Cottam Solar Project

Environmental Statement Appendix 19.1:

Agricultural Land Quality, Soil Resources & Farming Circumstances

Prepared by: Daniel Baird Soil Consultancy Ltd

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Cottam
SOLAR PROJECT

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Issue Sheet

Report Prepared for: Cottam Solar Project Ltd.
DCO Submission

ES Appendix 19.1
Agricultural Land Quality, Soil Resources & Farming Circumstances

Prepared by:

Name: Daniel Baird Soil Consultancy Ltd

Date: January 2023

1 Introduction

1.1 Brief

1.1.1 This report has been prepared by Daniel Baird Soil Consultancy Ltd (Baird Soil). It provides an assessment of the Agricultural Land Quality, Soil Resources and Farming Circumstances baseline for the proposed Solar PV development site at Cottam.

1.1.2 The site area (within the Order Limits – Sites and Cable Route Corridor) covers approximately 1,451.23 hectares of agricultural land predominantly within Lincolnshire, with some in Nottinghamshire.

2 Agricultural Land Classification Methodology

2.1.1 The MAFF ALC system of grading land quality for use in land use planning purposes divides farmland into five grades according to the degree of limitation imposed upon land use by the inherent physical characteristics of climate, site and soils. Grade 1 land is of an excellent quality, whilst Grade 5 land has very severe limitations for agricultural use. Grade 3 land is split between the subgrades of 3a (good quality) and 3b (moderate quality).

2.1.2 Accordingly, a detailed assessment of the Site has been undertaken using the Ministry of Agriculture Fisheries and Food (MAFF) revised guidelines and criteria for Agricultural Land Classification[1] (ALC) published October 1988.

2.1.3 Field survey and ALC assessment work was undertaken by two separate teams without any overlap in survey extent. The use of two separate survey teams stems from an initial plan to bring forward the Sites as separate solar farm proposals rather than the current NSIP application. Two reports are given as Annex A and Annex B to this Baseline Report, presenting the results of each of the two ALC assessment teams and the extent of assessment work. These reports show ALC grades for the full extent of their survey area. Subsequent to this work the site boundary has excluded parts of the initial wider assessment area in response to emerging site data and consultation. Figures 19.1, 19.2 and 19.3 show the Agricultural Land Classification Grade Distribution for areas Cottam 1, 2 and 3a & 3b. Agricultural Land Classification Grade Distribution, shows the extent of ALC grades determined by site survey and the extent of the Order Limits.

2.1.4 The MAFF revised guidelines and criteria for ALC of October 1988 require that the following factors be investigated:

- Climate: Average Annual Rainfall (AAR) and Accumulated Temperature above 0°C between January and June (AT0);
- Site: Gradient, Micro Relief and Flooding;
- Soils: Texture, Structure, Depth, Stoniness, and Chemical Toxicity; and

- Interactive Factors Soil Wetness, Soil Droughtiness and Liability to Erosion.

2.1.5 Use of the ALC methodology is also supported by Natural England Technical Advice Note 049[2] (TIN049) as revised December 2012.

3 Soil Resources Methodology

3.1.1 The Defra Construction Code of Practice for the Sustainable Use of Soils on Construction Sites[3] provides guidance on the conservation of soil for beneficial reuse at development sites, safeguarding both the mass of the soil resource and its functional capacity. The application of this code of practice is voluntary, however following the guidance can deliver clear benefits in terms of the sustainable use of a finite resource, minimising the generation of waste and sediment from a construction site, and the cost effective delivery of the Development.

3.1.2 The agricultural Land Quality, Soil Resources and Farming Circumstances assessment focuses on the functional capacity of the soil for the production of biomass – farming.

3.1.3 Data on the physical characteristics of the soil (including depth of horizons and soil texture) will inform the appropriate segregation of different soil materials present at the site, and the appropriate management of that material, both where topsoil is to be stripped, stored and reinstated, and where the soil remains in place through the lifetime of the development.

4 Farming Circumstances Methodology

4.1.1 The assessment methodology for farming circumstances is taken from the IEMA publication, A New Perspective on Land and Soils in Environmental Impact Assessment1. It broadly continues the guidance from the now superseded planning guidance PPG7 which had remained a common approach for EIA in England, and was for a time included in the Design Manual for Roads and Bridges. This practice is in common with EIA for other qualifying development proposals, High Speed 2 EIA being a prominent example.

5 Agricultural Land Classification Assessment

5.1.1 Detailed ALC surveys within the site found agricultural land in ALC Grades 2, 3a and 3b. The distribution of ALC grades within the Sites is shown on Figures 19.1, 19.2 and 19.3 within the ES Chapter, with areas given in Table 2 below.

[1] A New Perspective on Land and Soil in Environmental Impact Assessment. IEMA, February 2022

Table 1 : ALC Grade Distribution

ALC Grade	Area (ha)*	%
2	6.1	0.5
3a	42.0	3.6
3b	1118.3	94.8
Not Surveyed	13.3	1.1
Total	**1179.7**	**100.0**

5.1.2 Grade 3b land covers the majority of the site. The land typically has a heavy textured (high clay content) topsoil that is vulnerable to structural degradation if disturbed when wetted to a plastic consistence. Clayey subsoil impedes drainage of excess water down through the soil profile leaving the topsoil wet for an extended period following rainfall. As a result the opportunities for cultivation and carrying livestock without incurring persistent soil degradation are limited. This soil wetness and workability limitation is sufficient to limit the land to ALC Grade 3b.

5.1.3 For Grade 3a land, soils are broadly similar to those on the Grade 3b land. Topsoil clay content is lower (medium textured) and/or there is a significant presence of naturally occurring calcium. This topsoil has greater resilience to structural degradation than the heavy textured topsoil of the Grade 3b land. As a result the soil wetness and workability limitation restricts this land to Grade 3a.

5.1.4 Where grade 2 land is found the slowly permeable subsoil starts at a greater depth, reducing the period that excess water is held in the topsoil. This in turn reduces the severity of the soil wetness and workability limitation, placing the land is Grade 2.

5.1.5 A small area of the Sites remains not surveyed. Absence of survey cover for this approximately 1.1% of the Sites is not a significant omission given that over 90% of the agricultural land falls within ALC Grade 3b.

6 Soil Resources

6.1.1 As described above soils within the site have medium to heavy textured topsoils over predominantly clayey subsoils, with some medium textured upper subsoil present at the areas of Grade 2 land. The high clay content of heavy textured soil material makes structural degradation (such as compaction and smearing) from trafficking over and handling, more persistent and difficult to remediate.

6.1.2 However, in contrast to built development or minerals extraction, there is no widespread soil movement entailed in a solar farm development. Soil stripping is limited in extent to just the areas of access track and compound. For tracks and hard standing this soil stripping will be limited to just the topsoil, with a geotextile and hardcore being laid above the subsoil to create a permeable surface. For the

majority of the solar farm development the soil profile will remain in place with a year round green cover. This is in contrast to the business as usual for arable land of annual intensive periods of cultivation and traffic that have limited capacity for delay in response to rainfall events.

7 Farming Circumstances

7.1.1 Four farm businesses manage land within the site. All are owners of the land occupied and all own and occupy additional land outside of the site area. Figure 19.4 within ES Chapter 19 shows the extent of occupancy for each of the four farm businesses within the Sites.

Farm Business A

7.1.2 Farm Business A is a large arable enterprise spread across three farm units. All of the land is in arable production aside from a small paddock. The farm uses outside contractors for all landwork (cultivation, sowing, application and harvest) and has no staff or machinery of its own.

7.1.3 Spread between the three units the farm has sufficient grain storage to accommodate the yield of a typical year. It does not have its own grain dryer.

7.1.4 Land within the solar farm would comprise approximately 132.3 ha out of a total area of 562ha owned by the farm. Land within the application area is not currently entered into any environmental scheme but has previously been in a Higher Level Scheme (HLS) agreement. Land management is not constrained by nuisance factors such as fly tipping.

Farm Business B

7.1.5 Farm Business B owns and occupies an area of approximately 1620ha, of which 937.4 are within the site. The majority of this land is in arable cropping with approximately 270ha of grassland used to graze and fatten 300 beef cattle each year.

7.1.6 Farm Business B undertakes the majority of its own arable landwork using its own machinery and labour, the farm employing seven full time, with occasional additional seasonal work. Contractor services are limited to baling of hay and straw, along with some load sharing with nearby farm businesses as circumstances dictate.

7.1.7 The farm runs a commercial shoot but this does not require use of land in the proposed solar farm.

7.1.8 The farm has a Scheduled Ancient Monument (SAM) but on land outside of the proposed development. Land within the site is in a mid-tier countryside Stewardship scheme due to end in December 2022. The farm experiences little nuisance from fly tipping and hare coursing but this is in part owing to the vigilance of the farm workers including a game keeper.

Farm Business C

7.1.9 Farm Business C is the owner occupier of approximately 344ha split across two units at Blyton and Kirton. This land is predominantly arable with only approximately 16ha under pasture. It is managed with four full time staff. Land within the Sites is part of the Blyton unit and covers 79.9ha.

7.1.10 Land at the Kirton unit benefits from winter abstraction licences for over 40,000 cubic meters that is stored in the farm's own reservoirs for irrigation in the growing season. Access to this irrigation water enables the inclusion of high value crops such as potato in the crop rotation. Economic production of such crops strongly favours access to irrigation because crop quality is dependant on an elevated and controlled moisture content, in contrast to grain which is harvested as dry as possible. Land within the site is not irrigated and has no connection to the reservoirs.

7.1.11 Existing diversified enterprises for Farm Business C include letting out parts of the old runway for motorsport, a small wind turbine (80kW) and a small area of solar PV (46kW). At present the farm does not have land entered into environmental schemes.

Farm Business D

7.1.12 Farm Business D occupies approximately 364ha. Most of this land is owner occupied including all of the 163.4ha of land within the site. Two small areas of approximately 24ha each are leased, the first on a secure, full agricultural tenancy and the second on an informal arrangement with the landowner.

7.1.13 The farm has a dairy unit with 150 milking cows plus approximately 200 youngstock. In addition the farm has an arable enterprise with arable rotations including ley grass and whole crop maize among the combinable crops. The farm does not manage any fields as permanent pasture, grazing cattle on the ley grass rotation and storing grass and maize as silage. Some barley is also retained as feed. Most work is undertaken using the farm's own staff and machinery, but contractors are used for maize harvesting.

7.1.14 Five full time and two part time workers are employed by Farm Business D. Three of the full time workers are owners of the farm. Two of these owners and one more full time worker are at retirement age.

7.1.15 The dairy unit has a milking parlour suitable for 200 milking cows. The herd has been deliberately reduced from 200 to 150 to cut workload and as a step towards terminating the dairy enterprise entirely. The farm business does not plan to continue the dairy enterprise because of imminent retirements, the difficulty in retaining experienced dairy workers and the economic push toward larger dairy units.

Farm Businesses Response to Development

7.1.16 Farm managers were questioned regarding the likely response of their farm business to the proposed development. All four farm businesses would have a

reduction in the area of land in arable cropping for the duration of the solar farm. This reduction in the scale of the arable enterprise will be compensated by income from the lease of the land to the solar farm. Individual units may be able to minimise the reduction in arable area by leasing additional suitable land.

7.1.17 For Farm Business D, two of the three owners are seeking to retire soon, and the farm has already started to shrink the size of the dairy enterprise (the most labour intensive farm enterprise) in preparation for terminating it. Income from the solar farm will facilitate both the orderly winding up of the dairy enterprise and the retirement from farming of two of the owners.

8 References

Ref.1 [1] Agricultural Land Classification of England and Wales: Revised guidelines and criteria for grading the quality of agricultural land. Ministry of Agriculture Fisheries and Food, October 1988. http://archive.defra.gov.uk/foodfarm/landmanage/land-use/documents/alc-guidelines-1988.pdf

Ref.2 [2] Agricultural Land Classification: protecting the best and most versatile agricultural land (TIN049). Natural England, January 2009. [redacted].

Ref.3 [3] Construction Code of Practice for the Sustainable Use of Soils on Construction Sites, Defra 2011. https://www.gov.uk/government/publications/code-of-practice-for-the-sustainable-use-of-soils-on-construction-sites

Annex 1 – Agricultural Land Classification Report (Cottam, AMET)

AGRICULTURAL LAND CLASSIFICATION
COTTAM SOLAR PROJECT

CLIENT: ISLAND GREEN POWER LTD LTD
PROJECT: COTTAM SOLAR PROJECT
DATE: 12TH JULY 2022 – ISSUE 4
ISSUED BY: JAMES FULTON MRICS FAAV

CONTENTS

1. EXECUTIVE SUMMARY

1.1 This report assesses the Agricultural Land Classification (ALC) grading of 1235.6-hectares, of agricultural land in West Lindsey District.

1.2 The limiting factor is found to be predominantly soil wetness, a combination of the soils found on sites and the climatic regime.

1.3 The land is graded as follows:

Grade 2:	26.6 Ha	2.2%
Grade 3a:	78.8 Ha	6.4%
Grade 3b:	1130.2 Ha	91.4%
Total:	1235.6 Ha	

1.4 The surveyed site totals 1235.6Ha of agricultural land of which 105.4ha (8.6%) is best and most versatile and 1130.2Ha (91.4%) is not best and most versatile agricultural land.

2. INTRODUCTION

2.1 Amet Property Ltd have been instructed by Island Green Power Limited to produce an ALC report on a 1235.6-hectare site for a proposed solar project. The solar project is split across 3 sites known as Cottam 1, Cottam 2 and Cottam 3, all in West Lindsey District.

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 a number of modules on soils and over 10 years' experience in producing agricultural land classification reports.

2.3 The report is based on 38 days of sampling conducted in September, October and November 2021. The survey consisted of taking approximately one sample per hectare using a Dutch/Eidelman 50mm soil augur to a depth of 1.2m (where possible). A plan of augur points can be found at ***appendix 1*** with a separate map for each site and 3 maps for Cottam 1 due to its size. In addition to the sampling with a soil augur trial pits were dug as required to determine soil structure and confirm colour where it was difficult to accurately gauge with the augur alone. Some of these trial pits were to the full 1.2m depth while others were shallower to investigate a specific change found whilst sampling with the augur. Accurate soil structures were recorded where trial pits were dug to examine soils. Where an augur was used subsoil structures are described as good, moderate or poor based on figure 9,10 and 11 in the MAFF guidance.

2.4 During the sampling conditions were generally good with the subsoil state described as moist allowing samples to be removed and examined easily.

2.5 Based on the published information some of the locations are possibly calcareous and so hydrochloric acid was used to test for a reaction that would indicate calcareous soils. None of the areas were identified in field as naturally calcareous but additional samples were collected in May 2022 and lab testing was ordered and the report updated accordingly.

2.6 The three sites are described as follows:

COTTAM 1

923.9 hectares of largely arable land centred around Coates and lying to the east of Willingham by Stow, Normanby by Stow, Stow and Sturton by Stow, generally flat and occasionally gently sloping with elevation ranging from 6m to 28m above ordinance datum (AOD). At the time of the survey the land was either stubble or recently cultivated/drilled or in some areas permanent pasture or temporary grass.

COTTAM 2

131.2 hectares of arable land to the east of Corringham, flat with elevation ranging from 15m to 20m AOD. At the time of the survey the land had been cultivated.

COTTAM 3

180.5 hectares of arable land to the east of Blyton, flat with elevation ranging from 19m to 24m AOD. At the time of the survey the land had been cultivated. The area was formerly the site of RAF Blyton. When active it was made up of 3 runways, taxi ways, a perimeter road and dispersal areas, the majority of which have now been removed but it is clear on the ground from the broken concrete and bricks on the surface and areas of subsoil that do not appear to have been formed naturally where the land has been restored.

2.7 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.

2.8 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.

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

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

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 shows there to be a range of basal geology and various overlying deposits.

COTTAM 1

The bedrock geology of the land to the west is shown to be Scunthorpe Mudstone Formation – Mudstone and Limestone. To the east the bedrock geology is identified as Charmouth Mudstone Formation - Mudstone. The superficial deposits are either not recorded or are variously Alluvium – Clay, Silt, Sand, and Gravel; River terrace deposits (undifferentiated) – sand and gravel; or Till, Mid Pleistocene – Diamicton.

COTTAM 2

The bedrock geology is shown to be Scunthorpe Mudstone Formation – Mudstone and Limestone. The superficial deposits are identified as Till, Mid Pleistocene – Diamicton.

COTTAM 3

The bedrock geology is shown to be Scunthorpe Mudstone Formation – Mudstone and Limestone. The superficial deposits are identified as Till, Mid Pleistocene – Diamicton.

3.2 The national soils map shows a variety soil types across the site.

COTTAM 1

An area either side of the water courses through the site is identified as Fladbury 2 Association – Stoneless clayey soils variably affected by groundwater some with sandy subsoils. To the north the site is identified as Salop Association – Slowly permeable seasonally waterlogged reddish fine loamy over clayey, fine loamy and clayey soils. To the west the site is identified as Wickham 2 Association – Slowly permeable seasonally waterlogged fine loamy over clayey, fine silty over clayey and clayey soils. To the South the site is identified as Beccles 1 Association – Slowly permeable, seasonally waterlogged fine loamy over clayey soils.

COTTAM 2

The majority of site is described as Beccles 1 Association – Slowly permeable, seasonally waterlogged fine loamy over clayey soils. A small area to the northeast is described as Fladbury 2 Association – Stoneless clayey soils variably affected by groundwater some with sandy subsoils with a very small area to the east described as Ragdale Association – Slowly permeable, seasonally waterlogged clayey and fine loamy over clayey soils.

The majority of the site is described as Salop Association – Slowly permeable seasonally waterlogged reddish fine loamy over clayey, fine loamy and clayey soils. The land to the south is described as Beccles 1 Association – Slowly permeable, seasonally waterlogged fine loamy over clayey soils. A small area to the west is described as Cranymoor – Well drained sandy soils mostly under woodland and very acid with bleached subsurface horizons.

3.3 The 1:250,000 series Agricultural Land Classification maps show the land to be Grade 3. These plans are of strictly limited value, using an out-of-date methodology at a very small scale (low detail) level of survey. Further information on the limits of their use can be found in TIN049.

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 site is listed in the table below.

4.3 The climatic data for each of the sites was determined separately as the distance between locations and difference in altitude could provide different results. Due to the size of Cottam 1 and its geographical spread this site has been split into 1a, 1b and 1c – these areas are shown on the plans at ***appendix 3***.

Agro-Climatic Data – Full details can be found at ***appendix 2***

COTTAM 1a

Grid Reference	489293 383499
Altitude (ALT)	16.97
Average Annual Rainfall (AAR)	623.69
Accumulated Temperature - Jan to June (ATO)	1407.24
Duration of Field Capacity (FCD)	128.28
Moisture Deficit Wheat	110.87
Moisture Deficit Potatoes	102.08

COTTAM 1b

Grid Reference	491203 381629
Altitude (ALT)	9.55
Average Annual Rainfall (AAR)	616.68
Accumulated Temperature - Jan to June (ATO)	1416.28
Duration of Field Capacity (FCD)	128.21
Moisture Deficit Wheat	112.12
Moisture Deficit Potatoes	103.17

COTTAM 1c

Grid Reference	492102 385082
Altitude (ALT)	17.10
Average Annual Rainfall (AAR)	629.44
Accumulated Temperature - Jan to June (ATO)	1405.78
Duration of Field Capacity (FCD)	132.93
Moisture Deficit Wheat	109.96
Moisture Deficit Potatoes	99.26

COTTAM 2

Grid Reference	488445 392175
Altitude (ALT)	17.30
Average Annual Rainfall (AAR)	620.54
Accumulated Temperature - Jan to June (ATO)	1402.99
Duration of Field Capacity (FCD)	130.56
Moisture Deficit Wheat	110.17
Moisture Deficit Potatoes	100.19

COTTAM 3

Grid Reference	487018 395878
Altitude (ALT)	23.18
Average Annual Rainfall (AAR)	623.04
Accumulated Temperature - Jan to June (ATO)	1395.20
Duration of Field Capacity (FCD)	130.43
Moisture Deficit Wheat	108.92
Moisture Deficit Potatoes	99.30

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

4.5 The AAR and ATO provide no climatic limitation to grade.

4.6 Large areas of Cottam 1 around the watercourses running through the site are shown as being in flood zone 2 and flood zone 3 – areas with a high risk of flooding. Anecdotal evidence provided by the farm manager suggests that flooding of some areas is relatively frequent and long enough term that it impacts on agricultural practices and has resulted in these areas being planted in a grass ley. While this will limit the land graded it is not considered that it will be the most limiting factor. Cottam 2 and Cottam 3 are shown to be in Flood Zone 3 – area with a less than 1 in 1000 chance of annual flooding.

5. STONINESS

5.1 The majority of Cottam 1 was either stoneless or the amount of stone was so low that it was not recorded. Parts of Cottam 1c had around 5% stone in the topsoil. The majority of Cottam 2 was stoneless with small areas to the west with around 5% stone in the topsoil. Cottam 3 didn't contain any significant amount of naturally occurring stone but there are areas with chunks of broken concrete and brick seemingly where runways and other infrastructure has been removed. Stoniness is not considered to be the most limiting factor at any sample point.

6. GRADIENT

6.1 The steepest areas of the site are only a gentle slope with gradient never representing the most limiting factor to land grade.

7. SOILS

7.1 The soils found on site largely follow the expectations set by the national soils map with occasional anomalies. Full information on the sample points along with lab results of topsoil textures and a number of descriptions and photographs from trial pits can be found at ***appendix 3***.

COTTAM 1

The soils were largely consistent generally having a slowly permeable layer indicated by weak medium angular blocky, course angular blocky or prismatic structures and mottles evidencing wetness from between 35cm and 60 cm and gleying indicated by grey or pale colours and ochreous mottles from similar depths. The topsoil varied in texture from sandy clay loam to clay. There were small areas with a lighter textured and/or better structured subsoil where either no slowly permeable layer was found or where it was significantly deeper.

The topsoil was often deeper than would be expected extending to 35cm or 40cm which was clearly below the usual cultivation depth but as the colour and texture remained unchanged this was not recorded as a first subsoil.

None of the topsoils or subsoils reacted to the in-field HCl test but the neutralizing value in the lab tests would suggest calcareous soils. Discussions with the farm manager suggest that this is not naturally occurring calcium carbonate as substantial quantities of Mag Lime have been applied to the farm to the extent that the soils now have such high levels of magnesium that crops are showing micro-nutrient deficiencies. The sample point with the highest neutralizing value was confirmed to be a site used to stockpile mag lime prior to spreading. It is not considered that the neutralizing value represents a naturally calcareous soil.

COTTAM 2

The soils were largely consistent generally having a slowly permeable layer indicated by a course angular blocky or massive structure and mottles evidencing wetness from between 35cm and 60 cm and gleying indicated by grey or pale colours and ochreous mottles from similar depths. The topsoil varied in texture from sandy clay loam to clay with the sandy clay loam being concentrated along the watercourse to the northwest and the majority of the site being a clay topsoil.

The topsoil was often deeper than would be expected extending to 35cm or 40cm which was clearly below the usual cultivation depth but as the colour and texture remained unchanged this was not recorded as a first subsoil.

None of the topsoils or subsoils reacted to the in-field HCl test but the neutralizing value in the lab tests shows sample points close to each other with hugely varying results. Discussions with the landowner's agent suggest that prior to being used as an arable farm the land was used to graze dairy cows. At that time there were lots of chalk/limestone tracks laid out to allow blocks away from the buildings to be grazed, it is likely that the vast change in results over short distances is the result of samples being taken from areas where these tracks once were. It is not considered that the neutralizing value represents a naturally calcareous soil.

COTTAM 3

The site was previously an airfield, and it is clear from both stony areas on the surface (not natural stone but brick and concrete pieces) and from the structures identified in the subsoils that much of the land has been disturbed. While the restoration work has been carried out relatively well there are course platy structures in the subsoils that appear to have been formed by mechanical operations rather than occurring naturally. It is likely that in places these slowly permeably layers are virtually impermeable and so it is possible that the wetness assessment underestimates the wetness limitation in places. Topsoil across the majority of the site ranges from sandy clay loam to clay with a slowly permeable layer indicated by either a course angular blocky, course platy or course prismatic structure stating at around 30cm and continuing to at least 1m and gleying evidenced by grey or pale colours and ochreous mottles starting at the same depth. A very small area to the west was completely different with a loamy sand topsoil over a sand subsoil.

The topsoil was often deeper than would be expected extending to 35cm or 40cm which was clearly below the usual cultivation depth but as the colour and texture remained unchanged this was not recorded as a first subsoil.

When the area was first inspected none of the sample points reacted to the HCL in field test for calcium carbonate. During the visit in May 2022 all sample points reacted to the HCl but this was thought to be due to the spreading of what appeared to be bone meal fertilizer as can be seen in the photograph

below. The neutralizing value shown on the lab tests is substantial but given the use of the bonemeal fertilizer this is not surprising. It is not considered that the neutralizing value represents a naturally calcareous soil.

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. The wetness assessment can be found at ***appendix 4***.

COTTAM 1

The slowly permeable gleyed subsoils result in most areas being calculated as Wetness class III which based on Table 6 in the MAFF guidance results in a grade 3b, where the topsoil is clay or heavy clay loam; and grade 3a where the topsoil is medium clay loam. Where the slowly permeable layer is deeper or does not exist a wetness class of I or II is determined which depending on the topsoil texture results in the grade being limited to Grad 1, 2 or 3a.

COTTAM 2

The slowly permeable gleyed subsoils result in most areas being calculated as Wetness class III which based on Table 6 in the MAFF guidance results in a grade 3b, where the topsoil is clay or heavy clay loam; and grade 3a where the topsoil is sandy clay loam.

COTTAM 3

The slowly permeable gleyed subsoils result in most areas being calculated as Wetness class III which based on Table 6 in the MAFF guidance results in a grade 3b, where the topsoil is clay or heavy clay loam; and grade 3a where the topsoil is medium clay loam, or sandy clay loam.

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:

Cottam 1a

MD (Wheat) = 110.87
MD (Potatoes) = 102.08

Cottam 1b

MD (Wheat) = 112.12
MD (Potatoes) = 103.17

Cottam 1c

MD (Wheat) = 109.96
MD (Potatoes) = 99.26

Cottam 2

MD (Wheat) = 110.17
MD (Potatoes) = 100.19

Cottam 3

MD (Wheat) = 108.92
MD (Potatoes) = 99.30

9.3 Crop adjusted available water is calculated by reference to the total available water and easily available water which is calculated by reference to soil texture and structural condition and the stone content. Where it was considered that droughtiness was likely to be a limiting factor the MD (Wheat) and MD (Potatoes) was calculated and then assessed against table 8. This assessment can be found at ***appendix 4.***

9.4 Droughtiness was only occasionally found to be the limiting factor an only where much lighter textured soils (loamy sand and sand) were identified.

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 principle 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 the principal limiting factor found across the site is wetness with droughtiness affecting occasional sample points.

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. Where wetness is the limiting factor areas of land with a lighter topsoil are downgraded when they are surrounded by areas with topsoil with a higher clay content when it is considered that accessing the lighter areas would be constrained by the surrounding heavier land.

10.5 The breakdown of land by classification is:

COTTAM 1

Grade 2:	25.2Ha	2.7%
Grade 3a:	55.7Ha	6.0%
Grade 3b:	843Ha	91.3%
Total:	923.9Ha	

COTTAM 2

Grade 3a:	15.4Ha	11.7%
Grade 3b:	115.8Ha	88.3%
Total:	131.2Ha	

COTTAM 3

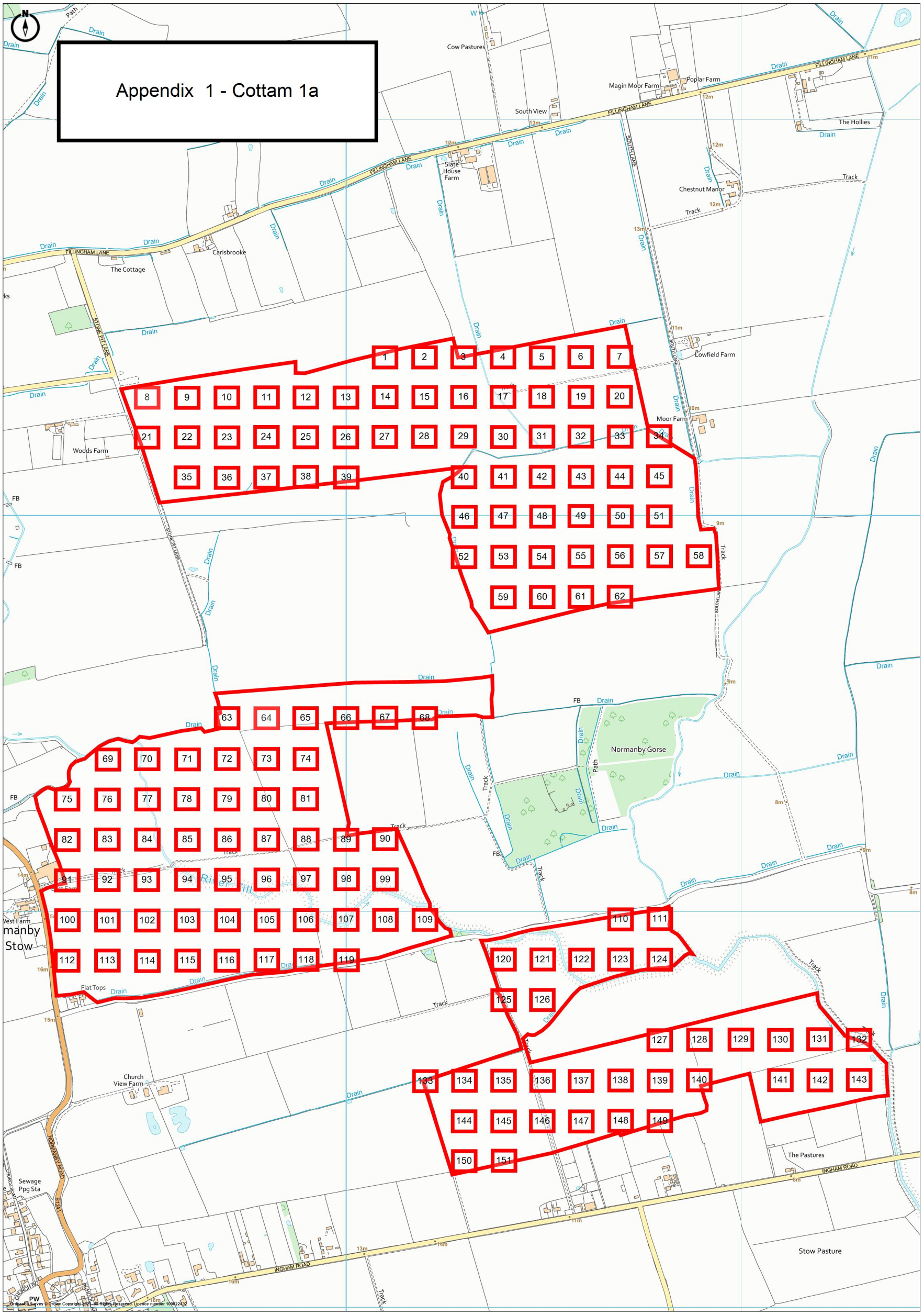
Grade 2:	1.4Ha	0.8%
Grade 3a:	7.7Ha	4.3%
Grade 3b:	171.4Ha	94.9%
Total:	180.5Ha	

