

LAND AT FORD LANE, YAPTON, RESERVED MATTERS

HERITAGE STATEMENT INCLUDING ARCHAEOLOGICAL ASSESSMENT

REDROW HOMES LTD

JANUARY 2020



TERENCE
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1 Introduction

- 1.1 This heritage statement is submitted in support of a reserved matters application by Redrow Homes Ltd for land between North End Road and Ford Lane, Yapton. It describes the known terrestrial archaeological resource and built heritage assets of the site and a 1km study area, that could be affected by the development of up to 100 homes, under outline planning consent Y/80/16/OUT which was approved at appeal on 15/01/2018.
- 1.2 The 4.5-hectare site is to the north of the village of Yapton, close to St Mary's Church (see figure 1). It consists of a single cultivated arable field parcel bounded to the east by a field boundary with sparse trees and to the north by the bank along the open boundary to Ford Lane. There is varied development to the south and west, including the Orchard Business Park and a linear area of housing along North End Road. The site is crossed by public rights of way numbers 357 and 358, both leading from the south east corner of the site by the church, and the whole site is covered by a tree preservation order (reference TPO/Y/2/17).
- 1.3 This report sets out the baseline, potential and significance of all the known and recorded heritage assets for the site and study area, both designated (scheduled monuments, listed buildings, conservation areas and registered parks and gardens) and non-designated (archaeological sites, and locally important historic buildings or landscapes). It also considers the evidence of time depth as shown in the historic landscape character across the site and in the surrounding area. The assessment examines the potential for the discovery of as yet unknown features of archaeological interest and the implications of the proposed development in order to set in train the survey work and intrusive investigations necessary for a full appraisal of the archaeological interest of the site, as required by condition 14 of the outline consent.
- 1.4 The site location and the designated and non-designated heritage assets in the 1km study area are illustrated on figures 1 and 2 and the gazetteer giving the relevant entries from the West Sussex Historic Environment Record and the National Heritage List for England is in appendix 1. Figures 3a and 3b reproduce historic maps of the land in 1875, and the mid 20th century to illustrate changes over time. The West Sussex Historic Landscape Characterisation data is reproduced as figure 4.

The reserved matters application

- 1.5 The outline approval gives consent for residential development comprising “3.4 hectares of land for up to 100 dwellings (up to 30 (30%) affordable housing) together with 1.1 hectares of land set aside for public open space and strategic landscaping and 2.2 hectares of public open space and green corridors, with vehicular access from Ford Lane and pedestrian/cycle access only from North End Road”. The planning statement describes the proposed development, and outlines the relevant planning policy background, the pre-application consultation undertaken with Arun District Council, and the evolution of the scheme in response.
- 1.6 This report is one of a series accompanying the application. It should therefore be read alongside the application drawings and the following documents:

Planning Statement and Affordable Housing Statement
Planning pack
Landscape pack
Engineering pack including levels and tracking drawings
Ecology Survey and biodiversity checklist
Tree Report.

2 National and local policy

- 2.1 National policy recognises the value and significance of cultural heritage, and the public interest in the preservation of particular assets, and sets out mechanisms to ensure that it is taken into account in planning decision-making. Sites and features of identified interest are protected under the Ancient Monuments and Archaeological Areas Act 1979 as amended, and the Town and Country Planning (Listed Buildings and Conservation Areas) Act 1990.
- 2.2 Section 66(1) of the 1990 act states that, in considering whether to grant planning permission for development that affects a listed building or its setting, the local planning authority or Secretary of State *“shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses”*. Section 72(1) in respect of conservation areas states that special attention shall be paid to the desirability of preserving or enhancing the character or appearance of that area.
- 2.3 National planning policy guidance on conserving and enhancing the historic environment is contained within the National Planning Policy Framework (NPPF), the online National Planning Practice Guidance, the National Design Guide and the Good Practice Advice published by Historic England (GPA1 Local plan making, GPA2 Managing significance in decision-taking in the historic environment (2015) and GPA3 The setting of heritage assets (2017)). Heritage assets are an irreplaceable resource, and should be conserved in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of existing and future generations (NPPF, paragraph 184).
- 2.4 Paragraph 192 of the NPPF states that in determining planning applications,
- “Local planning authorities should take account of:*
- *The desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;*
 - *The positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and*
 - *The desirability of new development making a positive contribution to local character and distinctiveness.”*
- 2.5 Local planning authorities are required to take the significance of an asset into account when considering proposals, in order to avoid or mitigate conflict between any aspects of the proposals and the conservation of the asset (paragraph 190), and *“great weight”* should be given to the objective of conserving designated heritage assets (paragraph 193). As heritage assets are irreplaceable, all harm, from demolition to harm through development within the setting, requires *“clear and convincing justification”* (paragraph 194).

- 2.6 Setting is not a heritage asset or a designation in itself, and its importance lies in what it contributes to the significance of the heritage asset. The approach to identifying those heritage assets likely to be affected by a development proposal is given in the guidance by Historic England, which states that, *“The setting of a heritage asset is ‘the surroundings in which a heritage asset is experienced’ (NPPF, Annex 2: Glossary). Where that experience is capable of being affected by a proposed development (in any way) then the proposed development can be said to affect the setting of that asset.”* (GPA3, paragraph 20). The guidance aims for a consistent approach to the assessment of setting and the range of historic, visual and functional relationships that can define the contribution of adjoining land to the significance of any single asset or group of assets. These include physical attributes and perceptual values, depending on the nature of an asset and its past and present surroundings. Potentially significant views can be deliberately designed or incidental, or the result of later changes.
- 2.7 The principal objective is to avoid harm to designated heritage assets, but detailed policies define the justification required in cases of harm, based on public benefits that outweigh the harm, taking account of the weight to be given to conservation, and consideration of whether the conflict between the provision of such public benefits and heritage conservation is necessary (paragraphs 195 and 196). The corresponding test for non-designated heritage assets such as locally listed buildings is in paragraph 197 which requires a *“balanced judgement”* of effects of development having regard to the scale of harm and the significance of the asset.
- 2.8 The National Design Guide: Planning practice guidance for beautiful, enduring and successful places, provides the following guidance at C2 in relation to context:
- “Value heritage, local history and culture*
- 45 *When determining how a site may be developed, it is important to understand the history of how the place has evolved. The local sense of place and identity are shaped by local history, culture and heritage, and how these have influenced the built environment and wider landscape. Sensitive re-use or adaptation adds to the richness and variety of a scheme and to its diversity of activities and users. It helps to integrate heritage into proposals in an environmentally sustainable way.*
- 47 *Well-designed places and buildings are influenced positively by:*
- *the history and heritage of the site, its surroundings and the wider area, including cultural influences;*
 - *the significance and setting of heritage assets and any other specific features that merit conserving and enhancing;*
 - *the local vernacular, including historical building typologies such as the terrace, town house, mews, villa or mansion block, the treatment of façades, characteristic materials and details – see Identity.”*
- 2.9 The planning statement provides an analysis of the relevant planning policy. The development plan is the Arun Local Plan 2011-2031, adopted July 2018. As outlined in section 16 of the plan the strategic objective for conservation and archaeological heritage is to *“Protect and enhance Arun’s outstanding landscape, coastline, historic, built and archaeological environment, as well as the setting of the South Downs National Park, thereby reinforcing local character and identity”*. Policy HER SP1 states that permission will be granted for development proposals that conserve or enhance the historic environment of the district, and that

designated and non-designated heritage assets should be conserved and enhanced in a manner appropriate to their significance. Development likely to prejudice any of the above, including their settings, will be refused. Relevant detailed guidance is provided by policies HER DM1 on listed buildings, HER DM3 on conservation areas and HER DM6 on sites of archaeological interest.

- 2.10 There are two designated conservation areas at Yapton, both first designated in 1994. One is at the junction of Main Road and Church Road at the south west of the village, and one is around St Mary's Church at the north, adjacent to the development site. There are no published appraisals. Brief descriptions are given in the Conservation Areas Supplementary Planning Guidance adopted 2000. The Church Lane conservation area and its setting was considered in detail by the Inspector for the appeal on a previous application on the site in 2015¹ and this analysis and conclusions were accepted by the Inspector in allowing the outline consent in 2018.

3 Baseline information and assessment of significance

Introduction

- 3.1 The West Sussex Historic Environment Record (HER) was consulted² for information on the known archaeological features and designated assets within the site, and a 1 kilometre radius study area. The data also included the historic landscape characterisation (HLC) information. Any historic relationships or key views that extend beyond this study area are accounted for in the assessment. A full list of the data sources consulted is provided at the end of this document.
- 3.2 The study was undertaken with reference to the Chartered Institute for Archaeologists code of conduct and appropriate standards (2008, updated 2014, and 2012). The report's conclusions are limited by the extent and quality of existing information and therefore its usefulness in predicting the extent and definitive location of the archaeological resource must be qualified. The report of a geophysical survey of the site by SUMO Geophysics Ltd is attached to this report at appendix 2.
- 3.3 The evidence is presented in chronological order in broadly accepted periods such as Palaeolithic–Neolithic. Within the study area are 42 non-designated sites or features listed in the HER data, one of which lies on the site boundary. The data also includes information on 13 previous archaeological investigations. Three locations within the study area are identified as Archaeological Notification Areas (figure 1).

Archaeological interest

- 3.4 The bedrock geology of the site comprises multiple undifferentiated chalk formations (Lewes Nodular, Seaford, Newhaven, Culver and Portsdown). Superficial geology of River Terrace Deposits – Sand, Silt and Clay, are mapped as overlying bedrock across the site.

¹ Appeal of application Y/60/14/OUT, dismissed 13/09/2016. The Inspector's recommendation to allow the appeal was overruled by the Secretary of State on the ground of the conflict with the adopted Yapton Neighbourhood Plan.

² Data received 15 October 2019.

- 3.5 Yapton is located within an area of the Sussex Coastal plain that has been known to be occupied since the Neolithic period, with evidence for Bronze Age and Romano-British settlement within the village itself.
- 3.6 There is a single find spot on the south edge of the site (TOR9) of a prehistoric stone axe. The results of one of the site evaluations to the south at Burndell Road (EV46), also uncovered prehistoric material in the form of flint and burnt flint. Finds of Bronze Age date in the study area are the location of a hoard of predominantly bronze axes, as well as rings and copper waste, to the south of Yapton (TOR17), and a late Bronze Age cooking pot was discovered north of Drove Lane, near Bonhams Farm (TOR20). The evaluation at Burndell Road (EV46) uncovered Bronze Age and Iron Age material.
- 3.7 The HER records the findspot (TOR18) of a Roman coin identified as a silver tetradrachm of Demetrius II of Syria (146-138BC), and a potential occupation site identified through scatters of pottery and roof tile dating to between the 1st and 3rd centuries (TOR24). Closer scrutiny of aerial photographs of this site revealed cropmarks and a possible building outline which when considered with the types of material recovered from fieldwalking may indicate the site of a Roman villa. Several of the previous evaluations recovered Romano-British material alongside evidence from earlier periods (EV45, 47, 50).
- 3.8 The southern part of the Archaeological Notification Area covering Yapton denotes the recorded evidence within the village dating from the Bronze Age through to evidence of Romano-British occupation.
- 3.9 The majority of the entries in the HER relate to 19th century farm holdings (see below).

Historic development

- 3.10 The HER includes no early records for the first documentary reference to Yapton and there are no records of finds or features of Anglo-Saxon date.
- 3.11 Based on the parish boundaries, Yapton may have been part of a larger Saxon territory that also included Barnham and Eastergate to the west³. The other boundaries were based on the watercourses on the north and along the artificial channel of the Ryebank Rife in the south, which may also be a pre-medieval estate boundary. The parish is crossed by the route across the coastal plain from Chichester to Climping on the wide estuary of the river Arun (Main Road, now the B2233) that is first recorded at the beginning of the 13th century.
- 3.12 Yapton was not described individually in the Domesday Survey, appearing as part of the very large holdings of the rape of Arundel, though it has been identified as forming an estate of 2½ hides that became the later manor. The church was in existence in 1086, attached to the minster church at Arundel. The present Church of St Mary (LB1, grade I) is *“a complete church of 1180-1200”*⁴ that incorporates material from an earlier church that is visible in masonry at the base of the tower.

³ The account that follows is based on the information in A History of the County of Sussex: Volume 5 Part 1, Arundel Rape: South-Western Part, Including Arundel. Originally published by Victoria County History, London, 1997.

⁴ Nairn, Pevsner, pg 394.

