### **Archaeological Desk-Based Assessment**



46 Culvers Avenue Carshalton SM5 2BL

On behalf of

Hawk Construction South Ltd

February 2022

#### **GENERAL ENQUIRIES**

e:info@borderarchaeology.com t: 01568 610101 W: borderarchaeology.com

#### Administration

The Plaza, Owen Way, Leominster Enterprise Park, Leominster, HR6 0LA

#### **Post-Ex Facility – Leominster**

t: 01568 610101 e: postex@borderarchaeology.com

#### Post-Ex Facility – Milton Keynes

- t: 01908 533233
- e postexmk@borderarchaeology.com

#### **REGIONAL OFFICES**

#### **Milton Keynes**

**Common Farm Calverton Lane** Milton Keynes **MK19 6EU** t: 01908 533233

#### London

4-4a Bloomsbury Square London WC1A 2RP t: 02033 015670

#### **Bristol**

First Floor, Citibase Bristol Aztec West Aztec Centre, Aztec West Almondsbury Bristol BS32 4TD t: 0117 9110767

#### Winchester

**Basepoint Business Centre** Winnall Valley Road Winchester SO23 0LD t: 01962 832777

#### Leeds

No 1 Leeds 26 Whitehall Road Leeds LS12 1BE t: 0113 8187959

#### Newport

Merlin House No1 Langstone Business Park Newport NP18 2HJ t: 01633 415339

Leeds

• Leominster Milton Keynes Newport • • Bristol London

• Winchester

MILTON KEYNES | SHOREDITCH | LEOMINSTER | BRISTOL | WINCHESTER | LEEDS | NEWPORT

**COMPILATION** Stephen Priestley MA MCI*f*A

ARTWORK Holly Litherland BA (Hons)

EDITING George Children MA MCIfA

FINAL EDIT AND APPROVAL George Children MA MCIfA **REPORT REFERENCE** BA2201CAC

**GRID REFERENCE** NGR: TQ 27609 65850

**OS LICENCE NUMBER** 100055758

**DATE** February 2022

Cover: View looking southeast towards 46 Culvers Avenue Carshalton

#### ISO 9001 | ISO 14001 | OHSAS 45001

Border Archaeology Ltd shall retain full copyright of any commissioned reports, tender documents or other project documents, under the Copyright, Designs and Patents Act 1988, with all rights reserved, excepting that it hereby provides a licence to the Client and the Council for the use of the report by the Client and the Council in all matters directly relating to the project as described in the Project Specification to use the documentation for their statutory functions and to provide copies of it to third parties as an incidental to such functions.

#### Contents:

1	Executive Summary		
2	Introduction		
3	Site Description	3	
	3.1 Soils & Geology	3	
4	Methodology	5	
	4.1 Aims and Objectives	5	
	4.2 Criteria for Assessment of Potential and Importance of Heritage Assets	5	
	4.3 Consultation of Archaeological Records	7	
5	Archaeological Assessment	8	
	5.1 Prehistoric	8	
	5.2 Romano-British	9	
	5.3 Medieval	10	
	5.4 Post-Medieval/Modern	11	
6	Historic Environment Record Gazetteers and Maps	13	
7	Site Assessment	23	
8	Conclusions	24	
	8.1 Potential Impacts	24	
	8.2 Overall Conclusions	24	
9	Copyright	25	
10	References	25	
	10.1 Cartography	26	
11	Appendix 1: Historic Maps	27	

#### **1** Executive Summary

Border Archaeology was instructed to carry out an Archaeological Desk-Based Assessment with regard to a proposed new dwelling attached to No. 46 Culvers Avenue, Carshalton, SM5 2BL. The results of this Assessment can be briefly summarized thus:

**Prehistoric:** The potential for encountering evidence of buried remains of prehistoric date has been assessed as **Moderate**, reflecting the fact that the site lies upon a gravel terrace above the floodplain of the River Wandle, within an area which has yielded significant evidence of multi-period prehistoric activity and is designated as an Archaeological Priority Area. Scatters of early prehistoric worked flint and fossilised faunal remains of Pleistocene date have been identified in the vicinity of the site, recovered from the underlying river terrace sands and gravels.

**Romano-British:** The potential for encountering evidence of Roman activity within the Site has been assessed as **Low**. This assessment reflects the paucity of recorded evidence from this period in the immediate vicinity of the site, while acknowledging that evidence of Romano-British rural settlement has been identified in the wider locality, particularly to the S and E of the site at Carshalton and Beddington.

**Medieval:** The potential for encountering remains associated with medieval activity has been assessed as **Low**. This assessment reflects the marked lack of archaeological evidence for medieval activity in the immediate vicinity of the site, suggesting that it probably lay within an extensive area of marginal agricultural land well to the N of Carshalton village, at some distance from any major focus of settlement.

