Environmental Statement: Technical Appendix 13.1 – Agricultural Land Classification: Alaw Mon

ES TA 13.1

Development of National Significance

Alaw Môn Solar Farm

Land west of the B5112, 415m south of Llyn Alaw, 500m east of Llantrisant and 1.5km west of Llannerch-y-Medd, Anglesey

February 2024

Agricultural Land Classification:

Alaw Mon Solar Farm, Anglesey, Wales

Prepared for:
Enso Energy Limited

Prepared by:
R W Askew BSC(Hons) MSc F.I. Soil Sci CSci
Askew Land & Soil Limited

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Our interpretation of the site characteristics is based on available data made during our desktop study and soil survey. This desktop study has assessed the characteristics of the site in relation to the assessment of its Agricultural Land Classification. It should not be relied on for alternative end-uses or for other schemes. This report has been prepared solely for the benefit of Enso Energy Limited.

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1 INTRODUCTION

1.1 Background

1.1.1 This report was commissioned by Enso Energy Limited to determine the quality of agricultural land at the proposed Alaw Mon Solar Farm, Anglesey, LL71 7BT ('the Site'). The assessment is made in accordance with the Agricultural Land Classification (ALC) system for England and Wales (see 'Methodology' below).

1.1.2 This report presents the findings of a detailed ALC survey carried out as per the methodology set out in an 'Agricultural Land Classification: Pre-Survey Report' dated 24th February 2021. Following a review of the Pre-Survey report, the ALC survey methodology was approved by the Welsh Government's Land Quality Advice Service on 26th February 2021.

1.1.3 The approximately 299.8 ha Study Area is located to the west of Llanerchymedd. The approximate centre of the Site is located at National Grid Reference (NGR) reference SH 38530 84028. The location and boundary of the Site is shown on **Figure 1**.

1.1.4 The report has been prepared to provide an evidence base in relation to the proposed development of the Site for a solar farm and energy storage facility. As the proposed development will have a generating capacity in excess of 10MW, it constitutes a Development of National Significance (DNS) for which the Welsh Minsters are the decision-maker.

1.2 Methodology

1.2.1 This report has been prepared by a Chartered Scientist (CSci), who is a Fellow (F.I. Soil Sci) of the British Society of Soil Science (BSSS). The survey was carried out by three highly experienced ALC surveyors who each meet the requirements of the BSSS Professional Competency Standard (PCS) scheme for ALC, which is endorsed, amongst others, by the Welsh Government, the Science Council, and the Institute of Environmental Assessment and Management (IEMA) (see BSSS PCS Document 2 'Agricultural Land Classification of England and Wales')[1].

1.2.2 This assessment is based upon the findings of a study of published information on climate, geology and soil, ALC information available from the Welsh Government ALC website[2] and in combination with the findings of a detailed soil investigation carried out over five days between the 19th and the 23rd of April 2021. The ALC survey and report follows the approach of the national 'Agricultural Land Classification of England and Wales: Revised Guidelines and

[1] British Society of Soil Science. Professional Competency Standard Scheme Document 2 'Agricultural Land Classification of England and Wales'. Available online @ WWS-Complete-Competencies.pdf (soils.org.uk) Last accessed June 2021

[2] Welsh Government (2021). Predictive Agricultural Land Classification Map (Version 2). Available online @ Lle - Map - Predictive Agricultural Land Classification (ALC) Map 2 (gov.wales) Last accessed June 2021

Criteria for Grading the Quality of Agricultural Land', October, 1988 (henceforth referred to as the 'the ALC Guidelines')[3].

1.2.3 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 set out in at paragraph 3.58 of Planning Policy Wales (Edition 11, February 2021) and Technical Advice Note 6. Further details of the ALC system and national planning policy implications are set out by the Welsh Government in a guidance note which is available online[4].

I. Auger Bores

1.2.4 For the ease of surveying, recording, and processing the soil profile data per auger-bore, the Site was divided into 15 'Survey Areas', i.e., Area A to O, as shown on **Figure 1**. Each Survey Area comprised approximately 20 auger-bore locations, which is a manageable number of auger-bores to locate, excavate, examine and record per surveyor, per day. The number of auger-bores per Survey Area are given in Table 1.1.

Table 1.1: Auger-bores per Survey Area

Survey Parcel	Number of Auger-Bores
A	18
B	20
C	17
D	14
E	18
F	19
G	22
H	27
I	20
J	23
K	16
L	21
M	20
N	12
O	19
Total	**286**

[3] Welsh Government (2021) Agricultural Land Classification. Available online @ Agricultural land classification | Sub-topic | GOV.WALES Last accessed June 2021

[4] Welsh Government. Agricultural land classification: frequently asked questions. Available online @ https://gov.wales/agricultural-land-classification-frequently-asked-questions Last accessed Jun 2021.

1.2.5 The auger-bore 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. Where auger locations on a 100 m grid pattern fall on headland, tramlines, or within 3 m of a hedgerow or tree, they were relocated on agricultural land close by, i.e., to avoid compacted ground or land affected by tree roots, etc.

II. Soil Pits

1.2.6 Five soil pits were excavated by hand with a spade in order to examine certain soil physical properties, such as stone content and the structural condition of the subsoil, more closely. Soil Pit 1 was located near auger-bore C14, Pit 2 was located near auger-bore F2, Pit 3 was located near auger-bore H10, Pit 4 was located near auger-bore K7, and Pit 5 was located near auger-bore L13.

1.2.7 The location of the 285 auger-bores and five soil pits are shown on **Figure 1**.

1.2.8 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 an ALC grade following the MAFF ALC Guidelines.

1.2.9 A record of the soil profiles recorded at each auger-bore location per Survey Area is given as **Appendix 1**. A description of the soil profile recorded in Soil Pits 1 to 5 is given as **Appendix 2**.

III. Topsoil Particle Size Distribution (PSD)

1.2.10 In order substantiate the determination of topsoil texture by hand-texturing on Site, nine samples of topsoil were collected at selected auger bore locations, i.e., A1, C8, D5, G5, H2, I2, J4, K10, and M11. The samples of topsoil were be sent to an UKAS 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, especially to distinguish between medium clay loams (i.e., <27% clay), heavy clay loams (i.e., 27% to 35% clay) and clays (i.e., >35% clay). The results of the laboratory analysis are given as a Certificate of Analysis as **Appendix 3**.

1.3 Structure of the Remainder of this Report

1.3.1 The remainder of this report is structured as follows:

- Section 2 – Planning Policy Framework;
- Section 3 – Predicted Agricultural Land Classification;
- Section 4 – ALC at the Site in a Wider Geographical Context; and
- Section 5 – Summary and Conclusions.

2 PLANNING POLICY FRAMEWORK

2.1 Background

2.1.1 This section of the report sets out the national and local planning framework in which to assess the opportunities and constraints to development at the Study Area in agricultural land quality terms.

2.2 Future Wales: the National Plan 2040

2.2.1 Future Wales sets the direction for development in Wales to 2040. It has development plan status and sets out a strategy for addressing key national priorities through the planning system, including achieving decarbonisation, climate-resilience and achieving net zero. It constitutes the highest tier of the development plan in Wales, and provides the policy context against which applications for Development of National Significance (DNS) are determined. The Plan sets out that 'Wales can become a world leader in renewable energy technologies.

2.2.2 In respect of agricultural land, Future Wales defines land of grades 1, 2 and 3a as the best and most versatile. It should be noted that during the drafting process for Future Wales, the Welsh Government commissioned a study to try and identify areas suitable for solar development within Wales[5]. This exercise identified a range of criteria that were applied to land across the whole of Wales in any attempt to identify solar development areas. In terms of agricultural land quality, the assessment discounted any land of ALC grade 1 or 2. This indicates that, in preparing Future Wales, the Welsh Government considers the development of solar on ALC Grade 3a land to be acceptable.

2.2.3 Under Future Wales, proposals for solar farms will be determined in accordance with Policies 17 and 18. Policy 17 (Renewable and Low Carbon Energy and Associated Infrastructure) of Future Wales states that the Welsh Government strongly supports the principle of developing renewable and low carbon energy from all technologies and at all scales to meet future energy needs. This support applies to all areas of Wales outside of National Parks and Areas of Outstanding Natural Beauty. The policy goes on further to state that, in determining applications for renewable and low carbon energy development, decision makers must give significant weight to the need to meet Wales's international commitments and the target to generate 70% of consumed electricity by renewable means by 2030 in order to combat the climate emergency.

2.2.4 Policy 18 of Future Wales refers to proposals for renewable and low carbon energy projects qualifying as DNSs. Thee policy states that '*proposals for renewable and low carbon energy*

[5] Welsh Government (2019). 'Assessment of onshore wind and solar energy potential in Wales Stage 1 - Development of Priority Areas for Wind and Solar Energy.' Available online at https://gov.wales/sites/default/files/publications/2019-08/stage-1-development-of-priority-areas-for-wind-and-solar-energy.pdf Last accessed June 2021

projects qualifying as DNS will be permitted subject to Policy 17 and criteria set out in Policy 18'. None of these criteria relate to ALC.

2.3 Planning Policy Wales February 2021

2.3.1 National planning policy guidance on development involving agricultural land is set out in paragraphs 3.58 and 3.59 of Planning Policy Wales (PPW) as follows:

'*3.58 Agricultural land of grades 1, 2 and 3a of the Agricultural Land Classification system (ALC) is the best and most versatile, and should be conserved as a finite resource for the future.'*

'3.59 When considering the search sequence and in development plan policies and development management decisions considerable weight should be given to protecting such land from development, because of its special importance. Land in grades 1, 2 and 3a should 16 https://gov.wales/agricultural-land-classification only be developed if there is an overriding need for the development, and either previously developed land or land in lower agricultural grades is unavailable, or available lower grade land has an environmental value recognised by a landscape, wildlife, historic or archaeological designation which outweighs the agricultural considerations. If land in grades 1, 2 or 3a does need to be developed, and there is a choice between sites of different grades, development should be directed to land of the lowest grade.'

2.4 Technical Advice Note 6

2.4.1 Planning policy regarding development involving agricultural land which is set out in PPW11 (see above) is supplemented by Technical Advice Note (TAN) 6 'Planning for Sustainable Rural Communities' (July, 2010).

2.4.2 TAN6 provides advice on areas including sustainable rural communities and economies, rural affordable housing, rural enterprise dwellings, one planet developments, sustainable rural services and sustainable agriculture. Specific advice for development involving agricultural land is given at Section 6.2 of TAN6. Paragraph 6.2.1 states that:

'When preparing development plans and considering planning applications, planning authorities should consider the quality of agricultural land and other agricultural factors and seek to minimise any adverse affects on the environment.'

2.5 Anglesey and Gwynedd Joint Local Development Plan

2.5.1 In the Anglesey and Gwynedd Joint Local Development Plan (2011 – 2026), the best and most versatile land is considered in Strategic Policy PS6(6): Alleviating and Adapting to the Effects of Climate Change', as below:

'*In order to alleviate the effects of climate change, proposals will only be permitted where it is demonstrated that they have fully taken account of and responded to the following:*

1. The energy hierarchy:

i. Reducing energy demand;

ii. Energy efficiency;

iii. Using low or zero carbon energy technologies wherever practical, viable and consistent with the need to engage and involve communities; protect visual amenities, the natural, built and historic environment and the landscape.

2. Reducing greenhouse gas emissions, help to reduce waste and encourage travel other than by car.

In order to adapt to the effects of climate change, proposals will only be permitted where it is demonstrated with appropriate evidence that they have fully taken account of and responded to the following:

3. Implementing sustainable water management measures in line with the objectives in the Western Wales River Basin Management Plan;

4. Locating away from flood risk areas, and aim to reduce the overall risk of flooding within the Plan area and areas outside it, taking account of a 100 years and 75 years of flood risk in terms of the lifetime of residential and non-residential development, respectively, unless it can be clearly demonstrated that there is no risk or that the risk can be managed;

5. Be able to withstand the effects of climate change as much as possible because of its high standards of sustainable design, location, layout and sustainable building methods (in line with Policy PCYFF 3);

6. Safeguarding the best and most versatile agricultural land, promoting allotments, support opportunities for local food production and farming in order to reduce the area's contribution to food miles;

7. Ensuring that the ability of landscapes, environments and species to adapt to the harmful effects of climate change is not affected, and that compensatory environments are provided if necessary;

8. Aim for the highest possible standard in terms of water efficiency and implement other measures to withstand drought, maintain the flow of water and maintain or improve the quality of water, including using sustainable drainage systems (in line with Policy PCYFF 6).'

2.6 Soil Health

2.6.1 Of relevance to the proposed development at the Site, the installation of a solar photovoltaic (PV) array is reversible, i.e., the agricultural land can be returned to its former agricultural productivity once the generation of renewable electricity has ceased, and the solar panels and associated infrastructure is removed. In many respects, the management of the land under solar PV panels as grassland can benefit soil health, as described in detail in **Appendix 4**.

2.6.2 A healthy soil has a well-developed soil structure, where soil particles are aggregated into soil peds (structural units) separated by pores or voids. This allows the free movement of water (precipitation) through the soil and facilitates gaseous exchange between the plant roots and

the air. These soils are well aerated (oxygenated), which encourages healthy plant (crop) growth and an abundance of soil fauna and aerobic microbes. These soils often have high amounts of soil organic matter (SOM), associated with an accumulation of plant and animal matter, and thus are a good store of soil organic carbon (SOC).

2.6.3 The greatest benefits in terms of increase in soil organic matter (SOM), and hence soil organic carbon (SOC), can be realised through land use change from intensive arable to grasslands. Likewise, SOM and SOC are increased when cultivation of the land for crops (tillage) is stopped and the land is uncultivated (zero tillage). Global evidence suggests that zero tillage results in more total soil carbon storage when applied for 12 years or more. Therefore, there is evidence that conversion of land from arable to grassland which is uncultivated over the long-term (>12 years), such as that under solar PV arrays, increases SOC and SOM.

2.6.4 Soils are habitats for millions of species, ranging from bacteria, fungi, protozoa, and microscopic invertebrates to mites, springtails, ants, worms and plants. Soil biota are strongly influenced by land management. Modern farming has led to the loss of soil biodiversity. Changes in land management practice and land use can have large effects on soil biodiversity over relatively short-time scales. Reducing the intensity of management, introducing no-tillage management, and converting arable land to pasture, such as grassland under solar PV arrays, has substantial beneficial effects.

2.6.5 In a well-structured soil, water and air can move freely through cracks and pores. However, a poor soil structure prevents water and air movement, and increases the risk of runoff. Soil structure is improved when the land is uncultivated over time (no tillage), and when soil organic matter content (SOM) is increased through the accumulation of plant material, such as roots, in the soil. The aerobic (oxygenated) decomposition of SOM helps to bind soil particles together into aggregates (peds). Therefore, the conversion of land which is tilled for arable to long-term grassland (no tillage), such as that under solar PV arrays, improves soil structure over time.

3 AGRICULTURAL LAND CLASSIFICATION

3.1 Background

3.1.1 This section of the report sets out the findings of an ALC based on a desktop study of relevant published information on climate, topography, geology, and soil, and ALC information available on the Welsh Government's ALC website[3].

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

- Climate;
- Site;
- Soil; and
- Interactive limitations.

3.1.3 These factors are considered in turn below.

3.2 Climate

3.2.1 Interpolated climate data relevant to the determination of the ALC grade of land at the Site is given in Table 3.1 below.

Table 3.1: ALC Climate Data for Alaw Mon Solar Farm, Anglesey

Survey Parcel	Grid Reference	Average Altitude (m)	Average Annual Rainfall (mm)	Accumulated Temperature above 0˚C (January – June)	Moisture Deficit (mm) Wheat	Moisture Deficit (mm) Potatoes	Field Capacity Days (FCD)	Grade According to Climate
A	SH374835	55	969	1422	81	66	200	1
B	SH377836	70	991	1404	78	62	204	2
C	SH378839	61	978	1414	79	64	202	1
D	SH382837	83	1011	1389	75	58	207	2
E	SH379843	48	960	1429	82	68	199	1
F	SH382843	71	993	1403	77	61	204	2
G	SH385845	72	995	1401	77	61	205	2
H	SH390846	81	1008	1391	75	59	207	2
I	SH394851	69	990	1404	78	62	204	2
J	SH399841	77	1002	1395	76	60	206	2
K	SH391838	79	1005	1393	76	59	206	2
L	SH387836	82	1010	1390	75	59	207	2

M	SH389833	87	1018	1385	74	57	208	2
N	SH385830	78	1005	1395	76	60	206	2
O	SH384827	98	1034	1373	72	54	210	2

3.2.2 With reference to Figure 1 '*Grade according to climate*' on page 6 of the ALC Guidelines, the quality of agricultural land over most parts of the Site at an altitude of approximately 70m or above cannot be graded higher than Grade 2 due to an overall climatic limitation.

3.2.3 The Annual Average Rainfall (AAR) at Alaw Mon Solar Farm site is between 960mm and 1011mm. Agricultural land at the Site is predicted to be at field capacity (i.e., near saturation point) for between 199 and 207 days per year, mainly over the late autumn, winter and early spring. In combination with topsoil texture, the climate will cause 'interactive limitations' to agricultural land quality at the Site, i.e., soil wetness and / or soil droughtiness (see below).

I. Exposure - Wind

3.2.4 The trees and hedgerows along field boundaries in the western parts of the Site (i.e., Areas A, B, C, D, M, N, and O, **Figure 1**) are severely wind-pruned, as shown in **Plate 1** below. The extent of exposure to the prevailing westerly wind in these parts of the Site is likely to be damaging to crops or cause stress to livestock, especially in wet weather. This provides further evidence that agricultural land in the western parts of the Site should not be graded higher than Grade 2 due to climate, in this case exposure to strong winds.

Plate 1: Wind pruning of trees in the west (Area M)

3.3 Site

3.3.1 As shown on **Appendix 1**, the approximately 285 ha Study Area is located to the east of Llanerchymedd. The land use at the Site is mainly agricultural. The Llyn Alaw (lake) is located to the north, and Carmel is location to the south.

3.3.2 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.

I. Gradient and Micro-Relief

3.3.3 The topography of the Site is undulated as shown by the contours on **Figure 1**. Altitude ranges from approximately 40 metres (m) Above Ordnance Datum (AOD) at the lowest point in the south-west, to approximately 109m AOD at the highest point in the south-east. The quality of agricultural land is limited by gradient to Subgrade 3b in parts of the Site where the gradient is greater than 7° and up to 11°, or Grade 4 where the gradient is greater than 11° and up to 18° (as per Table 1 of the ALC Guidelines, 1988). Where the quality of agricultural land is limited by gradient, this is identified in the right-hand column ('Final ALC Grade') in the soil profile logs given as **Appendix 1.**

3.3.4 Micro-relief, i.e., complex changes in slope angle and direction over short distances, is not limiting to agricultural land quality at the Site.

II. Risk of Flooding

3.3.5 From the Welsh Government's Flood Map for Planning website[6], the Site has a low risk of flooding. It is predicted that the quality of agricultural land is not limited by flood risk, with regard to Table 2 '*Grade according to flood risk in summer*' and Table 3 '*Grade according to flood risk in winter*' of the ALC Guidelines.

3.4 Soil

I. Geology/Soil Parent Material

3.4.1 British Geological Survey (BGS) information available online[7] has been utilised to identify the Bedrock underlying the Site and any Superficial (Drift) Deposits over the Bedrock. This information helps to determine the parent material from which the soil has formed.

3.4.2 The BGS information (1:50,000) indicates that land at the Site is underlain entirely by Ordovician Rocks, comprising interbedded mudstone, sandstone and conglomerate.

3.4.3 BGS information (1:50,000) indicates that most of the bedrock has a superficial covering of glacial till (Devensian, diamicton), with smaller regions of Alluvium (clay, silt, sand and gravel)

[6] Welsh Government. Long term flood risk maps. Available online @ https://naturalresources.wales/evidence-and-data/maps/long-term-flood-risk/?lang=en Last accessed June 2021.

[7] British Geological Survey 'Geology of Britain Viewer'. Available online @ http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html Last accessed June 2021

in the west. Parts of the Site are not covered by any superficial deposits and here the soil is developed directly from the Ordovician rocks.

II. Published Information on Soil

National Soil Map (1:250,000)

3.4.4 The National Soil Map held by the National Soil Resources Institute (NSRI) at Cranfield University shows that land within the Study Area is covered by soils grouped mainly in the Cegin association (713d)[8]. A small are of land around higher, sloping ground to the north of Carmel in the south of the study area is covered by soils grouped in the East Keswick association (541x). Land to the northwest of the Site is mapped with peaty soils belonging to the Crowdy 2 Association (1031b).

3.4.5 NSRI at Cranfield University[9] describes how the Cegin association comprises seasonally waterlogged loamy and clayey cambic stagnogley soils belonging to the Cegin, Brickfield and Greyland series. They are intractable for much of the year unless artificially drained and their slowly permeable subsoils are coarsely structured and often compact at depth. Sannan and Denbigh series occur on steep slopes or where the drift is thin over bedrock giving good drainage. The association, which covers 1622 km², is widespread over Silurian and Ordovician sedimentary rocks in Wales. In northern Anglesey thick drift and low relief combine to give an extensive uninterrupted area of the association.

3.4.6 The nature of Cegin soils varies with topography and parent material (Thompson 1982). On convex hilltops compact slowly permeable material may be near the surface as a result of truncation. On footslopes, profiles have permeable finely structured upper horizons in colluvium overlying the more compact layers characteristic of stagnogley soils. In some Cegin soils there is a thin clayey horizon possibly formed by in situ weathering. Soils with thicker clayey horizons are classified as fine loamy over clayey Greyland series or similar unnamed fine silty over clayey stagnogley soils. These two soils are components of this association throughout Wales, being most prominent in eastern counties where bedrock is soft and more easily weathered, and over the mudstones of south Wales. Clayey Hallsworth soils (pelo-stagnogley soils) have a similar distribution. Brickfield soils are fine loamy throughout and are most common where more sandstone and gritstone are incorporated in the drift. Stagnogleyic brown earths of the Sannan series and well drained brown earths of the Denbigh, Barton or East Keswick series are most common on steeper slopes where topography varies rapidly over short distances.

3.4.7 The Cegin association absorbs only a small proportion of winter rain. In wet districts Cegin, Brickfield and Greyland soils are waterlogged for long periods in the growing season (Wetness Class V) and even with artificial drainage they can remain wet throughout the winter (Wetness

[8] National Soil Resources Institute (2021) Soils Site Report for location 238586E, 383863N, 4km x 4km, National Soil Resources Institute, Cranfield University. Accessed via: https//www.landis.org.uk/sitereporter Last accessed June 2021

[9] Cranfield University 2021. *The Soils Guide.* Available: www.landis.org.uk. Cranfield University, UK. Last accessed June 2021

Class IV). Where the field capacity period is less than 200 days, the soils are naturally drier (Wetness Class IV) and their drainage regime can be improved to Wetness Class III. Denbigh soils are naturally well drained (Wetness Class I) and Sannan soils occasionally waterlogged (Wetness Class III).

3.4.8 NSRI, Cranfield University, describes how the East Keswick 1 association comprises deep fine loamy brown earths with some wetter soils in drift. The well drained East Keswick series, typical brown earths in drift with siliceous stones, occupies approximately two-thirds of the association. The seasonally waterlogged Nercwys series, fine loamy stagnogleyic brown earths, and Arrow series, coarse loamy gleyic brown earths, occupy most of the remainder. The association occurs throughout Anglesey and Lleyn where the soils were previously mapped as Gaerwen and Arfon series. The drift thickness varies considerably over short distances and there are isolated exposures of schist and gneissose granite. The soils are often stony, with hard metamorphic and igneous stones. East Keswick soils are well drained (Wetness Class I), whereas seasonal waterlogging is a feature of lower horizons in Nercwys and Arrow soils. Natural drainage in the Nercwys is hampered by the slowly permeable subsoil. The land readily absorbs winter rainwater. Available water is adequate for arable crops in normal years in most places.

3.4.9 The Crowdy 2 Association consists of raw acid peat soils dominate this association which occupies wide upland tracts of blanket bog and scattered peat-filled basins in Wales and South West England. These soils are more or less permanently wet (Wetness Class VI) and this usually prevents their economic improvement.

Detailed Soil Information (1:63,360)

3.4.10 A more detailed soil map (1 inch to 1 mile – 1:63,360) of 'The County of Anglesey' was produced by the Agricultural Research Council in 1958[10]. This map indicates that land within the Study Area is covered by soils mainly in the Sannan series. These are 'brown earths with gleying', comprising silty loam topsoil over similarly textured upper and lower subsoil. The lower subsoil is slightly gleyed, with ochreous mottles (estimated to be Wetness Class II or III).

III. Soil Survey

3.4.11 A log of the soil profiles recorded on Site in April 2021 is given as **Appendix 1**. A description of five soil pits is given as **Appendix 2**. The ALC/soil survey determined soil profiles with predominantly medium clay loam to medium silty clay loam topsoil overlying upper subsoil of similar textures. On higher ground in the south-west and east, the lower subsoil is slightly to moderately stony and well drained (Wetness Class I) to slightly seasonally waterlogged (Wetness Class II).

[10] E. Roberts (1958). Agricultural Research Council. Memoirs of the Soil Survey of Great Britain. 'The County of Anglesey: Soils and Agriculture'. Her Majesty's Stationary Office, London.

3.4.12 Most of the Site has soil profiles which are slowly permeable and seasonally waterlogged (Wetness Class III).

3.4.13 Land at the base of slopes, or in the bottom of valleys, is slowly permeable and seasonally waterlogged for long periods over the winter (Wetness Class IV). Here, the pasture is commonly poached by the hooves of livestock and has many soft rushes (Juncuss spp.) in the sward, as shown in the photograph taken in Area M (see **Figure 1**) given as **Plate 2**.

Plate 2: Wet ground in Area M with common soft rushes (Juncuss Spp.)

IV. Topsoil Texture

3.4.14 In order to determine the topsoil texture, nine samples of topsoil were collected at auger-bore locations A1, C8, D5, G5, H2, I2, J4, K10, and M11, as shown on **Figure 1**. The topsoil samples were sent to a UKAS accredited laboratory for analysis of particle size distribution (PSD), based on the British Standard Institution particle size grades. Certificates of analysis is provided as **Appendix 3**. The findings of the PSD analysis are shown in Table 3.2 below:

Table 3.2: Topsoil Texture (re Table 10, ALC Guidelines)

Topsoil Sample Location (See Fig. 1)	% sand 0.063-2.0 mm	% silt 0.002-0.063 mm	% clay <0.002 mm	ALC Soil Texture Class
A1	20	48	32	Heavy Silty Clay Loam (HZCL)
C8	28	48	24	Medium Clay Loam (MCL)
D5	26	49	25	Medium Clay Loam (MCL)
G5	31	46	23	Medium Clay Loam (MCL)
H2	22	52	26	Medium Clay Loam (MCL)
I2	19	55	26	Medium Silty Clay Loam (MZCL)

J4	26	50	24	Medium Clay Loam (MCL)
K10	26	52	22	Medium Clay Loam (MCL)
M11	19	56	25	Medium Silty Clay Loam (MZCL)

3.5 Interactive Limitations

3.5.1 From the published information above, together with the findings of the detailed soil survey, it has been determined that the quality of agricultural land at the Site is limited mainly by soil wetness, as described below.

I. Soil Wetness

3.5.2 A soil wetness limitation occurs where the soil water regime adversely affects plant growth or imposes restrictions on cultivations or grazing by livestock. The ALC grade according to soil wetness at the Site is given in Table 3.3 below (based on Table 6 'Grade According to Soil Wetness – Mineral Soils' in the ALC Guidelines).

Table 3.3: ALC Grade According to Soil Wetness

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

Key
* <27% clay; and ** >27% clay

3.5.3 In a climate area with between 199-207 FCD, soil profiles with medium clay loam or medium silty clay loam topsoil overlying slowly permeable subsoils which are waterlogged for long periods over the winter (i.e., Wetness Class IV) are limited by soil wetness to Subgrade 3b. Where the soil profiles are slowly permeable and slightly seasonally waterlogged (Wetness Class II) they are limited by soil wetness to Subgrade 3a.

3.5.4 Auger-bores 1 and 3 in Area A had heavy silty clay loam topsoil and the profiles are in Wetness Class IV. These profiles are limited by soil wetness to Grade 4.

3.5.5 Some well drained soils in Wetness Class I are limited by soil wetness to Grade 2.

3.6 ALC Grading at the Site

3.6.1 The area of land in each ALC grade has been measured from **Figure 2** and the area (ha) and proportion (% of Site) is given in Table 3.4.

Table 3.3: Agricultural Land Classification – Alaw Mon Solar Farm, Anglesey

ALC Grade	Total (Ha)	Total (% of Site)
Grade 1 (Excellent)	0	0
Grade 2 (Very Good)	39.0	13.0
Subgrade 3a (Good)	147.1	49.0
Subgrade 3b (Moderate)	99.0	33.0
Grade 4 (Poor)	7.5	2.5
Grade 5 (Very Poor)	0	0
Other Land / Disturbed Land	7.2	2.4
Total	**299.8**	**100**

3.6.2 Grade 2 land is limited by (i) an overall climate limitation, (ii) exposure to wind in the western parts of the Site, and by (iii) soil wetness where well drained soil profiles (Wetness Class) have medium clay loam or medium silty clay loam topsoils. This grade of land generally occurs at higher elevations in the western, southern and eastern parts of the Site.

3.6.3 Subgrade 3a land is limited by soil wetness where soil profiles with medium clay loam or medium silty clay loam topsoils are slightly seasonally waterlogged (Wetness Class II) or seasonally waterlogged (Wetness Class III). This grade of land generally occurs on upper and middle slopes across the whole Site.

3.6.4 Subgrade 3b is limited by (i) slopes with gradients between 7°and 11°, and (ii) soil wetness where soil profiles with medium clay loam or medium silty clay loam topsoils are slowly permeable and seasonally waterlogged for long periods over the winter (Wetness Class IV). This grade of land tends to occur at the base of slopes and in the bottom of valleys. This grade of land is readily identified on Site by the presence of many soft rushes in the grassland.

3.6.5 Grade 4 land is limited by (i) soil wetness in the western end of the Site where there are some soil profiles with heavy silty clay loam topsoil in Wetness Class IV, and (ii) by slopes with gradients between 11° and 18° in the south-western part of the Site.

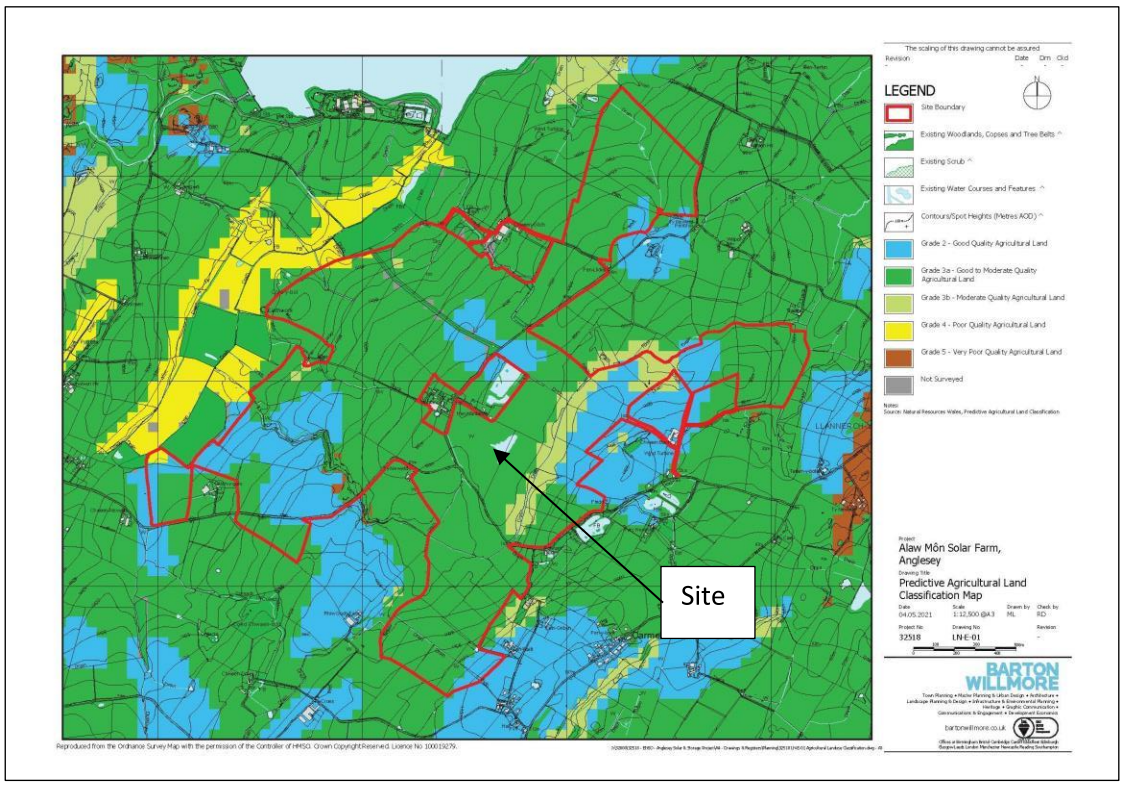
4.0 ALC AT THE SITE IN A WIDER GEOGRAPHICAL CONTEXT

4.1 Introduction

4.1.1 The aim of this section is to examine agricultural land quality at the Site in a national, regional, county and local context.

4.2 Predictive ALC Information

4.2.1 The Welsh Government has developed a Predictive ALC map for Wales[11] online. A map showing the Welsh Government's prediction of ALC grades at the Site is given below and in more detail as **Appendix 5**.



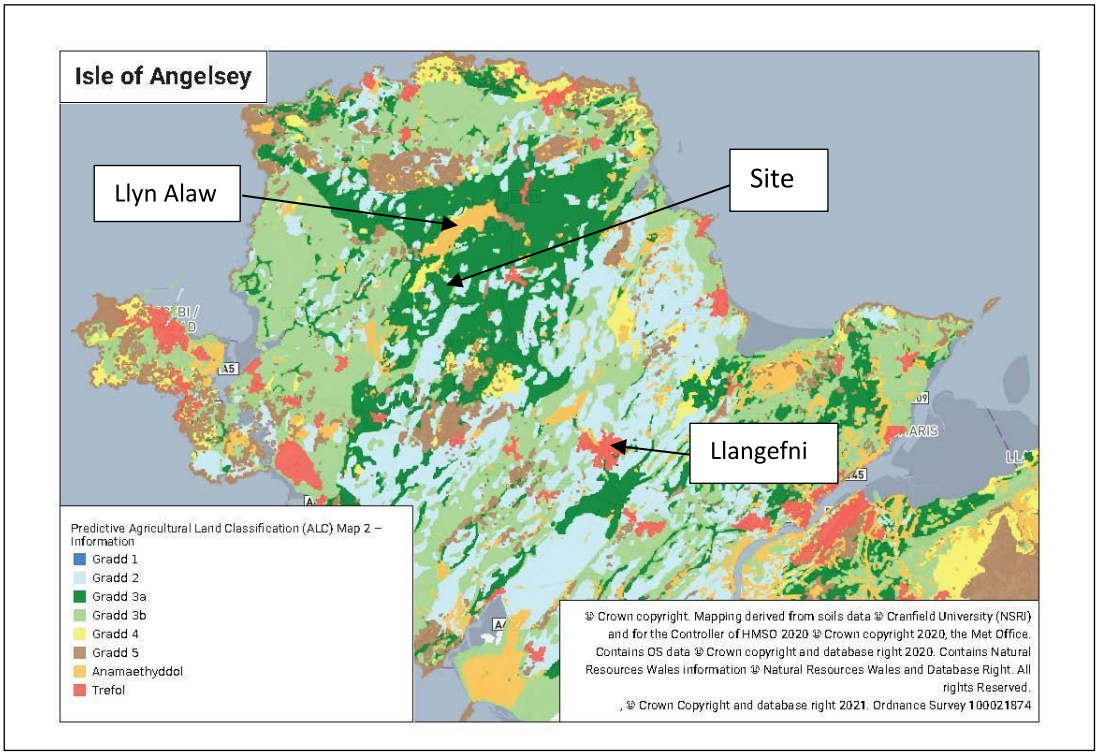
4.2.2 The Welsh Government's Predictive ALC map shows the predominant grade at the Site is Subgrade 3a (dark green), with some limited areas of Grade 2 (light blue) and Subgrade 3b (olive green). A small area of Grade 4 (yellow) is predicted in the west.

4.2.3 The detailed ALC survey carried out in April 2021 and described in Section 3 of this report has confirmed the predominance of agricultural land in Subgrade 3a (49.1% of the Site), with smaller proportions of Grade 2 (13.0% of the Site) and Grade 4 (2.5% of the Site). The detailed

[11] Welsh Government (2021). Predictive Agricultural Land Classification Map (Version 2). Available online @ Lle - Map - Predictive Agricultural Land Classification (ALC) Map 2 (gov.wales) Last accessed June 2021

ALC determined that approximately one-third of the Site (33.0%) is in Subgrade 3b; this grade of land is limited by gradient and/or soil wetness.

4.2.4 An extract from the Predictive ALC map for Wales showing the predicted ALC grades for the Isle of Anglesey is shown below.



4.2.5 The Predictive ALC map of Anglesey shows there is preponderance of Subgrade 3a in the central-northern part of the island around Lynn Alaw, with a high proportion of Grade 2 in the centre of Anglesey between Llanefni and Llyn Alaw. Therefore, the presence of mainly Subgrade 3a and some Grade 2 at the Site is unsurprising, as there is a high likelihood of encountering these grades of land on Anglesey. The presence of approximately 99.0ha of Subgrade 3b (or 33.0%) at the Site represents some of the poorest quality land on Angelsey.

5 SUMMARY AND CONCLUSIONS

5.1.1 An assessment of agricultural land quality, involving a desktop study and a detailed Agricultural Land Classification (ALC) survey, has been undertaken to determine the quality of agricultural land at the proposed Alaw Mon Solar Farm, Anglesey ('the Site'). The assessment is made in accordance with the Agricultural Land Classification (ALC) system for England and Wales. The approximately 299.8 ha Site is located to the west of Llanerchymedd. The approximate centre of the Site is located at National Grid Reference (NGR) reference SH 38530 84028. The location and boundary of the Site is shown on **Figure 1**.

5.1.2 British Geological Survey (BGS) information (1:50,000) indicates that land at the Site is underlain entirely by Ordovician Rocks, comprising interbedded mudstone, sandstone and conglomerate. Most of the bedrock has a superficial covering of glacial till (Devensian, diamicton), with smaller regions of Alluvium (clay, silt, sand and gravel) in the west. Parts of the Site are not covered by any superficial deposits and here the soil is developed directly from the Ordovician rocks.

5.1.3 The National Soil Map for Wales held by the National Soil Resources Institute (NSRI) at Cranfield University shows that land at the Site is covered by soils grouped mainly in the Cegin association (713d). A small are of land around higher, sloping ground to the north of Carmel in the south of the study area is covered by soils grouped in the East Keswick association (541x). Land to the northwest of the Site is mapped with peaty soils belonging to the Crowdy 2 Association (1031b).

5.1.4 A detailed ALC survey carried out in April 2021 has determined that approximately half the Site (147.1ha or 49.1% of the Site) is in Subgrade 3a. Approximately one-third (99.0ha or 33.0% of the Site) is in Subgrade 3b. There are smaller proportions of Grade 2 (39.0ha or 13.0% of the Site) and Grade 4 (7.5ha or 2.5% of the Site). The remainder of the land is classified as non-agricultural, i.e., woodland, roads, buildings (7.2ha or 2.4% of the Site).

5.1.5 Grade 2 land is limited by (i) an overall climate limitation, (ii) exposure to wind in the western parts of the Site, and by (iii) soil wetness where well drained soil profiles (Wetness Class) have medium clay loam or medium silty clay loam topsoils. This grade of land generally occurs at higher elevations in the western, southern and eastern parts of the Site.

