

# PROPOSED SOLAR FARM, KATE'S HILL FARM, POND HALL ROAD, IPSWICH, SUFFOLK

# DESK BASED ASSESSMENT



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## PROPOSED SOLAR FARM, KATE'S HILL FARM, POND HALL ROAD, IPSWICH, SUFFOLK

## **Desk Based Assessment**

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## Abstract

Britannia Archaeology was commissioned by Mr Adrian French of A. G. Renewables Ltd to prepare an archaeological desk based assessment on land to the east of Kate's Hill Farm, Pond Hall Road, Ipswich, Suffolk (NGR: 605400 241400). The assessment will support a planning application for the development of a new solar farm and associated works.

The site has a moderate potential for subsurface archaeological remains dating to the Roman period based on the location of a villa complex 400m to the east. It is possible that outlying field boundaries and other archaeological features associated with farming activity may extend into the site. There is also a low to moderate potential for Anglo-Saxon remains associated with the Lafham demesne located 80m to the north, although the documentary sources suggest that this manorial complex was small and poor.

The potential for finds or features dating to all other periods is low.

Historical maps show that the site has been given over to agricultural for at least the last 200 years and the only changes have been the removal of two internal field boundaries and the construction, and subsequent abandonment, of the railway along the southern boundary

The development will use small gauge piles in the construction of the panel frames and these will reduce the area of impact to any surviving subsurface archaeological remains. The wider and deeper cable trenches and substation foundations are likely to have a more significant impact on any buried remains.

There will be a negligible impact on the setting of existing listed buildings and archaeological sites, mainly due to screening by existing woodland and the already hugely significant impact to setting imposed by the two parallel sets of high voltage power cables and towers that traverse the site to the north.



## 1.0 INTRODUCTION & METHODOLOGY

#### 1.1 Project Background

This report presents an archaeological desk based assessment undertaken by Britannia Archaeology Ltd, commissioned by Mr Adrian French of A. G. Renewables Ltd, for a proposed new solar farm on land east of Kate's Hill Farm, Pond Hall Road, Ipswich, Suffolk (NGR: 605400 241400) (Fig.1).

This assessment will support a planning application for the proposed development of the site which will involve:

- construction of solar PV arrays arranged in rows facing south;
- construction of electricity substations; and
- associated trenching to connect the array to the national grid (Fig. 4).

The objective of this assessment is to establish the presence of, or likely potential for, buried archaeological remains and the possible impact of the development on these remains. The assessment will also consider the setting of the new development in relation to existing listed buildings and known archaeological sites within the immediate area.

#### 1.2 Site Description

The assessment site is located 3km south-east of Hadleigh town centre on the edge of the parish boundary with Raydon, in the District of Babergh. It covers an area of approximately 64ha (Fig. 1) and comprises 10 pasture fields on land east of Kate's Hill Farm. The site is bounded to the north by Clay Lane, to the east by Woodlands Road and by a footpath along the course of the disused railway line to the south. Two large areas of woodland are also located within the site boundary, but they are not being considered for development. The land is currently pasture (sheep grazing) and is relatively flat (52m AOD), with the exception of the western field (Big Field) which sits on the edge of a small valley for a stream that feeds into the River Brett, 1.6km to the south-west.

The site is accessed from either Clay Lane at several points or from a small car park next to the disused railway line on Woodlands Road. No buildings or any other temporary structures are located on the site and only one field contained grazing livestock at the time of the site visit.

The geology alters slightly between the east and western halves of the site.

In the east the bedrock geology comprises Crag Formation sandstone which is a sedimentary bedrock formed approximately 2 to 4 million years ago in the Neogene Period when the local environment was dominated by shallow seas. The superficial geology comprises Lowestoft Formation Diamicton which formed up to 2 million years ago in ice age conditions.

In the west the bedrock comprises Thames Group silty clays which is also a sedimentary rock and was formed in a deep sea environment 34 to 55 million years ago in the Palaeogene Period. The superficial geology is a mixture of Lowestoft Formation Diamicton



and glaciofluvial sand and gravel deposits also formed up to 2 million years ago in ice age conditions (BGS, 2013).

#### 2.0 METHODOLOGY

#### 2.1 Aims & Scope

This report aims to assess all known information relating to subsurface and above ground archaeological remains within a 2km radius centred on the development site. This information will be used to identify the potential presence of archaeological remains upon which the proposed development is likely to have an impact. It will also consider the impact of the development on the setting of existing archaeological sites and listed buildings in the immediate vicinity. This report will take into consideration existing truncation from previous developments and the potential impact caused by the implementation of the proposed development plans and construction methods.

#### 2.2 Research and Sources

#### Historic Environment Record Office

The Suffolk Historic Environment Record Office (SHER) was consulted and provided details of all data held within a 2km radius of the site. The SHER database holds records of archaeological sites, scheduled monuments, listed buildings, finds spots, registered parks and gardens, protected wreck sites and battlefields.

#### Documentary Sources

Primary and secondary documentary sources were consulted via the SHER, the Suffolk Record Office based in Bury St. Edmunds, Hadleigh Library Local Studies Collection and the Archaeology Data Service (www.archaeologydataservice.ac.uk). All sources consulted are listed in the bibliography.

#### Cartographic Sources

A search of primary and secondary cartographic sources was undertaken at Suffolk Record Office in Bury St Edmunds.

#### Site Visit

A site visit was undertaken on the 8<sup>th</sup> May 2013 and a photographic record compiled. The visit aimed:

- to identify any existing earthworks or visible archaeological remains; and
- to establish the condition and character of the existing site and note its setting.

Proposed site plans were consulted during the visit to assess the areas most at risk from the development.



## Presentation of Results

The results of the research are presented by historical/archaeological period and are a synthesis of all data gathered that are relevant to the site. Not all of the data supplied by the SHER is referred to in the report, however Appendix 1 contains a full table and brief description of the HER search results.

## 3.0 PLANNING BACKGROUND

The archaeological assessment was carried out in accordance with guidance laid down by the National Planning and Policy Framework (NPPF, DCLD 2012). The relevant local development plan is the Babergh Development Framework Core Strategy (2011-2031) Submission Draft.

## 3.1 National Planning Policy Framework (NPPF, DCLG March 2012)

The NPPF recognises that 'heritage assets' are an irreplaceable resource and planning authorities should conserve them in a manner appropriate to their significance when considering development. It requires 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. The key areas for consideration are:

- The significance of the heritage asset and its setting in relation to the proposed development;
- 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;
- Significance (of the heritage asset) can be harmed or lost through alteration or destruction, or development within its setting. As heritage assets are irreplaceable, any harm or loss should require clear and convincing justification;
- Local planning authorities should not permit loss of the whole or part of a heritage asset without taking all reasonable steps to ensure the new development will proceed after the loss has occurred;
- 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.

