Archaeological Desk-Based Assessment in advance of the Proposed Residential Development at Kilnmead, Crawley, West Sussex RH10 8BQ

NGR: 527100 137000



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SWAT. ARCHAEOLOGY

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1 SUMMARY

Swale & Thames Survey Company (SWAT Archaeology) has been commissioned by Osborne on behalf of Crawley Borough Council to carry out an archaeological deskbased assessment in advance of the proposed development at Kilnmead, Crawley, West Sussex as part of the planning application submitted on behalf of HNW Architects.

This Desk Based Assessment examines the wide variety of archaeological data held by West Sussex County Council and other sources.

Based on this data the potential for archaeological sites either on or in the near vicinity of the proposed development can be summarised as:

- Prehistoric: Low
- Iron Age: Low
- Romano-British: Low
- Anglo-Saxon: Low
- Medieval: Medium
- Post-medieval: High
- Modern: High

The Desk Based Assessment concludes that:

• The site has **medium** potential for any archaeological discoveries.

The PDA is located in the south of England, in the Weald, between the North and South Downs, set in the northeastern corner of West Sussex, in the town and borough of Crawley. 'Kilnmead' (527100 137000) is a polygonal car park of some 1.19 acres with access gained from the Kilnmead Road to the northeast. Characterised by Sussex County council as an area of industry in a post medieval to modern setting, surrounded by settlement, that has been subject to suburban expansion, a narrow swathe of regenerated woodland and a small triangular area of horticulture in the form of allotments are located in the northeast and a designed landscape area of formal parkland, known as the Memorial Gardens is to the south. The medieval historic core of the town can be found to the southwest, tapering northwards. The landscape is predominantly mixed residential styles interspersed with commercial shopping and industry. The 'Dyers Almshouse's to the west is the most dominant feature along with the army reserve centre and the Boulevard Road.

2 INTRODUCTION

SWAT Archaeology has been commissioned by Osborne on behalf of Crawley Borough Council to carry out an Archaeological Desk-Based Assessment to supplement a planning application for the proposed residential development at Kilnmead, Crawley, West Sussex (Figure 1). The report has accessed various sources of information to identify any known heritage assets, which may be located within the vicinity of the Proposed Development Area. The PDA is centered on National Grid Reference TQ 27118 37053.

Archaeological investigations, both recent and historic have been studied and the information from these investigations has been incorporated in the assessment.

The site is 200m east of an Archaeological Notification Area (DWS8671) that is focused on the medieval town and tapers northwards. It relates to the c.1200 settlement and the planned town that was built around the London to Shoreham road and the expansion following the arrival of the railway in 1848.

Excavations in 1997 on the London Road (EWS1208) revealed late medieval ironworking area complete with several hearths, a sequence of associated floors, a structure though to be a smithy and significant quantities of smelting and forging slag.

In 2004 further excavations at Pegler Way (EWS967) uncovered a medieval industrial site that appeared to be connected with the process of turning flax in to linen. Iron slag, pottery dating from 12th-14th century and a wooden scotching knife were recovered.

However, a watching brief at 101 High Street in 1994 (EWS759) and 94 High Street in 2009 (EWS1036) produced a negative result.

This report is a desk-based appraisal from known cartographic, photographic and archaeological sources and is a research led statement on the archaeological potential of the proposed development.

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

2.1 Geology and Topography

The Geological Survey of Great Britain (1:50,000) indicates that the site's bedrock geology is formed of Upper Tunbridge Wells Sand – Sandstone and Mudstone. Sedimentary Bedrock formed approximately 134 to 140 million years ago in the Cretaceous Period in a local environment previously dominated by swamps, estuaries and deltas. These rocks were formed in marginal coastal plains with lakes and swamps periodically inundated by the sea; or estuaries and deltas, and shallow seas. There are no recorded superficial deposits at the PDA (BGS 1:50,000 digital).

The PDA's sits at an average height of 239.5ft (73m) AOD.

2.2 Planning Background

The National Planning Policy Framework (March 2012) Policy 12 is the relevant policy for the historic environment:

2.2.1 Conserving and Enhancing the Historic Environment

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

• the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;

• the wider social, cultural, economic and environmental benefits that conservation of the historic environment can bring;

• the desirability of new development making a positive contribution to local character and distinctiveness; and

• opportunities to draw on the contribution made by the historic environment to the character of a place.

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

Regional Policies

The Crawley Local Plan has heritage policies, in particular Policy CH 12: Heritage Assets "All development should ensure that Crawley's designated and non

designated heritage assets are treated as a finite resource and that their key features or significance are not lost as a result of development".

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

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

2.3 The Proposed Development

The proposed development will comprise of thirty-six residential properties and associated landscaping and access roads. (Figure.3)

2.4 Project Constraints

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

3 AIMS AND OBJECTIVES

3.1 The Desk-Based Assessment was commissioned by Osborne on behalf of Crawley Borough Council in order to supplement a planning application for a residential development at Kilnmead, Crawley, West Sussex, RH10 8BQ (527100 137000), to establish the potential for archaeological features and deposits.

3.2 Desktop Study – Institute for Archaeologists (revised 2011)

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

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

4 METHODOLOGY

4.1 Desk-Based Assessment

4.1.1 Archaeological Databases

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

4.1.2 Historical Documents

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

4.1.3 Cartographic and Pictorial Documents

A cartographic and pictorial document search was undertaken during this assessment. Research was carried out using resources offered by West Sussex County Council, the Internet, Historic England and Ordnance Survey Historical mapping (Figs. 4-12).

Map Regression 1874 - 1995

A map regression exercise on maps was carried out on the proposed development area and has shown that the PDA has historically been open land since at least 1874, which was later turned into a car park.

Earlier maps of West Sussex have been consulted from the John Speed map of 1610 and the Crawley Tithe map of 1839. But the detail on these earlier maps is of such a small scale as not to be of use (front cover John Speed 1610 detail).

From the 1840s the Ordnance Survey started work on the Great Britain 'County Series', modelled on the earlier Ireland survey. A start was made on mapping the whole country, county by county, at six inches to the mile (1:10,560). From 1854, to meet requirements for greater detail, including land-parcel numbers in rural areas and accompanying information, cultivated and inhabited areas were mapped at 1:2500 (25.344 inches to the mile), at first parish by parish, with blank space beyond the parish boundary, and later continuously. (Figs. 4- 12)

In the OS Map of 1874 the PDA, field 50, is set within a narrow strip of land that is bounded to the west by the Parliamentary Boundary for the Borough of New Shoreham that follows the line of the High Street and the Parliamentary, County, Divisional & Union Boundary to the east that is paralleled by a footpath. The landscape is one of tree-lined fields that surround a settlement to the south that fronts the High Street, of which the dominant feature is the Glebe and the Rectory. The Glebe is a large estate of several buildings, paddocks, ornamental gardens, a croquet ground and a Summer House. A long driveway leads to the Rectory that is itself set within ornamental gardens and an orchard. Beyond this are small buildings and smallholdings and the Brewery. Continuing northwards along the High Street is a second area of settlement that is made up of the Gas Works, the Sun Inn and Albert Cottages. Between these two settlement areas a Mile Post indicates that London is 29 miles and Brighton is 23 miles (Fig. 4).

In the OS Map of 1897 the PDA is now field 44 (4.920a.). The Rectory driveway has been diverted south and the small building at its entrance is named the Lodge. The Brewery is no longer marked. Aside from small changes to the size and layout of some of the buildings the area remains unchanged (Fig. 5).

In the OS Map of 1910 there have been few changes with the exception that the Gas Works is now disused (Fig. 6).

In the OS Map of 1932, there has been some development in the fields around the Gas Works and continuing southwards along the High Street a Victoria Hall can be found on the east side (Fig. 7).

In the OS Map of 1937 an access road from the High Street has been installed between Victoria Hall and the new Omnibus Depot (LPTB) leading to a turning point on the site of the PDA. A line of small semi-detached dwellings has sprung up to the south of the new access road and a T-road pointing north is in readiness for further development. A nursery is now in situ in the bordering field to the north and the settlement around the Gas Works, which has a new silo, has increased around the new development at Cobbler Crescent. Electric pylons and a telephone box testify to changes in modernisation (Fig. 8).

In the OS Map of 1946 the development of houses has been extended around the turn point of Northgate Road sited on the PDA and have gardens and small outbuildings with a footpath that leads to a Laundry. The T-road leads to Dyers Almshouses, belonging to the Worshipful Company of Dyers, a London Livery Company and the Nursery has grown to double its previous size (Fig. 9).

In the OS Map of 1959-1961 the landscape around the PDA has entirely changed and is now the subject of significant suburban expansion. On the site of the PDA a line of garages has been built to serve the houses and a 'T A Centre' has been constructed on the northern part of the land. The Alms-houses have been extended to the east and west side. The High Street is now the B2125 and Kilnmead road has been constructed to the north and The Boulevard and a large roundabout to the south. North of the PDA, the land has been developed into medium and low-density housing and there is now a Fire Station and a Bowling Green. To the west are a large Telephone Exchange and some residual open ground. The south settlement now boasts a Garage, a Works, a larger Laundry a Head Post Office, three Banks, Crown Buildings, two Car Parks, a college and a significant development to the south of The Boulevard (Figs. 10-12).

In the OS Map of 1969-1973 the area to the north of the PDA has been further developed, a Police Station is located to the east and a Town Hall to the south. The area directly to the south has been developed into a large office block named Woodhall Duckham House (Fig. 13).

In the OS Map of 1991-1995 the area surrounding the PDA remains a high-density residential and commercial area and the PDA has been converted into a car park.

4.1.4 Aerial Photographs

The study of the collection of aerial photographs held by Google Earth was undertaken. From 2001 to 2013 the PDA remains within an area of high-density residential and commercial development and is a car park. (Plates 1-3)

4.1.5 Geotechnical Information

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

4.1.6 Secondary and statutory resources

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

5 ARCHAEOLOGICAL AND HISTORICAL DEVELOPMENT

5.1 Introduction

	Palaeolithic	<i>c.</i> 500,000 BC – <i>c</i> .10,000 BC
	Mesolithic	<i>c</i> .10,000 BC – <i>c</i> . 4,300 BC
i.	Neolithic	<i>c</i> . 4.300 BC – <i>c</i> . 2,300 BC
Prehistoric	Bronze Age	<i>c</i> . 2,300 BC – <i>c</i> . 600 BC
Preh	Iron Age	<i>c</i> . 600 BC – <i>c</i> . AD 43
Romano-British		AD 43 – <i>c</i> . AD 410
Anglo	o-Saxon	AD 410 – AD 1066
Medi	eval	AD 1066 – AD 1485
Post-	medieval	AD 1485 – AD 1900
Mod	ern	AD 1901 – present day

Table 1 Classification of Archaeological Periods

The Archaeological record within the area is diverse and comprises possible activity dating from the prehistoric period through to the modern period. The geographic and topographic location of the site is within a landscape that has been the focus of trade, travel and communication.

5.2 History of the site

It is likely that Crawley has been inhabited since the Mesolithic Period, due to the discovery of locally manufactured flints of the Horsham Culture type to the southwest of the town on the ridge that runs from Pease Pottage to Horsham, 3 miles (4.8km) south of the PDA. There is however no evidence of settlement associated with the finds and the hunters were probably nomadic, setting up seasonal camps in the forest. Neolithic archaeology has also been revealed in the form of tools and burial mounds and a Bronze Age sword found at Lowfield Heath, 2 miles (3.2km) north of the PDA, a bowl barrow and flat bronze axe in Colgate, 4 miles (6.4km) southwest of the PDA indicate a continuation of settlement.

Owing to its rich source of Iron Ore found in the Weald's clay beds the Iron smelting process has long been a part of Crawley's history and development. Two Iron Age furnaces were found at Goff Park it became the centre of Iron working during the Roman period.

Saxon Settlers were responsible for the name, meaning Crow's Wood, 'crow' crawe and 'woodland clearing' leah, later adapted to Crauleia, Crawele and Croule and finally Crawley. It is not mentioned in the Domesday Book of 1086, the first written record appearing in 1202 when King John issued a licence for a weekly market. By 1267 the parish church of St John the Baptist's was built (HWS22362), located between the High Street and Broadway, less than half a mile (0.8km) southwest from the PDA. The nave still survives from the 14th century, but in the 15th century the roof was rebuilt, a tower was added to the west, the windows were enlarged and a rood screen was installed between the chancel and the nave. The earliest surviving memorial carvings and stones are also from this period. The bells were replaced in the 1742 by Thomas Lester and again, in 1880, by Gillet Bland & Co; the church

underwent significant development at this time with a new north aisle, porch, chancel and organ chamber.

Iron Ore deposits had been mined and smelted here for centuries but in the 15th century new technologies developed in the Ardennes Forest reached Sussex and it quickly became the centre of the English Iron Industry. The ancient Wealden Forest became a source of fuel and large areas disappeared, changing the landscape forever. In 1573 a Royal Commission noted that the foundries were destroying the forests, damaging the roads with heavy traffic and spoiling agricultural land. In response to this a law was passed in 1581, preventing any new iron works and preserving the trees within 12 miles of the coastline for shipbuilding.

