

West Burton Solar Project

Environmental Statement Appendix 19.1: Agricultural Land Quality, Soil Resources & Farming Circumstances

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Issue Sheet

Report Prepared for: West Burton Solar Project Ltd.
DCO Submission

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

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1 Introduction

1.1 Brief

1.1.1 This report was prepared by Lanpro with the assistance of 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 West Burton.

1.1.2 The site area covers approximately 758 hectares of predominately agricultural land in the District of West Lindsey.

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 (ALC) (Ref 19.1.1) published October 1988.

2.1.3 A report is given as an Annex to this Baseline report, presenting the results of the detailed ALC site assessment. This report shows 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. The distribution of ALC Grades within the Sites is shown on Figures 19.1, 19.2 and 19.3, covering areas West Burton 1, West Burton 2 and West Burton 3 respectively **[EN010132/APP/WB6.4.19.1 - WB6.4.19.3]**.

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 (TIN049) (Ref 19.1.2) 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 (Ref 19.1.3) 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 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 Assessment (Ref 19.1.4). 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 site is shown on Figures 19.1, 19.2 and 19.3, with areas given in Table 2 below [EN010132/APP/WB6.4.19.1 - WB6.4.19.3].

Table 1 : ALC Grade Distribution

ALC Grade	Area (ha)*	%
1	17.6	2.3
2	9.5	1.3
3a	172.4	22.8
3b	557.0	73.5
Non Agricultural	1.3	0.2
Total	757.8	100

- 5.1.2 Grade 3b land covers the majority of the Sites. 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 resulting in seasonal water logging

(Wetness Class III). As a result, the opportunities for cultivation and carrying livestock are limited by the risk of incurring persistent soil degradation, particularly in the autumn and spring periods for arable cultivation and sowing. 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. Pockets of land with a lighter textured soil are also encountered where there is a drought limitation to Grade 3a.
- 5.1.4 Where Grade 1 and 2 land is found the slowly permeable subsoil starts at a greater depth or is not found within the 1.2m assessment depth. Soils are Seldom Wet (Wetness Class II) to Rarely Wet (Wetness Class I), reducing the period that excess water is held in the topsoil. This in turn reduces the severity of the soil wetness and workability limitation, to Grade 2 or no limitation (Grade 1). No Grade 1 and 2 land is found in the West Burton 1 area. A small pocket of Grade 2 land is found in West Burton 2 and two fields of Grades 1 and 2 land is present in the south of the West Burton 3 area.
- 5.1.5 Best and most versatile land together (ALC Grades 1, 2 and 3a) covers 199.5ha of land within the sites, 26%. This predominantly comprises Grade 3a land.

6 Soil Resources Assessment

- 6.1.1 As described above soils within the site typically have medium to heavy textured topsoils over clayey subsoils. 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 Assessment

- 7.1.1 Four farm businesses manage land within the site. All are owner occupiers of the land occupied and all own and occupy additional agricultural land outside of the site

area. Figure 19.4 within the ES Chapter 19 shows the extent of land within the Sites for each of these farm businesses.

Farm Business A

- 7.1.2 Farm Business A occupies approximately 1200ha of agricultural land, the majority of which is owner occupied. All of the Farm Business A land within the site (90.4ha) is owner occupied. Approximately 120ha of land outside of the Sites is held on short term Farm Business Tenancy (FBT) agreements. The land comprises seven separate areas of land with six farm yards. There are no farm yards or buildings within the Sites.
- 7.1.3 Combinable cropping (such as cereals, oilseed and field beans) is the dominant enterprise of the farm business, and the land use found within the Sites. This land is managed 'in hand' by the farm business using its own staff and equipment for cultivation, sowing, crop protection and harvest. The farm employs eight full time staff including the owner. In addition, the farm employs a neighbouring farmer seasonally to assist with peak workload.
- 7.1.4 The farm business has grain storage for 25,000 to 30,000 tonnes which is more than is required for its own harvest. The surplus capacity is let to grain merchants and used by the farm business for its own grain merchant enterprise.
- 7.1.5 On lighter land outside of the Sites, combinable crops are rotated with potato, carrot, parsnip and beetroot crops supported by irrigation. There is no connection to supply the land within the Sites with irrigation water from the licenced abstraction points.
- 7.1.6 Farm Business A does not have its own livestock but does operate a pig 'Bed and Breakfast' enterprise accommodating pigs belonging to another farm. There are approximately seven thousand pigs housed by the farm at any one time.
- 7.1.7 In addition to the grain merchant diversified enterprise noted above, the farm manages a commercial shoot but this does not operate on the land in the Sites.
- 7.1.8 The farm has no SSSI or Scheduled Monument sites that impede agricultural management. Approximately 39ha of land is entered into a mid tier Countryside Stewardship agreement.
- 7.1.9 Flytipping is a common nuisance but the principal problem the farm has is on land adjoining the A1 (away from the sites) with damage from criminal gangs crossing land to target HGVs for diesel theft.
- 7.1.10 The farmer's overall opinion is that the solar farm will improve the viability of the farm through diversification. A small reduction in the total arable area will not undermine that enterprise and the farm may respond by taking on additional land should suitable sites become available.

Farm Business B

- 7.1.11 Farm Business B is the owner occupier of approximately 810ha of land. While not in a single block the land is all within a 10min drive. There are two farm yards on the land, with the farm being managed from the yard that adjoins the Sites. The centre of operations could be moved to the secondary farm yard without difficulty. Approximately 303ha of Farm Business B land is in the Sites.
- 7.1.12 Approximately 708ha of land is in arable management, with rotations of combinable crops. Some occasional maize and sugar beet crops are included in the rotations but not at the site where the heavy land is not suited to these late harvested crops. About 20ha of the arable area is also under a rotational ley grass crop at any one time.
- 7.1.13 Most landwork is in hand with the farm employing three and a half full time equivalent staff including one of the owners. The farm jointly owns a combine harvester and a sugarbeet seed drill with another farm.
- 7.1.14 The remaining land (approximately 102ha) is under permanent pasture. This land is used by a tenant, a livery business with thirty stables.
- 7.1.15 A poultry enterprise has approximately 130,000 broiler hens raised in barns. Litter from the poultry is applied to the farms own arable land and following development the farm will retain sufficient arable land to continue to do so without difficulty. Feed is bought in, the farm being unable to feed its own grain to the poultry.
- 7.1.16 In addition to letting land to a livery business as noted above, Farm Business B has a diversified enterprise of self storage units.
- 7.1.17 The farm has land in Higher Level Schemes that are ending in the autumn of 2023. Away from the Sites the farm has land in a pilot of the Sustainable Farm Initiative (SFI). Areas of artificial flood plain (to attenuate flooding downstream) are close to but not within the Sites. A Scheduled Monument outside of the Sites is managed by grazing to avoid disturbance of the former village.
- 7.1.18 What little nuisance the farm experiences is concentrated on the river bank where walkers access the land.
- 7.1.19 The farmer considers that the diversification of having land under solar would be economically beneficial to the farm. They also anticipate that the extended fallow period will improve soil health, in particular the structural stability of topsoil that at present, is unable to be managed for direct drilling of crops.

Farm Business C

- 7.1.20 Farm Business C is an arable enterprise with approximately 562ha 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.

- 7.1.21 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.
- 7.1.22 Land within the solar farm would comprise approximately 210.8ha out of a total area of 562ha owned by the farm. Farm Business C is also the landowner of approximately 132.3ha of land that is part of a separate application for a solar energy development. Land within the Sites is not currently entered into any environmental scheme but some land has previously been in a Higher Level Scheme (HLS) agreement. Land management is not constrained by nuisance factors such as fly tipping.
- 7.1.23 With all farming operations undertaken by contractors, Farm Business C will not have any surplus capacity of farm labour or machinery should one or both solar farm applications progress. Any surplus grain storage could be let to other farm businesses or grain merchants. For Farm Business C the solar farm will be the addition of a diversified enterprise that is not subject to the same fluctuations of income as the arable enterprise.

Farm Business D

- 7.1.24 Farm Business D manages approximately 274ha of owner occupied land. At present the majority of the land is in arable production with approximately 17ha of permanent grass. 154.9ha of this land sits within the Sites.
- 7.1.25 The arable land is in rotations of cereals with beans as a break crop. In addition a small area (2.5ha) of bird seed crop is grown. The landowner undertakes his own cultivation work but relies on third parties for harvest, crop protection and fertiliser application. There are no farm workers in addition to the owner. The farm has grain storage for approximately 1000 tonnes which is not sufficient for annual yield.
- 7.1.26 Hay crops taken off the permanent pasture are sold off the farm. Straw from the arable enterprise goes to a power station. There are no farm livestock and no diversified enterprises.
- 7.1.27 In 2018 the farm closed down its primary enterprise, a dairy unit with 180 milking cows plus followers. The land that supported this enterprise transitioned to the current arable enterprise. The dairy enterprise was ended because of the planned retirement of the farmer, with equipment including a robot milking system, sold. A dairy unit of this scale in Lincolnshire is not considered economically viable by the farmer, for any successor to take on following the owner's retirement.
- 7.1.28 The farm has land in the Entry Level Scheme with agreements centred on hedge management and field margins. These measures have approximately one year remaining.

- 7.1.29 The farmer wants the diversification to solar to progress so that the farm business has a more stable income that will enable retirement and be able to support any successor taking over the farm.

7.2 Effect of Development on Farm Businesses

- 7.2.1 The farmers were questioned regarding the likely response of their farm business to the proposed development. All farm businesses would have a reduction in area managed for combinable crops. For Farm Business D the farmer is seeking to retire and has already terminated a dairy enterprise, seeing no medium to long term viability for continuing dairy production at this scale, and needing to reduce their own working hours because of age.

8 References

- Ref 19.1.1 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 19.1.2 Agricultural Land Classification: protecting the best and most versatile agricultural land (TIN049). Natural England, January 2009.
[REDACTED]
- Ref 19.1.3 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>
- Ref 19.1.4 A New Perspective on Land and Soil in Environmental Impact Assessment. IEMA, February 2022

Annex 1 Agricultural Land Classification Report (AMET)



AGRICULTURAL LAND CLASSIFICATION WEST BURTON SOLAR PROJECT

CLIENT: ISLAND GREEN POWER LTD LTD
PROJECT: WEST BURTON SOLAR PROJECT
DATE: 14TH FEBRUARY 2023 – ISSUE 8
ISSUED BY: JAMES FULTON MRICS FAAV

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1. EXECUTIVE SUMMARY

- 1.1 This report assesses the Agricultural Land Classification (ALC) grading of 1077Ha, of agricultural land in West Lindsey District and Bassetlaw District.
- 1.2 The limiting factor is found to be predominantly soil wetness, with some areas of lighter (sandy) land limited by droughtiness. Both wetness and droughtiness are a combination of the soils found on sites and the climatic regime.

- 1.3 The land is graded as follows:

Grade 1:	28.7Ha	2.6%
Grade 2:	48.7Ha	4.5%
Grade 3a:	381.6Ha	35.4%
Grade 3b:	617.8Ha	57.3%
Non-Agricultural	2ha	0.2%
Total:	1078.8Ha	

- 1.4 The surveyed site totals 1076.8 Ha of agricultural land of which 459ha (42.6%) is best and most versatile and 617.8Ha (57.4%) 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 the area of a proposed solar project. The solar project is split across 5 sites known as West Burton 1, West Burton 2, West Burton 3, West Burton 4 and West Burton Substation. West Burton 1, West Burton 2 and West Burton 3 are all in West Lindsey District while West Burton 4 and West Burton Substation are in Bassetlaw District. The ALC report is being prepared to accompany a planning application for the proposed West Burton Solar Project.
- 2.2 The report's author is James Fulton BSc (Hons) MRICS FAAV who has worked as a chartered surveyor, agricultural valuer, and agricultural consultant since 2004, has a degree in agriculture which included modules on soils and over 10 years' experience in advising farmers on soil structure and cultivation methods and in producing agricultural land classification reports.
- 2.3 The report is based on 35 days of sampling conducted in August and September 2021 a day in February 2022 to survey the grid connection point. 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. 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. The topsoils were generally dry and so a lot of water had to be added to hand texture samples. In places the subsoil was dry and so a further visit was conducted to re-examine several trial pit locations in January 2022 to examine the subsoils when in a moist condition and to check hand textured samples.
- 2.5 A number of locations are described in literature as possibly calcareous and so hydrochloric acid was used to test in field for a reaction that would indicate calcareous soils. Some areas were identified as calcareous while others where a reaction might be expected did not and so additional lab testing was ordered and the report updated accordingly.

2.6 The five sites are described as follows:

WEST BURTON 1

91.2 hectares of arable land to the northeast of Broxholme, generally flat with elevation ranging from 4m to 7m above ordinance datum (AOD). At the time of the survey the land had just had a cereal crop removed and was still stubble.

WEST BURTON 2

347.3 hectares of predominantly arable land with some small areas of permanent pasture to the east and west of Ingleby, generally flat with some shallow slopes with elevation ranging from 3m to 18m AOD. At the time of the survey the majority of the land had just had a cereal crop removed and was still stubble with some areas of miscanthus and maize still growing.

WEST BURTON 3

379.6 hectares of predominantly arable land to the east of Brampton, ranging from flat shallow slopes with elevation ranging from 4m to 23m AOD. At the time of the survey the majority of the land had just had a combinable crop removed and was still stubble with some areas cultivated and a single field of temporary grass.

WEST BURTON 4

252.3 hectares of predominantly arable land to the northeast of Clayworth and south of Gringley on the Hill mostly shallow slopes and smaller flat areas with elevation ranging from 15m to 73m AOD. At the time of the survey the majority of the land had just had a combinable crop removed and was still stubble with small areas of permanent pasture.

WEST BURTON SUBSTATION

6.6 hectares of arable land at Best Burton flat to gently sloping with elevation ranging from 11m to 13m AOD. At the time of the survey the two fields were drilled with a winter cereal crop.

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.

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.

WEST BURTON 1

The bedrock geology is shown to be Charmouth Mudstone Formation - Mudstone. The superficial deposits for the west of the site are not recorded and for the east of the site are shown to be Till, Mid Pleistocene - Diamicton.

WEST BURTON 2

The bedrock geology for the majority of the site is shown to be Scunthorpe Mudstone Formation – Mudstone and Limestone and for a strip to the west near to the river is shown to be Charmouth Mudstone Formation – Mudstone. The superficial deposits for the majority of the site are not recorded with the area to the east of the site shown to be Alluvium – Clay, Silt, Sand, and Gravel.

WEST BURTON 3

The bedrock geology is shown to be Scunthorpe Mudstone Formation – Mudstone and Limestone. The superficial deposits for the majority of the site are not recorded and for a strip through the centre of the site are shown to be Holme Pierpoint Sand and Gravel Member – Sand and Gravel.

WEST BURTON 4

The bedrock geology for the majority of the site is shown to be Mercia Mudstone Group – Mudstone. Small areas within the site boundary are shown to be Mercia Mudstone Group – Siltstone, Dolomitic and Clarborough Member – Siltstone. The superficial deposits for the site are not recorded.

WEST BURTON SUBSTATION

The bedrock geology for the site is shown to be Mercia Mudstone Group – Mudstone. The superficial deposits for the site are not recorded.

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*

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

WEST BURTON 1

A small area to the north of the site adjacent to the river is identified as Fladbury 2 Association – Stoneless clayey soils variably affected by groundwater some with sandy subsoils. A small area to the west of the site is identified as Wickham 2 Association – slowly permeable seasonally waterlogged fine loamy over clayey, fine silty over clayey and clayey soils and the majority of the site is identified as Beccles 1 Association - slowly permeable seasonally waterlogged fine loamy over clayey soils

WEST BURTON 2

The strip of land to the east of the site adjacent to the river is identified as Fladbury 2 Association – Stoneless clayey soils variably affected by groundwater some with sandy subsoils. A very small area to the southwest of the site is identified as Blackwood Association – Deep permeable sandy and coarse loamy soils. The majority of the site is identified as Wickham 2 Association – slowly permeable seasonally waterlogged fine loamy over clayey, fine silty over clayey and clayey soils.

WEST BURTON 3

An area to the southwest of the site is identified as Evesham 3 Association – slowly permeable calcareous clayey, and fine loamy over clayey soils. A strip through the middle of the site is identified as Blackwood Association – deep permeable sandy and coarse loamy soils. The majority of the site is identified as Wickham 2 Association – slowly permeable seasonally waterlogged fine loamy over clayey, fine silty over clayey and clayey soils.

WEST BURTON 4

An area to the northwest of the site is identified as Whimple 3 Association – reddish fine loamy or fine silty over clayey soils with slowly permeable subsoils and slight seasonal waterlogging. A very small area to the west Highfield Farm is identified as Brockhurst 2 Association – slowly permeable seasonally waterlogged reddish fine loamy over clayey soils. The majority of the site is identified as Worcester Association – slowly permeable non calcareous and calcareous reddish clayey soils over mudstone, shallow on steeper slopes.

WEST BURTON SUBSTATION

The site is identified as Brockhurst 2 Association – slowly permeable seasonally waterlogged reddish fine loamy over clayey soils.

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.

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

WEST BURTON 1

Grid Reference	491631 378498
Altitude (ALT)	5.58
Average Annual Rainfall (AAR)	609.12
Accumulated Temperature - Jan to June (ATO)	1421.86
Duration of Field Capacity (FCD)	125.97
Moisture Deficit Wheat	112.94
Moisture Deficit Potatoes	104.66

WEST BURTON 2

Grid Reference	489198 377715
Altitude (ALT)	9.7
Average Annual Rainfall (AAR)	604.23
Accumulated Temperature - Jan to June (ATO)	1418.06
Duration of Field Capacity (FCD)	121.89
Moisture Deficit Wheat	112.91
Moisture Deficit Potatoes	105.50

WEST BURTON 3

Grid Reference	485694 380101
Altitude (ALT)	11.54
Average Annual Rainfall (AAR)	586.62
Accumulated Temperature - Jan to June (ATO)	1416.24
Duration of Field Capacity (FCD)	116.45
Moisture Deficit Wheat	114.64
Moisture Deficit Potatoes	107.34

WEST BURTON 4

Grid Reference	474053 389193
Altitude (ALT)	35.51
Average Annual Rainfall (AAR)	573.49
Accumulated Temperature - Jan to June (ATO)	1386.90
Duration of Field Capacity (FCD)	110.84
Moisture Deficit Wheat	113.02
Moisture Deficit Potatoes	99.65

WEST BURTON SUBSTATION

Grid Reference	478686 385652
Altitude (ALT)	12
Average Annual Rainfall (AAR)	566.03
Accumulated Temperature - Jan to June (ATO)	1415.29
Duration of Field Capacity (FCD)	109.51
Moisture Deficit Wheat	115.16
Moisture Deficit Potatoes	105.06

- 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 West Burton 1, 2 and 3 are shown by the predictive mapping to be in flood zone 2 and 3 – areas with a high risk of flooding. The rest of the land was shown to be flood zone 1 – areas with a less than 1 in 1000 annual chance of flooding. Despite this, there was no evidence of flooding seen during the site visits and it is considered that any flooding is of a low enough frequency that it will not be the most limiting factor to land grade.

5. STONINESS

- 5.1 The majority of the site was stoneless. Where there were stones in the topsoil, they very rarely exceeded 5% and with very few exceptions were too small to be retained by a 2cm grid. Where stone content was less than 5% it was not recorded. Stoniness is not considered a limiting factor to land grade.

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**.

WEST BURTON 1

A small area of land adjacent to the river at the north of the site was made up of a sandy loam topsoil over a loamy sand or sand first subsoil with a clay or sand second subsoil. This small area was completely different to the rest of the site and does not reflect any of the expected soils based upon available data.

The rest of the site was extremely consistent with either a clay or clay loam topsoil over a subsoil that is grey, greyish brown or brown, gleyed from between 30 and 35cm slowly permeable clay, or sandy clay.

The topsoil was occasionally deeper than would be expected extending to approximately 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.

WEST BURTON 2

Despite the national soils map showing two different soil associations across the site the soils identified were extremely consistent across all the area. Topsoils were either dark grey, dark greyish brown or very dark greyish brown and almost all clay, sandy clay or heavy clay loam with some small areas of lighter textured topsoils, either sandy clay loam or medium clay loam. Subsoils were almost all grey, greyish brown or brown, gleyed from between 30 and 35cm slowly permeable clay, sandy clay, or clay loam.

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 samples on site reacted to hydrochloric acid but two of the samples showed a slight neutralizing value in the lab tests. The subsoils were not reactive to HCl and discussions with the farmer confirmed that both Mag Lime and Gypsum have been used on site. It is not considered that the neutralizing value is caused by the soils being naturally calcareous.

WEST BURTON 3

There is a small area of land to the southwest of stow park with sandy clay loam topsoils of deep permeable loamy sand subsoils over a slowly permeable clay layer at around 80cm. This appears to be a mix of the Wickham 2 and

Blackwood Associations providing the best of both worlds resulting in very good land.

The rest of the land all has largely similar subsoils being slowly permeable clay or sandy clay gleyed subsoils from around 30cm occasionally becoming reddish from 80-90cm.

The topsoils range from sandy loam through sandy, medium, and heavy clay loams to clay and sandy clay. The topsoils often change texture over quite short distances although there are patterns of lighter and heavier areas.

The areas that were shown on the national soils map to be Evesham Association were found to be calcareous based on an in-field test with HCL.

The topsoil was often deeper than would be expected extending to 35cm or 40cm and occasionally even 50cm which was clearly below the usual cultivation depth but as the colour and texture remained unchanged this was not recorded as a first subsoil.

The soils to the southwest that reacted to HCL on site showed a very high neutralizing value in the lab tests as would be expected. The lab test on the soil to the north of the site showed a neutralizing value of just over 1% despite the in-field test not reacting. Following discussions with the landowner it was determined that this area had recently had lime applied and so the neutralizing value was not the result of naturally calcareous soils.

WEST BURTON 4

The topsoil across the site was almost all brown or dark greyish brown and except for a small number of locations was either heavy clay loam or medium clay loam. The samples taken at sample points 70 and 71 show how quickly the soil texture changed over very short distances and were generally just one side or the other of the boundary between medium and heavy clay loam. Occasionally the topsoil was noticeably heavier and was recorded as clay while a similar number of points were noticeably lighter, and a lab test confirmed these to be a sandy loam.

The area to the southwest of Highfield Farm is made up of a sandy loam topsoil over a silty sandy loam first subsoil with a slowly permeable clay subsoil starting at around 80cm from the surface.

The small number of sample points to the north of the site had grey heavily gleyed, slowly permeable clay subsoils from depths of between 30 and 35cm.

The rest of the site had extremely consistent subsoils being slowly permeable reddish-brown clay or silty clay starting at around 30cm. Several locations were impenetrable to the soil augur during sampling in summer and when dug appeared to be mudstone. When a small proportion of these were re-assessed in January it was found that where the impenetrable layer was shallow (around

30cm) this was identified as a slowly permeable reddish-brown clay that had presumably dried to such an extent in the summer that it had hardened to the point of being impenetrable. Where the impenetrable layer was deeper it was found to still be impenetrable and thus determined to be a mudstone layer.

While the national soils map suggests that some of the areas may be calcareous none of the tests on site with hydrochloric acid reacted and so all points have been recorded as non-calcareous.

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.

Despite the in-field tests with hydrochloric acid showing no reaction all of the clay/clay loam soils on the site that were tested in the lab shows a neutralizing value of between 2.5 and 3.8. There is no adequate explanation from the management of the land to explain this and so the land must be considered to be naturally calcareous.

The majority of the soils on site correspond very strongly to the Whimble 3 Association and Worcester Association soils expected.

WEST BURTON SUBSTATION

The topsoil across this area is very consistent being a dark brown clay or heavy clay loam extending to approximately 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. The subsoils varied but were generally reddish with a slowly permeable layer occurring around 40cm except for one sample point where there was a sand layer from 40-60cm with the slowly permeable layer from 60cm.

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**.
- 8.2 Wetness was found to be the limiting factor across the majority of sample points over the whole survey area.

WEST BURTON 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.

