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and Deposit Modelling  
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This report presents a survey of a larger area which was considered for the Scheme during the application and assessment process. As such there are areas surveyed and presented in this report which are no longer within the Order limits. This does not impact on the conclusions of this report.



# Tillbridge Solar Project Gainsborough, Lincolnshire

Geoarchaeological Borehole Survey  
and Deposit Modelling

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## Contents

Summary .....	1
Acknowledgements.....	1
<b>1 INTRODUCTION .....</b>	<b>2</b>
1.1 Project and planning background.....	2
1.2 Scope of works .....	3
1.3 Scope of document.....	5
<b>2 GEOARCHAEOLOGICAL BACKGROUND.....</b>	<b>6</b>
2.1 Location, topography and geology.....	6
2.2 Quaternary superficial deposits.....	7
<b>3 ARCHAEOLOGICAL BACKGROUND.....</b>	<b>11</b>
3.2 Archaeological and historical context.....	11
3.3 Previous investigations .....	14
<b>4 AIMS AND OBJECTIVES.....</b>	<b>15</b>
4.2 Overarching aims.....	15
4.3 Overarching objectives .....	16
4.4 Site-specific objectives.....	16
<b>5 METHODS.....</b>	<b>16</b>
5.1 Introduction.....	16
5.2 Setting out of the boreholes .....	17
5.3 Geoarchaeological borehole survey.....	17
5.4 Sediment description .....	18
5.5 Survey .....	18
<b>6 RESULTS.....</b>	<b>19</b>
6.1 Introduction.....	19
6.2 Deposit modelling .....	19
<b>7 DISCUSSION .....</b>	<b>23</b>
7.1 Introduction.....	23
7.2 Sedimentary sequence and depositional environment .....	23
<b>8 CONCLUSION AND RECOMMENDATIONS .....</b>	<b>25</b>
8.1 Conclusion.....	25
8.2 Recommendations.....	26
<b>REFERENCES .....</b>	<b>27</b>
<b>APPENDICES .....</b>	<b>30</b>
Appendix 1 Borehole sediment logs.....	30



## List of Figures

- Figure 1** Site location and BGS bedrock geology
- Figure 2** Borehole locations and BGS superficial geology
- Figure 3** Boreholes P01 to P17
- Figure 4** Boreholes P18 to P35
- Figure 5** Boreholes P36 to P44
- Figure 6** Boreholes C01 to C08
- Figure 7** Transect 1
- Figure 8** Transect 2
- Figure 9** Transect 3
- Figure 10** Transect 4
- Figure 11** Transect 5
- Figure 12** Transect 6
- Figure 13** Transect 7
- Figure 14** Transect 8 (reproduced from Wessex Archaeology 2023c)

## List of Tables

- Table 1** Spatial data for the geoarchaeological boreholes
- Table 2** Staged approach to geoarchaeological investigations
- Table 3** British Quaternary chronostratigraphy



## Summary

A programme of geoarchaeological borehole survey and deposit modelling was undertaken within the Order Limits of the Tillbridge Solar Scheme, focussed on an approximately 1,400 ha parcel of land centred around Common Lane, Gainsborough, Lincolnshire. The area investigated as part of these works, referred to here as the Scheme, comprises the Principal Site and the Cable Route Corridor. On the basis that no pre-existing GI data was available to identify localised potential within the Principal Site, a series of boreholes targeting mapped areas of alluvium within both the Principal Site and Cable Corridor were proposed following a review of BGS (2023) mapping and identification of areas where deposits of palaeoenvironmental potential may be preserved (Wessex Archaeology 2023a).

The geoarchaeological borehole survey was undertaken to provide further information on the archaeological and geoarchaeological resource that may be impacted by the proposed development, and facilitate an informed decision regarding the requirement for, and methods of, any further archaeological and geoarchaeological work that may be required in consultation with the Historic England Science Advisor. A total of 52 boreholes were undertaken across the Scheme, comprising 35 boreholes within the Principal Site area (boreholes WA-P01 to WA-P35), eight boreholes within the Cable Route Corridor (boreholes WA-C01 to WA-C08) and an additional nine boreholes within the possible moated enclosure within the Principal Site (WA-P36 to WA-P44).

The sequence of Quaternary superficial deposits within the Order Limits of the Scheme comprises Pleistocene till, overlain (where stream valleys have cut through these deposits) by alluvium forming on the floodplains of these stream valleys during the Holocene. These alluvial deposits, as mapped by the BGS, were targeted by the borehole survey on the basis they may contain or mask deposits of high archaeological and geoarchaeological potential. The alluvium at both the Principal Site and in the Cable Corridor was found to be entirely minerogenic, with no distinct organic rich or peat units observed, and is therefore considered to be of low potential to preserve archaeology or palaeoenvironmental remains.

A 'moat' identified on historic Ordnance Survey mapping was targeted by a series of nine boreholes towards the east of the Site. Here, deposits provisionally interpreted as moat or ditch fills were recorded; these were minerogenic and of low geoarchaeological potential in all but one sequence (borehole WA-P37), in which an organic basal fill was recorded between 1.60 and 1.95 m bgl. These deposits are considered to be of moderate to high geoarchaeological potential on the basis that the deposits may preserve palaeoenvironmental remains, and material suitable for scientific dating, associated with the 'moat'.

A programme of palaeoenvironmental assessment and scientific dating of the organic unit in borehole WA-P37 is recommended, comprising an assessment of plant macrofossil, pollen and diatom and radiocarbon dating. No further geoarchaeological investigation of the deposits identified in the remainder of the boreholes is recommended.

## Acknowledgements

Wessex Archaeology would like to thank AECOM, on behalf of Tillbridge Solar Limited, for commissioning the work detailed in this report, in particular [REDACTED] (Tillbridge Solar), [REDACTED] (AECOM) and [REDACTED] (DDM Agriculture). We are grateful to Geotechnical Engineering Ltd for undertaking the borehole survey under the supervision of Wessex Archaeology. The fieldwork was managed on site by [REDACTED]. Deposit modelling was undertaken by [REDACTED]. The report was compiled by [REDACTED] and reviewed by [REDACTED]. Figures were produced by [REDACTED]. The project was managed on behalf of Wessex Archaeology by [REDACTED].



# Tillbridge Solar Project, Gainsborough, Lincolnshire

## Geoarchaeological Borehole Survey and Deposit Modelling

### 1 INTRODUCTION

#### 1.1 Project and planning background

- 1.1.1 Wessex Archaeology has been commissioned by Tillbridge Solar Limited ('the Client'), to produce a report detailing the results of a geoarchaeological borehole survey and deposit modelling for the proposed Tillbridge Solar Scheme focussed on an approximately 1,400 ha parcel of land centred around Common Lane, Gainsborough, Lincolnshire, DN21 5UZ. The evaluation area is centred on NGR SK 91197 88413 (**Figure 1**).
- 1.1.2 The proposed development ('the Scheme') comprises the installation of solar photovoltaic (PV) generating panels and on-site energy storage facilities within Lincolnshire ('the Principal Site') and associated infrastructure for connection to the national grid at Cottam sub-station in Nottinghamshire ('the Cable Route Corridor'). The Scheme would allow for the generation, storage, export and import of electricity with an anticipated capacity greater than 50 megawatts (MW).
- 1.1.3 The EIA Scoping Report (AECOM 2022) forms a formal request for an EIA Scoping Opinion under Regulation 10(1) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (as amended) (the 'EIA Regulations') (Ref 1-1).
- 1.1.4 The Scheme is a 'Schedule 2' development under Paragraph 3(a) of Schedule 2 of the Environmental Impact Assessment (EIA) Regulations as it constitutes 'Industrial installations for the production of electricity, steam and hot water'. The Applicant wishes to confirm under Regulation 8(1)(b) of the EIA Regulations that an Environmental Statement (ES) will be provided in respect of the application for development consent for the Scheme, as it is considered that the Scheme meets the criteria set out in Schedule 3 of the EIA Regulations.
- 1.1.5 The Scheme is defined as a Nationally Significant Infrastructure Project (NSIP) under Section 14(1)(a) and 15(2) of the Planning Act 2008 (Ref 1-2) as an onshore generating station in England with a capacity exceeding 50 MW. The Planning Act 2008 requires the Applicant to apply for a Development Consent Order (DCO) to develop the NSIP.
- 1.1.6 No comprehensive geotechnical Ground Investigation (GI) works have taken place within the Principal Site and no pre-existing GI data is available to identify localised potential within this area of the Scheme Order Limits. In lieu of this, a review of BGS (2023) mapping and identification of areas where deposits of palaeoenvironmental potential may be preserved was undertaken as part of the Written Scheme of Investigation (WSI) for the geoarchaeological borehole survey (Wessex Archaeology 2023a).
- 1.1.7 The proposed borehole survey follows on from a Cultural Heritage Desk-Based Assessment (DBA) (AECOM 2023) and archaeological Written Scheme of Investigation for archaeological evaluation (Wessex Archaeology 2023b). The borehole survey was





undertaken in tandem with an archaeological trial trench evaluation, the results of which are being reported separately for each area (Wessex Archaeology 2023d-m), and to be followed by a final combined executive report (Wessex Archaeology, in prep).

1.1.8 The geoarchaeological investigations being undertaken within the Order Limits of the Scheme can be read in conjunction with the results of geoarchaeological deposit modelling for the Gate Burton Solar Scheme (Wessex Archaeology 2023c), which shares its cable corridor across the River Trent with the Tillbridge Solar Scheme. The work presented here provides additional wider geoarchaeological context to the deposit model present in Wessex Archaeology (2023c), and where appropriate the results of this work are referred to here.

## 1.2 Scope of works

1.2.1 The geoarchaeological borehole survey will provide further information on the archaeological and geoarchaeological resource that may be impacted by the proposed development and facilitate an informed decision regarding the requirement for, and methods of, any further archaeological and geoarchaeological work that may be required; or the formation of a mitigation strategy (to offset the impact of the development on the archaeological resource) or a management strategy.

1.2.2 The proposed program of works outlined within the approved WSI (Wessex Archaeology 2023a), following consultation with the Historic England Science Advisor, comprised the following types and number of investigations split between the Cable Route Corridor and Principal Site (**Figures 1 to 4**):

- 35 no. window samples within the Principal Site area (boreholes WA-P01 to WA-P35), within Fields 58, 61, 65, 74, 75, 81, 84, 98, 107-109 and 123-127;
- 8 no. window samples along the Cable Route Corridor (boreholes WA-C01 to WA-C08); and
- 9 no. window samples (WA-P36 to WA-P44) within Field 124 were added to the scope in order to investigate the deposits associated with a moated enclosure investigated as part of the geophysical survey (Magnitude Surveys 2023) and archaeological trial trench evaluation (Wessex Archaeology 2023j); see **Section 5.3** and **Figure 5**.

1.2.3 The location and associated details, including Field numbers, of the boreholes are listed in **Table 1**.

**Table 1** Spatial data for the geoarchaeological boreholes

Borehole	Easting	Northing	Elevation (m OD)	Total depth (m)	Field number
P-01	490690.63	390572.26	18.78	4.00	61
P-02	490725.76	390556.41	18.93	4.00	
P-03	490867.19	389690.34	21.02	4.00	58
P-04	490924.53	389705.46	20.76	4.00	65
P-05	490984.72	389720.36	20.92	4.00	
P-06	491044.47	389734.97	21.77	4.00	
P-07	491100.83	389749.54	22.03	4.00	
P-08	491003.55	389415.63	21.96	4.00	
P-09	491108.33	389458.64	21.62	3.70	



P-10A	492510.37	390149.64	25.92	3.80	84
P-11A	492572.88	390132.70	26.14	4.00	98
P-12	492560.72	390050.05	26.61	3.00	107
P-13	492601.12	390065.76	26.39	3.60	
P-14	492575.73	389793.83	27.65	4.00	108
P-15	492634.36	389821.88	27.48	4.00	
P-16	492649.50	389559.22	28.27	4.00	109
P-17	492710.14	389606.29	28.60	4.00	
P-18	491873.73	387641.09	17.22	4.00	81
P-20	491605.50	387534.34	16.06	4.00	
P-21	491604.22	387464.41	15.85	4.00	
P-22	491379.26	387402.18	15.79	4.00	74
P-23	491441.86	387379.38	15.35	4.00	
P-24	491513.18	387351.83	15.35	4.00	75
P-25	493035.72	387663.42	21.58	4.00	123
P-26	492901.90	387438.47	20.98	4.00	124
P-27	493048.75	387626.63	21.55	4.00	123
P-28	492934.68	387410.53	19.99	4.00	124
P-29	492782.04	387177.94	19.67	3.90	125
P-30	492847.78	387168.87	19.37	4.00	126
P-31	492716.04	386859.97	18.02	4.00	125
P-32	492788.57	386861.41	18.18	4.00	
P-33	492861.74	386857.64	18.71	4.00	127
P-34	492940.60	386877.40	19.09	4.00	
P-35	493010.03	386862.23	19.33	4.00	
P-36	492885.28	387316.15	19.78	2.00	124
P-37	492886.13	387312.44	19.72	3.00	
P-38	492886.61	387308.72	19.72	3.00	
P-39	492896.44	387295.44	19.72	2.00	
P-40	492900.44	387286.16	19.73	2.00	
P-41	492907.89	387275.38	19.64	2.30	
P-42	492905.86	387266.80	19.13	2.30	
P-43	492908.82	387261.92	19.07	1.80	
P-44	492909.79	387260.66	19.13	2.20	
C-01	490347.73	385149.39	10.29	4.00	
C-02	490368.33	385090.67	9.90	4.00	
C-03	490162.03	384610.26	9.95	2.90	
C-04	488731.79	383515.60	10.25	2.50	
C-05	488697.80	383443.36	9.93	2.60	
C-06	488663.99	383369.19	10.60	2.10	
C-07	488625.84	383294.50	10.79	0.90	



C-07a	488642.26	383329.44	10.76	1.70
C-08	488574.71	383212.64	9.36	2.80

### 1.3 Scope of document

- 1.3.1 To help frame archaeological and geoarchaeological investigations of this nature, Wessex Archaeology has developed a four-stage approach, encompassing different levels of investigation appropriate to the results obtained, accompanied by formal reporting of the results at the level achieved. The borehole survey reported on here represents Stage 2 of this process (**Table 2**).
- 1.3.2 In format and content, the work follows the methodology set out within the WSI (Wessex Archaeology 2023a), and conforms to current best practice, including the guidance in *Management of Research Projects in the Historic Environment* (MoRPHE, Historic England 2015a), the Chartered Institute for Archaeologists' (CIfA) *Standard and guidance for archaeological field evaluation* (CIfA 2020a), Historic England's technical guide to Geoarchaeology: Using Earth Sciences to Understand the Archaeological Record (Historic England 2015b) and Deposit Modelling and Archaeology (Historic England 2020).
- 1.3.3 This document will be submitted to the AECOM heritage team for technical review, and the Historic England Science Advisor for the East Midlands for approval.

**Table 2** Staged approach to geoarchaeological investigations

<p><b>Stage 1:</b></p> <p>Geoarchaeological Desk-based Assessment (GDBA) and deposit modelling</p>	<p>A Geoarchaeological Desk-Based Assessment (GDBA) examines a range of data (published and unpublished ("grey literature"), LiDAR, historic maps) and models existing Ground Investigation (GI) data to inform on the possible Palaeolithic archaeological and geoarchaeological potential of a site.</p> <p>The GDBA may include, dependant on the site and complexity of a site, a Geoarchaeological Deposit Model which demonstrates the vertical and lateral extent of superficial deposits across the site. The GDBA establishes the requirements for and scope of Stage 2 archaeological and geoarchaeological field elevation.</p> <p>Geoarchaeological potential is defined as potential for paleoenvironmental and dating evidence. Should Stage 2 evaluation be required, appropriate and proportionate recommendations for the site are provided.</p>
<p><b>Stage 2:</b></p> <p>Geoarchaeological monitoring of GI works and/or Geoarchaeological borehole survey</p>	<p>Field evaluation to establish the geoarchaeological and archaeological potential of Quaternary deposits within an evaluation area, which informs on the requirements and scope of further works at Stage 2 (e.g. purposive borehole survey), Stage 3 palaeoenvironmental assessment and/or Stage 4 mitigation.</p> <p>The principal methods of geoarchaeological evaluation are through monitoring of Ground Investigation (GI) works or targeted boreholes.</p> <p>A geoarchaeological evaluation report is produced, which includes deposit modelling (where sufficient data allows) and recommendations for further work at Stage 2 or Stage 3 if required. Further works may include additional interventions (stepped trenches, test pits or boreholes) to retain additional/suitable samples for assessment.</p>
<p><b>Stage 3:</b></p> <p>Palaeoenvironmental assessment</p>	<p>Palaeoenvironmental samples recovered during Stage 2 are assessed to inform on the archaeological and geoarchaeological potential of deposits and guide the scope and need for Stage 4 analysis.</p> <p>A report is produced outlining the palaeoenvironmental potential of the deposits including targeted and proportionate recommendations for Stage 4 analysis.</p>



<b>Stage 4:</b> Palaeoenvironmental analysis	<p>Based on the results of the Stage 3 palaeoenvironmental assessment, palaeoenvironmental analysis on selected deposits/samples may be required.</p> <p>In addition to full analysis of suitable samples identified during the assessment, work at Stage 4 may include additional scientific dating where appropriate/required.</p> <p>A final analysis report is provided on completion of mitigation program. Where appropriate, this may include recommendations for publication or other forms of dissemination.</p>
<b>Publication</b>	<p>The scope and location of a publication report will be agreed in consultation with the Client, Historic England and the LPA advisor.</p> <p>The publication report may comprise a note in a local journal or a larger publication article or monograph, dependant on the significance of the archaeological and geoarchaeological work.</p>

## 2 GEOARCHAEOLOGICAL BACKGROUND

### 2.1 Location, topography and geology

- 2.1.1 The Scheme lies to the east (Principal Site) and south-east (Cable Route Corridor) of Gainsborough in Lincolnshire. The site is located approximately 5 km to the east of Gainsborough and approximately 13 km north of Lincoln. The Principal Site covers an area of approximately 1,400 ha and is located entirely within the administrative area of West Lindsey District Council; the Cable Route Corridor falls within West Lindsey District Council and west of the River Trent lies within the Bassetlaw District of Nottinghamshire.
- 2.1.2 The Principal Site is bounded to the north by the A361, the east by the B1398 and to the west and south by farmland. The southern boundary is 0.5 km south of Kexby Road and the eastern boundary wraps around the Mobile Structures site, 1.6 km north-east of Heapham.
- 2.1.3 From north to south, the topography of the Principal Site is essentially flat and gently undulating, located at an average of 22 m OD. From west to east, the landform gently rises from 16 m to 32 m OD at Harpswell before rising more steeply to 65–68 m OD along Middle Street, beyond which lies the ridgeline of the Lincoln Cliff.
- 2.1.4 The Cable Route Corridor is approximately 10 km in length and extends southwest from the Principal Site across the valley of the River Trent to the area of Cottam and Rampton, Nottinghamshire. Where the Cable Route Corridor crosses the River Trent the cable corridor is shared with the Gate Burton Solar Scheme, for which a programme of geoarchaeological deposit modelling was reported in Wessex Archaeology (2023c).
- 2.1.5 The bedrock geology across the area of the Principal Site and Cable Route Corridor are Mudstones of the Lias Group (**Figure 1**), with Charmouth Mudstone Formation recorded underlying much of the Principal Site. The western part of the Principal Site and much of the Cable Route Corridor is underlain by the Scunthorpe Mudstone Formation, with Mudstones of the Penarth and Mercia Mudstone Groups to the west.
- 2.1.6 Along the eastern boundary of the Principal Site, marked by the B1398 road, the geology is variable. It is formed of north–south aligned bands which extend westwards 0.7 km into the Principal Site. The bands from east to west are formed of:
- Lincolnshire Limestone Formation – Limestone;



- Grantham Formation – Sandstone, Siltstone and Mudstone;
- Whitby Mudstone Formation – Mudstone;
- Marlstone Rock Formation – Ferruginous limestone and ferruginous sandstone with superficial, glaciofluvial deposits, mid Pleistocene – sand and gravel; and,
- Charmouth Mudstone Formation – Mudstone.

2.1.7 Superficial deposits of Till, Mid Pleistocene – Diamicton underlie much of the Principal Site, with superficial deposits of alluvium – Clay, silt, sand and gravel dominating the small watercourses that traverse the site including Yewthorpe Beck and the small dykes and watercourses that feed Fillingham Beck (British Geological Survey GeolIndex).

2.1.8 The Cable Route Corridor cross a series of superficial deposits associated with the valley of the River Trent, including Holocene alluvium, and Pleistocene deposits comprising glaciofluvial deposits and fluvial sands and gravels of the Holme Pierrepont Sand and Gravel Member (HPSG). Peat deposits are mapped in places overlying the HPSG on the eastern side of the valley of the Trent, likely forming within former, now abandoned, channels, although these are not mapped by the BGS within the Cable Route Corridor.

## 2.2 Quaternary superficial deposits

2.2.1 The superficial deposits in the Principal Site and Cable Route Corridor may include deposits with geoarchaeological and/or archaeological potential of both Pleistocene and Holocene date. These epochs form parts of the Quaternary, a period covering the last 2.6 Mya, and defined by repeated fluctuations between cold (glacial) and warm (interglacial) climate stages (**Table 3**).

2.2.2 Where age estimates are available for deposits these are expressed in millions of years (Mya), thousands of years (Kya) and within the Holocene epoch as either years Before Present (BP), Before Christ (BC) and Anno Domini (AD). Where radiocarbon dates are included, they are quoted as calibrated (cal.) BC or AD. These dates are supplemented where relevant with the comparable Marine Isotope Stage (MIS) where odd numbers indicate an interglacial period and even numbers a glacial period.

**Table 3** British Quaternary chronostratigraphy

Geological Period	Chronostratigraphy		Age (Kya)	MIS
Holocene	Holocene interglacial		11.7 – present	1
Late Pleistocene	Devensian Glaciation	Loch Lomond Stadial	11.7 – 12.9	2 – 5d
		Windermere Interstadial	12.9 – 15	
		Dimlington Stadial	15 – 26	
		Upton Warren Interstadial	40 – 43	
	Early Devensian	60 – 110		
	Ipswichian interglacial		115 – 130	5e
		Unnamed cold stage	130-374	6



Geological Period	Chronostratigraphy	Age (Kya)	MIS
Middle Pleistocene	Aveley interglacial		7
	Unnamed cold stage		8
	Purfleet interglacial		9
	Unnamed cold stage		10
	Hoxnian interglacial	374 – 424	11
	Anglian glaciation	424 – 478	12
	Cromerian Complex	478 – 780	13 – 19

2.2.3 This section provides relevant background information on the Quaternary superficial deposits that may be present across the Principal Site and Cable Route Corridor. BGS mapping suggests that the following deposits are present within the Scheme Order Limits and may be encountered during the proposed borehole survey:

- River Terrace Deposits (Pleistocene);
- Glaciofluvial sands and gravels (Pleistocene);
- Till (Pleistocene);
- Alluvium (Holocene); and
- Peat (Holocene).

#### *River Terrace Deposits*

2.2.4 To the west of the A1500 the cable route crosses multiple areas of Pleistocene terrace deposits - including an outcrop to the east of Normanby on Stow, and at the western end of the cable route shared with the Gate Burton Solar Scheme and associated with the River Trent. The terrace deposits associated with the River Trent formed part of an earlier program of GI review and associated deposit model (Wessex Archaeology2023c), the results of which are to be built upon as part of this report. A brief summary of these deposits is provided here for wider context.

2.2.5 River terrace deposits are key contexts for archaeological and geoarchaeological investigation. They represent high energy fluvially deposited sediments, typically sands and gravels, that have been subsequently incised through and preserved as evidence for former floodplains along the sides of current and former river valleys. Where multiple terraces are preserved, they represent successive phases of aggradation and incision covering multiple glacial and interglacial cycles.

2.2.6 Sediment deposition is closely linked to climate, typically comprising coarse grained fluvial sands and gravels laid down during cold stages, with finer grained fluvial sediments accumulating during interglacial/interstadials. Terrace formation occurs during episodes of incision and erosion, creating step-like sequences of sediment.

#### *River Trent*

2.2.7 Pleistocene sediments within the floodplain of the River Trent are mapped by BGS as the Holme Pierrepont Sand and Gravel Member. The Holme Pierrepont Sand and Gravel

(HPSG) is the youngest Pleistocene unit of the of the Middle Trent Valley terrace stratigraphy (Bridgland et al. 2014).

- 2.2.8 The high energy sands and gravel units of the HPSG likely reflect deposition during cold climatic conditions, probably during the Loch Lomond Stadial (see **Table 3**). Investigations at Holme Pierrepont identified organic silts and peats infilling channels at the base of sands and gravels and cut into bedrock; radiocarbon dates on material from these channel sediments suggest that they date to the Windermere Interstadial (15-12.9 Ka), supporting a latest Devensian date (12.9-11.7 Ka) for the HSPG (Howard et al. 2011).
- 2.2.9 The HPSG is therefore likely to have been deposited during peak cold conditions of the Loch Lomond Stadial, a period in which humans are thought to have been absent from Britain (Jacobi and Higham 2011). A review of GI works across the Trent as part of the Gate Burton Solar Scheme did not identify any organic deposits associated with the HPSG (Wessex Archaeology2023c).
- 2.2.10 The Cable Route Corridor also crosses a small outcrop of river terrace deposits mapped 1.5km east of Normanby by Stow (**Figure 2**), for which there is currently no existing GI data. These deposits are likely to form part of the river terrace gravels mapped to the south associated with the River Witham. The River Witham represents a possible remnant of the Trent, with the Trent now flowing north into the Humber Estuary.

#### *Glaciofluvial sands and gravels*

- 2.2.11 Glaciofluvial deposits of Mid-Pleistocene date are mapped by the BGS at the eastern end of the Principal Site in the proximity of Glentworth (**Figure 2**), comprising sands and gravels.
- 2.2.12 Glaciofluvial sands and gravels are a lithostratigraphic unit mapped by the BGS at the 1:50,000 scale, but in practice may be difficult to distinguish from river terrace deposits without the aid of sedimentary exposures. Glaciofluvial sands and gravels are deposited by seasonal meltwater outwash at the edge of ice sheets or as subglacial, englacial and supraglacial deposits of ice sheets.
- 2.2.13 Although glaciofluvial sands and gravels have little direct geoarchaeological potential, they may contain eroded and redeposited Palaeolithic archaeology or seal stratified deposits of archaeological and geoarchaeological potential.

#### *Till*

- 2.2.14 Tills are poorly sorted sediments deposited directly by ice sheets. Areas of till are mapped by the BGS to the east and west of the Cable Route Corridor and dominate the Principal Site area, but may be present underlying other mapped superficial deposits. The upper reaches of the Trent Valley and surrounding landscape were glaciated during the last Ice Age (Late Devensian, MIS 2). The tills mapped in the area of the Scheme are south of the mapped extent of the Late Devensian ice sheet, and may therefore relate to earlier glacial episodes between the Anglian (MIS 12, 478-424 Ka) and Late Devensian (MIS 2; 26-11.7 Ka), which in turn has implications for the potential for discovering Lower and Middle Palaeolithic archaeology.
- 2.2.15 Although the Tills have a limited archaeological and geoarchaeological potential, they may seal and preserve underlying stratigraphy containing environmental remains and artefacts.



### *Alluvium*

- 2.2.16 Alluvium is a generalised term covering unconsolidated sediment transported by water in a non-marine environment. Pleistocene river terrace deposits are technically alluvium, but the term here is applied to fine-grained deposits of Holocene date (11.7 Ka to present).
- 2.2.17 Alluvial deposits are mapped by the BGS in the south of the Principal Site to the west of Glentworth (a tributary of the River Till) and to the east of Harpswell distributed along and to the south of the A631, forming tributaries courses of the River Eau (a tributary of the River Trent).
- 2.2.18 Deposits of alluvium are also mapped where the Cable Route Corridor is associated with the River Till and tributaries to the east of Normanby by Stow. Widespread alluvial deposits are also recorded along the cable route within the floodplain of the River Trent. The review covering the Gate Burton Solar Scheme Grid Connection Corridor revealed a sequence of peat and alluvium overlying the Holme Pierrepoint Sands and Gravels (Wessex Archaeology 2023c). The alluvial deposits were generally present within the centre of the corridor at elevations of 0.00-4.00m OD (Ordnance Datum) and ranged between a thickness of 0.30 to 8.68m.
- 2.2.19 The geoarchaeological potential of minerogenic alluvium is low, although alluvium has the potential to contain layers of peat of high potential and may also contain or partially obscure archaeological remains.
- 2.2.20 The floodplain of rivers may also contain palaeochannels which are key contexts for understanding the physical evolution of the landscape and act as effective traps preserving both artefacts and ecofacts indicative of the surrounding environment, human activity and land-use.

### *Peat*

- 2.2.21 Areas of alluvium along the Cable Route Corridor and within the Principal Site have the potential to contain peat deposits.
- 2.2.22 Peat comprises partially decayed organic matter preserved within waterlogged anaerobic (oxygen-free) conditions. Peats and organic-rich alluvium are ideal contexts for the preservation of palaeoenvironmental remains (e.g. pollen, plant macrofossils, insects) that provide important data on past climate, vegetation, environment and land-use.
- 2.2.23 Any peat deposits identified, interbedded in alluvium or preserved in palaeochannels, are therefore of high geoarchaeological potential.
- 2.2.24 Peat deposits have been identified to the west along the cable route associated with the floodplain of the River Trent. A review of GI for the Gate Burton Solar Farm (Wessex Archaeology 2023c) identified peat deposits within the central part of the corridor in the vicinity of the River Trent at elevations between 1.07 to 1.61m OD with a thickness of 1.70 to 2.90m. These deposits were indicative of a transition to semi-terrestrial conditions on the floodplain supporting the growth of wetland vegetation, and were deemed to be of high palaeoenvironmental and archaeological potential.





### 3 ARCHAEOLOGICAL BACKGROUND

#### 3.1 Introduction

3.1.1 The archaeological and historical background was assessed in detail in a prior cultural heritage Desk-Based Assessment (AECOM 2023), which considered the recorded historic environment resource within a 1 and 3 km Study Area of the Scheme. The background also integrates results and guidance from the current Updated Period Resource Assessment: The Palaeolithic Period within the East Midlands Historic Environment Research Framework (Howard 2019).

3.1.2 The results of the DBA for elements of the archaeological background relevant to the anticipated deposits (principally those of prehistoric date) are summarised below, with relevant entry numbers from the Lincolnshire Historic Environment Record (LHER) and the National Heritage List for England (NHLE) included. Additional sources of information are referenced, as appropriate. The full results of the archaeological DBA can be found in AECOM (2023) and Wessex Archaeology (2023b).

#### 3.2 Archaeological and historical context

##### *Palaeolithic (700,000 – 10,000 BC)*

3.2.1 Evidence of Palaeolithic activity is rare nationally, with *in situ* remains particularly rare and the slightly more frequent findspots of stone tools providing most of the evidence for a human presence in Lincolnshire during the period.

3.2.2 The glaciers of the Anglian Ice Age extended across Lincolnshire scouring the landscape and depositing the superficial glacial till deposits found across the Principal Site. It is also likely that the icesheets of the Wolstonian glaciation extended across the Study Area.

3.2.3 Following the Anglian glaciation, both the River Trent and River Witham meandered and shifted across their current floodplains providing routeways for groups of transient hunter-gatherers into Lincolnshire during warmer interglacial periods and following the last glacial maximum of the Devensian Ice Age 21,000 years ago.

3.2.4 There are no recorded Palaeolithic remains or artefacts within the Principal Site or Study Area. A total of three findspots are recorded, relating to Upper Palaeolithic or Mesolithic flint artefacts either dredged from or found alongside the River Trent near Torksey. These include a flint bladelet [LHER MLI98514], a core adze [MLI98513] and several scrapers and microliths [MLI98505] and indicate the potential for Palaeolithic remains within the Trent Valley.

##### *Mesolithic (10,000 – 4,000 BC)*

3.2.5 Following the end of the Devensian glaciation the climate of Britain gradually improved becoming warmer, enabling a change from late-glacial steppe to forests of birch and pine and mixed forests of oak, elm and lime. From 9,000 BC rising sea levels gradually encroached on the low-lying Doggerland land bridge to the continent, until Britain finally became an island c.6,500 BC.

3.2.6 Throughout the Mesolithic small bands of hunter-gatherers continued to move across the landscape subsisting in hunting, fishing and gathering edible plants, and settling in short term or seasonal camps. Evidence for Mesolithic occupation in Lincolnshire is limited, with only a small number of possible settlement sites excavated and the majority of the evidence comprising surface scatters or isolated findspots of flint artefacts.

3.2.7 However, a substantial quantity of artefacts and feature of late Mesolithic to late Neolithic/early Bronze Age date were identified at Newton Cliff during the 1980s [LHER MLI52576], approximately 7 km to the south of the Scheme in the valley of the River Trent, including evidence for possible Mesolithic occupation comprising four substantial post-holes, pits and a series of post-settings, as well as artefact scatters associated with a lithic working site. The site was interpreted as possibly representing intermittent, perhaps seasonal, occupation and attests to prehistoric activity in proximity to the floodplain of the River Trent. The current pattern of Mesolithic settlement appears to favour the upland areas of the Lincolnshire Wolds or sandy rises along the fen edge, with the resource rich valleys of the Rivers Trent and Witham providing routeways further inland. Evidence for Mesolithic activity within the Principal Site is limited to a single findspot [LHER MLI51357] at the north-west corner of the Site, where three or four Mesolithic flints, including an arrowhead with rudimentary tang, a possible petit-tranchet arrowhead and two scrapers, were recovered.

3.2.8 As noted above, flint artefacts of uncertain, Upper Palaeolithic or Mesolithic date have been recovered from the River Trent near Torksey, providing further evidence that the river and its floodplain were exploited during the Mesolithic period.

#### *Neolithic (4,000 – 2,200 BC)*

3.2.9 The introduction of domesticated crops and animals during the Early Neolithic marks a transition from mobile hunter-gather communities to a more fixed pattern of settlement, with the extensive forests beginning to be cleared for agriculture and small farming settlements. The Neolithic also sees the introduction of pottery and the first monuments within the landscape. In Lincolnshire these monuments are represented by a small number of causewayed enclosures, long barrows and mortuary enclosures recorded on the higher ground of the central and southern Lincolnshire Wolds to the east and south-east of the Study Area.

3.2.10 A number of Neolithic settlement sites have been recorded during archaeological investigations, while artefact scatters suggest the location of further settlements across the county, demonstrating that occupation was not restricted to the uplands of the Wolds and limestone ridges, but extended across a wider and more varied area.

3.2.11 Artefactual evidence for Neolithic activity with the Scheme area is limited to a single isolated findspot of a straight-sided polished stone axe [LHER MLI51341] recorded in the north-west corner of the Principal Site. Further evidence for Neolithic activity in the landscape to the north-west of the Principal Site is provided by other findspots of lithic artefacts including a stone axe [MLI51358] and a stone axe and flint scrapers [MLI51349], found near Springfield 160 m and 320 m from the Scheme respectively. Evidence for Neolithic activity within the valley of the River Trent c. 7 km to the south of the Scheme is provided by [artefacts of possible Neolithic date identified at Newton Cliff \[LHER MLI52578\]](#).

#### *Bronze Age (2,200 – 800 BC)*

3.2.12 The Bronze Age is poorly represented within the Study Area. In Lincolnshire, the evidence for Bronze Age activity is dominated by round barrows, burial monuments distributed along the Wolds, the eastern flank of the Limestone ridge and river valleys of the Ancholme and Witham, extending southwards towards the fens. Few settlement sites have been recorded with by far the most extensive evidence for Bronze Age occupation being the recorded findspots of metalwork. There is a notable concentration of Bronze Age metal finds along the river valleys of the Trent and Witham, areas which, based on the wider evidence have little recorded evidence for settlement during this period.



