A428 Black Cat to Caxton Gibbet improvements

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9.69 Agricultural Technical Note – Soils and Agricultural Land Classification

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Development Consent Order 202[ ]

9.69 Agricultural Technical Note – Soils and Agricultural Land Classification (Tracked)

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1 Introduction

1.1 Scope of the Technical Note

1.1.1 This Agricultural Land Technical Note (known as the Technical Note herein) sets out the methodology and results of a soil and Agricultural Land Classification (ALC) survey undertaken of land within the ~~Development Consent Order (DCO) limits for~~Order Limits of the A428 Black Cat to Caxton Gibbet Improvements (the Scheme). It also describes the methodology and findings of the assessment undertaken for and reported in Chapter 9, Geology and Soils **[APP-078]** of the Environmental Statement (ES) and considers the implications of the survey results for the assessment of effects on agricultural land as reported.

1.1.2 Paragraph 9.3.30 of Chapter 9, Geology and Soils **[APP-078]** indicates that the proposed scope of agricultural soil surveys and the approach to soil management and mitigation were shared with Natural England through a series of meetings, presentations and written correspondence. The Scoping Response from Natural England **[APP-258]** indicated that the impacts of the Scheme should be considered in the light of the Government's policy for the protection of the best and most versatile (BMV) agricultural land; that soils should be considered in the context of the sustainable use of land; and that a detailed soil and ALC survey may be required if one is not already available.

1.1.3 Paragraph 9.4.6 of Chapter 9, Geology and Soils **[APP-078]** explains that an agricultural survey involving auger samples to confirm ALC grades within the Order Limits was incorporated into the scope of the assessment and was planned to be undertaken in 2020 during the design-development of the Scheme. However, as the timing of the survey coincided with the Covid-19 pandemic and associated lockdown restrictions, it was not possible to carry out the fieldwork.

1.1.4 Chapter 9, Geology and Soils **[APP-078]** indicated in a footnote to paragraph 9.4.6 that '*the agricultural survey will be undertaken subject to the timing of any lifting of lockdown restrictions in 2021. On completion of this fieldwork and analysis of the findings, a report will be prepared by National Highways and submitted to the Examination as further environmental information. Any requirement to update the assessment of effects on soil resources reported within this chapter will also be evaluated at that time and, if required, a supplementary report or addendum will also be submitted to the Examination'*.

1.1.5 This Technical Note includes these 2021 survey results and sets out the detailed methodology and considers the implications for the assessment of effects on soils and agricultural land reported in Chapter 9, Geology and Soils **[APP-078]** of the ES.

1.1.6 Most landowners requested that the surveys were undertaken following harvest in order to minimise any disturbance or damage to growing crops and so the survey was commenced in September 2021. Not all landowners granted consent for the surveys to take place and these limitations have been considered within the applicable sections of this Technical Note.

1.1.7 This Technical Note has been prepared by suitably qualified and experienced agricultural consultants who have extensive experience and expertise in the assessment of the impacts of infrastructure schemes on soils and agricultural land, and in the preparation of Environmental Impact Assessments (EIAs).

1.2 Policy framework and guidance

National Policy Statement for National Networks

1.2.1 Relevant policies and guidance are set out in Chapter 9, Geology and Soils **[APP-078]** and comprise paragraph 5.168 of the National Policy Statement for National Networks (Ref 1Ref 1~~Ref 1~~) which sets out that applicants should take into account the economic and other benefits of best and most versatile (BMV) agricultural land. It states that where significant development of agricultural land is demonstrated to be necessary, applicants should seek to use poorer quality land in preference to that of a higher quality.

1.2.2 Paragraph 5.176 sets out that when considering proposed development, the decision maker should take into account the economic and other benefits of BMV land. The decision maker should give little weight to the loss of agricultural land in grades 3b, 4 and 5, except in areas (such as uplands) where particular agricultural practices may contribute to the quality and character of the environment or local economy.

1.2.3 Paragraph 5.179 states that applicants can minimise the direct effects of a project on the existing use of the proposed site or proposed uses near the site by the application of good design principles, including the layout of the project and the protection of soils during construction.

Local Plan policies

Bedford Borough Council

1.2.4 The Bedford Borough Local Plan 2030 (Ref 2) deals with the use of agricultural soils in previously developed land and the use of undeveloped land in Policy 46S.

1.2.5 The policy sets out that where significant development is demonstrated to be necessary on agricultural land, poorer quality land should be used in preference to BMV agricultural land. Where the development site is located on agricultural land outside existing settlements, evidence should be provided of the grade of the agricultural land and, where the land is likely to be grade 3 or higher, a detailed ALC survey must be undertaken.

Central Bedfordshire Council

1.2.6 The Central Bedfordshire Local Plan 2015 – 2035 (Ref 3) deals with the use of agricultural land for development in policy DC5.

1.2.7 The policy sets out that where development would result in the significant loss of Grades 2 and 3a agricultural land, the proposed development will only be permitted where it can be demonstrated that the location of the proposed development is necessary to provide a scheme that is of valuable public benefit that overrides the need to protect the land. Any such application must be supported by an ALC assessment.

Huntingdonshire District Council

1.2.8 The Huntingdonshire Plan to 2036 (Ref 4) deals with the development of agricultural land in policy LP10.

1.2.9 The policy sets out that all development in the countryside must seek to use land of lower agricultural value in preference to land of higher agricultural value, avoiding the irreversible loss of BMV agricultural land where possible and avoiding Grade 1 agricultural land apart from exceptional circumstances where the benefits of the proposal will significantly outweigh the loss of the land.

South Cambridgeshire District Council

1.2.10 The South Cambridgeshire Local Plan 2018 (Ref 5) deals with the protection of agricultural land in policy NH/3.

1.2.11 The policy sets out that planning permission will not be granted for development which would lead to the irreversible loss of BMV agricultural land unless the land is allocated for development in the Local Plan and sustainability considerations and the need for the proposed development are sufficient to override the need to protect the agricultural value of the land.

Guidance

1.2.12 Relevant guidance includes the Soil Strategy for England – Safeguarding Our Soils (Ref 6) which seeks to encourage the sustainable management of soil resources. The Strategy sets out Defra's vision that by 2030 all of England's soils will be managed sustainably and degradation threats will be tackled successfully in order to improve soil quality and safeguard the ability to provide essential services for future generations. The Strategy sets out priorities for:

a. The better protection of agricultural soils.
b. Enhancing stores of soil carbon.
c. Building the resilience of soils to a changing climate.
d. Preventing soil pollution.
e. Protecting soils during construction and development.
f. Dealing with the legacy of contaminated land.

1.2.13 Defra's Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (Ref 7) is a practical guide to assist the construction industry to protect the soil resources with which it works and achieve good soil management at all stages of the construction process. It advises that the protection, use and movement of soils should be considered to protect the soil resources with which it works and achieve good soil management at all stages of the construction process. It advises that the protection, use and movement of soils should be considered from the outset of a development project's planning, through its design and construction phases and on into future maintenance and operation. The sustainable use and management of soil resources during construction can help with the re-establishment of soil functions following their storage or movement, including food production, habitat provision and support, and natural cycling of elements such as carbon and nitrogen.

1.2.14 Guidance on the assessment of impacts of road schemes on soils and agricultural land is provided in the Design Manual for Roads and Bridges (DMRB): LA 109 Geology and Soils (Ref 8).

2 Environmental Statement Method and Findings

2.1 Summary of the methodology used in the ES

2.1.1 The below section summarises the methodology used in undertaking the agricultural land assessment (as provided within Chapter 9, Geology and Soils **[APP-078]** of the ES) for the Scheme, and subsequently provides a summary of the findings of that assessment.

2.1.2 The assessment of the effects on soils and agricultural land presented within Chapter 9, Geology and Soils **[APP-078]** followed the methodology set out in DMRB LA 109 Geology and Soils.

2.1.3 Establishment of the baseline conditions relied on:

a. Natural England's East Region: 1:250,000 Series Agricultural Land Classification map (Ref 9).

b. Soil data (Ref 10) compiled by the Cranfield Soil and Agri-food Institute which was obtained to establish the coverage, extent and variation of different soil types.

c. Soil sampling and chemical analysis undertaken as part of the Ground Investigation (GI) (Ref 11) which supplemented the above data.

2.1.4 **Error! Reference source not found.**The assignment of value (sensitivity) for soil resources and agricultural land used the criteria contained in DMRB LA 109. These are set out in **Table 2-1**~~Table 2-1~~ which is an extract of Table 9-1 of Chapter 9, Geology and Soils **[APP-078]** of the ES.

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Table 2-1: Value (sensitivity) of soil and agricultural land

Receptor value (sensitivity)	Description
Very high	Soils directly supporting an EU designated site (e.g. SAC, SPA, Ramsar). ALC Grades 1 and 2.
High	Soils directly supporting a UK designated site (e.g. SSSI). ALC Grade 3a.
Medium	Soils supporting non-statutory designated sites (e.g. Local Nature Reserves (LNR), LGSs, Sites of Nature Conservation Importance (SNCIs)). ALC Grade 3b.
Low	Soils supporting non-designated notable or priority habitats. ALC Grades 4 & 5.
Negligible	Previously developed land formerly in 'hard uses' with little potential to return to agriculture.

2.1.5 Table 9.1 of **[APP-078]** noted also that:

a. As the East Region: 1:250,000 Series Agricultural Land Classification map does not distinguish between ALC subgrades 3a and 3b, all land within ALC Grade 3 has been deemed to be BMV in the assessment.

b. Soils not categorised as BMV can be allocated in a higher sensitivity category where particular agricultural practices contribute to the quality and character of the environment or the local economy.

2.1.6 The assessment for the magnitude of impact (change) on soils and agricultural land also followed the criteria set out in DMRB LA 109, including the additional criteria contained in the England National Application Annex to LA 109 (Ref 8) in respect of the permanent loss or sealing of agricultural land. **Table 2-2~~Table 2-2~~** is an extract of Table 9-2 of Chapter 9, Geology and Soils **[APP-078]** of the ES.

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Table 2-2: Magnitude of impact (change) for soil and agricultural land

Magnitude of impact (change)	Description
Major	Physical removal or permanent sealing of >20 ha of agricultural land.
Moderate	Physical removal or permanent sealing of 1 ha to 20 ha of agricultural land. Permanent loss/ reduction of one or more soil function(s) and restriction to current or approved future use (e.g. through degradation, compaction, erosion of soil resource).
Minor	Temporary loss/ reduction of one or more soil function(s) and restriction to current or approved future use (e.g. through degradation, compaction, erosion of soil resource).
Negligible	No discernible loss/reduction of soil function(s) that restrict current or approved future use.
No change	No loss/reduction of soil function(s) that restrict current or approved future use.

2.1.7 The assignment of significance effects involved combining the value of the receptor with the predicted magnitude of impact, guided by the significance matrix set out in DMRB LA 104 (Ref 12) which is also reproduced in Table 9-3 of **[APP-078]**.

2.2 Summary of the findings of the ES

Baseline conditions

2.2.1 Table 9.7 of Chapter 9, Geology and Soils **[APP-078]** reports that Grade 2 agricultural soils account for nearly 412ha (80%) of the land within the Order Limits. Grade 2 land extends from the Alington Hill locality through to the existing Caxton Gibbet roundabout. A smaller pocket of Grade 2 is located immediately east of the River Great Ouse, extending eastward towards the ECML Railway. Further Grade 2 land surrounds the A421 to the west of Roxton, the A1 south of Church End, and the A1 at Wyboston interchange.

2.2.2 Grade 1 land amounts to 53ha (10%) of land within the Order Limits and surrounds the Black Cat roundabout, extending northwards as far as Chawston and southwards to the east of Roxton.

2.2.3 Grade 3 land accounts for 47ha (9%) and extends from Alington Hill to the west of the ECML Railway. A further narrow area of Grade 3 land is located immediately west of the River Great Ouse, extending southwards towards Tempsford. A small area (approximately 0.5ha) of Grade 4 land is also recorded.

2.2.4 The baseline soil types are described as:

a. The western extents near the Black Cat roundabout are underlain by 'Freely draining, slightly acid, loamy soils' with moderate to low fertility.

b. The area associated with the River Great Ouse is underlain by 'Loamy and clayey floodplain soils with naturally high groundwater' of moderate fertility.

c. The area extending from the east of the River Great Ouse toward the Caxton Gibbet junction is underlain by 'Lime-rich loamy and clayey soils with impeded drainage'.

2.2.5 The chemical analysis undertaken on soil samples collected during the GI recorded that:

a. Soils are alkaline with values of pH ranging from 7.7 to 9.9.

b. Concentration range for heavy metals (Arsenic, Cadmium, Chromium, Lead, Nickel) analysed were all within acceptable limits.

c. Petroleum hydrocarbon chemical compounds such as benzene, toluene, ethylbenzene and xylene (BTEX) were not reported in any samples.

Assessment of effects

2.2.6 As noted within Chapter 2, the Scheme **[APP-071]** recorded that the total area of land within the Order Limits is approximately 713 hectares (ha).

2.2.7 Construction of the Scheme would necessitate an unavoidable loss and disturbance of soil resources, a high percentage of which comprise BMV soils.

2.2.8 Based on the extents of the temporary and permanent land take defined on the Land Plans **[APP-008]**, the following disturbance and losses are predicted to result from construction:

a. Approximately 52.77ha of temporary disturbance and 37.17ha of permanent loss of ALC Grade 1 soils.

b. Approximately 411.75ha temporary disturbance and 285.40ha of permanent loss of ALC Grade 2 soils.

c. Approximately 47.36ha temporary disturbance and 26.37ha of permanent loss of ALC Grade 3 soils.

d. Approximately 0.46ha temporary disturbance and no permanent loss of ALC Grade 4 soils.

2.2.9 The assessment presented within Chapter 9, Geology and Soils **[APP-078]** took the worst-case assumption that all Grade 3 land within the Order Limits is BMV, such that there would be a total permanent loss of 348.94ha of BMV land and a total temporary disturbance of 511.881ha of BMV land.

2.2.10 In addition, Chapter 9, Geology and Soils **[APP-078]** considered BMV land to be a receptor of very high sensitivity, which would experience a major magnitude of impact. The significance of the effect of the Scheme on Grades 1 and 2 agricultural land is assessed as very large adverse (significant), and on Grade 3 agricultural land as large adverse (significant).

3 2021 Soil and Agricultural Land Classification Surveys

3.1 Background to Agricultural Land Classification

3.1.1 Guidance for assessing the quality of agricultural land in England and Wales is set out in the Ministry of Agriculture, Fisheries and Food (MAFF) revised guidelines and criteria for grading the quality of agricultural land (Ref 13), and summarised in Natural England's Technical Information Note (TIN) 049 (Ref 14).

3.1.2 Agricultural land in England and Wales is graded between 1 and 5, depending on the extent to which physical or chemical characteristics impose long-term limitations on agricultural use. The principal physical factors influencing grading are climate, site and soil which, together with interactions between them, form the basis for classifying land into one of the five grades.

3.1.3 Grade 1 land is excellent quality agricultural land with very minor or no limitations to agricultural use. Grade 2 is very good quality agricultural land, with minor limitations which affect crop yield, cultivations or harvesting. Grade 3 land has moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield, and is subdivided into Subgrade 3a (good quality land) and Subgrade 3b (moderate quality land). Grade 4 land is poor quality agricultural land with severe limitations which significantly restrict the range of crops and/or level of yields. Grade 5 is very poor quality land, with severe limitations which restrict use to permanent pasture or rough grazing.

3.1.4 Land which is classified as Grades 1, 2 and 3a in the ALC system is defined as BMV agricultural land.

3.1.5 As explained in Natural England's TIN049 (Ref 14), the whole of England and Wales was mapped from reconnaissance field surveys in the 1960s and 1970s to provide general strategic guidance on agricultural land quality for planners. This Provisional Series of maps was originally published on an Ordnance Survey base at a scale of One Inch to One Mile (1:63,360) and is now available at 1:250,000 on the MAGIC website (Ref 9).

3.1.6 TIN049 explains that these maps are appropriate for the strategic use originally intended but are limited by scale and by refinements to the classification system (particularly the subdivision of Grade 3 into two subgrades) that have taken place since they were drawn up. TIN049 indicates that a definitive ALC grading should be obtained by undertaking a detailed survey according to the published guidelines, at an observation density of one boring per hectare. The soil survey undertaken in 2021 follows the established ALC guidelines.

3.2 Background data used for the soil and ALC survey

General features, land form and drainage

3.2.1 Agricultural land within the DCO boundary is predominantly in arable crop rotation, with the main areas of non-agricultural land within the DCO limits comprising the Black Cat Roundabout and the relating sections of the A1 and A421; mineral workings to the east of the Black Cat Roundabout; a short section of the Great River Ouse and the East Coast Mainline; the A428 (Cambridge Road); and the Caxton Gibbet Roundabout.

3.2.2 Topography within the DCO limits broadly slopes from the Caxton Gibbet Roundabout in the west at approximately 60-65m above Ordnance Datum (AOD), down to the centre of the site north of the B1046 at approximately 20m AOD. Land to the south of this point forms a broad hilltop with a highest elevation of around 50m AOD before sloping down to 18m AOD west of the East Coast mainline. There is a small hilltop feature on the eastern bank of the River Great Ouse, with land around the Black Cat Roundabout at an elevation of around 20-25m AOD.

Agro-climatic conditions

3.2.3 Agro-climatic data for the site have been interpolated from the Meteorological Office's standard 5km grid point dataset at representative altitudes. The site has a moderately warm and dry climate, and moderately large to very large moisture deficits. The number of Field Capacity Days (FCD) is smaller than the average for lowland England (150) and is very favourable for providing opportunities for agricultural field work. There are no overriding climatic limitations to agricultural land quality.

Table 3-1: Local agro-climatic conditions

Parameter	Value	Value	Value	Value	Value
Grid Reference	TL 156554	TL180554	TL 193566	TL240606	TL 299610
Approximate location	Black Cat Roundabout	East Coast Main Line	West of Potton Road	Toseland Road	Caxton Gibbet
Elevation mAOD	21	22	45	54	65
Average Annual Rainfall mm	556	545	549	540	549
Accumulated Temperatures >0°C day°	1453	1451	1425	1412	1397
Field Capacity Days	95	94	95	93	93
Average Moisture Deficit, wheat mm	123	124	122	118	115

Parameter	Value	Value	Value	Value	Value
Average Moisture Deficit, potatoes mm	120	121	118	113	109

Soil parent material and soil type

3.2.4 As reported in Chapter 9, Geology and Soils **[APP-078]**, the underlying geology mapped by the British Geological Survey within the Order Limits is the Oxford Clay Formation and the West Walton Formation and Ampthill Clay Formation (undifferentiated).

3.2.5 The Oxford Clay Formation is mapped in the west and comprises smooth to slightly silty mudstone with sporadic beds of limestone nodules.

3.2.6 The West Walton Formation and Ampthill Clay Formation (undifferentiated) is mapped in the east. The West Walton Formation comprises calcareous mudstone, silty mudstone and siltstone with fine grained sandstones and limestones or siltstone nodules. The Ampthill Clay Formation comprises smooth or slightly silty pale to medium grey mudstone with limestone nodules.

3.2.7 Superficial deposits mapped within the Order Limits include:

a. The Oadby Member widespread across the west, across an area at Eynesbury Hardwicke and an area to the east of the River Great Ouse.

b. Alluvium, mapped across the western bank of the River Great Ouse, composed of clay, silt, sand and gravel.

c. River Terrace deposits around the Black Cat Roundabout, comprising sand and gravel.

3.2.8 There are no superficial deposits mapped in areas to the east of the River Great Ouse between units of the Oadby Member.

3.2.9 The Soil Survey of England and Wales soil association mapping (Ref 15) shows:

a. Hanslope (411d) association mapped across the eastern half of the land within the Order Limits. These soils are characterised by slowly permeable, calcareous, clayey soils with some non-calcareous soils, and are typically assessed as Wetness Class (WC) III when undrained. These soils are responsible to drainage and can achieve an improvement to WC II in drier climates.

b. Evesham 3 (411c) association mapped east of the River Great Ouse which comprises slowly permeable, calcareous, clayey and fine loamy over clayey soils. There are some slowly permeable, seasonally waterlogged, non-calcareous, clayey soils. These profiles are typically assessed as WC III or WC II.

c. Efford 1 (571s) association mapped around the Black Cat Roundabout which comprises well drained, fine loamy soils, often over gravel, with some similar permeable soils that are variably affected by groundwater. These profiles are typically assessed as WC I.

d. Curdride association (841a) which is mapped between the Black Cat Roundabout and the River Great Ouse, and comprises deep, stoneless, permeable, coarse loamy soils with some slowly permeable clayey soils. Profiles are typically assessed as WC II and are affected by groundwater.

3.3 Description of the soil survey methodology

3.3.1 In total, 557 soil profiles were pre-set to form the survey scope (see Figure 1 at Appendix D). Detailed survey data undertaken by MAFF (Ref 16, Ref 9) is also available to the west of the River Great Ouse and south of the Caxton Gibbet Roundabout.

3.3.2 Soil profiles were examined using a hand-held Edelman (Dutch) auger at an observation density of one per hectare. Six observation pits were also excavated by hand to examine subsoil structures.

3.3.3 At each observation point the following characteristics were assessed for each soil horizon up to a maximum of 120cm or any impenetrable layer:

a. Soil texture.

b. Significant stoniness.

c. Colour (including localised mottling), according to the Munsell Soil Colour Charts (Ref 17**Error! Reference source not found.**).

d. Consistency.

e. Structural condition.

f. Free carbonate.

g. Depth.

3.3.4 Twenty-eight topsoil samples were submitted for laboratory determination of particle size distribution, pH, organic matter content and nutrient contents (P, K, Mg). Results are presented in Appendix A.

3.3.5 Soil WC was determined from the matrix colour, presence or absence of, and depth to, greyish and ochreous gley mottling, and slowly permeable subsoil layers at least 15cm thick, in relation to the number of Field Capacity Days at the location.

3.3.6 Soil droughtiness was investigated by the calculation of moisture balance equations (given in Appendix B). Crop-adjusted Available Profile Water (AP) is estimated from texture, stoniness and depth, and then compared to a calculated moisture deficit (MD) for the standard crops wheat and potatoes. The MD is a function of potential evapotranspiration and rainfall. Grading of the land can be affected if the AP is insufficient to balance the MD and droughtiness occurs.

3.4 Limitations

3.4.1 The principal limitation to the completion of the survey was the refusal of a small number of land owners, occupiers or agents to grant access for the surveys to take place. The surveys had been delayed until after harvest 2021 at the request of a number of land owners and occupiers in order to avoid any damage to maturing crops prior to harvest, and took place from September to November 2021 inclusive. Access was requested to all parcels of agricultural land within the Order Limits but not agreed for three land holdings; in two cases once access had been organised. These areas are shown as unsurveyed on the ALC plan (Figure 2 at Appendix D) with the predominant predicted grade shown based on the mapped soil association and extrapolation from nearby detailed soils data collected from land within the same mapped soil association. ~~Provisional ALC grades also shown as, in the absence of detailed survey work, that data represents the best available information.~~

3.5 There were no limitations to the survey itself, other than within an area to the east of Eynesbury that was stripped for archaeology investigation and was not in agricultural use at the time of survey. Although it was possible to observe the stripped soil resources, a full ALC survey of this land could not be undertaken.

3.6 Description of the findings of the soil survey

3.6.1 Assessment of land quality has been carried out according to the MAFF revised ALC guidelines (Ref 13). Soil profiles have been described according to Hodgson (Ref 18 ~~Ref 18~~) which is the recognised source for describing soil profiles and characteristics according to the revised ALC guidelines.

3.6.2 There are four main soil types present within the survey area.

Soil Type 1

3.6.3 The most widespread soil type is present from the Caxton Gibbet Roundabout to the River Great Ouse and in the very west of the site. This comprises clay or clay loam topsoil over clay to depth with some clay loam subsoil horizons often correlating with a high calcareous stone content.

3.6.4 The topsoil comprises variably calcareous clay or heavy clay loam and is brown (10YR4/3 in the Munsell soil colour charts), very dark or dark greyish brown (10YR3/2, 2.5Y4/2, 10YR4/2), dark brown (10YR3/3), dark grey (2.5Y4/1) or olive brown (2.5Y4/3, 2.5Y4/4) in colour. The topsoil is very slightly to slightly stony, comprising of hard stone with less widespread calcareous stone. Soil structure is mostly fine to medium subangular blocky.

3.6.5 The upper subsoil comprises clay which is mostly calcareous and commonly greyish brown (2.5Y5/2), light olive brown (2.5Y5/3, 2.5Y5/4) or light yellowish brown (2.5Y6/3, 2.5Y6/4). Stone content is stoneless to moderately stony and is primarily made up of calcareous stone, especially where the content is moderate. Soils within this horizon mostly contain ochreous mottling present at varying depths, indicating prolonged periods of wetness. This horizon is variably permeable and has either a medium subangular blocky structure or a coarse angular to prismatic structure.

3.6.6 The lower subsoil comprises calcareous clay which is grey (10YR5/1, 10YR6/1, 2.5Y6/1, N6/, N5/) or olive brown (2.5Y5/3, 2.5Y5/4). Stone content is varied and mostly stoneless to slight between the Great River Ouse and across the flat land east of the East Coast Mainline. East of this point, as the land slopes up to higher elevations, and as the Scheme runs parallel to the A428, stone content is higher and the lower subsoil is commonly moderately stony and made up mostly of calcareous stone. Soil structure is predominantly poor, firm and coarse angular blocky to prismatic. This horizon is slowly permeable and ochreous mottling is observed. The lower subsoil commonly has lenses of clay loam which is often high in calcareous stone.

3.6.7 Soil profiles with these characteristics are assessed as WC II or III depending on the depth to the gleyed and slowly permeable horizon. Profiles have slight to moderate deficits in available water throughout the growing season. Soil profiles are primarily assessed as Subgrade 3a by soil wetness and/or droughtiness. Where soil wetness is the overriding limitation, profiles are either WC II with a decalcified topsoil or WC III with a calcareous topsoil. Grade 2 profiles are assessed as WC II with a calcareous topsoil and have slight deficits in available water. WC III profiles with a non-calcareous topsoil are further limited to Subgrade 3b.

3.6.8 A calcareous topsoil improves water movement, workability and reduces the risk of structural damage to the topsoil caused by poorly timed cultivations.

3.6.9 This soil type is dominant across land east of the River Great Ouse, but is also found in a limited number of profiles to the very west of the site. Profiles around the Black Cat Roundabout comprise sandy loam over loamy sand or are of varying clay loam.

Soil Type 2

3.6.10 Soils comprising sandy loam over loamy sand are present to the north of the Black Cat Roundabout. The topsoil comprises dark greyish brown (10YR4/2), non-calcareous, medium sandy loam, with one recording of sandy clay loam. Stone content is very slight to slight, at 5% to 10% by volume. Soil structure is medium to coarse granular and the consistency is friable.

3.6.11 The upper subsoil comprises dark yellowish brown (10YR4/4), non-calcareous, medium sandy loam, loamy sand or sandy clay loam. The upper subsoil has slight to moderate levels of stone. Soil structure is medium granular and the consistency is friable.

3.6.12 The lower subsoil comprises brown (7.5YR4/4), strong brown (7.5YR4/6) or light yellowish brown (10YR6/4), loamy sand or sandy loam, with few recordings of sand at depth. Stone content is slight to moderate, at 7-20%. Structure is medium granular and the consistency is friable.

3.6.13 Soil profiles with these characteristics are assessed as WC I and drain freely through the soil profile. Soils have moderate deficits in available water and are limited to Subgrade 3a by droughtiness. Profile 42/Pit has large deficits and is restricted to Subgrade 3b. This is an isolated observation and has been incorporated into the surrounding Subgrade 3a unit.

Soil Type 3

3.6.14 Soils comprising varying clay loam are found in small patches around the Black Cat Roundabout. The topsoil comprises dark greyish brown (10YR4/2) or brown (10YR4/3), primarily non-calcareous, sandy silt loam, sandy clay loam or heavy clay loam. Stone content is very slight to slight, at 4-8%. Soil structure is fine to medium subangular blocky and the consistency is friable.

3.6.15 The upper subsoil is brown (7.5YR4/3, 7.5YR4/4), dark yellowish brown (10YR4/4) or light brown (7.5YR6/4), non-calcareous, sandy clay loam, medium clay loam or heavy clay loam. Stone content is commonly higher than the topsoil but is still very slight to slight, at 5-10%. Structure is medium subangular blocky and the consistency is friable.

3.6.16 The lower subsoil has similar characteristics to the upper subsoil with some yellowish brown (10YR5/4), light yellowish brown (10YR6/4) or light brown (7.5YR6/3) present in few profiles and is variably calcareous. Stone content is slight to moderate, up to 20%, with occasional recordings of calcareous stone.

3.6.17 Profiles of this soil type are assessed as WC I and have slight to moderate deficits in available water limiting them to Grade 2 or Subgrade 3a respectively.

Soil Type 4

3.6.18 A fourth soil type is present in patches west of the River Great Ouse. The topsoil is dark brown (10YR3/3), predominantly non-calcareous, sandy loam, sandy silt loam or clay loam. Stone content is very slight to slight, at 4-10%. Soil structure is coarse granular, and the consistency is friable.

3.6.19 The upper subsoil, where present, comprises brown (10YR5/3, 7.5YR5/3), light brown (7.5YR6/3, 7.5YR6/4) or yellowish brown (10YR5/6) clay loam or sandy loam and is very slightly to moderately stony, up to 20% hard stone. Soil structure is fine to medium granular, with a friable to very friable consistency.

3.6.20 The lower subsoil comprises yellow (10YR7/6), calcareous loamy sand and is moderately to very stony, up to 40%, made up of both hard and calcareous stone. Soil structure is fine to medium granular and has a friable to very friable consistency.

3.6.21 Soils with these characteristics are assessed as WC I and are freely draining. Profiles have moderate to large deficits in available water and are limited to Subgrade 3a or 3b by droughtiness.

3.6.22 Where isolated observations do not form a conformable mapping unit, they have been incorporated into the surrounding classification.

3.6.23 Observations 213-228, east of Eynesbury, are located on land stripped for archaeology investigation and is no longer in agricultural use. This area is mapped as the Hanslope and Evesham 3 association and has been classified as Subgrade 3a in line with the observed stripped soils and the most prevalent grade from surrounding detailed data.

3.6.24 **Table 3-2~~Table 3-2~~** sets out the distribution of ALC grades within the order limits, which is also shown in Figure 2 at Appendix D.

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Table 3-2: Agricultural Land Classification within the Order Limits

Grade	Description	Ha (approx.)	% of area surveyed
Grade 2	Very good quality agricultural land	26	5
Subgrade 3a	Good quality agricultural land	308	59
Subgrade 3b	Moderate quality agricultural land	23	5
Non-agricultural	*Intentionally blank*	161	31
Total surveyed	*Intentionally blank*	518	100
Not surveyed	*Intentionally blank*	195	
Total		713	

3.6.25 Of the 195ha for which access was not granted, approximately 190ha are mapped as mostly Hanslope association with some Evesham 3 association soils and are adjacent to soils described as Type 1 soils above. The adjacent soils are predominantly classified as Subgrade 3a (86%), with patches of Grade 2 (7%) and Subgrade 3b (7%).

3.6.26 The area of unsurveyed land to the north of the Black Cat Roundabout is mapped as Efford 1 soils and adjacent soil profile data conforms to the Type 3 soils described above. It is predicted that this area (extending to approximately 5ha) would be classified as Grade 2 on a detailed survey.

3.6.27 If these proportions are applied to the 195ha of unsurveyed land, the total areas within each grade would be expected to be as set out in **Table 3-3~~Table 3-3~~**.

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Table 3-3: Agricultural Land Classification within the Order Limits (including predicted grades)

Grade	Description	Ha (approx.)	%
Grade 2	Very good quality agricultural land	44	6
Subgrade 3a	Good quality agricultural land	472	66
Subgrade 3b	Moderate quality agricultural land	36	5
Non-agricultural	*Intentionally blank*	161	23
Total		713	100

~~If the 195ha to which access has not been granted for survey is apportioned in line with the areas surveyed, the area of BMV land in Grades 2 and 3a agricultural land would be expected to amount to approximately 460ha.~~

4 Implications for the assessment of effects in the ES

4.1.1 The detailed ALC survey demonstrates that the quality of agricultural land is generally lower than assumed in Chapter 9, Geology and Soils **[APP-078]** of the ES, with no Grade 1 land found in the detailed survey, a considerably smaller area of Grade 2 land but a considerably larger area of Subgrade 3a land. In short, the land mapped as Provisional Grade 2, on which the ES was based, has been generally classified as Subgrade 3a on detailed survey examination.

4.1.2 Chapter 9, Geology and Soils **[APP-078]**, assessed the significance of the effect on Provisional Grades 1 and 2 agricultural land as very large adverse, and on Provisional Grade 3 agricultural land as large adverse.

4.1.3 Although the actual area of Grade 2 is reduced substantially from that assumed within Chapter 9, Geology and Soils **[APP-078]**, the significance criteria within DMRB LA109 would still determine that the effect on Grade 2 land is very large adverse (as it is assessed as a very high sensitivity receptor that would be subject to a major magnitude of impact).

4.1.4 Subgrade 3a agricultural land is a high sensitivity receptor from Table 9-1 of Chapter 9, Geology and Soils **[APP-078]**, which would be subject to a major magnitude of impact (Table 9-2 of Chapter 9, Geology and Soils **[APP-078]**), which would give rise to a large or very large adverse effect (Table 9-3 of Chapter 9, Geology and Soils **[APP-078]**).

4.1.5 The detailed survey has therefore established that the quality of land is slightly lower than assumed in Chapter 9, Geology and Soils **[APP-078]**, which was based on the best available data in the absence of field data and in the case of Grade 3, took a worst case assumption that all Provisional Grade 3 would be Subgrade 3a and BMV land. However, applying the same assessment methodology and criteria to the detailed survey results does not alter the significance of effect reported for agricultural land in Chapter 9, Geology and Soils **[APP-078]**.

References

Ref 1 National Policy Statement for National Networks. Department for Transport (2014).

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Ref 4 Huntingdonshire's Local Plan to 2036. Huntingdonshire District Council (2019).

Ref 5 South Cambridgeshire Local Plan. South Cambridgeshire District Council (2018).

Ref 6 Safeguarding our Soils, A Strategy for England. Defra (2009).

Ref 7 Construction code of practice for the sustainable use of soils on construction sites. Defra (2011).

Ref 8 Design Manual for Roads and Bridges Volume LA109 Geology and soils. (2020).

Ref 9 MAGIC online interactive mapping. Department for Environment Food & Rural Affairs.

Ref 10 Soilscapes soil types viewer. Cranfield University Soil and AgriFood Institute (2020).

