

**Hounslow Heath Golf
Centre, Staines Road,
Hounslow, London**

**Archaeological Desk
Based Assessment**

Client: KIDSPACE ADVENTURES
HOLDINGS LTD

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Hounslow Heath Golf Centre, Staines Road, Hounslow, London Archaeological Desk Based Assessment

Client Kidspace Adventures Holdings
Ltd
Project Number 10584
Prepared By Kerry Kerr-Peterson
Illustrated By Zoe Edwards
Approved By Hannah Simpson

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Enquiries To:

AB Heritage Limited (Head Office)
Caerus Suite, 150 Priorswood Road,
Taunton, Somerset, TA2 8DU
Email: info@abheritage.co.uk
Tel: 03333 440 206



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1. INTRODUCTION

1.1 Project Background

- 1.1.1 AB Heritage Limited (hereinafter AB Heritage) has been commissioned by Kidspace Adventures Holdings Ltd to produce an Archaeological Desk-Based Assessment to support a forthcoming planning application for a proposed development site at Hounslow Heath Golf Club, Staines Road, Hounslow, London.
- 1.1.2 This report includes a description of the baseline conditions; an examination of available documentary, cartographic and known archaeological evidence; and identifies any known and potential cultural heritage receptor(s) within the application proposed development site and its surrounding area. It proposes a suitable mitigation strategy for archaeology, where such works are deemed appropriate.

1.2 Site Location & Description

- 1.2.1 The proposed development site (hereafter referred to as the proposed development site) covers an area of c. 47.77 hectares and is centred on National Grid Reference TQ 11833 74863. The proposed development site is currently occupied by an extensive golf course running north-south adjacent to the east side of the River Crane, from Donkey Wood in the north to the main railway line between Feltham and Whitton to the south.
- 1.2.2 A small car park area containing a clubhouse porta cabin and two sheds is located along the south side of Staines Road and a mill stream runs north-south through the proposed development site, on the east side of the main course of the River Crane.
- 1.2.3 The proposed development site is bounded by modern residential and industrial development to the south, east and north. The Hounslow Heath National Nature Reserve is located immediately to the west of the proposed development site.
- 1.2.4 The main A315 Staines Road runs between the northern and central parts of the proposed development site. This was the Roman road between the towns of Silchester (Calleva Atribartum) and London (Londinium).

1.3 Geology & Topography

- 1.3.1 The solid underlying geology consists of sedimentary clay and silt of the London Clay Formation deposited 34 – 56 million years ago, in an environment previously dominated by deep seas.
- 1.3.2 The northern part and the western side of the central and southern parts of the proposed development site are covered by a superficial deposit of alluvial clay, silt sand and gravel. This was deposited around 2 million years ago in an environment previously dominated by rivers (BGS 2015).
- 1.3.3 The topography across the proposed development site rises from the south and north towards the centre. The lowest point is located towards the southern boundary at c. 17m above OD, with the highest point is located towards the centre of the proposed development site at c. 27m above OD.

1.4 Proposed Development

The proposed development consist of a children's zoo and adventure park to include associated buildings and outdoor play structures, childcare nursery, 9 hole golf course, golf driving range, adventure golf, surfing lake, associated landscaping, high ropes courses and zip line park, climbing/jump tower, car parking and alterations to two existing vehicular access points off Staines Road (See Figure 2).

2. AIMS & METHODOLOGY

- 2.1.1 Early consultation of the results of archaeological research and consideration of the implications of proposed development are the key to informing reasonable planning decisions.
- 2.1.2 The aim of this report is to facilitate such a process by understanding the historical development of the proposed development site and the likely impact upon any surviving archaeological resource resulting from the proposed development, devising appropriate mitigation responses where necessary.

2.2 Aims of Works

- 2.2.1 The assessment has been carried out, in regard to the collation of baseline information, in line with the Chartered Institute for Archaeologists' Standard and Guidance for Desk-Based Assessment (1994, latest revision November 2012).
- 2.2.2 This assessment includes relevant information contained in various statutory requirements, national, regional and local planning policies and professional good practice guidance, including:
- Ancient Monuments and Archaeological Areas Act, 1979
 - Planning (Listed Buildings and Conservation Areas) Act, 1990
 - The National Planning Policy Framework, 2012

2.3 Methodology of Works

- 2.3.1 The Greater London Historic Environment Record (hereafter referred to as the HER) is the primary source of information concerning the current state of archaeological and architectural knowledge in this area. For reporting purposes the HER information has been re-numbered with AB numbers, which can be viewed in Appendix 1. The information contained within this database was supported by examination of data from a wide range of other sources, principally:
- The Heritage Gateway (www.heritagegateway.org.uk) for information from English Heritage National Monuments Record (NMR), Pastscape and other research resources, including the Access to Archives (A2A)
 - The English Heritage website professional pages, particularly the National Heritage List For England (NHLE)
 - A visit to the Hounslow Archives held at the Hounslow Local Studies Centre at Hounslow Library and site visit were undertaken on the 26th May 2015
 - A visit to the National Monuments Records Centre in Swindon was undertaken on the 9th June 2015 to view aerial photographs covering the proposed development site
 - Additional relevant documentary and online historic sources
- 2.3.2 Information from these sources was used to understand:
- Information on statutory and non-statutory designated sites

- Information on heritage assets recorded on the Greater London HER
 - Readily accessible information on the proposed development site's history from readily available historic maps and photographs
 - Any information on the proposed development site contained in published and unpublished archaeological and historical sources, including any previous archaeological investigations undertaken within the study area
 - A greater understanding of key cultural heritage issues of the proposed development site and surrounding area, developed through the onsite walkover, including information on areas of past truncation within the proposed development site boundary
- 2.3.3 The impact of the proposed development on the known and potential archaeological resource, resulting in the formulation of a mitigation strategy, where required, which appropriately targets any future works to those required to gain planning consent.
- 2.3.4 The Archaeological Desk-Based Assessment has examined heritage records within 500m of the boundary of the proposed development site. This was agreed in correspondence via email between Gillian King (Greater London Archaeological Advisor) and Zoe Edwards (Archaeological Technician, AB Heritage) on 22nd May 2015.

2.4 Assessment of the Cultural Heritage Resource

- 2.4.1 This desk-based assessment contains a record of the known and potential cultural heritage resource of an area. In relation to buried archaeological remains, where there is a potential for encountering a particular resource within the proposed development site this is assessed according to the following scale:
- | | | |
|--------|---|--------------------------------------------------------------|
| Low | - | Very unlikely to be encountered on site |
| Medium | - | Possibility that features may occur / be encountered on site |
| High | - | Remains almost certain to survive on site |
- 2.4.2 There is currently no standard adopted statutory or government guidance for assessing the importance of an archaeological feature and this is instead judged upon factors such as statutory and non-statutory designations, architectural, archaeological or historical significance, and the contribution to local research agendas. Considering these criteria each identified feature can be assigned to a level of importance in accordance with a five point scale (Table 1, below).

Table 1: Assessing the Importance of a Cultural Heritage Site

SCALE OF SITE IMPORTANCE	
NATIONAL	The highest status of site, e.g. Scheduled Monuments (or undesignated assets of schedulable quality and importance). Grade I and Grade II* Listed Buildings. Other listed buildings that can be shown to have exceptional qualities in their fabric or historical associations not adequately reflected in the listing grade. Conservation Areas containing very important buildings. Undesignated structures of clear national importance. Extremely well preserved historic landscape, whether inscribed or not, with exceptional coherence, time depth, or other critical factor(s).
REGIONAL	Grade II Listed Buildings or other designated or undesignated archaeological sites (in addition to those listed above), or assets of a reasonably defined extent and significance, or reasonable evidence of occupation / settlement, ritual, industrial activity. Examples may include areas containing buildings that contribute significantly to its historic character, burial sites, deserted medieval villages, Roman roads and dense scatter of finds.
LOCAL	Evidence of human activity more limited in historic value than the examples above, or compromised by poor preservation and/or survival of context associations, though which still have the potential to contribute to local research objectives. Examples include sites such as 'locally designated' buildings or undesignated structures / buildings of limited historic merit, out-of-situ archaeological findspots / ephemeral archaeological evidence and historic field systems and boundaries etc.
NEGLIGIBLE	Assets with very little or no surviving archaeological interest. Examples include destroyed antiquities, structures of almost no architectural / historic merit, buildings of an intrusive character or relatively modern / common landscape features such as quarries, drains and ponds etc.
UNKNOWN	Insufficient information exists to assess the importance of a feature (e.g. unidentified features on aerial photographs).

- 2.4.3 The importance of already identified cultural heritage resources is determined by reference to existing designations. Where classification of a receptor's value covered a range of the above possibilities or for previously unidentified features where no designation has been assigned, the value of the receptor was based on professional knowledge and judgement.
- 2.4.4 For some types of finds or remains there is no consistent value and the importance may vary, for example Grade II Listed Buildings and Conservation Areas. For this reason, adjustments are occasionally made, where appropriate, based on professional judgement.

2.5 Impact Assessment Criteria

- 2.5.1 The magnitude of impact upon the archaeological and heritage resource, which can be considered in terms of direct and indirect impacts, is determined by identifying the level of effect from the proposed development upon the baseline conditions of the site and the cultural heritage resource identified. The criteria for assessing the magnitude of impact are set out in Table 2 (below).