- 3.2.13 No designated or non-designated heritage assets of Bronze Age date have been recorded within the boundary of the Scheme.
- 3.2.14 Within the surrounding 1 km Study Area a single findspot, relating to a bronze flanged axe which was found north of Harpswell Lane [LHER MLI50983], is recorded approximately 130 m north of the Principal Site and may indicate a human presence within, or at least moving through the landscape.
- 3.2.15 Around 7 km to the south of the Scheme at Newton Cliff [MLI52578] an occupation site of Neolithic or Bronze Age date was recorded in the 1980s, including beaker pottery and pits in which probably early Bronze Age artefacts were recorded. The LHER reports that trial trenching in 2011 [SLI14498 and SLI13710] recorded three pits and a ditch of likely Neolithic or Early Bronze Age date, with a sherd of probable early Bronze Age pottery recovered from one of the pits.

*Iron Age (800 BC – AD 43)*

- 3.2.16 Greater levels of evidence have been recorded from the later prehistoric period in the East Midlands, including a small number of hill forts and settlements, and features of burial and cremation in Lincolnshire. The Principal Site is located to the east of the River Trent, which has been known to provide evidence of prehistoric remains given the past exploitation of the resource and the survival potential of archaeological remains. Evidence from Nottinghamshire suggests that by the Late Iron Age the Trent Valley and south Nottinghamshire were well settled and economically strong.
- 3.2.17 During the Late Iron Age period Lincolnshire and Nottinghamshire were occupied by the Corieltauvi tribe (according to Ptolemy's 2nd century Geography) whose capital was Ratae Corieltauorum (now Leicester).
- 3.2.18 Within the 1 km Study Area there are 25 non-designated heritage assets of an Iron Age or late prehistoric date, seven of which are located within the Scheme area and four of which are relevant to the Principal Site.
- 3.2.19 Cropmarks visible on aerial photography provide evidence for the pattern of Iron Age settlement across the Study Area, with a number of these sites recorded within the Scheme area. Although undated, cropmarks can, through their shape, form and character, be compared with excavated examples of late prehistoric settlements. Within the Principal Site a series of cropmarks appear to represent a later prehistoric settlement enclosure [LHER MLI53952].
- 3.2.20 Excavated evidence for extensive Iron Age rural settlement west of the River Trent is focussed just to the south-west of the scheme, with Iron Age and Roman settlement recorded south of Cottam power station and at Rampton Quarry, both 14 km south-west of the Principal Site.
- 3.2.21 Within the eastern side of the Principal Site, archaeological remains representing the edge of a, probably small, settlement site of Late Iron Age to early Romano-British date were recorded and comprised a number of ditches and pits [LHER MLI86409]. One ditch produced stratified pottery sherds dating to the Late Iron Age to early Roman transition (50 BC to 150 AD). The remains were found during an archaeological watching brief [LHER ELI5075] during the construction of a replacement gas main between Caenby Corner and Sturgate Airfield.

- 3.2.22 Within the wider 1 km Study Area the LHER records several locations at which Iron Age remains have been recorded, including a fragment of Early Iron Age pottery associated with a skeleton [MLI50980] just to the east of the junction of the A631 and B1398 (375 m north-east of the Principal Site), and an undated prehistoric stone rubber or pounder [MLI51353] recovered near Springthorpe.
- 3.2.23 On the edge of the 1 km Study Area, south-east of the Principal Site, the cropmark remains of a late prehistoric ring ditch enclosure [LHER MLI54007] north of Fillingham have been recorded. This asset appears to be part of a wider prehistoric landscape with further prehistoric features seen as cropmarks just beyond the 1 km Study Area. This includes a large ditch feature [MLI54008], further circular cropmark features [MLI51123] and a cropmark possibly indicative of the remains of a round barrow [MLI54006].

#### *Undated Assets*

- 3.2.24 Many of the undated heritage assets consist of archaeological features identified through cropmarks, soil marks and earthworks, which may provide evidence for past settlement of the landscape. Within the Principal Site boundary these comprise:
- a cropmark and earthwork enclosure [LHER MLI53953] located in the north-eastern part of the Site;
  - a possible trackway or boundary near the centre of the Site [MLI53951];
  - a possible soil mark of a linear boundary in the south-east corner of the Site [MLI54000]; and
  - cropmarks of two sides of a rectangular ditched enclosure are located to the north-west of Billyards Farm [MLI51010].
- 3.2.25 The A631 Harpswell Lane [LHER MLI53954], which runs along the northern boundary of the Principal Site is also identified by the LHER as a former major routeway of unknown date. The routeway would have formed a cross-road with Roman Ermine Street at Caenby Corner.

### **3.3 Previous investigations**

#### *Borehole survey at Blyborough to Cottam Pipeline (Wessex Archaeology 1997a)*

- 3.3.1 A borehole survey and subsequent pollen assessment was undertaken associated with archaeological evaluation of the Blyborough to Cottam Pipeline, comprising a geophysical survey (GeoQuest Associates 1997) and trial trench evaluation (Wessex Archaeology 1997b). During the geoarchaeological element of these works an auger survey was undertaken across the floodplain of the River Trent, c. 200-500m to the south of Transect 8 (**Figure 14**) in the area of the Gate Burton Solar Scheme.
- 3.3.2 During these works a total of 19 boreholes were undertaken to a maximum depth of c. 5.0 m bgl, supported by a watching brief during the excavation of the pipe trench. A sequence of alluvium was recorded between to depths between c. 1.5 and 2.3 m bgl, comprising fine-grained (clayey) alluvium over sands in places incorporating detrital organic remains; towards the north of their transect, deposits of peat were recorded at a depth of c. 1.8 m in the area of their borehole 18 (to the south of where peat was identified in boreholes BH8 and BH8.5 on Transect 8; see **Figure 14**). The alluvial sequence was not bottomed during these works.
- 3.3.3 The results of the pollen assessment of the peat deposits here revealed pollen assemblages typical of wetland and marsh habitats, dominated by alder carr, with yew and willow and a

ground flora of sedges and other herbs and ferns, with oak, ash, hazel and lime on the nearby drier ground (see Wessex Archaeology 1997a). No evidence for human activity was recorded in pollen assemblage Zone 1, although in their upper Zone 2 limited evidence for localised woodland clearance and agriculture was recorded in the form of disturbed ground taxa and cereal type grains, along with various herbs which may relate to arable land.

- 3.3.4 The sequence was not dated, but on the basis of the pollen assemblage it was tentatively considered to be of Neolithic date (see Wessex Archaeology 1997a).

*Geophysical Survey at Cottam (WYAS 2022a, 2022b) and Archaeological Evaluation at Gate Burton Solar Scheme (Wessex Archaeology 2022)*

- 3.3.5 Programmes of archaeological works have been undertaken at both Cottam and Gate Burton Solar Scheme in recent years and include some of the land within the Cable Trench Corridor. The results conform to the local narrative of increased but diffuse settlement throughout the Iron Age and Romano-British periods, with a predominantly agricultural focus that remains preeminent to the present day.

*Geophysical Survey (2023)*

- 3.3.6 A geophysical survey was conducted across approximately 1325 ha of the Principal Site, identifying a total of 12 major 'Areas of Archaeological Activity' (AAA). These appear to form settlement complexes focussed on elevated points of the landscape and comprise ditched enclosures, ring, ditches, trackways, former field systems and discrete pits. These major areas were thought to represent multi-period archaeological landscapes, and were probably associated with various phases of occupation. Other anomalies consist of ditches, trackways and a moated feature in Field 124 (Magnitude Surveys 2023).
- 3.3.7 Geological variations were also detected across the surveyed area, particularly in the east where they were interpreted as indicating the presence of glaciofluvial deposition. In addition, a number of anomalies have been classified as undetermined, these are of uncertain date and function and have little supporting context (Magnitude Surveys 2023).

*Trial Trench Evaluation at the Principal Site (Wessex Archaeology 2024)*

- 3.3.8 The geoarchaeological borehole survey reported on here was undertaken in tandem with an archaeological trial trench evaluation, the results of which have been report by landowner area in Wessex Archaeology (2023d-m), with a combined report presented in Wessex Archaeology (2024).

## 4 AIMS AND OBJECTIVES

- 4.1.1 The aims and objectives of the borehole survey follow those outlined within the WSI (Wessex Archaeology 2023a) and are presented below.

### 4.2 Overarching aims

- 4.2.1 The general aims (or purpose) of the borehole survey, in compliance with the *CifA Standard and guidance for archaeological field evaluation* (CifA 2020), are as follows:
- provide information about the archaeological and geoarchaeological potential of the area within the Scheme Order Limits;
  - consider the possible significance of any archaeological and geoarchaeological evidence present, or potentially present, in the context of national and regional research priorities and agendas (e.g., EH 2008a), and



- inform either the scope and nature of any further archaeological and geoarchaeological work that may be required; or the formation of a mitigation strategy (to offset the impact of the development on the archaeological resource); or a management strategy.

### 4.3 Overarching objectives

4.3.1 The specific objectives of the geoarchaeological borehole survey are as follows:

- To record the sequence of superficial deposits at each borehole location;
- To obtain geoarchaeological samples of relevant deposits (where possible);
- To undertake deposit modelling of the data arising from the borehole survey, integrating any available GI data and relevant BGS archive boreholes, in order to map the extent, thickness and depth of Quaternary superficial deposits;
- Interpret the probable environments represented;
- Determine the importance of the deposits with regard to their archaeological and geoarchaeological (including palaeoenvironmental) potential, and
- Make specific recommendations for further work, where appropriate, which may include additional geoarchaeological boreholes, palaeoenvironmental assessment and/or scientific dating.

### 4.4 Site-specific objectives

4.4.1 Following consideration of the archaeological potential of the site and the regional research framework (East Midlands Historic Environment Research Framework 2022), the site-specific objectives of the evaluation are to:

- determine the depth of the alluvial sequence and examine the archaeological and palaeoenvironmental potential of alluvial deposits;
- for the area of the possible moated enclosure, to investigate the profile, depth and nature of the deposits infilling the moat and those within the interior of the enclosure.

## 5 METHODS

### 5.1 Introduction

5.1.1 Health and safety override archaeological considerations in all works since, as stated in ClfA guidance, *Health and Safety regulations and requirements cannot be ignored no matter how imperative the need to record archaeological information; hence Health and Safety will take priority over archaeological matters* (ClfA 2020, 11).

5.1.2 All works were undertaken in accordance with the detailed methods set out within the WSI (Wessex Archaeology 2023a). Any significant variations to these methods were agreed in writing with the Historic Environment Officers at Lincolnshire County Council, and the client, prior to being implemented. The fieldwork was carried out under the supervision of an experienced geoarchaeological specialist.



## 5.2 Setting out of the boreholes

- 5.2.1 All boreholes were set out using GNSS in the approximate positions shown in **Figures 3 to 5**. The borehole locations were tied in to the Ordnance Survey (OS) National Grid and Ordnance Datum (OD) (Newlyn), as defined by OSGM15 and OSTN15.
- 5.2.2 Before excavation began, the area of the boreholes was walked over and visually inspected to identify the location of any below/above-ground services. All borehole locations were scanned before and during excavation with a Cable Avoidance Tool (CAT) to verify the absence of any live underground services.

## 5.3 Geoarchaeological borehole survey

- 5.3.1 An experienced member of the Wessex Archaeology geoarchaeology team monitored the excavation of targeted geoarchaeological boreholes undertaken using a window sampling drilling rig operated by experience geotechnical drillers from Geotechnical Engineering Ltd (GEL).
- 5.3.2 A total of 34 of the proposed 35 boreholes were undertaken in the Principal Area (WA\_P-01 to WA\_P-35), with an additional eight boreholes within the Cable Route Corridor (WA\_C-01 to WA\_C-08) as shown in **Figures 3 to 5**. Due to land access issues at the time of the borehole survey, borehole WA-P19 (located within the Principal Site) was inaccessible and was therefore descoped.
- 5.3.3 An additional nine boreholes, WA-P36 to WA-P44, were undertaken as shown in **Figure 5** in Field 124, where a moated enclosure shown on historic mapping was investigated during the geophysical survey and trial trench evaluation (Wessex Archaeology 2023j). The additional boreholes, aligned in a broadly N-S transect and taking in the northern and southern arms of the moat and the interior of the enclosure, were undertaken in consultation with the Client and Historic England in order to investigate the profile, depth and nature of the deposits infilling the moat and within the interior of the enclosure.
- 5.3.4 The attending geoarchaeologist liaised closely with the geotechnical drillers in order to ensure effective communication was maintained throughout the works. Hand-dug test pits were excavated to a depth of 1.2m below ground level (bgl) prior to drilling. All hand-dug test pits were monitored by the attending geoarchaeologist and recorded as described below.
- 5.3.5 A percussive window sampling rig (Terrier type) was used to extract sleeved cores one metre in length and 100mm in diameter. Samples retained in sleeved plastic liners were sealed and marked with the project number, site number, borehole number and sample depth and returned to the Wessex Archaeology laboratory for later description.
- 5.3.6 The boreholes were drilled to a depth of between 0.9 and 4.0 m below ground level (bgl). Boreholes and test pits were backfilled with a combination of bentonite and arisings from the excavations. The supervising geoarchaeologist recorded and interpreted the sequence of deposits encountered in order to allow assessment of likely geoarchaeological potential. Where appropriate, selected cores were retained as part of the sedimentary archive against which further works will be recommended.
- 5.3.7 Any exposed archaeological deposits and features were recorded using a pro forma recording system. A record of the datum (either m above Ordnance Datum or m below ground level) levels of the archaeological deposits was recorded by the monitoring geoarchaeologist. This data was tabulated by test pit/borehole and depth.



## 5.4 Sediment description

5.4.1 The boreholes were recorded using Wessex Archaeology's pro-forma digital recording system, as shown in **Appendix 1**. For each stratigraphic unit descriptions and interpretations of the deposits are provided. Descriptions of deposits included information such as:

- *Depth*
- *Texture*
- *Composition*
- *Colour*
- *Inclusions*
- *Structure*
- *Shape and nature of contacts between deposits*

5.4.2 Interpretations included, where possible, probable depositional environments and formation processes.

5.4.3 A full photographic record was made using a digital camera equipped with an image sensor of not less than 10 megapixels. This recorded both the detail and the general context of the principal lithological and stratigraphic features, and the evaluation area as a whole.

5.4.4 Digital images were subject to managed quality control and curation processes which will embed appropriate metadata within the image and ensure long term accessibility of the image set. Photographs were taken of all areas, including access routes, to provide a record of conditions prior to and on completion of the borehole survey.

## 5.5 Survey

5.5.1 The real time kinematic (RTK) survey of all boreholes was carried out using a Leica GNSS connected to Leica's SmartNet service. All survey data was recorded in OS National Grid coordinates and heights above OD (Newlyn), as defined by OSGM15 and OSTN15, with a three-dimensional accuracy of at least 50 mm.

## 5.6 Deposit modelling

5.6.1 A series of geoarchaeological deposit models were constructed for the site using the total of 52 stratigraphic records arising from the geoarchaeological borehole survey. The deposit modelling was undertaken following the guidelines in Historic England (2020).

5.6.2 All available data points were entered into industry standard geological utilities software (RockWorks 20). Each stratigraphic unit was given a colour and pattern allowing cross correlation and grouping of the different sedimentary units. The grouping of these deposits is based on lithological descriptions, which define distinct depositional environments referred to as 'stratigraphic units' (e.g. alluvium, till etc.).

5.6.3 Sedimentary units from the boreholes were classified into six stratigraphic units: (1) bedrock, (2) till, (3) alluvium, (4) moat fill, (5) organic moat fill and (6) topsoil/ploughsoil. The classified data for groups 1 to 6 were then input into a database within the RockWorks 20 program. Two-dimensional stratigraphic profiles ('transects') of selected interventions across the site have also been generated using RockWorks 20. These include Transects 1



to 7 (**Figures 7 to 13**), which show the main stratigraphic units and their lateral and vertical variability across these areas of the Scheme.

- 5.6.4 Data from the Gate Burton Solar Scheme (reported in Wessex Archaeology 2023c) has been incorporated in order to compile a deposit model for the western part of the Cable Route Corridor where it crosses the valley of the River Trent (see **Figure 14**). Given the absence of borehole data between the areas investigated as part of the present investigation and the work at the Gate Burton Solar Scheme, and the very different modes of deposition of the deposits, a complete transect covering the Cable Route Corridor is not provided.
- 5.6.5 The key aims of the modelling were to interpret the data, identify the probable depositional environments represented, and determine areas of higher and/or lower geoarchaeological potential where further work may be required (e.g. deposits with potential for the recovery of significant archaeological and palaeoenvironmental remains).

## 6 RESULTS

### 6.1 Introduction

6.1.1 This section summarises the results of the purposive geoarchaeological borehole survey, undertaken to provide further information on the archaeological and geoarchaeological resource that may be impacted by the proposed development. A total of 52 geoarchaeological boreholes (**Appendix 1**) were undertaken within the Scheme as outlined in **Section 5.3**, followed by a programme of geoarchaeological deposit modelling. The results of the geoarchaeological deposit modelling, comprising seven transects located in various areas of the Scheme and aligned as shown in **Figures 3 to 5**, are described below.

### 6.2 Deposit modelling

6.2.1 The full sequence of superficial geological deposits recorded during the borehole survey and monitoring of the GI works, and forming the basis of the deposit modelling, comprises:

- Made ground (modern)
- Topsoil/ploughsoil (modern)
- Moat fill (medieval/post-medieval)
- Alluvium (Holocene)
- Peat (Holocene; present only in the valley of the River Trent)
- Clayey sands and gravels (?Pleistocene)
- Holme Pierrepont Sand and Gravel Member (Late Devensian; present only in the valley of the River Trent)
- Till (Pleistocene)
- Bedrock (Jurassic)

6.2.2 More detail on the variability and composition of these deposits is described below, with a consideration of their geoarchaeological and archaeological potential outlined in **Section 7**. The deposits encountered in the Cable Route Corridor within the valley of the River Trent are reported in Wessex Archaeology (2023c) and are summarised below and in **Figure 14**. In that part of the Cable Route Corridor the deposits incorporate Pleistocene and Holocene sediments associated with the River and its former channel(s), including the Late Devensian



Holme Pierrepont Sand and Gravel Member and a sequence of Holocene floodplain alluvium incorporating peat deposits (see Wessex Archaeology 2023c and **Figure 14**).

#### *Bedrock*

- 6.2.3 The weathered upper surface of the bedrock, recorded as a very stiff, blue grey or grey silty clay with bands of sandstone and mudstone, was recorded only within the Cable Route Corridor in the area of boreholes WA-C01 to WA-C08, although it was not reached in boreholes WA-C07 and WA-C07A, which terminated at 0.90 and 1.70 m bgl respectively (see **Figure 7**).
- 6.2.4 Here the surface of the bedrock rises slightly from the southwest to northeast as the boreholes move away from the River Till and up a tributary valley of Till, from a level of 7.8 m OD in WA-C08 to between c. 8.0 and 8.7 m OD in the area of boreholes WA-C04 to WA-C06. The bedrock here is overlain by Pleistocene till in all but WA-C08, located close to the River Till, where it is overlain by Holocene floodplain alluvium of the Till (see below).
- 6.2.5 At the western end of the Cable Route Corridor, where it crosses the River Trent and as reported in Wessex Archaeology (2023c), the bedrock was recorded at levels between 21.6m OD in SK88SW53 and -11.4 m OD in BH11 (**Figure 14**). Deposits interpreted as weathered bedrock were recorded as siltstone reddish brown/bluish grey silty clay (BH3, BH5 and BH6) or silty clay/clayey silt (BH4) at elevations between 3.79 and -7.42 m OD. The weathered bedrock varies in thickness from 0.3m to 7.8 m.

#### *Till*

- 6.2.6 Deposits generally described as a firm to stiff, generally sandy or silty clay with frequent or abundant sub angular to subrounded clasts of chalk, flint, siltstone or sandstone are widespread across both the Principal Site and the Cable Route Corridor, recorded in all but WA-C01 to WA-C03 and WA-C08 in the valley of the River Till (**Figure 7**) and borehole WA-P30 towards the southeast of the Principal Site in Field 126.
- 6.2.7 Till was not encountered within the valley of the River Trent during the work associated with Gate Burton Solar Scheme (Wessex Archaeology 2023c), and it is likely that during incision of the Late Devensian channel of the Trent these deposits, if present, were entirely removed, with Pleistocene fluvial sands and gravels resting directly on bedrock (see below and **Figure 14**).
- 6.2.8 The till deposits are of unknown thickness in all but the area of the River Till within the Cable Route Corridor (**Figure 13**) where it was recorded overlying weathered bedrock and was between 0.35 and 0.60 m thick. Thicknesses of a minimum of 2-3 m were recorded outside of the valley of the River Till, where the till was not bottomed (see **Figures 7 to 12**).

#### *Clayey sands and gravels*

- 6.2.9 Sands and gravels in a matrix of clay were recorded in boreholes WA-P24 (Field 75) and WA-P30 (Field 126) located towards the southeast of the Principal Site on the margins of a stream valley to the west of Glenworth (**Figure 9**). These were recorded at between 1.00 and 1.85 m bgl in WA-P24 overlying till, and as the basal unit in WA-P30 between 3.0 and 4.0 m bgl.
- 6.2.10 In both boreholes these deposits are described as an orangey brown slightly clayey sand and gravel with sub-angular to angular flint and rare chalk clasts. The depositional environment and date of these deposits is currently unclear; on the basis of the angularity of the gravels and the poorly sorted nature of the deposits, they are provisionally interpreted

as material worked downslope during the Pleistocene (Head), although they may include Holocene colluvium (see **Section 7**).

#### *Holme Pierrepont Sand and Gravel Member*

- 6.2.11 Deposits recorded as a variously sandy or silty gravel were recorded widely where the Cable Route Corridor crosses the valley of the River Trent (see **Figure 14**). These deposits were generally present at elevations between c. 5 and -8m OD, and increased in thickness towards the centre of the valley in the area of boreholes BH8-BH12 (see **Figure 14**). As a whole they ranged in thickness from 10.55m in BH12 to 0.7m in BH5, with thinner deposits recorded at the sides of the valley and the thinning to absence east of BH14.
- 6.2.12 These sands and gravels are interpreted as fluvial sands and gravels of the Holme Pierrepont Sand and Gravel Member, forming the youngest Pleistocene unit of the of the Middle Trent Valley terrace stratigraphy of Late Devensian date (12.9-11.7 Ka) (Bridgland et al. 2014; Howard et al. 2011).

#### *Alluvium*

- 6.2.13 Deposits of variously sandy or silty clay were recorded in most boreholes, generally including rare or occasional inclusions of sub-angular to angular gravel clasts of various lithologies including flint, chalk and sandstone. These deposits are interpreted as Holocene alluvium, forming through overbank flooding in mapped stream valleys which drain in to the River Trent or River Till.

#### Principal Site (WA-P01 to WA-P35)

- 6.2.14 The Principal Site encompasses two different catchments, with stream valleys towards the north of the Principal Site draining in to the River Trent (WA-P01 to WA-P17), and towards the south draining in to the River Till (WA-P18 to WA-P35; see **Figure 2**).
- 6.2.15 In the Principal Site there is little to differentiate the alluvial deposits in these stream valleys. The alluvium is almost entirely minerogenic, and generally between 0.5 and 1.5 m thick (see **Figures 7 to 11**). No distinct organic alluvium or peat units were recorded during the borehole survey within the Principal Site. The alluvium generally overlies till, and in places the interface between these deposits is unclear, with alluvial reworking of the till evident in places.

#### Cable Route Corridor (WA-C01 to WA-C08)

- 6.2.16 The stream valley in the area of boreholes WA-C01 to WA-C03 drains in to the River Till, with boreholes WA-C04 to WA-C08) located within the valley of the River Till itself (which in turn is a tributary of the River Witham, meeting that river at Lincoln).
- 6.2.17 The alluvium here is generally between 0.5 and 1.2 m thick (see **Figure 13**), and similar to the Principal Site, the deposits here are entirely minerogenic, with no distinct organic alluvium or peat units recorded. The alluvium generally overlies till, with alluvial reworking of the till evident in places, although towards the axis of the River Till the river has incised to bedrock, with only a thin remnant of till evident on the northeastern side of this valley.

#### Valley of the River Trent

- 6.2.18 Where the Cable Route Corridor crosses the valley of the River Trent (see **Figure 14**) a sequence of alluvial deposits are recorded as variously silty and sandy clays, encountered between 4.1m OD in SK88SW26 and 1.6m OD in SK88SW8 and ranging in thickness from 0.3m in SK88SW16 to 8.68m in SK88SW28 (**Figure 14**). The alluvium was generally present at elevations between c. 0.0 and 4.0m OD.



6.2.19 Alluvium was generally encountered towards the west and centre of the Site in boreholes BH3, BH8, BH8.5, BH9, BH10 and BH11. It was absent in boreholes BH4, BH5, BH6, BH7 towards the west of the Site and in BH12, BH13, BH14, BH15 and BH16 towards the east.

#### *Peat*

6.2.20 Peat was recorded in three GI boreholes (BH8.5, BH9 and BH10) towards the centre of the valley of the River Trent, encountered at elevations between 1.61m OD in BH8.5 to 1.07m OD in BH9 and ranging in thickness from 2.9m in BH8.5 to 1.7m in BH10 (see Wessex Archaeology 2023c and **Figure 14**). The peat is indicative of a transition to semi-terrestrial conditions on the Holocene floodplain of the River Trent, supporting the growth of wetland vegetation.

#### *Moat/ditch fill*

6.2.21 An additional nine boreholes (WA-P36 to WA-P44) were undertaken across a moated enclosure with Field 124, shown on historic Ordnance Survey mapping and investigated by geophysical survey (Magnitude Surveys 2023) and trial trench evaluation, as shown in **Figure 5**. The additional boreholes were aligned in a broadly N-S transect extending across the northern and southern arms of the moat and interior of the enclosure (**Figure 12**).

6.2.22 The results of the geophysical survey (Magnitude Surveys 2023) identified weak magnetic anomalies forming a double ditched rectilinear pattern, roughly corresponding with a 'Moat' visible on historic Ordnance Survey mapping, infilled in 1964 and since ploughed over. The deposits recorded in this area include sediments related to either fills of the moat or associated ditch fills in all nine boreholes, generally recorded as a grey, slightly sandy or sandy clay with occasional chalk and flint clasts and a notable reddish mottling which distinguished it from the alluvium. In places, these deposits may incorporate Holocene sediments accumulating during overbank flooding on the wider floodplain.

6.2.23 The sediments interpreted as infilling the moat/ditch were generally between 0.5 and 1.5 m thick, and overlie till in all but boreholes WA-P36, P38 and P39, where they overlie alluvium (**Figure 12**). If these deposits relate to the moat or associated ditches, it appears that they were cut in to the alluvium towards the north and the till towards the south, likely having the effect of at least partly levelling the natural topography on this edge of the valley. The deposits within the moat were entirely minerogenic except for occasional detrital plant remains in all but borehole WA-P37, in which the basal fill was organic between 1.60 and 1.95 m bgl, containing mostly decomposed organic matter but with occasional plant remains (see **Figure 12**).

6.2.24 The upper part of the moat fill in boreholes WA-P38, P39 and P40 comprised a sandy clay with occasional anthropogenic material including burnt flint, CBM and charcoal, potentially representing more recent deliberate backfill of the moat.

#### *Made ground*

6.2.25 Modern made ground, generally difficult to distinguish from the underlying alluvium but demonstrating evidence for artificial redistribution of the underlying alluvial sediments (e.g. poorly consolidated and containing occasional anthropogenic material including slag) was recorded in boreholes WA-P16 (Field 109), P30 (Field 126), P32 (Field 125) and P33 (Field 127) (**Figure 11**). These deposits were between 0.35 and 0.50 m thick and overlain by topsoil/ploughsoil. In places these sediments may represent deeper instances of the ploughsoil.



### *Topsoil/ploughsoil*

- 6.2.26 A unit of modern topsoil or ploughsoil was recorded as the uppermost unit in all boreholes, generally comprising a blocky, poorly consolidated sandy or silty clay with abundant root material and occasional clasts of flint and chalk, and rare ceramic building material (CBM) and coal. This unit was generally between 0.3 and 0.5 m thick.

## **7 DISCUSSION**

### **7.1 Introduction**

- 7.1.1 A programme of geoarchaeological borehole survey and deposit modelling was undertaken at the proposed site of the Tillbridge Solar Project, focussed on a 1,400 ha parcel of land centred around Common Lane, Gainsborough, Lincolnshire, DN21 5UZ. The area investigated as part of these works, referred to here as the Scheme, comprises the Principal Site and the Cable Route Corridor.
- 7.1.2 On the basis that no pre-existing GI data was available to identify localised potential within the area of the Scheme, a series of boreholes targeting mapped areas of alluvium were proposed following a review of BGS (2023) mapping and identification of areas where deposits of palaeoenvironmental potential may be preserved (Wessex Archaeology 2023a).
- 7.1.3 The geoarchaeological borehole survey was undertaken to provide further information on the archaeological and geoarchaeological resource that may be impacted by the proposed development, and facilitate an informed decision regarding the requirement for, and methods of, any further archaeological and geoarchaeological work that may be required.
- 7.1.4 A total of 52 boreholes were undertaken across the Scheme, including a total of 34 boreholes within the Principal Site (boreholes WA-P01 to WA-P35, with WA-P19 descoped), nine boreholes within the Cable Route Corridor area (boreholes WA-C01 to WA-C08, including boreholes WA-P07 and WA-P07A), and an additional nine boreholes (WA-P36 to WA-P44) added to the scope proposed in the WSI (Wessex Archaeology 2023a) in order to investigate the deposits associated with a possible moated enclosure.

### **7.2 Sedimentary sequence and depositional environment**

- 7.2.1 The sequence of superficial geological deposits recorded overlying the weathered mudstone bedrock across the area of the Scheme comprises Pleistocene till, which in the majority of the area of the borehole survey is overlain by Holocene alluvium. Pleistocene Head and/or Holocene colluvium were identified in two boreholes, whilst in the area of a moated enclosure to the east of the Scheme deposits associated with moat or ditch fill were identified. The sequence across the Scheme is capped by topsoil or ploughsoil, with occasional deposits of made ground, likely representing modern ground raising or landscaping.
- 7.2.2 The till within the area of the Scheme is of unknown Pleistocene date. Given that the Scheme is located to the south of the mapped extent of the Late Devensian British-Irish Ice Sheet (BIIS) (Clark et al 2018), it is assumed to relate to an earlier glacial episode between the Anglian (MIS 12, 478-424 Ka) and Late Devensian (MIS 2; 26-11.7 Ka) glaciations. Tills are poorly sorted sediments deposited directly by ice sheets and are considered to have a limited archaeological and geoarchaeological potential. Although they may seal and preserve underlying stratigraphy containing environmental remains and artefacts, such deposits were not encountered during the borehole survey.

- 7.2.3 The Scheme is mapped close to the margins of a high stage area of Proglacial Lake Humber (Fairburn & Bateman 2015). Proglacial Lake Humber, which formed to the south of the Vale of York BIIS ice lobe and to the west of the North Sea BIIS ice lobe, formed when drainage from the ice sheet was blocked by ice. It was relatively short-lived, with multiple lake level stands between c. 40 and 5 m OD related to the switching of lake outlets from the Lincolnshire Gap to the Humber Gap, and to oscillations of the BIIS (Fairburn & Bateman 2015). However, no glaciolacustrine deposits were identified within the boreholes at the present site, although it is possible that the stream valleys in which the boreholes were focussed have incised in to and removed such deposits in these areas.
- 7.2.4 Clayey sands and gravels were recorded in two boreholes (WA-P24 and WA-P30) located towards the southeast of the Principal Site in Fields 75 and 126 on the margins of a stream valley to the west of Glenworth. These were recorded either overlying till or as the basal unit. The deposit environment and date of these deposits is currently unclear, but they are considered likely to represent slope-wash sediments of either Pleistocene Head or Holocene colluvium. Head is defined as a poorly sorted cold-climate slope deposit that represents material reworked downslope from earlier formations through solifluction processes (alternate freeze-thawing). Head deposits are therefore most widely recorded at the base of slopes and along river valleys. Colluvium meanwhile represents unconsolidated material which has been deposited downslope by either rainwash, sheetwash and/or slow continuous downslope creep. Colluviation is likely in areas of topographic relief where soil instability has been brought on by activities such as clearance of woodland, agricultural activity and soil degradation, leading to downslope movement of sediment. The palaeoenvironmental potential of both types of deposits is generally low, although they may mask or contain deposits of higher geoarchaeological potential (e.g. buried land surfaces).
- 7.2.5 The till within the boreholes is overlain in the majority of cases by Holocene alluvium, associated with overbank flooding in the stream valleys which cut through the till and were targeted by the borehole survey. Two catchments are evident in the pattern of drainage within the Scheme; towards the north of The Principal Site stream valleys drain north towards the River Trent, whilst in the southern half of the Principal Site these stream valleys are tributary to or formed by the River Till, itself a tributary of the River Witham.
- 7.2.6 The date and evolution of these stream valleys is uncertain. They will post-date the accumulation of the till, with initial incision of their channels potentially occurring either during the Late Devensian or Early Holocene, followed by likely relatively minor migration of those channels across narrow floodplain corridors during the Holocene. The alluvium here is entirely minerogenic (comprised of sands, silts and clays), with no distinct organic alluvium or peat units recorded. Similarly, no distinct evidence for former buried channels ('palaeochannels') were recorded in either catchment. Towards the south of the Scheme the River Till has incised to bedrock, with only a thin remnant of till evident underlying the northeastern side of the floodplain; the stream valleys elsewhere overlie a reasonable thickness (>2-3 m) of till was recorded and in places not bottomed.
- 7.2.7 The alluvium within the Scheme, including in both the Principal Site and the Cable Corridor, is considered to be of low geoarchaeological potential.
- 7.2.8 Nine boreholes located within Field 124 along a broadly north-south transect towards the east of the Scheme, targeting a 'moat' visible on historic Ordnance Survey mapping and subsequently investigated during a geophysical survey (Magnitude Surveys 2023) and trial trench evaluation (Wessex Archaeology, in prep) recorded sediments provisionally interpreted as relating to either fills of the moat or associated ditches. These deposits were entirely minerogenic and of low geoarchaeological potential in all but borehole WA-P37, in



which an organic basal fill was recorded between 1.60 and 1.95 m bgl. This unit is considered to be of moderate to high geoarchaeological potential on the basis of its potential to preserve palaeoenvironmental remains, and material suitable for scientific dating, associated with the 'moat'.

## **8 CONCLUSION AND RECOMMENDATIONS**

### **8.1 Conclusion**

- 8.1.1 A targeted geoarchaeological borehole survey has helped to refine understanding of the nature and distribution of the superficial geological deposits with the area of the Scheme. A programme of geoarchaeological deposit modelling integrating the results of the borehole survey has enabled a reconstruction of the distribution, thickness and topography of these deposits, which in combination with the results presented for the Gate Burton Solar Scheme (Wessex Archaeology 2023c), has provided further information on the evolution of the prehistoric landscape in this area.
- 8.1.2 The deposit model has been used to inform the requirement for and scope of any further archaeological and geoarchaeological investigation, with recommendations presented here for further palaeoenvironmental assessment. The scope of any proposed archaeological or geoarchaeological mitigation measures for the Scheme will be presented in the Cultural Heritage Chapter of the Environment Statement and Archaeological Mitigation Strategy prepared to support the DCO application.
- 8.1.3 The sequence of deposits recorded during the present investigations comprises Pleistocene till, overlain (where stream valleys have cut through these deposits) by alluvium forming on the floodplains of these stream valleys during the Holocene. These alluvial deposits, as mapped by the BGS, were targeted by the borehole survey on the basis they may contain or mask deposits of high archaeological and geoarchaeological potential. The alluvium at the Site was found to be entirely minerogenic, with no distinct organic rich or peat units observed, and is therefore considered to be of low potential to preserve archaeology or palaeoenvironmental remains.
- 8.1.4 A very different sequence of deposits was encountered in the Cable Route Corridor within the valley of the River Trent, as reported in Wessex Archaeology (2023c). Here the deposits incorporate Pleistocene and Holocene sediments associated with the River Trent and its former channel(s), including the Late Devensian Holme Pierrepont Sand and Gravel Member, which has incised the bedrock and likely eroded any deposits of Pleistocene till equivalent to those recorded underlying the Cable Route Corridor to the northeast and the Principal site. Within the valley of the River Trent, the Late Devensian sands and gravels are overlain by a sequence of Holocene floodplain alluvium incorporating peat deposits (see Wessex Archaeology 2023c).
- 8.1.5 A 'moat' identified on historic Ordnance Survey mapping was targeted by a series of boreholes towards the east of the Site. Here, deposits provisionally interpreted as moat or ditch fills were recorded; these were minerogenic and of low geoarchaeological potential in all but one sequence (borehole WA-P37), in which an organic the basal fill was recorded between 1.60 and 1.95 m bgl. These deposits are considered to be of moderate to high geoarchaeological potential and may preserve palaeoenvironmental remains (e.g. pollen) for reconstructing past environment, landscape and human activity in the locale of the site, and material suitable for scientific dating, associated with the 'moat'.



