Appendix G – Archaeological Desk Based Assessment



Archaeological Desk-Based Assessment



Land at Broadwater Lake
Moorhall Road
Harefield
Middlesex
UB9 6PE

On behalf of

Mace Group

July 2021



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Cover: View looking north showing remains of concrete hopper associated with former modern sand and gravel works within the Site

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Land at Broadwater Lake Moorhall Road Harefield Middlesex UB9 6PE July 2021

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1 Executive Summary

Border Archaeology (BA) has been commissioned to carry out an Archaeological Desk Based Assessment with regard to the proposed construction of the Hillingdon Outdoor Activity Centre on land at Broadwater Lake, South Harefield, Moorhall Road, UB9 6PE, the results of which can be briefly summarised thus:

Prehistoric: The potential for encountering evidence of buried remains of prehistoric date has been assessed as **Moderate**. Although recorded artefactual evidence for prehistoric activity in the immediate vicinity of the site is limited to unstratified lithic finds, it may be noted that the Site is located on the western fringes of the Colne Valley Archaeological Priority Zone, with recognised potential for early prehistoric finds and palaeoenvironmental remains (including buried alluvial and peat deposits). Previous fieldwork has also identified evidence of buried peat deposits in relatively close proximity to the Site; such deposits if encountered could contain organic material which could shed significant light on human activity and environmental changes dating back to early prehistory.

Romano-British: The potential to encounter evidence for Romano-British activity has been assessed as **Low**, reflecting the dearth of recorded evidence of activity from this period, both in the immediate vicinity of the site and its wider environs. It is likely that the site lay at some considerable distance from any significant focus of Romano-British settlement during this period.

Medieval: The potential to encounter evidence of medieval activity in the vicinity of the Site has been assessed as **Low to Moderate**. This assessment reflects the fact the Site was located within an area of sparsely settled, unenclosed wetland moor (Harefield Moor) throughout the medieval period, on the western periphery of Harefield, a settlement of pre-Conquest origin. The site of the deserted medieval settlement of Moorhall and its 13th century chapel are located c. 450m southeast of the Site.

Post-Medieval: The potential to encounter archaeological remains of post-medieval date has been assessed as **Low to Moderate**. Historic mapping shows that the Site lay within a large area of unenclosed moorland known as Harefield Moor until the 19th century, when enclosure and drainage of the moorland took place. There is some limited potential to encounter evidence of post-medieval drainage features. Historic mapping still shows the study area to be water meadows until the 1960s, when a sand and gravel works and associated quarries were established within and adjacent to the Site, which are likely to have disturbed sub-surface remains of earlier periods.

Overall Conclusion: The overall archaeological potential of the Site has been assessed as **Moderate**, with particular reference to encountering prehistoric remains, in particular stratified alluvial and peat deposits of palaeoenvironmental significance. The potential for archaeological remains of medieval and post-medieval date has been assessed as **Low to Moderate**, while the potential for Romano-British remains is considered to be **Low**.

Recommendations: It is BA's considered opinion that, *prima facie*, the archaeological potential of the site does <u>not</u> present an impediment to the proposed development. Given the <u>Moderate</u> potential for prehistoric remains but also taking into account the likely truncation by modern quarrying, it is suggested that a programme of archaeological monitoring and recording of geotechnical investigations may be the most appropriate form of mitigation in this instance, to determine the survival of archaeological deposits within the site. The details of this programme would be subject to agreement with the Greater London Archaeological Advisory Service.



2 Introduction

Border Archaeology (BA) has been instructed by Mr Richard Densham of Mace Group to produce an Archaeological Desk Based Assessment (ADBA) in connection with the proposed re-location and construction of the Hillingdon Outdoor Activity Centre and provision of site access at Broadwater Lake Moorhall Road, UB9 6PE (NGR TQ 04710 89160).

This ADBA assesses the impact of the proposed development on buried heritage assets (archaeological remains) and forms an initial stage of site investigation enabling the local planning authority to formulate an appropriate response.

3 Site Description

The proposed development is located on an irregularly shaped promontory of wooded land on the E side of Broadwater Lake, formerly occupied by a sand and gravel works, situated within the outer London residential suburb of South Harefield (Hillingdon Borough). The Site covers an approximate area of $90,930\text{m}^2$ and is bordered to the E by the line of the Grand Union Canal (formerly the Grand Junction Canal), Broadwater Lake makes up its N and W boundaries, and there is scrubland to the S. The site is currently accessed along a trackway W of the canal, leading from Moorhall Road c.420m to the S.

The Site is located approximately 1.4km SSW of Harefield along the Greater London Buckinghamshire boundary. The E part of the Site appears to lie partially within the Colne Valley Archaeological Priority Zone (APZ) which incorporates the Archaeological Priority Areas (APA) of Harefield North, West Drayton, and parts of Uxbridge, while the remaining parts of the site lie just outside the W boundary of the APZ. The South Harefield APA is within 700m ENE of the Site, and the Harefield Village Conservation Area (CA) within 600m.