#### 3.2 Babergh Development Framework Core Strategy (2011-2031) Submission Draft

The local development framework for Babergh states the following:

• Careful consideration of the character of other, unlisted, historic assets is important and that developments which may affect historic assets make a positive contribution to local character and distinctiveness (3.35 & 3.3.6).



## 4.0 SITE VISIT (Figs. 4&5)

A site visit was undertaken by the author on 8<sup>th</sup> May 2013 with the following aims:

- to determine the current state of the assessment area;
- to investigate the presence of any surface or potential subsurface archaeological remains; and
- to ascertain the current level of truncation.

The site is split into 10 fields all laid to short grass for livestock grazing and divided by fences and hedges of varying size and age. The site is bounded to the north by Clay Lane, Tom's Wood and Broad Oak Wood, to the south by the formed railway line, to the east by Woodlands Road and to the west by other fields and buildings belonging to Kate's Hill farm.

The topography is generally flat with a slight downward slope to the south-west except for the western extent of Big Field (Fig. 4) which contains a dry valley that slopes to the west and meets a small river valley. The northern fields (19 Acres and Side of Drive) are bisected by two sets of large high voltage power cables and associated towers (Fig 1). These continue through the fields to the west of the site and run to the south-west. They are visible for several miles in either direction and have a highly significant visual impact on the natural environment. They are partly screened from sight in the eastern fields by Raydon Great Wood and Tom's Wood.

Three linear depressions were visible in the grass fields during the visit. One relates to a field boundary in Big Field that is visible on all the OS maps consulted. One on the south-west side of the field called 32 Acres relates to a former footpath that has now been rerouted and is also on the former OS maps. The final linear was also in 32 Acres and was the least distinct. It is not shown on any of the maps consulted and may relate to an earlier field boundary.

No other obvious archaeological remains or structures were observed during the visit. No finds were observed, however ground conditions were not conducive to do so.

## 5.0 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

The following results are presented as a synthesis of all data obtained from the sources detailed above (Section 2.0) and listed in the bibliography (Figs. 2-3). Where possible the Suffolk HER preferred reference has been used.

## 5.1 Prehistoric (750000BC – 43AD) (Fig. 2)

The site lies to the east of the Brett river valley on the edge of a tributary stream on land that slopes down into the flood plain which is traditionally suited to prehistoric funerary and settlement activity. The SHER search returned only one record (HAD001) of



prehistoric date; a fragment of undecorated Iron Age pottery recovered from a gravel pit 1.5km west of the assessment site.

The SHER produced records for two undated ring-ditches (HAD025 and LYM014), which are likely to be late Neolithic or Bronze Age in date. Both are located to the south-west of the site around 800m and 1.4km respectively.

In the wider landscape, numerous probable Bronze Age ring-ditch sites have been recorded mainly on the east bank of the River Brett to the North of Hadleigh (HAD024). These tend to be found on or around the 20m contour and were noted on aerial photograph surveys which do not extend as far as the assessment site. A significant Bronze Age and early Iron Age site at Red Hill Road (HAD061) north-east of Hadleigh (and just beyond the assessment HER search radius) recorded a ditched field system, probable track way and six timber structures.

No other prehistoric sites or finds have been recorded within 2km of the assessment site.

## 5.2 Roman (43AD – *c*. 410AD)

The Romano-British period marked a significant change in development for the wider area with *Camulodunum* (Colchester) becoming the Roman capital.

The assessment site is located approximately 15km north of *Camulodunum* and is sandwiched between two main Roman roads that converge at *Combretovium* (Coddenham) around 15km to the north-east. The north to south road is the main route from the Iceni capital *Venta Icenorum* (Caister St. Edmund) to *Londinium* (London) via Colchester and the east to west road runs from the Fort at *Combretovium*, through Long Melford and joins the *Via Devana* running to *Duroliponte* (Cambridge) (Antonine *Iter V* & *IX*). This area is littered with villa complexes and small settlements and while much of Britain remained virtually unchanged after the Roman invasion, East Anglia experienced significant development with city/settlement, road and villa building in evidence over a wide area.

A Roman ville and furnace is the only Roman site recorded within the 2km search area. It is located 400m east of the assessment site at Town House Fruit Farm. The site was partially excavated in the 1950s by 'boys from Woolverstone LCC School' who uncovered the remains of the *hypocaust* and furnace, two rooms of flint foundations and finds including coins, Samian pottery, window glass, a harness pendant, a spoon, a key and a bronze vessel.

Roman villa buildings tend to sit at the centre of large farming estates and the presence of a substantial villa complex in relatively close proximity to the assessment site would suggest that there is a moderate potential for evidence of agricultural activity within the site. This would most likely be manifest in the form of outlying field boundaries and occasional finds scatters. It is unlikely that further buildings would be located at such a distance from the villa and any accompanying buildings would almost certainly be closer to the river and the main villa.



## 5.3 Anglo-Saxon (early medieval) (*c*.410AD – 1066AD) (Fig. 2)

Hadleigh and many of the surrounding villages trace their origins to the Anglo-Saxon period which was a time of significant change in East Anglia. After the withdrawal of Roman authority in Britain in the early 5<sup>th</sup> Century AD, many Roman towns like Colchester waned in significance while new towns such as Ipswich and Hadleigh emerged as centres of administration. Settlement patterns persisting throughout Iron Age and Roman Britain did not necessarily continue into the Anglo-Saxon period.

There is evidence of 5<sup>th</sup> century Anglo-Saxon occupation in Hadleigh, however evidence around the assessment site has not been recorded. Hadleigh came to prominence in the 9<sup>th</sup> century and is thought to have been one of King Guthrum's royal towns and, according to medieval literary sources, it was his final resting place (Dumville *et al.* 1984). The name of the town dates to this period and was recorded in AD 995 as *Hædleage* which literally means 'heath clearing where heather grows' (Mills, A. 2003)

It is notable that the SHER search returned no records dating to this period. The manor house located 80m to the north (HAD078) is clearly listed as being the centre of the demesne of Lafham (Domesday, 1086) which was Anglo-Saxon in origin and persisted through the medieval period.

There is no evidence for Anglo-Saxon activity on the assessment site.

#### 5.4 Medieval (1066 AD – 1540 AD) (Fig. 2)

The medieval period in Hadleigh and surrounding area is well documented in both primary and secondary sources. The 2km search returned six archaeological records and one listed building.