## **8.2 Recommendations**

- 8.2.1 A programme of palaeoenvironmental assessment and scientific dating of the organic unit in borehole WA-P37 is recommended, comprising an assessment of plant macrofossil remains and identification of material suitable for radiocarbon dating, assessment of pollen in order to establish the vegetation history of the deposits and any evidence for human activity associated with the 'moat', and assessment of diatoms in order to assess hydrological conditions in the moat (for example water depth and quality) and any evidence for pollutants. Should material suitable for radiocarbon dating be present, the top and base of these deposits should be dated.





## REFERENCES

- AECOM 2023. *Tillbridge Solar: Cultural Heritage Desk-Based Assessment*. Croydon. Unpublished Client Report.
- Bridgland D R, Howard A J, White M J, and White T S (eds) 2014 *Quaternary of the Trent*. Oxford, Oxbow Books.
- Cooke, N. and Mudd, A., 2014. *A46 Nottinghamshire*. Salisbury: Wessex Archaeology.
- British Geological Survey Geology Viewer [redacted]  
(accessed 06/06/2023)
- British Geological Survey GeoIndex (Onshore) [redacted]  
[redacted] (accessed 06/06/2023)
- Brown, D H 2011 *Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation* (revised edition). Archaeological Archives Forum
- Carey C, Howard A J, Knight D, Corcoran J and Heathcote J (Eds) 2018 *Deposit Modelling and Archaeology*. [redacted].
- Chartered Institute for Archaeologists [CIfA] 2020 *Standard and Guidance for Archaeological Field Evaluation*. Reading, CIfA
- Clark C D, Ely J C, Greenwood S L, Hughes A L C, Meehan R, Barr I D, Bateman M D, Bradwell T, Doole J, Evans D J A, Jordan C J, Monteys X, Pellicer X M & Sheehy M 2018 BRITICE Glacial Map, version 2: a map and GIS database of glacial landforms of the last British–Irish Ice Sheet. *Boreas* 47: 11– 27.
- East Midlands Historic Environment Research Framework 2022. [Research Agenda – East Midlands Historic Environment Research Framework \(researchframeworks.org\)](https://www.researchframeworks.org) (accessed June 2023)
- English Heritage 2008a *Research and Conservation Framework for the British Palaeolithic*. Portsmouth, English Heritage
- English Heritage 2008b *Luminescence Dating: Guidelines on using luminescence dating in archaeology*. Portsmouth, English Heritage
- English Heritage 2011 *Environmental Archaeology: A Guide to the Theory, Practice of Methods, from Sampling and Recovery to Post-excavation* (second edition). Portsmouth, English
- Fairburn W and Bateman M 2015 A new multi-stage recession model for Proglacial Lake Humber during the retreat of the last British-Irish Ice Sheet. *Boreas* 45. 10.1111/bor.12140.
- GeoQuest Associates 1997 Geophysical survey of five sites on the route of the Blyborough (Lincs.) To Cottam (Notts.) gas pipeline. A programme of research carried out on behalf of Wessex Archaeology. Unpublished report, May 1997.
- Historic England 2015a *Management of Research Projects in the Historic Environment: the MoRPHE project managers' guide*. Swindon, Historic England



- Historic England 2015b *Geoarchaeology: Using Earth Sciences to Understand the Archaeological Record*. Swindon, Historic England
- Historic England 2020 *Deposit Modelling and Archaeology. Guidance for Mapping Buried Deposits*. Swindon. Historic England.
- Howard 2019. Updated Period Resource Assessment: The Palaeolithic Period. *East Midlands Regional Research Framework*. [REDACTED]  
[REDACTED] Accessed June 2023.
- Howard A J, Carney J N, Greenwood M T, Keen D H, Mighall T, O'Brien C, and Tetlow E 2011 The Holme Pierrepont sand and gravel and the timing of Middle and Late Devensian floodplain aggradation in the English Midlands. *Proceedings of the Geologists' Association* 122, 419-431.
- Jacobi R and Higham T 2011 The later Upper Palaeolithic recolonisation of Britain: New results from AMS radiocarbon dating. *Developments in Quaternary Science* 14, 223–247.
- Magnitude Surveys 2023. *Tillbridge Solar Scheme Geophysical Survey*. Unpublished client report.
- Watkinson, D and Neal, V 1998 *First Aid for Finds: practical guide for archaeologists*. United Kingdom Institute for Conservation of Historic & Artistic Works
- Wessex Archaeology 1997a Record of Trent Valley sediment profile. In: Blyborough, Lincs. to Cottam, Notts. Pipeline Report on the Archaeology. Part 2: The Appendices. Unpublished report, December 1997.
- Wessex Archaeology 1997b Blyborough, Lincs. to Cottam, Notts. Pipeline Report on the Archaeology. Part 1: The Results. Unpublished report, December 1997.
- Wessex Archaeology 2022. *Shared Grid Connection Corridor, Nottinghamshire and Lincolnshire, Archaeological Evaluation Interim Report*. Sheffield. Unpublished Client Report: 268980.01.
- Wessex Archaeology 2023a *Tillbridge Solar Project Gainsborough, Lincolnshire Written Scheme of Investigation for Geoarchaeological Borehole Survey*. Report Ref.: 273791.01, June 2023.
- Wessex Archaeology 2023b. *Tillbridge Solar Project, Gainsborough, Lincolnshire Written Scheme of Investigation for Archaeological Evaluation*. Unpublished Report. Ref No. 273970.01
- Wessex Archaeology 2023c. *Gate Burton Grid Connection Corridor Geoarchaeological Deposit Modelling*. Unpublished Report. Ref No. 268981.3
- Wessex Archaeology 2023d. *Tillbridge Solar Scheme, Gainsborough, Lincolnshire, Archaeological Evaluation Report for Fields 50–51 and 55–57* Sheffield: unpublished report ref. 273790.03.
- Wessex Archaeology 2023e. *Tillbridge Solar Scheme, Gainsborough, Lincolnshire, Archaeological Evaluation Report for Fields 100 and 109* Sheffield: unpublished report ref. 273790.04.
- Wessex Archaeology 2023f. *Tillbridge Solar Scheme, Gainsborough, Lincolnshire, Archaeological Evaluation Report for Fields 111, 112, 117, 118, 131–134, 136 and 137* Sheffield: unpublished report ref. 273790.05.



- Wessex Archaeology 2023g. *Tillbridge Solar Scheme, Gainsborough, Lincolnshire, Archaeological Evaluation Report for Fields 88, 99, 107 and 108* Sheffield: unpublished report ref. 273790.06.
- Wessex Archaeology 2023h. *Tillbridge Solar Scheme, Gainsborough, Lincolnshire, Archaeological Evaluation Report for Fields 27–32, 36–41, 43–49, 52–54, 60, 68, 72–79, 89–90, 101–106 and 110* Sheffield: unpublished report ref. 273790.07.
- Wessex Archaeology 2023i. *Tillbridge Solar Scheme, Gainsborough, Lincolnshire, Archaeological Evaluation Report for Fields 80, 81, 93–97, 115, 116, 125, 126 and 128* Sheffield: unpublished report ref. 273790.08.
- Wessex Archaeology 2023j. *Tillbridge Solar Scheme, Gainsborough, Lincolnshire, Archaeological Evaluation Report for Fields 91–92, 113–114 and 119–124* Sheffield: unpublished report ref. 273790.09.
- Wessex Archaeology 2023k. *Tillbridge Solar Scheme, Gainsborough, Lincolnshire, Archaeological Evaluation Report for Fields 9, 10, 14 and 16–26* Sheffield: unpublished report ref. 273790.10.
- Wessex Archaeology 2023l. *Tillbridge Solar Scheme, Gainsborough, Lincolnshire, Archaeological Evaluation Report for Fields 1–8, 33, 35 and 138–141* Sheffield: unpublished report ref. 273790.11.
- Wessex Archaeology 2023m. *Tillbridge Solar Scheme, Gainsborough, Lincolnshire, Archaeological Evaluation Report for Fields 58–59, 61–62, 64–67, 83–85, 87 and 98* Sheffield: unpublished report ref. 273790.12.
- Wessex Archaeology 2024 *Tillbridge Solar Scheme, Gainsborough, Lincolnshire Archaeological Evaluation: Overarching Executive Report*. Sheffield: unpublished report ref. 273790.13, January 2024.
- WYAS 2022a. *Cottam Solar Project: Cottam 1, Lincolnshire*. Unpublished Client Report: 3777.
- WYAS 2022b. *Cottam Solar Project: Cottam Cable Route, Lincolnshire*. Unpublished Client Report: 3851.



## APPENDICES

### Appendix 1 Borehole sediment logs

<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P01		
<b>Coordinates (NGR) X:</b> 490690.63		<b>Coordinates (NGR) Y:</b> 390572.26		<b>Level (top):</b> 18.78mOD		
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 4 m		
<b>Context Number</b>	<b>Description</b>	<b>Interpretation</b>	<b>Depth m BGL</b>	<b>Depth m OD</b>	<b>Samples</b>	
101	Firm mid greyish orangey brown silty CLAY with abundant plant rooting in upper 0.15. Semi common coarse components, generally angular fine gravel to coarse gravel sized flint, brown inners off white cortex. Some CBM seen. Slightly crumbly.  Gradual somewhat undulate boundary with 102, chunking up.	Ploughsoil	0-0.4	18.78 - 18.38		
102	Somewhat soft mid greyish yellowy orange clayish SAND. Sand is fine to medium and appears rounded sub-spheroid to spheroid. Rare angular to subangular gravel to coarse gravel sized flint.  Abrupt to sharp horizontal boundary with 103.	Alluvium	0.4-0.7	18.38 - 18.08		
103	Somewhat firm to very firm softening with depth brownish grey mottled orangey brown silty CLAY with common fine gravel to coarse gravel sized subangular to subrounded irnst flint sst ?calcite concretion nodules ?chalk. Chalk/flint more rounded. Weak evidence of rooting. No orientation or sorting. Rare ?charcoal.  Sharp (approx. 3cm) boundary with 104.	Till, alluvially altered	0.7-1.7	18.08 - 17.08		



104	Slightly firm plastic mid brownish grey mottled greyish brown slightly sandy CLAY. common coarse components of sand to coarse gravel sized subrounded to rounded ?weathered flint (off white, too hard to scratch) ? chalk, poorly sorted sand sized more common (gravel sized is uncommon). No apparent orientation. Some iron staining in places, rare sand sized ?charcoal. Bioturbed, weak rooting.  Sharp boundary with 105.  Becoming firm at 2.5, sharp boundary with 105.	Chalky till (related to Lowestoft formation?)	1.7-2.5	17.08 – 16.28	
105	Very firm mid dark neutral grey CLAY with GRAVEL, gravel being sand sized to coarse gravel sized poorly sorted subrounded to rounded white chalk and flint. No orientation or grading.  Gradual boundary with 106.	Chalky flinty till	2.5-2.8	16.28 – 15.98	
106	Somewhat firm somewhat plastic greyish brown CLAY with sparse to uncommon clasts of weak grey lmsd dark grey mdst reddish grey sst of coarse sand size subangular to rounded frequently ovoid tabular. Some gravel sized flint in top of unit near boundary with 105. Some rare gravel sized clasts. No apparent orientation or sorting. Matrix massive/structureless.	Till,  ?glaciofluvial	2.8-4	15.98 – 14.78	

<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-C01	
<b>Coordinates (NGR) X:</b> 490347.73		<b>Coordinates (NGR) Y:</b> 385149.39		<b>Level (top):</b> 10.29mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 4 m	
<b>Context Number</b>	<b>Description</b>	<b>Interpretation</b>	<b>Depth m BGL</b>	<b>Depth m OD</b>	<b>Samples</b>



10101	Firm greyish brown silty CLAY with abundant coarse sand to small cobble sized coarse components of predominantly flint, cortex and core and some fossiliferous lmst, rare mdst. Angular to subrounded. Bioturbed in upper 30cm.  Fragmentary CBM.  Difficult to determine boundary with 10102 - ?gradual.	Ploughsoil	0-0.3	10.29 – 9.99	
10102	Moderately firm to firm brownish grey mottled orangey brown sandy CLAY with lenses of fine orangey brown sand. Semi common coarse components of subangular to rounded coarse sand to small cobble size. ?Chalk sst lmst ?irnstn seen. Mang and fe stained. Some rare frag fossil shell and poss wood charcoal.  Sand lenses 1.5 and 2.4m.  Diffuse boundary with 10103.	Alluvium	0.3-2.6	9.99 – 7.69	
10103	Very firm to stiff fissile brownish to blueish grey (blueing with depth) silty CLAY with weathered mdst and sst bands. Fe stained in places. Buff lustre becoming buff with glitter when blue grey. Predominantly blue grey by 2.8m. Yellow sst band at 3.1m.	Weathered bedrock.	2.6-4	7.69 – 6.29	

<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P02	
<b>Coordinates (NGR) X:</b> 490725.76		<b>Coordinates (NGR) Y:</b> 390556.41		<b>Level (top):</b> 18.93mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 4 m	
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples
201	Firm mid greyish orangey brown silty CLAY with abundant plant rooting in upper 0.15. Semi common coarse components, generally angular fine gravel to coarse gravel sized flint, brown inners off white cortex. Some chalk seen, subrounded fine gravel sized. Slightly crumbly.  Gradual somewhat undulate boundary with 202, chunking up.	Ploughsoil	0-0.4	18.93 – 18.53	



202	<p>Somewhat soft mid greyish yellowy orange clayish SAND. Sand is fine to medium and appears rounded sub-spheroid to spheroid. Rare angular to subangular gravel to coarse gravel sized flint.</p> <p>Abrupt to sharp horizontal boundary with 203.</p>	Alluvium	0.4-0.8	18.53 – 18.13	
203	<p>Somewhat firm to very firm softening with depth brownish grey mottled orangey brown silty CLAY with abundant fine GRAVEL to coarse gravel sized subangular to subrounded irnst flint sst chalk. Chalk more rounded, more common than other clast types. Weak evidence of rooting. No orientation or sorting.</p> <p>Difficult to see boundary between 203 and 204, change appears to be sharp.</p>	Till ?Redeposited	0.8-1.5	18.13 – 17.43	
204	<p>Somewhat firm brownish grey slightly plastic CLAY with semi abundant clasts subangular to subrounded coarse sand to gravel sized flint grey ?sst ?lmst and ?calcite nodules. Notable lack of chalk.</p> <p>Difficult to see boundary, assumed sharp with 205.</p>	Glacial, ?till ?glaciofluvial	1.5-1.8	17.43 – 18.13	
205	<p>Identical to 203 (Somewhat firm to very firm softening with depth brownish grey mottled orangey brown silty CLAY with abundant fine GRAVEL to coarse gravel sized subangular to subrounded irnst flint sst chalk. Chalk more rounded, more common than other clast types. No orientation or sorting).</p> <p>Sharp boundary with 206.</p>	Glacial, ?till	1.8- 2.15	18.13 – 16.73	



206	<p>Somewhat firm somewhat plastic greyish brown CLAY with sparse to uncommon clasts of weak grey lmst dark grey mdst reddish grey sst of coarse sand size subangular to rounded frequently ovoid tabular. Some gravel sized chalk in top of unit near boundary with 205. Some rare gravel sized clasts. No apparent orientation or sorting. Matrix massive/structureless. Possible weathered sst band at 2.4 yellow.</p> <p>Graying with depth, brownish grey by 2.55. Clasts become rarer and more sporadic once grey, same lithologies, with some common gravel sized grey sst and orange sst ?irndt and from 3.7-4.</p>	Glacial, ?till ?glaciofluvial	2.15-4	16.73 – 14.93	
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<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-C02	
<b>Coordinates (NGR) X:</b> 490368.33		<b>Coordinates (NGR) Y:</b> 385090.67		<b>Level (top):</b> 9.90mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 4m	
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples
10201	<p>Firm crumbly mid greyish slightly orangey brown silty CLAY with frequent rooting and semi common to common coarse components of ?lmst sst and ?weathered flint, angular to rounded trending fine gravel to gravel sized. Clasts trend ovoid. Fragmentary CBM seen.</p> <p>Gradual undulate boundary with 10201.</p>	Ploughsoil	0-0.4	9.9 – 9.5	





10202	<p>Soft to moderately firm friable mostly loose orangey reddish brown clayish SAND. Variably clayish and sandy, with clay being brownish grey and mottled brown, sand associated with redder colour. Common coarse components of flint, angular to subrounded trending gravel sized tabular. Gravel sized rounded orangey brown ?chalcedony ?sst seen. Some rare lmst. Sand is fine to medium. No smell.</p> <p>Checked for worked flint - didn't see any I could say were 100% worked, but they're looking a bit flake-y in places. Sharp boundary with 10203.</p>	Alluvium	0.4-1.1	9.5 – 8.8	
10203	<p>Firm mid orangey brown mottled grey sandy CLAY with common to abundant subrounded to rounded coarse components of fine gravel to gravel size, ?chalk ?sst ?irnst. No definitive flint identified. Possible wood charcoal. Variably sandy. No apparent orientation. Coarse components appear to become less abundant with depth. No smell.</p> <p>1 cobble sized subangular clast of lmst at 1.8-1.85.</p> <p>Grey fine sand band 1.35-1.4. Orangey brown and grey fine sand band at 1.9-1.95.</p> <p>Boundary not seen with 10204 - assumed abrupt, between core lengths.</p>	Alluvium	1.1-2	8.8 – 7.9	
10204	<p>Very soft to soft friable poorly consolidated slightly clayish SAND. Massive/structureless, no coarse components seen.</p> <p>Abrupt boundary with 10205.</p>	?Alluvium, possibly another sand band of 10203 Possible drop	2-2.12	7.9 – 7.78	
10205	<p>Very firm to stiff dark neutral grey silty CLAY with weathered mdst and sst bands parallel to gl. Becoming stiffer with depth. Buff and glittery lustre.</p>	Weathered bedrock	2.12-4	7.78 – 5.9	

<b>Site Code:</b> 273791	<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology	<b>GeoTech Tr ID:</b> WA-P03
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Coordinates (NGR) X: 490867.19		Coordinates (NGR) Y: 389690.34		Level (top): 21.02mOD	
Length: n/a		Width: n/a		Depth: 4 m	
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples
301	<p>Somewhat soft mid greyish brown sandy CLAY with common crop and grass rooting and sparse to uncommon fine gravel to gravel sized angular to subrounded flint. Some rare CBM and blue white ceramic (modern) fragments seen. Some mang seen.</p> <p>Sharp to gradual boundary with 302 - undulate.</p>	Top/ploughsoil	0-0.4	21.02 – 20.62	
302	<p>Soft to somewhat soft generally loose friable brownish orange clayish SAND with sparse fine gravel sized angular to subangular flint. Variably clayish - more clayish at boundaries, becoming sandy clay in places. Clay is yellowish grey.</p> <p>Boundary with 303 not seen.</p>	Alluvium  Less flinty than usual but also thicker	0.4-1	20.62 – 20.02	
303	<p>Soft to slightly firm brownish greenish grey mottled orangey brown sandy CLAY with uncommon to common clasts of subangular to angular coarse sand to coarse gravel sized chalk and flint. Variably sandy and clayish, sand is brown.</p> <p>Sharp sub horizontal boundary with 304.</p> <p>Sand band 1.3-1.4, orangey brown clayish sand here, clasts sparse.</p>	Alluvium.	1-1.45	20.02 - 19.57	



304	<p>Firm to very firm greyish brown/blueish grey/orangey brown mottled slightly silty CLAY with common to very common coarse components of chalk flint grey lmst dark mdst reddish slst orange brown ?irnst subrounded to angular coarse sand to coarse gravel sized trending cs to fg. Clasts generally weak, especially chalk of larger size. Some rare amorphous ?charcoal seen (poss manganese, actual mang also seen.) Bioturb, weak thin rooting, rooting associated with grey.</p> <p>Orangey brown mottling rarer at depth, mostly absent by 1.5.</p> <p>Slightly sandy in places. Boundary with 305 not seen, between cores.</p>	<p>Till, ?bioturbed</p>	<p>1.45- ?2</p>	<p>19.57- 19.02</p>	
305	<p>Soft orangey brown clayish SAND with common clasts of subangular to angular coarse sand to coarse gravel sized chalk and flint. Variably sandy and clayish, sand is brown clay is greenish grey.</p> <p>Abrupt undulate boundary with 306.</p>	<p>Drop No recovery</p>	<p>?2-2.1</p>	<p>19.02 - 18.92</p>	
306	<p>Firm to very firm mid dark brownish grey silty CLAY with common to abundant clasts of white off-white chalk and flint with uncommon grey lmst and dark grey mdst. Clasts rounded to angular, sand to cobble sized (trending coarse sand to fine gravel). Large chalk cobble 2.65-2.75. Some fe staining? Rare orangey mottling</p> <p>Boundary difficult to see with 307 but changes quickly after large cobble - base of sequence, ?sharp boundary.</p>	<p>Till</p>	<p>2.1-2.8</p>	<p>18.92 - 18.22</p>	



307	<p>Firm to very firm mid greyish brown CLAY. Sparse coarse components that trend very weak, coarse sand to gravel sized subrounded to subangular slst mdst chalk. Slst greenish grey reddish grey mdst dark grey. Clasts becoming rarer and smaller with depth. Chalk absent after 3.</p> <p>Some localised patches of more brownish matrix starting at 3.7, no apparent change except colour. Generally buff lustre but becoming glittery at 3.8.</p>	Glacial,  ?till ?glaciofluvial	2.8-4	18.22 – 17.02	
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<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-C03		
<b>Coordinates (NGR) X:</b> 490162.03		<b>Coordinates (NGR) Y:</b> 384610.26		<b>Level (top):</b> 9.95mOD		
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 2.90 m		
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples	
10301	<p>Somewhat soft friable crumbly mid greyish brown sandy CLAY with rare flint gravel sa to sr g sized. Rooted in upper 0.15, crop.</p> <p>Sharp slightly undulate boundary with 10302.</p>	Ploughsoil.	0-0.35	9.95 – 9.6		
10302	<p>Slightly firm mid pale orangey brownish grey mottled orangey brown slightly silty sandy CLAY with no seen coarse components except manganese, fg sized. Structureless. Weak bioturb, thin white rooting ≤1mm holes.</p> <p>Gradual boundary with 10303.</p>	Alluvium  Possible reworked ground	0.35-0.6	9.6 – 9.35		
10303	<p>Slightly firm crumbly mid pale greenish brownish grey mottled orangey brown sandy CLAY. Much sandier than above. Very rare a, g sized clasts of lmst. Manganese seen, fg sized. Appears to be getting sandier with depth.</p> <p>Gradual boundary with 10304.</p>	Alluvium	0.6-?1	9.35 – 8.95		



10304	<p>Somewhat soft slightly damp weak friable crumbly vivid orangey yellow clayish SAND with uncommon to common coarse components of sa to sr fg sized weak yellowish orange ?sst poss lmst. Clasts are dirty coated with matrix colour, possible other lithologies. No apparent grading or orientation. Sand is medium to coarse.</p> <p>Gradual boundary with 10305.</p>	Alluvium	?1- 1.35	8.95 – 8.6	
10305	<p>Somewhat soft slightly plastic mid pale brownish blueish grey mottled and sub horizontally striped brownish orange CLAYISH SAND with no seen coarse components. Sand is fine. Stripes are generally 3-5mm.</p> <p>Becoming less plastic and crumblier with depth. Gradual texture boundary with 10306, but boundary marked with tabular a sc sized fossiliferous lmst clasts - generally sharp.</p>	Alluvium	1.35- 1.65	8.6 – 8.3	
10306	<p>Firm friable crumbly subhorizontal fissile breaking habit mid greenish brownish grey mottled greyish orangey brown sandy CLAY. Blocky, fissile habit has planes of orangey and blackish staining when torn along weaknesses (?fe &amp; ?mang staining). Sparse to rare coarse components, a to sa, fg fossil shell (lmst) and orangey yellow ?sst (poss lmst). Firmer and softer between subhorizontal planes. Fissile planes generally laminar, 3-6mm.</p> <p>Sharp to slightly gradual boundary with 1307.</p>	?Alluvium,  Transitional unit between 10305 & 10307?	1.65- 1.9	8.3 – 8.05	



10307	Firm to stiff crumbly across subhorizontal fissile breaking habit dark blackish brownish grey mottled mis greyish orangey brown sandy CLAY. Blocky, fissile habit has planes of orangey and blackish staining when torn along weaknesses (?fe & ?mang staining). Sparse to rare coarse components, a to sa, fg fossil shell (lmst) and orangey yellow ?sst (poss lmst). Firmer and softer between subhorizontal planes. Planes thicker than 10306 on average. Fossils orientated with layers.  No recovery 2-2.3. Abrupt subhorizontal boundary with 10308.	Weathered bedrock	1.9-2.5	8.05 – 7.45	
10308	Very firm to stiff crumbly across subhorizontal fissile breaking habit dark blackish brownish sandy CLAY. Uncommon coarse components a to sa, fg to g grey stiff lmst and fossil shell. Shell orientated with fissile layers. Firmer and softer between subhorizontal planes. Planes slightly discontinuous and slightly crenulated - ?convolute bedding. Firming with depth.	Weathered bedrock	2.5-2.9	7.45-7.05	

<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P04	
<b>Coordinates (NGR) X:</b> 490924.53		<b>Coordinates (NGR) Y:</b> 389705.46		<b>Level (top):</b> 20.76mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 4 m	
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples
401	Somewhat soft mid greyish brown sandy silty CLAY with common crop rooting and sparse to uncommon fine gravel to gravel sized angular to subrounded. Some mang and CBM seen.  Difficult to see boundary with 402, sharp undulate.	Ploughsoil	0-0.3	20.76 – 20.46	



402	<p>Somewhat firm yellowish grey mottled orangey brown slightly sandy CLAY. Semi common coarse components including flint and chalk rare vein quartz angular to subrounded coarse sand to gravel sized. Some localised patches of charcoal, structureless. Mang seen.</p> <p>Difficulty pinpointing boundary with 403 - assumed diffuse, gone by 1m.</p>	Alluvium	0.3- ?0.8	20.46 – 19.96	
403	<p>Firm blueish grey mottled orangey brown silty CLAY with common coarse components of chalk lmst and flint with most being fine gravel sized subrounded, but some coarse gravel sized and angular clasts seen.</p> <p>No apparent orientation, appears to have fewer coarse components between 1.6-2. Some bioturb, rooting, appears to be associated with grey matrix.</p> <p>Odd looking ovoid nodule of slst at 2.25. Becoming more consistently greyish brown at 2.3.</p> <p>Gradual boundary with 404</p>	Till, ?bioturbed	?0.8- 2.4	19.96 – 18.36	
404	<p>Somewhat firm to firm mid greyish brown CLAY. Sparse coarse components that trend very weak, coarse sand to gravel sized subangular to subrounded slst chalk. Slst greenish grey grey reddish grey dark grey. Fe staining following apparent bioturb. Target shaped staining in places, orangey, ?rooting.</p> <p>Gravellier between 3-3.1, contains chalk lmst sst slst frequently tabular angular before coarse components becoming v rare to sparse in distribution.</p>	Glacial, ?till ?glaciofluvial	2.4-4	18.36 – 16.76	

<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-C04	
<b>Coordinates (NGR) X:</b> 488731.79		<b>Coordinates (NGR) Y:</b> 383515.60		<b>Level (top):</b> 10.25mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 2.50 m	
<b>Context Number</b>	<b>Description</b>	<b>Interpretation</b>	<b>Depth m bgl</b>	<b>Depth m OD</b>	<b>Samples</b>



10401	<p>Firm mid greyish slightly orangey brown silty CLAY with abundant crop root and gravel sized clasts of subangular vein quartz ?chalcedony (brownish orange silicate) and sand sized clasts of poss manganese and frag fossil shell. Bioturbed.</p> <p>Sharp boundary with 10402. Possible archaeological feature cutting down to 1.4. May also be from pit digging.</p>	Ploughsoil.	0-0.35	10.25-9.9	
10402	<p>Firm mid yellowish grey mottled orange slightly silty CLAY with rare to uncommon coarse sand to fine gravel sized subangular to subrounded ?calcretions, trending spheroid whitish grey irregularly shaped can be scratched with fingernail with difficulty (mohs 3). Some rare fossil fragments and possible fe mang staining.</p> <p>Sharp boundary with 10403.</p>	Alluvium	0.35-1.4	9.9-8.85	
10403	<p>Firm crumbly yellowy brown mottled grey sandy CLAY with common coarse components of coarse gravel sized angular to subrounded lmst, with this lmst being frequently fossils and trending more subrounded due to this. Coral, gryphaea and bivalve fossils seen. Some fe staining. Difficult to pull apart. Sharp to gradual boundary with 10404.</p>	Till	1.4-1.75	8.85-8.5	
10404	<p>Firm mid brownish grey mottled grey silty CLAY with common to abundant fine gravel to gravel sized subangular ?lmst ?chalk ?calcretions. Localised and clustered.</p> <p>Abrupt to sharp boundary with 10405.</p>	Till/weathered bedrock transition	1.75-1.9	8.5-8.35	
10405	<p>Very firm grey mottled orange in stripes silty CLAY. Stripes orientated parallel to ground level. No seen coarse components until base, where ?v weathered dark grey mdst starts appearing, tabular angular.</p> <p>Sharp boundary with 10406, but 10406 may be continuation of this.</p>	Weathered bedrock	1.9-2	8.35-8.25	





10406	Very firm to stiff fissile dark bluish grey silty CLAY with fe staining, ?weathered mdst. Apparent orientation parallel to gl. Lmst clasts from 2.4, very fossiliferous whole fossils. Becoming stiffer to base. Buff lustre, with buff lustre with vitreous components from 2.4.	Weathered bedrock	2-2.5	8.25-7.75	
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<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P05	
<b>Coordinates (NGR) X:</b> 490984.72		<b>Coordinates (NGR) Y:</b> 389720.36		<b>Level (top):</b> 20.92mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 4 m	
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples
501	Somewhat soft mid greyish brown sandy silty CLAY with common crop rooting and sparse to uncommon fine gravel to gravel sized angular to subrounded flint. Some rare CBM and blue white fragments seen. Some mang seen.  Undulate gradual boundary with 502.	Ploughsoil	0-0.35	20.92-20.57	
502	Very soft friable poorly consolidated brownish orange slightly clayish SAND with sparse clasts of flint, angular trending gravel sized. Sand is medium and rounded.  Sharp boundary with 503.	Alluvium	0.35-0.75	20.57-20.17	
503	Firm brownish grey mottled orangey brown silty CLAY. Common coarse components of coarse sand to coarse gravel size subangular to rounded yellow and red sst, flint and chalk seen, chalk trending more rounded and smaller as well as more abundant. No orientation seen, clasts becoming more common and larger with depth, trending gravel sized abundant by 1m.  Becoming more consistently greyish brown with depth. Boundary with 504 unclear, assumed gradual.	Till, ?bioturbed	0.75-1.4	20.17-19.52	



504	Firm to very firm greyish brown mottled blueish grey CLAY. Very rare coarse components of chalk ?sst lmst seen, sand to coarse sand sized subangular to subrounded. No smell. ?manganese. Possible bioturb, thin rooting until 3. Poss desiccation cracks (unlikely)? Selenite seen, very very rare.  Becoming more consistently coloured after 3m, greyish brown.	Till,  ?glaciofluvial ?bioturbed	1.4-4	19.52-16.92	
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<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-C05	
<b>Coordinates (NGR) X:</b> 488697.80		<b>Coordinates (NGR) Y:</b> 383443.36		<b>Level (top):</b> 9.93mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 2.60 m	
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples
10501	Firm mid greyish slightly orangey brown silty CLAY with abundant crop rooting and uncommon coarse components of fragmentary CBM, gravel sized clasts of subangular vein quartz ?chalcedony (brownish orange silicate) and sand sized clasts of poss manganese. No apparent orientation or sorting. Some angular cobble sized fossiliferous lmst to base of unit.  Gradual to diffuse boundary with 10502 - difficult to see, main difference is becoming less consistently coloured and the addition of calcreted coarse components.	Ploughsoil	0-0.4	9.93 – 9.53	



10502	<p>Firm mid yellowish grey mottled orange slightly silty CLAY with abundant to very abundant coarse sand to fine gravel sized subangular to subrounded ?calcretions ?chalk, trending spheroid whitish grey irregularly shaped can be scratched with fingernail with difficulty (mohs 3). Uncommon tabular angular fragmentary fossil shell.</p> <p>Contains rare to uncommon coarse sand sized crinoid columnals, disarticulated star and tube shaped.</p> <p>Sharp 3-5cm boundary with 10503, same colour different texture.</p>	<p>Alluvium</p> <p>Assuming ?calcretions precipitated from caco3 rich water inundation</p>	0.4-1.3	9.53 – 8.63	
10503	<p>Firm slightly friable crumbly yellowy grey mottled orangey brown sandy CLAY with rare fine gravel sized subrounded ?ironstone ?lmst ?fe stained with rare fossil shell fragments and possible manganese staining.</p> <p>Sharp 3-5 boundary with 10504.</p>	Alluvium	1.3-1.4	8.63 – 8.53	
10504	<p>Somewhat firm to stiff firming down sequence blueish grey mottled orangey brown CLAY with common to abundant clasts of gravel to small cobble sized angular to subangular ?irnst fossiliferous lmst ?fe stained lmst some gryphaea valves seen frag and whole no orientation weakly greater clast abundance to depth.</p> <p>Sharp boundary with 10505 (6cm).</p>	Till	1.4-2	8.53 – 7.93	
10505	<p>Very firm to stiff dark blueish grey silty CLAY, generally massive but contains some rare gryphaea and bivalve valves frag and whole. ?Weak fissile nature parallel to gl. Becomes very gravelly with very shelly limestone at 2.5m. Buff lustre until 1.5, where it starts containing vitreous elements.</p>	Weathered bedrock	2-2.6	7.93 – 7.33	

<b>Site Code:</b> 273791	<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology	<b>GeoTech Tr ID:</b> WA-P06
<b>Coordinates (NGR) X:</b> 491044.47	<b>Coordinates (NGR) Y:</b> 389734.97	<b>Level (top):</b> 21.77mOD
<b>Length:</b> n/a	<b>Width:</b> n/a	<b>Depth:</b> n/a



Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples
601	<p>Somewhat soft mid greyish brown sandy silty CLAY with common crop rooting and sparse to uncommon fine gravel to gravel sized angular to subrounded flint. Some rare CBM fragments seen. Orange stained downwards from gl assumed bioturb pathway fe staining. Some mang seen.</p> <p>Sharp undulate boundary with 602.</p>	Ploughsoil.	0-0.3	21.77 – 21.47	
602	<p>Firm brownish greenish grey mottled orangey brown silty CLAY with frequent mang in orange portions in upper 10cm. Uncommon coarse components of coarse sand to coarse gravel size angular to rounded, grey sst flint and chalk seen chalk trending more rounded and smaller. No orientation seen, clasts becoming more common and larger with depth, trending gravel sized abundant by 1m.</p> <p>Abrupt slightly undulate boundary with 603.</p>	?Alluvium	0.3- 1.05	21.47 – 20.72	
603	<p>Soft friable poorly consolidated orangey brown becoming blueish grey with depth slightly clayish SAND. Sand is medium grained sr to rounded and more clayish when greyer. Somewhat discontinuous. No coarse components seen.</p> <p>Sharp to diffuse angular boundary with 604 - brown sand becoming rare at 1.2 but grey continues at an angle into 604.</p>	Alluvium	1.05- 1.28	20.72 – 20.49	



