

ARCHAEOLOGICAL DESK-BASED ASSESSMENT

Gravesend RFC Bowls Club, corner of Milton Road and Ellersie,
Gravesend, Kent DA12 2QU

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& Ellersie, Gravesend, Kent DA12 2QU
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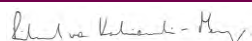
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EXECUTIVE SUMMARY

The site of Gravesend RFC Bowls Club, Milton Road and Ellersie, Gravesend, Kent, DA12 2QU, has been reviewed for its below ground archaeological potential.

In terms of relevant, nationally significant designated heritage assets, no World Heritage Sites, Scheduled Monuments, Historic Wrecks or Historic Battlefields lie within the study site or its immediate vicinity.

The study site is considered likely to have a generally low archaeological potential for all past periods of human activity.

Past post-depositional impacts within the study site are considered likely to have had a severe, negative archaeological impact. The central/eastern area was laid out as a bowling green with associated pavilion during the early part of the 20th century, and a substantial modern sewer is known to cross beneath the study site on a northwest-southeast alignment.

Proposals comprise residential redevelopment, focussed within the area of the existing bowling green.

In view of the study site's perceived low archaeological potential, combined with the likely impact of existing development, no further archaeological mitigation works are anticipated to be required in this particular instance.

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1 INTRODUCTION AND SCOPE OF STUDY

- 1.1 This below ground archaeological desk based assessment has been prepared by RPS on behalf of McCarthy Stone.
- 1.2 The subject of this assessment comprises the site, also referred to as the study site, of the Gravesend RFC Bowls Club, situated at the corner of Milton Road and Ellersie, Gravesend, Kent, DA12 2QU.
- 1.3 The study site is centred at TQ65730 73766 within the administrative boundaries of Gravesham Borough Council (see Figures 1-2 and 17-18).
- 1.4 Figure 2 spatially summarises relevant cultural heritage designations and archaeological findspot references in relation to the study site, primarily using data provided by the Kent Historic Environment Record (HER).
- 1.5 In terms of relevant nationally significant designated heritage assets, the study site does not lie within the immediate vicinity of a World Heritage Site, Scheduled Monument, Historic Battlefield or Historic Wreck.
- 1.6 McCarthy Stone have commissioned RPS to establish the archaeological potential of the study site, and to provide guidance on ways to accommodate any archaeological constraints identified.
- 1.7 In accordance with relevant policy and guidance on archaeology and planning, including 'Standard and Guidance for Historic Environment Desk-Based Assessments' (Chartered Institute for Archaeologists, 2020), this assessment draws together the available archaeological, topographic and land-use information in order to clarify the likely archaeological potential and significance of the study site.
- 1.8 This desk based assessment comprises an examination of evidence on the Kent Historic Environment Record (HER) and other sources, and includes a comprehensive map regression exercise.
- 1.9 The assessment thus enables relevant parties to assess the archaeological potential of various parts of the study site, together with the likely significance of that potential, and to consider the need for design, civil engineering, and archaeological solutions to the archaeological potential and significance identified.

2 PLANNING BACKGROUND AND DEVELOPMENT PLAN FRAMEWORK

- 2.1 National legislation regarding archaeology, including scheduled monuments, is contained in the Ancient Monuments and Archaeological Areas Act 1979, amended by the National Heritage Act 1983 and 2002, updated April 2014.
- 2.2 In March 2012, the government published the National Planning Policy Framework (NPPF), and it was last updated in July 2021. The NPPF is supported by the National Planning Practice Guidance (NPPG), which was published online 6th March 2014 and is periodically updated (<https://www.gov.uk/guidance/conserving-and-enhancing-the-historic-environment>).
- 2.3 The NPPF and NPPG are additionally supported by three Good Practice Advice (GPA) documents published by Historic England: GPA 1: The Historic Environment in Local Plans; GPA 2: Managing Significance in Decision-Taking in the Historic Environment (both published March 2015). The second edition of GPA3: The Setting of Heritage Assets was published in December 2017.

National Planning Policy

- 2.4 Section 16 of the NPPF, entitled Conserving and enhancing the historic environment provides guidance for planning authorities, property owners, developers and others on the conservation and investigation of heritage assets. Overall, the objectives of Section 16 of the NPPF can be summarised as seeking the:
 - Delivery of sustainable development;
 - Understanding the wider social, cultural, economic and environmental benefits brought by the conservation of the historic environment;
 - Conservation of England's heritage assets in a manner appropriate to their significance; and
 - Recognition that heritage makes to our knowledge and understanding of the past.
- 2.5 Section 16 of the NPPF recognises that intelligently managed change may sometimes be necessary if heritage assets are to be maintained for the long term. Paragraph 194 states that planning decisions should be based on the significance of the heritage asset and that level of detail supplied by an applicant should be proportionate to the importance of the asset and should be no more than sufficient to review the potential impact of the proposal upon the significance of that asset.
- 2.6 *Heritage Assets* are defined in Annex 2 of the NPPF as: a building, monument, site, place, area or landscape positively identified as having a degree of significance meriting consideration in planning decisions. They include designated heritage assets (as defined in the NPPF) and assets identified by the local planning authority during the process of decision-making or through the plan-making process.
- 2.7 Annex 2 also defines *Archaeological Interest* as a heritage asset which holds or potentially could hold evidence of past human activity worthy of expert investigation at some point.

- 2.8 A *Designated Heritage Asset* comprises a: World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield or Conservation Area.
- 2.9 *Significance* (for heritage policy) is defined as: The value of a heritage asset to this and future generations because of its heritage interest. This interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting.
- 2.10 *Setting* is defined 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. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.
- 2.11 In short, government policy provides a framework which:
- Protects nationally important designated Heritage Assets;
 - Protects the settings of such designations;
 - In appropriate circumstances seeks adequate information (from desk based assessment and field evaluation where necessary) to enable informed decisions;
 - Provides for the excavation and investigation of sites not significant enough to merit *in-situ* preservation.
- 2.12 The NPPG reiterates that the conservation of heritage assets in a manner appropriate to their significance is a core planning principle, requiring a flexible and thoughtful approach. Furthermore, it highlights that neglect and decay of heritage assets is best addressed through ensuring they remain in active use that is consistent with their conservation. Importantly, the guidance states that if complete, or partial loss of a heritage asset is justified, the aim should then be to capture and record the evidence of the asset's significance and make the interpretation publicly available. Key elements of the guidance relate to assessing harm. An important consideration should be whether the proposed works adversely affect a key element of the heritage asset's special architectural or historic interest. Additionally, it is the degree of harm, rather than the scale of development, that is to be assessed. The level of 'substantial harm' is considered to be a high bar that may not arise in many cases. Essentially, whether a proposal causes substantial harm will be a judgment for the decision taker, having regard to the circumstances of the case and the NPPF. Importantly, harm may arise from works to the asset or from development within its setting. Setting is defined as the surroundings in which an asset is experienced and may be more extensive than the curtilage. A thorough assessment of the impact of proposals upon setting needs to take into account, and be proportionate to, the significance of the heritage asset and the degree to which proposed changes enhance or detract from that significance and the ability to appreciate it.
- 2.13 In considering any planning application for development, the planning authority will be mindful of the framework set by government policy, in this instance the NPPF, by current Development Plan Policy and by other material considerations.

Local Planning Policy

- 2.16 The Gravesham Local Plan Core Strategy was adopted September 2014, and contains the following policy relevant to the historic environment:

Policy CS20: Heritage and the Historic Environment

5.16.10 The Council will accord a high priority towards the preservation, protection and enhancement of its heritage and historic environment as a non-renewable resource, central to the regeneration of the area and the reinforcement of sense of place. Particular attention in this regard will be focused on those heritage assets most at risk through neglect, decay or other threats. Securing viable, sustainable and appropriate futures for such assets at risk will need to be reconciled with the sensitivity to change that many present.

5.16.11 Proposals and initiatives will be supported which preserve and, where appropriate, enhance the significance of the Borough's heritage assets, their setting where it contributes to the significance of the asset and their interpretation and enjoyment, especially where these contribute to the distinct identity of the Borough.

These include:

- Gravesend Town Centre, its development as a heritage riverside town, and its setting;
- The Borough's urban and rural conservation areas; and
- Surviving built features and archaeology relating to the Borough's maritime, military, industrial and transport history.

5.16.12 When considering the impact of a proposed development on a designated heritage asset, the weight that will be given to the asset's conservation value will be commensurate with the importance and significance of the asset. For non-designated assets, decisions will have regard to the scale of any harm or loss and the significance of the heritage asset.

Relevant Designations

- 2.17 In terms of relevant nationally significant designated heritage assets, the study site does not lie within the immediate vicinity of a World Heritage Site, Scheduled Monument, Historic Battlefield or Historic Wreck.
- 2.18 In line with relevant planning policy and guidance, this desk-based assessment seeks to clarify the study site's archaeological potential, together with the likely significance of that potential, and the need or otherwise for additional mitigation measures.

3 GEOLOGY AND TOPOGRAPHY

Geology

- 3.1 The British Geological Survey has mapped the solid geology underlying the study site to comprise chalk deposits relating to the Lewes Nodular Formation/Seaford Formation/Newhaven Formation, overlain by Head deposits comprising clay, silt and gravel, of Quaternary date.
- 3.2 Head deposits typically comprise frost and ice damaged material which has progressed downslope through a process of solifluction (BGS 1996: 123; Wymer 1999: 18).
- 3.3 No site specific geotechnical information is currently available.

Topography

- 3.4 Within the study site, the open space to the west of the bowling green drops from west to east, from c.10.3m to c.7.6m AOD. The bowling green is level at c.6.9-7m AOD, suggesting that the natural topography has been terraced within the footprint of the bowling green.
- 3.5 No watercourses or naturally occurring bodies of water are present within the immediate vicinity of the study site. The course of the River Thames flows from west to east c.660m north of the study site.

