The Great Grid Upgrade

Sea Link

Sea Link

Volume 9: Examination Submissions

Document 9.30: Agricultural Land Classification Survey Report - Suffolk

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Contents

Table of Tables

Version History			
Date	**Version**	**Status**	**Description / Changes**
March 2026	A	Final	For Deadline 5 submission
April 2026	B	Final	For Deadline 7 submission

Executive Summary

Ex1.0.1 This report has been prepared to provide updated, site-specific Agricultural Land Classification (ALC) information in support of the Sea Link Project (hereafter referred to as the 'Proposed Project') in Suffolk (also known as the Suffolk Onshore Scheme). It is submitted during Examination to supplement and refine the assessment presented within **Application Document 6.2.2.6 (B) Part 2 Suffolk Chapter 6 Agriculture and Soils [PDA-019]** in the Environmental Statement submitted as part of the Application.

Ex1.0.2 The ALC assessment originally submitted as part of the ES was informed by published available datasets and predictive modelling, including Defra Provisional ALC mapping, National Soil mapping, climatic data interpolation, purchased Cranfield University data and professional judgement,

Ex1.0.3 Since submission, site-specific soil surveys have been undertaken in line with the methodology set out in the Defra & Welsh Government (2025) Agricultural Land Classification for England and Wales: Guidelines for grading the quality of agricultural land. Field survey work comprised hand-auger borings and soil profile pit assessments to characterise soil texture, structure, depth, wetness characteristics, and other relevant limiting factors. Climatic limitations were assessed using standard ALC climatic datasets.

Ex1.0.4 The purpose of this report is to:

- Present the findings of the detailed ALC surveys; and
- Compare the extent of surveyed grades against the previously reported predictive assessment.

Ex1.0.5 The detailed survey confirmed that 193.7 hectares (ha) of land within the Order Limits comprises Best and Most Versatile (Grades 1, 2 and Subgrade 3a) agricultural land. This is 4.4ha (2.9%) greater than the predicted data had indicated.

Ex1.0.6 While localised differences between predictive mapping and field-verified grades have been identified, the overall distribution of land quality across the Order Limits is broadly consistent with that previously reported.

Ex1.0.7 Accordingly, the conclusions of the ES in respect of the sensitivity, magnitude and significance of the effects on agricultural land remain unchanged.

1. Introduction

1.1 Background

1.1.1 This report sets out the updated assessment undertaken to assign grades to agricultural land in accordance with the Agricultural Land Classification (ALC) system associated with the Proposed Project (as described in **Application Document 6.2.1.4 (D) Part 1 Introduction Chapter 4 Description of the Proposed Project [REP1A-003]**). This report forms an update to **Application Document 6.3.2.6.A Appendix 2.6.A Predictive Agricultural Land Classification Report – Suffolk [APP-121],** which was prepared based on predictive modelling using available desk-based information.

1.1.2 This report presents the ALC survey methodology, the detailed ALC survey data, the ALC grades calculated from the survey data, the distribution of ALC grades, and a comparison between the results from the predictive modelling and the detailed survey. The ALC grades in this report confirm or supersede the previous grades derived from the predictive modelling. In addition, a reassessment of the impact on agricultural land has been undertaken using the survey results, which is presented in Appendix E.

1.1.3 This report should be read in conjunction with the following documents:

- **Application Document 6.3.2.6.A Appendix 2.6.A Predictive Agricultural Land Classification Report – Suffolk [APP-121];** and
- **Application Document 6.2.2.6 (B) Part 2 Suffolk Chapter 6 Agriculture and Soils [PDA-019]**.

1.1.4 This report is supported by the following figure:

- **Auger Bore Location and Agricultural Land Classification Grade Distribution (Appendix A)** submitted at Deadline 5

1.1.5 The Agricultural Land Classification (ALC) system provides a framework for classifying land according to the extent to which its physical or chemical characteristics impose long-term limitations on agricultural use. The ALC system divides agricultural land into five grades (Grade 1 ‘excellent’ to Grade 5 ‘very poor’), with Grade 3 subdivided into Subgrade 3a ‘good’ and Subgrade 3b ‘moderate’. Agricultural land classified as Grades 1, 2, and Subgrade 3a are categorized as Best and Most Versatile (BMV) (Defra & Welsh Government, 2025) (Natural England, 2012) . Further details of the ALC system and national planning policy implications are set out by Natural England (Natural England, 2021).

1.1.6 ALC surveys were undertaken between October 2025 and February 2026, with a total of 169 locations surveyed as identified in Appendix A: Auger Bore Location and ALC Grade Distribution.

Table 1 Auger Bore Survey Status

Auger Bore Status	No. Augers
Surveyed	169
Cranfield University Information	6
Scoped Out (design reasons)	75
Un-surveyed	59
Total	**300**

1.1.7 The ALC surveys were undertaken in line with the standards set out by the ALC Guidelines (Defra & Welsh Government, 2025). Due to spatial overlap with third-party construction activities, there were 59 survey locations where access was not possible. A total of 75 survey locations were scoped out, as the updated design indicates that land and soil in these areas would not be disturbed. For these areas the predictive assessment conducted in **Application Document 6.3.2.6.A Appendix 2.6.A Predictive Agricultural Land Classification Report – Suffolk [APP-121]** has been used to cover this area as part of the assessment of the Proposed Project.

2. ALC Methodology

2.1 ALC Site Survey

2.1.1 The ALC survey and assessment was undertaken in accordance with:

- Soil Survey Field Handbook (Hodgson, 2022);
- ALC guidelines (Defra & Welsh Government, 2025); and
- Meteorological Office climatological data (Meteorological Office, 1989).

2.1.2 The survey points were set out at 100 m intervals along the Suffolk Onshore Scheme central alignment, and at a density of a 100 m grid within wider working areas such as the converter station and substation sites. The survey density meets the requirements of one auger bore examination per hectare from the ALC guidelines where practicable.

2.1.3 Auger bore examinations were conducted where land access permitted and the condition of the land and soil were suitable for the survey (e.g. very dry ground can prevent the full depth of the soil profile being exposed).

2.1.4 A total of 300 auger bores (see Appendix A) were plotted in ArcGIS prior to the survey and were loaded using the FieldMaps app into smart devices to locate the auger bores in the field.

2.1.5 The survey examined 169 soil profiles through the use of a hand auger and 5 soil pits/profiles.

2.1.6 Soil profiles were examined up to a depth of 120 cm using a 50 mm insulated Dutch soil auger, or to a depth of 100 cm for soil pits using hand-held insulated spades.

2.1.7 The following soil properties and site conditions were observed, examined and recorded:

- Texture;
- Horizon depths;
- Stoniness;
- Carbonate; presence and quantity;
- Colour;
- Mottling; presence, abundance, size and colour;
- Soil structure;
- Slope and topography; and
- Land use.

2.1.8 10% hydrochloric acid was used to determine the presence and quantity of carbonate in the soil.

2.1.9 A Munsell Soil Colour Chart (Munsell, 2022) was used to describe soil and mottle colours.

2.1.10 A small number of soil samples were collected and sent to NRM Laboratory (UKAS accredited) for particle size distribution analysis to confirm the hand texturing undertaken during the surveys (see Appendix D).

2.1.11 A Cable Avoidance Tool and Signal Generator (CAT and Genny) was used to scan each auger bore and soil pit prior to breaking ground to ensure buried services were avoided. Soils from each auger bore and soil pit were reinstated immediately following examination and record of description.

2.1.12 In areas where a medium or higher UXO risk had been identified through a detailed desk study, a UXO specialist was present on site to undertake scanning prior to augering. No UXO were found.

2.1.13 The observed and recorded soil data from the field surveys were collated, analysed and used to determine the following limitations to ALC Grades:

- Climatic limitations.
- Site limitations:
  - Gradient;
  - Microrelief; and
  - Flooding.
- Soil limitations:
  - Texture and structure;
  - Depth;
  - Stoniness; and
  - Chemical.
- Interactive limitations:
  - Soil wetness;
  - Droughtiness; and
  - Erosion.

2.1.14 Based on the most limiting factor, the final ALC Grades and their distribution were subsequently determined and mapped.

2.1.15 Where the ALC surveys were not possible, the original desk based predictive assessment (as presented in **Application Document 6.3.2.6.A Appendix 2.6.A Predictive Agricultural Land Classification Report – Suffolk**) **[APP-121]** was utilised.

2.2 Predictive ALC Grading Methodology

2.2.1 This site-based ALC assessment of agricultural land within the Order Limits for the Suffolk Onshore Scheme is supported by predictive modelling of agricultural grades for 59 auger bore locations where access was not feasible.

2.2.2 These predictive modelling locations are concentrated to the north of Friston and were arranged on a 100 m grid pattern at a density of approximately one sample point per

hectare. The coordinates for all predictive ALC grading locations are listed in Annex A of **Application Document 6.3.2.6.A Appendix 2.6.A Predictive Agricultural Land Classification Report – Suffolk [APP-121].**

2.2.3 The predictive ALC grading comprised an assessment of the likely soil types present and the factors affecting soils at the given locations to assess the potential land grades as detailed in **Application Document 6.3.2.6.A Appendix 2.6.A Predictive Agricultural Land Classification Report – Suffolk [APP-121]**.

2.2.4 A summary of the methodology for the predictive assessment is detailed in Appendix C.

3. Baseline Information

3.1 Land Use

3.1.1 Aerial imagery indicates that the land use across the Suffolk Onshore Scheme is predominantly a mixture of arable land and grazing pasture. This has been confirmed through detailed site surveys.

3.2 Topography and Relief

3.2.1 Using available desk-based information the land within the Order Limits across the Suffolk Onshore Scheme is shown as relatively level and with an average gradient of 2.47°. On average, the quality of agricultural land is generally not limited by gradient as the angle of slope does not exceed 7 ° (See Table 1 of the ALC Guidelines; (Defra & Welsh Government, 2025))

3.2.2 As part of the original predictive assessment there were 27 locations (as identified in **Application Document 6.3.2.6.A Appendix 2.6.A Predictive Agricultural Land Classification Report – Suffolk**) **[APP-121]** where the calculated gradient exceeded 7°. Following the site surveys there were no grade-limiting gradients recorded. This discrepancy is likely due to the level of granularity available in the original GIS data set.

3.2.3 Following the site survey, it is concluded that the quality of land within the Order Limits is not limited by micro-relief.

3.3 Flooding

3.3.1 From the Environment Agency Flood Map for Planning website (Environment Agency, 2021) the land within the Order Limits for the Suffolk Onshore Scheme contains areas of land classified as being in Flood Zone 3, as well as further areas in Flood Zone 2. For Flood Zone 3 this means that there is a high probability of flooding in these areas, quantified as a 1% or more chance of flooding from rivers, or a 0.5% or more chance of flooding by sea. For Flood Zone 2 these risks are noted as a 0.1% risk of flooding from rivers and a 0.05%-0.1% chance of flooding from the sea.

3.3.2 These flood zones primarily follow the coastal strip and the land surrounding local rivers such as the River Alde, River Fromus, and the Hundred River.

3.3.3 Land within areas identified as Flood Zone 3 would be limited to Grade 3b.

3.4 Geology

3.4.1 The solid geology underlying the majority of the Order Limits is described as bedrock of the Crag Formation, comprising sands, gravels, silts, and clays. The gravels in the lower part of the group are almost entirely composed of flint.

3.4.2 The solid geology is in the main overlain by diamicton till superficial deposit (Lowestoft Formation). This material was deposited around 3 million years ago in the Quaternary Period when the local environment was dominated by ice age conditions. Closer to the

coast the superficial deposits are replaced by glacial sands and gravel formed up to 3 million years ago in the Quaternary Period.

3.5 Previous ALC

3.5.1 Provisional- 1:250,000 scale ALC mapping showed the land within the Suffolk Onshore Scheme to be indicatively mapped as predominately Grade 4 land between Aldeburgh and Friston, with the land to the north of Friston mapped as a mixture of Grade 2 and Grade 3 land.

3.5.2 There is no existing published detailed ALC mapping available for the Suffolk Onshore Scheme Order Limits.

3.6 Soil Auger Bore Data

3.6.1 Local auger bore data was purchased from Cranfield University to support in the original development of the predictive modelling (**Application Document 6.3.2.6.A Appendix 2.6.A Predictive Agricultural Land Classification Report – Suffolk [APP-121]**).

3.6.2 Where appropriate, the Cranfield Auger Bore information has been used to supplement the detailed site survey information (noted alongside the survey data in Appendix A).

3.7 Climatological Data

3.7.1 The available climate data for ALC which have been used to represent 5 km grid squares covering the Order Limits are shown in Table 2. These are the values that have been used to calculate interpolated values for each of the auger locations.

Table 2 Available Met Office climate data for land within the Order Limits

5 km grid reference	Height (m)	AAR	AT0	FCD	MDW	MDP	Grade according to climate only[1]
TM350600	21	594	1423	111	120	117	1
TM350650	23	618	1419	115	120	116	1
TM400550	15	600	1431	109	124	121	1
TM400600	15	610	1429	111	121	118	1
TM400650	34	600	1405	110	120	116	1
TM450550	3	589	1444	105	128	126	1
TM450600	10	595	1434	106	124	121	1
TM500550	0	544	1446	98	129	128	1

[1] This is the grade according to climate only, excluding any other limiting factor, i.e., site, soil and/or interactive limitations.

5 km grid reference	Height (m)	AAR	AT0	FCD	MDW	MDP	Grade according to climate only[1]
TM500600	0	580	1444	103	126	124	1

Table 3 Key to Table 2

Parameter	Definition
AT0	Accumulated Temperature above 0˚C (January – June)
AAR	Average Annual Rainfall (mm)
FCD	Field Capacity Days
MDW	Moisture Deficit (mm) Wheat
MDP	Moisture Deficit (mm) Potatoes
Climate grade	Best ALC Grade According to Climate Limitation

3.7.2 With reference to Figure 1 *'Grade according to climate'* of the ALC Guidelines (Defra & Welsh Government, 2025), there is no overall climatic limitation to the quality of agricultural land within the Order Limits for the Suffolk Onshore Scheme. This means that agricultural land could be graded as ALC Grade 1 in overall climatic terms, in the absence of any other limiting factor, i.e., site, soil and/or interactive limitations.

3.7.3 The climatic data presented in Table 2 was used to calculate interpolated climatic values for each of the predicted auger locations, based upon the proximity of each location to the surrounding climatic points. The interpolated climatic values for each location are detailed in Appendix A.

3.7.4 Agricultural land within the Order Limits for the Suffolk Onshore Scheme is predicted to be at field capacity (i.e., near saturation point) for between 105 and 111 days (average 108 days) per year (see Appendix A). In combination with topsoil texture and wetness class, this will cause an interactive limitation to agricultural land quality, i.e., soil wetness and/or soil droughtiness.

4. ALC Assessment

4.1 Soil Type

4.1.1 The ALC survey indicated that the primary soils identified were deep sandy soils to the south of the cable route between Aldeburgh and Friston, with clay and clay loam soils identified to the north.

4.2 Climatic Limitations

4.2.1 Prior to the commencement of the surveys, the climatic data shown in Table 2 were analysed to assess potential limitations to land grade based on the climate parameters. The climatic Grade, as detailed in Section 3.7, is identified as Grade 1. As such, climatic conditions do not present a limitation across the Suffolk Onshore Scheme.

