HELIOS RENEWABLE ENERGY PROJECT

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Environmental Statement Appendix 14.1: ALC of the Site

June 2024

AGRICULTURAL LAND CLASSIFICATION
HELIOS RENEWABLE ENERGY PROJECT

CLIENT: ENSO GREEN HOLDINGS D LIMITED
PROJECT: HELIOS RENEWABLE ENERGY PROJECT
DATE: 12TH JUNE 2023 – ISSUE 3
ISSUED BY: JAMES FULTON MRICS FAAV

CONTENTS

1. EXECUTIVE SUMMARY

1.1 This report assesses the Agricultural Land Classification (ALC) grading of 394.8-hectares, of land approximately 3 miles south of Selby, North Yorkshire.

1.2 The limiting factor is found variously to be topsoil texture; wetness, a combination of the climatic regime, soil water regime and texture of the top 25cm of soil; and droughtiness, based on crop adjusted available water as calculated from the soil and the climatic regime.

1.3 The land is graded as follows:

Grade 1:	**14.8 Ha**	**3.8%**
Grade 2:	**161.7 Ha**	**41.1%**
Grade 3a:	**206.5 Ha**	**52.4%**
Grade 3b:	**10.8 Ha**	**2.7%**
Total Agricultural Land surveyed:	**393.8 Ha**	**100%**
Non-Agricultural land in the survey area	**1 Ha**	

2. INTRODUCTION

2.1 Amet Property Ltd have been instructed by Enso Green Holdings D Limited to produce an Agricultural Land Classification (ALC) report on a 394.8-hectare survey area on land to the south and west of the village of Camblesforth and to the north of the village of Hirst. The survey area was originally 537.3-hectares but has been reduced as the project has progressed. The report is produced in support of a DCO application for a renewable energy project.

2.2 The report's author is James Fulton BSc (Hons) MRICS FAAV who has worked as a chartered surveyor, agricultural valuer, and agricultural consultant since 2004, has a degree in agriculture which included several modules on soils and over 10 years' experience in producing agricultural land classification reports.

2.3 The report is based on site visits conducted in March 2022. During site visits conditions ranged from full sunshine to overcast and showery. During the inspection 15 trial pits were dug to a depth of 120cm. In addition to the trial pits an augur was used to take a minimum of one sample per hectare on the survey area to a depth of 120cm with smaller trial pits at some of these locations to confirm soil structure and colour where it was not clear from the augur samples. A plan of augur points can be found at ***appendix 1***. The trial pit locations were selected as they were representative of the soils found on site. Where an augur was used to take samples soil structure was extrapolated from the locations at which trial pits were dug.

2.4 The land is level with altitudes of the sample points ranging from 4m to 9m AOD.

2.5 At the time of the survey the land use was in an arable rotation that appeared to include combinable crops and root crops.

2.6 Further information has been obtained from the MAGIC website, the Soil Survey of England and Wales, the British Geological Survey, the Meteorological Office and 1:250,000 series Agricultural Land Classification maps.

2.7 The collected information has been judged against the Ministry of Agriculture Fisheries and Food Agricultural Land Classification of England and Wales revised guidelines and criteria for grading the quality of agricultural land.

2.8 The principal factors influencing agricultural production are climate, site and soil and the interaction between them MAFF (1988)[1] & Natural England (2012)[2].

[1] MAFF (1988) - *Agricultural Land Classification of England and Wales. Revised guidelines and criteria for grading the quality of agricultural land*. MAFF Publications

[2] Natural England (2012) - *Technical Information Note 049 - Agricultural Land Classification: protecting the best and most versatile agricultural land*, Second Edition

3. PUBLISHED INFORMATION

3.1 The British Geological Survey 1:50,000 scale map identifies various bedrock and superficial geology across the survey area.

3.1.1 The bedrock geology of the block to the southwest of Camblesforth is recorded as Sherwood sandstone group – sandstone with superficial geology identified as Breighton sand formation – Sand on the majority of the survey area and small areas of Hemingborough glaciolacustrine formation – clay to the southeast of Hagg Bush House.

3.1.2 The bedrock geology of the block to the north of Hirst Courtney is recorded as Sherwood sandstone group – sandstone with superficial geology identified as Hemingborough glaciolacustrine formation – clay.

3.2 The national soils map identifies 5 soil associations within the survey area.

3.2.1 The majority of the land to the southwest of Camblesforth is identified as Everingham Association – Deep stoneless permeable fine sandy soils some with bleached subsurface horizon. The very eastern tip of the block is identified as Newport 1 Association – Deep well drained sandy and course loamy soils. A small area to the southeast of Hagg Bush House is identified as Sessay Association – Fine and course loamy often stoneless, permeable soils affected by groundwater.

3.2.2 The majority of the block to the north of Hirst Courtney is identified as Sessay Association – Fine and course loamy often stoneless, permeable soils affected by groundwater. A small area to the south of the block is identified as Wick 1 Association – Deep well drained course loamy and sandy soils locally over gravel.

3.3 The 1:250,000 series agricultural land classification mapping shows the majority of the survey area to be Grade 2 with some areas identified as Grade 3.

4. CLIMATE

4.1 Climate has a major, and in places overriding, influence on land quality affecting both the range of potential agricultural uses and the cost and level of production.

4.2 There is published agro-climatic data for England and Wales provided by the Meteorological Office, such data for the subject survey area is listed in the table below.

Figure 2.1 Agro-Climatic Data – Details at ***appendix 2***

Grid Reference	462626 426368
Altitude (ALT)	6.28
Average Annual Rainfall (AAR)	604.70
Accumulated Temperature - Jan to June (ATO)	1406.53
Duration of Field Capacity (FCD)	126.20
Moisture Deficit Wheat	109.77
Moisture Deficit Potatoes	101.59

4.3 The main parameters used in assessing the climatic limitation are average annual rainfall (AAR), as a measure of overall wetness; and accumulated temperature, as a measure of the relative warmth of a locality.

4.4 The Average Annual Rainfall and Accumulated Temperature provide no climatic limitation to grade.

4.5 With the exception of some very small areas shown to be in flood zone 1 the whole area is shown by the environment agency mapping to be in an area benefitting from flood defences. There was no evidence of any flooding within the survey area and nothing to suggest that it is a limiting factor to land grade.

5. STONINESS

5.1 There was no area within the survey where any stones were recorded. There were very occasional areas with a very small number of stones but not that would affect land grade.

6. GRADIENT

6.1 The survey area is all level with no area where gradient would affect land grade.

7. SOILS

7.1 While there is variation in the soils found in the block to the south and west of Camblesforth they largely conform to the soil association descriptions found in the national soils map. The topsoil at most sample points was identified as a loamy sand with areas of slightly lighter (sand) and heavier (sandy loam) topsoil which tended to be grouped together. Colours and structures of subsoils varied but sand was the dominant texture with some areas of loamy sand and occasionally sandy loam. There was one notable exception in the block in an area to the south of Stockshill Farm, Camblesforth where there was an area with sandy clay loam topsoil and clay subsoil very similar to soils within the Foggathorpe Association. The majority of sandy soils were identified by the lab tests as medium sand or loamy medium sand. The areas to the northeast of the site identified in field as sandy loam were found by the lab testing to be a fine sandy loam. The area identified on the soils map as Sessay Association had subsoils similar to the rest of the block but tended to have a sandy loam topsoil that at times verged on being a sandy clay loam which was noticeably heavier than the rest of the block.

7.2 The block to the north of Hirst Courtney largely consists of sandy clay loam or sandy loam topsoils, occasionally loamy sand topsoils with subsoils that are more variable than the rest of the survey area including generally medium to well-structured clay loam and sandy loam with loamy sand and sand at deeper horizons.

7.3 The soil topsoil texture can provide a limitation to land grade such that sand topsoil is not eligible to be graded grade 1, 2 or 3a and loamy sand topsoil is not eligible to be graded grade 1. This limitation is accounted for in the Table at ***appendix 4***.

INTERACTIVE FACTORS

8. WETNESS

8.1 An assessment of the wetness class of each sample point was made based on the flow chart at Figure 6 in the MAFF guidance. The wetness class and topsoil texture were then assessed against Table 6 of the MAFF guidance to determine the ALC grade according to wetness.

9. DROUGHTINESS

9.1 Droughtiness limits are defined in terms of moisture balance for wheat and potatoes using the formula:

MB (Wheat) = AP (Wheat) - MD (Wheat)

and

MB (Potatoes) = AP (Potatoes) - MD (Potatoes)

Where:
MB = Moisture Balance
AP = Crop Adjusted available water capacity
MD = Moisture deficit

9.2 Moisture deficit for wheat and potatoes can be found in the agro-climatic data and are as follows:

MD (Wheat) = 109.77
MD (Potatoes) = 101.59

9.3 A large proportion of the land is being used for root vegetable production with evidence of irrigation in use. The moisture balance limitation for potatoes has therefore been disregarded as it is assumed that potatoes and root crops will be irrigated and so it is only where the moisture balance for wheat provides a limitation to land grade that a limitation is said to exist. The moisture balance for each sample point can be found at ***appendix 4***.

10. AGRICULTURAL LAND CLASSIFICATION

10.1 The Agricultural Land Classification provides a framework for classifying land according to which its physical or chemical characteristics impose long-term limitations on agricultural use. The limitations can operate in one or more of four principal ways: they may affect the range of crops that can be grown, the level of yield, the consistency of yield and the cost of obtaining it.

10.2 The principle physical factors influencing agricultural production are climate, site and soil and the interactions between them which together form the basis for classifying land into one of 5 grades; grade 1 being of excellent quality and grade 5 being land of very poor quality. Grade 3 land, which constitutes approximately half of all agricultural land in the United Kingdom is divided into 2 subgrades – 3a and 3b. A full definition of all of the grades can be found at ***appendix 5.***

10.3 This assessment sets out that for several locations the topsoil texture limits the sand topsoil to grade 3b and the loamy sand topsoil to grade 2. At most sample points no one factor limits the grade of the land, the interaction between climate and soil result in a wetness assessment that limits the heavier land to grade 3a or grade 3b and a droughtiness assessment limits the lighter land to grade 2 or 3a. In some locations there is no limitation to land grade and so the land is Grade 1.

10.4 The MAFF guidance sets out that 'where soil and site conditions vary significantly and repeatedly over short distances and impose a practical constraint on cropping and land management a 'pattern' limitation is said to exist. To this end where there are individual sample points that ae different to the land around them and where these could only be farmed as a whole the area has been graded alike.

10.5 Taking into account all limitations the survey area is graded as follows:

Grade 1:	**14.8 Ha**	**3.8%**
Grade 2:	**161.7 Ha**	**41.1%**
Grade 3a:	**206.5 Ha**	**52.4%**
Grade 3b:	**10.8 Ha**	**2.7%**
Total Agricultural Land surveyed:	**393.8 Ha**	**100%**
Non-Agricultural land in the survey area	**1 Ha**	

A plan of the land grading can be found at ***appendix 6***.

Appendix 1 - Map of Sample Points

Survey Area

Project: Helios Renewable Energy Project
Client: Enso Green Holdings D Limited

APPENDIX 2 – AGRO-CLIMATIC DATA

Survey area Details: Helios Renewable Energy Project

Grid reference (centre of survey area): 462626 426368

Altitude: Mean 6.28

Climatic data from surrounding locations:

Grid Reference	ALT	AAR	LR_AAR	ASR	ATO	ATS	MDW	MDP	FCD
46004250	6	612	1.4	315	1408	2367	110	102	128
46004300	8	600	0.9	325	1404	2363	107	99	126
46504250	5	603	3.1	310	1408	2369	111	104	126
46504300	4	584	1.4	315	1407	2368	110	102	121

Altitude Adjusted

Grid Reference	AAR	ATO	FCD	MDW	MDP	Proximity Adjustment
46004250	612.39	1407.68	128.06	109.94	101.30	33.46%
46004300	598.45	1405.96	125.78	107.28	98.40	13.63%
46504250	606.97	1406.54	126.57	110.59	103.21	38.12%
46504300	587.19	1404.40	121.46	109.54	101.05	14.80%

