THORNE FARM
ISLE OF THANET
KENT

WATCHING BRIEF REPORT
CP. NO 10835 & 10848
05/11/2014

WARDELL ARMSTRONG ARCHAEOLOGY
COCKLAKES YARD,
CUMWHINTON,
CARLISLE,
CUMBRIA,
CA4 0BQ
TEL: 01228 564820
FAX: 01228 560025
WWW.WA-ARCHAEOLOGY.COM

WARDELL ARMSTRONG ARCHAEOLOGY

DOCUMENT TITLE:	Land at Thorne Farm, Isle of Thanet, Kent
DOCUMENT TYPE:	Watching Brief Report
CLIENT:	Lightsource Renewable Energy Ltd.
CP NUMBER:	10835 & 10848
SITE CODE:	TFK-C
OASIS REFERENCE:	wardella2-194177
PRINT DATE:	05/11/2014
GRID REFERENCE:	TR 33158 65310

Quality Assurance
This report covers works as outlined in the brief for the above-named project as issued by the relevant authority, and as outlined in the agreed programme of works. Any deviation to the programme of works has been agreed by all parties. The works have been carried out according to the guidelines set out in the Institute for Archaeologists (IfA) Standards, Policy Statements and Codes of Conduct. The report has been prepared in keeping with the guidance set out by WA Archaeology on the preparation of reports.

REVISION SCHEDULE			
	01	**02**	**03**
PREPARED BY:	Scott Vance and Ed Johnson		
POSITION:	Assistant Supervisor and Project Archaeologist		
DATE:	25/07/14		
EDITED BY:	Richard Newman		
POSITION:	Project Manager		
DATE:	28/08/14		
APPROVED BY:	Frank Giecco		
POSITION:	Technical Director		
DATE:	04/11/14		

CONTENTS

ILLUSTRATIONS

FIGURES (APPENDIX 2)

PLATES

SUMMARY

Wardell Armstrong Archaeology was commissioned by Lightsource Renewable Energy Limited, to undertake an archaeological watching brief at Thorne Farm, Kent (NGR TR 33158 65310). The work followed a planning application for the construction of a solar farm and was required as the site lies within an area of high archaeological interest.

The archaeological watching brief was split into two phases. Phase One (foundations and cable trenches within solar farm) was undertaken over 34 days between the 17/06/2014 and 30/07/2014. Phase Two (cable trench connecting the solar farm to the national grid) was undertaken over 42 days between 07/07/14 and 11/09/14. No archaeological remains were noted in either phase.

ACKNOWLEDGEMENTS

Wardell Armstrong Archaeology would like to thank Lightsource Renewable Energy Limited, for commissioning the project, and for all assistance throughout the work.

The archaeological watching brief was undertaken by Ed Johnson, Helen Phillips, Scott Vance, Megan Stoakley, Adam Slater and Eleonora Montanari. The report was written by Scott Vance (Phase One) and Ed Johnson (Phase Two).The drawings were produced by Adrian Bailey. The project was managed by Frank Giecco, Technical Director for WAA. The report was edited by Richard Newman, Project Manager for WAA.

1 INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

1.1.1 In June 2014 Wardell Armstrong Archaeology was invited by Lightsource Renewable Energy Ltd to maintain an archaeological watching brief at Thorne Farm, Kent (NGR TR 33158 65310 ; Figure 1) during groundworks associated with the installation of a solar farm. The intention of the programme of archaeological watching brief was to contribute to heritage knowledge of the area through the recording of any archaeological remains exposed as a result of excavations in connection with the development. The archaeological work was undertaken in accordance with Wardell Armstrong Archaeology Project Design (Evans 2014), which was submitted to, and approved by Wendy Rogers, Senior Archaeological Officer at Kent County Council. This is in line with government advice as set out in Section 12 of the National Planning Policy Framework (NPPF 2012).

1.1.2 It was believed that archaeological remains could survive at the site, including potential prehistoric, Romano-British and medieval activity. In particular, during the early 1980s, a gas pipeline was constructed within and parallel to the northern boundary of the site, which was subject to archaeological monitoring. Within the northwest corner of the site a spread of material indicative of settlement activity was recorded, which included burnt flint, shells, bones and Iron Age pottery (HER reference TR 36 NW 185). To the east of this three graves, two of which were dated to the Anglo Saxon period, were recorded within the site boundary (HER reference TR 36NW 186). Further to the east a series of inhumations and cremations dated to the Roman period were recorded (HER reference TR 36 NW 187). In the northeast corner of the site the gas pipeline trench was observed to cut a V-shaped ditch which contained Romano-British pottery within its fill (HER reference TR 36 NW 188). There was therefore potential for further archaeological features to extend southwards into the proposed development area.

1.1.3 All groundworks associated with the development of solar farm had to be excavated under full archaeological supervision and all stages of the archaeological work were undertaken following approved statutory guidelines (IfA 2008).

1.1.4 This report outlines the monitoring works undertaken on-site, the subsequent programme of post-fieldwork analysis, and the results of this scheme of archaeological work.