TOTAL

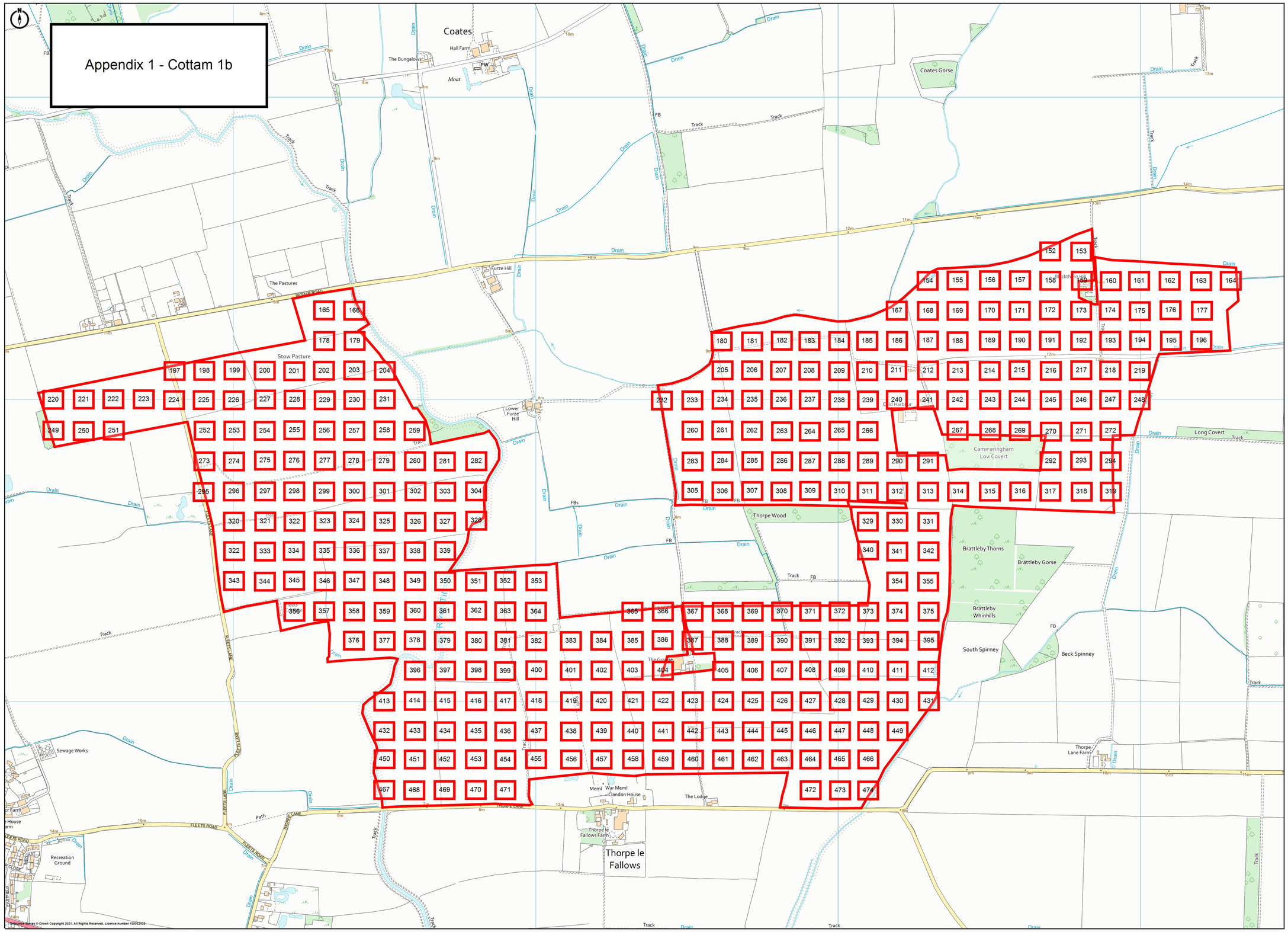
Grade 2:	26.6Ha	2.2%
Grade 3a:	78.8Ha	6.4%
Grade 3b:	1130.2Ha	91.4%
Total:	1235.6Ha	

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

Appendix 1 - Cottam 1a



Appendix 1 - Cottam 1b



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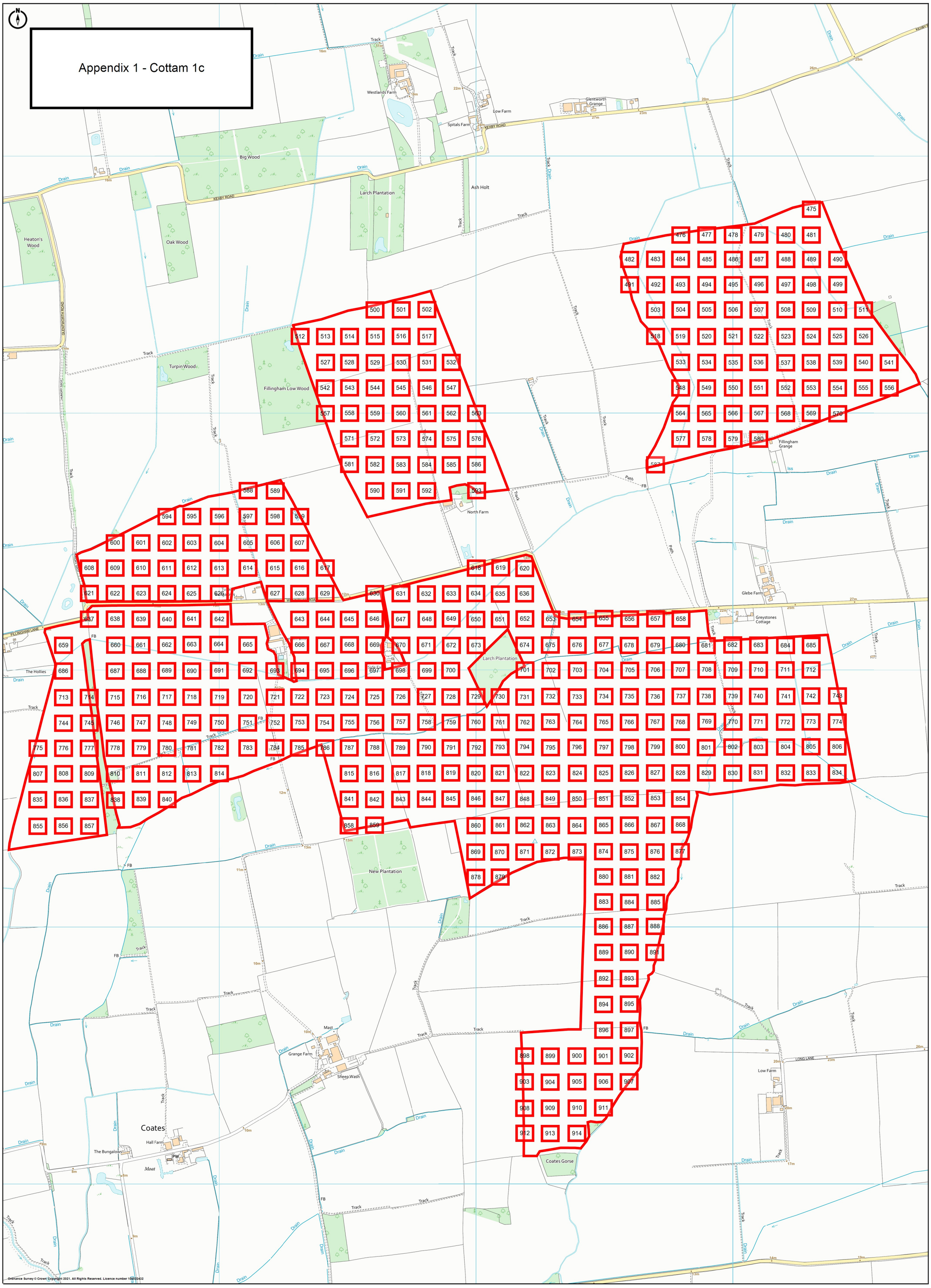
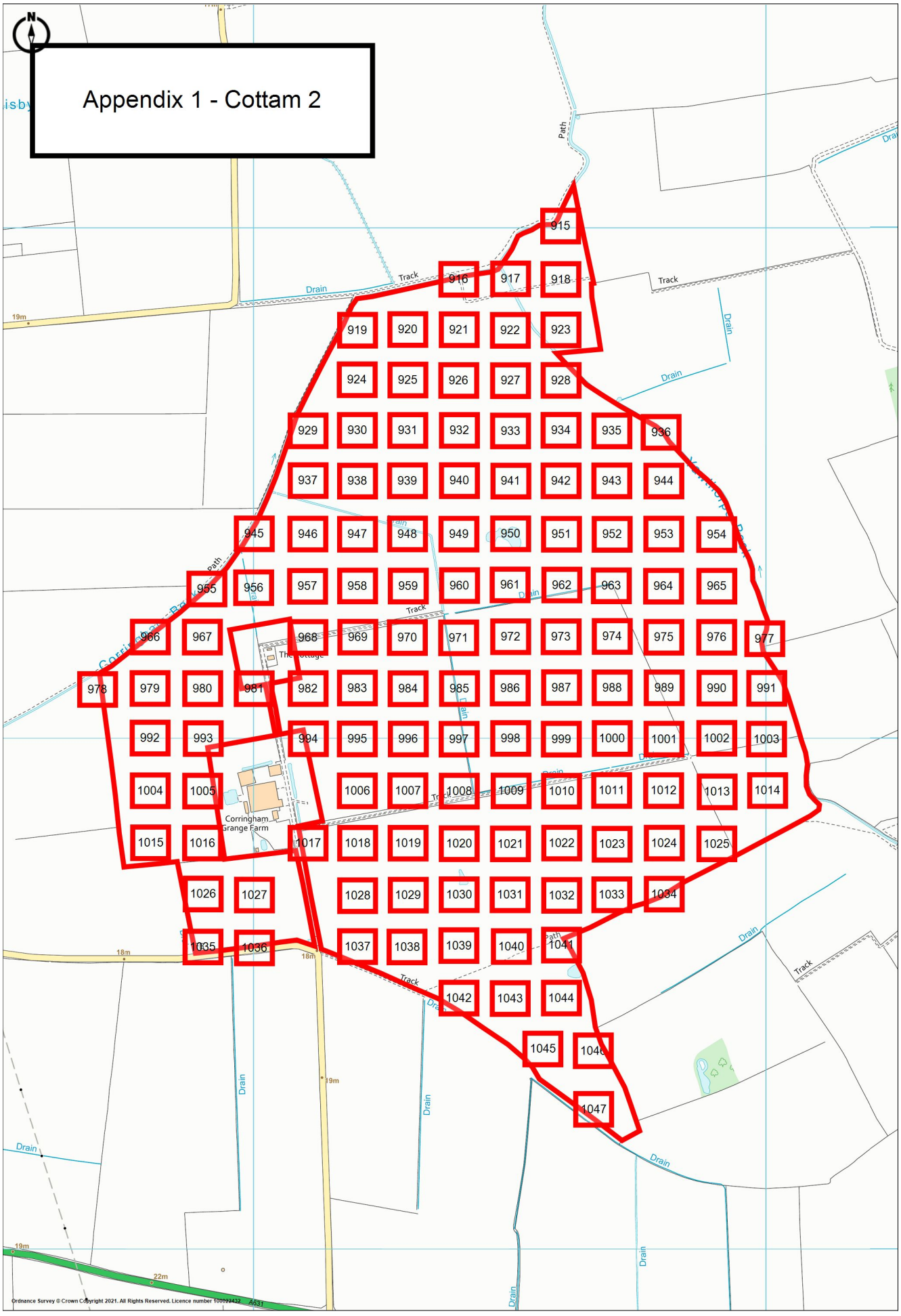
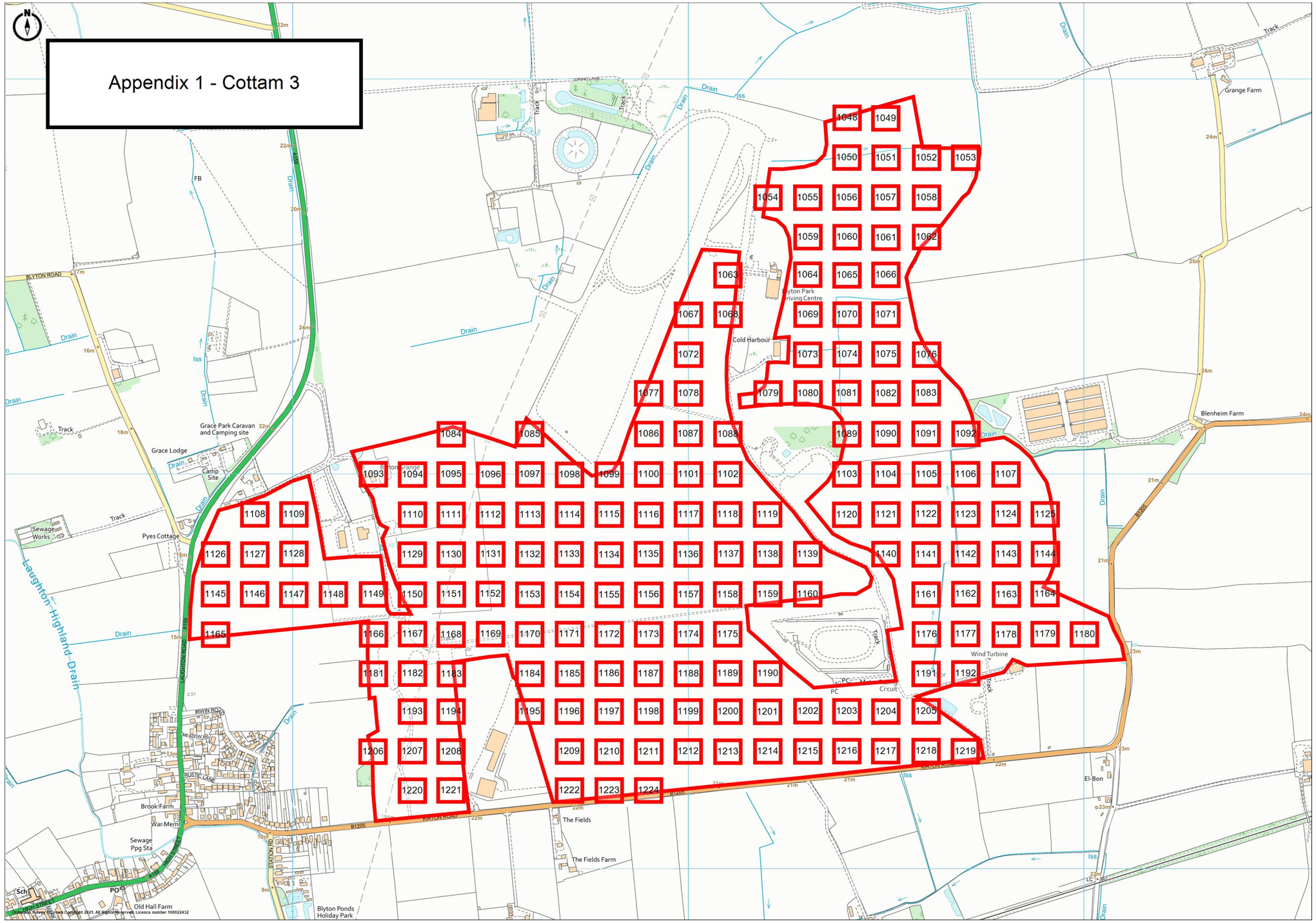
Plotted Scale - 1:8500. Paper Size - A2

Appendix 1 - Cottam 1c





Appendix 1 - Cottam 3



Promap
LANDMARK INFORMATION

APPENDIX 2 – AGRO-CLIMATIC DATA

Site Details: Cottam 1a

Grid reference (centre of site): 489293 383499

Altitude: Mean 16.97

Climatic data from surrounding locations:

Grid Reference	ALT	AAR	LR_AAR	ASR	ATO	ATS	MDW	MDP	FCD
48503800	10	584	1.3	300	1418	2389	115	109	116
48503850	17	597	1	310	1407	2376	112	105	121
49003800	8	610	1.6	310	1419	2392	113	106	125
49003850	14	626	1.3	315	1410	2382	111	104	130

Altitude Adjusted

Grid Reference	AAR	ATO	FCD	MDW	MDP	Proximity Adjustment
48503800	593.06	1410.06	117.31	113.65	106.04	5.35%
48503850	596.97	1407.04	121.00	112.01	102.82	9.67%
49003800	624.35	1408.78	127.07	111.08	102.61	18.36%
49003850	629.86	1406.62	130.56	110.43	101.51	66.62%

Site Details: Cottam 1b

Grid reference (centre of site): 491203 381629

Altitude: Mean 9.55

Climatic data from surrounding locations:

Grid Reference	ALT	AAR	LR_AAR	ASR	ATO	ATS	MDW	MDP	FCD
49003800	8	610	1.6	310	1419	2392	113	106	125
49503800	27	631	0.5	320	1396	2368	109	101	134
49003850	14	626	1.3	315	1410	2382	111	104	130
49503850	41	644	0.6	325	1378	2348	106	97	139

Altitude Adjusted

Grid Reference	AAR	ATO	FCD	MDW	MDP	Proximity Adjustment
49003800	612.48	1417.23	125.36	112.67	104.69	55.19%
49503800	622.27	1415.89	132.74	111.40	100.55	15.03%
49003850	620.21	1415.07	129.16	111.86	103.39	21.16%
49503850	625.13	1413.85	136.27	110.55	97.47	8.62%

Site Details: Cottam 1c

Grid reference (centre of site): 492102385082

Altitude: Mean 17.10

Climatic data from surrounding locations:

Grid Reference	ALT	AAR	LR_AAR	ASR	ATO	ATS	MDW	MDP	FCD
49003850	14	626	1.3	315	1410	2382	111	104	130
49003900	23	630	1.3	320	1397	2367	109	101	133
49503850	41	644	0.6	325	1378	2348	106	97	139
49503900	55	652	0.6	335	1360	2329	102	93	140

Altitude Adjusted

Grid Reference	AAR	ATO	FCD	MDW	MDP	Proximity Adjustment
49003850	630.02	1406.47	130.58	110.40	101.48	58.41%
49003900	622.32	1403.73	131.89	110.14	99.53	5.65%
49503850	629.66	1405.25	136.93	109.46	96.03	31.37%
49503900	629.26	1403.21	136.71	107.48	92.79	4.56%

Site Details: Cottam 2

Grid reference (centre of site): 488445 392175

Altitude: Mean 17.30

Climatic data from surrounding locations:

Grid Reference	ALT	AAR	LR_AAR	ASR	ATO	ATS	MDW	MDP	FCD
48503900	23	610	1.1	310	1398	2366	111	103	126
48503950	19	611	1.4	310	1401	2370	111	104	128
49003900	23	630	1.3	320	1397	2367	109	101	133
49003950	15	631	1.2	320	1404	2375	109	102	133

Altitude Adjusted

Grid Reference	AAR	ATO	FCD	MDW	MDP	Proximity Adjustment
48503900	603.73	1404.50	125.09	112.02	101.35	17.48%
48503950	608.61	1402.94	127.65	111.34	102.04	14.05%
49003900	622.58	1403.50	131.93	110.10	99.48	39.69%
49003950	633.75	1401.38	133.40	108.57	99.55	28.78%

Site Details: Cottam 3

Grid reference (centre of site): 487018 395878

Altitude: Mean 23.18

Climatic data from surrounding locations:

Grid Reference	ALT	AAR	LR_AAR	ASR	ATO	ATS	MDW	MDP	FCD
48503950	19	611	1.4	310	1401	2370	111	104	128
48504000	16	594	1.2	315	1402	2371	110	103	125
49003950	15	631	1.2	320	1404	2375	109	102	133
49004000	15	620	0.9	325	1402	2373	108	100	131

Altitude Adjusted

Grid Reference	AAR	ATO	FCD	MDW	MDP	Proximity Adjustment
48503950	616.85	1396.23	128.85	110.16	100.49	51.24%
48504000	602.62	1393.81	126.25	108.66	99.22	11.40%
49003950	640.82	1394.67	134.42	107.47	98.11	28.84%
49004000	627.36	1392.67	132.06	106.65	96.29	8.52%

Appendix 3a - Augur sample results - Cottam 1a

		Topsoil					Subsoil 1						Subsoil 2						Subsoil 3				
Sample No	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
1	14	0-40	HCL	10YR 4/4			40-75	C	10YR 5/3		MOB	P	75-120	C	10YR 5/2		MOB	P						
2	13	0-40	HCL	10YR 4/4			40-75	C	10YR 5/2		MOB	P	75-120	C	10YR 5/2		MOB	P						
3	12	0-40	HCL	10YR 4/4			40-120	C	10YR 4/2		MOB	P												
4	12	0-40	HCL	10YR 4/2		B	40-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
5	14	0-40	HCL	10YR 4/2		B	40-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
6	15	0-40	HCL	10YR 4/2		B	40-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
7	12	0-40	HCL	10YR 4/2		B	40-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/1		MOB	P						
8	16	0-30	HCL	10YR 4/2			30-70	C	10YR 5/2		MO	P	70-90	StC	10YR 5/2		MO	M	90-120	C	10YR 5/1	MO	P	
9	16	0-40	HCL	10YR 4/2			40-70	C	10YR 5/2		MO	CAB	70-90	StC	10YR 5/2		MO	MAB	90-120	C	10YR 5/1	MO	MASSIVE	
10	14	0-40	HCL	10YR 4/2			40-60	C	10YR 5/2		MOB	P	60-120	C	10YR 5/3		MOB	P						
11	13	0-40	HCL	10YR 4/2			40-60	C	10YR 5/2		MOB	P	60-120	C	10YR 5/3		MOB	P						
12	12	0-40	HCL	10YR 4/2			40-75	C	10YR 5/2		MOB	P	75-120	C	10YR 5/2		MOB	P						
13	12	0-40	HCL	10YR 4/2			40-75	C	10YR 5/2		MOB	P	75-120	C	10YR 5/2		MOB	P						
14	13	0-40	HCL	10YR 4/2			40-75	C	10YR 5/2		MOB	P	75-120	C	10YR 5/2		MOB	P						
15	14	0-40	HCL	10YR 4/4			40-75	C	10YR 4/2		MOB	P	75-120	C	10YR 5/2		MOB	P						
16	15	0-40	HCL	10YR 4/4			40-75	C	10YR 5/2		MOB	P	75-120	C	10YR 5/2		MOB	P						
17	15	0-40	HCL	10YR 4/2		B	40-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
18	14	0-40	HCL	10YR 4/2		B	40-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
19	12	0-40	HCL	10YR 4/2		B	40-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/1		MOB	P						
20	11	0-40	HCL	10YR 4/2		B	40-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
21	15	0-40	HCL	10YR 4/2			40-70	C	10YR 5/2		MO	P	70-90	StC	10YR 5/2		MO	M	90-120	C	10YR 5/1	MO	P	
22	15	0-40	HCL	10YR 4/2		B	40-70	StC	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
23	14	0-40	HCL	10YR 4/2		B	40-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
24	13	0-40	HCL	10YR 4/2		B	40-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
25	12	0-40	HCL	10YR 4/2		B	40-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
26	12	0-40	HCL	10YR 4/4			40-75	C	10YR 5/2		MOB	P	75-120	C	10YR 5/2		MOB	P						
27	14	0-40	HCL	10YR 4/4			40-75	C	10YR 5/2		MOB	P	75-120	C	10YR 5/2		MOB	P						
28	14	0-40	HCL	10YR 4/4			40-75	C	10YR 5/2		MOB	P	75-120	C	10YR 5/2		MOB	P						
29	14	0-40	HCL	10YR 4/4			40-75	C	10YR 5/2		MOB	P	75-120	C	10YR 5/2		MOB	P						
30	12	0-40	HCL	10YR 4/4			40-75	C	10YR 5/2		MOB	P	75-120	C	10YR 5/2		MOB	P						
31	12	0-40	HCL	10YR 4/2		B	40-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
32	13	0-40	HCL	10YR 4/2		B	40-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
33	14	0-40	HCL	10YR 4/2		B	40-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
34	11	0-40	HCL	10YR 4/2		B	40-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/1		MOB	P						
35	15	0-40	HCL	10YR 4/2			40-70	C	10YR 5/2		MO	P	70-90	StC	10YR 5/2		MO	M	90-120	C	10YR 5/1	MO	P	
36	12	0-40	HCL	10YR 4/2		B	40-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
37	12	0-40	HCL	10YR 4/2		B	40-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
38	13	0-40	HCL	10YR 4/2		B	40-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
39	13	0-40	HCL	10YR 4/4			40-80	C	10YR 4/4		MOB	P	80-120	C	10YR 4/4		MOB	P						
40	11	0-40	HCL	10YR 4/2		B	40-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
41	12	0-45	HCL	10YR 4/2		B	45-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
42	10	0-45	HCL	10YR 4/2		B	45-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
43	9	0-45	HCL	10YR 4/2		B	45-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
44	8	0-45	HCL	10YR 4/2		B	45-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
45	7	0-45	HCL	10YR 4/2		B	45-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/1		MOB	P						
46	10	0-40	HCL	10YR 4/2		B	40-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
47	10	0-45	HCL	10YR 4/2		B	45-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
48	10	0-45	HCL	10YR 4/2		B	45-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
49	9	0-45	HCL	10YR 4/2		B	45-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
50	10	0-45	HCL	10YR 4/2		B	45-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
51	11	0-40	HCL	10YR 4/2		B	40-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
52	9	0-40	HCL	10YR 4/2		B	40-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
53	9	0-45	HCL	10YR 4/2		B	45-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
54	9	0-45	HCL	10YR 4/2		B	45-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
55	9	0-45	HCL	10YR 4/2		B	45-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
56	9	0-45	HCL	10YR 4/2		B	45-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
57	9	0-40	HCL	10YR 4/2		B	40-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
58	9	0-40	HCL	10YR 4/2		B	40-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
59	9	0-40	HCL	10YR 4/2		B	40-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
60	9	0-40	HCL	10YR 4/2		B	40-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
61	9	0-40	HCL	10YR 4/2		B	40-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						

		Topsoil					Subsoil 1						Subsoil 2						Subsoil 3					
Sample No	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
62	9	0-40	HCL	10YR 4/2		B	40-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/2		MOB	P						
63	12	0-40	MCL	10YR 4/3			40-80	CL	10YR 5/3		MOB	P	80-120	C	10YR 5/1		MO	P						
64	12	0-40	MCL	10YR 4/3			40-80	CL	10YR 5/6		B	MAB	80	IMP (MUDSTONE)										
65	11	0-40	MCL	10YR 4/3			40-80	CL	10YR 5/6		B	M	80	IMP (MUDSTONE)										
66	10	0-40	MCL	10YR 4/3			40-80	CL	10YR 5/6		B	M	80	IMP (MUDSTONE)										
67	10	0-40	MCL	10YR 4/3			40-80	CL	10YR 5/3		MOB	P	80-120	C	10YR 5/1		MO	P						
68	9	0-40	MCL	10YR 4/3			40-80	CL	10YR 5/3		MOB	P	80-120	C	10YR 5/1		MO	P						
69	12	0-30	HCL	10YR 4/2			30-70	C	10YR 5/2		MOB	CAB	70-80	StC	10YR 5/2		MO	MAB	80	IMP (MUDSTONE)				
70	12	0-30	C	10YR 4/2			30-70	C	10YR 5/2		MOB	P	70-80	StC	10YR 5/2		MO	M	80	IMP (MUDSTONE)				
71	12	0-30	C	10YR 4/2			30-70	C	10YR 5/2		MOB	P	70-80	StC	10YR 5/2		MO	M	80	IMP (MUDSTONE)				
72	10	0-30	C	10YR 4/2			30-70	C	10YR 5/2		MOB	P	70-80	StC	10YR 5/2		MO	M	80	IMP (MUDSTONE)				
73	10	0-40	MCL	10YR 4/3			35-80	C	10YR 5/2		MOB	P	80-120	C	10YR 4/1		MO	P						
74	9	0-40	MCL	10YR 4/3			35-80	C	10YR 5/2		MOB	P	80-120	C	10YR 4/1		MO	P						
75	12	0-30	HCL	10YR 4/2			30-70	C	10YR 5/2		MOB	P	70-80	StC	10YR 5/2		MO	M	80	IMP (MUDSTONE)				
76	12	0-30	HCL	10YR 4/2			30-70	C	10YR 5/2		MOB	P	70-80	StC	10YR 5/2		MO	M	80	IMP (MUDSTONE)				
77	12	0-30	C	10YR 4/2			30-70	C	10YR 5/2		MOB	P	70-80	StC	10YR 5/2		MO	P	80	IMP (MUDSTONE)				
78	12	0-30	C	10YR 4/2			30-70	C	10YR 5/2		MOB	P	70-80	StC	10YR 5/2		MO	P	80	IMP (MUDSTONE)				
79	10	0-30	C	10YR 4/2			30-70	C	10YR 5/2		MOB	P	70-80	StC	10YR 5/2		MO	P	80	IMP (MUDSTONE)				
80	9	0-40	MCL	10YR 4/3			35-80	C	10YR 5/2		MOB	P	80-120	C	10YR 4/1		MO	P						
81	9	0-40	MCL	10YR 4/3			35-80	C	10YR 5/2		MOB	P	80-120	C	10YR 4/1		MO	P						
82	12	0-30	HCL	10YR 4/2			30-70	C	10YR 5/2		MOB	P	70-80	StC	10YR 5/2		MO	M	80	IMP (MUDSTONE)				
83	12	0-40	MCL	10YR 4/2			40-70	SC	10YR 5/2		MOB	P	70-120	C	10YR 5/1		MOB	P						
84	12	0-40	MCL	10YR 4/2			40-70	SC	10YR 5/2		MOB	C PRISM	70-120	C	10YR 5/1		MOB	P						
85	11	0-35	C	10YR 4/2			35-70	C	10YR 5/2		MOB	P	70-120	C	10YR 4/1		MO	P						
86	11	0-35	C	10YR 4/2			35-70	C	10YR 5/2		MOB	P	70-120	C	10YR 4/1		MO	P						
87	11	0-35	C	10YR 4/2			35-70	C	10YR 5/2		MOB	P	70-120	C	10YR 4/1		MO	P						
88	11	0-35	C	10YR 4/2			35-70	C	10YR 5/2		MOB	P	70-120	C	10YR 4/1		MO	P						
89	11	0-35	C	10YR 4/2			35-70	C	10YR 5/2		MOB	P	70-120	C	10YR 4/1		MO	P						
90	12	0-35	C	10YR 4/2			35-70	C	10YR 5/2		MOB	P	70-120	C	10YR 4/1		MO	P						
91	15	0-40	HCL	10YR 4/2			40-90	C	10YR 5/2		MO	P	90-120	C	10YR 5/1		MO	P						
92	14	0-40	HCL	10YR 4/2			40-90	C	10YR 5/2		MO	P	90-120	C	10YR 5/1		MO	P						
93	14	0-40	HCL	10YR 4/2			40-90	C	10YR 5/2		MO	P	90-120	C	10YR 5/1		MO	P						
94	12	0-40	HCL	10YR 4/2			40-90	C	10YR 5/2		MO	P	90-120	C	10YR 5/1		MO	P						
95	12	0-40	HCL	10YR 4/2			40-90	C	10YR 5/2		MO	P	90-120	C	10YR 5/1		MO	P						
96	13	0-35	C	10YR 4/2			35-70	C	10YR 5/2		MOB	P	70-120	C	10YR 4/1		MO	P						
97	11	0-35	C	10YR 4/2			35-70	C	10YR 5/2		MOB	P	70-120	C	10YR 4/1		MO	P						
98	9	0-35	C	10YR 4/2			35-70	C	10YR 5/2		MOB	P	70-120	C	10YR 4/1		MO	P						
99	9	0-35	C	10YR 4/2			35-70	C	10YR 5/2		MOB	P	70-120	C	10YR 4/1		MO	P						
100	17	0-30	HCL	10YR 4/2			30-70	C	10YR 5/2		MOB	P	70	IMP (MUDSTONE)										
101	16	0-40	HCL	10YR 4/2			40-90	C	10YR 5/2		MO	P	90-120	C	10YR 5/1		MO	P						
102	15	0-40	HCL	10YR 4/2			40-90	C	10YR 5/2		MO	P	90-120	C	10YR 5/1		MO	P						
103	14	0-40	HCL	10YR 4/2			40-90	C	10YR 5/2		MO	P	90-120	C	10YR 5/1		MO	P						
104	14	0-40	HCL	10YR 4/2			40-90	C	10YR 5/2		MO	P	90-120	C	10YR 5/1		MO	P						
105	11	0-40	C	10YR 4/2			40-70	C	10YR 5/2		MO	P	70-90	StC	10YR 5/2		MO	M	90-120	C	10YR 4/1		MO	P
106	9	0-30	C	10YR 4/2			30-70	C	10YR 5/2		MO	P	70-90	StC	10YR 5/2		MO	M	90-120	C	10YR 4/1		MO	P
107	9	0-30	C	10YR 4/2			30-70	C	10YR 5/2		MO	P	70-90	StC	10YR 5/2		MO	M	90-120	C	10YR 4/1		MO	P
108	9	0-30	C	10YR 4/2			30-70	C	10YR 5/2		MO	P	70-90	StC	10YR 5/2		MO	M	90-120	C	10YR 4/1		MO	P
109	9	0-30	C	10YR 4/2			30-70	C	10YR 5/2		MO	P	70-90	StC	10YR 5/2		MO	M	90-120	C	10YR 4/1		MO	P
110	7	0-30	MCL	10YR 4/2		MO	50-120	S	7.5YR 5/6		MO	M												
111	6	0-30	C	10YR 4/2			30-70	C	10YR 5/2		MO	P	70-120	C	10YR 5/1		MO	P						
112	17	0-30	HCL	10YR 4/2			30-70	C	10YR 5/2		MOB	P	70	IMP (MUDSTONE)										
113	16	0-30	C	10YR 4/2			30-70	C	10YR 5/2		MOB	P	70-120	C	10YR 5/1		MO	P						
114	15	0-30	C	10YR 4/2			30-70	C	10YR 5/2		MO	P	70-120	S	7.5YR 5/3			P						
115	14	0-40	HCL	10YR 4/2			40-70	C	10YR 5/2		MO	P	70-120	C	10YR 5/1		MO	P						
116	14	0-40	HCL	10YR 4/2			40-70	C	10YR 5/2		MO	P	70-120	C	10YR 5/1		MO	P						
117	13	0-40	HCL	10YR 4/2			40-70	C	10YR 5/2		MO	P	70-120	C	10YR 5/1		MO	P						
118	11	0-40	HCL	10YR 4/2			40-70	C	10YR 5/2		MO	P	70-120	C	10YR 5/1		MO	P						
119	10	0-30	C	10YR 4/2		O	30-70	C	10YR 5/2		MO	P	70-90	StC	10YR 5/2		MO	M	90-120	C	10YR 4/1		MO	M
120	8	0-40	HCL	10YR 4/3			40	IMP																
121	8	0-30	C	10YR 4/2			30-70	C	10YR 5/2		MO	P	70-120	C	10YR 5/1		MO	P						
122	8	0-30	C	10YR 4/2			30-70	C	10YR 5/2		MO	P	70-120	C	10YR 5/1		MO	P						
123	7	0-30	C	10YR 4/2			30-70	C	10YR 5/2		MO	P	70-120	C	10YR 5/1		MO	P						

