Note: Outline Planning Application (OPA) Site Boundary

The following report was produced prior to the finalisation of the application site boundary. The final application site boundary is shown on Figure 1.1 in ES Appendix 1.1. Therefore, references within the report to the site boundary do not reflect the site area and site boundary submitted with the OPA.

The reports were correct at the time of preparation, and all information within the Environmental Statement assessment reflects the latest relevant information.

Otterpool Park
Lympne, Kent

Archaeological Watching Brief

Ref: 211110.03
November 2018

wessexarchaeology

69 College Road,
Maidstone,
Kent
ME15 6SX

www.wessexarch.co.uk

Wessex Archaeology Ltd is a Registered Charity no. 287786 (England & Wales) and SC042630 (Scotland)

Document Information

Document title	Otterpool Park, Lympne, Kent
Document subtitle	Archaeological Watching Brief
Document reference	211110.3
Client name	Arcadis Consulting (UK) Limited
Address	Manning House 22 Carlisle Place London SW1P 1JA
Site location	Lympne
County	Kent
National grid reference (NGR)	611239 163507 (TR 11239 63507)
WA project name	Otterpool Park
WA project code	211110
Dates of fieldwork	15 August 2018 – 6 September 2018
Fieldwork directed by	Sarah Baker and Mark Denyer
Project management by	Sarah Barrowman
Document compiled by	Mark Denyer
Contributions from	Andrew Shaw
Graphics by	Andrew Souter

Quality Assurance

Issue number & date		Status	Author	Approved by
1	Nov 2018	Internal Draft	MD	SJB
2	Nov 2018	External Draft	MD	SJB
3	Nov 2018	External Draft	MD	SJB

Contents

List of Figures

List of Plates

List of Tables

Summary

Wessex Archaeology was commissioned by Arcadis Consulting (UK) Limited, on behalf of Folkestone and Hythe District Council and Cozumel Estates, to undertake an archaeological watching brief during geo-environmental and drainage investigation works on land covering 765 ha, centred on NGR 611239, 136507 between the M20 motorway and B2067 Aldington Road, Lympne, Kent.

The watching brief was undertaken as part of a programme of archaeological works carried out prior to an outline planning application for a new garden settlement – Otterpool Park – accommodating up to 8,500 homes (use class C2 and C3) and use class D1, D2, A1, A2, A3, A4, B1a, B1b, B2, C1 development with related highways, green and blue infrastructure (access, appearance, landscaping, layout and scale matters to be reserved).

The ground investigations monitored by the watching brief were undertaken in order to obtain preliminary information on general ground conditions, investigate potential sources of contamination, inform drainage designed and for archaeological purposes.

The watching brief monitored the excavation of 19 machine excavated test pits, one window sample, one hand dug test pit and four rotary drilled cored boreholes. A Pleistocence geoarchaeological specialist was required to monitor the works in areas of high geoarchaeological potential.

Due to external factors, test pits TP216, TP212 and borehole BH205 were not excavated.

The watching brief identified deposits of Holocene colluvium overlaying Pleistocene head-brickearth across large areas of the site, although the thickness of these deposits varies considerably. Within the floodplain of the East Stour River Holocene alluvial deposits, which in places overlie Pleistocene Head-Brickearth, were identified. A flint flake, identified as a soft hammer flake was recovered from the colluvium of test pit TP223, but the flake itself is not chronologically diagnostic.

Within borehole BH206, located south of Westenhanger Castle, brick fragments were observed in the borehole spoil which have the potential to be associated either with the walled garden of Westenhanger Castle or related to the construction of the Folkestone horse racing course, but this hypothesis is limited within the confines a borehole observation.

The watching brief was undertaken between 15 August 2018 – 6 September 2018.

Acknowledgements

Wessex Archaeology would like to thank Kate Clover of Arcadis Consulting (UK) Limited for commissioning the archaeological watching brief on behalf of Folkestone and Hythe District Council and Cozumel Estates. Wessex Archaeology is also grateful for the advice of Ben Found, Senior Archaeological Officer for Kent County Council (KCC), who monitored the project for Folkestone and Hythe District Council, and to Marcus Toms and Irene Trujois of Arcadis, for their cooperation and help onsite.

The fieldwork was directed by Mark Denyer, with assistance of Sarah Baker, Emilia Seredynska and Pleistocene geoarchaeologist specialist, Andrew Shaw. This report was written by Mark Denyer and edited by Sarah Barrowman. The project was managed by Sarah Barrowman on behalf of Wessex Archaeology.

Otterpool Park
Lympne, Kent

Archaeological Watching Brief

1 INTRODUCTION

1.1 Project and planning background

1.1.1 Wessex Archaeology was commissioned by Arcadis Consulting (UK) Limited on behalf of Folkestone and Hythe District Council and Cozumel Estates, to undertake an archaeological watching brief prior to an outline planning application for a new garden settlement – Otterpool Park - accommodating up to 8,500 homes (use class C2 and C3) and use class D1, D2, A1, A2, A3, A4, B1a, B1b, B2, C1 development with related highways, green and blue infrastructure (access, appearance, landscaping, layout and scale matters to be reserved).

1.1.2 The watching brief monitored ground investigations undertaken across the proposed development area. These were undertaken in order to obtain preliminary information on general ground conditions, investigate potential sources of contamination, inform drainage designed and for archaeological purposes. The works monitored were over an area of 765 ha, centred on NGR 611239 136507, on land between the M20 and the B2067 Aldington Road, Lympne, Kent (**Fig. 1**).

1.1.3 The proposed development comprises an area south of the M20 and to the north of the B2067 Aldington Road in Shepway District, Kent.

1.1.4 This watching brief is part of a programme of archaeological works, including an Environmental Impact Assessment prepared by Arcadis Consulting (2016), a geoarchaeological desk-based assessment (Oxford Archaeology 2018) and archaeological evaluation trenches (report forthcoming).

1.1.5 The watching brief was undertaken in accordance with a written scheme of investigation (WSI) which detailed the aims, methodologies and standards to be employed (Wessex Archaeology 2018). Ben Found, Senior Archaeological Officer for KCC approved the WSI, on behalf of the Local Planning Authority (LPA), prior to fieldwork commencing.

1.1.6 The watching brief was undertaken between 15 August 2018 and 6 September 2018.

1.2 Scope of the report

1.2.1 The purpose of this report is to provide the results of the watching brief, to interpret the results within their local or regional context (or otherwise), and to assess their potential to address the aims outlined in the WSI, thereby making available information about the archaeological resource (a preservation by record).

1.3 Location, topography and geology

1.3.1 The watching brief area was located south of the M20 and to the north of the B2067 Aldington Road, Lympne, in the Shepway District of Kent.

1.3.2 The current land use of the development area is a mix of agricultural, recreational, residential, industrial and commercial areas.

1.3.3 Existing ground levels range from 55-60m aOD (above Ordnance Datum) close to the East Stour River, rising to 75-80m aOD, with the highest point being in the southeast of corner of the development area.

1.3.4 Due to the size of the area covered by the watching brief, the underlying geology is mapped as belonging to a range of Lower Greensand geological formation deposits. Hythe Formation sandstone and limestone is predominate in the southwest half of the development area, interspersed with Atherfield Clay Formation formed of Sandy Mudstone and Weald Clay Formations of Mudstone. Sandgate Formation deposits of Sandstone, Siltstone and Mudstone are predominate in the northeast, with Folkestone Formation Sandstone deposits in the far north-eastern area. The presence of superficial deposits are variable. Where present, they are comprised of head clay and silt or alluvial clay, silt, sand and gravel associated with the East Stour River (British Geological Survey online viewer).

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

2.1 Introduction

2.1.1 The archaeological and historical background was assessed in a desk-based assessment (Arcadis 2016), which considered the recorded historic environment resource within a 1km study area of the development for designated assets and a 500m study area for non-designated assets.

2.1.2 A geoarchaeological desk-based assessment has also been undertaken for the proposed development area (Oxford Archaeology 2018), which assessed the Pleistocene and Early Holocene stratigraphy and potential of the site.

2.1.3 A summary of the results are presented below. Additional sources of information are referenced, as appropriate.

2.2 Previous investigations related to the development

Geophysical survey (April to May 2017)

2.2.1 Headland Archaeology undertook a geophysical (magnetometer) survey at five locations within the proposed development area.

2.2.2 Area 1, east of Barrowhill, was surveyed in order to determine the presence of possible barrows, other than the one recorded, on the KHER. A roughly circular area of magnetic enhancement, centred at TP 1145 3713, corresponds to a possible barrow (TR13 NW1) which is clearly visible as a circular cropmark on modern satellite images. No anomalies have been identified to accurately locate the cropmark although it may be defined by a very faint circular trend, 37m in diameter. Discrete anomalies within the interior of the possible ring-ditch may be due to pits. A possible second ring ditch was identified, centred at TP 1100 3728, and discrete anomalies within the interior of the possible ring ditch may locate pits. A possible field system was also identified.

2.2.3 Area 2, immediately southeast of Westenhanger Castle, and Area 3, southwest of Folkestone Racecourse, were chosen to investigate the potential for a possible causeway which may have provided access to Westenhanger Castle. No anomalies of clear archaeological interest were recorded in Area 2. In Area 3, a broad linear anomaly may

be associated with a trackway seen on early OS maps, and possibly associated with the racecourse. A further isolated area of potential interest was identified in Area 3, as a possible spread of material.

2.2.4 Area 4, east of Lympne Industrial Park, was deemed to be of high potential. An extensive complex of linear and rectilinear anomalies being identified with features comprising enclosures, trackways and likely quarry pits. A potential settlement area was also recorded, along with possible pits and postholes. A series of linear and curvilinear anomalies were also identified. Possible demolished infrastructure associated with RAF Lympne may also have been indicated by broad areas of magnetic disturbance.

2.2.5 The HER suggested that Area 5, east of Westenhanger, had a high archaeological potential; however no clear archaeological anomalies were identified. However, the anomalies were interpreted as a probable brick clamp associated with the brick and tile works seen on the 1888-1913 OS six inch map.

2.2.6 A former field boundary located in the west of the survey area is thought to also be the western pale of the deer park associated with Westenhanger Castle.

2.2.7 As is the case with the ring-ditches, it is likely that there is insufficient magnetic contrast over the prevailing sandstone bedrock for some soil-filled features to manifest as magnetic anomalies. For this reason, the archaeological potential of the areas surveyed to date may be greater than indicated by the survey. Evidence associated with an enclosure recorded on the HER was not observed.

Geophysical survey (October to December 2017)

2.2.8 Sumo Services undertook a 200ha magnetic survey over scattered parcels of land within the development area (Sumo Services 2018c).

2.2.9 Prior to the survey, four ring ditch features were known from aerial photographs to lie within the footprint of the geophysical blocks. In addition to identifying these four rings, three extra further similar sites were recorded. Furthermore, several archaeological complexes / foci were successfully mapped. These included numerous ditched enclosures and tracks / droveways and several extensive field systems, possible small settlements and a wide track with numerous pits of unknown function. The small settlements are possibly Iron Age or earlier farmsteads, and the results from one area are very tentatively likened to a small Roman villa.

2.2.10 In addition to recording archaeological features, the survey identified old boundaries, land drains, service pipes and possible areas of UXO. It was also possible to see differing geological responses, including a former river / stream channel, in the magnetic data.

Geophysical survey (June 2018)

2.2.11 Sumo Services undertook a geophysical survey of the former Lympne Airfield, in the south of the development area (Sumo Services 2018b).

2.2.12 This detected a number of archaeological features, including a past field system comprising enclosures and trackways in the southwest of the survey area. The complex could be Iron Age (or Romano-British) although a medieval date cannot be ruled out, and it extends into an area of magnetic disturbance caused by former airfield infrastructure. It may be related to nearby prehistoric features recorded in the Kent HER. Several former field boundaries were recorded, plus numerous anomalies of uncertain origin which could be due to archaeological, agricultural, natural or more recent causes.

2.2.13 Evidence of the former airfield was noted in the form of magnetic disturbance and ferrous responses. Some evidence correlated to known features including a broad zone of magnetic disturbance with some internal anomalies which coincides with a series of hangars and associated buildings identified by a 1930s photograph. The locations of the wind tee, possible dispersals, a taxiway and numerous ferrous responses were also identified, as were anomalies identified as pipe mines in a recent UXO survey.

Geophysical survey (June 2018)

2.2.14 Sumo Service undertook an approximately 1.2ha earth resistance survey on land to the northeast of the Lympne Industrial Estate.

2.2.15 The survey was targeting possible structural remains; however no evidence interpreted as structural was recorded.

2.2.16 Linear ditch-type anomalies were recorded, along with possible former quarry pits. Anomalies of uncertain origin were also identified, though they are likely to be of modern origin rather than archaeological.

Archaeological evaluation (ongoing, 2018)

2.2.17 Oxford Archaeology are undertaking an archaeological evaluation within the proposed development area. Details regarding the evaluation have been supplied by the Client. A summary of the results is presented below.

Field 1

2.2.18 A quantity of early prehistoric finds were recovered from Field 1 including 55 sherds of Early Neolithic pottery, leaf-shaped and chisel-shaped arrowheads, knives, blades and microdenticulates.

2.2.19 A possible Early Iron Age enclosure has been recorded with evidence of partial recutting in the Middle and Late Iron Ages together with a series of pits. A large Late Iron Age ditch was also found at the eastern edge of the field. It has not been determined if the ditch is associated with the enclosure.