604	Firm to very firm mottled blue grey/orangey brown/greyish brown slightly silty CLAY with common to abundant coarse components angular to subrounded coarse sand to coarse gravel sized flint lmst chalk and ?shale, chalk most frequent and more rounded. Larger chalks weak, some areas of larger chalk wet in sample - rest dry.  Becoming more consistently greyish brown by 1.9.  Boundary between 605 and 606 not seen - between core lengths, assumed abrupt to sharp.	Till	1.28-2	20.49 – 19.77	
605	Soft friable poorly consolidated mid brownish orange SAND. Sand is medium and well rounded. No coarse components seen. Structureless, colour is consistent.  Abrupt slightly undulate boundary with 606	Probable drop  No recovery	2-2.09	19.77 – 19.68	
606	Very firm brownish grey silty CLAY with common to abundant coarse components including lmst (oolite), chalk, selenite angular to subrounded coarse sand to coarse gravel sized. No orientation seen. Clast abundance and size decreases with depth. Areas of brown staining that feels sandy orientated parallel to gl. Becoming stiffer with depth.  Diffuse boundary with 607.	Glacial,  ?till ?glaciofluvial	2.09- 3.1	19.68 – 18.67	
607	Very firm to stiff mid dark brownish blueish grey silty sandy CLAY with sparse to rare coarse components, coarse sand to gravel sized subangular to rounded lmst chalk sst seen. Chalk rarer than above units.	Glacial,  ?till ?glaciofluvial	3.1-4	18.67 – 17.77	

<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-C06	
<b>Coordinates (NGR) X:</b> 488663.99		<b>Coordinates (NGR) Y:</b> 383369.19		<b>Level (top):</b> 10.60mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 2.10 m	
<b>Context Number</b>	<b>Description</b>	<b>Interpretation</b>	<b>Depth m bgl</b>	<b>Depth m OD</b>	<b>Samples</b>



10601	Moderately firm mid orangey brown slightly silty CLAY with frequent rooting of crop. No discernible smell. Some rare complete gryphaea valves of gravel size. ?granular pidding.	Ploughsoil.	0-0.25	10.6 – 10.35	
10602	Somewhat soft to firm weak crumbly yellowish brown silty CLAY with very common to abundant angular frequently tabular coarse gravel to cobble sized fossiliferous lmst, no orientation or grading. Contains gryphaea valves. Small fragmentary fossil shell, fine gravel sized. fe staining on lmst.  Sharp boundary with 10603, very lmst-y at base, fissile. Firmer after 1.2.	Alluvium	0.25-1.5	10.35 – 9.1	
10603	Firm to stiff mid brownish grey mottled orangey brown slightly silty CLAY with no seen lmst clasts but fe staining and rare fine gravel sized tabular dark grey ?mdst.  Gradual boundary with 10603.	Glacial,  ?till/weathered bedrock transition	1.5-1.9	9.1 – 8.7	
10604	Stiff dark grey silty CLAY with fissile bands of mdst running parallel to ground level. Buff lustre with small vitreous components. Difficult to stab, some localised areas of fe staining.  Lmst at 2.1 base, angular cobbles	Weathered bedrock	1.9-2.1	8.7 – 8.5	

<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P07	
<b>Coordinates (NGR) X:</b> 491100.83		<b>Coordinates (NGR) Y:</b> 389749.54		<b>Level (top):</b> 22.03mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 4 m	
<b>Context Number</b>	<b>Description</b>	<b>Interpretation</b>	<b>Depth m bgl</b>	<b>Depth m OD</b>	<b>Samples</b>
701	Somewhat soft mid greyish brown sandy silty CLAY with common crop rooting and sparse to uncommon fine gravel to gravel sized angular to subrounded flint. Some mang seen.  Gradual boundary with 702 - undulate sandy clay interface.	Ploughsoil	0-0.3	22.03 – 21.73	



702	<p>Soft friable brownish yellowish orange clayish SAND with uncommon coarse components of flint angular gravel sized. More clayish at top.</p> <p>Boundary difficult to see, assumed sharp.</p>	Alluvium	0.3-0.7	21.73 – 21.34	
703	<p>Firm blueish grey mottled greyish orangey brown silty CLAY with abundant coarse components from coarse sand to coarse gravel size rounded to angular, chalk flint lmsst predominantly chalk. Fragmentary charcoal seen. ?bioturbed, weak plant matter seen. No orientation no grading seen. No smell. fe stained.</p> <p>Softer where wetter.</p> <p>Boundary not seen between 703 and 704 - between core lengths. Assumed abrupt to sharp.</p>	Till, ?bioturbed	0.7-2	21.34 – 20.03	
704	<p>Soft friable poorly consolidated brownish orange SAND. No coarse components seen structureless. Sand is medium to coarse rounded.</p> <p>Abrupt to sharp boundary with 705.</p>	Drop from sides  No recovery	2-2.07	20.03 – 19.96	
705	<p>Very firm to stiff greyish yellowish brown slightly sandy CLAY with common to abundant coarse components angular to rounded sand to coarse gravel sized trending gravel chalk and flint slst. Fe stained. Slst weak.</p> <p>Becoming greyer and stiffed with depth.</p>	Till,  ?bioturbed	2.07- 2.55	19.96 – 19.48	
706	<p>Very firm to stiff dark blueish grey silty CLAY with abundant coarse components of coarse sand to coarse gravel subangular to rounded chalk flint grey slst rare ?shale lmsst predominantly chalk gravel sized no sorting no orientation. Fe staining apparent parallel to gl.</p> <p>Average clast size decreasing down sequence, fine gravel by 3.4. Sharp to gradual boundary with 707.</p>	Till	2.55- 3.85	19.48 – 18.18	



707	Firm mid dark greyish brown slightly silty CLAY with sparse coarse components of lmst slst mdst chalk fine gravel size subangular no orientation or grading.	Glacial,  ?till ?glaciofluvial	3.85-4	18.18- 18.03	
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<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-C07A	
<b>Coordinates (NGR) X:</b> 488642.26		<b>Coordinates (NGR) Y:</b> 383329.44		<b>Level (top):</b> 10.76mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 1.7m	
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples
107101	Moderately firm mid orangey brown slightly silty CLAY with frequent rooting of crop in upper 30cm. No discernible smell. ?Granular pidding.  Gradual (8-10cm) boundary, undulate, with 107102.	Ploughsoil	0-0.3	10.76 – 10.46	
107102	Firm mid brownish yellowy grey mottled yellowish orangey brown slightly silty CLAY with gryphaea fossils and localised clusters of fine gravelly subrounded calcitic pale whitish grey ?calcretions. Manganese stained. No orientation or grading.  Becoming very firm by 1m. Sharp boundary with 107103 with angular tabular fossiliferous lmst at boundary.	Alluvium	0.3-1.5	10.46 – 9.26	
107103	Very firm to stiff blueish brownish grey mottled orangey brown clayish SAND with common clasts of subangular cobble sized lmst tabular to semi spheroid frequently fractured. Sandiness increases when browner. Tabular sides of lmst orientated to ground level? No sorting or grading. Can't be stabbed or sliced easily but can be snapped when 55mm core.  Becoming damp at 1.7.	Till	1.5-1.7	9.26 – 9.06	

<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-C07	
<b>Coordinates (NGR) X:</b> 488625.84		<b>Coordinates (NGR) Y:</b> 383294.50		<b>Level (top):</b> 10.79mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 0.80 m	





Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples
10701	Moderately firm mid orangey brown slightly silty CLAY with frequent rooting of crop in upper 30cm. No discernible smell. ?Granular pidding. Rare to uncommon subrounded to well-rounded coarse gravel to cobble sized clasts of lmst, grey sugary lustre when broken.  Undulate sharp (3-5cm) boundary with 10702.	Ploughsoil	0-0.2	10.79 – 10.59	
10702	Firm mid brownish grey mottled yellowish brown sandy CLAY with common to semi abundant clasts of angular to subangular frequently tabular coarse gravel to cobble sized fossiliferous lmst, marine fossils death assemblage. Whole gryphaea seen, ?Gryphaea arcuata. Some fragmentary fossil shell fragments. Sand is v fine to fine, near silt.  Lmst boulders from 0.8 onwards.	Till	0.2-0.8	10.59 – 9.99	

<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P08	
<b>Coordinates (NGR) X:</b> 491003.55		<b>Coordinates (NGR) Y:</b> 389415.63		<b>Level (top):</b> 21.96mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 4 m	
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples
801	Somewhat soft crumbly mid greyish brown sandy silty CLAY with common crop rooting and sparse to uncommon fine gravel to gravel sized angular to subrounded flint. Some mang seen.  Irregular undulate sharp to diffuse boundary with 802 - upwelling of 802 into 801.	Ploughsoil	0-0.4	21.96 – 21.56	



802	<p>Very soft to somewhat soft friable crumbly greyish orangey brown sandy CLAY with uncommon coarse components of chalk and flint coarse sand to gravel angular to subrounded. Variably sandy and clayish - the more orangey the sandier it is, greyer the more clayish. Manganese quite common, coarse sand sized nodules.</p> <p>Sharp slightly undulate boundary with 803.</p>	<p>Alluvium</p> <p>Poss reworked ground</p>	0.4-0.7	21.56 – 21.26	
803	<p>Somewhat soft to firm brownish blueish grey mottled orangey brown and greyish brown slightly silty sandy CLAY with common to abundant coarse components of off white chalk flint ?irnst (?orange slst) dark grey mdst orangey brown sst grey lmst subangular to rounded coarse sand to small cobble sized. Predominantly chalk clasts, ranging from tacky weak friable to stiff. No orientation no sorting seen.</p> <p>Very rare coarse sand sized amorphous charcoal seen between 1.2-1.3.</p> <p>Orange mottling becoming rarer with depth, mostly absent by 1.5.</p> <p>Sharp subhorizontal undulate boundary with 804.</p>	<p>Till,</p> <p>?bioturbed</p>	0.7-2.6	21.26 – 20.36	
804	<p>Firm to very firm mid dark blueish grey silty CLAY with abundant to very abundant coarse components of chalk and flint sand to coarse gravel sized subangular to rounded no sorting or orientation seen. Most (90%) clasts chalk, stiff. Some ?fe staining ?parallel to gl. Matrix well consolidated, difficult to break apart.</p> <p>Clasts becoming smaller and less frequent from 3.5.</p> <p>Sharp to slightly gradual boundary with 805, subhorizontal.</p>	<p>Till</p>	2.6-3.8	20.36 – 18.16	



805	Firm mid dark greyish brown slightly silty CLAY with uncommon coarse components, coarse sand to fine gravel sized subangular to subrounded off-white stiff chalk reddish weak ?slst dark grey weak mdst. No grading or orientation seen.	Glacial,  ?till ?glaciofluvial	3.8-4	18.16 – 17.96	
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<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-C08	
<b>Coordinates (NGR) X:</b> 488574.71		<b>Coordinates (NGR) Y:</b> 383212.64		<b>Level (top):</b> 9.36mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 2.8m	
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples
10801	Moderately firm mid orangey brown slightly silty CLAY with frequent rooting of crop in upper 30cm. No discernible smell. ?Granular pidding. Rare to uncommon subrounded to well-rounded coarse gravel to cobble sized clasts of lmst, grey sugary lustre when broken, and ?quartzite, brownish orange very hard slightly uneven weathering surface.  Rare fragments of CBM seen, coarse sand sized angular.  Land drain at 0.8 - silted up, lmst in it, dry. Sharp (3-5cm) boundary with 10802. Likely thicker than it should be due to land drain cut.	Ploughsoil	0-0.9	9.36 – 8.46	
10802	Very firm mid blueish grey mottled yellowish brown sandy CLAY with common to semi abundant clasts of angular to subangular frequently tabular coarse gravel to cobble sized fossiliferous lmst, marine fossils death assemblage. Appears to have broken across bedding planes. Matrix easily cleaved/sliced with trowel but difficult to clean - can be stabbed with fingernail but not compressed with finger. Possible irnst clasts at 1.3, fe ?manganese stained.  Loose and friable in pit. Gradual (6cm) boundary with 10803, very fissile at boundary.	Alluvium	0.9-1.6	8.46 – 7.76	



10803	Very stiff to hard fissile dark grey silty CLAY with occasional marine fossils. Generally buff lustre with some vitreous components.  Becoming hard by 2.3m. Fissile parallel to ground level, assumed laminations. Stained brown in places fe staining	Weathered bedrock	1.6-2.8	7.76 – 6.56	
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<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P09	
<b>Coordinates (NGR) X:</b> 491108.33		<b>Coordinates (NGR) Y:</b> 389458.64		<b>Level (top):</b> 21.62mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 3.70 m	
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples
901	Somewhat soft crumbly mid greyish brown sandy silty CLAY with common crop rooting and sparse to uncommon fine gravel to gravel sized angular to subrounded flint. Some CBM and mang seen.  Sharp undulate boundary with 902.	Ploughsoil	0-0.4	21.62 – 21.22	
902	Very soft to somewhat soft friable crumbly greyish orangey brown sandy CLAY with uncommon coarse components of chalk and flint coarse sand to gravel angular to subrounded. Predominantly flint. Variably sandy and clayish - the more orangey the sandier it is, greyer the more clayish.  Some fragmentary CBM seen in bulk bag, but also contains 901 in same bag - possible drag down.	Alluvium	0.4-0.8	21.22 – 20.82	



903	<p>Somewhat firm to firm brownish blueish grey mottled orangey brown and greyish brown slightly silty slightly sandy CLAY with common coarse components of off white chalk flint ?irnst (?orange slst) dark grey mdst yellow ?sst ?marl grey lmst subangular to rounded! coarse sand to small cobble sized. Predominantly chalk clasts (60%), stiff. No orientation no sorting seen; larger clasts more sporadic.</p> <p>Amorphous charcoal seen at 1.3m.</p> <p>Orange mottling becoming rare after 1.6. Weak evidence of bioturb - thin rooting and thin (<math>\leq 1</math>mm) holes. Buff lustre. Softer to base - soft-firm. Sandier when softer, fine sand.</p> <p>Difficult to see boundary between 903 and 904 - gradual.</p>	Till,  ?bioturbed	0.8-2.1	20.82 – 19.52	
904	<p>Somewhat soft to slightly firm well consolidated crumbly mid dark greyish brown sandy CLAY with rare to sparse coarse components of sand to coarse sand size subrounded. Difficult to determine lithology of clasts due to size and sparseness, reddish brown greyish orange and grey clasts noted, assumed slst. Some rare off white weak - ? chalk. Variably weak/stiff. Sand in matrix is fine.</p> <p>One rounded gravel sized hard clast at 2.4.</p> <p>Occasional ?fe staining orange, thin crack-like pattern. Crumbles along these cracks, gravel sized prismatic pids.</p> <p>Difficult to see boundary between 904 and 905 - appears sharp to gradual from texture change.</p>	Glacial  ?till ?glaciofluvial	2.1-2.5	19.52 – 19.12	



905	<p>Very firm mid dark greyish brown slightly silty sandy CLAY with uncommon to common coarse components of coarse sand to gravel sized subangular to subrounded chalk dark grey mdst red slst grey lmst. Variably weak to stiff. No apparent orientation abundance of clasts appears to be reducing slightly to base.</p> <p>Sub parallel fe staining 2.55 &amp; 2.6 causing fissile break.</p> <p>Chalk seen throughout unit. Less brown than above unit.</p>	<p>Glacial</p> <p>?till</p> <p>?glaciofluvial</p>	2.5-3.7	19.12 – 17.92	
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<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P10A		
<b>Coordinates (NGR) X:</b> 492510.37		<b>Coordinates (NGR) Y:</b> 390149.64		<b>Level (top):</b> 25.92mOD		
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 3.80 m		
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples	
1001	<p>Somewhat soft mid slightly orangey greyish brown sandy CLAY with frequent crop rooting and uncommon coarse components angular to subangular fine gravel sized flint CBM and anthracitic coal. Some rare weak tacky chalk. Worms seen.</p> <p>Sharp boundary with 1002.</p>	Ploughsoil	0-0.4	25.92 – 25.52		
1002	<p>Firm to very firm brownish grey mottled orangey brown greyish brown silty CLAY. Manganese seen. Bioturb, thin weak rooting small (<math>\leq 1</math>mm) holes. Smells mouldy. Crumbly, prismatic coarse gravel to cobble sized pids.</p> <p>Notable rarity of non-manganese coarse components - very rare tacky weak to hard stiff chalk seen, latter gravel sized subrounded.</p> <p>Angled sharp boundary with 1003 - unusual, kind of continues.</p>	Alluvium	0.4-1.6	25.52 – 24.32		



1003	<p>Moderately soft somewhat damp mid bluish grey silty/fine sandy CLAY with notable down sequence orientated reddish orange fibrous wood. No discernible smell. Matrix paler/whiter immediately surrounding wood. No lithological coarse components noted.</p> <p>Somewhat discontinuous - surrounded by areas of matrix resembling 1002 but sandy clay with sparse to uncommon clasts of chalk reddish brown slt orangey ?inst ?sst. Wood of similar type NOT seen above this unit. Exits core obliquely at 1.7 and re-emerges more continuous at 1.85.</p> <p>Rooting ends at 2, but clayish matrix continues to 2.2. Becomes increasingly sandy after 2.</p> <p>Gradual to diffuse boundary with 1004</p>	Rooting in ?alluvium	1.6-2.2	24.32 – 23.72	1.65, 1.7, 1.85
1004	<p>Firm but friable dark greyish brown clayish SAND. No seen coarse components, structureless (massive). Sand is fine to medium, with grains being reddish and whitish and brownish. Will fail if crushed. Some patches of greenish yellow in places in 2-3 core. Mottled orange at top of sequence for about 20cm (1003 boundary). Becoming somewhat firmer with depth.</p>	Glacial?  ?glaciofluvial	2.2-3.8	23.72 – 22.12	

<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P11A	
<b>Coordinates (NGR) X:</b> 492572.88		<b>Coordinates (NGR) Y:</b> 390132.70		<b>Level (top):</b> 26.14mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 4 m	
<b>Context Number</b>	<b>Description</b>	<b>Interpretation</b>	<b>Depth m bgl</b>	<b>Depth m OD</b>	<b>Samples</b>



1101	<p>Somewhat soft mid slightly orangey greyish brown sandy CLAY with frequent crop rooting and uncommon coarse components angular to subangular fine gravel sized flint CBM and anthracitic coal.</p> <p>Undulate sharp to slightly diffuse boundary with 1102. Quite difficult to see.</p>	Ploughsoil.	0-0.4	26.14 - 25.74	
1102	<p>Somewhat firm to firm greenish brownish grey mottled brownish orange sandy CLAY with rare coarse components of fine gravel sized subangular grey lmst and frequent manganese nodules/staining. Weak evidence of bioturb, weak rooting and small (<math>\leq 1\text{mm}</math>) holes. No lmst seen after 1m.</p> <p>Rare amorphous charcoal, coarse sand sized.</p> <p>Becoming increasingly soft and sticky from 1.3, somewhat soft from 1.5, soft from 1.7. Also becoming damper.</p>	Alluvium	0.4-1.7	25.74 – 24.44	
1103	<p>As 1102 (greenish brownish grey mottled brownish orange sandy CLAY) but soft and including semi common sand to fine gravel sized subrounded clasts of white chalk orangey ?slst dark grey ?mdst. Also contains rare amorphous charcoal.</p> <p>Sparse woody material, discontinuous, reddish brown with apparent weak orientation down sequence. Damp.</p> <p>Becoming sandier at 1.95, clayish sand by 2. Gradual boundary with 1104.</p>	Continuation of above	1.7-2	24.44 – 24.14	





1104	<p>Somewhat soft to firm friable blueish brownish grey mottled orangey brown clayish SAND with waterlogged reddish brown fibrous wood rooting in upper 0.15. Otherwise no seen coarse components. Sand is fine to medium. Firming with depth, firm by 2.15. Browning with depth, greyish orangey brown by 2.4.</p> <p>Sharp to slightly gradual boundary with 1105.</p>	Alluvium	2-2.6	24.14 – 24.54	
1105	<p>Firm to very firm but friable dark greyish brown clayish SAND. No seen coarse components, structureless (massive). Sand is fine to medium, with grains being reddish and whitish and brownish. Will fail if crushed. Some rare fe staining.</p> <p>Gradual boundary with 1106.</p>	Glacial, ?glaciofluvial	2.6- 3.25	24.54 – 22.89	
1106	<p>Mid dark greyish brown firm to very firm slightly sandy silty CLAY with common clasts sand to gravel sized subangular to rounded clasts of off-white chalk grey lmst (trending ang larger) reddish?slst dark grey ?mdst. No orientation or grading seen.</p> <p>Sharp boundary with 1107.</p>	Glacial, ?glaciofluvial  See 1109	3.25- 3.45	22.89 – 22.69	
1107	<p>As 1105 but trending coarser sand - Firm to very firm but friable dark greyish brown clayish SAND. No seen coarse components, structureless (massive). Grains are reddish and whitish and brownish. Will fail if crushed. Medium to coarse sand.</p> <p>Sharp boundary with 1108.</p>	Glacial, ?glaciofluvial  See 1109	3.45- 3.85	22.69 – 22.29	
1108	<p>As 1106 -Mid dark firm to very firm slightly sandy silty CLAY with common clasts sand to gravel sized subangular to rounded clasts of off-white chalk grey lmst (trending ang larger) reddish ?slst dark grey ?mdst. No orientation or grading seen.</p> <p>Sharp to gradual boundary with 1109. Angled.</p>	Glacial, ?glaciofluvial  See 1109	3.85- 3.95	22.29 – 22.19	



1109	As 1107 - Firm to very firm but friable dark greyish brown clayish SAND. No seen coarse components, structureless (massive). Sand is fine to medium, with grains being reddish and whitish and brownish. Will fail if crushed. Medium to coarse sand.	Glacial  ?glaciofluvial  1105-1109 appears to be part of same sequence - varved?	3.95-4	22.19 – 22.14	
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<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P12	
<b>Coordinates (NGR) X:</b> 492560.72		<b>Coordinates (NGR) Y:</b> 390050.05		<b>Level (top):</b> 26.61mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 3 m	
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples
1201	Somewhat soft mid slightly orangey greyish brown sandy CLAY with frequent crop rooting. Semi common coarse components of angular gravel sized frequently tabular flint seen. Manganese nodules.  Sharp undulate boundary with 1202.	Ploughsoil	0-0.3	26.61 – 26.31	
1202	Firm mid greenish grey mottled orangey brown sandy CLAY with rare to sparse coarse components of angular gravel sized flint. Bioturb, thin rooting ≤1,mm holes. Rare amorphous black streak coarse sand sized ? charcoal. Common manganese staining and nodules, coarse sand sized. Patches where sandier, sand is brownish orange.  Can't identify boundary in pit easily, appears to be at 0.8m. ?Sharp.	Alluvium	0.3- ?0.8	26.31 – 26.81	



1203	<p>Somewhat soft friable crumbly greyish brown slightly mottled blueish grey clayish SAND. No seen lithological coarse components, but some sand appears to be derived from chalk and flint. Rare coarse sand sized amorphous black streaking black charcoal seen. White off-white yellow brown and reddish-brown grains seen. Sand is fine to medium. Sticky and damp.</p> <p>Firming with depth, slightly firm from 1.45 onwards. Grey mottling starts having orientation parallel to gl from 1.42. Sand coarser at boundary with 1204.</p> <p>Abrupt subhorizontal boundary with 1204.</p>	Alluvium	?0.8-1.55	26.81 – 25.06	
1204	<p>Somewhat firm slightly friable slightly orangey greyish brown clayish SAND with rare coarse components at top of unit in upper 5cm, coarse sand to fine gravel sized subrounded to subangular flint and chalk. No seen coarse components seen afterwards. Sand trending fine. Off-white brown grey reddish brown dark grey grains, subrounded to rounded.</p> <p>Becoming blocky and crumbly at 1.7-2. Orangier near block cracks. Weak orientation parallel to gl.</p> <p>Drop 2-2.05 (NO RECOVERY). Slightly gradual boundary with 1205.</p>	Alluvium	1.55-2.4	25.06 – 24.21	
1205	<p>Firm friable weak to pressure mid dark blueish grey mottled orangey brown SAND with no seen coarse components. Orange is weakly orientated parallel to gl, sediment breaks most readily into angular coarse gravel sized blocks across these lines. Sand is fine to medium grey off white dark grey reddish-brown grains subrounded to rounded grains.</p> <p>Orange becoming more absent closer to boundary with 1206. Slightly gradual boundary with 1206.</p>	Glacial,  ?glaciofluvial ?till	2.4-2.65	24.21 – 23.96	



1206	Firm to very firm slightly friable mid dark greyish brown clayish SAND with no seen coarse components. Sand trends fine with some medium. Off white grey yellowish grey dark grey reddish-brown grains seen sr to r. Some dark yellowish greenish grey mottling.  Slightly gradual boundary with 1208.	Glacial,  ?glaciofluvial ?till	2.65- 2.9	23.96 – 23.71	
1207	Firm to very firm slightly friable mid dark brownish grey sandy CLAY. No seen coarse components, sand very fine to fine. Off white grey yellowish grey dark grey reddish-brown grains seen. Some dark yellowy greenish grey mottling.	Glacial,  ?glaciofluvial ?till	2.9-3	23.71 – 23.61	

<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P13		
<b>Coordinates (NGR) X:</b> 492601.12		<b>Coordinates (NGR) Y:</b> 390065.76		<b>Level (top):</b> 26.39mOD		
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 3.60 m		
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples	
1301	Somewhat soft mid slightly orangey greyish brown sandy CLAY with frequent crop rooting. Semi common coarse components of angular gravel sized frequently tabular flint seen.  Sharp undulate boundary with 1302.	Ploughsoil.	0-0.3	26.39 - 26.09		
1302	Somewhat soft pidding granular yellowish brown sandy CLAY. Very sandy, sand fine to medium. Weak bioturb, thin rooting ≤1mm holes. Sparse coarse components, angular fine gravel to coarse gravel sized orangey to brownish flint. Flint appears to be clumped together when found. Some manganese staining seen.  Difficult to see boundary - appears sharp undulate.	Alluvium, possible interface layer	0.3-0.7	26.09 – 25.69		



1303	<p>Somewhat soft to slightly firm mottled greenish grey/brownish grey/orangey brown sandy CLAY with no seen lithological coarse components. Damp in sample, sticky. Very rare sand sized amorphous? charcoal (dirty streak black) seen in bulk bag sample from pit. Sand is fine to medium.</p> <p>Getting firmer and less damp near boundary with 1304, 1.5 onwards slightly firm.</p> <p>Gradual boundary with 1304.</p>	Alluvium	0.7-1.6	25.69 – 24.79	
1304	<p>Firm to very firm slightly damp greyish brown clayish SAND with no seen lithological coarse components. Frequently seen orangey brown staining, generally orientated parallel to gl, giving sediment a striped appearance. Some staining also orientated down sequence.</p> <p>Sand is fine to medium, with grey, brown off-white and reddish-brown grains seen. Grains appear to be subrounded to rounded.</p> <p>Layer identical to 1003 except for one single subangular gravel sized clast of oolite 2-2.05 - probable drop from sides during core swap. Sharp subhorizontal boundary with 1305.</p>	Glacial, ?glaciofluvial	1.6- 2.05	24.79 - 24.34	
1305	<p>Firm to very firm mid dark brownish grey regularly mottled orangey brown sandy CLAY. Similar in appearance to 1304 but different texture. No seen coarse components. Orange mottling thin, appears to be weakly orientated parallel to gl with a "blocking" tendency - sediment breaks easiest across the staining and tends to peel off in gravel sized blocks.</p> <p>Sharp to slightly gradual boundary with 1306.</p>	Glacial, ?glaciofluvial	2.05- 2.25	24.34 – 24.14	



1306	Slightly soft to somewhat firm mid slightly greyish orangey brown slightly clayish SAND with no seen coarse components. Sand is fine to medium, with yellow off-white brown and reddish-brown grains seen.  Consistently coloured massive structureless. Sharp subhorizontal boundary with 1307.	Glacial  ?glaciofluvial	2.25-2.4	24.14 – 23.99	
1307	Somewhat firm mid dark greyish brown clayish SAND with no seen coarse components. consistently coloured, slightly variable in grain size down sequence, fine to medium with patches of finer sand. Grains appear subrounded to rounded, off-white grey reddish. Friable crumbly, fails under pressure.  Clay band with semi common coarse components of off-white chalk dark grey mdst reddish ?slst sand to fine gravel sized frequently tabular subrounded to rounded at 3.47-3.5.	Glacial  ?glaciofluvial	2.4-4	23.99-24.39	

<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P14	
<b>Coordinates (NGR) X:</b> 492575.73		<b>Coordinates (NGR) Y:</b> 389793.83		<b>Level (top):</b> 27.65mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 4 m	
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples
1401	Somewhat firm mid slightly orangey greyish brown sandy CLAY with frequent crop rooting. Semi common coarse components of angular gravel sized frequently tabular flint seen.  Sharp undulate boundary with 1402.	Ploughsoil	0-0.3	27.65-27.35	



1402	<p>Very firm to stiff dry slightly friable greenish grey mottled yellowy orangey brown sandy CLAY with rare to sparse coarse components of angular gravel sized flint. Weak evidence of bioturb, thin rooting ≤1mm holes. Somewhat crumbly. Manganese staining; coarse sand nodules. Very difficult to impossible to pull apart in core. Variably sandy, sand is fine to medium.</p> <p>Instant to abrupt subhorizontal boundary with 1403.</p>	Possible reworked ground, ?alluvium	0.3-1.3	27.35-26.35	
1403	<p>Firm slightly plastic very slightly friable mid pale blueish grey mottled brownish orange sandy CLAY. Less sandy than 1402, sand is v fine. Semi uncommon coarse components coarse sand to coarse gravel sized, subrounded to rounded stiff grey lmst white chalk. Rare fragmentary coarse sand sized reddish brown fibrous wood seen.</p> <p>Difficult to determine boundary with 1404 - ? slightly diffuse.</p>	Till, ?bioturbed	1.3-?1.5	26.35 – 26.15	
1404	<p>Firm greyish brown mottled yellowish brown and orangey brown slightly sandy CLAY with no seen coarse components. Slightly fissile across thin orange mottle bands, breaks into blocks across these lines. Blockier after 1.7. Blocks into gravel to coarse gravel sized angular units. p Small ≤1mm bioturb holes.</p> <p>Becoming less greyish with depth. Band of clay at 2.3. Slightly diffuse boundary with 1405.</p>	Glacial, ?till ?glaciofluvial	?1.5-2.5	26.15 – 25.15	
1405	<p>Firm to very firm friable mid dark brownish grey clayish SAND with no seen coarse components. Sand is fine, subrounded to rounded off white dark grey rare reddish brown.</p> <p>Sharp boundary with 1406</p>	Glacial ?glaciofluvial	2.5-3.65	25.15-24	



1406	Somewhat firm damp friable mid dark brownish grey clayish SAND, sand fine sr to r with apparent ≤1mm paler brownish grey laminations parallel to gl subhorizontal. No seen coarse components. Grains off white grey reddish brown brownish grey. More off white grains in pale laminations.	Glacial  ?glaciofluvial	3.65-4	24-23.65	
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<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P15	
<b>Coordinates (NGR) X:</b> 492634.36		<b>Coordinates (NGR) Y:</b> 389821.88		<b>Level (top):</b> 27.48mOD	
<b>Length:</b>		<b>Width:</b>		<b>Depth:</b> 4 m	
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples
1501	Somewhat soft mid slightly orangey greyish brown sandy CLAY with frequent crop rooting. Semi common coarse components of angular gravel sized frequently tabular flint seen.  Sharp undulate boundary with 1502.	Ploughsoil	0-0.3	27.48-27.18	
1502	Very firm to stiff dry slightly friable greenish grey mottled yellowy orangey brown sandy CLAY with rare to sparse coarse components of angular gravel sized flint. Weak evidence of bioturb, thin rooting ≤1mm holes. Somewhat crumbly. Manganese staining and coarse sand nodules. Very difficult to impossible to pull apart in core.  Starts to soften at 1.2. Sharp firmness boundary with 1503.	Alluvium, possible reworked	0.3-1.27	27.18-26.21	
1503	Somewhat soft slightly moist somewhat friable mid blueish grey mottled brownish orange clayish SAND with no seen coarse components. Sand is v fine to fine subrounded to rounded. Orange mottles appear to be weakly orientated parallel to gl - unit appears stripey.  Boundary with 1504 not seen - split core 1.7-2	Alluvium	1.27-?2	26.21-25.48	





1504	<p>Somewhat soft to slightly firm friable weak to crushing mid greyish brown clayish SAND with no seen coarse components. Orange mottling 2.1-2.2. Sand is fine, subrounded to rounded off-white yellowish grey grey reddish brown.</p> <p>Apparent lamination (1-2mm) parallel to gl subhorizontal, very apparent 2.2-2.3. Laminations appear both lighter brownish grey and darker blueish grey darker bands appear coarser. Darker laminations apparent from 2.1.</p> <p>Abrupt boundary with 1505.</p>	Glacial  ?glaciofluvial	2-2.3	25.48- 25.18	
1505	<p>Somewhat firm friable weak to crushing mid dark blueish grey clayish SAND with no seen coarse components. Sand is fine, v subrounded to rounded brown grey brownish grey off-white reddish-brown grains seen. Apparent laminations (<math>\leq 1</math>mm) of paler brownish grey parallel to gl subhorizontal.</p> <p>Browner grey 2.7-2.8. Sandy clay band blueish grey with semi common subangular to subrounded coarse sand to gravel coarse components of weak chalk black mdst reddish mdst light grey lmst 2.9-2.95. Clay band appears to be at boundary, abrupt to sharp boundary with 1506.</p>	Glacial,  ?glaciofluvial	2.3- 2.95	25.18- 24.53	
1506	<p>Firm somewhat friable mid dark greyish brown structureless clayish SAND with no coarse components except 1 coarse gravel/small cobble sized angular clast of grey fossiliferous lmst at 3.2-3.25. Sand is fine subrounded to rounded with off-white dark grey greyish brown and reddish-brown grains seen.</p> <p>Boundary with 1507 difficult to determine - same colour and texture, ? sharp.</p>	Glacial,  ?glaciofluvial	2.95- 3.8	24.53- 23.68	



1507	As 1506 (Firm somewhat friable mid dark greyish brown clayish SAND, fine sr to r, off-white dark grey greyish brown and reddish-brown grains seen) but with paler brownish grey subhorizontal ≤1mm laminations. No coarse components seen. Laminations contain more off-white grains that seen in regular matrix.	Glacial,  ?glaciofluvial	3.8-4	23.68- 23.48	
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<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P16	
<b>Coordinates (NGR) X:</b> 492649.50		<b>Coordinates (NGR) Y:</b> 389559.22		<b>Level (top):</b> 28.27mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 4 m	
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples
1601	Firm friable mid slightly orangey greyish brown sandy CLAY with frequent crop rooting with angular flint seen Metal slag seen.  Undulate sharp boundary with 1602.	Ploughsoil	0-0.35	28.27- 27.92	
1602	Somewhat firm greenish grey mottled orangey brown sandy CLAY with very rare coarse components coarse sand sized angular to subrounded flint and chalk. Variably sandy, orangier and softer when sandier. Manganese seen frequently. Chalk flint more common after 1m.  Black ?slag ?asphalt inclusions. Sharp boundary with 1603.	reworked ground, from alluvium	0.35- 1.2	27.92- 27.07	
1603	Somewhat firm mid blueish grey mottled brownish orange slightly sandy CLAY with common clasts of subrounded coarse sand to gravel sized yellowish and off-white chalk . Larger clasts are frequently weak and can be easily crushed. White and pale yellow dust frequent throughout. Stiff chalk also present.  Sandier at base. Sharp boundary with 1604.	Alluvium  ?Reworked till	1.2-1.3	27.07- 26.97	



