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1 SUMMARY

Touchstone Archaeology has been commissioned to carry out an archaeological desk-based assessment in advance of the proposed residential development at Grey Goose Farm, Stifford Clays Road, Grays RM16 3NH as part of the planning application submitted by Persimmon Homes Essex.

This Desk Based Assessment examines the wide variety of archaeological data held by Kent County Council and other sources. Based on this data the potential for archaeological sites either on or in the near vicinity of the proposed development can be summarised as:

- Prehistoric: Low
- Iron Age: Low
- Romano-British: Low
- Anglo-Saxon: Low
- Medieval: High
- Post-medieval: High
- Modern: High
- Undated/Undefined: High

The Desk Based Assessment concludes that:

- The site has moderate potential for any archaeological discoveries.

The PDA is located in the town of Grays, within the borough of Thurrock, in the Greater London area and the southeast of England. It is situated north of the River Thames and south of the A13 at the point where urban development gives way to
2 INTRODUCTION

Touchstone Archaeology has been commissioned by Persimmon Homes Essex to carry out an Archaeological Desk-Based Assessment to supplement a planning application for the proposed residential development at Grey Goose Farm, Stifford Clays Road, Grays RM16 3NH (Figure 1). The report has accessed various sources of information to identify any known heritage assets, which may be located within the vicinity of the Proposed Development Area. The PDA is centered on National Grid Reference: TQ 626806.

Archaeological investigations, both recent and historic have been studied and the information from these investigations has been incorporated into the assessment. This report is a desk-based appraisal from known cartographic, photographic and archaeological sources and is a research led statement on the archaeological potential of the proposed development.

It may be that intrusive investigations, such as a Geophysical Survey and/or an Archaeological Evaluation, with machine cut trial trenching, may be requested by the Local Planning Authority (LPA) as a Planning Condition.

Grey Goose Farm House dates to the mid 17th century (35358) and Grey Goose Farm has been subject to several archaeological investigations. A watching brief on an extension to the property revealed a post-hole, modern pottery and a modern drainpipe (48518). An excavation of a swimming pool uncovered a medieval rubbish pit containing oyster shell, burnt material and shell tempered pottery dating to the 12th/13th century (14843).
Field walking has produced finds of medieval or later (5241/5242) and an excavation of sub circular pit features uncovered glazed post-medieval pottery and tile (5239) and two sherds of flint tempered reduced coarse pottery (5240). Six pit features were excavated; some were thought to be a medieval pit (5243) while others remain undefined (5244). An uncertain natural feature is also recorded (638104)

Several crop marks have been identified within the curtilage of the property through aerial photography, particularly to the north, an area to the west and the southeast corner. The cropmarks to the north are part of a much wider distribution of features that continue beyond the property. These features have been recorded as possible Saxon Gruben-houses and ditches (5237) and a circular group of pit features (5238). To the south east of the farm there are possible track-ways, enclosures and pits (14645). (Fig.4)

Nearby at Bakers Street an excavation recorded an uncertain natural feature (638391) and in 1983 finds of pottery, glass, clay pipe stems, bone and tile prompted a sample excavation, but it proved negative (5245). A watching brief at 5 The Goslings also produced medieval brick and modern pottery sherds (18621).

Despite the cropmark evidence of possible prehistoric archaeology and the wealth of surrounding archaeology from all periods the site has so far produced only medieval and post-medieval deposits and features.

2.1 Geology and Topography

The Geological Survey of Great Britain (1:50,000) shows that the PDA is situated upon Bedrock Geology of Lambeth Group (Clay, silt and sand). Sedimentary Bedrock formed approximately 56 to 66 million years ago in the Palaeogene Period in a local environment previously dominated by swamps, estuaries and deltas. These rocks were formed in swamps, estuaries and deltas formed in marginal coastal plains with lakes and swamps periodically inundated by the sea.

Superficial deposits of Boyn Hill Gravel Member (Sand And Gravel) formed up to 2 million years ago in the Quaternary Period in a local environment previously dominated by rivers. Sand and gravel detrital material gathered in channels to form
river terrace deposits, with fine silt and clay from overbank floods forming floodplain alluvium, and some bogs depositing peat; this includes estuarine and coastal plain deposits mapped as alluvium.

A slither of Head (Clay, silt, sand and gravel) deposits are found running east west across the north end of the PDA. These deposits formed up to 3 million years ago in the Quaternary Period, from the material accumulated by down slope movements including landslide, debris flow, solifluction, soil creep and hill wash in a local environment previously dominated by subaerial slopes.

The PDA sits at an average height of 78ft (24m) AOD in the north rising steadily to 82ft (25m) in the centre and to 85ft (26m) in the south.

2.2 Planning Background

The National Planning Policy Framework (March 2012)

Policy 12 is the relevant policy for the historic environment:

2.2.1 Conserving and Enhancing the Historic Environment

Local planning authorities should set out in their Local Plan a positive strategy for the conservation and enjoyment of the historic environment, including heritage assets most at risk through neglect, decay or other threats. In doing so, they should recognise that heritage assets are an irreplaceable resource and conserve them in a manner appropriate to their significance. In developing this strategy, local planning authorities should take into account:

- the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;
- the wider social, cultural, economic and environmental benefits that conservation of the historic environment can bring;
- the desirability of new development making a positive contribution to local character and distinctiveness; and
• opportunities to draw on the contribution made by the historic environment to the character of a place.