A window of c.1100 may also be part of an earlier church. The low square tower is visibly leaning and is supported by buttresses added in 1671.

- 3.13 The medieval settlement was focused on the area around the church, with a looser pattern of sporadic development around a square formed by North End Road, Main Road, and Church Road to the south. North End developed later, as an area of linear settlement encroaching onto the roadside waste. The HER identifies the site of the medieval manor house and an area of earthworks of the rectangular house plots of the medieval village to the east and south of the church (TOR21-23, 26). These and the former location of the manor house are included in the Archaeological Notification Area. In the very north of the study area are the possible earthworks of a moated site (TOR29).
- 3.14 The cultivated open fields of the parish were named as Cinders to the east, Tacklee or South Street Field to the south west and East Town Field to the north of Ford Lane. North of the village there was also an area of common meadow named as East Town mead. The enclosure of the open fields occurred piecemeal from the mid 16th century, consolidating holdings into the few principal farmsteads.
- 3.15 The later medieval manorial structure of Yapton was complex, as the early manor had been subdivided into five separate holdings by the 13th and 14th century. These included the principal manor based at the manor house next to the church, that was referred to as the "*great farm*" in 1621; an estate named as Bercourt that was in existence in the mid 14th century, with a manor house by 1460; and some land held by Shulbrede Priory by the 13th century that was recorded as a manor in the mid 16th century.
- 3.16 The earliest extant domestic building in the study area is Coachman's Cottage (LB19) on Church Lane, which is a 16th century timber framed cottage with a later wing. The Old Malthouse (LB13) is a brick house of 17th century origin, but the majority of the listed buildings are small brick or flint cottages of 18th century date, dispersed around the roads (LB3 -5, 7, 20, 23, 24). The 18th century Laburnham Cottages (LB12) was the poorhouse for Yapton until 1836. Of the principal farms, The Homestead (LB18) has a datestone reading 1734, but may be based on a possible earlier core, and the barn at Bonhams Farm (LB15) is of mid 18th century date. Berricourt (LB6), which replaced the manor house recorded in 1460, is a formal 18th century house in large grounds in a conspicuous location on the corner of Church Road and Main Road. Separate from the village the linear group on North End Road includes one listed building, the 18th century rendered brick The Old Cottage (LB23).
- 3.17 The layout of the historic village and the prevailing land uses are shown on the Yeakell & Gardner map of Sussex published in 1778-83⁵. This shows the dispersed form of the village, with the church and a large square block identifiable as the manor house on the north east edge, within a number of walled enclosures. Land to the north is shown as parkland, crossed by several lines of trees and the main footpaths (on the alignments of the present public rights of way). The map shows houses on both sides of North End Road, encroaching on the roadside wastes, and a number of small fields along the western edge of the site.

⁵ This can be viewed at
<http://www.envf.port.ac.uk/geo/research/historical/webmap/sussexmap/Yeakelllarge16.htm>

- 3.18 Records in the West Sussex county archives provide some detail of the estate at Yapton manor and the group of related buildings. A deed of 1775⁶ refers to a farmhouse *“lately erected near Yapton Place together with the orchards and gardens adjoining and the barn, stable, cowstall, oxstall, granary, hogsty, carthouse and gateroom adjoining together with three other barns ... and two others ... and the little orchard next adjoining”*. The manor house was enlarged by a new owner in the later 18th century. An image of the manor and church in 1782⁷ shows a large formal house, with the principal 7-bay entrance façade to the north, shown with a pediment at the centre and a projecting porch. The house was demolished in 1836, and the tithe map drawn a few years later shows no sign of its former location, which had been integrated into the adjacent field to the east. The parkland and area of small fields on North End Road had also been removed and the site area is shown as two large fields. The surviving buildings are the walled garden and a former service range on the north side of the church, and a second area of small buildings including the dovecote around two small courtyards to the south of the church. The service range of 17th century origin survives as part of the modern Church Farm, along with the walled garden. The group to the south is now Binsted Farm which includes the 17th century dovecote (LB2).
- 3.19 The early 19th century buildings in the study area include the farmhouses of some of the early farms that were rebuilt in a more formal style, as at Bonhams Farmhouse (LB14), Stakers Farmhouse (LB16), and the extensions to The Homesteads (LB18). Yapton was also a focus for the building of a number of new gentry scale houses in the early part of the 19th century, at Yewtree House (LB16), Park Lodge (LB21), and Church House (LB22). The a similar style and materials were also used for smaller cottages such as the unlisted Church Cottages on Church Road.
- 3.20 The parish was crossed by the Portsmouth and Arundel Navigation which opened in 1823. There was no wharf in Yapton, as the barge canal linking the River Arun to Chichester Harbour was part of the waterway intended as an alternative inland route from London to Portsmouth. The canal closed in 1855 and parts of the alignments remain extant as earthworks and/or footpaths. The related buildings in the study area are the surviving sections of the bridges at Tack Lee Bridge (HER30), Burndell Bridge (HER31) and the listed bridge at The Pines (LB10).
- 3.21 The OS map dated 1876, reproduced at figure 3a, shows the dispersed form of the village around the square created by the road layout, with the church slightly separate at the north east and the linear area of North End. The origin of North End as piecemeal encroachment on the former roadside commons is legible and a small area of commons is shown surviving at the south west leading to the junction with Church Lane. There are very few individually named holdings, only two of the large 19th century houses and the two principal farms at Stakers and Bonhams are identified. The former location of the manor at Yapton Place is identifiable by the surviving walled garden and the pair of small courtyards to the south, including the distinctive form of the dovecote. The field patterns around the village are irregular, and the site is part of an area of large fields to the north east of the village, crossed by three footpaths radiating out from the corner by the

⁶ Catalogue number HCC/Acc 1771A/Box17/Bundle1/20

⁷ <http://yaptonhistory.org.uk/places/yapton-place/>

church. The land to the north of Church Lane is undeveloped with only a single cottage at the corner on the junction of Ford Lane and North End Lane.

- 3.22 The HER records the former locations of a large number of historic farmsteads and sites of outfarms that have since been removed, or redeveloped as the village expanded (TOR1-8, TOR10-5, TOR33-42). Of the extant farmsteads, along with the listed farmhouses the principal farms at Bonhams and Stakers both preserve 19th century farm buildings arranged in a U-shaped regular courtyard plan set away from the farmhouse (TOR14, 32). The 19th century industrial history of Yapton is recorded in the sites of a number of brickworks along Burndell Road to the south of the study area (TOR27, 28).
- 3.23 There are few public buildings of 19th century date, principally the Evangelical Church of 1861 (LB11), and several of the buildings included in the Arun local list (see the gazetteer, appendix 1) such as the former post office and the pubs (now converted to dwellings).
- 3.24 There was significant additional housing development at Yapton from the early 20th century, in the form of ribbon development along the roads, and several large council estates were built to the south of the village in the inter-war and early post-war periods. The map of the village in the mid 20th century (figure 3b) shows the focus of the new housing areas to the south, and the fragments of the earthworks marking the former course of the canal. The outline of the large area occupied by Ford Airfield is shown, the detail suppressed because of the continued military use. The airfield was first established 1917 and was in use as a private airfield in the inter-war years before being recommissioned as the Royal Naval Observer School, and then taken over by the RAF. The base closed in 1958.
- 3.25 The HLC data (figure 4) illustrates the dispersed pattern of the early hamlet at the church and the principal farmsteads, now absorbed within the larger areas of modern development. The field patterns across the study area are predominantly post-medieval and modern types, and the site is part of a wide area identified as modern field amalgamation (the most prevalent type). The north of the study area is dominated by large scale horticulture and nurseries.

Assessment of significance

- 3.26 The categories of heritage values that may be attached to a place were outlined in the English Heritage document Conservation principles: policies and guidance for the sustainable management of the historic environment, 2008, and the revised draft published by Historic England in 2017. These definitions have now been included in the updated NPPG, July 2019:

“The National Planning Policy Framework definition further states that in the planning context heritage interest may be archaeological, architectural, artistic or historic. This can be interpreted as follows:

archaeological interest: As defined in the Glossary to the National Planning Policy Framework, there will be archaeological interest in a heritage asset if it holds, or potentially holds, evidence of past human activity worthy of expert investigation at some point.

architectural and artistic interest: These are interests in the design and general aesthetics of a place. They can arise from conscious design or fortuitously from the way the heritage asset has evolved. More specifically, architectural interest is an interest in the art or science of the design, construction, craftsmanship and decoration of buildings and structures of all types. Artistic interest is an interest in other human creative skill, like sculpture.

historic interest: An interest in past lives and events (including pre-historic). Heritage assets can illustrate or be associated with them. Heritage assets with historic interest not only provide a material record of our nation's history, but can also provide meaning for communities derived from their collective experience of a place and can symbolise wider values such as faith and cultural identity."

Paragraph: 006 Reference ID: 18a-006-20190723

- 3.27 The following section describes how these values can be applied to the heritage assets at Yapton.
- 3.28 There are no designated heritage assets anywhere on site and the closest non-designated heritage asset pertains to a single archaeological findspot on the southern boundary denoting the chance discovery of a single prehistoric stone axe (TOR 9). This type of find does not indicate the presence of a prehistoric settlement in the area, it simply gives a general background of transient landscape use. The southern portion of the Archaeological Notification Area (ANA) covering Yapton denotes the recorded evidence within the village dating from the chance discovery of a Bronze Age hoard (TOR 17) through to evidence of Romano-British occupation (TOR 24). The eastern portion of the village ANA is more focused on the medieval origins, including the Yapton DMV (TOR 26) and the subsequent establishment of St Mary's Church (TOR 21) and the site of the manor of Yapton Place (TOR 22) and its associated dovecote (TOR 23).
- 3.29 The site has been agricultural land on the northern outskirts of the village probably since medieval times. The absence of archaeological records on the site should not be viewed as evidence that archaeology is not present. It is more an indication that the site has been in use as farmland since historic times and the growth of the village. However, the recent geophysical survey of the application site failed to record any features or anomalies that could be interpreted as being of archaeological interest (SUMO 2019, 3; appendix 2). Where archaeological deposits are still present across the site, it is considered based on evidence presented here, that the remains are likely to be of low value and of a significance in relation to other local sites recorded in the HER database and unlikely to be older than post-medieval or modern date.
- 3.30 The relevant designated heritage assets were identified by the 2015 appeal Inspector as St Mary's Church and the Church Lane conservation area, based on the contribution of the site to the significance of the heritage assets as part of their setting⁸.
- 3.31 For both designated assets, their significance was judged to lie principally in the value of the fabric of the buildings and in the visible time depth.

⁸ The relevant paragraphs are 11.27-11.42 of the Inspector's report (ref APP/C3810/A/14/2228260).

- 3.32 For St Mary's Church, the historic and architectural interest is found in the fabric and the appearance of the church within its walled churchyard, and in the close views on Church Lane. As the inspector stated, *"Little if any of what is important to the significance of the asset can be experienced from beyond the churchyard and the contribution which the wider setting makes to its significance is very limited."* (paragraph 11.28).
- 3.33 The low tower with the distinctive square top is visible above the surrounding trees from within the fields including the site area crossed by the public footpath, which is within its setting (though the body of the church is not visible, and the site is not visible from the churchyard). The setting is strongly influenced by the surrounding modern housing development and Orchard Business Park, though the church retains the open fields forming the historic setting to the east and the relationship to Church Farm. The contribution of the views between the site and the church to the significance of the listed church is minimal because of the lack of other factors, *"This is because there is no important relationship between the church and the appeal site, no historical association, the composition in the view was never part of its design or function, and no relationship with features or phenomena."* (paragraph 11.29).
- 3.34 The Inspector concluded on the church that the site is *"a relatively peripheral part of its setting."* (paragraph 11.30).
- 3.35 The other closest listed buildings are Church House and Park Lodge on Church Lane. The site area is not part of the setting of these assets, there was no relationship historically or functionally to the farmland to the north, and there is now no relationship physically or visually because of the modern houses on the north side of Church Lane. The Inspector concluded that there was no potential for effects on these assets as a result of development of the site. There is also no relationship or potential for effects on any of the other listed buildings in the study area, or the conservation area at Main Road to the south.
- 3.36 The Church Lane conservation area covers a small and tightly defined area around the building group at the church. It coincides with the medieval village location, marked by the modern Church Farm and walled garden and Binsted Farm, both originating in the buildings surviving when the manor house at Yapton Place was demolished in the early 19th century. The designation includes the large early 19th century houses on Church Lane, and several cottages of similar date and formal appearance. The older buildings are seen in close juxtaposition with the modern houses and bungalows on the north side of Church Lane. Again, the significance derives from the fabric of the buildings, the boundaries (including the distinctive high flint walls) and the dispersed layout of the older buildings on the intricate pattern of roads. In the absence of an adopted appraisal, the Conservation Areas SPG (2000), provides a brief description of the Church Lane conservation area as a *"loose grouping"* based around St Mary's Church, Church Farm and the two 19th century gentry scale houses. The description highlights the value of the high flint walls along sections of Church Lane and the overall rural character.
- 3.37 The 2015 appeal Inspector's assessment was that *"the character and appearance of the conservation area, and its significance, are derived from the extant historic*

structures, including the vernacular style and materials they exhibit, and their arrangement and patterns.” (paragraph 11.34).

