Archaeological Watching Brief at Ebbsfleet Farm, Ebbsfleet Lane, Minster, Thanet, Kent

June 2011

SWAT. Archaeology
Swale and Thames Archaeological Survey Company
School Farm Oast, Graveney Road
Faversham, Kent
ME13 8UP
Tel: 01795 532548 or 07885 700 112
www.swatarchaeology.co.uk
Archaeological Watching Brief at Ebbsfleet Farm, Ebbsfleet Lane, Minster, Thanet, Kent

NGR 633344 162628
Site Code: EBBS-WB-11
(Planning Application TH/11/0029)

Report for
Vogt Solar Ltd

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The Office, School Farm Oast, Graveney Road
Faversham, Kent
ME13 8UP
Tel; 01795 532548 or 07885 700 112
info@swatarchaeology.co.uk
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SUMMARY
Swale & Thames Survey Company (SWAT) carried out an archaeological Watching Brief at Ebbsfleet Farm, Thanet in Kent. A planning application (TH/11/0029) for the construction of a Solar Park was submitted to Thanet District Council whereby the Council requested that an Archaeological Watching Brief be undertaken in order to determine the possible impact of the development on any archaeological remains. The work was carried out in accordance with the requirements set out within an Archaeological Specification (KCC 2011) and in discussion with the Senior Archaeological Heritage Officer, Kent County Council. The Archaeological Watching Brief consisted of archaeological monitoring of specific groundworks as itemised in the KCC Archaeological Specification. The Archaeological Watching Brief did not encounter any archaeological remains. The Archaeological Watching Brief has therefore been successful in fulfilling the primary aims and objectives of the Specification.

INTRODUCTION
Swale & Thames Survey Company (SWAT) was commissioned by Vogt Solar Ltd to carry out an Archaeological Watching Brief at the above site. The work was carried out in accordance with the requirements set out within an Archaeological Specification (KCC 2011) and in discussion with the Senior Archaeological Heritage Officer, Kent County Council. The work was carried out from the 25th June to 18th July 2011.

SITE DESCRIPTION AND TOPOGRAPHY
The development site is situated to the south-west of the southern beach line of the Isle of Thanet, a ridge of Thanet Beds which is to the east of the Ebbsfleet Stream, and an area of marine alluvium reclaimed from the former Wantsum sea channel which covers the western area of the development site.
According to the 1:50,000 British Geological Survey, the Bedrock underlying the site is Thanet Sand Formation, comprising Sand, Silt, and Clay. The Superficial Deposits (west of the Ebbsfleet Stream) are Tidal Flat Deposits, comprising Clay and Silts. The site averages 3.00aOD rising to 5.00aOD to the east of the Ebbsfleet Stream.

PLANNING BACKGROUND
Planning consent (TH/11/0029) for the construction of a solar array park at Ebbsfleet Farm was approved by Thanet District Council (TDC). Thanet District Council requested that an Archaeological Watching Brief be undertaken in order to determine the possible impact of the development on any archaeological remains. The Local Planning Authority (TDC) placed the
following condition on the planning consent:

‘No development shall take place until the applicant, or the developer, or successor(s) in title has secured the implementation of a programme of archaeological work in accordance with written specification and timetable which has been submitted to and approved by the Local Planning Authority.’

Requirements for the Archaeological Watching Brief included archaeological monitoring of specific groundworks and should be targeted on the stripping of ground deposits (topsoil and subsoil) during the construction of foundation bases for the substations, inverter and transformer housing and the bridge crossing. In addition, to monitor the excavation of trenches for electric cabling linking the ends of the solar panel arrays and the main cable runs, and scan with metal detector the excavated spoil and record the location of any finds.

ARCHAEOLOGICAL and HISTORICAL BACKGROUND
The development site lies within an area of considerable archaeological potential. The Ebbsfleet Peninsula has been a focus of archaeological activity from the earliest times and recent archaeological investigation in advance of the East Kent Access Phase 2 road construction revealed monuments from the Bronze Age, Iron Age, Roman fields and a number of medieval farms with associated field systems. The recent work on the road construction established that the archaeology became increasingly buried to the west with a postulated archaeological horizon on the development site of about 0.65m.