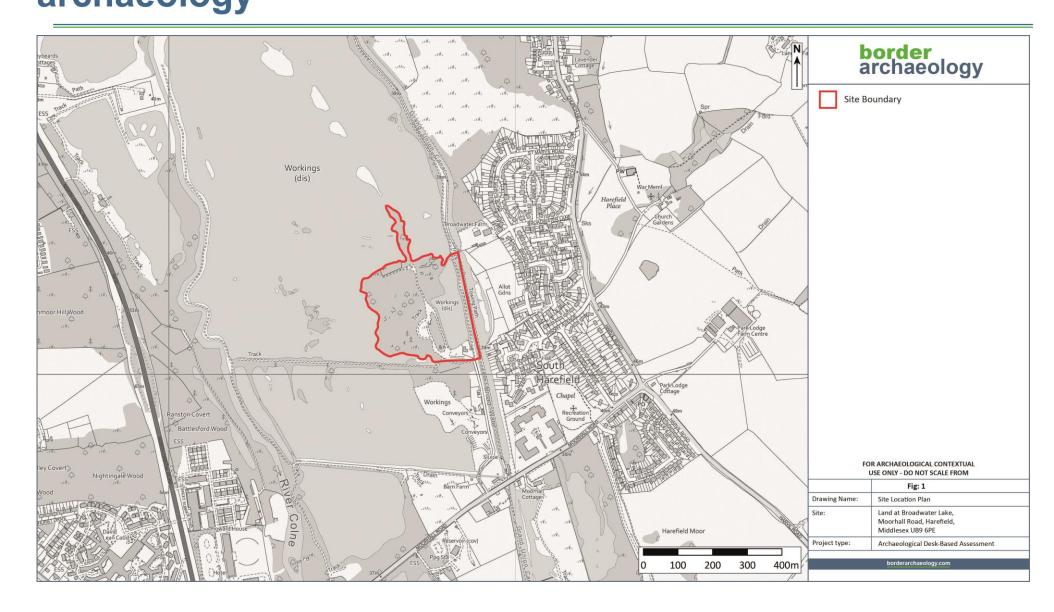
3.1 Soils & Geology

The underlying geology in the vicinity of the site consists of Chalk bedrock of the Seaford Chalk Formation and Newhaven Chalk Formation (undifferentiated) formed approximately 72 to 90 million years ago in the Cretaceous Period, within a local environment previously dominated by warm chalk seas. Overlying superficial deposits are recorded as Alluvium - Clay, Silt, Sand and Gravel. Superficial Deposits formed up to 2 million years ago in the Quaternary Period, within a local environment previously dominated by rivers. Superficial deposits of Shepperton Gravels are recorded to the immediate W of the site (BGS 2021).

No records of geotechnical investigations have been identified within the site, however data recorded at several boreholes within 100m of the Site at Widewater Embankment 87 showed a stratigraphy of made ground to a depth of *c*2.3m overlying soft dark brown and dark greyish brown slightly sandy locally organic clay, over dark brown and dark greyish brown slightly clayey fine to medium sand and limestone gravel. Several other boreholes taken at the same time showed similar deposits of organics, clay, sand and gravels.

Archaeological Desk-Based Assessment

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4 Methodology

3.1 Aims and Objectives

This ADBA seeks to identify any known or potential archaeological and built-heritage assets (both designated and undesignated) in the vicinity of the specific study area and to establish the importance of these archaeological and built heritage assets (including an assessment of their character, extent and quality) within a local, regional and national context.

3.2 Criteria for Assessment of Potential and Importance of Heritage Assets

Potential

This assessment contains a record of the known and potential archaeological and built-heritage assets in the vicinity of the proposed development. The potential for encountering a particular resource in the vicinity of the site has been assessed according to the following scale:

Low – Very unlikely to be encountered.

Moderate – Possibility that features may be encountered in the vicinity of the site.

High – Remains highly likely to survive in the vicinity of the site.

Importance (Value)

The criteria used to determine the importance of archaeological and built heritage assets in the vicinity of the proposed development (*Table 1*) has been informed by guidelines for assessing cultural heritage assets contained in *Design Manual for Roads and Bridges (DMRB) Sustainability and Environment Appraisal LA 106: Cultural Heritage Assessment* (revised January 2020) and informed by relevant Historic England guidance regarding the assessment of archaeological assets, including: *The Setting of Heritage Assets Historic Environment Good Practice Advice in Planning Note 3 2nd Edition* (Historic England 2017), *Statements of Heritage Significance: Analysing Significance in Heritage Assets Historic England Advice Note 12* (Historic England 2019) and *Preserving Archaeological Remains* (Historic England 2016).

BA is also cognisant of general guidelines on the assessment of heritage assets within the *National Policy Planning Framework* Chapter 16, in particular paragraph 189 stating that ...in determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance (MCHLG 2019).

This Assessment also reflects local and regional planning policy guidance regarding the assessment of archaeological assets contained in the *London Plan* (Policy 7.8 Heritage Assets and Archaeology) and in the *London Borough of Hillingdon Local Plan Part 2 Development Management Policies* (Policy 5 Historic and Built Environment).



	Table 1: Factors for assessing the importance of archaeological and built heritage assets				
Very High World Heritage Sites (including nominated sites).					
	Assets of acknowledged international importance.				
	Assets that can contribute significantly to acknowledged international research objectives.				
High	Scheduled Monuments (including proposed sites).				
	Undesignated assets of schedulable quality and importance.				
	Assets that can contribute significantly to acknowledged national research objectives.				
Medium	Designated or undesignated assets that contribute to regional research objectives.				
Low Designated and undesignated assets of local importance.					
Assets compromised by poor preservation and/or poor survival of contextual associations.					
	Assets of limited value, but with potential to contribute to local research objectives.				
Negligible	Assets with very little or no surviving archaeological interest.				
Unknown	The importance of the resource has not been ascertained.				

3.3 Consultation of Archaeological Records

In order to understand the full archaeological and historical context of the Site, information was collected on the known cultural heritage features within a 750m study area around the site, the results of which are shown on a series of maps (*figs. 2-5; Tables 2-4*). These maps show the location of known archaeological and built heritage features (including SAMs, archaeological events and monuments) and previous archaeological interventions within the study area, which are listed in the gazetteer and referred to in the text.

The research carried out for this ADBA consists of the following elements:

- Greater London Historic Environment Record (GLHER) information from past investigations, find spots, documentary & cartographic sources and aerial photographs. A total of 21 archaeological monuments, 9 events and 5 listed buildings were recorded within a 750m radius of the site, based on consultation of the GLHER;
- Historic England information on statutory designations, including Scheduled Ancient Monuments (SAMs),
 Registered Parks and Gardens and Listed Buildings, along with identified Heritage at Risk;
- British Geological Survey (BGS) solid and drift geology digital mapping and geological borehole record data;
- The British Library, National Archives and London Metropolitan Archives historic maps, published and unpublished archaeological and historical accounts;
- Internet sources LPA local plan and information on Conservation Areas, APAs and locally listed buildings;
- Historic England Archive collections of oblique and vertical aerial photographs dating back to 1922 were consulted.