The glass industry competed heavily with the iron industry, but Parliament decided in favour of Iron and banned the use of wood in the glass furnaces.

The positive legacy of these industries was the wealth that was accumulated and poured into the construction of 16th and 17th century fine houses for the 'Ironmasters', who owned the foundries.

Crawley had grown and prospered from the Iron industry and with the construction of the London to Brighton Road (now the A23) in 1770, providing travel to the popular seaside resort it became a busy staging post. The 16th century George hotel was once one such building and is now Grade II Listed.

The railway arrived in 1848 and by the 1861 it provided employment for almost a quarter of the town's population. A house building expansion followed, known as 'New Town' and in 1891 a racecourse was opened on farmland at Gatwick and held the Grand National during the years of the First World War. A private airfield opened adjacent to the racecourse in 1930 and was claimed by the Royal Air Force during the Second World War.

Crawley was one of the new towns created by the New Towns Act of 1946, designed for the purpose of moving people out of London following the Second World War. The expansion of the town swallowed up the villages of Three Bridges, Ifield and Pound Hill.

Buchan Country Park is 170 acres of woodland and heathland, carved out of St Leonard's forest and forming part of the High Weald Area of Outstanding natural

Beauty; Spruce Hill, Silver Hill and Target Hill surround Douster Pond and Island Pond.

Tilgate Park is over 2000 acres of woodland and heathland. Originally part of the ancient Worth forest and the Tilgate Estate, its history can be traced to the Norman Conquest. Tilgate Mansion, built in the 1860's was demolished in 1965, although the walled kitchen garden and Silt Lake remain. In the 1820's it was the location of the discovery of some of Gideon Mantell's finest Paleontology specimens and is now home to rare species of Pink Pigeons, Red Squirrels and White Park Cattle.

5.3 This section (5.4) of the assessment will focus on the archaeological and historical development of this area, placing it within a local context. Each period classification will provide a brief introduction to the wider landscape (500m radius centered on each site of the PDA), followed by a full record of archaeological sites, monuments and records within the site's immediate vicinity. Time scales for archaeological periods represented in the report are listed on page 13 in **Table 1**. A preliminary review of the cultural heritage data shows that the site has archaeological potential.

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

No events, monuments, Listed Buildings, farmsteads, historic parks & gardens or conservation areas are recorded within the confines of the proposed development area (PDA). One archaeological notification area, five events, twenty monuments and six listed buildings are within the vicinity of the PDA and of those none of the listed buildings are visible from the PDA.

An Archaeological Notification area is located within c.100m southwest (DWS8671) of the PDA. It is related to the settlement from c.1200AD and the planned town that grew up around the London to Shoreham Road and the subsequent expansion that came with the railway in 1848. Several buildings and much of the street pattern survive from the pre-railway town, although the building of the new town has

resulted in some losses of buildings along the High Street and some removal of the distinctive medieval burgage-like plots on the east side of the street. The wide High Street of Crawley was the centre of the medieval town and its market place. Despite the creation of a shopping centre to the east of the High Street as part of the postwar new town, this area remains commercial in nature combining shops, businesses, and, several historic inns. Regular burgage plots do not appear to have been present on the west side of the High Street, but clearly defined plots survived on the east side of the High Street until the building of the post-war new town.

The parish church of St John the Baptist (Grade II*) was founded as a chapel perhaps as early as c.1200, and is the oldest surviving building in Crawley.

An excavation carried out on London Road (EWS1208/ MWS6897/ MWS6893/ MWS6896/ MWS6895) within c.350m northwest of the PDA, uncovered considerable evidence for late medieval ironworking dating to the late 14th and early 15th centuries. Substantial deposits of smelting and forging slag, several ironworking hearths, clay floors and the remains of a structure, possibly a smithy, were revealed. A second excavation (EWS967/MWS8042/ MWS4393) carried out at Pegler Way, within c. 250m west of the PDA, uncovered a medieval industrial site that appeared to have been used for the disposal of iron slag and in the processes relating to turning flax into linen. Pottery from the 12th to 14th century, numerous gullies, pits and postholes and a wooden scutching knife were recovered. A third excavation (MWS3991/7850) took place at Crawley Barn, within c. 125m west of the PDA, where the finds include late Iron Age, Roman pottery and some 13th to 14th century pottery sherds, including Bewbush pottery.

A war memorial (MWS9075) carved on an oak board with swan necked pediment 'In proud and grateful memory of (Names) of the Crawley Postal Staff who made the supreme sacrifice 1914-18, their name liveth for evermore' is located at the Post Office, c.150m southwest of the PDA.

Moat Hall, 103 High Street (MWS680) located c.200m southwest of the PDA, which

was demolished and removed to Singleton Open Air Museum, was found to be the remains of a 14th century Moot Hall. A fallen tree at Driftway, c.300m west of the (MWS7952/MWS5204/MWS5473) PDA revealed sherds of a medieval anthropomorphic jug, a bloomery slag and a furnace bottom dating between late 13th and early 15th century. An excavation at Woolborough Road, Northgate (MWS6907) revealed seven postholes and two ditches/gullies but there was no dating evidence. At the junction of Kilnmead and High Street (MWS6919), c.300m northwest of the PDA, four trenches produced evidence of medieval and post medieval pits and postholes and the foundations of a brick built structure and high concentrations of iron working slag. Ifield and Crawley Memorial Garden (MWS9076) is sited c.300m south of the PDA. It was constructed after WWI and bought through public subscription. John F Drughorn presented the entrance gates and plates, in memory of the men of Ifield and Crawley, who fell in the Great War 1914-1918. At 60 High Street, c.500m southwest of the PDA (MWS8229) post medieval finds and

features were uncovered.

The High Street is the location of six Grade II listed buildings; the closest being Furnall Cottage (DWS4865) located c.200m west of the PDA, which originates from the 17th century but was refaced in the 18th century. Further south along the High Street is the White Hart Hotel (DWS4896), which originates from the 18th century and is located c.350m south west of the PDA. The last four listed buildings within a 500m vicinity of the PDA include Crawley Borough Council office, formerly The Tree, a late 15th to early 16th century L-shaped timber framed open hall-house (DWS4897/MWS11541) that takes its name from the 'Crawley Elm' one of Crawley's oldest and most longstanding landmark. Natwest bank, 101 High Street, is the site of an early 15th century medieval, timber framed, Hall House (DWS4830/MWS5475) with central three bays that form the parlour and a two bay open hall of what was a four bay Wealden style medieval house, located c.200m southwest of the PDA, Brewery Shades Inn has a 15th century hall-house at its core (DWS4887) and finally a pair of cast iron modern telephone kiosks (DWS4909)

The report has accessed various sources of information to identify any known

heritage assets, which may be located within the vicinity of the Proposed Development Area. Archaeological investigations, both recent and historic have been studied and the information from these investigations has been incorporated in the assessment.

6. ARCHAEOLOGICAL POTENTIAL

6.1 Palaeolithic, Mesolithic, Neolithic and Bronze Age

Mesolithic flints of the Horsham Culture type were found to the southwest of the town 3 miles (4.8km) south of the PDA. Neolithic archaeology is also present in the form of tools and burial mounds and Bronze Age finds including burial mounds, a sword found at Lowfield Heath, 2 miles (3.2km) north and a bowl barrow and flat bronze axe were revealed in Colgate, 4 miles (6.4km) southwest of the PDA. In addition residual flint flakes were found during excavations c.170m north (MWS6907). Most of these finds are at some distance from the PDA and therefore, the potential for finding remains dating to the prehistoric period within the confines of the PDA is considered **Low**.

6.2 Iron Age

Goff's Park, 1mile (1.6km) southwest of the PDA, was also the site of two late Iron Age furnaces and Iron Age pottery was found at Crawley Barn (MWS3991/7850), c.125m to the west. There is some evidence for the Iron Age period in the immediate vicinity; therefore. However, the potential for finding remains dating to the Iron Age within the confines of the PDA is considered **Low**.

6.3 Romano-British

Crawley was the centre of the Iron working industry during the Roman times however despite this there is little evidence for this period around the PDA, the Broadfield area, 3 miles (4.8km) southwest of the PDA, appearing to be the focus of the industry. Roof tiles are evidence of one Roman building in Southgate, 1 mile (1.6km) northeast of the PDA and pottery finds from 125m to the south west of the area are dated mainly from the early years of occupation which suggests that the local iron industry lost its importance to the Romans once the frontier moved further north (MWS3991). Therefore, the potential for finding Romano-British archaeology within the confines of the PDA is considered to be **Low**.

6.4 Anglo-Saxon

There is a Saxon church located in nearby Worth, just 2 miles (3.2km) east of the PDA, dating from between 950 AD and 1050 AD, but no further evidence of this period has surfaced. Therefore, it is reasonable to conclude that the potential for finding remains dating to the Anglo-Saxon period in the PDA is considered as **Low**.

6.5 Medieval

The Medieval period is the most widely represented period in the vicinity of the PDA. AT London Road (EWS1208) a late medieval iron working site was uncovered c.350m northwest of the PDA and at Pegler Way (EWS967), c.25m west, a medieval industrial site relating to the process of turning flax to linen was discovered. When Moat Hall was demolished and removed to the open air museum it was found to be the site of a 14th century Moot Hall and when a tree fell at Driftway (MWS7952), c.300m to the west, a bloomery and sherds of an anthropomorphic jug were revealed. Therefore, the potential for finding remains on the development site is considered as **Medium**.

6.6 Post Medieval to Modern

Crawley underwent great expansion following the arrival of the railway and was the centre of the Iron working industry during the 17th and 18th century. The post medieval to modern period is represented by pits, postholes and features excavated at the junction of Kilnmead and the High Street (MWS6919/MWS8229) c.300m northwest of the PDA and in the Crawley Memorial Garden (MWS9076) and the Post Office Memorial (MWS9075). Therefore, the potential for finding remains dating to the post-medieval period is considered as **High**.

6.7 Summary of Potential

The desk-based assessment has considered the archaeological potential of the site but this potential can only be tested by fieldwork. Research has shown that the PDA may contain archaeological sites and these can be summarised as:

- Prehistoric: Low
- Iron Age: Low
- Roman: Low
- Anglo-Saxon: Low
- Medieval: Medium
- Post-Medieval and Modern: High

7. IMPACT ASSESSMENT

7.1 Introduction

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

- **Total Impact** Where the area has undergone a destructive process to a depth that would in all probability have destroyed any archaeological remains e.g. construction, mining, quarrying, archaeological evaluations etc.
- High Impact Where the ground level has been reduced to below natural geographical levels that would leave archaeological remains partly in situ either in plan or section e.g. the construction of roads, railways, buildings, strip foundations etc.
- Medium Impact Where there has been low level or random disturbance of the ground that would result in the survival of archaeological remains in areas undisturbed e.g. the installation of services, pad-stone or piled foundations, temporary structures etc.
- Low Impact Where the ground has been penetrated to a very low level e.g. farming, landscaping, slab foundation etc.

7.2 Existing Impacts

7.2.1 Cartographic regression (4.1.3), Topographic analysis (4.1.4) and Historical research (5.2) indicate that the site has been the subject of agriculture and post medieval residential development and modern car park development. These processes will have significantly affected any buried archaeological deposits, however, there is the potential for archaeological survival across the site but to the north of the site closer to the vicinity of known archaeological remains and where the car park works may not have penetrated into deeper deposits there will have been less impact. Therefore, previous impacts through construction and excavation are considered **medium**.

7.2.2 Agriculture became gradually more intense over time and by the modern era it was mechanised. Although the farming process rarely penetrates below the upper layers of the ground, plough truncation can have a significant impact on preserved shallow deposits. The site is within an enclosure that was once subject to agricultural use, however, later construction works would have penetrated deeper than the agricultural process. Therefore, the impact of agriculture is considered to be **Low**.

7.3 Proposed Impacts

7.3.1 The general development of the site

At the time of preparing this archaeological assessment, the extent of the proposed development was for the construction of thirty-six residential dwellings.

7.3.2 The very nature of construction can have a negative impact on below ground deposits through the movement of plant, general ground disturbance and contamination and excavation. Therefore, extensive impact can be expected within the development area once construction begins.

7.3.3 With due consideration to the impacts sited above the following is an assessment of the specific impacts and their relation to this development:

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

7.4 Proposed mitigation for the impact of the construction process

The mitigation proposed is for a full archaeological investigation by either geophysical survey followed by evaluation trenching or by archaeological evaluation trenching prior to any development work starting on site.

8. MITIGATION

The purpose of this archaeological desk-based assessment was to provide an assessment of the contextual archaeological record, in order to determine the

potential survival of archaeological deposits that may be impacted upon during any proposed construction works.

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

9. OTHER CONSIDERATIONS

Setting of Listed Buildings

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

None of the listed buildings within a 500m vicinity of the PDA share intervisibility with the PDA. (Plates 4- 10)

9.1 Archive

Subject to any contractual requirements on confidentiality, two copies of this deskbased assessment will be submitted to West Sussex County Council (Heritage) within 6 months of completion.