		Topsoil					Subsoil 1						Subsoil 2						Subsoil 3					
Sample No	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
124	8	0-30	C	10YR 4/2			30-70	C	10YR 5/2		MO	P	70-120	C	10YR 5/1		MO	P						
125	7	0-30	MCL	10YR 4/3			30-50	C	10YR 5/3		MOB	P	50	IMP (MUDSTONE)										
126	8	0-30	C	10YR 4/2			30-70	C	10YR 5/2		MO	P	70-120	C	10YR 5/1		MO	P						
127	9	0-40	SCL	10YR 4/2			40-70	C	10YR 5/2		MO	P	70-120	C	10YR 5/1		MO	P						
128	9	0-35	SCL	10YR 4/2			35-60	C	10YR 5/2		MO	P	60-120	C	10YR 5/1		MO	P						
129	9	0-40	SCL	10YR 4/2			40-50	CL	10YR 4/1			M	50	IMP (MUDSTONE)										
130	7	0-40	SCL	10YR 4/2			40-50	CL	10YR 4/1			MAB	50	IMP (MUDSTONE)										
131	6	0-30	SCL	10YR 4/2			35-90	ZC	10YR 5/1		MO	P	90-120	Z	10YR 6/1		MO	M						
132	6	0-35	HCL	10YR 4/2			35-60	C	10YR 5/2		MO	P	60-120	C	10YR 5/1		MO	P						
133	9	0-45	HCL	10YR 4/2			45-120	StC	10YR 5/2		MOB	P												
134	10	0-45	HCL	10YR 4/2			45-120	C	10YR 5/1		MOB	C PRISM												
135	10	0-30	SCL	10YR 4/2			30-60	CL	10YR 5/3		MO	M	60-120	C	10YR 5/1		MO	P						
136	10	0-40	SCL	10YR 4/3			40	IMP																
137	9	0-40	SCL	10YR 4/2			40-60	C	10YR 5/3		MO	P	60-120	C	10YR 5/1		MO	P						
138	9	0-40	SCL	10YR 4/2			40-70	C	10YR 5/2		MO	P	70-120	C	10YR 5/1		MO	P						
139	8	0-35	SCL	10YR 4/2			35-80	ZC	10YR 5/2		MO	P	80	IMP (MUDSTONE)										
140	7	0-35	SCL	10YR 4/2			35-60	C	10YR 5/2		MO	P	60-120	C	10YR 5/1		MO	P						
141	6	0-35	C	10YR 4/2			35-60	C	10YR 5/2		MO	P	60-120	C	10YR 5/1		MO	P						
142	6	0-35	C	10YR 4/2			35-60	C	10YR 5/2		MO	P	60-120	C	10YR 5/1		MO	P						
143	6	0-35	C	10YR 4/2			35-60	C	10YR 5/2		MO	P	60-120	C	10YR 5/1		MO	P						
144	11	0-45	SCL	10YR 4/2			45-120	C	10YR 5/1		MOB	P												
145	9	0-40	SCL	10YR 4/2			40-60	C	10YR 5/3		MO	P	60-120	C	10YR 5/1		MO	P						
146	9	0-40	SCL	10YR 4/2			40-70	ZCL	10YR 5/3		MO	WMAB	70-120	C	10YR 5/1		MO	C PRISM						
147	8	0-30	SCL	10YR 4/2			30-60	CL	10YR 5/3		MO	M	60-120	C	10YR 5/1		MO	P						
148	7	0-40	SCL	10YR 4/2			40-60	C	10YR 5/3		MO	P	60-120	C	10YR 5/1		MO	P						
149	7	0-40	SCL	10YR 4/2			40-60	C	10YR 5/3		MO	P	60-120	C	10YR 5/1		MO	P						
150	12	0-45	HCL	10YR 4/2		B	45-120	C	10YR 5/1		MOB	P												
151	10	0-45	HCL	10YR 4/2		B	45-120	C	10YR 5/1		MOB	P												
	11.00																							

Appendix 3b - Augur sample results - Cottam 1b

		Topsoil					Subsoil 1						Subsoil 2						Subsoil 3					
Sample No	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
152	12	0-40	C	10YR 4/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
153	12	0-40	C	10YR 4/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
154	12	0-40	C	10YR 4/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
155	12	0-40	C	10YR 4/2			40-75	C	10YR 5/1		MOB	P	75-120	C	7.5YR 4/2		MOGB	P						
156	12	0-40	C	10YR 4/2			40-75	C	10YR 5/1		MOB	P	75-120	C	7.5YR 4/2		MOGB	P						
157	12	0-40	C	10YR 4/2			40-70	C	10YR 5/1		MOB	P	70-120	C	7.5YR 4/2		MOGB	P						
158	12	0-40	C	10YR 4/2			40-70	C	10YR 5/1		MOB	P	70-120	C	7.5YR 4/2		MOGB	P						
159	12	0-40	C	10YR 4/2			40-70	C	10YR 5/1		MOB	P	70-120	C	7.5YR 4/2		MOGB	P						
160	12	0-40	C	10YR 4/2			40-75	C	10YR 4/3		MOB	P	75-120	C	7.5YR 4/2		MOGB	P						
161	12	0-40	C	10YR 4/2			40-75	C	10YR 4/3		MOB	P	75-120	C	7.5YR 4/2		MOB	P						
162	12	0-40	C	10YR 4/2			40-75	C	10YR 4/3		MOB	P	75-120	C	7.5YR 4/2		MOB	P						
163	15	0-40	C	10YR 4/2			40-75	C	10YR 4/3		MOB	P	75-120	C	7.5YR 4/2		MOB	P						
164	15	0-40	C	10YR 4/2			40-75	C	10YR 4/3		MOB	P	75-120	C	7.5YR 4/2		MOB	P						
165	8	0-30	SCL	10YR 3/2			30-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
166	9	0-30	SCL	10YR 3/2			30-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
167	12	0-40	C	10YR 3/3			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
168	12	0-40	C	10YR 4/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
169	12	0-40	C	10YR 4/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P
170	12	0-40	C	10YR 4/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
171	12	0-40	C	10YR 4/2			40-75	C	10YR 5/1		MOB	CAB	75-120	C	10YR 5/1		MOB	P						
172	12	0-40	C	10YR 4/2			40-75	C	10YR 5/2		MOB	P	75-120	C	7.5YR 4/2		MOGB	P						
173	12	0-40	C	10YR 4/2			40-75	C	10YR 5/2		MOB	P	75-120	C	7.5YR 4/2		MOGB	P						
174	12	0-40	C	10YR 4/2			40-75	C	10YR 4/2		MOB	P	75-120	SC	10YR 4/2		MOB	P						
175	12	0-40	C	10YR 4/2			40-75	C	10YR 4/2		MOB	P	75-120	SC	10YR 4/2		MOB	P						
176	14	0-40	C	10YR 4/2			40-75	C	10YR 5/2		MOB	P	75-120	C	7.5YR 4/2		MOGB	P						
177	15	0-40	C	10YR 4/2			40-75	C	10YR 5/2		MOB	P	75-120	C	7.5YR 4/2		MOGB	P						
178	9	0-35	C	10YR 4/2			35-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MO	P						
179	9	0-35	C	10YR 4/2			35-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MO	P						
180	11	0-40	C	10YR 4/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
181	12	0-40	C	10YR 4/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
182	12	0-40	SC	10YR 4/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MO	P						
183	12	0-40	SC	10YR 4/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MO	P						
184	12	0-40	SC	10YR 4/2			40-75	C	10YR 5/1		MOB	P	75-120	S	10YR 5/1		MO	P						
185	12	0-40	C	10YR 3/3			40-120	S	10YR 5/2		MO	M												
186	12	0-40	C	10YR 3/3			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
187	12	0-40	C	10YR 4/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
188	12	0-40	C	10YR 4/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
189	12	0-40	C	10YR 4/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
190	12	0-40	C	10YR 4/2			40-75	C	10YR 5/1		MOB	P	75-120	C	7.5YR 4/2		MOB	P						
191	12	0-40	C	10YR 4/2			40-70	C	10YR 5/2		MOB	P	70-120	C	7.5YR 4/2		MOGB	P						
192	12	0-40	C	10YR 4/2			40-70	C	10YR 5/2		MOB	P	70-120	C	7.5YR 4/2		MOGB	P						
193	12	0-40	C	10YR 4/2			40-70	C	10YR 4/3			P	70-120	C	7.5YR 4/2		MOGB	P	90	IMP				
194	12	0-40	C	10YR 4/2			40-75	C	10YR 5/2		MOB	P	75-120	C	7.5YR 4/2		MOGB	P						
195	13	0-40	C	10YR 4/2			40-75	C	10YR 5/2		MOB	P	75-120	C	7.5YR 4/2		MOGB	P						
196	14	0-40	C	10YR 4/2			40-75	C	10YR 5/2		MOB	P	75-120	C	7.5YR 4/2		MOGB	P						
197	7	0-45	SCL	10YR 4/2			45-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
198	6	0-40	HCL	10YR 4/2			40-100	C	10YR 5/3		MO	P	100-120	S	10YR 4/4			P						
199	6	0-40	MCL	10YR 4/2			40-60	SC	10YR 5/3		MO	P	60-80	S	10YR 4/4		MO	P						
200	6	0-35	C	10YR 4/2			35-70	C	10YR 5/3		MO	P	70-120	C	10YR 5/1		MO	P						
201	6	0-30	SL	10YR 3/2			30-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
202	6	0-35	C	10YR 4/2			35-70	C	10YR 5/3		MO	P	70-120	C	10YR 5/1		MO	P						
203	6	0-35	C	10YR 4/2			35-70	C	10YR 5/3		MO	P	70-120	C	10YR 5/1		MO	P						
204	6	0-45	SCL	10YR 4/2			45-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
205	11	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
206	12	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
207	12	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
208	12	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
209	12	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
210	12	0-40	SC	10YR 4/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
211	12	0-40	C	10YR 4/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
212	12	0-40	C	10YR 4/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						

		Topsoil					Subsoil 1						Subsoil 2						Subsoil 3					
Sample No	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
213	12	0-40	C	10YR 4/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
214	12	0-40	C	10YR 4/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
215	12	0-40	C	10YR 4/2			40-75	C	10YR 5/2		MOB	P	75-120	C	10YR 5/1		MOB	P						
216	12	0-40	C	10YR 4/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
217	12	0-40	C	10YR 4/2			40-75	C	10YR 5/1		MOB	P	75-120	C	7.5YR 4/2		MOB	P						
218	12	0-40	C	10YR 4/2			40-70	C	10YR 5/1		MOB	P	70-120	C	7.5YR 4/2		MOB	P						
219	12	0-40	C	10YR 4/2			40-70	C	10YR 5/1		MOB	P	70-120	C	7.5YR 4/2		MOB	P						
220	8	0-35	SCL	10YR 4/2			35-80	C	10YR 5/1		MOB	P	80-90	S	10YR 5/3			M						
221	6	0-45	SCL	10YR 4/2			45-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
222	6	0-45	SCL	10YR 4/2			45-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
223	6	0-45	SCL	10YR 4/2			45-80	C	10YR 5/1		MOB	CAB	80-120	C	10YR 5/1		MOB	MASSIVE						
224	6	0-45	SCL	10YR 4/2			45-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
225	6	0-40	HCL	10YR 4/2			40-100	C	10YR 5/3		MO	P	100-120	S	10YR 4/4			P						
226	6	0-40	HCL	10YR 4/2			40-100	C	10YR 5/3		MO	P	100-120	S	10YR 4/4			P						
227	6	0-35	HCL	10YR 4/2			35-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
228	6	0-35	HCL	10YR 4/2			35-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
229	6	0-45	SCL	10YR 4/2			45-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
230	6	0-45	SCL	10YR 4/2			45-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
231	6	0-45	SCL	10YR 4/2			45-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
232	10	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MO	P	70-120	C	10YR 5/1		MO	P						
233	11	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MO	P	70-120	C	10YR 5/1		MO	P						
234	12	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MO	P	70-120	C	10YR 5/1		MO	P						
235	12	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
236	12	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
237	12	0-40	C	10YR 3/2			40-70	C	10YR 4/3		MOB	CAB	70-120	SC	10YR 4/3		MOB	P						
238	12	0-40	C	10YR 4/2			40-75	SC	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
239	12	0-40	C	10YR 4/2			40-75	SC	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
240	12	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
241	12	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
242	12	0-40	C	10YR 4/2			40-75	SC	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
243	12	0-40	C	10YR 4/2			40-75	SC	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
244	12	0-40	C	10YR 4/2			40-75	SC	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
245	12	0-40	C	10YR 4/2			40-75	SC	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
246	12	0-40	C	10YR 4/2			40-70	C	10YR 5/1		MOB	P	70-120	C	7.5YR 4/2		MOB	P						
247	12	0-40	C	10YR 4/2			40-70	C	10YR 5/1		MOB	P	70-120	C	7.5YR 4/2		MOB	P						
248	12	0-40	C	10YR 4/2			40-70	C	10YR 5/1		MOB	P	70-120	C	7.5YR 4/2		MOB	P						
249	7	0-45	SCL	10YR 4/2			45-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
250	6	0-45	SCL	10YR 4/2			45-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
251	6	0-45	SCL	10YR 4/2			45-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
252	7	0-45	SCL	10YR 4/2			45-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
253	6	0-45	SCL	10YR 4/2			45-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
254	6	0-45	SCL	10YR 4/2			45-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
255	6	0-45	SCL	10YR 4/2			45-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
256	6	0-45	SCL	10YR 4/2			45-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
257	6	0-40	SCL	10YR 4/2			40-60	LS	7.5YR 5/6			C Platy	60-120	LS	7.5YR 5/6			M						
258	6	0-35	SCL	10YR 4/2			35-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
259	7	0-35	SCL	10YR 4/2			35-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
260	8	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MO	P	70-120	C	10YR 5/1		MO	P						
261	9	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MO	P	70-120	C	10YR 5/1		MO	P						
262	10	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	SC	10YR 5/1		MOB	P						
263	12	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	SC	10YR 5/1		MOB	P						
264	12	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	SC	10YR 5/1		MOB	P						
265	12	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	SC	10YR 5/1		MOB	P						
266	12	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	SC	10YR 5/1		MOB	P						
267	12	0-40	C	10YR 4/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
268	12	0-40	C	10YR 4/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
269	12	0-40	C	10YR 4/2			40-75	C	10YR 5/2		MOB	P	75-120	C	10YR 5/1		MOB	P						
270	12	0-40	C	10YR 4/2			40-75	C	10YR 5/2		MOB	P	75-120	C	10YR 5/1		MOB	P						
271	14	0-40	C	10YR 4/2			40-70	C	10YR 5/1		MOB	P	70-120	C	7.5YR 4/2		MOGB	P						
272	14	0-40	C	10YR 4/2			40-70	C	10YR 5/2		MOB	P	70-120	C	7.5YR 4/2		MOB	P						
273	6	0-35	HCL	10YR 4/2			35-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
274	6	0-35	HCL	10YR 4/2			35-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						

		Topsoil					Subsoil 1						Subsoil 2						Subsoil 3					
Sample No	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
275	6	0-35	HCL	10YR 4/2			35-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
276	6	0-45	SCL	10YR 4/2			45-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
277	6	0-45	SCL	10YR 4/2			45-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
278	6	0-35	HCL	10YR 4/2			35-80	SC	10YR 5/3		MOB	P	80-120	S	10YR 4/4		MO	P						
279	6	0-35	HCL	10YR 4/2			35-80	SC	10YR 5/3		MOB	P	80-120	S	10YR 4/4		MO	P						
280	7	0-35	SCL	10YR 4/2			35-90	SC	10YR 5/1		MOB	P	90-120	St S	10YR 4/4		MO	P						
281	8	0-35	SCL	10YR 4/2			35-90	SC	10YR 5/1		MOB	P	90-120	St S	10YR 4/4		MO	P						
282	8	0-35	SCL	10YR 4/2			35-90	SC	10YR 5/1		MOB	P	90-120	St S	10YR 4/4		MO	P						
283	6	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MO	P	70-120	C	10YR 5/1		MO	P						
284	9	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MO	P	70-120	C	10YR 5/1		MO	P						
285	10	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MO	P	70-120	C	10YR 5/1		MO	P						
286	11	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MO	P	70-120	C	10YR 5/1		MO	P						
287	12	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MO	P	70-120	C	10YR 5/1		MO	P						
288	12	0-40	C	10YR 3/2			40-70	C	10YR 4/1		MOB	P	70-120	SC	10YR 4/1		MOB	P						
289	12	0-40	C	10YR 3/2			40-70	C	10YR 4/1		MOB	P	70-120	SC	10YR 4/1		MOB	P						
290	12	0-40	C	10YR 3/2			40-70	C	10YR 4/1		MOB	P	70-120	SC	10YR 4/1		MOB	P						
291	12	0-40	C	10YR 3/2			40-70	C	10YR 4/1		MOB	P	70-120	SC	10YR 4/1		MOB	P						
292	12	0-40	C	10YR 4/2			40-70	C	10YR 5/1		MOB	P	70-120	C	7.5YR 4/2		MOGB	P						
293	12	0-40	C	10YR 4/2			40-70	C	10YR 5/1		MOB	P	70-120	C	7.5YR 4/2		MOGB	P						
294	12	0-40	C	10YR 4/2			40-70	C	10YR 5/1		MOB	P	70-120	C	7.5YR 4/2		MOGB	P						
295	6	0-35	HCL	10YR 4/2			35-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
296	6	0-35	MCL	10YR 4/2			35-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
297	6	0-35	MCL	10YR 4/2			35-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
298	6	0-35	MCL	10YR 4/2			35-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
299	6	0-35	MCL	10YR 4/2			35-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
300	6	0-35	HCL	10YR 4/2			35-80	SC	10YR 5/3		MOB	P	80-120	S	10YR 4/4		MO	P						
301	6	0-35	HCL	10YR 4/2			35-80	SC	10YR 5/3		MOB	P	80-120	S	10YR 4/4		MO	P						
302	6	0-45	SCL	10YR 4/2			45-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
303	7	0-45	SCL	10YR 4/2			45-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
304	7	0-45	SCL	10YR 4/2			45-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
305	12	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MO	P	70-120	C	10YR 5/1		MO	P						
306	12	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MO	P	70-120	C	10YR 5/1		MO	P						
307	12	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MO	P	70-120	C	10YR 5/1		MO	P						
308	12	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MO	P	70-120	C	10YR 5/1		MOB	P						
309	12	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MO	P	70-120	C	10YR 5/1		MOB	P						
310	12	0-40	C	10YR 3/2			40-70	C	10YR 4/1		MOB	P	70-120	C	10YR 4/1		MOB	P						
311	12	0-40	C	10YR 3/2			40-70	C	10YR 4/1		MOB	P	70-120	C	10YR 4/1		MOB	P						
312	12	0-40	C	10YR 3/2			40-70	C	10YR 4/1		MOB	P	70-120	C	10YR 4/1		MOB	P						
313	12	0-40	SCL	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
314	12	0-40	SCL	10YR 3/2			40-70	SC	10YR 5/1		MOB	P	70-120	SC	10YR 5/1		MOB	P						
315	12	0-40	SC	10YR 4/2			40-70	C	10YR 5/1		MOB	P	70-120	C	7.5YR 4/2		MOB	P						
316	13	0-40	SC	10YR 4/2			40-70	C	10YR 5/1		MOB	P	70-120	C	7.5YR 4/2		MOB	P						
317	13	0-40	C	10YR 4/2			40-70	SC	10YR 5/1			P	70-120	C	10YR 5/1		MOB	P						
318	14	0-40	C	10YR 4/2			40-75	C	7.5YR 4/3			P	75-120	C	10YR 4/2		MOGB	P						
319	14	0-40	C	10YR 4/2			40-75	C	7.5YR 4/3			P	75-120	C	10YR 4/2		MOGB	P						
320	6	0-35	HCL	10YR 4/2			35-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
321	6	0-35	HCL	10YR 4/2			35-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
322	6	0-40	HCL	10YR 4/2		O	40-80	C	10YR 5/1		MOB	P	80-120	C	10YR 4/1		MO	P						
323	6	0-40	HCL	10YR 4/2		O	40-80	C	10YR 5/1		MOB	P	80-120	C	10YR 4/1		MO	P						
324	6	0-40	HCL	10YR 4/2			40-80	C	10YR 5/1		MOB	P	80-120	C	10YR 4/1		MO	P						
325	6	0-40	HCL	10YR 4/2			40-80	C	10YR 5/1		MOB	P	80-120	C	10YR 4/1		MO	P						
326	6	0-45	SCL	10YR 4/2			45-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
327	6	0-45	SCL	10YR 4/2			45-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
328	6	0-45	SCL	10YR 4/2			45-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
329	12	0-40	C	10YR 3/2			40-70	C	10YR 4/1		MOB	P	70-120	StC	10YR 4/1		MO	P						
330	12	0-40	C	10YR 3/2			40-75	C	10YR 4/1		MOB	P	75-120	C	10YR 4/1		MO	P						
331	13	0-40	C	10YR 3/2			40-75	C	10YR 4/1		MOB	P	75-120	C	10YR 4/1		MO	P						
332	6	0-40	HCL	10YR 4/2		O	40-80	C	10YR 5/1		MOB	P	80-120	C	10YR 4/1		MO	P						
333	6	0-40	HCL	10YR 4/2			40-80	C	10YR 5/1		MOB	P	80-120	C	10YR 4/1		MO	P						
334	6	0-40	HCL	10YR 4/2			40-80	C	10YR 5/1		MOB	P	80-120	C	10YR 4/1		MO	P						
335	6	0-40	HCL	10YR 4/2			40-80	C	10YR 5/1		MOB	P	80-120	C	10YR 4/1		MO	P						
336	6	0-40	HCL	10YR 4/2			40-80	C	10YR 5/1		MOB	P	80-120	C	10YR 4/1		MO	P						

		Topsoil					Subsoil 1						Subsoil 2						Subsoil 3					
Sample No	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
337	6	0-40	HCL	10YR 4/2			40-80	C	10YR 5/1		MOB	P	80-120	C	10YR 4/1		MO	P						
338	6	0-40	HCL	10YR 4/2			40-80	C	10YR 5/1		MOB	CAB	80-120	C	10YR 4/1		MO	P						
339	6	0-40	HCL	10YR 4/2			40-80	C	10YR 5/1		MOB	P	80-120	C	10YR 4/1		MO	P						
340	10	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	StC	10YR 4/3		MOB	P						
341	11	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	StC	10YR 4/3		MOB	P						
342	12	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	StC	10YR 4/3		MOB	P						
343	8	0-40	HCL	10YR 4/2			40-80	C	10YR 5/1		MOB	P	80-120	C	10YR 4/1		MO	P						
344	7	0-40	HCL	10YR 4/2			40-80	C	10YR 5/1		MOB	P	80-120	C	10YR 4/1		MO	P						
345	7	0-40	HCL	10YR 4/2			40-80	C	10YR 5/1		MOB	P	80-120	C	10YR 4/1		MO	P						
346	6	0-40	HCL	10YR 4/2			40-80	C	10YR 5/1		MOB	P	80-120	C	10YR 4/1		MO	P						
347	6	0-40	HCL	10YR 4/2			40-80	C	10YR 5/1		MOB	P	80-120	C	10YR 4/1		MO	P						
348	6	0-40	HCL	10YR 4/2			40-80	C	10YR 5/1		MOB	P	80-120	C	10YR 4/1		MO	P						
349	6	0-40	HCL	10YR 4/2			40-80	C	10YR 5/1		MOB	P	80-120	C	10YR 4/1		MO	P						
350	6	0-40	HCL	10YR 4/2			40-80	C	10YR 5/1		MOB	P	80-120	C	10YR 4/1		MO	P						
351	6	0-40	HCL	10YR 3/3			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
352	6	0-40	HCL	10YR 3/3			40-80	C	10YR 4/3		MOB	P	80-120	C	10YR 4/3		MO	P						
353	6	0-40	HCL	10YR 3/3			40-80	C	10YR 4/3		MOB	P	80-120	C	10YR 4/3		MO	P						
354	9	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MO	P						
355	11	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MO	P						
356	6	0-40	C	10YR 4/2			40-80	C	10YR 5/1		MOB	P	80-120	C	10YR 4/1		MO	P						
357	6	0-40	C	10YR 4/2			40-80	C	10YR 5/1		MOB	P	80-120	C	10YR 4/1		MO	P						
358	6	0-40	C	10YR 4/2			40-80	C	10YR 5/1		MOB	P	80-120	C	10YR 4/1		MO	P						
359	6	0-40	C	10YR 4/2			40-120	St S	7.5YR 5/6			MASSIVE												
360	8	0-40	C	10YR 4/2			40-120	St S	7.5YR 5/6			P												
361	8	0-40	C	10YR 3/3			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
362	6	0-40	HCL	10YR 3/3			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
363	6	0-40	SCL	10YR 3/3			40-75	SC	10YR 5/1		MOB	P	75-120	ZCL	10YR 5/1		MOB	P						
364	6	0-40	SCL	10YR 3/3			40-75	SC	10YR 4/3		MOB	P	75-120	C	10YR 4/3		MOB	P						
365	7	0-40	HCL	10YR 3/2			40-75	SC	10YR 4/3		MO	P	75-120	C	10YR 5/1		MOB	P						
366	6	0-40	SCL	10YR 3/3			40-70	C	10YR 5/1		MOB	P	70-120	SC	10YR 5/1		MOB	P						
367	6	0-40	C	10YR 3/3			40-75	SC	10YR 5/1		MOB	P	75-120	SC	10YR 5/1		MOB	P						
368	8	0-40	C	10YR 3/3			40-75	SC	10YR 5/1		MOB	CAB	75-120	SC	10YR 5/1		MOB	P						
369	9	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 4/1		MOB	P						
370	9	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 4/1		MOB	P						
371	10	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	2.5Y 4/1		MOB	P						
372	11	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	2.5Y 4/1		MOB	P						
373	12	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
374	12	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
375	12	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
376	6	0-40	SCL	10YR 4/2			40-120	St S	7.5YR 5/6			M												
377	6	0-40	SCL	10YR 4/2			40-120	St S	7.5YR 5/6			M												
378	6	0-40	C	10YR 4/2			40-80	C	10YR 5/1		MOB	P	80-120	C	10YR 4/1		MO	P						
379	6	0-40	C	10YR 3/3			40-75	C	10YR 4/3		MOB	P	75-120	C	10YR 5/1		MO	P						
380	7	0-45	SCL	10YR 3/3			45-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MO	P						
381	7	0-40	HCL	10YR 3/2			40-75	SC	10YR 4/3		MO	P	75-120	C	10YR 5/1		MOB	P						
382	8	0-40	HCL	10YR 3/2			40-75	SC	10YR 4/3		MO	P	75-120	C	10YR 5/1		MOB	P						
383	10	0-40	HCL	10YR 3/3			40-75	C	10YR 4/1		MO	P	75-120	S	7.5YR 5/6			P						
384	10	0-40	C	10YR 3/2			40-75	C	10YR 4/3		MO	P	75-120	C	10YR 4/1		MO	P						
385	10	0-40	HCL	10YR 3/2			40-75	SC	10YR 4/3		MO	P	75-120	C	10YR 5/1		MOB	P						
386	11	0-40	SCL	10YR 3/3			40-70	C	10YR 5/1		MOB	P	70-120	SC	10YR 5/1		MOB	P						
387	12	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
388	12	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
389	12	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
390	13	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MO	P						
391	14	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MO	P						
392	14	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MO	P						
393	14	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MO	P						
394	15	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MO	P						
395	15	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MO	P						
396	6	0-40	C	10YR 3/3			40-75	SC	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
397	6	0-40	C	10YR 3/3			40-75	C	10YR 4/3		MOB	P	75-120	C	10YR 5/1		MO	P						
398	10	0-40	C	10YR 3/3			40-75	C	10YR 4/3		MOB	P	75-120	C	10YR 5/1		MO	P						

		Topsoil					Subsoil 1						Subsoil 2						Subsoil 3					
Sample No	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
399	10	0-45	SCL	10YR 3/3			45-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MO	P						
400	10	0-40	HCL	10YR 3/3			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
401	11	0-40	HCL	10YR 3/3			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
402	12	0-40	HCL	10YR 3/3			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
403	12	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	SC	10YR 5/1		MOB	P						
404	12	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	SC	10YR 5/1		MOB	P						
405	11	0-40	C	10YR 3/2			40-70	C	10YR 4/1		MOB	P	70-120	C	10YR 4/1		MOB	P						
406	9	0-40	C	10YR 3/2			40-70	C	10YR 4/1		MOB	P	70-120	C	10YR 4/1		MOB	P						
407	8	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
408	8	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
409	8	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
410	7	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
411	8	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MO	P						
412	10	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MO	P						
413	6	0-45	SCL	10YR 3/3			45-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MO	P						
414	6	0-40	C	10YR 3/3			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
415	6	0-40	C	10YR 3/3			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
416	12	0-40	C	10YR 3/3			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
417	12	0-40	C	10YR 3/3			40-75	C	10YR 5/1		MOB	P	75-120	S	10YR 5/1		MO	M						
418	12	0-40	HCL	10YR 3/3			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
419	12	0-40	HCL	10YR 3/3			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MO	P						
420	12	0-40	HCL	10YR 3/2			40-75	C	10YR 4/1		MOB	P	75-120	C	10YR 4/1		MO	P						
421	12	0-40	HCL	10YR 3/3			40-75	SC	10YR 4/1		MO	P	75-120	C	10YR 4/1		MO	P						
422	12	0-40	HCL	10YR 3/3			40-75	SC	10YR 4/1		MO	P	75-120	C	10YR 4/1		MO	P						
423	12	0-40	HCL	10YR 3/3			40-75	SC	10YR 4/1		MO	P	75-120	C	10YR 4/1		MO	P						
424	10	0-40	C	10YR 3/2			40-70	C	10YR 4/1		MOB	P	70-120	C	10YR 4/1		MOB	P						
425	10	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
426	9	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
427	8	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
428	8	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
429	7	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	S	10YR 5/1		MO	P						
430	8	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MO	P						
431	9	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MO	P						
432	6	0-45	SCL	10YR 3/3			45-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MO	P						
433	7	0-40	C	10YR 3/3			40-75	C	10YR 5/1		MOB	P	75-120	SC	10YR 5/1		MOB	P						
434	9	0-40	C	10YR 3/3			40-75	C	10YR 5/1		MOB	P	75-120	SC	10YR 5/1		MOB	P						
435	10	0-40	C	10YR 3/3			40-75	C	10YR 5/1		MOB	P	75-120	SC	10YR 5/1		MOB	P						
436	11	0-40	C	10YR 3/3			40-75	C	10YR 5/1		MOB	P	75-120	SC	10YR 5/1		MOB	P						
437	12	0-40	HCL	10YR 3/3			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MO	P						
438	13	0-40	HCL	10YR 3/3			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MO	P						
439	10	0-40	HCL	10YR 3/3			40-75	C	10YR 4/1		MO	P	75-120	C	10YR 4/1		MO	P						
440	7	0-40	HCL	10YR 3/3			40-75	C	10YR 4/1		MO	P	75-120	C	10YR 4/1		MO	P						
441	8	0-40	HCL	10YR 3/3			40-75	C	10YR 4/1		MO	P	75-120	C	10YR 4/1		MO	P						
442	6	0-40	HCL	10YR 3/3			40-75	C	10YR 4/1		MO	P	75-120	C	10YR 4/1		MO	P						
443	6	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MO	P						
444	6	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MO	P						
445	9	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MO	P						
446	10	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
447	10	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MO	P						
448	11	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MO	P						
449	12	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MO	P						
450	7	0-45	C	10YR 3/3			45-75	C	10YR 4/3		MOB	P	75-120	S	10YR 5/4		MOB	P						
451	6	0-40	HCL	10YR 3/3			40-75	C	10YR 5/1		MOB	P	75-120	ZCL	10YR 5/1		MOB	P						
452	10	0-40	C	10YR 4/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
453	10	0-45	C	10YR 4/2			45-75	C	10YR 5/4		MOB	P	75-120	C	10YR 5/1		MOB	P						
454	10	0-40	C	10YR 3/3			40-75	C	10YR 5/1		MOB	P	75-120	SC	10YR 5/1		MOB	P						
455	13	0-40	HCL	10YR 3/3			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MO	P						
456	15	0-40	HCL	10YR 3/2			40-75	C	10YR 4/3			P	75-120	C	10YR 4/3		G	P						
457	10	0-40	HCL	10YR 3/2			40-75	C	10YR 4/3			P	75-120	C	10YR 4/3		G	P						
458	8	0-40	HCL	10YR 3/2			40-75	C	10YR 4/1		MOB	P	75-120	C	10YR 4/1		MO	P						
459	8	0-40	C	10YR 3/3			40-75	C	10YR 4/3		MO	P	75-120	C	10YR 4/1		MO	P						
460	6	0-40	C	10YR 3/3			40-75	C	10YR 4/3		MO	P	75-120	C	10YR 4/1		MO	P						

