Mallard Pass
Solar Farm

Mallard Pass Solar Farm

Environmental Statement Volume 2 Appendix 12.4: Land Use and Soils - Agricultural Land Classification Survey

November 2022

PINS Ref: EN010127

Document Ref: EN010127/APP/6.2

Revision P0

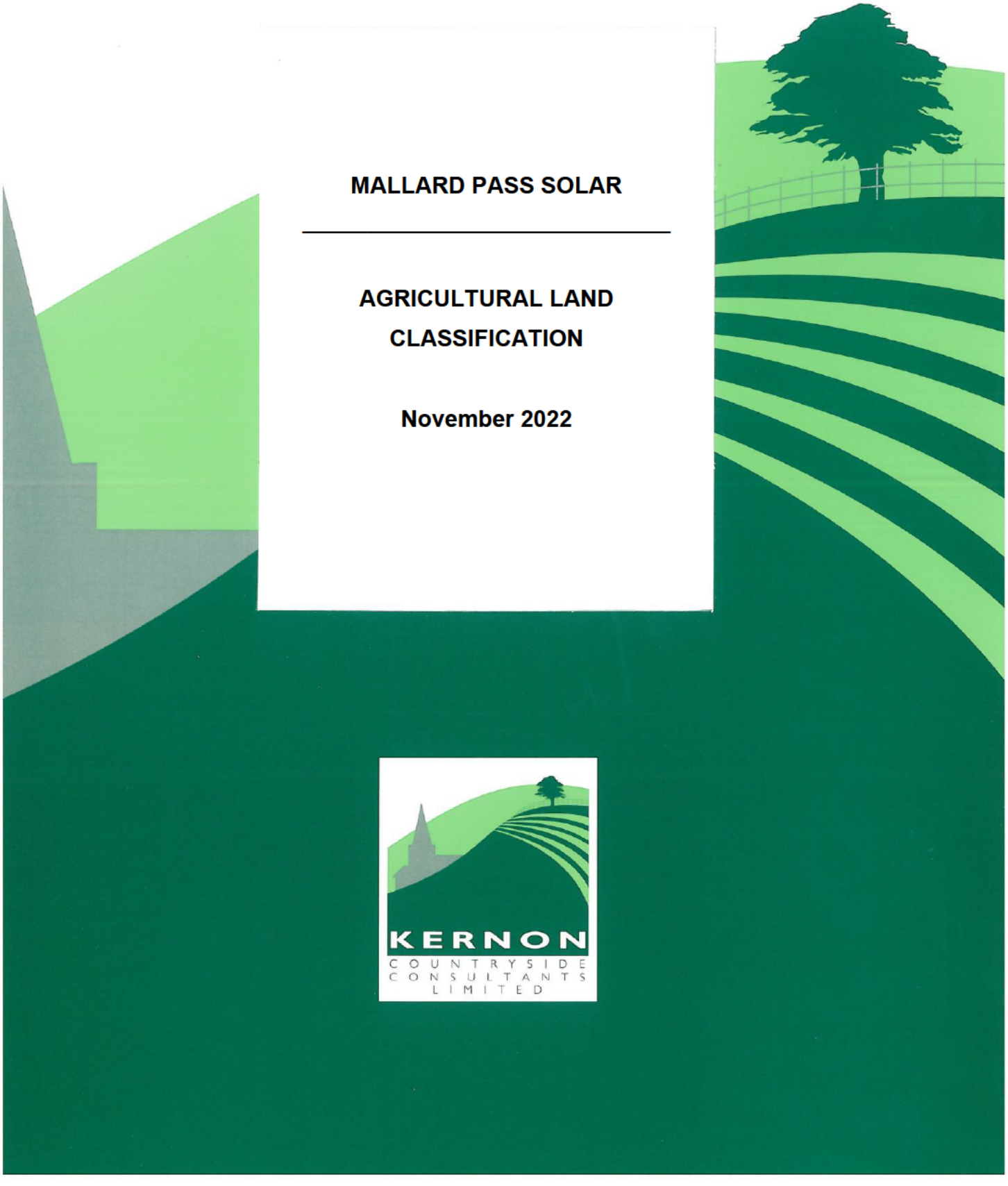
Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 - Reg 5 (2) (a)

Appendix 12.4: Agricultural Land Classification

MALLARD PASS SOLAR

AGRICULTURAL LAND CLASSIFICATION

November 2022



KERNON
COUNTRYSIDE CONSULTANTS LIMITED

MALLARD PASS SOLAR

AGRICULTURAL LAND CLASSIFICATION

November 2022

Authorised By APK 11/22.

Greenacres Barn, Stoke Common Lane, Purton Stoke, Swindon SN5 4LL
T: 01793 771333 Email: info@kernon.co.uk [redacted]

---

*Directors - **Tony Kernon** BSc(Hons), MRAC,, MRICS, FBIAC **Sarah Kernon***
*Chartered Surveyor – **Sam Eachus** BSc(Hons), MRICS, MBIAC*
*Consultant – **Ellie Chew** BSc(Hons), **Lauren Gaunt** BSc(Hons), **Amy Curtis** BSc(Hons)*

CONTENTS

Annexes

Plans

1 INTRODUCTION

1.1 This report sets out the results of an Agricultural Land Classification (ALC) of 852 hectares of land near the villages of Essendine and Ryhall.

1.2 The area was initially surveyed at a semi-detailed survey level, involving auger samples on a regular 200m grid. This was supplemented by a detailed ALC over parts of the site, sampling at a regular 100m grid spacing, focusing on areas identified as mostly better quality land in order to refine the boundaries between grades.

1.3 The Site comprises a mixture of land qualities, with Grades 2, Subgrades 3a and 3b, and Grade 4. Areas of farm woodland are excluded from the survey area, as shown on the plans.

1.4 This report is structured as follows:

(i) section 2 describes the methodology;
(ii) section 3 describes the known and predictive land quality of the wider area;
(iii) section 4 describes the relevant factors in delivering ALC;
(iv) and section 5 sets out the results.

2 METHODOLOGY

2.1 The work has been carried out by a Chartered Scientist (CSci), who is a Fellow (F. I. Soil Sci) of the British Society of Soil Science (BSSS). This ALC survey has been carried out by a soil scientist who meets the requirements of the BSSS Professional Competency Standard (PSC) scheme for ALC (see BSSS PCS Document 2 '*Agricultural Land Classification of England and Wales*'[1]). The BSSS PSC scheme is endorsed, amongst others, by the Department for Environment, Food and Rural Affairs (Defra), Natural England, the Science Council, and the Institute of Environmental Assessment and Management (IEMA).

2.2 This assessment is based upon the findings of a study of published information on climate, geology and soil in combination with a soil investigation carried out in accordance with the Ministry of Agriculture, Fisheries and Food (MAFF) [2] '*Agricultural Land Classification of England and Wales: Revised Guidelines and Criteria for Grading the Quality of Agricultural Land*', October 1988 (henceforth referred to as the 'the ALC Guidelines').

2.3 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*' (BMV) category as defined in Annex 2 of the National Planning Policy Framework (NPPF), revised July 2021. Further details of the ALC system and national planning policy implications are set out by Natural England in its Technical Information Note 049[3].

2.4 A semi-detailed ALC survey was carried out in December 2021. The survey involved examination of the soil's physical properties at 217 auger bore locations on a 200m by 200m grid, as shown on **Plan KCC3051/01A**. For the purpose of the ALC survey, the Site was divided up into 11 parcels, labelled A to K on **Plan KCC3051/01A**. Each parcel contained approximately 20 auger-bore locations, and represents the area covered by one ALC surveyor per day.

[1] British Society of Soil Science. Professional Competency Scheme Document 2 'Agricultural Land Classification of England and Wales'. Available online @ [redacted] Last accessed February 2022

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

[3] Natural England (December, 2012). 'Agricultural Land Classification: protecting the best and most versatile agricultural land (TIN049)'. Available online @ [redacted] Last accessed February 2022

2.5 Following discussions with Natural England, further sampling of an additional 117 auger bores were carried out, principally in parcel areas A, D, H, I and J, where the sampling density was increased to a 100 metre grid. These are also shown on **Plan KCC3051/01A**.

2.6 Four soil pits were excavated with a spade to examine certain soil physical properties, such as stone content and subsoil structure, in more detail.

2.7 A sample of topsoil was collected at 11 auger-bore locations. 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.

2.8 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.

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

3 KNOWN AND PREDICTIVE LAND QUALITY

BMV Generally

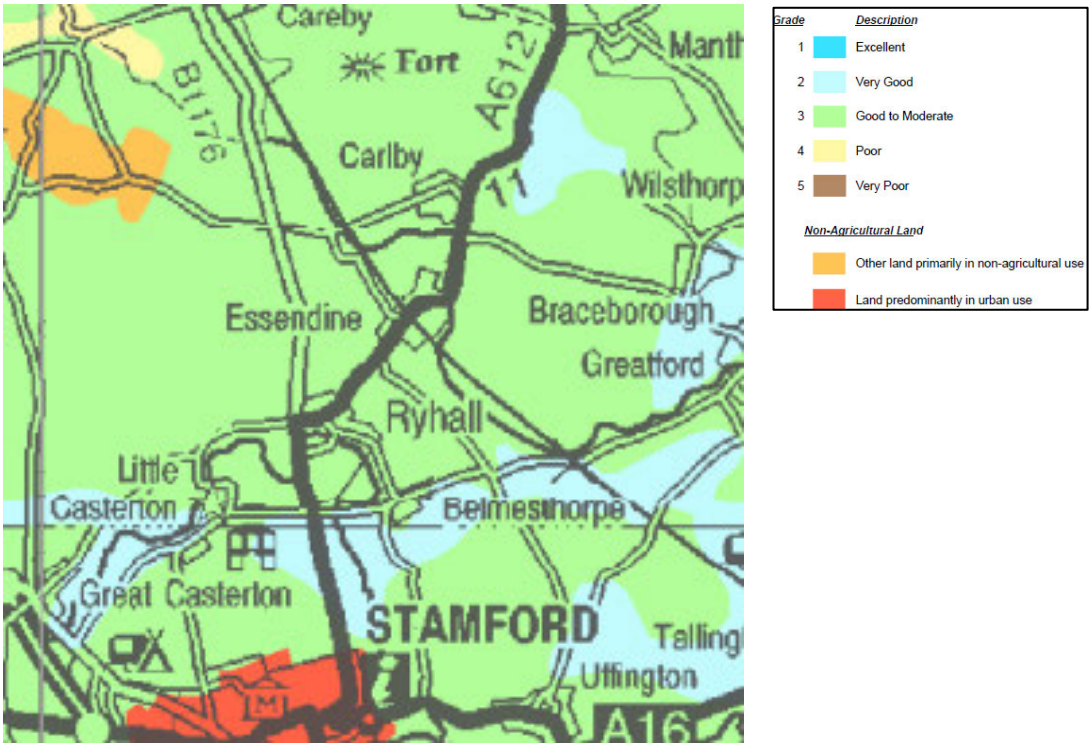
3.1 The best and most versatile (BMV) agricultural land is that in Grades 1, 2 and 3a of the ALC (see 2.3 above).

3.2 Nationally across England BMV is estimated to account for 42% of agricultural land (see Natural England's Technical Information Note TIN049, 2012) reproduced in **Annex 1**). It is not, therefore, a particularly rare resource.

Published ALC Data

3.3 In the 1970's MAFF published "provisional" ALC maps. As described in TIN 049, these were not based on extensive survey, and are not suitable for site-specific analysis. The survey area is shown as mostly undifferentiated Grade 3.

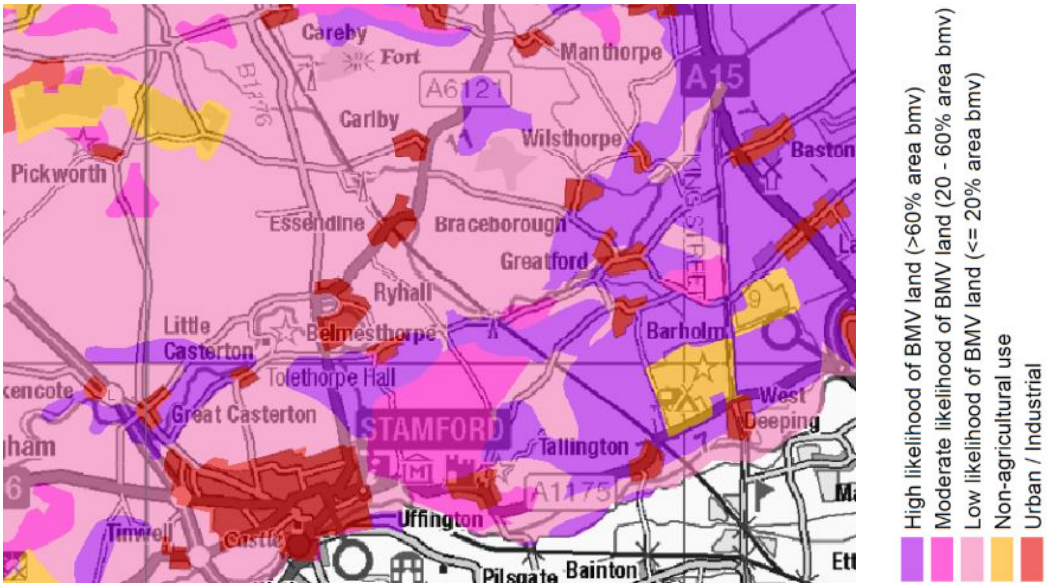
Insert 1: Extract from Provisional ALC (original plan at 1:250,000 scale)



Predictive BMV Maps

3.4 In 2017 Natural England published predictive BMV maps, dividing England into areas according to the percentage of land likely to be of BMV quality. They are categorised as low (<20% area BMV), medium (20-60% area BMV) and high (>60% area BMV). This area is mostly in the low probability of bmv, as shown below.

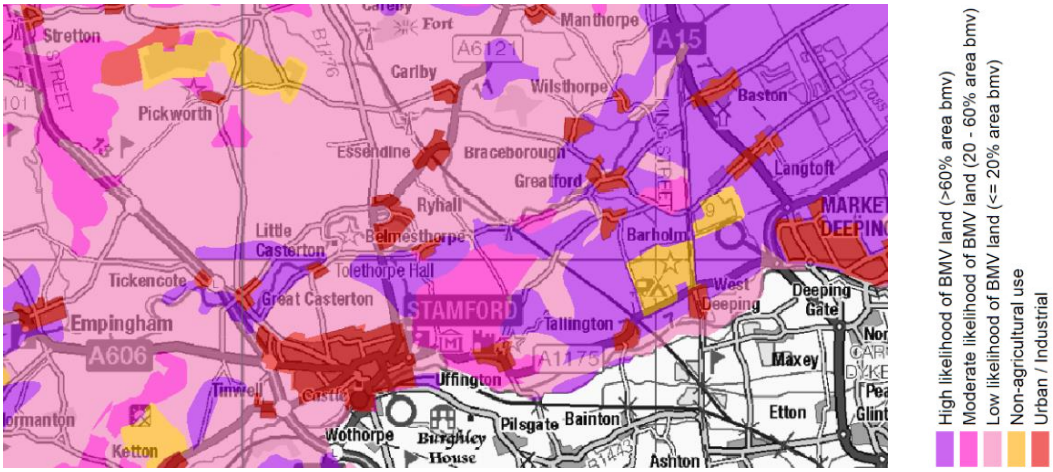
Insert 2: Extract from Predictive BMV Map



(Original plan at 1:250,000)

3.5 In the wider context, as shown below, the area is some of the poorest quality available.

Insert 3: Wider Predictive BMV Map

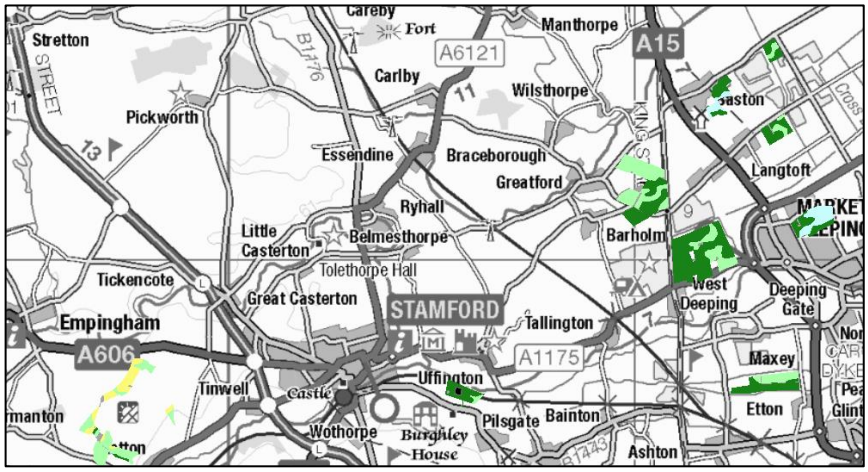


Available Survey Results

3.6 Where MAFF has carried out ALC survey results they are available on the Multi-Agency Geographic Information for the Countryside website www.magic.co.uk.

3.7 No survey results are available for the area within the Site, however those in the wider area generally comprise a mix of Subgrades 3a and 3b. The map is reproduced in **Annex 2**, with an extract below.

Insert 4: Available ALC Data



KEY	
	Grade 1
	Grade 2
	Grade 3a
	Grade 3b
	Grade 4
	Grade 5
	Non-agricultural
	Urban
	Not surveyed

Not to scale

4 FACTORS AFFECTING LAND QUALITY

4.1 As described in the ALC Guidelines, the main physical factors influencing agricultural land quality are:

- climatic limitations;
- site limitations;
- soil limitations; and
- interactive limitations.

4.2 These factors are considered in turn below.

Climatic Limitations

4.3 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 Mallard's Pass [(1)]

Climate Parameter	**Grid Ref:** TF025138 (Area A, North)	**Grid Ref:** TF053113 (Area I, Central)	**Grid Ref:** TF051096 (Area K, South)
Average Altitude (m)	53	21	41
Average Annual Rainfall (mm)	589	575	584
Accumulated Temperature above 0˚C (January – June)	1394	1431	1409
Moisture Deficit (mm) Wheat	111	117	114
Moisture Deficit (mm) Potatoes	104	111	107
Field Capacity Days (FCD)	118	112	114
Grade according to climate	1	1	1

[(1)] Climatological Data for Agricultural Land Classification, The Met. Office (1989)

4.4 Agricultural land quality within the Site is not limited by climate with reference to Figure 1 '*Grade according to climate*' on page 6 of the ALC Guidelines. In this case, agricultural land within the Site could be Grade 1 without any additional limitations.

4.5 The soil profiles across the Site are predicted to be at field capacity (i.e., the amount of soil moisture or water content held in the soil after excess water has drained away) for approximately 112 - 118 Field Capacity Days (FCD) per year, mainly over the late autumn, winter and early spring. The climate interacts with soil physical properties, i.e., soil texture

and wetness class, and can limit agricultural land quality due to soil wetness as per Table 6 of the ALC Guideline '*Grade according to soil wetness'*. It should be noted that the number of FCD at this Site falls in the FCD category <126 for determining the grade according to wetness; this indicates the land in this climate area is drained/workable for quite a long period over the year in comparison with central lowland England which has approximately 150 FCD.

Site Limitations

4.6 The Site is located to north east of Stamford, on the Rutland-Lincolnshire border. The Site is mainly surrounded by agricultural land, with residential development of Essendine to the north, and a railway through the centre of the Site between Essendine and Tallington. The approximate centre of the Site is located at British National Grid (BNG) reference TF 052115.

4.7 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.

4.8 **Gradient and Micro Relief.** The land in the Site is undulated and reaches and elevation of approximately 69 metres (m) Above Ordnance Datum (AOD) at the highest point in the north and western regions. The lowest ground occurs in the centre at an elevation of approximately 20 mAOD. The quality of agricultural land over the Site is not limited by gradient, which does not exceed 7°. No part of the Site is limited by micro-relief (i.e., complex changes in slope angle and direction over short distances).

4.9 **Risk of Flooding.** From the Government Flood Map for Planning website[4], the Site is mainly located in Flood Zone 1, with a region of Flood Zone 2 and 3 in the centre bordering the course of the West Glen River. However, there are no records (data) to show that agricultural land in any part of the Site is limited by flooding, according to the criteria for frequency and/or duration in Table 2 '*Grade according to flood risk in summer*' and/or Table 3 '*Grade according to flood risk in winter*' of the ALC Guidelines.

[4] Government Flood Map for Planning website. Available online @ https://flood-map-for-planning.service.gov.uk/ Last accessed January 2022

Soil Limitations

4.10 **Geology/Soil Parent Material.** From British Geological Survey (BGS) maps at 1:50,000 scale, the land in the Site is underlain by limestone in the Blisworth Limestone Formation and the Rutland Formation (argillaceous rocks with subordinate sandstone and limestone). The land in the north west is underlain by limestone in the Upper Lincolnshire Limestone Member. The eastern and southern parts of the Site are underlain by mudstone in the Kellaways Clay Member and Blisworth Clay Formation, with small areas of limestone in the Cornbrash Formation.

4.11 Most of the bedrock is not covered by any superficial deposits, but there is a narrow band of Alluvium (clay, silt, sand and gravel) and River Terrace Deposits (sand and gravel) bordering the West Glen River. There are also smaller regions of Glaciofluvial Deposits (Mid Pleistocene; sand and gravel) in the east and south, with an isolated region of glacial Till (Mid Pleistocene; diamicton) in centre of the Site.

4.12 **Published Information on Soil.** Soil information is available only at a small scale (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 Elmton 1, Elmton 3, Denchworth, Fladbury 1 and Sherborne Association.

4.13 As described by the SSEW, the Elmton 1 Association is found on gently undulating plateaux or dipslopes dissected by dry valleys. Although there is wide variation in the component soils because of the range of parent materials, the association consists mainly of shallow brown soils with small areas of deeper brown calcareous soils. These soils are permeable and well drained (Wetness Class I).

4.14 The Elmton 3 Association consists of shallow loamy and clayey soils over limestone and deeper slowly permeable clayey soils on clay-shale. These soils are well drained (Wetness Class I) but, in places, receive seepage or run-off water from adjacent Denchworth, Haselor and Evesham soils.

4.15 The Denchworth Associaiton is extensive on Jurassic and Cretaceous clays and clay shales in the Midlands, South West and South East England. It consists mainly of wet clayey soils, that are stoneless, strongly mottled and waterlogged for long periods in winter (Wetness Class IV and V).

4.16 The Fladbury 1 Association comprise deep clayey alluvial soils and prominently mottled directly below the topsoil. The subsoils are usually slowly permeable, however the primary

source of waterlogging is groundwater which fluctuates seasonally with changes in the river level and the duration of waterlogging is often related to elevation. In winter months, these soils often suffer prolonged waterlogging (Wetness Class V).

4.17 The Sherborne Association soils is extensive in South West England and occurs in small patches in Oxfordshire, Warwickshire, Cambridgeshire, Lincolnshire and Northamptonshire. This Association is developed on Jurassic limestone with thin interbedded clays giving a varied soil pattern. These soils are soils are very permeable and naturally well drained (Wetness Class I).

4.18 **Soil Survey**. The semi-detailed soil survey carried out in December 2021, supplemented by the detailed survey in September and October 2022, determined that the soils within the Site are predominantly developed over limestone (several different geological types, as described above) and are accordingly quite variable spatially over short distances, e.g., due to variations in soil depth to impenetrable rock, stone/rock content and wetness class. This leads to a quite complex pattern of ALC Grade 2, Subgrade 3a, Subgrade 3b and Grade 4 due to a combination of factors, particularly soil droughtiness and topsoil stone content on Elmton and Sherborne soils over limestone, and soil wetness on wetter and heavier (clayey) Denchworth soils over mudstone and Fladbury soils developed in river alluvium.

4.19 A log of all the soil profiles recorded on the Site is available on request. Four soil pits were excavated with a spade to examine certain soil physical properties, such as subsoil structure, in more detail. The first pit (Pit 1) was located in Area D near auger-bore 90, and Pit 2 was located in Area G near auger-bore 105, as shown on **Plan KCC3051/01A**. Two further pits were dug in Areas I and J, and a total of 10 archaeological trenches (open at the time of survey) were examined. Photographs of some of these areas are in **Annex 3**.

4.20 In order to substantiate topsoil texture determined during the ALC survey by hand-texturing, 11 samples of topsoil were collected over the Site. The topsoil sample was sent to an accredited laboratory for analysis of particle size distribution (PSD), based on the British Standard Institution particle size grades. The certificates of analysis are provided as **Annex 4**. 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 Plan KCC3051/01A)	**% sand 0.063-2.0 mm***	**% silt 0.002-0.063 mm**	**% clay <0.002 mm**	**ALC Soil Texture Class**
Area A, AB8	38	41	21	Medium Clay Loam
Area B, AB25	30	50	20	Medium Clay Loam
Area C, AB48	31	44	25	Medium Clay Loam
Area D, AB91	28	44	28	Heavy Clay Loam
Area E, AB64	32	34	34	Heavy Clay Loam
Area F, AB102	23	53	24	Medium Clay Loam
Area G, AB119	39	43	18	Medium Clay Loam/Medium Sandy Silt Loam
Area H, AB149	20	43	37	Clay
Area I, AB162	6	39	55	Clay
Area J, AB173	23	42	35	Heavy Clay Loam/Clay
Area K, AB207	24	47	29	Heavy Clay Loam

Interactive Limitations

4.21 From the information above, together with the findings of the semi-detailed and detailed soil survey, it has been determined that the quality of agricultural land in many soil profiles over the Site is limited by soil wetness where there are heavy (clayey) and slowly permeable and seasonally waterlogged soil developed from mudstone and alluvium. Some land is limited by soil droughtiness where it has calcareous and stony soils developed over limestone. These interactive limitations are described in more detail below.

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

Table 3: ALC Grade According to Soil Wetness

Wetness Class	Texture of the Top 25 cm	<126 Field Capacity Days
I	Sand, Loamy Sand, Sandy Loam, Sandy Silt Loam	1
	Sandy Clay Loam/Medium Silty Clay Loam /Medium Clay Loam*	1
	Heavy Silty Clay Loam/Heavy Clay Loam**	2
	Sandy Clay/Silty Clay/Clay	3a(2)
II	Sand, Loamy Sand, Sandy Loam, Sandy Silt Loam	1
	Sandy Clay Loam/Medium Silty Clay Loam /Medium Clay Loam*	2
	Heavy Silty Clay Loam/Heavy Clay Loam**	3a(2)
	Sandy Clay/Silty Clay/Clay	3a(2)
III	Sand, Loamy Sand, Sandy Loam, Sandy Silt Loam	2
	Sandy Clay Loam/Medium Silty Clay Loam /Medium Clay Loam*	3a(2)
	Heavy Silty Clay Loam/Heavy Clay Loam**	3b(3a)
	Sandy Clay/Silty Clay/Clay	3b(3a)
IV	Sand, Loamy Sand, Sandy Loam, Sandy Silt Loam	3a
	Sandy Clay Loam/Medium Silty Clay Loam /Medium Clay Loam*	3b
	Heavy Silty Clay Loam/Heavy Clay Loam**	3b
	Sandy Clay/Silty Clay/Clay	3b
V	Sand, Loamy Sand, Sandy Loam, Sandy Silt Loam	4
	Sandy Clay Loam/Medium Silty Clay Loam /Medium Clay Loam*	4
	Heavy Silty Clay Loam/Heavy Clay Loam**	4
	Sandy Clay/Silty Clay/Clay	4
Key * 18% to <27% clay; and ** 27% to 35% clay		

4.23 In a climate area with <126 FCD, profiles which are slowly permeable and seasonally waterlogged (Wetness Class III) are limited by soil wetness to Subgrade 3a where the topsoil is non-calcareous, medium clay loam. Where the topsoil has been determined by hand-texturing and laboratory analysis to be non-calcareous heavy clay loam, profiles in Wetness Class III are limited by soil wetness to Subgrade 3b.

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

Table 4: ALC Grade According to Droughtiness (re Table 8 of the MAFF ALC Guidelines)

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

4.25 It has been calculated that Moisture Balance (MB) values are sufficient to limit agricultural land over the Site, but predominantly in areas underlain by limestone, to a mixture of Grade 2, Subgrade 3a, and Subgrade 3b. Some land in Area H (see **Plan KCC3051/01A**) which is shallow and brashy (stony) over limestone is limited by soil droughtiness to Grade 4.

5 ALC GRADING OF THE SITE

5.1 The area and proportion of agricultural land in each ALC grade has been measured from an ALC map. The findings are reported below.

5.2 As described above, the semi-detailed soil survey carried out in December 2021 determined the soils at within the Site are predominantly developed over limestone (several different geological types, as described above) and are accordingly quite variable spatially over short distances, e.g., due to variations in soil depth to impenetrable rock, stone/rock content and wetness class. This leads to a quite complex pattern of ALC Grade 2, Subgrade 3a, Subgrade 3b and Grade 4 due to a combination of factors, namely: soil droughtiness and topsoil stone content on Elmton and Sherborne soils over limestone. Some land is limited by soil wetness to Subgrade 3a and Subgrade 3b, where the soils are slowly permeable and seasonally waterlogged (Wetness Class III). These include clayey Denchworth soils developed in mudstone, and silty-clay Fladbury soils developed in river alluvium flanking the West Glen River which flows through the central parts of the Site.

5.3 Significant parts of the site were then the subject of additional survey to a detailed level. The revised results, being a mixture of detailed and semi-detailed, are shown below. This is shown on **Figure 12.1**. This relates to the Order Limits.

Table 5: Order Limits (detailed and semi-detailed ALC)

ALC Grade	**Area (Ha)**	**Area (%)**
Grade 1 (Excellent)	0	0
Grade 2 (Very Good)	100	11.7
Subgrade 3a (Good)	260	30.5
Subgrade 3b (Moderate)	439	51.5
Grade 4 (Poor)	18	2.1
Grade 5 (Very Poor)	0	0
Urban	3	0.4
Not surveyed (roads, railway, verges etc)	32	3.8
Total	**852**	**100**

5.4 Solar PV Arrays are proposed only over part of the site. Taking the Solar PV Array area plus land between the arrays and the fence, the areas are as follows. This is shown on **Figure 12.2**.

Table 6: Solar PV Array and Field Margins

ALC Grade	**Area (Ha)**	**Area (%)**
Grade 1 (Excellent)	0	0
Grade 2 (Very Good)	35	6.6
Subgrade 3a (Good)	181	34.1
Subgrade 3b (Moderate)	297	55.9
Grade 4 (Poor)	18	3.4
Grade 5 (Very Poor)	0	0
Non-agricultural / Other land	0	0
Urban	0	0
Total	**531**	**100.0**

6 SOIL SENSITIVITY

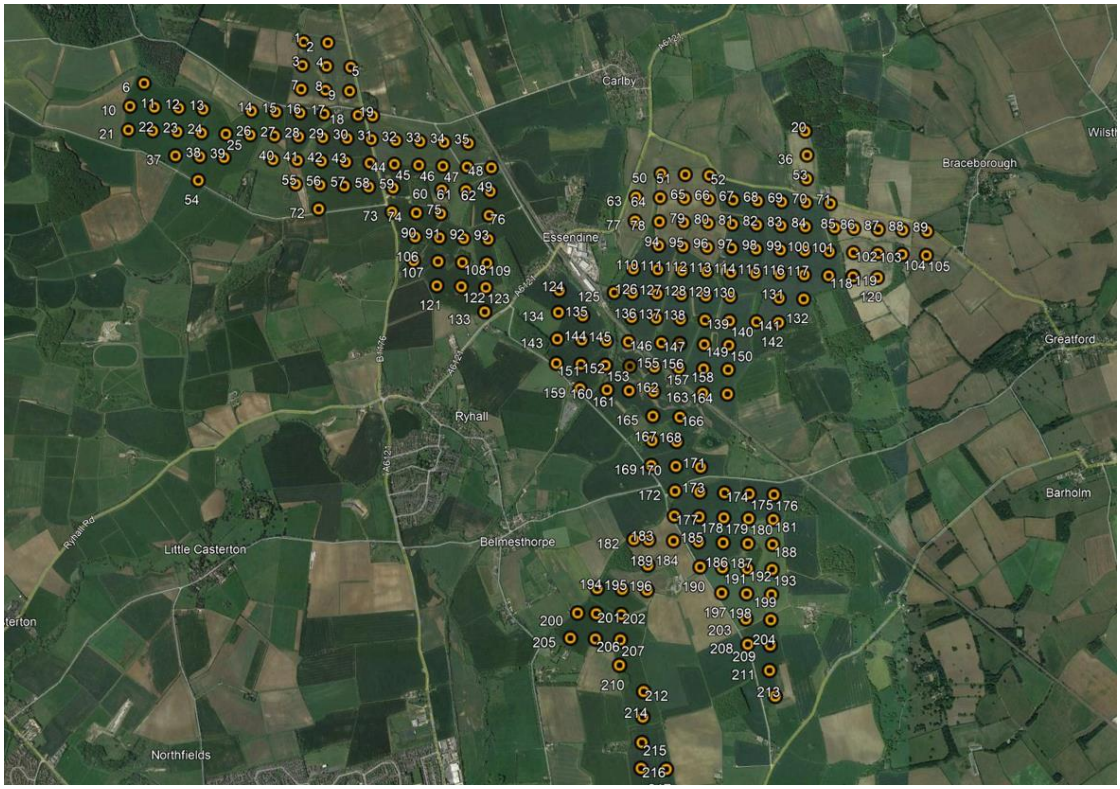
6.1 Soil resilience to being handled is described in the table below.