2.2.20 A concentration of medieval ditches have been found in the eastern limits of the field with pottery dated between AD1075-1300 recovered from the features.

Fields 2 and 3

2.2.21 A large assemblage of struck flints have been recovered from both Field 2 and 3 with flints of Mesolithic, Early/Middle Neolithic (polished adze and tranchet arrowhead), Late Neolithic (backed knife) and Early Bronze Age (thumbnail scraper) confirmed.

2.2.22 A possible barrow of Early or Middle Bronze Age has been discovered in the western portion of Field 2. A series of ditches associated with the barrow of Middle Bronze Age date were found surrounding the feature. To the southeast of the barrow, a Middle Bronze Age field/enclosure system was recorded on a similar axis to the barrows.

2.2.23 Curvilinear features/enclosures have been found in Field 3 alongside a series of pits of Early Iron Age date. To the southeast, Romano-British enclosures have also been found with near-complete pots recovered from the enclosure ditches.

2.2.24 Medieval ditches on a similar alignment to those recorded in Field 1 have also been found on the west side of Field 3.

Field 4

2.2.25 Surface finds recorded in Field 4 include a polished axe of Early Neolithic date, flints of Late Neolithic to Early Bronze date and a few sherds of Early Bronze Age pottery.

2.2.26 A sub-rectangular enclosure of Middle Iron date was found in the west side of the field. However, the main period of activity in Field 4 is of Romano-British date with a large rectilinear enclosure recorded in the centre of the field along with a series of pits. Pottery and tile of Middle Romano-British date has been recovered within the enclosure, which is thought to have been used for domestic purposes.

Field 5

2.2.27 The main archaeological feature of Field 5 is a mound found in the southern area of the evaluated area which covered a buried soil horizon that contained large quantities of struck flint, charcoal and some pottery. The purpose of the mound has yet to be determined.

2.2.28 At the northern end of the Field, a Romano-British villa was revealed with at least one hypocaust system recorded along with the remains of tile *pilae* and decorative columns. The stone for the columns is thought to have been imported. Fragments of window and vessel glass, a few brooches, and iron nails were found internally while a series of ditches delineated the boundaries of the villa.

Field 10

2.2.29 In the northwest part of the field a possible small barrow ditch and prehistoric enclosure have been recorded. To the east of the enclosure, Romano-British ditches and a dense scatter of pits have been exposed. A Late Iron Age roundhouse was recorded in the northern section of the Field in between the ditches suggesting that at least some of them may be of Late Iron Age origin. Romano-British enclosures are also present to the north of the ditches with a post-Romano-British building recorded within one of the enclosures.

2.2.30 In the southern portion of Field 10, at least three ring ditches thought to be the remains of barrows have been recorded, however no burials have been found. A possible Iron Age roundhouse was also recorded to the southeast of the barrows.

Area C and F

2.2.31 Further Middle Bronze Age ditches have been recorded in Area C while a brick clamp kiln of post-medieval date was found at the northern edge of the area.

2.2.32 Features of the Tudor gardens associated with Westenhanger Castle were found in Area F. Wood posts from an earlier incarnation of the Folkestone racecourse were also recorded but have yet to be accurately dated.

2.3 Archaeological and historical context

Designated assets within the development area

2.3.1 There is one scheduled monument, Westenhanger Castle, within the northern edge of the development area. The monument is described as a fortified house and associated structures and landscaping which remain both above and below ground. It comprises both the earthwork and structural remains of the moated inner court, a 16th century barn and stable, the buried remains of the outer court, the buried remains of the church, medieval hall, walled garden, and cemetery. The site is also associated with more modern remains such as a deer park and water control system and was formerly the site of two manors,

Westenhanger and Ostenhanger (Easternhanger), which were reunited in the 16th century.

2.3.2 The moat encloses an area of around 60m square and is 10-14m wide, and is still water filled on the south and southeast sides. The castle's water control system lies to the west and north of the outer court and used the floodplain of the East Stour to create an expanse of shallow water around the monument which formed a symbolic defensive feature in keeping with its high status. To the north are a series of banks and ditches which delineate platforms and enclosures which fell inside the area of the deer park laid out in 1542. The deer park had a symbolic value as viewed from the castle but the only remains of this now can be found to the northeast of the moat where an earthwork bank is located: this was part of the park pale (the ditch and boundary of the deer park).

Palaeolithic and Mesolithic

2.3.1 Utilising geotechnical data obtained from an earlier phase of ground investigations, a previous desk-based geoarchaeological assessment of the deposits within the Site identified Pleistocene and early Holocene stratigraphy with possible Palaeolithic and Mesolithic geoarchaeological potential (Oxford Archaeology 2017). The key conclusions of this initial assessment are summarized below.

2.3.2 Alluvial clays, silts, sands and fluvial gravels are present within the valley of the East Stour, which passes through the northern limit of the development area. The fine-grained deposits are likely to be mostly of Holocene age (< 12,000 yrs BP), whilst the underlying coarse-grained sands and gravels are likely to have been deposited during the late Pleistocene.

2.3.3 Other parts of the development area are associated Head-Brickearth deposits overlying Lower Greensand geologies. The Palaeolithic potential of Head-Brickearth deposits from analogous contexts within the Weald Basin is demonstrated by the key localities of Oldbury, near Ightham, in Kent and Beedings in West Sussex. In the case of the former, a large assemblage of late Middle Palaeolithic artefacts in fresh condition were recovered from within Head-Brickearth deposits on the slopes of a Folkestone Beds escarpment (Cooke and Jacobi 2001). At Beedings Middle and early Upper Palaeolithic artefacts have been recovered from Head-Brickearth deposits filling fissures in the Lower Greensand Hythe Beds (Pope *et al*. 2013).

2.3.4 One locality associated with Head-Brickearth deposits within the proposed development area, Otterpool Manor Farm, was investigated as part of the Stour Valley Palaeolithic Project (Wenban-Smith 2015). Here, dating of the Head-Brickearth deposits indicated a Last Glacial Maximum Age; older Head-Brickearth deposits may be present in other areas, however.

2.3.5 Palaeolithic material from within the immediate environs of the proposed development area comprise a single handaxe from Head-Brickearth at Folkestone (c. 3km to the south-east) and another from Port Lympne (c. 2.5km to the south-west). An evaluation undertaken in 1969 recovered flint lithic artefacts of possible Upper Palaeolithic or Mesolithic date (Swanton 1973, 203-7).

2.3.6 The presence of Palaeolithic material from Head-Brickearth deposits overlying Lower Greensand geologies and within fissures within the Hythe Beds in the wider region, and the presence of Palaeolithic artefacts from Head-Brickearth in the immediate area indicates that such contexts within the proposed development area have Palaeolithic geoarchaeological potential

2.3.7 An evaluation undertaken on the racecourse in 1969 retrieved some waste and worked flints of possible Upper Palaeolithic or Mesolithic date. The proven presence of Palaeolithic material from contexts unrelated to river terraces and from within fissure capture points in the Lower Greensand of the Weald requires special consideration of the Palaeolithic potential for the current site (Oxford Archaeology 2018).

Later Prehistoric

2.3.8 Within the study area seventeen monuments are listed on the KHER as dating to the prehistoric period. Of these seven have been found within the development area, and ten within 500m of the site. Most these assets are find spots which are listed as flint and pottery finds. Of the remaining assets six indicate occupation activity within the prehistoric period, including evidence of Bronze Age occupation within the development area. The seventh is a palaeochannel close to Barrow Hill.

2.3.9 Approximately 1.2 to 1.4km to the north of the occupation site, are two possible Bronze Age barrows which lie close to the East Stour River on slight rises in the ground, at least one of which is marked on the first edition OS map. Beyond the site the evidence of occupation is limited to some Bronze Age ditches to the north of Westenhanger, 50m north of the site, which are associated with finds of Neolithic or Bronze Age worked flint and a buried soil-horizon; and a possible ring ditch which lies within Sandling Park 500m to the east of the site.

2.3.10 Three find spots from the Iron Age have been recorded in the development area. Two Iron Age occupation sites have been recorded within the study area, to the north of Westenhanger.

2.3.11 The potential for unknown prehistoric evidence within the development is considered to be moderate. Iron Age potential is considered to be low across the majority of the development area, but moderate in the north.

Romano-British

2.3.12 The KHER records thirteen assets as dating from the Romano-British, or Romano-British to early medieval, period. Nine of these are find spots, two are roads and two are occupation evidence.

2.3.13 Stone Street, a Roman Road, runs north-south from Canterbury to Lympne for 16 miles (Margary 1955) and passes through the northeastern corner of the development area through the village of Westenhanger. The route of the road then either follows the line of the development area boundary from Newingreen down to Lympne, and the Roman fort beyond, or diverges to head for West Hythe and the Roman port of *Portus Lemanis*. The KHER maps both routes with one, Stone Street, still in use and the other having dropped out of use between Newingreen and the Aldington Road. The Aldington Road is itself a Roman Road which runs east-west from Dover to Maidstone via Lympne and marks the southern boundary of the development area. The road has been in use since this time to the present day and this stretch, which runs along the Aldington Ridge, is thought to have earlier origins (Margary 1955).

2.3.14 Within the wider study area, evidence of Romano-British settlement has been found during excavations at Westenhanger. In addition, casual finds are scattered across the study area. A copper alloy weight and a copper alloy bead have been found within the development area while further copper alloy finds including a coin have been found beyond the site. Further, there have been several finds of pottery or tile within 500m of the site.

2.3.15 There is a moderate potential for Romano-British evidence within the east and north of the development area, close to the Roman road, but a low potential for the remainder of the site.

Early medieval

2.3.16 Sixteen assets are listed on the KHER within the study area with eight of these listed as being within the development area.

2.3.17 Within the development area there is one asset which is recorded as occupation for the early medieval period. This is based on cropmark evidence and is thought to be an Anglo-Saxon palace which sits within the current Folkestone Racecourse. The cropmarks are described as six or seven 'boat shaped' features which may represent the earliest site of Westenhanger Manor, 200m to the northwest. However, it remains possible that it may instead relate to installations and activity during WWII.

2.3.18 Within the study area early medieval occupation evidence is shown through features to the north of Westenhanger Manor and through two burial sites, to the south and southeast of the site. The first of these lies 465m southeast of the Site at the cross roads of Stone Street and Aldington Road and is a possible Anglo-Saxon cemetery. The second lies 155m to the south of the site within the land around Port Lympne Park and is recorded as a Flemish inhumation cemetery. Other assets within the study area are isolated find spots.

2.3.19 The potential for unknown archaeological remains from the early medieval period is therefore considered to be high in the northeast of the site, moderate along the southern and eastern edges close to the Roman Roads, and low in all other areas of the site.

Medieval

2.3.20 Activity in the medieval landscape is demonstrated on the KHER through six find spots, comprised of coins, a figuring, a brooch, a ring and a pottery scatter, and fourteen HER monuments.

2.3.21 Seven of the HER monuments are within the development area. Four of these are located within the scheduled monument at Westenhanger Manor. Two of these are described as the deserted medieval sites of Westenhanger and Easternhanger, however it is noted that deserted medieval villages (DMV) are virtually unproven in Kent.

2.3.22 To the west of Westenhanger are cropmarks of a trackway and fields system which may have been associated with the Manor. Close to the Manor house at Westenhanger is the site of St Mary's Church which was demolished around AD 1701.

2.3.23 To the south of the site, at Belle Vue, is the site of a medieval moated site and an associated site of an aisled barn which lies on the junction of Otterpool Lane and the Aldington Road. This may indicate an earlier establishment date for occupation in this location which is backed up by data from the KHER of earlier activity to the north beneath the current industrial park. Additionally, associated settlement activity from the medieval period can be found to the south of the Aldington Road.

2.3.24 Harringe Court lies at the western edge of the site and is described as an L-shaped brick and stone house of probable 15th century date.

2.3.25 A further seven assets are recorded within the study area. To the east of Westenhanger village medieval ditches are recorded and to the north of Westenhanger Manor is further

possible settlement activity in the form of ditches and enclosures which may have once been associated with the manor itself.

2.3.26 To the north of Barrow Hill, 35m from the site, is the location of Talbot House which was a Medieval Hall House that was dismantled and relocated as part of the CTRL project. To the northwest of Talbot House, close to the southern end of Sellindge, are ditches and surfaces which are of a possible medieval date.

2.3.27 Forty meters to the south of the development area at Lympne campsite is the location of a medieval hollow way with associated enclosures and buildings which presents potential settlement activity associated with the moated site to the north at Belle Vue.

2.3.28 The potential for unknown medieval assets within the development area is considered to be low except around the Manor of Westenhanger, Belle Vue and Harringe Court where the potential is considered to be moderate.

Post-medieval

2.3.29 Seven assets are recorded on the KHER within the study area, of which one lies outside the development area.

2.3.30 Within the site there are two find spots described as gold jewellery on the KHER.

2.3.31 The majority of the other assets from the post-medieval period are located to the east of the development area close to Stone Street, between Westenhanger village and Newingreen. At Newingreen two assets are described as the location of the former Royal Oak Motel and features found during excavations at the Hotel. A ditch runs parallel to Stone Street where it passes through the village of Westenhanger and features were discovered on either side of Stone Street during the CTRL construction work, which were assessed to have been of post-medieval date. However, during the excavations a buried soil horizon was also discovered which could have origins in the Roman or Late prehistoric period.

