

**Langham Airfield, Cockthorpe Road,
Langham, Holt, Norfolk, NR25 7BP**

Archaeological Monitoring



**Y
RenEnergy**

Planning Ref: NMA1/14/0002

HER: ENF136702

August 2015

QUALITY ASSURANCE		
Job Number	01-04-15-2-1280	
Overview	Niall Oakley	
Draft	Elizabeth Govier/Andrew Crowson	08-06-2015
Graphics	David Dobson	10-06-2015
Edit	Andrew Crowson	08-06-2015
Review	David Adams	15-06-2015
<i>Version 1.3</i>		
Revision	Andrew Crowson	07-08-2015
<i>Version 2</i>		

Author: Elizabeth Govier, BA, MA

Author: Andrew Crowson, BA

Cover image: hand-excavation of trenches in Area 1.

Disclaimer

This document has been prepared in good faith on the basis of information available at the date of publication without any independent verification for the exclusive use and benefit of the named client and for the sole purpose for which it is provided. NPS Archaeology does not guarantee the accuracy, reliability, completeness, or currency of the content of this document nor its usefulness in achieving any purpose. This document is not intended to nor should it be relied upon by any third party. NPS Archaeology accepts no responsibility nor liability should this document be used for any alternative purpose other than for which it is intended nor to any third party. NPS Archaeology will not be liable for any loss, damage, cost, or expense incurred or arising by reason of any person using or relying on information in this document.

Scandic House
85 Mountergate
Norwich
NR1 1PY

T 01603 756150
F 01603 756190
E nau.mail@nps.co.uk
W nau.nps.co.uk

Contents

<i>Summary</i>	1
Introduction.....	2
Project Background.....	2
Planning Background.....	2
Geology and Topography	4
Geology	4
Topography.....	4
Archaeological and Historical Background	5
Sources.....	5
HER data	5
Previous archaeological investigations	8
Cartographic evidence	8
Methodology.....	10
General	10
Objectives	10
Methods.....	10
Archive.....	11
Results	12
Archaeological Finds	18
Discussion.....	19
<i>Acknowledgements</i>	20
<i>Bibliography and Sources</i>	21
Appendix 1: Context Summary	22
Appendix 2: NHER Records: Monuments and Find Spots.....	23
Appendix 3: NHER Records: Listed Buildings and Scheduled Monuments ..	25
Appendix 4: List of military units present at Langham Airfield	26
Appendix 5: Historical Periods	27
Appendix 6: OASIS Report Summary	28
Appendix 7: Archaeological Specification	31

Figures

- Figure 1 Site location with NHER data
- Figure 2 Location of Areas 1 3
- Figure 3 Location of monitored groundworks within Areas 1 3

Plates

- Plate 1 Hand-dug trench in Area 1, looking north

Tables

- Table 1 NHER records within 1km of the site

Client: RenEnergy Installations Ltd
Location: Langham Airfield, Cockthorpe Road, Langham, Holt
District: North Norfolk
Planning Ref.: NMA1/14/0002
Grid Ref.: TF 9887 4198
HER No.: ENF136702
OASIS Ref.: Norfolk1-204597
Dates of Fieldwork: 24 March 2015 and 30 April 2015

Summary

NPS Archaeology was commissioned by RenEnergy to carry out archaeological monitoring of three sets of groundworks for the installation of cabling for 450kw ground-mounted photovoltaic solar arrays at Langham Airfield, Norfolk (TF 9887 4198).

The site of the installations is inside a World War Two RAF airfield base, and the potential existed for heritage assets associated with this period of use to be impacted by the development. There was also limited additional potential for previously unidentified archaeological remains that pre-dated the use of the site as an airfield, such as historical field systems, to be present.

Monitoring of the excavation of the cable trenches took place on 24 March and 30 April 2015. Approximately 225m of trenches was excavated. There were limited exposures of geological deposits and a layer of subsoil was the only archaeological deposit recorded.

The monitoring did not identify any evidence of activity pre-dating the airfield nor of its use during World War Two. The only finds recovered were recent items related to agriculture and poultry farming.

Y

Figure 1

- s NPS Archaeology was commissioned and funded by RenEnergy Ltd to conduct a programme of archaeological monitoring at Langham Airfield, Cockthorpe Road, Langham, Norfolk NR25 7BP (TF 9887 4198).
- t The programme was to comprise monitoring of all groundworks for the installation of cables serving 450kw ground-mounted photovoltaic solar arrays, alongside a hedge line in the east of the site (Area 1), adjacent to a disused concrete aircraft taxi-way in the northwest of the airfield (Area 2), and in the northeast tip of the airfield site adjacent to a runway (Area 3).
- u The airfield encompasses an area of approximately 1.4km², although the installations necessitated only c. 225m of narrow trenching.
- v The airfield site is well documented, but little is known of its previous use. A single find a Bronze Age axe head has been recovered from the site, and there have been no prior direct archaeological investigations. Records, predominantly of archaeological finds by metal-detecting in the vicinity of the site, indicate a background of activity in the area from the prehistoric period to the post-medieval period.

Y

- y The current work was undertaken to fulfil planning requirements set by North Norfolk District Council (NMA1/14/0002) and a generic Brief issued by Norfolk County Council Historic Environment Service (Hamilton 2012). The work was conducted in accordance with a Written Scheme of Investigation prepared by NPS Archaeology (01-04-15-2-1280/Crawley 2014) (Appendix 7).

The programme of work was designed to assist in defining the character and extent of any archaeological remains within the World War Two airfield at Langham, following guidelines set out in *National Planning Policy Framework* (Department for Communities and Local Government 2012).

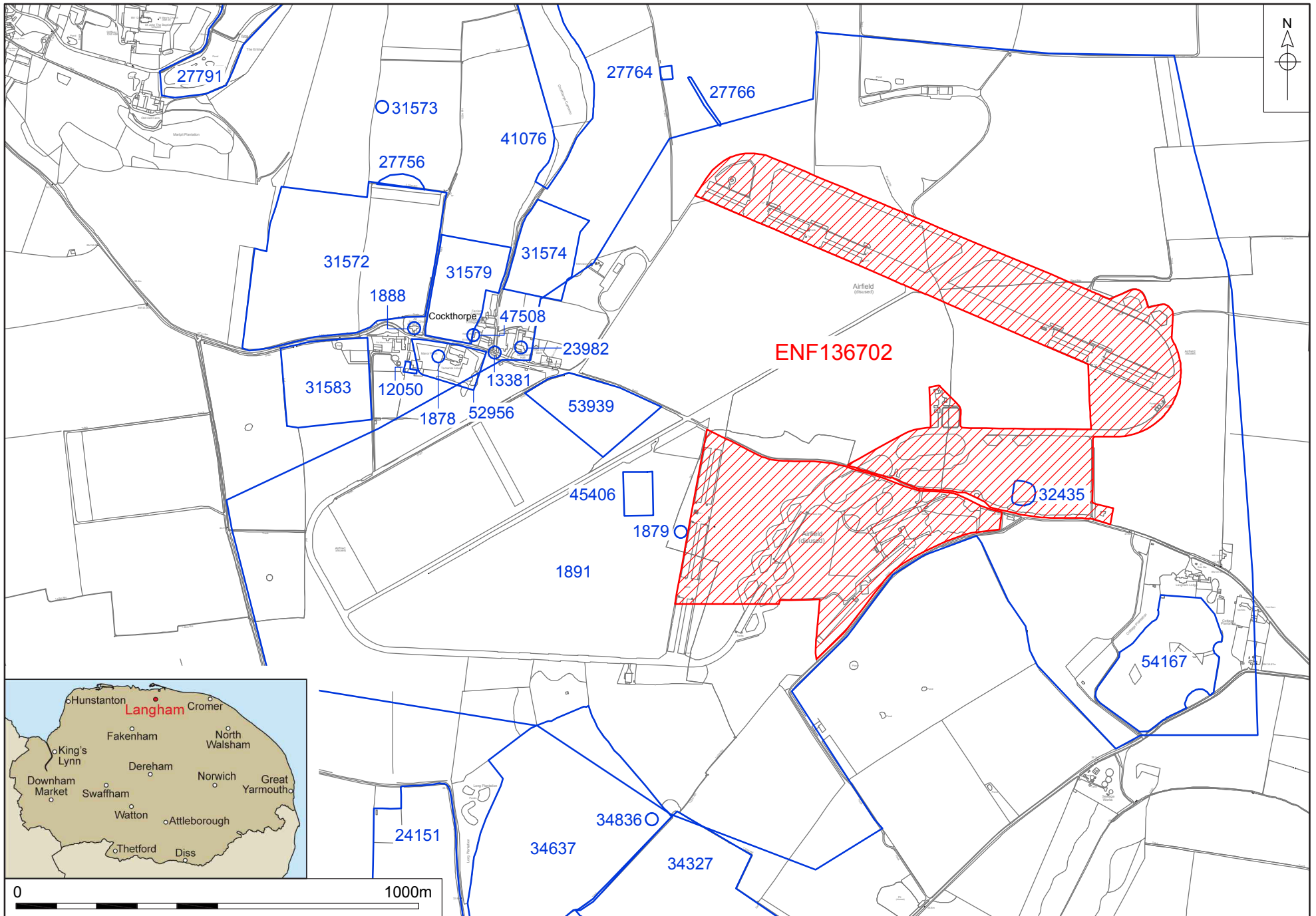


Figure 1. Site location with NHER data. Scale 1:12,500

Y

The underlying solid geology in the area of Langham Airfield is Upper Chalk, a sedimentary bedrock formed approximately 71 94 million years ago in the Cretaceous period. The superficial geology is of the Sheringham Cliffs formation clay, silt, sand and gravel formed up to 3 million years ago in the Quaternary period. The local environment was previously dominated by ice age conditions (British Geological Survey 2015).