Table 7: Soil Resilience

Table 1.1: Soil Handling Units		
Soil Handling Unit/Sensitivity	**Resilience to structural damage during soil handling**	**Soil Texture Class**
A (Green) – Low Sensitivity	High	Light textured soils: sand (S), loamy sands (LS), sandy loam (SL), sandy silt loams (SZL); where fewer than 225 Field Capacity Days (FCD) (Average Annual Rainfall (AAR) less than 1000mm).
B (Orange) – Medium Sensitivity	Moderate	Above textures where there are 225 FCD or more (AAR 1000mm or greater). Medium textured soils with less than 27% clay content: silt loam (ZL), medium silty clay loam (MZCL), medium clay loam (MCL), sandy clay loam (SCL); where there are 225 FCD or fewer (AAR 1000mm or less). Heavy textures below (i.e., more than 27% clay content) where fewer than 150 FCD (AAR less than 700mm).
C (Red) – High Sensitivity	Low	Medium textures above where there are more than 225 FCD (AAR greater than 1000mm). Heavy textures soils with more than 27% clay content: heavy silty clay loams (HZCL), heavy clay loam (HCL), sandy clay (SC) silty clay (ZC) clay (C); where FCD are 150 or more (AAR 700mm or greater). Organic and peaty soils.

6.2 The resilience of soils across the site is plotted below. All soils are of medium sensitivity in this climate area.

Insert 5: Soil Resilience in the Area



Annex 1

Natural England Technical Information Note TIN049

Natural England Technical Information Note TIN049

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

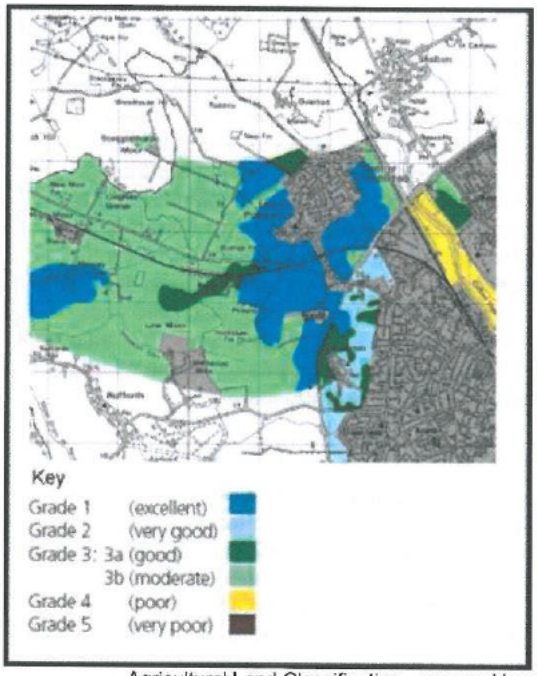
Most of our land area is in agricultural use. How this important natural resource is used is vital to sustainable development. This includes taking the right decisions about protecting it from inappropriate development.

Policy to protect agricultural land

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

The ALC system: purpose & uses

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



Agricultural Land Classification - map and key

Second edition 19 December 2012

[redacted]

NATURAL ENGLAND

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

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

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

Criteria and guidelines

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

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

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

Versatility and yield

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

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

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

Availability of ALC information

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

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

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

New field survey

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

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

Consultations

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

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

Other factors

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

Further information

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

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

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

ALC information for Wales is held by Welsh Government. Detailed information and advice is available on request from Ian Rugg [redacted]r David Martyn [redacted]. 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**.

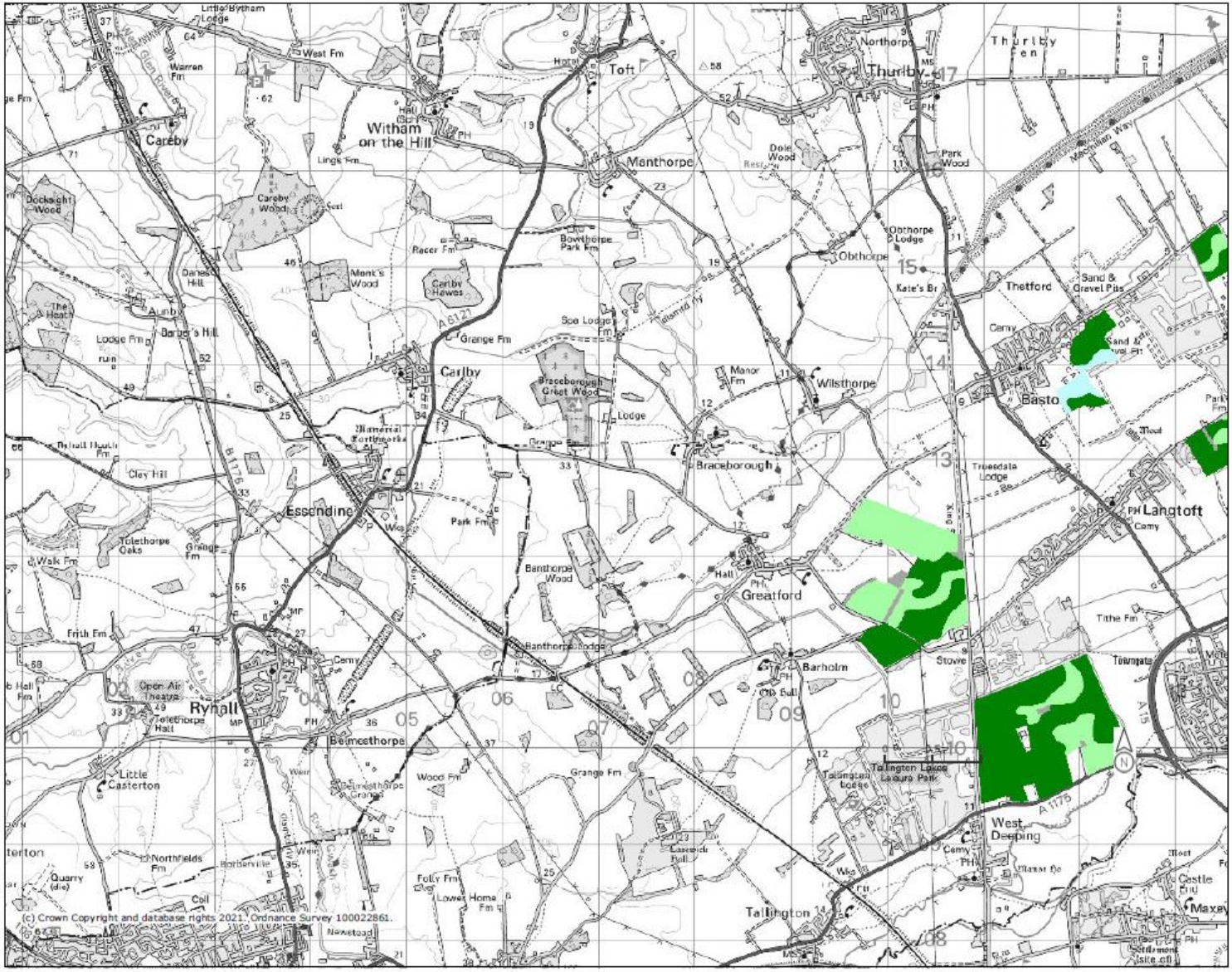
Copyright

Annex 2

Available ALC from www.magic.gov.uk

MAGIC

Essendine



Legend

Post 1988 Agricultural Land Classification (England)

- Grade 1
- Grade 2
- Grade 3a
- Grade 3b
- Grade 4
- Grade 5
- Not Surveyed
- Other

Projection = OSGB36
xmin = 492100
ymin = 305000
xmax = 522300
ymax = 320400

0 0.75 1.5
km

Map produced by MAGIC on 28 July, 2021.

Annex 3

Photos of Soil Pits

Trench 2 in shallow valley bottom, West of AB5 and AB9 at TF 03427 12632

Trench 4 at TF 03599 12622 on lower slopes towards valley bottom. Very variable.

Trench 7 near AB15 at TF 03528 12413

Above, Limestone is 'weathered' / 'altered' rather than solid. Few very fine roots, but very dense and compact so probably only rootable for about 20cm.

Annex 4
Soil Profile Logs

Site A

Point	Grid ref.			Alt (m)	Slope °	Aspect	Land use	Depth (cm)			Matrix	Ochreous Mottles		Grey Mottles		Gley	Texture	Stones - type 1				Stones - type 2				Ped			SUBS STR	CaCO3	Mn C	SPL	Drought			Wet		Final ALC			
	NGR	X	Y					Top	Bttm	Thick	Munsell colour	Form	Munsell colour	Form	Munsell colour			%	> 2cm	> 6cm	Type	%	> 2cm	> 6cm	Type	Strength	Size	Shape					MBw	MBp	Gd	WC	Gw	Limitation 1	Limitation 2	Limitation 3	Grade
1	TF 02400 14200	502400	314200	58	≤7	S		0	35	35	10YR4/6					No	HCL - Cla	7	7	3	HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	VC - Ve	No	No	-26	82	3b	WC I	2	Droughtiness			3b
								35	45	10	10YR6/3					Yes	MZCL - S	0			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	VC - Ve	No	No									
								45	55	10							MZCL - S	50			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate			No									
								55	120	65							IMP - Im	50			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate			No									
2	TF 02600 14200	502600	314200	58	≤7	S		0	30	30	10YR4/4					No	C - Clay	6	6	4	HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	VC - Ve	No	No	-44	62	3b	WC I	2	Droughtiness			3b
								30	35	5	10YR4/4					No	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	VC - Ve	No	No									
								35	45	10							C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate			No									
								45	120	75							IMP - Im	50			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate			No									
3	TF 02400 14000	502400	314000	58	≤7	S		0	40	40	7.5YR4/4					No	C - Clay	5	5	2	HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	MC - M	No	No	-24	86	3b	WC I	2	Droughtiness			3b
								40	50	10	7.5YR4/4					No	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	VC - Ve	No	No									
								50	60	10							C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate			No									
								60	120	60							IMP - Im	50			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate			No									
4	TF 02600 14000	502600	314000	53	≤7	S		0	38	38	10YR4/3					No	C - Clay	5	5	2	HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	MC - M	No	No	-36	70	3b	WC I	2	Droughtiness			3b
								38	40	2	10YR5/4					No	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	VC - Ve	No	No									
								40	50	10							C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate			No									
								50	120	70							IMP - Im	50			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate			No									
5	TF 02800 14000	502800	314000	53	≤7	S		0	38	38	7.5YR4/6					No	HCL - Cla	5	5	2	HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	MC - M	No	No	-34	72	3b	WC I	2	Droughtiness			3b
								38	50	12						No	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate			No	No									
								50	120	70							IMP - Im	50			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate			No	No									
7	TF 02400 13800	502400	313800	49	≤7	S		0	40	40	10YR4/4					No	C - Clay	5	5	2	HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	MC - M	No	No	-24	86	3b	WC I	2	Droughtiness			3b
								40	50	10	10YR4/6					No	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate			No	No									
								50	60	10							C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate			No									
								60	120	60							IMP - Im	50			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate			No									
8	TF 02600 13800	502600	313800	40	≤7	S		0	40	40	10YR4/3					No	C - Clay	1	1		HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	NON -	No	No	-10	107	3a	WC II	3a	Droughtines:Wetness			3a
								40	55	15	7.5YR4/4					No	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	NON -	No	No									
								55	75	20	10YR6/3	MD - I	10YR5/6			Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratche								Poor	NON -	No	Yes									
								75	120	45							IMP - Im	0			HR - All hard rocks or stones (i.e. those which cannot be scratche								Poor	NON -	No	Yes									
9	TF 02800 13800	502800	313800	37	≤7	S		0	35	35	10YR4/3					No	C - Clay	1	1		HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	NON -	No	No	-7	111	3a	WC I	3a	Droughtines:Wetness			3a
								35	70	35	7.5YR4/4					No	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	NON -	No	No									
								70	80	10							C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	NON -	No	No									
								80	120	40							IMP - Im	50			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	NON -	No	No									
16	TF 02400 13600	502400	313600	46	≤7	S																														N/A			
17	TF 02600 13600	502600	313600	43	≤7	S																														N/A			
18	TF 02880 13600	502880	313600	39	≤7	S																														N/A			
28	TF 02400 13400	502400	313400	46	≤7	S																														N/A			
29	TF 02600 13400	502600	313400	43	≤7	S																														N/A			
30	TF 02800 13400	502800	313400	46	≤7	S																														N/A			
41	TF 02400 13200	502400	313200	40	≤7	S																														N/A			
42	TF 02600 13200	502600	313200	51	≤7	S																														N/A			
43	TF 02800 13200	502800	313200	51	≤7	S		0	38	38	7.5YR4/6					No	HCL - Cla	3	3	1	HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	SC - Sli	No	No	-9	106	3a	WC I	2	Droughtiness			3a
								38	40	2	7.5YR4/6					No	HCL - Cla	0			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	SC - Sli	Yes	No									
								40	60	20	5YR4/6					No	HCL - Cla	0			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	SC - Sli	No	No									
								60	70	10							HCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate		No	No									
								70	120	50							IMP - Im	50			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate		No	No									
44	TF 03000 13200	503000	313200	42	≤7	S		0	38	38	7.5YR4/6					No	HCL - Cla	3	3	1	HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	SC - Sli	No	No	-9	106	3a	WC I	2	Droughtiness			3a
								38	40	2	7.5YR4/6					No	HCL - Cla	0			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	SC - Sli	Yes	No									
								40	60	20	5YR4/6					No	HCL - Cla	0			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	SC - Sli	No	No									
								60	70	10							HCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate		No	No									
								70	120	50							IMP - Im	50			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate		No	No									
55	TF 02400 13000	502400	313000	56	≤7	S		0	40	40	10YR4/3					No	MCL - Cl	2	2		HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	NON -	No	No	12	115	2	WC I	1	Droughtiness			2
								40	70	30	10YR5/3	CD - C	10YR5/6			Yes	MCL - Cl	0			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate		No	No									
								70	80	10	10YR5/2	CD - C	10YR5/6			Yes	MCL - Cl	0			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate		No	No									
								80	90	10							MCL - Cl	50			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate		No	No									
								90	120	30							IMP - Im	50			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate		No	No									
56	TF 02600 13000	502600	313000	52	≤7	S		0	35	35	10YR4/4					No	MCL - Cl	2	2		HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	NON -	No	No	-18	91	3a	WC I	1	Droughtiness			3a
								35	50	15	10YR5/6					No	MCL - Cl	0			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate		No	No									
								50	60	10							MCL - Cl	50			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate		No	No									
								60	120	60							IMP - Im	50			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate		No	No									
57	TF 02800 13000	502800	313000	52	≤7	S		0	35	35	7.5YR4/6					No	HCL - Cla	2	2		HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	NON -	No	No	-8	110	3a	WC I	2	Droughtiness			3a
								35	65	30	7.5YR5/6	CD - C	10YR5/6			No	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	NON -	Yes	No									
								65	75	10							C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate		No	No									
								75	120	45							IMP - Im	51			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate		No	No									
58	TF 03000 13000	503000	313000	46	≤7	S		0	38	38	7.5YR4/6					No	HCL - Cla	2	2		HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	NON -	No	No	-18	91	3a	WC I	2	Droughtiness			3a
								38	50	12	7.5YR5/6	CD - C	10YR5/6			No	HCL - Cla	0			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	NON -	Yes	No									
								50	60	10							HCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate		No	No									
								60	120	60							IMP - Im	50			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate		No	No									
72	TF 02600 12800	502600	312800	51	≤7	S		0	40	40	7.5YR4/6					No	HCL - Cla	2	2		HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	NON -	No	No	-8	107	3a	WC I	2	Droughtiness			3a
								40	60	20	7.5YR5/6					No	HCL - Cla	0			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	NON -	Yes	No									
								60	70	10							HCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate		No	No									
								70	120	50							IMP - Im	50			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate		No	No									
	END																																						

SITE B

Point	Grid ref. NGR	X	Y	Alt (m)	Slope °	Aspect	Land use	Depth (cm) Top	Bttm	Thick	Matrix Munsell colour	Ochreous Mottles Form	Munsell colour	Grey Mottles Form	Munsell colour	Gley	Texture	Stones - type 1 %	>2cm	>6cm	Type	Stones - type 2 %	>2cm	>6cm	Type	Ped Strength	Size	Shape	SUBS STR	CaCO3	Mn C	SPI	Drought MBw	MBp	Gd	Wet WC	Gw	Final ALC Limitation 1	Limitation 2	Limitation 3	Grade
6	TF 01100 13800	501100	313800	65	≤7	SE		0	35	35	7.5YR4/4					No	MCL - Clay loam (medium)	8	8	4	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	-40	-33	3b	WC I	1	Droughtiness			3b
								35	45	10							MCL - Clay loam (medium)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								45	120	75							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
10	TF 0 000 13600	501000	313600	68	≤7	SE		0	0	30	2.5Y /6					No	HCL - Clay loam (heavy)	6	6	1	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	-19	-9	3a	WC I	2	Droughtiness			3a
								30	50	20	2.5Y /6					No	HCL - Clay loam (heavy)	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No									
								50	60	10							HCL - Clay loam (heavy)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								60	120	60							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
11	TF 01200 13600	501200	313600	59	≤7	SE		0	35	35	5YR4/4					No	HCL - Clay loam (heavy)	5	5	2	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	SC - Slightly calcareous (1 - 5% CaCO)	No	No	-26	-15	3b	WC I	2	Droughtiness			3b
								35	40	5	5YR4/4					No	HCL - Clay loam (heavy)	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	SC - Slightly calcareous (1 - 5% CaCO)	Yes	No									
								40	60	20	5YR4/4					No	HCL - Clay loam (heavy)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	SC - Slightly calcareous (1 - 5% CaCO)	No	No									
								60	120	60							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	SC - Slightly calcareous (1 - 5% CaCO)	No	No									
12	TF 01400 13600	501400	313600	55	≤7	SE		0	0	30	5YR4/4					No	HCL - Clay loam (heavy)	5	5	1	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	-33	-26	3b	WC I	2	Droughtiness			3b
								30	8	8	5YR4/4					No	HCL - Clay loam (heavy)	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	Yes	No									
								38	50	12	5YR4/4						HCL - Clay loam (heavy)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								50	120	70							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
13	TF 0 600 13600	501600	313600	48	≤7	SE		0	8	38	7.5YR4/4					No	MCL - Clay loam (medium)	5	5	1	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	-36	-29	3b	WC I	1	Droughtiness			3b
								38	45	7	5YR4/4					No	MCL - Clay loam (medium)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	Yes	No									
								45	120	75							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No									
14	TF 02000 13600	502000	313600	52	≤7	SE		0	0	30	7.5YR4/4					No	MCL - Clay loam (medium)	5	5	1	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	-47	-40	3b	WC I	1	Droughtiness			3b
								30	40	10	5YR4/4					No	MCL - Clay loam (medium)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	Yes	No									
								40	120	80							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No									
15	TF 02200 13600	502200	313600	51	≤7	SE		0	39	39	7.5YR4/4					No	MCL - Clay loam (medium)	5	5		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	-35	-28	3b	WC I	1	Droughtiness			3b
								39	45	6	5YR4/4					No	MCL - Clay loam (medium)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	Yes	No									
								45	120	75	5YR4/4						IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)		No									
21	TF 0 000 13400	501000	313400	69	≤7	SE		0	35	35	5YR4/6					No	HCL - Clay loam (heavy)	6	6	1	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	SC - Slightly calcareous (1 - 5% CaCO)	No	No	1	14	3a	WC I	2	Droughtiness			3a
								35	70	35	5YR4/4					No	HCL - Clay loam (heavy)	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	SC - Slightly calcareous (1 - 5% CaCO)	Yes	No									
								70	80	10	5YR4/4						HCL - Clay loam (heavy)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	SC - Slightly calcareous (1 - 5% CaCO)	No	No									
								80	120	40							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	SC - Slightly calcareous (1 - 5% CaCO)	No	No									
22	TF 01200 13400	501200	313400	65	≤7	SE		0	35	35	5YR4/6					No	HCL - Clay loam (heavy)	6	6	1	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	SC - Slightly calcareous (1 - 5% CaCO)	No	No	1	14	3a	WC I	2	Droughtiness			3a
								35	70	35	5YR4/4					No	HCL - Clay loam (heavy)	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	SC - Slightly calcareous (1 - 5% CaCO)	Yes	No									
								70	80	10	5YR4/4						HCL - Clay loam (heavy)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	SC - Slightly calcareous (1 - 5% CaCO)	No	No									
								80	120	40							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	SC - Slightly calcareous (1 - 5% CaCO)	No	No									
23	TF 01400 13400	501400	313400	63	≤7	SE		0	8	38	5YR4/4					No	HCL - Clay loam (heavy)	3	3	1	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VSC - Very slightly calcareous (0.5 - 1% CaCO3)	No	No	-27	-19	3b	WC I	2	Droughtiness			3b
								38	48	10	5YR4/4					No	HCL - Clay loam (heavy)	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VSC - Very slightly calcareous (0.5 - 1% CaCO3)	Yes	No									
								48	120	72							IMP - Impenetrable to roots	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VSC - Very slightly calcareous (0.5 - 1% CaCO3)	No	No									
24	TF 0 600 13400	501600	313400	53	≤7	SE		0	48	48	7.5YR4/4					No	MCL - Clay loam (medium)	5	5		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VSC - Very slightly calcareous (0.5 - 1% CaCO3)	No	No	-19	- 0	3a	WC I	1	Droughtiness			3a
								48	58	10							MCL - Clay loam (medium)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								58	120	62							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
25	TF 0 800 13400	501800	313400	45	≤7	SE		0	8	38	5YR4/1					Yes	MCL - Clay loam (medium)	3	3	1	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	-37	- 0	3b	WC I	1	Droughtiness			3b
								38	42	4							MCL - Clay loam (medium)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No									
								42	120	78							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No									
26	TF 02000 13400	502000	313400	44	≤7	SE		0	45	45	7.5YR4/4					No	HCL - Clay loam (heavy)	5	5		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	-18	-7	3a	WC I	2	Droughtiness			3a
								45	50	5	5YR4/4					No	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No									
								50	60	10							C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								60	120	60							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
27	TF 02200 13400	502200	313400	48	≤7	SE		0	0	30	7.5YR4/4					No	MCL - Clay loam (medium)	8	8	6	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	-48	-41	3b	WC I	1	Droughtiness			3b
								30	40	10							MCL - Clay loam (medium)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								40	120	80							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
37	TF 01400 13200	501400	313200	63	≤7	SE		0	40	40	5YR4/4					No	MCL - Clay loam (medium)	5	5		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	0	16	3a	WC I	1	Droughtiness			3a
								40	80	40	5YR5/4					No	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No									
								80	120	40							IMP - Impenetrable to roots	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No									
38	TF 0 600 13200	501600	313200	62	≤7	SE		0	8	38	5YR4/4					No	HCL - Clay loam (heavy)	5	5	2	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	-26	-17	3b	WC I	2	Droughtiness			3b
								38	43	5	5YR5/4					No	HCL - Clay loam (heavy)	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No									
								43	55	12							HCL - Clay loam (heavy)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								55	120	65							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
39	TF 0 800 13200	501800	313200	59	≤7	SE		0	8	38	5YR5/4						HCL - Clay loam (heavy)	3	3	1	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	-29	-22	3b	WC I	2	Droughtiness			3b
								38	40	2	5YR5/4						HCL - Clay loam (heavy)	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								40	50	10							HCL - Clay loam (heavy)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								50	120	70							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
40	TF 02200 13200	502200	313200	42	≤7	SE		0	45	45	7.5YR4/4					No	HCL - Clay loam (heavy)	3	3		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	34	18	1	WC I	2	Wetness			2
								45	80	35	5YR4/4					No	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No									
								80	120	40							C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	Yes									
54	TF 0 600 13000	501600	313000	61	≤7	SE		0	40	40	5YR5/4					No	HCL - Clay loam (heavy)	4	4	1	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	MC - Moderately calcareous (5 - 10% CaCO3)	No	No	-29	-22	3b	WC I	2	Droughtiness			3b
								40	50	10	5YR5/4					No	HCL - Clay loam (heavy)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	MC - Moderately calcareous (5 - 10% CaCO3)	No	No									
								50	120	70							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	MC - Moderately calcareous (5 - 10% CaCO3)	No	No									
	END																																							

SITE C

Point	Grid ref.			Alt (m)	Slope °	Aspect	Land use	Depth (cm)			Matrix	Ochreous Mottles		Grey Mottles		Gley	Texture	Stones - type 1				Stones - type 2				Ped			SUBS STR	CaCO3	Mn C	SPL	Drought			Wet		Final ALC			
	NGR	X	Y					Top	Bttm	Thick	Munsell colour	Form	Munsell colour	Form	Munsell colour			%	> 2cm	> 6cm	Type	%	> 2cm	> 6cm	Type	Strength	Size	Shape					MBw	MBp	Gd	WC	Gw	Limitation 1	Limitation 2	Limitation 3	Grade
19	TF 03000 13600	503000	313600	33	≤7	SE		0	40	40	7.5YR4/4					No	MCL - Clay loam (medium)	5	5		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	-28	-22	3b	WC I	1	Droughtiness			3b
								40	45	5	7.5YR4/4					No	MCL - Clay loam (medium)	3			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No									
								45	55	10							MCL - Clay loam (medium)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								55	120	65							IMP - Impenetrable to roots	70			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
31	TF 03000 13400	503000	313400	33	≤7	SE		0	35	35	7.5YR4/6					No	C - Clay	5	5		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	-28	-19	3b	WC I	2	Droughtiness			3b
								35	50	15	7.5YR4/6					No	C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No									
								50	60	10							C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								60	120	60							IMP - Impenetrable to roots	51			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
32	TF 03200 13400	503200	313400	31	≤7	SE		0	40	40	7.5YR4/6					No	HCL - Clay loam (heavy)	5	5		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	-29	-22	3b	WC I	2	Droughtiness			3b
								40	45	5	5YR4/6					No	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No									
								45	55	10							C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								55	120	65							IMP - Impenetrable to roots	51			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
33	TF 03400 13400	503400	313400	33	≤7	SE		0	45	45	7.5YR4/6					No	HCL - Clay loam (heavy)	3	3		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	-48	-39	3b	WC I	2	Droughtiness			3b
								45	50	5	7.5YR4/6					No	C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No									
								50	60	10							C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								60	120	60							IMP - Impenetrable to roots	51			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
34	TF 03600 13400	503600	313400	28	≤7	SE		0	40	40	7.5YR3/4					No	HCL - Clay loam (heavy)	3	3		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	-15	2	3a	WC I	2	Droughtiness			3a
								40	60	20	7.5YR4/6					No	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No									
								60	70	10							C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								70	120	50							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
35	TF 03800 13400	503800	313400	31	≤7	SE		0	40	40	7.5YR4/4					No	MCL - Clay loam (medium)	5	5	2	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	MC - Moderately calcareous (5 - 10% CaCO3)	No	No	-1	7	3a	WC I	2	Droughtiness			3a
								40	60	20	5YR4/4					No	HCL - Clay loam (heavy)	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	SC - Slightly calcareous (1 - 5% CaCO3)	No	No									
								60	80	20	5YR4/4					No	HCL - Clay loam (heavy)	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	SC - Slightly calcareous (1 - 5% CaCO3)	No	No									
								80	120	40							IMP - Impenetrable to roots	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	SC - Slightly calcareous (1 - 5% CaCO3)	No	No									
45	TF 03200 13200	503200	313200	35	≤7	SE		0	35	35	7.5YR4/6					No	HCL - Clay loam (heavy)	5	5	2	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	SC - Slightly calcareous (1 - 5% CaCO3)	No	No	-31	-23	3b	WC I	2	Droughtiness			3b
								35	45	10	7.5YR4/6					No	C - Clay	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	SC - Slightly calcareous (1 - 5% CaCO3)	No	No									
								45	55	10							C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								55	120	65							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
46	TF 03400 13200	503400	313200	32	≤7	SE		0	40	40	7.5YR4/6					No	HCL - Clay loam (heavy)	3	3		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	MC - Moderately calcareous (5 - 10% CaCO3)	No	No	-23	-14	3b	WC I	2	Droughtiness			3b
								40	50	10	7.5YR4/6					No	C - Clay	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No									
								50	60	10							C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								60	120	60							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
47	TF 03600 13200	503600	313200	29	≤7	SE		0	30	30	7.5YR4/6					No	MCL - Clay loam (medium)	3	3	2	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable		No	No	-14	1	3a	WC I	1	Droughtiness			3a
								30	40	10	7.5YR4/6					No	HCL - Clay loam (heavy)	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								40	60	20	5YR4/6					No	HCL - Clay loam (heavy)	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								60	70	10							C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								70	120	50							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
48	TF 03800 13200	503800	313200	31	≤7	SE		0	35	35	7.5YR4/6					No	MCL - Clay loam (medium)	2	2		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	NON - Non-calcareous (<0.5% CaCO3)	No	No	-2	10	3a	WC I	1	Droughtiness			3a
								35	50	15	7.5YR4/6					No	MCL - Clay loam (medium)	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	NON - Non-calcareous (<0.5% CaCO3)	Yes	No									
								50	70	20	7.5YR5/6					No	HCL - Clay loam (heavy)	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		Yes	No									
								70	80	10							HCL - Clay loam (heavy)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								80	120	40							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
49	TF 04000 13200	504000	313200	32	≤7	SE		0	38	38	10YR4/3					No	HCL - Clay loam (heavy)	2	2		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	NON - Non-calcareous (<0.5% CaCO3)	No	No	-19	-5	3a	WC III	3b	Wetness			3b
								38	60	22	10YR5/3	MD - Many Distinct	10YR5/6			Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Poor	NON - Non-calcareous (<0.5% CaCO3)	No	Yes									
								60	70	10							C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Poor		No	Yes									
								70	120	50							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Poor		No	Yes									
59	TF 03200 13000	503200	313000	41	≤7	SE		0	35	35	7.5YR4/6					No	MCL - Clay loam (medium)	2	2		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	SC - Slightly calcareous (1 - 5% CaCO3)	No	No	-12	2	3a	WC I	1	Droughtiness			3a
								35	45	10	7.5YR4/4					No	HCL - Clay loam (heavy)	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	SC - Slightly calcareous (1 - 5% CaCO3)	No	No									
								45	60	15	7.5YR4/6					No	HCL - Clay loam (heavy)	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	NON - Non-calcareous (<0.5% CaCO3)	No	No									
								60	70	10							HCL - Clay loam (heavy)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								70	120	50							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
60	TF 03600 13000	503600	313000	30	≤7	SE		0	38	38	7.5YR4/4					No	HCL - Clay loam (heavy)	5	5	2	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	SC - Slightly calcareous (1 - 5% CaCO3)	No	No	-29	-22	3b	WC I	2	Droughtiness			3b
								38	45	7	7.5YR4/4					No	HCL - Clay loam (heavy)	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	SC - Slightly calcareous (1 - 5% CaCO3)	No	No									
								45	55	10							HCL - Clay loam (heavy)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								55	120	65							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
61	TF 03800 13000	503800	313000	35	≤7	SE		0	38	38	2.5Y4/2					Yes	C - Clay	3	3	2	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	13	-4	2	WC III	3a	Wetness			3a
								38	60	22	2.5Y5/3	CD - Common Distinct	10YR5/6			Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Poor	VC - Very calcareous (>10% CaCO3)	No	Yes									
								60	120	60							C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Poor		No	Yes									
62	TF 04000 13000	504000	313000	36	≤7	SE		0	38	38	10YR4/3					No	C - Clay	5	5	1	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	-27	-18	3b	WC I	2	Droughtiness			3b
								38	50	12	10YR4/4					No	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No									
								50	60	10							C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								60	120	60							IMP - Impenetrable to roots	51			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
76	TF 04000 12800	504000	312800	44	≤7	SE		0	35	35	10YR4/3					No	C - Clay	7	5	2	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	-40	-35	3b	WC I	2	Droughtiness			3b
								35	40	5	10YR4/3					No	C - Clay	3			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No									
								40	50	10							C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								50	120	70							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
	END																																							