Appendix 3 - Soil Sampling Information

		Topsoil						Subsoil 1						Subsoil 2					
Sample No	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
11	6	0-40	LS	10YR 2/1			WFSAB	40-60	SCL	10YR 3/2			WC PRISM	60-120	SCL	10YR 4/1		CO	M
16	5	0-40	S	10YR 2/1			G	50-90	LS	10YR 5/8		COB	WFAB	90-120	SL	10YR 6/1		CO	M
17	7	0-50	LS	10YR 2/1			WSAB	70-120	S	10YR 6/1		CO	WFAB						
18	7	0-50	LS	10YR 2/1			WSAB	70-120	S	10YR 6/1		CO	WFAB						
19	8	0-40	S	10YR 2/1			G	50-90	LS	10YR 5/8		COB	WFAB	90-120	SL	10YR 6/1		CO	M
25	5	0-50	LS	10YR 2/1			WSAB	70-120	S	10YR 6/1		CO	WFAB						
26	5	0-50	LS	10YR 2/1			WSAB	70-120	S	10YR 6/1		CO	WFAB						
27	6	0-50	LS	10YR 2/1			WSAB	70-120	S	10YR 6/1		CO	WFAB						
28	6	0-50	LS	10YR 2/1			WSAB	70-120	S	10YR 6/1		CO	WFAB						
29	6	0-50	LS	10YR 2/1			WSAB	70-120	S	10YR 6/1		CO	WFAB						
34	7	0-40	LS	10YR 2/1			G	50-120	LS	10YR 5/8		OB	WFAB						
35	6	0-50	LS	10YR 2/1			WSAB	70-120	S	10YR 6/1		CO	WFAB						
36	6	0-50	LS	10YR 2/1			WSAB	70-120	S	10YR 6/1		CO	WFAB						
37	5	0-50	LS	10YR 2/1			WSAB	70-120	S	10YR 6/1		CO	WFAB						
38	5	0-50	LS	10YR 2/1			WSAB	70-120	S	10YR 6/1		CO	WFAB						
39	5	0-50	LS	10YR 2/1			WSAB	70-120	S	10YR 6/1		CO	WFAB						
40	5	0-50	LS	10YR 2/1			WSAB	70-120	S	10YR 6/1		CO	WFAB						
46	7	0-40	LS	10YR 2/1			G	50-120	LS	10YR 5/8		OB	WFAB						
47	6	0-40	LS	10YR 2/1			G	50-120	LS	10YR 5/8		OB	WFAB						
48	6	0-40	LS	10YR 2/1			G	50-120	LS	10YR 5/8		OB	WFAB						
49	5	0-40	LS	10YR 2/1			G	50-120	LS	10YR 5/8		OB	WFAB						
50	5	0-50	LS	10YR 2/1			WSAB	70-120	S	10YR 6/1		CO	WFAB						
51	6	0-50	LS	10YR 2/1			WSAB	70-120	S	10YR 6/1		CO	WFAB						
57	6	0-45	LS	10YR 2/1			G	45-120	S	10YR 5/8			WFAB						
58	5	0-45	LS	10YR 2/1			G	45-120	S	10YR 5/8			WFAB						
59	5	0-45	LS	10YR 2/1			G	45-65	S	10YR 5/1			WFAB	65-120	S	10YR 5/8			SG
60	5	0-50	SL	10YR 2/1			WSAB	70-120	S	10YR 6/1		CO	WFAB						
61	6	0-50	SL	10YR 2/1			WSAB	70-120	S	10YR 6/1		CO	WFAB						
67	8	0-45	LS	10YR 2/1			G	45-120	S	10YR 5/1			WFAB						
68	8	0-45	LS	10YR 2/1			G	45-120	S	10YR 5/1			WFAB						
69	8	0-45	LS	10YR 2/1			G	45-120	S	10YR 5/8			WFAB						
70	8	0-45	LS	10YR 2/1			G	45-65	S	10YR 5/1			WFAB	65-120	S	10YR 5/8			SG
71	8	0-45	SL	10YR 2/1			G	45-120	S	10YR 5/1			SG						
72	9	0-45	SL	10YR 2/1			G	45-120	S	10YR 5/1			SG						
73	9	0-45	SL	10YR 2/1			G	45-120	S	10YR 5/1			SG						
74	6	0-45	SL	10YR 2/1			G	45-120	S	10YR 5/1			SG						
75	7	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
78	7	0-45	LS	10YR 2/1			G	45-70	S	10YR 5/6			SG	70-120	LS	10YR 5/1			WFAB
79	7	0-45	LS	10YR 2/1			G	45-70	S	10YR 5/6			SG	70-120	LS	10YR 5/1			WFAB
80	6	0-45	LS	10YR 2/1			G	45-70	S	10YR 5/6			SG	70-120	LS	10YR 5/1			WFAB
81	7	0-45	LS	10YR 2/1			G	45-70	S	10YR 5/6			SG	70-120	LS	10YR 5/1			WFAB
82	6	0-45	LS	10YR 2/1			G	45-120	S	10YR 5/6			SG						
83	6	0-45	LS	10YR 2/1			G	45-120	S	10YR 5/6			SG						
84	8	0-35	LS	10YR 4/2			WFSAB	35-120	S	10YR 5/8		COB	WFAB						
85	6	0-35	LS	10YR 4/2			WFSAB	35-120	S	10YR 5/8		COB	WFAB						
86	7	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
87	8	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
88	8	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
89	8	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
90	9	0-45	LS	10YR 2/1			WMSAB	45-120	S	10YR 5/2			SG						

		Topsoil						Subsoil 1						Subsoil 2					
Sample No	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
91	8	0-45	LS	10YR 2/1			WMSAB	45-120	S	10YR 5/2			SG						
92	9	0-45	LS	10YR 2/1			WMSAB	45-70	S	10YR 5/6			SG	70-120	S	10YR 5/2			SG
95	8	0-40	LS	10YR 4/2			G	40-70	SL	10YR 6/1		COB	WFAB	70-120	S	7.5YR 6/8			SG
96	9	0-90	LS	10YR 4/2			WFSAB	90	IMP										
97	8	0-35	LS	10YR 4/2			WFSAB	35-120	S	10YR 5/8		COB	WFAB						
98	7	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
99	8	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
100	8	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
101	8	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
102	8	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
103	8	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
104	8	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
105	7	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
106	6	0-45	LS	10YR 2/1			WMSAB	45-120	S	10YR 5/2			SG						
107	8	0-45	LS	10YR 2/1			WMSAB	45-120	S	10YR 5/2			SG						
108	8	0-45	LS	10YR 2/1			WMSAB	45-120	S	10YR 5/2			SG						
109	8	0-45	LS	10YR 2/1			WMSAB	45-120	S	10YR 5/2			SG						
110	7	0-45	LS	10YR 2/1			WMSAB	45-120	S	10YR 5/6			SG						
114	8	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
115	8	0-40	SL	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
116	8	0-40	SL	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
117	8	0-35	LS	10YR 4/2			WFSAB	35-120	S	10YR 5/8		COB	WFAB						
118	8	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
119	8	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
120	8	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
121	7	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
122	7	0-45	LS	10YR 2/1			G	45-120	S	10YR 5/6			SG						
123	6	0-30	HCL	10YR 4/2			WMAB	30-90	C	10YR 5/2		MOB	CAB	90-120	S	10YR 5/1		FO	SG
124	8	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
125	8	0-35	LS	10YR 4/2			WFSAB	35-120	S	10YR 5/8		COB	WFAB						
126	8	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
127	8	0-45	LS	10YR 2/1			WMSAB	45-120	S	10YR 5/2			SG						
128	8	0-45	LS	10YR 2/1			WMSAB	45-120	S	10YR 5/2			SG						
129	8	0-70	LS	10YR 2/1			WMSAB	70-120	S	10YR 5/2			SG						
130	8	0-45	LS	10YR 2/1			WMSAB	45-65	S	10YR 5/2			SG	65-120	S	10YR 5/6			SG
131	8	0-45	LS	10YR 2/1			WMSAB	45-120	S	10YR 5/6			SG						
136	6	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
137	7	0-40	SL	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
138	7	0-40	SL	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
139	8	0-35	LS	10YR 4/2			WFSAB	35-120	S	10YR 5/8		COB	WFAB						
140	8	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
141	8	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
142	8	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
143	7	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
144	8	0-45	LS	10YR 2/1			G	45-120	S	10YR 3/1			SG						
145	8	0-40	LS	10YR 2/1			G	40-70	S	10YR 5/1			SG	70-120	S	10YR 5/8			SG
146	8	0-40	LS	10YR 2/1			G	40-70	S	10YR 5/1			SG	70-120	S	10YR 5/8			SG
147	8	0-40	LS	10YR 2/1			G	40-120	S	10YR 5/1			SG						
148	8	0-45	LS	10YR 2/1			G	45-120	S	10YR 5/8			SG						
149	6	0-45	LS	10YR 2/1			WMSAB	45-120	S	10YR 5/6			SG						
150	8	0-45	LS	10YR 2/1			WMSAB	45-120	S	10YR 5/2			SG						

		Topsoil						Subsoil 1						Subsoil 2					
Sample No	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
151	8	0-45	LS	10YR 2/1			WMSAB	45-120	S	10YR 5/2			SG						
152	8	0-45	LS	10YR 2/1			WMSAB	45-120	S	10YR 5/2			SG						
154	8	0-45	LS	10YR 2/1			WMSAB	45-120	S	10YR 5/6			SG						
159	8	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
160	8	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
161	5	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
162	8	0-35	LS	10YR 4/2			WFSAB	35-120	S	10YR 5/8		COB	WFAB						
163	6	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
164	8	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
165	8	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
166	8	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
167	6	0-45	LS	10YR 2/1			WMSAB	45-120	S	10YR 5/6			SG						
168	6	0-45	LS	10YR 2/1			WMSAB	45-120	S	10YR 5/6			SG						
169	7	0-45	LS	10YR 2/1			G	45-120	S	10YR 5/8			SG						
170	8	0-45	LS	10YR 2/1			WMSAB	45-120	S	10YR 5/2			SG						
171	8	0-45	LS	10YR 2/1			WMSAB	45-120	S	10YR 5/2			SG						
172	8	0-45	LS	10YR 2/1			WMSAB	45-120	S	10YR 5/2			SG						
173	8	0-45	LS	10YR 2/1			WMSAB	45-120	S	10YR 5/2			SG						
174	9	0-45	LS	10YR 2/1			WMSAB	45-120	S	10YR 5/6			SG						
175	9	0-45	LS	10YR 2/1			WMSAB	45-120	S	10YR 5/6			SG						
178	8	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
179	8	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
180	8	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
181	8	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
182	8	0-50	SL	10YR 4/2			WMAB	50-120	S	10YR 6/1		COB	WCAB						
183	8	0-50	SL	10YR 4/2			WMAB	50-120	S	10YR 6/1		COB	WCAB						
184	8	0-50	SL	10YR 4/2			WMAB	50-120	S	10YR 6/1		COB	WCAB						
185	7	Non-Agricultural																	
186	6	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
187	6	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
188	5	0-45	LS	10YR 2/1			WMSAB	45-120	S	10YR 5/6			SG						
189	5	0-45	LS	10YR 2/1			WMSAB	45-70	S	10YR 5/1			SG	70-120	S	10YR 5/6			SG
190	6	0-45	LS	10YR 2/1			WMSAB	45-120	S	10YR 5/1			SG						
191	5	0-45	LS	10YR 2/1			WMSAB	45-120	S	10YR 5/1			SG						
192	6	0-45	LS	10YR 2/1			WMSAB	45-70	S	10YR 5/1			SG	70-120	S	10YR 5/6			SG
193	6	0-45	LS	10YR 2/1			WMSAB	45-70	S	10YR 5/1			SG	70-120	S	10YR 5/6			SG
194	5	0-45	LS	10YR 2/1			WMSAB	45-120	S	10YR 5/6			SG						
198	8	0-40	SL	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
199	7	0-40	SL	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
200	6	0-40	SL	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
201	6	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
202	6	0-50	SL	10YR 4/2			WMAB	50-120	S	10YR 6/1		COB	WCAB						
203	7	0-50	SL	10YR 4/2			WMAB	50-120	S	10YR 6/1		COB	WCAB						
204	8	0-50	SL	10YR 4/2			WMAB	50-120	S	10YR 6/1		COB	WCAB						
205	8	Non-Agricultural																	
206	8	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
207	8	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
208	5	0-45	SL	10YR 2/1			WMSAB	45-70	S	10YR 5/2			SG	70-120	S	10YR 5/6			SG
209	6	0-45	SL	10YR 2/1			WMSAB	45-120	S	10YR 5/6			SG						
210	7	0-45	SL	10YR 2/1			WMSAB	45-70	S	10YR 5/2			SG	70-120	S	10YR 5/6			SG
211	7	0-45	LS	10YR 2/1			WMSAB	45-120	S	10YR 5/6			SG						

		Topsoil						Subsoil 1						Subsoil 2					
Sample No	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
215	8	0-50	SL	10YR 4/2			WMAB	50-120	S	10YR 6/1		COB	WCAB						
216	8	0-40	SL	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
217	7	0-50	SL	10YR 4/2			WMAB	50-120	S	10YR 6/1		COB	WCAB						
218	7	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
219	7	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
220	6	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
221	8	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
222	8	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
223	7	0-45	LS	10YR 2/1			WMSAB	45-120	S	10YR 5/2			SG						
224	7	0-45	LS	10YR 2/1			WMSAB	45-120	S	10YR 5/2			SG						
228	6	0-50	SL	10YR 4/2			WMAB	50-120	S	10YR 6/1		COB	WCAB						
229	7	0-50	SL	10YR 4/2			WMAB	50-120	S	10YR 6/1		COB	WCAB						
230	7	0-40	LS	10YR 4/2			G	40-120	S	10YR 6/1		CO	WFAB						
231	6	0-45	SL	10YR 2/1			WMSAB	45-120	S	10YR 5/2			SG						
232	6	0-45	SL	10YR 2/1			WMSAB	45-120	S	10YR 5/2			SG						
233	5	0-45	SL	10YR 2/1			WMSAB	45-60	S	10YR 3/2			SG	60-120	S	10YR 5/2			SG
234	5	0-45	SL	10YR 2/1			WMSAB	45-120	S	10YR 3/2			SG						
235	6	0-50	SL	10YR 4/2			WMAB	50-120	S	10YR 6/1		COB	WCAB						
236	8	0-45	SL	10YR 2/1			WMSAB	45-120	S	10YR 5/2			SG						
237	7	0-45	SL	10YR 2/1			WMSAB	45-120	S	10YR 5/2			SG						
238	7	0-45	SL	10YR 2/1			WMSAB	45-120	S	10YR 5/2			SG						
239	6	0-45	SL	10YR 2/1			WMSAB	45-120	S	10YR 5/2			SG						
240	5	0-45	SL	10YR 2/1			WMSAB	45-120	S	10YR 5/2			SG						
241	4	0-45	SL	10YR 2/1			WMSAB	45-120	S	10YR 5/2			SG						
242	6	0-45	SL	10YR 2/1			WMSAB	45-120	S	10YR 5/2			SG						
243	7	0-45	SL	10YR 2/1			WMSAB	45-120	S	10YR 5/2			SG						
244	8	0-45	SL	10YR 2/1			WMSAB	45-60	S	10YR 5/2			SG	60-120	S	10YR 5/6			SG
245	7	0-45	SL	10YR 2/1			WMSAB	45-60	S	10YR 5/2			SG	60-120	S	10YR 5/6			SG
246	7	0-50	LS	10YR 4/2			G	50-70	LS	10YR 6/1		FO	WFAB	70-120	LS	10YR 6/1		FO	SG
247	6	0-50	LS	10YR 4/2			G	50-70	LS	10YR 6/1		FO	WFAB	70-120	LS	10YR 6/1		FO	SG
248	6	0-35	C	10YR 4/1			WCAB	35-120	C	10YR 5/1		MO	C PRISM						
249	7	0-35	C	10YR 4/1			WCAB	35-120	C	10YR 5/1		MO	C PRISM						
250	6	0-35	C	10YR 4/1			WCAB	35-120	C	10YR 5/1		MO	C PRISM						
251	6	0-45	SL	10YR 2/1			WMSAB	45-120	S	10YR 5/6			SG						
252	6	0-45	SL	10YR 2/1			WMSAB	45-60	S	10YR 5/2			SG	60-120	S	10YR 5/6			SG
253	6	0-45	SL	10YR 2/1			WMSAB	45-60	S	10YR 5/2			SG	60-120	S	10YR 5/6			SG
254	5	0-50	SL	10YR 4/2			G	50-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
255	5	0-50	SCL	10YR 4/2			G	50-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
256	5	0-35	SCL	10YR 4/1			WFSAB	35-120	C	10YR 5/1		MO	C PRISM						
257	5	0-35	SCL	10YR 4/1			WFSAB	35-120	C	10YR 5/1		MO	C PRISM						
258	6	0-40	SL	10YR 4/2			G	40-120	LS	10YR 5/2		FO	SG						
259	7	0-50	LS	10YR 4/2			G	50-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
260	7	0-50	LS	10YR 4/2			G	50-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
261	7	0-50	SCL	10YR 4/2			G	50-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
262	6	0-50	LS	10YR 4/2			G	50-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
264	5	0-50	LS	10YR 4/2			G	50-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
265	5	0-50	LS	10YR 4/2			G	50-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
266	6	0-50	LS	10YR 4/2			G	50-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
267	6	0-50	LS	10YR 4/2			G	50-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
270	5	0-50	LS	10YR 4/2			G	50-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
271	5	0-50	LS	10YR 4/2			G	50-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG

