

## **APPENDIX 14.1 ARCHAEOLOGICAL DESK BASED ASSESSMENT**



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**ARCHAEOLOGICAL  
DESK BASED  
ASSESSMENT**

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**STAG BREWERY  
MORTLAKE**

**October 2017**

**Local Planning Authority:  
London Borough of  
Richmond upon Thames**

**Site centred at:  
TQ20371 76022**

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## **CONTENTS**

### Executive Summary

- 1.0 Introduction and Scope of Study
- 2.0 Development Plan Framework
- 3.0 Geology and Topography
- 4.0 Archaeological and Historical Background, with Assessment of Significance  
(Including map regression exercise)
- 5.0 Site Conditions and the Proposed Development  
(Review of Potential Impact on Heritage Assets)
- 6.0 Summary and Conclusions

### Sources Consulted

**Appendix 1** Geotechnical information 1995, 2003, 2015

**Appendix 2** Correspondence re archaeological mitigation

## **LIST OF ILLUSTRATIONS**

- Fig. 1 Site location
- Fig. 2 Summary of Cultural Heritage Designations (data from GLHER)
- Fig. 3 1745 John Rocque's Map of London
- Fig. 4 1793 Lindley & Crossley's Map of Surrey
- Fig. 5 1829 view of Mortlake (including the northern Site frontage) from the River Thames
- Fig. 6 1839 Mortlake Tithe Map
- Fig. 7 1865 Ordnance Survey
- Fig. 8 1865 Plan of Thames Street
- Fig. 9 1896 Ordnance Survey
- Fig. 10 1907 GOAD Insurance Plan
- Fig. 11 1913 Ordnance Survey
- Fig. 12 1940 Ordnance Survey
- Fig. 13 1952-1961 Ordnance Survey
- Fig. 14 1962 aerial photograph
- Fig. 15 1965-1968 Ordnance Survey
- Fig. 16 1992-1998 Ordnance Survey
- Fig. 17 2009 Ordnance Survey
- Fig. 18 2016 Site survey

- Fig. 19 Probable extent of Medieval land use zones across the eastern part of the Site
- Fig. 20 Location of archaeological works undertaken within the Site to date
- Fig. 21 Deposit model section plan location
- Fig. 22a Deposit model section (with proposed development finished floor level OD heights)
- Fig. 22b Deposit model section (with proposed development finished floor level OD heights)
- Fig. 23 Redevelopment proposals: plan of basement east of Ship Lane
- Fig. 24 Redevelopment proposals: plan of basement west of Ship Lane
- Fig. 25 Redevelopment proposals: ground floor
- Fig. 26 Redevelopment proposals: section east of Ship Lane
- Fig. 27 Redevelopment proposals: section west of Ship Lane
- Fig. 28 Plan overlay of proposed basements and ground floor
- Fig. 29 Plan showing previous and existing development impacts

## **EXECUTIVE SUMMARY**

The Site of the Stag Brewery, Mortlake (hereafter the 'Site') has been reviewed for its below ground archaeological potential.

In terms of relevant nationally designated heritage assets, no World Heritage Sites, Scheduled Monuments, Historic Battlefield or Historic Wreck Sites lie within or in immediate proximity to the Site.

In terms of relevant local designations the Site lies within the Mortlake and Barnes Archaeological Priority Area, as defined by the London Borough of Richmond upon Thames.

The Site is considered to have an archaeological potential for the Medieval, Post Medieval and Modern periods. The eastern part of the Site is known to contain the site of the Medieval palace of the Archbishops of Canterbury, together with the site of the fourteenth century parish church, while the western part of the Site is known to contain the site of the Renaissance mansion of Thomas Cromwell, Earl of Essex.

Past post-depositional impacts are considered likely to have been severe and cumulative across the Site as a result of previous and existing phases of development, principally relating to the Brewery complex which currently occupies the Site.

Programmes of archaeological fieldwork undertaken across the Site have revealed evidence of Medieval and Post Medieval deposits, together with substantial modern horizontal truncation.

The Site is proposed for comprehensive mixed use, residential-led redevelopment, including areas of basement beneath the Site.

Redevelopment of the Site as a whole can be considered likely to have a potential adverse impact on below ground archaeological deposits of potential national significance.

Relevant archaeological measures are therefore proposed in order to mitigate the impact of redevelopment upon the Site's archaeological potential, which have been discussed and approved by the planning authorities' archaeological advisor. Such work will be secured by appropriate condition(s) attached to the granting of planning consent for redevelopment.

## **1.0 INTRODUCTION AND SCOPE OF STUDY**

- 1.1 This archaeological desk-based assessment has been prepared by CgMs Consulting, on behalf of Reselton Properties Limited.
- 1.2 The subject of this Assessment comprises the site of the Stag Brewery, Mortlake, also referred to as the Site. The Site is centred at TQ20371 76022 within the London Borough of Richmond upon Thames (see Figures 1, 2 and 18).
- 1.3 In terms of relevant designated heritage assets, as defined below in Section 2 and as shown on Figure 2, no World Heritage Sites, Scheduled Monuments, Historic Battlefield or Historic Wreck Sites have been identified within the Site or its immediate vicinity.
- 1.4 In terms of relevant local designations, the Site lies within the Mortlake and Barnes Archaeological Priority Area (APA), as defined by the London Borough of Richmond upon Thames (see also Figure 2).
- 1.5 Reselton Properties Limited have commissioned CgMs Consulting to establish the archaeological potential of the Site, to accompany a planning application for redevelopment, and to provide guidance on ways to accommodate any archaeological constraints identified.
- 1.6 In accordance with relevant government policy and guidance on archaeology and planning, and in accordance with the 'Standard and Guidance for Historic Environment Desk-Based Assessments' (Chartered Institute for Archaeologists, August 2014), this assessment draws together the available archaeological, topographic and land-use information in order to clarify the archaeological potential of the Site.
- 1.7 The assessment comprises an examination of evidence on the Greater London Historic Environment Record (GLHER) and other sources, including Richmond Local Studies and Archives Centre. The report reviews existing site investigation/geotechnical data, together with the results of archaeological interventions within the Site undertaken in 1995, 1996, 1999 and 2016.
- 1.8 The Assessment thus enables relevant parties to understand the archaeological potential of various parts of the Site and to consider the need for design, civil engineering, and archaeological solutions to the archaeological potential identified.

## 2.0 **DEVELOPMENT PLAN FRAMEWORK**

- 2.1 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.
- 2.2 In March 2012, the government published the National Planning Policy Framework (NPPF). The National Planning Practice Guidance (NPPG) was published online 6<sup>th</sup> March 2014 and updated 10 April 2014 (<http://planningguidance.planningportal.gov.uk>).
- 2.3 In addition the NPPF and NPPG are supported by three Good Practice Advice (GPA) documents published by Historic England in March 2015: GPA 1: The Historic Environment in Local Plans; GPA 2: Managing Significance in Decision-Taking in the Historic Environment, and GPA 3: The Setting of Heritage Assets.
- 2.4 Section 12 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 12 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 of the contribution that heritage assets make to our understanding of the past.
- 2.5 Section 12 of the NPPF recognises that intelligently managed change may sometimes be necessary if heritage assets are to be maintained for the long term. Paragraph 128 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. Heritage assets with archaeological interest are the primary source of evidence about the substance and evolution of places, and of the people and cultures that made them.
- 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* 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 In short, government policy provides a framework which:
- Protects nationally important designated Heritage Assets;
  - 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.
- 2.11 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 publically 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.

- 2.12 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.
- 2.13 The relevant Strategic Development Plan framework is provided by the London Plan Consolidated with Alterations Since 2011. The Further Alterations to the London Plan (FALP) were adopted 10 March 2015. This document includes the revised early minor alterations to the London Plan were published in October 2013. There are no changes to Policy 7.8; slight amendments have been made to the wording of Policy 7.10 World Heritage Sites, cross referencing this policy with the Supplementary Planning Guidance document for the setting of World Heritage Sites prepared in 2012. Recent Minor Alterations to the London Plan (MALP) published 14 March 2016, concern housing standards and parking, with no alteration to heritage policies.
- 2.14 Policy in the Consolidated London Plan relevant to archaeology at the Site includes the following:

## **POLICY 7.8 HERITAGE ASSETS AND ARCHAEOLOGY**

### **STRATEGIC**

- A. LONDON'S HERITAGE ASSETS AND HISTORIC ENVIRONMENT, INCLUDING LISTED BUILDINGS, REGISTERED HISTORIC PARKS AND GARDENS AND OTHER NATURAL AND HISTORIC LANDSCAPES, CONSERVATION AREAS, WORLD HERITAGE SITES, REGISTERED BATTLEFIELDS, SCHEDULED MONUMENTS, ARCHAEOLOGICAL REMAINS AND MEMORIALS SHOULD BE IDENTIFIED, SO THAT THE DESIRABILITY OF SUSTAINING AND ENHANCING THEIR SIGNIFICANCE AND OF UTILISING THEIR POSITIVE ROLE IN PLACE SHAPING CAN BE TAKEN INTO ACCOUNT.**
- B. DEVELOPMENT SHOULD INCORPORATE MEASURES THAT IDENTIFY, RECORD, INTERPRET, PROTECT AND, WHERE APPROPRIATE, PRESENT THE SITE'S ARCHAEOLOGY.**

## **PLANNING DECISIONS**

- C. DEVELOPMENT SHOULD IDENTIFY, VALUE, CONSERVE, RESTORE, RE-USE AND INCORPORATE HERITAGE ASSETS, WHERE APPROPRIATE.**
- D. DEVELOPMENT AFFECTING HERITAGE ASSETS AND THEIR SETTINGS SHOULD CONSERVE THEIR SIGNIFICANCE, BY BEING SYMPATHETIC TO THEIR FORM, SCALE, MATERIALS AND ARCHITECTURAL DETAIL.**
- E. NEW DEVELOPMENT SHOULD MAKE PROVISION FOR THE PROTECTION OF ARCHAEOLOGICAL RESOURCES, LANDSCAPES AND SIGNIFICANT MEMORIALS. THE PHYSICAL ASSETS SHOULD, WHERE POSSIBLE, BE MADE AVAILABLE TO THE PUBLIC ON-SITE. WHERE THE ARCHAEOLOGICAL ASSET OR MEMORIAL CANNOT BE PRESERVED OR MANAGED ON-SITE, PROVISION MUST BE MADE FOR THE INVESTIGATION, UNDERSTANDING, RECORDING, DISSEMINATION AND ARCHIVING OF THAT ASSET.**

## **LDF PREPARATION**

- F. BOROUGHES SHOULD, IN LDF POLICIES, SEEK TO MAINTAIN AND ENHANCE THE CONTRIBUTION OF BUILT, LANDSCAPED AND BURIED HERITAGE TO LONDON'S ENVIRONMENTAL QUALITY, CULTURAL IDENTITY AND ECONOMY AS PART OF MANAGING LONDON'S ABILITY TO ACCOMMODATE CHANGE AND REGENERATION.**
- G. BOROUGHES, IN CONSULTATION WITH ENGLISH HERITAGE, NATURAL ENGLAND AND OTHER RELEVANT STATUTORY ORGANISATIONS, SHOULD INCLUDE APPROPRIATE POLICIES IN THEIR LDFS FOR IDENTIFYING, PROTECTING, ENHANCING AND IMPROVING ACCESS TO THE HISTORIC ENVIRONMENT AND HERITAGE ASSETS AND THEIR SETTINGS WHERE APPROPRIATE, AND TO ARCHAEOLOGICAL ASSETS, MEMORIALS AND HISTORIC AND NATURAL LANDSCAPE CHARACTER WITHIN THEIR AREA.**

- 2.15 The relevant Development Plan framework for the Site is provided by the Richmond-upon-Thames Development Management Plan, adopted November 2011. Policy relevant to the Site includes:

### **POLICY DM HD 4 ARCHAEOLOGICAL SITES**

**THE COUNCIL WILL SEEK TO PROTECT, ENHANCE AND PROMOTE ARCHAEOLOGICAL HERITAGE (BOTH ABOVE AND BELOW GROUND), AND WILL ENCOURAGE ITS INTERPRETATION AND PRESENTATION TO THE PUBLIC. IT WILL TAKE THE NECESSARY MEASURES REQUIRED TO SAFEGUARD THE ARCHAEOLOGICAL REMAINS FOUND, AND REFUSE PLANNING PERMISSION WHERE PROPOSALS WOULD ADVERSELY AFFECT ARCHAEOLOGICAL REMAINS OR THEIR SETTING.**

- 2.16 Policies relevant to below ground archaeology at the Site contained within the London Borough of Richmond upon Thames Local Plan (Pre-publication version for consultation 8<sup>th</sup> July – 19<sup>th</sup> August 2016) include the following:

#### **New Policy LP 4 Non-Designated Heritage Assets**

The Council will seek to preserve, and where possible enhance, the significance, character and setting of non-designated heritage assets, including Buildings of Townscape Merit, memorials, particularly war memorials, and other local historic features. Applicants will be required to:

1. retain the character of Buildings of Townscape Merit, war memorials and any other non-designated heritage assets;
2. assess the potential harm to, or loss of, the significance of the non-designated heritage asset, including from both direct and indirect effects;
3. describe the significance of the non-designated heritage asset affected, including any contribution made by their setting; the extent of the relevant setting will be proportionate to the significance of the asset. Appropriate expertise should be used to assess a non-designated heritage asset; and
4. retain or restore the structures, features and materials of the asset, which contribute to its architectural integrity and historic interest.

#### **New Policy LP 7 Archaeology**

The Council will seek to protect, enhance and promote its archaeological heritage (both above and below ground), and will encourage its interpretation and presentation to the public. It will take the necessary measures required to safeguard the archaeological remains found, and refuse planning permission where proposals would adversely affect archaeological remains or their setting.

Desk based assessments and, where necessary, archaeological field evaluation will be required before development proposals are determined, where development is proposed on sites of archaeological significance or potential significance.

- 2.17 In terms of relevant designated heritage assets as defined above in the NPPF, and as shown on Figure 2, no World Heritage Sites, Scheduled Monuments, Historic Battlefield or Historic Wreck designations lie within, or in immediate proximity, to the Site. In terms of relevant local designations, the Site is located within an Archaeological Priority Area as designated by the London Borough of Richmond-upon-Thames.
- 2.18 This desk based assessment therefore aims to meet relevant policy and guidance as set out above, in order to clarify the archaeological potential of the Site and therefore the need or otherwise for further mitigation measures.

### **3.0 GEOLOGY AND TOPOGRAPHY**

#### **3.1 Mapped Geology**

3.1.1 The solid geology of the Site is shown by the Institute of Geological Sciences (IGS 1979) as London Clay deposits forming the London Basin. Overlying the London Clay is a series of gravel terraces deposited during periods of glacial and inter-glacial conditions (Bridgland 1996).

3.1.2 The underlying geology of the Site is summarised by British Geological Survey Sheet 270 (South London: 1998) to comprise Kempton Park floodplain Gravels, defined as 'Post-diversionary Thames River Terrace Deposits: gravel, sandy and clayey in part'. A thin strip of alluvium (defined as 'mainly sand, silt and clay') is shown running along the northern boundary of the Site, adjacent to the River Thames.

#### **3.2 Site Investigation Data**

3.2.1 Boreholes undertaken across the Site in the mid 1990s encountered river terrace gravels at 1.95m-3.1m AOD, overlying the London Clay, below made ground (MoLAS 1995a: 11). Site investigations undertaken in 1995, 2003 and 2015 indicate quantities of made ground up c.0.4-3.0m thick, above naturally occurring sands and gravels. The intervention logs and their location plan are reproduced at Appendix 1.

#### **3.3 Archaeological Data**

3.3.1 Archaeological evaluation and monitoring of the eastern part of the Site in 1995, 1996 and 1999 revealed substantial quantities of overburden dated to the Medieval, Post Medieval and Modern periods, above the gravels and alluvium, which had been truncated by concrete basement slabs and walls, brick and concrete footings and foundations, hogging, and service trenches. The top of the alluvial deposits were observed at 3.3-3.92m AOD, with the top of the sands and gravels noted at 2.6-3.6m AOD (MoLA 1995, 1996, 1999; see also Figure 21).

3.3.2 Archaeological evaluation undertaken within the eastern part of the Site in August 2016 revealed quantities of made ground indicating substantial horizontal truncation of the natural sequence. Naturally occurring river gravels were found at c.2.25-4.40m AOD within this part of the Site, with subsoil identified in the western and central

areas. Archaeological monitoring of SI works within the eastern part of the Site identified primarily deposits of made ground, with natural deposits identified at c.2.12-4.77m AOD, confirming the increase in the depth of made ground towards the east (PCA 2016).

3.3.3 Archaeological evaluation undertaken within the western part of the Site in August 2016 revealed made ground above natural geological horizons. In the evaluation trenching within this part of the Site, natural gravels were observed at c.5.04-5.06m AOD, with intact subsoil above. Within the test pits, natural gravels were observed at c.4.68-4.76m AOD, with no subsoil, indicating truncation of natural horizons (PCA 2016).

3.3.4 It is important to note that in all of the geotechnical and archaeological interventions undertaken at the Site to date, no deposits of peat were identified.

### **3.4 Deposit Model**

3.4.1 The results of the Site investigation logs and the 2016 archaeological evaluation are shown in deposit model format at Figures 21-22, providing a vertical profile of the site's underlying make up and geology. The east-west transect through the Site demonstrates the varying thickness of the made ground and the varying heights of the naturally occurring deposits. As a general trend, the heights of the natural geology drop from west to east, and the thickness of the made ground increases, to the east, however the thickness of the made ground and the height of the made ground does vary across the Site. The short north-south transect also shows varying thicknesses of made ground. The presence of varying thicknesses of made ground beneath the Site represents the varying levels of impact through previous and existing development.

### **3.5 Topography**

3.5.1 The modern topography of the Site is generally level, with a slight drop from south to north, and west to east. The Site to the west of Ship Lane is generally level at c.4.99-6.40m AOD; the Site to the east of Ship Lane is generally level at c.4.5-6.0m AOD.

3.5.2 However it is believed that the natural topography prior to development included a steeper drop towards the river than is present today, suggesting that substantial landforming and river revetment has been carried out across the northern parts of the

Site. This was borne out by the results of an archaeological watching brief carried out in 1996 (MoLA 1996). There may also have been a natural, gradual drop in height from west to east (PCA 2016).

- 3.5.3 Mortlake lies on the southwestern side of the arc of a bend in the River Thames. The river flows from northwest to northeast beyond the northwestern boundary of the Site, and abuts the northeastern boundary.

#### 4.0 **ARCHAEOLOGICAL AND HISTORICAL BACKGROUND, WITH ASSESSMENT OF SIGNIFICANCE**

(Including Historic Map Regression exercise)

##### 4.1 Timescales used in this report:

###### **Prehistoric**

Palaeolithic	450,000	-	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	
Anglo-Saxon/Early Medieval	AD 410	-	1066	
Medieval	AD 1066	-	1485	
Post Medieval	AD 1486	-	1749	
Modern	AD 1750	-	Present	

#### 4.2 **Introduction**

4.2.1 What follows is a consideration of archaeological finds and features from within a 750m radius of the Site, also referred to as the study area, held on the Greater London Historic Environment Record (GLHER), together with a map regression charting the history of the Site from the eighteenth century until the present day.

4.2.2 In terms of relevant nationally significant designated heritage assets, as defined above in Section 2 and as shown on Figure 2, no World Heritage Sites, Scheduled Monuments, Historic Battlefield or Historic Wreck Sites have been identified within the Site or its immediate vicinity. The Site lies within the Mortlake and Barnes Archaeological Priority Area (APA), as defined by the London Borough of Richmond upon Thames (GLHER ref DLO33477, TQ2125 7615). The northern boundary of the Site abuts the Thames Foreshore and Bank APA, related to archaeology from all past periods of human activity, particularly the prehistoric (DLO33481, TQ1815 7383).



- 4.2.3 Many of the finds of prehistoric material have been given a generic grid reference (TQ2050 7600) which places their location within the Site. However, it is probable that in fact these discoveries have been made in the general Mortlake area, possibly from the River Thames, and have therefore been 'rounded up' on the designated grid point. Unfortunately, this lessens the effectiveness of these findspots when reviewing potential.
- 4.2.4 The GLHER indicates that several known archaeological Sites and findspots occur within the Site, most notably the Medieval Archbishop's Palace on the eastern part of the Site, together with the early Post Medieval palace of the Earl of Essex, Thomas Cromwell, on the western part of the Site (see Sections 4.7 and 4.8 below).
- 4.2.5 Four phases of investigative archaeological works have been undertaken within the Site. Evaluation and two phases of watching brief have been undertaken on the eastern part of the Site in 1995, 1996 and 1999. This work revealed ploughsoils/ garden soils dating from the Medieval period onwards, together with Medieval, Post Medieval and Modern walls and foundations. Most recently, archaeological evaluation within both the western and eastern sides of the Site has revealed extensive horizontal truncation, however with intact subsoil above natural sands and gravels in places, together with traces of nineteenth century buildings, a large piece of decorated masonry which may relate to Medieval/Post Medieval activity, albeit discovered in a modern context, and a cut feature (see paragraphs 4.7.23-4 below; Figure 20; MoLAS 1995, 1996 and 1999; PCA 2016; ELO4480, TQ2046 7606).

### **4.3 Prehistoric - Palaeolithic and Mesolithic**

- 4.3.1 Kempton Park Gravels, which underlie the study Site, have been categorised as part of the Devensian Stage, the last glacial stage of the British Pleistocene epoch. Organic material within the Kempton Park Gravels has been dated to c.45,000-30,000 BP, within the Middle Devensian Stage. While vertebrate remains have been identified within the Kempton Park Gravels, the identification of archaeological artefacts to date has not been common (Gibbard 1994: 90).
- 4.3.2 Within the study area, a small Palaeolithic flint flake has been identified southeast of the Site, at a depth of c.4.5 metres in sand, c.275 metres from the River Thames (MLO20853, TQ205 755). A small handaxe was also identified in 1903-4, the grid

reference places the location of this find within the eastern part of the Site (MLO13286, TQ2050 7600).

4.3.3 Finds of Mesolithic date have included three tranchet axes and Thames Picks, two within the northwestern part of the Site (MLO18147, TQ2030 7610) and another from the general Mortlake area (MLO18370 TQ2050 7600).

4.3.4 In view of the finds identified within the study area the potential of the Site for the Palaeolithic and Mesolithic can be categorised as moderate. It is interesting to note an absence of peat deposits within the site investigation data and from the archaeological fieldwork undertaken to date at the Site; alluvial deposits were recorded in the 1995 archaeological fieldwork (see paragraph 4.2.5 above; also Section 3 above and Appendix 1).

#### **4.4 Neolithic, Bronze Age and Iron Age**

4.4.1 Quantities of Prehistoric finds from the general Mortlake area include Neolithic axeheads (MLO18921) Neolithic pottery (MLO19094) Bronze Age horn hammerheads (MLO18979, MLO19105), Bronze axeheads (MLO18980, MLO23453), and Bronze ingots (MLO14382).

4.4.2 Undiagnostic prehistoric finds and features have been identified to the east of the Site along Mortlake High Street, at Nos 61-69 (MLO71683, TQ2070 7600), at Nos 77-91 (ELO161, MLO75689, TQ2071 7599; MLO75660, MLO77301, TQ2077 7601), and at No 105 (MLO71386, TQ2084 7599).

4.4.3 Quantities of Neolithic and Bronze Age artefacts, including pottery, metalwork and flintwork, have been identified in the vicinity of Townmead Road, northwest of the Site (ELO956, MLO76430, TQ19790 76410). Shallow pits, gullies and well abraded pottery dated to the Bronze Age and Iron Age have been identified at 107 Mortlake High Street, east of the Site (ELO4090, MLO67490-91, TQ2085 7600).

4.4.4 In view of the finds of Neolithic, Bronze Age and Iron Age date within the study area, the potential of the Site itself for these periods can be identified as moderate. Evidence for land division and agricultural activity may be represented. It is interesting to note an absence of peat deposits within the Site investigation data and from the archaeological fieldwork undertaken to date at the Site; alluvial deposits were

recorded in the 1995 archaeological fieldwork (see paragraph 4.2.5 above; also Section 3 above and Appendix 1).

#### **4.5 Roman**

4.5.1 No archaeological finds or features of Roman date have been identified on the GLHER within a 750m radius of the Site.

4.5.2 A correspondingly low archaeological potential can be identified for the Roman period at the Site itself.

#### **4.6 Anglo-Saxon**

4.6.1 The manor and settlement at Mortlake was evidently an extensive and prosperous one in the Late Saxon period, in the ownership of the Archbishops of Canterbury, as indicated by its entry in Domesday Book (1086):

**The Archbishop holds Mortlake himself, in lordship. Before 1066 it answered for 80 hides. The Canons of St Paul's hold 8 of these hides, which paid and pay tax with these. Now they pay tax together for 25 hides. Land for 35 ploughs. In lordship 5 ploughs; 80 villagers and 14 smallholders with 28 ploughs. A church; 16 slaves 2 mills at 100s; meadow, 20 acres; from the woodland, 55 pigs from pasturage. In London there were 17 dwellings which paid 52d; in Southwark 4 dwellings at 27d; from the village of Putney 20s from tolls. 1 fishery without dues. Before 1066 Earl Harold had this fishery in Mortlake. Archbishop Stigand had it for a while after 1066. However [the jurors] state that Harold established it by force before 1066 on Kingston land, and on St Paul's land. Value of the whole manor before 1066 £32; later £10; now £38.**

4.6.2 Mortlake is recorded in Domesday Book as *Mortelage*, which is thought to derive from a stream with young salmon, and perhaps refers to the fishery mentioned in the entry, probably situated on a now vanished tributary of the Thames (VCH Surrey 1912: 69-74; Weinreb, Hibbert & Keay 2008: 561).

4.6.3 No finds of Anglo-Saxon date have been identified within a 750m radius of the Site. In view of this the potential for this period at the Site can be categorised as generally low, although evidence of agricultural activity and land division could conceivably be present.

## 4.7 Medieval

- 4.7.1 The site of the Medieval Archbishops Palace at Mortlake has been identified on the eastern side of Ship Lane, within the Brewery complex at the Site. It is known to have been a residency of the See of Canterbury from 1099 and remained in the ownership of the Archbishops until the sixteenth century. Brickwork dated to 'the time of the Plantagenets' (1154-1485 AD) was identified here in 1817 (MLO19136, TQ2046 7606; Phillips 1817). Also in 1817, a walled up gateway interpreted as part of the Archbishops Palace was noted within the eastern part of the Site (MLO48473, TQ2046 7606); a Chapel was also present within the palace precinct, present since at least 1095 (MLO48474, TQ207 763; MoLAS 1995a: 16), with associated human remains (MLO48488, TQ207 763) and a summerhouse fronting the river (MLO48487, TQ207 763; see paragraph 4.7.7). Figure 5, which reproduces a section of Samuel Leigh's *Panorama of the Thames from London to Richmond* undertaken in 1829, shows a section of wall east of Ship Lane fronting the river on the northern boundary of the Site, which has been interpreted as part of the Medieval palace precinct wall.
- 4.7.2 Analysis of documentary sources has identified probable areas of Medieval land use on the eastern side of the Site. The results are reproduced on plan at Figure 19, and demonstrate three principal zones: the site of the Archbishops Palace to the west, the church and cemetery to the east, and residential occupation along both sides of Thames Street to the southeast. It is believed that the western side of the Site, west of Ship Lane, comprised open agricultural and horticultural land during the Medieval period.
- 4.7.3 The church referred to in Domesday in the Manor of Mortlake is believed to have existed at Wimbledon, c.5 miles to the south of the Site (Manning & Bray 1814: 306; VCH 1912: 69-74; MoLAS 1995a: 14). However, a church was licensed in 1349 and constructed west of the present building in Mortlake, to save the villagers the trip to Wimbledon (VCH 1912: 69-74). This church has been sited within the eastern end of the Site, within the curtilage of the manor house, on the opposite side of the high street from the existing church (MoLAS 1995a: 20-23). It was demolished and moved to its present site, to the southeast of the Site by Henry VIII in 1543 (MLO19129, TQ2084 7599).
- 4.7.4 Archaeological fieldwork undertaken within the eastern part of the Site, between Ship Lane and Bulls Alley, revealed alluvial deposits containing tile and pottery dating to

the Medieval period onwards (MoLAS 1995b) together with ploughsoils of possible Medieval date, truncated by Medieval walls and foundations (MoLAS 1996; MLO67935, TQ2046 7606). Recent evaluation on the western part of the Site revealed a large piece of decorated masonry which may relate to the documented Medieval/Post Medieval activity, albeit discovered in a modern context (PCA 2016).