Due to travel restrictions as a result of the Covid-19 pandemic, it was not possible to undertake a detailed site visit, as per usual BA practice. Photographs of the site and its immediate setting have been kindly supplied by the Client. BA has endeavoured to use its experience in accessing alternative sources and methodologies to provide relevant information; site visits will be undertaken in the future if appropriate and so required.



5 Archaeological Assessment

5.1 Prehistoric

The site is located within the valley of the River Colne, on the W periphery of the Colne Valley Archaeological Priority Zone (APZ) designated by Hillingdon Council), an area which has been recognised as having good potential for the preservation of early prehistoric remains, both in terms of lithic finds (particularly from the Palaeolithic) and buried alluvial and peat deposits, much of which was revealed during gravel extraction in this area during the 20th century. Buried alluvial and peat deposits, if encountered, could potentially contain organic remains (including waterlogged wood and pollen) which could possibly shed light on human activity and past environmental changes dating back to early prehistory.

Several isolated lithic find spots have been recorded within the 750m search radius and, whilst all appear to have been unstratified, they do at least point to some level of early prehistoric activity in the area. Finds include a Lower Palaeolithic hand axe, cores and flakes, some in mint condition, which were recovered during groundworks for a road cutting in 1928 at Normer Hill Denham, c. 400m WNW of the Site (GLHER MLO445; Wymer 1999, 90). Similarly, a number of surface finds including Palaeolithic scrapers, blades, cores, flakes and a borer were recovered from a post medieval quarry named 'Dewes Pit', located about 310m SE of the site in the vicinity of present-day Peerless Drive (GLHER MLO10560). An unstratified Mesolithic worked flint was also found c. 600m ENE of the Site, within a field adjacent to St Marys Church, within the South Harefield APA GLHER MLO293).

A geoarchaeological examination of peat deposits encountered during an archaeological evaluation at Broadwater Gardens (GLHER ELO2883, ELO7358), c. 175m E of the Site, indicated that the organic sediments accumulated around 9700BP and 5000BP (Cotswold Archaeology 1997). Whilst no archaeological features or artefacts were recovered, there remains the potential that similar *in-situ* peat deposits may be encountered in the vicinity of the Site, which could possibly contain significant evidence of organic remains including pollen and waterlogged wood.

These early prehistoric lithic finds and buried peat deposits recorded within the study area should be viewed in the context of evidence for early prehistoric activity which has been identified elsewhere within the Colne Valley, including Palaeolithic interglacial sites at Yiewsley (c. 8.8km to the S), Denham (c. 2.5km to the W) and Harefield itself (Wymer 1999, 47-50). Other early prehistoric sites investigated at Uxbridge (c. 5km) and Staines (c. 17km) have revealed a sequence of hunter-gatherer butchery sites.

No evidence for later Bronze Age or Iron Age activity has been recorded within the study area, with only limited evidence for later prehistoric settlement within the wider locality of the Colne Valley APZ. This probably reflects the fact that the Colne Valley floodplain remained as low-lying marshland throughout this period and was frequently prone to flooding (Colne Valley Landscape Partnership 2018).

Conclusion: The potential for encountering evidence of buried remains of prehistoric date has been assessed as **Moderate**. Although recorded artefactual evidence for prehistoric activity in the immediate vicinity of the site is limited to unstratified lithic finds, it may be noted that the Site is located on the western fringes of the Colne Valley Archaeological Priority Zone, with acknowledged potential for early prehistoric finds and palaeoenvironmental remains (including buried alluvial and peat deposits). Previous fieldwork has also identified evidence of buried



peat deposits in relatively close proximity to the Site; such deposits if encountered could contain organic material which could shed significant light on human activity and environmental changes dating back to early prehistory. Evidence of stratified lithic finds or buried alluvial or peat deposits would be regarded as being of **High** importance in archaeological and geoarchaeological terms as they could shed light on early prehistoric habitation and changing environmental conditions.

5.2 Romano-British

There is no recorded evidence of Romano-British activity in the immediate vicinity of the site based on consultation of archaeological records contained in the GLHER. The wider Colne Valley appears to have remained sparsely populated, low-lying marshland, with settlement activity probably being focused further to the south. Several occupation sites of Romano-British date having been identified at Heathrow and Staines.

Conclusion: The potential to encounter evidence for Romano-British activity has been assessed as **Low**, reflecting the dearth of recorded evidence of activity from this period, both in the immediate vicinity of the site and its wider environs. It is likely that the site lay at some considerable distance from any significant focus of Romano-British settlement during this period.

5.3 Medieval

Scanty evidence of early medieval activity has been identified within the 750m search area defined for this study, restricted to the find of a possible Saxon spearhead found near Dewes Pit, about 310m SE of the Site.

Historical records suggest that study area remained as remote, low-lying, unenclosed marshy moor (referred to in later documents and maps as Harefield Moor) throughout the medieval and early post-medieval periods, lying on the western fringes of the manor and parish of Harefield. The manor of Harefield was a settlement of early medieval origin first recorded as 'Herefelle' in Domesday Book (1086) when it was held by the Norman lord Richard de Clare. The place name, of Old English origin, appears to denote 'an area of open land used by an army' (Mills 2003, 227). The chief focus of early medieval settlement was probably represented by the parish church of St Mary (GLHER MLO81978, DLO20241) c. 670m ENE of the Site. The fabric of the church, which is Grade I listed, retains evidence of 12th century masonry in the west wall of the nave, but is predominantly of 14th century construction.

The church likely formed an early focus for the medieval settlement, which appears to have extended NW over time (GLHER MLO68621). The site of a 13th century house named 'Ancrehaglie' are believed to survive on the N side of the churchyard (GLHER MLO68583). Located to the immediate S of the church is the site of Harefield Place, demolished in 1813, which may represent the site of the principal manor house in Harefield during the medieval period although this identification remains uncertain (GLHER MLO442; Reynolds 1962, 242).