WEST BURTON 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; grade 3a, where the topsoil is medium clay loam; and grade 2, where the topsoil is sandy loam. Where there is no slowly permeable subsoil the sample points are calculated to be Wetness class I which result in grade 3a, where the topsoil is clay or sandy clay.

WEST BURTON 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 calcareous clay or calcareous heavy clay loam or medium clay loam. Where there is no slowly permeable subsoil the sample points are calculated to be Wetness class I which result in grade 3a where the topsoil is clay; and grade 2 where the topsoil is heavy clay loam.

WEST BURTON 4

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 3a, where the topsoil is calcareous clay or calcareous heavy clay loam; and grade 2, where the topsoil is calcareous medium clay loam or sandy loam.

WEST BURTON SUBSTATION

The slowly permeable gleyed subsoils result in all sample points 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.

9. DROUGHTINESS

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

$$MB \text{ (Wheat)} = AP \text{ (Wheat)} - MD \text{ (Wheat)}$$

and

$$MB \text{ (Potatoes)} = AP \text{ (Potatoes)} - MD \text{ (Potatoes)}$$

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:

West Burton 1

MD (Wheat) = 125.97
MD (Potatoes) = 104.66

West Burton 2

MD (Wheat) = 112.91
MD (Potatoes) = 105.50

West Burton 3

MD (Wheat) = 114.64
MD (Potatoes) = 107.34

MD (Wheat) = 113.02
MD (Potatoes) = 99.65

West Burton Substation

MD (Wheat) = 115.16
MD (Potatoes) = 105.06

- 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**.

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:

WEST BURTON 1

Grade 3a:	18.4Ha	20.2%
Grade 3b:	72.8Ha	79.8%
Total:	91.2Ha	

WEST BURTON 2

Grade 2:	2.5Ha	0.7%
Grade 3a:	11.9Ha	3.4%
Grade 3b:	332.9Ha	95.9%
Total:	347.3Ha	

WEST BURTON 3

Grade 1:	19.3Ha	5.0%
Grade 2:	6.6Ha	1.7%
Grade 3a:	148Ha	38.9%
Grade 3b:	205.5Ha	53.9%
Non-Agricultural	2Ha	0.5%
Total:	381.4Ha	

WEST BURTON 4

Grade 1:	9.4Ha	3.7%
Grade 2:	39.6Ha	14.7%
Grade 3a:	203.3Ha	81.6%
Total:	252.3Ha	

WEST BURTON SUBSTATION

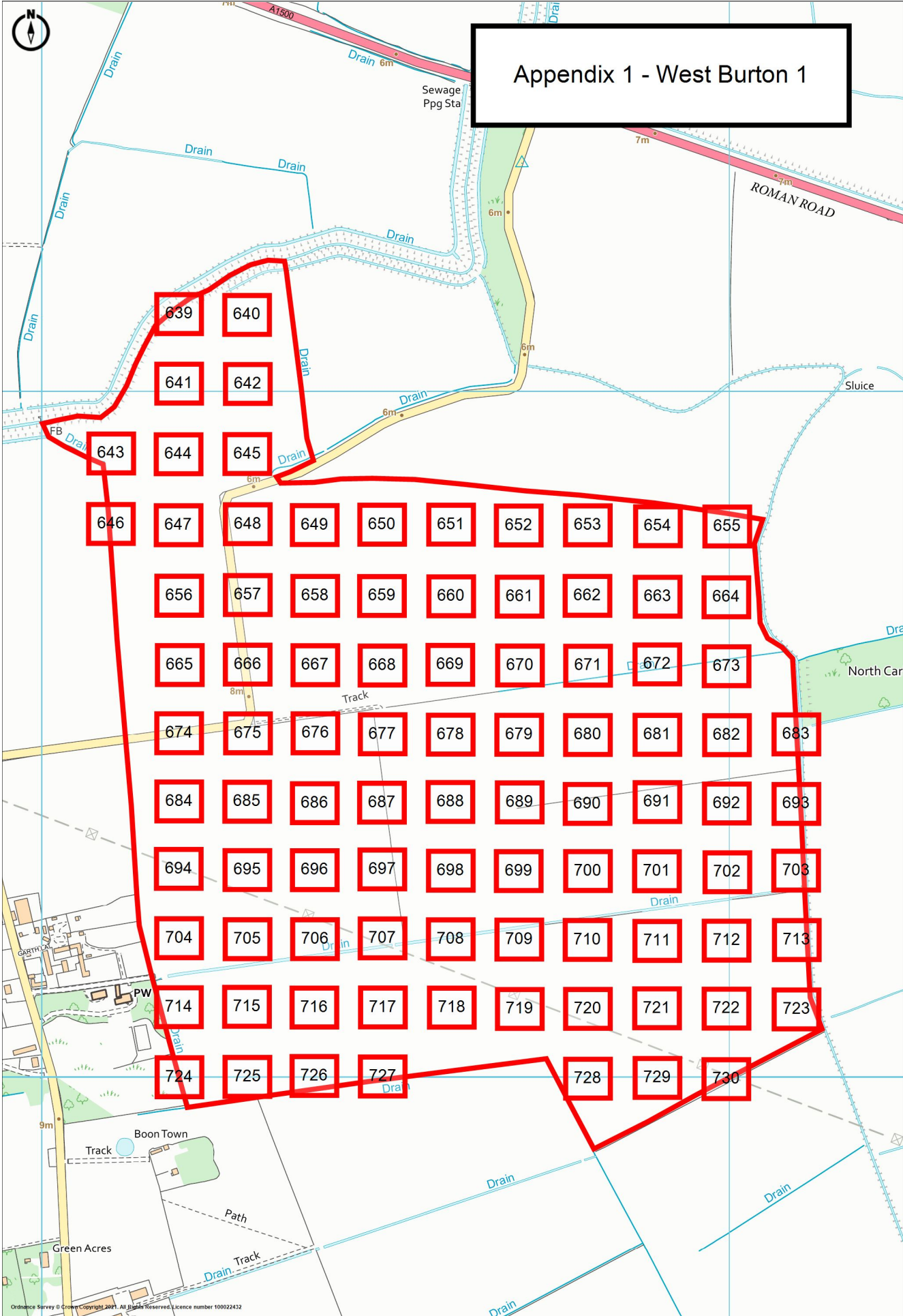
Grade 3b:	6.6Ha	100%
Total:	6.6Ha	

TOTAL

Grade 1:	28.7Ha	2.6%
Grade 2:	48.7Ha	4.5%
Grade 3a:	381.6Ha	35.4%
Grade 3b:	617.8Ha	57.3%
Non-Agricultural	2ha	0.2%
Total:	1078.8Ha	

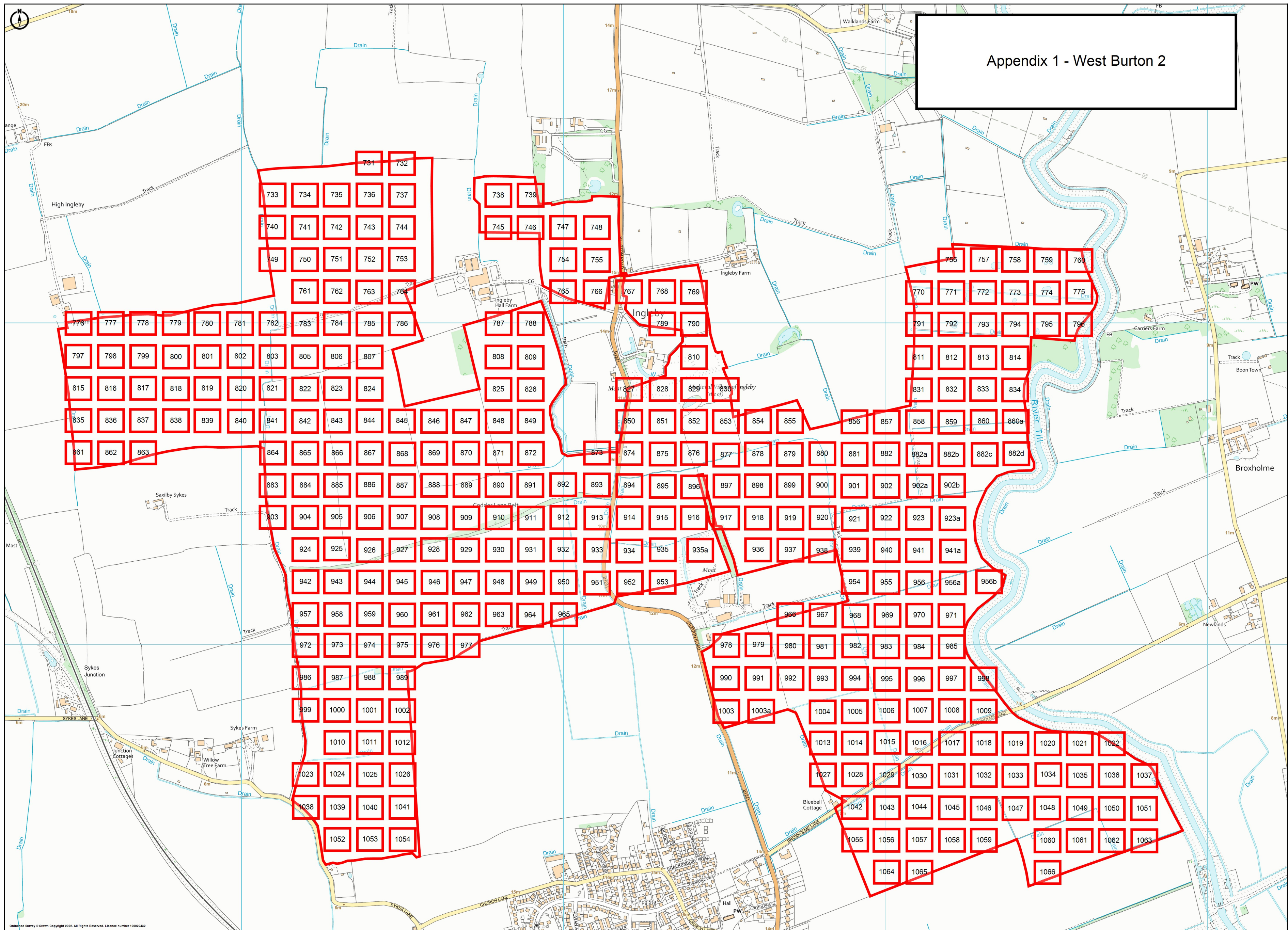
10.6 A plan of the land grading can be found at **appendix 6**.

Appendix 1 - West Burton 1

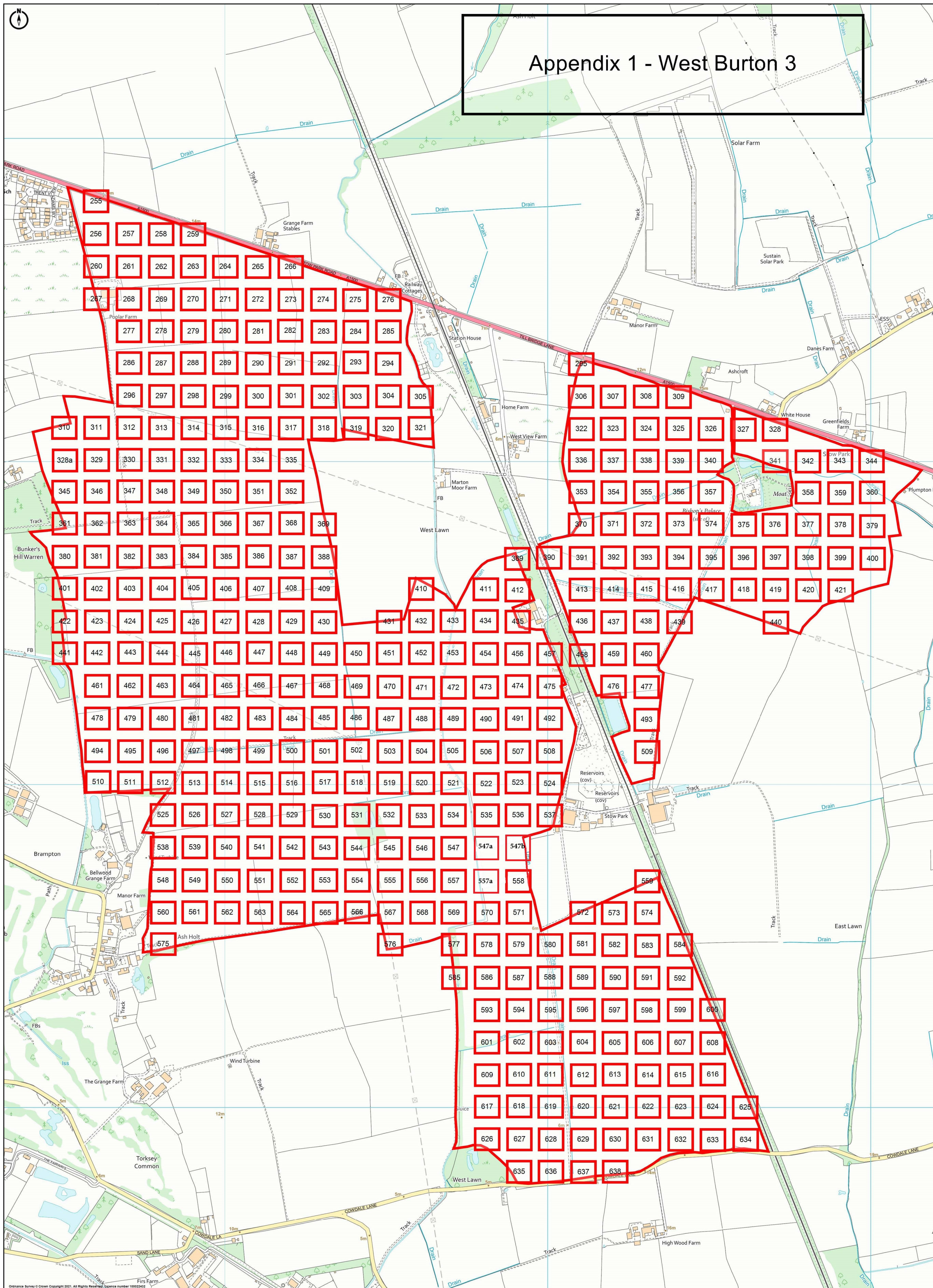


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Appendix 1 - West Burton 2

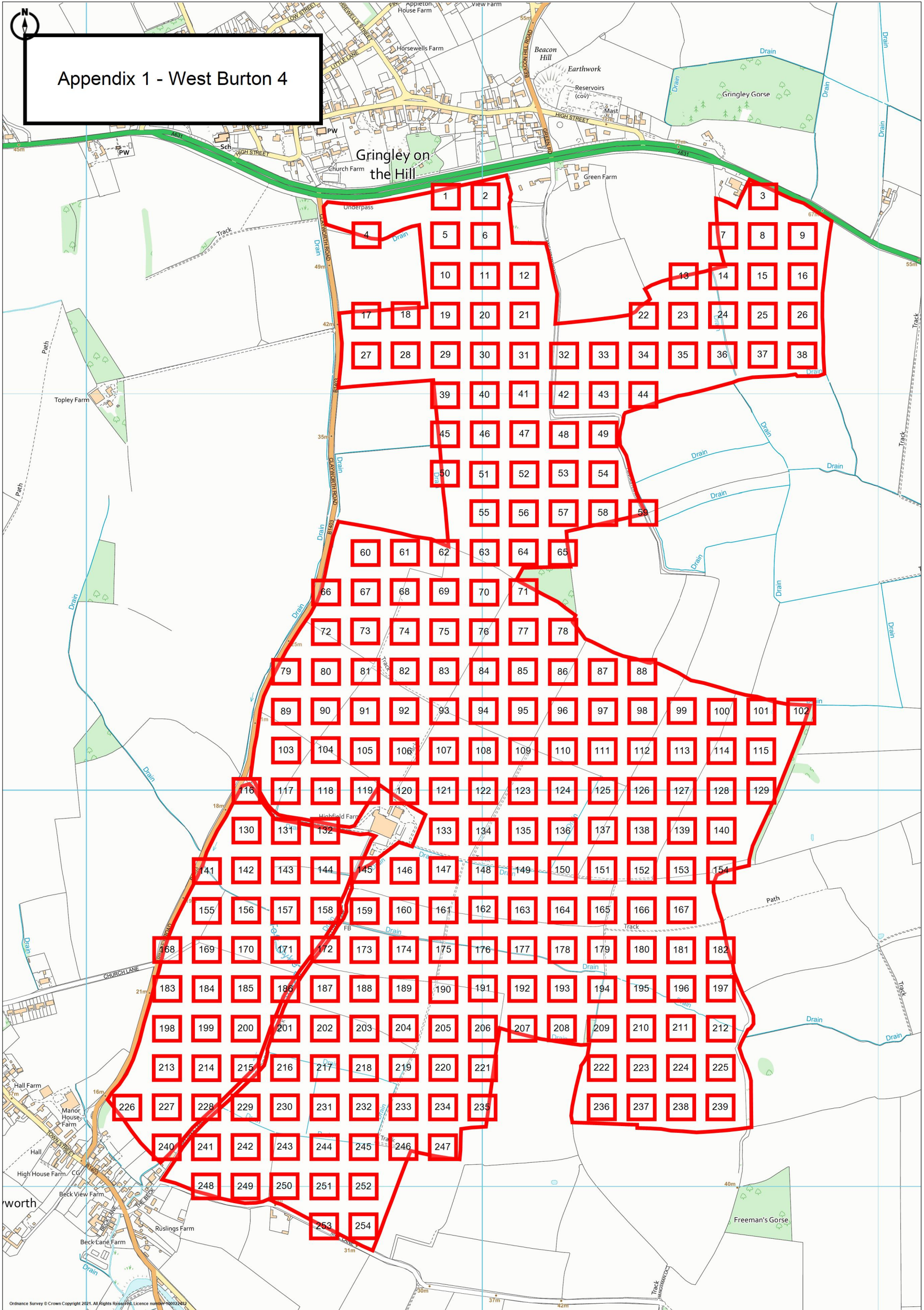


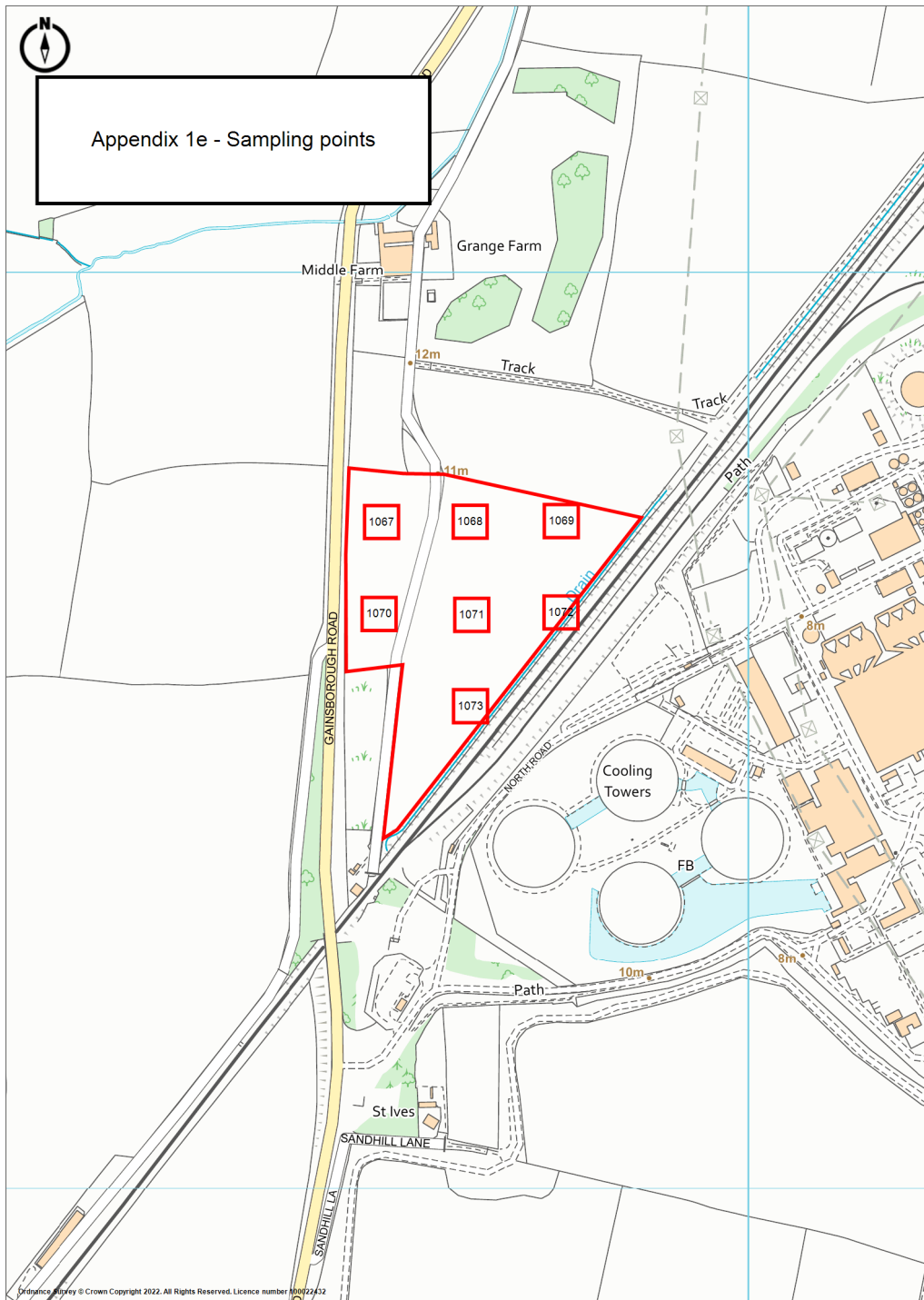
Appendix 1 - West Burton 3





Appendix 1 - West Burton 4





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APPENDIX 2 – AGRO-CLIMATIC DATA

Site Details: West Burton 1

Grid reference (centre of site): 491631 78498

Altitude: Mean 5.58

Climatic data from surrounding locations:

Grid Reference	ALT	AAR	LR_AAR	ASR	ATO	ATS	MDW	MDP	FCD
49003750	6	600	1.5	310	1423	2396	113	107	121
49003800	8	610	1.6	310	1419	2392	113	106	125
49503750	12	622	0.5	320	1415	2390	111	103	130
49503800	27	631	0.5	320	1396	2368	109	101	134

Altitude Adjusted

Grid Reference	AAR	ATO	FCD	MDW	MDP	Proximity Adjustment
49003750	599.37	1423.48	120.91	113.09	106.50	18.70%
49003800	606.13	1421.76	124.44	113.52	105.80	50.13%
49503750	618.79	1422.32	129.54	111.88	102.59	10.43%
49503800	620.29	1420.42	132.45	111.95	101.27	20.74%
491631 378498	609.12	1421.86	125.97	112.94	104.66	

Site Details: West Burton 2

Grid reference (centre of site): 489198 377715

Altitude: Mean 9.7

Climatic data from surrounding locations:

Grid Reference	ALT	AAR	LR_AAR	ASR	ATO	ATS	MDW	MDP	FCD
48503750	7	577	1.1	300	1423	2394	115	109	111
48503800	10	584	1.3	300	1418	2389	115	109	116
49003750	6	600	1.5	310	1423	2396	113	107	121
49003800	8	610	1.6	310	1419	2392	113	106	125

Altitude Adjusted

Grid Reference	AAR	ATO	FCD	MDW	MDP	Proximity Adjustment
48503750	579.97	1419.92	111.43	114.52	107.56	9.08%
48503800	583.61	1418.34	115.94	115.06	107.89	10.32%
49003750	605.55	1418.78	121.80	112.23	105.38	35.07%
49003800	612.72	1417.06	125.39	112.64	104.65	45.53%
489198 377715	604.23	1418.06	121.89	112.91	105.50	

Site Details: West Burton 3

Grid reference (centre of site): 485694 380101

Altitude: Mean 11.54

Climatic data from surrounding locations:

Grid Reference	ALT	AAR	LR_AAR	ASR	ATO	ATS	MDW	MDP	FCD
48503750	7	577	1.1	300	1423	2394	115	109	111
48503800	10	584	1.3	300	1418	2389	115	109	116
49003750	6	600	1.5	310	1423	2396	113	107	121
49003800	8	610	1.6	310	1419	2392	113	106	125