- 4.7.5 Beyond the eastern end of the Site, evidence for dumping thought to demonstrate enwharfment during the Medieval period was identified at 105 Mortlake High Street to the east (MLO71387, TQ2084 7599). Alluvial silts dated to the Medieval period, together with building material, refuse and pottery dated to the 13th-15th Centuries has been identified at 107 Mortlake High Street (MLO67492, TQ2085 7600). Two lines of stake and postholes were revealed at 77-91 Mortlake High Street, with remains indicating that from the fifteenth century two burgage plots were developed with buildings (ELO162, MLO77303, MLO77304, TQ2077 7601), and a well, ditches and pits were identified at Tapestry Court (ELO148, MLO75647, MLO77281, TQ2077 7600).
- 4.7.6 A wharf dated by documentary references to the fifteenth century existed at the northern end of Ship Lane, adjacent to the Site's northern boundary (MLO72098, TQ2040 7610). A sherd of Surrey Hampshire Coarse Borderware pottery was found at 10 Thames Bank, northwest of the Site (MLO72157, TQ2037 7611).
- 4.7.7 The potential of the eastern part of the Site for the Medieval period can therefore be categorised as high. Figure 19 summarises the Medieval landuse in this area, which potentially includes remains of the Bishops Palace, chapel and manorial centre, the fourteenth century church and associated cemetery, together with residential occupation and activity associated with Mortlake village to the southeast.
- 4.7.8 The western part of the Site, west of Ship Lane, is most likely to have comprised open land during the Medieval period, used for agriculture and/or horticulture. Evidence of such activity together with land division is most likely to be present on this side of the Site. The archaeological potential of this part of the Site is therefore categorised as generally low.
- 4.7.9 In spite of the generally negative results of intrusive archaeological fieldwork within the Site, it is considered likely that archaeological remains of Medieval date may remain at depth below the Site, through the identification of fragmentary remains of possible Medieval date, together with intact subsoils above natural sands and gravels.

#### **4.8 Post Medieval and Modern (including map regression exercise)**

- 4.8.1 It is thought that brewing was taking place in Mortlake by the very early Post-Medieval period, established by John Morgan c.1487 to supply the household of Henry VII. The site of the brewery is thought to have lain within the eastern part of the Site, adjacent to the Archbishops Palace (Watneys London n/d; Port of London 1984). This brewery is likely to be simply a facility within a palace, rather like a bakery or a blacksmiths, instead of a commercial enterprise.
- 4.8.2 A large house was recorded as being constructed on the east side of Williams Lane, within the western boundary of the Site, after 1493 by a brewer named John Williams. This house is subsequently thought to have been occupied by Sir Thomas Cromwell, Earl of Essex (information from Barnes & Mortlake History Society website), and it became known as Cromwell House (MLO1753, TQ2020 7605).
- 4.8.3 The Archbishop of Canterbury exchanged the manor of Mortlake with Henry VIII for other lands in 1535-6 (VCH 1912: 69-74). The king granted the Manors of Mortlake and Wimbledon to Cromwell in 1536, who is believed to have undertaken much building work there. Cromwell was an English lawyer and statesman, who served as Henry VIII's chief minister 1532-1540. He rose to power as an advocate of the Church of England and presided over the Dissolution of the monasteries (Leithead 2004/2009). A letter from Richard Tomyow to Henry VIII in 1536 references '*Mortlake, where Cromwell's servants are in health and his building ariseth fair*' (VCH 1912: 69-74; Barnes & Mortlake History Society website). It can therefore be conjectured that Cromwell rebuilt or significantly added to the existing house built by John Williams, perhaps utilising materials from the former Archbishops Palace to the east.
- 4.8.4 The Site of a manor house has been established close to the Thames on the eastern side of Ship Lane, within the central part of the study Site towards the northern boundary, possibly associated with the former Archbishops Palace (VCH 1912: 69-74; Barnes & Mortlake History Society website). Cromwell appears to have sold the manors of Mortlake and Wimbledon back to Henry VIII in 1540, prior to his execution in July of that year.
- 4.8.5 The king may have utilised Mortlake as a residence after Cromwell's execution; in 1543 he ordered the demolition of the existing church and its reconstruction beyond the Site boundary (MLO19129, TQ2084 7599; VCH 1912: 69-74). In 1543-4 Henry

VIII granted the manors of Mortlake and Wimbledon to Katherine Parr and she held the manor until her death in 1548. The manor of Mortlake subsequently became merged with that of Wimbledon, which had become the head manor at the beginning of the 1540s. A succession of owners subsequently possessed the manors (VCH 1912: 69-74).

- 4.8.6 At least part of the former Bishops Palace is thought to have still been extant in 1663, and by the late seventeenth century the gatehouse and associated buildings were in use as an inn. The Palace is recorded as having been largely demolished after 1700, but garden walls were apparently extant in 1812 (Manning & Bray 1814: 306; MoLAS 1995a). The earliest available map which shows the Site in any detail, John Rocque's Survey of London (Fig 3: 1745) shows the former palace site devoid of buildings, and occupied by market gardens. The site of Cromwell House, towards the centre of the western boundary, is shown occupied a range of buildings fronting a lane running east-west towards the centre of the Site. The southeastern part of the Site and much of the southern boundary has been developed with houses, with a meadow in the southwestern corner, and further areas of market garden present towards the centre of the Site.
- 4.8.7 Cromwell House, within the western boundary of the Site, remained in occupation throughout the seventeenth, eighteenth and nineteenth centuries. Upon the death of Valentina Aynscombe in 1841 however, the house fell into disrepair, and it was finally demolished in 1857. Another house named Cromwell House was built to the northwest of the study Site, fronting the river (Barnes & Mortlake History Society website).
- 4.8.8 Archaeological fieldwork undertaken within the eastern side of the Site, between Ship Lane and Bulls Alley, revealed Post Medieval ploughsoils, walls and foundations, including a wall of probable eighteenth century date (MoLAS 1995b, 1996). Recent evaluation on the western part of the Site revealed a large piece of decorated masonry which may relate to the documented Medieval/Post Medieval activity, albeit discovered in a modern context (PCA 2016).
- 4.8.9 Documentary references to commercial brewing at Mortlake date to 1765, when court rolls mention two small breweries adjacent to each other on either side of Thames Street, within the southeastern part of the study Site (Brown 1997: 34). It is this brewery, rather than the fifteenth century establishment, which is the most likely origin of the existing brewing facility.

- 4.8.10 The Lindley & Crossley Map of Surrey (Fig 4: 1793) shows little change within the Site from Rocque's survey. In 1807, James Weatherstone and his partner extended their brewery fronting Thames Street northwards to the river (Brown 1997: 34).
- 4.8.11 Observations made in 1817 referred to upstanding masonry dated 'to the time of the Plantagenets' on the site of the Medieval Archbishops Palace east of Ship Lane fronting the river (see paragraph 4.6.1 above). A painting of the river at Mortlake by WH Harriot, dated 1824, together with Samuel Leigh's *Panorama of the Thames from London to Richmond* undertaken in 1829 (Figure 5), both appear to show survival of the precinct wall around the former Medieval palace, including buttresses and the feature identified as a summer house, fronting the river on the Site's northern boundary.
- 4.8.12 The Mortlake Tithe Map (Fig 6: 1839) and the associated Award shows the Site occupied by brewery buildings at the eastern end, with buildings fronting the west side of Ship Lane which runs through the centre of the Site, Mortlake High Street on the southern boundary, and the road running east-west through the centre of the Site. The bulk of the remainder of the Site comprises horticultural land and meadow. The parcel of land in the southeastern corner, between Thames Street and the High Street, is shown fully developed.
- 4.8.13 In 1852, the Mortlake brewery was bought by Charles John Phillips, who expanded the facility significantly (Brown 1997: 35).
- 4.8.14 The First Edition Ordnance Survey (Fig 7: 1865) shows the expansion of the brewery towards the river from the road to the south. A large house named *The Cedars* is shown adjacent, which is known to have been basemented (information from Richmond Local Studies Library). A riding school is shown to the east of Ship Lane, where an L-shaped lane has been laid out. Further residential development is shown along the southern boundary. The site of Cromwell House is indicated within the western boundary of the Site, while the extent of the Bishops Palace is shown on the eastern part of the Site, fronting the river. The land between Thames Street and Mortlake High Street to the southeast is shown partially cleared to the west, with intact brewery buildings to the east.
- 4.8.15 The line of Thames Street, within the southeastern part of the Site, was absorbed into the brewery complex in 1865. Figure 8 comprises a plan showing the extent of what



became part of the Site. Phillips acquired the freehold of substantial areas of land along the riverside in 1865, after which buildings including a tithe barn (probably of Late Medieval origin) docking house, shop and stable, slaughterhouse, lofts and blacksmiths workshop were demolished. The new brewery included the brick wall still present along the north side of Mortlake High Street (Brown 1997: 36; Cherry & Pevsner 1999: 514-5).

- 4.8.16 The Second Edition Ordnance Survey (Fig 9: 1896) shows the absorption of Thames Street within the Site, and the brewery's dominance east of Ship Lane. Further development is shown along Cromwell Road, which runs east of Ship Lane. West of Ship Lane, a building labelled *Fairfax*, probably a large house, has been built towards the centre of the Site, with buildings formerly fronting the west side of Ship Lane now demolished.
- 4.8.17 The brewery at Mortlake was taken over by Watneys in 1898. In 1903, an eight storey maltings was constructed on the river frontage (Brown 1997: 36; Port of London 1984). This was constructed on the Site of the riding school, on the east side of Ship Lane fronting the river.
- 4.8.18 The 1907 GOAD Insurance Plan (Fig 10) shows the eastern part of the Site, between Ship Lane and Bulls Alley, occupied by the *Watney Coombe Reid & Co Limited Mortlake Brewery*. The functions of various buildings within the brewery complex are shown, which at this time included beer stores, engine rooms, tun rooms, bottling and sugar stores, cask washing areas, wheelwrights, smithy, stables and paint shops, with the 1903 malthouse shown in the northwestern corner. Basements are shown beneath "*E*" *Beer Store No 4* towards the eastern end, and beneath the tun rooms fronting the river, with buildings varying in height from one to eight storeys. Residential houses are shown fronting Guildford Place (formerly Cromwell Road) within the centre of the Site.
- 4.8.19 The Third Edition Ordnance Survey (Fig 11: 1913) shows little change across the eastern part of the Site from the earlier GOAD plan. Through the middle of the Site, between Aynscombe Lane and Ship Lane, West Street has been laid out, with houses either side and allotment gardens to the north. The western part of the Site remains primarily open land.

- 4.8.20 The Revised Ordnance Survey (Fig 12: 1940) shows alterations within the main brewery complex, together with the replacement of the allotment gardens north of West Road, in the centre of the Site, with a single large building. Buildings have also been constructed on the northern edge of the cricket ground, including a pavilion on the western boundary. The site of the brewery is thought to have received only minor damage during World War Two (James 1963: 168; Barnes & Mortlake Historical Society 2004).
- 4.8.21 The 1952-1961 composite Ordnance Survey (Fig 13) shows redevelopment of the northwestern part of the brewery, east of Ship Lane between 1953 and 1961, and additions to the pavilion in the northwestern corner of the sports ground. Figure 14 reproduces an aerial photo of 1962 which shows in the foreground two large pavilions occupying the northwestern and northeastern corners of the sports ground.
- 4.8.22 The bulk of the mid nineteenth century and later brewery buildings were demolished in the 1970s and replaced by the modern industrial brewing facility occupying the Site today. Several alleys, streets and paddocks were removed in the process, which extended the brewery west of Ship Lane (Brown 1997: 36; Cherry & Pevsner 1999: 515). There were several significant fires at the Brewery complex during the later twentieth century, which resulted in significant reconstruction (information from Richmond Local Studies Library).
- 4.8.23 The 1965-1968 composite Ordnance Survey (Fig 15) shows the repositioning of the pavilion within the northeast corner of the cricket ground, the demolition of buildings along the southern boundary and the construction of a circular building at the main entrance. The buildings fronting Mortlake High Street on the southeastern boundary have been modified, and a new building constructed at the eastern end.
- 4.8.24 Three phases of fieldwork were carried out by the Museum of London Archaeology Service (MoLAS) including an evaluation in 1995, followed by monitoring programmes during 1996 and 1999. The reports indicate that *in-situ* river terrace gravels were observed, together with ploughsoils, garden soils, walls and foundations dating from the Medieval period to the eighteenth century (MoLAS 1995b, 1996, 1999).
- 4.8.25 The above work was carried out prior to the construction of the lager bottling plant currently occupying the centre of the eastern part of the Site. The plant comprises an

open plan warehouse with a raft base and piled foundations, and required the reduction of the ground level by 1.2m within its footprint (MoLAS 1995a).

- 4.8.26 Archaeological evaluation undertaken across the Site in 2016 revealed traces of nineteenth century buildings together with Post Medieval and Modern truncation (PCA 2016).
- 4.8.27 The 1992-1998 composite Ordnance Survey (Fig 16) shows the redevelopment of the eastern side of the Site in progress. Substantial detached brewery buildings have been constructed through the centre of the Site, replacing West Street and its associated structures. Additional buildings have also been constructed in the northwestern corner, and a new club house has been constructed on the eastern boundary of the sports ground. The building formerly known as Fairfax on the northern boundary west of Ship Lane has been demolished.
- 4.8.28 The 2009 Ordnance Survey (Fig 17) shows the Site as it remains today, occupied by the buildings of the brewery, with the sports ground and pavilion to the southwest. In comparison with the 1992-1998 survey the scale of recent redevelopment on the eastern side of the Site is clearly evident.
- 4.8.29 The current Site survey (Fig 18) shows no substantial changes within the Site.
- 4.8.30 The potential of the Site for the Post Medieval and Modern periods can be categorised as high. Remains of Cromwell House (c.1491-1857) may survive within the northwestern boundary of the Site; remains associated with the former Archbishops Palace may survive east of Ship Lane (apparently extant until the early/mid nineteenth century) together with village activity and occupation in the southeastern corner, prior to absorption into the brewery complex in 1865. Across the whole of the Site, remains associated with previous phases of the brewery dating from the eighteenth century are likely to survive below the existing facility.
- 4.8.31 In spite of the generally negative results of intrusive archaeological fieldwork within the Site, it is considered likely that archaeological remains of Post Medieval date may remain at depth below the Site, through the identification of fragmentary remains of possible Post Medieval date, together with intact subsoils above natural sands and gravels.

#### **4.9 Assessment of Significance**

- 4.9.1 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.
- 4.9.2 No archaeological designated heritage assets as defined in the NPPF are recorded on or in close proximity to the Site. In terms of local designations, the Site lies within an Archaeological Priority Area as defined by the London Borough of Richmond upon Thames.
- 4.9.3 Overall, it is possible that archaeological remains of national significance may be present within the Site boundary, relating to the known presence of the Site of the Medieval palace and parish church, together with village settlement, and the Renaissance mansion to the west.

## **5.0 SITE CONDITIONS AND THE PROPOSED DEVELOPMENT**

(Review of potential impact upon Heritage Assets)

### **5.1 Site Conditions**

- 5.1.1 The Site is currently occupied by the buildings of the Mortlake Brewery complex, dating to the nineteenth and twentieth centuries, with a sports ground and pavilion occupying the southwestern corner (Fig 18).
- 5.1.2 The construction of the existing brewing facility is considered likely to have had a cumulative, severe destructive impact on underlying archaeological deposits.
- 5.1.3 The construction and demolition of buildings formerly occupying the Site can be considered likely to have had a severe negative impact on any underlying archaeological deposits through the cutting of foundations and services, and in particular any basements or cellars formerly present. This will include previous phases of the brewery (see paragraph 4.8.17 above) together with domestic buildings (see paragraph 4.8.10 above).
- 5.1.4 The negative impact of previous and existing development is demonstrated by the results of archaeological works undertaken within the Site to date (see paragraph 4.2.5 above). Figures 21-22 reproduce the deposit model which demonstrates the extent of made ground across the Site, while Figure 29 identifies areas of existing and previous basements.
- 5.1.5 Phases of landforming across the Site, including revetment along the Thames frontage of the Site and levelling of the natural topography, are thought to have been carried out from the Medieval period into the eighteenth century. These are considered likely to have buried the original land surface of the northern part of the Site below several metres of made ground (see paragraph 3.4.2 above). This process has the potential to have preserved archaeological remains at depth.
- 5.1.6 The bulk of the sports ground occupying the southwestern corner of the Site appears to have remained undeveloped within its documented history. The insertion of drainage and any floodlighting measures can be considered to have had a severe but localised archaeological impact through the cutting of services.

5.1.7 Any agricultural and/or horticultural use of the Site prior to development can be considered to have had a moderate, widespread negative archaeological impact.

## **5.2 Proposed Development**

5.2.1 Draft proposals include the mixed use, residentially led redevelopment of the Site, to include areas of basement to the west and east of Ship Lane (see Figures 23-28).

## **5.3 Review of Potential Impact**

5.3.1 In view of the Site's known archaeological potential, combining the Medieval palace, church and part of Mortlake village to the east, with the early Post Medieval mansion of Cromwell House to the west, together with related activity, any redevelopment of the Site could potentially have a detrimental archaeological impact upon remains deemed to be of national significance.

5.3.2 Previous archaeological work within the Site has indicated significant truncation as a result of successive phases of the brewery which has occupied the Site since the eighteenth century (see section 3 above and Figs 21-22). However, surviving Medieval and Post Medieval deposits have been noted below modern development, together with intact subsoil and natural sands and gravels, where archaeological remains may be present.

5.3.3 The bottom of the proposed basement slab within the eastern part of the Stag Brewery component of the Site (east of Ship Lane) would be set at 0.76m OD. This area of the Site recorded natural terrace gravels at between 4.4m and 2.68m OD, so the proposed basement would likely impact on any archaeological structures or deposits present (see Figure 22). The proposed foundation design for all buildings within the eastern part of the Stag Brewery component of the Site (east of Ship Lane) would comprise a 1m deep piled raft, with the exception of the proposed cinema area which would be founded in 1m deep local pile caps with 1m deep ground beams. Below the foundations, all buildings would have an expanse of piles (3 to 5 per column) that would be 600mm in diameter and extending down 25m in length.

5.3.4 The maximum extent for the proposed basement within the west part of the Stag Brewery component of the Site (west of Ship Lane), would be set at 2.45m OD. The natural gravel in this area of the Site was recorded at between 5.6 and 4.68m OD, so

the proposed basement would also likely impact on any archaeological structures or deposits present in this area of the Site (see also Figure 22).

- 5.3.5 In addition to the above, the new river wall would be formed of a sheet pile wall with an *in-situ* reinforced concrete capping beam. The toe level of the sheet pile wall would be set at -1m AOD.
- 5.3.6 It is considered that the archaeological fieldwork and desk based assessment undertaken to date has sufficiently characterised the Site. Site restrictions due to the presence of existing buildings together with associated internal and external plant also preclude the application of additional targeted exploratory archaeological fieldwork, prior to demolition.
- 5.3.7 Given the absence to date of identified appropriate geological horizons, it is not proposed to progress geoarchaeological/palaeoenvironmental work at the Site.
- 5.3.8 Given the likely archaeological potential, further archaeological works are proposed in the form of a phased evaluation programme, following demolition, with further works dependant upon the results of the evaluation. Additionally it is anticipated that a programme of historic building recording for the extant Brewery buildings will also be required. Such work can follow the granting of planning consent, secured by condition.
- 5.3.9 The above approach to archaeological mitigation has been discussed and approved by the Greater London Archaeological Advisory Service (GLAAS) officer for the London Borough of Richmond upon Thames, Laura O’Gorman (see Appendix 2).

## **6.0 SUMMARY AND CONCLUSIONS**

- 6.1 The Site of the Stag Brewery, Mortlake, has been reviewed 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 designated heritage assets, no World Heritage Sites, Scheduled Monuments, Historic Battlefield or Historic Wreck Sites lie within or in immediate proximity to the Site.
- 6.4 In terms of relevant local designations the Site lies within the Mortlake and Barnes Archaeological Priority Area, as defined by the London Borough of Richmond upon Thames.
- 6.5 The Site is considered likely to have a moderate potential for the Prehistoric periods. Original land surfaces within the Site are thought to be buried beneath made ground and later structures, where not truncated by subsequent development.
- 6.6 The Site is considered likely to have a generally low potential for the Roman and Anglo-Saxon periods.
- 6.7 The eastern side of the Site is considered likely to have a high potential for the Medieval period. The eastern part of the Site is known to contain the site of an Archbishops Palace, together with a chapel or church, with part of the Medieval village to the southeast. The western part of the Site is understood to have comprised principally open fields during the Medieval period, with a correspondingly generally low archaeological potential.
- 6.8 The Site is considered likely to have a high potential for the Post Medieval and Modern periods. The Renaissance mansion of Sir Thomas Cromwell is known to lie on the western part of the Site, while the brewery developed on the eastern part from the eighteenth century onwards.



- 6.9 Past post-depositional impacts within the Site are considered to have been severe and cumulative as a result of previous and existing phases of development, particularly the construction and demolition of phases of the Mortlake Brewery across the Site during the nineteenth and twentieth centuries.
- 6.10 Programmes of archaeological fieldwork undertaken across the Site have revealed Medieval and Post Medieval deposits, together with substantial modern deposits and post depositional impacts.
- 6.11 Redevelopment of the Site can be considered likely to have an adverse archaeological impact.
- 6.12 On the basis of the available information it is proposed to progress archaeological mitigation measures in the form of a phased archaeological evaluation programme, following demolition and Site clearance, with further excavation work dependant upon the results of evaluation. Additionally, a programme of historic building recording on the extant Brewery buildings is also anticipated.
- 6.13 The above mitigation strategy has been discussed and approved by the planning authorities' archaeological advisor.
- 6.14 Such work would necessarily follow the granting of planning consent, secured by relevant condition(s).

## **SOURCES CONSULTED**

### 1. **General**

Barnes & Mortlake History Society (website)  
British Library  
Greater London Historic Environment Record  
London Archaeological Archive and Research Centre  
Richmond Local Studies Library  
Society of Antiquaries Library

### 2. **Internet**

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1745 John Rocque's Map of London

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1823 Charles & John Greenwood's Map of Surrey

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1865 Ordnance Survey

1865 Plan of Thames Street Mortlake

1894-6 Ordnance Survey

1907 GOAD Insurance Plan

1913 Ordnance Survey

1940 Ordnance Survey

1948 Ordnance Survey

1952 Ordnance Survey

1953 Ordnance Survey

1958 Ordnance Survey

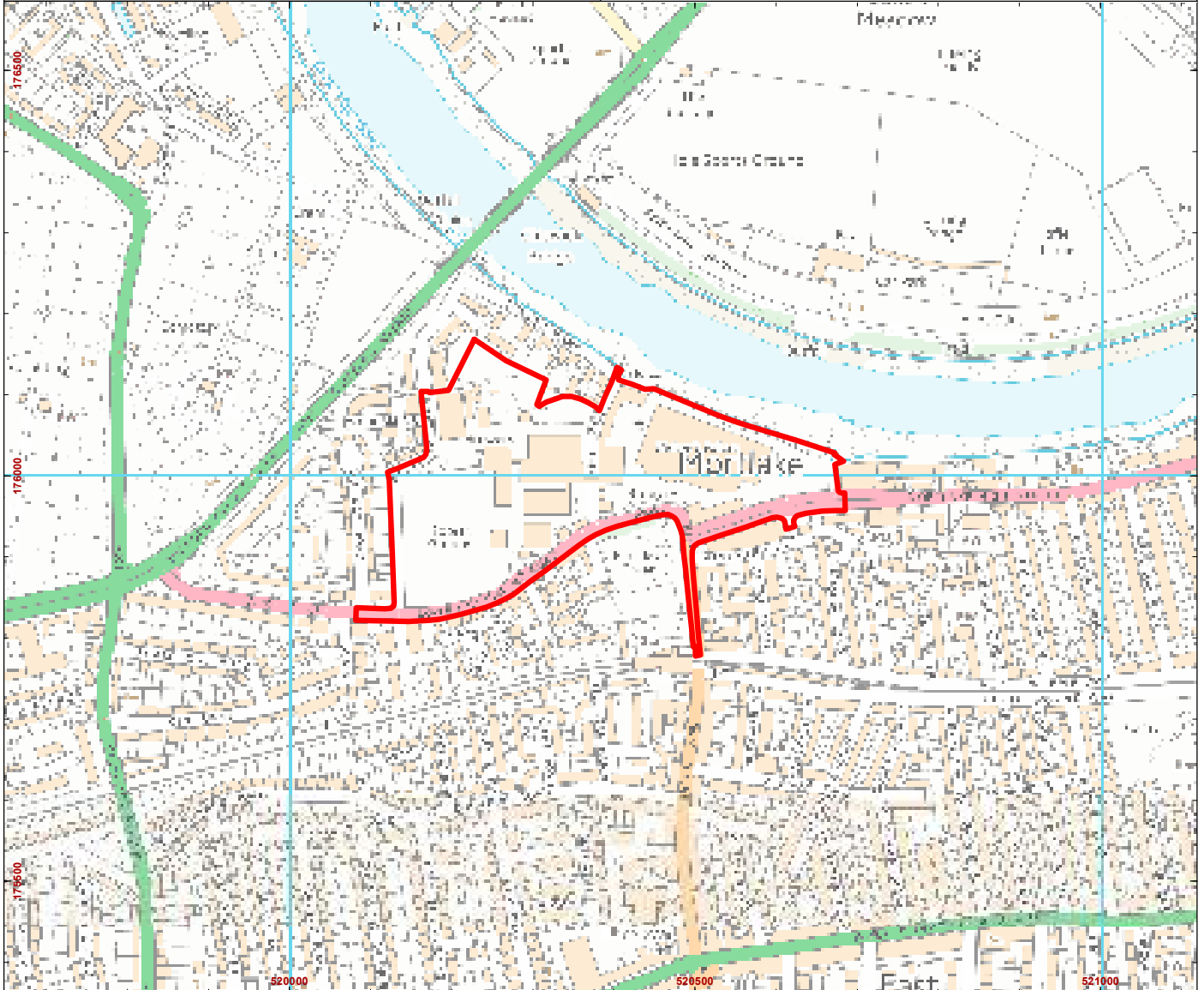
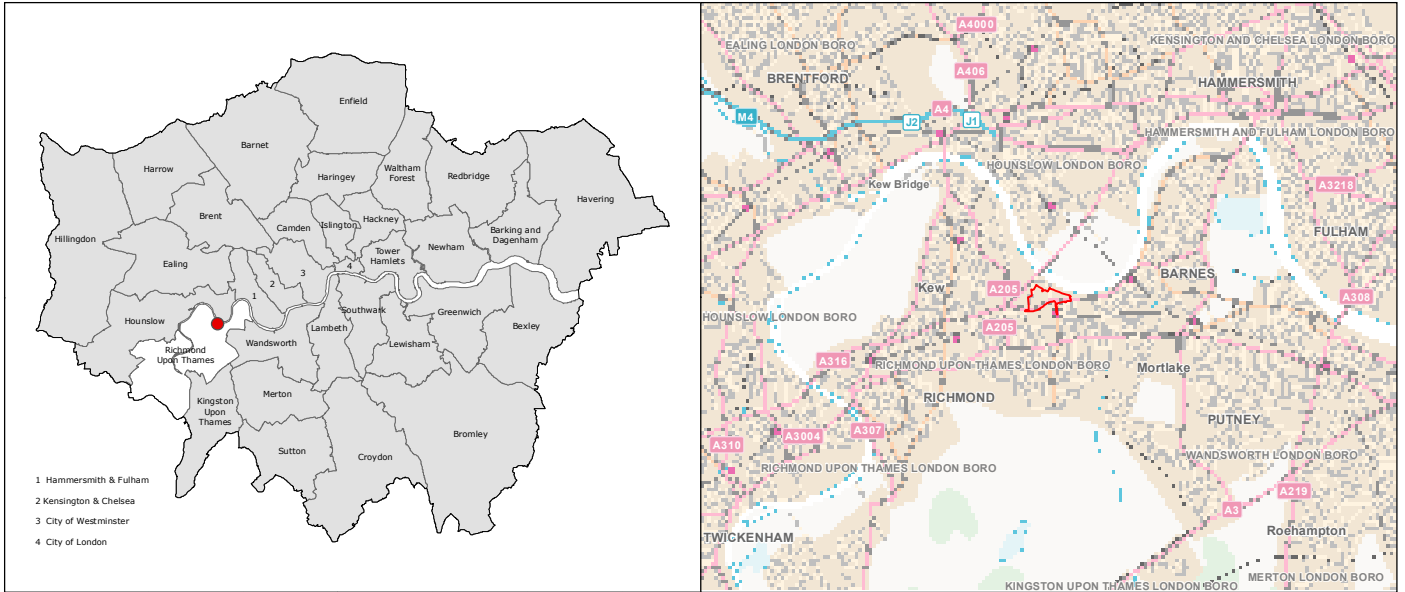
1961 Ordnance Survey