5.1.6 Subgrade 3a land is limited by soil wetness where soil profiles with medium clay loam or medium silty clay loam topsoils are slightly seasonally waterlogged (Wetness Class II) or seasonally waterlogged (Wetness Class III). This grade of land generally occurs on upper and middle slopes across the whole Site.

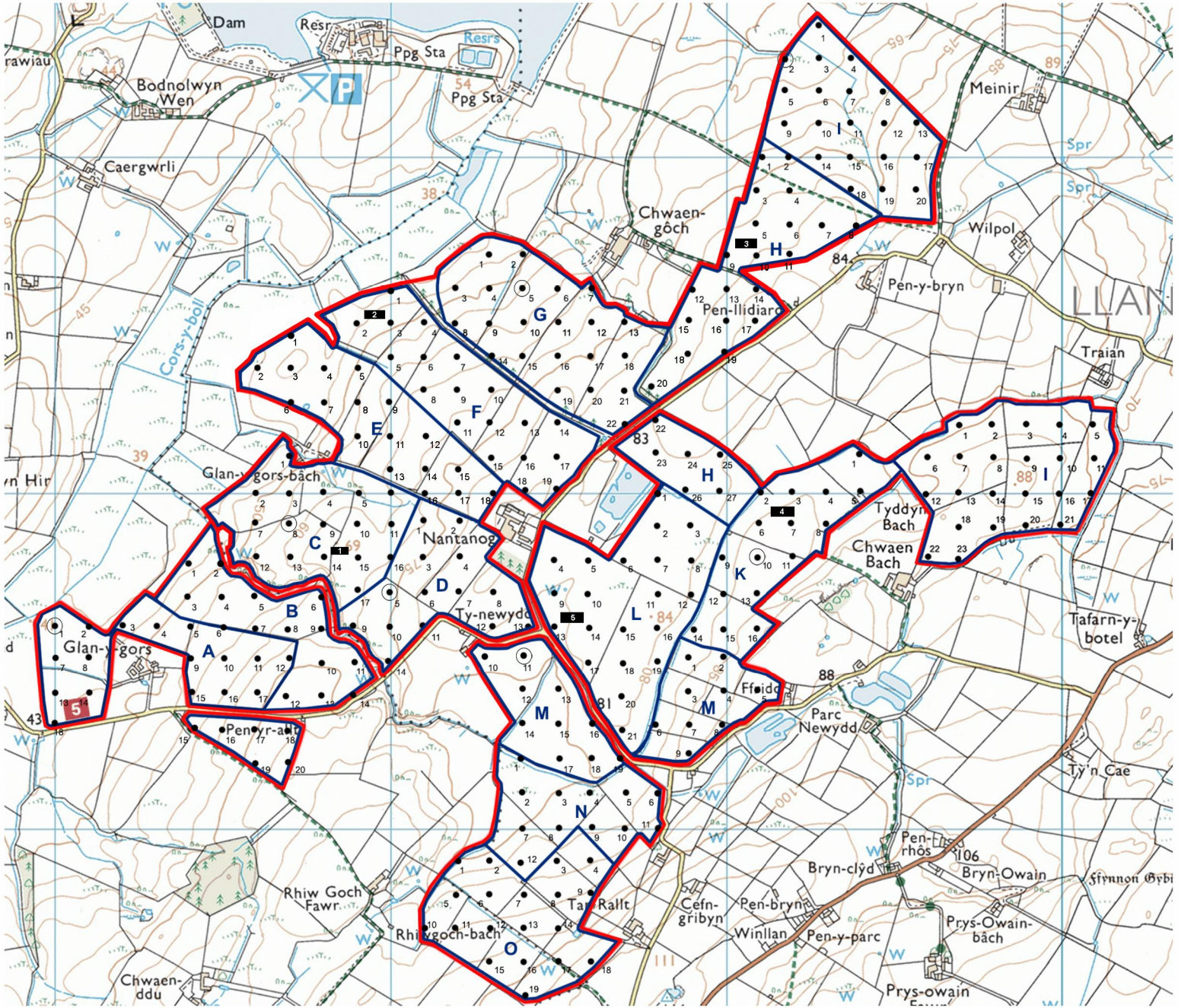
5.1.7 Subgrade 3b is limited by (i) slopes with gradients between 7°and 11°, and (ii) soil wetness where soil profiles with medium clay loam or medium silty clay loam topsoils are slowly permeable and seasonally waterlogged for long periods over the winter (Wetness Class IV). This grade of land tends to occur at the base of slopes and in the bottom of valleys. This grade of land is readily identified on Site by the presence of many soft rushes in the grassland.

5.1.8 Grade 4 land is limited by (i) soil wetness in the western end of the Site where there are some soil profiles with heavy silty clay loam topsoil in Wetness Class IV, and (ii) by slopes with gradients between 11° and 18° in the south-western part of the Site.

5.1.9 The Predictive ALC map of Anglesey shows there is preponderance of Subgrade 3a in the central-northern part of the island around Lynn Alaw, with a high proportion of Grade 2 in the centre of Anglesey between Llanefni and Llyn Alaw. Therefore, the presence of mainly Subgrade 3a and some Grade 2 at the Site is unsurprising, as there is a high likelihood of encountering these grades of land on Anglesey. The presence of approximately 95.2ha of Subgrade 3b (or 33.4%) and 7.1ha of Grade 4 (or 2.5%) at the Site represents some of the poorest quality land on Angelsey.

5.1.10 It is important to consider that the construction of a solar farm at the Site is reversible development, i.e., the solar panels will be removed following the operational life of the scheme, and the land would be returned to agricultural production. In many respects, the management of the land under solar PV panels over the operational life of the scheme can improve soil health, such as increasing soil organic matter (SOM), and hence soil organic carbon (SOC), increasing soil biodiversity, and improving soil structure. This is consistent with national planning policy for conserving BMV agricultural land and improving soil health in Future Wales, Planning Policy Wales , Technical Advice Note 6, and Anglesey and Gwynedd Joint Local Development Plan (2011 – 2026).

Figures



Key:

- Site Parcel
- Site boundary
- Auger location
- Topsoil Sample
- Soil Pit

N

NTS

Figure 1 :

Sample Locations

Project Name:

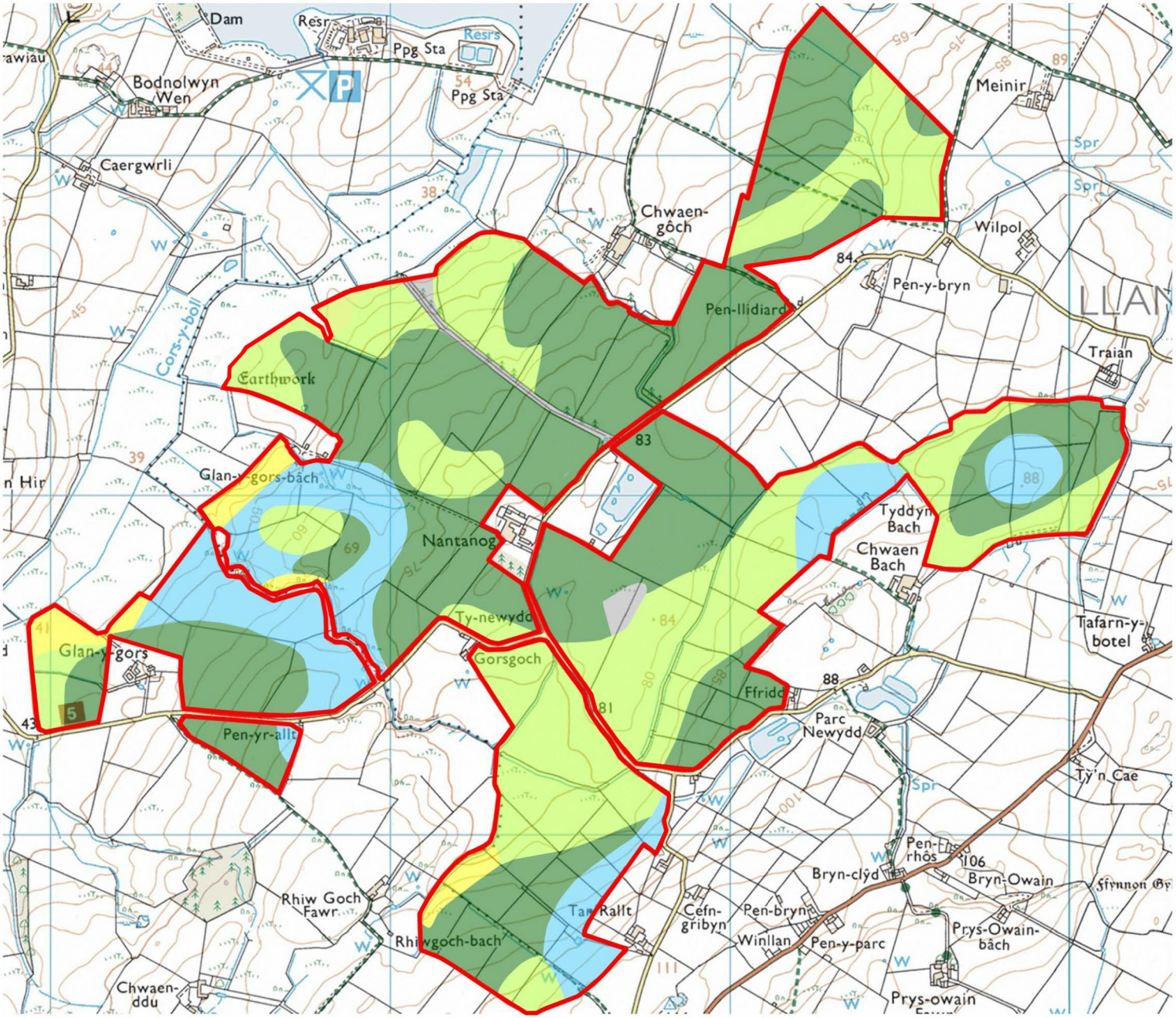
Alaw Mon Solar Farm, Anglesey

Client:

Enso Energy Limited

Project No. C772	**Date:** 01/06/2021
Dwg. No. 01	**Drawn By:** RWA

R W Askew BSc(Hons) F.I.Soil Sci MSc
CSCi The Old Stables, Upexe, Exeter, EX5
5ND Tel: 07753 227 224
Email: rabaskew@btinternet.com



Key:

Approximate Site Boundary

ALC Grade

- Grade 1
- Grade 2
- Subgrade 3a
- Subgrade 3b
- Grade 4
- Grade 5
- Other Land

NTS

Figure 2:

Agricultural Land Classification

Project Name:

Alaw Mon Solar Farm, Anglesey

Client:

Enso Energy Limited

Project No. C772	**Date:** 01/06/2021
Dwg. No. 02	**Drawn By:** RWA

R W Askew BSc(Hons) F.I.SoilSci MSc CSCi The Old Stables, Upexe, Exeter, EX5 5ND Tel: 07753 227 224 Email: rabaskew@btinternet.com

Appendix 1:
Soil Profile Logs

Project Number	Project Name	Parcel
C772	Alaw Mon Solar Farm, Anglesey	A

Date of Survey	Survey Type	Surveyor(s)	Company
19/04/2021	ALC	RWA	Askew Land and Soil

Weather	Relief	Land use and vegetation
Dry, Sunny	NW facing slope	PGR (Permanent Grassland)

Grid Reference	Postcode	Altitude	Area
SH374835	LL717BN	55	15.4

MAFF prov	MAFF detailed	Flooding
Grade 2/3a/3b	None	Flood Zone 1

AAR	AT0	MDw	MDp	FCD	Climate grade
969	1422	81	66	200	1

Bedrock	Superficial deposits
Ordovician Rocks	Till/Alluvium/Glaciofluvial

Soil association(s) 1:250,000	Detailed soil information
Brickfield 2/Crowdy 2	None

Revision Number	Date Revised
2	09/06/2021

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	SH 37000	83600	237000	383600	40	≤7	NW	PGR	0	18	18	7.5YR4/2				No	HZCL - Sil	0										Not Applic	NON - N	No	No	41	31	1	WC IV	4	Wetness			4
									18	30	12	2.5Y6/2				Yes	HZCL - Sil	0										Poor	NON - N	No	No									
									30	120	90	2.5Y5/2	MD - M	7.5YR5/8		Yes	ZC - Silty	0										Poor	NON - N	Yes	Yes									
2	SH 37100	83600	237100	383600	39	≤7	NW	PGR	0	28	28	7.5YR2.5/2				No	OL - Orga	0										Not Applic	NON - N	No	No	73	63	1	WC IV	4	Wetness			4
									28	40	12	2.5Y5/3				Yes	HZCL - Sil	0										Poor	NON - N	No	No									
									40	120	80	2.5Y5/1	MD - M	7.5YR5/6		Yes	ZC - Silty	0										Poor	NON - N	Yes	Yes									
3	SH 37200	83600	237200	383600	47	≤7	NW	PGR	0	22	22	7.5YR5/2				No	HZCL - Sil	0										Not Applic	NON - N	No	No	43	33	1	WC IV	4	Wetness			4
									22	35	13	2.5Y6/2				Yes	HZCL - Sil	0										Poor	NON - N	No	No									
									35	120	85	2.5Y5/2	MD - M	7.5YR5/6		Yes	ZC - Silty	0										Poor	NON - N	Yes	Yes									
4	SH 37300	83600	237300	383600	47	≤7	NW	PGR	0	24	24	7.5YR4/3				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w							Not Applic	NON - N	No	No	-3	16	3a	WC I	2	Droughtiness	Exposure-Wind		3a
									24	40	16	7.5YR5/4				No	HCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	No	No									
									40	70	30	2.5Y5/6				No	HCL - Cla	70			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	No	No									
5	SH 37400	83600	237400	383600	55	≤7	NW	PGR	0	26	26	5YR4/3				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w							Not Applic	NON -	Non-ca	No	49	41	1	WC III	3a	Wetness			3a
									26	55	29	7.5YR5/3				No	MCL - Cla	12			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Non-ca	No									
									55	120	65	2.5Y5/4	MD - M	7.5YR5/6	MD - M	2.5Y6/1	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor	NON - N	Yes	Yes									
6	SH 37500	83600	237500	383600	61	≤7	NW	PGR	0	24	24	7.55YR4/3				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w							Not Applic	NON -	Non-ca	No	49	40	1	WC III	3a	Wetness			3a
									24	58	34	7.5YR5/3				No	MCL - Cla	12			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Non-ca	No									
									58	120	62	2.5Y5/4	MD - M	7.5YR5/6	MD - M	2.5Y6/1	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor	NON - N	Yes	Yes									
7	SH 37000	83500	237000	383500	40	≤7	NW	PGR	0	25	25	10YR5/3				No	MCL - Cla	0										Not Applic	NON - N	No	No	48	40	1	WC IV	3b	Wetness			3b
									25	35	10	10YR5/2	CD - C	5YR5/8			HCL - Cla	0										Moderate	NON - N	No	No									
									35	120	85	2.5Y5/2	MD - M	5YR5/6			C - Clay	0										Poor	NON - N	No	Yes									
8	SH 37100	83500	237100	383500	39	≤7	NW	PGR	0	24	24	7.5YR4/3				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w							Not Applic	NON -	Non-ca	No	48	40	1	WC III	3a	Wetness			3a
									24	55	31	7.5YR5/3				No	MCL - Cla	12			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Non-ca	No									
									55	120	65	2.5Y5/4	MD - M	7.5YR5/6	MD - M	2.5Y6/1	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor	NON - N	Yes	Yes									
9	SH 37400	83500	237400	383500	55	≤7	NW	PGR	0	28	28	10YR5/3				No	MCL - Cla	1	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w							Not Applic	NON -	Non-ca	No	51	42	1	WC III	3a	Wetness			3a
									28	59	31	10YR6/3	FF - Fe	7.5YR5/8			HCL - Cla	12			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Non-ca	No									
									59	120	61	2.5Y5/4	MD - M	7.5YR5/6	MD - M	2.5Y6/1	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor	NON - N	Yes	Yes									
10	SH 37500	83500	237500	383500	61	≤7	NW	PGR	0	25	25	10YR4/3				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w							Not Applic	NON -	Non-ca	No	49	40	1	WC III	3a	Wetness			3a
									25	60	35	10YR5/3	FF - Fe	7.5YR5/8			HCL - Cla	14			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Non-ca	No									
									60	120	60	2.5Y5/4	MD - M	7.5YR5/6	MD - M	2.5Y6/1	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor	NON - N	Yes	Yes									
11	SH 37600	83500	237600	383500	61	≤7	NW	PGR	0	26	26	10YR5/3				No	MCL - Cla	1	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w							Not Applic	NON -	Non-ca	No	50	42	1	WC III	3a	Wetness			3a
									26	55	29	10YR6/3				No	HCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Non-ca	No									
									55	120	65	2.5Y5/4	MD - M	7.5YR5/6	MD - M	2.5Y6/1	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor	NON - N	Yes	Yes									
12	SH 37700	83500	237700	383500	70	≤7	NW	PGR	0	24	24	7.5YR4/3				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w							Not Applic	NON - N	No	No	-3	16	3a	WC I	2	Droughtiness			3a
									24	40	16	7.5YR5/4				No	HCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	No	No									
									40	70	30	2.5Y5/6				No	HCL - Cla	70			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	No	No									

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
13	SH 37000	83400	237000	383400	44	≤7	NW	PGR	0	22	22	10YR5/3				No	MCL - Cla	0										Not Applic	NON - N	No	No	49	41	1	WC IV	3b	Wetness			3b
									22	38	16	10YR5/2	CD - C	5YR5/8		Yes	HCL - Cla	0										Moderate	NON - N	No	No									
									38	120	82	2.5Y5/2	MD - M	5YR5/6		Yes	C - Clay	0										Poor	NON - N	No	Yes									
14	SH 37100	83400	237100	383400	47	≤7	NW	PGR	0	26	26	5YR4/3				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w							Not Applic	NON - N	Non-ca	No	50	41	1	WC III	3a	Wetness			3a
									26	55	29	5YR5/3				No	MCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	Non-ca	No									
									55	120	65	2.5Y5/4	MD - M	7.5YR5/6	MD - M	Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor	NON - N	Yes	Yes									
15	SH 37400	83400	237400	383400	60	≤7	NW	PGR	0	27	27	7.5YR4/3				No	MCL - Cla	2	0	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w							Not Applic	NON - N	Non-ca	No	50	42	1	WC III	3a	Wetness			3a
									27	54	27	10YR5/3				No	HCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	Non-ca	No									
									54	120	66	2.5Y5/4	MD - M	7.5YR5/6	MD - M	Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor	NON - N	Yes	Yes									
16	SH 37500	83400	237500	383400	70	≤7	NW	PGR	0	23	23	10YR4/3				No	MCL - Cla	1	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w							Not Applic	NON - N	Non-ca	No	50	42	1	WC III	3a	Wetness			3a
									23	54	31	10YR5/3	FF - Fe	7.5YR5/8		No	HCL - Cla	8			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	Non-ca	No									
									54	120	66	2.5Y5/4	MD - M	7.5YR5/6	MD - M	Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor	NON - N	Yes	Yes									
17	SH 37600	83400	237600	383400	70	≤7	NW	PGR	0	24	24	10YR5/3				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w							Not Applic	NON - N	No	No	10	35	2	WC IV	3b	Wetness			3b
									24	38	14	10YR6/3				No	HCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	No	No									
									38	70	32	2.5Y5/1	MD - M	7.5YR5/6	MD - M	Yes	HCL - Cla	0			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor	NON - N	Yes	Yes									
18	SH 37000	83320	237000	383320	44	≤7	NW	PGR	0	28	28	10YR5/3	FD - Fe	7.5YR5/6		No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w							Not Applic	NON - N	No	No	50	41	1	WC IV	3b	Wetness			3b
									28	46	18	10YR5/3	CD - C	5YR5/8	CD - C	Yes	HCL - Cla	0										Moderate	NON - N	No	No									
									46	120	74	2.5Y5/2	MD - M	5YR5/6	CD - C	Yes	HCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor	NON - N	No	Yes									
	END																																						

Mottle form
FF - Few Faint
FD - Few Distinct
FP - Few Prominent
CF - Common Faint
CD - Common Distinct
CP - Common Prominent
MF - Many Faint
MD - Many Distinct
MP - Many Prominent
VF - Very many Faint
VD - Very many Distinct
VP - Very many Prominent

Texture
C - Clay
CHK - Chalk
CS - Coarse Sand
CSL - Coarse sandy loam
CSZL - Coarse sandy silt loam
FP - Fibrous and semifibrous peats
FS - Fine Sand
FSL - Fine sandy loam
FSZL - Fine sandy silt loam
HCL - Clay loam (heavy)
HP - Humified peats
HZCL - Silty clay loam (heavy)
IMP - Impenetrable to roots
LCS - Loamy Coarse Sand
LFS - Loamy fine sand
LMS - Loamy medium sand
LP - Loamy peats
MCL - Clay loam (medium)
MS - Medium Sand
MSL - Medium sandy loam
MSZL - Medium sandy silt loam
MZ - Marine Light Silts
MZCL - Silty clay loam (medium)
OC - Organic clays
OL - Organic loams
OS - Organic sands
PL - Peaty loams
PS - Peaty sands
SC - Sandy clay
SCL - Sandy clay loam
SP - Sandy peats
ZC - Silty clay
ZL - Silt loam

Stone Type
CH - Chalk or chalk stones
FSST - Soft fine grained sandstones
GH - Gravel with non-porous (hard) stones
GS - Gravel with porous stones (mainly soft stone types listed above)
HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)
MSST - Soft, medium or coarse grained sandstones
SI - Soft 'weathered' igneous or metamorphic rocks or stones
SLST - Soft oolitic or dolomitic limestones
ZR - Soft, argillaceous or silty rocks or stones

Ped. Shape
SG - Single grain
GRA - Granular
SAB - Subangular Blocky
AB - Angular Blocky
PRIS - Prismatic
PLAT - Platy
MASS - Massive
NA - N/A

Subsoil Structure Condition
Not Applicable
Good
Moderate
Poor

Soil or Ped. Strength
Loose
Very friable
Friable
Firm
Very firm
Extremely firm
Extremely hard
N/A

Calcareousness
NON - Non-calcareous (<0.5% CaCO3)
VSC - Very slightly calcareous (0.5 - 1% CaCO3)
SC - Slightly calcareous (1 - 5% CaCO3)
MC - Moderately calcareous (5 - 10% CaCO3)
VC - Very calcareous (>10% CaCO3)

Ped. Size
VF - Very Fine
F - Fine
M - Medium
C - Coarse
VC - Very Coarse
NA - N/A

Degree of Ped. Development
W - Weak
M - Moderate
S - Strong
NA - Not applicable

Wetness Class
WC I
WC II
WC III
WC IV
WC V
WC VI

ALC Grades
1
2
3a
3b
4
5
Non-Ag

Gley
None
Gley
N/A

Project Number	Project Name	Parcel
C772	Alaw Mon Solar Farm, Anglesey	B

Date of Survey	Survey Type	Surveyor(s)	Company
19/04/2021	ALC	RM	Askew Land and Soil

Weather	Relief	Land use and vegetation
Dry, Sunny	Level	PGR (Permanent Grassland)

Grid Reference	Postcode	Altitude	Area
SH377836	LL717BN	70	18

MAFF prov	MAFF detailed	Flooding
Grade 2/3a	None	Flood Zone 1

AAR	AT0	MDw	MDp	FCD	Climate grade
991	1404	78	62	204	2

Bedrock	Superficial deposits
Ordovician Rocks	Till/None

Soil association(s) 1:250,000	Detailed soil information
Brickfield 2/Crowdy 2	None

Revision Number	Date Revised
2	29/05/2021

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	SH 37400	83800	237400	383800	42	≤7	NW	PGR	0	32	32	7.5YR3/3				No	MCL - Clay loam (medium)											Not Applicable			No	20	28	2	WC I	2	Droughtiness	Wetness		2
									32	58	26	7.5YR4/3				No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No								
									58	80	22	7.5YR4/4				No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No								
									80	120	40	7.5YR4/4				No	MCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No								
2	SH 37500	83800	237500	383800	50	≤7	NW	PGR	0	20	20	7.5YR4/3				No	MCL - Clay loam (medium)											Not Applicable			No	9	16	2	WC I	2	Droughtiness	Wetness		2
									20	58	38	7.5YR4/3				No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No								
									58	80	22	7.5YR4/4				No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No								
									80	120	40	7.5YR4/4				No	MCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No								
3	SH 37400	83700	237400	383700	42	≤7	NW	PGR	0	25	25	7.5YR3/3				No	MCL - Clay loam (medium)											Not Applicable			No	14	21	2	WC I	2	Droughtiness	Wetness		2
									25	58	33	7.5YR4/3				No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No								
									58	80	22	7.5YR4/4				No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No								
									80	120	40	7.5YR4/4				No	MCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No								
4	SH 37500	83700	237500	383700	50	≤7	NW	PGR	0	33	33	7.5YR4/3				No	MCL - Clay loam (medium)											Not Applicable			No	21	29	2	WC I	2	Droughtiness	Wetness		2
									33	58	25	7.5YR4/3				No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No								
									58	80	22	7.5YR4/4				No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No								
									80	120	40	7.5YR4/4				No	MCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No								
5	SH 37600	83700	237600	383700	50	≤7	NW	PGR	0	35	35	7.5YR3/3				No	MCL - Clay loam (medium)											Not Applicable		No	No	37	46	1	WC I	2	Droughtiness	Wetness		2
									35	40	5	7.5YR4/3				No	MCL - Clay loam (medium)											Moderate		No	No								
									40	55	15	7.5YR4/4				No	MCL - Clay loam (medium)											Moderate		No	No								
									55	80	25	7.5YR4/4				No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No								
									80	120	40	7.5YR4/4				No	MCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No								
6	SH 37800	83700	237800	383700	66	≤7	NW	PGR	0	30	30	7.5YR4/3				No	MCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Not Applicable		No	No	16	28	2	WC I	2	Droughtiness	Wetness		2
									30	35	5	7.5YR4/3				No	MCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No								
									35	50	15	7.5YR4/3				No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	Yes								
									50	80	30	7.5YR4/4				No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No								
									80	100	20	7.5YR4/4				No	MCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No								
7	SH 37600	83600	237600	383600	61	≤7	NW	PGR	0	25	25	7.5YR4/3				No	MCL - Clay loam (medium)											Not Applicable			No	14	21	2	WC I	2	Droughtiness	Wetness		2
									25	30	5	7.5YR4/3				No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No								
									30	80	50	7.5YR4/4				No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No								
									80	120	40	7.5YR4/4				No	MCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No								
8	SH 37700	83600	237700	383600	70	≤7	NW	PGR	0	20	20	7.5YR3/2				No	MCL - Clay loam (medium)											Not Applicable			No	9	16	2	WC I	2	Droughtiness	Wetness		2
									20	58	38	7.5YR4/3				No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No								
									58	80	22	7.5YR4/4				No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No								
									80	120	40	7.5YR4/4				No	MCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No								
9	SH 37800	83600	237800	383600	70	≤7	NW	PGR	0	30	30	7.5YR4/3				No	MCL - Clay loam (medium)											Not Applicable			No	18	26	2	WC I	2	Droughtiness	Wetness		2
									30	60	30	7.5YR3/3				No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate			No								
									60	65	5	7.5YR3/2				No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate			No								
									65	80	15	7.5YR4/4				No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate			No								
									80	120	40	7.5YR4/4				No	MCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate			No								
10	SH 37800	83500	237800	383500	70	≤7	NW	PGR	0	30	30	7.5YR3/3				No	MCL - Clay loam (medium)											Not Applicable		No	No	21	28	2	WC I	2	Droughtiness	Wetness		2
									30	38	8	7.5YR4/3				No	MCL - Cla	30			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No								
									38	80	42	7.5YR4/4				No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate			No								
									80	120	40	7.5YR4/4				No	MCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate			No								
11	SH 37900	83500	237900	383500	71	≤7	NW	PGR	0	38	38	7.5YR4/3				No	MCL - Clay loam (medium)											Not Applicable		No	No	27	35	2	WC I	2	Droughtiness	Wetness		2
									38	40	2	7.5YR4/3				No	MCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No								
									40	80	40	7.5YR4/4				No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate			No								
									80	120	40	7.5YR4/4				No	MCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate			No								
12	SH 37700	83400	237700	383400	77	≤7	NW	PGR	0	38	38	7.5YR4/3				No	MCL - Clay loam (medium)											Not Applicable		No	No	38	47	1	WC II	3a	Wetness			3a
									38	43	5	7.5YR3/3				No	MCL - Cla	1			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No								
									43	60	17	10YR5/3	CF - Cc	10YR5/6		Yes	MCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No								
									60	80	20	10YR5/3	CF - Cc	10YR5/6		Yes	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate			No								
									80	120	40	10YR5/3	CF - Cc	10YR5/6		Yes	MCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate			No								

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
13	SH 37800 83400	237800	383400	80	≤7	NW	PGR	0	35	35	7.5YR4/3					No	MCL - Clay loam (medium)											Not Applicable		No	No	32	40	1	WC I	2	Droughtiness	Wetness		2
								35	40	5	7.5YR4/3					No	MCL - Cla	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No									
								40	50	10	10YR4/4	FF - Fe	10YR5/6			No	MCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No									
								50	80	30	10YR4/4	FF - Fe	10YR5/6			No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate			No									
								80	120	40	10YR4/4	FF - Fe	10YR5/6			No	HZCL - Sil	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate			No									
14	SH 37900 83400	237900	383400	79	≤7	NW	PGR	0	25	25	7.5YR4/3					No	MCL - Clay loam (medium)											Not Applicable		No	No	29	37	2	WC I	2	Droughtiness	Wetness		2
								25	40	15	7.5YR4/3					No	MCL - Cla	3			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No									
								40	48	8	10YR4/3					No	MCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No									
								48	80	32	10YR5/3					No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate			No									
								80	120	40	10YR5/3					No	MCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate			No									
15	SH 37400 83300	237400	383300	60	≤7	NW	PGR	0	30	30	10YR4/3					No	MCL - Clay loam (medium)											Not Applicable		No	No	18	26	2	WC I	2	Droughtiness	Wetness		2
								30	80	50	10YR4/3					No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No									
								80	120	40	10YR5/3					No	MCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate			No									
16	SH 37500 83300	237500	383300	70	≤7	NW	PGR	0	30	30	10YR4/3					No	MCL - Clay loam (medium)											Not Applicable		No	No	20	28	2	WC I	2	Droughtiness	Wetness		2
								30	32	2	10YR4/3	FF - Fe	10YR5/6			No	MCL - Clay loam (medium)											Moderate		No	No									
								32	80	48	10YR4/3	FF - Fe	10YR5/6			No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate			No									
								80	120	40	10YR5/3	FF - Fe	10YR5/6			No	MCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate			No									
17	SH 37600 83300	237600	383300	70	≤7	NW	PGR	0	15	15	10YR4/2					No	MZCL - Silty clay loam (medium)											Not Applicable		No	No	21	30	2	WC III	3a	Wetness			3a
								15	25	10	10YR4/2	CD - Cx	10YR5/6			Yes	MZCL - Silty clay loam (medium)											Moderate		No	No									
								25	32	7	10YR4/2	CD - Cx	10YR5/6			Yes	MZCL - Silty clay loam (medium)											Moderate		No	No									
								32	80	48	10YR4/2	CD - Cx	10YR5/6			Yes	MZCL - Si	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate			No									
								80	120	40	10YR5/3	CD - Cx	10YR5/6			Yes	MZCL - Si	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate			No									
18	SH 37700 83300	237700	383300	77	≤7	NW	PGR	0	40	40	10YR4/3					No	MCL - Clay loam (medium)											Not Applicable		No	Yes	45	54	1	WC I	2	Wetness			2
								40	50	10	10YR4/3					No	MCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No									
								50	75	25	10YR4/3					No	MCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No									
								75	80	5	5YR4/3					No	MCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No									
								80	120	40	5YR4/3					No	MCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No									
19	SH 37600 83200	237600	383200	76	≤7	NW	PGR	0	35	35	7.5YR4/3					No	MCL - Clay loam (medium)											Not Applicable		No	No	30	38	2	WC III	3a	Wetness			3a
								35	50	15	10YR5/3	CD - Cx	10YR5/6			Yes	MCL - Cla	20			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No									
								50	80	30	10YR5/3	CD - Cx	10YR5/6			Yes	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate			No									
								80	120	40	10YR5/3	CD - Cx	10YR5/6			Yes	MCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate			No									
20	SH 37700 83200	237700	383200	82	≤7	NW	PGR	0	25	25	10YR4/2					Yes	MCL - Clay loam (medium)											Not Applicable		No	No	17	25	2	WC III	3a	Wetness			3a
								25	30	5	10YR4/2	FF - Fe	10YR5/6			Yes	MCL - Clay loam (medium)											Moderate		Yes	No									
								30	80	50	10YR5/3	CD - Cx	10YR5/6			Yes	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate			Yes									
								80	120	40	10YR5/3	CD - Cx	10YR5/6			Yes	MCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate			No									
	END																																							

Mottle form
FF - Few Faint
FD - Few Distinct
FP - Few Prominent
CF - Common Faint
CD - Common Distinct
CP - Common Prominent
MF - Many Faint
MD - Many Distinct
MP - Many Prominent
VF - Very many Faint
VD - Very many Distinct
VP - Very many Prominent

Texture
C - Clay
CHK - Chalk
CS - Coarse Sand
CSL - Coarse sandy loam
CSZL - Coarse sandy silt loam
FP - Fibrous and semifibrous peats
FS - Fine Sand
FSL - Fine sandy loam
FSZL - Fine sandy silt loam
HCL - Clay loam (heavy)
HP - Humified peats
HZCL - Silty clay loam (heavy)
IMP - Impenetrable to roots
LCS - Loamy Coarse Sand
LFS - Loamy fine sand
LMS - Loamy medium sand
LP - Loamy peats
MCL - Clay loam (medium)
MS - Medium Sand
MSL - Medium sandy loam
MSZL - Medium sandy silt loam
MZ - Marine Light Silts
MZCL - Silty clay loam (medium)
OC - Organic clays
OL - Organic loams
OS - Organic sands
PL - Peaty loams
PS - Peaty sands
SC - Sandy clay
SCL - Sandy clay loam
SP - Sandy peats
ZC - Silty clay
ZL - Silt loam

Stone Type
CH - Chalk or chalk stones
FSST - Soft fine grained sandstones
GH - Gravel with non-porous (hard) stones
GS - Gravel with porous stones (mainly soft stone types listed above)
HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)
MSST - Soft, medium or coarse grained sandstones
SI - Soft 'weathered' igneous or metamorphic rocks or stones
SLST - Soft oolitic or dolomitic limestones
ZR - Soft, argillaceous or silty rocks or stones

Ped. Shape
SG - Single grain
GRA - Granular
SAB - Subangular Blocky
AB - Angular Blocky
PRIS - Prismatic
PLAT - Platy
MASS - Massive
NA - N/A

Subsoil Structure Condition
Not Applicable
Good
Moderate
Poor

Soil or Ped. Strength
Loose
Very friable
Friable
Firm
Very firm
Extremely firm
Extremely hard
N/A

Calcareousness
NON - Non-calcareous (<0.5% CaCO3)
VSC - Very slightly calcareous (0.5 - 1% CaCO3)
SC - Slightly calcareous (1 - 5% CaCO3)
MC - Moderately calcareous (5 - 10% CaCO3)
VC - Very calcareous (>10% CaCO3)

Ped. Size
VF - Very Fine
F - Fine
M - Medium
C - Coarse
VC - Very Coarse
NA - N/A

Degree of Ped. Development
W - Weak
M - Moderate
S - Strong
NA - Not applicable

Wetness Class
WC I
WC II
WC III
WC IV
WC V
WC VI

ALC Grades
1
2
3a
3b
4
5
Non-Ag

Gley
None
Gley
N/A

Project Number	Project Name	Parcel
C772	Alaw Mon Solar Farm, Anglesey	C

Date of Survey	Survey Type	Surveyor(s)	Company
19/04/2021	Detailed ALC	AR	Askew Land and Soil

Weather	Relief	Land use and vegetation
Dry, Sunny	Level	PGR (Permanent Grassland)

Grid Reference	Postcode	Altitude	Area
SH378839	LL717BN	61	17.7

MAFF prov	MAFF detailed	Flooding
Grade 2/3a	None	Flood Zone 1

AAR	AT0	MDw	MDp	FCD	Climate grade
978	1414	79	64	202	1

Bedrock	Superficial deposits
Ordovician Rocks	Till/None/Alluvium

Soil association(s) 1:250,000	Detailed soil information
Brickfield 2/Crowdy 2	None

Revision Number	Date Revised
2	29/05/2021

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	SH 37700	84100	237700	384100	52	≤7	NW	PGR	0	30	30	10YR4/3					MCL - Cla	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare	65	46	1	WC I	2	Wetness			2
								30	50	20	10YR4/4					No	MCL - Cla	8			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON -	No	No									
								50	120	70	10YR4/6					No	MCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON -	No	No									
2	SH 37600	84000	237600	384000	43	≤7	NW	PGR	0	20	20	10YR4/3					MZCL - Si	8			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare	32	27	1	WC I	2	Wetness			2
								20	50	30	2.5Y5/4					No	MZCL - Si	25			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON -	No	No									
								50	120	70						No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON -	No	No									
3	SH 37700	84000	237700	384000	52	≤7	NW	PGR	0	35	35	10YR4/3					MZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare	54	56	1	WC I	2	Wetness			2
								35	45	10	10YR5/4					No	MZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON -	No	No									
								45	70	25	10YR6/4	CP - C	10YR5/6			Yes	HZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON -	No	No									
								70	120	50	2.5Y5/3	CP - C	10YR4/6			Yes	HZCL - Si	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON -	No	No									
4	SH 37800	84000	237800	384000	61	≤7	NW	PGR	0	25	25	10YR4/3					MZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare	36	48	1	WC I	2	Wetness			2
								25	35	10	2.5Y4/3					No	MZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON -	No	No									
								35	80	45	5Y6/3	CP - C	10YR5/8			Yes	ZC - Silty	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON -	Yes	No									
								80	120	40	5Y6/3	CP - C	10YR5/8			Yes	SCL - San	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON -	Yes	No									
5	SH 37900	84000	237900	384000	61	≤7	NW	PGR	0	15	15	2.5Y4/3					MZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare	16	21	2	WC I	2	Wetness			2
								15	35	20	2.5Y5/3	CP - C	7.5YR4/6			Yes	MZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON -	No	No									
								35	50	15	2.5Y6/1	MP - M	7.5YR5/6			Yes	HZCL - Si	30			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON -	No	No									
								50	120	70	2.5Y6/1	MP - M	7.5YR5/6			Yes	SCL - San	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON -	No	No									
6	SH 38000	84000	238000	384000	65	≤7	NW	PGR	0	28	28	2.5Y4/2					MZCL - Si	3			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare	21	27	2	WC I	2	Wetness			2
								28	50	22	2.5Y6/3					No	ZC - Silty	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON -	No	No									
								50	55	5	2.5Y4/1					No	SCL - San	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON -	No	No									
								55	120	65	2.5Y4/1					No	SCL - San	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON -	No	No									
7	SH 37600	83900	237600	383900	50	≤7	NW	PGR	0	25	25	10YR4/3					MZCL - Si	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare	27	41	2	WC III	3a	Wetness			3a
								25	70	45	2.5Y6/2	MP - M	10YR5/6			Yes	HZCL - Si	20			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON -	Yes	No									
								70	120	50	2.5Y6/2	MP - M	10YR5/6			Yes	HZCL - Si	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON -	Non-ca	No									
8	SH 37700	83900	237700	383900	57	≤7	NW	PGR	0	28	28	10YR4/3					MCL - Cla	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare	47	40	1	WC IV	3b	Wetness			3b
								28	50	22	2.5Y5/3	CP - C	10YR5/6			Yes	HZCL - Si	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON -	Yes	No									
								50	120	70	2.5Y6/2	CP - C	10YR5/6			Yes	ZC - Silty	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor	NON -	Yes	Yes									
9	SH 37800	83900	237800	383900	61	≤7	NW	PGR	0	28	28	10YR4/3					MZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare	53	44	1	WC IV	3b	Wetness			3b
								28	55	27	2.5Y5/3	CP - C	10YR5/6			Yes	HZCL - Si	15			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON -	Yes	No									
								55	120	65	2.5Y6/2	CP - C	10YR5/6			Yes	ZC - Silty	1			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor	NON -	No	Yes									
10	SH 37900	83900	237900	383900	61	≤7	NW	PGR	0	28	28	10YR4/3					MZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare	51	47	1	WC III	3a	Wetness			3a
								28	70	42	2.5Y6/3	CP - C	10YR5/6	CD - C	2.5Y6/1	Yes	ZC - Silty	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON -	Yes	No									
								70	120	50	2.5Y6/3	MP - M	10YR5/6	CD - C	2.5Y6/1	Yes	ZC - Silty	20			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON -	Yes	No									
11	SH 38000	83900	238000	383900	65	≤7	NW	PGR	0	30	30	10YR4/3					MZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare	60	50	1	WC I	2	Wetness			2
								30	55	25	2.5Y5/5					No	MZCL - Si	8			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON -	No	No									
								55	80	25	2.5Y4/3					No	MZCL - Si	20			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON -	No	No									
								80	120	40	2.5Y4/3					No	MZCL - Si	30			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON -	No	No									
12	SH 37600	83800	237600	383800	50	≤7	NW	PGR	0	20	20	10YR4/3					MCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare	26	32	2	WC I	2	Wetness			2
								20	38	18	10YR4/4					No	MCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON -	No	No									
								38	60	22	10YR5/6					No	MCL - Cla	20			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON -	No	No									
								60	75	15	10YR5/6					No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON -	No	No									
								75	120	45	2.5Y4/1					No	SCL - San	70			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON -	No	No									