4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND WITH ASSESSMENT OF SIGNIFICANCE

Timescales used in this report

Prehistoric

Palaeolithic	900,000 -	12,000 BC
Mesolithic	12,000 -	4,000 BC
Neolithic	4,000 -	1,800 BC
Bronze Age	1,800 -	600 BC
Iron Age	600 -	AD 43

Historic

Roman	AD 43 -	410
Saxon/Early Medieval	AD 410 -	1066
Medieval	AD 1066 -	1485
Post Medieval	AD 1486 -	1799
Modern	AD 1800 -	Present

Introduction

- 4.1 This chapter reviews the available archaeological evidence for the study site and the archaeological/historical background of the general area, and, in accordance with NPPF, considers the potential for any as yet to be discovered archaeological evidence on the study site.
- 4.2 What follows comprises a review of known archaeological assets within a 750m radius of the study site, also referred to as the study area, held on the Kent Historic Environment Record (HER), together with a historic map regression exercise charting the development of the study area from the eighteenth century onwards until the present day (see Figures 2a, 2b and 3).
- 4.3 In terms of relevant nationally significant designated heritage assets, the study site does not lie within the vicinity of a World Heritage Site, Scheduled Monument, Historic Battlefield or Historic Wreck (Figure 2a).
- 4.4 Historic Landscape Characterisation (HLC) data provided by the Kent HER confirms the area of the study site to comprise 'general Post 1810 settlement' (see Figure 3).
- 4.5 Chapter 5 subsequently considers the site conditions and whether the proposed development will impact the theoretical archaeological potential identified below.

Previous Archaeological Work & Lidar Survey

- 4.6 The Kent HER does not record that any archaeological work has previously been undertaken within the study site.
- 4.7 Immediately to the west of the study site, TQ67SE1157-MKE41 (TQ6562 7379) refers to a Second World War air raid wardens post on the south side of East Milton Road, built 1939 and demolished c.1948; TQ67SE1173-MKE41 (TQ6559 7380) refers to a Territorial Army drill hall, also on the south side of Milton Road, originating in the 1890s and demolished in the 1980s; and TQ67SE1204 (TQ6564 7379) refers to a temporary Second World War air raid warden's post at a large Victorian house named Ellersie. Immediately to the north of the study site, reference TQ67SE16-MKE1116 (TQ6579 7383) refers to the site of a school which was demolished c.1960.
- 4.8 The wider study area has also been subject to various studies: Kent HER ref EKE13239 as shown on Figure 2b refers to the English Heritage 2013 Hoo Peninsula Historic Landscape Project (Gravesend lay at the western boundary of this project); EKE14761 refers to an Archaeological Survey of mineral extraction sites around the Thames Estuary, prepared by Essex County Council and Kent County Council in 2004; EKE10278 refers to a desk based assessment of the North Kent Coast as part of the Rapid Coastal Zone Assessment Survey, prepared by Wessex Archaeology in 2000, whilst EWX8094 refers to the part 1 pilot field assessment for the Rapid Coastal Zone Assessment, prepared by Wessex Archaeology in 2002, and EWX8626 refers to the second phase of this assessment undertaken in 2005. EKE15020-EKE15021 refers to survey of the Hoo Peninsula, undertaken in 2012 by English Heritage. The subjects of these studies have not been deemed relevant to the study site itself.
- 4.9 The Lidar survey for the study site is reproduced at Figure 4; DTM and DSM Lidar data was sourced from the Environment Agency; the data was captured between January and February 2018, at 1m resolution. The data was then processed to generate simple local relief and multidirectional hillshade models and reviewed in relation to the historic mapping and aerial photography. Aside from the layout of the bowling green, some Modern features have been identified to the west and southwest of the bowling club and the sewer which crosses the study site.

Prehistoric

- 4.10 Head deposits can be a source of residual Palaeolithic material, but their inclusion is dependant upon such activity at a higher topographic level, due to the nature of their formation (see paragraph 3.2 above).
- 4.11 No finds or features of Palaeolithic or Mesolithic date are recorded on the Kent HER within the study area search radius.
- 4.12 The presence of early prehistoric material is notoriously difficult to predict, and can be influenced by suitable topographical locations, particularly related to watercourses, together with suitable underlying geology. A generally low archaeological potential can be identified for the early prehistoric periods at the study site.
- 4.13 From around 4000 BC the mobile hunter-gathering economy of the Mesolithic gradually gave way to a more settled agriculture-based subsistence. The pace of woodland clearance to create arable and pasture-based agricultural land varied regionally and locally, depending on a wide variety of climatic,

topographic, social and other factors. The trend was one of a slow, but gradually increasing pace of forest clearance.

- 4.14 By the 1st millennium, i.e. 1000 BC, the landscape was probably a mix of extensive tracts of open farmland, punctuated by earthwork burial and ceremonial monuments from distant generations, with settlements, ritual areas and defended locations reflecting an increasingly hierarchical society.
- 4.15 Within the study area search radius, evaluation of the Denton Relief Road to the northeast of the study site revealed 3 worked flints, one of possible Mesolithic/Neolithic date, together with other prehistoric material within a possible Roman feature (EWX6628, TQ6656 7375).
- 4.16 In view of the available information, a generally low archaeological potential is anticipated within the study site for the prehistoric periods.

Roman

- 4.17 Evidence of Roman activity including occupation has been identified to the west of the study site beyond the 750m study area search radius, at St George's Shopping Centre and at the Gravesend and North Kent Hospital; settlement is known at Springhead (Vagniacae) c.4km to the southwest (KCC/EH 2004; Margary 1955; Garrod & Philp 1979; Philp 2002).
- 4.18 Within the study area search radius, evaluation of the Denton Relief Road to the northeast of the study site revealed Roman material within a feature of possible Roman date (EWX6628, TQ6656 7375).
- 4.19 In view of the available information, a generally low archaeological potential is anticipated within the study site for the Roman period.

Anglo-Saxon & Medieval

- 4.20 Gravesend and Milton are recorded in Domesday, indicating its existence by the Late Saxon period:

Herbert son of Ivo holds Gravesend from the Bishop. It answers for 2 sulungs and 1 yoke. Land for 4 ploughs. In Lordship1.
4 villagers and 8 slaves have 2 oxen
A church; one enclosure
Value before 1066 £10; when acquired as much; now £11.
Before 1066 this manor was three manors. Leofric, Wulfwin and Godwin held them. Now it is in one.
Ralph son of Thorold holds Milton from the Bishop. It answers for 1 sulung and 3 yokes. Land for 4 ploughs. In lordship 1.
21 villages with 2 smallholders have 2 ploughs.
A church; 1 mill at 49d; an enclosure at 20s; 3 slaves.
Value before 1066 £4; later £3, now £6; what Richard holds in his territory in a wood, 5s.
Earl Leofwin held it.
- 4.21 The site of four inhumations dated to the Saxon period have been identified at St Mary's Roman Catholic church, Rochester Road, Denton, to the east of the study site (TQ67SE100-MKE116, TQ6610 7350).
- 4.22 The location of the church of St Mary the Virgin, recorded in Domesday, has been identified at the junction of Pelham Road and Old Dover Road, southwest of the study site; riverside settlement is thought to have been present in Gravesend during the Saxon period (KCC/EH 2004).

- 4.23 Settlement activity at Gravesend to the northwest of the study site, is assumed to have progressed during the Medieval period (TQ67SW172, TQ6475 7432). The first record of a fair dates to 1366, possibly at the junction of West Street and the High Street (KCC/EH 2004). Gravesend is recorded as having been attacked by the French in 1380 (English Heritage 2013). The original church of St George was built in the late fifteenth century as a chapel of ease for the church of St Mary, also to the northwest of the study site (TQ67SW1096, TQ64689 74341).
- 4.24 The Kent HER identifies the location of deserted Medieval settlement in the Denton area, with the generic grid reference placing this site to the southeast of the study site. This reference derives from a gazetteer produced by Beresford and Hurst in 1971, and the HER entry queries the accuracy of this potential (MKE1581, TQ6673).
- 4.25 The church of St Peter and St Paul, East Milton Road, to the northeast of the study site, is recorded to have originated during the 14th century (TQ67SE1132-MKE27, TQ6589 7383; Newman 2012).
- 4.26 The available evidence indicates that the study site lay away from known settlement and activity centres during the Anglo Saxon and Medieval periods. The potential of the study site can therefore be categorised as having been generally low, with evidence of agricultural activity and land division most likely to have been represented in the archaeological record.

Post Medieval & Modern (including map regression exercise)

- 4.27 The large majority of the Kent HER records within the study area search radius refer to Post Medieval and Modern findspots, including a substantial number of references to the sites of wrecked boats recorded in the River Thames to the north of the study site, and gathered together at one specific grid reference (TQ6561 7434). These findspots are not discussed in detail here as they are not deemed to be directly relevant to the development and history of the study site itself.
- 4.28 The site of the Milton Blockhouse lies to the northwest of the study site. The blockhouse comprised an artillery fort constructed in 1539 as part of Henry VIII's defence of the country. The structure was amended in 1545 and demolished in 1557-8, with associated remains identified during archaeological works in 1974-8 (MKE1558, TQ6550 7429; EKE8102, TQ6551 7429).
- 4.29 The New Tavern Fort, c.530m northwest of the study site, was established in 1780 to provide crossfire with Tilbury Fort on the opposite side of the River Thames. The fort was expanded during the 1790s, further developed during the 19th and 20th centuries, and disarmed c.1938. The fort comprises a nationally significant designated heritage asset (Scheduled Monument ref 1013658; MKE2775, TQ65291 74238; EKE11550, TQ6524 7427; EKE12916, TQ6530 7427).
- 4.30 Early maps show the study site to lie in open land to the south of Gravesend Marsh, east of Milton and to the southeast of Gravesend (Figure 5: 1768 Andrews & Dury Map of Kent; Figure 6: 1778 Thomas Hyde Page map of Tilbury Fort Gravesend and parts adjacent; Figure 7: 1826 Plan of the Town and Lands within the jurisdiction of Gravesend and Milton).
- 4.31 The 1840 Milton next Gravesend Tithe Map (Figure 8) and the associated Award shows that the study site lies within an area in arable use.

- 4.32 The First Edition Ordnance Survey (Figure 9: 1866) shows the study site unchanged from the tithe map; no significant changes are shown within the study site on the Second Edition Ordnance Survey (not reproduced here), nor on the Third Edition Ordnance Survey (Figure 10: 1909), noting that the road alignment immediately to the north appears to have been embanked to sit at a higher level.
- 4.33 The Revised Ordnance Survey (Figure 11: 1932) shows alterations again within the study site's northern boundary, and the construction of the bowling green within the eastern area, with the pavilion to the west.
- 4.34 No substantial changes appear to have taken place within the study site into the present day. The 1953 Ordnance Survey (Figure 12) and the 1960 aerial photograph (Figure 13) show trees within the northeastern boundary; the 2021 aerial photograph (Figure 17) shows the northern edge of the playing field within the southern boundary of the study site, and the 2021 Ordnance Survey (Figure 18) shows the study site in its current layout, together with the alignment of the sewer.
- 4.35 The study site's archaeological potential for the Post Medieval and Modern periods is considered likely to be generally low.