1965 Ordnance Survey

1967 Ordnance Survey

1968 Ordnance Survey

1973 Ordnance Survey  
1976 Ordnance Survey  
1977 Ordnance Survey  
1982 Ordnance Survey  
1987 Ordnance Survey  
1988 Ordnance Survey  
1991 Ordnance Survey  
1992 Ordnance Survey  
1993 Ordnance Survey  
1998 British Geological Survey Sheet 270 (South London)  
2009 Ordnance Survey  
2016 Site survey

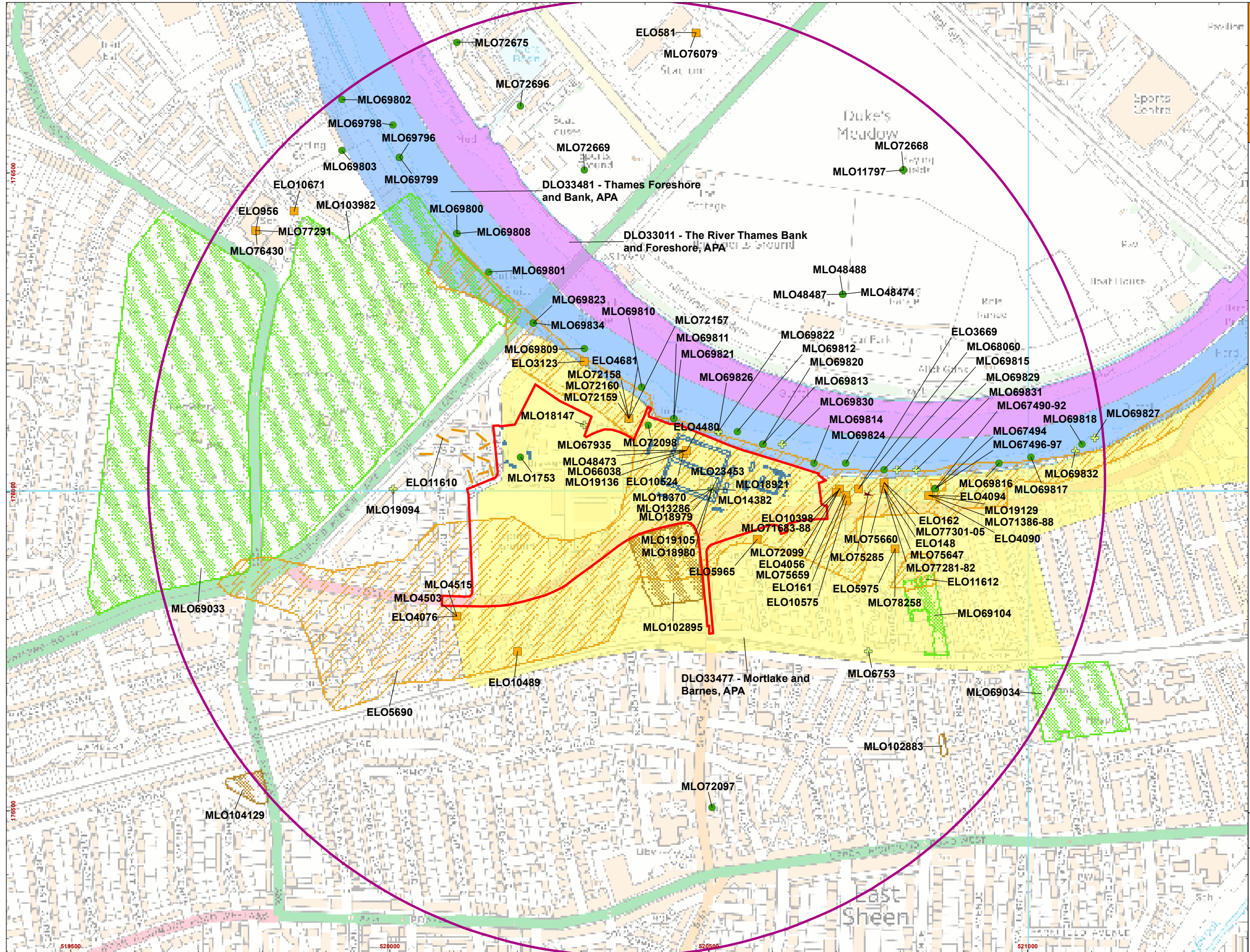


Scale at A4: 1:8,000  
0 200m

Figure 1:  
Site Location

Site Boundary

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- Site Boundary
- Search Radius 750m

- Designated Assets:**
- Archaeological Priority Areas**
- DLO33011 - The River Thames Bank and Foreshore
  - DLO33477 - Mortlake and Barnes
  - DLO33481 - Thames Foreshore and Bank

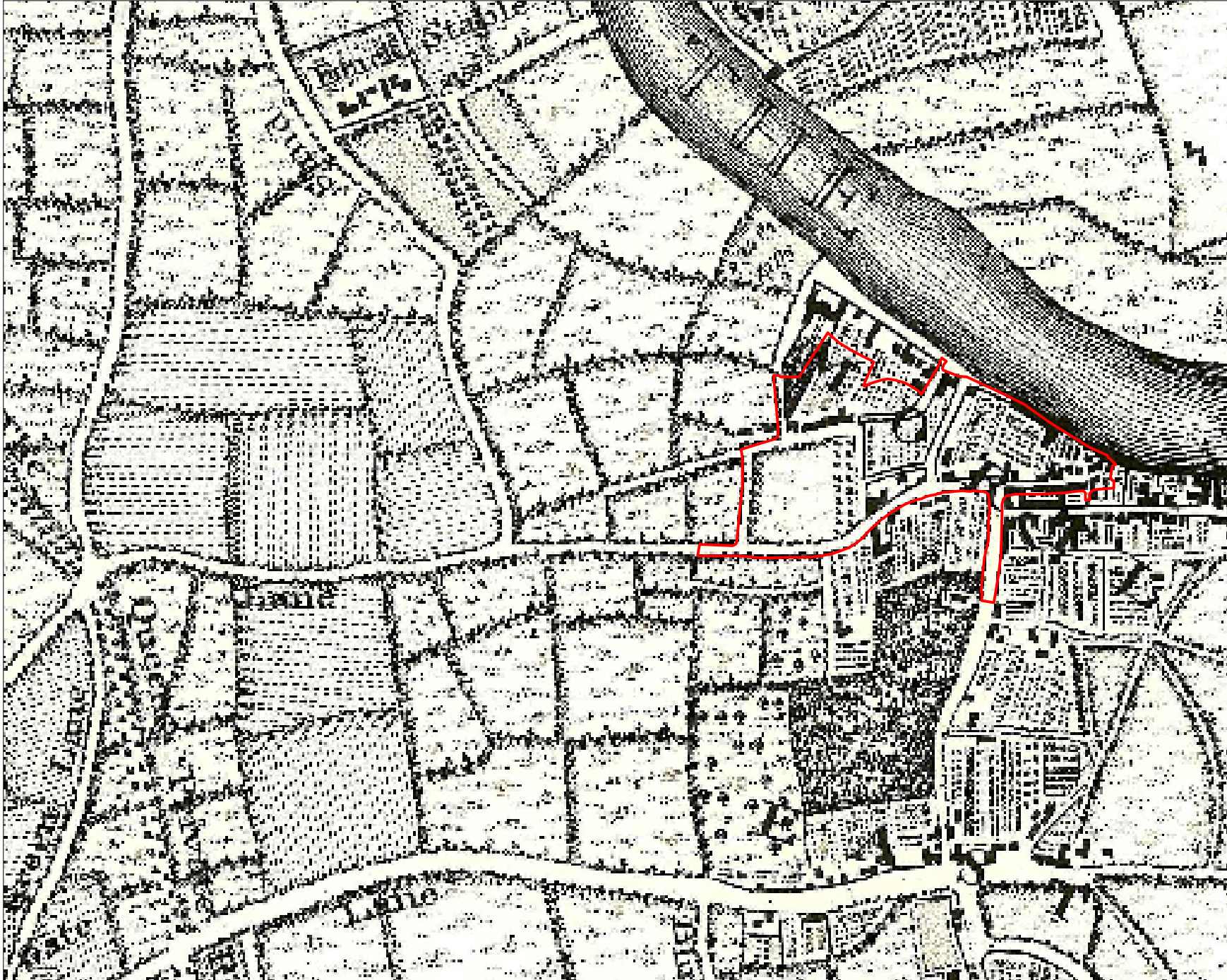
- Non-Designated Assets:**
- HER Record (Point)**
- Monument
  - Find Spot
  - Marine
- HER Record (Polygon)**
- Monument
  - Park

- Previous Archaeological Work:**
- Event Record (Point)
  - Event Record (Linear)
  - Event Record (Polygon)
  - Archaeological works within the site



Scale at A3: 1:5,500  
0 150m

Figure 2: Summary of Cultural Heritage Designations (data from GLHER)



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 Site Location



Not to Scale:  
Illustrative Only

Figure 3:  
1745 John Rocque's Map  
of London





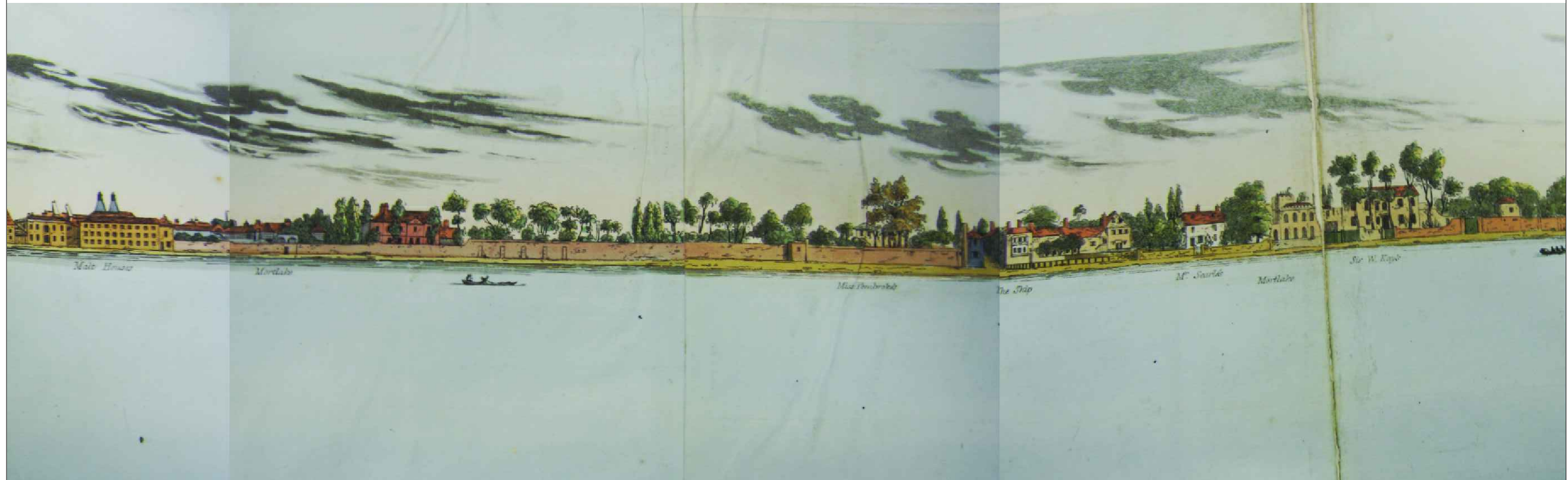
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 Site Location



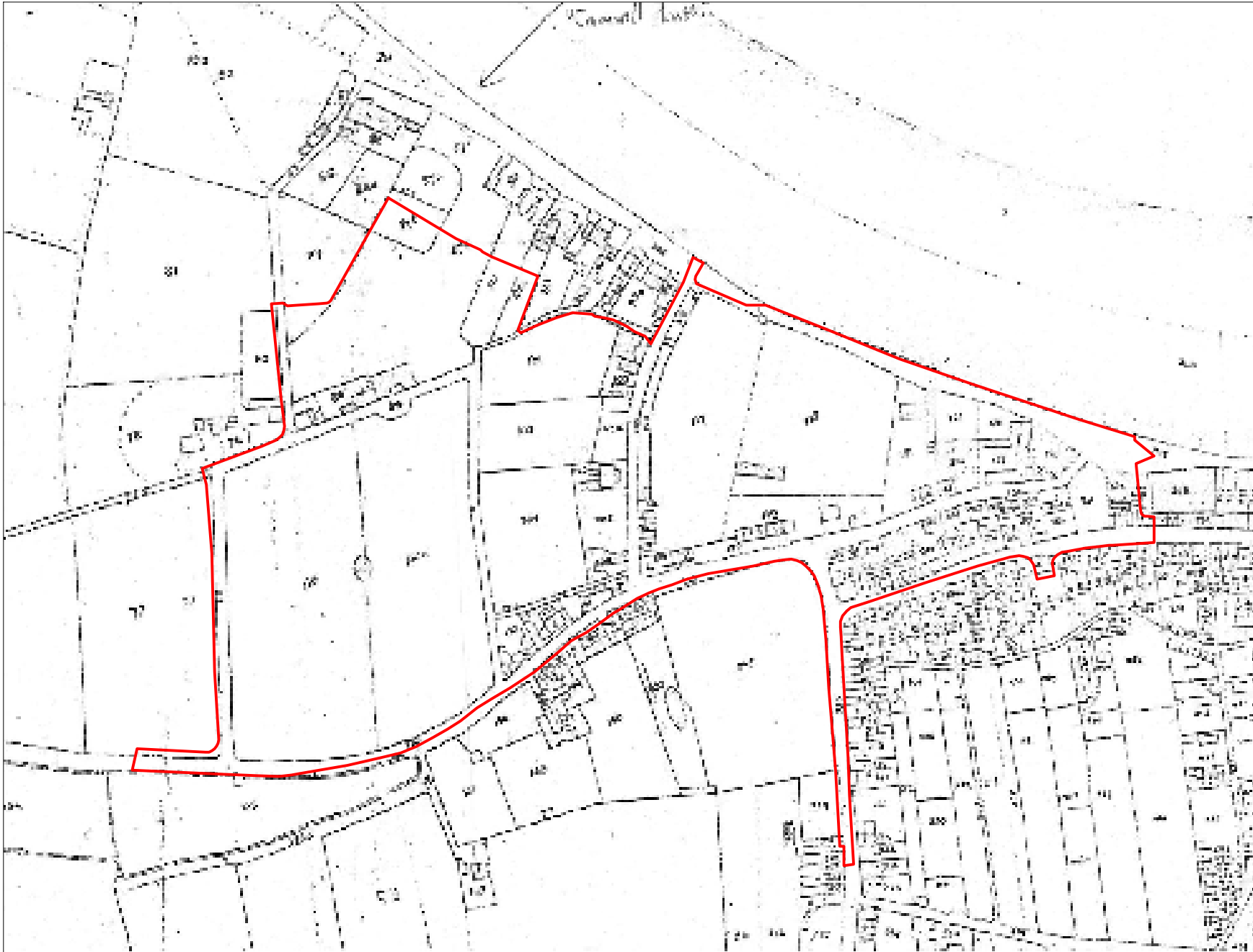
Not to Scale:  
Illustrative Only

Figure 4:  
1793 Lindley & Crossley's  
Map of Surrey



Not to Scale:  
Illustrative Only

Figure 5:  
1829 View of Mortlake  
(including the northern site  
frontage) from the River  
Thames



 Site Boundary



Not to Scale:  
Illustrative Only

Figure 6:  
1839 Mortlake Tithe Map



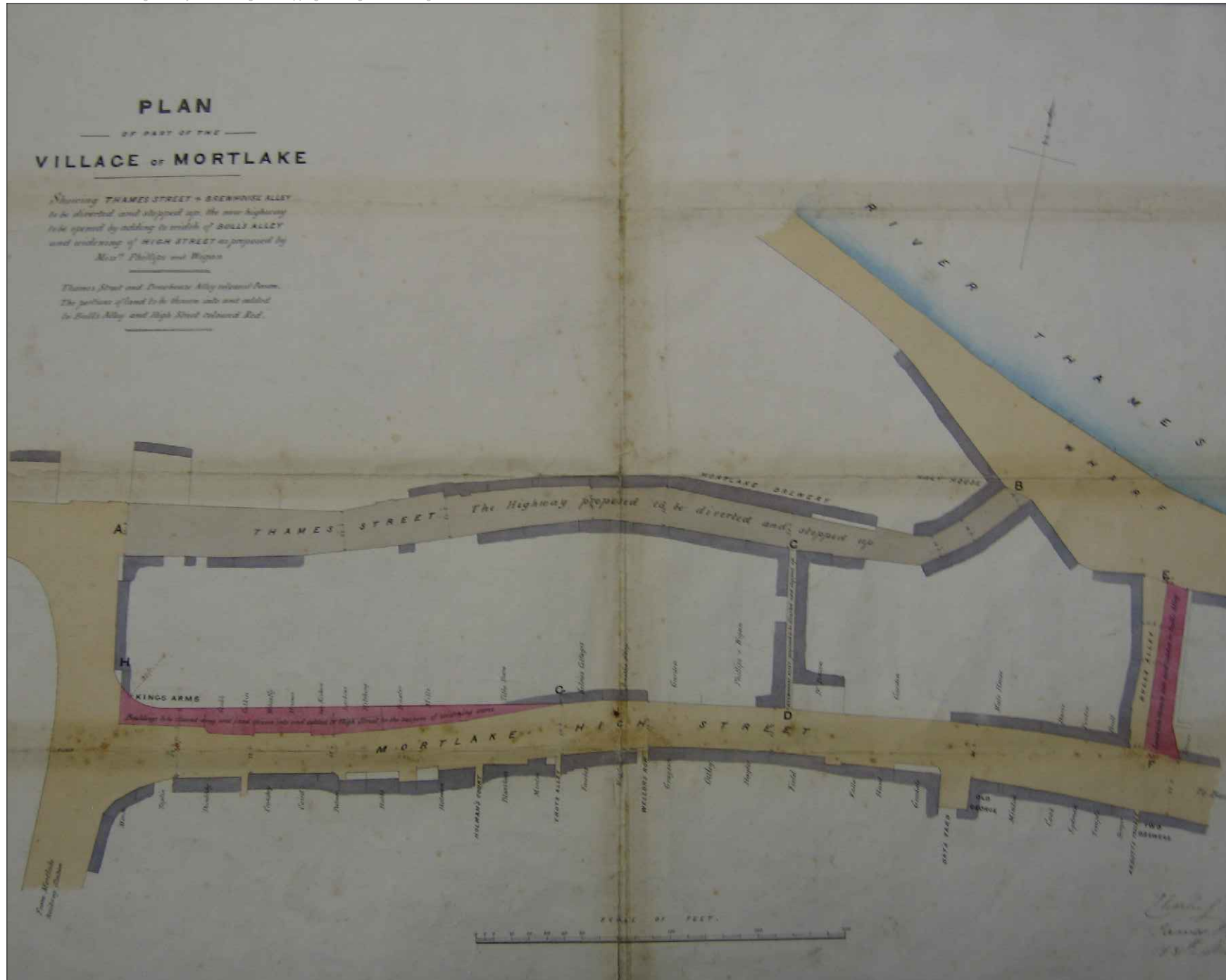
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 Site Boundary



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Illustrative Only

Figure 7:  
1865 Ordnance Survey

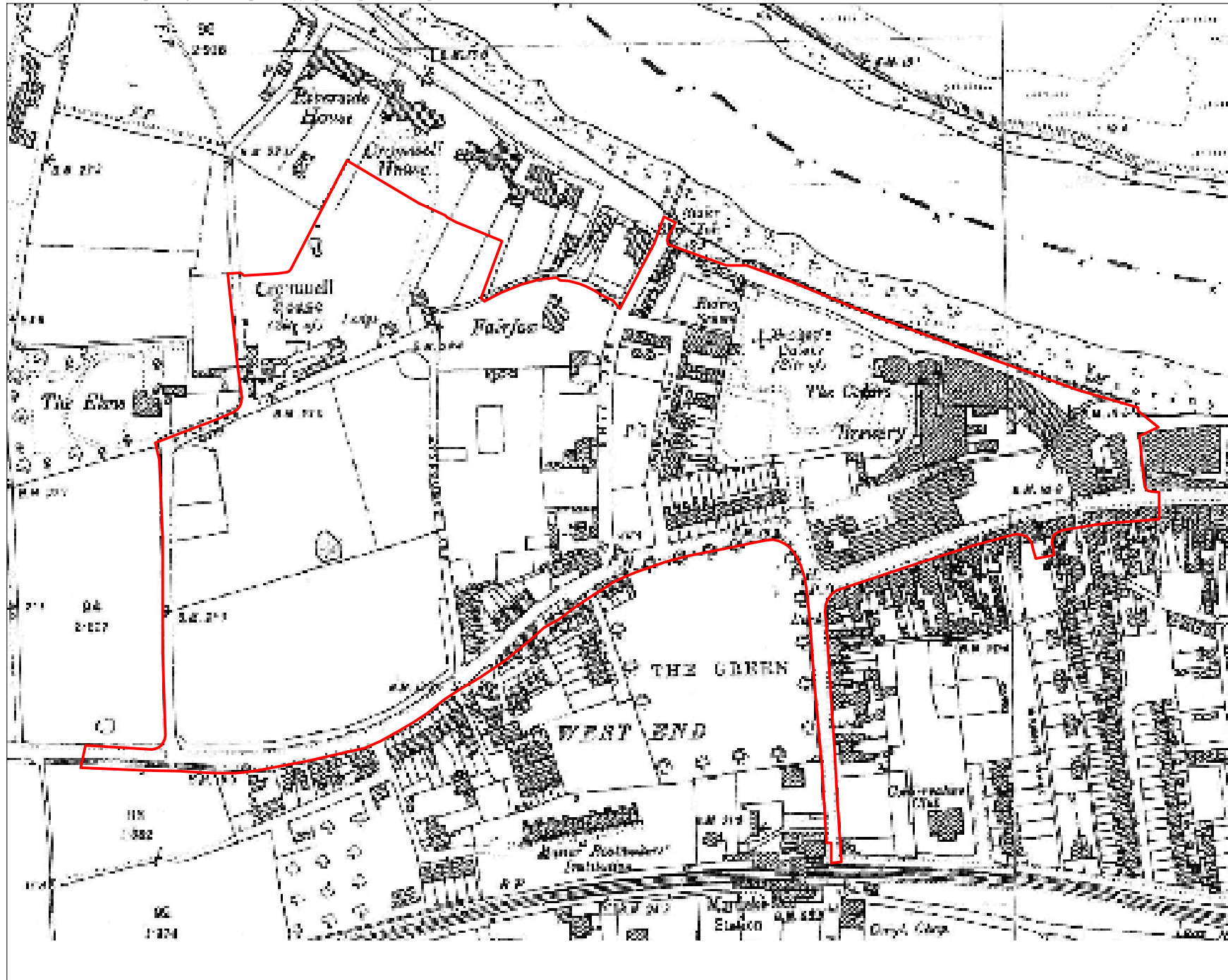


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Figure 8:  
1865 Plan of Thames Street



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 Site Boundary



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Illustrative Only

Figure 9:  
1896 Ordnance Survey

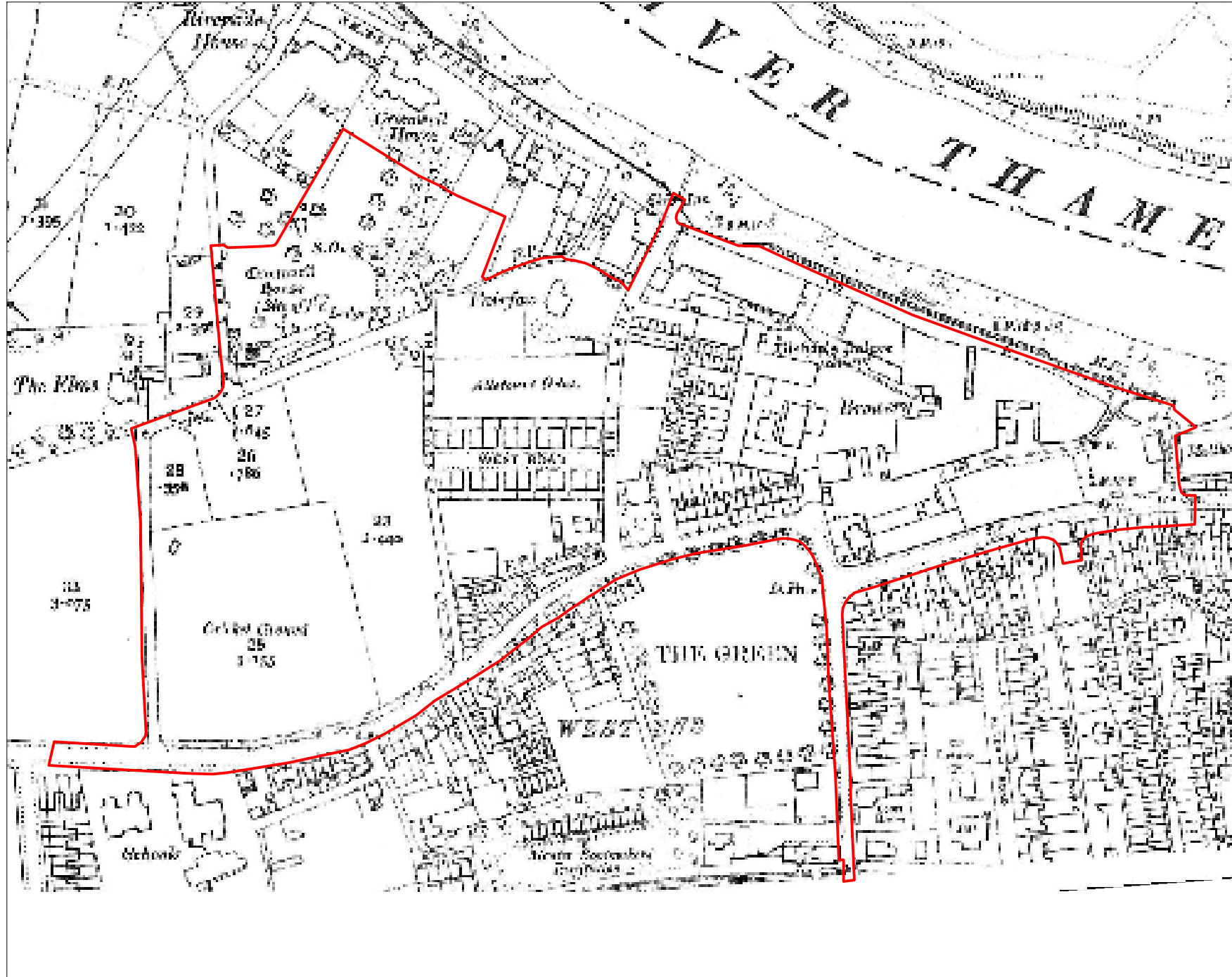


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Figure 10:  
1907 GOAD Insurance  
Plan