1604	<p>Somewhat firm slightly friable mid blueish grey mottled yellowish grey and greyish brown very sandy CLAY. No lithological coarse components seen but some grains appear to be chalk. Grains are sr to r, fine to medium off-white white grey reddish grey yellow seen. Mottling appears weakly orientated parallel to gl, appears stripey (<math>\leq 1</math>cm). Becoming blockier at 1.9, blocking across orangey lines. Becoming sandier at 1.7.</p> <p>Gradual boundary with 1605</p>	<p>Alluvium ?reworked till</p>	1.3-1.9	26.97-26.37	
1605	<p>Firm slightly friable blocky orangey brown between fissile area for blocks greyish brown clayish SAND with no seen coarse components. Blocks variable in size, generally coarse gravel sized tabular. Angular blocking</p> <p>No longer blocky in 2-3 core. Boundary not seen.</p>	<p>Glacial ?glaciofluvial</p>	1.9-2	26.37-26.27	
1606	<p>Somewhat firm brownish grey with yellow laminations somewhat fissile across laminations sandy CLAY with no seen coarse components. Laminations are sandier and subhorizontal. Generally continuous.</p> <p>Slightly sharp boundary with 1607.</p>	<p>Glacial ?glaciofluvial</p>	2-2.35	26.27-25.92	
1607	<p>Firm slightly friable brownish grey clayish SAND massive/structureless no coarse components medium to coarse. Off-white reddish brown dark grey reddish grey grains seen.</p> <p>Sharp horizontal boundary with 1608.</p>	<p>Glacial glaciofluvial?</p>	2.35-2.45	25.92-25.82	
1608	<p>Firm slightly friable mid dark brownish grey slightly clayish SAND with weakly apparent paler grey laminations subhorizontal. Sand is fine to medium sr to r off-white reddish brown grey brownish grey grains seen.</p> <p>Sharp. boundary angled steeply with 1609</p>	<p>Glacial ?glaciofluvial</p>	2.45-3.6	25.82-24.67	



1609	Firm greyish brown CLAY with semi common coarse components of sand to fine gravel sized with some rare coarse gravel sized angular lmsd subrounded to subangular dark grey weak mdst grey ?lmsd ?marl. Appears weakly laminated same colour tearing pattern.  Sharp angled boundary with 1610.	Glacial  ?glaciofluvial	3.6-3.8	24.67-24.47	
1610	Firm slightly friable mid dark brownish grey slightly clayish SAND with weakly apparent paler grey laminations subhorizontal. Sand is fine to medium sr to r off-white reddish brown grey brownish grey grains seen.	Glacial  ?glaciofluvial	3.8-4	24.47-24.27	

<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P17		
<b>Coordinates (NGR) X:</b> 492710.14		<b>Coordinates (NGR) Y:</b> 389606.29		<b>Level (top):</b> 28.60mOD		
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 4 m		
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples	
1701	Somewhat soft friable weak to crushing mid slightly orangey greyish brown sandy CLAY with frequent crop rooting. Uncommon coarse sand rounded to subrounded flint and chalk seen.  Sharp undulate boundary with 1702.	Ploughsoil	0-0.35	28.6-28.25		
1702	Somewhat firm greenish grey mottled orangey brown sandy CLAY with rare to sparse coarse components coarse sand to gravel sized subrounded flint and chalk. Variably sandy, orangier and softer when sandier. Manganese seen.  Sharp boundary with 1703	Alluvium	0.35-0.8	28.25-27.8		



1703	<p>Somewhat firm mid blueish grey mottled brownish orange slightly sandy CLAY with common clasts of subrounded coarse sand to gravel sized yellowish and off-white chalk . Larger clasts are frequently weak and can be easily crushed. White and pale-yellow dust frequent throughout. Stiff chalk also present. Subangular gravel sized calcitic ?marl ?calcretion nodules also seen.</p> <p>Abrupt boundary with 1704.</p>	Alluvium	0.8-1.15	27.8-27.45	
1704	<p>Somewhat firm slightly friable mid blueish grey mottled yellowish grey and greyish brown very SANDY CLAY. No lithological coarse components seen. Very rare sand sized black streak amorphous ?charcoal. Rare bioturb, rare ≤1mm sized holes thin rooting. Grains are sr to r, fine to medium off-white grey reddish grey yellow seen. Mottling appears weakly orientated parallel to gl (subhorizontal), appears stripey (≤1cm). Becoming blockier at 1.7.</p> <p>Clay band with sediment similar to 1703 but with smaller clasts (coarse sand sized) 1.4-1.44 orientated diagonal (3cm thick).</p> <p>Gradual boundary with 1705.</p>	Alluvium	1.15-1.8	27.45-26.8	
1705	<p>Firm slightly friable blocky orangey brown between fissile area for blocks greyish brown clayish SAND with no seen coarse components. Blocks variable in size, generally coarse gravel sized tabular. Angular blocking.</p> <p>Gradual boundary with 1706.</p>	Glacial ?glaciofluvial	1.8-2.1	26.8-26.5	



1706	<p>Somewhat firm friable weak to pressure mid yellowish brown with subhorizontal bands of blueish grey (<math>\leq 5\text{mm}</math> thick) slightly clayish SAND with no seen coarse components. Becoming more clayish at base, ?clayband.</p> <p>Subhorizontal band of greyish brown clay with semi common coarse components of sand to fine gravel sized subrounded weak off white chalk and red ?slst 2.2-2.25.</p> <p>Sharp boundary with 1707.</p>	Glacial  ?glaciofluvial	2.1- 2.45	26.6- 26.25	
1707	<p>Firm slightly friable mid dark brownish grey slightly clayish SAND with weakly apparent paler grey laminations subhorizontal. Sand is fine to medium sr to r off-white reddish brown grey brownish grey grains seen. Rare coarse components, angular 1mst gravel sized.</p> <p>Angled sharp boundary with 1708 - angle steep approx 70°.</p>	Glacial  ?glaciofluvial	2.45- 2.8	26.25- 25.8	
1708	<p>Firm greyish brown CLAY with semi common coarse components of sand to fine gravel sized subrounded to subangular with weak and stiff off-white chalk and weak red slst.</p> <p>Appears to be wider clay band as seen above.</p> <p>Sharp steeply angled boundary with 1708.</p>	Glacial  ?glaciofluvial	2.8-3	25.8- 25.6	



1709	<p>As 1707 (Firm slightly friable mid dark brownish grey slightly clayish sand with weakly apparent paler grey laminations subhorizontal. Sand is fine to medium sr to r off-white reddish brown grey brownish grey grains seen) with no seen coarse components. Laminations somewhat rarer and slightly more discontinuous than 1707.</p> <p>Clay band similar to 1708 2.2-2.3 (firm greyish brown CLAY with uncommon coarse components of sand to coarse sized subrounded to subangular with weak and stiff off white chalk and weak red slst).</p>	<p>Glacial</p> <p>?glaciofluvial</p>	3-4	25.8-25.6	
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<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P18		
<b>Coordinates (NGR) X:</b> 491873.73		<b>Coordinates (NGR) Y:</b> 387641.09		<b>Level (top):</b> 17.22mOD		
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 4 m		
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples	
1801	Slightly firm prismatic pidding mid greyish brown silty sandy CLAY with semi common unsorted unorientated cs to g sized a to sr predominantly flint with chalk also seen.	Ploughsoil	0-0.4	17.22-16.82		
1802	<p>Slightly soft to firm slightly friable slightly damp greenish yellowish brownish grey mottled orangey brown sandy CLAY with semi common coarse components fg to g sized, va to a, predominantly flint, reddish, brownish, oranget blackish and off-white. Coarser sand when orangier. Difficult to break apart. Elements of weak chalk also seen. Manganese seen.</p> <p>Becoming sandier and more gravelly with depth. Softer and damper when sandier.</p>	Alluvium	0.4-1.25	16.82-15.97		



1803	<p>Slightly firm slightly damp mid blueish grey mottled orangey yellowish brown slightly silty CLAY with rare coarse components sc to g size, sa to sr, weak reddish brown slst, flint and stiff and weak chalk.</p> <p>Subvertically discontinuously rooted with reddish brown roots.</p> <p>Structureless. Some uncommon reddish brown mottling in upper 0.2. Becoming dryer and browner with depth, mottling greyish brown by 1.8.</p> <p>Sharp undulate boundary with 1804.</p>	Alluvium	1.25-2.1	15.97-15.12	
1804	<p>Firm mid dark greyish greenish brown with thin "cracks" of blueish grey with ?selenite crystals within slightly sandy CLAY with uncommon unsorted coarse components cs to cg sized a to sr off-white chalk stiff and weak stiff flint weak yellowish, brownish and greenish sst stiff grey lmst stiff marine fossils (lmst) weak reddish slst weak dark grey mdst seen.</p> <p>?selenite generally associated with sandier patches, yellow sst and and cracks and is off white vitreous cs sized. Bioturbed, subvertical rooting, rooting holes have yellow aureole.</p> <p>Abundance and average size of clasts both increase at 2.55. Becoming gradually less green and more brown with depth.</p> <p>Boundary not seen with 1805 - between cores, assumed sharp.</p>	Till  Reworked?	2.1-?3	15.12-14.22	





1805	<p>Firm to very firm mid dark greyish brown subvertical fissile tearing habit ?laminated slightly sandy CLAY with common coarse components unsorted cs to cg sized, a to r stiff and weak chalk stiff grey lmst weak dark grey mdst weak red slst weak yellow sst stiff fossil shell needle off-white selenite planar ?selenite. Selenite generally found with yellow sst. Smaller (≤fg) clasts have apparent weak orientation to ? laminations.</p> <p>No recovery 3-3.1. Angular cobble of lmst at 1.6-1.65, broken.</p>	<p>Glacial</p> <p>?Till</p> <p>?glaciofluvial</p>	?3-4	14.22-13.22	
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<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P20		
<b>Coordinates (NGR) X:</b> 491605.50		<b>Coordinates (NGR) Y:</b> 387534.34		<b>Level (top):</b> 16.06mOD		
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 4m		
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples	
2001	<p>Firm to stiff prismatic pidding mid greyish brown silty sandy CLAY with semi common unsorted unorientated cs to g sized a to sr predominantly flint with chalk also seen. Fragmentary CBM seen.</p> <p>Sharp subhorizontal boundary with 2002.</p>	Topsoil	0-0.4	16.06-15.66		
2002	<p>Firm slightly friable greenish yellowish brownish grey mottled orangey brown sandy CLAY with semi common coarse components fg to g sized, va to a, predominantly flint, reddish, brownish, oranget blackish and off-white. Some clasts crumbly, but all stiff. Some possible ?burnt flints, very vivid orange. Sandier when orangier. Difficult to break apart. Elements of weak chalk also seen. Manganese seen.</p> <p>Sharp subhorizontal boundary with 2003.</p>	Alluvium	0.4-0.5	15.66-15.56		



2003	Slightly firm mid slightly reddish brown mottled blueish grey slightly silty CLAY with no seen coarse components but patches fg to c size of very weak friable off-white chalk. Becoming greyer with depth.	Alluvium	0.5-1	15.56-15.06	
2004	Somewhat firm blueish brownish grey mottled greyish orangey brown slightly silty CLAY with common to abundant coarse components unsorted unoriented cs to cg sized, a to sr off-white weak friable and stiff chalk weak orangey red slst stiff grey lmst weak yellowish grey sst, flint, weak brown shale seen. Occasional discontinuous reddish brown mottling. Reddish brown mottling becomes rarer at depth, becoming mostly absent by 1.8. Orange mottling becoming greyer with depth.  Rooting bioturb seen with discontinuous reddish brown roots.  Diffuse boundary with 2005.	Till	1-2	15.06-14.06	
2005	Firm mid dark greyish brown with thin "cracks" of orangey brown slightly sandy CLAY with common to abundant unsorted unoriented coarse compinents cs to cg sized a to sr off-white chalk stiff and weak stiff flint weak yellowish, brownish and greenish sst stiff grey lmst stiff fossil valves (lmst) weak reddish slst weak dark grey mdst seen. Good distribution of all lith types. Some a cg stiff yellow grey ?recrystalised sst.	Till	2-3.1	14.06-12.96	



2006	<p>Firm mid dark brownish grey with thin "cracks" of orangey brown subhorizontally ?laminated/fissile tearing patterned slightly sandy CLAY with common to abundant unsorted coarse components cs to cg sized a to sr off-white chalk stiff and weak stiff flint weak yellowish, brownish and greenish sst stiff grey lmst stiff fossil valves (lmst) weak reddish slst weak dark grey mdst seen.</p> <p>Odd off-white coarse angular vteous sand surrounding one cobble sized clast of ?lmst, grey with a glittery greenish gold lustre at 3.4m. ?selenite.</p> <p>Chalk and dark grey mdst becoming larger and more abundant on average at 3.8. Browning with depth, greyish brown by 3.8.</p>	<p>Till</p> <p>Possible transition to glaciofluvial</p>	3.1-4	12.96-12.06	
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<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P21		
<b>Coordinates (NGR) X:</b> 491604.22		<b>Coordinates (NGR) Y:</b> 387464.41		<b>Level (top):</b> 15.85mOD		
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 4m		
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples	
2101	<p>Slightly firm prismatic pidding mid greyish brown silty sandy CLAY with semi common unsorted unorientated cs to g sized a to sr predominantly flint with chalk also seen. Fragmentary CBM seen. Manganese seen.</p> <p>One subrounded tabular boulder of yellowish grey ?recrystallised sst at 0.3. Sharp boundary with 2102.</p>	Topsoil	0-0.4	15.85-15.45		



2102	<p>Firm slightly friable greenish yellowish brownish grey mottled orangey brown sandy CLAY with semi common coarse components fg to sc sized, va to a, predominantly flint, reddish, brownish, orange blackish and off-white with some rare weak yellow sst. Difficult to break apart. Elements of weak chalk also seen. Manganese seen.</p> <p>Sharp subhorizontal boundary with 2101.</p>	Alluvium, possibly reworked/land scaped	0.4-0.7	15.45-15.15	
2103	<p>Somewhat firm blueish brownish grey mottled greyish orangey brown slightly silty CLAY with uncommon to common coarse components unsorted unoriented cs to cg sized, a to sr off-white weak friable and stiff chalk weak orangey red slst stiff grey lmst weak yellowish grey sst, flint, weak brown shale seen.</p> <p>Chalk weaker and patchier at top of unit. Discontinuous reddish brown subvertical rooting seen.</p> <p>Lens of soft loose friable orangey brown sand and gravel orientated subvertically from 1.4-1.6 (only in one half of core) . Gravel is fine to gravel sized a to sr chalk and flint and stiff dark grey ?mdst. No grading or orientation seen. Sand is medium.</p> <p>Sharp to gradual boundary with 2104.</p>	Till, ?reworked	0.7-1.6	15.15-14.25	
2104	<p>Firm to very firm mid dark greyish brown with occasional patches of dark blueish brownish grey sandy CLAY with common to abundant unsorted unoriented coarse components cs to cg sized a to sr off-white chalk stiff and weak stiff flint weak yellowish, brownish and greenish sst stiff grey lmst stiff fossil valves (lmst) weak reddish slst weak dark grey mdst seen. Grey patches softer and damper ?bioturb rooting.</p> <p>Gradual boundary with 2105</p>	Glacial, ?glaciofluvial	1.6-2.6	14.25-13.25	



2105	Firm mid dark brownish blueish grey sandy CLAY with uncommon to common unorientated unsorted cs to fg sized a to sr weak and stiff chalk, weak dark grey mdst, weak reddish slst. Very weak subhorizontal tearing habit ?laminations. Crack planar zonea of orangey brown matrix. Browning with dept.  Sharp boundary with 2106.	Glacial,  ?glaciofluvial	2.6-3.3	13.25-12.55	
2106	Firm to very firm mid dark greyish brown sandy CLAY with very abundant to pervasive coarse components unsorted unorientated cs to sc sized, a to r stiff and weak chalk stiff grey lmst weak dark grey mdst weak red slst weak peachy sst stiff fossil shell. Weak subhorizontal fissile habit, ?laminations in areas with less clasts 3.55-3.6.  More crumbly than above unit, generally weaker and sandier.	Glacial,  ?glaciofluvial	3.3-4	12.55-11.85	

<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P22	
<b>Coordinates (NGR) X:</b> 491379.26		<b>Coordinates (NGR) Y:</b> 387402.18		<b>Level (top):</b> 15.79mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 4m	
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples
2201	Firm to stiff prismatic pidding mid greyish brown silty sandy CLAY with semi common unsorted unorientated cs to g sized a to sr predominantly flint with chalk also seen.  Sharp undulate boundary with 2202 seen.	Ploughsoil	0-0.3	15.79-15.49	
2202	Slightly firm slightly friable mid orangey greyish brown mottled brownish grey sandy CLAY with semi common to common coarse components cs to fg sized sa to sr stiff chalk and flint, flint more common and larger. No apparent orientation or sorting. Rare patches of reddish brown, coin sized maximum.	Alluvium	0.3-0.8	15.49-14.99	



2203	<p>Firm slightly plastic mid blueish grey mottled orangey brown slightly silty CLAY with patches of chalk dust and uncommon to very common unsorted unorientated sc to sc sized coarse components of weak yellowish brownish peachy sst stiff and weak chalk, weak reddish slst, stiff off white flint, dark grey weak mdst. Some chalk stiffer and more nobbly - ?calcreted nodules before 1m. Clasts appear more abundant in core than in bulk bag.</p> <p>Tabular angular lmst possible boulder cobble at 1.42-1.45.</p> <p>Sharp shallowly angled boundary with 2204.</p>	Till, ?redeposited	0.8- 1.65	14.99- 14.14	
2204	<p>Firm to very firm slightly crumbly mid dark greyish brown mottled blueish brownish grey sandy CLAY with very common to abundant coarse components cs to cg sized a to sr unorientated unsorted stiff chalk stiff flint weak reddish brownish slst weak dark mdst stiff lmst. ?Selenite ?muscovite seen, planar vitreous angular coarse sand sized light coloured.</p> <p>Subangular small cobble of mint green ?slst ?marl at 3.5., can be scratched by fingernail stiff.</p> <p>Diffuse boundary with 2205.</p>	Till	1.65- 3.6	14.14- 12.19	
2205	<p>As above (blueish brownish grey sandy CLAY with very common coarse components cs to cg sized a to sr unorientated unsorted stiff chalk stiff flint weak reddish brownish slst weak dark mdst stiff lmst) but with lower clastal abundance, clasts being smaller on average than in (2204), no seen ?selenite ?muscovite and a weak subhorizontal tearing habit ?laminated. Higher proportions of mdst and lmst seen.</p>	Glacial, ?glaciofluvial	3.6-4	12.19- 11.79	

<b>Site Code:</b> 273791	<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology	<b>GeoTech Tr ID:</b> WA-P23
<b>Coordinates (NGR) X:</b> 491441.86	<b>Coordinates (NGR) Y:</b> 387379.38	<b>Level (top):</b> 15.35mOD



Length: n/a		Width: n/a		Depth: 4m		
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples	
2301	<p>Slightly soft to very firm prismatic pidding mid greyish brown silty sandy CLAY with semi common unsorted unoriented cs to g sized a to sr predominantly flint with chalk also seen. Getting softer with depth.</p> <p>Sharp undulate boundary with 2302.</p>	Ploughsoil	0-0.4	15.35-14.95		
2302	<p>Slightly firm greenish brownish mottled orangey brown sandy CLAY with sparse to uncommon coarse components sa to sr, fg sized flint. Manganese seen at a higher abundance to flint.</p> <p>Sharp boundary with 2303.</p>	Alluvium, ?distal edge	0.4-0.7	14.95-14.65		
2303	<p>Very firm to stiff somewhat crumbly mid blueish brownish grey mottled orangey brown slightly sandy clay with semi common to abundant cs to sb sized a to sr coarse components of stiff ?recrystallised yellowish brown sst stiff chalk stiff flint stiff lmst weak yellowish reddish greenish slst weak peachy sst spear habit off-white vitreous selenite dark grey weak mdst. Boulders tend to be lmst. No dominant lithology identified. Variably sandy, sandier patches discontinuous ?disintegrated sst. Selenite weakly associated with sandy patches.</p> <p>Evidence of bioturb seen, weak discontinuous reddish brown subvertical rooting and rooting holes seen. Rooting holes sometimes have yellowish orange aureole.</p> <p>Becoming less orange and darker with depth gradually, mid dark greyish brown mottled brownish blueish grey by 1.65.. Otherwise same, although clasts becoming slightly less abundant down sequence. Mdst and chalk becoming more common by 2.6. Mottling becoming rarer with depth. Gradual boundary 2304.</p>	Till	0.7-2.6	14.65-12.75		



2304	Firm mid dark greyish brown slightly sandy CLAY with common to abundant a to sr, cs to sc sized coarse components of brown sst stiff chalk stiff flint stiff lmst weak yellowish reddish greenish slst weak peachy sst off-white vitreous needle selenite dark grey weak mdst ? recrystallised yellow stiff sst. Predominantly stiff chalk, mint green slst and dark grey mdst.  Uncommon greyish brown mottling.	Till	2.6-4	12.75-11.35	
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<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P24	
<b>Coordinates (NGR) X:</b> 491513.18		<b>Coordinates (NGR) Y:</b> 387351.83		<b>Level (top):</b> 15.35mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 4m	
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples
2401	Somewhat firm prismatic pidding mid greyish brown silty sandy CLAY with semi common unsorted unorientated cs to g sized a to sr predominantly flint with chalk also seen. Fragmentary CBM seen.  Sharp undulate boundary with 2402.	Ploughsoil	0-0.35	15.35-15	
2402	Very soft to somewhat soft poorly consolidated friable orangey brown clayish SAND with abundant fg to g sized a to sa gravel of flint with rare chalk. Some rare manganese seen. Sand is fine to medium.  ?Gradual boundary with 2403, difficult to see in pit.	Alluvium	0.35-0.7	15-14.65	
2403	Slightly firm greenish brownish mottled orangey brown and reddish brown sandy CLAY with uncommon to semi common coarse components sa to sr, cs to cg sized flint, chalk, lmst, all stiff. Predominantly flint. Sandier when orange.  Boundary with 2404 not seen.	Alluvium	0.7-?1	14.65-14.35	





2404	<p>Soft loose friable mid greyish orangey brown slightly clayish SANDS AND GRAVEL, with gravel being va to a cs to cg sized no apparent sorting or orientation predominantly flint with rare chalk and uncommon ?recrystallised yellow sst. All gravel stiff.</p> <p>Sandy clay band 1.5-1.58 with matrix similar to 2403 but far gravellier, gravel more chalky but otherwise similar to rest of 2404.</p> <p>Abrupt angled slightly undulate boundary with 2405 (unconformable).</p>	Sands and gravel, ?river terrace	?1-1.85	14.35-13.5	
2405	<p>Firm to very firm slightly crumbly mid dark greyish brown rarely mottled blueish brownish grey sandy CLAY with common to abundant coarse components cs to cg sized a to sr unoriented unsorted stiff chalk stiff flint weak to friable reddish brownish greenish slst weak dark mdst stiff lmst stiff friable needle selenite stiff green peachy sst. Clasts trend sa to sr fg to g.</p> <p>Rooting seen, discontinuous subvertical to subhorizontal reddish brown fibrous, especially at 1.9. Greyer around rooting, absent otherwise. Becoming greyer with depth. Rare planar orangey brown cracking pattern.</p> <p>More plastic 3-3.3, same otherwise.</p>	Till	1.85-4	13.5-11.35	

<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P25	
<b>Coordinates (NGR) X:</b> 493035.72		<b>Coordinates (NGR) Y:</b> 387663.42		<b>Level (top):</b> 21.58mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 4m	
<b>Context Number</b>	<b>Description</b>	<b>Interpretation</b>	<b>Depth m bgl</b>	<b>Depth m OD</b>	<b>Samples</b>
2501	<p>Firm mid dark greyish brown clayish SAND, sand is fine. Frequent crop rooting. Coarse components fg to sc size, a to sr, uncommon, usually flint.</p> <p>Sharp undulate boundary with 2502.</p>	Ploughsoil	0-0.4	21.58-21.18	



2502	<p>Soft to slightly firm mid orangey brown mottled greenish grey CLAYISH SAND/SANDY CLAY. Sandiness is variable with amount of orange, with orange being sandier. Mostly sandy clay. Common to abundant coarse components of fg to g size, a to sr (mostly sa to sr), off-white stiff chalk orangey brown flint red ?slst seen. No apparent bedding of clays and sands, clumpy.</p> <p>Sharp subhorizontal boundary with 2503.</p>	poss reworked, ? alluvium	0.4-1	21.18-20.58	
2503	<p>Soft damp somewhat loose mid pale orangey brown slightly clayish SAND with common coarse components of cs to cg size predominantly fg to g, r to a mostly sr to sa. Off-white chalk oolite dark red ?slst and brownish flint seen, mostly chalk. Apparent weak orientation parallel to gl, no grading. Massive structureless matrix, consistent colour.</p> <p>Sharp subhorizontal boundary with 2504.</p>	Alluvium.	1-1.4	20.58-20.18	
2504	<p>Somewhat firm greyish brown mottled blueish grey and orangey brown CLAY with very abundant cs to c sized, a to sr variable sphericity coarse components of predominantly stiff white off white chalk with weak red (CBM red) and brown slst rare black weak ?mdst, orangey yellow weak sst(non dirty streak), stiff fossiliferous grey lmst. No sorting or orientation. Stiffer clasts generally trend larger.</p> <p>Odd cylindrical with central hole stiff object running perpendicular to gl 2.3-2.4- fe stained? Rooting?</p> <p>Sand drop 2.0-2.1. Abrupt to sharp subhorizontal boundary with 2505.</p>	Till	1.4-2.4	20.18-19.18	



2505	<p>Very firm mid dark brownish blueish grey sandy CLAY with uncommon to common coarse components generally cs to g sized sr to sa off white stiff chalk, reddish brown slst black mdst grey lmst with sparse cobble sized subangular grey lmst. Predominantly chalk. No sorting or orientation noted. Last large lmst 3.15.</p> <p>More sandy with with orangey sandy cracking 2.4-2.5. Greyish sand with weak fissile trend and laminated (<math>\leq 1</math>mm) striping parallel to gl trend.</p> <p>Becoming slightly firm from 3.3.</p> <p>Abrupt subhorizontal boundary with 2506.</p>	<p>Glacial, ?till ?glaciofluvial</p>	<p>2.4- 3.45</p>	<p>19.18- 18.13</p>	
2506	<p>Mid dark firm dry reddish greyish brown CLAY discontinuously marbled with blueish grey sandy clay (like 2505 matrix) parallel to gl at variable intervals. No seen coarse components. Sandy clay discontinuous.</p>	<p>Glacial, ?till ?glaciofluvial</p>	<p>3.45-4</p>	<p>18.13- 17.58</p>	

<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P26	
<b>Coordinates (NGR) X:</b> 492901.90		<b>Coordinates (NGR) Y:</b> 387438.47		<b>Level (top):</b> 20.98mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 4 m	
<b>Context Number</b>	<b>Description</b>	<b>Interpretation</b>	<b>Depth m bgl</b>	<b>Depth m OD</b>	<b>Samples</b>
2601	<p>Very firm dry crumbly mid dark greyish brown clayish SAND, sand is fine. Frequent crop rooting. Coarse components fg to sc size, a to sr, uncommon, usually flint and chalk.</p> <p>Sharp undulate boundary with 2602</p>	Ploughsoil.	0-0.5	20.98- 20.48	



2602	<p>Very firm dry crumbly greyish brown mottled orangey brown sandy clay with uncommon to common to semi common clasts a to sa, fg to g sized flint with some rare r off white vein quartz and sst. Crumbling into coarse gravel to small cobble sized pids. Rooted, thin pale roots <math>\leq 1\text{mm}</math> holes. Manganese and possible burnt stone seen (dark shelled, stiff, rounded, possibly manganese nodules).</p> <p>Difficult to determine boundary with 2603 - appears gradual.</p>	Poss reworked, ?alluvium.	0.5-1.3	20.48-19.68	
2603	<p>Somewhat firm greyish brown mottled mid dark blueish grey and orangey brown CLAY with very abundant cs to c sized, a to sr variable sphericity coarse components of predominantly stiff white off white chalk with weak red and brown slst rare black weak ?mdst, orangey yellow weak sst(non dirty streak), rounded stiff off-white quartz, stiff fossiliferous grey lmst. No sorting or orientation. Stiffer clasts generally trend larger.</p> <p>More weak clasts than seen in (2504). Becoming darker with depth. becoming slightly damp at 2.5. Clast abundance decreasing slightly in 2-3 liner (possibly caused by thinner liner).</p> <p>Sharp to slightly gradual boundary with 2604.</p>	Till	1.3-2.6	19.68-18.38	
2604	<p>Slightly firm damp fissile parallel to gl mid brownish grey striped orangey greyish brown and rarely blueish grey sandy CLAY with no seen coarse components. Laminated, laminations slightly discontinuous subhorizontal <math>\leq 1\text{mm}</math>. Sand id v fine to fine.</p> <p>Abrupt subhorizontal sandy boundary with 2605.</p>	Glacial, ?glaciofluvial	2.6-2.9	18.38-18.08	



2605	Firm dark slightly damp slightly fissile brownish grey slightly sandy CLAY with reddish brown striping and laminations parallel to gl. One seen clast of g size sa lmst. Sandier when greyer. Sand is v fine. Reddish brown is true clay and discontinuous.  Sharp to slightly gradual boundary with 2606.	Glacial,  ?glaciofluvial	2.9-3.5	18.08-17.48	
2606	Slightly firm fissile parallel to gl dark brownish blueish grey clayish SAND with paler grey subhorizontal somewhat discontinuous ≤1mm laminations and no seen coarse components.  Laminations subvertically (perpendicular to gl) inclined after 3.8.	Glacial,  ?glaciofluvial	3.5-4	17.48-16.98	

<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P27		
<b>Coordinates (NGR) X:</b> 493048.75		<b>Coordinates (NGR) Y:</b> 387626.63		<b>Level (top):</b> 21.55mOD		
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 4 m		
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples	
2701	Firm mid dark greyish brown clayish SAND, sand is fine. Frequent crop rooting. Coarse components fg to sc size, a to sr, uncommon, usually flint.  Sharp undulate boundary with 2702.	Ploughsoil	0-0.4	21.55-21.15		
2702	Somewhat soft to firm dry crumbly greyish yellow sandy CLAY with rare pale flint cs, a sa. Manganese seen, uncommon. Variably sandy, yellower when sandier.  Not as sandy as P25 at same depth, also dryer.  Sharp subhorizontal boundary with 2703.	Alluvium  Poss reworked till,	0.4-1	21.15-20.55		



2703	<p>Very firm dry greyish orangey brown mottled blueish brownish grey slightly silty CLAY with common coarse components cs to cg sized, sa to r weak off white chalk red brown slst stiff grey lmst brownish flint. No orientation or grading seen. Rare amorphous black dirty streak charcoal seen, cs sized non oriented.</p> <p>Abrupt subhorizontal boundary with 2704. Boundary sandy with grey sand.</p>	<p>Alluvium</p> <p>Poss reworked till,</p>	1-1.5	20.55-20.05	
2704	<p>Slightly soft to slightly firm damp greyish orangey brown mottled blueish brownish grey sandy CLAY with no seen coarse components.. Weak evidence of rooting bioturb - paler damper in places in grey mottling, sparse small <math>\leq 1</math>mm holes, thin pale rooting. Tacky texture.</p> <p>Similar colour to above. 2-2.15 of core drop from above.</p> <p>Gradual boundary with 2705.</p>	<p>Glacial,</p> <p>?bioturbed till</p>	1.5-2.3	20.05-19.25	
2705	<p>Slightly firm damp fissile parallel to gl mid brownish grey striped orangey greyish brown and blueish grey sandy CLAY with no seen coarse components but weak evidence of rooting reddish brown fibrous. Laminated <math>\leq 1</math>mm, discontinuous. Blueing with depth.</p> <p>Gradual boundary wirh 2706.</p>	<p>Glacial,</p> <p>?glaciofluvial</p>	2.3-2.6	19.25-18.95	
2706	<p>As 2705 but bluer and less brown (slightly firm damp fissile parallel to gl mid dark blueish grey laminated paler brownish blue grey sandy CLAY with no seen coarse components). Laminations more discontinuous and more weakly orientated to gl than 2705, <math>\leq 1</math>mm.</p> <p>Discontinuous subhorizontal mid dark reddish brown clay bands with no coarse components appearing from 3.7, 1-3,cm thick at widest.</p>	<p>Glacial,</p> <p>?glaciofluvial</p>	2.6-4	18.95-17.55	

<b>Site Code:</b> 273791	<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology	<b>GeoTech Tr ID:</b> WA-P28
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Coordinates (NGR) X: 492934.68		Coordinates (NGR) Y: 387410.53		Level (top): 19.99mOD		
Length: n/a		Width: n/a		Depth: 4m		
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples	
2801	Slightly firm slightly damp mid dark greyish orangey brown crumbly slightly silty sandy CLAY with frequent crop rooting and uncommon coarse components cs to sc, a to sr flint lmst. Prismatic coarse gravel to cobble sized pids.	Ploughsoil	0-?0.5	19.99-19.49		
2802	Slightly soft to slightly firm damp mid greenish brownish grey mottled reddish orangey brown sandy CLAY. No seen coarse components. Structureless outside of colour. No smell. Weak manganese staining. Sand is v fine to fine.  Sharp subhorizontal boundary with 2803.	Alluvium, poss reworked	?0.5-1.25	19.49-18.74		
2803	Very soft friable poorly consolidated mid pale slightly pinkish grey mottled orangey brown SAND, fine to medium coarse. Uncommon coarse components, fg sa flint and fg sr ?slst ?burnt, the latter associated with orange mottling. Sand grains sr to r off white dark grey grey orange.  Sharp to slightly gradual subhorizontal boundary with 2804.	Alluvium	1.25-1.5	18.74-18.49		
2804	Soft slightly friable damp mid pale pinkish grey mottled orangey brown clayish SAND. Tacky texture. fine to medium coarse sand. Uncommon coarse components, fg sa to a flint and fg sr ?slst ?burnt, the latter associated with orange mottling. Sand grains sr to r off white dark grey grey orange.  Better consolidated than above.  Sharp undulate to angled boundary with 2805, with a higher abundance of gravel at boundary. One black clast g sized sa silky lustre very light for size plasticity sounding at base.	Alluvium	1.5-1.85	18.49-18.14		



2805	Slightly soft to slightly firm laminated subhorizontal $\leq 1$ mm damp mid greyish brown laminated brownish orangey yellow slightly sandy CLAY. Sand is v fine to fine. Blue grey striping subvertically ?rooting pathway. No seen coarse components.  Sharp subhorizontal boundary with 2806.	Glacial,  ?glaciofluvial	1.85-2.1	18.14-17.89	
2806	Somewhat soft to slightly firm mid dark brownish grey mottled weakly reddish brown and orangey brown CLAY with no seen coarse components. Weak subhorizontal and subvertically orientated reddish brown rooting, fibrous in upper 0.15 of unit. Weak subhorizontal fissile habit.  Sharp subhorizontal boundary with 2807.	Glacial,  ?glaciofluvial	2.1-2.5	17.89-17.49	2.15, 2.2, 2.25
2807	As 2805 (Slightly soft to slightly firm laminated subhorizontal $\leq 1$ mm mid greyish brown laminated brownish orangey yellow slightly sandy CLAY. Sand is v fine to fine) but dryer and with 1-2cm wide subvertically orientated orangey yellow sand. Brighter than laminations sand.  Laminations becoming less distinct in colour by 2.8.  Brownish clay apband subhorizontal discontinuous 3-3.07.  Gradual boundary with 2808.	Glacial  ?glaciofluvial	2.5-3.5	17.49-16.49	
2808	Firm dark slightly fissile brownish grey slightly sandy CLAY with $\leq 1$ mm laminations parallel to gl. No seen clasts. Sand is v fine. Sandier when greyer, Discontinuous bands of greyer laminated sand same orientation as clay.  Both clay and sand is laminated.	Glacial,  ?glaciofluvial	3.5-4	16.49-15.99	