There is one entry in Domesday Book (1086AD) relating to the site. This describes manorial demesne of Lafham located 80m north of the site at Pond Hall Farm. This identified the site as the manor of Lafham in the Risbridge Hundred in the county of Suffolk. The total population was not recorded, but the tax was valued at 0.3 gelds which was very small. The manor had 0.5 Lord's plough teams and the total land value was 0.3 gelds. The Lord and tenant in 1086 was Wulfmer the Reeve, a Saxon name therefore indicating that the new Norman hierarchy had not subsumed the manor or viewed Wulfmer as potentially useful. Joint lords where noted in 1066 with the manor split between the abbey of Bury St Edmunds and Wulfmer's father. It is interesting that the abbey had given up or lost control of the manor when in most cases they retained their holdings between the Conquest and 1086.

In 1252, Hadleigh was granted a weekly Monday market and an annual fair was secured from Henry III by the Lord of Toppesfield. The town became incredibly wealthy over the next 300 years thanks to the wool and cloth trade, and many of the significant buildings in the town date to this period (Jones, WAB. 1989).



The assessment site is located in the parish of Hadleigh, but was very much on the periphery. Of the six records, the most significant relates to the manor at Pond Hall (HAD078) located 80m north of the site and described above. The record describes the site as a moat, crenelated manor house & chapel.

Two records (HAD045 & HAD079) relate to the medieval deer park (HAD079) in the manor of Pond Hall located 800m north of the assessment site. In 1369 a licence for a deer park was granted to Helminge Legat of Essex who had purchased Pond Hall estate in 1359 (Copinger, 1905). A rectangular moat (HAD045), probably associated with the park-keeper's lodge, was noted on the 1830 Tithe Map.

Another medieval moated site (WMM001) is recorded 950m west of the assessment site, although this is described as a small, isolated and probably separate manor belonging to Robert de Vaux. The only medieval listed building, Vauxhall (278848), is located inside the moated area and dates to c.1480AD.

The remaining medieval records (both HAD Misc) are conjectural points derived from Tithe Map field names. Both sites lie to the north-east between 900m and 1.3km distance from the assessment area. The closest is called Cook's Warren and may suggest the location of a medieval rabbit warren. The furthest, is called Gallows Field and may be the location of a former gallows.

No medieval sites or finds have been recorded within the assessment area.

## 5.5 Post-medieval and modern (1540AD – Present) (Figs. 2 & 3)

The area around Pond Hall is better documented, especially in cartographic sources, towards the latter half of the post-medieval period. Hadleigh continues to be very well documented thanks to its considerable wealth and importance at the end of the medieval and into the early post-medieval period. The SHER search returned seven archaeological records and nine listed buildings within 2km of the assessment site.

The parish of Hadleigh in general began a long period of decline in the early postmedieval period with trade in wool and other cloth types, upon which the local economy relied, being superseded by continental styles (Jones, W. 1984). The decline continued well into the late 19<sup>th</sup> century with a series of poor harvests in the 1870s severely damaging the already struggling farming industry.

The earliest maps of the area show very little detail of the town or assessment site, but confirm the rough location in relation to surrounding towns and villages. Saxon's Map of Suffolk dates to 1575 and shows pictorial representations of the towns and villages and scales the size to match population and importance. Hadleigh is shown prominently as a larger town along with Lavenham, Sudbury and Ipswich. The Pond Hall deer park to the north of the assessment site is also clearly identified. John Kirby's map from 1736 is a little more detailed showing some roads and the basic layout of the larger settlements, however pictorial representations are still used for the smaller settlements. The



positioning of the villages is somewhat askew and the deer park to the north is still identified, although it is shown disproportionately far from the site.

Only one listed building, Pond Hall, is recorded close to site (277778) located on the site of the medieval manor. The origins of the current building, a timber-framed structure with rendered skin and plain tile roof, may be late medieval and it is described as a probable early 16th century hall range with a later 16th century cross wing and  $17^{th} - 20^{th}$  century alterations.

The house is screened from the site by several wooded areas and is not visible from the road or even its immediate grounds due to the presence of well-established trees.

Seven of the remaining eight listed buildings (276867, 277262, 276866, 276868, 277196, 277783 and 277784) are all located in the village of Upper Layham over a kilometre away to the south-west. None have line of site to the assessment area and will not be affected by the development. Raydon Hall (277279) is located around 1.5km south and is also screened from the site by large areas of dense woodland and undulating ground.

None of the seven SHER records were located on the assessment site and all lie at least 1km away in the western half of the search area. Four of the records (3 x HAD Misc & LYM Misc) relate to suggested locations for sites based on Tithe Map field names. The last three records identify Mason's Bridge (HAD010) adjacent to Layham Hall, the site of a windmill at Windy Ridge (LYM030) and White Brick Kiln (LYM026).

The later cartographic sources (Fig. 3) show that little has changed on the site since at least 1839 when the Tithe Map was produced. Field division is very similar with the only difference being the 'Big Field' which was split into three plots and '19 acres' was shown as two plots. The railway had not been built by this point and consequently is not shown either. The Tithe apportionments for the western half of the assessment site record the following land holdings:

TITHE NUMBER	LAND OWNER	OCCUPIE R	SITE NAME	LAND USE	A	R	Р
1119	SIR WILLIAM B RUSH (TRUST) THOMAS IRELANG ESQ. & WALKER SKIRROW ESQ.	HENERY SALLOWS	BULLEMAR	ARABLE	10	1	21
1121	и	н	GREAT CONEY FURROWS	н	15	3	25
1133	и	и	ROOK YARD	-	11	3	29
1134	и	н	TOM'S FIELD & POND	н	12	0	1
1135	и	u .	BARN FIELD	u	8	1	32
1136	и	н	LITTLE CONEY FURROWS	н	9	2	10
1137	и	u .	WET LET PONDS	и	19	0	27
1140	и	и	MIDDLE HILL LEY & POND	н	8	0	7
1138	и	AS OWNER	RAYDON GREAT WOOD	WOOD	1	2	0
1141	и	н	TOMS WOOD	и	17	2	14

Table 1: Tithe Apportionment

Two of the plots include 'Tom' in the name and may refer to Thomas Irelang.



The First Edition Ordnance Survey Map (1892) shows that little changed on the site except for the construction of the railway line which bounds Big Field to the south and cuts through Raydon Great Wood (Fig 3).

The Relief Map, Second and Revised Ordnance Survey editions (Fig. 3) show that no change took place on the assessment site between 1886 and 1927. The 1958 Ordnance Survey (OS) shows the addition of the southernmost high voltage electricity cables and by 1972 the northern cable and towers had been constructed. The field boundaries remain unchanged since 1892.

The only change by 2013 is the removal of one field boundary to form 'Big Field' (Fig. 1) and the line of this boundary was still visible in the grass during the site visit.

## 5.6 Undated

The SHER search produced nine undated or negative archaeological records. Six of these relate to suggested areas of ancient woodland (HAD050, HAD103, HNS016, RAY012, RAY013 and RAY014), two suggested sites from the Tithe Map (HAD Misc and Had Misc) and a group of unidentified linear cropmarks (HAD104) located on a site of the former ancient woodland (HAD1003).

