Armistead Windfarm,

Cumbria

Archaeological Watching Brief

Oxford Archaeology North

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ENTEC UK LTD, ON BEHALF OF BANKS RENEWABLES

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CONTENTS

SUMMARY **3**

ACKNOWLEDGEMENTS **4**

1. INTRODUCTION **5**

1.1 Circumstances of the Project 5

1.2 Location, Topography and Geology 5

1.3 Archaeological and Historical Background 5

2. METHODOLOGY **7**

2.1 Fieldwork 7

2.2 Archive 7

3. RESULTS **8**

3.1 Introduction 8

3.2 Fieldwork Results 8

4. DISCUSSION **9**

4.1 Conclusions 9

5. ILLUSTRATIONS **10**

5.1 Figures 10

5.2 Plates 10

6. BIBLIOGRAPHY **13**

6.1 Primary Sources 13

6.2 Secondary Sources 13

APPENDIX 1: PROJECT DESIGN **14**

APPENDIX 2: CONTEXT DESCRIPTIONS.....19

APPENDIX 3: TRIAL PIT SUMMARY.....20

SUMMARY

Entec UK Ltd, on behalf of their client Banks Renewables, commissioned Oxford Archaeology North (OA North) to undertake a watching brief during a phase of geotechnical site investigation (SI) works across the site of a proposed windfarm, near the village of Old Hutton, Cumbria (NGR centred on SD 58000 87000). Sites recorded on the Historic Environment Record for the area include a Bronze Age flanged axe find less than 1km to the north-east at Tarneybank Tarn (HER **16726**), and Mansergh circular enclosure to the south-east (HER **4285**), both from the prehistoric period. Sites dating to the post-medieval period include a stone quarry located in the site (HER **14161**), and a plantation and chopwood kiln (HER **17892**) situated just to the north; both are illustrated on the 1857 first edition of the Ordnance Survey map. Although the archaeological monitoring was not requisite under the planning conditions, it followed the best practice of Banks Renewables.

The development site was located on undulating fell landscape, with areas of bog, rough pasture and bedrock outcrops, interspersed with springs, and ranging from 200m to 260m AOD. In all, 52 geotechnical trial pits, measuring 2.5m by 1.5m, and ranging from 0.4m to 5m in depth, were excavated across the proposed development site between 16th February and 1st March 2011. The purpose of the archaeological watching brief was to identify, assess, record and mitigate for any archaeological remains encountered.

In the main, the trial pits (TP) comprised a layer of peaty topsoil, ***100***, a sandy-clay subsoil, ***101***, natural geology comprising clay and weathered bedrock, ***102***; and metamorphic siltstone bedrock. Some trial pits contained additional deposits or different compositions: subsoil ***103*** had a higher organic content, and was identified in trial pits excavated in wetter areas (TPs 11, 27, 35, 36 and 41); subsoil ***106*** had a higher sand content, and was identified in TPs 1 and 3; degraded bedrock ***105*** in TP31 suggested that a higher level of water was percolating through this area; and waterborne deposit ***104*** was observed in TP36 only, which was adjacent to a small water course.

The trial pits were observed to contain deposits in keeping with the typical, upland fell topography and geology of the area, comprising layers of peaty topsoil, organic-rich subsoils, and heavily degraded bedrock. The only feature encountered during the trial pitting was a modern ceramic field drain, running across the south-eastern end of TP16. The remainder of the trial pits excavated across the proposed development site contained no features or deposits of archaeological interest. No finds were encountered or recovered from any of the pits. Although limited in scope, the lack of any features of archaeological significance within the trial pits would suggest that the landscape was not subject to much settlement in the past, but probably functioned as it does today; rough pasture and grazing for sheep and cattle.

ACKNOWLEDGEMENTS

OA North would like to thank Rob Johns of Entec UK Ltd for commissioning the project, on behalf of their client Banks Renewables. Thanks are also extended to Stewart Dolan from Halcrow, and Bill Anderson from Fugro for their assistance and advice on site.

The fieldwork was undertaken by Kelly Clapperton. The report was compiled by Kelly Clapperton, and the illustrations by Mark Tidmarsh. The report was edited by Emily Mercer, who also managed the project.

1. INTRODUCTION

1.1 Circumstances of the Project

1.1.1 Entec UK Ltd, on behalf of their client Banks Renewables, commissioned Oxford Archaeology North (OA North) to undertake a watching brief during a phase of geotechnical site investigation (SI) works across the site of a proposed windfarm, near Old Hutton, Cumbria. Although the archaeological monitoring was not requisite under planning issues, it followed the best practice of Banks Renewables.

1.1.2 In all, 52 geotechnical trial pits were excavated across the proposed development site (Fig 2) between 16th February and 1st March 2011. The purpose of the archaeological watching brief was to identify, assess, record and mitigate for any archaeological remains that may be encountered. All of the work was carried out in line with current IfA guidelines (2008a), the IfA Code of Conduct (2008b), and the project design (*Appendix 1*).

1.2 Location, Topography and Geology

1.2.1 The proposed windfarm is located approximately 2km to the south-east of Old Hutton, Cumbria (NGR centred on 58000 87000; Fig 1). To the east, the site is located on the fell above Swarther Plantation at a height of 260m AOD. From here it runs north-west, with proposed turbines situated on the hill above Gillsmere Sike, at a height of 220m AOD. The proposed access track runs downhill west from this position towards Crosslands Farm and the B6254, finishing at a height of approximately 200m AOD.