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
13	SH 37700	83800	237700	383800	57	≤7	NW	PGR	0	25	25	10YR4/3					MZCL - Si	3			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON -	Non-calcare		17	23	2	WC I	2	Wetness			2
								25	45	20	2.5Y6/3					No	MZCL - Si	15			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	No	No									
								45	55	10	2.5Y4/1					No	MZCL - Si	70			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	No	No									
								55	120	65	2.5Y4/1					No	SCL - San	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	No	No									
14	SH 37800	83800	237800	383800	66	≤7	NW	PGR	0	30	30	10YR4/2					MZCL - Si	12			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON -	Non-calcare		55	43	1	WC III	3a	Wetness			3a
								30	60	30	2.5Y6/2	CP - Cr	10YR5/6			Yes	HZCL - Si	15			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
								60	120	60	2.5Y6/2	CP - Cr	10YR5/6			Yes	HZCL - Si	25			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
15	SH 37900	83800	237900	383800	70	≤7	NW	PGR	0	30	30	7.5YR4/3					MZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON -	Non-calcare		52	53	1	WC I	2	Wetness			2
								30	45	15	7.5YR4/4					No	MZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	No	No									
								45	80	35	10YR5/5					No	MZCL - Si	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	No	No									
								80	120	40	10YR4/5					No	MCL - Cla	60			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	No	No									
16	SH 38000	83800	238000	383800	70	≤7	NW	PGR	0	32	32	10YR4/3					MCL - Cla	3			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON -	Non-calcare		4	10	3a	WC I	2	Wetness			2
								32	50	18	5Y4/1					No	MCL - Cla	70			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	No	No									
								50	120	70	5Y5/1					No	MCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	No	No									
17	SH 37900	83700	237900	383700	70	≤7	NW	PGR	0	28	28	10YR4/3					MCL - Cla	3			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON -	Non-calcare		8	25	2	WC I	2	Wetness			2
								28	50	22	10YR4/3					No	MCL - Cla	15			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	No	No									
								50	60	10	5YR4/1					No	MCL - Cla	70			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	No	No									
								60	80	20	5YR4/1					No	MCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	No	No									
	END																																						

Mottle form
FF - Few Faint
FD - Few Distinct
FP - Few Prominent
CF - Common Faint
CD - Common Distinct
CP - Common Prominent
MF - Many Faint
MD - Many Distinct
MP - Many Prominent
VF - Very many Faint
VD - Very many Distinct
VP - Very many Prominent

Texture
C - Clay
CHK - Chalk
CS - Coarse Sand
CSL - Coarse sandy loam
CSZL - Coarse sandy silt loam
FP - Fibrous and semifibrous peats
FS - Fine Sand
FSL - Fine sandy loam
FSZL - Fine sandy silt loam
HCL - Clay loam (heavy)
HP - Humified peats
HZCL - Silty clay loam (heavy)
IMP - Impenetrable to roots
LCS - Loamy Coarse Sand
LFS - Loamy fine sand
LMS - Loamy medium sand
LP - Loamy peats
MCL - Clay loam (medium)
MS - Medium Sand
MSL - Medium sandy loam
MSZL - Medium sandy silt loam
MZ - Marine Light Silts
MZCL - Silty clay loam (medium)
OC - Organic clays
OL - Organic loams
OS - Organic sands
PL - Peaty loams
PS - Peaty sands
SC - Sandy clay
SCL - Sandy clay loam
SP - Sandy peats
ZC - Silty clay
ZL - Silt loam

Stone Type
CH - Chalk or chalk stones
FSST - Soft fine grained sandstones
GH - Gravel with non-porous (hard) stones
GS - Gravel with porous stones (mainly soft stone types listed above)
HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)
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SI - Soft 'weathered' igneous or metamorphic rocks or stones
SLST - Soft oolitic or dolomitic limestones
ZR - Soft, argillaceous or silty rocks or stones

Ped. Shape
SG - Single grain
GRA - Granular
SAB - Subangular Blocky
AB - Angular Blocky
PRIS - Prismatic
PLAT - Platy
MASS - Massive
NA - N/A

Subsoil Structure Condition
Not Applicable
Good
Moderate
Poor

Soil or Ped. Strength
Loose
Very friable
Friable
Firm
Very firm
Extremely firm
Extremely hard
N/A

Calcareousness
NON - Non-calcareous (<0.5% CaCO3)
VSC - Very slightly calcareous (0.5 - 1% CaCO3)
SC - Slightly calcareous (1 - 5% CaCO3)
MC - Moderately calcareous (5 - 10% CaCO3)
VC - Very calcareous (>10% CaCO3)

Ped. Size
VF - Very Fine
F - Fine
M - Medium
C - Coarse
VC - Very Coarse
NA - N/A

Degree of Ped. Development
W - Weak
M - Moderate
S - Strong
NA - Not applicable

Wetness Class
WC I
WC II
WC III
WC IV
WC V
WC VI

ALC Grades
1
2
3a
3b
4
5
Non-Ag

Gley
None
Gley
N/A

Project Number	Project Name	Parcel
C772	Alaw Mon Solar Farm, Anglesey	D

Date of Survey	Survey Type	Surveyor(s)	Company
20/04/2021	Detailed ALC	RWA	Askew Land and Soil

Weather	Relief	Land use and vegetation
Dry, Sunny	Level	PGR (Permanent Grassland)

Grid Reference	Postcode	Altitude	Area
SH382837	LL717BN	83	15

MAFF prov	MAFF detailed	Flooding
Grade 2/3a	None	Flood Zone 1

AAR	AT0	MDw	MDp	FCD	Climate grade
1011	1389	75	58	207	2

Bedrock	Superficial deposits
Ordovician Rocks	Till

Soil association(s) 1:250,000	Detailed soil information
Brickfield 2	None

Revision Number	Date Revised
2	09/06/2021

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	SH 38100	83900	238100	383900	72	≤7	NW	LEY	0	24	24	10YR5/4				No	MZCL - Si	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-ca	No	55	54	1	WC III	3a	Wetness			3a
								24	67	43	2.5Y5/4	CD - C	7.5YR5/6	CD - C	2.5Y5/1	Yes	C - Clay	8			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
								67	120	53	2.5Y6/2	MD - P	7.5YR5/6	MD - P	2.5Y6/1	Yes	C - Clay	8			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Poor	NON -	Yes	Yes									
2	SH 38200	83900	238200	383900	80	≤7	NW	LEY	0	26	26	10YR4/3				No	MZCL - Si	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-ca	No	56	54	1	WC III	3a	Wetness			3a
								26	65	39	10Y5/3	CD - C	7.5YR5/6			Yes	C - Clay	8			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
								65	120	55	2.5Y6/2	MD - P	7.5YR5/6	MD - P	2.5Y6/1	Yes	C - Clay	8			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Poor	NON -	Yes	Yes									
3	SH 38100	83800	238100	383800	77	≤7	NW	LEY	0	24	24	10YR5/4				No	MZCL - Si	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-ca	No	63	58	1	WC III	3a	Wetness			3a
								24	57	33	10YR5/3	CD - C	7.5YR5/6	CD - C	2.5Y5/1	Yes	MZCL - Si	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
								57	120	63	2.5Y6/2	MD - P	7.5YR5/6	MD - P	2.5Y6/1	Yes	C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Poor	NON -	Yes	Yes									
4	SH 38200	83800	238200	383800	83	≤7	NW	LEY	0	24	24	10YR4/4				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-ca	No	61	52	1	WC III	3a	Wetness			3a
								24	67	43	10YR5/4	CD - C	7.5YR5/6			Yes	MCL - Cla	8			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
								67	120	53	2.5Y6/2	MD - P	7.5YR5/6			Yes	C - Clay	8			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	Yes	No									
5	SH 38000	83700	238000	383700	70	≤7	NW	LEY	0	22	22	10YR5/4				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-ca	No	58	53	1	WC III	3a	Wetness			3a
								22	58	36	10YR6/3	CD - C	7.5YR5/8			Yes	MCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
								58	120	62	2.5Y5/4	MD - P	7.5YR5/6			Yes	C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Poor	NON -	Yes	Yes									
6	SH 38100	83700	238100	383700	77	≤7	NW	LEY	0	26	26	10YR5/4				No	MZCL - Si	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-ca	No	60	57	1	WC III	3a	Wetness			3a
								26	60	34	10YR5/3	FD - Fe	7.5YR5/6			Yes	C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
								60	120	60	2.5Y6/2	MD - P	7.5YR5/6	MD - P	2.5Y6/1	Yes	C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Poor	NON -	Yes	Yes									
7	SH 38200	83700	238200	383700	83	≤7	NW	LEY	0	26	26	10YR5/4				No	MZCL - Si	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-ca	No	55	51	1	WC IV	3b	Wetness			3b
								26	52	26	10YR5/3	CD - C	7.5YR5/6	CD - C	2.5Y5/1	Yes	C - Clay	8			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
								52	120	68	2.5Y6/2	MD - P	7.5YR5/6	MD - P	2.5Y6/1	Yes	C - Clay	8			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Poor	NON -	Yes	Yes									
8	SH 38300	83700	238300	383700	83	≤7	NW	LEY	0	18	18	7.5YR4/3				No	MCL - Cla	10	6	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-ca	No	8	17	2	WC I	2	Droughtiness	Wetness		2
								18	40	22	10YR6/3					No	MCL - Cla	18			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
								40	120	80	2.5Y5/4					No	C - Clay	70			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
9	SH 37900	83600	237900	383600	71	≤7	NW	LEY	0	18	18	7.5YR4/3				No	MCL - Cla	10	6	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-ca	No	-5	17	3a	WC I	2	Droughtiness			3a
								18	40	22	10YR6/3					No	MCL - Cla	18			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
								40	70	30	2.5Y5/4					No	C - Clay	70			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
10	SH 38000	83600	238000	383600	71	≤7	NW	LEY	0	24	24	10YR5/4				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-ca	No	59	53	1	WC III	3a	Wetness			3a
								24	58	34	10YR6/3	CD - C	7.5YR5/8			Yes	MCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
								58	120	62	2.5Y5/4	MD - P	7.5YR5/6			Yes	C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Poor	NON -	Yes	Yes									
11	SH 38100	83600	238100	383600	78	≤7	NW	LEY	0	26	26	10YR5/4				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-ca	No	59	53	1	WC III	3a	Wetness			3a
								26	58	32	10YR6/3	CD - C	7.5YR5/8			Yes	MCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
								58	120	62	2.5Y5/4	MD - P	7.5YR5/6			Yes	C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Poor	NON -	Yes	Yes									
12	SH 38300	83600	238300	383600	80	≤7	NW	LEY	0	26	26	10YR5/4				No	MZCL - Si	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-ca	No	57	53	1	WC IV	3b	Wetness			3b
								26	52	26	10YR5/3	CD - C	7.5YR5/6	CD - C	2.5Y5/1	Yes	MZCL - Si	8			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
								52	120	68	2.5Y6/2	MD - P	7.5YR5/6	MD - P	2.5Y6/1	Yes	C - Clay	8			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Poor	NON -	Yes	Yes									

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
13	SH 38400	83600	238400	383600	79	≤7	NW	LEY	0	24	24	10YR5/4				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi					Not Applic	NON -	Non-cal	No	51	47	1	WC IV	3b	Wetness			3b
									24	52	28	10YR5/3	CD - C	7.5YR5/6	CD - C	2.5Y5/1	Yes	C - Clay	8			HR - All hard rocks or stones (i.e. those which cannot be scratched wi					Moderate	NON -	No	No											
									52	120	68	2.5Y6/2	MD - F	7.5YR5/6	MD - F	2.5Y6/1	Yes	C - Clay	8			HR - All hard rocks or stones (i.e. those which cannot be scratched wi					Poor	NON -	Yes	Yes											
14	SH 38000	83500	238000	383500	71	≤7	NW	LEY	0	24	24	10YR5/4				No	MZCL - Si	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi					Not Applic	NON -	Non-cal	No	54	51	1	WC IV	3b	Wetness			3b
									24	55	31	2.5Y5/4	CD - C	7.5YR5/6	CD - C	2.5Y5/1	Yes	C - Clay	8			HR - All hard rocks or stones (i.e. those which cannot be scratched wi					Moderate	NON -	No	No											
									55	120	65	2.5Y6/2	MD - F	7.5YR5/6	MD - F	2.5Y6/1	Yes	C - Clay	8			HR - All hard rocks or stones (i.e. those which cannot be scratched wi					Poor	NON -	Yes	Yes											
	END																																						

Mottle form
FF - Few Faint
FD - Few Distinct
FP - Few Prominent
CF - Common Faint
CD - Common Distinct
CP - Common Prominent
MF - Many Faint
MD - Many Distinct
MP - Many Prominent
VF - Very many Faint
VD - Very many Distinct
VP - Very many Prominent

Texture
C - Clay
CHK - Chalk
CS - Coarse Sand
CSL - Coarse sandy loam
CSZL - Coarse sandy silt loam
FP - Fibrous and semifibrous peats
FS - Fine Sand
FSL - Fine sandy loam
FSZL - Fine sandy silt loam
HCL - Clay loam (heavy)
HP - Humified peats
HZCL - Silty clay loam (heavy)
IMP - Impenetrable to roots
LCS - Loamy Coarse Sand
LFS - Loamy fine sand
LMS - Loamy medium sand
LP - Loamy peats
MCL - Clay loam (medium)
MS - Medium Sand
MSL - Medium sandy loam
MSZL - Medium sandy silt loam
MZ - Marine Light Silts
MZCL - Silty clay loam (medium)
OC - Organic clays
OL - Organic loams
OS - Organic sands
PL - Peaty loams
PS - Peaty sands
SC - Sandy clay
SCL - Sandy clay loam
SP - Sandy peats
ZC - Silty clay
ZL - Silt loam

Stone Type
CH - Chalk or chalk stones
FSST - Soft fine grained sandstones
GH - Gravel with non-porous (hard) stones
GS - Gravel with porous stones (mainly soft stone types listed above)
HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)
MSST - Soft, medium or coarse grained sandstones
SI - Soft 'weathered' igneous or metamorphic rocks or stones
SLST - Soft oolitic or dolomitic limestones
ZR - Soft, argillaceous or silty rocks or stones

Ped. Shape
SG - Single grain
GRA - Granular
SAB - Subangular Blocky
AB - Angular Blocky
PRIS - Prismatic
PLAT - Platy
MASS - Massive
NA - N/A

Subsoil Structure Condition
Not Applicable
Good
Moderate
Poor

Soil or Ped. Strength
Loose
Very friable
Friable
Firm
Very firm
Extremely firm
Extremely hard
N/A

Calcareousness
NON - Non-calcareous (<0.5% CaCO3)
VSC - Very slightly calcareous (0.5 - 1% CaCO3)
SC - Slightly calcareous (1 - 5% CaCO3)
MC - Moderately calcareous (5 - 10% CaCO3)
VC - Very calcareous (>10% CaCO3)

Ped. Size
VF - Very Fine
F - Fine
M - Medium
C - Coarse
VC - Very Coarse
NA - N/A

Degree of Ped. Development
W - Weak
M - Moderate
S - Strong
NA - Not applicable

Wetness Class
WC I
WC II
WC III
WC IV
WC V
WC VI

ALC Grades
1
2
3a
3b
4
5
Non-Ag

Gley
None
Gley
N/A

Project Number	Project Name	Parcel
C772	Alaw Mon Solar Farm, Anglesey	E

Date of Survey	Survey Type	Surveyor(s)	Company
20/04/2021	Detailed ALC	RM	Askew Land and Soil

Weather	Relief	Land use and vegetation
Dry, sunny	Level	PGR (Permanent Grassland)

Grid Reference	Postcode	Altitude	Area
SH379843	LL717BS	48	20

MAFF prov	MAFF detailed	Flooding
Subgrade 3b	None	Flood Zone 1

AAR	AT0	MDw	MDp	FCD	Climate grade
960	1429	82	68	199	1

Bedrock	Superficial deposits
Ordovician Rocks	Till

Soil association(s) 1:250,000	Detailed soil information
Brickfield 2	None

Revision Number	Date Revised
2	29/05/2021

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	SH 37700	84500	237700	384500	41	≤7	NW	PGR	0	35	35	10YR3/2				No	MCL - Clay loam (medium)											Not Applic	NON - N	No	No	59	47	1	WC III	3a	Wetness			3a
									35	43	8	10YR3/2	FF - Fe	10YR5/6		No	MCL - Clay loam (medium)											Moderate	NON - N	No	No									
									43	80	37	10YR5/3	MD - N	10YR5/6		Yes	HCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON - N	Yes	No									
									80	120	40	10YR5/3	MD - N	10YR5/6		Yes	C - Clay											Poor	NON - N	Yes	Yes									
2	SH 37600	84400	237600	384400	39	≤7	NW	PGR	0	35	35	10YR3/2				No	MZCL - Silty clay loam (medium)											Not Applicable		No	No	53	44	1	WC IV	3b	Wetness			3b
									35	120	85	10YR5/3	MD - N	10YR5/6		Yes	C - Clay											Poor		No	Yes									
3	SH 37700	84400	237700	384400	41	≤7	NW	PGR	0	35	35	10YR4/2	CD - Cc	10YR5/6		Yes	MZCL - Silty clay loam (medium)											Not Applicable			No	16	26	2	WC IV	3b	Wetness			3b
									35	40	5	10YR5/3	MF - N	10YR5/6		Yes	C - Clay	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor			Yes									
									40	80	40	10YR5/3	MF - N	10YR5/6		Yes	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor			Yes									
									80	120	40	10YR5/3	MF - N	10YR5/6		Yes	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor			Yes									
4	SH 37800	84400	237800	384400	43	≤7	NW	PGR	0	38	38	10YR4/3				No	MCL - Clay loam (medium)											Not Applicable			No	35	39	1	WC III	3a	Wetness			3a
									38	40	2	10YR4/3	FF - Fe	10YR5/6		No	MCL - Clay loam (medium)											Moderate			No									
									40	80	40	10YR5/3	MD - N	10YR5/6		Yes	C - Clay	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor			Yes									
									80	120	40	10YR5/3	MD - N	10YR5/6		Yes	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor			Yes									
5	SH 37900	84400	237900	384400	43	≤7	NW	PGR	0	38	38	10YR4/3				No	MCL - Clay loam (medium)											Not Applicable			No	51	42	1	WC III	3a	Wetness			3a
									38	40	2	10YR5/4				No	MCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate			No									
									40	120	80	2.5Y5/3	MD - N	10YR5/6		Yes	C - Clay											Poor			Yes									
6	SH 37700	84300	237700	384300	39	≤7	NW	PGR	0	38	38	10YR4/3				No	MCL - Clay loam (medium)											Not Applicable		No	No	15	24	2	WC IV	3b	Wetness			3b
									38	40	2	10YR5/4	CF - Cc	10YR5/6		No	C - Clay	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate		No	No									
									40	80	40	10YR5/4	CF - Cc	10YR5/6		No	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes									
									80	120	40	10YR5/4	CF - Cc	10YR5/6		No	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes									
7	SH 37800	84300	237800	384300	48	≤7	NW	PGR	0	36	36	10YR4/3				No	MCL - Clay loam (medium)											Not Applicable		No	No	19	32	2	WC III	3a	Wetness			3a
									36	40	4	10YR4/3	FD - Fe	10YR5/6		No	MCL - Clay loam (medium)											Moderate		No	No									
									40	50	10	10YR5/3	MD - N	10YR5/6		Yes	HCL - Cla	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate		No	No									
									50	80	30	10YR5/3	MD - N	10YR5/6		Yes	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes									
									80	100	20	10YR5/3	MD - N	10YR5/6		Yes	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes									
8	SH 37900	84300	237900	384300	48	≤7	NW	PGR	0	38	38	10YR4/3				No	MCL - Clay loam (medium)											Not Applicable			No	51	42	1	WC III	3a	Wetness			3a
									38	40	2	10YR5/4				No	MCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate			No									
									40	120	80	2.5Y5/3	MD - N	10YR5/6		Yes	C - Clay											Poor			Yes									
9	SH 38000	84300	238000	384300	59	≤7	NW	PGR	0	29	29	10YR4/3				No	MCL - Clay loam (medium)											Not Applicable		No	No	28	39	2	WC III	3a	Wetness			3a
									29	38	9	10YR4/2				Yes	MCL - Clay loam (medium)											Moderate		Yes	No									
									38	55	17	10YR4/6	MD - N	10YR5/6		No	HCL - Clay loam (heavy)											Moderate		Yes	No									
									55	60	5	10YR5/3	MD - N	10YR5/6		Yes	HCL - Cla	20			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate		Yes	No									
									60	80	20	10YR5/3	MD - N	10YR5/6		Yes	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		Yes	Yes									
									80	120	40	10YR5/3	MD - N	10YR5/6		Yes	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		Yes	Yes									
10	SH 37900	84200	237900	384200	48	≤7	NW	PGR	0	36	36	10YR4/3				No	MCL - Clay loam (medium)											Not Applicable		No	No	24	33	2	WC III	3a	Wetness			3a
									36	40	4	10YR6/6	FF - Fe	10YR5/6		No	HCL - Clay loam (heavy)											Moderate		No	No									
									40	50	10	10YR5/3	MD - N	10YR5/6		Yes	C - Clay											Moderate		No	Yes									
									50	80	30	10YR5/3	MD - N	10YR5/6		Yes	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes									
									80	120	40	10YR5/3	MD - N	10YR5/6		Yes	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes									
11	SH 38000	84200	238000	384200	59	≤7	NW	PGR	0	35	35	10YR4/3				No	MZCL - Silty clay loam (medium)											Not Applicable		No	No	32	47	1	WC I	2	Wetness			2
									35	40	5	7.5YR4/3				No	MZCL - Silty clay loam (medium)											Moderate		No	No									
									40	50	10	7.5YR4/3				No	HZCL - Silty clay loam (heavy)											Moderate		No	No									
									50	60	10	7.5YR5/6				No	HZCL - Sil	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate		No	No									
									60	80	20	7.5YR5/6				No	HZCL - Sil	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes									
									80	120	40	7.5YR5/6				No	HZCL - Sil	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes									
12	SH 38100	84200	238100	384200	67	≤7	NW	PGR	0	36	36	10YR4/3				No	MZCL - Silty clay loam (medium)											Not Applicable		No	No	26	39	2	WC IV	3b	Wetness			3b
									36	60	24	2.5Y5/3	MD - N	10YR5/6		Yes	C - Clay											Poor		No	Yes									
									60	80	20	2.5Y5/3	MD - N	10YR5/6		Yes	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes									
									80	120	40	2.5Y5/3	MD - N	10YR5/6		Yes	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes									

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
13	SH 38000	84100	238000	384100	65	≤7	NW	PGR	0	38	38	7.5YR3/3				No	MCL - Clay loam (medium)											Not Applicable		No	No	30	43	1	WC III	3a	Wetness			3a
									38	43	5	7.5YR4/3				No	MCL - Clay loam (medium)											Moderate		No	No									
									43	60	17	7.5YR4/3				No	MCL - Clay loam (medium)											Moderate		No	No									
									60	80	20	7.5YR4/3				No	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes									
									80	120	40	7.5YR4/3				No	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes									
14	SH 38100	84100	238100	384100	72	≤7	NW	PGR	0	38	38	10YR3/2				No	MZCL - Silty clay loam (medium)											Not Applicable		No	No	38	54	1	WC III	3a	Wetness			3a
									38	40	2	10YR3/2	FF - Fe	10YR5/6		No	MZCL - Silty clay loam (medium)											Moderate		Yes	No									
									40	60	20	10YR5/3	MD - N	10YR5/6		Yes	HZCL - Silty clay loam (heavy)											Moderate		No	No									
									60	70	10	2.5Y5/3	MP - N	10YR5/6		Yes	C - Clay	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes									
									70	80	10	2.5Y5/3	MP - N	10YR5/6		Yes	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes									
									80	120	40	2.5Y5/3	MP - N	10YR5/6		Yes	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes									
15	SH 38200	84100	238200	384100	80	≤7	NW	PGR	0	38	38	10YR4/2				Yes	MZCL - Silty clay loam (medium)											Not Applicable		No	No	55	44	1	WC IV	3b	Wetness			3b
									38	40	2	10YR4/2	CD - C	10YR5/6		Yes	MZCL - Silty clay loam (medium)											Moderate		No	No									
									40	120	80	10YR6/3	MD - N	10YR5/6		Yes	ZC - Silty clay											Poor		Yes	Yes									
16	SH 38100	84000	238100	384000	72	≤7	NW	PGR	0	35	35	10YR4/2				Yes	MCL - Clay loam (medium)											Not Applicable		No	No	25	39	2	WC IV	3b	Wetness			3b
									35	40	5	10YR4/2	MD - N	10YR5/6		Yes	MCL - Clay loam (medium)											Moderate		No	No									
									40	60	20	10YR5/3	MD - N	10YR5/6		Yes	C - Clay	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes									
									60	70	10	10YR5/3	MD - N	10YR5/6		Yes	C - Clay	15			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes									
									70	80	10	10YR5/3	MD - N	10YR5/6		Yes	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes									
									80	120	40	10YR5/3	MD - N	10YR5/6		Yes	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes									
17	SH 38200	84000	238200	384000	80	≤7	NW	PGR	0	38	38	10YR4/3				No	MCL - Clay loam (medium)											Not Applicable		No	No	26	39	2	WC III	3a	Wetness			3a
									38	40	2	7.5YR4/3				No	MCL - Clay loam (medium)											Moderate		No	No									
									40	50	10	10YR4/4				No	HCL - Cla	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate		No	No									
									50	60	10	10YR4/4				No	C - Clay	20			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate		No	No									
									60	80	20	10YR4/4				No	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes									
									80	120	40	10YR4/4				No	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes									
18	SH 38300	84000	238300	384000	80	≤7	NW	PGR	0	15	15	10YR4/2	MD - N	10YR5/6		Yes	MZCL - Silty clay loam (medium)											Not Applicable		No	No	14	24	2	WC III	3a	Wetness			3a
									15	38	23	10YR4/2	CD - C	10YR5/6		Yes	MZCL - Silty clay loam (medium)											Moderate		Yes	No									
									38	40	2	10YR4/2	CD - C	10YR5/6		Yes	MZCL - Silty clay loam (medium)											Moderate		No	No									
									40	50	10	10YR4/2	CD - C	10YR5/6		Yes	HZCL - Sil	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	No									
									50	80	30	10YR4/2	CD - C	10YR5/6		Yes	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes									
									80	120	40	10YR4/2	CD - C	10YR5/6		Yes	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes									
	END																																						

Mottle form
FF - Few Faint
FD - Few Distinct
FP - Few Prominent
CF - Common Faint
CD - Common Distinct
CP - Common Prominent
MF - Many Faint
MD - Many Distinct
MP - Many Prominent
VF - Very many Faint
VD - Very many Distinct
VP - Very many Prominent

Texture
C - Clay
CHK - Chalk
CS - Coarse Sand
CSL - Coarse sandy loam
CSZL - Coarse sandy silt loam
FP - Fibrous and semifibrous peats
FS - Fine Sand
FSL - Fine sandy loam
FSZL - Fine sandy silt loam
HCL - Clay loam (heavy)
HP - Humified peats
HZCL - Silty clay loam (heavy)
IMP - Impenetrable to roots
LCS - Loamy Coarse Sand
LFS - Loamy fine sand
LMS - Loamy medium sand
LP - Loamy peats
MCL - Clay loam (medium)
MS - Medium Sand
MSL - Medium sandy loam
MSZL - Medium sandy silt loam
MZ - Marine Light Silts
MZCL - Silty clay loam (medium)
OC - Organic clays
OL - Organic loams
OS - Organic sands
PL - Peaty loams
PS - Peaty sands
SC - Sandy clay
SCL - Sandy clay loam
SP - Sandy peats
ZC - Silty clay
ZL - Silt loam

Stone Type
CH - Chalk or chalk stones
FSST - Soft fine grained sandstones
GH - Gravel with non-porous (hard) stones
GS - Gravel with porous stones (mainly soft stone types listed above)
HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)
MSST - Soft, medium or coarse grained sandstones
SI - Soft 'weathered' igneous or metamorphic rocks or stones
SLST - Soft oolitic or dolomitic limestones
ZR - Soft, argillaceous or silty rocks or stones

Ped. Shape
SG - Single grain
GRA - Granular
SAB - Subangular Blocky
AB - Angular Blocky
PRIS - Prismatic
PLAT - Platy
MASS - Massive
NA - N/A

Subsoil Structure Condition
Not Applicable
Good
Moderate
Poor

Soil or Ped. Strength
Loose
Very friable
Friable
Firm
Very firm
Extremely firm
Extremely hard
N/A

Calcareousness
NON - Non-calcareous (<0.5% CaCO3)
VSC - Very slightly calcareous (0.5 - 1% CaCO3)
SC - Slightly calcareous (1 - 5% CaCO3)
MC - Moderately calcareous (5 - 10% CaCO3)
VC - Very calcareous (>10% CaCO3)

Ped. Size
VF - Very Fine
F - Fine
M - Medium
C - Coarse
VC - Very Coarse
NA - N/A

Degree of Ped. Development
W - Weak
M - Moderate
S - Strong
NA - Not applicable

Wetness Class
WC I
WC II
WC III
WC IV
WC V
WC VI

ALC Grades
1
2
3a
3b
4
5
Non-Ag

Gley
None
Gley
N/A

Project Number	Project Name	Parcel
C772	Alaw Mon Solar Farm, Anglesey	F

Date of Survey	Survey Type	Surveyor(s)	Company
20/04/2021	Detailed ALC	AR	Askew Land and Soil

Weather	Relief	Land use and vegetation
Dry, sunny	Level	PGR (Permanent Grassland)

Grid Reference	Postcode	Altitude	Area
SH382843	LL717BN	71	20

MAFF prov	MAFF detailed	Flooding
Subgrade 3b	None	Flood Zone 1

AAR	AT0	MDw	MDp	FCD	Climate grade
993	1403	77	61	204	2

Bedrock	Superficial deposits
Ordovician Rocks	Till

Soil association(s) 1:250,000	Detailed soil information
Brickfield 2	None

Revision Number	Date Revised
1	29/05/2021

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	SH 38000	84600	238000	384600	37	≤7	NW	PGR	0	24	24	10YR4/3					MZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON -	Non-calcare		38	35	1	WC III	3a	Wetness			3a
								24	40	16	2.5Y6/2	CP - C	10YR5/6			Yes	ZC - Silty	15			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
								40	120	80	2.5Y6/1	CP - C	10YR5/6			Yes	ZC - Silty	30			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
2	SH 37900	84500	237900	384500	43	≤7	NW	PGR	0	22	22	10YR4/3					MZCL - Si	8			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON -	Non-calcare		37	30	1	WC IV	3b	Wetness			3b
								22	120	98	2.5Y6/2	MP - M	7.5YR5/6			Yes	ZC - Silty	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor	NON -	Yes	Yes									
3	SH 38000	84500	238000	384500	50	≤7	NW	PGR	0	25	25	10YR4/3					MZCL - Si	3			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON -	Non-calcare		46	38	1	WC IV	3b	Wetness			3b
								25	120	95	2.5Y6/2	MP - M	10YR5/6			Yes	ZC - Silty	3			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor	NON -	Yes	Yes									
4	SH 38100	84500	238100	384500	58	≤7	NW	PGR	0	30	30	10YR4/3					MZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON -	Non-calcare		40	44	1	WC III	3a	Wetness			3a
								30	50	20	2.5Y6/2	CP - C	10YR5/6			Yes	HZCL - Sil	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
								50	60	10	2.5Y6/1	CP - C	10YR5/6			Yes	ZC - Silty	20			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
								60	120	60	2.5Y6/1	CP - C	10YR5/6			Yes	ZC - Silty	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
5	SH 38000	84400	238000	384400	50	≤7	NW	PGR	0	24	24	10YR4/3					MZCL - Si	8			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON -	Non-calcare		42	34	1	WC IV	3b	Wetness			3b
								24	120	96	2.5Y6/1	MP - M	10YR5/8			Yes	ZC - Silty	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor	NON -	Yes	Yes									
6	SH 38100	84400	238100	384400	58	≤7	NW	PGR	0	25	25	10YR4/3					MZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON -	Non-calcare		64	55	1	WC III	3a	Wetness			3a
								25	70	45	2.5Y5/2	MP - M	10YR5/6			Yes	HZCL - Sil	8			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
								70	120	50	2.5Y5/3	MP - M	10YR5/6			Yes	HZCL - Sil	25			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
7	SH 38200	84400	238200	384400	61	≤7	NW	PGR	0	28	28	10YR4/3					MZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON -	Non-calcare		51	53	1	WC III	3a	Wetness			3a
								28	60	32	2.5Y6/2	MP - M	7.5YR5/6			Yes	HZCL - Sil	8			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
								60	70	10	2.5Y5/3	CP - C	10YR5/6	CD - C	2.5Y6/1	Yes	HZCL - Sil	25			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
								70	120	50	2.5Y5/3	CP - C	10YR5/6	CD - C	2.5Y6/1	Yes	HZCL - Sil	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		Yes	No									
8	SH 38100	84300	238100	384300	67	≤7	NW	PGR	0	27	27	10YR4/3					MCL - Cla	3			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON -	Yes		62	51	1	WC III	3a	Wetness			3a
								27	50	23	2.5Y6/3	CP - C	10YR5/6			Yes	HZCL - Sil	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
								50	70	20	2.5Y5/3	MP - M	10YR5/6			Yes	HZCL - Sil	20			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
								70	120	50	2.5Y6/1	MP - M	10YR5/8			Yes	ZC - Silty	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	No	No									
9	SH 38200	84300	238200	384300	71	≤7	NW	PGR	0	27	27	10YR4/3					MZCL - Si	3			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON -	No		29	45	2	WC III	3a	Wetness			3a
								27	40	13	2.5Y5/3	MP - M	7.5YR5/6			Yes	HZCL - Sil	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
								40	55	15	2.5Y6/2	MP - M	7.5YR4/6			Yes	ZC - Silty	8			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
								55	70	15	2.5Y6/1	MP - M	7.5YR5/6			Yes	ZC - Silty	40			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
								70	120	50	2.5Y6/1	MP - M	7.5YR5/6			Yes	ZC - Silty	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		Yes	No									
10	SH 38300	84300	238300	384300	71	≤7	NW	PGR	0	25	25	10YR4/3	CD - C	10YR4/6			MZCL - Si	3			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON -	Non-calcare		16	25	2	WC III	3a	Wetness			3a
								25	45	20	2.5Y6/2	CP - C	10YR5/6			Yes	ZC - Silty	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
								45	50	5	2.5Y5/3	CP - C	10YR5/6	CD - C	2.5Y6/1	Yes	ZC - Silty	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
								50	120	70	2.5Y5/3	CP - C	10YR5/6	CD - C	2.5Y6/1	Yes	ZC - Silty	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
11	SH 38200	84200	238200	384200	71	≤7	NW	PGR	0	20	20	2.5Y4/3					MZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON -	Non-calcare		35	42	1	WC III	3a	Wetness			3a
								20	45	25	2.5Y6/3	MP - M	10YR5/8			Yes	ZC - Silty	8			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
								45	70	25	2.5Y6/1	MP - M	10YR5/8			Yes	ZC - Silty	15			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
								70	120	50	2.5Y6/1	MP - M	10YR5/8			Yes	ZC - Silty	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
12	SH 38300	84200	238300	384200	71	≤7	NW	PGR	0	25	25	2.5Y4/3	CP - C	10YR5/6			MZCL - Si	3			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON -	Yes		62	56	1	WC III	3a	Wetness			3a
								25	60	35	2.5Y5/3	CP - C	10YR5/6			Yes	HZCL - Sil	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
								60	75	15	2.5Y5/2	CP - C	10YR4/6			Yes	ZC - Silty	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	No	No									
								75	120	45	2.5Y5/3	MP - M	10YR4/6			Yes	ZC - Silty	15			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									