Negative and Neutral Data

- 4.36 To the northwest of the study site, monitoring at Ordnance Road for the new skate park didn't reveal anything of archaeological interest (EKE11968, TQ6535 7410), nor did monitoring of geotechnical boreholes at the Chantry Primary School on Ordnance Road (EJE11174, TQ6531 7404).
- 4.37 To the northeast of the study site, monitoring at Mark Lane revealed no archaeology (EKE8633, TQ6637 7394); monitoring at Waterton Avenue revealed Post Medieval/Modern dumped material (EWX6609, TQ6620 7398).
- 4.38 To the southeast of the study site, evaluation and monitoring at St John's Roman Catholic School did not reveal significant archaeological remains (EKE19663, TQ6592 7317; EKE16748, TQ6594 7336). Monitoring at Gravesend Grammar School for boys did not reveal any significant remains (EKE11191, TQ6583 7367).

Assessment of Significance (Designated Assets)

- 4.39 Existing national policy guidance for archaeology (the NPPF as referenced in section 2) enshrines the concept of the 'significance' of heritage assets. Significance as defined in the NPPF centres on the value of an archaeological or historic asset for its 'heritage interest' to this or future generations.
- 4.40 In terms of relevant nationally significant designated heritage assets, the study site does not lie within the vicinity of a World Heritage Site, Scheduled Monument, Historic Battlefield or Historic Wreck.
- 4.41 In view of the above it is concluded that the redevelopment proposals will have no direct archaeological impact upon relevant designated heritage assets.

Assessment of Significance (Non-Designated Assets)

4.42 As identified by desk based work, archaeological potential by period and the likely significance of any archaeological remains which may be present is summarised in table form below:

Period:	Identified Archaeological Potential	Identified Archaeological Significance
Palaeolithic	Low	Low (Local)
Mesolithic	Low	Low (Local)
Neolithic	Low	Low (Local)
Bronze Age	Low	Low (local)
Iron Age	Low	Low (local)
Roman	Low	Low (local)
Anglo-Saxon	Low	Low (local)
Medieval	Low	Low (local)
Post Medieval	Low	Low (local)
Modern	Low	Low (local)

4.43 Any archaeological remains, should they occur at the study site, would in the context of the Secretary of State's non-statutory criteria for Scheduled Monuments (DCMS 2013) most likely be of local significance.

5 SITE CONDITIONS, THE PROPOSED DEVELOPMENT AND REVIEW OF POTENTIAL DEVELOPMENT IMPACTS ON ARCHAEOLOGICAL ASSETS

Site Conditions

- 5.1 The study site is currently occupied by the existing Gravesend RFC Bowling Club facility, dating to the early part of the 20th century, with open space to the west and south (see Figures 17 and 18).
- 5.2 The construction of the existing club facility can be considered likely to have had a negative archaeological impact, through the cutting of foundations and services for the pavilion, and in particular for the landforming associated with the creation of the bowling green, which appears to have terraced this area of the site, together with drainage measures associated with the green.
- 5.3 The installation of the sewer running diagonally through the study site (as shown on Figure 18) is understood to have had a further negative archaeological impact.
- 5.4 Agricultural/horticultural use of the study site prior to development can be considered likely to have had a moderate, widespread negative archaeological impact.

Proposed Development

- 5.5 Proposals comprise the demolition of existing structures and the construction of a residential scheme focussed within the footprint of the existing bowling green, with open space including parking to the west (Figure 19).

Review of Potential Development Impacts on Designated Archaeological Assets

- 5.6 In terms of relevant nationally significant designated heritage assets, as defined above and as shown on Figure 2, no nationally designated World Heritage Sites, Scheduled Monuments, Historic Battlefield or Historic Wreck sites lie within the vicinity of the study site.
- 5.7 In view of the above it is concluded that the redevelopment proposals will have no direct archaeological impact upon relevant designated heritage assets.

Review of Potential Development Impacts on Non-Designated Assets

- 5.8 The nature of archaeological survival will necessarily depend upon the impact of past post-depositional impacts as a result of development since deposition, which in this case comprises the construction of the existing bowling green and the installation of the sewer across the study site.
- 5.9 As defined above in Section 4, the available information indicates that the study site has a generally low archaeological potential for all past periods of human activity.
- 5.10 The available information indicates that the redevelopment proposals are not anticipated to have a severe or negative archaeological impact.

6 SUMMARY AND CONCLUSIONS

- 6.1 The study site of the Gravesend RFC Bowls Club, Milton Road and Ellersie, Gravesend, Kent, DA12 2QU, has been assessed for its below ground archaeological potential.
- 6.2 In accordance with relevant government planning policy and guidance, a desk based assessment has been undertaken to clarify the archaeological potential of the study area.
- 6.3 In terms of relevant nationally significant designated heritage assets, no World Heritage Sites, Scheduled Monuments, Historic Battlefield or Historic Wreck sites have been identified within the vicinity of the study site.
- 6.4 The available information indicates a generally low archaeological potential within the study site for all past periods of human activity.
- 6.5 Past-post depositional impacts within the study site are considered likely to have had a negative archaeological impact. The central/eastern area was laid out as a bowling green with associated pavilion during the early part of the 20th century, and a substantial modern sewer is known to cross beneath the study site on a northwest-southeast alignment.
- 6.6 Proposals comprise residential redevelopment, focussed within the area of the existing bowling green.
- 6.7 In view of the study site's perceived low archaeological potential, combined with the likely impact of previous and existing development, no further archaeological mitigation works are anticipated to be required in this particular instance.

SOURCES CONSULTED

General

Kent Historic Environment Record

Internet

Archaeological Data Service: <http://archaeologydataservice.ac.uk>

Aerial photography: <http://www.britainfromabove.org.uk/>

British Geological Survey: <http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html>

British History: <http://www.british-history.ac.uk/>

Domesday Book: <https://opendomesday.org.uk>

Historic England (National Heritage List): <https://www.historicengland.org.uk/listing/the-list>

Past Scape: <http://www.pastscape.org.uk>

Portable Antiquities Database: <https://finds.org.uk/database/>

NPPG: <http://planningguidance.planningportal.gov.uk>

Bibliographic

Bridgland Quaternary River terrace deposits as a framework for the Lower Palaeolithic record in Gamble & Lawson (eds.) *The English Palaeolithic Reviewed* 1996

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Chartered Institute for Archaeologists *Standard & Guidance for historic environment desk based assessment* 2014, revised 2020 unpublished document

Department of Communities and Local Government *Scheduled Monuments and Nationally Important Non-Scheduled Monuments* 2013

Department of Communities and Local Government *National Planning Policy Framework* 2012 (revised July 2021)

Department of Communities and Local Government/Department of Culture Media and Sport/English Heritage *PPS5 Planning for the Historic Environment: Historic Environment Planning Practice Guide* 2010

English Heritage *Hoo Peninsula Kent, Hoo Peninsula Historic Landscape Characterisation Project Research Report Series no 21* 2013

Gibbard *The Pleistocene History of the Lower Thames Valley* 1994

Harley *Ordnance Survey Maps A descriptive Manual* 1975

Hasted *The History and Topographical Survey of the County of Kent* Volume 3 1797

Historic England (formerly English Heritage) *Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment* 2008 (new draft 2017)

Historic England *Historic Environment Good Practice Advice in Planning: 1 The Historic Environment in Local Plans* July 2015 unpublished document

Historic England *Historic Environment Good Practice Advice in Planning: 2 Managing Significance in Decision-Taking in the Historic Environment* July 2015 unpublished document

Historic England *Historic Environment Good Practice Advice in Planning: 3 The Setting of Heritage Assets* December 2017 unpublished document

Juby *London before London: Reconstructing a Palaeolithic Landscape* 2011 PhD Thesis

Kent County Council *Kent Historic Towns Survey Gravesend - Kent Archaeological Assessment Document*
December 2004 unpublished document