**Post-Medieval/Modern**: The potential for encountering buried archaeological assets of a post-medieval or modern date has been assessed as **Low**. Historic mapping shows that the site remained as agricultural fields and parkland (forming part of the Culvers estate) during the 18<sup>th</sup>/19<sup>th</sup> centuries, with no evidence for building activity on the site until the early 1930s when the existing property at No. 46 was built as part of the residential development of this area. There is limited potential to encounter evidence of small-scale industrial activity (associated with bleaching or quarrying) and landscaping features of 19<sup>th</sup> century date within the site.

**Overall Conclusion:** The archaeological potential of the site has been assessed in overall terms as **Moderate**, with particular reference to encountering archaeological remains associated with prehistoric activity. The potential to encounter evidence Romano-British, medieval and post-medieval/modern remains has been assessed as **Low**. It is likely that the construction of the existing late 20<sup>th</sup> century side extension will have disturbed sub-surface remains within its footprint, although the extent and depth of any truncation remains unclear.

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 overall <u>Moderate</u> potential of the site in archaeological terms, it is recommended that an appropriate programme of archaeological work, the details of which to be agreed with the Greater London Archaeological features and deposits across the site. In this particular case, it is respectfully suggested that a limited programme of archaeological observation (watching brief) of groundworks, specifically focused on excavations for the proposed foundations and service trenching associated with the new dwelling, would be appropriate in this instance.

#### 2 Introduction

Border Archaeology (BA) was instructed by Mr Adam Park on behalf of Hawk Construction South Ltd to produce an Archaeological Desk-Based Assessment (ADBA) with regard to a proposed new dwelling attached to No. 46 Culvers Avenue, Carshalton, SM5 2BL (NGR: TQ 27609 65850) (*Fig. 1*).

This ADBA assesses the impact of the proposed development on buried heritage assets (archaeological remains) and forms an initial stage of investigation of the proposed development site and may be required in relation to the planning process, so that the local planning authority can formulate an appropriate response in the light of the impact upon any known or potential heritage assets, defined as parts of the historic environment considered significant because of their historic, evidential or aesthetic and/or communal interest.

#### 3 Site Description

The proposal site, which stands at an approximate height of 30m AOD and covers an area of c.270 square metres, is currently occupied by a single-storey extension attached to the W gable end of No. 46 Culvers Avenue, a twostorey semi-detached house of early 1930s date situated at the corner of Culvers Avenue and Beech Close within the residential South London suburb of Carshalton, in the London Borough of Sutton.

The site is not located within a Conservation Area; however, it is located within an Archaeological Priority Area (Wandle Gravels) as designated by the London Borough of Sutton and the Greater London Archaeological Advisory Service (DLO33271).

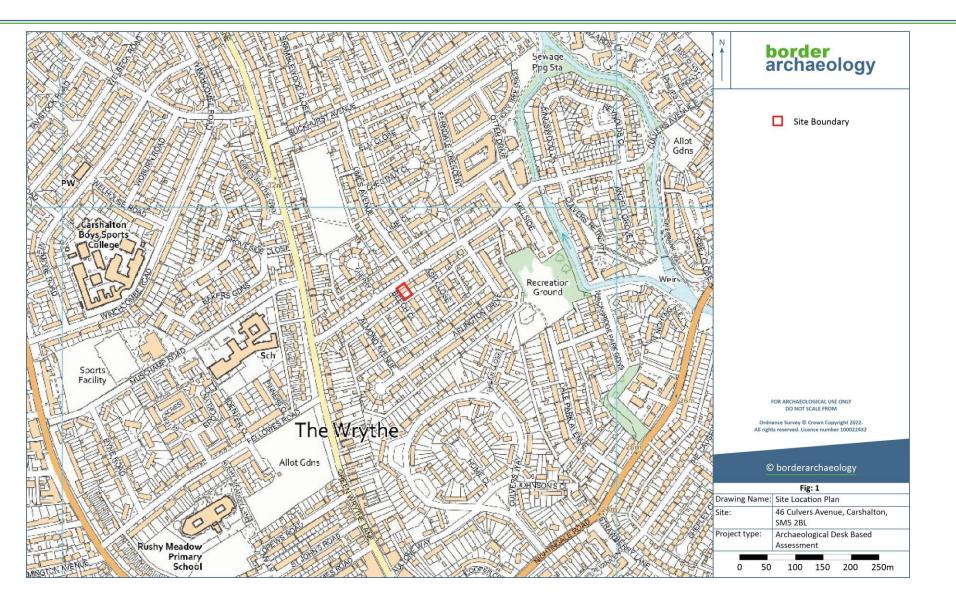
#### 3.1 Soils & Geology

The British Geological Survey (BGS) records solid geology of the London Clay Formation (also known as brickearth) comprising sedimentary bedrock formed approximately 48 to 56 million years ago during the Palaeogene period in a local environment previously dominated by deep seas (BGS 2022). The London Clay is recorded as being overlain by superficial deposits comprising Sand and Gravel of the Hackney Gravel Member, formed up to two million years ago during the Quaternary Period within a local environment previously dominated by rivers (BGS 2022).