SITE D

Point	Grid ref. NGR	X	Y	Alt (m)	Slope °	Aspect	Land use	Depth (cm) Top	Bttm	Thick	Matrix Munsell colour	Ochreous Mottles Form	Munsell colour	Grey Mottles Form	Munsell colour	Gley	Texture	Stones - type 1 %	> 2cm	> 6cm	Type	Stones - type 2 %	> 2cm	> 6cm	Type	Ped Strength	Size	Shape	SUBS STR	CaCO3	Mn C	SPL	Drought MBw	MBp	Gd	Wet WC	Gw	Final ALC Limitation 1	Limitation 2	Limitation 3	Grade
73	TF 03200	12800	503200	312800	39	≤7	SE	0	28	28	7.5YR4/6					No	HCL - Clay loam (heavy)	5	5		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	-50	-43	4	WC I	2	Droughtiness			4
								28	30	2	7.5YR4/6						HCL - Clay loam (heavy)	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								30	40	10							HCL - Clay loam (heavy)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								40	120	80							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
74	TF 03400	12800	503400	312800	37	≤7	SE	0	35	35	7.5YR4/6					No	MCL - Clay loam (medium)	3	3		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	-36	-29	3b	WC I	1	Droughtiness			3b
								35	38	3	7.5YR4/6						HCL - Clay loam (heavy)	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No									
								38	48	10							HCL - Clay loam (heavy)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								48	120	72							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
75	TF 03600	12800	503600	312800	32	≤7	SE	0	38	38	7.5YR4/6					No	HCL - Clay loam (heavy)	2	2		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	-12	3	3a	WC I	2	Droughtiness			3a
								38	60	22	7.5YR5/6						HCL - Clay loam (heavy)	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No									
								60	65	5							HCL - Clay loam (heavy)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								65	120	55							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
90	TF 03400	12600	503400	312600	35	≤7	SE	0	40	40	10YR4/3					No	C - Clay	2	2		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	-20	-5	3a	WC I	2	Droughtiness			3a
								40	55	15	10YR4/4					No	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No									
								55	65	10							C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								65	120	55							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
91	TF 03600	12600	503600	312600	39	≤7	SE	0	35	35	10YR4/4					No	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	SC - Slightly calcareous (1 - 5% CaCO3)	No	No	28	12	2	WC I	3a	Wetness			3a
								35	60	25	7.5YR5/6					No	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	NON - Non-calcareous (<0.5% CaCO3)	No	No									
								60	65	5	10YR5/3					Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								65	120	55							C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
92	TF 03800	12600	503800	312600	42	≤7	SE	0	35	35	10YR4/4					No	C - Clay	5	5	3	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	SC - Slightly calcareous (1 - 5% CaCO3)	No	No	18	3	2	WC III	3b	Wetness			3b
								35	50	15	10YR5/3					No	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	NON - Non-calcareous (<0.5% CaCO3)	No	No									
								50	60	10	10YR5/3	CD - Common Distinct	10YR5/6			Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Poor	NON - Non-calcareous (<0.5% CaCO3)	No	Yes									
								60	120	60							C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Poor	NON - Non-calcareous (<0.5% CaCO3)	No	Yes									
93	TF 04000	12600	504000	312600	46	≤7	SE	0	38	38	10YR4/3					No	C - Clay	1	1		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	NON - Non-calcareous (<0.5% CaCO3)	No	No	20	5	2	WC II	3a	Wetness			3b
								38	50	12	10YR5/3					Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	NON - Non-calcareous (<0.5% CaCO3)	No	No									
								50	60	10	10YR5/3	MD - Many Distinct	10YR5/6			Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Poor		No	Yes									
								60	120	60							C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Poor		No	Yes									
106	TF 03400	12400	503400	312400	50	≤7	SE	0	38	38	10YR4/3					No	C - Clay	1			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	-8	11	3a	WC I	2	Droughtiness			3a
								38	50	12	10YR5/3					Yes	C - Clay	1			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No									
								50	70	20	2.5Y5/3	MD - Many Distinct	10YR5/6			Yes	C - Clay	1			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No									
								70	80	10							C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Poor		No	No									
								80	120	40							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Poor		No	No									
107	TF 03600	12400	503600	312400	51	≤7	SE	0	36	36	10YR4/4					No	HCL - Clay loam (heavy)	3	3	1	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	-29	-20	3b	WC I	2	Droughtiness			3b
								36	43	7	10YR4/3					No	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	Yes	No									
								43	53	10							C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								53	120	67							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
108	TF 03800	12400	503800	312400	50	≤7	SE	0	29	29	10YR4/3					No	C - Clay	3	3	2	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	-25	-13	3b	WC I	2	Droughtiness			3b
								29	50	21	10YR5/3					Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No									
								50	60	10							C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								60	120	60							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
109	TF 04000	12400	504000	312400	48	≤7	SE	0	30	30	10YR4/4					No	C - Clay	7	7	4	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	-34	-23	3b	WC I	2	Droughtiness			3b
								30	40	10	10YR4/3					No	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No									
								40	60	20	10YR4/3						C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								60	120	60							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
121	TF 03600	12200	503600	312200	52	≤7	SE	0	38	38	10YR4/4					No	C - Clay	3	3	1	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	-36	-29	3b	WC I	2	Droughtiness			3b
								38	40	2	10YR4/3					No	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								40	50	10							C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								50	120	70							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
122	TF 03800	12200	503800	312200	51	≤7	SE	0	35	35	10YR4/3					No	C - Clay	5	5	2	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	-37	-30	3b	WC I	2	Droughtiness			3b
								35	40	5	7.5YR4/4					No	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VC - Very calcareous (>10% CaCO3)	No	No									
								40	50	10							C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								50	120	70							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
123	TF 04000	12200	504000	312200	44	≤7	SE	0	38	38	2.5Y4/3					No	C - Clay	2	2		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	SC - Slightly calcareous (1 - 5% CaCO3)	No	No	-16	3	3a	WC I	2	Droughtiness			3a
								38	50	12	10YR5/3					Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	SC - Slightly calcareous (1 - 5% CaCO3)	No	No									
								50	60	10	10YR5/3	FF - Few Faint	10YR5/6			Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								60	70	10							C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								70	120	50							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
134	TF 04600	12020	504600	312020	24	≤7	SE	0	30	30	10YR5/3					Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Not Applicable	VC - Very calcareous (>10% CaCO3)	No	No	-50	-43	4	WC I	2	Droughtiness			4
								30	40	10							C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
								40	120	80							IMP - Impenetrable to roots	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate		No	No									
	END																																							

SITE E

Po nt	G d ef. NGR	X	Y	Alt (m)	Slope °	Aspect	Land use	Depth (cm) Top	ttm	Th ck	Mat x Munsell colou	Och reous Mottles Fo m	Munsell colou	G ey Mottles Fo m	Munsell colou	Grey	Textu e	Stones - type 1 %	>2cm	>6cm	Type	Stones - type 2 %	>2cm	>6cm	Type	Ped St ength	S pe	Shape	SUBS STR	CaCO3	Mn C	SPL	D ought MBw	MBp	Gd	Wet WC	Gw	F nal ALC L m tat on 1	L m tat on 2	L m tat on 3	G ade
50	TF 05400 13200	505400	313200	34	≤7	SE		0	22	22	10YR4/3						C - Clay	10	4		SLST - Soft ool t c o dolom t c l mestones								SC - Sl ghtly calca eous (1 - 5% CaCO3)			5	-10	3a	WC I	2	D ought ness			3a
								22	38	16	7.5YR5/4					No	C - Clay	5			SLST - Soft ool t c o dolom t c l mestones								Mode ate SC - Sl ghtly calca eous (1 - 5% CaCO3)	No	No										
								38	120	82	7.5YR5/5					No	C - Clay	30			SLST - Soft ool t c o dolom t c l mestones								Mode ate MC - Mode ately calca eous (5 - 10% CaCO3)		No										
51	TF 05600 13200	505600	313200	36	≤7	SE		0	27	27	10YR4/3						C - Clay	20	8		HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								SC - Sl ghtly calca eous (1 - 5% CaCO3)			-48	-38	3b	WC I	2	D ought ness			3b
								27	40	13	10YR6/3	CD - Common D st nct	10YR5/6			es	C - Clay	20			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate SC - Sl ghtly calca eous (1 - 5% CaCO3)	es	No										
								40	60	20	10YR5/5					No	C - Clay	50			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate SC - Sl ghtly calca eous (1 - 5% CaCO3)		No										
52	TF 05800 13200	505800	313200	36	≤7	SE		0	25	25	10YR4/3						HCL - Clay loam (heavy)	10			SLST - Soft ool t c o dolom t c l mestones								MC - Mode ately calca eous (5 - 10% CaCO3)			-36	-25	3b	WC I	1	D ought ness			3b
								25	35	10	10YR5/4					No	C - Clay	20			SLST - Soft ool t c o dolom t c l mestones								Mode ate MC - Mode ately calca eous (5 - 10% CaCO3)	No	No										
								35	65	30	10YR6/4					No	SCL - Sandy clay loam	50			SLST - Soft ool t c o dolom t c l mestones								Mode ate MC - Mode ately calca eous (5 - 10% CaCO3)		No										
63	TF 05200 13000	505200	313000	24	≤7	SE		0	27	27	10YR4/2						MCL - Clay loam (med um)	10	3		HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								SC - Sl ghtly calca eous (1 - 5% CaCO3)			-12	-10	3a	WC I	1	D ought ness			3a
								27	48	21	7.5YR4/4					No	MCL - Clay loam (med um)	5			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate SC - Sl ghtly calca eous (1 - 5% CaCO3)		No										
								48	60	12	7.5YR4/4					No	MSL - Med um sandy loam	20			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate SC - Sl ghtly calca eous (1 - 5% CaCO3)		No										
								60	90	30	7.5YR5/4					No	SCL - Sandy clay loam	50			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate MC - Mode ately calca eous (5 - 10% CaCO3)		No										
64	TF 05400 13000	505400	313000	34	≤7	SE		0	25	25	10YR4/3						C - Clay	10	3		SLST - Soft ool t c o dolom t c l mestones								SC - Sl ghtly calca eous (1 - 5% CaCO3)			14	-3	2	WC I	2	D ought ness	Wetness		2
								25	35	10	10YR4/4					No	C - Clay	5			SLST - Soft ool t c o dolom t c l mestones								Mode ate SC - Sl ghtly calca eous (1 - 5% CaCO3)	No	No										
								35	120	85	10YR5/4					No	C - Clay	10			SLST - Soft ool t c o dolom t c l mestones								Mode ate MC - Mode ately calca eous (5 - 10% CaCO3)		No										
65	TF 05600 13000	505600	313000	36	≤7	SE		0	25	25	10YR4/2						MCL - Clay loam (med um)	40	18		HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								MC - Mode ately calca eous (5 - 10% CaCO3)			-60	-51	4	WC I	1	D ought ness			4
								25	40	15	10YR4/4					No	MCL - Clay loam (med um)	50			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate MC - Mode ately calca eous (5 - 10% CaCO3)	No	No										
								40	60	20							MCL - Clay loam (med um)	50			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate MC - Mode ately calca eous (5 - 10% CaCO3)		No										
66	TF 05800 13000	505800	313000	36	≤7	SE		0	25	25	2.5Y4/3						C - Clay	4			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								NON - Non-calca eous (0.5% CaCO3)			6	-11	3a	WC III	3b	Wetness			3b
								25	120	95	2.5Y5/3	CD - Common D st nct	10YR5/6			es	C - Clay	2			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Poo NON - Non-calca eous (0.5% CaCO3)	No	Yes										
67	TF 06000 13000	506000	313000	37	≤7	SE		0	28	28	10YR4/3						C - Clay	4			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								NON - Non-calca eous (0.5% CaCO3)			12	-5	2	WC III	3b	Wetness			3b
								28	50	22	2.5Y5/3	MP - Many P om nent	10YR5/6			es	HCL - Clay loam (heavy)	10			SLST - Soft ool t c o dolom t c l mestones								Mode ate SC - Sl ghtly calca eous (1 - 5% CaCO3)	No	No										
								50	120	70	5Y5/1	CP - Common P om nent	10YR5/6			es	C - Clay	0			SLST - Soft ool t c o dolom t c l mestones								Poo SC - Sl ghtly calca eous (1 - 5% CaCO3)		Yes										
77	TF 05200 12800	505200	312800	23	≤7	SE		0	30	30	7.5Y4/2						MCL - Clay loam (med um)	15	8		HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								SC - Sl ghtly calca eous (1 - 5% CaCO3)			-47	-39	3b	WC I	1	D ought ness			3b
								30	40	10	7.5YR4/4					No	SCL - Sandy clay loam	50			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate MC - Mode ately calca eous (5 - 10% CaCO3)	No	No										
								40	60	20							SCL - Sandy clay loam	50			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate MC - Mode ately calca eous (5 - 10% CaCO3)		No										
78	TF 05400 12800	505400	312800	33	≤7	SE		0	28	28	10YR4/2						C - Clay	30	16		HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								MC - Mode ately calca eous (5 - 10% CaCO3)			-58	-48	4	WC I	1	D ought ness			4
								28	40	12	10YR4/4					No	C - Clay	50			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate MC - Mode ately calca eous (5 - 10% CaCO3)	No	No										
								40	60	20							C - Clay	50			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate MC - Mode ately calca eous (5 - 10% CaCO3)		No										
79	TF 05600 12800	505600	312800	34	≤7	SE		0	28	28	10YR4/3						C - Clay	5			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								NON - Non-calca eous (0.5% CaCO3)			13	-4	2	WC II	3a	Wetness			3a
								28	50	22	10YR5/4					No	C - Clay	2			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate NON - Non-calca eous (0.5% CaCO3)	No	No										
								50	120	70	10YR5/3	CD - Common D st nct	10YR5/6			es	C - Clay	2			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Poo SC - Sl ghtly calca eous (1 - 5% CaCO3)		Yes										
80	TF 05800 12800	505800	312800	33	≤7	SE		0	25	25	10YR4/3						C - Clay	50	25		HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								MC - Mode ately calca eous (5 - 10% CaCO3)			-77	-71	4	WC I	2	D ought ness			4
								25	30	5	10YR4/4					No	C - Clay	50			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate MC - Mode ately calca eous (5 - 10% CaCO3)	No	No										
								30	50	20							C - Clay	70			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate MC - Mode ately calca eous (5 - 10% CaCO3)		No										
81	TF 06000 12800	506000	312800	34	≤7	SE		0	28	28	10YR4/3						HCL - Clay loam (heavy)	2			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								NON - Non-calca eous (0.5% CaCO3)			12	-5	2	WC III	3b	Wetness			3b
								28	120	92	2.5Y6/1	CP - Common P om nent	10YR5/6			es	C - Clay	0			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Poo NON - Non-calca eous (0.5% CaCO3)	es	Yes										
82	TF 06200 12800	506200	312800	37	≤7	SE		0	28	28	10YR4/3						HCL - Clay loam (heavy)	15	8		HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								NON - Non-calca eous (0.5% CaCO3)			-31	-22	3b	WC I	2	Wetness			3b
								28	40	12	10YR6/3	CD - Common D st nct	10YR5/6			es	HCL - Clay loam (heavy)	30			SLST - Soft ool t c o dolom t c l mestones								Mode ate SC - Sl ghtly calca eous (1 - 5% CaCO3)	es	No										
								40	75	35	2.5Y6/3	CD - Common D st nct	10YR5/6			es	SCL - Sandy clay loam	50			SLST - Soft ool t c o dolom t c l mestones								Mode ate VC - Ve y calca eous (>10% CaCO3)		No										
95	TF 05600 12600	505600	312600	32	≤7	SE		0	25	25	10YR4/3						C - Clay	5			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								VSC - Ve y sl ghtly calca eous (0.5 - 1% CaCO3)			10	-3	2	WC I	3a	Wetness			3a
								25	55	30	10YR4/4					No	C - Clay	5			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate VSC - Ve y sl ghtly calca eous (0.5 - 1% CaCO3)	No	No										
								55	120	65	10YR5/2	CD - Common D st nct	10YR5/6			es	C - Clay	20			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate SC - Sl ghtly calca eous (1 - 5% CaCO3)	es	No										
96	TF 05800 12600	505800	312600	32	≤7	SE		0	25	25	10YR4/3						C - Clay	5			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								VSC - Ve y sl ghtly calca eous (0.5 - 1% CaCO3)			6	-10	2	WC III	3b	Wetness			3b
								25	35	10	10YR5/4					No	C - Clay	5			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate VSC - Ve y sl ghtly calca eous (0.5 - 1% CaCO3)	No	No										
								35	120	85	2.5Y5/3	CD - Common D st nct	2.5Y6/1	CD - Common D st nct	10YR5/6	es	C - Clay	5			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Poo SC - Sl ghtly calca eous (1 - 5% CaCO3)	No	Yes										
97	TF 06000 12600	506000	312600	32	≤7	SE		0	25	25	10YR4/2						C - Clay	4			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								VSC - Ve y sl ghtly calca eous (0.5 - 1% CaCO3)			8	-8	2	WC III	3b	Wetness			3b
								25	38	13	10YR6/4					No	SCL - Sandy clay loam	2			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate SC - Sl ghtly calca eous (1 - 5% CaCO3)	es	No										
								38	120	82	5Y5/3	CD - Common D st nct	5Y6/1			es	C - Clay	2			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Poo SC - Sl ghtly calca eous (1 - 5% CaCO3)		Yes										
98	TF 06200 12600	506200	312600	34	≤7	SE		0	25	25	7.5YR4/3						MCL - Clay loam (med um)	25	12		HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								NON - Non-calca eous (0.5% CaCO3)			27	-8	2	WC I	1	D ought ness			2
								25	35	10	7.5YR4/4					No	MCL - Clay loam (med um)	5			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate NON - Non-calca eous (0.5% CaCO3)		No										
								35	65	30	7.5YR5/8					No	MSL - Med um sandy loam	2			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate NON - Non-calca eous (0.5% CaCO3)		No										
								65	120	55	7.5YR5/8					No	SCL - Sandy clay loam	2			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate NON - Non-calca eous (0.5% CaCO3)		No										
114	TF 06000 12400	506000	312400	28	≤7	SE		0	25	25	10YR4/3						C - Clay	2			SLST - Soft ool t c o dolom t c l mestones								SC - Sl ghtly calca eous (1 - 5% CaCO3)			-11	-10	3a	WC I	2	D ought ness			3a
								25	35	10	10YR4/4	CD - Common D st nct	2.5Y6/1			es	C - Clay	4			SLST - Soft ool t c o dolom t c l mestones								Mode ate SC - Sl ghtly calca eous (1 - 5% CaCO3)		No										
								35	55	20	10YR5/6					No	SCL - Sandy clay loam	10			SLST - Soft ool t c o dolom t c l mestones								Mode ate SC - Sl ghtly calca eous (1 - 5% CaCO3)		No										
								55	85	30	10YR6/4	CD - Common D st nct	10YR5/6			es	MSL - Med um sandy loam	50			SLST - Soft ool t c o dolom t c l mestones								Mode ate MC - Mode ately calca eous (5 - 10% CaCO3)		No										
115	TF 06200 12400	506200	312400	28	≤7	SE		0	25	25	10YR4/3						C - Clay	20	10		SLST - Soft ool t c o dolom t c l mestones								NON - Non-calca eous (0.5% CaCO3)			3	-13	3a	WC III	3b	Wetness			3b
								25	45	20	2.5Y5/3	CD - Common D st nct	2.5Y6/1			es	C - Clay	2			SLST - Soft ool t c o dolom t c l mestones								Poo NON - Non-calca eous (0.5% CaCO3)	es	No										
								45	55	10	2.5Y5/4					No	C - Clay	10			SLST - Soft ool t c o dolom t c l mestones								Mode ate SC - Sl ghtly calca eous (1 - 5% CaCO3)		No										
								55	120	65	5Y5/2	CD - Common D st nct	10YR5/6			es	C - Clay	2			SLST - Soft ool t c o dolom t c l mestones								Poo NON - Non-calca eous (0.5% CaCO3)		Yes										
130	TF 06000 12200	506000	312200	24	≤7	SE		0	28	28	10YR4/4						C - Clay	2			SLST - Soft ool t c o dolom t c l mestones								SC - Sl ghtly calca eous (1 - 5% CaCO3)			-26	-16	3b	WC I	2	D ought ness			3b
								28	40	12	10YR5/6					No	C - Clay	20			SLST - Soft ool t c o dolom t c l mestones								Poo MC - Mode ately calca eous (5 - 10% CaCO3)	es	No										
								40	60	20	10YR5/5					No	C - Clay	40			SLST - Soft ool t c o dolom t c l mestones								Mode ate MC - Mode ately calca eous (5 - 10% CaCO3)		No										
								60	80	20							C - Clay	50			SLST - Soft ool t c o dolom t c l mestones								Mode ate		No										
	END																																								

SITE F

Point	Grid ref. NGR	X	Y	Alt (m)	Slope °	Aspect	Land use	Depth (cm) Top	Bttm	Thick	Matrix Munsell colour	Ochreous Mottles Form	Munsell colour	Grey Mottles Form	Munsell colour	Gley	Texture	Stones - type 1 %	> 2cm	> 6cm	Type	Stones - type 2 %	> 2cm	> 6cm	Type	Ped Strength	Size	Shape	SUBS STR	CaCO3	Mn C	SPL	Drought MBw	MBp	Gd	Wet WC	Gw	Final ALC Limitation 1	Limitation 2	Limitation 3	Grade
68	TF 06200 13000	506200	313000	38	≤7	E		0	30	30	10YR4/3						MCL - Clay loam (medium)	40	20		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								NON - Non-calcareous (<0.5% CaCO3)			-26	-40	b	WC I	1	Droughtiness			3b
								30	40	10	10YR4/6					No	HCL - Clay loam (heavy)	40			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Moderate	NON - Non-calcareous (<0.5% CaCO3)	No	No								
								40	120	80							HCL - Clay loam (heavy)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Moderate	NON - Non-calcareous (<0.5% CaCO3)		No								
69	TF 06400 13000	506400	313000	35	≤7	E		0	30	30	10YR4/3						MCL - Clay loam (medium)	28	16		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								NON - Non-calcareous (<0.5% CaCO3)			12	-14	a	WC I	1	Droughtiness			3a
								30	120	90	10YR4/6					No	MCL - Clay loam (medium)	15			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Moderate	NON - Non-calcareous (<0.5% CaCO3)	No	No								
70	TF 06600 13000	506600	313000	33	≤7	E		0	30	30	10YR4/3						HCL - Clay loam (heavy)	2			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								NON - Non-calcareous (<0.5% CaCO3)			13	-4	2	WC III	b	Wetness			3b
								30	120	90	10YR5/2	CP - Common Prominent	7.5YR5/6			Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Poor	NON - Non-calcareous (<0.5% CaCO3)	Yes	Yes								
83	TF 06400 12800	506400	312800	35	≤7	E		0	38	38	10YR4/3						MCL - Clay loam (medium)	25	16		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								NON - Non-calcareous (<0.5% CaCO3)			-13	-27	a	WC I	1	Droughtiness			3a
								38	45	7	10YR4/4					No	HCL - Clay loam (heavy)	25			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Moderate	NON - Non-calcareous (<0.5% CaCO3)	No	No								
								45	120	75							HCL - Clay loam (heavy)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Moderate	NON - Non-calcareous (<0.5% CaCO3)		No								
84	TF 06600 12800	506600	312800	34	≤7	E		0	25	25	2.5Y4/3						C - Clay	5	2		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								NON - Non-calcareous (<0.5% CaCO3)			7	-10	2	WC III	b	Wetness			3b
								25	120	95	2.5Y6/1	CP - Common Prominent	10YR5/6			Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Poor	NON - Non-calcareous (<0.5% CaCO3)	No	Yes								
99	TF 06400 12600	506400	312600	35	≤7	E		0	25	25	10YR4/3						MCL - Clay loam (medium)	15	8		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								NON - Non-calcareous (<0.5% CaCO3)			-2	-14	a	WC I	1	Droughtiness			3a
								25	40	15	10YR4/4					No	MCL - Clay loam (medium)	15			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Moderate	NON - Non-calcareous (<0.5% CaCO3)		No								
								40	60	20	10YR4/6					No	HCL - Clay loam (heavy)	15			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Moderate	NON - Non-calcareous (<0.5% CaCO3)		No								
								60	120	60							HCL - Clay loam (heavy)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Moderate			No								
00	TF 06600 12600	506600	312600	34	≤7	E		0	25	25	2.5Y4/3						C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								NON - Non-calcareous (<0.5% CaCO3)			8	-9	2	WC III	b	Wetness			3b
								25	120	95	2.5Y6/1	CP - Common Prominent	10YR5/6			Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Poor	NON - Non-calcareous (<0.5% CaCO3)	No	Yes								
01	TF 06800 12600	506800	312600	34	≤7	E		0	25	25	10YR4/3						MCL - Clay loam (medium)	3			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								NON - Non-calcareous (<0.5% CaCO3)			0	-7	2	WC III	a	Wetness			3a
								25	120	95	2.5Y6/2	CP - Common Prominent	10YR5/6			Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Poor	NON - Non-calcareous (<0.5% CaCO3)	No	Yes								
116	TF 06400 12400	506400	312400	34	≤7	E		0	24	24	10YR4/3						C - Clay	30	16		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								NON - Non-calcareous (<0.5% CaCO3)			-56	-46	4	WC I	1	Droughtiness			4
								24	35	11	10YR4/4					No	C - Clay	30			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Moderate	NON - Non-calcareous (<0.5% CaCO3)		No								
								35	40	5	10YR4/6					No	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Moderate	NON - Non-calcareous (<0.5% CaCO3)		No								
								40	60	20							C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Moderate			No								
117	TF 06600 12400	506600	312400	36	≤7	E		0	30	30	10YR4/3						MCL - Clay loam (medium)	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								NON - Non-calcareous (<0.5% CaCO3)			9	-8	2	WC III	a	Wetness			3a
								30	120	90	2.5Y6/1	CP - Common Prominent	10YR5/6			Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Poor	NON - Non-calcareous (<0.5% CaCO3)	No	Yes								
118	TF 06800 12400	506800	312400	37	≤7	E		0	25	25	10YR4/3						MCL - Clay loam (medium)	8	3		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								NON - Non-calcareous (<0.5% CaCO3)			8	-9	2	WC III	a	Wetness			3a
								25	120	95	2.5Y6/1	CP - Common Prominent	10YR5/6			Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Poor	NON - Non-calcareous (<0.5% CaCO3)	Yes	Yes								
131	TF 06400 12200	506400	312200	33	≤7	E		0	25	25	10YR4/3						C - Clay	15	8		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								SC - Slightly calcareous (1 - 5% CaCO3)			-29	-16	b	WC II	2	Droughtiness			3b
								25	60	35	10YR5/3					No	C - Clay	15			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Moderate	MC - Moderately calcareous (5 - 10% CaCO3)		No								
								60	80	20							C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Moderate			No								
132	TF 06600 12200	506600	312200	35	≤7	E		0	30	30	10YR4/3						MCL - Clay loam (medium)	30	18		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								NON - Non-calcareous (<0.5% CaCO3)			-51	-42	4	WC I	1	Droughtiness			4
								30	40	10	10YR4/6					No	HCL - Clay loam (heavy)	30			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Moderate	NON - Non-calcareous (<0.5% CaCO3)		No								
								40	60	20							HCL - Clay loam (heavy)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Moderate			No								
142	TF 06400 12000	506400	312000	35	≤7	E		0	30	30	10YR4/3						C - Clay	35	18		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								SC - Slightly calcareous (1 - 5% CaCO3)			-60	-49	4	WC I	2	Droughtiness			4
								30	40	10	10YR5/4					No	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Moderate	MC - Moderately calcareous (5 - 10% CaCO3)		No								
								40	60	20							C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Moderate			No								
	END																																							

SITE G

Point	Grid ref. NGR	X	Y	Alt (m)	Slope °	Aspect	Land use	Depth (cm) Top	Bttm	Thick	Matrix Munsell colour	Ochreous Mottles Form	Ochreous Mottles Munsell colour	Grey Mottles Form	Grey Mottles Munsell colour	Gley	Texture	Stones - type 1 %	> 2cm	> 6cm	Type	Stones - type 2 %	> 2cm	> 6cm	Type	Ped Strength	Size	Shape	SUBS STR	CaCO3	Mn C	SPs	Drought MBw	MBp	Gd	Wet WC	Gw	Final ALC Limitation 1	Limitation 2	Limitation 3	Grade
20	TF 06580 13600	506580	313600	35	≤7	SE		0	30	30	10YR4/3						HCL - Clay loam (heavy)	3			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								NON - Non-calcareous (<0.5% CaCO3)			21	5	2	WC II	3a	Wetness			3a
								30	42	12	10YR4/4					No	HCL - Clay loam (heavy)	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Moderate	NON - Non-calcareous (<0.5% CaCO3)			No								
								42	60	18	2.5Y6/4	CP - Common Prominent	10YRS/6			Yes	MZCL - Silty clay loam (medium)	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Moderate	NON - Non-calcareous (<0.5% CaCO3)			No								
								60	120	60	5Y6/2	CP - Common Prominent	7.5YRS/6			Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Poor	NON - Non-calcareous (<0.5% CaCO3)			Yes								
36	TF 06600 13400	506600	313400	32	≤7	SE		0	28	28	10YR4/3						MCL - Clay loam (medium)	2			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								NON - Non-calcareous (<0.5% CaCO3)			8	-11	3a	WC III	3a	Droughtiness	Wetness		3a
								28	50	22	10YR6/3	CP - Common Prominent	7.5YRS/6			Yes	HCL - Clay loam (heavy)	2			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Poor	NON - Non-calcareous (<0.5% CaCO3)			Yes								
								50	120	70	2.5Y6/2	CP - Common Prominent	7.5YRS/8			Yes	HCL - Clay loam (heavy)	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Poor	NON - Non-calcareous (<0.5% CaCO3)			Yes								
53	TF 06600 13200	506600	313200	33	≤7	SE		0	28	28	10YR4/3						C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								NON - Non-calcareous (<0.5% CaCO3)			8	-9	2	WC III	3b	Wetness			3b
								28	120	92	10YR6/1	MP - Many Prominent	7.5YRS/8			Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Poor	NON - Non-calcareous (<0.5% CaCO3)			Yes								
71	TF 06800 13000	506800	313000	33	≤7	SE		0	25	25	10YR4/3						C - Clay	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								NON - Non-calcareous (<0.5% CaCO3)			6	-11	3a	WC III	3b	Wetness			3b
								25	120	95	2.5Y6/2	CP - Common Prominent	10YRS/6			Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Poor	NON - Non-calcareous (<0.5% CaCO3)			Yes								
85	TF 06840 12800	506840	312800	33	≤7	SE		0	30	30	10YR4/3						C - Clay	3			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								NON - Non-calcareous (<0.5% CaCO3)			9	-8	2	WC III	3b	Wetness			3b
								30	120	90	2.5Y6/1	MP - Many Prominent	10YRS/8			Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Poor	NON - Non-calcareous (<0.5% CaCO3)			Yes								
86	TF 07000 12800	507000	312800	32	≤7	SE		0	35	35	10YR4/3						MCL - Clay loam (medium)	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								NON - Non-calcareous (<0.5% CaCO3)			35	4	2	WC II	2	Droughtiness	Wetness		2
								35	55	20	10YR6/2	CP - Common Prominent	10YRS/8			Yes	MCL - Clay loam (medium)	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Moderate	NON - Non-calcareous (<0.5% CaCO3)			No								
								55	120	65	2.5Y6/1	CP - Common Prominent	10YRS/8			Yes	HCL - Clay loam (heavy)	2			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Moderate	NON - Non-calcareous (<0.5% CaCO3)			No								
87	TF 07200 12800	507200	312800	31	≤7	SE		0	26	26	10YR4/3						HCL - Clay loam (heavy)	8	4		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								NON - Non-calcareous (<0.5% CaCO3)			7	-10	2	WC III	3b	Wetness			3b
								26	120	94	5Y6/1	CP - Common Prominent	10YRS/6			Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Poor	NON - Non-calcareous (<0.5% CaCO3)			Yes								
88	TF 07400 12800	507400	312800	30	≤7	SE		0	25	25	10YR4/3						MCL - Clay loam (medium)	10	4		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								NON - Non-calcareous (<0.5% CaCO3)			14	-10	2	WC I	1	Droughtiness			2
								25	50	25	10YR4/4					No	HCL - Clay loam (heavy)	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Moderate	NON - Non-calcareous (<0.5% CaCO3)			No								
								50	120	70	7.5YR4/6					No	SCL - Sandy clay loam	25			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Moderate	NON - Non-calcareous (<0.5% CaCO3)			No								
89	TF 07600 12800	507600	312800	28	≤7	SE		0	30	30	10YR4/2						HCL - Clay loam (heavy)	10	6		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								NON - Non-calcareous (<0.5% CaCO3)			8	-9	2	WC III	3b	Wetness			3b
								30	120	90	2.5Y6/2	CP - Common Prominent	10YRS/6	CD - Common Distinct	2.5Y6/1	Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Poor	NON - Non-calcareous (<0.5% CaCO3)			Yes								
102	TF 07000 12600	507000	312600	31	≤7	SE		0	25	25	10YR4/3						MCL - Clay loam (medium)	4			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								NON - Non-calcareous (<0.5% CaCO3)			17	0	2	WC III	3a	Wetness			3a
								25	55	30	10YRS/2	MP - Many Prominent	7.5YRS/8			Yes	HCL - Clay loam (heavy)	2			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Moderate	NON - Non-calcareous (<0.5% CaCO3)	Yes		No								
								55	120	65	2.5YS/2	CP - Common Prominent	10YRS/6			Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Poor	NON - Non-calcareous (<0.5% CaCO3)	Yes		Yes								
103	TF 07200 12600	507200	312600	30	≤7	SE		0	28	28	10YR4/3						MCL - Clay loam (medium)	8	3		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								NON - Non-calcareous (<0.5% CaCO3)			18	1	2	WC II	2	Droughtiness	Wetness		2
								28	60	32	2.5YS/2	CP - Common Prominent	10YRS/6			Yes	MCL - Clay loam (medium)	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Moderate	NON - Non-calcareous (<0.5% CaCO3)	Yes		No								
								60	120	60	2.5Y6/1	MP - Many Prominent	7.5YRS/6			Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Poor	NON - Non-calcareous (<0.5% CaCO3)	No		Yes								
104	TF 07400 12600	507400	312600	27	≤7	SE		0	30	30	10YR4/2						HCL - Clay loam (heavy)	3			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								NON - Non-calcareous (<0.5% CaCO3)			11	-6	2	WC III	3b	Wetness			3b
								30	120	90	2.5Y5/2	CP - Common Prominent	10YRS/6			Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Poor	NON - Non-calcareous (<0.5% CaCO3)			Yes								
105	TF 07600 12600	507600	312600	25	≤7	SE		0	22	22	10YR4/2						HCL - Clay loam (heavy)	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								NON - Non-calcareous (<0.5% CaCO3)			6	-11	3a	WC III	3b	Wetness			3b
								22	120	98	2.5YS/2	CP - Common Prominent	10YRS/6			Yes	C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Poor	NON - Non-calcareous (<0.5% CaCO3)			Yes								
119	TF 07000 12400	507000	312400	35	≤7	SE		0	28	28	10YR4/3						MCL - Clay loam (medium)	1			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								NON - Non-calcareous (<0.5% CaCO3)			39	7	2	WC II	2	Droughtiness	Wetness		2
								28	120	92	2.5Y7/1	CP - Common Prominent	10YRS/6			Yes	HCL - Clay loam (heavy)	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Moderate	NON - Non-calcareous (<0.5% CaCO3)	No		No								
120	TF 07200 12400	507200	312400	32	≤7	SE		0	28	28	10YR4/3						MCL - Clay loam (medium)	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								NON - Non-calcareous (<0.5% CaCO3)			19	3	2	WC III	3a	Wetness			3a
								28	55	27	10YRS/2	CP - Common Prominent	7.5YRS/6			Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Moderate	NON - Non-calcareous (<0.5% CaCO3)			No								
								55	120	65	5Y6/2	MP - Many Prominent	7.5YS/6			Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Poor	NON - Non-calcareous (<0.5% CaCO3)			Yes								
133	TF 04000 12000	504000	312000	52	≤7	SE		0	30	30	10YR4/3						MCL - Clay loam (medium)	2			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								NON - Non-calcareous (<0.5% CaCO3)			37	3	2	WC II	2	Droughtiness	Wetness		2
								30	120	90	2.5Y6/1	CP - Common Prominent	10YRS/6			Yes	SCL - Sandy clay loam	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)							Moderate	NON - Non-calcareous (<0.5% CaCO3)	No		No								
	END																																							