2 METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 A project design was submitted by Wardell Armstrong Archaeology (2014) in response to a request by Lightsource Renewable Ltd, for an archaeological watching brief of the study area. Following acceptance of the project design by Wendy Rogers, Senior Archaeological Officer at Kent County Council, Wardell Armstrong Archaeology was commissioned by the client to undertake the work. The project design was adhered to in full, and the work was consistent with the relevant standards and procedures of the Institute for Archaeologists (IfA 2008).

2.2 THE WATCHING BRIEF

2.2.1 The works involved a structured watching brief to observe, record and excavate any archaeological deposits from the development site. A watching brief is a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons, on a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed (IfA 2008).

2.2.2 The aims and principal methodology of the watching brief can be summarised as follows:

- to establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record them;
- to carry out further excavation and recording work in adequate time, if intact archaeological remains are uncovered during the project;
- to accurately tie the area watched by the archaeologist into the National Grid at an appropriate scale, with any archaeological deposits and features adequately levelled;
- to sample environmental deposits encountered as required, in line with English Heritage (2002) guidelines;
- to produce a photographic record of all contexts using colour digital, and monochrome formats as applicable, each photograph including a graduated metric scale;
- to recover artefactual material, especially that useful of dating purposes;
- to produce a site archive in accordance with IFA, 2009

2.2.3 The watching brief was undertaken in two phases. Phase One measured approximately 152860m^2 and included the archaeological monitoring of access roads, substation foundations and cable trenches. The cable trenches are shown in Figure 2 and are split into Green (0.5m wide x 0.7m deep), Blue (0.6m wide x 1m deep) and Purple (0.6m wide x 1.2m deep). Archaeological monitoring and supervision of groundworks associated with the excavation commenced on 17th June 2014. A summary of the findings of the watching brief is included within this report (Section 4).

2.2.4 Phase Two (Figure 3) monitored the excavation of the cable trenches connecting the solar farm on to the national grid. Measuring approximately 2000m the trenches were excavated to a depth of 1.2m- 1.4m with ducting placed in the base of the trench before being backfilled.

2.3 THE ARCHIVE

2.3.1 A full professional archive has been compiled in accordance with the specification, and according to the Archaeological Archives Forum recommendations (Brown 2011). The archive will be deposited within an appropriate repository, with copies of the report sent to the County Historic Environment Record at Maidstone, Kent, available upon request. The archive can be accessed under the unique project identifier WAA14, TFK-C, CP 10835/10848.

2.3.2 Wardell Armstrong Archaeology, and Kent County Council, support the **O**nline **A**cces**S** to the **I**ndex of Archaeological Investigation**S** (**OASIS**) project. This project aims to provide an on-line index and access to the extensive and expanding body of grey literature, created as a result of developer-funded archaeological work. As a result, details of the results of this project will be made available by Wardell Armstrong Archaeology, as a part of this national project. The unique OASIS identification number for this project is **wardella2-194177**.

3 BACKGROUND

3.1 LOCATION AND GEOLOGICAL CONTEXT

3.1.1 Thorne Farm lies approximately 6km to the west of Ramsgate within the Isle of Thanet, which lies at the most easterly point of Kent. While in the past it was separated from the mainland by the wide River Wantsum, it is no longer an island. Land heights slope from a maximum height of 50m AOD along the northern boundary of the site to a minimum of 35m AOD along the southern site boundary.

3.1.2 The underlying geology at the northern extent of site (Phase One) comprised of Margate Chalk Member. This sedimentary bedrock was formed approximately 71 to 86 million years ago in the Cretaceous Period (BGS 2001). At the southern extent of the development area (Phase Two), Thanet Formation (Sand, Silt & Clay) sedimentary bedrock was observed that formed approximately 56 to 59 million years ago in the Palaeogene Period *(ibid*.).

3.1.3 The superficial geology observed during Phase One comprised sandy clay with bands of undulating chalk. To the south (Phase Two) Head, 1 Clay and Silt was observed that formed up to 3 million years ago in the Quaternary Period (*ibid*.).

3.1.4 Historic Landscape Characterisation (HLC) defines the study area as post-medieval informal enclosure. It is located within the Isle of Thanet Character Area, which is recorded as being an area of fields bound by trackways, a character type common to Thanet.

3.2 HISTORICAL CONTEXT

3.2.1 ***Introduction:*** an Archaeology and Cultural Heritage Assessment was undertaken by Wardell Armstong LLP (Dawson 2013), a summary of which is included below. The historical background is compiled mostly from secondary sources, and is intended only as a brief summary of historical developments specific to the study area. References to the Kent Historic Environment Record (HER) are included where known.

3.2.2 ***Prehistoric (up to c.43 AD):*** the earliest evidence for activity in the area comprises the recovery of nine early Palaeolithic handaxes from Thanet. However, there is no evidence for Middle or Upper Palaeolithic activity (Moody 2008 & Scott 2010). Evidence for Mesolithic activity is also sparse, but recent work undertaken ahead of the construction of the East Kent Access Road has recovered Mesolithic tranchet axes and worked flint (Oxford & Wessex Archaeology 2011).

