure ALC Grades and HELAA References

Job Land off Bidworth Lane

Client Mansfield District Council

Figure No.	Revision	Date
2	1	27 March 2026
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Job No. 250905.07



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APPENDIX II

SITE SURVEY LOGS

FGD: 157.95 MDWHT: 96.01 MDPOT: 83.81

Auger Sample	Top depth(cm)	Bottom Depth (cm)	Texture	Hue	Matrix value	chroma	colour	Hue	Matrix value	chroma	colour	Hue	Matrix value	chroma	colour	Stones	Structure	SPL	GLEIVING	Figure	Wetness class	Wetness Grade	condition	Droughtiness Grade		Overriding Limitation		Notes
1	0	40	MSZL	7.5YR	2.5	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No	WC1	I	1	good	1	1	2	stoniness	stones >2cm
	40	65	MSL	7.5YR	4	6	Brownish	7.5YR	5	8	Ochreous	n/a	n/a	n/a	-	0	MSAB	No	No				good					
	65	120	MS	7.5YR	5	4	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	FSAB	No	No				good					
2	0	40	MSZL	7.5YR	2.5	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No	WC1	I	1	good	1	1	2	stoniness	stones >2cm
	40	90	MSL	7.5YR	4	6	Brownish	7.5YR	5	8	Ochreous	n/a	n/a	n/a	-	0	MSAB	No	No				good					
	90	120	MS	7.5YR	5	4	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	FSAB	No	No				good					
3	0	35	MSZL	7.5YR	2.5	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No	WC1	I	1	good	1	1	2	stoniness	stones >2cm
	35	65	MSL	7.5YR	4	6	Brownish	7.5YR	5	8	Ochreous	n/a	n/a	n/a	-	0	MSAB	No	No				good					
	65	120	MS	7.5YR	5	4	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	FSAB	No	No				good					
4	0	35	MSZL	7.5YR	2.5	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No	WC1	I	1	good	1	1	2	stoniness	stones >2cm
	35	65	MSL	7.5YR	4	6	Brownish	7.5YR	5	8	Ochreous	n/a	n/a	n/a	-	0	MSAB	No	No				good					
	65	120	MS	7.5YR	5	4	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	FSAB	No	No				good					
5	0	35	MSZL	7.5YR	2.5	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No	WC1	I	1	good	1	1	2	stoniness	stones >2cm
	35	65	MSL	7.5YR	4	6	Brownish	7.5YR	5	8	Ochreous	n/a	n/a	n/a	-	0	MSAB	No	No				good					
	65	120	MS	7.5YR	5	4	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	FSAB	No	No				good					
6	0	40	MSZL	7.5YR	2.5	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No	WC1	I	1	good	1	1	2	stoniness	stones >2cm
	40	65	FSL	7.5YR	4	6	Brownish	7.5YR	5	8	Ochreous	n/a	n/a	n/a	-	0	MSAB	No	No				good					
	65	120	MS	7.5YR	5	4	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	FSAB	No	No				good					
7	0	30	MSZL	7.5YR	2.5	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No	WC1	I	1	good	1	1	2	stoniness	stones >6cm
	30	60	MSL	7.5YR	4	6	Brownish	7.5YR	5	8	Ochreous	n/a	n/a	n/a	-	0	MSAB	No	No				good					
	60	120	MS	7.5YR	5	4	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	FSAB	No	No				good					
8	0	20	MSZL	7.5YR	2.5	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No	WC1	I	1	good	4	3b	4	Droughtiness Wheat	
																100	No	No	good									
																	No	No	good									
9	0	30	MSZL	7.5YR	2.5	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	0	MSAB	No	No	WC1	I	1	good	2	1	2	Droughtiness Wheat	
	30	50	FSL	7.5YR	4	6	Brownish	7.5YR	5	8	Ochreous	n/a	n/a	n/a	-	0	MSAB	No	No				good					
	50	70	MS	7.5YR	5	4	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	FSAB	No	No				good					
10	0	35	MSZL	7.5YR	2.5	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	0	MSAB	No	No	WC1	I	1	good	1	1	1		
	35	80	MSL	7.5YR	4	6	Brownish	7.5YR	5	8	Ochreous	n/a	n/a	n/a	-	0	MSAB	No	No				good					
	80	120	MS	7.5YR	5	4	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	FSAB	No	No				good					
11	0	30	MSZL	7.5YR	2.5	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No	WC1	I	1	good	1	1	3a	stoniness	stones >6cm
	30	60	MSL	7.5YR	4	6	Brownish	7.5YR	5	8	Ochreous	n/a	n/a	n/a	-	0	MSAB	No	No				good					
	60	120	MS	7.5YR	5	4	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	FSAB	No	No				good					