Ref 11 A428 Black Cat to Caxton Gibbet Improvements Ground Investigation Report - HE551495-ACM-VGT-GEN_SW_Z_ZZ-RP-GE-0004 P02 S3 HAGDMS no. 31712. AECOM (2020).

Ref 12 Design Manual for Roads and Bridges Volume LA104 Environmental assessment and monitoring. Highways England (2020).

Ref 13 Agricultural Land Classification of England and Wales: Revised criteria for grading the quality of agricultural land (ALC011). Ministry of Agriculture, Fisheries and Food (1988).

Ref 14 Agricultural Land Classification: protecting the best and most versatile agricultural land – Technical Information Note TIN 049. Natural England 2012).

Ref 15 Soils of Eastern England (1:250,000), Sheet 4. Soil Survey of England and Wales (1984).

Ref 16 Agricultural Land Classification detailed Post 1988 ALC survey, Roxton, Black Cat Roundabout (ALCC00191). Ministry of Agriculture, Fisheries and Food (1991).

Ref 17 Munsell Soil Color Book. Munsell Color (2009). Grand Rapids, MI, USA

Ref 18 Soil Survey Field Handbook, Describing and Sampling Soil Profiles. Soil Survey Technical Monograph No. 5. Hodgson J.M (1997).

Appendix A – Laboratory Data

Determinand	42 TS	86/PIT TS	96/PIT TS	146/147 TS	337 TS	524/525 TS	539/542 TS	Units
Sand 2.00-0.063 mm	68	43	23	24	24	24	26	% w/w
Silt 0.063-0.002 mm	21	34	40	27	31	29	33	% w/w
Clay <0.002 mm	11	23	37	49	45	47	41	% w/w
Organic Matter	0.9	1.3	1.7	2.2	1.5	2.3	2.2	% w/w
Texture	Sandy Loam	Medium clay loam	Clay	Clay	Clay	Clay	Clay	

Determinand	42 TS	86/PIT TS	96/PIT TS	146/147 TS	337 TS	524/525 TS	539/542 TS	Units
Soil pH	7	6.8	7.3	7.7	8.2	7.8	6.4	
Phosphorus (P)	24.6	15.6	10.6	19.4	7.2	16.4	23.2	Mg/l (av)
Potassium (K)	170	120	201	209	114	165	140	Mg/l (av)
Magnesium (Mg)	49.3	86.2	158	115	64.5	76.5	134	Mg/l (av)

Determinand	42 TS	86/TS	96/PIT	146/147	337 TS	524/525 TS	539/542 TS	Units
Phosphorus (P)	2	2	1	2	0	2	2	ADAS Index
Potassium (K)	2-	1	2+	2+	1	2-	2-	ADAS Index
Magnesium (Mg)	1	2	3	3	2	2	3	ADAS Index

Determinand	1 TS	4 TS	6/7 TS	15/16 TS	20/21 TS	30/31 TS	50 TS	Units
Soil pH	7.5	7.7	5.7	7.2	7.2	7.1	6.8	
Phosphorus (P)	34.2	25.8	67.4	45.2	42.8	51.6	29.8	Mg/l (av)
Potassium (K)	220	153	321	225	92.7	287	59.2	Mg/l (av)
Magnesium (Mg)	116	33.0	105	47.1	31.1	71	22.3	Mg/l (av)
Organic matter	2.5	1.6	1.5	1.3	1.3	1.7	1.2	% w/w

Determinand	1 TS	4 TS	6/7 TS	15/16 TS	20/21 TS	30/31	50 TS	Units
Phosphorus (P)	3	3	4	3	3	4	3	ADAS Index
Potassium (K)	2+	2-	3	2+	1	3	0	ADAS Index
Magnesium (Mg)	3	1	3	1	1	2	0	ADAS Index

Determinand	131/132 TS	150/151 TS	157 TS	168/172 TS	178/179 TS	182/183 TS	319-325 TS COMPOSITE	Units
Soil pH	7.7	7.7	8	8.3	8.2	8.3	8.2	
Phosphorus (P)	21.6	19.2	9.4	10	9.8	8.8	7	Mg/l (av)
Potassium (K)	205	194	172	296	233	263	145	Mg/l (av)
Magnesium (Mg)	68.6	71.9	45	71.9	70.5	86.7	70.5	Mg/l (av)
Organic matter	2.3	1.6	2.2	2.5	2.2	2.3	1.8	% w/w

Determinand	131/132 TS	150/151 TS	157 TS	168/172	178/179 TS	182/183 TS	319-325 TS COMPOSITE	Units
Phosphorus (P)	2	2	0	1	1	0	0	ADAS Index
Potassium (K)	2+	2+	2-	3	2+	3	2-	ADAS Index
Magnesium (Mg)	2	2	1	2	2	2	2	ADAS Index

Determinand	354 TS	378/380 TS	392/294 TS	416/417 TS	422/423/424 TS	537/545 TS	553/556 TS	Units
Soil pH	**8.2**	**7.9**	**8.1**	8	**8.2**	**7.2**	**7.2**	
Phosphorus (P)	22.2	11.8	11.2	16.6	13.4	20.4	20	Mg/l (av)
Potassium (K)	147	173	172	143	148	170	150	Mg/l (av)
Magnesium (Mg)	81.7	98.2	74.9	67.0	68.3	99.0	88.8	Mg/l (av)
Organic matter	1.8	1.8	1.8	1.9	1.6	2.2	2	% w/w

Determinand	354 TS	378/380 TS	392/294 TS	416/417 TS	422/423/424 TS	537/545 TS	553/556 TS	Units
Phosphorus (P)	2	1	1	2	1	2	2	ADAS Index
Potassium (K)	2-	2-	2-	2-	2-	2-	2-	ADAS Index
Magnesium (Mg)	2	2	2	2	2	2	2	ADAS Index

Appendix B – Soil Profile Summaries and Droughtiness Calculations

Appendix B – Soil Profile Summaries and Droughtiness Calculations

Wetness / workability limitations are determined according to the methodology given in Appendix 3 of the ALC guidelines, MAFF 1988

Droughtiness calculations are made according to the methodology given in Appendix 4 of the ALC guidelines, MAFF 1988.

Grades are shown for drought, wetness and any other soil or site factors which are relevant. The overall Grade is set by the most limiting factor and shown on the right.

Stone types		
%	TAv	Eav
hard	1	0.5
chalk	10	7

Climate Data	
MDwheat	123
MDpotato	120
FCD	95
AAR	556

Wetness Class Guidelines	*II*	*III*	*IV*	*V*
SPL within 80cm, gleying within 40cm	>52cm	52-80cm		
SPL within 80cm, gleying at 40-70cm	<80cm			
No SPL but gleying within 40cm	coarse subsoil	*I*	other cases	*I*
Maximum depth of auger penetration is underlined				

Ciimate
1453 D^{o}
Limitation
Grade 1
21 m

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% chalk	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
1	T	0	32	C	mod	10YR3/3			3	1		53	53	n	n	*II*	2	**3a**	DR
		32	52	C	calc	2.5Y5/3			0	5		30	31	n	n				
		52	63	C	calc	2.5Y5/3	Fe	com	0	10		9	17	y	n				
		63	120	C	v.calc	10YR6/1	Fe	many	0	7	poor	40	9	y	y				
											Total	**131**	**110**						
											MB	8	-10						
											Droughtiness grade (DR)	2	3a						
4	T	0	35	mSL	mod	10YR3/3			7	5		54	54	n	n	*I*	1	**3b**	DR
		35	120	LmS	v.calc	10YR7/6			10	15		52	29	n	n				
											Total	**106**	**84**						
											MB	-17	-36						
											Droughtiness grade (DR)	3a	3b						
5	T	0	30	C	slight	2.5Y4/3			6	0		48	48	n	n	*II*	2	**3a**	DR
		30	42	C	mod	2.5Y6/6	Fe	few	5	5		18	18	n	n				
		42	72	C	mod	2.5Y6/4	Fe	com	5	10	poor	24	34	y	y				
		72	100	C	mod	7.5Y6/1	Fe	com	0	10	poor	20	0	y	y				
		100	120	C	mod	N6/0	Fe	many	0	10	poor	14	0	y	y				
											Total	**124**	**100**		GR.gradient			1 o	NE
											MB	1	-20		ST.stone>2cm				
											Droughtiness grade (DR)	3a	3a						
6	T	0	32	CL	n	10YR4/3			8	0		53	53	n	n	*II*	2	**3a**	DR

		32	65	SCL	n	10YR5/4			5	0		40	47	n	n							
		65	100	C	n	10YR5/4	Fe	com	5	0	poor	23	6	(y)	y							
		100	120	C	n	2.5Y6/4	Fe	com	30	0	poor	10	0	y	y							
											Total	**127**	**107**		GR.gradient				2 °		NE	
											MB	4	-13		ST.stone>2cm							
											Droughtiness grade (DR)	3a	3a									
7	T	0	38	SCL	n	10YR4/3			6	0		61	61	n	n	*II*	2	**3a**	DR			
		38	45	C	n	7.5YR5/4	Fe	few	5	0		11	11	n	n							
		45	75	C	n	10YR6/4	Fe	com	5	0	poor	23	31	y	y							
		75	85	SCL	n	10YR6/4	Fe	com	20	0		8	0	y	n							
		85	120	C	n	10YR7/6	Fe	com	0	0	poor	25	0	y	y							
											Total	**127**	**103**		GR.gradient				2 °		NE	
											MB	4	-17		ST.stone>2cm							
											Droughtiness grade (DR)	3a	3a									
8	**Non-agricultural land**																					
9	T	0	30	hCL	n	10YR3/3			10	0		49	49	n	n	*I*	2	**3b**	DR			
		30	48	hCL	n	10YR5/6	Mn	many	15	0		25	25	n	n							
		48	65	LcS	very	10YR7/6	Fe	com	20	10		9	12	n	n							
		65	120	LcS	very	10YR7/6			30	10		24	3	n	n							
											Total	**107**	**88**		GW.Groundwater				EA Fz1			
											MB	-16	-32		ST.stone>2cm							
											Droughtiness grade (DR)	3a	3b		Scrub							
10	T	0	33	C	n	10YR4/2			8	0		52	52	n	n	*II*	3a	**3a**	WE DR			
		33	60	hCL	n	7.5YR6/3	Fe	many	15	0		32	37	y	n							
		60	120	LcS	very	10YR7/6	Mn	com	30	10		27	6	n	n							
											Total	**111**	**95**		GW.Groundwater				EA Fz1		1	
											MB	-12	-25		ST.stone>2cm							
											Droughtiness grade (DR)	3a	3a		Rough (set aside) grass, by deep ditch							
11	T	0	34	hCL	n	10YR3/3			10	0		55	55	n	n	*I*	2	**2**	WE DR			
		34	65	C	calc	10YR5/4			0	3		37	49	n	n							
		65	110	C	calc	10YR5/3	Fe	com	0	3		36	8	y	n							
		110	120	hCL	calc	10YR5/1	Fe	many	0	5	m/poor	8	0	y	y							
											Total	**137**	**112**									

											MB	14	-8							
										Droughtiness grade (DR)		2	2							
12	T	0	38	hCL	n	10YR3/2			10	0		62	62	n	n	*II*	3a	**3a**	WE DR	
		38	67	C	mod	10YR5/4	Fe	few	5	10		30	42	n	n					
		67	120	C	v.calc	N5/	Fe	com	0	5	poor	37	4	y	y					
											Total	**129**	**108**							
											MB	6	-12							
										Droughtiness grade (DR)		2	3a							
13	T	0	34	SCL	n	10YR3/2			12	0		51	51	n	n	*I*	1	**3a**	DR	
		34	50	SCL	n	10YR4/4			20	0		20	20	n	n					
		50	80	mSL	n	10YR5/4			30	0		24	22	n	n					
		80	120	LcS	n	10YR7/6			30	0		17	0	n	n					
											Total	**112**	**92**		SCL-Sand and clay					
											MB	-11	-28							
										Droughtiness grade (DR)		3a	3a							
14	T	0	37	hCL	slight	10YR4/2			7	0		62	62	n	n	*I*	2	**2**	WE DR	
		37	68	mCL	calc	10YR4/4			3	2		37	48	n	n					
		68	120	SZL	calc	10YR5/4			0	5		56	3	n	n					
											Total	**156**	**113**							
											MB	33	-7							
										Droughtiness grade (DR)		1	2							
15	T	0	32	mCL	n	10YR4/3			8	0		53	53	n	n	*I*	1	**3a**	DR	
		32	42	mCL	n	10YR6/6	Fe	com f	8	0		15	15	n	n					
		42	100	hSCL	n	7.5YR6/4	Fe	com	5	0	m/poor	54	37	y	n					
		100	120	SL	n	10YR7/6	Fe	com	10	0		20	0	n	n					
											Total	**142**	**105**		GR.gradient			1^{o}	S	
											MB	19	-15		ST.stone>2cm					
										Droughtiness grade (DR)		2	3a							
16	T	0	35	SCL	n	10YR3/3			20	0		48	48	n	n	*I*	1	**3b**	DR	

		35	50	LcS	mod	10YR7/6			20	10		10	10	n	n							
		50	120	LcS	very	10YR7/6			30	10		31	12	n	n							
											Total	**90**	**71**		GR.gradient			1 o	S			
											MB	-33	-49		ST.stone>2cm			> 5%	2			
											Droughtiness grade (DR)	3b	3b									
17	T	0	33	SL+	n	10YR3/3			12	0		50	50	n	n	*I*	1	**3b**	DR			
		33	60	SL	n	7.5YR5/3	Fe	com	20	0		30	33	y	n							
		60	120	LcS	very	10YR7/6			30	10		27	6	n	n							
											Total	**106**	**89**		GR.gradient			2 o	S			
											MB	-17	-31		ST.stone>2cm							
											Droughtiness grade (DR)	3a	3b									
18	T	0	34	SZL	n	10YR4/4			6	0		61	61	n	n	*I*	1	**2**	DR			
		34	60	SZL	n	7.5YR6/6	OM		8	0		35	41	n	n							
		60	100	SCL	n	7.5YR6/3	Fe	com	8	0		37	14	y	n							
		100	120	C	n	10YR7/6	FeMn	many	8	0	poor	13	0	(y)	y							
											Total	**146**	**116**		GR.gradient			1 o	S			
											MB	23	-4		ST.stone>2cm							
											Droughtiness grade (DR)	2	2									
19	T	0	31	mCL	n	10YR4/3			6	0		53	53	n	n	*I-II*	2	**3a**	DR			
		31	40	mCL	n	7.5YR6/4	MnFe	com f	5	0		14	14	y	n							
		40	50	SCL	n	7.5YR6/3			20	0		12	12	n	n							
		50	120	LcS	n	10YR7/6			30	10		31	12	n	n							
											Total	**110**	**91**		GR.gradient			1 o	S			
											MB	-13	-29		ST.stone>2cm							
											Droughtiness grade (DR)	3a	3a									
20	T	0	34	SL	n	10YR3/3			8	0		53	53	n	n	*I*	1	**3a**	DR			
		34	42	SL	n	7.5YR6/4	Fe	com f	10	0		11	11	y	n							
		42	70	SL	n	7.5YR6/4	Fe	com	10	0		31	38	y	n							
		70	120	LmS	n	7.5YR4/6	Mn	com	15	0		26	0	n	n							
											Total	**121**	**102**		Drilled, patchy SL and cloddier SCL topsoil							
											MB	-2	-18									
											Droughtiness grade (DR)	3a	3a									

21	T	0	32	SCL	n	10YR4/3			8	0		50	50	n	n	/	2	**3a**	DR	
		32	42	SL	n	7.5YR5/4	Fe	com f	10	0		14	14	n	n					
		42	85	SL/SCL	n	7.5YR6/4	Fe	com	10	0		44	41	y	n					
		85	110	SCL	n	7.5YR6/4	Fe	many	15	0	m/poor	19	0	y	n					
		110	120	S	n	7.5YR7/6			5	0		5	0	n	n					
											Total	**132**	**105**							
											MB	9	-15							
											Droughtiness grade (DR)	2	3a							
22	T	0	33	SZL	n	10YR3/3			6	0		59	59	n	n	/	1	**2**	DR	
		33	45	hCL	n	7.5YR6/6			5	0		18	18	n	n					
		45	90	mCL	n	7.5YR6/4			8	0		44	37	n	n					
		90	120	C	n	7.5YR6/4	Fe	many	0	0	poor	21	0	y	y					
											Total	**143**	**114**							
											MB	20	-6							
											Droughtiness grade (DR)	2	2							
23	T	0	28	SL	n	10YR4/3			10	0		43	43	n	n	/	1	**3a**	DR	
		28	45	SL		10YR5/6	OM	com	10	0	good	26	26	n	n					
		45	80	SL-		7.5YR5/4	Fe	few	20	0		33	31	n	n					
		80	110	LcS		10YR7/6			20	0		15	0	n	n					
		110	120	SL		10YR7/6			10	0		7	0	n	n					
											Total	**124**	**100**							
											MB	1	-20							
											Droughtiness grade (DR)	3a	3a							
24	T	0	28	SZL	n	10YR4/3			8	0		49	49	n	n	/	1	**2**	DR	
		28	65	SZL	n	7.5YR6/4	OM	few	5	0		51	60	n	n					
		65	80	SCL	n	7.5YR6/3	Fe	com	10	0		14	7	y	n					
		80	120	SL	n	7.5YR5/3	Fe	com	20	0		36	0	y	n					
											Total	**150**	**116**							
											MB	27	-4							
											Droughtiness grade (DR)	2	2							
27	T	0	30	mSL	n	10YR4/2			5	0		49	49	n	n	/	1	**3a**	Dr	
		30	54	mSL	n	10YR4/4			7	0		32	34	n	n					

Drilled

		54	58	LmS	n	10YR4/6			15	0		2	3	n	n						
		58	120	LmS	n	10YR4/6			20	0		30	9	n	n						
											Total	**113**	**94**								
											MB	-10	-26								
											Droughtiness grade (DR)	3a	3a								
28	T	0	34	SZL	n	10YR4/3			8	0		60	60	n	n	*I*	1	**3a**	DR		
		34	50	SL	n	10YR5/3	Mn	com	20	0		20	20	n	n						
		50	65	LcS	very	10YR7/6			20	10		8	10	n	n						
		65	120	LcS	very	10YR7/6			30	10		24	3	n	n						
											Total	**111**	**92**								
											MB	-12	-28		ST.stone>2cm						
											Droughtiness grade (DR)	3a	3a								
29	T	0	30	SCL	n	10YR4/3			10	0		46	46	n	n	*I*	1	**3a**	DR		
		30	40	SCL	n	10YR5/4	OM		15	0	good	16	16	n	n						
		40	55	SL	n	10YR5/6	Fe	few	8	0		19	21	n	n						
		55	80	LcS	very	10YR7/6	Fe	com	20	10		13	10	n	n						
		80	120	LcS	very	10YR7/6	Fe	com	30	10		18	0	n	n						
											Total	**112**	**94**		GR.Gradient			1o	S		
											MB	-11	-26		ST.stone>2cm						
											Droughtiness grade (DR)	3a	3a								
30	T	0	31	hCL	n	10YR3/3			8	0		52	52	n	n	*I-II*	3a	**3a**	WE DR		
		31	43	hCL	n	10YR5/3	Fe	com f	10	0	good	23	23	y	n						
		43	55	LcS	very	10YR7/6	Fe	com	20	10		7	8	n	n						
		55	120	LcS	very	10YR7/6	Fe	com	30	10		29	9	n	n						
											Total	**111**	**92**		GW.Groundwater			EA Fz1			
											MB	-12	-28		ST.stone>2cm						
											Droughtiness grade (DR)	3a	3a								
31	T	0	30	mCL	n	10YR3/3			4	0		52	52	n	n	*I*	1	**2**	DR		
		30	42	mCL	n	10YR4/3		com f	4	0	good	24	24	n	n						
		42	80	SCL	n	10YR5/6	Fe	few	8	0		39	39	n	n						
		80	95	LcS	very	10YR7/6	Fe	com	20	10		8	0	n	n						

		95	120	LcS	very	10YR7/6	Fe	com	30	10		11	0	n	n							
											Total	**134**	**115**		GW.Groundwater			EA Fz1				
											MB	11	-5		ST.stone>2cm							
											Droughtiness grade (DR)	2	2									
32	T	0	30	mSL	n	10YR4/2			5	0		49	49	n	n	*I*	3a	**3a**	DR			
		30	60	SCL	n	10YR4/4			7	0		37	42	n	n							
		60	77	hCL	n	7.5YR4/4			10	0		15	15	n	n							
		77	120	hCL	n	7.5YR4/4			20	0		35	0	n	n							
											Total	**136**	**105**									
											MB	13	-15									
											Droughtiness grade (DR)	2	3a									
33	T	0	31	SCL	n	10YR4/2			5	0		50	50	n	n	*I*	3a	**3a**	DR			
		31	60	SCL	n	10YR4/4			15	0		33	37	n	n							
		60	80	LmS	n	7.5YR4/6			7	0		11	8	n	n							
		80	95	hCL	mod	7.5YR4/4			7	7		14	0	n	n							
		95	120	hCL	mod	7.5YR4/4			10	10		22	0	n	n							
											Total	**130**	**96**									
											MB	7	-24									
											Droughtiness grade (DR)	2	3a									
34	**Non-agricultural land**																					
35	T	0	33	SL	n	10YR3/3			6	0		53	53	n	n	*I*	1	**3a**	DR			
		33	50	SL	n	10YR4/4	OM		5	0	good	28	28	n	n							
		50	75	SL	n	7.5YR6/4	Fe	com	5	0		26	29	y	n							
		75	100	SCL	n	7.5YR6/4	Fe	many	5	0	m/poor	21	0	y	n							
		100	115	SL	n	7.5YR6/4	Fe	com	10	0		15	0	y	n							
		115	120	cS	n	7.5YR6/4			30	0		1	0	n	n							
											Total	**144**	**109**									
											MB	21	-11									
											Droughtiness grade (DR)	2	3a									
36	T	0	34	SZL	n	10YR4/3			4	0		62	62	n	n	*II*	1	**2**	DR			
		34	65	mCL	n	7.5YR6/4	Fe	few f	5	0		39	47	n	n							

		65	85	hCL	n	7.5YR6/3	Fe	com	5	0	poor	13	6	y	y					
		85	115	C	slight	7.5YR6/3	Fe	many	5	0	poor	20	0	y	y					
		115	120	SL	mod	7.5YR6/3	Fe	many	5	0		5	0	y	n					
											Total	**139**	**115**							
											MB	16	-5							
											Droughtiness grade (DR)	2	2							
37	T	0	28	SL+	n	10YR4/3			6	0		45	45	n	n	*I*	1	**2**	DR	
		28	43	mCL	n	10YR6/6	OM		5	0	good	30	30	n	n					
		43	65	mCL	n	10YR7/6	Fe	com	5	0		25	34	n	n					
		65	115	hCL	n	2.5Y7/4	Fe	com	5	0	m/poor	41	7	y	n					
		115	120	SL	n	2.5Y7/4			10	0		5	0	n	n					
											Total	**145**	**115**							
											MB	22	-5							
											Droughtiness grade (DR)	2	2							
38	T	0	31	SL	n	10YR3/3			10	0		48	48	n	n	*I*	1	**3a**	DR	
		31	65	mCL	n	7.5YR5/3			20	0		37	44	n	n					
		65	90	LcS	very	10YR7/6			20	10		13	3	n	n					
		90	120	LcS	very	10YR7/6			30	10		13	0	n	n					
											Total	**110**	**95**							
											MB	-13	-25							
											Droughtiness grade (DR)	3a	3a							
39	T	0	32	mSL	n	10YR3/2			10	0		49	49	n	n	*I*	1	**3a**	DR	
		32	50	mSL	n	10YR4/4			10	0		24	24	n	n					
		50	72	mSL	n	10YR4/4			15	0		21	26	n	n					
		72	105	LmS	n	7.5YR4/6			7	0		19	0	n	n					
		105	120	LmS	n	7.5YR4/4			20	0		7	0	n	n					
											Total	**120**	**100**							
											MB	-3	-20							
											Droughtiness grade (DR)	3a	3a							
40	T	0	30	mSL	n	10YR4/2			10	0		46	46	n	n	*I*	1	**3a**	DR	
		30	56	mSL	n	10YR4/4			10	0		33	35	n	n					

ST.stone>2cm <5%

		56	70	mSL	n	10YR4/4			15	0		13	18	n	n						
		70	110	LmS	n	7.5YR4/6			15	0		21	0	n	n						
		110	120	S	n	7.5YR4/6			20	0		4	0	n	n						
											Total	**117**	**100**								
											MB	-6	-20								
											Droughtiness grade (DR)	3a	3a								
41	T	0	32	mSL	n	10YR4/2			10	0		49	49	n	n	*I*	1	**3a**	DR		
		32	68	SCL	n	10YR4/4			10	0		41	49	n	n						
		68	110	mSL	n	10YR6/4			15	0		40	3	n	n						
		110	120	mSL	n	10YR6/4			20	0		9	0	n	n						
											Total	**139**	**101**								
											MB	16	-19								
											Droughtiness grade (DR)	2	3a								
42	T	0	30	mSL	n	10YR4/2			10	0		46	46	n	n	*I*	1	**3b**	DR		
Pit		30	48	mSL	n	10YR4/4			10	0		24	24	n	n						
		48	80	LmS	n	10YR6/4			15	0		17	17	n	n						
		80	120	LmS	n	10YR4/4			7	0		22	0	n	n						
											Total	**110**	**88**								
											MB	-13	-32								
											Droughtiness grade (DR)	3a	3b								
43	T	0	30	mSL	n	10YR4/2			7	0		48	48	n	n	*I*	3a	**3a**	DR		
		30	73	mCL	n	10YR4/4			5	0		52	61	n	n						
		73	90	mSL	n	7.5YR4/4			5	0		18	0	n	n						
		90	120	mSL	n	7.5YR4/4			20	0		27	0	n	n						
											Total	**145**	**109**								
											MB	22	-11								
											Droughtiness grade (DR)	2	3a								
44	T	0	24	SCL	n	10YR4/2			7	0		38	38	n	n	*I*	3a	**3a**	DR		
		24	73	hCL	n	10YR4/4	Mn	com	10	0		59	67	n	n						

		73	120	mCL	v.calc	10YR6/4	0	12		45	0	n	n						
									Total	**142**	**105**								
									MB	19	-15								
									Droughtiness grade (DR)	2	3a								
45	**Non-agricultural land**																		
50	T	0	31	SZL	n	10YR4/2	5	0		56	56	n	n	/	1	**2**	DR		
		31	66	SCL	n	7.5YR4/4	7	0		42	49	n	n						
		66	120	SCL	n	7.5YR4/4	20	0		44	5	n	n						
									Total	**141**	**110**								
									MB	18	-10								
									Droughtiness grade (DR)	2	2								
52	T	0	32	SZL	n	10YR4/2	5	0		58	58	n	n	/	1	**2**	DR		
		32	53	mCL	n	7.5YR4/3	5	0		30	32	n	n						
		53	70	SCL	n	7.5YR4/4	7	0		16	24	n	n						
		70	120	mSL	n	7.5YR4/4	10	0		50	0	n	n						
									Total	**154**	**114**								
									MB	31	-6								
									Droughtiness grade (DR)	1	2								
56-63	**Surveyed by MAFF in 1991 land assessed as Subgrade 3a**																		

Wetness / workability limitations are determined according to the methodology given in Appendix 3 of the ALC guidelines, MAFF 1988

Droughtiness calculations are made according to the methodology given in Appendix 4 of the ALC guidelines, MAFF 1988.

Grades are shown for drought, wetness and any other soil or site factors which are relevant. The overall Grade is set by the most limiting factor and shown on the right.

Stone types		
%	TAv	Eav
hard	1	0.5
chalk	10	7
hard	flint & pebble	

Climate Data	
MDwheat	124
MDpotato	121
FCD	94
AAR	545

Wetness Class Guidelines	*II*	*III*	*IV*	*V*
SPL within 80cm, gleying within 40cm	>52cm	52-80cm		
SPL within 80cm, gleying at 40-70cm	<80cm			
No SPL but gleying within 40cm	coarse subsoil	*I*	other cases	*I*
Maximum depth of auger penetration is underlined				

Ciimate
1451 D°
Limitation
Grade 1
22 m

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% chalk	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
64	T	0	25	C	n	2.5Y4/3			6	0		40	40	n	n	*II*	3a	**3a**	DR WE
		25	50	C	mod	2.5Y4/4	FeOM	faint	0	0		40	40	n	n				
		50	80	C	mod	2.5Y6/2	Fe	com	0	0	poor	21	26	y	y				
		80	100	C	mod	7.5GY6/1	Fe	many	0	0	poor	14	0	y	y				
		100	120	Mst							poor	10	0	y	y				
											Total	**125**	**106**		GR.gradient			1 °	SE
											MB	1	-15		ST.stone>2cm			<5%	footslope
									Droughtiness grade (DR)			3a	3a						
65	T	0	25	hCL	mod	10YR4/3			8	2		41	41	n	n	*II*	2	**3a**	DR
		25	35	hCL	mod	10YR4/2			5	2		15	15	n	n				
		35	75	hCL	mod	2.5Y5/3	Fe	com	15	5	m/poor	36	41	y	n				
		75	100	C	very	7.5GY6/1	Fe	com	0	0	poor	18	0	y	y				
		100	120	Mst							poor	10	0	y	y				
											Total	**120**	**98**		GR.gradient			2 °	SW
											MB	-4	-23		ST.stone>2cm			<5%	
									Droughtiness grade (DR)			3a	3a						
66	T	0	25	C	mod	2.5Y4/2			10	0		39	39	n	n	*II*	2	**3a**	DR
		25	45	C	calc	2.5Y5/3	Fe	few	0	0		32	32	n	n				
		45	62	C	calc	2.5Y5/3	Fe	com	0	0	poor	15	22	y	y				
		62	120	C	calc	10YR6/1	Fe	com	0	0	poor	41	10	y	y				
											Total	**126**	**103**						
											MB	2	-18						
									Droughtiness grade (DR)			3a	3a						

67	T	0	30	C	mod	10YR4/2			5	0		49	49	n	n	///	3a	**3a**	WE DR	
		30	67	C	calc	2.5Y5/3	Fe	com	0	3	poor	38	48	y	y					
		67	120	C	calc	10YR5/1	Fe	com	0	3	poor	37	4	y	y					
											Total	**123**	**100**							
											MB	-1	-21							
											Droughtiness grade (DR)	3a	3a							
68	T	0	27	C	mod	10YR4/2			12	0		41	41	n	n	///	3a	**3a**	WE DR	
		27	73	C	calc	2.5Y5/2	Fe/grey	many	0	0	poor	46	56	y	y					
		73	120	C	calc	10YR6/1	Fe	com	0	0	poor	33	0	y	y					
											Total	**120**	**97**							
											MB	-4	-24							
											Droughtiness grade (DR)	3a	3a							
69	T	0	26	C	mod	10YR4/2			20	0		36	36	n	n	//	2	**3b**	DR	
		26	70	C	calc	10YR5/6	Fe	many	25	0		42	54	(y)	n					
		70	120	C	calc	10YR6/1	Fe	com	25	0	poor	27	0	y	y					
											Total	**104**	**90**							
											MB	-20	-31							
											Droughtiness grade (DR)	3a	3b							
70	T	0	26	C	mod	10YR4/2			20	0		36	36	n	n	//	2	**3b**	DR	
		26	43	C	calc	10YR5/1,10 YR5/6	Fe	many	25	0		21	21	y	n					
		43	70	C	calc	10YR5/1,10 YR5/6	Fe	many	25	0		21	33	y	n					
		70	120	C	calc	10YR6/1	Fe	com	25	0	poor	27	0	y	y					
											Total	**104**	**90**							
											MB	-20	-31							
											Droughtiness grade (DR)	3a	3b							
71	T	0	32	hCL	n	10YR3/2			5	0		55	55	n	n	//	2	**2**	WE DR	
		32	43	C	n	10YR4/2			5	0		17	17	n	n					

Lenses of sand in USS
auger stopped at 40cm

Lenses of sand in USS

		43	70	C	calc	2.5Y5/3	Fe	com	0	15		26	41	y	n						
		70	120	C	calc	10YR5/1	Fe	com	0	15	poor	35	0	y	y						
											Total	**133**	**112**		LSS-infered too dry						
											MB	9	-9								
											Droughtiness grade (DR)	2	2								
72	T	0	27	SCL	n	10YR3/2			15	0		39	39	n	n	*III*	3a	**3b**	DR		
		27	38	SC	n	10YR5/2	Fe	com	20	0		13	13	y	n						
		38	45	C	n	10YR5/2	Fe	com	20	0		9	9	y	n						
		45	120	C	n	10YR5/2	Fe	com	20	0	poor	45	27	y	y						
											Total	**107**	**88**								
											MB	-17	-33								
											Droughtiness grade (DR)	3a	3b								
73	T	0	30	hCL	n	10YR4/2			12	0		48	48	n	n	*II*	3a	**3a**	WE DR		
		30	43	C	n	10YR5/3			0	0		21	21	n	n						
		43	78	C	mod	2.5Y5/3	Fe	many	0	0	poor	29	35	y	y						
		78	120	C	calc	10YR5/1	Fe	many	0	0	poor	29	0	y	y						
											Total	**127**	**104**								
											MB	3	-17								
											Droughtiness grade (DR)	3a	3a								
74	T	0	26	C	slight	2.5Y4/2			10	0		40	40	n	n	*II*	2	**3a**	DR		
		26	55	C	calc	2.5Y5/3			0	0	m/poor	39	42	n	n						
		55	120	C	mod	10YR6/1	Fe	com	0	5	poor	46	19	y	y						
											Total	**124**	**101**		USS-poor no signs of waterlogging						
											MB	0	-20								
											Droughtiness grade (DR)	3a	3a								
75	T	0	27	C	slight	10YR4/2			10	0		42	42	n	n	*III*	3a	**3a**	WE DR		
		27	50	C	slight	10YR5/2	Fe	com	7	0		34	34	y	n						
		50	120	C	calc	10YR6/1	Fe	many	0	0	poor	49	26	y	y						
											Total	**125**	**102**								