- 2.5.2 In certain cases it is not possible to confirm the magnitude of impact upon a cultural heritage resource, especially where anticipated buried deposits exist. Where possible a professional judgement as to the scale of such impacts is applied to enable the likely 'Significance of Effects' to be established; however, a magnitude level of 'uncertain' is included for situations where it is simply not appropriate to make such a judgement at this stage of works.

Table 2: Criteria for Determining Magnitude of Impact

IMPACT LEVEL	DEFINITION
HIGH	Major impacts fundamentally changing the baseline condition of the receptor, leading to total or considerable alteration of character or setting – e.g. complete or almost complete destruction of the archaeological resource; dramatic visual intrusion into a historic landscape element; adverse change in the setting or visual amenity of the feature/site; significant increase in noise; extensive changes to use or access.
MEDIUM	Impacts changing the baseline condition of the receptor materially but not entirely, leading to partial alteration of character or setting – e.g. a large proportion of the archaeological resource damaged or destroyed; intrusive visual intrusion into key aspects of the historic landscape; or use of site that would result in detrimental changes to historic landscape character.
LOW	Detectable impacts which alter the baseline condition of the receptor to a small degree – e.g. a small proportion of the surviving archaeological resource is damaged or destroyed; minor severance, change to the setting or structure or increase in noise; and limited encroachment into character of a historic landscape.
NEGLIGIBLE	Barely distinguishable adverse change from baseline conditions, where there would be very little appreciable effect on a known site, possibly because of distance from the development, method of construction or landscape or ecological planting, that are thought to have no long term effect on the historic value of a resource.
UNCERTAIN	Extent / nature of the resource is unknown and the magnitude of change cannot be ascertained.

- 2.5.3 The overall Significance of Effects from the proposed development upon the Cultural Heritage Resource is determined by correlating the magnitude of Impact against value of the Cultural Heritage resource. Table 3 highlights the criteria for assessing the overall Significance of Effects. Where effects are moderate or above these are classified as significant.

Table 3: Significance of Effects

IMPORTANCE	MAGNITUDE			
	HIGH	MED	LOW	NEG
NATIONAL	Severe	Major	Mod	Minor
REGIONAL	Major	Mod	Minor	Not Sig.
LOCAL	Mod	Minor	Minor	Not Sig.
NEGLIGIBLE	Minor	Not Sig.	Not Sig.	Nt.

Not Sig. = Not Significant; Nt. = Neutral; Mod = Moderate; Ext. = Extensive

2.6 Limitations

- 2.6.1 It should be noted that the report has been prepared under the express instruction and solely for the use of Kidspace Adventures Holdings Ltd, and any associated parties they elect to share this information with.
- 2.6.2 Measurements and distances referred to in the report should be taken as approximations only and should not be used for detailed design purposes.
- 2.6.3 All the work carried out in this report is based upon the professional knowledge and understanding of AB Heritage on current (June 2015) and relevant United Kingdom standards and codes, technology and legislation. Changes in these areas may occur in the future and cause changes to the conclusions, advice, recommendations or design given. AB Heritage does not accept responsibility for advising the client's or associated parties of the facts or implications of any such changes in the future.
- 2.6.4 This report has been prepared utilising factual information obtained from third party sources. AB Heritage takes no responsibility for the accuracy of such information. It should also be noted that this report represents an early stage of a phased approach to assessing the archaeological and cultural heritage resource of the proposed development site to allow the development of an appropriate mitigation strategy, should this be required. It does not comprise mitigation of impacts in itself.

3. PLANNING & LEGISLATIVE FRAMEWORK

3.1 Introduction

- 3.1.1 The following section highlights the key planning and legislative framework relevant to this project. Legislative framework, national planning policy and relevant sector guidance.

3.2 Statutory Protection for Heritage Assets

- 3.2.1 Current legislation, in the form of the Ancient Monuments and Archaeological Areas Act 1979, provides for the legal protection of important and well-preserved archaeological sites and monuments through their addition to a list, or 'schedule' of archaeological monuments by the Secretary of State for Culture, Media and Sport. This necessitates the granting of formal Scheduled Monument Consent for any work undertaken within the designated area of a Scheduled Ancient Monument.
- 3.2.2 Likewise, structures are afforded legal protection in the form of their addition to 'lists' of buildings of special architectural or historical interest. The listing of buildings is carried out by the Department of Culture, Media and Sport under the Planning (Listed Buildings and Conservation Areas) Act, 1990. The main purpose of the legislation is to protect buildings and their surroundings from changes that would materially alter the special historic or architectural value of the building or its setting. This necessitates the granting of formal Listed Building Consent for all works undertaken to or within the designated curtilage of a Listed Building. This legislation also allows for the creation and protection of Conservation Areas by local planning authorities to protect areas and groupings of historical significance.
- 3.2.3 The categories of assets with some form of legal protection have been extended in recent years, and now include Registered Parks and Gardens, and Historic Battlefields. While designation as a UNESCO World Heritage Site is not a statutory designation under English planning law, such a designation is regarded as a material consideration in planning decisions, and World Heritage Sites are in practice protected from development that could affect any aspect of their significance including settings within the Site and a buffer zone around it.

3.3 National Planning Policy

- 3.3.1 The NPPF sets out government policy on the historic environment, which covers all elements, whether designated or not, that are identified as 'having a degree of significance meriting consideration in planning decisions, because of its heritage interest'.
- 3.3.2 One of the over-arching aims is to 'Conserve heritage assets in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of this and future generations'. To achieve this, local planning authorities can request that the applicant describe "the significance of any heritage assets affected, including any contribution made by their setting". The level of detail required in the assessment should be "proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance". It goes on to say that "where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest,

local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.”

- 3.3.3 A key policy within the NPPF is that “when considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset’s conservation. The more important the asset, the greater the weight should be.
- 3.3.4 With regard to non-designated heritage assets specific policy is provided in that a balanced judgement will be required having due regard to the scale of any harm or loss and the significance of the heritage asset affected.

3.4 Greater London Authority Planning Policy

- 3.4.1 Policy 7.8 Heritage Assets and Archaeology of the London Plan states that development should incorporate measures that identify, record, interpret, protect, and where possible, present the site’s archaeology.
- 3.4.2 It highlights the importance of the preservation of the character of heritage assets through the re-use of heritage buildings and their settings, with consideration for sustainable and environmentally friendly development options. Any development which affects the setting of a heritage asset is required to be of the highest quality of architecture and design, in-keeping with local context and character.
- 3.4.3 It also states that new development should make provision for the protection of archaeological resources, landscapes and significant memorials. The physical assets should, where possible, be made accessible 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 the asset.
- 3.4.4 Any development which will cause substantial harm or loss of a designated heritage asset will only be accepted in exceptional circumstances. The importance of the development will be assessed proportionately in terms of public benefit against the impact on, and the importance of the asset.

3.5 Local Planning Policy

London Borough of Hounslow Unitary Development Plan adopted 2003 and reviewed 2007

- 3.5.1 The Unitary Development Plan (UDP) was adopted on 12 December 2003 and subsequently amended and saved as of 28 September 2007. The following policy from the UDP is relevant to this scheme:

Policy ENV-B.3.2: Sites of Archaeological Importance

Within the Council’s Archaeological Priority Areas and for other sites of archaeological potential (as identified by archaeological advisors to the Council):

- (i) A written assessment of the likely archaeological impact of development (archaeological statement) will be required as part of the documentation needed to complete a planning application.

- (ii) The Council may require that an on site assessment by trial work (archaeological field evaluation) is carried out before any decision on the planning application is taken.

Hounslow Local Plan Proposed Submission 2015-2030

- 3.5.2 The London Borough of Hounslow is preparing an emerging development plan document. The Hounslow Local Plan will form the overarching spatial strategy for the Borough of Hounslow borough up to 2030. The council submitted its Local Plan Proposed Submission to the Secretary of State for examination by an independent Inspector on 20 August 2014. From this date the Local Plan is treated as a material consideration in the determination of planning applications and all other planning decisions and advice. The following policy is relevant to this scheme:

Policy CC4: Heritage

- 3.5.3 This policy states that Hounslow Borough Council requires development proposals to preserve and enhance any heritage asset, their setting and significant within a development proposal or where it affects a heritage asset in the immediate vicinity. With regard to sites of archaeological importance:
- 3.5.4 Hounslow Borough Council will expect the development proposal to submit an Archaeological Evaluation Report if the proposal falls within or adjacent to an Archaeological Priority Area.
- 3.5.5 The definition of a heritage asset includes non-designated assets identified by the local planning authority (e.g. local listed building or heritage fringe). Hounslow Heath is identified on the corresponding plan as Heritage Fringe.

4. ARCHAEOLOGICAL RESOURCE BASELINE

4.1 Statutory Designated Features

Within the proposed development site

- 4.1.1 There are no statutory designated heritage features located within the proposed development site.

Within the 500m study area

- 4.1.2 There are a total of 4 statutory designated heritage features [AB 9 & 15-17] recorded on the Greater London HER within the 500m study area:

- Baber Bridge & Baber Auxiliary Bridge (Grade II Listed) [AB 9 & 15] &
- Boundary stones (Grade II Listed) [AB 16 & 17]

4.2 Non Statutory Designated Features

Within the proposed development site

- 4.2.1 One non statutory designated heritage feature is situated within the proposed development site.

- 4.2.2 This is the Archaeological Priority Area of the Staines Road / London Road Roman road [AB 6]. Part of this is located along the northern boundary of the central, and the southern boundary of the northern part of the proposed development site.