2.2.2 In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets’ importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation (NPPF 2012).

Thurrock Borough Council in the Thurrock Borough Local Plan Publication 1997 lists a number of policies relevant to archaeology:

**CSTP24 – Heritage Assets And The Historic Environment**

*Introduction*

5.146 The Council is committed to preserving or enhancing Thurrock’s historic environment, in accordance with the wishes of the community and other stakeholders as determined through consultation. Thurrock’s historic environment includes a range of heritage assets:

- The significant surviving historic urban fabric of the towns and other settlements.
- The cohesive hierarchy of smaller settlements ranging from nucleated villages, often marked by architecturally significant medieval parish churches, through a pattern of dispersed hamlets and isolated farms.
• The historic coastal zone, which includes extensive submerged prehistoric landscapes, ancient salt manufacturing and fishing facilities, the relict sea walls of grazing marshes and ancient ports.

• The outstanding regional and nationally important defence and military coastal fortifications, which reflect the strategic importance of the Thames Estuary, including Tilbury Fort and Coalhouse Fort. The former is of international significance.

• Formal planned settlements of the early twentieth century including the factory village of Bata at East Tilbury.

• Conservation Areas, Listed Buildings and historic parks and gardens, including both their fabric and their settings.

• Rural landscapes as identified in English Heritage’s Historic Landscape Characterisation Study (2004), Thurrock’s Landscape Capacity Study (2005) and Essex County Council’s Thurrock Unitary Historic Environment Characterisation Project (2009).

• Ancient woodland, hedgerows and trees.

• Wide variety of archaeological monuments, sites and buried deposits which include many ancient monuments and other nationally important archaeological assets.

• Extensive buried historic landscape of multi-period date known from aerial photography.

**Thurrock Plans and Strategies**

5.148 Thurrock contains a number of important historic assets including:

• 7 Conservation Areas;
• 241 entries in the List of Buildings of Special Architectural or Historic Interest;
• 16 Scheduled Ancient Monuments;
• 1 listing on the Register of Parks and Gardens of Special Interest;
• 23 Ancient woodlands; and
• 1095 Archaeological records on the Historic Environment Record.
PMD4 - Historic Environment

Introduction

6.18 Thurrock’s architectural, archaeological and historic heritage is made up of both statutorily and non-statutorily protected assets. The Council is committed to preserving or enhancing those assets for the benefit of current and future generations, by controlling development affecting their fabric or setting.

6.19 Statutorily protected heritage assets include Listed Buildings, Scheduled Ancient Monuments and Archaeological sites, Conservation Areas, and Historic Parks and Gardens. The Council also recognises the importance of non-statutorily protected heritage assets, such as ancient woodlands, landscapes and hedgerows, as well as those assets on the Thurrock Heritage at Risk Register and the Local Listing.

Thurrock Plans and Strategies

6.20 The Council has produced a Character Appraisal for each of its seven Conservation Areas which evaluates the special interest and significance of these areas and sets out how they will be preserved and enhanced. The Council’s Thurrock Heritage at Risk Register identifies the Borough’s Listed Buildings in need of repair and/or maintenance which will be reviewed annually.

The Council will ensure that the fabric and setting of heritage assets, including Listed Buildings, Conservation Areas, Scheduled Ancient Monuments and other important archaeological sites, and historic landscape features are appropriately protected and enhanced.

1. The Council will also require new development to take all reasonable steps to retain and incorporate non-statutorily protected heritage assets contributing to the quality of Thurrock’s broader historic environment.
2. Applications must demonstrate that they contribute positively to the special qualities and local distinctiveness of Thurrock, through compliance with local heritage guidance including:
   i. Conservation Area Character Appraisals;
   ii. Conservation Area Management Proposals;
   iii. Other relevant Thurrock-based studies, including the Landscape Capacity Study (2005), the Thurrock Urban Character Study (2007) and the Thurrock Unitary Historic Environment Characterisation Project (2009).
   iv. Further local guidance as it is developed.

3. The Council will follow the approach set out in ‘PPS 5: Planning for the Historic Environment’ in the determination of applications affecting

4. Thurrock’s built or archaeological heritage assets. This will include consideration of alterations, extensions or demolition of Listed Buildings or the demolition of unlisted buildings within Conservation Areas, and requirements for pre-determination archaeological evaluations and for preservation of archaeology in situ or by recording.

Regional Policies

A Research Framework for London Archaeology was produced by MOLA in 2002 following The Archaeology of Greater London (MoLAS 2000). It is intended that they will be used in conjunction with each other to realise the potential of the London Archaeological Archive, to manage the archaeological resource more effectively, and to generate more focused research.

This Archaeological Desk-Based Assessment has been prepared in accordance with the guidance in the National Planning Policy Framework and the Good Practise Advice notes 1, 2 and 3, which now supersede the PPS 5 Practise Guide, which has been withdrawn by the Government. The Good Practise Advice notes emphasises the need for assessments of the significance of any heritage assets, which are likely to be changed, so the assessment can inform the decision process. Significance is
defined in the NPPF Guidance in the Glossary as “the value of the heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic, or historical. Significance derives not only from a heritage asset’s physical presence, but also it’s setting”. The setting of the heritage asset is also clarified in the Glossary as “the surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve”.

