

Bentley Estate Uckfield East Sussex

Archaeological Watching Brief



for
Hyder Consulting (UK) Limited

on behalf of
Lightsource Renewable Energy

CA Project: 770214
CA Report: 15802

October 2015

Planning Application Ref:
WD/2015/0193/MAJ



Bentley Estate Uckfield East Sussex

Archaeological Watching Brief

CA Project: 770294
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CONTENTS

SUMMARY	2
1. INTRODUCTION.....	3
2. ARCHAEOLOGICAL BACKGROUND.....	5
3. AIMS AND OBJECTIVES.....	8
4. METHODOLOGY	9
5. RESULTS (FIGS 2-6).....	10
6. DISCUSSION.....	10
7. CA PROJECT TEAM.....	11
8. REFERENCES.....	11
APPENDIX A: CONTEXT DESCRIPTIONS	12
APPENDIX B: OASIS REPORT FORM.....	13

LIST OF ILLUSTRATIONS

- Fig. 1 Site location plan
- Fig. 2 The site, showing location of groundworks
- Fig. 3 Working Shot
- Fig. 4 Working Shot
- Fig. 5 Working Shot
- Fig. 6 South facing representative section



SUMMARY

Project Name:	Bentley Estate Solar Farm
Location:	Uckfield, East Sussex
NGR:	548330, 116990
Type:	Watching Brief
Date:	29 October 2015
Planning Reference:	WD/2015/0193/MAJ
Location of Archive:	East Sussex HER
Site Code:	BENT15

An archaeological watching brief was undertaken by Cotswold Archaeology during groundworks associated with the development of a solar farm and associated infrastructure at Bentley Estate, Uckfield, East Sussex

Despite the archaeological potential of the site as identified in the archaeological evaluation, the watching brief was unable to identify any further archaeological features or deposits as a result of the very limited scope of groundworks that could be observed.



1. INTRODUCTION

- 1.1 In October 2015 Cotswold Archaeology (CA) carried out an archaeological watching brief at the request of Hyder Consulting (UK) Limited on behalf of Lightsource Renewable Energy (the Client).
- 1.2 The watching brief was undertaken to fulfil a condition attached to planning permission (Ref: WD/2015/0193/MAJ) approved by Wealden District Council (WDC) for the Installation and Operation of a Solar Farm and Associated Infrastructure, Including Photovoltaic Panels, Mounting Frames, Inverters, Transformers, Substations, Communications Building, Fence and Pole Mounted Security Cameras, for the Life of the Solar Farm. Conditions 10 and 11 relate to archaeology and state:

Condition 10: No development shall take place until the developer has secured the implementation of a programme of archaeological work (including archaeological evaluation), in accordance with a Written Scheme of Archaeological Investigation which has been submitted to and approved in writing by the Local Planning Authority.

REASON: To enable the recording of any items of historical or archaeological interest, in accordance with Policies SPO2 and WCS14 of the Wealden Core Strategy Local Plan 2013 and the requirements of paras 129, 131 and 132 of the NPPF

Condition 11: The development hereby permitted shall not be brought into use until the archaeological site investigation and post investigation assessment (including provision for analysis, publication and dissemination of results and archive deposition) has been completed in accordance with the programme set out in the Written Scheme of Investigation approved under condition [16] to the satisfaction of the Local Planning Authority.

REASON: To enable the recording of any items of historical or archaeological interest, in accordance with Policies SPO2 and WCS14 of the Wealden Core Strategy Local Plan 2013 and the requirements of paras 129, 131 and 132 of the NPPF

- 1.3 The planning decision was informed by a Heritage Desk-based Assessment and Walkover Survey (Hyder 2014) and Geophysical Survey StrataScan (2014). Following consultation by WDC with the East Sussex Archaeological Adviser (ESAA) in the light of these investigations it was recommended that any planning approval should be subject to conditions as detailed above in paragraph 1.2.
- 1.4 Following approval of conditional planning permission an archaeological evaluation was undertaken by Cotswold Archaeology (CA 2015b) in accordance with an approved WSI (CA 2015a). The evaluation identified the survival of archaeological features and deposits within the site. The results of the evaluation allowed the ESAA to provide consultee advice to WDC in regard of further archaeological mitigation in the form of an archaeological watching brief that would be required during the construction of the solar farm.
- 1.5 A detailed *Written Scheme of Investigation* (WSI) produced by CA (2015) in order to further address conditions 10 and 11 of the approved planning application was submitted to and approved by East Sussex Archaeological Adviser acting on behalf of the LPA prior to the commencement of fieldwork. The WSI was also guided by *Standard and Guidance: Archaeological watching brief* (ClfA 2014), the *Sussex Archaeological Standards* (April 2015) and the *Management of Archaeological Projects 2* (English Heritage 1991), the *Management of Research Projects in the Historic Environment (MORPHE): Project Manager's Guide* (EH 2006).