											MB	1	-19								
										Droughtiness grade (DR)		3a	3a								
76		Non-ag, construction compound																			
77	T	0	28	hCL	mod	10YR4/3			10	2		45	45	n	n	*II*	2	**3a**	DR		
		28	60	hCL	mod	2.5Y5/3	Fe	com	10	10		39	44	y	n						
		60	100	hCL	mod	2.5Y5/2	Fe	many	15	10	poor	24	10	y	y						
		100	120	Mst					15	10	poor	9	0	y	y						
											Total	**118**	**100**		GR.gradient			2^{o}	S		
											MB	-6	-21		ST.stone>2cm			>5%	2		
										Droughtiness grade (DR)		3a	3a								
78	T	0	28	C	slight	2.5Y4/3			6	0		45	45	n	n	*II*	2	**3a**	DR		
		28	48	C	mod	2.5Y5/4	Mn	faint	5	5	m/poor	27	27	n	n						
		48	100	C	mod	2.5Y5/3	Fe	com	0	5	poor	38	28	y	y						
		100	120	Mst							poor	10	0	y	y						
											Total	**120**	**100**		GR.gradient			2^{o}	S		
											MB	-4	-21		ST.stone>2cm			<5%	footslope		
										Droughtiness grade (DR)		3a	3a								
79	T	0	28	hCL	n	2.5Y4/4			4	0		48	48	n	n	*III*	3b	**3b**	WE		
		28	35	hCL	n	2.5Y5/4	Fe	faint	5	0	m/poor	9	9	y	n						
		35	80	C	mod	2.5Y6/3	Fe	com	0	0	poor	41	46	y	y						
		80	100	C	mod	10Y6/1	Fe	com	0	0	poor	14	0	y	y						
		100	120	Mst							poor	10	0	y	y						
											Total	**122**	**103**		GR.gradient				valley		
											MB	-2	-18		ST.stone>2cm			<5%			
										Droughtiness grade (DR)		3a	3a								
80	T	0	28	hCL	n	2.5Y4/4			4	0		48	48	n	n	*III*	3b	**3b**	WE		
		28	40	hCL	n	2.5Y6/3	Fe	com	5	0	m/poor	16	16	y	n						
		40	60	hCL	mod	2.5Y6/3	Fe	com	5	0	poor	18	23	y	y						
		60	110	C	mod	5Y6/1	Fe	com	0	0	poor	35	13	y	y						
		110	120	Mst							poor	5	0	y	y						
											Total	**123**	**100**		GR.gradient			1%	NE		

											MB	-1	-21		ST.stone>2cm			<5%			
										Droughtiness grade (DR)		3a	3a								
81	T	0	28	hCL	n	2.5Y4/4			4	0		48	48	n	n	//	3a	**3a**	WE DR			
		28	50	C	n	2.5Y4/4	OM	com	0	0	m/poor	32	32	n	n							
		50	60	C	mod	5Y6/1	Fe	com	0	0	poor	7	13	y	y							
		60	100	C	very	5Y6/1	Fe	com	0	0	poor	28	13	y	y							
		100	120	Mst							poor	10	0	y	y							
											Total	**125**	**106**		GR.gradient			2o	NE		
											MB	1	-15		ST.stone>2cm			<5%			
										Droughtiness grade (DR)		3a	3a								
82	T	0	26	C	slight	2.5Y4/3			4	0		43	43	n	n	///	3a	**3a**	WE DR			
		26	40	C	slight	2.5Y6/3	Fe	com f	0	0	m/poor	20	20	y	n							
		40	75	C	mod	5Y6/2	Fe	com	0	0	poor	31	39	y	y							
		75	100	C	mod	5Y6/2	Fe	many	0	0	poor	18	0	y	y							
		100	120	Mst							poor	10	0	y	y							
											Total	**121**	**102**								
											MB	-3	-19		ST.stone>2cm			<5%			
										Droughtiness grade (DR)		3a	3a								
83	T	0	25	C	slight	2.5Y4/3			8	0		39	39	n	n	//	2	**3a**	DR			
		25	35	C	slight	2.5Y4/1	Mn	com	5	2	m/poor	14	14	n	n							
		35	45	C	very	2.5Y5/4	Mn	faint	0	0	m/poor	15	15	n	n							
		45	80	C	very	5Y7/3	Fe	com	0	0	poor	28	33	y	y							
		80	100	C	mod	7.5GY6/1	Fe	many	0	0	poor	14	0	y	y							
		100	120	Mst				many	0	0	poor	10	0	y	y							
											Total	**119**	**100**		GR.gradient			2 ^{o}	S		
											MB	-5	-21		ST.stone>2cm			<5%	footslope		
										Droughtiness grade (DR)		3a	3a		Stubble, pan 25-35cm						
84	T	0	30	hCL	mod	10YR4/3			8	2		49	49	n	n	//	2	**3a**	DR			
		30	48	hCL	mod	2.5Y5/4			10	2		26	26	n	n							
		48	70	hCL	mod	2.5Y5/3	Fe	com	10	5		21	31	y	n							
		70	100	hCL	mod	2.5Y5/2	Fe	many	15	5	poor	18	0	y	y							
		100	120	Mst					10	10	poor	10	0	y	y							

											Total	**124**	**107**		GR.gradient		Brow			
											MB	0	-14		ST.stone>2cm		<5%			
										Droughtiness grade (DR)		3a	3a							
85	T	0	25	hCL	slight	2.5Y4/3			6	0		42	42	n	n	*II*	2	**3a**	DR		
		25	40	hCL	slight	10Y5/1	Mn	com	5	0	(poor)	23	23	n	n						
		40	65	C	slight	2.5Y7/3	Fe	com	0	0	poor	24	33	y	y						
		65	80	C	mod	2.5Y7/3	Fe	com	0	10	poor	11	6	y	y						
		80	100	C	mod	7.5GY6/1	Fe	many	0	5	poor	14	0	y	y						
		100	120	Mst								10	0	y	y						
											Total	**123**	**104**		GR.gradient		3^{o}	N		
											MB	-1	-17		ST.stone>2cm					
										Droughtiness grade (DR)		3a	3a		Stubble, pan 25-40cm					
86	T	0	25	mCL	n	2.5Y4/4			3	0		44	44	n	n	*III*	3a	**3a**	WE DR		
/PIT		25	35	hCL	n	2.5Y4/2	Mn	few	3	0		16	16	n	n						
		35	70	C	slight	2.5Y5/3	Fe	com	0	0	poor	34	46	y	y						
		70	90	C	mod	7.5GY6/1	Fe	many	0	0	poor	14	0	y	y						
		90	120	Mst							poor	15	0	y	y						
											Total	**122**	**105**		GR.gradient		2^{o}	N		
											MB	-2	-16		ST.stone>2cm		<5%	footslope		
										Droughtiness grade (DR)		3a	3a							
87	T	0	28	C	slight	2.5Y4/3			5	2		45	45	n	n	*III*	3a	**3a**	WE DR		
		28	38	C	mod	2.5Y5/2	Fe	com	5	2		15	15	y	n						
		38	80	C	very	5Y7/1	Fe	com	0	0	poor	37	42	y	y						
		80	100	C	very	10GY7/1	Fe	many	0	0	poor	14	0	y	y						
		100	120	Mst							poor	10	0	y	y						
											Total	**121**	**102**		GR.gradient		3^{o}	NE		
											MB	-3	-19		ST.stone>2cm		<5%			
										Droughtiness grade (DR)		3a	3a							
88	T	0	28	fSCL	n	2.5Y4/4			2	0		49	49	n	n	*III*	3a	**3a**	WE DR		
		28	44	hCL	slight	2.5Y5/3	Fe	com f	5	0		24	24	y	n						
		44	80	C	very	2.5Y6/3	Fe	com	0	0	poor	29	34	y	y						
		80	100	C	mod	10Y7/1	Fe	com	0	0	poor	14	0	y	y						

		100	120	Mst							poor	10	0	y	y					
											Total	**127**	**108**		GR.gradient			2 °	NE	
											MB	3	-13		ST.stone>2cm			<5%	footslope	
										Droughtiness grade (DR)		3a	3a							
89	T	0	30	mCL	n	2.5Y4/4			4	0		52	52	n	n	*II-III*	3a	**3a**	WE DR	
		30	40	hCL	n	2.5Y5/4	FeOM	few	5	0		15	15	n	n					
		40	95	C/CL	slight	2.5Y5/3	Fe	com	5	0	poor	42	36	y	y					
		95	120	Mst							poor	13	0	y	y					
											Total	**122**	**103**							
											MB	-2	-18							
										Droughtiness grade (DR)		3a	3a							
90	T	0	25	hZCL	slight	10YR4/3			2	0		47	47	n	n	*II*	2	**3a**	DR	
		25	45	C	mod.	2.5Y4/4	FeOM	few	0	0	m/poor	29	29	n	n					
		45	85	C	mod.	5Y5/3	Fe	com	0	0	poor	31	33	y	y					
		85	120	Mst								18	0	y	y					
											Total	**124**	**108**							
											MB	0	-13							
										Droughtiness grade (DR)		3a	3a							
91	T	0	30	C	non	10YR4/3			2	0		50	50	n	n	*II*	3a	**3a**	WE DR	
		30	45	C	non	2.5Y4/4	FeOM	few	0	0	m/poor	22	22	n	n					
		45	110	C	slight	5Y5/2	Fe	com	0	0	poor	49	33	y	y					
		110	120	Mst								5	0	y	y					
											Total	**125**	**104**							
											MB	1	-17							
						fsab				**Droughtiness grade (DR)**		3a	3a		Stubble					
92	T	0	27	C	slight	2.5Y4/2			3	0		45	45	n	n	*III*	3a	**3a**	WE DR	
		27	48	C	slight	2.5Y5/3	Fe	com	0	0		34	34	y	n					
		48	82	C	calc	2.5Y5/3	Fe/grey	many	0	0	poor	25	29	y	y					
		82	120	C	calc	10YR5/1	Fe/grey	many	0	5	poor	27	0	y	y					
											Total	**130**	**107**							
											MB	6	-14							
										Droughtiness grade (DR)		2	3a							

93	T	0	30	C	slight	2.5Y4/2			3	0		50	50	n	n	///	3a	**3a**	WE DR	
		30	45	C	slight	2.5Y5/3	Fe	com	0	0		24	24	y	n					
		45	100	C	mod	2.5Y5/3	Fe	many	0	0	poor	42	33	y	y					
		100	120	C	calc	10YR5/1	Fe	many	0	5	poor	14	0	y	y					
											Total	**129**	**106**							
											MB	5	-15							
									Droughtiness grade (DR)			2	3a							
94	T	0	28	C	n	2.5Y4/2			3	0		46	46	n	n	//	3a	**3a**	WE DR	
		28	42	C	n	2.5Y5/3			5	0		21	21	n	n					
		42	90	C	n	2.5Y5/3	Fe/grey	com	0	0	poor	38	36	y	y					
		90	120	C	calc	10YR5/1	Fe/grey	com	0	0	poor	21	0	y	y					
											Total	**127**	**104**							
											MB	3	-17							
									Droughtiness grade (DR)			3a	3a							
95	T	0	30	C	n	2.5Y4/2			3	0		50	50	n	n	//	3a	**3a**	WE DR	
		30	50	C	slight	2.5Y5/3			0	0	m/poor	29	29	n	n					
		50	72	C	slight	2.5Y5/3	Fe	com	0	0	poor	15	26	y	y					
		72	120	C	mod	10YR5/1	Fe/grey	many	0	5	poor	34	0	y	y					
											Total	**128**	**105**							
											MB	4	-16							
									Droughtiness grade (DR)			3a	3a							
96	T	0	30	C	n	2.5Y4/2			3	0		50	50	n	n	//	3a	**3a**	WE DR	
/Pit		30	53	C	n	2.5Y5/3			0	0	m/poor	31	33	n	n					
		53	70	C	slight	2.5Y5/3	Fe	com	0	0	poor	12	22	y	y					
		70	120	C	mod	2.5Y5/2	Fe/grey	many	0	0	poor	35	0	y	y					
											Total	**128**	**105**							
											MB	4	-16							
									Droughtiness grade (DR)			3a	3a							

97	T	0	28	C	n	2.5Y4/2			0	0		48	48	n	n	*II*	3a	**3a**	WE DR	
		28	62	C	v.slight	2.5Y5/3	Fe	few	0	0	m/poor	41	49	n	n					
		62	120	C	calc	10YR5/1	Fe	many	0	0	poor	41	10	y	y					
											Total	**129**	**107**							
											MB	5	-14							
											Droughtiness grade (DR)	2	3a							
98	T	0	32	C	mod	2.5Y4/2			1	0		54	54	n	n	*III*	3a	**3a**	WE	
		32	40	C	calc	2.5Y5/3	Fe	com	0	0		13	13	y	n					
		40	65	C	calc	2.5Y5/3	Fe	com	0	0	poor	24	33	y	y					
		40	120	C	calc	10YR5/1	Fe	com	0	0	poor	62	39	y	y					
											Total	**152**	**138**							
											MB	28	17							
											Droughtiness grade (DR)	2	1							
99	T	0	28	C	mod	2.5Y4/2			2	0		47	47	n	n	*III*	3a	**3a**	WE	
		28	45	C	calc	2.5Y5/3	Fe	com	0	0		27	27	y	n					
		45	63	C	calc	2.5Y5/3	Fe	com	0	0	poor	16	23	y	y					
		45	120	C	calc	10YR5/1	Fe	com	0	0	poor	56	33	y	y					
											Total	**145**	**130**							
											MB	21	9							
											Droughtiness grade (DR)	2	2							
100	T	0	27	C	slight	2.5Y4/2			2	0		45	45	n	n	*III*	3a	**3a**	WE DR	
		27	50	C	mod	2.5Y5/3	Fe	many	0	0		37	37	y	n					
		50	70	C	calc	10YR5/1	Fe	many	0	0	m/poor	15	29	y	y					
		70	120	C	calc	10YR5/1	Fe	many	0	0	m/poor	38	0	y	y					
											Total	**134**	**111**							
											MB	10	-10							
											Droughtiness grade (DR)	2	3a							
101	T	0	27	C	slight	10YR4/2			0	0		46	46	n	n	*III*	3a	**3a**	WE	
		27	72	C	mod	2.5Y5/3	Fe	many	0	0	poor	45	56	y	y					

TS-v.slight/slight

		72	120	C	calc	10YR5/1	Fe	many	0	0	poor	34	0	y	y						
											Total	**125**	**102**								
											MB	1	-19								
											Droughtiness grade (DR)	3a	3a								
102	T	0	30	C	n	2.5Y4/2			0	0		51	51	n	n	///	3b	**3b**	WE		
		30	38	C	n	2.5Y5/3	Fe	few	0	0		13	13	n	n						
		38	80	C	calc	2.5Y5/3	Fe	com	0	0	poor	37	42	y	y						
		80	120	C	calc	10YR5/1	Fe	com	0	0	poor	28	0	y	y						
											Total	**128**	**105**								
											MB	4	-16								
											Droughtiness grade (DR)	3a	3a								
103	T	0	25	hCL	mod	2.5Y5/3			2	1		44	44	n	n	//	2	**3a**	DR		
		25	45	C	mod	5Y5/4	OM		0	0	m/poor	29	29	n	n						
		45	75	C	mod	5Y5/2	Fe	com	0	0	poor	24	33	y	y						
		75	105	C	mod	7.5GY6/2	Fe	many	0	0	poor	21	0	y	y						
		105	120	MSt								8	0	y	y						
											Total	**125**	**105**		GR.gradient						
											MB	1	-16		ST.stone>2cm		<5%				
											Droughtiness grade (DR)	3a	3a		stubble corner						
104	T	0	25	C+	slight	2.5Y4/3			2	2		41	41	n	n	///	3b	**3b**	WE		
		25	70	C	mod	2.5Y6/3	Fe	com	2	10	poor	45	56	y	y						
		70	112	C	mod	5Y5/2	FeMn	many	0	0	poor	29	0	y	y						
		112	120	C	mod	7.5GY6/2	Fe	many	0	0	poor	6	0	y	y						
											Total	**121**	**97**		GR.gradient		Downgraded to 3b- Heavy clay!				
											MB	-3	-24		ST.stone>2cm		<5%				
											Droughtiness grade (DR)	3a	3a		Compacted trackway; stripped to 35-40cm on west side						
105	T	0	30	C	n	10YR3/2			0	2		51	51	n	n	//	3a	**3a**	WE DR		
		30	43	C	mod	2.5Y5/3	Fe	few	0	0		21	21	n	n						
		43	56	C	mod	2.5Y5/3	Fe	com	0	0	poor	13	17	y	y						
		56	90	hCL	v.calc	10YR5/1	Fe	many	0	5		33	22	y	n						
		90	120	C	calc	10YR6/1	Fe	many	0	2	poor	21	0	y	y						

											Total	**139**	**110**						SPL<15cm
											MB	15	-11						
										Droughtiness grade (DR)		2	3a						
106	T	0	25	hCL	n	2.5Y4/4			2	0		44	44	n	n	*II*	3a	**3a**	WE DR
		25	50	SC	n	2.5Y5/3	Mn	com f	2	0	m/poor	34	34	y	n				
		50	80	hSCL	mod	2.5Y6/3	Fe	com	2	0		29	29	y	n				
		80	120	SCL	mod	2.5Y7/2	Fe	com	2	0		39	0	y	n				
											Total	**147**	**108**						
											MB	23	-13						ST.stone>2cm <5%
										Droughtiness grade (DR)		2	3a						Compacted trackway
107	T	0	25	hCL	slight	10YR3/2			5	0		43	43	n	n	*II*	2	**2**	WE DR
		25	32	C	mod	10YR4/1			3	0		11	11	n	n				
		32	80	C	calc	10YR5/3	Fe	many	0	0		53	61	y	n				
		80	102	SC	calc	10YR5/2	Fe	many	0	3		22	0	y	n				
		102	120	SCL	calc	10YR5/2	Fe	many	0	3		18	0	y	n				
											Total	**146**	**115**						USS-some sand lenses
											MB	22	-6						Field stripped for archeo, point on patch of natural
										Droughtiness grade (DR)		2	2						
108	T	0	29	C	mod	2.5Y5/2			5	0		47	47	n	n	*III*	3a	**3a**	WE DR
		29	50	C	calc	2.5Y5/3	Fe	com	0	3	poor	27	27	y	y				
		50	62	C	calc	2.5Y5/3	Fe/grey	com	0	3	poor	8	15	y	y				
		62	120	C	calc	10YR6/1	Fe	many	0	0	poor	41	10	y	y				
											Total	**123**	**100**						
											MB	-1	-21						
										Droughtiness grade (DR)		3a	3a						
109	T	0	20	C+	n	2.5Y5/4			4	1		33	33	n	n	*III*	3b	**3b**	WE
		20	32	C	n	2.5Y5/2	Mn		0	0	(poor)	19	19	n	n				
		32	50	C	v.slight	5Y6/3	Fe	com	0	0	poor	23	23	y	y				
		50	75	C	mod	5Y6/3	Fe	com	0	10	poor	18	25	y	y				
		75	100	C	mod	7.5GY6/2	Fe	many	0	0	poor	18	0	y	y				

		100	120	MSt								10	0	y	y						
											Total	**120**	**101**		GR.gradient						
											MB	-4	-20		ST.stone>2cm		<5%				
										Droughtiness grade (DR)		3a	3a		ex field beans						
110	T	0	27	C	slight	10YR4/2			7	0		43	43	n	n	///	3a	**3a**	WE DR		
		27	43	C	mod	2.5Y5/3	Fe	com	0	0		26	26	y	n						
		43	55	C	calc	2.5Y5/3	Fe	com	0	3	poor	13	15	y	y						
		55	120	C	calc	10YR6/1	Fe	com	0	3	poor	46	19	y	y						
											Total	**127**	**103**								
											MB	3	-18								
										Droughtiness grade (DR)		3a	3a								
111	T	0	25	C	n	2.5Y4/3			0	0		43	43	n	n	///	3b	**3b**	WE		
		25	35	C	n	2.5Y4/2	Mn	few	0	0	(poor)	16	16	n	n						
		35	65	C	slight	2.5Y5/3	Fe	com	0	0	poor	30	39	y	y						
		65	100	C	mod	5Y6/3	Fe	com	0	0	poor	25	7	y	y						
		100	120	MSt							poor	10	0	y	y						
											Total	**123**	**104**		GR.gradient						
											MB	-1	-17		ST.stone>2cm		<5%				
										Droughtiness grade (DR)		3a	3a		Cultivated						
112	T	0	29	C	n	2.5Y4/2			2	0		48	48	n	n	///	3b	**3b**	WE		
		29	48	C	mod	2.5Y5/3	Fe	com	0	0	poor	25	25	y	y						
		48	75	C	calc	2.5Y5/3	Fe	com	0	0	poor	20	29	y	y						
		75	120	C	calc	10YR6/1	Fe	many	0	2	poor	32	0	y	y						
											Total	**125**	**102**								
											MB	1	-19								
										Droughtiness grade (DR)		3a	3a								
113	T	0	30	C	slight	2.5Y4/2			2	0		50	50	n	n	//	2	**3a**	DR		
		30	45	C	mod	2.5Y5/3			0	0		24	24	n	n						
		45	72	C	calc	2.5Y5/3	Fe	com	0	5	poor	22	32	y	y						
		72	120	C	calc	10YR6/1	Fe	many	0	5	poor	34	0	y	y						
											Total	**129**	**106**								

											MB	5	-15							
										Droughtiness grade (DR)		2	3a							
114	T	0	22	C+	n	2.5Y5/4			0	0		37	37	n	n	///	3b	**3b**	WE	
		22	25	C	n	2.5Y4/2			0	0	(poor)	5	5	n	n					
		25	40	C	n	2.5Y5/3	Fe	com	0	0	poor	20	20	y	y					
		40	100	C	slight	5Y6/3	Fe	faint	0	0	poor	48	39	n	y					
		100	120	MSt							poor	10	0	y	y					
											Total	**120**	**101**		GR.gradient					
											MB	-4	-20		ST.stone>2cm		<5%			
										Droughtiness grade (DR)		3a	3a							
115	T	0	20	C	slight	2.5Y5/3			0	0		34	34	n	n	//	2	**3a**	DR	
	T	20	28	C	slight	2.5Y4/2			0	0	(poor)	14	14	n	n					
		28	45	C	mod	5Y5/4	OM	Fe few	0	5	m/poor	24	24	n	n					
		45	80	C	mod	5Y5/2	Fe	com	0	5	poor	27	32	y	y					
		80	100	C	mod	7.5Y6/2	Fe	com	0	10	poor	14	0	y	y					
		100	120	MSt							poor	10	0	y	y					
											Total	**123**	**104**		GR.gradient					
											MB	-1	-17		ST.stone>2cm		<5%			
										Droughtiness grade (DR)		3a	3a							
116	T	0	30	C	mod	2.5Y4/2			3	0		50	50	n	n	//	2	**3a**	DR	
		30	44	C	calc	2.5Y5/4			0	0		22	22	n	n					
		44	73	C	calc	2.5Y5/3	Fe	com	0	0	poor	24	34	y	y					
		73	120	C	calc	10YR6/1	Fe	many	0	3	poor	33	0	y	y					
											Total	**129**	**106**							
											MB	5	-15							
										Droughtiness grade (DR)		2	3a							
117	T	0	28	C	mod	2.5Y4/2			2	0		47	47	n	n	///	3a	**3a**	WE DR	
		28	64	C	calc	2.5Y5/3	Fe	com	0	0	poor	38	47	y	y					
		64	120	C	calc	10YR6/1	Fe	many	0	0	poor	39	8	y	y					
											Total	**124**	**101**							
											MB	0	-20							

												Droughtiness grade (DR)		3a	3a					
118	T	0	30	C	n	10YR4/2			5	0		49	49	n	n	//	3a	**3a**	WE DR	
		30	50	C	slight	2.5Y5/3	Fe	few	0	0	m/poor	29	29	n	n					
		50	82	C	calc	2.5Y5/3	Fe	com	0	3	poor	22	26	y	y					
		82	120	C	calc	10YR6/1	Fe	many	0	5	poor	27	0	y	y					
											Total	**127**	**103**							
											MB	3	-18							
											Droughtiness grade (DR)		3a	3a					
119	T	0	28	hCL	n	2.5Y5/3			4	0		48	48	n	n	//	3a	**3a**	WE DR	
		28	50	C	n	5Y4/4	OM	Fe f	5	0	m/poor	30	30	y	n					
		50	80	C/CL	n	5Y5/3	Fe	com	5	0	m/poor	24	28	y	n					
		80	100	C	mod	7.5Y6/2	Fe	com	0	0	poor	14	0	y	y					
		100	120	MSt							poor	10	0	y	y					
											Total	**127**	**107**		GR.gradient					
											MB	3	-14		ST.stone>2cm		<5%			
											Droughtiness grade (DR)		3a	3a					
120	T	0	25	C	n	10YR4/3			6	0		40	40	n	n	//	3a	**3a**	WE DR	
		25	45	C	n	10YR4/6	OM,Fe	few	15	0	m/poor	25	25	n	n					
		45	72	C	mod	5Y5/3	Fe	com	0	0	m/poor	24	36	y	y					
		72	90	C	mod	7.5GY6/1	Fe	com	0	0	poor	13	0	y	y					
		90	120	MSt							poor	15	0	y	y					
											Total	**116**	**101**		GR.gradient		1o	W		
											MB	-8	-20		ST.stone>2cm		<5%			
											Droughtiness grade (DR)		3a	3a	flintier soil on brow					
121	T	0	30	C	n	2.5Y4/2			3	0		50	50	n	n	//	3a	**3a**	WE DR	
		30	43	C	slight	2.5Y5/3	Fe	few	0	0		21	21	n	n					
		43	80	C	calc	2.5Y5/3	Fe	com	0	0	poor	30	35	y	y					
		80	120	C	calc	10YR6/1	Fe	many	0	5	poor	28	0	y	y					
											Total	**128**	**105**							
											MB	4	-16							
											Droughtiness grade (DR)		3a	3a					

122	T	0	30	C	n	2.5Y4/2			5	0		49	49	n	n	*III*	3a	**3b**	WE	
		30	47	C	slight	2.5Y5/3	Fe	com	0	0		27	27	y	n					
		47	80	C	calc	2.5Y5/3	Fe	com	0	0	poor	25	30	y	y					
		80	120	C	calc	10YR6/1	Fe	many	0	0	poor	28	0	y	y					
											Total	**129**	**106**							
											MB	5	-15							
											Droughtiness grade (DR)	2	3a							
123	T	0	30	mCL	n	10YR4/4			4	0		52	52	n	n	*I*	1	**3a**	DR	
		30	40	C	n	2.5Y4/4			5	0		15	15	n	n					
		40	90	hCL	n	7.5YR6/6	grey	com	15	0		48	41	n	n					
		90	120	hCL					25	0		23	0	n	n					
						stony at					Total	**138**	**108**		GR.gradient			1-2o	E	
						depth					MB	14	-13		ST.stone>2cm			<5%		
											Droughtiness grade (DR)	2	3a		loamier soil in valley					
124	T	0	30	hCL	n	10YR3/2			7	0		50	50	n	n	*II*	3a	**3a**	WE DR	
		30	42	C	n	10YR5/4			7	0		18	18	n	n					
		42	50	C	calc	10YR5/2	Fe	com	0	0	poor	10	10	y	y					
		50	120	C	calc	10YR6/1	Fe	many	0	0	poor	49	26	y	y					
											Total	**128**	**105**							
											MB	4	-16							
											Droughtiness grade (DR)	3a	3a							
125	T	0	32	hCL	n	2.5Y4/2			2	0		57	57	n	n	*III*	3b	**3b**	WE	
		32	55	C	calc	2.5Y5/3	Fe	many	0	0	poor	27	30	y	y					
		55	120	C	calc	10YR6/1	Fe	many	0	3	poor	46	19	y	y					
											Total	**129**	**106**							
											MB	5	-15							
											Droughtiness grade (DR)	2	3a							
126	T	0	24	C	mod	2.5Y4/3			2	0		40	40	n	n	*III*	3a	**3a**	WE DR	
		24	40	C	mod	2.5Y5/3	OMMn	faint	0	0	m/poor	23	23	n	n					

		40	75	C	mod	2.5Y5/3	Fe	com	0	10	poor	30	38	y	y						
		75	90	C	mod	7.5GY6/1	Fe	many	0	0	poor	11	0	y	y						
		90	120	MSt							poor	15	0	y	y						
											Total	**119**	**101**		GR.gradient						
											MB	-5	-20		ST.stone>2cm			<5%			
											Droughtiness grade (DR)	3a	3a								
127	T	0	20	C+	n	2.5Y4/3			2	0		33	33	n	n	*II-III*	3b	**3b**	WE		
		20	30	C	n	2.5Y5/2	Mn	com	0	0	(poor)	16	16	n	n						
		30	40	C	n	2.5Y6/3	Mn	com	0	0	m/poor	15	15	n	n						
		40	80	C	mod	5Y6/3	Fe	com	0	10	poor	34	38	y	y						
		80	100	C	mod	7.5GY6/1	Fe	many	0	0	poor	14	0	y	y						
		100	120	MSt							poor	10	0	y	y						
											Total	**122**	**102**		GR.gradient						
											MB	-2	-19		ST.stone>2cm			<5%			
											Droughtiness grade (DR)	3a	3a								
128	T	0	31	C	slight	2.5Y4/2			3	0		51	51	n	n	*II*	2	**3a**	DR		
		31	44	C	mod	2.5Y4/3	Fe	few	3	0		20	20	n	n						
		44	60	C	v.calc	2.5Y5/3	Fe	many	0	10	m/poor	16	22	y	y						
		60	120	C	v.calc	10YR6/1	Fe	many	0	10	poor	42	13	y	y						
											Total	**129**	**107**								
											MB	5	-14								
											Droughtiness grade (DR)	2	3a								
129	T	0	26	C	slight	2.5Y4/4			2	0		43	43	n	n	*III*	3a	**3a**	WE DR		
		26	40	C	slight	2.5Y5/3	MnFe	com	0	0	m/poor	20	20	y	n						
		40	55	C	mod	5Y5/2	Fe	com	0	0	poor	17	20	y	y						
		55	80	hCL	very	7.5GY6/1	Fe	many	0	10	poor	18	18	y	y						
		80	120	MSt							poor	20	0	y	y						
											Total	**118**	**101**		GR.gradient			2o	SW		
											MB	-6	-20		ST.stone>2cm			<5%			
											Droughtiness grade (DR)	3a	3a								

Wetness / workability limitations are determined according to the methodology given in Appendix 3 of the ALC guidelines, MAFF 1988

27/10/2021

Droughtiness calculations are made according to the methodology given in Appendix 4 of the ALC guidelines, MAFF 1988.

Grades are shown for drought, wetness and any other soil or site factors which are relevant. The overall Grade is set by the most limiting factor and shown on the right.