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
13	SH 38400 84200	238400	384200	78	≤7	NW	PGR	0	28	28	10YR4/3						MZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger	NON -	Non-calcare	50	45	1	WC III	3a	Wetness			3a
								28	60	32	2.5Y6/2	CP - Cr	10YR5/6			Yes	ZC - Silty	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Moderate	NON -	Yes	No															
								60	120	60	2.5Y6/1	MP - M	10YR5/6			Yes	ZC - Silty	20			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Moderate	NON -	Yes	No															
14	SH 38500 84200	238500	384200	81	≤7	NW	PGR	0	30	30	10YR4/3						MZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger	NON -	Non-calcare	51	47	1	WC III	3a	Wetness			3a
								30	60	30	2.5Y5/3	CP - Cr	10YR5/6			Yes	ZC - Silty	8			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Moderate	NON -	Yes	No															
								60	120	60	2.5Y6/1	CP - Cr	10YR5/6			Yes	ZC - Silty	20			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Moderate	NON -	Yes	No															
15	SH 38300 84100	238300	384100	80	≤7	NW	PGR	0	25	25	10YR4/2						HZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger	NON -	Non-calcare	23	27	2	WC IV	3b	Wetness			3b
								25	55	30	2.5Y6/2	MP - M	10YR5/8			Yes	ZC - Silty	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Poor	NON -	Yes	Yes															
								55	120	65	2.5Y6/2	MP - M	10YR5/8			Yes	ZC - Silty	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Poor	NON -	Yes	Yes															
16	SH 38400 84100	238400	384100	85	≤7	NW	PGR	0	27	27	10YR4/3						MZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger	NON -	Non-calcare	56	50	1	WC III	3a	Wetness			3a
								27	50	23	2.5Y6/3	CP - Cr	10YR5/6			Yes	HZCL - Si	8			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Moderate	NON -	Yes	No															
								50	120	70	2.5Y6/2	MP - M	10YR5/6			Yes	ZC - Silty	15			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Moderate	NON -	Yes	No															
17	SH 38500 84100	238500	384100	84	≤7	NW	PGR	0	30	30	10YR4/3						MZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger	NON -	Non-calcare	53	47	1	WC III	3a	Wetness			3a
								30	65	35	2.5Y6/3	MP - M	10YR5/6			Yes	ZC - Silty	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Moderate	NON -	Yes	No															
								65	120	55	2.5Y5/3	MP - M	10YR5/6			Yes	ZC - Silty	15			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Moderate	NON -	Yes	No															
18	SH 38400 84000	238400	384000	85	≤7	NW	PGR	0	20	20	10YR4/2						MCL - Cla	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger	NON -	Non-calcare	55	46	1	WC III	3a	Wetness			3a
								20	48	28	2.5Y6/1	MP - M	10YR5/6			Yes	HZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Moderate	NON -	Yes	No															
								48	120	72	2.5Y5/3	CP - Cr	10YR5/6			Yes	HZCL - Si	30			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Moderate	NON -	Yes	No															
19	SH 38500 84000	238500	384000	84	≤7	NW	PGR	0	28	28	10YR4/3						MCL - Cla	8			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger	NON -	Non-calcare	50	45	1	WC III	3a	Wetness			3a
								28	60	32	2.5Y6/3	CP - Cr	10YR5/8			Yes	HZCL - Si	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Moderate	NON -	No	No															
								60	120	60	2.5Y5/3	CP - Cr	10YR5/6			Yes	MZCL - Si	40			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Moderate	NON -	No	No															
	END																																						

Mottle form
FF - Few Faint
FD - Few Distinct
FP - Few Prominent
CF - Common Faint
CD - Common Distinct
CP - Common Prominent
MF - Many Faint
MD - Many Distinct
MP - Many Prominent
VF - Very many Faint
VD - Very many Distinct
VP - Very many Prominent

Texture
C - Clay
CHK - Chalk
CS - Coarse Sand
CSL - Coarse sandy loam
CSZL - Coarse sandy silt loam
FP - Fibrous and semifibrous peats
FS - Fine Sand
FSL - Fine sandy loam
FSZL - Fine sandy silt loam
HCL - Clay loam (heavy)
HP - Humified peats
HZCL - Silty clay loam (heavy)
IMP - Impenetrable to roots
LCS - Loamy Coarse Sand
LFS - Loamy fine sand
LMS - Loamy medium sand
LP - Loamy peats
MCL - Clay loam (medium)
MS - Medium Sand
MSL - Medium sandy loam
MSZL - Medium sandy silt loam
MZ - Marine Light Silts
MZCL - Silty clay loam (medium)
OC - Organic clays
OL - Organic loams
OS - Organic sands
PL - Peaty loams
PS - Peaty sands
SC - Sandy clay
SCL - Sandy clay loam
SP - Sandy peats
ZC - Silty clay
ZL - Silt loam

Stone Type
CH - Chalk or chalk stones
FSST - Soft fine grained sandstones
GH - Gravel with non-porous (hard) stones
GS - Gravel with porous stones (mainly soft stone types listed above)
HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)
MSST - Soft, medium or coarse grained sandstones
SI - Soft 'weathered' igneous or metamorphic rocks or stones
SLST - Soft oolitic or dolomitic limestones
ZR - Soft, argillaceous or silty rocks or stones

Ped. Shape
SG - Single grain
GRA - Granular
SAB - Subangular Blocky
AB - Angular Blocky
PRIS - Prismatic
PLAT - Platy
MASS - Massive
NA - N/A

Subsoil Structure Condition
Not Applicable
Good
Moderate
Poor

Soil or Ped. Strength
Loose
Very friable
Friable
Firm
Very firm
Extremely firm
Extremely hard
N/A

Calcareousness
NON - Non-calcareous (<0.5% CaCO3)
VSC - Very slightly calcareous (0.5 - 1% CaCO3)
SC - Slightly calcareous (1 - 5% CaCO3)
MC - Moderately calcareous (5 - 10% CaCO3)
VC - Very calcareous (>10% CaCO3)

Ped. Size
VF - Very Fine
F - Fine
M - Medium
C - Coarse
VC - Very Coarse
NA - N/A

Degree of Ped. Development
W - Weak
M - Moderate
S - Strong
NA - Not applicable

Wetness Class
WC I
WC II
WC III
WC IV
WC V
WC VI

ALC Grades
1
2
3a
3b
4
5
Non-Ag

Gley
None
Gley
N/A

Project Number	Project Name	Parcel
C772	Alaw Mon Solar Farm, Anglesey	G

Date of Survey	Survey Type	Surveyor(s)	Company
18/02/2021	ALC	RWA	Askew Land and Soil

Weather	Relief	Land use and vegetation
Dry, Sunny	Level	PGR (Permanent Grassland)

Grid Reference	Postcode	Altitude	Area
SH385845	LL717BN	72	22.7

MAFF prov	MAFF detailed	Flooding
Grade 2/3a	None	Flood Zone 1

AAR	AT0	MDw	MDp	FCD	Climate grade
995	1401	77	61	205	2

Bedrock	Superficial deposits
Ordovician Rocks	Till/None

Soil association(s) 1:250,000	Detailed soil information
Brickfield 2	None

Revision Number	Date Revised
2	10/06/2021

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	SH 38300	84700	238300	384700	42	≤7	NW	PGR	0	20	20	10YR4/2				No	MZCL - Si	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w							Not Applic	NON -	Non-ca	No	51	44	1	WC IV	3b	Wetness			3b
									20	30	10	10YR5/2				No	HZCL - Si	2			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	No	No									
									30	120	90	2.5Y5/4	MD - N	7.5YR5/6	MD - N	Yes	C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor	NON -	Yes	Yes									
2	SH 38400	84700	238400	384700	50	≤7	NW	PGR	0	22	22	10YR4/3				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w							Not Applic	NON -	Non-ca	No	54	48	1	WC III	3a	Gradient			4
									22	55	33	10YR6/3	CD - C	7.5YR5/8		No	MCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	No	No									
									55	120	65	2.5Y5/4	MD - N	7.5YR5/6		Yes	C - Clay	6			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor	NON -	Yes	Yes									
3	SH 38200	84600	238200	384600	38	≤7	NW	PGR	0	22	22	10YR4/3				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w							Not Applic	NON -	Non-ca	No	54	48	1	WC III	3a	Gradient			3b
									22	55	33	10YR6/3	CD - C	7.5YR5/8		No	MCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	No	No									
									55	120	65	2.5Y5/4	MD - N	7.5YR5/6		Yes	C - Clay	6			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor	NON -	Yes	Yes									
4	SH 38300	84600	238300	384600	42	≤7	NW	PGR	0	24	24	10YR4/2				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w							Not Applic	NON -	Non-ca	No	56	50	1	WC III	3a	Gradient			3b
									24	60	36	10YR6/3	CD - C	7.5YR5/8		No	MCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	No	No									
									60	120	60	2.5Y5/4	MD - N	7.5YR5/6		Yes	C - Clay	6			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor	NON -	Yes	Yes									
5	SH 38400	84600	238400	384600	50	≤7	NW	PGR	0	22	22	7.5YR4/3				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w							Not Applic	NON -	Non-ca	No	60	45	1	WC II	3a	Wetness			3a
									22	50	28	7.5YR5/3				No	MCL - Cla	8			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	No	No									
									50	120	70	2.5Y6/4	CD - C	7.5YR5/6		Yes	HCL - Cla	20			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
6	SH 38500	84600	238500	384600	59	≤7	NW	PGR	0	24	24	7.5YR4/2				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w							Not Applic	NON -	Non-ca	No	62	48	1	WC II	3a	Wetness			3a
									24	55	31	7.5YR5/3				No	MCL - Cla	6			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	No	No									
									55	120	65	2.5Y6/4	CD - C	7.5YR5/6		Yes	HCL - Cla	20			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
7	SH 38600	84600	238600	384600	59	≤7	NW	PGR	0	20	20	7.5YR4/2				No	MCL - Cla	4	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w							Not Applic	NON -	Non-ca	No	59	44	1	WC II	3a	Wetness			3a
									20	50	30	7.5YR5/3				No	MCL - Cla	8			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	No	No									
									50	120	70	2.5Y6/4	CD - C	7.5YR5/6		Yes	HCL - Cla	20			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
8	SH 38200	84500	238200	384500	58	≤7	NW	PGR	0	23	23	10YR4/2				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w							Not Applic	NON -	Non-ca	No	55	49	1	WC III	3a	Wetness			3b
									23	58	35	10YR6/3	CD - C	7.5YR5/8		No	MCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	No	No									
									58	120	62	2.5Y5/4	MD - N	7.5YR5/6		Yes	C - Clay	6			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor	NON -	Yes	Yes									
9	SH 38300	84500	238300	384500	61	≤7	NW	PGR	0	22	22	7.5YR4/2				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w							Not Applic	NON -	Non-ca	No	55	49	1	WC III	3a	Gradient			3b
									22	58	36	7.5YR6/3	CD - C	7.5YR5/8		Yes	MCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	No	No									
									58	120	62	2.5Y5/4	MD - N	7.5YR5/6		Yes	C - Clay	6			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor	NON -	Yes	Yes									
10	SH 38400	84500	238400	384500	64	≤7	NW	PGR	0	23	23	7.5YR4/2				No	MCL - Cla	4	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w							Not Applic	NON -	Non-ca	No	60	46	1	WC II	3a	Wetness			3a
									23	54	31	7.5YR5/3				No	MCL - Cla	8			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	No	No									
									54	120	66	2.5Y6/4	CD - C	7.5YR5/6		Yes	HCL - Cla	20			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
11	SH 38500	84500	238500	384500	72	≤7	NW	PGR	0	24	24	7.5YR4/2				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w							Not Applic	NON -	Non-ca	No	62	48	1	WC II	3a	Wetness			3a
									24	55	31	7.5YR5/3				No	MCL - Cla	6			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	No	No									
									55	120	65	2.5Y6/4	CD - C	7.5YR5/6		Yes	HCL - Cla	20			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
12	SH 38600	84500	238600	384500	72	≤7	NW	PGR	0	25	25	7.5YR4/3				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w							Not Applic	NON -	Non-ca	No	64	48	1	WC II	3a	Wetness			3a
									25	50	25	7.5YR5/3				No	MCL - Cla	6			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	No	No									
									50	120	70	2.5Y6/4	CD - C	7.5YR5/6		Yes	HCL - Cla	16			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									

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
13	SH 38700	84500	238700	384500	77	≤7	NW	PGR	0	20	20	7.5YR4/2				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w					Not Applic	NON -	Non-ca	No	61	47	1	WC II	3a	Wetness			3a
									20	55	35	7.5YR5/3				No	MCL - Cla	6			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate	NON -	No	No											
									55	120	65	2.5Y6/4	CD - Cr	7.5YR5/6		Yes	HCL - Cla	20			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate	NON -	Yes	No											
14	SH 38300	84400	238300	384400	61	≤7	NW	PGR	0	22	22	7.5YR4/3				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w					Not Applic	NON -	Non-ca	No	60	45	1	WC II	3a	Gradient			3b
									22	50	28	7.5YR5/3				No	MCL - Cla	8			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate	NON -	No	No											
									50	120	70	2.5Y6/4	CD - Cr	7.5YR5/6		Yes	HCL - Cla	20			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate	NON -	Yes	No											
15	SH 38400	84400	238400	384400	64	≤7	NW	PGR	0	22	22	7.5YR4/3				No	MCL - Cla	4	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w					Not Applic	NON -	Non-ca	No	60	45	1	WC II	3a	Gradient			3b
									22	54	32	7.5YR5/3				No	MCL - Cla	8			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate	NON -	No	No											
									54	120	66	2.5Y6/4	CD - Cr	7.5YR5/6		Yes	HCL - Cla	20			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate	NON -	Yes	No											
16	SH 38500	84400	238500	384400	72	≤7	NW	PGR	0	20	20	7.5YR4/2				No	MCL - Cla	4	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w					Not Applic	NON -	Non-ca	No	59	45	1	WC II	3a	Wetness			3a
									20	54	34	7.5YR5/3				No	MCL - Cla	8			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate	NON -	No	No											
									54	120	66	2.5Y6/4	CD - Cr	7.5YR5/6		Yes	HCL - Cla	20			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate	NON -	Yes	No											
17	SH 38600	84400	238600	384400	72	≤7	NW	PGR	0	22	22	10YR5/3				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w					Not Applic	NON -	Non-ca	No	56	50	1	WC III	3a	Wetness			3a
									22	58	36	10YR6/3	CD - Cr	7.5YR5/8		Yes	MCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate	NON -	No	No											
									58	120	62	2.5Y5/4	MD - M	7.5YR5/6		Yes	C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Poor	NON -	Yes	Yes											
18	SH 38700	84400	238700	384400	77	≤7	NW	PGR	0	24	24	10YR4/2				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w					Not Applic	NON -	Non-ca	No	52	47	1	WC III	3a	Wetness			3a
									24	58	34	10YR5/3	CD - Cr	7.5YR5/8		Yes	MCL - Cla	6			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate	NON -	No	No											
									58	120	62	2.5Y5/4	MD - M	7.5YR5/6		Yes	C - Clay	8			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Poor	NON -	Yes	Yes											
19	SH 38500	84300	238500	384300	81	≤7	NW	PGR	0	24	24	7.5YR4/3				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w					Not Applic	NON -	Non-ca	No	61	47	1	WC II	3a	Wetness			3a
									24	58	34	7.5YR5/3				No	MCL - Cla	8			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate	NON -	No	No											
									58	120	62	2.5Y6/4	CD - Cr	7.5YR5/6		Yes	HCL - Cla	20			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate	NON -	Yes	No											
20	SH 38600	84300	238600	384300	81	≤7	NW	PGR	0	24	24	7.5YR5/3				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w					Not Applic	NON -	Non-ca	No	57	51	1	WC III	3a	Wetness			3a
									24	60	36	10YR5/3	CD - Cr	7.5YR5/8		Yes	MCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate	NON -	No	No											
									60	120	60	2.5Y5/4	MD - M	7.5YR5/6		Yes	C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Poor	NON -	Yes	Yes											
21	SH 38700	84200	238700	384200	82	≤7	NW	PGR	0	22	22	10YR4/3				No	MCL - Cla	4	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w					Not Applic	NON -	Non-ca	No	51	46	1	WC III	3a	Wetness			3a
									22	58	36	10YR5/3	CD - Cr	7.5YR5/8		Yes	MCL - Cla	6			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate	NON -	No	No											
									58	120	62	2.5Y5/4	MD - M	7.5YR5/6		Yes	C - Clay	8			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Poor	NON -	Yes	Yes											
22	SH 38700	84300	238700	384300	82	≤7	NW	PGR	0	24	24	10YR4/2				No	MCL - Cla	4	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched w					Not Applic	NON -	Non-ca	No	52	46	1	WC III	3a	Wetness			3a
									24	58	34	10YR5/3	CD - Cr	7.5YR5/8		Yes	MCL - Cla	6			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate	NON -	No	No											
									58	120	62	2.5Y5/4	MD - M	7.5YR5/6		Yes	C - Clay	8			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Poor	NON -	Yes	Yes											
	END																																						

Mottle form
FF - Few Faint
FD - Few Distinct
FP - Few Prominent
CF - Common Faint
CD - Common Distinct
CP - Common Prominent
MF - Many Faint
MD - Many Distinct
MP - Many Prominent
VF - Very many Faint
VD - Very many Distinct
VP - Very many Prominent

Texture
C - Clay
CHK - Chalk
CS - Coarse Sand
CSL - Coarse sandy loam
CSZL - Coarse sandy silt loam
FP - Fibrous and semifibrous peats
FS - Fine Sand
FSL - Fine sandy loam
FSZL - Fine sandy silt loam
HCL - Clay loam (heavy)
HP - Humified peats
HZCL - Silty clay loam (heavy)
IMP - Impenetrable to roots
LCS - Loamy Coarse Sand
LFS - Loamy fine sand
LMS - Loamy medium sand
LP - Loamy peats
MCL - Clay loam (medium)
MS - Medium Sand
MSL - Medium sandy loam
MSZL - Medium sandy silt loam
MZ - Marine Light Silts
MZCL - Silty clay loam (medium)
OC - Organic clays
OL - Organic loams
OS - Organic sands
PL - Peaty loams
PS - Peaty sands
SC - Sandy clay
SCL - Sandy clay loam
SP - Sandy peats
ZC - Silty clay
ZL - Silt loam

Stone Type
CH - Chalk or chalk stones
FSST - Soft fine grained sandstones
GH - Gravel with non-porous (hard) stones
GS - Gravel with porous stones (mainly soft stone types listed above)
HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)
MSST - Soft, medium or coarse grained sandstones
SI - Soft 'weathered' igneous or metamorphic rocks or stones
SLST - Soft oolitic or dolomitic limestones
ZR - Soft, argillaceous or silty rocks or stones

Ped. Shape
SG - Single grain
GRA - Granular
SAB - Subangular Blocky
AB - Angular Blocky
PRIS - Prismatic
PLAT - Platy
MASS - Massive
NA - N/A

Subsoil Structure Condition
Not Applicable
Good
Moderate
Poor

Soil or Ped. Strength
Loose
Very friable
Friable
Firm
Very firm
Extremely firm
Extremely hard
N/A

Calcareousness
NON - Non-calcareous (<0.5% CaCO3)
VSC - Very slightly calcareous (0.5 - 1% CaCO3)
SC - Slightly calcareous (1 - 5% CaCO3)
MC - Moderately calcareous (5 - 10% CaCO3)
VC - Very calcareous (>10% CaCO3)

Ped. Size
VF - Very Fine
F - Fine
M - Medium
C - Coarse
VC - Very Coarse
NA - N/A

Degree of Ped. Development
W - Weak
M - Moderate
S - Strong
NA - Not applicable

Wetness Class
WC I
WC II
WC III
WC IV
WC V
WC VI

ALC Grades
1
2
3a
3b
4
5
Non-Ag

Gley
None
Gley
N/A

Project Number	Project Name	Parcel
C772	Alaw Mon, Anglesey	H

Date of Survey	Survey Type	Surveyor(s)	Company
21/04/2021	Detailed ALC	RM	Askew Land and Soil

Weather	Relief	Land use and vegetation
Dry, sunny	Level	PGR (Permanent Grassland)

Grid Reference	Postcode	Altitude	Area
SH390846	LL717BN	81	20.3

MAFF prov	MAFF detailed	Flooding
Subgrade 3b	None	Flood Zone 1

AAR	AT0	MDw	MDp	FCD	Climate grade
1008	1391	75	59	207	1

Bedrock	Superficial deposits
Ordovician Rocks	Till/none

Soil association(s) 1:250,000	Detailed soil information
Brickfield 2	None

Revision Number	Date Revised
2	29/05/2021

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	SH 39100	85000	239100	385000	79	≤7	NW	PGR	0	38	38	10YR3/3				No	MCL - Clay loam (medium)											Not Applicable	No	No	52	55	1	WC III	3a	Wetness			3a
									38	40	2	10YR4/3				No	MCL - Clay loam (medium)											Moderate		Yes	No									
									40	55	15	10YR5/3	CD - C	10YR5/6		Yes	HCL - Cla	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate		No	No									
									55	65	10	10YR5/3	MD - M	10YR5/6		Yes	HCL - Cla	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate		No	No									
									65	120	55	7.5YR5/3	MP - M	10YR5/6		Yes	C - Clay	35			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes									
2	SH 39180	85000	239180	385000	79	≤7	NW	PGR	0	30	30	10YR3/3				No	MCL - Clay loam (medium)											Not Applicable	No	No	42	59	1	WC III	3a	Wetness			3a
									30	70	40	10YR5/3	MD - M	10YR5/6		Yes	HCL - Clay loam (heavy)											Moderate		Yes	No									
									70	80	10	10YR5/3	MD - M	10YR5/6		Yes	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		Yes	Yes									
									80	120	40	10YR5/3	MD - M	10YR5/6		Yes	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		Yes	Yes									
3	SH 39100	84900	239100	384900	79	≤7	NW	PGR	0	36	36	10YR4/3				No	MCL - Clay loam (medium)											Not Applicable	No	No	31	42	1	WC III	3a	Wetness			3a
									36	50	14	2.5Y5/3	MD - M	10YR5/6		Yes	HCL - Clay loam (heavy)											Moderate		Yes	No									
									50	80	30	2.5Y5/3	MD - M	10YR5/6		Yes	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		Yes	Yes									
									80	120	40	2.5Y5/3	MD - M	10YR5/6		Yes	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		Yes	Yes									
4	SH 39200	84900	239200	384900	82	≤7	NW	PGR	0	33	33	10YR4/3				No	MCL - Clay loam (medium)											Not Applicable	No	No	52	58	1	WC III	3a	Wetness			3a
									33	65	32	10YR5/3	MD - M	10YR5/6		Yes	HCL - Clay loam (heavy)											Moderate		Yes	No									
									65	80	15	10YR5/3	MD - M	10YR5/6		Yes	C - Clay	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		Yes	Yes									
									80	120	40	10YR5/3	MD - M	10YR5/6		Yes	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		Yes	Yes									
5	SH 39100	84800	239100	384800	79	≤7	NW	PGR	0	36	36	10YR4/2				Yes	MCL - Clay loam (medium)											Not Applicable	No	No	32	45	1	WC IV	3b	Wetness			3b
									36	55	19	10YR5/3	MD - M	10YR5/6		Yes	HCL - Cla	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate		Yes	No									
									55	80	25		MD - M	10YR5/6		Yes	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		Yes	Yes									
									80	120	40		MD - M	10YR5/6		Yes	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		Yes	Yes									
6	SH 39200	84800	239200	384800	82	≤7	NW	PGR	0	36	36	10YR4/3				Yes	MCL - Clay loam (medium)											Not Applicable	No	No	44	45	1	WC IV	3b	Wetness			3b
									36	40	4	10YR5/3	MD - M	10YR5/6		Yes	HCL - Cla	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate		Yes	No									
									40	50	10	10YR5/3	MD - M	10YR5/6		Yes	C - Clay	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate		Yes	No									
									50	120	70	10YR5/3	MD - M	10YR5/6		Yes	C - Clay	35			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		Yes	Yes									
7	SH 39300	84800	239300	384800	82	≤7	NW	PGR	0	33	33	10YR4/3				Yes	MCL - Clay loam (medium)											Not Applicable	No	No	28	39	2	WC IV	3b	Wetness			3b
									33	50	17	2.5Y5/3	MD - M	10YR5/6		Yes	HCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate		Yes	No									
									50	80	30	2.5Y5/3	MD - M	10YR5/6		Yes	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		Yes	Yes									
									80	120	40	2.5Y5/3	MD - M	10YR5/6		Yes	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		Yes	Yes									
8	SH 39400	84800	239400	384800	80	≤7	NW	PGR	0	40	40	10YR3/4				No	MCL - Clay loam (medium)											Not Applicable	No	No	68	60	1	WC I	2	Wetness			2
									40	55	15	7.5YR4/3				No	MCL - Clay loam (medium)											Moderate		Yes	No									
									55	70	15	7.5YR4/3				No	HCL - Cla	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate		No	No									
									70	90	20	10YR5/3	FF - Fe	10YR5/6		Yes	HCL - Cla	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate		No	No									
									90	120	30	10YR5/3	FF - Fe	10YR5/6		Yes	C - Clay	20			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes									
9	SH 39000	84700	239000	384700	81	≤7	NW	PGR	0	20	20	10YR4/2	MD - M	10YR5/6		Yes	MCL - Clay loam (medium)											Not Applicable	No	No	39	56	1	WC III	3a	Wetness			3a
									20	50	30	10YR4/2	CD - C	10YR5/6		Yes	MCL - Clay loam (medium)											Moderate		No	No									
									50	70	20	2.5Y5/1	MD - M	10YR5/6		Yes	HCL - Cla	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate		Yes	No									
									70	80	10	2.5Y5/1	MD - M	10YR5/6		Yes	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		Yes	Yes									
									80	120	40	2.5Y5/1	MD - M	10YR5/6		Yes	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		Yes	Yes									
10	SH 39100	84700	239100	384700	87	≤7	NW	PGR	0	30	30	10YR3/3				No	MCL - Clay loam (medium)											Not Applicable	No	No	36	56	1	WC III	3a	Wetness			3a
									30	40	10	10YR4/3				No	MCL - Clay loam (medium)											Moderate		Yes	No									
									40	55	15	10YR5/3	CD - C	10YR5/6		Yes	MCL - Cla	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate		Yes	Yes									
									55	70	15	2.5Y5/3	MP - M	10YR5/6		Yes	HCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate		No	Yes									
									70	80	10	2.5Y5/3	MP - M	10YR5/6		Yes	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		Yes	Yes									
									80	100	20	2.5Y5/3	MP - M	10YR5/6		Yes	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		Yes	Yes									
11	SH 39200	84700	239200	384700	89	≤7	NW	PGR	0	38	38	10YR4/3				No	MCL - Clay loam (medium)											Not Applicable	No	No	53	59	1	WC III	3a	Wetness			3a
									38	65	27	10YR5/3	MD - M	10YR5/6		Yes	HCL - Clay loam (heavy)											Moderate		No	No									
									65	80	15	2.5Y5/3	MD - M	10YR5/6		Yes	C - Clay	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes									
									80	120	40	2.5Y5/3	MD - M	10YR5/6		Yes	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes									
12	SH 38900	84600	238900	384600	81	≤7	NW	PGR	0	30	30	10YR4/2				Yes	MCL - Clay loam (medium)											Not Applicable	No	No	58	56	1	WC III	3a	Wetness			3a
									30	50	20	10YR4/2				Yes	MCL - Clay loam (medium)											Moderate		Yes	No									
									50	65	15	10YR4/2	MD - M	10YR5/6		Yes	HCL - Cla	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate		No	No									
									65	90	25	10YR5/1	MD - M	10YR5/6		Yes	C - Clay	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes									
									90	100	10	10YR5/1	MD - M	10YR5/6		Yes	C - Clay	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes									
									100	120	20	10YR5/1	MD - M	10YR5/6		Yes	C - Clay	35			HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes									

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
13	SH 39000	84600	239000	384600	81	≤7	NW	PGR	0	40	40	10YR4/2				Yes	MCL - Clay loam (medium)											Not Applicable			Yes	35	45	1	WC III	3a	Wetness			3a
									40	50	10	2.5Y5/3	MD - M	10YR5/6		Yes	HCL - Cla	5		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate		No	No								
									50	80	30	2.5Y5/3	MD - M	10YR5/6		Yes	HCL - Cla	50		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate		No	No								
									80	120	40	2.5Y5/3	MD - M	10YR5/6		Yes	HCL - Cla	80		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes								
14	SH 39100	84600	239100	384600	87	≤7	NW	PGR	0	30	30	10YR4/2	CD - C	10YR5/6		Yes	MCL - Clay loam (medium)											Not Applicable		No	No	25	39	2	WC IV	3b	Wetness			3b
									30	60	30	10YR5/3	MD - M	10YR5/6		Yes	C - Clay	5		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes								
									60	80	20	10YR5/3	MD - M	10YR5/6		Yes	C - Clay	50		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes								
									80	120	40	10YR5/3	MD - M	10YR5/6		Yes	C - Clay	80		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes								
15	SH 39200	84600	239200	384600	89	≤7	NW	PGR	0	33	33	10YR4/2	CD - C	10YR5/6		Yes	MCL - Clay loam (medium)											Not Applicable		No	No	40	57	1	WC III	3a	Wetness			3a
									33	70	37	2.5Y5/3	MD - M	10YR5/6		Yes	HCL - Cla	5		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate		Yes	No								
									70	80	10	2.5Y5/3	MD - M	10YR5/6		Yes	C - Clay	50		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		Yes	Yes								
									80	120	40	2.5Y5/3	MD - M	10YR5/6		Yes	C - Clay	80		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		Yes	Yes								
16	SH 38900	84500	238900	384500	87	≤7	NW	PGR	0	30	30	10YR4/2				Yes	MCL - Clay loam (medium)											Not Applicable		No	No	34	48	1	WC III	3a	Wetness			3a
									30	38	8	10YR4/2	CD - C	10YR5/6		Yes	MCL - Clay loam (medium)											Moderate		Yes	No										
									38	60	22	10YR5/3	MD - M	10YR5/6		Yes	HCL - Cla	5		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate		Yes	No								
									60	80	20	10YR5/3	MD - M	10YR5/6		Yes	C - Clay	50		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		Yes	Yes								
									80	120	40	10YR5/3	MD - M	10YR5/6		Yes	C - Clay	80		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		Yes	Yes								
17	SH 39000	84500	239000	384500	87	≤7	NW	PGR	0	40	40	10YR4/2				Yes	MCL - Clay loam (medium)											Not Applicable		Yes	No	43	48	1	WC III	3a	Wetness			3a
									40	53	13	10YR5/2	MD - M	10YR5/6		Yes	HCL - Cla	5		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate		Yes	No								
									53	80	27	10YR5/2	MD - M	10YR5/6		Yes	C - Clay	35		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		Yes	Yes								
									80	120	40	10YR5/2	MD - M	10YR5/6		Yes	C - Clay	50		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		Yes	Yes								
18	SH 39100	84500	239100	384500	90	≤7	NW	PGR	0	33	33	10YR4/2				Yes	MCL - Clay loam (medium)											Not Applicable		Yes	No	21	33	2	WC IV	3b	Wetness			3b
									33	40	7	10YR5/3	MD - M	10YR5/6		Yes	HCL - Clay loam (heavy)											Moderate		No	No										
									40	80	40	10YR5/3	MD - M	10YR5/6		Yes	C - Clay	50		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes								
									80	120	40	10YR5/3	MD - M	10YR5/6		Yes	C - Clay	80		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes								
19	SH 38900	84400	238900	384400	87	≤7	NW	PGR	0	40	40	10YR4/2				Yes	MCL - Clay loam (medium)											Not Applicable			Yes	35	45	1	WC III	3a	Wetness			3a
									40	50	10	2.5Y5/3	MD - M	10YR5/6		Yes	HCL - Cla	5		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate		No	No								
									50	80	30	2.5Y5/3	MD - M	10YR5/6		Yes	HCL - Cla	50		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate		No	No								
									80	120	40	2.5Y5/3	MD - M	10YR5/6		Yes	HCL - Cla	80		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		No	Yes								
20	SH 39000	84400	239000	384400	87	≤7	NW	PGR	0	33	33	10YR4/3					MCL - Clay loam (medium)											Not Applicable		Yes	No	32	44	1	WC IV	3b	Wetness			3b
									33	55	22	2.5Y5/2	MD - M	10YR5/6		Yes	HCL - Cla	5		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate		Yes	No								
									55	80	25	2.5Y5/2	MD - M	10YR5/6		Yes	C - Clay	50		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		Yes	Yes								
									80	120	40	2.5Y5/2	MD - M	10YR5/6		Yes	C - Clay	80		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor		Yes	Yes								
21	SH 38800	84300	238800	384300	85	≤7	NW	PGR	0	35	35	10YR3/3				No	MCL - Clay loam (medium)											Not Applicable		No	No	45	46	1	WC III	3a	Wetness			3a
									35	40	5	7.5YR4/3				No	MCL - Clay loam (medium)											Moderate		No	No								
									40	60	20	10YR5/2				Yes	MCL - Cla	20		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate		No	No								
									60	70	10						HCL - Cla	35		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor			Yes								
									70	120	50						C - Clay	35		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor			Yes								
22	SH 38800	84200	238800	384200	85	≤7	NW	PGR	0	28	28	10YR4/3					MZCL - Si	3		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare	59	51	1	WC III	3a	Wetness			3a
									28	50	22	2.5Y6/3	MP - M	10YR5/6		Yes	ZC - Silty	5		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON - M	Yes	No								
									50	120	70	2.5Y6/1	MP - M	10YR5/6		Yes	ZC - Silty	10		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON - M	Yes	No								
23	SH 38800	84100	238800	384100	85	≤7	NW	PGR	0	36	36	10YR4/2					MZCL - Si	2		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare	57	48	1	WC IV	3b	Wetness			3b
									36	120	84	2.5Y5/2	MP - M	10YR5/6		Yes	ZC - Silty	2		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Poor	NON - M	No	Yes								
24	SH 38900	84100	238900	384100	86	≤7	NW	PGR	0	26	26	10YR4/3					MZCL - Si	5		HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare	37	53	1	WC III	3a	Wetness			3a
									26	50	24	2.5Y5/3	CP - Cr	10YR5/6		Yes	HZCL - Si	10		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON - M	Yes	No								
									50	70	20	2.5Y6/2	CP - Cr	10YR5/6		Yes	HZCL - Si	20		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON - M	No	No								
									70	120	50	2.5Y6/2	CP - Cr	10YR5/6		Yes	HZCL - Si	80		HR - All hard rocks or stones (i.e. those which cannot be scratched w								Moderate	NON - M	No	No								

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
25	SH 39000 84100	239000	384100	86	≤7	NW	PGR	0	48	48	10YR4/2						MZCL - SI	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare	28	49	2	WC II	3a	Wetness			3a
								48	60	12	2.5Y6/2	CP - C	10YR5/6			Yes	HZCL - Si	20			HR - All hard rocks or stones (i.e. those which cannot be scratched w								NON -	No	No									
								60	80	20	2.5Y6/2	CP - C	10YR5/6			Yes	HZCL - Si	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w								NON -	No	No									
26	SH 38900 84000	238900	384000	79	≤7	NW	PGR	0	25	25	2.5Y5/2	CP - C	10YR5/6			Yes	MZCL - SI	3			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare	34	45	1	WC III	3a	Wetness			3a
								25	50	25	2.5Y6/2	CP - C	10YR5/6			Yes	HZCL - Si	3			HR - All hard rocks or stones (i.e. those which cannot be scratched w								NON -	No	No									
								50	60	10	2.5Y6/2	CP - C	10YR5/6			Yes	HZCL - Si	30			HR - All hard rocks or stones (i.e. those which cannot be scratched w								NON -	Yes	No									
								60	120	60	2.5Y6/2	CP - C	10YR5/6			Yes	HZCL - Si	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w								NON -	Yes	No									
27	SH 39000 84000	239000	384000	79	≤7	NW	PGR	0	26	26	10YR4/3						MZCL - SI	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare	32	44	1	WC III	3a	Wetness			3a
								26	50	24	2.5Y5/3	CP - C	10YR5/6			Yes	MZCL - SI	15			HR - All hard rocks or stones (i.e. those which cannot be scratched w								NON -	Yes	No									
								50	70	20	2.5Y5/3	CP - C	10YR5/6			Yes	MZCL - SI	40			HR - All hard rocks or stones (i.e. those which cannot be scratched w								NON -	Yes	No									
								70	120	50	2.5Y5/3	CP - C	10YR5/6			Yes	MZCL - SI	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w								NON -	Yes	No									
	END																																						

Mottle form
FF - Few Faint
FD - Few Distinct
FP - Few Prominent
CF - Common Faint
CD - Common Distinct
CP - Common Prominent
MF - Many Faint
MD - Many Distinct
MP - Many Prominent
VF - Very many Faint
VD - Very many Distinct
VP - Very many Prominent

Texture
C - Clay
CHK - Chalk
CS - Coarse Sand
CSL - Coarse sandy loam
CSZL - Coarse sandy silt loam
FP - Fibrous and semifibrous peats
FS - Fine Sand
FSL - Fine sandy loam
FSZL - Fine sandy silt loam
HCL - Clay loam (heavy)
HP - Humified peats
HZCL - Silty clay loam (heavy)
IMP - Impenetrable to roots
LCS - Loamy Coarse Sand
LFS - Loamy fine sand
LMS - Loamy medium sand
LP - Loamy peats
MCL - Clay loam (medium)
MS - Medium Sand
MSL - Medium sandy loam
MSZL - Medium sandy silt loam
MZ - Marine Light Silts
MZCL - Silty clay loam (medium)
OC - Organic clays
OL - Organic loams
OS - Organic sands
PL - Peaty loams
PS - Peaty sands
SC - Sandy clay
SCL - Sandy clay loam
SP - Sandy peats
ZC - Silty clay
ZL - Silt loam

Stone Type
CH - Chalk or chalk stones
FSST - Soft fine grained sandstones
GH - Gravel with non-porous (hard) stones
GS - Gravel with porous stones (mainly soft stone types listed above)
HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)
MSST - Soft, medium or coarse grained sandstones
SI - Soft 'weathered' igneous or metamorphic rocks or stones
SLST - Soft oolitic or dolomitic limestones
ZR - Soft, argillaceous or silty rocks or stones

Ped. Shape
SG - Single grain
GRA - Granular
SAB - Subangular Blocky
AB - Angular Blocky
PRIS - Prismatic
PLAT - Platy
MASS - Massive
NA - N/A

Subsoil Structure Condition
Not Applicable
Good
Moderate
Poor

Soil or Ped. Strength
Loose
Very friable
Friable
Firm
Very firm
Extremely firm
Extremely hard
N/A

Calcareousness
NON - Non-calcareous (<0.5% CaCO3)
VSC - Very slightly calcareous (0.5 - 1% CaCO3)
SC - Slightly calcareous (1 - 5% CaCO3)
MC - Moderately calcareous (5 - 10% CaCO3)
VC - Very calcareous (>10% CaCO3)

Ped. Size
VF - Very Fine
F - Fine
M - Medium
C - Coarse
VC - Very Coarse
NA - N/A

Degree of Ped. Development
W - Weak
M - Moderate
S - Strong
NA - Not applicable

Wetness Class
WC I
WC II
WC III
WC IV
WC V
WC VI

ALC Grades
1
2
3a
3b
4
5
Non-Ag

Gley
None
Gley
N/A

Project Number	Project Name	Parcel
C772	Alaw Mon Solar Farm, Anglesey	I

Date of Survey	Survey Type	Surveyor(s)	Company
21/04/2021	ALC	AR	Askew Land and Soil

Weather	Relief	Land use and vegetation
Dry, Sunny	Level	PGR (Permananet Grassland)