9.2 Reliability/Limitations of Sources

The sources that were used in this assessment were, in general, of high quality. The majority of the information provided herewith has been gained from either published texts or archaeological 'grey' literature held at West Sussex County Council, and therefore considered as being reliable.

9.3 Copyright

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behalf of Crawley Borough Council (and representatives) for the use of this document in all matters directly relating to the project.

Paul Wilkinson PhD., MCifA., FRSA. 28th November 2016

10 REFERENCES & BIBLIOGRAPHY

IFA (2014) STANDARD AND GUIDANCE for historic environment desk-based assessment.

National Planning Policy Framework 2012.

Data provided by West Sussex HER

Crawley Historic Character Assessment Report (December 2008)

APPENDIX 1 ARCHAEOLOGICAL SITES

HER Ref.	Location	Period	Summary
DWS8671	SW of the site	Medieval	Highly sensitive Archaeological Notification Area at the Historic Core of Medieval Crawley.
EWS1118	315m SW of the site	Medieval	Archaeological Interpretive survey and a Historic Fabric survey carried out on what was a four-bay 'Wealden-Style' medieval house.
EWS1208	380m NW of the site	Medieval	Excavations revealed considerable evidence for late medieval ironworking dated during the late 14th and early 15th centuries. Substantial deposits of smelting and forging slag, several ironworking hearths, clay floors and the remains of a structure, possibly a smithy, were revealed.
EWS759	315m SW of the site	Unknown	Watching brief at 101 High Street, Crawley.
EWS1310	300m SW of the site	Medieval	An archaeological interpretative survey of The Tree, a listed building dating back to the 13th Century, with 17th, 18th, 19th and 20th century alterations.
EWS967	380m W of the site	Medieval	Excavation uncovered a medieval industrial site that appeared to have been used for the disposal of iron slag and in the process of turning flax into linen. Pottery from the 12th to 14th century, numerous gullies, pits and postholes and a wooden scutching knife were also found.
MWS680	260m SW of site	Medieval	Moat Hall, 103 High Street, Crawley recorded prior to demolition, found to be the remains of a timber framed 14th century Moot Hall.
MWS3991	130m W of site	Roman (43 AD to 409 AD)	During the Crawley Barn excavation late Iron Age, Roman (mainly) and some 13th and 14th Century pottery sherds and some Bewbush pottery was found.
MWS4393	300m W of site	Medieval	Seven trenches were excavated revealing 2 gullies, 5 post holes, 8 pits, 3 features back-filled with iron slag, medieval pottery, large quantities of iron slag, some lead and a copper alloy perforated disc.

1	1	1	
MWS5204	370m W of site	Medieval (1066 AD to 1539 AD)	A number of pieces of bloomery slag, including an almost complete furnace bottom and several pieces of medieval pottery sherds came from the same green glazed jug with graffito decoration dating from the late 13th to early 15th century.
MWS5473	365m W of site	Medieval	A number of pieces of bloomery slag and a complete furnace bottom were revealed. Several sherds of medieval pottery were recovered from the same green glazed jug.
MWS5475	285m SW of site	Medieval	An archaeological survey was carried out on 101 High Street, Crawley, which dates from the early 15th to mid to late 17th century. Slag filled pits and some medieval glazed pottery were recovered during a WB. A Bloomery is recorded at this point.
MWS6893	255m NW of site	Medieval and Post Medieval	Multi period archaeological features including a gully filled with 13th and 14th century pottery, an old smithy and a post modern to modern inn. Finds include hammerscale, smithing slag, forging slag and charcoal.
MWS6894	260m NW of site	Medieval, Post Medieval and Modern	Multi period features, including a large keyhole shaped hearth containing 8kg of redeposited slag, used for forging and smithing, a boundary ditch and an ancillary building to the west of the sun inn.
MWS6895	255m NW of site	Medieval and Modern	Multi-period features including a medieval clay floor with pits containing forging slag and hammerscale as well as a modern building.
MWS6896	265m NW of site	Medieval and Modern	Multi period features including 2 track-ways, a possible structure including beam slots, large pits containing slag, some roasted ore and pottery dating to the 13th to 14th century.
MWS6897	375m NW of site	Medieval	Excavations revealed considerable evidence for late medieval ironworking dated during the late 14th and early 15th centuries. Substantial deposits of smelting and forging slag, several ironworking hearths, clay floors and the remains of a structure, possibly a smithy, were revealed.
MWS6907	140m N of site	Medieval	Seven postholes/pits and two ditches/gullies were identified and excavated. Residual flint flake was also found.

			An archaeological evaluation identified evidence for medieval and post medieval activity including
		Medieval	pits, postholes, foundations of a brick built
	265m N of	and Post	structure and high concentrations of iron working
MWS6919	site	Medieval	slag.
	260m SW of		13th to 14th century pottery was recovered
MWS7850	site	Medieval	during excavation at Crawley Barn
		Medieval	A fallen tree exposed a medieval
	360m W of	(1200 AD to	anthropomorphic jug dating to the mid 13th
MWS7952	site	1299 AD)	century.
	300m W of	Medieval	An archaeological excavation uncovered a medieval industrial site, which was used for the disposal of iron slag and for turning flax into
MWS8042	site	and Modern	linen. A wooden scutching knife was also found.
	445m SW of	Post	An evaluation trench revealed two intercutting
MWS8229	site	Medieval	pits and a small assemblage of finds.
	260m S of		
MWS9075	site	Post WWI	World War I Memorial
MWS 9076	270m S of Site	Post WWI	Ifield and Crawley Memorial Garden commemorating WWI, WWII and WWII Civilians
MWS11541	SW of site	Medieval, Post Medieval and Modern	Grade II Listed building dating back to the 13th century, though very little original feature remain and there has been extensive 19th and 20th century alterations.
HWS22278		Post Medieval to Modern	Planned estate built on previous ancient semi- natural woodland.
		Post	
HWS22315	SE of site	Medieval to Modern	Market town settlement built on previous fieldscapes.
		Post Medieval to	
HWS22316	S of site	Modern	Urban park built on previous fieldscapes.
		Post	
	N of etc.	Medieval to	Schools and settlements built on previous
HWS22318	N of site	Modern	fieldscapes.
		Post	Dravious fieldscapes regenerated into weedland
HWS22320	NE of site	Medieval	Previous fieldscapes regenerated into woodland.
		Post	
	SE of cito	Medieval to	Planned suburban estate built on previously
HWS22323	SE of site	Modern	informal fieldscapes.
HWS22327	N of site	Post Medieval to Modern	Planned suburban estate built on previously informal fieldscapes.

I	I	Deat	
		Post	Dianned suburban estate built on proviously
HWS22328	N of site	Medieval to Modern	Planned suburban estate built on previously
Πνν322328	IN OF SILE		informal fieldscapes.
		Post	
104/522220		Medieval to	Suburban settlement replaced previous historic
HWS22330	N of site	Modern	dispersed settlement.
		Post	
104/522224		Medieval to	Planned suburban estate built on previous
HWS22331	N of site	Modern	fieldscapes.
		Post	
		Medieval to	Horticulture allotments replaced informal
HWS22332	NE of site	Modern	fieldscapes.
		Post	
		Medieval to	Planned suburban estate built on previously
HWS22333	NE of site	Modern	informal fieldscapes.
		Post	
		Medieval to	Planned suburban estate built on previously
HWS22334	N of site	Modern	informal fieldscapes.
		Post	
		Medieval to	
HWS22338	NW of site	Modern	Industrial factories replaced informal fieldscapes.
		Post	
		Medieval to	Planned suburban estate built on previously
HWS22354	W of site	Modern	informal fieldscapes.
		Post	
		Medieval to	Planned suburban estate built on previously
HWS22356	E of site	Modern	informal fieldscapes.
		Post	
		Medieval to	
HWS22360	SE of site	Modern	Industrial factories replaced informal fieldscapes.
			Crauleia 1203 'crow leah' St John Baptist 19th
HWS22362	SW of site	Medieval	century with medieval parts
		Post	
		Medieval to	Market town settlement built on previous
HWS22368	SW of site	Modern	informal fieldscapes.
		Post	
		Medieval to	Market town settlement built on previous formal
HWS22369	S of site	Modern	enclosure style fieldscapes.
		Post	
		Medieval to	Planned suburban estate built on previously
HWS22370	W of site	Modern	informal fieldscapes.
		Post	
		Medieval to	Market Town settlement replaced informal
HWS22371	S of site	Modern	parkland and fieldscapes.

		Post Medieval to	Market gardens/allotments and formal enclosure style fieldscapes replaced by suburban
HWS22372	SW of site	Modern	settlement.
		Post	
		Medieval to	Market town settlement on historic core
HWS22373	N of site	Modern	settlement and processing industry site.
104/022204		Post	Informal fieldscapes replaced by school
HWS22381	S of site	Medieval	settlements.
		Post	
104/022202	C of othe	Medieval to	Planned suburban estate built on previously
HWS22382	S of site	Modern	informal fieldscapes.
	Nofeito	Post Medieval	Small farmstead/cottage named Blackdog Farm dated from 1600 AD to 1799 AD.
HWS22329	N of site	Ivieulevai	
		1400 AD to	Brewery Shades Inn, a grade II Listed building. At the core is a 15th century hall-house, altered in
DWS4887	SW of site	1400 AD 10 1983 AD	the 17th, 18th and 19th century.
01134887		1963 AD	Furnall Cottage, also known as Boscobel and CGA
			Insurance Brokers, a Grade II listed building
		1600 AD to	originating from the 17th with amendments in
DWS4865	W of site	1799 AD	the 18th century.
			101 High Street (National Westminster Bank)
		Medieval,	formerly known as the Punch Bowl, Grade II listed
		Post	early 15th century timber-framed hall house of
		Medieval	Wealden type. 16th, 17th and 18th century
DWS4830	SW of site	and Modern	amendments.
		Medieval,	Grade II listed Crawley Borough Council offices.
		Post	Late 15th to early 16th century timber framed L-
		Medieval	shaped open hall-house, altered in the 18th, 19th
DWS4897	SW of site	and Modern	and 20th century.
		Post	Grade II Listed 18th and 19th century inn named
DWS4896	SW of site	Medieval	the White Hart Hotel.
			Grade II Listed cast iron telephone kiosk pair on
			island site. Designed in 1935 by Sir Giles Gilbert
DWS4909	SW of site	Modern	Scott.



Plate 1. 2001 Google Earth



Plate 2. 2007 Google Earth



Plate 3. 2016 Google Earth



Plate 4. View of site looking south-west (Fig. 2 location 1)



Plate 5. View of site looking north-east (Fig. 2 location 2)



Plate 6. View of site looking west (Fig. 2 location 3)



Plate 7. View of site looking south (Fig. 2 location 4)



Plate 8. View of site looking south (Fig. 2 location 5)



Plate 9. View of site looking north-west (Fig. 2 location 6)



Plate 10. View of site looking south (Fig. 2 location 7)