Altitude Adjusted

Grid Reference	AAR	ATO	FCD	MDW	MDP	Proximity Adjustment
48503750	581.99	1417.82	111.72	114.18	107.12	1.01%
48503800	586.00	1416.24	116.29	114.70	107.42	96.68%
49003750	608.31	1416.68	122.20	111.85	104.88	0.38%
49003800	615.66	1414.96	125.82	112.24	104.13	1.92%
485694 380101	586.62	1416.24	116.45	114.64	107.34	

Site Details: West Burton 4

Grid reference (centre of site): 474053 389193

Altitude: Mean 35.51

Climatic data from surrounding locations:

Grid Reference	ALT	AAR	LR_AAR	ASR	ATO	ATS	MDW	MDP	FCD
47003850	12	575	0.2	305	1417	2381	113	107	111
47003900	13	570	0.3	305	1413	2377	113	106	110
47503850	28	563	0	295	1397	2361	114	107	109
47503900	50	574	0	295	1370	2331	112	104	111

Altitude Adjusted

Grid Reference	AAR	ATO	FCD	MDW	MDP	Proximity Adjustment
47003850	579.70	1390.20	111.68	110.26	101.75	3.50%
47003900	576.75	1387.34	110.98	110.22	100.58	10.08%
47503850	563.00	1388.44	109.00	113.23	102.14	9.01%
47503900	574.00	1386.52	111.00	113.49	99.14	77.40%
474053 389193	573.49	1386.90	110.84	113.02	99.65	

Site Details: West Burton Substation

Grid reference (centre of site): 478686 385652

Altitude: Mean 12

Climatic data from surrounding locations:

Grid Reference	ALT	AAR	LR_AAR	ASR	ATO	ATS	MDW	MDP	FCD
47003850	12	575	0.2	305	1417	2381	113	107	111
47003900	13	570	0.3	305	1413	2377	113	106	110
47503850	28	563	0	295	1397	2361	114	107	109
47503900	50	574	0	295	1370	2331	112	104	111

Altitude Adjusted

Grid Reference	AAR	ATO	FCD	MDW	MDP	Proximity Adjustment
47003850	575.00	1417.00	111.00	113.00	105.39	14.82%
47003900	569.70	1414.14	109.96	113.12	104.43	4.32%
47503850	563.00	1415.24	109.00	115.64	105.36	72.16%
47503900	574.00	1413.32	111.00	115.90	102.36	8.70%
478686 38552	566.03	1415.29	109.51	115.16	105.06	

Appendix 3a - Augur sample results - West Burton 1

Sample No	Topsoil					Subsoil 1					Subsoil 2							
	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
639	5	0-40	SL	10YR 3/2			40-70	LS	10YR 5/2		MO	P	70-120	C	10YR 5/1		MOB	P
640	5	0-40	SL	10YR 3/2			40-70	LS	10YR 5/2		MO	P	70-120	C	10YR 5/1		MOB	P
641	6	0-40	SL	10YR 3/2			40-90	S	10YR 4/3			G	90-120	S	10YR 5/1			G
642	6	0-40	MCL	10YR 3/2			40-120	C	10YR 5/1		MOB	P						
643	6	0-40	MCL	10YR 4/2			40-70	SC	10YR 5/3		MO	C PLATY	70-120	C	10YR 5/1		MOB	CPRISM
644	6	0-40	MCL	10YR 4/2			40-70	SC	10YR 5/3		MO	P	70-120	C	10YR 5/1		MOB	P
645	6	0-30	MCL	10YR 3/2			30-50	LS	10YR 5/2		MOB	P	50-120	C	10YR 5/1		MOB	P
646	6	0-30	HCL	10YR 4/2			30-120	C	10YR 5/1		MOB	P						
647	6	0-40	HCL	10YR 4/2			40-70	SC	10YR 5/3		MO	P	70-120	C	10YR 5/1		MOB	P
648	6	0-30	HCL	10YR 4/2			30-60	C	2.5Y 5/3		MO	P	60-120	C	10YR 5/1		MOB	P
649	6	0-30	C	10YR 4/2		FO	30-120	C	10YR 5/1		MOB	P						
650	6	0-30	C	10YR 4/2		FO	30-120	C	10YR 5/1		MOB	P						
651	6	0-30	C	10YR 4/2		FO	30-120	C	10YR 5/1		MOB	P						
652	6	0-30	C	10YR 4/2		FO	30-120	C	10YR 5/1		MOB	P						
653	6	0-30	C	10YR 4/2		FO	30-120	C	10YR 5/1		MOB	P						
654	6	0-30	C	10YR 4/2		FO	30-120	C	10YR 5/1		MOB	P						
655	6	0-30	C	10YR 4/2		FO	30-120	C	10YR 5/1		MOB	P						
656	6	0-40	MCL	10YR 3/2			40-120	C	10YR 5/1		MOB	P						
657	6	0-30	MCL	10YR 4/2			30-60	C	2.5Y 5/3		MO	P	60-120	C	10YR 5/1		MOB	P
658	6	0-30	HCL	10YR 4/2			30-60	C	2.5Y 5/3		MO	P	60-120	C	10YR 5/1		MOB	P
659	6	0-30	HCL	10YR 4/2			30-60	C	2.5Y 5/3		MO	P	60-120	C	10YR 5/1		MOB	P
660	6	0-30	C	10YR 4/2		FO	30-120	C	10YR 5/1		MOB	P						
661	6	0-30	C	10YR 4/2		FO	30-120	C	10YR 5/1		MOB	P						
662	6	0-30	C	10YR 4/2		FO	30-120	C	10YR 5/1		MOB	P						
663	6	0-30	C	10YR 4/2		FO	30-120	C	10YR 5/1		MOB	P						
664	6	0-30	C	10YR 4/2		FO	30-120	C	10YR 5/1		MOB	P						
665	8	0-40	SCL	10YR 3/2			40-120	C	10YR 5/1		MOB	P						
666	7	0-30	SCL	10YR 4/2			30-60	C	2.5Y 5/3		MO	P	60-120	C	10YR 5/1		MOB	P
667	8	0-30	SCL	10YR 4/2			30-60	C	2.5Y 5/3		MO	P	60-120	C	10YR 5/1		MOB	P
668	6	0-30	HCL	10YR 4/2			30-60	C	2.5Y 5/3		MO	P	60-120	C	10YR 5/1		MOB	P
669	6	0-30	HCL	10YR 4/2			30-60	C	2.5Y 5/3		MO	P	60-120	C	10YR 5/1		MOB	P
670	6	0-30	HCL	10YR 4/2			30-60	C	2.5Y 5/3		MO	P	60-120	C	10YR 5/1		MOB	P
671	6	0-30	HCL	10YR 4/2			30-60	C	2.5Y 5/3		MO	P	60-120	C	10YR 5/1		MOB	P
672	6	0-30	HCL	10YR 4/2			30-60	C	2.5Y 5/3		MO	P	60-120	C	10YR 5/1		MOB	P
673	6	0-30	HCL	10YR 4/2			30-60	C	2.5Y 5/3		MO	P	60-120	C	10YR 5/1		MOB	P
674	8	0-40	SCL	10YR 3/2			40-120	C	10YR 5/1		MOB	P						
675	7	0-30	SCL	10YR 4/2			30-60	SC	2.5Y 5/3		MO	P	70-120	C	10YR 5/1		MOB	P
676	6	0-30	HCL	10YR 4/2			30-60	SC	2.5Y 5/3		MO	P	70-120	C	10YR 5/1		MOB	P
677	6	0-30	HCL	10YR 4/2			30-60	SC	2.5Y 5/3		MO	P	70-120	C	10YR 5/1		MOB	P
678	6	0-30	HCL	10YR 4/2			30-60	SC	2.5Y 5/3		MO	P	70-120	C	10YR 5/1		MOB	P
679	6	0-30	HCL	10YR 4/2			30-60	SC	2.5Y 5/3		MO	P	70-120	C	10YR 5/1		MOB	P
680	6	0-30	HCL	10YR 4/2			30-60	SC	2.5Y 5/3		MO	P	70-120	C	10YR 5/1		MOB	P
681	6	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	CPRISM						
682	6	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	P						
683	6	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	P						
684	6	0-40	SCL	10YR 3/2			40-120	C	10YR 5/1		MOB	P						
685	6	0-30	SCL	10YR 4/2		FO	30-120	C	10YR 5/1		MOB	P						
686	6	0-30	SCL	10YR 4/2		FO	30-120	C	10YR 5/1		MOB	P						

Sample No	Altitude	Topsoil				Subsoil 1						Subsoil 2						
		Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
687	6	0-30	C	10YR 4/2		FO	30-120	C	10YR 5/1		MOB	P						
688	6	0-30	HCL	10YR 4/2			30-60	SC	2.5Y 5/3		MO	P	70-120	C	10YR 5/1		MOB	P
689	6	0-30	HCL	10YR 4/2			30-60	SC	2.5Y 5/3		MO	P	70-120	C	10YR 5/1		MOB	P
690	6	0-30	HCL	10YR 4/2			30-60	SC	2.5Y 5/3		MO	CAB	70-120	C	10YR 5/1		MOB	CPRISM
691	6	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	P						
692	6	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	P						
693	6	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	P						
694	6	0-30	SCL	10YR 4/2			30-60	SC	2.5Y 5/3		MO	P	70-120	C	10YR 5/1		MOB	P
695	4	0-30	SCL	10YR 4/2			30-60	SC	2.5Y 5/3		MO	P	70-120	C	10YR 5/1		MOB	P
696	6	0-30	C	10YR 4/2		FO	30-120	C	10YR 5/1		MOB	P						
697	6	0-30	C	10YR 4/2		FO	30-120	C	10YR 5/1		MOB	P						
698	6	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	P						
699	6	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	P						
700	5	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	P						
701	4	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	P						
702	4	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	P						
703	4	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	P						
704	5	0-35	C	10YR 4/2			35-50	LS	10YR 5/1		MO	CPLATY	50-120	C	10YR 5/1		MOB	P
705	4	0-30	C	10YR 4/2		FO	30-120	C	10YR 5/1		MOB	P						
706	3	0-30	C	10YR 4/2		FO	30-120	C	10YR 5/1		MOB	P						
707	5	0-30	C	10YR 4/2		FO	30-120	C	10YR 5/1		MOB	P						
708	6	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	P						
709	5	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	P						
710	6	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	P						
711	6	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	P						
712	5	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	P						
713	6	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	P						
714	5	0-35	C	10YR 4/2			35-50	LS	10YR 5/1		MO	M	50-120	C	10YR 5/1		MOB	P
715	3	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	P						
716	4	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	P						
717	5	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	P						
718	6	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	CPRISM						
719	4	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	P						
720	3	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	P						
721	3	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	P						
722	5	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	P						
723	6	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	P						
724	4	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	P						
725	5	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	P						
726	4	0-30	HCL	10YR 4/2			30-60	SC	2.5Y 5/3		MO	P	70-120	C	10YR 5/1		MOB	P
727	5	0-30	HCL	10YR 4/2			30-60	SC	2.5Y 5/3		MO	P	70-120	C	10YR 5/1		MOB	P
728	5	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	P						
729	4	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	P						
730	4	0-35	C	10YR 4/2		FO	35-120	C	10YR 5/1		MOB	P						

Appendix 3b - Augur Sample Results - West Burton 2

Sample No	Altitude	Topsoil					Subsoil 1					Subsoil 2					Subsoil 3							
		Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
731	18	0-35	C	10YR 4/2			35-120	C	10YR 5/1			MOB	P											
732	18	0-35	C	10YR 4/2			35-120	C	10YR 5/1			MOB	MASSIVE											
733	9	0-35	C	10YR 4/2			35-120	C	10YR 5/1			MOB	P											
734	11	0-35	C	10YR 4/2			35-120	C	10YR 5/1			MOB	P											
735	13	0-35	C	10YR 4/2			35-120	C	10YR 5/1			MOB	P											
736	16	0-35	C	10YR 4/2			35-120	C	10YR 5/1			MOB	P											
737	17	0-35	C	10YR 4/2			35-120	C	10YR 5/1			MOB	P											
738	15	0-30	HCL	10YR 4/2			30-90	C	10YR 5/3			MOB	CAB	90	IMP									
739	15	0-30	HCL	10YR 4/2			30-70	C	10YR 5/3			MOB	P	70-120	S	10YR 5/1			MO				P	
740	9	0-35	C	10YR 4/2			35-120	C	10YR 5/1			MOB	P											
741	12	0-35	C	10YR 4/2			35-120	C	10YR 5/1			MOB	P											
742	15	0-35	C	10YR 4/2			35-120	C	10YR 5/1			MOB	P											
743	16	0-35	C	10YR 4/2			35-120	C	10YR 5/1			MOB	P											
744	17	0-35	C	10YR 4/2			35-120	C	10YR 5/1			MOB	P											
745	15	0-35	HCL	10YR 4/2			35-50	C	10YR 5/3			MOB	P	50-120	C	10YR 5/2			MOG				P	
746	15	0-35	HCL	10YR 4/2			35-50	C	10YR 5/3			MOB	P	50-120	C	10YR 5/2			MOG				P	
747	14	0-35	HCL	10YR 4/2			35-65	CL	10YR 5/4			MO	P	65-120	CL	10YR 5/3			MO				P	
748	12	0-35	HCL	10YR 4/2			35-65	CL	10YR 5/4			MO	P	65-120	CL	10YR 5/3			MO				P	
749	9	0-35	C	10YR 4/2			35-120	C	10YR 5/1			MOB	P											
750	10	0-35	C	10YR 4/2			35-120	C	10YR 5/1			MOB	P											
751	11	0-35	C	10YR 4/2			35-120	C	10YR 5/1			MOB	P											
752	14	0-35	C	10YR 4/2			35-70	C	10YR 5/3			MOB	P	70-120	C	10YR 5/1			MOB				P	
753	17	0-35	C	10YR 4/2			35-70	C	10YR 5/3			MOB	P	70-120	C	10YR 5/1			MOB				P	
754	17	0-35	HCL	10YR 4/2			35-65	CL	10YR 5/1			MOB	P	65-120	CL	10YR 5/1			MO				P	
755	16	0-35	HCL	10YR 4/2			35-65	CL	10YR 5/4			MO	P	65-120	CL	10YR 5/3			MO				P	
756	6	0-30	C	10YR 3/2			30-90	SC	2.5Y 5/1			MOB	P	90-120	C	2.5Y 6/1			MO				P	
757	6	0-30	C	10YR 3/2			30-90	SC	2.5Y 5/1			MOB	P	90-120	C	2.5Y 6/1			MO				P	
758	4	0-30	C	10YR 3/2			30-90	SC	2.5Y 5/1			MOB	P	90-120	C	2.5Y 6/1			MO				P	
759	3	0-30	C	10YR 3/2		MO	30-70	SC	2.5Y 6/2			MOB	P	70-120	S	2.5Y 6/1			MOB				P	
760	3	0-30	C	10YR 3/2		MO	30-70	SC	2.5Y 6/2			MOB	P	70-120	S	2.5Y 6/1			MOB				P	
761	9	0-35	C	10YR 4/2			35-120	C	10YR 5/1			MOB	P											
762	13	0-35	C	10YR 4/2			35-120	C	10YR 5/1			MOB	P											
763	15	0-35	C	10YR 4/2			35-70	C	10YR 5/3			MOB	P	70-120	C	10YR 5/1			MOB				P	
764	17	0-35	C	10YR 4/2			35-70	C	10YR 5/3			MOB	P	70-120	C	10YR 5/1			MOB				P	
765	17	0-35	SCL	10YR 4/2			35-50	C	10YR 5/1			MO	P	50-120	C	10YR 5/1			MO				P	
766	16	0-45	SCL	10YR 4/2			45-65	CL	10YR 5/4			MO	P	65-120	CL	10YR 5/3			MO				P	
767	15	0-35	SCL	10YR 3/2			35-120	C	10YR 5/3			OB	M											
768	14	0-35	SCL	10YR 3/2			35-120	C	10YR 5/3			OB	M											
769	11	0-35	SCL	10YR 3/2			35-120	C	10YR 5/3			OB	WMAB											
770	6	0-30	C	10YR 3/2			30-90	SC	2.5Y 5/1			MOB	P	90-120	C	2.5Y 6/1			MO				P	
771	6	0-30	C	10YR 3/2			30-90	SC	2.5Y 5/1			MOB	CAB	90-120	C	2.5Y 6/1			MO			MASSIVE	P	
772	5	0-30	C	10YR 3/2			30-90	SC	2.5Y 5/1			MOB	P	90-120	C	2.5Y 6/1			MO				P	
773	4	0-30	C	10YR 3/2			30-90	SC	2.5Y 5/1			MOB	P	90-120	C	2.5Y 6/1			MO				P	
774	3	0-30	C	10YR 3/2			30-70	SC	2.5Y 6/2			MOB	P	70-120	S	2.5Y 6/1			MOB				P	
775	6	0-30	C	10YR 3/2			30-70	SC	2.5Y 6/2			MOB	P	70-120	S	2.5Y 6/1			MOB				P	
776	15	0-35	C	10YR 4/2			35-70	C	10YR 5/3			MOB	P	70-120	C	10YR 5/1			MOB				P	
777	14	0-35	C	10YR 4/2			35-70	C	10YR 5/3			MOB	P	70-120	C	10YR 5/1			MOB				P	
778	13	0-35	C	10YR 4/2			35-70	C	10YR 5/3			MOB	P	70-120	C	10YR 5/1			MOB				P	
779	11	0-35	C	10YR 4/2			35-120	C	10YR 5/1			MOB	P											
780	10	0-35	C	10YR 4/2			35-120	C	10YR 5/1			MOB	P											
781	9	0-35	C	10YR 4/2			35-120	C	10YR 5/1			MOB	P											
782	9	0-35	C	10YR 4/2			35-120	C	10YR 5/1			MOB	P											
783	10	0-35	C	10YR 4/2			35-120	C	10YR 5/1			MOB	P											
784	11	0-35	C	10YR 4/2			35-70	C	10YR 5/3			MOB	P	70-120	C	10YR 5/1			MOB				P	
785	12	0-35	C	10YR 4/2			35-70	C	10YR 5/3			MOB	P	70-120	C	10YR 5/1			MOB				P	
786	13	0-35	C	10YR 4/2			35-70	C	10YR 5/3			MOB	P	70-120	C	10YR 5/1			MOB				P	
787	14	0-35	C	10YR 4/2			35-70	C	10YR 5/3			MOB	P	70-120	C	10YR 5/1			MOB				P	
788	15	0-35	C	10YR 4/2			35-70	C	10YR 5/3			MOB	P	70-120	C	10YR 5/1			MOB				P	
789	15	0-35	HCL	10YR 3/2			35-120	C	10YR 5/3			OB	M											
790	12	0-35	HCL	10YR 3/2			35-120	C	10YR 5/3			OB	M											
791	6	0-30	C	10YR 3/2			30-90	SC	2.5Y 5/1			MOB	P	90-120	C	2.5Y 6/1			MO				P	
792	6	0-30	C	10YR 3/2			30-90	SC	2.5Y 5/1			MOB	P	90-120	C	2.5Y 6/1			MO				P	
793	6	0-30	C	10YR 3/2			30-90	SC	2.5Y 5/1			MOB	P	90-120	C	2.5Y 6/1			MO				P	

Sample No	Altitude	Topsoil					Subsoil 1					Subsoil 2					Subsoil 3							
		Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
794	5	0-30	C	10YR 3/2			30-90	SC	2.5Y 5/1		MOB P	90-120	C	2.5Y 6/1		MO	P							
795	4	0-30	C	10YR 3/2			30-70	SC	2.5Y 6/2		MOB P	70-120	S	2.5Y 6/1		MOB	P							
796	3	0-30	C	10YR 3/2			30-70	SC	2.5Y 6/2		MOB P	70-120	S	2.5Y 6/1		MOB	P							
797	15	0-35	C	10YR 4/2			35-70	C	10YR 5/3		MOB P	70-120	C	10YR 5/1		MOB	P							
798	15	0-35	C	10YR 4/2			35-70	C	10YR 5/3		MOB P	70-120	C	10YR 5/1		MOB	P							
799	13	0-35	C	10YR 4/2			35-70	C	10YR 5/3		MOB P	70-120	C	10YR 5/1		MOB	P							
800	12	0-35	C	10YR 4/2			35-120	C	10YR 5/1		MOB	MASSIVE												
801	10	0-35	C	10YR 4/2			35-120	C	10YR 5/1		MOB	P												
802	9	0-35	C	10YR 4/2			35-120	C	10YR 5/1		MOB	P												
803	8	0-35	C	10YR 4/2			35-120	C	10YR 5/1		MOB	P												
805	12	0-35	C	10YR 4/2			35-120	C	10YR 5/1		MOB	P												
806	15	0-35	C	10YR 4/2			35-120	C	10YR 5/1		MOB	P												
807	15	0-35	C	10YR 4/2			35-50	C	10YR 5/3		MOB	P	50-120	C	10YR 5/1		MOB	P						
808	15	0-35	C	10YR 4/2			35-70	C	10YR 5/3		MOB	P	70-120	C	10YR 5/1		MOB	P						
809	14	0-35	C	10YR 4/2			35-70	C	10YR 5/3		MOB	P	70-120	C	10YR 5/1		MOB	P						
810	13	0-35	HCL	10YR 3/2			35-120	C	10YR 5/3		OB	WMAB												
811	6	0-30	C	10YR 3/2			30-80	SC	2.5Y 6/2		MOB	P	80-120	ZC	10YR 5/1		MO	P						
812	6	0-30	C	10YR 3/2			30-80	SC	2.5Y 6/2		MOB	P	80-120	ZC	10YR 5/1		MO	P						
813	6	0-30	C	10YR 3/2			30-80	SC	2.5Y 6/2		MOB	P	80-120	ZC	10YR 5/1		MO	P						
814	6	0-30	C	10YR 3/2			30-80	SC	2.5Y 6/2		MOB	P	80-120	ZC	10YR 5/1		MO	P						
815	15	0-35	C	10YR 4/2			35-70	C	10YR 5/3		MOB	P	70-120	C	10YR 5/1		MOB	P						
816	15	0-35	C	10YR 4/2			35-70	C	10YR 5/3		MOB	P	70-120	C	10YR 5/1		MOB	P						
817	13	0-35	C	10YR 4/2			35-70	C	10YR 5/3		MOB	P	70-120	C	10YR 5/1		MOB	P						
818	11	0-35	C	10YR 4/2			35-120	C	10YR 5/1		MOB	P												
819	11	0-35	C	10YR 4/2			35-120	C	10YR 5/1		MOB	P												
820	9	0-35	C	10YR 4/2			35-120	C	10YR 5/1		MOB	P												
821	12	0-35	C	10YR 4/2			35-50	C	10YR 5/3		MOB	P	50-120	C	10YR 5/1		MOB	P						
822	12	0-35	C	10YR 4/2			35-50	C	10YR 5/3		MOB	P	50-120	C	10YR 5/1		MOB	P						
823	14	0-35	C	10YR 4/2			35-50	C	10YR 5/3		MOB	P	50-120	C	10YR 5/1		MOB	P						
824	15	0-35	C	10YR 4/2			35-50	C	10YR 5/3		MOB	P	50-120	C	10YR 5/1		MOB	P						
825	15	0-35	C	10YR 4/2			35-70	C	10YR 5/3		MOB	P	70-120	C	10YR 5/1		MOB	P						
826	13	0-35	C	10YR 4/2			35-70	C	10YR 5/3		MOB	P	70-120	C	10YR 5/1		MOB	P						
827	15	0-30	HCL	10YR 4/2			30-70	C	10YR 4/2		MOB	P	70-120	C	10YR 5/1		MO	P						
828	17	0-30	HCL	10YR 4/2			30-70	C	10YR 4/2		MOB	P	70-120	C	10YR 5/1		MO	P						
829	13	0-30	HCL	10YR 4/2			30-70	C	10YR 4/2		MOB	P	70-120	C	10YR 5/1		MO	P						
830	6	0-30	HCL	10YR 4/2			30-70	C	10YR 4/2		MOB	P	70-120	C	10YR 5/1		MO	P						
831	6	0-30	C	10YR 3/2			30-80	SC	2.5Y 6/2		MOB	P	80-120	ZC	10YR 5/1		MO	P						
832	6	0-30	C	10YR 3/2			30-80	SC	2.5Y 6/2		MOB	P	80-120	ZC	10YR 5/1		MO	P						
833	6	0-30	C	10YR 3/2			30-80	SC	2.5Y 6/2		MOB	P	80-120	ZC	10YR 5/1		MO	P						
834	6	0-30	C	10YR 3/2			30-80	SC	2.5Y 6/2		MOB	P	80-120	ZC	10YR 5/1		MO	P						
835	15	0-35	C	10YR 4/2			35-70	C	10YR 5/3		MOB	P	70-120	C	10YR 5/1		MOB	P						
836	12	0-35	C	10YR 4/2			35-70	C	10YR 5/3		MOB	P	70-120	C	10YR 5/1		MOB	P						
837	12	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
838	9	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
839	9	0-35	C	10YR 4/2			35-70	SCL	10YR 5/5		MOB	P	70-100	C	10YR 5/1		MOB	P	100-120	S	10YR 4/6			G
840	10	0-35	C	10YR 4/2			35-70	SCL	10YR 5/5		MOB	P	70-100	C	10YR 5/1		MOB	P	100-120	S	10YR 4/6			G
841	11	0-35	C	10YR 4/2			35-50	C	10YR 5/3		MOB	P	50-120	C	10YR 5/1		MOB	P						
842	11	0-35	C	10YR 4/2			35-50	C	10YR 5/3		MOB	P	50-120	C	10YR 5/1		MOB	P						
843	13	0-35	C	10YR 4/2			35-50	C	10YR 5/3		MOB	P	50-120	C	10YR 5/1		MOB	P						
844	14	0-35	C	10YR 4/2			35-50	C	10YR 5/3		MOB	P	50-120	C	10YR 5/1		MOB	P						
845	15	0-35	C	10YR 4/2			35-50	C	10YR 5/3		MOB	P	50-120	C	10YR 5/1		MOB	P						
846	15	0-30	C	10YR 4/2			30-120	C	10YR 5/1		MOB	P												
847	13	0-35	C	10YR 4/2			35-50	C	10YR 5/3		MOB	P	50-120	C	10YR 5/1		MOB	P						
848	15	0-35	C	10YR 4/2			35-70	C	10YR 5/3		MOB	P	70-120	C	10YR 5/1		MOB	P						
849	12	0-35	C	10YR 4/2			35-70	C	10YR 5/3		MOB	P	70-120	C	10YR 5/1		MOB	P						
850	11	0-35	HCL	10YR 4/2			35-65	CL	10YR 5/1		MOB	P	65-120	CL	10YR 5/1		MO	P						
851	12	0-35	HCL	10YR 3/2			35	IMP - MUDSTONE																
852	11	0-35	HCL	10YR 3/2			35	IMP - MUDSTONE																
853	10	0-30	HCL	10YR 3/2			30-70	C	2.5Y 5/3		MO	P	70-120	C	10YR 5/1		MO	P						
854	6	0-40	HCL	10YR 3/2			40-60	CL	2.5Y 5/6		MB	M	60-120	IMP - MUDSTONE										
855	6	0-40	HCL	10YR 3/2			40-60	CL	2.5Y 5/6		MB	M	60-120	IMP - MUDSTONE										
856	6	0-35	C	10YR 3/2			35-60	C	2.5Y 4/2		MOB	P	60-120	C	2.5Y 6/1		MO	P						
857	6	0-35	C	10YR 3/2			35-70	C	2.5Y 5/1		MOB	P	70-120	C	N 4/		MO	P						
858	6	0-30	C	10YR 3/2			30-80	SC	2.5Y 6/2		MOB	P	80-120	ZC	10YR 5/1		MO	P						

