



Farm Renewables Limited

New Hook Farm, Isle of Sheppey

Archaeological Desk Based Assessment

660765

JULY 2016





RSK GENERAL NOTES

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This work has been undertaken in accordance with the quality management system of RSK Environment Ltd.

NON-TECHNICAL SUMMARY

This document is an archaeological desk based assessment, prepared by RSK Environment Ltd. The purpose of the assessment is to inform determination of a planning application for a proposed anaerobic digestion (AD) plant on land near Hook Farm, Isle of Sheppey.

The assessment has considered the known and potential archaeological remains within the application site using a range of data for a 1km study area.

The DBA considers the proposed development impact in relation to known and potential heritage assets. The purpose is to gain an understanding of the historic environment in order to judge the potential for heritage assets to survive at the site and their significance.

The potential for archaeological remains to be present at the site is considered to be low due to the large-scale disturbance of large parts of the land, including recent surface-extraction. The area most likely to produce archaeological remains is limited to the arable field element of the proposal site (Area A).

No significant visual effects are identified to heritage assets or their settings in a 1km study area as a result of the AD proposal.

Given the low overall archaeological potential of the site, and the limited extent of proposed groundworks, an archaeological watching brief is recommended over deep excavations during construction to determine the archaeological potential of Area A. A subsequent programme of 'preservation by record' may be required if any archaeological remains are identified during the watching brief. These works could be secured through a planning condition on consent.

The proposed development at the site is not considered to conflict with national or local planning policy in respect to the historic environment, and archaeological considerations should not pose a constraint to development should planning permission be granted for the scheme.

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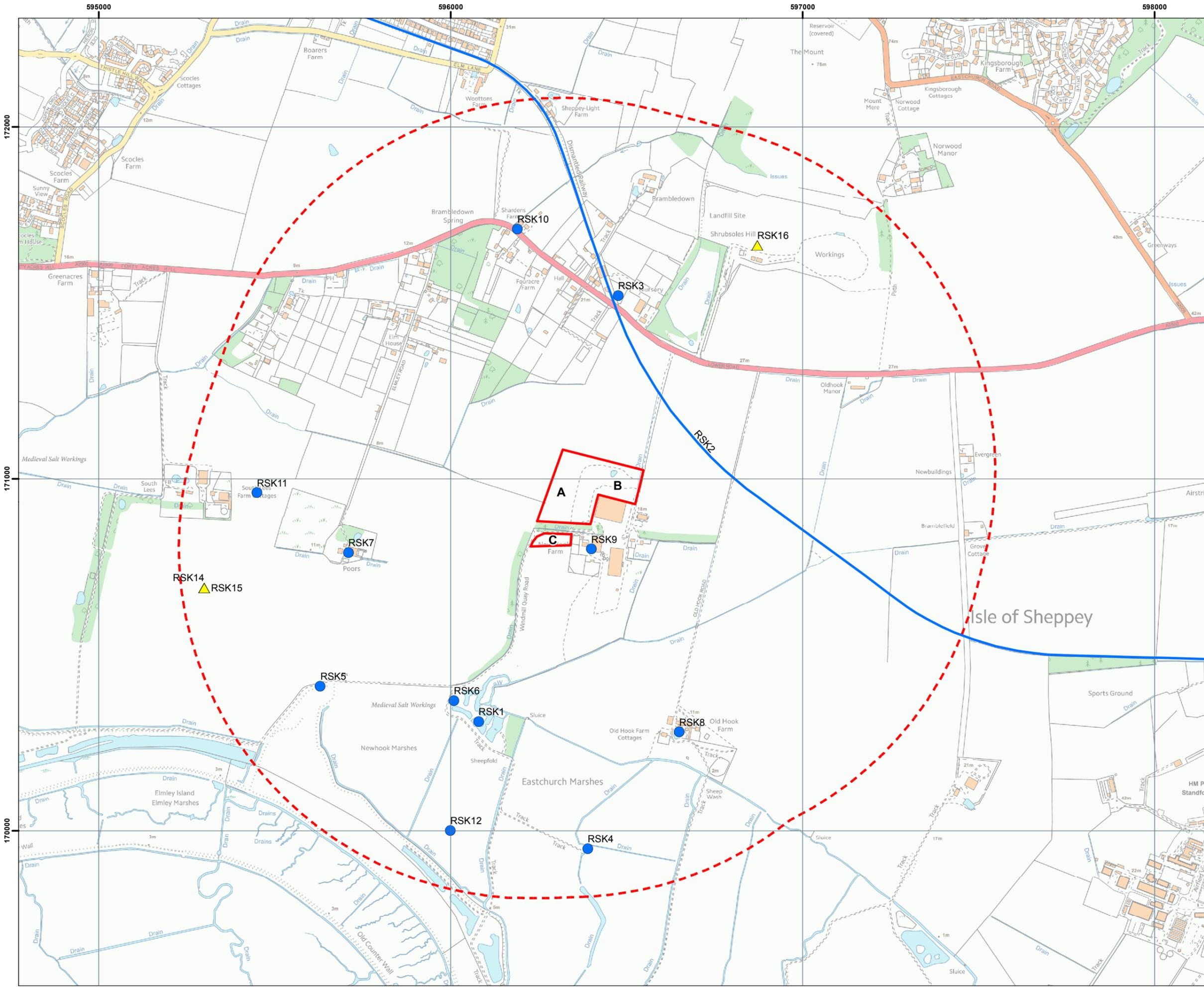
Figure 15. Existing baseline at New Hook Farm, as viewed looking south east from Area C. New Hook Farm is located behind vegetation to left of shot.31

1 INTRODUCTION

- 1.1 This document is an archaeological desk based assessment, prepared by RSK Environment Ltd ('RSK') on behalf of Farm Renewables Ltd (the Client).
- 1.2 The purpose of the assessment is to inform determination of a planning application for an anaerobic digestion (AD) facility at New Hook Farm, Isle of Sheppey, Kent (NGR 596295E 170852N, post code ME12 3SU, see Figure 1) with regards to potential direct impacts to known and potential archaeological remains, and potential visual impacts to heritage assets and their settings.
- 1.3 The report has been prepared in accordance with the Chartered Institute for Archaeologists (CIfA) *Standards and Guidance for Historic Environment Desk Based Assessment*¹ and *Code of Conduct*².
- 1.4 RSK is a Registered Organisation with the CIfA, an audited status which confirms that work is carried out in accordance with the highest standards of the profession. RSK operates a quality management system to help ensure all projects are managed in a professional and transparent manner, which enables it to qualify for ISO 9001.
- 1.5 Ordnance Survey data is reproduced under licence 100014807. LiDAR data is reproduced © Environment Agency copyright and/or database right 2015. All rights reserved.

¹ CIfA, 2014

² CIfA, 2014



- Legend:**
- Site Boundary
 - 1km Study Area
 - Linear Monument
 - Monument
 - ▲ Event
 - ABC Area ID

Notes:-
 This map contains data from the following sources-
 Historic Environment Record (HER) October 2015
 Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter



| Rev | Date | Description | Drn | Chk | App |
|-----|------------|-------------|-----|-----|-----|
| 01 | 11/11/2015 | First Draft | NH | OR | OR |
| 00 | 02/11/2015 | First Draft | NH | OR | OR |

New Hook Farm

TITLE: **Figure 1:
Historic Environment Constraints**

SCALE: 1:10,000 @ A3

REV 01

2 LEGISLATION, POLICY AND GUIDANCE

Legislation

- 2.1 Designated heritage assets protected under primary legislation comprise scheduled monuments³, and listed buildings and conservation areas⁴.
- 2.2 Additional designations for onshore heritage assets include world heritage sites, registered parks and gardens and registered battlefields. These assets may be of equal or higher significance in heritage terms to scheduled monuments or listed buildings and protection is afforded through national and local planning policy.