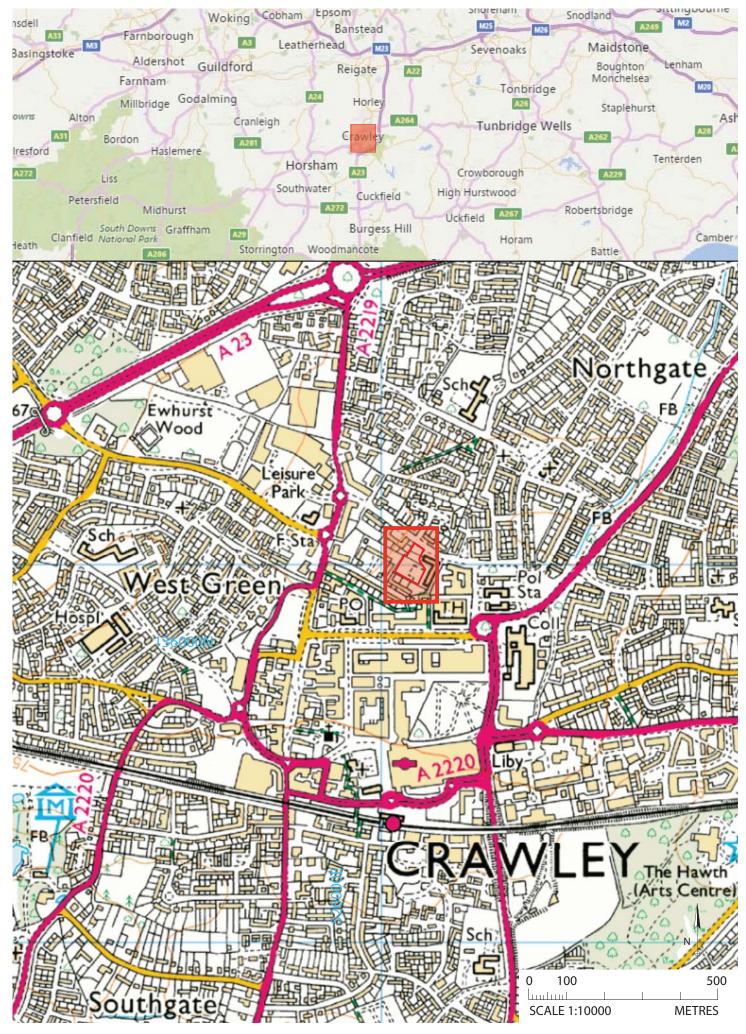


Figure 1: Site location map, scale 1:10000

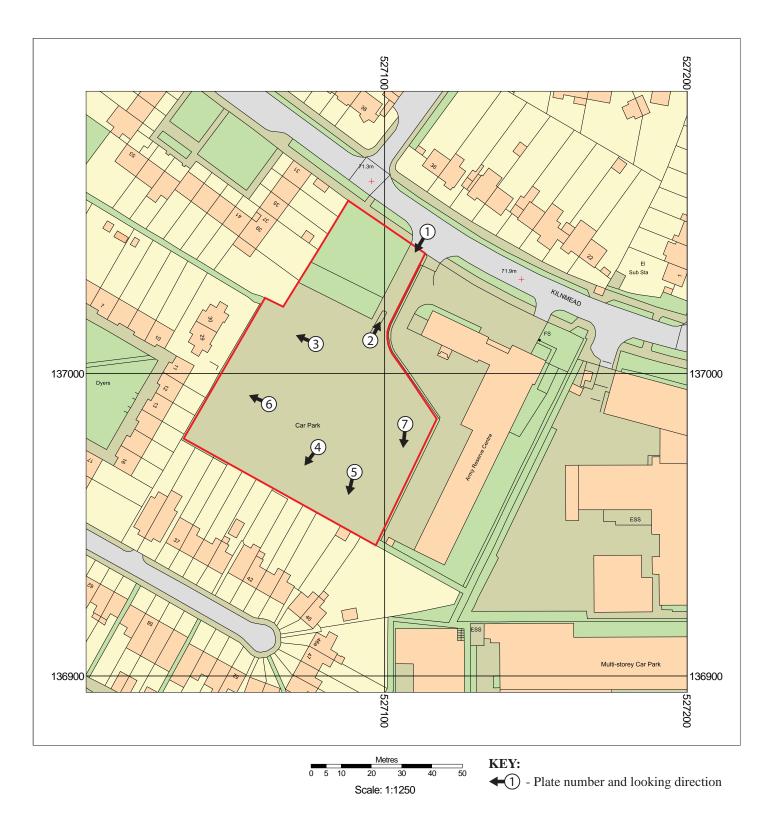
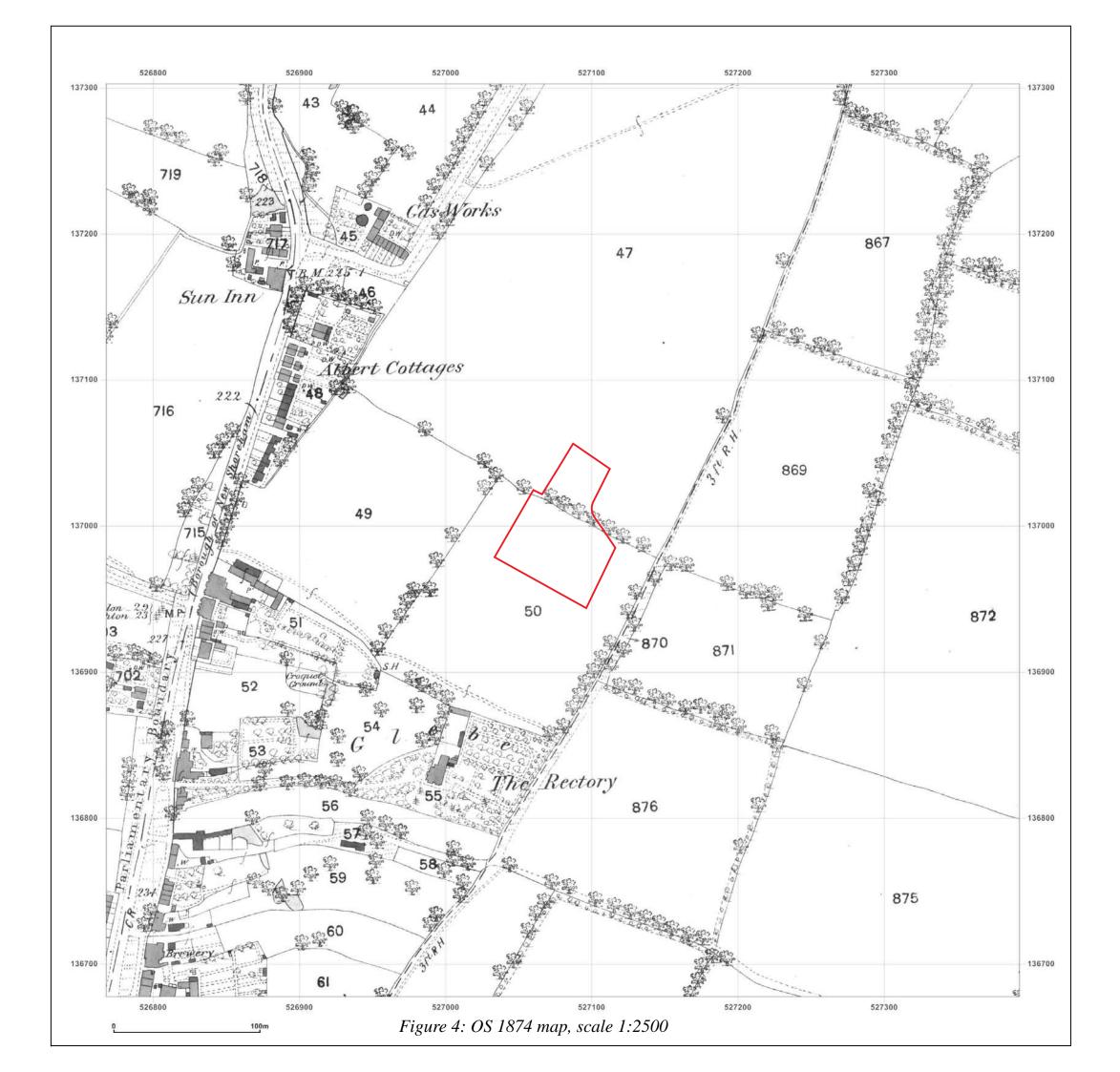
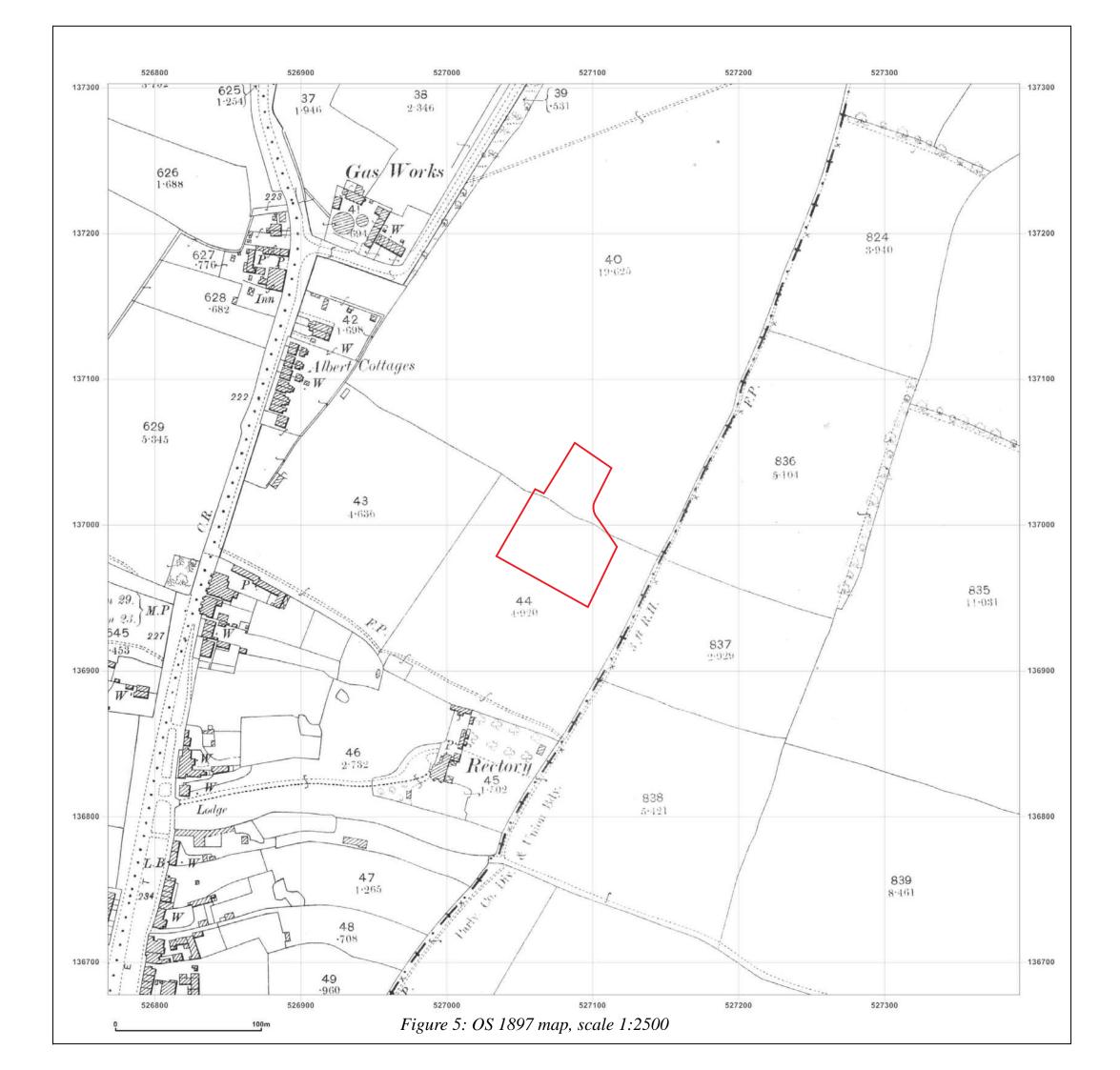


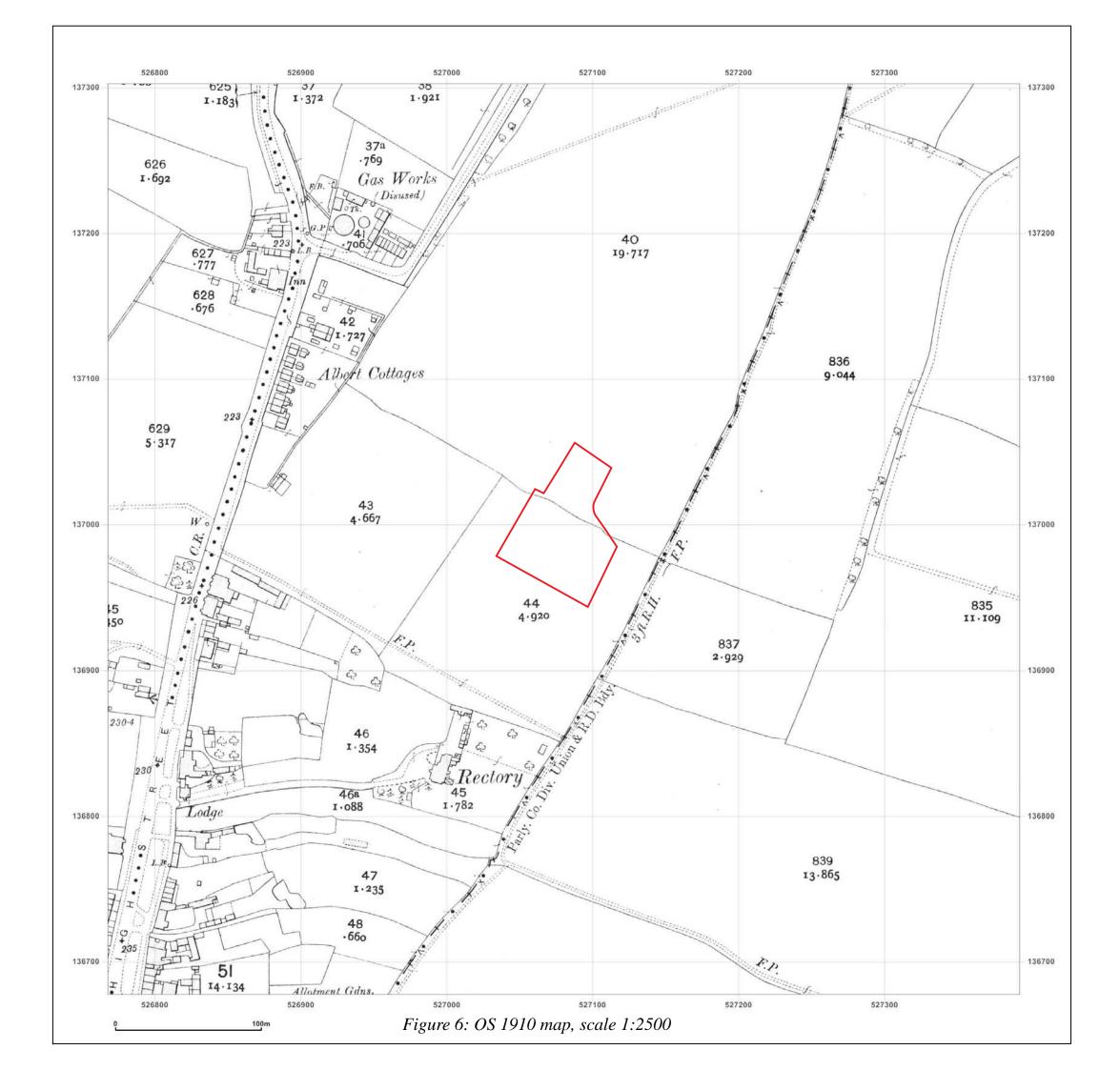
Figure 2: Site location plan with marked plates, scale 1:1250.