12	0	30	MSZL	7.5YR	2.5	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No	WC1	I	1	good	1	1	3a	stoniness	stones >6cm
	30	60	MSL	7.5YR	4	6	Brownish	7.5YR	5	8	Ochreous	n/a	n/a	n/a	-	0	MSAB	No	No				good					
	60	120	MS	7.5YR	5	4	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	FSAB	No	No				good					
13	0	25	MSZL	7.5YR	2.5	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No	WC1	I	1	good	3b	3b	3b	Droughtiness Wheat	
																100	No	No	good									
																	No	No	good									
14	0	25	MSZL	7.5YR	2.5	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No	WC1	I	1	good	2	1	2	stoniness	
	25	60	MSL	7.5YR	4	6	Brownish	7.5YR	5	8	Ochreous	n/a	n/a	n/a	-	5	MSAB	No	No				good					
	60	100	MS	7.5YR	5	4	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	FSAB	No	No				good					
15	0	30	MSZL	7.5YR	2.5	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	0	CSAB	No	No	WC1	I	1	good	1	1	2	stoniness	
	30	65	MSZL	7.5YR	4	6	Brownish	7.5YR	5	8	Ochreous	n/a	n/a	n/a	-	0	CSAB	No	No				good					
	65	120	MS	7.5YR	5	4	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	MSAB	No	No				good					
16	0	45	FSZL	7.5YR	2.5	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No	WC1	I	1	good	1	1	3a	stoniness	stones >6cm
	45	80	MSL	7.5YR	4	6	Brownish	7.5YR	5	8	Ochreous	n/a	n/a	n/a	-	0	CSAB	No	No				good					
	80	120	MS	7.5YR	5	4	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	MSAB	No	No				good					
17	0	40	MSZL	7.5YR	2.5	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No	WC1	I	1	good	1	1	3a	stoniness	stones >6cm
	40	90	MSL	7.5YR	4	6	Brownish	7.5YR	5	8	Ochreous	n/a	n/a	n/a	-	0	CSAB	No	No				good					
	90	120	MS	7.5YR	5	4	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	MSAB	No	No				good					
18	0	30	FSZL	7.5YR	2.5	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No	WC1	I	1	good	3b	3a	3b	Droughtiness Wheat	
																100	No	No	good									
																	No	No	good									
19	0	25	MSZL	7.5YR	2.5	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No	WC1	I	1	good	3b	3b	3b	Droughtiness Wheat	stones >6cm
																100	No	No	good									
																	No	No	good									
20	0	35	MSZL	7.5YR	2.5	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No	WC1	I	1	good	3b	3a	3b	Droughtiness Wheat	stones >6cm
																100	No	No	good									
																	No	No	good									
21	0	20	MSZL	7.5YR	2.5	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	15	MSAB	No	No	WC1	I	1	good	4	3b	4	Droughtiness Wheat	stones >6cm
																100	No	No	good									
																	No	No	good									
22	0	40	MSZL	7.5YR	2.5	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No	WC1	I	1	good	1	1	3a	stoniness	stones >6cm
	40	75	MSL	7.5YR	4	6	Brownish	7.5YR	5	8	Ochreous	n/a	n/a	n/a	-	0	FSAB	No	No				good					
	75	100	MS	7.5YR	5	4	Brownish	7.5YR	5	8	Ochreous	7.5YR	3	2	-	0	CSAB	No	No				good					
23	0	30	MSZL	7.5YR	2.5	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No	WC1	I	1	good	2	1	3a	stoniness	stones >6cm
	30	70	MSL	7.5YR	4	6	Brownish	7.5YR	5	8	Ochreous	n/a	n/a	n/a	-	0	MSAB	No	No				good					
																100	No	No	good									
24	Non-Agricultural																			WC1	I	1	good					
																			good									
																			good									
25	0	25	MSZL	7.5YR	2.5	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No	WC1	I	1	good	1	1	1		
	25	90	MSL	7.5YR	4	6	Brownish	7.5YR	5	8	Ochreous	n/a	n/a	n/a	-	0	CSAB	No	No				good					
	90	120	MS													0	MSAB	No	No				good					
26	0	50	MSZL	7.5YR	2.5	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	5	MSAB	No	No	WC1	I	1	good	3a	1	3a	Droughtiness Wheat	
																100	No	No	good									
																	No	No	good									
27	0	40	MSZL	7.5YR	2.5	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	0	MSAB	No	No	WC1	I	1	good	2	1	2	Droughtiness Wheat	
	40	60	MSL	7.5YR	4	6	Brownish	7.5YR	5	8	Ochreous	n/a	n/a	n/a	-	0	FSAB	No	No				good					
																100	No	No	good									
28	0	50	MSZL	7.5YR																								