- 4.2.3 This road was the main route between Roman London (Londinium), located c. 20km to the east and the town of Silchester (Calleva Atribartum) located c. 50km to the west of the proposed development site.

Within the 500m study area

- 4.2.4 There is one additional non statutory designated heritage feature located within the 500m study area.

- 4.2.5 This is the Archaeological Priority Area of the River Crane Valley & Crane Valley [AB 28], located immediately adjacent to the western and southern boundaries of the proposed development site respectively.

- 4.2.6 These areas have been identified for the potential survival of palaeoenvironmental evidence and are an important region for industrial archaeology due to the utilisation of the water from the River Crane to power numerous early mills.

4.3 Historic Environment Record (HER) Data

Within the proposed development site

- 4.3.1 The Greater London HER has recorded 6 cultural heritage features within the proposed development site on:

- Gunpowder Mills [AB 10 & 14]

- Landfill Sites [AB 22 & 23] &
- Hounslow Heath & West Hounslow Sheds Historic Landscape Character Areas [AB 29 & 30]

Within the 500m study area

4.3.2 The Greater London HER has recorded an additional 21 non designated heritage features [AB 1-5, 7, 11-13, 18-21, 24-26 & 31-35] that are located within the 500m study area surrounding the proposed development site.

4.3.3 These relate mostly to a variety of Prehistoric and Roman settlement and other activity, Medieval farming, Post-Medieval industrial activity, as well as the existence of Modern landfill across the region.

4.4 Other Sources

4.4.1 Three previously unrecorded heritage features [AB 8, 27 & 36] have been identified within the proposed development site. These have been identified through aerial photograph analysis and include:

- Ridge and furrow earthworks [AB 8]
- Airfield defensive features [AB 27] &
- Crop/parch marks of possible linear & square enclosure type features [AB 36]

4.5 Previous Archaeological Works in the Study Area

4.5.1 There has been no recorded previous archaeological works within the bounds of the proposed development site.

4.5.2 There have however been a number of previous archaeological works carried out in within the 500m study area surrounding the proposed development site. These include several Archaeological Desk Based Assessments and trench Evaluations [AB 5] as well as an Excavation [AB 5] and Watching Brief [AB 5].

- Prehistoric – Medieval activity was identified along with the proposed development site of the Modern former Feltham railway marshalling yard [AB 5].
- A series of undated pits and post holes [AB 31] as well as evidence of Post-Medieval ploughing [AB 11] were identified in a trench evaluation carried out at Bavers Lane Camp, located c. 280m to the east of the northern part of the proposed development site.
- An Archaeological Desk Based Assessment carried out at River Gardens, located c. 200m to the east of the northern part of the proposed development site identified a low – medium potential for Prehistoric – Medieval archaeology and a medium – high potential for Post-Medieval activity.

4.6 Palaeoenvironmental Evidence

4.6.1 No palaeoenvironmental evidence has previously been recorded within the bounds of the proposed development proposed development site. However, three undated former stream

beds [AB 32] were identified during a trench evaluation c. 280m to the east of the northern part of the proposed development proposed development site.

4.7 Archaeology & History Background

The Prehistoric Periods (c. 500, 000 BC – AD 43) & The Roman Period (AD 43 – AD 410)

- 4.7.1 There are no non designated heritage features of Prehistoric or Roman date that are located within the bounds of the proposed development site.
- 4.7.2 There are however, a total of five non designated heritage features of Prehistoric date and one of Roman date [AB 1-5 & 7] located within the 500m study area surrounding the proposed development site.
- 4.7.3 These include several findspots of flint dating from the Palaeolithic (c. 500,000-10,000 BC) and the Neolithic (c. 4,300-2,300 BC), the closest of which was a Neolithic arrow and lance head [AB 1] found c. 30m to the east of the southern part of the proposed development site.
- 4.7.4 Other Prehistoric objects have been found across Hounslow Heath including a Bronze Age spearhead, axes and sword and knife fragments, along with additional Iron Age objects.
- 4.7.5 Prehistoric burial activity is demonstrated in the area by the site of a possible ring ditch [AB 4], identified c. 30m to the east of the central part of the proposed development site.
- 4.7.6 Settlement activity including pits and post holes dating to the Early Iron Age (c. 700 BC) and a Prehistoric enclosure [AB 5] have been identified c. 200m to the south-east of the southern part of the proposed development site [AB 5].
- 4.7.7 A fragment of Roman roof tile was also found at c. 200m to the south-east of the southern part of the proposed development site. In addition, it has been suggested that a Roman camp is positioned on or near Hounslow Heath (Maxwell, 1935).
- 4.7.8 A route way [AB 7] has been identified on aerial photographs cutting across the region for a distance of over 4km from south-west to north-east. Part of this is located between the central and southern parts of the proposed development site. The route way joins up with Bath Road located c. 1.3km to the north-east of the proposed development site.
- 4.7.9 Based on the straight, linear nature of this possible route way and the proximity to other known Roman roads in the region, this could have Roman origins.

The Medieval Period (AD 410 – AD 1536)

- 4.7.10 There is one non designated heritage feature of Medieval date located within the bounds of the proposed development site. This is the location of an area of ridge and furrow earthworks [AB 8] that have been identified on aerial photographs within the northern and central areas of the central part of the proposed development site.
- 4.7.11 There is an additional non designated heritage feature located within the study area that dates to the Medieval period. This is a series of settlement related features, including fence lines and a hearth, that have been dated to the Middle Saxon period (c. 650 AD) [AB 5], located c. 200m to the south-east of the southern part of the proposed development site.

- 4.7.12 Hounslow Heath was part of the Isleworth Hundred and was used as a royal hunting ground throughout the Medieval and into the Post-Medieval period. In addition the heath contained a large area of common land that was used for farming during these periods [AB 8].
- 4.7.13 The name elements that make up the word Hounslow have Anglo-Saxon origins. The name means Hund's hill or mound and is made up from the words *Hund*, which is an Anglo-Saxon personal name and *hlaw* meaning tumulus or hill. This name suggests that a tumulus or mound in the area could have been used as a meeting place during the Anglo-Saxon period (Key to English Place Names).

The Post - Medieval Period (AD 1537 – AD 1800)

- 4.7.14 There are two non statutory designated heritage features of Post-Medieval date located within the bounds of the proposed development site. These are both watermills used for the production of gunpowder [AB 10 & 14].
- 4.7.15 There are an additional three heritage features of Post-Medieval date [AB 11-13] located within the 500m study area surrounding the proposed development site.
- 4.7.16 Part of the common land of Hounslow Heath was enclosed in 1544 by the Duke of Northumberland who constructed two artificial channels across the Heath that became known as the Upper and Lower Duke of Northumberland's River. A channel, associated watercourse and sluice system [AB 12], possibly associated with this artificial river system have been identified c. 70m to the west of the northern part of the proposed development site.
- 4.7.17 The creation of this artificial river sparked an increase in water driven industries in the area, chiefly the manufacturing of gunpowder brought on by the outbreak of the seven years war in 1757.
- 4.7.18 This led to the construction of a system of leats to channel the flow of the water to the mills. As well as the two powder mills located within the bounds of the proposed development site [AB 10 & 14], an additional mill [AB 13] was located c. 70m to the west of the northern part of the proposed development site, on the Upper section of the Duke of Northumberland's River.
- 4.7.19 Hounslow Heath was used as a military training and shooting ground from the 18th Century by the Hounslow Barracks that was located to the north of Staines Road and gravel and sand extraction was undertaken in the region from the Post-Medieval period.

The Modern Period (AD 1801 – Present)

- 4.7.20 There are three non statutory designated heritage features [AB 22, 23 & 27] located within the bounds of the proposed development site. These include the sites of Modern landfill [AB 22 & 23] and airfield defensive features [AB 27] identified on aerial photographs.
- 4.7.21 The military use of Hounslow Heath continued into the Modern period and an airfield [AB 26] located c. 250m to the south-east of the central part of the proposed development site and constructed c. 1910 was utilised by the military during both World Wars. Double ditched defensive features [AB 27], likely to represent anti-tank traps or aircraft landing obstructions; have been identified on the eastern side of the proposed development site, adjacent to the airfield.

- 4.7.22 The growth of the local railway network can be seen in the construction of the Feltham Marshalling Yard [AB 5], located c. 360m to the south-east of the southern part of the proposed development site, that was the first of its kind constructed by the London and South Western Railway during World War One.
- 4.7.23 As discussed above, the position of the airfield [AB 26] and the railway marshalling yard [AB 5] made the area a target during World War Two. Two high explosive bombs fell within the proposed development site. Although their exact location is uncertain, both fell potentially within the proposed development site, one in the region of the car park of the golf club in July 1944 and another on the western side of the central part of the proposed development site, close to the River Crane between October 1940 and June 1941 (Bombsight).
- 4.7.24 By the early 20th Century the mill industries in the region were in decline and Crane Park [AB 25], the northern part of which is located c. 400m to the south of the southern part of the proposed development site, was established in 1935 and is locally designated by the London Parks & Gardens Trust.
- 4.7.25 Gravel and sand extraction continued throughout the region until 1976 (Plate 3). This gravel extraction extended across the southern and central parts of the proposed development site, apart from the south-west area of the central part of the proposed development site, between the River Crane and the mill stream (See Figure 5).
- 4.7.26 The resulting pits (Plate 3) that are located within the proposed development site and surrounding it to the north, west and east were filled with domestic refuse [AB 19-23] during the 1960-70s (Figure 5). Detailed investigations have identified that the landfill deposits are consistently more than 2m deep within the northern part and 5-8m deep in other parts of the proposed development site.