A geotechnical borehole previously dug for sewage drainage purposes to the immediate SW of the site at NGR TQ 27610 65850 recorded the following sequence of deposits:

- 0-1.22m: Topsoil (clay, sand and gravel)
- 1.22m-3.55m: Orange brown occasionally grey fine to medium sand
- 3.55-13.71m: Firm stiff to fissured grey silty clay

Archaeological Desk-Based Assessment 46 Culvers Avenue Carshalton SM5 2BL February 2022



#### 4 Methodology

#### 4.1 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.

#### 4.2 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 2<sup>nd</sup> 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 194 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 (MHCLG 2021).

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 *Sutton Local Plan 2016-2031* (adopted February 2018) in particular Policy 30 (Heritage).

Particular attention may be drawn to Policy 30 Section A (General) which states that:

'A/ The council will conserve and, where practicable, enhance the borough's historic environment. This comprises: Listed Buildings and structures, Scheduled Ancient Monuments, Conservation Areas, Historic Parks and Gardens, Areas of Special Local Character, Locally Listed Buildings and undesignated archaeological remains. B/ Development that has an impact upon a heritage asset will be expected to conserve and, where practicable, enhance its significance. The council will expect that new development integrates into the historic environment and will look for opportunities from new development affecting heritage assets and their settings to enhance or better reveal their significance.

C/ Great weight will be given to conservation of Sutton's heritage assets. Any harm to the significance of a designated or non-designated heritage asset, or their loss, must be justified.

Proposals will be weighed against:

(i) the public benefits of the proposal.

(ii) whether it has been demonstrated that all reasonable efforts have been made to sustain the existing use, find new uses or mitigate the extent of the harm to the significance of the asset.

(iii) whether the works proposed are the minimum required to secure the long-term beneficial use and retain the significance and conservation of the asset.

D/ Proposals likely to affect the significance of a heritage asset, including the contribution made by its setting, should be accompanied by a description of its significance in sufficient detail to allow the potential impacts to be adequately assessed.'

Section K (Archaeological Priority Areas) further states that 'the Council will (i) in consultation with the Greater London Archaeological Advisory Service, require the necessary level of investigation and recording for development proposals that affect, or have the potential to affect Sutton's archaeological heritage. Remains of archaeological importance, whether scheduled or not, should be protected in situ, or if this is not possible, excavated and removed as directed by the Greater London Archaeological Advisory Service and (ii) expect the applicant to have sought preapplication advice from the Greater London Archaeological Advisory Service before submitting an archaeological evaluation.'

	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	n 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 asso					
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.				

#### 4.3 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 500m radius, the results of which are shown on a series of maps and accompanying gazetteers (*Figs. 2-5; Tables 2-4*). These maps show the location of known archaeological and built heritage features (including archaeological events and monuments) and previous archaeological interventions within the study area, which are listed in the gazetteer and referenced in the text.

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

- Greater London Historic Environment Record (HER): Information from past investigations, findspots, documentary & cartographic sources etc. A total of four archaeological monuments, 17 archaeological events and one Listed Buildings was recorded within a 500m radius of the site;
- Historic England: Information on statutory designations including SAMs, Registered Parks and Gardens and Listed Buildings along with identified Heritage at Risk;
- British Geological Survey (BGS): Solid and drift geology mapping and geological borehole record data;
- The British Library, London Metropolitan Archives and the National Archives: Historic maps, illustrations and relevant primary & secondary sources;
- Internet sources: Including the Local Planning Authority Local Plan and information on Conservation Areas, Archaeological Priority Areas and locally listed buildings.
- Aerial photographs dating back to 1945 were consulted at the Historic England Archive & the Surrey History Centre
- Photographs of the site and its setting were obtained to determine the presence of archaeological remains in the vicinity.

#### 5 Archaeological Assessment

#### 5.1 Prehistoric

The proposal site lies upon a gravel terrace just above the floodplain of the River Wandle, within a locality which has yielded significant evidence of multi-period prehistoric activity, including Palaeolithic remains and is designated as an Archaeological Priority Area (DLO33271). The underlying geology in this area comprises terrace gravels (Hackney Gravels) overlying London Clay, which have been recognised elsewhere as having potential to contain evidence of faunal remains and lithic finds, in particular Levallois material of the Lower Palaeolithic (Juby 2011).