Margary *Roman Roads in Britain* 1955

Newman *The Buildings of England Kent: West and the Weald* 2012

Williams (ed.) *The Archaeology of Kent to AD800* 2007

Wymer *The Lower Palaeolithic Occupation of Britain* 2 volumes 1999

Cartographic

1769 Andrews & Dury Map of Kent

1778 Thomas Hyde Page, a colored plan of Tilbury Fort, Gravesend, and parts adjacent

1795 Gravesend and Tilbury Fort

1797 Edward Hasted Map of the Hundreds of Toltingborough and Shamel

1801 Faden (Milton) Map of Kent

1826 Plan of the Town and Lands within the jurisdiction of Gravesend and Milton

1826 Cadell's Plan of the Town and Lands

1834 Dawson Map of Gravesend

1840 Milton next Gravesend Tithe Map

1866 Ordnance Survey

1897 Ordnance Survey

1909 Ordnance Survey

1932 Ordnance Survey

1953 Ordnance Survey

1954 Ordnance Survey

1955-1958 Ordnance Survey

1974-1978 Ordnance Survey

1980-1983 Ordnance Survey

1983-1986 Ordnance Survey

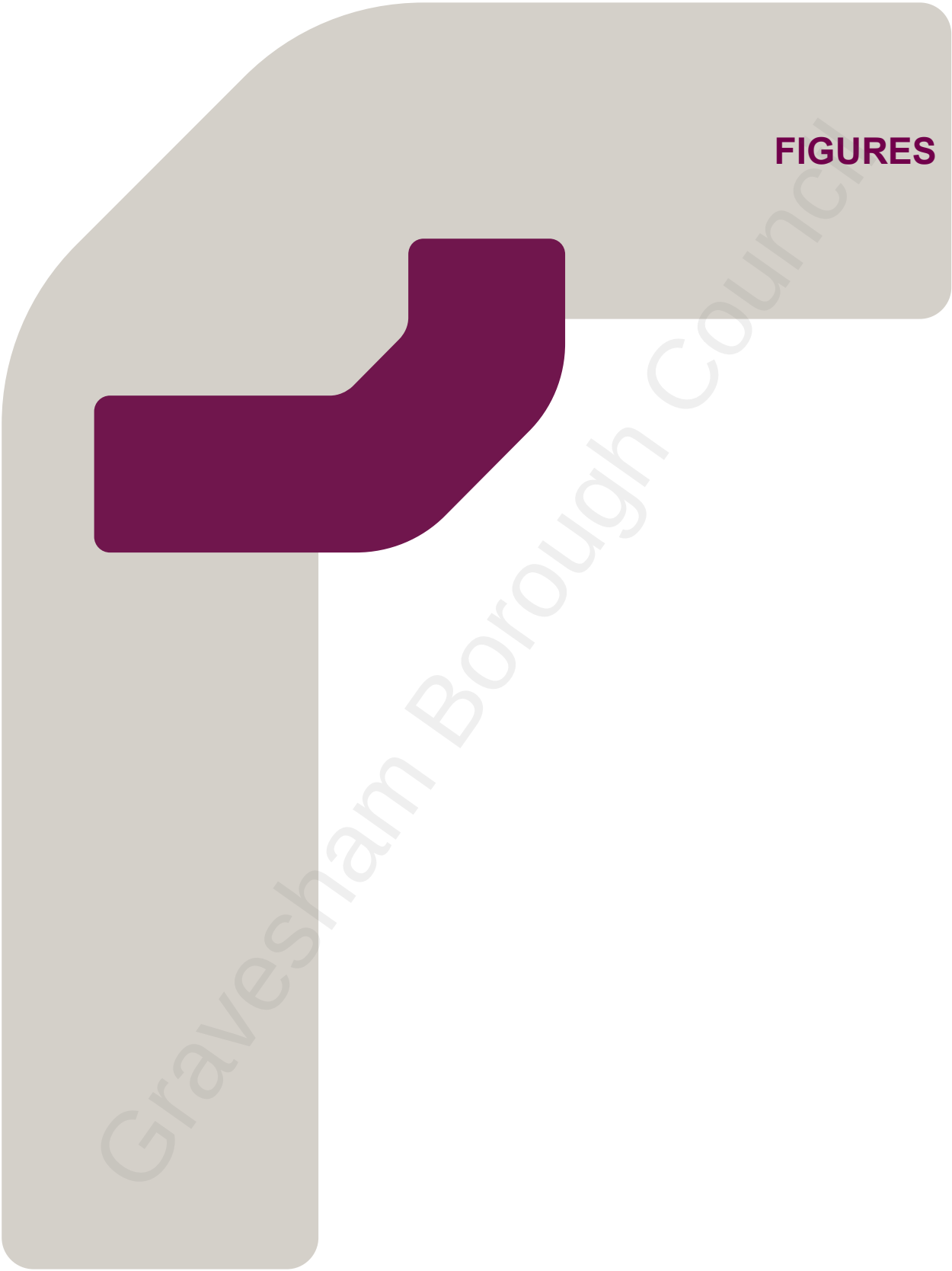
1992-1993 Ordnance Survey

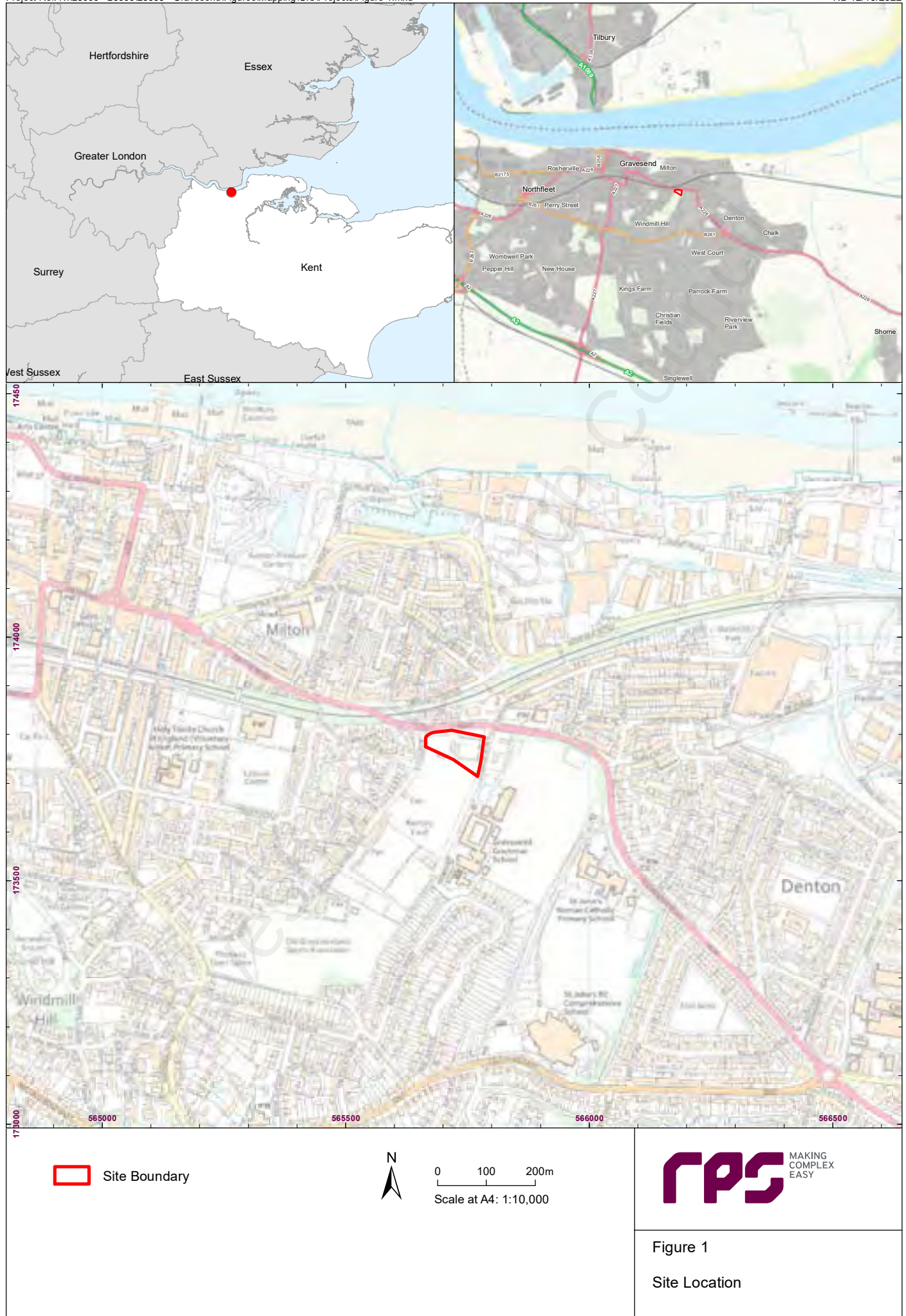
1993 Ordnance Survey

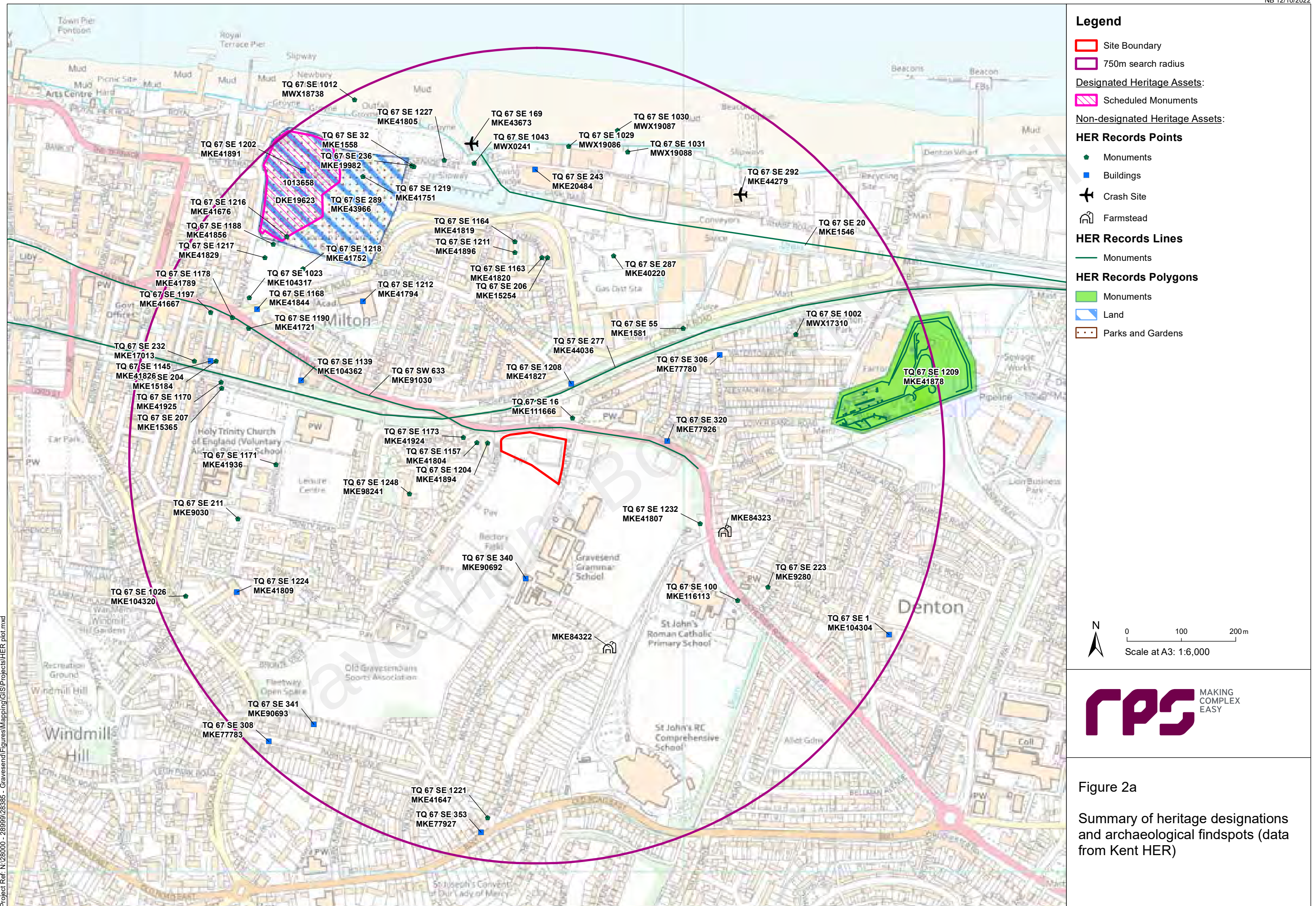
1994 Ordnance Survey

2003 Ordnance Survey

FIGURES







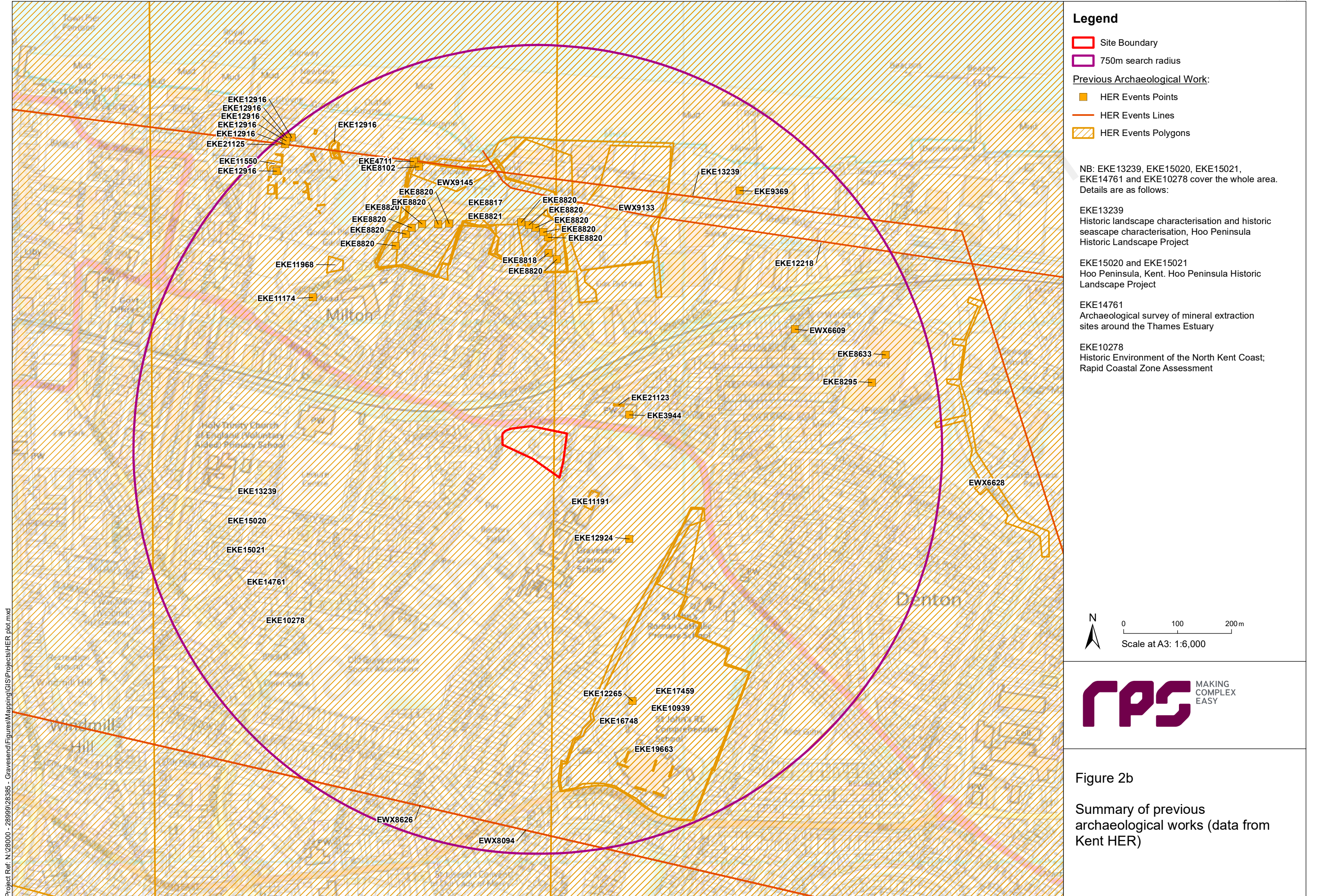
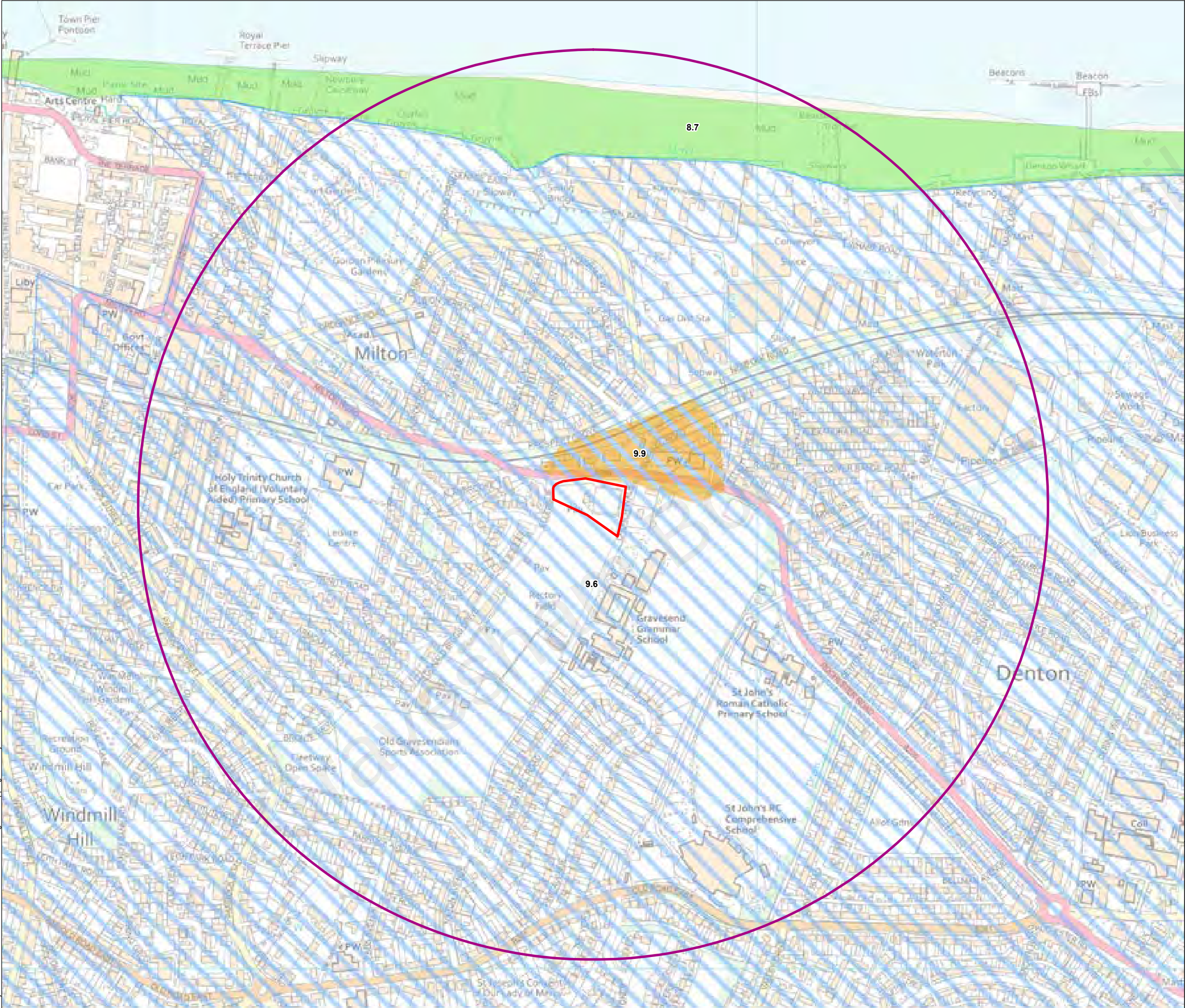


Figure 2b

Summary of previous archaeological works (data from Kent HER)

Project Ref: N128000 - 28999128385 - GravesendFiguresMapping\GIS\Projects\HER plot.mxd



Legend

- Site Boundary
- 750m search radius

Historic Landscape Characterisation:

- Mud flats
- Post 1810 settlement
- Town & city 1810



0 100 200m
Scale at A3: 1:6,000



Figure 3
Historic Landscape
Characterisation (data from Kent
HER)