Two of the wooded areas relate to Tom's Wood (HAD050) and Raydon Great Wood (HAD012) which bound the site, but will not be developed.

#### 6. DISCUSSION

#### 6.1 Archaeological Potential

Due to the paucity of prehistoric remains recorded within 2km of the assessment site there is a **low** potential for the presence of prehistoric features or finds. However, there has been little development within the 2km search area and therefore the lack of finds of this date may be a result of a lack of archaeological investigation rather than a true reflection of the prehistoric activity in the area.

The assessment site is located within 400m of a substantial Roman villa site (HAD014) and there is a **moderate** potential to encounter outlying field systems associated with this development, especially in the western half of the site. However, it is also possible that the small river that flows between the assessment site and the Roman villa would have formed a natural boundary and the Roman activity may not have extended as far as the proposed development.

The Anglo-Saxon demesne of Lafham is centred on the manor house 80m north of the assessment site and the entry in Domesday Book suggests it was small and relatively poor. No Anglo-Saxon finds or features have been noted within the vicinity of the site, however it is likely that at least some activity associated with the demesne would occur in the closer fields in the west and north of the assessment site. Therefore the potential



for finding new archaeological remains dating to the Anglo-Saxon period is **low** to **moderate**.

The manor seems to have grown little during the medieval period with Hadleigh being the local centre of prosperity and wealth. It is probable that the current land division on the site has its origins in the medieval period. The various woods probably date to this period as does the deer park to the north. As development of the site has certainly been limited since the medieval period, the potential for finding further archaeological assets is **low**.

Very little development has been recorded in the area during the post-medieval period. Most of the finds, features and listed buildings in the search area are located on the periphery towards Hadleigh. The maps show very little change in the last 200 years and as such the potential for encountering post-medieval and modern remains is **low**.

## 6.2 Existing and Proposed Impact (Fig. 4)

#### Existing Impact

The fields do show evidence of ploughing and the Tithe Map records arable use from the mid-19<sup>th</sup> century at least. It is possible that any shallow subsurface archaeological features could have been truncated. However the depth of the topsoil and subsoils on site is yet to be determined and the presence of a dry valley in 'Big Field' would also suggest the presence of localised colluvial deposits.

The most significant impact relates to the high voltage power cable towers in the northern fields. The pads for these are likely to have damaged any subsurface archaeology.

There is no evidence of any other development on the site and consequently, should there be any buried archaeological remains, these are likely to be moderately well preserved.

#### Proposed Impact

The proposed construction plans involve the installation of several thousand solar panels mounted to aluminium and steel frame structures spaced 8m apart and facing south. The frame uprights will be constructed on small 10.30cm<sup>2</sup> piles to a depth of around 1.20m to 1.60m and spaced at 2.10m intervals.

Electricity substations and several kilometres of internal and external cable trenching will also be required. The internal cabling will involve the excavation of trenches of varying widths to accommodate a variety of cables. The external cable trench will run from the assessment site to a connection point at an as yet unknown location.

The proposed panel construction techniques arguably have a lower impact on subsurface archaeological remains compared with comparable options such as machine excavation



and concrete foundation pads. Where the 10.5cm<sup>2</sup> piles do impact on archaeological deposits they are likely to remove them completely however damage to the overall asset in the wider context is kept to a minimum.

The cable trenching is also likely to have a destructive impact where it encounters archaeological remains.

#### Impact on Setting

The construction of these solar panels will significantly change the immediate nature of the site and its setting. The closest listed building is Pond Hall Farm, 80m to the north which does not have line of sight to the proposed development area, being already screened by numerous trees close to the house, and further away. A slight rise and then fall in the northern fields will also obscure the panels from the Hall.

More significantly, the area has suffered a much greater visual and aesthetic impact from the two sets of parallel high voltage overhead power cables which dominate the landscape with tall steel-framed towers.

In comparison, the impact to setting from the development will be negligible due to the low elevation of the structures, the slight slope to the south-west and the high degree of screening already provided by the existing woods.

#### 7. CONCLUSIONS AND RECOMMENDATIONS

#### 7.1 Conclusions

The results of this investigation suggest that very little has changed on the assessment site for some considerable time. Evidence for prehistoric activity in the area is relatively sparse and the Roman villa to the west is the first indication of more intensive activity. The landscape has its origins in the Anglo-Saxon period, however the sources show that the manorial complex at Lafham was very small and poor unlike the nearby Hadleigh which became very wealthy and influential. The site lies on the eastern boundary of the Hadleigh parish and as such is on the periphery of settlement activity. It is therefore unsurprising that it has not undergone significant change in the last 1500 years.

The most significant potential is for remains relating to the Roman villa at Fruit Farm. It is unlikely that any buildings associated with the villa were constructed on the assessment site, but there is a potential to encounter ditches and pits associated with outlying field systems.

The development plans will have a high impact on surviving archaeological deposits where encountered, however the structure foundations will use highly localised, small diameter piling to significantly reduce the risk of damage to unknown sub-surface archaeological remains. The cable trenching connecting the panels to the internal substation and national grid is likely to present a greater risk to archaeological deposits.



There will be a negligible impact on the setting of existing listed buildings and archaeology sites, mainly due to screening by existing woodland and the already significant impact to setting imposed by the high voltage power cables and towers.

#### 7.2 Recommendations

The potential for Roman remains relating to the villa site would normally warrant some further archaeological mitigation, despite the actual location of any potential Roman finds or features being unknown. It would therefore be usual to attempt to verify and the extent, quality and quantity of these heritage assets before any work commences.

Given the proposed construction methods and archaeological potential detailed above, a programme of archaeological monitoring would seem an appropriate level of mitigation. In this case piling, especially small piles of this design are not conducive to the monitoring process, however monitoring of the wider and deeper cable trenches and foundations for the substations would be useful in identifying and adequately recording any subsurface archaeology.

Any future archaeology fieldwork should be discussed with Suffolk County Council Archaeology Service Conservation Team.

#### 8.0 ACKNOWLEDGMENTS

Britannia Archaeology Ltd would like to thank Adrian French of AG Renewables for commissioning the project and for his advice and assistance.

#### 9.0 PROJECT ARCHIVE & DEPOSITION

A full archive will be prepared for all work undertaken in accordance with guidance from the *Selection, Retention and Dispersion of Archaeological Collections,* Archaeological Society for Museum Archaeologists, 1993. Arrangements will be made for the archive to be deposited with the relevant museum or the SHER Office.