National Planning Policy

- 2.3 The National Planning Policy Framework⁵ is centred on the concept of sustainable development:

'International and national bodies have set out broad principles of sustainable development. Resolution 42/187 of the United Nations General Assembly defined sustainable development as meeting the needs of the present without compromising the ability of future generations to meet their own needs. The UK Sustainable Development Strategy Securing the Future set out five 'guiding principles' of sustainable development: living within the planet's environmental limits; ensuring a strong, healthy and just society; achieving a sustainable economy; promoting good governance; and using sound science responsibly.' (p2)

- 2.4 Heritage and conservation forms one of the core planning principles of the NPPF:

[Planning should] conserve heritage assets in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life for this and future generations.

- 2.5 Policies on the historic environment relevant to this assessment contained within the document include (paragraph numbers in bold text)⁶:

128. *In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance.*

129. *Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development*

³ Protected under the Ancient Monuments and Archaeological Areas Act, 1979

⁴ Protected under the Planning (Listed Buildings and Conservation Areas) Act 1990

⁵ NPPF, 2012

⁶ Government guidance on the application of the policies contained within the NPPF is available at <http://planningguidance.planningportal.gov.uk/blog/guidance/conserving-and-enhancing-the-historic-environment/>

affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this assessment into account when considering the impact of a proposal on a heritage asset, to avoid or minimise conflict between the heritage asset's conservation and any aspect of the proposal.

131. In determining planning applications, local planning authorities should take account of:

- the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;
- the positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and
- the desirability of new development making a positive contribution to local character and distinctiveness.

135: The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.

139: Non-designated heritage assets of archaeological interest that are demonstrably of equivalent significance to scheduled monuments, should be considered subject to the policies for designated heritage assets.

141: Local planning authorities should make information about the significance of the historic environment gathered as part of plan-making or development management publicly accessible. They should also require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible.³⁰ However, the ability to record evidence of our past should not be a factor in deciding whether such loss should be permitted.

Local Policy and Guidance

2.6 The Local Plan for Swale was adopted in 2008. *Bearing Fruits 2031: Swale Borough Local Plan*⁷ Part 1 contains saved policies from the adopted plan including strategic policies, development allocations and general planning policies.

2.7 Relevant to this assessment is **Policy DM34 Scheduled Monuments and archaeological sites** and **Policy DM35 Historic Parks and Gardens**.

Policy DM34

1. Development will not be permitted which would adversely affect a Scheduled Monument, and/or its setting, as shown on the Proposals Map, or subsequently designated, or any other monument or archaeological site demonstrated as being of equivalent significance to scheduled monuments.

⁷ December, 2014

2. *Whether they are currently known, or discovered during the Plan period, there will be a preference to preserve important archaeological sites in-situ and to protect their settings. Development that does not achieve acceptable mitigation of adverse archaeological effects will not be permitted.*

3. *Where development is permitted and preservation in-situ is not justified, the applicant will be required to ensure that provision will be made for archaeological excavation and recording, in advance of and/or during development, with the appropriate deposition of any artefacts in an archaeological archive or museum.*

Policy DM35

1. *The Borough Council will seek to protect registered Historic Parks and Gardens, as shown on the Proposals Map, or which are registered during the Plan period.*

2. *Development that would adversely affect the landscape character, layout and features of a Historic Park and Garden, or its setting, will not be permitted.*

3. *Development that would adversely affect a non-Registered Historic Park or Garden will only be permitted where the loss of significance is unavoidable.*

- 2.8 Further detailed guidance is available in *Planning Practice Guidance - Renewable and low carbon energy*⁸. Paragraph 013 identifies particular factors that Swale Borough Council will need to consider when determining applications, including:

Care should be taken to ensure heritage assets are conserved in a manner appropriate to their significance, including the impact of proposals on views important to their setting. As the significance of a heritage asset derives not only from its physical presence, but also from its setting, careful consideration should be given to the impact of large scale solar farms on such assets. Depending on their scale, design and prominence, a large scale solar farm within the setting of a heritage asset may cause substantial harm to the significance of the asset.

Heritage Guidance

- 2.9 The NPPF defines conservation in heritage terms as *the process of maintaining and managing change to a heritage asset in a way that sustains and, where appropriate, enhances its significance.*
- 2.10 Significance is defined as *the value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting.*
- 2.11 Setting is defined as *the surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate the significance or may be neutral.*

⁸ DCLG (March 2014)

3 AIMS AND OBJECTIVES

3.1 The ClfA defines a desk based assessment⁹ as:

“A programme of study of the historic environment within a specified area or site on land, the inter-tidal zone or underwater that addresses agreed research and/or conservation objectives. It consists of an analysis of existing written, graphic, photographic and electronic information in order to identify the likely heritage assets, their interests and significance and the character of the study area, including appropriate consideration of the settings of heritage assets and, in England, the nature, extent and quality of the known or potential archaeological, historic, architectural and artistic interest. Significance is to be judged in a local, regional, national or international context as appropriate.”

3.2 The purpose is to gain an understanding of the historic environment in order to formulate an assessment of the potential for heritage assets to survive within the site, their significance, and strategies for further evaluation, mitigation or management as appropriate.

3.3 The aims of this archaeological desk based assessment are therefore:

- to establish, from documentary sources and a site visit, the known heritage assets within the application site;
- to assess, from existing sources, the potential for previously unknown heritage assets to be present at the site;
- to assess the heritage significance of identified assets;
- to identify the likely development impact on the historic environment arising from the proposed scheme;
- to assess the potential for development constraints arising from consideration of the historic environment during the planning process; and
- to prepare a report suitable for submission in support of a planning application to develop AD at the site.

⁹ in *Standards and Guidance for Historic Environment Desk Based Assessment* (2014)

4 METHODOLOGY

Sources of Information

- 4.1 The sources consulted in the preparation of this report comprise:
- The National Heritage List for England (NHLE);
 - Kent County Council's Historic Environment Record (HER) and archive;
 - Kent History and Library Centre catalogues, aerial photos and secondary sources;
 - Kent County Council's 'Exploring Kent's Past' website for background information and information on Conservation Areas;
 - Historic mapping;
 - Digital terrain model derived from Light Detection and Ranging (LiDAR) data (Digital Surface Model (DSM) & Digital Terrain Model (DTM) derived from Environment Agency LiDAR data taken between 1998-2014); and
 - Observations from a site visit.

Study Area and Gazetteer

- 4.2 Data from the sources described above (designated and non-designated heritage assets) has been collected for a study area of 1km around the application site. A gazetteer of heritage assets within the study area, compiled from the sources above, is presented as Appendix A. Each asset has been given a unique number prefixed 'RSK' which is used throughout the report. Gazetteer sites are shown on Figure 1.
- 4.3 The 1km study area is used for an assessment of visual impact for designated heritage assets as it is unlikely that visual impacts would be significant for a development of this scale and massing beyond this distance.

LiDAR Data

- 4.4 Light Detection and Ranging (LiDAR) is an airborne mapping technique, which uses a laser to measure the distance between the aircraft and the ground. Up to 100,000 measurements per second are made of the ground, allowing highly detailed terrain models to be generated at spatial resolutions of between 25cm and 2 metres.
- 4.5 The Environment Agency data is provided as a composite dataset derived from a combination of the full dataset which has been merged and re-sampled to give the best possible coverage (i.e. the data is derived from multiple chronological periods). Data is available at 1m resolution for the study area.
- 4.6 A Digital Surface Model (DSM) has been used which was generated from the signal returned to the LiDAR (which includes heights of objects, such as vehicles, buildings and vegetation, as well as the terrain surface) and a Digital Terrain Model (DTM) produced by removing objects from the Digital Surface Model.