The site

- 1.6 The site is located to the south-west of the A22 (Eastbourne Road), approximately 1km north-west of Halland village. The proposed application area is c.29.6 hectares split over six fields. The fields are bounded by a combination of hedgerows and tree-lines and small areas of woodland lie immediately adjacent to the south-eastern and north-western site boundaries. A small stream runs through the site.
- 1.7 However the proposed development area of the solar arrays will be confined to a single field in the south west corner of the site c. 8ha in size along with a compound area of c. 0.3ha in size in the field to the north (Fig. 2).

- 1.8 The solid geology underlying the site comprises Weald Clay Formation, a sedimentary bedrock formed approximately 125 to 134 million years ago and Tunbridge Wells Sand Formation, a sedimentary bedrock formed approximately 134 to 140 million years ago (British Geological Survey Digital Geological map, 1:10,000). A fault runs east-west across the southern portion of the application site, at a boundary of the two formations. The only superficial deposit recorded within the application site is a band of alluvial deposits mapped along the course of the stream, which runs across the southern portion of the application site. The alluvial deposits were formed within the last 1.8 million years.
- 1.9 The topography within, and immediately surrounding the application site broadly consists of two areas of higher ground sloping gently downwards towards the stream that runs across the site. The site slopes downwards in a south-easterly direction from 36m AOD at the north-eastern extent of the site to the stream, which lies 19m AOD and then upwards to 35m AOD at the south-western extent of the site. The surrounding landscape largely comprises agricultural fields interspersed with stands of plantation woodland, small scattered settlements and isolated agricultural and residential properties. Principal landscape features in the wider area include Plashett Wood, 2km to the south-west and the town of Uckfield, the southern borders of which lie 2km to the north. The main watercourse in the area, the River Ouse, runs about 3.5km to the west.

2. ARCHAEOLOGICAL BACKGROUND

- 2.1 A DBA of the site has previously been undertaken setting out the archaeological and historical background to the site (Hyder 2014). A brief summary of these results is set out below.
- 2.2 The earliest evidence of prehistoric activity within the study area are the locations of groups of Mesolithic (circa 10,000BC to 4,000BC) and Neolithic (c. 4,000BC to 2,500BC) flint tools, some with associated manufacturing debris recorded c. 0.75km to the west of the application site boundary.
- 2.3 A possible Neolithic or Bronze Age (c. 2,500BC to 800BC) round barrow 1.5km south-west of the application site, on the opposite side of the A26, within Plashett Wood. Although the feature may actually be a medieval hunting platform associated

with the adjacent deer park. In the wider area, archaeological investigations have identified a probable late Iron Age settlement, as well as an associated ditched enclosure and numerous pits at Plashett Park Farm.

- 2.4 The Roman asset nearest to the site is a Roman bloomery, or iron smelting site, located 0.7km to the south-west of the site. A Roman period 'rubbish' pit was identified in 1932 during widening of a section of the A26 Lewes to Uckfield Road, approximately 2km west of the site. Within the wider landscape, The London to Lewes Roman road runs north-east / south-west c. 5km to the west of the application site. A new Roman town located approximately 5km to the south west of the application site has also been identified during a recent geophysical survey.
- 2.5 The only clear evidence for Early Medieval period activity within the study area is Munken Lane, a trackway running through Plashett Wood approximately 2km south-west of the site, that is thought to follow the course of a previous Early Medieval road. The site itself is likely to have been forested at this time, as suggested by the Historic Landscape Characterisation (HLC) data, which records many of the fields in this area as medieval assarts (i.e. land that was deforested during the medieval period). The HLC data also records a large amount of ancient woodland across this area (including Plashett Wood), much of which is thought to have originated during the Early Medieval period.
- 2.6 Plashett Park (now Plashett Wood) is first referenced as a deer park in 1285, when it was referred to as 'le Plessit Park'. During the eighteenth century, the park was in possession of the Gage family and it was subsequently restored in 1825. Also associated with the deer park is a moated site 1.75km to the south-east of the application site, which is probably the lodge of the Prior of Lewes. The HLC data suggests that it was during the medieval period that the land within the application site, as well as much of the land within the wider study area, was first cleared of woodland and brought into agricultural use. This agricultural intensification is attested to by the survival of numerous medieval farmhouses within the region.
- 2.7 During the Post-medieval period the site and the surrounding study area continued to be predominantly agricultural in character. The HLC data shows an increasing number of farmsteads appearing at this time in the vicinity of the site. A building, probably a small dwelling or farmstead, is first shown on Gardner and Gream's 1795