This Desk-Based Assessment therefore forms the initial stage of the archaeological investigation and is intended to inform and assist in decisions regarding archaeological mitigation for the proposed development and associated planning applications.

2.3 The Proposed Development

The proposed development will comprise of a planning application for residential development with associated parking, access roads and landscaping in accordance with the Landscape Strategy Plan NC14/102-Iva01. (Plate.10)

2.4 Project Constraints

No project constraints were encountered during the data collection for this assessment.

3 AIMS AND OBJECTIVES

3.1 The Desk-Based Assessment was commissioned by Persimmon Homes Essex in order to supplement a planning application for the proposed residential development at Grey Goose Farm, Stifford Clays Road, Grays, Essex RM16 3NH (TQ 6268 8060), to establish the potential for archaeological features and deposits.
3.2 Desktop Study – Institute for Archaeologists (revised 2011)

This desktop study has been produced in line with archaeological standards, as defined by the Institute for Archaeologists (2014). A desktop, or desk-based assessment, is defined as being:

“a programme of study of the historic environment within a specified area or site on land, the inter-tidal zone or underwater that addresses agreed research and/or conservation objectives. It consists of an analysis of existing written, graphic, photographic and electronic information in order to identify the likely heritage assets, their interests and significance and the character of the study area, including appropriate consideration of the settings of heritage assets and, in England, the nature, extent and quality of the known or potential archaeological, historic, architectural and artistic interest. Significance is to be judged in a local, regional, national or international context as appropriate”. (CiFA 2014)

4 METHODOLOGY

4.1 Desk-Based Assessment

4.1.1 Archaeological Databases

The Greater London Historic Environment Record (GLHER) provides an accurate insight into catalogued sites and finds within both the proposed development area (PDA) and the surrounding environs of Grays. The Archaeology Data Service Online Catalogue (ADS) was also used. The search was carried out within a 500m radius of the proposed development site and relevant HER data is included in the report. The Portable Antiquities Scheme Database (PAS) was also searched as an additional source as the information contained within is not always transferred to the local HER.

4.1.2 Historical Documents

Historical documents, such as charters, registers, wills and deeds etc., were considered not relevant to this specific study.
4.1.3 Cartographic and Pictorial Documents

A cartographic and pictorial document search was undertaken during this assessment. Research was carried out using resources offered by Kent County Council, the Internet and Ordnance Survey Historical mapping (Figs. 3-10).

Map Regression 1867 - 1994

In the Emanuel Bowen Map of 1764 (51cm x 69cm) the PDA is located close to the border between Ford Hundred and Barstable Hundred. Baker Street is just east, Stifford Clay is north and Grays or Graves is south. A small settlement and windmill are clustered around Baker Street and around the Hall at Stifford Road. The area around the PDA is largely rural (Fig.2).

In the OS Map of 1868 the PDA forms part of the lands of Grey Goose Farm, a small cluster of buildings and ponds to the west boundary of the PDA. The southern field is designated as an orchard (441) and above this a small kitchen garden. A fence and footpath runs along the western boundary. Little Wellhouse is visible just north but otherwise the surrounding area is large open fields with tree and hedged boundaries traversed by footpaths and track ways (Fig.3).

In the OS Map of 1897 a small building with footpath has appeared in the northern field (48.207) and the southern field has been redesignated 442 (48.207). Several of the farm buildings have undergone layout changes and development and a pump is visible in the farmyard. Little Wellhouse has removed one of its smaller outbuildings and has a well. (Fig.4).

In the OS Map of 1920 the small building in the north field is within a small enclosure. The north south fields have reduced in size to 11.933 and 36.274 and the western boundary has been hedged. Little Wellhouse has a small open fronted western extension (Fig.5).
In the OS Map of 1959 the area has seen some significant changes. A large medium density residential estate has appeared to the southwest boundary and electric poles have been installed across the fields to facilitate the new development. The small building in the north field is named ‘Greygoose farm cottage’ and the farm has again undergone some development and change of layout to its buildings. Little Wellhouse farm has added some buildings to the west (Fig.6).

In the OS Map of 1960 – 91 there has been no change (Fig.7-10).

4.1.4 Aerial Photographs

The study of the collection of aerial photographs held by Google Earth was undertaken. In 1999 the PDA forms part of the lands of Grey Goose Farm; the farmyard and buildings are on the western boundary. To the north it meets the A13 and just beyond is Stifford Clays Road leading east to Baker Street. To the south it is bounded by Long Lane, to the west by a medium density residential estate. The east boundary opens on to fields. By 2015 there has been very little change (Plate 1).

4.1.5 Geotechnical Information

To date, no known geotechnical investigations have been carried out at the site.