Site Visit

- 4.7 Heritage assets identified from desk-based sources and the areas of proposed development impact (including the grid connection) were visited, described and photographed.
- 4.8 A summary of site characteristics, any visible archaeology and geographical/geological features which may have had a bearing on prehistoric land use as well as that which may constrict subsequent archaeological evaluation was noted.
- 4.9 Records were made on extant archaeological features, such as earthworks or structural remains, any negative features, soil discolourations or cropmarks, present land use, current boundary formation, evidence for previous land use, local topography and aspect, exposed geology, soils, watercourses, exposure, health and safety considerations, surface finds, and any other relevant information.
- 4.10 The area of the proposed development was divided into Areas A – C which are referenced throughout this report, and shown on Figure 1.

Importance

- 4.11 In this report the relative importance of each heritage asset potentially affected by the proposed development has been determined to provide a framework for comparison. The grading of significance of heritage assets is based on the criteria listed in Table 1.

Table 1: Criteria for Determining Heritage Asset Importance

| Importance | Definition |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| High | Assets and structures of acknowledged international / national importance. Examples include World Heritage Sites, Registered Parks and Gardens, Scheduled Monuments, Listed Buildings, Conservation Areas and buildings of recognised international importance. |
| Medium | Assets and structures of acknowledged regional importance. Examples include historic townscapes, and non designated assets of value within the county HER. |
| Low | Assets and structures of acknowledged local importance. Examples include historic (unlisted) buildings, assets of limited value registered in the county HER, and assets compromised by poor preservation. |
| Negligible | Assets and structures known to be of low archaeological or historical importance. Examples include remains previously subject to large-scale destruction, assets with very little or no surviving archaeological or historic interest and assets which hold little intrinsic archaeological value. |
| Uncertain | Assets and structures of uncertain character, extent and/or date where the importance cannot be ascertained. |

Assessment of Impacts

Physical impacts

- 4.12 Physical impacts would occur during the construction phase of the development. Impacts would be primarily from groundworks for construction compounds, foundations, access tracks and any service and drainage runs.
- 4.13 The potential physical effect of construction of the proposed development and recommended requirement for further mitigation is assessed by comparing the land-take needed against the location of the known/potential heritage assets.
- 4.14 Where the extent of physical impacts is uncertain, further field assessments such as geophysical survey and/or archaeological trial trenching may be recommended in order to determine archaeological potential.

Visual impacts

- 4.15 Impacts to setting are defined as any perceived change or effect of the proposed development on a protected heritage asset or its setting (e.g. visual or sensory change perceived of a designated heritage asset, or change within its setting with the potential to affect the ability to understand or appreciate significance of the protected asset itself), where this distracts from the context, integrity or appreciation of the monument or monuments affected.
- 4.16 Visual impacts would occur throughout construction and during the operational life of the development.
- 4.17 Designated heritage assets (i.e. protected assets) within a 1km study area and non-designated heritage assets in the immediate vicinity to the proposed development were screened for sensitivity to visual change regarding heritage significance worthy of preservation, including any contribution made by setting. These were visited in order to identify the contribution of setting to significance (prominence and dominance etc.), and any significant sightlines.

Limitations of the Assessment

Data sources

- 4.18 Information held by public data sources is usually considered to be reliable, however certain limitations are made explicit:
- The content of the HER is largely defined by patterns of research and fieldwork, undertaken in response to commercial development, alongside private or publicly funded research programmes. There can therefore be geographic and period-specific bias in the available evidence for the historic environment;
 - Dating evidence for sites is often circumstantial and may be approximate;
 - Documentary sources are rare before the medieval period, and many early historic texts are inherently biased for political or ideological reasons; and
 - Primary sources, especially antiquarian records, often fail to accurately locate sites and can be erroneous in any interpretation.

Site visit

- 4.19 Any archaeological site visit has inherent limitations primarily because archaeological remains below ground level may have no surface indicators or be obscured by current land use.

5 SITE DESCRIPTION

Location, Land Use and Topography

- 5.1 The site is located in the middle of the Isle of Sheppey, Kent (NGR 596295E 170852N, post code ME12 3SU) in the parish of Eastchurch (directly adjacent to the boundary of the Parish of Minster).
- 5.2 The Isle of Sheppey lies off the north coast of Kent at the mouth of the River Medway in the Thames Estuary. It is separated from the mainland by a channel ('the Swale'). The island is 9 miles long, 4 miles wide and connected to the mainland by a bridge at Kingsferry.
- 5.3 The site of the proposed development surrounds the farm complex called New Hook Farm. At the outset of the project the developable area was divided into Areas A – C. Following environmental assessments, Area C was discarded in development proposals (see Part 8).
- 5.4 The site is accessed via a track (Windmill Quay Road) leading south from Lower Road. The area which is proposed for development includes the farm yard (Area B) and fields to its north (Area A) and south (Area C).
- 5.5 The general wider landscape is undulating. The site itself is on a relatively flat area, lying at 14m above Ordnance Datum (aOD), rising slightly to the north at 16m aOD. Views are therefore open to the south, east and west, and restricted northwards by the slope.

Geology

- 5.6 The geology of the site is recorded by BGS as the Thames group, consisting of clay, silt, sand and gravel¹⁰. The BGS website also gives records of nearby borehole results (TQ97SE2) which record the geology as boulder clay. Surface extraction of this natural deposit at the site was observed during the site visit of >5m depth.

Site visit

- 5.7 The site visit for this assessment has added no further heritage assets to the gazetteer.
- 5.8 Area A is currently arable (a vegetable crop was present at the time of the site visit).
- 5.9 Area B, the farm yard is located to the south of Area A and is highly disturbed following recent installation of barns. Large earth bunds earth were formed around Area B at this time.
- 5.10 Area C has been subject to extensive surface-extraction of boulder clay, for which the landowner holds a licence (landowner, Pers. Comm.).

¹⁰ <http://mapapps.bgs.ac.uk/geologyofbritain>, accessed 29/09/15



Figure 2. General view of the site of New Hook Farm looking south



Figure 3. Area A looking south west

5.11 Area A is part of an arable field to the north of the farm and Windmill Quay Road.

- 5.12 The field was ploughed at the time of the site visit and low earthworks would not have been visible if present.



Figure 4. Area B looking east

- 5.13 Area B is part of the farm yard. The surface has been reduced and material banded (see also Figure 12).



Figure 5. Area C looking east

- 5.14 Area C was subject to deep excavation at the time of survey, to a depth of c.5m.

6 RESULTS

6.1 Heritage assets in the 1km study area are described by period below and, where relevant to the archaeological potential of the site, are referenced in the 'Archaeological and Historical Narrative' section. See the gazetteer (Appendix A) for the full list of heritage assets, and Figure 1 for their location.

Designated Heritage Assets

6.2 There are no designated assets at the proposed site of development or within the study area. The closest designated heritage assets are listed buildings:

- 'Scocles Court' (grade II), 1.6km to the north-west of the site; and
- 'Four hangars' (grade II), 2.1km south-east of the site.

Non-Designated Heritage Assets

6.3 There are no known non-designated heritage assets recorded by the Kent HER located within the proposed development site boundary.

6.4 The nearest heritage asset to the proposed development is the post-medieval farm house of New Hook farm (RSK 9), described by the Kent HER as follows:

Type: Loose courtyard with working agricultural buildings on four sides and with additional detached elements to the main plan.

Farmhouse: Farmhouse detached gable end-on to yard.

Position: Isolated position.

Survival: Altered - significant loss of original form (more than 50%).

New sheds: Large modern sheds built on the site of the historic farmstead, may have destroyed original buildings or obscured them.

6.5 There are 12 non-designated heritage assets recorded by the Kent HER in the study area for the site (RSK 1-12).

6.6 There are no known heritage assets dating from the Palaeolithic to the early Medieval periods (inclusive) within the study area.

6.7 There are two Medieval period non-designated assets within the study area, both saltworks (RSK 1 & 6).

6.8 There are five post-medieval period assets of which four are farmsteads (RSK 7 – 10) and one is a drainage feature (RSK 4).