Little evidence has been found to suggest that the chief settlement at Harefield extended significantly westwards during the medieval period, although there is some evidence for limited encroachment on the S periphery of the moorland during the later medieval period. Located about 450m to the SE of the Site is the deserted medieval settlement of Moorhall (GLHER MLO10635). The settlement is first documented in about 1180-85, when it was granted to the Knights Hospitallers and remained in their hands until the Dissolution (Reynolds 1962, 243). No



trace of the manor house remains extant; however, the remains of a medieval chapel at Moorhall appear to have survived until c.1960 when it was demolished (GLHER MLO4556). Records show that it was a two-storey building of early 13th century date, of flint rubble with stone dressings, and was restored in the 17th century and later, when it was put to agricultural use (Reynolds 1962, 238). Documentary records indicate that there were numerous grants of land made to the Knights Hospitallers during the 13th century and it would appear that much of this land granted to the Hospitallers encompassed the moorland on the W fringes of Harefield. There is limited evidence for medieval quarrying activity in the vicinity of the Site; with the probable site of a marlpit at Moorhall held by one Felicia Atte Watre in 1318 recorded c. 290m SE of the Site (GLHER MLO68582).

Conclusion: The potential to encounter evidence of medieval activity in the vicinity of the Site has been assessed as **Low to Moderate**. This assessment reflects the fact the Site was located within an area of sparsely settled, unenclosed wetland moor (Harefield Moor) throughout the medieval and early post-medieval periods, on the western periphery of Harefield, a settlement of presumed early medieval origin. The site of the deserted medieval settlement of Moorhall and its 13th century chapel are located c. 450m SE of the Site. Should buried features or deposits of medieval date be revealed, these would be considered of **Medium** importance as they could possibly shed further light on the nature and extent of medieval settlement in this area, and the use and exploitation of riverine environments and moorland management during the medieval period

5.4 Post-medieval

Cartographic evidence indicates that, during the early post-medieval period, the Site appears to have lain within the central portion of Harefield Moor, at that time an extensive area of largely unenclosed low-lying marshland within an isthmus formed by two branches of the River Colne, as depicted on John Rocque's map of Middlesex, dated 1754 (*fig. 7*). Rocque's map shows the Site and its immediate surroundings as being unenclosed although it is not entirely clear whether this is an accurate depiction; documentary evidence suggests that there had been some piecemeal enclosure in the vicinity of Harefield Moor during the 16th-18th centuries although it is true that large areas of it still remained unenclosed well into the 19th century (Reynolds 1962). The area further to the E and SE, in the vicinity of Harefield village and Moorhall, is shown as having been heavily enclosed for agricultural purposes.

Significant changes to the fieldscape pattern in the vicinity of the Site appear to have occurred in the late 18th/early 19th century, as shown on an Ordnance Survey drawing of 1811 (*fig.8*). The line of the Grand Junction Canal, constructed between 1793 and 1805, is shown as running along the E boundary of the Site; the canal is shown as have been broadened at that point, possibly to allow for the passage of vessels along the canal. A linear channel aligned ENE-WSW is shown as extending across the N portion of the Site, from the newly constructed canal to the old course of the River Colne further to the W. A trackway is also shown as leading NW-SE from the Canal towpath across the moor and crossing the site. The 1811 map does not show any wharves or other ancillary structures associated with the Canal within the site, the nearest recorded structure, the Widewater Lock cottage, a Grade II listed 18th century lock keeper's house, is located c. 440m SSE from the Site (GLHER MLO84935, DLO19907).

Little detail is provided by 1846 tithe map (*fig. 9*), although this may reflect the fact that the moor had previously been subject to enclosure or that it was historically exempt from tithe. The OS 1st edition map of 1872 (*fig. 10*) shows the feeder channel running ENE-WSW from the Canal across the N portion of the Site with a parallel channel



running just beyond the S boundary of the Site. These two channels are shown as linked by a perpendicular drainage ditch running NNW-SSE. The NW-SE aligned trackway shown on the 1811 surveyor's drawing is no longer present, and the pool adjacent to the E side of the Canal is marked as Broadwater. Moorhall Farm and the associated Chapel are depicted in some detail to the SE of the Site.

Little change to the pattern of land use and fieldscape within the site is indicated on the OS 2nd and 3rd edition maps dated 1897 and 1916 respectively (*figs. 11 & 12*). The OS 4th edition map of 1939 (*fig. 13*) shows the site itself as unchanged although there had been some residential development to the SE in the vicinity of Moorhall Farm, which had been demolished in 1922 (Reynolds 1962). By 1947, as shown on a RAF vertical photograph of that date, a substantial quarry site had been established to the N of Moorhall Lane, to the immediate S of the Site (fig. 16) and is marked as a gravel put on an OS 1:10560 map of 1960.

Later 20th century OS mapping and aerial photographs show that an extensive sand and gravel works was established within the Site from the late 1960s through to the late 1980s, in connection with the construction of Heathrow Airport and the M25 (GLHER MLO 72618). An Ordnance Survey map of 1975 shows a series of hoppers and conveyors within the N, S and W portions of the Site, associated with substantial quarry workings to the N and W. and later aerial photographs dated 1990 show further quarry pits within the E portion of the site. The sand and gravel works were closed in the early 1990s and the associated extraction sites have since been repurposed as lakes and are now managed as a wetland reserve and designated as a Site of Special Scientific Interest.

Conclusion: The potential to encounter archaeological remains of post-medieval date has been assessed as **Low to Moderate**. Historic mapping indicates that the site lay within an extensive area of unenclosed moorland known as Harefield Moor until the 19th century, when enclosure and drainage of the moorland took place. There is some limited potential to encounter evidence of post-medieval drainage features. Historic mapping still shows the Site to be broadly undeveloped water meadows until the mid-20th century. However, between the late 1960s and *c*.1990 a substantial sand and gravel works was established within the Site, associated with quarry workings to the N, W and E; it is likely that this will have caused some disturbance to buried archaeological remains.