4.1.6 Secondary and statutory resources

Secondary and statutory sources, such as regional and periodic archaeological studies, landscape studies; dissertations, research frameworks and websites are considered appropriate to this type of study and have been included within this assessment where necessary.
5 ARCHAEOLOGICAL AND HISTORICAL DEVELOPMENT

5.1 Introduction

<table>
<thead>
<tr>
<th>Prehistoric</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Palaeolithic</td>
<td>c. 500,000 BC – c. 10,000 BC</td>
</tr>
<tr>
<td>Mesolithic</td>
<td>c. 10,000 BC – c. 4,300 BC</td>
</tr>
<tr>
<td>Neolithic</td>
<td>c. 4,300 BC – c. 2,300 BC</td>
</tr>
<tr>
<td>Bronze Age</td>
<td>c. 2,300 BC – c. 600 BC</td>
</tr>
<tr>
<td>Iron Age</td>
<td>c. 600 BC – c. AD 43</td>
</tr>
<tr>
<td>Romano-British</td>
<td>AD 43 – c. AD 410</td>
</tr>
<tr>
<td>Anglo-Saxon</td>
<td>AD 410 – AD 1066</td>
</tr>
<tr>
<td>Medieval</td>
<td>AD 1066 – AD 1485</td>
</tr>
<tr>
<td>Post-medieval</td>
<td>AD 1485 – AD 1900</td>
</tr>
<tr>
<td>Modern</td>
<td>AD 1901 – present day</td>
</tr>
</tbody>
</table>

Table 1 Classification of Archaeological Periods

The Archaeological record within the assessment area is diverse and should comprise possible activity dating from one of the earliest human period in Britain through to the modern period. The geographic and topographic location of Grays is within a landscape that has been the focus of trade, travel and communication since the Palaeolithic.

This section of the assessment will focus on the archaeological and historical development of this area, placing it within a local context. Each period classification will provide a brief introduction to the wider landscape, followed by a full record of archaeological sites, monuments and records within the site’s immediate vicinity. Time scales for archaeological periods represented in the report are listed on the previous page in Table 1.
5.2 History of the site

The area of Grays has been populated since the Palaeolithic period and the local Pleistocene gravels have yielded remains of the wild cat, spotted hyena, wolf, bear, bison, hippopotamus, rhinoceros and mammoth; a hand axe and flint were found at Chadwell St Mary, 2.8km southwest.

Archaeological evidence testifies to continued occupation throughout all periods of history. A Mesolithic flint scraper and mace-head with hourglass perforation have been found at a distance of some 2.6 km southeast and southwest; a Neolithic causewayed enclosure is recorded at Baker Street, 1.6 km southwest and at Orsett, 2.6km southwest and a polished axe, worked flint and a flint arrowhead have been found at a distance of 2.3km southeast and southwest; a Bronze Age open settlement is recorded at Bakers Street 700m east (638897), along with finds of a cylindrical weight and pyramidal weight; Iron Age field enclosures are found 1.6km southeast and loom weights have been discovered 0.7km west; the Roman road is 1.9km southeast at Chadwell St Mary, a double ditched enclosure 1km east and finds of a glass bottle and coins are with 0.9km.

Grays derived its name from Henry de Grai a descendent of the Norman Knight Anchetil de Greye who was granted the Manor of Grays in 1195 by Richard I. It was a small rural manor with a recorded population of 28. During the medieval period it grew along the narrow High Street, which ran from the Thames northwards.

Despite a regular service between Grays port and London from as early as 1637, the town still extended no further than the church by 1777. By 1838 Gravesend River steamers ferried travellers to and from London and a pier was constructed to increase the number of trips to five per day and failing this a coach ran daily from London to the nearby Horndon on the Hill.

The chalk quarries and brickworks provided much of the local employment and although a few terraces of cottages were built to accommodate workers most lived in the crowded tenements behind the High Street. The area did not see any significant expansion until 1871 with the opening of the railway and the Tilbury docks. Grays has few historic buildings, most having been destroyed in the 20th century.
While the PDA is within the district of Grays, it is sited near to Stifford, first recorded in the Domesday book as *Stiforda* meaning ‘path ford’, a crossing that ran across the *Mardyke*, a small river that is found northwest of the PDA, through Stifford, before joining the Thames at west Thurrock.

Early settlement was focused along the ridge to the south of the Mardyke and northwest of the PDA. Stifford Clays Road to the north is part of the ancient road from London to Orsett. To the northwest at William Edwards School, Stifford Clays Road, excavations have uncovered a Bronze Age barrow, an Iron Age hut circle and cremation and a Roman stock enclosure (658638). Further excavations revealed a late Iron Age farmstead, a Roman farmstead dating to the 4th century and a medieval post hole (1232574).

The name Stifford or ‘path ford’ suggests that the crossing held some importance in the Saxon period and this continued with the building of a bridge in the 15th century, later replaced by a stone bridge in the 17th century, a brick bridge in the 18th century and an iron bridge in the 19th century.

The village grew around the 12th century church of St Mary the Virgin, which was subject to several alterations in the 13th, 14th, 18th and 19th centuries. In 1086 the population was recorded as 11 but grew steadily until the late 16th century, when it is recorded as having 38 houses. Between this period and WWII growth was very small.