map of Sussex as lying within the site and is labelled Whitelocks. There is no evidence of this farmstead on the site today.

- 2.8 In the modern period the site and the surrounding study area remained predominantly agricultural land within a landscape of small farmsteads, with the Bentley Motor Museum and Wildfowl Reserve being a significant feature to the south-east and the East Sussex National Golf Club a significant feature to the north-west. Both saw construction of new buildings in the vicinity of existing farmsteads during the late 20th and early 21st centuries.

Geophysical Survey

- 2.9 A detailed gradiometry survey was conducted over approximately 29.6 hectares of the site (SS 2014). The survey did not identify any probable archaeology. Several possible archaeological anomalies were identified; however it was not possible to determine their origin with any degree of confidence. The majority of the anomalies identified are of modern origin relating to former field boundaries, agricultural activity, an underground service, ferrous objects and fencing. Within the area of the site that is to be investigated an underground service (5) was identified along with areas of magnetic variation (6) which are likely to be geological or pedological in origin. A number of magnetic 'spikes' (strong focussed values with associated antipolar response) indicate ferrous metal objects (9). These are likely to be modern rubbish.

Trial trench evaluation

- 2.10 An archaeological evaluation was undertaken by Cotswold Archaeology in May 2015 comprising the excavation of eleven 20m x 2m trial trenches (CA 2015b).
- 2.11 Three trenches (trenches 5, 6 and 7) revealed linear ditches on a south west to north east alignment, which does not correspond to the modern day field alignments. The ditches possibly form part of a former field system boundary dating to the Romano-British period. The ditches in trenches 6 and 7 remained undated, but the ditch recorded within trench 5 contained a single sherd of Romano-British pottery and a quantity of unabraded Early Saxon pottery, and may indicate activity of this Early Saxon period within the site and its vicinity. A pit recorded in trench 7 produced a single highly abraded sherd of Early Saxon pottery. All these features lay on a downward slope within the field and were sealed by c.0.80 to 0.90m of topsoil, subsoil and colluvium.

2.12 An undated possible hearth/fire pit with in situ scorching was also recorded in trench 11 in the south west corner of the site. The topsoil and subsoil overburden in this part of the site was found to be only c.0.45m in depth to the top of the geological and archaeological horizon.

2.13 A palaeochannel recorded in trench one was found to contain quantities of charcoal along with a number of worked flints. Additionally small quantities of worked and burnt flints were recovered from the topsoil of three trenches. The remaining six trenches were devoid of archaeological features.

3. AIMS AND OBJECTIVES

3.1 The objectives of the archaeological works were:

- to monitor groundworks, and to identify, investigate and record all significant buried archaeological deposits revealed on the site during the course of the development groundworks;
- at the conclusion of the project, to produce an integrated archive for the project work and a report setting out the results of the project and the archaeological conclusions that can be drawn from the recorded data.

3.2 Specific aims were

- Can further dating evidence for the establishment of the field system recorded in the evaluation be identified?
- Try and provide dating evidence for the fire pit/hearth feature recorded in trench 11 and establish whether it is an isolated find spot or part of more extensive archaeological evidence.
- Establish whether the firepit / hearth in trench 11 can be linked to Romano-British metalworking activity that has been recorded within the vicinity of the site.