		Topsoil						Subsoil 1						Subsoil 2					
Sample No	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
272	5	0-50	LS	10YR 4/2			G	50-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
273	5	0-40	LS	10YR 4/2			G	40-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
276	5	0-40	LS	10YR 4/2			G	40-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
277	5	0-50	LS	10YR 4/2			G	50-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
278	7	0-50	LS	10YR 4/2			G	50-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
279	7	0-50	LS	10YR 4/2			G	50-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
280	7	0-40	LS	10YR 4/2			G	40-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
281	6	0-40	LS	10YR 4/2			G	40-60	LS	10YR 6/1		FO	WFAB	60-120	S	10YR 6/1		FO	SG
284	5	0-40	LS	10YR 4/2			G	40-60	LS	10YR 6/1		FO	WFAB	60-120	S	10YR 6/1		FO	SG
285	5	0-50	LS	10YR 4/2			G	50-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
286	6	0-50	LS	10YR 4/2			G	50-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
287	6	0-40	LS	10YR 4/2			G	40-60	LS	10YR 6/1		FO	WFAB	60-120	S	10YR 6/1		FO	SG
288	7	0-40	LS	10YR 4/2			G	40-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
289	5	0-40	LS	10YR 4/2			G	40-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
290	5	0-40	LS	10YR 4/2			G	40-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
291	5	0-40	LS	10YR 4/2			G	40-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
292	5	0-50	LS	10YR 4/2			G	50-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
293	5	0-50	LS	10YR 4/2			G	50-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
294	5	0-40	LS	10YR 4/2			G	40-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
295	5	0-40	LS	10YR 4/2			G	40-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
296	5	0-40	LS	10YR 4/2			G	40-60	LS	10YR 6/1		FO	WFAB	60-120	LS	10YR 6/1		FO	SG
297	5	0-50	LS	10YR 4/1			WFSAB	50-60	SC	10YR 5/1		MO	CAB	60-120	S	10YR 5/1			
298	5	0-50	LS	10YR 4/2			G	50-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
299	5	0-50	LS	10YR 4/2			G	50-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
303	7	0-40	SL	10YR 4/2			G	40-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
304	6	0-40	SL	10YR 4/2			G	40-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
305	5	0-50	SL	10YR 4/2			G	50-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
306	5	0-40	LS	10YR 4/2			G	40-60	LS	10YR 6/1		FO	WFAB	60-120	S	10YR 6/1		FO	SG
307	5	0-40	LS	10YR 4/2			G	40-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
311	5	0-40	SL	10YR 4/2			G	40-70	LS	10YR 6/1		FO	WFAB	70-120	LS	10YR 6/1		FO	SG
312	5	0-40	SL	10YR 4/2			G	40-70	LS	10YR 6/1		FO	WFAB	70-120	S	10YR 6/1		FO	SG
313	5	0-40	LS	10YR 4/2			G	40-60	LS	10YR 6/1		FO	WFAB	60-120	S	10YR 6/1		FO	SG
314	5	0-40	LS	10YR 4/2			G	40-70	LS	10YR 6/1		FO	WFAB	70-120	LS	10YR 6/1		FO	SG
315	5	0-40	LS	10YR 4/2			G	40-70	LS	10YR 6/1		FO	WFAB	70-120	LS	10YR 6/1		FO	SG
316	5	0-40	LS	10YR 4/2			G	40-70	LS	10YR 6/1		FO	WFAB	70-120	LS	10YR 6/1		FO	SG
317	5	0-50	S	10YR 4/1			G	50-120	S	7.5YR 5/6			SG						
318	5	0-50	S	10YR 4/1			G	50-120	S	7.5YR 5/6			SG						
319	5	0-50	S	10YR 4/1			G	50-120	S	7.5YR 5/6			SG						
320	6	0-50	S	10YR 4/1			G	50-120	S	7.5YR 5/6			SG						
321	7	0-50	S	10YR 4/1			G	50-120	S	7.5YR 5/6			SG						
322	5	0-40	LS	10YR 4/2			G	40-70	LS	10YR 6/1		FO	WFAB	70-120	LS	10YR 6/1		FO	SG
323	5	0-40	LS	10YR 4/2			G	40-70	LS	10YR 6/1		FO	WFAB	70-120	LS	10YR 6/1		FO	SG
324	5	0-40	LS	10YR 4/2			G	40-70	LS	10YR 6/1		FO	WFAB	70-120	LS	10YR 6/1		FO	SG
325	5	0-50	S	10YR 4/1			G	50-120	S	7.5YR 5/6			SG						
326	6	0-50	S	10YR 4/1			G	50-120	S	7.5YR 5/6			SG						
327	6	0-50	S	10YR 4/1			G	50-120	S	7.5YR 5/6			SG						
328	7	0-50	S	10YR 4/1			G	50-120	S	7.5YR 5/6			SG						
329	8	0-50	S	10YR 4/1			G	50-120	S	7.5YR 5/6			SG						
330	5	0-70	LS	10YR 3/2			WFSAB	70-120	LS	5YR 4/6			WFAB						
331	5	0-40	LS	10YR 4/2			G	40-70	LS	10YR 6/1		FO	WFAB	70-120	LS	10YR 6/1		FO	SG
332	5	0-40	LS	10YR 4/2			G	40-60	LS	10YR 6/1		FO	WFAB	60-120	LS	10YR 6/1		FO	SG

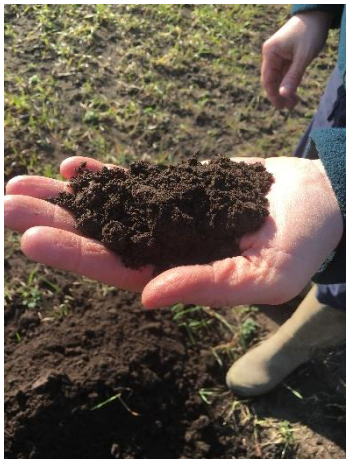
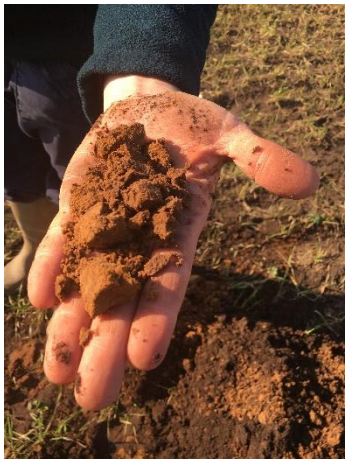
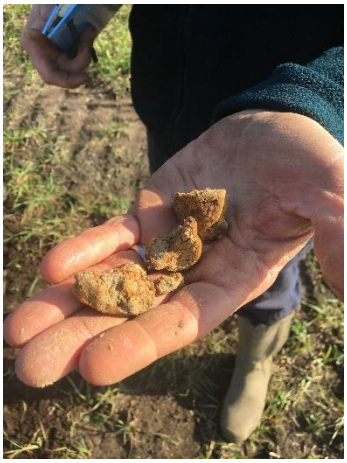
		Topsoil						Subsoil 1						Subsoil 2					
Sample No	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
333	5	0-40	LS	10YR 4/2			G	40-60	LS	10YR 6/1		FO	WFAB	60-120	LS	10YR 6/1		FO	SG
334	5	0-50	LS	10YR 3/2			WFSAB	50-120	LS	10YR 6/1		CO	SG						
335	5	0-40	SCL	10YR 4/2			WMSAB	40-60	CL	5YR 5/6			CAB	60-120	S	10YR 5/1		CO	SG
336	5	0-40	LS	10YR 4/2			G	40-70	LS	10YR 6/1		FO	WFAB	70-120	LS	10YR 6/1		FO	SG
337	6	0-40	LS	10YR 4/2			WFSAB	40-120	S	7.5YR 5/6		MO	SG						
338	5	0-40	SL	10YR 3/2			WMAB	40-80	SL	10YR 5/3		COB	WMAB	80-120	LS	10YR 5/1		COB	WFSAB
339	5	0-40	SL	10YR 3/2			WMAB	40-80	SL	10YR 5/3		CO	WMAB	80-120	LS	10YR 5/1		CIO	WFSAB
340	5	0-45	SL	10YR 3/2			WMAB	45-80	LS	10YR 5/1		COB	WFSAB	80-120	C	10YR 5/1		CO	M
341	5	0-70	LS	10YR 3/2			WFSAB	70-120	LS	5YR 4/6			WFAB						
342	5	0-70	LS	10YR 3/2			WFSAB	70-120	LS	5YR 4/6			WFAB						
343	8	0-70	LS	10YR 3/2			WFSAB	70-120	LS	5YR 4/6			WFAB						
344	5	0-45	SL	10YR 3/2			WMAB	45-70	SL	10YR 5/1		COB	WMAB	70-120	LS	10YR 5/1		COB	WFSAB
345	5	0-40	LS	10YR 3/2			WFSAB	40-80	LS	10YR 4/3		COB	WFSAB	80-120	SCL	10YR 5/1		COB	WMAB
346	5	0-40	SCL	10YR 4/2			WMSAB	40-60	CL	5YR 5/6			CAB	60-120	S	10YR 5/1		CO	SG
347	5	0-40	SCL	10YR 4/2			WMSAB	40-120	S	7.5YR 5/6		MO	SG						
348	5	0-40	LS	10YR 4/2			WFSAB	40-120	S	7.5YR 5/6		MO	SG						
349	5	0-40	LS	10YR 4/2			WFSAB	40-120	S	7.5YR 5/6		MO	SG						
351	5	0-40	SCL	10YR 3/2			WMAB	40-70	SL	10YR 5/1		COB	WMAB	70-120	LS	10YR 5/3		CO	WFSAB
352	5	0-40	SCL	10YR 3/2			WMAB	40-70	SCL	10YR 5/1		COB	WMAB	70-120	SL	10YR 4/3		COB	WMAB
353	5	0-40	SL	10YR 3/2			WMAB	40-70	SCL	10YR 5/1		COB	WMAB	70-120	LS	10YR 5/1		COB	WFSAB
354	5	0-40	SL	10YR 3/2			WMAB	40-70	SCL	10YR 5/1		COB	WMAB	70-120	LS	10YR 5/1		COB	WFSAB
355	6	0-50	SL	10YR 3/2			WMAB	70-120	LS	10YR 5/1		MO	WFAB						
356	5	0-50	SL	10YR 3/2			WMAB	70-120	LS	10YR 5/1		MO	WFAB						
357	5	0-40	SCL	10YR 4/2			WMSAB	40-60	C	5YR 5/6		FO	CAB	60-120	S	10YR 5/1		CO	SG
358	5	0-40	SCL	10YR 4/2			WMSAB	40-60	C	5YR 5/6		FO	CAB	60-120	S	10YR 5/1		CO	SG
359	5	0-40	SCL	10YR 4/2			WMSAB	40-120	C	10YR 5/1		FO	C PRISM						
360	5	0-40	SCL	10YR 4/2			WMSAB	40-120	C	10YR 5/1		FO	C PRISM						
361	7	0-40	SCL	10YR 4/2			WMSAB	40-120	C	10YR 5/1		FO	C PRISM						
362	7	0-40	LS	10YR 3/2			WCSAB	40-120	LS	10YR 5/1		CO	WFAB						
363	5	0-40	LS	10YR 3/2			WCSAB	40-120	LS	10YR 5/1		CO	WFAB						
364	5	0-40	SCL	10YR 3/2			WMAB	40-75	SCL	10YR 5/1		COB	WMAB	75-120	SL	10YR 5/1		COB	WMAB
365	5	0-40	SCL	10YR 3/2			WMAB	40-75	C	10YR 5/1		COB	CAB	75-120	SL	10YR 5/3		COB	WMAB
366	5	0-40	SL	10YR 3/2			WMAB	40-75	SL	10YR 5/1		COB	WMAB	75-120	LS	10YR 4/3		COB	WFSAB
367	5	0-40	SL	10YR 3/2			WMAB	40-80	SL	10YR 5/1		COB	WMAB	80-120	SL	10YR 4/3		COB	WMAB
368	5	0-40	SL	10YR 3/2			WMAB	40-120	SL	10YR 3/2		COB	WMAB						
369	5	0-40	SL	10YR 3/2			WMAB	40-120	SL	10YR 3/2		COB	WMAB						
374	5	0-40	LS	10YR 3/2			WFSAB	40-120	LS	10YR 5/1		MO	WFAB						
375	5	0-40	LS	10YR 3/2			WFSAB	40-120	LS	10YR 5/1		MO	WFAB						
376	5	0-40	SL	10YR 4/2			WMSAB	40-120	LS	10YR 5/1		MO	CAB						
377	5	0-50	SL	10YR 3/2			WMAB	70-120	LS	10YR 5/1		MO	WFAB						
378	5	0-40	SCL	10YR 4/2			WMSAB	40-120	CL	10YR 5/1			C PRISM						
379	5	0-40	SCL	10YR 4/2			WMSAB	40-120	CL	10YR 5/1			C PRISM						
380	5	0-40	SCL	10YR 4/2			WMSAB	40-120	CL	10YR 5/1			C PRISM						
381	5	0-30	SL	10YR 3/2			WCSAB	30-120	LS	10YR 5/1		CO	WFAB						
382	5	0-40	LS	10YR 3/2			WCSAB	40-80	LS	5YR 4/4			WFAB	80-120	S	5YR 4/6			SG
383	5	0-40	SCL	10YR 3/2			WMAB	40-70	SCL	10YR 5/1		COB	WMAB	70-120	LS	10YR 5/3		COB	WFSAB
384	5	0-40	SCL	10YR 3/2			WMAB	40-75	SCL	10YR 5/1		COB	WMAB	75-120	LS	10YR 5/3		COB	WFSAB
385	5	0-40	SCL	10YR 3/2			WMAB	40-75	SCL	10YR 5/3		COB	WMAB	75-120	LS	10YR 5/3		COB	WFSAB
386	5	0-40	SCL	10YR 3/2			WMAB	40-65	SCL	10YR 5/3		COB	WMAB	65-120	LS	10YR 5/3		COB	WFSAB
387	5	0-40	SL	10YR 3/2			WMAB	40-80	SL	10YR 5/1		COB	WMAB	80-120	LS	10YR 5/1		COB	WFSAB
388	5	0-40	SL	10YR 3/2			WMAB	40-80	SL	10YR 5/3		COB	WMAB	80-120	SCL	10YR 5/1		COB	WMAB