1.2.2 The topography is an undulating fell landscape, with areas of bog, rough pasture and bedrock outcrops, interspersed with springs that run downhill to join Gillsmere Sike and Fell Beck. The underlying geology comprises Silurian mudstones, siltstones and sandstones of the Windermere Group (Countryside Commission 1998, 66), which have been overlain in areas by with glacial boulder clay, forming the hummocky landscape (*ibid*). The local soils are ferric stagnopodzols (Ordnance Survey 1983).

1.3 Archaeological and Historical Background

1.3.1 The following section provides a brief overview of the background of the proposed development site, putting the site in its immediate historical and archaeological context. This was achieved through a search of the online Cumbria Historic Environment Record (HER), and assessment of early editions of the Ordnance Survey (OS).

1.3.2 No features or finds dating to the prehistoric period have been documented across the proposed development site, however, two known prehistoric sites have been identified in the local area. A Bronze Age flanged axe was discovered less than 1km to the north-east of the development site at Tarneybank Tarn (HER **16726**), and a circular enclosure near Mansergh (HER **4285**), 1.5km to the south-east , may also be prehistoric in date. It is also commonly accepted that areas of boggy and hummocky ground in the North West were

used as places of ritual deposition during the prehistoric period (Hodgson and Brennand 2006, 44).

1.3.3 There is little Roman activity within the immediate vicinity of the proposed development site. The former north-south Roman road running from Manchester to Carlisle passed approximately 5km to the east of the site (Margary 1957, 113), following the current A683. This runs to Low Borrowbridge Roman Fort, 16km to the north-east (*ibid*).

1.3.4 No sites dating to the medieval period were identified in the development site. The village of Old Hutton, 2km to the north-west, most likely dates to the medieval period, including the village church (HER **14118**), and an area of medieval ridge and furrow was identified 1km north-west of the site (HER **16659**). Approximately 1.5km to the west was the location of Holme Scales Deer Park (HER **4950**), also dating to the medieval period.

1.3.5 Sites and features dating to the post-medieval period are the most prolific in the local area, and relate to farming or extraction functions. A stone quarry is identified on the site, and is recorded in the HER (**14161**) and present on the 1862 first edition and the 1899 second edition OS maps (Fig 2), although it seems to have gone out of use by the early twentieth century (OS 1920). Early editions of the OS (1857, 1862, 1899 and 1920) illustrate a Banks Plantation situated to the north-west, with a strip running down to the Fell Beck near the area of the current sheep pen (Fig 2), and would have been contemporary with a chopwood kiln (HER **17892**) identified 400m to the north. It had been felled by the mid-twentieth century (OS 1956). In the main, however, a study of the OS maps from the first edition to the current indicate that very little development has taken place across the proposed windfarm site, with the landscape remaining a mix of rough grazing, upland bog and rocky outcrops. The depots, adjacent to the Fell Beck in the development site, were constructed during the latter half of the twentieth century (OS 1977-1979).

2. METHODOLOGY

2.1 FIELDWORK

2.1.1 The geotechnical SI works included the excavation of 52 trial pits across the proposed development site, at the locations of the proposed wind turbines and the access road (Fig 2). Of the trial pits, 46 were excavated by a 13 ton, 360º mechanical excavator, while the remaining six were excavated with a JCB fitted with a back-actor. The excavation of the trial pits comprised the removal of overburden, topsoil and subsoil, down to natural geology, with a 1.5m wide ditching bucket, under constant archaeological supervision. Once the pit was identified as free of archaeological remains, the overlying natural geology was removed down to bedrock, using a 0.6m wide toothed bucket.

2.1.2 All deposits identified were assessed and recorded on *pro forma* sheets produced by OA North, while 1m sample sections of each trial pit were illustrated on permatrace at a scale of 1:20. A digital photographic archive, with an appropriate scale, was compiled of each trial pit, and also recorded on *pro forma* sheets.

2.2 ARCHIVE

2.2.1 A full and professional archive has been compiled in accordance with the project design (*Appendix 1*), and in line with current English Heritage guidelines (English Heritage 1991). The paper archive will be deposited with Kendal Museum, and a copy of the report will be deposited with the Record Office, also in Kendal.

3. RESULTS

3.1 INTRODUCTION

3.1.1 The trial pits (Fig 2) were relatively small in size, measuring only 2.5m long by 1.5m wide, and their depths varied from 0.4m to 5m, dependent on the ground conditions. A full description of the contexts encountered is located in *Appendix 2*, while a summary of the composition and depths of the trial pits can be found in *Appendix 3*. The following section provides a brief summary of the watching brief results.