2.3.32 Assets from the post-medieval period within the study area are limited which may correlate with cartographic evidence that there has been little change in the area until the modern period. As such there is considered to be little potential for unknown archaeological assets of this date within the site.

Modern

2.3.33 All assets listed on the KHER within the study area are of a military nature and are probably associated with the former airfield at Lympne. There are twenty-three assets of this nature within the study area and only three of these are outside the boundary of the development area.

2.3.34 Lympne airfield covered the area to the north of the Aldington Road between Otterpool Lane and Stone Street with some activity to the west of Otterpool Lane and was an emergency landing ground for home defence aircraft which was established in 1916. The development of the site began with canvas hangers and wooden huts; the officers' mess was at Lympne Castle. In 1917 more sheds, workshops and offices were built close to the Aldington Road.

2.3.35 Between the two world wars the airfield was opened to civil aviation and was the host location for several competitions and cape to cape runs, by Amy Johnson, Jim Mollison and the Duchess of Bedford. In 1936 the base was reopened as an operational station

and was over the course of the war a bomber base, HMS *Buzzard* under the Admiralty, a fighter command; but only became fully operational in 1941. Dispersed hard standings, a fighter pen and accommodation were built during this time to bring the station up to standard. The station was further upgraded in 1942 to accommodate more fighters for Operation Jubilee. After the war the airfield was downgraded to care and maintenance only, with civil aviation readmitted.

2.3.36 Much of the airfield has now been replaced by an industrial estate and to the east only a small portion of the runway has survived. Additional assets which are listed at the site include an auxiliary operational unit base, a battle headquarters, two aircraft dispersal pens, a gas decontamination building, air raid shelters, Picket Hamilton fort, slit trenches, trenches, a former barracks hut, an overblister hanger and trackway, a machine gun testing range, a bulk fuel installation, a concrete base of unknown use and a gun emplacement.

2.3.37 Four military crash sites are recorded in the KHER within the study area, and of these, two are located within the site.

2.3.38 The potential for unknown archaeology from this period within the site is considered to be low, due to the potential for unrecorded military assets within the south of the site.

3 AIMS AND OBJECTIVES

3.1 Aims

3.1.1 The aims of the watching brief, as stated in the WSI (Wessex Archaeology 2018) and as defined in the CIfA's *Standard and guidance for an archaeological watching brief* (CIfA 2014a), were:

- To allow, within the resources available, the preservation by record of archaeological deposits, the presence and nature of which could not be established (or established with sufficient accuracy) in advance of the development or other works;
- To provide an opportunity, if needed, for the watching archaeologist to signal to all interested parties, before the destruction of the material in question, that an archaeological find has been made for which the resources allocated to the watching brief itself are not sufficient to support treatment to a satisfactory and proper standard; and
- To guide, not replace, any requirement for contingent excavation or preservation of possible deposits.

3.2 Objectives

3.2.1 In order to achieve the above aims, the objectives of the watching brief, also defined in the WSI (Wessex Archaeology 2018), were:

- To determine the presence or absence of archaeological features, deposits, structures, artefacts or ecofacts within the specified works area;
- To record and establish, within the constraints of the works, the extent, character, date, condition and quality of any surviving archaeological remains (a preservation by record);

- To place any identified archaeological remains within a wider historical and archaeological context in order to assess their significance; and

- To make available information about the archaeological resource on the site by preparing a report on the results of the watching brief.

4 METHODS

4.1 Introduction

4.1.1 All works were undertaken in accordance with the detailed methodology set out within the WSI (Wessex Archaeology 2018) and in general compliance with the standards outlined in CIfA guidance (CIfA 2014a). The methods employed are summarised below.

4.1.2 The watching brief monitored the geo-environmental and drainage ground investigation works to be carried out across the site, shown on the plan presented in **Appendix 2**.

4.2 Service location and other constraints

4.2.1 The client and/or their principal contactor were responsible for the identification and protection of any above and below ground services within the watching brief area/s. The client and/or their principal contactor was also responsible for informing Wessex Archaeology of, and delimiting, any other areas of environmental, ecological or other constraints.

4.2.2 Test pit TP219 was relocated approximately 5m west, due to the presence of a buried service at its planned location (**Plate 1**).

4.2.3 Test pit TP216 was cancelled and not excavated. Test pit TP212 and borehole BH205 were unable to be excavated, as the landowner had not given permission to access the land.

4.3 Fieldwork methods

General

4.3.1 The watching brief was undertaken by at least one archaeologist, subject to the number of site operations being carried out at any one time. All mechanical excavation was, where possible, undertaken using a toothless ditching bucket, and constantly monitored by the watching archaeologist.

4.3.2 Ground investigations of areas identified as having higher potential for Middle to Late Pleistocene deposits and Palaeolithic archaeology were monitored by a Pleistocene geoarchaeological specialist.

4.3.3 All exposed Pleistocene geoarchaeological deposits were recorded, described and interpreted. Interpretations included, where possible, probable depositional environments and formation processes.

4.3.4 Material from the different Pleistocene stratigraphic horizons was screened by the monitoring geoarchaeological specialist to investigate whether artefacts and/or macro mammalian faunal remains were present.

4.3.5 The potential for deposits to preserve palaeoenvironmental evidence was assessed for each Quaternary sediment unit by the monitoring geoarchaeological specialist.

4.3.6 The suitability of any sediment units for optically stimulated luminescence dating (OSL) or dating of mollusc shells, if abundant enough, by Amino Acid Racemisation (AAR) was considered.

4.3.7 Spoil derived from both machine stripping and hand-excavation was visually scanned for the purposes of finds retrieval, and where appropriate, was also metal-detected by trained archaeologists.

4.3.8 The following test pits were monitored by the attending archaeologist; TP201, TP202, TP208, TP209, TP210, TP211, TP213, TP214, TP215, TP217, TP218, TP219, TP220, TP221 (**Plate 2**).

4.3.9 Borehole BH206 and borehole BH207 were monitored by the attending archaeologist (**Plate 3 & 4**).

4.3.10 Borehole BH201 and borehole BH202 were monitored by the attending geoarchaeological specialist.

4.3.11 Window sample WS201 was monitored by the attending geoarchaeological specialist.

4.3.12 The following test pits were monitored by the attending geoarchaeological specialist; TP206, TP223, TP226, TP228, TP228 and hand dug test pit HD201 (**Plate 5**).

Recording

4.3.13 All exposed archaeological deposits and features were recorded using Wessex Archaeology's pro forma recording system.

4.3.14 A complete drawn record of excavated features and deposits was made including both plans and sections drawn to appropriate scales (generally 1:20 or 1:50 for plans and 1:10 for sections), and tied to the Ordnance Survey (OS) National Grid. The Ordnance Datum (OD: Newlyn) heights of all principal features were calculated, and levels added to plans and section drawings.

4.3.15 A full photographic record was made using digital cameras equipped with an image sensor of not less than 10 megapixels. Digital images have been subject to managed quality control and curation processes, which has embedded appropriate metadata within the image and will ensure long term accessibility of the image set.

4.4 Artefactual and environmental strategies

4.4.1 Appropriate strategies for the recovery, processing and assessment of artefacts and environmental samples were in line with those detailed in the WSI (Wessex Archaeology 2018). The treatment of artefacts and environmental remains was in general accordance with: *Guidance for the collection, documentation, conservation and research of archaeological materials* (CIfA 2014b) and *Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation* (English Heritage 2011).

4.4.2 Palaeoenvironmental samples were taken as appropriate by the geoarchaeological specialist as detailed in section 4.3 above.

4.5 Monitoring

4.5.1 Ben Found, Senior Archaeological Officer for KCC, on behalf of the LPA, monitored the watching brief. Any variations to the WSI, if required to better address the project aims, were agreed in advance with both the client and the Senior Archaeological Officer for KCC.

5 ARCHAEOLOGICAL RESULTS

5.1 Introduction

5.1.1 Detailed context descriptions can be found in **Appendix 1**, and a generalised stratigraphic sequence as recorded by the geoarchaeological specialist, can be summarised as follows;

5.2 Phase AC: Atherfield Clay Formation

5.2.1 Brownish grey to light reddish brown mottled sandy clays of the Atherfield Clay Formation were observed at the base of Quaternary deposits in TP218.

5.3 Phase HB: Hythe Beds Formation

5.3.1 Light grey cemented sandstone forming part of the Hythe Beds was observed by the geoarchaeological specialist underlying Quaternary deposits in BH201, BH202, BH203, BH204, BH 207, TP201, TP202, TP206, TP208, TP209, TP211, TP219A, TP221, TP222, TP226, TP228, WS201 and WS202.

5.3.2 The Hythe Beds were also observed / identified in TP201, TP202, TP208, TP209, TP211, TP221 and TP222.

5.4 Phase S: Sandgate Formation

5.4.1 Very well consolidated dark grey to dark brown sandy clay is recorded underlying Quaternary stratigraphy in BH206 and BH208

5.5 Phase WC: Weald Clay Formation

5.5.1 Weald Clay consisting of well consolidated blue-grey silty clays are recorded beneath Quaternary deposits in BH209.

5.6 Folkestone Formation

5.6.1 Light reddish brown sands of the Folkstone Formation were noted at the base of the Quaternary sequence in TP214.Phase I: Sandy Head-Brickearth

5.6.2 The basal Quaternary deposit identified during this watching brief comprises sandy Head-Brickearth, identified in BH201 and WS201. This consists of an orangish to yellowish brown sandy clay to sandy clay-silt. It is structureless and generally clast free. It represents material reworked through slope processes light yellow clay-silt units are present which are likely to include reworked windblown loess. Within WS201 the lower-most units are sub-horizontally bedded, which may reflect the stochastic deposition of material washed into a depression within the bedrock. The basal units in both BH201 and WS201 are clay rich and heavily iron stained, reflecting translocation through clay eluviation (**Plate 6**).

5.6.3 The deposit is only present where extensive sequences of Quaternary deposits are preserved and, when encountered, is generally ~1.0m in thickness.

5.6.4 This deposit was also identified in TP201, TP208, TP209, TP210, TP211 and TP221.

5.7 Phase II: Clayey Head-Brickearth

5.7.1 Where present, the **Phase I** deposits are overlain by a more clay rich units. The deposits consist of an orangish to yellowish brown clay to silty clay, which is sometimes slightly sandy. It is generally clast free and again reflects material reworked down slope through slope processes.

5.7.2 The deposit is generally ~0.40m thick, although this increases to 1.45m in BH201.

5.8 Phase I and II: Undifferentiated Head-Brickearth

5.8.1 Undifferentiated sequences of Head-Brickearth are recorded in the geotechnical borehole logs from BH203, BH204, BH206, BH207, BH208, TP 202, TP206, TP214, TP217, TP218, TP219A, TP223, TP226, TP227, TP228, WS202 and WS 203. The uppermost units within these sediment bodies may also include **Phase III** colluvial material.

5.8.2 These deposits are relatively shallow in BH 203, TP202, TP206, TP214, TP218, TP219A, TP226, TP 227 and TP228, being approximate 0.30m-1.00m thick. However, they extend from between approximately 2.00m to in excess of 4.00m in BH 204, BH 206, BH 207, TP 217 TP218, TP223, TP 227, WS202 and WS 203.

5.9 Phase III: Alluvium

5.9.1 Holocene alluvial deposits are recorded in geotechnical logs for BH 207 and 209. These are associated with the floodplain of the East Stour River. They are largely mineralogenic. However, pockets of peat are recorded at 1.15m in BH209, whilst in the same borehole organic alluvium is recorded between 2.60 and 3.76m; these deposits may have potential to preserve palaeoenvironmental datasets.

5.9.2 In BH207 the alluvium is underlain by Pleistocene Head-Brickearth, whereas in BH209 is underlain by clays belonging to the Weald Clay Formation.

5.10 Phase IV: Colluvial deposits

5.10.1 The **Phase I** and **II** are overlain in places by orange-brown slightly sandy, clayey silty, with occasional medium-course sub-angular light grey cemented sandstone, limestone and chert clasts. This reflects colluvial material resulting from the downslope movement of generally fine-grained sediments. Colluvium is a slope deposit of Holocene age formed in areas of topographical relief where soil instability has been bought on by activities such as clearance of woodland, agricultural activity and soil degradation, leading to downslope movement of sediment.

5.10.2 A proximal fragment of a flint flake was recovered from within colluvial layer 22303 within test pit TP223.

5.10.3 The colluvial sequence in TP223 is underlain by a medium brown, slightly silty clay, which contained organic material (occasional wood fragments); this unit also produced significant quantities of natural sub-angular flint clasts with extensive thermal scars; these are likely to derive from a now eroded Tertiary deposit. It is underlain by Sandy Head-Brickearth (**Phase I**). The deposit is likely to reflect material deposited through slope wash into a depression within the underlying deposits, which was subject to waterlogging. The age of this deposit is unknown, but is likely to be Holocene.

5.10.4 Colluvial deposits of various thicknesses and depths were observed / identified in all the test pits and boreholes monitored by the attending archaeologist.

5.11 Phase TS/MG: Top Soil/Made Ground

5.11.1 The deposits are generally overlain by topsoil. Within boreholes BH 202, BH203, BH304 test pits TP202, TP203, TP204, TP205, TP206, TP208, TP215, TP219, TP219A, TP222, TP228, and hand dug test pit HD201 made ground was encountered.