- 3.38 The contribution of the site area as part of the wider rural setting of the village is limited by the landscape of modern agriculture and strong influence of modern development. The nature of the village means the historic areas are now a relatively small proportion of the settlement, dispersed through the large areas of modern development. The public footpaths across the site (in particular number 357 running diagonally across the site from the corner of Ford Lane) are identified as the main way in which to experience St Mary’s Church within its setting and the relationship to the conservation area within this northern field parcel.
- 3.39 The appeal Inspector concluded that, *“in general the site is physically and visually separated from the conservation area by intervening modern development and tree cover. Historically, it has not formed part of the setting to the conservation area”*. (paragraph 11.35).

4 The proposals

- 4.1 Information presented in this assessment, based on current knowledge of non-designated archaeological assets in the West Sussex HER database, and the geophysical survey (SUMO 2019, appendix 2) indicates that the site has a low potential to contain archaeological remains of no more than local interest. The risk of impacts from the development would come from the possible damage to any unanticipated below ground archaeological features caused by the various elements of the construction process. Such features have thus far not been identified and are not recorded in the HER database anywhere on site.
- 4.2 The detail of the proposed development is described in the submitted planning statement and shown on the application drawings. Of particular relevance to this assessment are the site layout, the landscape plan and materials palette.
- 4.3 Significant aspects of the design response to the heritage assets to the south of the site that were noted by the 2018 appeal Inspector in granting the outline application were the character of the view towards the top of the church tower along the public footpath across the site, that will be framed by the new development, and the importance of the separation created by the landscaped open space across the south and east of the site. The pre-application advice from the Arun District Council conservation officer confirmed the importance of the buffer to the assets to the south, of the layout of the development making reference to the character of the local area, and the choice of high quality materials.
- 4.4 The detailed site layout ensures an appropriate physical and visual separation from the heritage assets on Church Lane by creating a significant setback of the built development beyond a wide area of new public open space across the south of the site. Additional areas of open space are provided along the frontage to Ford Lane to the north, and on the eastern boundary and at the centre of the site, incorporating the two public footpaths from Ford Lane towards the church. This layout creates three different areas of significant open space.

- 4.5 The overall approach to the landscape proposals for the site is rural and informal, in keeping with the village location, and consists of areas of retained grassland with wildflowers, new planting and reinforcement of the existing field boundaries and the edges of the site where it abuts adjacent development.
- 4.6 The area of public open space across the southern part of the site is the largest and the most informal. The layout of the built development ensures that this space also links to the space along the footpath along the surviving field boundary on the east side of the site and to the farmland beyond. The retained grassland areas and the new planting have been designed to create an attractive and informal parkland area, integrating the LEAP and infiltration basin, with planting to reinforce the existing field boundaries and to provide visual screening of the substation and the boundaries with the adjacent Orchard Business Park. The new planting will result in a change to the currently the gappy hedge on North End Road and to the open aspect of Ford Lane between high banks, where the hedgerow that was present historically will be reinstated.
- 4.7 The new landscape for the important central open space which is faced by the new housing and is more active, is designed around the route of the footpath across the centre of the site and the retained TPO tree. The layout ensures that the views of the top of the church tower within the trees of the churchyard that are a feature of this route, are retained and framed by development. The boundaries between houses on the edge as the path opens out to the landscaped space to the south, are defined by a mix of hedges and high brick walls, to replicate the enclosure created by the layers of hedges and high walls, of both flint and brick, that are characteristic within the historic part of the village.
- 4.8 The frontage along Ford Lane is faced by the new houses overlooking the existing steps to the public footpath and the new site access road. This area is entirely separate from the church and the older village centre, and is designed to create a new arrival space for the development and to relate to the mixed modern development on North End Road.
- 4.9 The density and layout of the development across the site has ensured that the areas of built development and the vehicular access are accommodated within and separated by the large landscaped spaces. The form and appearance of the built development, shows a mixture of types and materials to integrate with the variety of development forms in the village, avoiding an appearance of uniformity, in particular on the southern edge and framing the public footpath.

5. Conclusions

- 5.1 The report's conclusions are limited by the extent and quantity of existing information and therefore its usefulness in predicting the actual full extent and definitive location of the archaeological resource must be qualified. It is important to stress that the areas currently showing an absence of archaeological sites ('blank areas') should not be seen as definitively proving lack of archaeological potential. In accordance with central and local government this desk-based assessment has been undertaken to clarify the archaeological potential of the site and study area.

- 5.2 In order to satisfactorily determine the archaeological resource across the site prior to development commencing, it was agreed in consultation with James Kenny, as archaeology advisor to the local planning authority, to commission a suitably qualified archaeological contractor to produce a scope of works, referred to as a Written Scheme of Investigation (WSI), for the trench evaluation for the site. The WSI produced by Pre-Construct Archaeology was submitted to the council and approved on 11 November 2019.
- 5.3 The detailed proposals as presented in this reserved matters application preserve the qualities of the site that are of value to the designated heritage assets to the south on the edge of the historic centre of Yapton. For St Mary's Church, the appreciation of the church in its rural setting on the edge of the modern village in views from the footpath across the site is preserved as part of the new framework of landscaped open spaces within the development. The informal areas to the south and east of the site provide a significant physical and visual buffer between the new development and the church group, and the footpath is framed by the central space and the southern development edge.
- 5.4 The value of the site area to the Church Lane conservation area is limited to its role as part of a rural setting to the modern village that dominates the small historic building group. The development proposals reflect the village character, with a preponderance of open space and landscape planting providing new landscaped areas, the reinforcement of site boundaries, and visual screening of some existing development.

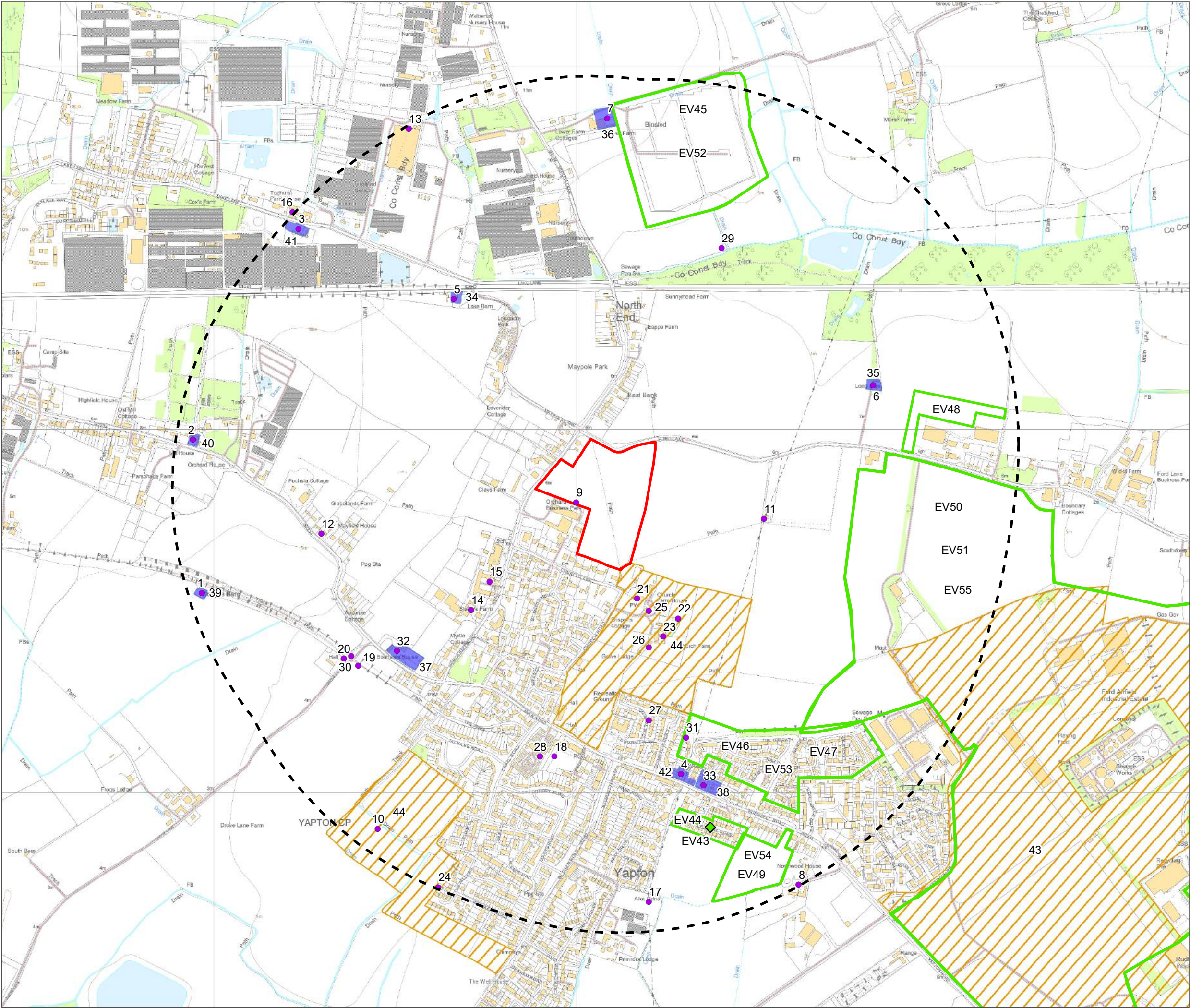
Sources

Arun District Council, 2000, Conservation Areas SPG
Arun District Council, 2005, Buildings or Structures of Character SPG
Arun District Council, 2014, Conservation Areas Management Plan
Chartered Institute for Archaeologists, 2012, Standards and guidance for historic environment desk based assessments
English Heritage, 2008, Conservation principles – policies and guidance for the sustainable management of the historic environment
Historic England, 2015, Good Practice Advice notes GPA1 Local plan making; GPA2 Managing significance in decision-taking in the historic environment
Historic England, 2017, GPA3 The setting of heritage assets
Historic England, 2017, Conservation principles for the sustainable management of the historic environment, consultation draft
Historic England, 2019, Historic England Advice Note 12, Statements of Heritage Significance: Analysing Significance in Heritage Assets
Ministry of Housing, Communities and Local Government, 2019, National Planning Policy Framework
Ministry of Housing, Communities and Local Government, 2019, Planning Practice Guidance (online)
Ministry of Housing, Communities and Local Government, 2019, National Design Guide; Planning practice guidance for beautiful, enduring and successful places
Nairn, I & Pevsner N, 1965, 2nd edition, The Buildings of England: Sussex

Websites:

www.british-history.ac.uk for historic background and documentary sources including Victoria County History
<http://list.historicengland.org.uk> for the National Heritage List for England
www.pastscape.org.uk/ for records in the Historic England Archives database

Figures



- Site boundary
- 1km study area
- HER records
- HER events
- HER events (areas)
- HER records (areas)
- Archaeological Notification Areas

**Yapton
Redrow Homes**

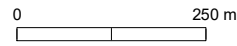


Figure 1: Archaeology: designated and non-designated heritage assets in the study area

Dwg no/161839	Revision
Status	24 October 2019
Scale: 1:10,000 @A3	Drawn by: JC Checked by: SD