3.2 FIELDWORK RESULTS

3.2.1 In the main, the trial pits (TP) comprised a layer of peaty topsoil, ***100***, ranging from 0.1m to 0.5m in thickness; a sandy-clay subsoil, ***101***, 0.05m to 0.8m thick; natural geology comprising clay and weathered bedrock, ***102***, 0.2m to more than 5m thick; and metamorphic siltstone bedrock (Bill Anderson pers comm), was encountered between 0.4m to over 5m in depth (Plates 1 to 3). Depending on their topographical locations, however, some of the trial pits contained additional deposits or different compositions. Subsoil ***103***, having a higher organic content, was identified in trial pits excavated in wetter areas (TPs 11, 27, 35, 36 and 41); subsoil ***106*** had a higher sand content, and was identified in TPs 1 and 3 (Plate 4); degraded bedrock ***105*** in TP31 suggested that a higher level of water was percolating through this area; and waterborne deposit ***104*** was observed only in TP36, and adjacent to a small water course.

3.2.2 The only feature encountered during the trial pitting was a modern ceramic field drain, running north-east/south-west across the south-eastern end of TP16. It was located 0.4m from the ground surface, and may well have already been disturbed as it was not functioning. The remainder of the trial pits excavated across the proposed development site contained no features or deposits of archaeological interest. No finds were encountered or recovered from any of the pits.

4. DISCUSSION

4.1 CONCLUSIONS

4.1.1 There are known archaeological sites, or heritage assets, within the local vicinity; Bronze Age axe was found less than 1km to the north-east at Tarneybank Tarn (HER **16726**), and circular enclosure dating to the prehistoric period at Mansergh located to the south-east (HER **4285**). Furthermore, two sites of post-medieval date were identified from the early editions of the Ordnance Survey and the HER, a centrally located stone quarry (HER **14161**), and a chopwood kiln (HER **17892**) to the north.

4.1.2 However, the 52 trial pits excavated across the development contained deposits in keeping with the typical, upland fell topography and geology of the area, comprising layers of peaty topsoil, organic-rich subsoils and heavily degraded bedrock, and no features of archaeological significance. These results, combined with the evidence from the first edition OS maps (1857 and 1862), would suggest that the landscape has not been subject to much settlement in the past, but probably functioned as it does today; rough pasture and grazing for sheep and cattle.