4.3 Site Limitations

Gradient and Microrelief

4.3.1 As stated in Section 3.2, the Suffolk Onshore Scheme is predominantly flat. Field surveys confirmed this general topography within the Order Limits with land noted as predominately being level (0-1 degrees), with gently sloping (2-3 degrees) land in places. No complex microrelief was identified during the field surveys. As such, gradient and microrelief are not considered to represent a limitation to land grade.

Flooding

4.3.2 No auger locations were located within the areas of increased flood risk - as such no flooding limitations were assigned to the survey results.

4.4 Soil Limitations

Soil Depth and Stoniness

4.4.1 The surveys, geological maps/data and national soil maps/data indicate that all the soils within the Order Limits are deeper than 1.2m, as such soil depth is not a limiting factor. However, auger bores located in the fields adjacent to Aldeburgh Golf Course were recorded as having reduced depths of 25-40cm (Augers S14-S17; Appendix A) and were limited to Grades 3a-3b.

4.4.2 The topsoils mostly contain few hard stones (1-5%) with common stones (6-15%) in places and common stones (16-35%) occasionally. Details regarding stone content for each auger bore are provided in Appendix A.

Soil Texture

4.4.3 Sandy topsoil textures can be identified as a limiting factor. Following the guidance in the ALC Guidelines Sand (noted as fS, mS, cS or org-S in Appendix A) are not eligible for Grades 1, 2 or 3a, and as such would be limited to Grade 3b, in the absence of further limiting factors, where a sand topsoil is identified.

4.4.4 Loamy sand topsoil (noted as LfS, LmS, LcS or org-LS in Appendix A) is not eligible for Grade 1 classification, and in the absence of further limiting factors would be limited to Grade 2.

4.5 Chemical Limitations

4.5.1 No chemical limitations on soil physical conditions, crop yield or crop growth were observed during the surveys.

4.6 Interactive Limitations

4.6.1 Gleying was noted in 50 auger locations within the Suffolk Onshore Scheme. These were observed in profiles primarily with clay loam topsoils over deep clay subsoils. The wetness class for these soils is typically II or III depending on the depths of the gleying layer and slowly permeable layer (SPL). Details regarding gleying depth, wetness class, grade and SPL are provided in the Auger Bore Log (Appendix A).

4.6.2 Moisture Balance (MB) values for wheat and potato were calculated for each of the surveyed locations and are presented in the Auger Bore Log (Appendix A).

4.7 Most Limiting Factors

4.7.1 Droughtiness and wetness are the two major limiting factors for the agricultural land within the Order Limits, with ~~Droughtiness~~droughtiness being the dominant across the route, with wetness limitations occurring more frequently towards the Saxmundham end of the Order Limits.

5. ALC Grade Distribution

5.1.1 The final ALC grade, soil properties, moisture balance, and limiting factors for each auger bore are presented in Appendix A. The ALC grade distribution for the Suffolk Onshore Scheme is presented in Table 4 below.

5.1.2 ALC grades per auger are provided in Appendix A. Maps showing the grade distribution can be found in Appendix A. The map is accurate to a scale of 1:10,000, any further enlargement could lead to inaccuracies.

5.1.3 As described in the ALC Guidelines, the grade or subgrade of the land is determined by the most limiting factor present. When classifying land, the overall climate and site limitations should be considered first as these can have an overriding influence on the grade.

5.1.4 The land has been graded and mapped without regard to present land boundaries, except where they coincide with permanent physical features. A degree of variability in physical characteristics within a discrete area is to be expected.

Table 4 ALC Grade Distribution

ALC Grade	Area (ha)	Percentage (ha)
Grade 1	0.0	0.0
Grade 2	65	21.8
Grade 3a	128.7	43.3
BMV land	*193.7*	*65.1*
Grade 3b	54	18.2
Grade 4	21.5	7.2
Grade 5	0.0	0.0
Non-Agricultural	28.2	9.5
Total	**297.4**	**100**

6. ALC Result Comparison

6.1.1 Table 5 summarises and compares the area and percentage of each ALC grade based on the Predictive Modelling and the detailed ALC Survey.

Table 5 ALC Distribution Comparison for Suffolk Onshore

ALC Grade	Predictive Modelling		Detailed Site Survey		Comparison
	Area (ha)	Area (%)	Area (ha)	Area (%)	Change
Grade 1	0.0	0.0	0.0	0.0	0.0
Grade 2	34.8	12.5	65*	21.8	+30.2ha, +9.3%
Grade 3a	154.5	55.5	128.7	43.3	-25.3ha, -12.2%
BMV Land	*189.3*	*68*	*193.7*	*65.1*	*+4.4ha, +2.9%*
Grade 3b	43.2	15.5	54*	18.2	+10.8ha, +2.7%
Grade 4	35.2	12.6	21.5	7.2	-13.7ha, -5.4%
Grade 5	0.00	0.00	0.0	0.0	0.0
Non-Agricultural	10.6	3.8	28.2	9.5	+17.6ha, 5.7%
Total	**278.3**	**100**	**297.4**	**100**	**+19.1**

*38.5ha of the 65 ha of ALC Grade 2 land and 7.2ha of the 54ha ALC Grade 3b land were derived from predictive modelling due to inaccessibility for survey or scope-out.

6.1.2 The detailed ALC results indicate that the area of BMV land identified through the survey is largely consistent with the predicted area and distribution. The total area of BMV land identified in the survey is 4.4ha higher, representing an increase compared to the prediction of 2.9%.

6.1.3 The ALC Grades 3b, 4 and BMV land identified in the detailed ALC survey are largely consistent with those from the ~~pPredictive MModelling~~Predictive modelling, with differences of 10.8 ha (2.7%), 13.7ha (5.4%) and 4.4ha (2.9%) respectively.

6.1.4 However~~;~~, the ALC Grades 2 and 3a areas identified in the detailed ALC survey appear less consistent with those derived from the predictive modelling, with differences of +30.2ha (9.3%) and -25.3ha (12.2%) respectively (i.e. the prediction underestimated the extent of Grade 2 land and overestimated the extent of Grade 3a land).

6.1.5 These differences are likely due to changes to the Order Limits for the Suffolk Onshore Scheme and the resulting increase in land area, introduced after the submission of the application. This additional land was not included within the earlier predictive modelling.

In addition, 38.5 ha of the 65 ha of ALC Grade 2 land shown in the detailed ALC map was assessed using the predictive modelling, either because the land was inaccessible for survey or because it was scoped out. This makes the comparison between surveyed and predicted ALC Grade 2 data difficult. If these areas had been fully surveyed, the differences for ALC Grades 2 and 3a would likely reduce, as there is a significant likelihood (based on the areas which were surveyed) that areas predicted to be Grade 2 would be determined to actually be Grade 3a.

7. Conclusion

7.1.1 The detailed ALC survey has identified the ALC grades and distribution as follows:

- ALC Grade 2: 65 ha, accounting for 21.8%;
- ALC Grade 3a: 128.7 ha, accounting for 43.3%;
- ALC Grade 3b: 54 ha, accounting for 18.2%;
- ALC Grade 4: 21.5 ha, accounting for 7.2%; and
- BMV land: 193.7 ha, accounting for 65.1%.

7.1.2 The extent of ALC Grade 3b and 4 land identified in the detailed ALC survey is largely in line with those in the Predictive Modelling.

7.1.3 The predicted extent of BMV land is also broadly in line with the results of the detailed ALC survey, with 68% predicted compared with 65.1% identified in the survey.

7.1.4 The ALC grade distributions in the detailed ALC survey map and the Predictive Modelling ALC map largely match.

7.1.5 As stated in paragraph 6.1.4, changes to the Order Limits for the Suffolk Onshore Scheme, the increase in land area, and land access issues have resulted in 50 ha of land remaining unsurveyed. This has contributed to the discrepancies in the extents of land in ALC Grades 2 and 3a, making direct comparison unreliable.

7.1.6 As the areas of BMV land, ALC Grades 3b and 4 are accurately predicted, this demonstrates that the Predictive Modelling provided a robust basis for the assessment of the likely impacts on agricultural land as reported in the ES.

7.1.7 The comparison (see Appendix E) between the two datasets indicates that any discrepancies are negligible. There are minor changes in the magnitude of ALC Grades 2 (increase) and 3a (decrease) land. However, these changes do not alter the significance of the likely effects on BMV land.

7.1.8 The reassessment confirms that there is no change in the significance of likely effects on BMV land. Therefore, the conclusions of the ES regarding the significance of effects on BMV land remain unchanged and valid.

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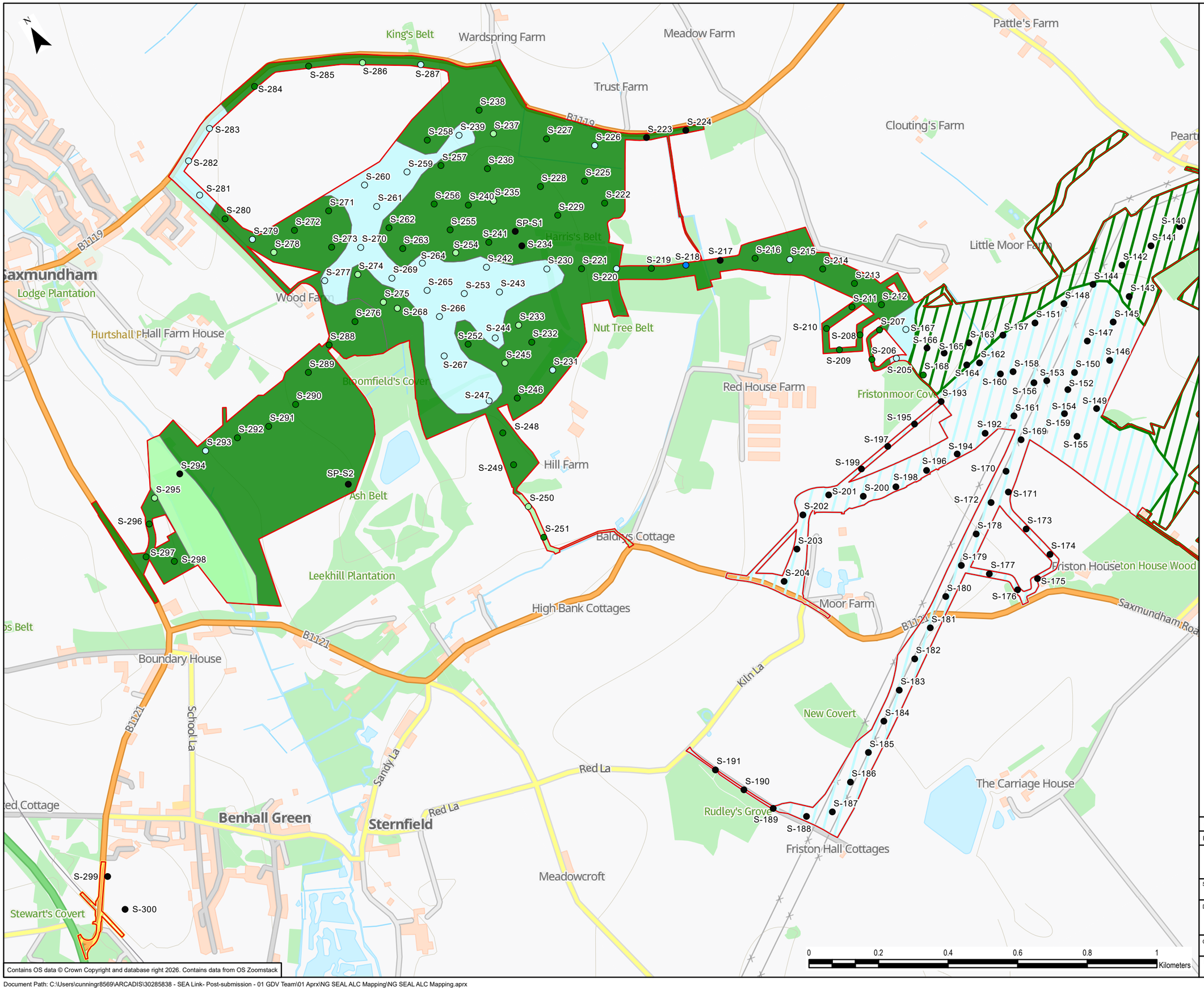
Appendix A Auger Bore Log and ALC Mapping



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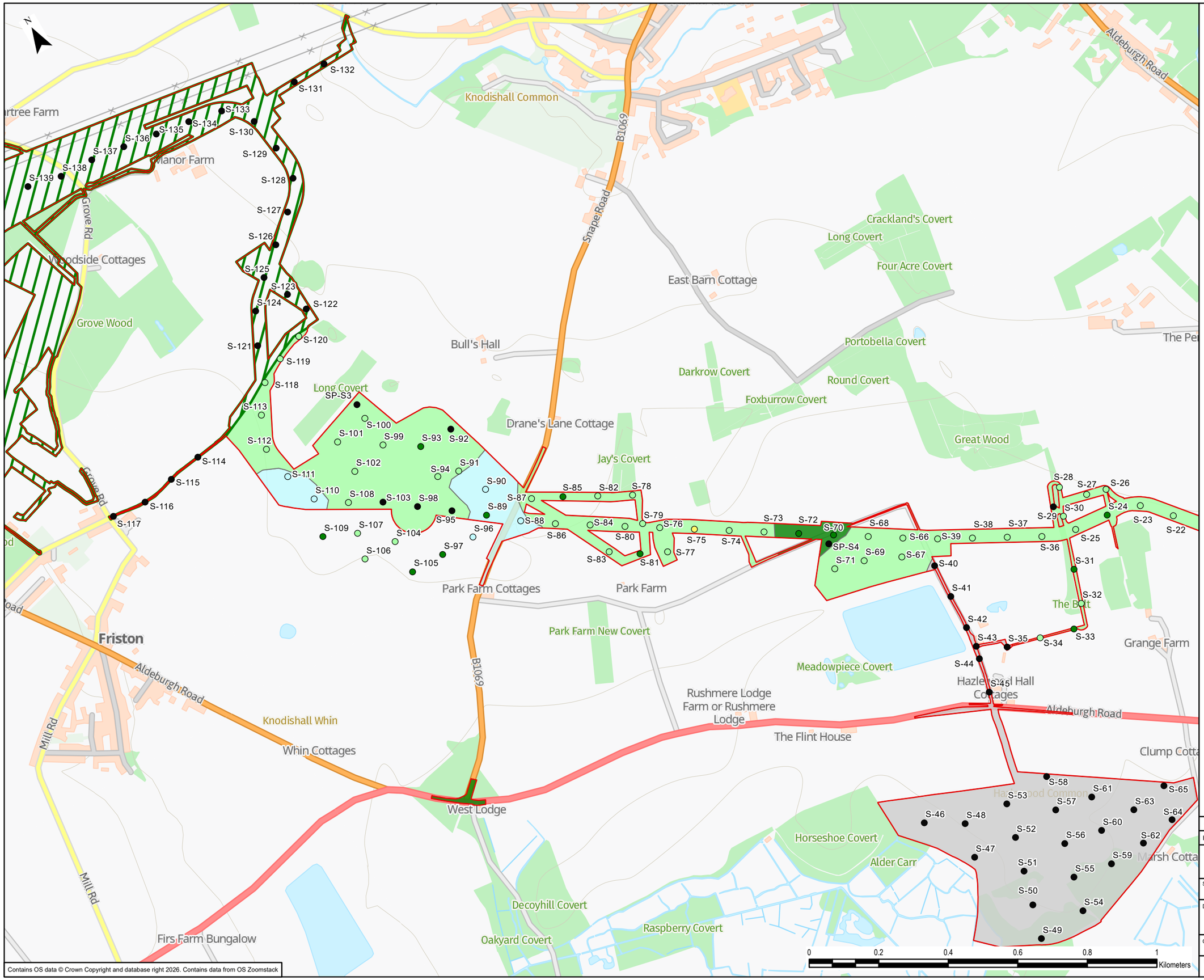

