

# *Archaeology Wales*

## **Fenton Home Farm, Crundale Grid Connection**

Archaeological Watching Brief



By  
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Report No. 1257




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# Archaeology Wales

## Fenton Home Farm, Crundale, Grid Connection

Archaeological Watching Brief

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## **Non – Technical Summary**

*An archaeological watching brief was carried out during the excavation of a cable trench connecting a new solar farm at Fenton Home Farm, Crundale (SM 9882 1734), with the Haverfordwest substation alongside the A40 to the southwest (SM 9785 1607). The work was carried out by Archaeology Wales Ltd at the request of The Farm Energy Partnership, on behalf of Vogt Solar. The work was set as a condition of the planning permission (planning reference no. 13/0278/PA).*

*The groundworks revealed topsoil and plough soil overlying mixed clays and fragmented mudstone bedrock within agricultural land alongside the A40. On lower lying ground to the north topsoil and plough soil covered alluvial clays which overlay bedrock deposits adjacent to current streams, with mixed clays and fragmented bedrock in between.*

*No finds, features or deposits of archaeological significance were noted within any of the recorded deposits revealed by the groundworks.*

## **1 Introduction**

- 1.1 In January 2014 Archaeology Wales Ltd (AW) was commissioned by The Farm Energy Partnership, on behalf of Vogt Solar, to undertake an archaeological watching brief during groundworks associated with the construction of a grid connection cable trench to connect a new solar farm at Fenton Home Farm, Crundale, near Haverfordwest (NGR SM 9882 1734, Figures 1 & 2).
- 1.2 The requirements for an archaeological watching brief was placed as a condition of the planning permission for the development (planning application number 13/0278/PA) by Pembrokeshire County Council, on the advice of Dyfed Archaeological Trust – Heritage Management Department (DAT-HM), in their capacity as archaeological advisors to the local planning authority.
- 1.3 An approved Written Scheme of Investigation (WSI) was produced by AW in accordance with the Standard and Guidance for Archaeological Watching Briefs (IfA 1994, revised 2011) and was designed to provide an approved scheme of archaeological work to be implemented during the construction works (see Appendix II).
- 1.4 The watching brief was undertaken in July 2014. The AW project number for the work is 2169.

## **2 Site Description**

- 2.1 The site lies to the south of Fenton Home Farm, Crundale, which itself lies to the northeast of Haverfordwest (SM 9882 1734) in Pembrokeshire. A solar farm, covering approximately 50 hectares, has recently been constructed immediately to the south of Fenton Home Farm. A cable trench was excavated to connect the substation within the solar farm to the main Haverfordwest substation to the southwest at SM 9785 1607.
- 2.2 The route of the cable trench extends for c.2.5km, crossing fields to the south of the solar farm and then running west alongside the A40 to the Haverfordwest substation.

- 2.3 The land falls away to the south of Fenton Home Farm into Fenton Brook, a small wooded stream, set in a valley, which feeds into the Cartlett Brook to the west. The land then rises to the south, onto undulating high ground, along the side of which the A40 runs. The route of the cable trench takes it through fields laid largely to pasture and bounded by hedgerows to a point where it meets the route of the A40 adjacent to Clayboro Farm.
- 2.4 The underlying geology consists of mudstones of the Slade and Redhill Formation as far as the lower lying ground to the south, beyond which lie mudstones of the Portfield and Haverford Mudstone Formations. The line of the A40 runs along an outcrop of sandstone of the Gasworks Sandstone Formation. Alluvium overlies the bedrock along the line of the streams that run through the lower lying ground, and glacio-fluvial deposits of sand and gravel and Diamicton Till overlie areas of the bedrock in the fields to the south.

### **3 Archaeological and Historical Background**

- 3.1 An archaeological Desk Based Assessment (Wessex 2013) has been undertaken on the site of the solar farm and its environs prior to the determination of the planning application. A detailed historical background is contained within that report.
- 3.2 The route of the cable trench runs through an area where sporadic remains dated to the Bronze Age (*c.*2300 BC – *c.*700 BC), in the form of burial mounds (PRNs 3334 & 4540) and burnt mounds (PRNs 3332 & 3333), suggests that this landscape may have been settled and utilised during this period. No sites of Bronze Age date have been recorded along the route to be taken by the cable trench, but the presence of these features indicates there is a potential for further unrecorded Bronze Age remains to survive in the area.
- 3.3 The regional Historic Environment Register also records numerous small cottages and farmsteads dating to the post-medieval period (*c.*1536 - 1900) dotted throughout this landscape. Many of these sites appear to have been abandoned in the late 19<sup>th</sup>- and early 20<sup>th</sup>-century and no longer appear on current maps, but evidence of their existence may still remain both above and below ground. No such sites are recorded along the route of the cable trench as it crosses the farmland, however, some sites are recorded along the edge of the A40 (PRNs 46917, 46920 & 48816).

### **4 Aims and Objectives**

- 4.1 The watching brief was undertaken:
- To allow, within the resources available, the preservation by record of archaeological deposits, the presence and nature of which could not be established (or established with sufficient accuracy) in advance of development or other potentially disruptive works.
  - To provide an opportunity, if needed, for the watching archaeologist to signal to all interested parties, before the destruction of the material in question, that an archaeological find has been made for which the resources allocated to the watching brief itself are not sufficient to support treatment to a satisfactory and proper standard.
  - The main objective of the watching brief was to establish and make available information about the archaeological resource existing on the site.

## **5 Methodology**

The methodology for this archaeological watching brief followed that set out in the WSI (Appendix II). In summary:

### **5.1 Watching Brief**

- 5.1.1 The watching brief was undertaken during the excavation of the cable trench from the southern end of the solar farm through the fields to the south. Work had started on the excavation of the cable trench alongside the A40, with areas backfilled prior to an archaeologist being present on site. However, the backfill material, descriptions from the site contractors and areas that remained open to inspection all indicate that this roadside section of the cable trench went into modern deposits previously disturbed by work along the A40 itself.
- 5.1.2 Groundworks were undertaken by a mechanical excavator using toothless buckets under archaeological observation.
- 5.1.3 The exposed deposits were subsequently recorded by detailed, measured, sketch drawings, high resolution digital photographs (using a 14MP camera) and written records using AW recording systems.
- 5.1.4 The on-site archaeological work was undertaken by Jerry Bond (AW). The overall management of the project was undertaken by Philip Poucher.
- 5.1.5 All works were undertaken in accordance with the IfA's *Standards and Guidance for an archaeological watching brief* (2011) and current Health and Safety legislation.

### **5.2 Finds**

- 5.2.1 No finds were recovered during the course of the works.