		Topsoil					Subsoil 1						Subsoil 2						Subsoil 3					
Sample No	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
461	7	0-40	C	10YR 3/2			40-70	C	10YR 4/3		MOB	P	70-120	C	10YR 4/3		MOB	P						
462	7	0-40	C	10YR 3/2			40-70	C	10YR 4/3		MOB	P	70-120	C	10YR 4/3		MOB	P						
463	8	0-40	C	10YR 3/2			40-70	C	10YR 4/1		MOB	P	70-120	C	10YR 4/3		MOB	P						
464	9	0-40	C	10YR 3/2			40-70	C	10YR 4/1		MOB	P	70-120	C	10YR 4/3		MOB	P						
465	10	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
466	10	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	C	10YR 5/1		MOB	P						
467	6	0-45	C	10YR 3/3			45-75	C	10YR 4/3		MOB	P	75-120	S	10YR 5/4		MOB	P						
468	7	0-45	C	10YR 4/2			45-75	C	10YR 5/3		MOB	P	75-120	C	10YR 5/1		MOB	P						
469	9	0-40	C	10YR 4/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P						
470	10	0-40	C	10YR 3/3			40-75	C	10YR 5/1		MOB	P	75-120	SC	10YR 5/1		MOB	P						
471	11	0-40	C	10YR 3/3			40-75	C	10YR 5/1		MOB	P	75-120	SC	10YR 5/1		MOB	P						
472	12	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	SC	10YR 5/1		MO	P						
473	12	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	CAB	70-120	SC	10YR 5/1		MO	MASSIVE						
474	12	0-40	C	10YR 3/2			40-70	C	10YR 5/1		MOB	P	70-120	SC	10YR 5/1		MO	P						
	9.55																							

Appendix 3c -Augur sample results - Cottam 1c

		Topsoil					Subsoil 1						Subsoil 2						Subsoil 3					
Sample No	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
475	24	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
476	21	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
477	23	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
478	23	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
479	23	0-50	C	10YR 4/2			50-90	SC	10YR 5/3		MOB	P	90-120	C	10YR 5/1		MO	P						
480	24	0-50	C	10YR 4/2			50-90	SC	10YR 5/3		MOB	P	90-120	C	10YR 5/1		MO	P						
481	25	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
482	18	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
483	19	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
484	20	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
485	22	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
486	23	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
487	23	0-40	C	10YR 4/2			40-60	C	10YR 5/3		MO	VC PLATY	60-120	C	10YR 5/1		MOB	C PRISM						
488	23	0-50	C	10YR 4/2			50-90	SC	10YR 5/3		MOB	WMAB	90-120	S	10YR 5/6			P						
489	23	0-50	C	10YR 4/2			50-90	SC	10YR 5/3		MOB	P	90-120	S	10YR 5/6			P						
490	24	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
491	18	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
492	19	0-40	C	10YR 4/2			40-60	C	10YR 5/3		MO	P	60-120	C	10YR 5/1		MOB	P						
493	20	0-40	C	10YR 4/2			40-60	C	10YR 5/3		MO	P	60-120	C	10YR 5/1		MOB	P						
494	22	0-40	C	10YR 4/2			40-60	C	10YR 5/3		MO	P	60-120	C	10YR 5/1		MOB	P						
495	23	0-40	C	10YR 4/2			40-60	C	10YR 5/3		MO	P	60-120	C	10YR 5/1		MOB	P						
496	23	0-40	C	10YR 4/2			40-60	C	10YR 5/3		MO	P	60-120	C	10YR 5/1		MOB	P						
497	23	0-40	C	10YR 4/2			40-60	C	10YR 5/3		MO	P	60-120	C	10YR 5/1		MOB	P						
498	23	0-40	C	10YR 4/2			40-60	C	10YR 5/3		MO	P	60-120	C	10YR 5/1		MOB	P						
499	25	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	C PRISM												
500	18	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	10YR 6/1		MO	P						
501	18	0-35	SC	10YR 4/2			35-70	SC	10YR 5/3		MOB	P	70	SC	10YR 5/1		MOB	P						
502	20	0-35	SC	10YR 4/2			35-70	SC	10YR 5/3		MOB	P	70	SC	10YR 5/1		MOB	P						
503	22	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
504	23	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
505	23	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
506	23	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
507	23	0-40	C	10YR 4/2			40-60	C	10YR 5/3		MO	P	60-120	C	10YR 5/1		MOB	P						
508	23	0-40	C	10YR 4/2			40-60	C	10YR 5/3		MO	P	60-120	C	10YR 5/1		MOB	P						
509	23	0-30	C	10YR 4/2			30-60	SC	10YR 5/3		FO	P	60-120	C	10YR 5/1		MOB	P						
510	24	0-30	C	10YR 4/2			30-60	SC	10YR 5/3		FO	P	60-120	C	10YR 5/1		MOB	P						
511	25	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
512	12	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	10YR 6/1		MO	P						
513	15	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	10YR 6/1		MO	P						
514	18	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	10YR 6/1		MO	P						
515	20	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	10YR 6/1		MO	P						
516	20	0-35	SC	10YR 4/2			35-70	SC	10YR 5/3		MOB	P	70	SC	10YR 5/1		MOB	P						
517	22	0-35	SC	10YR 4/2			35-70	SC	10YR 5/3		MOB	P	70	SC	10YR 5/1		MOB	P						
518	19	0-50	C	10YR 4/2		FO	50-80	C	10YR 5/1		MOB	P	80	IMP										
519	20	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
520	22	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
521	24	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
522	23	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
523	24	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
524	25	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
525	25	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
526	24	0-40	C	10YR 4/2			40-60	C	10YR 5/3		MO	P	60-120	C	10YR 5/1		MOB	P						
527	12	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	10YR 6/1		MO	P						
528	14	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	10YR 6/1		MO	P						
529	18	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	10YR 6/1		MO	P						
530	19	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	WMAB	60-120	C	10YR 6/1		MO	C PRISM						
531	20	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	10YR 6/1		MO	P						
532	22	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	10YR 6/1		MO	P						
533	18	0-50	C	10YR 4/2		FO	50-80	C	10YR 5/1		MOB	P	80	IMP										
534	20	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
535	24	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												

		Topsoil					Subsoil 1						Subsoil 2						Subsoil 3					
Sample No	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
536	24	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
537	24	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
538	25	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
539	24	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
540	24	0-30	C	10YR 4/2			30-60	SC	10YR 5/3		FO	P	60-120	C	10YR 5/1		MOB	P						
541	24	0-40	C	10YR 4/2			40-60	C	10YR 5/3		MO	P	60-120	C	10YR 5/1		MOB	P						
542	14	0-35	C	10YR 4/2			35-70	C	10YR 5/1		MO	P	70-120	C	5YR 4/2		MG	P						
543	15	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	10YR 6/1		MO	P						
544	17	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	10YR 6/1		MO	P						
545	18	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	10YR 6/1		MO	P						
546	20	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	10YR 6/1		MO	P						
547	23	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	10YR 6/1		MO	P						
548	18	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
549	23	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
550	24	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
551	25	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
552	26	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
553	26	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
554	27	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
555	27	0-40	C	10YR 4/2			40-60	C	10YR 5/3		MO	P	60-120	C	10YR 5/1		MOB	P						
556	28	0-40	C	10YR 4/2			40-60	C	10YR 5/3		MO	P	60-120	C	10YR 5/1		MOB	P						
557	16	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	10YR 6/1		MO	P						
558	18	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	10YR 6/1		MO	P						
559	20	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	10YR 6/1		MO	P						
560	22	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	10YR 6/1		MO	P						
561	24	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	N 6/N		MO	P						
562	20	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	10YR 6/1		MO	P						
563	19	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	10YR 6/1		MO	P						
564	18	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
565	20	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
566	23	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
567	24	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
568	26	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
569	27	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
570	27	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
571	12	0-35	C	10YR 4/2		FO	35-120	C	5YR 4/2		MG	P												
572	13	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	10YR 6/1		MO	P						
573	15	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	10YR 6/1		MO	P						
574	16	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	10YR 6/1		MO	P						
575	19	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	10YR 6/1		MO	P						
576	20	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	10YR 6/1		MO	P						
577	18	0-40	C	10YR 4/2			40-60	C	10YR 5/3		MO	P	60-120	C	10YR 5/1		MOB	P						
578	23	0-30	C	10YR 4/2			30-60	SC	10YR 5/3		FO	P	60-120	C	10YR 5/1		MOB	P						
579	25	0-30	C	10YR 4/2			30-60	SC	10YR 5/3		FO	P	60-120	C	10YR 5/1		MOB	P						
580	27	NON AGRUCULTURAL																						
581	13	0-35	C	10YR 4/2		FO	35-120	C	5YR 4/2		MG	P												
582	15	0-35	C	10YR 4/2		FO	35-120	C	5YR 4/2		MG	P												
583	18	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	10YR 6/1		MO	P						
584	20	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	10YR 6/1		MO	P						
585	21	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	10YR 6/1		MO	P						
586	18	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	10YR 6/1		MO	P						
587	18	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
588	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
589	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
590	13	0-35	C	10YR 4/2		FO	35-120	C	5YR 4/2		MG	P												
591	17	0-35	C	10YR 4/2		FO	35-120	C	5YR 4/2		MG	P												
592	19	0-35	C	10YR 4/2		FO	35-60	C	10YR 5/1		MO	P	60-120	C	N 6/N		MO	P						
593	15	0-30	C	10YR 4/2			30-50	C	10YR 4/2		FO	P	50-80	C	10YR 5/1		MO	M	80-120	C	5YR 4/2		MG	P
594	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
595	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
596	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
597	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						

		Topsoil					Subsoil 1						Subsoil 2						Subsoil 3					
Sample No	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
598	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
599	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
600	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	CAB	80-120	C	10YR 5/1		MOB	P						
601	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
602	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
603	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
604	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
605	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
606	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
607	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
608	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
609	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
610	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
611	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
612	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
613	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
614	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
615	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
616	13	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
617	14	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
618	17	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	80-120	C	5YR 4/2		MG	P						
619	15	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	80-120	C	5YR 4/2		MG	P						
620	18	0-35	C	10YR 4/2			35-60	St C	10YR 5/3		MOB	P	60-120	C	10YR 5/1		MOB	P						
621	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
622	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
623	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
624	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
625	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
626	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
627	13	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
628	14	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
629	14	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
630	12	0-35	HCL	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 5/1		MOB	P						
631	13	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	80-120	C	5YR 4/2		MG	P						
632	15	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	80-120	C	5YR 4/2		MG	P						
633	14	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	80-120	C	5YR 4/2		MG	P						
634	15	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	80-120	C	5YR 4/2		MG	P						
635	16	0-35	C	10YR 4/2			35-60	St C	10YR 5/3		MOB	P	60-120	C	10YR 5/1		MOB	P						
636	16	0-35	C	10YR 4/2			35-60	St C	10YR 5/3		MOB	P	60-120	C	10YR 5/1		MOB	P						
637	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
638	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
639	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
640	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
641	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
642	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
643	16	0-30	HCL	10YR 4/2			30-60	C	10YR 5/1		MOB	P	60-120	C	10YR 5/1		MOB	P						
644	14	0-35	HCL	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 5/1		MOB	P						
645	12	0-35	HCL	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 5/1		MOB	P						
646	12	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 5/1		MOB	P						
647	12	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	80-120	C	5YR 4/2		MG	P						
648	12	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	80-120	C	5YR 4/2		MG	P						
649	12	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	80-120	C	5YR 4/2		MG	P						
650	13	0-40	C	10YR 4/2			40-80	St C	10YR 5/3		MOB	P	80-120	C	10YR 5/1		MOB	P						
651	14	0-40	C	10YR 4/2			40-80	St C	10YR 5/3		MOB	P	80-120	C	10YR 5/1		MOB	P						
652	14	0-35	C	10YR 4/2			35-80	St C	10YR 5/3		MOB	P	80-120	C	10YR 5/1		MOB	P						
653	16	0-35	C	10YR 4/2			35-80	St C	10YR 5/3		MOB	P	80-120	C	10YR 5/1		MOB	P						
654	17	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	5YR 4/2		MG	P						
655	18	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	5YR 4/2		MG	P						
656	18	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	5YR 4/2		MG	P						
657	19	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	5YR 4/2		MG	P						
658	20	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	5YR 4/2		MG	P						
659	12	0-30	SC	10YR 4/2			30-70	SC	10YR 4/2		MOB	P	70-120	C	10YR 5/1		MOB	P						

		Topsoil					Subsoil 1						Subsoil 2						Subsoil 3					
Sample No	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
660	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
661	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
662	14	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
663	14	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
664	15	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
665	16	0-30	HCL	10YR 4/2			30-120	C	10YR 5/1		MOB	P												
666	12	0-35	HCL	10YR 4/2	5%		30-60	C	10YR 5/1		MOB	P	60	IMP										
667	12	0-40	HCL	10YR 4/2			40-60	C	10YR 5/1		MOB	P	60-120	C	10YR 5/1		MOB	P						
668	12	0-30	C	10YR 4/2			30-60	C	10YR 5/1		MOB	P	60-120	C	10YR 5/1		MOB	P						
669	12	0-30	C	10YR 4/2			30-50	C	10YR 4/2		MOB	P	50-120	C	10YR 5/1		MOB	P						
670	14	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	80-120	C	10YR 4/2		MG	P						
671	15	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	80-120	C	10YR 4/2		MG	P						
672	16	0-40	HCL	10YR 4/2			40-120	C	10YR 5/1		MO	P												
673	12	0-40	HCL	10YR 4/2			40-120	C	10YR 5/1		MO	CAB												
674	18	0-35	C	10YR 4/2			35-80	St C	10YR 5/3		MOB	P	80-120	C	10YR 5/1		MOB	P						
675	18	0-35	C	10YR 4/2			35-80	St C	10YR 5/3		MOB	P	80-120	C	10YR 5/1		MOB	P						
676	18	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	5YR 4/2		MG	P						
677	19	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	5YR 4/2		MG	P						
678	20	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	5YR 4/2		MG	P						
679	21	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	5YR 4/2		MG	P						
680	23	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	5YR 4/2		MG	P						
681	23	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	5YR 4/2		MG	P						
682	23	0-35	C	10YR 4/2			35-50	C	10YR 5/3		MOB	P	50-120	St C	10YR 5/1		MOB	P						
683	23	0-35	C	10YR 4/2			35-50	C	10YR 5/3		MOB	P	50-120	St C	10YR 5/1		MOB	P						
684	23	0-35	C	10YR 4/2			35-50	C	10YR 5/3		MOB	P	50-120	St C	10YR 5/1		MOB	P						
685	24	0-35	C	10YR 4/2			35-50	C	10YR 5/3		MOB	P	50-120	St C	10YR 5/1		MOB	P						
686	12	0-30	SC	10YR 4/2			30-70	SC	10YR 4/2		MOB	P	70-120	C	10YR 5/1		MOB	P						
687	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
688	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
689	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
690	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
691	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
692	12	0-30	C	10YR 4/2			30-50	C	10YR 5/3		MO	MAB	50-120	C	10YR 5/1		MOB	C Prism						
693	12	0-30	C	10YR 4/2			30-50	C	10YR 5/3		MO	M	50-120	C	10YR 5/1		MOB	P						
694	12	0-30	HCL	10YR 4/2	5%		30-50		10YR 5/1		MOB	P	50-120	C	10YR 5/1		MOB	P						
695	12	0-35	HCL	10YR 4/2			35-120	C	10YR 5/1		MOB	P												
696	12	0-40	C	10YR 4/2			40-60	C	10YR 5/1		MOB	P	60-120	SC	10YR 5/1		MO	P						
697	12	0-30	HCL	10YR 4/2			30-60	C	10YR 4/2		MOB	P	60-120	C	10YR 4/1		MOB	P						
698	12	0-40	C	10YR 4/2			40-60	SCL	10YR 4/1		MO	P	60-100	SC	10YR 6/1		MOB	P	100-120	S	10YR 5/4		G	G
699	14	0-40	HCL	10YR 4/2			40-120	C	10YR 5/1		MO	P												
700	15	0-40	C	10YR 4/2			40-80	St C	10YR 5/3		MOB	P	80-120	C	10YR 5/1		MOB	P						
701	19	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
702	18	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
703	20	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
704	21	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
705	18	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
706	20	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
707	21	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
708	23	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
709	23	0-35	C	10YR 4/2			35-50	C	10YR 5/3		MOB	P	50-120	St C	10YR 5/1		MOB	P						
710	22	0-35	C	10YR 4/2			35-50	C	10YR 5/3		MOB	P	50-120	St C	10YR 5/1		MOB	P						
711	21	0-35	C	10YR 4/2			35-50	C	10YR 5/3		MOB	P	50-120	St C	10YR 5/1		MOB	P						
712	21	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
713	12	0-30	SC	10YR 4/2			30-70	SC	10YR 4/2		MOB	P	70-120	C	10YR 5/1		MOB	P						
714	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
715	12	0-30	HCL	10YR 4/2			30-120	C	10YR 5/1		MOB	P												
716	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
717	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
718	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
719	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
720	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
721	12	0-40	C	10YR 4/2			40-80	SCL	10YR 5/1		MO	P	80-120	SC	10YR 5/1		MOB	P						

		Topsoil					Subsoil 1						Subsoil 2						Subsoil 3					
Sample No	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
722	12	0-40	C	10YR 4/2			40-80	SCL	10YR 5/1		MO	P	80-120	SC	10YR 5/1		MOB	P						
723	12	0-40	C	10YR 4/2			40-80	SCL	10YR 5/1		MO	P	80-120	SC	10YR 5/1		MOB	P						
724	12	0-40	C	10YR 4/2			40-80	SCL	10YR 5/1		MO	P	80-120	SC	10YR 5/1		MOB	P						
725	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
726	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
727	12	0-40	HCL	10YR 4/2			40-120	C	10YR 5/1		MO	P												
728	12	0-40	C	10YR 4/2			40-80	St C	10YR 5/3		MOB	P	80-120	C	10YR 5/1		MOB	P						
729	14	0-40	C	10YR 4/2			40-80	St C	10YR 5/3		MOB	P	80-120	C	10YR 5/1		MOB	P						
730	14	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
731	15	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
732	16	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
733	18	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
734	20	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
735	21	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
736	22	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
737	22	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
738	19	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
739	20	0-35	C	10YR 4/2			35-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
740	21	0-35	C	10YR 4/2			35-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
741	22	0-35	C	10YR 4/2			35-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
742	22	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
743	23	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
744	12	0-30	SC	10YR 4/2			30-70	SC	10YR 4/2		MOB	P	70-120	C	10YR 5/1		MOB	P						
745	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
746	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
747	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
748	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
749	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
750	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
751	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
752	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
753	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
754	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
755	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
756	12	0-40	C	10YR 4/2			40-80	SCL	10YR 5/1		MO	P	80-120	SC	10YR 5/1		MOB	P						
757	12	0-40	C	10YR 4/2			40-80	SCL	10YR 5/1		MO	P	80-120	SC	10YR 5/1		MOB	P						
758	14	0-30	C	10YR 4/2			30-50	C	10YR 5/3		MO	P	50-120	C	10YR 5/1		MOB	P						
759	16	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 5/1		MOB	P						
760	18	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 5/1		MOB	P						
761	19	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 5/1		MOB	P						
762	20	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
763	21	0-35	C	10YR 4/2			35-60	C	10YR 5/3		MOGB	P	60-120	C	10YR 4/1		MO	P						
764	21	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
765	18	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
766	19	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
767	20	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
768	21	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
769	22	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
770	23	0-35	C	10YR 4/2			35-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
771	23	0-35	C	10YR 4/2			35-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
772	24	0-35	C	10YR 4/2			35-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
773	25	0-35	C	10YR 4/2			35-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
774	26	0-35	C	10YR 4/2			35-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
775	12	0-30	C	10YR 4/2			30-70	SC	10YR 4/2		MOB	P	70	IMP										
776	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
777	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
778	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
779	12	0-30	SC	10YR 4/2			30-70	SC	10YR 4/2		MOB	P	70-120	C	10YR 5/1		MOB	P						
780	12	0-30	SC	10YR 4/2			30-70	SC	10YR 4/2		MOB	P	70-120	C	10YR 5/1		MOB	P						
781	12	0-30	SC	10YR 4/2			30-50	SC	10YR 4/2		MOB	P	50-120	C	10YR 5/1		MOB	P						
782	12	0-30	SC	10YR 4/2			30-50	SC	10YR 4/2		MOB	P	50-120	C	10YR 5/1		MOB	P						
783	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						

		Topsoil					Subsoil 1						Subsoil 2						Subsoil 3					
Sample No	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
784	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
785	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
786	12	0-35	C	10YR 4/2		B	35-60	C	10YR 5/3		MOB	P	60-120	C	5YR 4/2		MG	P						
787	12	0-35	C	10YR 4/2		B	35-60	C	10YR 5/3		MOB	P	60-120	C	5YR 4/2		MG	P						
788	13	0-35	C	10YR 4/2		B	35-60	C	10YR 5/3		MOB	P	60-120	C	5YR 4/2		MG	P						
789	14	0-35	C	10YR 4/2		B	35-60	C	10YR 5/3		MOB	P	60-120	C	5YR 4/2		MG	P						
790	14	0-35	C	10YR 4/2		B	35-60	C	10YR 5/3		MOB	P	60-120	C	5YR 4/2		MG	P						
791	19	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 5/1		MOB	P						
792	20	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 5/1		MOB	P						
793	21	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 5/1		MOB	P						
794	22	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
795	22	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
796	23	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
797	23	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
798	23	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
799	23	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
800	23	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
801	23	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
802	21	0-35	C	10YR 4/2			35-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
803	21	0-35	C	10YR 4/2			35-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
804	20	0-35	C	10YR 4/2			35-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
805	20	0-35	C	10YR 4/2			35-50	C	10YR 4/2		MO	WCSAB	50-120	C	10YR 5/1		MO	P						
806	18	0-35	C	10YR 4/2			35-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
807	12	0-35	C	10YR 4/3			35-70	C	10YR 4/2		MOB	P	70-120	C	10YR 5/1		MOB	P						
808	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
809	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
810	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
811	12	0-30	SC	10YR 4/2			30-70	SC	10YR 4/2		MOB	P	70-120	C	10YR 5/1		MOB	P						
812	12	0-30	SC	10YR 4/2			30-70	SC	10YR 4/2		MOB	P	70-120	C	10YR 5/1		MOB	P						
813	12	0-30	SC	10YR 4/2			30-50	SC	10YR 4/2		MOB	P	50-120	C	10YR 5/1		MOB	P						
814	12	0-30	C	10YR 4/2			30-120	St S	10YR 6/6		B	P												
815	12	0-35	C	10YR 4/2		B	35-60	C	10YR 5/3		MOB	P	60-120	C	5YR 4/2		MG	P						
816	12	0-35	C	10YR 4/2		B	35-60	C	10YR 5/3		MOB	P	60-120	C	5YR 4/2		MG	P						
817	12	0-35	C	10YR 4/2		B	35-60	C	10YR 5/3		MOB	P	60-120	C	5YR 4/2		MG	P						
818	12	0-35	C	10YR 4/2		B	35-60	C	10YR 5/3		MOB	P	60-120	C	5YR 4/2		MG	P						
819	12	0-35	C	10YR 4/2		B	35-60	C	10YR 5/3		MOB	P	60-120	C	10YR 5/1		MOB	P						
820	12	0-35	C	10YR 4/2		B	35-60	C	10YR 5/3		MOB	P	60-120	C	10YR 5/1		MOB	P						
821	14	0-35	C	10YR 4/2		B	35-60	C	10YR 5/3		MOB	P	60-120	C	10YR 5/1		MOB	P						
822	14	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
823	15	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
824	18	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
825	18	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
826	19	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
827	20	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
828	21	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
829	22	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
830	22	0-35	C	10YR 4/2			35-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
831	23	0-35	C	10YR 4/2			35-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
832	20	0-35	C	10YR 4/2			35-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
833	20	0-35	C	10YR 4/2			35-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
834	18	0-35	C	10YR 4/2			35-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
835	12	0-35	C	10YR 4/3			30-70	C	10YR 4/2		MOB	P	70-120	C	10YR 5/1		MOB	P						
836	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
837	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
838	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
839	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
840	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
841	12	0-35	C	10YR 4/2		B	35-60	C	10YR 5/3		MOB	P	60-120	C	5YR 4/2		MG	P						
842	12	0-35	C	10YR 4/2		B	35-60	C	10YR 5/3		MOB	P	60-120	C	5YR 4/2		MG	P						
843	12	0-35	C	10YR 4/2		B	35-60	C	10YR 5/3		MOB	P	60-120	C	5YR 4/2		MG	P						
844	12	0-35	C	10YR 4/2		B	35-60	C	10YR 5/3		MOB	P	60-120	C	5YR 4/2		MG	P						
845	12	0-35	C	10YR 4/2		B	35-60	C	10YR 5/3		MOB	P	60-120	C	5YR 4/2		MG	P						

		Topsoil					Subsoil 1						Subsoil 2						Subsoil 3					
Sample No	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
846	14	0-35	C	10YR 4/2		B	35-60	C	10YR 5/3		MOB	P	60-120	C	5YR 4/2		MG	P						
847	14	0-35	C	10YR 4/2		B	35-60	C	10YR 5/3		MOB	P	60-120	C	5YR 4/2		MG	P						
848	15	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
849	16	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
850	17	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
851	18	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
852	20	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
853	20	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
854	21	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
855	12	0-30	SC	10YR 4/2			30-70	SC	10YR 4/2		MOB	P	70-120	C	10YR 5/1		MOB	P						
856	11	0-30	SC	10YR 4/2			30-70	SC	10YR 4/2		MOB	P	70-120	C	10YR 5/1		MOB	P						
857	12	0-30	C	10YR 4/2	5%		30-80	C	10YR 5/1		MOB	P	80-120	C	10YR 5/1		MOB	P						
858	12	0-35	C	10YR 4/2			35-100	C	10YR 5/1		MOB	P	100-120	S	10YR 5/1		MO	M						
859	12	0-35	C	10YR 4/2			35-100	C	10YR 5/1		MOB	P	100-120	S	10YR 5/1		MO	M						
860	21	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
861	20	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
862	22	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
863	22	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
864	22	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
865	21	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
866	21	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
867	20	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
868	22	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
869	20	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
870	21	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
871	20	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
872	19	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
873	18	0-35	C	10YR 4/2		B	35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
874	20	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
875	21	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
876	21	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
877	21	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
878	19	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
879	20	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
880	19	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
881	20	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
882	20	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
883	20	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
884	20	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
885	20	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
886	19	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
887	19	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
888	19	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
889	19	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
890	19	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
891	19	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
892	19	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
893	18	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
894	17	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
895	17	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
896	13	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
897	14	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
898	13	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
899	12	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	CAB	60-120	C	10YR 4/1		MO	MASSIVE						
900	12	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
901	13	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
902	13	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
903	12	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
904	12	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
905	12	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
906	12	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						
907	13	0-35	C	10YR 4/2			35-60	C	10YR 5/1		MOB	P	60-120	C	10YR 4/1		MO	P						

		Topsoil					Subsoil 1						Subsoil 2						Subsoil 3					
Sample No	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
908	17	0-40	MCL	10YR 4/2			40-80	SC	10YR 5/1		MO	P	80-120	S	10YR 5/4		MO	G						
909	12	0-40	MCL	10YR 4/2			40-80	SC	10YR 5/1		MO	WMAB	80-120	S	10YR 5/4		MO	G						
910	12	0-35	C	10YR 4/2			40-80	St SC	10YR 5/1		MO	MAB	80-120	S	10YR 5/4		MO	G						
911	12	0-35	C	10YR 4/2			40-80	St SC	10YR 5/1		MO	M	80-120	S	10YR 5/4		MO	G						
912	16	0-40	MCL	10YR 4/2			40-120	C	5YR 4/2		MOB	P												
913	13	0-40	MCL	10YR 4/2			40-120	C	5YR 4/2		MOB	P												
914	12	0-40	MCL	10YR 4/2			40-120	C	5YR 4/2		MOB	P												
	17.10																							

Appendix 3d - Augur sample results - Cottam 2

		Topsoil					Subsoil 1						Subsoil 2					
Sample No	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
915	15	0-40	HCL	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
916	15	0-40	HCL	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
917	15	0-40	HCL	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
918	15	0-40	HCL	10YR 3/2			40-75	C	10YR 5/1		MOB	CAB	75-120	C	10YR 5/1		MOB	P
919	15	0-40	SCL	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	StC	10YR 5/1		MOB	P
920	15	0-40	SCL	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
921	15	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	StC	10YR 5/1		MOB	P
922	15	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	StC	10YR 5/1		MOB	P
923	15	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
924	15	0-40	SCL	10YR 3/2	5%		40-75	SC	10YR 5/3		MOB	P	75-120	SC	10YR 5/1		MOB	P
925	15	0-40	SCL	10YR 3/2	5%		40-75	SC	10YR 5/3		MOB	P	75-120	SC	10YR 5/1		MOB	P
926	15	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	StC	10YR 5/1		MOB	P
927	15	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	StC	10YR 5/1		MOB	P
928	15	0-40	C	10YR 3/2	5%		40-75	C	10YR 5/1		MOB	P	75-120	StC	10YR 5/1		MOB	P
929	15	0-40	SCL	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
930	17	0-40	SCL	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
931	17	0-40	SCL	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	SC	10YR 5/1		MOB	P
932	15	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	SC	10YR 5/1		MOB	P
933	15	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
934	15	0-40	C	10YR 3/2	5%		40-75	C	10YR 5/1		MOB	P	75-120	StC	10YR 5/1		MOB	P
935	15	0-40	C	10YR 3/2	5%		40-75	C	10YR 5/1		MOB	P	75-120	StC	10YR 5/1		MOB	P
936	15	0-40	C	10YR 3/2	5%		40-75	C	10YR 5/1		MOB	P	75-120	StC	10YR 5/1		MOB	P
937	15	0-40	SCL	10YR 3/2			40-75	SC	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
938	16	0-40	SCL	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
939	18	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
940	15	0-40	SCL	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
941	15	0-40	C	10YR 3/2	5%		40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
942	15	0-40	HCL	10YR 3/2	5%		40	IMP										
943	15	0-40	C	10YR 3/2	5%		40-75	C	10YR 5/1		MOB	P	75-120	StC	10YR 5/1		MOB	P
944	15	0-40	C	10YR 3/2	5%		40-75	C	10YR 5/1		MOB	P	75-120	StC	10YR 5/1		MOB	P
945	17	0-40	SCL	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
946	16	0-40	SCL	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
947	17	0-40	C	10YR 3/2			40-75	SC	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
948	18	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
949	18	0-40	C	10YR 3/2			40-75	SC	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
950	18	0-40	C	10YR 3/2	5%		40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
951	18	0-40	C	10YR 3/2	5%		40-75	C	10YR 5/1		MOB	P	75-120	StC	10YR 5/1		MOB	P
952	17	0-40	C	10YR 3/2	5%		40-75	C	10YR 5/3		MOB	P	75-120	StC	10YR 5/3		MOB	P
953	15	0-40	C	10YR 3/2			40-75	C	10YR 5/3		MOB	P	75-120	StC	10YR 5/3		MOB	P
954	15	0-40	C	10YR 3/2			40-75	SC	10YR 5/3		MOB	P	75-120	StSC	10YR 5/3		MOB	P
955	17	0-40	SCL	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
956	18	0-40	SCL	10YR 3/2			40-75	C	10YR 5/1		MOB	CAB	75-120	C	10YR 5/1		MOB	MASSIVE
957	16	0-40	C	10YR 3/2			40-75	SC	10YR 5/1		MOB	P	75-120	S	10YR 5/1		MOB	G
958	16	0-40	C	10YR 3/2			40-75	C	10YR 5/3		MOB	P	75-120	C	10YR 5/1		MOB	P
959	18	0-40	C	10YR 3/2			40-75	C	10YR 5/3		MOB	P	75-120	C	10YR 5/1		MOB	P
960	18	0-40	C	10YR 3/2	5%		40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P

		Topsoil					Subsoil 1						Subsoil 2					
Sample No	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
961	18	0-40	C	10YR 3/2	5%		40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
962	18	0-40	C	10YR 3/2	5%		40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
963	18	0-40	C	10YR 3/2			40-75	StC	10YR 5/1		MOB	P	75-120	StC	10YR 5/1		MOB	P
964	16	0-40	C	10YR 3/2			40-75	C	10YR 5/3		MOB	P	75-120	StC	10YR 5/3		MOB	P
965	16	0-40	C	10YR 3/2			40-60	C	10YR 5/1		MOB	P	60	IMP				
966	17	0-40	SCL	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
967	18	0-40	SCL	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
968	18	0-40	C	10YR 3/2			40-75	SC	10YR 5/3		MOB	P	75-120	C	10YR 5/3		MOB	P
969	18	0-40	C	10YR 3/2			40-75	SC	10YR 5/3		MOB	P	75-120	C	10YR 5/3		MOB	P
970	18	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
971	18	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
972	18	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
973	18	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
974	17	0-40	C	10YR 3/2			40-75	StC	10YR 5/1		MOB	P	75-120	StC	10YR 5/1		MOB	P
975	15	0-40	C	10YR 3/2	5%		40-75	SC	10YR 5/3			P	75-120	StC	10YR 5/3		MOB	P
976	15	0-40	C	10YR 3/2			40-65	C	10YR 5/3		MOB	P	65	IMP				
977	15	0-40	C	10YR 3/2			40-75	SC	10YR 5/3		MOB	P	75-120	StSC	10YR 5/3		MOB	P
978	18	0-40	SCL	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
979	18	0-40	SCL	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
980	18	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	2.5YR 5/2		MOB	P
981	18	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	2.5YR 5/2		MOB	P
982	18	0-40	SCL	10YR 3/2			40-75	SC	10YR 5/3		MOB	P	75-120	C	10YR 5/3		MOB	P
983	18	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
984	18	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
985	18	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
986	18	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
987	18	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
988	16	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
989	15	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
990	15	0-40	C	10YR 3/2			40-75	C	10YR 3/1		MO	P	75-120	StC	10YR 3/1		MOB	P
991	15	0-40	C	10YR 3/2			40-75	SC	10YR 5/3		MOB	P	75-120	StSC	10YR 5/3		MOB	P
992	18	0-40	SCL	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
993	20	0-40	C	10YR 3/2			40-75	C	10YR 3/1		MOB	CAB	75-120	C	2.5YR 5/2		MOB	P
994	20	0-40	SCL	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
995	19	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
996	18	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
997	18	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
998	18	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
999	18	0-40	C	10YR 3/2			40-75	C	10YR 5/3		MOB	P	75-120	C	10YR 5/1		MOB	P
1000	18	0-40	C	10YR 3/2			40-75	C	10YR 5/3		MOB	P	75-120	C	10YR 5/1		MOB	P
1001	17	0-40	C	10YR 3/2			40-75	C	10YR 5/3		MOB	P	75-120	StC	10YR 5/3		MOB	P
1002	16	0-40	C	10YR 3/2			40-75	C	10YR 5/3		MOB	P	75-120	StC	10YR 5/3		MOB	P
1003	15	0-40	C	10YR 3/2			40-75	SC	10YR 5/3		MOB	P	75-120	StSC	10YR 5/3		MOB	P
1004	18	0-40	SCL	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
1005	21	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	2.5YR 5/2		MOB	P
1006	19	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
1007	18	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P