6 Historic Environment Record Gazetteers and Maps

#	MonUID	PrefRef	Name	Date	NGR
1	MLO445	050043/00/00	Findspot: Acheulian Handaxes	Palaeolithic	TQ 0420 8920
2	MLO10560	050125/00/00	Findspot: Lithic Finds	Palaeolithic	TQ 0500 8900
3	MLO2934	050150/00/00	Findspot: Mesolithic Flints	Mesolithic	TQ 0523 8952
4	MLO10635	050502/00/00	Site of C12 Farm, Recreation Ground	Medieval	TQ 0517 8891
5	MLO68583	052924/00/00	Site of C13 House, Church Hill	Medieval	TQ 0533 8962
6	MLO68621	052946/00/00	Site of Med. Village of Harefield	Medieval	TQ 0525 8960
7	MLO4556	MLO4556	Site of C13 Chapel, Moorhall Road	Medieval	TQ 0516 8890
8	MLO81978	MLO81978	Church of St Mary (GI)	Medieval	TQ 0533 8958
9	MLO108696	MLO108696	St Mary-the-Virgin Churchyard	Medieval	TQ 0537 8955
10	MLO442	050500/00/00	Site of Med./PM Manor House, S of Harefield	Med./PM	TQ 0540 8951
			Church		



#	MonUID	PrefRef	Name	Date	NGR
11	MLO68582	052923/00/00	Quarry, Harefield High Street	Med./PM	TQ 0500 8900
12	MLO725	054412/00/00	Landfill Site, Church Hill	Post-med.	TQ 0480 8990
13	MLO72618	054469/00/00	Landfill Site, Moorhall Road	Post-med.	TQ 0480 8910
14	MLO6903	210053/00/00	Site of PM Manor House, Church Hill	Post-med.	TQ 0540 8950
15	MLO84930	MLO84930	Australian War Memorial (GII)	Post-med.	TQ 0535 8952
16	MLO84931	MLO84931	Entrance Archway to Australian Military	Post-med.	TQ 0531 8955
			Cemetery (GII)		
17	MLO84935	MLO84935	Widewater Lock Cottage (GII)	Post-med.	TQ 0497 8872
18	MLO85125	MLO85125	Church Gardens Nursery & Nursery Cottage	Post-med.	TQ 0541 8948
			(GII)		
19	MLO100831	MLO100831	Harefield Place/Church Gardens, Church Hill	Post-med.	TQ 0544 8951
20	MLO104586	MLO104586	WWII Pillbox	Post-med.	TQ 0492 8905
21	MLO105838	MLO105838	WWII Pillbox	Post-med.	TQ 0490 8905

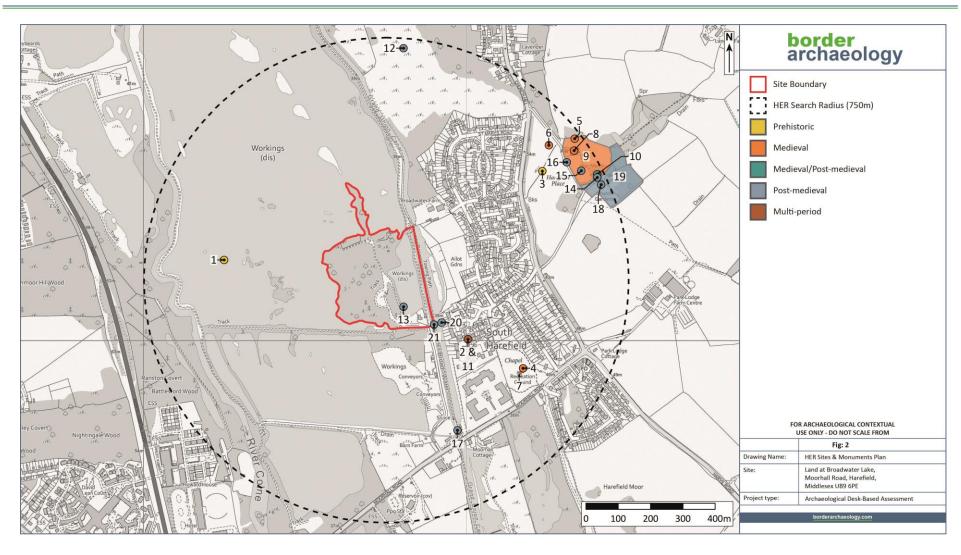
Table 2: Gazetteer of monuments recorded within a 750m radius of the site based on consultation of the Greater London HER

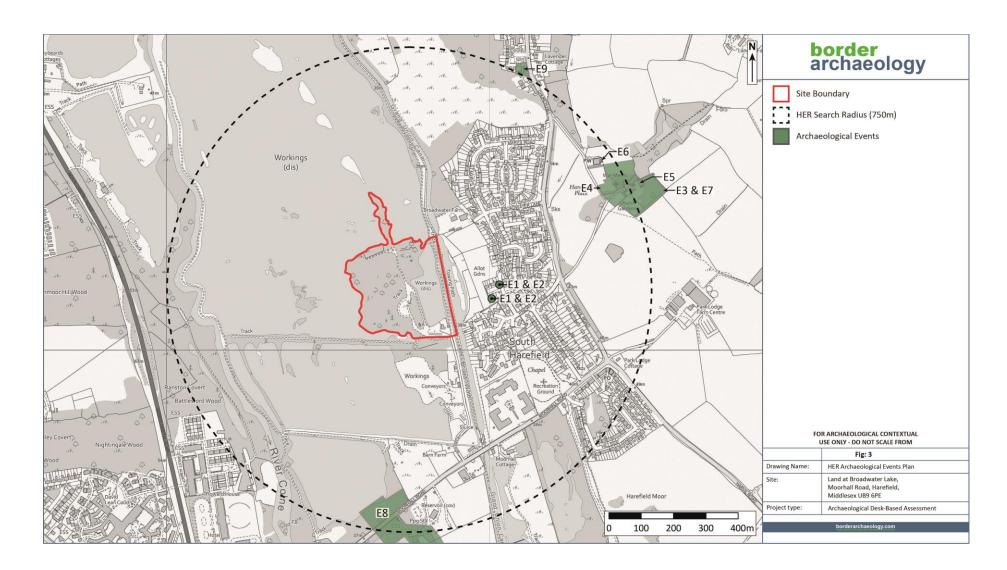
#	EvUID	Name	Date	NGR
E1	ELO2883	Eval.: Broadwater Gardens	1997	TQ 0501 8918
E2	ELO7358	Sedimentological Assessment: Broadwater Gardens	1997	TQ 0501 8918
E3	ELO17643	HBR: Harefield Place	1997	TQ 0542 8950
E4	ELO17804	HBR: The Garden Walls, Harefield Place	1997	TQ 0541 8951
E5	ELO17779	WB: Church Gardens	2002	TQ 0545 8950
E6	ELO14358	DBA: St Mary's Church	2005	TQ 0534 8958
E7	ELO17502	Eval.: Church Gardens	2015	TQ 0544 8948
E8	ELO21068	Eval.: Colne Valley Viaduct	2018-2020	TQ 0478 8839
E9	ELO20681	HBR & WB: The White House	2019-2020	TQ 0510 8986