Legend

 Site

LiDAR DATA

Source:
Environment Agency

Data Type: DTM

Resolution: 1m

Date Captured:
29.01.2018 - 07.02.2018

Processing:
Multi-direction Hillshade overlaid on
simple Local Relief Model



0 10 20m

Scale at A3: 1:1,000



Figure 4

LiDAR Plot



Approximate Site Location



Not to Scale
Illustrative Only



Figure 5

1768 Andrews and Dury Map of Kent



Approximate Site Location



Not to Scale
Illustrative Only



Figure 6
1778 Thomas Hyde Page map of
Tilbury Fort Gravesend and parts
adjacent



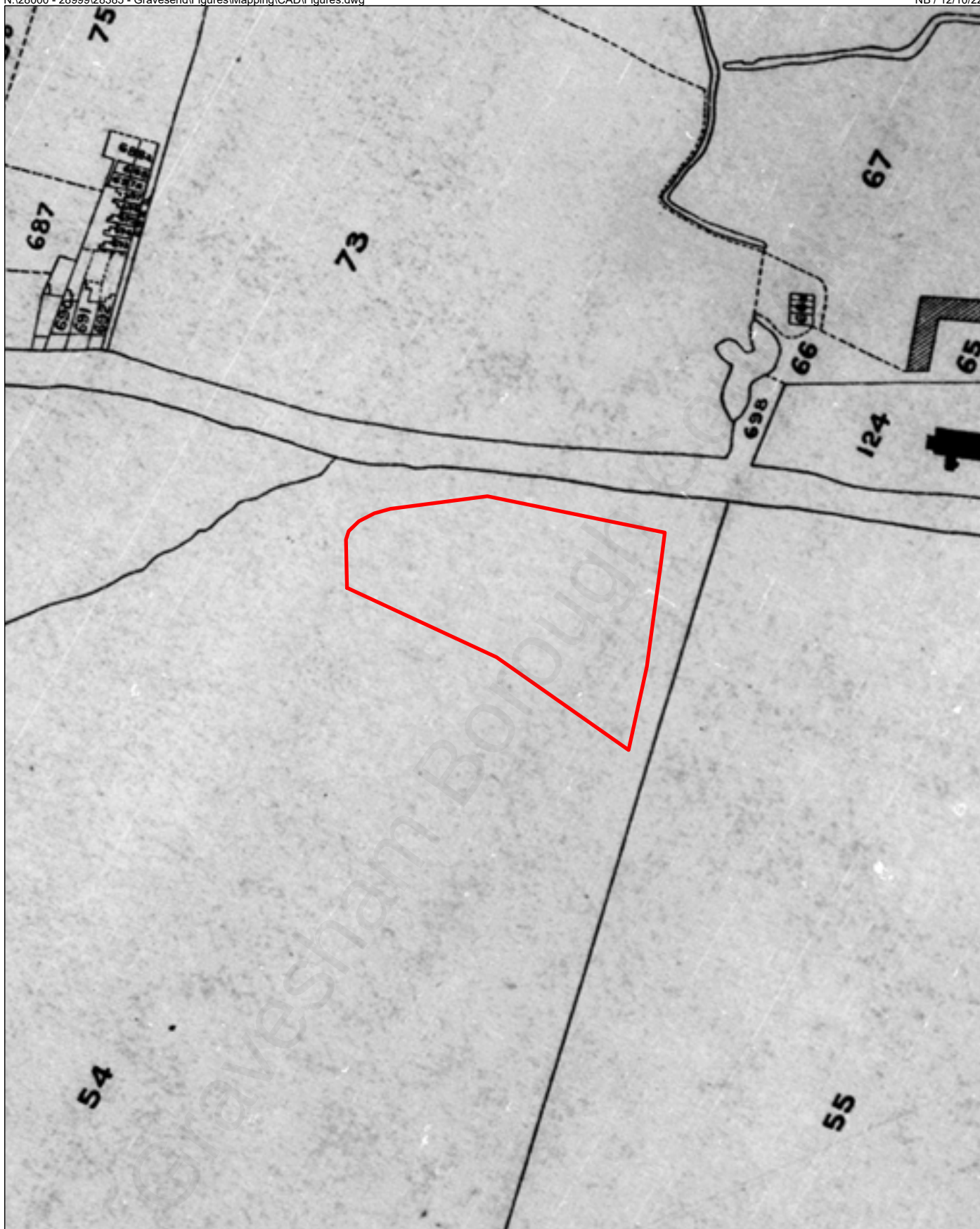
 Site Boundary



0 50 100m
Scale at A4: 1:5,000



Figure 7
1826 Plan of the Town and Lands
within the jurisdiction of
Gravesend and Milton