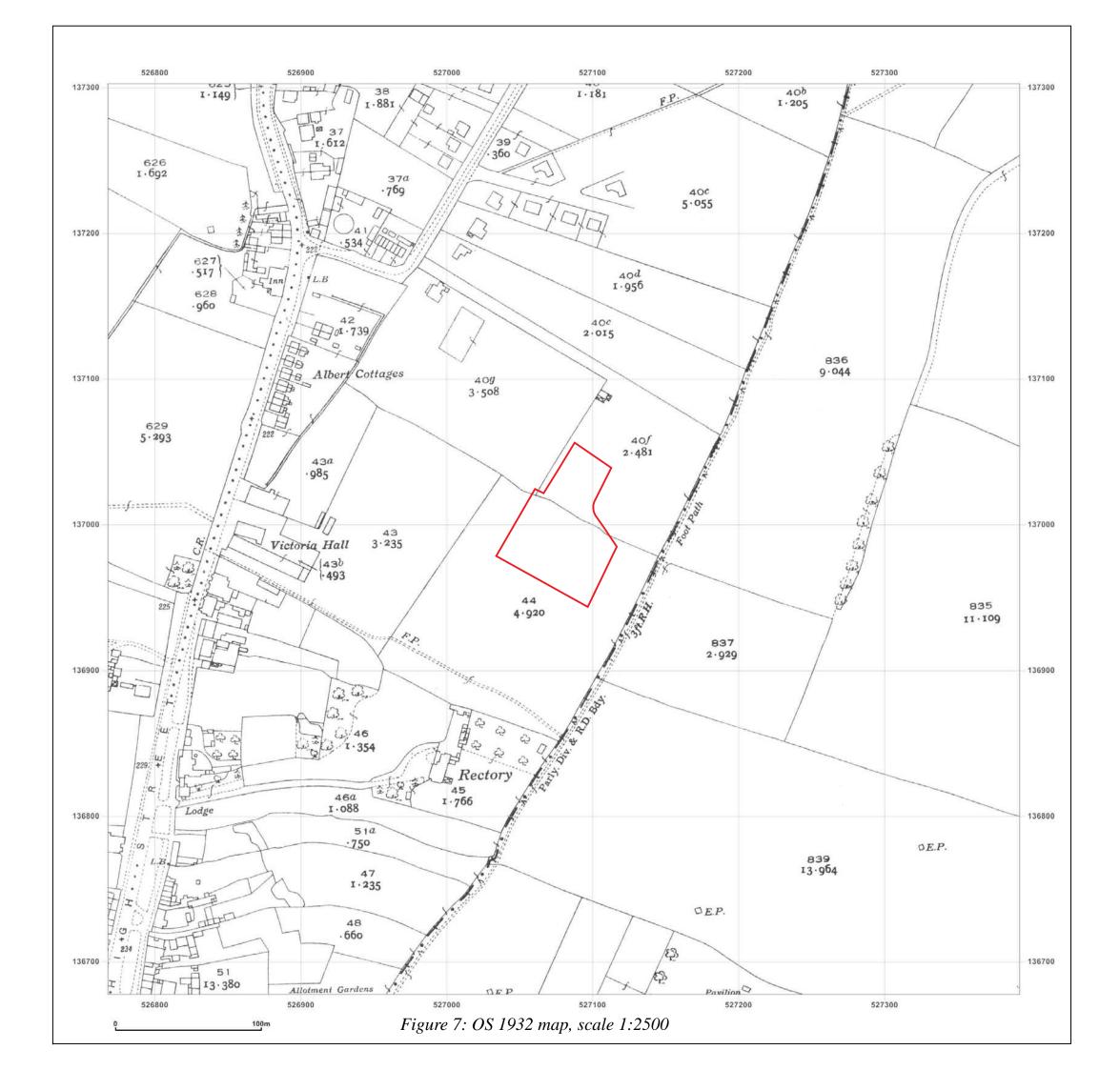


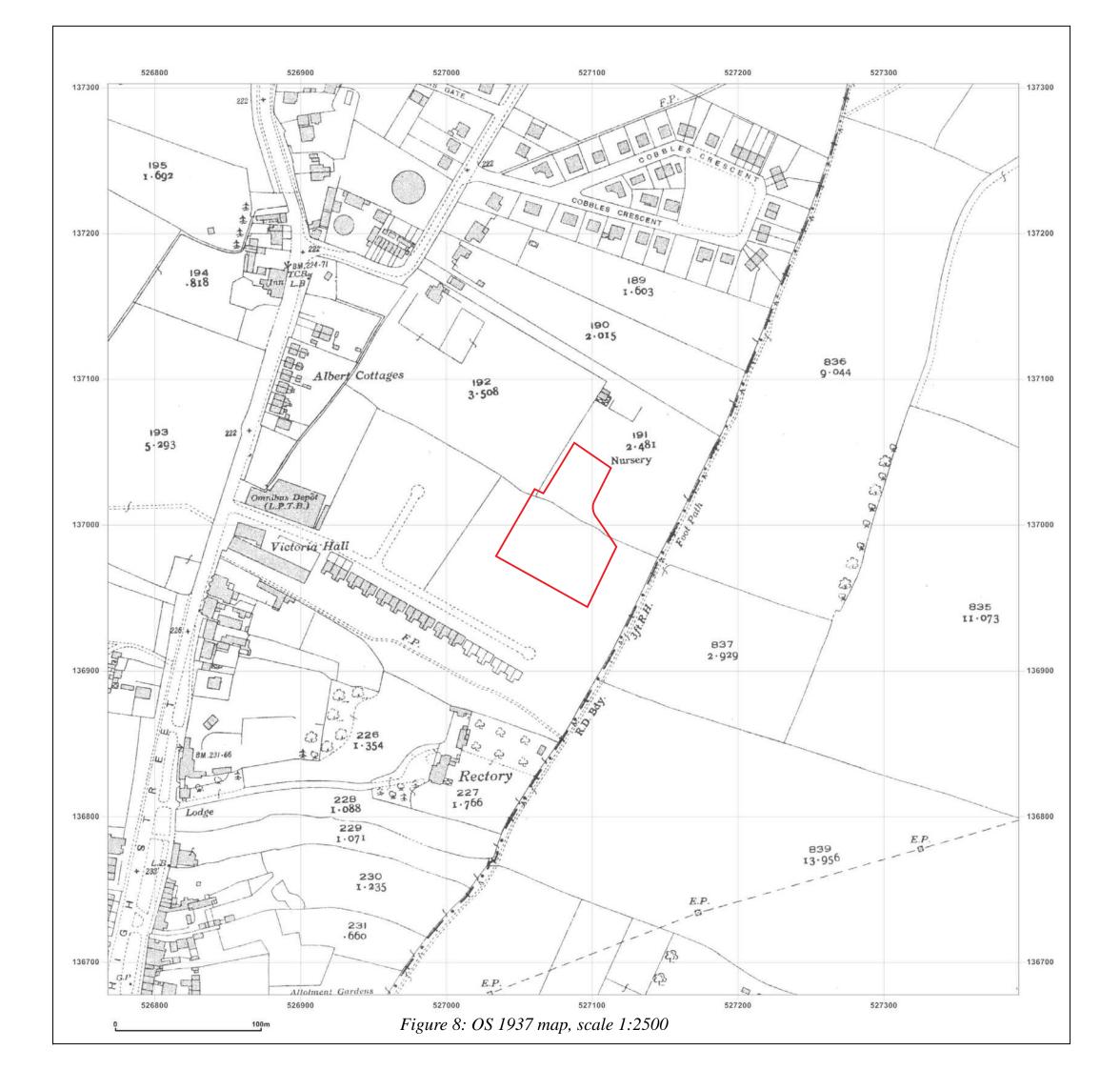
Figure 3: Plan of proposed development, scale 1:500