The airfield is located 2km inland from the North Sea coast, south of a point between Stiffkey and Morston. It is situated on a plateau at an elevation of c. 35 40m OD: some levelling of the area may have occurred during construction of the airfield. The site of the airfield encloses an area of c. 1.4km².

The land inside the airfield is predominately used for farmland, with fields occupying spaces between runways and the perimeter track. The agricultural fields are broken up by small plantations of coniferous and deciduous trees. Hardstanding in the southeast of the site is covered by rough grassland, whilst some of the former runways and aircraft dispersal points are occupied by poultry sheds, still currently in use.

- sr** Area 1 of the monitoring project lay within an area of grassland with poultry sheds on a runway to the west, a hedgerow to the north, open grassland to the south and the hardstanding/aircraft dispersal points to the east. Area 2 was positioned alongside one of the disused concrete runways at the north end of the airfield, with agricultural fields in all directions interspersed by former airfield tracks and runways with poultry sheds. Area 3, in the northeast of the site, was similarly surrounded by agricultural fields, with a runway and poultry sheds immediately to the north and an aircraft dispersal track to the south and east.
- ss** There is a possible spring located to the southeast of the hardstanding area, with the natural drainage off the plateau falling towards a tributary stream of the Stiffkey in its valley between Langham and Binham in the southeast. Elsewhere, the plateau drains in other directions, notably towards the river Stiffkey in the north.

Y

Y

- st The primary source for archaeological evidence in the county of Norfolk is the Norfolk Historic Environment Record (NHER), which details archaeological discoveries and sites of historical interest. In order to characterise the likely archaeological potential of the proposed development site, NHER record data was purchased from Norfolk Historic Environment Service for a 1km radius of TF 9887 4198. This exercise returned 27 individual records, including scheduled monuments, listed buildings and find spots, containing evidence of historical activity spanning the prehistoric period 20th century.
- su Details on the wartime role of the airfield and its post-war use until decommissioning in 1961 were sourced principally from the Langham Dome website (Langham Dome 2015), and also from relevant printed sources.
- sv Historical maps available online (Norfolk County Council 2015) and reprinted in modern publications (Barringer 1989; 2004) were examined for pertinent information of the landscape prior to construction of the airfield. Available aerial photograph coverage for the airfield site was incomplete and largely unhelpful (Norfolk County Council 2015).
- sy A reference table listing dates for historical periods described in this report is provided in Appendix 5.

Y

Figure 1

- s The data recorded by NHER in the environs of the current work are referenced and summarised below. Table 1 provides a summary of NHER record types, which are detailed in Appendices 2 and 3. The information presented that is sourced from Norfolk Historic Environment Record remains copyright of Norfolk County Council Historic Environment Service.

Record type	No. within study area
Find spot	13
Monuments/places of archaeological significance	11
Buildings (including listed buildings)	3
TOTAL	27

Table 1. NHER records within 1km of the site

Prehistoric evidence

- s Many of the records of prehistoric date refer to finds of worked flints, often collected amongst material of later date. Notably, however, there are finds of Mesolithic date to the northwest of Area 1 in the form of a flint axe or adze (NHER 45406) and a flint blade (NHER 52956). The Bronze Age is also conspicuously represented in the area as finds of a Middle Bronze Age pin (NHER 45406) and a Late Bronze Age spearhead (NHER 31572) confirm. Of significance to the current work, a Bronze Age socketed copper-alloy axe head was found during disturbance for road

(runway) making on the airfield during World War Two (NHER 1879). This find spot is located less than 100m to the west of monitoring Area 1.

Roman evidence

- s Field-walking and metal-detecting are the two main sources of archaeological finds dating from the Roman period. Roman pottery sherds, a pendant and a steelyard weight (NHER 31572) have been found, as well as coins, a brooch and other metalwork (NHER 24151). Other finds of ceramics (NHER 31574, 31579, 31583) and coins (NHER 31579, 54167) have been made nearby. A Roman furniture fitting (NHER 34327) and a Hod Hill brooch (NHER 54167) have also been recovered by metal-detecting.

Anglo-Saxon evidence

- s An Early Saxon brooch has been found in the area (NHER 24151), but of more note is a broad distribution of Late Anglo-Saxon material, most of which has been collected during metal-detecting. Late Saxon pottery and dress accessories were found close to the Early Saxon brooch (NHER 24151), and pottery finds have been made elsewhere in the vicinity (NHER 31572, 31574, 31579, 31583).
- tr Other Late Saxon finds of note amount to a spindle whorl and strap end (NHER 31572), a second strap end (NHER 34327), a strap (NHER 45406), and a mount/belt-fitting (NHER 54167). The distribution of the finds indicates widespread activity in the area around the airfield during the Late Saxon period.

Medieval evidence

- ts Various earthworks of medieval date such as cultivation terraces, trackways and a wood bank survive on Cockthorpe Common, indicating that the common was cultivated in the medieval period (NHER 41076).
- tt Two ponds and a shallow broad depression east of Manor Farm, Cockthorpe, suggest the location of a possible medieval moat (NHER 52956). Archaeological watching briefs in this area recovered multi-period finds.
- tu A broad background level of medieval activity in the area, not untypical for rural Norfolk, has been established principally by metal-detector finds: coins, buckles and other small items of metalwork are characteristic objects alongside hand-collected pottery fragments. Some of these are worthy of note, including an ampulla and seal matrix (NHER 31574), a second seal matrix decorated with a flower motif and a silver pendant loop (NHER 34637), a silver coin and copper-alloy buckles and harness fittings (NHER 31572), and further coins and items of metalwork (NHER 24151, 53939).

Post-medieval evidence

- tv Standing post-medieval buildings and the sites of others exist in the vicinity of the airfield. Extant examples include Cockthorpe Manor, a mainly 17th-century brick and flint building (NHER 12050), Cockthorpe Hall another 17th-century building (NHER 23982), and Well Cottage, a third structure of the same date (NHER 47508). The site of early post-medieval cottages has been identified from the remains of building foundations (NHER 1878).
- ty Post-medieval earthwork banks have been identified from aerial photographs close to the river Stiffkey (NHER 27791). It is likely that the banks are associated with drainage and management of the river valley.

- 26 Metal-detector finds of post-medieval date from the surrounding area are relatively common, and typical examples are coins, tokens, weights and miscellaneous small metal objects such as recorded by NHER 34327. Perhaps of more interest, a silver coin (NHER 31572) and a balance (NHER 24151) have been found.

World War Two evidence

- 27 The historical background information for this section was collated from the Langham Dome website (Langham Dome 2015), which is dedicated to the history of the Langham Airfield site, and is supplemented by data sourced from NHER. A list of the principal military units stationed at Langham is given in Appendix 4.
- 28 RAF Langham (NHER 1891) was initially built as a satellite station to RAF Bircham Newton, located c. 22km to the southwest. The first phase of its construction in 1940 was the instatement of a simple grass landing strip located north of the Langham–Cockthorpe road.
- 29 Over the course of World War Two, the airfield grew in size and much upgrading to the site occurred. In July 1942, it became independent from RAF Bircham Newton, and Langham was transformed progressively from a grass strip to a ‘Class A standard’ airfield, where three concrete runways were built.
- 30 Large hangers, workshops, fuel stores, bomb stores, training rooms, parachute stores, offices, photographic laboratories, and a 5.5km-long perimeter road were constructed. At the height of its operations more than 140 buildings were associated with the airfield. However, the airfield was put in Care & Maintenance in November 1943 for extensive redevelopment, before re-opening in February 1944.
- 31 The Battle Headquarters (BHQ) (NHER 32435) was an underground set of rooms with only the concrete cupola (look-out post) visible above ground. Most World War Two airfields were equipped with such a structure, though very few have survived.
- 32 Built in 1942, Langham Dome is situated on the east edge of the airfield. Standing 7.62m tall x 12.19m wide, the Dome was a state-of-the-art anti-aircraft gunner trainer. Gunners were schooled in accuracy using ground-breaking stop-frame film technology developed in 1940, which ‘simulated’ air attacks by projecting images of enemy aircraft onto the interior walls of the Dome.
- 33 Langham Dome is one of only six World War Two gunner trainers remaining in existence (as at 2014), although 40 were built. Today, it is a Scheduled Monument (List entry Number 1003173) and is owned by the North Norfolk Historic Buildings Trust, which has repaired, restored and opened the Dome as a visitor centre.
- 34 Another training building, the ‘Bomb Teacher’, was once situated adjacent to the Dome Trainer. Here, aircrew learned and practiced accurate bomb aiming. Aside from the Dome Trainer, surviving military infrastructure on the site comprises the concrete runways, the BHQ and a control tower.
- 35 It has been suggested that there is evidence that Fog Intensive Dispersal Operation (FIDO) was used at the site. The earliest documents referring to FIDO date from September 1942 (Williams 1995). Successful trials in foggy weather were held in July 1943. Visibility was between 100 and 200 yards, and FIDO was able to clear the runway for several take-offs and landings. The Air Ministry subsequently authorised several other FIDO installations elsewhere (Ensor 2011).