Sample No	Altitude	Topsoil				Subsoil 1						Subsoil 2						Subsoil 3						
		Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
859	6	0-30	C	10YR 3/2			30-80	SC	2.5Y 6/2		MOB	P	80-120	ZC	10YR 5/1		MO	P						
860	6	0-30	C	10YR 3/2			30-80	SC	2.5Y 6/2		MOB	P	80-120	ZC	10YR 5/1		MO	P						
860a	6	0-30	C	10YR 3/2			30-80	SC	2.5Y 6/2		MOB	P	80-120	ZC	10YR 5/1		MO	P						
861	14	0-35	C	10YR 4/2			35-70	C	10YR 5/3		MOB	P	70-120	C	10YR 5/1		MOB	P						
862	12	0-35	C	10YR 4/2			35-70	C	10YR 5/3		MOB	P	70-120	C	10YR 5/1		MOB	P						
863	11	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
864	8	0-35	C	10YR 4/2			35-50	C	10YR 5/3		MOB	P	50-120	C	10YR 5/1		MOB	P						
865	9	0-35	C	10YR 4/2			35-50	C	10YR 5/3		MOB	P	50-120	C	10YR 5/1		MOB	P						
866	10	0-35	C	10YR 4/2			35-120	C	10YR 5/1		MOB	P												
867	11	0-35	C	10YR 4/2			35-50	C	10YR 5/3		MOB	P	50-120	C	10YR 5/1		MOB	P						
868	13	0-35	C	10YR 4/2			35-50	C	10YR 5/3		MOB	P	50-120	C	10YR 5/1		MOB	P						
869	15	0-35	C	10YR 4/2			35-50	C	10YR 5/3		MOB	P	50-120	C	10YR 5/1		MOB	P						
870	15	0-35	C	10YR 4/2			35-50	C	10YR 5/3		MOB	P	50-120	C	10YR 5/1		MOB	P						
871	15	0-35	C	10YR 4/2			35-70	C	10YR 5/3		MOB	P	70-120	C	10YR 5/1		MOB	P						
872	14	0-35	C	10YR 4/2			35-70	C	10YR 5/3		MOB	P	70-120	C	10YR 5/1		MOB	P						
873	10	0-30	C	10YR 4/2			30-50	C	10YR 5/3		MO	P	50-120	C	10YR 5/1		MOB	P						
874	10	0-30	C	10YR 3/2			30-70	C	10YR 5/2		MO	P	70	IMP										
875	10	0-30	HCL	10YR 3/2			30-90	C	2.5Y 5/3		MO	P	90-120	C	10YR 5/2		MO	P						
876	9	0-30	HCL	10YR 3/2			30-70	C	2.5Y 5/3		MO	P	70-120	C	10YR 5/1		MO	P						
877	10	0-30	HCL	10YR 3/2			30-70	C	2.5Y 5/3		MO	P	70-120	C	10YR 5/1		MO	P						
878	11	0-30	HCL	10YR 3/2			30-80	CL	10YR 5/3		MOB	P	80-120	C	10YR 5/1		OB	P						
879	9	0-30	HCL	10YR 3/2			30-80	CL	10YR 5/3		MOB	CAB	80	IMP - MUDSTONE										
880	9	0-30	HCL	10YR 3/2			30-80	CL	10YR 5/3		MOB	P	80-120	C	10YR 5/1		OB	P						
881	8	0-35	C	10YR 3/2			35-60	C	2.5Y 4/2		MOB	P	60-120	C	2.5Y 6/1		MO	P						
882	6	0-35	C	10YR 3/2			35-70	SC	2.5Y 5/1		MOB	P	70-120	C	5YR 4/3		G	P						
882a	6	0-35	C	10YR 3/2			35-70	SC	2.5Y 5/1		MOB	P	70-120	C	5YR 4/3		G	P						
882b	6	0-30	C	10YR 3/2			30-80	SC	2.5Y 6/2		MOB	P	80-120	ZC	10YR 5/1		MO	P						
882c	6	0-35	C	10YR 3/2			35-70	SC	2.5Y 5/1		MOB	P	70-120	C	5YR 4/3		G	P						
882d	6	0-30	C	10YR 3/2			30-80	SC	2.5Y 6/2		MOB	P	80-120	ZC	10YR 5/1		MO	P						
883	9	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
884	10	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
885	12	0-35	C	10YR 4/2			35-120	C	10YR 5/1		MOB	P												
886	12	0-35	C	10YR 4/2			35-120	C	10YR 5/1		MOB	P												
887	14	0-30	C	10YR 4/2			30-50	C	10YR 5/3		MO	P	50-120	C	10YR 5/1		MOB	P						
888	15	0-30	C	10YR 4/2			30-50	C	10YR 5/3		MO	P	50-120	C	10YR 5/1		MOB	P						
889	15	0-30	C	10YR 4/2			30-50	C	10YR 5/3		MO	P	50-120	C	10YR 5/1		MOB	P						
890	13	0-30	C	10YR 4/2			30-50	C	10YR 5/3		MO	P	50-120	C	10YR 5/1		MOB	P						
891	11	0-30	C	10YR 4/2			30-50	C	10YR 5/3		MO	P	50-120	C	10YR 5/1		MOB	P						
892	10	0-30	C	10YR 4/2			30-50	C	10YR 5/3		MO	P	50-120	C	10YR 5/1		MOB	P						
893	9	0-30	C	10YR 4/2			30-50	C	10YR 5/3		MO	P	50-120	C	10YR 5/1		MOB	P						
894	9	0-30	HCL	10YR 3/2			30-90	C	2.5Y 5/3		MO	P	90-120	C	10YR 5/2		MO	P						
895	9	0-30	HCL	10YR 3/2			30-90	C	2.5Y 5/3		MO	P	90-120	C	10YR 5/2		MO	P						
896	10	0-30	HCL	10YR 3/2			30-90	C	2.5Y 5/3		MO	P	90-120	C	10YR 5/2		MO	P						
897	11	0-20	HCL	10YR 3/2			20-80	CL	10YR 5/3		MOB	P	80-120	C	10YR 5/1		OB	P						
898	12	0-30	HCL	10YR 3/2			30-80	CL	10YR 5/3		MOB	P	80-120	C	10YR 5/1		OB	P						
899	10	0-30	HCL	10YR 3/2			30-55	CL	10YR 5/3		MOB	P	55	IMP - MUDSTONE										
900	7	0-30	HCL	10YR 3/2			30-80	CL	10YR 5/3		MOB	P	80-120	C	10YR 5/1		OB	P						
901	6	0-35	C	10YR 3/2			35-60	C	2.5Y 4/2		MOB	P	60-120	C	2.5Y 6/1		MO	P						
902	6	0-35	C	10YR 3/2			35-60	C	2.5Y 4/2		MOB	P	60-120	C	2.5Y 6/1		MO	P						
902a	6	0-35	C	10YR 3/2			35-60	C	2.5Y 4/2		MOB	P	60-120	C	2.5Y 6/1		MO	P						
902b	6	0-35	C	10YR 3/2			35-60	C	2.5Y 4/2		MOB	P	60-120	C	2.5Y 6/1		MO	P						
903	9	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
904	11	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
905	12	0-35	C	10YR 4/2			35-120	C	10YR 5/1		MOB	P												
906	13	0-35	C	10YR 4/2			35-120	C	10YR 5/1		MOB	P												
907	14	0-35	C	10YR 4/2			35-120	C	10YR 5/1		MOB	P												
908	14	0-30	C	10YR 4/2			30-50	C	10YR 5/3		MO	P	50-120	C	10YR 5/1		MOB	P						
909	15	0-30	C	10YR 4/2			30-50	C	10YR 5/3		MO	P	50-120	C	10YR 5/1		MOB	P						
910	15	0-30	C	10YR 4/2			30-50	C	10YR 5/3		MO	P	50-120	C	10YR 5/1		MOB	P						
911	13	0-30	C	10YR 4/1			30-50	C	10YR 5/3		MOB	P	50-120	C	10YR 5/1		MOB	P						
912	11	0-30	C	10YR 4/1			30-50	C	10YR 5/3		MOB	P	50-120	C	10YR 5/1		MOB	P						
913	11	0-35	C	10YR 4/1			35-70	C	10YR 5/3		MOB	P	70-120	C	10YR 5/1		MOB	P						
914	12	0-30	HCL	10YR 3/2			30-90	C	2.5Y 5/3		MO	P	90-120	C	10YR 5/2		MO	P						
915	12	0-30	HCL	10YR 3/2			30-90	C	2.5Y 5/3		MO	P	90-120	C	10YR 5/2		MO	P						

Sample No	Altitude	Topsoil					Subsoil 1					Subsoil 2					Subsoil 3							
		Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
975	10	0-30	C	10YR 4/1			30-120	C	10YR 5/1		MOB	P												
976	11	0-30	C	10YR 4/1			30-120	C	10YR 5/1		MOB	P												
977	12	0-35	C	10YR 4/1			35-50	C	10YR 5/3		MOB	P	50-120	C	10YR 5/1		MOB	P						
978	12	0-40	C	10YR 4/2			40-60	C	10YR 5/3		MOB	P	60-120	C	10YR 5/1		MO	P						
979	13	0-35	MCL	10YR 4/2			35-120	C	10YR 5/3		MOBG	P												
980	11	0-35	MCL	10YR 4/2			35-120	C	10YR 5/3		MOBG	P												
981	10	0-35	MCL	10YR 4/2			35-120	C	10YR 5/3		MOBG	P												
982	8	0-35	MCL	10YR 4/2			35-120	C	10YR 5/3		MOBG	P												
983	7	0-40	HCL	10YR 4/2			40-120	CL	10YR 5/3		OBG	M												
984	6	0-40	HCL	10YR 4/2			40-120	CL	10YR 5/3		OBG	M												
985	6	0-40	C	10YR 3/2			40-60	SC	2.5Y 5/2		MO	P	60-120	C	5YR 4/4		G	P						
986	6	0-30	C	10YR 4/1			30-120	C	10YR 5/1		MOB	P												
987	5	0-30	C	10YR 4/1			30-120	C	10YR 5/1		MOB	P												
988	4	0-30	C	10YR 4/1			30-120	C	10YR 5/1		MOB	P												
989	5	0-30	C	10YR 4/1			30-120	C	10YR 5/1		MOB	P												
990	12	0-40	C	10YR 4/2			40-60	C	10YR 5/3		MOB	P	60-120	C	10YR 5/1		MO	P						
991	11	0-40	SL	10YR 4/2			40-60	CL	10YR 5/3		MO	M	60	IMP - MUDSTONE										
992	10	0-40	SL	10YR 4/2			40-60	CL	10YR 5/3		MO	M	60	IMP - MUDSTONE										
993	9	0-35	MCL	10YR 4/2			35-120	C	10YR 5/3		MOBG	P												
994	9	0-35	MCL	10YR 4/2			35-120	C	10YR 5/3		MOBG	P												
995	8	0-40	HCL	10YR 4/2			40-120	CL	10YR 5/1		OBG	M												
996	6	0-35	C	10YR 3/2			40-70	SC	2.5Y 5/2		MO	P	70-120	C	2.5Y 5/1		O	P						
997	6	0-35	C	10YR 3/2			40-70	SC	2.5Y 5/2		MO	P	70-120	C	2.5Y 5/1		O	P						
998	6	0-30	C	10YR 3/2			30-50	SC	2.5Y 6/2		MO	P	50-120	S	10YR 5/6		O	G						
999	6	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
1000	6	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
1001	10	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
1002	11	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
1003	12	0-40	C	10YR 4/2			40-60	C	10YR 5/3		MOB	P	60-120	C	10YR 5/1		MO	P						
1003a	10	0-35	SL	10YR 4/2			35-90	CL	10YR 5/3		MO	M	90-120	C	10YR 5/1		MOB	P						
1004	9	0-40	C	10YR 4/2			40-60	C	10YR 5/3		MOB	P	60-120	C	10YR 5/1		MO	P						
1005	8	0-40	C	10YR 4/2			40-60	C	10YR 5/3		MOB	P	60-120	C	10YR 5/1		MO	P						
1006	6	0-40	HCL	10YR 4/2			40-60	C	10YR 5/1		MOB	M	60-120	C	10YR 5/1		MOB	P						
1007	5	0-35	C	10YR 3/2			40-70	SC	2.5Y 5/2		MO	P	70-120	C	2.5Y 5/1		O	P						
1008	5	0-35	C	10YR 3/2			40-70	SC	2.5Y 5/2		MO	P	70-120	C	2.5Y 5/1		O	P						
1009	6	0-30	C	10YR 3/2			30-50	SC	2.5Y 6/2		MO	P	50-120	S	10YR 5/6		O	G						
1010	6	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
1011	9	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
1012	12	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
1013	8	0-40	C	10YR 4/2			40-60	C	10YR 5/3		MOB	P	60-120	C	10YR 5/1		MO	P						
1014	6	0-40	C	10YR 4/2			40-60	C	10YR 5/3		MOB	P	60-120	C	10YR 5/1		MO	P						
1015	5	0-40	HCL	10YR 4/2			40-60	C	10YR 5/1		MOB	M	60-120	C	10YR 5/1		MOB	P						
1016	5	0-35	C	10YR 3/2			40-70	SC	2.5Y 5/2		MO	P	70-120	C	2.5Y 5/1		O	P						
1017	5	0-30	C	10YR 3/2			30-80	C	10YR 5/1		MO	P	80-120	C	10YR 5/1		MO	P						
1018	5	0-30	C	10YR 3/2			30-80	SC	10YR 6/1		MOB	P	80-100	C	10YR 5/1		MO	P	100-120	S	7.5YR 5/6			P
1019	4	0-30	C	10YR 3/2			30-80	SC	10YR 6/1		MOB	M	80-100	C	10YR 5/1		MO	P	100-120	S	7.5YR 5/6			P
1020	3	0-30	C	10YR 3/2			30-80	SC	10YR 6/1		MOB	M	80-100	C	10YR 5/1		MO	P	100-120	S	7.5YR 5/6			P
1021	6	0-30	C	10YR 3/2			30-80	SCL	10YR 6/1		MOB	M	80-120	C	5YR 4/4		BG	P						
1022	6	0-30	C	10YR 3/2			30-80	SCL	10YR 6/1		MOB	M	80-120	C	5YR 4/4		BG	P						
1023	8	0-40	C	10YR 4/2			40-60	C	10YR 5/3		MOB	P	60-120	C	10YR 5/1		MOB	P						
1024	7	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
1025	6	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
1026	8	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P												
1027	8	0-40	C	10YR 4/2			40-60	C	10YR 5/3		MOB	P	60-120	C	10YR 5/1		MO	P						
1028	6	0-40	C	10YR 4/2			40-60	C	10YR 5/3		MOB	P	60-120	C	10YR 5/1		MO	P						
1029	5	0-40	C	10YR 4/2			40-70	C	10YR 4/2		MOB	P	70	IMP - MUDSTONE										
1030	5	0-40	C	10YR 4/3			40-90	C	10YR 5/3		MOB	P	90	IMP - MUDSTONE										
1031	5	0-40	C	10YR 4/3			40-90	C	10YR 5/3		MOB	P	90	IMP - MUDSTONE										
1032	6	0-30	C	10YR 3/2			30-80	SC	10YR 5/1		MOB	P	80-120	C	5YR 4/4		G	P						
1033	5	0-30	C	10YR 3/2			30-80	SC	10YR 5/1		MOB	M	80-120	C	5YR 4/4		G	P						
1034	4	0-30	C	10YR 3/2			30-80	SC	10YR 5/1		MOB	M	80-120	C	5YR 4/4		G	P						
1035	3	0-30	C	10YR 3/2			30-80	SC	10YR 5/1		MOB	M	80-120	C	5YR 4/4		G	P						
1036	3	0-30	C	10YR 3/2			30-80	SCL	10YR 6/1		MOB	M	80-120	C	5YR 4/4		BG	P						
1037	3	0-30	C	10YR 3/2			30-80	SCL	10YR 6/1		MOB	M	80-120	C	5YR 4/4		BG	P						

Sample No	Altitude	Topsoil				Subsoil 1						Subsoil 2						Subsoil 3							
		Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	
1038	7	0-40	C	10YR 4/2			40-120	S	10YR 5/6																
1039	7	0-50	SC	10YR 4/2			50-120	S	10YR 5/6																
1040	7	0-40	C	10YR 4/2			40-60	C	10YR 5/3		MOB	P	60-120	C	10YR 5/1		MOB	P							
1041	11	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P													
1042	8	0-40	C	10YR 4/3			40-70	C	10YR 5/3		MOB	P	70	IMP - MUDSTONE											
1043	6	0-40	C	10YR 4/3			40-70	C	10YR 5/3		MOB	P	70	IMP - MUDSTONE											
1044	5	0-40	C	10YR 4/3			40-70	C	10YR 5/3		MOB	P	70	IMP - MUDSTONE											
1045	4	0-40	C	10YR 4/3			40-60	C	10YR 5/3		MOB	P	60	IMP - MUDSTONE											
1046	3	0-30	C	10YR 3/2			30-80	SC	10YR 5/1		MOB	M	80-120	C	5YR 4/4		G	P							
1047	3	0-30	C	10YR 3/2			30-80	SC	10YR 5/1		MOB	M	80-120	C	5YR 4/4		G	P							
1048	4	0-30	C	10YR 3/2			30-80	SC	10YR 5/1		MOB	M	80-120	C	5YR 4/4		G	P							
1049	5	0-30	C	10YR 3/2			30-80	SC	10YR 5/1		MOB	M	80-120	C	5YR 4/4		G	P							
1050	5	0-30	C	10YR 3/2			30-80	SCL	10YR 6/1		MOB	M	80-120	C	5YR 4/4		BG	P							
1051	6	0-30	C	10YR 3/2			30-80	SCL	10YR 6/1		MOB	M	80-120	C	5YR 4/4		BG	P							
1052	6	0-50	SC	10YR 4/2			50-120	S	10YR 5/6			P													
1053	7	0-50	SC	10YR 4/2			50-120	S	10YR 5/6			P													
1054	8	0-40	C	10YR 4/2			40-120	C	10YR 5/1		MOB	P													
1055	14	0-40	C	10YR 4/3			40-70	C	10YR 4/2		MOB	P	70	IMP - MUDSTONE											
1056	10	0-40	C	10YR 4/3			40-70	C	10YR 4/2		MOB	P	70	IMP - MUDSTONE											
1057	9	0-40	C	10YR 4/3			40-70	C	10YR 4/2		MOB	P	70	IMP - MUDSTONE											
1058	7	0-40	C	10YR 4/3			40-60	C	10YR 5/3		MOB	P	60	IMP - MUDSTONE											
1059	4	0-30	C	10YR 3/2			30-80	SC	10YR 5/1		MOB	M	80-120	C	5YR 4/4		G	P							
1060	4	0-30	C	10YR 3/2			30-80	SC	10YR 5/1		MOB	M	80-120	C	5YR 4/4		G	P							
1061	4	0-30	C	10YR 3/2			30-80	SC	10YR 5/1		MOB	M	80-120	C	5YR 4/4		G	P							
1062	3	0-40	C	10YR 3/2			40-60	SC	10YR 5/1		MOB	M	60-90	SCL	10YR 6/1		MO	P	90-120	C	5YR 4/4		BG	P	
1063	5	0-40	C	10YR 3/2			40-60	SC	10YR 5/1		MOB	M	60-90	SCL	10YR 6/1		MO	P	90-120	C	5YR 4/4		BG	P	
1064	11	0-40	C	10YR 4/3			40-70	C	10YR 4/2		MOB	M	70	IMP - MUDSTONE											
1065	8	0-40	C	10YR 4/3			40-70	C	10YR 4/2		MOB	M	70	IMP - MUDSTONE											
1066	3	0-30	C	10YR 3/2			30-80	SC	10YR 5/1		MOB	M	80-120	C	5YR 4/4		G	P							