### **5.3 Palaeo-Environmental Evidence**

- 5.3.1 No deposits suitable for environmental sampling were encountered during the course of the excavation.

## 6 Watching Brief Results

- 6.1 The cable trench excavation began at the Haverfordwest substation, located alongside the A40, to the east of Haverfordwest at SM 9785 1607. The trench ran eastward along the verge on the northern side of the A40 for *c.*500m before doglegging slightly to the north, to continue the line within the agricultural fields that line the road. Where it was cut along the roadside, the trench measured 0.3m wide and 0.8m deep. Work commenced along this stretch of the cable trench prior to an archaeologist being present on site, however the exposed backfill material (Photo 2) and anecdotal information from the site contractors indicated that the cable trench was excavated into modern deposits associated with the construction of the A40, and that no potential archaeological features were encountered.
- 6.2 The cable trench continued eastwards along the southern edge of five fields for *c.*580m before turning north to head towards the solar farm. Where it ran through agricultural land, the cable trench measured 0.4m wide and up to 1.2m deep. In the first three fields a turf-topped topsoil overlay a plough-soil of dark grey-brown loam (deposit 109), together typically 0.3m thick. This overlay a very firm, pale greyish yellow-brown clay with common small to medium mudstone fragments (deposit 110). This is recorded in section 1 (Figure 3, Photo 3). For the remaining two fields along this stretch the topsoil and plough-soil increased slightly to 0.35m thick, generally becoming darker brown in colour (deposit 111). The underlying subsoil consisted largely of fragmented mudstone (deposit 112) set within a small amount of the clay similar to that recorded in the preceding three fields. This is recorded in section 2 (Figure 3, Photo 4).
- 6.3 The cable trench turned northwards and ran downhill through two fields for *c.*300m to a wooded stream, at which point it was drilled underneath the stream and the trench continued beyond that point. As it ran through the lower northern field the topsoil became a firm dark brown clay (deposit 113) and thinned to 0.25m thick. This overlay a 0.45m thick deposit of firm grey clay (deposit 114), below which was exposed a loose deposit of clay and fragmented shale and mudstone (deposit 115). This is recorded in section 3 (Figure 4, Photo 5).
- 6.4 To the north of the stream, the cable trench was excavated for *c.*370m through a further five fields before it was drilled under a gas pipeline, before once again continuing to the north. As it ran along this stretch, the trench revealed a relatively consistent deposit of mid brown clayey-loam topsoil (deposit 100), averaging 0.2m thick, overlying a natural subsoil of pale yellow-brown clay (deposit 101), which undulated greatly from 0.2m to 0.8m thick in places. Below this the natural, fragmented, grey shale bedrock (deposit 102) was exposed (Photos 6 – 8).
- 6.5 To the north of the gas pipeline the cable trench continued for *c.*260m through a further four fields before it reached Fenton Brook. At this point it was drilled underneath the brook to join up with an existing cable within the area of the solar farm. Immediately to the north of the gas pipeline the topsoil consisted of 0.25m of a dark brown loamy plough-soil (deposit 105). Below this was a thick natural geological deposit of shale and mudstone set within a yellow-brown clay (deposit 106). This is recorded in section

4 (Figure 4, Photos 9 & 10). This sequence continued to the north, with the underlying geological deposit becoming a more solid bedrock (deposit 104) before changing once again to fragmented shale and mudstone within a firm yellow-brown clay (deposit 108) closer to the line of Fenton Brook. This is recorded in sections 5 and 6 (Figure 5, Photos 11 - 13).

- 6.6 No finds, features or deposits of archaeological significance were noted within any of the recorded deposits revealed by the cable trench.



## **7 Conclusions**

- 7.1 An archaeological watching brief was undertaken in July 2014 during the excavation of a cable trench connecting a substation at the recently constructed solar farm at Fenton Home Farm, Crundale, to the Haverfordwest substation on the A40 to the southwest.
- 7.2 Although groundworks had commenced along the route of the A40 prior to an archaeologist being on site it was evident that only modern material associated with the construction of the adjacent A40 was disturbed. Throughout this stretch the cable trench measured 0.3m wide and 0.8m deep. As the cable trench passed through agricultural land the trench size increased to 0.4m wide and up to 1.2m deep. In the fields alongside the A40, an upper deposit of topsoil and plough soil overlay natural deposits of mixed clay and fragmented mudstone bedrock. As the ground sloped away to the north down to a stream, topsoil deposits thinned and clays overlay the fragmented bedrock, presumably representing alluvial material collecting on the lower ground. This sequence, consisting of topsoil and plough soil deposits, overlying clay and then bedrock deposits, continued to the north of the stream for around 350m. Beyond this point the underlying bedrock and clay deposit became more mixed, with bedrock occasionally coming closer to the surface.
- 7.3 No finds, features or deposit of archaeological interest were noted within any of the deposits revealed during the groundworks.

## 8 Sources

British Geological Survey 1994 *The Rocks of Wales: Geological Map of Wales 1:250 000*

Institute for Archaeologists 2011 *Standard and Guidance for an Archaeological Watching Brief*

Poucher, P 2013 *Fenton Home Farm, Crundale, Haverfordwest: Geophysical Survey*  
Archaeology Wales Report No. 1170

Wessex Archaeology 2013 *Fenton Farm, Crundale, Pembrokeshire: Archaeological Desk-Based Assessment.* Wessex Archaeology Project No.89230.02