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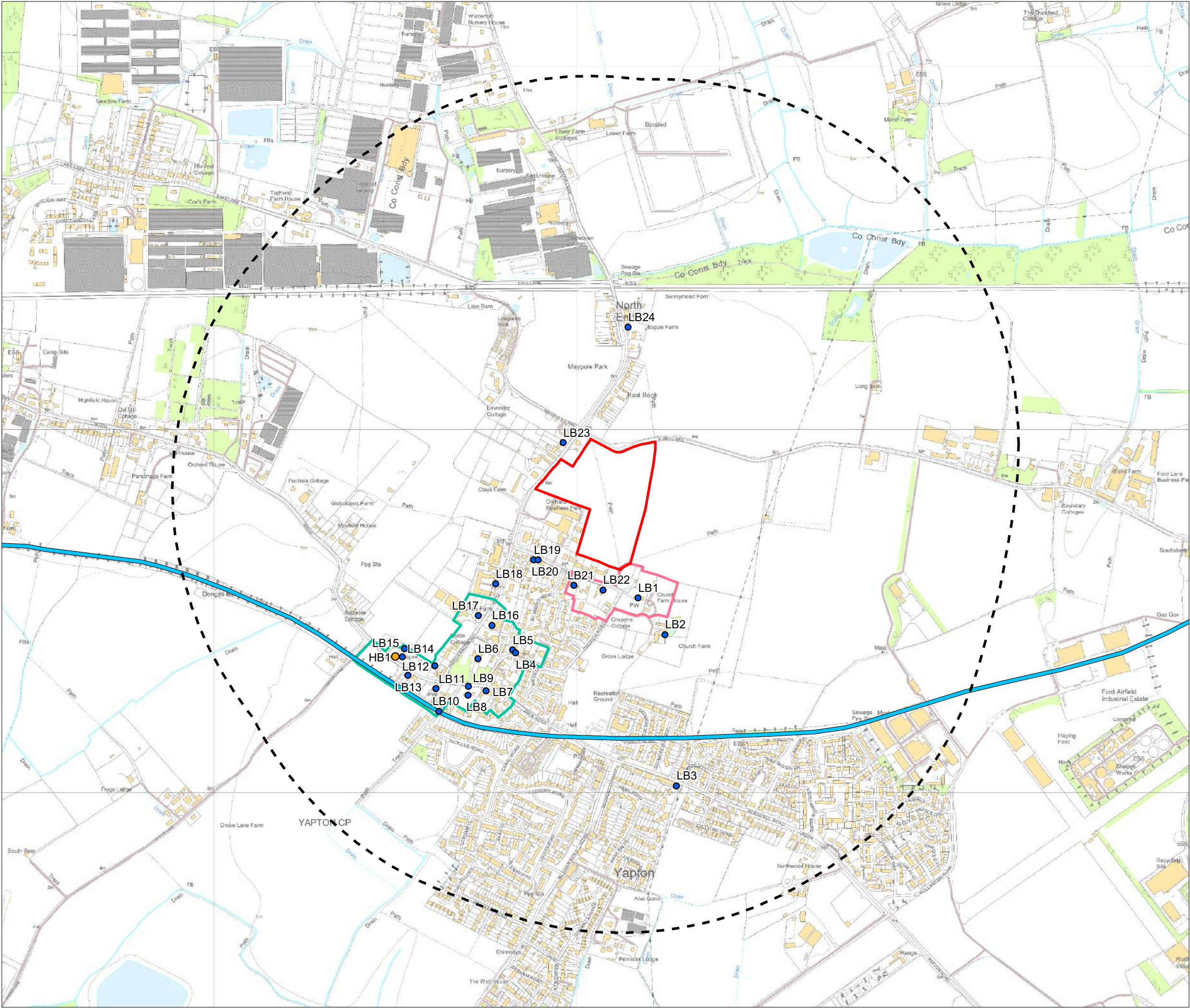
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- Site boundary
- 1km study area
- Listed buildings
- HER record
- Portsmouth - Arundel Canal
- Conservation areas
 - Yapton Church Lane
 - Yapton Church Road/Main Road

Yapton
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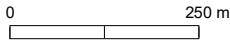


Figure 2: Built heritage: designated and non-designated heritage assets in the study area

Dwg no/161839	Revision
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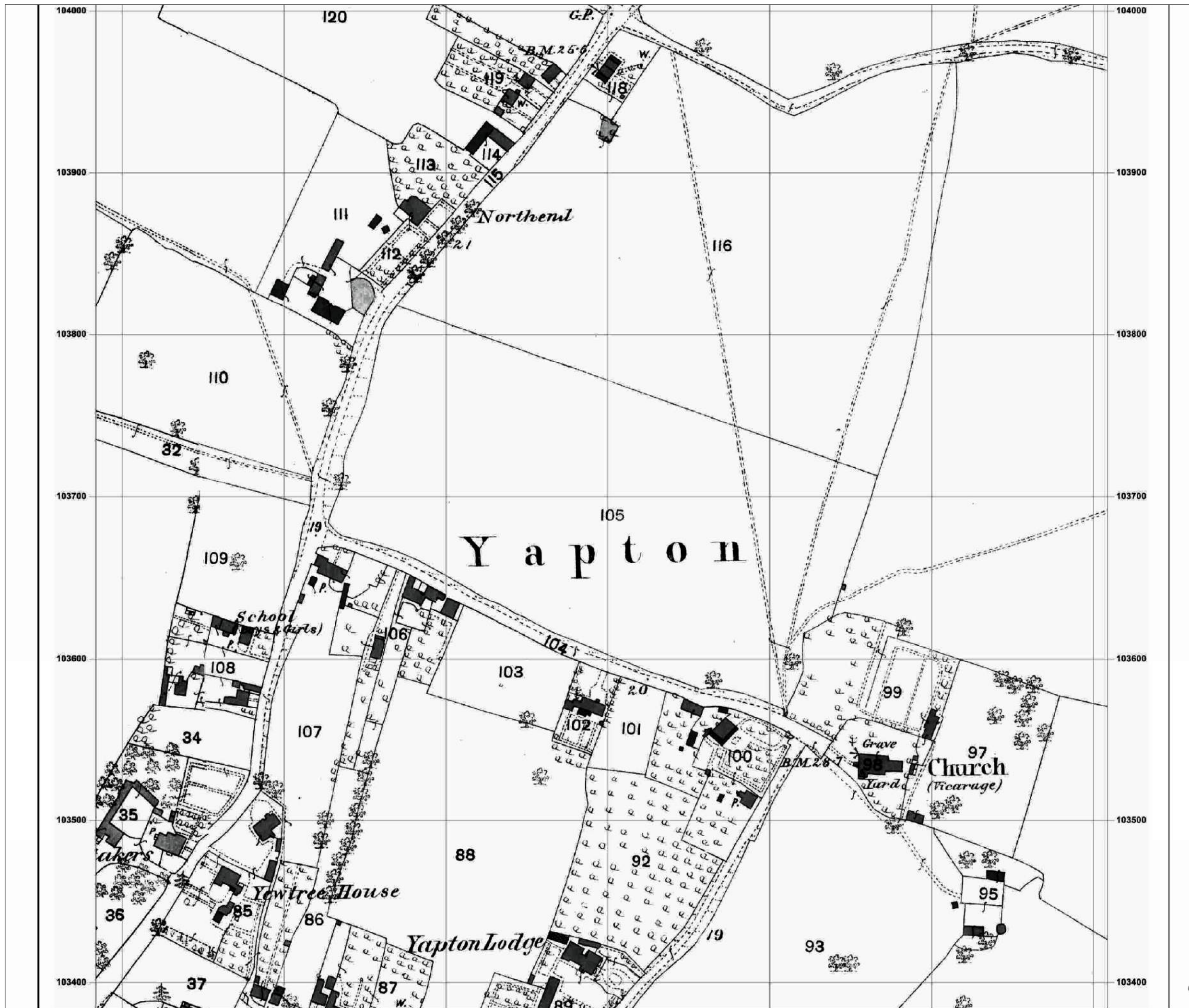
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Figure 3a: Ordnance Survey maps dated 1876

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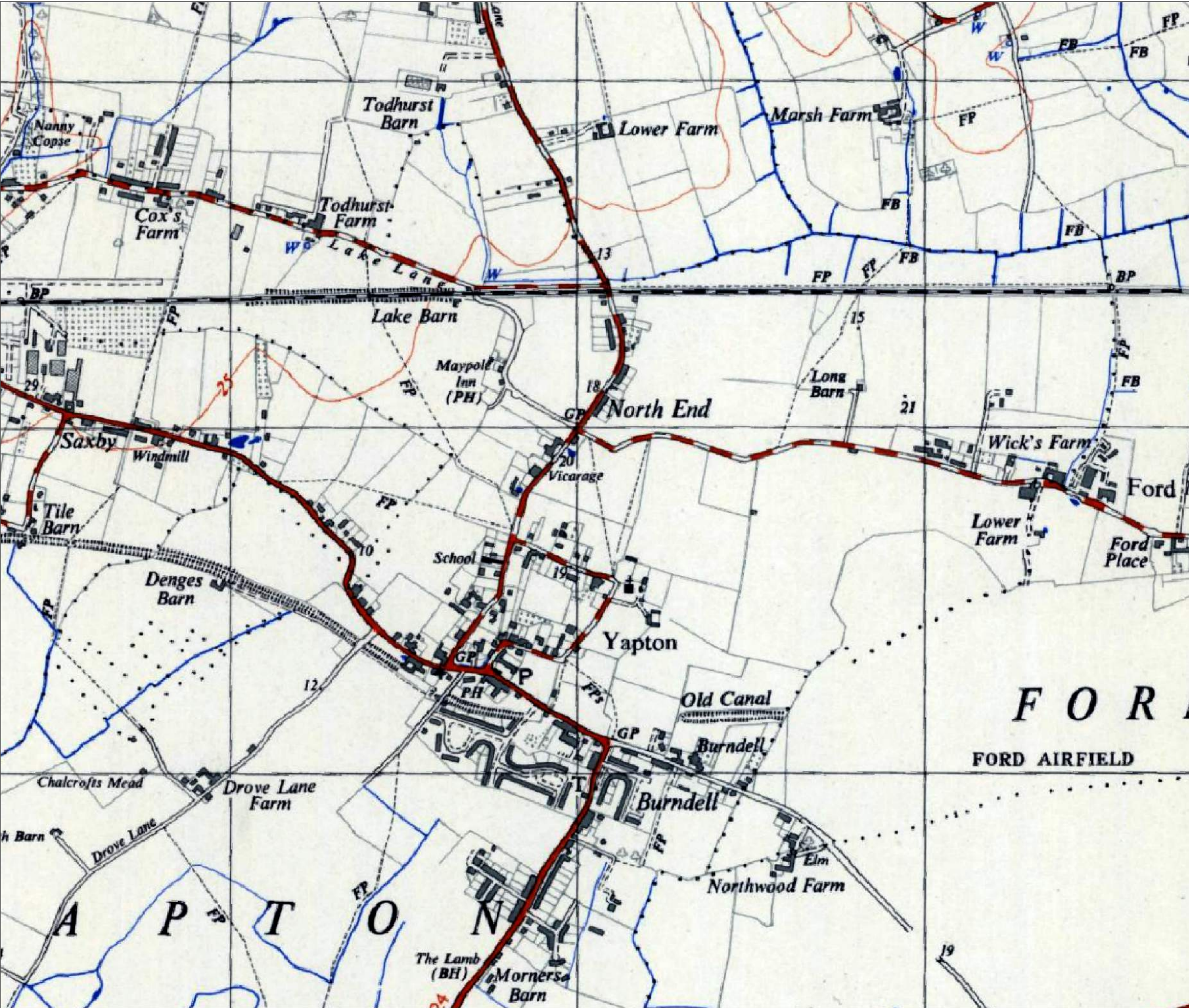
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Figure 3b: Ordnance Survey
Mid 20th century