6.9 There are four modern non-designated assets. Two are aviation crash sites (RSK 11 & 12) and two are associated with the nearby railway infrastructure (RSK 2 & 3). The former Queensborough and Leysdown Light Railway (RSK 2) once passed through the field of which Area A is a part, but this line lay outside the area of the proposed development.

Historic Environment Events

- 6.10 The gazetteer (Appendix A) lists archaeological events previously implemented within the study area. The results of these assessments are summarised in Table 2 and their location is shown on Figure 1.
- 6.11 There are no events which directly relate to the proposed development site.

Table 2: Historic environment events within study area

| RSK ID | Name | Organisation | Year | Results |
|--------------|------------------------------------------------------------------------------------|----------------------------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RSK13 | Historic Environment of the North Kent Coast: Rapid Coastal Zone Assessment Survey | Wessex Archaeology | 1999-2000 | CZAS included the current application site within its study area. No remains were identified within the site boundary as part of this assessment. |
| RSK14 | Archaeological Consultancy Report and Desktop at South Lees Farm, Minster | Bartlett-Clark Consultancy | 2013 | The highest potential for archaeology was considered to be prehistoric features around the South Lees Farm in Minster. |
| RSK15 | Proposed Solar Park at South Lees Farm, Minster On Sea, Sheerness. | Barlett-Clark Consultancy | 2013 | A magnetometer survey showed a number of features which relate to the ordnance survey mapping. Linear features related to old field boundaries, a pond and land drains. |
| RSK16 | Geotechnical boreholes at Shrubsoles Hill, Sheppey | Contest Melbourne Weeks | 1995 | A document in support of a Planning Application for the excavation of clay at Shrubsoles Hill. |

Archaeological and Historical Narrative

Palaeolithic period (800,000 BC to 10,000 BC)¹¹

- 6.12 There have been several separate ice ages in Britain, each lasting tens of thousands of years. At the cold peak of ice ages, glacier sheets hundreds of metres thick would have covered most of Britain, reaching on occasion as far south as London.
- 6.13 At times, the sea-level would have been up to 100m less than the present day, and there would have been a highway of chalk downland where the English Channel is

¹¹ drawing upon Wenban-Smith et. al., 2010

today. Kent would be one of the first parts of Britain reached by early colonisers, being the closest part of Britain to the European mainland.

- 6.14 Kent is a special place for Palaeolithic archaeology, having far more recorded finds than any other county. The deposits containing Palaeolithic tools are often deeply buried, so they are usually only exposed by quarrying or major construction projects. There are multiple finds of hand axes, including one from Minster on the Isle of Sheppey.
- 6.15 There is a negligible potential for previously unknown Palaeolithic remains at the site.

Mesolithic period (10,000 BC to 4,000 BC)¹²

- 6.16 Following evidence for occupation in the interglacial periods, the earliest traces of Mesolithic reoccupation in the county are sparse, despite its potential as a possible gateway into Britain.
- 6.17 Many of Kent's Mesolithic finds have been made along river valleys, reflecting resources targeted by hunter-gatherers. At High Rocks near Tunbridge Wells, Mesolithic tools were found with hearths, from which material has been carbon-dated to the very end of the period c.6000 years ago. Mesolithic stone tools have been found on the Isle of Sheppey although none are known from the study area.
- 6.18 There is as yet no evidence for built permanent Mesolithic structures in Kent, and the mobile lifestyle has left little trace of settlement sites. It is therefore unsurprising that Mesolithic settlement evidence has not been identified on the Isle of Sheppey.
- 6.19 There is a low potential for previously unknown Mesolithic remains at the site.

Neolithic period (4,000 BC to 2,350 BC)¹³

- 6.20 During this period major monuments were constructed and some members of society were buried within chambered tombs or earthen long barrows. It is likely that some of Kent's barrows were among the earliest examples of this type of monument in Britain. Recent interpretations suggest some of these changes took place over many centuries. The shift from a mobile hunting and gathering lifestyle to more permanent settlement may have been very gradual.
- 6.21 It is likely that during the early Neolithic much of the Kent landscape was still covered with deciduous woodland. Clearance of woodland, to provide pasture and crop fields, was patchy and at first may not have been permanent leading to woodland regeneration in some areas. The first domesticated animals were sheep, pigs and goats. Barley and wheat were planted.
- 6.22 The discovery of Kent's causewayed enclosures and possible cursus is recent, coming about through road and housing development. Two causewayed enclosures have recently been discovered on the Isle of Sheppey at Kingsborough¹⁴ and a Neolithic

¹² drawing on Palmer, www.kent.gov.uk

¹³ drawing on Palmer, www.kent.gov.uk

¹⁴ Allen et al 2008

oven and pottery were recovered from excavations on the Isle of Sheppey on Power Station Road, approximately 4 miles from the proposed development.

- 6.23 During the later Neolithic, new types of monument were built in Britain, such as henges, and stone or wooden circles. Kent has one example of a henge at Ringlemere near Sandwich.
- 6.24 There is still little evidence for permanent settlement in the shape of large buildings, with only around 40 such known sites in Britain. Recent excavations at White Horse Stone, near Maidstone, uncovered a substantial timber structure.
- 6.25 During the site visit carried out as part of this assessment a worked flint artefact (a broken blade likely of the later Prehistoric period) was identified, indicating that the site area was probably exploited during this period.
- 6.26 There is a low potential for previously unknown Neolithic archaeological remains at the site.

Bronze Age period (2,350 BC to 700 BC)¹⁵

- 6.27 Bronze Age houses were usually round, and often within an oval or rectangular enclosure. The coast and river valleys were favoured settlement areas; rivers would have been important in the trade and communication network.
- 6.28 The commonest type of earlier Bronze Age remains are barrows, round or more rarely oval mounds often covering a central burial, with an encircling quarry ditch. Barrows are often grouped together, as at Monkton in Thanet. Aerial photographs have led to the discovery of many more barrows over the last few decades. Several Bronze Age cemeteries are known on the Isle of Sheppey at Shrubsoles Hill and Eastchurch. There is a Bronze Age barrow at the former.
- 6.29 Around 3500 years ago the remains of settlements begin to dominate the evidence for Kent's later Bronze Age. Monument building for the dead declined; for a few centuries in the later second millennium BC cremations in large pots were sometimes inserted into already-existing barrows or laid in cemeteries with very small, or no, mounds, as at Bridge, near Canterbury.
- 6.30 Bronze Age fields systems, enclosures and artefacts such as a spearhead, sickle and amber bead are all known from the Isle of Sheppey although none are known in the study area. A number of bronze sickles are also recorded from the region. The practice of depositing precious items in water probably began in the Bronze Age. There have been several gold finds in the Medway Valley, for example, torcs and bracelets at Aylesford. There is no Bronze Age gold from north east Kent, where there is a concentration of bronze hoards, such as at Leysdown, near to the study area. Various reasons have been put forward for hoard burial; as ritual offerings, to increase the scarcity of remaining metalwork or to hide precious goods.
- 6.31 There is a low potential for previously unknown Bronze Age archaeological remains at the site.

¹⁵ drawing on Palmer, www.kent.gov.uk

Iron Age period (800 BC to AD 42)¹⁶

- 6.32 Kent has a few hillforts but unlike those elsewhere in Britain, which were generally built early in the period, Kent's are middle-to-late Iron Age. Hillforts in other areas, such as in neighbouring Sussex, were often densely occupied, but examples from Kent do not seem to be used in this way.
- 6.33 A handful of Kent sites have been suggested as *oppida*, a term used by Caesar to describe large and important (urban) centres which had political and economic functions similar to Roman towns. Iron Age settlements at Canterbury, Rochester and Quarry Wood Camp and Boughton Monchelsea, may fit the criteria of dense settlement and of finds demonstrating trade with the continent.
- 6.34 More typically Iron Age settlements ranged from single farmsteads to large villages, some enclosed with ditches and fences. Multiple enclosing ditches are common elsewhere in the country, but in Kent the only known example is Beechbrook Wood near Ashford. Houses were normally round, made of wood, wattle and daub. Enclosures, field boundaries and trackways dating to the Iron Age are known on the Isle of Sheppey, although none are known in the study area.
- 6.35 There is a lack of burial evidence until the late Iron Age; the few graves that have been found are in a crouched position on their side, a rite which seems to change by the middle Iron Age when the body was laid flat on its back. By the late Iron Age cremation was a more common rite.
- 6.36 According to Roman sources Iron Age Kent was within the territory of the Iceni tribe at the time of the invasion of AD 43.
- 6.37 There is a low potential for previously unknown Iron Age archaeological remains at the site.