Structure	
MSAB	Medium Subangular Blocky
AB	Angular Blocky
CP	Coarse Prismatic
MSAB	Massive
SAB	Subangular Blocky
CP	Coarse
W	Weak

Stones	
5	Very Slightly Stony
15	Slightly Stony
35	Moderately Stony

Texture	
C	Clay
ZC	Silty Clay
SC	Sandy Clay
CL	Clay Loam
ZCL	Silty Clay Loam
SCL	Sandy Clay Loam
SZL	Sandy Silty Loam
SL	Sandy Loam
LS	Loamy Sand
S	Sand
ZS	Silty Sand
MG	Made Ground
F (sand)	Fine
M (sand)	Medium
C (sand)	Coarse
H (clay)	Heavy
M (clay)	Medium

Rock Type	
Ca	Calcareous

Mottling	
*	No Mottling
X	Fine Grey
O	Fine Ochreous
N	Numerous Mottles
F	Few Mottles
D	Fine Brown

Cell Colours	Reason
	Livestock in field - not accessed
	Woodland/Made Ground/Urban
	Inaccessible areas
	N/A

APPENDIX III

SITE SURVEY PHOTOGRAPHS

Photograph Number	Photograph Description	Photograph
1.	Land South of Blidworth Lane General Site View	
2.	Land South of Blidworth Lane General Site View	
3.	Land South of Blidworth Lane General Site View	

Photograph Number	Photograph Description	Photograph
4.	Land South of Blidworth Lane General Site View	
5.	Land South of Blidworth Lane Auger Sample	
6.	Land South of Blidworth Lane Topsoil Structure	

Photograph Number	Photograph Description	Photograph
7.	Land South of Blidworth Lane Subsoil Structure	
8.	Land South of Blidworth Lane Subsoil Structure	

APPENDIX IV

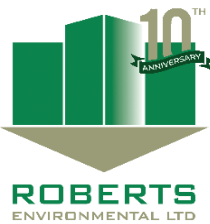
SUMMARY OF FINDINGS

Job Name:	Land South of Bidworth Lane, Area 323
Job Number:	250905.07
Date:	27/03/2026
Completed By:	SS