Undated / Multi-Period

- 4.7.27 As mentioned in Section 4.2.3, there are three Undated / Multi-Period heritage features [AB 29 & 30] that cover the proposed development site. These include the Greater London Historic Landscape Characters of Hounslow Heath [AB 29] and West Hounslow Sheds [AB 30] and the location of crop/parch marks [AB 36] located within the northern part of the proposed development site that may be archaeological in nature.
- 4.7.28 An additional five Undated / Multi-Period heritage features [AB 31-35] are located within the 500m study area surrounding the proposed development site.
- 4.7.29 A series of undated pits and post holes [AB 31] have previously been discussed in Section 4.3.4 and former stream beds [AB 32] in Section 4.4.1.
- 4.7.30 The remainder of the Undated / Multi-Period heritage features consist of undated ditch systems [AB 33 & 34] and an enclosure [AB 35], located c. 370m to the east of the northern part and c. 180m to the west of the southern part of the proposed development site respectively. These have subsequently been destroyed by Modern housing.

4.8 Historic Map Sources

Map of the County of Middlesex by John Rocque, 1754 (Plate 1)

- 4.8.1 The map of the County of Middlesex surveyed by John Rocque in 1754 is one of the earliest maps to show the proposed development site in any detail. The northern part of the proposed development site is shown as a series of square fields adjacent to the River. The central and southern parts of the proposed development site are shown as heathland.

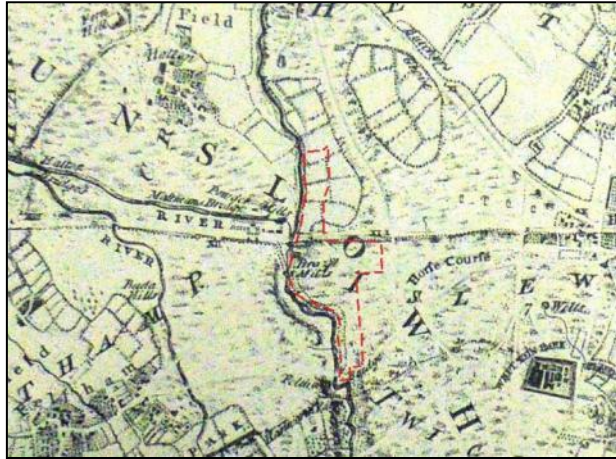


Plate 1: Extract from the Map of the County of Middlesex by John Rocque, 1754. The proposed development site is outlined in red

Plan of the Parish of Isleworth, 1819

- 4.8.2 This map shows the central and southern parts of the proposed development site in more detail. A lake or mill head pond is located in the north-west corner of the central part of the proposed development site. Elongated fields are shown adjacent to the River Crane. A rectangular gravel pit is shown along the southern boundary of Staines Road. This is the earliest depiction of a gravel pit within the proposed development site.

1st & 2nd edition 6-inch OS Middlesex Map Sheet 10 NE surveyed 1864-65 & 1894 and published 1869 & 1897

- 4.8.3 The 1st edition of this map (Plate 2) shows the northern part of the proposed development site consisting of eleven square and rectangular fields that are separated by tree lined rhynes. The central part of the proposed development site contains the lake or mill head pond in the north-west corner with a building located immediately to the south. The mill stream is shown running north-south through the proposed development site.
- 4.8.4 The area located to the east of the mill stream is shown as heathland. Several gravel pits are depicted in this area, one adjacent to the mill stream on the western side and two more further to the south, on the eastern side of the field.
- 4.8.5 Two square fields are located on the southern side of Staines Road. The western of the two fields contains two gravel pits and has four boundary stones at each of the corners. Two additional stones are shown on the southern side of the eastern plot.



Plate 2: Extract from the 1st edition 6-inch OS Middlesex Map Sheet 10 NE surveyed 1864-5 & published 1869

4.8.6 The 2nd edition of the OS map shows that the areas of gravel extraction have been filled in.

6-inch OS Middlesex Map Sheet 10 NE surveyed 1938 & published 1943

4.8.7 By the 1938 edition of the OS map, the area of the proposed development site has changed relatively little. The lake or mill head pond in the north-west corner of the central part of the proposed development site is no longer extant. New gravel pits have been opened up within the central part of the proposed development site.

25-inch OS Middlesex Map Sheet 10:10 published 1962-3 (Plate 3)

This edition of the OS map shows a dramatic change within the proposed development site since the previous map. A large part of the proposed development site has been used for the extraction of gravel. This includes the central and eastern areas of the central part, along with the entire southern part of the proposed development site (Plate 3).



Plate 3: Extract from 25-in OS Middlesex Map Sheet 10:10 published 1962-3

4.9 Aerial Photograph Sources

4.9.1 A visit was made to the National Monument Record Centre on 9th June 2015 by Kerry Kerr-Peterson (Assistant Project Archaeologist, AB Heritage). A total of 128 vertical and two oblique aerial photographs covering the proposed development site have been analysed. These range in date from 1944 to 1995.

4.9.2 A number of additional heritage features [AB 7, 8, 27 & 36] have been identified from the vertical aerial photographs.

1940's Aerial Photographs

4.9.3 Seventy-three of the aerial photographs that have been analysed dated to between 1944 and 1947. These show a large area of the central part of the proposed development site was utilised for gravel extraction. A number of heritage features have been identified from the 1940's aerial photographs.

4.9.4 A series of the images taken during the 1940's show a straight feature cutting across the landscape which is could represent a road or route way [AB 7]. It is visible as crop or parch marks across the fields to the south-west and runs though the gap between the central and southern part of the proposed development site. It then continues across Staines Road and is visible as a route that has been respected by the modern housing development to the north-east and joins up with Bath Road c. 1.3km to the north-east of the proposed development site. This road could have Roman origins.

4.9.5 An image taken in 1944 and another in 1946 show the northern and central areas of the central part of the proposed development site with a series of ridge and furrow earthworks [AB 8] visible as small square areas, orientated north-south and east-west.

4.9.6 Two images taken in 1946 show a series six double ditched features[AB 27], up to c. 100m in length that can be seen on the western side of the airfield [AB 26]. These are likely to be anti-tank defences or aircraft landing obstructions and are located within the eastern area of the southern part of the proposed development site.

4.9.7 In addition, photographs taken in 1946-7 show a series of marks within the northern part of the proposed development site [AB 36]. These may be archaeological in nature or they could be related to the former course of the River Crane.

1950's Aerial Photographs

4.9.8 Twenty-eight of the aerial photographs that have been analysed dated to between 1950 and 1956. The gravel extraction has shifted to the eastern side of the central and southern parts of the proposed development site. The course of the route way [AB 7] is being utilised by the gravel extractors across this area. The ridge and furrow earthworks [AB 8] and the airfield defensive features [AB 27] have been destroyed by the gravel extraction.

1960's & 1970's Aerial Photographs

4.9.9 Twenty-six of the aerial photographs that were analysed dated to the 1960's & 1970's. The 1960's photographs show that gravel extraction was still underway in the southern part of the proposed development site and in the northern area of the central part of the proposed

development site. The route way [AB 7] has been respected by the encroaching modern development and has been utilised as roadways within the housing estates to the north-east and south-west. It is visible as a crop or parch mark continuing to the south-west.

- 4.9.10 The 1960's aerial photographs also show the northern part of the proposed development site has been truncated in preparation for the deposition of refuse.
- 4.9.11 By 1995 the present golf club is shown to be fully operational across the proposed development site.

4.10 Site Visit

- 4.10.1 A proposed development site visit was carried out on 26th May 2015 by Tom Cloherty (Archaeological Technician, AB Heritage).
- 4.10.2 The proposed development site is currently occupied by an extensive golf course with a small car park located along the northern boundary of the central part of the proposed development site, accessed via Staines Road.
- 4.10.3 The flat, tarmac car park contains a number of buildings including a porta cabin club house and two sheds (Photo 1).
- 4.10.4 The car park is accessed via an entrance on the south side of Staines Road (Photo 2)
- 4.10.5 The fairways of the golf course are moderately undulating with bunkers excavated sporadically across the proposed development site. The edges of the golf course, watercourses and road are lined with mature trees and the fairways have trees scattered throughout (Photo 1-3).
- 4.10.6 The areas of the fairways have been made up with sand for the creation of the bunkers.



Photo 1: View of the car park and clubhouse from the north-west



Photo 2: View of the existing entrance to the proposed development site, from the north-east



Photo 3: View across the central part of the proposed development proposed development site from the south

4.11 Preliminary Visual Appraisal

- 4.11.1 The specification provided by the GLAAS Archaeological Officer (Gillian King) for this scheme of works requested that the archaeological desk based assessment 'describe the significance of any heritage assets that could be affected by the proposed development and the contribution of their setting to that significance'.
- 4.11.2 Therefore, an early review of any heritage features that could be potentially impacted upon by the proposed development was carried out, including visual links between the heritage features and the proposed development site. Any heritage features that have been impacted upon by past development within the proposed development site have been removed from the preliminary visual appraisal.
- 4.11.3 The purpose of this preliminary appraisal was to gain an early understanding of potential future constraints associated with any development (as outlined in Table 2) upon any heritage features.
- 4.11.4 The Grade II Listed Baber Bridge [**AB 9**] and Baber Auxiliary Bridge [**AB 15**] have been included in this appraisal as requested by the GLAAS Archaeological Officer.