3.2.3 A causewayed enclosure has been recorded at Ramsgate to the east of the site, and Neolithic flints have been recorded to the southwest of the site (HER TR 36 SW 100). By the Bronze Age period Thanet's coastal location proved ideal for sea trade with other coastal communities of Britain and mainland Europe. By the end of the Bronze Age Thanet was of paramount importance essentially providing a gateway between the Continent and the rest of Kent (Yates 2010).

3.2.4 Known Bronze Age activity was recorded *c*.30-40m north of the site prior to the construction of the East Kent Access Road. This comprised an enclosure with possible ritual associations, and a pit was recorded *c*.10m north of the site. Slightly further afield but still in the vicinity of the site the HER records a possible Bronze Age settlement 1km to the north (HER TR 36 NW 226). In addition potential Bronze Age funerary activity is attested to by possible barrows located 450m east, 670m west, 680m west and 900m west of the site boundary (TR 36 NW 34, TR 36 NW 179, TR 36 NW 241 and TR 36 NW 178).

3.2.5 Thanet is believed to have been one of the most densely populated parts of Kent during the early Iron Age (700-300 BC). Although the middle Iron Age (300-150 BC) appears to have witnessed a decline in population, by the end of the period (150 BC – 43 AD) population levels appear to have increased again with occupation being more widespread and by now supported by coinage (Parfitt 2010). When Julius Caesar visited Thanet he recorded a landscape of farmsteads inhabited by people with coinage (Andrews 2010).

3.2.6 The ridgeway, located to the north of the site boundary, is likely to have been a routeway during this period. It probably provided access between upland settled areas of Thanet, where livestock farming and grain production dominated, to the landing places on the coasts. Moody refers to a likely network of trade routes and droveways some of which were metalled (Moody 2008). As indicated by the fieldwork undertaken ahead of the construction of the East Kent Access road, smaller trackways are likely to have branched off the ridgeway into the boundary of the site (Dawson 2013).

3.2.7 As well as the Iron Age occupation site, recorded 35m north of the site boundary during the installation of a gas pipeline in the 1980s (HER TR 36 NW 185), other known sites are recorded on the HER. These include cropmark enclosures recorded 80m west of the site (Ref. 1004203). A known settlement site is also recorded 680m east of the site (HER TR 36 NW 190) and 1km north of the site (HER TR 36 NW 226).

3.2.8 ***Romano-British (c.43 to c.410AD):*** The Roman invasion of Britain is reputed by many to have landed first at Richborough, a defensible outcrop on the opposite side of the Wantsum Channel, approximately 5km south of the site. The name Thanet is reputed to derive from the presence of a beacon or lighthouse, placed on Thanet during this period to mark the approach to Richborough (Glover 1982).

3.2.9 Romano-British occupation within the vicinity of the site boundary has been attested to by finds and features indicative of industrial activity (HER TR 36 NW 184 and TR 36 NW 50). In addition a Romano-British cemetery has also been recorded 30m north of the boundary of the site (HER TR 36 NW 187) and recent fieldwork has recorded the presence of a further cemetery to the north of the site (see Section 3.3 below).

3.2.10 ***Anglo-Saxon (c.410 to 1066AD):*** An Anglo Saxon estate centre was located at Minster *c*.1.8-2km southwest of the site and a possible meeting place may have been located 1.75km west of the site along the ridgeway at Mount Pleasant (Lawson 2010). In AD 670 a nunnery was established at Minster (Ref. 1016850). The hollow way, recorded by fieldwork to the north of the site, probably provided access to the nunnery from the main route-way occupying the ridgeway to the north of the site. Activity alongside the hollow way has been demonstrated by the recording of Anglo Saxon cemeteries along

its route, including two which extend to within the boundary of the site. Whilst the settlement associated with these cemeteries is thought to be located elsewhere (Oxford & Wessex Archaeology 2011) it is possible that Thorne Farm, 330m south of the site (HER MKE86972), may have had early origins, potentially as early as the Saxon period (Quested 1996).

3.2.11 ***Medieval (c.1066 to c.1540AD):*** Thorne Farm (HER MKE86972) is located on the site of a manor house, and was named as a consequence of the abundance of thorn bushes growing in its vicinity. The bushes also reputedly gave rise to the name of the family that originally resided there. In 1300 it was recorded in correspondence between the Archbishop and Vicar that Henry de Thorne was arranging mass in his private chapel at the manor which affected the mass being held at Minster (Helsted 1797-1801). Remains of the chapel are located 160m south of the site, preserved within the fabric of a later building (Ref. 1224336). The manor was later held by the family of Goshall who remained until the time of Henry IV after which through marriage it transferred it into the family of St Nicholas, the family of Dynley and then the family of Powcies (ibid).

3.2.12 ***Post medieval and Modern (c.1540 to 1901):*** By 1790 Thorne had transferred to the ownership of Mr Henry Wooton (Helsted 1797-1801). The earliest cartographic evidence studied as part of the assessment comprised the Minster in Thanet Tithe Map dated *c*.1840. This recorded that the land within the site boundary was owned by Mary Wooton within the Thorn Farm land holding. The land within the site was at this time located within four fields and a trackway was shown providing direct access between the farm to the ridgeway located to the north of the site. Another trackway or footpath was shown crossing the site on a northeast to southwest alignment. A chalk pit, recorded by the HER, is also shown on the map to the south of the site (HER TR 36 NW 331).