9.90

Appendix 3d - Augur sample results - West Burton 4

Sample No	Topsoil						Subsoil 1						Subsoil 2					
	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
1	61	0-40	SL	7.5YR 4/2	10%		40	IMP										
2	66	0-40	SL	7.5YR 4/2	10%		40	IMP										
3	73	0-30	SL	10YR 3/3			30-120	S	5YR 4/4			P						
4	59	0-30	SL	7.5YR 4/2	10%		30	IMP										
5	60	0-30	Calc HCL	7.5YR 4/2	5%		30-80	ZC	5YR 4/4		BG	C PRISM	80	IMP				
6	63	0-30	Calc HCL	7.5YR 4/2	5%		30-80	ZC	5YR 4/4		BG	P	80	IMP				
7	68	0-30	SL	10YR 3/3	10%		30-70	SC	7.5YR 5/4		MO	P	70-120	S	5YR 4/4			M
8	69	0-30	Calc HCL	7.5YR 4/2			30-90	C	5YR 4/4		BG	P	90	IMP				
9	68	0-30	Calc HCL	7.5YR 4/2			30-90	C	5YR 4/4		BG	P	90	IMP				
10	53	0-30	Calc MCL	7.5YR 4/2	5%		30-80	ZC	5YR 4/4		BG	P	80	IMP				
11	58	0-30	Calc MCL	7.5YR 4/2	5%		30-90	ZC	10YR 7/1		MO	P	90	IMP				
12	61	0-30	Calc HCL	7.5YR 4/2	5%		30-80	ZC	5YR 4/4		BG	P	80	IMP				
13	63	0-35	Calc HCL	7.5YR 4/2			35-70	C	10YR 5/1		MOBG	P	70	IMP				
14	61	0-40	SL	10YR 3/3	10%		40	IMP										
15	60	0-30	Calc HCL	7.5YR 4/2			30-90	C	5YR 4/4		BG	C PRISM	90	IMP				
16	58	0-30	Calc HCL	7.5YR 4/2			30-90	C	5YR 4/4		BG	P	90	IMP				
17	47	0-30	SL	7.5YR 4/2	10%		30	IMP										
18	49	0-30	SL	7.5YR 4/2	5%		30	IMP										
19	51	0-30	Calc HCL	7.5YR 4/2	5%		30-90	ZC	10YR 7/1		MO	P	90	IMP				
20	55	0-30	Calc C	7.5YR 4/2			30-70	C	5YR 4/4		BG	P	70	IMP				
21	58	0-30	Calc C	7.5YR 4/2			30-70	C	5YR 4/4		BG	P	70	IMP				
22	61	0-35	Calc HCL	7.5YR 4/2			35-70	C	10YR 5/1		MOBG	P	70	IMP				
23	60	0-35	Calc HCL	7.5YR 4/2			35-70	C	10YR 5/1		MOBG	C PRISM	70	IMP				
24	58	0-30	Calc HCL	7.5YR 4/2			30-90	C	5YR 4/4		BG	P	90	IMP				
25	57	0-30	Calc HCL	7.5YR 4/2			30-90	C	5YR 4/4		BG	P	90	IMP				
26	56	0-30	Calc HCL	7.5YR 4/2			30-90	C	5YR 4/4		BG	P	90	IMP				
27	43	0-30	SL	7.5YR 4/2	10%		30	IMP										
28	45	0-30	SL	7.5YR 4/2	10%		30	IMP										
29	47	0-30	Calc HCL	7.5YR 4/2	5%		30-80	ZC	5YR 4/4		BG	P	80	IMP				
30	49	0-30	Calc C	7.5YR 4/2	5%		30	IMP										
31	50	0-30	Calc C	7.5YR 4/2			30-70	C	5YR 4/4		BG	P	70	IMP				
32	51	0-40	Calc C	10YR 4/2		OB	40-120	C	5YR 4/4		BG	P						
33	55	0-30	Calc HCL	7.5YR 4/2			30-120	C	5YR 4/4		BG	p						
34	58	0-30	Calc HCL	7.5YR 4/2			30-120	C	5YR 4/4		BG	p						
35	59	0-30	Calc HCL	7.5YR 4/2			30-120	C	5YR 4/4		BG	p						
36	57	0-30	Calc HCL	7.5YR 4/2			30-120	C	5YR 4/4		BG	P						
37	56	0-30	Calc HCL	7.5YR 4/2			30-90	C	5YR 4/4		BG	P	90	IMP				
38	55	0-30	Calc HCL	7.5YR 4/2			30-90	C	5YR 4/4		BG	P	90	IMP				
39	41	0-30	Calc HCL	7.5YR 4/2	5%		30	IMP										
40	44	0-30	Calc C	7.5YR 4/2			30-80	ZC	5YR 4/4		BG	P	80	IMP				
41	47	0-30	Calc C	7.5YR 4/2			30-80	ZC	5YR 4/4		BG	P	80	IMP				
42	51	0-40	Calc C	10YR 4/2		OB	40-120	C	5YR 4/4		BG	P						
43	53	0-30	Calc C	10YR 4/2			30	IMP										
44	58	0-30	Calc C	10YR 4/2			30	IMP										
45	39	0-30	Calc HCL	7.5YR 4/2			30-70	ZC	5YR 4/4		BG	P	70	IMP				
46	43	0-30	Calc C	7.5YR 4/2			30-80	ZC	5YR 4/4		BG	P	80	IMP				
47	45	0-30	Calc HCL	7.5YR 4/2			30-70	ZC	5YR 4/4		BG	P	70	IMP				

Sample No	Altitude	Topsoil				Stoniness	Mottles	Subsoil 1				Structure	Subsoil 2					
		Depth	Texture	Colour	Depth			Texture	Colour	Stoniness	Mottles		Depth	Texture	Colour	Stoniness	Mottles	Structure
48	55	0-35	Calc C	10YR 4/2		OB	35-80	C	5GY8/1		OB	P	80	C	5YR 4/4		BG	P
49	59	0-35	Calc C	10YR 4/2		OB	35-80	C	5GY8/1		OB	P	80	C	5YR 4/4		BG	P
50	39	0-30	Calc HCL	7.5YR 4/2	5%		30	IMP										
51	43	0-30	Calc HCL	7.5YR 4/2			30-70	ZC	5YR 4/4		BG	P	70	IMP				
52	47	0-30	Calc HCL	7.5YR 4/2			30-70	ZC	5YR 4/4		BG	P	70	IMP				
53	51	0-35	Calc C	10YR 4/2		OB	35-80	C	5GY8/1		OB	P	80	C	5YR 4/4		BG	P
54	58	0-35	Calc C	10YR 4/2		OB	35-80	C	5GY8/1		OB	P	80	C	5YR 4/4		BG	P
55	47	0-30	Calc HCL	7.5YR 4/2			30-70	ZC	5YR 4/4		BG	P	70	IMP				
56	51	0-30	Calc HCL	7.5YR 4/2			30-70	ZC	5YR 4/4		BG	P	70	IMP				
57	56	0-40	Calc C	10YR 4/2		OB	40-120	C	5YR 4/4		BG	P						
58	58	0-40	Calc C	10YR 4/2		OB	40-120	C	5YR 4/4		BG	P						
59	59	0-40	Calc C	10YR 4/2		OB	40-120	C	5YR 4/4		BG	P						
60	31	0-35	Calc HCL	7.5YR 4/2			35-50	ZC	5YR 5/4		B	P	50	IMP				
61	37	0-35	Calc HCL	7.5YR 4/2			35-50	ZC	5YR 5/4		B	P	50	IMP				
62	40	0-35	Calc HCL	7.5YR 4/2			35-50	ZC	5YR 5/4		B	P	50	IMP				
63	39	0-30	Calc HCL	7.5YR 4/2			30-70	ZC	5YR 4/4		BG	P	70	IMP				
64	39	0-30	Calc HCL	7.5YR 4/2			30-70	ZC	5YR 4/4		BG	P	70	IMP				
65	57	0-40	Calc C	10YR 4/2		OB	40-120	C	5YR 4/4		BG	P						
66	29	0-35	Calc HCL	7.5YR 4/2			35-50	ZC	5YR 5/4		B	P	50	IMP				
67	34	0-35	Calc MCL	7.5YR 4/2			35-50	ZC	5YR 5/4		B	P	50	IMP				
68	37	0-30	Calc HCL	7.5YR 4/2			30-80	ZC	5YR 5/4		B	P	80	IMP				
69	39	0-35	Calc HCL	7.5YR 4/2			35-50	ZC	5YR 5/4		B	P	50	IMP				
70	45	0-35	Calc MCL	7.5YR 4/2			35-50	ZC	5YR 5/4		B	P	50	IMP				
71	54	0-35	Calc HCL	7.5YR 4/2			35	IMP										
72	32	0-35	Calc HCL	7.5YR 4/2			35-50	ZC	5YR 5/4		B	P	50	IMP				
73	36	0-35	Calc HCL	7.5YR 4/2			35-50	ZC	5YR 5/4		B	P	50	IMP				
74	40	0-35	Calc MCL	7.5YR 4/2			35-50	ZC	5YR 5/4		B	P	50	IMP				
75	41	0-35	Calc HCL	7.5YR 4/2			35-50	ZC	5YR 5/4		B	P	50	IMP				
76	45	0-35	Calc HCL	7.5YR 4/2			35-50	ZC	5YR 5/4		B	P	50	IMP				
77	50	0-30	Calc HCL	7.5YR 4/2			30-70	ZC	5YR 5/4		B	P	70	IMP				
78	51	0-35	Calc HCL	7.5YR 4/2			35-40	ZC	5YR 5/4		B	P	40	IMP				
79	27	0-35	Calc HCL	7.5YR 4/2			35-50	ZC	5YR 5/4		B	P	50	IMP				
80	30	0-35	Calc HCL	7.5YR 4/2			35-50	ZC	5YR 5/4		B	P	50	IMP				
81	33	0-30	Calc HCL	7.5YR 4/2			30	IMP										
82	35	0-30	Calc HCL	7.5YR 4/2			30	IMP										
83	37	0-30	Calc HCL	7.5YR 4/2			30-70	ZC	5YR 5/4		B	P	70	IMP				
84	39	0-30	Calc HCL	7.5YR 4/2			30-70	ZC	5YR 5/4		B	P	70	IMP				
85	40	0-30	Calc HCL	7.5YR 4/2			30-60	ZC	5YR 5/4		B	P	60	IMP				
86	41	0-30	Calc HCL	7.5YR 4/2			30-60	ZC	5YR 5/4		B	P	60	IMP				
87	42	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 5/4		B	P						
88	44	0-30	Calc HCL	7.5YR 4/2			30-70	ZC	5YR 5/4		B	P	70	IMP				
89	25	0-35	Calc HCL	7.5YR 4/2			35-70	ZC	5YR 5/4		B	P	70	IMP				
90	26	0-35	Calc HCL	7.5YR 4/2			35-70	ZC	5YR 5/4		B	P	70	IMP				
91	28	0-20	Calc MCL	7.5YR 4/2			20-30	ZC	5YR 5/4		B	P	30	IMP				
92	30	0-30	Calc MCL	7.5YR 4/2			30-40	ZC	5YR 5/4		B	P	40	IMP				
93	33	0-20	Calc HCL	7.5YR 4/2			20-30	ZC	5YR 5/4		B	P	30	IMP				
94	36	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 5/4		B	P						
95	40	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 5/4		B	P						

Sample No	Altitude	Topsoil				Subsoil 1						Subsoil 2						
		Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
96	44	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 5/4			B	P					
97	45	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 5/4			B	P					
98	45	0-30	Calc HCL	7.5YR 4/2			30-50	ZC	5YR 5/4			B	C PRISM	50	IMP			
99	49	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 5/4			B	P					
100	53	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 5/4			B	P					
101	52	0-30	Calc MCL	7.5YR 4/2			30-70	C	10YR 5/2			MOB	CAB	70-120	C	5YR 5/4	B	C PRISM
102	51	0-30	Calc MCL	7.5YR 4/2			30-70	C	10YR 5/2			MOB	P	70-120	C	5YR 5/4	B	P
103	24	0-30	Calc HCL	7.5YR 4/2			30-70	ZC	5YR 5/4			B	P	70	IMP			
104	25	0-20	Calc HCL	7.5YR 4/2			20-30	ZC	5YR 5/4			B	P	30	IMP			
105	27	0-20	Calc HCL	7.5YR 4/2			20-30	ZC	5YR 5/4			B	P	30	IMP			
106	28	0-20	Calc HCL	7.5YR 4/2			20-30	ZC	5YR 5/4			B	P	30	IMP			
107	29	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 5/4			B	P					
108	33	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 5/4			B	P					
109	35	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 5/4			B	P					
110	37	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 5/4			B	P					
111	36	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 5/4			B	P					
112	38	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 5/4			B	P					
113	40	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 5/4			B	P					
114	50	0-30	Calc MCL	7.5YR 4/2			30-120	ZC	5YR 5/4			B	P					
115	52	0-30	Calc MCL	7.5YR 4/2			30-120	ZC	5YR 5/4			B	P					
116	23	0-30	SL	7.5YR 4/2			30-80	ZSL	5YR 4/4			MB	P	80-120	C	5YR 4/4	GB	P
117	21	0-30	Calc HCL	7.5YR 4/2			30-70	ZC	5YR 5/4			B	P	70	IMP			
118	22	0-30	Calc HCL	7.5YR 4/2			30-70	ZC	5YR 5/4			B	P	70	IMP			
119	23	0-30	Calc HCL	7.5YR 4/2			30-70	ZC	5YR 5/4			B	P	70	IMP			
120	25	0-30	Calc MCL	7.5YR 4/2			30-70	ZC	5YR 5/4			B	P	70	IMP			
121	25	0-30	Calc MCL	7.5YR 4/2			30-60	ZC	5YR 5/4			B	P	60	IMP			
122	26	0-30	Calc HCL	7.5YR 4/2			30-70	ZC	5YR 5/4			B	P	70	IMP			
123	28	0-30	Calc HCL	7.5YR 4/2			30-70	ZC	5YR 5/4			B	P	70	IMP			
124	32	0-30	Calc HCL	7.5YR 4/2			30-80	ZC	7.5YR 6/3			OBG	P	80	C	5YR 4/4	BG	P
125	31	0-30	Calc HCL	7.5YR 4/2			30-80	ZC	7.5YR 6/3			OBG	P	80	C	5YR 4/4	BG	P
126	37	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 5/4			B	P					
127	44	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 5/4			B	P					
128	47	0-30	Calc MCL	7.5YR 4/2			30-120	ZC	5YR 5/4			B	P					
129	49	0-30	Calc MCL	7.5YR 4/2			30-120	ZC	5YR 5/4			B	P					
130	22	0-30	SL	7.5YR 4/2			30-80	ZSL	5YR 4/4			MB	P	80-120	C	5YR 4/4	GB	P
131	20	0-30	SL	7.5YR 4/2			30-40	ZC	7.5YR 4/3				MAB	40	IMP			
132	20	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 5/4			B	P					
133	23	0-30	Calc HCL	7.5YR 4/2			30-80	ZC	7.5YR 6/3			OBG	P	80	C	5YR 4/4	BG	P
134	24	0-30	Calc HCL	7.5YR 4/2			30-80	ZC	7.5YR 6/3			OBG	P	80	C	5YR 4/4	BG	P
135	28	0-30	Calc HCL	7.5YR 4/2			30-80	ZC	7.5YR 6/3			OBG	P	80	C	5YR 4/4	BG	P
136	28	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 5/4			B	P					
137	29	0-30	Calc MCL	7.5YR 4/2			30-120	ZC	5YR 5/4			B	P					
138	30	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 5/4			B	P					
139	33	0-30	Calc MCL	7.5YR 4/2			30-120	ZC	5YR 5/4			B	P					
140	44	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 5/4			B	P					
141	21	0-30	SL	7.5YR 4/2			30-80	ZSL	5YR 4/4			MB	P	80-120	C	5YR 4/4	GB	P
142	20	0-30	SL	7.5YR 4/2			30-80	ZSL	5YR 4/4			MB	P	80-120	C	5YR 4/4	GB	P
143	18	0-30	SL	7.5YR 4/2			30-40	ZC	7.5YR 4/3				MAB	40	IMP			

Sample No	Altitude	Topsoil				Subsoil 1						Subsoil 2						
		Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
144	19	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 5/4			B	P					
145	18	0-40	Calc HCL	10YR 4/3			40-120	ZC	5YR 4/4			B	P					
146	18	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 4/4			B	P					
147	20	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 4/4			B	P					
148	22	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 4/4			B	P					
149	28	0-35	Calc HCL	7.5YR 4/2			35-50	ZC	5YR 5/4			OB	P	50	IMP			
150	29	0-35	Calc HCL	7.5YR 4/2			35-50	ZC	5YR 5/4			B	P	50	IMP			
151	30	0-30	Calc HCL	7.5YR 4/2			30-40	ZC	5YR 5/4			OB	C PRISM	40	IMP			
152	33	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 5/4			B	P					
153	38	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 5/4			OB	P					
154	41	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 5/4			B	P					
155	21	0-30	SL	7.5YR 4/2			30-80	ZSL	5YR 4/4			MB	P	80-120	C	5YR 4/4	GB	P
156	18	0-30	SL	7.5YR 4/2			30-80	ZSL	5YR 4/4			MB	P	80-120	C	5YR 4/4	GB	P
157	17	0-30	SL	7.5YR 4/2			30-80	ZSL	5YR 4/4			MB	P	80-120	C	5YR 4/4	GB	P
158	16	0-30	SL	7.5YR 4/2			30-80	ZSL	5YR 4/4			MB	P	80-120	C	5YR 4/4	GB	P
159	18	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 4/4			B	P					
160	20	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 4/4			B	P					
161	22	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 4/4			B	P					
162	23	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 4/4			B	P					
163	24	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 4/4			B	P					
164	26	0-30	Calc HCL	7.5YR 4/2			30-40	ZC	5YR 5/4			OB	P	40	IMP			
165	28	0-30	Calc HCL	7.5YR 4/2			30-40	ZC	5YR 5/4			OB	P	40	IMP			
166	31	0-30	Calc MCL	7.5YR 4/2			30-40	ZC	5YR 5/4			OB	P	40	IMP			
167	32	0-30	Calc MCL	7.5YR 4/2			30-40	ZC	5YR 5/4			OB	P	40	IMP			
168	22	0-30	SL	7.5YR 4/2			30-50	ZSL	5YR 4/4			MB	P	50-120	C	5YR 4/4	GB	P
169	20	0-30	SL	7.5YR 4/2			30-80	ZSL	5YR 4/4			MB	P	80-120	C	5YR 4/4	GB	P
170	18	0-30	SL	7.5YR 4/2			30-80	ZSL	5YR 4/4			MB	P	80-120	C	5YR 4/4	GB	P
171	19	0-30	SL	7.5YR 4/2			30-80	ZSL	5YR 4/4			MB	P	80-120	C	5YR 4/4	GB	P
172	18	0-30	Calc HCL	7.5YR 4/2			30-60	ZC	5YR 5/4			B	P	60	IMP			
173	18	0-30	Calc HCL	7.5YR 4/2			30-60	ZC	5YR 5/4			B	P	60	IMP			
174	20	0-30	Calc HCL	7.5YR 4/2			30-60	ZC	5YR 5/4			B	P	60	IMP			
175	24	0-30	Calc HCL	7.5YR 4/2			30-50	ZC	5YR 5/4			B	P	50	IMP			
176	25	0-30	Calc HCL	7.5YR 4/2			30-50	ZC	5YR 5/4			B	P	50	IMP			
177	27	0-30	Calc HCL	10YR 4/3			30-120	C	7.5YR 6/3			OB	P					
178	28	0-30	Calc HCL	10YR 4/3			30-120	C	7.5YR 6/3			OB	P					
179	31	0-30	Calc HCL	10YR 4/3			30-120	C	7.5YR 6/3			OB	P					
180	35	0-30	Calc MCL	10YR 4/3			30-120	C	7.5YR 6/3			OB	P					
181	38	0-40	Calc MCL	10YR 4/3			40-120	ZC	5YR 4/4			B	P					
182	42	0-40	Calc MCL	10YR 4/3			40-120	ZC	5YR 4/4			B	P					
183	21	0-40	SL	7.5YR 4/2	15%		40	IMP										
184	19	0-40	SL	7.5YR 4/2	15%		40	IMP										
185	17	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 4/4			OB	P					
186	16	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 4/4			OB	P					
187	18	0-30	Calc HCL	7.5YR 4/2			40	IMP										
188	20	0-30	Calc HCL	5YR 4/4			30-50	C	5GY 8/1			OB	P	50	IMP			
189	22	0-30	Calc HCL	5YR 4/4			30-50	C	5GY 8/1			OB	P	50	IMP			
190	23	0-30	Calc HCL	7.5YR 4/2			30-50	ZC	5YR 5/4			B	P	50	IMP			
191	24	0-30	Calc HCL	7.5YR 4/2			30-50	ZC	5YR 5/4			B	P	50	IMP			

Sample No	Altitude	Topsoil				Subsoil 1						Subsoil 2						
		Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
240	15	0-30	Calc HCL	7.5YR 4/2			30-120	ZC	5YR 4/4									
241	17	0-35	Calc HCL	5YR 4/2			35-40	C	5YR 4/4				40	IMP				
242	18	0-35	Calc HCL	5YR 4/2			35-40	C	5YR 4/4				40	IMP				
243	20	0-30	Calc HCL	5YR 4/4			30-50	C	5GY 8/1				50	IMP				
244	24	0-30	Calc HCL	5YR 4/4			30-50	C	5GY 8/1				50	IMP				
245	27	0-35	Calc HCL	5YR 4/2			35-40	C	5YR 4/4				40	IMP				
246	29	0-40	Calc HCL	7.5YR 4/2			40	IMP										
247	32	0-30	Calc HCL	10YR 4/2			30-70	C	5YR 4/4				70	IMP				
248	27	0-30	Calc HCL	5YR 4/2			30-80	C	5YR 4/4				80	IMP				
249	30	0-30	Calc HCL	5YR 4/2			30-80	C	5YR 4/4				80	IMP				
250	32	0-30	Calc HCL	5YR 4/4			30-50	C	5GY 8/1				50	IMP				
251	33	0-30	Calc HCL	5YR 4/4			30-50	C	5GY 8/1				50	IMP				
252	34	0-35	Calc HCL	5YR 4/2			35-40	C	5YR 4/4				40	IMP				
253	32	0-35	Calc HCL	5YR 4/2			35-40	C	5YR 4/4				40	IMP				
254	34	0-30	Calc HCL	5YR 4/4			30-50	C	5GY 8/1				50	IMP				

35.51

Appendix 3e - Augur sample results - West Burton Substation

Sample No	Topsoil					Subsoil 1					Subsoil 2					Subsoil 3								
	Altitude	Depth	Texture	Colour	Stoniness	Mottles	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure	Depth	Texture	Colour	Stoniness	Mottles	Structure
1067	13	0-40	HCL	7.5YR 3/2			40-120	C	5YR 4/4		FG	P												
1068	12	0-40	HCL	7.5YR 3/2			40-60	SC	5YR 5/3		FBG	P	60-90	C	10YR 5/1		MOB	P	90-120	C	2.5YR 4/4		FG	P
1069	11	0-40	HCL	7.5YR 3/2			40-120	C	5YR 4/4		FG	C PRISM												
1070	13	0-30	C	7.5YR 3/2			30-50	C	5YR 5/3		FBG	P	50	IMP										
1071	12	0-40	C	7.5YR 3/2			40-60	S	5YR 5/3		FBG	M	60-120	C	2.5YR 4/4		FG	P						
1072	11	0-40	C	7.5YR 3/2			40-60	SC	5YR 5/3		FB	P	60-120	C	2.5YR 4/4		FG	P						
1073	12	0-40	HCL	7.5YR 3/2			40-120	C	5YR 4/4		FG	P												

Appendix 3f – Selection of Trial Pit Descriptions

Sample point 15:

Surface flat and partly slaked

Horizon 1: 0-30cm Brown (7.5YR 4/2) heavy clay loam with a weak fine angular blocky structure

Horizon 2: 30-90cm Reddish brown (5YR 4/4) clay with a coarse prismatic structure and common black and grey mottles.

At 90cm the ground became impenetrable to a soil augur and only small chips could be removed with a heavy spade. Colour continued to be reddish brown as above.

Sample point 70:

Surface flat and partly slaked in summer – unslaked at second visit in winter.

Horizon 1: 0-35cm Brown (7.5YR 4/2) medium clay loam with generally a weak fine subangular blocky structure but small areas where a medium platy structure appeared to be forming.



Horizon 2: 35-50cm Reddish brown (2.5YR 4/4) silty clay with a medium to coarse prismatic structure and few black mottles.