Within the 500m search radius defined for this study, evidence for early prehistoric activity has been identified in relatively close proximity to the site. A small quantity of flint flakes of Palaeolithic date including a notched flake were found during groundworks to the rear of 64 Culvers Avenue (MLO4469), about 60m NE of the site, apparently lying on top of river terrace deposits (although the depth at which the finds were encountered is not recorded). Further finds of Palaeolithic flints have been made in allotments to the W of Green Wrythe Lane, about 390m SW of the site (MLO4468).

Another lithic findspot is recorded about 360m SE of the site, within the garden of 46 Dale Park Avenue, where a Neolithic polished flint axe was found in 1965 at a depth of 3ft (0.91m) below ground level (MLO4326), while evidence of fossilised faunal remains of Pleistocene date including an elephant's tusk, the skull of a rhinoceros, mammoth bones and remains of two or three horses were discovered in a sandy drift deposit during excavations for a sludge tank to the E of Green Wrythe Lane in the late 19<sup>th</sup> century (MLO10763; Whimster 1931, 26).

These finds of lithic scatters and faunal remains would appear to suggest that there is some potential to encounter evidence of early prehistoric habitation in this area, perhaps representing seasonal hunter-gatherer activity on the gravel terraces just above the floodplain of the Wandle. A small quantity of residual burnt and struck flint was recovered during the 2009 evaluation at Durand Close, about 270m NE of the site (ELO15988; Sutton Archaeological Services 2009). However, it may be noted that more recent archaeological interventions undertaken with regard to development on the Durand Estate (ELO16294; ELO15992), have yielded largely negative results in terms of archaeological deposits or features generally (ASE 2012; Shaikhley 2015).

Little evidence for later prehistoric activity has been recorded in the immediate vicinity of the study area. However, significant evidence for Bronze Age and Iron Age occupation and associated agricultural activity (including field systems) has been identified in the wider surrounding locality, which appears to have been focused along the low gravel terraces of the Wandle, where the presence of flint-rich gravel deposits, the proximity to water and well-drained, easily-cultivated soils would have been attractive to farming and settlement.

Archaeological investigations on the southern periphery of the study area at Carshalton and Wallington, close to the River Wandle have yielded extensive evidence of prehistoric activity and exploitation of riverine resources. Excavations at Strawberry Lodge, Mill Lane Carshalton (about 800m SSE of the site) prior to the construction of a new church in 1995 revealed a large quantity of Mesolithic- to late Bronze Age struck flints were recovered from

alluvial deposits and from the fill of a ditch cutting the alluvium, which was interpreted as relating to limited exploitation of the river edge during the Mesolithic and later prehistoric periods (MLO77350; Perry & Skelton 1995).

In 2001, excavations at the former Vinamul Site, Butter Hill, Wallington (about 880m SE of the site) revealed a complex sequence of sedimentary deposition (comprising London Clay overlain by sand and gravel deposits) presumably laid down as part of a braided river system associated with the River Wandle, which in turn was sealed by a peat deposit containing a substantial quantity of worked flint ranging in date from the Mesolithic to the Bronze Age, as well as some Bronze Age pottery (Leary, Branch and Bishop 2005, 1-28).

**Conclusion:** The potential for encountering evidence of buried remains of prehistoric date has been assessed as **Moderate**. This assessment reflects the fact that the site lies upon a gravel terrace above the floodplain of the River Wandle, within an area which has yielded considerable evidence of multi-period prehistoric activity, including early prehistoric lithic finds and Pleistocene faunal remains and is designated as an Archaeological Priority Area. Should evidence of prehistoric remains be identified, it appears likely that they will consist primarily of residual finds of worked flint. Nevertheless, any prehistoric remains encountered may be regarded as being of **High** significance in archaeological terms, as they could potentially add to the existing body of knowledge regarding the extent and nature of human activity and past environmental changes within the Wandle Valley, potentially dating back to early prehistory.

#### 5.2 Romano-British

No archaeological remains of Romano-British date are recorded within the 500m search radius; however, evidence for Romano-British rural settlement has been identified elsewhere in the wider locality of the Wandle Valley, in the vicinity of Carshalton and Beddington. Excavations undertaken by Wessex Archaeology in 1994 in advance of housing development at New Road, Hackbridge (about 660m NE of the site) revealed an assemblage of Roman pottery and fragments of ceramic building materials, all heavily abraded and recovered from the topsoil (Birbeck 1994). An evaluation undertaken in 1991 on land at William Street, Carshalton (about 590m SW of the site) revealed evidence of cobbled surfaces and linear features presumed to be of Roman date and possibly representing construction cuts for timber buildings, together with a quantity of undiagnostic iron slag (HER Refs. 021375/00/00; 021376/00/00).