3.2.13 By the time of the production of the 1877 Ordnance Survey map the boundary between some of the field boundaries at the site had been removed. Consequently, the site was located within two much larger fields separated by a trackway, which continued to provide access to the farm from the ridgeway to the north of the site. Subsequent editions of the Ordnance Survey showed no change within the boundary of the site until the removal at some point between 1907 and 1938 of the northeast to southwest aligned footpath/trackway, shown crossing the site on the Tithe map.

3.2.14 By the time of WWII an airstrip had been constructed to the immediate north of the site (HER TR 36 NW 432). This was defended during WWII by trenching and pill boxes, none of which are known to have been located within the boundary of the site. Other evidence of WWII activity comprises the crash site of a Messerschmitt which is recorded 490m south-west of the site (HER TR 36 SW 279).

3.3 PREVIOUS WORK

3.3.1 During the early 1980s, a gas pipeline was constructed within and parallel to the northern boundary of the site, which was subject to archaeological monitoring. A number of archaeological features were recorded, which have the potential to extend into the survey area. These comprised evidence for Iron Age occupation (HER TR 36 NW 185), Romano British surface and ring ditch (HER TR 36 NW 184 & TR 36 NW 188), a Roman occupation/industrial site (HER TR 36 NW 50), a Romano–British cemetery (HER TR 36 NW 187) and three early medieval/Saxon graves were also recorded to the north of the site (HER TR 36 NW 186).

3.3.2 In addition to these features it is known from recent fieldwork that further non-designated heritage assets are located within the boundary of the site. These include two Anglo Saxon cemeteries and road/track ways dating from the Iron Age/Roman period. An Anglo Saxon holloway may also extend into the survey area.

3.3.3 These features were identified in 2009 during the construction of the East Kent Access Road, which bounds the site to the north (Oxford-Wessex 2011). Initially the road corridor was subject to field walking, a metal detecting survey and a test pit survey. All parts of the road corridor located within undisturbed land (predominantly arable land) were then subject to an archaeologically monitored topsoil and subsoil strip after which exposed remains were mapped and characterised. Subsequently and where necessary, full excavation of remains was then undertaken. In addition, in some areas a watching brief was implemented during road construction and ordinance removal.

3.3.4 The East Kent Access road project also involved, excavation of a new easement in order to move the 1980's gas pipeline. This easement was excavated at the same time as the road corridor. The easement extended to within the eastern half of the northern boundary of the site by around 5m.

3.3.5 The road and gas corridor was split into zones with the land to the immediate north and within the site boundary being located predominantly within Zones 19 and 20a. From observations undertaken during the installation of the gas pipeline in the 1980s these Zones were known to have been located in the vicinity of Roman and Saxon burials and Roman occupation/industrial sites.

3.3.6 The earliest activity recorded comprised an early Bronze Age pit (Zone 20a) c.10m north of the site boundary. A Late Bronze Age enclosure (Zone 19) was located 40-50m north of the site. This had an internal pit containing 20 sherds of Late Bronze Age pottery. Possible ritual associations to the enclosure were indicated by the find of a disarticulated human skull from a ditch terminus.

3.3.7 Evidence for Iron Age activity included evidence for two structures identified from post holes (Zone 19) located 30-40m north of the site. One was identified as a possible storage structure typically found in association with settlement. A metalled trackway dating to the Iron Age period was recorded to the west of these structures. This is likely to have branched off from a main routeway on the ridgeline to the north. Extrapolation of the road alignment would project the road to within the site boundary (Dawson 2013).

3.3.8 Two further trackways dated to the Late Iron Age/Roman period were recorded in Zone 19. As with the earlier trackway these later trackways are likely to have extended to within the boundary of the site. Another trackway dated to the Roman period was recorded through Zone 20a although extrapolation of its alignment would not place it in the site.

3.3.9 Two Roman cemeteries were recorded adjacent to the later trackways. These included one cemetery located 30m north of the site, which included 11 inhumations and 18 cremations. This was probably associated with HER reference TR 36 NW 187 and it is not thought that this extended any further south – i.e. within the boundary of the site. However the second cemetery which included 9 inhumations was recorded within the boundary of the site, and it is not known how far south within the site boundary this cemetery may extend (*ibid*).

3.3.10 A hollow way, likely to be Saxon in date, was recorded in Zones 19 and 20a, again branching off the ridgeline to the north of the site. Aligned roughly east-west the hollow way is unlikely to have entered the site boundary except at the western end where it may have entered across the northern boundary of the site on route to Minster where an Anglo Saxon monastery was known to be present.