TL 195574

Stone types		
%	TAv	Eav
hard	1	0.5
chalk	10	7
hard	various	

Climate Data	
MDwheat	122
MDpotato	118
FCD	95
AAR	549

Wetness Class Guidelines	*II*	*III*	*IV*	*V*
SPL within 80cm, gleying within 40cm	>53cm	<53cm		
SPL within 80cm, gleying at 40-70cm	<80cm			
No SPL but gleying within 40cm	coarse subsoil	*I*	other cases	*I*
Maximum depth of auger penetration is underlined				

Ciimate
1425 D^{o}
Limitation
Grade 1
36 m

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% chalk	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
130	T	0	29	C	n	2.5Y4/2			3	0		48	48	n	n	*II*	3a	**3a**	WE DR
		29	47	hCL	n	10YR4/3			5	0		27	27	n	n				
		47	56	SCL	n	10YR5/3	Fe	com	5	0		10	13	y	n				
		56	120	C	very	10YR6/1	Fe	com	0	10	poor	45	18	y	y				
											Total	**130**	**106**						
											MB	8	-12						
											Droughtiness grade (DR)	2	3a						
131	T	0	29	hCL	slight	10YR4/3			4	1		50	50	n	n	*II-III*	3a	**3a**	WE
		29	40	C	slight	2.5Y5/3	Fe	com f	0	0		18	18	y	n				
		40	50	C	slight	2.5Y5/3	Fe	com	0	0	poor	13	13	y	y				
		50	85	hCL	slight	7.5YR6/8	grey	com	5	5		33	30	y	n				
		85	100	C	mod	7.5GY6/1	Fe	many	0	0	poor	11	0	y	y				
		100	120	MSt							poor	10	0	y	y				
											Total	**134**	**110**		GR.gradient			2o	SW
											MB	12	-8		ST.stone>2cm			<5%	
											Droughtiness grade (DR)	2	2						
132	T	0	29	C	mod	10YR3/2			4	2		47	47	n	n	*II*	2	**3a**	DR
		29	75	hCL	very	2.5Y5/2	Fe	com	5	15		53	59	y	n				
		75	95	C	mod	7.5GY6/1	Fe	many	0	0	poor	14	0	y	y				
		95	120	MSt							poor	13	0	y	y				
											Total	**126**	**106**		GR.gradient			3o	W

											MB	4	-12					ST.stone>2cm		<5%	
										Droughtiness grade (DR)		3a	3a								
133	T	0	29	C	mod	10YR4/2			4	2		47	47	n	n	//	2	**3a**	DR
		29	50	C	very	2.5Y5/4			5	15		30	30	n	n				
		50	75	hCL	very	2.5Y5/2	Fe	com	15	15		20	26	y	n				
		75	120	C	very	7.5Y6/1	Fe	many	15	30	poor	27	0	y	y				
											Total	**125**	**103**					GR.gradient		2o	W
											MB	3	-15					ST.stone>2cm		<5%	
										Droughtiness grade (DR)		3a	3a								
134	T	0	25	C	mod	10YR4/2			4	1		41	41	n	n	//	2	**3a**	DR
		25	65	C	mod	2.5Y6/2	Fe	com	5	10	m/poor	44	54	y	n				
		65	120	C	very	7.5Y6/1	Fe	com	5	20	poor	37	6	y	y				
											Total	**122**	**100**								
											MB	0	-18					ST.stone>2cm		<5%	
										Droughtiness grade (DR)		3a	3a								
135	T	0	27	C	slight	10YR4/2			6	1		43	43	n	n	//	2	**3a**	DR
		27	45	C	mod	2.5Y5/3	Fe	com	5	10	m/poor	24	24	y	n				
		45	60	hCL	very	2.5Y5/2	Fe	com	5	15		16	22	y	n				
		60	90	C	very	7.5Y6/1	Fe	many	5	20	poor	20	12	y	y				
		90	120	C	very	7.5Y6/1	Fe	many	15	30	poor	18	0	y	y				
											Total	**122**	**101**								
											MB	0	-17					ST.stone>2cm		<5%	
										Droughtiness grade (DR)		3a	3a								
136	T	0	28	C	n	2.5Y4/2			5	0		45	45	n	n	//	3a	**3a**	WE DR
		28	40	C	n	10YR5/2	Fe	com	15	0		17	17	y	n				
		40	70	C	mod	10YR5/2	Fe	com	7	8		29	43	y	n				
		70	120	C	mod	10YR5/1	Fe	com	0	15		39	0	y	n				
											Total	**130**	**105**								
											MB	8	-13								
										Droughtiness grade (DR)		2	3a								

137	T	0	28	C	slight	2.5Y4/2			7	0		44	44	n	n	*II*	2	**2**	WE DR	
		28	40	C	slight	2.5Y5/2	Fe	few	7	0		18	18	n	n					
		40	55	C	v.calc	2.5Y5/3	Fe	com	0	10		19	23	y	n					
		55	120	C	v.calc	10YR5/1	Fe	com	0	15		51	23	y	n					
											Total	**133**	**108**		LSS-dry, loose					
											MB	11	-10							
											Droughtiness grade (DR)	2	2							
138	T	0	30	C	mod	2.5Y4/2			2	5		49	49	n	n	*II*	2	**2**	WE DR	
		30	48	C	calc	2.5Y5/2	Fe	com	0	5		28	28	y	n					
		48	70	C	v.calc	2.5Y5/1	Fe	com	0	10		19	34	y	n					
		70	120	C	v.calc	10YR5/1	Fe	com	0	15	poor	35	0	y	y					
											Total	**131**	**111**							
											MB	9	-7							
											Droughtiness grade (DR)	2	2							
139	T	0	26	C	slight	2.5Y4/2			3	2		43	43	n	n	*I*	2	**2**	WE DR	
		26	59	C	cac	2.5Y5/2			0	10		44	51	n	n					
		59	120	hCL	v.calc	10YR6/3			0	40		54	15	n	n					
											Total	**140**	**108**		LSS-dry					
											MB	18	-10							
											Droughtiness grade (DR)	2	2							
140	T	0	30	C	slight	2.5Y4/3			5	0		49	49	n	n	*III*	3a	**3a**	WE DR	
		30	72	C	mod	10YR5/3	Fe	com	2	3	poor	40	51	y	y					
		72	120	C	v.calc	10YR5/1	Fe	com	0	15	m/poor	36	0	y	y					
											Total	**125**	**99**		LSS-dry					
											MB	3	-19							
											Droughtiness grade (DR)	3a	3a							
141	T	0	28	C	slight	2.5Y4/1			5	2		45	45	n	n	*III*	3a	**3a**	WE DR	
		28	57	C	calc	2.5Y5/3	och	mfd	10	10	poor	30	33	y	y					

		57	60	C	calc	2.5Y5/3	och	mmd	5	10	poor	2	4	y	y						
		60	120	hCL	calc	2.5Y5/2			5	20		54	14	y	n						
											Total	**130**	**96**		Lower SS Mix Clay and soft chalk						
											MB	8	-22		ST.stone>2cm	<5%					
											Droughtiness grade(DR)	2	3a								
142	T	0	30	C	slight	2.5Y4/1			5	2		48	48	n	n	*III*	3a	**3a**	WE DR		
		30	40	C	calc	2.5Y5/3	och	mfd	10	2		14	14	y	n						
		40	60	C	calc	2.5Y5/3	och	mmd	10	10	poor	18	23	y	y						
		60	74	C	calc	2.5Y5/3	och	mmd	5	10	poor	9	12	y	y						
		74	120	C	calc	2.5Y5/1	och/Grey	cmd	5	20		34	0	y	n						
											Total	**124**	**98**								
											MB	2	-20		ST.stone>2cm	<5%					
											Droughtiness grade(DR)	3a	3a								
143	T	0	25	C	slight	2.5Y4/1			5	1		40	40	n	n	*III*	3a	**3a**	WE DR		
		25	41	C	calc	2.5Y5/3	och	mmd	5	1	poor	20	20	y	y						
		41	54	C	calc	2.5Y5/3	och	cmd	5	5	poor	14	16	y	y						
		54	60	C	calc	2.5Y5/2	och	cmd	5	5	poor	4	7	y	y						
		60	120	C	calc	2.5Y5/1	och/Grey	cmd	5	20		45	14	y	n						
											Total	**122**	**97**								
											MB	0	-21		ST.stone>2cm	<5%					
											Droughtiness grade(DR)	3a	3a								
144	T	0	30	hCL	slight	2.5Y4/1			5	1		51	51	n	n	*III*	3a	**3a**	WE DR		
		30	48	C	calc	2.5Y5/3	och	mmd	5	1	poor	22	22	y	y						
		48	63	C	calc	2.5Y5/3	och	cmd	5	10	poor	11	18	y	y						
		63	120	hCL	calc	2.5Y5/2	och/Grey	cmd	5	20		51	10	y	n						
											Total	**135**	**101**								
											MB	13	-17		ST.stone>2cm	<5%					
											Droughtiness grade(DR)	2	3a		Lower SS Mix Clay and soft chalk						
145	T	0	26	C	slight	2.5Y4/1			5	1		42	42	n	n	*III*	3a	**3a**	WE DR		
		30	55	C	calc	2.5Y5/3	och	cmd	5	5	poor	28	31	y	y						
		55	120	C	calc	2.5Y5/2	och/Grey	cmd	5	15	poor	43	18	y	y						
											Total	**113**	**90**								

											MB	-9	-28		ST.stone>2cm	<5%					
										Droughtiness grade(DR)		3a	3a								
146	T	0	25	C	n	2.5Y4/3			6	0		40	40	n	n	*II*	3a	**3a**	WE DR			
		25	38	C	slight	2.5Y4/4			5	0	m/poor	18	18	n	n							
		38	50	C	mod	2.5Y5/4	Fe	few	0	0	m/poor	17	17	n	n							
		50	65	C	mod	2.5Y5/2	Fe	com	0	5	poor	11	19	y	y							
		65	78	C	mod	5Y6/1	Fe	com	0	10	poor	9	6	y	y							
		78	90	C	mod	N6/	Fe	many	5	10	poor	8	0	y	y							
		90	120	Mst							poor	15	0	y	y							
											Total	**118**	**101**		dry 65cm							
											MB	-4	-17		ST.stone>2cm	<5%					
										Droughtiness grade (DR)		3a	3a		Winter beans						
147	T	0	27	hCL	n	2.5Y4/4			4	0		47	47	n	n	*II*	3a	**3a**	WE DR			
		27	43	C	n	2.5Y4-5/4	OM		2	0	m/poor	23	23	n	n							
		43	65	C	n	2.5Y5/3	Fe	com f	5	0	poor	19	27	y	n							
		65	75	C	very	2.5Y7/1	Fe	com	0	20	poor	7	6	y	y							
		75	110	hCL	mod	5Y6/1	Fe	com	0	10	poor	25	0	y	y							
		110	120	Mst							poor	5	0	y	y							
											Total	**125**	**103**		dry 65cm							
											MB	3	-15		ST.stone>2cm	<5%					
										Droughtiness grade (DR)		3a	3a								
148	T	0	27	hCL	slight	2.5Y4/4			6	0		46	46	n	n	*III*	3a	**3a**	WE DR			
		27	35	C	slight	2.5Y4-5/4	OMFe	few	5	0		12	12	n	n							
		35	45	C	mod	2.5Y6/4	Fe	com f	0	10	m/poor	14	14	y	n							
		45	65	C	mod	2.5Y6/3	Fe	com	5	10	poor	16	24	y	y							
		65	100	C	mod	N6/	Fe	com	10	10	poor	22	6	y	y							
		100	120	Mst							poor	10	0	y	y							
											Total	**120**	**102**		dry 65cm							
											MB	-2	-16		ST.stone>2cm	<5%					
										Droughtiness grade (DR)		3a	3a								
149	T	0	28	hCL	n	2.5Y4/4			6	0		48	48	n	n	*III*	3b	**3b**	WE			

		28	45	C	n	2.5Y6/4	Fe	com f	5	0	m/poor	24	24	y	n					
		45	60	C	mod	2.5Y6/2	Fe	com	0	10	poor	13	19	y	y					
		60	80	CL	very	7.5Y7/2	Fe	com	5	20	poor	13	11	y	y					
		80	90	hCL					10	20	poor	6	0	y	y					
		90	120	Mst							poor	15	0	y	y					
											Total	**119**	**101**		dry 65cm					
											MB	-3	-17		vdense 80					
											Droughtiness grade (DR)	3a	3a							
150	T	0	30	hCL	slight	2.5Y4/4			4	0		52	52	n	n	*II*	2	**3a**	DR	
		30	40	C	mod	2.5Y5/4			5	0		15	15	n	n					
		40	70	C/CL	mod	2.5Y6/2	Fe	com	5	10	m/poor	29	40	y	n					
		70	95	C	mod	2.5Y7/2	Fe	com	5	10	poor	17	0	y	y					
		95	120	Mst							poor	13	0	y	y					
											Total	**126**	**107**							
											MB	4	-11		ST.stone>2cm			<5%		
											Droughtiness grade (DR)	3a	3a							
151	T	0	25	C	slight	2.5Y3/3			6	0		40	40	n	n	*III*	3a	**3a**	WE DR	
		25	35	C	mod	2.5Y6/4	Fe	com f	8	5		15	15	y	n					
		35	42	C	mod	2.5Y6/4			5	10	m/poor	9	9	n	n					
		42	58	C	mod	2.5Y6/3	Fe	com	5	5	poor	15	20	y	y					
		58	75	hCL	very	7.5Y6/2	Fe	com	5	5	poor	11	14	y	y					
		75	90	hCL					10	20	poor	10	0	y	y					
		90	120	Mst							poor	15	0	y	y					
											Total	**115**	**97**							
											MB	-7	-21		ST.stone>2cm			<5%		
											Droughtiness grade (DR)	3a	3a							
152	T	0	30	C	slight	2.5Y4/1			5	1		48	48	n	n	*III*	3a	**3a**	WE	
		30	55	C	mod	2.5Y5/3	och	mmd	5	10	poor	28	30	y	y					
		55	120	C	very	2.5Y5/3	och/Grey	cmd	5	30	poor	43	17	y	y					
											Total	**119**	**96**							

											MB	-3	-22		ST.stone>2cm		<5%				
										Droughtiness grade(DR)		3a	3a		Unfarmed area						
153	T	0	26	C	slight	2.5Y4/1			5	1		42	42	n	n	///	3a	**3a**	WE		
		26	59	C	mod	2.5Y5/3	och	mmd	5	10	poor	35	40	y	y						
		59	80	C	very	2.5Y5/3	och/Grey	mmd	5	20	poor	14	13	y	y						
		80	120	hCL	very	2.5Y5/3	och/Grey	mmd	5	30		35	0	y	n						
											Total	**126**	**95**		LSS Mix Clay and soft chalk - V dry						
											MB	4	-23		ST.stone>2cm		<5%				
										Droughtiness grade(DR)		3a	3a		Unfarmed area						
154	T	0	30	C	calc	2.5Y4/2			5	2		48	48	n	n	///	3a	**3a**	WE DR		
		30	48	C	calc	2.5Y5/3	Fe	com	0	7	poor	23	23	y	y						
		48	60	C	calc	10YR6/1	Fe	many	0	7	poor	10	15	y	y						
		60	120	C	calc	10YR6/1	Fe	many	0	12	poor	42	13	y	y						
											Total	**123**	**99**								
											MB	1	-19								
										Droughtiness grade (DR)		3a	3a								
155	T	0	32	hCL	n	10YR3/2			5	0		55	55	n	n	/	2	**2**	WE DR		
		32	50	hCL	slight	10YR4/4			10	0		26	26	n	n						
		50	73	mSL	calc	10YR4/4			0	10		24	29	n	n						
		73	105	LmS	calc	10YR5/6			0	15		20	0	n	n						
		105	120	LmS	calc	10YR5/6			0	20		9	0	n	n						
											Total	**134**	**110**								
											MB	12	-8								
										Droughtiness grade (DR)		2	2								
156	T	0	32	C	calc	10YR3/2			2	5		52	52	n	n	///	3a	**3a**	WE DR		
		32	60	C	v.calc	2.5Y5/3	Fe	com	0	10	poor	30	36	y	y						
		60	120	C	v.calc	10YR6/1	Fe	many	0	10	poor	42	13	y	y						
											Total	**124**	**101**								
											MB	2	-17								
										Droughtiness grade (DR)		3a	3a								
157	T	0	32	C	calc	10YR3/2			5	2		51	51	n	n	//	2	**3a**	DR		
		32	56	C	v.calc	2.5Y5/3	Fe	com	0	7		33	37	y	n						

		56	120	C	v.calc	10YR6/1	Fe	many	0	10	poor	45	18	y	y					
											Total	**129**	**107**							
											MB	7	-11							
											Droughtiness grade (DR)	2	3a							
158	T	0	34	hCL	n	10YR4/1			3	0		59	59	n	n	*I*	2	**2**	WE DR	
		34	50	SCL	n	2.5Y5/3			5	0		23	23	n	n					
		50	65	SCL	n	10YR4/6			7	0		14	21	n	n					
		65	100	mSL	v.slight	10YR4/6	Mn	com	7	0		36	7	n	n					
		100	120	mSL	calc	10YR4/6	Mn	com	15	0		19	0	n	n					
											Total	**151**	**110**							
											MB	29	-8							
											Droughtiness grade (DR)	2	2							
159	T	0	30	C	calc	2.5Y4/1			5	2		48	48	n	n	*II*	2	**3a**	DR	
		30	50	C	calc	2.5Y5/3			7	0		30	30	n	n					
		50	120	C	v.calc	N5/	Fe	many	0	2	poor	49	26	y	y					
											Total	**127**	**104**							
											MB	5	-14							
											Droughtiness grade (DR)	2	3a							
160	T	0	32	C	n	10YR3/2			5	0		52	52	n	n	*II*	3a	**3a**	WE	
		32	59	C	slight	2.5Y4/3			2	0		35	42	n	n					
		59	120	C	v.calc	N5/	Fe	many	2	0	poor	42	14	y	y					
											Total	**129**	**108**							
											MB	7	-10							
											Droughtiness grade (DR)	2	2							
161	T	0	26	C	calc	10YR3/3			3	7		42	42	n	n	*II*	2	**3a**	DR	
		26	56	C	calc	10YR4/4			0	7		42	47	n	n					
		56	80	C	v.calc	10YR5/2	Fe	com	0	10	poor	17	18	y	y					
		80	120	C	v.calc	N5/	Fe	many	10	10	poor	25	0	y	y					
											Total	**126**	**106**							
											MB	4	-12							
											Droughtiness grade (DR)	3a	3a							
162	T	0	30	C	calc	10YR3/3			3	7		48	48	n	n	*II*	2	**3a**	DR	

		30	48	C	calc	10YR5/4	Fe	few	3	5		27	27	n	n					
		48	58	C	v.calc	2.5Y5/3, 10YR5/1	Fe	many	5	5	poor	8	12	y	y					
		58	120	C	v.calc	10YR5/1	Fe	many	20	10	poor	35	12	y	y					
											Total	**119**	**100**							
											MB	-3	-18							
											Droughtiness grade (DR)	3a	3a							
163	T	0	30	C	calc	10YR3/3			3	7		48	48	n	n	*II*	2	**3a**	DR	
		30	58	C	v.calc	2.5YR5/3	Fe	many	0	10		37	43	y	n					
		58	120	C	v.calc	10YR6/1	Fe	many	0	7	poor	43	15	y	y					
											Total	**129**	**107**							
											MB	7	-11							
											Droughtiness grade (DR)	2	3a							
164	T	0	32	C	calc	10YR3/2			4	3		52	52	n	n	*II*	2	**2**	DR	
		32	45	C	calc	10YR5/4			0	6		20	20	n	n					
		45	80	C	v.calc	2.5Y5/2	Fe	com	0	7		32	39	y	n					
		80	120	C	v.calc	N5/	Fe	many	0	2	poor	28	0	y	y					
											Total	**132**	**111**							
											MB	10	-7							
											Droughtiness grade (DR)	2	2							
165	T	0	32	C	calc	10YR3/3			3	5		52	52	n	n	*III*	3a	**3a**	WE DR	
		32	50	C	v.calc	10YR5/2	Fe	many	0	5		28	28	y	n					
		50	120	C	v.calc	10YR6/1	Fe	many	0	5	poor	49	26	y	y					
											Total	**129**	**106**							
											MB	7	-12							
											Droughtiness grade (DR)	2	3a							
166	T	0	29	C	calc	10YR3/2			5	2		47	47	n	n	*II*	2	**2**	WE DR	
		29	60	C	calc	10YR4/4			0	5		41	49	n	n					
		60	82	C	v.calc	10YR5/2	Fe	com	0	2	poor	15	13	y	y					
		82	120	C	v.calc	N5/	Fe	com	0	1	poor	27	0	y	y					
											Total	**129**	**108**							
											MB	7	-10							
											Droughtiness grade (DR)	2	2							

167	T	0	32	C	calc	10YR3/3			3	3		52	52	n	n	*II-III*	3a	**3a**	WE DR
		32	53	C	v.calc	10YR5/3	Fe	com	0	5		31	33	y	n				
		53	120	C	v.calc	10YR6/1	Fe	many	0	5	poor	47	22	y	y				
											Total	**130**	**107**						
											MB	8	-11						
											Droughtiness grade (DR)	2	3a						
168	T	0	22	oC	mod	2.5Y3/3			4	2		48	48	n	n	*III*	3a	**3a**	WE
	T	22	35	C	mod	2.5Y4/2	Mn	com	10	2		20	20	n	n				
		35	90	C	mod	2.5Y6/3	Fe	many	5	10	poor	45	42	y	y				
		90	100	C	mod	7.5Y6/1	Fe	com	0	0	poor	7	0	y	y				
		100	120	Mst							poor	10	0	y	y				
											Total	**130**	**110**		GR.gradient			3o	W
											MB	8	-8						
											Droughtiness grade (DR)	2	2						
169	T	0	33	C	mod	2.5Y4/2			4	2		54	54	n	n	*III*	3a	**3a**	WE DR
		33	46	C	mod	2.5Y6/3	Fe	com	10	10	m/poor	17	17	y	n				
		46	78	C	mod	7.5Y6/1	Fe	com	5	5	poor	24	29	y	y				
		78	100	C	very	7.5Y7/2	Fe	many	0	20	poor	15	0	y	y				
		100	120	Mst							poor	10	0	y	y				
											Total	**119**	**99**		GR.gradient			1o	W
											MB	-3	-19		ST.stone>2cm			<5%	
											Droughtiness grade (DR)	3a	3a						
170	T	0	28	hCL	very	2.5Y5/2			4	4		48	48	n	n	*III*	3a	**3a**	WE DR
		28	50	C	mod	2.5Y5/2	Fe	many	10	15		30	30	y	n				
		50	72	C	mod	2.5Y5/2	Fe	many	10	10	poor	14	23	y	y				
		72	100	C	mod	7.5Y7/1	Fe	com	0	0	poor	20	0	y	y				
		100	120	Mst							poor	10	0	y	y				
											Total	**121**	**101**		GR.gradient			4o	W
											MB	-1	-17		ST.stone>2cm			<5%	
											Droughtiness grade (DR)	3a	3a						
171	T	0	25	C	mod	2.5Y4/2			6	2		40	40	n	n	*II*	2	**3a**	DR
		25	33	C	mod	2.5Y4/2	Mn	few	5	2	(poor)	12	12	n	n				

		33	48	C	mod	2.5Y5/4			5	5	m/poor	20	20	n	n						
		48	82	C	mod	2.5Y6/3	Fe	com	0	5	poor	25	28	y	y						
		82	95	C	mod	2.5Y6/3	Fe	com	15	15	poor	8	0	y	y						
		95	120	Mst							poor	13	0	y	y						
											Total	**118**	**101**								
											MB	-4	-17			ST.stone>2cm		<5%			
											Droughtiness grade (DR)	3a	3a								
172	T	0	25	C	mod	2.5Y3/3			4	1		41	41	n	n	*II*	2	**3a**	DR GW		
	T	25	33	C	mod	2.5Y4/2			4	1		13	13	n	n						
		33	45	C	mod	2.5Y6/4			0	2	m/poor	17	17	n	n						
		45	80	C	mod	5Y6/1	Fe	com	0	5	poor	27	32	y	y						
		80	120	C	mod	7.5Y7/1	Fe	com	0	0	poor	28	0	y	y						
											Total	**126**	**103**			GR.gradient		2o	SW		
						moist 80cm					MB	4	-15			GW.groundwater		spring?	3a		
											Droughtiness grade (DR)	3a	3a								
173	T	0	28	C	(very)	2.5Y4/3			4	2		45	45	n	n	*III*	3a	**3a**	WE DR		
		28	42	C	mod	2.5Y6/3	Fe	com	10	10	m/poor	18	18	y	n						
		42	65	C	mod	2.5Y6/3	Fe	many	5	5	poor	20	28	y	y						
		65	95	C	very	7.5Y6/1	Fe	many	10	10	poor	19	6	y	y						
		95	120	Mst							poor	13	0	y	y						
											Total	**115**	**97**			GR.gradient		1o	SW		
											MB	-7	-21			ST.stone>2cm		<5%			
											Droughtiness grade (DR)	3a	3a								
174	T	0	30	C	calc	10YR3/3			3	5		49	49	n	n	*III*	3a	**3a**	WE DR		
		30	38	C	calc	10YR5/2	Fe	many	2	10		12	12	y	n						
		38	62	C	v.calc	10YR5/1	Fe	many	0	10	poor	24	30	y	y						
		62	120	C	v.calc	N5/	Fe	many	0	10	poor	41	10	y	y						
											Total	**125**	**101**								
											MB	3	-17								
											Droughtiness grade (DR)	3a	3a								
175	T	0	30	C	calc	10YR3/3			3	3		49	49	n	n	*II*	2	**2**	WE DR		
		30	60	C	v.calc	2.5Y5/3	Fe	com	0	5		39	47	y	n						

		60	120	C	v.calc	N5/	Fe	many	0	1	poor	42	13	y	y					
											Total	**130**	**109**							
											MB	8	-9							
											Droughtiness grade (DR)	2	2							
176	T	0	28	C	calc	10YR3/3			3	5		45	45	n	n	///	3a	**3a**	WE DR	
		28	48	C	calc	2.5Y5/2	Fe	com	0	10		31	31	y	n					
		48	120	C	calc	N5/	Fe	many	0	2	poor	52	28	y	y					
											Total	**128**	**105**							
											MB	6	-13							
											Droughtiness grade (DR)	2	3a							
177	T	0	32	C	slight	2.5Y4/2			4	0		52	52	n	n	//	2	**3a**	DR	
		32	45	C	mod	2.5Y5/4			0	2	m/poor	19	19	n	n					
		45	90	C	mod	2.5Y6/3	Fe	com	0	10	poor	34	32	y	y					
		90	110	C	mod	N6/	Fe	many	5	10	poor	13	0	y	y					
		110	120	MSt							poor	5	0	y	y					
											Total	**124**	**103**							
											MB	2	-15		ST.stone>2cm			<5%		
											Droughtiness grade (DR)	3a	3a							
178	T	0	25	C	mod	2.5Y4/2			4	2		41	41	n	n	//	2	**3a**	DR	
		25	37	C	mod	2.5Y4/2			5	2	(poor)	18	18	n	n					
		37	45	C	mod	2.5Y5/4	OM		5	2		12	12	n	n					
		45	60	C	mod	5Y6/3	Fe	com	5	5	m/poor	14	20	y	n					
		60	100	C	mod	7.5Y6/1	Fe	many	0	10	poor	28	13	y	y					
		100	120	C	mod	N6/	Fe	many	0	10	poor	14	0	y	y					
											Total	**127**	**104**							
											MB	5	-14		ST.stone>2cm			<5%		
											Droughtiness grade (DR)	2	3a							
179	T	0	22	C	mod	2.5Y4/2			4	2		36	36	n	n	//	2	**3a**	DR	
	T	22	37	C	mod	2.5Y4/3			8	2		23	23	n	n					
		37	46	C	mod	2.5Y5/4	Fe	few f	5	5	m/poor	12	12	n	n					
		46	78	C	mod	2.5Y6/3	Fe	com	0	8	poor	25	31	y	y					
		78	100	C	mod	N6/	Fe	many	0	10	poor	15	0	y	y					

		100	120	Mst							poor	10	0	y	y							
											Total	**121**	**102**									
											MB	-1	-16									
											Droughtiness grade (DR)	3a	3a									
180	T	0	28	hCL	mod	2.5Y4/3			6	2		47	47	n	n	*III*	3a	**3a**	WE	DR		
		28	45	C	mod	2.5Y6/3	Fe	com	5	5	m/poor	23	23	y	n							
		45	70	C	mod	2.5Y5/3	Fe	many	5	10	poor	19	30	y	y							
		70	95	C	mod	N6/	Fe	many	5	10	poor	17	0	y	y							
		95	120	Mst							poor	13	0	y	y							
											Total	**119**	**100**		GR.gradient			2o	NE			
											MB	-3	-18		ST.stone>2cm			<5%				
											Droughtiness grade (DR)	3a	3a									
181	T	0	28	hCL	mod	2.5Y4/2			6	1		47	47	n	n	*II*	2	**3a**	DR			
		28	45	C	mod	2.5Y5/4			5	5	m/poor	23	23	n	n							
		45	60	C	mod	2.5Y6/3	Fe	com	5	10	m/poor	14	20	y	n							
		60	90	C	mod	7.5Y6/1	Fe	many	0	10	poor	21	13	y	y							
		90	120	C	mod	N6/	Fe	many	0	10	poor	21	0	y	y							
											Total	**126**	**103**		GR.gradient			2o	NE			
											MB	4	-15		ST.stone>2cm			<5%				
											Droughtiness grade (DR)	3a	3a									
182	T	0	32	C	n	2.5Y4/3			4	0		52	52	n	n	*III*	3b	**3b**	WE			
		32	42	C	n	10YR6/4	MnFe	com	8	0	m/poor	13	13	y	n							
		42	75	C	mod	2.5Y6/3	Fe	com	0	5	poor	28	36	y	y							
		75	80	CL	mod	2.5Y6/3	Fe	many	0	0	poor	4	0	y	y							
		80	120	C	mod	7.5Y6/1	Fe	many	0	0	poor	28	0	y	y							
											Total	**125**	**102**		GR.gradient			2o	NE			
											MB	3	-16		ST.stone>2cm			<5%				
											Droughtiness grade (DR)	3a	3a		Wheat, many poor patches							
183	T	0	25	C	n	2.5Y4/3			6	0		40	40	n	n	*II-III*	3b	**3b**	WE			
	T	25	34	C	n	2.5Y4/2	Mn	com	5	0		15	15	n	n							
		34	40	C	slight	2.5Y5/4	Fe	few f	10	0	m/poor	8	8	n	n							
		40	80	C	mod	5Y6/3	Fe	com	5	0	poor	32	37	y	y							

		80	100	C	mod	7.5Y6/1	Fe	com	0	0	poor	14	0	y	y						
		100	120	Mst							poor	10	0	y	y						
											Total	**119**	**100**		GR.gradient			2o	NE		
											MB	-3	-18		ST.stone>2cm			<5%			
											Droughtiness grade (DR)	3a	3a		Wheat, many poor patches						
184	T	0	25	mCL	n	10YR4/2			6	0		42	42	n	n	//	2	**3a**	DR		
	T	25	35	hCL	n	10YR4/2			10	0		16	16	n	n						
		35	45	hCL	n	2.5Y5/4	Fe	com f	5	0		15	15	(y)	n						
		45	63	hCL	slight	2.5Y6/4	Fe	com f	5	0	m/poor	17	24	y	n						
		63	85	C	mod	5Y6/3	Fe	com	0	0	poor	15	9	y	y						
		85	120	C	mod	N6/	Fe	many	0	5	poor	25	0	y	y						
											Total	**131**	**107**		GR.gradient			1o	NE		
											MB	9	-11		ST.stone>2cm			<5%			
											Droughtiness grade (DR)	2	3a								
185	T	0	20	hCL	slight	2.5Y4/2			6	0		34	34	n	n	//	2	**3a**	DR		
	T	20	35	hCL	mod	2.5Y4/4	Mn	few	10	1	(poor)	24	24	n	n						
		35	45	C	mod	2.5Y5/4			5	8	m/poor	13	13	n	n						
		45	60	C	mod	2.5Y7/2	Fe	com	0	15	poor	13	19	y	y						
		60	85	C	very	7.5Y6/1	Fe	many	5	10	poor	17	12	y	y						
		85	105	C	mod	N6/	Fe	com	10	10	poor	13	0	y	y						
		105	120	Mst							poor	8	0	y	y						
						deepened					Total	**122**	**103**		GR.gradient			2o	NE		
						topsoil					MB	0	-15		ST.stone>2cm			<5%			
											Droughtiness grade (DR)	3a	3a		Wheat (edge of poor strip along edge)						
186	T	0	28	hCL	slight	2.5Y4/3			4	2		48	48	n	n	//	2	**3a**	DR		
		28	45	C	mod	2.5Y6/4	Fe	com	5	10	(poor)	25	25	y	n						
		45	75	C	mod	2.5Y6/3	Fe	com	5	5	poor	23	31	y	n						
		75	90	C	mod	7.5Y6/1	Fe	com	0	15	poor	11	0	y	y						
		90	105	C	mod	7.5Y6/1	Fe	com	15	15	poor	9	0	y	y						
		105	120	Mst							poor	8	0	y	y						
											Total	**123**	**104**						stopped		
											MB	1	-14		ST.stone>2cm			<5%	by stone		

									Droughtiness grade (DR)			3a	3a								
187	T	0	25	hCL	slight	2.5Y4/3			6	1		42	42	n	n	*III*	3a	**3a**	WE DR		
	T	25	35	hCL	mod	2.5Y4/4			5	2		17	17	n	n						
		35	55	C	mod	2.5Y6/3	Fe	com	5	5	poor	22	25	y	y						
		55	60	hCL	very	7.5Y7/2	Fe	com	0	15	m/poor	4	7	y	y						
		60	100	C	mod	7.5Y6/1	Fe	many	0	8	poor	28	13	y	y						
		100	120	Mst							poor	10	0	y	y						
											Total	**123**	**103**								
											MB	1	-15								
									Droughtiness grade (DR)			3a	3a								

ST.stone>2cm <5%

end	**Surveyors notes :** pattern of erosion. On browsgrey (relic?) mottled clay subsoil is nearer the surface. And deeper organic enriched topsoils on footslope Mottling interpreted as normal despite this.

Wetness / workability limitations are determined according to the methodology given in Appendix 3 of the ALC guidelines, MAFF 1988

Droughtiness calculations are made according to the methodology given in Appendix 4 of the ALC guidelines, MAFF 1988.

Grades are shown for drought, wetness and any other soil or site factors which are relevant. The overall Grade is set by the most limiting factor and shown on the right.