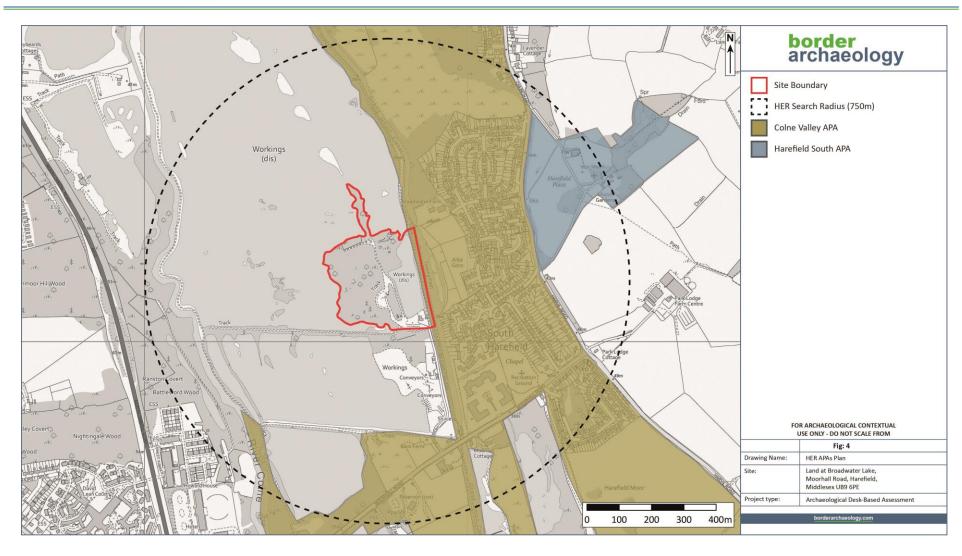
Table 3: Gazetteer of archaeological events recorded within a 750m radius of the site based on consultation of the Greater London HER

#	DesigUID	PrefRef	Name	Grade	NGR
B1	DLO20241	1358363	Church of St Mary	1	TQ 0533 8958
B2	DLO19902	1061377	Australian War Memoiral	П	TQ 0535 8952
			Entrance Archway to the Harefield Australian Military		
В3	DLO19903	1061378	Cemetery	II	TQ 0531 8955
B4	DLO19907	1080085	Widewater Lock Cottage	П	TQ 0497 8872
B5	DLO20108	1192887	Church Gardens Nursery & Nursery Cottage	П	TQ 0541 8948

Table 4: Gazetteer of listed buildings recorded within a 750m radius of the site based on consultation of the Greater London HER