- Can further evidence of Early Saxon activity be identified at the site in particular near to Trench 5 and if identified can it be established what type of activity is being undertaken?
- Is the Early Saxon activity transitory or is there evidence of more permanent activity? Can it be established if the activity is domestic or industrial?
- If a date can be established is the feature recorded in trench 11 Early Saxon in date rather than possibly Roman?
- Early Saxon pottery from East Sussex is relatively rare. Can more pottery of this date be recovered which will help to add to the growing dataset and help refine our understanding and dating of the types of pottery already recorded and anymore examples that may be recovered during the course of the watching brief

4. METHODOLOGY

- 4.1 The proposed agreed fieldwork methodology as set out within the WSI (CA 2015) had been to monitor groundworks associated with the establishment of the site compound and for the excavation of two cable trenches (Cable Trench 1 and 2) (Fig. 2).
- 4.2 Monitoring of the site compound was not required as no intrusive groundworks were undertaken, as the compound was established and constructed directly on the existing ground surface..
- 4.3 Although a specific date of 29 October 2015 for site attendance by an archaeologist was provided it was found that on attending site on this date that the cable trenches had already been excavated, cable laid and the vast majority of the trenches had already been backfilled. Only a small open section of Cable Trench 1 remained that could be observed (Fig. 2).
- 4.3 A written, graphic and photographic record was compiled in accordance with CA Technical Manual 1: *Fieldwork Recording Manual* of the remaining open excavated cable trench section and visible soil profile.

- 4.4 The archive and artefacts from the evaluation and watching brief are currently held by CA at their offices in Andover. Subject to the agreement of the legal landowner the artefacts will be deposited with the Barbican House Lewes, along with the site archive. However, Barbican House Lewes is currently not accepting archives, and until this is resolved or another repository has been identified the archive will be securely stored at the offices of Cotswold Archaeology in Andover
- 4.5 A summary of information from this project, set out within Appendix B, will be entered onto the OASIS online database of archaeological projects in Britain.

5. RESULTS (FIGS 2-6)

- 5.1 Only one small excavated c.5m long section of cable trenching (Fig. 2, 4 & 6) remained open and was visible to the attending archaeologist. This was located in the southern most portion of Cable Trench 1. It had been partially backfilled and cable had been laid within it, so observation was limited to a small section of the trench. No archaeological features or deposits were observed within this cable trench and, despite visual scanning of spoil, no artefactual material pre-dating the modern period was recovered
- 5.2 The natural geological substrate (**103**) consisting of orange clay with no inclusions was revealed at an average depth of 0.60m below present ground level. This was overlain by greyish brown firmly compacted sandy clay subsoil (**102**) with very rare sub-angular stone inclusions with an average thickness of 0.39m. The topsoil (**101**) consisted of a greyish brown moderately compacted sandy clay and had an average thickness of 0.21m

6. DISCUSSION

- 6.1 Despite the archaeological potential of the site as identified in the archaeological evaluation, the watching brief was unable to identify any further archaeological features or deposits as a result of the very limited scope of groundworks that could be observed.



7. CA PROJECT TEAM

Fieldwork was undertaken by Ray Kennedy, assisted. The report was written by Ray Kennedy. The illustrations were prepared by Leno Heatley. The archive has been compiled by Tom Rowley and prepared for deposition by Hazel O'Neill. The project was managed for CA by Damian De Rosa

8. REFERENCES

BGS (British Geological Survey) 2011 *Geology of Britain Viewer*
http://maps.bgs.ac.uk/geology_viewer_google/googleviewer.html

Cotswold Archaeology 2015a, *Bentley Estate Uckfield, East Sussex, Written Scheme of Investigation for Archaeological Evaluation*. Project No. 770214

Cotswold Archaeology 2015, *Bentley Estate Uckfield, East Sussex, Written Scheme of Investigation for Archaeological Watching Brief*. Project No. 770294

Cotswold Archaeology 2015b. *Bentley Estate Uckfield, East Sussex, Archaeological Evaluation*. Report No. 15269. Project No. 770214

Hyder Consulting 2013: 'Bentley Estate Solar Development Cultural Heritage Desk-Based Assessment

Stratascan 2014. Bentley, East Sussex. Geophysical Survey Report. Job Ref. J6403

Sussex Archaeological Standards April 2015.