TL240606

Stone types		
%	TAv	Eav
hard	1	0.5
chalk	10	7
hard	flint & pebble	

Climate Data	
MDwheat	118
MDpotato	113
FCD	93
AAR	540

Wetness Class Guidelines	*II*	*III*	*IV*	*V*
SPL within 80cm, gleying within 40cm	>52cm	52-80cm		
SPL within 80cm, gleying at 40-70cm	<80cm			
No SPL but gleying within 40cm	coarse subsoil	*I*	other cases	*I*
Maximum depth of auger penetration is underlined				

Ciimate
1412 D^{o}
Limitation
Grade 1
54 m

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% chalk	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
316	T	0	27	C	mod	10YR3/3			7	0		43	43	n	n	*III*	3a	**3a**	WE DR
		27	55	C	v.calc	10YR6/1	Femn	many	0	10	poor	33	36	y	y				
		55	120	C	v.calc	10YR6/1	Fe	com	0	15	poor	46	19	y	y				
											Total	**121**	**97**						
											MB	3	-16						
									Droughtiness grade (DR)			3a	3a						
317	T	0	29	C	mod	10YR3/3			5	0		47	47	n	n	*III*	3a	**3a**	WE DR
		29	60	C	calc	2.5Y5/2	Femn	com	0	5	poor	34	40	y	y				
		60	120	C	v.calc	10YR6/1	Fe	com	0	20	poor	42	12	y	y				
											Total	**123**	**99**						
											MB	5	-14						
									Droughtiness grade (DR)			2	3a						
318	T	0	28	C	mod	10YR3/3			5	0		45	45	n	n	*III*	3a	**3a**	WE DR
		28	45	C	mod	2.5Y5/2	Femn	many	5	5	poor	21	21	y	y				
		45	80	C	v.calc	10YR6/1	Fe	com	0	15	poor	27	31	y	y				
		80	120	C	v.calc	10YR6/1	Fe	com	0	20	poor	28	0	y	y				
											Total	**121**	**98**						
											MB	3	-15						
									Droughtiness grade (DR)			3a	3a						
319	T	0	27	C	slight	2.5Y4/3			6	0		43	43	n	n	*II*	2	**3a**	DR
		27	42	C	slight	2.5Y4-6/4			5	2	m/poor	21	21	n	n				
		42	60	C	mod	2.5Y5/3	Fe	com	0	5	poor	17	23	y	y				

		60	90	C	very	2.5Y6/2	Fe	com	0	15	m/poor	22	14	y	n						
		90	110	C	mod	N6/	Fe	many	0	10	poor	14	0	y	y						
		110	120	MSt							poor	5	0	y	y						
											Total	**122**	**101**								
											MB	4	-12			ST.stone>2cm		<5%			
											Droughtiness grade (DR)	3a	3a								
320	T	0	25	C	slight	2.5Y4/3			6	0		40	40	n	n	*III*	3a	**3a**	WE DR		
		25	32	C	slight	2.5Y4/2	Mn	com	5	0	(poor)	11	11	n	n						
		32	40	C	mod	2.5Y5/3	Fe	com	5	2	m/poor	11	11	y	n						
		40	60	C	mod	2.5Y5/3	Fe	com	10	10	poor	18	23	y	y						
		60	75	C	very	2.5Y6/2	Fe	com	0	20	m/poor	11	14	y	y						
		75	95	C	mod	N6/	Fe	many	0	10	poor	14	0	y	y						
		95	120	MSt							poor	13	0	y	y						
											Total	**117**	**98**								
											MB	-1	-15			ST.stone>2cm		<5%			
											Droughtiness grade (DR)	3a	3a								
321	T	0	28	C+	mod	2.5Y4/3			4	0		46	46	n	n	*III*	3b	**3b**	WE		
		28	33	C	mod	2.5Y4/2			5	0		8	8	n	n						
		33	60	C	mod	2.5Y6/4	Fe	com	2	10	poor	28	34	y	y						
		60	85	hCL	mod	2.5Y6/2	Fe	com	0	10	poor	18	12	y	y						
		85	95	C	very	2.5Y6/3	Fe	com	0	10	poor	7	0	y	y						
		95	120	MSt							poor	13	0	y	y						
											Total	**118**	**99**			Wetness downgraded heavy clay topsoil					
											MB	0	-14			ST.stone>2cm		<5%			
											Droughtiness grade (DR)	3a	3a								
322	T	0	30	C	slight	2.5Y4/2			6	0		48	48	n	n	*II-III*	3a	**3a**	WE DR		
		30	40	C	slight	2.5Y5/2			5	5	m/poor	14	14	n	n						
		40	60	C	mod	2.5Y5/4	Mn	com	2	5	poor	19	25	(y)	y						
		60	80	hCL	very	2.5Y7/2	Fe	com	0	10		19	15	y	n						
		80	95	C	mod				0	20	poor	11	0	y	y						
		95	120	MSt							poor	13	0	y	y						
											Total	**124**	**102**								

											MB	6	-11		ST.stone>2cm		<5%				
										Droughtiness grade (DR)		2	3a							
323	T	0	28	C	v.slight	2.5Y4/2			4	0		46	46	n	n	*II*	2	**3a**	DR		
		28	50	C	slight	2.5Y5/4			5	0	m/poor	30	30	n	n						
		50	75	C	mod	2.5Y5/2	Fe	com	5	5	m/poor	18	27	y	n						
		75	90	C	mod	7.5Y6/1	Fe	many	10	20	poor	10	0	y	y						
		95	120	Mst							poor	13	0	y	y						
											Total	**116**	**103**								
											MB	-2	-10		ST.stone>2cm		<5%				
										Droughtiness grade (DR)		3a	2							
324	T	0	28	C+	n	2.5Y4/3			6	0		45	45	n	n	*III*	3b	**3b**	WE		
		28	45	C	slight	2.5Y5/2	Fe	com	5	0	poor	21	21	y	y						
		45	80	C	mod	N6/	Fe	many	10	15	poor	25	28	y	y						
		80	120	MSt							poor	20	0	y	y						
											Total	**111**	**94**								
											MB	-7	-19		ST.stone>2cm		<5%				
										Droughtiness grade (DR)		3a	3a							
325	T	0	28	C	slight	2.5Y4/3			6	0		45	45	n	n	*II*	2	**3a**	DR		
		28	42	C	slight	2.5Y4-6/4	Fe	few f	5	2		21	21	n	n						
		42	50	C	mod	2.5Y5/3	Fe	com	0	10	m/poor	11	11	y	n						
		50	90	mCL	very	2.5Y7/2	Fe	com	0	15	poor	28	23	y	y						
		90	120	MSt							poor	15	0	y	y						
											Total	**120**	**101**								
											MB	2	-12		ST.stone>2cm		<5%				
										Droughtiness grade (DR)		3a	3a							
326	T	0	28	hCL	n	10YR4/3			5	0		48	48	n	n	*II-III*	3a	**3a**	WE		
		28	40	C	n	2.5Y4/3			7	0		18	18	n	n						
		40	60	C	calc	10YR6/2	Fe	com	0	10	poor	20	25	y	y						
		60	120	C	v.calc	10YR6/2	Fe	com	0	15	poor	42	13	y	y						
											Total	**128**	**104**								
											MB	10	-9								
										Droughtiness grade (DR)		2	2							

327	T	0	30	C	mod	10YR3/3			5	0		49	49	n	n	///	3a	**3a**	WE	
		30	45	C	mod	10YR5/2	Femn	many	5	0		23	23	y	y					
		45	60	C	v.calc	10YR6/2	Fe	com	0	10	poor	13	19	y	y					
		60	120	C	v.calc	10YR6/1	Fe	com	0	15	poor	42	13	y	y					
											Total	**127**	**103**							
											MB	9	-10							
											Droughtiness grade (DR)	2	2							
328	T	0	27	hCL	n	10YR3/3			5	0		46	46	n	n	//	3a	**3a**	WE	
		27	46	C	n	10YR4/4	Mn	com	10	0		28	28	n	n					
		46	65	C	calc	10YR6/1	Fe	many	0	5	poor	16	24	y	y					
		65	120	hCL	v.calc	10YR6/1	Fe	many	0	20		52	7	y	n					
											Total	**141**	**106**							
											MB	23	-7							
											Droughtiness grade (DR)	2	2							
329	T	0	28	hCL	n	10YR3/3			2	0		49	49	n	n	//	3a	**3a**	WE	
		28	56	C	n	10YR6/1	Fe	com	0	12		38	43	y	n					
		56	120	C	calc	10YR6/1	Fe	com	0	20	poor	45	17	y	y					
											Total	**133**	**110**							
											MB	15	-3							
											Droughtiness grade (DR)	2	2							
330	T	0	32	hCL	n	10YR3/3			3	0		56	56	n	n	//	3a	**3a**	WE	
		32	70	C	n	2.5Y4/3			3	0		44	59	n	n					
		70	86	C	calc	10YR5/2	Fe	com	10	0	poor	10	0	y	y					
		86	120	C	calc	10YR6/1	Fe	com	15	0	poor	20	0	y	y					
											Total	**130**	**115**							
											MB	12	2							
											Droughtiness grade (DR)	2	2							
331	T	0	26	C	mod	10YR4/2			3	0		43	43	n	n	///	3a	**3a**	WE DR	
		26	60	C	calc	10YR5/2	Femn	com	0	5	poor	38	44	y	y					
		60	120	C	calc	10YR5/2	Femn	com	0	7	poor	42	13	y	y					
											Total	**123**	**99**							
											MB	5	-14							

											Droughtiness grade (DR)		2	3a							
332	T	0	25	C	slight	10YR3/3			3	0			41	41	n	n	*III*	3a	**3a**	WE	
		25	42	C	mod	2.5Y5/3	Fe	com	0	0			27	27	y	n					
		42	73	C	calc	10YR6/1	Fe	many	0	3	poor		26	36	y	y					
		73	120	C	calc	N5/	Fe	com	0	3	poor		33	0	y	y					
												Total	**128**	**105**							
												MB	10	-8							
											Droughtiness grade (DR)		2	2							
333	T	0	31	C	slight	10YR3/3			2	0			52	52	n	n	*III*	3a	**3a**	WE	
		31	50	C	slight	2.5Y5/3	Fe	com	0	2			30	30	y	n					
		50	120	C	calc	N5/	Fe	com	0	2	poor		49	26	y	y					
												Total	**131**	**108**							
												MB	13	-5							
											Droughtiness grade (DR)		2	2							
334	T	0	27	C	slight	2.5Y4/2			4	0			44	44	n	n	*II*	2	**3a**	DR	
		27	40	C	slight	2.5Y4/4			5	0	m/poor		18	18	n	n					
		40	60	C	mod	2.5Y5/4			0	10	m/poor		22	28	n	n					
		60	110	C	mod	N6/	Fe	many	5	10	poor		33	12	y	y					
		110	120	MSt							poor		5	0	y	y					
												Total	**122**	**102**							
												MB	4	-11							
											Droughtiness grade (DR)		3a	3a							
335	T	0	29	C	n	2.5Y4/3			4	0			47	47	n	n	*II*	3a	**3a**	WE DR	
		29	43	C	slight	2.5Y4/4			5	5	m/poor		19	19	n	n					
		43	70	C	mod	2.5Y6.2	Fe	com	5	5	poor		22	33	y	y					
		70	100	C	mod	10Y5/1	Fe	many	5	5	poor		20	0	y	y					
		110	120	MSt							poor		5	0	y	y					
												Total	**113**	**100**							
												MB	-5	-13							
											Droughtiness grade (DR)		3a	3a							
336	T	0	27	C	slight	2.5Y4/4			6	1			43	43	n	n	*III*	3a	**3a**	WE DR	
		27	38	C	mod	2.5Y5/3	Fe	com	5	0	m/poor		15	15	y	n					

ST.stone>2cm <5%

ST.stone>2cm <5%

		38	60	C	very	10YR7/3	Fe	com	0	20	poor	22	27	y	y						
		60	80	C	mod	N6/	Fe	many	5	10	poor	13	12	y	y						
		80	120	MSt							poor	20	0	y	y						
											Total	**114**	**98**								
											MB	-4	-15			ST.stone>2cm		<5%			
											Droughtiness grade (DR)	3a	3a								
337	T	0	25	C	slight	2.5Y4/2			4	0		41	41	n	n	*III*	3a	**3a**	WE DR		
		25	34	C	slight	2.5Y5/4			5	0		14	14	n	n						
		34	58	C	mod	2.5Y5/2	Fe	com	0	0	poor	26	31	y	y						
		58	90	C	mod	N6/	Fe	many	0	10	poor	22	15	y	y						
		90	120	MSt							poor	15	0	y	y						
											Total	**118**	**101**								
											MB	0	-12			ST.stone>2cm		<5%			
											Droughtiness grade (DR)	3a	3a								
338	T	0	25	C	slight	2.5Y4/2			4	0		41	41	n	n	*III*	3a	**3a**	WE DR		
		25	32	C	slight	2.5Y5/3			5	0		11	11	n	n						
		32	58	C	mod	2.5Y6/2	Fe	com	0	5	poor	29	33	y	y						
		58	90	C	mod	N6/	Fe	many	5	10	poor	21	15	y	y						
		90	120	MSt							poor	15	0	y	y						
											Total	**117**	**100**								
											MB	-1	-13			ST.stone>2cm		<5%			
											Droughtiness grade (DR)	3a	3a								
339	T	0	33	C	mod	10YR3/3			5	0		53	53	n	n	*I*	2	**2**	WE DR		
		33	53	C	calc	2.5Y5/4			2	3		29	31	n	n						
		53	120	hCL	v.calc	10YR6/1	Fe	com	0	25		62	25	y	n						
											Total	**144**	**109**								
											MB	26	-4								
											Droughtiness grade (DR)	2	2								
340	T	0	23	C	n	10YR3/3			2	0		38	38	n	n	*II*	3a	**3a**	WE DR		
		23	45	C	slight	2.5Y5/3	Fe	few	0	0	m/poor	32	32	n	n						
		45	120	C	calc	10YR5/1	Fe	many	0	5	poor	55	32	y	y						
											Total	**126**	**102**								

											MB	8	-11							
								Droughtiness grade (DR)				2	3a							
341	T	0	32	C	mod	10YR3/2			5	2		51	51	n	n	//	2	**2**	WE DR	
		32	50	C	calc	2.5Y4/3			0	3		28	28	n	n					
		50	70	C	calc	2.5Y4/3	Fe	com	0	3		16	32	y	n					
		70	120	C	calc	10YR5/2	Fe	com	0	5	poor	35	0	y	y					
											Total	**131**	**112**							
											MB	13	-1							
								Droughtiness grade (DR)				2	2							
342	T	0	28	C	n	10YR3/3			3	0		46	46	n	n	//	3a	**3a**	WE	
		28	52	C	v.slight	2.5Y5/4			3	0		36	37	n	n					
		52	72	C	slight	10YR6/1	Fe	com	3	0		16	28	y	n					
		72	120	C	mod	10YR6/1	Fe	many	0	5	poor	34	0	y	y					
											Total	**131**	**112**							
											MB	13	-1							
								Droughtiness grade (DR)				2	2							
343	T	0	27	C	n	2.5Y4/3			4	1		44	44	n	n	//	3a	**3a**	WE	
		27	33	C	n	2.5Y4/4			0	0		10	10	n	n					
		33	60	C	v.slight	2.5Y5/4	Fe	few f	0	0	m/poor	32	39	n	n					
		60	85	C	slight	2.5Y6/2	Fe	com	0	5	poor	18	13	y	y					
		85	105	C	mod	N6/	Fe	many	0	10	poor	14	0	y	y					
		105	120	MSt							poor	8	0	y	y					
											Total	**125**	**106**		GR.gradient					
											MB	7	-7		ST.stone>2cm		<5%			
						fsab		**Droughtiness grade (DR)**				2	2							
344	T	0	28	C	n	2.5Y4/3			6	1		45	45	n	n	//	3a	**3a**	WE DR	
		28	35	C	slight	2.5Y6/4			5	0		11	11	n	n					
		35	50	C	slight	2.5Y5/4	Fe	few f	0	0	m/poor	22	22	n	n					
		50	65	C	mod	2.5Y6/3	Fe	com	0	10	poor	11	19	y	y					
		65	85	hCL	very	2.5Y7/1	Fe	many	5	20	m/poor	16	6	y	y					
		85	120	MSt							poor	18	0	y	y					
											Total	**121**	**102**		GR.gradient					

											MB	3	-11		ST.stone>2cm		<5%				
										Droughtiness grade (DR)		3a	3a								
345	T	0	30	C	n	10YR3/3			5	0		49	49	n	n	///	3b	**3b**	WE		
		30	44	C	slight	2.5Y5/3	Fe	com	5	2		21	21	y	n						
		44	120	C	v.calc	10YR6/1	Fe	many	0	10	poor	57	33	y	y						
											Total	**126**	**103**								
											MB	8	-10								
										Droughtiness grade (DR)		2	3a								
346	T	0	27	C	mod	10YR3/3			5	2		43	43	n	n	//	2	**2**	WE DR		
		27	42	C	calc	2.5Y5/3	Femn	com	3	3		23	23	y	n						
		42	75	C	calc	2.5Y5/3	Femn	com	0	3		33	44	y	n						
		75	120	C	calc	10YR6/1	Fe	com	0	5	poor	32	0	y	y						
											Total	**130**	**111**								
											MB	12	-2								
										Droughtiness grade (DR)		2	2								
347	T	0	27	hCL	n	10YR4/4			6	0		46	46	n	n	///	3b	**3b**	WE		
		27	35	C	n	10YR6/4	Mn	com	10	0	m/poor	11	11	n	n						
		35	74	C	slight	2.5Y6/3	Fe	com	5	0	poor	35	43	y	y						
		74	95	C	mod	N6/	Fe	many	5	15	poor	14	0	y	y						
		95	120	MSt							poor	13	0	y	y						
											Total	**118**	**100**		GR.gradient		2o	NE			
											MB	0	-13		ST.stone>2cm		<5%				
										Droughtiness grade (DR)		3a	3a								
348	T	0	28	hCL	n	10YR4/4			6	0		48	48	n	n	///	3b	**3b**	WE		
		28	45	C	slight	2.5Y6/4	MnFe	com	5	5	m/poor	23	23	y	n						
		45	60	C	slight	2.5Y6/3	Fe	com	0	0	poor	14	20	y	y						
		60	90	C	mod	2.5Y6/3	Fe	many	0	10	poor	21	13	y	y						
		90	100	C	mod	N6/	Fe	many	0	10	poor	7	0	y	y						
		100	120	MSt							poor	10	0	y	y						
											Total	**122**	**103**		GR.gradient		1o	NE			
											MB	4	-10		ST.stone>2cm		<5%				
										Droughtiness grade (DR)		3a	3a								

349	T	0	23	C	calc	2.5Y4/1			5	0		37	37	n	n	*III*	3a	**3a**	WE DR	
		23	60	C	calc	2.5Y5/3	Fe	mff	0	10	poor	41	47	y	y					
		60	70	hCL	calc	2.5Y5/3	Fe	cmd	0	30		9	14	y	n					
		70	120	hCL	calc	2.5Y5/3	Fe	cmd	0	30		46	0	y	n					
											Total	**133**	**98**		LSS 50/50 Chalk Dust/Clay					
											MB	15	-15		ST.stone>2cm		<5%			
											Droughtiness grade (DR)	2	3a							
350	T	0	31	C	calc	2.5Y4/2			5	0		50	50	n	n	*III*	3a	**3a**	WE DR	
		31	48	C	calc	10YR5/3	Red,fe	mmd	0	5	poor	22	22	y	y					
		48	82	C	calc	2.5Y5/3	Fe	cmd	0	10	poor	25	28	y	y					
		82	120	hCL	calc	2.5Y5/3	Fe	cmd	0	30		35	0	y	n					
											Total	**132**	**100**		LSS 50/50 Chalk Dust/Clay					
											MB	14	-13		ST.stone>2cm		<5%			
											Droughtiness grade (DR)	2	3a							
351	T	0	28	C	calc	2.5Y4/1			5	2		45	45	n	n	*III*	3a	**3a**	WE DR	
		28	76	C	calc	2.5Y5/3	Fe	cmd	0	15	poor	46	53	y	y					
		76	80	hCL	calc	2.5Y5/3	Fe	cmd	0	20		4	0	y	n					
		80	120	hCL	calc	2.5Y5/3	Fe	cmd	0	20		38	0	y	n					
											Total	**132**	**98**		LSS 50/50 Chalk Dust/Clay					
											MB	14	-15		ST.stone>2cm		<5%			
											Droughtiness grade (DR)	2	3a							
352	T	0	30	C	calc	2.5Y4/1			5	0		49	49	n	n	*III*	3a	**3a**	WE	
		30	43	C	calc	2.5Y5/3	Fe	cmd	0	5	poor	17	17	y	y					
		43	52	C	calc	2.5Y5/3	Fe	cmd	0	10	poor	10	11	y	y					
		52	120	hCL	calc	2.5Y5/3	Fe	cmd	0	30		62	26	y	n					
											Total	**137**	**102**		LSS 50/50 Chalk Dust/Clay					
											MB	19	-11		ST.stone>2cm		<5%			
											Droughtiness grade (DR)	2	3a							
353	T	0	32	C	calc	2.5Y4/1			5	0		52	52	n	n	*III*	3a	**3a**	WE DR	
		32	63	C	calc	2.5Y5/3	Fe	mmd	0	5	poor	32	40	y	y					
		63	120	hCL	calc	2.5Y5/3	Fe	cmd	0	30		52	10	y	n					
											Total	**136**	**102**		LSS 50/50 Chalk Dust/Clay					
											MB	18	-11		ST.stone>2cm		<5%			

											Droughtiness grade (DR)		2	3a							
354	T	0	30	C	calc	2.5Y4/1			5	0			49	49	n	n	///	3a	**3a**	WE DR	
		30	63	C	calc	2.5Y5/3	Fe	cmd	0	5	poor		35	42	y	y					
		63	120	C	calc	2.5Y5/3	Fe	cmd	0	20	poor		40	9	y	y					
												Total	**123**	**100**		LSS 50/50 Chalk Dust/Clay					
												MB	5	-13		ST.stone>2cm					
											Droughtiness grade (DR)		2	3a							
355	T	0	31	C	calc	2.5Y4/1			5	0			50	50	n	n	///	3a	**3a**	WE DR	
		31	45	C	calc	2.5Y5/3	Fe	mmd	0	5			22	22	y	n					
		45	58	C	calc	2.5Y5/3	Fe	mmd	0	5	poor		12	17	y	y					
		58	60	C	calc	2.5Y5/3	Fe	cmd	0	30	poor		1	2	y	y					
		65	120	C	calc	2.5Y5/3	Fe	cmd	0	30	m/poor		40	7	y	n					
												Total	**126**	**98**		LSS 50/50 Chalk Dust/Clay					
												MB	8	-15		ST.stone>2cm					
											Droughtiness grade (DR)		2	3a							
356	T	0	24	C	calc	2.5Y4/1			5	5			38	38	n	n	///	3a	**3a**	WE DR	
		24	50	C	calc	2.5Y5/3	Fe	mmd	0	10	poor		33	33	y	y					
		50	60	C	calc	2.5Y5/2	Fe	mmd	0	30	poor		7	12	y	y					
		60	120	C	calc	2.5Y5/2	Fe	mmd	0	30	m/poor		44	13	y	n					
												Total	**122**	**96**		LSS 50/50 Chalk Dust/Clay					
												MB	4	-17		ST.stone>2cm	<5%				
											Droughtiness grade (DR)		3a	3a							
357	T	0	30	C	calc	2.5Y4/1			10	5			45	45	n	n	///	3a	**3a**	WE/DR	
		30	40	C	calc	2.5Y5/3	Fe	mmd	0	10			15	15	y	n					
		40	56	C	calc	2.5Y5/3	Fe	cmd	0	10	poor		17	20	y	y					
		56	60	C	calc	2.5Y5/3	Fe	mmd	0	30	poor		3	5	y	y					
		60	120	C	calc	2.5Y5/3	Fe	mmd	0	30	m/poor		44	13	y	n					
												Total	**124**	**99**		LSS 50/50 Chalk Dust/Clay					
												MB	6	-14		ST.stone>2cm					
											Droughtiness grade (DR)		2	3a							
358	T	0	40	C	calc	2.5Y4/1			5	5			63	63	n	n	///	3a	**3a**	WE DR	
		40	56	C	calc	2.5Y5/3	Fe	cmd	0	10	poor		17	20	y	y					
		56	60	C	calc	2.5Y5/3	Fe	mmd	0	30	poor		3	5	y	y					

		65	120	C	calc	2.5Y5/3	Fe	mmd	0	30	m/poor	40	7	y	n						
											Total	**124**	**95**		LSS 50/50 Chalk Dust/Clay						
											MB	6	-18		ST.stone>2cm						
											Droughtiness grade (DR)	2	3a								
359	T	0	30	C	calc	2.5Y4/1			5	5		48	48	n	n	///	3a	**3a**	WE DR		
		30	43	C	calc	2.5Y5/3	Fe	mmd	0	5		20	20	y	n						
		43	60	C	calc	2.5Y5/3	Fe	cmd	0	10	poor	16	22	y	y						
		60	120	C	calc	2.5Y5/3	Fe	cmd	0	30	m/poor	44	13	y	n						
											Total	**128**	**103**		LSS 50/50 Chalk Dust/Clay						
											MB	10	-10		ST.stone>2cm						
											Droughtiness grade (DR)	2	3a								
360	T	0	36	C	calc	2.5Y4/1			5	2		58	58	n	n	///	3a	**3a**	WE DR		
		36	58	C	calc	2.5Y5/3	Fe	cmd	0	15	poor	23	28	y	y						
		58	120	C	calc	2.5Y5/1	Fe	cmd	0	20	poor	43	15	y	y						
											Total	**124**	**100**		GR.gradient						
											MB	6	-13		ST.stone>2cm	<5%					
											Droughtiness grade (DR)	2	3a								
361	T	0	40	C	calc	2.5Y4/1			10	5		60	60	n	n	///	3a	**3a**	WE DR		
		40	50	C	calc	2.5Y5/3	Fe	mmd	0	10		15	15	y	n						
		50	60	C	calc	2.5Y5/3	Fe	mmd	0	10	poor	7	13	y	y						
		60	65	C	calc	2.5Y5/3	Fe	mmd	0	30	m/poor	4	7	y	y						
		65	120	C	calc	2.5Y5/3	Fe	mmd	0	30	m/poor	40	7	y	y						
											Total	**127**	**101**		LSS 50/50 Chalk Dust/Clay						
											MB	9	-12		ST.stone>2cm						
											Droughtiness grade (DR)	2	3a								
362	T	0	27	C	calc	2.5Y4/1			10	5		41	41	n	n	///	3a	**3a**	WE DR		
		27	60	C	calc	2.5Y5/3	Fe	mmd	0	20	poor	36	41	y	y						
		60	78	C	calc	2.5Y5/3	Fe	mmd	0	30	m/poor	13	13	y	y						
		78	120	C	calc	2.5Y5/3	Fe	mmd	0	30	m/poor	31	0	y	n						
											Total	**120**	**95**		LSS 50/50 Chalk Dust/Clay						
											MB	2	-18		ST.stone>2cm						
											Droughtiness grade (DR)	3a	3a								
363	T	0	30	C	calc	2.5Y4/1			5	5		48	48	n	n	///	3a	**3a**	WE DR		

		30	46	C	calc	2.5Y4/2	Fe	mmd	0	10		25	25	y	n					
		46	100	C	calc	2.5Y4/2	Fe	mmd	0	30	poor	40	29	y	y					
		100	120	C	calc	2.5Y5/3	Fe	mmd	0	30	m/poor	15	0	y	n					
											Total	**127**	**101**		LSS 50/50 Chalk Dust/Clay					
											MB	9	-12		ST.stone>2cm	<5%				
											Droughtiness grade (DR)	2	3a							
364	T	0	35	C	calc	2.5Y4/1			5	0		57	57	n	n	*III*	3a	**3a**	WE DR	
		35	74	C	calc	2.5Y5/3	Fe	mmd	0	5	poor	36	45	y	y					
		74	77	C	calc	2.5Y5/3	Fe	cmd	0	20		2	0	y	n					
		77	120	hCL	calc	2.5Y5/3			0	30		39	0	y	n					
											Total	**134**	**102**		LSS 50/50 Chalk Dust/Clay					
											MB	16	-11		ST.stone>2cm	<5%				
											Droughtiness grade (DR)	2	3a							
365	T	0	35	C	calc	2.5Y4/1			5	5		55	55	n	n	*II-III*	3a	**3a**	WE DR	
		35	47	C	calc	2.5Y5/3	Fe	mmd	0	10	poor	15	15	y	y					
		47	60	C	calc	2.5Y5/3	Fe	mmd	0	30	m/poor	11	17	y	n					
		60	120	hCL	calc	2.5Y5/3	Fe	mmd	0	30		55	14	y	n					
											Total	**137**	**102**		LSS 50/50 Chalk Dust/Clay					
											MB	19	-11		ST.stone>2cm	<5%				
											Droughtiness grade (DR)	2	3a							
366	T	0	38	C	calc	2.5Y4/1			5	2		61	61	n	n	*III*	3a	**3a**	WE DR	
		38	52	C	calc	2.5Y5/3	Fe	cmd	0	10	poor	17	18	y	y					
		52	60	C	calc	2.5Y5/3	Fe	mmd	0	10	poor	6	10	y	y					
		60	120	C	calc	2.5Y5/3	Fe	mmd	0	10	poor	42	13	y	y					
											Total	**125**	**102**		GR.gradient					
											MB	7	-11		ST.stone>2cm	<5%				
											Droughtiness grade (DR)	2	3a							
367	T	0	30	C	calc	2.5Y4/1			5	5		48	48	n	n	*III*	3a	**3a**	WE DR	
		30	50	C	calc	2.5Y5/3	Fe	mmd	0	10	poor	25	25	y	y					
		50	60	C	calc	2.5Y5/3	Fe	mmd	0	30	m/poor	7	13	y	y					
		60	120	hCL	calc	2.5Y5/3			0	30		55	14	y	n					
											Total	**135**	**100**		LSS 50/50 Chalk Dust/Clay					
											MB	17	-13		ST.stone>2cm	<5%				

											Droughtiness grade (DR)		2	3a							
368	T	0	30	C	calc	2.5Y4/1			5	5			48	48	n	n	*III*	3a	**3a**	WE DR	
		30	40	C	calc	2.5Y5/3	Fe	mmd	0	10	poor		13	13	y	y					
		40	45	C	calc	2.5Y5/3	Fe	mmd	0	30	m/poor		7	7	y	y					
		45	120	hCL	calc	2.5Y5/3			0	30			71	36	y	n					
												Total	**138**	**102**		LSS 50/50 Chalk Dust/Clay					
												MB	20	-11		ST.stone>2cm		<5%			
											Droughtiness grade (DR)		2	3a							
369	T	0	27	C	calc	2.5Y4/1			5	2			43	43	n	n	*III*	3a	**3a**	WE DR	
		27	43	C	calc	2.5Y5/3	Fe	mmf	0	10	poor		20	20	y	y					
		43	47	C	calc	2.5Y5/3	Fe	mmf	0	30	m/poor		5	5	y	y					
		47	120	hCL	calc	2.5Y5/3	Fe	mmd	0	30			68	33	y	n					
												Total	**137**	**102**		LSS 50/50 Chalk Dust/Clay					
												MB	19	-11		ST.stone>2cm					
											Droughtiness grade (DR)		2	3a							
370	T	0	40	C	calc	2.5Y4/1			5	2			64	64	n	n	*III*	3a	**3a**	WE DR	
		40	60	C	calc	2.5Y5/3	Fe	mmd	0	10	poor		20	25	y	y					
		60	70	C	calc	2.5Y5/3	Fe	cmd	0	30	m/poor		7	13	y	y					
		70	120	hCL	calc	2.5Y5/3	Fe	cmd	0	30			46	0	y	n					
												Total	**137**	**103**		LSS 50/50 Chalk Dust/Clay					
												MB	19	-10		ST.stone>2cm					
											Droughtiness grade (DR)		2	3a							
371	T	0	30	C	mod	2.5Y4/1			5	2			48	48	n	n	*III*	3a	**3a**	WE	
		25	63	C	calc	2.5Y5/3	Fe	mmd	0	5	poor		41	49	y	y					
		63	70	C	calc	2.5Y5/3	Fe	mmd	0	20	m/poor		5	10	y	n					
		70	120	hCL	calc	2.5Y5/3	Fe	mmd	0	30			46	0	y	n					
												Total	**140**	**107**		LSS 50/50 Chalk Dust/Clay					
												MB	22	-6		ST.stone>2cm					
											Droughtiness grade (DR)		2	2							
372	T	0	30	C	calc	2.5Y4/1			5	2			48	48	n	n	*I*	2	**2**	WE DR	
		30	50	C	calc	2.5Y5/3	Fe	fff	0	10			31	31	n	n					
		50	55	hCL	calc	10YR5/3	Fe	mmd	0	30			5	7	y	n					
		55	120	hCL	calc	10YR5/3	Fe	mmd	0	30			59	21	y	n					

											Total	**143**	**107**		LSS 50/50 Chalk Dust/Clay					
											MB	25	-6		ST.stone>2cm					
										Droughtiness grade (DR)		2	2							
373	T	0	23	C	calc	2.5Y4/1			5	2		37	37	n	n	*III*	3a	**3a**	WE DR	
		23	42	C	calc	2.5Y5/3	Fe	mmf	0	10	poor	24	24	y	y					
		42	120	hCL	calc	2.5Y5/3	Fe	mmd	0	30	m/poor	67	36	y	n					
											Total	**128**	**97**		LSS 50/50 Chalk Dust/Clay					
											MB	10	-16		ST.stone>2cm					
										Droughtiness grade (DR)		2	3a							
374	T	0	21	C	calc	2.5Y4/1			5	5		33	33	n	n	*III*	3a	**3a**	WE DR	
		21	52	C	calc	2.5Y5/3	Fe	mmf	0	5	poor	39	40	y	y					
		52	56	C	calc	2.5Y5/3	Fe	mmd	0	10	m/poor	3	6	y	y					
		56	120	hCL	calc	2.5Y5/3	Fe	mmd	0	30		58	20	y	n					
											Total	**133**	**99**		LSS 50/50 Chalk Dust/Clay					
											MB	15	-14		ST.stone>2cm					
										Droughtiness grade (DR)		2	3a							
375	T	0	32	C	slight	10YR4/1			5	2		51	51	n	n	*III*	3a	**3a**	WE DR	
		32	75	C	mod	2.5Y5/3	Fe	mff	0	5	poor	41	49	y	y					
		75	120	C	mod	2.5Y5/3	Fe	mmd	0	30	poor	32	0	y	y					
											Total	**124**	**100**		LSS 50/50 Chalk Dust/Clay					
											MB	6	-13		ST.stone>2cm					
										Droughtiness grade (DR)		2	3a							
376	T	0	22	C+	mod	2.5Y4/4			3	2		36	36	n	n	*II*	3a	**3a**	WE DR	
	T	22	33	C	mod	2.5Y4/2	Mn	com	10	2	(poor)	17	17	n	n					
		33	42	C	mod	2.5Y5/4			5	5	m/poor	12	12	n	n					
		42	55	C	mod	2.5Y6/1	Fe	com	5	5	poor	13	16	y	y					
		55	100	C	mod	N6/	Mn	many	5	5	poor	30	18	y	y					
		100	120	MSt							poor	10	0	y	y					
											Total	**118**	**99**		Wetness-downgraded heavy clay topsoil					
											MB	0	-14		ST.stone>2cm	<5%				
										Droughtiness grade (DR)		3a	3a							
377	T	0	25	C+	n	2.5Y4/3			4	0		41	41	n	n	*III*	3b	**3b**	WE	
		25	32	C	n	2.5Y4/2	Mn	com	5	0	(poor)	11	11	n	n					

		32	75	C	n	2.5Y5/2	Mn	com	5	0	poor	39	47	(y)	y							
		75	92	hCL	very	2.5Y7/3	Fe	com	15	15		14	0	y	n							
		92	120	MSt							poor	14	0	y	y							
											Total	**118**	**99**		GR.gradient				2o	S		
											MB	0	-14		ST.stone>2cm				<5%			
											Droughtiness grade (DR)	3a	3a									
378	T	0	28	C	mod	2.5Y4/3			2	2		46	46	n	n	*III*	3a	**3a**	WE DR			
		28	34	C	mod	7.5Y6/2	Mn	com	4	2	(poor)	9	9	n	n							
		34	55	C	mod	2.5Y5/3	Fe	com	0	10	poor	24	27	y	y							
		55	75	CL	very	2.5Y7/2	Fe	com	0	10	m/poor	17	20	y	y							
		75	80	C	very	2.5Y7/2	Fe	com	0	15	poor	4	0	y	y							
		80	120	MSt							poor	20	0	y	y							
											Total	**120**	**103**									
											MB	2	-10		ST.stone>2cm				<5%			
											Droughtiness grade (DR)	3a	3a									
379	T	0	25	C	slight	2.5Y4/3			4	0		41	41	n	n	*II*	2	**3a**	DR			
		25	45	C	mod	2.5Y4/4	Mn	few	5	0		31	31	n	n							
		45	65	C	mod	2.5Y6/2	FeMn	com	20	5	poor	14	21	y	y							
		65	85	C	very	N6/	Fe	com	0	15	poor	14	6	y	y							
		85	120	MSt							poor	18	0	y	y							
											Total	**117**	**99**		GR.gradient				2o	S		
											MB	-1	-14		ST.stone>2cm				<5%			
						fsab					**Droughtiness grade (DR)**	3a	3a									
380	T	0	25	C	slight	2.5Y4/3			4	0		41	41	n	n	*III*	3a	**3a**	WE DR			
		25	32	C	mod	7.5Y6/2			5	2		11	11	n	n							
		32	45	C	mod	2.5Y6/2	Fe	many	5	10	poor	16	16	y	y							
		45	75	C/CL	very	10Y7/2	Fe	com	5	10	m/poor	27	33	y	y							
		75	100	C	mod	N6/	FeMn	com	0	10	poor	18	0	y	y							
		100	120	MSt							poor	10	0	y	y							
											Total	**121**	**101**									
											MB	3	-12		ST.stone>2cm				<5%			
											Droughtiness grade (DR)	3a	3a									