Table 4: Cultural Heritage Features Appraised

AB No.	Description	Status	Reason
6	Archaeological Priority Area of Staines Road / London Road Roman road	APA	Non Statutory Designated and inter-visibility with the proposed development site
9	Baber Bridge	Grade II LB	Statutory Designated and requested by GLASS Archaeological Officer
15	Baber Auxiliary Bridge	Grade II LB	Statutory Designated and requested by GLASS Archaeological Officer
16 & 17	Boundaries Stones along Staines Road	Grade II LB	Statutory Designated in close proximity to the proposed development site
28	Archaeological Priority Area of River Crane Valley & Crane Valley	APA	Non Statutory Designated in close proximity to the proposed development site

APA = Archaeological Priority Area LB = Listed Building GLAAS = Greater London Archaeological Advisory Service

Archaeological Priority Area (APA) of Staines Road / London Road Roman road [AB 6]

- 4.11.5 Part of the Archaeological Priority Area of Staines Road / London Road Roman road [AB 6] is located along the northern section of the central part, and the southern section of the northern part of the proposed development site.
- 4.11.6 This area has been designated by GLAAS as an area with significant known archaeological interest with the potential for further discoveries. Therefore it is considered to be a cultural heritage feature of regional significance (in line with Table 1).
- 4.11.7 The significance of the APA is based upon the evidential value of the buried archaeological remains of the Roman road and any associated features. As a result the setting is considered to have little, if any, contribution towards the significance of the APA as a cultural heritage feature.
- 4.11.8 In addition, there is no intervisibility between the main part of the road and the proposed development site (Photo 4 & 6) due in part to the screening of the road by mature trees.
- 4.11.9 The processes of cumulative change and development have occurred along the roadside and gravel quarrying has affected the areas adjacent to the road within the central part of the proposed development site. As a result, the potential for the survival of below ground archaeological remains relating to the road or roadside activities in these areas is considered to be low.



Photo 4: View towards Staines Road from the car park, viewed from the south-east

Grade II Listed Baber Bridge [AB 9], Baber Auxiliary Bridge [AB 15] & Boundary Stones [AB 16 & 17]

- 4.11.10 Additional designated heritage features in close proximity to the proposed development site include the Grade II Listed Baber Bridge [AB 9]; Baber Auxiliary Bridge [AB 15], and two boundary stones [AB 16 & 17] which are located immediately adjacent to the proposed development site on Staines Road.
- 4.11.11 As statutory Grade II Listed structures, they are considered to be cultural heritage features of regional significance.
- 4.11.12 The significance of these features is mostly evidential, based on their historic and architectural merits. Their position along Staines Road and the associated watercourses that the bridges cross is considered to make a minor contribution towards their setting. Their setting therefore is considered to have a minor contribution towards their significance.
- 4.11.13 In addition, there is no intervisibility between these heritage features and the proposed development site due to the covering of mature trees adjacent to the River Crane and the boundaries of the proposed development site (Photo 5 & 6). Therefore the setting of these heritage features is not considered to be affected by the proposed development.



Photo 5: View from Baber Bridge [AB 9] towards the proposed development site, viewed from the north



Photo 6: View of the tree screening along Staines Road, taken from the north-east

Archaeological Priority Areas of River Crane Valley and Crane Valley [AB 28]

- 4.11.14 The Archaeological Priority Areas of River Crane Valley and Crane Valley [AB 28] are located immediately adjacent to the west and south of the central and southern part of the proposed development site respectively. As mentioned previously, this is a heritage feature of regional significance.
- 4.11.15 The significance of the APAs is based on the historical and evidential value of the area and the cultural heritage features that form part of them. Therefore the setting is considered to have little if any contribution towards the significance of these heritage features.
- 4.11.16 In addition, the intervisibility between the proposed development site and these heritage features is very restricted due to the dense mature trees along the edges of the golf course and surrounding the River Crane (Photo 7) and the proposed development is considered to have limited visual intrusion on the character of the area.



Photo 7: View from the southern part of the proposed development site towards the south

5. ARCHAEOLOGICAL POTENTIAL & MITIGATION

5.1 Known Heritage Resource

- 5.1.1 There are no statutory designated heritage features located within the bounds of the proposed development site.
- 5.1.2 There is one non statutory designated heritage feature located within the bounds of the proposed development site. A small area of the northern and central parts of the proposed development site is located within the Archaeological Priority Area of the Staines Road / London Road Roman road [AB 6].
- 5.1.3 There are a total of nine non designated heritage features [AB 8, 10, 14, 22, 23, 27, 29, 30 & 36] within the bounds of the proposed development site.
- 5.1.4 As well as the Historic Landscape Character categories of Hounslow Heath [AB 29] and West Hounslow Sheds [AB 30] covering the proposed development site, the location of two former Post-Medieval gunpowder mills [AB 10 & 14] and two proposed development sites of Modern landfill [AB 22 & 23] have been recorded on the Greater London HER within the bounds of the proposed development site.
- 5.1.5 A number of heritage features have been identified from aerial photograph analysis located within in the bounds of the proposed development site, these include an area of ridge and furrow earthworks [AB 8], a series of airfield defensive features [AB 27] and a group of crop/parch marks [AB 36] that may be archaeological in nature.
- 5.1.6 In addition, there are a number of other non designated heritage features located within the 500m study area surrounding the proposed development site. These include several proposed development sites relating to Prehistoric and Roman settlement and other activity, as well as Medieval farming, Post-Medieval industrial activity and Modern landfill.

5.2 Past Impacts within the Site Boundary

- 5.2.1 Past impacts within the boundary of the proposed development site relate mostly to extensive gravel extraction from at least the Post-Medieval period through to the 1960's. Analysis of historic maps (Plate 3) and aerial photographs has identified that a large part of the central and entirety of the southern part of the proposed development site has been subject to gravel extraction to depths of up to 5-8m (See Figure 5).
- 5.2.2 The past impacts of the gravel extraction are likely to have completely truncated any surviving below ground archaeological deposits within these areas of the proposed development site (See Figure 5).
- 5.2.3 Additional past impacts include the use of the site for landfill. This has the potential to have impacted upon below ground archaeological deposits, as a degree of truncation is evident from 1960's aerial photographs within the northern part of the proposed development site. The total depth of landfill deposits in this area is unknown but they are known to continue to a depth of more than 2m.

- 5.2.4 In addition, the effect of the compaction of an extensive depth of refuse (up to 8m in places) has the potential to have impacted upon any surviving below ground archaeological deposits across the proposed development site.
- 5.2.5 The construction of a lake or mill head pond, formerly located in the north-west corner of the central part of the proposed development site also has the potential to have caused some impacts upon below ground archaeological deposits in this area.
- 5.2.6 Although their exact position is uncertain, two high explosive World War Two bombs fell within the region of the proposed development site. These have the potential to have caused some impacts upon surviving below ground archaeological deposits limited to these areas.

5.3 Potential Archaeological Resource

- 5.3.1 The potential for the survival of below ground archaeological deposits is considered to be limited in extent. However one area, in the south-west section of the central part of the proposed development site, between the River Crane and the mill stream (See Figure 5), has the potential for the survival of below ground archaeological deposits as the impact is unknown.
- 5.3.2 The potential for the survival of below ground archaeological deposits within this unknown area related to the Prehistoric and Roman settlement and other activity is considered to be medium –low (in line with Section 2.4).
- 5.3.3 Should evidence of this nature survive, it is considered to be of Local - Regional Importance (in line with Table 1).
- 5.3.4 The potential for the survival of below ground archaeological deposits dating to the Medieval, Post-Medieval and Modern periods is considered to be low and should remains dating to these periods survive, they are considered to be of Negligible Importance.

5.4 Predicted Impact of Proposed Development

- 5.4.1 The potential impact upon any surviving below ground archaeological deposits relating to Prehistoric or Roman settlement or other possible activity within the south-west area of the central part of the proposed development site (See Figure 5) is considered to be low (in line with Table 2). Therefore the overall significance of effect is thought to be minor (in line with Table 3).
- 5.4.2 In relation to the potential impact upon deposits of Medieval, Post-Medieval & Modern date, should such deposits survive, the potential impact is considered to be negligible and therefore the overall significance of effect is considered to be neutral.

5.5 Outline Recommendations

- 5.5.1 At this early stage, the methodology of the proposed development is unknown.
- 5.5.2 Should intrusive works occur within the area of unknown impact which has the potential to truncate potentially surviving below ground archaeological deposits; a geophysical survey may be a beneficial method in determining the resource. Should surviving archaeology be

suspected at this stage, a further programme of archaeological investigation may be proposed.