HER Data in close proximity to the site include:

HER Number TR 36 SW 11
Record Type Find Spot
Site Name Bronze Age founders hoard, Ebbsfleet Farm

A late Bronze Age founder’s hoard was discovered in January 1893 on a farm at Ebbsfleet, near Minster. The hoard consisted of 181 weapons and implements and these are now held in the British Museum. A further number of socketed axes, spearheads, and winged axes were previously on exhibition in the Royal Museum, Canterbury. These finds are reported as ‘from the Ebbsfleet hoard’ however there appears to be little information to support this statement. The exact location of this findspot is uncertain and no further information about its discovery was available.

HER Number TR 36 SW 109
Record Type Monument
Site Name Multi-period occupation

Settlement (Bronze Age - 2350 BC to 701 BC)
Settlement (Iron Age - 800 BC to 42 AD)
Settlement (Roman - 43 AD to 409 AD)
Settlement (Medieval - 1066 AD to 1539 AD)

Multi-period occupation identified, dating from the BA, IA, RO, MD and later periods. Early/Mid IA settlement remains and traces of a structure of RO or MD date were located during the pre-construction evaluation phase of the wastewater treatment works site. The development proposals were modified to ensure the continued preservation of these deposits. The most important find from the site is a small
LBA hoard, dated 9/8C BC. The hoard consists of 5 CU alloy objects; a fragment of sword; a socketed hammer; a small cylindrical band; a bun ingot and a flat ingot fragment. The 3rd hoard to be found at Ebbsfleet.

**HER Number TR 36 SW 116**
**Record Type** Monument
**Site Name** Probable medieval ditch-enclosed farmstead, near Weatherless Treatment Works, Minster Parish

The remains of a probable ditch enclosing a 13th - 14th century farmstead were found during archaeological investigations near the Weatherless Water Treatment Works. The infilled ditches were found within a horizon of sandy loam soil. Amongst the finds recovered from the feature were tin glazed 13 - 14th century medieval pottery, tile, iron fragments, animal bone and shells.

**HER Number TR 36 SW 117**
**Record Type** Monument
**Site Name** Possible sunken medieval building near Ebbsfleet Farm

The remains of a possible sunken medieval building were found near Ebbsfleet Farm. Probable wall foundations were identified and a floor of compact chalk-flecked earth. Evidence of a possible external wall was suggested by an area of flint cobbles. A pit found at the site contained medieval pottery dating to the late 12th to early 13th century date. Shellfish remains were also found nearby.

**HER Number TR 36 SW 127**
**Record Type** Monument
**Site Name** Prehistoric, Romano-British and Medieval enclosure and boundary ditches and two middens with Bronze Age pottery

A large number of ditches, dating to the prehistoric, Romano-British and Medieval periods were recorded. The ditches are enclosure and boundary ditches. Two midden spreads were located at the southern end of the site and contained large quantities of Bronze Age pottery. Investigated by Wessex Archaeology in 2005 on the Margate to Weatherless Hill Wastewater Treatment Works pipeline.

**AIMS AND OBJECTIVES**

The purpose of the evaluation, as set out within the Archaeological Specification (2011) was:

- Assessing the likely archaeological impact of the proposed development including drainage, access and car parking works
- Assessing the impact of past development on the site’s archaeological potential including from ploughing, landscaping and modern road development
- Establishing the degree of Iron Age and Romano-British activity on the site.
- Establishing the degree of earlier prehistoric activity on the site given its topographic position
- Establishing the degree of medieval and post-medieval activity on the site and its relationship with the Fairbrook Estate
- Contributing to the environmental and landscape history of the area

**METHODOLOGY**

All archaeological work was carried out in accordance with KCC and IFA standards and guidance. The objectives of the archaeological watching brief were 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 groundworks.
Trenching by the contractor was carried out on between 25th June-18th July 2011, with the excavation of sixty trenches for the cable runs measuring 0.65m in width and between 10m and 30m in length. Depth of these trenches was no more than 50-55cm. Trench location was to an agreed plan carried out by the solar array contractors. The access bridge was constructed on piles and the four DNO substation and transformer buildings were constructed on concrete platforms which were about 0.55m deep.