Grid Reference	Postcode	Altitude	Area
SH394851	LL717BN	69	19.4

MAFF prov	MAFF detailed	Flooding
Grade 2/3a	None	Flood Zone 1

AAR	AT0	MDw	MDp	FCD	Climate grade
990	1404	78	62	204	2

Bedrock	Superficial deposits
Ordovician Rocks	Till

Soil association(s) 1:250,000	Detailed soil information
Brickfield 2	None

Revision Number	Date Revised
2	29/05/2021

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	SH 39300	85400	239300	385400	56	≤7	NW	PGR	0	25	25	10YR4/3					MZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare		46	36	1	WC IV	3b	Wetness			3b
								25	55	30	2.5Y6/2	MP - M	10YR5/6			Yes	ZC - Silty	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Poor		NON -	N	Yes										
								55	120	65	2.5Y5/3	CP - C	10YR5/6			Yes	MZCL - Si	30			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate		NON -	N	Yes	No									
2	SH 39200	85300	239200	385300	51	≤7	NW	PGR	0	30	30	10YR4/2					MZCL - Si	3			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare		13	23	2	WC III	3a	Wetness			3a
								30	70	40	10YR5/1	CD - C	10YR5/6			Yes	MZCL - Si	60			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate		NON -	Non-ca	No										
								70	120	50	10YR5/1	CD - C	10YR5/6			Yes	MZCL - Si	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate				No										
3	SH 39300	85300	239300	385300	56	≤7	NW	PGR	0	25	25	10YR4/3					MZCL - Si	3			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare		77	58	1	WC III	3a	Wetness			3a
								25	120	95	5Y5/1	CP - C	10YR5/6			Yes	HZCL - Si	3			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate		NON -	Non-ca	No										
4	SH 39400	85300	239400	385300	60	≤7	NW	PGR	0	30	30	10YR4/3					MZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare		24	32	2	WC I	2	Wetness			2
								30	50	20	10YR5/4					No	HZCL - Si	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate		NON -	Non-ca	No										
								50	60	10	10YR4/1					No	HZCL - Si	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate		NON -	Non-ca	No										
								60	120	60	10YR4/1					No	HZCL - Si	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate		NON -	Non-ca	No										
5	SH 39200	85200	239200	385200	65	≤7	NW	PGR	0	25	25	10YR4/3					MZCL - Si	3			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare		20	27	2	WC III	3a	Wetness			3a
								25	50	25	2.5Y5/2	CP - C	10YR5/6			Yes	ZC - Silty	8			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate		NON -	N	Yes	No									
								50	65	15	10YR4/2					No	MZCL - Si	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate		NON -	N	No	No									
								65	120	55	10YR4/2					No	MZCL - Si	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate				No	No									
6	SH 39300	85200	239300	385200	65	≤7	NW	PGR	0	25	25	10YR4/3					MZCL - Si	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare		56	47	1	WC III	3a	Wetness			3a
								25	60	35	2.5Y6/2	CP - C	10YR5/6			Yes	ZC - Silty	3			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate		NON -	N	Yes	No									
								60	120	60	2.5Y5/3	CP - C	10YR5/6			Yes	ZC - Silty	3			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate		NON -	N	Yes	No									
7	SH 39400	85200	239400	385200	69	≤7	NW	PGR	0	38	38	10YR4/2					MZCL - Si	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare		59	50	1	WC III	3a	Wetness			3a
								38	50	12	10YR5/3	CD - C	10YR5/6			Yes	ZC - Silty	3			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate		NON -	N	Yes	No									
								50	120	70	2.5Y6/2	CP - C	10YR5/6			Yes	ZC - Silty	3			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate		NON -	N	Yes	No									
8	SH 39500	85200	239500	385200	77	≤7	NW	PGR	0	25	25	10YR4/2					MZCL - Si	3			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare		45	38	1	WC IV	3b	Wetness			3b
								25	60	35	2.5Y6/3	MP - M	10YR5/6			Yes	ZC - Silty	3			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Poor		NON -	N	No	Yes									
								60	120	60	2.5Y6/2	CP - C	10YR5/6			Yes	ZC - Silty	15			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate		NON -	N	Yes	No									
9	SH 39200	85100	239200	385100	65	≤7	NW	PGR	0	35	35	10YR4/3					MZCL - Si	3			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare		54	52	1	WC III	3a	Wetness			3a
								35	60	25	2.5Y6/2	CP - C	10YR5/6			Yes	ZC - Silty	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate		NON -	N	Yes	No									
								60	70	10	2.5Y6/1	MP - M	10YR5/6			Yes	ZC - Silty	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate		NON -	N	Yes	No									
								70	120	50	2.5Y6/1	MP - M	10YR5/6			Yes	ZC - Silty	25			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate		NON -	N	Yes	No									
10	SH 39300	85100	239300	385100	65	≤7	NW	PGR	0	28	28	10YR4/3					MZCL - Si	3			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare		34	49	1	WC III	3a	Wetness			3a
								28	65	37	2.5Y6/2	CP - C	10YR5/6			Yes	HZCL - Si	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate		NON -	N	Yes	No									
								65	75	10	2.5Y5/3	CP - C	10YR5/6			Yes	HZCL - Si	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate		NON -	N	No	No									
								75	120	45	2.5Y5/3	CP - C	10YR5/6			Yes	HZCL - Si	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate				No	No									
11	SH 39400	85100	239400	385100	69	≤7	NW	PGR	0	25	25	10YR4/3					MZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare		11	19	2	WC III	3a	Wetness			3a
								25	40	15	2.5Y5/3	CP - C	10YR5/6			Yes	HZCL - Si	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate		NON -	N	Yes	No									
								40	120	80	2.5Y5/3	CP - C	10YR5/6			Yes	HZCL - Si	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate		NON -	N	Yes	No									
12	SH 39500	85100	239500	385100	77	≤7	NW	PGR	0	30	30	10YR4/2					MZCL - Si	8			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare		46	39	1	WC IV	3b	Wetness			3b
								30	60	30	2.5Y5/2	CP - C	10YR5/6			Yes	ZC - Silty	3			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Poor		NON -	N	Yes	Yes									
								60	120	60	2.5Y5/3	MP - M	10YR5/6	CD - C	2.5Y6/1	Yes	ZC - Silty	15			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate		NON -	N	No	No									

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
13	SH 39600 85100	239600	385100	77	≤7	NW	PGR	0	25	25	10YR4/3						MZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare	60	49	1	WC III	3a	Wetness			3a
								25	50	25	2.5Y5/3	CP - Cı	10YR5/6			Yes	HZCL - Sil	8			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate			NON -	Yes	No									
								50	120	70	2.5Y5/3	CP - Cı	10YR5/6			Yes	HZCL - Sil	25			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate			NON -	Yes	No									
14	SH 39300 85000	239300	385000	82	≤7	NW	PGR	0	25	25	10YR4/3						MZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare	36	41	1	WC III	3a	Wetness			3a
								25	60	35	2.5Y6/2	MP - M	10YR5/6			Yes	ZC - Silty	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate			NON -	Yes	No									
								60	120	60	2.5Y6/1	MP - M	10YR5/6			Yes	ZC - Silty	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate			NON -	No	No									
15	SH 39400 85000	239400	385000	80	≤7	NW	PGR	0	30	30	10YR4/3						MZCL - Si	3			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare	48	40	1	WC IV	3b	Wetness			3b
								30	120	90	2.5Y6/2	MP - M	10YR5/6			Yes	ZC - Silty	3			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Poor			NON -	Yes	Yes									
16	SH 39500 85000	239500	385000	82	≤7	NW	PGR	0	30	30	10YR4/3						MZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare	26	36	2	WC III	3a	Wetness			3a
								30	40	10	2.5Y5/1	CP - Cı	10YR5/6			Yes	MZCL - Si	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate			NON -	Yes	No									
								40	60	20	2.5Y6/2	CP - Cı	10YR5/6			Yes	SCL - San	20			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate			NON -	Yes	No									
								60	120	60	2.5Y6/2	CP - Cı	10YR5/6			Yes	SCL - San	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate			NON -	Yes	No									
17	SH 39600 85000	239600	385000	77	≤7	NW	PGR	0	27	27	10YR4/3						MZCL - Si	8			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare	50	44	1	WC IV	3b	Wetness			3b
								27	50	23	2.5Y6/3	CP - Cı	10YR5/6			Yes	HZCL - Sil	3			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate			NON -	No	No									
								50	120	70	2.5Y6/2	CP - Cı	10YR5/6			Yes	ZC - Silty	15			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Poor			NON -	No	Yes									
18	SH 39400 84900	239400	384900	80	≤7	NW	PGR	0	35	35	10YR4/3						MCL - Cla	3			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare	76	57	1	WC III	3a	Wetness			3a
								35	120	85	5Y5/12.5Y6/3	CP - Cı	10YR5/6			Yes	HZCL - Sil	3			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate			NON -	Yes	No									
19	SH 39500 84900	239500	384900	82	≤7	NW	PGR	0	27	27	10YR4/3						MCL - Cla	3			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare	71	55	1	WC III	3a	Wetness			3a
								27	60	33	2.5Y6/3	CP - Cı	10YR5/6			Yes	HZCL - Sil	3			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate			NON -	Yes	No									
								60	120	60	2.5Y6/2	CP - Cı	10YR5/6			Yes	HZCL - Sil	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Moderate			NON -	Yes	No									
20	SH 39600 84900	239600	384900	82	≤7	NW	PGR	0	25	25	10YR4/2						MCL - Cla	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger								NON -	Non-calcare	42	33	1	WC IV	3b	Wetness			3b
								25	120	95	2.5Y6/3	CP - Cı	10YR5/6			Yes	ZC - Silty	3			HR - All hard rocks or stones (i.e. those which cannot be scratched w					Poor			NON -	Yes	Yes									
	END																																						

Mottle form
FF - Few Faint
FD - Few Distinct
FP - Few Prominent
CF - Common Faint
CD - Common Distinct
CP - Common Prominent
MF - Many Faint
MD - Many Distinct
MP - Many Prominent
VF - Very many Faint
VD - Very many Distinct
VP - Very many Prominent

Texture
C - Clay
CHK - Chalk
CS - Coarse Sand
CSL - Coarse sandy loam
CSZL - Coarse sandy silt loam
FP - Fibrous and semifibrous peats
FS - Fine Sand
FSL - Fine sandy loam
FSZL - Fine sandy silt loam
HCL - Clay loam (heavy)
HP - Humified peats
HZCL - Silty clay loam (heavy)
IMP - Impenetrable to roots
LCS - Loamy Coarse Sand
LFS - Loamy fine sand
LMS - Loamy medium sand
LP - Loamy peats
MCL - Clay loam (medium)
MS - Medium Sand
MSL - Medium sandy loam
MSZL - Medium sandy silt loam
MZ - Marine Light Silts
MZCL - Silty clay loam (medium)
OC - Organic clays
OL - Organic loams
OS - Organic sands
PL - Peaty loams
PS - Peaty sands
SC - Sandy clay
SCL - Sandy clay loam
SP - Sandy peats
ZC - Silty clay
ZL - Silt loam

Stone Type
CH - Chalk or chalk stones
FSST - Soft fine grained sandstones
GH - Gravel with non-porous (hard) stones
GS - Gravel with porous stones (mainly soft stone types listed above)
HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)
MSST - Soft, medium or coarse grained sandstones
SI - Soft 'weathered' igneous or metamorphic rocks or stones
SLST - Soft oolitic or dolomitic limestones
ZR - Soft, argillaceous or silty rocks or stones

Ped. Shape
SG - Single grain
GRA - Granular
SAB - Subangular Blocky
AB - Angular Blocky
PRIS - Prismatic
PLAT - Platy
MASS - Massive
NA - N/A

Subsoil Structure Condition
Not Applicable
Good
Moderate
Poor

Soil or Ped. Strength
Loose
Very friable
Friable
Firm
Very firm
Extremely firm
Extremely hard
N/A

Calcareousness
NON - Non-calcareous (<0.5% CaCO3)
VSC - Very slightly calcareous (0.5 - 1% CaCO3)
SC - Slightly calcareous (1 - 5% CaCO3)
MC - Moderately calcareous (5 - 10% CaCO3)
VC - Very calcareous (>10% CaCO3)

Ped. Size
VF - Very Fine
F - Fine
M - Medium
C - Coarse
VC - Very Coarse
NA - N/A

Degree of Ped. Development
W - Weak
M - Moderate
S - Strong
NA - Not applicable

Wetness Class
WC I
WC II
WC III
WC IV
WC V
WC VI

ALC Grades
1
2
3a
3b
4
5
Non-Ag

Gley
None
Gley
N/A

Project Number	Project Name	Parcel
C772	Alaw Mon Solar Farm, Anglesey	J

Date of Survey	Survey Type	Surveyor(s)	Company
22/04/2021	ALC	RWA	Askew Land and Soil

Weather	Relief	Land use and vegetation
Dry, sunny	Level	PGR (Permanent Grassland)

Grid Reference	Postcode	Altitude	Area
SH399841	LL717BT	77	19.5

MAFF prov	MAFF detailed	Flooding
Subgrade 3b	None	Flood Zone 1

AAR	AT0	MDw	MDp	FCD	Climate grade
1002	1395	76	60	206	1

Bedrock	Superficial deposits
Ordovician Rocks	Till/none

Soil association(s) 1:250,000	Detailed soil information
Brickfield 2	None

Revision Number	Date Revised
2	10/06/2021

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	SH 39700	84200	239700	384200	73	≤7		PGR	0	25	25	10YR4/3				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-cal	No	54	48	1	WC IV	3b	Wetness			3b
									25	50	25	10YR6/3	CD - Cr	7.5YR5/8		Yes	MCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
									50	120	70	2.5Y5/4	MD - M	7.5YR5/6		Yes	C - Clay	6			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Poor	NON -	Yes	Yes									
2	SH 39800	84200	239800	384200	76	≤7		PGR	0	22	22	7.5YR4/2				No	MCL - Cla	4	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-cal	No	66	48	1	WC II	3a	Wetness			3a
									22	54	32	7.5YR5/3				No	MCL - Cla	8			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
									54	120	66	2.5Y6/4	CD - Cr	7.5YR5/6		Yes	HCL - Cla	12			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	Yes	No									
3	SH 39900	84200	239900	384200	77	≤7		PGR	0	24	24	7.5YR4/2				No	MCL - Cla	4	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-cal	No	66	49	1	WC II	3a	Wetness			3a
									24	60	36	7.5YR5/3				No	MCL - Cla	8			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
									60	120	60	2.5Y6/4	CD - Cr	7.5YR5/6		Yes	HCL - Cla	12			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	Yes	No									
4	SH 40000	84200	240000	384200	75	≤7		PGR	0	24	24	10YR4/2				No	MCL - Cla	4	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-cal	No	57	49	1	WC II	3a	Wetness			3a
									24	65	41	10YR5/3	CD - Cr	7.5YR5/6		Yes	MCL - Cla	8			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
									65	120	55	2.5Y6/4	CD - Cr	7.5YR5/6		Yes	C - Clay	12			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
5	SH 40100	84200	240100	384200	75	≤7		PGR	0	24	24	7.5YR4/3				No	MCL - Cla	4	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-cal	No	67	49	1	WC II	3a	Wetness			3a
									24	62	38	7.5YR5/3				No	MCL - Cla	8			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
									62	120	58	2.5Y6/4	CD - Cr	7.5YR5/6		Yes	HCL - Cla	12			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	Yes	No									
6	SH 39600	84100	239600	384100	73	≤7		PGR	0	22	22	10YR4/2				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-cal	No	56	49	1	WC IV	3b	Wetness			3b
									22	48	26	10YR5/2				No	HCL - Cla	0			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
									48	120	72	2.5Y5/4	MD - M	7.5YR5/6	MD - M	2.5Y6/1	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Poor	NON -	Yes	Yes									
7	SH 39700	84100	239700	384100	73	≤7		PGR	0	24	24	7.5YR4/2				No	MCL - Cla	4	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-cal	No	66	49	1	WC II	3a	Wetness			3a
									24	60	36	7.5YR5/3				No	MCL - Cla	8			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
									60	120	60	2.5Y6/4	CD - Cr	7.5YR5/6		Yes	HCL - Cla	12			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	Yes	No									
8	SH 39800	84100	239800	384100	76	≤7		PGR	0	24	24	7.5YR4/2				No	MCL - Cla	4	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-cal	No	38	48	1	WC I	2	Wetness			2
									24	45	21	7.5YR5/3				No	MCL - Cla	8			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
									45	70	25	2.5Y6/4				No	HCL - Cla	12			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
									70	120	50	2.5Y6/4				No	HCL - Cla	70			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
9	SH 39900	84100	239900	384100	77	≤7		PGR	0	26	26	7.5YR4/3				No	MCL - Cla	6	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-cal	No	18	44	2	WC I	2	Wetness			2
									26	45	19	7.5YR5/3				No	MCL - Cla	12			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
									45	70	25	7.5YR6/3				No	HCL - Cla	20			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
10	SH 40000	84100	240000	384100	75	≤7		PGR	0	25	25	7.5YR4/3				No	MCL - Cla	6	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-cal	No	18	44	2	WC I	2	Wetness			2
									25	50	25	7.5YR5/3				No	MCL - Cla	12			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
									50	70	20	7.5YR6/3				No	HCL - Cla	20			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
11	SH 40100	84100	240100	384100	75	≤7		PGR	0	26	26	7.5YR4/3				No	MCL - Cla	4	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-cal	No	67	49	1	WC II	3a	Wetness			3a
									26	55	29	7.5YR5/3				No	MCL - Cla	8			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
									55	120	65	2.5Y6/4	CD - Cr	7.5YR5/6		Yes	HCL - Cla	12			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	Yes	No									
12	SH 39600	84000	239600	384000	79	12		PGR	0	24	24	7.5YR4/3				No	MCL - Cla	4	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-cal	No	67	49	1	WC II	3a	Gradient			4
									24	62	38	7.5YR5/3				No	MCL - Cla	8			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
									62	120	58	2.5Y6/4	CD - Cr	7.5YR5/6		Yes	HCL - Cla	12			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	Yes	No									

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
13	SH 39700	84000	239700	384000	79	≤7		PGR	0	25	25	7.5YR4/3				No	MCL - Cla	6	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-ca	No	66	49	1	WC II	3a	Wetness			3a
									25	62	37	7.5YR5/3				No	MCL - Cla	8			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
									62	120	58	2.5Y6/4	CD - Cr	7.5YR5/6		Yes	HCL - Cla	12			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	Yes	No									
14	SH 39900	84000	239900	384000	80	≤7		PGR	0	22	22	7.5YR4/3				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-ca	No	67	50	1	WC II	3a	Wetness			3a
									22	55	33	7.5YR5/3				No	MCL - Cla	6			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
									55	120	65	2.5Y6/4	CD - Cr	7.5YR5/6		Yes	HCL - Cla	12			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	Yes	No									
15	SH 40000	84000	240000	384000	75	≤7		PGR	0	25	25	10YR4/2				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-ca	No	56	50	1	WC IV	3b	Wetness			3b
									25	52	27	10YR5/2				No	HCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
									52	120	68	2.5Y5/4	MD - M	7.5YR5/6	MD - M	2.5Y6/1	C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Poor	NON -	Yes	Yes									
16	SH 40100	84000	240100	384000	75	≤7		PGR	0	25	25	10YR4/3				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-ca	No	55	49	1	WC IV	3b	Wetness			3b
									25	54	29	10YR6/3	CD - Cr	7.5YR5/8		Yes	MCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
									54	120	66	2.5Y5/4	MD - M	7.5YR5/6		Yes	C - Clay	6			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Poor	NON -	Yes	Yes									
17	SH 39900	83900	239900	383900	80	≤7		PGR	0	28	28	10YR4/2				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-ca	No	55	49	1	WC IV	3b	Wetness			3b
									28	52	24	10YR6/3	CD - Cr	7.5YR5/8		Yes	MCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
									52	120	68	2.5Y5/4	MD - M	7.5YR5/6		Yes	C - Clay	6			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Poor	NON -	Yes	Yes									
18	SH 40000	83900	240000	383900	75	≤7		PGR	0	24	24	10YR5/2				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-ca	No	56	49	1	WC IV	3b	Wetness			3b
									24	52	28	10YR5/3				No	HCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
									52	120	68	2.5Y5/4	MD - M	7.5YR5/6	MD - M	2.5Y6/1	C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Poor	NON -	Yes	Yes									
	END																																						

Mottle form
FF - Few Faint
FD - Few Distinct
FP - Few Prominent
CF - Common Faint
CD - Common Distinct
CP - Common Prominent
MF - Many Faint
MD - Many Distinct
MP - Many Prominent
VF - Very many Faint
VD - Very many Distinct
VP - Very many Prominent

Texture
C - Clay
CHK - Chalk
CS - Coarse Sand
CSL - Coarse sandy loam
CSZL - Coarse sandy silt loam
FP - Fibrous and semifibrous peats
FS - Fine Sand
FSL - Fine sandy loam
FSZL - Fine sandy silt loam
HCL - Clay loam (heavy)
HP - Humified peats
HZCL - Silty clay loam (heavy)
IMP - Impenetrable to roots
LCS - Loamy Coarse Sand
LFS - Loamy fine sand
LMS - Loamy medium sand
LP - Loamy peats
MCL - Clay loam (medium)
MS - Medium Sand
MSL - Medium sandy loam
MSZL - Medium sandy silt loam
MZ - Marine Light Silts
MZCL - Silty clay loam (medium)
OC - Organic clays
OL - Organic loams
OS - Organic sands
PL - Peaty loams
PS - Peaty sands
SC - Sandy clay
SCL - Sandy clay loam
SP - Sandy peats
ZC - Silty clay
ZL - Silt loam

Stone Type
CH - Chalk or chalk stones
FSST - Soft fine grained sandstones
GH - Gravel with non-porous (hard) stones
GS - Gravel with porous stones (mainly soft stone types listed above)
HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)
MSST - Soft, medium or coarse grained sandstones
SI - Soft 'weathered' igneous or metamorphic rocks or stones
SLST - Soft oolitic or dolomitic limestones
ZR - Soft, argillaceous or silty rocks or stones

Ped. Shape
SG - Single grain
GRA - Granular
SAB - Subangular Blocky
AB - Angular Blocky
PRIS - Prismatic
PLAT - Platy
MASS - Massive
NA - N/A

Subsoil Structure Condition
Not Applicable
Good
Moderate
Poor

Soil or Ped. Strength
Loose
Very friable
Friable
Firm
Very firm
Extremely firm
Extremely hard
N/A

Calcareousness
NON - Non-calcareous (<0.5% CaCO3)
VSC - Very slightly calcareous (0.5 - 1% CaCO3)
SC - Slightly calcareous (1 - 5% CaCO3)
MC - Moderately calcareous (5 - 10% CaCO3)
VC - Very calcareous (>10% CaCO3)

Ped. Size
VF - Very Fine
F - Fine
M - Medium
C - Coarse
VC - Very Coarse
NA - N/A

Degree of Ped. Development
W - Weak
M - Moderate
S - Strong
NA - Not applicable

Wetness Class
WC I
WC II
WC III
WC IV
WC V
WC VI

ALC Grades
1
2
3a
3b
4
5
Non-Ag

Gley
None
Gley
N/A

Project Number	Project Name	Parcel
C772	Alaw Mon Solar Farm, Anglesey	K

Date of Survey	Survey Type	Surveyor(s)	Company
22/04/2021	ALC	RM	Askew Land and Soil

Weather	Relief	Land use and vegetation
Dry, sunny	Level	PGR (Permanent Grassland()

Grid Reference	Postcode	Altitude	Area
SH391840	LL717BT	76	16.7

MAFF prov	MAFF detailed	Flooding
Subgrade 3b	None	Flood Zone 1

AAR	AT0	MDw	MDp	FCD	Climate grade
1001	1397	76	60	206	2

Bedrock	Superficial deposits
Ordovician Rocks	Till

Soil association(s) 1:250,000	Detailed soil information
Brickfield 2	None

Revision Number	Date Revised
2	29/05/2021

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	SH 39400	84100	239400	384100	76	≤7	NW	PGR	0	38	38	10YR4/2				Yes	MCL - Clay loam (medium)											Not Applicable		No	No	33	46	1	WC III	3a	Wetness			3a
									38	40	2	10YR4/2	FF - Fe	10YR5/6		Yes	MCL - Clay loam (medium)											Moderate		Yes	No									
									40	58	18	10YR4/2	CP - Cc	10YR5/6		Yes	HCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Moderate		Yes	No									
									58	60	2	10YR4/2	CP - Cc	10YR5/6		Yes	HCL - Cla	30			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Moderate		Yes	No									
									60	80	20	10YR4/2	CP - Cc	10YR5/6		Yes	HCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Poor		Yes	Yes									
									80	120	40	10YR4/2	CP - Cc	10YR5/6		Yes	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Poor		Yes	Yes									
2	SH 39100	84000	239100	384000	76	≤7	NW	PGR	0	38	38	10YR3/2				No	MCL - Clay loam (medium)											Not Applicable		No	No	52	47	1	WC IV	3b	Wetness			3b
									38	40	2	2.5Y4/1	FP - Few Prominent			Yes	C - Clay											Moderate		No	No									
									40	120	80	10YR2/1	MP - Many Prominent			No	C - Clay	10			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Poor		No	Yes									
3	SH 39200	84000	239200	384000	78	≤7	NW	PGR	0	30	30	7.5YR3/3					MCL - Clay loam (medium)											Not Applicable			No	63	58	1	WC I	2	Wetness			2
									30	55	25	7.5YR4/3					MCL - Clay loam (medium)											Moderate			No									
									55	80	25	7.5YR4/3					HCL - Clay loam (heavy)											Moderate		Yes	No									
									80	120	40	10YR5/3	MP - M	10YR5/6		Yes	C - Clay	20			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Poor			Yes									
4	SH 39300	84000	239300	384000	77	≤7	NW	PGR	0	38	38	7.5YR4/3				No	MCL - Clay loam (medium)											Not Applicable			No	27	37	2	WC I	2	Droughtiness	Wetness		2
									38	42	4	7.5YR4/3				No	MCL - Cla	30			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Moderate		Yes	No									
									42	80	38	7.5YR4/3				No	HCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Moderate		Yes	No									
									80	120	40	7.5YR4/3				No	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Poor		Yes	Yes									
5	SH 39400	84000	239400	384000	77	≤7	NW	PGR	0	38	38	7.5YR3/3				No	MCL - Clay loam (medium)											Not Applicable		No	No	37	49	1	WC I	2	Wetness			2
									38	40	2	7.5YR3/3	FF - Fe	10YR5/6		No	MCL - Clay loam (medium)											Moderate		No	No									
									40	60	20	7.5YR4/3				No	MCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Moderate		No	No									
									60	80	20	7.5YR4/3				No	HCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Moderate		No	No									
									80	120	40	7.5YR4/3				No	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Poor		No	Yes									
6	SH 39100	83900	239100	383900	76	≤7	NW	PGR	0	33	33	7.5YR4/2					MCL - Cla	5	5	2	HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Not Applicable		No	No	26	30	2	WC III	3a	Wetness			3a
									33	45	12	10YR4/2	FF - Fe	10YR5/6		Yes	MCL - Cla	30			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Moderate		Yes	No									
									45	50	5	10YR4/2	CP - Cc	10YR5/6		Yes	HCL - Cla	30			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Moderate		Yes	Yes									
									50	120	70	10YR4/2	CP - Cc	10YR5/6		Yes	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Poor		Yes	Yes									
7	SH 39200	83900	239200	383900	78	≤7	NW	PGR	0	38	38	7.5YR4/2				Yes	MCL - Clay loam (medium)											Not Applicable		No	No	42	47	1	WC III	3a	Wetness			3a
									38	45	7	7.5YR4/2				Yes	MCL - Clay loam (medium)											Moderate		Yes	No									
									45	53	8	10YR5/3	MD - M	10YR5/6		Yes	MCL - Cla	5			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Moderate		Yes	No									
									53	60	7	10YR5/3	MD - M	10YR5/6		Yes	HCL - Cla	30			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Moderate		Yes	No									
									60	120	60	10YR5/3	MD - M	10YR5/6		Yes	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Poor		Yes	Yes									
8	SH 39300	83900	239300	383900	77	≤7	NW	PGR	0	30	30	7.5YR4/2				Yes	MCL - Clay loam (medium)											Not Applicable		No	No	54	58	1	WC I	2	Wetness			2
									30	55	25	7.5YR4/3	CF - Cc	10YR5/6		No	MCL - Clay loam (medium)											Moderate		Yes	No									
									55	80	25	7.5YR4/3	CD - Cc	10YR5/6		No	HCL - Clay loam (heavy)											Moderate		No	Yes									
									80	100	20	7.5YR5/3	CD - Cc	10YR5/6		No	C - Clay											Poor		No	Yes									
9	SH 39000	83800	239000	383800	78	≤7	NW	PGR	0	20	20	2.5Y3/2	MP - M	10YR5/6		Yes	HCL - Clay loam (heavy)											Not Applicable		No	No	11	25	2	WC IV	3b	Wetness			3b
									20	50	30	5Y2.5/1	MP - M	10YR5/6		Yes	ZC - Silty clay											Poor		No	Yes									
									50	80	30	5Y2.5/1	MP - M	10YR5/6		Yes	ZC - Silty	50			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Poor		No	Yes									
									80	100	20	5Y2.5/1	MP - M	10YR5/6		Yes	ZC - Silty	80			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Poor		No	Yes									
10	SH 39100	83800	239100	383800	79	≤7	NW	PGR	0	38	38	10YR4/3				No	MCL - Clay loam (medium)											Not Applicable		No	No	17	27	2	WC IV	3b	Wetness			3b
									38	40	2	10YR5/2	CD - Cc	10YR5/6		Yes	HCL - Clay loam (heavy)											Moderate		No	No									
									40	50	10	10YR5/2	CD - Cc	10YR5/6		Yes	HCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Moderate		No	No									
									50	120	70	10YR5/2	CD - Cc	10YR5/6		Yes	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Poor		No	Yes									
11	SH 39200	83800	239200	383800	82	≤7	NW	PGR	0	38	38	10YR4/2	CD - Cc	10YR5/6		Yes	MCL - Clay loam (medium)											Not Applicable		No	No	30	42	1	WC IV	3b	Wetness			3b
									38	40	2	10YR5/3	MP - M	10YR5/6			HCL - Clay loam (heavy)											Moderate		No	No									
									40	50	10	10YR5/2	MP - M	10YR5/6		Yes	HCL - Clay loam (heavy)											Moderate		Yes	No									
									50	80	30	10YR5/2	MP - M	10YR5/6		Yes	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Poor		Yes	Yes									
									80	120	40	10YR5/2	MP - M	10YR5/6		Yes	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Poor		Yes	Yes									
12	SH 39000	83700	239000	383700	78	≤7	NW	PGR	0	38	38	10YR4/3				No	MCL - Clay loam (medium)											Not Applicable		No	No	37	51	1	WC III	3a	Wetness			3a
									38	40	2	7.5YR4/3				No	MCL - Clay loam (medium)											Moderate		No	Yes									
									40	55	15	7.5YR5/3	CD - Cc	10YR5/6		Yes	MZCL - Silty clay loam (medium)											Moderate		Yes	No									
									55	60	5	7.5YR5/3	CD - Cc	10YR5/6		Yes	HCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Moderate		No	No									
									60	80	20	7.5YR5/3	CD - Cc	10YR5/6		Yes	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Poor		No	Yes									
									80	120	40	7.5YR5/3	CD - Cc	10YR5/6		Yes	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Poor		No	Yes									

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
13	SH 39100	83700	239100	383700	79	≤7	NW	PGR	0	38	38	10YR4/2	CD - Common	Distinct			Yes	HCL - Clay loam (heavy)											Not Applicable		No	No	29	49	2	WC IV	3b	Wetness			3b
								38	65	27	10YR4/2	MD - M	10YR5/6			Yes	C - Clay											Poor		No	Yes									
								65	70	5	10YR5/3	MP - M	10YR5/6			Yes	C - Clay	10			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Poor		No	Yes									
								70	80	10	10YR5/3	MP - M	10YR5/6			Yes	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Poor		No	Yes									
								80	100	20	10YR5/3	MP - M	10YR5/6			Yes	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Poor		No	Yes									
14	SH 38900	83600	238900	383600	80	≤7	NW	PGR	0	30	30	10YR4/1	FD - Fe	10YR5/6			Yes	MCL - Cla	0										Not Applicable		No	No	60	54	1	WC IV	3b	Wetness			3b
								30	40	10	10YR4/1	CD - Cl	10YR5/6			Yes	MCL - Cla	0										Moderate		No	No									
								40	55	15	10YR4/1	MD - M	10YR5/6			Yes	HCL - Cla	0										Moderate		No	No									
								55	120	65	2.5Y3/1	MP - M	10YRR/6			No	C - Clay	0										Poor		No	Yes									
15	SH 39000	83600	239000	383600	80	≤7	NW	PGR	0	38	38	7.35YR3/3					No	MCL - Clay loam (medium)											Not Applicable		No	No	33	49	1	WC III	3a	Wetness			3a
								38	40	2	7.5YR4/3					No	MCL - Clay loam (medium)											Moderate		No	No									
								40	60	20	7.5YR4/3					No	MCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Moderate		Yes	No									
								60	70	10	7.5YR5/3					No	HCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Moderate		Yes	No									
								70	120	50	10YR5/3	MD - M	10YR5/5			Yes	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Poor		Yes	Yes									
16	SH 39100	83600	239100	383600	89	≤7	NW	PGR	0	20	20	7.5YR3/3					No	MCL - Cla	5			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Not Applicable		No	No	-31	-18	3b	WC I	2	Depth	Droughtiness		3b
								20	120	100	7.5YR3/3					No	MCL - Cla	95			HR - All hard rocks or stones (i.e. those which cannot be scratched wi								Poor		No	No									
	END																																							

Mottle form
FF - Few Faint
FD - Few Distinct
FP - Few Prominent
CF - Common Faint
CD - Common Distinct
CP - Common Prominent
MF - Many Faint
MD - Many Distinct
MP - Many Prominent
VF - Very many Faint
VD - Very many Distinct
VP - Very many Prominent

Texture
C - Clay
CHK - Chalk
CS - Coarse Sand
CSL - Coarse sandy loam
CSZL - Coarse sandy silt loam
FP - Fibrous and semifibrous peats
FS - Fine Sand
FSL - Fine sandy loam
FSZL - Fine sandy silt loam
HCL - Clay loam (heavy)
HP - Humified peats
HZCL - Silty clay loam (heavy)
IMP - Impenetrable to roots
LCS - Loamy Coarse Sand
LFS - Loamy fine sand
LMS - Loamy medium sand
LP - Loamy peats
MCL - Clay loam (medium)
MS - Medium Sand
MSL - Medium sandy loam
MSZL - Medium sandy silt loam
MZ - Marine Light Silts
MZCL - Silty clay loam (medium)
OC - Organic clays
OL - Organic loams
OS - Organic sands
PL - Peaty loams
PS - Peaty sands
SC - Sandy clay
SCL - Sandy clay loam
SP - Sandy peats
ZC - Silty clay
ZL - Silt loam

Stone Type
CH - Chalk or chalk stones
FSST - Soft fine grained sandstones
GH - Gravel with non-porous (hard) stones
GS - Gravel with porous stones (mainly soft stone types listed above)
HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)
MSST - Soft, medium or coarse grained sandstones
SI - Soft 'weathered' igneous or metamorphic rocks or stones
SLST - Soft oolitic or dolomitic limestones
ZR - Soft, argillaceous or silty rocks or stones

Ped. Shape
SG - Single grain
GRA - Granular
SAB - Subangular Blocky
AB - Angular Blocky
PRIS - Prismatic
PLAT - Platy
MASS - Massive
NA - N/A

Subsoil Structure Condition
Not Applicable
Good
Moderate
Poor

Soil or Ped. Strength
Loose
Very friable
Friable
Firm
Very firm
Extremely firm
Extremely hard
N/A

Calcareousness
NON - Non-calcareous (<0.5% CaCO3)
VSC - Very slightly calcareous (0.5 - 1% CaCO3)
SC - Slightly calcareous (1 - 5% CaCO3)
MC - Moderately calcareous (5 - 10% CaCO3)
VC - Very calcareous (>10% CaCO3)

Ped. Size
VF - Very Fine
F - Fine
M - Medium
C - Coarse
VC - Very Coarse
NA - N/A

Degree of Ped. Development
W - Weak
M - Moderate
S - Strong
NA - Not applicable

Wetness Class
WC I
WC II
WC III
WC IV
WC V
WC VI

ALC Grades
1
2
3a
3b
4
5
Non-Ag

Gley
None
Gley
N/A

Project Number	Project Name	Parcel
C772	Alaw Mon Solar Farm, Anglesey	L

Date of Survey	Survey Type	Surveyor(s)	Company
19/04/2021	ALC	RM	Askew Land and Soil

Weather	Relief	Land use and vegetation
Dry, Sunny	Level	PGR (Permanent Grassland)