5. ILLUSTRATIONS

5.1 FIGURES

Figure 1: Site location

Figure 2: Trial Pit location plan

5.2 PLATES

Plate 1: South-facing section through TP50

Plate 2: TP28, looking south-west

Plate 3: TP22, looking north

Plate 4: TP3 showing deposit ***106***, looking south-west

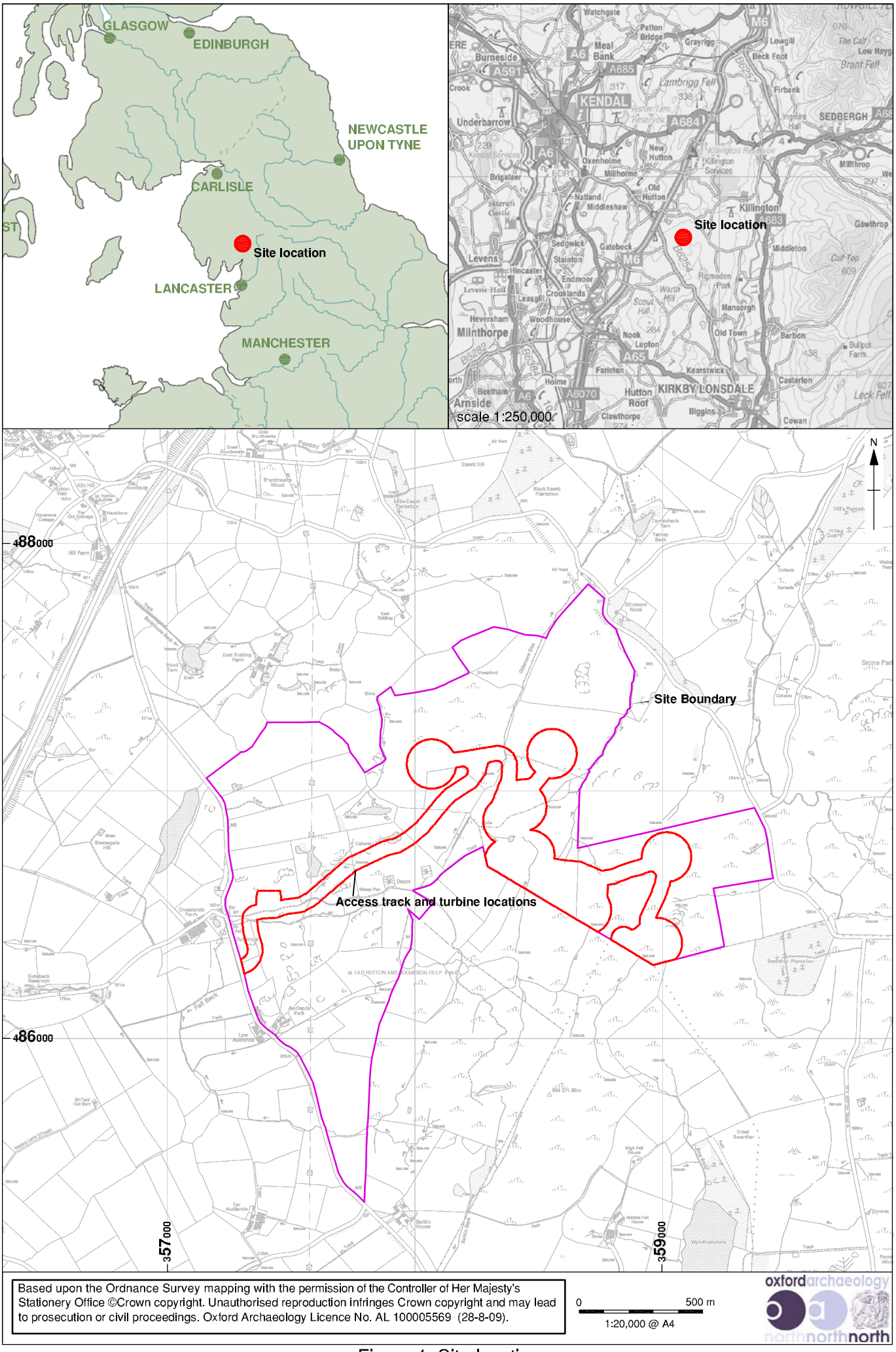

Figure 1: Site location

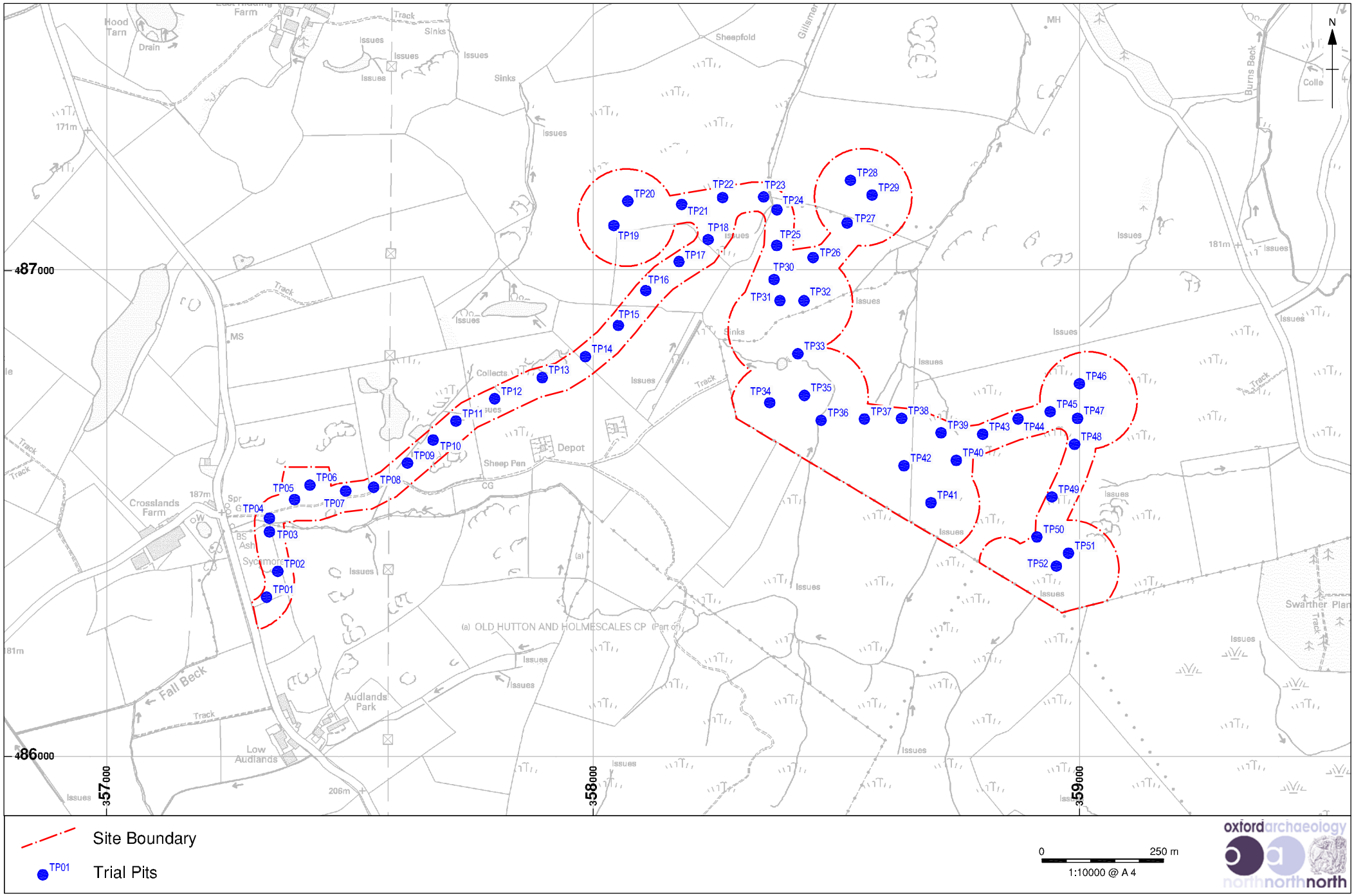

Figure 2: Trial Pit location plan

Plate 1: South-facing section through TP50

Plate 2: TP28, looking south-west

Plate 3: TP22, looking north

Plate 4: TP3 showing deposit ***106***, looking south-west

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APPENDIX 1: PROJECT DESIGN

1. INTRODUCTION

1.1 PROJECT BACKGROUND

1.1.1 Entec UK Ltd (hereafter the 'client'), on behalf of their client Banks Renewables, has commissioned that Oxford Archaeology North (OA North) to undertake a programme of archaeological watching brief at the site of the proposed Armistead Wind Farm, Cumbria (NGR centred SD 58000 87000). This will be undertaken to maintain an archaeological presence during a phase of SI works across the site which, although is not required under planning issues, will be carried out following the pursuit of best practice by Banks Renewables.