### *Online resources*

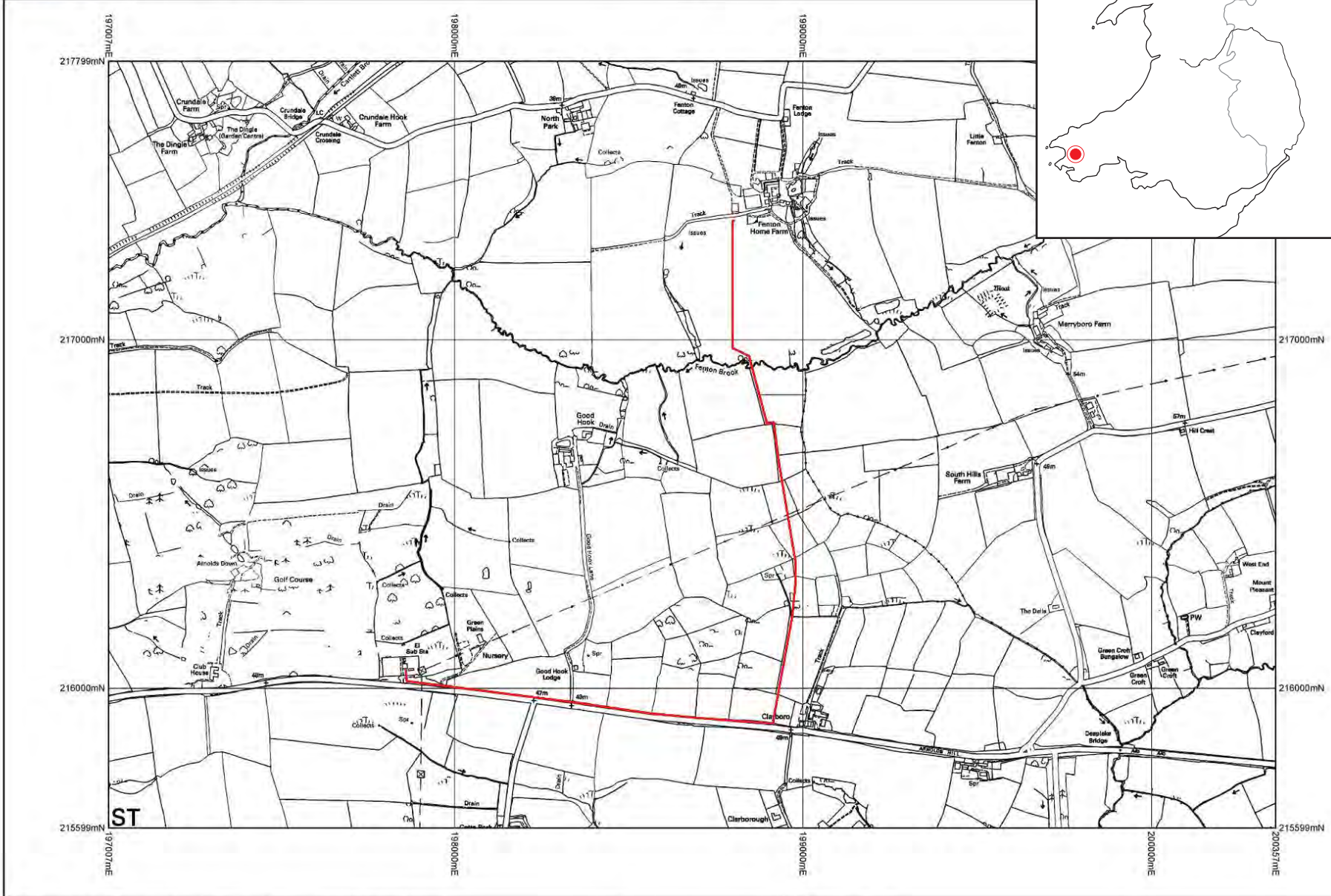
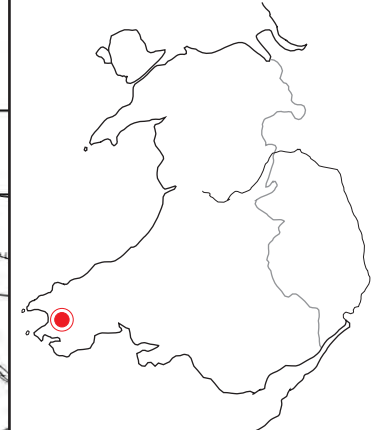
Bluesky. Infoterra Ltd & COWI A/S 2013 *Digital imagery*

British Geological Survey 2014 online viewer  
<http://mapapps.bgs.ac.uk/geologyofbritain/home.html> (accessed 20<sup>th</sup> August 2014)

### *Databases*

Regional Historic Environment Record (HER), held and maintained by Dyfed Archaeological Trust

National Monuments Record (NMR), held and maintained by the Royal Commission on the Ancient and Historical Monuments of Wales



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Figure 1: Location map of cable route (red line).

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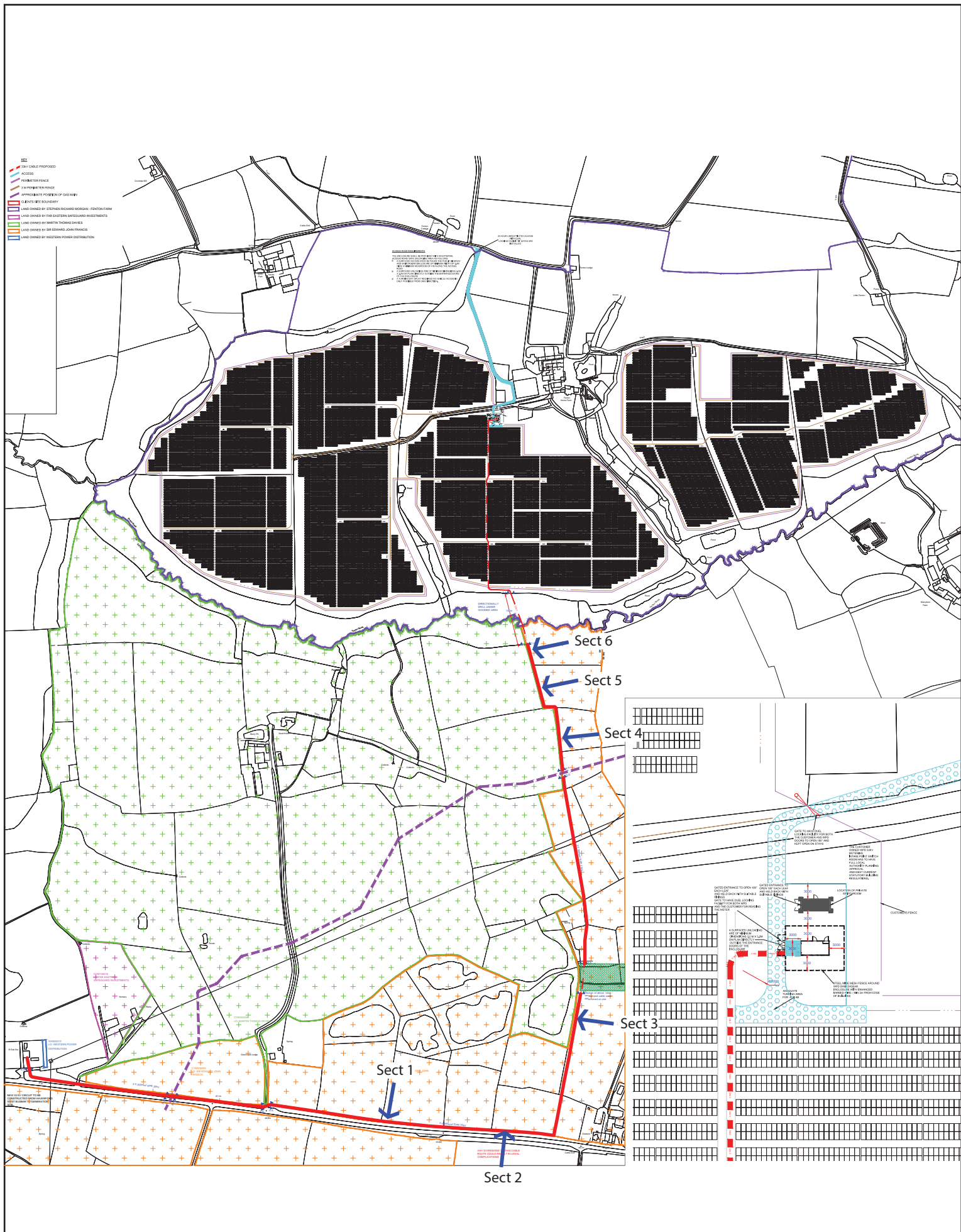
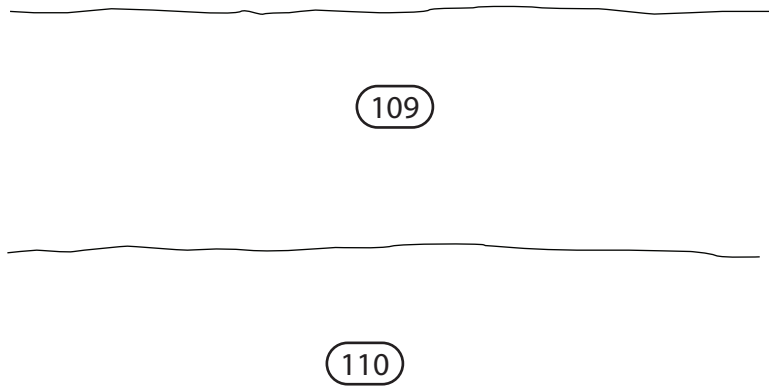
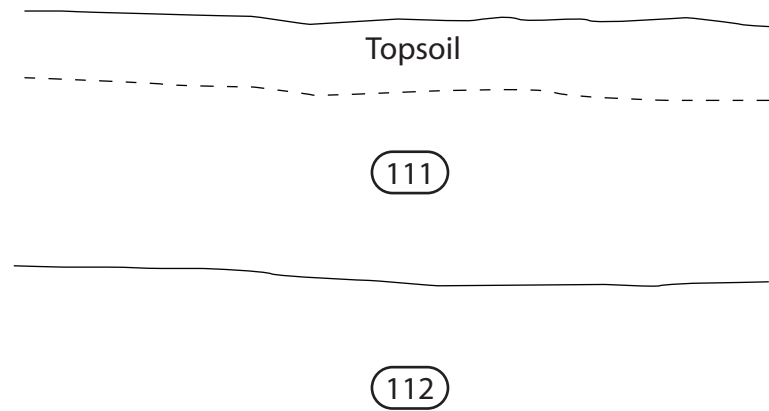