Roman period (AD 43 to AD 410)¹⁷

- 6.38 Southern England became part of the Roman empire after the invasion of AD43. It is likely that the Roman army landed at Richborough (Rutupiae) in Kent. The tribal area of Roman Kent was known as the *Civitas Cantiacorum*.
- 6.39 Much of the countryside's population continued to live in timber houses, round and rectangular.
- 6.40 There is a large amount of evidence for Roman occupation on the Isle of Sheppey, which the Romans called *Insula Orium*. Enclosures, field boundaries, a farmstead, cremations and a coin hoard are all known from within 2km of the site of the proposed development, although none is known in the study area.
- 6.41 There is a low potential for previously unknown Roman archaeological remains at the site.

¹⁶ drawing on Palmer, www.kent.gov.uk

¹⁷ drawing on Palmer, www.kent.gov.uk

Early Medieval period (AD 410 to 1066)¹⁸

- 6.42 Kent has produced a wealth of archaeological evidence from the Anglo-Saxon period and has the earliest written sources in England. Early medieval settlers in Kent were Jutes from southern Scandinavia, a picture that has some support from archaeological evidence. 'Kent' was created in this period; the original powerbase of the kingdom seems to have lain east of the River Stour. By the end of the 6th century, however, it included at least the area of the modern county, consisting perhaps of around 20-30 large estates, each with a centre.
- 6.43 Settlements found in Kent have generally been small and rural, apart from those at Canterbury and Dover. On the Isle of Sheppey, there are several known Medieval settlement sites, including two settlements in Minster-On-Sea. Post-holes, glass and pottery have been recovered. Other Anglo-Saxon occupational sites are known, including a 7th century sunken featured building at St George's School and the site of a timber building associated with the nearby Abbey. These are within 2km of the site of the proposed development. Spot finds of silver and gold artefacts are also known.
- 6.44 The Isle of Sheppey was named by the Saxons, who called it 'scepige', meaning isle of sheep¹⁹.
- 6.45 Minster Abbey on the Isle of Sheppey was established in AD664 on behalf of Queen Sexburgha²⁰. The priory was destroyed by Viking raiders in the 9th century. There are historical records pertaining to a Viking military camp on the Isle of Sheppey, although its location is unknown. Historical texts talk of Kent suffering from Viking raids, although little archaeological evidence has yet been found. From 980 onwards Thanet was devastated and Canterbury was sacked in 1011. The Danish King Cnut was defeated in 1017 and his army departed.
- 6.46 Evidence for maritime activity elsewhere is sparse, but Kent does possess the earliest clinker-built boat known in Britain. The Graveney boat was uncovered in the marshes by the Swale in 1970 and has been dated to the 10th century.
- 6.47 There is a negligible potential for previously unknown Early Medieval archaeological remains at the site.

Medieval period (AD 1066 to AD 1540)

- 6.48 In addition to cathedrals, minsters and churches, Kent possessed a number of monastic houses. Some of these were very ancient, being founded by the Saxon Kings of Kent such as at Canterbury (Christ Church Priory and St Augustine's Abbey), Dover and Rochester (St Andrew's Priory).
- 6.49 In 1339 Edward III built a castle at Queenborough which was used by later royals, including Elizabeth I. It was destroyed by Oliver Cromwell and today it only survives as a motte²¹.

¹⁸ drawing on Palmer & Richardson, www.kent.gov.uk

¹⁹ Mills, 2003

²⁰ Lambarde, 1570

²¹ Clancy, 2013

- 6.50 Salt was an important industry during the Medieval period, as it not only flavoured food, but also preserved without refrigeration. Saltworking sites are known on the Isle of Sheppey. These are the areas where salt was extracted and purified by the dehydration of brine. Within the study area there are two non-designated heritage assets which are associated with the Medieval salt industry (RSK 1 & 6).
- 6.51 The Isle of Sheppey was known for copperas production in the 1500s, a Kentish product used for dyeing wool, ink, tanning and dressing leather²². The material was gathered from Sheppey but processed on the mainland.
- 6.52 There is a negligible potential for previously unknown Medieval archaeological remains at the site.

Post-Medieval period (1540 – 1800)

- 6.53 The Isle of Sheppey was the centre of a brief conflict when Dutch forces invaded the island in 1667. They captured the fort at Sheerness and occupied the island for a few days before leaving after taking supplies. The island was also an important military defence point in the 1800s because of its strategic location near Chatham Dockyard and the City of London.
- 6.54 Post-medieval buildings on the Isle of Sheppey are common and many farmsteads were created during this era, including New Hook Farm (RSK 9). There are four post-medieval farmsteads in the study area (RSK 7-10). Inventories from 1565-1579 and 1600 show the majority of farms were in east Kent, Romney Marsh or the north Kent marshlands. The Isle of Sheppey had a developed agricultural sector as demonstrated by a Peter Heayne of Eastchurch who died in 1565 with over 500 acres of land with 36 acres of cereal crops, 966 sheep, 35 cattle and 7 horses²³.
- 6.55 It is probable that the study area was drained at around the time Old Hook and New Hook Farms were established, probably in the late eighteenth century. The proposed development site was most likely marshland prior to the post-medieval period.
- 6.56 There is a negligible potential for previously unknown post-Medieval archaeological remains at the site.

²² Chalklin, 1965

²³ Zell, 2000

Nineteenth Century



Figure 6. Tithe Map of 1842. Copy taken at Kent History and Library Centre.

- 6.57 The 1842 tithe map held by the Kent History and Library Centre shows the site located across two large fields in an agricultural landscape (Figure 6). The field boundaries (mainly ditches) shown on the tithe map are mostly still present in the modern landscape, however some areas have been reworked (see below). The form of the fields- large sub-rectangular parcels are consistent with post-medieval enclosures.
- 6.58 The site lay largely within the parish of Eastchurch; however, the parish boundary between Eastchurch and Minster was shown running north-south through Area A. This may indicate that it was an arbitrary line drawn up by a remote administrator rather than a long lived local boundary, or alternatively followed the line of a feature subsequently lost during the amalgamation of fields during the enclosure of the landscape.
- 6.59 The proposed development areas lie within parts of two fields on the tithe map:
- Areas A and B, part of field **136**, is called Lower Romney Marsh (arable land),
 - Area C, part of field **140**, is called The Meadow (pasture).
- 6.60 In addition, Windmill Quay Road was labelled 142 (waste).
- 6.61 Demonstrating that these buildings were built prior to 1842, New Hook Farm (shown as a cluster of farm buildings positioned around a courtyard) was shown, as was Old Hook Farm to the south east.
- 6.62 The surrounding area contains further farmsteads, is clearly an agricultural landscape, and the road system still in use today was established.