1.1.2 The SI work aims to avoid known potentially archaeologically sensitive areas, and the topsoil in the areas of SI test pits will be reduced to the underlying natural under archaeological supervision. Should any remains be encountered during this process a provision will be allow to enable Banks Renewables to direct the SI contractors to leave any archaeological remains undisturbed, by reinstating and relocating the requisite trial pit.

1.2 OXFORD ARCHAEOLOGY NORTH

1.2.1 OA North has considerable experience of fieldwork and post-excavation, having undertaken a great number of small and large-scale projects during the past 30 years. Such projects have taken place to fulfil the requirements of the clients to rigorous timetables. OA North has the professional expertise and resources to undertake the project detailed below to a high level of quality and efficiency. OA North is **an Institute of Field Archaeologists (IFA) registered organisation, registration number 17**, and all its members of staff operate subject to the IFA Code of Conduct.

2. OBJECTIVES

2.1 The following programme has been designed to identify any archaeological deposits or features that may be present during groundworks in advance of the SI works. It will be undertaken in order to mitigate the impact by means of preservation by record of any such archaeological features or deposits, or preservation *in situ* by reinstating and relocating the trial pit, under the overall direction of Banks Renewables. The work will be carried out in line with current IfA guidelines (2008a) and in line with the IfA Code of Conduct (2008b).

2.2 ***Archaeological Watching Brief:*** to maintain a permanent archaeological presence during groundworks, specifically removal of the topsoil and overburden in areas of the test pits. The purpose is to identify, investigate and record any archaeological remains that may be encountered. Where such remains cannot be adequately recorded under watching brief conditions it may be necessary to undertake consultation with all interested parties to determine and implement the appropriate mitigation. However, it is anticipated that the trial pits will be reinstated and relocated in such circumstances.

2.3 ***Report:*** the results of the fieldwork and any post-excavation assessment will culminate in a final report to be submitted within eight weeks of completion of the fieldwork (subject to any specialist reports outstanding).

2.4 ***Archive:*** a site archive will be produced to English Heritage guidelines (MAP 2 (1991)). The information will be finally disseminated through the deposition of the archive at Kendal Museum, and report at the County Historic Environment Record (HER) Office in Kendal.

3. METHOD STATEMENT

3.1 HEALTH AND SAFETY

3.1.1 ***Risk assessment:*** OA North provides a Health and Safety Statement for all projects and maintains a Company Safety Policy. All site procedures are in accordance with the guidance set out in the Health and Safety Manual compiled by the Standing Conference of Archaeological Unit Managers (1997). OA North will liase with the client and the site contractor, Halcrow, to ensure all health and safety regulations are met.

3.1.2 ***Contamination:*** any contamination issues must also be made known to OA North in order that adequate PPE can be supplied prior to commencement. Should any presently unknown contamination be discovered during excavation, it may be necessary to halt the works and reassess the risk assessment. Any specialist safety requirements may be costed as a variation.

3.2 ARCHAEOLOGICAL WATCHING BRIEF

3.2.1 ***Introduction:*** a programme of field observation will accurately record the location, extent, and character of any surviving archaeological features and/or deposits during the ground disturbance for the installation of the onshore cable and other ancillary works.

3.2.2 ***Methodology:*** the work will comprise archaeological observation during the excavation, to include the systematic examination of any subsoil horizons exposed during the course of the groundworks, and the accurate recording of all archaeological features and horizons, and any artefacts, identified.

3.2.3 Discovery of archaeological remains will require stoppage of the excavation. Areas of potential archaeological remains will require fencing-off from any construction works, preferably with netlon-type fencing, to allow the OA North archaeologist sufficient time to undertake adequate recording under safe conditions. This will be carried out as efficiently as possible in order to minimise disruption. Depending on the deposits revealed, it is anticipated that the average time for the suspension of works will be approximately 2-4 hours.

3.2.4 Clearance will be given for the SI works to proceed once the archaeologist is satisfied that either no remains are present, or that they have been adequately recorded, or that the level of impact will not disturb any deeper remains that can be preserved *in situ*.

3.2.5 Banks Renewables reserve the right, however, to direct the SI contractors to leave any archaeological remains undisturbed, and reinstate and suitably relocate the requisite trial pits.

3.2.6 ***Complex or extensive remains:*** should the remains be too complex or extensive to be investigated and recorded under watching brief conditions then the area will be fenced-off and the client will be immediately contacted in order to determine the requirements for further investigation. All further groundworks within the marked area will cease until clearance is given to proceed. All further works would be subject to a variation to this project design.

3.2.7 ***Investigation and recording:*** putative archaeological features and/or deposits identified by the machining process, together with the immediate vicinity of any such features, will be cleaned by hand, using either hoes, shovel scraping, and/or trowels depending on the subsoil conditions, and where appropriate sections will be studied and drawn. Any such features will be sample excavated (i.e. selected pits and postholes will normally only be half-sectioned, linear features will be subject to no more than a 10% sample, and extensive layers will, where possible, be sampled by partial rather than complete removal).