5.11.2 Borehole BH202, test pits TP208, TP209, TP213, TP215, TP220 and TP222 identified topsoil and/or made ground overlying bedrock; no Quaternary deposits were present.

6 ARTEFACTUAL EVIDENCE

6.1.1 A proximal fragment of a flint flake was recovered from within the colluvium 22303 in TP223. It is a soft hammer flake with a complex dorsal scar pattern, no cortex is preserved; it is in fresh condition and has a maximum length of 1.8cm. The artefact is not chronologically diagnostic.

6.1.2 Brick fragments, of a bright orange colour with a soft porous makeup, were identified, but not recovered or retained, within the spoil derived from the deliberate backfill / made ground layers 20603 and 20604 of borehole BH206 (**Plate 7**).

6.1.3 The brick fragments observed in borehole BH206 were initially thought to pertain to the construction of the horse racing course and represent a possible consolidation layer to improve drainage of the grass race course. Research has suggested that the brick fragments could be associated with the buried remains of the walled garden of Westenhanger Castle, located to the immediate north of the borehole, but this cannot be directly proven due to the method and / or confines of excavating / drilling the borehole. The forthcoming evaluation report from Oxford Archaeology could assist with interpreting the significance of the brick fragments further.

6.1.4 There was no other artefactual evidence recovered from the other test pits or boreholes that were monitored during the watching brief.

7 ENVIRONMENTAL EVIDENCE

7.1.1 During the monitoring of the test pits and boreholes by the geoarchaeological specialist, a single 0.5l bulk sample was taken from the **Phase I**: Sandy Head Brickearth deposits 22305, in TP223 (**Table 1**). This sample could be used to provide an initial rapid assessment of whether this unit has potential to preserve palaeoenvironmental datasets.

Sample no	Area	Phase	Context	Description
22301	I	I	22305	0.5l bulk

Table 1 Palaeoenvironmental samples

8 CONCLUSIONS

8.1 Summary

8.1.1 The aims and objectives of the watching brief have been met successfully insofar as a sequence of apparent subsequent colluvial deposits overlaying head deposits have been identified across the watching brief area, with discrete deposits of made ground and

potentially archaeological remains / deposits perhaps pertaining to the walled garden of Westenhanger Castle.

8.1.2 The results of the geoarchaeological investigations by the geoarchaeological specialist can be summarised as follows:

- Head-Brickearth deposits are present across much of the Site, although the thickness of these deposits varies considerably, the deposits being thickest within the sampled locations along a north-south axis extending from BH206 to BH204.
- The Head-Brickearth comprises at least two lithologically distinct units – an earlier, generally sandier unit (**Phase I**) and a younger, more clay rich set of deposits (**Phase II**). Both contain material reworked through slope processes, although material likely to derive from a windblown loess parent sediment is also present within the **Phase I** deposits.
- The age of the **Phase I** deposits is unknown, although **Phase I** units are clearly Pleistocene in age. The **Phase II** deposits may also be Pleistocene, although they could equally represent early Holocene slope deposits.
- Holocene colluvium (**Phase IV**) has formed in areas of topographical relief where soil instability has been bought on by activities such as clearance of woodland, agricultural activity and soil degradation, leading to downslope movement of sediment. A flint flake fragment was recovered from this context in TP223. At the base of the colluvial sequence in TP223 a silty clay containing occasional wood fragments was encountered. This is likely to be a Holocene deposit, but one which predates the main phase of colluvial deposition.
- In the northern portion of the Site, within the floodplain of the River East Stour, Holocene alluvial deposits were identified.

8.2 Discussion

8.2.1 The geoarchaeological evidence gathered during this watching brief supports and enhances the conclusions made in the previous geoarchaeological desk-based assessment (Oxford Archaeology 2017). It has demonstrated that three phases of Holocene and Pleistocene slope wash deposits are present across the Site; **Phases I**, **II** and **IV**.

8.2.2 Pleistocene Head-Brickearth is present (**Phase I**). This may be analogous with the late Devensian deposits identified at Otterpool Manor Farm (Wenban-Smith 2015), and/or include earlier stratigraphy. These deposits have broad geoarchaeological potential, the nature of which could be established through targeted evaluation.

8.2.3 The **Phase I** deposits are post-dated by a more clay rich series of slope deposits which may be Pleistocene or early Holocene in age. The age and geoarchaeological potential of these deposits are currently unknown.

8.2.4 The latest phase of slope deposits consists of Holocene colluvium. TP223 demonstrates that this colluvium contains artefactual material, although in this case it is likely to have been reworked as no stabilisation surface was evident. In TP223 the colluvium is underlain by silty clay which preserves some organic material (occasional wood fragments); the specific geoarchaeological potential of these deposits could be assessed through targeted evaluation.

8.2.5 Holocene alluvial (**Phase III**) deposits were identified with the floodplain of the East Stour river. These are generally mineralogenic and have limited geoarchaeological potential. However, some organic deposits are present which may have potential to preserve palaeonevironmntal datasets.

8.2.6 Having refined the nature of the Quaternary deposits present across the Site, it is recommended that the geoarchaeological and geotechnical logs from test pits and boreholes carried out during this phase of geotechnical investigations are used to enhance and refine the Pleistocene and early Holocene stratigraphic model outlined in the prior desk-based geoarchaeological assessment (Oxford Archaeology 2017). This will allow any subsequent Palaeolithic and Mesolithic geoarchaeological evaluation to be clearly targeted on areas of potential.

8.2.7 The brick fragments observed within the spoil of borehole BH206, which unfortunately were of too small a size to recover and assess, could either be associated with the horse racecourse construction in the late 1890s or they could pertain to the gardens of Westenhanger Castle.

8.2.8 If the brick fragments are associated with the buried garden remains of Westenhanger Castle, then they could date from as early as the Tudor period of the early 1500s, when Westenhanger Castle was extensively enlarged, initially by the Poynnings family, followed by the English Crown, and then the Smythe family. Westenhanger castle was eventually neglected in the early 18th century and the grounds of the estate were then converted into the Folkestone horse racing course in the late 1890s.

8.2.9 The results, when known, of the Oxford Archaeology evaluation in the former Folkestone racecourse, could help interpret whether the hypothesis that borehole BH206 is located in, or around, the buried remains of Westenhanger Castle walled garden is correct, and if so then the racecourse itself may seal further remain associated with Westenhanger Castle.

9 ARCHIVE STORAGE AND CURATION

9.1 Museum

9.1.1 The archive resulting from the watching brief is currently held at the offices of Wessex Archaeology in Maidstone. In the absence of any museum in the area actively collecting archaeological archives, no final repository for the project archive has yet been identified.

9.1.2 The archive will continue to be stored at the offices of Wessex Archaeology until such time as the situation is resolved. However, ongoing storage charges may be levied after a set time after project completion.

9.2 Preparation of the archive

9.2.1 The archive, which includes paper records, graphics, artefacts, ecofacts and digital data, will be prepared following the standard conditions for the acceptance of excavated archaeological material, and in general following nationally recommended guidelines (SMA 1995; CIfA 2014c; Brown 2011; ADS 2013).

9.2.2 All archive elements are marked with the **site code 211110**, and a full index will be prepared. The physical archive currently comprises the following:

- 1 file/document case of paper records and A4 graphics.

9.3 Selection policy

9.3.1 Wessex Archaeology follows national guidelines on selection and retention (SMA 1993; Brown 2011, section 4). In accordance with these, and any specific guidance prepared by the museum, a process of selection and retention will be followed so that only those artefacts or ecofacts that are considered to have potential for future study will be retained. The selection policy will be agreed with the museum, and is fully documented in the project archive.

9.4 Security copy

9.4.1 In line with current best practice (eg, Brown 2011), on completion of the project a security copy of the written records will be prepared, in the form of a digital PDF/A file. PDF/A is an ISO-standardised version of the Portable Document Format (PDF) designed for the digital preservation of electronic documents through omission of features ill-suited to long-term archiving.

9.5 OASIS

9.5.1 An OASIS online record (http://oasis.ac.uk/pages/wiki/Main) has been initiated, with key fields and a .pdf version of the final report submitted. Subject to any contractual requirements on confidentiality, copies of the OASIS record will be integrated into the relevant local and national records and published through the Archaeology Data Service ArchSearch catalogue.

10 COPYRIGHT

10.1 Archive and report copyright

10.1.1 The full copyright of the written/illustrative/digital archive relating to the project will be retained by Wessex Archaeology under the *Copyright, Designs and Patents Act* 1988 with all rights reserved. The client will be licenced to use each report for the purposes that it was produced in relation to the project as described in the specification. The museum, however, will be granted an exclusive licence for the use of the archive for educational purposes, including academic research, providing that such use conforms to the *Copyright and Related Rights Regulations* 2003. In some instances, certain regional museums may require absolute transfer of copyright, rather than a licence; this should be dealt with on a case-by-case basis.

10.1.2 Information relating to the project will be deposited with the Historic Environment Record (HER) where it can be freely copied without reference to Wessex Archaeology for the purposes of archaeological research or development control within the planning process.

10.2 Third party data copyright

10.2.1 This document and the project archive may contain material that is non-Wessex Archaeology copyright (eg, Ordnance Survey, British Geological Survey, Crown Copyright), or the intellectual property of third parties, which Wessex Archaeology are able to provide for limited reproduction under the terms of our own copyright licences, but for which copyright itself is non-transferable by Wessex Archaeology. Users remain bound by the conditions of the *Copyright, Designs and Patents Act* 1988 with regard to multiple copying and electronic dissemination of such material.

REFERENCES

ADS 2013 *Caring for Digital Data in Archaeology: a guide to good practice*. Archaeology Data Service and Digital Antiquity Guides to Good Practice

British Geological Survey online viewer http://mapapps.bgs.ac.uk/geologyofbritain/home.html (accessed September 2018)

Brown, D H 2011 *Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation* (revised edition). Archaeological Archives Forum

CIfA 2014a *Standard and Guidance for an Archaeological Watching Brief*. Reading, Chartered Institute for Archaeologists

CIfA 2014b *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials*. Reading, Chartered Institute for Archaeologists

CIfA 2014c *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives*. Reading, Chartered Institute for Archaeologists

Cook, J and Jacobi, R, 1998 Discoidal core technology in the Palaeolithic at Oldbury, Kent, in Ashton, N, Healy, F and Pettitt, P (eds), *Stone Age Archaeology: Essays in Honor of John Wymer*, Oxford, Oxbow Books, 124-136

English Heritage 2011 *Environmental Archaeology: a guide to theory and practice of methods, from sampling and recovery to post-excavation*. Swindon, Centre for Archaeology Guidelines

Oxford Archaeology 2017 Otterpool Park, Sellindge, Kent. Desk-based Geoarchaeological Assessment of Pleistocene and Early Holocene Stratigraphy

SMA 1993 *Selection, Retention and Dispersal of Archaeological Collections*. Society of Museum Archaeologists

SMA 1995 *Towards an Accessible Archaeological Archive*. Society of Museum Archaeologists

Wenban-Smith, F F, 2015 *Stour Basin Palaeolithic Project: Final Fieldwork Report, funded by Historic England* (Project no. 6637)

Wessex Archaeology 2018 *Otterpool Park, Lympne, Kent: Written Scheme of Investigation for an Archaeological Watching Brief*. Unpublished report ref. 211110.01

Wessex Archaeology 2018 *Otterpool Park, Lympne, Kent: Risk Assessment and Method Statement*. Unpublished report ref. 211110.02

Westenhanger Castle website http://www.westenhangercastle.co.uk/aflemish cemebout/ (accessed Sep. 2018)

APPENDICES

Appendix 1 Context descriptions

Archaeological monitoring

Testpit TP201	Length 2.5m	Width 0.70m	Depth 3.40m
Context Number	**Interpretative Category**	**Description**	**Depth BGL**
20101	Topsoil	Mid brown sandy loam. Grass rooting	0-0.2
20102	Subsoil	Light brown sandy loam. Very rare small sub-angular flints	0.2-0.4
20103	Natural	Mid brown sandy clay. Sterile	0.4-1.8
20104	Natural	Mid to light brown sandy silt. Sterile	1.8-2.7
20105	Natural	Yellow sandy clay with grey mottles. Sterile	2.7-3.3
20106	Natural	Bedrock geology of ragstone and limestone	3.3+

Testpit TP202	Length 2.5m	Width 0.70m	Depth 2.60m
Context Number	**Interpretative Category**	**Description**	**Depth BGL**
20201	Topsoil	Light Grey brown sandy loam. Rooting. Occasional modern rebar.	0-0.20
20202	Subsoil	Mid brown sad loam. Occasional modern rebar.	0.20-0.40
20203	Natural	Mid brown sandy silty clay.	0.40-1.5
20204	Natural	Ragstone / limestone	1.5-2.2
20205	Natural	Solid bedrock geology	2.2+

Testpit TP208	Length 2.50m	Width 0.70m	Depth 2.60m
Context Number	**Interpretative Category**	**Description**	**Depth BGL**
20801	Topsoil	Mid greyish brown. Silty sand. Rare modern CBM and small chalk inclusions, sparse small rounded pebbles - all well sorted. Loose and friable, with grass rooting.	0.00-0.22
20802	Subsoil	Dark orangey brown. Silty sand. Rare small to medium sized rounded pebbles - well sorted, occasional small angular flints and modern glass. Smooth and more compacted comparing to topsoil.	0.22-0.84
20803	Natural	Light brownish orange. Silty sand. Some manganese inclusions, occasional small rounded pebbles. Loose compaction.	0.84-1.50
20804	Natural	Light brownish yellow. Sand. Rare patches of bluish grey sandy clay. No inclusions.	1.50-2.40
20805	Natural	Bedrock. Limestone.	2.40-2.60+