		Topsoil					Subsoil 1						Subsoil 2					
Sample No	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
1008	18	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
1009	18	0-40	C	10YR 3/2			40-75	C	10YR 5/3		MOB	P	75-120	C	10YR 5/1		MOB	P
1010	18	0-40	C	10YR 3/2			40-75	C	10YR 5/3			P	75-120	C	10YR 5/3			P
1011	18	0-40	C	10YR 3/2			40-75	C	10YR 5/3		MOB	P	75-120	C	10YR 5/1		MOB	P
1012	18	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	StC	10YR 5/1		MOB	P
1013	17	0-40	C	10YR 3/2			40-75	C	10YR 5/3		MOB	P	75-120	C	10YR 5/1		MOB	P
1014	15	0-40	C	10YR 3/2			40-75	C	10YR 5/3		MOB	P	75-120	C	10YR 5/1		MOB	P
1015	18	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
1016	19	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	2.5YR 5/2		MOB	P
1017	19	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
1018	18	0-40	C	10YR 3/2			40-75	C	10YR 5/3		MOB	P	75-120	C	10YR 5/1		MOB	P
1019	18	0-40	C	10YR 3/2			40-75	C	10YR 5/3			P	75-120	C	10YR 4/2		FOB	P
1020	18	0-40	C	10YR 3/2			40-75	C	10YR 5/3		MOB	P	75-120	C	10YR 5/1		MOB	P
1021	18	0-40	C	10YR 3/2			40-75	C	10YR 5/3		MOB	P	75-120	C	10YR 5/1		MOB	P
1022	18	0-40	C	10YR 3/2			40-75	C	10YR 5/3		MOB	P	75-120	C	10YR 5/1		MOB	P
1023	18	0-40	C	10YR 3/2			40-75	C	10YR 5/3		MOB	P	75-120	C	2.5Y 4/2		MOB	P
1024	18	0-40	C	10YR 3/2			40-75	C	10YR 5/3		MOB	CAB	75-120	C	10YR 5/1		MOB	MASSIVE
1025	18	0-40	C	10YR 3/2			40-75	C	10YR 4/2			P	75-120	C	2.5Y 4/1		O	P
1026	19	0-40	C	10YR 2/2			40-75	C	10YR 4/1		MOB	CAB	75-120	C	10YR 5/1		MOB	P
1027	18	0-40	C	10YR 2/2			40-75	C	10YR 5/1		MOB	CAB	75-120	C	10YR 5/1		MOB	P
1028	18	0-40	C	10YR 3/2			40-75	C	10YR 5/3		MOB	CAB	75	IMP				
1029	19	0-40	C	10YR 3/2			40-75	C	10YR 5/3		MOB	CAB	75-120	S	10YR 5/3		MOB	P
1030	20	0-40	C	10YR 3/2			40-75	C	10YR 5/3		MOB	CAB	75-120	S	10YR 5/3		MOB	P
1031	20	0-40	C	10YR 3/2			40-75	C	10YR 5/3		MOB	CAB	75-120	S	10YR 5/3		MOB	P
1032	19	0-40	C	10YR 3/2			40-75	StC	10YR 5/1		MOB	CAB	75-120	C	10YR 5/1		MOB	P
1033	18	0-40	C	10YR 3/2			40-75	StC	10YR 5/1		MOB	CAB	75-120	C	10YR 5/1		MOB	P
1034	18	0-40	C	10YR 3/2			40-75	C	10YR 4/2			M	75-120	C	2.5Y 4/1		O	P
1035	18	0-40	C	10YR 2/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
1036	18	0-40	C	10YR 2/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
1037	19	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	StC	10YR 5/1		MOB	P
1038	19	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	StC	10YR 5/1		MOB	P
1039	19	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	StC	10YR 5/1		MOB	P
1040	19	0-40	C	10YR 3/2			40-75	C	10YR 5/1		MOB	P	75-120	C	10YR 4/2		MOB	P
1041	18	0-40	C	10YR 3/2			40-75	StC	10YR 5/1		MOB	P	75-120	C	10YR 5/1		MOB	P
1042	18	0-40	C	10YR 3/2			40-75	C	10YR 4/1		MOB	P	75-120	C	10YR 5/1		MOB	P
1043	18	0-40	C	10YR 3/2			40-75	C	10YR 4/1		MOB	P	75-120	C	10YR 5/1		MOB	P
1044	18	0-40	SCL	10YR 3/2			40-75	S	10YR 5/3		MO	M	75-120	S	10YR 5/3		MO	P
1045	18	0-40	C	10YR 3/2			40-75	C	10YR 4/2		MO	P	75-120	C	10YR 4/2		MOB	P
1046	19	0-40	C	10YR 3/2			40-75	C	2.5Y 4/2		MO	P	75-120	C	2.5Y 4/2		MOB	P
1047	18	0-40	C	10YR 3/2			40-75	C	2.5Y 4/2		MO	P	75-120	C	2.5Y 4/2		MOB	P
	17.30																	

Appendix 3e - Augur sample results - Cottam 3

		Topsoil					Subsoil 1						Subsoil 2						Subsoil 3					
Sample No	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
1048	20	0-30	MCL	7.5YR 4/2	5%		30-50	St C	2.5Y 5/3		MOB	C Platy	50-70	SC	2.5Y 5/1		MOB	C Platy	70-120	C	2.5Y 5/1		MOB	C Prism
1049	21	0-30	MCL	7.5YR 4/2	5%		30-50	St C	2.5Y 5/3		MOB	P	50-70	SC	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1050	19	0-30	HCL	7.5YR 4/2	5%		30-60	C	2.5Y 5/3		MOB	P	60-120	C	2.5Y 5/1		MOB	P						
1051	20	0-30	HCL	7.5YR 4/2	5%		30-60	C	2.5Y 5/3		MOB	P	60-120	C	2.5Y 5/1		MOB	P						
1052	21	0-30	HCL	7.5YR 4/2			30-60	C	2.5Y 5/3		MOB	P	60-120	C	2.5Y 5/1		MOB	P						
1053	21	0-30	HCL	7.5YR 4/2			30-60	C	2.5Y 5/3		MOB	P	60-120	C	2.5Y 5/1		MOB	P						
1054	20	0-30	HCL	7.5YR 4/2			30-60	C	2.5Y 5/3		MOB	P	60-120	C	2.5Y 5/1		MOB	P						
1055	21	0-30	HCL	7.5YR 4/2			30-60	C	2.5Y 5/3		MOB	CAB	60-120	C	2.5Y 5/1		MOB	P						
1056	20	0-30	HCL	7.5YR 4/2			30-60	C	2.5Y 5/3		MOB	P	60-120	C	2.5Y 5/1		MOB	P						
1057	21	0-30	HCL	7.5YR 4/2			30-60	C	2.5Y 5/3		MOB	P	60-120	C	2.5Y 5/1		MOB	P						
1058	20	0-30	HCL	7.5YR 4/2			30-60	C	2.5Y 5/3		MOB	P	60-120	C	2.5Y 5/1		MOB	P						
1059	23	0-30	HCL	7.5YR 4/2			30-60	C	2.5Y 5/3		MOB	P	60-120	C	2.5Y 5/1		MOB	P						
1060	20	0-30	HCL	7.5YR 4/2			30-60	C	2.5Y 5/3		MOB	P	60-120	C	2.5Y 5/1		MOB	P						
1061	19	0-30	HCL	7.5YR 4/2			30-60	C	2.5Y 5/3		MOB	P	60-120	C	2.5Y 5/1		MOB	P						
1062	21	0-30	HCL	7.5YR 4/2			30-60	C	2.5Y 5/3		MOB	P	60-120	C	2.5Y 5/1		MOB	P						
1063	24	0-30	HCL	10YR 4/2			30-70	C	10YR 5/1		MO	P	70-120	C	5YR 4/4		MG	P						
1064	24	0-30	HCL	7.5YR 4/2			30-80	C	2.5Y 5/3		MOB	P	80	IMP										
1065	24	0-30	HCL	7.5YR 4/2			30-60	C	2.5Y 5/3		MOB	P	60-120	C	2.5Y 5/1		MOB	P						
1066	24	0-30	HCL	7.5YR 4/2			30-60	C	2.5Y 5/3		MOB	P	60-120	C	2.5Y 5/1		MOB	P						
1067	24	0-30	HCL	10YR 4/2			30-70	C	10YR 5/1		MO	P	70-120	C	5YR 4/4		MG	P						
1068	24	0-30	HCL	10YR 4/2			30-70	C	10YR 5/1		MO	C Platy	70-120	C	5YR 4/4		MG	P						
1069	24	0-30	HCL	7.5YR 4/2			30-50	C	2.5Y 5/3		MOB	P	50-70	C	2.5Y 4/1		MO	P	70-120	C	2.5Y 5/1		MO	P
1070	24	0-30	HCL	7.5YR 4/2			30-60	C	2.5Y 5/3		MOB	P	60-120	C	2.5Y 5/1		MOB	P						
1071	24	0-30	HCL	7.5YR 4/2			30-60	C	2.5Y 5/3		MOB	P	60-120	C	2.5Y 5/1		MOB	P						
1072	24	0-30	HCL	10YR 4/2			30-70	C	10YR 5/1		MO	P	70-120	C	5YR 4/4		MG	P						
1073	24	0-35	HCL	7.5YR 4/2			35-50	C	2.5Y 5/3		MOB	P	50-70	St C	2.5Y 5/1		MOB	P	70-120	C	7.5YR 5/6		MBG	P
1074	24	0-30	HCL	7.5YR 4/2			30-60	C	2.5Y 5/3		MOB	P	60-120	C	2.5Y 5/1		MOB	P						
1075	24	0-30	HCL	7.5YR 4/2			30-60	C	2.5Y 5/3		MOB	P	60-120	C	2.5Y 5/1		MOB	P						
1076	24	0-30	HCL	7.5YR 4/2			30-60	C	2.5Y 5/3		MOB	P	60-120	C	2.5Y 5/1		MOB	P						
1077	24	0-30	HCL	10YR 4/2			30-70	C	10YR 5/1		MO	P	70-120	C	5YR 4/4		MG	P						
1078	24	0-30	HCL	10YR 4/2			30-70	C	10YR 5/1		MO	P	70-120	C	5YR 4/4		MG	P						
1079	24	0-30	MCL	7.5YR 4/2			30-50	C	2.5Y 5/1		MO	P	50-90	SC	2.5Y 5/1		MOB	P	90-120	C	2.5Y 5/1		MO	P
1080	24	0-30	MCL	7.5YR 4/2			30-50	C	2.5Y 5/1		MO	P	50-90	S	10YR 5/6		FO	P	90-120	C	2.5Y 5/1		MO	P
1081	24	0-30	MCL	7.5YR 4/2			30-50	C	2.5Y 5/1		MO	P	50-90	S	10YR 5/6		FO	P	90-120	C	2.5Y 5/1		MO	P
1082	24	0-30	MCL	7.5YR 4/2			30-50	C	2.5Y 5/1		MO	P	50-90	S	10YR 5/6		FO	P	90-120	C	2.5Y 5/1		MO	P
1083	24	0-30	HCL	7.5YR 4/2	5%		30-50	C	10YR 5/3		MO	P	50-70	St C	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1084	24	0-40	HCL	10YR 4/2			40-80	C	10YR 5/1		MO	P	80-120	S	7.5YR 4/4			P						
1085	24	0-40	HCL	10YR 4/2	5%		40-80	C	10YR 5/1		MO	P	80-120	S	7.5YR 4/4			P						
1086	24	0-40	HCL	10YR 4/2			40-80	C	10YR 5/1		MO	P	80-120	S	7.5YR 4/4			P						
1087	24	0-40	HCL	10YR 4/2			40-80	C	10YR 5/1		MO	P	80-120	S	7.5YR 4/4			P						
1088	24	0-40	C	10YR 4/2			40-80	C	10YR 5/1		MO	P	80-120	S	7.5YR 4/4			P						
1089	24	0-30	MCL	7.5YR 4/2			30-50	C	2.5Y 5/1		MO	P	50-90	S	10YR 5/6		FO	P	90-120	C	2.5Y 5/1		MO	P
1090	24	0-30	MCL	7.5YR 4/2	5%		30-50	C	10YR 5/3		MO	P	50-70	St C	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1091	24	0-30	HCL	7.5YR 4/2	5%		30-50	C	10YR 5/3		MO	P	50-70	St C	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1092	24	0-30	HCL	7.5YR 4/2	5%		30-50	C	10YR 5/3		MO	P	50-70	St C	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1093	23	0-40	HCL	10YR 4/2			40-80	C	10YR 5/1		MO	P	80-120	S	7.5YR 4/4			P						
1094	24	0-40	HCL	10YR 4/2			40-80	C	10YR 5/1		MO	P	80-120	S	7.5YR 4/4			P						
1095	24	0-40	HCL	10YR 4/2			40-80	C	10YR 5/1		MO	P	80-120	S	7.5YR 4/4			P						
1096	24	0-30	C	10YR 4/2	5%		30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1097	24	0-30	C	10YR 4/2			30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1098	24	0-30	C	10YR 4/2			30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1099	24	0-30	HCL	10YR 4/2			30-80	S	5YR 4/4		MO	M	80-120	C	5YR 4/4		G	P						
1100	24	0-30	C	10YR 4/2			30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1101	24	0-30	C	10YR 4/2			30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1102	24	0-30	C	10YR 4/2			30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1103	24	0-30	HCL	7.5YR 4/2	5%		30-50	C	10YR 5/3		MO	P	50-70	St C	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1104	24	0-30	HCL	7.5YR 4/2	5%		30-50	C	10YR 5/3		MO	P	50-70	St C	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1105	24	0-30	HCL	7.5YR 4/2	5%		30-50	C	10YR 5/3		MO	P	50-70	St C	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1106	24	0-30	C	7.5YR 4/2			30-50	C	10YR 5/3		MOB	P	50-70	SC	10YR 5/3		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1107	24	0-30	C	7.5YR 4/2			30-50	C	10YR 5/3		MOB	P	50-70	SC	10YR 5/3		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1108	22	0-30	LS	7.5YR 3/2			30-120	S	10YR 5/1			MASSIVE												

		Topsoil					Subsoil 1						Subsoil 2						Subsoil 3					
Sample No	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
1109	22	0-40	SL	7.5YR 3/2			40-70	C	10YR 5/3		MOB	P	70-80	St C	10YR 5/1		MO	P	80-120	S	7.5YR 4/4			P
1110	23	0-40	HCL	10YR 4/2			40-80	C	10YR 5/1		MO	P	80-120	S	7.5YR 4/4			P						
1111	24	0-40	HCL	10YR 4/2			40-80	C	10YR 5/1		MO	P	80-120	S	7.5YR 4/4			P						
1112	24	0-30	C	10YR 4/2	5%		30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1113	24	0-30	C	10YR 4/2			30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1114	24	0-30	C	10YR 4/2			30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1115	24	0-40	C	10YR 4/2			40-80	C	10YR 5/1		MO	P	80-120	S	7.5YR 4/4			P						
1116	24	0-30	C	10YR 4/2			30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1117	24	0-30	C	10YR 4/2			30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1118	24	0-30	C	10YR 4/2			30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1119	24	0-30	C	10YR 4/2			30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1120	24	0-30	HCL	7.5YR 4/2	5%		30-50	C	10YR 5/3		MO	P	50-70	St C	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1121	24	0-30	MCL	7.5YR 4/2	5%		30-50	C	10YR 5/3		MO	P	50-70	St C	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1122	24	0-30	HCL	7.5YR 4/2	5%		30-50	C	10YR 5/3		MO	P	50-70	St C	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1123	24	0-30	HCL	7.5YR 4/2	5%		30-50	C	10YR 5/3		MO	P	50-70	St C	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1124	24	0-30	HCL	7.5YR 4/2	5%		30-50	C	10YR 5/3		MO	P	50-70	St C	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1125	24	0-30	HCL	7.5YR 4/2	5%		30-50	C	10YR 5/3		MO	P	50-70	St C	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1126	21	0-30	LS	7.5YR 3/2			30-120	S	10YR 5/1			P												
1127	22	0-30	LS	7.5YR 3/2			30-120	S	10YR 5/1			P												
1128	22	0-50	HCL	10YR 4/2			50-70	SC	10YR 5/3		MOB	P	70-120	St C	10YR 5/1		MOB	P						
1129	23	0-30	C	10YR 4/2	10%		30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1130	24	0-30	C	10YR 4/2	10%		30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1131	24	0-30	C	10YR 4/2	5%		30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1132	24	0-30	C	10YR 4/2			30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1133	24	0-30	C	10YR 4/2			30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1134	24	0-40	C	10YR 4/2			40-80	C	10YR 5/1		MO	P	80-120	S	7.5YR 4/4			P						
1135	24	0-30	C	10YR 4/2			30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1136	24	0-30	C	10YR 4/2			30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1137	24	0-30	C	10YR 4/2			30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1138	24	0-40	HCL	10YR 4/2			40-80	C	10YR 5/1		MO	P	80-120	S	7.5YR 4/4			P						
1139	24	0-40	HCL	10YR 4/2			40-80	C	10YR 5/1		MO	P	80-120	S	7.5YR 4/4			P						
1140	24	0-30	HCL	7.5YR 4/2	5%		30-50	C	10YR 5/3		MO	P	50-70	St C	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1141	24	0-30	HCL	7.5YR 4/2	5%		30-50	C	10YR 5/3		MO	P	50-70	St C	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1142	24	0-30	HCL	7.5YR 4/2	5%		30-50	C	10YR 5/3		MO	C Platy	50-70	St C	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1143	24	0-30	HCL	7.5YR 4/2	5%		30-50	C	10YR 5/3		MO	P	50-70	St C	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1144	24	0-30	HCL	7.5YR 4/2	5%		30-50	C	10YR 5/3		MO	P	50-70	St C	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1145	20	0-30	C	7.5YR 3/2			30-120	C	5YR 4/2		MG	P												
1146	20	0-30	C	7.5YR 3/2			30-120	C	5YR 4/2		MG	P												
1147	20	0-50	HCL	10YR 4/2			50-70	SC	10YR 5/3		MOB	P	70-120	St C	10YR 5/1		MOB	P						
1148	20	0-25	SCL	7.5YR 3/2	5%		25-40	SC	5YR 4/2			P	40-90	C	10YR 5/1		MO	P	90	IMP				
1149	20	0-25	SCL	7.5YR 3/2	5%		25-40	SC	5YR 4/2			WCSAB	40-90	C	10YR 5/1		MO	C Platy	90	IMP				
1150	21	0-30	C	10YR 4/2	5%		30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1151	22	0-30	C	10YR 4/2	10%		30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1152	22	0-40	HCL	10YR 4/2	10%		40-60	SCL	10YR 5/2		MO	P	60-120	C	10YR 5/1		MOB	P						
1153	24	0-30	C	10YR 4/2			30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1154	24	0-30	C	10YR 4/2			30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1155	24	0-40	HCL	10YR 4/2			40-80	C	10YR 5/1		MO	P	80-120	S	7.5YR 4/4			P						
1156	24	0-40	HCL	10YR 4/2			40-80	C	10YR 5/1		MO	P	80-120	S	7.5YR 4/4			P						
1157	24	0-30	C	10YR 4/2			30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1158	24	0-30	C	10YR 4/2			30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1159	24	0-40	HCL	10YR 4/2			40-80	C	10YR 5/1		MO	P	80-120	S	7.5YR 4/4			P						
1160	24	0-40	HCL	10YR 4/2			40-80	C	10YR 5/1		MO	P	80-120	S	7.5YR 4/4			P						
1161	24	0-30	HCL	7.5YR 4/2			30-50	C	10YR 4/1		MO	P	50-70	St C	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1162	24	0-30	HCL	7.5YR 4/2	5%		30-50	C	10YR 5/3		MO	P	50-70	St C	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1163	24	0-30	HCL	7.5YR 4/2	5%		30-50	C	10YR 5/3		MO	P	50-70	St C	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1164	24	0-30	HCL	7.5YR 4/2	5%		30-50	C	10YR 5/3		MO	P	50-70	St C	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1165	19	0-30	C	7.5YR 3/2			30-120	C	5YR 4/2		MG	P												
1166	23	0-50	HCL	10YR 4/2	5%		50-70	SC	10YR 5/3		MOB	P	70-120	St C	10YR 5/1		MOB	P						
1167	23	0-30	C	10YR 4/2	5%		30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1168	23	0-30	C	10YR 4/2	10%		30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1169	23	0-40	SCL	10YR 4/2	10%		40-60	SCL	10YR 5/2		MO	P	60-120	C	10YR 5/1		MOB	P						
1170	23	0-30	C	10YR 4/2	5%		30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						

		Topsoil					Subsoil 1						Subsoil 2						Subsoil 3					
Sample No	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
1171	24	0-30	C	10YR 4/2	5%		30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1172	24	0-30	HCL	7.5YR 4/2	5%		30-50	C	10YR 5/3		MO	P	50-70	St C	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1173	24	0-30	HCL	7.5YR 4/2	5%		30-50	C	10YR 5/3		MO	P	50-70	St C	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1174	24	0-30	HCL	10YR 4/2			30-80	S	5YR 4/4		MO	P	80-120	C	5YR 4/4		G	P						
1175	24	0-30	HCL	10YR 4/2			30-80	S	5YR 4/4		MO	P	80-120	C	5YR 4/4		G	P						
1176	24	0-30	HCL	7.5YR 4/2			30-50	C	10YR 4/1		MO	P	50-70	St C	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1177	23	0-30	HCL	7.5YR 4/2			30-50	C	10YR 4/1		MO	P	50-70	St C	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1178	23	0-30	HCL	7.5YR 4/2			30-50	C	10YR 4/1		MO	P	50-70	St C	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1179	23	0-30	HCL	7.5YR 4/2			30-50	C	10YR 4/1		MO	P	50-70	St C	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1180	23	0-30	HCL	7.5YR 4/2			30-50	C	10YR 4/1		MO	P	50-70	St C	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1181	19	0-50	HCL	10YR 4/2	5%		50-70	SC	10YR 5/3		MOB	P	70-120	St C	10YR 5/1		MOB	P						
1182	21	0-50	HCL	10YR 4/2			50-70	SC	10YR 5/3		MOB	P	70-120	St C	10YR 5/1		MOB	P						
1183	21	0-50	HCL	10YR 4/2			50-70	SC	10YR 5/3		MOB	P	70-120	St C	10YR 5/1		MOB	P						
1184	21	0-30	C	10YR 4/2	5%		30-50	C	2.5Y 5/1		MO	P	50-120	C	2.5Y 5/1		MOB	P						
1185	22	0-30	C	10YR 4/2	5%		30-50	C	2.5Y 5/1		MO	P	50-120	C	2.5Y 5/1		MOB	P						
1186	22	0-30	C	10YR 4/2			30-50	C	2.5Y 5/1		MO	P	50-120	C	2.5Y 5/1		MOB	P						
1187	22	0-30	C	10YR 4/2			30-50	C	2.5Y 5/1		MO	P	50-120	C	2.5Y 5/1		MOB	P						
1188	24	0-30	C	10YR 4/2			30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1189	24	0-30	C	10YR 4/2			30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1190	24	0-30	C	10YR 4/2			30-50	C	10YR 5/1		MO	P	50-120	C	10YR 5/1		MOB	P						
1191	24	0-30	HCL	7.5YR 4/2			30-50	HCL	7.5YR 4/2	10%		P	50-70	SC	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1192	24	0-30	HCL	7.5YR 4/2			30-50	C	10YR 4/1		MO	P	50-70	St C	2.5Y 5/1		MOB	P	70-120	C	2.5Y 5/1		MOB	P
1193	21	0-50	HCL	10YR 4/2	5%		50-70	SC	10YR 5/3		MOB	P	70-120	St C	10YR 5/1		MOB	P						
1194	21	0-50	HCL	10YR 4/2	5%		50-70	SC	10YR 5/3		MOB	P	70-120	St C	10YR 5/1		MOB	P						
1195	23	0-30	C	10YR 4/2	5%		30-50	C	2.5Y 5/1		MO	P	50-120	C	2.5Y 5/1		MOB	P						
1196	23	0-30	C	10YR 4/2	5%		30-50	C	2.5Y 5/1		MO	P	50-120	C	2.5Y 5/1		MOB	P						
1197	23	0-30	C	10YR 4/2			30-50	C	2.5Y 5/1		MO	P	50-120	C	2.5Y 5/1		MOB	P						
1198	23	0-30	C	10YR 4/2			30-50	C	2.5Y 5/1		MO	P	50-120	C	2.5Y 5/1		MOB	P						
1199	24	0-30	C	10YR 4/2			30-50	C	2.5Y 5/1		MO	P	50-120	C	2.5Y 5/1		MOB	P						
1200	24	0-30	C	10YR 4/2			30-50	C	2.5Y 5/1		MO	P	50-120	C	2.5Y 5/1		MOB	P						
1201	24	0-30	C	10YR 4/2			30-50	C	2.5Y 5/1		MO	P	50-120	C	2.5Y 5/1		MOB	P						
1202	24	0-30	HCL	10YR 4/2			30-50	C	2.5Y 5/3		MO	P	50-120	C	2.5Y 5/1		MOB	P						
1203	24	0-30	HCL	10YR 4/2			30-50	C	2.5Y 5/3		MO	P	50-120	C	2.5Y 5/1		MOB	P						
1204	24	0-30	SC	10YR 4/2			30-50	C	2.5Y 5/3		MO	P	50-100	C	2.5Y 5/1		MOB	P	100-120	S	7.5YR 4/4			M
1205	24	0-30	SC	10YR 4/2			30-50	C	2.5Y 5/3		MO	P	50-100	C	2.5Y 5/1		MOB	P	100-120	S	7.5YR 4/4			M
1206	22	0-50	HCL	10YR 4/2			50-70	SC	10YR 5/3		MOB	P	70-120	St C	10YR 5/1		MOB	P						
1207	21	0-50	HCL	10YR 4/2	5%		50-70	SC	10YR 5/3		MOB	P	70-120	St C	10YR 5/1		MOB	P						
1208	22	0-50	HCL	10YR 4/2	5%		50-70	SC	10YR 5/3		MOB	CAB	70-120	St C	10YR 5/1		MOB	P						
1209	23	0-30	C	10YR 4/2			30-50	C	2.5Y 5/1		MO	P	50-120	C	2.5Y 5/1		MOB	P						
1210	23	0-30	C	10YR 4/2			30-50	C	2.5Y 5/1		MO	P	50-120	C	2.5Y 5/1		MOB	P						
1211	24	0-30	C	10YR 4/2			30-50	C	2.5Y 5/1		MO	P	50-120	C	2.5Y 5/1		MOB	P						
1212	24	0-30	C	10YR 4/2			30-50	C	2.5Y 5/1		MO	P	50-120	C	2.5Y 5/1		MOB	P						
1213	24	0-30	C	10YR 4/2			30-50	C	2.5Y 5/1		MO	P	50-120	C	2.5Y 5/1		MOB	P						
1214	23	0-30	C	10YR 4/2			30-50	C	2.5Y 5/1		MO	P	50-80	C	2.5Y 5/1		MOB	P	80-120	C	5YR 4/3		MG	P
1215	22	0-30	HCL	10YR 4/2			30-50	C	2.5Y 5/3		MO	P	50-120	C	2.5Y 5/1		MOB	P						
1216	22	0-30	C	10YR 3/2			30-70	S	10YR 5/6			P	70-120	C	2.5Y 5/1		MOB	P						
1217	21	0-30	SC	10YR 4/2			30-50	C	2.5Y 5/3		MO	P	50-100	C	2.5Y 5/1		MOB	P	100-120	S	7.5YR 4/4			G
1218	20	0-30	SC	10YR 4/2			30-50	C	2.5Y 5/3		MO	P	50-100	C	2.5Y 5/1		MOB	P	100-120	S	7.5YR 4/4			G
1219	20	0-30	SC	10YR 4/2			30-50	C	2.5Y 5/3		MO	CAB	50-100	C	2.5Y 5/1		MOB	C Platy	100-120	S	7.5YR 4/4			SINGLE GRAIN
1220	22	0-50	HCL	10YR 4/2			50-70	SC	10YR 5/3		MOB	P	70-120	St C	10YR 5/1		MOB	P						
1221	23	0-50	HCL	10YR 4/2			50-70	SC	10YR 5/3		MOB	P	70-120	St C	10YR 5/1		MOB	P						
1222	25	0-30	C	10YR 4/2			30-50	C	2.5Y 5/1		MO	P	50-120	C	2.5Y 5/1		MOB	P						
1223	23	0-30	C	10YR 4/2			30-50	C	2.5Y 5/1		MO	P	50-120	C	2.5Y 5/1		MOB	P						
1224	22	0-30	C	10YR 4/2			30-50	C	2.5Y 5/1		MO	P	50-120	C	2.5Y 5/1		MOB	P						
	23.18																							

Appendix 3f– Trial Pit Descriptions

Sample point 9:

Surface flat and unslaked

Horizon 1: 0-40cm Dark yellowish brown (10YR 4/4) heavy clay loam with a weak medium subangular blocky structure. *The topsoil showed a minor reaction to the infield HCl test for calcium carbonate, but no other sample points nearby showed a reaction. This was discussed with the farm manager who confirmed that the site has in the past been used as a tip point for lime that has been regularly spread on the whole farm.*

Horizon 2: 40-70cm Greyish brown (10YR 5/2) clay with a course angular blocky structure and many ochreous mottles.

Horizon 3: 70-90cm Greyish brown (10YR 5/2) slightly stony clay with a medium angular blocky structure and many ochreous mottles.

Horizon 4: 90-120cm Grey (10YR 5/1) clay with a massive structure and many ochreous mottles.

Sample point 146:

Surface flat and unslaked

Horizon 1: 0-40cm Dark greyish brown (10YR 4/2) sandy clay loam with a fine subangular blocky structure

Horizon 2: 40-70cm Brown (10YR 5/3) silty clay loam with a weak medium angular blocky structure and many ochreous mottles

Horizon 3: 70-120cm Grey (10YR 5/1) clay with a course prismatic structure and many ochreous mottles.

Sample point 223:

Horizon 1: 0-45cm Dark greyish brown (10YR 4/2) sandy clay loam with a fine subangular blocky structure

Horizon 2: 45-80cm Grey (10YR 5/1) clay with a course angular blocky structure and many ochreous and black mottles.

Horizon 3: 80-120cm Grey (10YR 5/1) clay with a massive structure and many ochreous and black mottles.

Sample point 473:

Surface flat and unslaked

Horizon 1: 0-40cm Very dark greyish brown (10YR 3/2) clay with a weak medium angular blocky structure

Horizon 2: 40-70cm Grey (10YR 5/1) clay with a course angular blocky structure and many ochreous and black mottles.

Horizon 3: 70-120cm Grey (10YR 5/1) clay with a massive structure and many ochreous mottles.

Sample Point 899:

Surface flat and unslaked

Horizon 1: 0-35cm Dark greyish brown (10YR 4/2) clay with a weak course subangular blocky structure

Horizon 2: 35-60cm Grey (10YR 5/1) clay with a course angular blocky structure and many ochreous and black mottles.

Horizon 3: 60-120cm Dark grey (10YR 4/1) clay with a massive structure and many ochreous mottles.

Sample point 956:

Surface flat and unslaked

Horizon 1: 0-40cm Very dark greyish brown (10YR 3/2) sandy clay loam with a weak fine subangular blocky structure

Horizon 2: 40-75cm Grey (10YR 5/1) clay with a course angular blocky structure and many ochreous and black mottles.

Horizon 3: 75-120cm Grey (10YR 5/1) clay with a massive structure and many ochreous and black mottles.

Sample point 1024:

Surface flat and unslaked

Horizon 1: 0-40cmVery dark greyish brown (10YR 3/2) clay with a weak medium angular blocky structure

Horizon 2: 40-75cm Brown (10YR 5/3) clay with a course angular blocky structure and many ochreous and black mottles.