The trenches were scanned for finds during and after excavation. Excavation by the contractors was carried out using an 8 ton mechanical excavator fitted with a toothless bucket for the cable runs and a toothless ditching bucket for the invertors, removing the overburden to the top of the first recognisable archaeological horizon, or natural, under the constant supervision of an experienced archaeologist. Trenches were subsequently hand-cleaned in areas of archaeological potential to reveal potential features in plan and carefully selected cross-sections through the features would have been excavated to enable sufficient information about form, development date and stratigraphic relationships to be recorded without prejudice to more extensive investigations, should these prove to be necessary.

All archaeological work was carried out in accordance with the KCC Archaeological Specification (2011)

MONITORING
No curatorial monitoring was carried out during the course of the evaluation.

RESULTS
The first development activity on site was by the piling of the bridge supports followed by the solar array galvanised steel uprights by the ground contractors followed closely by the excavation of the cable runs.

The Archaeological Watching Brief continued throughout the programme of the groundworks but no archaeology was revealed.

Geology revealed was constant across the site and comprised topsoil- a grey brown sandy clay loam of about 25cm thick overlaying a darker grey brown sandy silt which was not pierced by the development. The construction of the pond and fencing was also watched with no archaeology revealed.
FINDS
No archaeological finds were retrieved.

DISCUSSION
The development site at Ebbsfleet Farm produced no archaeology. Given its location on low ground claimed back from marsh and the shallow nature of most of the construction it is not entirely surprising. However, important archaeology has been identified at the Weatherlees Hill Wastewater Treatment Works to the north-west of the site and during construction of the East Kent Access Phase 2 road to the east. It is entirely possible that as suggested in the KCC Specification, that archaeology could be on site, albeit at a depth of below 65cm and at this depth the solar array construction did not impact on any postulated archaeological remains.

CONCLUSION
The archaeological watching brief has been successful in fulfilling the primary aims and objectives of the Specification. A common stratigraphic sequence was recognised across the site comprised of topsoil (001) overlaying Tidal Flat Deposits (002). No archaeological activity was found during the archaeological watching brief. The watching brief has, therefore, been successful in fulfilling the primary aims and objectives of the Specification.

ACKNOWLEDGEMENTS
SWAT would like to thank Mr J Pace for commissioning this project. Thanks are also extended to Simon Mason, Senior Heritage Officer, Kent County Council for his advice and assistance.
Paul Wilkinson supervised the fieldwork, assisted in the field by James Madden. Illustrations were produced by James Madden for Digitise This. The project was managed by Paul Wilkinson.

Dr Paul Wilkinson MifA
October 2011
REFERENCES

Bibliography
Kent County Council (KCC), (2010) Specification for an Archaeological Watching Brief at Ebbsfleet Farm, Ebbsfleet Lane, Minster, Thanet during Groundworks for the construction of a Solar Park, Kent.


Kent County Council (KCC) (2010) Kent County Council Monument Full Report for site centred at 604661 162712

Maps
Ordnance Survey 1st Edition (1871-1890)
Ordnance Survey 2nd Edition (1897-1900)
Ordnance Survey 3rd Edition (1907-1923)
Ordnance Survey 4th Edition (1929-1952)

Websites
Kent Landscape Information System http://extranet7.kent.gov.uk/klis/home.htm
Plate 1. View of bridge site looking north-west
Plate 2. Main cable run at a depth of about 50-55cm
Plate 3. Inverter building, depth of construction about 55cm
Plate 4. Solar arrays
APPENDIX 1 – Kent County Council HER Summary Form

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<td>Swale &amp; Thames Survey Company (SWAT) carried out an archaeological watching brief on land at the Ebbsfleet Farm site. A planning application (TH/11/0029) for the construction of a new Solar Park development, along with associated cable runs and services at the above site was submitted to Thanet District Council (TDC) whereby Kent County Council Heritage and Conservation (KCCHC), on behalf of Thanet District Council requested that an Archaeological Watching Brief be undertaken in order to determine the possible impact of the development on any archaeological remains. The work was carried out in accordance with the requirements set out within an Archaeological Specification (KCC 2011) and in discussion with the Senior Archaeological Officer, Kent County Council. No archaeological remains were found.</td>
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<td>Contact at Unit: Paul Wilkinson Date: 10th Oct 2011</td>
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