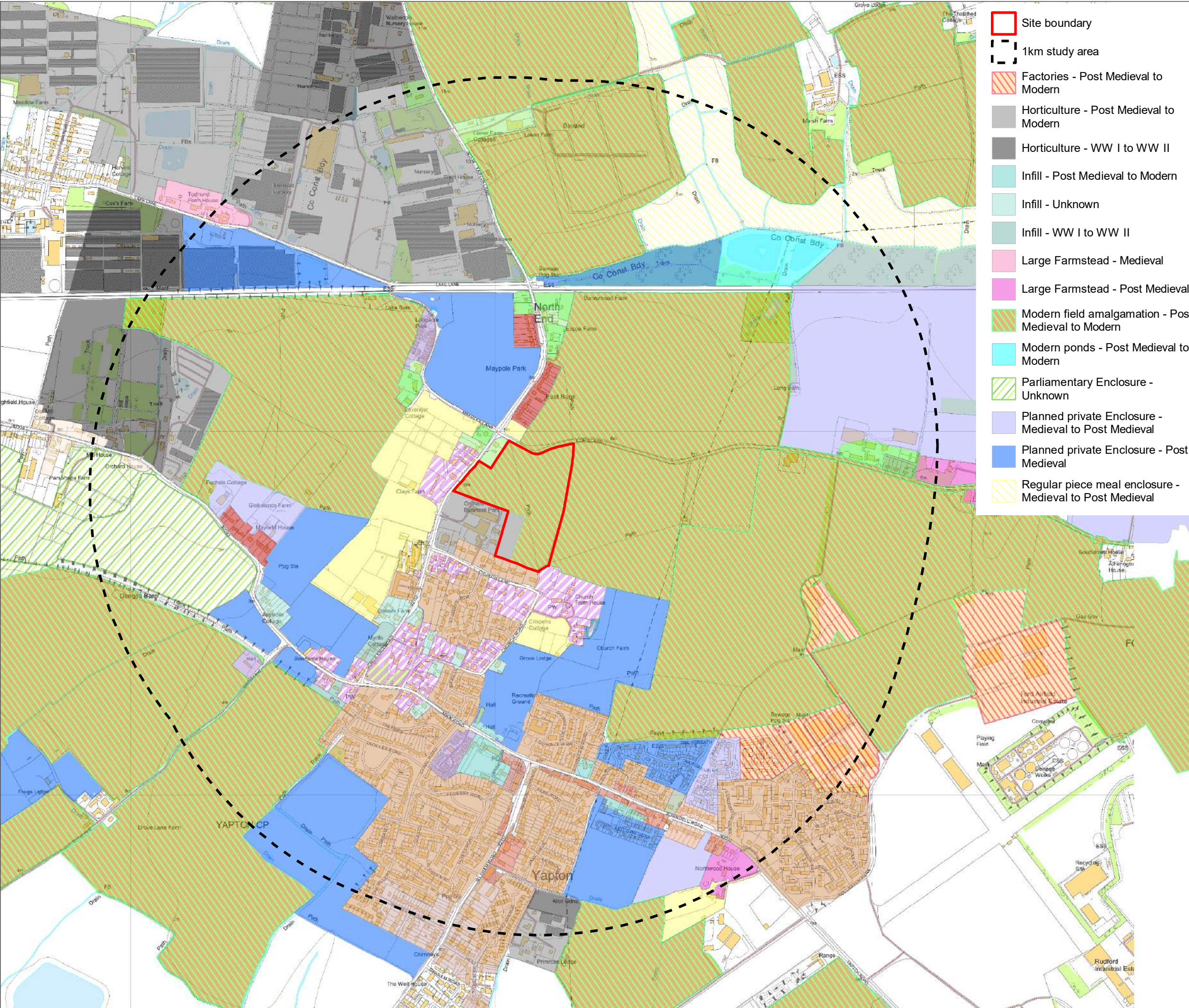
Dwg no/161839	Revision
Status	24 October 2019
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- Site boundary
- 1km study area
- Factories - Post Medieval to Modern
- Horticulture - Post Medieval to Modern
- Horticulture - WW I to WW II
- Infill - Post Medieval to Modern
- Infill - Unknown
- Infill - WW I to WW II
- Large Farmstead - Medieval
- Large Farmstead - Post Medieval
- Modern field amalgamation - Post Medieval to Modern
- Modern ponds - Post Medieval to Modern
- Parliamentary Enclosure - Unknown
- Planned private Enclosure - Medieval to Post Medieval
- Planned private Enclosure - Post Medieval
- Regular piece meal enclosure - Medieval to Post Medieval

- Regular piece meal enclosure - Post Medieval to Modern
- Ribbon Development
- Ribbon Development - Post Medieval to Modern
- Ribbon Development - Unknown
- Ribbon Development - WW I to WW II
- Schools - Unknown
- Small farmstead/cottage - Post Medieval
- Small farmstead/cottage - Post Medieval to Modern
- Small farmstead/cottage - Unknown
- Small farmstead/cottage - WW I to WW II
- caravan/chalet/camp - Post Medieval to Modern
- hamlet
- planned estate - Post Medieval to Modern
- planned estate - Unknown
- planned estate - WW I to WW II

Yapton
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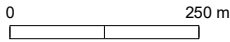


Figure 4: Historic Landscape
Characterisation

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Appendix 1: Gazetteers of heritage assets in the study area

Entries in West Sussex County Council Historic Environment Record

Archaeological findspots and areas

TOR ref	WSCC HER ref	Description
1	MWS10049	Site of Denges Barn Historic Outfarm, Yapton
2	MWS10284	Site of Farmstead at Saxby Historic Farmstead, Barnham
3	MWS10374	Historic Farmstead to the South of Todhurst Farms, Yapton
4	MWS10401	Site of Historic Farmstead to the West of Burndell Farm, Yapton
5	MWS11908	Lake Barn Historic Outfarm, Yapton
6	MWS12035	Site of Long Barn Historic Outfarm, Ford
7	MWS12219	Lower Farm Historic Farmstead, Walberton
8	MWS12641	Northwood Farm Historic Farmstead, Ford
9	MWS1266	Stone Axe, Yapton
10	MWS12740	Site of Outfarm Historic Outfarm, Yapton
11	MWS13032	Historic Outfarm North East of Yapton
12	MWS13065	Site of Historic Outfarm North West of Yarton, Yapton
13	MWS13209	Site of Historic Outfarm South West of Todhurst Barn, Yapton
14	MWS13636	Stakers Historic Farmstead, Yapton
15	MWS13728	The Homestead Historic Farmstead, Yapton
16	MWS13783	Todhurst Farm Historic Farmstead, Walberton
17	MWS2397	Bronze Age Hoard - Yapton
18	MWS2398	Syrian Coin - Yapton
19	MWS2400	Medieval Steelyard Weight - Yapton
20	MWS2402	Late Bronze Age Pot - Yapton
21	MWS2403	The Parish Church of St Mary, Yapton
22	MWS2405	Yapton Place
23	MWS2406	Dovecot - Yapton Place
24	MWS2415	Possible Roman Occupation Site , Yapton
25	MWS2423	Parkscape - Yapton
26	MWS3369	Yapton DMV
27	MWS4706	Brickfield between Burndell Road and the Canal
28	MWS4707	Brickworks
29	MWS7313	Earthworks,Todhurst Crossing
30	MWS7927	Tack Lee Bridge, Yapton on the Portsmouth & Arundel Navigation
31	MWS7928	Burndell Bridge on the Portsmouth & Arundel Navigation, Yapton
32	MWS9453	Bonhams Historic Farmstead, Yapton
33	MWS9604	Site of Burndell Farm Historic Farmstead, Yapton
34	MWS11908	Lake Barn Historic Outfarm, Yapton
35	MWS12035	Site of Long Barn Historic Outfarm, Ford
36	MWS12219	Lower Farm Historic Farmstead, Walberton
37	MWS9453	Bonhams Historic Farmstead, Yapton
38	MWS9604	Site of Burndell Farm Historic Farmstead, Yapton
39	MWS10049	Site of Denges Barn Historic Outfarm, Yapton
40	MWS10284	Site of Farmstead at Saxby Historic Farmstead, Barnham
41	MWS10374	Historic Farmstead to the South of Todhurst Farms, Yapton
42	MWS10401	Site of Historic Farmstead to the West of Burndell Farm, Yapton

HER archaeological events

TOR ref	WSCC HER ref	Description
EV43	MWS13020	Land at Fellows Gardens, Yapton - Archaeological Evaluation
EV44	EWS1655	Land at Fellows Gardens, Yapton - Evaluation
EV45	EWS1664	Land at Lower Farm, Binsted - Archaeological Investigations
EV46	EWS1774	Land off Burndell Road, Ford - Archaeological Evaluation
EV47	EWS1824	Land at East Yapton - Desk Based Assessment
EV48	EWS36	Land at Wicks Farm, Ford - Desk Based Assessment
EV49	EWS397	Land off Burndell Road, Yapton - Evaluation
EV50	EWS1874	Land at Ford Airfield, Ford - Desk Based Assessment
EV51	EWS1875	Land at Ford Airfield, Ford - Archaeological Survey's
EV52	14981	Land at Lower Farm, Binsted - Archaeological Investigations
EV53	15030	Land off Burndell Road, Ford - Archaeological Evaluation
EV54	15112	Land off Burndell Road, Yapton - Evaluation
EV55	16144	Land at Ford Airfield, Ford - Archaeological Surveys

Archaeological Notification Areas

DWS84 85	Multi-Period Site at the Disused Ford Airfield and Ford Open Prison, For, Arun 039
DWS85 15	Bronze Age Activity and Roman Occupation, Yapton Deserted Medieval Village and the Parish Church of St Mary, Yapton, Arun 022

Listed buildings

LB ref	Description
LB1	The Parish Church of St Mary, grade I Chancel, nave with aisles and tower to the south west of the nave. Nave and tower C12. The nave has lean-to roofs with later dormer windows inserted. The tower has red brick buttresses and a hipped shingled roof. Chancel C13. Very attractive unrestored medieval church.
LB2	Manorial Dovecote at Church Farm, grade II Dove cote. C17. Circular structure of flint with red brick quoin-shaped patterns at regular intervals and cornice of 3 courses of brick. Conical tiled roof with 2 hipped dormers. Cupola for bird entry missing. The small size of the dovecote indicates use solely for the Lord of the Manor. This dovecote appears to be identified in MSS 12894 of the West Sussex Record Office, a lease dated 17 October 1667 for a 'capital messuage with dove house, in Yapton'.
LB3	No. 19 Burndell Road, grade II C18 cottage. Two storeys. Two windows. Faced with flints with brick dressings, quoins and modillion eaves cornice, all now painted. Hipped thatched roof. Casement windows.
LB4	Rose Cottage, Church Road, grade II C18. Two storeys. Two windows. Faced with flints with brick dressings and quoins, all now painted. Slate roof, turnerised. Casement windows. Modern addition to east.
LB5	Willow Cottage, Church Road, grade II L-shaped cottage. C18 or earlier. Two storeys. Two windows. Red brick, south front stuccoed. Steeply-pitched tiled roof. Casement windows.
LB6	Berricourt, Main Road, grade II C18. Two storeys and attic. Five windows. Two dormers. Stuccoed. Stringcourse. Eaves cornice. Tiled roof. Glazing bars intact. Doorway with pilasters and pediment.

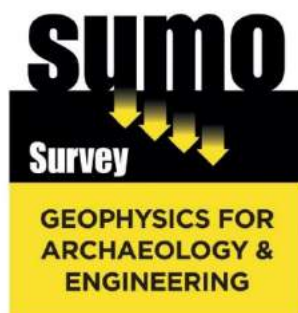
LB ref	Description
LB7	The Shoulder of Mutton Inn, Main Road, grade II C18. Two storeys. Three windows. Painted brick. Modillion eaves cornice. Tiled roof. Glazing bars missing. Doorway with pilasters and pediment. Ground floor addition to west with similar doorway.
LB8	Dyers Croft, Main Road GV II House. 1938-9 in Arts and Crafts style similar to work of the architect Baillie Scott. Built of painted textured brickwork, tile hanging and thatched roof with 2 brick chimney stacks. The property is angled to take maximum advantage of the south facing garden front rather in the manner of an Edwardian 'Butterfly' house. 2 storeys 5 windows, oak windows with leaded lights. North or entrance front has right side half-hipped gable, the upper floors tile hung the lower floor painted brick. 1st floor has 5 light tall oak mullioned window. Ground floor has shorter 5 light mullioned windows. The gable overhangs on deep wooden brackets. To the left of the gable is a 2 light oak mullioned window and 4 centred arched wooden doorcase with studded oak door and decorative large hinges. To the left of this is the principal feature of the north front, a projecting semi circular 2 storey staircase tower with 8 light mullioned window with leaded lights and stone cills, the 2 centre lights taller. To the left of this is an eyebrow dormer and mullioned window to ground floor. The south front has painted brick ground floor and right side gable. 3 of the 1st floor bays are tile hung with a recess between the 1st and 3rd bay from the left with brackets and wooden balcony, 2 light mullioned windows to 1st floor and French window below. Other windows are 4 or 5 light mullioned windows on 1st floor and 4 or 5 light mullioned and transomed casements to ground floor. Gable has two 2-light mullioned windows to ground floor. Interior not seen but sales particulars refer to oak joinery and marble fittings of the period.
LB9	Wall to Dyers Croft, Main Road, GV II Garden wall 1938-9. Built of carved sandstone rubble. Almost 6 feet high with triangular stone coping. To the west are 2 circular taller sandstone rubble gatepiers and a further pair to the south linked by sections of walling and with wrought iron gate.
LB10	Old Canal Bridge, on footpath 157, grade II Former canal bridge c1820. Brick, mostly Flemish bond. Single arch humped back bridge with parapets and retaining walls. A substantial structural survival of the former Portsmouth and Arundel Canal built between 1817 and 1823, abandoned in mid C19. Believed to be only surviving structure remaining of the canal.
LB11	Yapton Evangelical Free Church and School / Hall attached, Main Road, grade II Dated 1861. The church and the school or hall form an L. One storey. Five windows. Faced with flints with stuccoed dressings and quoins. Slate roof. Narrow round-headed windows. The school or hall wing to the west has a gabled central projection with a larger window of two lights.
LB12	Laburnham Cottages, Main Road, grade II L-shaped building. C18, much altered since. Two storeys. Four windows. Red brick, south fronted stuccoed. Tiled roof. Casement windows. Gabled projection at east end.
LB13	The Old Malthouse, Main Road, grade II C17. Two storeys. Three windows. Painted brick. Modillion eaves cornice. Tiled roof. Casement windows. C19 stuccoed porch.
LB14	Bonhams Farmhouse, Main Road, grade II Early C19. Two storeys. Three windows. Stuccoed. Long and short quoins. Slate roof. Glazing bars intact. Porch with iron columns and tent-shaped canopy. C19 addition on ground floor only to the west comprising one bay of three windows.
LB15	Bonham's Barn Main Road, grade GV II An intact mid C18 barn reusing some earlier timbers with two attached early lean-to's, one a cart shed the other reputed to have been a horse-powered 'engine house' for threshing corn. It has group value with the former farmhouse.