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## **Cartographic Sources**

Saxon's Map of Suffolk, 1575

John Kirby, 1736

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Ordnance Survey Office Relief Map, 1886

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Ordnance Survey Provisional Revised Edition

Ordnance Survey 1958

Ordnance Survey 1972-1973

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English Heritage PastScape <u>www.pastscape.org.uk</u>

Archaeological Data Service (ADS) www.ads.ahds.ac.uk

English Heritage National List for England www.english-heritage.org.uk/professional/protection/process/national-heritage-list-forengland

DEFRA Magic <a href="http://magic.defra.gov.uk/website/magic">http://magic.defra.gov.uk/website/magic</a>



#### **APPENDIX 1 – SHER DATA**

#### Monument Records

PREFERED REF	MONUID	PERIOD	MONTYPES	NAME	SUMMARY	GRID REF
HAD 001	MSF5156	Iron Age	FINDSPOT		Rim sherd in hard dark grey fabric, flattened everted rim, undecorated.	TM 035 416
HAD 014	MSF5172	Roman	VILLA, HYPOCAUST, FURNACE	Town House - fruit farm	Site of Roman ?villa, partially excavated in 1950s.	TM 044 411
HAD 025	MSF5184	Unknown	CAUSEWAYED RING DITCH		Ring ditch (single), circa 25m in diameter, appears to have a causeway on NE side and a pit in centre (S1).	TM 0393 4089
HAD 045	MSF14017	Medieval	MOAT, DEER PARK, LODGE	Park Yards	Rectangular moat shown on 1830 Tithe Map and described as `Park Yards', arable, 0a 2r 22p (S1).	TM 0600 4233
HAD 050	MSF19318	Unknown	WOOD, EARTHWORK	Tom's Wood/Broadoak Wood	Ancient Woodland as defined in (S1).	TM 05847 41251
HAD 078	MSF22836	Medieval	MANOR HOUSE, FORTIFIED MANOR HOUSE, MANOR, CHAPEL, MOAT	Pond Hall; Pond Hall Farm; Manor of Lafham (1086)	Site of moat, crenallated manor house & chapel in manor of Pond Hall (Domesday manor of Lafham?).	TM 05111 41886
HAD 079	MSF22837	14th century to 17th century	RABBIT WARREN, DEER PARK, PARK PALE	Pond Hall Park	Deer Park in the manor of Pond Hall (for manor house etc see HAD 078).	TM 06053 42495
HAD 103	MSF24625	Undated		Bushy coopers wood (Ancient wood)	Bushy Coopers wood: Ancient woodland seen on Tithe Map. Missing from later OS maps.	TM 0577 4178
HAD 104	MSF24626	Undated			Unidentified linier cropmarks on site of previous ancient woodland (Bushy Cooper's Wood) shown on 1839 Tithe Map. Shown on 1999 and 2010 aeriel photographs.	TM 0575 4181
HAD Misc	MSF16984	Unknown	GALLOWS	Gallows Field (1839)	Gallows site SE of Hadleigh suggested by field name Gallows Field in tithe apportionment (S1).	TM 038 418
HAD MISC	MSF24614	Post Medieval	STABLE	Stable Field (Tithe Map)	Recorded on 1839 Tithe Map as number 1269 under the name of stable field, indicationg the presence of a stable at some point.	TM 0482 4281
HAD MISC	MSF24615	Post Medieval	AGRICULTURAL BUILDING	Cartlodge Field (Tithe Map)	Recorded on 1839 Tithe Map as number 1240 under the name of cart lodge field, indicationg the presence of a Cart lodge at some point.	TM 0490 4265



#### Proposed Solar Farm, Kate's Hill Farm, Pond Hall Road, Ipswich, Suffolk Archaeological Desk Based Assessment Project Number 1031

HAD MISC	MSF24616	Medieval to Post Medieval	RABBIT WARREN	Cooks Warren (Tithe Map)	Recorded on 1839 Tithe Map as number 1261 under the name of Cooks Warren, indicationg the presence of a possible rabbit warren at some point. TM 0462 4241	TM 4241	0462
HAD MISC	MSF24617	Medieval to Post Medieval	GALLOWS	Gallows Field (Tithe Map)	Recorded on 1839 Tithe Map as number 1050 under the name of Gallows Field, indicationg the presence of Gallows at some point.	TM 4189	0387
HAD MISC	MSF24618	Post Medieval	GRAVEL PIT	Gravel Pit Field (Tithe Map)	Recorded on 1839 Tithe Map as number 1249 under the name of Gravel pit, indicationg the presence of gravel pit.	TM 4216	0393
HAD MISC	MSF24624	Undated		Mill Field, Hadleigh (Tithe Map)	Field shown on Tithe Map under the name of Mill Field, suggesting the location of a past Mill in the immediate area. Numbered 1147 in Tithe Apportionment. TM 0548 4180	TM 4180	0548
HNS 016	MSF19516	Unknown	WOOD, EARTHWORK	Ramsey Wood; Hintlesham (Great & Little) Wood	Former ancient woodlands of Ramsey Wood and Hintlesham Wood.	TM 42495	06053
LYM 014	MSF3983	Unknown	RING DITCH		Ring ditch, circa 25m in diameter (S1).	TM 4099	0333
LYM 026	MSF18256	Post Medieval	BRICK KILN, BRICKWORKS	White Brick Kiln	White Brick Kiln' and pit marked and recorded in 1839 tithe (S1).	TM 4055	0380
LYM 030	MSF18257	19th century to 20th century	WINDMILL	Windy Ridge	Site of windmill.	TM 4015	0381
LYM Misc	MSF20146	Unknown	WORKHOUSE	Lower & Upper Workhouse Piece (Tithe 1839)	Workhouse suggested by field name 'Upper & Lower Workhouse- Piece'.	TM 40555	03446
RAY 010	MSF15834	18th century to 19th century	BRIDGE	Mason's Bridge	Bridge shown on Hodskinson's map 1783 (S1).	TM 3989	0388
RAY 012	MSF19317	Unknown	WOOD, EARTHWORK	Raydon Great Wood; Cocksedge Wood	Ancient Woodland as defined in (S1).	TM 40459	05348
RAY 013	MSF19319	Unknown	WOOD, EARTHWORK	Squares Grove	Ancient Woodland as defined in (S1).	TM 40644	06552
RAY 014	MSF19320	Unknown	WOOD, EARTHWORK	Long Wood	Ancient Woodland as defined in (S1).	TM 40917	06432
WMM 001	MSF5127	Medieval	MOAT	Vauxhall	Moat, small, irregular, causeway in S side, complete, wet, ocupied.	TM 07	2 409