Site Altitude:	110
Centre Grid Ref:	458391 358976

AAR	696.82
ATO	1319.71
FCD	157.53
MDMWHT	96.31
MDMPOT	84.20

Soil Type 1	
AP WHT	138.60
MB WHT	42.29
AP POT	122.85
MB POT	38.65



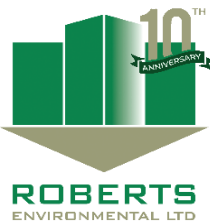
Site Limitations Summary	
Soil Type 1	
Wetness Class	I
Wetness Grading	1
Droughtiness Wheat	1 / 2 / 3a / 3b / 4
Droughtiness Potato	1 / 3a / 3b
Gradient Limitation	1
Soil Depth Limitation	1
Stoniness Limitation	1 / 2 / 3a
Overall	
Site Climatic Limitation	1
Overall Grade	1 / 2 / 3a / 3b / 4

Job Name:	Land South of Bidworth Lane, Area 340
Job Number:	250905.07
Date:	27/03/2026
Completed By:	SS

Site Altitude:	114
Centre Grid Ref:	457544 358709

AAR	699.72
ATO	1315.15
FCD	157.95
MDMWHT	96.01
MDMPOT	83.81

Soil Type 1	
AP WHT	138.60
MB WHT	42.59
AP POT	122.85
MB POT	39.04



Site Limitations Summary	
Soil Type 1	
Wetness Class	1
Wetness Grading	1
Droughtiness Wheat	1 / 2 / 3a / 3b / 4
Droughtiness Potato	1 / 3a / 3b
Gradient Limitation	1
Soil Depth Limitation	1
Stoniness Limitation	1 / 2 / 3a
Overall	
Site Climatic Limitation	1
Overall Grade	1 / 2 / 3a / 3b / 4

Agricultural Land Classification (ALC)

The Agricultural Land Classification (ALC) 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 limitations can operate in one or more of four principal ways: they may affect the range of crops which can be grown; the level of yield; the consistency of yield and the cost of obtaining it. The classification system gives considerable weight to flexibility of cropping, whether actual or potential, but the ability of some land to produce consistently high yields of a somewhat narrower range of crops is also taken into account.

These factors form the basis for classifying agricultural land into one of five grades (with Grade 3 land divided into Subgrades 3a and 3b since the guidelines were revised in 1988), ranked from Excellent (Grade 1) to Very Poor (Grade 5). ALC grading is determined using the Ministry of Agriculture Food and Fisheries (MAFF) '*Agricultural Land Classification of England and Wales – Revised guidelines and criteria for grading the quality of agricultural land*'.

Definition of Agricultural Land Classification Grades

ALC Grade	Description
Grade 1	Excellent quality agricultural land No or very minor limitations to agricultural use.
Grade 2	Very good quality agricultural land Minor limitation which affect crop yield, cultivation or harvesting.
Subgrade 3a (pre-1988 Grade 3)	Good quality agricultural land Capable of producing moderate to high yields of a narrow range of arable crops or moderate yields of a wider range of crops.
Subgrade 3b (pre-1988 Grade 3)	Moderate quality agricultural land Capable of producing moderate yields of a narrow range of arable crops and/or lower yields of a wider range of crops.
Grade 4	Poor quality agricultural land Severe limitations which significantly restrict the range of crops and/or levels of yield.
Grade 5	Very poor quality agricultural land Very severe limitations which restrict use to permanent pasture or rough grazing.

Best and Most Versatile (BMV) Agricultural Land

The National Planning Policy Framework (NPPF) (Department for Communities and Local Government, 2012) defines Best and Most Versatile (BMV) agricultural land as land of Excellent (ALC Grade 1), Very Good (Grade 2) and Good (Grade 3a) agricultural quality. BMV land is provided a degree of protection against development within planning policy, with most Local Plans including specific policies which refer to the protection of BMV agricultural land.