LB ref	Description
LB16	Yew Tree House, North End Road, grade II Early C19. Two storeys and attic. Three windows. Two dormers. Stuccoed. Stringcourse. Eaves cornice. Slate roof. Glazing bars intact. Later C19 square porch.
LB17	Stakers Farmhouse, North End Road, grade II Early C19. Two storeys and attic. Three windows. Two dormers. Stuccoed. Stringcourse. Tiled roof. Glazing bars intact. Later C19 square stuccoed porch.
LB18	The Homestead, including attached outbuildings, North End Road, grade II House with attached outbuildings. Dated 1734 but possible earlier core, extended in C19. Brick, covered in roughcast with tiled roof with end brick chimneystacks. Two storeys, two windows. C19 casements with canted bay on ground floor and central doorcase with mid C19 door. Catslide roof to rear and L-wing with casement windows. Interior has open brick fireplace, the lower part of an C18 winder staircase, original floorboards, C18 roof including staggered purlins, three plank doors and an C18 wooden fireplace. The fireplace and one of the doors was not in situ at the time of inspection. The attached outbuildings were probably a small barn and stable with hayloft over. Barn of cobbles partly rendered with thatched roof and C20 shopfront. Probable stable building of cobbles with brick lacing courses, slate roof and brick external chimney. Cambered entrance to ground floor and cambered loft door to rear. Formerly a butcher's shop.
LB19	Coachman's Cottage, Church Lane, grade II C16 timber-framed building with painted brick infilling and diagonal braces on first floor. Thatched roof. Casement windows. Two storeys. Three windows.
LB20	The Twelfth of Never, Church Lane, grade II C18 cottage. Two storeys. Two windows. Faced with flints with brick dressings and quoins, all now painted. Thatched roof. Casement windows.
LB21	Park Lodge, Church Lane, grade II Early C19. Two storeys. Four windows. Stuccoed. Slate roof. Two C19 bays three windows each on ground floor. Glazing bars intact in the other windows. Doric porch between the bays.
LB22	Church House, Church Lane, grade II Early C19. Two storeys. Five windows. Stuccoed. Eaves cornice. Hipped slate roof. Windows with Venetian shutters and glazing bars intact on first floor only. Doorway with flat hood on brackets and door of six fielded panels.
LB23	The Old Cottage, North End Road, grade II C18. Two storeys. Two windows. Stuccoed. Tiled roof. Casement windows in moulded architrave surrounds. Modern gabled porch.
LB24	The Thatched Cottage, North End Road, grade II C18. Two storeys. Two windows. Faced with knapped flints with red brick dressings and quoins. Thatched roof. Casement windows.

Local list: Buildings or structures of character

Bilsham Road: Nos 84, 85
Burndell Road: 3 Northwood Cottages, 4 Northwood Cottages, Ferndale House, Chilgrove Cottage, Ferndale Cottage
Church Lane: Little Orchard, Hazel Cottage, 1,2,3 Lilac Cottages
Church Road: Jonathan Cottage, The Old Bakery, The Old Forge, Pound Cottage, East Pound Cottage, West Sunnyside, Grove Lodge, Church Cottage
Main Road: Cornerways, St Giles Cottage, The Cottage, Cosy Cot, 3 and 4 Tillington Cottages
North End Road: The Olive Branch, Yapton Lodge, Hawthorn House (part of Yew Tree Nursing Home) – excludes the modern single storey extension

Appendix 2: Geophysical survey report, North End Road, Yapton, Arundel, West Sussex, SUMO Geophysics Ltd, March 2019



GEOPHYSICAL SURVEY REPORT

North End Road, Yapton, Arundel, West Sussex

Client

Terence O'Rourke

Survey Report

14745

Date

March 2019



Survey Report 14745: North End Road, Yapton, Arundel, West Sussex

Survey dates 14-15 March 2019

Field co-ordinator Simon Lobel BSc

Field Team Jay Griffiths BA
Oliver Thomas

Report Date 28 March 2019

CAD Illustrations Rebecca Davies BSc

Report Author Rebecca Davies BSc

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Report approved Dr John Gater BSc DSc(Hon) MCIfA FSA

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4	INTRODUCTION	2
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Appendix A	Technical Information: Magnetometer Survey Methods, Processing and Presentation
Appendix B	Technical Information: Magnetic Theory

Figure 01	NTS	Site Location
Figure 02	1:1500	Magnetometer Survey - Greyscale Plot
Figure 03	1:1500	Magnetometer Survey - Interpretation
Figure 04	1:1500	Minimally Processed Data – Greyscale Plot

Detailed magnetic survey (magnetometry) was chosen as the most efficient and effective method of locating the type of archaeological anomalies which might be expected at this site.

Bartington Grad 601-2 Traverse Interval 1.0m Sample Interval 0.25m

3 SUMMARY OF RESULTS

- 3.1 A detailed magnetometer survey was conducted over approximately 6.7 ha of land at North End Road, Yapton. No anomalies of archaeological interest have been mapped, however several linear anomalies of uncertain origin have been identified. Evidence of modern ploughing activity is visible in the data, along with areas of modern ferrous disturbance.

4 INTRODUCTION

- 4.1 **SUMO Geophysics Ltd** were commissioned to undertake a geophysical survey of an area outlined for development. This survey forms part of an archaeological investigation being undertaken by **Terence O'Rourke**.

4.2 Site details

NGR / Postcode	SU 980 038 / BN18 0DS
Location	The survey area is located to the west of North End Road in the village of Yapton, West Sussex.
HER	West Sussex
District	Arun
Parish	Yapton CP
Topography	Mostly level
Current Land Use	Arable - short crop
Geology (BGS 2019)	Bedrock: Lewes Nodular Chalk Formation, Seaford Chalk Formation, Newhaven Chalk Formation, Culver Chalk Formation and Portsdown Chalk Formation (undifferentiated) - chalk. Superficial: River Terrace Deposits (undifferentiated) - sand, silt and clay.
Soils	Soilscape 6; freely draining slightly acid loamy soils (CU 2019).
Archaeology (WSCC 2019)	A search of West Sussex HER identifies a few heritage assets within a 500m radius of the site. These include St Mary's Parish Church (MWS2403), a post-medieval park to the north of the village (MWS2423) and the findspot of a stone axe (MWS1266) from an unknown location within the parish.
Survey Methods	Magnetometer survey (fluxgate gradiometer)
Study Area	6.7 ha

4.3 Aims and Objectives

To locate and characterise any anomalies of possible archaeological interest within the study area.

5 RESULTS

Specific anomalies have been given numerical labels [1] [2] which appear in the text below, as well as on the Interpretation Figure(s).

5.1 **Probable / Possible Archaeology**

- 5.1.1 No magnetic responses have been recorded that could be interpreted as being of archaeological interest.

5.2 **Uncertain Origin**

- 5.2.1 A number of weak linear trends [1, 3, 4] have been mapped across the survey area, all of which are of uncertain origin. It is possible that the responses relate to former ditch-type responses of archaeological origin, however their interpretation as such is tentative at best. They are more likely to be a result of agricultural origin.
- 5.2.2 A linear band of enhanced magnetic response [2] in the north-west of the site is also of undetermined origin. The response appears to form a continuation of the linear anomaly [1] to the south and could be archaeological, natural or agricultural.

5.3 **Agricultural - Ploughing**

- 5.3.1 Evidence of modern ploughing is visible in the northern part of the site in the form of magnetically weak, closely spaced, parallel linear anomalies [5].

5.4 **Ferrous / Magnetic Disturbance**

- 5.4.1 Ferrous responses close to boundaries are due to adjacent fences and gates. Smaller scale ferrous anomalies ("iron spikes") are present throughout the data and are characteristic of small pieces of ferrous debris (or brick / tile) in the topsoil; they are commonly assigned a modern origin. Only the most prominent of these are highlighted on the interpretation diagram.