Horizon 3: 75-120cm Grey (10YR 5/1) clay with a massive structure and many ochreous and black mottles.

Sample point 1108:

Surface flat and unslaked

Horizon 1: 0-30cm Dark brown (7.5YR 3/2) loamy sand with a granular structure

Horizon 2: 30-120cm Grey (10YR 5/1) sand with a massive structure and very firm consistence.

Sample point 1149:

Surface flat and unslaked

Horizon 1: 0-25cm Dark brown (7.5YR 3/2) sandy clay loam with a fine subangular blocky structure

Horizon 2: 25-40cm Dark reddish grey (5YR 4/2) sandy clay with a weak course subangular blocky structure

Horizon 3: 40-90cm Grey (10YR 5/1) clay with a course platy structure and many ochreous mottles

Impenetrable to both augur and spade at 90cm due to stone.

Sample point 1219:

Surface flat and unslaked

Horizon 1: 0-30cm Dark greyish brown (10YR 4/2) sandy clay with a weak course subangular blocky structure

Horizon 2: 30-50cm Light olive brown (2.5Y 5/3) clay with a course angular blocky structure and many ochreous mottles

Horizon 3: 50-100cm Grey (2.5Y 5/1) clay with a course platy structure and many ochreous and black mottles

Horizon 3: 100-120cm Brown (7.5YR 4/4) sand with a single grained structure.

ANALYTICAL REPORT

Report Number	**80310-21**	**W250**	**AMET PROPERTY**	**Client**	**ISLAND GP-COTTAM**
Date Received	**14-DEC-2021**		**HENWICK BARN**		
Date Reported	**21-DEC-2021**		**BULWICK**		
Project	**SOIL**		**CORBY**		
Reference	**ISLAND GP**		**NORTHANTS**		
Order Number			**NN17 3DU**		

Laboratory Reference		**SOIL538952**	**SOIL538953**	**SOIL538954**	**SOIL538955**	**SOIL538956**					
Sample Reference		**1149**	**223**	**899**	**1219**	**1169**					
Determinand	**Unit**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**					
Sand 2.00-0.063mm	% w/w	60	53	31	47	56					
Silt 0.063-0.002mm	% w/w	18	24	23	19	19					
Clay <0.002mm	% w/w	22	23	46	34	25					
Textural Class **		SCL	SCL	C	SC	SCL					

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
Tel: 01344 886338
Fax: 01344 890972
email: enquiries@nrm.uk.com

ANALYTICAL REPORT

Report Number	**84783-22**	**W250**	**AMET PROPERTY**	**Client**	**ISLAND GP**
Date Received	**24-JAN-2022**		**HENWICK BARN**		**COTTAM**
Date Reported	**01-FEB-2022**		**BULWICK**		
Project	**SOIL**		**CORBY**		
Reference	**ISLAND GP**		**NORTHANTS**		
Order Number			**NN17 3DU**		

Laboratory Reference		**SOIL542857**	**SOIL542858**	**SOIL542859**	**SOIL542860**						
Sample Reference		**9**	**146**	**473**	**956**						
Determinand	**Unit**	**SOIL**	**SOIL**	**SOIL**	**SOIL**						
Sand 2.00-0.063mm	% w/w	42	56	43	64						
Silt 0.063-0.002mm	% w/w	25	24	15	14						
Clay <0.002mm	% w/w	33	20	42	22						
Textural Class **		HCL	SCL	C	SCL						

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

Linaben Patel

Natural Resource Management, a trading division of Cawood Scientific Ltd.
Coopers Bridge, Braziers Lane, Bracknell, Berkshire, RG42 6NS
Tel: 01344 886338
Fax: 01344 890972
email: enquiries@nrm.uk.com

ANALYTICAL REPORT

Report Number	**88030-22**	**W250**	**AMET PROPERTY**	**Client**	**ISLAND GP**
Date Received	**07-FEB-2022**		**HENWICK BARN**		**COTTAM**
Date Reported	**16-FEB-2022**		**BULWICK**		
Project	**SOIL**		**CORBY**		
Reference	**ISLAND GP**		**NORTHANTS**		
Order Number			**NN17 3DU**		

Laboratory Reference		**SOIL545615**	**SOIL545616**	**SOIL545617**							
Sample Reference		**994**	**1024**	**1027**							
Determinand	**Unit**	**SOIL**	**SOIL**	**SOIL**							
Sand 2.00-0.063mm	% w/w	59	44	38							
Silt 0.063-0.002mm	% w/w	15	19	15							
Clay <0.002mm	% w/w	26	37	47							
Textural Class **		SCL	C	C							

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

Myles Nicholson

Natural Resource Management, a trading division of Cawood Scientific Ltd.
Coopers Bridge, Braziers Lane, Bracknell, Berkshire, RG42 6NS
Tel: 01344 886338
Fax: 01344 890972
email: enquiries@nrm.uk.com

ANALYTICAL REPORT

Report Number	**18618-22**	**W250**	**AMET PROPERTY**	**Client**	**ISLAND GREEN POWER**
Date Received	**19-MAY-2022**		**HENWICK BARN**		
Date Reported	**31-MAY-2022**		**BULWICK**		
Project	**SOIL**		**CORBY**		
Reference	**ISLAND GREEN POWER**		**NORTHANTS**		
Order Number			**NN17 3DU**		

Laboratory Reference		**SOIL563863**	**SOIL563864**	**SOIL563865**	**SOIL563866**	**SOIL563867**	**SOIL563868**				
Sample Reference		**COTTAM 1024**	**COTTAM 1169**	**COTTAM 956**	**COTTAM 146**	**COTTAM 9**	**COTTAM 1219**				
Determinand	**Unit**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**				
Coarse Sand 2.00-0.63mm	% w/w	1	2	2	3	2	1				
Medium Sand 0.63-0.212mm	% w/w	29	30	39	25	22	24				
Fine Sand 0.212-0.063mm	% w/w	25	23	25	28	17	27				
Silt 0.063-0.002mm	% w/w	7	17	14	22	26	18				
Clay <0.002mm	% w/w	38	28	20	22	33	30				
Stones >50mm	% w/w	0.0	0.0	0.0	0.0	0.0	0.0				
Stones 20-50mm	% w/w	0.0	0.0	0.0	0.0	0.0	0.0				
Stones 2-20mm	% w/w	2.5	2.5	4.0	3.0	0.7	1.2				
Organic Matter LOI	% w/w	4.9	4.8	3.3	3.7	4.5	5.1				
Neutralising Value as CaCO3 eq.	% w/w	<1	3.3	1.5	1.1	3.7	1.6				
Neutralising Value as CaO eq.	% w/w	<1	1.8	<1	<1	2.1	<1				
Textural Class **		SC	SCL	SCL	SCL	HCL	SC/SCL				

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

ANALYTICAL REPORT

Report Number	**18619-22**	**W250**	**AMET PROPERTY**
Date Received	**19-MAY-2022**		**HENWICK BARN**
Date Reported	**31-MAY-2022**		**BULWICK**
Project	**SOIL**		**CORBY**
Reference	**ISLAND GREEN POWER**		**NORTHANTS**
Order Number			**NN17 3DU**

Laboratory Reference		**SOIL563869**	**SOIL563870**	**SOIL563871**	**SOIL563872**	**SOIL563873**	**SOIL563874**				
Sample Reference		**COTTAM 1027**	**COTTAM 899**	**COTTAM 1149**	**COTTAM 223**	**COTTAM 473**	**COTTAM 994**				
Determinand	**Unit**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**				
Coarse Sand 2.00-0.63mm	% w/w	4	2	4	1	1	1				
Medium Sand 0.63-0.212mm	% w/w	25	17	36	27	29	28				
Fine Sand 0.212-0.063mm	% w/w	18	12	24	31	19	25				
Silt 0.063-0.002mm	% w/w	16	21	15	21	15	16				
Clay <0.002mm	% w/w	37	48	21	20	36	30				
Stones >50mm	% w/w	0.0	0.0	0.0	0.0	0.0	0.0				
Stones 20-50mm	% w/w	0.0	0.0	0.0	0.0	0.0	0.0				
Stones 2-20mm	% w/w	1.4	2.8	4.3	1.9	2.9	5.0				
Organic Matter LOI	% w/w	6.5	6.3	5.2	3.6	5.1	4.8				
Neutralising Value as CaCO3 eq.	% w/w	5.5	2.5	<1	<1	1.3	<1				
Neutralising Value as CaO eq.	% w/w	3.1	1.4	<1	<1	<1	<1				
Textural Class **		SC	C	SCL	SCL	SC	SC/SCL				

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.

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 4a - Wetness and Droughtiness Assesment - Cottam 1a

	Wetness Assesment				Grade	Droughtiness Assessment		Grade	
	Depth to			Wetness	According to			According to	ALC
Sample No	SPL	Gley	Reddish	Class	Wetness	MB Wheat	MB Potato	Droughtiness	Grade
1	40	40	N	III	3b				3b
2	40	40	N	III	3b				3b
3	40	40	N	III	3b				3b
4	40	40	N	III	3b				3b
5	40	40	N	III	3b				3b
6	40	40	N	III	3b				3b
7	40	40	N	III	3b				3b
8	35	30	N	III	3b				3b
9	35	40	N	III	3b				3b
10	40	40	N	III	3b				3b
11	40	40	N	III	3b				3b
12	40	40	N	III	3b				3b
13	40	40	N	III	3b				3b
14	40	40	N	III	3b				3b
15	40	40	N	III	3b				3b
16	40	40	N	III	3b				3b
17	40	40	N	III	3b				3b
18	40	40	N	III	3b				3b
19	40	40	N	III	3b				3b
20	40	40	N	III	3b				3b
21	35	40	N	III	3b				3b
22	40	40	N	III	3b				3b
23	40	40	N	III	3b				3b
24	40	40	N	III	3b				3b
25	40	40	N	III	3b				3b
26	40	40	N	III	3b				3b
27	40	40	N	III	3b				3b
28	40	40	N	III	3b				3b
29	40	40	N	III	3b				3b
30	40	40	N	III	3b				3b
31	40	40	N	III	3b				3b
32	40	40	N	III	3b				3b
33	40	40	N	III	3b				3b
34	40	40	N	III	3b				3b
35	35	40	N	III	3b				3b
36	40	40	N	III	3b				3b
37	40	40	N	III	3b				3b
38	40	40	N	III	3b				3b
39	40	40	N	III	3b				3b
40	40	40	N	III	3b				3b
41	45	45	N	II	3a				3a
42	45	45	N	II	3a				3a
43	45	45	N	II	3a				3a
44	45	45	N	II	3a				3a
45	45	45	N	II	3a				3a
46	40	40	N	III	3b				3b
47	45	45	N	II	3a				3a
48	45	45	N	II	3a				3a
49	45	45	N	II	3a				3a
50	45	45	N	II	3a				3a
51	40	40	N	III	3b				3b
52	40	40	N	III	3b				3b
53	45	45	N	II	3a				3a
54	45	45	N	II	3a				3a

	Wetness Assesment				Grade	Droughtiness Assessment		Grade	
	Depth to			Wetness	According to			According to	ALC
Sample No	SPL	Gley	Reddish	Class	Wetness	MB Wheat	MB Potato	Droughtiness	Grade
55	45	45	N	II	3a				3a
56	45	45	N	II	3a				3a
57	40	40	N	III	3b				3b
58	40	40	N	III	3b				3b
59	40	40	N	III	3b				3b
60	40	40	N	III	3b				3b
61	40	40	N	III	3b				3b
62	40	40	N	III	3b				3b
63	35	35	N	III	3a				3a
64			N	I	1	21.46	29.18	1	1
65			N	I	1	21.46	29.18	1	1
66			N	I	1	21.46	29.18	1	1
67	40	40	N	III	3a				3a
68	40	40	N	III	3a				3a
69	35	30	N	III	3b				3b
70	35	30	N	III	3b				3b
71	35	30	N	III	3b				3b
72	35	30	N	III	3b				3b
73	35	35	N	III	3a				3a
74	35	35	N	III	3a				3a
75	35	30	N	III	3b				3b
76	35	30	N	III	3b				3b
77	35	30	N	III	3b				3b
78	35	30	N	III	3b				3b
79	35	30	N	III	3b				3b
80	35	35	N	III	3a				3a
81	35	35	N	III	3a				3a
82	35	30	N	III	3b				3b
83	40	40	N	III	3a				3a
84	40	40	N	III	3a				3a
85	35	35	N	III	3b				3b
86	35	35	N	III	3b				3b
87	35	35	N	III	3b				3b
88	35	35	N	III	3b				3b
89	35	35	N	III	3b				3b
90	35	35	N	III	3b				3b
91	35	40	N	III	3b				3b
92	35	40	N	III	3b				3b
93	35	40	N	III	3b				3b
94	35	40	N	III	3b				3b
95	35	40	N	III	3b				3b
96	35	35	N	III	3b				3b
97	35	35	N	III	3b				3b
98	35	35	N	III	3b				3b
99	35	35	N	III	3b				3b
100	35	30	N	III	3b				3b
101	35	40	N	III	3b				3b
102	35	40	N	III	3b				3b
103	35	40	N	III	3b				3b
104	35	40	N	III	3b				3b
105	35	40	N	III	3b				3b
106	35	30	N	III	3b				3b
107	35	30	N	III	3b				3b
108	35	30	N	III	3b				3b
109	35	30	N	III	3b				3b

	Wetness Assesment				Grade	Droughtiness Assessment		Grade	
	Depth to			Wetness	According to			According to	ALC
Sample No	SPL	Gley	Reddish	Class	Wetness	MB Wheat	MB Potato	Droughtiness	Grade
110			N	I	1	-6.54	-23.82	3a	3a
111	35	30	N	III	3b				3b
112	35	30	N	III	3b				3b
113	35	30	N	III	3b				3b
114	35	30	N	III	3b				3b
115	35	40	N	III	3b				3b
116	35	40	N	III	3b				3b
117	35	40	N	III	3b				3b
118	35	40	N	III	3b				3b
119	35	30	N	III	3b				3b
120			N	I	2	-41.54	-33.82	3b	3b
121	35	30	N	III	3b				3b
122	35	30	N	III	3b				3b
123	35	30	N	III	3b				3b
124	35	30	N	III	3b				3b
125	35	30	N	III	3a				3a
126	35	30	N	III	3b				3b
127	40	40	N	III	3a				3a
128	35	35	N	III	3a				3a
129			N	I	1	-20.54	-12.82	3b	3b
130			N	I	1	-20.54	-12.82	3b	3b
131	35	35	N	III	3a				3a
132	35	35	N	III	3b				3b
133	45	45	N	II	3a				3a
134	45	45	N	II	3a				3a
135	60	30	N	II	2				2
136			N	I	1	-20.54	-12.82	3b	3b
137	40	40	N	III	3a				3a
138	40	40	N	III	3a				3a
139	35	35	N	III	3a				3a
140	35	35	N	III	3a				3a
141	35	35	N	III	3b				3b
142	35	35	N	III	3b				3b
143	35	35	N	III	3b				3b
144	45	45	N	II	2				2
145	40	40	N	III	3a				3a
146	40	40	N	III	3a				3a
147	60	30	N	II	2				2
148	40	40	N	III	3a				3a
149	40	40	N	III	3a				3a
150	45	45	N	II	3a				3a
151	45	45	N	II	3a				3a

Appendix 4b - Wetness and Droughtiness Assesment - Cottam 1b

	Wetness Assesment			Grade	Droughtiness Assessment		Grade	
	Depth to		Wetness	According to			According to	ALC
Sample No	SPL	Gley	Class	Wetness	MB Wheat	MB Potato	Droughtiness	Grade
152	40	<40	III	3b				3b
153	40	<40	III	3b				3b
154	40	<40	III	3b				3b
155	40	<40	III	3b				3b
156	40	<40	III	3b				3b
157	40	<40	III	3b				3b
158	40	<40	III	3b				3b
159	40	<40	III	3b				3b
160	40	<40	III	3b				3b
161	40	<40	III	3b				3b
162	40	<40	III	3b				3b
163	40	<40	III	3b				3b
164	40	<40	III	3b				3b
165	35	<40	III	3a				3a
166	35	<40	III	3a				3a
167	40	<40	III	3b				3b
168	40	<40	III	3b				3b
169	40	<40	III	3b				3b
170	40	<40	III	3b				3b
171	40	<40	III	3b				3b
172	40	<40	III	3b				3b
173	40	<40	III	3b				3b
174	40	<40	III	3b				3b
175	40	<40	III	3b				3b
176	40	<40	III	3b				3b
177	40	<40	III	3b				3b
178	35	<40	III	3b				3b
179	35	<40	III	3b				3b
180	40	<40	III	3b				3b
181	40	<40	III	3b				3b
182	40	<40	III	3b				3b
183	40	<40	III	3b				3b
184	40	<40	III	3b				3b
185			I	3a				3a
186	40	<40	III	3b				3b
187	40	<40	III	3b				3b
188	40	<40	III	3b				3b
189	40	<40	III	3b				3b
190	40	<40	III	3b				3b
191	40	<40	III	3b				3b
192	40	<40	III	3b				3b
193	40	<40	III	3b				3b
194	40	<40	III	3b				3b
195	40	<40	III	3b				3b
196	40	<40	III	3b				3b
197	40	<40	III	3a				3a
198	40	<40	III	3b				3b

	Wetness Assesment			Grade	Droughtiness Assessment			
	Depth to		Wetness	According to			According to	ALC
Sample No	SPL	Gley	Class	Wetness	MB Wheat	MB Potato	Droughtiness	Grade
199	40	<40	III	3a				3a
200	35	<40	III	3b				3b
201	35	<40	III	2				2
202	35	<40	III	3b				3b
203	35	<40	III	3b				3b
204	45	40-70	II	2				2
205	40	<40	III	3b				3b
206	40	<40	III	3b				3b
207	40	<40	III	3b				3b
208	40	<40	III	3b				3b
209	40	<40	III	3b				3b
210	40	<40	III	3b				3b
211	40	<40	III	3b				3b
212	40	<40	III	3b				3b
213	40	<40	III	3b				3b
214	40	<40	III	3b				3b
215	40	<40	III	3b				3b
216	40	<40	III	3b				3b
217	40	<40	III	3b				3b
218	40	<40	III	3b				3b
219	40	<40	III	3b				3b
220	35	<40	III	3a				3a
221	45	40-70	II	2				2
222	45	40-70	II	2				2
223	45	40-70	II	2				2
224	45	40-70	II	2				2
225	40	<40	III	3b				3b
226	40	<40	III	3b				3b
227	35	<40	III	3b				3b
228	35	<40	III	3b				3b
229	45	40-70	II	2				2
230	45	40-70	II	2				2
231	45	40-70	II	2				2
232	40	<40	III	3b				3b
233	40	<40	III	3b				3b
234	40	<40	III	3b				3b
235	40	<40	III	3b				3b
236	40	<40	III	3b				3b
237	40	<40	III	3b				3b
238	40	<40	III	3b				3b
239	40	<40	III	3b				3b
240	40	<40	III	3b				3b
241	40	<40	III	3b				3b
242	40	<40	III	3b				3b
243	40	<40	III	3b				3b
244	40	<40	III	3b				3b
245	40	<40	III	3b				3b
246	40	<40	III	3b				3b

	Wetness Assesment			Grade	Droughtiness Assessment			
	Depth to		Wetness	According to			According to	ALC
Sample No	SPL	Gley	Class	Wetness	MB Wheat	MB Potato	Droughtiness	Grade
247	40	<40	III	3b				3b
248	40	<40	III	3b				3b
249	45	40-70	II	2				2
250	45	40-70	II	2				2
251	45	40-70	II	2				2
252	45	40-70	II	2				2
253	45	40-70	II	2				2
254	45	40-70	II	2				2
255	45	40-70	II	2				2
256	45	40-70	II	2				2
257			I	2				2
258	35	<40	III	3a				3a
259	35	<40	III	3a				3a
260	40	<40	III	3b				3b
261	40	<40	III	3b				3b
262	40	<40	III	3b				3b
263	40	<40	III	3b				3b
264	40	<40	III	3b				3b
265	40	<40	III	3b				3b
266	40	<40	III	3b				3b
267	40	<40	III	3b				3b
268	40	<40	III	3b				3b
269	40	<40	III	3b				3b
270	40	<40	III	3b				3b
271	40	<40	III	3b				3b
272	40	<40	III	3b				3b
273	35	<40	III	3b				3b
274	35	<40	III	3b				3b
275	35	<40	III	3b				3b
276	45	40-70	II	2				2
277	45	40-70	II	2				2
278	35	<40	III	3b				3b
279	35	<40	III	3b				3b
280	35	<40	III	3a				3a
281	35	<40	III	3a				3a
282	35	<40	III	3a				3a
283	40	<40	III	3b				3b
284	40	<40	III	3b				3b
285	40	<40	III	3b				3b
286	40	<40	III	3b				3b
287	40	<40	III	3b				3b
288	40	<40	III	3b				3b
289	40	<40	III	3b				3b
290	40	<40	III	3b				3b
291	40	<40	III	3b				3b
292	40	<40	III	3b				3b
293	40	<40	III	3b				3b
294	40	<40	III	3b				3b

	Wetness Assesment			Grade	Droughtiness Assessment			
	Depth to		Wetness	According to			According to	ALC
Sample No	SPL	Gley	Class	Wetness	MB Wheat	MB Potato	Droughtiness	Grade
295	35	<40	III	3b				3b
296	35	<40	III	3a				3a
297	35	<40	III	3a				3a
298	35	<40	III	3a				3a
299	35	<40	III	3a				3a
300	35	<40	III	3b				3b
301	35	<40	III	3b				3b
302	45	40-70	II	2				2
303	45	40-70	II	2				2
304	45	40-70	II	2				2
305	40	<40	III	3b				3b
306	40	<40	III	3b				3b
307	40	<40	III	3b				3b
308	40	<40	III	3b				3b
309	40	<40	III	3b				3b
310	40	<40	III	3b				3b
311	40	<40	III	3b				3b
312	40	<40	III	3b				3b
313	40	<40	III	3a				3a
314	40	<40	III	3a				3a
315	40	<40	III	3b				3b
316	40	<40	III	3b				3b
317	40	<40	III	3b				3b
318	40	<40	III	3b				3b
319	40	<40	III	3b				3b
320	35	<40	III	3b				3b
321	35	<40	III	3b				3b
322	40	<40	III	3b				3b
323	40	<40	III	3b				3b
324	40	<40	III	3b				3b
325	40	<40	III	3b				3b
326	45	40-70	II	2				2
327	45	40-70	II	2				2
328	45	40-70	II	2				2
329	40	<40	III	3b				3b
330	40	<40	III	3b				3b
331	40	<40	III	3b				3b
332	40	<40	III	3b				3b
333	40	<40	III	3b				3b
334	40	<40	III	3b				3b
335	40	<40	III	3b				3b
336	40	<40	III	3b				3b
337	40	<40	III	3b				3b
338	40	<40	III	3b				3b
339	40	<40	III	3b				3b
340	40	<40	III	3b				3b
341	40	<40	III	3b				3b
342	40	<40	III	3b				3b

	Wetness Assesment			Grade	Droughtiness Assessment			
	Depth to		Wetness	According to			According to	ALC
Sample No	SPL	Gley	Class	Wetness	MB Wheat	MB Potato	Droughtiness	Grade
343	40	<40	III	3b				3b
344	40	<40	III	3b				3b
345	40	<40	III	3b				3b
346	40	<40	III	3b				3b
347	40	<40	III	3b				3b
348	40	<40	III	3b				3b
349	40	<40	III	3b				3b
350	40	<40	III	3b				3b
351	40	<40	III	3b				3b
352	40	<40	III	3b				3b
353	40	<40	III	3b				3b
354	40	<40	III	3b				3b
355	40	<40	III	3b				3b
356	40	<40	III	3b				3b
357	40	<40	III	3b				3b
358	40	<40	III	3b				3b
359			I	3a				3a
360			I	3a				3a
361	40	<40	III	3b				3b
362	40	<40	III	3b				3b
363	40	<40	III	3a				3a
364	40	<40	III	3a				3a
365	40	<40	III	3b				3b
366	40	<40	III	3a				3a
367	40	<40	III	3b				3b
368	40	<40	III	3b				3b
369	40	<40	III	3b				3b
370	40	<40	III	3b				3b
371	40	<40	III	3b				3b
372	40	<40	III	3b				3b
373	40	<40	III	3b				3b
374	40	<40	III	3b				3b
375	40	<40	III	3b				3b
376			I	2				2
377			I	2				2
378	40	<40	III	3b				3b
379	40	<40	III	3b				3b
380	45	40-70	II	2				2
381	40	<40	III	3b				3b
382	40	<40	III	3b				3b
383	40	<40	III	3b				3b
384	40	<40	III	3b				3b
385	40	<40	III	3b				3b
386	40	<40	III	3a				3a
387	40	<40	III	3b				3b
388	40	<40	III	3b				3b
389	40	<40	III	3b				3b
390	40	<40	III	3b				3b

	Wetness Assesment			Grade	Droughtiness Assessment			
	Depth to		Wetness	According to			According to	ALC
Sample No	SPL	Gley	Class	Wetness	MB Wheat	MB Potato	Droughtiness	Grade
391	40	<40	III	3b				3b
392	40	<40	III	3b				3b
393	40	<40	III	3b				3b
394	40	<40	III	3b				3b
395	40	<40	III	3b				3b
396	40	<40	III	3b				3b
397	40	<40	III	3b				3b
398	40	<40	III	3b				3b
399	45	40-70	II	2				2
400	40	<40	III	3b				3b
401	40	<40	III	3b				3b
402	40	<40	III	3b				3b
403	40	<40	III	3b				3b
404	40	<40	III	3b				3b
405	40	<40	III	3b				3b
406	40	<40	III	3b				3b
407	40	<40	III	3b				3b
408	40	<40	III	3b				3b
409	40	<40	III	3b				3b
410	40	<40	III	3b				3b
411	40	<40	III	3b				3b
412	40	<40	III	3b				3b
413	45	40-70	II	2				2
414	40	<40	III	3b				3b
415	40	<40	III	3b				3b
416	40	<40	III	3b				3b
417	40	<40	III	3b				3b
418	40	<40	III	3b				3b
419	40	<40	III	3b				3b
420	40	<40	III	3b				3b
421	40	<40	III	3b				3b
422	40	<40	III	3b				3b
423	40	<40	III	3b				3b
424	40	<40	III	3b				3b
425	40	<40	III	3b				3b
426	40	<40	III	3b				3b
427	40	<40	III	3b				3b
428	40	<40	III	3b				3b
429	40	<40	III	3b				3b
430	40	<40	III	3b				3b
431	40	<40	III	3b				3b
432	45	40-70	II	2				2
433	40	<40	III	3b				3b
434	40	<40	III	3b				3b
435	40	<40	III	3b				3b
436	40	<40	III	3b				3b
437	40	<40	III	3b				3b
438	40	<40	III	3b				3b

	Wetness Assesment			Grade	Droughtiness Assessment			
	Depth to		Wetness	According to			According to	ALC
Sample No	SPL	Gley	Class	Wetness	MB Wheat	MB Potato	Droughtiness	Grade
439	40	<40	III	3b				3b
440	40	<40	III	3b				3b
441	40	<40	III	3b				3b
442	40	<40	III	3b				3b
443	40	<40	III	3b				3b
444	40	<40	III	3b				3b
445	40	<40	III	3b				3b
446	40	<40	III	3b				3b
447	40	<40	III	3b				3b
448	40	<40	III	3b				3b
449	40	<40	III	3b				3b
450	45	40-70	II	3b				3b
451	40	<40	III	3b				3b
452	40	<40	III	3b				3b
453	45	40-70	II	3b				3b
454	40	<40	III	3b				3b
455	40	<40	III	3b				3b
456	40	<40	III	3b				3b
457	40	<40	III	3b				3b
458	40	<40	III	3b				3b
459	40	<40	III	3b				3b
460	40	<40	III	3b				3b
461	40	<40	III	3b				3b
462	40	<40	III	3b				3b
463	40	<40	III	3b				3b
464	40	<40	III	3b				3b
465	40	<40	III	3b				3b
466	40	<40	III	3b				3b
467	45	40-70	II	3b				3b
468	45	40-70	II	3b				3b
469	40	<40	III	3b				3b
470	40	<40	III	3b				3b
471	40	<40	III	3b				3b
472	40	<40	III	3b				3b
473	40	<40	III	3b				3b
474	40	<40	III	3b				3b

Appendix 4c -Wetness and Droughtiness Assessment - Cottam 1c

	Wetness Assesment				Grade	Droughtiness Assessment		Grade	
	Depth to			Wetness	According to			According to	ALC
Sample No	SPL	Gley	Reddish	Class	Wetness	MB Wheat	MB Potato	Droughtiness	Grade
475	40	40	N	III	3b				3b
476	40	40	N	III	3b				3b
477	40	40	N	III	3b				3b
478	40	40	N	III	3b				3b
479	50	50	N	II	3b				3b
480	50	50	N	II	3b				3b
481	40	40	N	III	3b				3b
482	40	40	N	III	3b				3b
483	40	40	N	III	3b				3b
484	40	40	N	III	3b				3b
485	40	40	N	III	3b				3b
486	40	40	N	III	3b				3b
487	40	40	N	III	3b				3b
488	50	50	N	II	3b				3b
489	50	50	N	II	3b				3b
490	40	40	N	III	3b				3b
491	40	40	N	III	3b				3b
492	40	40	N	III	3b				3b
493	40	40	N	III	3b				3b
494	40	40	N	III	3b				3b
495	40	40	N	III	3b				3b
496	40	40	N	III	3b				3b
497	40	40	N	III	3b				3b
498	40	40	N	III	3b				3b
499	40	40	N	III	3b				3b
500	35	35	N	III	3b				3b
501	35	35	N	III	3b				3b
502	35	35	N	III	3b				3b
503	40	40	N	III	3b				3b
504	40	40	N	III	3b				3b
505	40	40	N	III	3b				3b
506	40	40	N	III	3b				3b
507	40	40	N	III	3b				3b
508	40	40	N	III	3b				3b
509	35	30	N	III	3b				3b
510	35	30	N	III	3b				3b
511	40	40	N	III	3b				3b
512	35	35	N	III	3b				3b
513	35	35	N	III	3b				3b
514	35	35	N	III	3b				3b
515	35	35	N	III	3b				3b
516	35	35	N	III	3b				3b
517	35	35	N	III	3b				3b
518	50	50	N	II	3b				3b
519	40	40	N	III	3b				3b
520	40	40	N	III	3b				3b
521	40	40	N	III	3b				3b
522	40	40	N	III	3b				3b
523	40	40	N	III	3b				3b
524	40	40	N	III	3b				3b
525	40	40	N	III	3b				3b
526	40	40	N	III	3b				3b
527	35	35	N	III	3b				3b
528	35	35	N	III	3b				3b
529	35	35	N	III	3b				3b

	Wetness Assesment				Grade	Droughtiness Assessment		Grade	
	Depth to			Wetness	According to			According to	ALC
Sample No	SPL	Gley	Reddish	Class	Wetness	MB Wheat	MB Potato	Droughtiness	Grade
530	35	35	N	III	3b				3b
531	35	35	N	III	3b				3b
532	35	35	N	III	3b				3b
533	50	50	N	II	3b				3b
534	40	40	N	III	3b				3b
535	40	40	N	III	3b				3b
536	40	40	N	III	3b				3b
537	40	40	N	III	3b				3b
538	40	40	N	III	3b				3b
539	40	40	N	III	3b				3b
540	35	30	N	III	3b				3b
541	40	40	N	III	3b				3b
542	35	35	N	III	3b				3b
543	35	35	N	III	3b				3b
544	35	35	N	III	3b				3b
545	35	35	N	III	3b				3b
546	35	35	N	III	3b				3b
547	35	35	N	III	3b				3b
548	40	40	N	III	3b				3b
549	40	40	N	III	3b				3b
550	40	40	N	III	3b				3b
551	40	40	N	III	3b				3b
552	40	40	N	III	3b				3b
553	40	40	N	III	3b				3b
554	40	40	N	III	3b				3b
555	40	40	N	III	3b				3b
556	40	40	N	III	3b				3b
557	35	35	N	III	3b				3b
558	35	35	N	III	3b				3b
559	35	35	N	III	3b				3b
560	35	35	N	III	3b				3b
561	35	35	N	III	3b				3b
562	35	35	N	III	3b				3b
563	35	35	N	III	3b				3b
564	40	40	N	III	3b				3b
565	40	40	N	III	3b				3b
566	40	40	N	III	3b				3b
567	40	40	N	III	3b				3b
568	40	40	N	III	3b				3b
569	40	40	N	III	3b				3b
570	40	40	N	III	3b				3b
571	35	35	Y	III	3b				3b
572	35	35	N	III	3b				3b
573	35	35	N	III	3b				3b
574	35	35	N	III	3b				3b
575	35	35	N	III	3b				3b
576	35	35	N	III	3b				3b
577	40	40	N	III	3b				3b
578	35	30	N	III	3b				3b
579	35	30	N	III	3b				3b
580									
581	35	35	Y	III	3b				3b
582	35	35	Y	III	3b				3b
583	35	35	N	III	3b				3b
584	35	35	N	III	3b				3b
585	35	35	N	III	3b				3b