5.5.3 These recommendations will need to be approved by the GLAAS Archaeological Officer.

6. REFERENCES

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1st & 2nd edition 6-inch OS Middlesex Map Sheet 10 NE surveyed 1864-65 & 1894 and published 1869 & 1897 (Hounslow Local Study Centre)

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6.2 Online Sources

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Appendices

Appendix 1 Gazetteer of Cultural Heritage Features

MLO & DLO = Greater London HER reference NHLE= National Heritage List for England reference

LB= Listed Building CA= Conservation Area APA = Archaeological Priority Area NGR = National Grid Reference

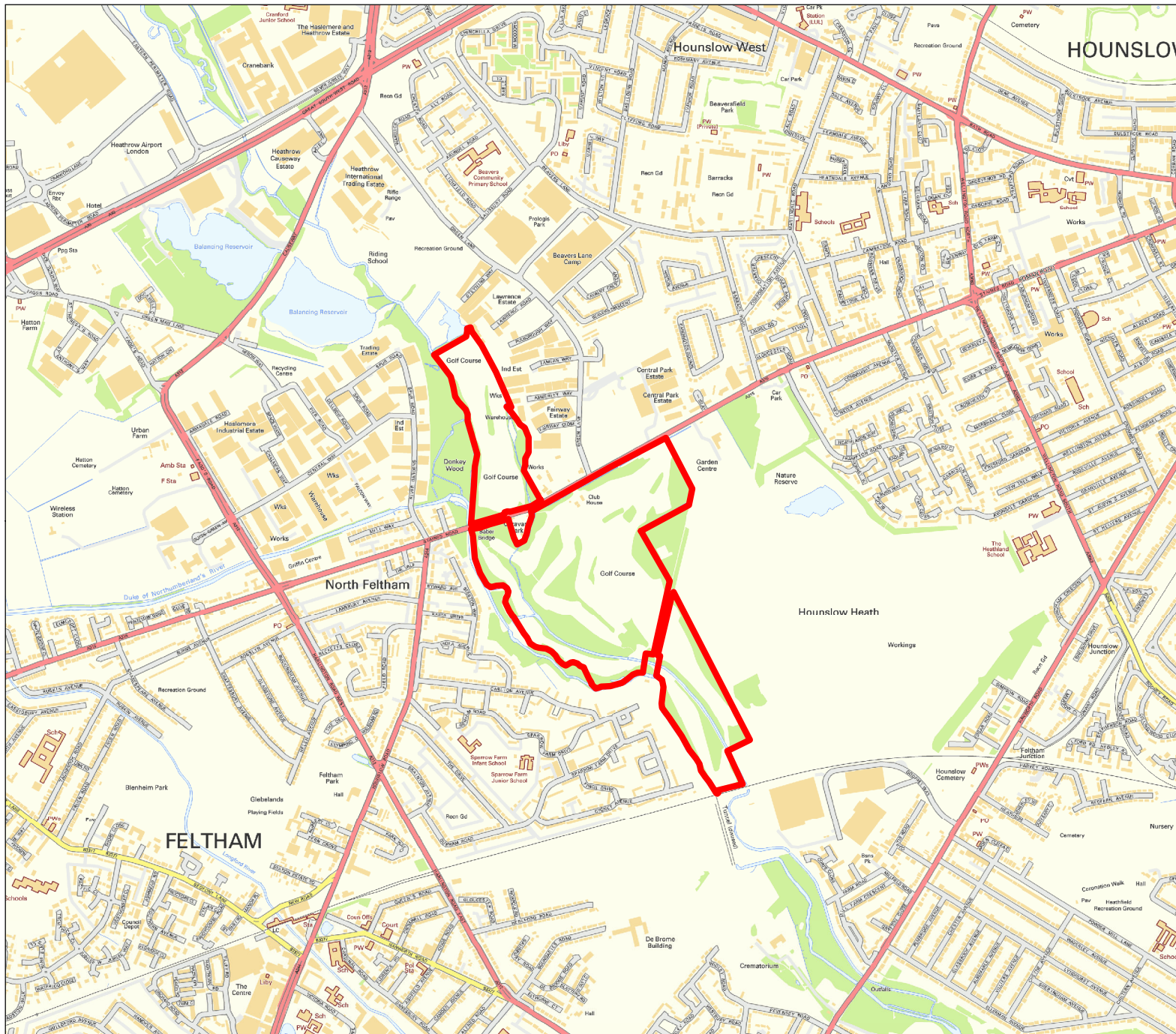
AB NO.	Period	Type	Name & Description	Status	NGR	Reference
1	Prehistoric	Findspot	Neolithic arrowhead & 'lance' head found.		TQ 1200 7400	MLO1959
2	Prehistoric	Findspot	Neolithic flint knife found.		TQ 1100 7540	MLO2190
3	Prehistoric	Findspot	Palaeolithic flint implements found.		TQ 1230 7480	MLO2192
4	Prehistoric	Ring Ditch	Possible ring ditch identified.		TQ 1182 7480	MLO17721
5	Prehistoric - Modern	Post Holes/Pits/Hearth/Fence/Findspot/ Sub Surface Features/Enclosure/Office/ Cattledock/Workshop/Engine Shed/Culvert	A Prehistoric enclosure, pits and post holes dating to the Early Iron Age, a piece of Roman tegula and several fence lines, a corn drying oven and hearth dating to the Middle Saxon period have been identified during excavations on the site of Feltham Marshalling Yards. The first conventional hump marshalling yards in the UK built by London & South-Western Railway during WWI. Features included office, cattle dock, workshop for wagon repairs, two locomotive sheds & two culverts cross the site. The River Crane flows through one and the artificial Duke of Northumberland's River flows through the other.		TQ 11200 73500-TQ 12500 73700	MLO64128, 30, 31-4, 74115-9 & 75107-9
6	Roman	APA - Staines Road / London Road - Line of Roman Road	The line of the main Roman Road from Londinium to Silchester and the West. The road has been found at Brentford, but its exact route has not been demonstrated elsewhere.	APA	TQ 11350 74610	DLO35691
7	Roman	Aerial Photograph/Road	A road or route way is visible running south-west - north-east across the area. It is visible for a distance of at least c. 4km and joins with the Bath Road c. 1.3km to the north-east of the proposed development site. This route way is likely to have Roman origins.		TQ 11762 74187	

8	Medieval-Post-Medieval	Aerial Photograph/Ridge & Furrow	An area of ridge & furrow earthworks is visible on 1940's aerial photographs, consisting of small square areas running north-south and east-west. This was destroyed by gravel extraction		TQ 11586 74549	
9	Post-Medieval	Bridge	Baber Bridge, Staines Road. Road bridge rebuilt in 1798. It carries the road from Hounslow to Staines, and is a survivor from the great age of road improvements.	Grade II LB	TQ 1115 7455	MLO85496 & NHLE489672
10	Post-Medieval	Gunpowder mill/Documentary	A second powder mill was built at Upper Mills in 1666. A former paper mill was later added to the complex. The former paper mill was known as Lower Mills and was destroyed by an explosion in 1799. It was rebuilt with earthen bafflemounds. Later this became an auxiliary site for Hounslow gunpowder mills. Shown as Brasil Mill on 1754 map and picture of 1757.		TQ 1130 7440	MLO74445
11	Post-Medieval	Ploughmarks/Sub Surface Features	Plough marks of Post-Medieval date were identified during a trench evaluation.		TQ 1135 7540	MLO58961
12	Post-Medieval	Sluice/Water Channel/Flood Deposit	A post medieval channel and associated watercourse, thought to be the Duke of Northumberland's River was located during investigations. Within the fill were four large pieces of oak timber thought to be part of an earlier sluice system. An 18th Century clay layer lay over a large area.		TQ 10783 74552	MLO66100
13	Post-Medieval	Gunpowder Works	Gunpowder mill converted from an existing corn mill in 1610 and paper mill in 1690, operated from 1690 until 1920. Expanded and rebuilt c. 1800. Buildings closed and dismantled in 1920s. Remains of mill buildings, water courses and blast mounds survive. Upper Mills converted to sword mill c. 1630.		TQ 1110 7465	MLO22055, 52654-5
14	Post-Medieval - Modern	Gunpowder Works	Established in 1667 and ceased production of gunpowder c. 1750 but converted back to the manufacture of explosives during the 19th Century as the North Feltham Cartridge Factory.		TQ 1120 7440	MLO52658
15	Modern	Bridge	Baber Auxiliary Bridge, Staines Road. Rebuilt 1809 by Brentford Turnpike Road. The first Baber (or Beaver) Auxiliary Bridge was erected by the Duke of Northumberland to carry the Hounslow-Staines road over a channel of the Isleworth Mill River.	Grade II LB	TQ 1135 7461	MLO85497 & NHLE489673

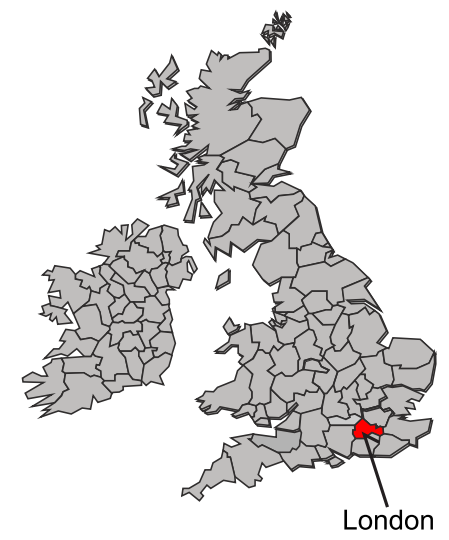
16	Modern	Boundary Stone	This cast iron milestone was erected c.1834 as one of a sequence laid along the principal old roads leading into the capital.	Grade II LB	TQ 1186 7488	MLO85830 & NHLE490472
17	Modern	Boundary Stone	This parish boundary stone was erected in 1812 following a survey carried out by Heston Parish to clarify the division between Heston and Islewort parishes.	Grade II LB	TQ 1161 7476	MLO85827 & NHLE490469
18	Modern	Road Barriers/Documentary	Road barriers at Baber Bridge, Staines Road forming a 'strongpoint'. Destroyed 1946.		TQ 1116 7455	MLO105769
19	Modern	Landfill	Site of landfill, it is not know whether this is made or worked land, and the date of infill is unknown, although all finds of are 19th/20th century date.		TQ 1070 7470	MLO72648
20	Modern	Landfill	Site of landfill.		TQ 1140 7480	MLO72649-50
21	Modern	Landfill	Site of landfill.		TQ 1120 7520	MLO72720
22	Modern	Landfill	Site of landfill.		TQ 1120 7460	MLO52655 & 72655
23	Modern	Landfill	Site of landfill.		TQ 1180 7410	MLO72651-3 & 72710
24	Modern	Crematorium	Founded in 1954, this crematorium contains three chapels and several gardens of remembrance.		TQ 12138 73222	MLO103974
25	Modern	Park	Crane Park opened in 1935 and is a linear park running along the north bank of the River Crane. Crane Park Island was the site of a mill and various mill streams, wheel pits and machine houses remain in the park. Also surviving are earthen mounds used to surround the huts where the gunpowder was produced. Locally designated by the London Parks & Garden Trust.		TQ 13211 73048	MLO102839