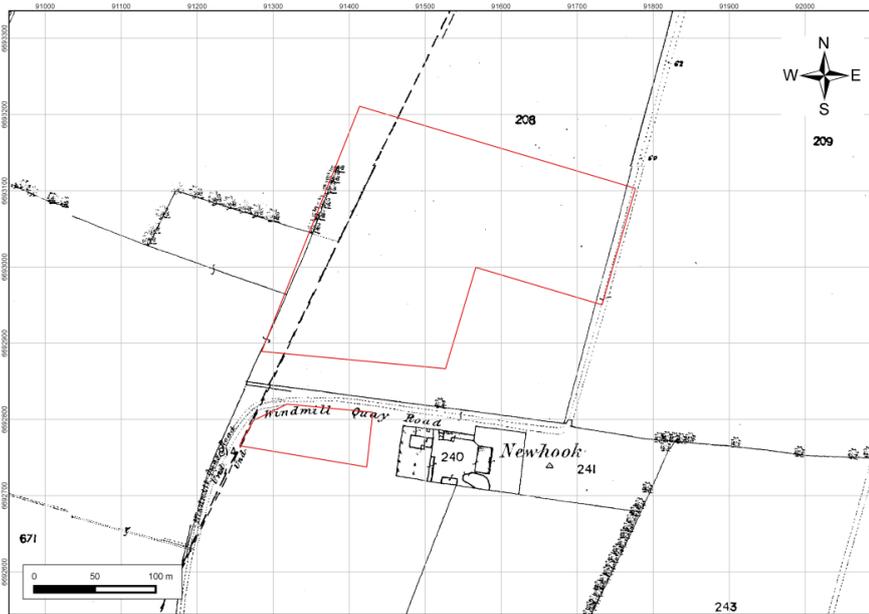


Figure 7. 1867 OS map 1:2500

6.63 The 1867 Ordnance Survey map (Figure 7) showed the site unchanged from the earlier tithe map.

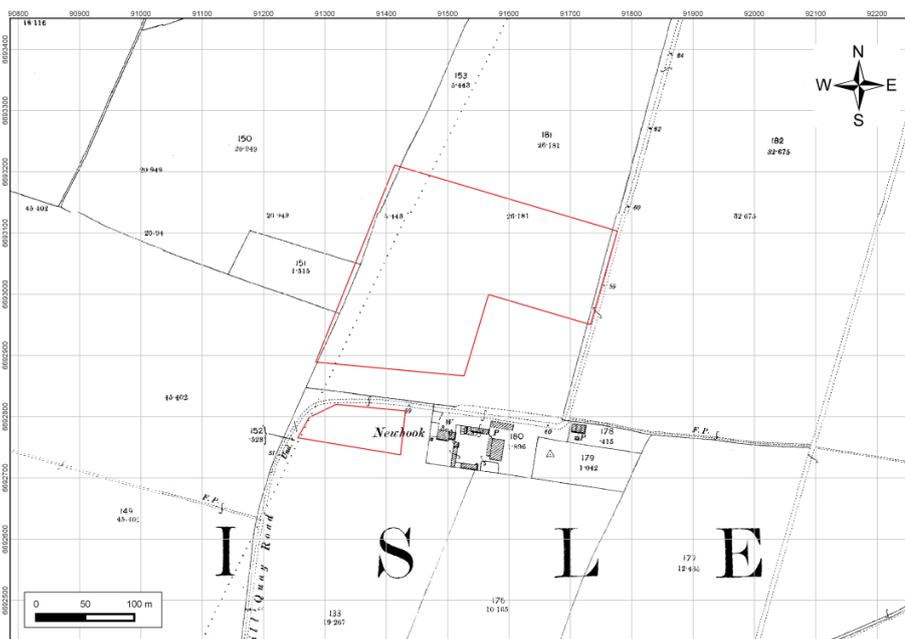


Figure 8. 1896 OS Map 1:2500

6.64 By the time of the 1896 Ordnance Survey mapping additional buildings had been constructed to the east of the farm: New Hook Farm Cottages.

6.65 The 19th century period is well-represented on historic mapping, thus there is a negligible potential for previously unknown 19th century archaeological remains at the site.

Twentieth Century

- 6.66 The Sheppey Light Railway was created in 1901. There are two non-designated assets associated with railways within the study area. RSK 3 is the site of Brambledon Halt, the disused halt on the Sheppey light railway and RSK 2 is the disused railway and associated features of the Sheppey Light Railway.
- 6.67 In the First World War the army, navy and RAF all used the area which was a designated military zone. The dockyard at Sheerness, which was established during the 19th Century was used for repairing and refitting naval ships and Eastchurch and Leysdown airfield were training and testing sites for the RAF²⁴.
- 6.68 The Isle of Sheppey was important in the history of aviation. In 1909 the Short brothers built the country's first aircraft factory on unobstructed marshland near Leysdown-on-Sea. The Moore Brabazon first flew from the Isle of Sheppey. Winston Churchill learnt to fly on the Isle of Sheppey in 1913 at an airstrip in Eastchurch. There are two non-designated heritage assets associated with the modern military presence on the Isle of Sheppey. These are RSK 11 and 12, the crash sites of a Submarine Spitfire and a Hawker Hurricane.
- 6.69 During WWII security on the island was so high internal passports were issued to local residents and there were restrictions in access to the island. Defence works, including trenches and gun emplacements were created for security purposes, resulting in the island becoming known as Barbed Wire Island. Surviving trenches are present across farmland in the south of the island.

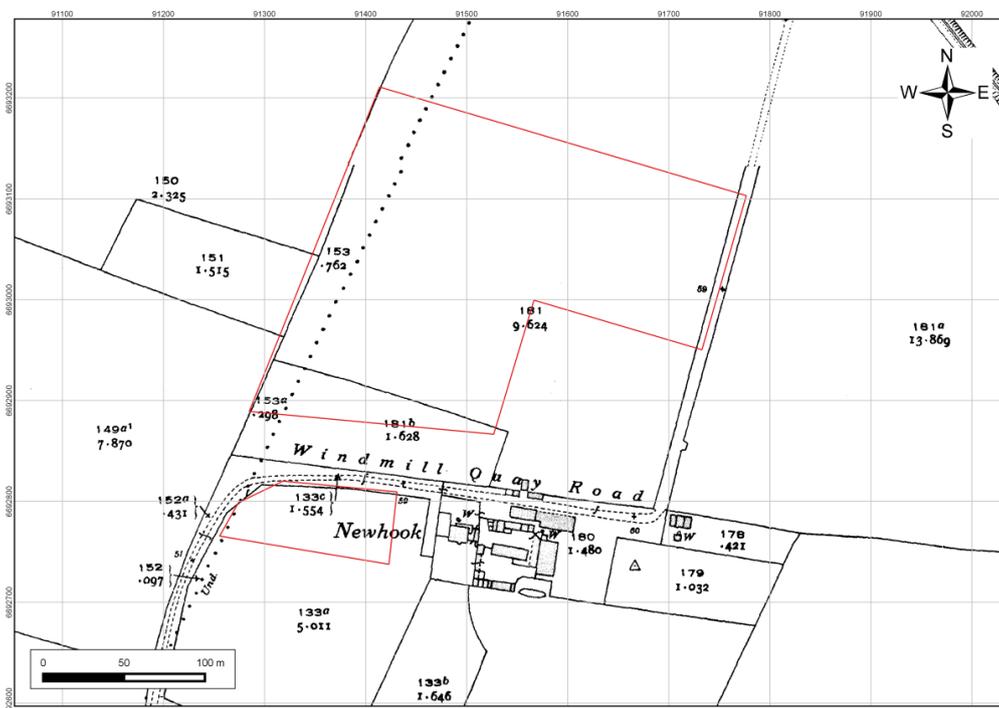


Figure 9. 1933 OS Map 1:2500

²⁴ Jessup, 1973

- 6.70 By 1933 Area A had been subdivided by the establishment of a field boundary aligned approximately north west-south east.
- 6.71 New buildings had been constructed within the farm yard complex. One of these was within the farm courtyard and a further building was an addition along Windmill Quay Road.



Figure 10. Aerial photograph of Hook Farm taken in 1946. Copy taken at Kent History and Library Centre

- 6.72 No archaeological features are identifiable within the proposed development site boundary in the 1946 RAF aerial photography (Figure 10).