Figure 2: Site development plan, showing cable route (red line) and locations of illustrated sections (blue arrows).

Section 1  
North facing section of cable trench



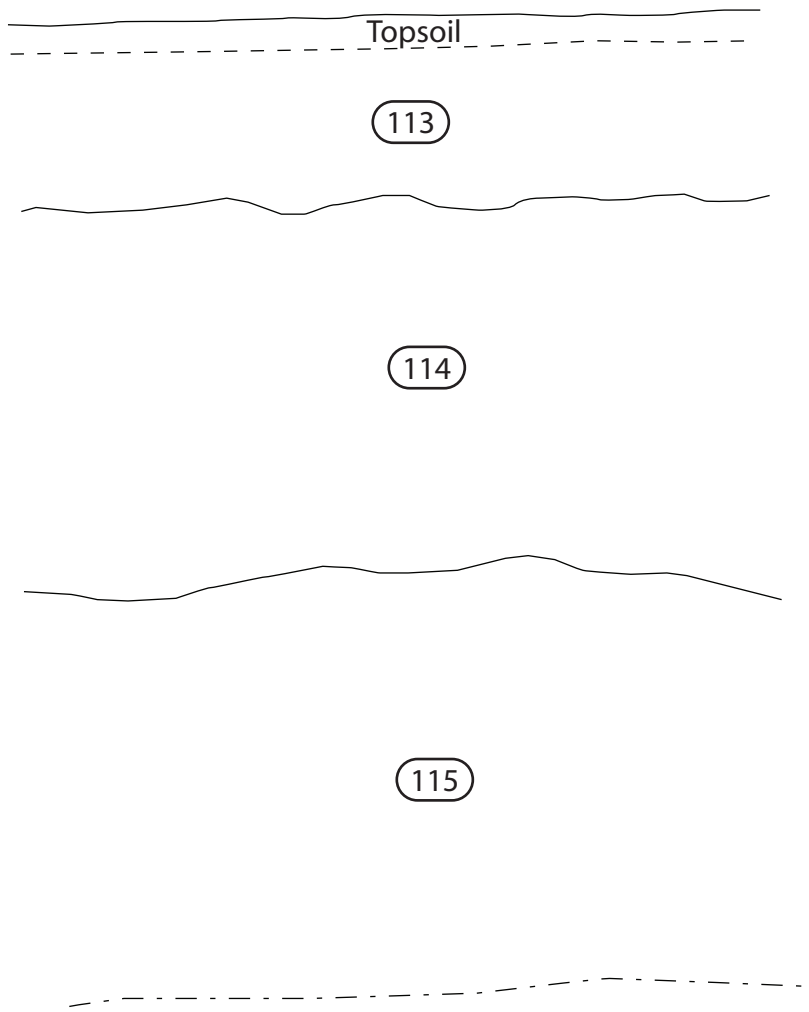
Section 2  
South facing section of cable trench