6 DATA APPRAISAL & CONFIDENCE ASSESSMENT

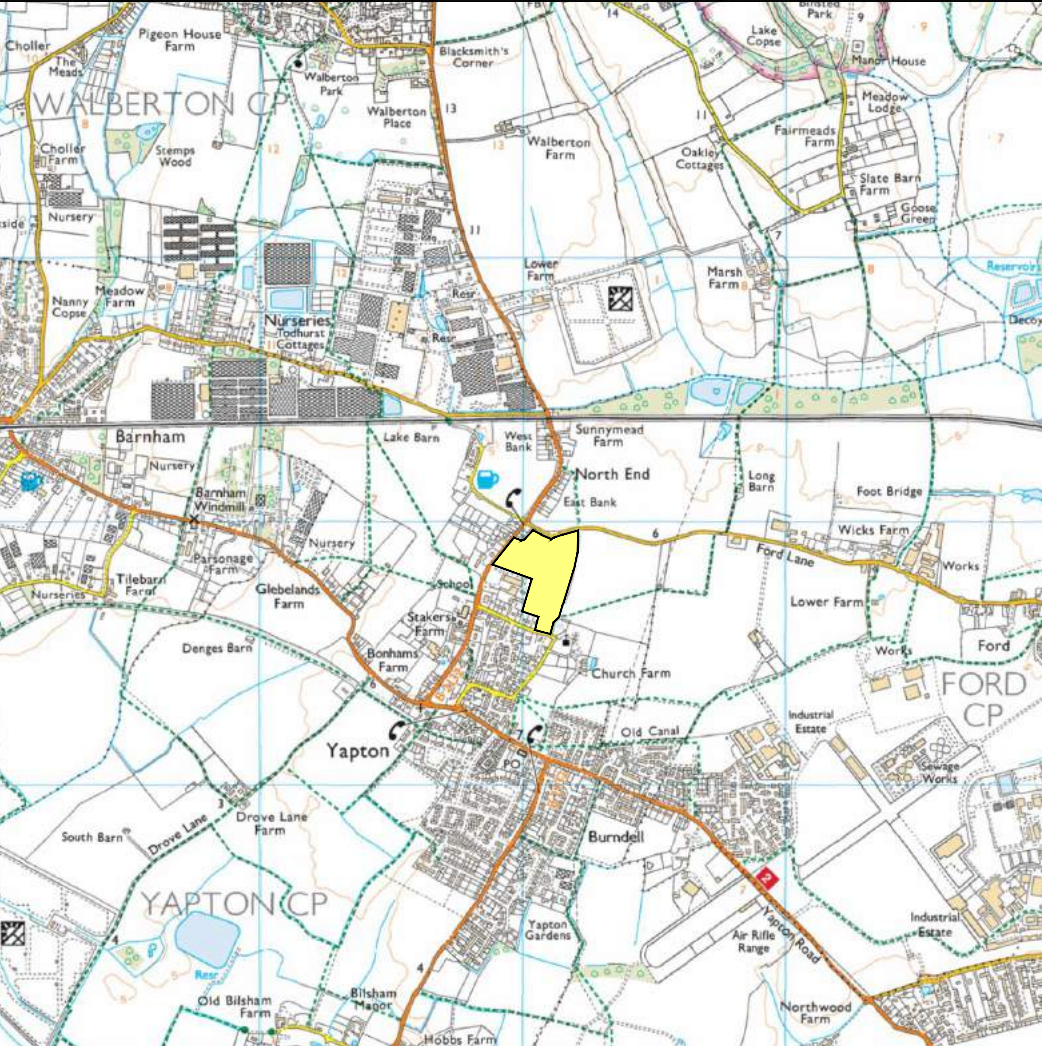
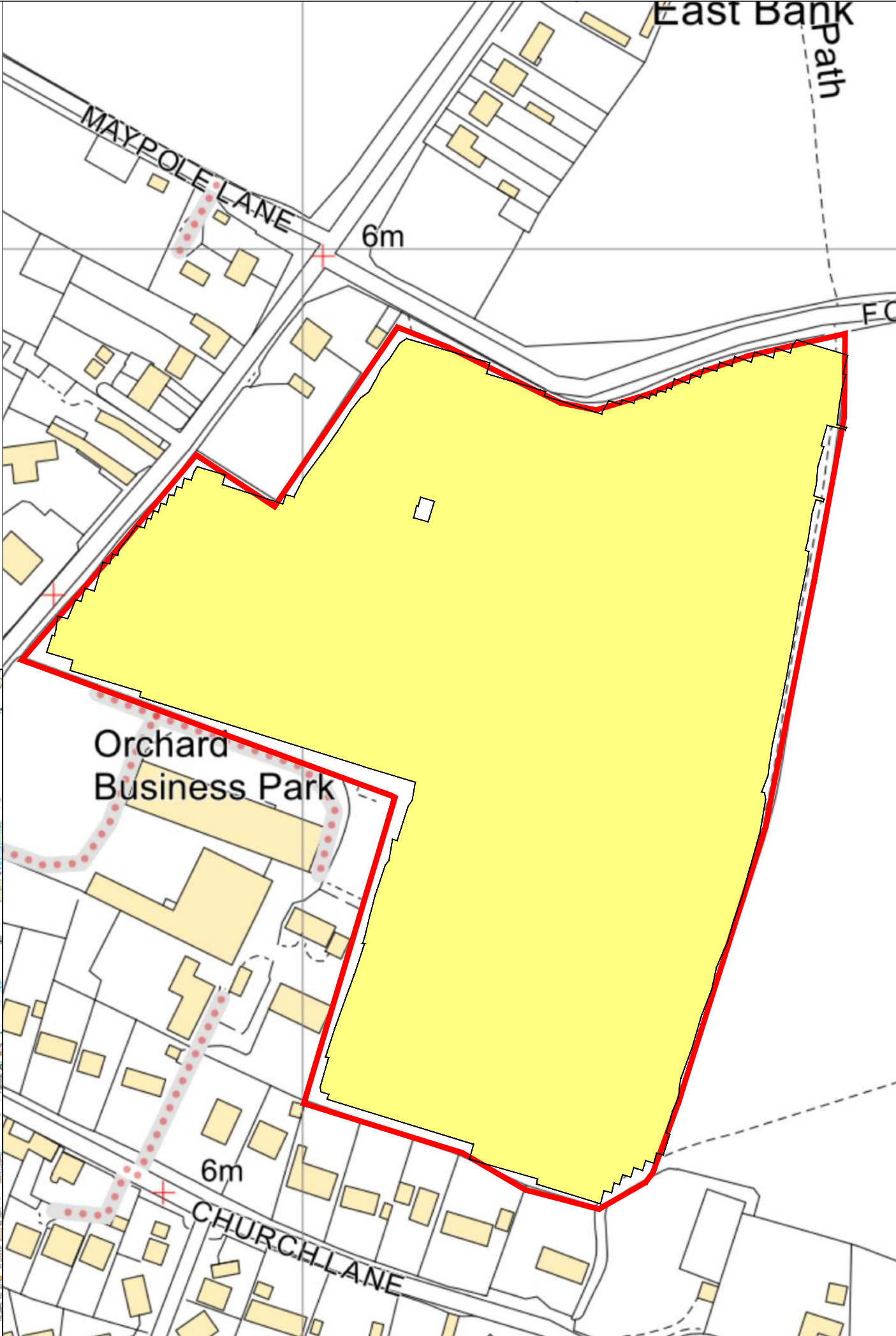
- 6.1 Historic England guidelines (EH 2008) Table 4 states that the typical magnetic response on the local chalk geology is generally good, while responses over superficial river terrace deposits can vary. The results from this survey indicate the presence of several linear anomalies of uncertain origin along with evidence for ploughing activity. It can therefore be determined that the technique has been effective.

7 CONCLUSION

- 7.1 The survey at North End Road, Yapton, has not identified any anomalies of definite archaeological interest. A number of weak linear trends and an area of increased magnetic response are of uncertain origin, and could be archaeological, agricultural or natural. Evidence of ploughing has been mapped, as well as areas of modern magnetic disturbance.

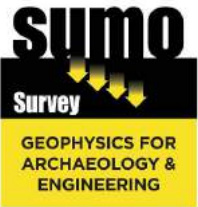
8 REFERENCES

- BGS 2019 British Geological Survey, Geology of Britain viewer [accessed 28/03/2019] *website:* (<http://www.bgs.ac.uk/opengeoscience/home.html?Accordion1=1#maps>)
- ClfA 2014 *Standard and Guidance for Archaeological Geophysical Survey*. Amended 2016. ClfA Guidance note. Chartered Institute for Archaeologists, Reading
http://www.archaeologists.net/sites/default/files/ClfAS%26GGeophysics_2.pdf
- CU 2019 The Soils Guide. Available: www.landis.org.uk. Cranfield University, UK. [accessed 28/03/2019] *website:* <http://mapapps2.bgs.ac.uk/ukso/home.html>
- EAC 2016 *EAC Guidelines for the Use of Geophysics in Archaeology*, European Archaeological Council, Guidelines 2.
- EH 2008 *Geophysical Survey in Archaeological Field Evaluation*. English Heritage, Swindon
<https://content.historicengland.org.uk/images-books/publications/geophysical-survey-in-archaeological-field-evaluation/geophysics-guidelines.pdf/>
- WSSC 2019 West Sussex County Council; Historic Environment Record. [accessed 28/03/2019] *website:* www.heritagegateway.org.uk

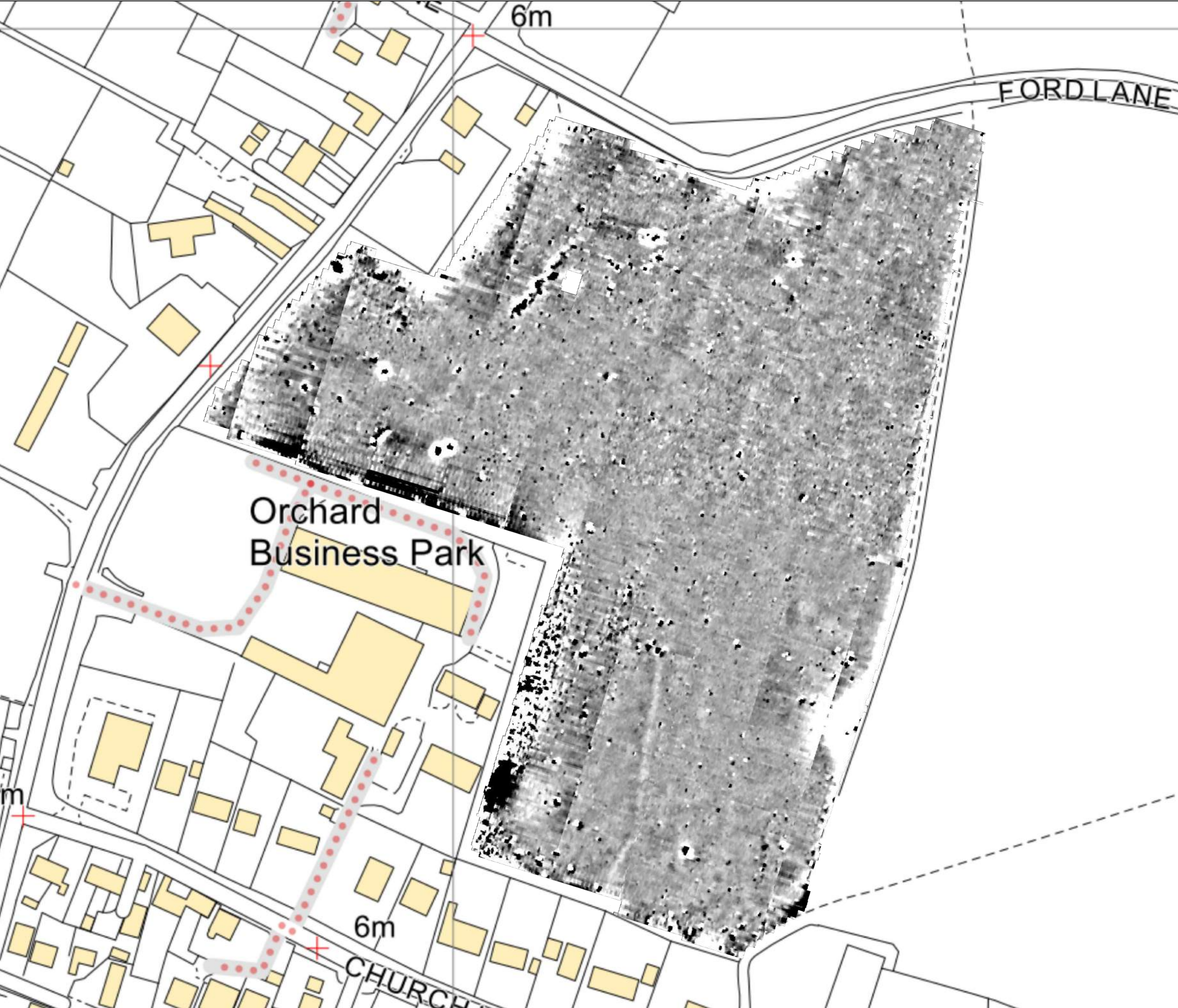
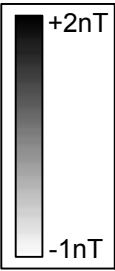
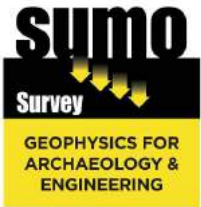


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	Survey Area	
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Title: Site Location	
Client: Terence O'Rourke	
Project: 14745 - North End Road, Yapton, Arundel	
Scale: NOT TO SCALE	Fig No: 01