Non-BMV agricultural land, i.e. Moderate, Poor and Very Poor quality agricultural land is designated subgrade 3b or Grades 4 and 5 respectively, and is restricted to a narrower range of agricultural uses. Limited to no protection is provided against development on this grade land within planning policy.

Limiting Factors

Main Factor	Sub Factor	Explanation
Climatic Limitations	Overall Climatic Limitation	Using a dataset of five parameters, as set on a 5km grid for the whole of the UK, the site climatic values are used to determine if there is an overriding limiting factor for the site with regard to the wider climate.
	Local Climatic Factors	Where the above climatic factors are liable to be modified by local factors such as aspect, gradient and elevation then one or more of these factors may become a limiting factor for the site.
Site Limitations	Gradient	Gradient may have an impact on mechanised farm operations and also on soil erosion. The ALC grade limitations with reference to gradient are given in Table 1 of the MAFF guidance.
	Microrelief	Complex changes in slope angle and direction over short distances may have an impact on agricultural machinery. The effect of microrelief is considered in conjunction with overall gradient.
	Flooding	The extent, duration, frequency and timing of flooding may have an influence over the ALC Grade and could become the limiting site factor. The ALC grade limitations with reference to flooding are given in Tables 2 and 3 of the MAFF guidance.
Soil Limitations	Soil Texture and Structure	Soil texture and structure can influence the water retention, water movement and aeration of the soil and therefore affect the workability, trafficability, poaching risk and suitability for plant growth. Soil texture is determined by the proportions of sand, silt and clay and is used to assess the wetness class of the soil.
	Soil Depth	Soil depth can influence the available water capacity of the soil, restrict nutrient uptake, root growth and root anchorage. The ALC grade limitations with reference to soil depth are given in Table 4 of the MAFF guidance.
	Stoniness	Stone content can influence the cultivation, harvesting and crop growth and may negatively impact machinery. The ALC grade limitations with reference to stoniness are given in Table 5 of the MAFF guidance.
	Chemical Limitations	Certain physical limitations may limit soil chemical properties, such as saline conditions, organic matter and toxic elements.
Interactive Limitations	Soil Wetness	Soil wetness is assessed using a combination of factors including climate, soil water regime and soil texture. The ALC grade limitations with reference to soil wetness are given in Tables 6 and 7 of the MAFF guidance.
	Droughtiness	Soil droughtiness is assessed using a combination of factors including available water capacity, moisture deficit, moisture balance and irrigation. The ALC grade limitations with reference to droughtiness are given in Table 8 of the MAFF guidance.
	Soil Erosion	Soil erosion may be caused by wind or water action and is determined by interactions between weather, soil type, topography and vegetation cover.

Soil Series

Soil series is the lowest categorical level used for classifying soils in England and Wales. According to the Soil Survey of England and Wales 1984:

"Soil series are defined using a combination of three main properties, the broad type of parent material present (substrate type), the texture of the soil material (textural grouping) and the presence or absence of material with a distinctive mineralogy."

Higher categories are: Major Soil Group, Soil Group, and Soil Subgroup, which are not explicitly used in this report.

Soil Association

A soil association is a geographic grouping of soils identified by the name of the most frequently occurring soil series and by the combination of additional soil series.

Gleying

Gleying is the process of iron reduction (opposite to oxidation) in soils from ferric (reddish in colour) to ferrous compounds (grey or colourless), by microorganisms or by-products of decomposing organic matter. Gleying occurs in areas devoid of oxygen when the soil is waterlogged. The resulting mottling (spots or blotches of colour) can therefore be used to identify the existence of a Slowly Permeable Layer (SPL); as defined within the MAFF ALC guidance.