	Wetness Assesment				Grade	Droughtiness Assessment		Grade	
	Depth to			Wetness	According to			According to	ALC
Sample No	SPL	Gley	Reddish	Class	Wetness	MB Wheat	MB Potato	Droughtiness	Grade
586	35	35	N	III	3b				3b
587	40	40	N	III	3b				3b
588	35	30	N	III	3b				3b
589	35	30	N	III	3b				3b
590	35	35	Y	III	3b				3b
591	35	35	Y	III	3b				3b
592	35	35	N	III	3b				3b
593	35	30	N	III	3b				3b
594	35	30	N	III	3b				3b
595	35	30	N	III	3b				3b
596	35	30	N	III	3b				3b
597	35	30	N	III	3b				3b
598	35	30	N	III	3b				3b
599	35	30	N	III	3b				3b
600	35	30	N	III	3b				3b
601	35	30	N	III	3b				3b
602	35	30	N	III	3b				3b
603	35	30	N	III	3b				3b
604	35	30	N	III	3b				3b
605	35	30	N	III	3b				3b
606	35	30	N	III	3b				3b
607	35	30	N	III	3b				3b
608	35	30	N	III	3b				3b
609	35	30	N	III	3b				3b
610	35	30	N	III	3b				3b
611	35	30	N	III	3b				3b
612	35	30	N	III	3b				3b
613	35	30	N	III	3b				3b
614	35	30	N	III	3b				3b
615	35	30	N	III	3b				3b
616	35	30	N	III	3b				3b
617	35	30	N	III	3b				3b
618	35	35	N	III	3b				3b
619	35	35	N	III	3b				3b
620	35	35	N	III	3b				3b
621	35	30	N	III	3b				3b
622	35	30	N	III	3b				3b
623	35	30	N	III	3b				3b
624	35	30	N	III	3b				3b
625	35	30	N	III	3b				3b
626	35	30	N	III	3b				3b
627	35	30	N	III	3b				3b
628	35	30	N	III	3b				3b
629	35	30	N	III	3b				3b
630	35	35	N	III	3b				3b
631	35	35	N	III	3b				3b
632	35	35	N	III	3b				3b
633	35	35	N	III	3b				3b
634	35	35	N	III	3b				3b
635	35	35	N	III	3b				3b
636	35	35	N	III	3b				3b
637	35	30	N	III	3b				3b
638	35	30	N	III	3b				3b
639	35	30	N	III	3b				3b
640	35	30	N	III	3b				3b
641	35	30	N	III	3b				3b

	Wetness Assesment				Grade	Droughtiness Assessment		Grade	
	Depth to			Wetness	According to			According to	ALC
Sample No	SPL	Gley	Reddish	Class	Wetness	MB Wheat	MB Potato	Droughtiness	Grade
642	35	30	N	III	3b				3b
643	35	30	N	III	3b				3b
644	35	35	N	III	3b				3b
645	35	35	N	III	3b				3b
646	35	35	N	III	3b				3b
647	35	35	N	III	3b				3b
648	35	35	N	III	3b				3b
649	35	35	N	III	3b				3b
650	40	40	N	III	3b				3b
651	40	40	N	III	3b				3b
652	35	35	N	III	3b				3b
653	35	35	N	III	3b				3b
654	35	35	N	III	3b				3b
655	35	35	N	III	3b				3b
656	35	35	N	III	3b				3b
657	35	35	N	III	3b				3b
658	35	35	N	III	3b				3b
659	35	30	N	III	3b				3b
660	35	30	N	III	3b				3b
661	35	30	N	III	3b				3b
662	35	30	N	III	3b				3b
663	35	30	N	III	3b				3b
664	35	30	N	III	3b				3b
665	35	30	N	III	3b				3b
666	35	35	N	III	3b				3b
667	40	40	N	III	3b				3b
668	35	30	N	III	3b				3b
669	35	30	N	III	3b				3b
670	35	35	N	III	3b				3b
671	35	35	N	III	3b				3b
672	40	40	N	III	3b				3b
673	40	40	N	III	3b				3b
674	35	35	N	III	3b				3b
675	35	35	N	III	3b				3b
676	35	35	N	III	3b				3b
677	35	35	N	III	3b				3b
678	35	35	N	III	3b				3b
679	35	35	N	III	3b				3b
680	35	35	N	III	3b				3b
681	35	35	N	III	3b				3b
682	35	35	N	III	3b				3b
683	35	35	N	III	3b				3b
684	35	35	N	III	3b				3b
685	35	35	N	III	3b				3b
686	35	30	N	III	3b				3b
687	35	30	N	III	3b				3b
688	35	30	N	III	3b				3b
689	35	30	N	III	3b				3b
690	35	30	N	III	3b				3b
691	35	30	N	III	3b				3b
692	50	30	N	III	3b				3b
693	50	30	N	III	3b				3b
694	35	35	N	III	3b				3b
695	35	35	N	III	3b				3b
696	40	40	N	III	3b				3b
697	35	30	N	III	3b				3b

	Wetness Assesment				Grade	Droughtiness Assessment		Grade	
	Depth to			Wetness	According to			According to	ALC
Sample No	SPL	Gley	Reddish	Class	Wetness	MB Wheat	MB Potato	Droughtiness	Grade
698	40	40	N	III	3b				3b
699	40	40	N	III	3b				3b
700	40	40	N	III	3b				3b
701	35	35	N	III	3b				3b
702	35	35	N	III	3b				3b
703	35	35	N	III	3b				3b
704	35	35	N	III	3b				3b
705	35	35	N	III	3b				3b
706	35	35	N	III	3b				3b
707	35	35	N	III	3b				3b
708	35	35	N	III	3b				3b
709	35	35	N	III	3b				3b
710	35	35	N	III	3b				3b
711	35	35	N	III	3b				3b
712	35	35	N	III	3b				3b
713	35	30	N	III	3b				3b
714	35	30	N	III	3b				3b
715	35	30	N	III	3b				3b
716	35	30	N	III	3b				3b
717	35	30	N	III	3b				3b
718	35	30	N	III	3b				3b
719	35	30	N	III	3b				3b
720	35	30	N	III	3b				3b
721	40	40	N	III	3b				3b
722	40	40	N	III	3b				3b
723	40	40	N	III	3b				3b
724	40	40	N	III	3b				3b
725	35	30	N	III	3b				3b
726	35	30	N	III	3b				3b
727	40	40	N	III	3b				3b
728	40	40	N	III	3b				3b
729	40	40	N	III	3b				3b
730	35	35	N	III	3b				3b
731	35	35	N	III	3b				3b
732	35	35	N	III	3b				3b
733	35	35	N	III	3b				3b
734	35	35	N	III	3b				3b
735	35	35	N	III	3b				3b
736	35	35	N	III	3b				3b
737	35	35	N	III	3b				3b
738	35	35	N	III	3b				3b
739	35	35	N	III	3b				3b
740	35	35	N	III	3b				3b
741	35	35	N	III	3b				3b
742	35	35	N	III	3b				3b
743	35	35	N	III	3b				3b
744	35	30	N	III	3b				3b
745	35	30	N	III	3b				3b
746	35	30	N	III	3b				3b
747	35	30	N	III	3b				3b
748	35	30	N	III	3b				3b
749	35	30	N	III	3b				3b
750	35	30	N	III	3b				3b
751	35	30	N	III	3b				3b
752	35	30	N	III	3b				3b
753	35	30	N	III	3b				3b

	Wetness Assesment				Grade	Droughtiness Assessment		Grade	
	Depth to			Wetness	According to			According to	ALC
Sample No	SPL	Gley	Reddish	Class	Wetness	MB Wheat	MB Potato	Droughtiness	Grade
754	35	30	N	III	3b				3b
755	35	30	N	III	3b				3b
756	40	40	N	III	3b				3b
757	40	40	N	III	3b				3b
758	50	30	N	III	3b				3b
759	35	35	N	III	3b				3b
760	35	35	N	III	3b				3b
761	35	35	N	III	3b				3b
762	35	35	N	III	3b				3b
763	35	35	N	III	3b				3b
764	35	35	N	III	3b				3b
765	35	35	N	III	3b				3b
766	35	35	N	III	3b				3b
767	35	35	N	III	3b				3b
768	35	35	N	III	3b				3b
769	35	35	N	III	3b				3b
770	35	35	N	III	3b				3b
771	35	35	N	III	3b				3b
772	35	35	N	III	3b				3b
773	35	35	N	III	3b				3b
774	35	35	N	III	3b				3b
775	35	30	N	III	3b				3b
776	35	30	N	III	3b				3b
777	35	30	N	III	3b				3b
778	35	30	N	III	3b				3b
779	35	30	N	III	3b				3b
780	35	30	N	III	3b				3b
781	35	30	N	III	3b				3b
782	35	30	N	III	3b				3b
783	35	30	N	III	3b				3b
784	35	30	N	III	3b				3b
785	35	30	N	III	3b				3b
786	35	35	N	III	3b				3b
787	35	35	N	III	3b				3b
788	35	35	N	III	3b				3b
789	35	35	N	III	3b				3b
790	35	35	N	III	3b				3b
791	35	35	N	III	3b				3b
792	35	35	N	III	3b				3b
793	35	35	N	III	3b				3b
794	35	35	N	III	3b				3b
795	35	35	N	III	3b				3b
796	35	35	N	III	3b				3b
797	35	35	N	III	3b				3b
798	35	35	N	III	3b				3b
799	35	35	N	III	3b				3b
800	35	35	N	III	3b				3b
801	35	35	N	III	3b				3b
802	35	35	N	III	3b				3b
803	35	35	N	III	3b				3b
804	35	35	N	III	3b				3b
805	35	35	N	III	3b				3b
806	35	35	N	III	3b				3b
807	35	35	N	III	3b				3b
808	35	30	N	III	3b				3b
809	35	30	N	III	3b				3b

	Wetness Assesment				Grade	Droughtiness Assessment		Grade	
	Depth to			Wetness	According to			According to	ALC
Sample No	SPL	Gley	Reddish	Class	Wetness	MB Wheat	MB Potato	Droughtiness	Grade
810	35	30	N	III	3b				3b
811	35	30	N	III	3b				3b
812	35	30	N	III	3b				3b
813	35	30	N	III	3b				3b
814			N	I	1	-9.96	-20.26	3a	3a
815	35	35	N	III	3b				3b
816	35	35	N	III	3b				3b
817	35	35	N	III	3b				3b
818	35	35	N	III	3b				3b
819	35	35	N	III	3b				3b
820	35	35	N	III	3b				3b
821	35	35	N	III	3b				3b
822	35	35	N	III	3b				3b
823	35	35	N	III	3b				3b
824	35	35	N	III	3b				3b
825	35	35	N	III	3b				3b
826	35	35	N	III	3b				3b
827	35	35	N	III	3b				3b
828	35	35	N	III	3b				3b
829	35	35	N	III	3b				3b
830	35	35	N	III	3b				3b
831	35	35	N	III	3b				3b
832	35	35	N	III	3b				3b
833	35	35	N	III	3b				3b
834	35	35	N	III	3b				3b
835	35	35	N	III	3b				3b
836	35	30	N	III	3b				3b
837	35	30	N	III	3b				3b
838	35	30	N	III	3b				3b
839	35	30	N	III	3b				3b
840	35	30	N	III	3b				3b
841	35	35	N	III	3b				3b
842	35	35	N	III	3b				3b
843	35	35	N	III	3b				3b
844	35	35	N	III	3b				3b
845	35	35	N	III	3b				3b
846	35	35	N	III	3b				3b
847	35	35	N	III	3b				3b
848	35	35	N	III	3b				3b
849	35	35	N	III	3b				3b
850	35	35	N	III	3b				3b
851	35	35	N	III	3b				3b
852	35	35	N	III	3b				3b
853	35	35	N	III	3b				3b
854	35	35	N	III	3b				3b
855	35	30	N	III	3b				3b
856	35	30	N	III	3b				3b
857	35	30	N	III	3b				3b
858	35	35	N	III	3b				3b
859	35	35	N	III	3b				3b
860	35	35	N	III	3b				3b
861	35	35	N	III	3b				3b
862	35	35	N	III	3b				3b
863	35	35	N	III	3b				3b
864	35	35	N	III	3b				3b
865	35	35	N	III	3b				3b

	Wetness Assesment				Grade	Droughtiness Assessment		Grade	
	Depth to			Wetness	According to			According to	ALC
Sample No	SPL	Gley	Reddish	Class	Wetness	MB Wheat	MB Potato	Droughtiness	Grade
866	35	35	N	III	3b				3b
867	35	35	N	III	3b				3b
868	35	35	N	III	3b				3b
869	35	35	N	III	3b				3b
870	35	35	N	III	3b				3b
871	35	35	N	III	3b				3b
872	35	35	N	III	3b				3b
873	35	35	N	III	3b				3b
874	35	35	N	III	3b				3b
875	35	35	N	III	3b				3b
876	35	35	N	III	3b				3b
877	35	35	N	III	3b				3b
878	35	35	N	III	3b				3b
879	35	35	N	III	3b				3b
880	35	35	N	III	3b				3b
881	35	35	N	III	3b				3b
882	35	35	N	III	3b				3b
883	35	35	N	III	3b				3b
884	35	35	N	III	3b				3b
885	35	35	N	III	3b				3b
886	35	35	N	III	3b				3b
887	35	35	N	III	3b				3b
888	35	35	N	III	3b				3b
889	35	35	N	III	3b				3b
890	35	35	N	III	3b				3b
891	35	35	N	III	3b				3b
892	35	35	N	III	3b				3b
893	35	35	N	III	3b				3b
894	35	35	N	III	3b				3b
895	35	35	N	III	3b				3b
896	35	35	N	III	3b				3b
897	35	35	N	III	3b				3b
898	35	35	N	III	3b				3b
899	35	35	N	III	3b				3b
900	35	35	N	III	3b				3b
901	35	35	N	III	3b				3b
902	35	35	N	III	3b				3b
903	35	35	N	III	3b				3b
904	35	35	N	III	3b				3b
905	35	35	N	III	3b				3b
906	35	35	N	III	3b				3b
907	35	35	N	III	3b				3b
908	40	40	N	III	3a				3a
909	40	40	N	III	3a				3a
910	35	35	N	III	3b				3b
911	35	35	N	III	3b				3b
912	40	40	Y	III	3a				3a
913	40	40	Y	III	3a				3a
914	40	40	Y	III	3a				3a

Appendix 4d - Wetness and Droughtiness Assessment - Cottam 2

	Wetness Assesment				Grade	Droughtiness Assessment		Grade	
	Depth to			Wetness	According to			According to	ALC
Sample No	SPL	Gley	Reddish	Class	Wetness	MB Wheat	MB Potato	Droughtiness	Grade
915	40	40	N	III	3b				3b
916	40	40	N	III	3b				3b
917	40	40	N	III	3b				3b
918	40	40	N	III	3b				3b
919	40	40	N	III	3a				3a
920	40	40	N	III	3a				3a
921	40	40	N	III	3b				3b
922	40	40	N	III	3b				3b
923	40	40	N	III	3b				3b
924	40	40	N	III	3a				3a
925	40	40	N	III	3a				3a
926	40	40	N	III	3b				3b
927	40	40	N	III	3b				3b
928	40	40	N	III	3b				3b
929	40	40	N	III	3a				3a
930	40	40	N	III	3a				3a
931	40	40	N	III	3a				3a
932	40	40	N	III	3b				3b
933	40	40	N	III	3b				3b
934	40	40	N	III	3b				3b
935	40	40	N	III	3b				3b
936	40	40	N	III	3b				3b
937	40	40	N	III	3a				3a
938	40	40	N	III	3a				3a
939	40	40	N	III	3b				3b
940	40	40	N	III	3a				3a
941	40	40	N	III	3b				3b
942			N	I	2	-38.17	-28.19	3b	3b
943	40	40	N	III	3b				3b
944	40	40	N	III	3b				3b
945	40	40	N	III	3a				3a
946	40	40	N	III	3a				3a
947	40	40	N	III	3b				3b
948	40	40	N	III	3b				3b
949	40	40	N	III	3b				3b
950	40	40	N	III	3b				3b
951	40	40	N	III	3b				3b
952	40	40	N	III	3b				3b
953	40	40	N	III	3b				3b
954	40	40	N	III	3b				3b
955	40	40	N	III	3a				3a
956	40	40	N	III	3a				3a
957	40	40	N	III	3b				3b
958	40	40	N	III	3b				3b
959	40	40	N	III	3b				3b
960	40	40	N	III	3b				3b
961	40	40	N	III	3b				3b
962	40	40	N	III	3b				3b
963	40	40	N	III	3b				3b
964	40	40	N	III	3b				3b
965	40	40	N	III	3b				3b
966	40	40	N	III	3a				3a
967	40	40	N	III	3a				3a
968	40	40	N	III	3b				3b
969	40	40	N	III	3b				3b

	Wetness Assesment				Grade	Droughtiness Assessment		Grade	
	Depth to			Wetness	According to			According to	ALC
Sample No	SPL	Gley	Reddish	Class	Wetness	MB Wheat	MB Potato	Droughtiness	Grade
970	40	40	N	III	3b				3b
971	40	40	N	III	3b				3b
972	40	40	N	III	3b				3b
973	40	40	N	III	3b				3b
974	40	40	N	III	3b				3b
975	40	40	N	III	3b				3b
976	40	40	N	III	3b				3b
977	40	40	N	III	3b				3b
978	40	40	N	III	3a				3a
979	40	40	N	III	3a				3a
980	40	40	N	III	3b				3b
981	40	40	N	III	3b				3b
982	40	40	N	III	3a				3a
983	40	40	N	III	3b				3b
984	40	40	N	III	3b				3b
985	40	40	N	III	3b				3b
986	40	40	N	III	3b				3b
987	40	40	N	III	3b				3b
988	40	40	N	III	3b				3b
989	40	40	N	III	3b				3b
990	40	40	N	III	3b				3b
991	40	40	N	III	3b				3b
992	40	40	N	III	3a				3a
993	40	40	N	III	3b				3b
994	40	40	N	III	3a				3a
995	40	40	N	III	3b				3b
996	40	40	N	III	3b				3b
997	40	40	N	III	3b				3b
998	40	40	N	III	3b				3b
999	40	40	N	III	3b				3b
1000	40	40	N	III	3b				3b
1001	40	40	N	III	3b				3b
1002	40	40	N	III	3b				3b
1003	40	40	N	III	3b				3b
1004	40	40	N	III	3a				3a
1005	40	40	N	III	3b				3b
1006	40	40	N	III	3b				3b
1007	40	40	N	III	3b				3b
1008	40	40	N	III	3b				3b
1009	40	40	N	III	3b				3b
1010	75	75	N	II	3b				3b
1011	40	40	N	III	3b				3b
1012	40	40	N	III	3b				3b
1013	40	40	N	III	3b				3b
1014	40	40	N	III	3b				3b
1015	40	40	N	III	3b				3b
1016	40	40	N	III	3b				3b
1017	40	40	N	III	3b				3b
1018	40	40	N	III	3b				3b
1019	75	75	N	II	3b				3b
1020	40	40	N	III	3b				3b
1021	40	40	N	III	3b				3b
1022	40	40	N	III	3b				3b
1023	40	40	N	III	3b				3b
1024	40	40	N	III	3b				3b
1025	75	75	N	II	3b				3b

	Wetness Assesment				Grade	Droughtiness Assessment		Grade	
	Depth to			Wetness	According to			According to	ALC
Sample No	SPL	Gley	Reddish	Class	Wetness	MB Wheat	MB Potato	Droughtiness	Grade
1026	40	40	N	III	3b				3b
1027	40	40	N	III	3b				3b
1028	40	40	N	III	3b				3b
1029	40	40	N	III	3b				3b
1030	40	40	N	III	3b				3b
1031	40	40	N	III	3b				3b
1032	40	40	N	III	3b				3b
1033	40	40	N	III	3b				3b
1034	75	75	N	II	3b				3b
1035	40	40	N	III	3b				3b
1036	40	40	N	III	3b				3b
1037	40	40	N	III	3b				3b
1038	40	40	N	III	3b				3b
1039	40	40	N	III	3b				3b
1040	40	40	N	III	3b				3b
1041	40	40	N	III	3b				3b
1042	40	40	N	III	3b				3b
1043	40	40	N	III	3b				3b
1044	40	40	N	III	3a				3a
1045	40	40	N	III	3b				3b
1046	40	40	N	III	3b				3b
1047	40	40	N	III	3b				3b

Appendix 4e - Wetness and Droughtiness Assessment - Cottam 3

	Wetness Assesment				Grade	Droughtiness Assessment		Grade	
	Depth to			Wetness	According to			According to	ALC
Sample No	SPL	Gley	Reddish	Class	Wetness	MB Wheat	MB Potato	Droughtiness	Grade
1048	35	30		III	3a				3a
1049	35	30		III	3a				3a
1050	35	30		III	3b				3b
1051	35	30		III	3b				3b
1052	35	30		III	3b				3b
1053	35	30		III	3b				3b
1054	35	30		III	3b				3b
1055	35	30		III	3b				3b
1056	35	30		III	3b				3b
1057	35	30		III	3b				3b
1058	35	30		III	3b				3b
1059	35	30		III	3b				3b
1060	35	30		III	3b				3b
1061	35	30		III	3b				3b
1062	35	30		III	3b				3b
1063	35	30		III	3b				3b
1064	35	30		III	3b				3b
1065	35	30		III	3b				3b
1066	35	30		III	3b				3b
1067	35	30		III	3b				3b
1068	35	30		III	3b				3b
1069	35	30		III	3b				3b
1070	35	30		III	3b				3b
1071	35	30		III	3b				3b
1072	35	30		III	3b				3b
1073	35	35		III	3b				3b
1074	35	30		III	3b				3b
1075	35	30		III	3b				3b
1076	35	30		III	3b				3b
1077	35	30		III	3b				3b
1078	35	30		III	3b				3b
1079	35	30		III	3a				3a
1080	35	30		III	3a				3a
1081	35	30		III	3a				3a
1082	35	30		III	3a				3a
1083	35	30		III	3b				3b
1084	40	40		III	3b				3b
1085	40	40		III	3b				3b
1086	40	40		III	3b				3b
1087	40	40		III	3b				3b
1088	40	40		III	3b				3b
1089	35	30		III	3a				3a
1090	35	30		III	3a				3a
1091	35	30		III	3b				3b
1092	35	30		III	3b				3b
1093	40	40		III	3b				3b
1094	40	40		III	3b				3b
1095	40	40		III	3b				3b
1096	35	30		III	3b				3b
1097	35	30		III	3b				3b
1098	35	30		III	3b				3b
1099	80		Y	II	3a				3a
1100	35	30		III	3b				3b
1101	35	30		III	3b				3b

	Wetness Assesment				Grade	Droughtiness Assessment		Grade	
	Depth to			Wetness	According to			According to	ALC
Sample No	SPL	Gley	Reddish	Class	Wetness	MB Wheat	MB Potato	Droughtiness	Grade
1102	35	30		III	3b				3b
1103	35	30		III	3b				3b
1104	35	30		III	3b				3b
1105	35	30		III	3b				3b
1106	35	30		III	3b				3b
1107	35	30		III	3b				3b
1108				I	1	-20.92	-32.3	3b	3b
1109	40	40		III	2	13.08	25.7	2	2
1110	40	40		III	3b				3b
1111	40	40		III	3b				3b
1112	35	30		III	3b				3b
1113	35	30		III	3b				3b
1114	35	30		III	3b				3b
1115	40	40		III	3b				3b
1116	35	30		III	3b				3b
1117	35	30		III	3b				3b
1118	35	30		III	3b				3b
1119	35	30		III	3b				3b
1120	35	30		III	3b				3b
1121	35	30		III	3b				3b
1122	35	30		III	3b				3b
1123	35	30		III	3b				3b
1124	35	30		III	3b				3b
1125	35	30		III	3b				3b
1126				I	1	-20.92	-32.3	3b	3b
1127				I	1	-20.92	-32.3	3b	3b
1128	40	40		III	3b				3b
1129	35	30		III	3b				3b
1130	35	30		III	3b				3b
1131	35	30		III	3b				3b
1132	35	30		III	3b				3b
1133	35	30		III	3b				3b
1134	40	40		III	3b				3b
1135	35	30		III	3b				3b
1136	35	30		III	3b				3b
1137	35	30		III	3b				3b
1138	40	40		III	3b				3b
1139	40	40		III	3b				3b
1140	35	30		III	3b				3b
1141	35	30		III	3b				3b
1142	35	30		III	3b				3b
1143	35	30		III	3b				3b
1144	35	30		III	3b				3b
1145	35	30	Y	III	3b				3b
1146	35	30	Y	III	3b				3b
1147	40	40		III	3b				3b
1148	35	40	Y	III	3a				3a
1149	35	40	Y	III	3a				3a
1150	35	30		III	3b				3b
1151	35	30		III	3b				3b
1152	40	40		III	3b				3b
1153	35	30		III	3b				3b
1154	35	30		III	3b				3b
1155	40	40		III	3b				3b
1156	40	40		III	3b				3b

	Wetness Assesment				Grade	Droughtiness Assessment		Grade	
	Depth to			Wetness	According to			According to	ALC
Sample No	SPL	Gley	Reddish	Class	Wetness	MB Wheat	MB Potato	Droughtiness	Grade
1157	35	30		III	3b				3b
1158	35	30		III	3b				3b
1159	40	40		III	3b				3b
1160	40	40		III	3b				3b
1161	35	30		III	3b				3b
1162	35	30		III	3b				3b
1163	35	30		III	3b				3b
1164	35	30		III	3b				3b
1165	35	30	Y	III	3b				3b
1166	40	40		III	3b				3b
1167	35	30		III	3b				3b
1168	35	30		III	3b				3b
1169	40	40		III	3b				3b
1170	35	30		III	3b				3b
1171	35	30		III	3b				3b
1172	35	30		III	3b				3b
1173	35	30		III	3b				3b
1174	80		Y	II	3a				3a
1175	80		Y	II	3a				3a
1176	35	30		III	3b				3b
1177	35	30		III	3b				3b
1178	35	30		III	3b				3b
1179	35	30		III	3b				3b
1180	35	30		III	3b				3b
1181	40	40		III	3b				3b
1182	40	40		III	3b				3b
1183	40	40		III	3b				3b
1184	35	30		III	3b				3b
1185	35	30		III	3b				3b
1186	35	30		III	3b				3b
1187	35	30		III	3b				3b
1188	35	30		III	3b				3b
1189	35	30		III	3b				3b
1190	35	30		III	3b				3b
1191	35	50		III	3b				3b
1192	35	30		III	3b				3b
1193	40	40		III	3b				3b
1194	40	40		III	3b				3b
1195	35	30		III	3b				3b
1196	35	30		III	3b				3b
1197	35	30		III	3b				3b
1198	35	30		III	3b				3b
1199	35	30		III	3b				3b
1200	35	30		III	3b				3b
1201	35	30		III	3b				3b
1202	35	30		III	3b				3b
1203	35	30		III	3b				3b
1204	35	30		III	3b				3b
1205	35	30		III	3b				3b
1206	40	40		III	3b				3b
1207	40	40		III	3b				3b
1208	40	40		III	3b				3b
1209	35	30		III	3b				3b
1210	35	30		III	3b				3b
1211	35	30		III	3b				3b

	Wetness Assesment				Grade	Droughtiness Assessment		Grade	
	Depth to			Wetness	According to			According to	ALC
Sample No	SPL	Gley	Reddish	Class	Wetness	MB Wheat	MB Potato	Droughtiness	Grade
1212	35	30		III	3b				3b
1213	35	30		III	3b				3b
1214	35	30		III	3b				3b
1215	35	30		III	3b				3b
1216	35	30		III	3b				3b
1217	35	30		III	3b				3b
1218	35	30		III	3b				3b
1219	35	30		III	3b				3b
1220	40	40		III	3b				3b
1221	40	40		III	3b				3b
1222	35	30		III	3b				3b
1223	35	30		III	3b				3b
1224	35	30		III	3b				3b

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.

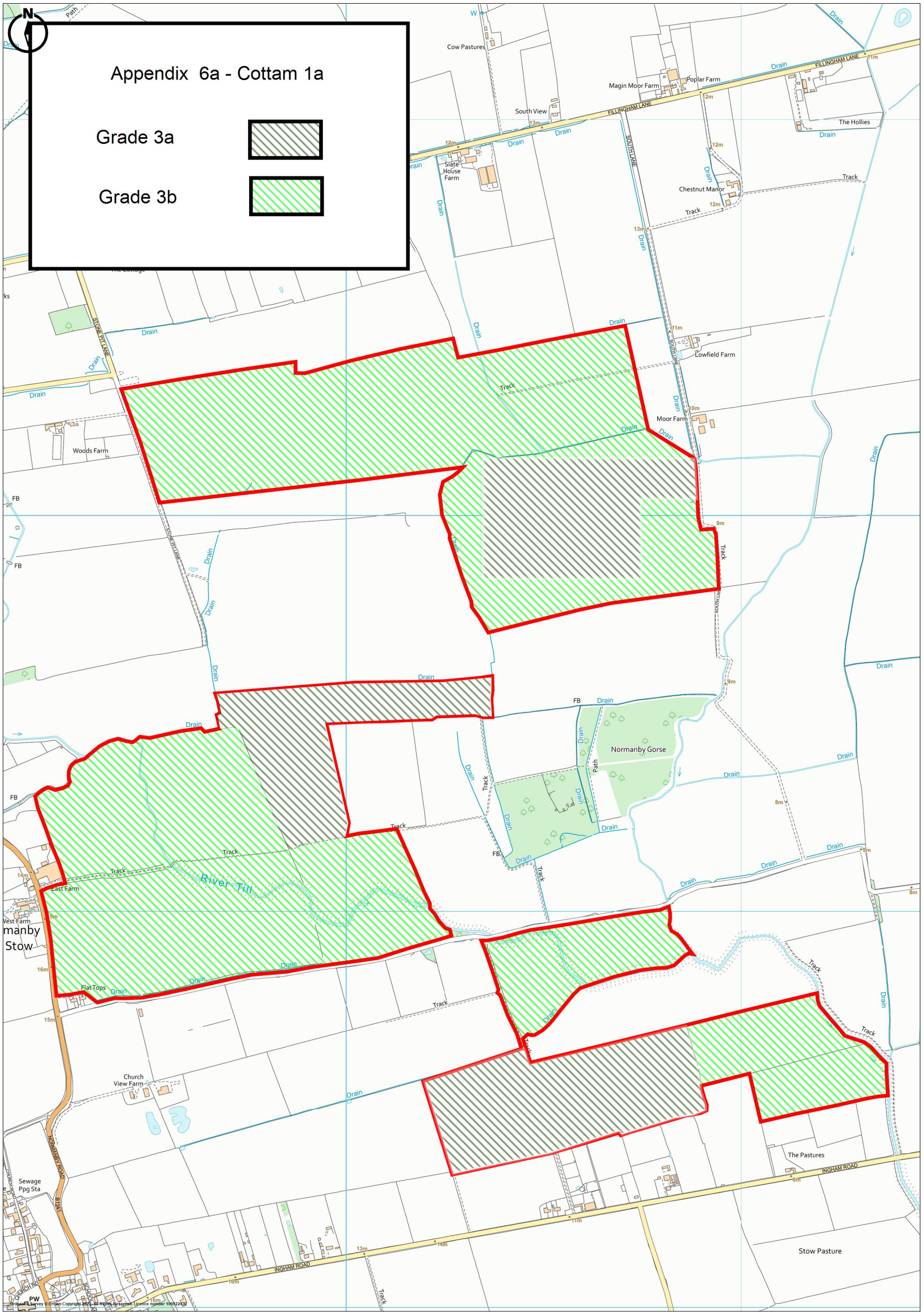
Grade 3 - good to moderate quality agricultural land Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.