Title:
Magnetometer Survey - Greyscale Plot

Client:
Terence O'Rourke

Project:
14745 - North End Road, Yapton, Arundel

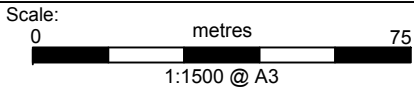
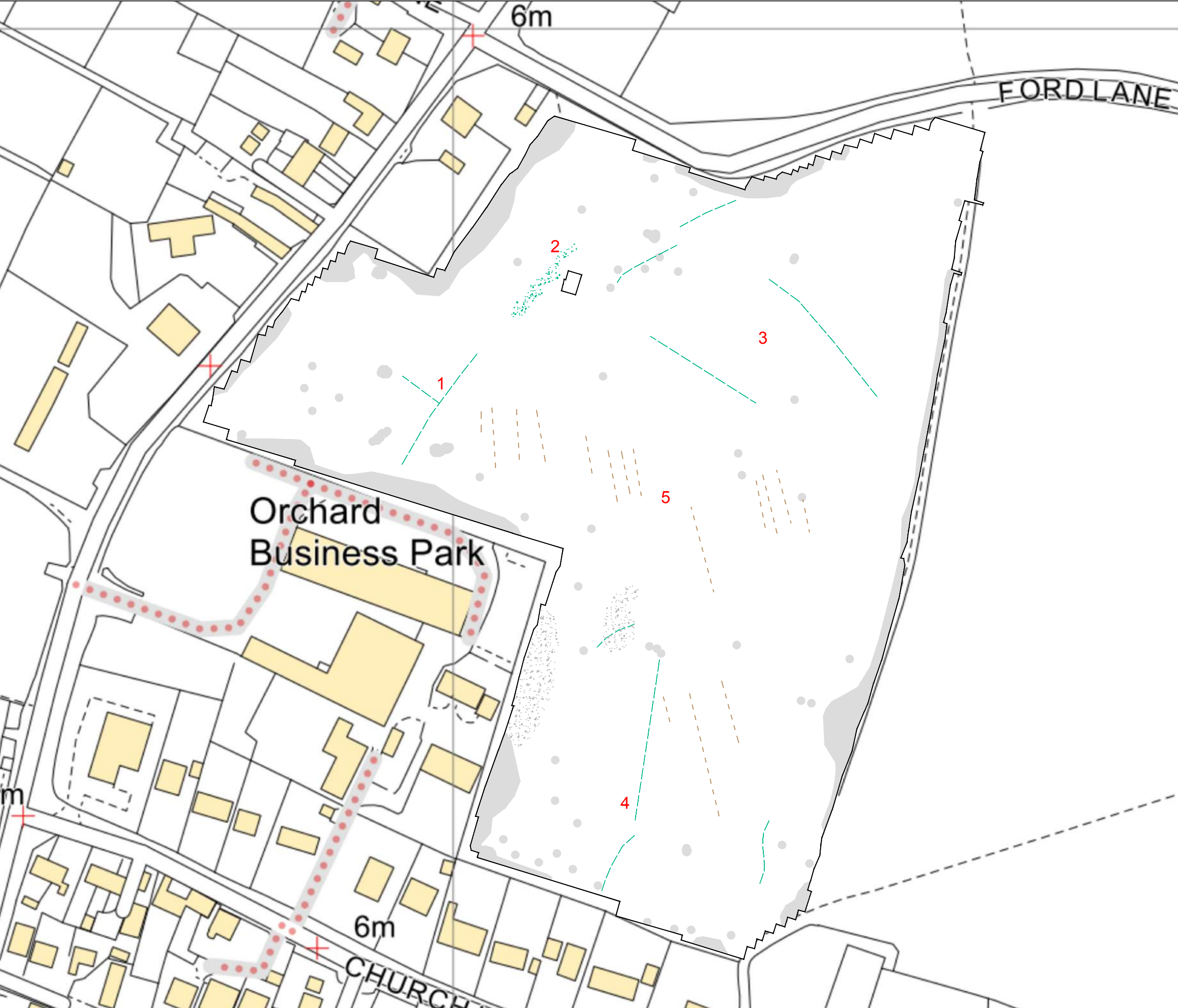
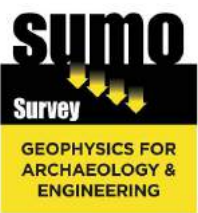


Fig No:
02

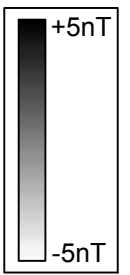
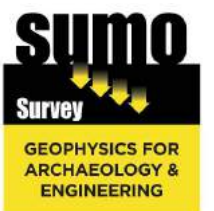


KEY

	Uncertain Origin (enhanced response / trend)
	Agriculture (plough)
	Magnetic disturbance
	Ferrous



Title: Magnetometer Survey - Interpretation	
Client: Terence O'Rourke	
Project: 14745 - North End Road, Yapton, Arundel	
Scale: 0 75 metres 1:1500 @ A3	Fig No: 03



Title:
Minimally Processed Data - Greyscale Plot

Client:
Terence O'Rourke

Project:
14745 - North End Road, Yapton, Arundel

Scale: 0 metres 75
1:1500 @ A3

Fig No: 04

Standards & Guidance

This report and all fieldwork have been conducted in accordance with the latest guidance documents issued by Historic England (EH 2008) (then English Heritage), the Chartered Institute for Archaeologists (CIfA 2014) and the European Archaeological Council (EAC 2016).

Grid Positioning

For hand held gradiometers the location of the survey grids has been plotted together with the referencing information. Grids were set out using a Trimble R8 Real Time Kinematic (RTK) VRS Now GNSS GPS system.

An RTK GPS (Real-time Kinematic Global Positioning System) can locate a point on the ground to a far greater accuracy than a standard GPS unit. A standard GPS suffers from errors created by satellite orbit errors, clock errors and atmospheric interference, resulting in an accuracy of 5m-10m. An RTK system uses a single base station receiver and a number of mobile units. The base station re-broadcasts the phase of the carrier it measured, and the mobile units compare their own phase measurements with those they received from the base station. This results in an accuracy of around 0.01m.

Technique	Instrument	Traverse Interval	Sample Interval
Magnetometer	Bartington Grad 601-2	1m	0.25m

Instrumentation: **Bartington Grad 601-2**

Bartington instruments operate in a gradiometer configuration which comprises fluxgate sensors mounted vertically, set 1.0m apart. The fluxgate gradiometer suppresses any diurnal or regional effects. The instruments are carried, or cart mounted, with the bottom sensor approximately 0.1-0.3m from the ground surface. At each survey station, the difference in the magnetic field between the two fluxgates is measured in nanoTesla (nT). The sensitivity of the instrument can be adjusted; for most archaeological surveys the most sensitive range (0.1nT) is used. Generally, features up to 1m deep may be detected by this method, though strongly magnetic objects may be visible at greater depths. The Bartington instrument can collect two lines of data per traverse with gradiometer units mounted laterally with a separation of 1.0m. The readings are logged consecutively into the data logger which in turn is daily down-loaded into a portable computer whilst on site. At the end of each site survey, data is transferred to the office for processing and presentation.

Data Processing

Zero Mean	This process sets the background mean of each traverse within each grid to zero.
Traverse	The operation removes striping effects and edge discontinuities over the whole of the data set.
Step Correction (De-stagger)	When gradiometer data are collected in 'zig-zag' fashion, stepping errors can sometimes arise. These occur because of a slight difference in the speed of walking on the forward and reverse traverses. The result is a staggered effect in the data, which is particularly noticeable on linear anomalies. This process corrects these errors.

Display

Greyscale/ Colourscale Plot	This format divides a given range of readings into a set number of classes. Each class is represented by a specific shade of grey, the intensity increasing with value. All values above the given range are allocated the same shade (maximum intensity); similarly, all values below the given range are represented by the minimum intensity shade. Similar plots can be produced in colour, either using a wide range of colours or by selecting two or three colours to represent positive and negative values. The assigned range (plotting levels) can be adjusted to emphasise different anomalies in the data-set.
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Presentation of results and interpretation

The presentation of the results includes a 'minimally processed data' and a 'processed data' greyscale plot. Magnetic anomalies are identified, interpreted and plotted onto the 'Interpretation' drawings.

When interpreting the results, several factors are taken into consideration, including the nature of archaeological features being investigated and the local conditions at the site (geology, pedology, topography etc.). Anomalies are categorised by their potential origin. Where responses can be related to other existing evidence, the anomalies will be given specific categories, such as: Abbey Wall or Roman Road. Where the interpretation is based largely on the geophysical data, levels of confidence are implied, for example: Probable, or Possible Archaeology. The former is used for a confident interpretation, based on anomaly definition and/or other corroborative data such as cropmarks. Poor anomaly definition, a lack of clear patterns to the responses and an absence of other supporting data reduces confidence, hence the classification Possible.

Interpretation Categories

In certain circumstances (usually when there is corroborative evidence from desk-based or excavation data) very specific interpretations can be assigned to magnetic anomalies (for example, *Roman Road, Wall, etc.*) and where appropriate, such interpretations will be applied. The list below outlines the generic categories commonly used in the interpretation of the results.

<i>Archaeology / Probable Archaeology</i>	This term is used when the form, nature and pattern of the responses are clearly or very probably archaeological and /or if corroborative evidence is available. These anomalies, whilst considered anthropogenic, could be of any age.
<i>Possible Archaeology</i>	These anomalies exhibit either weak signal strength and / or poor definition, or form incomplete archaeological patterns, thereby reducing the level of confidence in the interpretation. Although the archaeological interpretation is favoured, they may be the result of variable soil depth, plough damage or even aliasing as a result of data collection orientation.
<i>Industrial / Burnt-Fired</i>	Strong magnetic anomalies that, due to their shape and form or the context in which they are found, suggest the presence of kilns, ovens, corn dryers, metal-working areas or hearths. It should be noted that in many instances modern ferrous material can produce similar magnetic anomalies.
<i>Former Field Boundary (probable & possible)</i>	Anomalies that correspond to former boundaries indicated on historic mapping, or which are clearly a continuation of existing land divisions. Possible denotes less confidence where the anomaly may not be shown on historic mapping but nevertheless the anomaly displays all the characteristics of a field boundary.
<i>Ridge & Furrow</i>	Parallel linear anomalies whose broad spacing suggests ridge and furrow cultivation. In some cases, the response may be the result of more recent agricultural activity.
<i>Agriculture (ploughing)</i>	Parallel linear anomalies or trends with a narrower spacing, sometimes aligned with existing boundaries, indicating more recent cultivation regimes.
<i>Land Drain</i>	Weakly magnetic linear anomalies, quite often appearing in series forming parallel and herringbone patterns. Smaller drains may lead and empty into larger diameter pipes, which in turn usually lead to local streams and ponds. These are indicative of clay fired land drains.
<i>Natural</i>	These responses form clear patterns in geographical zones where natural variations are known to produce significant magnetic distortions.
<i>Magnetic Disturbance</i>	Broad zones of strong dipolar anomalies, commonly found in places where modern ferrous or fired materials (e.g. brick rubble) are present.
<i>Service</i>	Magnetically strong anomalies, usually forming linear features are indicative of ferrous pipes/cables. Sometimes other materials (e.g. pvc) or the fill of the trench can cause weaker magnetic responses which can be identified from their uniform linearity.
<i>Ferrous</i>	This type of response is associated with ferrous material and may result from small items in the topsoil, larger buried objects such as pipes, or above ground features such as fence lines or pylons. Ferrous responses are usually regarded as modern. Individual burnt stones, fired bricks or igneous rocks can produce responses similar to ferrous material.
<i>Uncertain Origin</i>	Anomalies which stand out from the background magnetic variation, yet whose form and lack of patterning gives little clue as to their origin. Often the characteristics and distribution of the responses straddle the categories of <i>Possible Archaeology / Natural</i> or (in the case of linear responses) <i>Possible Archaeology / Agriculture</i> ; occasionally they are simply of an unusual form.

Where appropriate some anomalies will be further classified according to their form (positive or negative) and relative strength and coherence (trend: weak and poorly defined).

Appendix B - Technical Information: Magnetic Theory

Detailed magnetic survey can be used to effectively define areas of past human activity by mapping spatial variation and contrast in the magnetic properties of soil, subsoil and bedrock. Although the changes in the magnetic field resulting from differing features in the soil are usually weak, changes as small as 0.1 nanoTeslas (nT) in an overall field strength of 48,000 (nT), can be accurately detected.

Weakly magnetic iron minerals are always present within the soil and areas of enhancement relate to increases in *magnetic susceptibility* and permanently magnetised *thermoremanent* material.

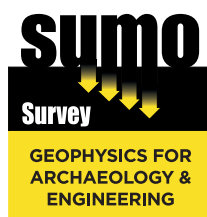
Magnetic susceptibility relates to the induced magnetism of a material when in the presence of a magnetic field. This magnetism can be considered as effectively permanent as it exists within the Earth's magnetic field. Magnetic susceptibility can become enhanced due to burning and complex biological or fermentation processes.

Thermoremanence is a permanent magnetism acquired by iron minerals that, after heating to a specific temperature known as the Curie Point, are effectively demagnetised followed by re-magnetisation by the Earth's magnetic field on cooling. Thermoremanent archaeological features can include hearths and kilns; material such as brick and tile may be magnetised through the same process.

Silting and deliberate infilling of ditches and pits with magnetically enhanced soil creates a relative contrast against the much lower levels of magnetism within the subsoil into which the feature is cut. Systematic mapping of magnetic anomalies will produce linear and discrete areas of enhancement allowing assessment and characterisation of subsurface features. Material such as subsoil and non-magnetic bedrock used to create former earthworks and walls may be mapped as areas of lower enhancement compared to surrounding soils.

Magnetic survey is carried out using a fluxgate gradiometer which is a passive instrument consisting of two sensors mounted vertically 1m apart. The instrument is carried about 30cm above the ground surface and the top sensor measures the Earth's magnetic field whilst the lower sensor measures the same field but is also more affected by any localised buried feature. The difference between the two sensors will relate to the strength of a magnetic field created by this feature, if no field is present the difference will be close to zero as the magnetic field measured by both sensors will be the same.

Factors affecting the magnetic survey may include soil type, local geology, previous human activity and disturbance from modern services.



- Archaeological
- Geophysical
- Laser Scanning
- Measured Building
- Topographic
- Utility Mapping

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