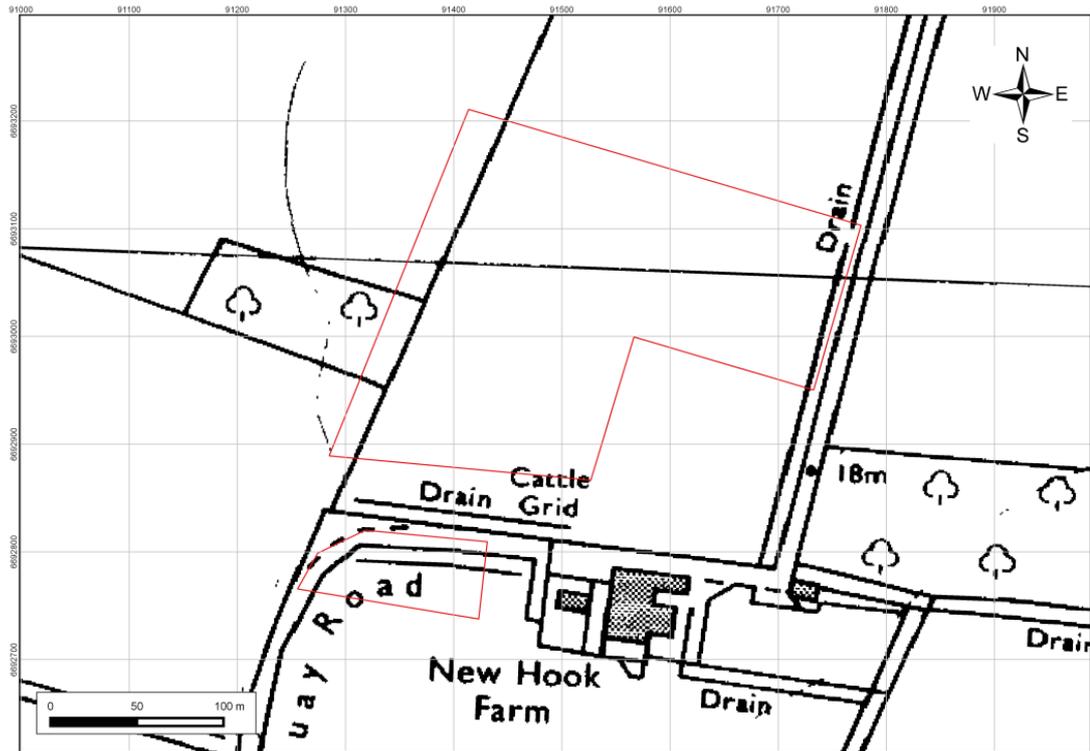


Figure 11. 1974 OS Map 1:10000

- 6.73 By 1974 the farm complex had developed and the courtyard had been replaced. The series of small buildings present on the earlier maps had been removed, replaced by a large barn. New Hook Farm remained, but the remainder of the buildings had been replaced.



Figure 12.
Digital Terrain Model

Development area boundary and site access indicated

Derived from LiDAR Data c.2012
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- 6.74 The LiDAR data for the site shows the recent terrain consistent with that of the arable land use. There are no obvious earthworks/targets for further assessment identified within the site boundary or adjacent fields which might extend into the development area. The previous disturbance and earthwork bunds of Area B are clearly defined.
- 6.75 North of, and beyond the site boundary in Area A the earthworks of the former Queenborough and Leysdown Light Railway (RSK 2) are evident, as are the field boundary drains.



**Figure 13. Modern (2013) Aerial View of New Hook Farm
Open Source Data**

- 6.76 A recent aerial view of the site shows extensive activities, which will have significantly impacted upon any archaeological remains which may have been present across a large proportion of the site.
- 6.77 There has been large scale disturbance within Area B. Bunds around this area were created during construction of the new barn to the north.
- 6.78 The boulder clay extraction observed during the site visit in Area C has been carried out (since collection of the LiDAR data, c.2012, shown in Figure 12).
- 6.79 Surface artefacts identified during the site visit comprised modern and post-medieval ceramics, and different kinds of slag, all of which are indicative of modern agricultural 'ground-improvements'.
- 6.80 There is a negligible potential for previously unknown 20th century archaeological remains at the site.

7 ARCHAEOLOGICAL POTENTIAL

- 7.1 Areas B and C have no archaeological potential as they have been subject to extensive recent disturbance which will have truncated any archaeological remains which may have been present.

Prehistoric and Roman Periods

- 7.2 A recent increase in the number of prehistoric sites recorded on the Isle of Sheppey, such as a Neolithic causewayed enclosures and possible cursus monuments, indicate there may be a more significant prehistoric presence on the island than previously thought.
- 7.3 Some prehistoric activity may have occurred in the study area, based on a worked flint artefact which was recovered on the site visit. There are no surface indicators of archaeological activity visible on aerial photography (Figures 10 & 13), LiDAR data (Figure 12), nor identified during the site visit in Area A, and no Prehistoric or Roman period heritage assets recorded within 1km of the site.
- 7.4 There is a low potential for previously unknown prehistoric and Roman remains to be preserved within Area A.

Early Medieval – Medieval Periods

- 7.5 Medieval remains recorded in the study area comprise salt works only, which are highly visible landscape features. It is very unlikely that further saltworks are present within Area A.
- 7.6 It is probable that the study area was drained at around the time Old Hook and New Hook Farms were established, probably in the late eighteenth century. The proposed development site was most likely marshland prior to the post-medieval period.
- 7.7 There is a negligible potential for early Medieval and Medieval remains at the site.

Post-medieval and Modern Periods

- 7.8 Known heritage assets within 1km were mostly of post-medieval date, indicative of a intensification of activity from this era. This primarily agricultural and industrial activity, represented by the establishment of farmsteads and the railway are all illustrated on contemporary mapping.
- 7.9 There is a negligible potential for hitherto unknown post-medieval or modern archaeological remains of significance to be discovered in Area A.
- 7.10 Modern artefacts on the ground surface of Area A recorded during the site visit are unlikely to indicate subsurface archaeological remains, and are more likely the result of manuring / pH improvements.

8 IMPACT ASSESSMENT

Project Description

- 8.1 Following drafting of environmental assessments in support of the planning submission, the decision was made by the design team to position infrastructure within Areas A and B only (see Figure 14).
- 8.2 The project will involve the establishment of the following elements of infrastructure; (heights above surrounding ground-level are given in brackets):
- Primary digester (12m)
 - Post digester (14m)
 - Storage tank
 - Technical building
 - Gas flare (6m)
 - Solid digestate removal area
 - Feedhopper
 - Silos
 - Liquid digestate removal station
 - Silage clamp (4m)
 - Back up generator
 - Reception building
 - Transformer
 - Concrete apron
 - Condensate pit
 - Weighbridge
 - Existing storage tank
 - ROV compound
 - Elstor gas injection
 - E-box
 - Propane tank base
 - Bio filters 320m² (800m³)
 - Site office
 - Gas to grid processing unit
 - CHP
 - Attenuation lagoon



Figure 14. Proposed Development Layout (Areas A and B only)

Direct impacts

- 8.3 There are no known archaeological remains within the site boundary likely to be affected by the proposed development.
- 8.4 There is a low potential for an impact on previously unknown archaeological remains, and this risk is limited to Area A only, since Area B has been truncated by modern land use.

Visual impacts

- 8.5 There are no designated heritage assets intervisible with the proposed development site and given the nature, landscape location, and relative scale of the proposed development, no visual impacts on designated heritage assets were identified within the 1km study area.
- 8.6 The nearest non-designated heritage asset to the proposed site of development is New Hook Farm which dates to the post-medieval period. The heritage significance of the farm lies primarily in its architectural values.
- 8.7 The immediate and general surroundings of this building have already been the subject of major redevelopment, including the construction of modern farm buildings, which has compromised entirely the original courtyard layout (see Figures 6 – 13). The presence of wind turbines also affects longer distance views from and to the farm, and the general landscape is one of large-scale industrial and agricultural buildings.
- 8.8 The visual effect of the proposed development on the significance of New Hook Farm is therefore considered to be negligible.