26	Modern	Airfield	Hounslow Airfield established c. 1910. Acquired by the Royal Flying Corps in 1914 and during the WW1 it was used for training as well as part of the Home Defence network for London. The site was used as a military airfield until 1919 when it reverted back to a civil airfield for a short while before becoming an aircraft manufacturing site. After WW1 it was used as a civil airport for commercial flights. The site was used by the army and in 1940 by the Civilian Repair Organization.		TQ 11954 74479	
27	Modern	Aerial Photograph/Airfield Defences	A series of six defensive features consisting of a length of up to c. 100m of double ditches is shown adjacent to the airfield on 1940's aerial photograph. These are likely to be anti-tank traps. These were destroyed by gravel extraction during the 1950's.		TQ 11645 74522 - 11988 73925	
28	Undated/Multi-Period	APA - River Crane Valley & Crane Valley	Alluvial deposits in the valley have the potential to preserve evidence for the prehistoric environment. The river provided a source of water power used to drive early mills; these were adapted to manufacture sword blades from 1630, and later industries included corn mills, paper mills and the manufacture of gunpowder. This is an important area for Industrial Archaeology.	APA	TQ 11708 74040	DLO33006 & 33459
29	Undated/Multi-Period	HLC	Historic Landscape Character - Hounslow Heath is categorised as Public Open Space or Parks & Open Space.		TQ 11550 74378	
30	Undated/Multi-Period	HLC	Historic Landscape Character - West Hounslow Sheds.		TQ 11295 74865	
31	Undated/Multi-Period	Post Holes/Pits/Sub Surface Features	A series of undated isolated post holes and pits were identified during a trench evaluation.		TQ 1135 7540	MLO58962
32	Undated/Multi-Period	Palaeoenvironmental	Three former stream channels were identified during a trench evaluation, cutting into the natural gravels at an unknown depth.		TQ 1135 7540	MLO58963
33	Undated/Multi-Period	Aerial Photograph/Ditches	Linear ditches identified on aerial photographs have subsequently been destroyed by housing development.		TQ 1150 7528	MLO2161
34	Undated/Multi-Period	Aerial Photograph/Ditches	Linear ditches identified on aerial photographs have subsequently been destroyed by housing development.		TQ 1175 7370	MLO2162
35	Undated/Multi-Period	Aerial Photograph/Enclosure	Sub rectangular enclosure identified on aerial photographs has subsequently been destroyed by		TQ 1175 7370	MLO2158

			housing development			
36	Undated/Multi-Period	Aerial Photograph/Sub Surface Features	A series of crop/parch marks are visible on 1946-7 aerial photographs. These may be archaeological in nature and include possible linear and rectangular enclosure type features. These have been destroyed by the creation of a landfill site.		TQ 11245 74818	



Legend
 Site Boundary



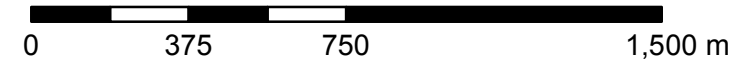
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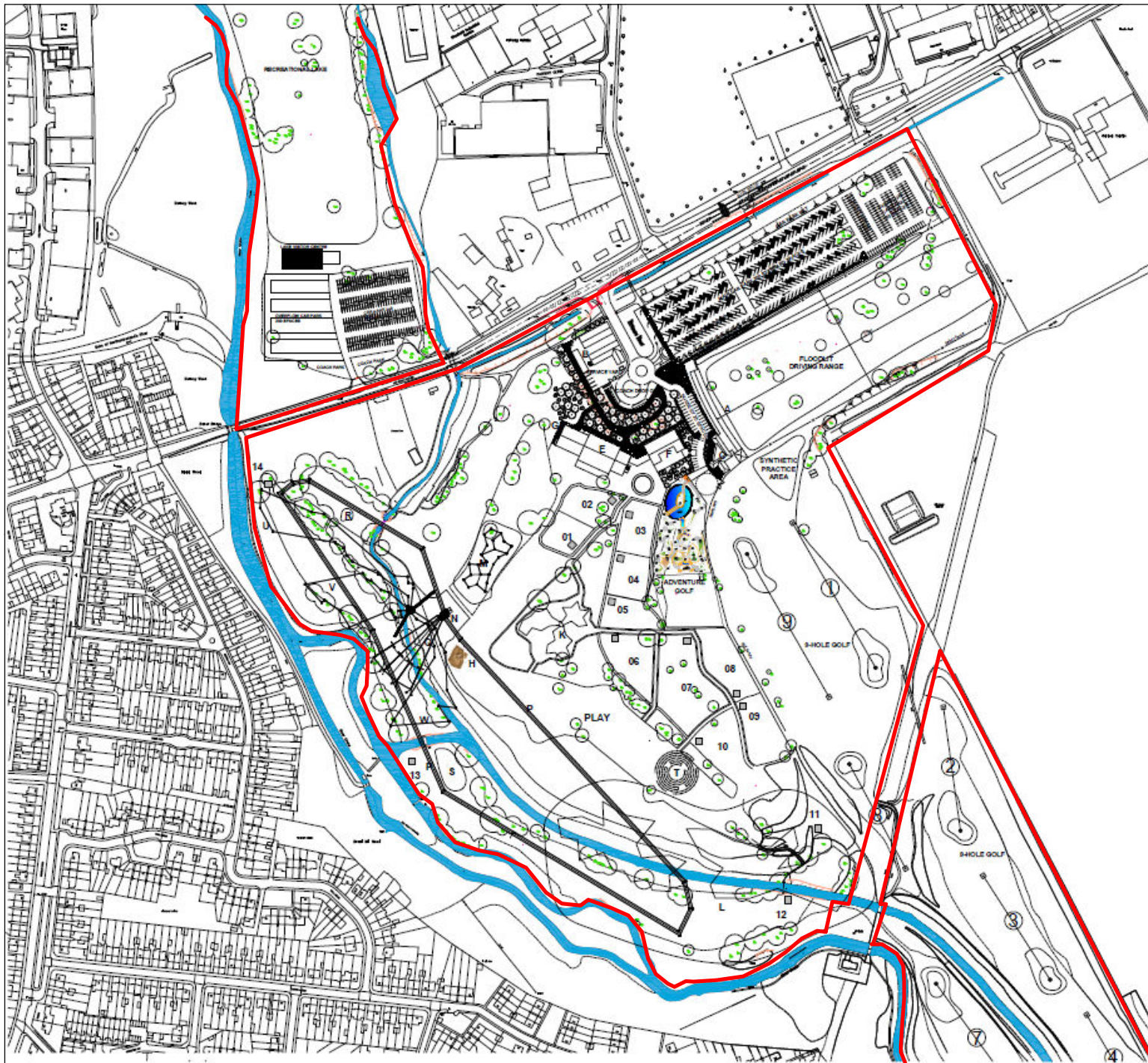
Figure 1: Site Location

Project: Hounslow Heath Golf Centre

Date: 23/06/15 Job Number: 10584

Drawn by: ZE Approved by: HS





Legend

Site Boundary

- A. DRIVING RANGE
- B. MAINTENANCE AND WORKSHOPS
- C. GOLF CLUB HOUSE
- D. MAIN PEDESTRIAN ENTRANCE
- E. MAIN BUILDING
- F. NURSERY
- G. HIGH ROPES
- H. VIEWING PLATFORM / CAFE / WC'S
- J. LAKE VISITOR CENTRE
- K. HIGH ROPES KIDS COURSES
- L. ACTIVE FUN PARK AREA
- M. CLIMBING PARK
- N. ADRENALINE TOWER
- P. DUO ZIP COURSE
- Q. POWER ZIP LINE
- R. GIANT SWING
- S. HUMAN CATAPULT
- T. WILLOW MAZE (23m DIAMETER)
- U. CLIMBING FOREST 1
- V. CLIMBING FOREST 2
- W. CLIMBING FOREST 3

ANIMAL HOUSES

01 - 14 ANIMAL ENCLOSURES

Site entrance road junction to
RPS Drawing JNY8426-100

Plan shows full extent of
detailed proposed development
information supplied to AB Heritage 12/6/15