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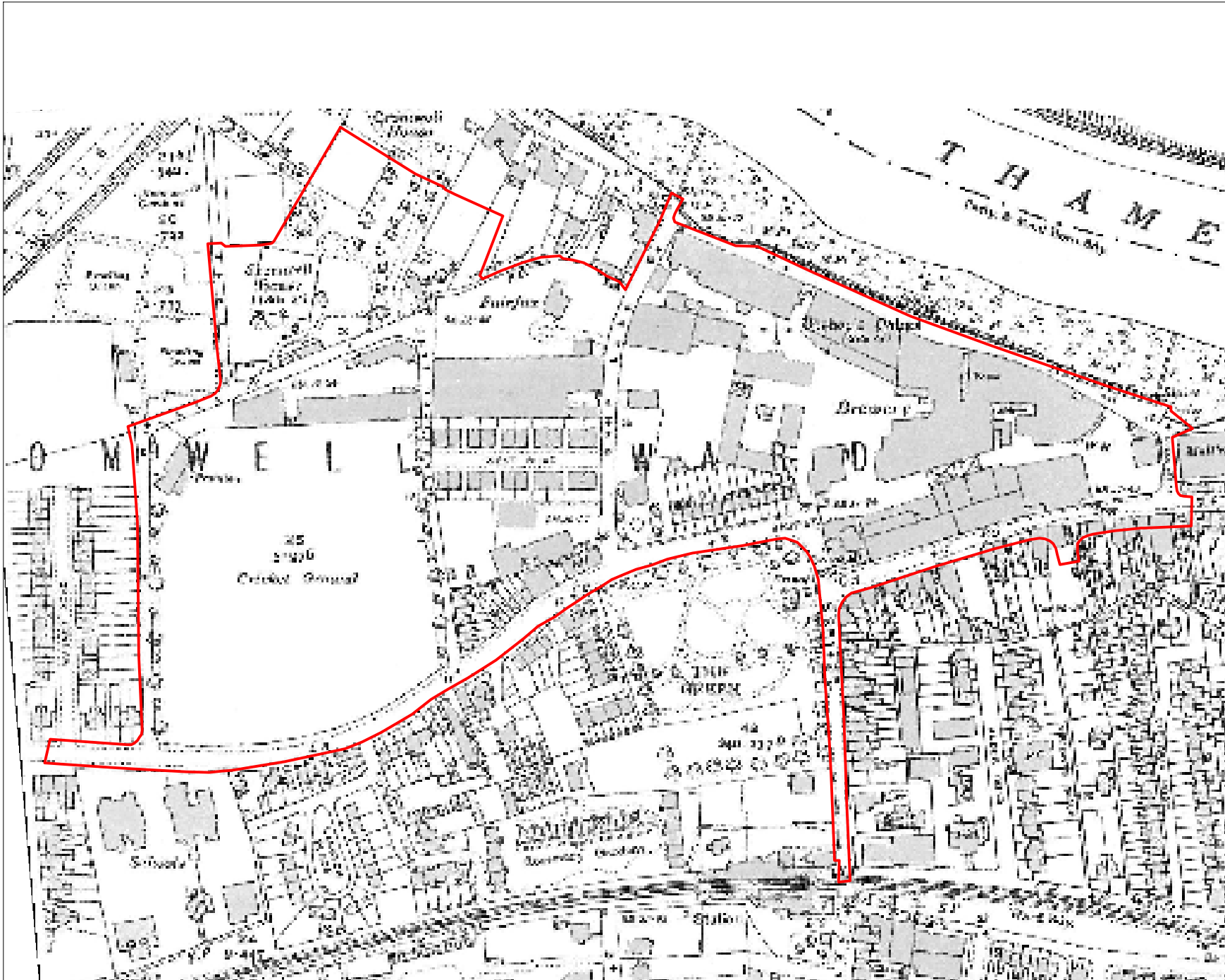
 Site Boundary



Not to Scale:  
Illustrative Only

Figure 11:  
1913 Ordnance Survey





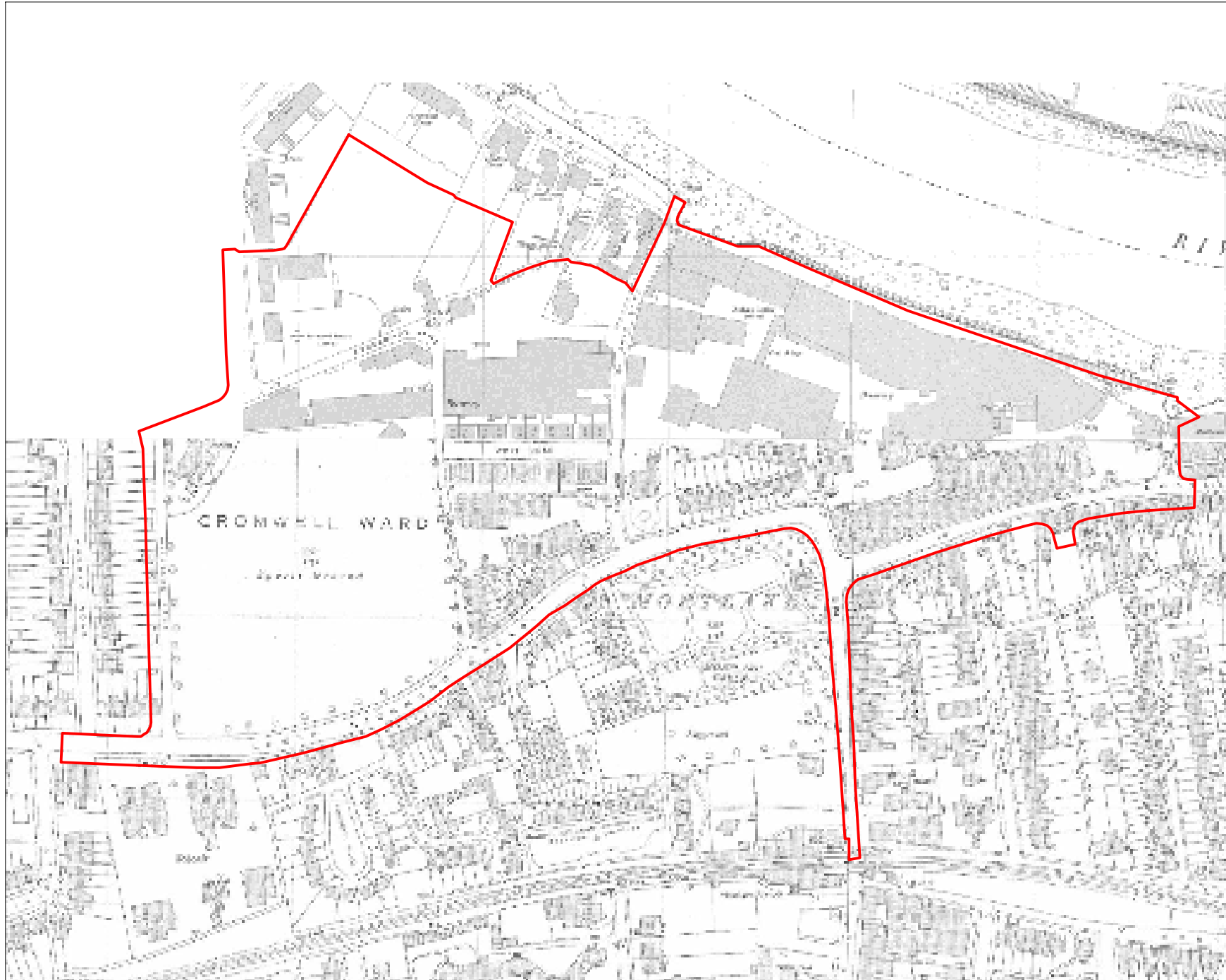
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 Site Boundary



Not to Scale:  
Illustrative Only

Figure 12:  
1940 Ordnance Survey

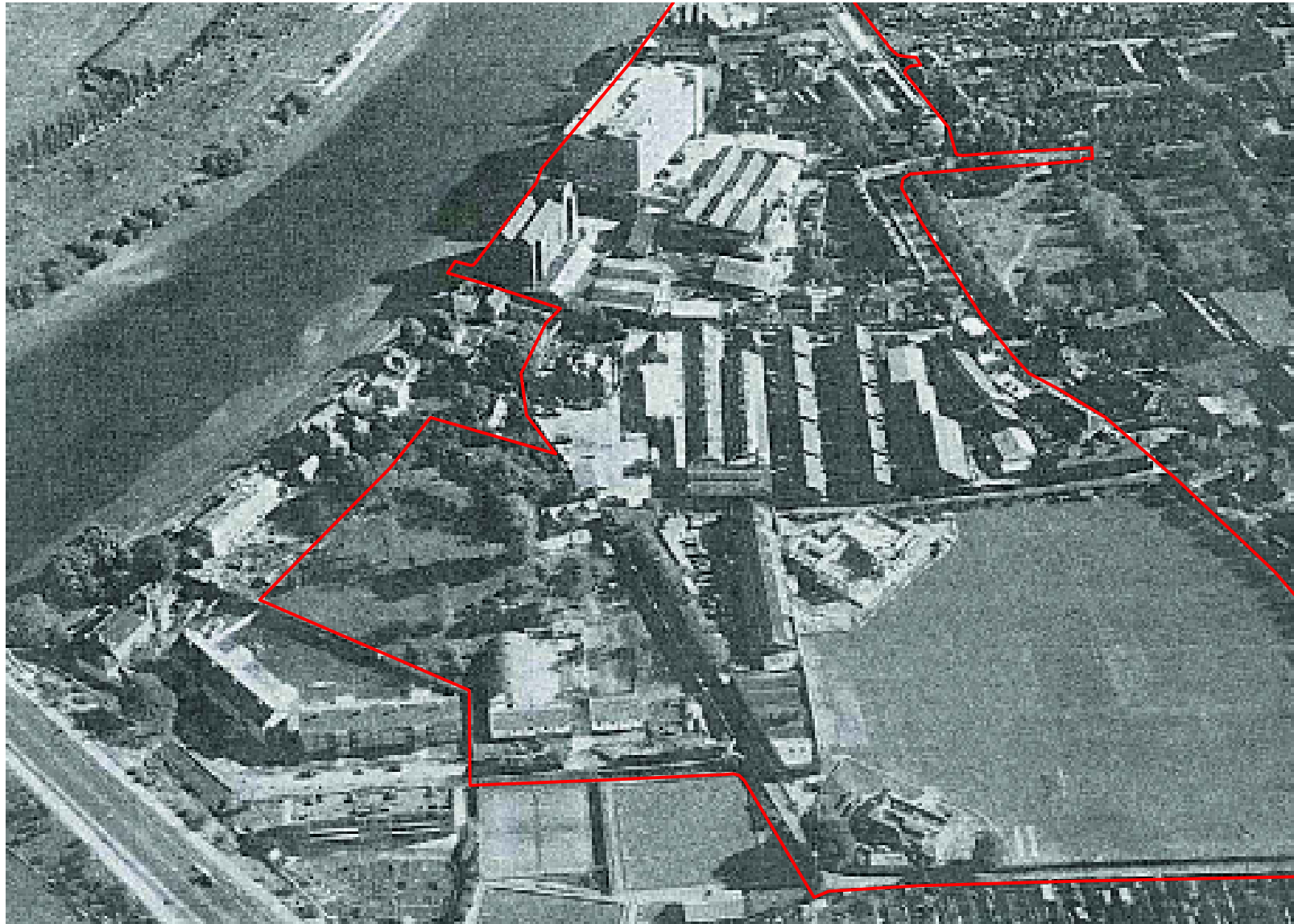


 Site Boundary



Not to Scale:  
Illustrative Only

Figure 13:  
1952-61 Ordnance  
Survey

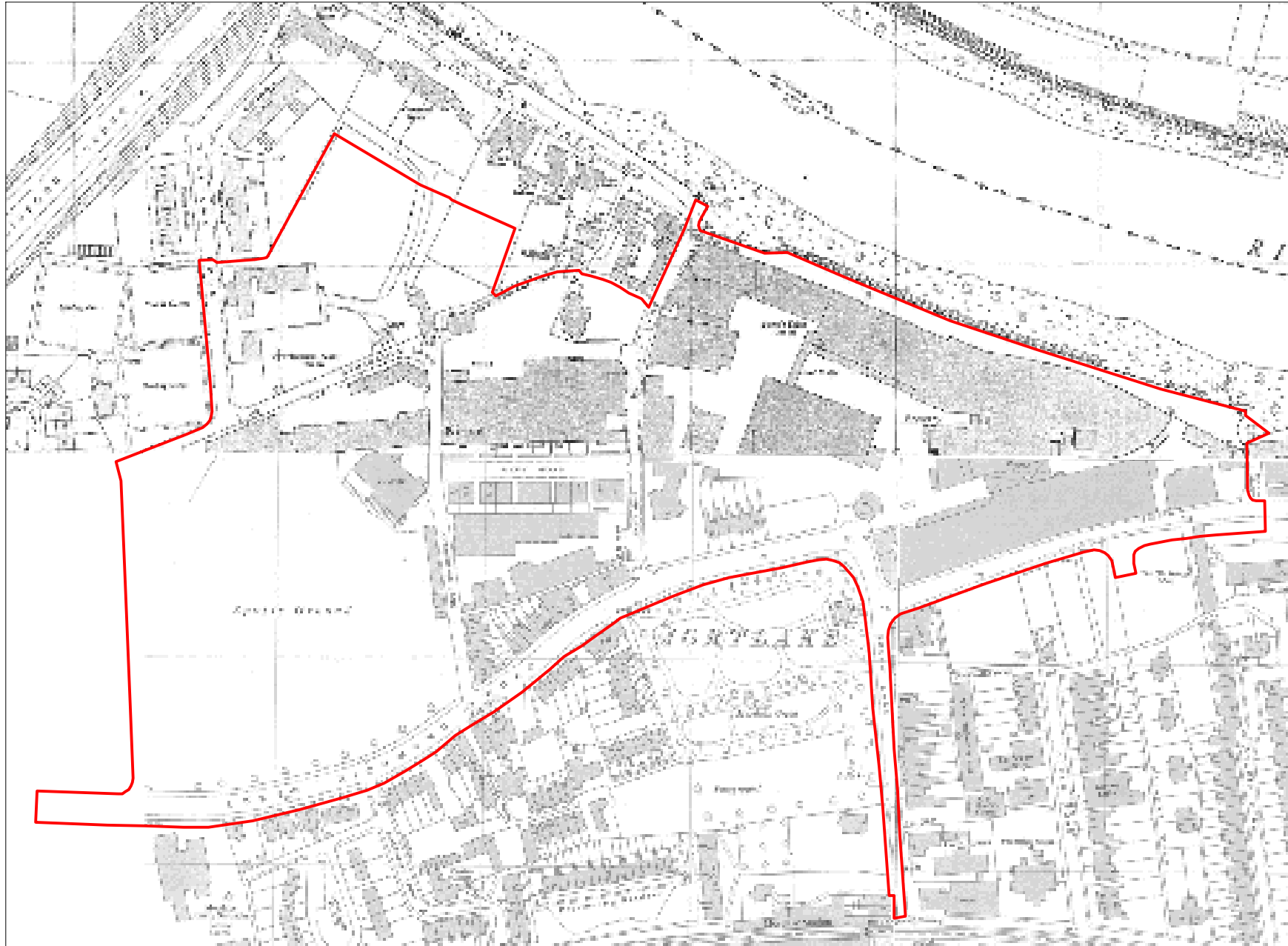


 Site Boundary



Not to Scale:  
Illustrative Only

Figure 14:  
1962 Aerial Photograph



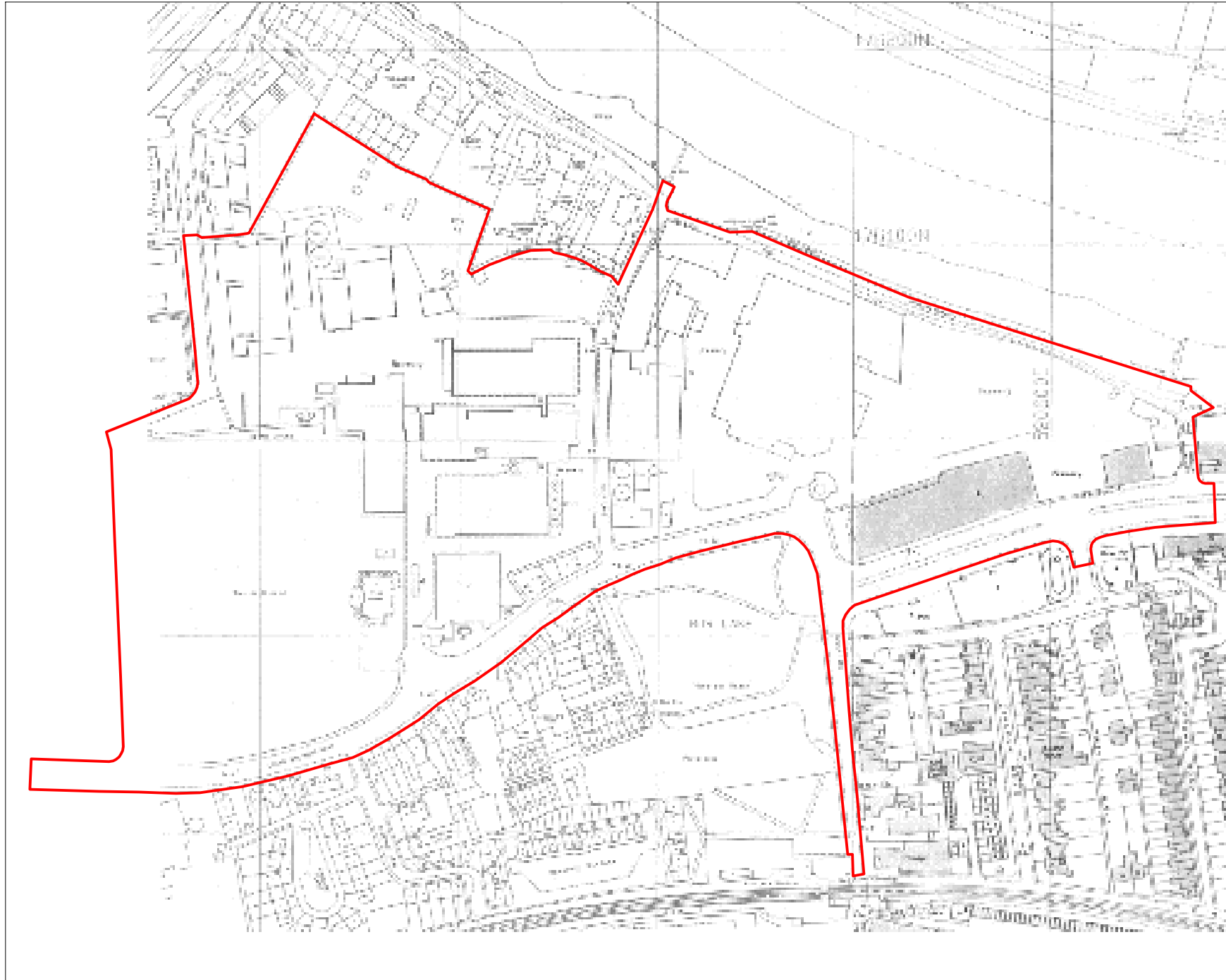
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 Site Boundary