		Topsoil						Subsoil 1						Subsoil 2					
Sample No	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
389	5	0-40	SL	10YR 3/2			WMAB	40-120	LS	10YR 5/1		COB	WFSAB						
394	5	0-40	LS	10YR 3/2			WFSAB	40-120	LS	10YR 5/1		MO	WFAB						
395	5	0-40	LS	10YR 3/2			WFSAB	40-120	LS	10YR 5/1		MO	WFAB						
396	5	0-40	SL	10YR 4/2			WMSAB	40-120	LS	10YR 5/1		MO	CAB						
397	8	0-40	SCL	10YR 4/2			WMSAB	40-120	CL	10YR 5/1			C PRISM						
398	5	0-40	SCL	10YR 4/2			WMSAB	40-120	CL	10YR 5/1			C PRISM						
399	5	0-40	LS	10YR 3/2			WCSAB	40-120	LS	10YR 5/1		CO	WFAB						
400	5	0-40	LS	10YR 3/2			WCSAB	40-120	LS	10YR 5/1		CO	WFAB						
401	5	0-40	LS	10YR 3/2			WCSAB	40-80	LS	5YR 4/4			WFAB	80-120	S	5YR 4/6			SG
403	5	0-40	SL	10YR 3/2			WMAB	40-70	SL	10YR 5/1		COB	WMAB	70-120	SL	10YR 5/3		COB	WMAB
404	5	0-40	SL	10YR 3/2			WMAB	40-70	SL	10YR 5/1		COB	WMAB	70-120	SL	10YR 5/3		COB	WMAB
405	5	0-40	SCL	10YR 3/2			WMAB	40-120	SL	10YR 5/1		CO	WMAB						
406	5	0-40	SCL	10YR 3/2			WMAB	40-75	SL	10YR 5/1		COB	WMAB	75-120	SL	10YR 4/3		COB	WMAB
407	5	0-40	SL	10YR 3/2			WMAB	40-65	LS	10YR 4/3		COB	WFSAB	65-120	LS	10YR 3/3		COB	WFSAB
408	5	0-40	SL	10YR 3/2			WMAB	40-80	SL	10YR 5/3		COB	WMAB	80-120	LS	10YR 5/1		COB	WFSAB
409	5	0-40	SL	10YR 3/2			WMAB	40-120	LS	10YR 5/1		COB	WFSAB						
410	6	0-40	SL	10YR 3/2			WMAB	40-120	LS	10YR 5/1		COB	WFSAB						
415	5	0-40	LS	10YR 3/2			WFSAB	40-120	LS	10YR 5/1		MO	WFAB						
416	5	0-40	LS	10YR 3/2			WFSAB	40-120	LS	10YR 5/1		MO	WFAB						
417	5	0-40	SL	10YR 4/2			WMSAB	40-90	SL	10YR 5/2		FO	WC PRISM	90-120	ZSL	10YR 5/2		MO	M
418	5	0-40	SL	10YR 4/2			WMSAB	40-120	LS	10YR 5/1		MO	CAB						
421	7	0-40	SCL	10YR 4/2			WMSAB	40-120	CL	10YR 5/1			C PRISM						
422	5	0-40	LS	10YR 3/2			WCSAB	40-120	LS	10YR 5/1		CO	WFAB						
423	5	0-40	LS	10YR 3/2			WCSAB	40-120	LS	10YR 5/1		CO	WFAB						
424	5	0-40	LS	10YR 3/2			WCSAB	40-80	LS	5YR 4/4			WFAB	80-120	S	5YR 4/6			SG
425	5	0-40	LS	10YR 3/2			WCSAB	40-80	LS	5YR 4/4			WFAB	80-120	S	5YR 4/6			SG
427	5	0-40	SCL	10YR 3/2			WMAB	40-120	LS	10YR 5/3		COB	WFSAB						
428	5	0-40	SCL	10YR 3/2			WMAB	40-120	LS	10YR 5/3		COB	WFSAB						
429	5	0-40	SCL	10YR 3/2			WMAB	40-80	SCL	10YR 5/1		COB	WMAB	80-120	LS	10YR 5/3		COB	WFSAB
430	5	0-40	SL	10YR 3/2			WMAB	40-65	SCL	10YR 5/1		COB	WMAB	65-120	LS	10YR 4/3		COB	WFSAB
431	5	0-40	SL	10YR 3/2			WMAB	40-65	LS	10YR 4/3		COB	WFSAB	65-120	LS	10YR 3/3		COB	WFSAB
432	5	0-40	LS	10YR 3/2			WMAB	40-120	SCL	10YR 4/3		CO	WMAB						
433	5	0-40	LS	10YR 3/2			WMAB	40-120	SCL	10YR 4/3		CO	WMAB						
434	5	0-40	LS	10YR 3/2			WMSAB	40-80	LS	10YR 5/1		CO	WMAB	80-120	SCL	10YR 5/1		CO	WC PRISM
435	8	0-40	SL	10YR 3/2			WMSAB	40-70	LS	10YR 4/3		CO	WMAB	70-120	LS	10YR 5/6		CO	M
436	8	0-40	SL	10YR 3/2			WMSAB	40-60	LS	10YR 4/3		FO	WMAB	60-80	SCL	10YR 5/1		CO	WC PRISM
437	5	0-50	SL	10YR 3/2			WMSAB	50-60	LS	10YR 5/1		FO	WMAB	60-120	LS	10YR 4/3		CO	WMAB
441	5	0-40	LS	10YR 4/2			WFSAB	40-80	SL	10YR 5/2		MOB	CAB	80-120	SCL	10YR 5/1		MO	SG
442	5	0-40	LS	10YR 4/2			WFSAB	40-80	SL	10YR 5/2		MOB	CAB	80-120	SCL	10YR 5/1		MO	SG
450	5	0-40	SCL	10YR 3/2			WMAB	40-75	SCL	10YR 4/3		COB	WMAB	75-120	SCL	10YR 5/1		COB	WMAB
451	5	0-40	SCL	10YR 3/2			WMAB	40-75	SCL	10YR 4/3		COB	WMAB	75-120	SCL	10YR 5/1		COB	WMAB
452	5	0-45	SCL	10YR 3/2			WMAB	45-120	SC	10YR 5/1		CO	CAB						
453	5	0-40	SCL	10YR 3/2			WMAB	40-75	SCL	10YR 5/1		COB	WMAB	75-120	LS	10YR 5/1		COB	WFSAB
454	5	0-40	SL	10YR 3/2			WMAB	40-65	LS	10YR 4/3		COB	WFSAB	65-120	LS	10YR 3/3		COB	WFSAB
455	5	0-40	LS	10YR 3/2			WMAB	40-70	SCL	10YR 4/3		CO	WMAB	70-120	SCL	10YR 5/1		CO	WMAB
456	8	0-40	LS	10YR 3/2			WMAB	40-120	SCL	10YR 4/3		CO	WMAB						
457	5	0-40	LS	10YR 3/2			WMSAB	40-60	LS	10YR 4/3		FO	WMAB	60-70	SCL	10YR 5/1		CO	WC PRISM
458	5	0-40	SL	10YR 3/2			WMSAB	40-60	LS	10YR 4/3		CO	WMAB	60-75	LS	10YR 5/1		CO	WMAB
459	5	0-40	SL	10YR 3/2			WMSAB	40-70	LS	10YR 4/3		CO	WMAB	70-120	LS	10YR 5/6		CO	M
460	6	0-40	LS	10YR 3/2			WMSAB	40-120	LS	10YR 5/1		MO	WMAB						
461	5	0-40	LS	10YR 3/2			WMSAB	40-70	LS	10YR 5/1		MO	WMAB	70-120	S	10YR 5/6			M

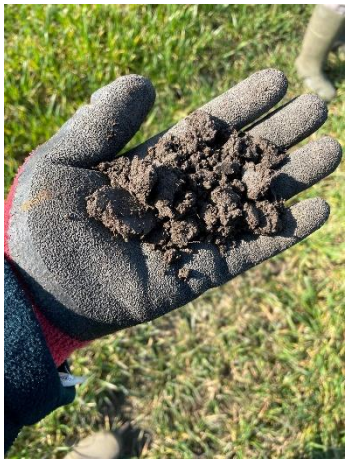
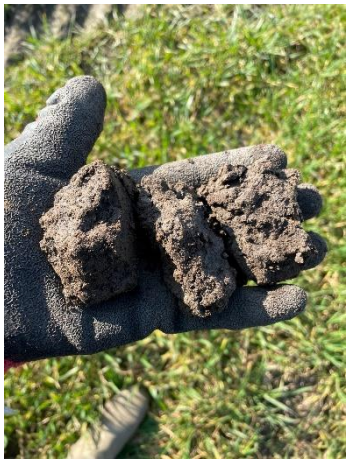
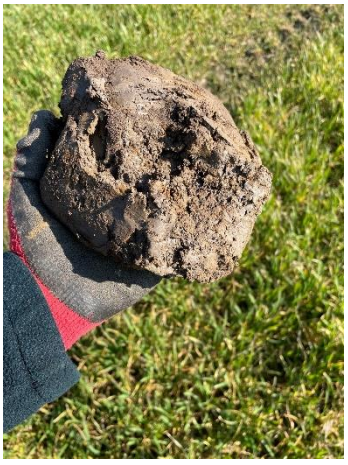
		Topsoil						Subsoil 1						Subsoil 2					
Sample No	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
462	6	0-40	LS	10YR 3/2			WMSAB	40-70	LS	10YR 4/3		MO	WMAB	70-120	LS	10YR 5/6		FO	WMAB
463	6	0-40	LS	10YR 3/2			WMSAB	40-120	LS	10YR 5/1		FO	WMAB						
464	5	0-40	LS	10YR 3/2			WMSAB	40-120	LS	10YR 5/1		FO	WMAB						
465	5	0-40	SL	10YR 4/2			WFSAB	40-50	S	10YR 6/4		FO	CAB	80-120	S	10YR 5/1		MO	SG
472	5	0-40	SCL	10YR 3/2			WMAB	40-120	LS	10YR 5/3		COB	WFSAB						
473	7	0-40	SCL	10YR 3/2			WMAB	40-75	SL	10YR 5/1		COB	WMAB	75-120	LS	10YR 5/1		COB	WFSAB
474	7	0-40	SCL	10YR 3/2			WMAB	40-75	SL	10YR 5/1		COB	WMAB	75-120	SL	10YR 5/1		COB	WMAB
475	5	0-40	SL	10YR 3/2			WMAB	40-80	LS	10YR 4/3		CO	WFSAB	80-120	SCL	10YR 5/1		CO	WMAB
476	6	0-40	LS	10YR 3/2			WMAB	40-70	SCL	10YR 4/3		CO	WMAB	70-120	SCL	10YR 5/1		CO	WMAB
477	6	0-40	LS	10YR 3/2			WMSAB	40-80	LS	10YR 4/3		FO	WMAB	80-120	LS	10YR 5/1		CO	WMAB
478	5	0-40	LS	10YR 3/2			WMAB	40-60	LS	10YR 4/3		FO	WMAB	60-120	SCL	10YR 5/1		CO	WC PRISM
479	5	0-40	LS	10YR 3/2			WMSAB	40-70	LS	10YR 4/3		CO	WMAB	70-120	LS	10YR 5/1		CO	WMAB
480	5	0-40	LS	10YR 3/2			WMSAB	40-75	LS	10YR 4/3		CO	WMAB	75-70	LS	10YR 5/1		CO	WMAB
481	5	0-70	LS	10YR 3/2			WMSAB	70-120	LS	10YR 5/1		MO	WMAB						
482	5	0-40	LS	10YR 3/2			WMSAB	40-120	LS	10YR 5/1		MO	WMAB						
483	5	0-40	LS	10YR 3/2			WMSAB	40-70	LS	10YR 5/1		MO	WMAB	70-120	S	10YR 5/6		M	
484	8	0-50	SL	10YR 3/2			WMSAB	50-120	LS	10YR 5/1		CO	WMAB						
485	5	0-50	SL	10YR 3/2			WMSAB	50-120	LS	10YR 5/1		CO	WMAB						
491	6	0-40	LS	10YR 3/2			WFSAB	40-80	SCL	10YR 4/3		CO	WMAB	80-120	SCL	10YR 5/1		CO	WMAB
492	5	0-40	SCL	10YR 3/2			WMAB	40-80	C	10YR 5/1		COB	CAB	80-120	LS	10YR 5/1		COB	WFSAB
493	5	0-40	SCL	10YR 3/2			WMAB	40-80	SCL	10YR 5/1		COB	WMAB	80-120	LS	10YR 5/1		COB	WFSAB
494	5	0-40	LS	10YR 3/2			WMAB	40-70	SCL	10YR 4/3		CO	WMAB	70-120	SCL	10YR 5/1		CO	WMAB
495	5	0-40	SL	10YR 3/2			WMAB	40-70	SCL	10YR 4/3		CO	WMAB	70-120	LS	10YR 5/1		CO	WMAB
496	5	0-40	LS	10YR 3/2			WSAB	40-120	LS	10YR 4/3		FO	WMAB						
497	6	0-40	LS	10YR 3/2			WMSAB	40-70	LS	10YR 4/3		CO	WMAB	70-120	LS	10YR 5/1		CO	WMAB
498	6	0-40	SL	10YR 3/2			WMAB	40-60	LS	10YR 5/1		CO	WMAB	60-90	LS	10YR 4/3		MO	WMAB
499	8	0-40	SL	10YR 3/2			WMSAB	40-60	LS	10YR 4/3		CO	WMAB	60-120	LS	10YR 5/1		CO	WMAB
500	5	0-40	LS	10YR 4/2			WFSAB	40-80	SL	10YR 5/2		MOB	CAB	80-120	SCL	10YR 5/1		MO	SG
504	6	0-40	LS	10YR 3/2			WMAB	40-80	SCL	10YR 4/3		CO	WMAB	80-120	SCL	10YR 5/1		CO	WMAB
505	5	0-40	SCL	10YR 2/2			WMAB	40-75	SCL	10YR 5/1		CO	WMAB	75-120	LS	10YR 5/1		CO	WFSAB
506	5	0-40	LS	10YR 3/2			WMAB	40-80	SCL	10YR 5/3		CO	WMAB	80-120	SCL	10YR 5/2		CO	WMAB
507	5	0-50	LS	10YR 3/2			WMAB	50-90	SCL	10YR 5/6		CO	WMAB	90-120	SCL	10YR 5/1		CO	WMAB
508	5	0-40	LS	10YR 3/2			WMSAB	40-80	LS	10YR 5/1		CO	WMAB	80-120	LS	10YR 5/6			WMAB
509	5	0-40	LS	10YR 3/2			WMSAB	40-120	LS	10YR 4/3		FO	WMAB						
510	5	0-40	LS	10YR 3/2			WMSAB	40-70	LS	10YR 4/3		CO	WMAB	70-120	LS	10YR 5/1		CO	WMAB
511	6	0-40	LS	10YR 4/2			WFSAB	40-80	SL	10YR 5/2		MOB	CAB	80-120	SCL	10YR 5/1		MO	SG
512	8	0-40	SL	10YR 3/2			WMAB	40-80	SCL	10YR 4/3		CO	WMAB	80-120	C	10YR 5/1		CO	M
513	7	0-40	LS	10YR 3/2			WMAB	40-80	SCL	10YR 4/3		CO	WMAB	80-120	SCL	10YR 5/1		CO	WMAB
514	6	0-40	LS	10YR 3/2			WSAB	40-70	LS	10YR 5/1		FO	WMAB	70-120	SCL	10YR 5/1		CO	C PRISM
515	6	0-40	LS	10YR 3/2			WSAB	40-70	LS	10YR 5/1		FO	WMAB	70-120	SCL	10YR 5/1		CO	C PRISM
516	8	0-40	LS	10YR 3/2			WMSAB	40-70	LS	10YR 4/3		CO	WMAB	70-120	LS	10YR 5/6		CO	M
517	7	0-40	SL	10YR 4/2			WFSAB	40-80	SL	10YR 5/2		MOB	CAB	80-120	S	10YR 6/4			WCAB