Stifford Heath, mentioned in 1374, the north known as The Warren (rabbit warren) and the south Colney Hall, was privately owned by 1762 and although still open in 1833 it was closed by 1871. In 1839 the Titheable land was 90% of the total and comprised of arable, meadow or pasture and woodland. Farming was mostly cereal crop and this was reflected in there being eight farms of over 50 acres to five small holdings of 20-50 acres; Grey Goose farm falling into the former category. By 1926, a change from cereal to fruit and vegetables reduced the farms to three and increased the smallholdings to six. Grey Goose Farm seems to have survived this change, and was certainly farming part of its land as orchard in the OS Maps. Livestock were few and continued to reduce in number from 761 sheep in 1866 to no sheep in 1926.
There were two ancient windmills within the area but the main forms of industry were chalk quarrying and lime burning and some of the cropmark anomalies on the site of the PDA are thought to be ‘deneholes’ from chalk quarrying.

The Stifford Clays housing estate that bounds the PDA to the west was built on land owned by Captain Thomas Chares Douglas Whitmore. He inherited the estate during the time of the great depression in agriculture and the estate was heavily mortgaged and derelict. Orsett hall was described as being an uninhabitable shell without light, water or sanitation. The estate was again re-mortgaged to pay for refurbishment works and sea defences following the great storm of 1881. The money was raised from four individuals. In 1939, the estate was conveyed to Mary Billings, who began the development of the housing estate, however, the development was postponed during WW2. Thurrock UDC bought the land after the war and finished the development.

5.3 This section of the assessment will focus on the archaeological and historical development of this area, placing it within a local context. Each period classification will provide a brief introduction to the wider landscape (500m radius centered on each site of the PDA), followed by a full record of archaeological sites, monuments and records within the site’s immediate vicinity. Time scales for archaeological periods represented in the report are listed on page 25 in Table 1. A preliminary review of the cultural heritage data shows that the site has low archaeological potential.

5.4 Scheduled Monuments; Listed Buildings; Historic Parks & Gardens and Conservation Areas

Five Monuments, four Findspots, two Events and 1 Listed Building are recorded within the confines of the proposed development area (PDA). Two monuments, two Findspots, two Events, one Portable Antiquities Scheme record and one Listed Building are recorded within a 500m vicinity of the PDA; Two Listed buildings share intervisibility with the PDA.
The report has accessed various sources of information to identify any known heritage assets, which may be located within the vicinity of the Proposed Development Area. Archaeological investigations, both recent and historic have been studied and the information from these investigations has been incorporated in the assessment.

The events include an excavation (638104) and a watching brief (48518) carried out on the site revealing an unknown natural feature and modern features and deposits.

The recorded Monuments are Cropmarks of possible Saxon Gruben houses and ditches (5237) and a circular group of pit features (5238); three pit features that were excavated but remain undefined (5244); three pit features that were excavated and appear to be a post medieval pit (5243); a medieval rubbish pit containing oyster shell, burnt material, shell tempered pottery dating to the 12th/13th century found during the excavation of a swimming pool (14843).

Find spots have uncovered glazed post medieval pottery and tile (20 sherds) during the excavation of sub circular pit features (5239); two sherds of flint tempered reduced course pottery during the excavation of sub circular pit features (5240) and finds of medieval or later while field walking (5242/5241).

Grey Goose Farm house is a Grade II Listed, mid 17th century, timber-framed house (35358).

6. ARCHAEOLOGICAL POTENTIAL

6.1 Palaeolithic, Mesolithic, Neolithic and Bronze Age

The Palaeolithic represents the earliest phases of human activity in the British Isles, up to the end of the last Ice Age. Palaeolithic dated material occurs in north and east Kent, especially along the Medway and Stour Valleys. Palaeolithic presence within the assessment area has not been found.
The Mesolithic period reflects a society of hunter-gatherers active after the last Ice Age. The Kent HER has no record of archaeological evidence from this period within the assessment area.

The Neolithic period, the beginning of a sedentary lifestyle based on agriculture and animal husbandry, is not represented within the assessment area.

The Bronze Age was a period of large migrations from the continent and more complex social developments on a domestic, industrial and ceremonial level. There are no records from this period within the assessment area.

The potential for finding remains that date prior to this period within the confines of the proposed development is therefore considered low.

6.2 Iron Age

The Iron Age is, by definition a period of established rural farming communities with extensive field systems and large ‘urban’ centres (the Iron Age ‘Tribal capital’ or civitas of the Cantiaci, the tribe occupying the area that is now Kent, was Canterbury). The Kent HER has no records, within the assessment area, dating to the Iron Age period. Therefore the potential for finding remains that date to this period within the confines of the development site is also considered low.

6.3 Romano-British

The Romano-British period is the term given to the Romanised culture of Britain under the rule of the Roman Empire, following the Claudian invasion in AD 43, Britain then formed part of the Roman Empire for nearly 400 years.

The predominant feature of the Roman infrastructure within Kent is arguably the extensive network of Roman roads connecting administrative centres: the towns to military posts and rural settlements (villas, farmsteads and temples) increasing the
flow of trade, goods, communications and troops. Canterbury or *Durovernum Cantiacorum* was a major town of the Roman province of Britannia and the regional capital and the Canterbury.

There are no records relating to this period within the assessment area. Therefore, the potential for finding archaeological features or deposits from this period is considered **low**.

### 6.4 Anglo-Saxon

No records within the assessment area represent the Anglo-Saxon period. Therefore, it is reasonable to conclude that the potential for finding remains dating to the Anglo-Saxon period in the PDA is considered as **low**.