Not to Scale:  
Illustrative Only

Figure 15:  
1965-68 Ordnance  
Survey

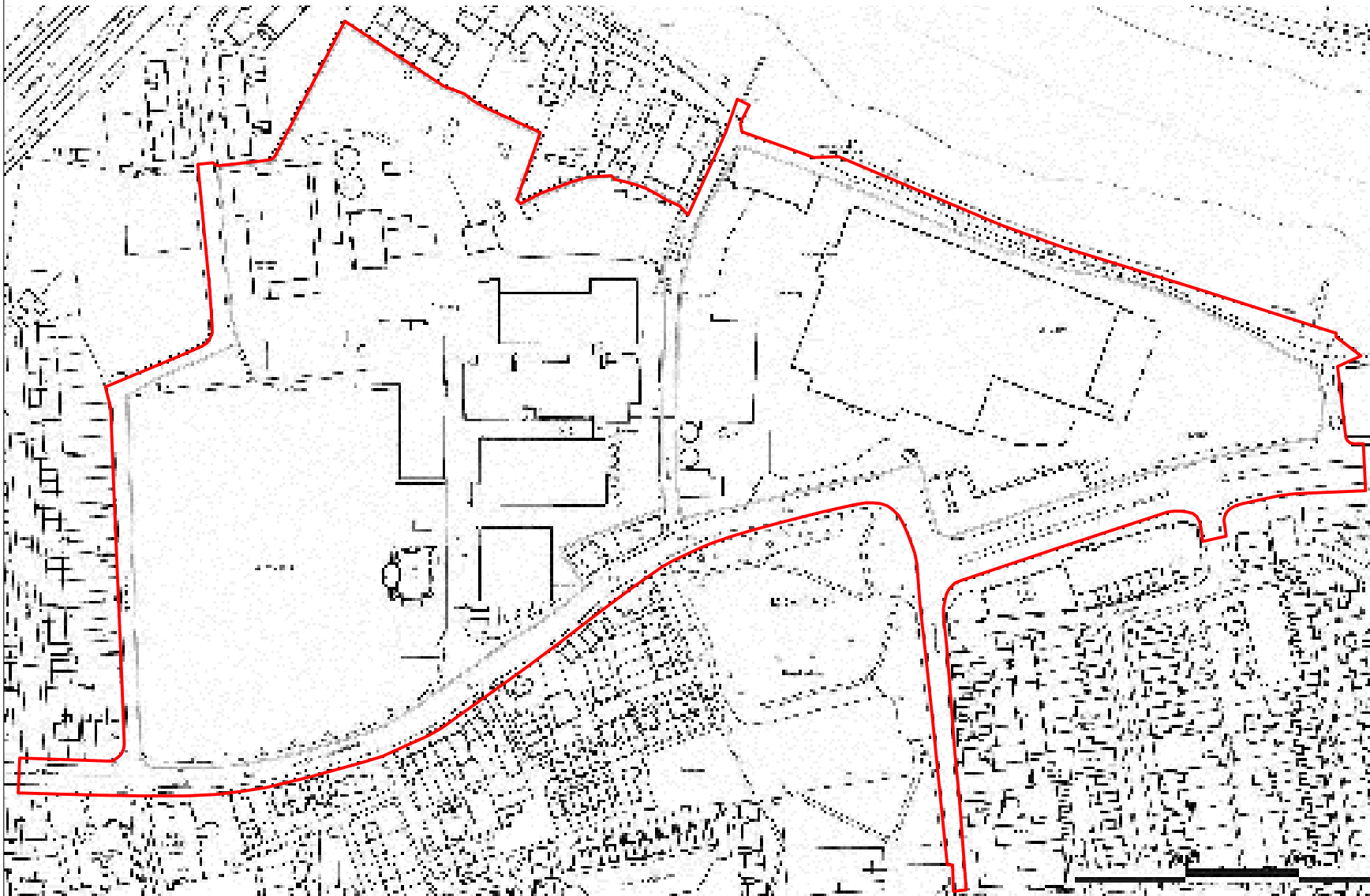


 Site Boundary



Not to Scale:  
Illustrative Only

Figure 16:  
1992-1998 Ordnance  
Survey

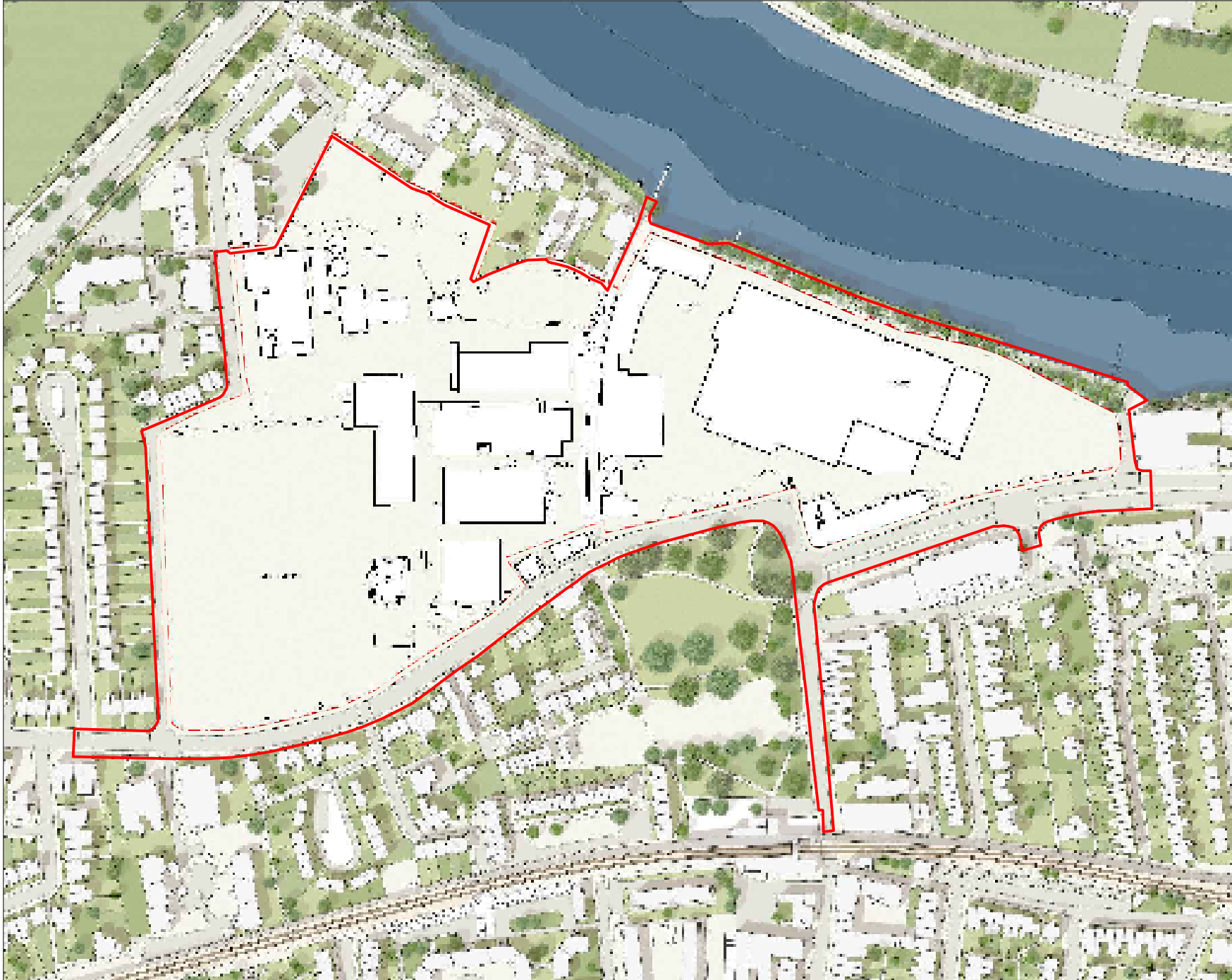


 Site Boundary



Not to Scale:  
Illustrative Only

Figure 17:  
2009 Ordnance Survey

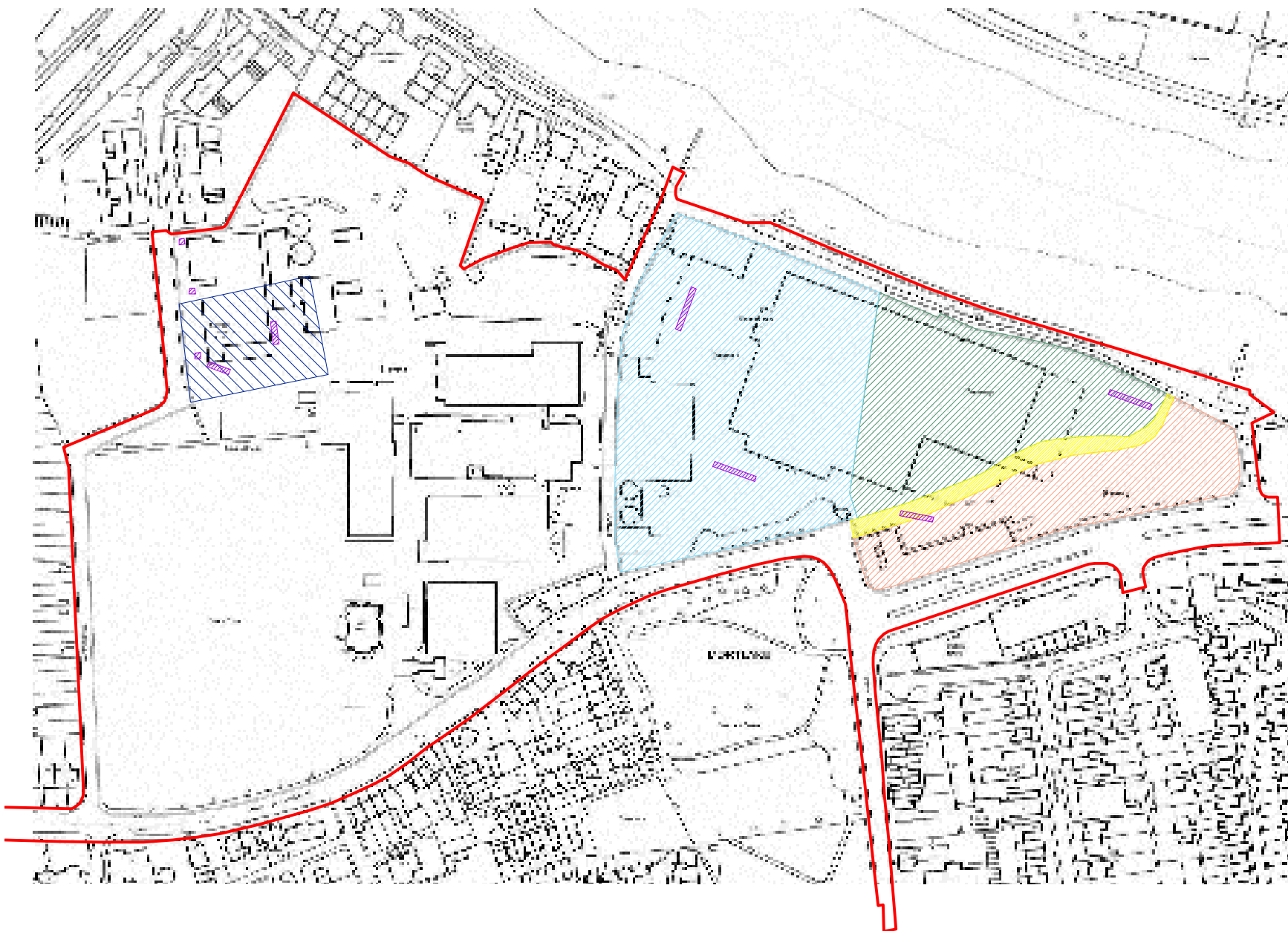


 Site Boundary



Not to Scale:  
Illustrative Only

Figure 18:  
2016 site survey



Additional information:

- Site boundary
- Church and Cemetery
- Palace Precinct
- High Street Frontage
- Line of Thames St. absorbed into brewery in 1865
- Site of Sixteenth Century Cromwell House

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Stag Brewery, Mortlake

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Cheltenham  
Kettering  
Newark  
Birmingham  
[www.cgms.co.uk](http://www.cgms.co.uk)

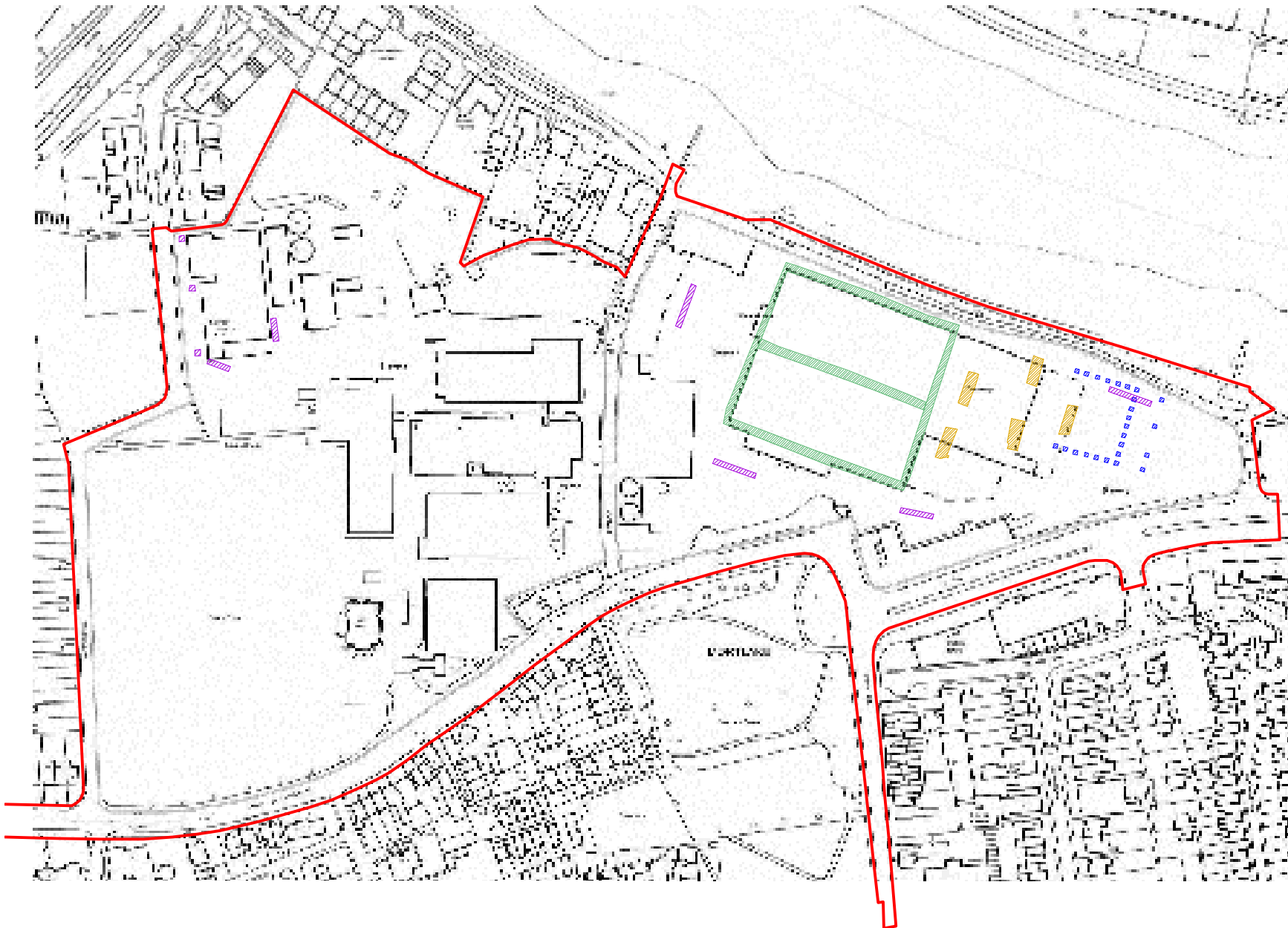
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Figure 19: Probable extent of Medieval land use zones across the eastern part of the site





Additional information:

- Site boundary
- Area of watching brief, 1995
- Evaluation test-pits, 1995
- Areas of watching brief, 1998
- Evaluation test-pits and trenching, 2016



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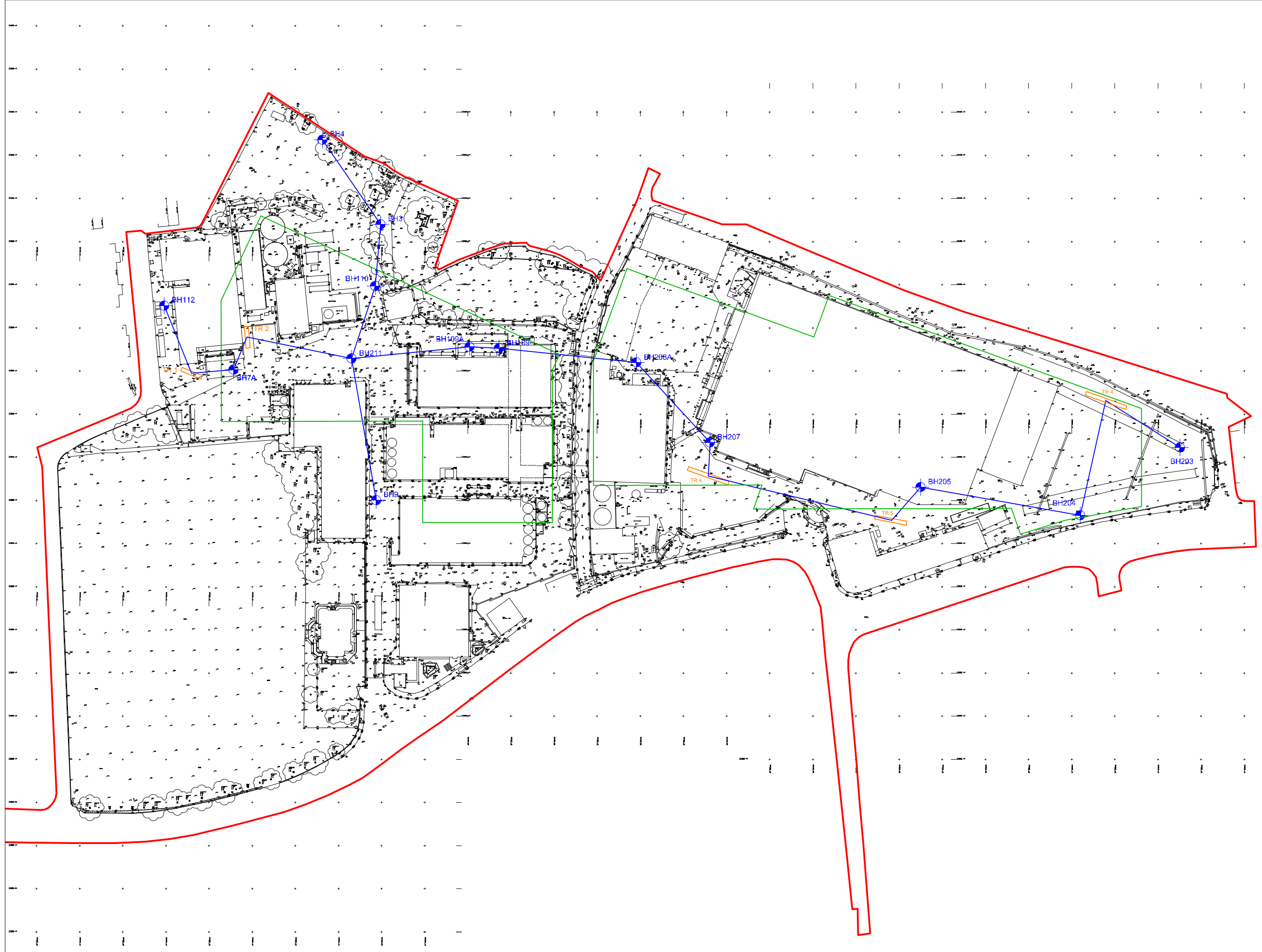
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Figure 20: Location of archaeological works undertaken within the Site to date

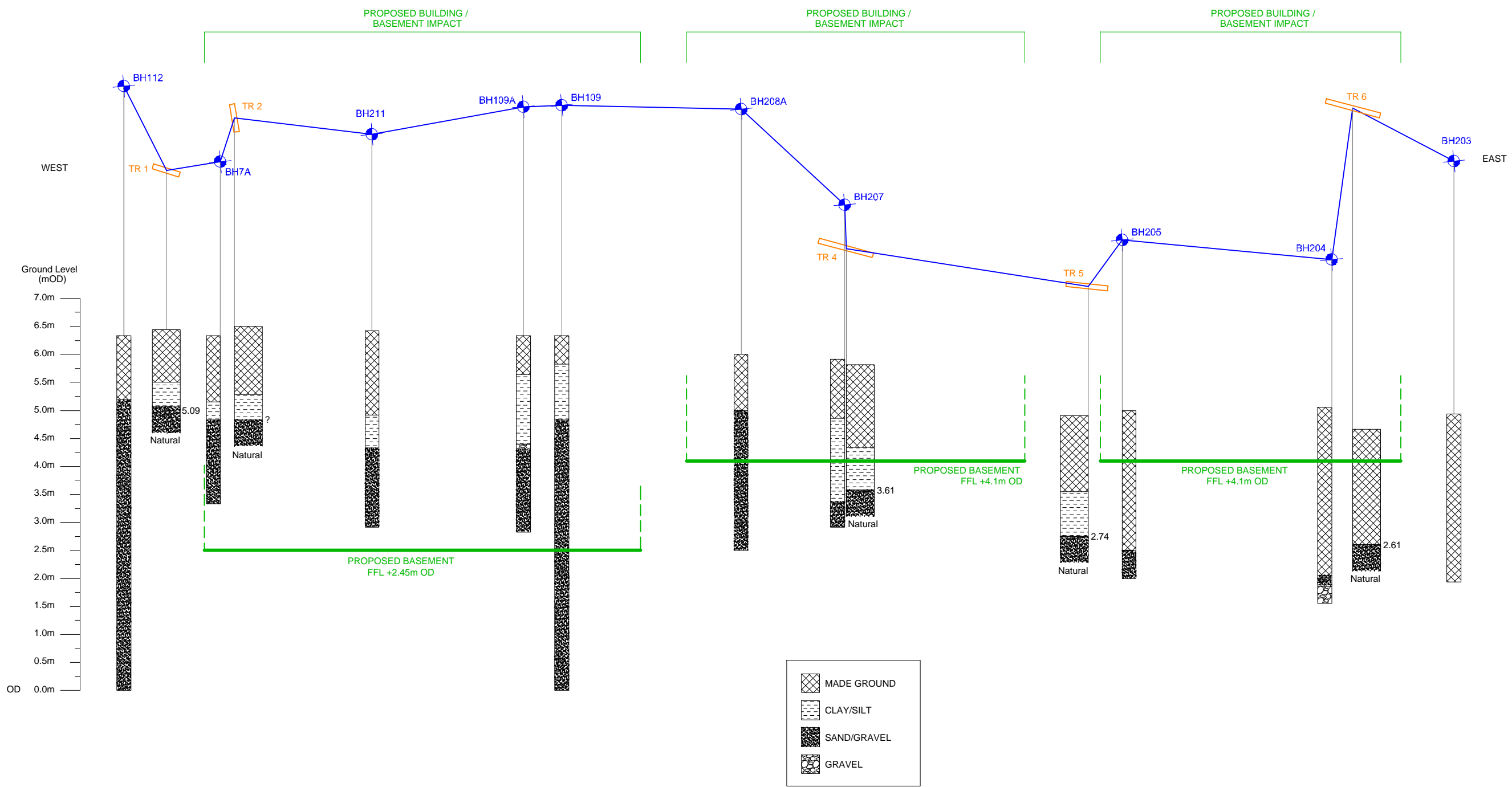


- ▭ Site Boundary
- ⊕ Borehole Location (1995-2015)
- ▭ Evaluation Trench Location (2016)
- ▭ Proposed Basement Footprint



Scale at A3: 1:1500  
0 50 m

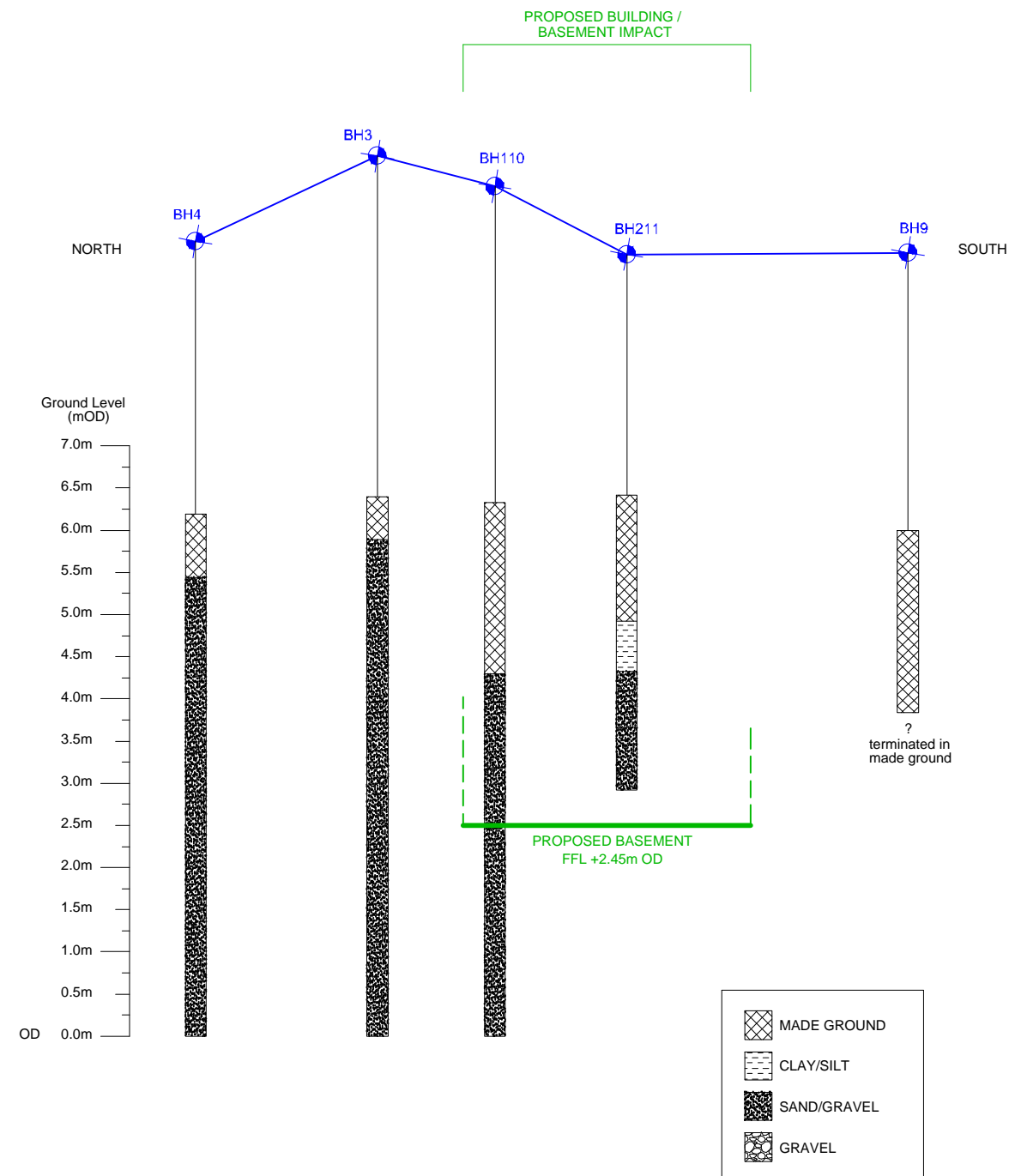
Figure 21:  
Deposit model section  
plan location





- Borehole Location (1995-2015)
- Evaluation Trench Location (2016)
- Proposed Basement Impacts

Scale at A3: 1:1500  
 0 50 m

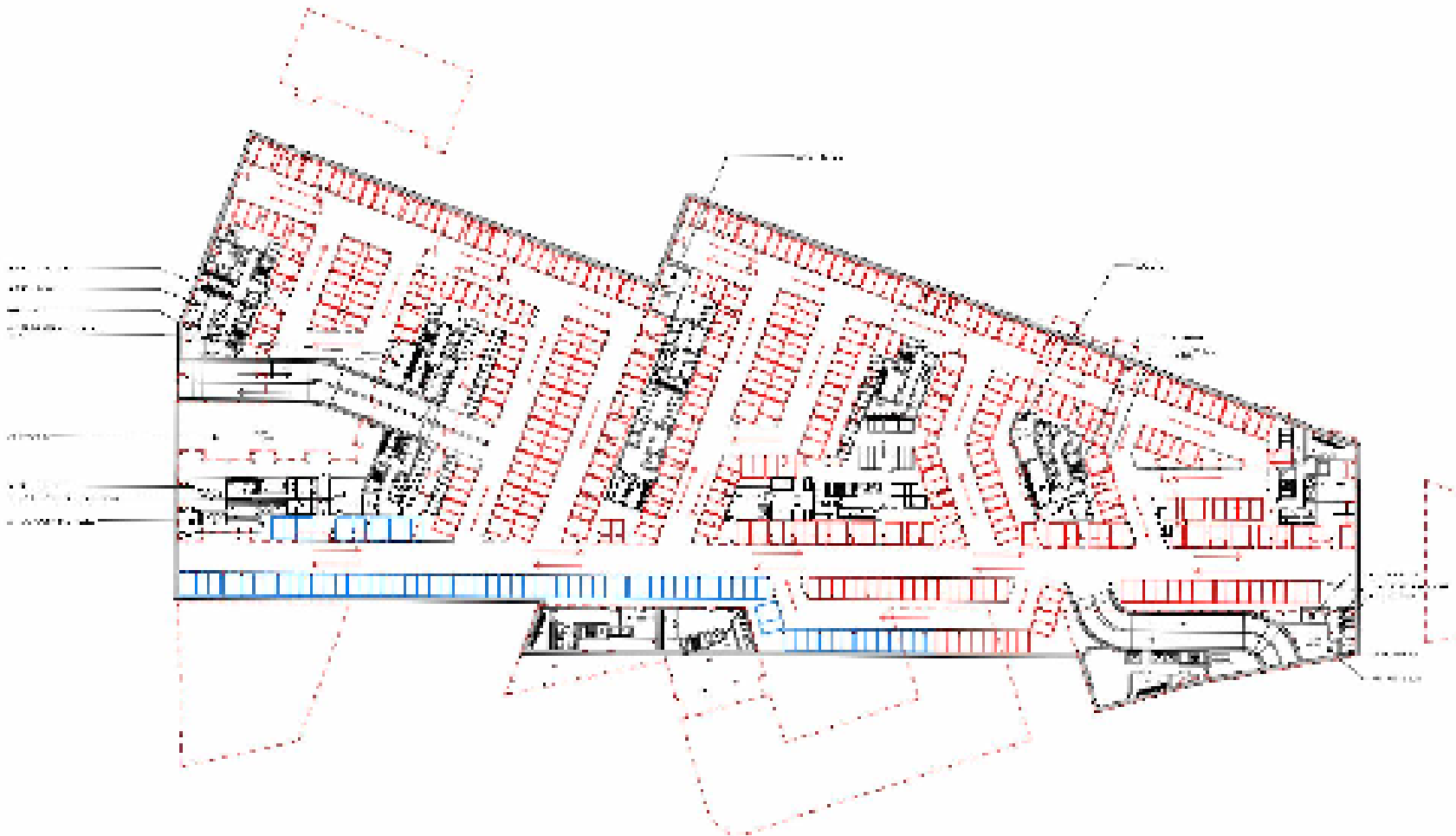
Figure 22a:  
 Deposit Model Section  
 (with proposed  
 development finished  
 floor level heights)



-  Borehole Location (1995-2015)
-  Evaluation Trench Location (2016)


Scale at A3: 1:1500  
 0 50 m

Figure 22b:  
 Deposit Model Section  
 (with proposed  
 development finished  
 floor level heights)



Additional information:

Project title:  
Stag Brewery, Mortlake

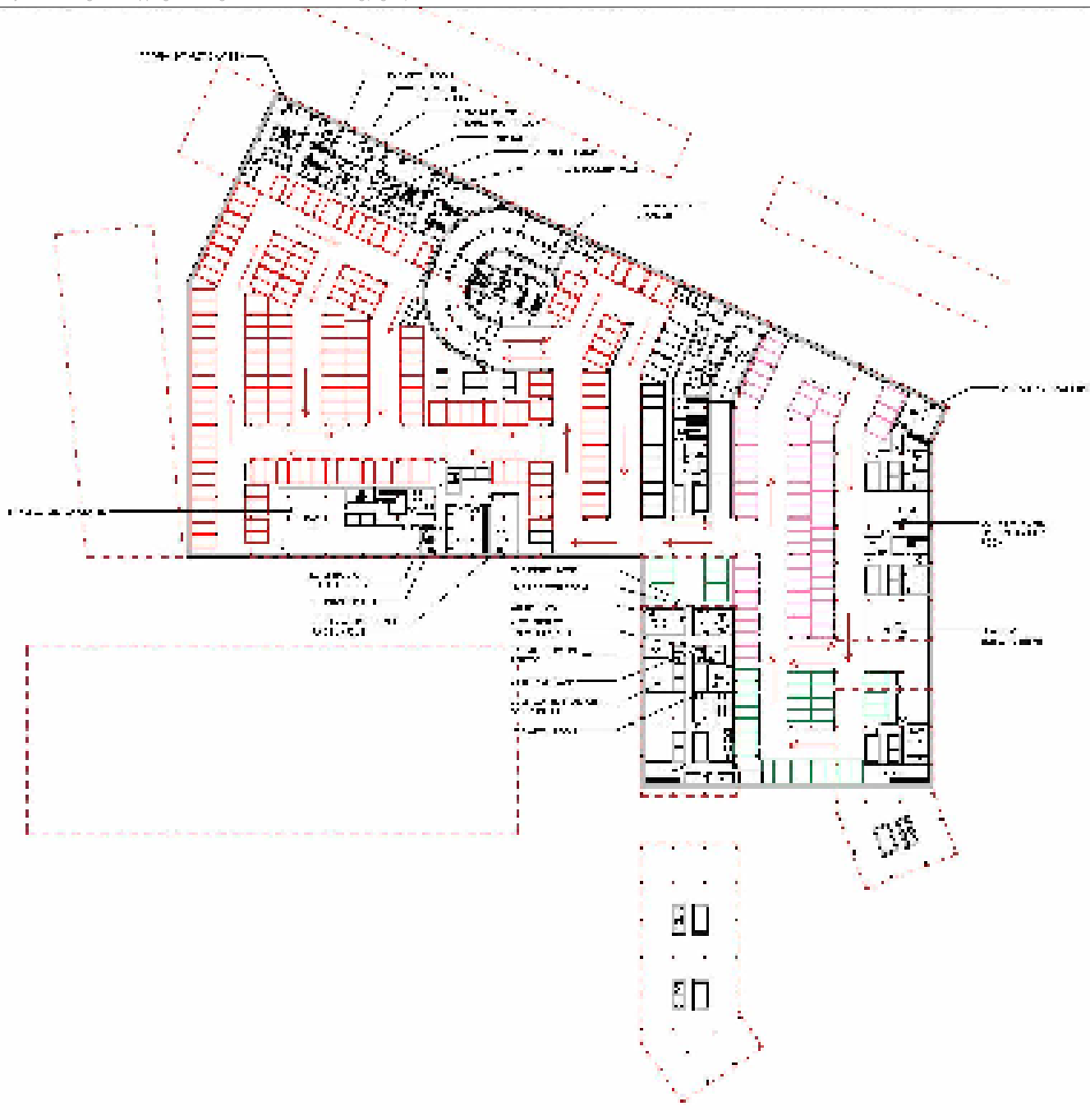
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Figure 23: Redevelopment proposals: plan of basement East of Ship Lane