Appendix 3b – Trial Pit Descriptions

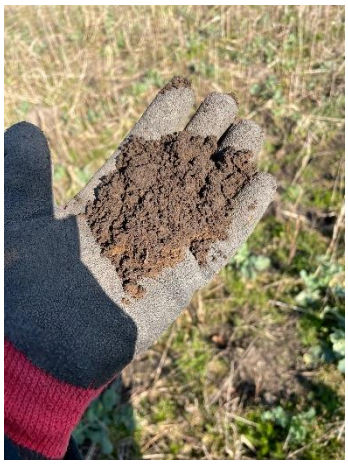
Sample Point No. 4	
Horizon 1	0-50 Black stoneless sand with a granular structure
Horizon 2	40-100 Yellowish brown stoneless sand with a weak fine angular blocky structure
Horizon 3	100-120 Light greyish brown stoneless sandy loam with common ochreous mottles and a weak medium angular blocky structure
Pictures	

Horizon 1	Horizon 2	Horizon 3
		

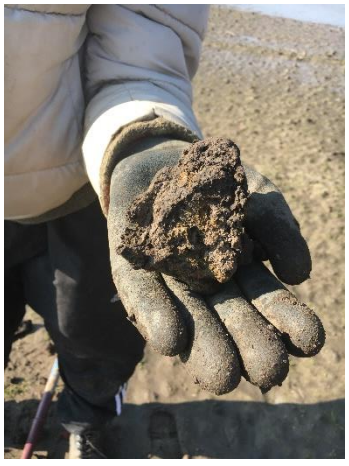
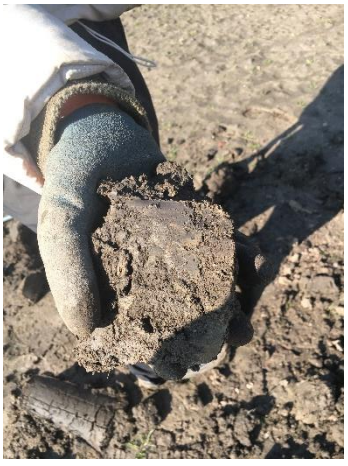
Sample Point No. 11	
Horizon 1	0-40 Black stoneless non calcareous loamy sand with a weak fine subangular blocky structure
Horizon 2	40-60 Very dark greyish brown stoneless sandy clay loam with a weak course prismatic structure
Horizon 3	60-120 dark grey stoneless sandy clay loam with common ochreous mottles and a massive structure
Pictures	

Horizon 1	Horizon 2	Horizon 3
		

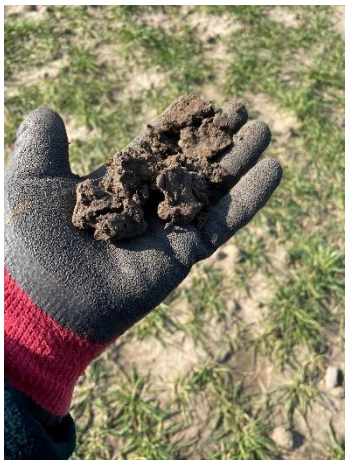
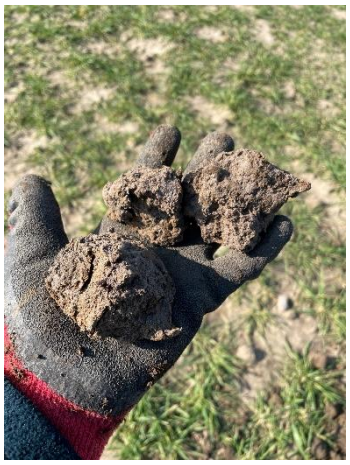
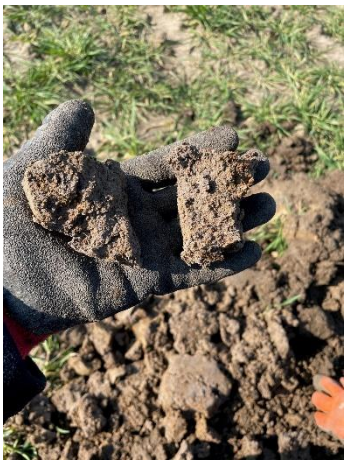
Sample Point No. 34	
Horizon 1	0-40 Black stoneless loamy sand with a granular structure
Horizon 2	40-120 Yellowish brown stoneless sand with a weak fine angular blocky structure
Horizon 3	
Pictures	

Horizon 1	Horizon 2	Horizon 3
		

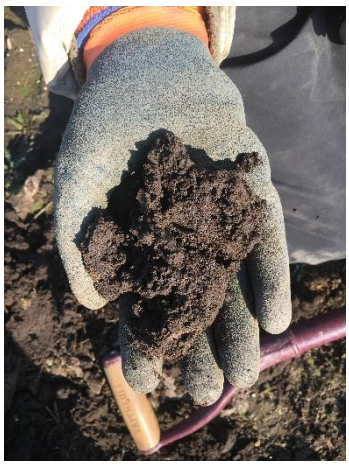
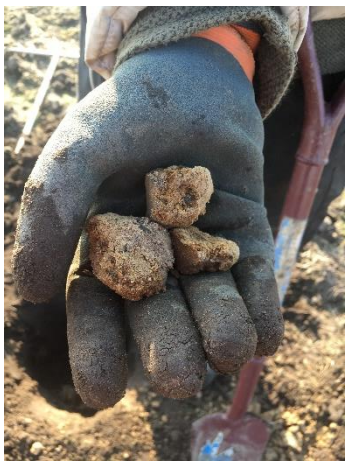
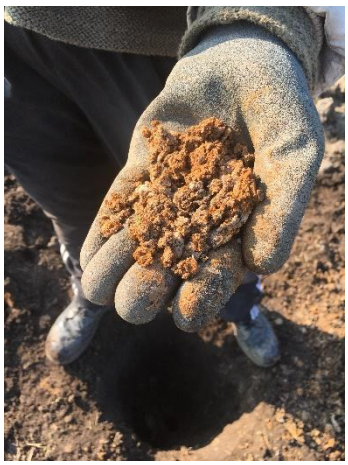
Sample Point No. 62	
Horizon 1	0-40 Black stoneless heavy clay loam with a weak medium angular blocky structure
Horizon 2	40-60 Black stoneless clay with many ochreous and black mottles and a course angular blocky structure
Horizon 3	60-120 Black stoneless clay with common ochreous mottles and a course prismatic structure
Pictures	

Horizon 1	Horizon 2	Horizon 3
		

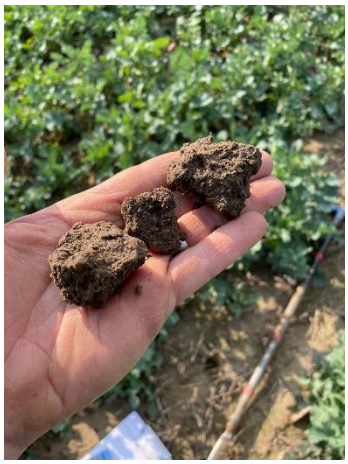
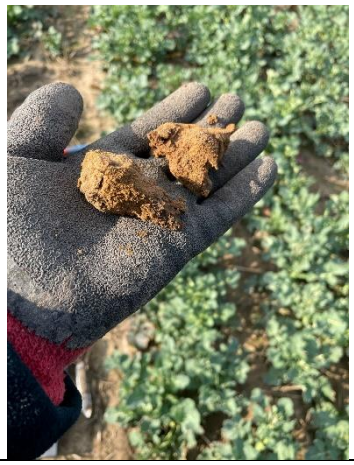
Sample Point No. 93	
Horizon 1	0-40 Dark greyish brown stoneless sandy loam with a weak fine subangular blocky structure
Horizon 2	40-70 Grey stoneless sandy clay loam with common ochreous mottles and a weak course subangular blocky structure
Horizon 3	70-120 Grey stoneless clay with common ochreous mottles and a weak course prismatic structure
Pictures	

Horizon 1	Horizon 2	Horizon 3
		

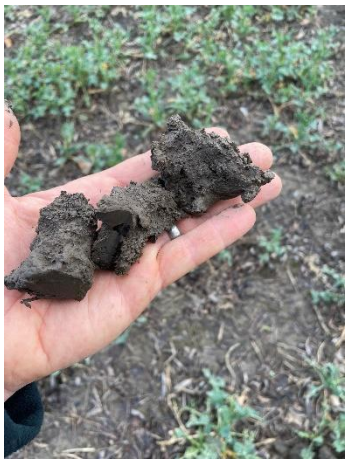
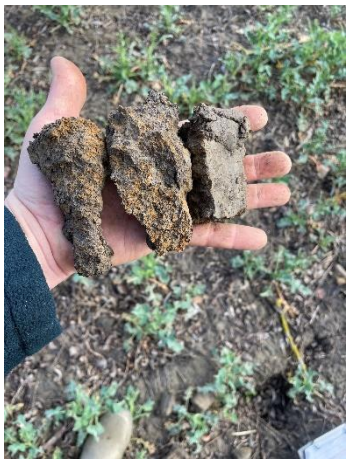
Sample Point No. 132	
Horizon 1	0-45 Black stoneless loamy sand with a weak fine subangular blocky structure
Horizon 2	45-70 Grey stoneless sandy clay loam with many ochreous and black mottles and a weak fine subangular blocky structure
Horizon 3	70-120 Grey sand with a single grained structure
Pictures	

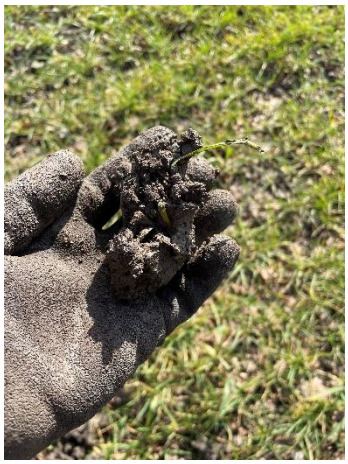
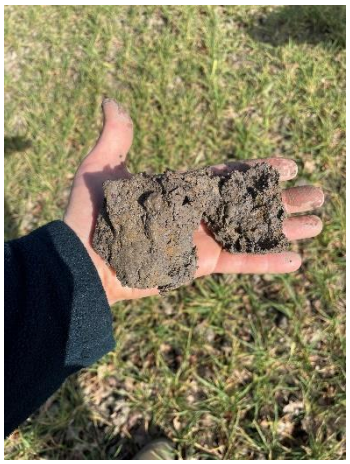
Horizon 1	Horizon 2	Horizon 3
		