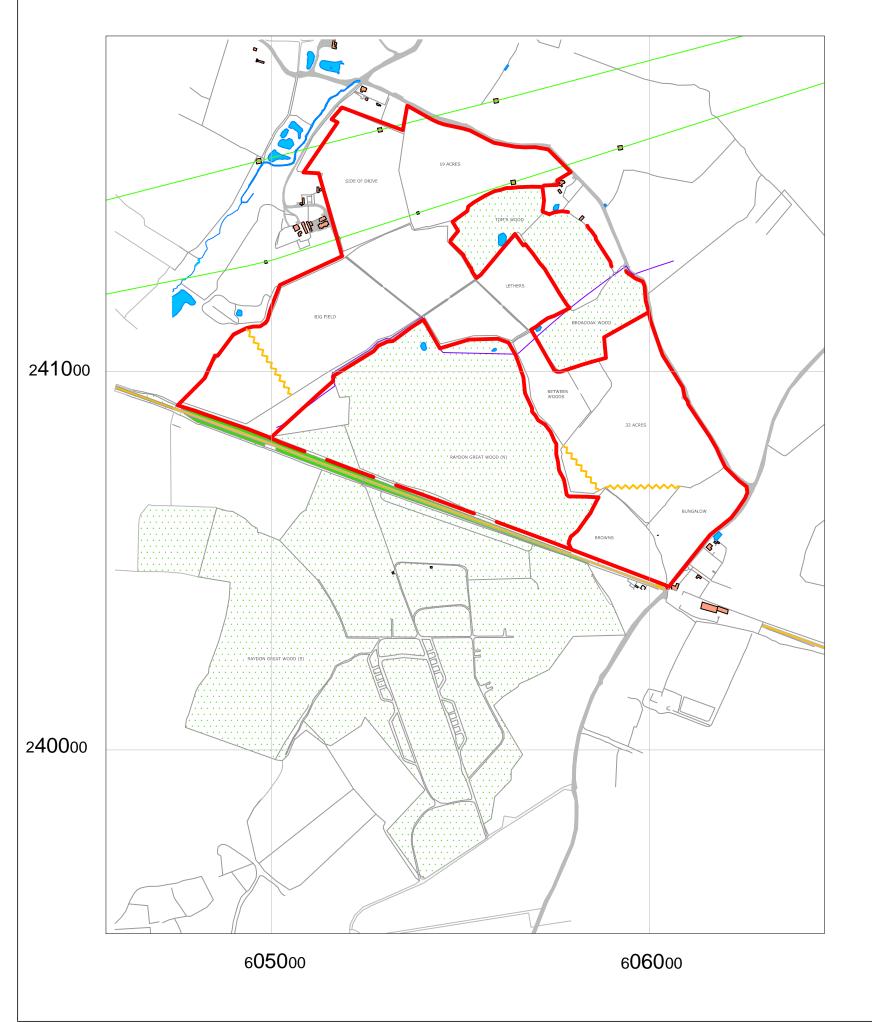
#### **Listed Buildings**

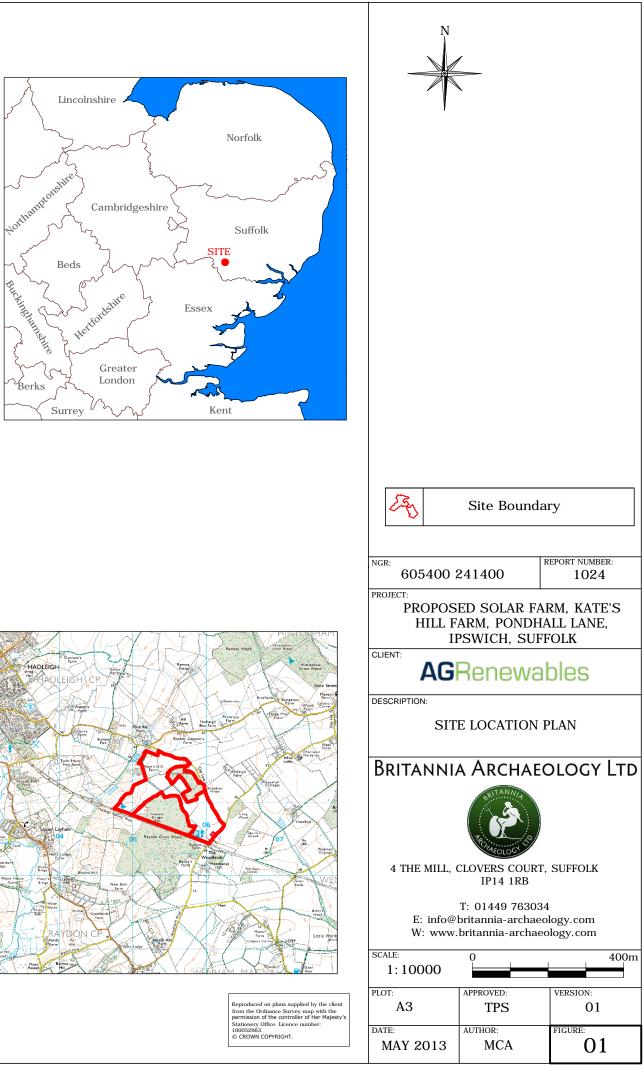
PREFFERED REF	DESIGUID	NAME	GRADE	PARISH	CURATOR NOTE
277783	DSF1019	BENTON END HOUSE	*	HADLEIGH	Type and date: c16 timber framed house. Date: from 1500 to 1599 type and date: c18 house. Date: from 1700 to 1799 main material: timber main material: plaster covering material: tile main material: brick
277196	DSF1537	UPLANDS HOUSE	11	LAYHAM	Type and date: c1830 house. Date: from 1810 to 1850 type and date: late c19 house. Date: from 1867 to 1899 type and date: outbuilding. Type and date: stable. Main material: brick covering material: slate main material: stone main material: w
276867	DSF1969	COTTAGE ADJOINING MARQUIS CORNWALLIS INN	II	LAYHAM	Type and date: c17-c18 timber framed house. Date: from 1600 to 1799 type and date: stable. Covering material: tile main material: timber main material: plaster main material: brick main material: weatherboard covering material: pantile main ma
278848	DSF2116	VAUXHALL	П	WENHAM MAGNA	Type and date: circa 1500 timber framed house. Date: from 1480 to 1520 type and date: c18/c19 house. Date: from 1700 to 1899 type and date: c20 house. Date: from 1900 to 1999 type and date: moat Main material: timber main material: plaster ma
276866	DSF2260	MARQUIS CORNWALLIS INN	II	LAYHAM	Type and date: c17 timber framed house. Date: from 1600 to 1699 type and date: c18 house. Date: from 1700 to 1799 type and date: public house. Main material: timber main material: plaster main material: brick main material: weatherboard coveri
277784	DSF2342	OUTBUILDINGS INCLUDING GRANARY OF BENTON END HOUSE TO THE SOUTH EAST OF THE HOUSE	II	HADLEIGH	Type and date: c17 timber framed barn. Date: from 1600 to 1699 type and date: c18 timber framed barn. Date: from 1700 to 1799 type and date: c17 granary. Date: from 1600 to 1699 type and date: c18 granary. Date: from 1700 to 1799 type and date: c