Post-war evidence

- 36 The airfield closed to flying in May 1946, but was used by a Technical Training School for the Royal Netherlands Air Force, being reduced again to Care & Maintenance status in September 1947. It was reactivated for a time during the Korean War (1950-3), and again between March 1953 and November 1958 for Beaufighter and Mosquito target towers of No. 2 Civilian Anti-Aircraft Co-operation Unit.
- 37 There was also some American military use of the airfield site during the 1950s, when U.S. Army radio-controlled model aircraft were used for gunnery practice.
- 38 After serving as a very basic Emergency Landing Ground for RAF Sculthorpe, the airfield was sold in October 1961, to Bernard Matthews Ltd.

Undated evidence

- 39 There are two entries of unknown date in the NHER data, both visible as crop marks on 1946 RAF aerial photographs: NHER 27756, a curved ditch, and NHER 27766, a straight ditch. The curved feature may be part of a larger enclosure, but no definite interpretation or date is proposed.

Previous archaeological investigations

- 40 Langham airfield, its Dome Trainer, underground headquarters and other infrastructural features are the subject of a series of entries in NHER recorded under or referenced by record NHER 1891 (see paras 27–35). The history of the airfield and its buildings are recorded elsewhere in further detail, too, e.g. the Langham Dome website (2015). These are primarily descriptive accounts which offer nothing of the pre-War history of the site.
- 41 Other than limited cartographic evidence (see paras 42–6), the only record of the monitored area is a casual find of a Bronze Age axe head (para. 17), which was not found *in situ*. There have been no previous direct archaeological interventions at the airfield site.

Cartographic evidence

- 42 The earliest readily accessible historical map for the area of the airfield is that by William Faden published in 1797 (Barringer 1989). The Langham–Cockthorpe road is depicted in approximately the same place as today, and Langham is shown as a far ‘busier’ village than Cockthorpe with substantially more buildings clustered around its streets and lanes. A pair of wind or water mills is depicted north of the road to the east of where the airfield would come to be sited, labelled *Langham W. Mills*. These aside, very little relevant topographic information is shown.
- 43 In 1826, Andrew Bryant published his county map of Norfolk (Barringer (2004). Although pleasingly detailed, the map for the Langham Airfield area shows only roads, pockets of woodland and smaller stands of trees. Relief around the river valleys is depicted, but there is no attempt to show individual fields. Straight-lined and angular divisions of what appear to be parish boundaries hint at enclosure of the ancient medieval landscape. The Langham–Cockthorpe boundary runs through what was to become the airfield site, but otherwise there is little information in the map pertinent to the current work. *Manor Ho.* is labelled south of Cockthorpe and

Manor Cottage is marked west of Langham, but the exact location of each of these structures is not distinct.

- vv There is no available Enclosure map for the study area in the first half of the 19th century, but part coverage is provided by a Tithe map (of c. 1843) (Norfolk County Council 2015). The Langham Cockthorpe road which was later overlain by the airfield is again a prominent feature. Enclosed, but characteristically small parcels of land are aligned to the road and to another (later obliterated by the airfield) that runs north-south on the west side of the study area. The location of Area 2 in the monitoring project is located within one such field, although there is no mapping for Areas 1 and 3. A block of woodland is positioned in the approximate centre of the future airfield site. Outside of what would become the airfield perimeter, there is a remarkable number, bar a few amalgamations, of field boundaries surviving from the time of the Tithe map to modern day. Within the airfield limits, however, the modern fields bear no relation to the mid-19th-century layout, being significantly larger and aligned to the grid of runways and airfield infrastructure rather than the earlier roads.
- vy The process of field amalgamation had evidently begun by the time of the First Edition Ordnance Survey map (c. 1884), otherwise the picture presented is almost unchanged from 50 years earlier (Norfolk County Council 2015). Many of the smallest fields have been brought together, with only their enlarged, collective outline surviving. The picture presented is of a little-settled, highly farmed landscape. All three areas of the archaeological monitoring project were located within what were agricultural fields at the time of the map.
- v The northeast part of the airfield is shown on an aerial photograph taken in 1946 (Norfolk County Council 2015). From what can be discerned, the airfield seems to be in poor condition, ostensibly being decommissioned. Many of the strategic and service buildings on the southeast side of the airfield, which have now been removed, are shown in a dense cluster amongst connecting roads and foot-worn paths. Interestingly, the rectangular areas of three presumably sensitive military buildings appear to have been sliced out of the photograph. Area 3 of the current monitoring project was part of the grass infield in 1946; the other two Areas are not covered by the photography.

- v Methodology for the archaeological monitoring followed the agreed Written Scheme of Investigation (01-04-15-2-1280/Crawley 2014). Archaeological procedures conformed to guidelines issued by the Chartered Institute for Archaeologists (CIfA 2014a) and the monitoring was conducted within the context of the relevant regional archaeological framework (Medlycott 2011).

- v The objective of the monitoring was to determine as far as reasonably possible the presence or absence, location, nature, extent, date, quality, condition and significance of any surviving archaeological deposits within the development area.
- v The archaeological project aimed to provide appropriate and adequate data to permit informed decisions regarding any requirement for future archaeological mitigation work, and to make the results of the work accessible.

- yr The generic Brief (Hamilton 2012) required that archaeological monitoring took place during groundworks for cable laying in association with the installation of 450kw ground-mounted photovoltaic solar arrays.
- ys The groundworks comprised hand- and machine-dug cable trenches for the photovoltaic solar arrays, along with driven foundations inserted to a depth of 1.70m, in three locations numbered Areas 1 3.
- yt Trenches were situated according to the planning proposal (NMA1/14/0002) and were located in relation to the Ordnance Survey National Grid.
- yu Prior to mechanical excavation each trench location was scanned with a CAT to check for buried services. The areas in which services were detected by the scan were hand-dug. The areas where topsoil was to be removed were examined for surface features and for archaeological artefacts prior to any excavation.
- yv Machine excavation was carried out by a small hydraulic excavator equipped with a toothless ditching bucket. All mechanical excavation was constantly and directly monitored by a suitably experienced archaeologist. Machining was halted when possible archaeological deposits or natural geology were observed.
- yy All trench surfaces and sides were hand-cleaned where potential archaeological deposits were identified. Upon completion of the work all trenches were backfilled by machine.
- y Spoil and exposed surfaces were scanned with a metal-detector. All metal-detected and hand-collected finds were evidently modern; those initially retained for examination have since been discarded.
- y All archaeological features and deposits were recorded using NPS Archaeology pro forma. Trench locations, plans and sections were recorded at appropriate scales. Monochrome 35mm negatives and digital photographs were taken of all relevant deposits where appropriate.

- y Site conditions were good and the work took place in fine weather.
- y All site work was undertaken with respect to Health and Safety provision. Hard hats, high-visibility vests and steel toe-capped boots were worn by all staff at all times.

- r The site archive is currently held at the offices of NPS Archaeology. Upon completion of the project, the documentary archive will be prepared and indexed following guidelines obtained from the relevant museum and relevant national guidelines (ClfA 2014b). The archive, consisting of all paper elements created during recording of the archaeological site, including digital material, will be deposited with Norfolk Museums Service.
- s A summary form of the results of this project has been completed for Online Access to the Index of archaeological investigations (OASIS) under the reference norfolka1-204597 (Appendix 6), and this report will be uploaded to the OASIS database.

RESULTS

Figures 2, 3

Area 1

- 62 Area 1 was the south-most of the three installations, situated close to the east flank of the airfield site. Five trenches were excavated, of which four were dug by hand 0.30m wide x c. 0.60m deep, and linked together. The fifth trench was excavated by machine 0.35m wide x c. 0.70m deep.
- 63 The hand-dug trenches all measured approximately 10m long and were joined to describe a closed Y-shape, aligned approximately east–west. The east trench (that closed the ‘Y’) was excavated across the west end of the intended site of two banks of solar panels (Plate 1). The west end of the conjoined trenches (the base of the ‘Y’), linked to existing infrastructure at the edge of a runway.



Plate 1. Hand-dug trench in Area 1, looking north

- v The machine-dug trench was positioned 60m east of and parallel to the east-most trench of the Y-shaped hand-dug trenches. It, too, measured c. 10m long and occupied a position between the two intended lines of solar panels.
- y The deposits exposed in the trenches were consistent throughout, comprising only topsoil, subsoil and exposures of geological deposits.

In the Y-shaped trenches, geological deposits **03** were only recorded in the east-most part of the excavations, at 0.57m below ground level. In the machine-dug trench, geology was exposed at 0.38m below ground level at the north end and at 0.68m at the south end. The geology consisted of yellowy white clayey silt with mid-orange brown patches. It contained small large chalk lumps and flecks and small large flints, with some large pieces of quartzite.

A deposit of subsoil **02** was observed throughout Area 1 above the geological deposits. With some variation, it measured typically 0.27 0.32m deep and was recorded c. 0.30m below ground level in the hand-dug trenches and at 0.10 0.32m in the machine-dug trench. The subsoil consisted of dark orange brown silty clay with small medium flint and gravel. No finds were recovered from **02**.