SITE H

Po nt	G d ef.			Alt (m)	Slope °	Aspect	Land use	Depth (cm)			Mat x	Och eous Mottles		G ey Mottles		Gley	Textu e	Stones - type 1				Stones - type 2				Ped			SUBS STR	CaCO3	Mn C	SPL	D ought			Wet		F nal ALC			
	NGR	X	Y					Top	ttm	Th ck	Munsell colou	Fo m	Munsell colou	o m	Munse l colou			%	> 2cm	> 6cm	Type	%	> 2cm	> 6cm	Type	St ength	S ze	Shape					MBw	MBp	Gd	WC	Gw	L m tat on 1	L m tat on 2	m tat on 3	G ade
94	TF 05400 12600	505400	312600	33	≤7	SE		0	30	30	10YR4/3						C - Clay	15	8		HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)									SC - Sl ghtly calca eous (1 - 5% CaCO3)			-39	-24	3b	WC I	2	D ought ness			3b
								30	38	8	10YR4/4					No	C - Clay	15			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
								38	50	12	10YR6/4						C - Clay	30			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
								50	70	20							C - Clay	50			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate			No									
110	TF 05200 12400	505200	312400	34	≤7	SE		0	25	25	10YR4/3						C - Clay	30	16	8	HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)									SC - Sl ghtly calca eous (1 - 5% CaCO3)			-48	-38	3b	WC I	2	D ought ness			3b
								25	35	10	10YR4/4					No	C - Clay	15			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
								35	50	15	10YR6/4						MSL - Med um sandy loam	50			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
								50	70	20							MSL - Med um sandy loam	50			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate			No									
111	TF 05400 12400	505400	312400	34	≤7	SE		0	30	30	10YR4/3						C - Clay	20	8		HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)									SC - Sl ghtly calca eous (1 - 5% CaCO3)			-47	-34	3b	WC I	2	D ought ness			3b
								30	40	10	10YR4/4					No	C - Clay	20			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
								40	45	5	10YR5/4						C - Clay	50			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
								45	65	20							C - Clay	50			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate			No									
112	TF 05600 12400	505600	312400	34	≤7	SE		0	28	28	10YR4/3						MCL - Clay loam (med um)	15	4		HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)									SC - Sl ghtly calca eous (1 - 5% CaCO3)			-56	-49	4	WC I	1	D ought ness			4
								28	35	7	10YR4/4					No	MCL - Clay loam (med um)	30			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	SC - Sl ghtly calca eous (1 - 5% CaCO3)		No									
								35	60	25							MCL - Clay loam (med um)	80			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	SC - Sl ghtly calca eous (1 - 5% CaCO3)		No									
113	TF 05800 12400	505800	312400	31	≤7	SE		0	30	30	10YR4/3						MCL - Clay loam (med um)	15	9		HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)									SC - Sl ghtly calca eous (1 - 5% CaCO3)			-57	-49	4	WC I	1	D ought ness			4
								30	33	3	10YR4/4					No	MCL - Clay loam (med um)	30			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	SC - Sl ghtly calca eous (1 - 5% CaCO3)		No									
								33	60	27							MCL - Clay loam (med um)	80			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	SC - Sl ghtly calca eous (1 - 5% CaCO3)		No									
125	TF 05050 12200	505050	312200	25	≤7	SE		0	30	30	10YR3/2						HCL - Clay loam (heavy)	20	12	8	HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)									SC - Sl ghtly calca eous (1 - 5% CaCO3)			-51	-42	4	WC I	2	D ought ness			4
								30	35	5	10YR7/2					No	SCL - Sandy clay loam	50			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	SC - Sl ghtly calca eous (1 - 5% CaCO3)		No									
								35	60	25							SCL - Sandy clay loam	50			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	SC - Sl ghtly calca eous (1 - 5% CaCO3)		No									
126	TF 05200 12200	505200	312200	29	≤7	SE		0	25	25	2.5Y4/3						C - Clay	5			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)									SC - Sl ghtly calca eous (1 - 5% CaCO3)			19	1	2	WC II	2	D ought ness	Wetness		2
								25	120	95	2.5Y6/3	CP - Common P om nent				Yes	C - Clay	2			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	SC - Sl ghtly calca eous (1 - 5% CaCO3)	Yes	No									
127	TF 05400 12200	505400	312200	33	≤7	SE		0	25	25	10YR4/4						C - Clay	25	16		HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)									SC - Sl ghtly calca eous (1 - 5% CaCO3)			-58	-48	4	WC I	2	D ought ness			4
								25	35	10	10YR6/4					No	C - Clay	50			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
								35	60	25							C - Clay	50			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
128	TF 05600 12200	505600	312200	30	≤7	SE		0	25	25	10YR4/3						HCL - Clay loam (heavy)	25	16		HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)									SC - Sl ghtly calca eous (1 - 5% CaCO3)			-62	-54	4	WC I	1	D ought ness			4
								25	35	10	10YR4/4					No	C - Clay	30			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	SC - Sl ghtly calca eous (1 - 5% CaCO3)		No									
								35	60	25							C - Clay	80			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	SC - Sl ghtly calca eous (1 - 5% CaCO3)		No									
129	TF 05800 12200	505800	312200	25	≤7	SE		0	32	32	10YR4/3						MCL - Clay loam (med um)	2			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)									NON - Non-calca eous (0 5% CaCO3)			20	3	2	WC III	3a	Wetness			3a
								32	55	23	2.5Y5/3	CP - Common P om nent	10YR5/6			Yes	HCL - Clay loam (heavy)	0			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	SC - Sl ghtly calca eous (1 - 5% CaCO3)	Yes	No									
								55	120	65	5Y5/3	CP - Common P om nent	10YR5/6			Yes	C - Clay	0			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Poo	SC - Sl ghtly calca eous (1 - 5% CaCO3)	Yes	Yes									
137	TF 05400 12000	505400	312000	28	≤7	SE		0	28	28	10YR4/3						C - Clay	4			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)									SC - Sl ghtly calca eous (1 - 5% CaCO3)			10	-7	2	WC III	3a	Wetness			3a
								28	38	10	10YR4/4					No	C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	SC - Sl ghtly calca eous (1 - 5% CaCO3)	No	No									
								38	65	27	2.5Y6/4	CP - Common P om nent	10YR5/6	D - Common D st nct	2.5Y6/1	Yes	C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Poo	SC - Sl ghtly calca eous (1 - 5% CaCO3)	No	Yes									
								65	120	55	5Y5/1	CP - Common P om nent	10YR5/6			Yes	C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Poo	NON - Non-calca eous (0 5% CaCO3)		Yes									
138	TF 05600 12000	505600	312000	23	≤7	SE		0	30	30	10YR4/4						C - Clay	25	12		HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)									SC - Sl ghtly calca eous (1 - 5% CaCO3)			-30	-23	3b	WC I	2	D ought ness			3b
								30	55	25	7.5YR4/4					No	C - Clay	20			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	SC - Sl ghtly calca eous (1 - 5% CaCO3)	No	No									
								55	65	10	10YR6/6					No	HCL - Clay loam (heavy)	30			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
								65	85	20							HCL - Clay loam (heavy)	50			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate			No									
139	TF 05800 12000	505800	312000	22	≤7	SE		0	34	34	10YR4/3						HCL - Clay loam (heavy)	10			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)									SC - Sl ghtly calca eous (1 - 5% CaCO3)			-35	-27	3b	WC I	2	D ought ness			3b
								34	45	11	10YR4/5					No	HCL - Clay loam (heavy)	10			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	SC - Sl ghtly calca eous (1 - 5% CaCO3)	No	No									
								45	50	5	10YR7/4					No	MSL - Med um sandy loam	50			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
								50	70	20							MSL - Med um sandy loam	80			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate			No									
140	TF 06000 12000	506000	312000	26	≤7	SE		0	25	25	10YR4/3						HCL - Clay loam (heavy)	4			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)									NON - Non-calca eous (0 5% CaCO3)			18	-9	2	WC I	2	D ought ness	Wetness		2
								25	35	10	10YR4/4					No	HCL - Clay loam (heavy)	4			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	NON - Non-calca eous (0 5% CaCO3)	No	No									
								35	120	85	10YR6/4					No	SCL - Sandy clay loam	20			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
141	TF 06220 12000	506220	312000	33	≤7	SE		0	35	35	10YR4/2						HCL - Clay loam (heavy)	2			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)									NON - Non-calca eous (0 5% CaCO3)			40	8	2	WC II	3a	Wetness			3a
								35	120	85	10YR5/3	CD - Common D st nct	10YR5/6			Yes	HCL - Clay loam (heavy)	0			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	NON - Non-calca eous (0 5% CaCO3)	Yes	No									
147	TF 05450 11800	505450	311800	22	≤7	SE		0	22	22	10YR4/2						C - Clay	2			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)									MC - Mode ately calca eous (5 - 10% CaCO3)			13	-4	2	WC III	3a	Wetness			3a
								22	45	23	2.5Y6/2	CP - Common P om nent	10YR5/6			Yes	C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
								45	120	75	5Y6/3	CP - Common P om nent	10YR5/6	D - Common D st nct	5Y6/1	Yes	C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Poo	SC - Sl ghtly calca eous (1 - 5% CaCO3)	No	Yes									
148	TF 05600 11800	505600	311800	21	≤7	SE		0	25	25	10YR4/3						MCL - Clay loam (med um)	2			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)									SC - Sl ghtly calca eous (1 - 5% CaCO3)			22	5	2	WC II	2	D ought ness	Wetness		2
								25	35	10	10YR4/4					No	MCL - Clay loam (med um)				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	SC - Sl ghtly calca eous (1 - 5% CaCO3)	No	No									
								35	65	30	7.5YR4/4					No	HCL - Clay loam (heavy)				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	SC - Sl ghtly calca eous (1 - 5% CaCO3)	Yes	No									
								65	120	55	10YR5/3	CD - Common D st nct	10YR5/6			Yes	C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Poo	NON - Non-calca eous (0 5% CaCO3)	Yes	Yes									
149	TF 05800 11800	505800	311800	21	≤7	SE		0	25	25	10YR4/3						C - Clay	4			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)									SC - Sl ghtly calca eous (1 - 5% CaCO3)			5	-12	3a	WC III	3a	D ought ness	Wetness		3a
								25	120	95	5Y5/3	CP - Common P om nent	10YR5/6			Yes	C - Clay	2			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Poo	SC - Sl ghtly calca eous (1 - 5% CaCO3)	Yes	Yes									
150	TF 06000 11800	506000	311800	27	≤7	SE		0	28	28	10YR4/3						MCL - Clay loam (med um)	5			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)									NON - Non-calca eous (0 5% CaCO3)			36	5	2	WC I	1	D ought ness			2
								28	50	22	10YR4/5					No	MCL - Clay loam (med um)	1			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	NON - Non-calca eous (0 5% CaCO3)	No	No									
								50	120	70	7.5YR4/5					No	HCL - Clay loam (heavy)	1			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
156	TF 05600 11600	505600	311600	21	≤7	SE		0	28	28	10YR4/2						MCL - Clay loam (med um)	20	8		HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)									NON - Non-calca eous (0 5% CaCO3)			-30	-35	3b	WC I	1	D ought ness			3b
								28	48	20	10YR4/4					No	SCL - Sandy clay loam	15			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	NON - Non-calca eous (0 5% CaCO3)	No	No									
								48	120	72	10YR5/4					No	LMS - Loamy med um sand	50			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	NON - Non-calca eous (0 5% CaCO3)	No	No									
157	TF 05800 11600	505800	311600	21	≤7	SE		0	30	30	10YR4/3						MCL - Clay loam (med um)	1			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)									NON - Non-calca eous (0 5% CaCO3)			43	6	2	WC I	1	D ought ness			2
								30	60	30	10YR4/4					No	MCL - Clay loam (med um)	0			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	NON - Non-calca eous (0 5% CaCO3)	Yes	No									
								60	80	20	2.5Y6/4					No	SCL - Sandy clay loam	0			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	NON - Non-calca eous (0 5% CaCO3)	Yes	No									
								80	120	40	5Y5/1					No	MSL - Med um sandy loam	0			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	NON - Non-calca eous (0 5% CaCO3)		No									
158	TF 06000 11600	506000	311600	27	≤7	SE		0	30	30	10YR4/2						MCL - Clay loam (med um)	15	8		HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)									NON - Non-calca eous (0 5% CaCO3)			-27	-35	3b	WC I	1	D ought ness			3b
								30	40	10	10YR4/4					No	MCL - Clay loam (med um)	20			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	NON - Non-calca eous (0 5% CaCO3)	No	No									
								40	120	80	10YR5/4					No	LMS - Loamy med um sand	30			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
163	TF 05800 11400	505800	311400	23	≤7	SE		0	26	26	7.5YR4/2						MCL - Clay loam (med um)	15	9		HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)									NON - Non-calca eous (0 5% CaCO3)			6	-4	2	WC I	1	D ought ness			2
								26	70	44	7.5YR4/4					No	MSL - Med um sandy loam	0			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	NON - Non-calca eous (0 5% CaCO3)	No	No									
								70	120	50	7.5YR5/4					No	LMS - Loamy med um sand	0			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	NON - Non-calca eous (0 5% CaCO3)	No	No									
164	TF 06000 11400	506000	311400	32	≤7	SE		0	30	30	7.5YR4/2						MCL - Clay loam (med um)	30	18		HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)									NON - Non-calca eous (0 5% CaCO3)			-44	-31	3b	WC I	1	D ought ness			3b
								30	40	10	7.5YR4/4					No	HCL - Clay loam (heavy)	30			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	NON - Non-calca eous (0 5% CaCO3)	No	No									
								40	65	25	7.5YR5/4					No	HCL - Clay loam (heavy)	30			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
	END																																								

SITE I

Po nt	G d ef.			Alt (m)	Slope °	Aspect	Land use	Depth (cm)			Mat x	Och eous Mottles		G ey Mottles		Gley	Textu e	Stones - type 1				Stones - type 2				Ped			SUBS STR	CaCO3	Mn C	SPL	D ought			Wet		F nal ALC			
	NGR	X	Y					Top	ttm	Th ck	Munsell colou	Fo m	Munsell colou	o m	Munse l colou			%	> 2cm	> 6cm	ype	%	2cm	> 6cm	Type	St ength	S ze	Shape					MBw	MBp	Gd	WC	Gw	L m tat on 1	L m tat on 2	L m tat on 3	G ade
124	TF 04600 12200	504600	312200	29	≤7	E		0	22	22	2.5Y4/3						C - Clay	0			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)									NON - Non-calca eous (0 5% CaCO3)			21	3	2	WC II	3a	Wetness			3a
								22	50	28	2.5Y5/4					No	C - Clay	0			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	NON - Non-calca eous (0 5% CaCO3)	No	No									
								50	120	70	5Y6/2	CP - Common P om nent	10YR5/6			Yes	C - Clay	0			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	NON - Non-calca eous (0 5% CaCO3)	Yes	No									
135	TF 04800 12000	504800	312000	24	≤7	E		0	30	30	2.5Y4/3						C - Clay	2			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)									VSC - Ve y sl ghtly calca eous (0.5 - 1% CaCO3)			21	3	2	WC II	3a	Wetness			3a
								30	50	20	2.5Y5/4					No	C - Clay	0			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	VSC - Ve y sl ghtly calca eous (0.5 - 1% CaCO3)	No	No									
								50	120	70	2.5Y5/3	CD - Common D st nct	10YR5/6	D - Common D st nct	2.5Y6/1	Yes	C - Clay	0			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	VSC - Ve y sl ghtly calca eous (0.5 - 1% CaCO3)	Yes	No									
136	TF 05200 12000	505200	312000	26	≤7	E		0	26	26	10YR4/3						C - Clay	8	2		HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)									SC - Sl ghtly calca eous (1 - 5% CaCO3)			-3	-3	3a	WC I	2	D ought ness			3a
								26	70	44	7.5YR4/4					No	C - Clay	5			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	SC - Sl ghtly calca eous (1 - 5% CaCO3)	No	No									
								70	120	50	7.5YR5/4					No	C - Clay	50			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
143	TF 04600 11800	504600	311800	24	≤7	E		0	32	32	10YR4/3						C - Clay	10			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)									NON - Non-calca eous (0 5% CaCO3)			9	-2	2	WC I	3a	Wetness			3a
								32	60	28	7.5YR4/4					No	C - Clay	2			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	NON - Non-calca eous (0 5% CaCO3)	No	No									
								60	75	15	7.5YR4/5					No	C - Clay	2			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	NON - Non-calca eous (0 5% CaCO3)	No	No									
								75	120	45	7.5YR4/5					No	C - Clay	20			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
144	TF 04800 11800	504800	311800	24	≤7	E		0	28	28	2.5Y4/2						C - Clay	2			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)									SC - Sl ghtly calca eous (1 - 5% CaCO3)			7	-10	2	WC I I	3a	Wetness			3a
								28	120	92	5Y5/2	CP - Common P om nent	10YR5/6			Yes	C - Clay	0			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Poo	MC - Mode ately calca eous (5 - 10% CaCO3)	No	Yes									
145	TF 05000 11800	505000	311800	25	≤7	E		0	25	25	10YR4/2						HCL - Clay loam (heavy)	10			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)									NON - Non-calca eous (0 5% CaCO3)			3	-8	3a	WC I	2	D ought ness			3a
								25	45	20	10YR4/3					No	HCL - Clay loam (heavy)	5			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	NON - Non-calca eous (0 5% CaCO3)	No	No									
								45	60	15	10YR5/4					No	HCL - Clay loam (heavy)	5			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	NON - Non-calca eous (0 5% CaCO3)	No	No									
								60	120	60	10YR6/4					No	HCL - Clay loam (heavy)	50			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
146	TF 05180 11800	505180	311800	22	≤7	E		0	28	28	10YR4/3						MCL - Clay loam (med um)	15	8		HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)									NON - Non-calca eous (0 5% CaCO3)			-8	-23	3a	WC I	1	D ought ness			3a
								28	45	17	10YR4/5					No	HCL - Clay loam (heavy)	10			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	SC - Sl ghtly calca eous (1 - 5% CaCO3)	No	No									
								45	120	75	10YR5/5					No	SCL - Sandy clay loam	50			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
151	TF 04600 11600	504600	311600	36	≤7	E		0	30	30	2.5Y4/1						C - Clay	5			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)									NON - Non-calca eous (0 5% CaCO3)			20	2	2	WC I I	3b	Wetness			3b
								30	120	90	2.5Y6/3	CP - Common P om nent	10YR5/6			Yes	C - Clay	0			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	SC - Sl ghtly calca eous (1 - 5% CaCO3)	No	No									
152	TF 04800 11600	504800	311600	32	≤7	E		0	30	30	10YR4/3						C - Clay	10	6		HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)									NON - Non-calca eous (0 5% CaCO3)			-41	-28	3b	WC I	3a	Depth			3b
								30	45	15	10YR5/4					No	C - Clay	20			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	SC - Sl ghtly calca eous (1 - 5% CaCO3)	Yes	No									
								45	65	20	2.5Y5/4					No	C - Clay	50			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate		No	No									
153	TF 05000 11600	505000	311600	25	≤7	E		0	38	38	10YR4/2						C - Clay	5			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)									VSC - Ve y sl ghtly calca eous (0.5 - 1% CaCO3)			16	-4	2	WC I	3a	Wetness			3a
								38	62	24	10YR5/4					No	C - Clay	15			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	VSC - Ve y sl ghtly calca eous (0.5 - 1% CaCO3)	Yes	No									
								62	120	58	2.5Y5/4					No	C - Clay	0			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	VSC - Ve y sl ghtly calca eous (0.5 - 1% CaCO3)	Yes	No									
154	TF 05200 11600	505200	311600	22	≤7	E		0	28	28	10YR4/2						C - Clay	3			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)									NON - Non-calca eous (0 5% CaCO3)			6	-11	3a	WC I I	3b	Wetness			3b
								28	120	92	10YR5/1	CP - Common P om nent	5YR4/6			Yes	C - Clay	1			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Poo	NON - Non-calca eous (0 5% CaCO3)	No	Yes									
155	TF 05400 11600	505400	311600	25	≤7	E		0	40	40	10YR4/2						MCL - Clay loam (med um)	12	4		HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)									NON - Non-calca eous (0 5% CaCO3)			-14	-14	3a	WC I	1	D ought ness			3a
								40	60	20	10YR4/4					No	HCL - Clay loam (heavy)	8			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	NON - Non-calca eous (0 5% CaCO3)	No	No									
								60	120	60	10YR5/5					No	LMS - Loamy med um sand	50			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
159	TF 04800 11400	504800	311400	35	≤7	E		0	25	25	10YR4/3						C - Clay	8			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)									VSC - Ve y sl ghtly calca eous (0.5 - 1% CaCO3)			-46	-37	3b	WC I	3a	D ought ness			3b
								25	40	15	10YR4/4					No	C - Clay	5			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
								40	50	10	10YR6/4					No	HCL - Clay loam (heavy)	80			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
								50	70	20							HCL - Clay loam (heavy)	80			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate			No									
160	TF 05020 11400	505020	311400	24	≤7	E		0	22	22	2.5Y4/3						C - Clay	2			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)									SC - Sl ghtly calca eous (1 - 5% CaCO3)			5	-12	3a	WC I I	3a	D ought ness	Wetness		3a
								22	120	98	2.5Y5/3	CP - Common P om nent	10YR5/6	D - Common D st nct	2.5Y6/1	Yes	C - Clay	0			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Poo	SC - Sl ghtly calca eous (1 - 5% CaCO3)	No	Yes									
161	TF 05200 11400	505200	311400	21	≤7	E		0	25	25	10YR4/3						HCL - Clay loam (heavy)	8			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)									VSC - Ve y sl ghtly calca eous (0.5 - 1% CaCO3)			-37	-26	3b	WC I	2	D ought ness			3b
								25	40	15	10YR4/4					No	HCL - Clay loam (heavy)	10			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	VSC - Ve y sl ghtly calca eous (0.5 - 1% CaCO3)	No	No									
								40	45	5	10YR5/4					No	HCL - Clay loam (heavy)	50			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
								45	65	20							HCL - Clay loam (heavy)	50			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate			No									
162	TF 05400 11400	505400	311400	20	≤7	E		0	28	28	2.5Y4/3						C - Clay	8			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)									VSC - Ve y sl ghtly calca eous (0.5 - 1% CaCO3)			-15	-9	3a	WC I I	3b	Wetness			3b
								28	60	32	10YR5/1	MP - Many P om nent	5YR5/6			Yes	C - Clay	0			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	NON - Non-calca eous (0 5% CaCO3)	No	No									
								60	70	10	10YR5/6					No	SCL - Sandy clay loam	50			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Poo	MC - Mode ately calca eous (5 - 10% CaCO3)	No	Yes									
								70	90	20							SCL - Sandy clay loam	50			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate			No									
165	TF 05400 11200	505400	311200	25	≤7	E		0	25	25	10YR4/3						C - Clay	15	8		HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)									SC - Sl ghtly calca eous (1 - 5% CaCO3)			-61	-53	4	WC I	2	D ought ness			4
								25	30	5	10YR4/4					No	C - Clay	10			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	SC - Sl ghtly calca eous (1 - 5% CaCO3)	No	No									
								30	35	5	10YR5/4					No	C - Clay	50			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
								35	60	25							C - Clay	80			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate			No									
166	TF 05620 11200	505620	311200	21	≤7	E		0	26	26	10YR4/3						C - Clay	15	8		HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)									SC - Sl ghtly calca eous (1 - 5% CaCO3)			-40	-26	3b	WC I	2	D ought ness			3b
								26	40	14	10YR4/4					No	C - Clay	10			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	SC - Sl ghtly calca eous (1 - 5% CaCO3)	No	No									
								40	50	10	10YR4/5					No	C - Clay	40			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	SC - Sl ghtly calca eous (1 - 5% CaCO3)	No	No									
								50	70	20							C - Clay	50			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate			No									
167	TF 05400 11000	505400	311000	28	≤7	E		0	25	25	10YR4/3						C - Clay	15	8		HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)									SC - Sl ghtly calca eous (1 - 5% CaCO3)			-53	-44	4	WC I	2	D ought ness			4
								25	35	10	10YR4/4					No	C - Clay	15			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	SC - Sl ghtly calca eous (1 - 5% CaCO3)	No	No									
								35	45	10	10YR5/4					No	C - Clay	50			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
								45	65	20							C - Clay	80			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate			No									
168	TF 05600 11000	505600	311000	22	≤7	E		0	26	26	10YR4/3						HCL - Clay loam (heavy)	2			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)									VSC - Ve y sl ghtly calca eous (0.5 - 1% CaCO3)			-25	-13	3b	WC I	2	D ought ness			3b
								26	46	20	10YR4/4					No	HCL - Clay loam (heavy)	1			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	NON - Non-calca eous (0 5% CaCO3)	No	No									
								46	50	4	10YR5/4					No	HCL - Clay loam (heavy)	50			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
								50	70	20							HCL - Clay loam (heavy)	50			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate			No									
169	TF 05400 10800	505400	310800	33	≤7	E		0	30	30	10YR4/3						C - Clay	30	18		HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)									SC - Sl ghtly calca eous (1 - 5% CaCO3)			-70	-62	4	WC I	2	D ought ness			3b
								30	60	30							C - Clay	80			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate			No									
170	TF 05600 10800	505600	310800	27	≤7	E		0	30	30	10YR4/3						C - Clay	5			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)									SC - Sl ghtly calca eous (1 - 5% CaCO3)			-36	-24	3b	WC I	2	D ought ness			3b
								30	38	8	10YR4/4					No	C - Clay	5			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	SC - Sl ghtly calca eous (1 - 5% CaCO3)	No	No									
								38	45	7	10YR6/4					No	C - Clay	20			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
								45	65	20							C - Clay	50			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate			No									
171	TF 05800 10800	505800	310800	24	≤7	E		0	30	30	10YR4/3						C - Clay	20	12		HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)									SC - Sl ghtly calca eous (1 - 5% CaCO3)			-54	-44	4	WC I	2	D ought ness			4
								30	60	30							C - Clay	50			HR - All ha d ocks o stones (e. those wh ch cannot be sc atched w th a f nge na l)								Mode ate			No									
	END																																								