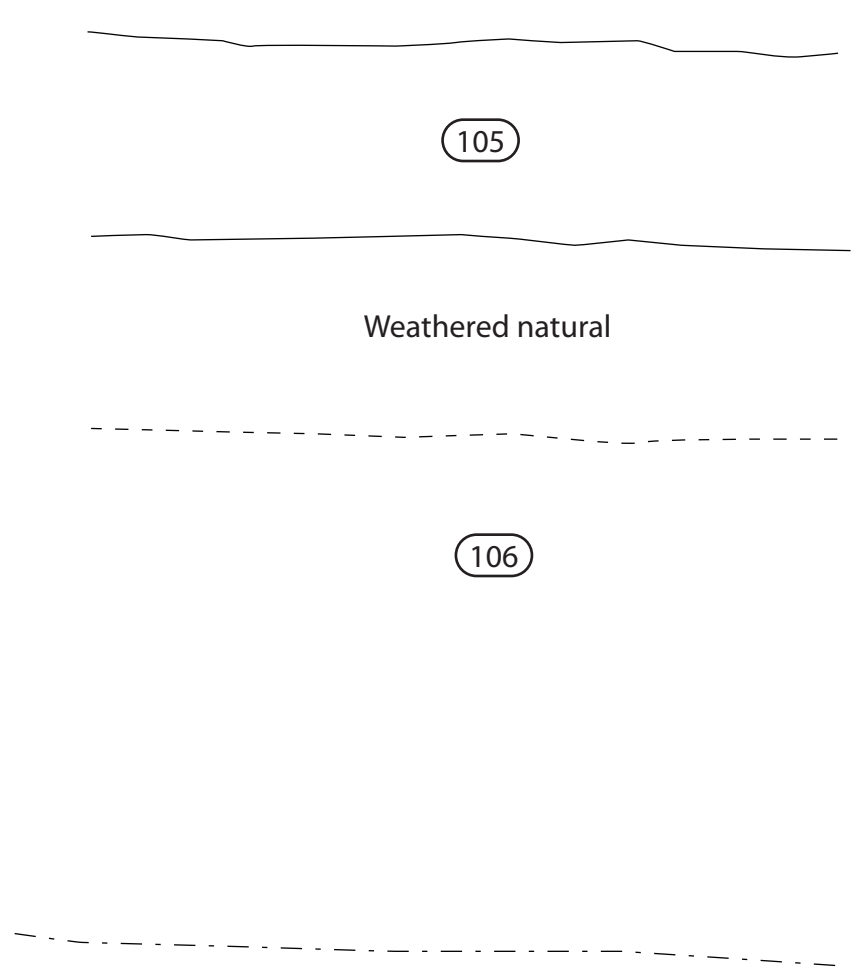
Scale 1:10

Figure 3: Sections 1 and 2 of the cable trench. Scale 1:10

Section 3  
East facing section of cable trench



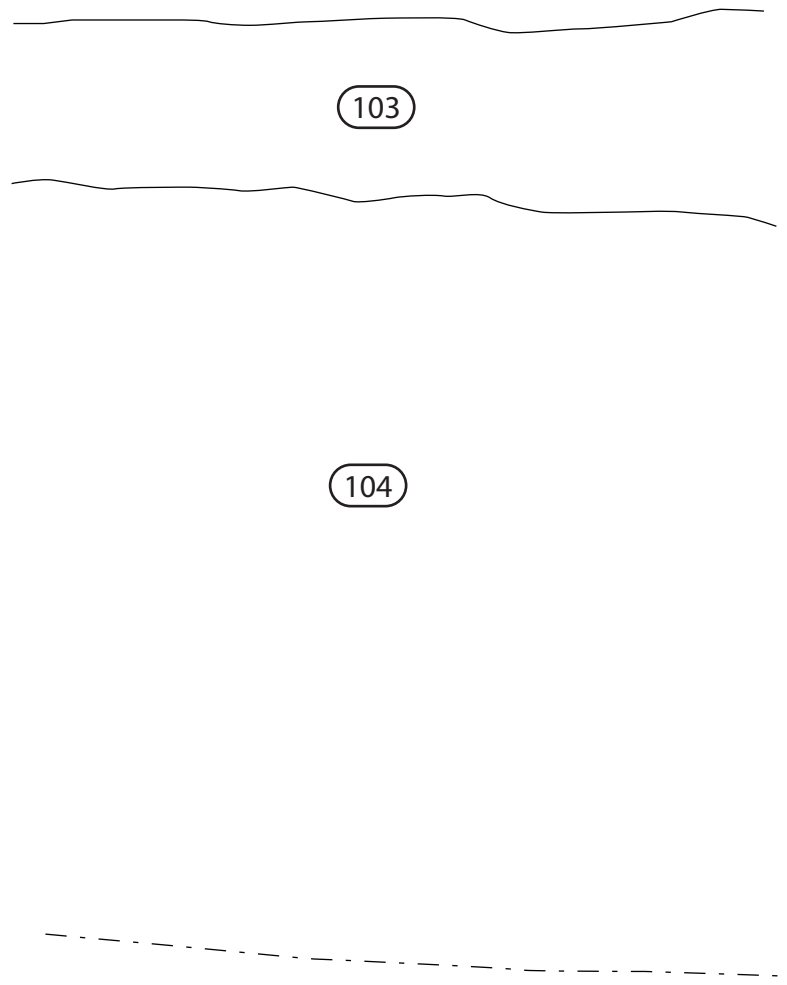
Section 4  
East facing section of cable trench



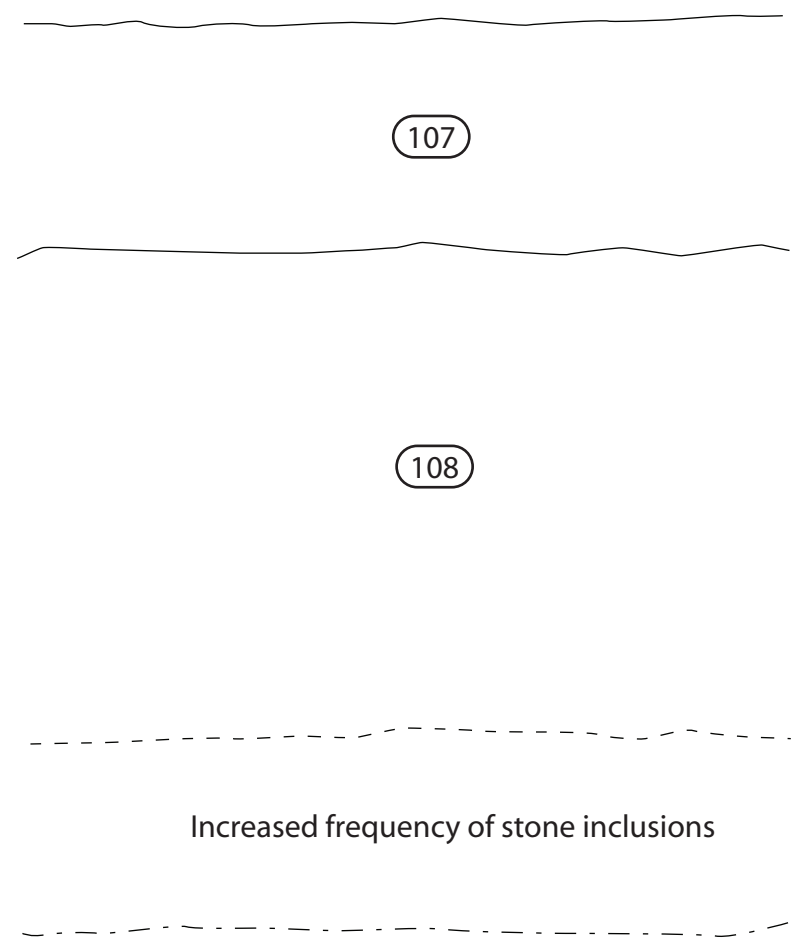
Scale 1:10

Figure 4: Sections 3 and 4 of the cable trench. Scale 1:10

Section 5  
East facing section of cable trench



Section 6  
East facing section of cable trench



Scale 1:10

Figure 5: Sections 5 and 6 of the cable trench. Scale 1:10





Photo 1: General view across the cable trench looking NNE with the solar farm in the background.