At 50cm the ground became impenetrable to a soil augur and only small chips could be removed with a heavy spade. Colour continued to be reddish brown as above.

Sample point 131:

Surface flat and partly slaked at both visits.

Horizon 1: 0-30cm Brown (7.5YR 4/2) sandy loam with a weak fine subangular blocky structure



Horizon 2: 30-40cm Brown (7.5YR 4/3) silty clay with a medium angular blocky structure



Horizon 3: 40cm – 120cm Reddish Brown (5YR 4/4) clay with any grey and black mottles and a coarse prismatic structure.



*In the summer, at 40cm the ground became impenetrable to a soil augur and only small chips could be removed with a heavy spade. Colour continued to be reddish brown as above. On returning in January it was found that this layer was as described above.

Sample point 194:

Surface flat, partly slaked in summer unslaked in winter

Horizon 1: 0-30cm Brown (10YR 4/3) heavy clay loam with a weak coarse subangular blocky structure.

Horizon 2: 30-70cm Dark greyish brown (10YR 4/2) clay with a coarse angular blocky structure and many ochreous mottles.

Horizon 3: 70-120cm Grey (10YR 6/1) clay with a massive structure and many ochreous mottles.

Sample point 257:

Surface unslaked at both visits

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

Horizon 2: 40-60cm Brown (10YR 5/3) clay with a weak medium angular blocky structure and ochreous and black mottles.

Horizon 3: 60-120cm Grey (10YR 5/1) clay with a massive structure and ochreous and black mottles.

Sample point 286:

Surface state unrecorded.

Horizon 1: 0-30cm very dark greyish brown (10YR 3/2) sandy clay loam with a weak fine subangular blocky structure.

Horizon 2: 30-100cm Brown (10YR 5/3) sandy clay with a coarse angular blocky structure and many ochreous mottles



Horizon 3: 100-120cm Grey (10YR 5/1) Clay with a massive structure

Sample point 413:

Surface unslaked at both visits

Horizon 1: 0-30cm Very dark greyish brown (10YR 3/2) clay with a weak coarse subangular blocky structure.

Horizon 2: 30-60cm Light olive brown (2.5Y 5/3) clay with a weak coarse subangular blocky structure and any ochreous mottles

Horizon 3: 60-120cm Grey (10YR 5/1) clay with a massive structure and many ochreous mottles

Sample Point 643:

Surface unslaked at both visits

Horizon 1: 0-40cm Dark greyish brown (10YR 4/2) medium clay loam with a weak medium angular blocky structure

Horizon 2: 40-70cm Brown (10YR 5/3) sandy clay with a coarse platy structure and many ochreous mottles



Horizon 3: Grey (10YR 5/1) clay with a coarse prismatic structure and many ochreous and black mottles.

Sample Point 681:

Surface flat and unslaked.

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

Horizon 2: 35-120cm Grey (10YR 5/1) clay with a coarse prismatic structure and many ochreous and black mottles

Sample point 768:

Surface flat and unslaked.

Horizon 1: 0-35cm Very dark greyish brown (10YR 3/2) sandy clay loam with a weak medium subangular blocky structure



Horizon 2: 35-120cm Brown (10YR 5/3) clay with a weak medium angular blocky structure and few ochreous and black mottles.

Sample point 800:

Surface flat and unslaked.

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

Horizon 2: 35-120cm Grey (10YR 5/1) clay with a massive structure and many ochreous and black mottles.

Sample point 963:

Surface flat and unslaked.

Horizon 1: 0-35cm Dark grey (10YR 4/1) clay with a weak coarse subangular blocky structure

Horizon 2: 35-50cm Brown (10YR 5/3) clay with a coarse angular blocky structure and many ochreous and black mottles.

Horizon 3: 50-120cm Grey (10YR 5/1) clay with a coarse prismatic structure and many ochreous and black mottles



ANALYTICAL REPORT

Report Number	82583-22	W250	AMET PROPERTY
Date Received	11-JAN-2022		HENWICK BARN
Date Reported	17-JAN-2022		BULWICK
Project	SOIL		CORBY
Reference	AMET PROPERTY		NORTHANTS
Order Number			NN17 3DU

Laboratory Reference		SOIL540870	SOIL540871	SOIL540872	SOIL540873	SOIL540874	SOIL540875				
Sample Reference		70	71	130	210	640	667				
Determinand	Unit	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL				
Sand 2.00-0.063mm	% w/w	26	25	52	26	66	54				
Silt 0.063-0.002mm	% w/w	50	46	32	50	17	20				
Clay <0.002mm	% w/w	24	29	16	24	17	26				
Textural Class **		MCL	HCL	SL	MCL	SL	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 **This test report shall not be reproduced, except in full, without the written approval of the laboratory.**

** 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.
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ANALYTICAL REPORT

Report Number	82584-22	W250	AMET PROPERTY
Date Received	11-JAN-2022		HENWICK BARN
Date Reported	17-JAN-2022		BULWICK
Project	SOIL		CORB Y
Reference	AMET PROPERTY		NORTHANTS
Order Number			NN17 3DU

Laboratory Reference		SOIL540876	SOIL540877	SOIL540878	SOIL540879	SOIL540880	SOIL540881				
Sample Reference		257	482	579	768	1019	1053				
Determinand	Unit	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL				
Sand 2.00-0.063mm	% w/w	67	54	61	58	39	53				
Silt 0.063-0.002mm	% w/w	11	12	10	19	14	12				
Clay <0.002mm	% w/w	22	34	29	23	47	35				
Textural Class **		SCL	SC	SCL	SCL	C	SC				

Notes

Analysis Notes The sample submitted was of adequate size to complete all analysis requested.
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ANALYTICAL REPORT

Report Number	18620-22	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		SOIL563875	SOIL563876	SOIL563877	SOIL563878	SOIL563879	SOIL563880				
Sample Reference		WEST BURTON 1019	WEST BURTON 579	WEST BURTON 667	WEST BURTON 640	WEST BURTON 210	WEST BURTON 183				
Determinand	Unit	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL				
Coarse Sand 2.00-0.63mm	% w/w	1	2	2	1	1	2				
Medium Sand 0.63-0.212mm	% w/w	12	27	32	34	9	26				
Fine Sand 0.212-0.063mm	% w/w	20	31	26	31	10	20				
Silt 0.063-0.002mm	% w/w	15	10	19	15	54	35				
Clay <0.002mm	% w/w	52	30	21	19	26	17				
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	4.3	2.6	2.3	1.5	2.6	3.2				
Organic Matter LOI	% w/w	7.7	4.8	3.2	3.4	3.4	3.4				
Neutralising Value as CaCO3 eq.	% w/w	1.3	1.4	<1	<1	3.8	1.1				
Neutralising Value as CaO eq.	% w/w	<1	<1	<1	<1	2.1	<1				
Textural Class **		C	SC/SCL	SCL	SCL	MCL/MZCL	mSZL				

Notes

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ANALYTICAL REPORT

Report Number	18621-22	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		SOIL563881	SOIL563882	SOIL563883	SOIL563884	SOIL563885	SOIL563886				
Sample Reference		WEST BURTON 257	WEST BURTON 1053	WEST BURTON 482	WEST BURTON 768	WEST BURTON 71	WEST BURTON 70				
Determinand	Unit	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL				
Coarse Sand 2.00-0.63mm	% w/w	2	1	3	1	1	2				
Medium Sand 0.63-0.212mm	% w/w	54	33	37	23	11	6				
Fine Sand 0.212-0.063mm	% w/w	11	21	14	32	12	9				
Silt 0.063-0.002mm	% w/w	10	12	12	20	46	51				
Clay <0.002mm	% w/w	23	33	34	24	30	32				
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	2.2	1.8	2.1	2.0	2.1	2.0				
Organic Matter LOI	% w/w	3.5	4.9	4.2	5.1	3.7	3.3				
Neutralising Value as CaCO3 eq.	% w/w	1.5	1.6	3.8	<1	2.5	3.1				
Neutralising Value as CaO eq.	% w/w	<1	<1	2.1	<1	1.4	1.7				
Textural Class **		SCL	SC	SC	SCL	HCL	HZCL				

Notes

Analysis Notes The sample submitted was of adequate size to complete all analysis requested.
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 The results are presented on a dry matter basis unless otherwise stipulated.

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ADAS (UK) Textural Class Abbreviations

The texture classes are denoted by the following abbreviations:

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

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

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

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

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

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

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

Appendix 4a - Wetness and Droughtiness Assessment - West Burton 1

Sample No	Wetness Assessment				Grade	Droughtiness Assessment		Grade	ALC Grade
	Depth to SPL	Gley	Reddish	Wetness Class	According to Wetness	MB Wheat	MB Potato	According to Droughtiness	
639	70	70	NO	III	2	18.06	-16.66	3a	3a
640	70	70	NO	III	2	18.06	-16.66	3a	3a
641			NO	I	1	-18.94	-31.66	3b	3b
642	40	40	NO	III	3a				3a
643	40	40	NO	III	3a				3a
644	40	40	NO	III	3a				3a
645	50	50	NO	III	3a				3a
646	35	30	NO	III	3b				3b
647	40	40	NO	III	3b				3b
648	35	30	NO	III	3b				3b
649	35	0	NO	III	3b				3b
650	35	0	NO	III	3b				3b
651	35	0	NO	III	3b				3b
652	35	0	NO	III	3b				3b
653	35	0	NO	III	3b				3b
654	35	0	NO	III	3b				3b
655	35	0	NO	III	3b				3b
656	40	40	NO	III	3a				3a
657	35	30	NO	III	3a				3a
658	35	30	NO	III	3b				3b
659	35	30	NO	III	3b				3b
660	35	0	NO	III	3b				3b
661	35	0	NO	III	3b				3b
662	35	0	NO	III	3b				3b
663	35	0	NO	III	3b				3b
664	35	0	NO	III	3b				3b
665	40	40	NO	III	3a				3a
666	35	30	NO	III	3a				3a
667	35	30	NO	III	3a				3a
668	35	30	NO	III	3b				3b
669	35	30	NO	III	3b				3b
670	35	30	NO	III	3b				3b
671	35	30	NO	III	3b				3b
672	35	30	NO	III	3b				3b
673	35	30	NO	III	3b				3b
674	40	40	NO	III	3a				3a
675	35	30	NO	III	3a				3a
676	35	30	NO	III	3b				3b
677	35	30	NO	III	3b				3b
678	35	30	NO	III	3b				3b
679	35	30	NO	III	3b				3b
680	35	30	NO	III	3b				3b
681	35	0	NO	III	3b				3b
682	35	0	NO	III	3b				3b
683	35	0	NO	III	3b				3b
684	0	40	NO	III	3a				3a
685	35	0	NO	III	3a				3a
686	35	0	NO	III	3a				3a
687	35	0	NO	III	3b				3b
688	35	30	NO	III	3b				3b
689	35	30	NO	III	3b				3b

Sample No	Wetness Assesment				Grade	Droughtiness Assessment		Grade	ALC Grade
	Depth to SPL	Gley	Reddish	Wetness Class	Wetness According to	MB Wheat	MB Potato	According to Droughtiness	
690	35	30	NO	III	3b				3b
691	35	0	NO	III	3b				3b
692	35	0	NO	III	3b				3b
693	35	0	NO	III	3b				3b
694	35	30	NO	III	3a				3a
695	35	30	NO	III	3a				3a
696	35	0	NO	III	3b				3b
697	35	0	NO	III	3b				3b
698	35	0	NO	III	3b				3b
699	35	0	NO	III	3b				3b
700	35	0	NO	III	3b				3b
701	35	0	NO	III	3b				3b
702	35	0	NO	III	3b				3b
703	35	0	NO	III	3b				3b
704	50	50	NO	III	3b				3b
705	35	0	NO	III	3b				3b
706	35	0	NO	III	3b				3b
707	35	0	NO	III	3b				3b
708	35	0	NO	III	3b				3b
709	35	0	NO	III	3b				3b
710	35	0	NO	III	3b				3b
711	35	0	NO	III	3b				3b
712	35	0	NO	III	3b				3b
713	35	0	NO	III	3b				3b
714	50	50	NO	III	3b				3b
715	35	0	NO	III	3b				3b
716	35	0	NO	III	3b				3b
717	35	0	NO	III	3b				3b
718	35	0	NO	III	3b				3b
719	35	0	NO	III	3b				3b
720	35	0	NO	III	3b				3b
721	35	0	NO	III	3b				3b
722	35	0	NO	III	3b				3b
723	35	0	NO	III	3b				3b
724	35	0	NO	III	3b				3b
725	35	0	NO	III	3b				3b
726	35	30	NO	III	3b				3b
727	35	30	NO	III	3b				3b
728	35	0	NO	III	3b				3b
729	35	0	NO	III	3b				3b
730	35	0	NO	III	3b				3b

Appendix 4b - Wetness and Droughtiness Assessment - West Burton 2

Sample No	Wetness Assessment			Wetness Class	Grade	Droughtiness Assessment		Grade	ALC Grade
	Depth to SPL	Gley	Reddish		According to Wetness	MB Wheat	MB Potato	According to Droughtiness	
731	35	35		III	3b				3b
732	35	35		III	3b				3b
733	35	35		III	3b				3b
734	35	35		III	3b				3b
735	35	35		III	3b				3b
736	35	35		III	3b				3b
737	35	35		III	3b				3b
738	35	30		III	3b				3b
739	35	30		III	3b				3b
740	35	35		III	3b				3b
741	35	35		III	3b				3b
742	35	35		III	3b				3b
743	35	35		III	3b				3b
744	35	35		III	3b				3b
745	35	35		III	3b				3b
746	35	35		III	3b				3b
747	35	35		III	3b				3b
748	35	35		III	3b				3b
749	35	35		III	3b				3b
750	35	35		III	3b				3b
751	35	35		III	3b				3b
752	35	35		III	3b				3b
753	35	35		III	3b				3b
754	35	35		III	3b				3b
755	35	35		III	3b				3b
756	35	30		III	3b				3b
757	35	30		III	3b				3b
758	35	30		III	3b				3b
759	35	30		III	3b				3b
760	35	30		III	3b				3b
761	35	35		III	3b				3b
762	35	35		III	3b				3b
763	35	35		III	3b				3b
764	35	35		III	3b				3b
765	35	35		III	3a				3a
766	45	40		III	3a				3a
767	35	35		III	3a				3a
768	35	35		III	3a				3a
769	35	35		III	3a				3a
770	35	30		III	3b				3b
771	35	30		III	3b				3b
772	35	30		III	3b				3b
773	35	30		III	3b				3b
774	35	30		III	3b				3b
775	35	30		III	3b				3b
776	35	35		III	3b				3b
777	35	35		III	3b				3b
778	35	35		III	3b				3b
779	35	35		III	3b				3b
780	35	35		III	3b				3b
781	35	35		III	3b				3b
782	35	35		III	3b				3b
783	35	35		III	3b				3b
784	35	35		III	3b				3b
785	35	35		III	3b				3b
786	35	35		III	3b				3b

Sample No	Wetness Assesment			Wetness Class	Grade According to Wetness	Droughtiness Assessment		Grade According to Droughtiness	ALC Grade
	Depth to SPL	Gley	Reddish			MB Wheat	MB Potato		
787	35	35		III	3b				3b
788	35	35		III	3b				3b
789	35	35		III	3b				3b
790	35	35		III	3b				3b
791	35	30		III	3b				3b
792	35	30		III	3b				3b
793	35	30		III	3b				3b
794	35	30		III	3b				3b
795	35	30		III	3b				3b
796	35	30		III	3b				3b
797	35	35		III	3b				3b
798	35	35		III	3b				3b
799	35	35		III	3b				3b
800	35	35		III	3b				3b
801	35	35		III	3b				3b
802	35	35		III	3b				3b
803	35	35		III	3b				3b
805	35	35		III	3b				3b
806	35	35		III	3b				3b
807	35	35		III	3b				3b
808	35	35		III	3b				3b
809	35	35		III	3b				3b
810	35	35		III	3b				3b
811	35	30		III	3b				3b
812	35	30		III	3b				3b
813	35	30		III	3b				3b
814	35	30		III	3b				3b
815	35	35		III	3b				3b
816	35	35		III	3b				3b
817	35	35		III	3b				3b
818	35	35		III	3b				3b
819	35	35		III	3b				3b
820	35	35		III	3b				3b
821	35	35		III	3b				3b
822	35	35		III	3b				3b
823	35	35		III	3b				3b
824	35	35		III	3b				3b
825	35	35		III	3b				3b
826	35	35		III	3b				3b
827	35	30		III	3b				3b
828	35	30		III	3b				3b
829	35	30		III	3b				3b
830	35	30		III	3b				3b
831	35	30		III	3b				3b
832	35	30		III	3b				3b
833	35	30		III	3b				3b
834	35	30		III	3b				3b
835	35	35		III	3b				3b
836	35	35		III	3b				3b
837	35	40		III	3b				3b
838	35	40		III	3b				3b
839	35	35		III	3b				3b
840	35	35		III	3b				3b
841	35	35		III	3b				3b
842	35	35		III	3b				3b
843	35	35		III	3b				3b
844	35	35		III	3b				3b

Sample No	Wetness Assesment			Wetness Class	Grade According to Wetness	Droughtiness Assessment		Grade According to Droughtiness	ALC Grade
	Depth to SPL	Gley	Reddish			MB Wheat	MB Potato		
845	35	35		III	3b				3b
846	35	30		III	3b				3b
847	35	35		III	3b				3b
848	35	35		III	3b				3b
849	35	35		III	3b				3b
850	35	35		III	3b				3b
851	35	35		III	3b				3b
852	35	35		III	3b				3b
853	35	30		III	3b				3b
854	40	40		III	3b				3b
855	40	40		III	3b				3b
856	35	35		III	3b				3b
857	35	35		III	3b				3b
858	35	30		III	3b				3b
859	35	30		III	3b				3b
860	35	30		III	3b				3b
860a	35	30		III	3b				3b
861	35	35		III	3b				3b
862	35	35		III	3b				3b
863	35	40		III	3b				3b
864	35	35		III	3b				3b
865	35	35		III	3b				3b
866	35	35		III	3b				3b
867	35	35		III	3b				3b
868	35	35		III	3b				3b
869	35	35		III	3b				3b
870	35	35		III	3b				3b
871	35	35		III	3b				3b
872	35	35		III	3b				3b
873	35	30		III	3b				3b
874	35	30		III	3b				3b
875	35	30		III	3b				3b
876	35	30		III	3b				3b
877	35	30		III	3b				3b
878	35	30		III	3b				3b
879	35	30		III	3b				3b
880	35	30		III	3b				3b
881	35	35		III	3b				3b
882	35	35		III	3b				3b
882a	35	30		III	3b				3b
882b	35	35		III	3b				3b
882c	35	35		III	3b				3b
882d	35	30		III	3b				3b
883	35	40		III	3b				3b
884	35	40		III	3b				3b
885	35	35		III	3b				3b
886	35	35		III	3b				3b
887	35	30		III	3b				3b
888	35	30		III	3b				3b
889	35	30		III	3b				3b
890	35	30		III	3b				3b
891	35	30		III	3b				3b
892	35	30		III	3b				3b
893	35	30		III	3b				3b
894	35	30		III	3b				3b
895	35	30		III	3b				3b
896	35	30		III	3b				3b

Sample No	Wetness Assesment			Wetness Class	Grade	Droughtiness Assessment		Grade	ALC Grade
	Depth to SPL	Gley	Reddish		According to Wetness	MB Wheat	MB Potato	According to Droughtiness	
897	35	20		III	3b				3b
898	35	30		III	3b				3b
899	35	30		III	3b				3b
900	35	30		III	3b				3b
901	35	35		III	3b				3b
902	35	35		III	3b				3b
902a	35	35		III	3b				3b
902b	35	35		III	3b				3b
903	35	40		III	3b				3b
904	35	40		III	3b				3b
905	35	35		III	3b				3b
906	35	35		III	3b				3b
907	35	35		III	3b				3b
908	35	30		III	3b				3b
909	35	30		III	3b				3b
910	35	30		III	3b				3b
911	35	30		III	3b				3b
912	35	30		III	3b				3b
913	35	35		III	3b				3b
914	35	30		III	3b				3b
915	35	30		III	3b				3b
916	35	30		III	3b				3b
917	35	35		III	3b				3b
918	35	30		III	3b				3b
919	35	30		III	3b				3b
920	35	30		III	3b				3b
921	35	30		III	3b				3b
922	35	30		III	3b				3b
923	35	30		III	3b				3b
923a	35	30		III	3b				3b
924	35	35		III	3b				3b
925	35	35		III	3b				3b
926	35	35		III	3b				3b
927	35	30		III	3b				3b
928	35	30		III	3b				3b
929	35	35		III	3b				3b
930	35	35		III	3b				3b
931	35	35		III	3b				3b
932	35	35		III	3b				3b
933	35	30		III	3b				3b
934	35	30		III	3b				3b
935	35	30		III	3a				3a
935a	35	30		III	3b				3b
936	35	30		III	3b				3b
937	35	30		III	3b				3b
938	35	30		III	3b				3b
939	35	30		III	3b				3b
940	35	30		III	3b				3b
941	35	30		III	3b				3b
941a	35	30		III	3b				3b
942	35	30		III	3b				3b
943	35	30		III	3b				3b
944	35	30		III	3b				3b
945	35	30		III	3b				3b
946	35	30		III	3b				3b
947	35	35		III	3b				3b
948	35	35		III	3b				3b

Sample No	Wetness Assesment		Wetness Class	Grade	Droughtiness Assessment		Grade	ALC Grade
	Depth to SPL	Gley Reddish		According to Wetness	MB Wheat	MB Potato	According to Droughtiness	
949	35	35	III	3b				3b
950	35	35	III	3b				3b
951	35	30	III	3b				3b
952	35	30	III	3b				3b
953	35	30	III	3b				3b
954	35	30	III	3b				3b
955	35	30	III	3a				3a
956	35	30	III	3a				3a
956a	40	40	III	3b				3b
956b	35	35	III	3b				3b
957	35	30	III	3b				3b
958	35	30	III	3b				3b
959	35	30	III	3b				3b
960	35	30	III	3b				3b
961	35	30	III	3b				3b
962	35	30	III	3b				3b
963	35	35	III	3b				3b
964	35	35	III	3b				3b
965	35	35	III	3b				3b
966	35	35	III	3a				3a
967	35	35	III	3a				3a
968		30	I	3a				3a
969	35	40	III	3b				3b
970	35	40	III	3b				3b
971	35	40	III	3b				3b
972	35	30	III	3b				3b
973	35	30	III	3b				3b
974	35	30	III	3b				3b
975	35	30	III	3b				3b
976	35	30	III	3b				3b
977	35	35	III	3b				3b
978	40	40	III	3b				3b
979	35	35	III	3a				3a
980	35	35	III	3a				3a
981	35	35	III	3a				3a
982	35	35	III	3a				3a
983	40	40	III	3b				3b
984	40	40	III	3b				3b
985	35	40	III	3b				3b
986	35	30	III	3b				3b
987	35	30	III	3b				3b
988	35	30	III	3b				3b
989	35	30	III	3b				3b
990	40	40	III	3b				3b
991	40	40	III	2				2
992	40	40	III	2				2
993	35	35	III	3a				3a
994	35	35	III	3a				3a
995	40	40	III	3b				3b
996	35	40	III	3b				3b
997	35	40	III	3b				3b
998		30	I	3a				3a
999	35	40	III	3b				3b
1000	35	40	III	3b				3b
1001	35	40	III	3b				3b
1002	35	40	III	3b				3b
1003	40	40	III	3b				3b