The subsoil **02** was overlain by topsoil **01**. Beneath turf, the topsoil consisted of friable silty loam with flints, gravel, chalk lumps, and modern brick fragments. In the hand-dug trenches, the topsoil measured 0.30m deep, but was slightly shallower to the east in the machined trench. Modern services connected with existing infrastructure at the west end of the trench were identified in the topsoil, but were not recorded. The topsoil contained substantial quantities of twine, plastic bags and other recent debris that is most likely related to use of the site for poultry farming. None of the modern items were retained, and there were no finds of earlier date.

No archaeological features were present in any of the Area 1 trenches.

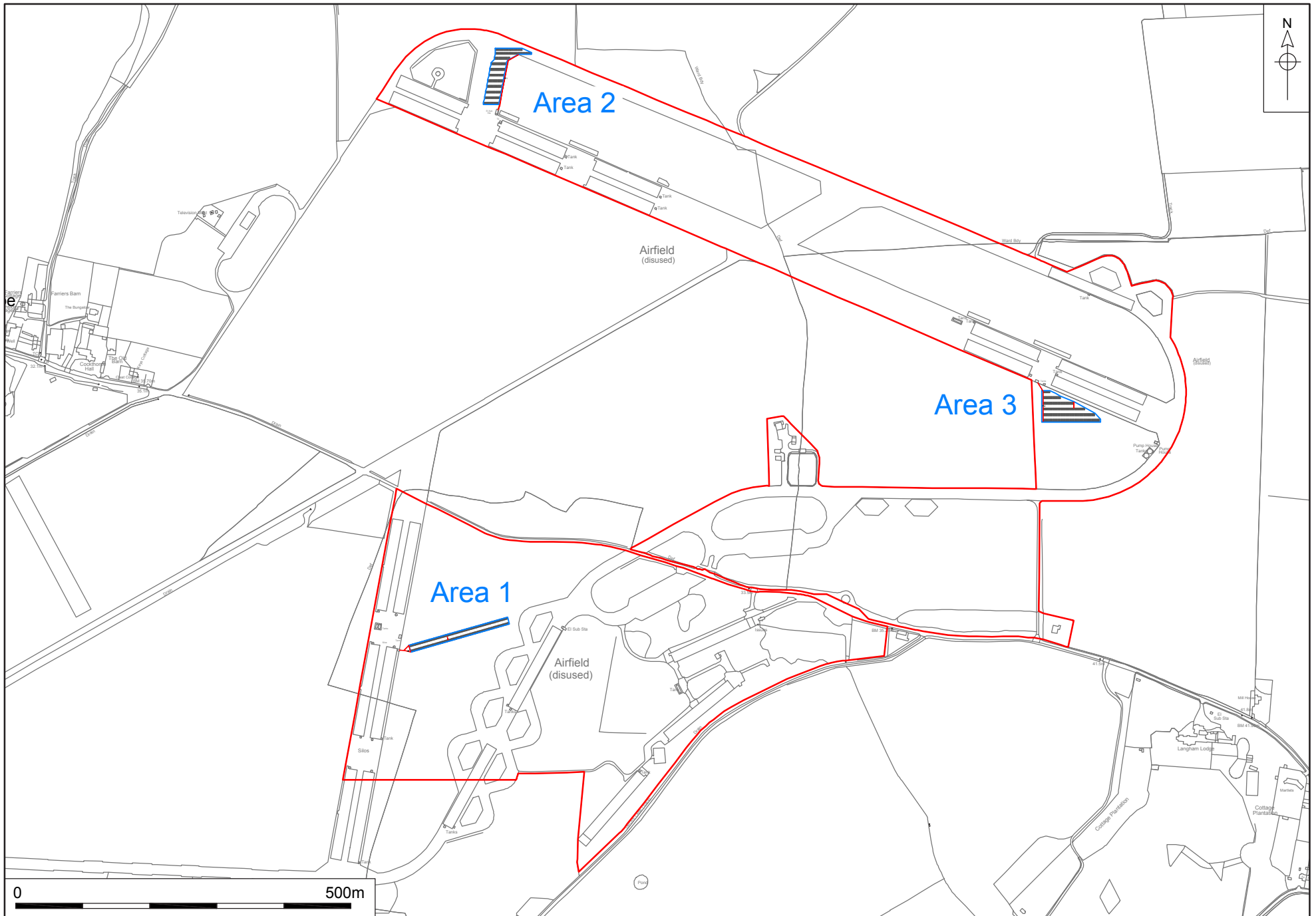


Figure 2. Location of areas 1-3. Scale 1:7500

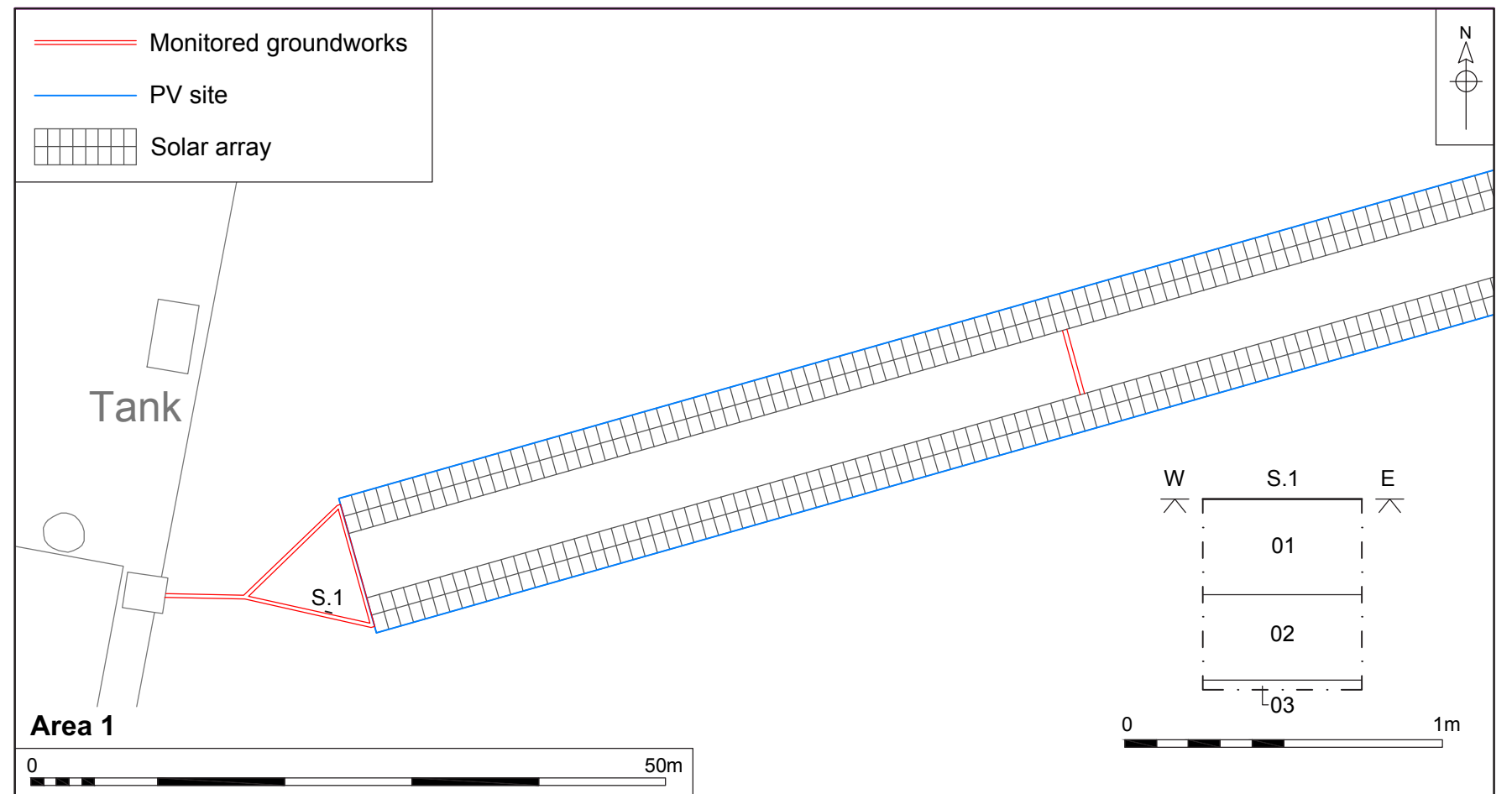
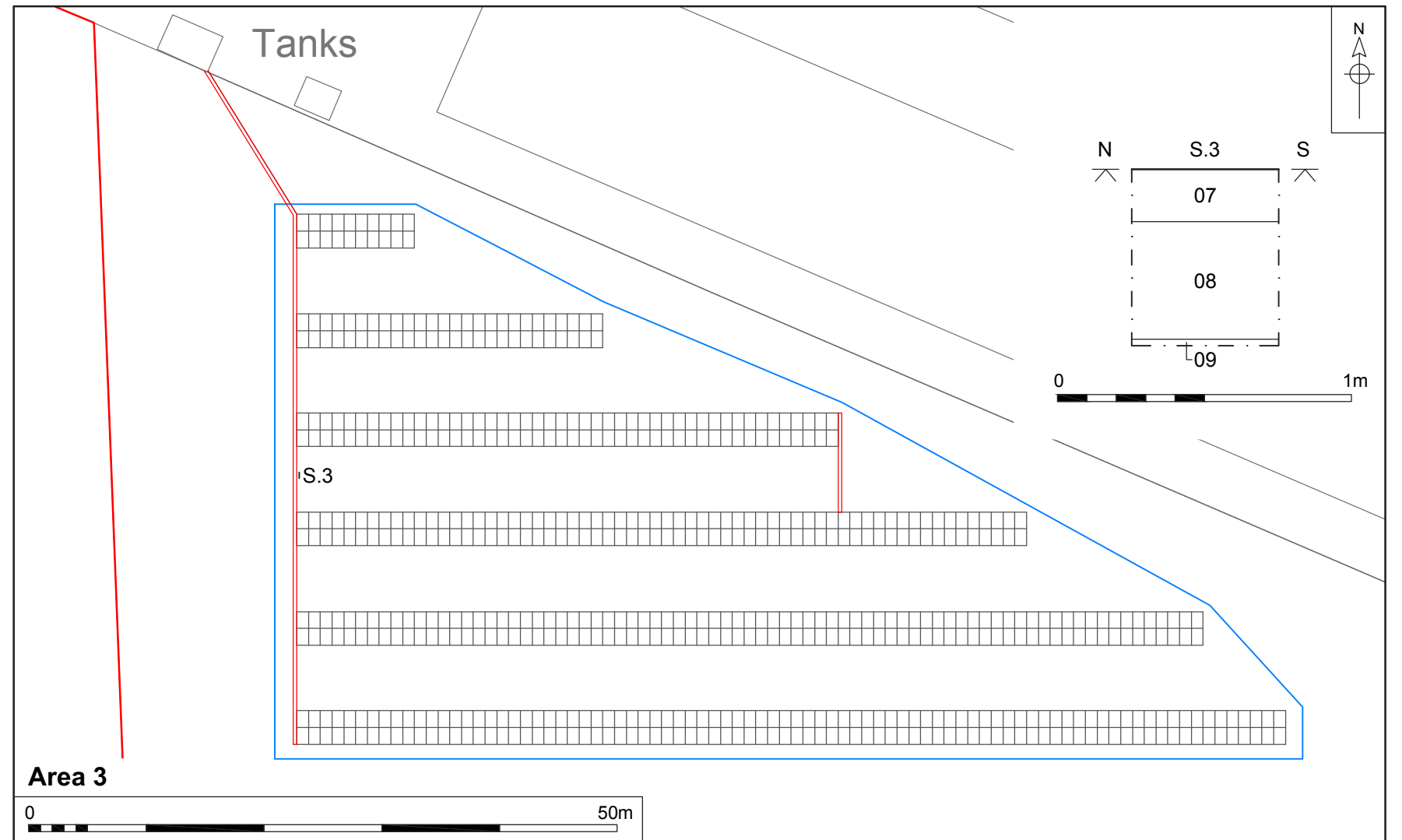
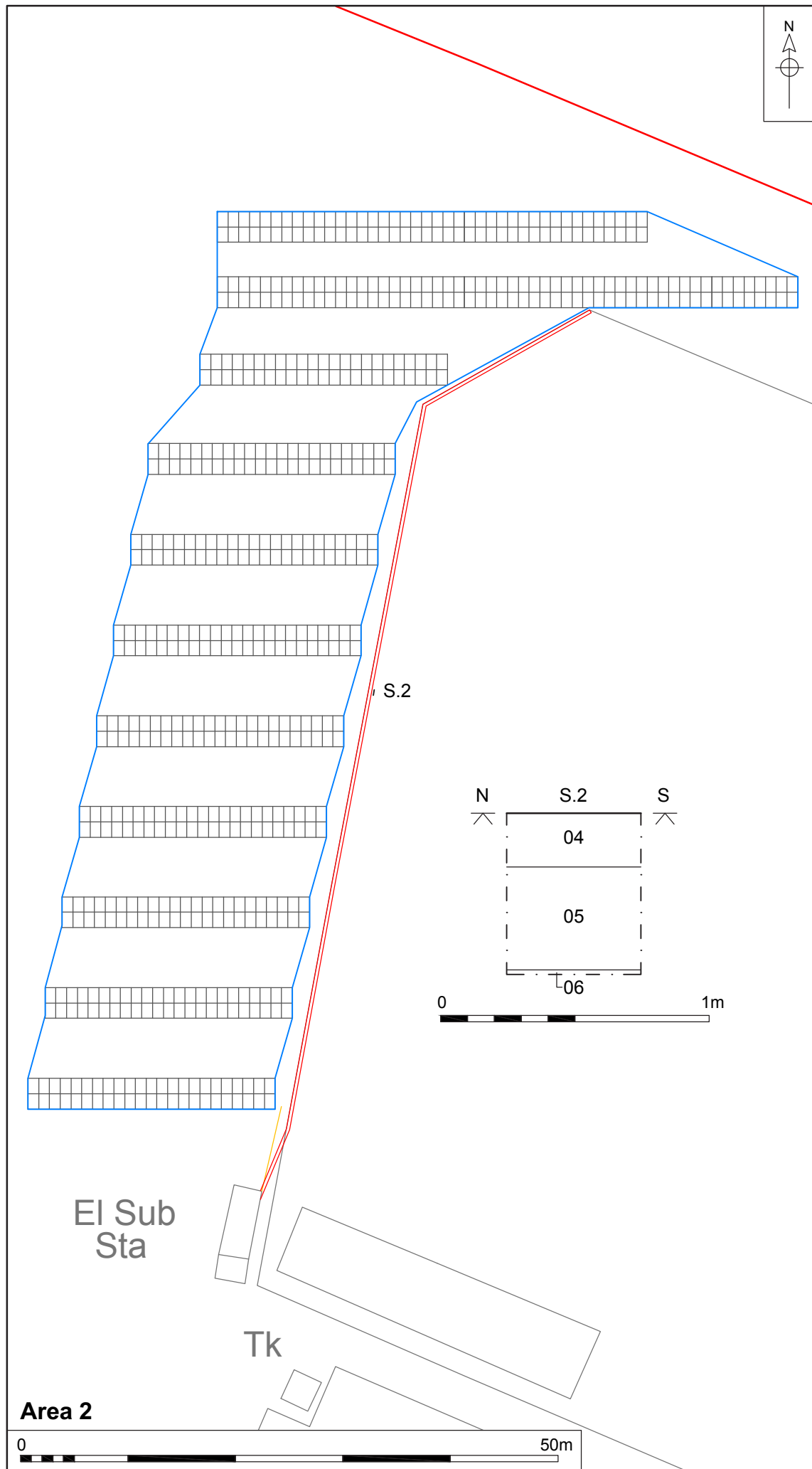


Figure 3. Location of monitored groundworks within areas 1-3. Scale 1:500

This page has been intentionally left blank

Area 2

- r Area 2 was situated in the northwest corner of the airfield. A single trench c. 100m long was excavated by machine approximately north south. It measured c. 0.30m wide x 0.60m deep and was dug through turf adjacent to a concrete aircraft taxi-way upon which solar panels will be mounted.
- s The trench was dug to link the north end of the proposed solar array to existing infrastructure situated on the edge of a runway to the south. It was dug parallel to and through disturbed soils of an existing modern service trench, and as a result provided no archaeological results. The same three-context sequence as that in Area 1 was observed, and can be summarised as follows.