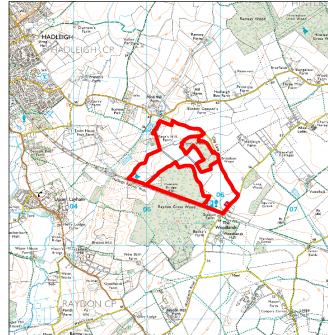


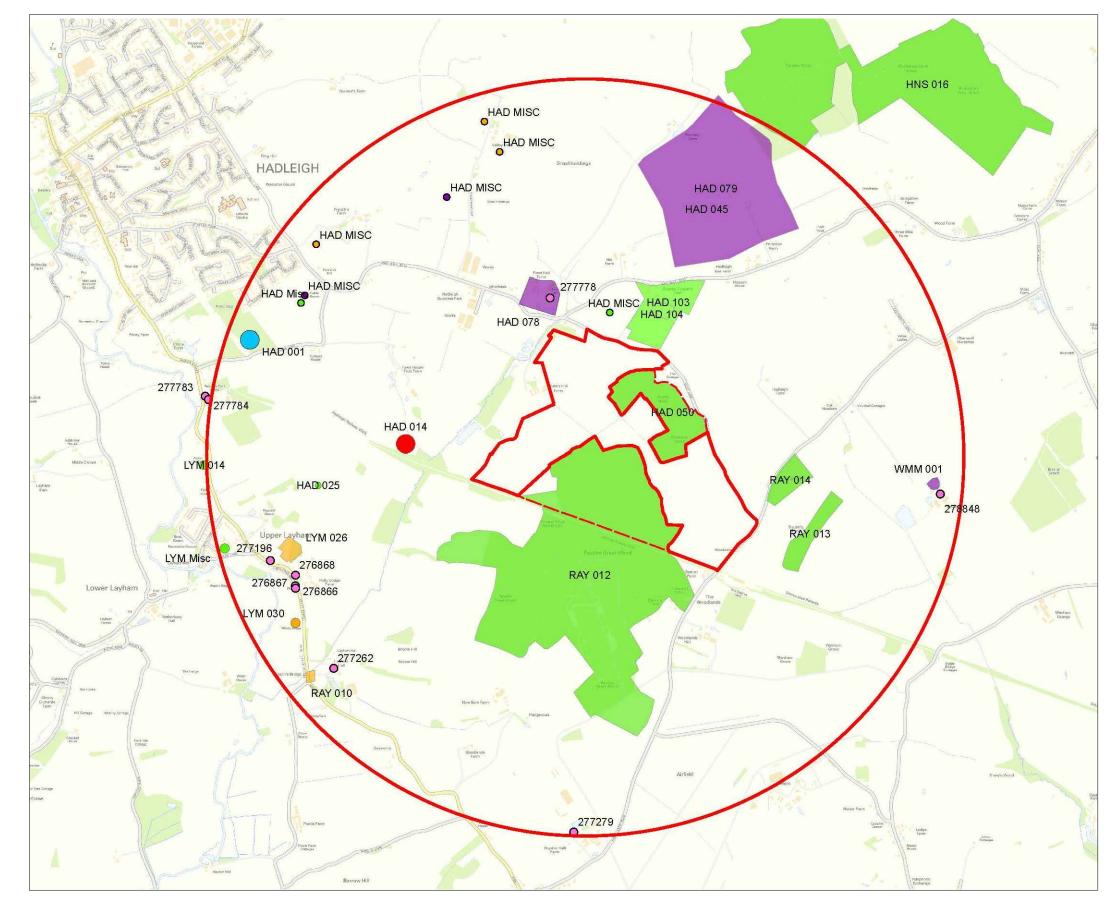
#### Proposed Solar Farm, Kate's Hill Farm, Pond Hall Road, Ipswich, Suffolk Archaeological Desk Based Assessment Project Number 1031

277778	DSF2711	POND HALL	II	HADLEIGH	Type and date: c16/17 timber framed house. Date: from 1500 to 1699 type and date: modern house. Date: from 1900 to 1972 main material: timber main material: plaster covering material: tile main material: brick
276868	DSF2999	THE COTTAGE	II	LAYHAM	Type and date: c18 timber framed house. Date: from 1700 to 1799 main material: timber main material: plaster covering material: tile
277262	DSF899	LAYHAM HALL	11	RAYDON	Type and date: c16-c17 timber framed house. Date: from 1500 to 1699 type and date: c1930 house. Date: from 1910 to 1950 type and date: farmhouse. Type and date: c20 house. Date: from 1900 to 1999 main material: timber main material: render mai
277279	DSF902	RAYDON HALL	11	RAYDON	Type and date: early c16 timber framed house. Date: from 1500 to 1532 type and date: late c16 house. Date: from 1567 to 1599 type and date: c20 house. Date: from 1900 to 1999 type and date: c17 house. Date: from 1600 to 1699 type and date: early



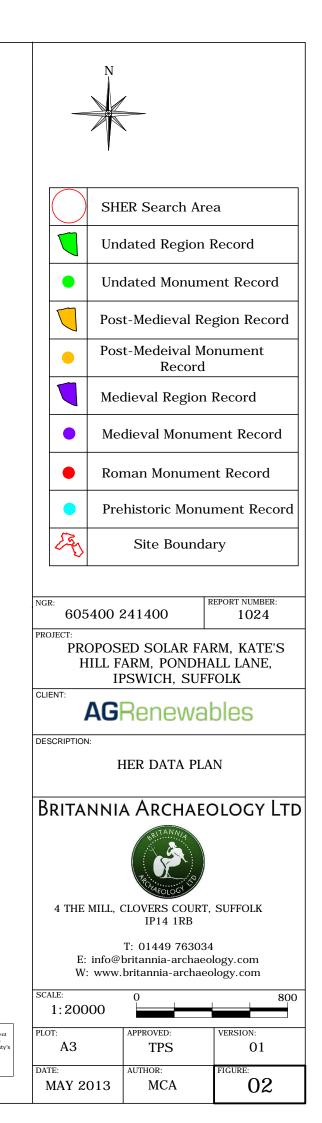






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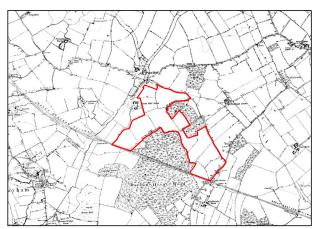
Saxon's Map of Suffolk - 1575