 Site Boundary

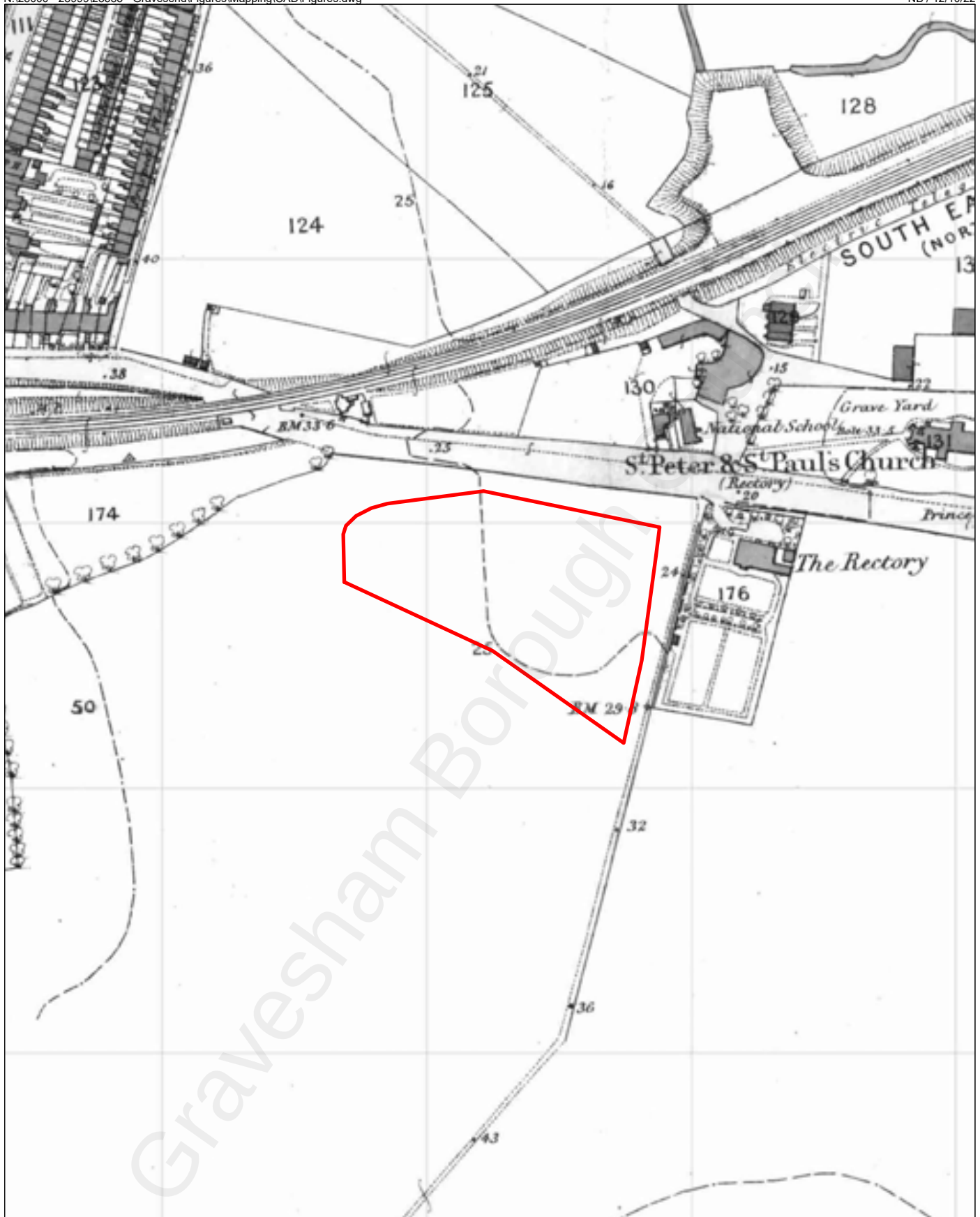


0 25 50m
Scale at A4: 1:2,000



Figure 8

1840 Milton next Gravesend Tithe Map



 Site Boundary

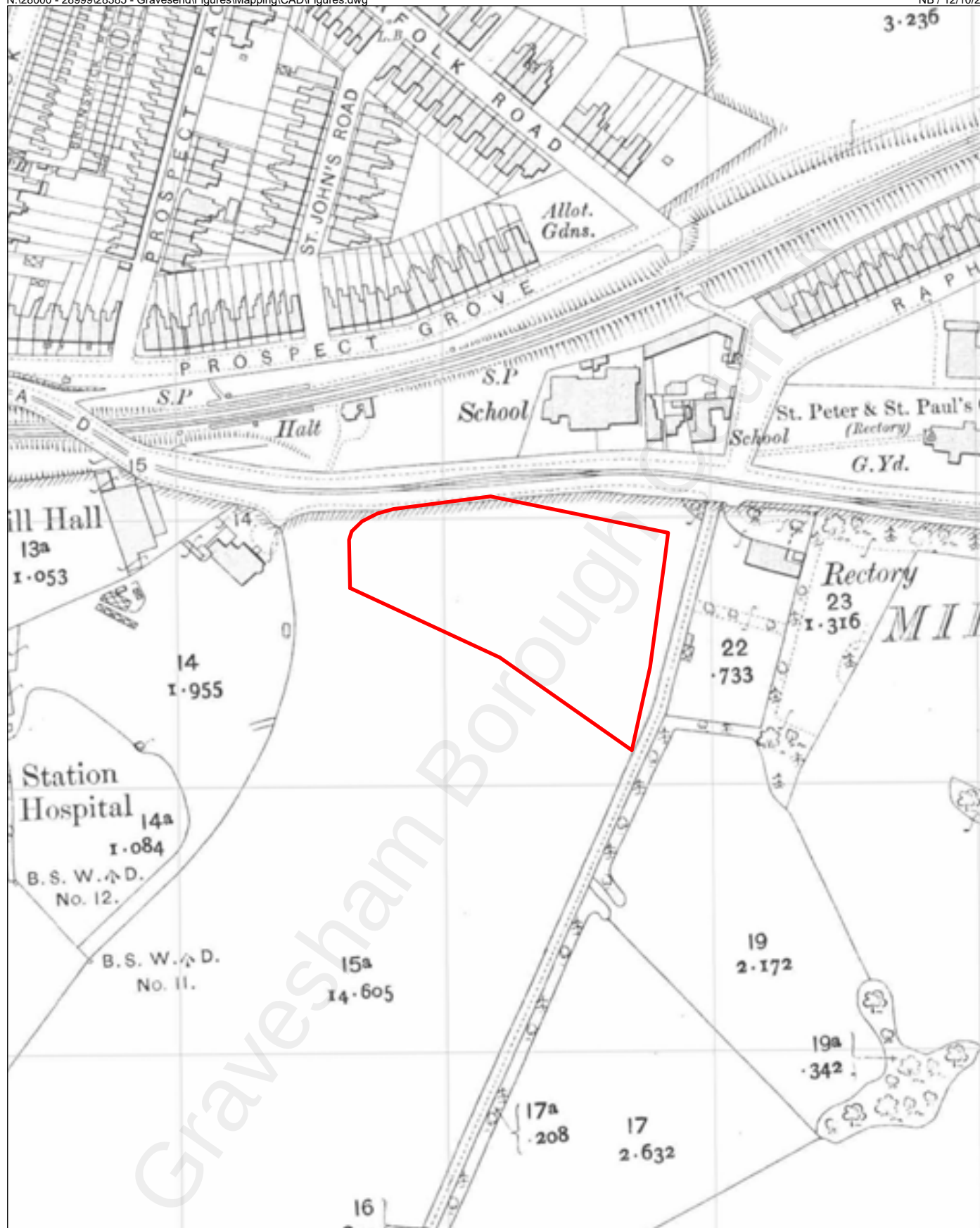


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Scale at A4: 1:2,000



Figure 9

1866 Ordnance Survey Map



 Site Boundary

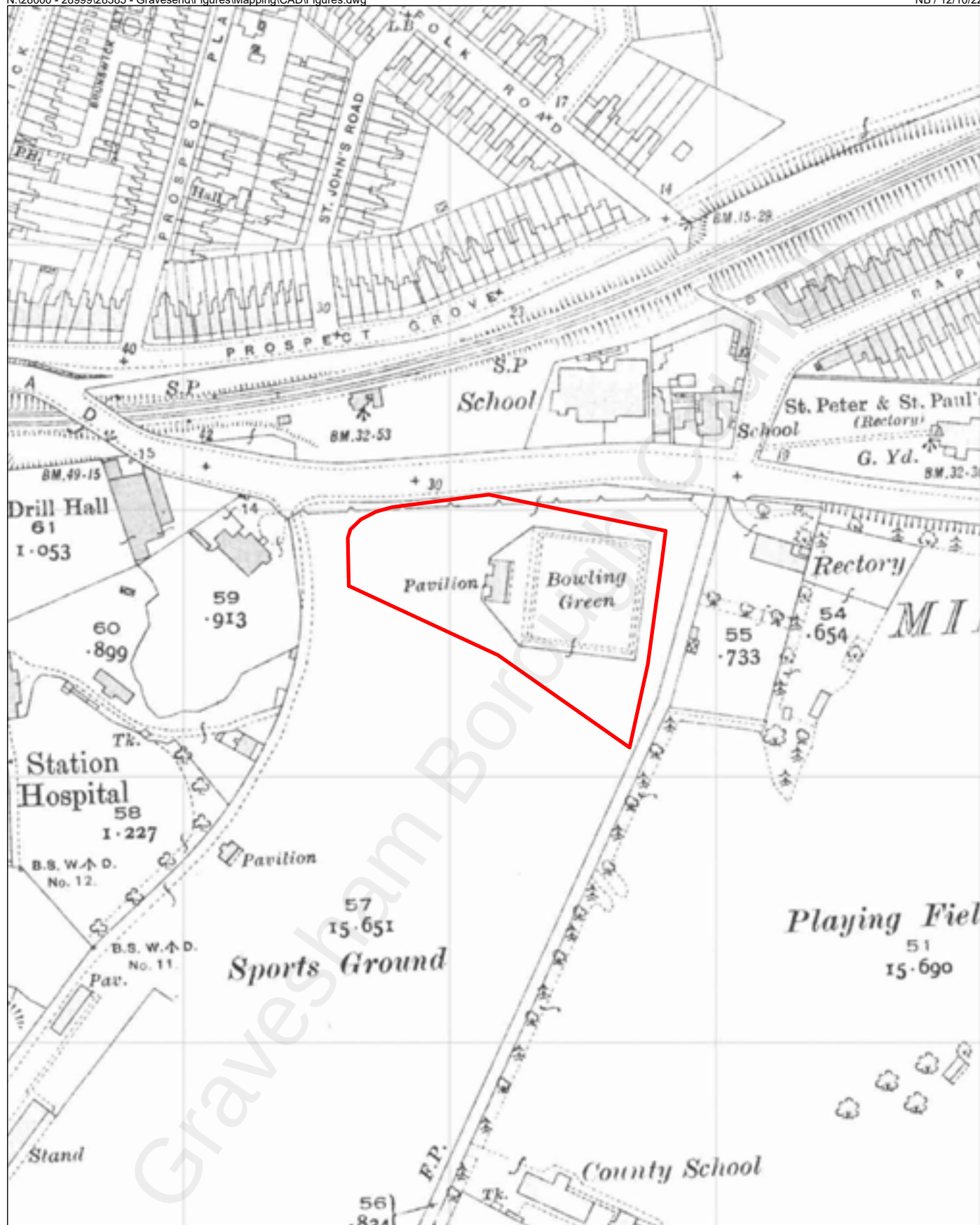


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Scale at A4: 1:2,000

rps MAKING
COMPLEX
EASY

Figure 10

1909 Ordnance Survey Map



 Site Boundary

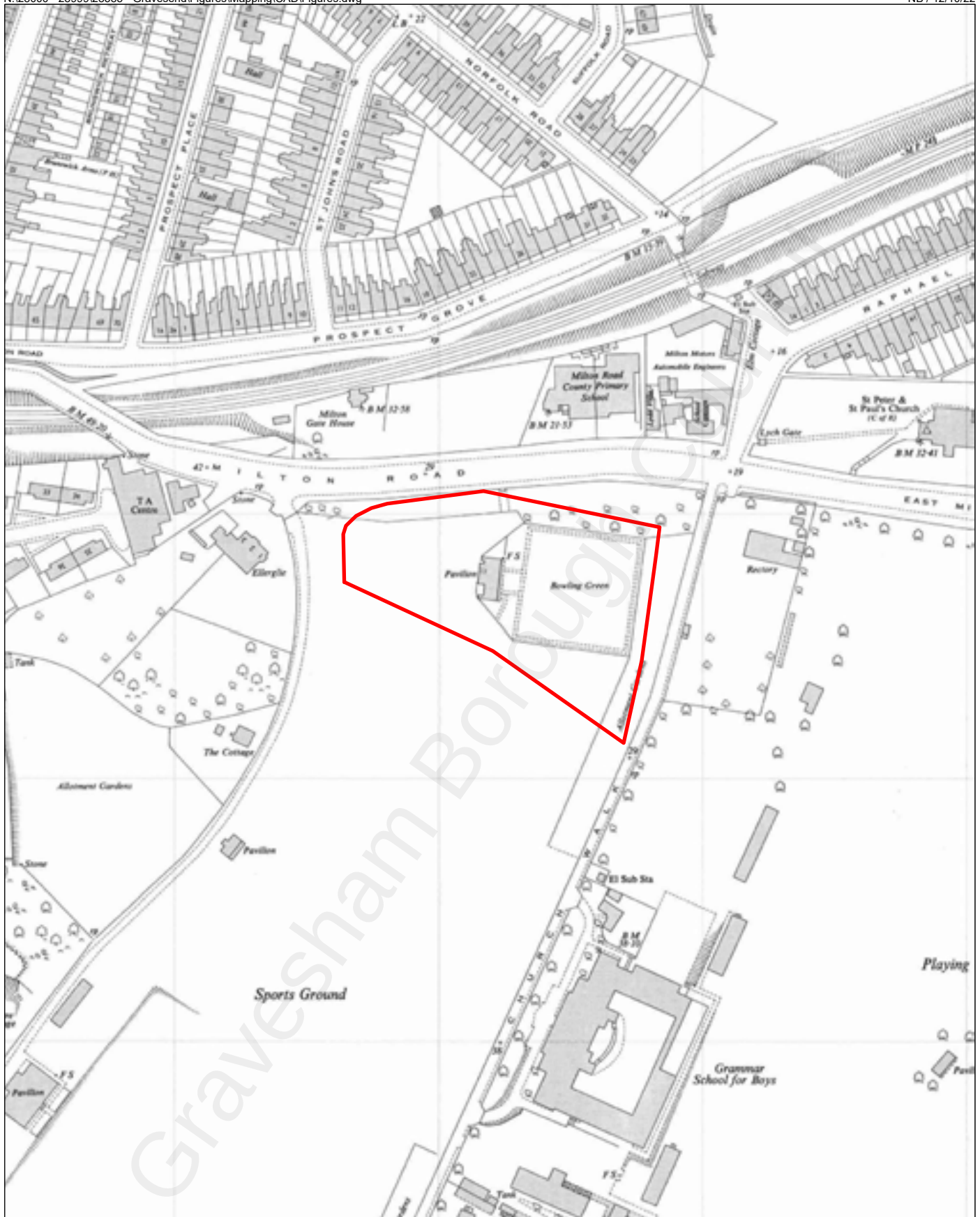


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Scale at A4: 1:2,000

rps MAKING
COMPLEX
EASY

Figure 11

1932 Ordnance Survey Map



 Site Boundary

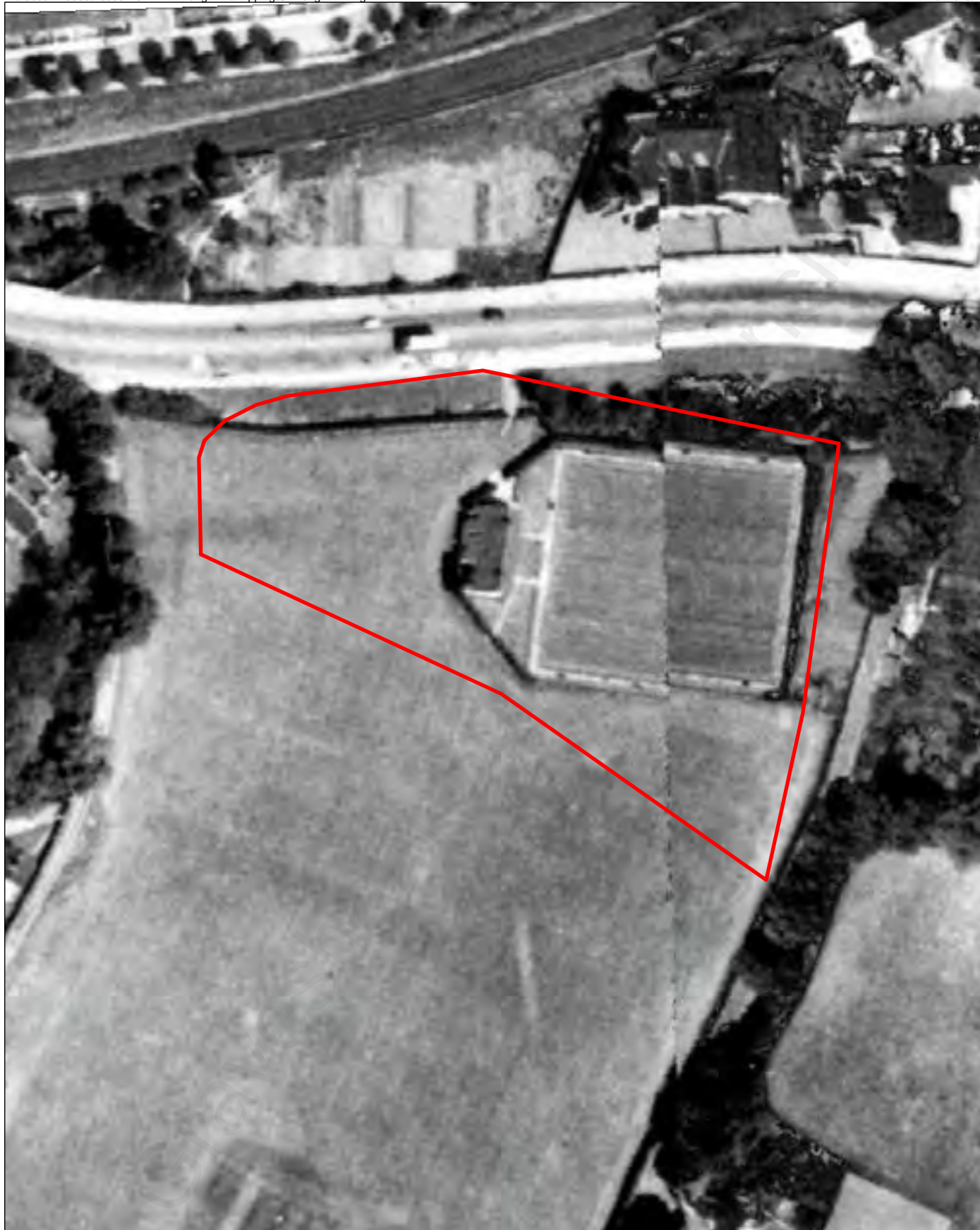


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Scale at A4: 1:2,000

rps MAKING
COMPLEX