### 6.5 Medieval

The Medieval period has four records within the assessment area, two of which are shared with the Post-medieval period, evidence of continued occupation (*). A medieval rubbish pit found at Grey Goose Farm during the excavation of a swimming pool (14843) and a seal matrix, found nearby, possibly belonging to a church dignitary, is recorded with the Portable Antiquities Scheme (52389). Fieldwalking, on the site of the PDA, has produced finds of medieval or later (5241*/5242*). Therefore the potential for finding remains dating to the medieval period is considered as **high**.

### 6.6 Post Medieval to Modern

The Post Medieval period is well represented within the assessment area. There are eight records from this period, two of which are shared with the medieval period and one with the modern period (*). Grey Goose Farm House is a Grade II Listed, mid 17th century, timber-framed house (35358). Fieldwalking, on the site of the PDA, has produced finds of medieval or later (5241*/5242*). Glazed post-medieval pottery and tile (20 sherds) were found during the excavation of sub circular pit
features (5239) and a possible post-medieval pit was found during the excavation of three pit features (5243) at Grey Goose Farm. Pottery, glass, clay pipe stems, bone and tile were found at Baker Street (5246). A watching brief at 5 The Goslings revealed post-medieval brick and modern pottery sherds (18621*). Little Well House is a Grade II Listed, late 16th to early 17th century, timber-framed house (35359). The potential for finding remains dating to the post-medieval to modern period is therefore considered as high.

6.7 Unknown/Undated

There are nine records that remain undated and unidentified within the assessment period. Uncertain natural features have been recorded at Grey Goose Farm and Bakers Street (638104/638391). Cropmarks of possible Saxon Gruben Houses and ditches (5237), a circular group of pit features (5238) and possible trackways, enclosures and pits to the south east (14645) and further cropmarks noted to the north east edge of Grays (5236). Three excavated pit features (5244) and subcircular pit features that produced flint tempered pottery (5240) remain undefined.

6.8 Summary of Potential

The desk-based assessment has considered the archaeological potential of the site but this potential can only be tested by fieldwork. Although there is a wealth of archaeology from the Palaeolithic period through to the Post-medieval period surrounding the site, there has been very little material evidence within the c.500m assessment area radius. The evidence found has related to the Medieval and Post-medieval period, however the presence of an intense group of cropmarks that remain undefined suggests that the PDA may contain archaeological sites from any period. Based on the HER results the assessment area can be summarised as:
• Prehistoric: Low
• Iron Age: Low
• Roman: Low
• Anglo-Saxon: Low
• Medieval: High
• Post-Medieval and Modern: High
• Undated/Undefined: High

7. IMPACT ASSESSMENT

7.1 Introduction

Cartographic Regression, Topographical Analysis, and Historic Research have provided evidence for the historic use of the site. By collating this information we have assessed the impact on previous archaeological remains through the following method of categorisation:

• **Total Impact** - Where the area has undergone a destructive process to a depth that would in all probability have destroyed any archaeological remains e.g. construction, mining, quarrying, archaeological evaluations etc.

• **High Impact** – Where the ground level has been reduced to below natural geographical levels that would leave archaeological remains partly in situ either in plan or section e.g. the construction of roads, railways, buildings, strip foundations etc.

• **Medium Impact** – Where there has been low level or random disturbance of the ground that would result in the survival of archaeological remains in areas undisturbed e.g. the installation of services, pad-stone or piled foundations, temporary structures etc.
• **Low Impact** – Where the ground has been penetrated to a very low level e.g. farming, landscaping, slab foundation etc.

7.2 Existing Impacts

7.2.1 Cartographic regression (4.1.3), Topographic analysis (4.1.4) and Historical research (5.2) indicate that the site has largely been the subject of agriculture ad therefore, previous impacts to archaeological remains from construction are considered to be **low** in this area.

7.2.2 Agriculture became gradually more intense over time and by the modern era it was mechanised. Although the farming process rarely penetrates below the upper layers of the ground, plough truncation can have a significant impact on preserved shallow deposits. The site is within an enclosure that was once subject to agricultural use, therefore the impacts of the agricultural process is considered to be **moderate**.

7.3 Proposed Impacts

7.3.1 The general development of the site

At the time of preparing this archaeological assessment, the extent of the proposed development was for the construction of residential housing, associated access roads and landscaping.

7.3.2 The very nature of construction can have a negative impact on below ground deposits through the movement of plant, general ground disturbance and contamination and excavation. Therefore, extensive impact can be expected within the development area once construction begins.
7.3.3 With due consideration to the impacts sited above the following is an assessment of the specific impacts and their relation to this development:

- Ground contamination from the storage and use of materials may have an adverse effect on soil sampling and recording of shallow deposits – **Medium impact**
- Ground vibration, weight displacement and surface disturbance from the movement and use of plant and machinery may cause disruption of shallow features and deposits – **Medium impact**
- Ground penetration from the erection of access equipment, barriers etc. could result in isolated damage to shallow features and deposits – **Medium impact**
- Landscaping may result in the displacement of shallow features and deposits – **Medium impact**
- Ground stripping and levelling could remove shallow deposits and features and leave the archaeological horizon open to damage or destruction from the foot, plant or vehicle traffic – **High impact**
- Trenching for the installation of services may involve the removal of shallow deposits or features and further damage the archaeological horizon sited immediately below or neighbouring archaeology – **High impact**
- The excavation of the foundations may result in the entire removal of the archaeological feature or deposit from a localised area, subsequently intruding on related neighbouring archaeology – **High impact**
- The long-term effect of the development will be in the new use of the site and changes resulting therein. In this case the possibility of higher foot and vehicular traffic to the site – **Low impact**
7.4  Proposed mitigation for the impact of the construction process