3.3.11 Three Saxon cemeteries were also record, one being 25m north of the site, which is likely to be associated with HER reference TR 36 NW 186. The other two were previously unknown and were recorded on the southern limits of the excavation of the gas easement, therefore they extend within the boundary of the site. The western-most cemetery was recorded within Zone 20a and included five inhumations dated to the 6th to 7th centuries AD. Grave goods included beads, glass, a comb, various copper alloy brooches, a spindle whorl, an iron spear head and a knife. The other cemetery recorded in the boundary of the site was located within Zone 19 and comprised 16 inhumations (*ibid*).

3.3.12 A geophysical survey of the site was undertaken by Wardell Armstrong Archaeology in 2013. The most significant features detected by the survey comprised of two possible ring ditches or small enclosures, of likely prehistoric or Romano-British date (Railton 2013). The remains of medieval ridge and furrow cultivation was also detected across the whole of the development area.

3.3.13 In conjunction with the geophysical survey Wardell Armstrong Archaeology also undertook a fieldwalking survey. The artefacts recovered from this survey comprised mainly of medieval peg tile. This may indicate that a kiln is located either on or within close proximity to the site, possibly south towards the site of the manor/chapel (HER MKE 86972).

3.3.14 Following the results of the Geophysical Survey and Fieldwalking survey Wardell Armstrong Archaeology undertook an archaeological trench evaluation between the 11th and 21st November 2013 (MacIntyre 2013). The evaluation involved the excavation of seventeen trenches, totaling 900m^2 of the development area. Three of the seventeen trenches contained archaeological features or deposits. Two small possible ditches were found in Trench 1 but neither contained dating evidence. Trench 16 also contained two shallow ditches one of which had no dating evidence while the second contained seven sherds of early Iron Age pottery. Trench 6 contained the most

informative archaeology with an inhumation with associated vessel and metal object being uncovered.

4 ARCHAEOLOGICAL WATCHING BRIEF

4.1 INTRODUCTION

4.1.1 The watching brief monitoring was undertaken in two key phases. The first phase (Figure 1) was on undertaken between 17/06/2014 and 30/07/2014 and oversaw the groundworks associated with the access roads, substation foundations and cable trenches within the solar farm. The second phase (Figure 3) monitored a cable trench running from the solar farm to the closest substation located next to St. Augustine's Golf Course; thereby connecting the solar farm to the National Grid (Figure 3). This phase was undertaken between 07/07/2014 and 11/09/2014. All trenches were excavated using an 8 tonne tracked excavator.

4.2 PHASE 1: SOLAR FARM

4.2.1 ***Access Road & Compound (Plate 1 & 2):*** The access road was located along the southern boundary of the site and was aligned west-north-west/east-south-east that led from Thorne Hill Road to the site compound (Figure 2). A mid greyish brown clayey silt topsoil (**100**) was stripped to a maximum depth of 0.30m revealing patches of mid reddish brown sandy silt subsoil (**101**). At the western end of the access road, a modern concrete road (**103**) was observed (shown as an orange dashed line in Figure 2) that measured 0.26m thick. No archaeological features were noted and no finds were recovered.

Plate 1: Access Road and compound area. 1m scale.

4.2.2 ***Substations (Figure 2):*** Three substations were located at the southern boundary of the development site. The main substation was located in the south-west corner with two production substations spread out equidistantly along the access track. The initial groundworks for the substations consisted of a 0.20m topsoil strip (**100**). This was

followed by excavating a cable pit within each substation (two cable pits within the main substation) connecting cables to the transformer units. The cable pits measured 3.7m^2 and were excavated to a maximum depth of 0.90m revealing 0.40m of light reddish brown sandy clay & white chalk superficial geology (**102**) below *c*.0.40m of mid reddish brown sandy silt subsoil (**101**) and *c*.0.10m (after the initial topsoil strip) mid greyish brown clayey silt topsoil (**100**) (Plate 2).

Plate 2: Cable Pit within eastern most substation. 1m scale.

4.2.3 No archaeological features were noted and no finds were recovered.

4.2.4 ***Cable Trenches (Figure 2):*** Cable trenches were excavated along the boundary of the development area to connect the solar panels to the cameras, and the transformers within the substations. The cable trenches are shown in Figure 2 and are split into Green (0.5m wide x 0.7m deep), Blue (0.6m wide x 1m deep) and Purple (0.6m wide x 1.2m deep). The maximum depth of 1.2m revealed fragmented Chalk bedrock (**106**) below *c*.0.72m of light reddish brown sandy clay & white chalk superficial geology (**102**), *c*.0.3m of mid reddish brown sandy silt subsoil (**101**) and 0.20m of mid greyish brown clayey silt topsoil (**100**) (Plate 3).

Plate 3: Purple (1.2m deep) cable trench. 1m scale.

4.2.5 A modern track way that consisted of compacted rubble (**105**) c.0.40m thick was observed crossing the development area and was aligned north-east/south-west and is shown on Figure 2 as an orange dashed line.

4.2.5 Geological deposits were not observed in the south-western & south-eastern areas of site as the subsoil (**101**) increased to a thickness of c.1m in these areas (Plate 4).

Plate 4: Subsoil within the south-western area of site.