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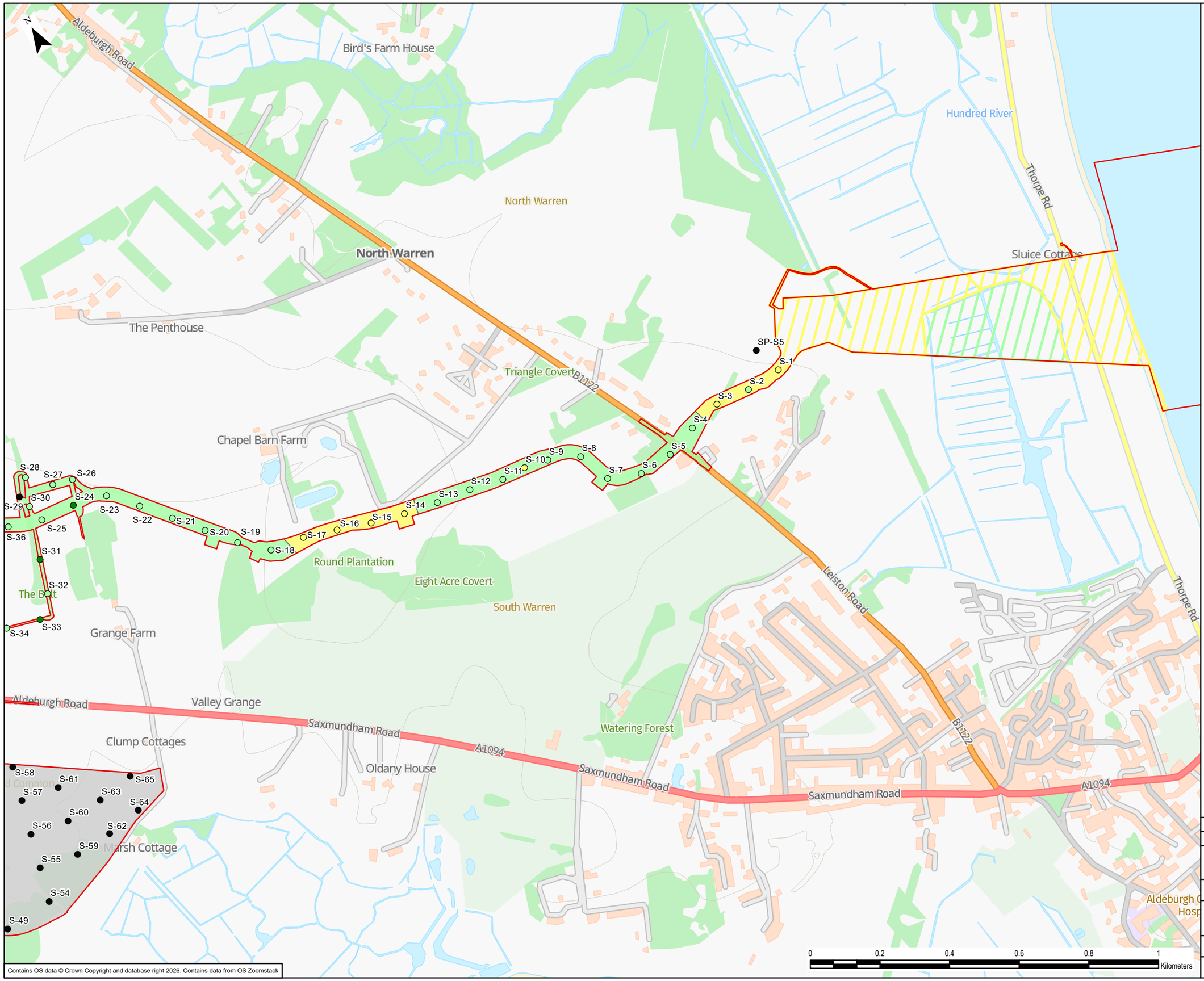

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Legend

Order Limits

ALC Grade

- 3a
- 3b
- 4
- Not Surveyed

Surveyed Agricultural Land Classification

- 3b
- 4
- Non-Agricultural

Predicted Agricultural Land Classification

- 3b
- 4

Rev	Date	Description	GIS	Chk	App
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FIGURE XXXX	1:10,000	A3	3	01

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Auger Bore No	BNG	Horizon Top (cm)	Horizon Bottom (cm)	Texture	Matrix Colour	Mottle Colour	Mottle %	Mottle Range	Gley	Depth to Gley	CaCo3 %	Slope	Hard Stone Content % >2mm	Hard Stone Content %>2cm	Hard Stone content %>6cm	Soft Stone Content % >2mm	Wetness Class	Wetness Grade	Droughti-ness - MB Wheat	Droughti-ness - MB Potato	Droughtines s Grade Converted	Droughti-ness Grade	Grade by Depth	Grade by Topsoil Texture	Grade by Topsoil Stoniness	Limiting Factor 1	Limiting Factor 2	Limiting Factor 3	Final ALC Grade
S1	TM459584	0	28	LcS	10YR4/4						non-calcareo	gently sloping	3	1	1		I	1	-47.1	-65.4	4	4	1	2	1	Droughtiness			**4**
		28	42	cS	10YR4/2						non-calcareous																		
		42	76	mS	10YR4/2						non-calcareous																		
		76	110	mS	5YR3/4						non-calcareous																		
		110	120	mS	10YR3/6						non-calcareous																		
S2	TM458584	0	24	LcS	10YR3/3						non-calcareo	level	1	1			I	1	-41.5	-54.8	3.2	3b	1	2	1	Droughtiness			**3b**
		24	38	LcS	10YR3/4						non-calcareous																		
		38	69	LcS	10YR5/4						non-calcareous																		
		69	120	cS	10YR6/4						non-calcareous																		
S3	TM457584	0	32	LcS	10yr4/4						non-calcareo	gently sloping	2				I	1	-42.1	-60.2	4	4	1	2	1	Droughtiness			**4**
		32	65	mS	10yr3/6						non-calcareous		1																
		65	120	IMP																									
S4	TM456583	0	24	LcS	10YR4/3						non-calcareo	level	3	2	1		I	1	-30.4	-53.5	3.2	3b	1	2	1	Droughtiness			**3b**
		24	45	LcS	10YR4/4						non-calcareous		3																
		45	62	LcS	10YR5/4						non-calcareous		7																
		62	120	IMP																									
S5	TM455583	0	12	org-S	10YR3/2						non-calcareo	level	2				I	1	-35.2	-53.1	3.2	3b	1	3b	1	Droughtiness	Texture		**3b**
		12	30	mS	10YR3/3						non-calcareous		1																
		30	120	IMP																									
S6	TM454583	0	10	org-LS	7.5YR3/3						non-calcareo	level	3	2			I	1	-21.2	-38.6	3.2	3b	1	2	1	Droughtiness			**3b**
		10	38	LmS	7.5YR4/3						non-calcareous		3																
		38	64	LmS	7.5YR4/4						non-calcareous		5																
		64	100	LcS	7.5YR5/6						non-calcareous		5																
		100	120	IMP									35																
S7	TM453583	0	8	org-LS	10YR4/3						non-calcareo	level	8	5	1		I	1	-29.3	-42.9	3.2	3b	1	2	1	Droughtiness			**3b**
		8	48	LmS	10YR4/4						non-calcareous		5																
		48	50	LmS	10YR5/4						non-calcareous		5																
		50	120	IMP									35																
S8	TM453584	0	4	org-S	7.5YR3/3						non-calcareo	level	1				I	1	-28.4	-47.5	3.2	3b	1	3b	1	Droughtiness	Texture		**3b**
		4	20	LmS	7.5YR4/3						non-calcareous		1																
		20	45	LmS	7.5YR4/4						non-calcareous		1																
		45	90	LmS	7.5YR5/6						non-calcareous		1																
		90	120	LmS	7.5YR5/6						non-calcareous		10																
S9	TM452585	0	3	org-S	7.5YR3/3						non-calcareo	level	1				I	1	-28.7	-47.7	3.2	3b	1	3b	1	Droughtiness	Texture		**3b**
		3	22	LmS	7.5YR4/3						non-calcareous		1																
		22	70	LmS	7.5YR4/4						non-calcareous		1																
		70	90	LmS	7.5YR5/6						non-calcareous		1																
		90	120	LmS	7.5YR5/8						non-calcareous		10																
S10	TM451585	0	6	LmS	7.5YR3/3						non-calcareo	level	3				I	1	-42.6	-56.0	4	4	1	2	1	Droughtiness			**4**
		6	20	LmS	7.5YR4/3						non-calcareous		1																
		20	50	LmS	7.5YR5/4						non-calcareous		2																
		50	120	IMP									35																
S11	TM450585	0	6	LmS	7.5YR3/3						non-calcareo	level	3				I	1	-22.5	-44.4	3.2	3b	1	2	1				**3b**
		6	20	LmS	7.5YR4/3						non-calcareous		1																
		20	50	LmS	7.5YR5/4						non-calcareous		2																
		50	120	IMP									35																
S12	TM449585	0	5	org-S	7.5YR3/3						non-calcareo	level	2				I	1	-5.7	-35.0	3.2	3b	1	1	1				**3b**
		5	15	mS	7.5YR4/4						non-calcareous																		
		15	45	LmS	7.5YR5/6						non-calcareous																		
		45	100	LmS	7.5YR5/8						non-calcareous																		
		100	120	IMP									35																
S13	TM448585	0	5	org-S	7.5YR3/3						non-calcareo	level	2				I	1	-34.2	-51.3	3.2	3b	1	3b	1	Droughtiness	Texture		**3b**
		5	15	mS	7.5YR4/4						non-calcareous																		
		15	45	LmS	7.5YR5/6						non-calcareous																		
		45	100	LmS	7.5YR5/8						non-calcareous																		
		100	120	IMP									35																
S14	TM447585	0	5	org-LS	7.5YR3/3						non-calcareo	level	1				I	1	-73.9	-70.4	4	4	3a	2	1	Droughtiness			**4**
Golf Course		5	36	LmS	7.5YR4/4						non-calcareous		1																
S15	TM446586	0	5	org-LS	7.5YR3/3						non-calcareo	level	1				I	1	-80.5	-76.8	4	4	3a	2	1	Droughtiness			**4**
Golf Course		5	30	LmS	7.5YR4/4						non-calcareous																		
S16	TM445586	0	10	org-LS	10YR4/3						non-calcareo	level	2				I	1	-81.3	-77.6	4	4	3b	2	1	Droughtiness			**4**
Golf Course		10	25	LmS	10YR4/4						non-calcareous																		
				Stones																									
S17	TM445586	0	10	org-LS	10YR4/3						non-calcareo	level	10	6	2		I	1	-66.8	-63.2	4	4	3a	2	2	Droughtiness			**4**
Golf Course		10	40	LmS	10YR4/4						non-calcareous		5																
				Stones																									
S18	TM444586	0	15	LcS	10YR4/3						non-calcareo	level	6	3	2		I	1	-29.8	-51.8	3.2	3b	1	2	1	Droughtiness			**3b**
		15	43	LcS	10YR4/4						non-calcareous		2																
		43	75	LcS	10YR4/6						non-calcareous		2																
		75	120	LmS	10YR5/6						non-calcareous		2																
S19	TM443587	0	28	LcS	10yr4/4						non-calcareo	level	15	10	2		I	1	-30.0	-50.0	3.2	3b	1	2	2	Droughtiness			**3b**
		28	58	LcS	10yr4/4						non-calcareous		3																
		58	65	LmS	10yr3/6						non-calcareous		5																
		65	120	IMP																									
S20	TM442588	0	22	LcS	10YR4/4						non-calcareo	level	7	2	2		I	1	-28.3	-48.9	3.2	3b	1	2	1	Droughtiness			**3b**
		22	44	LcS	10YR4/3						non-calcareous																		
		44	63	LmS	10YR5/4						non-calcareous																		
		63	120	IMP																									
S21	TM442589	0	32	LcS	10yr4/2						non-calcareo	level	10	8	2		I	1	-34.1	-52.8	3.2	3b	1	2	2	Droughtiness			**3b**
		32	47	LcS	10yr4/2						non-calcareous		3	1															
		47	82	LcS	10yr4/3						non-calcareous		2																
		82	120	mS	10yr5/8						non-calcareous																		
S22	TM441589	0	23	LcS	10YR4/4						non-calcareo	level	3	2	1		I	1	-28.2	-48.3	3.2	3b	1	2	1	Droughtiness			**3b**