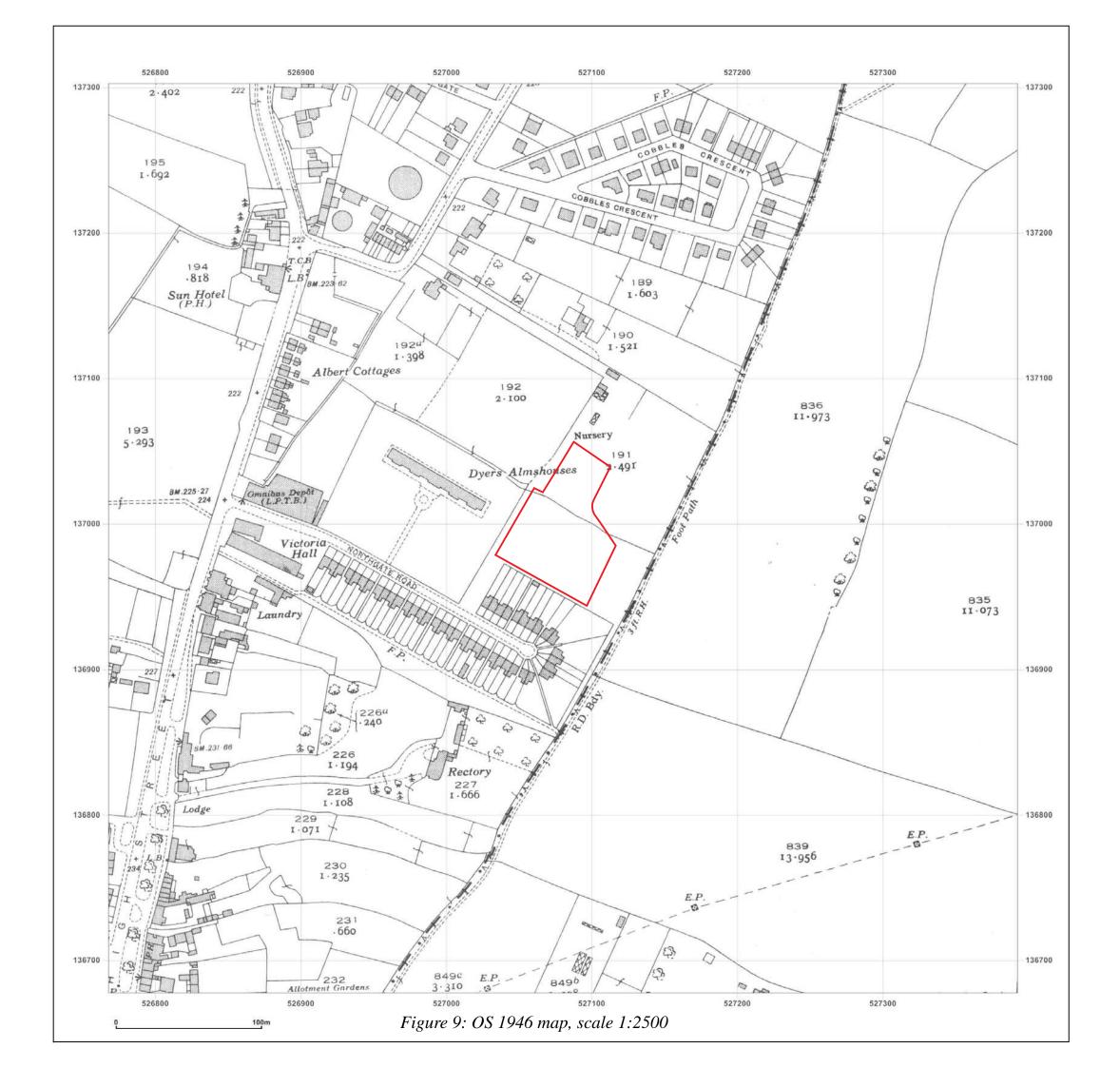


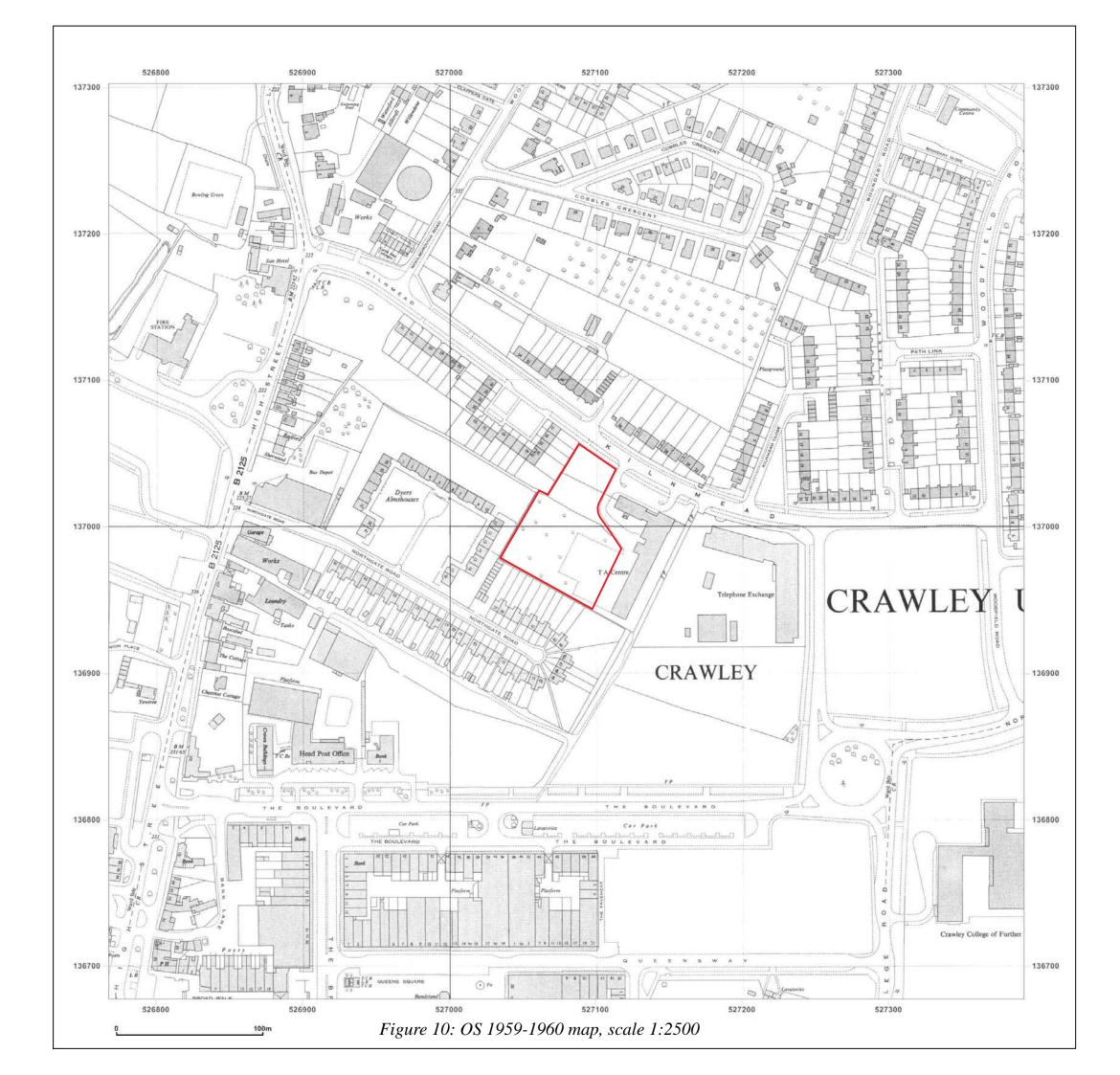


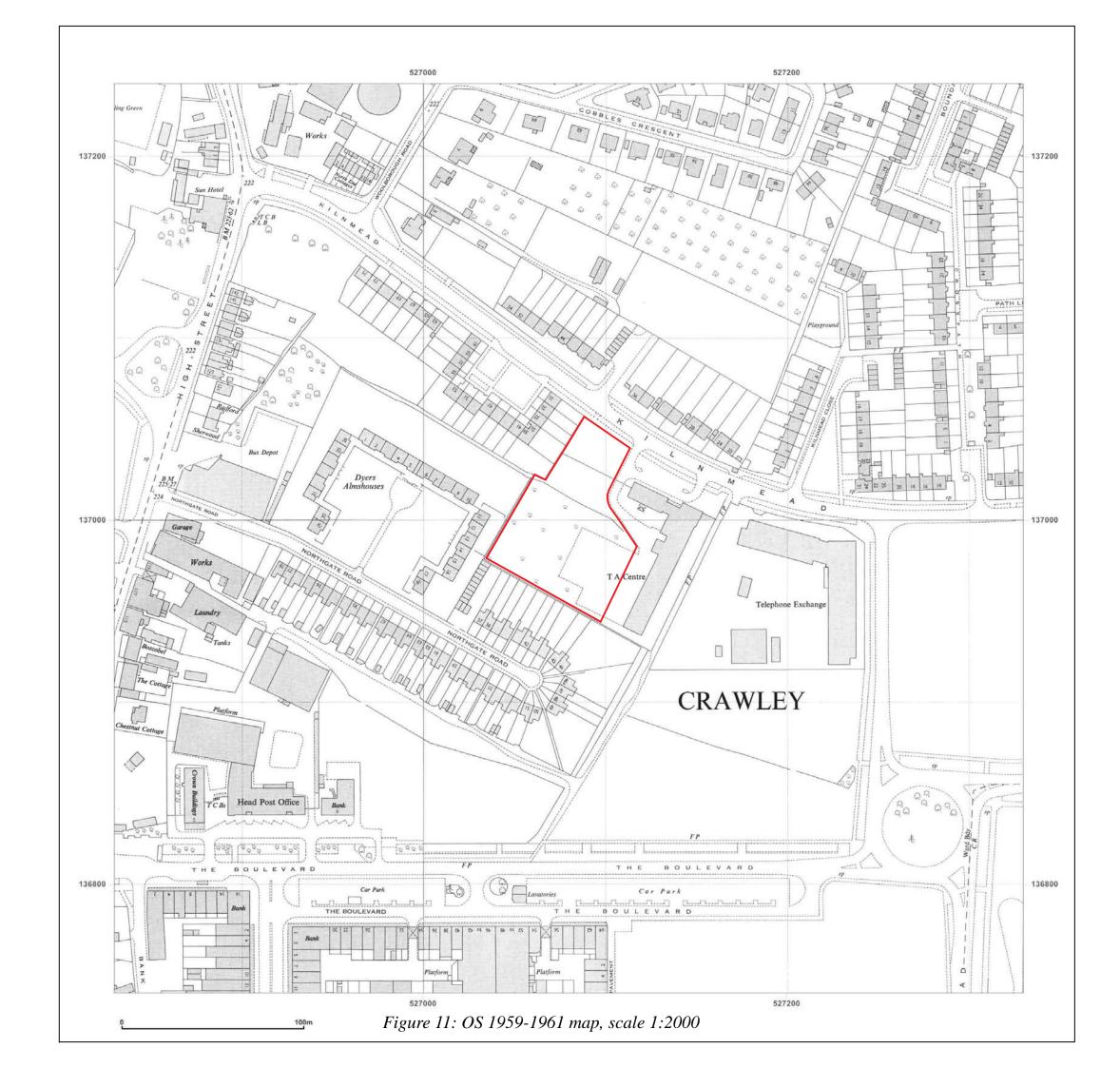


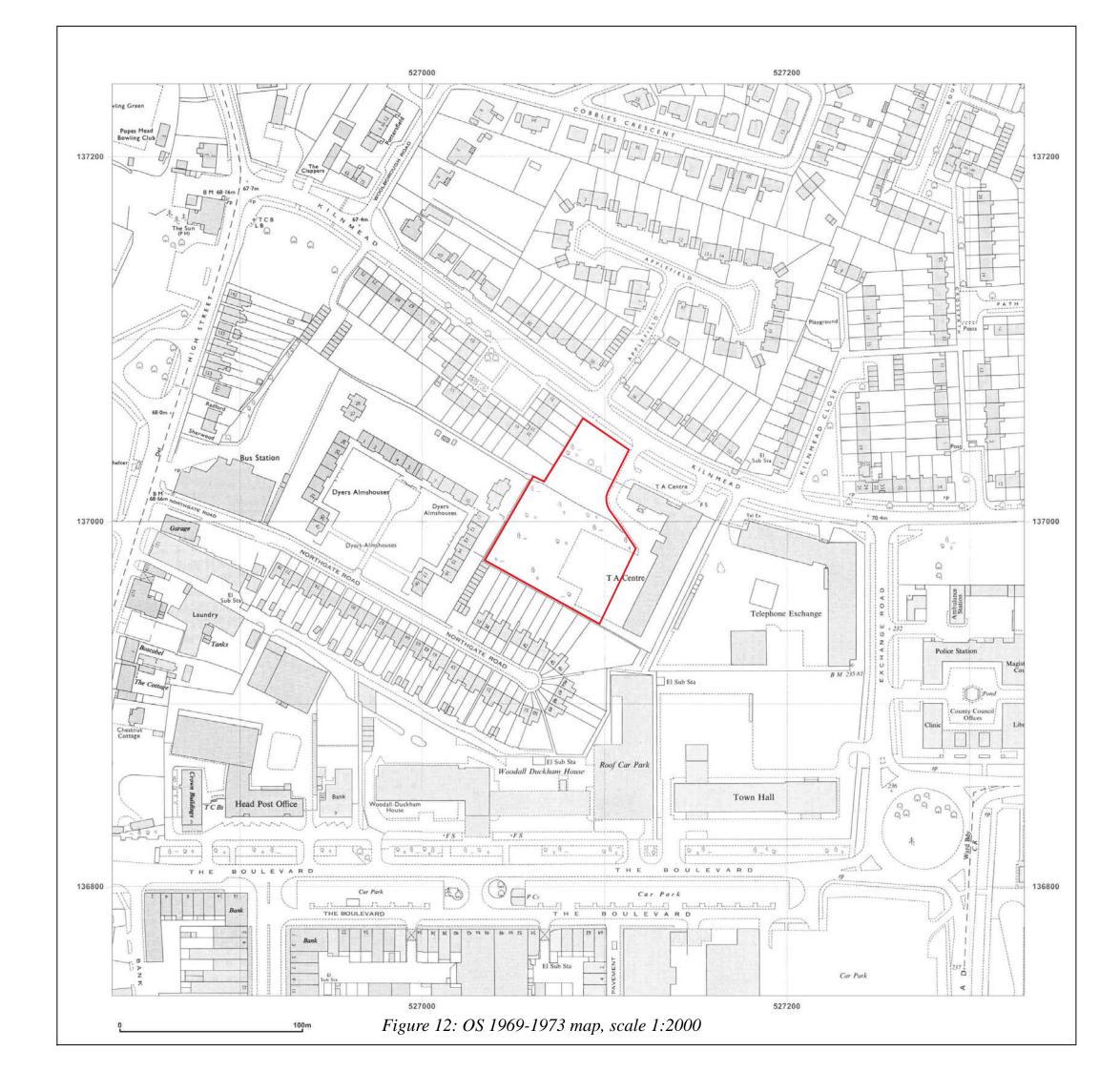


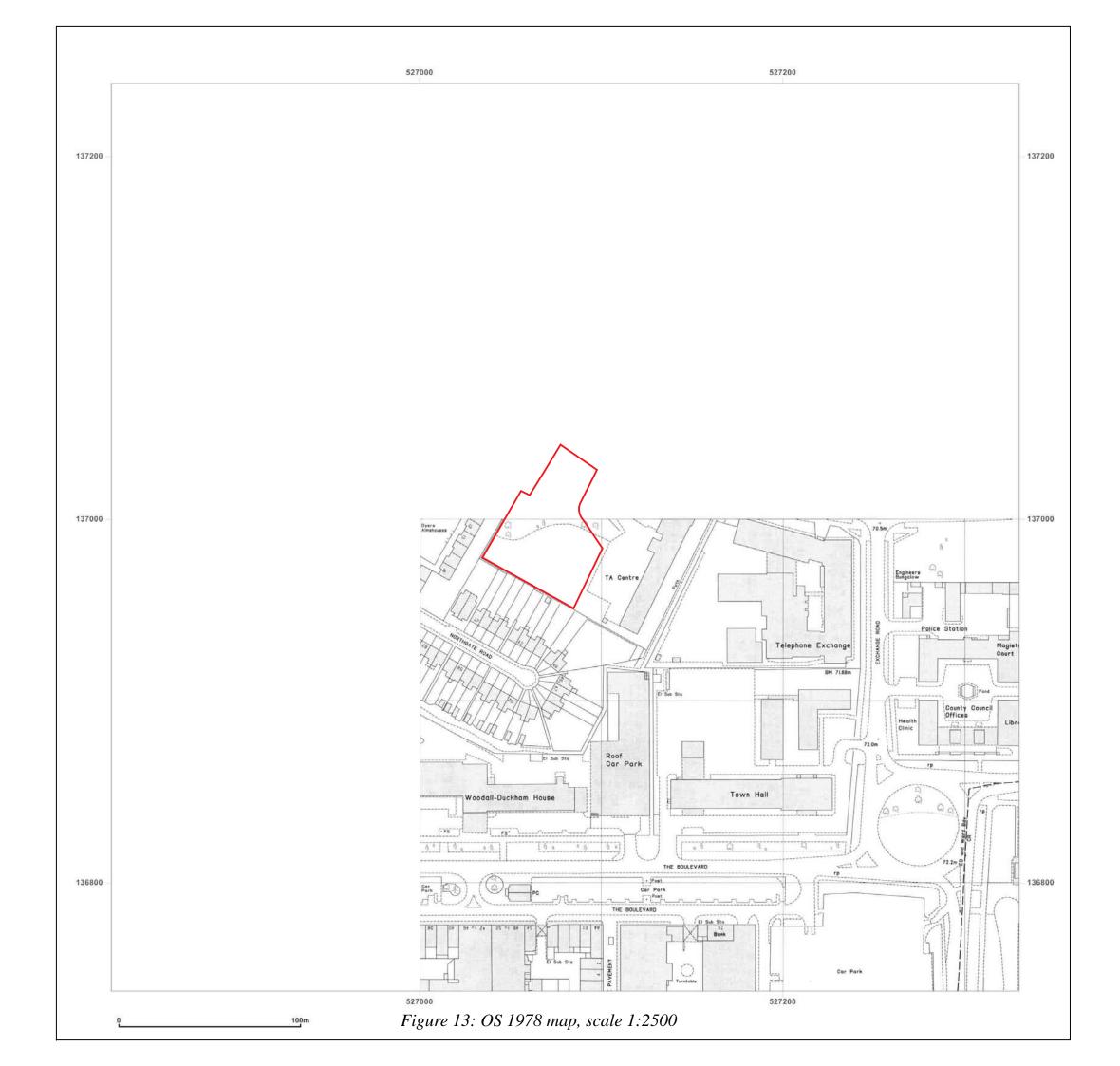


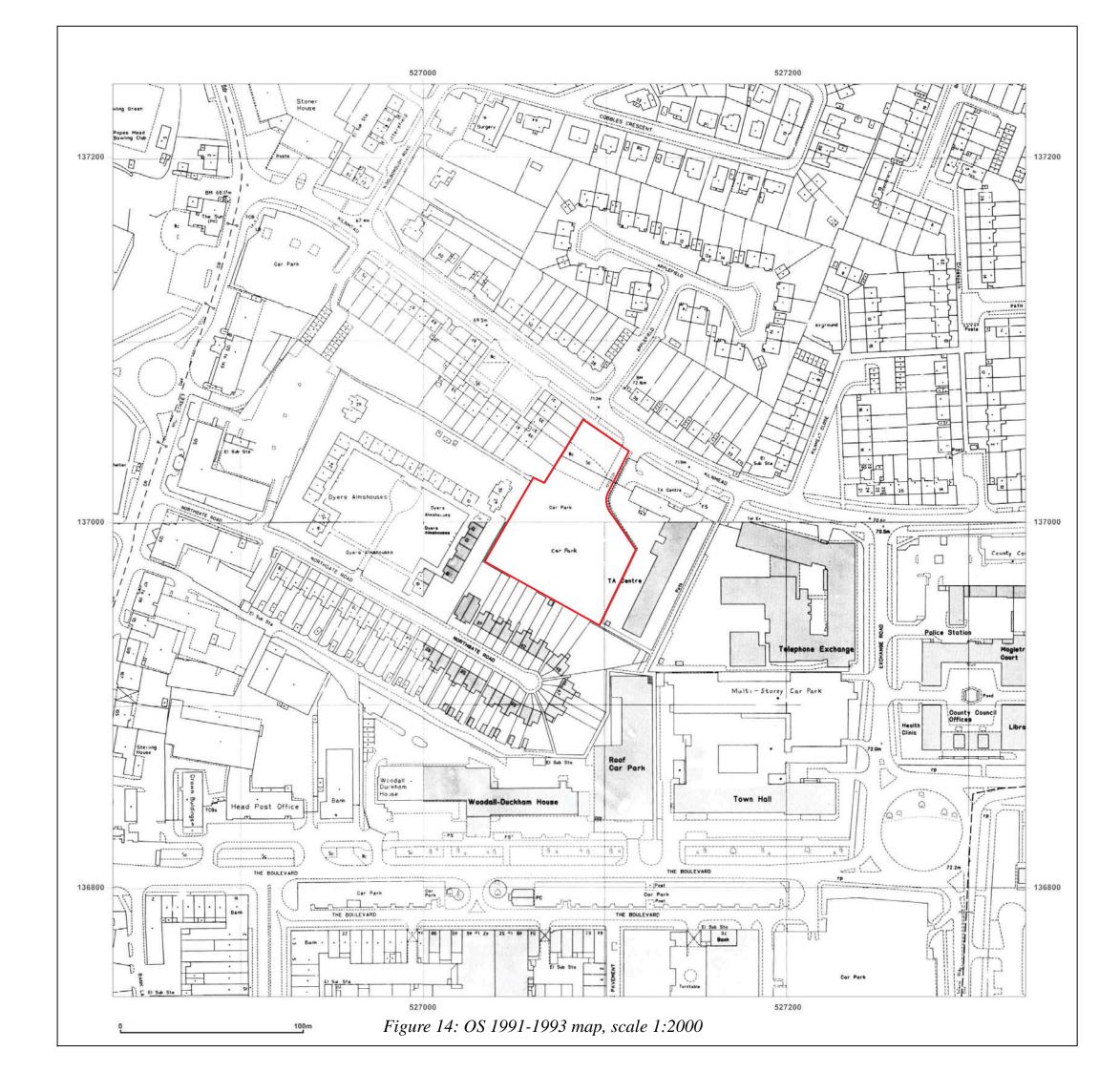


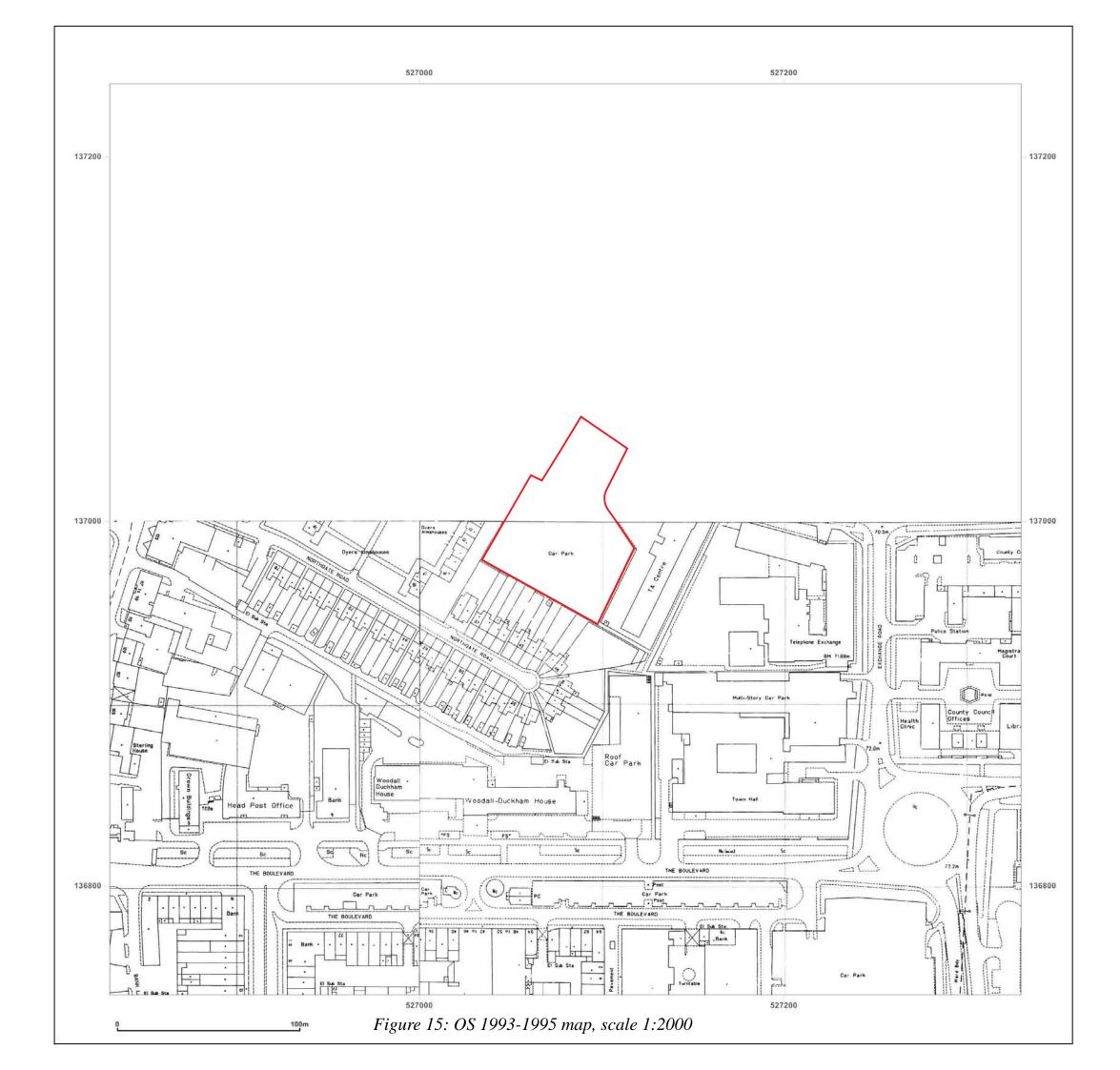




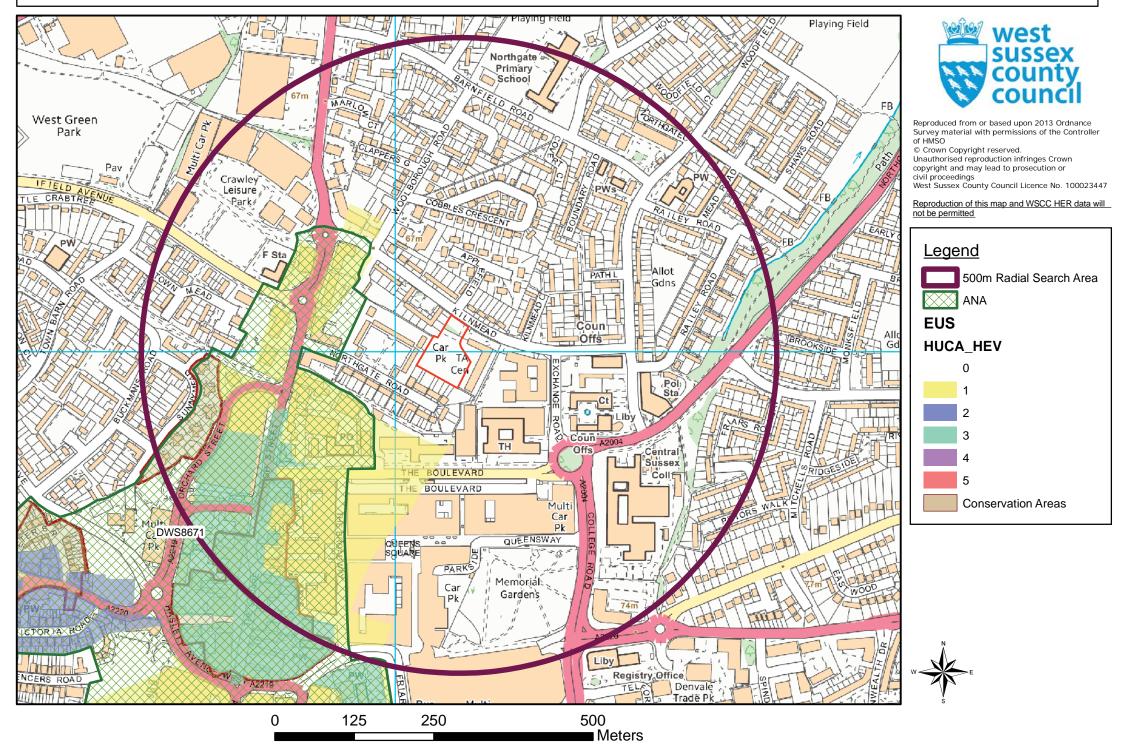




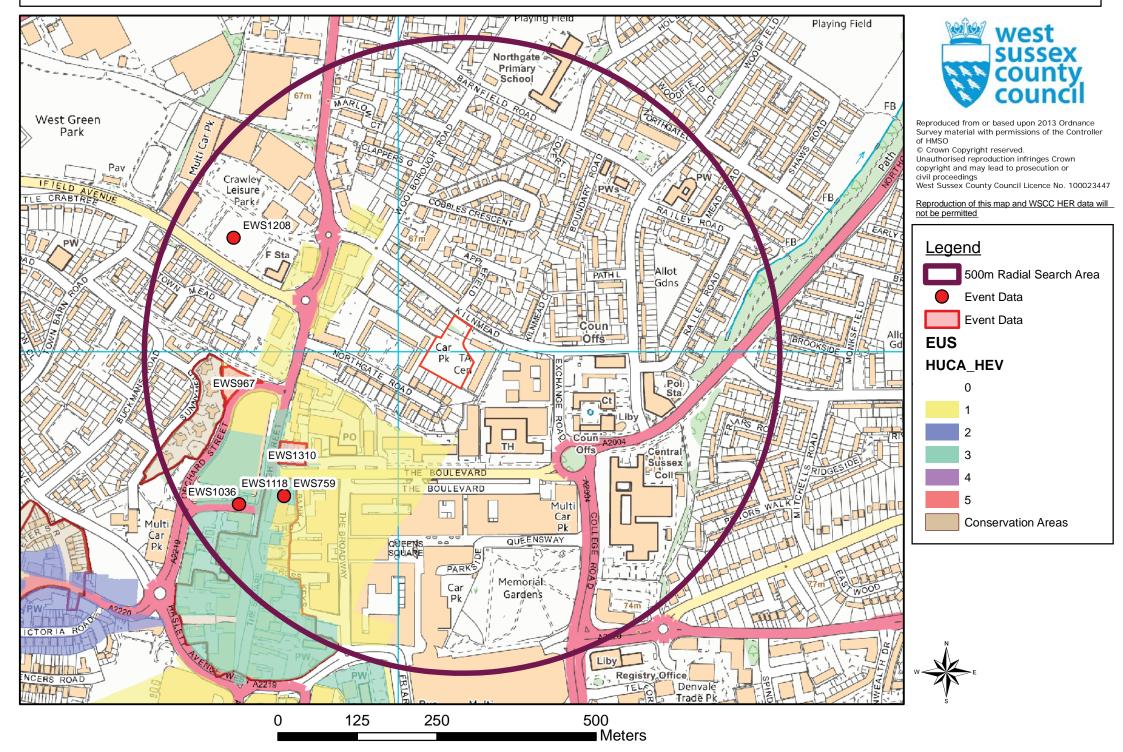