Photo 2: View west along the backfilled cable trench alongside the A40. 1m scales.





Photo 3: Looking south at a section of cable trench showing deposits 109 and 110 (Section 1). 2m & 1m scale.



Photo 4: Looking north at a section of the cable trench showing deposits 111 and 112 (Section 2). 2m scales.





Photo 5: Looking south along a section of the cable trench as it approaches the northernmost stream, showing deposits 113 and 114. Strong sunlight prevented a meaningful photograph of the section (Section 3). 2m & 1m scale.



Photo 6: Looking west at a section of the cable trench between the northernmost stream and the line of the gas pipe, showing deposits 100, 101 and 102. 2m scales.





Photo 7: Looking south along a section of the cable trench between the northernmost stream and the line of the gas pipe, showing deposits 100, 101 and 102. 2m scales.

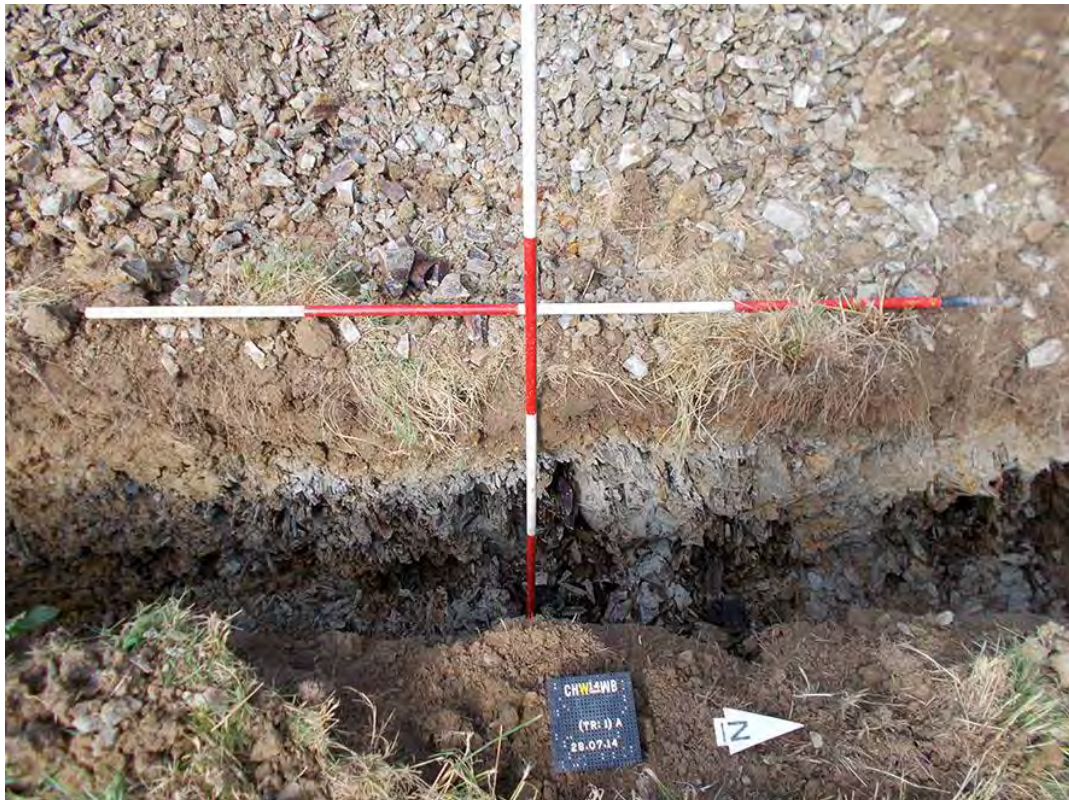


Photo 8: Looking west at a section of the cable trench between the northernmost stream and the line of the gas pipe, showing deposit 102 nearing the surface. 2m scales.





Photo 9: Looking west at a section of the cable trench just to the north of the line of the gas pipeline, showing deposits 105 and 106 (Section 4). 2m & 1m scale.



Photo 10: Looking south along a section of the cable trench just to the north of the line of the gas pipeline. 2m & 1m scale.





Photo 11: Looking west at a section of the cable trench between the gas pipeline and Fenton Brook, showing deposits 103 and 104 (Section 5). 2m & 1m scale.



Photo 12: Looking west at a section of the cable trench just to the south of Fenton Brook, showing deposits 107 and 108 (Section 6). 2m & 1m scale.





Photo 13: Looking northeast along a section of the cable trench just to the south of Fenton Brook (the wooded area to the rear), showing deposits 107 and 108. 2m & 1m scale.

# *Archaeology* *Wales*

## **APPENDIX I: Context Descriptions**

## Context Descriptions

Context Number	Context Type	Description	Dimensions (Length x width x thickness)
100	Layer	<ul style="list-style-type: none"> <li>• Topsoil</li> <li>• Moderate, mid brown, silty-clay (loam) with common, medium-large, sub-rounded stone inclusions</li> </ul>	c.180m x 0.4m (trench dimensions) x 0.2m
101	Layer	<ul style="list-style-type: none"> <li>• Subsoil</li> <li>• Fairly compact, light yellow-brown, clay with rare small-medium, sub-rounded stone.</li> </ul>	c.180m x 0.4m (trench dimensions) x 0.8m
102	Layer	<ul style="list-style-type: none"> <li>• Bedrock</li> <li>• Grey shaley mudstone.</li> </ul>	
103	Layer	<ul style="list-style-type: none"> <li>• Topsoil &amp; Ploughsoil</li> <li>• Moderate to loose, dark brown, silty-clay (loam) with rare, medium-large, sub-rounded stone inclusions</li> </ul>	c.85m x 0.4m (trench dimensions) x 0.28m
104	Layer	<ul style="list-style-type: none"> <li>• Bedrock</li> <li>• Solid mudstone.</li> </ul>	
105	Layer	<ul style="list-style-type: none"> <li>• Topsoil &amp; Ploughsoil</li> <li>• Moderate to loose, dark brown, silty-clay (loam) with abundant, small-medium, sub-rounded stone</li> </ul>	c.100m x 0.4m (trench dimensions) x 0.25m
106	Layer	<ul style="list-style-type: none"> <li>• Subsoil</li> <li>• Compact, mid yellow-brown clay with 90% fragmented shale/mudstone bedrock inclusions</li> </ul>	
107	Layer	<ul style="list-style-type: none"> <li>• Topsoil &amp; Ploughsoil</li> <li>• Moderate to loose, dark brown, silty-clay (loam) with common, small-medium, sub-rounded stone</li> </ul>	c.60m x 0.4m (trench dimensions) x 0.3m
108	Layer	<ul style="list-style-type: none"> <li>• Subsoil</li> <li>• Compact, light yellow-brown clay with abundant medium-large sub-angular fragmented bedrock</li> </ul>	
109	Layer	<ul style="list-style-type: none"> <li>• Topsoil &amp; Ploughsoil</li> <li>• Moderate to loose, dark grey-brown, silty-clay (loam) with common, small-medium, sub-rounded stone.</li> </ul>	c.300m x 0.4m (trench dimensions) x 0.32m
110	Layer	<ul style="list-style-type: none"> <li>• Subsoil</li> <li>• Compact, light yellow-brown clay with abundant (30%) medium-large sub-angular mudstone inclusions.</li> </ul>	