		23	47	LcS	10YR4/3	non-calcareous		3														
		47	66	LmS	10YR5/4	non-calcareous		2														
		66	88	LmS	10YR4/6	non-calcareous		2														
		88	120	LmS	10YR5/6	non-calcareous		2														
S23	TM440590	0	34	LmS	10yr4/2	non-calcareo	level	7	5	1		I	1	-35.1	-52.7	3.2	3b	1	2	1	Droughtiness	**3b**
		34	62	mS	10yr5/6	non-calcareous		1														
		62	120	IMP																		
				IMP																		
S24	TM439590	0	25	LmS	10yr4/2	non-calcareo	level	2	1			I	1	27.7	-24.9	3.1	3a	1	2	1	Droughtiness	**3a**
		25	42	fS	10yr5/8	non-calcareous		3														
		42	120	IMP																		
S25	TM438590	0	26	LcS	10YR4/4	non-calcareo	level	3	2	1		I	1	-3.9	-39.5	3.2	3b	1	2	1	Droughtiness	**3b**
		26	50	LmS	10YR4/6	non-calcareous		3														
		50	120	IMP																		
S26	TM437591	0	20	LcS	10YR4/4	non-calcareo	level	7	3	2		I	1	-21.2	-44.9	3.2	3b	1	2	1	Droughtiness	**3b**
		20	50	LcS	10YR4/4	non-calcareous		3														
		50	120	IMP																		
S27	TM436591	0	32	LmS	10yr4/2	non-calcareo	level	10	7	1		I	1	-1.0	-36.9	3.2	3b	1	2	2	Droughtiness	**3b**
		32	45	LmS	10yr4/4	non-calcareous		2														
		45	120	IMP																		
S28	TM436592	0	34	LmS	10yr4/2	non-calcareo	level	10	5	2		I	1	-0.7	-36.5	3.2	3b	1	2	1	Droughtiness	**3b**
		34	45	LmS	10yr4/2	non-calcareous																
		45	120	IMP																		
S29												I		0.0	0.0	0	0		1	1		**5**
Scoped Out																						
S30	TM434593	0	22	LcS	10YR4/4	non-calcareo	level	3	2	1		I	1	-3.9	-39.8	3.2	3b	1	2	1	Droughtiness	**3b**
		22	50	LmS	10YR4/6	non-calcareous		3														
		50	120	IMP																		
S31	TM434592	0	22	LmS	10yr4/2	non-calcareo	level	2		1		I	1	37.7	-20.2	3.1	3a	1	2	1	Droughtiness	**3a**
		22	52	LfS	10yr5/8	non-calcareous																
		52	120	IMP																		
S32	TM433593	0	24	LcS	10YR4/4	non-calcareo	level	3	2	1		I	1	-3.8	-39.6	3.2	3b	1	2	1	Droughtiness	**3b**
		24	48	LmS	10YR4/6	non-calcareous		2			1											
		48	120	IMP																		
S33	TM433593	0	27	LmS	10yr4/2	non-calcareo	level	2	1			I	1	36.4	-21.6	3.1	3a	1	2	1	Droughtiness	**3a**
		27	42	LfS	10yr4/6	non-calcareous					2											
		42	120	IMP																		
S34	TM432594	0	23	LcS	10YR4/3	non-calcareo	level	2	1	1		I	1	-20.1	-44.0	3.2	3b	1	2	1	Droughtiness	**3b**
		23	43	LcS	10YR5/4	non-calcareous		2														
		43	120	IMP																		
S35												I		0.0	0.0	0	0		1	1		**5**
Scoped Out																						
S36	TM431594	0	21	LcS	10YR4/3	non-calcareo	level	7	4	2		I	1	-31.5	-54.3	3.2	3b	1	2	1	Droughtiness	**3b**
		21	38	LcS	10YR4/3	non-calcareous		3			1											
		38	50	LcS	10YR5/3	non-calcareous		2			1											
		50	120	IMP																		
S37	TM430595	0	25	LcS	10yr4/2	non-calcareo	level	5	2	1		I	1	-28.3	-49.0	3.2	3b	1	2	1	Droughtiness	**3b**
		25	37	LmS	10yr4/2	non-calcareous		2														
		37	40	LmS	10yr4/3	non-calcareous																
		40	120	IMP																		
S38	TM430595	0	28	LmS	10yr4/2	non-calcareo	level	7	3	1		I	1	-27.7	-45.3	3.2	3b	1	2	1	Droughtiness	**3b**
		28	49	LmS	10yr4/3	non-calcareous		2														
		49	60	mS	10yr5/6	non-calcareous					2											
		60	120	IMP																		
S39	TM429596	0	21	LmS	10YR4/3	non-calcareo	level	7	3	1		I	1	-25.7	-46.5	3.2	3b	1	2	1	Droughtiness	**3b**
		21	33	LmS	10YR4/4	non-calcareous		1			1											
		33	50	LmS	10YR4/4	non-calcareous		3			1											
		50	120	IMP																		
S40-S65																						
Scoped Out																						
S66	TM424612	0	32	LcS	10yr4/2	non-calcareo	level	5	3			I	1	-33.8	-51.8	3.2	3b	1	2	1	Droughtiness	**3b**
		32	48	LmS	10yr4/2	non-calcareous		1														
		48	65	mS	10yr5/6	non-calcareous		4														
		65	120	IMP																		
S67	TM423613	0	25	LcS	10YR4/2	non-calcareo	level	7	3	1		I	1	-27.0	-48.4	3.2	3b	1	2	1	Droughtiness	**3b**
		25	56	LcS	10yr4/3	non-calcareous		1														
		56	72	LcS	5YR3/4	non-calcareous		1														
		72	120	LmS	10YR5/6	non-calcareous		1														
S68	TM422613	0	31	LcS	10yr4/2	non-calcareo	level	7	5	2		I	1	-33.8	-51.6	3.2	3b	1	2	1	Droughtiness	**3b**
		31	47	LmS	10yr4/3	non-calcareous		1														
		47	52	mS	10yr5/6	non-calcareous		3														
		52	120	IMP																		
S69	TM421614	0	23	LcS	10YR4/3	non-calcareo	level	7	3	1		I	1	-31.5	-54.2	3.2	3b	1	2	1	Droughtiness	**3b**
		23	35	LcS	10YR4/4	non-calcareous		3														
		35	70	LcS	10YR4/6	non-calcareous		3														
		70	120	IMP																		
S70	TM420614	0	32	cSL	10yr4/2	non-calcareo	level	10	7	1		I	1	-9.1	-28.2	3.1	3a	1	1	2	Droughtiness	**3a**
		32	65	LcS	10yr4/2	non-calcareous		2														
		65	75	LmS	5yr3/4	very slightly calcareous		1														
		75	120	IMP																		
S71	TM419614	0	26	LcS	10YR4/3	non-calcareo	level	5	3	1	1	I	1	-22.7	-43.3	3.2	3b	1	2	1	Droughtiness	**3b**
		26	53	LmS	10YR4/4	non-calcareous		2			1											
		53	70	LmS	10YR4/6	non-calcareous		2			1											
		70	120	IMP																		
S72	TM418614	0	34	mSL	10yr4/4	very slightly c gently sloping		15	10	5		I	1	-12.0	-17.5	3.1	3a	1	1	2	Droughtiness	**3a**

		34	45	LmS	10yr4/4				non-calcareous																		
		45	52	LfS	10yr5/4				non-calcareous																		
		52	63	SCL	10yr5/6				very slightly calcareous		3																
		63	84	SCL	10yr5/8				slightly calcareous																		
		84	91	LmS	10yr6/8				non-calcareous																		
		91	120	LfS	10yr6/8				non-calcareous																		
S73	TM417614	0	18	LcS	10YR4/4				non-calcareo	level	7	3	1		I	1	-31.3	-53.9	3.2	3b	1	2	1	Droughtiness			**3b**
		18	32	LcS	10YR5/4				non-calcareous		3																
		32	50	LcS	10YR5/6				non-calcareous		3																
		50	120	IMP																							
S74	TM416614	0	27	LmS	10yr4/4				non-calcareo	level	5	2	1		I	1	-1.4	-42.9	3.2	3b	1	2	1	Droughtiness			**3b**
		27	49	LmS	10y4/4				non-calcareous																		
		49	70	mS	10yr5/6				non-calcareous																		
		70	85	SCL	10yr5/6				non-calcareous																		
		85	120	SC	10yr5/6	10YR6/8	5	common	very slightly calcareous		3																
S75	TM415614	0	20	LcS	10YR4/3				non-calcareo	level	7	3	1		I	1	-37.6	-55.0	4	4	1	2	1	Droughtiness			**4**
		20	39	LcS	10YR4/3				non-calcareous		1																
		39	84	mS	10YR6/6				non-calcareous		2																
		84	120	mS	10YR7/6				non-calcareous		1																
S76	TM414614	0	39	LmS	10yr4/4				non-calcareo	level	5	2	1		I	1	-18.3	-33.8	3.2	3b	1	2	1	Droughtiness			**3b**
		39	67	LmS	10yr5/4				non-calcareous																		
		67	120	mS	10yr5/6				non-calcareous		2																
S77	TM413614	0	23	LmS	10YR5/3				non-calcareo	level	5	3	2		I	1	-32.9	-50.4	3.2	3b	1	2	1	Droughtiness			**3b**
		23	36	LmS	10YR5/3				non-calcareous		2																
		36	86	mS	10YR6/6				non-calcareous		1																
		86	120	mS	10YR7/6				non-calcareous		1																
S78	TM412614	0	18	LmS	10YR5/3				non-calcareo	level	7	4	2		I	1	-26.2	-46.9	3.2	3b	1	2	1	Droughtiness			**3b**
		18	28	LmS	10YR5/4				non-calcareous		3																
		28	40	LmS	10YR5/4				non-calcareous		3																
		40	120	IMP																							
S79	TM411614	0	29	LmS	10yr4/4				non-calcareo	level	5	3			I	1	2.7	-33.1	3.2	3b	1	2	1	Droughtiness			**3b**
		29	50	LmS	10yr4/3				non-calcareous																		
		50	120	IMP																							
S80	TM410614	0	32	LmS	10yr4/4				non-calcareo	level	6	2	1		I	1	2.8	-32.9	3.2	3b	1	2	1	Droughtiness			**3b**
		32	55	LmS	10yr4/3				non-calcareous																		
		55	120	IMP																							
S81	TM409614	0	18	LmS	10YR5/3				non-calcareo	level	7	3	1		I	1	8.1	-29.1	3.1	3a	1	2	1	Droughtiness			**3a**
		18	52	LmS	10YR5/4				non-calcareous		2																
		52	65	SCL	10YR5/4				non-calcareous		3																
		65	120	IMP																							
S82	TM408614	0	19	LmS	10YR4/4				non-calcareo	level	10	4	1		I	1	-31.3	-48.4	3.2	3b	1	2	1	Droughtiness			**3b**
		19	34	LmS	10YR4/4				non-calcareous		2																
		34	56	LmS	7.5YR5/4				non-calcareous		3																
		56	70	mS	10YR5/6				non-calcareous		2																
		70	120	IMP																							
S83	TM409614	0	32	LmS	10yr3/4				non-calcareo	gently sloping	7	3	1		I	1	-24.0	-39.9	3.2	3b	1	2	1	Droughtiness			**3b**
		32	49	LmS	10yr3/4				non-calcareous		2																
		49	72	LmS	10yr4/6				non-calcareous																		
		72	90	mS	10yr5/8				non-calcareous																		
		90	120	mS	2.5y6/8				non-calcareous																		
S84	TM409614	0	31	LmS	10yr4/3				non-calcareo	level	4	2	1		I	1	3.2	-32.5	3.2	3b	1	2	1	Droughtiness			**3b**
		31	60	LmS	10yr4/5				slightly calcareous		1			1													
		60	120	IMP																							
S85	TM410613	0	29	LmS	10yr4/4				non-calcareo	level	10	4	1		I	1	34.5	-23.3	3.1	3a	1	2	1	Droughtiness			**3a**
		29	45	LfS	10yr4/4				non-calcareous		5																
		45	120	IMP																							
S86	TM410613	0	18	LmS	10YR4/4				non-calcareo	level	10	4	1		I	1	0.8	-34.9	3.2	3b	1	2	1	Droughtiness			**3b**
		18	38	LmS	10YR4/4				non-calcareous		3																
		38	120	IMP																							
S87	TM410612	0	20	LmS	10YR5/3				non-calcareo	level	10	4	1		I	1	-27.6	-45.4	3.2	3b	1	2	1	Droughtiness			**3b**
		20	51	LmS	7.5YR5/4				non-calcareous		3																
		51	65	mS	10YR5/4				non-calcareous		4																
		65	120	IMP	10YR5/6																						
S88	TM411612	0	28	mSL	10yr4/4				non-calcareo	level	5	4	1		I	1	91.3	19.4	1	1	1	1	1	None			**1**
		28	45	fSL	10yr4/3				non-calcareous																		
		45	120	IMP																							
S89	TM411612	0	22	LmS	10YR4/4				non-calcareo	level	10	4	1		I	1	17.5	-26.4	3.1	3a	1	2	1	Droughtiness			**3a**
		22	38	LmS	10YR4/3				non-calcareous		3																
		38	45	mSL	10YR4/3				very calcareous		2			10													
		45	120	IMP																							
S90	TM412613	0	29	mSL	10yr4/4				non-calcareo	level	15	10	2		I	1	45.4	-8.6	2	2	1	1	2	Droughtiness	Stoniness		**2**
		29	55	mSL	10yr4/4				non-calcareous		5	1															
		55	120	IMP																							
S91	TM413613	0	24	LmS	10YR5/3				non-calcareo	level	7	3	1		I	1	-23.5	-44.4	3.2	3b	1	2	1	Droughtiness			**3b**
		24	38	LmS	10YR5/4				non-calcareous		2																
		38	62	LmS	10YR5/6				non-calcareous		3																
		62	120	IMP																							
S92																											
Scoped Out																											
S93	TM412612	0	36	mSL	10yr4/4				non-calcareo	level	15	10	2		I	1	19.2	-15.9	3.1	3a	1	1	2	Droughtiness			**3a**
		36	95	SC	10yr4/6				very slightly calcareous		3	1															
		95	120	SC	10yr5/6				moderately calcareous		4			3													
S94	TM411611	0	18	LmS	10YR5/3				non-calcareo	level	10	5	1		I	1	0.4	-35.4	3.2	3b	1	2	1	Droughtiness			**3b**
		18	40	LmS	10YR5/3				non-calcareous		4																
		40	120	IMP																							
S95																											

Scoped Out																															
S96	TM411612	0	25	mSL	10yr4/4					non-calcareo	level	10	7	2		I	1	50.4	-3.5	2	2	1	1	2	Droughtiness	Stoniess		**2**	
		25	55	mSL	10yr4/4					non-calcareous																					
		55	120	IMP																											
S97	TM411611	0	34	mSL	10yr4/3					non-calcareo	level	7	3	1		I	1	25.2	-11.5	3.1	3a	1	1	1	Droughtiness			**3a**	
		34	55	SCL	10yr5/6					non-calcareous		3																			
		55	75	SC	10yr4/6					non-calcareous																					
		75	95	SC	10yr6/4					very calcareous					5																
		95	120	IMP																											
S98																															
Scoped Out																															
S99	TM409612	0	25	LmS	10yr4/4					non-calcareo	level	10	7	1		I	1	1.0	-34.9	3.2	3b	1	2	2	Droughtiness			**3b**	
		25	42	LmS	10yr4/6					non-calcareous																					
		42	120	IMP																											
S100	TM408612	0	21	LmS	10YR5/4					non-calcareo	level	10	5	1		I	1	-24.0	-44.9	3.2	3b	1	2	1	Droughtiness			**3b**	
		21	38	LmS	10YR5/4					non-calcareous		2																			
		38	55	LmS	10YR5/6					non-calcareous		3																			
		55	120	IMP																											
S101	TM407612	0	31	LmS	10yr4/4					non-calcareo	level	15	10	2		I	1	-1.7	-37.7	3.2	3b	1	2	2	Droughtiness			**3b**	
		31	65	LmS	10yr4/5					non-calcareous		4																			
		65	120	IMP																											
S102	TM406612	0	18	LmS	10YR5/4					non-calcareo	level	10	4	2		I	1	-25.1	-45.8	3.2	3b	1	2	1	Droughtiness			**3b**	
		18	32	LmS	10YR5/4					non-calcareous		2																			
		32	45	LmS	10YR5/6					non-calcareous		3																			
		45	120	IMP																											
S103																															
Scoped Out																															
S104	TM404612	0	35	LmS	10yr4/4					non-calcareo	level	5	2	1		I	1	8.8	-30.2	3.2	3b	1	2	1	Droughtiness			**3b**	
		35	61	LmS	10yr4/3					non-calcareous		4																			
		61	120	SC	10yr4/6					non-calcareous																					
S105	TM404612	0	22	LmS	10YR5/3					non-calcareo	level	3	2			I	1	11.3	-25.0	3.1	3a	1	2	1	Droughtiness			**3a**	
		22	46	LmS	10YR5/3					non-calcareous		1																			
		46	68	SCL	10YR5/6					non-calcareous		1																			
		68	120	SCL	10YR6/6					non-calcareous		1																			
S106	TM403612	0	20	LmS	10YR5/4					non-calcareo	level	7	4			I	1	-21.3	-41.9	3.2	3b	1	2	1	Droughtiness			**3b**	
		20	41	LmS	10YR5/4					non-calcareous		2																			
		41	50	LmS	7.5YR5/4					non-calcareous		3																			
		50	120	IMP																											
S107	TM402612	0	22	LmS	10YR5/3					non-calcareo	level	3	2			I	1	-21.7	-38.4	3.2	3b	1	2	1	Droughtiness			**3b**	
		22	57	LmS	10YR5/4					non-calcareous		1																			
		57	120	mS	10YR5/6					non-calcareous		1																			
S108	TM401611	0	27	LmS	10yr4/4					non-calcareo	level	15	10	3		I	1	-0.1	-35.7	3.2	3b	1	2	2	Droughtiness			**3b**	
		27	50	LmS	10yr4/6					non-calcareous		3																			
		50	120	IMP																											
S109	TM408615	0	32	mSL	10yr4/3					non-calcareo	level	10	6	1		I	1	12.2	-23.5	3.1	3a	1	1	2	Droughtiness			**3a**	
		32	55	LmS	10yr4/6					non-calcareous		4																			
		55	120	IMP																											
S110	TM408616	0	27	mSL	10YR5/2					very slightly c	level	5	2	1		I	1	28.3	-8.6	2	2	1	1	1	Droughtiness			**2**	
		27	38	mSL	10YR5/3					non-calcareous		2																			
		38	55	SC	10YR5/6					non-calcareous		3																			
		55	70	SC	10YR6/8					non-calcareous		4																			
		70	120	IMP																											
S111	TM408616	0	28	fSL	10yr4/4					non-calcareo	gently sloping	7	3	1		I	1	37.2	3.2	2	2	1	1	1	Droughtiness			**2**	
		28	46	fSL	10yr4/4					non-calcareous		3																			
		46	75	LfS	10yr4/6					non-calcareous		4																			
		75	87	SCL	10yr5/6					moderately calcareous					2																
		87	120	C	2.5y5/6					very calcareous					5																
S112	TM407617	0	25	mSL	10YR5/2					non-calcareo	level	5	2	1		I	1	-12.5	-33.0	3.2	3b	1	1	1	Droughtiness			**3b**	
		25	38	LmS	10YR5/2					non-calcareous		3																			
		38	50	LmS	10YR5/6					non-calcareous		5																			
		50	120	IMP																											
S113	TM407618	0	26	LmS	10YR5/3					non-calcareo	level	5	3			I	1	-31.7	-49.4	3.2	3b	1	2	1	Droughtiness			**3b**	
		26	38	LmS	10YR5/3					non-calcareous		3																			
		38	60	mS	10YR5/6					non-calcareous		5																			
		60	120	IMP																											
S114 -S117																															
Scoped Out																															
S118	TM402621	0	34	LmS	10yr4/2					non-calcareo	level	5	3	1		I	1	-22.8	-40.0	3.2	3b	1	2	1	Droughtiness			**3b**	
		34	58	LmS	10yr4/6					non-calcareous		2																			
		58	120	mS	2.5y5/6					non-calcareous																					
S119	TM401621	0	26	LmS	10YR4/3					non-calcareo	level	6	3	2		I	1	-29.7	-47.2	3.2	3b	1	2	1	Droughtiness			**3b**	
		26	45	LmS	10YR4/3					non-calcareous		5																			
		45	120	mS	10YR7/6					non-calcareous		1																			
S120	TM402623	0	28	LmS	10yr4/4					non-calcareo	level	5	2	1		I	1	-29.2	-46.6	3.2	3b	1	2	1	Droughtiness			**3b**	
		28	37	LmS	10yr4/4					non-calcareous																					
		37	53	LmS	10yr4/6					non-calcareous																					
		53	62	mS	10yr5/6					non-calcareous		5																			
		62	120	mS	2.5y5/6					non-calcareous																					
S121 -S166																															
Excluded- SPR																															
S167	TM391622	0	25	mCL	10YR4/2				Yes	57	non-calcareo	gently sloping	11	6	2		II	2	14.5	-6.3	2	2	1	1	2	Droughtiness	Stoniness	Wetness	**2**	
		25	39	mCL	10YR4/2						non-calcareous		3																		
		39	57	C	2.5Y5/6	)YR6/8;10YR6	5	common			very slightly calcareous																				
		57	63	C	2.5Y6/4	)YR6/8;10YR6	40	many			very slightly calcareous																				
		63	80	C	2.5Y6/4	)YR6/8;10YR6	40	many			very calcareous																				
		80	120	IMP																											