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Figure 24: Redevelopment proposals: plan of basement West of Ship Lane




Additional information:

 Site boundary



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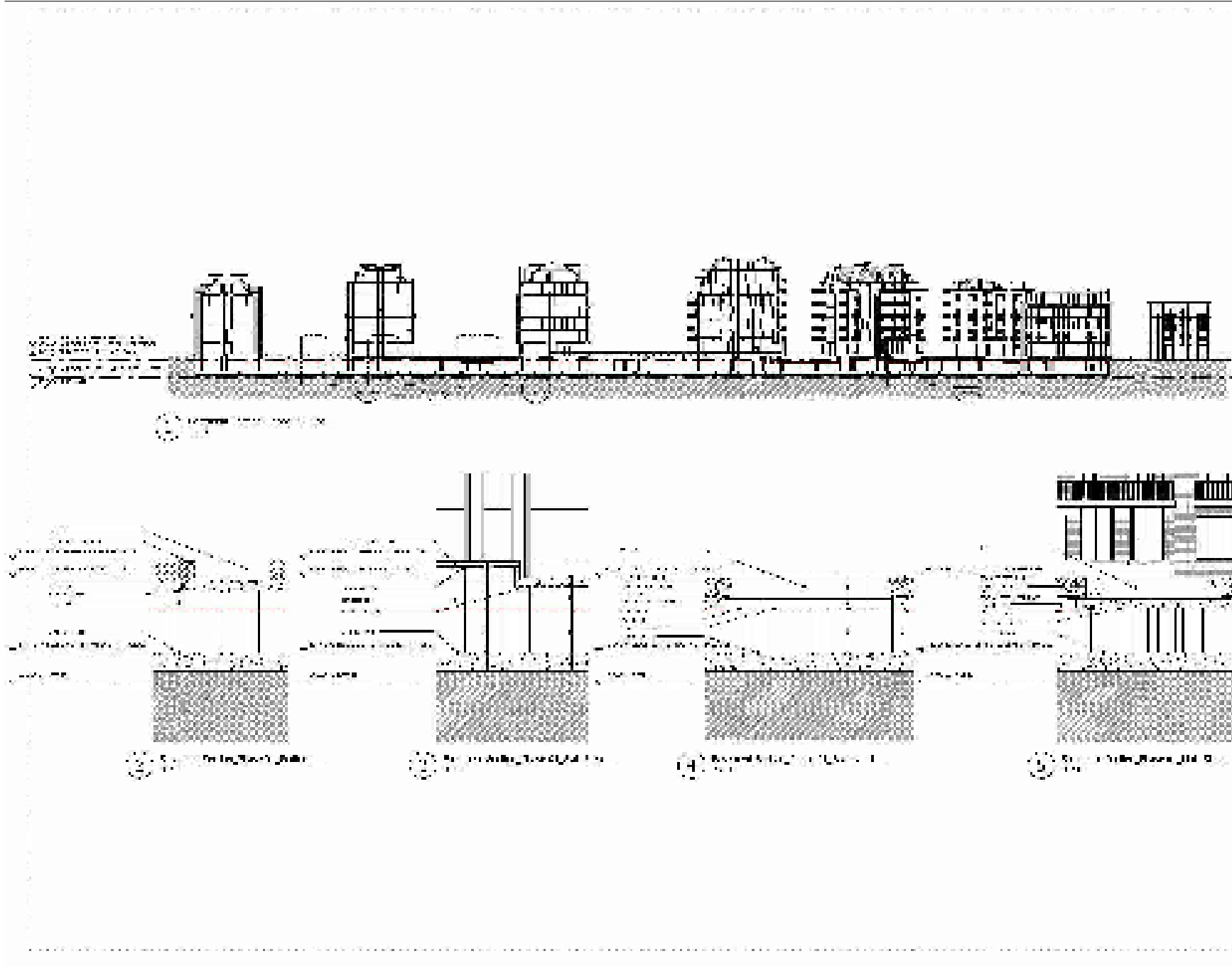
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Figure 25: Redevelopment proposals: ground floor




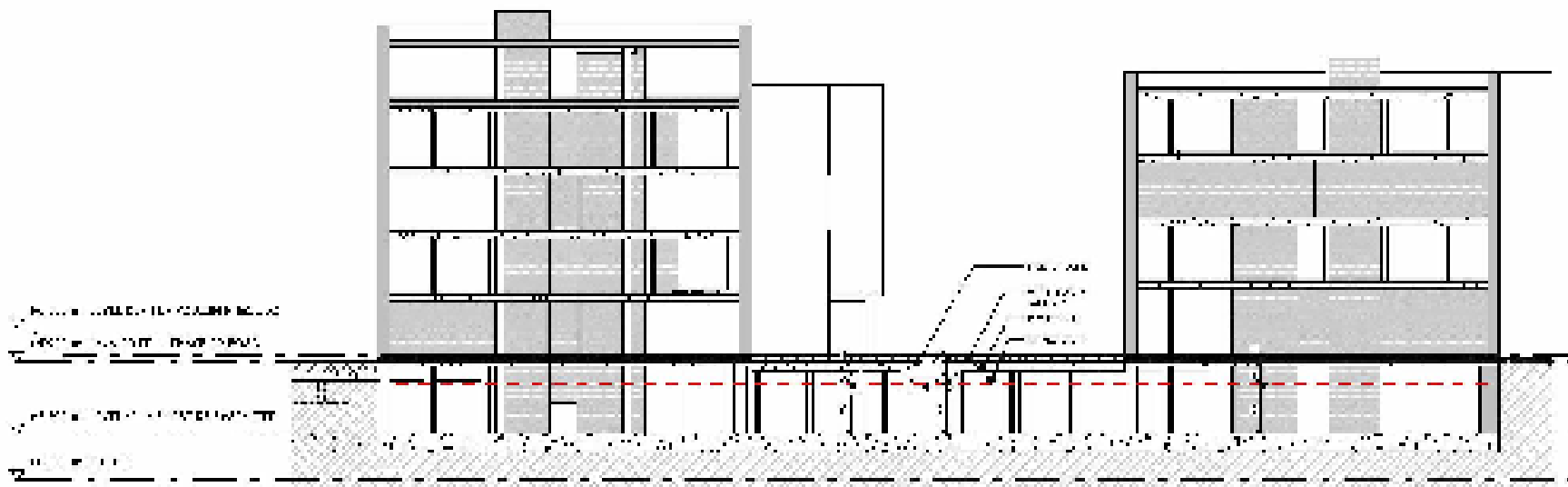
Additional information:	
Project title:	
Stag Brewery, Mortlake	
	London Cheltenham Kettering Newark Birmingham <a href="http://www.cgms.co.uk">www.cgms.co.uk</a>
	<i>Planning &amp; Development          Archaeology &amp; Historic Buildings</i>
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	Checked by:

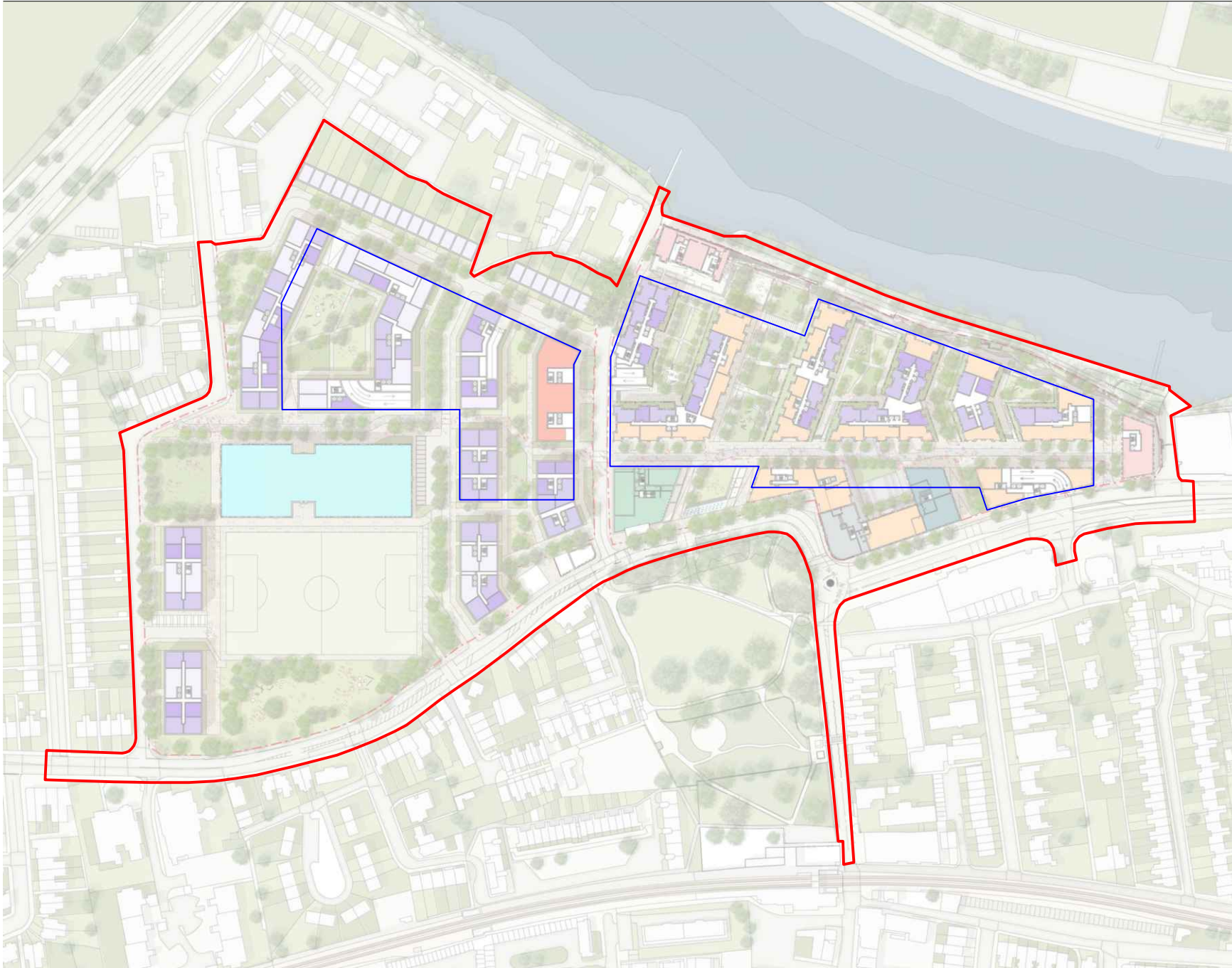
Figure 26: Redevelopment proposals: section East of Ship Lane







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Figure 27: Redevelopment proposals: section West of Ship Lane




Additional information:

-  Site boundary
-  Proposed Basement Footprints

N

Project title:

Stag Brewery, Mortlake

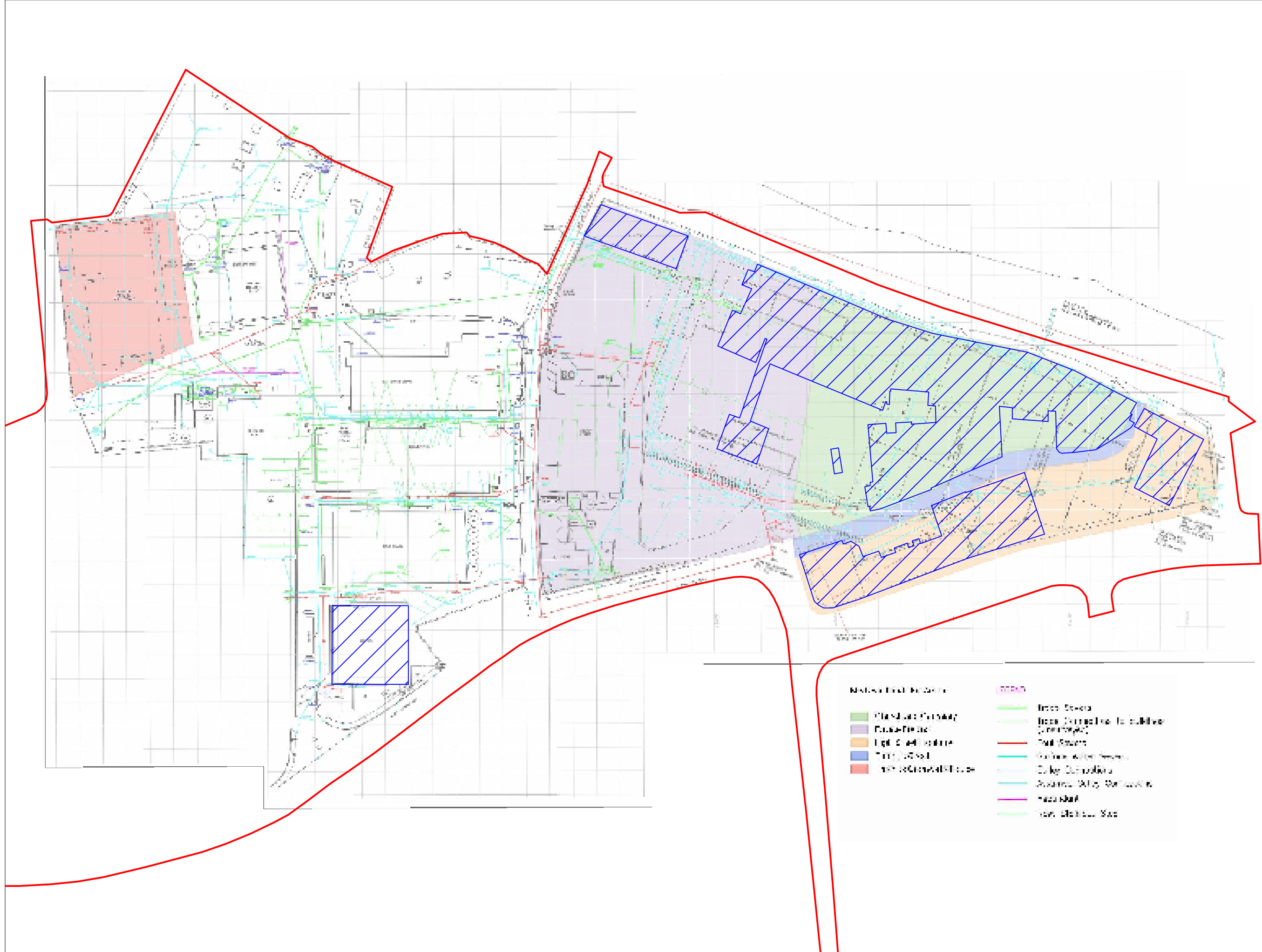
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Figure 28: Plan overlay of proposed basements and ground floor



- Site Boundary
- Extent of existing and former basements

Miscellaneous Features	SPPAS
<span style="display: inline-block; width: 15px; height: 10px; background-color: #90EE90; border: 1px solid black; margin-right: 5px;"></span> Main Street Footway	<span style="display: inline-block; width: 15px; height: 10px; border-bottom: 1px solid green; margin-right: 5px;"></span> Water Sewers
<span style="display: inline-block; width: 15px; height: 10px; background-color: #D8BFD8; border: 1px solid black; margin-right: 5px;"></span> Public Footway	<span style="display: inline-block; width: 15px; height: 10px; border-bottom: 1px dashed green; margin-right: 5px;"></span> Base (Original to building)
<span style="display: inline-block; width: 15px; height: 10px; background-color: #FFDAB9; border: 1px solid black; margin-right: 5px;"></span> Light & Well Footway	<span style="display: inline-block; width: 15px; height: 10px; border-bottom: 1px solid red; margin-right: 5px;"></span> Rail Sewers
<span style="display: inline-block; width: 15px; height: 10px; background-color: #ADD8E6; border: 1px solid black; margin-right: 5px;"></span> Tarmac Footway	<span style="display: inline-block; width: 15px; height: 10px; border-bottom: 1px solid cyan; margin-right: 5px;"></span> Surface water Sewers
<span style="display: inline-block; width: 15px; height: 10px; background-color: #F08080; border: 1px solid black; margin-right: 5px;"></span> 18th & 19th Century House	<span style="display: inline-block; width: 15px; height: 10px; border-bottom: 1px solid magenta; margin-right: 5px;"></span> Gas Sewers
	<span style="display: inline-block; width: 15px; height: 10px; border-bottom: 1px solid cyan; margin-right: 5px;"></span> Drainage (Along the wall)
	<span style="display: inline-block; width: 15px; height: 10px; border-bottom: 1px solid green; margin-right: 5px;"></span> Sewer
	<span style="display: inline-block; width: 15px; height: 10px; border-bottom: 1px solid green; margin-right: 5px;"></span> Sewer



Scale at A3: 1:1500  
 0  50 m

Figure 29:  
 Plan showing  
 previous and existing  
 development impacts

**Appendix 1**

Geotechnical information

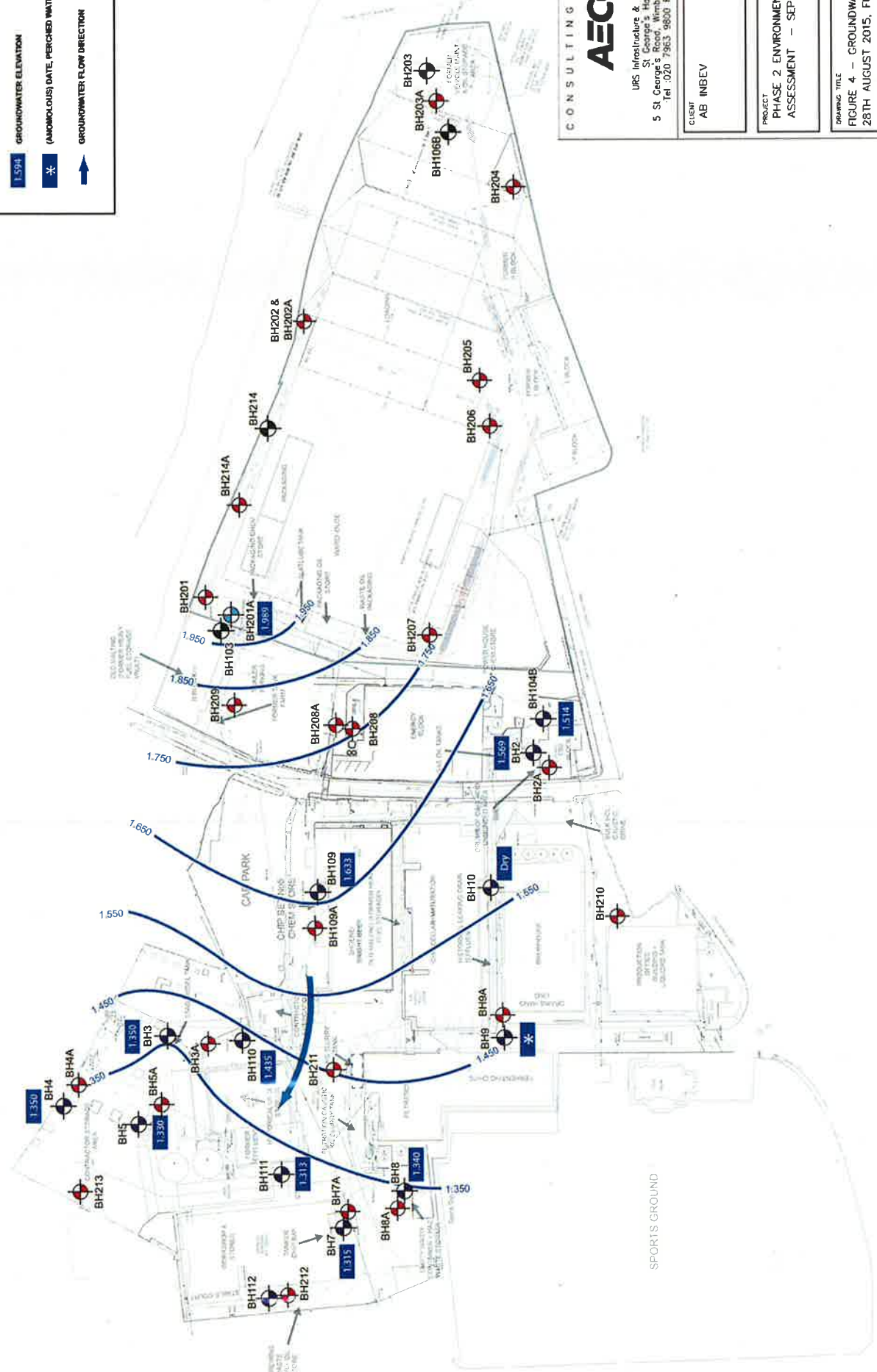
1995, 2003, 2015





**AREA KEY**

- GROUNDWATER MONITORING WELL NETWORK - DATES 8 NOV 2015 & 05A, 2015
- BH21A - ADDITIONAL GROUNDWATER MONITORING WELL - AECOM 2015
- GROUNDWATER CONTOUR
- GROUNDWATER ELEVATION
- (ANOMALOUS) DATE, PERCHED WATER
- GROUNDWATER FLOW DIRECTION



**AECOM**  
 CONSULTING ENGINEERS  
 URS Infrastructure & Environment UK LTD,  
 St George's House, 3rd Floor, SW13 4DR  
 5 St. George's Road, Wimbledon, London SW13 4DR  
 Tel: 020 7963 9800 Fax: 020 7963 9801

CLIENT  
 AB INBEV

PROJECT  
 PHASE 2 ENVIRONMENTAL SITE  
 ASSESSMENT - SEPTEMBER 2015

DRAWING TITLE  
 FIGURE 4 - GROUNDWATER CONTOUR PLAN,  
 28TH AUGUST 2015, FULL DIP ROUND

DATE	BY	CHECKED	APPROVED	DATE
05/09/15	UCS	MM	MM	05/09/15
AS SHOWN	UCS	MM	MM	05/09/15
SCALE			FIG No	REV
AS SHOWN			47074683	

## Borehole Log

Project Name and Site Location Stag Brewery, Mortlake, London SW14		Client AB Inbev		BOREHOLE No <b>BH109A</b>
Job No 47075502	Date Start Date 28-08-15 End Date 28-08-15	Ground Level (m)	Co-Ordinates ( )	
Contractor ESL		Method / Plant Used Concrete Corer and Premier		Sheet 1 of 1

Depth BGL	Sample / Test Details	PID	Water	STRATA			Installation
				Legend	DESCRIPTION	COMMENTS	
				(0.35) 0.35	CONCRETE		
0.5		<0.1		(0.35) 0.70	MADE GROUND. Brown, grey, sandy, fine to coarse, angular to subangular gravel. Sand is fine to coarse. Gravel is concrete, red and yellow brick and natural stone.	Dry NVO	
1.0	BH109A 0.8	<0.1		(0.50) 1.20	Soft, dark brown, sandy, generally clay. Sand is fine to coarse. Gravel is fine to medium, angular to subangular of flint.	Damp NVO	
1.5		<0.1		(0.70) 1.90	Brown, sandy, slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine to medium subrounded of flint.	Damp NVO	
2.0		<0.1		(0.70) 2.10	Brown, sandy, fine to medium, subrounded to subangular gravel. Gravel is fine to coarse.	Damp NVO	
2.5		<0.1		(0.70) 2.80	Brown, grey, slightly gravelly, fine to coarse SAND. Gravel is fine, subrounded of flint.	Damp NVO	
3.0		<0.1		(0.70) 3.50	Brown/orange, gravelly, fine to coarse SAND. Gravel is fine to medium, subangular to subrounded of flint.	Damp NVO	
3.5		<0.1			Borehole terminated at 3.5m bgl.		

22/9/15

<b>Backfill</b> <input checked="" type="checkbox"/> Cement seal <input checked="" type="checkbox"/> Bentonite Fill	<b>Sample Details</b> <input checked="" type="checkbox"/> Small sample	<b>Legend</b> <input checked="" type="checkbox"/> Concrete <input checked="" type="checkbox"/> Sandy gravelly CLAY <input checked="" type="checkbox"/> Gravelly Sand <input checked="" type="checkbox"/> Groundwater Table <input checked="" type="checkbox"/> Groundwater Strike <input checked="" type="checkbox"/> Made Ground <input checked="" type="checkbox"/> Sandy Gravel	<b>GENERAL REMARKS</b> NVO - No visual or Olfactory Evidence of Contamination in bgl - meters below ground level, Hand pitted to 1.2mbgl
Logged By CG		Approved By MM	



## Borehole Log

Project Name and Site Location Stag Brewery, Mortlake, London SW14		Client AB Inbev		<b>BOREHOLE No</b>  <b>BH201</b>
Job No 47075502	Date Start Date 20-08-15 End Date 20-08-15	Ground Level (m)	Co-Ordinates ( )	
Contractor ESL		Method / Plant Used Concrete Corer		Sheet 1 of 1

STRATA						
Depth BGL	Sample / Test Details	PID (ppm)	Water	Legend	DESCRIPTION	COMMENTS
				0.25	TARMAC over CONCRETE	
1.5				(0.45)	MADE GROUND: Dense, sandy, fine-medium, angular-subangular gravel of brick and concrete. Sand is fine to coarse.	Dry NVO.
				0.70	Borehole terminated at 0.7m bgl due to refusal on concrete.	

<b>Backfill</b> <input checked="" type="checkbox"/> Cement seal	<b>Sample Detail</b>	<b>Legend</b> <input type="checkbox"/> Asphalt <input checked="" type="checkbox"/> Made Ground  <input checked="" type="checkbox"/> Groundwater Table <input checked="" type="checkbox"/> Groundwater Strike	<b>GENERAL REMARKS</b> NVO - No visual or Olfactory Evidence of Contamination. m bgl - meters below ground level. Hand pitted to 0.7mbgl
Logged By      CG		Approved By      MM	

STAG BREWERY LOGS - 2008-08-15



## Borehole Log

Project Name and Site Location Stag Brewery, Mortlake, London SW14		Client AB Inbev		BOREHOLE No <b>BH201A</b>
Job No 47075502	Date Start Date 24-08-15 End Date 25-08-15	Ground Level (m)	Co-Ordinates ( )	
Contractor ESL		Method / Plant Used Concrete Corer and Solid Stem Auger.		Sheet 1 of 1

Depth BGL	Sample / Test Details	PID (ppm)	Water	STRATA			
				Legend	Depth (m)	DESCRIPTION	COMMENTS
					0.25	TARMAC over CONCRETE	
0.5	BH201A_07	<0.1			(0.95)	MADE GROUND: Brown/red/ yellow, gravelly, fine-coarse sand. Gravel is fine-coarse, angular-subangular of brick, flint and natural stone.	Damp NVO
1.0		<0.1			1.20		
1.5		<0.1				Light brown, dense, medium-fine SAND with occasional rounded flint.	Dry NVO
2.0	BH201A_1	<0.1			(2.00)		
2.5		<0.1					
3.0		<0.1					
3.5		<0.1			3.20		
4.0		<0.1				SAND and GRAVEL. Gravel is medium-coarse flint. Sand is fine-coarse dense light brown.	Wet from 3.7mbgl NVO
4.5		<0.1			(1.90)		
5.0		<0.1			5.10		
5.5		<0.1			(0.90)	Grey, mottled dark brown, possibly stiff CLAY (LONDON CLAY).	Dry, NVO.
6.0		<0.1			6.00		
						Borehole terminated at 6.0m bgl.	