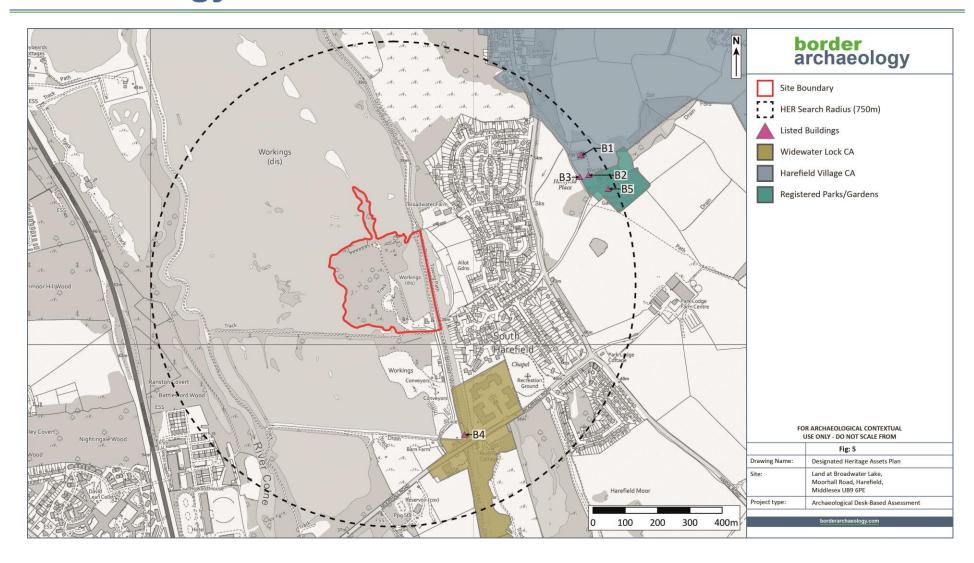






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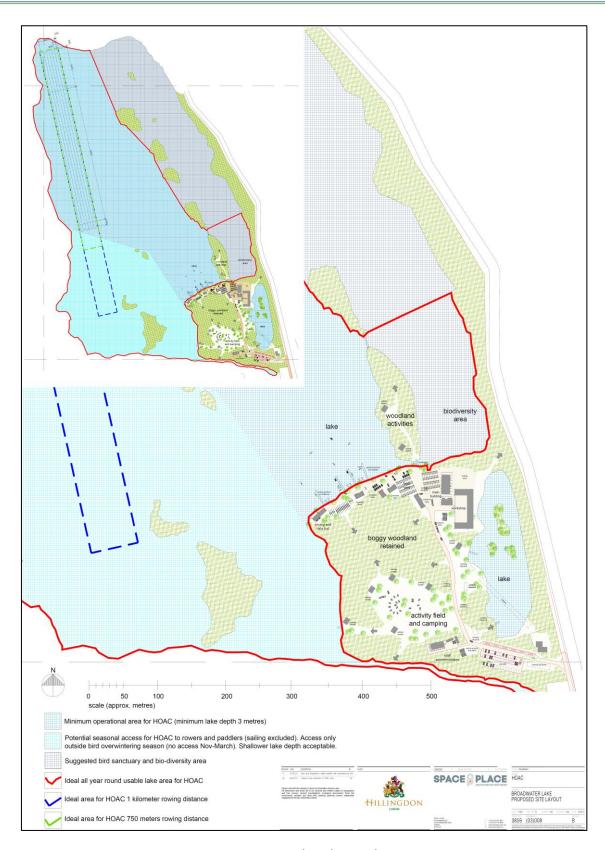


Fig. 6: Proposed site layout plan (Reproduced by courtesy of the client)



7 Site Visit

The Site of the proposed development comprises an irregularly shaped spit of densely wooded land on the E side of Broadwater Lake, with former gravel workings to the E (now waterfilled and heavily tree-lined). The Grand Union Canal demarcates the eastern boundary of the Site, which is currently accessed along a compacted rubble trackway W of the canal, leading from Moorhall Road *c*.420m to the S (*Photo 1*).



Plate 1: View looking NW along trackway within S portion of Site



Plate 2: View looking N showing heavily overgrown areas of hardstanding within NW portion of Site



Evidence of heavily overgrown, extensive areas of gravel and concrete hardstanding relating to the modern sand and gravel works were noted across the N, S and W portions of the site (*Plates 2 & 3*). The remains of a partly demolished concrete structure (*Plate 4*) were noted within the N portion of site, which is likely to represent the remains of a hopper and conveyor associated with the mid-20th century gravel works, several of which are marked on an Ordnance Survey map of 1975 within the site. No visible features of archaeological interest were identified.



Plate 3: View looking W showing extensive area of modern hardstanding within W portion of Site



Plate 4: View looking N showing overgrown remains of concrete hopper within N portion of Site



8 Conclusions

8.1 Potential Impacts

The following brief description of the development is based on details provided by the client in July 2021 (fig. 6). Subsequent publication of more detailed, revised proposals and specifications for the proposed development, together with updated plans, may necessitate revisions to this report and the conclusions reached. The proposed development would involve the construction of the new Hillingdon Outdoor Activity Centre, with a staff accommodation and welcome centre located at the S end of the site. The main activity centre building will be located within the N portion of the promontory site, with a rectangular workshop to the SE and a series of ancillary structures to the W including a boat hut on the NW edge of the site. The former gravel workings within the E portion of the site will be landscaped to form a small boating lake. Full specifications of the proposed foundations of the new buildings were not available at time of writing but it may be assumed that potential impacts from the proposed development on buried archaeological remains could potentially include the following:

8.1.1 Excavation of foundation trenching

Standard strip foundations would entail the removal of any archaeological remains within the footprint of each excavated strip to a typical depth of 1.0–1.5m below existing ground level as assumed for the purposes of this assessment. This would remove or truncate any archaeological remains within the footprint of the groundworks.

8.1.2 Excavation of service trenching and landscaping features

The excavation of new service trenches, drains and other landscaping features, such as attenuation ponds, may extend to a depth of at least 1.0 - 1.5m below existing ground level as assumed for the purposes of this assessment. This would entirely remove or truncate any archaeological remains within the footprint of the works.

8.2 Overall Conclusions

The overall archaeological potential of the site has been assessed as **Moderate**, with particular reference to encountering evidence of early prehistoric activity and buried alluvial and peat deposits of palaeoenvironmental significance. Although recorded evidence for prehistoric activity in the immediate vicinity of the site is limited to unstratified lithic finds, previous investigations nearby have recorded stratified peat deposits with potential to contain organic remains, which could shed light on human activity and environmental changes dating back to early prehistory. The potential for remains of Romano-British date to be encountered is considered to be **Low**, while the potential for evidence of medieval and post-medieval activity has been assessed as **Low to Moderate**.

It should be noted that there is potential for significant disturbance to sub-surface deposits as a result of modern sand and gravel extraction in the vicinity of the site; although the extent and depth of this truncation remains unclear as there has been no previous archaeological investigation within the site. It is considered that deep excavations, if required for groundworks associated with the new activity centre, may have greater potential to



encounter evidence of undisturbed archaeological remains or buried alluvial/peat deposits of palaeoenvironmental interest.

Recommendations: It is BA's considered opinion that, prima facie, the archaeological potential of the site does not present an impediment to the proposed development. Given the Moderate potential for prehistoric remains but also taking into account the likely degree of truncation by modern quarrying, it is suggested that a programme of archaeological monitoring and recording of geotechnical investigations may be the most appropriate form of mitigation in this instance, to establish the depth and survival of archaeological deposits within the site and in particular to determine the presence of any stratified peat deposits of prehistoric date. The details of this programme would be subject to agreement with the archaeological monitoring body, in this case the Greater London Archaeological Advisory Service.