APPENDIX A: CONTEXT DESCRIPTIONS

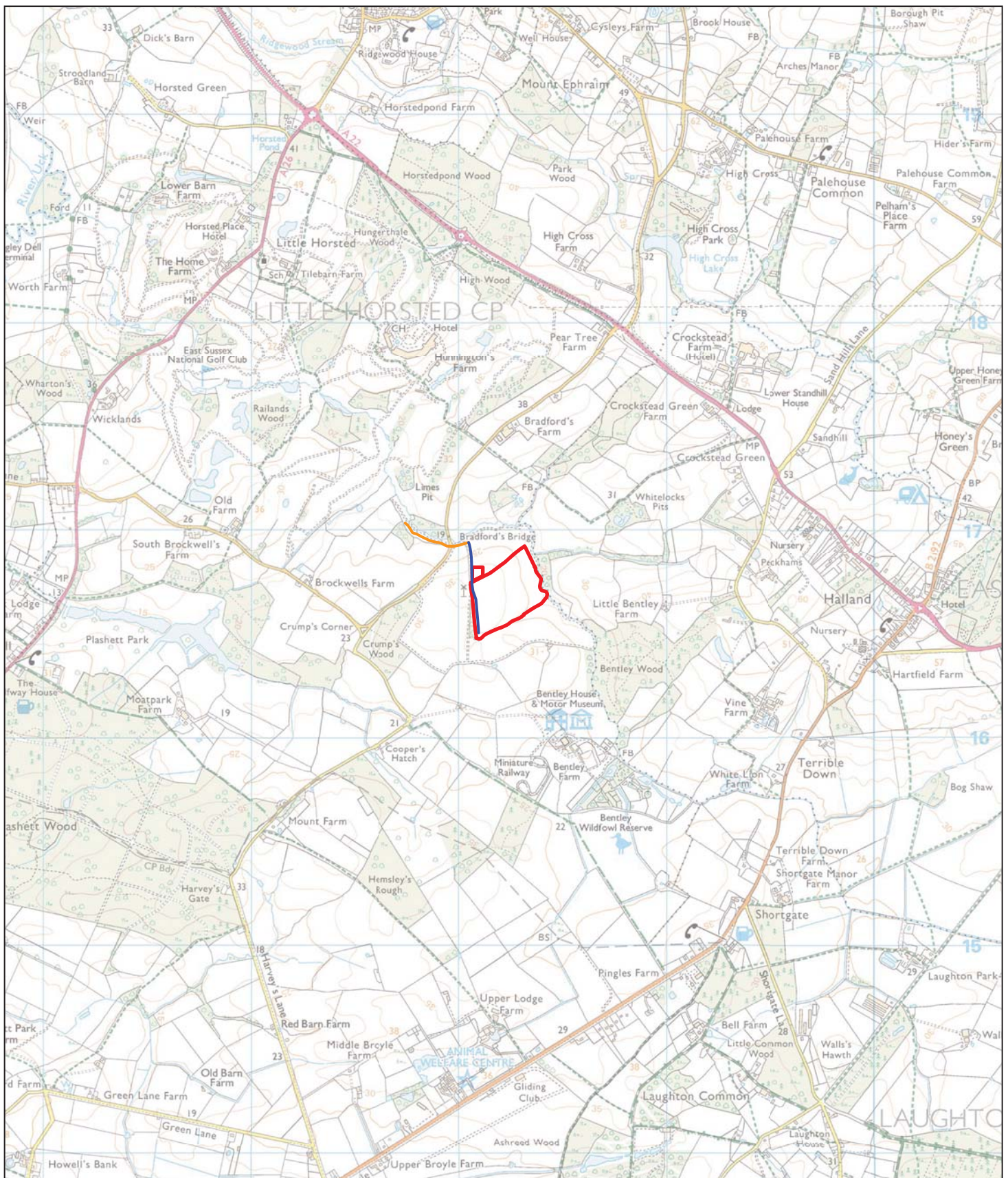
Trench No.	Context No.	Type	Context interpretation	Description	L (m)	W (m)	Depth/thickness (m)
1	101	Layer	Topsoil	Greyish brown moderately compacted sandy clay with no inclusions and frequent bioturbation	N/A	0.75	0-0.21
1	102	Layer	Subsoil	Greyish brown firmly compacted sandy clay with v rare sub-angular stone inclusions	N/A	0.75	0.21-0.60
1	103	Layer	Natural	Brownish-orange clay with no inclusions	N/A	0.75	0.60+