3.2.8 During this phase of work, recording will comprise a full description and preliminary classification of features or materials revealed, and their accurate location (either on plan and/or section, and as grid co-ordinates where appropriate). Features will be planned accurately at appropriate scales and annotated on to a large-scale digital plan to be provided by the client. A photographic record will be undertaken simultaneously.

3.2.9 Levels will be recorded and reduced to their OD heights, with all benchmark and TBMS to be shown. The location of all features excavated will be recorded by Total Station with appropriate spot heights and tied into

the OS grid. Altitude information will be established with respect to OS Datum. The location of the remains within the areas of SI works will be based on site plans provided by the client containing OS information.

3.2.10 A plan will be produced of the areas of groundworks showing the location and extent of the ground disturbance and one or more dimensioned sections will be produced.

3.3 General Procedures

3.3.1 ***Environmental Sampling:*** samples (bulk samples of 40 litres volume, to be sub-sampled at a later stage) will be collected from stratified undisturbed deposits and will particularly target negative features (gullies, pits and ditches). Monolith samples will be collected from freshly exposed sections through all buried soils/old ground surfaces by trained staff. These will be returned to OA North's offices for processing.

3.3.2 Deposits of particular interest may incur additional sampling, on advice from the appropriate in-house specialist.

3.3.3 The location of all samples will be recorded on drawings and sections with heights OD etc.

3.3.4 Between 50%-100% of bulk samples shall be selected for processing, based on the advice from OA North's in-house environmental manager. An assessment of the environmental potential would include soil pollen analysis and the retrieval of charred plant macrofossils and land molluscs from former dry-land palaeosols and cut features. In addition, the samples would be assessed for plant macrofossils, insect, molluscs and pollen from waterlogged deposits.

3.3.5 In order to achieve the aims of the programme of work, it may be required to obtain dating evidence through radiocarbon dating, dendrochronological or other such techniques. This would only be undertaken in consultation with the client.

3.3.6 ***Human Remains****:* should any remains be discovered they will be left *in situ*, covered and protected. No further investigation will continue beyond that required to establish the date and character of the burial. The client, Cumbria County Council's Historic Environment Officer and the local Coroner will be informed immediately. If removal is essential the exhumation of any funerary remains will require the provision of a Home Office license, under section 25 of the Burial Act of 1857. An application will be made by OA North for the study area on discovery of any such remains and the removal will be carried out with due care and sensitivity under the environmental health regulations. Any delays caused by unforeseen and complex excavation of inhumations may be subject to a variation to the cost of the contract and will be agreed with the client.

3.3.7 ***Finds:*** all finds recovered during the evaluation investigation (metal detecting and trial trenching) will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the United Kingdom Institute for Conservation (UKIC) *First Aid For Finds*, 1998 (new edition) and Kendal Museum's guidelines.

3.3.8 Finds recovery and sampling programmes will be in accordance with best practice (current IfA guidelines 2008c) and subject to expert advice.

3.3.9 Neither artefacts nor ecofacts will be collected systematically during the mechanical excavation of the topsoil unless significant deposits, for example clay pipe waster dumps, are encountered. In such an eventuality, material will be sampled in such a manner as to provide data to enhance present knowledge of the production and dating of such artefacts, although any ensuing studies will not be regarded as a major element in any post-excavation analysis of the site. Other finds recovered during the removal of overburden will be retained only if of significance to the dating and/or interpretation of the site. It is not anticipated that ecofacts (e.g. unmodified animal bone) will be collected during this procedure.

3.3.10 All material will be collected and identified by stratigraphic unit. Objects deemed to be of potential significance to the understanding, interpretation and dating of individual features will be recorded as individual items, and their location plotted in 3-D. This may include, for instance, material recovered from datable medieval pit groups.

3.3.11 All finds will be washed, dried, marked, bagged and packed in stable conditions; no attempt at conservation will be made unless special circumstances require prompt action. In such case guidance will be sought from OA North's consultant conservator.

3.3.12 Any waterlogged finds will be treated as appropriate. In the case of large deposits of waterlogged

environmental material (eg unmodified wood), advice will be sought with the OA North consultant with regard to an appropriate sampling strategy.

3.3.13 Where possible, spot dates will be obtained on pottery and other finds recovered from the site. Artefacts will be examined and commented upon by OA North in-house specialists. Initial artefact dating shall be integrated into the site matrix.

3.3.14 Any gold and silver artefacts recovered during the course of the excavation will be removed to a safe place and reported to the local Coroner according to the procedures relating to the Treasure Act, 1996. Where removal cannot take place on the same working day as discovery, suitable security will be employed to protect the finds from theft.