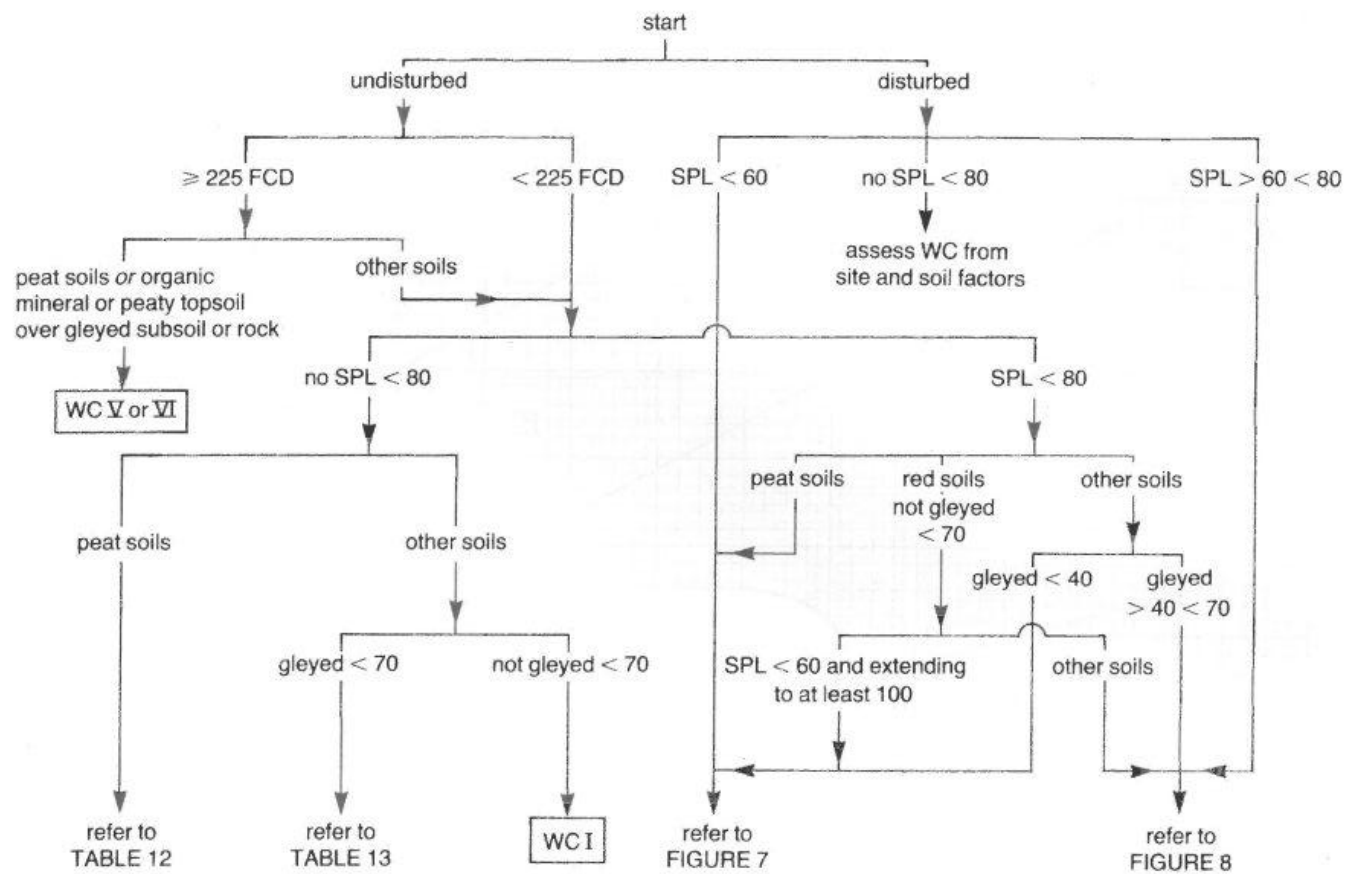


Figure 6. Flow diagram for assessing soil wetness class (WC) from field capacity days (FCD), depth to gleying (in cm) and depth to a slowly permeable layer (SPL, in cm)

Figure 6