111	Layer	<ul style="list-style-type: none"> <li>• Topsoil &amp; Ploughsoil</li> <li>• Moderate to loose, dark brown, silty-clay (loam) with common, small-medium, sub-rounded stone.</li> </ul>	c.220m x 0.4m (trench dimensions) x 0.35m
112	Layer	<ul style="list-style-type: none"> <li>• Subsoil</li> <li>• Compact, light greyish yellow-brown clay with 90% fragmented mudstone bedrock</li> </ul>	
113	Layer	<ul style="list-style-type: none"> <li>• Topsoil &amp; Ploughsoil</li> <li>• Fairly compact, dark brown, silty-clay with common, small-medium, sub-rounded stone.</li> </ul>	c.190m x 0.4m (trench dimensions) x 0.25m
114	Layer	<ul style="list-style-type: none"> <li>• Subsoil</li> <li>• Fairly compact, mid grey clay</li> </ul>	c.190m x 0.4m (trench dimensions) x 0.5m
115	Layer	<ul style="list-style-type: none"> <li>• Subsoil</li> <li>• Loose mid yellow-grey clay with c.80% fragmented bedrock</li> </ul>	

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**APPENDIX II:**  
**Written Scheme of Investigation**

# *Archaeology Wales*

**WRITTEN SCHEME OF INVESTIGATION  
FOR AN ARCHAEOLOGICAL WATCHING BRIEF**

**AT**

**Fenton Home Farm, Crundale,**

**Prepared for:**

The Farm Energy Partnership & Vogt Solar

**20<sup>th</sup> January 2013**

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## NON TECHNICAL SUMMARY

*This Written Scheme of Investigation (WSI) details the proposal for an archaeological Watching Brief during groundworks associated with the construction of a grid connection cable that will connect the proposed solar farm at Fenton Home Farm, Crundale, near Haverfordwest. It has been prepared by Archaeology Wales Limited for The Farm Energy Partnership.*

### **1. Introduction and archaeological background**

The scope of the construction work to be undertaken at the site (NGR SM 9882 1734, Figure 1) includes the digging of a trench 450mm wide and 1000mm deep (extending to 1500mm below Fenton Brook, at which point it will be drilled), laying a 33kv cable and insulation and backfilling to ground level (details in Figure 2). The cable will connect a substation at the solar farm with the National Grid at the Haverfordwest substation on the A40. The planning application number for the solar farm is 13/0278/PA and the planning authority is Pembrokeshire County Council.

This WSI has been prepared by Philip Poucher, Project Manager, Archaeology Wales Ltd (henceforth - AW) at the request of the Farm Energy Partnership on behalf of their client Vogt Solar. It provides information on the methodology that will be employed by AW during an archaeological watching brief at the site.

The methodology set out in this WSI will be agreed with the planning services division of Dyfed Archaeological Trust (DAT - PS) prior to the commencement of groundworks due to be carried out on the site. An archaeological watching brief has been recommended by DAT – PS in their capacity as archaeological advisors to the local planning authority.

All work will be undertaken in accordance with the standards and guidelines of the Institute for Archaeologists (2011).

### **2. Site description and historic background**

The route of the cable trench extends for c.2.5km, from a substation within the solar farm, located in fields to the southwest of Fenton Home Farm (SM 9882 1734), crossing fields to the south and then running west along the A40 to Haverfordwest substation (SM 9785 1607).

The land falls away to the south of Fenton Home Farm into Fenton Brook, a small wooded stream valley feeding into the Cartlett Brook to the west. The land then rises to the south onto undulating high ground along which the A40 runs. The route of the cable trench takes it through fields laid largely to pasture and bounded by hedgerows to a point where it meets the route of the A40 adjacent to Clayboro Farm.

The route of the cable trench runs through an area where sporadic remains dated to the Bronze Age (c.2300 BC – c.700 BC), in the form of burial mounds (PRNs 3334 & 4540) and burnt mounds (PRNs 3332 & 3333), suggest this landscape may have been settled and utilised during this period. No sites of a Bronze Age date have been recorded along the route to be taken by the cable trench but the presence of these

features indicates the potential for further unrecorded Bronze Age remains to be present in this landscape.

The regional Historic Environment Register also records numerous small cottages and farmsteads dating to the post-medieval period (c.1536 - 1900) dotted throughout this landscape. Many of these sites appear to have been abandoned in the late 19<sup>th</sup>- and early 20<sup>th</sup>-century and no longer appear on current maps but evidence of their existence may still remain both above and below ground. No such sites are recorded along the route of the cable trench as it crosses the farmland, however some sites are recorded along the edge of the A40 (PRNs 46917, 46920 & 48816). It is likely however that the cable trench in this area will largely be cut into ground previously disturbed by various modern road improvement works in this area.

### **3 Site specific objectives**

The aims of the watching brief, as defined by the IfA (2011) are:

- To allow a rapid investigation and recording of any archaeological features that are uncovered during the proposed groundworks within the application area.
- To provide the opportunity, if needed, for the watching archaeologist to signal to all interested parties, before the destruction of the material in question, that an archaeological find has been made for which the resources allocated to the watching brief are not sufficient to support the treatment to a satisfactory or proper standard

### **4 Watching Brief Methodology**

#### General

The archaeological watching brief will be undertaken by AW staff using current best practice.

All work will be carried out by a suitably qualified archaeologist with relevant level membership of the Institute for Archaeologists (IfA) and will follow the IfA Standard and Guidance for an archaeological watching brief (2011).