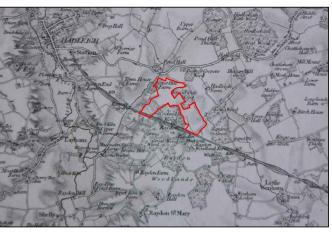
Tithe Map - 1839



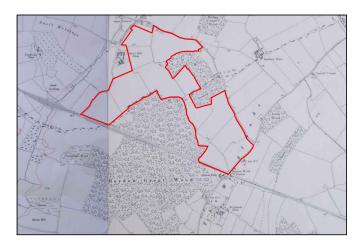
John Kirby - 1736



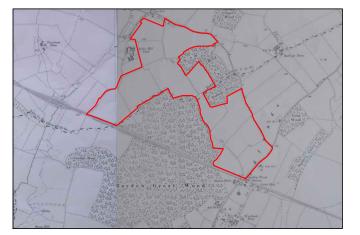
Ordnance Survey First Edition - 1892



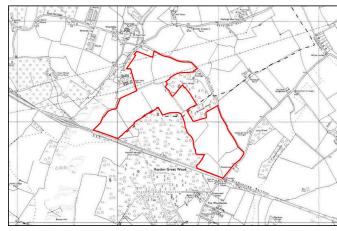
Ordnance Survey Office Relief Map - 1886



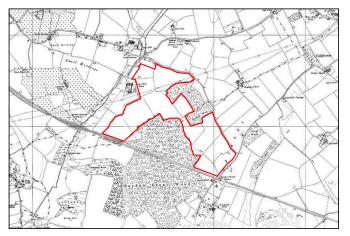
Ordnance Survey Second Edition - 1904



Ordnance Survey Provisional Revised Edition - 1927



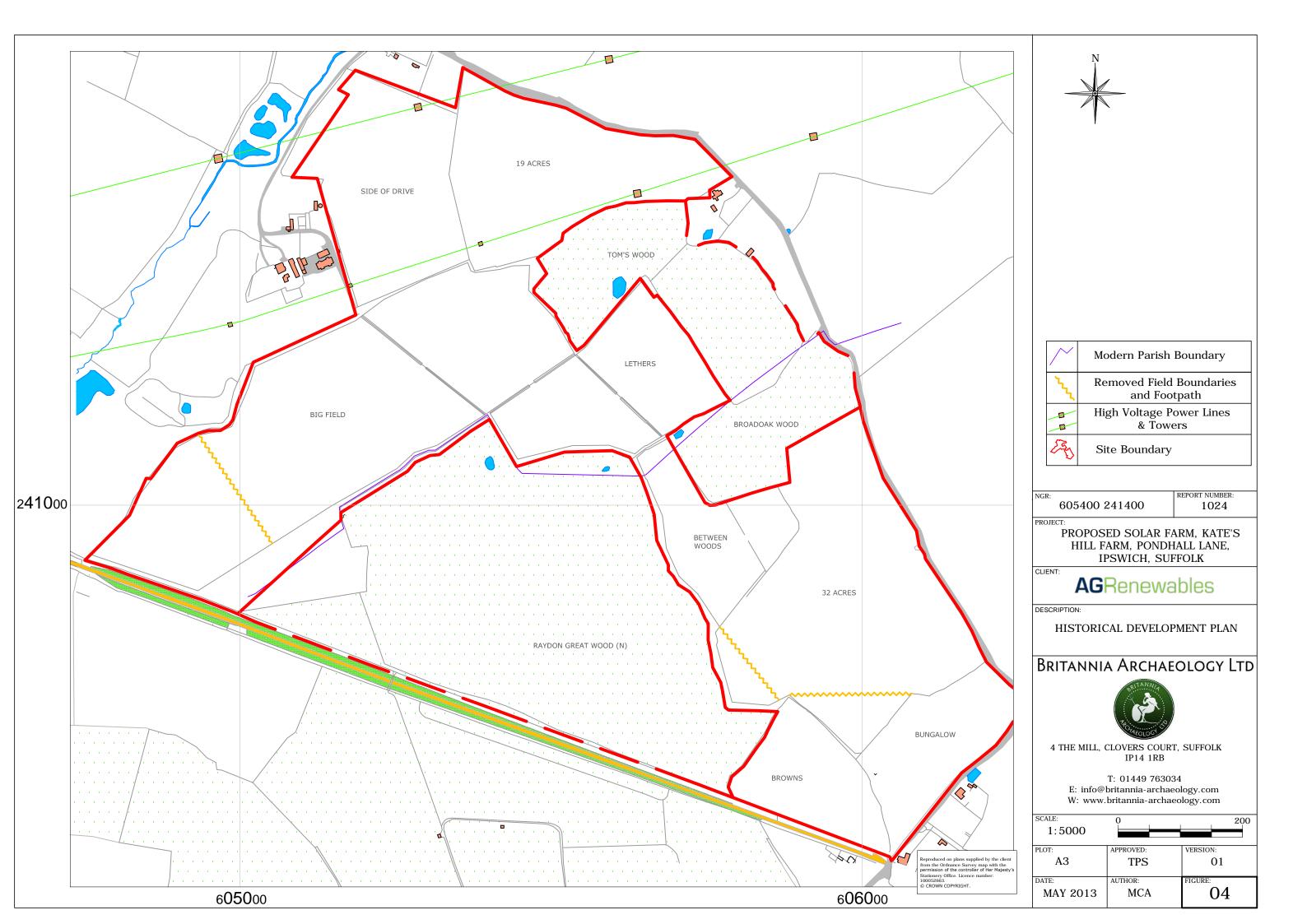
Ordnance Survey - 1958



Ordnance Survey - 1972



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DP1. Browns Field View NW



DP2. 32 Acres Field. Old Field Boundary? View E



DP3. 32 Acres Field. Old Footpath View SE



DP4. Between Woods Field. View NW



DP5. View to Side of Drive and 19 Acres Fields showing Pylons. View NW



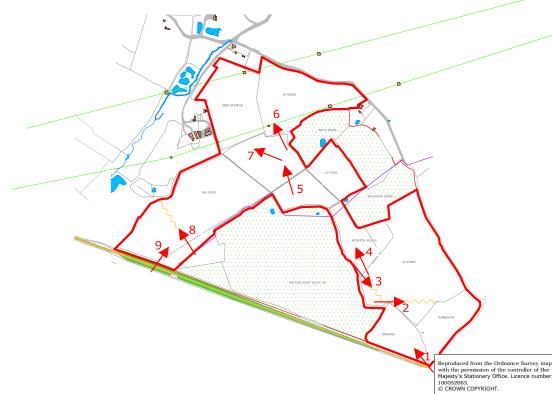
DP8. Big Field and old field boundary. View NW



DP6. 19 Acres Field showing Pylons. View NW



DP7. Kates Hill Farm & Pylons. View W





DP9. Big Field. View NE