4.2.6 No archaeological features were observed within the cable trenches nor were any artefacts recovered.

4.3 PHASE 2: ROAD

4.3.1 ***Cable Trenches:*** The cable trench excavated from the solar farm site on Thorne Hill Road towards St. Augustine's Golf Course along Cottington Road was excavated to a depth between 1.2m and 1.4m. The trench generally ran along the verge of the existing road but in places did cross Cottington Road requiring the trenches to be at least 1.4m in depth and to be backfilled with type 1 aggregate before the road was re-laid.

4.3.2 The cable trench was excavated generally through a small layer of greyish brown topsoil (**100**) measuring between 0.1m and 0.3m and another shallow layer of mid reddish brown sandy clay subsoil (**101**). This subsoil layer ranged from 0.1m to 0.4m in depth before the natural mid red brown clay layer (**110**) was recorded. In some areas a shallow layer of chalk and flint was visible (**109**) between the Subsoil and Natural clay measuring approximately 0.2m in depth.

Plate 5: Section showing topsoil and subsoil (100) and (101). 1.0m scale

4.3.3 In areas the cable trench was excavated through modern made ground (**111**) mainly on the trackway around St. Augustine's Golf which measured approximately 1.2m in depth. Under the new road bridge crossing Cottington Road, the maximum depth of this modern backfill (**111**) was 0.6m before reaching the natural clay (**110**).

4.3.4 In areas where the cable trench had to cross Cottington Road, the existing tarmac road surface was excavated. This happened in two main areas with both trenches reaching the natural clay (**110**) at a depth between 0.8m and 1m. The excavations in these cases passed through a layer of tarmac (**107**) measuring 0.2m and a formation layer for the road surface (**108**) measuring between 0.4m and 0.6m.

Plate 6: Excavations across Cottington Road after backfilling.

Plate 7: Section of excavation through road surface. 1.0m scale

4.4 ARCHAEOLOGICAL FINDS AND ENVIRONMENTAL SAMPLING

4.4.1 No finds of archaeological significance were recovered, and no environmental samples were retained during the groundworks.

5 CONCLUSIONS

5.1 CONCLUSIONS

5.1.1 ***Phase 1:*** all works associated with the construction of the solar farm, including the excavation of cable trenches and substations along with the preparation of access roads onto site were monitored during the watching brief. No archaeological remains were noted.

5.1.2 ***Phase 2:*** the excavation of all the cable trenches was monitored during the watching brief. No archaeological remains were noted.

5.1.3 Although the area of development was in an area highlighted as having a high archaeological potential the negative results of the watching brief were disappointing. The lack of any archaeological features can be partly explained by significant parts of the development service trenches going through area of modern disturbance and in the shallow, narrow size of much of the trenching in the main solar farm site itself. It is highly likely that archaeological deposits did survive in parts of the site (which was confirmed during the evaluation phase) but were not exposed during the works associated with the solar farm.

6 BIBLIOGRAPHY

6.1 SECONDARY SOURCES

Andrews, C (2010) Roman Kent, in Lawson, T and Killingray, D (eds), *An historical atlas of Kent.*

British Geological Survey (2001) *Solid Geology Map: UK North Sheet, 4th Edition.*

Brown, D.H. (2011) *Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation.* Archaeological Archives Forum .

Dawson, C (2013) *Thorne Farm, Archaeology and Cultural Heritage Assessment*, Unpublished report, Wardell Armstrong LLP.

English Heritage (1991) *Management of Archaeological Projects (MAP2).* London: English Heritage.

English Heritage (2002) *Environmental Archaeology: A Guide to the Theory and Practice of Methods from Sampling and Recording to Post-Excavation).* London: English Heritage.

English Heritage (2006) *Management of Research Projects in the Historic Environment (MoRPHE).* London: English Heritage.

Evans, P (2014) *Written Scheme of Investigation for a archaeological watching brief at Thorne Farm, Kent*, Unpublished WSI, Wardell Armstrong Archaeology.

Glover, J (1982), *The place names of Kent.*

Helsted, E (1797-1801), *The history and topographical survey of the county of Kent.*

IfA (2008) *Standard and Guidance for an Archaeological Watching Brief*. Reading: Institute for Archaeologists.

Lawson, T (2010) Lathes and Hundreds, in Lawson, T and Killingray, D (eds), *An historical atlas of Kent.*

MacIntyre, H (2013) *An Archaeological Evaluation at Thorne Farm Kent.* Unpublished report. Wardell Armstrong Archaeology CP10712.

Moody, G (2008*) The Isle of Thanet from prehistory to the Norman conquest.*

NPPF (2012) *National Planning Policy Framework: Archaeology and Planning*. Department for Communities and Local Government.

Oxford & Wessex Archaeology (2011) *East Kent Access (Phase II)*, *Thanet Kent*, Unpublished post-excavation assessment, volumes I and II.

Parfitt, K (2010) The Iron Age c.700 BC – AD 43, in Lawson, T and Killingray, D (eds), *An historical atlas of Kent.*

Railton, M (2013) *Geophysical Survey at Thorne Farm*, Kent. Unpublished report. Wardell Armstrong Archaeology CP10571.