- t Exposures of geological soil **06** were seen intermittently in the base of the trench, situated at c. 0.60m below ground level. It consisted of pale yellow brown slightly sandy clay. The natural geology was overlain by subsoil **05**, which was up to 0.40m deep and occurred typically 0.20m below ground level. It consisted of pale brown clayey silt and contained occasional medium large flints. The subsoil **05** was sealed by topsoil **04**, which was typically 0.20m deep and composed of mid-brown clayey silty sand.
- u A small quantity of late 20th-century metalwork was observed in the trench; only one piece was retained (a cotter pin), but this has since been discarded. There were no finds of earlier date from the Area 2 trench and no archaeological features were observed.

Area 3

- v Three lengths of trench were excavated by machine in Area 3 in the northeast part of the airfield. The trenching measured 0.30m wide x 0.60m deep.
- y A north south trench c. 45m long was dug along the west flank of the proposed site of six banks of solar panels. At its north end it joined with a 20m-long trench aligned northwest southeast, which linked with existing infrastructure on the edge of a concrete runway. A third, separate trench was dug c. 9m long, parallel to and c. 40m east of the north south section of trenching.

The deposit sequence recorded followed that seen in Areas 1 and 2. Deposits of geological pale creamy brown chalky clay **09** were seen intermittently at the base of the Area 3 trenches, c. 0.60m below ground level. In places there was less chalk and it varied to orange sandy clay. Deposits of 0.40m-thick subsoil **08** were recorded in all of the trench sections, typically 0.20m below ground level. It consisted of orange mid-brown clayey silty sand with few inclusions. The subsoil **08** was overlain by topsoil **07**, mid-brown clayey silty sand, which was characteristically no more than 0.20m deep.

No archaeological features were present in the Area 3 trenches and no finds were collected.