#### Detailed

The Watching Brief will be carried out by a suitably qualified archaeologist during the excavation of the cable trench and all other associated work (removal of topsoil, levelling) where the sub-soil is likely to be exposed or cut into. The mechanical excavation will be undertaken by a machine using a toothless ditching bucket wherever possible.

If archaeological features, finds or deposits are uncovered, work will be stopped in the area of the exposed feature in order that the supervising archaeologist can clean and identify the extent and nature of the feature and for excavation and recording to take place.

All archaeological deposits that are identified will be mapped, cleaned, recorded and fully excavated. The developer will provide a safe working area and sufficient time to record and excavate all features to the satisfaction of AW and DAT - PS. Full excavation of identified features will not be compromised by the construction programme.

### Contingency Arrangements

In the event of significant archaeological features being discovered all activities in this area of the site can be temporarily suspended. This will allow a period of consultation with DAT - PS and if required the opinion of specialists.

Following such consultation, recommendations will be presented to the Developer and the Local Planning Authority.

The methodology and timescale of additional archaeological work to investigate such features will be presented and included in the Developers Programme; the feature will be fenced off and secured thus allowing the site programme to continue.

### Recording

Recording will be carried out using AW recording systems (pro-forma context sheets etc), using a continuous number sequence for all contexts.

Plans and sections will be drawn to a scale of 1:50, 1:20 and 1:10 as required and related to Ordnance Survey datum and published boundaries where appropriate.

All features identified will be tied in to the OS survey grid and fixed to local topographical boundaries. The location of all features will also be recorded using a Topcon GTS725 total station.

Photographs will be taken in digital format, using a 14MP camera with photographs stored in Tiff format. Should significant remains be identified that require excavation, photographs will also be taken in black and white and colour slide (35mm film).

The archaeologist undertaking the watching brief will have access to the AW metal detector and be trained in its use.

### Artefacts

Archaeological artefacts recovered during the course of the excavation will be cleaned and labelled using an accession number, which will be obtained from the local museum. A single number sequence will be allocated to all finds. The artefacts will be stored appropriately until they are deposited with a suitable local museum.

All finds of gold and silver will be removed to a safe place and Natural Resources Wales, Cadw and the local coroner informed, within the guidelines of the Treasure Act 1996.

Any finds which are considered to be in need of immediate conservation will be referred to a UKIC qualified conservator (Phil Parkes at Cardiff University).

### Human remains

In the event of burials or cremations being found all work will be halted in the area of the burials and their extent and nature established. The client, DAT and the Ministry of Justice will be informed and a methodology of excavation agreed which will adhere to Ministry of Justice Guidelines.

### Environmental and technological samples

Environmental samples will be taken where necessary when significant deposits are located. Technological samples will be taken where necessary when significant deposits are located.

### Specialists

In the event of certain finds/features etc. being discovered, the site archaeologist may have to seek specialist opinion for assistance. Such specialists will be accessed either internally within AW itself or from an external source. A list of external specialists is given in the table below.

<b>Type</b>	<b>Name</b>	<b>Tel No.</b>
Flint	Dr Amelia Pannett	02920 899509
Animal bone	Jen Kitch	07739 093712
CBM, heat affected clay, Daub etc.	Rachael Hall	01305 259751
Clay pipe	Hilary Major	01376 329316
Glass	Andy Richmond	01234 888800
Cremated and non-cremated human bone	Malin Holst	01759 368483
Metalwork	Kevin Leahy	01652 658261
Neo/BA pottery	Dr Alex Gibson	Bradford University
IA/Roman pottery	Jane Timby	01453 882851
Post Roman pottery	Mr Stephen Clarke	
Charcoal (wood ID)	John Carrot	01388 772167
Waterlogged wood	Nigel Nayling	University of Wales (Lampeter)
Molluscs and pollen	Dr James Rackham	01992 552256
Charred and waterlogged plant remains	Wendy Carruthers	01443 233466

## 5 Post-Fieldwork Programme

### Conservation

After agreement with the client, DAT and any identified landowner arrangements will be made for the long term conservation and storage of all artefacts in an appropriate local or county museum.

### Archive

The site archive will be prepared in accordance with MAP 2, Appendix 3 (English Heritage 1991). It will comprise all the data recovered during the fieldwork and shall be quantified, ordered and indexed and will be internally consistent. The archive will be deposited with the finds in a suitable local museum.

### Reporting

The results of the watching brief will be submitted in an illustrated and bound report, which will include the following material:

- Non-technical summary
- Location plan showing the area/s covered by the watching brief, all artefacts, structures and features found
- Plan and section drawings with ground level, ordnance datum and vertical and horizontal scales.
- Written description and interpretation of all deposits identified, including their character, function, potential dating and relationship to adjacent features. Specialist descriptions and illustrations of all artefacts and soil samples will be included as appropriate.
- An indication of the potential of archaeological deposits which have not been disturbed by the development
- Statement of local, regional and national context of the remains
- A detailed archive list at the rear listing all contexts recorded, all samples finds and find types, drawings and photographs taken. This will include a statement of the intent to deposit, and location of deposition, of the archive.

### Monitoring

Any changes to the specification that the contractor may wish to make after approval will be communicated to DAT-PS for approval on behalf of the Planning Authority.

Representatives of DAT-PS will be given access to the site so that they may monitor the progress of the watching brief. DAT-PS will be kept regularly informed about developments, both during the site works and subsequently during any potential post-excavation.

### Archive Format & Deposition

The full site archive will be deposited within one month of the completion of the client report.

The paper/drawing/digital archive will be deposited at the appropriate regional archival store with the finds will be deposited with the appropriate local museum. AW will agree the location and timing of the deposition of the archive before the contract commences.

The archive will include all site notes, finds, documents, drawings, photographs, digital



data and a copy of the final report and any prior draft versions. All of these items will be clearly quantified **in tabular form in an 'archive deposition statement' located at the rear of the clients report**, and their ultimate location and proposed date of deposition stated.

## **6 Resources and timetable**

### Standards

The watching brief will be undertaken by AW staff using current best practice.

All work will be undertaken to the standards and guidelines of the IFA.

### Staff

The project will be undertaken by suitably qualified AW staff.

### Equipment

The project will use existing AW equipment.

### Timetable of archaeological works

The watching brief will be undertaken at the convenience of the client.

### Insurance

AW is an affiliated member of the CBA, and holds Insurance through the CBA insurance service.

### Health and safety

All members of staff will adhere to the requirements of the *Health & Safety at Work Act, 1974*, and the Health and Safety Policy Statement of AW.

# Archaeology Wales



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