A Landscape Strategy Plan (NC14/102-Iva01) developed in 2014 suggests that the area of cropmarks to the north of the site, designated as a Scheduled Ancient Monument, could become Managed Grassland. Tree and woodland planting and species rich wildflower meadow creates a natural boundary at the centre of the site, between the proposed development and the Scheduled Ancient Monument. This is repeated in the southeast corner of the site where further cropmarks are present. The proposed development area faces away from the Listed Buildings of Grey Goose Farm House (35358) and Little well House (35359). The community allotments are sited within an area that is free of cropmarks and the route of the footpaths circumnavigate the cropmark areas. The cropmarks to the west do not form part of the PDA. (Plate.10)

Some cropmarks remain within the development area, although this is a small proportion, and the tree plantation and the creation of ponds may affect the southeast group of cropmarks. Fig.4

8. MITIGATION

The purpose of this archaeological desk-based assessment was to provide an assessment of the contextual archaeological record, in order to determine the potential survival of archaeological deposits that may be impacted upon during any proposed construction works.

The assessment has generally shown that the area to be developed is within an area of moderate archaeological potential.

9. OTHER CONSIDERATIONS

Setting of Listed Buildings

One of the tasks of the site visit was aimed to identify any designated heritage assets within the wider context of the PDA in accordance with The Setting of
Heritage Assets – English Heritage Guidance (English Heritage 2011). This guidance states that “setting embraces all of the surroundings (land, sea, structures, features and skyline) from which the heritage asset can be experienced or that can be experienced from or with the asset” (The Setting of Heritage Assets, English Heritage 2011).

There are two listed buildings within the assessment area, Grey Goose Farm House (35358) is a Grade II Listed, 17th century, timber-framed house and Little Well House (35359) is a Grade II Listed 16th-17th century, timber-framed House.

Both Listed Buildings share direct intervisibility with the PDA (Plates 3-9) however due to the design of the development Little Well House will view a Managed Grassland area and Grey Goose Farm will view tree and woodland planting and species rich wildflower meadow, creating a natural boundary between the two buildings and the development area. In addition, the development is designed to face east and both Listed buildings are located north of the development area.

9.1 Archive

Subject to any contractual requirements on confidentiality, two copies of this desk-based assessment will be submitted to Thurrock Borough Council (Heritage) within 6 months of completion.

9.2 Reliability/Limitations of Sources

The sources that were used in this assessment were, in general, of high quality. The majority of the information provided herewith has been gained from either published texts or archaeological ‘grey’ literature held at Greater London HER, and therefore considered as being reliable.

9.3 Copyright

Touchstone Archaeology and the author shall retain full copyright on the commissioned report under the Copyright, Designs and Patents Act 1988. All rights are reserved, excepting that it hereby provides exclusive licence to Persimmon
Homes Essex for the use of this document in all matters directly relating to the project.

Zoe Schofield
9th August 2016

10 REFERENCES & BIBLIOGRAPHY

Thurrock Borough Local Plan (1997)