<b>Backfill</b> <input type="checkbox"/> Cement seal riser <input type="checkbox"/> Bentonite seal riser <input type="checkbox"/> Filter pack riser <input type="checkbox"/> Filter pack screen <input type="checkbox"/> Hole Collapse	<b>Sample Details</b> <input checked="" type="checkbox"/> Small sample	<b>Legend</b> <input type="checkbox"/> Asphalt <input type="checkbox"/> Sand <input type="checkbox"/> Clay <input checked="" type="checkbox"/> Made Ground <input checked="" type="checkbox"/> Silty/clayey PEAT <input type="checkbox"/> Groundwater Table <input checked="" type="checkbox"/> Groundwater Strike	<b>GENERAL REMARKS</b> NVO - No visual or Olfactory Evidence of Contamination m bgl - meters below ground level Hand pitted to 1.2mbgl
Logged By CG/MM		Approved By GM	

## Borehole Log

Project Name and Site Location Stag Brewery, Mortlake, London SW14		Client AB Inbev		BOREHOLE No <b>BH202</b>
Job No 47075502	Date Start Date 24-08-15 End Date 24-08-15	Ground Level (m)	Co-Ordinates ( )	
Contractor ESL		Method / Plant Used Concrete Corer.		Sheet 1 of 1

STRATA							
Depth BGL	Sample / Test Details	PID	Water	Legend	Depth (Thickness)	DESCRIPTION	COMMENTS
					0.25	TARMAC over CONCRETE	
0.5		<0.1			(0.35)	MADE GROUND: <del>Cool, dense, well-sorted</del> gravel of coarse Sand is fine-coarse. Gravel is fine-medium, angular sub-angular	Dry NVO
					0.60		
					0.80	MADE GROUND: Brown, sandy, fine-medium, angular-subangular gravel of concrete. Sand is fine-coarse. Borehole terminated at 0.8m bgl due to refusal on concrete.	Dry NVO

<b>Backfill</b> <input checked="" type="checkbox"/> Cement seal <input type="checkbox"/> Bentonite Fill	<b>Sample Details</b>  	<b>Legend</b> <input type="checkbox"/> Asphalt <input checked="" type="checkbox"/> Made Ground  <input checked="" type="checkbox"/> Groundwater Table <input type="checkbox"/> Groundwater Strike	<b>GENERAL REMARKS</b>  NVO - No visual or Olfactory Evidence of Contamination m bgl - meters below ground level, Hand pitted to 1.2mbgl
Logged By      CG		Approved By      MM	

## Borehole Log

Project Name and Site Location Stag Brewery, Mortlake, London SW14		Client AB Inbev		BOREHOLE No <b>BH202A</b>
Job No 47075502	Date Start Date 24-08-15 End Date 24-08-15	Ground Level (m)	Co-Ordinates ( )	
Contractor ESL		Method / Plant Used Concrete Corer and Solid Stem Auger		Sheet 1 of 1

STRATA							
Depth BGL	Sample / Test Details	PID	Water	Legend	Depth (Thickness)	DESCRIPTION	COMMENTS
					0.25	TARMAC over CONCRETE	
0.5		<0.1			(0.35) 0.60	MADE GROUND: Grey, sandy, fine-medium, angular-subangular gravel of concrete. Sand is fine-coarse.	Wet NVO
1.0	BH202A 0.8	<0.1			(1.20)	MADE GROUND: Brown, gravelly, fine-coarse sand. Gravel is fine-medium, subangular-subrounded of concrete.	Dry NVO
1.5		<0.1			1.80	Borehole terminated at 1.8m bgl due to refusal on concrete.	

<b>Backfill</b> <input checked="" type="checkbox"/> Cement seal <input type="checkbox"/> Bentonite Fill	<b>Sample Details</b> <input checked="" type="checkbox"/> Small sample	<b>Legend</b> <input type="checkbox"/> Asphalt <input checked="" type="checkbox"/> Made Ground <input type="checkbox"/> Groundwater Table <input checked="" type="checkbox"/> Groundwater Strike	<b>GENERAL REMARKS</b> NVO - No visual or Olfactory Evidence of Contamination m bgl - meters below ground level Hand pitted to 1.2mbgl
Logged By CG		Approved By MM	

## Borehole Log

Project Name and Site Location Stag Brewery, Mortlake, London SW14		Client AB Inbev		BOREHOLE No <b>BH203</b>
Job No 47075502	Date Start Date 20-08-15 End Date 20-08-15	Ground Level (m)	Co-Ordinates ( )	
Contractor ESL		Method / Plant Used Concrete Corer and Solid Stem		Sheet 1 of 1

STRATA						
Depth (m)	Sample / Test Details	PID (ppm)	Water	Legend	DESCRIPTION	COMMENTS
0.20					TARMAC over CONCRETE	
(0.70)		<0.1			MADE GROUND: Very dense, sandy, fine-medium, angular-subangular gravel of yellow and red brick, granite and concrete.	Dry NVO
0.90					Concrete / <del>asphalt</del> slab.	
					No recovery.	
(2.00)						
3.00					Borehole terminated at 3.0m bgl due to <del>obstruction</del> on concrete.	

<b>Backfill</b> Cement seal riser Bentonite seal riser Filter pack riser Filter pack screen	<b>Sample Detail</b> 	<b>Legend</b> <input type="checkbox"/> Asphalt <input checked="" type="checkbox"/> Made Ground  <input checked="" type="checkbox"/> Groundwater Table       Groundwater Strike	<b>GENERAL REMARKS</b> NVO - No visual or Olfactory Evidence of Contamination in bgl - meters below ground level. Hand pitted to 1.2mbgl
Logged By CG		Approved By MM	

## Borehole Log

Project Name and Site Location Stag Brewery, Mortlake, London SW14		Client AB Inbev		BOREHOLE No <b>BH203A</b>
Job No 47075502	Date Start Date 20-08-15 End Date 20-08-15	Ground Level (m)	Co-Ordinates ( )	
Contractor ESL		Method / Plant Used Concrete Corer and Solid Stem Auger		Sheet 1 of 1

STRATA								
Depth BGL	Sample / Test Details	PID (ppm)	Water	Legend	Depth (Thickness)	DESCRIPTION	COMMENTS	Installation
0.5	BH203A 0.5	<0.1			0.20 (0.70)	TARMAC over CONCRETE MADE GROUND: Very dense, sandy, angular to sub-angular gravel of brick, granite and concrete.	Dry NVO	
1.0		<0.1			0.90	Concrete /  slab. No recovery.	Damp, NVO.	
2.0		<0.1			(2.50)			
3.5		<0.1			3.50	Concrete /  slab. No recovery.	Damp, NVO.	
4.5		<0.1			(1.20)			
5.0		<0.1			4.80 5.00	Possibly CLAY (no recovery). Borehole terminated at 5.0m bgl.	Wet, NVO.	

<b>Backfill</b> Cement seal riser Bentonite seal riser Filter pack riser Filter pack screen	<b>Sample Details</b> <input checked="" type="checkbox"/> Small disturbed sample	<b>Legend</b> <input type="checkbox"/> Asphalt <input checked="" type="checkbox"/> Concrete <input checked="" type="checkbox"/> Made Ground <input type="checkbox"/> Clay Groundwater Table Groundwater Strike	<b>GENERAL REMARKS</b> NVO - No visual or Olfactory Evidence of Contamination, in bgl - meters below ground level, Hand pitted to 1.2mbgl	
Logged By		CG	Approved By	MM

## Borehole Log

Project Name and Site Location Stag Brewery, Mortlake, London SW14			Client AB Inbev		BOREHOLE No <b>BH204</b>
Job No 47075502	Date Start Date 21-08-15 End Date 21-08-15	Ground Level (m)	Co-Ordinates ()		
Contractor ESL		Method / Plant Used Concrete Corer and Premier Rig.		Sheet 1 of 1	

STRATA						
Depth BGL	Sample / Test Details	PID (ppm)	Water	Legend	DESCRIPTION	COMMENTS
					0.28 TARMAC over CONCRETE	Dry NVO
					0.41 MADE GROUND: Pea gravel	Dry NVO
					0.70 CONCRETE	Dry NVO
1.0		<0.1			0.80 MADE GROUND: Red bricks.	Dry NVO
					(0.40) MADE GROUND: Brown/ red, sandy, fine-medium, angular-subangular brick gravel	Dry NVO
1.5	BH204_1.3	<0.1			1.50 MADE GROUND: Very soft, brown/ red, very sandy clay. Sand is fine-coarse.	Dry NVO
2.0		<0.1			MADE GROUND: Dark grey/ black, sandy, fine-medium, angular-subangular gravel of flint. Sand is fine-coarse.	Dry NVO
2.5					(1.50)	
3.0		<0.1			3.00 Orange/ yellow, fine-coarse SAND.	Dry NVO
3.0	BH204_3.3	<0.1			3.20 Brown, sandy, fine-medium, subangular-subrounded GRAVEL.	Damp NVO
3.5					3.50 Borehole terminated at 3.5m bgl.	

<b>Backfill</b> <input checked="" type="checkbox"/> Cement seal <input type="checkbox"/> Bentonite Fill	<b>Sample Detail</b> <input checked="" type="checkbox"/> Small disturbed sample	<b>Legend</b> <input type="checkbox"/> Asphalt <input checked="" type="checkbox"/> Made Ground <input checked="" type="checkbox"/> Concrete <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Sandy Gravel <input type="checkbox"/> Groundwater Table <input type="checkbox"/> Groundwater Strike	<b>GENERAL REMARKS</b> NVO - No visual or Olfactory Evidence of Contamination. m bgl - meters below ground level Hand pitted to 1.2mbgl
Logged By CG		Approved By MM	

## Borehole Log

Project Name and Site Location Stag Brewery, Mortlake, London SW14			Client AB Inbev		<b>BOREHOLE No</b>  <b>BH205</b>
Job No 47075502	Date Start Date 21-08-15 End Date 21-08-15	Ground Level (m)	Co-Ordinates ( )		
Contractor ESL		Method / Plant Used Concrete Corer and Premier Rig.			Sheet 1 of 1

Depth BGL	Sample / Test Details	PID (ppm)	Water	STRATA			Termination	
				Legend	Depth (Thickness)	DESCRIPTION		COMMENTS
				[Concrete Pattern]	0.27	CONCRETE		
0.5				[Cross-hatch Pattern]	(0.53)	MADE GROUND: Grey, dense, fine to coarse sand and gravel of concrete.	Dry NVO	
1.0	BH205_1.0	<0.1		[Cross-hatch Pattern]	0.80	MADE GROUND: Very dense, brown, sandy, fine-medium, angular-subangular gravel of brick, concrete, flint, glass. Sand is fine-coarse. Little recovery.	Dry NVO	
1.5		<0.1		[Cross-hatch Pattern]	(1.70)			
2.0		<0.1		[Cross-hatch Pattern]				
2.5	BH205_2.5	<0.1		[Cross-hatch Pattern]	2.50			
2.5		<0.1		[Gravelly Sand Pattern]	(0.50)	Brown/ orange, gravelly, fine-coarse SAND. Gravel is fine-medium, subangular-subrounded, becoming more gravelly with depth. Little recovery.	Dry NVO	
3.0		<0.1		[Gravelly Sand Pattern]	3.00	Borehole terminated at 3.0m bgl.		

<b>Backfill</b> <input checked="" type="checkbox"/> Cement seal <input type="checkbox"/> Bentonite Fill	<b>Sample Details</b> <input checked="" type="checkbox"/> Small disturbed sample	<b>Legend</b> <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Concrete  <input type="checkbox"/> Gravelly Sand  <input type="checkbox"/> Groundwater Table         </div> <div> <input checked="" type="checkbox"/> Made Ground  <input type="checkbox"/> Groundwater Strike         </div> </div>	<b>GENERAL REMARKS</b> NVO - No visual or Olfactory Evidence of Contamination. m bgl - meters below ground level. Hand pitted to 1.2mbgl
Logged By <span style="float: right;">CG</span>		Approved By <span style="float: right;">MM</span>	

TE 08.02.10 STAG LOGS - FULL GPJ AGS3 ALL GDT 22/8/15

## Borehole Log

Project Name and Site Location Stag Brewery, Mortlake, London SW14		Client AB Inbev		BOREHOLE No <b>BH206</b>
Job No 47075502	Date Start Date 21-08-15 End Date 21-08-15	Ground Level (m)	Co-Ordinates ( )	Sheet 1 of 1
Contractor ESL		Method / Plant Used Concrete Corer and Premier Fig		

STRATA						
Depth BGL	Sample / Test Details	PID (ppm)	Water	Legend	DESCRIPTION	COMMENTS
0.00					TARMAC over CONCRETE	
0.20					MADE GROUND: Grey, dense, fine to coarse sand and gravel of concrete.	Dry, NVO.
0.80						
1.00	BH206_1_1	<0.1			MADE GROUND: Soft brown sandy clay. Gravel is fine-medium, angular-subangular of brick and concrete.	Dry, NVO.
1.50		<0.1				
1.80					Borehole terminated at 1.8m bgl due to refusal on concrete.	

<b>Backfill</b> <input checked="" type="checkbox"/> Cement seal <input type="checkbox"/> Bentonite Fill	<b>Sample Detail</b> <input checked="" type="checkbox"/> Small sample	<b>Legend</b> <input type="checkbox"/> Asphalt <input checked="" type="checkbox"/> Made Ground <input type="checkbox"/> Groundwater Table <input type="checkbox"/> Groundwater Strike	<b>GENERAL REMARKS</b> NVO - No visual or Olfactory Evidence of Contamination m bgl - meters below ground level. Hand pitted to 1.2mbgl
Logged By CG		Approved By MM	



## Borehole Log

Project Name and Site Location Stag Brewery, Mortlake, London SW14		Client AB Inbev		BOREHOLE No <b>BH207</b>
Job No 47075502	Date Start Date 25-08-15 End Date 25-08-15	Ground Level (m)	Co-Ordinates ()	
Contractor ESL		Method / Plant Used Concrete Corer and Premier Rig.		Sheet 1 of 1

STRATA						
Depth (m)	Sample / Test Details	PID (ppm)	Water	Legend	DESCRIPTION	COMMENTS
0.20					TARMAC	
0.5	BH207_0.7	<0.1			MADE GROUND: Grey/red, dense, fine to coarse sand and gravel of concrete and brick.	Dry, NVO.
1.10		<0.1			Soft, gravelly, brown CLAY. Gravel is fine-medium, subangular-subrounded of flint. (Possibly reworked)	Dry, NVO.
1.50		<0.1				
2.60	BH207_2.6-3.5	<0.1			Brown, dense, gravelly SAND. Gravel fine, occasionally medium of flint. Sand is fine to medium.	Dry, NVO.
3.50		<0.1			Borehole terminated at 3.5m bgl.	

<b>Backfill</b> <input checked="" type="checkbox"/> Cement seal <input type="checkbox"/> Bentonite Fill	<b>Sample Details</b> <input checked="" type="checkbox"/> Small disturbed sample	<b>Legend</b> <input type="checkbox"/> Asphalt <input checked="" type="checkbox"/> Gravelly Clay <input type="checkbox"/> Groundwater Table <input checked="" type="checkbox"/> Made Ground <input type="checkbox"/> Gravelly Sand <input type="checkbox"/> Groundwater Strike	<b>GENERAL REMARKS</b> NVO - No visual or Olfactory Evidence of Contamination in bgl - meters below ground level. Hand pitted to 1.2mbgl
Logged By CG		Approved By MM	



## Borehole Log

Project Name and Site Location Stag Brewery, Mortlake, London SW14		Client AB Inbev		BOREHOLE No <b>BH208</b>
Job No 47075502	Date Start Date 25-08-15 End Date 25-08-15	Ground Level (m)	Co-Ordinates ( )	
Contractor ESL		Method / Plant Used Concrete Corer.		Sheet 1 of 1

STRATA						
Depth BGL	Sample / Test Details	PID (ppm)	Water	Legend	DESCRIPTION	COMMENTS
0.5		<0.1		0.25	CONCRETE	
				(0.55)	MADE GROUND: Brown, sandy, medium gravel of concrete, brick and flint.	Dry, NVO.
				0.80	Borehole terminated at 0.8m bgl due to refusal on concrete.	

<b>Backfill</b> <input checked="" type="checkbox"/> Cement seal <input type="checkbox"/> Bentonite Fill	<b>Sample Details</b>  	<b>Legend</b> <input type="checkbox"/> Concrete <input checked="" type="checkbox"/> Made Ground  <input type="checkbox"/> Groundwater Table <input type="checkbox"/> Groundwater Strike	<b>GENERAL REMARKS</b>  <small>NVO - No visual or Olfactory Evidence of Contamination. m bgl - meters below ground level. Hand pitted to 1.2mbgl</small>
Logged By <span style="float: right;">CG</span>		Approved By <span style="float: right;">MM</span>	



## Borehole Log

Project Name and Site Location Stag Brewery, Mortlake, London SW14		Client AB Inbev		<b>BOREHOLE No</b>  <b>BH208A</b>
Job No 47075502	Date Start Date 25-08-15 End Date 25-08-15	Ground Level (m)	Co-Ordinates ( )	
Contractor ESL		Method / Plant Used Concrete Corer and Premier Rig.		Sheet 1 of 1

Depth BGL	Sample / Test Details	PID (ppm)	Water	STRATA			Termination
				Legend	Depth (Thickness)	DESCRIPTION	
					0.25	CONCRETE	
0.5		<0.1			0.50	MADE GROUND: Fine to medium, angular to subangular concrete gravel.	Dry NVO
1.0	BH208A_0.8 BH208A_1.1	<0.1			(0.50) 1.00	MADE GROUND: Dark brown, slightly clayey, gravelly, fine to coarse sand. Gravel fine occasionally coarse, subangular to subrounded of brick and flint.	Dry NVO
1.5		<0.1				Medium density, brown, gravelly, fine to coarse SAND. Gravel is fine to medium, subangular to subrounded of flint. Very sandy between 1.5m and 1.9m.	Dry NVO
2.0		<0.1					
2.5		<0.1					
3.0		<0.1					
3.5		<0.1			3.50	Borehole terminated at 3.5m bgl.	

TE 08.02.10 STAG LOGS - FULL.GPJ AGS3 ALL.GDT 22/9/15

<b>Backfill</b> <input checked="" type="checkbox"/> Cement seal <input checked="" type="checkbox"/> Bentonite Fill	<b>Sample Details</b> <input checked="" type="checkbox"/> Small disturbed sample	<b>Legend</b> <input checked="" type="checkbox"/> Concrete <input checked="" type="checkbox"/> Made Ground <input checked="" type="checkbox"/> Gravelly Sand <input checked="" type="checkbox"/> Groundwater Table <input checked="" type="checkbox"/> Groundwater Strike	<b>GENERAL REMARKS</b> NVO - No visual or Olfactory Evidence of Contamination. m bgl - meters below ground level. Hand pitted to 1.2mbgl
		Logged By CG	Approved By MM

## Borehole Log

Project Name and Site Location Stag Brewery, Mortlake, London SW14		Client AB Inbev		<b>BOREHOLE No</b>  <b>BH209</b>
Job No 47075502	Date Start Date 25-08-15 End Date 25-08-15	Ground Level (m)	Co-Ordinates ( )	
Contractor ESL		Method / Plant Used Concrete Corer and Premier		Sheet 1 of 1

STRATA						
Depth BGL	Sample / Test Details	PID (ppm)	Water	Legend	DESCRIPTION	COMMENTS
				0.27	CONCRETE	
0.5	BH209_0.5	<0.1		(2.43)	MADE GROUND: Brown, grey/ black, gravelly, fine to coarse sand. Gravel is fine to coarse, angular to subangular of brick and concrete. Becoming	Dry NVO
1.0		<0.1				
1.5						
2.0						
2.5				2.70	Brown, gravelly, fine to coarse SAND. Gravel is fine to medium, subangular to subrounded of flint. Very little gravel between 3.0 -3.2m. Poor recovery between 1.2m - 3.4m. Driller noted it becoming dense at 2.7m.	Dry NVO
3.0	BH209_2.7-3.4	<0.1		(0.70)		
				3.40	Borehole terminated at 3.4m bgl.	

<b>Backfill</b> <input checked="" type="checkbox"/> Cement seal <input type="checkbox"/> Bentonite Fill	<b>Sample Details</b> <input checked="" type="checkbox"/> Small sample	<b>Legend</b> <input type="checkbox"/> Concrete <input type="checkbox"/> Gravelly Sand <input checked="" type="checkbox"/> Made Ground <input type="checkbox"/> Groundwater Table <input type="checkbox"/> Groundwater Strike	<b>GENERAL REMARKS</b> NVO - No visual or Olfactory Evidence of Contamination m bgl - meters below ground level, Hand pitted to 1.2mbgl
Logged By CG		Approved By MM	

## Borehole Log

Project Name and Site Location Stag Brewery, Mortlake, London SW14		Client AB Inbev		BOREHOLE No <b>BH210</b>
Job No 47075502	Date Start Date 26-08-15 End Date 26-08-15	Ground Level (m)	Co-Ordinates ( )	
Contractor ESL		Method / Plant Used Concrete Corer and Premier Rig.		Sheet 1 of 1

STRATA							
Depth BGL	Sample / Test Details	PID (ppm)	Water	Legend	Depth (Thickness)	DESCRIPTION	COMMENTS
					0.30	CONCRETE	
	BH210_0.8	<0.1			(0.90)	MADE GROUND: Dense, brown, sandy, fine to coarse, subangular to rounded gravel of natural stones.	Dry NVO
		<0.1			1.20	Soft, brown, sandy CLAY (possibly reworked clay).	Dry NVO
	BH210 2.2-2.8	<0.1			2.10	Brown, gravelly, fine to coarse SAND. Gravel is fine to medium to subrounded of flint. Becoming more gravelly with depth.	Dry NVO
		<0.1			(1.40)		
		<0.1			3.50	Borehole terminated at 3.5m bgl.	

<b>Backfill</b> <input checked="" type="checkbox"/> Cement seal <input type="checkbox"/> Bentonite Fill	<b>Sample Detail</b> <input checked="" type="checkbox"/> Small sample	<b>Legend</b> <input type="checkbox"/> Concrete <input type="checkbox"/> Sandy Clay <input checked="" type="checkbox"/> Made Ground <input type="checkbox"/> Gravelly Sand <input type="checkbox"/> Groundwater Table <input checked="" type="checkbox"/> Groundwater Strike	<b>GENERAL REMARKS</b> NVO - No visual or Olfactory Evidence of Contamination in bgl - meters below ground level Hand pitted to 1.2mbgl
Logged By CG		Approved By MM	

THE ABOVE STRATA LOGS ARE FOR INFORMATION ONLY AND DO NOT REPRESENT A GUARANTEE OF ACCURACY.

## Borehole Log

Project Name and Site Location <b>Stag Brewery, Mortlake, London SW14</b>		Client <b>AB Inbev</b>		BOREHOLE No <b>BH211</b>
Job No <b>47075502</b>	Date Start Date <b>26-08-15</b> End Date <b>26-08-15</b>	Ground Level (m)	Co-Ordinates ( )	
Contractor <b>ESL</b>		Method / Plant Used <b>Concrete Corer and Premier Rig.</b>		Sheet <b>1 of 1</b>

STRATA						
Depth BGL	Sample / Test Details	PID (ppm)	Water	Legend	DESCRIPTION	COMMENTS
0.25					CONCRETE	
0.5	BH211 0.7	<0.1			MADE GROUND: Brown sandy, fine to coarse, subangular to rounded gravel of natural origin, occasional brick. Becoming clayey with depth.	Dry NVO
1.0						
1.25						
1.50		<0.1			Soft, brown, grey, sandy, gravelly CLAY. Gravel is fine to medium, subangular to angular and subrounded of flint. Sand is fine to coarse. (possibly reworked clay)	Dry NVO
2.0						
2.10	BH211 2.2	<0.1			Brown, gravelly, fine to coarse SAND. Gravel is fine to medium, subangular to rounded of flint. Becoming more gravelly with depth.	Dry NVO
2.50		<0.1				
3.50					Borehole terminated at 3.5m bgl.	

<b>Backfill</b> <input checked="" type="checkbox"/> Cement seal <input type="checkbox"/> Bentonite Fill	<b>Sample Detail</b> <input checked="" type="checkbox"/> Small disturbed sample	<b>Legend</b> <input checked="" type="checkbox"/> Concrete <input checked="" type="checkbox"/> Made Ground <input checked="" type="checkbox"/> Gravelly Sandy Clay <input type="checkbox"/> Gravelly Sand  <input checked="" type="checkbox"/> Groundwater Table <input checked="" type="checkbox"/> Groundwater Strike	<b>GENERAL REMARKS</b> NVO - No visual or Olfactory Evidence of Contamination, m bgl - meters below ground level. Hand pitted to 1.2mbgl
Logged By <b>CG</b>		Approved By <b>MM</b>	

## Borehole Log

Project Name and Site Location Stag Brewery, Mortlake, London SW14		Client AB Inbev		<b>BOREHOLE No</b>  <b>BH212</b>
Job No 47075502	Date Start Date 27-08-15 End Date 27-08-15	Ground Level (m)	Co-Ordinates ( )	
Contractor ESL		Method / Plant Used Concrete Corer and Premier Rig.		Sheet 1 of 1

STRATA						
Depth BGL	Sample / Test Details	PID (ppm)	Water	Legend	DESCRIPTION	COMMENTS
0.30				[Concrete Pattern]	CONCRETE	
0.5	BH212_0.6	<0.1		[Concrete Pattern]	MADE GROUND: Pink / red, gravelly, fine to coarse sand. Gravel is fine to medium of flint with occasional coarse brick and crushed concrete.	Dry NVO
1.0		<0.1		[Concrete Pattern]		
1.5		<0.1		[Concrete Pattern]		
1.70	BH212_1.8-2.5	<0.1		[Sand Pattern]	Dense, brown, gravelly fine to coarse SAND. Gravel is fine to medium subangular to rounded. Becoming more gravelly with depth.	Dry NVO
2.0		<0.1		[Sand Pattern]		
2.5		<0.1		[Sand Pattern]		
3.5		<0.1		[Sand Pattern]	Borehole terminated at 3.5m bgl.	