SITE J

o nt	G d ef. NGR	X	Y	Alt (m)	Slope °	Aspect	Land use	Depth (cm) Top	B tm	Th ck	Mat x Munsell colou	Och eous Mottles Fo m	Munse l colou	G ey Mottles Fo m	Munsell colou	Gley	Textu e	Stones - type 1 %	> 2cm	> 6cm	Type	Stones - type 2 %	> 2cm	> 6cm	Type	Ped St ength	S ze	Shape	SUBS STR	CaCO3	Mn C	SPL	D ought MBw	MBp	Gd	Wet WC	Gw	F nal ALC L m tat on 1	L m tat on 2	L m tat on 3	G ade
72	TF 05600 10600	505600	310600	29	≤7	S		0	25	25	10YR4/3						C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)									NON - Non-calca eous (0.5% CaCO3)			14	-3	2	WC I	3a	Wetness			3a
								25	55	30	10YR5/4					No	C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	NON - Non-calca eous (0.5% CaCO3)	No	No									
								55	120	65	10YR5/3	CD - Common D st nct	10YR4/6			es	C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Poo	NON - Non-calca eous (0.5% CaCO3)	Yes	Yes									
73	TF 05800 10600	505800	310600	29	≤7	S		0	25	25	7.5YR4/3						HCL - Clay loam (heavy)	5	18		HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)									SC - Sl ghtly calca eous 1 - 5% CaCO3)			-65	-59	4	WC I	2	D ought ness			4
								25	50	25							HCL - Clay loam (heavy)	0			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	SC - Sl ghtly calca eous 1 - 5% CaCO3)		No									
74	TF 06000 10600	506000	310600	25	≤7	S		0	30	30	10YR4/2						C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)									NON - Non-calca eous (0.5% CaCO3)			36	4	2	WC I	3a	Wetness			3a
								30	120	90	10YR5/3	CD - Common D st nct	7 5YR5/6			es	HCL - Clay loam (heavy)				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	NON - Non-calca eous (0.5% CaCO3)	Yes	No									
75	TF 06200 10600	506200	310600	21	≤7	S		0	25	25	10YR4/3						HCL - Clay loam (heavy)				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)									VSC - Ve y sl ghtly calca eous 0 5 - 1% CaCO3)			32	5	2	WC I	2	D ought ness	Wetness		2
								25	65	40	10YR5/3	FD - Few D st nct	10YR5/6			es	C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	VSC - Ve y sl ghtly calca eous 0 5 - 1% CaCO3)	No	No									
								65	120	55	10YR5/6					No	SCL - Sandy clay loam				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	SC - Sl ghtly calca eous 1 - 5% CaCO3)	No	No									
76	TF 06400 10600	506400	310600	20	≤7	S		0	25	25	10YR4/3						HCL - Clay loam (heavy)				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)									SC - Sl ghtly calca eous 1 - 5% CaCO3)			-14	-24	3a	WC I	2	D ought ness			3a
								25	45	20	10YR5/5					No	SCL - Sandy clay loam				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	SC - Sl ghtly calca eous 1 - 5% CaCO3)	No	No									
								45	120	75	10YR5/4					No	LMS - Loamy med um sand	0			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	SC - Sl ghtly calca eous 1 - 5% CaCO3)	No	No									
77	TF 05600 10400	505600	310400	33	≤7	S		0	25	25	10YR4/3						HCL - Clay loam (heavy)	5	8		HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)									SC - Sl ghtly calca eous 1 - 5% CaCO3)			-30	-21	3b	WC I	2	D ought ness			3b
								25	35	10	10YR4/4					No	HCL - Clay loam (heavy)	0			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	SC - Sl ghtly calca eous 1 - 5% CaCO3)	No	No									
								35	55	20	10YR5/4					No	HCL - Clay loam (heavy)	5			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
								55	60	5	10YR6/2					No	HCL - Clay loam (heavy)	0			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
								60	80	20	10YR6/2					No	HCL - Clay loam (heavy)	0			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate			No									
78	TF 05800 10400	505800	310400	32	≤7	S		0	30	30	10YR4/3						C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)									NON - Non-calca eous (0.5% CaCO3)			15	-9	2	WC I	3a	Wetness			3a
								30	120	90	10YR5/4					No	HCL - Clay loam (heavy)	0			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
79	TF 06000 10400	506000	310400	31	≤7	S		0	30	30	10YR4/3						C - Clay	0	16	10	HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)									SC - Sl ghtly calca eous 1 - 5% CaCO3)			-15	-29	3a	WC II	3a	D ought ness	Wetness		3a
								30	120	90	10YR6/2	CD - Common D st nct	10YR5/6			es	C - Clay	5			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Poo	MC - Mode ately calca eous (5 - 10% CaCO3)	Yes	Yes									
80	TF 06200 10400	506200	310400	23	≤7	S		0	20	20	10YR4/3						C - Clay	0			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)									SC - Sl ghtly calca eous 1 - 5% CaCO3)			-4	-20	3a	WC II	3a	D ought ness	Wetness		3a
								20	30	10	10YR5/3	CD - Common D st nct	10YR5/6			es	C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Poo	SC - Sl ghtly calca eous 1 - 5% CaCO3)	Yes	Yes									
								30	120	90						es	C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Poo	SC - Sl ghtly calca eous 1 - 5% CaCO3)	No	Yes									
81	TF 06400 10400	506400	310400	21	≤7	S		0	30	30	10YR4/3						C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)									NON - Non-calca eous (0.5% CaCO3)			16	1	2	WC I	3a	Wetness			3a
								30	65	35	10YR5/4					No	C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	NON - Non-calca eous (0.5% CaCO3)	No	No									
								65	120	55	2.5Y6/2	CP - Common P om nent	10YR5/6			es	C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Poo	SC - Sl ghtly calca eous 1 - 5% CaCO3)	No	Yes									
85	TF 05800 10200	505800	310200	32	≤7	S		0	25	25	2.5Y4/3						C - Clay	0	6		HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)									VSC - Ve y sl ghtly calca eous 0 5 - 1% CaCO3)			5	-15	3a	WC I	3a	D ought ness	Wetness		3a
								25	40	15	2.5Y4/4					No	C - Clay	0			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	SC - Sl ghtly calca eous 1 - 5% CaCO3)	No	No									
								40	75	35	2.5Y6/2	CD - Common D st nct	10YR5/6			es	HCL - Clay loam (heavy)	0			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
								75	120	45	2.5Y6/1	CD - Common D st nct	10YR5/6			es	C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Poo	NON - Non-calca eous (0.5% CaCO3)	No	Yes									
86	TF 06000 10200	506000	310200	33	≤7	S		0	30	30	10YR4/2						C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)									SC - Sl ghtly calca eous 1 - 5% CaCO3)			10	-5	2	WC I	2	D ought ness	Wetness		2
								30	65	35	10YR5/5					No	C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	SC - Sl ghtly calca eous 1 - 5% CaCO3)	No	No									
								65	120	55	10YR5/3	CD - Common D st nct	10YR5/6			es	C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Poo	SC - Sl ghtly calca eous 1 - 5% CaCO3)	No	Yes									
87	TF 06200 10200	506200	310200	27	≤7	S		0	28	28	10YR4/3						C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)									SC - Sl ghtly calca eous 1 - 5% CaCO3)			9	-4	2	WC I	2	D ought ness	Wetness		2
								28	70	42	10YR5/3	CD - Common D st nct	10YR5/6			es	C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
								70	120	50	10YR5/3	CD - Common D st nct	10YR5/6	CD - Common D st nct	10YR5/1	es	C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Poo	SC - Sl ghtly calca eous 1 - 5% CaCO3)	No	Yes									
88	TF 06400 10200	506400	310200	25	≤7	S		0	30	30	10YR4/3						C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)									NON - Non-calca eous (0.5% CaCO3)			19	2	2	WC I	3a	Wetness			3a
								30	120	90	10YR5/4					No	C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	SC - Sl ghtly calca eous 1 - 5% CaCO3)	No	No									
90	TF 05820 10000	505820	310000	38	≤7	S		0	20	20	10YR4/3						C - Clay	5	6		HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)									SC - Sl ghtly calca eous 1 - 5% CaCO3)			-35	-21	3b	WC I	2	D ought ness			3b
								20	25	5	10YR4/4					No	C - Clay	0			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	SC - Sl ghtly calca eous 1 - 5% CaCO3)	No	No									
								25	30	5	10YR4/6					No	C - Clay	0			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
								30	60	30							C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate			No									
91	TF 06000 10000	506000	310000	33	≤7	S		0	20	20	10YR4/3						C - Clay	5	8		HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)									SC - Sl ghtly calca eous 1 - 5% CaCO3)			14	-12	3a	WC I	2	D ought ness			3a
								20	70	50	10YR6/2	CD - Common D st nct	10YR5/6			es	HCL - Clay loam (heavy)	5			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
								70	120	50							HCL - Clay loam (heavy)	5			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate			No									
92	TF 06200 10000	506200	310000	27	≤7	S		0	25	25	10YR4/3						HCL - Clay loam (heavy)	0	30	22	HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)									SC - Sl ghtly calca eous 1 - 5% CaCO3)			-71	-65	4	WC I	2	D ought ness			4
								25	50	25						No	HCL - Clay loam (heavy)	0			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	SC - Sl ghtly calca eous 1 - 5% CaCO3)	No	No									
93	TF 06400 10000	506400	310000	25	≤7	S		0	28	28	10YR4/3						C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)									SC - Sl ghtly calca eous 1 - 5% CaCO3)			12	-4	2	WC I	2	D ought ness	Wetness		2
								28	120	92	10YR5/4					No	C - Clay	0			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	SC - Sl ghtly calca eous 1 - 5% CaCO3)	No	No									
97	TF 06000 09800	506000	309800	37	≤7	S		0	25	25	10YR4/3						HCL - Clay loam (heavy)	0	4		HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)									NON - Non-calca eous (0.5% CaCO3)			30	-1	2	WC I	2	D ought ness	Wetness		2
								25	40	15	10YR4/5					No	HCL - Clay loam (heavy)				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	NON - Non-calca eous (0.5% CaCO3)	No	No									
								40	120	80							HCL - Clay loam (heavy)				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate			No									
98	TF 06200 09800	506200	309800	31	≤7	S		0	25	25	10YR4/4						HCL - Clay loam (heavy)	5	10	6	HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)									SC - Sl ghtly calca eous 1 - 5% CaCO3)			17	-10	2	WC I	2	D ought ness	Wetness		2
								25	120	95						No	HCL - Clay loam (heavy)	5			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	SC - Sl ghtly calca eous 1 - 5% CaCO3)	No	No									
99	TF 06400 09800	506400	309800	28	≤7	S		0	30	30	10YR4/3						C - Clay	5	11	6	HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)									SC - Sl ghtly calca eous 1 - 5% CaCO3)			3	-11	3a	WC I	2	D ought ness			3a
								30	120	90						No	C - Clay	5			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	SC - Sl ghtly calca eous 1 - 5% CaCO3)	No	No									
03	TF 06200 09600	506200	309600	30	≤7	S		0	25	25	10YR4/4						HCL - Clay loam (heavy)	0	18	12	HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)									SC - Sl ghtly calca eous 1 - 5% CaCO3)			-5	-26	3a	WC I	2	D ought ness			3a
								25	120	95						No	HCL - Clay loam (heavy)	0			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	SC - Sl ghtly calca eous 1 - 5% CaCO3)	No	No									
04	TF 06400 09600	506400	309600	29	≤7	S		0	28	28	10YR4/3						C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)									SC - Sl ghtly calca eous 1 - 5% CaCO3)			6	-8	2	WC I	2	D ought ness	Wetness		2
								28	50	22	10YR5/5					No	C - Clay	5			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	SC - Sl ghtly calca eous 1 - 5% CaCO3)	No	No									
								50	120	70							C - Clay	5			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate			No									
08	TF 06220 09400	506220	309400	32	≤7	S		0	25	25	10YR4/3						HCL - Clay loam (heavy)	5	12	6	HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)									SC - Sl ghtly calca eous 1 - 5% CaCO3)			13	-14	3a	WC I	2	D ought ness			3a
								25	40	15	10YR5/5					No	HCL - Clay loam (heavy)	5			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	SC - Sl ghtly calca eous 1 - 5% CaCO3)	No	No									
								40	120	80							HCL - Clay loam (heavy)	5			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate			No									
09	TF 06400 09400	506400	309400	31	≤7	S		0	28	28	10YR4/3						C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)									SC - Sl ghtly calca eous 1 - 5% CaCO3)			16	-1	2	WC I	2	D ought ness	Wetness		2
								28	40	12	10YR5/4					No	C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
								40	120	80	10YR5/3					No	C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)		No									
11	TF 06400 09200	506400	309200	30	≤7	S		0	28	28	10YR4/3						C - Clay	0	6		HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)									SC - Sl ghtly calca eous 1 - 5% CaCO3)			53	-4	2	WC I	3a	Wetness			3a
								28	50	22	10YR5/4					No	C - Clay	0			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	No	No									
								50	120	70	10YR5/3	CD - Common D st nct	10YR5/6			es	C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	Yes	No									
								70	120	50							C - Clay				HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	MC - Mode ately calca eous (5 - 10% CaCO3)	Yes	No									
13	TF 06450 09000	506450	309000	32	≤7	S		0	28	28	10YR4/2						MCL - Clay loam (med um)	5	12		HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)									NON - Non-calca eous (0.5% CaCO3)			11	-17	3a	WC I	1	D ought ness			3a
								28	120	92	10YR4/4					No	SCL - Sandy clay loam	5			HR - All ha d ocks o stones (.e. those wh ch cannot be sc atched w th a f nge na)								Mode ate	NON - Non-calca eous (0.5% CaCO3)	No	No									
	END																																								

SITE K

Point	Grid ref. NGR	X	Y	Alt (m)	Slope °	Aspect	Land use	Depth (cm) Top	Bttm	Thick	Matrix Munsell colour	Ochreous Mottles Form	Munsell colour	Grey Mottles Form	Munsell colour	Gley	Texture	Stones - type 1 %	>2cm	>6cm	Type	Stones - type 2 %	>2cm	>6cm	Type	Ped Strength	Size	Shape	%UBS STR	CaCO3	Mn C	SPL	Drought MBw	MBp	Gd	Wet WC	Gw	Final ALC Limitation 1	Limitation 2	Limitation 3	Grade
82	TF 05280 10200	505280	310200	37	≤7	E		0	28	28	10YR4/3						C - Clay	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)									VSC - Very slightly calcareous (0.5 - 1% CaCO3)			13	-3	2	WC II	3a	Wetness			3a
								28	35	7	10YR4/4					No	C - Clay	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VSC - Very slightly calcareous (0.5 - 1% CaCO3)	No	No								
								35	52	17	10YR5/4					No	C - Clay	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	SC - Slightly calcareous (1 - 5% CaCO3)	No	No								
								52	120	68	5Y5/3	CP - Common Prominent	0YR5/6	CD - Common Distinct	5Y6/1	Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Poor	MC - Moderately calcareous (5 - 0% CaCO)	No	Yes								
83	TF 05400 10200	505400	310200	6	≤7	E		0	26	26	10YR4/3						C - Clay	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)									NON - Non-calcareous (<0.5% CaCO)			-35	-19	b	WC II	3a	Droughtiness			3b
								26	8	12	2.5Y5/3	CD - Common Distinct	0YR5/6			Yes	C - Clay	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	MC - Moderately calcareous (5 - 0% CaCO)	No	No								
								38	70	32	2.5Y5/3	CD - Common Distinct	0YR5/6			Yes	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	MC - Moderately calcareous (5 - 0% CaCO)	No	No								
84	TF 05600 10200	505600	310200	33	≤7	E		0	28	28	10YR4/3						C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)									NON - Non-calcareous (<0.5% CaCO)			25	8	2	WC I	3a	Wetness			3a
								28	120	92	7.5YR4/6					No	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	NON - Non-calcareous (<0.5% CaCO)	No	No								
89	TF 05400 10000	505400	310000	8	≤7	E		0	28	28	10YR4/3						C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)									NON - Non-calcareous (<0.5% CaCO)			14	-2	2	WC III	3b	Wetness			3b
								28	8	0	10YR5/4	FD - Few Distinct	7.5YR5/6			No	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	NON - Non-calcareous (<0.5% CaCO)	Yes	No								
								38	50	12	2.5Y5/3	MP - Many Prominent	7.5YR5/6			Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Poor	NON - Non-calcareous (<0.5% CaCO)	Yes	Yes								
								50	120	70	5Y5/3	MP - Many Prominent	7.5YR5/6			Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Poor	NON - Non-calcareous (<0.5% CaCO)	Yes	Yes								
194	TF 05000 09800	505000	09800	45	≤7	E		0	26	26	10YR4/3						C - Clay	12	6		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)									VSC - Very slightly calcareous (0.5 - 1% CaCO3)			-17	-23	a	WC I	3a	Droughtiness	Wetness		3a
								26	40	14	10YR4/5					No	C - Clay	15			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VSC - Very slightly calcareous (0.5 - 1% CaCO3)	No	No								
								40	120	80							C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate			No							
195	TF 05200 09800	505200	09800	43	≤7	E		0	20	20	2.5Y4/3						C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)									VSC - Very slightly calcareous (0.5 - 1% CaCO3)			16	0	2	WC II	3a	Wetness			3a
								20	45	25	2.5Y5/4					No	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VSC - Very slightly calcareous (0.5 - 1% CaCO3)	No	No								
								45	120	75	2.5Y5/3	CP - Common Prominent	0YR5/6			Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Poor	SC - Slightly calcareous (1 - 5% CaCO3)	No	Yes								
196	TF 05400 09800	505400	09800	43	≤7	E		0	28	28	10YR4/3						C - Clay	10	4		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)									SC - Slightly calcareous (1 - 5% CaCO3)			11	-5	2	WC II	2	Droughtiness	Wetness		2
								28	45	17	10YR5/4					No	C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	MC - Moderately calcareous (5 - 0% CaCO)	No	No								
								45	70	25	2.5Y5/3	CP - Common Prominent	0YR5/6			Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Poor	MC - Moderately calcareous (5 - 0% CaCO)	No	Yes								
								70	120	50	2.5Y6/3	CP - Common Prominent	0YR5/6			Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Poor	NON - Non-calcareous (<0.5% CaCO)	Yes	Yes								
200	TF 04850 09600	504850	09600	47	≤7	E		0	28	28	10YR4/3						MCL - Clay loam (medium)	8	4		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)									SC - Slightly calcareous (1 - 5% CaCO3)			6	-5	2	WC I	1	Droughtiness			2
								28	60	32	10YR6/4					No	HCL - Clay loam (heavy)	8			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	MC - Moderately calcareous (5 - 0% CaCO)	No	No								
								60	120	60							HCL - Clay loam (heavy)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate			No							
201	TF 05000 09600	505000	09600	44	≤7	E		0	25	25	10YR4/3						MCL - Clay loam (medium)	25	18	10	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)									SC - Slightly calcareous (1 - 5% CaCO3)			-48	-37	b	WC I	1	Stoniness	Droughtiness		3b
								25	40	15	7.5YR4/4					No	HCL - Clay loam (heavy)	25			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	SC - Slightly calcareous (1 - 5% CaCO3)	No	No								
								40	60	20							HCL - Clay loam (heavy)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate			No							
202	TF 05200 09600	505200	09600	43	≤7	E		0	6	6	10YR4/3						C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)									VSC - Very slightly calcareous (0.5 - 1% CaCO3)			13	-3	2	WC III	3b	Wetness			3b
								36	120	84	2.5Y6/3	CP - Common Prominent	0YR5/6	CD - Common Distinct	2.5Y6/1	Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Poor	VSC - Very slightly calcareous (0.5 - 1% CaCO3)	No	Yes								
205	TF 04800 09400	504800	09400	50	≤7	E		0	0	0	2.5Y4/3						C - Clay	8	4		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)									NON - Non-calcareous (<0.5% CaCO)			-9	-8	a	WC I	3a	Droughtiness	Wetness		3a
								30	60	0	2.5Y4/4					No	C - Clay	8			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	MC - Moderately calcareous (5 - 0% CaCO)	No	No								
								60	120	60	2.5Y5/4					No	C - Clay	60			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	MC - Moderately calcareous (5 - 0% CaCO)	No	No								
206	TF 05000 09400	505000	09400	48	≤7	E		0	26	26	10YR4/3						C - Clay	20	12		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)									VSC - Very slightly calcareous (0.5 - 1% CaCO3)			-14	-19	a	WC I	3a	Droughtiness	Wetness		3a
								26	50	24	7.5YR4.4					No	C - Clay	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	VSC - Very slightly calcareous (0.5 - 1% CaCO3)	No	No								
								50	120	70							C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate			No							
207	TF 05200 09400	505200	09400	43	≤7	E		0	0	0	10YR4/3						HCL - Clay loam (heavy)	10	6		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)									VSC - Very slightly calcareous (0.5 - 1% CaCO3)			1	-12	a	WC I	2	Droughtiness			3a
								30	50	20	7.5YR4/4					No	HCL - Clay loam (heavy)	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	SC - Slightly calcareous (1 - 5% CaCO3)	No	No								
								50	120	70	7.5YR4/4					No	HCL - Clay loam (heavy)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	MC - Moderately calcareous (5 - 0% CaCO)	No	No								
210	TF 05200 09200	505200	09200	43	≤7	E		0	0	0	10YR4/3						C - Clay	25	16	10	HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)									SC - Slightly calcareous (1 - 5% CaCO3)			-57	-48	4	WC I	2	Droughtiness			4
								30	40	0	10YR4/4					No	C - Clay	25			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	SC - Slightly calcareous (1 - 5% CaCO3)	No	No								
								40	60	20							C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate			No							
212	TF 05400 09000	505400	09000	40	≤7	E		0	28	28	10YR4/3						HCL - Clay loam (heavy)	12	6		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)									SC - Slightly calcareous (1 - 5% CaCO3)			-45	-35	b	WC I	1	Droughtiness			3b
								28	40	12	10YR6/4					No	HCL - Clay loam (heavy)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	MC - Moderately calcareous (5 - 0% CaCO)	No	No								
								40	60	20							HCL - Clay loam (heavy)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate			No							
214	TF 05400 08800	505400	08800	40	≤7	E		0	28	28	10YR4/3						HCL - Clay loam (heavy)	12	6		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)									SC - Slightly calcareous (1 - 5% CaCO3)			-45	-35	b	WC I	1	Droughtiness			3b
								28	35	7	10YR6/4					No	HCL - Clay loam (heavy)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	SC - Slightly calcareous (1 - 5% CaCO3)	No	No								
								35	60	25							HCL - Clay loam (heavy)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate			No							
215	TF 05400 08600	505400	08600	37	≤7	E		0	28	28	10YR4/3						C - Clay	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)									SC - Slightly calcareous (1 - 5% CaCO3)			-34	-21	b	WC I	2	Droughtiness			3b
								28	40	12	10YR5/4					No	C - Clay	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	MC - Moderately calcareous (5 - 0% CaCO)	No	No								
								40	50	0	10YR6/4					No	HCL - Clay loam (heavy)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	MC - Moderately calcareous (5 - 0% CaCO)		No								
								50	70	20							HCL - Clay loam (heavy)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate			No							
216	TF 05400 08400	505400	08400	8	≤7	E		0	26	26	10YR4/3						C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)									NON - Non-calcareous (<0.5% CaCO)			-27	-13	b	WC I	3a	Droughtiness			3b
								26	45	19	7.5YR4/4					No	C - Clay	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	NON - Non-calcareous (<0.5% CaCO)	No	No								
								45	50	5	10YR6/4					No	HCL - Clay loam (heavy)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate	MC - Moderately calcareous (5 - 0% CaCO)		No								
								50	70	20							HCL - Clay loam (heavy)	50			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Moderate			No							
217	TF 05600 08400	505600	08400	8	≤7	E		0	25	25	10YR5/2						C - Clay	10	6		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)									SC - Slightly calcareous (1 - 5% CaCO3)			3	-14	a	WC II	2	Droughtiness			3a
								25	55	0	10YR5/5					No	C - Clay	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Poor	SC - Slightly calcareous (1 - 5% CaCO3)	No	No								
								55	120	65	5Y5/6	CP - Common Prominent	0YR5/6			Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)								Poor	MC - Moderately calcareous (5 - 0% CaCO)	No	Yes								
	END																																							

Detailed: Area A

Project Number	Project Name	Parcel
C925A	Mallard Pass	Area A

Date of Survey	Survey Type	Surveyor(s)	Company
19/10/2022	Detailed ALC	AR	Askew Land and Soil

Weather	Relief	Land use and vegetation
Mild, cloudy	Gently undulated	CER (Cereals)

Grid Reference	Postcode	Altitude	Area
TF027130		52	

MAFF prov	MAFF detailed	Flooding
Grade 3	None	Flood Zone 1

AAR	AT0	MDw	MDp	FCD	Climate grade
590	1394	111	104	118	1

Bedrock	Superficial deposits
Blisworth Formation	None

Soil association(s) 1:250,000	Detailed soil information
Elmton 1	None

Revision Number	Date Revised
2	03/11/2022

Point	Grid ref.			Alt (m)	Slope °	Aspect	Land use	Depth (cm)			Matrix	Ochreous Mottles		Grey Mottles		Gley	Texture	Stones - type 1				Stones - type 2				Ped			SUBS STR	CaCO3	Mn C	SPL	Drought			Wet		Final ALC			
	NGR	X	Y					Top	Bttm	Thick	Munsell colour	Form	Munsell colour	Form	Munsell colour			%	> 2cm	> 6cm	Type	%	> 2cm	> 6cm	Type	Strength	Size	Shape					MBw	MBp	Gd	WC	Gw	Limitation 1	Limitation 2	Limitation 3	Grade
1	TF 02700 13200	502700	313200	51	≤7		CER	0	30	30	7.5YR4/4						C - Clay	15	8		HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi								SC - Slightly calca			-46	-35	3b	WC I	1	Droughtiness			3b
								30	50	20	7.5YR6/3						C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	SC - Slig	No	No								
								50	70	20							C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	SC - Slightly c		No								
2	TF 02900 13200	502900	313200	48	≤7		CER	0	30	30	7.5YR4/4						HCL - Cla	25	12		HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi								SC - Slightly calca			-54	-45	4	WC I	1	Droughtiness			3b
								30	35	5	7.5YR4/6						HCL - Cla	30			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	SC - Slig	No	No								
								35	40	5	7.5YR6/3						MSL - Me	50			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	MC - M	No	No								
								40	60	20							MSL - Me	80			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	MC - Moderat		No								
3	TF 02500 13100	502500	313100	54	≤7		CER	0	30	30	7.5YR4/4						MSL - Me	10	5		HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi								SC - Slightly calca			-4	2	3a	WC I	1	Droughtiness			3a
								30	45	15	7.5YR4/6						MSL - Me	15			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	SC - Slig	No	No								
								45	70	25	7.5YR5/5						HZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	MC - M	No	No								
								70	85	15	7.5YR6/3						MSL - Me	50			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	MC - M	No	No								
								85	105	20							MSL - Me	80			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate			No								
4	TF 02600 13100	502600	313100	52	≤7		CER	0	30	30	7.5YR4/4						MCL - Cla	15	8		HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi								SC - Slightly calca			-22	-12	3b	WC I	1	Droughtiness			3b
								30	58	28	7.5YR4/6						HCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	SC - Slig	No	No								
								58	60	2	7.5YR6/3						MSL - Me	50			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	MC - M	No	No								
								60	80	20							MSL - Me	80			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	MC - Moderat		No								
5	TF 02700 13100	502700	313100	52	≤7		CER	0	28	28	7.5YR4/4						MCL - Cla	15	11		HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi								SC - Slightly calca			-27	-19	3b	WC I	1	Droughtiness			3b
								28	45	17	7.5YR4/6						MCL - Cla	20			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	SC - Slig	No	No								
								45	55	10	7.5YR6/3						MSL - Me	20			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	MC - M	No	No								
								55	60	5	7.5YR6/3						MSL - Me	50			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	MC - M	No	No								
								60	80	20							MSL - Me	80			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate			No								
6	TF 02800 13100	502800	313100	52	≤7		CER	0	30	30	7.5YR4/4						MCL - Cla	15	11		HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi								SC - Slightly calca			-27	-17	3b	WC I	1	Droughtiness			3b
								30	55	25	7.5YR5/5						MCL - Cla	20			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	SC - Slig	No	No								
								55	60	5	7.5YR6/2						MSL - Me	50			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	MC - M	No	No								
								60	80	20							MSL - Me	80			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	MC - Moderat		No								
7	TF 02900 13100	502900	313100	48	≤7		CER	0	28	28	7.5YR4/4						MCL - Cla	10	6		HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi								SC - Slightly calca			-22	-11	3b	WC I	1	Droughtiness			3b
								28	55	27	7.5YR5/4						C - Clay	10			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	SC - Slig	No	No								
								55	60	5	7.5YR6/3						MSL - Me	50			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	MC - M	No	No								
								60	80	20							MSL - Me	80			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	MC - Moderat		No								
8	TF 03000 13100	503000	313100	46	≤7		CER	0	30	30	7.5YR4/4						MCL - Cla	30	18	9	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi								SC - Slightly calca			-54	-45	4	WC I	1	Droughtiness			4
								30	45	15	7.5YR4/6						MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	SC - Slig	No	No								
								45	65	20							MCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	SC - Slightly c		No								
9	TF 02500 13000	502500	313000	54	≤7		CER	0	28	28	7.5YR4/5						MZCL - S	2			HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi								NON - Non-calcar			-35	-24	3b	WC I	1	Droughtiness			3b
								28	65	37	7.5YR4/6						LMS - Lo	0			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	NON -	No	No								
								65	70	5	7.5YR4/6						LMS - Lo	90			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	NON - Non-ca		No								
10	TF 02700 13000	502700	313000	52	≤7		CER	0	30	30	7.5YR4/4						MCL - Cla	12	6		HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi								NON - Non-calcar			-18	-6	3a	WC I	1	Droughtiness			3a
								30	60	30	7.5YR4/6						HCL - Cla	5			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	NON -	Yes	No								
								60	80	20	7.5YR4/6						HCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	NON - Non-ca		No								

11	TF 02900 13000	502900	313000	48	≤7	CER	0	25	25	7.5YR4/4				MZCL - S	15	8	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi		NON - Non-calcar			-47	-38	3b	WC I	1	Droughtiness	3b
							25	40	15	7.5YR4/6				HCL - Cla	30		HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	NON -	No	No							
							40	60	20	7.5YR4/6				HCL - Cla	80		HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	NON - Non-ca		No							
12	TF 02500 12900	502500	312900	54	≤7	CER	0	30	30	10YR5/2				MZCL - S	2		HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi		NON - Non-calcar			25	7	2	WC III	3a	Wetness	3a
							30	45	15	10YR5/2	CD - C	10YR5/6	Yes	HZCL - Si	0		HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	NON -	No	No							
							45	120	75	2.5Y7/1	CP - C	10YR5/6	Yes	ZC - Silty	0		HR - All hard rocks or stones (i.e. those which cannot be scratche	Poor	NON -	No	Yes							
13	TF 02600 12900	502600	312900	51	≤7	CER	0	26	26	10YR4/3				MZCL - S	8		HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi		SC - Slightly calca			-18	-5	3a	WC II	2	Droughtiness	3a
							26	40	14	10YR6/2	CP - C	7.5YR5/6	Yes	MZCL - S	8		HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	SC - Sli	No	No							
							40	60	20					MZCL - S	8		HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	MC - Modera		No							
14	TF 02700 12900	502700	312900	51	≤7	CER	0	28	28	7.5YR4/5				MCL - Cl	10		HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi		SC - Slightly calca			-30	-21	3b	WC I	1	Droughtiness	3b
							28	45	17	7.5YR5/6				C - Clay	5		HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	SC - Sli	No	No							
							45	50	5	10YR7/2				MSL - Me	50		HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	MC - M	No	No							
							50	70	20					MSL - Me	80		HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	MC - Modera		No							
15	TF 02800 12900	502800	312900	50	≤7	CER	0	25	25	7.5YR4/5				MCL - Cl	20	8	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi		SC - Slightly calca			-51	-42	4	WC I	1	Droughtiness	4
							25	40	15	7.5YR4/6				MCL - Cl	30		HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	SC - Sli	No	No							
							40	60	20					MCL - Cl	80		HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	MC - Modera		No							
16	TF 02900 12900	502900	312900	46	≤7	CER	0	25	25	7.5YR4/5				MCL - Cl	50	20	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi		SC - Slightly calca			-79	-72	4	WC I	1	Droughtiness	4
							25	45	20	7.5YR4/6				MCL - Cl	80		HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	SC - Sli	No	No							
17	TF 03000 12900	503000	312900	44	≤7	CER	0	25	25	7.5YR4/5				MCL - Cl	40	12	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi		SC - Slightly calca			-67	-60	4	WC I	1	Droughtiness	4
							25	35	10	7.5YR4/6				MCL - Cl	50		HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	SC - Sli	No	No							
							35	55	20					MCL - Cl	80		HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	MC - M	No	No							
18	TF 03100 12900	503100	312900	44	≤7	CER	0	30	30	7.5YR4/4				HCL - Cla	10		HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi		SC - Slightly calca			-22	-11	3b	WC I	1	Droughtiness	3b
							30	40	10	7.5YR4/6				C - Clay	10		HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	SC - Sli	No	No							
							40	50	10	10YR5/4				MSL - Me	10		HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	MC - M	No	No							
							50	70	20					MSL - Me	50		HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	MC - Modera		No							
	END																											

Detailed: Area D

Project Number	Project Name	Parcel
C925D	Mallard Pass Area D	Area D

Date of Survey	Survey Type	Surveyor(s)	Company
19/10/2022	Detailed ALC	AR	Askew Land and Soil

Weather	Relief	Land use and vegetation
Mild, cloudy	Gently undulated	CER (Cereals)

Grid Reference	Postcode	Altitude	Area
TF036124	PE9 4QD	51	

MAFF prov	MAFF detailed	Flooding
Grade 3	None	Flood Zone 1

AAR	AT0	MDw	MDp	FCD	Climate grade
590	1396	112	104	117	1

Bedrock	Superficial deposits
Upper Lincolnshire/Rutland/Blisworth	None

Soil association(s) 1:250,000	Detailed soil information
Elmton 1 and Elmton 3	None

Revision Number	Date Revised
1	28/10/2022

Point	Grid ref.			Alt (m)	Slope °	Aspect	Land use	Depth (cm)			Matrix	Ochreous Mottles		Grey Mottles		Gley	Texture	Stones - type 1				Stones - type 2				Ped			SUBS STR	CaCO3	Mn C	SPL	Drought			Wet		Final ALC			
	NGR	X	Y					Top	Bttm	Thick	Munsell colour	Form	Munsell colour	Form	Munsell colour			%	> 2cm	> 6cm	Type	%	> 2cm	> 6cm	Type	Strength	Size	Shape					MBw	MBp	Gd	WC	Gw	Limitation 1	Limitation 2	Limitation 3	Grade
1	TF 03300 12800	503300	312800	37	≤7		CER	0	25	25	7.5YR4/4						MSZL - M	30	12		HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi								SC - Slightly calcar			-61	-53	4	WC I	1	Droughtiness			4
								25	35	10	7.5YR4/6					No	MSZL - M	30			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	MC - M	No	No									
								35	55	20							MSZL - M	90			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	MC - Moderat		No									
2	TF 03500 12800	503500	312800	34	≤7		CER	0	25	25	7.5YR4/4						MZCL - S	8	4		HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi								SC - Slightly calcar			-20	-9	3b	WC I	1	Droughtiness			3b
								25	35	10	7.5YR4/6					No	MZCL - S	15			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	MC - M	No	No									
								35	60	25	7.5YR6/4					No	MSZL - M	25			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	MC - M	No	No									
								60	80	20							MSZL - M	80			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate			No									
3	TF 03300 12700	503300	312700	37	≤7		CER	0	35	35	7.5YR4/4						MZCL - S	8	4		HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi								SC - Slightly calcar			0	11	3a	WC I	1	Droughtiness			3a
								35	80	45	7.5YR4/6					No	HZCL - Si	10			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	SC - Slig	No	No									
4	TF 03400 12700	503400	312700	37	≤7		CER	0	25	25	7.5YR4/4						MSZL - M	30	10		HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi								SC - Slightly calcar			-58	-49	4	WC I	1	Droughtiness			4
								25	35	10	7.5YR7/2					No	MSZL - M	40			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	MC - M	No	No									
								35	60	25							MSZL - M	80			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	MC - Moderat		No									
5	TF 03500 12700	503500	312700	34	≤7		CER	0	30	30	7.5YR4/4						MZCL - S	15	8		HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi								SC - Slightly calcar			-8	5	3a	WC I	1	Droughtiness			3a
								30	65	35	7.5YR4/6					No	MZCL - S	5			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	MC - M	No	No									
								65	85	20	7.5YR7/2					No	MZCL - S	60			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	MC - M	No	No									
6	TF 03600 12700	503600	312700	39	≤7		CER	0	28	28	10YR4/3						C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi								SC - Slightly calcar			25	9	2	WC I	1	Droughtiness			3a
								28	60	32	7.5YR4/4					No	C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	MC - M	No	No									
								60	120	60	10YR5/3	CD - C	10YR5/6			Yes	C - Clay				HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	MC - M	Yes	No									
7	TF 03700 12700	503700	312700	39	≤7		CER	0	28	28	10YR4/3						MCL - Cl	12	11	1	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi								MC - Moderately (			24	9	2	WC II	2	Stoniness			3a
								28	55	27	10YR4/5					No	MCL - Cl	2			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	MC - M	No	No									
								55	75	20	10YR5/1	CP - C	7.5YR5/6			Yes	MZCL - S	0			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	MC - M	No	No									
								75	120	45	2.5Y5/1	CP - C	10YR5/6			Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratche							Poor	MC - M	No	Yes									
8	TF 03300 12600	503300	312600	35	≤7		CER	0	25	25	10YR4/3						HCL - Cla	10	6	2	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi								MC - Moderately (			-53	-44	4	WC I	1	Droughtiness			4
								25	30	5	10YR4/5					No	HCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	MC - M	No	No									
								30	35	5	10YR4/6					No	HCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	MC - Moderat		No									
								35	55	20							HCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate			No									
9	TF 03500 12600	503500	312600	34	≤7		CER	0	30	30	7.5YR4/3						HZCL - Si	18	12		HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi								SC - Slightly calcar			25	2	2	WC I	1	Stoniness			3a
								30	120	90	7.5YR4/5					No	HZCL - Si	15			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	SC - Slig	No	No									
10	TF 03700 12600	503700	312600	39	≤7		CER	0	25	25	10YR4/4						MZCL - S	40	20	12	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi								MC - Moderately (			-55	-44	4	WC I	1	Droughtiness			3b
								25	40	15	10YR4/6					No	MZCL - S	40			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	MC - M	No	No									
								40	60	20							MZCL - S	60			HR - All hard rocks or stones (i.e. those which cannot be scratche							Moderate	MC - Moderat		No									