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10 References

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10.1 Cartography

(All maps were obtained from the National Archives unless otherwise stated)

1757: A map of the county of Middlesex surveyed by John Rocque

1811: Ordnance Survey Map of Uxbridge and Windsor (British Library)

1846: Harefield parish tithe map

1872: OS 1st edition 6-inch Map of Middlesex

1897: OS 2nd edition 6-inch Map of Middlesex

1916: OS 3rd edition 6-inch Map

1939: OS 4th edition 6-inch Map

1950: OS provisional edition 6-inch Map

1960: OS 1:10000 map

1975 OS National Survey 1:10000 map

(Historic illustrations of the study area, dating back to the 19th century were consulted using records at the British Library, the London Metropolitan Archives and the National Archives. Aerial photographs of the study area dating back to c. 1947 were consulted using records held at the London Metropolitan Archives and the Historic England Archive)

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11 Appendix 1: Historic Maps

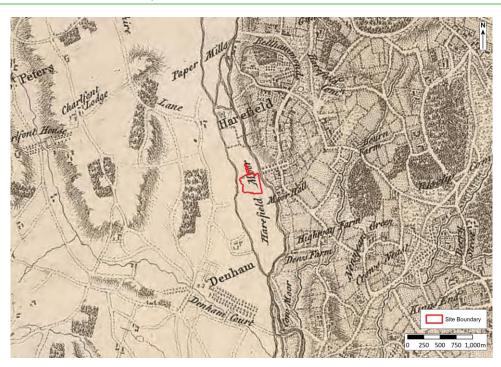


Fig. 7: Extract from John Rocque's Map of Middlesex (1757) with site circled in red (Reproduced by courtesy of the National Archives)

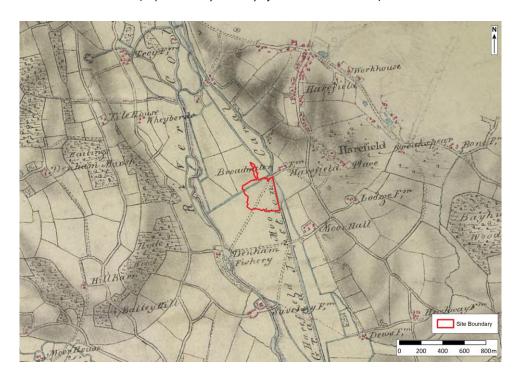


Fig. 8: Extract from an Ordnance Survey drawing of Uxbridge and Windsor (1811) with site marked in red (Reproduced by courtesy of the British Library)



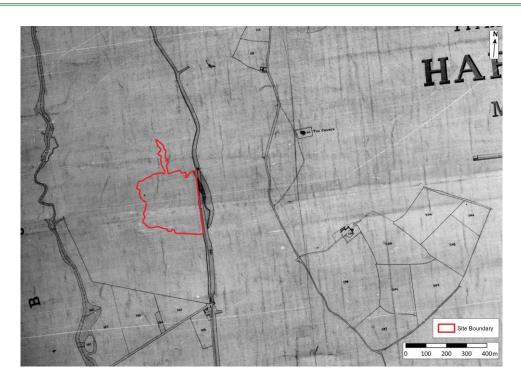


Fig. 9: Extract from the Harefield Parish Tithe Map (1846) (Reproduced by courtesy of the National Archives)

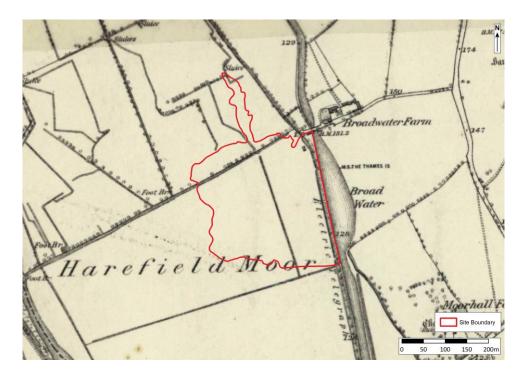


Fig. 10: Extract from the OS 1st edition 6-inch map of Buckinghamshire (1872) (Reproduced courtesy of the National Archives)



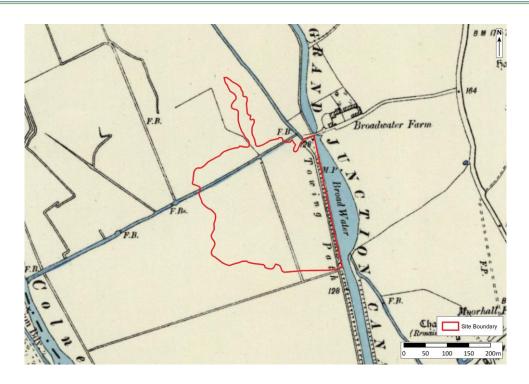


Fig. 11: Extract from the OS 2nd edition 6-inch map of Middlesex (1897) (Reproduced courtesy of the National Archives)

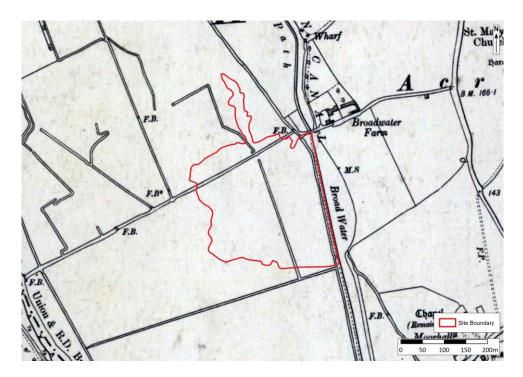


Fig. 12: Extract from the OS 3rd edition 6-inch map (1916) (Reproduced courtesy of the National Archives)



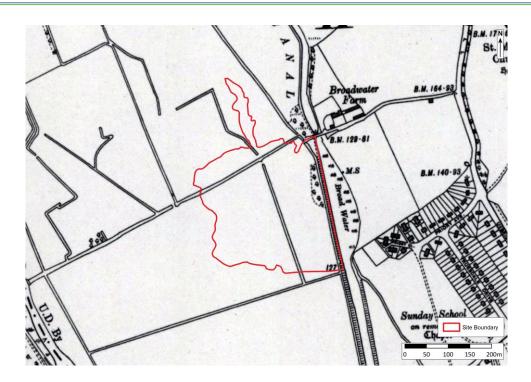


Fig. 13: Extract from the OS 4th edition 6-inch map (1939) (Reproduced courtesy of the National Archives)



Fig. 14: Extract from a RAF vertical photograph (1947) with approximate site circled in red (Reproduced courtesy of the Centre for Buckinghamshire Studies)

July 2021



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