S168	TM390622	0	34	hCL	10yr3/3				Yes	52	non-calcareo	gently sloping	10	7	1		II	3a	13.4	-8.4	2	2	1	1	2	Wetness		**3a**
		34	45	C	2.5y5/4						very slightly calcareous		2																
		45	120	C	2.5y5/4	!.5y6/4;2.5y6/	40	many			very calcareous					15													
S169 -S191																													
Scoped Out																													
S192-S204																													
Excluded- SPR																													
S205	TM407615	0	32	hCL	10yr3/3				Yes	81	non-calcareo	gently sloping	2	1			I	2	10.8	-8.6	2	2	1	1	1	Droughtiness	Wetness	**2**
		32	45	hCL	10yr3/3						non-calcareous		2																
		45	81	C	2.5y4/4	!.5y5/6; 2.5y6/	30	many			very slightly calcareous		3																
		81	120	C	2.5y4/4	!.5y5/6; 2.5y6/	35	many			very calcareous		1			15													
S206	TM407615	0	27	mCL	10YR4/2						non-calcareo	level	7	4	1		I	1	6.7	-13.1	3.1	3a	1	1	1	Droughtiness		**3a**
		27	39	mCL	10YR4/2						non-calcareous		2																
		39	58	C	2.5Y5/4	0YR5/8;2.5Y6/	30	many			moderately calcareous		2																
		58	60	C	2.5Y5/4	0YR5/8;2.5Y6/	30	many			very calcareous		2			10													
		60	120	IMP																									
S207	TM407616	0	34	hCL	10yr3/3				Yes	60	non-calcareo	gently sloping	2	1			II	3a	9.4	-10.8	3.1	3a	1	1	1	Droughtiness	Wetness	**3a**
		34	60	C	10yr4/6	0yr5/8; 10yr6/	25	many			very slightly calcareous																		
		60	120	C	2.5y5/4	0yr5/8; 10yr6/	40	many			very calcareous					20													
S208	TM407616	0	18	hCL	10YR4/3				Yes	60	non-calcareo	level	25	10	5		II	3a	-1.5	-22.8	3.1	3a	1	1	2	Droughtiness	Wetness	**3a**
		18	37	hCL	10YR4/3						very calcareous		2			5													
		37	59	C	2.5Y5/4	)YR6/8;10YR6	20	common			very calcareous		3			2													
		59	70	C	2.5y5/4	)YR6/8;10YR6	50	very many			very calcareous		3			40													
		70	120	IMP																									
S209	TM406616	0	38	hCL	10yr3/3				Yes	40	non-calcareo	level	7	2			II	3a	8.8	-11.6	3.1	3a	1	1	1	Droughtiness	Wetness	**3a**
		38	2	C	2.5y5/2	2.5y6/8	15	common			non-calcareous		2																
		2	120	C	2.5y5/2	2.5y6/8	20	common			very calcareous					15													
S210	TM406617	0	34	hCL	10yr3/3						non-calcareo	level	8	3	1		I	2	5.8	-13.8	3.1	3a	1	1	1	Droughtiness		**3a**
		34	45	C	10yr4/6	7.5yr4/6	10	common			non-calcareous																		
		45	120	IMP																									
S211	TM407617	0	35	hCL	10yr3/3				Yes	46	non-calcareo	level	15	8	1		II	3a	1.6	-19.2	3.1	3a	1	1	2	Droughtiness	Wetness	**3a**
		35	46	C	10yr4/6	0yr6/8: 10yr6/	20	common			very slightly calcareous		2																
		46	120	C	2.5y5/4	2.5y6/1	40	many			very calcareous					20													
S212	TM408616	0	29	hCL	10YR4/2				Yes	40	non-calcareo	level	12	7	1		II	3a	4.0	-15.5	3.1	3a	1	1	2	Droughtiness	Wetness	**3a**
		29	39	hCL	10YR4/2						non-calcareous		2																
		39	65	C	2.5Y5/4	/1;10YR6/8;7.!	40	many			non-calcareous		2																
		65	77	C	2.5Y5/4	)YR7/1;10YR6	40	many			very calcareous		2			7													
		77	90	C	2.5Y6/4	)YR7/1;10YR6	40	many			very calcareous		3			50													
		90	120	IMP																									
S213	TM407617	0	33	hCL	10yr4/4						very slightly c	level	7	5	1		I	2	5.6	-14.6	3.1	3a	1	1	1	Droughtiness		**3a**
		33	55	C	10yr5/6	.5yr4/6: 2.5y5	15	common			non-calcareous		2																
		55	120	C	10yr5/6						very calcareous					15													
S214	TM407618	0	28	hCL	2.5Y4/4				Yes	50	slightly calca	level	15	8	2		II	2	2.2	-18.3	3.1	3a	1	1	2	Droughtiness		**3a**
		28	38	hCL	2.5Y4/4						moderately calcareous		2																
		38	50	C	2.5Y5/4	)YR5/6;10YR6	20	common			very calcareous		2			2													
		50	60	C	2.5Y5/4	)YR5/6;10YR6	40	many			very calcareous		3			25													
		60	120	IMP																									
S215	TM406619	0	22	hCL	10YR4/3						moderately ca	level	10	4	2		I	2	26.8	-7.9	2	2	1	1	1			**2**
		22	32	hCL	10YR4/3						moderately calcareous		5																
		32	50	hCL	10YR5/6						very calcareous		5			5													
		50	120	IMP																									
S216	TM405619	0	35	hCL	10yr4/4						non-calcareo	level	5	3	1		I	2	5.8	-14.0	3.1	3a	1	1	1	Droughtiness		**3a**
		35	78	C	10yr4/6						non-calcareous		2																
		78	120	C	10yr5/6						very calcareous		1			10													
S217																													
Scoped Out																													
S218	TM403620	0	23	mSL	10yr4/4						non-calcareo	level	6	4			I	1	62.3	10.3	1	1	1	1	1	None		**1**
		23	45	fSL	10yr5/4						non-calcareous		2																
		45	60	fSL	10yr4/6						slightly calcareous																		
		60	120	IMP																									
S219	TM402621	0	23	SCL	10YR5/2						non-calcareo	level	5	3	1		I	1	24.6	-12.3	3.1	3a	1	1	1	Droughtiness		**3a**
		23	35	SCL	10YR5/2						non-calcareous		3																
		35	50	SCL	10YR5/3						very calcareous		3			2													
		50	120	IMP																									
S220	TM401621	0	24	SCL	10YR4/2						non-calcareo	level	3	2	1		I	1	7.6	-8.3	2	2	1	1	1	Droughtiness		**2**
		24	47	SCL	10YR4/3						non-calcareous		1																
		47	68	C	10YR4/4	)YR5/8;10YR5	2	common			very slightly calcareous																		
		68	120	C	10YR4/4	)YR5/8;10YR5	5	common			very calcareous		1			8													
S221	TM401622	0	24	SCL	10YR4/2						non-calcareo	level	3	2	1		I	1	25.8	-10.5	3.1	3a	1	1	1	Droughtiness		**3a**
		24	48	SCL	10YR4/3						non-calcareous		2																
		48	100	SCL	10YR5/4	)YR6/8;10YR6	4	common			non-calcareous		2																
		100	120	IMP																									
S222	TM402623	0	26	SCL	10YR4/2				Yes	78	very slightly c	level	6	3	2		I	1	25.6	-11.1	3.1	3a	1	1	1	Droughtiness		**3a**
		26	40	SCL	10YR4/3						moderately calcareous		1																
		40	78	SCL	10YR5/4	)YR6/8;10YR6	6	common			very slightly calcareous		1																
		78	120	SCL	10YR5/4	)YR6/8;10YR6	18	common			very slightly calcareous																		
S223 -S224																													
Scoped Out																													
S225	TM402624	0	30	SCL	7.5YR4/4				Yes	50	moderately ca	level	8	5	1	1	II	2	5.1	-15.1	3.1	3a	1	1	1	Droughtiness		**3a**
		30	50	C	10YR6/3	5YR7/1, 7.5YR	6	common			moderately calcareous		1			1													
		50	120	C	10YR6/2	7.5YR7/1	25	many			very calcareous		2			15													
S226	TM403625	0	25	mSL	10YR4/3						non-calcareo	level	10	6	2		I	1	47.3	-6.8	2	2	1	1	2	Droughtiness	Stoniness	**2**
		25	43	mSL	10YR4/4						non-calcareous		5																
		43	60	mSL	7.5YR4/4	5YR7/1, 7.5YR	3	common			non-calcareous		5																