Sample No	Wetness Assesment			Wetness Class	Grade According to Wetness	Droughtiness Assessment		Grade According to Droughtiness	ALC Grade
	Depth to SPL	Gley	Reddish			MB Wheat	MB Potato		
1003a	35	35		III	2				2
1004	40	40		III	3b				3b
1005	40	40		III	3b				3b
1006	40	40		III	3b				3b
1007	35	40		III	3b				3b
1008	35	40		III	3b				3b
1009		30		I	3a				3a
1010	35	40		III	3b				3b
1011	35	40		III	3b				3b
1012	35	40		III	3b				3b
1013	40	40		III	3b				3b
1014	40	40		III	3b				3b
1015	40	40		III	3b				3b
1016	35	40		III	3b				3b
1017	35	30		III	3b				3b
1018	35	30		III	3b				3b
1019	35	30		III	3b				3b
1020	35	30		III	3b				3b
1021	35	30		III	3b				3b
1022	35	30		III	3b				3b
1023	35	40		III	3b				3b
1024	35	40		III	3b				3b
1025	35	40		III	3b				3b
1026	35	40		III	3b				3b
1027	40	40		III	3b				3b
1028	40	40		III	3b				3b
1029	40	40		III	3b				3b
1030	40	40		III	3b				3b
1031	40	40		III	3b				3b
1032	35	30		III	3b				3b
1033	35	30		III	3b				3b
1034	35	30		III	3b				3b
1035	35	30		III	3b				3b
1036	35	30		III	3b				3b
1037	35	30		III	3b				3b
1038				I	3a				3a
1039				I	3a				3a
1040	35	40		III	3b				3b
1041	35	40		III	3b				3b
1042	40	40		III	3b				3b
1043	40	40		III	3b				3b
1044	40	40		III	3b				3b
1045	40	40		III	3b				3b
1046	35	30		III	3b				3b
1047	35	30		III	3b				3b
1048	35	30		III	3b				3b
1049	35	30		III	3b				3b
1050	35	30		III	3b				3b
1051	35	30		III	3b				3b
1052				I	3a				3a
1053				I	3a				3a
1054	35	40		III	3b				3b
1055	40	40		III	3b				3b
1056	40	40		III	3b				3b
1057	40	40		III	3b				3b
1058	40	40		III	3b				3b
1059	35	30		III	3b				3b

Sample No	Depth to SPL	Wetness Assesment		Wetness Class	Grade According to Wetness	Droughtiness Assessment		Grade According to Droughtiness	ALC Grade
		Gley	Reddish			MB Wheat	MB Potato		
1060	35	30		III	3b				3b
1061	35	30		III	3b				3b
1062	35	40		III	3b				3b
1063	35	40		III	3b				3b
1064	40	40		III	3b				3b
1065	40	40		III	3b				3b
1066	35	30		III	3b				3b

Appendix 4c - Wetness and Droughtiness Assessment - West Burton 3

Sample No	Wetness Assessment				Grade	Droughtiness Assessment		Grade	ALC Grade
	Depth to SPL	Gley	Reddish	Wetness Class	According to Wetness	MB Wheat	MB Potato	According to Droughtiness	
255	35	30	N	III	3b				3b
256	40	40	N	III	3a				3a
257	40	40	N	III	3a				3a
258	40	40	N	III	3a				3a
259	35	30	N	III	3a				3a
260	40	40	N	III	3a				3a
261	40	40	N	III	3a				3a
262	40	40	N	III	3a				3a
263	35	30	N	III	3a				3a
264	35	30	N	III	3b				3b
265	40	20	N	III	3b				3b
266		30	N	I	2				2
267	Non-agricultural								
268	Non-agricultural								
269	35	30	N	III	3a				3a
270	35	30	N	III	3a				3a
271	35	30	N	III	3a				3a
272	35	30	N	III	3a				3a
273	35	30	N	III	3a				3a
274	35	30	N	III	3b				3b
275	35	30	N	III	3b				3b
276	35	30	N	III	3b				3b
277	35	30	N	III	3a				3a
278	35	30	N	III	3a				3a
279	35	30	N	III	3a				3a
280	35	30	N	III	3a				3a
281	35	30	N	III	3a				3a
282	35	30	N	III	3a				3a
283	35	30	N	III	3b				3b
284	35	20	N	III	3b				3b
285	35	30	N	III	3b				3b
286	35	30	N	III	3a				3a
287	35	30	N	III	3a				3a
288	35	30	N	III	3a				3a
289	35	30	N	III	3a				3a
290			N	I	1	-1.81	-14.18	3a	3a
291			N	I	1	-1.81	-14.18	3a	3a
292	35	30	N	III	3b				3b
293	60		N	I	2				2
294	35	30	N	III	3b				3b
295	35	30	N	III	3b				3b
296	35	30	N	III	3a				3a
297	35	30	N	III	3a				3a
298	35	30	N	III	3a				3a
299	35	30	N	III	3a				3a
300			N	I	1	-1.81	-14.18	3a	3a
301			N	I	1	-1.81	-14.18	3a	3a
302			N	I	1	-1.81	-14.18	3a	3a
303	35	30	N	III	3b				3b
304	35	30	N	III	3b				3b
305	35	30	N	III	3b				3b
306	35	30	N	III	3b				3b
307	35	30	N	III	3b				3b
308	35	30	N	III	3b				3b

Sample No	Wetness Assessment				Grade	Droughtiness Assessment		Grade	ALC Grade
	Depth to SPL	Gley	Reddish	Wetness Class	According to Wetness	MB Wheat	MB Potato	According to Droughtiness	
309	35	30	N	III	3b				3b
310	35	30	N	III	3b				3b
311	35	30	N	III	3b				3b
312	35	30	N	III	3b				3b
313	40	20	N	III	3b				3b
314	40	20	N	III	3b				3b
315	40	20	N	III	3b				3b
316	40	20	N	III	3b				3b
317			N	I	1	-1.81	-14.18	3a	3a
318			N	I	1	-1.81	-14.18	3a	3a
319	35	30	N	III	3b				3b
320	35	30	N	III	3b				3b
321	35	30	N	III	3b				3b
322	35	30	N	III	3b				3b
323	35	30	N	III	3b				3b
324	35	30	N	III	3b				3b
325	35	30	N	III	3b				3b
326	35	30	N	III	3b				3b
327	35	30	N	III	3b				3b
328	35	30	N	III	3b				3b
328a	35	30	N	III	3b				3b
329	35	30	N	III	3b				3b
330	35	30	N	III	3b				3b
331	35	30	N	III	3b				3b
332	35	30	N	III	3b				3b
333	35	30	N	III	3b				3b
334	35	30	N	III	3b				3b
335	35		N	I	2				2
336	35	30	N	III	3b				3b
337	35	30	N	III	3b				3b
338	35	30	N	III	3b				3b
339	35	30	N	III	3b				3b
340	35	30	N	III	3b				3b
341	35	30	N	III	3b				3b
342	35	30	N	III	3b				3b
343	35	30	N	III	3b				3b
344	35	30	N	III	3b				3b
345	35	30	N	III	3b				3b
346	35	30	N	III	3b				3b
347	35	30	N	III	3a				3a
348	35	20	N	III	3a				3a
349	35	25	N	III	3a				3a
350	35	50	N	III	3b				3b
351	35	60	N	III	3b				3b
352			N	I	2				2
353	35	30	N	III	3b				3b
354	35	30	N	III	3b				3b
355	35	30	N	III	3b				3b
356	35	30	N	III	3b				3b
357	35	30	N	III	3b				3b
358	35	30	N	III	3b				3b
359	35	30	N	III	3b				3b
360	35	30	N	III	3b				3b
361			N	I	1				1
362	35	30	N	III	3a				3a

Sample No	Wetness Assesment				Grade	Droughtiness Assessment		Grade	ALC Grade
	Depth to SPL	Gley	Reddish	Wetness Class	According to Wetness	MB Wheat	MB Potato	According to Droughtiness	
363	35	30	N	III	3a				3a
364	35	30	N	III	3a				3a
365	35	30	N	III	3a				3a
366	35	30	N	III	3b				3b
367	35	30	N	III	3b				3b
368	35	30	N	III	3b				3b
369	35	30	N	III	3b				3b
370		30	N	I	2				2
371	35	30	N	III	3b				3b
372	35	30	N	III	3b				3b
373	35	30	N	III	3b				3b
374	35	30	N	III	3b				3b
375	35	30	N	III	3b				3b
376	35	30	N	III	3b				3b
377	35	30	N	III	3b				3b
378	35	30	N	III	3b				3b
379	35	30	N	III	3b				3b
380			N	I	1				1
381			N	I	1				1
382	35	30	N	III	3a				3a
383	35	30	N	III	3a				3a
384	35	30	N	III	3a				3a
385	35	30	N	III	3a				3a
386	35	30	N	III	3b				3b
387	35	30	N	III	3b				3b
388	35	30	N	III	3b				3b
389	35	30	N	III	3a				3a
390	80	60	N	I	3a				3a
391		30	N	I	3a				3a
392	35	30	N	III	3b				3b
393	35	30	N	III	3b				3b
394	35	30	N	III	3b				3b
395	35	30	N	III	3b				3b
396	35	30	N	III	3b				3b
397	35	30	N	III	3b				3b
398	35	30	N	III	3b				3b
399	35	30	N	III	3b				3b
400	35	30	N	III	3b				3b
401			N	I	1				1
402	35	30	N	III	3a				3a
403	35	30	N	III	3a				3a
404	35	30	N	III	3a				3a
405	35	30	N	III	3a				3a
406	35	30	N	III	3a				3a
407	35	30	N	III	3b				3b
408	35	30	N	III	3b				3b
409	35	30	N	III	3b				3b
410			N	I	3a				2
411	60		Y	II	3a				2
412	60		Y	II	3a				2
413	35	30	N	III	3b				3b
414	35	30	N	III	3b				3b
415	35	30	N	III	3b				3b
416	35	30	N	III	3b				3b
417	35	30	N	III	3b				3b

Sample No	Wetness Assessment				Grade	Droughtiness Assessment		Grade	ALC Grade
	Depth to SPL	Gley	Reddish	Wetness Class	According to Wetness	MB Wheat	MB Potato	According to Droughtiness	
418	35	30	N	III	3b				3b
419	35	30	N	III	3b				3b
420	35	30	N	III	3b				3b
421	35	30	N	III	3b				3b
422			N	I	1				1
423	35	30	N	III	3a				3a
424	35	30	N	III	3a				3a
425	35	30	N	III	3a				3a
426	35	30	N	III	3a				3a
427	35	30	N	III	3a				3a
428	35	30	N	III	3a				3a
429	35	30	N	III	3b				3b
430	35	30	N	III	3b				3b
431	35	30	N	III	3a				3a
432			N	I	3a				3a
433			N	I	1				1
434	60		Y	II	3a				3a
435	60		Y	II	3a				3a
436	35	30	N	III	3b				3b
437	35	30	N	III	3b				3b
438	35	30	N	III	3b				3b
439	35	30	N	III	3b				3b
440	35	30	N	III	3b				3b
441			N	I	1				1
442	35	30	N	III	3a				3a
443	35	30	N	III	3a				3a
444	35	30	N	III	3a				3a
445	35	30	N	III	3a				3a
446	35	30	N	III	3a				3a
447	35	30	N	III	3a				3a
448	35	30	N	III	3b				3b
449	35	30	N	III	3b				3b
450		30	N	I	2				2
451		30	N	I	2				2
452			N	I	2				2
453			N	I	2				2
454	60		Y	II	3a				3a
455									
456	60		Y	II	3a				3a
457	70	70	N	II	1				1
458	35	30	N	III	3b				3b
459	35	30	N	III	3b				3b
460	35	30	N	III	3b				3b
461	35	30	N	III	3a				3a
462	35	30	N	III	3a				3a
463	35	30	N	III	3a				3a
464	35	30	N	III	3a				3a
465	35	30	N	III	3a				3a
466	35	30	N	III	3a				3a
467	35	30	N	III	3b				3b
468	35	30	N	III	3b				3b
469		30	N	I	3a				3a
470	35	35	N	III	3a				3a
471	35	35	N	III	3a				3a
472	60		Y	II	3a				3a

Sample No	Wetness Assessment				Grade	Droughtiness Assessment		Grade	ALC Grade
	Depth to SPL	Gley	Reddish	Wetness Class	According to Wetness	MB Wheat	MB Potato	According to Droughtiness	
473			N	I	2				2
474	60		Y	II	3a				3a
475	70	70	N	II	1				1
476	35	30	N	III	3b				3b
477	35	30	N	III	3b				3b
478	35	30	N	III	3a				3a
479	35	30	N	III	3a				3a
480	35	30	N	III	3a				3a
481	35	30	N	III	3a				3a
482	35	30	N	III	3a				3a
483	35	30	N	III	3b				3b
484	35	30	N	III	3b				3b
485	35	30	N	III	3b				3b
486		30	N	I	2				2
487	35	35	N	III	3a				3a
488	35	35	N	III	3a				3a
489			N	I	2				2
490			N	I	2				2
491	35	30	N	III	3a				3a
492	35	30	N	III	3a				3a
493	35	30	N	III	3b				3b
494	35	30	N	III	3a				3a
495	35	30	N	III	3a				3a
496	35	30	N	III	3a				3a
497	35	30	N	III	3a				3a
498	35	30	N	III	3a				3a
499	35	30	N	III	3a				3a
500	35	30	N	III	3a				3a
501	35	30	N	III	3b				3b
502			N	I	3a				3a
503	35	35	N	III	3b				3b
504	35	35	N	III	3b				3b
505			N	I	2				2
506			N	I	2				2
507	35	30	N	III	3b				3b
508	35	30	N	III	3b				3b
509	35	30	N	III	3b				3b
510	35	30	N	III	3a				3a
511	35	30	N	III	3a				3a
512	35	30	N	III	3a				3a
513	35	30	N	III	3a				3a
514	35	30	N	III	3a				3a
515	35	30	N	III	3a				3a
516	35	30	N	III	3a				3a
517	35	30	N	III	3b				3b
518			N	I	3a				3a
519			N	I	3a				3a
520			N	I	3a				3a
521	35	35	N	III	3b				3b
522	90		Y	I	1				1
523	60		Y	II	3a				3a
524	60		Y	II	3a				3a
525	35	30	N	III	3a				3a
526	35	30	N	III	3a				3a
527	35	30	N	III	3a				3a

Sample No	Wetness Assesment				Grade	Droughtiness Assessment		Grade	ALC Grade
	Depth to		Reddish	Wetness Class	According to	MB Wheat	MB Potato	According to	
SPL	Gley	Wetness			Droughtiness				
528	35	30	N	III	3a			3a	
529	35	30	N	III	3a			3a	
530	35	30	N	III	3b			3b	
531	Non-Agricultural								
532	35	30	N	III	3b			3b	
533	40	50	N	III	3b			3b	
534	40	50	N	III	3b			3b	
535	90		Y	I	1			1	
536	60		Y	II	3a			3a	
537	60		Y	II	3a			3a	
538	35	30	N	III	3a			3a	
539	35	30	N	III	3a			3a	
540	35	30	N	III	3a			3a	
541	35	30	N	III	3a			3a	
542	35	30	N	III	3a			3a	
543	35	30	N	III	3a			3a	
544	35	30	N	III	3b			3b	
545	35	30	N	III	3b			3b	
546	35	30	N	III	3b			3b	
547	40	50	N	III	3b			3b	
547a			N	I	1			1	
547b								0	
548	35	30	N	III	3a			3a	
549	35	30	N	III	3a			3a	
550	35	30	N	III	3a			3a	
551	35	30	N	III	3a			3a	
552	35	30	N	III	3a			3a	
553	35	30	N	III	3a			3a	
554	35	30	N	III	3b			3b	
555	35	30	N	III	3b			3b	
556	35	30	N	III	3b			3b	
557			N	I	3a			3a	
557a									
558	90		Y	I	1			1	
559	35	30	N	III	3b			3b	
560	35	30	N	III	3a			3a	
561	35	30	N	III	3a			3a	
562	35	30	N	III	3a			3a	
563	35	30	N	III	3a			3a	
564	35	30	N	III	3a			3a	
565	35	30	N	III	3a			3a	
566	35	30	N	III	3b			3b	
567			N	I	1			1	
568			N	I	3a			3a	
569			N	I	3a			3a	
570			N	I	3a			3a	
571	90		Y	I	1			1	
572	35	30	N	III	3b			3b	
573	35	30	N	III	3b			3b	
574	35	30	N	III	3b			3b	
575	35	30	N	III	3a			3a	
576			N	I	1			1	
577	90		Y	I	1			1	
578	90		Y	I	1			1	
579	90		Y	I	1			1	

Sample No	Wetness Assesment			Wetness Class	Grade	Droughtiness Assessment		Grade	ALC Grade
	Depth to SPL	Gley	Reddish		According to Wetness	MB Wheat	MB Potato	According to Droughtiness	
580	90		Y	I	1				1
581	35	30	N	III	3b				3b
582	35	30	N	III	3b				3b
583	35	30	N	III	3b				3b
584	35	30	N	III	3b				3b
585	90		Y	I	1				1
586	90		Y	I	1				1
587	90	50	Y	I	1				1
588	40		Y	III	3b				3b
589	35	30	N	III	3a				3a
590	35	30	N	III	3b				3b
591	35	30	N	III	3b				3b
592	35	30	N	III	3b				3b
593	90		Y	I	1				1
594	90	50	Y	I	1				1
595	60	35	Y	II	3a				3a
596	35	30	N	III	3a				3a
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	90		Y	I	1				1
602	90		Y	I	2				2
603	40		Y	III	3b				3b
604		40	N	I	1				1
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	80		Y	I	1				1
610	90	50	Y	I	1				1
611	90		Y	I	2				2
612		40	N	I	1				1
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	90	50	Y	I	1				1
618	90	50	Y	I	1				1
619	90		Y	I	2				2
620		40	N	I	1				1
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	90		Y	I	1				1
627	80	80	N	I	2				2
628	90	50	Y	I	1				1
629	35	30	N	III	3b				3b
630	35	30	N	III	3b				3b
631	35	30	N	III	3b				3b
632	35	30	N	III	3b				3b
633	35	30	N	III	3b				3b
634	35	30	N	III	3b				3b

Sample No	Wetness Assesment				Grade	Droughtiness Assessment		Grade	ALC
	Depth to	SPL	Gley	Reddish	Wetness Class	Wetness	MB Wheat	MB Potato	
635	80	80	N	I	I	1			1
636	80	80	N	I	I	1			1
637	35	30	N	III	III	3b			3b
638	35	30	N	III	III	3b			3b

Appendix 4d - Wetness and Droughtiness Assessment - West Burton 4

Sample No	Wetness Assessment				Grade According to Wetness	Droughtiness Assessment		Grade According to Droughtiness	ALC Grade
	Depth to SPL	Gley	Reddish	Wetness Class		MB Wheat	MB Potato		
1	35		Y	III	2				2
2	35		Y	III	2				2
3			Y	I	1	-25.02	-32.65	3b	3b
4	35		Y	III	2				2
5	35		Y	III	3a				3a
6	35		Y	III	3a				3a
7	30		Y	III	2				2
8	35		Y	III	3a				3a
9	35		Y	III	3a				3a
10	35		Y	III	2				2
11	35	30	N	III	2				2
12	35		Y	III	3a				3a
13	35	35	N	III	3a				3a
14	35		Y	III	2				2
15	35		Y	III	3a				3a
16	35		Y	III	3a				3a
17	35		Y	III	2				2
18	35		Y	III	2				2
19	35	30	N	III	3a				3a
20	35		Y	III	3a				3a
21	35		Y	III	3a				3a
22	35	35	N	III	3a				3a
23	35	35	N	III	3a				3a
24	35		Y	III	3a				3a
25	35		Y	III	3a				3a
26	35		Y	III	3a				3a
27	35		Y	III	2				2
28	35		Y	III	2				2
29	35		Y	III	3a				3a
30	35		Y	III	3a				3a
31	35		Y	III	3a				3a
32	35		Y	III	3a				3a
33	35		Y	III	3a				3a
34	35		Y	III	3a				3a
35	35		Y	III	3a				3a
36	35		Y	III	3a				3a
37	35		Y	III	3a				3a
38	35		Y	III	3a				3a
39	35		Y	III	3a				3a
40	35		Y	III	3a				3a
41	35		Y	III	3a				3a
42	35		Y	III	3a				3a
43	35		Y	III	3a				3a
44	35		Y	III	3a				3a
45	35		Y	III	3a				3a
46	35		Y	III	3a				3a
47	35		Y	III	3a				3a
48	35	35	N	III	3a				3a
49	35	35	N	III	3a				3a
50	35		Y	III	3a				3a
51	35		Y	III	3a				3a
52	35		Y	III	3a				3a

Sample No	Wetness Assesment				Grade	Droughtiness Assessment		Grade	ALC Grade
	Depth to SPL	Gley	Reddish	Wetness Class	According to Wetness	MB Wheat	MB Potato	According to Droughtiness	
53	35	35	N	III	3a				3a
54	35	35	N	III	3a				3a
55	35		Y	III	3a				3a
56	35		Y	III	3a				3a
57	35		Y	III	3a				3a
58	35		Y	III	3a				3a
59	35		Y	III	3a				3a
60	35		Y	III	3a				3a
61	35		Y	III	3a				3a
62	35		Y	III	3a				3a
63	35		Y	III	3a				3a
64	35		Y	III	3a				3a
65	35		Y	III	3a				3a
66	35		Y	III	3a				3a
67	35		Y	III	2				2
68	35		Y	III	3a				3a
69	35		Y	III	3a				3a
70	35		Y	III	2				2
71	35		Y	III	3a				3a
72	35		Y	III	3a				3a
73	35		Y	III	3a				3a
74	35		Y	III	2				2
75	35		Y	III	3a				3a
76	35		Y	III	3a				3a
77	35		Y	III	3a				3a
78	35		Y	III	3a				3a
79	35		Y	III	3a				3a
80	35		Y	III	3a				3a
81	35		Y	III	3a				3a
82	35		Y	III	3a				3a
83	35		Y	III	3a				3a
84	35		Y	III	3a				3a
85	35		Y	III	3a				3a
86	35		Y	III	3a				3a
87	35		Y	III	3a				3a
88	35		Y	III	3a				3a
89	35		Y	III	3a				3a
90	35		Y	III	3a				3a
91	35		Y	III	2				2
92	35		Y	III	2				2
93	35		Y	III	3a				3a
94	35		Y	III	3a				3a
95	35		Y	III	3a				3a
96	35		Y	III	3a				3a
97	35		Y	III	3a				3a
98	35		Y	III	3a				3a
99	35		Y	III	3a				3a
100	35		Y	III	3a				3a
101	35	35	N	III	2				2
102	35	30	N	III	2				2
103	35		Y	III	3a				3a
104	35		Y	III	3a				3a
105	35		Y	III	3a				3a

Sample No	Wetness Assesment			Grade According to Wetness	Droughtiness Assessment		Grade According to Droughtiness	ALC Grade
	Depth to SPL	Gley	Reddish		Wetness Class	MB Wheat		
106	35		Y	III	3a			3a
107	35		Y	III	3a			3a
108	35		Y	III	3a			3a
109	35		Y	III	3a			3a
110	35		Y	III	3a			3a
111	35		Y	III	3a			3a
112	35		Y	III	3a			3a
113	35		Y	III	3a			3a
114	35		Y	III	2			2
115	35		Y	III	2			2
116	80		Y	I	1			1
117	35		Y	III	3a			3a
118	35		Y	III	3a			3a
119	35		Y	III	3a			3a
120	35		Y	III	2			2
121	35		Y	III	2			2
122	35		Y	III	3a			3a
123	35		Y	III	3a			3a
124	35		Y	III	3a			3a
125	35		Y	III	3a			3a
126	35		Y	III	3a			3a
127	35		Y	III	3a			3a
128	35		Y	III	2			2
129	35		Y	III	2			2
130	80		Y	I	1			1
131	35		Y	III	2			2
132	35		Y	III	3a			3a
133	35		Y	III	3a			3a
134	35		Y	III	3a			3a
135	35		Y	III	3a			3a
136	35		Y	III	3a			3a
137	35		Y	III	2			2
138	35		Y	III	3a			3a
139	35		Y	III	2			2
140	35		Y	III	3a			3a
141	80		Y	I	1			1
142	80		Y	I	1			1
143	35		Y	III	2			2
144	35		Y	III	3a			3a
145	40		Y	III	3a			3a
146	35		Y	III	3a			3a
147	35		Y	III	3a			3a
148	35		Y	III	3a			3a
149	35		Y	III	3a			3a
150	35		Y	III	3a			3a
151	35		Y	III	3a			3a
152	35		Y	III	3a			3a
153	35		Y	III	3a			3a
154	35		Y	III	3a			3a
155	80		Y	I	1			1
156	80		Y	I	1			1
157	80		Y	I	1			1
158	80		Y	I	1			1