The site lies approximately 1.9km W of the Roman villa complex at Beddington, the site of which is designated as a Scheduled Ancient Monument. The site of the main villa complex (about 700m NW of the proposed development) now largely lies beneath the modern sludge beds associated with the Beddington Sewage Treatment Works. The villa, which appears to have lain to the N of an earlier Iron Age enclosed settlement, was first discovered during ploughing in 1736 when footings of buildings were discovered (Malden 1912, 358).

The first organized excavations on the site were undertaken in 1871 during the initial construction of the Treatment Works (Addy 1874, 117-21), followed by further investigations between 1959 and 1963 (Keulemans 1963, 37-44). A more substantial programme of archaeological excavations was undertaken in advance of gravel extraction

between 1981 and 1987 (Adkins & Adkins 1986; Howell 2005). The villa complex appears to have been occupied from the late 1<sup>st</sup> century AD through to about 400 AD and consisted of several buildings, including the main villa range, a masonry bathhouse which underwent several phases of construction, a series of timber and clay-walled barns and outbuildings, as well as cobbled yards, a well, ditches, pits and enclosures.

Little information is available regarding the pattern of outlying rural settlement and field systems in the wider hinterland of the Beddington villa, although the results of the evaluation at New Road Hackbridge suggest that there is potential for smaller farmstead sites of Romano-British date to be encountered within the floodplain of the Wandle extending to the W of the villa complex.

**Conclusion:** The potential for encountering evidence of Roman activity within the Site has been assessed as **Low**. This assessment reflects the paucity of recorded evidence from this period in the immediate vicinity of the site, while acknowledging that evidence of Romano-British rural settlement has been identified in the wider locality, particularly to the S and E of the site at Carshalton and Beddington. Should groundworks reveal evidence of Romano-British occupation or field systems, this would be considered to be of **High** importance as the nature and extent of Roman rural settlement in this particular area remain poorly understood generally.

#### 5.3 Medieval

No recorded evidence of medieval occupation has been identified in the immediate vicinity of the site, suggesting that it probably lay within a sparsely settled landscape of agricultural fields and water meadows adjoining the River Wandle, at some distance from any significant focus of settlement during this period.

The nearest focus of medieval occupation was represented by the village of Carshalton (about 900m S of the site) a settlement of Anglo-Saxon origin which is recorded as 'Æuueltone' in a charter of AD675. The place name, of Old English origin, denoted 'a farmstead by the spring head', with the prefix 'cress' added in the late 12<sup>th</sup> century referring to the presence of watercress beds nearby associated with the River Wandle (Gover, Mawer & Stenton 1934, 41). The evidence of Domesday Book (1086) shows that Carshalton was a substantial estate, comprising five manors prior to the Norman Conquest which were amalgamated into a single estate after 1066 and granted to the Norman lord Geoffrey de Mandeville (Malden 1912).

Documentary evidence suggests that the site lay within an extensive area of marginal land to the N of the core settlement at Carshalton which was known as the 'Wrythe', a place name first documented in the early 13<sup>th</sup> century which refers to a brook or stream, most likely a tributary of the Wandle which entered the river at Hackbridge (Gover, Mawer & Stenton 1934, 43). During the medieval and early post-medieval periods, this area appears to have been categorised as waste or common land pertaining to the manor of Carshalton, with little evidence for settlement activity recorded (LBS 2021). There were several water mills located along the River Wandle to the E and SE of the site during the medieval period, the closest of these being Hackbridge Mill (MLO101121) about 790m to the SE, which is first documented in about 1200 when it was held by St Thomas's Hospital in Southwark (Drucker 1932; Pre-Construct Archaeology 2017).

**Conclusion:** The potential for encountering remains associated with medieval activity has been assessed as **Low.** This assessment reflects the marked lack of archaeological evidence for medieval activity in the immediate vicinity of the site, suggesting that it probably lay within an extensive area of marginal agricultural land well to the N of Carshalton village, at some distance from any major focus of settlement. Evidence of medieval occupation features or agricultural activity would be considered to be of **Medium** importance, as the nature and extent of medieval activity in this area is poorly documented in archaeological terms.

#### 5.4 Post-Medieval/Modern

Examination of cartographic evidence indicates that the proposal site remained as undeveloped agricultural land through to the 1930s when the existing residential development at Culvers Avenue was established.

The earliest map to show the study area with an appreciable level of topographical detail is Rocque's map of Surrey dated 1762 (*fig. 10*). While Rocque's map is somewhat schematic in terms of its depiction of topographical detail, it appears to show that site lay within a large agricultural field bounded to the W by the roadway of Green Wrythe Lane and to the E by the River Wandle.

Located about 420m ENE of the site, Rocque's map marks the location of a mill (Carshalton Mill) located close to W branch of the River Wandle, which divides into two streams to the N of Hackbridge. The W branch was an artificial watercourse established in the early 18<sup>th</sup> century by one Philip Selby, a 'whitster' (bleacher of linen cloth) who owned an extensive bleaching ground in this area which appears to have been located on the island formed by the branching of the two streams but may also have extended to the W of the Wandle.