Figure 2: Partial Proposed
Development Plan

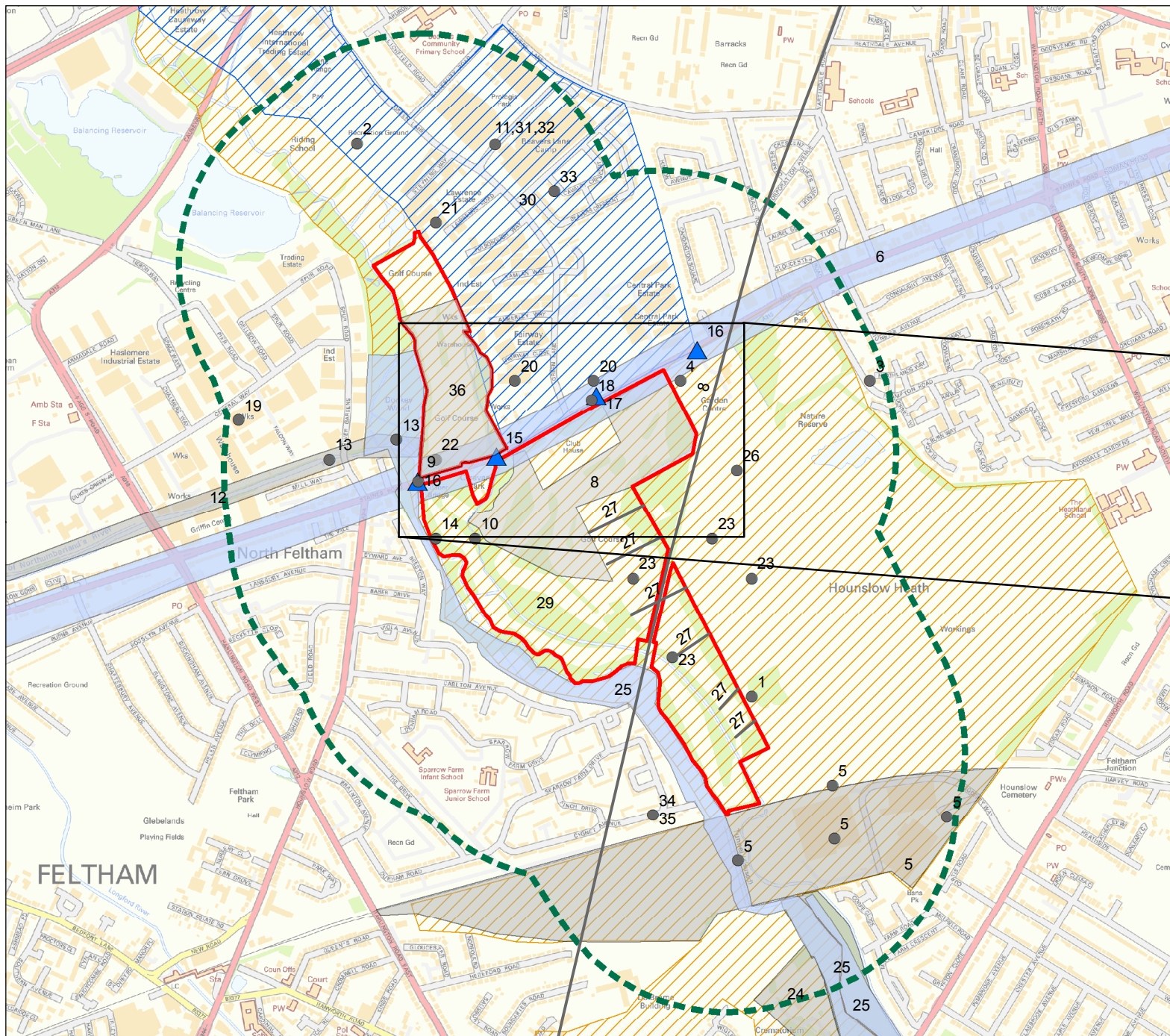
Project: Hounslow Heath Golf Centre

Date: 2014

Job Number: 10584

Reproduced from Plans drawn by:
Hadfield Carkwell Davidson





Legend

- Monument Point
- ▲ Listed Building
- Monument Polygon
- Archaeological Priority Area
- ▨ Hounslow Heath HLC
- ▨ West Hounslow Sheds HLC
- Site Boundary
- 500m Study Area

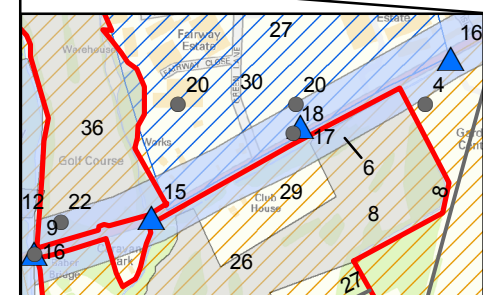
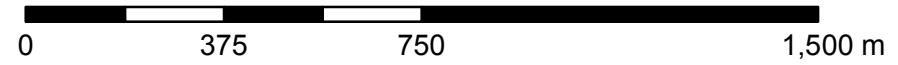


Figure 3: Map of Cultural Heritage Features

Project: Hounslow Heath Golf Centre

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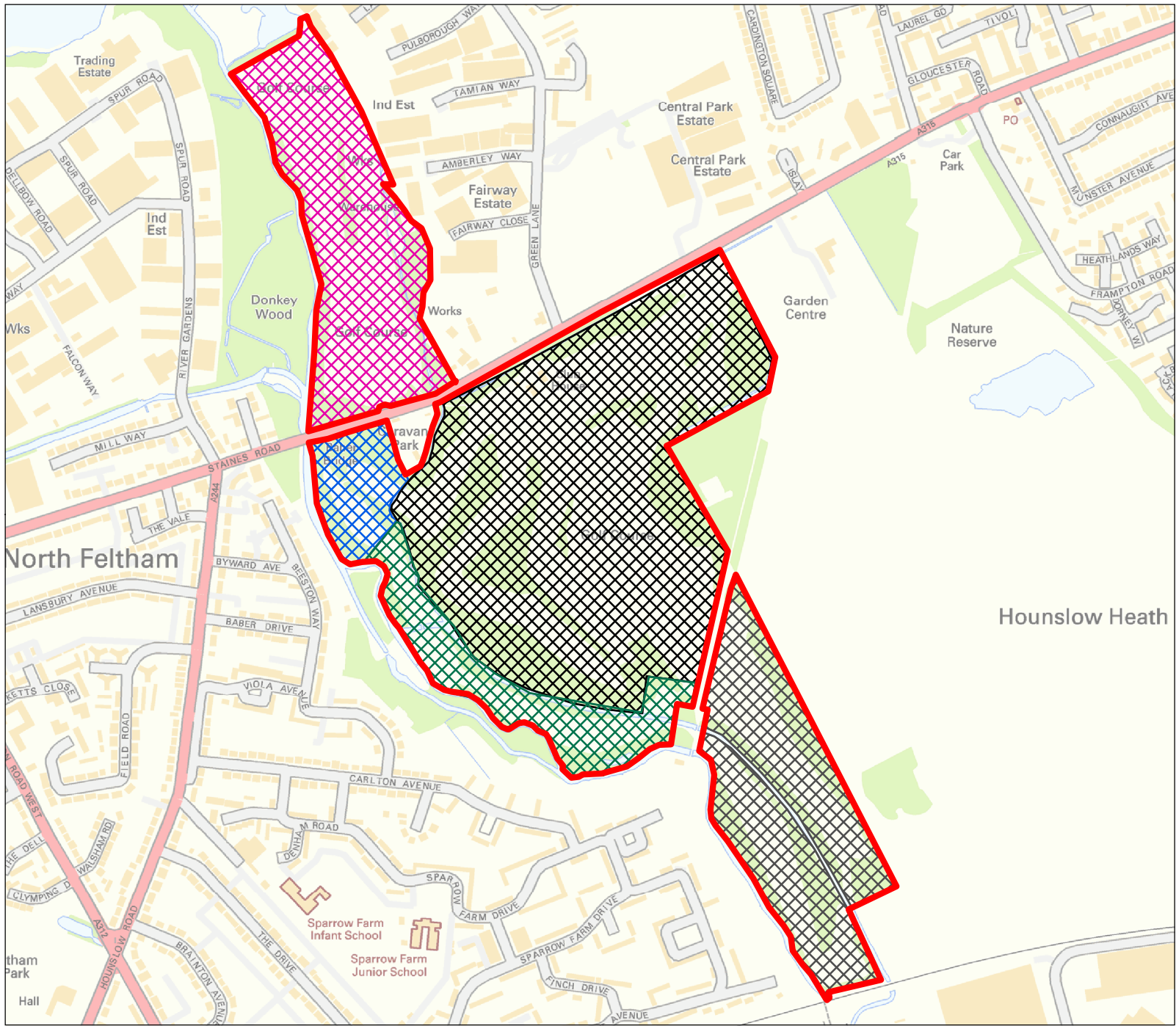
Legend
 Site Boundary



Figure 4: Plan of Site Visit Photograph Locations

Project: Hounslow Heath Golf Centre	
Date: 23/06/15	Job Number: 10584
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- Legend**
-  Truncated by Gravel Extraction (c. 5-8m deep)
 -  Truncated by Lake/Mill Head Pond
 -  Truncated by Creation of Landfill (>2m deep)
 -  Unknown Level of Past Impact
 -  Site Boundary

Figure 5: Plan of Past Impacts

Project: Hounslow Heath Golf Centre

Date: 23/06/15 Job Number: 10584

Drawn by: ZE Approved by: HS





AB Heritage Limited
Caerus Suite, 150 Priorswood Road,
Taunton, Somerset, TA2 8DU
Tel: 03333 440 206
e-mail: info@abheritage.co.uk