<b>Backfill</b> <input checked="" type="checkbox"/> Cement seal <input type="checkbox"/> Bentonite Fill	<b>Sample Details</b> <input checked="" type="checkbox"/> Small sample	<b>Legend</b> <input type="checkbox"/> Concrete <input type="checkbox"/> Gravelly Sand <input checked="" type="checkbox"/> Made Ground <input type="checkbox"/> Groundwater Table <input type="checkbox"/> Groundwater Strike	<b>GENERAL REMARKS</b> NVO - No visual or Olfactory Evidence of Contamination, m bgl - meters below ground level. Hand pitted to 1.2mbgl
Logged By		CG	Approved By
			MM

## Borehole Log

Project Name and Site Location Stag Brewery, Mortlake, London SW14		Client AB Inbev		BOREHOLE No <b>BH213</b>
Job No 47075502	Date Start Date 27-08-15 End Date 27-08-15	Ground Level (m)	Co-Ordinates ( )	
Contractor ESL		Method / Plant Used Concrete Corer and Premier Rig.		Sheet 1 of 1

STRATA							
Depth BGL	Sample / Test Details	PID (ppm)	Water	Legend	Depth (Thickness)	DESCRIPTION	COMMENTS
					0.24	CONCRETE	
	BH213_0.6	<0.1			(0.76)	MADE GROUND: Brown / grey, slightly clayey, sandy, fine to coarse, angular to subangular gravel of brick, concrete, tile and plastic. Sand is fine to coarse.	Damp NVO
1.0		<0.1			1.00	Soft brown grey slightly gravelly CLAY. (Possibly reworked clay)	
					(0.60)		
1.5	BH213_1.7-2.0	<0.1			1.60	Dense, brown, gravelly, fine to coarse SAND. Gravel is fine to medium, angular to subrounded of flint. Occasional sand and gravel pockets throughout.	Damp NVO
2.0		<0.1			(1.40)		
3.0		<0.1			3.00	Borehole terminated at 3.0m bgl.	

<b>Backfill</b> <input checked="" type="checkbox"/> Cement seal <input type="checkbox"/> Bentonite Fill	<b>Sample Detail</b> <input checked="" type="checkbox"/> Small sample	<b>Legend</b> <input type="checkbox"/> Concrete <input checked="" type="checkbox"/> Made Ground <input type="checkbox"/> Gravelly Clay <input type="checkbox"/> Gravelly Sand  <input checked="" type="checkbox"/> Groundwater Table <input type="checkbox"/> Groundwater Strike	<b>GENERAL REMARKS</b> NVO - No visual or Olfactory Evidence of Contamination. m bgl - meters below ground level. Hand pitted to 1.2mbgl
Logged By		CG	Approved By
			MM

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## Borehole Log

Project Name and Site Location Stag Brewery, Mortlake, London SW14		Client AB Inbev		BOREHOLE No <b>BH214</b>
Job No 47075502	Date Start Date 25-08-15 End Date 25-08-15	Ground Level (m)	Co-Ordinates ()	
Contractor ESL		Method / Plant Used Concrete Corer and Solid Stem Auger.		Sheet 1 of 1

STRATA						
Depth BGL	Sample / Test Details	PID (ppm)	Water	Legend	DESCRIPTION	COMMENTS
					0.05 TARMAC	
					0.20 CONCRETE	Dry NVO
-0.5	BH214_0.85	<0.1			(0.60) MADE GROUND: Light brown, dense, sandy gravel. Sand is medium to coarse. Gravel is medium to coarse, subangular, but subrounded of flint and concrete.	Dry NVO
-1.0					(1.80) MADE GROUND: Light brown, dense gravelly sand. Sand is medium to coarse. Gravel is medium to coarse, subangular to subrounded of flint and concrete.	
-1.5						
-2.0						
-2.5					2.60 Borehole terminated at 2.6m bgl due to refusal on concrete.	

<b>Backfill</b> <input checked="" type="checkbox"/> Cement seal <input type="checkbox"/> Bentonite Fill	<b>Sample Details</b> <input checked="" type="checkbox"/> Small sample	<b>Legend</b> <input type="checkbox"/> Asphalt <input checked="" type="checkbox"/> Concrete <input checked="" type="checkbox"/> Made Ground <input checked="" type="checkbox"/> Groundwater Table <input checked="" type="checkbox"/> Groundwater Strike	<b>GENERAL REMARKS</b> NVO - No visual or Olfactory Evidence of Contamination in bgl - meters below ground level. Hand pitted to 1.2mbgl
Logged By		MM	Approved By
			GM

## Borehole Log

Project Name and Site Location Stag Brewery, Mortlake, London SW14			Client AB Inbev		BOREHOLE No <b>BH214A</b>
Job No 47075502	Date Start Date 25-08-15 End Date 25-08-15	Ground Level (m)	Co-Ordinates ( )		
Contractor ESL		Method / Plant Used Concrete Corer and Solid Stem Auger.			Sheet 1 of 1

STRATA						
Depth BGL	Sample / Test Details	PID (ppm)	Water	Legend	DESCRIPTION	COMMENTS
0.05					TARMAC	
0.20					CONCRETE	Dry NVO
0.60					MADE GROUND: Light brown, dense sandy gravel. Sand is medium to coarse. Gravel is medium to coarse, subangular to subrounded of flint and concrete.	Dry NVO
0.80					MADE GROUND: Light brown, dense gravelly sand. Sand is medium to coarse. Gravel is medium to coarse, subangular to subrounded of flint and concrete.	
1.20						
2.00					Borehole terminated at 2.0m bgl due to refusal on concrete.	

<b>Backfill</b> <input checked="" type="checkbox"/> Cement seal <input type="checkbox"/> Bentonite Fill	<b>Sample Detail</b>	<b>Legend</b> <input type="checkbox"/> Asphalt <input checked="" type="checkbox"/> Made Ground <input type="checkbox"/> Concrete <input type="checkbox"/> Groundwater Table <input type="checkbox"/> Groundwater Strike	<b>GENERAL REMARKS</b> NVO - No visual or Olfactory Evidence of Contamination. m bgl - meters below ground level. Hand pitted to 1.2mbgl
Logged By: MM		Approved By: GM	

THE ABOVE STRATA LOGS HAVE BEEN CHECKED BY THE SURVEYOR ON 25/08/15

## Borehole Log

Project Name and Site Location Stag Brewery, Mortlake, London SW14		Client AB Inbev		BOREHOLE No <b>BH2A</b>
Job No 47075502	Date Start Date 25-08-15 End Date 25-08-15	Ground Level (m)	Co-Ordinates ( )	
Contractor ESL		Method / Plant Used Concrete Corer and Premier Rig.		Sheet 1 of 1

STRATA							
Depth BGL	Sample / Test Details	PID (ppm)	Water	Legend	Depth (Thickness)	DESCRIPTION	COMMENTS
					0.25	CONCRETE	
0.5	BH2A_0.5	<0.1			(0.55)	MADE GROUND: Brown sandy fine-medium angular gravel of flint and crushed concrete. Sand is fine-coarse.	Dry NVO
					0.80	CONCRETE	Dry NVO
1.0		<0.1			1.10	Soft, brown, sandy CLAY. (Possibly reworked clay)	Dry NVO
1.5	BH2A_1.5	<0.1			(1.40)		
		<0.1			2.50	Dense, brown, gravelly, fine-coarse SAND. Gravel is fine-medium, subangular-subrounded of flint.	Dry NVO
2.5		<0.1			(1.00)		
3.0		<0.1			3.50	Borehole terminated at 3.5m bgl.	
3.5							

<b>Backfill</b> <input checked="" type="checkbox"/> Cement seal <input type="checkbox"/> Bentonite Fill	<b>Sample Details</b> <input checked="" type="checkbox"/> Small disturbed sample	<b>Legend</b> <input checked="" type="checkbox"/> Concrete <input type="checkbox"/> Sandy Clay <input checked="" type="checkbox"/> Made Ground <input type="checkbox"/> Gravelly Sand <input checked="" type="checkbox"/> Groundwater Table <input checked="" type="checkbox"/> Groundwater Strike	<b>GENERAL REMARKS</b> NVO - No visual or Olfactory Evidence of Contamination, m bgl - meters below ground level Hand pitted to 1.2mbgl
Logged By CG		Approved By MM	

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## Borehole Log

Project Name and Site Location Stag Brewery, Mortlake, London SW14		Client AB Inbev		<b>BOREHOLE No</b>  <b>BH3A</b>
Job No 47075502	Date Start Date 28-08-15 End Date 28-08-15	Ground Level (m)	Co-Ordinates ( )	
Contractor ESL		Method / Plant Used Concrete Corer and Premier Rig.		Sheet 1 of 1

STRATA						
Depth BGL	Sample / Test Details	PID	Water	Legend	DESCRIPTION	COMMENTS
0.5	BH3A_0.5	<0.1			0.25 CONCRETE.	
1.0		<0.1			(1.25) MADE GROUND: Brown, gravelly, fine-coarse sand. Gravel is fine-medium, occasionally coarse, angular-subangular of brick, glass and concrete.	Dry NVO
1.5		<0.1			1.50 Dense, brown, sandy, fine-medium, subangular-subrounded GRAVEL of flint. Sand is fine-coarse.	Dry NVO
2.0		<0.1			2.00 Dense, brown, gravelly, fine-coarse SAND. Gravel is subangular-subrounded fine-coarse of flint.	Dry NVO
2.5		<0.1			(1.00)	
3.0		<0.1			3.00	
					Borehole terminated at 3.0m bgl.	

<b>Backfill</b> <input checked="" type="checkbox"/> Cement seal <input type="checkbox"/> Bentonite Fill	<b>Sample Details</b> <input checked="" type="checkbox"/> Small sample	<b>Legend</b> <input checked="" type="checkbox"/> Concrete <input type="checkbox"/> Sandy Gravel <input checked="" type="checkbox"/> Made Ground <input type="checkbox"/> Gravelly Sand  <input type="checkbox"/> Groundwater Table <input checked="" type="checkbox"/> Groundwater Strike	<b>GENERAL REMARKS</b> NVO - No visual or Olfactory Evidence of Contamination in bgl - meters below ground level. Hand pitted to 1.2mbgl
Logged By CG		Approved By MM	

## Borehole Log

Project Name and Site Location Stag Brewery, Mortlake, London SW14		Client AB Inbev		BOREHOLE No <b>BH4A</b>
Job No 47075502	Date Start Date 27-08-15 End Date 27-08-15	Ground Level (m)	Co-Ordinates ( )	
Contractor ESL		Method / Plant Used Concrete Corer and Premier Rig.		Sheet 1 of 1

STRATA								
Depth BGL	Sample / Test Details	PID (ppm)	Water	Legend	Depth (Thickness)	DESCRIPTION	COMMENTS	Installation
0.0		<0.1			(1.30)	MADE GROUND: Brown, grey, slightly clayey, gravelly, fine-coarse sand. Gravel is fine-medium, angular-subangular of concrete, brick tile and rootlets.	Dry. Possible asbestos fragments.	
1.0	BH4A 0.9	<0.1			1.30			
1.5		<0.1				Brown, very gravelly, fine-coarse SAND. Gravel is fine-medium, subangular-subrounded of flint.	Dry NVO	
2.0		<0.1						
2.5		<0.1			(2.70)			
3.0		<0.1						
3.5	BH4A 3.5-4.0	<0.1			4.00			
4.0		<0.1				Borehole terminated at 4.0m bgl.		

<b>Backfill</b> <input checked="" type="checkbox"/> Cement seal <input checked="" type="checkbox"/> Bentonite Fill	<b>Sample Details</b> <input checked="" type="checkbox"/> Small sample	<b>Legend</b> <input checked="" type="checkbox"/> Made Ground <input type="checkbox"/> Gravelly Sand  <input checked="" type="checkbox"/> Groundwater Table <input checked="" type="checkbox"/> Groundwater Strike	<b>GENERAL REMARKS</b> NVO - No visual or Olfactory Evidence of Contamination m bgl - meters below ground level Hand pitted to 1.2mbgl
Logged By		CG	Approved By MM

## Borehole Log

Project Name and Site Location Stag Brewery, Mortlake, London SW14		Client AB Inbev		BOREHOLE No <b>BH5A</b>
Job No 47075502	Date Start Date 28-08-15 End Date 28-08-15	Ground Level (m)	Co-Ordinates ( )	
Contractor ESL		Method / Plant Used Concrete Corer and Premier Rig.		Sheet 1 of 1

STRATA							
Depth BGL	Sample / Test Details	PID (ppm)	Water	Legend	Depth (m)	DESCRIPTION	COMMENTS
0.5	BH5A_0.5	<0.1			0.3	MADE GROUND: Pea gravel.	Dry NVO
1.0		<0.1			(1.70)	MADE GROUND: Brown, silty clay, gravelly, fine coarse sand. Gravel is fine-medium, occasionally coarse, subangular to subrounded of red to st.	
1.5		<0.1			1.70		
2.0		<0.1			1.70	Dense, brown, gravelly, fine-coarse SAND. Gravel is fine-medium, subangular-rounded of flint.	Dry NVO
2.5		<0.1			(1.20)		
3.0		<0.1			3.00	Borehole terminated at 3.0m bgl.	

<b>Backfill</b> <input checked="" type="checkbox"/> Cement seal <input checked="" type="checkbox"/> Bentonite Fill	<b>Sample Detail</b> <input checked="" type="checkbox"/> Small sample	<b>Legend</b> <input checked="" type="checkbox"/> Made Ground <input type="checkbox"/> Gravelly Sand  <input checked="" type="checkbox"/> Groundwater Table <input type="checkbox"/> Groundwater Strike	<b>GENERAL REMARKS</b> NVO - No visual or Olfactory Evidence of Contamination in bgl - meters below ground level. Hand pitted to 1.2mbgl.
Logged By		CG	Approved By
			MM

TEL: 0800 0 1234567890 FAX: 020 8996 9001 EMAIL: info@aecom.com

## Borehole Log




Project Name and Site Location Stag Brewery, Mortlake, London SW14		Client AB Inbev		BOREHOLE No <b>BH7A</b>
Job No 47075502	Date Start Date 27-08-15 End Date 27-08-15	Ground Level (m)	Co-Ordinates ( )	
Contractor ESL		Method / Plant Used Concrete Corer and Premier Rig.		Sheet 1 of 1





STRATA								
Depth (m)	Sample / Test Details	PID (m)	Water	Legend	Depth (Thickness)	DESCRIPTION	COMMENTS	Installation
0.5					(0.55)	CONCRETE		
0.55	BH7A 07	<0.1			(0.65)	MADE GROUND: Soft, dark brown/grey, slightly gravelly, silty clay. Gravel is fine and subangular of red brick with fragments of wood.	Damp NVO	
1.0					1.20	Brown, slightly gravelly CLAY. Gravel is medium to coarse of flint.	Dry NVO	
1.5		<0.1			1.50	Dense, brown, gravelly, fine-coarse SAND. Gravel content increases with depth. Gravel is fine-medium, subangular-subrounded of flint.	Dry NVO	
2.0		<0.1			(1.50)			
2.5	BH7A 2 5-3 0	<0.1						
3.0		<0.1			3.00	Borehole terminated at 3.0m bgl.		

<b>Backfill</b> <input checked="" type="checkbox"/> Cement seal <input type="checkbox"/> Bentonite Fill	<b>Sample Details</b> <input checked="" type="checkbox"/> Small disturbed sample	<b>Legend</b> <input type="checkbox"/> Concrete <input type="checkbox"/> Gravelly Clay <input checked="" type="checkbox"/> Made Ground <input type="checkbox"/> Gravelly Sand <input type="checkbox"/> Groundwater Table <input checked="" type="checkbox"/> Groundwater Strike	<b>GENERAL REMARKS</b> NVO - No visual or Olfactory Evidence of Contamination. m bgl - meters below ground level. Hand pitted to 1.2mbgl
Logged By		CG	Approved By
			MM

## Borehole Log

Project Name and Site Location Stag Brewery, Mortlake, London SW14		Client AB Inbev		BOREHOLE No <b>BH7B</b>
Job No 47075502	Date Start Date 27-08-15 End Date 27-08-15	Ground Level (m)	Co-Ordinates ( )	
Contractor ESL		Method / Plant Used Concrete Corer		Sheet 1 of 1

STRATA						
Depth BGL	Sample / Test Details	PID (ppm)	Water	Legend	DESCRIPTION	COMMENTS
					CONCRETE	
					MADE GROUND - Brown, sandy, fine-medium, angular-subangular gravel of flint and concrete. Sand is fine-coarse.	Err-NVO
					Groundwater Table	
					Borehole terminated at 0.6m bgl due to refusal on concrete.	

<input checked="" type="checkbox"/> Cement seal	Sample Details	<b>Legend</b>  Concrete  Made Ground  Groundwater Table  Groundwater Strike	<b>GENERAL REMARKS</b> NVO - No visual or Olfactory Evidence of Contamination in bgl - meters below ground level. Hand pitted to 0.6mbgl
Logged By CG		Approved By MM	

THE SEVEN STAG BREWERY PROJECT - AUGUST 2015



## Borehole Log

Project Name and Site Location Stag Brewery, Mortlake, London SW14		Client AB Inbev		<b>BOREHOLE No</b>  <b>BH8A</b>
Job No 47075502	Date Start Date 26-08-15 End Date 26-08-15	Ground Level (m)	Co-Ordinates ( )	
Contractor ESL		Method / Plant Used Concrete Corer and Premier III		Sheet 1 of 1

STRATA						
Depth BGL	Sample / Test Details	PID (ppm)	Water	Legend	DESCRIPTION	COMMENTS
					0.20 CONCRETE	
					0.40 MADE GROUND: Grey, sandy, fine-medium gravel of concrete.	Dry NVO
0.5	BH8A	2.1			(0.40) MADE GROUND: Black sand and gravel	Dry. Black ash noted.
					0.80 Gravel is medium to coarse, angular to sub-rounded of flint. Sand is fine-medium of ash.	Dry NVO
1.0		<0.1			Soft, brown, grey, sandy, gravelly CLAY (Possibly reworked clay).	
1.5		<0.1			(1.40)	
2.0		<0.1			2.20	
2.5		<0.1			Dense, brown, gravelly, fine-coarse SAND. Gravel is fine-medium subangular-rounded of flint.	Dry NVO
3.0	BH8A 3 0-3 5	<0.1			(1.30)	
		<0.1			3.50	
					Borehole terminated at 3.0m bgl.	

<b>Backfill</b> <input checked="" type="checkbox"/> Cement seal <input type="checkbox"/> Bentonite Fill	<b>Sample Details</b> <input checked="" type="checkbox"/> Small disturbed sample	<b>Legend</b> <input type="checkbox"/> Concrete <input type="checkbox"/> Gravelly Sandy Clay <input type="checkbox"/> Gravelly Sand <input checked="" type="checkbox"/> Made Ground <input type="checkbox"/> Gravelly Sand <input type="checkbox"/> Groundwater Table <input type="checkbox"/> Groundwater Strike	<b>GENERAL REMARKS</b> NVO - No visual or Olfactory Evidence of Contamination in bgl - meters below ground level Hand pitted to 1.2mbgl
Logged By		CG	Approved By
			MM

## Borehole Log

Project Name and Site Location Stag Brewery, Mortlake, London SW14		Client AB Inbev		BOREHOLE No <b>BH9A</b>
Job No 47075502	Date Start Date 26-08-15 End Date 26-08-15	Ground Level (m)	Co-Ordinates ( )	
Contractor ESL		Method / Plant Used Concrete Corer and Premier Rig.		Sheet 1 of 1

STRATA								
Depth BGL	Sample / Test Details	PID (ppm)	Water	Legend	Depth (Thickness)	DESCRIPTION	COMMENTS	Installation
					0.30	CONCRETE		
0.5	BH9A_05	<0.1			(1.90)	MADE GROUND: Dense, brown, gravelly, fine-coarse sand. Gravel is fine-medium, subrounded-rounded of natural stone, becoming clayey with depth. Poor recovery.	Dry NVO	
1.0		<0.1			2.20			
1.5					(1.10)	MADE GROUND: Black, sandy, fine-medium, angular, red/grey gravel of flint and crushed concrete. Sand is fine-coarse. Poor recovery.	Wet NVO	
2.0	BH9A_2 2-3-3				3.30			
2.5						Borehole terminated at 3.3m bgl due to refusal on concrete.		
3.0								

<b>Backfill</b> <input checked="" type="checkbox"/> Cement seal <input type="checkbox"/> Bentonite Fill	<b>Sample Details</b> <input checked="" type="checkbox"/> Small sample	<b>Legend</b> <input checked="" type="checkbox"/> Concrete <input checked="" type="checkbox"/> Made Ground <input type="checkbox"/> Groundwater Table <input type="checkbox"/> Groundwater Strike	<b>GENERAL REMARKS</b> NVO - No visual or Olfactory Evidence of Contamination m bgl - meters below ground level. Hand pitted to 1.2mbgl
Logged By CG		Approved By MM	

**Appendix 2**

Correspondence with GLAAS  
re archaeological mitigation

**From:** O'Gorman, Laura  
**To:** [Richard von Kalinowski-Meager](#)  
**Subject:** [EXT] RE: Stag Brewery, Mortlake  
**Date:** 16 August 2017 15:26:28

---

Hi Richard,

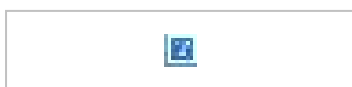
I have finally managed to get around to reviewing the current draft, and I'm pleased to say that the additional assessment, including the new past impact plan and transects are really useful. The assessment helps to give us a clearer steer and the next phase of archaeological investigation. Your client will need to submit this along with the evaluation report as part of their application. When consulted by the borough I will then recommend a 2 stage condition, with the first stage comprising further evaluation in order to refine the mitigation strategy. It would be good for us to sit down in due course to work out the best evaluation scope in light of the most recent assessment.

Please get in touch if you have questions.

Regards,  
Laura

Laura O'Gorman  
Assistant Archaeology Advisor  
Planning Group: London  
Historic England | 1 Waterhouse Square, 138-142 Holborn, London EC1N 2ST  
Direct Dial: 0207 973 3242      Mobile: 07789 928 817

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**From:** Richard von Kalinowski-Meager [mailto:Richard.von-Kalinowski-Meager@cgms.co.uk]  
**Sent:** 16 August 2017 11:19  
**To:** O'Gorman, Laura  
**Subject:** RE: Stag Brewery, Mortlake

Hi Laura,

I was wondering how your deliberations were progressing re the Stag Brewery site, and whether you needed any further information?

Regards,

Richard

**Richard von Kalinowski-Meager BA MA PG Cert FSA MCI fA**  
**Director**  
**Archaeology**  
**Direct Dial: 020 7832 1487**  
**Email Address: [richard.meager@cgms.co.uk](mailto:richard.meager@cgms.co.uk)**  
**Mobile: 07764 830956**

Please note that I will be on annual leave from the end of Wednesday 23 August until the morning of Monday 4 September 2017.

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Part of RPS Group plc

#### **Planning, Archaeology & Historic Buildings Consultants**

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**Fax: 020 7583 2231**

Co. Reg No. 3303376

[www.cgms.co.uk](http://www.cgms.co.uk)



---

**From:** Richard von Kalinowski-Meager  
**Sent:** 09 August 2017 11:16  
**To:** 'O'Gorman, Laura'  
**Subject:** RE: Stag Brewery, Mortlake

Laura,

I attach the updated DBA for the Stag Brewery site, for your review and comment (the full report size is nearly 30MB and you will shortly receive a weblink from my secretary Karen to download

this from).

I would draw your attention to the 1962 aerial photograph, reproduced at Figure 14, which shows the full extent of development within the northwestern and northeastern corners of the playing field to the southwest, which has not previously been identified.

Figures 21-22 comprise the deposit model, crossing the whole site, which now also show the current proposed basement depths – it is clear from this that large parts of the site have undergone substantial impacts.

In addition, Figure 29 indicates the known previous and existing areas of basement, together with the quantities of services which run across the whole of the site, and which were an important deciding factor in placing the 2016 evaluation trenches. Unfortunately we have not been able to ascertain the foundation details for the buildings within the western part of the site.

I have been notified that while some soft strip of the buildings across the site is ongoing, the majority of strip out and demolition work will not be undertaken prior to planning submission.

The proposed basement and ground floor redevelopment plans are now included, at Figures 23-28, with Figure 28 overlaying the proposed basement and ground floor plans to clarify proposed locations. Proposed basements west of Ship Lane are focussed in two areas and are not as extensive as the area of proposed basement to the east of Ship Lane.

I would be grateful for your comment re the above and attached, at your earliest convenience – I trust that you are now able to confirm that further works can be conditioned to the granting of planning consent.

Please do not hesitate to contact me should you require any further information or clarification.

Many thanks,

Regards,

Richard

**Richard von Kalinowski-Meager BA MA PG Cert FSA MCI fA**  
**Director**  
**Archaeology**  
**Direct Dial: 020 7832 1487**  
**Email Address: [richard.meager@cgms.co.uk](mailto:richard.meager@cgms.co.uk)**  
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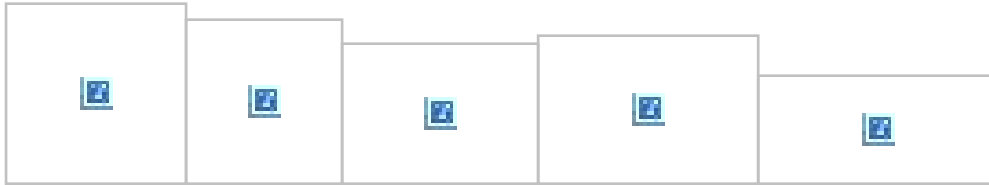
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---

**From:** O'Gorman, Laura [mailto:Laura.O'Gorman@HistoricEngland.org.uk]

**Sent:** 29 June 2017 11:59

**To:** Christopher Clarke (London Wall); Abrams, Diane

**Cc:** Richard Meager

**Subject:** [EXT] RE: Stag Brewery, Mortlake

Richard/Chris,

Thank you for sending through the updated DBA. I welcome the additional information however I still feel there needs to be a little bit more done to help draw out the conclusions and reasoning for condition led mitigation.

What would be really useful for me and also to help formulate an archaeological fieldwork strategy as we go forward, is for the assessment to include a plan which highlights areas of archaeological survival. This should include:

1. Areas where we believe there is no archaeological, owing to past/existing basements. Figure 3 with the old 1995 MOLAS assessment provides some useful information on the basements that were then known to be present. The Goad map also provides useful information on which buildings had basement.
2. Areas where there is some/moderate survival – for example below the 1996 warehouse building where there could be fragmentary survival between piled foundations. Also buildings shown on historic maps where we are uncertain if they had basement and so could also have survival between their foundations.
3. Areas where there is likely to be good archaeological survival – e.g. areas which have not been developed.

I would still also like to see information regarding the foundations on which the building in the location of Cromwell's house was constructed, in order to provide further indication on the likely level of survival at this location.

I welcome the inclusion of the proposed basement plans however as it stands it is impossible to identify where these will be located within the site. At the moment they are just floating in space!

Last of all could you also include the ground floor proposal plans so that it is clear where there would be impacts outside the proposed basement footprints?

Once I have the above additional information I should hopefully be in a better position in which to make a comfortable decision.

Please let me know if you have any questions regarding the above.

Regards,  
Laura

Laura O’Gorman

Assistant Archaeology Advisor

Planning Group: London

Historic England | 1 Waterhouse Square, 138-142 Holborn, London EC1N 2ST

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---

**From:** Christopher Clarke (London Wall) [<mailto:chris.clarke@cgms.co.uk>]

**Sent:** 21 June 2017 10:19

**To:** Abrams, Diane; O’Gorman, Laura

**Cc:** Richard Meager

**Subject:** Stag Brewery, Mortlake

Morning Diane/Laura,

Further to previous discussions relating to the site at the Stag Brewery, Mortlake, and on behalf of my colleague Richard who is on annual leave, please find attached an updated version of the DBA for review. The DBA has yet to be finalised with the full final proposed design details, but hopefully this should facilitated further discussions.

Please note that the proposed basement designs have now been included. Plus QUEST have undertaken a review of the available data and have established that there is limited Palaeolithic potential within the site.

If you are able to review and provide further comment to Richard, that would be appreciated.



Regards,  
Chris

**Chris Clarke BSc (Hons) MA MCIFA**  
**Senior Associate Director**  
**Direct Dial: 020 7832 0253**  
**Mobile: 07881 020428**  
**Email Address: [chris.clarke@cgms.co.uk](mailto:chris.clarke@cgms.co.uk)**

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