Selby also erected a dwelling house and a mill associated with the bleaching of cloth on the W branch of the river, followed by the construction of a corn mill at some time between c.1744 and 1777. A substantial block of fields to the W of the Wandle (including the site at Culvers Avenue) appears to have been acquired by the owners of Carshalton Mill and it is possible that it may have formed part of the extensive 'bleaching grounds' referred to in documentary sources in the 18<sup>th</sup> and early 19<sup>th</sup> centuries, which appear to have covered some 200 acres of land.

An OS surveyor's drawing of Croydon and district dated 1804 (*fig. 11*) appears to show that the overall pattern of landscape in the immediate vicinity of the site had changed relatively little since the mid-18<sup>th</sup> century, although it does show the fields between Green Wrythe Lane and the Wandle as having been subdivided into large rectilinear enclosures, the boundaries of which are suggestive of survey planned enclosure of former common land.

More accurate and detailed information regarding the pattern of land use, settlement and field boundaries in the vicinity of the site is provided by the Carshalton tithe map of 1848 (*fig. 12*). This map shows the site as lying within a long rectilinear arable field (marked as Plot No 153) extending NE from Green Wrythe Lane up to a substantial complex of buildings comprising a dwelling house and stables adjacent to the mill and bleaching grounds which had been recently erected by Samuel Gurney, the owner of Carshalton Mill and a wealthy banker and MP. Gurney's residence was known as The Culvers and the tithe map marks a linear drive running NE along the northern extent of Plot No. 153 up to the house which represents the line of present-day Culvers Avenue.

Plot No. 153 also formed part of an extensive block of lands owned by Gurney to the W of The Culvers; the accompanying tithe apportionment describes it as 'Sandpit Weather and Stackfield'. The derivation of the place name element 'weather' is unclear, it could refer to a specific area where male sheep ('wethers') were taken to graze, perhaps referring to the historic usage of the area as common 'waste' land used for the pasturing of livestock. The reference to a sandpit suggests that there was extractive activity in this area although the precise location of any sandpits or quarries is unclear.

The OS 1<sup>st</sup> edition map of 1870 (*fig. 13*) shows that the site then lay within an extensive park which had been laid out by Gurney in the mid-19<sup>th</sup> century, covering a large swathe of land between Green Wrythe Lane and the Wandle and extending S towards Carshalton village. Immediately N of the site, the line of the driveway leading from Green Wrythe Lane to The Culvers is now clearly shown as a tree-lined avenue with an ornamental lodge at its SW end (later known as Avenue Cottage or Culvers Lodge). Samuel Gurney's banking firm failed in 1866 and the Culvers estate was put up for auction in October of that year, being purchased by a retired wine merchant, John Peter Gassiot who held the property until his death in 1899.

Little change to the pattern of land use within the site is shown on the OS 2<sup>nd</sup> and 3<sup>rd</sup> edition maps dated 1897 and 1910 respectively (*figs. 14 & 15*). A thin belt of trees and a meandering path is depicted along the S side of Culvers Avenue while a covered artesian well is marked about 120m to the SW of the site.

Local newspaper records indicate that plots of land were being advertised to let for housebuilding in Culvers Avenue from the late 1920s/early 1930s onwards and the OS 4<sup>th</sup> edition map of 1935 (*fig. 16*) shows that some building activity had already taken place along both sides of the road by that date, including the construction of the existing house at No. 46 Culvers Avenue although the adjoining side streets had not yet been laid out. By 1947, as shown on an aerial photograph of that date (*fig. 17*), both sides of Culvers Avenue were lined with residential properties and the side streets of Beech Close, Ash Close and Almond Avenue had been laid out to the S of the road. The single-storey side extension to No. 46 appears to be a later addition, probably of late 20<sup>th</sup> century date.

**Conclusion:** The potential for encountering buried archaeological assets of a post-medieval/modern date has been assessed as **Low.** Historic mapping shows that the site remained as agricultural fields and parkland (forming part of the Culvers estate) during the 18<sup>th</sup>/19<sup>th</sup> centuries, with no evidence for building activity on the site until the early 1930s when the existing property at No. 46 was built as part of the residential development of this area. There is limited potential to encounter evidence of post-medieval activity (associated with bleaching or quarrying) and landscaping features of 19<sup>th</sup> century date within the site. Evidence of post-medieval industrial activity, cultivation or landscaping features would be assessed as being of **Low to Medium** (ie. local) significance in archaeological terms.