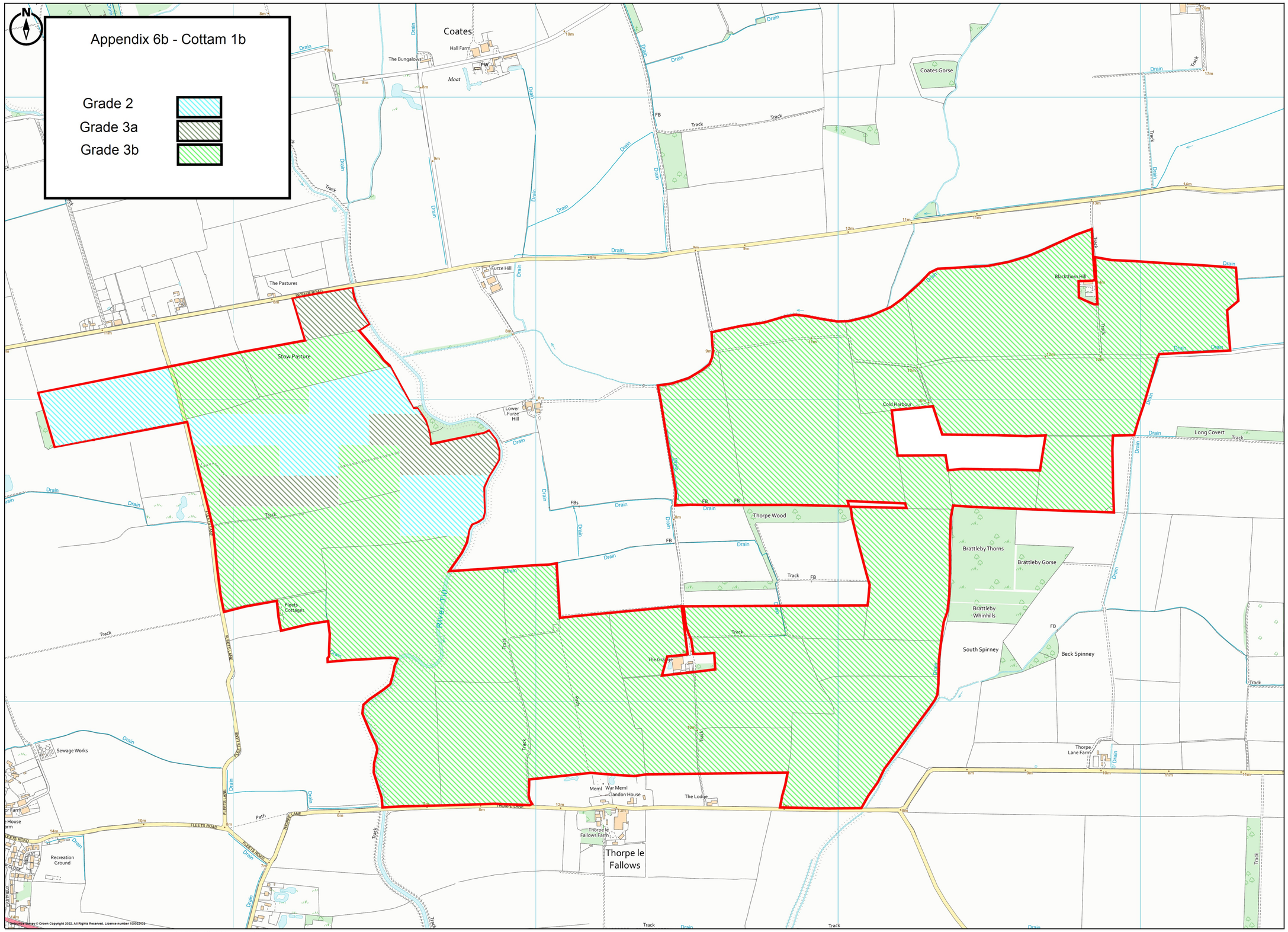
Subgrade 3a - good quality agricultural land Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural 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 - Cottam 1c

Grade 3a

Grade 3b

N

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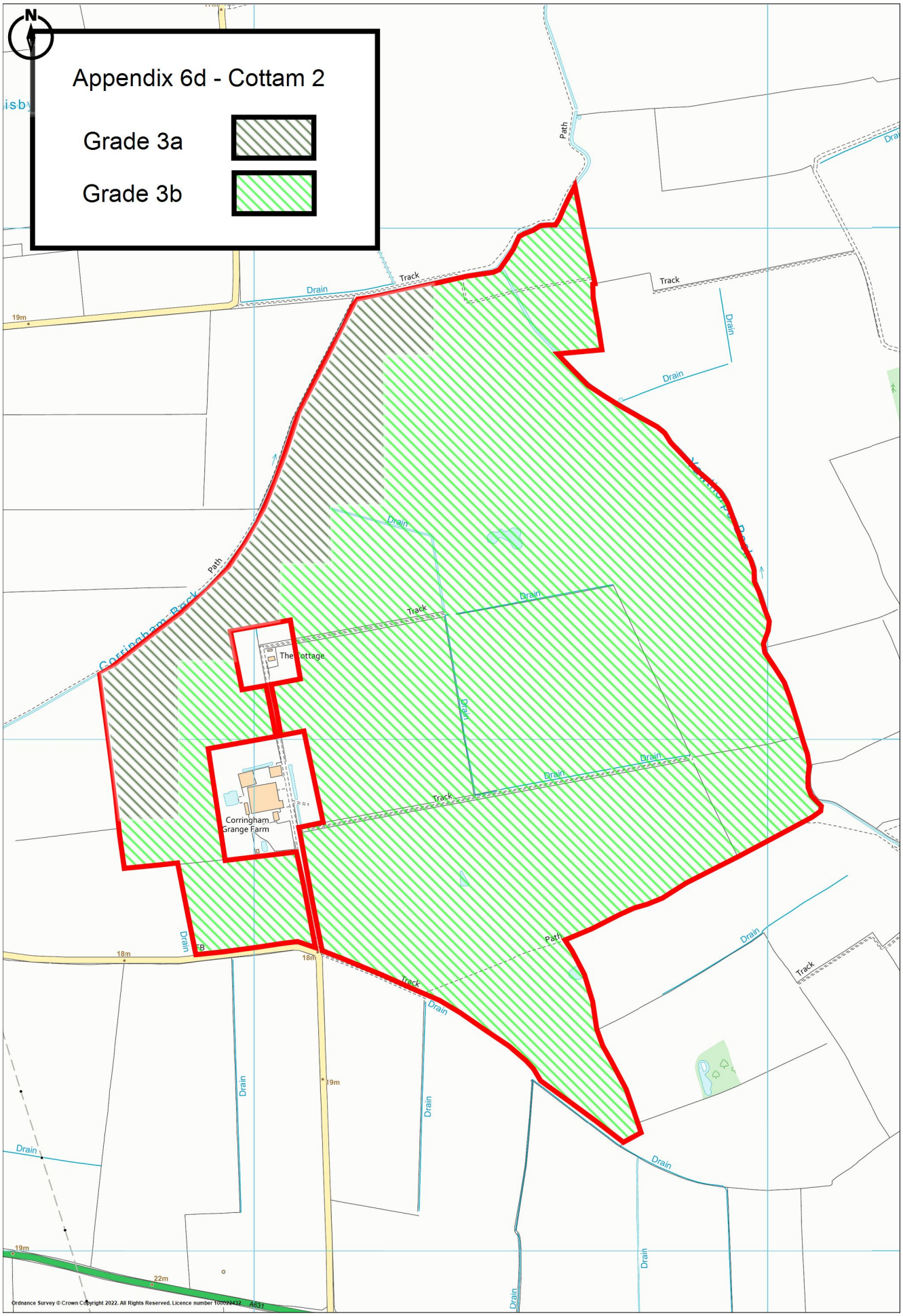
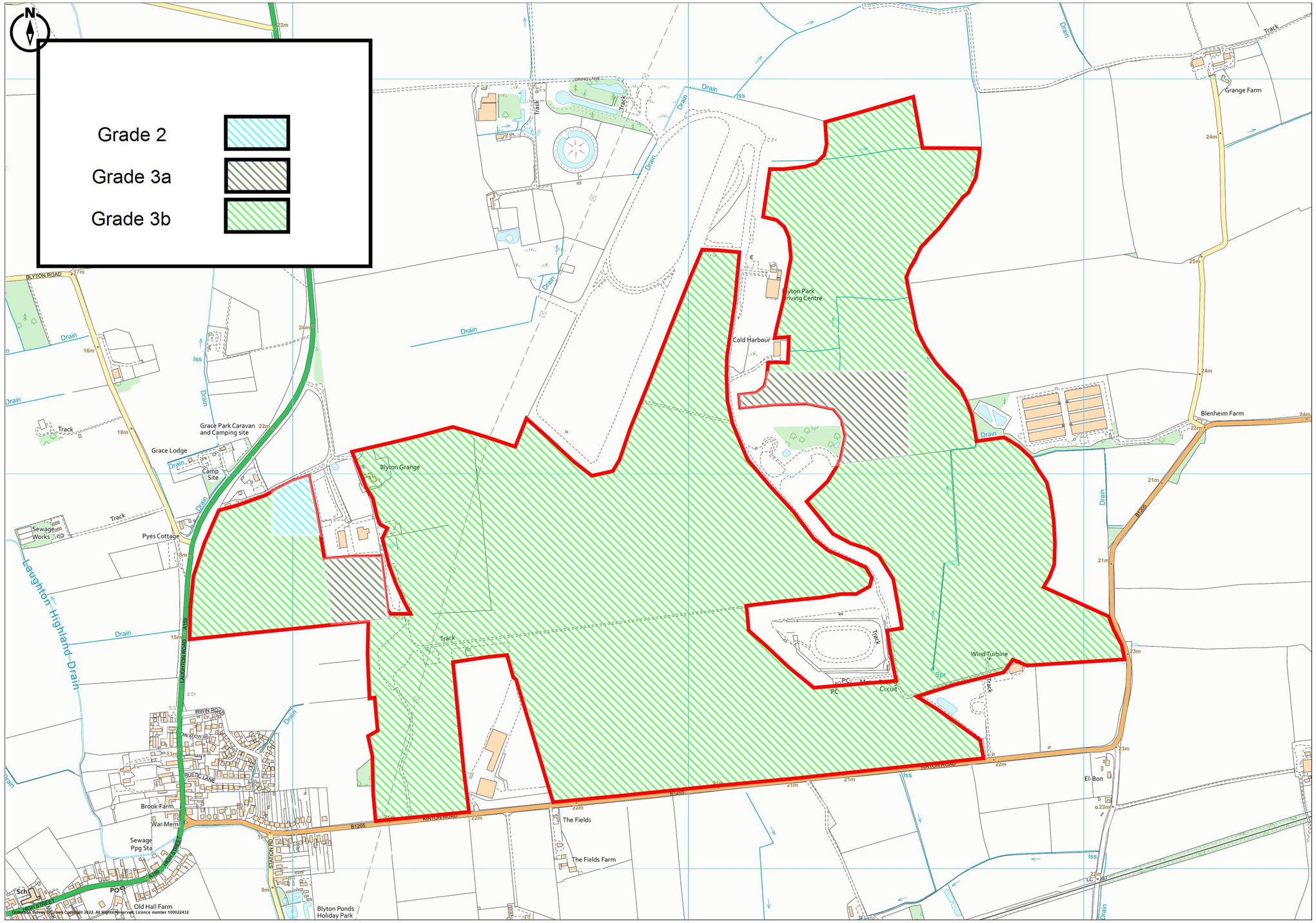


Promap
LANDMARK INFORMATION



Annex 2 – Agricultural Land Classification Report (Cottam 3b, LRA)

AGRICULTURAL QUALITY

OF LAND NEAR BLYTON

LINCOLNSHIRE

Report 1883/1

19th September, 2021

Land Research ASSOCIATES

AGRICULTURAL QUALITY

OF LAND NEAR BLYTON, LINCOLNSHIRE.

F.W Heaven BSc, MISoilSci

Report 1883/1
Land Research Associates Ltd
Lockington Hall,
Lockington,
Derby
DE74 2RH

19th September, 2021

SUMMARY

A survey of 72.3 ha of land near Blyton in Lincolnshire has shown that the soils are heavy-textured and slowly permeable, developed in clay and chalky till.

The majority of the land is of sub-grade 3b agricultural quality, limited by wetness.

1.0 Introduction

1.1 This report provides information on the agricultural quality of 72.3 ha of land to the south-east of Blyton, near Gainsborough in Lincolnshire. The report is based on a survey of the land in September 2021.

SITE ENVIRONMENT

1.2 The land investigated comprises six fields running southward from the Gainsborough to Barnetby railway. The eastern boundary is marked in large part by Bonsall Lane, and the other extents by field hedges and drains. The land is mainly level, with an elevation of approximately 20 m AOD.

AGRICULTURAL USE

1.3 Five of the fields were in arable use at the time of the survey: either in stubble after cereals and field beans, or newly cultivated. The sixth field was in ley grassland.

PUBLISHED INFORMATION

1.4 The 1:50,000 BGS geological information shows the geology as Scunthorpe Mudstone Formation, overlain by glacial till.

1.5 The National Soil Map[1] shows the land as Beccles 1 Association, comprising mainly slowly permeable fine loamy over clayey soils (Beccles series) with similar clayey soils (Ragdale series)

[1] Hodge, C.A.H. *et al* (1984). *Soils and their use in Eastern England.* Soil Survey Bulletin No 13.

2.0 Soils

2.1. A detailed soil resource and agricultural quality survey was carried out in September 2021. It was based on observations at intersects of a 100 m grid, giving a sampling density of one observation per hectare. During the survey soils were examined by a combination of pits and augerings to a maximum depth of 1.2 m. A log of the sampling points and a map (Map 1) showing their location is in an appendix to this report.

2.2. The survey showed that the soils of the site are slowly permeable and developed in heavy clay till. The most prevalent type has heavy clay loam or clay topsoil, 30 to 35 cm deep and dark greyish brown in colour. The subsoil, as is typical of soils developed in chalky till, is more variable, but the upper part is usually heavily mottled slowly permeable clay and greyish brown in colour with many ochreous mottles. In many cases the lower subsoil is clay with abundant chalk stones and often more open-structured than the horizon above as the result of the high calcium carbonate concentration.

2.1 An example profile from close to observation 67 (Map 1) is described below.

0-33 cm	Dark brown (10YR 4/3) clay; 3% small and medium subangular flint and rounded quartzite stones, weakly developed coarse subangular blocky structure; firm; common medium and fine pores and earthworm channels; common very fine fibrous roots; sharp smooth boundary to:
33-48 cm	Greyish brown (10YR 5/2) clay with many grey (10YR 5/1) and strong brown (7.5YR 5/8) mottles; ; 3% small and medium subangular flint and rounded quartzite stones; weakly developed coarse prismatic structure breaking to coarse angular blocky structure; firm; 0.2% fine pores; common very fine fibrous roots; merging to:
48-80+ cm	Grey (10YR 5/1) and greyish brown (10YR 5/2) calcareous clay with many yellowish brown (10YR 5/8) mottles; 5% small rounded chalk stones and small subangular flint stones; moderately developed medium prismatic structure, friable; common fissures, no visible pores; a few fine fibrous roots.

2.3. In some areas the chalky subsoil is closer to the surface and the topsoil may be calcareous. Elsewhere, and particularly in the north, the till is reddish grey (5YR 5/2) in colour and ochreous mottled and contains no chalk stones. Locally are soils where the upper subsoils are browner and less mottled than elsewhere. Sandy lenses occur sporadically in the subsoils.

2.4. In small areas in the west of the site the topsoil and upper subsoil are sandy clay loam, (Beccles series), as in an example profile from close to observation

28 (Map 1) is described below.

0-28 cm	Dark brown (10YR 3/3) sandy clay loam; 1% small and medium subangular flint and rounded quartzite stones, moderately developed medium and coarse subangular blocky structure; friable; common medium pores; common very fine fibrous roots; clear smooth boundary to:
28-40 cm	Brown (10YR 5/3) sandy clay loam many strong brown (7.5YR 5/6) mottles; 1% small and medium subangular flint and rounded quartzite stones; moderately developed medium subangular blocky structure; friable; common fine pores; a few very fine fibrous roots; merging to:
48-80+ cm	Reddish brown (5YR 5/3) calcareous clay with many grey (N 6/0) and reddish brown (5YR 5/8) mottles; 3% small rounded chalk fragments and rounded quartzite stones; moderately developed coarse angular blocky structure, firm; 0.2% fine pores; common very fine fibrous roots on ped faces.

2.5. The subsoil of all the soils is slowly permeable causing winter waterlogging (Soil Wetness Class II and III).

3.0 Agricultural Quality

2.6. To assist in assessing land quality, the Ministry of Agriculture, Fisheries and Food (MAFF) developed a method for classifying agricultural land by grade according to the extent to which physical or chemical characteristics impose long-term limitations on agricultural use for food production. The MAFF Agricultural Land Classification (ALC) system classifies land into five grades numbered 1 to 5, with grade 3 divided into two sub-grades (3a and 3b). The system was devised and introduced in the 1960s and revised in 1988.

2.7. The agricultural climate is an important factor in assessing the agricultural quality of land and has been calculated using the Climatological Data for Agricultural Land Classification[2]. The relevant site data for an average elevation of 20 m is given below.

• Average annual rainfall:	622 mm
• January-June accumulated temperature >0°C	1399 day°
• Field capacity period (when the soils are fully replete with water)	130 days late Nov–early Apr
• Summer moisture deficits for:	wheat: 110 mm potatoes: 102 mm

2.8. The survey described in the previous section was used in conjunction with the agroclimatic data above to classify the site using the revised guidelines for agricultural land classification issued in 1988 by the Ministry of Agriculture, Fisheries and Food[3].

SURVEY RESULTS

2.9. The agricultural quality of the survey area is determined by the degree of soil wetness and the effect of this on the workability of the soils. The land is of Grade 3 agricultural quality.

[2] *Climatological Data for Agricultural Land Classification*. Meteorological Office, 1989
[3] *Agricultural Land Classification for England and Wales: Guidelines and Criteria for Grading the Quality of Agricultural Land*. MAFF, 1988.

Sub-grade 3a

3.1 There is a small area of sub-grade 3a land in the east of the site where the soils have sandy clay loam topsoils, improving their workability over the surrounding heavier soils described below. In practice this area is not sufficiently large to be treated as a separate management unit.

Sub-grade 3b

3.2 The land over most of the site has heavy topsoils over slowly permeable clay subsoils resulting in seasonal wetness and limiting the cultivation of the soils in late autumn and spring.

Grade areas

3.3 The boundaries between the different grades of land are shown on Map 2 and the areas occupied by each are shown below.

Table 1. Areas occupied by the different land grades

Grade/sub-grade	*Area (ha)*	*% of agricultural land*
Sub-grade 3a	2.7	4
Sub-grade 3b	69.6	96
Total	72.3	100

APPENDIX

MAPS AND DETAILS OF OBSERVATIONS

Land near Blyton: ALC survey September 2021 - Details of observations at each sampling point

Obs No	Topsoil			Upper subsoil			Lower subsoil			Slope (°)	Wetness Class	Agricultural quality	
	Depth (cm)	Texture	Stones (%)	Depth (cm)	Texture	Mottling	Depth (cm)	Texture	Mottling			Grade	Main limitation
1	0-33	C	2	33-55	C	xxx	55-100+	C+chk stones	xxx	0	III	3b	W
2	0-30	HCL	3	30-45	C	xxx	45-100+	C+chk stones	xxx	0	III	3b	W
3	0-30	C	2	30-40	C	xxx	40-50 50+	C+chk stones stop on stones	xxx	0	III	3b	W
4	0-40	HCL	3	40-90	C	xxx	90-110	C+chk stones	xxx	0	II/III	3a/3b	W
5	0-30	HCL	3	30-45	HCL-C	xxx	45-80 80-110	C C+chk stones	xxx xxx	0	III	3b	W
6	0-32	HCL	2	32-65	C	xxx	65-100	C+chk stones	xxx	0	III	3b	W
7	0-30	C	1	30-65	C	xxx	65-90+	C+chk stones	xxx	0	III	3b	W
8	0-28	C	2	28-60	C	xxx	60-90+	C+chk stones	xxx	0	III	3b	W
9	0-32	C	2	32-80+	C+chk stones	xxx				0	III	3b	W
10	0-30	HCL	2	30-80+	C+chk stones	xxx				0	III	3b	W
11	0-30	ca HCL	2	30-45	ca C	xxx	45-100+	C+chk stones	xxx	0	III	3a	W
12	0-33	HCL	3	33-45	C	xx	45-55 55-80+	C C+chk stones	xxx	0	II/III	3a/3b	W
13	0-33	HCL	2	33-45	C	xx(x)	45-70 70-110	C C+chk stones	xxx	0	III	3b	W
14	0-32	HCL-C	1	32-55 55-75	C gr C	xxxx xxx	75-100 100-120	rb C C+chk stones	xxx xxx	0	III	3b	W
15	0-36	C	3	36-110	rb C	xxx				0	III	3b	W
16	0-35	C	1	35-50	C	xx	50-110	C	xxx	0	II	3b	W
17	0-35	C	2	35-60	C	xxx	60-100+	C+chk stones	xxx	0	III	3b	W
18	0-35	HCL	1	35-65	C	xxx	65-100+	C+chk stones	xxx	0	III	3b	W
19	0-35	HCL	2	35-75	HCL	xx	75-95 95-120	SCL C+chk stones	xxx	0	II	3a	W
20	0-30	HCL	3	30-40	HCL	xxx	40-80+	C+chk stones	xxx	0	III	3b	W
21	0-34	HCL	3	34-60	HCL-C	xxx	60-80 80-100+	C rb C+chks	xxx	0	III	3b	W
22	0-36	HCL	2	36-45	HCL	x	45-60 60-100+	rb C C+chk stones	xxx	0	II/III	3a/3b	W
23	0-32	HCL	2	32-44	C	x	44-65 65-70 70+	C C+chk stones stop on stones	xxx xxx	0 0	III III	3b 3b	W W
24	0-34	C	1	34-60	C	xxxx	60-40+	C+chk stones	xxx	0	III	3b	W
25	0-30	C	1	30-110	C	xxx				0	III	3b	W
26	0-34	HCL	2	34-42	HCL	xxx	42-110	C	xxx	1	III	3b	W
27	0-30	HCL	3	30-75	rb C	xxx	75-85 85-110	MS ca rb C	o xxx	<1	III	3b	W

Obs No	Topsoil			Upper subsoil			Lower subsoil			Slope (°)	Wetness Class	Agricultural quality	
	Depth (cm)	Texture	Stones (%)	Depth (cm)	Texture	Mottling	Depth (cm)	Texture	Mottling			Grade	Main limitation
28	0-30	SCL	2	30-41	SCL	xx	41-70 70-80 80+	C+chk stones rb C stop on stones	xxx xxx	0	III	3a	b
29	0-28	C	1	28-110	rb C	xxx				0	III	3b	W
30	0-30	C	1	30-80	C	xxx	80-110	C+chk stones	xxx	0	III	3b	W
31	0-33	HCL	1	33-45	C	xx	45-85 85-110	SCL-MSL C+chk stones	xx xxx	0	II/III	3a/3b	W
32	0-30	HCL	1	30-38	ca HCL	xxx	38-80+	C+chk stones	xxx	0	III	3b	W
33	0-30	C-HCL	2	30-110	rb C+chks	xxx				0	III	3b	W
34	0-30	HCL	2	30-50	rb C +chks	xxx	50+	stop on stones		0	III	3b	W
35	0-30	C	1	30-80	gr C	xxx	80-110	C+chk stones	xxx	0	III	3b	W
36	0-30	C	2	30-100+	rb G	xxx				0	III	3b	W
37	0-30	C	2	30-100+	rb C	xxx				0	III	3b	W
38	0-34	C	1	34-100	rb C	xxx				0	III	3b	W
39	0-30	HCL-C	1	30-100	rb C	xxx				0	III	3b	W
40	0-30	HCL	1	30-110	C	xxx				0	III	3b	W
41	0-30	HCL	1	30-48	C	xxx	48-55 55-100+	SCL C+chk stones	xx xxx	0	III	3b	W
42	0-30	SCL	2	30-35	br SCL	o	35-40 40-100	HCL C+chk stones	x	0	III	3a	W
43	0-35	C	1	35-60	C	xxx	60-80 80-100+	SCL C+chk stones	o-x xxx	0	III	3b	W
44	0-31	C	1	31-42	C	xx	42-80+	C+chk stones	xxx	0	II	3b	W
45	0-30	HCL	1	30-45	C	xxx	45-100+	C+chk stones	xxx	0	III	3b	W
46	0-25	HCL	1	25-38	C	xx	38-80+	C+chk stones	xxx	0	III	3b	W
47	0-30	HCL	3	30-50	C	xxx	50-80+	C+chk stones	xxx	0	III	3b	W
48	0-31	C	2	31-45	C	xxx	45-100	C+chk stones	xxx	0	III	3b	W
49	0-32	C	1	32-50	C	xx	50-80 80-110	MSL rb C+chks	o	0	II	3b	W
50	0-31	C	1	31-100	rb C	xxx				0	III	3b	W
51	0-33	C	1	33-70	C	xxx	70-110	rb C	ZZZ	0	III	3b	W
52	0-28	C	1	28-40	C	xxx	40-80+	C+chk stones	xxx	0	III	3b	W
53	0-30	C	1	30-50	C	xxx	50-60 60+	rb C+chks stop on stones	xxx	0	III	3b	W
54	0-35	SCL	2	35-46	SCL	xx	46-110	C+chk stones	xxx	0	II	2	W
55	0-40	HCL	1	40-65	HCL	xxx	65-90 90-420	MS C+chk stones	o xxx	0	III	3b	W
56	0-30	C	2	30-50	C	xxx	50-65 65-110	SCL C+chk stones	xxx xxx	0	III	3b	W
57	0-26	C	2	26-35	C	xxx	35-60 60-110	SCL C+chk stones	xxx xxx	0	III	3b	W

Obs No	Topsoil			Upper subsoil			Lower subsoil			Slope (°)	Wetness Class	Agricultural quality	
	Depth (cm)	Texture	Stones (%)	Depth (cm)	Texture	Mottling	Depth (cm)	Texture	Mottling			Grade	Main limitation
58	0-35	C	2	35-50	C	xxx	50+	stop on stones		0	III	3b	W
59	0-30	C	1	30-60	C	xx(x)	60-70 70-100+	rb C C+chk stones	xxx xxx	0	II/III	3a/3b	W
60	0-33	C	2	33-60	C	xx	60-70 70-100	C C+chk stones	xxx xxx	0	II	3b	W
61	0-30	C	1	30-70	C	xxx	70-110	gr C	xxxx	0	III	3b	W
62	0-30 30-50	C C compact	1 1	50-70	C	xxx	70-110	rb C+chks	xxx	0	III	3b	W (dist)
63	0-35	C	2	35-100	C	xxx				0	III	3b	W
64	0-35	C	1	35-110	rb C	xxx				0	III	3b	W
65	0-32	C	1	32-110	C	xxx				0	III	3b	W
66	0-35	HCL	2	35-50	HCL	xxx	50-100+	C	xxx	0	II/III	3a/3b	W
67	0-30	C	1	30-50	C	xxx	50-70 70+	C+chk stones stop on stones	xxx	0	III	3b	W
68	0-30	HCL	2	30-40	ca C	xxx	40-80+	C+chk stones	xxx	0	III	3b	W
69	0-32	C	1	32-40	C	xxx	40-80+	C+chk stones	xxx	0	III	3b	W
70	0-28	C	2	28-50	C	xxx	50-80	C+chk stones	xxx	0	III	3b	W
71	0-30	ca C	1	30-80+	C+chk stones	xxx				0	III	3a	W
72	0-33	C	1	33-50	C	xxx	50-110	ca C	xxx	0	III	3b	W
73	0-30	C	1	30-100	br C	xxx	00-110	C+chk stones	xxx	0	III	3b	W
74	0-33	HCL	1	33-45	C	xxx	45-70 70-120	rb C C+chk stones	xxx xxx	0	III	3b	W
75	.0-35	C	2	35-45	C	xx	45-55 55-100	rb C rb C+chks	xxx xxx	0	II	3b	W
76	0-30	C	1	30-65	gr C	xxx	65-85 85-110	rb C rb C+chks	xxx	0	III	3b	W

Key to table

Mottle intensity:

o	unmottled
x	1-2% ochreous mottles and brownish matrix (or a few to common rusty root mottles (topsoils)[3]
xx	>2% ochreous mottles and brownish matrix and/or dull structure faces (slightly gleyed horizon)
xxx	>2% ochreous mottles and greyish or pale matrix or reddish matrix and >2% greyish, brownish or ochreous mottles or fmn concentrations (gleyed horizon)
xxxx	dominantly bluish matrix , often with some ochreous mottles (gleyed horizon)

Slowly permeable layers[4]

A depth underlined (e.g. 50) indicates the top of a slowly permeable layer
A wavy underline (eg 50) indicates the top of a layer bordering to extremely)
slowly permeable

Texture:

C - clay
ZC - silty clay
SC - sandy clay
CL - clay loam (H-heavy, M-medium)
ZCL - silty clay loam (H-heavy, M-medium)
SCL - sandy clay loam
SZL - sandy silt loam (F-fine, M-medium, C-coarse
SL - sandy loam (F-fine, M-medium, C-coarse)
LS - loamy sand (F-fine, M-medium, C-coarse)
S - sand (F-fine, M-medium, C-coarse)
P - peat (H-humified, SF-semi-fibrous, F-fibrous)
LP - loamy peat; PL - peaty loam

Wetness Class[5]

I (freely drained) to VI (very poorly drained)

Limitations:

W - wetness/workability
D - droughtiness
De - depth
St – stoniness
Sl – slope
F - flooding
T – topography/microrelief

Suffixes & prefixes

r-reddish, gn greenish, br brownish, gr-grey
o-organic,
(m, v, x)st (very slightly, slightly, extremely) stony
chky-chalky
[7](vsl, sl, m, v,x)(very slightly,slightly,moderately, very,

ca – calcareous

Other abbreviations

fmn –ferri-manganiferous concentrations
dist - disturbed soil layer;
R – bedrock (chky – Chalk, SST – Sandstone, PLST – Limestone, MST – Mudstone)

[1]Gley indicators in accordance with Hodgson, J.M. (1997) Soil survey Field Handbook (third edition) Soil Survey Technical Monograph No 5
[2]Texture in accordance with particle size classes in Hodgson (1997)
[3]Occasionally recorded in the texture box
[4]Permeability is estimated for auger borings and confirmed by full pit observations in accordance with the definitions in Hodgson (1997)
[5]Soil Wetness Classes are defined in Hodgson (1997)
[6]Stoniness classes as defined in Hodgson (1997)
[7]Calcareous classes as defined in Hodgson (1997)

Client

Lanpro

Project

Land near Blyton
Lincolnshire

Map

Map 1
Location of the observations

KEY

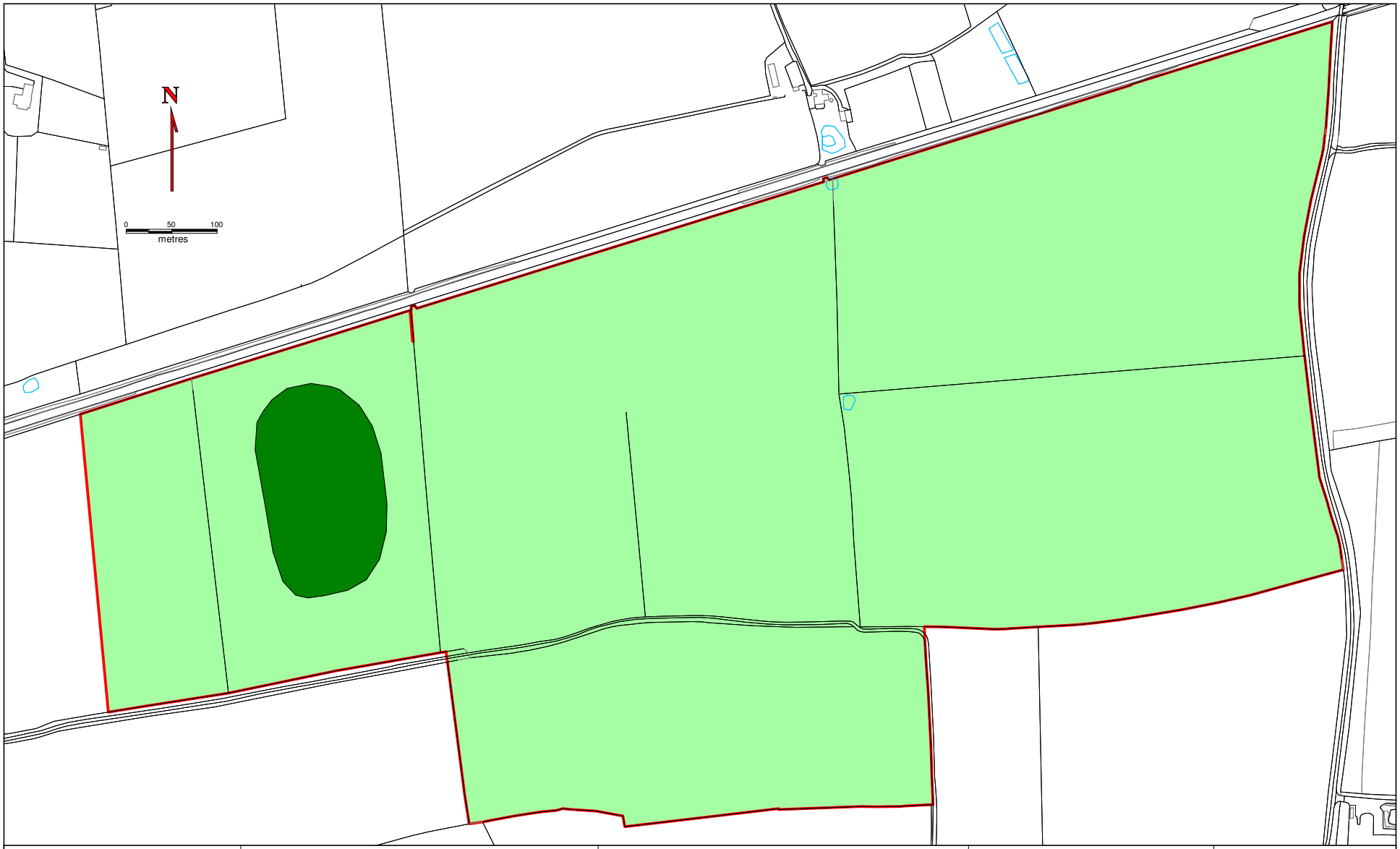
- Auger location
- Soil description pit
- Survey area

Scale
1:6,000 at A4

Date
18/09/2021

Land Research Associates

Lockington Hall
Lockington
Derby DE74 2RH
Tel: 01509 670470



Client

Lanpro

Project

Land near Blyton
Lincolnshire

Map

Map 2
Agricultural Land Classification

KEY

- Sub-grade 3a
- Sub-grade 3b
- Survey area

Scale
1:6,000 at A4

Date
18/09/2021

Land Research Associates

Lockington Hall
Lockington
Derby DE74 2RH
Tel: 01509 670470