Sample No	Wetness Assesment			Grade According to Wetness	Droughtiness Assessment		Grade According to Droughtiness	ALC Grade
	Depth to SPL	Gley	Reddish		Wetness Class	MB Wheat		
159	35		Y	III	3a			3a
160	35		Y	III	3a			3a
161	35		Y	III	3a			3a
162	35		Y	III	3a			3a
163	35		Y	III	3a			3a
164	35		Y	III	3a			3a
165	35		Y	III	3a			3a
166	35		Y	III	2			2
167	35		Y	III	2			2
168	80		Y	I	1			1
169	80		Y	I	1			1
170	80		Y	I	1			1
171	80		Y	I	1			1
172	35		Y	III	3a			3a
173	35		Y	III	3a			3a
174	35		Y	III	3a			3a
175	35		Y	III	3a			3a
176	35		Y	III	3a			3a
177	35		Y	III	3a			3a
178	35		Y	III	3a			3a
179	35		Y	III	3a			3a
180	35		Y	III	2			2
181	40		Y	III	2			2
182	40		Y	III	2			2
183	35		Y	III	2			2
184	35		Y	III	2			2
185	35		Y	III	3a			3a
186	35		Y	III	3a			3a
187	35		Y	III	3a			3a
188	35	30	N	III	3a			3a
189	35	30	N	III	3a			3a
190	35		Y	III	3a			3a
191	35		Y	III	3a			3a
192	35		Y	III	3a			3a
193	35		Y	III	3a			3a
194	35	30	N	III	3a			3a
195	35	30	N	III	2			2
196	40		Y	III	2			2
197	40		Y	III	2			2
198	35		Y	III	3a			3a
199	35		Y	III	3a			3a
200	35		Y	III	3a			3a
201	35		Y	III	3a			3a
202	35		Y	III	3a			3a
203	35		Y	III	3a			3a
204	35		Y	III	3a			3a
205	35		Y	III	3a			3a
206	35	30	N	III	3a			3a
207	35		Y	III	3a			3a
208	35		Y	III	3a			3a
209	40		Y	III	3a			3a
210	40		Y	III	2			2
211	40		Y	III	2			2

Sample No	Wetness Assesment				Grade	Droughtiness Assessment		Grade	ALC Grade
	Depth to SPL	Gley	Reddish	Wetness Class	According to Wetness	MB Wheat	MB Potato	According to Droughtiness	
212	40		Y	III	2				2
213	35		Y	III	2				2
214	35		Y	III	3a				3a
215	35		Y	III	3a				3a
216	35		Y	III	3a				3a
217	35		Y	III	3a				3a
218	35		Y	III	3a				3a
219	35		Y	III	3a				3a
220	35		Y	III	3a				3a
221	35		Y	III	3a				3a
222	40		Y	III	3a				3a
223	35		Y	III	2				2
224	35		Y	III	2				2
225	40		Y	III	2				2
226	35		Y	III	2				2
227	35		Y	III	3a				3a
228	35		Y	III	3a				3a
229	35		Y	III	3a				3a
230	35		Y	III	3a				3a
231	35		Y	III	3a				3a
232	35		Y	III	3a				3a
233	35		Y	III	3a				3a
234	35		Y	III	3a				3a
235	35		Y	III	3a				3a
236	40		Y	III	3a				3a
237	35		Y	III	2				2
238	35		Y	III	2				2
239	35		Y	III	2				2
240	35		Y	III	3a				3a
241	35		Y	III	3a				3a
242	35		Y	III	3a				3a
243	35	30	N	III	3a				3a
244	35	30	N	III	3a				3a
245	35		Y	III	3a				3a
246	35		Y	III	3a				3a
247	35		Y	III	3a				3a
248	35		Y	III	3a				3a
249	35		Y	III	3a				3a
250	35	30	N	III	3a				3a
251	35	30	N	III	3a				3a
252	35		Y	III	3a				3a
253	35		Y	III	3a				3a
254	35	30	N	III	3a				3a

Appendix 4e - Wetness and Droughtiness Assessment - West Burton Substation

Sample No	Wetness Assessment				Grade	Droughtiness Assessment		Grade	ALC Grade
	Depth to SPL	Gley	Reddish	Wetness Class	Wetness According to	MB Wheat	MB Potato	According to Droughtiness	
1067	40		Y	III	3b				3b
1068	40	<40	Y	III	3b				3b
1069	40	<40	Y	III	3b				3b
1070	35	<40	Y	III	3b				3b
1071	60	<40	Y	II	3a				3a
1072	40	<40	Y	III	3b				3b
1073	40		Y	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.

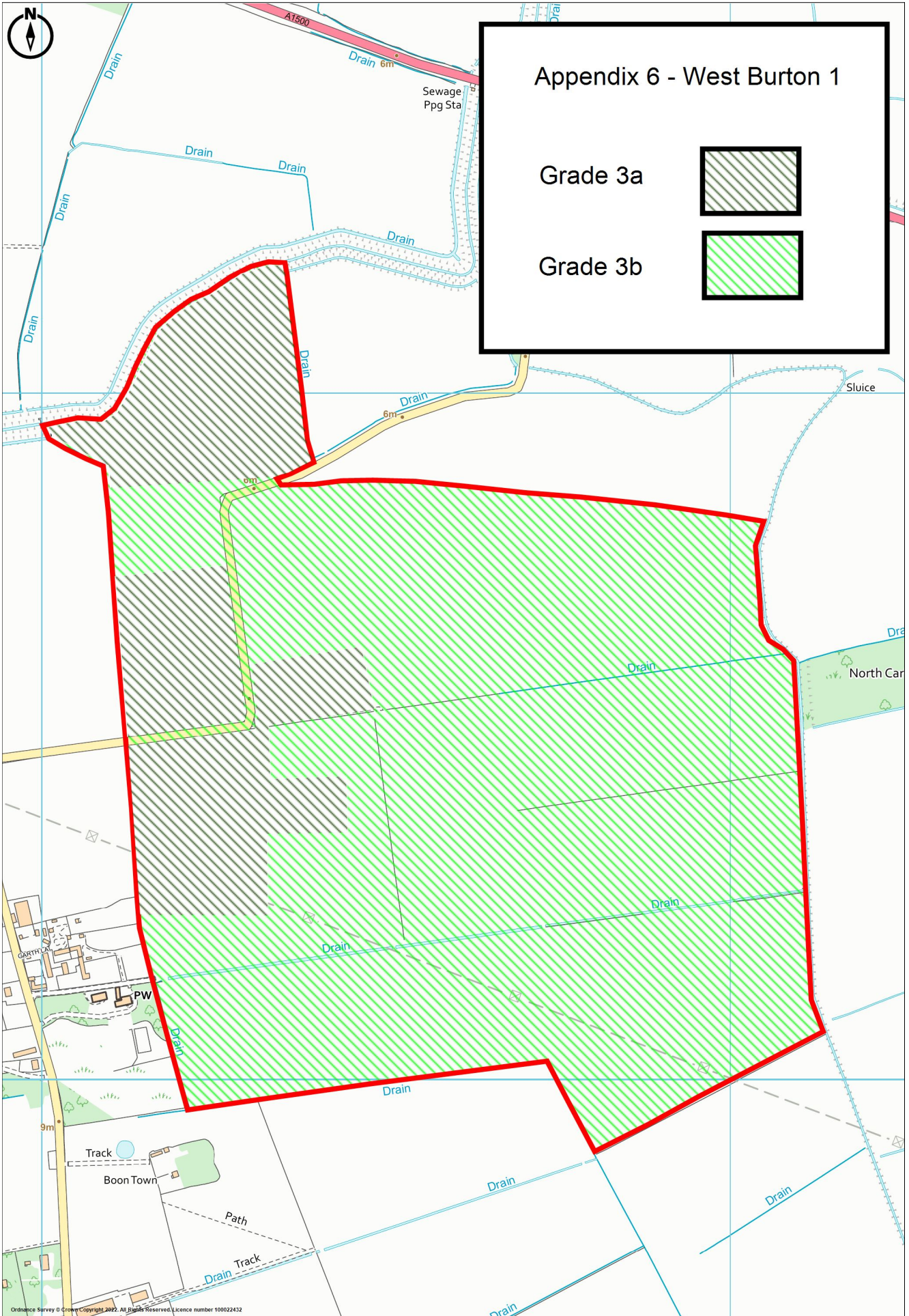


Appendix 6 - West Burton 1

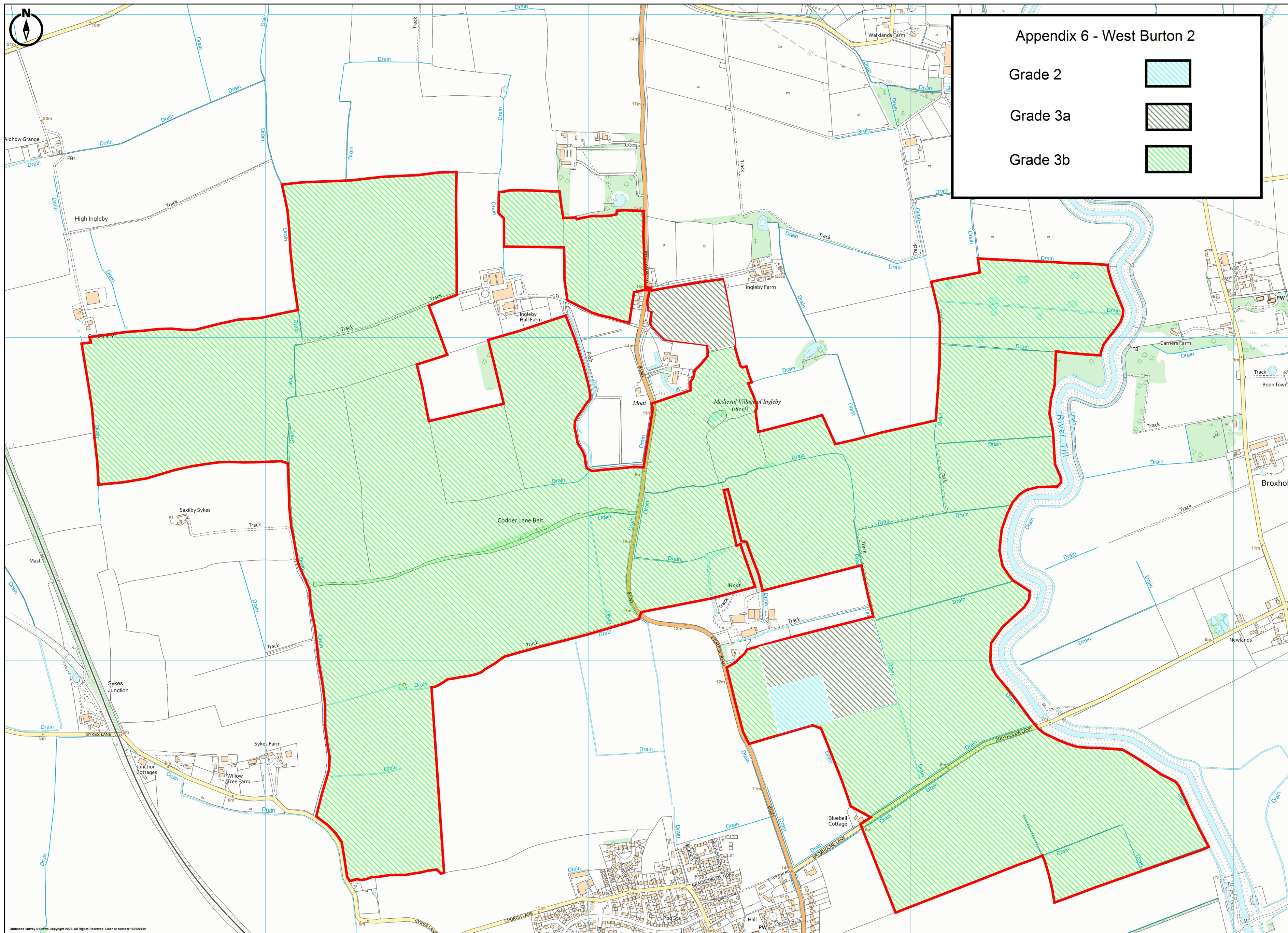
Grade 3a






Grade 3b



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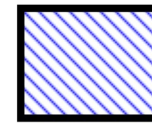
Appendix 6 - West Burton 2

- Grade 2 
- Grade 3a 
- Grade 3b 



Appendix 6 - West Burton 3

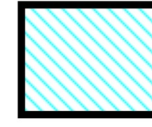
Grade 1



Grade 3a



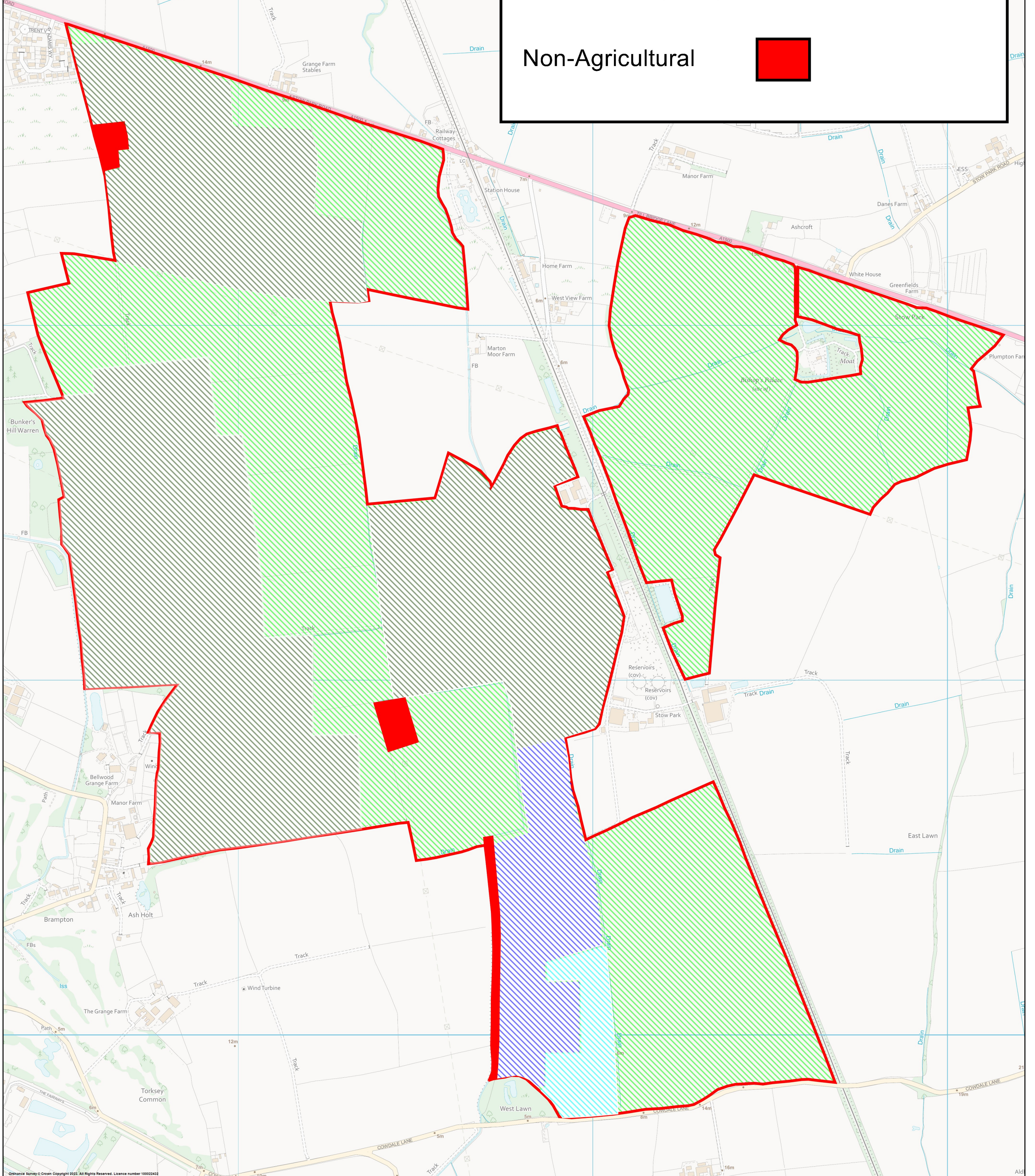
Grade 2



Grade 3b



Non-Agricultural





Appendix 6 - West Burton 4

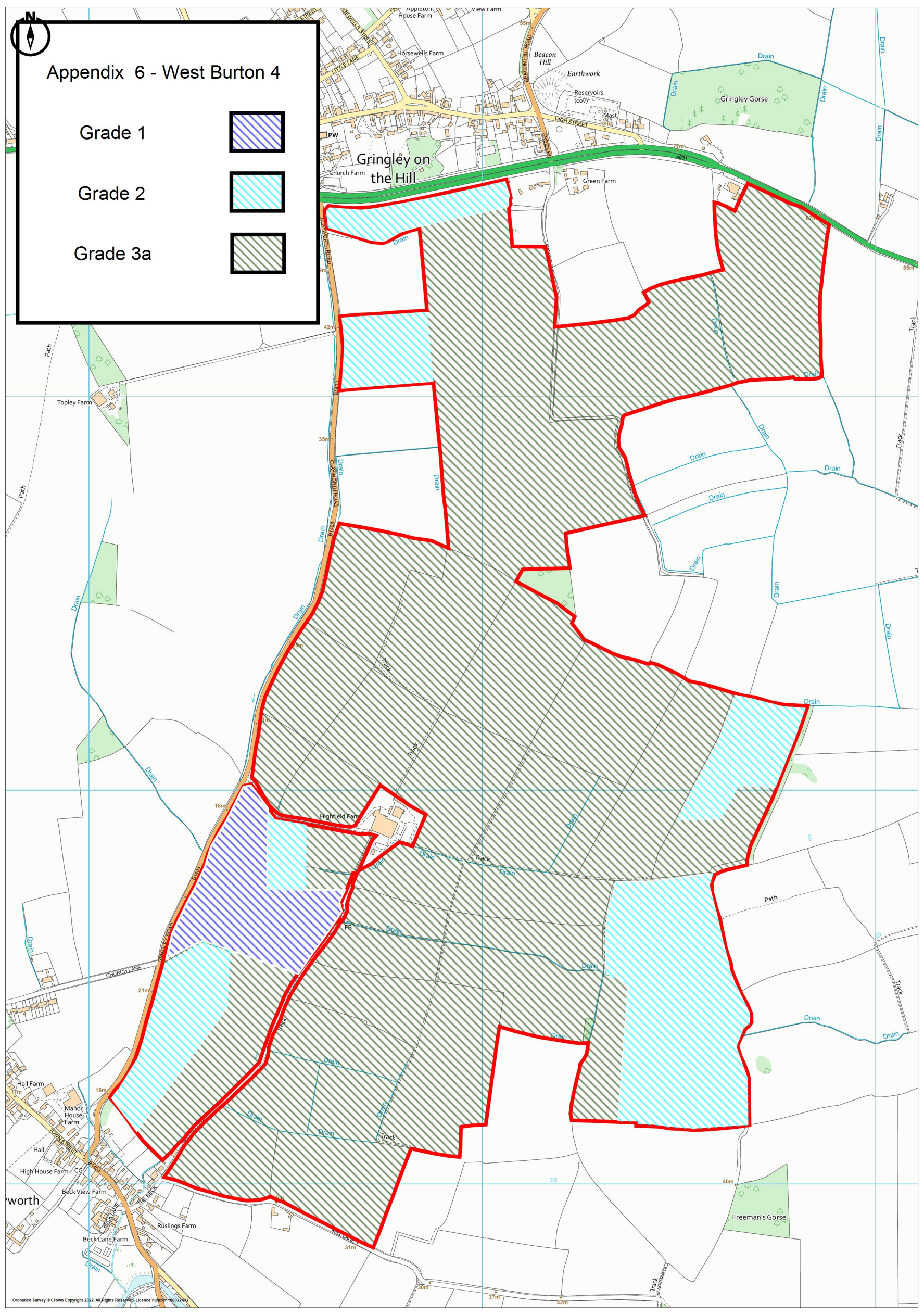
Grade 1

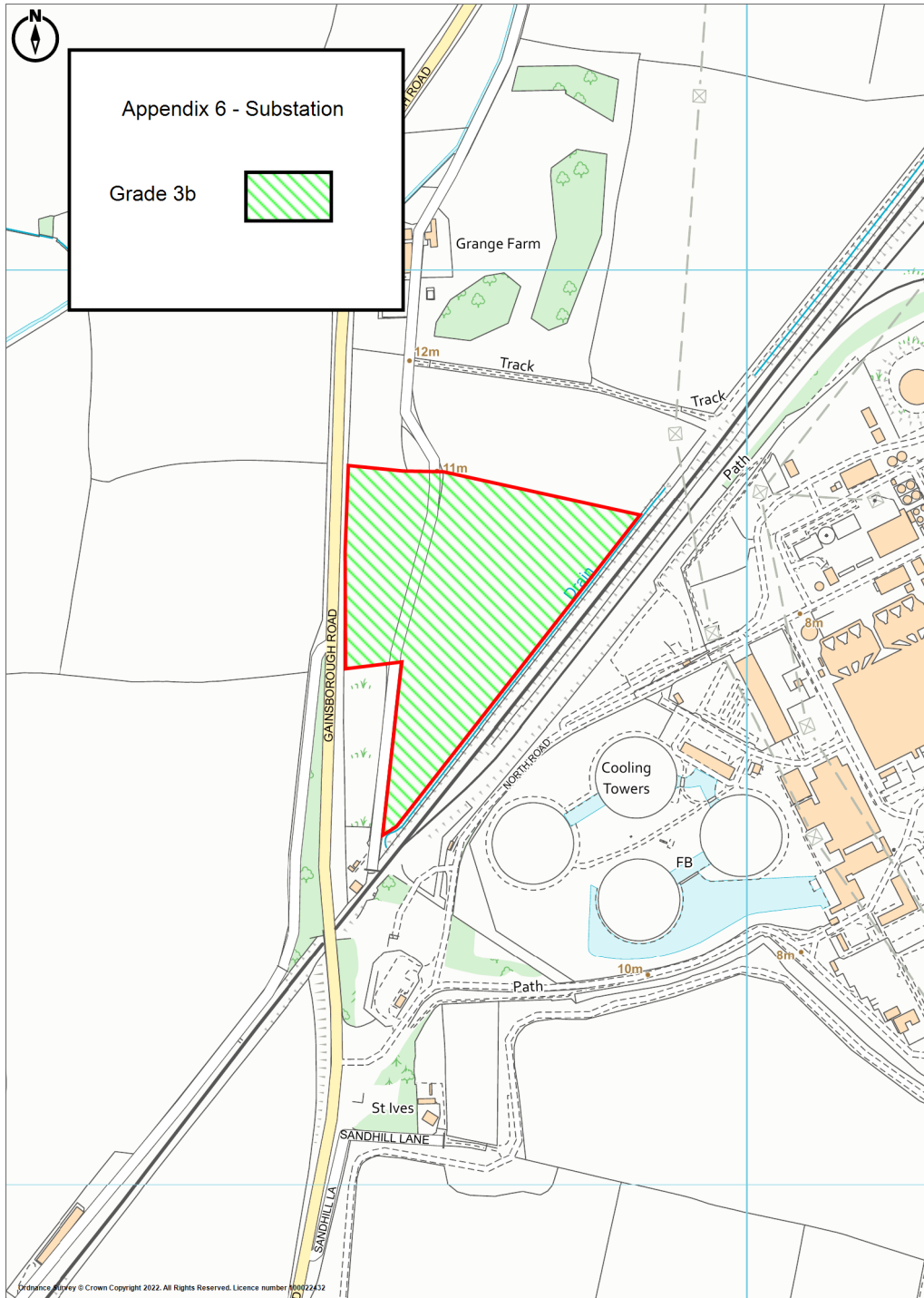


Grade 2



Grade 3a





Annex 2 Agricultural Land Classification Report (LRA)