APPENDIX B: OASIS REPORT FORM

PROJECT DETAILS	
Project Name	Bentley Estate, Uckfield, East Sussex Watching Brief
Short description (250 words maximum)	<p>An archaeological watching brief was undertaken by Cotswold Archaeology during groundworks associated with the development of a solar farm and associated infrastructure at Bentley Estate, Uckfield, East Sussex</p> <p>The watching brief was carried out following the undertaking of an archaeological evaluation of the site by Cotswold Archaeology in advance of the proposed development.</p> <p>Despite the archaeological potential of the site as identified in the archaeological evaluation, the watching brief was unable to identify any further archaeological features or deposits as a result of the very limited scope of groundworks that could be observed.</p>
Project dates	29/10/2015
Project type (e.g. desk-based, field evaluation etc)	Watching Brief
Previous work (reference to organisation or SMR numbers etc)	<p>Hyder Consulting 2013: 'Bentley Estate Solar Development Cultural Heritage Desk-Based Assessment</p> <p>Stratascan 2014. Bentley, East Sussex. Geophysical Survey Report. Job Ref. J6403</p> <p>Cotswold Archaeology, 2015, Bentley Estate Uckfield, East Sussex, Archaeological Evaluation. Report No. 15269. Project No. 770214</p>
Future work	None
PROJECT LOCATION	
Site Location	Bentley Estate, Uckfield, East Sussex
Study area (M ² /ha)	29.6 ha
Site co-ordinates (8 Fig Grid Reference)	548330, 116990
PROJECT CREATORS	
Name of organisation	Cotswold Archaeology
Project Brief originator	East Sussex Archaeological Adviser
Project Design (WSI) originator	Cotswold Archaeology
Project Manager	Damian De Rosa
Project Supervisor	Ray Kennedy
MONUMENT TYPE	
None	
SIGNIFICANT FINDS	
None	
PROJECT ARCHIVES	
Intended final location of archive (museum/Accession no.) Barbican House Lewes, but to be held temporarily at CA Andover	Content (e.g. pottery, animal bone etc)
Physical	None
Paper	Context sheets, plans
Digital	Photos, survey data

BIBLIOGRAPHY	
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Cotswold Archaeology 2015b. Bentley Estate, Uckfield, East Sussex. Archaeological Watching Brief. Report No. 15802 Project No. 770294



- site boundary
- mains connection cable (within application area)
- mains connection cable (permitted development)