<b>Site Code:</b> 273791	<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology	<b>GeoTech Tr ID:</b> WA-P29
<b>Coordinates (NGR) X:</b> 492782.04	<b>Coordinates (NGR) Y:</b> 387177.94	<b>Level (top):</b> 19.67mOD





Length: n/a		Width: n/a		Depth: 3.90 m		
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples	
2901	<p>Moderately firm mid greyish orangey brown slightly silty CLAY with rare clasts of sa g sized flint. Rooted in upper 0.1.</p> <p>Difficult to see boundary with 2902, sharp undulate.</p>	Topsoil	0-0.5	19.67-19.17		
2902	<p>Moderately firm dry brownish grey mottled orangey brown sandy CLAY with common coarse components of a to sa, cs to cg flint, chalk and rare sst. Bioturb, thin rooting and ≤1mm holes seen. No smell. Some uncommon manganese nodules seen.</p> <p>Becoming damper and sandier at depth, orangier material. Sharp boundary with 2903.</p>	Alluvium	0.5-1	19.17-18.67		
2903	<p>Somewhat firm damp brownish grey mottled orangey brown slightly silty CLAY with very abundant gravel a to sr, cs to sb sized predominantly chalk with flint brown sst red slst and grey lmst off white oolite also seen. Chalk is generally stiff with some soft friable clasts. No sorting or orientation.</p> <p>Band of a, cg, tabular clasts of yellowish brown cgl/oolite orientated parallel to gl at 1.5.</p> <p>Becoming browner and dryer by 1.7, with orange mottling becoming absent. Clasts the same.</p> <p>Gradual boundary with 2904.</p>	Till	1-2.25	18.67-17.42		



2904	Firm dry greyish brown with some greyer brown mottling and rare orangey brown ?fe staining down cracks slightly silty CLAY with common to abundant coarse components soft to stiff sa to r, cs to g sized trending fg. Offwhite chalk and oolite greenish and reddish slst, dark grey mdst grey lmst seen. Clastal abundance varies, with thin bands of more abundant clasts, usually chalk. No sorting or orientation seen.  Firming with depth, v firm at large weak sc sized clast of red slst 3.4.	Glacial  ?till ?glaciofluvial	2.25-3.9	17.42-15.77	
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<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P30	
<b>Coordinates (NGR) X:</b> 492847.78		<b>Coordinates (NGR) Y:</b> 387168.87		<b>Level (top):</b> 19.37mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 4 m	
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples
3001	Moderately firm mid greyish orangey brown slightly silty CLAY with flecks of charcoal and rare to sparse coarse sand sized sr to r chalk clasts. Rooted in upper 0.1. Manganese nodules and staining seen.  Sharp undulate boundary with 3002.	Topsoil	0-0.5	19.37-18.87	
3002	Very soft to soft friable loose greyish mid pale brownish yellow SAND with no seen coarse components. Some localised patches of reddish brown. Slightly damp. Medium coarse well sorted sr to r grains yellow and off white.  Sharp boundary with 3003.	Altered alluvium/made ground	0.5-0.8	18.87-18.57	



3003	<p>Somewhat soft slightly friable mid greyish brownish yellow sandy CLAY with uncommon coarse components of angular coarse sand to coarse gravel sized flint and v angular to angular dark brownish grey ?metal slag of fine gravel to gravel size.</p> <p>Becoming gravellier after 1m, abundant clasts. Very sticky when damp.</p> <p>Abrupt subhorizontal boundary with 3004.</p>	Altered alluvium/made ground	0.8-1.3	18.57-18.07	
3004	<p>Slightly firm brownish grey mottled orangey brown CLAY with very rare coarse sand soft subrounded chalk clasts. Marbling has no apparent orientation but grey appears to have a branching pattern. Bioturb, small ≤1mm holes, rooting. Patches of pale yellow weak tacky chalk.</p> <p>Steepy angled sharp boundary with 3005 - 3005 starts appearing at 1.8.</p>	Alluvium	1.3-2	18.07-17.37	
3005	<p>Soft wet slightly greyish yellowy brown clayish SAND with v abundant a to sr cs to g coarse components of chalk and flint. Flint trends larger and more angular. More flint than chalk.</p> <p>Subhorizontal sharp boundary with 3006.</p>	Alluvium.	2-2.2	17.37-17.17	
3006	<p>Slightly firm tacky brownish grey mottled orangey brown CLAY with very rare coarse sand stiff subrounded chalk clasts. Some reddish brown mottling seen rarely.</p> <p>Diffuse boundary with 3007 - becoming more consistently greyish brown with depth.</p>	Alluvium	2.2-2.65	17.17-16.72	



3007	Firm dry greyish brown with some greyer brown mottling slightly silty CLAY with common to abundant coarse components soft to stiff sa to r, cs to fg sized. Offwhite chalk and oolite greenish and reddish slst, dark grey mdst seen. Clasts frequently tabular v weak orientation parallel to gl. Weak fissile habit parallel to gl.No grading seen.  Boundary not seen with 3008 - split liner.	Alluvium, ?poss glaciofluvial	2.65-?3	16.72-16.37	
3008	Clast supported wet soft matrixed slightly clayish mid orangey brown SAND & GRAVEL with gravel being predominately gravel sized angular flint with clasts ranging from fg to cg with roundedness from a to sa. Flint off white yellowish white and reddish brown predominantly white toned.  Difficult to determine boundary	Sands and gravels ?glac sands and gravels	?3-3.6	16.37-15.77	
3009	As 3008 (wet soft matrixed slightly clayish mid orangey brown SAND & GRAVEL with gravel being predominantly angular flint with clasts ranging from fg to cg with roundedness from a to sa. Flint off white yellowish white and reddish brown predominantly white toned); but more matrix and smaller clasts on average - 50:50 m:c clasts trending fine gravel sized.  Appears to be becoming like 3007 again on basal foot of core.	Could be from above - shake down. ?River terrace  ?glac sands and gravels	3.6-4	15.77-15.37	

<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P31	
<b>Coordinates (NGR) X:</b> 492716.04		<b>Coordinates (NGR) Y:</b> 386859.97		<b>Level (top):</b> 18.02mOD	
<b>Length:</b>		<b>Width:</b>		<b>Depth:</b> 4m	
<b>Context Number</b>	<b>Description</b>	<b>Interpretation</b>	<b>Depth m bgl</b>	<b>Depth m OD</b>	<b>Samples</b>



3101	<p>Firm mid dark greyish brown silty CLAY with frequent grass rooting and sparse coarse components of a to sa, cs to g sized flint. Contains worms.</p> <p>Difficult to see boundary with 3102 - ?slightly gradual</p>	Topsoil	0-0.6	18.02-17.42	
3102	<p>Slightly firm slightly friable mid yellowish grey with orange mottling sandy CLAY no lithological coarse components seen, but grainy soft manganese staining noted.</p> <p>Sharp boundary with 3103.</p>	Alluvium, Poss reworked	0.6-0.9	17.42-17.12	
3103	<p>Very soft to soft loose damp clayish SAND, coarse grained rounded, with common coarse components of cs to sc size (predominantly cs), sa to r flint quartz. Some dark black clasts with red innards - ?burnt stone ?slag ?wood. Patches of weak dark material streaking dark brown to black with woody grain - wood, burnt (subcharcoal).</p> <p>Sharp subhorizontal texture boundary, diffuse colour boundary with 3104.</p>	Alluvium	0.9-1.1	17.12-16.92	
3104	<p>Slightly soft to slightly firm well consolidated slightly tacky blueish grey mottled yellowish orangey brown and reddish brown CLAY, with no seen lithological coarse components but contains reddish brown fibrous wood orientated downsequence perpendicular to gl. Difficult to snap, easy to slice. Wood appears to be correlated with grey matrix.</p> <p>Wood appears absent from 2.1m, but remains same texture. Gradual boundary with 3105.</p>	?Alluvium ?bioturbed till	1.1-2.5	16.92-15.52	



3105	<p>Slightly firm mid dark grey sandy CLAY with no seen coarse components but a weakly parallel to gl fissile habit and apparent laminations. Sand is v fine to fine.</p> <p>Brownish grey clay banding of 1-5cm size subhorizontal appearing after 3.4. Contains reddish brown streaks that run the same direction as the banding.</p>	<p>Glacial, ?glaciofluvial</p>	2.5-4	15.52-14.02	
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<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P32	
<b>Coordinates (NGR) X:</b> 492788.57		<b>Coordinates (NGR) Y:</b> 386861.41		<b>Level (top):</b> 18.18mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 4m	
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples
3201	<p>Moderately firm mid greyish orangey brown slightly silty CLAY with rare clasts of sa g sized flint. Rooted in upper 0.1.</p> <p>Slightly undulate sharp boundary with 3202.</p>	Ploughsoil	0-0.4	18.18-17.78	
3202	<p>Slightly firm slightly friable mid yellowish grey with orange mottling sandy CLAY uncommon sa to sr, fg to cg lithological coarse components of flint seen as well as suspected gravel sized slag, black with vesicles.</p> <p>Boundary with 3203 not seen.</p>	Reworked alluvium/made ground	0.4-?1	17.78-17.18	
3203	<p>Soft somewhat loose mid greyish orangey yellow clayish SAND with common sa to sr, fg to g coarse components of flint and suspected slag, dark grey with vesicles. No sorting of clasts seen.</p> <p>Slightly diffuse boundary with 3204-interface between 1.2&amp;1.35 where clasts less common and matrix is more orange.</p>	Reworked/modern alluvium/made ground	?1-1.2	17.18-16.98	



3204	<p>Somewhat firm blue grey mottled orangey brown and greyish brown CLAY with common to abundant clasts a to sr, cs to g, predominantly stiff chalk, with flint, weak red slst, grey lmst fossil bivalves also seen.</p> <p>Orange mottling becoming absent at depth. Brown rooting seen at 1.8m.</p> <p>No recovery 2-2.1, boundary not really seen, assumed slightly gradual.</p>	Till, bioturbed	1.2-2	16.98-15.98	
3205	<p>Firm dry greyish brown with uncommon greyer brown mottling slightly silty CLAY with common to abundant coarse components soft to stiff sa to r, cs to g sized trending fg. Offwhite chalk greenish and reddish slst, dark grey mdst grey lmst seen. Clastal abundance varies. No sorting or orientation seen.</p> <p>Becoming greyer at depth, brownish grey at 2.4. V firm by 3. 1 lmst sa cobble at 3.3.</p> <p>Slightly gradual boundary with 3206.</p>	Glacial ?glaciofluvial	2-3.7	15.98-14.48	
3206	<p>Firm mid dark slightly reddish brown CLAY with no seen coarse components or structures. Dry.</p> <p>Thin areas that resemble 3207 in places - these two units appear to be strongly correlated (see P31 sheet).</p> <p>Sharp boundary with 3207.</p>	Glacial ?glaciofluvial	3.7-3.9	14.48-14.28	
3207	<p>Slightly firm mid dark grey sandy CLAY with no seen coarse components but a weakly parallel to gl fissile habit and apparent laminations. Sand is v fine to fine.</p>	Glacial ?glaciofluvial	3.8-4	14.28-14.18	

<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P33	
<b>Coordinates (NGR) X:</b> 492861.74		<b>Coordinates (NGR) Y:</b> 386857.64		<b>Level (top):</b> 18.71mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 4 m	
<b>Context Number</b>	<b>Description</b>	<b>Interpretation</b>	<b>Depth m bgl</b>	<b>Depth m OD</b>	<b>Samples</b>



3301	<p>Firm blocky pidding crumbly mid dark greyish sandy CLAY with uncommon coarse components of chalk and lmst, cd to sc size, a to sr. No sorting or orientation seen. Grass rooted at surface.</p> <p>Sharp boundary with 3302.</p>	Ploughsoil	0-0.4	18.71-18.31	
3302	<p>Slightly soft crumbly brownish greenish grey mottled orangey greyish brown sandy CLAY to clayish SAND. Rare clasts of sc to fg sized sr flint. Manganese seen.</p> <p>Boundary not seen wirh 3303, assumed sharp.</p>	Alluvium, possible reworked landscaped ground	0.4-1	18.31-17.71	
3303	<p>Very soft damp friable somewhat loose weak brownish greenish grey slightly clayish SAND with no seen coarse components except manganese, sr fg sized. Structureless.</p> <p>Slightly gradual boundary with 3304 - manganese in upper 5cm of 3304 but no later.</p>	Alluvium	1-1.2	17.71-17.51	
3304	<p>Slightly soft damp plastic mid blueish grey mottled orangey brown slightly sandy CLAY. Very rare cs to fg sized a to sr clasts of chalk, flint, and orange sst. Variably sandy, sand is patchy and discontinuous. Evidence of rooting bioturb - holes, 1mm - 5mm wide surrounded by wetter grey matrix. No actual rooting seen.</p> <p>Sharp boundary wirh 3305, but 3305 same colour - only change is clast abundance.</p>	Alluvium	1.2-1.6	17.51-17.11	
3305	<p>Slightly soft damp plastic mid blueish grey mottled orangey brown slightly sandy CLAY with common to abundant clasts cs to cg sized sa to sr unorientated unsorted of predominantly weak to stiff chalk. Grey lmst yellowish brown sst reddish orange slst also seen. Weakly rooted discontinuously with reddish brown <math>\leq 1</math>mm roots.</p> <p>Boundary with 3306 not seen - between cores.</p>	Reworked till bioturbed	1.6-??	17.11-16.71	





3306	Somewhat soft to slightly firm mid greyish brown mottled blueish grey and rarely brownish yellow sandy CLAY with no seen clasts. Greyer where sandier Rooting seen, greyer and yellower surrounding rooting holes 1-5mm. Weak discontinuous reddish brown rooting subvertical orientation. Subhorizontal apparent laminations/tearing pattern. Sand is v fine.  Slightly gradual boundary with 3307.	Glacial  ?glaciofluvial	?2-2.8	16.71-15.91	
3307	Slightly firm mid dark brownish grey sandy CLAY with no seen coarse components but a tearing habit with subhorizontal apparent laminations. Variably sandy between these layers.  Discontinuous subhorizontal reddish brown clay banding 3-5cm appearing at 3.2 and continues in sequence to 4m.  No recovery ?3-3.1	Glacial,  ?glaciofluvial	2.8-4	15.91-14.71	

<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P34	
<b>Coordinates (NGR) X:</b> 492940.60		<b>Coordinates (NGR) Y:</b> 386877.40		<b>Level (top):</b> 19.09mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 4 m	
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples
3401	Firm blocky pidding crumbly mid dark greyish sandy CLAY with uncommon coarse components of chalk and lmst, cd to sc size, a to sr. CBzm fragments seen. Grass rooted at surface.  Sharp undulate boundary with 3402.	Topsoil	0-0.35	19.09-18.74	
3402	Slightly soft crumbly brownish greenish grey mottled orangey greyish brown and greyish red sandy CLAY to clayish SAND. Rare clasts of sc to fg sized sr flint. Manganese seen. Bioturbed, weak thin dark rooting ≤1mm. Crumbles into cobble sized prismatic pids.	Alluvium,  Poss reworked	0.35-0.6	18.74-18.49	



3403	Very soft damp poorly consolidated (loose) weak friable mid pale brownish grey mottled greyish brownish orange slightly clayish SAND with uncommon manganese at top. More clayish when greyer. Sand is medium. Becoming gradually more orange with depth.  Diffuse boundary with 3404.	Alluvium	0.6- 1.15	18.49- 17.94	
3404	Very soft poorly consolidated damp friable brownish orange SAND with apparent normal grading, with most coarse components being in lower 0.1 of unit. Gravel is fg to g, a to sa flint. Sand is medium to coarse. Dark brown subhorizontal approx 3mm thick layers 1.3-1.45, no smell.  Abrupt subhorizontal boundary with 3305.	Alluvium	1.15- 1.4	17.94- 17.69	
3405	Slightly soft damp plastic mid blueish grey mottled orangey brown slightly sandy CLAY with common to abundant clasts cs to cg sized sa to sr unorientated unsorted of predominantly weak to stiff chalk, with yellowish brown sst reddish orange slst also seen. Weakly rooted discontinuously with reddish brown ≤1mm roots.  Sharp subhorizontal boundary with 3406.	Till, reworked  ?bioturbed	1.4- 2.25	17.69- 16.84	
3406	Somewhat soft friable weak crumbly brownish grey mottled greyish orangey brown sandy CLAY with no seen coarse components. Weak subhorizontal to angled fissile habit, ?laminations.  Sharp subhorizontal boundary with 3407.	Glacial  ?glaciofluvial	2.25- 2.5	16.84- 16.59	
3407	Slightly firm mid dark greyish brown with reddish brown discontinuous subhorizontal stripes slightly silty CLAY with yellowish brown planar pattern in places. Weak subhorizontal fissile? laminations.  Sharp boundary with 3408.	Glacial  ?glaciofluvial	2.5- 2.65	16.59- 16.44	



3408	Slightly soft to slightly firm slightly friable slightly crumbly mid dark brownish grey CLAYISH SAND with fissile convolute subvertical to angled to subhorizontal laminated habit. Laminations ≤1mm to 3mm, with sandier layers appearing paler. Sand is v fine to f. Bands of reddish brown clay, discontinuous also laminated. Bands 2.7-2.73 and 2.9-2.93.  More vertical and angled at top of unit, generally subhorizontal by 2.85. Sharp to slightly gradual boundary with 3409.	Glacial  ?glaciofluvial	2.65-3.2	16.44-15.89	
3409	Slightly firm mid dark greyish brown sandy CLAY with no coarse components but a tearing habit that suggests ≤1mm to 3mm subhorizontal laminations. Discontinuous reddish brown clay banding, with the abundance of red increasing towards base of unit.  Diffuse boundary with 3410.	Glacial  ?glaciofluvial	3.2-3.65	15.89-15.44	
3410	Slightly firm mid dark reddish brown CLAY with no coarse components but a tearing habit that suggests ≤1mm to 3mm subhorizontal laminations. Occasional discontinuous subhorizontal greyish brown clay bands.	Glacial  ?glaciofluvial	3.65-4	15.44-15.09	

<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P35	
<b>Coordinates (NGR) X:</b> 493010.03		<b>Coordinates (NGR) Y:</b> 386862.23		<b>Level (top):</b> 19.33mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 4 m	
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples
3501	Firm blocky pidding crumbly mid dark greyish sandy CLAY with uncommon coarse components of chalk and lmst, cd to sc size, a to sr. Layer of clasts at 0.2. Grass rooted at surface, thicker branch thickness rooting also seen.  Clasts appear to be boundary - abrupt boundary with 3503	Topsoil	0-0.2	19.33-19.13	



3502	<p>Slightly soft crumbly brownish greenish grey mottled orangey greyish brown sandy CLAY to clayish SAND. Rare clasts of sc to fg sized sr flint. Manganese seen. Bioturbed, weak thin dark rooting <math>\leq 1\text{mm}</math>. Crumbles in cobble sized prismatic pids.</p> <p>Can't see boundary well, assumed sharp to slightly gradual boundary with 3503.</p>	Alluvium, possible reworked landscaped	0.2-0.8	19.13-18.53	
3503	<p>Very soft damp poorly consolidated (loose) weak friable mid pale brownish grey mottled greyish brownish orange slightly clayish SAND with uncommon manganese. More clayish when greyer. Sand is medium.</p> <p>Sharp subhorizontal boundary with 3504.</p>	Alluvium	0.8-1.05	18.53-18.28	
3504	<p>Very soft poorly consolidated damp friable brownish orange SAND with apparent normal grading, with most coarse components being in lower 0.1 of unit. Gravel is fg, a to sa flint. Sand is coarse.</p> <p>Abrupt slightly undulate subhorizontal boundary with 3505.</p>	Alluvium, ?river terrace ?flood event	1.05-1.25	18.28-18.08	
3506	<p>Slightly soft damp plastic mid blueish grey mottled orangey brown and reddish brown slightly sandy CLAY. Sparse to uncommon cs to g sized a to sr clasts of chalk, flint, red slst brown shale and orange sst. Clast abundance increases at 1.8. Evidence of rooting bioturb - holes and rooting/wood, 1mm - 5mm wide surrounded by wetter grey matrix. Rooting is woody, dark brown damp discontinuous. Sand is fine.</p> <p>Angled abrupt boundary with 3507 caused by rooting at boundary.</p>	Alluvium, redeposited till matrix	1.25-2.05	18.08-17.28	1.65-1.7, 1.7-1.75m



3507	Slightly firm dry somewhat crumbly mid dark greyish brown slightly silty CLAY with common unsorted unorientated clasts cs to sc trending sc-fg sized sa to off-white stiff chalk flint grey lmst, weak brown and reddish orange slst orangey yellow sst and dark grey mdst. Cobble at 2.3.  Sharp subhorizontal boundary with 3508.	Till	2.05-2.6	17.28-16.73	
3508	Slightly soft to slightky firm slightly friable slightly crumbly mid dark brownish grey CLAYISH SAND with fissile subhorizontal laminated habit. Laminations ≤1mm to 3mm, with sandier layers appearing paler. Sand is v fine to f.  Occasional reddish brown subhorizontal discontinuous clay banding.  No recovery 3-3.15. Boundary in the very base of no recovery - apparent sharp subhorizontal boundary with 3509.	Glacial  ?glaciofluvial	2.6-3.15	16.73-16.18	
3509	Slightly firm mid dark greyish brown sandy CLAY with no coarse components but a tearing habit that suggests ≤1mm to 3mm subhorizontal laminations. Discontinuous reddish brown clay banding, with the abundance of red increasing towards base of unit.  Diffuse boundary with 3510.	Glacial  ?glaciofluvial	?3.15-3.55	16.18-15.78	
3510	Slightly firm mid dark reddish brown CLAY with no coarse components but a tearing habit that suggests ≤1mm to 3mm subhorizontal laminations. Occasional discontinuous subhorizontal greyish brown clay bands.	Glacial  ?glaciofluvial	3.55-4	15.78-15.33	

<b>Site Code:</b> 273791	<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology	<b>GeoTech Tr ID:</b> WA-P36
<b>Coordinates (NGR) X:</b> 492885.28	<b>Coordinates (NGR) Y:</b> 387316.15	<b>Level (top):</b> 19.78mOD
<b>Length:</b> n/a	<b>Width:</b> n/a	<b>Depth:</b> 2 m



Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples
3601	<p>Somewhat firm slightly damp mid slightly greyish brown slightly sandy CLAY with uncommon c to sb sized sa clasts of yellowish to off white lmst, coquina and oolite. No sorting no orientation.</p> <p>Sharp to slightly gradual boundary with 3602.</p>	Ploughsoil	0-0.3	19.78-19.48	
3602	<p>Somewhat firm mid dark blueish brownish grey with notable reddish orangey brown mottling weakly striped sandy CLAY with rare stiff cs to fg sized sr chalk and flint. Amorphous black streaking charcoal cs fg sized. Vibrant patches of reddish orange sand. Sand is v fine to fine.</p> <p>Animal bone near top of unit, broken ?femur ?humerus, dark grey.</p> <p>Becoming sandier at depth, with sand becoming coarser. Grey also becoming lighter. Damper at depth.</p> <p>Slightly gradual boundary with 3603.</p>	Moat, ?secondary fill	0.3-1.1	19.48-18.68	0.3 (a-bone)
3603	<p>Soft wet friable mid pale brownish grey with brownish orange mottling clayish SAND. Sand is fine to medium. Patches of vibrant orange and reddish orange material, usually circular and dryer, ?weak slst clasts. Becoming less clayish with depth.</p> <p>Clasts have apparent normal grading - no clasts 1.1-1.25, uncommon fg sized sr to rounded clasts of flint slst 1.25 to 1.3, common to abundant sa to sr g to sc sized clasts of yellowish lmst brownish flint.</p> <p>Lmst clast a cobble sized tabular marking boundary with 3604 - texture is sharp transition, boundary is abrupt angled about 40° at the stone.</p>	Moat, ?possible deliberate backfill	1.1-1.35	18.68-18.43	



3604	Somewhat firm mid orangey brown mottled brownish grey sandy CLAY with common to abundant coarse components of predominantly yellowy off-white lmst oolite fg to cg frequently tabular, a to sa. Frag shell off white seen.  Sharp slightly undulate boundary with 3605.	Moat, ?primary fill.	1.35-1.45	18.43-18.33	
3605	Soft friable damp pale brownish grey slightly clayish SAND with no clasts. Weak pale brown mottling and weak fissile habit subhorizontal.  Sharp subhorizontal boundary with 3607.	Alluvium, poss moat	1.45-1.55	18.33-18.23	
3606	Somewhat firm greyish brown mottled mid dark blueish grey and orangey brown CLAY with very abundant cs to c sized, a to sr variable sphericity coarse components of predominantly stiff white off white chalk with weak brown slst, orangey yellow weak sst(non dirty streak), weak off white oolite, stiff fossiliferous grey lmst. No sorting or orientation. Stiffer clasts generally trend larger.  Weakly rooted, discontinuous subvertical reddish brown.	Till  Bioturbed	1.55-2	18.23-17.78	

<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P37	
<b>Coordinates (NGR) X:</b> 492886.13		<b>Coordinates (NGR) Y:</b> 387312.44		<b>Level (top):</b> 19.72mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 3 m	
<b>Context Number</b>	<b>Description</b>	<b>Interpretation</b>	<b>Depth m bgl</b>	<b>Depth m OD</b>	<b>Samples</b>
3701	Somewhat firm slightly damp mid slightly greyish brown slightly sandy CLAY with uncommon c to sb sized sa clasts of yellowish to off white lmst, coquina and oolite. No sorting no orientation. Some rare orangey streaking seen.  Difficult to see boundary with 3702, assumed sharp to slightly gradual.	Ploughsoil	0-0.7	19.72-19.02	



3702	<p>Somewhat firm friable mid brownish grey yellowish sandy banding with rare reddish orangey brown mottling weakly striped SANDY CLAY with rare stiff cs to fg sized flint. Vibrant patches of reddish orange sand. Sand is v fine to fine.</p> <p>Much sandier and more crumbly than (3602).</p>	Moat.	0.7-?1	19.02-18.72	
3703	<p>Somewhat soft dry friable greyish orangey brown slightly clayish SAND. No coarse components seen, structureless.</p> <p>Sharp slightly undulate boundary with 3704</p>	Moat	?1-1.13	18.72-18.59	
3704	<p>Somewhat soft to firm slightly damp brownish blueish grey with vibrant brownish orangey red mottling and stripes slightly sandy CLAY. No seen coarse components, but contains subhorizontal bands of fibrous woody material, dark brown. Slight organic odour.</p> <p>Sharp subhorizontal boundary with 3705.</p>	Moat	1.13-1.6	18.59-18.12	
3705	<p>Somewhat soft dark blueish grey with black banding tacky dirty streaking CLAY. Strong organic odour, stains. Occasional patches of mid greenish grey clay. Rare coarse components, weak to stiff chalk, cs to fg sized sr. Weak evidence of plant matter, but generally amorphous. Bivalve shell seen at 1.94, non-fossil.</p> <p>Black more evident after 1.7.</p> <p>Slightly gradual boundary with 3706, black absent after 1.95.</p>	Peaty ?moat	1.6-1.95	18.12-17.77	
3706	<p>Slightly firm blueish brownish grey mottled greyish brown slightly silty CLAY with semi-common coarse components of cs to fg sized, sa to sr off-white stiff chalk and weak reddish brown slst. G to CG sized a grey lmst. Irregularly orientated orientated thin woody reddish brown rooting throughout, discontinuous. No smell.</p> <p>Gradual boundary with 3707.</p>	Alluvially reworked till?  Bioturb	1.95-?2.3	17.77-17.42	





3707	<p>Firm greyish brown with weak blueish grey and orangey brown mottling slightly silty CLAY with common coarse components sa to r, cs to cg off-white stiff chalk weak mint green red slst somewhat weak dark brown dark grey mdst. ?rootholes 2mm wide with orange aureole seen 2.6-2.7.</p> <p>No sorting no orientation seen. Becoming more consistently coloured greyish brown at depth.</p>	Till	?2.3-3	17.42-16.42	
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<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P38	
<b>Coordinates (NGR) X:</b> 492886.61		<b>Coordinates (NGR) Y:</b> 387308.72		<b>Level (top):</b> 19.72m	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 3 m	
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples
3801	<p>Somewhat firm mid slightly greyish brown slightly sandy CLAY with uncommon c to sb sized sa clasts of yellowish to off-white lmst, coquina and oolite, frequently tabular. No sorting.</p> <p>Sharp undulate boundary with 3802.</p>	Ploughsoil	0-0.3	19.72-19.42	
3802	<p>Somewhat firm mid dark slightly greyish brown sandy CLAY with very common c to sb sized sa clasts of yellowish to off-white lmst, coquina and oolite, frequently tabular. Tabular clasts generally orientated subhorizontally (flags?). No grading or sorting seen. Burnt stone seen.</p> <p>Discontinuous layer of boulders 0.7-0.72, tabular same lithology. Layer is boundary with 3803, horizontal abrupt.</p>	?deliberate backfill of moat	0.3-0.72	19.42-19	



3803	<p>Somewhat firm mid dark blueish brownish grey with notable reddish orangey brown mottling sandy CLAY with sparse stiff cs to fg sized sr chalk and flint and uncommon a to sa yellowish to grey burnt lmst cg to sc sized. Amorphous black streaking charcoal cs fg sized. Vibrant patches of reddish orange sand. Sand is v fine to fine.</p> <p>Fragmentary animal bone seen, beige marrowless.</p> <p>Sharp subhorizontal boundary with 3804.</p>	Moat	0.72- 1.25	19.72- 18.47	
3804	<p>Slightly firm very mottled reddish brown/pinkish grey/yellowy brown/greyish brown clayish SAND with common to abundant coarse components a to sr, fg to cg sized predominantly flint with red slst ?r orangey citrine. Amorphous charcoal seen.</p> <p>One shattered grey off white flint nodule and one ?ferrous nodule at boundary with 3805. Clasts weakly graded, larger at base. Abrupt undulate boundary with 3805.</p>	Moat	1.25- 1.47	18.47- 18.25	
3805	<p>Slightly firm to firm somewhat dense mid orangey yellow mottled blueish grey slightly silty CLAY. Yellow appears "platey" when torn. No lithological coarse components seen, but rare thin discontinuous reddish-brown woody rooting and ≤1mm holes seen.</p> <p>Difficult to see boundary with 3806, sharp.</p>	?Alluvium	1.47-2	18.25- 17.72	



3806	Slightly firm blueish brownish grey mottled greyish brown slightly silty CLAY with semi-common coarse components of cs to fg sized, sa to r off-white stiff chalk and weak reddish brown slst and brownish yellow g sized sst. Irregularly orientated orientated thin woody reddish brown rooting throughout, discontinuous. Some rooting holes have orangey brown aurioles. Becoming more consistently greyish brown down sequence.  Greenish grey ?marl g, sa, clast at boundary. Boundary sharp subhorizontal.	Alluvially altered till?	2-2.7	17.72-17.02	
3807	Very firm to stiff dry dark greyish brown sandy CLAY with common to abundant coarse components cs to cg a to sr, poorly sorted no orientation, predominantly chalk stiff with weak reddish slst dark grey mdst stiff grey flint grey sst seen. Some rare sandy yellow patches.  Less coarse than some nearby tills.	Till	2.7-3	17.02-16.72	

<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P39	
<b>Coordinates (NGR) X:</b> 492896.44		<b>Coordinates (NGR) Y:</b> 387295.44		<b>Level (top):</b> 19.72mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 2 m	
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples
3901	Somewhat firm mid slightly greyish brown slightly sandy CLAY with common c to sb sized sa clasts of yellowish to off white lmst, coquina and oolite, frequently tabular. No sorting.  Sharp undulate boundary with 3902.	Ploughsoil	0-0.4	19.72-19.32	



3902	<p>Somewhat firm mid dark slightly greyish brown sandy CLAY with very common c to sb sized sa clasts of yellowish to off white lmst, coquina and oolite, frequently tabular. Tabular clasts generally orientated subhorizontally. No grading or sorting seen. Burnt stone seen.</p> <p>Layer of boulders 0.7-0.73, tabular same lithology, some burnt. Layer is boundary with 3903, horizontal abrupt.</p>	?Deliberate backfill	0.4-0.73	19.32-18.99	
3903	<p>Somewhat firm mid dark blueish brownish grey with reddish orangey brown mottling weakly striped sandy CLAY with rare stiff cs to fg sized sr chalk, coquina, lmst and flint. Amorphous black streaking charcoal cs to fg sized. Sand is v fine to fine.</p> <p>Firm from 1 onwards. Sharp slightly undulate boundary with 3904.</p>	Moat	0.73-1.3	18.99-18.42	
3904	<p>Somewhat firm friable mid brownish grey mottled slightly orangey grey clayish SAND with sparse coarse components cs sized a flint, with abundance increasing to common and size increasing to g at 1.38 - graded.</p> <p>Undulate abrupt boundary with 3905 - abrasive boundary.</p>	Moat base	1.3-1.4	18.42-18.32	
3905	<p>Slightly firm blueish brownish grey mottled orangey brown slightly silty CLAY with semi-common coarse components of cs to fg sized, sa to sr off-white stiff chalk and weak reddish brown slst stiff grey lmst.</p> <p>Gradual boundary with 3906.</p>	?Alluvially reworked till	1.4-1.65	18.32-18.07	



3906	<p>Firm to stiff mid dark blueish brownish grey mottled slightly orangey greyish brown slightly silty CLAY with abundant poorly sorted cs to sc, a to r coarse components of predominantly stiff and weak chalk with grey lmst brown and red slst weak orangey pinkish sst also seen. No grading no orientation seen. Clasts trend cs to fg sized, larger rare.</p> <p>Woody subvertical rooting seen, weak discontinuous reddish brown. Softer damper where woodier.</p>	Till	1.65-2	18.07-17.72	
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<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P40		
<b>Coordinates (NGR) X:</b> 492900.44		<b>Coordinates (NGR) Y:</b> 387286.16		<b>Level (top):</b> 19.73mOD		
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 3m		
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples	
4001	<p>Somewhat firm mid slightly greyish brown sandy CLAY with common c to sb sized sa clasts of yellowish to off white lmst, coquina and oolite, dark off white cortexed flint, frequently tabular. No sorting.</p> <p>Sharp undulate boundary with 4002.</p>	Ploughsoil	0-0.25	19.73-19.48		
4002	<p>Somewhat soft to slightly firm slightly friable slightly plastic somewhat crumbly greyish orangey brown sandy CLAY with uncommon to common poorly sorted cs to c sized a to sr coarse components of stiff flint and chalk weak reddish slst dark mdst, stiff tabular lmst. Lmst flint most common. CBM and amorphous charcoal seen rarely.</p> <p>Layer of c to sb sized, a, tabular lmst clasts ,0.7-0.75. Appears to function as boundary, abrupt subhorizontal.</p>	Moat related - deliberate backfill?	0.25-0.75	19.48-18.98		



4003	<p>Slightly firm crumbly slightly friable mid brownish grey mottled reddish brown sandy CLAY with rare to uncommon coarse components of a cs to fg sized flint. Amorphous charcoal seen.</p> <p>Boundary not seen with 4004.</p>	Moat	0.75- ?1.3	18.98- 18.43	
4004	<p>Very firm dark brownish grey mottled black and greyish orangey brown sandy CLAY with very common coarse components of cs to sb size, va to sa stiff lmst sst flint chalk. Black mottling associated with charcoal. Blacker at boundary with 4005. No seen orientation.</p> <p>Fragmentary a bone seen at 1.4.</p> <p>Sharp slightly undulate subhorizontal boundary with 4005.</p>	Moat	?1.3- 1.5	18.43- 18.23	
4005	<p>Very firm but weak crumbly friable yellowish orangey greyish brown slightly clayish SAND and GRAVEL, with gravel being fg to cg sized, a to sr flint ?irnstn quartz burnt stone seen. Sand is coarse to very coarse. No seen grading or orientation. Clast supported.</p> <p>Sharp erosive angled boundary with 4006, some clasts in 4006.</p>	Base of moat	1.5-1.6	18.23- 18.13	
4006	<p>Slightly soft to firm slightly plastic mid blueish grey mottled greyish brown slightly silty CLAY with common to abundant clasts a to sr cs to b sized stiff chalk grey lmst off white oolite weak reddish slst orangey sst. No seen orientation or grading.</p> <p>Lmst boulder 1.95-2. Apparent drop 2-2.1. Weak reddish brown rooting discontinuous.</p> <p>Very strange lens 2.25-2.35 at widest hemispherical with orangey brown ?sst ?irnstn ?layered nodularly (curved surface, irregular thickness on crust) and apparent cg a fibrous ?charcoal, breaks into fine brown needles when crushed.</p> <p>Gradual boundary with 4007.</p>	?Till, reworked	1.6-2.4	18.13- 17.33	