11	TF 03300 12500	503300	312500	35	≤7	CER	0	30	30	10YR4/3			C - Clay	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi		NON - Non-calcar			15	1	2	WC I	3a	Wetness		3a
							30	50	20	7.5YR4/5		No	C - Clay	5			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	NON -	No	No								
							50	120	70	10YR5/5		No	C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratche	Poor	NON -	Yes	No								
12	TF 03500 12500	503500	312500	34	≤7	CER	0	30	30	7.5YR4/4			C - Clay	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi		NON - Non-calcar			2	-11	3a	WC I	3a	Droughtines	Wetness	3a
							30	120	90	7.5YR5/6		No	C - Clay	10			HR - All hard rocks or stones (i.e. those which cannot be scratche	Poor	NON -	No	No								
13	TF 03600 12500	503600	312500	39	≤7	CER	0	35	35	10YR4/3			C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi		SC - Slightly calca			20	6	2	WC II	2	Droughtines	Wetness	2
							35	45	10	10YR5/4		No	C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	SC - Slig	No	No								
							45	55	10	10YR5/3	CD - C 10YR5/6	Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	SC - Slig	No	No								
							55	120	65	5Y5/1	CP - C 10YR5/6	Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratche	Poor	SC - Slig	No	Yes								
14	TF 03700 12500	503700	312500	39	≤7	CER	0	25	25	7.5YR4/4			HCL - Cla	15	8		HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi		SC - Slightly calca			-49	-39	3b	WC I	1	Droughtiness		3b
							25	35	10	7.5YR4/6		No	HCL - Cla	15			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	MC - M	No	No								
							35	40	5	7.5YR7/2		No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	MC - M	No	No								
							40	60	20				MCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate			No								
15	TF 03500 12400	503500	312400	56	≤7	CER	0	30	30	7.5YR4/4			HCL - Cla	30	12	8	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi		MC - Moderately c			11	-8	2	WC II	2	Stoniness		3a
							30	60	30	2.5Y7/4		No	HCL - Cla	15			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	MC - M	No	No								
							60	120	60	5Y5/1		No	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	SC - Slig	No	No								
16	TF 03300 12300	503300	312300	50	≤7	CER	0	30	30	10YR4/3			HCL - Cla	10	6		HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi		SC - Slightly calca			17	2	2	WC II	2	Droughtines	Wetness	2
							30	60	30	10YR4/6		No	HCL - Cla	8			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	SC - Slig	No	No								
							60	120	60	2.5Y5/2	CP - C 10YR5/6	Yes	C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratche	Poor	SC - Slig	Yes	Yes								
17	TF 03400 12300	503400	312300	50	≤7	CER	0	30	30	10YR4/4			MCL - Cla	30	12	6	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi		MC - Moderately c			-62	-53	4	WC I	1	Droughtiness		4
							30	35	5	10YR4/6		No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	MC - M	No	No								
							35	55	20				MCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	MC - Modera		No								
18	TF 03300 12200	503300	312200	53	≤7	CER	0	25	25	10YR4/3			MCL - Cla	30	12	6	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi		MC - Moderately c			-64	-55	4	WC I	1	Droughtiness		4
							25	35	10	10YR4/5		No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	MC - M	No	No								
							35	55	20				MCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	MC - Modera		No								
	END																												

Detailed: Area H SP1

Project Number	Project Name	Parcel
C925H	Mallard Pass Detailed ALC	SP1

Date of Survey	Survey Type	Surveyor(s)	Company
13/10/2022	Detailed ALC	RDM	Askew Land and Soil

Weather	Relief	Land use and vegetation
Mild, cloudy	Gently undulated	CER (Cereals)

Grid Reference	Postcode	Altitude	Area
TF056120	PE9 4QD	27	

MAFF prov	MAFF detailed	Flooding
Grade 3	None	Flood Zone 1

AAR	AT0	MDw	MDp	FCD	Climate grade
579	1424	116	110	112	1

Bedrock	Superficial deposits
Rutland Formation	Head

Soil association(s) 1:250,000	Detailed soil information
Elmton 3	None

Revision Number	Date Revised
2	03/11/2022

Point	Grid ref.			Alt (m)	Slope °	Aspect	Land use	Depth (cm)			Matrix	Ochreous Mottles		Grey Mottles		Gley	Texture	Stones - type 1				Stones - type 2				Ped			SUBS STR	CaCO3	Mn C	SPL	Drought			Wet		Final ALC			
	NGR	X	Y					Top	Bttm	Thick	Munsell colour	Form	Munsell colour	Form	Munsell colour			%	> 2cm	> 6cm	Type	%	> 2cm	> 6cm	Type	Strength	Size	Shape					MBw	MBp	Gd	WC	Gw	Limitation 1	Limitation 2	Limitation 3	Grade
1	TF 05500 11900	505500	311900	27	<7		CER	0	30	30	7.5YR4/3					No	C - Clay	10	8	4	HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	VC - Ve	No	No	6	-11	3a	WC III	3a	Droughtines	Wetness		3a
								30	35	5	5YR5/4					No	C - Clay	10			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	VC - Ve	No	No									
								35	120	85							C - Clay												Poor			Yes									
2	TF 05600 11900	505600	311900	27	<7		CER	0	40	40	7.5YR4/4					No	C - Clay	2	2		HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	NON -	No	No	12	-2	2	WC II	3a	Wetness			3a
								40	55	15	7.5YR5/4	CF - C	10YR5/6			No	C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	NON -	No	No									
								55	120	65							C - Clay	10			HR - All hard rocks or stones (i.e. those which cannot be scratche								Poor			Yes									
3	TF 05700 11900	505700	311900	27	<7		CER	0	35	35	10YR4/3					No	HCL - Cla	2	2		HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	SC - Slig	No	No	27	8	2	WC I	2	Droughtines	Wetness		2
								35	55	20	10YR3/4					No	HCL - Clay loam (heavy)												Moderate	SC - Slig	No	No									
								55	70	15	10YR4/4					No	C - Clay												Moderate	VC - Ve	No	No									
								70	120	50							C - Clay												Moderate			No									
4	TF 05800 11900	505800	311900	27	<7		CER	0	30	30	10YR4/4					No	C - Clay	6	5	2	HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	VC - Ve	No	No	5	-8	2	WC I	2	Droughtines	Wetness		2
								30	40	10	10YR4/3					No	C - Clay	10			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	VC - Ve	No	No									
								40	120	80							C - Clay	20			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate			No									
5	TF 05900 11900	505900	311900	27	<7		CER	0	35	35	10YR3/3					No	HCL - Cla	5	4	2	HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	VC - Ve	No	No	24	6	2	WC I	2	Droughtines	Wetness		2
								35	40	5	10YR3/4					No	HCL - Clay loam (heavy)												Moderate	VC - Ve	No	No									
								40	120	80							C - Clay												Moderate			No									
6	TF 06000 11900	506000	311900	27	<7		CER	0	40	40	10YR4/4					No	MCL - Cla	5	4	1	HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	NON -	No	No	39	7	2	WC I	1	Droughtiness			2
								40	50	10	7.5YR4/2					No	HCL - Clay loam (heavy)												Moderate		No	No									
								50	75	25	7.5YR5/4					No	HCL - Clay loam (heavy)												Moderate			No									
								75	120	45							HCL - Clay loam (heavy)												Moderate			No									
7	TF 06100 11900	506100	311900	27	<7		CER	0	35	35	7.5YR3/4					No	HCL - Cla	5	4	1	HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	SC - Slig	No	No	38	6	2	WC I	2	Droughtines	Wetness		2
								35	38	3	7.5YR4/4					No	HCL - Clay loam (heavy)												Moderate		No	No									
								38	120	82							HCL - Clay loam (heavy)												Moderate			No									
8	TF 05500 11800	505500	311800	27	<7		CER	0	35	35	10YR3/4					No	C - Clay	2	2		HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	NON -	No	No	14	-3	2	WC II	3a	Wetness			3a
								35	45	10	7.5YR4/3					No	C - Clay												Moderate	NON -	No	No									
								45	120	75							C - Clay												Poor			Yes									
9	TF 05700 11800	505700	311800	27	<7		CER	0	30	30	10YR3/4					No	MCL - Cla	3	3		HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	MC - M	No	No	27	6	2	WC I	2	Droughtines	Wetness		2
								30	40	10	10YR3/3					No	MCL - Clay loam (medium)												Moderate	VC - Ve	No	No									
								40	65	25							HCL - Clay loam (heavy)												Moderate			No									
								65	120	55							C - Clay												Moderate			No									
10	TF 05900 11800	505900	311800	27	<7		CER	0	30	30	10YR3/4					No	C - Clay	8	8	4	HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	VC - Ve	No	No	19	1	2	WC I	2	Stoniness	Droughtines	Wetness	2
								30	45	15	10YR4/3					No	C - Clay												Moderate	VC - Ve	No	No									
								45	120	75							C - Clay												Moderate			No									

11	TF 06100 11800	506100	311800	27	<7	CER	0	35	35	10YR4/4			No	HCL - Cla	12	10	5	HR - All hard rocks or stones (i.e. those which cannot be scratche	Not Appli	SC - Sli	No	No	17	-8	2	WC I	1	Stoniness	Droughtiness	2
							35	40	5	7.5YR3/3			No	HCL - Cla	12			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate		No	No								
							40	120	80					HCL - Cla	20			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate			No								
12	TF 05500 11700	505500	311700	27	<7	CER	0	43	43	10YR3/4			No	MCL - Cl	2	2		HR - All hard rocks or stones (i.e. those which cannot be scratche	Not Applicable		No	No	41	9	2	WC I	1	Droughtiness		2
							43	120	77					MCL - Clay loam (medium)					Moderate			No								
13	TF 05600 11700	505600	311700	27	<7	CER	0	30	30	10YR4/3			No	MCL - Cl	3	2		HR - All hard rocks or stones (i.e. those which cannot be scratche	Not Appli	SC - Sli	No	No	37	5	2	WC I	1	Droughtiness		2
							30	45	15	10YR3/3			No	MCL - Cl	5			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	SC - Sli	No	No								
							45	120	75					MCL - Clay loam (medium)					Moderate			No								
14	TF 05700 11700	505700	311700	27	<7	CER	0	30	30	10YR3/3			No	MCL - Cl	3	3		HR - All hard rocks or stones (i.e. those which cannot be scratche	Not Appli	NON -	No	No	17	0	2	WC II	2	Droughtines	Texture	2
							30	40	10	10YR4/4			No	MCL - Cl	5			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate		No	No								
							40	50	10	10YR4/4			No	HCL - Clay loam (heavy)					Moderate			No								
							50	120	70					C - Clay					Poor			Yes								
15	TF 05800 11700	505800	311700	27	<7	CER	0	30	30	10YR3/3			No	HCL - Cla	2	2		HR - All hard rocks or stones (i.e. those which cannot be scratche	Not Appli	NON -	No	No	18	1	2	WC II	3a	Wetness		3a
							30	40	10	10YR3/4			No	HCL - Clay loam (heavy)					Moderate	NON -	No	No								
							40	50	10	7.5YR3/4	CF - C	10YR5/6	No	HCL - Clay loam (heavy)					Moderate		No	No								
							50	120	70					C - Clay					Poor			Yes								
16	TF 05900 11700	505900	311700	27	<7	CER	0	30	30	10YR3/4			No	HCL - Cla	3	3		HR - All hard rocks or stones (i.e. those which cannot be scratche	Not Appli	SC - Sli	No	No	24	6	2	WC I	2	Droughtines	Wetness	2
							30	40	10	10YR3/3			No	HCL - Clay loam (heavy)					Moderate	MC - M	No	No								
							40	45	5	10YR4/4			No	HCL - Clay loam (heavy)					Moderate	MC - M	No	No								
							45	120	75					C - Clay					Moderate			No								
17	TF 06000 11700	506000	311700	27	<7	CER	0	30	30	7.5YR3/3			No	MCL - Cl	5	3	1	HR - All hard rocks or stones (i.e. those which cannot be scratche	Not Appli	NON -	No	No	37	5	2	WC I	1	Droughtiness		2
							30	40	10	10YR3/4			No	MCL - Clay loam (medium)					Moderate	NON -	No	No								
							40	120	80					MCL - Clay loam (medium)					Moderate			No								
18	TF 06100 11700	506100	311700	27	<7	CER	0	38	38	10YR4/4			No	MCL - Cl	10	8	3	HR - All hard rocks or stones (i.e. those which cannot be scratche	Not Appli	SC - Sli	No	No	35	3	2	WC I	1	Stoniness	Droughtiness	2
							38	40	2	7.5YR4/3				MCL - Clay loam (medium)					Moderate	VC - Ve	No	No								
							40	120	80					HCL - Clay loam (heavy)					Moderate			No								
19	TF 05700 11600	505700	311600	27	<7	CER	0	39	39	10YR3/3			No	MCL - Cl	2	2		HR - All hard rocks or stones (i.e. those which cannot be scratche	Not Appli	NON -	No	No	40	8	2	WC I	1	Droughtiness		2
							39	40	1	10YR3/4			No	MCL - Clay loam (medium)					Moderate	NON -	No	No								
							40	50	10	10YR4/4			No	MCL - Clay loam (medium)					Moderate	NON - Non-ca		No								
							50	120	70					MCL - Clay loam (medium)					Moderate			No								
20	TF 05900 11600	505900	311600	27	<7	CER	0	35	35	10YR3/3			No	MCL - Cl	3	2		HR - All hard rocks or stones (i.e. those which cannot be scratche	Not Appli	NON -	No	No	39	7	2	WC I	1	Droughtiness		2
							35	45	10	7.5YR3/4			No	MCL - Clay loam (medium)					Moderate	NON -	No	No								
							45	120	75					MCL - Clay loam (medium)					Moderate	NON - Non-ca		No								

21	TF 06100 11600	506100	311600	27	≤7	CER	0	35	35	10YR3/3	No	MCL - Cl	8	6	2	HR - All hard rocks or stones (i.e. those which cannot be scratche	Not Appli	SC - Slig	No	No	-32	-20	3b	WC II	2	Droughtiness			3b
							35	40	5	10YR3/4	No	MCL - Cl	5			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	VC - Very calc	No										
							40	65	25			HCL - Cla	20			HR - All hard rocks or stones (i.e. those which cannot be scratche	Poor			Yes									
22	TF 05700 11500	505700	311500	27	≤7	CER	0	30	30	10YR3/4	No	MSZL - M	8	6	2	HR - All hard rocks or stones (i.e. those which cannot be scratche	Not Appli	NON -	No	No	8	-2	2	WC I	1	Droughtiness			2
							30	40	10	7.5YR3/4	No	MSZL - M	10			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	NON -	No	No									
							40	100	60			MSZL - M	24			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate			No									
23	TF 05800 11500	505800	311500	27	≤7	CER	0	30	30	10YR3/3	No	SCL - San	10	8	0	HR - All hard rocks or stones (i.e. those which cannot be scratche	Not Appli	SC - Slig	No	No	-9	-17	3a	WC I	1	Droughtiness			3a
							30	40	10	7.5YR3/3	No	MSL - Me	10			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate		No	No									
							40	43	3	7.5YR3/4	No	SCL - San	20			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate		No	No									
							43	100	57			SCL - San	30			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate			No									
24	TF 05900 11500	505900	311500	27	≤7	CER	0	30	30	7.5YR4/4	No	MCL - Cl	10	8	0	HR - All hard rocks or stones (i.e. those which cannot be scratche	Not Appli	NON -	No	No	-19	-8	3a	WC I	1	Droughtiness			3a
							30	40	10	10YR3/6	No	MCL - Cl	10			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate			No									
							40	75	35			MCL - Cl	20			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate			No									
25	TF 06000 11500	506000	311500	27	≤7	CER	0	38	38	7.5YR3/3	No	MCL - Cl	10	8	3	HR - All hard rocks or stones (i.e. those which cannot be scratche	Not Appli	SC - Slig	No	No	-29	-17	3b	WC I	1	Droughtiness			3b
							38	40	2	10YR3/4	No	MCL - Cl	20			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	SC - Slig	No	No									
							40	65	25			MCL - Cl	30			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate			No									
26	TF 05900 11400	505900	311400	27	≤7	CER	0	30	30	7.5YR5/4	No	MCL - Cl	10	8	2	HR - All hard rocks or stones (i.e. those which cannot be scratche	Not Appli	NON -	No	No	-33	-22	3b	WC I	1	Droughtiness			3b
							30	40	10	7.5YR3/3	No	SCL - San	20			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate		No	No									
							40	65	25			SCL - San	30			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate			No									
27	TF 06000 11300	506000	311300	27	≤7	CER	0	30	30	10YR3/4	No	HCL - Cla	10	8	2	HR - All hard rocks or stones (i.e. those which cannot be scratche	Not Appli	NON -	No	No	-31	-19	3b	WC I	2	Stoniness	Droughtines	Wetness	3b
							30	45	15	7.5YR4/4	No	HCL - Cla	20			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate		No	No									
							45	65	20			HCL - Cla	30			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate			No									
	END																												

Detailed: Area J SP1

Project Number	Project Name	Parcel
C925JSP1	Mallard Pass Detailed ALC Area J SP1	SP1

Date of Survey	Survey Type	Surveyor(s)	Company
12/10/2022	Detailed ALC	RWA	Askew Land and Soil

Weather	Relief	Land use and vegetation
Mild, cloudy, light showers	Undulated	CER (Cereals)

Grid Reference	Postcode	Altitude	Area
TF611101	PE9 4QD	27	

MAFF prov	MAFF detailed	Flooding
Grade 3	None	Flood Zone 1

AAR	AT0	MDw	MDp	FCD	Climate grade
578	1424	116	110	113	1

Bedrock	Superficial deposits
Limestone	None Recorded

Soil association(s) 1:250,000	Detailed soil information
Sherborne Association	None

Revision Number	Date Revised
2	02/11/2022

Point	Grid ref.			Alt (m)	Slope °	Aspect	Land use	Depth (cm)			Matrix	Ochreous Mottles		Grey Mottles		Gley	Texture	Stones - type 1				Stones - type 2				Ped			SUBS STR	CaCO3	Mn C	SPL	Drought			Wet		Final ALC			
	NGR	X	Y					Top	Bttm	Thick	Munsell colour	Form	Munsell colour	Form	Munsell colour			%	> 2cm	> 6cm	Type	%	> 2cm	> 6cm	Type	Strength	Size	Shape					MBw	MBp	Gd	WC	Gw	Limitation 1	Limitation 2	Limitation 3	Grade
1	TF057106	505700	310600	29	≤7		CER	0	26	26	10YR4/3						C - Clay	8	6	2	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi								NON -	Non-calcar		10	-7	2	WC II	3a	Wetness			3a
								26	50	24	10YR5/4					No	C - Clay	6			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	NON -	No	No								
								50	120	70	10YR5/3	CD - C	10YR4/6			Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratche								Poor	NON -	Yes	Yes								
2	TF059106	505900	310600	25	≤7		CER	0	24	24	7.5YR4/3						HCL - Cla	35	18		HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi								SC -	Slightly calcar		-65	-59	4	WC I	1	Droughtiness			4
								24	50	26							HCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	SC -	Slightly c	No								
3	TF061106	506100	310600	21	≤7		CER	0	28	28	10YR4/2						C - Clay	1	0	0	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi								NON -	Non-calcar		35	4	2	WC II	3a	Wetness			3a
								28	120	92	10YR5/3	CD - C	7.5YR5/6			Yes	HCL - Cla	1			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	NON -	Yes	No								
4	TF063106	506300	310600	20	≤7		CER	0	23	23	10YR4/2						HCL - Cla	6	4	1	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi								VSC -	Very slightly		31	2	2	WC I	2	Droughtines	Wetness		2
								23	62	39	10YR5/3	FD - F	10YR5/6			Yes	C - Clay	1			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	VSC -	No	No								
								62	120	58	10YR5/6					No	SCL - San	5			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	SC -	No	No								
5	TF056105	505600	310500	29	≤7		CER	0	24	24	10YR4/2						C - Clay	10	8	2	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi								NON -	Non-calcar		4	-11	3a	WC II	3a	Droughtines	Wetness		3a
								24	50	26	10YR5/4					No	C - Clay	10			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	NON -	No	No								
								50	120	70	10YR5/3	CD - C	10YR4/6			Yes	C - Clay	8			HR - All hard rocks or stones (i.e. those which cannot be scratche								Poor	NON -	Yes	Yes								
6	TF057105	505700	310500	29	≤7		CER	0	24	24	7.5YR4/3						HCL - Cla	20	16		HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi								SC -	Slightly calcar		-55	-49	4	WC I	1	Droughtiness			4
								24	50	26							HCL - Cla	40			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	SC -	Slightly c	No								
7	TF058105	505800	310500	29	≤7		CER	0	24	24	10YR4/2						C - Clay	24	18	8	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi								NON -	Non-calcar		-3	-18	3a	WC II	3a	Stoniness			3b
								24	45	21	10YR5/4					No	C - Clay	10			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	NON -	No	No								
								45	120	75	10YR5/3	CD - C	10YR4/6			Yes	C - Clay	8			HR - All hard rocks or stones (i.e. those which cannot be scratche								Poor	NON -	Yes	Yes								
8	TF059105	505900	310500	25	≤7		CER	0	26	26	10YR4/3						C - Clay	1	0	0	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi								NON -	Non-calcar		35	4	2	WC II	3a	Wetness			3a
								26	120	94	10YR5/3	CD - C	7.5YR5/6			Yes	HCL - Cla	1			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	NON -	Yes	No								
9	TF060105	506000	310500	25	≤7		CER	0	28	28	10YR4/3						HCL - Cla	20	15	5	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi								SC -	Slightly calcar		-8	-22	3a	WC III	3a	Stoniness	Droughtines	Wetness	3a
								28	120	92	10YR6/2	CD - C	10YR5/6			Yes	C - Clay	15			HR - All hard rocks or stones (i.e. those which cannot be scratche								Poor	MC - M	Yes	Yes								
10	TF061105	506100	310500	21	≤7		CER	0	30	30	10YR4/3						HCL - Cla	1	0	0	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi								NON -	Non-calcar		25	7	2	WC II	3a	Wetness			3a
								30	120	90	10YR5/3	CD - C	7.5YR5/6			Yes	C - Clay	1			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	NON -	Yes	No								

11	TF062105	506200	310500	21	≤7		CER	0	24	24	10YR4/2						C - Clay	10	8	2	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi		SC - Slightly calcar			0	-16	3a	WC III	3a	Droughtines	Wetness		3a
								24	30	6	10YR5/3	CD - C	10YR5/6			Yes	C - Clay	5			HR - All hard rocks or stones (i.e. those which cannot be scratche	Poor	SC - Slig	Yes	Yes									
								30	120	90						Yes	C - Clay	5			HR - All hard rocks or stones (i.e. those which cannot be scratche	Poor	SC - Slig	No	Yes									
12	TF063105	506300	310500	20	≤7		CER	0	28	28	10YR4/3						HCL - Cla	8	6	1	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi		VSC - Very slightly			19	3	2	WC I	2	Stoniness	Droughtines	Wetness	2
								28	62	34	10YR5/3	FD - F	10YR5/6			Yes	C - Clay	1			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	VSC - V	No	No									
								62	120	58	10YR5/6					No	C - Clay	5			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	SC - Slig	No	No									
13	TF064105	506400	310500	20	≤7		CER	0	28	28	10YR4/3						C - Clay	10	8	2	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi		NON - Non-calcar			5	-8	3a	WC II	3a	Droughtines	Wetness		3a
								28	62	34	10YR5/4					No	C - Clay	10			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	NON -	No	No									
								62	120	58	2.5Y6/2	CP - C	10YR5/6			Yes	C - Clay	10			HR - All hard rocks or stones (i.e. those which cannot be scratche	Poor	SC - Slig	No	Yes									
14	TF057104	505700	310400	33	≤7		CER	0	25	25	10YR4/3						HCL - Cla	15	8		HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi		SC - Slightly calcar			-30	-21	3b	WC I	2	Droughtiness			3b
								25	35	10	10YR4/4					No	HCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	SC - Slig	No	No									
								35	55	20	10YR5/4					No	HCL - Cla	15			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	MC - M	No	No									
								55	80	25	10YR6/2					No	HCL - Cla	70			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	MC - M	No	No									
15	TF059104	505900	310400	31	≤7		CER	0	32	32	10YR4/3						C - Clay	30	16	10	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi		SC - Slightly calcar			-15	-28	3a	WC III	3a	Stoniness			3b
								32	120	88	10YR6/2	CD - C	10YR5/6			Yes	C - Clay	15			HR - All hard rocks or stones (i.e. those which cannot be scratche	Poor	MC - M	Yes	Yes									
16	TF061104	506100	310400	27	≤7		CER	0	30	30	10YR4/2						HCL - Cla	25	16	10	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi		SC - Slightly calcar			-10	-24	3a	WC III	3a	Stoniness			3b
								30	120	90	10YR6/2	CD - C	10YR5/6			Yes	C - Clay	15			HR - All hard rocks or stones (i.e. those which cannot be scratche	Poor	MC - M	Yes	Yes									
17	TF063104	506300	310400	21	≤7		CER	0	20	20	10YR4/3						C - Clay	20	12	6	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi		SC - Slightly calcar			-4	-20	3a	WC III	3a	Stoniness	Droughtines	Wetness	3a
								20	30	10	10YR5/3	CD - C	10YR5/6			Yes	C - Clay	5			HR - All hard rocks or stones (i.e. those which cannot be scratche	Poor	SC - Slig	Yes	Yes									
								30	120	90						Yes	C - Clay	5			HR - All hard rocks or stones (i.e. those which cannot be scratche	Poor	SC - Slig	No	Yes									
18	TF057103	505700	310300	33	≤7		CER	0	24	24	10YR4/3						HCL - Cla	20	6		HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi		VSC - Very slightly			7	-13	3a	WC II	3a	Droughtines	Wetness		3a
								24	40	16	2.5Y4/4					No	HCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	SC - Slig	No	No									
								40	72	32	2.5Y6/2	CD - C	10YR5/6			Yes	HCL - Cla	20			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	MC - M	No	No									
								72	120	48	2.5Y6/1	CD - C	10YR5/6			Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratche	Poor	NON -	No	Yes									
19	TF058103	505800	310300	32	≤7		CER	0	30	30	10YR4/3						HCL - Cla	24	13	10	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi		SC - Slightly calcar			-6	-21	3a	WC III	3a	Stoniness	Droughtines	Wetness	3a
								30	120	90	10YR6/2	CD - C	10YR5/6			Yes	C - Clay	10			HR - All hard rocks or stones (i.e. those which cannot be scratche	Poor	MC - M	Yes	Yes									
20	TF059103	505900	310300	31	≤7		CER	0	32	32	10YR4/2						C - Clay	22	10	6	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi		SC - Slightly calcar			-14	-27	3a	WC III	3a	Stoniness	Droughtines	Wetness	3a
								32	120	88	10YR6/2	CD - C	10YR5/6			Yes	C - Clay	20			HR - All hard rocks or stones (i.e. those which cannot be scratche	Poor	MC - M	Yes	Yes									

21	TF060103	506000	310300	31	≤7		CER	0	32	32	10YR4/2						HCL - Cla	25	12	8	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi									SC - Slightly calca			-10	-23	3a	WC III	3a	Stoniness	Droughtines	Wetness	3a
								32	120	88	10YR6/2	CD - C	10YR5/6			Yes	C - Clay	15			HR - All hard rocks or stones (i.e. those which cannot be scratche								Poor	MC - M	Yes	Yes									
22	TF061103	506100	310300	27	≤7		CER	0	20	20	10YR4/2						HCL - Cla	18	11	6	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi									SC - Slightly calca			-2	-18	3a	WC III	3a	Stoniness	Droughtines	Wetness	3a
								20	30	10	10YR5/3	CD - C	10YR5/6			Yes	C - Clay	5			HR - All hard rocks or stones (i.e. those which cannot be scratche								Poor	SC - Sli	Yes	Yes									
								30	120	90						Yes	C - Clay	5			HR - All hard rocks or stones (i.e. those which cannot be scratche								Poor	SC - Sli	No	Yes									
23	TF057102	505700	310200	33	≤7		CER	0	32	32	10YR4/2						HCL - Cla	20	15	6	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi									SC - Slightly calca			-4	-18	3a	WC III	3a	Stoniness	Droughtines	Wetness	3a
								32	120	88	10YR6/2	CD - C	10YR5/6			Yes	C - Clay	10			HR - All hard rocks or stones (i.e. those which cannot be scratche								Poor	MC - M	Yes	Yes									
24	TF059102	505900	310200	33	≤7		CER	0	24	24	10YR4/3						HCL - Cla	16	10	6	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi									SC - Slightly calca			-1	-17	3a	WC III	3a	Droughtines	Wetness		3a
								24	30	6	10YR5/3	CD - C	10YR5/6			Yes	C - Clay	6			HR - All hard rocks or stones (i.e. those which cannot be scratche								Poor	SC - Sli	Yes	Yes									
								30	120	90						Yes	C - Clay	6			HR - All hard rocks or stones (i.e. those which cannot be scratche								Poor	SC - Sli	No	Yes									
25	TF061102	506100	310200	31	≤7		CER	0	30	30	10YR4/2						C - Clay	8	6	2	HR - All hard rocks or stones (i.e. those which cannot be scratched with a fi									SC - Slightly calca			9	-4	2	WC II	2	Stoniness	Droughtines	Wetness	2
								30	70	40	10YR5/3	CD - C	10YR5/6			Yes	C - Clay	8			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	MC - M	No	No									
								70	120	50	10YR5/3	CD - C	10YR5/6	CD - C	10YR5/1	Yes	C - Clay	4			HR - All hard rocks or stones (i.e. those which cannot be scratche								Poor	SC - Sli	No	Yes									
	END																																								

Detailed: Area J SP2

Project Number	Project Name	Parcel
C925J	Mallard Pass Detailed ALC Area J SP2	SP2

Date of Survey	Survey Type	Surveyor(s)	Company
14/10/2022	Detailed ALC	RDM	Askew Land and Soil

Weather	Relief	Land use and vegetation
Mild, cloudy	Gently undulated	CER (Cereals)

Grid Reference	Postcode	Altitude	Area
TF061101	PE9 4QD	27	

MAFF prov	MAFF detailed	Flooding
Grade 3	None	Flood Zone 1

AAR	AT0	MDw	MDp	FCD	Climate grade
578	1424	116	110	113	1

Bedrock	Superficial deposits
Limestone	None Recorded

Soil association(s) 1:250,000	Detailed soil information
Sherborne Associaiton	None

Revision Number	Date Revised
2	02/11/2022

Point	Grid ref.			Alt (m)	Slope °	Aspect	Land use	Depth (cm)			Matrix	Ochreous Mottles		Grey Mottles		Gley	Texture	Stones - type 1				Stones - type 2				Ped			SUBS STR	CaCO3	Mn C	SPL	Drought			Wet		Final ALC			
	NGR	X	Y					Top	Bttm	Thick	Munsell colour	Form	Munsell colour	Form	Munsell colour			%	> 2cm	> 6cm	Type	%	> 2cm	> 6cm	Type	Strength	Size	Shape					MBw	MBp	Gd	WC	Gw	Limitation 1	Limitation 2	Limitation 3	Grade
26	TF058101	505800	310100	27	≤7		CER	0	30	30	1OYR4/4					No	C - Clay	15	13	8	HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	VC - Ve	No	No	-13	-22	3a	WC I	2	Stoniness	Droughtiness		3a
								30	40	10	10YR4/3					No	C - Clay	10			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	VC - Ve	No	No									
								40	120	80							C - Clay	40			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate			No									
27	TF059101	505900	310100	27	≤7		CER	0	33	33	2.5Y4/3					No	C - Clay	2	2		HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	VSC - V	No	No	21	3	2	WC I	3a	Wetness			3a
								33	40	7	2.5Y4/2					No	C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	VSC - V	No	No									
								40	60	20	10YR4/6	CF - C	10YR5/6			No	C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	SC - Slig	Yes	No									
								60	80	20	2.5Y5/4					No	C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	SC - Slig	No	No									
								80	120	40							C - Clay												Moderate			No									
28	TF060101	506000	310100	27	≤7		CER	0	35	35	2.5Y3/2					No	C - Clay	2	2		HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	NON -	No	No	11	-5	2	WC II	3a	Wetness			3a
								35	40	5	2.5Y3/2					No	C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	NON -	No	No									
								40	70	30	2.5Y5/3	MD - M	10YR5/6			Yes	C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratche								Poor	SC - Slig	No	Yes									
								70	120	50	2.5Y5/4					No	C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratche								Poor		No	No									
29	TF061101	506100	310100	27	≤7		CER	0	30	30	1OYR4/4					No	C - Clay	8	7	4	SLST - Soft oolitic or dolomitic limestones								Not Appli	VC - Ve	No	No	-1	-14	3a	WC I	2	Stoniness	Droughtiness		3a
								30	40	10	10YR4/3					No	C - Clay	15			SLST - Soft oolitic or dolomitic limestones								Moderate	VC - Ve	No	No									
								40	120	80							C - Clay	40			SLST - Soft oolitic or dolomitic limestones								Moderate			No									
30	TF059100	505900	310000	27	≤7		CER	0	33	33	1OYR4/4					No	C - Clay	6	6	3	HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	SC - Slig	No	No	-1	-15	3a	WC I	2	Stoniness	Droughtiness		3a
								33	35	2	2.5Y5/4					No	C - Clay	15			SLST - Soft oolitic or dolomitic limestones								Moderate	MC - M	No	No									
								35	120	85							C - Clay	40			SLST - Soft oolitic or dolomitic limestones								Moderate			No									
31	TF061100	506100	310000	27	≤7		CER	0	20	20	7.5YR4/3					No	C - Clay	12	12	8	SLST - Soft oolitic or dolomitic limestones								Not Appli	SC - Slig	No	No	-6	-20	3a	WC I	2	Stoniness	Droughtiness		3a
								20	30	10	10YR4/4					No	C - Clay	12			SLST - Soft oolitic or dolomitic limestones								Moderate	SC - Slig	No	No									
								30	120	90							C - Clay	40			SLST - Soft oolitic or dolomitic limestones								Moderate			No									
32	TF059099	505900	309900	27	≤7		CER	0	33	33	7.5YR3/3					No	HCL - Cla	5	4	2	HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	NON -	No	No	24	6	2	WC I	2	Droughtines	Wetness		2
								33	40	7	7.5YR3/4					No	HCL - Cla	2			MSST - Soft, medium or coarse grained sandstones								Moderate	NON -	No	No									
								40	42	2	7.5YR3/4						C - Clay												Moderate		No	No									
								42	120	78							C - Clay												Moderate			No									
33	TF060099	506000	309900	27	≤7		CER	0	35	35	10YR3/4					No	C - Clay	5	4	2	SLST - Soft oolitic or dolomitic limestones								Not Appli	SC - Slig	No	No	9	-6	2	WC I	2	Droughtines	Wetness		2
								35	40	5	10YR4/4					No	C - Clay	12			SLST - Soft oolitic or dolomitic limestones								Moderate	SC - Slig	No	No									
								40	120	80							C - Clay	25			SLST - Soft oolitic or dolomitic limestones								Moderate			No									
34	TF061099	506100	309900	27	≤7		CER	0	30	30	10YR4/4					No	C - Clay	6	5	3	HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	NON -	No	No	0	-14	3a	WC II	3a	Droughtines	Wetness		3a
								30	40	10	7.5YR3/4					No	C - Clay	5			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	NON -	No	No									
								40	120	80							C - Clay	20			MSST - Soft, medium or coarse grained sandstones								Poor			Yes									
35	TF062099	506200	309900	27	≤7		CER	0	38	38	10YR4/4					No	C - Clay	5	5	3	HR - All hard rocks or stones (i.e. those which cannot be scratche								Not Appli	MC - M	No	No	11	-3	2	WC I	2	Droughtines	Wetness		2
								38	50	12	7.5YR3/4					No	C - Clay	5			HR - All hard rocks or stones (i.e. those which cannot be scratche								Moderate	SC - Slig	No	No									
								50	120	70							C - Clay	20			MSST - Soft, medium or coarse grained sandstones								Moderate			No									