Y

Aside from a small number of late 20th-century pieces of metalwork, including agricultural machine parts, the trench excavations did not produce any archaeological finds. Almost all of the finds were left at the site and those retained have been discarded.

Monitoring of trench excavation for solar array cabling in three areas at Langham Airfield, Norfolk by NPS Archaeology did not record any archaeological features or deposits. The only finds collected were of recent date and associated with modern agricultural activity and poultry farming at the site.

- r Neither the records of the NHER nor examination of available cartographic sources indicated that the site held much potential for identification of historical features or artefacts: the only notable find in the area of the trenches – a Bronze Age axe head, 100m distant from Area 1 – was not found *in situ*, and there is no map evidence from the late 18th century onwards for anything other than agricultural fields in the area of the site. All other records of pre-20th-century finds and buildings are at significantly further distance (200m+) to the trenches.
- s The location of the three areas of cable trenching is important, nevertheless, because of their location within the World War Two airfield. Each of the trenches was located close to former runways, but well away from known World War Two buildings, and no evidence associated with the airfield infrastructure, or of wartime or other military use of the site was recorded. Moreover, the relatively consistent depths of topsoil, subsoil and geological deposits recorded across the site indicate that no significant landscaping occurred in these areas in association with runway building.
- t A layer of subsoil was identified beneath topsoil and above natural geology in all of the trench locations. Such deposits are relatively characteristic of rural, agricultural locations, and it is considered likely that at Langham it is the product of cultivation in the area of the site over many centuries. The earliest of the available historical maps are not entirely helpful in determining contemporary land use, but in the absence of evidence to the contrary it is assumed that prior to World War Two the site had been under cultivation over a long period.
- u In conclusion, the archaeological monitoring project at Langham Airfield did not identify any historical deposits or features pre-dating the use of the site in World War Two. The groundworks undertaken were situated away from wartime buildings and no evidence of the wartime use of the site was recovered.

Acknowledgements

NPS Archaeology would like to thank RenEnergy Ltd for commissioning the archaeological work and Bernard Matthews Ltd for funding the monitoring.

Staff at NHER are thanked for providing HER data and advice.

The monitoring was conducted by Elizabeth Govier and Stuart Calow.

This report was illustrated by David Dobson and edited by Andrew Crowson

Bibliography and Sources

- Barringer, J.C. 1989. *Faden's Map of Norfolk in 1797*. Guist: Larks Press
- Barringer, J.C. 2004. *Bryant's Map of Norfolk in 1826*. Guist: Larks Press
- British Geological Survey 2015. *Geology of Britain viewer*. [online] Available at: <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>. [Accessed 24 March 2015]
- Chartered Institute for Archaeologists (CIfA) 2014a. *Standard and guidance for archaeological watching briefs*
- Chartered Institute for Archaeologists (CIfA) 2014b. *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives*
- Crawley, P. 2014. *Archaeological Monitoring at Langham Airfield, Norfolk. Written Scheme of Investigation*. NPS Archaeology report 01-04-15-2-1280 (unpublished)
- Department for Communities and Local Government 2012. *National Planning Policy Framework*
- Ensor, D.S. (ed.) 2011. Aerosol Science and Technology: History and Reviews. *The Development of FIDO by Ian Colbeck*. Chapter 13. RTI International. [online] Available at: <https://www.rti.org/pubs/bk-0003-1109-chapter13.pdf>. [Accessed 2 April 2015]
- Hamilton, K. 2012. *Generic brief for the monitoring of works under archaeological supervision and control*. Norfolk County Council Historic Environment Service document (unpublished)
- Langham Dome 2015. *Small Building, Big Story*. [online] Available at: <https://langhamdome.org/>. [Accessed 2 April 2015]
- Medlycott, M. (ed.) 2011. *Research and Archaeology Revisited: a Revised Framework for the East of England*. East Anglian Archaeology Occasional Paper 24
- Norfolk County Council 2015. *Mapping Browser*. [online] Available at: <http://historic-maps.norfolk.gov.uk/mapexplorer/>. [Accessed 24 March 2015]
- Williams, G. 1995. *Flying Through Fire*. Stroud: Sutton Publishing

Appendix 1: Context Summary

Context	Category	Type	Fill Of	Description	Period	Area
01	Deposit	Topsoil	-	silty loam with flints, gravel, chalk lumps, and modern brick fragments, max 0.30m deep	Modern	1
02	Deposit	Subsoil	-	dark orange brown silty clay with small medium flint and gravel, max 0.32m deep	Uncertain	1
03	Deposit	Geology	-	yellowy white clayey silt with mid-orange brown patches, 0.57m BGL	-	1
04	Deposit	Topsoil	-	mid-brown clayey silty sand, max 0.20m deep	Modern	2
05	Deposit	Subsoil	-	pale brown clayey silt with occ medium large flints, max 0.40m deep	Uncertain	2
06	Deposit	Geology	-	pale yellow brown slightly sandy clay, 0.60m BGL	-	2
07	Deposit	Topsoil	-	mid-brown clayey silty sand, max 0.20m deep	Modern	3
08	Deposit	Subsoil	-	orange mid-brown clayey silty sand with few inclusions, max 0.40m deep	Uncertain	3
09	Deposit	Geology	-	pale creamy brown chalky clay/ orange sandy clay, 0.60m BGL	-	3

Appendix 2: NHER Records: Monuments and Find Spots

NHER	Description	Period(s)	Type
1878	Foundations for medieval houses, with associated medieval and post-medieval pottery and building materials. Found during site clearance works.	Medieval post-medieval	Monument
1879	Socketed axehead. Found during removal of material for road making on aerodrome during WWII. Not in situ.	Bronze Age	Find spot
12050	Cockthorpe Manor, extant building.	17th 18th century	Monument
24151	Artefact scatter metal detecting finds from 1987-2012. Including late Saxon and medieval pottery sherds, Roman and medieval coins and Early Saxon brooch.	Multi-period	Find spot
27756	Cropmarks of a curvilinear ditch, undated. Visible on 1946 RAF aerial photographs.	Undated	Monument
27764	Ruins of a building, probably agricultural in origin. Visible on RAF aerial photographs.	Post-medieval	Monument
27766	Cropmarks of linear ditch. Visible on 1946 RAF aerial photographs.	Undated	Monument
27791	Earthwork banks and drainage ditches. Visible on aerial photographs alongside the river Stiffkey. Found by Norfolk National Mapping Programme.	Post-medieval	Monument
31572	Artefact scatter metal detecting and field walking finds from 1994-1996 and 2007. Such as Prehistoric flints, Roman, Saxon and medieval pottery sherds and Medieval buckles, harness fittings and Late Bronze Age copper alloy spearhead.	Multi-period	Find spot
31573	Worked flint, found in 1994.	Bronze Age or Iron Age	Find spot
31574	Artefact scatter Including Prehistoric flints, Roman, Saxon and medieval pottery. Found by metal detecting.	Multi-period	Find spot
31579	Artefact scatter Including Roman, Saxon and medieval pottery, and Late Saxon strap distributor. Found by metal detecting.	Multi-period	Find spot
31583	Artefact scatter Including Prehistoric flints and Roman, Saxon and medieval pottery sherds.	Multi-period	Find spot
32435	Battle headquarters on Langham Airfield (NHER 1891). Only the concrete observation cupola is visible above ground, and a staircase leads down a corridor	WWII	Monument
34327	Artefact scatter Including a Roman furniture fitting, a Saxon strap fitting, medieval coins, pottery and weights. Found by metal detecting.	Multi-period	Find spot
34637	Including a medieval seal matrix, a medieval pendant loop and medieval nad post medieval coins.	Medieval post-medieval	Find spot
34836	A medieval ampulla made of lead and decorated with a flower motif. Found by metal detecting.	Medieval	Find spot
41076	Cockthorpe Common, various earthworks including cultivation terraces and the remains of former trackways.	Medieval	Monument
45406	Mesolithic flint axe, a small Middle Bronze Age pin, a Late Saxon strap and a medieval buckle.	Multi-period	Find spot

NHER	Description	Period(s)	Type
52956	Possible moated site at Cockthorpe. A watching brief in 2009 revealed flint walls, possible pits and recovered finds including a Mesolithic flint blade and Late Saxon, medieval and post medieval pottery sherds.	Multi-period	Monument
53939	Artefact scatter Including a medieval harness mount, and a post medieval hooked dress fastener and coin. Found by metal detecting in 2009.	Medieval post-medieval	Find spot
54167	Roman and medieval coins and a post medieval jetton, as well as a Roman Hod Hill brooch and a Late Saxon mount/belt fitting. Found by metal detecting in 2010.	Multi-period	Find spot

Appendix 3: NHER Records: Listed Buildings and Scheduled Monuments

NHER	Listing	Description	Period(s)	Type
1888	Grade I	Church of All Saints, a medieval parish church, parts dating to 11th or 12th century with 13th and 14th century alterations and 15th century wall painting	11th 15th century	Building
1891	--	Langham Airfield with Scheduled dome trainer.	WWII	Monument
13381	--	Scheduled Stone cross at a road crossing, on track formerly leading from Binham to Stiffkey harbour.	Medieval	Monument
23982	Grade II	Cockthorpe Hall, formerly Lower Farm, Binham. Extant building	17th century	Building
47508	Grade II	Well Cottage, flint and brick construction with various alterations. Extant building	17th century or earlier	Building