Grid Reference	Postcode	Altitude	Area
SH387836	LL717BT	82	24.7

MAFF prov	MAFF detailed	Flooding
Grade 2/3a	None	Flood Zone 1

AAR	AT0	MDw	MDp	FCD	Climate grade
1010	1390	75	59	207	2

Bedrock	Superficial deposits
Ordovician Rocks	Till/None

Soil association(s) 1:250,000	Detailed soil information
Brickfield 2	None

Revision Number	Date Revised
2	29/05/2021

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	SH 38800 84000	238800	384000	82	≤7	NW	PGR	0	30	30	7.5YR4/2					Yes	MZCL - Silty clay loam (medium)											Not Applicable		No	No	72	66	1	WC III	3a	Wetness			3a
								30	45	15	7.5YR4/3					No	HZCL - Silty clay loam (heavy)											Moderate		No	No									
								45	75	30	7.5YR4/2	MD - N	10YR5/6			Yes	HZCL - Silty clay loam (heavy)											Moderate		Yes	No									
								75	120	45	10YR5/2	MD - N	10YR5/6			Yes	C - Clay											Poor		Yes	Yes									
2	SH 38800 83900	238800	383900	82	≤7	NW	PGR	0	40	40	7.5YR4/3					Yes	MCL - Clay loam (medium)											Not Applicable		No	No	83	61	1	WC I	2	Wetness			2
								40	60	20	7.5YR4/4					No	MCL - Clay loam (medium)											Moderate		No	No									
								60	120	60	7.5YR5/3	FF - Fe	10YR5/6			Yes	MCL - Clay loam (medium)											Moderate		No	No									
3	SH 38900 83900	238900	383900	79	≤7	NW	PGR	0	30	30	7.5YR4/3					Yes	MCL - Clay loam (medium)											Not Applicable		No	No	23	36	2	WC III	3a	Wetness			3a
								30	38	8	7.5YR4/2					No	MCL - Clay loam (medium)											Moderate		No	No									
								38	40	2	7.5YR5/4					No	MCL - Clay loam (medium)											Moderate		No	No									
								40	70	30	7.5YR5/4					No	HCL - Clay	50	HR - All hard rocks or stones (i.e. those which cannot be scratched w										Moderate		No	No									
								70	120	50	7.5YR5/4					No	C - Clay	80	HR - All hard rocks or stones (i.e. those which cannot be scratched w										Poor		No	Yes									
4	SH 38500 83800	238500	383800	82	≤7	NW	PGR	0	35	35	7.5YR3/3					No	MCL - Clay loam (medium)											Not Applicable		No	No	24	37	2	WC III	3a	Wetness			3a
								35	40	5	7.5YR4/3					No	MCL - Clay	5	HR - All hard rocks or stones (i.e. those which cannot be scratched w										Moderate		No	No									
								40	70	30	7.5YR4/3					No	HCL - Clay	50	HR - All hard rocks or stones (i.e. those which cannot be scratched w										Moderate		No	No									
								70	120	50	10YR5/3	MD - N	10YR5/8			Yes	C - Clay	80	HR - All hard rocks or stones (i.e. those which cannot be scratched w										Poor		No	Yes									
5	SH 38600 83800	238600	383800	82	≤7	NW	PGR	0	30	30	7.5YR3/2					No	MZCL - Silty clay loam (medium)											Not Applicable		No	No	37	52	1	WC III	3a	Wetness			3a
								30	40	10	7.5YR3/3					No	MZCL - Silty clay loam (medium)											Moderate		No	No									
								40	60	20	7.5YR4/3					No	MCL - Clay	10	HR - All hard rocks or stones (i.e. those which cannot be scratched w										Moderate		No	No									
								60	70	10	7.5YR4/3					No	HCL - Clay	50	HR - All hard rocks or stones (i.e. those which cannot be scratched w										Moderate		No	No									
								70	120	50	10YR5/2	CD - Cl	10YR5/8			Yes	C - Clay	80	HR - All hard rocks or stones (i.e. those which cannot be scratched w										Poor		No	Yes									
6	SH 38700 83800	238700	383800	82	≤7	NW	PGR	0	18	18	7.5YR4/3						MCL - Clay loam (medium)											Not Applicable			No	4	18	3a	WC III	3a	Droughtiness	Wetness		3a
								18	40	22	7.5YR4/4					No	MCL - Clay	50	HR - All hard rocks or stones (i.e. those which cannot be scratched w										Moderate		No	No									
								40	70	30	7.5YR5/3	FF - Fe	10YR5/6			Yes	HCL - Clay	50	HR - All hard rocks or stones (i.e. those which cannot be scratched w										Moderate		No	No									
								70	120	50	10YR5/2	CD - Cl	10YR5/8			Yes	C - Clay	80	HR - All hard rocks or stones (i.e. those which cannot be scratched w										Poor		No	Yes									
7	SH 38800 83800	238800	383800	82	≤7	NW	PGR	0	35	35	10YR4/3					No	MCL - Clay loam (medium)											Not Applicable		No	No	34	49	1	WC III	3a	Wetness			3a
								35	40	5	10YR4/2					Yes	MCL - Clay loam (medium)											Moderate		Yes	No									
								40	50	10	10YR5/3	CD - Cl	10YR5/6			Yes	MCL - Clay loam (medium)											Moderate		No	No									
								50	55	5	10YR5/1	CD - Cl	10YR5/6			Yes	MCL - Clay loam (medium)											Moderate		No	No									
								55	70	15	10YR5/1	CD - Cl	10YR5/6			Yes	HCL - Clay	50	HR - All hard rocks or stones (i.e. those which cannot be scratched w										Moderate		No	Yes									
								70	120	50	10YR5/2	CD - Cl	10YR5/8			Yes	C - Clay	80	HR - All hard rocks or stones (i.e. those which cannot be scratched w										Poor		No										
8	SH 38900 83800	238900	383800	78	≤7	NW	PGR	0	32	32	10YR4/3					No	MCL - Clay loam (medium)											Not Applicable		No	No	36	52	1	WC III	3a	Wetness			3a
								32	42	10	10YR4/2					Yes	MCL - Clay loam (medium)											Moderate		Yes	No									
								42	55	13	10YR5/3	CD - Cl	10YR5/6			Yes	MCL - Clay loam (medium)											Moderate		No	No									
								55	60	5	10YR5/1	CD - Cl	10YR5/6			Yes	MCL - Clay loam (medium)											Moderate		No	No									
								60	70	10	10YR5/1	CD - Cl	10YR5/6			Yes	HCL - Clay	50	HR - All hard rocks or stones (i.e. those which cannot be scratched w										Moderate		No	Yes									
								70	120	50	10YR5/2	CD - Cl	10YR5/8			Yes	C - Clay	80	HR - All hard rocks or stones (i.e. those which cannot be scratched w										Poor		No										
9	SH 38500 83700	238500	383700	82	≤7	NW	PGR	0	30	30	10YR4/3					No	MCL - Clay loam (medium)											Not Applicable		No	No	33	48	1	WC III	3a	Wetness			3a
								30	42	12	10YR4/2					Yes	MCL - Clay loam (medium)											Moderate		Yes	No									
								42	50	8	10YR5/3	CD - Cl	10YR5/6			Yes	MCL - Clay loam (medium)											Moderate		No	No									
								50	55	5	10YR5/1	CD - Cl	10YR5/6			Yes	MCL - Clay loam (medium)											Moderate		No	No									
								55	70	15	10YR5/1	CD - Cl	10YR5/6			Yes	HCL - Clay	50	HR - All hard rocks or stones (i.e. those which cannot be scratched w										Moderate		No	Yes									
								70	120	50	10YR5/2	CD - Cl	10YR5/8			Yes	C - Clay	80	HR - All hard rocks or stones (i.e. those which cannot be scratched w										Poor		No										
10	SH 38600 83700	238600	383700	82	≤7	NW	PGR	0	40	40	10YR4/2					Yes	MZCL - Silty clay loam (medium)											Not Applicable		No	No	25	42	2	WC III	3a	Wetness			3a
								40	70	30	10YR5/1	CD - Cl	10YR5/6			Yes	HCL - Clay	50	HR - All hard rocks or stones (i.e. those which cannot be scratched w										Moderate		No	Yes									
								70	100	30	10YR5/2	CD - Cl	10YR5/8			Yes	C - Clay	80	HR - All hard rocks or stones (i.e. those which cannot be scratched w										Poor		No										
11	SH 38800 83700	238800	383700	82	≤7	NW	PGR	0	38	38	7.5YR4/3					No	MCL - Clay loam (medium)											Not Applicable		No	No	31	35	1	WC IV	3b	Wetness			3b
								38	45	7	10YR5/3	MD - N	10YR5/6			Yes	C - Clay	10	HR - All hard rocks or stones (i.e. those which cannot be scratched w										Poor		Yes	Yes									
								45	120	75	10YR5/3	MD - N	10YR5/6			Yes	C - Clay	50	HR - All hard rocks or stones (i.e. those which cannot be scratched w										Poor		Yes	Yes									
12	SH 38900 83700	238900	383700	78	≤7	NW	PGR	0	33	33	10YR4/1	CD - Cl	10YR5/6			Yes	MZCL - Silty clay loam (medium)											Not Applicable		No	No	34	38	1	WC IV	3b	Wetness			3b
								33	50	17	10YR5/1	MD - N	10YR5/6			Yes	C - Clay	10	HR - All hard rocks or stones (i.e. those which cannot be scratched w										Poor		No	Yes									
								50	120	70	10YR5/1	MD - N	10YR5/6			Yes	C - Clay	50	HR - All hard rocks or stones (i.e. those which cannot be scratched w										Poor		No	Yes									
								120	120	0	10YR5/1	MD - N	10YR5/6			Yes	C - Clay	80	HR - All hard rocks or stones (i.e. those which cannot be scratched w										Poor		No	Yes									

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
13	SH 38500 83600	238500	383600	78	≤7	NW	PGR	0	35	35	10YR4/3					No	MCL - Clay loam (medium)											Not Applicable		No	No	37	52	1	WC III	3a	Wetness			3a
								35	40	5	10YR5/3					Yes	MCL - Clay loam (medium)											Moderate		No	No									
								40	65	25	10YR5/3					Yes	HCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No									
								65	80	15	10YR5/1	MD - M	10YR5/6			Yes	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor		No	Yes									
								80	120	40	10YR5/1	MD - M	10YR5/6			Yes	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor		No	Yes									
14	SH 38600 83600	238600	383600	82	≤7	NW	PGR	0	38	38	10YR4/2					Yes	MZCL - Silty clay loam (medium)											Not Applicable		No	No	30	45	2	WC III	3a	Wetness			3a
								38	40	2	7.5YR4/3					No	MCL - Clay loam (medium)											Moderate		Yes	No									
								40	50	10	10YR5/3	MD - M	10YR5/6			Yes	HCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No									
								50	80	30	10YR5/1	MD - M	10YR5/6			Yes	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor		No	Yes									
								80	100	20	10YR5/1	MD - M	10YR5/6			Yes	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor		No	Yes									
15	SH 38700 83600	238700	383600	82	≤7	NW	PGR	0	25	25	10YR4/2					Yes	MCL - Clay loam (medium)											Not Applicable		No	No	26	40	2	WC III	3a	Wetness			3a
								25	30	5	10YR4/2					Yes	MCL - Clay loam (medium)											Moderate		No	No									
								30	50	20	10YR4/2					Yes	MCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		Yes	No									
								50	70	20	10YR5/3	MD - M	10YR5/8			Yes	HCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		Yes	No									
								70	120	50	10YR5/2	MP - M	10YR5/8			Yes	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor		Yes	Yes									
16	SH 38800 83600	238800	383600	78	≤7	NW	PGR	0	38	38	7.5YR4/3					No	MCL - Clay loam (medium)											Not Applicable		No	No	34	38	1	WC IV	3b	Wetness			3b
								38	50	12	10YR5/3	MD - M	10YR5/6			Yes	C - Clay	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor		Yes	Yes									
								50	120	70	10YR5/3	MD - M	10YR5/6			Yes	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor		Yes	Yes									
17	SH 38600 83500	238600	383500	82	≤7	NW	PGR	0	30	30	10YR4/2					Yes	MCL - Clay loam (medium)											Not Applicable		No	No	14	26	2	WC IV	3b	Wetness			3b
								30	32	2	10YR5/3	CD - Co	10YR5/6			Yes	MCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		Yes	No									
								32	40	8	10YR5/3					Yes	HCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No									
								40	80	40	10YR5/1	MD - M	10YR5/6			Yes	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor		No	Yes									
								80	120	40	10YR5/1	MD - M	10YR5/6			Yes	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor		No	Yes									
18	SH 38700 83500	238700	383500	82	≤7	NW	PGR	0	28	28	7.5YR3/3					No	MCL - Clay loam (medium)											Not Applicable		No	Yes	26	37	2	WC IV	3b	Wetness			3b
								28	50	22	7.5YR4/2	CD - Co	10YR5/6			Yes	HCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		Yes	No									
								50	80	30	10YR5/3	MD - M	10YR5/8			Yes	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor		Yes	Yes									
								80	120	40	10YR5/2	MP - M	10YR5/8			Yes	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor		Yes	Yes									
19	SH 38800 83500	238800	383500	78	≤7	NW	PGR	0	20	20	10YR4/2	MD - M	10YR5/6			Yes	MCL - Clay loam (medium)											Not Applicable		No	No	24	42	2	WC IV	3b	Wetness			3b
								20	40	20	10YR4/1	MD - M	10YR/5			Yes	HCL - Clay loam (heavy)											Moderate		No	No									
								40	60	20	2.5Y4/1	MD - M	10YR5/6			Yes	C - Clay											Poor		No	Yes									
								60	80	20	2.5Y4/1	MD - M	10YR5/6			Yes	C - Clay	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor		No	Yes									
								80	100	20	2.5Y4/1	MD - M	10YR5/6			Yes	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor		No	Yes									
20	SH 38700 83400	238700	383400	77	≤7	NW	PGR	0	35	35	7.5YR4/3					No	MCL - Clay loam (medium)											Not Applicable		No	No	24	37	2	WC III	3a	Wetness			3a
								35	38	3	10YR5/3	FF - Few Faint				Yes	MCL - Clay loam (medium)											Moderate		No	No									
								38	40	2	10YR5/3	MD - M	10YR5/6			Yes	MCL - Cla	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No									
								40	70	30	10YR5/3	MD - M	10YR5/8			Yes	HCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		Yes	Yes									
								70	120	50	10YR5/2	MP - M	10YR5/8			Yes	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor		Yes	Yes									
21	SH 38700 83300	238700	383300	77	≤7	NW	PGR	0	38	38	7.5YR4/2					Yes	MCL - Clay loam (medium)											Not Applicable		No	No	34	44	1	WC III	3a	Wetness			3a
								38	50	12	10YR5/3	MD - M	10YR5/6			Yes	MCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scRMtched v							Moderate		Yes	No									
								50	70	20	10YR5/3					Yes	HCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		Yes	No									
								70	80	10	10YR5/3	MD - M	10YR5/8			Yes	C - Clay	50			GS - Gravel with porous stones (mainly soft stone types listed above)							Poor		Yes	Yes									
								80	120	40	10YR5/2	MP - M	10YR5/8			Yes	C - Clay	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor		Yes	Yes									
	END																																						

Mottle form
FF - Few Faint
FD - Few Distinct
FP - Few Prominent
CF - Common Faint
CD - Common Distinct
CP - Common Prominent
MF - Many Faint
MD - Many Distinct
MP - Many Prominent
VF - Very many Faint
VD - Very many Distinct
VP - Very many Prominent

Texture
C - Clay
CHK - Chalk
CS - Coarse Sand
CSL - Coarse sandy loam
CSZL - Coarse sandy silt loam
FP - Fibrous and semifibrous peats
FS - Fine Sand
FSL - Fine sandy loam
FSZL - Fine sandy silt loam
HCL - Clay loam (heavy)
HP - Humified peats
HZCL - Silty clay loam (heavy)
IMP - Impenetrable to roots
LCS - Loamy Coarse Sand
LFS - Loamy fine sand
LMS - Loamy medium sand
LP - Loamy peats
MCL - Clay loam (medium)
MS - Medium Sand
MSL - Medium sandy loam
MSZL - Medium sandy silt loam
MZ - Marine Light Silts
MZCL - Silty clay loam (medium)
OC - Organic clays
OL - Organic loams
OS - Organic sands
PL - Peaty loams
PS - Peaty sands
SC - Sandy clay
SCL - Sandy clay loam
SP - Sandy peats
ZC - Silty clay
ZL - Silt loam

Stone Type
CH - Chalk or chalk stones
FSST - Soft fine grained sandstones
GH - Gravel with non-porous (hard) stones
GS - Gravel with porous stones (mainly soft stone types listed above)
HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)
MSST - Soft, medium or coarse grained sandstones
SI - Soft 'weathered' igneous or metamorphic rocks or stones
SLST - Soft oolitic or dolomitic limestones
ZR - Soft, argillaceous or silty rocks or stones

Ped. Shape
SG - Single grain
GRA - Granular
SAB - Subangular Blocky
AB - Angular Blocky
PRIS - Prismatic
PLAT - Platy
MASS - Massive
NA - N/A

Subsoil Structure Condition
Not Applicable
Good
Moderate
Poor

Soil or Ped. Strength
Loose
Very friable
Friable
Firm
Very firm
Extremely firm
Extremely hard
N/A

Calcareousness
NON - Non-calcareous (<0.5% CaCO3)
VSC - Very slightly calcareous (0.5 - 1% CaCO3)
SC - Slightly calcareous (1 - 5% CaCO3)
MC - Moderately calcareous (5 - 10% CaCO3)
VC - Very calcareous (>10% CaCO3)

Ped. Size
VF - Very Fine
F - Fine
M - Medium
C - Coarse
VC - Very Coarse
NA - N/A

Degree of Ped. Development
W - Weak
M - Moderate
S - Strong
NA - Not applicable

Wetness Class
WC I
WC II
WC III
WC IV
WC V
WC VI

ALC Grades
1
2
3a
3b
4
5
Non-Ag

Gley
None
Gley
N/A

Project Number	Project Name	Parcel
C772	Alaw Mon Solar Farm, Anglesey	M

Date of Survey	Survey Type	Surveyor(s)	Company
19/04/2021	ALC	RWA	Askew Land and Soil

Weather	Relief	Land use and vegetation
Dry, sunny	Level	PGR (Permanent Grassland)

Grid Reference	Postcode	Altitude	Area
SH390835	LL717BT	80	16.9

MAFF prov	MAFF detailed	Flooding
Subgrade 3b	None	Flood Zone 1

AAR	AT0	MDw	MDp	FCD	Climate grade
1007	1392	75	59	207	2

Bedrock	Superficial deposits
Ordovician Rocks	Till/None

Soil association(s) 1:250,000	Detailed soil information
Brickfield 2	None

Revision Number	Date Revised
2	10/06/2021

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	SH 38300	83500	238300	383500	80	≤7		PGR	0	30	30	10YR4/2				No	MCL - Cla	1	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-ca	No	57	48	1	WC III	3a	Wetness			3a
									30	47	17	10YR4/2				No	MCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
									47	70	23	10YR4/2	CD - Cr	7.5YR5/6	CD - Cr	2.5Y6/1	Yes	HCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Poor	NON -	No	Yes									
									70	120	50	10YR5/2	MD - M	7.5YR5/6	MD - M	2.5Y6/1	Yes	HCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Poor	NON -	Yes	Yes									
2	SH 38400	83500	238400	383500	79	≤7		PGR	0	32	32	10YR4/2				No	MCL - Cla	1	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-ca	No	56	47	1	WC III	3a	Wetness			3a
									32	43	11	10YR4/2				No	MCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
									43	68	25	10YR5/3	CD - Cr	7.5YR5/6	CD - Cr	2.5Y6/1	Yes	HCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Poor	NON -	No	Yes									
									68	120	52	10YR5/2	MD - M	7.5YR5/6	MD - M	2.5Y6/1	Yes	HCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Poor	NON -	Yes	Yes									
3	SH 38500	83500	238500	383500	78	≤7		PGR	0	28	28	10YR5/2				No	MCL - Cla	1	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-ca	No	56	47	1	WC IV	3b	Wetness			3b
									28	46	18	10YR6/1	CD - Cr	7.5YR5/8			Yes	MCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
									46	120	74	2.5Y5/4	CD - Cr	7.5YR5/8	CD - Cr	2.5Y6/1	Yes	HCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Poor	NON -	Yes	Yes									
4	SH 38900	83500	238900	383500	80	≤7		PGR	0	20	20	10YR5/2				No	MCL - Cla	1	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-ca	No	53	46	1	WC IV	3b	Wetness			3b
									20	40	20	10YR5/1	CD - Cr	7.5YR5/8	CD - Cr	2.5Y6/1	Yes	HCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
									40	120	80	2.5Y5/4	CD - Cr	7.5YR5/8	CD - Cr	2.5Y6/1	Yes	C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Poor	NON -	Yes	Yes									
5	SH 39000	83500	239000	383500	80	≤7		PGR	0	26	26	5YR4/3				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-ca	No	56	48	1	WC III	3a	Wetness			3a
									26	55	29	5YR5/3				No	MCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	Non-ca	No									
									55	120	65	2.5Y5/4	MD - M	7.5YR5/6	MD - M	2.5Y6/1	Yes	C - Clay	0			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Poor	NON -	Yes	Yes									
6	SH 38400	83400	238400	383400	70	≤7		PGR	0	24	24	10YR5/2				No	MCL - Cla	1	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-ca	No	54	45	1	WC IV	3b	Wetness			3b
									24	42	18	10YR6/2	CD - Cr	7.5YR5/8			Yes	MCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
									42	120	78	2.5Y5/4	CD - Cr	7.5YR5/8	CD - Cr	2.5Y6/1	Yes	HCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Poor	NON -	Yes	Yes									
7	SH 38500	83400	238500	383400	74	≤7		PGR	0	24	24	10YR4/2				No	MCL - Cla	1	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-ca	No	57	48	1	WC IV	3b	Wetness			3b
									24	50	26	10YR6/1				No	MCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
									50	120	70	2.5Y5/4	CD - Cr	7.5YR5/8	CD - Cr	2.5Y6/1	Yes	HCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Poor	NON -	Yes	Yes									
8	SH 38900	83400	238900	383400	80	≤7		PGR	0	22	22	10YR5/3				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-ca	No	58	52	1	WC III	3a	Wetness			3a
									22	58	36	10YR6/3	CD - Cr	7.5YR5/8			Yes	MCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
									58	120	62	2.5Y5/4	MD - M	7.5YR5/6			Yes	C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Poor	NON -	Yes	Yes									
9	SH 39000	83400	239000	383400	89	≤7		PGR	0	22	22	7.5YR4/3				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-ca	No	62	47	1	WC II	3a	Wetness			3a
									22	50	28	7.5YR5/3				No	MCL - Cla	8			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
									50	120	70	2.5Y6/4	CD - Cr	7.5YR5/6			Yes	HCL - Cla	20			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	Yes	No									
10	SH 39100	83400	239100	383400	89	≤7		PGR	0	26	26	7.5YR4/3				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-ca	No	63	49	1	WC II	3a	Wetness			3a
									26	52	26	7.5YR5/3				No	MCL - Cla	8			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
									52	120	68	2.5Y6/4	CD - Cr	7.5YR5/6			Yes	HCL - Cla	20			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	Yes	No									
11	SH 38400	83300	238400	383300	70	≤7		PGR	0	20	20	10YR5/2				No	MCL - Cla	1	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-ca	No	54	45	1	WC IV	3b	Wetness			3b
									20	45	25	10YR6/2	CD - Cr	7.5YR5/8	CD - Cr	2.5Y6/1	Yes	MCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
									45	120	75	2.5Y5/4	MD - M	7.5YR5/8	MD - M	2.5Y6/1	Yes	HCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Poor	NON -	Yes	Yes									
12	SH 38500	83300	238500	383300	74	≤7		PGR	0	28	28	10YR5/2				No	MCL - Cla	1	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Not Applic	NON -	Non-ca	No	56	47	1	WC IV	3b	Wetness			3b
									28	46	18	10YR6/1	CD - Cr	7.5YR5/8			Yes	MCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Moderate	NON -	No	No									
									46	120	74	2.5Y5/4	CD - Cr	7.5YR5/8	CD - Cr	2.5Y6/1	Yes	HCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi							Poor	NON -	Yes	Yes									

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
13	SH 38600	83300	238600	383300	77	≤7		PGR	0	28	28	10YR5/2				No	MCL - Cla	1	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi					Not Applic	NON -	Non-cal	No	58	49	1	WC IV	3b	Wetness			3b
									28	50	22	10YR6/2	CD - Cr	7.5YR5/8	CD - Cr	2.5Y6/1	Yes	MCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi					Moderate	NON -	No	No											
									50	120	70	2.5Y5/4	MD - M	7.5YR5/8	MD - M	2.5Y6/1	Yes	HCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi					Poor	NON -	Yes	Yes											
14	SH 38800	83300	238800	383300	79	≤7		PGR	0	20	20	10YR5/2				No	MCL - Cla	1	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi					Not Applic	NON -	Non-cal	No	53	47	1	WC IV	3b	Wetness			3b
									20	42	22	10YR6/2	CD - Cr	7.5YR5/8	CD - Cr	2.5Y6/1	Yes	HCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi					Moderate	NON -	No	No											
									42	120	78	2.5Y5/4	MD - M	7.5YR5/8	MD - M	2.5Y6/1	Yes	C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi					Poor	NON -	Yes	Yes											
15	SH 38900	83300	238900	383300	87	≤7		PGR	0	24	24	7.5YR4/3				No	MCL - Cla	4	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi					Not Applic	NON -	Non-cal	No	62	47	1	WC II	3a	Wetness			3a
									24	50	26	7.5YR5/3				No	MCL - Cla	8			HR - All hard rocks or stones (i.e. those which cannot be scratched wi					Moderate	NON -	No	No											
									50	120	70	2.5Y6/4	CD - Cr	7.5YR5/6			Yes	HCL - Cla	20			HR - All hard rocks or stones (i.e. those which cannot be scratched wi					Moderate	NON -	Yes	No											
16	SH 39000	83300	239000	383300	91	≤7		PGR	0	25	25	10YR4/2				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi					Not Applic	NON -	Non-cal	No	22	48	2	WC III	3a	Wetness			3a
									25	49	24	10YR5/6				No	MCL - Cla	8			HR - All hard rocks or stones (i.e. those which cannot be scratched wi					Moderate	NON -	No	No											
									49	70	21	2.5Y5/4	MD - M	7.5YR5/6	MD - M	2.5Y6/1	Yes	HCL - Cla	20			HR - All hard rocks or stones (i.e. those which cannot be scratched wi					Moderate	NON -	Yes	No											
17	SH 38500	83200	238500	383200	74	≤7		PGR	0	22	22	10YR4/2				No	MCL - Cla	1	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi					Not Applic	NON -	Non-cal	No	54	46	1	WC IV	3b	Wetness			3b
									22	45	23	10YR5/2	CD - Cr	7.5YR5/8	CD - Cr	2.5Y6/1	Yes	MCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi					Moderate	NON -	No	No											
									45	120	75	2.5Y5/4	MD - M	7.5YR5/8	MD - M	2.5Y6/1	Yes	HCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi					Poor	NON -	Yes	Yes											
18	SH 38600	83200	238600	383200	77	≤7		PGR	0	26	26	10YR5/2				No	MCL - Cla	1	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi					Not Applic	NON -	Non-cal	No	57	49	1	WC IV	3b	Wetness			3b
									26	50	24	10YR6/2	CD - Cr	7.5YR5/8			Yes	MCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi					Moderate	NON -	No	No											
									50	120	70	2.5Y5/4	MD - M	7.5YR5/8	MD - M	2.5Y6/1	Yes	HCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi					Poor	NON -	Yes	Yes											
19	SH 38700	83200	238700	383200	77	≤7		PGR	0	24	24	10YR5/3				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi					Not Applic	NON -	Non-cal	No	59	52	1	WC III	3a	Wetness			3a
									24	58	34	10YR6/3	CD - Cr	7.5YR5/8			Yes	MCL - Cla	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi					Moderate	NON -	No	No											
									58	120	62	2.5Y5/4	MD - M	7.5YR5/6			Yes	C - Clay	2			HR - All hard rocks or stones (i.e. those which cannot be scratched wi					Poor	NON -	Yes	Yes											
20	SH 38900	83220	238900	383220	87	≤7		PGR	0	26	26	7.5YR4/3				No	MCL - Cla	2	1	0	HR - All hard rocks or stones (i.e. those which cannot be scratched wi					Not Applic	NON -	Non-cal	No	67	50	1	WC II	3a	Wetness			3a
									26	50	24	7.5YR5/3				No	MCL - Cla	6			HR - All hard rocks or stones (i.e. those which cannot be scratched wi					Moderate	NON -	No	No											
									50	120	70	2.5Y6/4	CD - Cr	7.5YR5/6			Yes	HCL - Cla	16			HR - All hard rocks or stones (i.e. those which cannot be scratched wi					Moderate	NON -	Yes	No											
	END																																						

Mottle form
FF - Few Faint
FD - Few Distinct
FP - Few Prominent
CF - Common Faint
CD - Common Distinct
CP - Common Prominent
MF - Many Faint
MD - Many Distinct
MP - Many Prominent
VF - Very many Faint
VD - Very many Distinct
VP - Very many Prominent

Texture
C - Clay
CHK - Chalk
CS - Coarse Sand
CSL - Coarse sandy loam
CSZL - Coarse sandy silt loam
FP - Fibrous and semifibrous peats
FS - Fine Sand
FSL - Fine sandy loam
FSZL - Fine sandy silt loam
HCL - Clay loam (heavy)
HP - Humified peats
HZCL - Silty clay loam (heavy)
IMP - Impenetrable to roots
LCS - Loamy Coarse Sand
LFS - Loamy fine sand
LMS - Loamy medium sand
LP - Loamy peats
MCL - Clay loam (medium)
MS - Medium Sand
MSL - Medium sandy loam
MSZL - Medium sandy silt loam
MZ - Marine Light Silts
MZCL - Silty clay loam (medium)
OC - Organic clays
OL - Organic loams
OS - Organic sands
PL - Peaty loams
PS - Peaty sands
SC - Sandy clay
SCL - Sandy clay loam
SP - Sandy peats
ZC - Silty clay
ZL - Silt loam

Stone Type
CH - Chalk or chalk stones
FSST - Soft fine grained sandstones
GH - Gravel with non-porous (hard) stones
GS - Gravel with porous stones (mainly soft stone types listed above)
HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)
MSST - Soft, medium or coarse grained sandstones
SI - Soft 'weathered' igneous or metamorphic rocks or stones
SLST - Soft oolitic or dolomitic limestones
ZR - Soft, argillaceous or silty rocks or stones

Ped. Shape
SG - Single grain
GRA - Granular
SAB - Subangular Blocky
AB - Angular Blocky
PRIS - Prismatic
PLAT - Platy
MASS - Massive
NA - N/A

Subsoil Structure Condition
Not Applicable
Good
Moderate
Poor

Soil or Ped. Strength
Loose
Very friable
Friable
Firm
Very firm
Extremely firm
Extremely hard
N/A

Calcareousness
NON - Non-calcareous (<0.5% CaCO3)
VSC - Very slightly calcareous (0.5 - 1% CaCO3)
SC - Slightly calcareous (1 - 5% CaCO3)
MC - Moderately calcareous (5 - 10% CaCO3)
VC - Very calcareous (>10% CaCO3)

Ped. Size
VF - Very Fine
F - Fine
M - Medium
C - Coarse
VC - Very Coarse
NA - N/A

Degree of Ped. Development
W - Weak
M - Moderate
S - Strong
NA - Not applicable

Wetness Class
WC I
WC II
WC III
WC IV
WC V
WC VI

ALC Grades
1
2
3a
3b
4
5
Non-Ag

Gley
None
Gley
N/A

Project Number	Project Name	Parcel
C772	Alaw Mon Solar Farm, Anglesey	N

Date of Survey	Survey Type	Surveyor(s)	Company
22/04/2021	Detailed ALC	AR	Askew Land and Soil

Weather	Relief	Land use and vegetation
Dry, sunny	Level	PGR (Permanent Grassland)

Grid Reference	Postcode	Altitude	Area
SH385832	LL717BN	74	23.6

MAFF prov	MAFF detailed	Flooding
Subgrade 3b	None	Flood Zone 1

AAR	AT0	MDw	MDp	FCD	Climate grade
999	1400	77	61	205	2

Bedrock	Superficial deposits
Ordovician Rocks	Till

Soil association(s) 1:250,000	Detailed soil information
Brickfield 2	None

Revision Number	Date Revised
2	29/09/2021

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	SH 38400	83200	238400	383200	70	≤7	NW	PGR	0	28	28	10YR4/2	CP - C	7.5YR4/6			Yes	MZCL - Si	2			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON -	Non-ca	lcare	56	47	1	WC IV	3b	Wetness			3b
								28	45	17	2.5Y6/4	CP - C	10YR5/6			Yes	ZC - Silty	0			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Non-ca	No									
								45	120	75	2.5Y5/3	CP - C	10YR5/6			Yes	ZC - Silty	0			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor	NON -	Non-ca	Yes									
2	SH 38400	83100	238400	383100	73	≤7	NW	PGR	0	18	18	2.5Y5/3	CP - C	7.5YR5/6			Yes	HCL - Cla	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON -	Non-ca	lcare	15	27	2	WC III	3b	Wetness			3b
								18	30	12	2.5Y6/3	CP - C	10YR5/6			Yes	ZC - Silty	2			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
								30	55	25	2.5Y5/3	CP - C	10YR4/6			Yes	ZC - Silty	15			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
								55	120	65	2.5Y5/3	CP - C	10YR4/6			Yes	ZC - Silty	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
3	SH 38500	83100	238500	383100	78	≤7	NW	PGR	0	25	25	10YR4/3						MZCL - Si	2			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON -	Non-ca	lcare	68	58	1	WC I	2	Wetness			2
								25	50	25	10YR4/4						MZCL - Si	2			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
								50	65	15	10YR5/4						MZCL - Si	2			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
								65	120	55	10YR4/2						SCL - San	25			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
4	SH 38600	83100	238600	383100	79	≤7	NW	PGR	0	28	28	10YR4/2					No	HZCL - Si	2			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON -	Non-ca	lcare	71	54	1	WC III	3b	Wetness			3b
								28	50	22	2.5Y6/3	CP - C	10YR5/6			Yes	ZC - Silty	2			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Non-ca	No									
								50	120	70	2.5Y5/3	MP - M	7.5YR5/6			Yes	HZCL - Si	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Non-ca	No									
5	SH 38700	83100	238700	383100	79	≤7	NW	PGR	0	25	25	10YR4/2	CP - C	5YR4/6			Yes	MZCL - Si	3			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON -	Non-ca	lcare	55	47	1	WC IV	3b	Wetness			3b
								25	35	10	2.5Y5/3	CP - C	7.5YR4/6			Yes	HZCL - Si	0			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Non-ca	No									
								35	55	20	2.5Y6/3	CP - C	10YR5/6			Yes	ZC - Silty	0			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor	NON -	Non-ca	Yes									
								55	120	65	2.5Y6/2	MP - M	7.5YR5/6			Yes	ZC - Silty	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Non-ca	No									
6	SH 38800	83100	238800	383100	83	≤7	NW	PGR	0	35	35	2.5Y4/2	CP - C	7.5YR4/6			Yes	MZCL - Si	0			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON -	Non-ca	lcare	62	47	1	WC IV	3b	Wetness			3b
								35	55	20	2.5Y6/3	MP - M	10YR5/6			Yes	HZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor	NON -	Non-ca	Yes									
								55	120	65	2.5Y5/3	MP - M	10YR5/6			Yes	SCL - San	20			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Non-ca	No									
7	SH 38400	83000	238400	383000	73	≤7	NW	PGR	0	25	25	10YR4/3						MCL - Cla	3			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON -	Non-ca	lcare	29	42	2	WC III	3a	Wetness			3a
								25	40	15	10YR4/4					No	MCL - Cla	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Non-ca	No									
								40	65	25	2.5Y6/4	CP - C	10YR4/6			Yes	MCL - Cla	15			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
								65	120	55	2.5Y6/4	CP - C	10YR4/6			Yes	MCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
8	SH 38500	83000	238500	383000	78	≤7	NW	PGR	0	24	24	10YR4/1	CP - C	5YR4/6			Yes	MZCL - Si	1			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON -	Non-ca	lcare	48	39	1	WC IV	3b	Wetness			3b
								24	120	96	2.5Y5/2	CP - C	10YR5/6	CD - C	2.5Y6/1	Yes	ZC - Silty	1			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Poor	NON -	Non-ca	Yes									
9	SH 38600	83000	238600	383000	79	≤7	NW	PGR	0	28	28	10YR4/3					No	MZCL - Si	2			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON -	Non-ca	lcare	81	59	1	WC III	3a	Wetness			3a
								28	60	32	2.5Y6/3	CP - C	10YR5/6			Yes	MZCL - Si	2			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	No	No									
								60	120	60	2.5Y6/3	MP - M	10YR5/6			Yes	SCL - San	2			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
10	SH 38700	83000	238700	383000	79	≤7	NW	PGR	0	25	25	10YR4/3					No	MZCL - Si	1			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON -	Non-ca	lcare	75	59	1	WC III	3a	Wetness			3a
								25	50	25	2.5Y5/3	CP - C	7.5YR5/6			Yes	MZCL - Si	2			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
								50	120	70	2.5Y5/3	MP - M	7.5YR5/6			Yes	MZCL - Si	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
11	SH 38800	83000	238800	383000	83	≤7	NW	PGR	0	35	35	10YR4/3						MCL - Cla	8			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON -	Non-ca	lcare	26	37	2	WC I	2	Wetness			2
								35	55	20	7.5YR4/4					No	MCL - Cla	15			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Non-ca	No									
								55	70	15	10YR4/4					No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Non-ca	No									
								70	120	50	10YR4/4					No	MCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Non-ca	No									
12	SH 38400	82900	238400	382900	85	≤7	NW	PGR	0	25	25	10YR4/3						MCL - Cla	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON -	Non-ca	lcare	28	38	2	WC III	3a	Wetness			3a
								25	55	30	2.5Y6/4	CP - C	10YR5/6			Yes	HZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
								55	60	5	2.5Y5/3	CP - C	10YR4/6			Yes	HZCL - Si	60			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									
								60	120	60	2.5Y5/3	CP - C	10YR4/6			Yes	HZCL - Si	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON -	Yes	No									

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
END																																							

Mottle form
FF - Few Faint
FD - Few Distinct
FP - Few Prominent
CF - Common Faint
CD - Common Distinct
CP - Common Prominent
MF - Many Faint
MD - Many Distinct
MP - Many Prominent
VF - Very many Faint
VD - Very many Distinct
VP - Very many Prominent

Texture
C - Clay
CHK - Chalk
CS - Coarse Sand
CSL - Coarse sandy loam
CSZL - Coarse sandy silt loam
FP - Fibrous and semifibrous peats
FS - Fine Sand
FSL - Fine sandy loam
FSZL - Fine sandy silt loam
HCL - Clay loam (heavy)
HP - Humified peats
HZCL - Silty clay loam (heavy)
IMP - Impenetrable to roots
LCS - Loamy Coarse Sand
LFS - Loamy fine sand
LMS - Loamy medium sand
LP - Loamy peats
MCL - Clay loam (medium)
MS - Medium Sand
MSL - Medium sandy loam
MSZL - Medium sandy silt loam
MZ - Marine Light Silts
MZCL - Silty clay loam (medium)
OC - Organic clays
OL - Organic loams
OS - Organic sands
PL - Peaty loams
PS - Peaty sands
SC - Sandy clay
SCL - Sandy clay loam
SP - Sandy peats
ZC - Silty clay
ZL - Silt loam

Stone Type
CH - Chalk or chalk stones
FSST - Soft fine grained sandstones
GH - Gravel with non-porous (hard) stones
GS - Gravel with porous stones (mainly soft stone types listed above)
HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)
MSST - Soft, medium or coarse grained sandstones
SI - Soft 'weathered' igneous or metamorphic rocks or stones
SLST - Soft oolitic or dolomitic limestones
ZR - Soft, argillaceous or silty rocks or stones

Ped. Shape
SG - Single grain
GRA - Granular
SAB - Subangular Blocky
AB - Angular Blocky
PRIS - Prismatic
PLAT - Platy
MASS - Massive
NA - N/A

Subsoil Structure Condition
Not Applicable
Good
Moderate
Poor

Soil or Ped. Strength
Loose
Very friable
Friable
Firm
Very firm
Extremely firm
Extremely hard
N/A

Calcareousness
NON - Non-calcareous (<0.5% CaCO3)
VSC - Very slightly calcareous (0.5 - 1% CaCO3)
SC - Slightly calcareous (1 - 5% CaCO3)
MC - Moderately calcareous (5 - 10% CaCO3)
VC - Very calcareous (>10% CaCO3)

Ped. Size
VF - Very Fine
F - Fine
M - Medium
C - Coarse
VC - Very Coarse
NA - N/A

Degree of Ped. Development
W - Weak
M - Moderate
S - Strong
NA - Not applicable

Wetness Class
WC I
WC II
WC III
WC IV
WC V
WC VI

ALC Grades
1
2
3a
3b
4
5
Non-Ag

Gley
None
Gley
N/A

Project Number	Project Name	Parcel
C772	Alaw Mon Solar Farm, Anglesey	O

Date of Survey	Survey Type	Surveyor(s)	Company
22/04/2021	Detailed ALc	AR	Askew Land and Soil

Weather	Relief	Land use and vegetation
Dry, Sunny	Level	PGR (Permanent Grassland)