381	T	0	25	C	slight	2.5Y4/3			4	0		41	41	n	n	*III*	3a	**3a**	WE DR	
		25	33	C	mod	2.5Y4/4			5	0		12	12	n	n					
		33	55	C	mod	2.5Y6/2	Fe	many	5	5	poor	24	27	y	y					
		55	90	C	mod	N6/	FeMn	com	5	10	poor	23	18	y	y					
		90	120	MSt							poor	15	0	y	y					
											Total	**116**	**98**							
											MB	-2	-15							
											Droughtiness grade (DR)	3a	3a							
382	T	0	27	C	calc	10YR3/3			5	0		44	44	n	n	*III*	3a	**3a**	WE DR	
		27	37	C	calc	2.5Y5/3	Mn	com	0	7		16	16	n	n					
		37	63	C	calc	2.5Y6/3	Fe	many	0	10	poor	26	33	y	y					
		63	120	C	v.calc	N5/	Fe	many	0	10	poor	40	9	y	y					
											Total	**125**	**101**							
											MB	7	-12							
											Droughtiness grade (DR)	2	3a							
383	T	0	26	C	mod	10YR3/3			5	0		42	42	n	n	*II*	2	**2**	WE DR	
		26	65	C	mod	2.5Y5/3	Fe	com	5	0		48	59	y	n					
		65	120	C	calc	10YR6/1	Fe	com	0	20	m/poor	41	7	y	y					
											Total	**131**	**108**							
											MB	13	-5							
											Droughtiness grade (DR)	2	2							
384	T	0	28	C	slight	2.5Y3/3			3	0		46	46	n	n	*III*	3a	**3a**	WE	
		28	50	C	mod	2.5Y5/2	Fe	com	2	5		34	34	y	n					
		50	120	C	v.calc	10YR6/1	Fe	com	0	10	poor	49	25	y	y					
											Total	**129**	**106**							
											MB	11	-7							
											Droughtiness grade (DR)	2	2							
385	T	0	26	C	n	2.5Y4/2			2	0		43	43	n	n	*II*	3a	**3a**	WE	
		26	60	SCL	n	2.5Y4/3			0	2		46	51	n	n					
		60	120	C	mod	10YR5/2	Femn	many	0	5	poor	42	13	y	y					
											Total	**131**	**107**							
											MB	13	-6							

ST.stone>2cm <5%

LSS- very dry firm. Round calc stone

								Droughtiness grade (DR)				2	2							
386	T	0	29	C	calc	10YR3/3			3	0		48	48	n	n	*II*	2	**2**	WE DR	
		29	68	SCL	v.calc	10YR5/3,10 YR6/1	Fe	com	5	5		46	55	y	n					
		68	120	C	calc	N5/	Fe	many	0	12	poor	36	3	y	y					
											Total	**131**	**105**							
											MB	13	-8							
								Droughtiness grade (DR)				2	2							
387	T	0	30	C	mod	2.5Y4/2			2	3		49	49	n	n	*III*	3a	**3a**	WE	
		30	43	C	mod	2.5Y5/3	Fe	com	2	3		20	20	y	n					
		43	70	C	calc	10YR6/1	Fe	many	0	5	poor	23	35	y	y					
		70	120	C	v.calc	N5/	Fe	com	0	10	poor	35	0	y	y					
											Total	**128**	**104**							
											MB	10	-9							
								Droughtiness grade (DR)				2	2							
388	T	0	27	C	slight	2.5Y4/1			5	0		44	44	n	n	*II*	2	**2**	WE DR	
		27	65	C	mod	2.5Y5/3	och	mff	0	0		49	61	y	n					
		65	120	C	mod	2.5Y5/3	och	mmd	2	1	poor	38	6	y	y					
											Total	**130**	**111**							
											MB	12	-2							
								Droughtiness grade (DR)				2	2							
389	T	0	30	C	very	2.5Y4/2			5	2		48	48	n	n	*III*	3a	**3a**	WE DR	
		30	62	C	very	2.5Y5/3	och	mmd	2	5	poor	33	40	y	y					
		62	120	hCL	very	2.5Y5/3	och	mmd	2	30		52	11	y	n					
											Total	**133**	**100**							
											MB	15	-13							
								Droughtiness grade (DR)				2	3a							
390	T	0	24	C	slight	2.5Y4/1			5	0		39	39	n	n	*III*	3a	**3a**	WE	
		24	50	C	mod	2.5Y5/3	och	mmd	0	0	poor	34	34	y	y					
		50	120	hCL	mod	2.5Y5/3	och	mmd	2	1		68	31	y	n					
											Total	**141**	**104**							
											MB	23	-9							

LSS 50/50 Chalk Dust/Clay
ST.stone>2cm

ST.stone>2cm

LSS 50/50 Chalk Dust/Clay
ST.stone>2cm

											Droughtiness grade (DR)		2	2							
391	T	0	23	C	Very	2.5Y4/1			5	0			37	37	n	n	*III*	3a	**3a**	WE DR	
		23	43	C	Very	2.5Y4/3	och	mmd	10	0			29	29	y	n					
		43	60	C	Very	2.5Y5/3	och	mmd	0	5	poor		16	22	y	y					
		60	120	hCL	Very	2.5Y5/3	och	mmd	0	30			55	14	y	n					
												Total	**137**	**102**		LSS 50/50 Chalk Dust/Clay					
												MB	19	-11		ST.stone>2cm					
											Droughtiness grade (DR)		2	3a							
392	T	0	25	C	mod	2.5Y4/3			6	1			40	40	n	n	*II*	2	**3a**	DR	
		25	42	C	mod	2.5Y4-6/4			5	5	m/poor		23	23	n	n					
		42	60	C	mod	2.5Y5/2	Fe	com	0	10	poor		17	23	y	y					
		60	75	CL	very	2.5Y7/1	Fe	com	0	20			14	15	y	n					
		75	90	CL	very	2.5Y7/1	Fe	com	0	30	poor		11	0	y	y					
		90	120	MSt							poor		15	0	y	y					
												Total	**120**	**101**		GR.gradient			2o	SW	
												MB	2	-12		ST.stone>2cm			<5%		
											Droughtiness grade (DR)		3a	3a							
393	T	0	24	C	Very	2.5Y4/1			5	0			39	39	n	n	*III*	3a	**3a**	WE DR	
		24	34	C	Very	2.5Y5/3	och	mmd	0	5			16	16	y	n					
		34	43	C	Very	2.5Y5/3	och	mmd	0	20	poor		11	11	y	y					
		43	120	hCL	Very	2.5Y5/3	och	mmd	0	30	m/poor		65	35	y	(y)					
												Total	**131**	**100**		LSS 50/50 Chalk Dust/Clay					
												MB	13	-13							
											Droughtiness grade (DR)		2	3a							
394	T	0	27	C+	mod	2.5Y4/3			6	1			43	43	n	n	*II*	3a	**3a**	WE DR	
		27	37	C	mod	2.5Y5/4			5	5			15	15	n	n					
		37	60	C	mod	2.5Y6/3	Fe	com	0	15	poor		23	29	y	y					
		60	75	CL	very	2.5Y7/1	Fe	com	0	25			14	15	y	n					
		75	90	C	mod	N6/	Fe	com	5	10	poor		10	0	y	y					
		90	120	MSt							poor		15	0	y	y					
												Total	**120**	**101**		Wetness downgraded- heavy clay topsoil					
												MB	2	-12							
											Droughtiness grade (DR)		3a	3a							

395	T	0	25	C	slight	2.5Y4/3			4	0		41	41	n	n	*II*	2	**3a**	DR
		25	35	C	slight	2.5Y4/4			5	0	m/poor	14	14	n	n				
		35	55	C	slight	2.5Y5/4			2	0	m/poor	25	28	n	n				
		55	75	C	mod	2.5Y5/2	Fe	com	0	10	poor	14	19	y	y				
		75	110	C	mod	N6/	Fe	com	0	10	poor	25	0	y	y				
		110	120	MSt							poor	5	0	y	y				
											Total	**123**	**102**		GR.gradient				
											MB	5	-11		ST.stone>2cm		<5%		
											Droughtiness grade (DR)	2	3a						
396	T	0	25	C	slight	2.5Y4/3			4	0		41	41	n	n	*III*	3a	**3a**	WE DR
		25	35	C	slight	2.5Y5/4			5	0		15	15	n	n				
		35	75	C	mod	2.5Y5/3	Fe	com	5	5	poor	35	43	y	y				
		75	95	C	mod	N6/	Fe	com	0	10	poor	14	0	y	y				
		95	120	MSt							poor	13	0	y	y				
											Total	**118**	**99**		GR.gradient				
											MB	0	-14		ST.stone>2cm		<5%		
											Droughtiness grade (DR)	3a	3a						
397	T	0	28	C	n	10YR4/4			2	0		47	47	n	n	*III*	3b	**3b**	WE
		28	37	C	n	10YR5/4			2	0	m/poor	13	13	n	n				
		37	75	C	slight	2.5Y5/3	Fe	com	2	0	poor	34	42	y	y				
		75	100	C	mod	7.5Y6/1	Fe	com	15	10	poor	15	0	y	y				
		100	120	MSt							poor	10	0	y	y				
											Total	**118**	**102**						
											MB	0	-11		ST.stone>2cm		<5%		
											Droughtiness grade (DR)	3a	3a		Cultivated headland, borderline 3b				
398	T	0	20	C	mod	2.5Y4/2			5	2		32	32	n	n	*III*	3a	**3a**	WE DR
		20	80	C	mod	2.5Y5/3	grey	mmd	0	5	poor	60	64	y	y				
		80	120	C	mod	2.5Y5/3	Fe	cmp	0	10	poor	28	0	y	y				
											Total	**120**	**96**						
											MB	2	-17		ST.stone>2cm				
											Droughtiness grade (DR)	3a	3a						
399	T	0	30	C	slight	2.5Y4/1			5	2		48	48	n	n	*III*	3a	**3a**	WE DR

		30	67	C	mod	2.5Y5/3	Fe	mmd	0	5	poor	38	48	y	y					
		67	120	C	mod	2.5Y5/3	Fe	mmd	0	20	poor	37	4	y	y					
											Total	**123**	**99**		LSS 50/50 Chalk Dust/Clay					
											MB	5	-14		ST.stone>2cm					
											Droughtiness grade (DR)	2	3a							
400	T	0	34	C	slight	2.5Y4/2			5	2		55	55	n	n	///	3a	**3a**	WE DR	
		34	70	C	mod	2.5Y5/3	Fe	mmd	5	5	poor	33	44	y	y					
		70	120	C	mod	2.5Y5/3	Fe	mmd	10	10	poor	32	0	y	y					
											Total	**119**	**99**		Waterlogged at 70 SSt inclusions					
											MB	1	-14		ST.stone>2cm					
											Droughtiness grade (DR)	3a	3a							
401	T	0	27	C	n	2.5Y4/2			5	2		43	43	n	n	///	3b	**3b**	WE	
		27	48	C	mod	2.5Y5/3	Fe	cmd	0	5	poor	27	27	y	y					
		48	83	C	mod	2.5Y5/3	Fe	cmp	0	20	poor	26	27	y	y					
		83	120	C	mod	2.5Y5/2	Fe	mmd	0	20	poor	26	0	y	y					
											Total	**122**	**98**							
											MB	4	-15		ST.stone>2cm					
											Droughtiness grade (DR)	3a	3a							
402	T	0	34	C	slight	2.5Y4/2			5	2		55	55	n	n	///	3a	**3a**	WE DR	
		34	50	C	mod	2.5Y5/3	Fe	mmd	0	5	poor	21	21	y	y					
		50	65	C	mod	2.5Y5/3	Fe	cmp	0	5	poor	11	19	y	y					
		65	120	C	mod	2.5Y5/3	Fe	fmd	0	10	poor	39	6	y	y					
											Total	**124**	**101**							
											MB	6	-12		ST.stone>2cm					
											Droughtiness grade (DR)	2	3a							
403	T	0	30	C	mod	2.5Y4/2			5	2		48	48	n	n	///	3a	**3a**	WE DR	
		30	50	C	mod	2.5Y5/3	Fe,red	mmp	0	5	poor	26	26	y	y					
		50	60	C	Very	2.5Y5/3	Fe	cmd	0	10	poor	7	13	y	y					
		60	120	C	Very	2.5Y5/3	Fe	cmd	0	30	poor	42	12	y	y					
											Total	**123**	**99**		LSS 50/50 Chalk Dust/Clay					
											MB	5	-14		ST.stone>2cm					
											Droughtiness grade (DR)	2	3a							
404	T	0	28	C	mod	2.5Y4/1			5	0		45	45	n	n	///	3a	**3a**	WE DR	

		28	53	C	mod	2.5Y5/3	Fe	mmd	0	5	poor	30	32	y	y					
		53	120	hCL	Very	2.5Y5/2	Fe	mmd	0	30		61	24	y	n					
											Total	**137**	**102**		LSS 50/50 Chalk Dust/Clay					
											MB	19	-11		ST.stone>2cm					
											Droughtiness grade (DR)	2	3a							
405	T	0	22	C	mod	2.5Y4/1			5	0		36	36	n	n	*III*	3a	**3a**	WE DR	
		22	30	C	mod	2.5Y5/3	Fe	mmd	0	5		13	13	y	n					
		30	50	C	mod	2.5Y5/3	Fe	cmd	0	5	poor	26	26	y	y					
		50	120	hCL	Very	2.5Y5/2	Fe	mmd	0	30		64	28	y	n					
											Total	**138**	**102**		LSS 50/50 Chalk Dust/Clay					
											MB	20	-11		ST.stone>2cm					
											Droughtiness grade (DR)	2	3a							
406	T	0	21	C	mod	2.5Y4/1			5	0		34	34	n	n	*III*	3a	**3a**	WE DR	
		21	48	C	mod	2.5Y5/3	red,fe	mmd	0	5		42	42	y	n					
		48	65	C	Very	2.5Y5/3	Fe	mmd	0	10	poor	13	22	y	y					
		65	76	C	Very	2.5Y5/1	Fe	mmd	0	20	poor	8	6	y	y					
		76	120	hCL	Very	2.5Y5/1	Fe	mmd	0	30		40	0	y	n					
											Total	**137**	**104**		LSS 50/50 Chalk Dust/Clay					
											MB	19	-9		ST.stone>2cm					
											Droughtiness grade (DR)	2	2							
407	T	0	30	C	mod	2.5Y4/1			5	0		49	49	y	n	*III*	3a	**3a**	WE DR	
		30	60	C	Very	2.5Y5/3	Fe	mmd	0	10	poor	32	38	y	y					
		60	120	hCL	Very	2.5Y5/3	Fe	mmd	0	30		55	14	y	n					
											Total	**136**	**101**		LSS 50/50 Chalk Dust/Clay					
											MB	18	-12		ST.stone>2cm					
											Droughtiness grade (DR)	2	3a							
408	T	0	25	C	mod	2.5Y4/2			5	0		41	41	n	n	*II-III*	3a	**3a**	WE DR	
		25	40	C	mod	2.5Y5/3	Fe	mmd	0	5	m/poor	21	21	y	(y)					
		40	48	C	Very	2.5Y5/3	Fe	mmd	0	20	poor	10	10	y	y					
		48	120	hCL	Very	2.5Y5/3	Fe	mmd	0	30		67	31	y	n					
											Total	**138**	**103**		LSS 50/50 Chalk Dust/Clay					
											MB	20	-10		ST.stone>2cm					
											Droughtiness grade (DR)	2	2							

409	T	0	28	C	mod	2.5Y4/3			4	2		45	45	n	n	*III*	3a	**3a**	WE DR	
		28	45	C	mod	2.5Y7/1	Fe	many	0	10	poor	22	22	y	y					
		45	65	hCL	very	2.5Y7/2	Fe	many	0	20	m/poor	19	26	y	n					
		65	80	hCL	very	2.5Y7/2	Fe	com	0	20	poor	11	6	y	y					
		80	100	hCL	very	2.5Y7/2	Fe	com	0	30	poor	14	0	y	y					
		100	120	MSt							poor	10	0	y	y					
											Total	**120**	**99**							
											MB	2	-14		ST.stone>2cm			<5%		
											Droughtiness grade (DR)	3a	3a							
410	T	0	25	C	slight	2.5Y4/4			6	0		40	40	n	n	*III*	3a	**3a**	WE DR	
		25	35	C	slight	2.5Y4/4			5	0		15	15	n	n					
		35	65	C	mod	2.5Y6/4	Fe	com	0	0	poor	30	39	y	y					
		65	80	C	mod	7.5Y6/1	Fe	com	0	10	poor	11	6	y	y					
		80	100	C	mod	N6/	Fe	many	0	10	poor	14	0	y	y					
		100	120	MSt							poor	10	0	y	y					
											Total	**120**	**101**							
											MB	2	-12		ST.stone>2cm			<5%		
											Droughtiness grade (DR)	3a	3a							
411	T	0	27	C	slight	2.5Y4/4			6	0		43	43	n	n	*II*	2	**3a**	DR	
		27	44	C	mod	2.5Y5/3	Fe	few f	5	5	m/poor	23	23	n	n					
		44	60	C	mod	2.5Y5/2	Fe	many	0	5	poor	15	21	y	y					
		60	80	CL	very	2.5Y7/3	Fe	com	0	15	m/poor	17	13	y	n					
		80	90	C	mod	N6/	Fe	many	0	20	poor	7	0	y	y					
		90	120	MSt							poor	15	0	y	y					
											Total	**120**	**100**							
											MB	2	-13		ST.stone>2cm			<5%		
											Droughtiness grade (DR)	3a	3a							
412	T	0	28	C	mod	2.5Y4/4			4	0		46	46	n	n	*II*	2	**3a**	DR	
		28	45	C	mod	2.5Y6/6	FeMn	few	4	0	m/poor	24	24	n	n					
		45	55	C	mod	2.5Y5/3	Fe	many	0	10	poor	10	13	y	y					
		55	75	CL	very	2.5Y7/3	Fe	com	0	15	m/poor	17	20	y	n					
		75	85	C	mod	N6/	Fe	many	0	20	poor	7	0	y	y					

		85	120	MSt							poor	18	0	y	y						
											Total	**120**	**102**								
											MB	2	-11								
										Droughtiness grade (DR)		3a	3a								
413	T	0	25	C	slight	2.5Y4/3			4	0		41	41	n	n	*II*	2	**2**	DR WE		
		25	33	C	mod	2.5Y5/2	Mn	few	10	0	(poor)	12	12	n	n						
		33	45	C	mod	2.5Y5/3	Fe	com	0	5	poor	15	15	y	n						
		45	70	SCL	very	2.5Y6/2	Fe	com	0	15		26	36	y	n						
		70	95	hCL	very	2.5Y7/3	Fe	com	0	20	poor	18	0	y	y						
		95	120	MSt							poor	13	0	y	y						
											Total	**124**	**104**								
											MB	6	-9								
										Droughtiness grade (DR)		2	2								
414	T	0	30	C	n	10YR4/4			4	0		49	49	n	n	*II-III*	3a	**3a**	WE		
		30	40	C	slight	10YR5/3	Mn	few	5	0	m/poor	14	14	n	n						
		40	46	C	mod	2.5Y5/2	Fe	com	0	10	poor	8	8	y	(y)						
		46	65	hCL	very	2.5Y7/3	Fe	com	0	15		20	29	y	n						
		65	80	hCL	very	2.5Y7/3	Fe	com	0	15	poor	11	6	y	y						
		80	90	hCL	very	2.5Y7/3	Fe	com	0	30	poor	7	0	y	y						
		90	120	MSt							poor	15	0	y	y						
											Total	**123**	**105**								
											MB	5	-8								
										Droughtiness grade (DR)		2	2								
415	T	0	27	C	n	10YR4/4			6	0		43	43	n	n	*III*	3b	**3b**	WE		
		27	33	C	n	10YR5/2	Fe	com	5	0		9	9	y	n						
		33	75	C	n	2.5Y5/2	Fe	many	5	0	poor	38	46	y	y						
		75	105	CL	very	7.5Y7/3	Fe	com	0	20	poor	21	0	y	y						
		105	120	MSt							poor	8	0	y	y						
											Total	**119**	**98**								
											MB	1	-15								
										Droughtiness grade (DR)		3a	3a								
416	T	0	28	C	slight	2.5Y4/3			4	0		46	46	n	n	*III*	3a	**3a**	WE DR		

ST.stone>2cm <5%

		28	33	C	mod	2.5Y6/4	Fe	com	4	0		8	8	n	n						
		33	47	C	mod	2.5Y5/2	FeMn	com	0	5	poor	18	18	y	y						
		47	60	C	mod	2.5Y7/3	Fe	com	0	20	m/poor	11	18	y	n						
		60	80	C	very	2.5Y7/3	Fe	com	0	30	m/poor	15	13	y	y						
		80	120	MSt							poor	20	0	y	y						
											Total	**118**	**102**								
											MB	0	-11			ST.stone>2cm		<5%			
											Droughtiness grade (DR)		3a	3a							
417	T	0	28	C	slight	2.5Y4/4			4	0		46	46	n	n	*II-III*	3a	**3a**	DR WE		
		28	33	C	mod	2.5Y5/4			4	0		8	8	n	n						
		33	48	C	mod	2.5Y6/3	Fe	many	0	5	poor	19	19	y	y						
		48	70	C	very	2.5Y7/3	Fe	com	0	15		19	33	y	n						
		70	85	C	mod	N6/	Fe	com	0	15	poor	11	0	y	y						
		85	120	MSt							poor	18	0	y	y						
											Total	**120**	**106**								
											MB	2	-7			ST.stone>2cm		<5%			
											Droughtiness grade (DR)		3a	2							
418	T	0	27	C	slight	10YR4/4			2	0		45	45	n	n	*II*	2	**2**	WE DR		
		27	50	C	slight	2.5Y5/4	Mn	few	2	0	m/poor	33	33	n	n						
		50	65	C/CL	mod	2.5Y6/1	Fe	com	0	10		13	23	y	n						
		65	95	C/CL	mod	2.5Y6/1	Fe	com	0	15	poor	21	6	y	y						
		95	110	CL	mod	2.5Y6/1	Fe	com	15	15	poor	9	0	y	y						
		110	120	MSt							poor	5	0	y	y						
											Total	**126**	**107**								
											MB	8	-6			ST.stone>2cm		<5%			
											Droughtiness grade (DR)		2	2							
419	T	0	25	C	slight	2.5Y4/3			4	0		41	41	n	n	*II*	2	**2**	WE DR		
		25	47	C	mod	2.5Y5/4			4	0		34	34	n	n						
		47	80	C	mod	2.5Y5/2	Fe	com f	0	10	poor	25	29	y	y						
		80	105	C	mod	N6/	Fe	many	0	10	poor	18	0	y	y						
		105	120	MSt							poor	8	0	y	y						
											Total	**125**	**104**								

											MB	7	-9		ST.stone>2cm		<5%				
										Droughtiness grade (DR)		2	2								
420	T	0	29	C	slight	2.5Y4/4			4	0		47	47	n	n	*III*	3a	**3a**	WE	DR	
		29	45	C	slight	2.5Y5/3	Fe	com	5	0	m/poor	22	22	y	n						
		45	65	C	mod	2.5Y6/2	Fe	many	0	10	poor	17	25	y	y						
		65	80	CL	very	2.5Y7/2	Fe	com	0	20	m/poor	12	7	y	y						
		80	90	CL	very	2.5Y7/2	Fe	com	0	30	poor	7	0	y	y						
		90	120	MSt							poor	15	0	y	y						
											Total	**121**	**102**								
											MB	3	-11		ST.stone>2cm		<5%				
										Droughtiness grade (DR)		3a	3a								
421	T	0	27	C	mod	2.5Y4/3			2	1		45	45	n	n	*II*	2	**2**	WE	DR	
		27	44	C	slight	2.5Y6/4			2	0		27	27	n	n						
		44	65	C	mod	2.5Y5/2	Fe	many	0	10	poor	18	27	y	y						
		65	80	C	mod	2.5Y6/1	Fe	com	0	20	m/poor	11	7	y	n						
		80	115	C	mod	7.5Y6/1	Fe	com	0	10	poor	25	0	y	y						
		115	120	MSt							poor	3	0	y	y						
											Total	**128**	**105**								
											MB	10	-8		ST.stone>2cm		<5%				
										Droughtiness grade (DR)		2	2								
422	T	0	28	C	slight	2.5Y4/3			4	0		46	46	n	n	*III*	3a	**3a**	WE	DR	
		28	35	C	slight	2.5Y6/4	Mn	com	10	0		10	10	y	n						
		35	65	C	mod	2.5Y5/2	Fe	many	10	10	poor	27	35	y	y						
		65	80	C/CL	very	2.5Y7/2	Fe	com	0	20	poor	11	6	y	y						
		80	90	C/CL	very	2.5Y7/2	Fe	com	0	30	poor	7	0	y	y						
		90	120	MSt							poor	15	0	y	y						
											Total	**115**	**96**								
											MB	-3	-17		ST.stone>2cm		<5%				
										Droughtiness grade (DR)		3a	3a								
423	T	0	25	C	slight	2.5Y4/3			6	0		40	40	n	n	*III*	3a	**3a**	WE	DR	
		25	35	C	slight	2.5Y5/3	Mn	com	10	0		15	15	y	n						
		35	75	C	mod	2.5Y6/2	Fe	many	0	5	poor	37	45	y	y						

		75	100	C/CL	mod	N6/	Fe	com	0	20	poor	18	0	y	y					
		100	120	MSt							poor	10	0	y	y					
											Total	**119**	**100**							
											MB	1	-13			ST.stone>2cm		<5%		
											Droughtiness grade (DR)	3a	3a							
424	T	0	29	C	mod	2.5Y4/3			4	2		47	47	n	n	*II*	2	**3a**	DR	
		29	42	C	mod	2.5Y4/4	Mn	few	0	5	m/poor	19	19	n	n					
		42	65	C	mod	2.5Y6/2	Fe	many	5	10	poor	20	28	y	y					
		65	75	C/CL	mod	2.5Y6/2	Fe	com	0	20	m/poor	8	7	y	n					
		75	105	C/CL	mod	7.5Y6/1	Fe	com	0	15	poor	21	0	y	y					
		105	120	MSt							poor	8	0	y	y					
											Total	**122**	**100**							
											MB	4	-13			ST.stone>2cm		<5%		
											Droughtiness grade (DR)	3a	3a							

Wetness / workability limitations are determined according to the methodology given in Appendix 3 of the ALC guidelines, MAFF 1988

Droughtiness calculations are made according to the methodology given in Appendix 4 of the ALC guidelines, MAFF 1988.

Grades are shown for drought, wetness and any other soil or site factors which are relevant. The overall Grade is set by the most limiting factor and shown on the right.

TL 299610

Stone types		
%	TAv	Eav
hard	1	0.5
chalk	10	7
hard	various	

Climate Data	
MDwheat	115
MDpotato	109
FCD	93
AAR	549

Wetness Class Guidelines	*II*	*III*	*IV*	*V*
SPL within 80cm, gleying within 40cm	>52cm	52-80cm		
SPL within 80cm, gleying at 40-70cm	<80cm			
No SPL but gleying within 40cm	coarse subsoil	*I*	other cases	*I*

Maximum depth of auger penetration is underlined

Ciimate
1397 D°
Limitation
Grade 1
65 m

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% chalk	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
486/487	T	0	25	C	calc	BR			3	0	N/A	N/A	N/A	n	n	*N/A*	N/A	**3a**	N/A
		25	60	C	calc	YBR	fwdo	fwdo	0	0	N/A	N/A	N/A	n	N/A				
		60	100+	C	calc	YBR/PYBR	cdo	cdo	0	5	N/A	N/A	N/A	y	N/A				
															Surveyed by Michael Boddington Assocaitates (1989)				
															Point 93 closest from 1989 report- included for 486/487				
489	T	0	35	C	calc	BR			2	0	N/A	N/A	N/A	n	n	*N/A*	N/A	**3a**	N/A
		35	50	C	calc	PYBR	cdo	cdo	0	5	n	N/A	N/A	y	n				
		50	100+	C	calc	GR	mpo	mpo	0	5	poor	N/A	N/A	y	y				
															Surveyed by Michael Boddington Assocaitates (1989)				
															Point 94 closest from 1989 report- included for 489				
490	T	0	30	C	calc	BR			2	0	N/A	N/A	N/A	n	n	*N/A*	N/A	**3a**	N/A
		30	50	C	n	GRBR			0	0	N/A	N/A	N/A	y	N/A				
		50	N/A	C	calc	GR			0	5	N/A	N/A	N/A	y	N/A				
															Surveyed by Michael Boddington Assocaitates (1989)				
															Point 95 closest from 1989 report- included for 490				
491	T	0	30	hCL	calc	BR			2	0	N/A	N/A	N/A	n	n	*N/A*	N/A	**3a**	N/A
		30	50	C	calc	GR	cdo	cdo	0	5	n	N/A	N/A	y	n				
		50	N/A	C	calc	GR	cdo	cdo	0	5	poor	N/A	N/A	y	y				
															Surveyed by Michael Boddington Assocaitates (1989)				

																			Point 96 closest from 1989 report- included for 491	
492	T	0	28	hCL	n	BR			2	0	N/A	N/A	N/A	n	n	*N/A*	N/A	**3a**	N/A	
		28	50	N/A	calc	GR	cdo	cdo	0	5	n	N/A	N/A	y	n					
		50	N/A	N/A	calc	GR	cdo	cdo	0	5	poor	N/A	N/A	y	y					
											Total	**118**	**98**		Surveyed by Michael Boddington Assocaitates (1989)					
											MB	3	-11		Point 97 closest from 1989 report- included for 492					
										Droughtiness grade (DR)		3a	3a							
492-495	**Surveyed by Michael Boddington Associates in 1989 land assessed as Subgrade 3a**																			
517	T	0	28	C	n	2.5Y4/3			4	0		46	46	n	n	*II*	3a	**3a**	WE DR	
		28	43	C	n	2.5Y5/4			5	0	m/poor	21	21	n	n					
		43	72	C	slight	2.5Y6/3	Fe	com	10	5	poor	22	31	y	y					
		72	80	hCL	extr	7.5Y8/2	Fe	many	0	25		7	0	y	n					
		80	90	hCL	extr	7.5Y8/2	Fe	many	0	30	poor	7	0	y	y					
		90	120	MSt							poor	15	0	y	y					
											Total	**118**	**98**							
											MB	3	-11		ST.stone>2cm		<5%			
										Droughtiness grade (DR)		3a	3a							
518	T	0	28	C	n	2.5Y4/2			6	0		45	45	n	n	*II*	3a	**3a**	WE	
		28	38	C	n	2.5Y5/4			10	0		15	15	n	n					
		38	45	C	n	2.5Y5/3	Fe	com	5	0	m/poor	10	10	y	n					
		45	60	C	mod	2.5Y6/3	FeMn	many	5	5	poor	13	18	y	y					
		60	80	CL	very	7.5Y7/1	Fe	many	0	15		19	15	y	n					
		80	90	hCL	very	7.5Y7/1	Fe	many	0	30	poor	7	0	y	y					
		90	120	MSt							poor	15	0	y	y					
											Total	**123**	**103**							
											MB	8	-6		ST.stone>2cm		<5%			
										Droughtiness grade (DR)		2	2							
519	T	0	28	C	mod	2.5Y4/3			4	1		46	46	n	n	*II-III*	3a	**3a**	WE	
		28	40	C	mod	2.5Y5/4	Fe	com f	5	2		18	18	n	n					
		40	70	C	mod	2.5Y5/2	Fe	com	0	10	poor	27	38	y	y					
		70	100	C	mod	N6/	Fe	many	0	10	poor	21	0	y	y					
		100	120	MSt							poor	10	0	y	y					

											Total	**121**	**102**								
											MB	6	-7								
										Droughtiness grade (DR)		2	2								
520	T	0	34	C	slight	2.5Y4/3			5	0		55	55	n	n	*II-III*	3a	**3a**	WE		
		34	40	C	slight	2.5Y5/4			5	0		9	9	n	n						
		40	60	C	mod	2.5Y5/3	FeMn	com	5	0	poor	19	25	y	y						
		60	100	hCL	very	7.5Y7/1	Fe	com	5	15	poor	27	11	y	y						
		100	120	MSt							poor	10	0	y	y						
											Total	**120**	**100**								
											MB	5	-9								
										Droughtiness grade (DR)		2	2								
521	T	0	28	C	slight	2.5Y4/3			4	0		46	46	n	n	*III*	3a	**3a**	WE DR		
	T	28	35	C	slight	2.5Y4/3			10	0		11	11	n	n						
		35	60	C	mod	5Y5/2	Fe	com	5	5	poor	25	31	y	y						
		60	80	hCL	very	7.5Y6/1	Fe	com	0	20	poor	14	12	y	y						
		80	90	hCL	very	7.5Y6/1	Fe	com	0	30	poor	7	0	y	y						
		90	120	MSt							poor	15	0	y	y						
											Total	**118**	**99**								
											MB	3	-10								
										Droughtiness grade (DR)		3a	3a								
522	T	0	28	mCL	n	10YR4/4			2	0		49	49	n	n	*I*	1	**2**	DR		
		28	50	CL	n	10YR6/4			2	0		35	35	n	n						
		50	120	SL	n	7.5YR6/4	FeMn	few	8	0		71	28	n	n						
											Total	**155**	**112**								
											MB	40	3								
										Droughtiness grade (DR)		1	2								
523	T	0	26	C	slight	2.5Y4/3			4	0		43	43	n	n	*II*	2	**2**	WE DR		
	(T)	26	38	C	slight	2.5Y4/4			4	0		18	18	n	n						
		38	46	C	slight	2.5YR5/4	Mn	com	0	0	m/poor	12	12	n	n						
		46	70	C	mod	7.5Y7/1	FeMn	many	0	10	poor	19	30	y	y						
		70	95	hCL	very	7.5Y7/1	Fe	many	10	10	poor	16	0	y	y						
		95	120	MSt							poor	13	0	y	y						

ST.stone>2cm	<5%
ST.stone>2cm	<5%
GR.gradient	1-2o
ST.stone>2cm	<5%
GR.gradient	2o
ST.stone>2cm	<5%

											Total	**120**	**103**		GR.gradient				1o	N	
											MB	5	-6		ST.stone>2cm				<5%		
										Droughtiness grade (DR)		2	2								
524	T	0	28	C	n	2.5Y4/3			6	0		45	45	n	n	///	3b	**3b**	WE		
	(T)	28	35	C/CL	n	2.5Y4/4			4	0		11	11	n	n						
		35	46	C	n	2.5Y5/3	Fe	com	8	0	poor	13	13	y	n						
		46	68	C	mod	2.5Y6/3	FeMn	many	10	5	poor	16	26	y	y						
		70	90	C	mod	7.5Y6/1	Fe	com	0	10	poor	14	0	y	y						
		90	120	MSt							poor	15	0	y	y						
											Total	**114**	**95**		GR.gradient				1o	N	
											MB	-1	-14		ST.stone>2cm				<5%		
										Droughtiness grade (DR)		3a	3a								
525	T	0	27	C	slight	2.5Y4/3			6	0		43	43	n	n	//	2	**2**	WE DR		
		27	48	C	slight	2.5Y4/4	OM		4	0		32	31	n	n						
		48	70	C	mod	2.5Y5/3	Fe	com	5	10	poor	16	28	y	y						
		70	100	C	mod	N6/	Fe	com	0	20	poor	21	0	y	y						
		100	120	MSt							poor	10	0	y	y						
											Total	**122**	**102**		GR.gradient				1o	N	
											MB	7	-7		ST.stone>2cm				<5%		
										Droughtiness grade (DR)		2	2								
526	T	0	32	C	n	2.5Y4/4			4	0		52	52	n	n	//	3a	**3a**	WE		
		32	50	C	n	2.5Y5/4	OM		8	0	m/poor	24	24	n	n						
		50	80	C	mod	2.5Y5/3	Fe	com	5	5	poor	20	25	y	y						
		80	105	C	mod	N6/	Fe	many	0	10	poor	18	0	y	y						
		105	120	MSt							poor	8	0	y	y						
											Total	**122**	**101**								
											MB	7	-8		ST.stone>2cm				<5%		
										Droughtiness grade (DR)		2	2								
527	T	0	28	C	n	2.5Y4/3			4	0		46	46	n	n	//	3a	**3a**	WE DR		
		28	46	C	n	2.5Y4-6/4	OM		0	0	m/poor	26	26	n	n						
		46	75	C	mod	2.5Y6/4	Fe	com	5	5	poor	22	29	y	y						
		75	92	C	mod	N6/	Fe	many	0	10	poor	12	0	y	y						