Testpit TP209	Length 2.50m	Width 0.70m	Depth 2.35m
Context Number	**Interpretative Category**	**Description**	**Depth BGL**
20901	Topsoil	Dark brownish grey. Silty sand. Very occasional small rounded pebbles - well sorted, common grass rooting. Very loose and friable.	0.00-0.28
20902	Subsoil	Mid greyish brown. Silty sand. Very occasional small rounded pebbles - well sorted. Slightly rooted, very loose.	0.28-0.96
20903	Natural	Light brownish orange. Silty sand. With greyish hue. Some manganese inclusions, occasional iron stones. Medium compaction.	0.96-1.66
20904	Natural	Light greyish yellow. Clayey sand. With brownish "rusty" patches of sandy clay.	1.66-1.82
20905	Natural	Light brownish grey. Sandy clay. Quite gritty but very wet and clayish. Occasional small manganese inclusions - poorly sorted, sparse medium sized sub-angular limestone. Compacted.	1.82-2.30
20906	Natural	Limestone bedrock.	2.30-2.35+

Testpit TP 210	Length 2.70m	Width 0.70m	Depth 2.50m
Context Number	**Interpretative Category**	**Description**	**Depth BGL**
21001	Topsoil	Mid blackish grey silt. Crumbly. Dusty when dry. Soft. Moderate (10%) small sub-angular stones.	0.00-0.30
21002	Subsoil	Mid greyish orangey brown clay sandy silt. Crumbly. Moderate softness while digging. Very rare (2%) small sub-angular stones.	0.30-0.60
21003	Natural	Moderate orangey brown silty sandy clay. Crumbles. Moderate compaction. Very rare (1%) small sub-angular stones.	0.60-0.90
21004	Natural	Mid orangey brown silty sandy clay, softer than layer above. Moderate (20%) small sub-angular stones.	0.90-1.30
21005	Natural	Light brownish orange sandy clay. Very rare (1%) small sub-angular stones.	1.30-1.60
21006	Natural	Light brownish orange sandy clay with a yellow hue. Soft and easy to dig. Almost no coarse components (small sub-angular stones).	1.60-1.90
21007	Natural	Light orangey yellow clay sand. No coarse components. Patches of reddish brown clay sand and brownish red clay sand. Red colouring indicates high iron content.	1.90-2.50
21008	Natural	Light orangey yellow clay sand. Mid orangey brown sandy patches. Patches of dark greyish blue colluvium coming through. No coarse components.	2.50+

Testpit TP 211	Length 2.60m	Width 0.70m	Depth 2.05m
Context Number	**Interpretative Category**	**Description**	**Depth BGL**
21101	Topsoil	Mid greyish brown sandy silt with moderate (20%) small sub-angular stones. Soft, loose and crumbly.	0.00-0.30
21102	Subsoil	Mid orangey brown sandy silt. Rare-moderate (10%) small sub-angular stones. Soft, loose compaction and crumbly.	0.30-0.45
21103	Natural	Mid brownish orange clay sand with moderate (30%) small sub-angular / sub rounded gravels.	0.45-0.70
21104	Natural	Mid yellowed brown clay sand with moderate brownish purple manganese patching. Moderate (30%) patches of small sub-angular / sub rounded gravels.	0.70-0.90
21105	Natural	Light brownish yellow clay sand with frequent (35-40%) dark brownish purple manganese patching. Moderate (20%) gravel patches. Large lumps of angular and sub-angular greyish white sandstone (bedrock) in the eastern end.	0.90-1.90
21106	Natural	Light brownish grey clay sand. Moderate (20%) orange spots of iron. Has greyish white crumbly sandstone mixed in.	1.90-2.05
21107	Natural	Greyish white sandstone bedrock.	2.05+

Testpit TP 213	Length 2.5m	Width 0.70m	Depth 2.50m
Context Number	**Interpretative Category**	**Description**	**Depth BGL**
21301	Topsoil	Dark brown sandy loam. Rare sub-angular flints, modern plastic food wrappers.	0-0.20
21302	Subsoil	Mid grey brown sandy clay. Rare small sub-angular flints.	0.20-40
21303	Subsoil	Light brownish yellow sandy silt, abundant small and medium sub-angular angular flints.	0.40- 0.60
21304	Natural	Mid brown orange sandy silt clay.	0.60-1.4
21305	Natural	Mid brown sandy silt with slight green hue.	1.4-2
21306	Natural	Grey clay. Gault clay?	2- 2.5+

Testpit TP 214	Length 2.5m	Width 0.70m	Depth 2.50m
Context Number	**Interpretative Category**	**Description**	**Depth BGL**
21401	Topsoil	Mid brown grey sandy silty clay. Plough soil. Common rooting. Rare small sub-angular flints.	0-0.20
21402	Subsoil	Yellowish sand. Common small sub-angular flints.	0.20 -0.40
21403	Natural	Yellow brown sandy silt with grey patches. Rare small sub-angular flints	0.40- 0.60
21404	Natural	Yellow sand silt with grey streaks. Firm.	0.60-1.15
21405	Natural	Grey sandy silt with yellow mottles. Firm.	1.15- 1.80
21406	Natural	Dark grey sandy silt. Soft.	1.80- 2.50+

Testpit TP 215	Length 2.5m	Width 0.70m	Depth 2.50m
Context Number	**Interpretative Category**	**Description**	**Depth BGL**
21501	Topsoil	Mid to light brown sandy silt. Rooting, rare small sub-angular flints.	0-0.20
21502	Subsoil	Light brown sandy silt. Rare small sub-angular flints. Rare flecks CBM, modern pottery (white glaze not recovered).	0.20-0.35
21503	Natural	Mid brown sandy silt clay. Rare small sub-angular flints.	0.35-0.60
21504	Natural	Mid orange brown sandy silty clay. Patches of grey in section. Land drain at west end of test pit.	0.60-1
21505	Natural	Brown grey sandy clay silt. Appears more firm to machine than layers above.	1-1.40
21506	Natural	Mid white grey sandy clay. Sterile. Firm and compact.	1.4-2.5+

Testpit TP 217	Length 2.70m	Width 0.70m	Depth 2.60m
Context Number	**Interpretative Category**	**Description**	**Depth BGL**
21701	Topsoil	Mid greyish brown sandy clay silt. Small roots from crops. Rare-moderate (10%) small sub rounded and sub-angular flints.	0.00-0.36
21702	Subsoil	Light brownish grey clay silt. Rare (1%) small sub rounded flints. Very loose and crumbly.	0.36-0.47
21703	Natural	Light yellowish brown sandy silty clay. Crumbly lumps. Very rare (1%) small sub rounded flints. Quite compacted.	0.47-1.50
21704	Natural	Light yellowish orange with a greenish blue hue, sandy clay. Crumbly. Very rare (1%) sub-angular flints. Moderate compaction. Softer than layer above.	1.50-1.70
21705	Natural	Light orangey blue colluvial clay? No coarse components.	1.70-2
21706	Natural	Light blueish grey sandy clay with an orange hue. No coarse components. Colluvial?	2-2.60+

Testpit TP 218	Length 2.30m	Width 0.70m	Depth 2.70m
Context Number	**Interpretative Category**	**Description**	**Depth BGL**
21801	Topsoil	Mid brown with grey hue. Clay silt. Rare (5%) small sub-angular and sub rounded flints. Some small roots from crops. Loose and crumbly.	0.00-0.20
21802	Subsoil	Mid yellowish brown clay silt. Rare (4%) small sub-angular and sub rounded stones and flints. Loose and crumbly.	0.20-0.35
21803	Natural	Light brownish yellow silty clay. Very rare (1%) small sub-angular flints. Crumbly. Moderate compaction. Rare- Moderate (10%) flecks of manganese. Quite compacted.	0.35-1.30
21804	Natural	Mid greyish brown to yellow sandy silty clay. Moderate (20%) manganese flecks. Quite compacted.	1.30-2.40
21805	Natural	Mid yellowish greyish brown silty clay- only small amount of silt, mostly clay. No coarse components.	2.40-2.70+

Testpit TP 219	Length 2.15m	Width 0.70m	Depth 1.60m
Context Number	**Interpretative Category**	**Description**	**Depth BGL**
21901	Topsoil	Mid-dark brown with grey hue. Clay silt. Rare (5%) small sub-angular and sub rounded flints. Some small roots from crops. Loose and crumbly.	0.00-0.30
21902	Subsoil	Dark yellowish brown clay silt. Moderate (10%) small sub-angular flints. Loose and crumbly.	0.30-0.50
21903	Natural	Dark yellowish brown clay silt. Moderate (10%) small sub-angular flints. Loose and crumbly. Contains frequent (30%) small angular broken pieces of a naturally occurring rock, looking like limestone (whitish grey in colour with tiny quartz specks and tiny black specks).	0.50-0.90
21904	Natural	Mid yellowish green clay sand. Very rare (1%) small sub rounded limestone.	0.90-1.20
21905	Natural	Light greyish yellow green sand with a small amount of clay. Very rare (1%) sub-angular limestone pieces. Slightly more compacted than layer above.	1.20-1.60
21906	Natural	Limestone mineral bedrock. Breaks with machine. Contains very light greyish yellow green sand with a very small amount of clay.	1.60+

Testpit TP 220	Length 2.50m	Width 0.70m	Depth 2.50m
Context Number	**Interpretative Category**	**Description**	**Depth BGL**
22001	Topsoil	Mid greyish brown clay silt. Moderate (10%) small irregular shaped flint. Thin band of mid greyish blue clay silt at base of topsoil.	0.00-0.35
22002	Natural	Mid orangey brown silty sandy clay. Rare (5%) small sub rounded flints. Soft and crumbly.	0.35-0.75
22003	Natural	Mid brownish orange silty sandy clay. Very rare (1%) small sub-angular / sub rounded flints.	0.75-1.40
22004	Natural	Light greyish blue sandy clay with orange hues. No coarse components. Soft to dig. Colluvial?	1.40-1.80
22005	Natural	Light greyish blue colluvial clay. Slight light orange hue. Soft and smooth to dig with some stickiness.	1.80-2.30
22006	Natural	Mid greyish blue sandy clay. Colluvial? Soft and smooth to dig with some stickiness.	2.30-2.50+

Testpit TP 221	Length 2.5m	Width 0.70m	Depth 1.50m
Context Number	**Interpretative Category**	**Description**	**Depth BGL**
22101	Topsoil	Dark brown sandy loamy ploughsoil. Occasion small and medium sub-angular flints. Flecks of CBM.	0-0.30
22102	Subsoil	Mid brown sandy silt clay. Rare small and medium sub-angular flints.	0.30-0.50
22103	Natural	Mid grey brown sandy silt clay.	0.50-0.70
22104	Natural	Mid brown sandy silt clay.	0.70-1
22105	Natural	Ragstone / limestone in grey silt.	1-1.5+

Testpit TP 222	Length 2.5m	Width 0.70m	Depth 1.60m
Context Number	**Interpretative Category**	**Description**	**Depth BGL**
22201	Topsoil	Dark brown sandy loam. Rare small sub-angular flints, rooting. Ploughsoil.	0-0.25
22202	Subsoil	Mid to light brown sandy silt loam.	0.25-0.40
22203	Natural	Light greyish sandy silt with abundant ragstone / limestone	0.40-0.55
22204	Natural	Greenish sand silt with abundant ragstone and limestone.	0.55-1.40
22205	Natural	Blue sandy clay. Firm. Occasional large ragstone.	1.40-1.60+

Borehole BH206	Length 0.50m	Width 0.40m	Depth 6.70m

Context Number	Interpretative Category	Description	Depth BGL
20601	Topsoil	Dark brownish grey silty sandy loam. Abundant grass rooting. Former horse racecourse grass running surface. Diffuses into layer below.	0-0.20
20602	Subsoil	Mid grey brown sandy silt loam. Common grass rooting. Diffuses into layers above and below.	0.20-0.30
20603	Deliberate Back fill	Mid grey brown sandy silt loam with abundant brick fragments. Possible deposited as a base to give horse racecourse racetrack a well-drained and firm surface? Probably the same as 20604 below?	0.30-0.40
20604	Made ground	Mid grey brown sand silt. Firm compaction. Occasional chalk flecks. Brick fragments at approx. 0.50-0.70m BGL. Common sub angular flints. Maybe associated with Westenhanger Castle gardens as per Oxford Archaeology evaluation?	0.40-1.1
20605	Natural	Mid grey brown clay. Occasional small to medium sub angular flints. Colluvium?	1.1-1.2
20606	Natural	Mid grey brown clay. Sterile. Very similar to 20605 above though. Diffuses into layer above	1.2-2.2
20607	Natural	Mid grey blue sandy clay with occasional yellow streaks. Colluvial deposit?	2.2-3.5
20608	Natural	Mid grey blue sandy clay. Colluvial deposit?	3.5-6.7+