Appendix 4: List of military units present at Langham Airfield

Main Units present
No 1 Anti-Aircraft Co-operation Unit K Flight
No 1 Anti-Aircraft Co-operation Unit M Flight
No 2 Anti-Aircraft Practice Camp
No 2 Armament Practice Camp
No 2 Civilian Anti-Aircraft Co-Operation Unit
No 24 Aircrew Holding Unit
No 254 Squadron
No 280 Squadron
No 407 Squadron
No 455 Squadron
No 489 Squadron
No 521 Squadron
No 524 Squadron
No 612 Squadron
No 819 Squadron
No 827 Squadron
No 1402 Met Flight
No 1561 Met Flight
No 1562 Met Flight
No 1611 Army Air Corps Flight
No 1612 Army Air Corps Flight
No 1626 Army Air Corps Flight
Coastal Command Fighter Affiliation Training Unit

Information taken from Airfields of Britain Conservation Trust. [online] Available at: <http://www.abct.org.uk/airfields/langham>. [Accessed 24 March 2015]

Appendix 5: Historical Periods

Period	Date From	Date To
Prehistoric	-500,000	42
Early Prehistoric	-500,000	-4,001
Palaeolithic	-500,000	-10,001
Lower Palaeolithic	-500,000	-150,001
Middle Palaeolithic	-150,001	-40,001
Upper Palaeolithic	-40,000	-10,001
Mesolithic	-10,000	-4,001
Early Mesolithic	-10,000	-7,001
Late Mesolithic	-7,000	-4,001
Late Prehistoric	-4,000	42
Neolithic	-4,000	-2,351
Early Neolithic	-4,000	-3,001
Middle Neolithic	-3,500	-2,701
Late Neolithic	-3,000	-2,351
Bronze Age	-2,350	-701
Early Bronze Age	-2,350	-1,501
Beaker	-2,300	-1,700
Middle Bronze Age	-1,600	-1,001
Late Bronze Age	-1,000	-701
Iron Age	-800	42
Early Iron Age	-800	-401
Middle Iron Age	-400	-101
Late Iron Age	-100	42
Roman	42	409
Post Roman	410	1900
Saxon	410	1065
Early Saxon	410	650
Middle Saxon	651	850
Late Saxon	851	1065
Medieval	1066	1539
Post-medieval	1540	1900
Modern	1900	2050
World War One	1914	1918
World War Two	1939	1945
Cold War	1945	1992
Unknown	--	--

after *English Heritage Periods List*, recommended by *Forum on Information Standards in Heritage*
available at: <http://www.fish-forum.info/inscript.htm>

Appendix 6: OASIS Report Summary

OASIS DATA COLLECTION FORM: England

[List of Projects](#) | [Manage Projects](#) | [Search Projects](#) | [New project](#) | [Change your details](#) | [HER coverage](#) | [Change country](#) | [Log out](#)

Printable version

OASIS ID: norfolka1-204597

Project details

Project name	Langham Airfield, Cockthorpe Road
Short description of the project	NPS Archaeology was commissioned by RenEnergy to carry out archaeological monitoring of three sets of groundworks for the installation of cabling for 450kw ground-mounted photovoltaic solar arrays at Langham Airfield, Norfolk (TF 9887 4198). The site of the installations is inside a World War Two RAF airfield base, and the potential existed for heritage assets associated with this period of use to be impacted by the development. There was limited additional potential for previously unidentified archaeological remains that pre-dated the use of the site as an airfield, such as historical field systems, to be present. Monitoring of the excavation of the cable trenches took place on 24 March and 30 April 2015. Approximately 225m of trenches was excavated. There were limited exposures of geological deposits and a layer of subsoil was the only archaeological deposit recorded. The monitoring did not identify any evidence of activity pre-dating the airfield nor of its use during World War Two. The only finds recovered were recent items related to agriculture and poultry farming.
Project dates	Start: 24-03-2015 End: 30-04-2015
Previous/future work	No / Not known
Any associated project reference codes	136702 - HER event no.
Type of project	Recording project
Site status	None
Monument type	NONE None
Significant Finds	NONE None
Investigation type	"Watching Brief"
Prompt	National Planning Policy Framework - NPPF

Project location

Country	England
Site location	NORFOLK NORTH NORFOLK LANGHAM Langham Airfield, Cockthorpe Road, Norfolk
Postcode	NR25 7BP
Study area	0.23 Kilometres

Site coordinates TF 9887 4198 52.937902017 0.959736374771 52 56 16 N 000 57 35 E Point
 Height OD / Min: 35.00m Max: 40.00m
 Depth

Project creators

Name of Organisation NPS Archaeology
 Project brief originator Norfolk Historic Environment Service
 Project design originator NPS Archaeology
 Project director/manager Elizabeth Govier
 Project supervisor Stuart Calow

Project archives

Physical Archive Exists? No
 Digital Archive recipient NPS Archaeology
 Digital Contents "other"
 Digital Media available "Images raster / digital photography","Text"
 Paper Archive recipient Norfolk Museums Service
 Paper Contents "other"
 Paper Media available "Context sheet","Miscellaneous Material","Photograph","Plan","Report"

Project bibliography 1

Publication type Grey literature (unpublished document/manuscript)
 Title Langham Airfield, Cockthorpe Road, Langham, Holt, Norfolk, NR25 7BP. Archaeological Monitoring
 Author(s)/Editor(s) Govier, E. and Crowson, A.
 Other bibliographic details 2015/1280
 Date 2015
 Issuer or publisher NPS Archaeology
 Place of issue or publication Norwich
 Entered by A Crowson (andrew.crowson@nps.co.uk)
 Entered on 8 June 2015

Appendix 7: Archaeological Specification

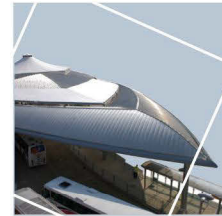
01-04-15-2-1280



nps archaeology

**Archaeological Monitoring at
Langham Airfield, Norfolk**

Written Scheme of Investigation



Prepared for
Melanie Smith
RenEnergy



NPS Archaeology

November 2014



www.nps.co.uk

Location	Langham Airfield, Norfolk
District	North Norfolk
Planning reference	NMA1/14/0002
Grid reference	TG 995 424
Client	Melanie Smith, RenEnergy

DOCUMENT CHECKLIST		
Compiled by	Pete Crawley	17/11/14
Reviewed by	Jayne Bown	19/11/2014
<i>Issue 1</i>		

NPS Archaeology
Scandic House
85 Mountergate
Norwich
NR1 1PY

T 01603 756150

F 01603 756190

E nau.mail@nps.co.uk

W <http://www.nau.nps.co.uk>

01-04-15-2-1280

© NPS Archaeology

Archaeological monitoring

Written Scheme of Investigation

1. Introduction

- 1.1 A proposal to install 450kw ground mounted photovoltaic solar arrays on a disused concrete runway at Langham Airfield in Norfolk (NGR TG 995 424) requires archaeological monitoring.
- 1.2 Norfolk Historic Environment Service (NHES) has recommended that a programme of archaeological monitoring be carried out during the installation of the new photovoltaic array to identify and record any archaeological remains affected by the development, in accordance with the principles set out in the *National Planning Policy Framework* (Department for Communities and Local Government 2012).
- 1.3 In order to comply with that requirement Melanie Smith of RenEnergy on behalf of their client have requested that NPS Archaeology prepare a WSI detailing an appropriate programme of archaeological works to fulfil the requirements of a *Generic Brief for the Monitoring of Works Under Archaeological Supervision and Control* issued by Norfolk Historic Environment Service.
- 1.4 Norfolk Historic Environment Service particularly drew attention to point 2 of the *Generic Brief for the Monitoring of Works Under Archaeological Supervision and Control* to emphasise that any disturbance through the insertion of driven foundations or piles should also be monitored. Groundworks associated with other aspects of disturbance arising from the development may also be subject to archaeological watching brief monitoring as advised by Norfolk Historic Environment Service.

2. Mitigation Strategy

- 2.1 The programme of archaeological works presented in this document has been designed to mitigate the impacts of the proposed construction works in line with the requirements of Norfolk Historic Environment Service.
- 2.2 Where archaeological remains are identified, and these cannot be preserved *in situ*, the potential impact of the scheme will be minimised by appropriate levels of archaeological excavation and recording (preservation by record).
- 2.3 The mitigation strategy comprises a watching brief to record any archaeological remains exposed during the construction works and reporting. The different elements to be employed are presented below in the anticipated order that they will take place.
- 2.4 The stages of the mitigation strategy may be summarised as follows:
 - i. *Watching Brief Monitoring.* Due to the potential for previously unidentified archaeological remains to exist, all ground disturbance works related to the construction works for the new photovoltaic solar arrays will be monitored. If archaeological features and deposits are encountered and these are deemed to be of significance, after consultation with Norfolk Historic Environment Service, appropriate levels of excavation and recording will be required.
 - ii. *Post-fieldwork Processing.* The drawn and written, photographic, stratigraphic and structural record will be cross-referenced and entered onto a database to provide a consistent and compatible record of the results of the various elements of fieldwork. Artefactual and ecofactual material recovered during the fieldwork will be cleaned, marked and packaged in accordance with the archive requirements of the Norfolk Museums Service. A database of these materials will be compiled.
 - iii. *Analysis, Reporting and Archive.* The results of the fieldwork will be presented as a client report or series of client reports. If appropriate, a synthesis of the results will be

published in an appropriate archaeological journal. The archive will be prepared for deposition with the Norfolk Museums Service.