0 1km

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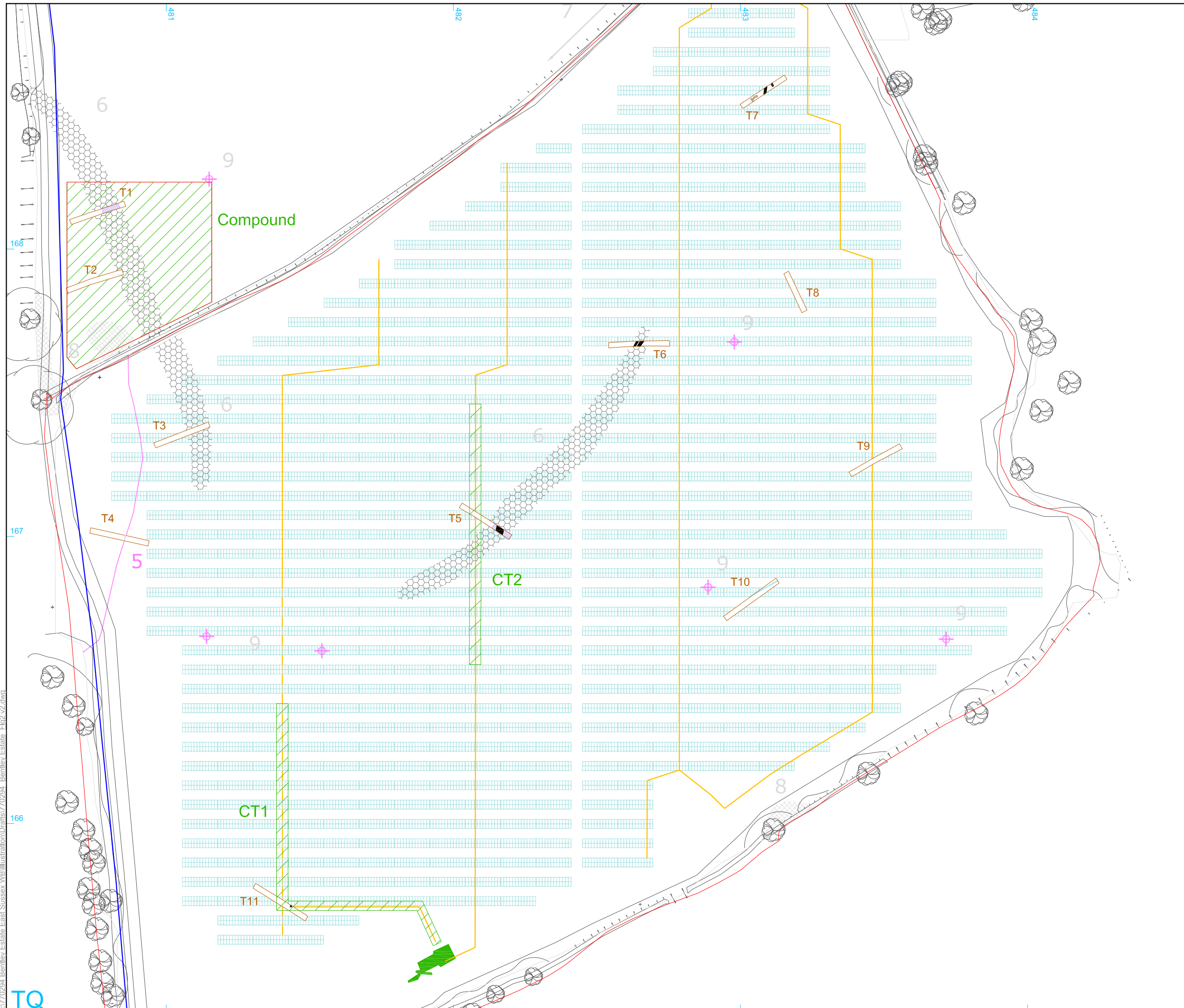
PROJECT TITLE
Bentley Estate, Uckfield, East Sussex

FIGURE TITLE
Site location plan

DRAWN BY LJH **PROJECT NO.** 770294
CHECKED BY DJB **DATE** 04/11/15
APPROVED BY DDR **SCALE@A4** 1:25,000

FIGURE NO.

1



- site boundary
- proposed watching brief area
- observed groundworks
- previous evaluation trench (CA 2015)
- solar panel module
- proposed mains connection cable (within application area)
- proposed cable trenches
- archaeological feature
- geological feature
- bioturbation
- field drain

Geophysics Survey results (Stratascan 2014)

Probable Archaeology

- Positive anomaly / weak positive anomaly - probable cut feature of archaeological origin
- Negative anomaly / weak negative anomaly - probable bank or earthwork of archaeological origin
- Linear anomaly - probably associated with former field boundaries
- Widely spaced curving parallel linear anomalies - probably related to ridge-and-furrow

Possible Archaeology

- Positive anomaly / weak positive anomaly - possible cut feature of archaeological origin
- Negative anomaly / weak negative anomaly - possible bank or earthwork of archaeological origin
- Linear anomaly - possibly associated with former field boundaries

Other Anomalies

- Closely spaced parallel linear anomalies - probably related to agricultural activity such as ploughing
- Linear anomaly - probably related to pipe, cable or other modern service
- Linear anomaly - possibly related to land drain
- Magnetic disturbance associated with nearby metal object such as service or field boundary
- Strong magnetic debris - possible disturbed or made ground
- Scattered magnetic debris
- Area of amorphous magnetic variation - probable natural (e.g. geological or pedological) origin
- Magnetic spike - probable ferrous object



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PROJECT TITLE
Bentley Estate, Uckfield, East Sussex

FIGURE TITLE
Trench location plan showing watching brief areas

DRAWN BY	LJH	PROJECT NO.	770294	FIGURE NO.	
CHECKED BY	DJB	REVISION	03		
DATE	12/11/2015	SCALE@A3	1:1250		2

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TQ



3



4



5



6

- 3 Working shot
- 4 Working shot
- 5 Working shot
- 6 South-facing representative section (1m scale)

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