36	TF061098	506100	309800	27	≤7	CER	0	30	30	10YR4/4	No	HCL - Cla	12	10	6	HR - All hard rocks or stones (i.e. those which cannot be scratche	Not Appli	NON -	No	No	-4	-17	3a	WC II	3a	Stoniness	Droughtines	Wetness	3a
							30	40	10			HCL - Cla	15			HR - All hard rocks or stones (i.e. those which cannot be scratche	Moderate	NON - Non-ca		No									
							40	120	80			C - Clay	20			HR - All hard rocks or stones (i.e. those which cannot be scratche	Poor			Yes									
37	TF061097	506100	309700	27	≤7	CER	0	40	40	10YR4/4	No	HCL - Cla	6	5	3	SLST - Soft oolitic or dolomitic limestones	Not Appli	NON -	No	No	15	-2	2	WC II	3a	Wetness			3a
							40	120	80			C - Clay					Poor			Yes									
38	TF062097	506200	309700	27	≤7	CER	0	38	38	10YR4/4	No	HCL - Cla	8	5	3	SI - Soft 'weathered' igneous or metamorphic rocks or stones	Not Appli	SC - Sli	No	No	23	5	2	WC I	2	Droughtines	Wetness		2
							38	40	2	10YR3/4	No	HCL - Clay loam (heavy)					Moderate	VC - Very calc		No									
							40	120	80			C - Clay					Moderate			No									
39	TF063097	506300	309700	27	≤7	CER	0	38	38	10YR4/4	No	HCL - Cla	8	6	3	SLST - Soft oolitic or dolomitic limestones	Not Appli	SC - Sli	No	No	37	5	2	WC I	2	Stoniness	Droughtines	Wetness	2
							38	40	2	10YR3/4	No	HCL - Cla	5			SLST - Soft oolitic or dolomitic limestones	Moderate	VC - Ve	No	No									
							40	120	80			HCL - Clay loa		20		SLST - Soft oolitic or dolomitic limestones	Moderate			No									
40	TF061096	506100	309600	27	≤7	CER	0	38	38	10YR4/4	No	HCL - Cla	6	5	4	SLST - Soft oolitic or dolomitic limestones	Not Appli	SC - Sli	No	No	24	6	2	WC I	2	Droughtines	Wetness		2
							38	43	5	10YR5/4	No	HCL - Cla	5			SLST - Soft oolitic or dolomitic limestones	Moderate	SC - Sli	No	No									
							43	120	77			C - Clay		20		SLST - Soft oolitic or dolomitic limestones	Moderate			No									
41	TF063096	506300	309600	27	≤7	CER	0	30	30	10YR4/4	No	HCL - Cla	8	7	3	SLST - Soft oolitic or dolomitic limestones	Not Appli	SC - Sli	No	No	22	-5	2	WC I	2	Stoniness	Droughtines	Wetness	2
							30	35	5			HCL - Cla	20			SLST - Soft oolitic or dolomitic limestones	Moderate			No									
							35	120	85			HCL - Cla	20			SLST - Soft oolitic or dolomitic limestones	Moderate			No									
	END																												

Annex 5
Description of Soil Pits

Project	Location	Date	Surveyor(s)	Company
C810	KCC3051 Mallards Pass Area D	09-Dec-21	RM	Askew Land and Soil

Pit	WC	Grade	Limitation(s)	Notes
1	I		limestone present	

Grid Ref.			Altitude	Nearest	Topography				Flora		Weather and conditions			
Square	East	North		point	Gradient	Aspect	Slope form	Surface	Culivation type	Vegetation types	Temp	Sky	Wind	Precipitation
TF	032	128	39m	D90	<7					Cereals	Cold	Cloudy	Slight	Showers

Horizon	Depth		Matrix			Gleying			Mottles			Stone content					Calc.	Mn C	Ped/soil structure				Horizon boundary		Biopores	SPL
	Top	Bttm	Texture	Colour	Munsell	Gley	Colour	Munsell	Form	Colour	Munsell	%	H	Type	S	Type			Dev.	Size	Structure	Strength	Distinct	Form	>0.5mm	
1	0	28	m/hcl		7.5YR4/6												VC		wk	f	sab	friable	clear	wavy	>0.5%	N
2	28	30	hcl		7.5YR4/6							10		hr					wk	f	sab	friable	clear	wavy	>0.5%	N
3	30		limestone																							

Pit	WC	Grade	Limitation(s)	Notes

Grid Ref.			Altitude	Nearest	Topography				Flora		Weather and conditions			
Square	East	North		point	Gradient	Aspect	Slope form	Surface	Culivation type	Vegetation types	Temp	Sky	Wind	Precipitation

Horizon	Depth		Matrix			Gleying			Mottles			Stone content					Calc.	Mn C	Ped/soil structure				Horizon boundary		Biopores	SPL
	Top	Bttm	Texture	Colour	Munsell	Gley	Colour	Munsell	Form	Colour	Munsell	%	H	Type	S	Type			Dev.	Size	Structure	Strength	Distinct	Form		

Project	Location	Date	Surveyor(s)	Company
C810	KCC3051 Mallards Pass Area G	09-Dec-21	AR	Askew Land and Soil

Pit	WC	Grade	Limitation(s)	Notes
Pit 2	III	3b	Wetness and Workabilty	Borderline WCII/III, due to variability in subsoil structure development. This is caused by mix of plastic C with more loamy lenses.

Grid Ref.			Altitude	Nearest	Topography				Flora		Weather and conditions			
Square	East	North		point	Gradient	Aspect	Slope form	Surface	Culivation type	Vegetation types	Temp	Sky	Wind	Precipitation
TF	07601	12603	21	G105	1°	East	flat	wheat crop	conventional	wheat	Cold	Cloudy	Slight	Showers

Horizon	Depth		Matrix			Gleying			Mottles			Stone content					Calc.	Mn C	Ped/soil structure				Horizon boundary		Biopores	SPL
	Top	Bttm	Texture	Colour	Munsell	Gley	Colour	Munsell	Form	Colour	Munsell	%	H	Type	S	Type			Dev.	Size	Structure	Strength	Distinct	Form	>0.5mm	
1	0	25	HCL		10YR4/2							5		HR			NC						clear	wavy		
2	25	50	C		2.5Y5/2			7.5YR5/6	CD		7.5YR5/6	2		HR			NC	None	Weak/adl	Coarse/very c	SAB	Firm			<0.5%	Y

Pit	WC	Grade	Limitation(s)	Notes

Grid Ref.			Altitude	Nearest	Topography				Flora		Weather and conditions			
Square	East	North		point	Gradient	Aspect	Slope form	Surface	Culivation type	Vegetation types	Temp	Sky	Wind	Precipitation

Horizon	Depth		Matrix			Gleying			Mottles			Stone content					Calc.	Mn C	Ped/soil structure				Horizon boundary		Biopores	SPL
	Top	Bttm	Texture	Colour	Munsell	Gley	Colour	Munsell	Form	Colour	Munsell	%	H	Type	S	Type			Dev.	Size	Structure	Strength	Distinct	Form		

Annex 6

Certificates of Analysis

TEST REPORT

ISSUED BY SOIL PROPERTY TESTING LTD

DATE ISSUED: 17/01/2022

0998

Contract	**Mallards Pass**
Serial No.	**40007_1**

Client:

Kernon Countryside Consultants Limited
Greenacres Barn,
Stoke Common Lane,
Purton Stoke,
Swindon
SN5 4LL

Soil Property Testing Ltd

15, 16, 18 Halcyon Court, St Margaret's Way, Stukeley Meadows, Huntingdon, Cambridgeshire, PE29 6DG

Tel: 01480 455579
Email: enquiries@soilpropertytesting.com
Website: [redacted]

Samples Submitted By:

Kernon Countryside Consultants Limited

Samples Labelled:

Mallards Pass

Approved Signatories:

☑ **J.C. Garner B.Eng (Hons) FGS**
Technical Director & Quality Manager

☐ **W. Johnstone**
Materials Lab Manager

[redacted]

Date Received: 11/01/2022

Samples Tested Between: 11/01/2022 **and** 17/01/2022

Remarks:

For the attention of Sarah Kernon
Your Reference No: C810

Notes:

1. All remaining samples or remnants from this contract will be disposed of after 21 days from today, unless we are notified to the contrary.
2. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.
3. Tests marked "NOT UKAS ACCREDITED" in this test report are not included in the UKAS Accreditation Schedule for this testing laboratory.
4. This test report may not be reproduced other than in full except with the prior written approval of the issuing laboratory.
5. The results within this report only relate to the items tested or sampled.

TEST REPORT

ISSUED BY SOIL PROPERTY TESTING LTD

DATE ISSUED: 17/01/2022

0998

Contract	**Mallards Pass**		
Serial No.	**40007_1**	**Target Date**	25/01/2022
Scheduled By	Kernon Countryside Consultants Limited		
Schedule Remarks			

Bore Hole No.	Type	Sample Ref.	Top Depth	Particle Size Distribution (BS1377)	Sample Remarks
AB119	G	-	0.00	1	
AB149	H	-	0.00	1	
AB64	E	-	0.00	1	
Totals				**3**	**End of Schedule**

TEST REPORT

ISSUED BY SOIL PROPERTY TESTING LTD

DATE ISSUED: 17/01/2022

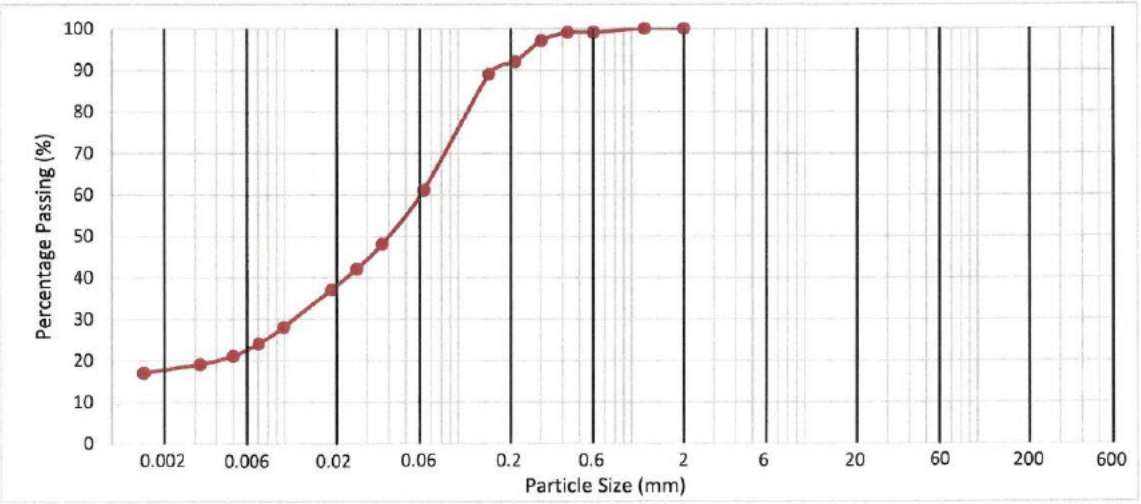
0998

Contract	Mallards Pass
Serial No.	40007_1

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Pit No.	Depth (m)	Sample Type	Sample Reference	Description	Remarks
AB119	0.00 - 0.25	G	-	Brown sandy SILT/CLAY	Material greater than 2mm removed before test

Method of Test:	Hydrometer + Pre-sieve	Method of Pretreatment:	Not required



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES	BOULDERS
	SILT			SAND			GRAVEL				

Hydrometer	Particle Size (mm)	Passing (%)	Silt by Dry Mass (%)
	0.0363	48	43
	0.0260	42	
	0.0186	37	
	0.0098	28	Clay by Dry Mass (%)
	0.0070	24	
	0.0050	21	
	0.0032	19	18
	0.0015	17	

Sieve Size (mm)	Passing (%)	Sand By Dry Mass (%)
2.00	100	39
1.18	100	
0.600	99	
0.425	99	
0.300	97	
0.212	92	
0.150	89	
0.063	61	

Fines By Dry Mass (%)	
<0.063mm	61

Sieve Size (mm)	Passing (%)	2mm+ By Dry Mass (%)
300		0
125		
90		
63		
50		
37.5		
28		
20		
14		
10		
6.3		
5		

Method of Preparation: BS1377: Part 1: 2016: 8.3 & 8.4.5
Method of test: BS1377: Part 2: 1990: 9.2,9.5
Type of Sample Key: U=Undisturbed, B=Bulk, D=Disturbed, J=Jar, W=Water, SPT=Split Spoon Sample, C=Core Cutter
Comments:

[redacted]

TEST REPORT

ISSUED BY SOIL PROPERTY TESTING LTD

DATE ISSUED: 17/01/2022

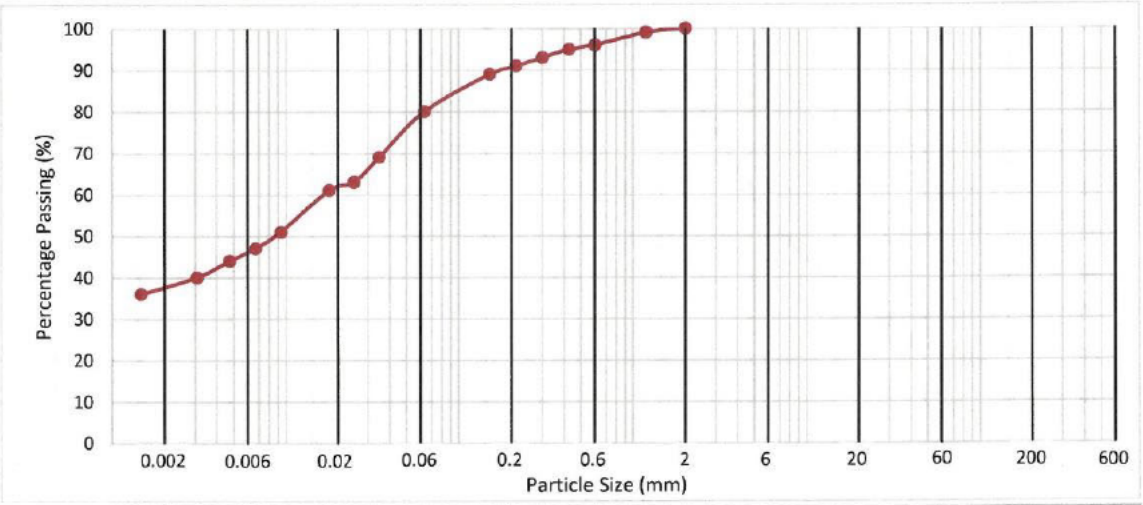
0998

Contract	Mallards Pass
Serial No.	40007_1

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Pit No.	Depth (m)	Sample Type	Sample Reference	Description	Remarks
AB149	0.00 - 0.25	H	-	Brown slightly sandy silty CLAY with rare fine gravel and recently active roots	Material greater than 2mm removed before test

Method of Test:	Hydrometer + Pre-sieve	Method of Pretreatment:	Not required



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES	BOULDERS
	SILT			SAND			GRAVEL				

Hydrometer

Particle Size (mm)	Passing (%)
0.0346	69
0.0248	63
0.0177	61
0.0094	51
0.0067	47
0.0047	44
0.0031	40
0.0015	36

Silt by Dry Mass (%): 43

Clay by Dry Mass (%): 37

Sieve Size (mm)	Passing (%)
2.00	100
1.18	99
0.600	96
0.425	95
0.300	93
0.212	91
0.150	89
0.063	80

Sand By Dry Mass (%): 20

Fines By Dry Mass (%)	
<0.063mm	80

Sieve Size (mm)	Passing (%)
300	
125	
90	
63	
50	
37.5	
28	
20	
14	
10	
6.3	
5	

2mm+ By Dry Mass (%): 0

Method of Preparation: BS1377: Part 1: 2016: 8.3 & 8.4.5
Method of test: BS1377: Part 2: 1990: 9.2,9.5
Type of Sample Key: U=Undisturbed, B=Bulk, D=Disturbed, J=Jar, W=Water, SPT=Split Spoon Sample, C=Core Cutter
Comments:

[redacted]

TEST REPORT

ISSUED BY SOIL PROPERTY TESTING LTD

DATE ISSUED: 17/01/2022

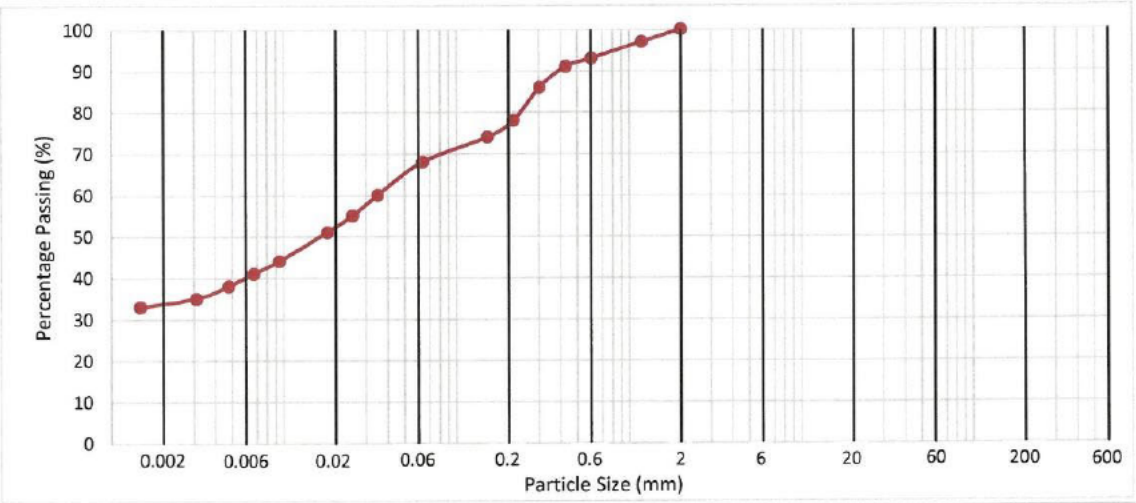
0998

Contract	Mallards Pass
Serial No.	40007_1

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Pit No.	Depth (m)	Sample Type	Sample Reference	Description	Remarks
AB64	0.00 - 0.25	E	-	Yellowish brown slightly gravelly slightly sandy silty CLAY with rare fossil debris and recently active roots. Gravel is fine and medium limestone fragments	Material greater than 2mm removed before test

Method of Test:	Hydrometer + Pre-sieve	Method of Pretreatment:	Not required



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES	BOULDERS
	SILT			SAND			GRAVEL				

Hydrometer

Particle Size (mm)	Passing (%)	Silt by Dry Mass (%)	Clay by Dry Mass (%)
0.0348	60	34	
0.0249	55		
0.0178	51		
0.0094	44		34
0.0067	41		
0.0048	38		
0.0031	35		
0.0015	33		

Sieve Size (mm)	Passing (%)	Sand By Dry Mass (%)
2.00	100	32
1.18	97	
0.600	93	
0.425	91	
0.300	86	
0.212	78	
0.150	74	
0.063	68	

Fines By Dry Mass (%)	
<0.063mm	68

Sieve Size (mm)	Passing (%)	2mm+ By Dry Mass (%)
300		0
125		
90		
63		
50		
37.5		
28		
20		
14		
10		
6.3		
5		

Method of Preparation:	BS1377: Part 1: 2016: 8.3 & 8.4.5
Method of test:	BS1377: Part 2: 1990: 9.2,9.5
Type of Sample Key:	U=Undisturbed, B=Bulk, D=Disturbed, J=Jar, W=Water, SPT=Split Spoon Sample, C=Core Cutter
Comments:	

[redacted]

TEST REPORT

ISSUED BY SOIL PROPERTY TESTING LTD

DATE ISSUED: 01/11/2022

0998

Contract	**Mallard Pass Solar Farm**
Serial No.	**41612_1**

Client:

Kernon Countryside Consultants Limited
Greenacres Barn,
Stoke Common Lane,
Purton Stoke,
Swindon
SN5 4LL

Soil Property Testing Ltd

15, 16, 18 Halcyon Court, St Margaret's Way, Stukeley Meadows, Huntingdon, Cambridgeshire, PE29 6DG

Tel: 01480 455579
Email: enquiries@soilpropertytesting.com
Website: [redacted]

Samples Submitted By:

Kernon Countryside Consultants Limited

Samples Labelled:

Mallard Pass Solar Farm

Approved Signatories:

☑ **J.C. Garner B.Eng (Hons) FGS**
Technical Director & Quality Manager

☐ **W. Johnstone**
Materials Lab Manager

[redacted]

Date Received: 17/10/2022

Samples Tested Between: 17/10/2022 **and** 01/11/2022

Remarks:

For the attention of Sarah Kernon
Your Reference No: KCC3051

Notes:

1. All remaining samples or remnants from this contract will be disposed of after 21 days from today, unless we are notified to the contrary.
2. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.
3. Tests marked "NOT UKAS ACCREDITED" in this test report are not included in the UKAS Accreditation Schedule for this testing laboratory.
4. This test report may not be reproduced other than in full except with the prior written approval of the issuing laboratory.
5. The results within this report only relate to the items tested or sampled.

TEST REPORT

ISSUED BY SOIL PROPERTY TESTING LTD

DATE ISSUED: 01/11/2022

UKAS TESTING
0998

Contract	**Mallard Pass Solar Farm**		
Serial No.	**41612_1**	**Target Date**	31/10/2022
Scheduled By	Kernon Countryside Consultants Limited		

Schedule Remarks

Bore Hole No.	Type	Sample Ref.	Top Depth	Particle Size Distribution (BS1377)	Sample Remarks
-	D	-	0.00	1	
-	F	-	0.00	1	
-	I	-	0.00	1	
-	J	-	0.00	1	
-	K	-	0.00	1	
-	A	-	0.00	1	
-	B	-	0.00	1	
-	C	-	0.00	1	
Totals				**8**	**End of Schedule**

TEST REPORT

ISSUED BY SOIL PROPERTY TESTING LTD

DATE ISSUED: 01/11/2022

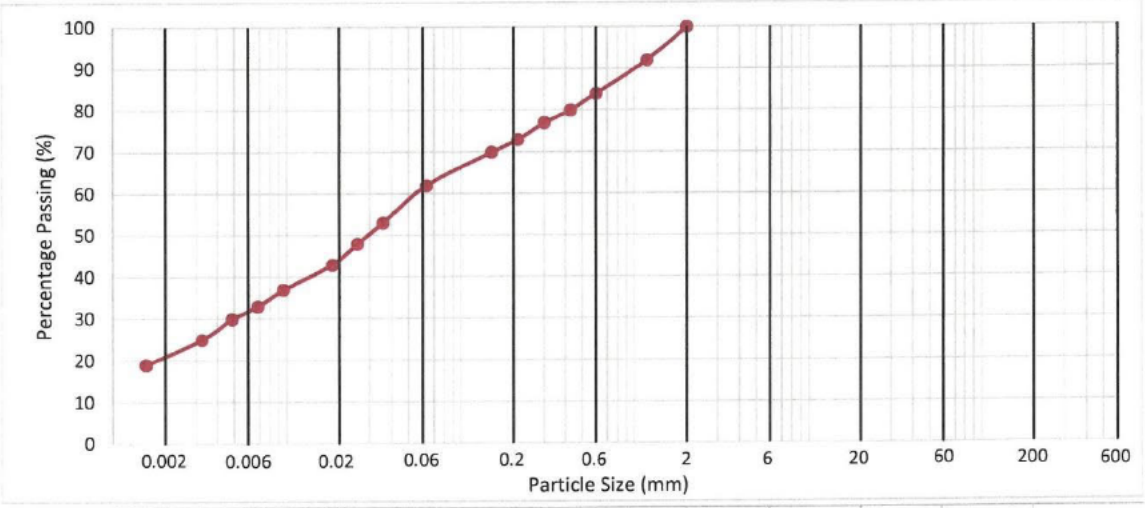
0998

Contract	Mallard Pass Solar Farm
Serial No.	41612_1

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Pit No.	Depth (m)	Sample Type	Sample Reference	Description	Remarks
-	0.00 - 0.25	A	-	Yellowish brown slightly sandy gravelly silty CLAY with occasional recently active and decayed roots. Gravel is fine to coarse angular and subangular limestone	Approximately 40% material greater than 2mm removed before test

Method of Test:	Hydrometer + Pre-sieve	Method of Pretreatment:	Not required



CLAY			SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

Hydrometer	Particle Size (mm)	Passing (%)	Silt by Dry Mass (%)	Clay by Dry Mass (%)
	0.0355	53	41	
	0.0254	48		
	0.0182	43		
	0.0096	37		
	0.0068	33		
	0.0049	30		
	0.0032	25		21
	0.0015	19		

Sieve Size (mm)	Passing (%)	Sand By Dry Mass (%)
2.00	100	38
1.18	92	
0.600	84	
0.425	80	
0.300	77	
0.212	73	
0.150	70	
0.063	62	

Fines By Dry Mass (%)	
<0.063mm	62

Sieve Size (mm)	Passing (%)	2mm+ By Dry Mass (%)
300		0
125		
90		
63		
50		
37.5		
28		
20		
14		
10		
6.3		
5		

Method of Preparation: BS1377: Part 1: 2016: 8.3 & 8.4.5
Method of test: BS1377: Part 2: 1990: 9.2,9.5
Type of Sample Key: U=Undisturbed, B=Bulk, D=Disturbed, J=Jar, W=Water, SPT=Split Spoon Sample, C=Core Cutter
Comments:

[redacted]

TEST REPORT

ISSUED BY SOIL PROPERTY TESTING LTD

DATE ISSUED: 01/11/2022

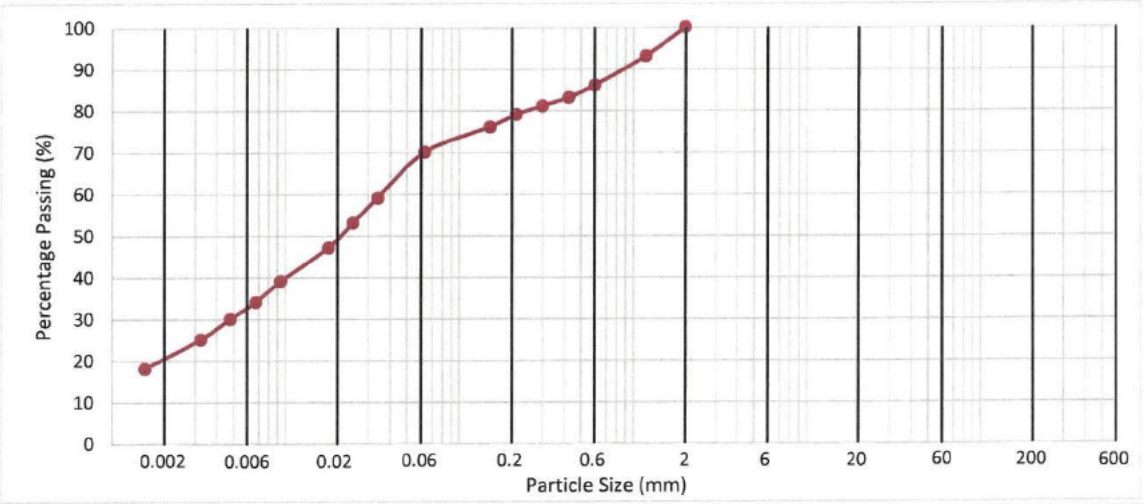
0998

Contract	Mallard Pass Solar Farm
Serial No.	41612_1

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Pit No.	Depth (m)	Sample Type	Sample Reference	Description	Remarks
-	0.00 - 0.25	B	-	Yellowish brown slightly sandy gravelly silty CLAY with occasional recently active and decayed roots. Gravel is fine to coarse angular and subangular limestone	Approximately 35% material greater than 2mm removed before test

Method of Test:	Hydrometer + Pre-sieve	Method of Pretreatment:	Not required



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES	BOULDERS
	SILT			SAND			GRAVEL				

Hydrometer

Particle Size (mm)	Passing (%)
0.0340	59
0.0245	53
0.0177	47
0.0094	39
0.0067	34
0.0048	30
0.0032	25
0.0015	18

Silt by Dry Mass (%): 50

Clay by Dry Mass (%): 20

Sieve Size (mm)	Passing (%)
2.00	100
1.18	93
0.600	86
0.425	83
0.300	81
0.212	79
0.150	76
0.063	70

Sand By Dry Mass (%): 30

Fines By Dry Mass (%)	
<0.063mm	70

Sieve Size (mm)	Passing (%)
300	
125	
90	
63	
50	
37.5	
28	
20	
14	
10	
6.3	
5	

2mm+ By Dry Mass (%): 0

Method of Preparation: BS1377: Part 1: 2016: 8.3 & 8.4.5
Method of test: BS1377: Part 2: 1990: 9.2,9.5
Type of Sample Key: U=Undisturbed, B=Bulk, D=Disturbed, J=Jar, W=Water, SPT=Split Spoon Sample, C=Core Cutter
Comments:

[redacted]

TEST REPORT

ISSUED BY SOIL PROPERTY TESTING LTD

DATE ISSUED: 01/11/2022

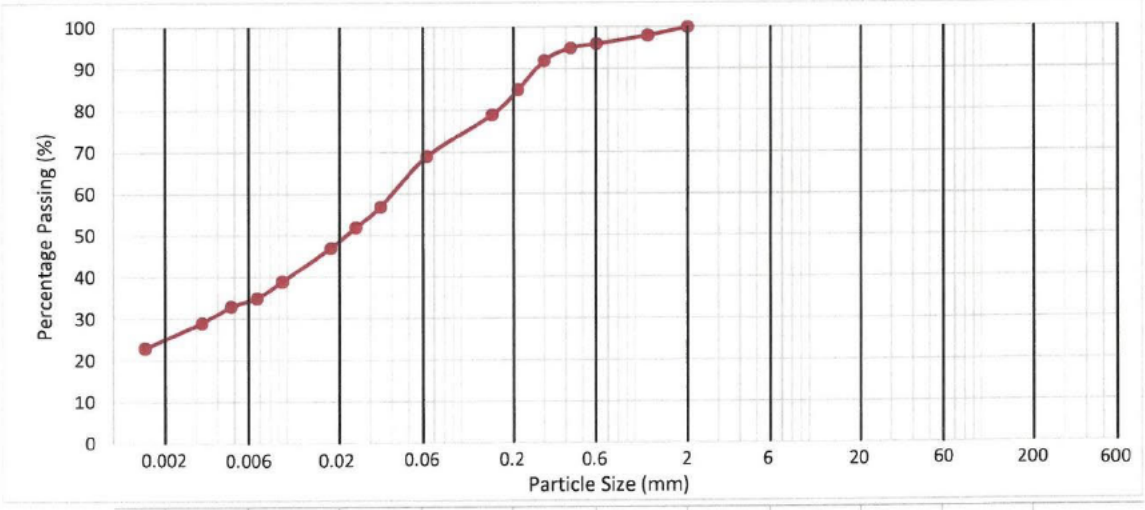
UKAS TESTING 0998

Contract	Mallard Pass Solar Farm
Serial No.	41612_1

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Pit No.	Depth (m)	Sample Type	Sample Reference	Description	Remarks
-	0.00 - 0.25	C	-	Yellowish brown slightly gravelly slightly sandy silty CLAY with frequent recently active and decayed roots and plant material. Gravel is fine and medium angular and subangular limestone	Approximately 5% material greater than 2mm removed before test