		92	120	MSt							poor	14	0	y	y					
											Total	**119**	**101**							
											MB	4	-8		ST.stone>2cm		<5%			
										Droughtiness grade (DR)		3a	2							
528	T	0	33	C	n	2.5Y4/3			4	0		54	54	n	n	//	3a	**3a**	WE	
		33	46	C	n	2.5Y5/4	Fe	com f	0	0	m/poor	19	19	n	n					
		46	90	C	mod	2.5Y5/2	Fe	com	5	10	poor	32	29	y	y					
		90	105	C	mod	N6/	Fe	many	0	10	poor	11	0	y	y					
		105	120	MSt							poor	8	0	y	y					
											Total	**122**	**102**							
											MB	7	-7		ST.stone>2cm		<5%			
										Droughtiness grade (DR)		2	2							
529	T	0	35	C	n	2.5Y4/1			2	2		58	58	n	n	//	3a	**3a**	WE	
		35	55	C	Mod	2.5Y5/3	och	mmd	0	2		28	32	y	n					
		55	80	C	Mod	2.5Y5/3	och	mmd	0	10	poor	18	19	y	y					
		80	120	C	Mod	2.5Y5/3	och	mmd	0	10	poor	28	0	y	y					
											Total	**131**	**109**		LSS Mix of Chalk dust and C					
											MB	16	0		ST.stone>2cm		<5%			
										Droughtiness grade (DR)		2	2							
530	T	0	40	C	n	2.5Y4/1			2	0		67	67	n	n	//	3a	**3a**	WE	
		40	50	C	slight	2.5Y5/3			0	2		16	16	n	n					
		50	70	C	mod	2.5Y5/2	och	mmd	0	15	poor	14	25	y	y					
		70	120	C	mod	2.5Y5/2	och	mmd	0	15	poor	35	0	y	y					
											Total	**132**	**108**		GR.gradient					
											MB	17	-1		ST.stone>2cm		<5%			
										Droughtiness grade (DR)		2	2							
531	T	0	26	C	slight	2.5Y4/2			6	0		42	42	n	n	//	2	**2**	WE DR	
	(T)	26	34	C	slight	2.5Y4/4	OM		10	0		12	12	n	n					
		34	70	C	slight	2.5Y5/5-2	Fe	com	5	5	m/poor	36	49	y	n					
		70	100	hCL	very	7.5Y6/1	Fe	com	0	20	poor	21	0	y	y					
		100	120	MSt							poor	10	0	y	y					
											Total	**120**	**102**		GR.gradient					

											MB	5	-7		ST.stone>2cm		<5%			
										Droughtiness grade (DR)		2	2							
532	T	0	27	hCL	n	2.5Y4/3			4	0		47	47	n	n	///	3b	**3b**	WE	
	(T)	27	35	C	n	2.5Y4/4	OM		10	0		12	12	n	n					
		35	45	C	n	2.5Y5/3	Fe	com	5	0	m/poor	14	14	y	n					
		45	70	C	mod	2.5Y5/2	Fe	many	0	5	poor	20	32	y	y					
		70	75	CL	very	2.5Y7/1	Fe	com	0	20	m/poor	4	0	y	y					
		75	100	C	mod	N6/	Fe	many	0	15	poor	18	0	y	y					
		100	120	MSt							poor	10	0	y	y					
											Total	**124**	**104**		GR.gradient					
											MB	9	-5		ST.stone>2cm		<5%			
										Droughtiness grade (DR)		2	2							
533	T	0	31	C	n	2.5Y4/1			2	0		52	52	n	n	//	3a	**3a**	WE	
		33	70	C	slight	2.5Y5/3			0	2		43	59	n	n					
		70	120	C	mod	2.5Y5/3	och	mmd	0	10	poor	35	0	y	y					
											Total	**130**	**110**		GR.gradient					
											MB	15	1		ST.stone>2cm		<5%			
										Droughtiness grade (DR)		2	2							
534	T	0	25	hCL	n	10YR4/2			6	0		42	42	n	n	//	3a	**3a**	WE	
	(T)	25	34	C	n	10YR5/2			10	0	(poor)	13	13	n	n					
		34	45	C	n	2.5Y6/3	Mn	few	5	0	m/poor	15	15	n	n					
		45	70	C	slight	2.5Y5/3	FeMn	many	0	10	poor	20	32	y	y					
		70	85	hCL	very	7.5Y7/1	Fe	com	0	10		15	0	y	y					
		85	120	MSt							poor	18	0	y	y					
											Total	**123**	**102**		GR.gradient		hollow			
											MB	8	-7		ST.stone>2cm		<5%			
										Droughtiness grade (DR)		2	2							
535	T	0	27	C	slight	2.5Y4/3			4	0		44	44	n	n	///	3a	**3a**	WE DR	
	(T)	27	34	C	slight	2.5Y4/4	OM		5	0		11	11	n	n					
		34	60	C	mod	2.5Y6/3	Fe	com	5	15	m/poor	28	34	y	y					
		60	70	C	very	7.5Y7/1	Fe	many	10	15	poor	6	11	y	y					
		70	85	CL	extr	7.5Y8/2			0	40	poor	11	0	y	y					

		85	120	MSt						poor	18	0	y	y					
										Total	**117**	**100**							
										MB	2	-9		ST.stone>2cm		<5%			
									Droughtiness grade (DR)		3a	2							
536	T	0	30	C	slight	2.5Y4/1			5	0		49	49	n	n	///	3a	**3a**	WE	
		30	60	C	mod	2.5Y5/3	Och	mmd	0	5	poor	33	39	y	y					
		60	80	C	very	2.5Y5/3	Och	mmd	0	10	poor	14	13	y	y					
		80	120	C	very	2.5Y5/3	Och	mmd	0	15	poor	28	0	y	y					
										Total	**123**	**100**							
										MB	8	-9		ST.stone>2cm		<5%			
									Droughtiness grade (DR)		2	2							
537	T	0	30	C	slight	2.5Y4/1			5	0		49	49	n	n	///	3a	**3a**	WE	
		30	60	C	mod	2.5Y5/3	och	mmd	0	5	poor	33	39	y	y					
		60	72	C	mod	2.5Y5/3	och	mmd	0	10	poor	8	13	y	y					
		72	80	C	mod	2.5Y5/2	och	cmp	0	20	poor	6	0	y	y					
		80	120	C	very	2.5Y5/3	och/grey	cmp	0	20	poor	28	0	y	y					
										Total	**123**	**100**							
										MB	8	-9		ST.stone>2cm		<5%			
									Droughtiness grade (DR)		2	2							
538	T	0	33	C	n	2.5Y4/1			2	0		55	55	n	n	///	3b	**3b**	WE	
		33	45	C	slight	2.5Y5/3	och	mmd	0	5		19	19	y	n					
		45	60	C	slight	2.5Y5/3	och	cmd	0	5	poor	13	19	y	y					
		60	120	C	mod	2.5Y5/2	och	cmp	0	20	poor	42	12	y	y					
										Total	**129**	**106**							
										MB	14	-3		ST.stone>2cm		<5%			
									Droughtiness grade (DR)		2	2							
539	T	0	35	C	slight	2.5Y4/1			2	0		58	58	n	n	///	3a	**3a**	WE	
		35	60	C	slight	2.5Y5/3	och	mmd	0	2	poor	26	32	y	y					
		60	80	C	mod	2.5Y5/2	och	mmd	0	10	poor	14	13	y	y					
		80	120	C	mod	2.5Y5/2	och	mmd	0	15	poor	28	0	y	y					
										Total	**127**	**103**							
										MB	12	-6		ST.stone>2cm		<5%			
									Droughtiness grade (DR)		2	2							

540	T	0	37	C	slight	2.5Y4/1			2	2		61	61	n	n	///	3a	**3a**	WE	
		37	52	C	Mod	2.5Y5/3	och	mmd	0	5	poor	18	19	y	n					
		52	80	C	Mod	2.5Y5/3	och	cmp	0	15	poor	20	23	y	y					
		80	120	C	Mod	2.5Y5/3	och	cmp	0	15	poor	28	0	y	y					
											Total	**127**	**103**		LSS Mix of Chalk dust and C Dry PP					
											MB	12	-6		ST.stone>2cm	<5%				
									Droughtiness grade (DR)			2	2							
541	T	0	30	C	n	2.5Y4/1			2			50	50	n	n	//	3a	**3a**	WE	
		30	70	C	Mod	2.5Y5/3	och	fmd	0	5	poor	40	51	y	n					
		70	80	C	Mod	2.5Y5/2	och	mmd	0	15	poor	7	0	y	y					
		80	120	C	Mod	2.5Y5/2	och	mmd	0	20	poor	28	0	y	y					
											Total	**125**	**101**		LSS Mix of Chalk dust and C Dry PP					
											MB	10	-8		ST.stone>2cm	<5%				
									Droughtiness grade (DR)			2	2							
542	T	0	30	C	slight	2.5Y4/1			2	0		50	50	n	n	///	3a	**3a**	WE	
		30	43	C	slight	2.5Y5/3	och	mmd	0	2	poor	17	17	y	y					
		43	60	C	slight	2.5Y5/2	och	mmd	0	10	poor	16	22	y	y					
		60	120	C	slight	2.5Y5/2	och	mmd	0	15	poor	42	13	y	y					
											Total	**125**	**101**							
											MB	10	-8		ST.stone>2cm	<5%				
									Droughtiness grade (DR)			2	2							
543	T	0	30	C	slight	2.5Y4/1			2			50	50	n	n	///	3a	**3a**	WE	
		30	45	C	slight	2.5Y5/3	och	mmd	0	2		24	24	y	n					
		45	70	C	slight	2.5Y5/3	och	cmd	0	2	poor	20	32	y	y					
		70	120	C	very	2.5Y5/3	och	cmp	0	15		39	0	y	n					
											Total	**134**	**106**							
											MB	19	-3		ST.stone>2cm	<5%				
									Droughtiness grade (DR)			2	2							
544	T	0	35	C	slight	2.5Y4/1			5	0		57	57	n	n	///	3a	**3a**	WE	
		35	90	C	mod	2.5Y5/3	Och/Grey	cmp	0	10	poor	47	44	y	y					
		90	120	C	very	2.5Y5/3	Och/Grey	cmp	0	15	poor	21	0	y	y					

											Total	**125**	**101**							
											MB	10	-8					ST.stone>2cm	<5%	
										Droughtiness grade (DR)		2	2							
545	T	0	28	C	slight	2.5Y4/1			5	0		45	45	n	n	*III*	3a	**3a**	WE	
		28	60	C	mod	2.5Y5/3	Och	mmd	0	5	poor	35	41	y	y					
		60	120	C	very	2.5Y5/3	Och/grey	cmd	0	10	poor	42	13	y	y					
											Total	**123**	**99**							
											MB	8	-10					ST.stone>2cm	<5%	
										Droughtiness grade (DR)		2	2							
546	T	0	28	C	n	2.5Y4/3			6	0		45	45	n	n	*III*	3b	**3b**	WE	
		28	35	C	n	2.5Y5/4			4	0		11	11	n	n					
		35	45	C	n	2.5Y6/4	Fe	com	5	0	poor	12	12	y	y					
		45	70	C	mod	2.5Y6/3	FeMn	many	0	10	poor	20	32	y	y					
		70	100	C	mod	7.5Y7/1	Fe	com	0	10	poor	21	0	y	y					
		100	120	MSt							poor	10	0	y	y					
											Total	**119**	**100**					GR.gradient	1o	N
											MB	4	-9					ST.stone>2cm	<5%	
										Droughtiness grade (DR)		3a	2							
547	T	0	25	C	n	2.5Y4/3			4	0		41	41	n	n	*II*	3a	**3a**	WE	
	(T)	25	35	C	n	2.5Y4/4	OM		4	0	m/poor	14	14	n	n					
		35	43	C	n	2.5Y5/4	Fe	Few	0	0	m/poor	12	12	n	n					
		43	70	C	slight	2.5Y6/3	Fe	many	5	5	poor	22	33	y	y					
		70	85	C	mod	2.5Y7/1	Fe	com	0	10	poor	11	0	y	y					
		85	105	C	mod	N6/	Fe	many	0	10	poor	14	0	y	y					
		105	120	MSt							poor	8	0	y	y					
											Total	**120**	**100**							
											MB	5	-9					ST.stone>2cm	<5%	
										Droughtiness grade (DR)		2	2							
548	T	0	20	hCL	n	2.5Y4/3			4	0		35	35	n	n	*II*	3a	**3a**	WE	
/PIT		20	34	C	n	2.5Y4/4	OM		4	0		22	22	n	n					
		34	42	C	n	2.5Y5/4	Fe	few	0	0	m/poor	12	12	n	n					
		42	60	C	slight	2.5Y6/3	Fe	many	0	5	poor	17	23	y	y					

		60	75	C	mod	2.5Y7/1	Fe	com	0	10	poor	11	13	y	y						
		75	90	C	mod	N6/	Fe	many	15	10	poor	9	0	y	y						
		90	120	MSt							poor	15	0	y	y						
											Total	**120**	**104**								
											MB	5	-5			ST.stone>2cm		<5%			
											Droughtiness grade (DR)	2	2								
549	T	0	25	C	n	2.5Y4/3			4	0		41	41	n	n	*II*	3a	**3a**	WE DR		
		25	45	C	n	2.5Y5/4	OM		8	0	m/poor	27	27	n	n						
		45	60	C	slight	2.5Y6/3	Fe	many	0	5	poor	13	19	y	y						
		60	80	C	mod	2.5Y6/2	Fe	com	10	10	poor	13	12	y	y						
		80	100	C	mod				15	10	poor	12	0	y	y						
		100	120	MSt							poor	10	0	y	y						
											Total	**116**	**99**								
											MB	1	-10			ST.stone>2cm		<5%			
											Droughtiness grade (DR)	3a	3a								
550	T	0	31	C	slight	2.5Y4/1			5	0		50	50	n	n	*III*	3a	**3a**	WE		
		31	50	C	slight	2.5Y5/3	och	cmd	0	2		30	30	y	n						
		50	60	C	mod	2.5Y5/3	och	cmd	0	2	poor	7	13	y	y						
		60	120	C	mod	10YR6/4	och/red	cmd	0	10	poor	42	13	y	y						
											Total	**129**	**106**								
											MB	14	-3			ST.stone>2cm		<5%			
											Droughtiness grade (DR)	2	2								
551	T	0	30	C	slight	2.5Y4/1			5	0		49	49	n	n	*III*	3a	**3a**	WE		
		30	45	C	slight	2.5Y5/3	och	mmd	0	2	m/poor	22	22	y	n						
		45	60	C	slight	2.5Y5/3	och	cmd	0	2	poor	13	19	y	y						
		60	120	C	mod	10YR6/4	och/red	cmd	0	10	poor	42	13	y	y						
											Total	**126**	**102**								
											MB	11	-7			ST.stone>2cm		<5%			
											Droughtiness grade (DR)	2	2								
552	T	0	28	C	slight	2.5Y4/1			5	0		45	45	n	n	*III*	3a	**3a**	WE		
		28	47	C	slight	2.5Y5/3	och	mfd	0	0	m/poor	28	28	y	n						
		47	60	C	slight	2.5Y5/2	och	cmd	0	10	poor	11	17	y	y						
		60	120	C	mod	2.5Y5/3	och	ccp	0	10	poor	42	13	y	y						

											Total	**126**	**102**							
											MB	11	-7							
										Droughtiness grade (DR)		2	2							
553	T	0	28	C	slight	2.5Y4/1			5	0		45	45	n	n	*III*	3a	**3a**	WE	
		28	40	C	mod	2.5Y5/3	och	mmd	0	2	poor	16	16	y	y					
		40	120	C	Very	2.5Y5/3	och/red	mmd	0	10	poor	62	38	y	y					
											Total	**123**	**99**							
											MB	8	-10							
										Droughtiness grade (DR)		2	3a							
554	T	0	25	C	slight	2.5Y4/1			5	0		41	41	n	n	*III*	3a	**3a**	WE	
		25	63	C	mod	2.5Y5/3	och	mmd	0	2	poor	41	49	y	y					
		63	67	C	mod	2.5Y5/3	och	cmd	0	10	poor	3	5	y	y					
		67	120	SC	mod	10YR6/4	och/red	cmd	0	10	poor	42	4	y	y					
											Total	**127**	**99**							
											MB	12	-10							
										Droughtiness grade (DR)		2	3a							
555	T	0	30	C	slight	2.5Y4/1			5	0		49	49	n	n	*III*	3a	**3a**	WE	
		30	50	C	slight	2.5Y5/3	och	mmd	0	2	poor	26	26	y	n					
		50	72	C	mod	2.5Y5/3	och	cmd	0	10	poor	15	25	y	y					
		72	80	C	very	2.5Y5/3	och	cmd	0	20	poor	6	0	y	y					
		80	120	C	very	2.5Y5/3	och	cmp	0	20	poor	28	0	y	y					
											Total	**123**	**100**							
											MB	8	-9							
										Droughtiness grade (DR)		2	2							
556	T	0	28	C	slight	2.5Y4/1			5	0		45	45	n	n	*III*	3a	**3a**	WE	
		28	69	C	slight	2.5Y5/3	och	mmf	0	2	poor	42	53	y	y					
		69	80	C	very	2.5Y5/3	och	cmd	0	15	poor	8	1	y	y					
		80	120	C	very	2.5Y5/3	och	cmp	0	20	poor	28	0	y	y					
											Total	**123**	**100**							
											MB	8	-9							
										Droughtiness grade (DR)		2	2							
557	T	0	40	C	n	2.5Y4/1			5	0		65	65	n	n	*II*	3a	**3a**	WE	
		40	60	C	n	2.5Y5/3	och	mmf	0	0	poor	20	26	y	n					

ST.stone>2cm <5%

ST.stone>2cm <5%

ST.stone>2cm <5%

ST.stone>2cm <5%

ST.stone>2cm <5%

60	80	C	slight	2.5Y5/3	och	mmd	0	5	poor	14	13	y	y	
80	120	C	mod	2.5Y5/3	och	cmd	0	0	poor	28	0	y	y	
									Total	**127**	**104**			
									MB	12	-5		ST.stone>2cm	<5%
									Droughtiness grade (DR)	2	2			

end

Surveyors notes : This is very well farmed land with loose granular topsoil to 20cm , unmottled brown subsoil to 30-37cm (former topsoil), over mottled clay, usually dense and calcareous within 50cm.

Though some non-calc could be graded 3b it is best to call whole field as 3a WE and/or DR though some profiles are drought 2 because of deepened topsoil

Appendix C – Photographs of typical soil profiles

Appendix C – Photographs of typical soil profiles

Observation 28/Pit: Pit wall

Observation 28/Pit: Topsoil over subsoil

Observation 28/Pit: Subsoil

Observation 42/Pit: Pit wall

Observation 42/Pit: Topsoil over upper subsoil over lower subsoil

Observation 42/Pit: Topsoil

Observation 42/Pit: Upper subsoil

Observation 42/Pit: Lower subsoil

Observation 86/Pit: Pit wall

Observation 86/Pit: Topsoil and upper subsoil peds

Observation 96/Pit: Pit wall

Observation 96/Pit: Topsoil and upper subsoil peds

Observation 319/Pit: Pit wall

Observation 319/Pit: Topsoil and upper subsoil peds

Observation 319/Pit: Lower subsoil in auger

Observation 547/Pit: Location arable field

Observation 547/Pit: Topsoil over upper subsoil boundary

Observation 547/Pit: Topsoil and upper subsoil peds

N

KEY

Observations

+1 Auger

+P Pit

Survey boundary

0 100 200 300 400 m

Title
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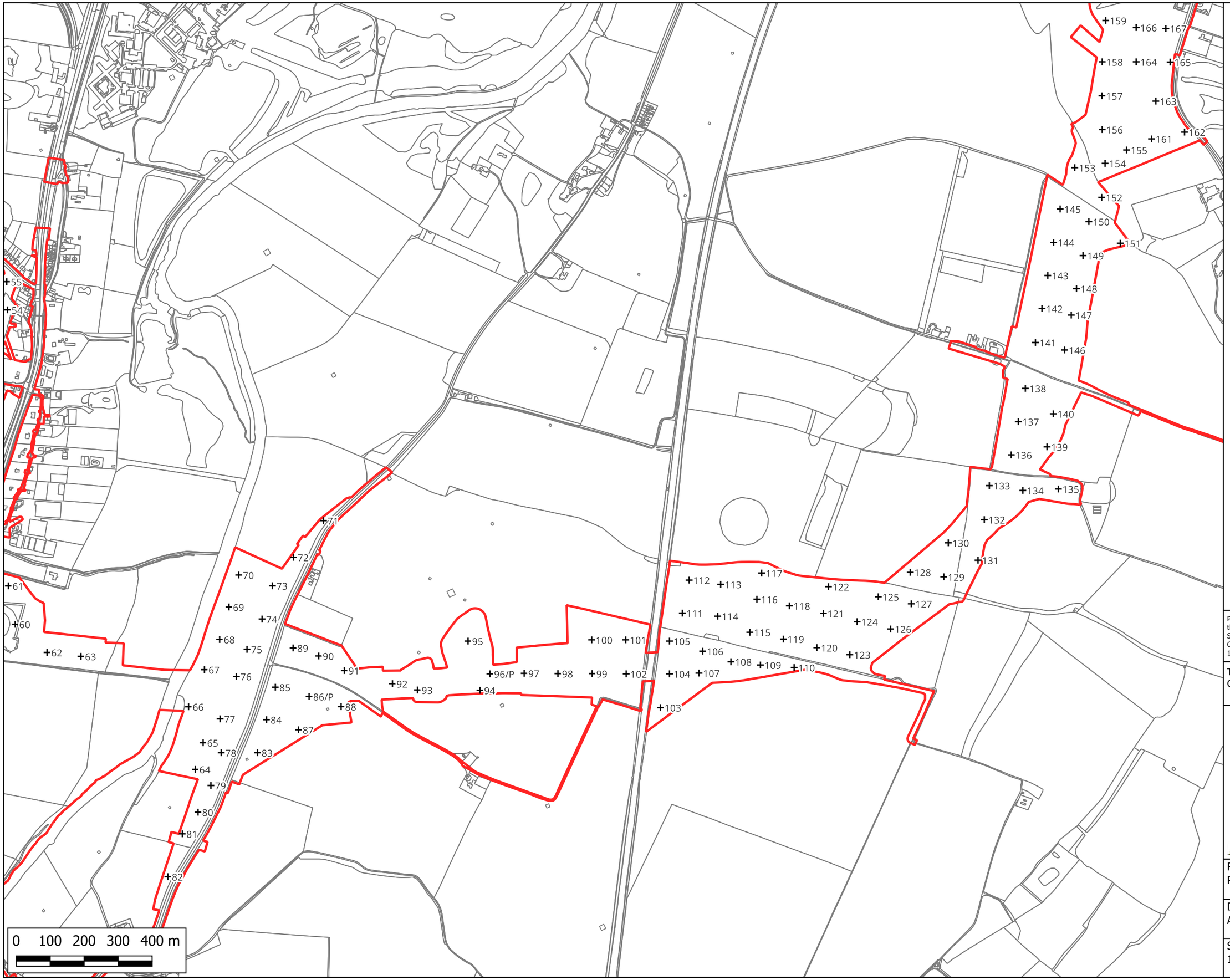
Scales 1:10,000@A3	Date 11/2021



Title
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N

0 100 200 300 400 m

KEY

Observations

+1 Auger

+P Pit

Survey boundary

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N

KEY

Observations

+1 Auger

+P Pit

Survey boundary

0 100 200 300 400 m

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OBSERVATION MAPPING (PAGE 4/6)

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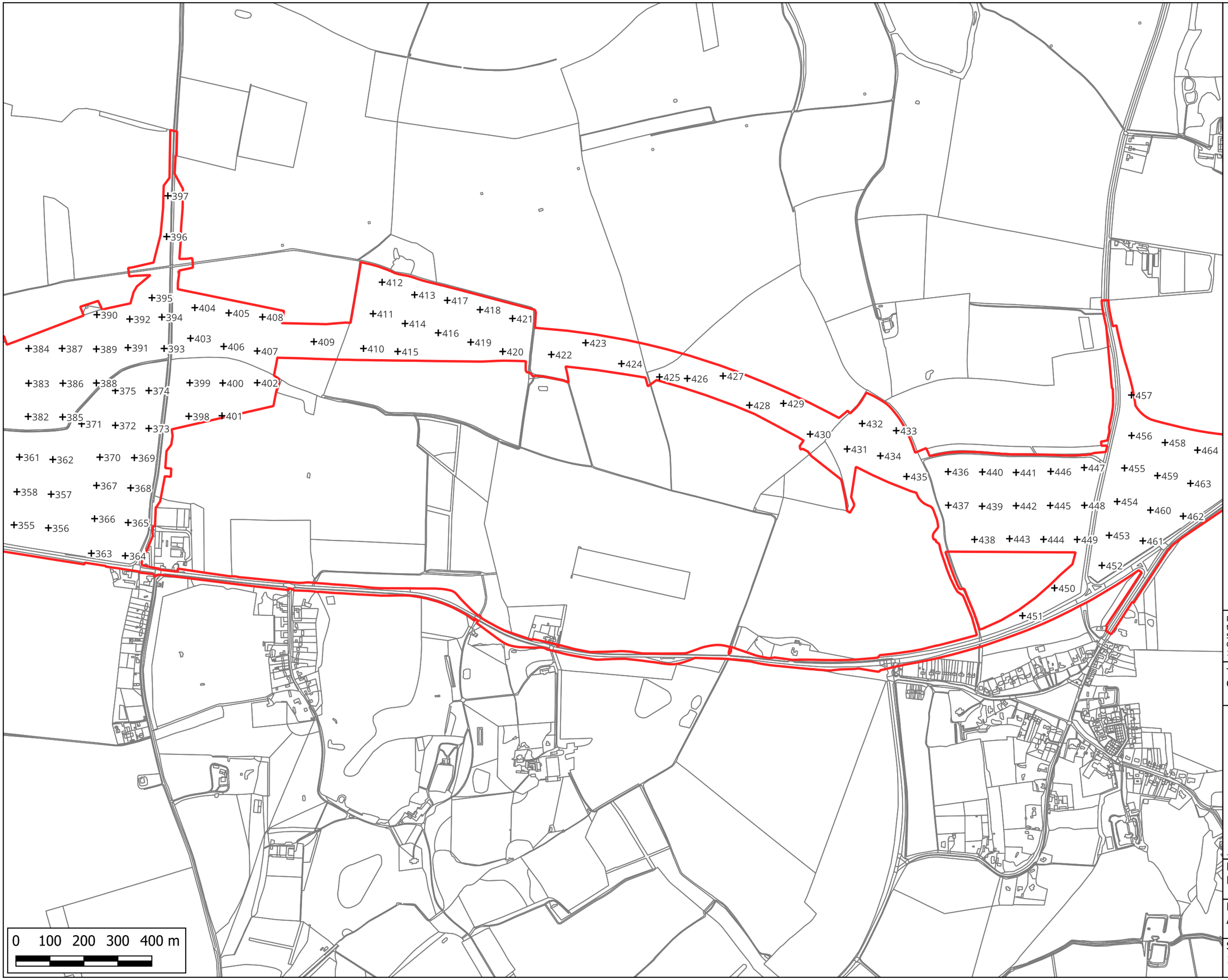
Drawn by AGM	Checked by AIF
Scales 1:10,000@A3	Date 11/2021



KEY

Observations

+1 Auger

+P Pit

Survey boundary

Title
OBSERVATION MAPPING (PAGE 5/6)

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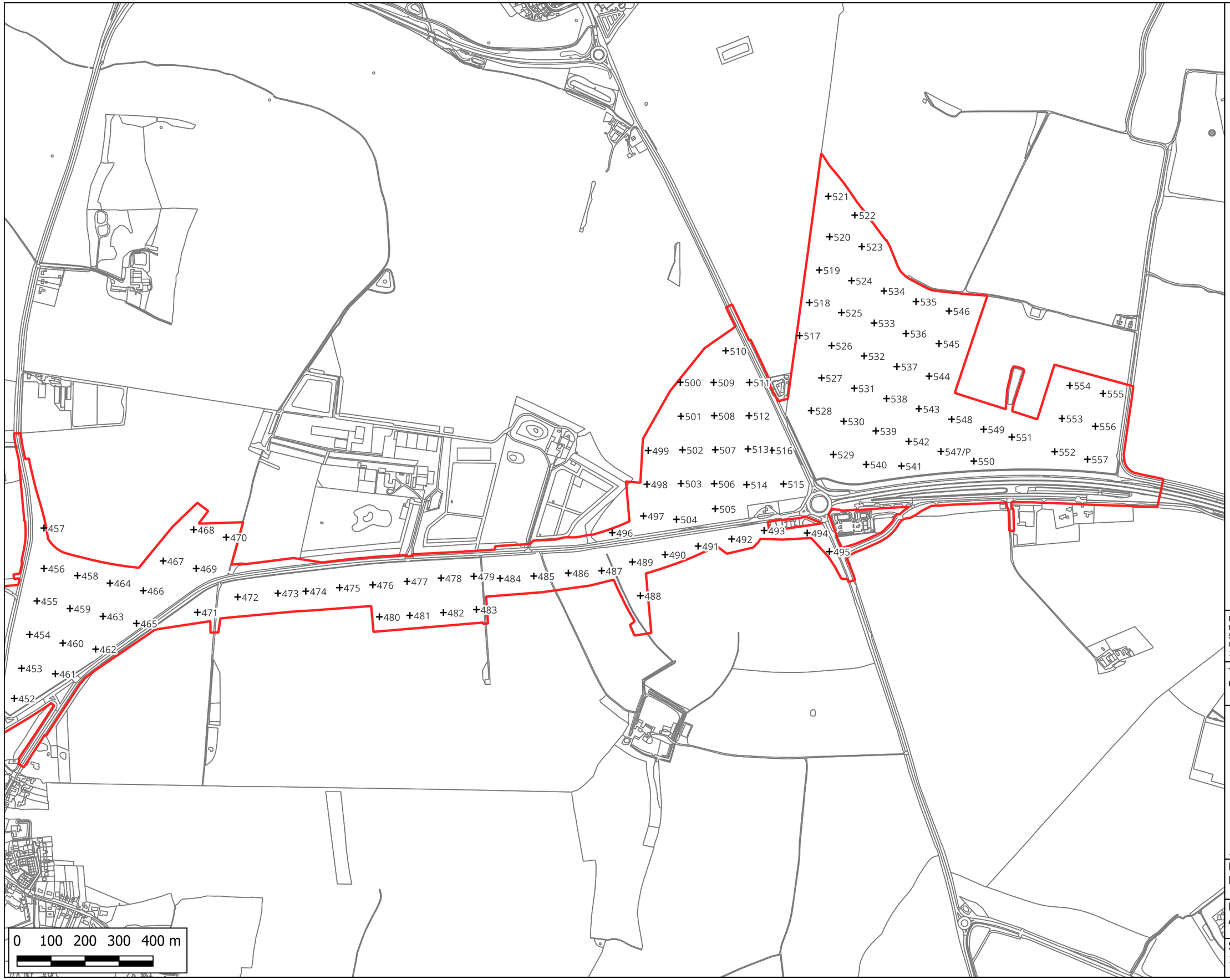
Drawn by AGM	Checked by AIF
Scales 1:10,000@A3	Date 11/2021



Title
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Scales 1:10,000@A3	Date 11/2021

N

KEY

- Survey boundary

Agricultural Land Classification

- * Grade 1
- Grade 2
- Subgrade 3a
- Subgrade 3b
- * Grade 4
- * Grade 5
- Not surveyed
- Non-agricultural
- * Not present

0 100 200 300 400 m

Title
AGRICULTURAL LAND CLASSIFICATION (PAGE 1/6)

Reading Agricultural Consultants Ltd
Gate House
Beechwood Court
Long Toll
Woodcote
RG8 0RR
01491 684233
www.reading-ag.com

READING AGRICULTURAL CONSULTANTS

Ref	Rev.
RAC/8677/2	
Drawn by AGM	Checked by AIF
Scales 1:10,000@A3	Date 11/2021

N

KEY

- Survey boundary

Agricultural Land Classification

- * Grade 1
- Grade 2
- Subgrade 3a
- Subgrade 3b
- * Grade 4
- * Grade 5
- Not surveyed
- Non-agricultural
- * Not present

0 100 200 300 400 m

Title
AGRICULTURAL LAND CLASSIFICATION (PAGE 2/6)

Reading Agricultural Consultants Ltd
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Ref	Rev.
RAC/8677/2	
Drawn by AGM	Checked by AIF
Scales 1:10,000@A3	Date 11/2021

N

KEY

Survey boundary

Agricultural Land Classification

- Grade 1 *
- Grade 2
- Subgrade 3a
- Subgrade 3b
- Grade 4 *
- Grade 5 *
- Not surveyed
- Non-agricultural
- Not present *

Title
AGRICULTURAL LAND CLASSIFICATION (PAGE 3/6)

Reading Agricultural Consultants Ltd
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Long Toll
Woodcote
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READING AGRICULTURAL CONSULTANTS

Ref	Rev.
RAC/8677/2	
Drawn by AGM	Checked by AIF
Scales 1:10,000@A3	Date 11/2021

0 100 200 300 400 m

N

KEY

Survey boundary

Agricultural Land Classification

Grade 1

Grade 2

Subgrade 3a

Subgrade 3b

Grade 4

Grade 5

Not surveyed

Non-agricultural

Not present

0 100 200 300 400 m

Title
AGRICULTURAL LAND CLASSIFICATION (PAGE 4/6)

Reading Agricultural Consultants Ltd
Gate House
Beechwood Court
Long Toll
Woodcote
RG8 0RR
01491 684233
www.reading-ag.com

READING AGRICULTURAL CONSULTANTS

Ref	Rev.
RAC/8677/2	
Drawn by AGM	Checked by AIF
Scales 1:10,000@A3	Date 11/2021

N

KEY

Survey boundary

Agricultural Land Classification

Grade 1

Grade 2

Subgrade 3a

Subgrade 3b

Grade 4

Grade 5

Not surveyed

Non-agricultural

Not present

0 100 200 300 400 m

Title
AGRICULTURAL LAND CLASSIFICATION (PAGE 5/6)

Reading Agricultural Consultants Ltd
Gate House
Beechwood Court
Long Toll
Woodcote
RG8 0RR
01491 684233
www.reading-ag.com

READING AGRICULTURAL CONSULTANTS

Ref	Rev.
RAC/8677/2	
Drawn by AGM	Checked by AIF
Scales 1:10,000@A3	Date 11/2021

N

KEY

Survey boundary

Agricultural Land Classification

Grade 1

Grade 2

Subgrade 3a

Subgrade 3b

Grade 4

Grade 5

Not surveyed

Non-agricultural

Not present

0 100 200 300 400 m

Title
AGRICULTURAL LAND CLASSIFICATION (PAGE 6/6)

Reading Agricultural Consultants Ltd
Gate House
Beechwood Court
Long Toll
Woodcote
RG8 0RR
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READING AGRICULTURAL CONSULTANTS

Ref	Rev.
RAC/8677/2	
Drawn by AGM	Checked by AIF
Scales 1:10,000@A3	Date 11/2021

Appendix C – Photographs of typical soil profiles

Appendix C – Photographs of typical soil profiles

Observation 28/Pit: Pit wall

Observation 28/Pit: Topsoil over subsoil

Observation 28/Pit: Subsoil

Observation 42/Pit: Pit wall

Observation 42/Pit: Topsoil over upper subsoil over lower subsoil

Observation 42/Pit: Topsoil

Observation 42/Pit: Upper subsoil

Observation 42/Pit: Lower subsoil

Observation 86/Pit: Pit wall

Observation 86/Pit: Topsoil and upper subsoil peds

Observation 96/Pit: Pit wall

Observation 96/Pit: Topsoil and upper subsoil peds

Observation 319/Pit: Pit wall

Observation 319/Pit: Topsoil and upper subsoil peds

Observation 319/Pit: Lower subsoil in auger

Observation 547/Pit: Location arable field

Observation 547/Pit: Topsoil over upper subsoil boundary

Observation 547/Pit: Topsoil and upper subsoil peds

Appendix D - Figures

NOTES

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DOCUMENTATION.