### 6 Historic Environment Record Gazetteers and Maps

#	MonUID	PrefRef	Name	Date	NGR
1	MLO4468	030356/00/00	Green Wrythe Lane Allotments – Lithic finds (Palaeolithic)	Palaeolithic	TQ 2740 6550
2	MLO4469	030357/00/00	64 Culvers Avenue – Lithic findspot (Palaeolithic)	Palaeolithic	TQ 2767 6587
3	MLO4326	030237/00/00	49 Dale Park Avenue – Lithic findspot of flint axe (Neolithic)	Neolithic	TQ 2793 6570
4	MLO10763	030390/00/00	Land off Culvers Way (back garden of No.56), The Wrythe, Carshalton (Pleistocene Animal Remains) - Find Spot	Unknown	TQ 276 656

# Table 2: Gazetteer of archaeological monuments recorded within a 500m radius of the Site based on consultation of the Greater London Historic Environment Record (HER).

#	EvUID	Name	Date	NGR
E1	ELO11634	Muschamp Road [Muschamp Primary School], London, SM5 2SE: Desk Based Assessment2010TO		TQ 273 657
E2	ELO11635	Muschamp Road [Muschamp Primary School], London, SM5 2SE: Watching Brief	2011	TQ 273 657
E3	ELO12522	Culvers Avenue [Durand Close Estate], Carshalton, Sutton: Evaluation	2012	TQ 2775 6603
E4	ELO12998	Nightingale Close/Corbet Close, Carshalton, Sutton, SM6: Heritage Statement	2012	TQ 28107 65916
E5	5 ELO13154 Buckhurst Avenue (No 128), Carshalton, Sutton, SM5 1PF: Watching Brief		2013	TQ 27776 66309
E6	ELO134	Red Kite, Fellowes Road: Watching Brief	2000-2001	TQ 27340 65525
E7	ELO15983	Culvers Avenue, [Durand Estate], Carshalton, Sutton: Desk Based Assessment	2014	TQ 2774 6612
E8	ELO15988	Culver's Avenue, [Durand Close Estate], Carshalton, Sutton, SM5 2BT: Evaluation	2009	TQ 2777 6603
E9	ELO15992	ELO15992 Culvers Avenue, [Durand Estate], Carshalton, Sutton, SM5 2BX: Evaluation		TQ 2775 6620
E10	ELO16294	Ferndale Crescent [Durand Close Estate], Carshalton, Sutton: Evaluation	2012	TQ 2773 6608
E11	1ELO17447Fellowes Road, Century Youth Centre, Carshalton, London Borough of Sutton: Archaeological Evaluation2017		TQ 27318 65621	

#### Archaeological Desk-Based Assessment 46 Culvers Avenue Carshalton SM5 2BL February 2022

E12	ELO18016	Fellows Road, [Century House], Carshalton SM5 2SX: Desk Based Assessment	2015	TQ 2731 6562
E13	ELO19162	Corbet Close [Land at] Carshalton London Borough of Sutton: Archaeological Evaluation	2016	TQ 2812 6595
E14	ELO19165	Corbet Close [Land at] Hackbridge Carshalton London Borough of Sutton: Archaeological Evaluation	2016	TQ 2812 6595
E15	ELO19171	Dale Park Avenue (44) Carshalton London Borough of Sutton: Desk Based Assessment	2017	TQ 2786 6565
E16	ELO6894 Durand Estate, Carshalton: Desk based assessment		2003	TQ 27752 66134
E17	ELO7429St James Road/ St John's Road (No 2-20) [Leicester House], Carshalton: Desk based assessment		2007	TQ 27467 65378

 Table 3: Gazetteer of archaeological events recorded within a 500m radius of the Site based on consultation of the Greater

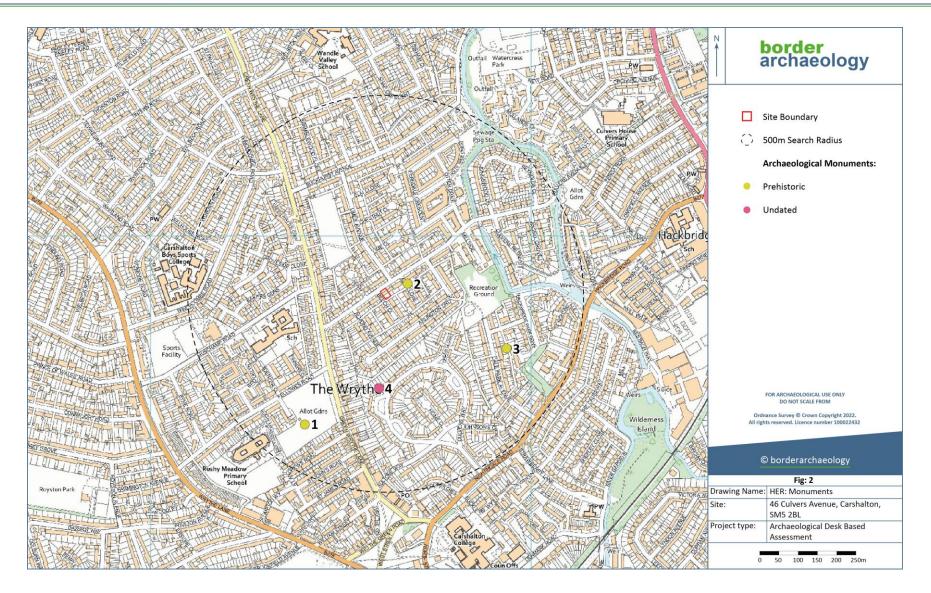
 London Historic Environment Record (HER).