3.4 REPORT

3.4.1 ***Final Report:*** one bound copy of a written synthetic report will be submitted to the client, together with a copy on CD, within eight weeks of completion of the fieldwork, unless an alternative deadline is agreed with the client beforehand. A copy will also be submitted to the Cumbria HER for reference purposes. The report will present, summarise, and interpret the results of the programme detailed above in order to come to as full an understanding as possible of the archaeology of the development area. The report will include;

- a front cover to include the NGR,
- a concise, non-technical summary of the results,
- the circumstances of the project and the dates on which the fieldwork was undertaken,
- description of the methodology, including the sources consulted,
- a summary of the historical background of the study area,
- a statement, where appropriate, of the archaeological implications of the impact,
- a copy of this project design, and indications of any agreed departure from that design,
- the report will also include a complete bibliography of sources from which data has been derived, and a list of any further sources identified but not consulted,
- a site location plan related to the national grid,
- appropriate plans showing the location and position of features or sites located,
- plans and sections showing the positions of deposits and finds,
- illustrative photographs as appropriate.

3.4.2 ***Confidentiality:*** all internal reports to the client are designed as documents for the specific use of the client, for the particular purpose as defined in the project brief and project design, and should be treated as such. They are not suitable for publication as academic documents or otherwise without amendment or revision.

3.5 ARCHIVE

3.5.1 The results of all archaeological work carried out will form the basis for a full archive to professional standards, in accordance with current IfA (2008d) and English Heritage guidelines (1991). This archive will be provided in the English Heritage Centre for Archaeology format and a synthesis will be submitted to the Cumbria HER (the index to the archive and a copy of the report). OA North will deposit the original record archive of projects (paper, magnetic and plastic media), and a full copy of the record archive, together with the material archive (artefacts, ecofacts, and samples) with an appropriate museum, which is likely to be Kendal Museum.

4. WORK TIMETABLE

4.1 ARCHAEOLOGICAL WATCHING BRIEF

4.1.1 The duration of the archaeological presence for the watching brief will be dictated by the client's schedule of works, but is anticipated to be approximately four days.

4.2 REPORT

4.2.1 The client report will be completed within approximately eight weeks following completion of all fieldwork elements, subject to any outstanding specialist reports.

4.3 ARCHIVE

4.3.1 The archive will be deposited within six months following completion of the site work.

5. STAFFING

5.1 The project will be under the direct management of **Emily Mercer** (OA North Senior Project Manager) to whom all correspondence should be addressed.

5.2 The fieldwork will be undertaken by **Nate Jepson**, an assistant supervisor experienced in this type of project, who will be responsible for liaison with the site contractors and the client, and other relevant interested parties with regards to on-site work and procedures.

5.3 Finds management will be undertaken by **Christine Howard-Davis** (OA North Finds Manager) who will also provide specialist input on certain finds categories.

5.4 Environmental management will be undertaken by **Elizabeth Huckerby** (OA North Environmental Manager) who has unparalleled experience of the palaeoecology of the North West through her work on the English Heritage-funded North West Wetlands Survey. Elizabeth will be assisted by **Denise Druce**, both of whom will provide specialist input on charred remains and pollen, and will advise on site sampling procedures and co-ordinate the processing of samples and organise internal and external specialist input as required.

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United Kingdom Institute for Conservation (UKIC), 1998 *First Aid for Finds* London

APPENDIX 2: CONTEXT DESCRIPTIONS

Context No	Thickness (m)	Description
100	0.1-0.5	Topsoil: dark blackish-grey, fine and soft silty-peat with 30% sub-angular siltstone fragments 50-120mm.
101	0.05-0.8m	Subsoil: mid-light orangey-grey, fine and firm sandy-clay with >25% sub-angular siltstone fragments 30-130mm.
102	0.1->5	Natural geology: mid grey, coarse and compact sandy-clay, with >50% sub-angular siltstone fragments <200mm – weathered metamorphic siltstone bedrock.
103	0.2-0.4	Subsoil: mid reddish-brown, fine and friable sandy-silt with a high organic content, with >60% sub-angular siltstone fragments 30-300mm – seems to be located in boggy areas with a higher peat content.
104	0.25	Subsoil: mid-light grey, coarse and compact clay, with >70% sub-angular siltstones 30-150mm – most likely a waterborne deposit of weathered bedrock, it is located adjacent to a small stream, only observed in TP36.
105	0.4	Subsoil/natural geology: light orangey-grey, coarse and friable sand with >30% sub-angular siltstone fragments – very degraded bedrock, only observed in TP31.
106	0.9-0.96	Natural geology: mid orangey-brown, coarse and friable silty-sand, with >80% sub-angular siltstone fragments 10mm-0.5m – only observed in TP1 and TP3.

APPENDIX 3: TRIAL PIT SUMMARY

Trial Pit No	Context Summary	Context Depth (m)
1	***100*** ***101*** ***106*** Bedrock	0 - 0.24 0.24 - 0.62 0.62 – 1.6 1.6
2	***100*** ***101*** Bedrock	0 – 0.12 0.12 – 0.7 0.7
3	***100*** ***101*** ***106*** Bedrock	0 – 0.4 0.4 – 0.6 0.6 – 1.5 1.5
4	***100*** ***101*** Bedrock	0 – 0.2 0.2 – 0.7 0.7-1
5	***100*** ***101*** Bedrock	0 – 0.1 0.1 – 0.2 0.2 – 0.4
6	***100*** ***101*** Bedrock	0 – 0.3 0.3 – 0.8 0.8 – 1
7	***100*** ***101*** Bedrock	0 – 0.2 0.2 – 0.5 0.5
8	***100*** ***101*** ***102*** Bedrock	0 – 0.14 0.14 – 0.55 0.55 – 1 1 – 1.3
9	***100*** ***102***	0 – 0.2 0.2 - >3
10	***100*** ***101*** Bedrock	0 – 0.12 0.12 – 0.5 0.5 – 0.6
11	***100*** ***101*** ***103*** Bedrock	0 – 0.1 0.1 – 0.25 0.25 – 0.4 0.4 – 0.7
12	***100*** ***101*** ***102*** Bedrock	0 – 0.1 0.1 – 0.4 0.4 – 1.18 1.18 – 1.7
13	***100*** ***101*** Bedrock	0 – 0.18 0.18 – 0.6 0.6 – 1.2
14	***100***	0 – 0.15