Borehole BH207	Length 0.50m	Width 0.40m	Depth 4.20m

Context Number	Interpretative Category	Description	Depth BGL
20701	Topsoil	Mid brown sandy silt loam with grass rooting	0-0.30
20702	Subsoil	Mid to light brown sandy silt loam. Rare chalk fragments. Diffuses into layers above and below.	0.30-0.40
20703	Natural	Mid brown sandy clay. Sterile and homogeneous. Diffuses into layers above and below. Colluvial?	0.40-1
20704	Natural	Mid brown sandy clay. More sandy then 20703 above. Diffuses with no clear horizon into 20705 below. Colluvial?	1-1.2
20705	Natural	Mid grey with rare brown mottles sandy silty clay. Rare small gravels. Colluvial?	1.2-2.2
20706	Natural	Mid grey sandy clay. Relatively firm compaction. Rare shell fragments. Early Holocene colluvial deposit?	2.2-4.2+

Geoarchaeological specialist monitoring

Site:	Otterpool Park, Lympne, Kent		**Borehole ID:**	BH 201	**Comments:**
Site code:	211110				
Level (top):	97.22 m aOD				
		Depth:	5.00 m		

Depth		**Sediment description**	**Interpretation**	**Context**	**Samples < >**	**Lithic finds**	**Enviro remains**
Mbgl	**mOD**						
0.00−0.30	97.22−96.92	Medium brown slightly clayey sandy (very fine) silt; clast free; rooted; loose; unconsolidated –ABRUPT–	TOPSOIL	BH 20101	-	-	-
0.30−0.90	96.92−96.32	Dark orange brown silty very fine sand; becoming less sandy and siltier with depth; occasional coarse sub-angular chert clasts; rooted; carbonate streaks; moderately compact; unconsolidated –DIFFUSE –	COLLUVIUM	BH 20102	-	-	-
0.90−1.70	96.32-95.52	Light yellowish brown silty clay with medium orange brown mottles; clast free; structureless; moderately compact; moderately consolidated –ABRUPT–	COLLUVIUM	BH 20103	-	-	-
1.70−2.35	95.52−94.87	Light orange brown silty clay; clast free; structureless' compact; moderately consolidated –ABRUPT–	HEAD-BRICKEARTH	BH 20104	-	-	-
2.35−2.70	94.87−94.52	Orange brown clayey very fine silty sand; clast free; structureless; moderately compact; unconsolidated –ABRUPT–	SANDY HEAD-BRICKEARTH	BH 20105	-	-	-
2.70−3.10	94.52−94.12	Light yellow to dark orange brown slightly clayey fine sand; frequent Fe staining; clast free; structureless; moderately compact; moderately consolidated –DIFFUSE–	SANDY HEAD-BRICKEARTH	BH 20106	-	-	-
3.10−3.50	94.12−93.72	Light yellow very fine sandy clay silt; clast free; structureless; moderately compact; moderately consolidated –UNSEEN–	SANDY HEAD-BRICKEARTH	BH 20107	-	-	-

Site:	Otterpool Park, Lympne, Kent		Borehole ID:	BH 201	Comments:
Site code:	211110				
Level (top):	97.22 m aOD				
		Depth:	5.00 m		

Depth		Sediment description	Interpretation	Context	Samples < >	Lithic finds	Enviro remains
Mbgl	mOD						
3.50−+5.00	93.72−92.22	From ~3.50m light grey cemented sandstone bedrock reached; limited recovered and mixed with (BH 20108).	HYTHE BEDS	BH 20108	-	-	-

Site:	Otterpool Park, Lympne, Kent		Borehole ID:	BH 202	Comments:
Site code:	211110				
Level (top):	97.15 m aOD				
		Depth:	10.50 m		

Depth		Sediment description	Interpretation	Context	Samples < >	Lithic finds	Enviro remains
Mbgl	mOD						
0.00−0.20	97.15−96.95	Light brown slightly sandy, slightly clayey silt; clast free; structureless; loose; unconsolidated –ABRUPT–	TOPSOIL	BH 20201	-	-	-
0.20−0.40	96.95−96.75	Light orange clay silt; clast free; structureless; rooted; moderately compact; unconsolidated –NOT SEEN–	SUBSOIL	BH 20202	-	-	-
0.40−1.20	96.75−95.95	Light orange brown silty clay; becoming increasingly clayey with depth; very frequent medium-very coarse angular light grey cemented sandstone clasts' moderate compact; unconsolidated –ABRUPT–	COLLUVIUM/ SLOPE WASH	BH 20203	-	-	-
1.20−1.57	95.95−95.58	Light yellowish brown slightly sandy (fine) silty clay; clast free; compact; moderately consolidated –SHARP–	HEAD-BRICKEARTH	BH 20204	-	-	-
1.57−+10.50	95.58−86.65	Light grey cemented sandstone	HYTHE BEDS	BH 20205	-	-	-

Site:	Otterpool Park, Lympne, Kent		Borehole ID:	WS 201	Comments:
Site code:	211110				
Level (top):	102.85 m aOD				
		Depth:	3.50 m		

Depth		Sediment description	Interpretation	Context	Samples < >	Lithic finds	Enviro remains
Mbgl	mOD						
0.00–0.20	102.85–102.65	Medium brown slightly sandy (fine), silty clay; frequent fine-coarse sub-angular flint and angular light grey cemented sandstone clasts; slate fragments; loose; unconsolidated –DIFFUSE–	TOPSOIL	WS 20101	-	-	-
0.20–0.40	102.65–102.45	Light orange brown slightly sandy (very fine) clay silt; occasional medium-coarse brick and concrete fragments; compact; unconsolidated –UNSEEN –	MADE GROUND	WS 20102	-	-	-
0.40–0.80	102.45–102.05	Light orange brown very fine sandy clay silt; very occasional medium sub-angular chert clasts; compact; moderately consolidated –DIFFUSE–	COLLUVIUM	WS 20103	-	-	-
0.80–2.61	102.05–100.24	Light orange brown very fine sandy silty clay; clast free; frequent Mn. flecks; very fine yellow silt lenses at 1.00m and from 1.50m; structures' moderately compact; moderately consolidated –ABRUPT–	HEAD-BRICKEARTH	WS 20104	-	-	-
2.61–2.82	100.24–100.03	Light yellow fine sandy clay silt; frequent Mn flecks; structureless; moderately compact; moderately consolidated –ABRUPT–	SANDY HEAD-BRICKEARTH	WS 20105	-	-	-
2.82–3.00	100.03–99.85	Grey brown, orange brown and yellow slightly silty clay; sub-horizontally laminated; dark brown clay rich horizon (2cm) t base; clast free; moderately compact; moderately consolidated –SHARP–	HEAD-BRICKEARTH	WS 20106	-	-	-
3.00–+3.50	99.85–99.35	Light grey demented sandstone	HYTHE BEDS	WS 20107	-	-	-

Site:	Otterpool Park, Lympne, Kent		Test Pit ID:	TP 206	Comments:
Site code:	211110				
Level (top):	95.00 m aOD	Length:	3.00 m		
		Width:	0.70 m		
		Depth:	0.70 m		

Depth		Sediment description	Interpretation	Context	Samples < >	Lithic finds	Enviro remains
Mbgl	mOD						
0.00–0.20	95.00–94.80	Made ground –ABRUPT–	MADE GROUND	20601	-	-	-
0.20–0.50	94.80–94.50	Medium brown silty clay; frequent medium-very coarse angular grey cemented sandstone clasts; structureless; loose; unconsolidated –ABRUPT –	TOPSOIL	20602	-	-	-
0.50–0.70	94.50–94.30	Medium-very coarse angular and sub-angular grey cemented sandstone gravel in yellowish grey slightly very fine sandy clay-silt matrix; poorly sorted; structureless; loose; unconsolidated –SHARP–	GRAVELLY HEAD / WEATHERED BEDROCK	20603	-	-	-
+0.70	+94.30	Cemented light grey sandstone	HYTHE BEDS	20604	-	-	-

Site:	Otterpool Park, Lympne, Kent		Test Pit ID:	TP 223	Comments:
Site code:	211110				
Level (top):	105.62 m aOD	Length:	2.70 m		
		Width:	0.70 m		
		Depth:	2.60 m		

Depth		Sediment description	Interpretation	Context	Samples < >	Lithic finds	Enviro remains
Mbgl	mOD						
0.00–0.25	105.62–105.37	Medium brown silty clay silt; occasional medium-coarse angular light grey cemented sandstone clasts; loose; unconsolidated –DIFFUSE–	TOPSOIL	22301	-	-	-
0.25–0.50	105.37–105.12	Light orange brown slightly clay silt with occasional medium-very coarse angular light grey cemented sandstone clasts; moderately compact; unconsolidated –DIFFUSE –	COLLUVIUM	22302	-	-	-

Site:	Otterpool Park, Lympne, Kent		Test Pit ID:	TP 223	Comments:
Site code:	211110				
Level (top):	105.62 m aOD	Length:	2.70 m		
		Width:	0.70 m		
		Depth:	2.60 m		

Depth		Sediment description	Interpretation	Context	Samples < >	Lithic finds	Enviro remains
Mbgl	mOD						
0.50−1.00	105.12−104.62	Medium orange slightly clayey silt; very occasional fine-medium angular light grey cemented sandstone clasts; moderately compact; unconsolidated –DIFFUSE–	COLLUVIUM	22303	-	1 flint flake (0.60m)	-
1.00−1.60	104.62−104.02	Medium brown slightly silty clay; increasingly clayey with depth; from 1.50m – 1.60m medium-coarse sub-angular iron stained flint clasts with frequent thermal scars (reworked from Tertiary deposit?); occasion wood fragments at contact with (22305); compact; moderately consolidated –ABRUPT–	SLOPE WASH WITH PONDING	22304	22302	-	-
1.60−+2.60	104.02−+103.02	Light brown slightly clayey, very fine sandy silt. Moderately frequent medium orange Fe staining and Fe cement concretions; clast free; moderately compact; moderately consolidated	HEAD-BRICKEARTH	22305	22301	-	-

Site:	Otterpool Park, Lympne, Kent		Test Pit ID:	TP 226	Comments:
Site code:	211110				
Level (top):	96.90 m aOD	Length:	2.40 m		
		Width:	0.70 m		
		Depth:	0.45 m		

Depth		Sediment description	Interpretation	Context	Samples < >	Lithic finds	Enviro remains
Mbgl	mOD						
0.00–0.25	96.90–96.65	Light brown slightly silty clay with very frequent medium-very coarse angular light grey cemented sandstone and ironstone clasts; loose; unconsolidated –SHARP–	TOPSOIL	22601	-	-	-
+0.25	+96.65	Light grey demented sandstone	HYTHE BEDS	22602	-	-	-

Site:	Otterpool Park, Lympne, Kent		Test Pit ID:	TP 228	Comments:
Site code:	211110				
Level (top):	100.27 m aOD	Length:	2.80 m		
		Width:	0.70 m		
		Depth:	1.70 m		

Depth		Sediment description	Interpretation	Context	Samples < >	Lithic finds	Enviro remains
Mbgl	mOD						
0.00–0.40	100.27–99.87	Medium brown silty clay; moderately frequent medium-course sub-angular iron stained flint clasts; occasional medium light grey cemented sandstone clasts; structureless; loose; unconsolidated –ABRUPT–	TOPSOIL	22801	-	-	-
0.40–0.60	99.87–99.67	Orange brown slightly sandy (fine) clay-silt; extensive brick and concrete rubble; moderately frequent medium-very coarse angular light grey cemented sandstone clasts (some Fe stained); structureless; loose; unconsolidated –SHARP –	MADE GROUND	22802	-	-	-