Scott, B (2010) Kentish evidence of the Palaeolithic and Mesolithic periods, in Lawson, T and Killingray, D (eds), *An historical atlas of Kent*.

Yates, D (2010) Kent in the Bronze Age: land, power and prestige c.1500-c.700BC, in Lawson, T and Killingray, D (eds), *An historical atlas of Kent.*

APPENDIX 1: CONTEXT TABLE

Context Number	Context Type	Description
100	Deposit	Topsoil
101	Deposit	Subsoil
102	Deposit	Drift Geology
103	Deposit	Concrete Road
104	Cut	Cut for Concrete
105	Deposit	Trackway
106	Deposit	Bedrock
107	Deposit	Tarmac
108	Deposit	Road Foundation
109	Deposit	Flint Layer
110	Deposit	Natural Clay
111	Deposit	Made Ground
112	Deposit	Natural Clay

Table 1: List of Contexts issued during Watching Brief

APPENDIX 2: FIGURES

wardell armstrong archaeology Wardell Armstrong Archaeology 2014	PROJECT: Land at Thorne Farm, Ramsgate, Kent SCALE: 1:40,000 at A4 REPORT No: CP10848 CLIENT: Lightsource Renewable Energy Ltd DRAWN BY: AB DATE: July 2014 FIGURE: 1	KEY: Site boundary

Figure 1: Site location.

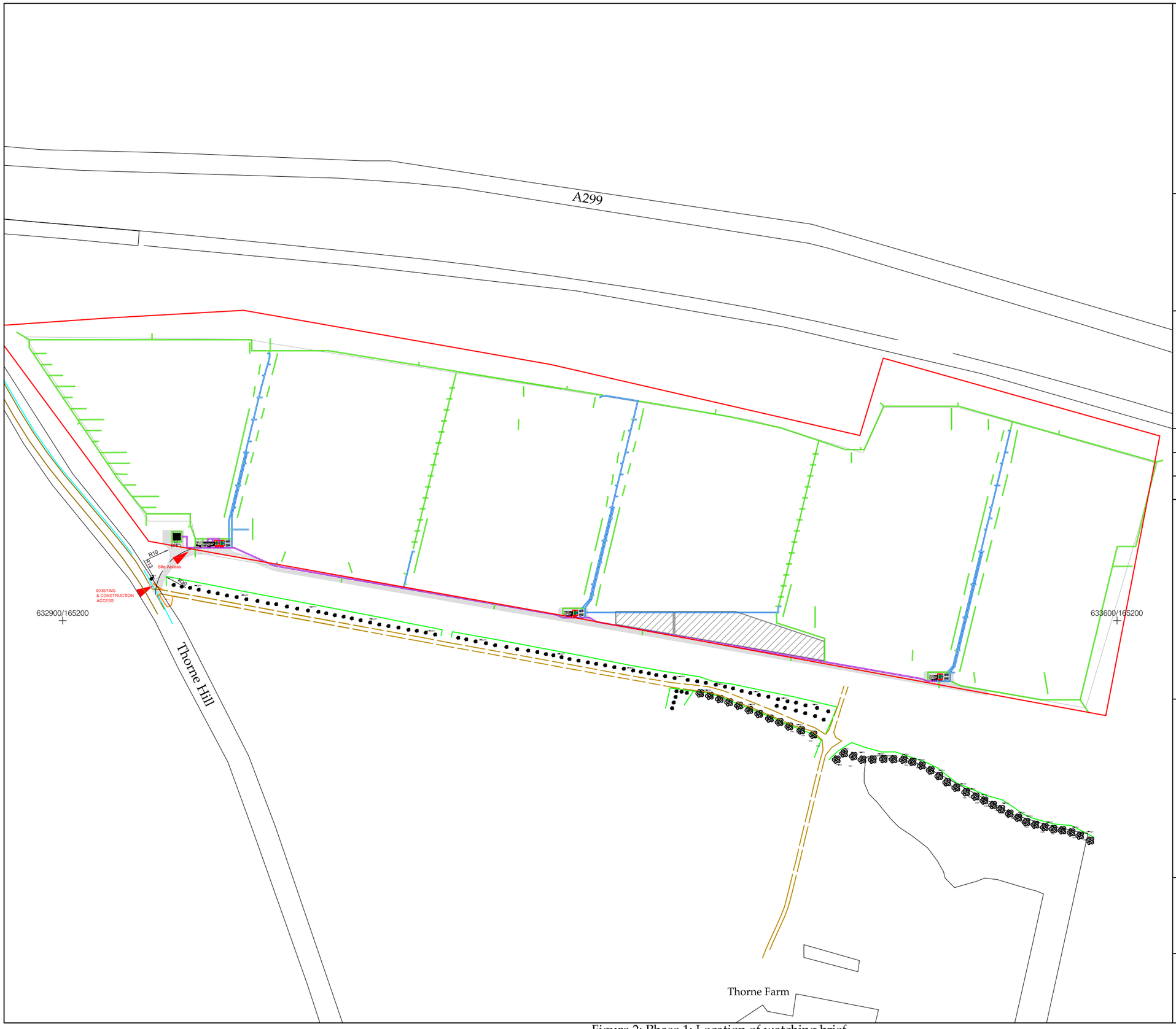

Figure 2: Phase 1: Location of watching brief.