Figure 15. Existing baseline at New Hook Farm, as viewed looking south east from Area C. New Hook Farm is located behind vegetation to left of shot.

9 RECOMMENDATIONS AND CONCLUSIONS

Recommendations

- 9.1 It is recommended that if archaeological mitigation is considered necessary, this should comprise an archaeological watching brief over any construction groundworks deeper than ploughsoil (i.e. 20cm) in previously undisturbed parts of the proposed development site (i.e. Area A only, an area measuring c1.2ha). Areas B and C are not considered to have any archaeological potential and therefore do not need to be considered further.
- 9.2 If necessary this stage may be followed by a programme of 'preservation by record' (archaeological excavation) of any significant remains identified.
- 9.3 It is expected that due to the low overall archaeological potential of the site that this assessment could be carried out as a condition of planning consent in order to inform any requirement for mitigation.
- 9.4 Any further works should be carried out according to a site-specific archaeological written scheme of investigation, to be issued and approved by Kent County Council's archaeological advisors in advance of the works.

Conclusions

- 9.5 This desk based assessment has considered the known and potential archaeological resources at the application site using a range of sources for a 1km study area.
- 9.6 The potential for archaeological remains to be present at the site is considered to be low due to the recent ground disturbance which has taken place in Areas B and C. The potential for significant archaeological remains to be present in Area A is not considered to be high given the low extent of known previous archaeological activity within the vicinity which are mostly post-medieval in date and indicate a reclamation date of the site around the late eighteenth century.
- 9.7 There would be no significant visual effects on heritage assets from the proposed development as there are no designated assets within 1km.
- 9.8 At this stage there are no known historic environment constraints that should affect or have a bearing on the layout or design of the proposed development at New Hook Farm.
- 9.9 Development as proposed would not therefore conflict with national or local planning policy in respect of the historic environment, and archaeology should not pose a constraint to development should planning permission be granted for the scheme.

10 REFERENCES

Allen, M. J, Leivers, M, Ellis, C, Stevens, S, Clelland, S, Bayliss, A, Butler, C, Gale, R, Gibson, A, McKinley, J. I, Knight, S, Mephram, L, Scaife, R, Stevens, C. J. (2008). *Neolithic Causewayed Enclosures and Later Prehistoric Farming: Duality, Imposition and the Roles of Predecessors at Kingsborough, Isle of Sheppey, Kent, UK*. Proceedings of the Prehistoric Society 74: 235-322.

Chalklin, C. W. 1965. *Seventeenth Century Kent*. Longman Green and Co: London.

Chartered Institute for Archaeologists, 2014, *Code of Conduct*

Chartered Institute for Archaeologists, 2014, *Standard and Guidance for Historic Environment Desk-Based Assessment*

Clancy, J. 2013. *Isle of Sheppey Through Time*. Amberley Publishing, Gloucestershire.

Jessup, F. W. 1973. *Kent History Illustrated*.

Lambarde, W. 1570. *A Perambulation of Kent*. Chatnam, Baldwin.

Mills, A. D. 2003. *Dictionary of British Place Names*. Oxford: Oxford University Press.

Zell, M. 2000. Landholding and Land Market in Early Modern Kent. In: *Early Modern Kent, 1540-1640*. M. Zell (ed). Boydell Press. Kent County Council.

Archaeological and historical background primarily drawn from www.Kent.gov.uk - <http://webapps.kent.gov.uk/KCC.ExploringKentsPast.Web.Sites.Public/>

APPENDIX A: GAZETTEER

| RSK ID | HER | SUMMARY | STATUS | NGR | EAST | NRTH | PERIOD |
|--------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-------|-------|-----------------------------|
| RSK1 | TQ 97 SE 15 | Unidentified salt-works. Two salt-working mounds situated on the Newhook Marshes | MON | TQ | 9608 | 7031 | Medieval |
| RSK2 | TQ 97 SE 1071 | Queenborough and Leysdown Light Railway. Sheppey Light Railway. Ran from junction with main line near Queenborough Station to Leysdown, opened in 1901. Closed 1950 | MON | TQ | 9732 | 7184 | Modern |
| RSK3 | TQ 97 SE 34 | Site of Brambledon Halt (disused halt on the Sheppey Light Railway) Brambledown Halt on Sheppey Light Railway, added 1905 , closed 1950. Single timber platform with single corrugated tin clad shelter. Now demolished and site built on | MON | TQ | 96476 | 71521 | Modern |
| RSK4 | TQ 96 NE 1029 | Change in drainage indicates presence of possible feature | MON | TQ | 96390 | 69949 | Unknown (earlier than 1870) |
| RSK5 | TQ 97 SE 1000 | Windmill Quay Windmill Quay, Newhook Marshes, on 1st-3rd ed OS | MON | TQ | 9563 | 7041 | Pre and Post-Medieval |
| RSK6 | TQ 97 SE 1012 | Unidentified salt-works One of two salt-working mounds situated on the Newhook Marshes | MON | TQ | 9601 | 7037 | Medieval |
| RSK7 | MKE85554 | Farmstead (Poors) A regular L-plan farmstead | MON | TQ | 9571 | 7079 | Post-medieval |
| RSK8 | MKE85647 | Farmstead (Oldhook) [sic. Old Hook] A regular courtyard farmstead with buildings to three sides of the yard incorporating a L-plan element | MON | TQ | 9665 | 7028 | Post-Medieval |

| RSK ID | HER | SUMMARY | STATUS | NGR | EAST | NRTH | PERIOD |
|--------|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|------|------|---------------|
| RSK9 | MKE85648 | <p>Farmstead (New Hook Farm)</p> <p>Type: Loose courtyard with working agricultural buildings on four sides and with additional detached elements to the main plan</p> <p>Farmhouse: Farmhouse detached gable end-on to yard</p> <p>Position: Isolated position</p> <p>Survival: Altered - significant loss of original form (more than 50%)</p> <p>New sheds: Large modern sheds built on the site of the historic farmstead, may have destroyed original buildings or obscured them</p> | MON | TQ | 9640 | 7080 | Post-Medieval |
| RSK10 | MKE85649 | <p>Farmstead (Shardens Farm)</p> <p>A loose courtyard plan farmstead with buildings to one side of the yard.</p> | MON | TQ | 9619 | 7171 | Post-Medieval |
| RSK11 | TQ 97 SE 111 | <p>Crash site of a Supermarine Spitfire I</p> <p>Supermarine Spitfire I (P9323) of 222 Sq, RAF Hornchurch, crashed 30th August 1940 on South Lees Farm, Minster, Sheppey. Pilot baled out. Aircraft ZD-F written off.</p> | MON | TQ | 9545 | 7096 | Modern |
| RSK12 | TQ 97 SE 108 | <p>Crash site of Hawker Hurricane I</p> <p>Hawker Hurricane I (P3479) of 56 Sq, RAF North Weald, abandoned 13th August 1940 over Sheppey. Pilot baled out. Aircraft written off.</p> | MON | TQ | 9600 | 7000 | Modern |

Historic Environment Events

| RSK ID | HER ID | SUMMARY | ORGANISATION | YEAR |
|--------|----------|------------------------------------------------------------------------------------|----------------------------|-----------|
| RSK13 | EKE10278 | Historic Environment of the North Kent Coast: Rapid Coastal Zone Assessment Survey | Wessex Archaeology | 1999-2000 |
| RSK14 | EKE14547 | Archaeological Consultancy Report and Desktop at South Lees Farm, Minster | Bartlett-Clark Consultancy | 2013 |
| RSK15 | EKE14727 | Proposed Solar Park at South Lees Farm, Minster On Sea, Sheerness. | Barlett-Clark Consultancy | 2013 |
| RSK16 | EKE8328 | Geotechnical boreholes at Shrubsoles Hill, Sheppey | Contest Melbourne Weeks | 1995 |