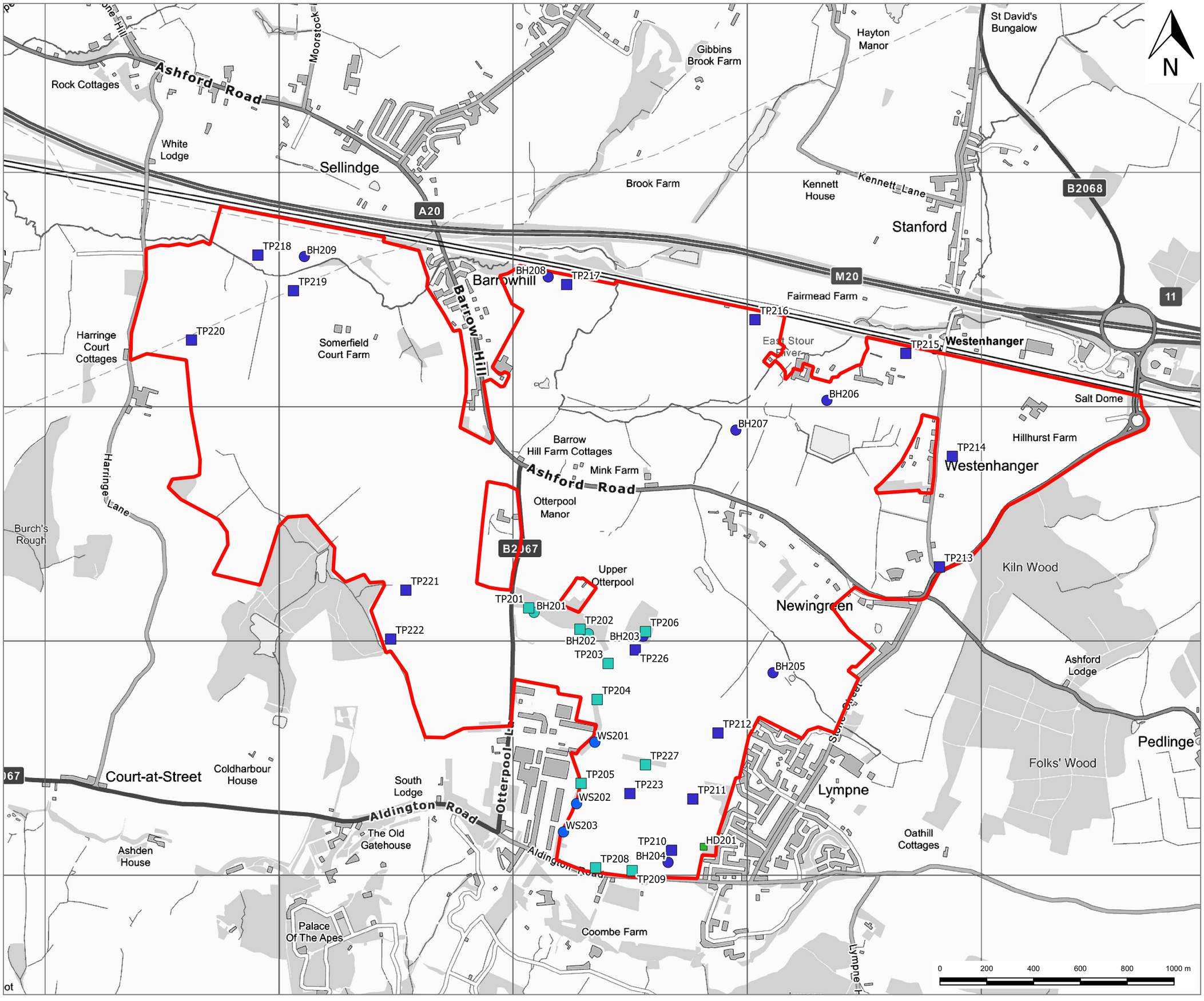
Site:	Otterpool Park, Lympne, Kent		Test Pit ID:	TP 228	Comments:
Site code:	211110				
Level (top):	100.27 m aOD	Length:	2.80 m		
		Width:	0.70 m		
		Depth:	1.70 m		

Depth		Sediment description	Interpretation	Context	Samples < >	Lithic finds	Enviro remains
Mbgl	mOD						
0.60−1.15	99.67−88.12	Light yellowish brown slightly clayey silt; frequent rooting; carbonate streaks; structureless; very occasional sub-angular limestone clasts; occasional sub-angular medium-very coarse iron stone clasts at base; moderately compact; unconsolidated –SHARP–	COLLUVIUM	22803	-	-)	-
1.15−+1.70	88.12−87.57	Cemented light grey sandstone	HYTHE BEDS	22804	-	-	-

Site:	Otterpool Park, Lympne, Kent		Test Pit ID:	HD 201	Comments:
Site code:	211110				
Level (top):	104.45 m aOD	Length:	0.30 m		
		Width:	0.30 m		
		Depth:	1.00 m		

Depth		Sediment description	Interpretation	Context	Samples < >	Lithic finds	Enviro remains
Mbgl	mOD						
0.00−0.20	104.45−104.25	Humic leaf litter –ABRUPT–		HD 20101	-	-	-
0.20−0.70	104.25−103.75	Light yellow-brown slightly sandy clay silt; moderately frequent fine-coarse light grey cemented sandstone angular clasts; occasional medium sub-angular flint clasts; structureless; loose unconsolidated –ABRUPT –	?RE-DEPOSITED	HD 20102	-	-	-
0.70−+1.00	103.75−+103.45	Mixed medium brown, medium orange and light yellowish brown slightly silty clay; moderately frequent fine-very coarse sub-angular flint clasts; compact; unconsolidated	?RE-DEPOSITED	HD 20103	-	-	-

Appendix 2 Location of geoenvironmental and drainage ground investigation works



Legend

- 2018 Site Boundary
- Phase 2 Arcadis Boreholes
  - Drainage
  - Geoenv
- Phase 2 Arcadis Trial Pits
  - Drainage
  - Geoenv
- Phase 2 Arcadis Window Samples

Title:
Phase 2 Site Investigation -
Proposed Exploratory Hole Location Plan

Site:
Otterpool Park

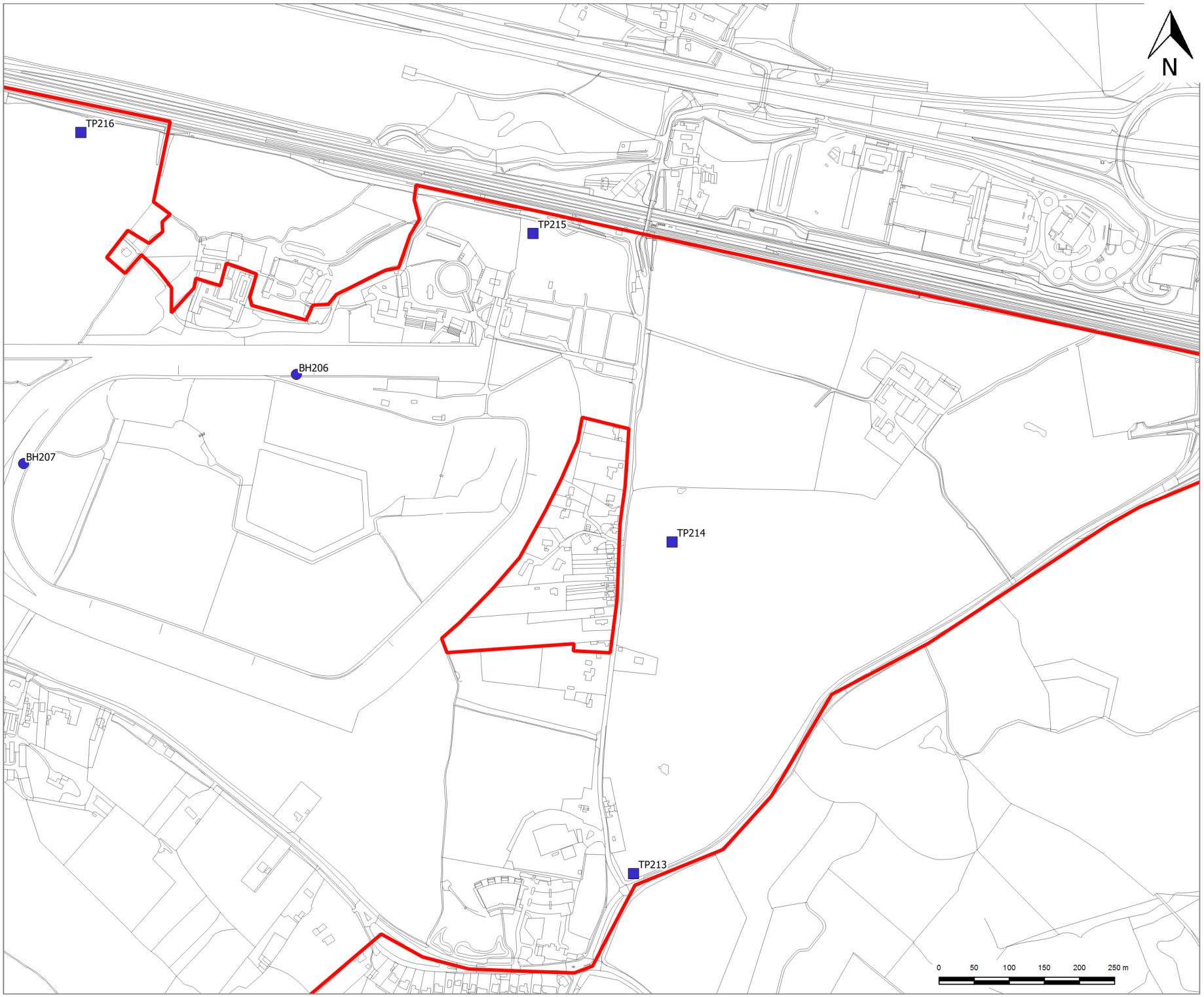
Client:
Shepway District Council

Project:
10011914

[DRAFT]

Date: 05/07/2018
Drawn By: JAR
DRG No: [DRAFT]
Scale at A3 Page Size: 1:15,000

ARCADIS Design & Consultancy for natural and built assets



Legend

- 2018 Site Boundary
- Phase 2 Arcadis Boreholes
  - Drainage
  - Geoenv
- Phase 2 Arcadis Trial Pits
  - Drainage
  - Geoenv
- Phase 2 Arcadis Window Samples