- 2.5 The procedures and methodology for each of the stages outlined above are described in detail below.

2.6 Watching Brief Monitoring

- 2.6.1 Ground disturbance works related to construction of a new photovoltaic array will be monitored by an experienced archaeologist. The monitoring will be carried out in accordance with the *Standard and Guidance for an Archaeological Watching Brief* (Institute for Archaeologists 2008) and guidelines set out in the document *Standards for Field Archaeology in the East of England* (Gurney 2003).
- 2.6.2 If areas of significant archaeological remains are encountered that cannot be recorded safely or to the appropriate standard within the watching brief, consultation will take place with Melanie Smith of RenEnergy and Norfolk Historic Environment Service and more detailed archaeological excavation may be required.
- 2.6.3 Archaeological deposits, features and layers will be assigned individual context numbers and recorded on standardised forms employing a pro forma recording system approved by Norfolk Historic Environment Service. The records will include full written, graphic and photographic elements with site and context numbering compatible with the Norfolk Historic Environment Record numbering system. Plans will be made at a scale of 1:50, with provision for 1:20 and 1:10 drawings. Sections will be recorded at scales of 1:10 and 1:20 depending on the detail considered necessary. A photographic record in black and white 35mm film and digital format will be maintained of all archaeological deposits, layers and features to record their characteristic and relationships. Photographs will also be taken to record the progress of the work.
- 2.6.4 If palaeo-environmental deposits of potential interest are encountered the Client and Norfolk Historic Environment Service will be immediately informed and the palaeo-environmental remains will be assessed by an appropriate specialist and a mitigation strategy will be agreed. Where appropriate this strategy will include suitable levels of scientific analysis (e.g. palynology, soil micromorphology) and the use of scientific dating techniques (radiocarbon dating).
- 2.6.5 If human remains or burials are encountered during the monitoring, which because of their location or vulnerability must be removed, an application for a Licence for the Removal of Human Remains will be made in compliance with Section 25 of the Burial Act, 1857, if appropriate. No human remains will be removed until permission has been granted in writing from all the relevant parties.

2.7 Post-Fieldwork Processing

- 2.7.1 The drawn, photographic and written stratigraphic and structural records will be cross-referenced and, if appropriate, entered into an archaeological database.
- 2.7.2 The cleaning and cataloguing of any artefactual materials recovered will be undertaken on completion of the excavation. All retained materials will be cleaned, marked and packaged in accordance with the requirements of the Norfolk Museums Service. Finds data will be stored on a database to allow summary listings of artefacts by category and context to provide basic quantification.
- 2.7.3 An archive structured in accordance with guidelines laid out in *Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation* (Brown 2007) will be created.

2.8 Report and Archive

- 2.8.1 A report will be produced that will present the stratigraphic, structural, artefactual and photographic evidence and an analyses of that evidence. If construction work is phased

over a considerable period of time, reports will be produced at the completion of each phase of construction.

- 2.8.2 The report will present data in written, tabular, graphic and appendix form. A list of archive components generated by the work will also be included in the report. Copyright of the reports will be retained by NPS Archaeology.
- 2.8.3 A synthesis of the report may be submitted for publication in an appropriate archaeological journal within twelve months of the completion of the fieldwork.
- 2.8.4 Multiple copies of the report will be produced as appropriate and presented to the Client and three paper copies plus a digital version to Norfolk Historic Environment Service. One copy of the report will also be sent to the English Heritage Regional Advisor for Archaeological Science, if considered appropriate. The report will include a reference to the archive and the intended place of archive deposition. The report will be submitted within eight weeks of the completion of the fieldwork.
- 2.8.5 An online OASIS record will be initiated immediately prior to the start of fieldwork and completed when the final report is submitted to Norfolk Historic Environment Service. This will include a pdf version of the final report.
- 2.8.6 A single integrated archive for all elements of the work will be prepared according to the recommendations set out in *Environmental standards for the permanent storage of excavated material from archaeological sites* (UKIC, Conservation Guidelines 3, 1984) and *Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation* (Brown 2007), and in accordance with the Norfolk Museums Service's own requirements for archive preparation, storage and conservation.
- 2.8.7 The archive will be fully indexed and cross-referenced. It will also be integrated with the Norfolk Museums Service's Project accession number and the Norfolk Historic Environment Record numbering system. A full listing of archive contents and finds boxes will accompany the deposition of the archive and finds.
- 2.8.8 All archaeological materials, excepting those covered by the *Treasure Act, 1996*, will remain the property of the landowners. NPS Archaeology will seek to reach a formal agreement with the landowners for the donation of the finds to the Norfolk Museums Service.

3. Timetable and Resources

- 31 The different stages of archaeological work have different time and staff requirements. The timetable for fieldwork assumes that there are no major delays to the work programme caused by factors outside of NPS Archaeology's reasonable control. Such circumstances would include, without limitation; long periods of adverse weather conditions, flooding, repeated vandalism, ground contamination, delays in the development programme, unsafe buildings, conflicts between the archaeological recording methods and the protection of flora and fauna on the site, disease restrictions, and unexploded ordnance.

4. Project Staff

- 4.1 The project will be co-ordinated on a day-to-day basis by the Project Officer who will be dedicated to the project throughout its duration. The Archaeology Manager will assume overall responsibility for the delivery of the project. All project staff will have substantial experience in archaeological monitoring and post-excavation analysis.
- 4.2 The Project Officer will have experience in watching brief monitoring and excavation and experience with NPS Archaeology's *pro forma* or similar recording systems. The Project Officer will be an experienced metal detector user.
- 4.3 NPS Archaeology staff associated with the project are as follows:

Project Management	
Archaeology Manager	Jayne Bown BA, MIFA
Project Staff	
Project Officer	Steve Hickling MA, AIFA
Finds Coordinator	Rebecca Sillwood AIFA

- 4.4 NPS Archaeology reserves the right, because of its developing work programme, to change its nominated personnel at any time. This will be in consultation with Norfolk Historic Environment Service.
- 4.5 The analysis of artefactual and ecofactual materials will be undertaken by NPS Archaeology staff or nominated external specialists. Nominated NPS Archaeology and external specialists and their areas of expertise are as follows:

Specialist	Research Field
Andy Barnett	Metal-detectorist, Numismatic Items
Sarah Bates	Worked Flint
Fran Green	Palaeo-environmental material
Julie Curl	Faunal Remains
Sue Anderson	Post-Roman Pottery, Ceramic Building Material, Osteoarchaeology
Debbie Forkes	Conservation
Val Fryer	Macrofossil analysis
Andrew Peachey	Prehistoric and Roman Pottery
Richard Macphail	Micromorphology

5. Quality Standards

- 5.1 NPS Archaeology is an Institute for Archaeologists Registered Organisation and fully endorses the *Code of Practice for the Regulation of Contractual Arrangements in Field Archaeology*. All staff employed or subcontracted by NPS Archaeology will be employed in line with the Institute for Archaeologists *Code of Practice*.
- 5.2 NPS Archaeology operates under a recognised Quality Management System and is accredited with BS EN ISO 9001:2008, the International Standard Model for Quality Assurance.
- 5.3 The guidelines set out in the document *Standards for Field Archaeology in the East of England* (Gurney 2003) will be adhered to. Provision will be made for monitoring the work by Norfolk Historic Environment Service in accordance with the procedures outlined in the document *Management of Research Projects in the Historic Environment* (MoRPHE) (English Heritage 2006). Monitoring opportunities for each phase of the project are suggested as follows:
- during watching brief monitoring
 - during post-fieldwork analysis
 - upon completion of the archive
 - upon receipt of the final report
- 5.4 A further monitoring opportunity will be provided at the end of the work upon deposition of the integrated archive and finds with the Norfolk Museum Service.
- 5.5 NPS Archaeology operates a Project Management System. Most aspects of this project will be co-ordinated by a Project Officer who has the day-to-day responsibility for the successful completion of the project. Overall responsibility for the successful delivery of the project lies with the Archaeology Manager who has the responsibility for all of NPS Archaeology's work and ensures the maintenance of quality standards within the organisation.

6. Health and Safety

- 6.1 NPS Archaeology will ensure that all work is carried out in accordance with NPS Property Consultants Limited's Health and Safety Policy, to standards defined in *the Health and Safety at Work, etc Act, 1974* and *The Management of Health and Safety Regulations, 1992*, and in accordance with the health and safety manual *Health and Safety in Field Archaeology* (SCAUM 2007).
- 6.2 A risk assessment will be prepared for the fieldwork. All staff will be briefed on the contents of the risk assessment and required to read it. Protective clothing and equipment will be issued and used as required.
- 6.3 NPS Archaeology will provide copies of NPS Property Consultants Limited's Health and Safety policy on request.

7. Insurance

- 7.1 NPS Archaeology's Insurance Cover is:

Employers Liability	£5,000,000
Public Liability	£50,000,000
Professional Indemnity	£5,000,000

- 7.2 Full details of NPS Archaeology's Insurance cover can be supplied on request.