Data provided by GLHER
## APPENDIX 1 ARCHAEOLOGICAL SITES

<table>
<thead>
<tr>
<th>KHER Ref</th>
<th>Type</th>
<th>Location</th>
<th>Period</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>638391</td>
<td>Excavation</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Bakers street-Uncertain natural feature</td>
</tr>
<tr>
<td>638104</td>
<td>Excavation</td>
<td>On site</td>
<td>Unknown</td>
<td>Grey Goose Farm- Uncertain natural feature</td>
</tr>
<tr>
<td>5237</td>
<td>Monument</td>
<td>On site</td>
<td>Unknown</td>
<td>Grey Goose Farm- Crop Marks, possible Saxon gruben houses and ditches</td>
</tr>
<tr>
<td>5238</td>
<td>Monument</td>
<td>On site</td>
<td>Unknown</td>
<td>Grey Goose Farm- circular group of pit features</td>
</tr>
<tr>
<td>5245</td>
<td>Excavation</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Bakers Street- 1983, sample excavation, negative</td>
</tr>
<tr>
<td>5246</td>
<td>Find spot</td>
<td>P Medieval</td>
<td>Unknown</td>
<td>Bakers street-1983, pottery, glass, clay pipe stems, bone and tile</td>
</tr>
<tr>
<td>5244</td>
<td>Monument</td>
<td>On site</td>
<td>Unknown</td>
<td>Grey Goose Farm- three pit features excavated undefined</td>
</tr>
<tr>
<td>5239</td>
<td>Find spot</td>
<td>On site</td>
<td>P Medieval</td>
<td>Grey Goose Farm- excavation of sub circular pit features, glazed post medieval pottery and tile, 20 sherds</td>
</tr>
<tr>
<td>5243</td>
<td>Monument</td>
<td>On site</td>
<td>P Medieval</td>
<td>Grey Goose Farm- 3 pit features excavated, possible post medieval pit</td>
</tr>
<tr>
<td>5242</td>
<td>Find spot</td>
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<td>Medieval-P Medieval</td>
<td>Grey Goose Farm- field walking, finds of medieval or later</td>
</tr>
<tr>
<td>5241</td>
<td>Find spot</td>
<td>On site</td>
<td>Medieval-P Medieval</td>
<td>Grey Goose Farm- field walking, finds of medieval or later</td>
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<tr>
<td>5240</td>
<td>Find spot</td>
<td>On site</td>
<td>Unknown</td>
<td>Grey Goose Farm- excavation of sub circular pit features, two sherds of flint tempered reduced course pottery</td>
</tr>
<tr>
<td>48518</td>
<td>WB</td>
<td>On site</td>
<td>Modern</td>
<td>Grey Goose Farm cottage- WB on extension, post hole, modern pot, modern drain pipe</td>
</tr>
<tr>
<td>Reference</td>
<td>Type</td>
<td>Location</td>
<td>Period</td>
<td>Description</td>
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<td>-----------</td>
<td>---------------</td>
<td>----------</td>
<td>------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>5236</td>
<td>Monument</td>
<td>NE</td>
<td>Unknown</td>
<td>NE edge of Grays, crop marks noted on areal photographs in 1978</td>
</tr>
<tr>
<td>18621</td>
<td>Find spot</td>
<td>P</td>
<td>Medieval-Modern</td>
<td>5 The Goslings- WB on extension, post med brick and modern pottery sherds</td>
</tr>
<tr>
<td>14645</td>
<td>Monument</td>
<td>SE</td>
<td>Unknown</td>
<td>Crop marks SE of Grey Goose Farm, possible track ways, enclosure and pits</td>
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<tr>
<td>14843</td>
<td>Monument</td>
<td>On site</td>
<td>Medieval</td>
<td>Grey Goose farm- Excavation of swimming pool, medieval rubbish pit, oyster shell, burnt material, shell tempered pottery, 12/13 century</td>
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<tr>
<td>35359</td>
<td>Listed building</td>
<td>16th-17th century</td>
<td>Little well house- late 16th early 17th timber framed house</td>
<td></td>
</tr>
<tr>
<td>35358</td>
<td>Listed building</td>
<td>On site</td>
<td>17th century</td>
<td>Grey Goose Farm house- mid 17th century timber framed house</td>
</tr>
<tr>
<td>52389</td>
<td>PAS</td>
<td></td>
<td>Medieval</td>
<td>Seal matrix, possibly belonging to church dignitary</td>
</tr>
</tbody>
</table>
Viewpoint photo 1: Looking east from the entrance to the site at the end of Fairfield Avenue

Viewpoint photo 2: Looking north east towards the A13, the site is on the foreground
Viewpoint photo 3: Looking south west over the site field with built form within the backdrop.

Viewpoint photo 4: Looking north west over the northern part of the site field.
Plate 5

Viewpoint photo 5: Looking west from the LNCA approximately 400mm from the eastern boundary

Viewpoint photo 6: Looking west through a gap in the boundary hedging over the site
Viewpoint photo 7: Looking south west towards the tower blocks and Long Lane

Viewpoint photo 8: Looking south west from public footpath towards tower blocks
Viewpoint photo 9: Looking north from public footpath within the site

Viewpoint photo 10: Looking east from the public footpath near Little Wellhouse Farm over the site
Viewpoint photo 11: Looking south over the western field

Viewpoint photo 12: Looking north west towards the site from the bridge over the A1089 around 600m away
Viewpoint photo 13: Looking west towards the site from Rectory Road approx 1800m away

Viewpoint photo 14: Looking west from the bridleway at Mill House approx 1500m away
Open Space Strategy

- Generally position housing to the southern side of the site as these are on the lowest areas of ground, closest to the existing development;
- Increase the sites biodiversity with native species planting and a range of habitats;
- Existing vegetation to be retained in all cases where possible;
- The Scheduled Ancient Monument to the north of the site is to be managed as a species rich wildflower meadow with mown paths and a link to the Roy Evans Memorial Field;
- Main area of public open space located along the eastern boundary helping to mitigate any short distance views from the east;
- The introduction of landscape nodes at major landscape intersection points these would provide seating areas and wayfinding information;
- Use a combination of scattered tree and copse planting to ensure that any new development is well integrated into the surrounding landscape;
- New shelterbelt/woodland copse planting to the northern edge of the development to help embed the proposed development into the landscape;
- Provide green links throughout the development to increase the permeability of the proposal whilst also encouraging residents to access the Roy Evans Memorial Field;
- Front positively onto Long Lane to provide a strong frontage to the development;
- Additional hedge and tree planting to the eastern and western boundaries;
- Create new and exciting areas of children’s play and positively link the development to the surrounding landscape, children’s play could also be incorporated into the proposed woodland;
- Connect to the existing public rights of way and enhance the public footpath found to the east of the site;
- The main spine-road to include avenue tree planning;
- Provide a series of pedestrian links to the Roy Evans Memorial Field via a strong network of wildlife corridors;
- Provide large scale native tree planting throughout the incidental and public open spaces of the development to visually break housing rooftops; and,
- The development could be more dense to the west and becoming less dense to the east with a strong landscaped edge to embed the proposals into the area.