Grid Reference	Postcode	Altitude	Area
SH384827	LL717BT	98	19.5

MAFF prov	MAFF detailed	Flooding
Grade 2/3a	None	Flood Zone 1

AAR	AT0	MDw	MDp	FCD	Climate grade
1034	1373	72	54	210	2

Bedrock	Superficial deposits
Ordovician Rocks	Till

Soil association(s) 1:250,000	Detailed soil information
Brickfield 2	None

Revision Number	Date Revised
2	29/05/2021

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	SH 38200	82900	238200	382900	84	≤7	NW	PGR	0	75	75	Mix				No	SCL - San	15			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON - Non-calcareo			76	48	1	WC I	2	Gradient			3b
								75	120	45							SCL - San	15			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate			No							
2	SH 38300	82900	238300	382900	85	≤7	NW	PGR	0	30	30	10YR4/3					MZCL - Si	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON - Non-calcareo			74	56	1	WC II	3a	Wetness			3a
								30	45	15	10YR4/4					No	MZCL - Si	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	No	No							
								45	60	15	10YR5/3	CP - Cı	7.5YR5/6			Yes	HZCL - Si	25			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	Yes	No							
								60	120	60	10YR4/4					No	HZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	No	No							
3	SH 38500	82900	238500	382900	86	≤7	NW	PGR	0	25	25	2.5Y5/2	CP - Cı	7.5YR4/6		Yes	MZCL - Si	1			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON - Non-calcareo			47	66	1	WC IV	3b	Wetness			3b
								25	50	25	2.5Y5/1	CP - Cı	7.5YR4/6			Yes	HZCL - Si	2			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	No	No							
								50	70	20	2.5Y6/2	CP - Cı	10YR4/6			Yes	HZCL - Si	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	No	No							
								70	90	20	2.5Y6/1	CP - Cı	10YR5/6			Yes	HZCL - Si	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	No	No							
								90	120	30	2.5Y6/1	CP - Cı	10YR5/6			Yes	HZCL - Si	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		No	No							
4	SH 38600	82900	238600	382900	91	≤7	NW	PGR	0	30	30	10YR4/3					MZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON - Non-calcareo			41	58	1	WC III	3a	Wetness			3a
								30	60	30	2.5Y6/3	CP - Cı	10YR5/6			Yes	HZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	Yes	No							
								60	70	10	2.5Y5/3	CP - Cı	10YR5/6			Yes	MZCL - Si	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	Yes	No							
								70	120	50	2.5Y5/3	CP - Cı	10YR5/6			Yes	MZCL - Si	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate		Yes	No							
5	SH 38200	82800	238200	382800	84	≤7	NW	PGR	0	35	35	10YR3/2					MZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON - Non-calcareo			69	61	1	WC III	3a	Wetness			3a
								35	120	85	2.5Y6/2	CP - Cı	10YR5/6			Yes	ZC - Silty	1			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	No	No							
6	SH 38300	82800	238300	382800	85	≤7	NW	PGR	0	30	30	10YR4/3					MZCL - Si	8			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON - Non-calcareo			77	63	1	WC I	2	Wetness			2
								30	50	20	10YR4/4					No	MZCL - Si	8			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	No	No							
								50	75	25	10YR5/4					No	HZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	Yes	No							
								75	120	45	2.5Y6/2	CP - Cı	10YR5/6			Yes	HZCL - Si	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	Yes	No							
7	SH 38400	82800	238400	382800	85	≤7	NW	PGR	0	35	35	10YR4/3					MZCL - Si	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON - Non-calcareo			63	54	1	WC III	3a	Wetness			3a
								35	50	15	2.5Y5/3	CP - Cı	10YR5/6			Yes	MZCL - Si	15			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	Yes	No							
								50	120	70	2.5Y6/2	CP - Cı	10YR5/6			Yes	HZCL - Si	25			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	Yes	No							
8	SH 38500	82800	238500	382800	86	≤7	NW	PGR	0	30	30	10YR4/3					MCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON - Non-calcareo			-3	13	3a	WC I	2	Wetness			2
								30	35	5	10YR4/4					No	MCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	No	No							
								35	45	10	10YR4/4					No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	No	No							
								45	120	75	10YR3/1					No	MCL - Cla	100			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	No	No							
9	SH 38600	82800	238600	382800	91	≤7	NW	PGR	0	30	30	10YR4/3					MCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON - Non-calcareo			1	22	3a	WC I	2	Wetness			2
								30	40	10	10YR4/4					No	MCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	No	No							
								40	45	5	10YR5/4					No	MCL - Cla	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	No	No							
								45	65	20	10YR5/4					No	MCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	No	No							
10	SH 38100	82700	238100	382700	91	≤7	NW	PGR	0	30	30	10YR4/2					MZCL - Si	2			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON - Non-calcareo			75	67	1	WC II	3a	Wetness			3a
								30	60	30	10YR4/1					No	MZCL - Si	2			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	No	No							
								60	120	60	2.5Y5/1	CP - Cı	10YR5/6			Yes	ZC - Silty	0			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	No	No							
11	SH 38200	82700	238200	382700	95	≤7	NW	PGR	0	20	20	2.5Y4/2	CP - Cı	7.5YR4/6		Yes	MZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON - Non-calcareo			26	37	2	WC III	3a	Wetness			3a
								20	48	28	2.5Y5/3	CP - Cı	10YR5/6			Yes	ZC - Silty	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	Yes	No							
								48	60	12	10YR4/3					No	MZCL - Si	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	No	No							
								60	120	60	10YR4/3					No	MZCL - Si	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	No	No							
12	SH 38300	82700	238300	382700	98	≤7	NW	PGR	0	30	30	10YR4/3					MZCL - Si	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger							NON - Non-calcareo			56	42	1	WC II	3a	Wetness			3a
								30	55	25	10YR3/1					No	MZCL - Si	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	No	No							
								55	120	65	2.5Y6/3	CP - Cı	10YR5/6			Yes	HZCL - Si	15			HR - All hard rocks or stones (i.e. those which cannot be scratched w							Moderate	NON - N	No	No							

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
13	SH 38400	82700	238400	382700	98	≤7	NW	PGR	0	35	35	10YR4/3					MZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger	NON -	Non-calcare	55	64	1	WC II	3a	Wetness			3a
								35	50	15	10YR4/6					No	MZCL - Si	8			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Moderate	NON -	No	No															
								50	80	30	10YR5/3	CP - C	7.5YR5/6			Yes	MZCL - Si	8			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Moderate	NON -	Yes	No															
								80	85	5	10YR5/3	CP - C	10YR4/6			Yes	MZCL - Si	20			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Moderate	NON -	No	No															
								85	120	35	10YR5/3	CP - C	10YR4/6			Yes	MZCL - Si	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Moderate		No	No															
14	SH 38500	82700	238500	382700	103	≤7	NW	PGR	0	35	35	10YR4/3					MZCL - Si	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger	NON -	Non-calcare	38	55	1	WC II	3a	Wetness			3a
								35	45	10	10YR4/4					No	MZCL - Si	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Moderate	NON -	No	No															
								45	60	15	2.5Y5/3	CP - C	7.5YR5/6			Yes	MZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Moderate	NON -	Yes	No															
								60	70	10	2.5Y5/3	CP - C	10YR4/6			Yes	HZCL - Si	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Moderate	NON -	Yes	No															
								70	120	50	2.5Y5/3	CP - C	10YR4/6			Yes	HZCL - Si	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Moderate		Yes	No															
15	SH 38300	82600	238300	382600	98	≤7	NW	PGR	0	25	25	10YR4/3					No	MZCL - Si	8			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger	NON -	Non-calcare	18	27	2	WC III	3a	Wetness			3a
								25	35	10	2.5Y5/3	CP - C	7.5YR5/6			Yes	MZCL - Si	10			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Moderate	NON -	Yes	No															
								35	50	15	2.5Y6/2	CP - C	7.5YR5/6			Yes	MZCL - Si	50			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Moderate	NON -	Yes	No															
								50	120	70	2.5Y6/2	CP - C	7.5YR5/6			Yes	MZCL - Si	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Moderate	NON -	Yes	No															
16	SH 38400	82600	238400	382600	98	≤7	NW	PGR	0	35	35	10YR4/2					HZCL - Si	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger	NON -	Non-calcare	69	61	1	WC III	3b	Wetness			3b
								35	120	85	2.5Y6/3	MP - M	7.5YR5/6			Yes	ZC - Silty	1			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Moderate	NON -	No	No															
17	SH 38500	82600	238500	382600	103	≤7	NW	PGR	0	25	25	7.5YR4/2					No	MCL - Cla	5			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger	NON -	Non-calcare	22	31	2	WC I	2	Wetness			2
								25	50	25	7.5YR4/4					No	MCL - Cla	15			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Moderate	NON -	No	No															
								50	60	10	7.5YR4/4					No	MCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Moderate	NON -	No	No															
								60	120	60	7.5YR4/4					No	MCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Moderate	NON -	No	No															
18	SH 38600	82600	238600	382600	109	≤7	NW	PGR	0	30	30	7.5YR4/2					No	MCL - Cla	10			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger	NON -	Non-calcare	7	16	2	WC I	2	Wetness			2
								30	35	5	7.5YR4/4					No	MCL - Cla	15			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Moderate	NON -	No	No															
								35	40	5	7.5YR4/4					No	MCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Moderate	NON -	No	No															
								40	120	80	7.5YR4/4					No	MCL - Cla	80			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Moderate	NON -	No	No															
19	SH 38400	82500	238400	382500	98	≤7	NW	PGR	0	28	28	10YR4/2						HCL - Cla	1			HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger	NON -	Non-calcare	53	46	1	WC IV	4	Wetness			4
								28	120	92	2.5Y6/3	CP - C	10YR5/6			Yes	ZC - Silty	1			HR - All hard rocks or stones (i.e. those which cannot be scratched w	Poor	NON -	Yes	Yes															
	END																																						

Mottle form
FF - Few Faint
FD - Few Distinct
FP - Few Prominent
CF - Common Faint
CD - Common Distinct
CP - Common Prominent
MF - Many Faint
MD - Many Distinct
MP - Many Prominent
VF - Very many Faint
VD - Very many Distinct
VP - Very many Prominent

Texture
C - Clay
CHK - Chalk
CS - Coarse Sand
CSL - Coarse sandy loam
CSZL - Coarse sandy silt loam
FP - Fibrous and semifibrous peats
FS - Fine Sand
FSL - Fine sandy loam
FSZL - Fine sandy silt loam
HCL - Clay loam (heavy)
HP - Humified peats
HZCL - Silty clay loam (heavy)
IMP - Impenetrable to roots
LCS - Loamy Coarse Sand
LFS - Loamy fine sand
LMS - Loamy medium sand
LP - Loamy peats
MCL - Clay loam (medium)
MS - Medium Sand
MSL - Medium sandy loam
MSZL - Medium sandy silt loam
MZ - Marine Light Silts
MZCL - Silty clay loam (medium)
OC - Organic clays
OL - Organic loams
OS - Organic sands
PL - Peaty loams
PS - Peaty sands
SC - Sandy clay
SCL - Sandy clay loam
SP - Sandy peats
ZC - Silty clay
ZL - Silt loam

Stone Type
CH - Chalk or chalk stones
FSST - Soft fine grained sandstones
GH - Gravel with non-porous (hard) stones
GS - Gravel with porous stones (mainly soft stone types listed above)
HR - All hard rocks or stones (i.e. those which cannot be scratched with a finger nail)
MSST - Soft, medium or coarse grained sandstones
SI - Soft 'weathered' igneous or metamorphic rocks or stones
SLST - Soft oolitic or dolomitic limestones
ZR - Soft, argillaceous or silty rocks or stones

Ped. Shape
SG - Single grain
GRA - Granular
SAB - Subangular Blocky
AB - Angular Blocky
PRIS - Prismatic
PLAT - Platy
MASS - Massive
NA - N/A

Subsoil Structure Condition
Not Applicable
Good
Moderate
Poor

Soil or Ped. Strength
Loose
Very friable
Friable
Firm
Very firm
Extremely firm
Extremely hard
N/A

Calcareousness
NON - Non-calcareous (<0.5% CaCO3)
VSC - Very slightly calcareous (0.5 - 1% CaCO3)
SC - Slightly calcareous (1 - 5% CaCO3)
MC - Moderately calcareous (5 - 10% CaCO3)
VC - Very calcareous (>10% CaCO3)

Ped. Size
VF - Very Fine
F - Fine
M - Medium
C - Coarse
VC - Very Coarse
NA - N/A

Degree of Ped. Development
W - Weak
M - Moderate
S - Strong
NA - Not applicable

Wetness Class
WC I
WC II
WC III
WC IV
WC V
WC VI

ALC Grades
1
2
3a
3b
4
5
Non-Ag

Gley
None
Gley
N/A

Appendix 2:
Soil Pit Description

Project	Location	Date	Surveyor(s)	Company
C772	Alaw Mon Solar Farm, Anglesey	19-Apr-21	AR	Askew Land and Soil

Pit	WC	Grade	Limitation(s)	Notes
Pit 1	III	3a	Wetness	Area C

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
SH	37802	83803	70m	C14	4°	SE	Flat			Grass - Permanent Pasture	Mild	Clear	Light	None

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	MZCL	Dark Greyish Brown	10YR4/2							12		HR			NC	No					Clear	Wavy		
2	28	55	HZCL	Light Brown Grey	2.5Y6/2	Yes	Light Brown Grey	2.5Y6/2	MP	Yellowish Brown	10YR5/8	15		HR			NC	Yes	Mod	Coarse	Subangular Blocky	Friable			<0.5%	No

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		

C772_Nantanog

Pit at AB14, site C

Photo 1 of Subsoil in pit at AB14, Site C. Moderately developed, Coarse SAB, friable. **NOT SPL.**

Photo 2 of Subsoil in pit at AB14, Site C. Moderately developed, Coarse SAB, friable. **NOT SPL.**

Project	Location	Date	Surveyor(s)	Company
C772	Alw Mon Solar Far, Anglesey	20-Apr-21	AR	Askew Land and Soil

Pit	WC	Grade	Limitation(s)	Notes
Pit 2	IV	3b	Wetness	Area F

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
SH	37903	84503	47m	F2	3° N	N	Flat			Grass - Permanent Pasture	Mild	Clear	Light	None

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	MZCL	Dark Greyish Brown	10YR4/2							10		HR			NC	No					Clear	Wavy		
2	25	50	ZC	Light Brown Grey	2.5Y6/2	Y	Strong Brown	7.5YR5/6	MP			10		HR			NC	No	Mod	Coarse	Prismatic	Firm			<0.5%	Yes

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		

Pit at AB2, Site F

Photo 1 of subsoil in pit at AB2, Site F. Moderately developed, Coarse prismatic, some breaking to coarse angular blocky. Firm. **SPL**

Photo 2 of subsoil in pit at AB2, Site F. Moderately developed, Coarse prismatic, some breaking to coarse angular blocky. Firm. **SPL**

Project	Location	Date	Surveyor(s)	Company
C772	Alaw Mon Solar Farm, Anglesey	21-Apr-21	RM	Askew Land and Soil

Pit	WC	Grade	Limitation(s)	Notes
3	III	3a	Wetness	Area H

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
SH	384	700	87	H10	3°	NW	Straight			Grass - Permanent Pasture	Mild	Clear	Slight	None

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	40	mcl	Brown	10YR4/3	n																				
2	40	55	mcl	Brown	10YR5/3	y	Brown	10YR5/3	md	Yellowish Brown	10YR5/6	5		HR				Y	mod	med	subangular blocky	friable	clear	smooth	>0.5%	N
3	55	60	hcl	Light Olive Brown	2.5Y5/3	y	Light Olive Brown	2.5Y5/3	mp	Yellowish Brown	10YR5/6	35		HR				Y	poor	coarse	prismatic	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		

Project	Location	Date	Surveyor(s)	Company
C772	Alaw Mon Solar Farm, Anglesey	22-Apr-21	RM	Askew Land and Soil

Pit	WC	Grade	Limitation(s)	Notes
4	III	3a	soil wetness	Auger stopped in AB K7 with stone 10cm long.

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
SH	394	840		K7	3˚	NW	Straight			Grass - Permanent Pasture	Mild	Clear	Light	None

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	40	mcl	Brown	7.5YR4/2	n						6		hard rock					mod	med	subangular blocky	friable	clear	smooth	>0.5%	n
2	40	50	hcl	Brown	10YR5/3	y	Brown	10YR5/3	MDM	Yellowish Brown	10YR5/6	10		hard rock					mod	coarse	angular blocky	firm	clear	smooth	>0.5%	n
3	50	60	c	Greyish Brown	10YR5/2	y	Greyish Brown	10YR5/2	CDM	Yellowish Brown	10YR5/6	50		hard rock					poor	coarse	massive (augered)	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		

Project	Location	Date	Surveyor(s)	Company
C772	Alw Mon Solar Farm, Anglesey	20-Apr-21	RM	Askew Land and Soil

Pit	WC	Grade	Limitation(s)	Notes
5	III	3a	Wetness	Area L

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
SH	389	836	78	L13	2°	NW	Convex			Grass - Permanent Pasture	mild	clear	light	dry

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	35	mcl	brown	10YR4/3							2		hard					mod	fine	subabgular blocky	friable	clear	smooth	>0.5%	No
2	35	40	mcl	brown	10YR5/3				MD	yellowish brown	10YR5/6	6		hard					mod	med	subabgular blocky	friable	clear	smooth	>0.5%	No
3	40	55	hcl	brown	10YR5/3				MD	yellowish brown	10YR5/6	8		hard					mod	med	subabgular blocky	friable			>0.5%	No

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		

Appendix 3:
Topsoil Particle Size Analysis

TEST REPORT

ISSUED BY SOIL PROPERTY TESTING LTD

DATE ISSUED: 27/05/2021

0998

Contract	**Alaw Mon, Anglesey**
Serial No.	**38744_1**

Client:

Askew Land & Soil Ltd

The Old Stables,
Upexe,
Exeter,
EX5 5ND

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: www.soilpropertytesting.com

Samples Submitted By:

Askew Land & Soil Ltd

Samples Labelled:

Alaw Mon, Anglesey

Approved Signatories:

- ☑ **J.C. Garner B.Eng (Hons) FGS** — Technical Director & Quality Manager
- ☐ **W. Johnstone** — Materials Lab Manager
- ☐ **D. Sabnis** — Operations Manager

Date Received: 19/05/2021

Samples Tested Between: 19/05/2021 **and** 27/05/2021

Remarks:

For the attention of Rob Askew
Your Reference No: C772

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.

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ISSUED BY SOIL PROPERTY TESTING LTD

DATE ISSUED: 27/05/2021

UKAS TESTING

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Contract	**Alaw Mon, Anglesey**		
Serial No.	**38744_1**	**Target Date**	02/06/2021
Scheduled By	Askew Land & Soil Ltd		

SCHEDULE OF LABORATORY TESTS

Schedule Remarks

Bore Hole No.	Type	Sample Ref.	Top Depth	Particle Size Distribution (BS1377)	Sample Remarks
-	I	2	0.00	1	MZCL
-	J	4	0.00	1	MCL
-	K	10	0.00	1	MCL
-	M	11	0.00	1	MZCL
-	A	1	0.00	1	HZCL
-	C	8	0.00	1	MCL
-	D	5	0.00	1	MCL
-	G	5	0.00	1	MCL
-	H	2	0.00	1	MCL
Totals				**9**	**End of Schedule**

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TEST REPORT

ISSUED BY SOIL PROPERTY TESTING LTD

DATE ISSUED: 27/05/2021

UKAS TESTING

0998

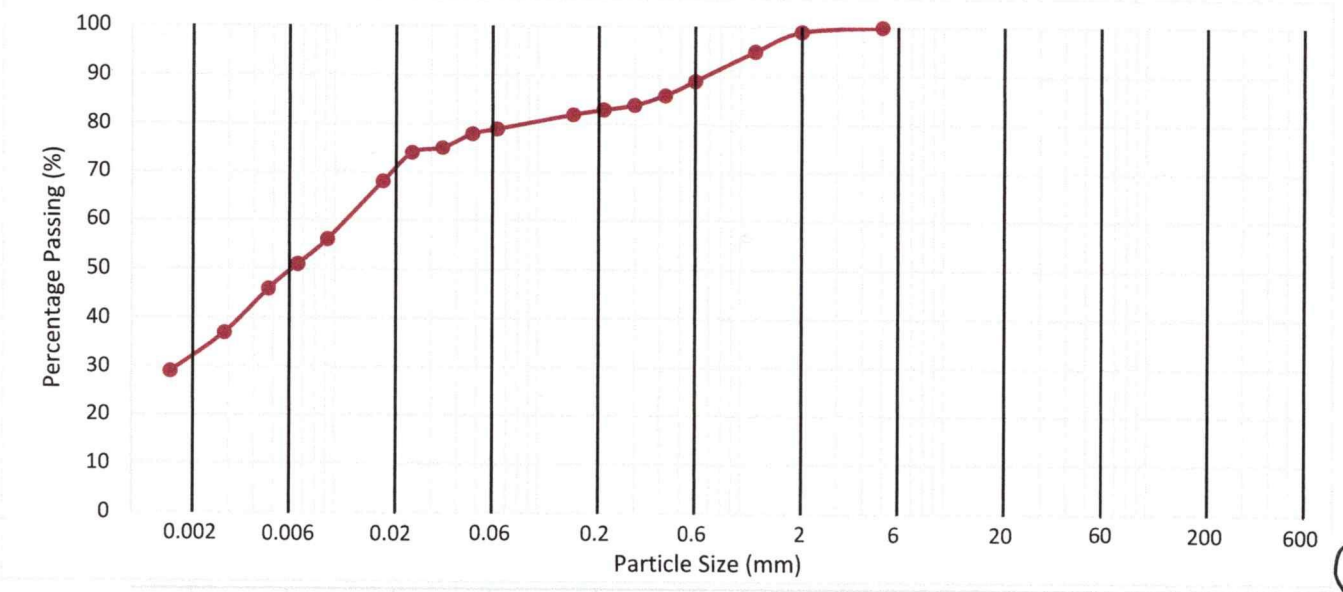
Contract	Alaw Mon, Anglesey
Serial No.	38744_1

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Pit No.	Depth (m)	Sample Type	Sample Reference	Description	Remarks
-	0.00 - 0.25	A	1	Dark yellowish brown slightly sandy silty CLAY with occasional decayed roots, and rare gravel.	

Method of Test: Hydrometer + Pre-sieve

Method of Pretreatment: Not required



A1

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 (%)
	0.0477	78	47	
	0.0340	75		
	0.0241	74		
	0.0173	68		32
	0.0092	56		
	0.0066	51		
	0.0047	46		
	0.0029	37		
	0.0016	29		

Sieve Size (mm)	Passing (%)	Sand By Dry Mass (%)
2.00	99	20
1.18	95	
0.600	89	
0.425	86	
0.300	84	
0.212	83	
0.150	82	
0.063	79	

Fines By Dry Mass (%)	
<0.063mm	79

Sieve Size (mm)	Passing (%)	2mm+ By Dry Mass (%)
300		1
125		
90		
63		
50		
37.5		
28		
20		
14		
10		
6.3		
5	100	

	TEST REP.	% <2mm
S	20	20
Z	47	48
C	32	32
TOT.	99	100

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

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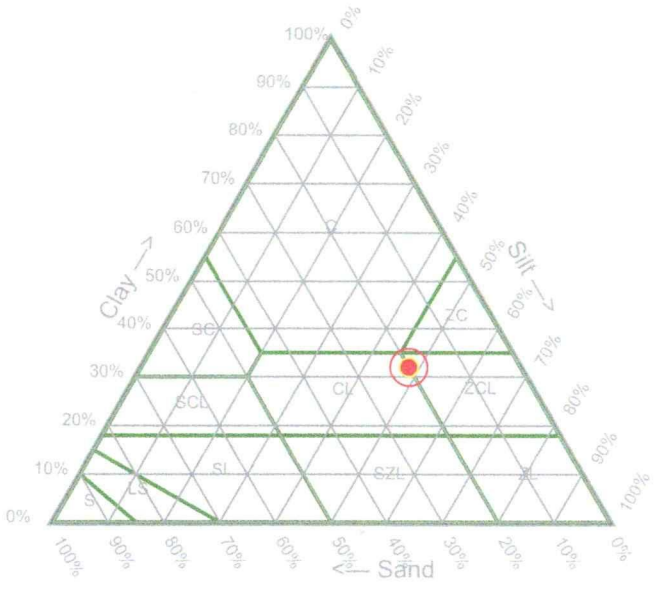
Enter soil sample proportions:

Clay (%):	X 32	Sand (%):	X 20	Silt (%):	X 48	•Calculate Calculate	•F



A1

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Soil sample is a Silty Clay Loam (HEAVY)

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C8

TEST REPORT

ISSUED BY SOIL PROPERTY TESTING LTD

DATE ISSUED: 27/05/2021

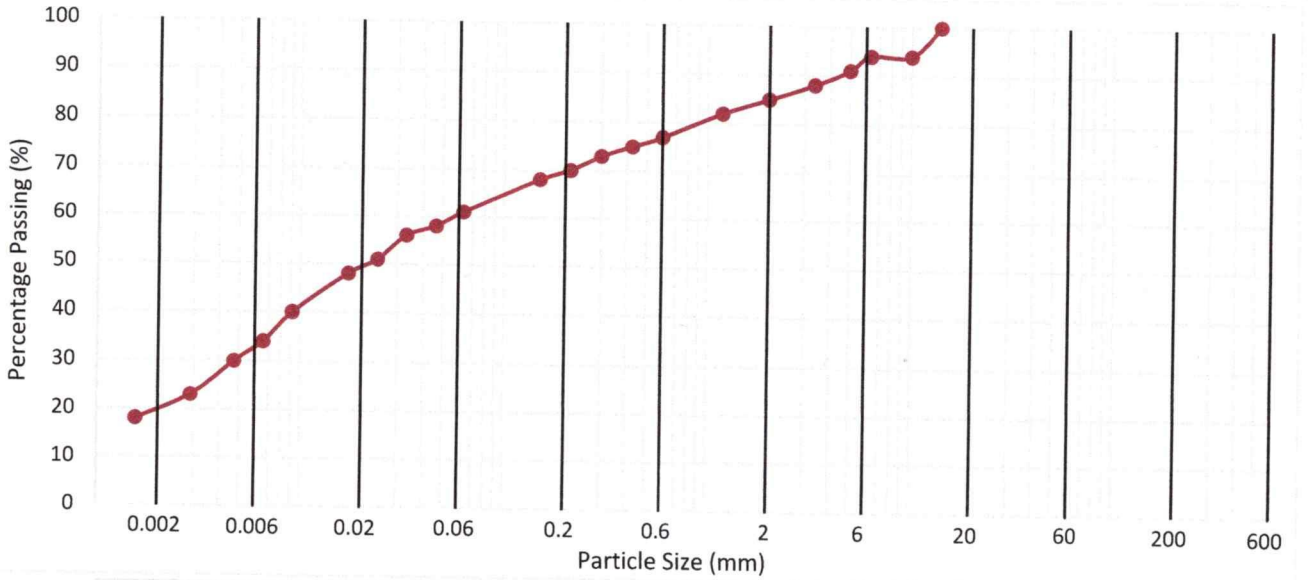
0998

Contract	Alaw Mon, Anglesey
Serial No.	38744_1

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Pit No.	Depth (m)	Sample Type	Sample Reference	Description	Remarks
-	0.00 - 0.25	C	8	Firm greyish brown slightly gravelly slightly sandy silty CLAY with occasional decayed roots, and rare grey mottling. Gravel is grey and brown fine to medium subangular to subrounded chert and mudstone.	

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				

C8

Hydrometer

Particle Size (mm)	Passing (%)	Silt by Dry Mass (%)
0.0465	58	41
0.0332	56	
0.0240	51	
0.0172	48	Clay by Dry Mass (%)
0.0092	40	
0.0066	34	
0.0047	30	20
0.0029	23	
0.0016	18	

Sieve Size (mm)	Passing (%)	Sand By Dry Mass (%)
2.00	85	24
1.18	82	
0.600	77	
0.425	75	
0.300	73	
0.212	70	
0.150	68	
0.063	61	

Fines By Dry Mass (%)	
<0.063mm	61

Sieve Size (mm)	Passing (%)	2mm+ By Dry Mass (%)
300		15
125		
90		
63		
50		
37.5		
28		
20		
14	100	
10	94	
6.3	94	
5	91	

TEST REP. % < 2mm

S 24 28

Z 41 48

C 20 24

101. 85 100

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:	

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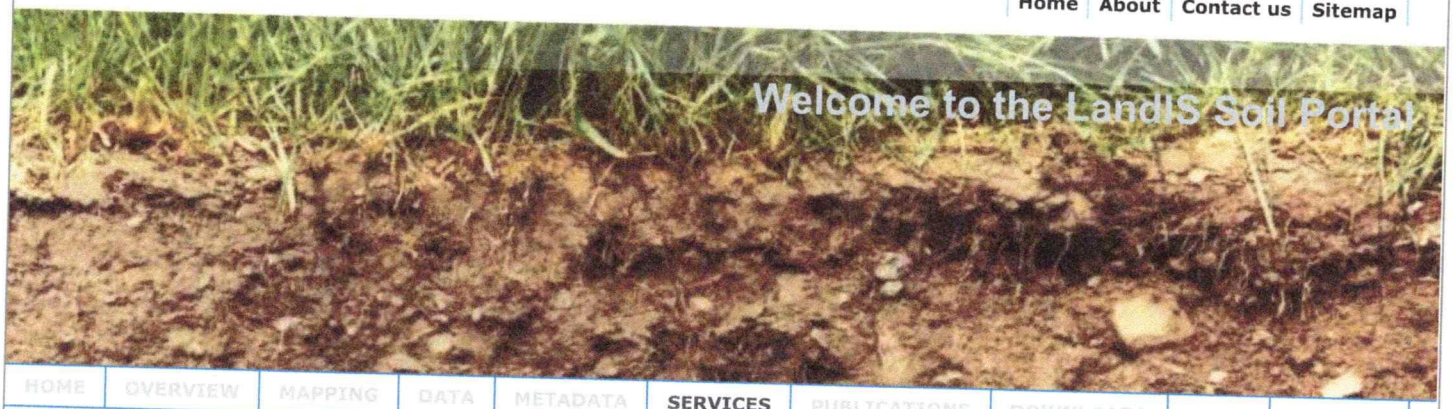

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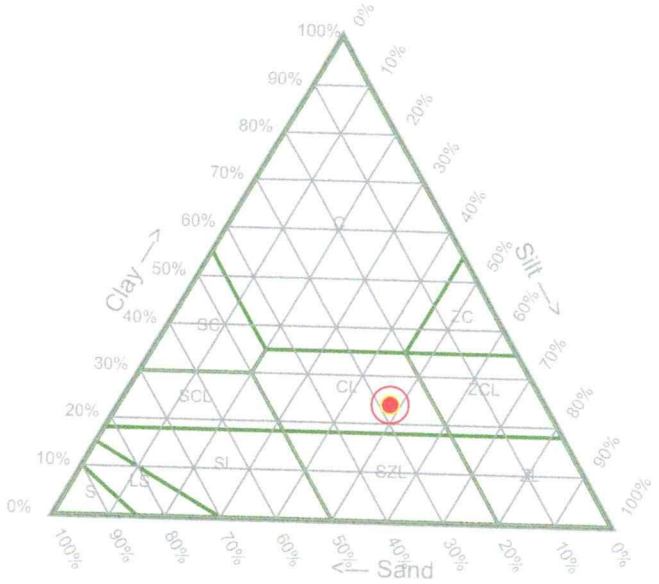
Enter soil sample proportions:

Clay (%):	X 24	Sand (%):	X 28	Silt (%):	X 48	•Calculate	Calculate	•F



C8

Soil sample is a Clay Loam (MEDIUM)

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TEST REPORT

ISSUED BY SOIL PROPERTY TESTING LTD

DATE ISSUED: 27/05/2021

UKAS TESTING

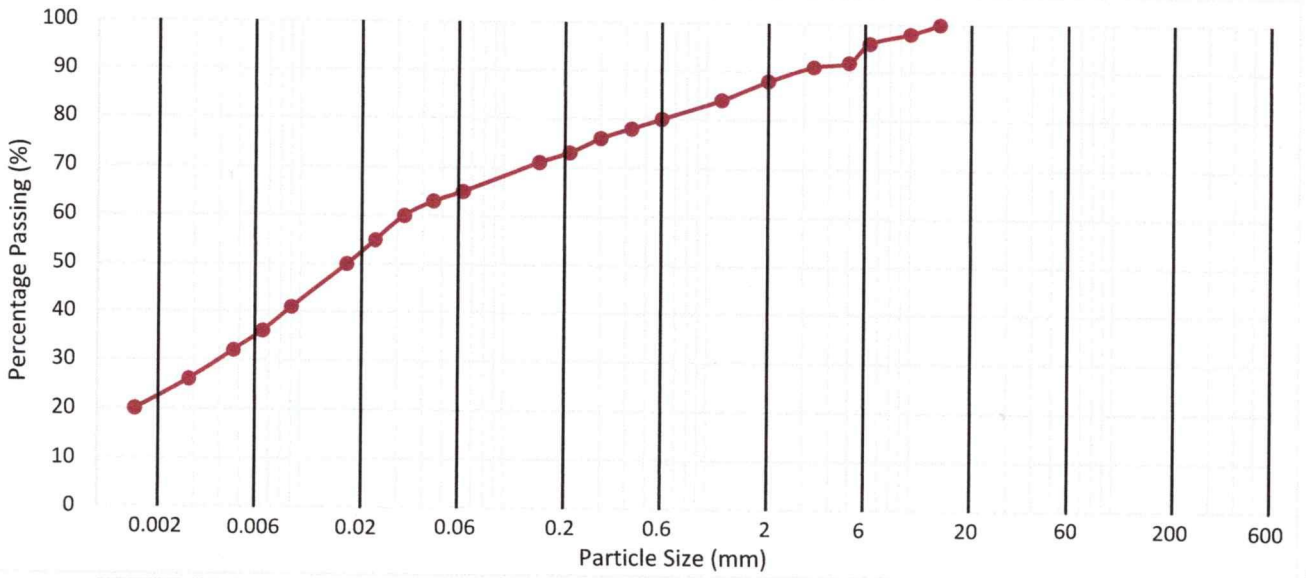
0998

Contract	Alaw Mon, Anglesey
Serial No.	38744_1

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Pit No.	Depth (m)	Sample Type	Sample Reference	Description	Remarks
-	0.00 - 0.25	D	5	Dark greyish brown slightly gravelly slightly sandy silty CLAY with occasional brown, and rare grey mottling. Gravel is grey, black and brown fine to medium angular to rounded chert and mudstone.	

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



D5

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 (%)
	0.0452	63	43	
	0.0325	60		
	0.0234	55		
	0.0169	50		
	0.0091	41		
	0.0065	36		
	0.0047	32		22
	0.0028	26		
	0.0015	20		

Sieve Size (mm)	Passing (%)	Sand By Dry Mass (%)
2.00	88	23
1.18	84	
0.600	80	
0.425	78	
0.300	76	
0.212	73	
0.150	71	
0.063	65	

Fines By Dry Mass (%)	
<0.063mm	65

Sieve Size (mm)	Passing (%)	2mm+ By Dry Mass (%)
300		12
125		
90		
63		
50		
37.5		
28		
20		
14	100	
10	98	
6.3	96	
5	92	

TEST REP.	% <2mm
S 23	26
Z 43	49
C 22	25
Tot. 88	100

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:	

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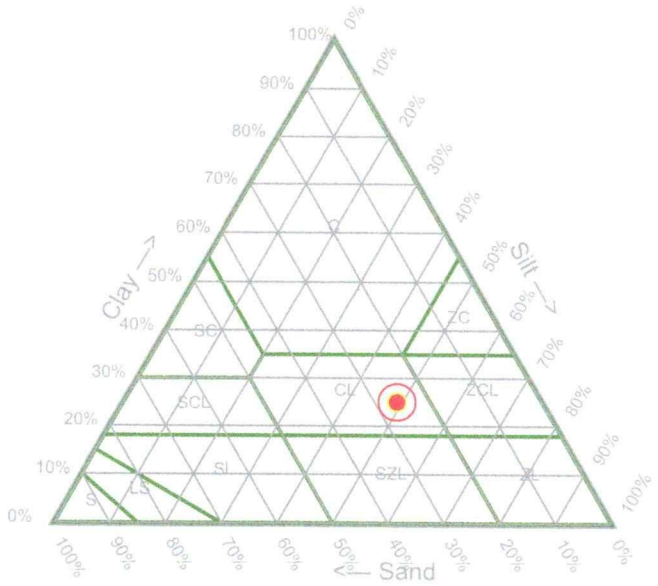
Enter soil sample proportions:

Clay (%):	X 25	Sand (%):	X 26	Silt (%):	X 49	•Calculate Calculate •F



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TEST REPORT

ISSUED BY SOIL PROPERTY TESTING LTD

DATE ISSUED: 27/05/2021

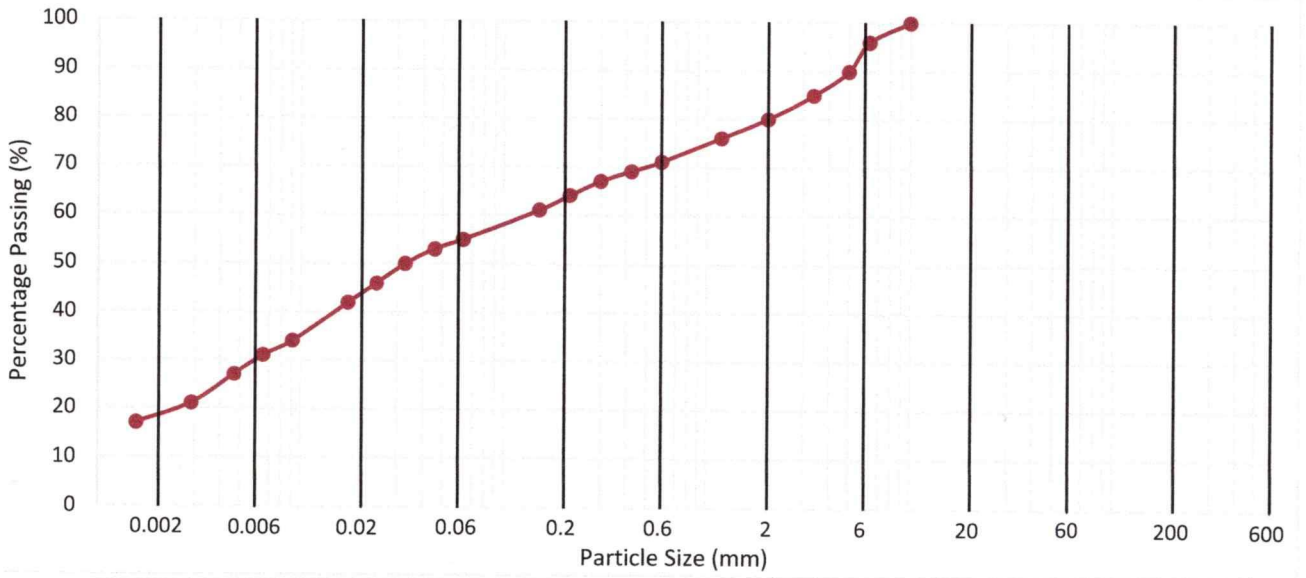
0998

Contract	Alaw Mon, Anglesey
Serial No.	38744_1

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Pit No.	Depth (m)	Sample Type	Sample Reference	Description	Remarks
-	0.00 - 0.25	G	5	Dark yellowish brown slightly gravelly slightly sandy silty CLAY. Gravel is grey, black and brown fine to medium angular to subrounded chert and mudstone.	