4007	Firm mid dark brownish grey weakly mottled greyish orangey brown sandy CLAY with common coarse components cs to g sized sa to sr chalk reddish slst dark grey mdst (larger than generally seen) greyish flint. Orangey mottling thin and planar.  Sandier in places, sand v fine to fine.	Glacial,  ?glaciofluvial ?till	2.4-3	17.33- 16.73	
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<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P41	
<b>Coordinates (NGR) X:</b> 492907.89		<b>Coordinates (NGR) Y:</b> 387275.38		<b>Level (top):</b> 19.64mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 2.30 m	
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples
4101	Somewhat firm mid slightly greyish brown sandy CLAY with common c to sb sized sa clasts of yellowish to off white lmst, coquina and oolite, dark off white cortexed flint, frequently tabular. No sorting. CBM seen.  Sharp slightly undulate boundary with 4102.	Ploughsoil	0-0.25	19.64- 19.39	
4102	Firm slightly friable slightly plastic somewhat crumbly greyish orangey brown with occasional reddish orangey mottling sandy CLAY with uncommon to common poorly sorted cs to c sized a to sr coarse components of stiff flint and chalk weak reddish slst dark mdst, stiff tabular lmst. Lmst flint most common. Pale pinkish off white with dark flecks ceramicy material seen cg sized generally 3cm thick.  Appears to be getting more reddish streaking with depth. Can't identify a definite change in unit.  Ceramicy material concentrated at 1.2m. Boundary with 4103 not seen.	Moat related.	0.25- 1.2	19.39- 18.44	



4103	<p>Slightly soft to firm slightly plastic mid blueish grey mottled greyish brown slightly sandy to sandy CLAY abundant clasts a to sr cs to b sized stiff chalk grey lmst off white oolite weak reddish slst peachy weak sst. No seen orientation. Larger clasts stiff chalk and flint. Softer where sandier.</p> <p>Clasts larger on average from 1.5 onwards and more clayish 1.2-1.5 with lower clastal abundance - reworked?</p>	Till, ? reworked	1.2-2.3	18.44-17.34	
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<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P42	
<b>Coordinates (NGR) X:</b> 492905.86		<b>Coordinates (NGR) Y:</b> 387266.80		<b>Level (top):</b> 19.13mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 2.30 m	
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples
4201	<p>Firm mid slightly greyish brown sandy CLAY with common c to sb sized sa clasts of yellowish to off white lmst, coquina and oolite, dark off white cortexed flint, frequently tabular. No sorting.</p> <p>Sharp undulate boundary with 4302.</p>	Ploughsoil	0-0.4	19.13-18.73	
4202	<p>Firm to slightly stiff prismatic pidding somewhat friable brownish yellowish greenish grey mottled brownish orange and orangey reddish grey sandy CLAY with sparse coarse components cs to fg, a to sa flint. Some rare amorphous cs to fg sized charcoal seen, black. Rare burnt stone ,(flint ?sst ?lmst). Rare possible manganese, poss more burnt stone.</p> <p>Never goes redder - unusual for area. difficult to see boundary with 4203, sharp subhorizontal.</p>	Moat.	0.4-0.8	18.73-18.33	





4203	<p>Somewhat firm to somewhat soft slightly friable mid blueish grey mottled yellowish greyish orange slightly sandy CLAY with common to abundant poorly sorted cs to cg a to sr coarse components, stiff and weak off-white chalk grey fossiliferous lmst orangey brown fine sst weak reddish slst dark grey mdst seen. Some rare weak discontinuous rooting, woody reddish</p> <p>Larger clasts tend to be weaker. Becoming softer and sandier with depth, sand fine to coarse.</p> <p>Sharp subhorizontal boundary with 4204.</p>	Reworked till	0.8-1.6	18.33-17.53	
4204	<p>Slightly soft friable blueish grey subhorizontally 1-2cn striped yellowish brown clayish SAND. Sand is medium to coarse, with off white white and grey sr grains seen. V rare sr fg sized chalk seen.</p> <p>Sharp boundary with 4205.</p>	Glaciofluvial	1.6-1.7	17.53-17.43	
4205	<p>Slightly firm friable greyish brown with irregular discontinuous thin lenses/bands of blueish grey clayish SAND. Sand is fine. Blocky breaking habit. No seen coarse components. Slightly fissile subhorizontal habit.</p> <p>Sharp slightly undulate boundary with 4206.</p>	Glaciofluvial	1.7-2.2	17.43-16.93	
4206	<p>Firm blueish brownish grey with weak greenish brown mottling slightly silty CLAY with common to abundant poorly sorted a to sr, cs to c sized clasts of stiff grey lmst stiff and weak off white chalk and oolite rare weak red slst and dark grey mdst. No sorting or orientation.</p>	Till	2.2-2.3	16.93-16.83	

<b>Site Code:</b> 273791		<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology		<b>GeoTech Tr ID:</b> WA-P43	
<b>Coordinates (NGR) X:</b> 492908.82		<b>Coordinates (NGR) Y:</b> 387261.92		<b>Level (top):</b> 19.07mOD	
<b>Length:</b> n/a		<b>Width:</b> n/a		<b>Depth:</b> 1.80 m	
<b>Context Number</b>	<b>Description</b>	<b>Interpretation</b>	<b>Depth m bgl</b>	<b>Depth m OD</b>	<b>Samples</b>

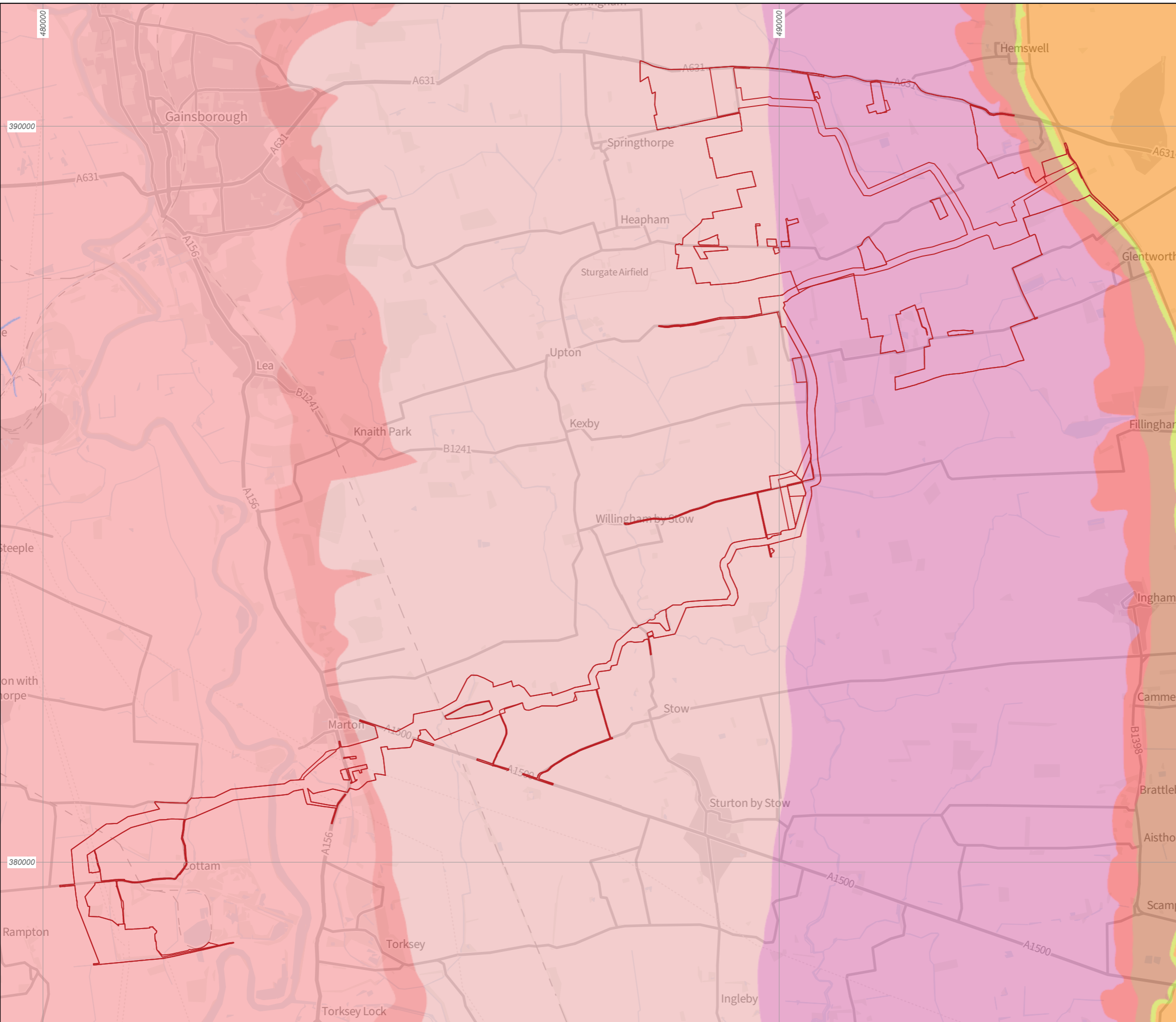


4301	Firm mid slightly greyish brown sandy CLAY with common c to sb sized sa clasts of yellowish to off white lmst, coquina and oolite, dark off white cortexed flint, frequently tabular. No sorting.  Sharp undulate boundary with 4302.	Ploughsoil	0-0.4	19.07-18.67	
4302	Firm to slightly stiff prismatic pidding somewhat friable brownish yellowish greenish grey mottled brownish orange and orangey reddish grey sandy CLAY with uncommon coarse components cs to fg, a to sa flint ?burnt stone weak red slst. Rooted, thin white, ≤1mm holes. Variably sandy. Browner and orangier stuff is sandier. Cs sized amorphous charcoal seen.  CBM fragments seen.	Moat	0.4-0.8	18.67-18.27	
4303	Somewhat soft to slightly firm mid brownish grey with notable brownish red and orangey brown mottling. No seen coarse components. Mottling appears to be weakly orientated subvertically.  Wet subhorizontally orientated wood at 1.35, branch barked.  Abrupt boundary with 4304, subhorizontal weakly concave.	Moat	0.8-1.18	18.27-17.89	1.35m
4304	Firm slightly friable mid blueish grey mottled yellowish greyish orange slightly sandy CLAY with common to abundant poorly sorted cs to cg a to sr coarse components, stiff and weak off-white chalk grey fossiliferous lmst orangey brown fine sst weak reddish slst dark grey mdst seen. Some rare weak discontinuous rooting, woody reddish brown.  More orange, slightly firm and tacky in upper 0.2m of sequence (1.18-1.38), gradually becoming grey down sequence. Otherwise same, similar lithology.	Reworked till?	1.18-1.8	17.89-17.27	

<b>Site Code:</b> 273791	<b>Site Name:</b> Tillbridge Solar Project: Geoarchaeology	<b>GeoTech Tr ID:</b> WA-P44
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Coordinates (NGR) X: 492909.79		Coordinates (NGR) Y: 387260.66		Level (top): 19.13mOD	
Length: n/a		Width: n/a		Depth: 2.20 m	
Context Number	Description	Interpretation	Depth m bgl	Depth m OD	Samples
4401	<p>Somewhat firm mid slightly greyish brown sandy CLAY with common c to sb sized sa clasts of yellowish to off white lmst, coquina and oolite, dark off white cortexed flint, frequently tabular. No sorting.</p> <p>Sharp undulate boundary with 4402.</p>	Ploughsoil.	0-0.4	19.13-18.73	
4402	<p>Firm to slightly stiff prismatic pidding somewhat friable brownish greenish grey mottled brownish orange and orangey reddish grey sandy CLAY with uncommon coarse components cs to fg, a to sa flint ?burnt stone weak red slst. Rooted, thin white, ≤1mm holes. Variably sandy. Browner and orangier stuff is sandier. Cs sized amorphous charcoal seen.</p> <p>Sharp boundary with 4403. Can't determine if angled, assumed subhorizontal.</p>	Moat related - distal edges?	0.4-1	18.73-19.13	
4403	<p>Firm slightly friable mid blueish grey mottled yellowish greyish orange sandy CLAY with very common to abundant poorly sorted cs to cg a to sr coarse components, stiff and weak off-white chalk grey fossiliferous lmst orangey brown fine sst weak reddish slst seen. Some patches of fine pale grey and reddish orange sand ?lens ?weathered clast.</p> <p>Some discontinuous sub vertically to subhorizontally orientated reddish brown woody ?rooting seen. Matrix softer and greyer surrounding roots.</p>	Reworked till, distal edge of fluvial water coarse?	1-2.2	19.13-16.93	



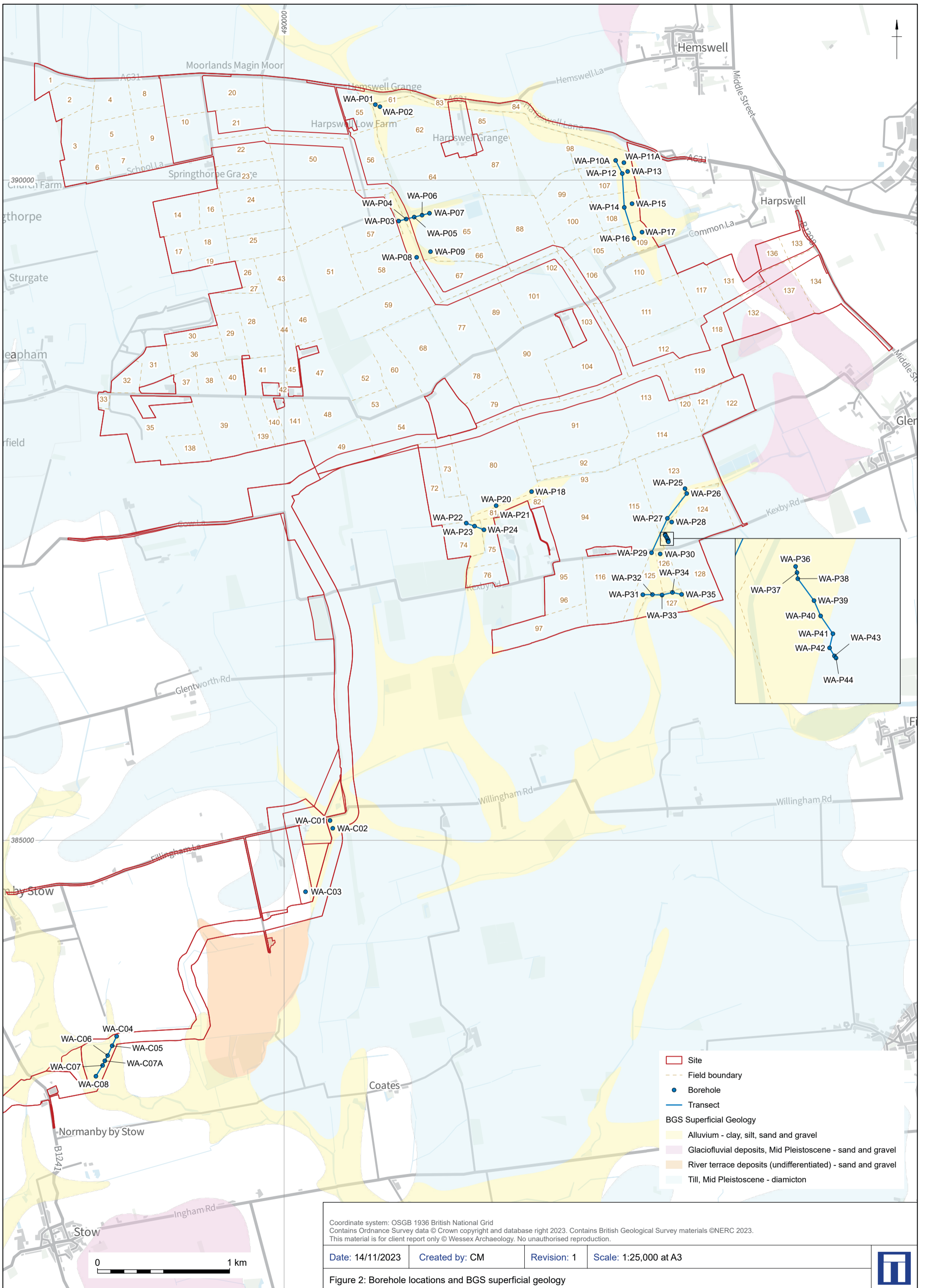
- Site
- BGS Bedrock Geology**
- Charmouth Mudstone Formation - mudstone
- Grantham Formation - sandstone, siltstone and mudstone
- Lincolnshire Limestone Formation - limestone
- Marlstone Rock Formation - ferruginous limestone and ferruginous sandstone
- Mercia Mudstone Group - mudstone
- Mercia Mudstone Group - siltstone, dolomitic
- Penarth Group - mudstone
- Scunthorpe Mudstone Formation - mudstone and limestone, interbedded
- Whitby Mudstone Formation - mudstone



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Scale: 1:50,000 at A3	Revision: 0	

Figure 1: Site location and BGS bedrock geology

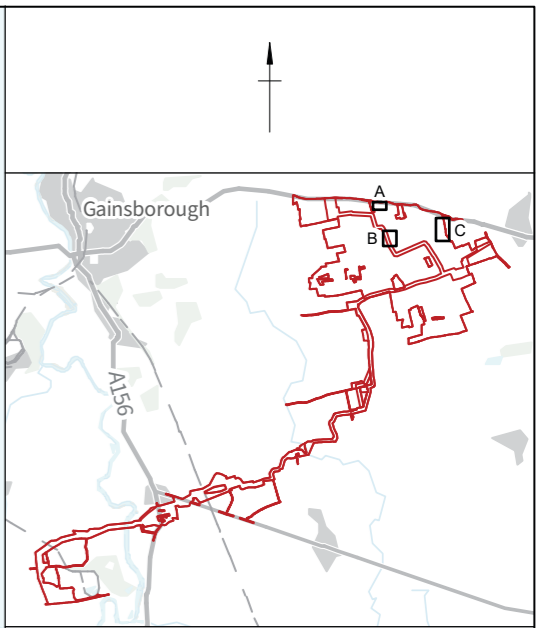
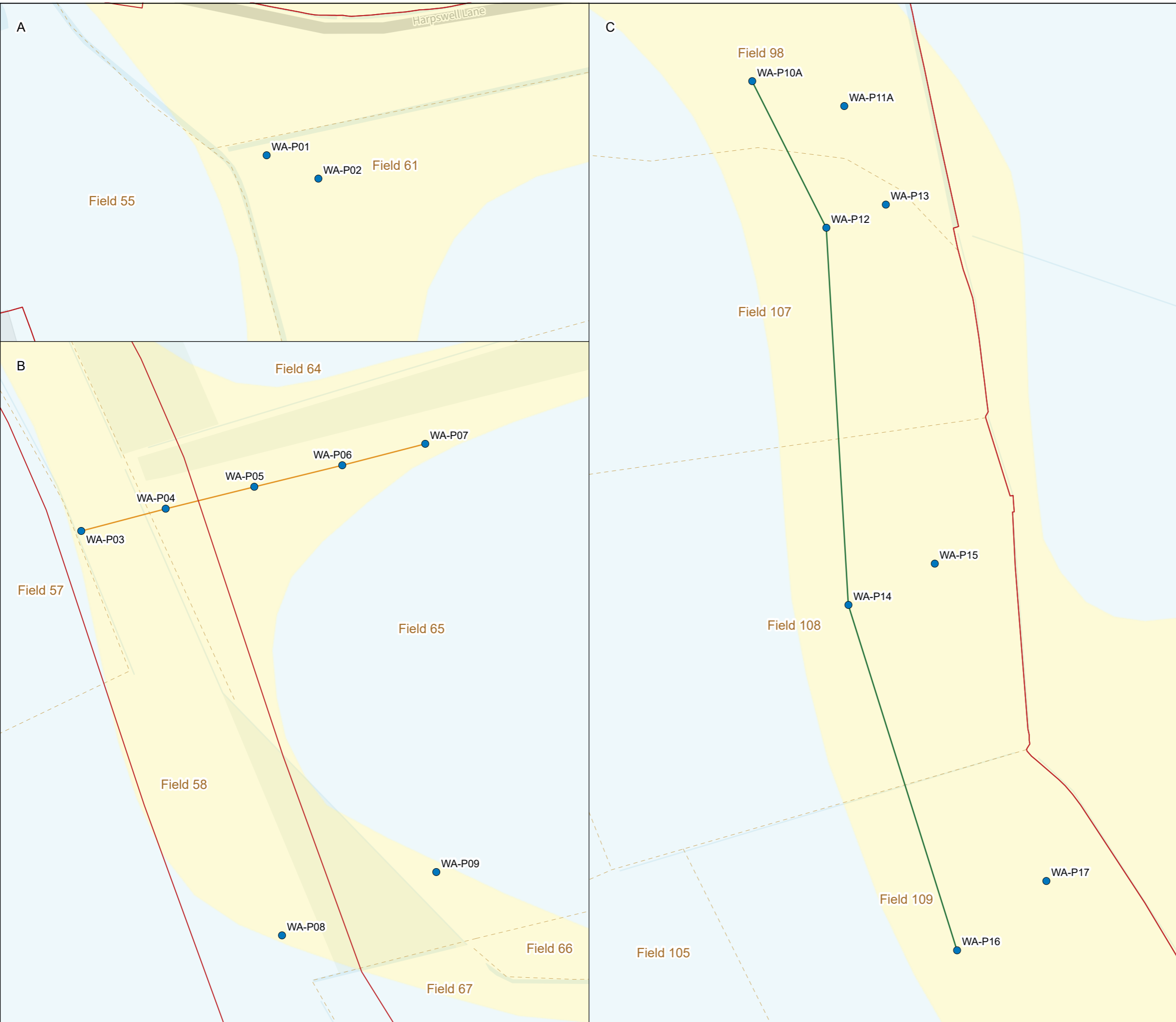


Coordinate system: OSGB 1936 British National Grid  
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Figure 2: Borehole locations and BGS superficial geology





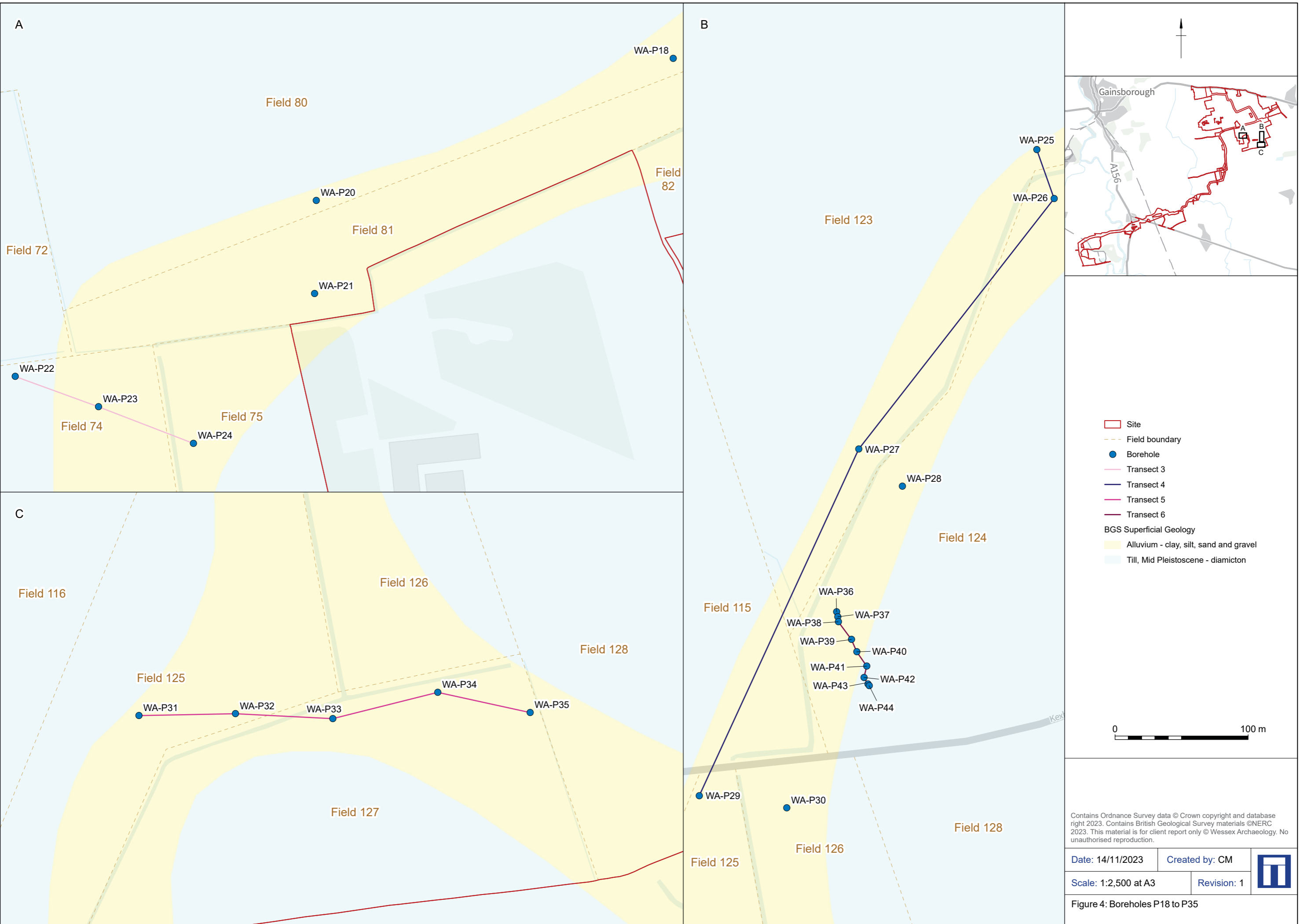
- Site
- Field boundary
- Borehole
- Transect 1
- Transect 2
- BGS Superficial Geology
  - Alluvium - clay, silt, sand and gravel
  - Till, Mid Pleistocene - diamicton



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Figure 3: Boreholes P01 to P17



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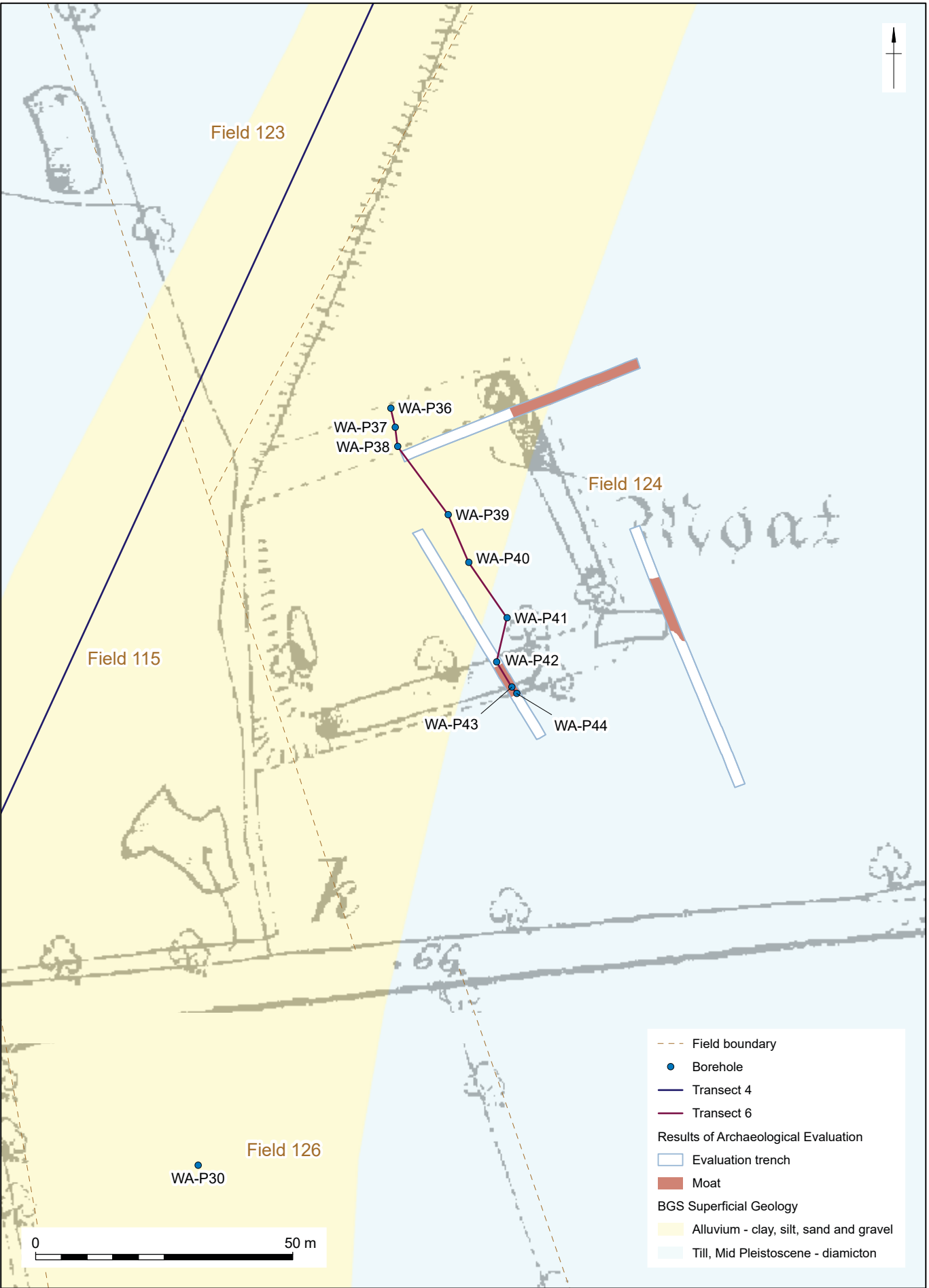
Date: 14/11/2023	Created by: CM	
Scale: 1:2,500 at A3	Revision: 1	

Figure 4: Boreholes P18 to P35



- - -	Field boundary
●	Borehole
— (blue)	Transect 4
— (red)	Transect 6
<b>Results of Archaeological Evaluation</b>	
▭ (light blue)	Evaluation trench
▭ (red)	Moat
<b>BGS Superficial Geology</b>	
▭ (yellow)	Alluvium - clay, silt, sand and gravel
▭ (light blue)	Till, Mid Pleistocene - diamicton

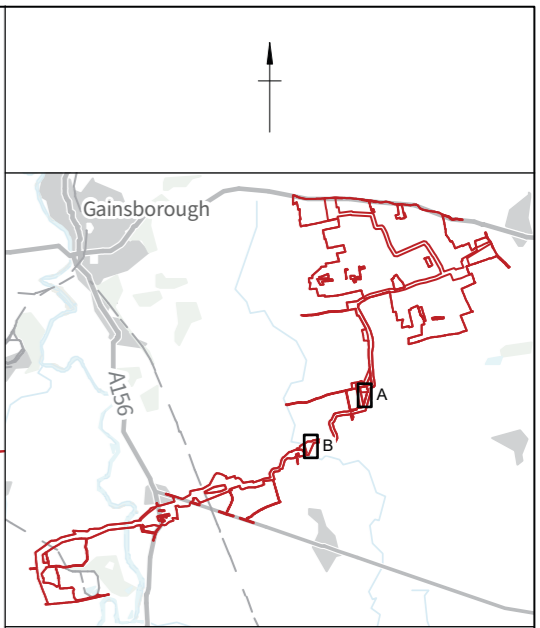
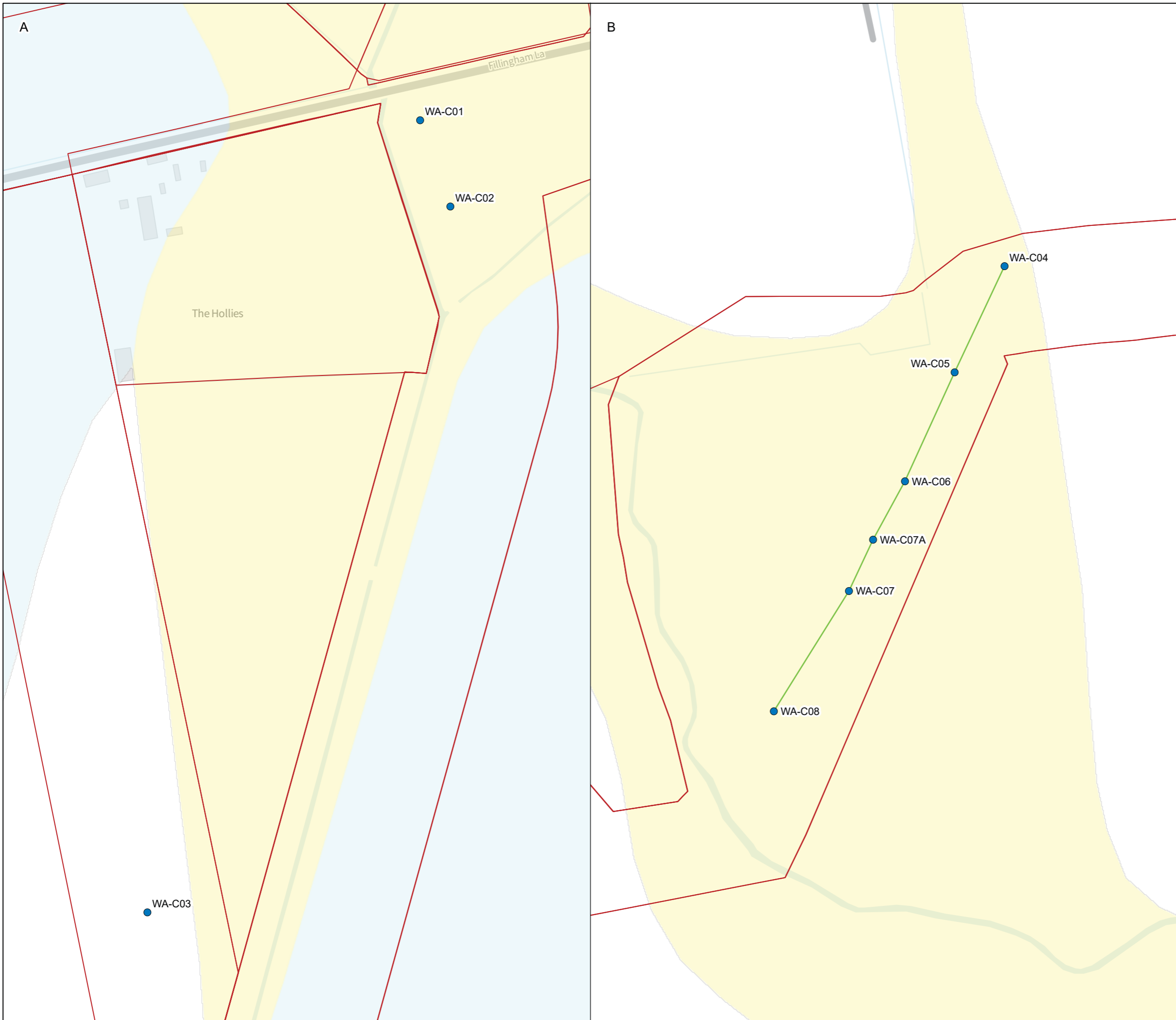
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Figure 5: Boreholes P36 to P44