		60	120	IMP																								
S227	TM402625	0	36	mSL	10YR4/4						non-calcareo	level	12	8	2		I	1	21.7	-14.9	3.1	3a	1	1	2	Droughtiness		**3a**
		36	90	SC	7.5YR4/6	5YR7/1, 7.5YR	6	common			non-calcareous		3															
		90	120	IMP																								
S228	TM401624	0	35	SCL	7.5YR4/4				Yes	78	very slightly c	level	8	4	2		I	1	6.5	-11.7	3.1	3a	1	1	1	Droughtiness		**3a**
		35	60	C	10YR6/3	5YR7/1, 7.5YR	8	common			very calcareous		1			6												
		60	120	C	10YR6/2	7.5YR7/1	18	common			very calcareous		1			15												
S229	TM401623	0	30	SCL	7.5YR4/4				Yes	55	slightly calca	level	8	4	2		II	2	5.6	-13.2	3.1	3a	1	1	1	Droughtiness		**3a**
		30	55	C	10YR6/3	5YR7/1, 7.5YR	6	common			slightly calcareous		2															
		55	120	C	10YR6/2	7.5YR7/1	35	many			very calcareous		3			20												
S230	TM400622	0	33	SCL	7.5YR4/4				Yes	75	very slightly c	level	3				I	1	9.7	-5.6	2	2	1	1	1	Droughtiness		**2**
		33	75	C	10YR6/3	5YR7/1, 7.5YR6/8					very calcareous		2	2	1	5												
		75	120	C	10YR6/2	7.5YR7/1	20	common			very calcareous		5			20												
S231	TM398620	0	18	org-HCL	10YR3/3				Yes	58	non-calcareo	level	3	2	1		II	2	23.7	4.4	2	2	1	1	1	Droughtiness	Wetness	**2**
		18	42	hCL	10YR4/3						very slightly calcareous		1															
		42	58	C	10YR6/3	R7/1, 7.5YR6/8	15	common			very calcareous		2			5												
		58	120	C	10YR6/2	7.5YR7/1	15	common			very calcareous		5			20												
S232	TM398621	0	29	hCL	10YR4/3				Yes	45	non-calcareo	level	3	2	1		II	3a	6.0	-13.1	3.1	3a	1	1	1	Droughtiness	Wetness	**3a**
		29	52	C	10YR6/4	YR7/1, 7.5YR	20	common			slightly calcareous		1															
		52	88	C	10YR6/3	YR7/1, 7.5YR	15	common			very calcareous		1															
		88	120	C	5YR6/4	0YR7/1, 5YR6/	15	common			very calcareous		2			10												
S233	TM398621	0	34	hCL	10YR4/3						slightly calca	level	5	3	2		I	2	-23.8	-11.9	3.2	3b	1	1	1	Droughtiness		**3b**
Scoped Out		34	60	C	10YR6/8	R7/1, 7.5YR6/8	5	common			slightly calcareous		1															
		60	75	C	10YR6/6	R7/1, 7.5YR6/8	10	common			very calcareous		1															
		75	120	ilk or chalk stones																								
S234																												
Scoped Out																												
S235	TM399625	0	25	C	2.5Y3/3						moderately ca	level	3	2			I	2	-41.5	-45.1	3.2	3b	1	1	1	Droughtiness		**3b**
		25	39	C	10YR6/6						moderately calcareous		1															
		49	49	C	2.5Y5/4	5Y6/3; 10YR6/	30	many			moderately calcareous		1															
		80	80	C	2.5Y5/4	5Y6/2; 10YR6/	35	many			moderately calcareous																	
S236	TM400626	0	35	C	10YR4/4				Yes	58	very slightly c	gently sloping	3	2	1		II	3a	4.1	-15.6	3.1	3a	1	1	1	Droughtiness	Wetness	**3a**
		35	53	C	10YR6/6	0YR7/1, 5YR6/	15	common			very slightly calcareous		1															
		53	120	C	10YR6/2	0YR7/1, 5YR6/	20	common			very calcareous		2			10												
S237	TM400626	0	29	org-SCL	10YR3/2						non-calcareo	gently sloping	2	2			I	1	-0.6	-38.5	3.2	3b	1	1	1	Droughtiness		**3b**
		29	100	org-SCL	10YR5/6						non-calcareous		2															
S238	TM400627	0	28	mSL	10YR4/4						non-calcareo	gently sloping	8	3	2		I	1	-8.7	-29.0	3.1	3a	1	1	1	Droughtiness		**3a**
		28	38	mSL	10YR4/4						non-calcareous																	
		38	62	LmS	10YR6/6						non-calcareous																	
		62	120	LmS	10YR7/8						non-calcareous		2															
S239	TM399627	0	35	mSL	10YR4/4						non-calcareo	gently sloping	6	3	2		I	1	18.3	-9.4	2	2	1	1	1	Droughtiness		**2**
		35	75	SCL	10YR6/6						non-calcareous																	
		75	120	C	10YR6/8	R7/1, 5YR6/6,	20	common			non-calcareous																	
S240	TM399625	0	35	hCL	10YR4/4				Yes	50	non-calcareo	gently sloping	5	3	1		II	3a	2.0	-14.7	3.1	3a	1	1	1	Droughtiness	Wetness	**3a**
		35	52	C	10YR6/4	0YR7/1, 5YR6/	15	common			non-calcareous		1															
		52	120	C	10YR6/3	0YR7/1, 5YR6/	15	common			very calcareous		2			10												
S241	TM399624	0	32	hCL	10YR4/4				Yes	42	very slightly c	level	6	3	2		II	3a	4.0	-13.6	3.1	3a	1	1	1	Droughtiness	Wetness	**3a**
		32	69	C	10YR6/3	0YR7/1, 5YR6/6					very slightly calcareous																	
		69	86	LmS	5YR5/4						non-calcareous																	
		86	120	C	10YR6/2	0YR7/1, 5YR6/6					very calcareous		3			5												
S242	TM398623	0	27	SCL	10YR4/3				Yes	55	non-calcareo	level	4	2	1		II	2	11.5	-9.4	2	2	1	1	1	Droughtiness	Wetness	**2**
		27	38	SCL	10YR4/4						non-calcareous																	
		38	68	SC	10YR6/2	0YR7/1, 5YR6/	15	common			very calcareous		2															
		68	120	C	10YR6/3	0YR7/1, 5YR6/	20	common			very calcareous		2			10												
S243	TM398622	0	30	SCL	10YR4/3				Yes	65	non-calcareo	level	4	2	1		II	2	14.3	-7.4	2	2	1	1	1	Droughtiness	Wetness	**2**
		30	55	SCL	10YR6/4	0YR7/1, 5YR6/	10	common			non-calcareous																	
		55	120	C	10YR6/4	0YR7/1, 5YR6/	5	common			very slightly calcareous		2			10												
S244	TM397621	0	29	SCL	10YR4/3				Yes	65	non-calcareo	level	4	2	1		II	2	23.2	-3.6	2	2	1	1	1	Droughtiness	Wetness	**2**
		29	65	C	10YR6/4	0YR7/1, 5YR6/	10	common			non-calcareous																	
		65	85	C	10YR6/4	0YR7/1, 5YR6/	5	common			very slightly calcareous		1															
		85	120	SCL	10YR6/3	0YR7/1, 5YR6/	5	common			very calcareous		1			2												
S245	TM397620	0	28	org-C	2.5Y4/3						non-calcareo	level	4	2			I	1	-0.9	-54.8	3.2	3b	1	1	1	Droughtiness		**3b**
		28	40	org-C	10YR5/6						moderately calcareous					5												
		40	60	org-C	2.5Y5/4	5Y6/3; 10YR6/	10	common			moderately calcareous					10												
		60	80	org-C	2.5Y5/4	10YR5/6; 5Y6/	40	many			very calcareous					15												
S246	TM397619	0	16	mCL	10YR3/3						non-calcareo	level	5	2	1		I	1	8.2	-11.6	3.1	3a	1	1	1	Droughtiness		**3a**
		16	35	mCL	10YR4/3						non-calcareous		1															
		35	47	hCL	10YR6/4						very slightly calcareous		1															
		47	60	C	10YR6/4	5YR7/1, 7.5YR	3	common			very calcareous		2			5												
		60	120	C	10YR6/5	5YR7/1, 7.5YR	3	common			very calcareous		2			15												
S247	TM396620	0	27	hCL							non-calcareo	gently sloping	2				I	2	13.0	-1.6	2	2	1	1	1	Droughtiness	Wetness	**2**
		27	35	SCL							non-calcareous																	
		35	100	hCL							non-calcareous																	
				IMP																								
S248	TM396619	0	27	SCL	10YR3/3						very calcareo	gently sloping	6	3	2	5	I	1	17.6	-19.1	3.1	3a	1	1	1	Droughtiness		**3a**
		27	60	hCL	10YR4/6						very calcareous		2			60												
		60	120	IMP																								
S249	TM396618	0	27	SCL	10YR3/2						very calcareo	gently sloping	6	3	2	3	I	1	12.1	-10.0	3.1	3a	1	1	1	Droughtiness		**3a**
		27	70	C	10YR5/4	0YR5/8;10YR5/	4	common			very calcareous		2			10												
		70	120	IMP																								
S250	TM396617	0	29	LmS	10YR4/3						non-calcareo	level	3	2	1		I	1	22.7	-32.5	3.2	3b	1	2	1	Droughtiness		**3b**
		29	72	LmS	10YR5/4						non-calcareous		0															
		72	120	LfS	10YR5/6						non-calcareous		0															
S251	TM396616	0	30	LmS	10YR4/2						non-calcareo	level	3	2	1		I	1	27.8	-29.6	3.1	3a	1	2	1	Droughtiness		**3a**
		30	58	LmS	10YR4/3						non-calcareous		0															
		58	85	LfS	10YR5/4						non-calcareous		0															

		85	120	LfS	10YR5/6						non-calcareous		0														
S252	TM397621	0	26	hCL	10YR4/3				Yes	65	non-calcareo	level	5	3	2		II	3a	7.2	-11.8	3.1	3a	1	1	1	Droughtiness	Wetness	**3a**
		26	38	hCL	10YR4/4						non-calcareous		1														
		38	66	C	10YR6/4	)YR6/8, 10YR6	2	common			non-calcareous		1														
		66	79	C	10YR6/3	)YR6/8, 10YR6	10	common			slightly calcareous		1														
		79	120	C	10YR6/3	)YR6/8, 10YR6	10	common			very calcareous		2			5											
S253	TM397623	0	29	SCL	10YR4/4				Yes	67	non-calcareo	level	4	2	1		II	2	23.3	-8.5	2	2	1	1	1	Droughtiness	Wetness	**2**
		29	65	SCL	10YR6/4	)YR6/8, 10YR6	2	common			very slightly calcareous		1			1											
		65	130	C	10YR6/3	)YR6/8, 10YR6	10	common			very calcareous		2			15											
S254	TM398624	0	27	org-HCL	2.5Y3/3						moderately c	level	4	2			I	1	50.8	-44.2	3.2	3b	1	1	1	Droughtiness		**3b**
		27	39	org-SC	2.5Y5/6	)YR6/8; 10YR6	20	common			moderately calcareous		3	2													
		39	65	org-C	2.5Y5/4	;Y6/3; 10YR5/	25	many			moderately calcareous		2														
		65	80	org-C	2.5Y5/4	;Y6/2; 10YR5/	30	many			very calcareous					5											
S255	TM398625	0	34	C	10YR4/4				Yes	65	very slightly c	level	3	2	1		II	3a	5.5	-14.6	3.1	3a	1	1	1	Droughtiness	Wetness	**3a**
		34	53	C	10YR6/4	)YR6/8, 10YR6	10	common			very slightly calcareous																
		53	120	C	10YR6/2	)YR6/8, 10YR6	15	common			very calcareous					10											
S256	TM398625	0	30	hCL	10YR4/2				Yes	48	moderately c	level	8	4	3	1	II	2	7.7	-17.2	3.1	3a	1	1	1	Droughtiness		**3a**
		30	50	C	10YR5/4	)YR5/6;10YR5	18	common			moderately calcareous		2			2											
		50	78	C	10YR5/4	)YR6/8;10YR6	25	many			very calcareous		1			12											
		78	95	SCL	10YR5/4	)YR6/8;10YR6	10	common			very calcareous		1			5											
		95	120	C	GLEY15/10Y	10YR5/8	20	common			very calcareous		1			5											
S257	TM399626	0	25	SCL	10YR3/2						non-calcareo	level	6	3	2		I	1	23.9	-11.5	3.1	3a	1	1	1	Droughtiness		**3a**
		25	48	SCL	10YR3/3						non-calcareous		2														
		48	65	SCL	10YR4/4						moderately calcareous		2			1											
		65	95	SCL	10YR4/2						moderately calcareous		2			1											
		95	120	SCL	10YR4/6						moderately calcareous		2			1											
S258	TM399627	0	36	SCL	10YR4/2				Yes	65	non-calcareo	level	8	4	3		II	2	1.9	-17.9	3.1	3a	1	1	1	Droughtiness		**3a**
		36	55	C	10YR5/4	)YR5/6;10YR5	6	common			non-calcareous		2														
		55	78	C	10YR5/4	)YR6/8;10YR6	20	common			very calcareous		1			8											
		78	120	C	GLEY15/10Y	10YR6/8	30	many			very calcareous		1			12											
S259	TM398627	0	32	SCL	10YR4/2				Yes	48	non-calcareo	level	8	5	2		II	2	12.3	-8.8	2	2	1	1	1	Droughtiness	Wetness	**2**
		32	48	C	10YR5/4	)YR5/6;10YR5	5	common			non-calcareous		1														
		48	120	C	10YR5/4	)YR6/8;10YR6	25	many			very calcareous		1			15											
S260	TM396627	0	33	SCL	10YR4/2						very calcareo	level	6	3	2	1	I	1	14.8	-5.7	2	2	1	1	1	Droughtiness		**2**
		33	72	C	10YR5/4	)YR5/6;10YR5	6	common			very calcareous		1			1											
		72	80	C	10YR5/4	)YR6/8;10YR6	15	common			very calcareous		2			8											
		80	120	IMP																							
S261	TM396626	0	35	SCL	10YR4/2				Yes	65	very calcareo	level	5	3	1		II	2	15.5	-5.5	2	2	1	1	1	Droughtiness	Wetness	**2**
		35	58	C	10YR5/4	)YR5/6;10YR5	6	common			very calcareous		1														
		58	80	C	10YR5/4	)YR6/8;10YR6	18	common			very calcareous		2			10											
		80	120	IMP																							
S262	TM396625	0	30	SCL	10YR4/2				Yes	65	non-calcareo	level	8	4	2		II	2	9.5	-11.8	3.1	3a	1	1	1	Droughtiness		**3a**
		30	43	SCL	10YR4/3						non-calcareous		2														
		43	65	SC	10YR4/4	)YR5/6;10YR5	6	common			very calcareous		1			2											
		65	70	C	10YR5/4	)YR6/8;10YR6	18	common			very calcareous		1			12											
		70	120	IMP																							
S263	TM396625	0	35	SCL	10YR4/3						non-calcareo	level	8	4	2		I	1	24.5	-11.6	3.1	3a	1	1	1	Droughtiness		**3a**
		35	90	SC	10YR5/4	)YR5/6;10YR5	6	common			very calcareous		2			8											
		90	120	IMP																							
S264	TM397624	0	33	SCL	10YR4/3				Yes	55	non-calcareo	level	5	2	1		II	2	14.8	-7.6	2	2	1	1	1	Droughtiness	Wetness	**2**
		33	58	SCL	10YR6/4	YR6/8, 10YR6/	10	common			non-calcareous																
		58	120	C	10YR6/3	YR6/8, 10YR6/	20	common			very calcareous		2			10											
S265	TM396623	0	33	SCL	10YR4/3						non-calcareo	level	5	2	1		I	1	22.9	-9.9	2	2	1	1	1	Droughtiness		**2**
		33	50	SCL	10YR6/8						non-calcareous																
		50	60	C	10YR6/4	YR6/8, 10YR6/	5	common			very calcareous		1			10											
		60	120	hCL	10YR6/3	)YR6/8, 10YR6	15	common			very calcareous		2			10											
S266	TM396623	0	28	SCL	10YR4/3				Yes	85	non-calcareo	level	4	2	1		I	1	13.7	-8.2	2	2	1	1	1	Droughtiness		**2**
		28	57	SCL	10YR6/8						non-calcareous																
		57	120	C	10YR6/4	)YR6/8, 10YR6	15	common			very calcareous		3			15											
S267	TM396621	0	31	SCL	10YR4/3						non-calcareo	level	5	2	1		I	1	16.9	-7.9	2	2	1	1	1	Droughtiness		**2**
		31	75	SCL	10YR6/8						non-calcareous																
		75	96	C	10YR6/4	5YR6/6	2	common			slightly calcareous		1			1											
		96	120	C	10YR6/3	10YR6/1	5	common			very calcareous		1			10											
S268	TM395623	0	29	hCL	7.5YR4/3				Yes	39	non-calcareo	level	4	2	1		III	3b	5.5	-13.7	3.1	3a	1	1	1	Wetness		**3b**
		29	52	C	10YR6/8						very slightly calcareous		1														
		52	75	C	10YR6/3	)YR6/8, 10YR6/1					very calcareous		1			5											
		75	120	C	10YR6/2	)YR6/8, 10YR6/1					very calcareous		2			10											
S269	TM396624	0	34	SCL	10YR4/2				Yes	40	moderately c	level	5	2	2	1	II	2	20.4	-8.4	2	2	1	1	1	Droughtiness	Wetness	**2**
		34	85	SC	10YR5/8	)YR6/8, 10YR6	20	common			slightly calcareous		1			1											
		85	120	C	10YR5/8	)YR6/8, 10YR6	25	many			very calcareous		1			10											
S270	TM395625	0	29	SCL	10YR4/2				Yes	55	very calcareo	level	6	3	2	1	II	2	13.9	-7.7	2	2	1	1	1	Droughtiness	Wetness	**2**
		29	38	SCL	10YR4/3						very calcareous		1			1											
		38	55	C	10YR5/4	)YR6/8, 10YR6	8	common			very calcareous		1			2											
		55	70	C	10YR5/6	)YR6/8, 10YR6	20	common			very calcareous		2			12											
		70	120	IMP																							
S271	TM395627	0	29	SCL	10YR4/2				No	53	moderately c	level	15	6	5	2	II	2	3.1	-14.7	3.1	3a	1	1	2	Droughtiness		**3a**
		29	38	SCL	10YR4/3						moderately calcareous		2			1											
		38	53	SC	10YR5/6	)YR6/8, 10YR6	8	common			moderately calcareous		2			1											
		53	64	C	10YR5/6	)YR6/8, 10YR6	18	common			moderately calcareous		2			1											
		64	80	C	10YR5/8	)YR6/8, 10YR6	22	many			very calcareous		3			12											
		80	120	IMP																							
S272	TM394627	0	28	SCL	10YR4/2				Yes	65	very calcareo	level	12	5	4	1	II	2	19.5	-12.4	3.1	3a	1	1	1	Droughtiness		**3a**
		28	42	SCL	10YR4/3						very calcareous		2			1											
		42	65	SC	10YR5/6	)YR6/8, 10YR6	10	common			moderately calcareous		1			1											
		65	85	SC	10YR5/6	)YR6/8, 10YR6	25	many			very calcareous		1			15											
		85	120	LmS	10YR6/8						moderately calcareous		1			1											