Title:
Phase 2 Site Investigation -
Proposed Exploratory Hole Location Plan

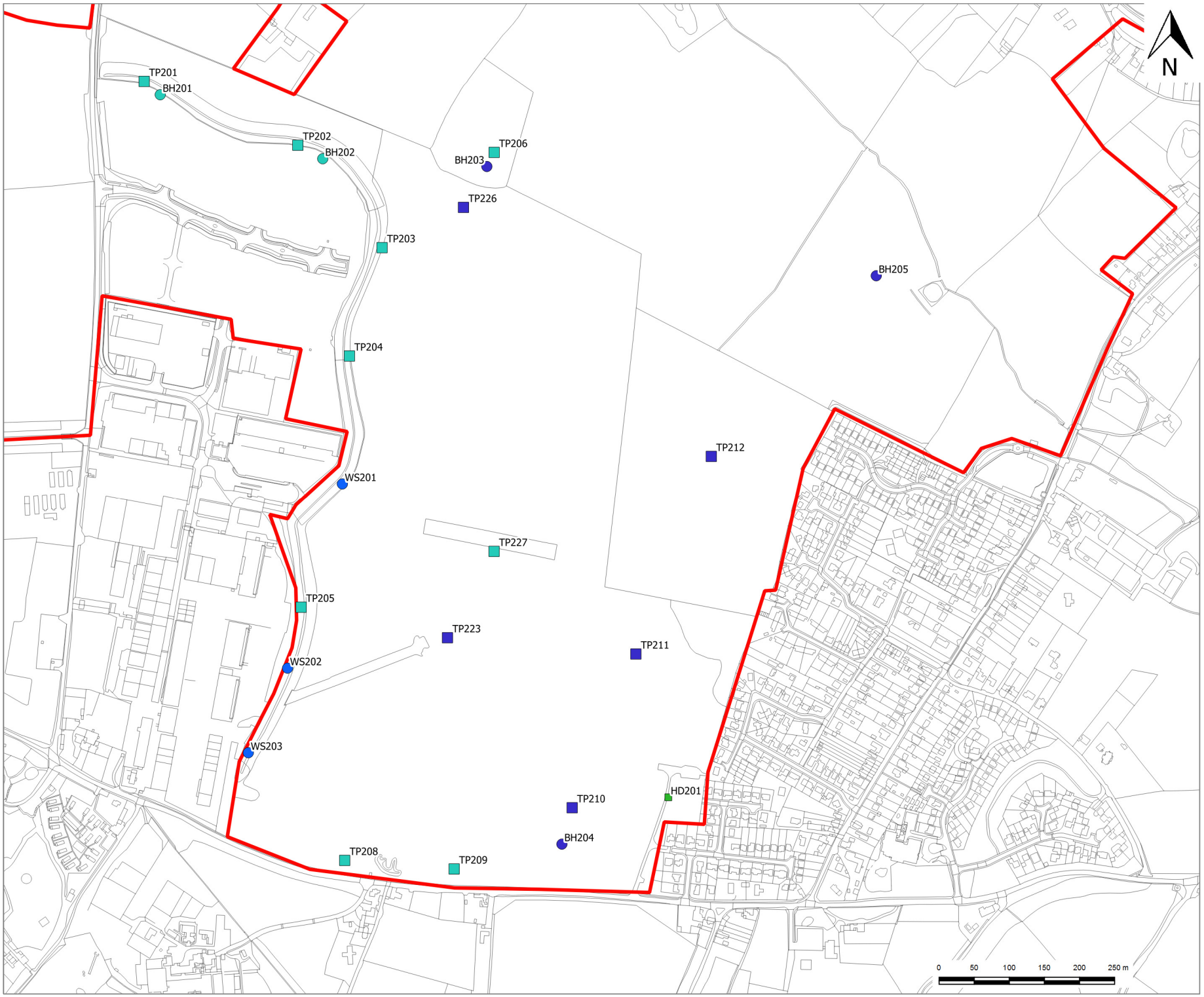
Site:
Otterpool Park

Client:
Shepway District Council

Project:	**[DRAFT]**
10011914	

Date: 05/07/2018
Drawn By: JAR
DRG No: [DRAFT]
Scale at A3 Page Size: 1:15,000

ARCADIS Design & Consultancy for natural and built assets



Legend

- 2018 Site Boundary

Phase 2 Arcadis Boreholes

- Drainage
- Geoenv

Phase 2 Arcadis Trial Pits

- Drainage
- Geoenv
- Phase 2 Arcadis Window Samples

Title:
Phase 2 Site Investigation -
Proposed Exploratory Hole Location Plan

Site:
Otterpool Park

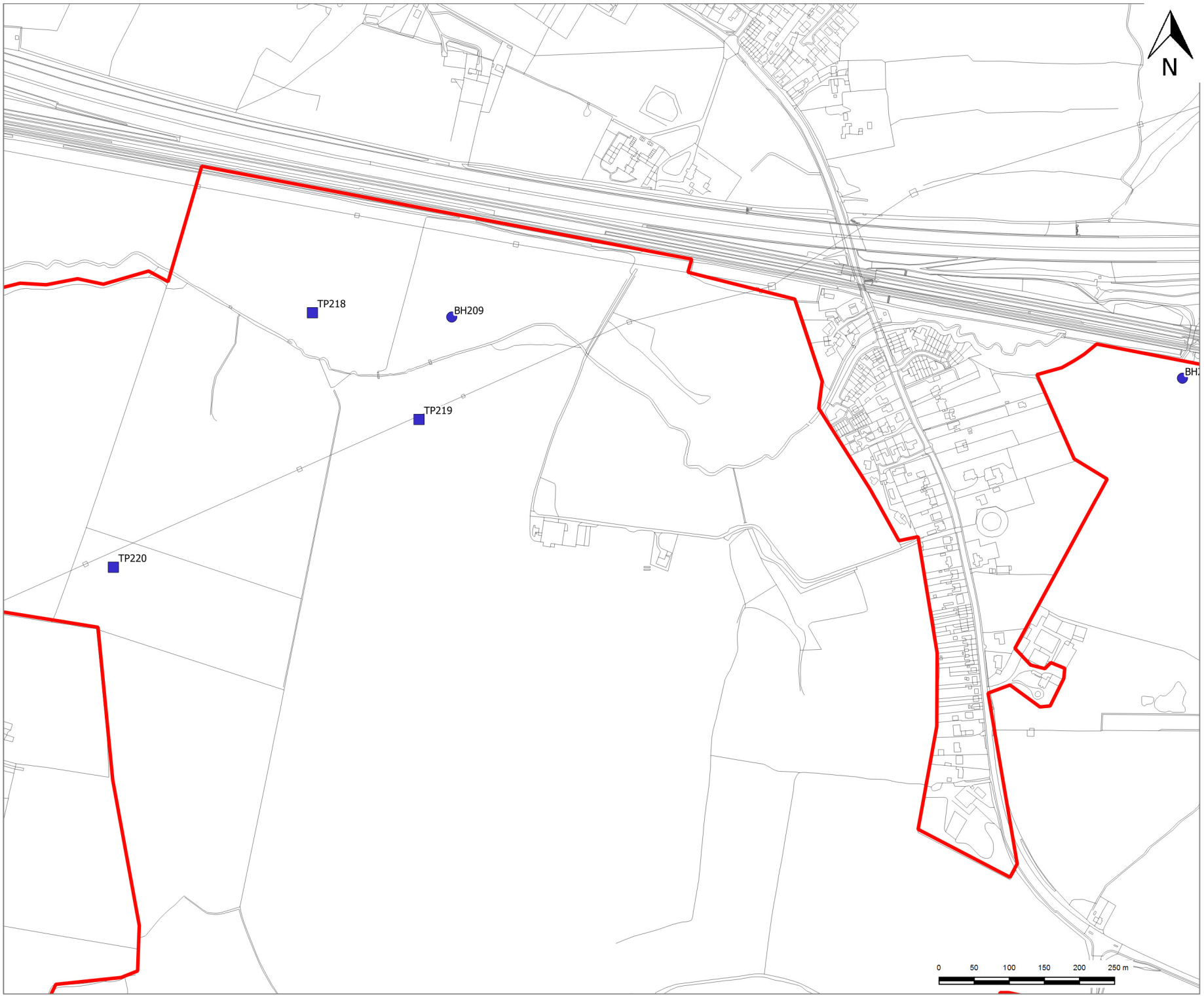
Client:
Shepway District Council

Project:
10011914

[DRAFT]

Date: 05/07/2018
Drawn By: JAR
DRG No: [DRAFT]
Scale at A3 Page Size: 1:15,000

ARCADIS Design & Consultancy for natural and built assets



Legend

- 2018 Site Boundary

Phase 2 Arcadis Boreholes

- Drainage
- Geoenv

Phase 2 Arcadis Trial Pits

- Drainage
- Geoenv

- Phase 2 Arcadis Window Samples

Title:
Phase 2 Site Investigation -
Proposed Exploratory Hole Location Plan

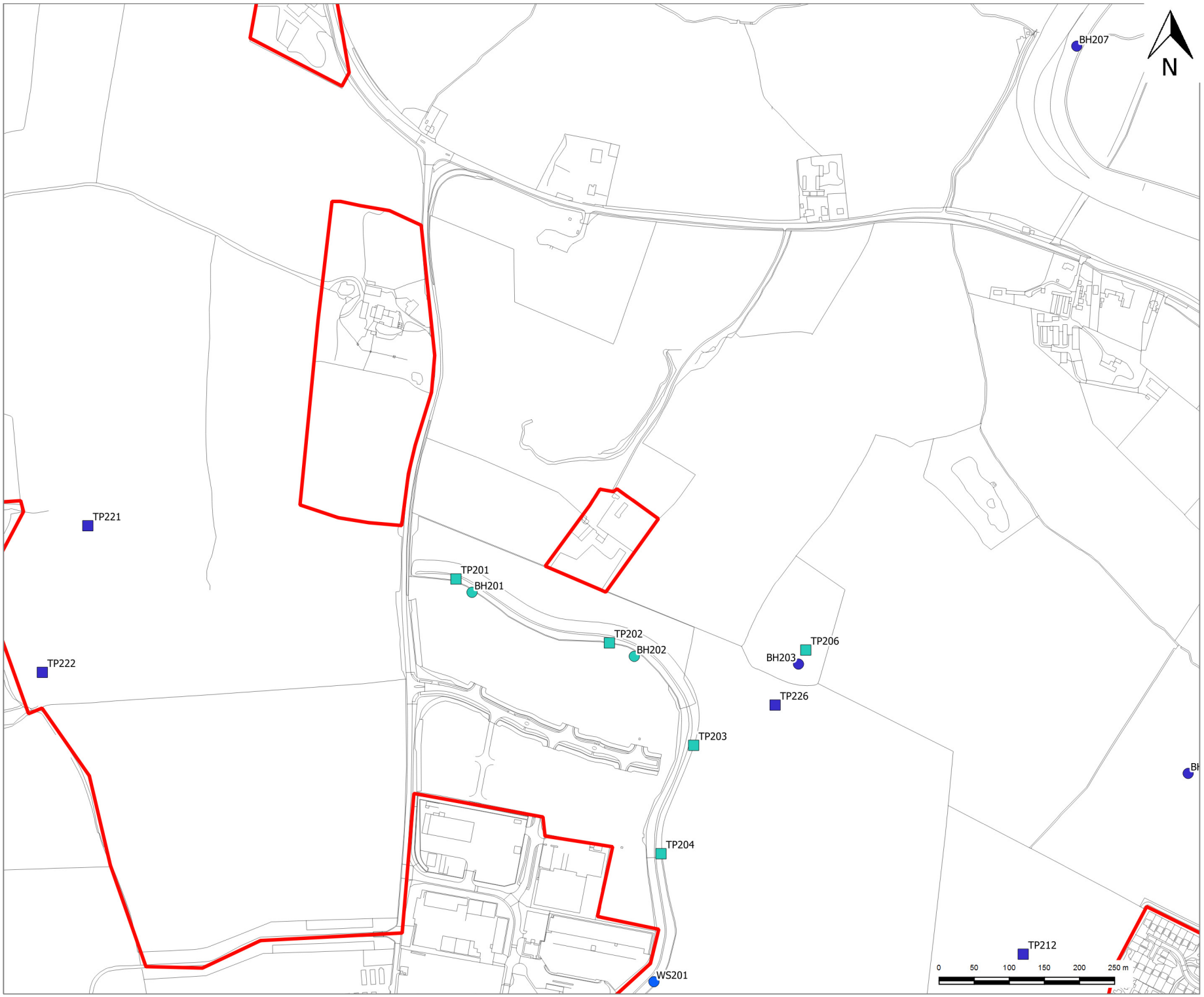
Site:
Otterpool Park

Client:
Shepway District Council

Project:	**[DRAFT]**
10011914	

Date: 05/07/2018
Drawn By: JAR
DRG No: [DRAFT]
Scale at A3 Page Size: 1:15,000

ARCADIS Design & Consultancy for natural and built assets



Legend

- 2018 Site Boundary
- Phase 2 Arcadis Boreholes
  - Drainage
  - Geoenv
- Phase 2 Arcadis Trial Pits
  - Drainage
  - Geoenv
- Phase 2 Arcadis Window Samples

Title:
Phase 2 Site Investigation -
Proposed Exploratory Hole Location Plan

Site:
Otterpool Park

Client:
Shepway District Council

Project:
10011914

[DRAFT]

Date: 05/07/2018
Drawn By: JAR
DRG No: [DRAFT]
Scale at A3 Page Size: 1:15,000

ARCADIS Design & Consultancy for natural and built assets

Appendix 3 OASIS form

OASIS ID: wessexar1-334474

Project details

Project name	Otterpool Park
Short description of the project	Wessex Archaeology was commissioned by Arcadis Consulting (UK) Limited, on behalf of Folkestone and Hythe District Council and Cozumel Estates, to undertake an archaeological watching brief during geo-environmental and drainage investigation works, centred on NGR 611239, 136507. The watching brief identified deposits of Holocene colluvium overlaying Pleistocene head-brickearth across large areas of the site, although the thickness of these deposits varies considerably. Within the floodplain of the East Stour River Holocene alluvial deposits, which in places overlie Pleistocene Head-Brickearth, were identified. A flint flake, identified as a soft hammer flake was recovered from the colluvium of test pit TP223, but the flake itself is not chronologically diagnostic. Within borehole BH206, located south of Westenhanger Castle, brick fragments were observed in the borehole spoil which have the potential to be associated either with the walled garden of Westenhanger Castle or related to the construction of the Folkestone horse racing course, but this hypothesis is limited within the confines a borehole observation.
Project dates	Start: 15-08-2018 End: 06-09-2018
Previous/future work	Yes / Yes
Any associated project reference codes	211110 - Contracting Unit No.
Type of project	Recording project
Investigation type	"Watching Brief"
Prompt	Planning agreement (Section 106 or 52)

Project location

Country	England
Site location	KENT SHEPWAY LYMPNE Otterpool Park
Postcode	CT5 3AT
Study area	706.5 Hectares
Site coordinates	TR 11239 36507 51.088287244442 1.016724947493 51 05 17 N 001 01 00 E Point

Project creators

Name of Organisation	Wessex Archaeology
Project brief originator	Arcadis Consulting (UK) Limited
Project design originator	Wessex Archaeology
Project director/manager	Sarah Barrowman

Project supervisor	Sarah Baker
Type of sponsor/funding body	Archaeological Consultant
Name of sponsor/funding body	Arcadis Consulting (UK) Limited

Project archives

Physical Archive Exists?	No
Digital Archive ID	211110
Digital Media available	"Images raster / digital photography","Text"
Paper Archive ID	211110
Paper Media available	"Context sheet","Diary","Drawing","Miscellaneous Material","Report","Unpublished Text","Unspecified Archive"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Otterpool Park, Lympe, Kent: Archaeological Watching Brief
Author(s)/Editor(s)	Denyer, M
Other bibliographic details	211110.3
Date	2018
Issuer or publisher	Wessex Archaeology
Place of issue or publication	Maidstone
Description	Report detailing the results of an archaeological watching brief. Grey Literature Report

Entered by	Andrew Souter (a.souter@wessexarch.co.uk)
Entered on	21 November 2018

Site Boundary

Coordinate system:
OSGB36 (OSTN15/OSGM15)

Date:	07/08/2018
Revision No.:	0
Scale:	1:100,000
Illustrator:	ALS
Path:	R:\PROJECTS\211110\

Graphics_Office\Rep figs\WB\2018_10_15\211110_WB

Site location

Figure 1

Plate 1: Test Pit 219, relocated 5m west of planned location in the foreground

Plate 2: Test Pit TP211, viewed from the northeast

Date:	15/10/2018	Revision Number:	0
Scale:	N/A	Illustrator:	ALS
Path:	R:\PROJECTS\211110\Graphics_Office\Rep Figs\WB\2018_10_15\211110_Plates.cdr		

Plate 3: Borehole BH207 at 1.2m below ground level

Plate 4: Working shot of Borehole BH207

Date:	15/10/2018	Revision Number:	0
Scale:	N/A	Illustrator:	ALS
Path:	R:\PROJECTS\211110\Graphics_Office\Rep Figs\WB\2018_10_15\211110_Plates.cdr		

Plate 5: Geoarchaeological specialist monitoring of test pits in high potential paleoarchaeological area

Plate 6: Phase I Sandy Head-Brickearth deposit

Date:	15/10/2018	Revision Number:	0
Scale:	N/A	Illustrator:	ALS
Path:	R:\PROJECTS\211110\Graphics_Office\Rep Figs\WB\2018_10_15\211110_Plates.cdr		

Plate 7: Brick fragments in spoil from Borehole BH206

Date:	15/10/2018	Revision Number:	0
Scale:	N/A	Illustrator:	ALS
Path:	R:\PROJECTS\211110\Graphics_Office\Rep Figs\WB\2018_10_15\211110_Plates.cdr		

Wessex Archaeology Ltd registered office Portway House, Old Sarum Park, Salisbury, Wiltshire SP4 6EB
Tel: 01722 326867 Fax: 01722 337562 info@wessexarch.co.uk www.wessexarch.co.uk

FS 606559