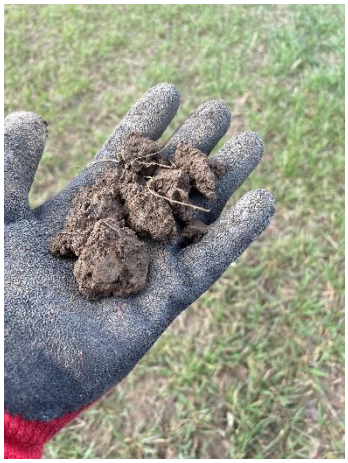
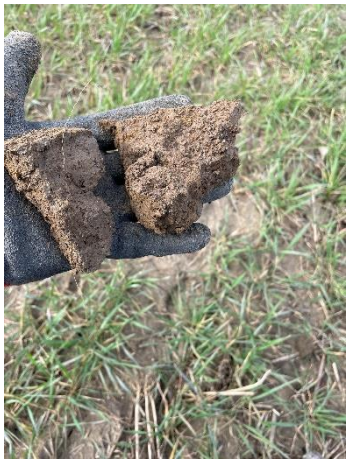
Sample Point No. 235	
Horizon 1	0-50 Dark greyish brown stoneless sandy loam with a weak medium angular blocky structure
Horizon 2	50-120 Grey sand with common ochreous and black mottles and a weak course angular blocky structure
Horizon 3	
Pictures	

Horizon 1	Horizon 2	Horizon 3
		

Sample Point No. 249	
Horizon 1	0-35 Dark grey clay with a weak course angular blocky structure
Horizon 2	35-120 Grey clay with many ochreous mottles and a course prismatic structure
Horizon 3	
Pictures	

Horizon 1	Horizon 2	Horizon 3
		

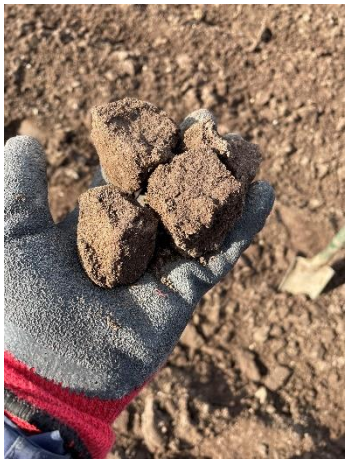
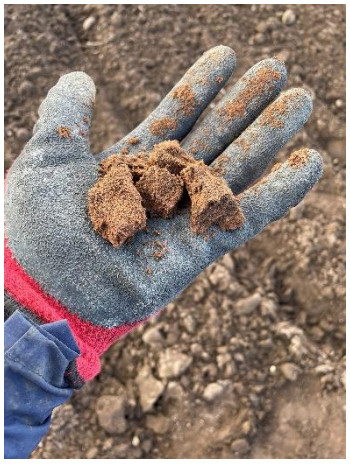
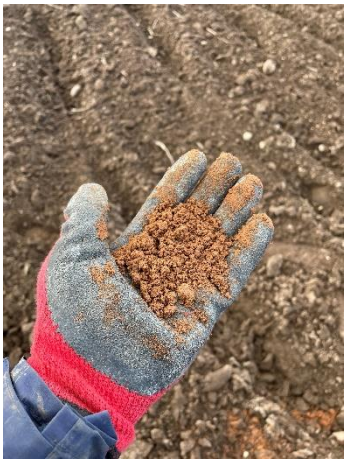
Sample Point No. 359		
Horizon 1	0-40 Dark greyish brown sandy clay loam with a weak medium subangular blocky structure	
Horizon 2	40-120 Grey clay with few ochreous mottles and a course prismatic structure	
Horizon 3		
Pictures		
Horizon 1 	Horizon 2 	Horizon 3

Sample Point No. 417		
Horizon 1	0-40 Dark greyish brown sandy loam with a weak medium subangular blocky structure	
Horizon 2	40-90 Greyish brown sandy loam with few ochreous mottles and a weak course prismatic structure	
Horizon 3	90-120 Greyish brown sandy silty loam with many ochreous mottles and a massive structure	
Pictures		
Horizon 1 	Horizon 2 	Horizon 3

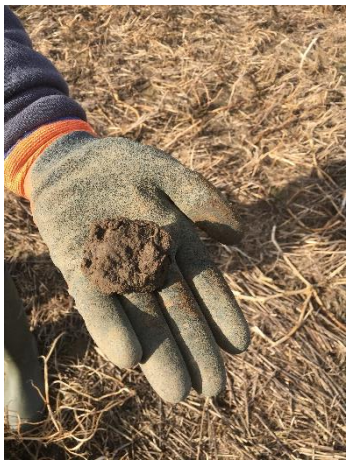
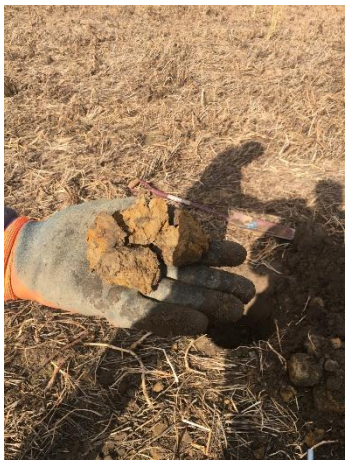
Sample Point No. 405	
Horizon 1	0-40 Very dark greyish brown stoneless non calcareous sandy clay loam with a weak medium angular blocky structure
Horizon 2	40-120 Grey stoneless sandy loam with common ochreous mottles and a weak medium angular blocky structure
Horizon 3	
Pictures	

Horizon 1	Horizon 2	Horizon 3
		

Sample Point No. 425	
Horizon 1	0-40 Very dark greyish brown loamy sand with a weak course subangular blocky structure
Horizon 2	40-80 Reddish brown loamy sand with a weak fine angular blocky structure
Horizon 3	80-120 Yellowish red sand with a single grained structure
Pictures	

Horizon 1	Horizon 2	Horizon 3
		

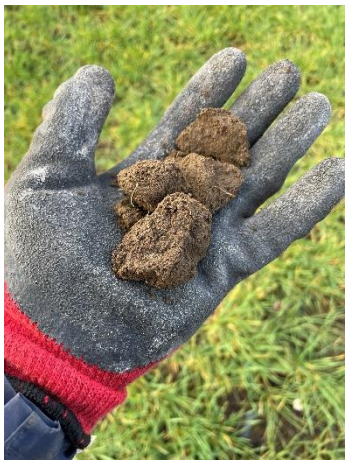
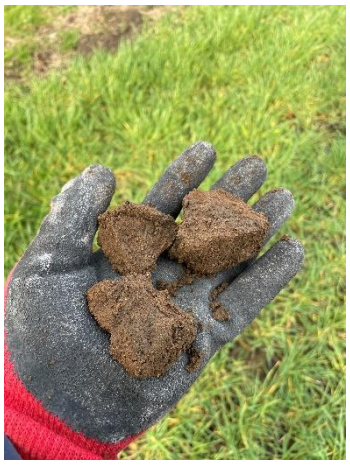
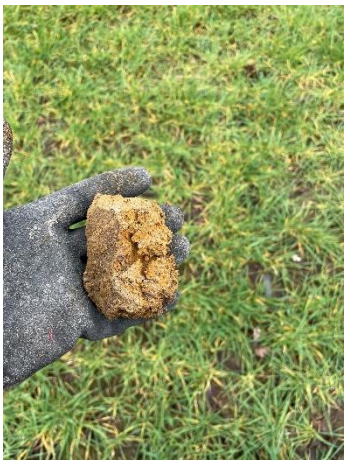
Sample Point No. 432	
Horizon 1	0-40 Very dark greyish brown loamy sand with a weak medium angular blocky structure
Horizon 2	40-120 Brown sandy clay loam with common ochreous mottles and weak medium angular blocky structure
Horizon 3	
Pictures	

Horizon 1	Horizon 2	Horizon 3
		

Sample Point No. 452	
Horizon 1	0-40 Very dark greyish brown stoneless non calcareous sandy clay loam with a weak medium angular blocky structure
Horizon 2	40-120 Grey stoneless sandy clay with common ochreous mottles and a coarse angular blocky structure
Horizon 3	
Pictures	

Horizon 1	Horizon 2	Horizon 3
		

Sample Point No. 478	
Horizon 1	0-40 Very dark greyish brown loamy sand with a weak medium angular blocky structure
Horizon 2	40-60 Brown loamy sand with few ochreous mottles and weak medium angular blocky structure
Horizon 3	60-120 Grey sandy clay loam with common ochreous mottles and a weak course prismatic structure
Pictures	

Horizon 1	Horizon 2	Horizon 3
		

ANALYTICAL REPORT

Report Number	**18050-22**	**W250**	**AMET PROPERTY**	**Client**	**HELIOS RENEWABLE**
Date Received	**17-MAY-2022**		**HENWICK BARN**		**ENERGY PROJECTS**
Date Reported	**27-MAY-2022**		**BULWICK**		
Project	**SOIL LATE REQUEST**		**CORBY**		
Reference	**HELIOS RENEWABLE**		**NORTHANTS**		
Order Number			**NN17 3DU**		

Laboratory Reference		**SOIL563580**	**SOIL563581**	**SOIL563582**	**SOIL563583**	**SOIL563584**	**SOIL563585**				
Sample Reference		**209**	**144**	**207**	**4**	**61**	**258**				
Determinand	**Unit**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**				
Coarse Sand 2.00-0.63mm	% w/w	2	2	2	2	1	0				
Medium Sand 0.63-0.212mm	% w/w	9	40	37	44	21	19				
Fine Sand 0.212-0.063mm	% w/w	67	39	44	43	49	58				
Silt 0.063-0.002mm	% w/w	11	10	10	7	17	12				
Clay <0.002mm	% w/w	11	9	7	4	12	11				
Organic Matter LOI	% w/w	2.4	2.8	3.3	3.9	3.6	3.0				
Textural Class **		fSL	LmS	LmS	mS	fSL	fSL				

Notes

Analysis Notes

The sample submitted was of adequate size to complete all analysis requested.
The results as reported relate only to the item(s) submitted for testing.
The results are presented on a dry matter basis unless otherwise stipulated.

** Please see the attached document for the definition of textural classes.

Reported by *Myles Nicholson*

Natural Resource Management, a trading division of Cawood Scientific Ltd.
Coopers Bridge, Braziers Lane, Bracknell, Berkshire, RG42 6NS
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ANALYTICAL REPORT

Report Number	**18051-22**	**W250**	**AMET PROPERTY**
Date Received	**17-MAY-2022**		**HENWICK BARN**
Date Reported	**27-MAY-2022**		**BULWICK**
Project	**SOIL LATE REQUEST**		**CORBY**
Reference	**HELIOS SOLAR**		**NORTHANTS**
Order Number			**NN17 3DU**

Laboratory Reference		**SOIL563586**	**SOIL563587**	**SOIL563588**	**SOIL563589**	**SOIL563590**	**SOIL563591**				
Sample Reference		**425**	**458 SUBSOIL 3**	**525**	**455**	**494**	**255**				
Determinand	**Unit**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**				
Coarse Sand 2.00-0.63mm	% w/w	2	0	3	1	8	1				
Medium Sand 0.63-0.212mm	% w/w	56	24	28	33	59	36				
Fine Sand 0.212-0.063mm	% w/w	25	61	36	43	16	19				
Silt 0.063-0.002mm	% w/w	8	6	17	12	8	21				
Clay <0.002mm	% w/w	9	9	16	11	9	23				
Organic Matter LOI	% w/w	3.2	1.4	3.2	2.7	2.5	4.5				
Textural Class **		LmS	LfS	mSL	mSL	LmS	SCL				

Notes

Analysis Notes

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The results as reported relate only to the item(s) submitted for testing.
The results are presented on a dry matter basis unless otherwise stipulated.

** Please see the attached document for the definition of textural classes.

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ANALYTICAL REPORT

Report Number	**18052-22**	**W250**	**AMET PROPERTY**
Date Received	**17-MAY-2022**		**HENWICK BARN**
Date Reported	**27-MAY-2022**		**BULWICK**
Project	**SOIL LATE REQUEST**		**CORBY**
Reference	**HELIOS SOLAR**		**NORTHANTS**
Order Number			**NN17 3DU**

Laboratory Reference		**SOIL563592**	**SOIL563593**
Sample Reference		**359**	**78**
Determinand	**Unit**	**SOIL**	**SOIL**
Coarse Sand 2.00-0.63mm	% w/w	1	1
Medium Sand 0.63-0.212mm	% w/w	16	36
Fine Sand 0.212-0.063mm	% w/w	35	46
Silt 0.063-0.002mm	% w/w	22	10
Clay <0.002mm	% w/w	26	7
Organic Matter LOI	% w/w	4.7	1.8
Textural Class **		SCL	LmS

Notes

Analysis Notes

The sample submitted was of adequate size to complete all analysis requested.
The results as reported relate only to the item(s) submitted for testing.
The results are presented on a dry matter basis unless otherwise stipulated.

** Please see the attached document for the definition of textural classes.

Reported by

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ANALYTICAL REPORT

Report Number	**18053-22**	**W250**	**AMET PROPERTY**
Date Received	**17-MAY-2022**		**HENWICK BARN**
Date Reported	**27-MAY-2022**		**BULWICK**
Project	**SOIL LATE REQUEST**		**CORBY**
Reference	**AMET PROPERTY**		**NORTHANTS**
Order Number			**NN17 3DU**

Laboratory Reference		**SOIL563594**	**SOIL563595**
Sample Reference		**SELBY 369**	**SELBY 474**
Determinand	**Unit**	**SOIL**	**SOIL**
Coarse Sand 2.00-0.63mm	% w/w	1	2
Medium Sand 0.63-0.212mm	% w/w	35	33
Fine Sand 0.212-0.063mm	% w/w	44	35
Silt 0.063-0.002mm	% w/w	10	16
Clay <0.002mm	% w/w	10	14
Organic Matter LOI	% w/w	1.3	3.7
Textural Class **		LmS/mSL	mSL

Notes

Analysis Notes

The sample submitted was of adequate size to complete all analysis requested.
The results as reported relate only to the item(s) submitted for testing.
The results are presented on a dry matter basis unless otherwise stipulated.