S273	TM395626	0	33	hCL	10YR4/2				Yes	48	very slightly c	level	7	3	3		II	3a	6.1	-14.1	3.1	3a	1	1	1	Droughtiness	Wetness		3a
		33	60	C	10YR4/4	)YR6/8, 10YR6	12	common			moderately calcareous		1			2													
		60	70	C	10YR5/4	)YR6/8, 10YR6	20	common			very calcareous		2			20													
		70	120	IMP																										
S274	TM395625	0	28	hCL	2.5Y4/3						moderately ca	level	5	2			I	2	-23.2	-14.9	3.2	3b	1	1	1	Droughtiness			3b
		28	48	C	10YR6/7	)YR5/8; 2.5Y6.	20	common			moderately calcareous		3	2															
		48	80	C	2.5Y6/4	5Y6/3; 10YR5/	25	many			moderately calcareous					5													
S275	TM395624	0	29	hCL	7.5YR4/3				Yes	39	non-calcareo	level	4	2	1		III	3b	5.5	-13.4	3.1	3a	1	1	1	Wetness			3b
		29	52	C	10YR6/8						very slightly calcareous		1																
		52	75	C	10YR6/3	)YR6/8, 10YR6/1					very calcareous		1																
		75	120	C	10YR6/2	)YR6/8, 10YR6/1					very calcareous		2																
S276	TM394624	0	32	hCL	7.5YR4/3				Yes	68	non-calcareo	level	3	2	1		II	3a	6.2	-12.4	3.1	3a	1	1	1	Droughtiness	Wetness		3a
		32	55	C	10YR6/6						very slightly calcareous		2																
		55	79	C	10YR6/3	)YR6/8, 10YR6/1					very calcareous		2			10													
		79	120	C	10YR6/2	)YR6/8, 10YR6/1					very calcareous		5			15													
S277	TM394625	0	35	SCL	10YR4/2				Yes	68	non-calcareo	level	2	1			II	2	29.7	-6.0	2	2	1	1	1	Droughtiness	Wetness		2
		35	72	SC	10YR5/6	)YR6/8, 10YR6	15	common			very slightly calcareous		1			1													
		72	90	SC	10YR5/8	)YR6/8;10YR6	12	common			very calcareous		1			10													
		90	120	IMP																										
S278	TM393626	0	28	org-HCL	10YR4/3						non-calcareo	level	2	1			I	1	54.6	-39.0	3.2	3b	1	1	1	Droughtiness			3b
		28	40	org-SC	10YR5/6	.5Y6/2; 10YR5.	1	few			non-calcareous		2																
		40	76	org-C	2.5Y5/4	5Y6/2; 10YR5/	30	many			non-calcareous		1																
		76	80	org-C	2/5Y6/4	5Y7/2; 10YR6/	35	many			moderately calcareous					3													
S279	TM393627	0	29	SCL	10YR4/4				Yes	55	very slightly c	level	5	2	1		II	2	28.0	-7.5	2	2	1	1	1	Droughtiness	Wetness		2
		29	63	SCL	10YR6/6	5YR6/8, 10YR6	20	common			non-calcareous																		
		63	120	SC	10YR6/3	5YR6/8, 10YR6	20	common			very calcareous					5													
S280	TM392628	0	27	SCL	10YR4/4				Yes	53	very slightly c	level	8	4	2		II	2	5.5	-13.5	3.1	3a	1	1	1	Droughtiness			3a
		27	39	SCL	10YR4/4						very slightly calcareous		1																
		39	55	SCL	10YR6/6	5YR6/8, 10YR6	5	common			non-calcareous		1																
		55	120	C	10YR6/3	5YR6/8, 10YR6	15	common			very calcareous		5			10													
S281	TM392629	0	28	mSL	10YR4/3				Yes	76	non-calcareo	level	6	3	2		I	1	26.5	0.6	2	2	1	1	1	Droughtiness			2
		28	39	mSL	10YR4/3						non-calcareous																		
		39	76	mSL	7.5YR6/4	5YR6/8, 10YR6	2	common			non-calcareous																		
		76	120	C	7.5YR6/2	5YR6/8, 10YR6	15	common			very calcareous		3			15													
S282	TM392630	0	27	mSL	10YR4/3						non-calcareo	level	5	2	1		I	1	31.7	-4.6	2	2	1	1	1	Droughtiness			2
		27	45	mSL	10YR4/3						non-calcareous		1																
		45	70	SCL	10YR6/6	5YR6/8, 10YR6	2	common			non-calcareous		1																
		70	120	IMP																										
S283	TM393631	0	30	SCL	10YR3/3						non-calcareo	level	5	3	2		I	1	33.4	-8.0	2	2	1	1	1	Droughtiness			2
		30	43	SCL	10YR3/3						slightly calcareous		1																
		43	72	SCL	7.5YR6/4						slightly calcareous		1			1													
		72	105	mSL	7.5YR6/4						very calcareous																		
		105	120	C	10YR6/4	5YR6/8, 10YR6	15	common			very calcareous		2			10													
S284	TM395631	0	28	SCL	10YR4/3				Yes	45	non-calcareo	level	6	3	2		II	2	2.1	-17.4	3.1	3a	1	1	1	Droughtiness			3a
		28	39	SCL	10YR4/4						very calcareous		1																
		39	120	C	10YR6/3	5YR6/8, 10YR6	20	common			very calcareous		3			15													
S285	TM397631	0	26	mCL	10YR4/3				Yes	46	non-calcareo	level	8	4	3		II	2	2.0	-17.0	3.1	3a	1	1	1	Droughtiness			3a
		26	37	hCL	10YR4/4						non-calcareous		3																
		37	120	C	10YR6/3	5YR6/8, 10YR6	15	common			very calcareous		5			10													
S286	TM398630	0	35	SCL	7.5YR4/3						non-calcareo	level	3	2	1		I	1	-32.3	-24.1	3.2	3b	1	1	1	Droughtiness			3b
		35	60	SCL	7.5YR5/4						non-calcareous		5																
				IMP									25																
S287	TM400629	0	35	mCL	10YR4/3				Yes	68	non-calcareo	level	2	1			II	2	16.2	-3.3	2	2	1	1	1	Droughtiness	Wetness		2
		35	62	hCL	10YR4/4						non-calcareous		1																
		62	120	C	7.5YR4/4	5YR5/8;7.5YR	20	common			non-calcareous		1																
S288	TM393623	0	30	hCL	2.5Y4/2				Yes	48	very calcareo	level	3	2	1	2	II	2	6.7	-12.8	3.1	3a	1	1	1	Droughtiness			3a
		30	43	C	2.5Y4/3						very calcareous		1			1													
		43	75	C	2.5Y5/3	)YR5/8;10YR5.	18	common			very calcareous					1													
		75	120	C	2.5Y5/4	)YR5/8;10YR5.	25	many			very calcareous					3													
S289	TM392623	0	35	hCL	10YR4/2				Yes	45	very slightly c	level	3	2	1	1	II	3a	8.1	-11.1	3.1	3a	1	1	1	Droughtiness	Wetness		3a
		35	75	C	10YR5/4	)YR5/8;10YR5.	15	common			slightly calcareous		1			2													
		75	120	C	GLEY15/10Y	10YR5/8	25	many			very calcareous		2			25													
S290	TM392622	0	28	hCL	10YR4/2				Yes	45	very calcareo	level	5	3	1	1	II	2	3.7	-15.4	3.1	3a	1	1	1	Droughtiness			3a
		28	75	C	10YR5/4	)YR5/8;10YR5.	15	common			very calcareous		1			1													
		75	120	C	10YR6/4	)YR5/8;10YR5.	25	many			very calcareous		2			15													
S291	TM391622	0	35	hCL	10YR4/2						non-calcareo	gently sloping	4	2	2		I	2	7.2	-12.5	3.1	3a	1	1	1	Droughtiness			3a
		35	74	C	10YR5/4	)YR5/8;10YR5.	6	common			non-calcareous		1			2													
		74	120	C	10YR6/4	)YR5/8;10YR5.	10	common			very calcareous		1			15													
S292	TM390622	0	34	mSL	10YR4/2						non-calcareo	gently sloping	4	3	1		I	1	4.6	-21.2	3.1	3a	1	1	1	Droughtiness			3a
		34	70	LmS	10YR4/4						non-calcareous		3																
		70	120	LcS	10YR5/6						non-calcareous		1																
S293	TM389623	0	34	mSL	10YR4/2						very calcareo	level	2	1			I	1	31.5	-1.7	2	2	1	1	1	Droughtiness			2
		34	90	mSL	10YR4/4						slightly calcareous		0																
		90	120	LmS	10YR4/4						very slightly calcareous		0																
S294 Wood																													
S295	TM387622	0	28	LmS	10YR3/2						non-calcareo	gently sloping	3	2	1		I	1	-26.2	-43.8	3.2	3b	1	2	1	Droughtiness			3b
		28	48	LmS	10YR3/3						non-calcareous		2																
		48	90	LcS	10YR4/4						non-calcareous		5																
		90	120	IMP									35																
S296	TM386622	0	37	mSL	10YR3/3						non-calcareo	gently sloping	3	2	1		I	1	16.5	-19.8	3.1	3a	1	1	1	Droughtiness			3a
		37	70	LmS	10YR4/4						non-calcareous		4																
		70	120	IMP																										
S297	TM386621	0	37	mSL	10YR3/2						non-calcareo	gently sloping	2				I	1	34.1	-17.1	3.1	3a	1	1	1	Droughtiness			3a
		37	68	LmS	10YR4/4						non-calcareous		1																
		68	120	fS	10YR6/8						non-calcareous																		

S298	TM386620	0	30	mSL	10YR3/2		non-calcareo	level	2		I	1	-9.2	-24.2	3.1	3a	1	1	1	Droughtiness	**3a**
		30	49	mSL	10YR3/3		non-calcareous		2												
		49	55	LcS	10YR4/4		non-calcareous		5												
		55	120	IMP					35												

Keys: BNG-British National Grid; mS-medium sand; fS-fine sand; LS-loamy sand; LcS-loamy coarse sand; LmS-loamy medium sand; LfS-Loamy fine sand; SL-sandy loam; cSL-coarse sandy loam; mSL-medium sandy loam; fSL-fine sand loam; SZL-sandy silt loam; cSZL-coarse sandy silt loam; mSZL-medium sandy silt loam; fSZL-fine sandy silt loam; ZL-silt loam; ZCL-silty clay loam; mZCL-medium silty clay loam; hZCL-heavy silty clay loam; CL-clay loam; mCL-medium clay loam; hCL-heavy clay loam; SCL-sandy clay loam; SC-sandy clay; ZC-silty clay; C-clay; MZ-marine light silt; P-peat; PS-peaty sand; SP-sandy peat; LP-loamy peat; PL-peaty loam;

Appendix B Soil Pit Profile Descriptions

B.1 Soil Pit 01

- Slightly stoney and slightly calcareous olive brown sandy clay loam topsoil over light olive brown to light yellowish brown very calcareous clay subsoil.
- Moderately weak medium subangular blocky structure observed in both subsoil horizons.
- Gleying was observed from 61 cm
- Chalky layer identified at approximately 80 cm.

B.2 Soil Pit 02

- Moderately stoney and slightly calcareous dark brown sandy clay loam topsoil over light olive brown very calcareous clay subsoil.
- Strong firm very coarse angular blocky upper subsoil structure over coarse moderate firm angular blocky structure.
- Gleying was observed in the lower subsoil layer from 65 cm

B.3 Soil Pit 03

- Very slightly calcareous slightly stoney dark yellowish brown loamy medium sand topsoil over slightly calcareous strong brown moderately stoney loamy medium and fine sand on top of moderately stoney yellowish brown slightly calcareous sandy clay loam topsoil.
- Very friable weak medium granular upper subsoil to very friable weak coarse granular, over very friable weak fine subangular blocky lower subsoil structure.
- No gleying or SPL observed

B.4 Soil Pit 04

- Slightly stoney non-calcareous dark brown loamy medium sand over moderately stoney non-calcareous very dark brown loamy fine sand down to very stoney strong brown medium sand.
- Friable moderate coarse granular upper subsoil structure to loose single grain structured lower subsoil
- No gleying or SPL observed

B.5 Soil Pit 05

- Non-calcareous very dark greyish brown slightly stoney organic loamy sand topsoil over non-calcareous slightly stoney dark grey to olive brown loamy medium sand down to non-calcareous moderately stoney yellowish brown medium sand.
- Very friable weak granular upper subsoil structure over lower subsoils loose single grain structure.
- No gleying or SPL was observed

Appendix C Predictive ALC Methodology

C.1.1 The predictive ALC mapping has utilised published information on climate, topography, flood risk, geology, soil types and associations, MAFF Provisional ALC (1:250,000) and Defra's Likelihood of BMV map (Defra, 2017) (Defra, 2024).

C.1.2 The data in Table C.1 is structured to follow the sequential approach of the ALC Guidelines accounting for the data featured in Annex A of **Application Document 6.3.2.6.A Appendix 2.6.A Predictive Agricultural Land Classification Report – Suffolk [APP-121].**

Table C.1 Data used in predictive ALC

Data	Description of data and source
Auger bore location- using the Ordnance Survey (OS) National Grid	
UID (A)	UID = Unique identification for sample point.
Easting (B)	This is a six-figure coordinate representing eastward distance on a map. The easting and northing figures are used to locate the sample point with precision and is especially useful when using a GPS.
Northing (C)	This is a six-figure coordinate representing northward distance on a map. The easting and northing figures are used to locate the sample point with precision and is especially useful when using a GIS.
Land use (D)	These are the terms and abbreviations used for soil pit and auger boring information collected during ALC surveys. These conform to definitions contained in the Soil Survey Field Handbook (Hodgson, 1997) and are available from Natural England (2016). For the purpose of this predictive ALC, the land use for each sample point was recorded from the latest available aerial imagery on Google Earth.
Climate limitations: The climate data listed below are interpolated from climatic data required for the assessment of ALC. The climatic data are provided as a grid dataset with 5 km spacings. The datasets are derived from data supplied by the Meteorological Office (1989), Bracknell, which were compiled and validated in collaboration with the Soil Survey and Land Research Centre (now National Soil Resources Institute) and the MAFF Agricultural Development and Advisory Service. For this predictive ALC, the representative climate for ALC has been interpolated for every predicted auger location covering the Order Limits, as shown in Annex A. The ALC climate	

Data	Description of data and source
data used for determining (i) overall climate limitation, (ii) soil wetness and (iii) soil droughtiness for each predictive ALC sample point depends upon the interpolated climate data from the available 5 km dataset. Table 2 details the initial climatic data set from which the modelled values were interpolated. A key to the ALC climate data headings is given below.	
AAR (E)	AAR = Average Annual Rainfall (mm)
AT0 (F)	AT0 = Accumulated Temperature above 0°C between January and June (day °C)
MDW (G)	MDW = Moisture Deficit for Wheat (mm)
MDP (H)	MDP = Moisture Deficit for Potatoes (mm)
FCD (I)	FCD = Field Capacity Days (days). This is a meteorological parameter which estimates when the soil moisture deficit is zero.
Climate grade (J)	This is the overall climate limitation. This can be read from the graph (X-axis is AAR and Y-axis is ATO) given as Figure 1 of the ALC Guidelines (MAFF, 1988).
Site Limitations	
Elevation (K)	This is altitude (m) above ordnance datum (AOD). For this predictive ALC, the altitude per sample location (located using six-figure easting and northing coordinates) has been derived from the National LiDAR programmes 2022 composite DTM model.
Gradient (L)	This is the angle of slope in degrees (°). For this predictive ALC model, this was calculated using the slope geoprocessing tool to calculate from the DTM elevation model.
ALC grade according to gradient (M)	Where the angle of slope at a predictive auger point was calculated to be equal to, or less than, 7°the ALC grade at this location could be Grades 1, 2 and Subgrade 3a according to gradient. The gradient of such land is considered to be suitable for most kinds of agricultural machinery, including precision seeding and harvesting equipment, as per Table 1 of the ALC Guidelines (MAFF, 1988). All but 27 predictive auger locations were found to have a gradient less than or equal to 7°.
ALC grade according to micro-relief (N)	Following the ALC Guidelines (MAFF, 1988), a micro-relief limitation to agricultural land quality exists where complex changes in slope angle and direction over short distances, or where the presence of boulders or rock outcrops, even on level or gentle slopes, can severely limit the use of agricultural machinery.