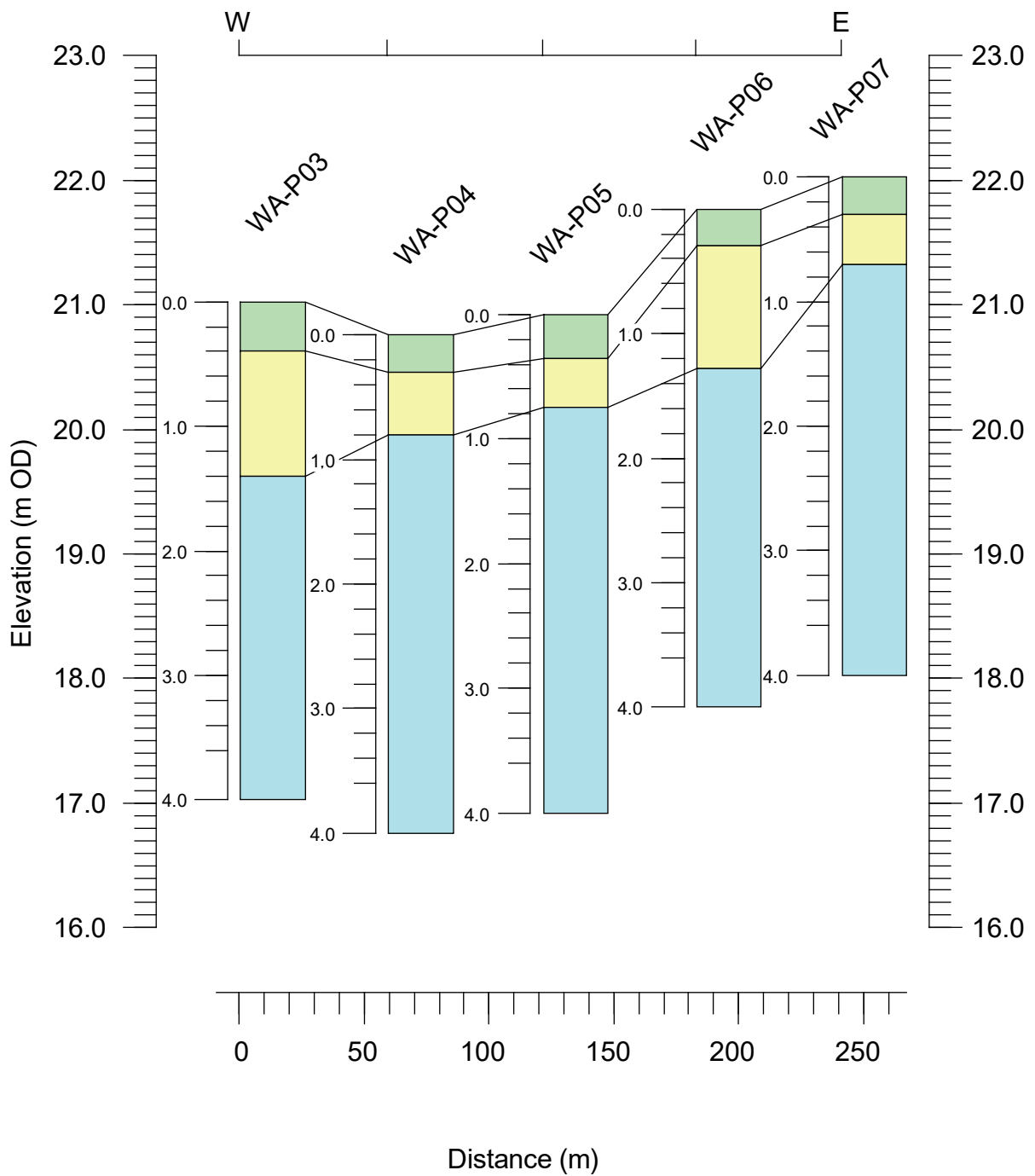
-  Site
-  Borehole
-  Transect 7
- BGS Superficial Geology**
-  Alluvium - clay, silt, sand and gravel
-  Till, Mid Pleistocene - diamicton



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Figure 6: Boreholes C01 to C08



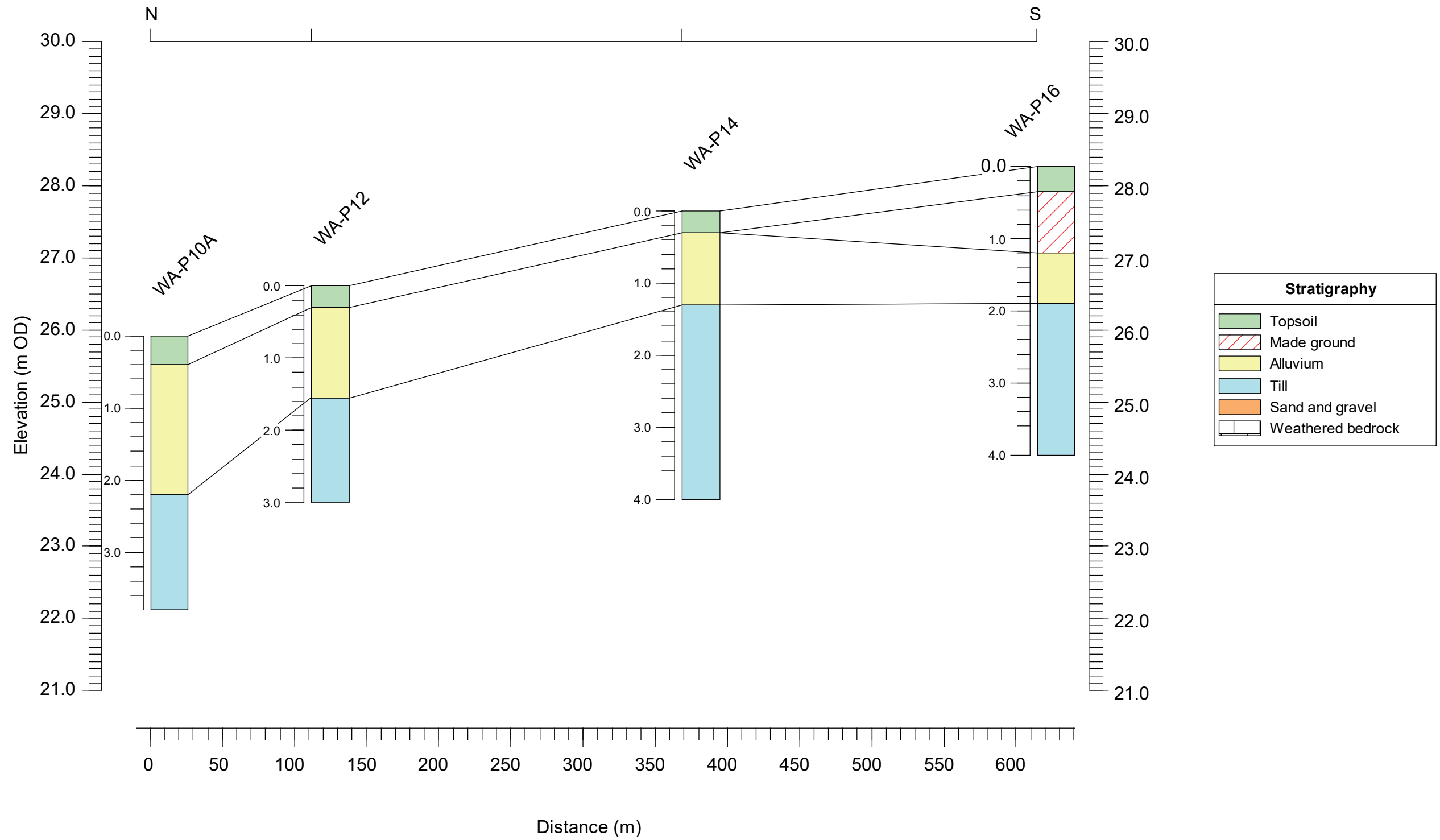
Stratigraphy	
	Topsoil
	Made ground
	Alluvium
	Till
	Sand and gravel
	Weathered bedrock

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Figure 7: Fields 58 and 65, Transect 1

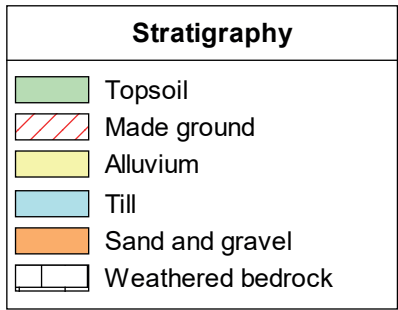
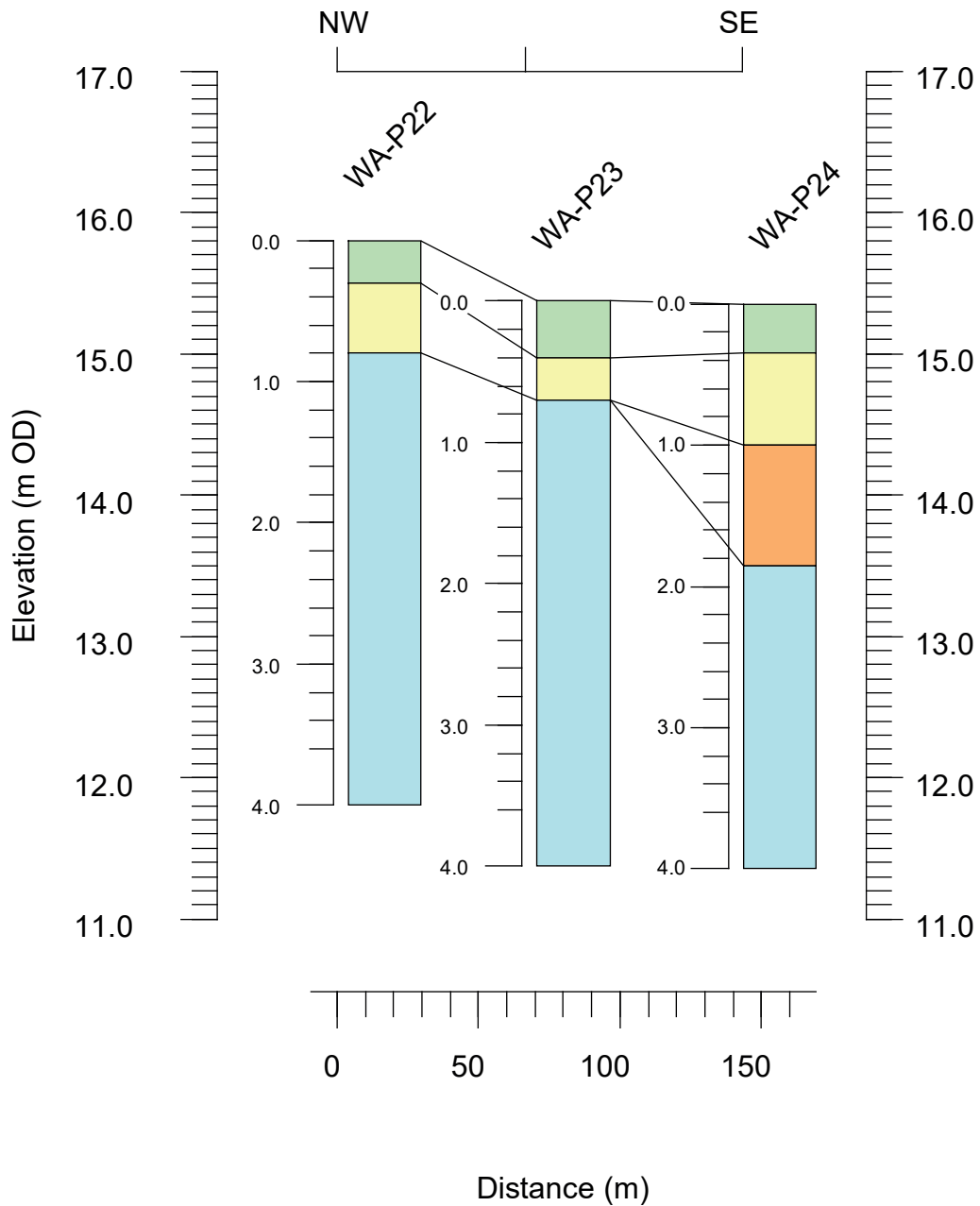


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Figure 8: Fields 98 and 107-109, Transect 2



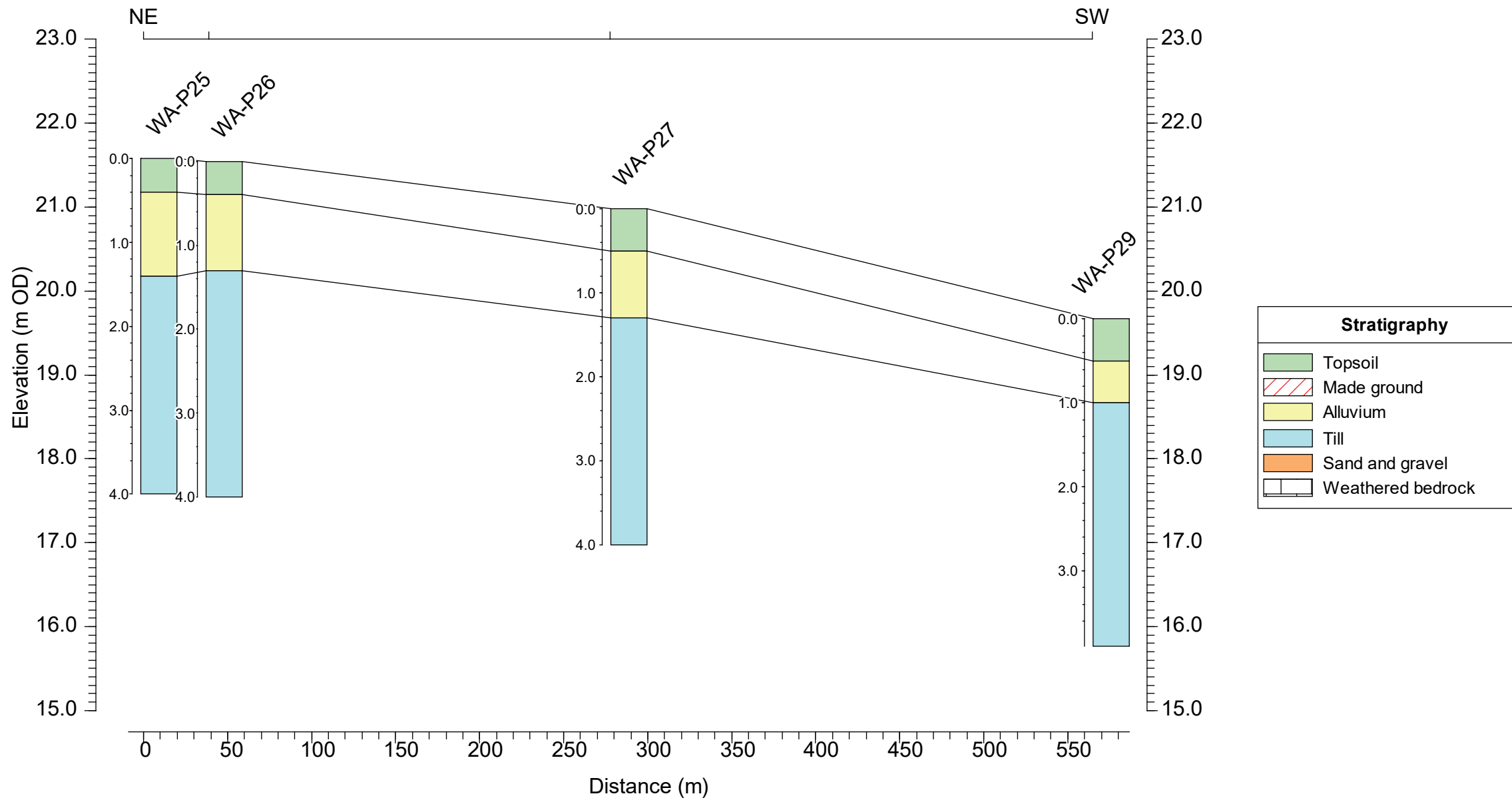


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Figure 9: Fields 74 and 75, Transect 3

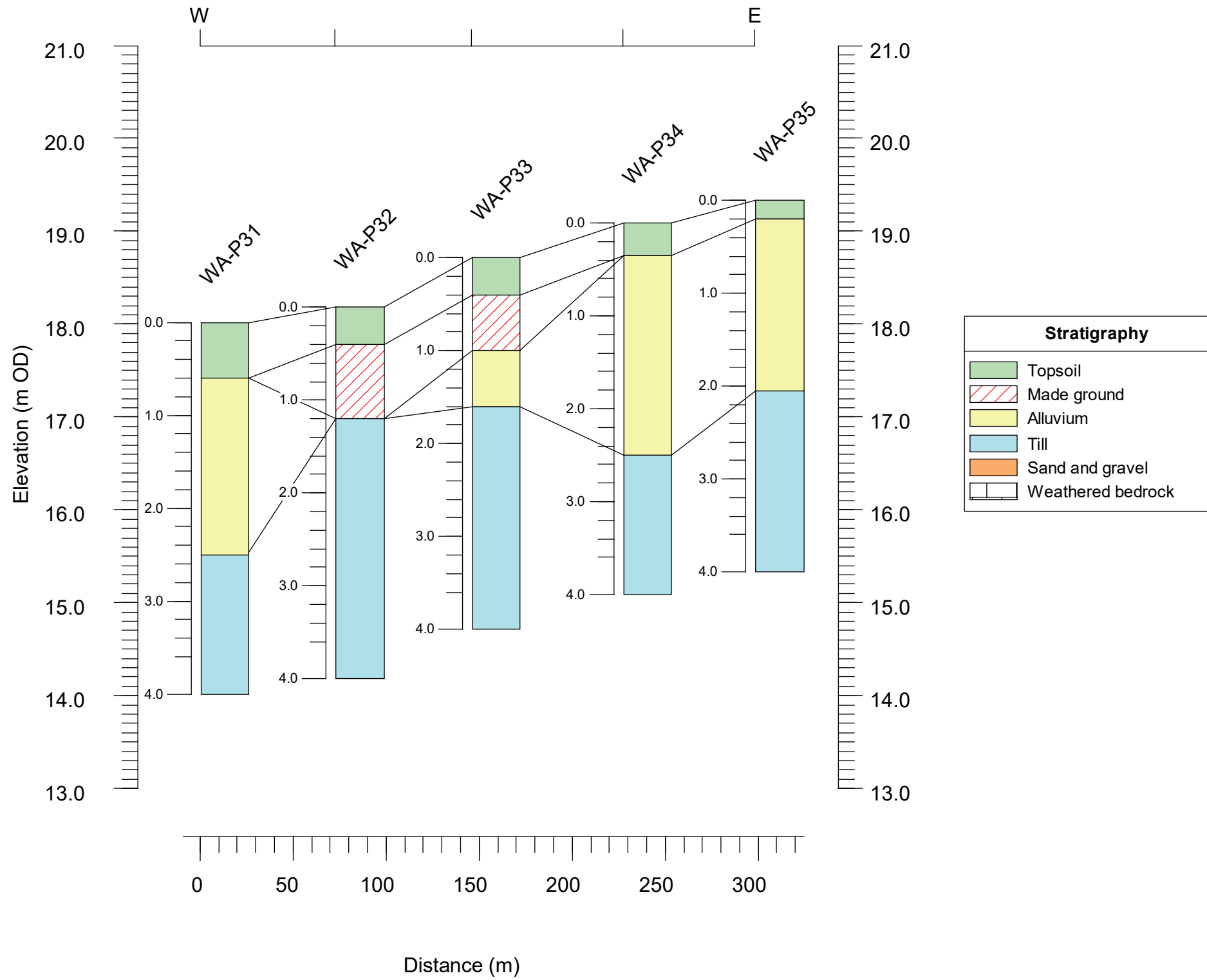


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Figure 10: Fields 123, 124, 115 and 125, Transect 4



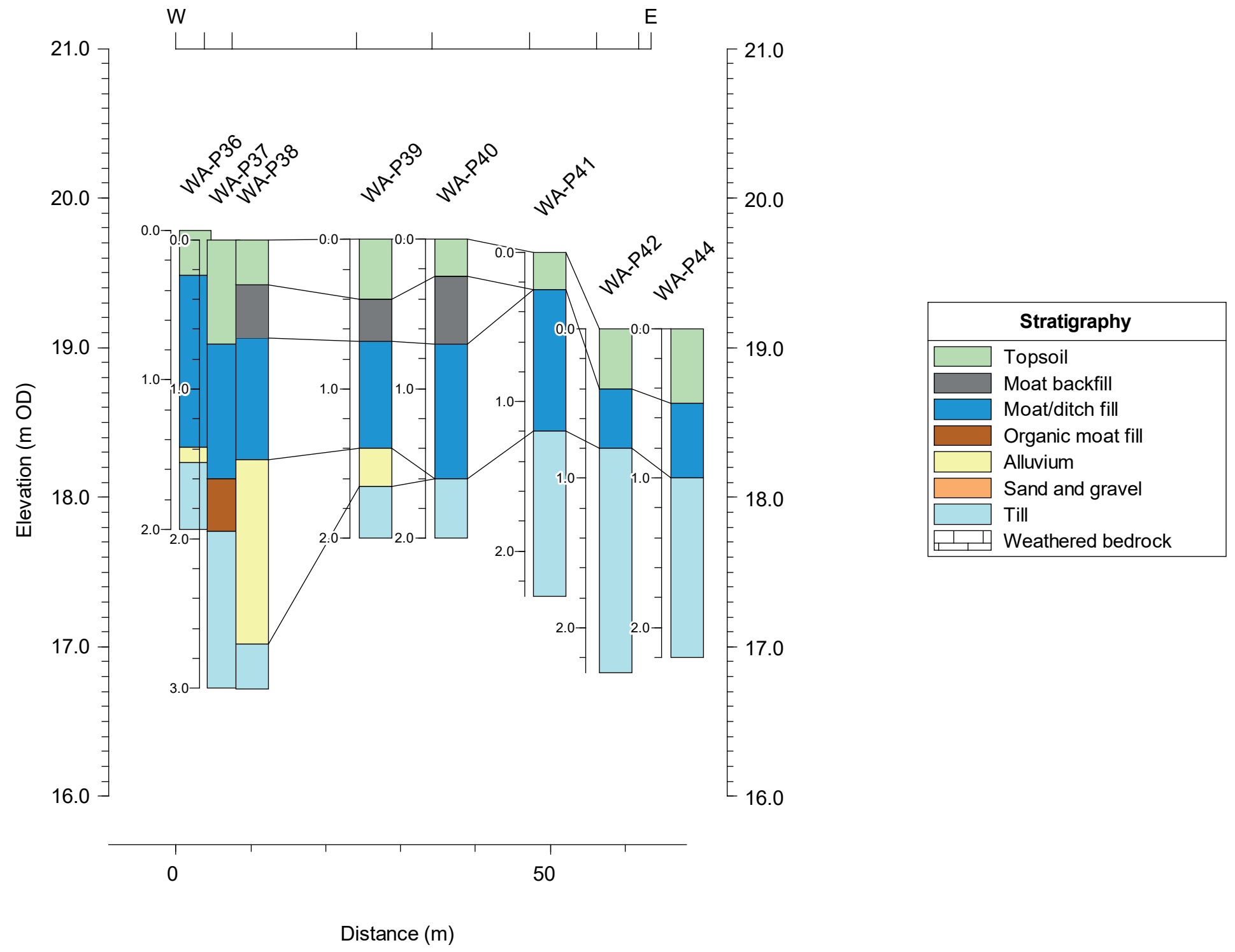


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Figure 11: Fields 125 and 127, Transect 5



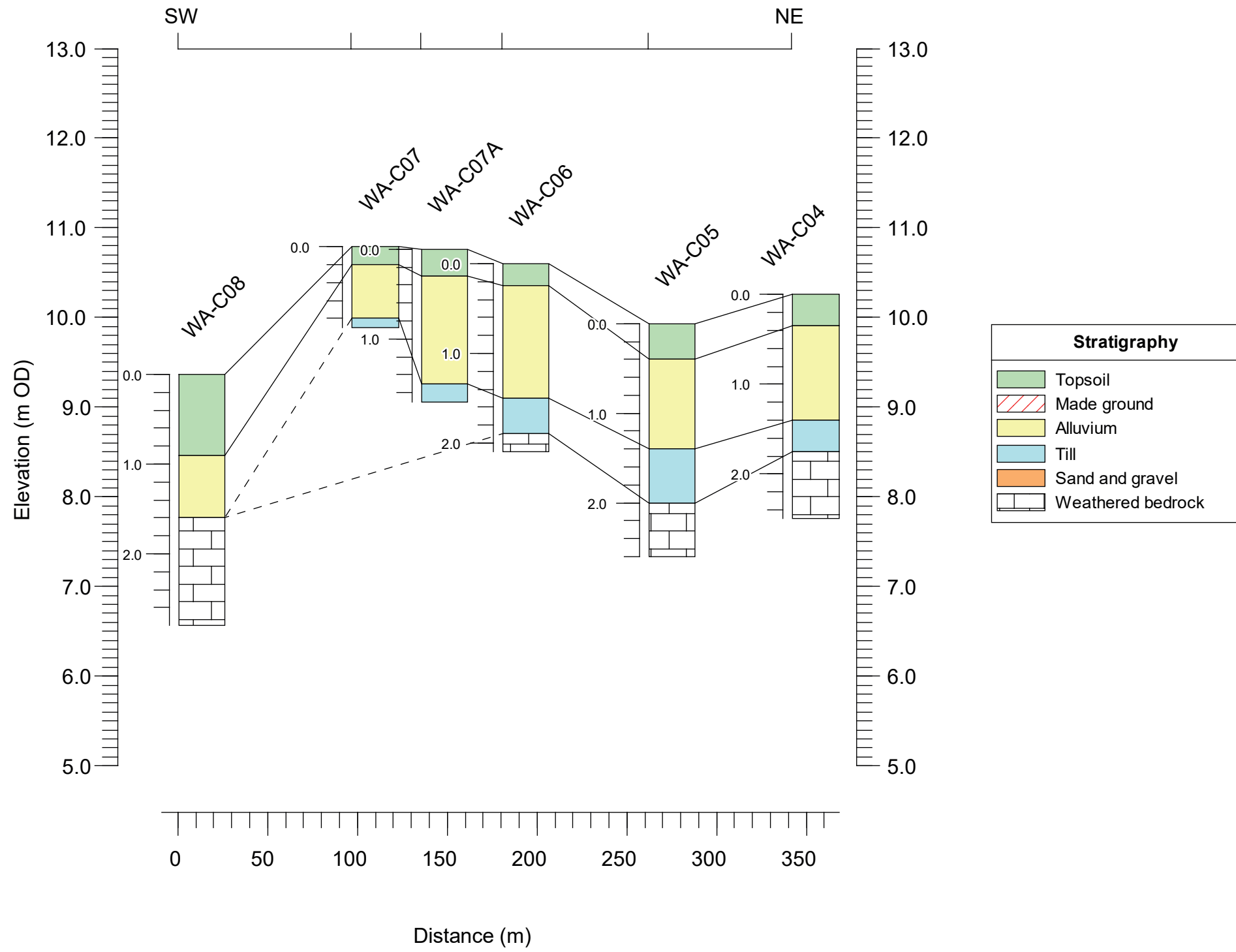


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Figure 12: Field 124, Transect 6





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Figure 13: Transect 7





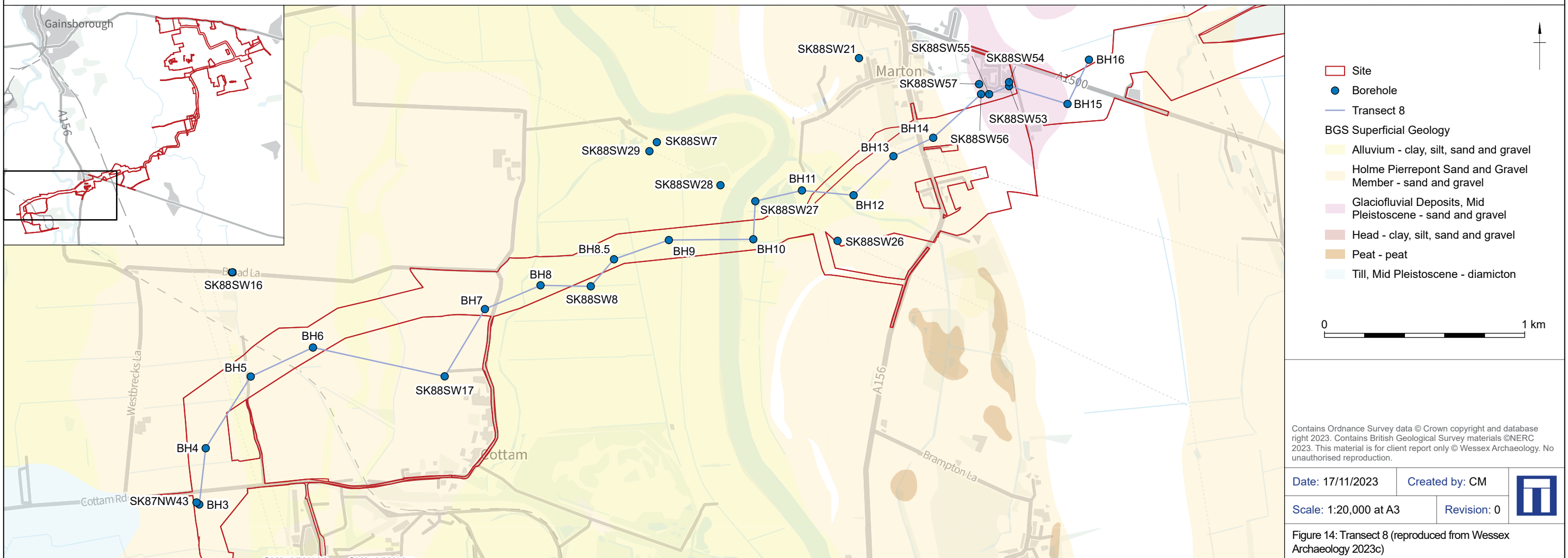
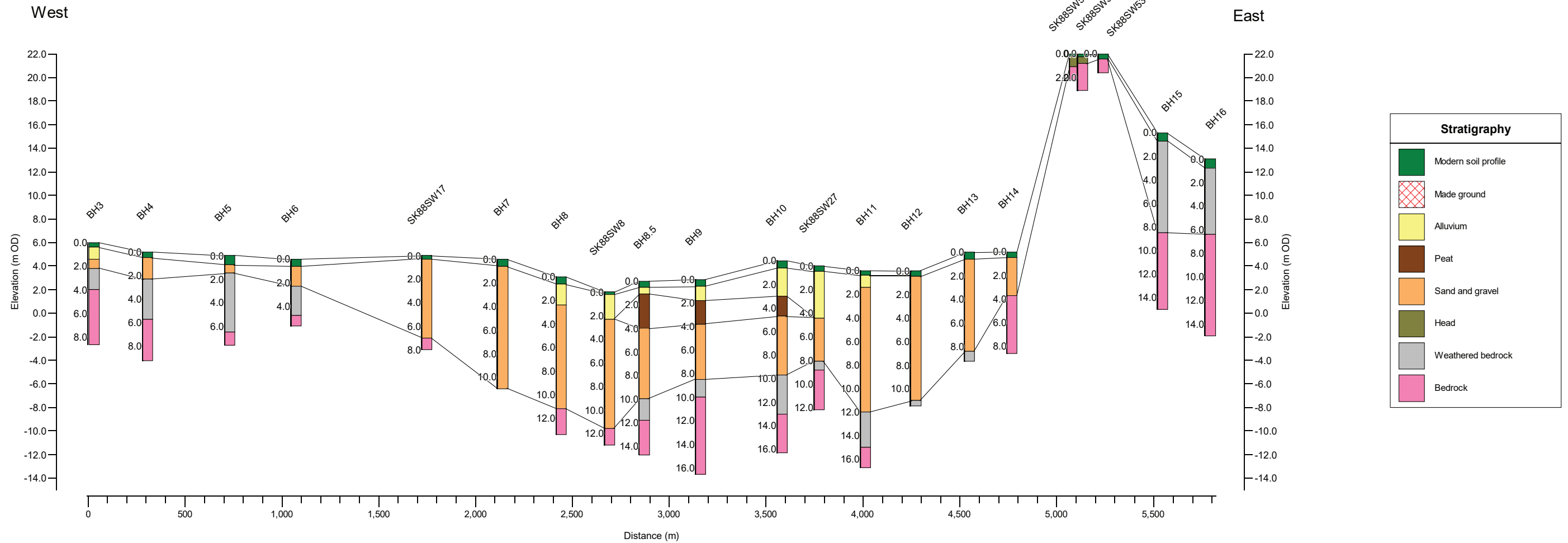


Figure 14: Transect 8 (reproduced from Wessex Archaeology 2023c)

# OASIS Summary for wessexar1-519395

OASIS ID (UID)	wessexar1-519395
Project Name	Borehole Survey at Tillbridge Solar Project Gainsborough Lincolnshire. Geoarchaeological Borehole Survey and Deposit Modelling
Sitename	Tillbridge Solar Project Gainsborough Lincolnshire. Geoarchaeological Borehole Survey and Deposit Modelling
Sitecode	273791
Project Identifier(s)	273791
Activity type	Borehole Survey
Planning Id	DCO Application
Reason For Investigation	Planning: Between application and determination
Organisation Responsible for work	Wessex Archaeology
Project Dates	16-Aug-2023 - 07-Sep-2023
Location	Tillbridge Solar Project Gainsborough Lincolnshire. Geoarchaeological Borehole Survey and Deposit Modelling NGR : SK 91197 88413 LL : 53.3846985767375, -0.630338341078714 12 Fig : 491197,388413
Administrative Areas	Country : England County : Lincolnshire District : West Lindsey Parish : Harpswell
Project Methodology	A programme of geoarchaeological borehole survey and deposit modelling was undertaken at the proposed site of the Tillbridge Solar Project, focussed on a 1,400 ha parcel of land centred around Common Lane, Gainsborough, Lincolnshire. The area investigated as part of these works, referred to here as the Scheme, comprises the Principal Site and the Cable Route Corridor. On the basis that no pre-existing GI data was available to identify localised potential within the area of the Scheme, a series of boreholes targeting mapped areas of alluvium were proposed following a review of BGS (2023) mapping and identification of areas where deposits of palaeoenvironmental potential may be preserved (Wessex Archaeology 2023a).

Project Results	<p>The sequence of Quaternary superficial deposits at the Site comprises Pleistocene till, overlain (where stream valleys have cut through these deposits) by alluvium forming on the floodplains of these stream valleys during the Holocene. These alluvial deposits, as mapped by the BGS, were targeted by the borehole survey on the basis they may contain or mask deposits of high archaeological and geoarchaeological potential. The alluvium at the Site was found to be entirely minerogenic, with no distinct organic rich or peat units observed, and is therefore considered to be of low potential to preserve archaeology or palaeoenvironmental remains.</p> <p>A 'moat' identified on historic Ordnance Survey mapping was targeted by a series of nine boreholes towards the east of the Site. Here, deposits provisionally interpreted as moat or ditch fills were recorded; these were minerogenic and of low geoarchaeological potential in all but one sequence (borehole WA-P37), in which an organic the basal fill was recorded between 1.60 and 1.95 m bgl. These deposits are considered to be of moderate to high geoarchaeological potential on the basis that it the deposits may preserve palaeoenvironmental remains, and material suitable for scientific dating, associated with the 'moat'.</p> <p>A programme of palaeoenvironmental assessment and scientific dating of the organic unit in borehole WA-P37 is recommended, comprising an assessment of plant macrofossil, pollen and diatom and radiocarbon dating. No further geoarchaeological investigation of the deposits identified in the remainder of the boreholes is recommended.</p>
Keywords	
Funder	Private or public corporation Tillbridge Solar Ltd
HER	Lincolnshire HER - unRev - STANDARD
Person Responsible for work	Alex Brown
HER Identifiers	
Archives	<p>Digital Archive - to be deposited with Archaeology Data Service Archive;</p> <p>Digital Archive - to be deposited with The Collection: Art and Archaeology in Lincolnshire;</p>



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