Document Control

** Please see the attached document for the definition of textural classes.

Reported by

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ADAS (UK) Textural Class Abbreviations

The texture classes are denoted by the following abbreviations:

Class	Code
Sand	S
Loamy sand	LS
Sandy loam	SL
Sandy Silt loam	SZL
Silt loam	ZL
Sandy clay loam	SCL
Clay loam	CL
Silt clay loam	ZCL
Clay	C
Silty clay	ZC
Sandy clay	SC

For the *sand, loamy sand, sandy loam* and *sandy silt loam* classes the predominant size of sand fraction may be indicated by the use of prefixes, thus:

- vf Very Fine (more than 2/3's of sand less than 0.106 mm)
- f Fine (more than 2/3's of sand less than 0.212 mm)
- c Coarse (more than 1/3 of sand greater than 0.6 mm)
- m Medium (less than 2/3's fine sand and less than 1/3 coarse sand).

The subdivisions of *clay loam* and *silty clay loam classes* according to clay content are indicated as follows:

- M medium (less than 27% clay)
- H heavy (27-35% clay)

Organic soils i.e. those with an organic matter greater than 10% will be preceded with a letter O.

Peaty soils i.e. those with an organic matter greater than 20% will be preceded with a letter P.

Appendix 4 - Soil limiting factors wetness and droughtiness assesment

Sample No	Altitude	Topsoil Depth	Texture	ALC Grade by Topsoil Texture	Wetness Assesment Depth to SPL	Depth to Gley	Wetness Class	Grade According to Wetness	Droughtiness Assessment MB Wheat	MB Potato	Grade According to Droughtiness	Grade by most limiting factor
11	6	0-40	LS	2			I	1	27.24	-4.59	2	2
16	5	0-40	S	3b			I	1	4.24	-35.59	3a	3b
17	7	0-50	LS	2			I	1	-9.76	-15.09	3a	3a
18	7	0-50	LS	2			I	1	-9.76	-15.09	3a	3a
19	8	0-40	S	3b			I	1	4.24	-35.59	3a	3b
25	5	0-50	LS	2			I	1	-9.76	-15.09	3a	3a
26	5	0-50	LS	2			I	1	-9.76	-15.09	3a	3a
27	6	0-50	LS	2			I	1	-9.76	-15.09	3a	3a
28	6	0-50	LS	2			I	1	-9.76	-15.09	3a	3a
29	6	0-50	LS	2			I	1	-9.76	-15.09	3a	3a
34	7	0-40	LS	2			I	1	17.24	-13.59	2	2
35	6	0-50	LS	2			I	1	-9.76	-15.09	3a	3a
36	6	0-50	LS	2			I	1	-9.76	-15.09	3a	3a
37	5	0-50	LS	2			I	1	-9.76	-15.09	3a	3a
38	5	0-50	LS	2			I	1	-9.76	-15.09	3a	3a
39	5	0-50	LS	2			I	1	-9.76	-15.09	3a	3a
40	5	0-50	LS	2			I	1	-9.76	-15.09	3a	3a
46	7	0-40	LS	2			I	1	17.24	-13.59	2	2
47	6	0-40	LS	2			I	1	17.24	-13.59	2	2
48	6	0-40	LS	2			I	1	17.24	-13.59	2	2
49	5	0-40	LS	2			I	1	17.24	-13.59	2	2
57	6	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
58	5	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
59	5	0-45	LS	2			I	1	-15.26	-22.09	3a	3a
60	5	0-40	SL	1			I	1	0.24	-12.59	3a	3a
61	6	0-40	SL	1			I	1	0.24	-12.59	3a	3a
67	8	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
68	8	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
69	8	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
70	8	0-45	LS	2			I	1	-15.26	-22.09	3a	3a
71	8	0-40	SL	1			I	1	0.24	-12.59	3a	3a
72	9	0-40	SL	1			I	1	0.24	-12.59	3a	3a
73	9	0-40	SL	1			I	1	0.24	-12.59	3a	3a
78	7	0-45	LS	2			I	1	7.24	-25.59	2	2
79	7	0-45	LS	2			I	1	7.24	-25.59	2	2
80	6	0-45	LS	2			I	1	7.24	-25.59	2	2
81	7	0-45	LS	2			I	1	7.24	-25.59	2	2
82	6	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
83	6	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
84	8	0-35	LS	2			I	1	-18.76	-24.09	3a	3a
85	6	0-35	LS	2			I	1	-18.76	-24.09	3a	3a
86	7	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
87	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
88	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
89	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
90	9	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
91	8	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
92	9	0-45	LS	2			I	1	-12.76	-22.09	3a	3a
95	8	0-40	LS	2			I	1	4.24	-4.59	3a	3a
96	9	0-90	LS	2			I	1	3.24	-10.59	3a	3a
97	8	0-35	LS	2			I	1	-18.76	-24.09	3a	3a
98	7	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
99	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
100	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
101	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
102	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
103	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
104	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
105	7	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
106	6	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
107	8	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
108	8	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
109	8	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
110	7	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
114	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
115	8	0-40	SL	1			I	1	0.24	-12.59	3a	3a

Sample No	Altitude	Topsoil Depth	Texture	ALC Grade by Topsoil Texture	Wetness Assesment Depth to SPL	Depth to Gley	Wetness Class	Grade According to Wetness	Droughtiness Assessment MB Wheat	MB Potato	Grade According to Droughtiness	Grade by most limiting factor
116	8	0-40	SL	1			I	1	0.24	-12.59	3a	3a
117	8	0-35	LS	2			I	1	-18.76	-24.09	3a	3a
118	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
119	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
120	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
121	7	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
122	7	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
123	6	0-30	HCL	1	35	<40	III	3b	83.24	20.41	1	3b
124	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
125	8	0-35	LS	2			I	1	-18.76	-24.09	3a	3a
126	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
127	8	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
128	8	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
129	8	0-70	LS	2			I	1	-1.76	-9.09	3a	3a
136	6	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
137	7	0-40	SL	1			I	1	0.24	-12.59	3a	3a
138	7	0-40	SL	1			I	1	0.24	-12.59	3a	3a
139	8	0-35	LS	2			I	1	-18.76	-24.09	3a	3a
140	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
141	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
142	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
143	7	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
144	8	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
145	8	0-40	LS	2			I	1	4.24	-28.59	3a	3a
146	8	0-40	LS	2			I	1	4.24	-28.59	3a	3a
147	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
148	8	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
149	6	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
150	8	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
151	8	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
152	8	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
154	8	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
159	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
160	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
161	5	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
162	8	0-35	LS	2			I	1	-18.76	-24.09	3a	3a
163	6	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
164	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
165	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
166	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
167	6	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
168	6	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
169	7	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
170	8	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
171	8	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
172	8	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
173	8	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
178	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
179	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
180	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
181	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
182	8	0-40	SL	1			I	1	0.24	-12.59	3a	3a
183	8	0-40	SL	1			I	1	0.24	-12.59	3a	3a
184	8	0-40	SL	1			I	1	0.24	-12.59	3a	3a
185	7	Non-Agricultural										
186	6	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
187	6	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
188	5	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
189	5	0-45	LS	2			I	1	-12.76	-22.09	3a	3a
190	6	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
191	5	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
192	6	0-45	LS	2			I	1	-12.76	-22.09	3a	3a
193	6	0-45	LS	2			I	1	-12.76	-22.09	3a	3a
194	5	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
198	8	0-40	SL	1			I	1	0.24	-12.59	3a	3a
199	7	0-40	SL	1			I	1	0.24	-12.59	3a	3a
200	6	0-40	SL	1			I	1	0.24	-12.59	3a	3a

Sample No	Altitude	Topsoil Depth	Texture	ALC Grade by Topsoil Texture	Wetness Assesment Depth to SPL	Depth to Gley	Wetness Class	Grade According to Wetness	Droughtiness Assessment MB Wheat	MB Potato	Grade According to Droughtiness	Grade by most limiting factor
201	6	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
202	6	0-40	SL	1			I	1	0.24	-12.59	3a	3a
203	7	0-40	SL	1			I	1	0.24	-12.59	3a	3a
204	8	0-40	SL	1			I	1	0.24	-12.59	3a	3a
205	8	Non-Agricultural										
206	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
207	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
208	5	0-40	SL	1			I	1	0.24	-12.59	3a	3a
209	6	0-40	SL	1			I	1	0.24	-12.59	3a	3a
210	7	0-40	SL	1			I	1	0.24	-12.59	3a	3a
211	7	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
215	8	0-40	SL	1			I	1	0.24	-12.59	3a	3a
216	8	0-40	SL	1			I	1	0.24	-12.59	3a	3a
217	7	0-40	SL	1			I	1	0.24	-12.59	3a	3a
218	7	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
219	7	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
220	6	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
221	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
222	8	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
223	7	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
224	7	0-45	LS	2			I	1	-12.76	-18.09	3a	3a
226	5	0-40	SL	1			I	1	0.24	-12.59	3a	3a
227	5	0-40	SL	1			I	1	0.24	-12.59	3a	3a
228	6	0-40	SL	1			I	1	0.24	-12.59	3a	3a
229	7	0-40	SL	1			I	1	0.24	-12.59	3a	3a
230	7	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
231	6	0-40	SL	1			I	1	0.24	-12.59	3a	3a
232	6	0-40	SL	1			I	1	0.24	-12.59	3a	3a
233	5	0-40	SL	1			I	1	0.24	-12.59	3a	3a
234	5	0-40	SL	1			I	1	0.24	-12.59	3a	3a
235	6	0-40	SL	1			I	1	0.24	-12.59	3a	3a
236	8	0-40	SL	1			I	1	0.24	-12.59	3a	3a
237	7	0-40	SL	1			I	1	0.24	-12.59	3a	3a
238	7	0-40	SL	1			I	1	0.24	-12.59	3a	3a
239	6	0-40	SL	1			I	1	0.24	-12.59	3a	3a
240	5	0-40	SL	1			I	1	0.24	-12.59	3a	3a
241	4	0-40	SL	1			I	1	0.24	-12.59	3a	3a
242	6	0-40	SL	1			I	1	0.24	-12.59	3a	3a
243	7	0-40	SL	1			I	1	0.24	-12.59	3a	3a
244	8	0-40	SL	1			I	1	0.24	-12.59	3a	3a
245	7	0-40	SL	1			I	1	0.24	-12.59	3a	3a
246	7	0-50	LS	2			I	1	26.24	-10.59	2	2
247	6	0-50	LS	2			I	1	26.24	-10.59	2	2
251	6	0-40	SL	1			I	1	0.24	-12.59	3a	3a
252	6	0-40	SL	1			I	1	0.24	-12.59	3a	3a
253	6	0-40	SL	1			I	1	0.24	-12.59	3a	3a
254	5	0-50	SL	1			I	1	12.24	1.41	2	2
255	5	0-50	SCL	1			I	1	12.24	8.41	2	2
256	5	0-35	SCL	1	35	<40	III	3a	79.24	13.91	1	3a
257	5	0-35	SCL	1	35	<40	III	3a	79.24	13.91	1	3a
258	6	0-40	SL	1			I	1	9.24	-6.59	2	2
259	7	0-50	LS	2			I	1	6.24	-10.59	2	2
260	7	0-50	LS	2			I	1	6.24	-10.59	2	2
261	7	0-50	SCL	1			I	1	12.24	8.41	2	2
262	6	0-50	LS	2			I	1	6.24	-10.59	2	2
263	7	0-40	LS	2			I	1	6.24	-10.59	2	2
264	5	0-50	LS	2			I	1	6.24	-10.59	2	2
265	5	0-50	LS	2			I	1	6.24	-10.59	2	2
266	6	0-50	LS	2			I	1	6.24	-10.59	2	2
267	6	0-50	LS	2			I	1	6.24	-10.59	2	2
270	5	0-50	LS	2			I	1	6.24	-10.59	2	2
271	5	0-50	LS	2			I	1	6.24	-10.59	2	2
272	5	0-50	LS	2			I	1	6.24	-10.59	2	2
273	5	0-40	LS	2			I	1	6.24	-10.59	2	2
276	5	0-40	LS	2			I	1	6.24	-10.59	2	2
277	5	0-50	LS	2			I	1	6.24	-10.59	2	2
278	7	0-50	LS	2			I	1	6.24	-10.59	2	2