	101 ***102*** Bedrock	0.15 – 0.45 0.45 – 1.2 1.2
15	***100*** ***101*** ***102*** Bedrock	0 – 0.15 0.15 – 0.35 0.35 – 1 1 – 1.2
16	***100*** ***102***	0 – 0.22 0.22 - >3.5
17	***100*** ***101*** ***102***	0 – 0.2 0.2 – 0.5 0.5 - >5
18	***100*** ***101*** ***102***	0 – 0.2 0.2 – 0.3 0.3 - >5
19	***100*** ***101*** ***102***	0 – 0.3 0.3 – 0.6 0.6 - >5
20	***100*** ***101*** ***102***	0 – 0.22 0.22 – 0.4 0.4 - >5
21	***100*** ***101*** ***102***	0 – 0.15 0.15 – 0.22 0.22 - >4
22	***100*** ***101*** ***102*** Bedrock	0 – 0.16 0.16 – 0.26 0.26 – 5 5
23	***100*** ***102*** Bedrock	0 – 0.3 0.3 – 5 5
24	***100*** ***101*** ***102*** Bedrock	0 – 0.22 0.22 – 0.42 0.42 – 2.7 2.7
25	***100*** ***101*** Bedrock	0 – 0.2 0.2 – 0.5 0.5 – 0.8
26	***100*** ***101*** ***102*** Bedrock	0 – 0.2 0.2 – 0.3 0.3 – 1.2 1.2
27	***100*** ***103*** Bedrock	0 – 0.3 0.3 – 1 1
28	***100*** ***101*** ***102*** Bedrock	0 – 0.22 0.22 – 0.5 0.5 – 3.1 3.1

29	***100*** ***101*** ***102*** Bedrock	0 – 0.2 0.2 – 0.45 0.45 – 3.3 3.3
30	***100*** ***101*** Bedrock	0 – 0.2 0.2 – 1 1
31	***100*** ***101*** ***105*** ***102*** Bedrock	0 – 0.2 0.2 – 0.4 0.4 – 0.8 0.8 – 2.2 2.2
32	***100*** Bedrock	0 – 0.3 0.3 – 0.4
33	***100*** Bedrock	0 – 0.3 0.3 – 1.2
34	***100*** ***101*** Bedrock	0 – 0.26 0.26 – 1.5 1.5
35	***100*** ***103*** Bedrock	0 – 0.2 0.2 – 0.5 0.5 – 2.1
36	***100*** ***104*** ***103*** Bedrock	0 – 0.36 0.36 – 0.6 0.6 – 1 1 – 2.2
37	***100*** ***101*** ***102*** Bedrock	0 – 0.22 0.22 – 0.7 0.7 – 0.9 0.9
38	***100*** ***101*** ***102*** Bedrock	0 – 0.1 0.1 – 0.5 0.5 – 1 1
39	***100*** ***101*** Bedrock	0 – 0.15 0.15 – 0.4/1.5 1.5
40	***100*** ***102*** Bedrock	0 – 0.4 0.4 – 1.7 1.7
41	***100*** ***103*** Bedrock	0 – 0.2 0.2 – 0.4 0.4 – 0.6
42	***100*** ***101*** ***102*** Bedrock	0 – 0.2 0.2 – 0.44 0.44 – 1 1
43	***100*** ***101***	0 – 0.15 0.15 – 0.2

	102 Bedrock	0.2 – 0.8 0.8
44	***100*** ***101*** ***102*** Bedrock	0 – 0.2 0.2 – 0.4 0.4 – 1 1
45	***100*** ***101*** ***102*** Bedrock	0 – 0.25 0.25 – 0.42 0.42 – 3 3
46	***100*** ***101*** ***102*** Bedrock	0 – 0.22 0.22 – 0.45 0.45 – 2.3 2.3
47	***100*** ***101*** ***102*** Bedrock	0 – 0.1 0.1 – 0.4 0.4 – 3.4 3.4
48	***100*** ***101*** ***102*** Bedrock	0 – 0.15 0.15 – 0.38 0.38 – 3.7 3.7
49	***100*** ***101*** ***102*** Bedrock	0 – 0.5 0.5 – 0.9 0.9 – 1.22 1.22
50	***100*** ***101*** ***102*** Bedrock	0 – 0.2 0.2 – 0.5 0.5 – 1.5 1.5
51	***100*** ***101*** ***102*** Bedrock	0 – 0.24 0.24 – 0.3 0.3 – 2 2
52	***100*** ***102*** Bedrock	0 – 0.4 0.4 – 2.8 2.8