Method of Test:	Hydrometer + Pre-sieve	Method of Pretreatment:	Not required



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES	BOULDERS
	SILT			SAND			GRAVEL				

Hydrometer

Particle Size (mm)	Passing (%)	Silt by Dry Mass (%)
0.0343	57	
0.0247	52	44
0.0178	47	
0.0094	39	Clay by Dry Mass (%)
0.0067	35	
0.0048	33	
0.0032	29	
0.0015	23	25

Sieve Size (mm)	Passing (%)	Sand By Dry Mass (%)
2.00	100	
1.18	98	
0.600	96	
0.425	95	31
0.300	92	
0.212	85	
0.150	79	
0.063	69	

Fines By Dry Mass (%)	
<0.063mm	69

Sieve Size (mm)	Passing (%)	2mm+ By Dry Mass (%)
300		
125		
90		
63		
50		
37.5		0
28		
20		
14		
10		
6.3		
5		

Method of Preparation:	BS1377: Part 1: 2016: 8.3 & 8.4.5
Method of test:	BS1377: Part 2: 1990: 9.2,9.5
Type of Sample Key:	U=Undisturbed, B=Bulk, D=Disturbed, J=Jar, W=Water, SPT=Split Spoon Sample, C=Core Cutter
Comments:	

[redacted]

TEST REPORT

ISSUED BY SOIL PROPERTY TESTING LTD

DATE ISSUED: 01/11/2022

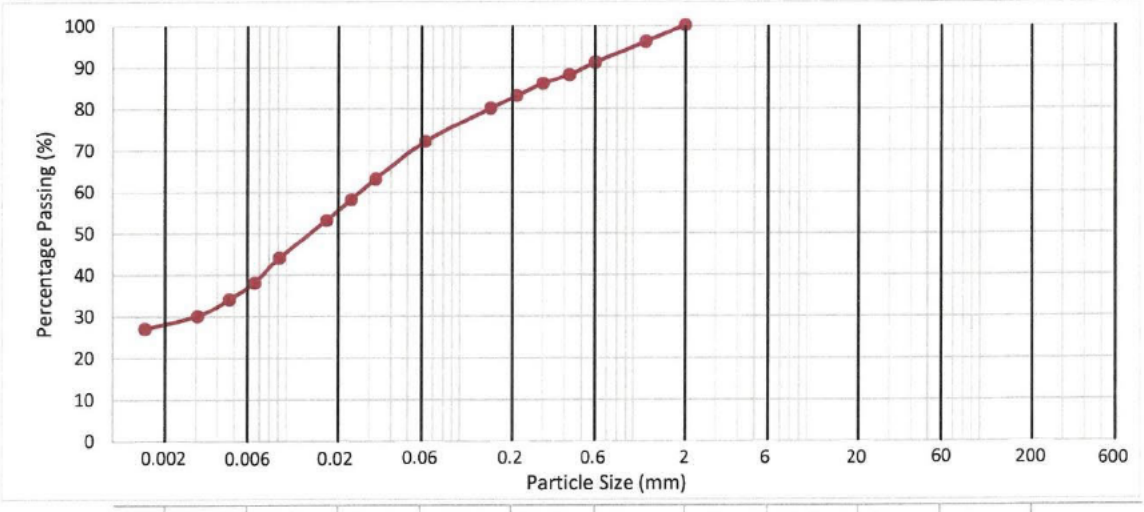
0998

Contract	Mallard Pass Solar Farm
Serial No.	41612_1

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Pit No.	Depth (m)	Sample Type	Sample Reference	Description	Remarks
-	0.00 - 0.25	D	-	Brown slightly sandy gravelly silty CLAY with frequent recently active and decayed roots and plant material. Gravel is fine to coarse angular and subangular limestone	Approximately 35% material greater than 2mm removed before test

Method of Test:	Hydrometer + Pre-sieve	Method of Pretreatment:	Not required



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES	BOULDERS
	SILT			SAND			GRAVEL				

Hydrometer

Particle Size (mm)	Passing (%)	Silt by Dry Mass (%)
0.0327	63	44
0.0237	58	
0.0171	53	
0.0091	44	Clay by Dry Mass (%)
0.0066	38	
0.0047	34	
0.0031	30	28
0.0015	27	

Sieve Size (mm)	Passing (%)	Sand By Dry Mass (%)
2.00	100	28
1.18	96	
0.600	91	
0.425	88	
0.300	86	
0.212	83	
0.150	80	
0.063	72	

Fines By Dry Mass (%)	
<0.063mm	72

Sieve Size (mm)	Passing (%)	2mm+ By Dry Mass (%)
300		0
125		
90		
63		
50		
37.5		
28		
20		
14		
10		
6.3		
5		

Method of Preparation: BS1377: Part 1: 2016: 8.3 & 8.4.5
Method of test: BS1377: Part 2: 1990: 9.2,9.5
Type of Sample Key: U=Undisturbed, B=Bulk, D=Disturbed, J=Jar, W=Water, SPT=Split Spoon Sample, C=Core Cutter
Comments:

[redacted]

TEST REPORT

ISSUED BY SOIL PROPERTY TESTING LTD

DATE ISSUED: 01/11/2022

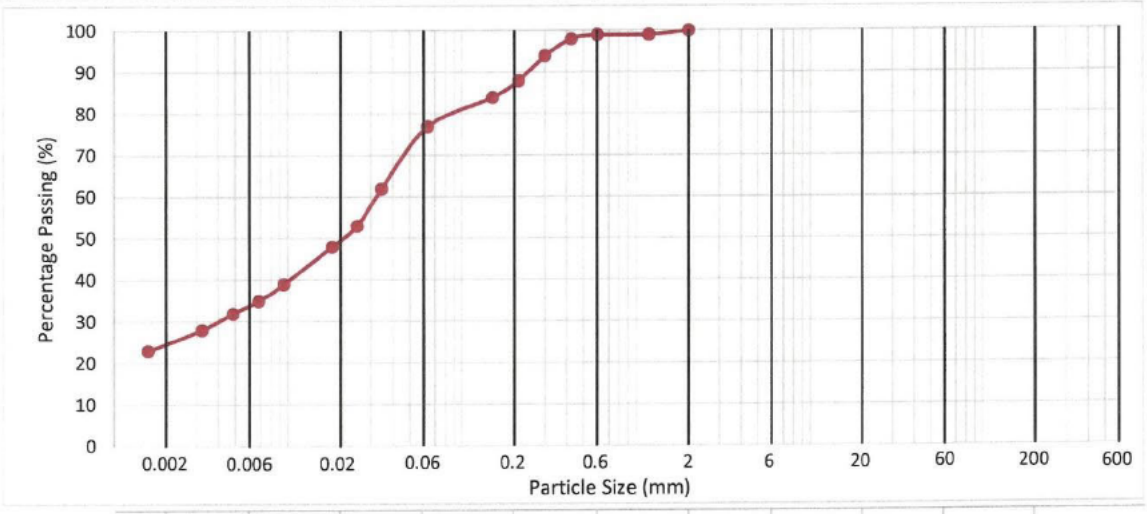
0998

Contract	Mallard Pass Solar Farm
Serial No.	41612_1

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Pit No.	Depth (m)	Sample Type	Sample Reference	Description	Remarks
-	0.00 - 0.25	F	-	Yellowish brown slightly gravelly slightly sandy silty CLAY with occasional recently active and decayed roots and plant material. Gravel is fine and medium angular and subangular limestone	Approximately 5% material greater than 2mm removed before test

Method of Test:	Hydrometer + Pre-sieve	Method of Pretreatment:	Not required



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES	BOULDERS
	SILT			SAND			GRAVEL				

Hydrometer

Particle Size (mm)	Passing (%)	Silt by Dry Mass (%)	Clay by Dry Mass (%)
0.0343	62	53	
0.0249	53		
0.0179	48		
0.0095	39		
0.0068	35		
0.0048	32		
0.0032	28		24
0.0016	23		

Sieve Size (mm)	Passing (%)	Sand By Dry Mass (%)
2.00	100	23
1.18	99	
0.600	99	
0.425	98	
0.300	94	
0.212	88	
0.150	84	
0.063	77	

Fines By Dry Mass (%)	
<0.063mm	77

Sieve Size (mm)	Passing (%)	2mm+ By Dry Mass (%)
300		0
125		
90		
63		
50		
37.5		
28		
20		
14		
10		
6.3		
5		

Method of Preparation: BS1377: Part 1: 2016: 8.3 & 8.4.5

Method of test: BS1377: Part 2: 1990: 9.2,9.5

Type of Sample Key: U=Undisturbed, B=Bulk, D=Disturbed, J=Jar, W=Water, SPT=Split Spoon Sample, C=Core Cutter

Comments:

[redacted]

TEST REPORT

ISSUED BY SOIL PROPERTY TESTING LTD

DATE ISSUED: 01/11/2022

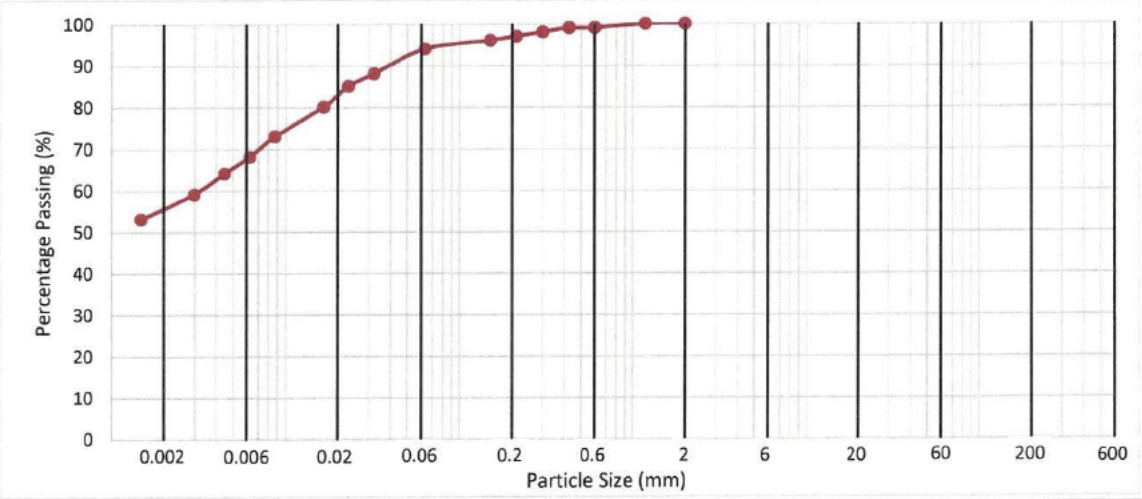
0998

Contract	Mallard Pass Solar Farm
Serial No.	41612_1

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Pit No.	Depth (m)	Sample Type	Sample Reference	Description	Remarks
-	0.00 - 0.25	I	-	Firm yellowish brown slightly sandy silty CLAY with occasional recently active roots and rare limestone fragments	Approximately 1% material greater than 2mm removed before test

Method of Test:	Hydrometer + Pre-sieve	Method of Pretreatment:	Not required



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES	BOULDERS
	SILT			SAND			GRAVEL				

Hydrometer

Particle Size (mm)	Passing (%)
0.0322	88
0.0229	85
0.0165	80
0.0087	73
0.0063	68
0.0045	64
0.0030	59
0.0015	53

Silt by Dry Mass (%): 39

Clay by Dry Mass (%): 55

Sieve Size (mm)	Passing (%)
2.00	100
1.18	100
0.600	99
0.425	99
0.300	98
0.212	97
0.150	96
0.063	94

Sand By Dry Mass (%): 6

Fines By Dry Mass (%)	
<0.063mm	94

Sieve Size (mm)	Passing (%)
300	
125	
90	
63	
50	
37.5	
28	
20	
14	
10	
6.3	
5	

2mm+ By Dry Mass (%): 0

Method of Preparation: BS1377: Part 1: 2016: 8.3 & 8.4.5
Method of test: BS1377: Part 2: 1990: 9.2,9.5
Type of Sample Key: U=Undisturbed, B=Bulk, D=Disturbed, J=Jar, W=Water, SPT=Split Spoon Sample, C=Core Cutter
Comments:

[redacted]

TEST REPORT

ISSUED BY SOIL PROPERTY TESTING LTD

DATE ISSUED: 01/11/2022

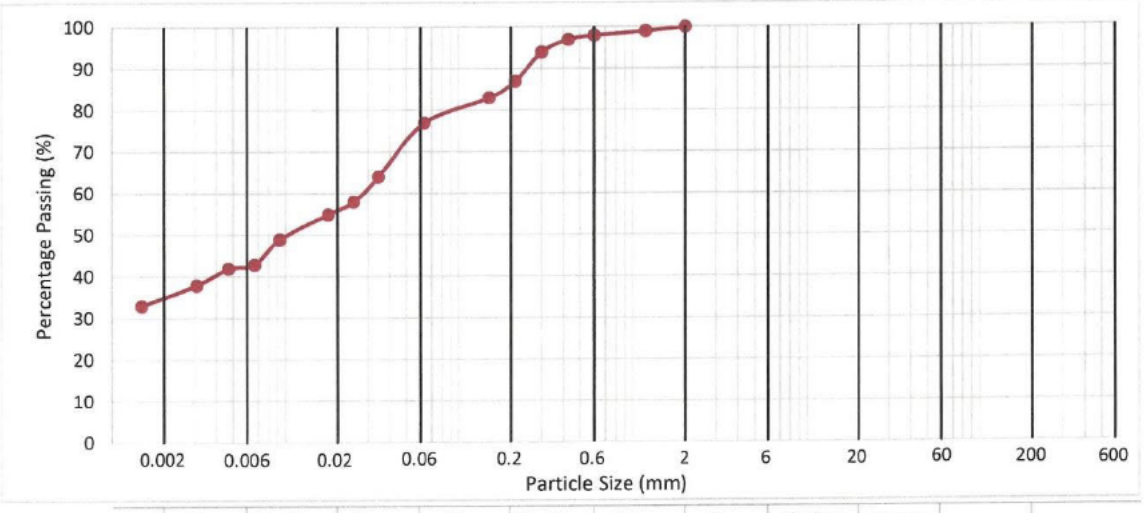
UKAS TESTING 0998

Contract	Mallard Pass Solar Farm
Serial No.	41612_1

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Pit No.	Depth (m)	Sample Type	Sample Reference	Description	Remarks
-	0.00 - 0.25	J	-	Yellowish brown slightly gravelly slightly sandy silty CLAY with occasional recently active and decayed roots. Gravel is fine and medium angular and subangular limestone	Approximately 10% material greater than 2mm removed before test

Method of Test:	Hydrometer + Pre-sieve	Method of Pretreatment:	Not required



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES	BOULDERS
	SILT			SAND			GRAVEL				

Hydrometer

Particle Size (mm)	Passing (%)	Silt by Dry Mass (%)
0.0343	64	42
0.0247	58	
0.0176	55	
0.0093	49	Clay by Dry Mass (%)
0.0067	43	
0.0047	42	
0.0031	38	35
0.0015	33	

Sieve Size (mm)	Passing (%)	Sand By Dry Mass (%)
2.00	100	23
1.18	99	
0.600	98	
0.425	97	
0.300	94	
0.212	87	
0.150	83	
0.063	77	

Fines By Dry Mass (%)	
<0.063mm	77

Sieve Size (mm)	Passing (%)	2mm+ By Dry Mass (%)
300		0
125		
90		
63		
50		
37.5		
28		
20		
14		
10		
6.3		
5		

Method of Preparation: BS1377: Part 1: 2016: 8.3 & 8.4.5
Method of test: BS1377: Part 2: 1990: 9.2,9.5
Type of Sample Key: U=Undisturbed, B=Bulk, D=Disturbed, J=Jar, W=Water, SPT=Split Spoon Sample, C=Core Cutter
Comments:

[redacted]

TEST REPORT

ISSUED BY SOIL PROPERTY TESTING LTD

DATE ISSUED: 01/11/2022

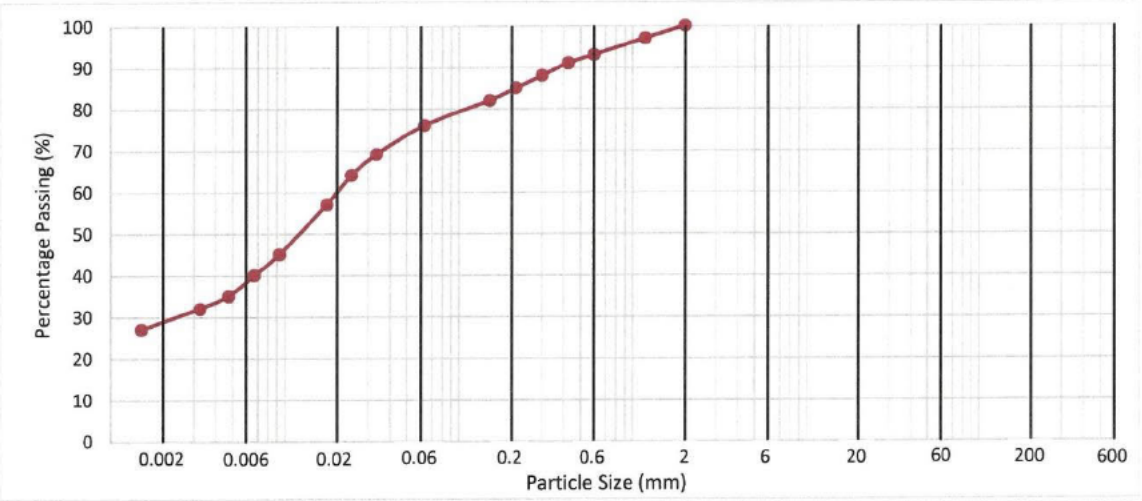
0998

Contract	Mallard Pass Solar Farm
Serial No.	41612_1

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Pit No.	Depth (m)	Sample Type	Sample Reference	Description	Remarks
-	0.00 - 0.25	K	-	Yellowish brown slightly gravelly slightly sandy silty CLAY with occasional recently active and decayed roots and plant material. Gravel is fine to coarse angular and subangular limestone	Approximately 20% material greater than 2mm removed before test

Method of Test:	Hydrometer + Pre-sieve	Method of Pretreatment:	Not required



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES	BOULDERS
	SILT			SAND			GRAVEL				

Hydrometer

Particle Size (mm)	Passing (%)	Silt by Dry Mass (%)
0.0334	69	47
0.0241	64	
0.0174	57	
0.0093	45	Clay by Dry Mass (%)
0.0067	40	
0.0048	35	
0.0033	32	29
0.0015	27	

Sieve Size (mm)	Passing (%)	Sand By Dry Mass (%)
2.00	100	24
1.18	97	
0.600	93	
0.425	91	
0.300	88	
0.212	85	
0.150	82	
0.063	76	

Fines By Dry Mass (%)	
<0.063mm	76

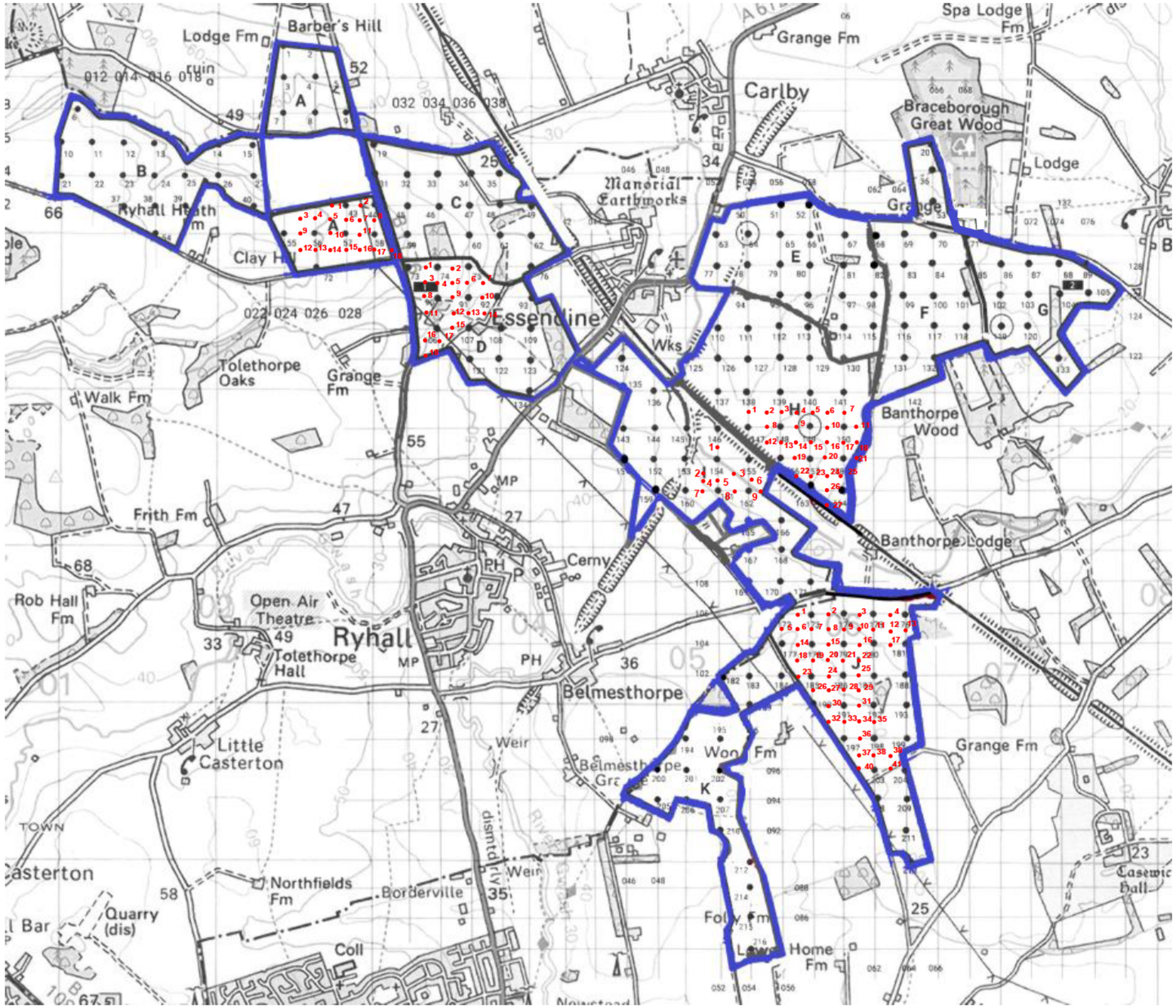
Sieve Size (mm)	Passing (%)	2mm+ By Dry Mass (%)
300		0
125		
90		
63		
50		
37.5		
28		
20		
14		
10		
6.3		
5		

Method of Preparation:	BS1377: Part 1: 2016: 8.3 & 8.4.5
Method of test:	BS1377: Part 2: 1990: 9.2,9.5
Type of Sample Key:	U=Undisturbed, B=Bulk, D=Disturbed, J=Jar, W=Water, SPT=Split Spoon Sample, C=Core Cutter
Comments:	

[redacted]

Plan KCC3051/01A

Auger Point Plan



Key	
Boundary of Surveyed Area	

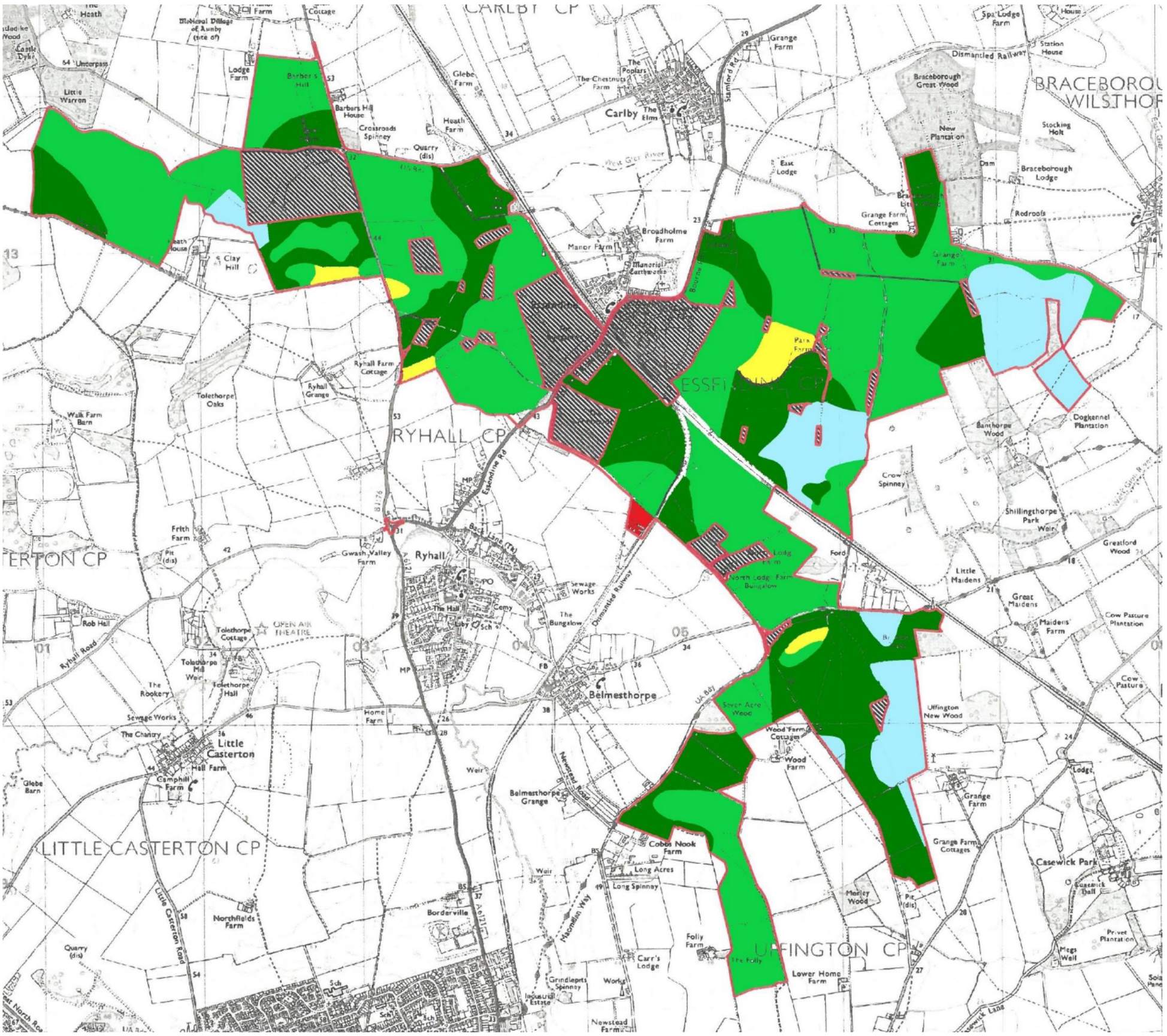
KEY

- Auger sample location
- Topsoil texture sample
- Soil Pit

PLAN	**Plan KCC3051/08**		
TITLE	**Auger Points Plan**		
SITE	Mallard Pass		
CLIENT	LDA Design		
NUMBER	**KCC3051/08 11/22hr**		
DATE	November 2022	**SCALE**	NTS

KERNON COUNTRYSIDE CONSULTANTS LTD
GREENACRES BARN, PURTON STOKE, SWINDON, WILTSHIRE SN5 4LL
Tel 01793 771 333 Email: info@kernon.co.uk

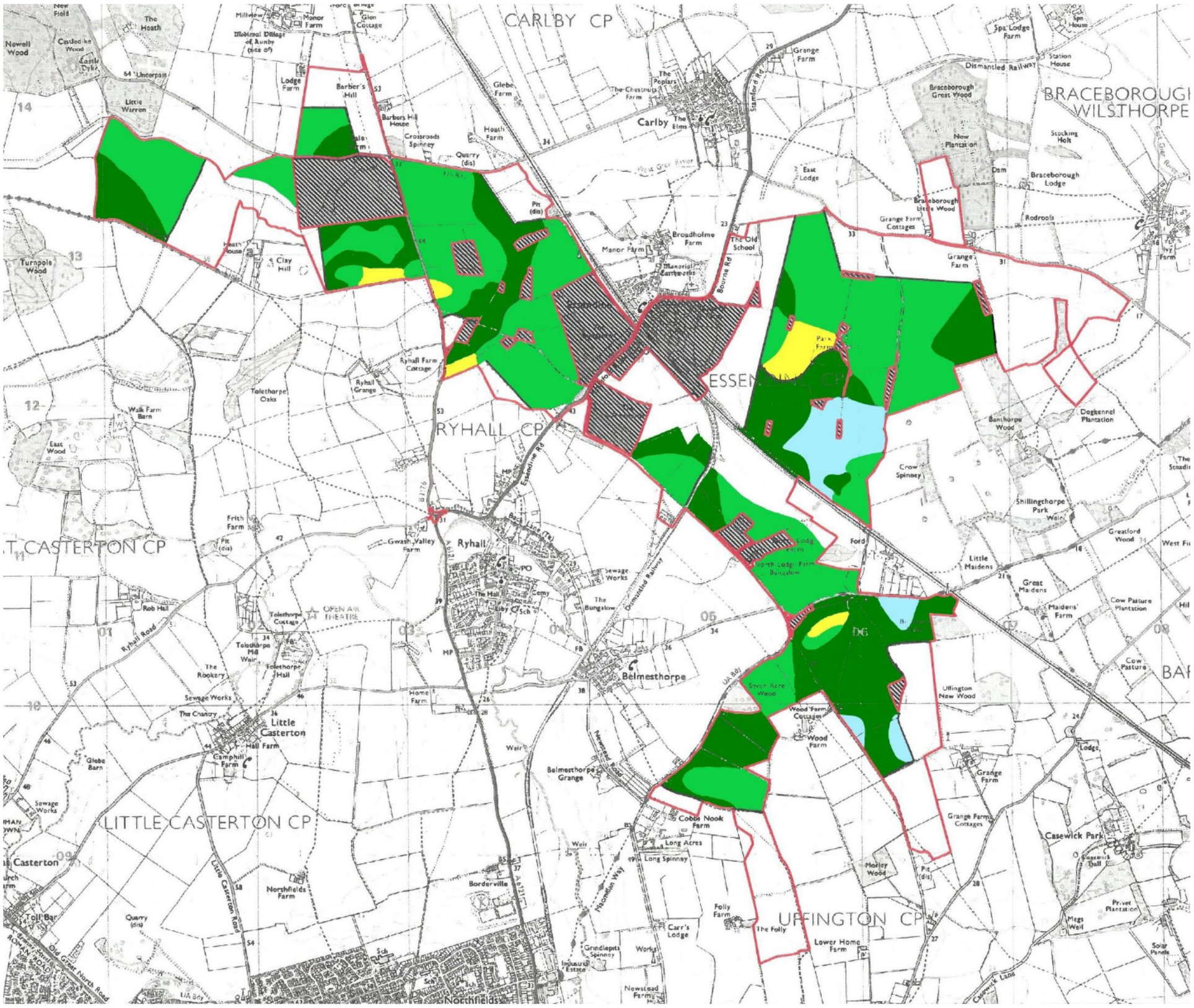
Figure 12.1
ALC Across Order Limits



KEY		Ha	%	PLAN	Figure 12.1		
	Grade 1	0	0	**TITLE**	ALC Across Order Limits		
	Grade 2	100	11.7	**SITE**	Mallard Pass		
	Grade 3a	260	30.5	**CLIENT**	LDA Design		
	Grade 3b	439	51.5	**NUMBER**	**KCC3051/06 11/22tk**		
	Grade 4	18	2.1	**DATE**	November 2022	**SCALE**	Not to Scale
	Grade 5						
	Non-agricultural						
	Urban	3	0.4				
	Not surveyed (roads, railways, verges etc)	32	3.8				

KERNON COUNTRYSIDE CONSULTANTS LTD
GREENACRES BARN, PURTON STOKE, SWINDON,
WILTSHIRE, SN5 4LL
Tel 01793 771 333 Email: info@kernon.co.uk

Figure 12.2
ALC Solar PV Site and Field Margins



KEY		Ha	%	PLAN	Figure 12.2		
	Grade 1	0	0	TITLE	ALC Solar PV Site and Field Margins		
	Grade 2	35	6.6	SITE	Mallard Pass		
	Grade 3a	181	34.1	CLIENT	LDA Design		
	Grade 3b	297	55.9	NUMBER	KCC3051/07 11/22tk		
	Grade 4	18	3.4	DATE	November 2022	SCALE	Not to scale
	Grade 5	0	0				
	Non-agricultural	0	0				
	Urban	0	0				
	Not surveyed	0	0				

KERNON COUNTRYSIDE CONSULTANTS LTD
GREENACRES BARN, PURTON STOKE, SWINDON,
WILTSHIRE, SN5 4LL
Tel 01793 771 333 Email: info@kernon.co.uk

Greenacres Barn, Stoke Common Lane, Purton Stoke, Swindon, Wiltshire SN5 4LL
Telephone: 01793 771333 • Email: info@kernon.co.uk