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



G5

Hydrometer

Particle Size (mm)	Passing (%)	Silt by Dry Mass (%)	Clay by Dry Mass (%)
0.0457	53	37	
0.0327	50		
0.0237	46		
0.0171	42		
0.0091	34		
0.0066	31		
0.0047	27		18
0.0029	21		
0.0016	17		

Sieve Size (mm)	Passing (%)	Sand By Dry Mass (%)
2.00	80	25
1.18	76	
0.600	71	
0.425	69	
0.300	67	
0.212	64	
0.150	61	
0.063	55	

Fines By Dry Mass (%)	
<0.063mm	55

Sieve Size (mm)	Passing (%)	2mm+ By Dry Mass (%)
300		20
125		
90		
63		
50		
37.5		
28		
20		
14		
10	100	
6.3	96	
5	90	

TEST REP. | % < 2mm

S 25 31

Z 37 46

C 18 23

TOT. 80 100

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

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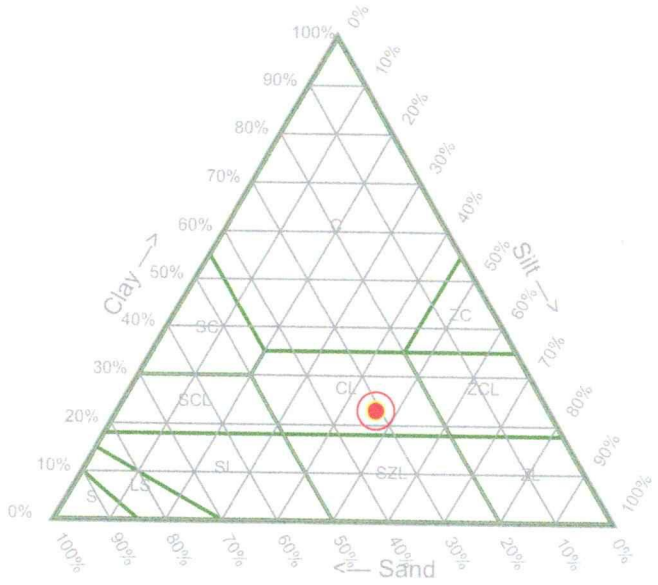
Enter soil sample proportions:

Clay (%):	X 23	Sand (%):	X 31	Silt (%):	X 46	•Calculate Calculate •F



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Soil sample is a Clay Loam (MEDIUM)

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TEST REPORT

ISSUED BY SOIL PROPERTY TESTING LTD

DATE ISSUED: 27/05/2021

UKAS TESTING

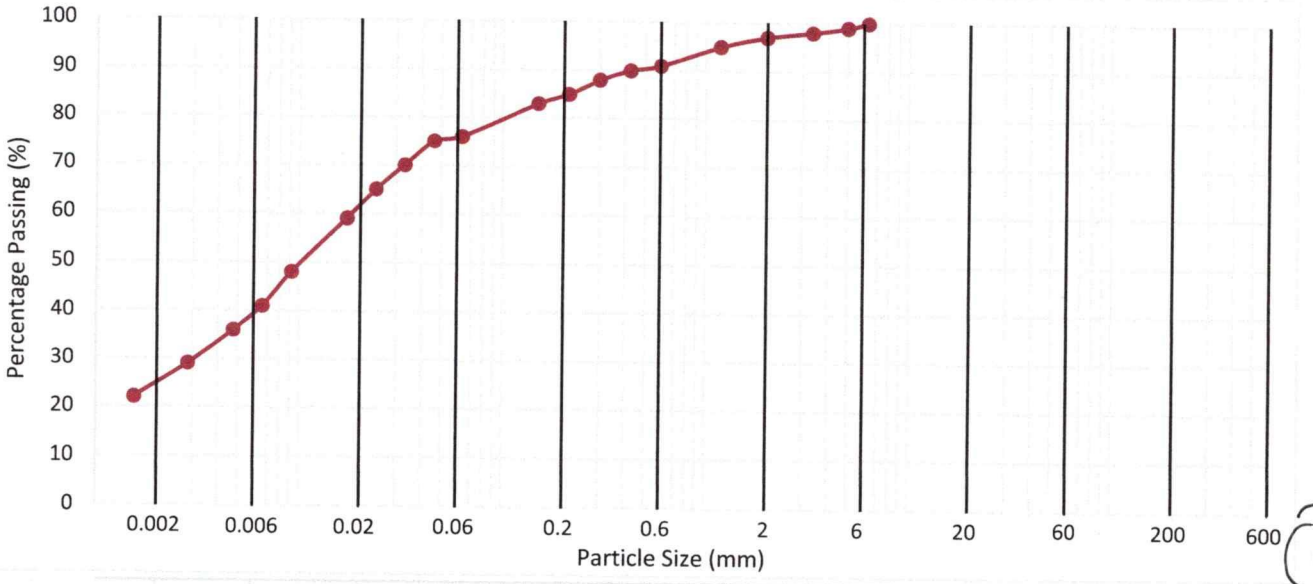
0998

Contract	Alaw Mon, Anglesey
Serial No.	38744_1

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Pit No.	Depth (m)	Sample Type	Sample Reference	Description	Remarks
-	0.00 - 0.25	H	2	Greyish brown slightly gravelly slightly sandy silty CLAY with occasional decayed roots, and rare grey mottling. Gravel is brown and grey fine to medium subangular to subrounded chert.	

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 (%)
	0.0461	75	
	0.0331	70	51
	0.0239	65	
	0.0172	59	Clay by Dry Mass (%)
	0.0092	48	
	0.0066	41	
	0.0048	36	25
	0.0029	29	
	0.0016	22	

Sieve Size (mm)	Passing (%)	Sand By Dry Mass (%)
2.00	97	
1.18	95	
0.600	91	
0.425	90	21
0.300	88	
0.212	85	
0.150	83	
0.063	76	

Fines By Dry Mass (%)	
<0.063mm	76

Sieve Size (mm)	Passing (%)	2mm+ By Dry Mass (%)
300		
125		
90		
63		
50		
37.5		3
28		
20		
14		
10		
6.3	100	
5	99	

	% TEST	<2mm REQ.
S	21	22
Z	51	52
C	25	26
TOT.	97	100

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:

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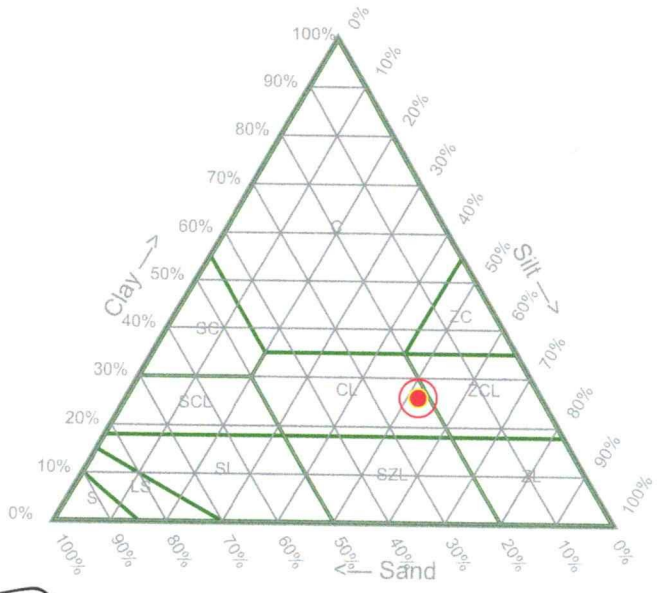
Enter soil sample proportions:

Clay (%):	X 26	Sand (%):	X 22	Silt (%):	X 52	•Calculate	Calculate	•F



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ISSUED BY SOIL PROPERTY TESTING LTD

DATE ISSUED: 27/05/2021

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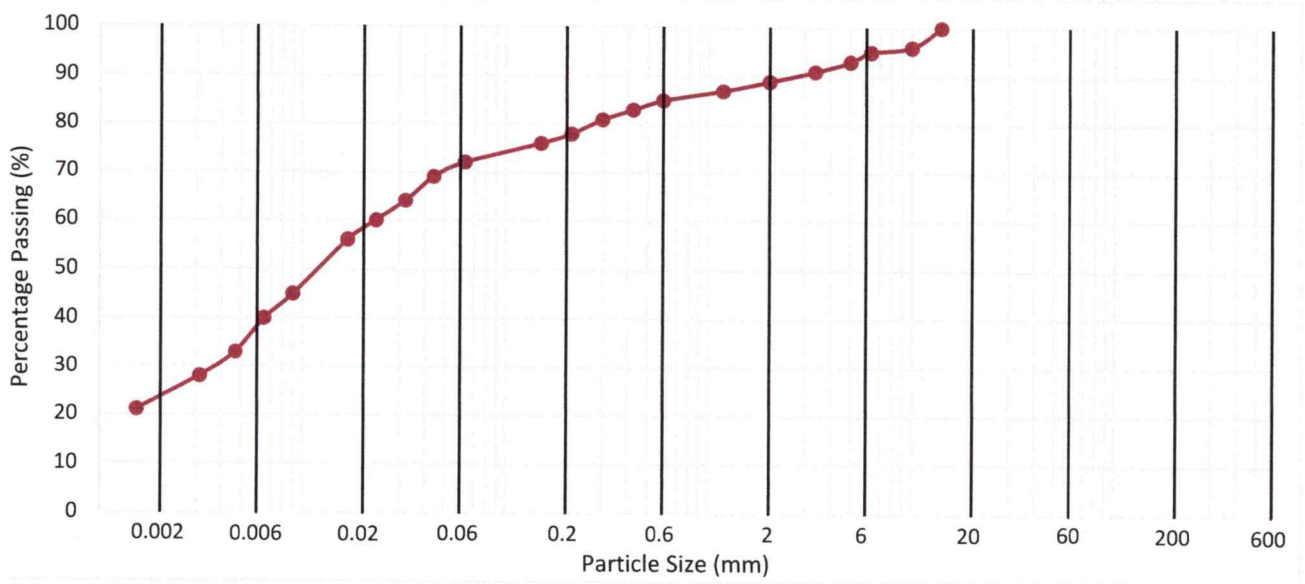
Contract	Alaw Mon, Anglesey
Serial No.	38744_1

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Pit No.	Depth (m)	Sample Type	Sample Reference	Description	Remarks
-	0.00 - 0.25	I	2	Firm dark greyish brown slightly gravelly slightly sandy silty CLAY with rare grey mottling, and decayed roots. Gravel is grey and brown fine to medium subangular to subrounded chert and mudstone.	

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



TI2

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

Hydrometer	Particle Size (mm)	Passing (%)	Silt by Dry Mass (%)
	0.0444	69	
	0.0322	64	49
	0.0231	60	
	0.0167	56	Clay by Dry Mass (%)
	0.0090	45	
	0.0065	40	
	0.0047	33	
	0.0031	28	23
	0.0015	21	

Sieve Size (mm)	Passing (%)	Sand By Dry Mass (%)
2.00	89	
1.18	87	
0.600	85	
0.425	83	17
0.300	81	
0.212	78	
0.150	76	
0.063	72	

Fines By Dry Mass (%)	
<0.063mm	72

Sieve Size (mm)	Passing (%)	2mm+ By Dry Mass (%)
300		
125		
90		
63		
50		
37.5		
28		11
20		
14	100	
10	96	
6.3	95	
5	93	

TEST REF.	<2mm
S 17	19
Z 49	55
C 23	26
TOT. 89	100

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:	

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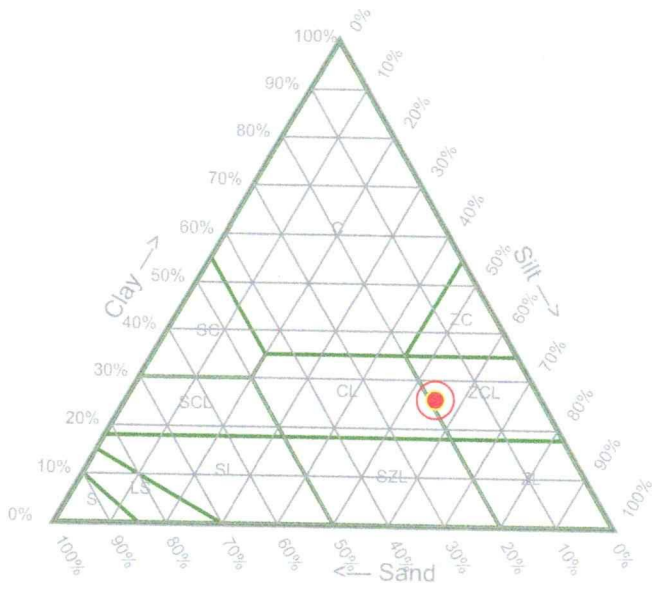
Enter soil sample proportions:

Clay (%):	X 26	Sand (%):	X 19	Silt (%):	X 55	•Calculate	Calculate	•F



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Soil sample is a Silty Clay Loam (MEDIUM)

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TEST REPORT

ISSUED BY SOIL PROPERTY TESTING LTD

DATE ISSUED: 27/05/2021

UKAS TESTING

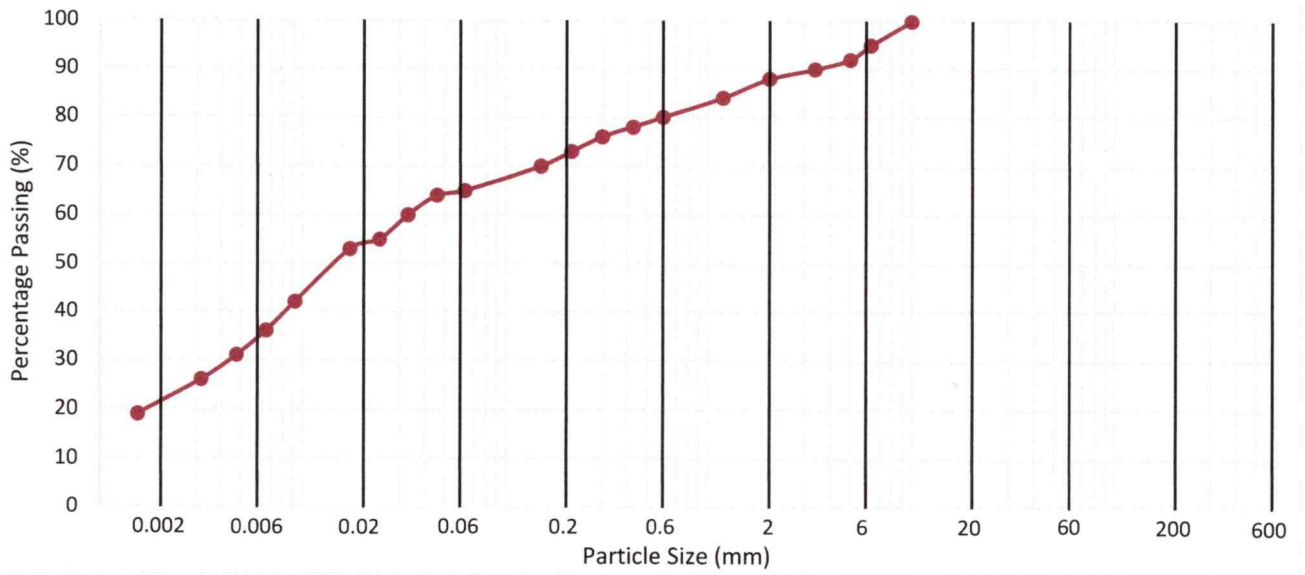
0998

Contract	Alaw Mon, Anglesey
Serial No.	38744_1

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Pit No.	Depth (m)	Sample Type	Sample Reference	Description	Remarks
-	0.00 - 0.25	J	4	Firm dark greyish brown slightly gravelly slightly sandy silty CLAY with occasional decayed roots, and rare grey mottling. Gravel is grey and brown fine to medium subangular to subrounded chert and mudstone.	

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				

J4

Hydrometer	Particle Size (mm)	Passing (%)	Silt by Dry Mass (%)	Clay by Dry Mass (%)
	0.0461	64	44	
	0.0331	60		
	0.0240	55		
	0.0171	53		
	0.0092	42		
	0.0066	36		
	0.0047	31		21
	0.0032	26		
	0.0015	19		

Sieve Size (mm)	Passing (%)	Sand By Dry Mass (%)
2.00	88	23
1.18	84	
0.600	80	
0.425	78	
0.300	76	
0.212	73	
0.150	70	
0.063	65	

Fines By Dry Mass (%)	
<0.063mm	65

Sieve Size (mm)	Passing (%)	2mm+ By Dry Mass (%)
300		12
125		
90		
63		
50		
37.5		
28		
20		
14		
10	100	
6.3	95	
5	92	

TEST REP.		% < 2mm
S	23	26
Z	44	50
C	21	24
TOT.	88	100

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:	

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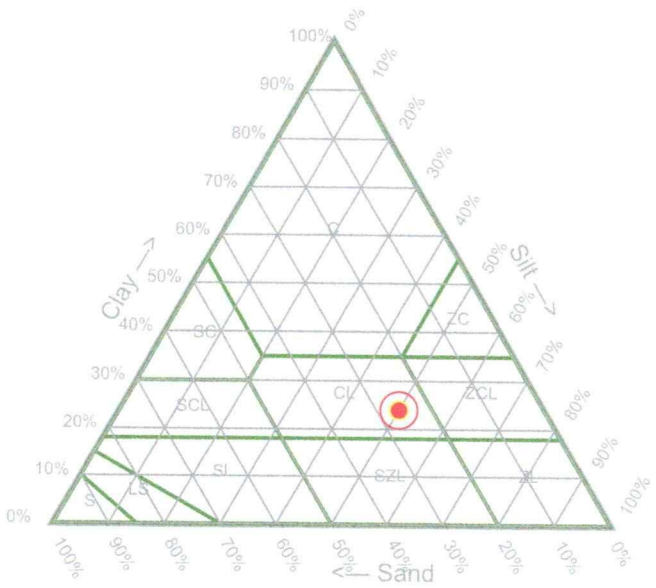
Enter soil sample proportions:

Clay (%):	X 24	Sand (%):	X 26	Silt (%):	X 50	•Calculate Calculate •F



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TEST REPORT

ISSUED BY SOIL PROPERTY TESTING LTD

DATE ISSUED: 27/05/2021

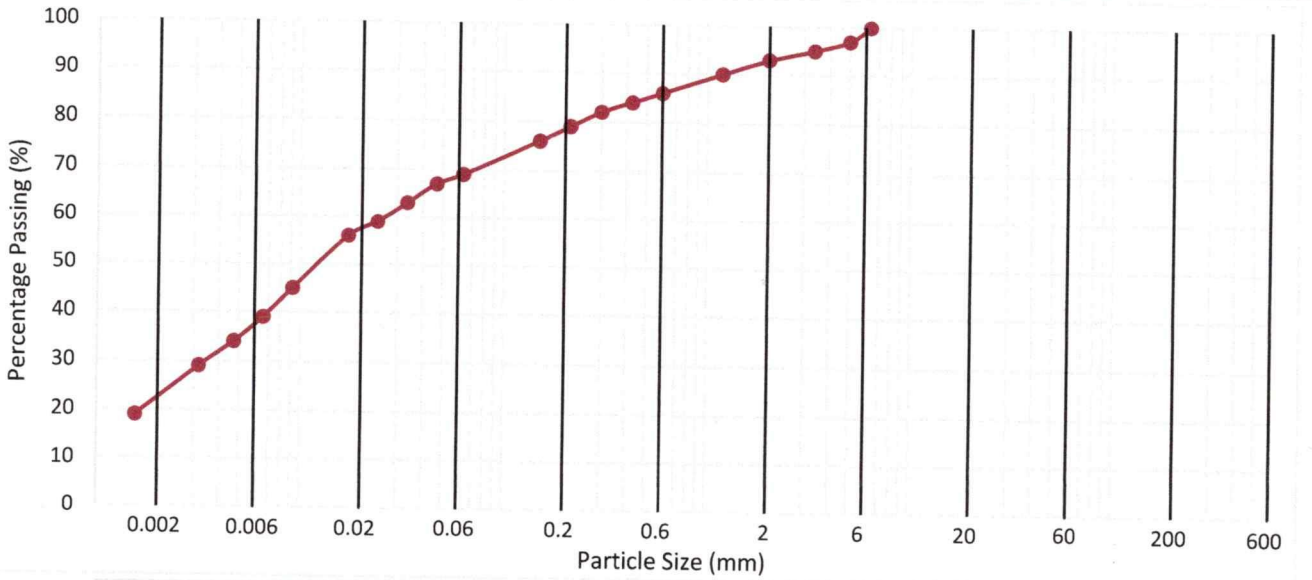
UKAS TESTING 0998

Contract	Alaw Mon, Anglesey
Serial No.	38744_1

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Pit No.	Depth (m)	Sample Type	Sample Reference	Description	Remarks
-	0.00 - 0.25	K	10	Firm dark greyish brown slightly gravelly slightly sandy silty CLAY with occasional decayed roots, and rare grey mottling. Gravel is grey and brown fine subangular to subrounded chert, and rare mudstone.	

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					

K10

Hydrometer	Particle Size (mm)	Passing (%)	Silt by Dry Mass (%)	Clay by Dry Mass (%)
	0.0467	67	48	
	0.0335	63		
	0.0240	59		
	0.0172	56		
	0.0092	45		
	0.0066	39		
	0.0047	34		21
	0.0032	29		
	0.0016	19		

Sieve Size (mm)	Passing (%)	Sand By Dry Mass (%)
2.00	93	24
1.18	90	
0.600	86	
0.425	84	
0.300	82	
0.212	79	
0.150	76	
0.063	69	

Fines By Dry Mass (%)	
<0.063mm	69

Sieve Size (mm)	Passing (%)	2mm+ By Dry Mass (%)
300		7
125		
90		
63		
50		
37.5		
28		
20		
14		
10		
6.3	100	
5	97	

TEST < 2MM

REP		
S	24	26
Z	48	52
C	21	22
TOT	93	100

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:	

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TEST REPORT

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DATE ISSUED: 27/05/2021

UKAS TESTING

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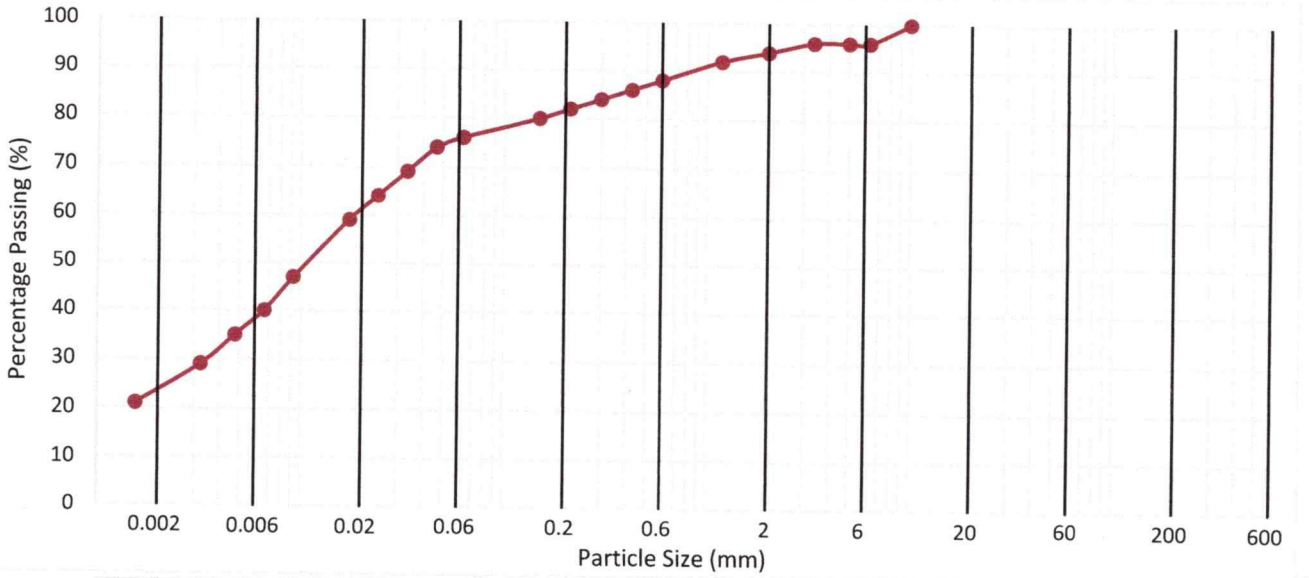
Contract	Alaw Mon, Anglesey
Serial No.	38744_1

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Pit No.	Depth (m)	Sample Type	Sample Reference	Description	Remarks
-	0.00 - 0.25	M	11	Firm greyish brown slightly gravelly slightly sandy silty CLAY with occasional decayed roots, and rare grey mottling. Gravel is grey and brown fine to medium subangular to subrounded chert and mudstone.	

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				

M11

Hydrometer	Particle Size (mm)	Passing (%)	Silt by Dry Mass (%)	Clay by Dry Mass (%)
	0.0468	74	53	
	0.0336	69		
	0.0241	64		
	0.0174	59		
	0.0093	47		
	0.0067	40		
	0.0048	35		23
	0.0033	29		
	0.0016	21		

Sieve Size (mm)	Passing (%)	Sand By Dry Mass (%)
2.00	94	18
1.18	92	
0.600	88	
0.425	86	
0.300	84	
0.212	82	
0.150	80	
0.063	76	

Fines By Dry Mass (%)	
<0.063mm	76

Sieve Size (mm)	Passing (%)	2mm+ By Dry Mass (%)
300		6
125		
90		
63		
50		
37.5		
28		
20		
14		
10	100	
6.3	96	
5	96	

TEST REP. <2mm

S	18	19
Z	53	56
C	23	25
~~tot.~~	94	100

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:

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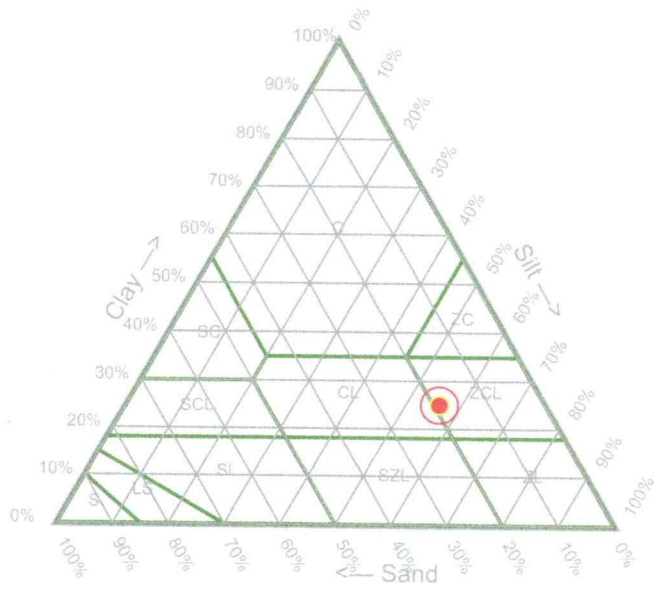
Enter soil sample proportions:

Clay (%):	X 25	Sand (%):	X 19	Silt (%):	X 56	•Calculate	Calculate	•F



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Appendix 4:
Soil Health

Soil Health

[1]Soil Health

Soil health can be defined as a soil's ability to function and sustain plants, animals and humans as part of the ecosystem. There are five main factors that impact the health of the soil and can have a large influence over its capability and resilience to function, they are:

1. Soil structure
2. Soil chemistry
3. Organic matter content
4. Soil biology
5. Water infiltration, retention and movement through the profile

A healthy soil will have a good combination of all these factors, whilst an unhealthy soil will have a problem with at least one of these. A healthy soil has plenty of air spaces (voids) within it, maintaining aerobic (oxygenated) conditions. A healthy soil will provide a buffer to extremes in temperature (as it allows movement of gases between the soil and the air above) and rainfall (as the soil is well drained). This helps to reduce the impact of extreme weather events.

When a soil has limited air spaces, anaerobic conditions (i.e. oxygen depleted) dominate, leading to waterlogging and stagnation of roots and the proliferation of anaerobic microbes and denitrification (i.e. the loss of nitrogen from the system). A healthy soil will filter water slowly, retaining the nutrients and plant protection products (PPP) applied to the crop. If rainfall moves through the soil profile too quickly, or if it is prevented from entering the soil through compaction or soil sealing, surface runoff increases, taking soil, nutrients and PPP with it. This also increases the risk of flooding.

Summary: A healthy soil has a well-developed soil structure, where soil particles are aggregated into soil peds (structural units) separated by pores or voids. This allows the free movement of water (precipitation) through the soil and facilitates gaseous exchange between the plant roots and the air. These soils are well aerated (oxygenated), which encourages healthy plant (crop) growth and an abundance of soil fauna and aerobic microbes. These soils often have high amounts of soil organic matter (SOM), associated with an accumulation of plant and animal matter, and thus are a good store of soil organic carbon (SOC).

[2]Soil Organic Matter (SOM)

Soil carbon is predominantly derived from carbon fixed by plants. This enters the soil as litter or dung, root tissue turnover, root exudates and carbon allocated to mutualistic fungi. Carbon is mixed into the soil and transformed by biological processes, but some is also carried down the profile by downward movement of rainwater. Where these biological processes are retarded, and mixing does not occur, soils can develop organic layers on their surface, and in waterlogged conditions these become deep peat deposits. Soils on limestone and chalk may also contain inorganic carbon as carbonate compounds. Some ammonia oxidising bacteria also fix carbon.

In all habitats, most carbon is stored in soils in the form of soil organic matter (SOM), and peaty soils in particular, are major stores of carbon (Natural England, 2012). Globally, soils contain more organic carbon than the vegetation and atmosphere combined (Swift, 2001). Ten billion tonnes of organic carbon are estimated to be stored in United Kingdom (UK) soils, with over half stored in peat. Soils in England and Wales store 2.4 billion tonnes of carbon of which 58% is in the top 30 cm of soil

(Department for Environment and Rural Affairs (Defra), 2011). Soil carbon is stored in fresh and decomposing litter and as longer-lasting material stored in soil particles, in a complex with clays or in anaerobic waterlogged conditions. England's deep and shallow peaty soils are estimated to contain over 580 million tonnes of carbon (Natural England, 2010), but in surface layers, denser mineral soils contain more carbon than peaty soils (Emmett et al, 2010). In peat, anaerobic conditions caused by waterlogging prevent the breakdown of phenols, which build up and inhibit other decomposition enzymes, while plants producing tannins also inhibit enzyme activity (Defra, 2010A). In lowland fens where waterlogging is due to groundwater, peat can be formed from a wide range of plants that are found in waterlogged conditions. In bogs, where water supply is derived from precipitation only, peat is predominantly formed from Sphagnum mosses and Cotton-grass (Eriophorum spp.), with minor components of other plants reflecting past drier conditions or periods (Natural England, 2013).

Cultivation of soils promotes the release of stored soil carbon by mineralisation of soil organic matter to carbon dioxide (CO^2) (Lal, 2004). The conversion of grassland to arable cropland was the largest contributor to soil carbon losses from land use change in the UK between 1990 and 2000 (Ostle et al, 2009). Carbon in the subsoil (below 15 cm for grassland or 30 cm plough layer for arable) is more stable and less influenced by surface processes (Defra, 2011A).

On mineral soils, Environmental Stewardship is estimated to have reduced England's agricultural greenhouse gas (GHG) emissions by around 11% a year (Defra, 2007), mainly through increases in soil organic carbon delivered by options such as buffer strips that take land out of cultivation.

The greatest benefits in terms of increase in soil carbon can be realised through land use change from intensive arable to grasslands (Conant et al, 2001), woodlands or some biofuels (Defra, 2003). Avoiding disturbance of undisturbed soils, and changing land use to grassland, heathland, woodland or wetland is likely to deliver carbon storage benefits (Natural England, 2012A), including on organo-mineral soils (Defra, 2011B). Conversion from arable to grassland may, however, be offset to some extent by methane emissions associated with livestock production.

There is ongoing research into how grasslands can be managed to increase carbon storage. Defra Project BD5003 (Ward et al, 2006) found that older, and particularly semi-improved grasslands are important carbon stores compared to intensively managed, improved grasslands.

Soil organic matter is a key indicator of many desirable soil functions. It helps to maintain soil structure, provides and stores nutrients, supports biological activity, increases water retention and stores carbon (Gobin et al, 2011). Early results from Natural England's project BD5001 (Natural England, 2016) indicate that grassland soils in good structural condition tend to have more organic matter than soils in moderate or poor condition. Soils with more organic matter tend to be more resistant and resilient to damage, with this effect interacting with soil texture and biological properties (Defra, 2010C).

The best opportunities to increase carbon storage come from planting perennial crops, returning crop residues to the soil and application of organic manures (Defra, 2014).

In the short to medium term (up to 10 years) zero tillage does not result in increased levels of soil carbon compared to conventional tillage (Defra, 2014), but global data suggests that zero tillage results in more total soil carbon storage when applied for 12 years or more (Steinbach and Alvarez, 2006).

Summary: The greatest benefits in terms of increase in soil organic matter (SOM), and hence soil organic carbon (SOC), can be realised through land use change from intensive arable to grasslands. Likewise, SOM and SOC are increased when cultivation of the land for crops (tillage) is stopped and the land is uncultivated (zero tillage). Global evidence suggests that zero tillage results in more total soil

carbon storage when applied for 12 years or more. Therefore, there is evidence that conversion of land from arable to grassland which is uncultivated over the long-term (>12 years), such as that under solar PV arrays, increases SOC and SOM.

[3]**Biodiversity in the Soil**

Biological function of soils can be enhanced by simple approaches that can be integrated into real farm systems, including adapting organic matter management, cultivation approaches and cropping, with likely benefits to both farming and the environment (Natural England, 2012B).

Soils are habitats for millions of species, ranging from bacteria, fungi, protozoa, and microscopic invertebrates to mites, springtails, ants, worms and plants. It is estimated that more than 1 in 4 of all living species in earth is a strictly soil-dwelling organism (Decaens et al, 2006).

A single gram of soil can contain a billion bacterial cells from up to 10,000 species (Torsvik et al, 1990, 2002).

Soil biota are strongly influenced by land management. Modern farming has sought to replace many soil biota functions with less sustainable technological solutions, which lead to loss of soil biodiversity (Stockdale et al, 2006; Defra 2010c). For example, changes in land management practice and land use can have large effects on soil biodiversity over relatively short-time scales. Reducing the intensity of management, introducing no-tillage management and converting arable land to pasture usually has substantial beneficial effects (Spurgeon et al, 2013).

Microbial diversity in the UK reflects soil conditions, especially pH, but also vegetation, climatic and other environmental factors. Distinct specialist communities occur in more extreme soils with low diversity (Griffiths et al, 2012).

Current levels of understanding of soil biodiversity is low. Out of approximately 11 million species of soil organisms, an estimated 1.5% have been named and classified (Turbé et al, 2010) and most ecological roles are understood only at a general level.

Summary: Soils are habitats for millions of species, ranging from bacteria, fungi, protozoa, and microscopic invertebrates to mites, springtails, ants, worms and plants. Soil biota are strongly influenced by land management. Modern farming has led to the loss of soil biodiversity. Changes in land management practice and land use can have large effects on soil biodiversity over relatively short-time scales. Reducing the intensity of management, introducing no-tillage management, and converting arable land to pasture, such as grassland under solar PV arrays, has substantial beneficial effects.

[4]**Soil Structure**

Soil structure is defined by the way individual particles of sand, silt, and clay are assembled. Single particles when assembled appear as larger particles, called aggregates or peds. Soil structure is most usefully described in terms of grade (degree of aggregation), class (average size) and type of aggregates (form), or shape. The degree of aggregation ranges from structureless, through weak and moderate structure to strong structure. The shape of soil aggregates/peds is often describes as platy, prismatic/columnar, angular/subangular, or granular/crumb structure (Farming and Agriculture Organisation, FAO).

Soil structure refers to the way that soils are bound together. In a well-structured soil, water and air can move freely through cracks and pores. But a poor soil structure prevents water and air movement, and increases the risk of runoff (Defra, 2008). Soil structure can be improved by increasing soil organic matter (SOM) (Cranfield University, 2001).

The Game and Wildlife Conservation Trust's Allerton Project (Game and Wildlife Conservation Trust, 2020) has been involved in investigating the sustainable intensification of agriculture through different experiments. Some research has focused on moving away from conventional agricultural practice, with greater emphasis on no-tillage ('no-till'). One of the fields at the Allerton Project has not been ploughed for the last 14 years and the soil structure is visibly different compared to other soils on the farm. No-till systems can help improve soil fertility, create changes to the structure and properties of the soil due to the stability of the environment, and enhance soil biology. Over time the no-till field has had the highest yields compared to the conventional field equivalent on the farm.

Summary: In a well-structured soil, water and air can move freely through cracks and pores. But a poor soil structure prevents water and air movement, and increases the risk of runoff. Soil structure is improved when the land is uncultivated over time (no tillage), and when soil organic matter content (SOM) is increased through the accumulation of plant material, such has roots, in the soil. The aerobic (oxygenated) decomposition of SOM helps to bind soil particles together into aggregates (peds). Therefore, the conversion of land which is tilled for arable to long-term grassland (no tillage), such as that under solar PV arrays, improves soil structure over time.

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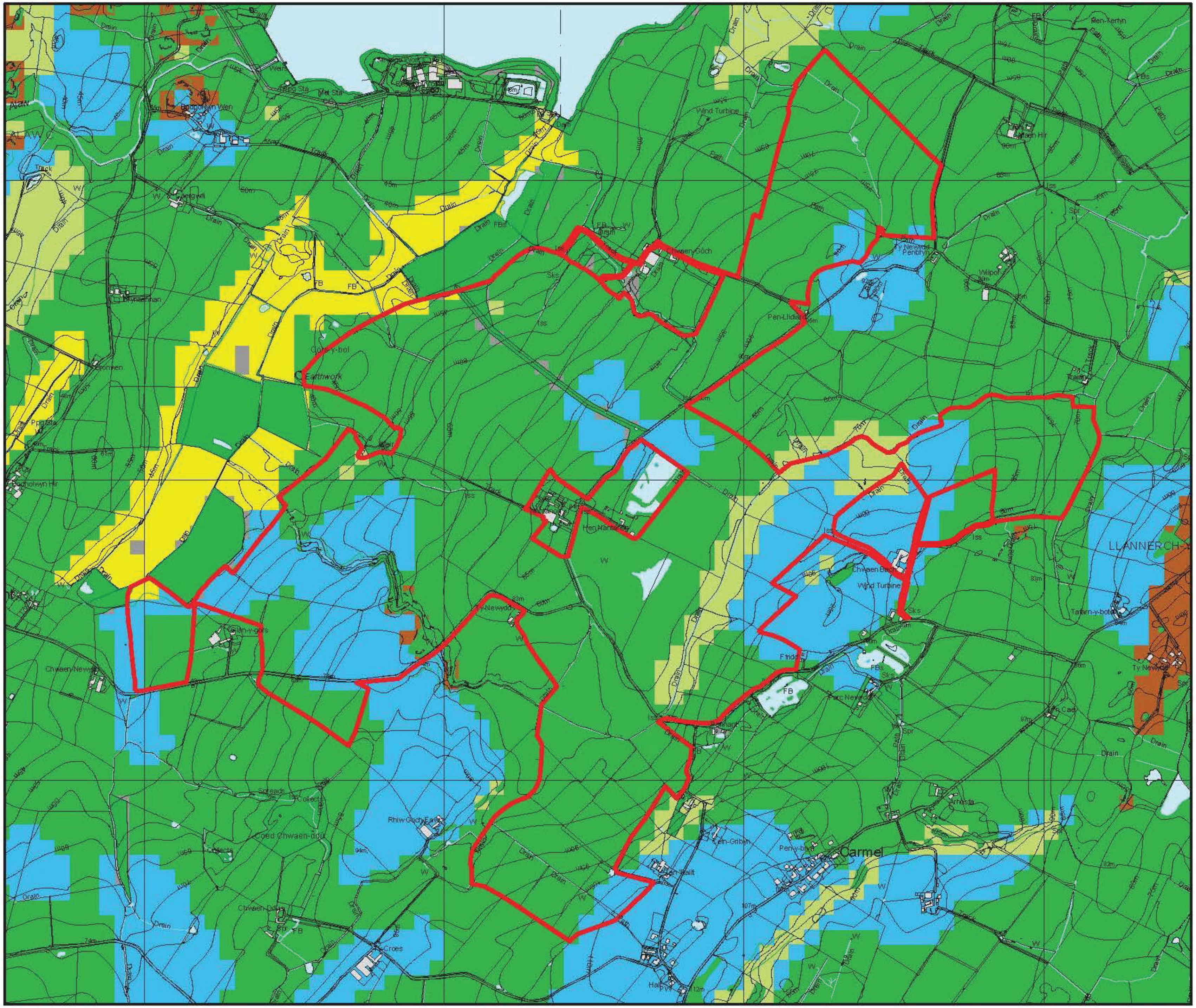
Appendix 5:
Welsh Government's Predictive ALC



The scaling of this drawing cannot be assured

Revision	Date	Drn	Ckd
-	-	-	-

LEGEND

- Site Boundary
- Existing Woodlands, Copses and Tree Belts ^
- Existing Scrub ^
- Existing Water Courses and Features ^
- Contours/Spot Heights (Metres AOD) ^
- Grade 2 - Good Quality Agricultural Land
- Grade 3a - Good to Moderate Quality Agricultural Land
- Grade 3b - Moderate Quality Agricultural Land
- Grade 4 - Poor Quality Agricultural Land
- Grade 5 - Very Poor Quality Agricultural Land
- Not Surveyed

Notes:
Source: Natural Resources Wales, Predictive Agricultural Land Classification

Project
Alaw Môn Solar Farm, Anglesey

Drawing Title
Predictive Agricultural Land Classification Map

Date	Scale	Drawn by	Check by
04.05.2021	1:12,500 @A3	ML	RD

Project No	Drawing No	Revision
32518	LNE-01	-

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