Sample No	Altitude	Topsoil Depth	Texture	ALC Grade by Topsoil Texture	Wetness Assesment Depth to SPL	Depth to Gley	Wetness Class	Grade According to Wetness	Droughtiness Assessment MB Wheat	MB Potato	Grade According to Droughtiness	Grade by most limiting factor
279	7	0-50	LS	2			I	1	6.24	-10.59	2	2
280	7	0-40	LS	2			I	1	6.24	-10.59	2	2
281	6	0-40	LS	2			I	1	0.24	-16.59	3a	3a
284	5	0-40	LS	2			I	1	0.24	-16.59	3a	3a
285	5	0-50	LS	2			I	1	6.24	-10.59	2	2
286	6	0-50	LS	2			I	1	6.24	-10.59	2	2
287	6	0-40	LS	2			I	1	0.24	-16.59	3a	3a
288	7	0-40	LS	2			I	1	6.24	-10.59	2	2
289	5	0-40	LS	2			I	1	6.24	-10.59	2	2
290	5	0-40	LS	2			I	1	6.24	-10.59	2	2
291	5	0-40	LS	2			I	1	6.24	-10.59	2	2
292	5	0-50	LS	2			I	1	6.24	-10.59	2	2
293	5	0-50	LS	2			I	1	6.24	-10.59	2	2
294	5	0-40	LS	2			I	1	6.24	-10.59	2	2
295	5	0-40	LS	2			I	1	6.24	-10.59	2	2
296	5	0-40	LS	2			I	1	26.24	-10.59	2	2
297	5	0-50	LS	2			I	1	-10.76	-21.09	3a	3a
298	5	0-50	LS	2			I	1	6.24	-10.59	2	2
299	5	0-50	LS	2			I	1	6.24	-10.59	2	2
303	7	0-40	SL	1			I	1	4.24	-6.59	3a	3a
304	6	0-40	SL	1			I	1	4.24	-6.59	3a	3a
305	5	0-50	SL	1			I	1	12.24	1.41	2	2
306	5	0-40	LS	2			I	1	0.24	-16.59	3a	3a
307	5	0-40	LS	2			I	1	6.24	-10.59	2	2
311	5	0-40	SL	1			I	1	9.24	-6.59	2	2
312	5	0-40	SL	1			I	1	4.24	-6.59	3a	3a
313	5	0-40	LS	2			I	1	0.24	-16.59	3a	3a
314	5	0-40	LS	2			I	1	26.24	-10.59	2	2
315	5	0-40	LS	2			I	1	26.24	-10.59	2	2
316	5	0-40	LS	2			I	1	26.24	-10.59	2	2
317	5	0-50	S	3b			I	1	-14.76	-32.59	3a	3b
318	5	0-50	S	3b			I	1	-14.76	-32.59	3a	3b
319	5	0-50	S	3b			I	1	-14.76	-32.59	3a	3b
320	6	0-50	S	3b			I	1	-14.76	-32.59	3a	3b
321	7	0-50	S	3b			I	1	-14.76	-32.59	3a	3b
322	5	0-40	LS	2			I	1	26.24	-10.59	2	2
323	5	0-40	LS	2			I	1	26.24	-10.59	2	2
324	5	0-40	LS	2			I	1	26.24	-10.59	2	2
325	5	0-50	S	3b			I	1	-14.76	-32.59	3a	3b
326	6	0-50	S	3b			I	1	-14.76	-32.59	3a	3b
327	6	0-50	S	3b			I	1	-14.76	-32.59	3a	3b
328	7	0-50	S	3b			I	1	-14.76	-32.59	3a	3b
329	8	0-50	S	3b			I	1	-14.76	-32.59	3a	3b
330	5	0-70	LS	2			I	1	18.24	-13.59	2	2
331	5	0-40	LS	2			I	1	26.24	-10.59	2	2
332	5	0-40	LS	2			I	1	26.24	-10.59	2	2
333	5	0-40	LS	2			I	1	26.24	-10.59	2	2
334	5	0-50	LS	2			I	1	18.24	-13.59	2	2
335	5	0-40	SCL	1	40	<40	III	3a	13.24	3.41	2	3a
336	5	0-40	LS	2			I	1	26.24	-10.59	2	2
337	6	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
338	5	0-40	SL	1			I	1	30.24	11.41	1	1
339	5	0-40	SL	1			I	1	30.24	11.41	1	1
340	5	0-45	SL	1			I	1	21.42	-2.59	2	2
341	5	0-70	LS	2			I	1	18.24	-13.59	2	2
342	5	0-70	LS	2			I	1	18.24	-13.59	2	2
343	8	0-70	LS	2			I	1	18.24	-13.59	2	2
344	5	0-45	SL	1			I	1	31.24	12.41	1	1
345	5	0-40	LS	2			I	1	21.24	-13.59	2	2
346	5	0-40	SCL	1	40	<40	III	3a	13.24	3.41	2	3a
347	5	0-40	SCL	1			I	1	0.24	-12.59	3a	3a
348	5	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
349	5	0-40	LS	2			I	1	-15.76	-21.09	3a	3a
351	5	0-40	SCL	1			I	1	25.24	11.41	2	2
352	5	0-40	SCL	1			I	1	48.24	11.41	1	1
353	5	0-40	SL	1	40	40-70	III	2	23.24	11.41	2	2
354	5	0-40	SL	1	40	40-70	III	2	23.24	11.41	2	2

Sample No	Altitude	Topsoil Depth	Texture	ALC Grade by Topsoil Texture	Wetness Assesment Depth to SPL	Depth to Gley	Wetness Class	Grade According to Wetness	Droughtiness Assessment MB Wheat	MB Potato	Grade According to Droughtiness	Grade by most limiting factor
355	6	0-50	SL	1			I	1	39.24	35.41	1	1
356	5	0-50	SL	1			I	1	39.24	35.41	1	1
357	5	0-40	SCL	1	40	<40	III	3a	12.24	5.41	2	3a
358	5	0-40	SCL	1	40	<40	III	3a	12.24	5.41	2	3a
359	5	0-40	SCL	1	40	<40	III	3a	79.74	14.41	1	3a
360	5	0-40	SCL	1	40	<40	III	3a	79.74	14.41	1	3a
361	7	0-40	SCL	1	40	<40	III	3a	79.74	14.41	1	3a
362	7	0-40	LS	2			I	1	17.24	-13.59	2	2
363	5	0-40	LS	2			I	1	17.24	-13.59	2	2
364	5	0-40	SCL	1			I	1	47.74	11.41	1	1
365	5	0-40	SCL	1	40	<40	III	3a	43.74	13.41	1	3a
366	5	0-40	SL	1			I	1	27.74	11.41	2	2
367	5	0-40	SL	1			I	1	50.24	11.41	1	1
368	5	0-40	SL	1			I	1	50.24	11.41	1	1
369	5	0-40	SL	1			I	1	50.24	11.41	1	1
374	5	0-40	LS	2			I	1	17.24	-13.59	2	2
375	5	0-40	LS	2			I	1	17.24	-13.59	2	2
376	5	0-40	SL	1			I	1	9.24	-6.59	2	2
377	5	0-50	SL	1			I	1	17.24	1.41	2	2
378	5	0-40	SCL	1	40	<40	III	3a	79.74	14.41	1	3a
379	5	0-40	SCL	1	40	<40	III	3a	79.74	14.41	1	3a
380	5	0-40	SCL	1	40	<40	III	3a	79.74	14.41	1	3a
381	5	0-30	SL	1			I	1	1.24	-14.59	3a	3a
382	5	0-40	LS	2			I	1	6.24	-10.59	2	2
383	5	0-40	SCL	1			I	1	23.42	11.41	2	2
384	5	0-40	SCL	1			I	1	25.24	11.41	2	2
385	5	0-40	SCL	1			I	1	25.24	11.41	2	2
386	5	0-40	SCL	1			I	1	21.24	8.41	2	2
387	5	0-40	SL	1			I	1	30.24	11.41	1	1
388	5	0-40	SL	1			I	1	46.24	11.41	1	1
389	5	0-40	SL	1			I	1	9.24	-6.59	2	2
394	5	0-40	LS	2			I	1	17.24	-13.59	2	2
395	5	0-40	LS	2			I	1	17.24	-13.59	2	2
396	5	0-40	SL	1			I	1	9.24	-6.59	2	2
397	8	0-40	SCL	1	40	<40	III	3a	79.74	14.41	1	3a
398	5	0-40	SCL	1	40	<40	III	3a	79.74	14.41	1	3a
399	5	0-40	LS	2			I	1	17.24	-13.59	2	2
400	5	0-40	LS	2			I	1	17.24	-13.59	2	2
401	5	0-40	LS	2			I	1	6.24	-10.59	2	2
402	5	0-40	SCL	1			I	1	27.24	11.41	2	2
403	5	0-40	SL	1			I	1	50.24	11.41	1	1
404	5	0-40	SL	1			I	1	50.24	11.41	1	1
405	5	0-40	SCL	1			I	1	50.24	11.41	1	1
406	5	0-40	SCL	1			I	1	50.24	11.41	1	1
407	5	0-40	SL	1			I	1	9.24	-6.59	2	2
408	5	0-40	SL	1			I	1	30.24	11.41	1	1
409	5	0-40	SL	1			I	1	9.24	-6.59	2	2
410	6	0-40	SL	1			I	1	9.24	-6.59	2	2
415	5	0-40	LS	2			I	1	17.24	-13.59	2	2
416	5	0-40	LS	2			I	1	17.24	-13.59	2	2
417	5	0-40	SL	1			I	1	50.24	11.41	1	1
418	5	0-40	SL	1			I	1	9.24	-6.59	2	2
419	5	0-30	SL	1			I	1	1.24	-14.59	3a	3a
420	7	0-30	SL	1			I	1	1.24	-14.59	3a	3a
421	7	0-40	SCL	1	40	<40	III	3a	79.74	14.41	1	3a
422	5	0-40	LS	2			I	1	17.24	-13.59	2	2
423	5	0-40	LS	2			I	1	17.24	-13.59	2	2
424	5	0-40	LS	2			I	1	6.24	-10.59	2	2
425	5	0-40	LS	2			I	1	6.24	-10.59	2	2
427	5	0-40	SCL	1			I	1	9.24	-6.59	2	2
428	5	0-40	SCL	1			I	1	9.24	-6.59	2	2
429	5	0-40	SCL	1			I	1	27.24	11.41	2	2
430	5	0-40	SL	1	40	40-70	III	2	21.24	8.41	2	2
431	5	0-40	SL	1			I	1	9.24	-6.59	2	2
432	5	0-40	LS	2			I	1	27.24	-4.59	2	2
433	5	0-40	LS	2			I	1	27.24	-4.59	2	2
434	5	0-40	LS	2			I	1	21.24	-13.59	2	2

Sample No	Altitude	Topsoil Depth	Texture	ALC Grade by Topsoil Texture	Wetness Assesment Depth to SPL	Depth to Gley	Wetness Class	Grade According to Wetness	Droughtiness Assessment MB Wheat	MB Potato	Grade According to Droughtiness	Grade by most limiting factor
435	8	0-40	SL	1			I	1	9.24	-6.59	2	2
436	8	0-40	SL	1			I	1	13.24	-0.59	2	2
437	5	0-50	SL	1			I	1	9.24	-6.59	2	2
441	5	0-40	LS	2			I	1	22.24	2.41	2	2
442	5	0-40	LS	2			I	1	22.24	2.41	2	2
450	5	0-40	SCL	1			I	1	43.24	11.41	1	1
451	5	0-40	SCL	1			I	1	43.24	11.41	1	1
452	5	0-45	SCL	1	45	40-70	III	3a	44.24	12.41	1	3a
453	5	0-40	SCL	1			I	1	25.24	11.41	2	2
454	5	0-40	SL	1			I	1	9.24	-6.59	2	2
455	5	0-40	LS	2			I	1	27.24	-4.59	2	2
456	8	0-40	LS	2			I	1	27.24	-4.59	2	2
457	5	0-40	LS	2			I	1	18.24	-10.59	2	2
458	5	0-40	SL	1			I	1	9.24	-6.59	2	2
459	5	0-40	SL	1			I	1	9.24	-6.59	2	2
460	6	0-40	LS	2			I	1	17.24	-13.59	2	2
461	5	0-40	LS	2			I	1	6.24	-10.59	2	2
462	6	0-40	LS	2			I	1	26.24	-10.59	2	2
463	6	0-40	LS	2			I	1	17.24	-13.59	2	2
464	5	0-40	LS	2			I	1	17.24	-13.59	2	2
465	5	0-40	SL	1			I	1	0.24	-12.59	3a	3a
472	5	0-40	SCL	1			I	1	9.24	-6.59	2	2
473	7	0-40	SCL	1			I	1	25.24	11.41	2	2
474	7	0-40	SCL	1			I	1	50.24	11.41	1	1
475	5	0-40	SL	1			I	1	33.24	-0.59	1	1
476	6	0-40	LS	2			I	1	27.24	-4.59	2	2
477	6	0-40	LS	2			I	1	26.24	-10.59	2	2
478	5	0-40	LS	2			I	1	23.24	-10.59	2	2
479	5	0-40	LS	2			I	1	26.24	-10.59	2	2
480	5	0-40	LS	2			I	1	26.24	-10.59	2	2
481	5	0-70	LS	2			I	1	18.24	-13.59	2	2
482	5	0-40	LS	2			I	1	17.24	-13.59	2	2
483	5	0-40	LS	2			I	1	6.24	-10.59	2	2
484	8	0-50	SL	1			I	1	17.24	1.41	2	2
485	5	0-50	SL	1			I	1	17.24	1.41	2	2
490	7	0-40	SL	1	40	40-70	III	2	35.24	11.41	1	2
491	6	0-40	LS	2			I	1	27.24	-4.59	2	2
492	5	0-40	SCL	1	40	<40	III	3a	20.24	14.41	2	3a
493	5	0-40	SCL	1			I	1	27.24	11.41	2	2
494	5	0-40	LS	2			I	1	27.24	-4.59	2	2
495	5	0-40	SL	1	40	40-70	III	2	23.24	11.41	2	2
496	5	0-40	LS	2			I	1	17.24	-13.59	2	2
497	6	0-40	LS	2			I	1	26.24	-10.59	2	2
498	6	0-40	SL	1			I	1	9.24	-6.59	2	2
499	8	0-40	SL	1			I	1	9.24	-6.59	2	2
500	5	0-40	LS	2			I	1	22.24	2.41	2	2
504	6	0-40	LS	2			I	1	27.24	-4.59	2	2
505	5	0-40	SCL	1			I	1	25.24	11.41	2	2
506	5	0-40	LS	2			I	1	27.24	-4.59	2	2
507	5	0-50	LS	2			I	1	27.24	-4.59	2	2
508	5	0-40	LS	2			I	1	26.24	-10.59	2	2
509	5	0-40	LS	2			I	1	17.24	-13.59	2	2
510	5	0-40	LS	2			I	1	26.24	-10.59	2	2
511	6	0-40	LS	2			I	1	22.24	2.41	2	2
512	8	0-40	SL	1	40	40-70	III	2	35.24	11.41	1	2
513	7	0-40	LS	2			I	1	27.24	-4.59	2	2
514	6	0-40	LS	2			I	1	22.24	-13.59	2	2
515	6	0-40	LS	2			I	1	22.24	-13.59	2	2
516	8	0-40	LS	2			I	1	26.24	-10.59	2	2
517	7	0-40	SL	1			I	1	30.24	11.41	1	1
	6.28233											

APPENDIX 5 - DESCRIPTION OF ALC GRADES

Grade 1 - excellent quality agricultural land Land with no or very minor limitations to agricultural use. A very wide range of agricultural and horticultural crops can be grown and commonly includes top fruit, soft fruit, salad crops and winter harvested vegetables. Yields are high and less variable than on land of lower quality.

Grade 2 - very good quality agricultural land Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1.

Grade 3 - good to moderate quality agricultural land Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.

Subgrade 3a - good quality agricultural land Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.

Subgrade 3b - moderate quality agricultural land Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.

Grade 4 - poor quality agricultural land Land with severe limitations which significantly restrict the range of crops and/or level of yields. It is mainly suited to grass with occasional arable crops (e.g. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.

Grade 5 - very poor-quality agricultural land Land with very severe limitations which restrict use to permanent pasture or rough grazing, except for occasional pioneer forage crops.

Appendix 6 - Map of ALC Grade

Survey Area

Grade 1

Grade 2

Grade 3a

Grade 3b

Non-Agricultural

Project: Helios Renewable Energy Project
Client: Enso Green Holdings D Limited