EASY

Figure 12

1953 Ordnance Survey Map



 Site Boundary

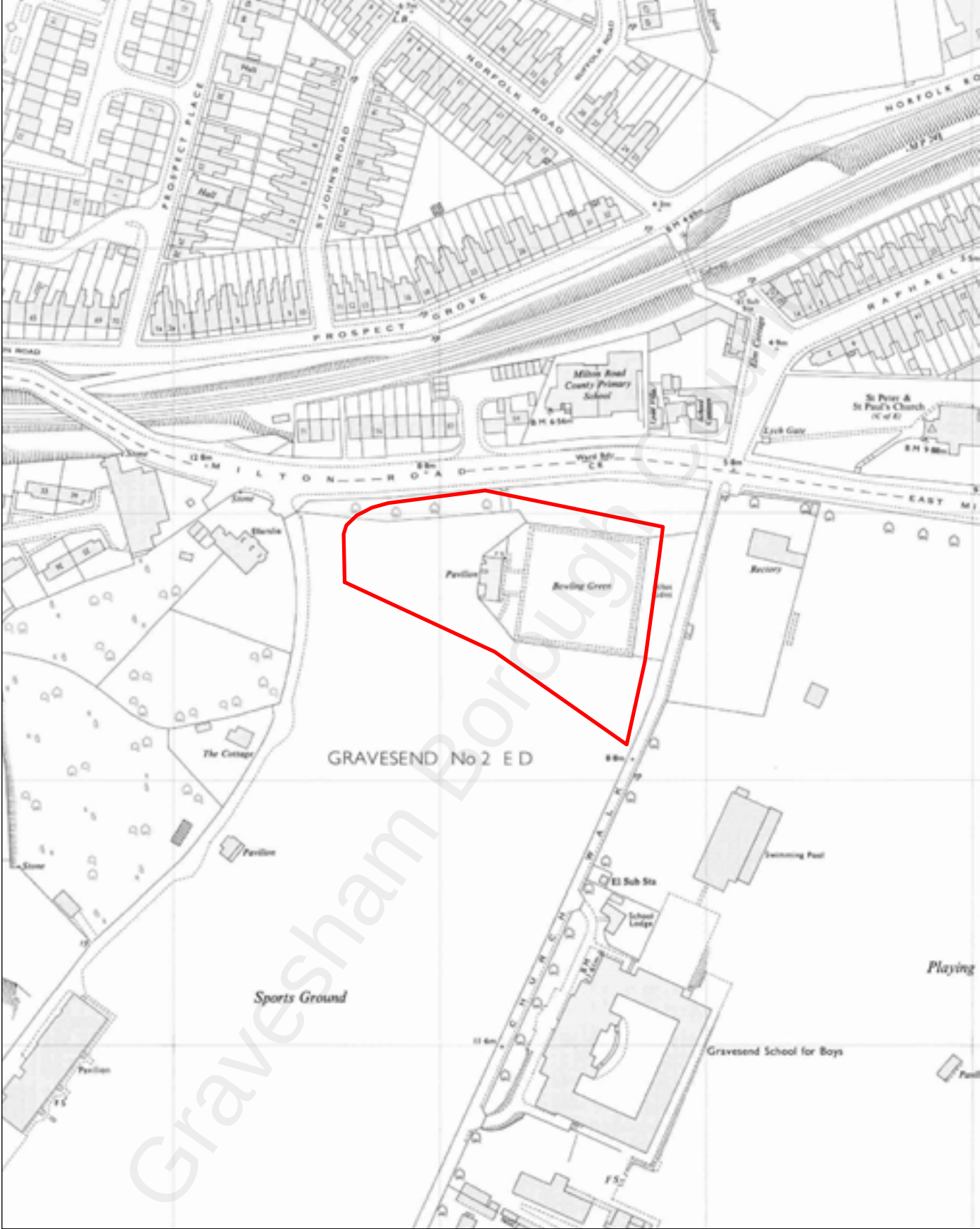


0 10 20m
Scale at A4: 1:1,000



Figure 14

1974-1978 Ordnance Survey Map



 Site Boundary

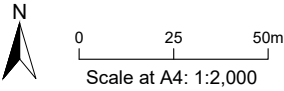
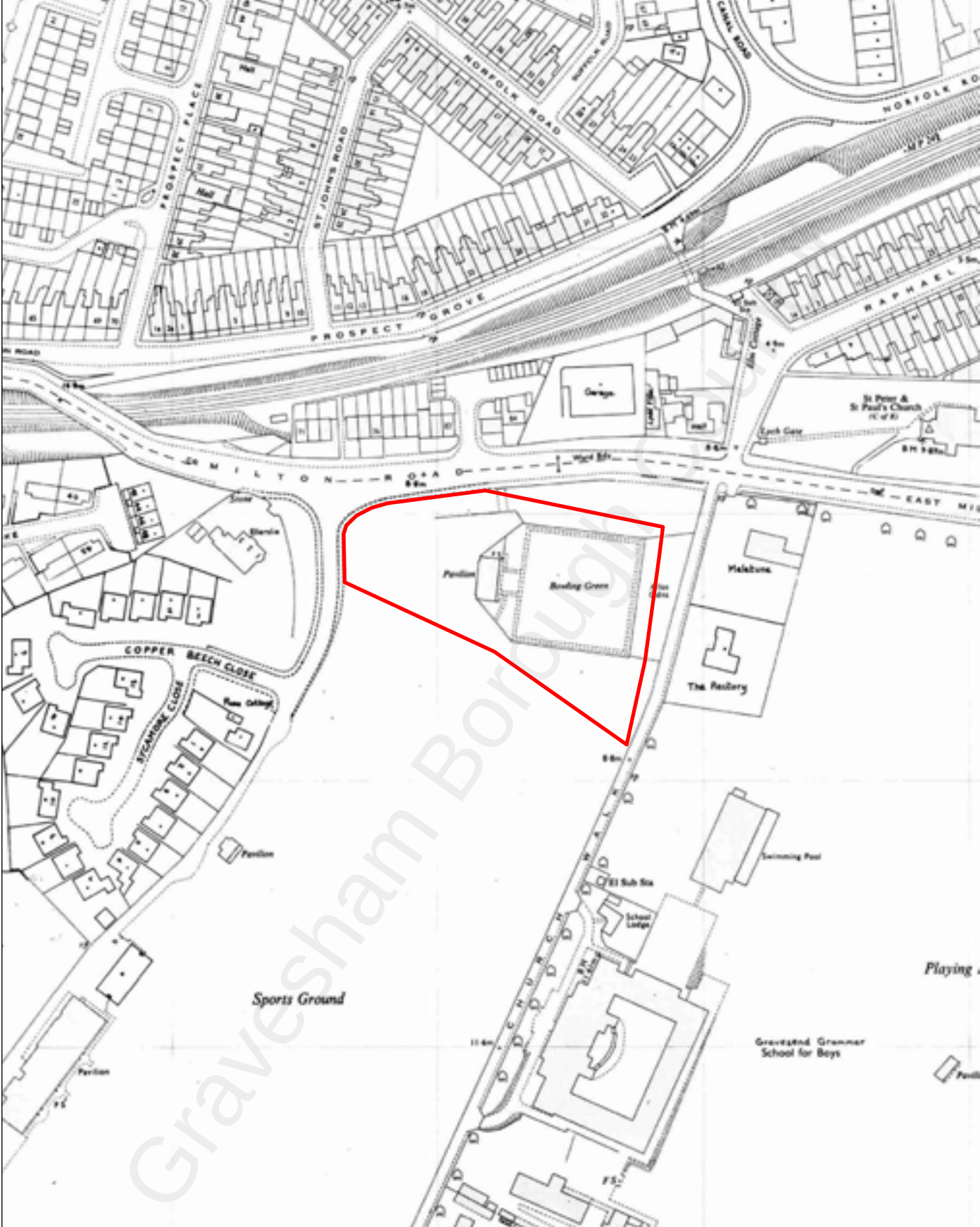


Figure 14
1974-1978 Ordnance Survey Map



 Site Boundary

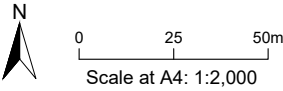


Figure 15
1992-1993 Ordnance Survey Map



 Site Boundary

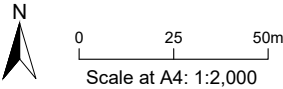


Figure 16
1993 Ordnance Survey Map



 Site Boundary



0 10 20m
Scale at A4: 1:1,000

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COMPLEX
EASY

Figure 17

2021 Aerial Photograph



0 10 20m
Scale at A4: 1:1,000



Figure 18

Current Site Survey and Services Plan

 Site Boundary


 0 10 20m
 Scale at A4: 1:750

rps MAKING
COMPLEX
EASY

Figure 19

Redevelopment Proposals