Data	Description of data and source
	For the purpose of this predictive ALC, an assessment of potential micro-relief limitations was made for each sample location using OS maps (1:25,000) and aerial imagery on Google Earth (Google, 2022).
Flood zone (O)	This identifies the flood zone for each sample point. This information is available on the Environment Agency's (2020) Flood Map for Planning website. Flood zones refer to the probability of river and sea flooding, ignoring the presence of defences, as follows: • Zone 1 Low Probability – Land having a less than 1 in 1,000 annual probability of river or sea flooding. • Zone 2 Medium Probability – Land having between a 1 in 100 and 1 in 1,000 annual probability of river flooding; or land having between a 1 in 200 and 1 in 1,000 annual probability of sea flooding. • Zone 3a High Probability – Land having a 1 in 100 or greater annual probability of river flooding; or land having a 1 in 200 or greater annual probability of sea flooding. • Zone 3b The Functional Floodplain – This zone comprises land where water must flow or be stored in times of flood.
Predicted grade according to flood risk in summer (P)	This is the grade according to flood risk in summer, as per Table 2 of the ALC Guidelines (MAFF, 1988). No data were available to be able to assess flood risk in summer. For this assessment, the grade according to flood risk in summer was predicted to be Grade 1 (i.e., no limitation) at all sample points.
Predicted grade according to flood risk in winter (Q)	This is the grade according to flood risk in winter, as per Table 3 of the ALC Guidelines (MAFF, 1988). No data were available to be able to assess flood risk in winter. For this assessment, the grade according to flood risk in winter was predicted to be Grade 1 (i.e. no limitation) at most sample points. Where the sample point was in Flood Zone 3 the point was limited to Grade 3b.
Soil and Interactive Limitations	
Bedrock (R)	This is the bedrock underlying each predictive ALC sample point identified from British Geological Survey (BGS) information at a scale of 1:50,000. This information was provided per sample point using GIS. This information is also publicly available on the BGS (2022) Geology of Britain viewer.

Data	Description of data and source
Superficial Deposits (S)	This is a superficial deposit (where present) which covers the bedrock. This information was determined for each predictive ALC sample point identified from BGS information at a scale of 1:50,000. This information was provided per sample point using GIS. This information is also publicly available on the BGS (2022) Geology of Britain viewer.
Soil association (T)	The whole of England and Wales is covered by the National Soil Map, comprising six soil maps at a scale of 1:250,000 with accompanying Regional Bulletins. The National Soil Map shows the location and extent of soil associations, which are groupings of spatially related soil types. Data and information on soil associations can be obtained from the Land Information System (LandIS) webpage.
Topsoil texture (U)	This is the texture of the topsoil used to represent each predictive ALC sample point It is derived from the SSEW description of the predominant soil series used to represent the soil at each predictive ALC sample point, as described in ‘soil series’ above. The SSEW description of soil series is available on the Land Information System (LandIS) ‘Soils Guide’
Wetness Class (V)	The Wetness Class (WC) of a soil is classified according to the depth and duration of waterlogging in the soil profile and has six categories from WC I, which is well drained, to WC VI, which is very poorly drained. The procedure for assessing WC for ALC purposes is described in Appendix 3 of the ALC Guidelines (MAFF, 1988). For the purpose of this predictive ALC, the WC used to represent each sample point is the WC as shown in the Wetness Mapping available from Cranfield University.
Topsoil stoniness (W)	This is the indicative stone content in the topsoil at each predictive ALC sample point. It does not provide a predictive ALC grade according to stone content, as per Table 5, ALC Guidelines (MAFF, 1988), as insufficient data regarding stone size and content are available from published sources. The indicative information is derived from available auger logs for land within the Order Limits that has been purchased from Cranfield University. This auger bore information was used in conjunction with the Soil Association information available through LandIS.
Predicted grade according to soil depth (X)	This is a prediction of the ALC grade according to soil depth, as per Table 4 of the ALC Guidelines (MAFF, 1988). It utilises the average depth of topsoil as per the auger logs purchased from Cranfield University. This auger bore information was used to conjunction with the Soil Association information available through LandIS.

Data	Description of data and source
Predicted grade according to soil stoniness (Y)	This is a prediction of the ALC grade according to soil stoniness, as per Table 5 of the ALC Guidelines (MAFF, 1988). It utilises information from LandIS on Soil Associations, as well as accounting for average stoniness in the auger bore logs purchased from Cranfield University.
Predicted grade according to soil wetness (Z)	This is the predictive ALC grade according to soil wetness, as per Table 6 of the ALC Guidelines (MAFF, 1988). It utilises (i) topsoil texture, (ii) WC (see 'Wetness Class') and (iii) Field Capacity Days (see 'Climate Limitations' above).
Calculated moisture balance – wheat (AA)	The ~~MBvalue~~MB value for wheat is calculated in accordance with the ALC Guidelines (MAFF, 1988) as follows: ~~MBfor~~MB for wheat = Crop Adjusted Available Water Capacity (AP) – Moisture Deficit (MD) for wheat. For the purpose of this predictive ALC, the MB value for wheat for each predictive ALC sample point is derived from calculated data using (i) soil profile data for the predominant soil series, and (ii) relevant climate data for the respective 1km square (see 'Climate Limitations' above).
Predicted grade according to soil droughtiness – wheat (AB)	This is the predicted ALC grade according to droughtiness for wheat per sample point, following Table 8 of the ALC Guidelines (MAFF, 1988). It is determined from the ~~MBvalue~~MB value for wheat, as described in 'Calculated Moisture Balance – Wheat' above.
Calculated moisture balance – potatoes (AC)	The ~~MBvalue~~MB value for potatoes is calculated in accordance with the ALC Guidelines (MAFF, 1988) as follows: ~~MBfor~~MB for potatoes = Crop Adjusted Available Water Capacity (AP) – Moisture Deficit (MD) for potatoes. For the purpose of this predictive ALC, the MB value for potatoes for each predictive ALC sample point is derived from calculated data using (i) soil profile data for the predominant soil series (see 'Soil Series' above), and (ii) relevant climate data for the respective 1km square (see 'Climate Limitations' above).
Predicted grade according to soil droughtiness – potatoes (AD)	This is the predicted ALC grade according to droughtiness for potatoes per sample point, following Table 8 of the ALC Guidelines (MAFF, 1988). It is determined from the ~~MBvalue~~MB value for potatoes, as described in 'Calculated Moisture Balance – Potatoes' above.
Predicted grade according to erosion (AE)	This is the predicted ALC grade according to erosion, as per pages 28 and 29 of the ALC Guidelines (MAFF, 1988). For the purpose of this predictive assessment we have assumed erosion to be a non-limiting factor; this is a factor that would be verified through site-specific surveys.

Data	Description of data and source
Predicted ALC according to most limiting factor (AF)	This is the final predictive ALC grade for each of the 448 sample points. It represents the most limiting (worst) grade(s) according to the climate, site, soil and interactive limitations.
MAFF provisional ALC grade (AG)	This is the Provisional ALC grade per sample point derived from MAFF Provisional (Pre-1988) ALC maps at a scale of 1:250,000. The Provisional ALC grade per sample point was determined using GIS, but the Provisional ALC information is available via Landscape/Landscape Classifications/Post-1988 ALC on the MAGIC website (Natural England, 2020). Pdf versions of the 1:250,000 Provisional ALC maps are available for download from Natural England (2010).
Defra likelihood of encountering BMV (AH)	This is a prediction made by Defra of the likelihood of encountering BMV agricultural land, i.e. ALC Grade 1, Grade 2 and Subgrade 3a. High likelihood of BMV land (>60% area BMV); moderate likelihood of BMV land (20–60% area BMV); low likelihood of BMV land (<=20% area BMV); non-agricultural use; urban/industrial. The likelihood of encountering BMV at each sample point was derived using GIS information. A pdf version of the Likelihood of Encountering BMV maps is available from Defra, (2017).
Comments (AI)	This is additional information which is relevant to the predictive ALC grade per sample point.

~~Laboratory Analyses~~

Appendix D Laborotory Analysis

ANALYTICAL REPORT

Report Number	**33207-25**	**B106**	**ARCADIS HUMAN RESOURCES**
Date Received	**12-DEC-2025**		**LTD**
Date Reported	**22-DEC-2025**		**80 FENCHURCH STREET**
Project	**SOIL**		**LONDON**
Reference	**LIV HOYLAND**		**EC3M 4BY**
Order Number	**UK2512145**		

Laboratory Reference		**SOIL778088**	**SOIL778089**
Sample Reference		**S243 Topsoil**	**S269 Upper Subsoil**
Determinand	**Unit**	**SOIL**	**SOIL**
Coarse Sand 2.00-0.63mm	% w/w	0	1
Medium Sand 0.63-0.212mm	% w/w	28	27
Fine Sand 0.212-0.063mm	% w/w	26	22
Silt 0.063-0.002mm	% w/w	20	20
Clay <0.002mm	% w/w	26	30
Textural Class **		SCL	HCL/SCL/SC

Notes

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

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

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Appendix E Comparison and Reassessment of Likely Significant Effect

7.1.9 The distribution of ALC grades in relation to the Suffolk Onshore Scheme was compared using both the Predictive Modelling data and the ALC survey data based on Table 5. This comparison was undertaken to assess differences between the two datasets and to reassess the reported likely significant effects on BMV land.

7.1.10 The ALC grades from the predictive modelling and the detailed ALC survey, in relation to the Suffolk Onshore Scheme, are presented in Table E.1. A summary of the original assessment of the likely significant effects on BMV land (based on the predictive modelling data) with the reassessment of the likely significant effects on BMV land using the detailed ALC survey data are presented in Table E.2.

7.1.11 The comparison between the two datasets indicates that any discrepancies are limited. There are minor changes in the aerial extent of effects on ALC Grades 2 (increase) and 3a (decrease) land, with an overall slight reduction in the extent of BMV land affected permanently. However, these changes do not alter the significance of the likely effects on BMV land. The reassessment confirms that there is no change in the significance of likely effects on BMV land. Therefore, the conclusions of the ES regarding significance of effects on BMV land remain unchanged and valid.

Table E.1 Permanent and Temporary Land Take Per ALC Grades

Project Aspect	Grade 1		Grade 2		Grade 3a		Grade 3b		Grade 4		Non-agricultural		Total land take – detailed survey
	Predicted	Survey	Predicted	Survey	Predicted	Survey	Predicted	Survey	Predicted	Survey	Predicted	Survey	
Order Limits (temporary)			34.8	65	154.45	128.7	44.28	~~53.515~~ 54	35.18	21.5	10.63	~~10.632~~ 8.2	~~279.3429~~ 7.4
Access (permanent)			0.53	0.4	1.16	0.7		0.1		0.4	0.1	0.2	1.~~79~~8
Substation (permanent)			1.68	1.68									1.68
~~Substation and~~ Converter Station (permanent)			~~1.68~~	6.~~9~~22	6.5	1.~~3~~28							~~8.18~~6.5
Pylons (permanent)			0.02	0.02									0.02
Ecological change (permanent)			0.31	0.9	1.25	0.71	0.02	0.08			0.02		1.~~6~~71
Total land required permanently			2.54	8.22	8.91	2.~~71~~69	0.02	0.18		0.4	0.12	0.~~2~~22	11.~~59~~71
BMV land required permanently - predicted	11.45												
BMV land required	10.~~93~~91												

Project Aspect	Grade 1		Grade 2		Grade 3a		Grade 3b		Grade 4		Non-agricultural		Total land take – detailed survey
	Predicted	Survey	Predicted	Survey	Predicted	Survey	Predicted	Survey	Predicted	Survey	Predicted	Survey	
permanently - detailed survey													

Table E.2 Agricultural Land (BMV) Effect

Data source	Stage	Description of Impact	Likely Significant Effect			Additional Mitigation Measures	Residual Effect		
			Sensitivity	Magnitude	Significance of Effect		Sensitivity	Magnitude	Significance of Effect
Predictive (pre-examination assessment)	Construction	Temporary loss of BMV land	Very high and high	Small	Moderate to minor adverse - Significant	None - Impact is temporary and BMV land required temporarily will be reinstated by the end of the construction phase	Very high and high	Small	Minor adverse – Not Significant
	Operation		Very high and high	Small	Minor adverse - Not significant	None	Very high and high	Small	Minor adverse - Not significant
	Decommissioning		Very high and high	Small	Moderate to	None - Impact is temporary and BMV land required	Very high and high	Small	Minor adverse –

Data source	Stage	Description of Impact	Likely Significant Effect			Additional Mitigation Measures	Residual Effect		
			Sensitivity	Magnitude	Significance of Effect		Sensitivity	Magnitude	Significance of Effect
					minor adverse - Significant	temporarily will be reinstated by the end of the construction phase			Not Significant
	Construction	Permanent loss of BMV land	Very high and high	Medium	Major to moderate adverse - Significant	None	Very high and high	Medium	Major to moderate adverse - Significant
	Decommissioning	Permanent reinstatement of BMV land	Very high, high and medium	Medium	Moderate to major beneficial - Significant	None	Very high and high	Medium	Moderate to major beneficial - Significant
Surveyed (during examination)	Construction	Temporary loss of BMV land	Very high and high	Small	Moderate to minor adverse - Significant	None - Impact is temporary and BMV land required temporarily will be reinstated by the end of the construction phase	Very high and high	Small	Minor adverse – Not Significant
	Operation		Very high and high	Small	Minor adverse - Not significant	None	Very high and high	Small	Minor adverse - Not significant

Data source	Stage	Description of Impact	Likely Significant Effect			Additional Mitigation Measures	Residual Effect		
			Sensitivity	Magnitude	Significance of Effect		Sensitivity	Magnitude	Significance of Effect
	Decommissioning		Very high and high	Small	Moderate to minor adverse - Significant	None - Impact is temporary and BMV land required temporarily will be reinstated by the end of the construction phase	Very high and high	Small	Minor adverse – Not Significant
	Construction	Permanent loss of BMV land	Very high and high	Medium	Major to moderate adverse - Significant	None	Very high and high	Medium	Major to moderate adverse - Significant
	Decommissioning	Permanent reinstatement of BMV land	Very high, high and medium	Medium	Moderate to major beneficial - Significant	None	Very high and high	Medium	Moderate to major beneficial - Significant

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