wardell armstrong archaeology

Wardell Armstrong
Archaeology
2014

PROJECT:

Land at Thorne Farm,
Ramsgate, Kent

CLIENT:

Lightsource Renewable
Energy Limited

SCALE: 1:2,500 at A3

DRAWN BY: AB

DATE: July 2014

KEY:

Site boundary

Cable trenches

0.5m wide x 0.7m deep

0.6m wide x 1m deep

0.6m wide x 1.2m deep

Area of compound

REPORT No:

CP10848

FIGURE:

2

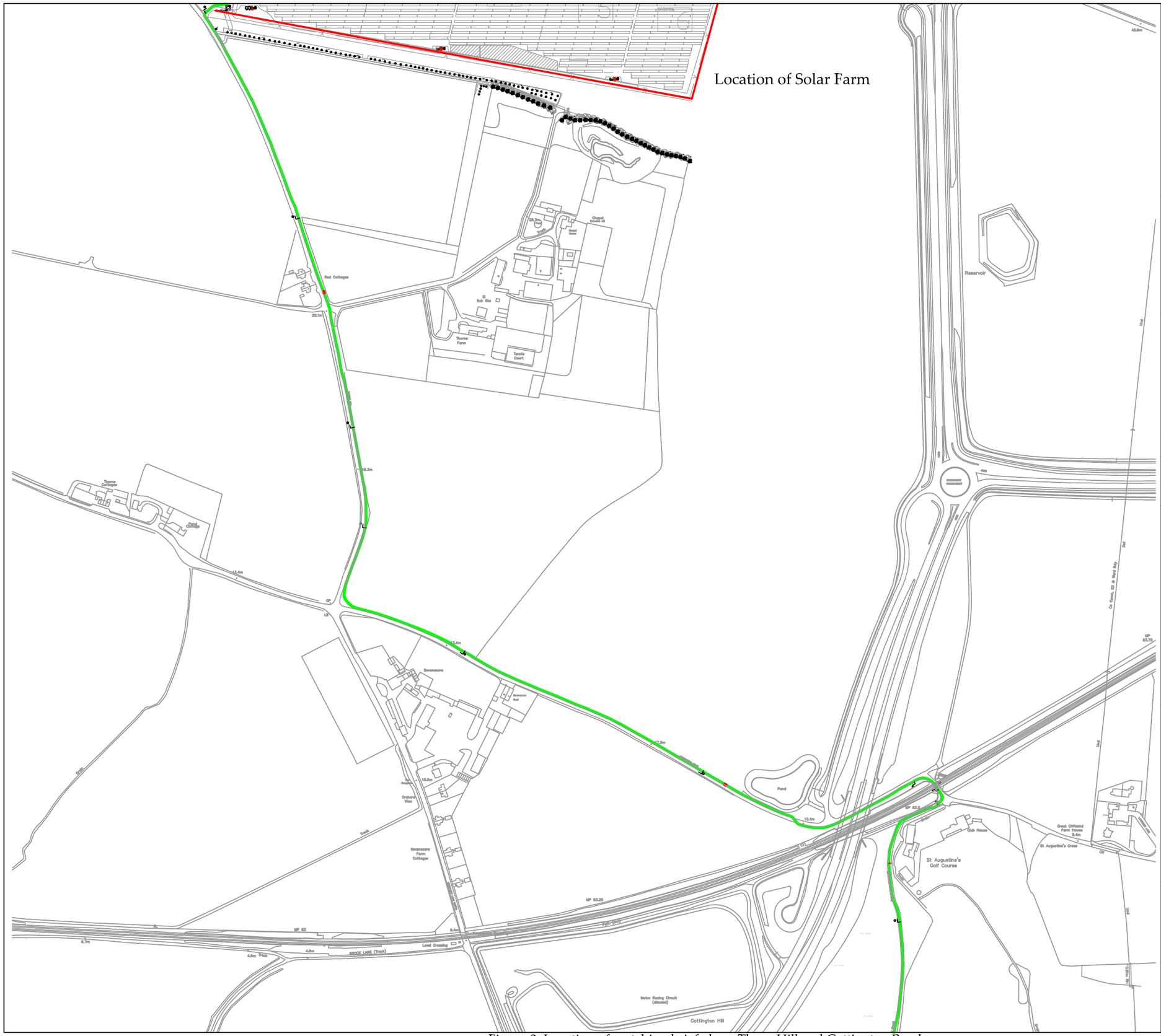

Figure 3: Location of watching brief along Thorn Hill and Cottington Road

wardell armstrong archaeology

Wardell Armstrong
Archaeology
2014

PROJECT:

Land at Thorne Farm,
Ramsgate, Kent

CLIENT:

Lightsource Renewable
Energy Limited

SCALE: 1:5000 at A3

DRAWN BY: FG

DATE: As in report

KEY:

Site boundary

Cable Trench observed during watching brief

REPORT No:

CP10848

FIGURE:

3