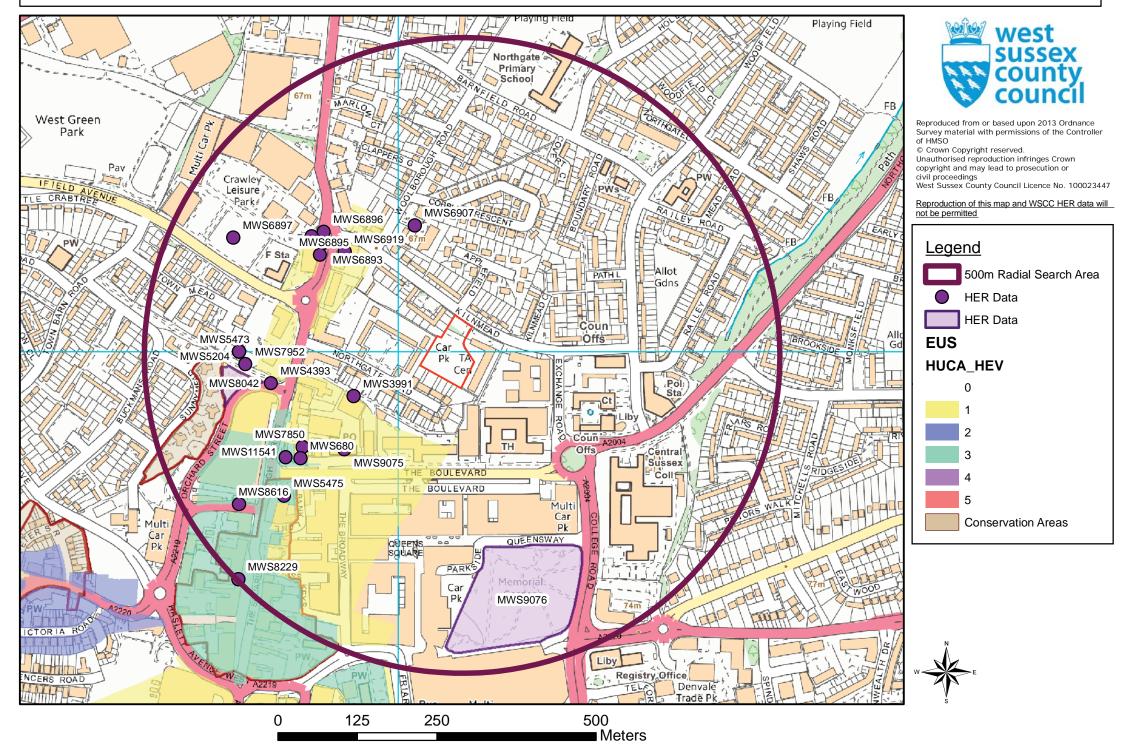
500m Radial Search centred on NGR 527101 136994, Crawley - Archaeological Notification Area



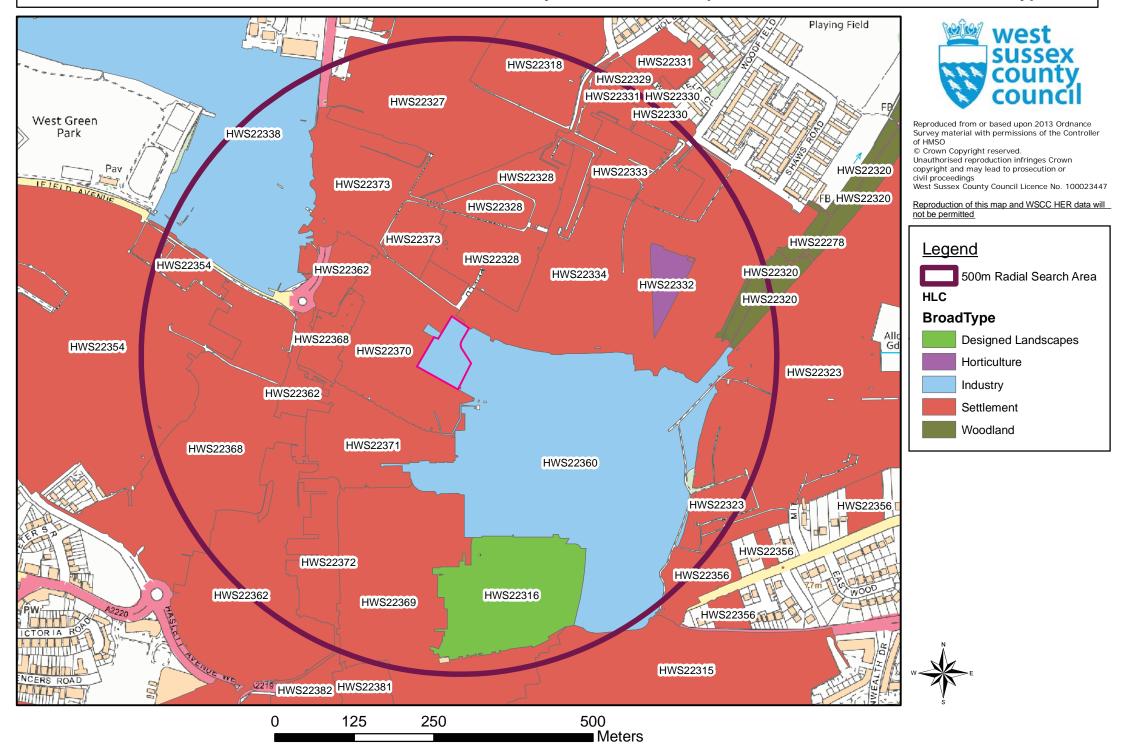
500m Radial Search centred on NGR 527101 136994, Crawley - Event/Activity Data



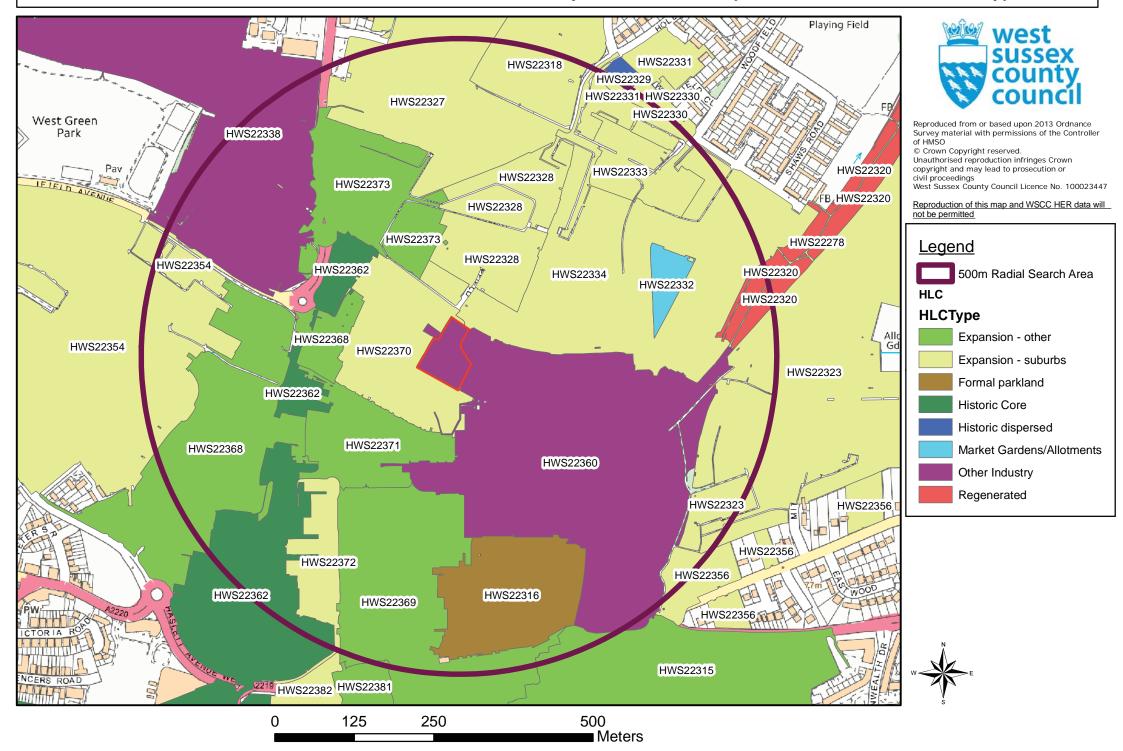
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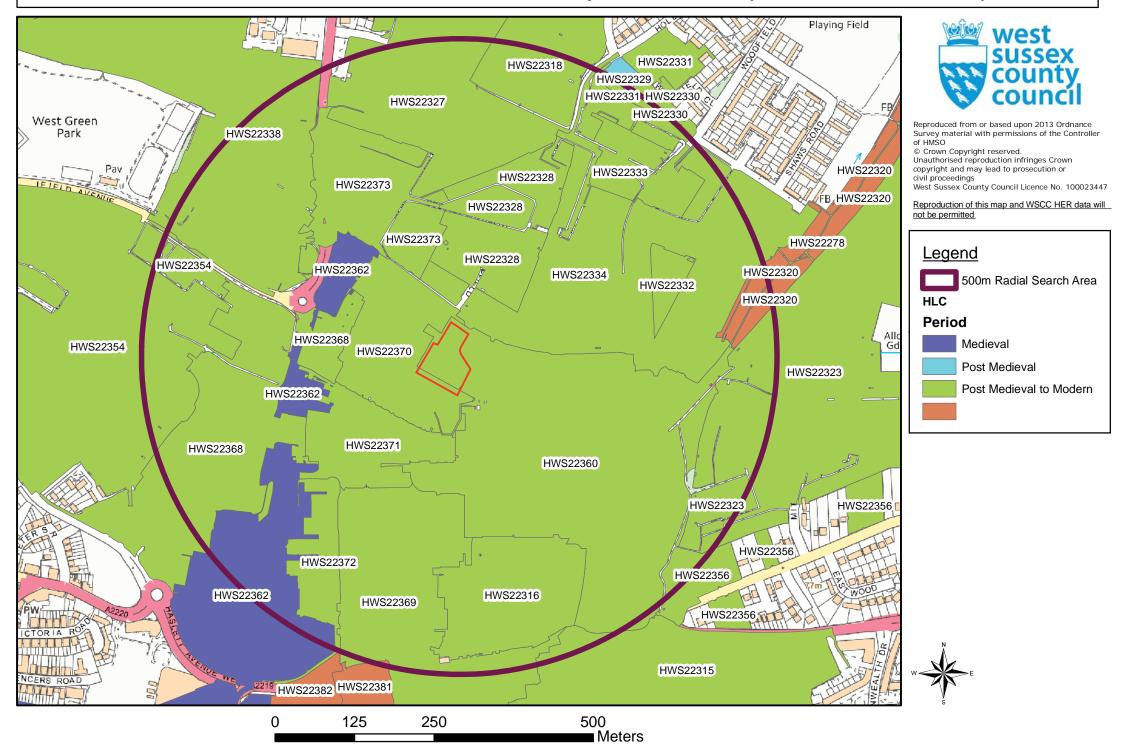
500m Radial Search centred on NGR 527101 136994, Crawley - Historic Landscape Characterisation Broad Character Type



500m Radial Search centred on NGR 527101 136994, Crawley - Historic Landscape Characterisation Character Type



500m Radial Search centred on NGR 527101 136994, Crawley - Historic Landscape Characterisation Time Depth



500m Radial Search centred on NGR 527101 136994, Crawley - Listed Buildings