REGULATION 5(2)(A)

N

0 200 400 600 800 m

KEY

Observation

+1 Auger

+P Pit

Survey boundary

Revision Details	By Check	Date	Suffix
SECOND ISSUE	AGM AIF	20/01/2022	P02
FIRST ISSUE	AGM AIF	08/12/2021	P01

Purpose of Issue

Examination Submission

Client

National Highways
Woodlands
Manton Lane
Manton Industrial Estate
Bedford
MK41 7LW

Development Consent Order Number

TR010044

Project Title

A428 BLACK CAT TO CAXTON GIBBET IMPROVEMENTS

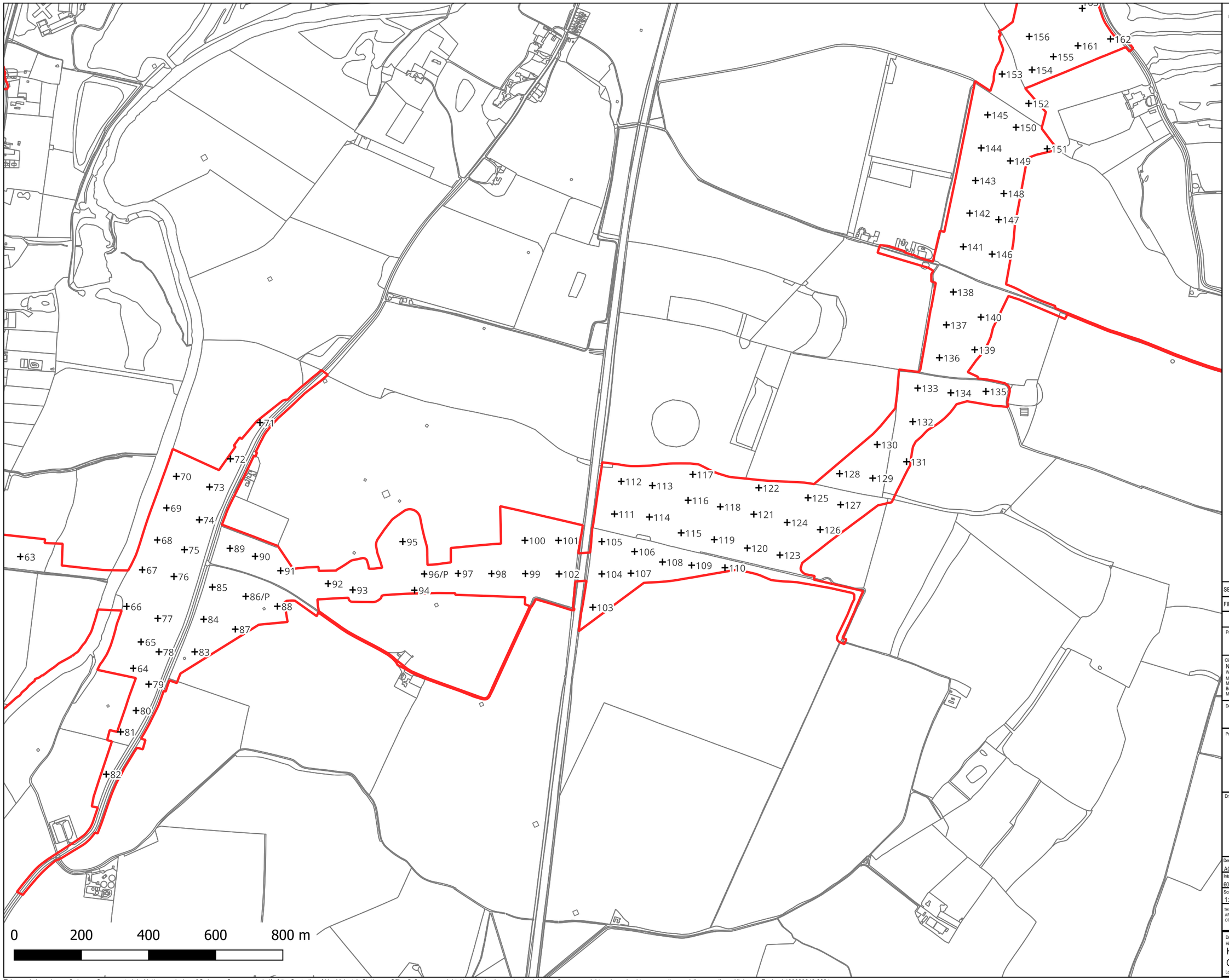
Drawing Title

FIGURE 1
OBSERVATIONS

Designed	Drawn	Checked	Approved	Date
AGM	AGM	AIF	MM	20/01/2022

Internal Project No	Suitability
60541541	D7
Scale @ A3 1:10,000	Zone

Drawing Number	|Originator	|Volume	Rev.
Highways England Pin HE551495 GEN_Z_Z_ZZ	-ACM	-EGN- -GS -GI -XXXX	P02
Location	|Type	|Role	|Number



NOTES

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DOCUMENTATION.

REGULATION 5(2)(A)

N

KEY

Observation

+1 Auger

+P Pit

Survey boundary

Revision Details	By / Check	Date	Suffix
SECOND ISSUE	AGM / AIF	20/01/2022	P02
FIRST ISSUE	AGM / AIF	08/12/2021	P01

Purpose of Issue: Examination Submission

Client: National Highways, Woodlands, Manton Lane, Manton Industrial Estate, Bedford, MK41 7LW

Development Consent Order Number: TR010044

Project Title: A428 BLACK CAT TO CAXTON GIBBET IMPROVEMENTS

Drawing Title: FIGURE 1 OBSERVATIONS

Designed	Drawn	Checked	Approved	Date
AGM	AGM	AIF	MM	20/01/2022

Internal Project No	Suitability
60541541	D7
Scale @ A3: 1:10,000	Zone

Drawing Number	Originator	Volume	Rev.
Highways England Pin: HE551495	-ACM	-EGN-	P02
Location: GEN_Z_Z_ZZ		-GS- (Type) GI (Role) -XXXX (Number)	

NOTES

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DOCUMENTATION.

REGULATION 5(2)(A)

N

0 200 400 600 800 m

KEY

Observation

+1 Auger

+P Pit

Survey boundary

Revision Details	By / Check	Date	Suffix
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Client

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Woodlands
Manton Lane
Manton Industrial Estate
Bedford
MK41 7LW

Development Consent Order Number

TR010044

Project Title

A428 BLACK CAT TO CAXTON GIBBET IMPROVEMENTS

Drawing Title

FIGURE 1
OBSERVATIONS

Designed	Drawn	Checked	Approved	Date
AGM	AGM	AIF	MM	20/01/2022

Internal Project No	Suitability
60541541	D7
Scale @ A3	Zone
1:10,000	

Drawing Number	|Originatr	|Volume	Rev.
Highways England Pin: HE551495	-ACM	-EGN-	P02
GEN_Z_Z_ZZ		-GS -GI -XXXX	
Location		|Type |Role |Number	

NOTES

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REGULATION 5(2)(A)

N

0 200 400 600 800 m

KEY

Observation

+1 Auger

+P Pit

Survey boundary

Revision Details	By / Check	Date	Suffix
SECOND ISSUE	AGM / AIF	20/01/2022	P02
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Purpose of Issue: Examination Submission

Client: National Highways, Woodlands, Manton Lane, Manton Industrial Estate, Bedford, MK41 7LW

Development Consent Order Number: TR010044

Project Title: A428 BLACK CAT TO CAXTON GIBBET IMPROVEMENTS

Drawing Title: FIGURE 1 OBSERVATIONS

Designed	Drawn	Checked	Approved	Date
AGM	AGM	AIF	MM	20/01/2022

Internal Project No	Suitability
60541541	D7
Scale @ A3	Zone
1:10,000	

Drawing Number: Highways England Pin	|Originatr	|Volume	Rev.
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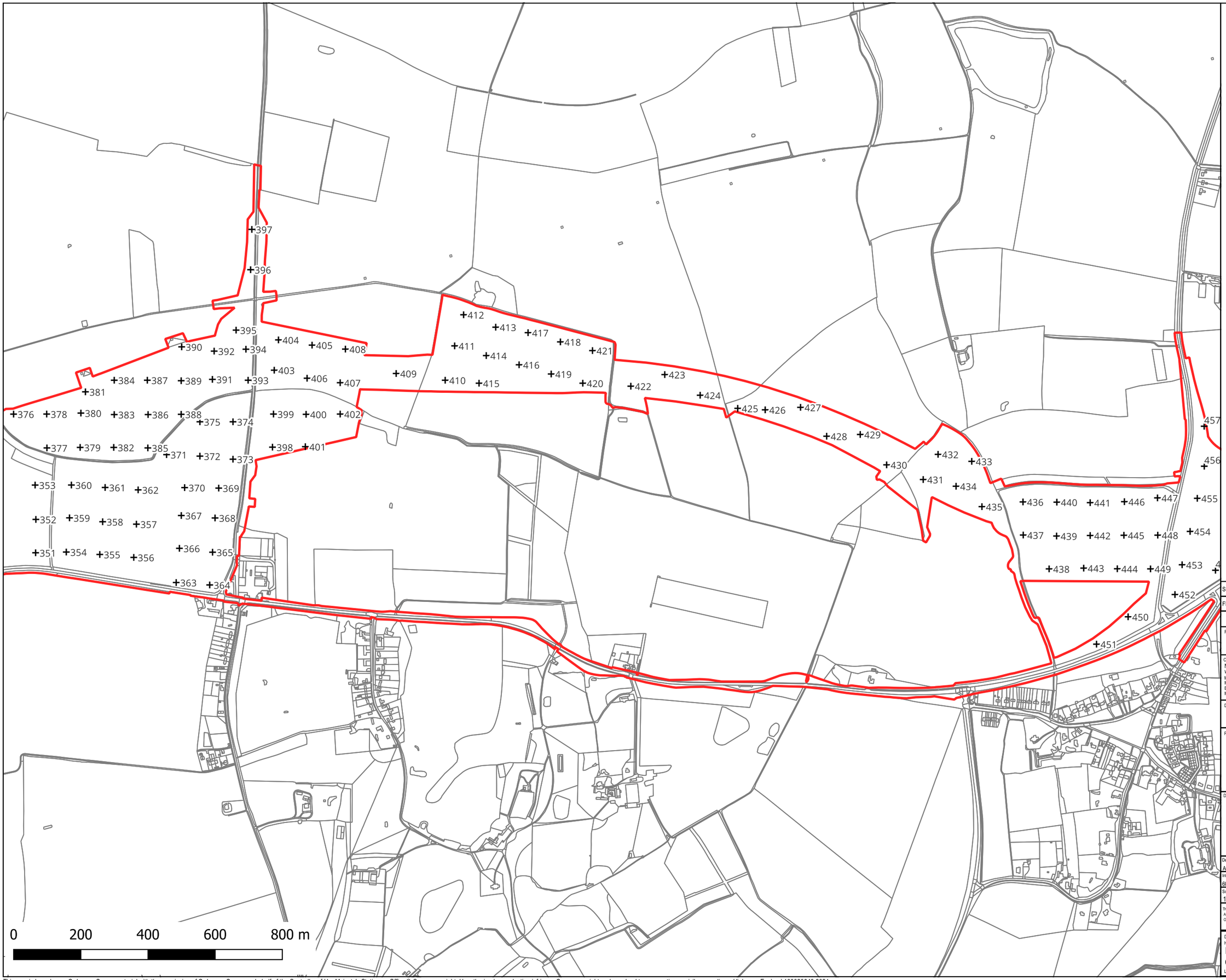
GEN_Z_Z_ZZ Location		-GS -GI -XXXX |Type |Role |Number	



NOTES

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REGULATION 5(2)(A)

N

KEY

Observation

+1 Auger

+P Pit

Survey boundary

Revision Details	By Check	Date	Suffix
SECOND ISSUE	AGM AIF	20/01/2022	P02
FIRST ISSUE	AGM AIF	08/12/2021	P01

Purpose of Issue: Examination Submission

Client: National Highways, Woodlands, Manton Lane, Manton Industrial Estate, Bedford, MK41 7LW

Development Consent Order Number: TR010044

Project Title: A428 BLACK CAT TO CAXTON GIBBET IMPROVEMENTS

Drawing Title: FIGURE 1 OBSERVATIONS

Designed	Drawn	Checked	Approved	Date
AGM	AGM	AIF	MM	20/01/2022

Internal Project No	Suitability
60541541	D7
Scale @ A3: 1:10,000	Zone

Drawing Number: Highways England Pin	Originator	Volume			Rev.
HE551495	-ACM	-EGN-			P02
GEN_Z_Z_ZZ		-GS	-GI	-XXXX	
Location		Type	Role	Number	

NOTES

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DOCUMENTATION.

REGULATION 5(2)(A)

N

0 200 400 600 800 m

KEY

Observation

+1 Auger

+P Pit

Survey boundary

SECOND ISSUE	AGM AIF	20/01/2022	P02
FIRST ISSUE	AGM AIF	08/12/2021	P01
Revision Details	By Check	Date	Suffix

Purpose of Issue: Examination Submission

Client: National Highways, Woodlands, Manton Lane, Manton Industrial Estate, Bedford, MK41 7LW

Development Consent Order Number: TR010044

Project Title: A428 BLACK CAT TO CAXTON GIBBET IMPROVEMENTS

Drawing Title: FIGURE 1 OBSERVATIONS

Designed	Drawn	Checked	Approved	Date
AGM	AGM	AIF	MM	20/01/2022

Internal Project No: 60541541	Suitability: D7
Scale @ A3: 1:10,000	Zone:

Drawing Number: Highways England Pin HE551495 | Originatr -ACM | Volume -EGN- | Location GEN_Z_Z_ZZ | Type -GS- | Role -GI- | Number -XXXX | Rev. P02

NOTES

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DOCUMENTATION.

REGULATION 5(2)(A)

N

KEY

- Survey boundary

Agricultural Land Classification

- * Grade 1
- Grade 2
- Subgrade 3a
- Subgrade 3b
- Grade 4
- * Grade 5
- Non-agricultural
- * Not present
- Not surveyed - Predominant predicted grade

Revision Details	By Check	Date	Suffix
SECOND ISSUE	AGM AIF	20/01/2022	P02
FIRST ISSUE	AGM AIF	08/12/2021	P01

Purpose of Issue: Examination Submission

Client: National Highways, Woodlands, Manton Lane, Manton Industrial Estate, Bedford, MK41 7LW

Development Consent Order Number: TR010044

Project Title: A428 BLACK CAT TO CAXTON GIBBET IMPROVEMENTS

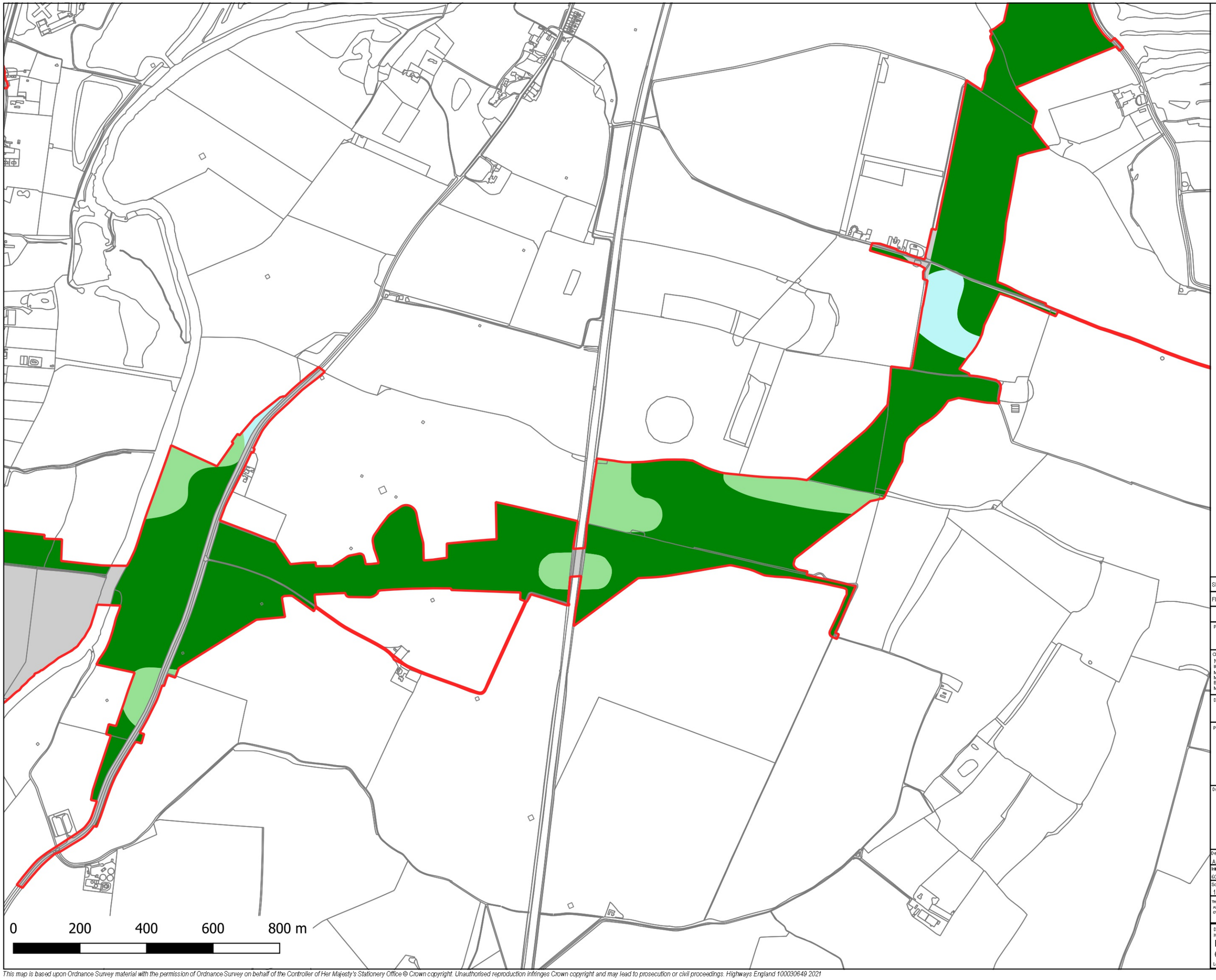
Drawing Title: FIGURE 2 ALC

Designed	Drawn	Checked	Approved	Date
AGM	AGM	AIF	MM	20/01/2022

Internal Project No	Suitability
60541541	D7
Scale @ A3: 1:10,000	Zone

Drawing Number: Highways England Pin HE551495 | Originator -AGM | Volume -EGN- | Location GEN_Z_Z_ZZ | Type -GS- | Role -GI- | Number -XXXX | Rev. P02

0 200 400 600 800 m



NOTES

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DOCUMENTATION.

REGULATION 5(2)(A)

N

KEY

- Survey boundary

Agricultural Land Classification

- Grade 1
- Grade 2
- Subgrade 3a
- Subgrade 3b
- Grade 4
- Grade 5
- Non-agricultural
- Not present
- Not surveyed - Predominant predicted grade

Revision Details	By Check	Date	Suffix
SECOND ISSUE	AGM AIF	20/01/2022	P02
FIRST ISSUE	AGM AIF	08/12/2021	P01

Purpose of Issue: Examination Submission

Client: National Highways, Woodlands, Manton Lane, Manton Industrial Estate, Bedford, MK41 7LW

Development Consent Order Number: TR010044

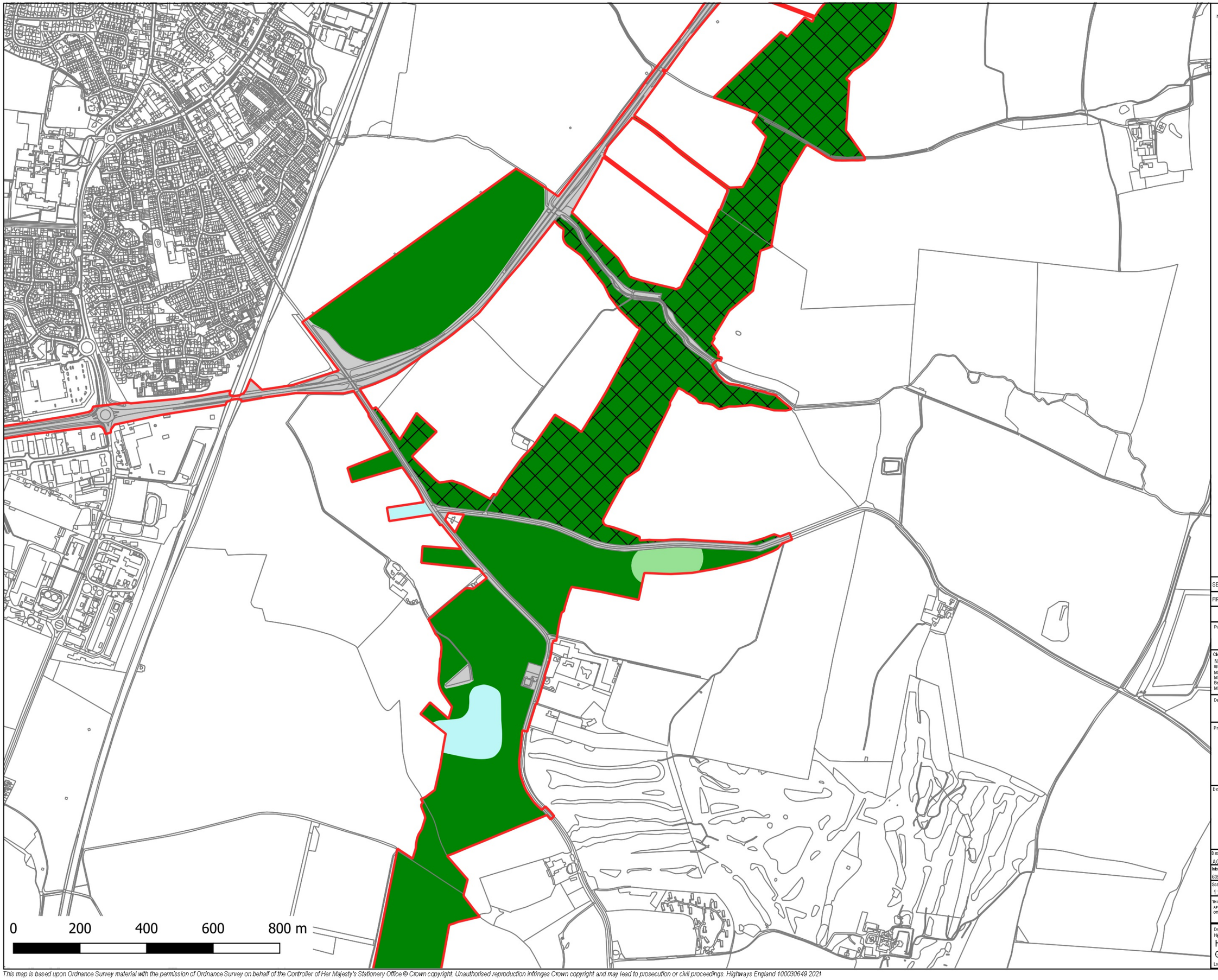
Project Title: A428 BLACK CAT TO CAXTON GIBBET IMPROVEMENTS

Drawing Title: FIGURE 2 ALC

Designed	Drawn	Checked	Approved	Date
AGM	AGM	AIF	MM	20/01/2021

Internal Project No	Suitability
60541541	D7
Scale @ A3: 1:10,000	Zone

Drawing Number: Highways England Pin: HE551495 | Originator: -ACM | Volume: -EGN- | Location: GEN_Z_Z_ZZ | Type: -GS- | Role: -GI- | Number: -XXXX | Rev.: P02



NOTES

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DOCUMENTATION.

REGULATION 5(2)(A)

N

KEY

Survey boundary

Agricultural Land Classification

- Grade 1
- Grade 2
- Subgrade 3a
- Subgrade 3b
- Grade 4
- Grade 5
- Non-agricultural
- Not present
- Not surveyed - Predominant predicted grade

Revision Details	By Check	Date	Suffix
SECOND ISSUE	AGM AIF	20/01/2022	P02
FIRST ISSUE	AGM AIF	08/12/2021	P01

Purpose of Issue: Examination Submission

Client: National Highways, Woodlands, Manton Lane, Manton Industrial Estate, Bedford, MK41 7LW

Development Consent Order Number: TR010044

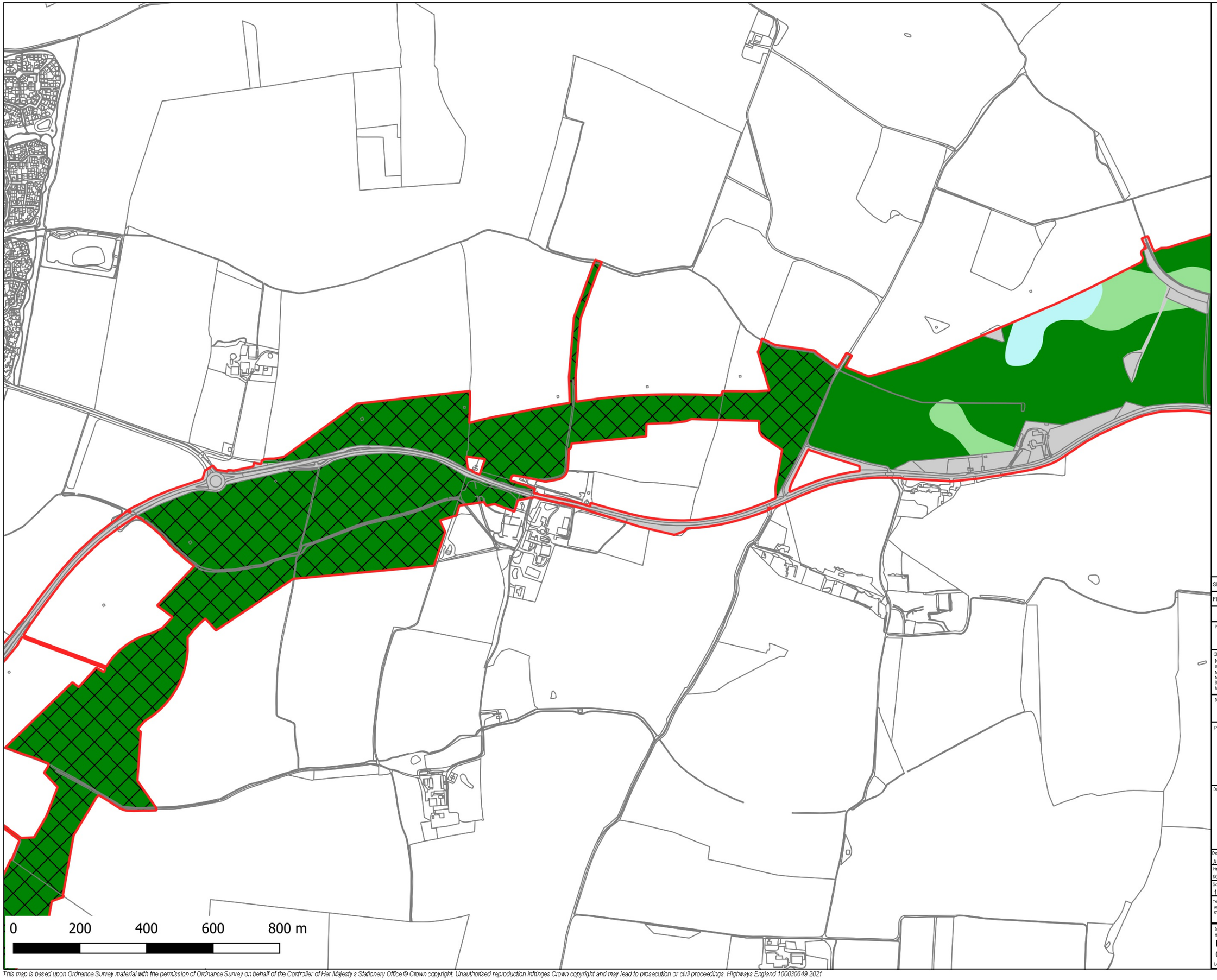
Project Title: A428 BLACK CAT TO CAXTON GIBBET IMPROVEMENTS

Drawing Title: FIGURE 2 ALC

Designed	Drawn	Checked	Approved	Date
AGM	AGM	AIF	MM	20/01/2022

Internal Project No	Suitability
60541541	D7
Scale @ A3: 1:10,000	Zone

Drawing Number: Highways England Pin: HE551495 | Originator: -ACM | Volume: -EGN- | Location: GEN_Z_Z_ZZ | Type: -GS- | Role: -GI- | Number: -XXXX | Rev.: P02



NOTES

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REGULATION 5(2)(A)

N

KEY

- Survey boundary

Agricultural Land Classification

- * Grade 1
- Grade 2
- Subgrade 3a
- Subgrade 3b
- Grade 4
- * Grade 5
- Non-agricultural
- * Not present
- Not surveyed - Predominant predicted grade

Revision Details	By	Check	Date	Suffix
SECOND ISSUE	AGM	AIF	20/01/2022	P02
FIRST ISSUE	AGM	AIF	08/12/2021	P01

Purpose of Issue: Examination Submission

Client: National Highways, Woodlands, Manton Lane, Manton Industrial Estate, Bedford, MK41 7LW

Development Consent Order Number: TR010044

Project Title: A428 BLACK CAT TO CAXTON GIBBET IMPROVEMENTS

Drawing Title: FIGURE 2 ALC

Designed	Drawn	Checked	Approved	Date
AGM	AGM	AIF	MM	20/01/2022

Internal Project No: 60541541	Suitability: D7
Scale @ A3: 1:10,000	Zone

Drawing Number: Highways England Pin	Originator	Volume			Rev.
HE551495	-ACM	-EGN-			P02
GEN_Z_Z_ZZ		-GS-	GI	-XXXX	
Location		Type	Role	Number	

NOTES

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DOCUMENTATION.

REGULATION 5(2)(A)

N

0 200 400 600 800 m

KEY

- Survey boundary

Agricultural Land Classification

- * Grade 1
- Grade 2
- Subgrade 3a
- Subgrade 3b
- Grade 4
- * Grade 5
- Non-agricultural
- * Not present
- Not surveyed - Predominant predicted grade

Revision Details	By	Check	Date	Suffix
SECOND ISSUE	AGM	AIF	20/01/2022	P02
FIRST ISSUE	AGM	AIF	08/12/2021	P01

Purpose of Issue: Examination Submission

Client: National Highways, Woodlands, Manton Lane, Manton Industrial Estate, Bedford, MK41 7LW

Development Consent Order Number: TR010044

Project Title: A428 BLACK CAT TO CAXTON GIBBET IMPROVEMENTS

Drawing Title: FIGURE 2 ALC

Designed	Drawn	Checked	Approved	Date
AGM	AGM	AIF	MM	20/01/2022

Internal Project No	Suitability
60541541	D7
Scale @ A3: 1:10,000	Zone

Drawing Number: Highways England Pin	[Originator]	[Volume]	Rev.
HE551495 GEN_Z_Z_ZZ	-ACM	-EGN-	P02
Location		[Type] -GS- [Role] -GI- [Number] -XXXX	

NOTES

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REGULATION 5(2)(A)

N

KEY

- Survey boundary

Agricultural Land Classification

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- * Grade 5
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0 200 400 600 800 m

SECOND ISSUE	AGM AIF	20/01/2022	P02
FIRST ISSUE	AGM AIF	06/12/2021	P01
Revision Details	By Check	Date	Suffix

Purpose of Issue: Examination Submission

Client: National Highways, Woodlands, Manton Lane, Manton Industrial Estate, Bedford, MK41 7LW

Development Consent Order Number: TR010044

Project Title: A428 BLACK CAT TO CAXTON GIBBET IMPROVEMENTS

Drawing Title: FIGURE 2 ALC

Designed	Drawn	Checked	Approved	Date
AGM	AGM	AIF	MM	20/01/2022

Internal Project No: 60541541	Suitability: D7
Scale @ A3: 1:10,000	Zone:

Drawing Number: Highways England Prn: HE551495 | Originator: -ACM | Volume: -EGN- | Location: GEN_Z_Z_ZZ | Type: -GS- | Role: -GI- | Number: -XXXX | Rev.: P02