#	DesigUID	PrefRef	Name	NGR
B1	DLO38710	1469869	Number 20 Sewer Ventilation Column in St Andrew's Road (south side)	TQ 27395 65399

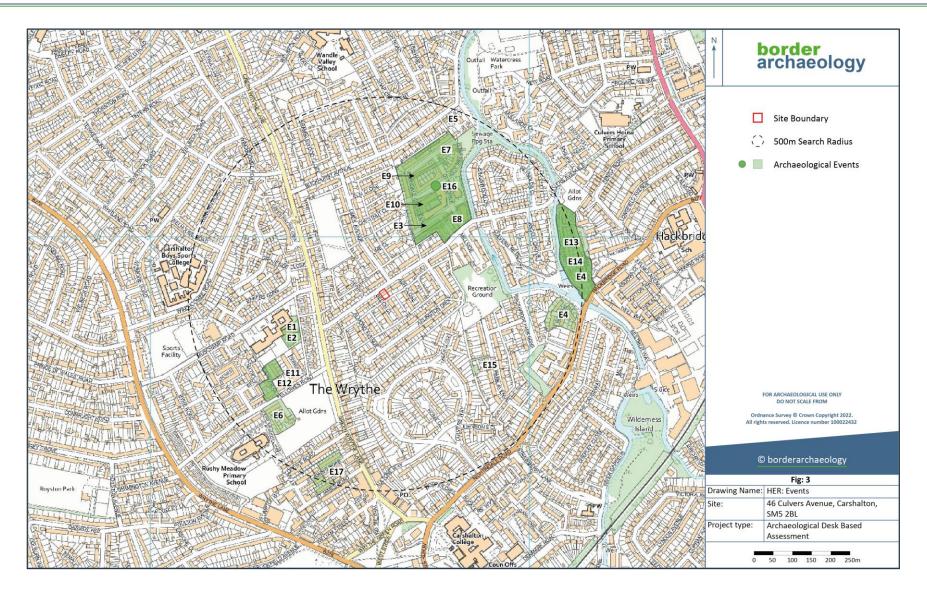
 Table 4: Gazetteer of designated heritage assets recorded within a 500m radius of the Site based on consultation of the

 Greater London Historic Environment Record (HER).

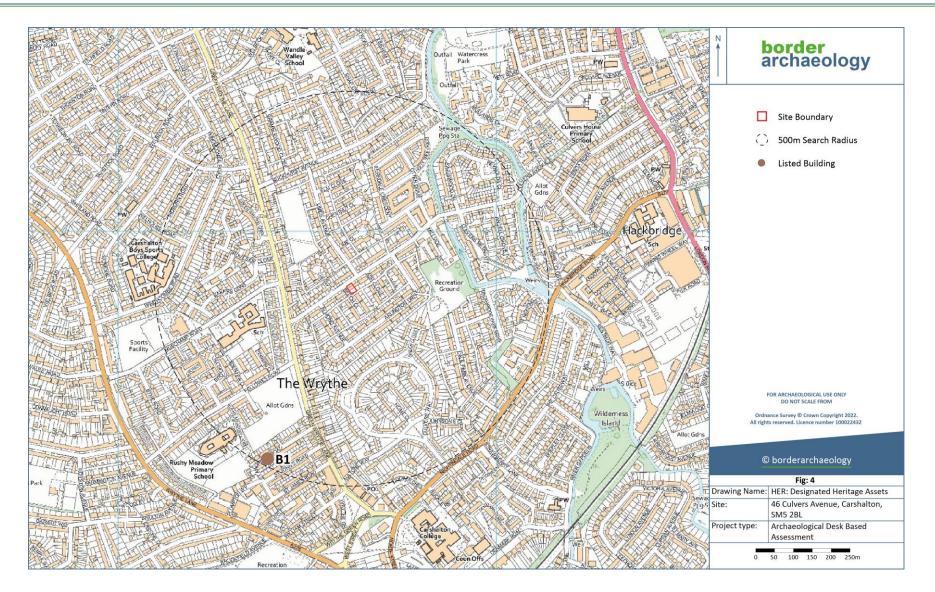
Archaeological Desk-Based Assessment 46 Culvers Avenue Carshalton SM5 2BL February 2022



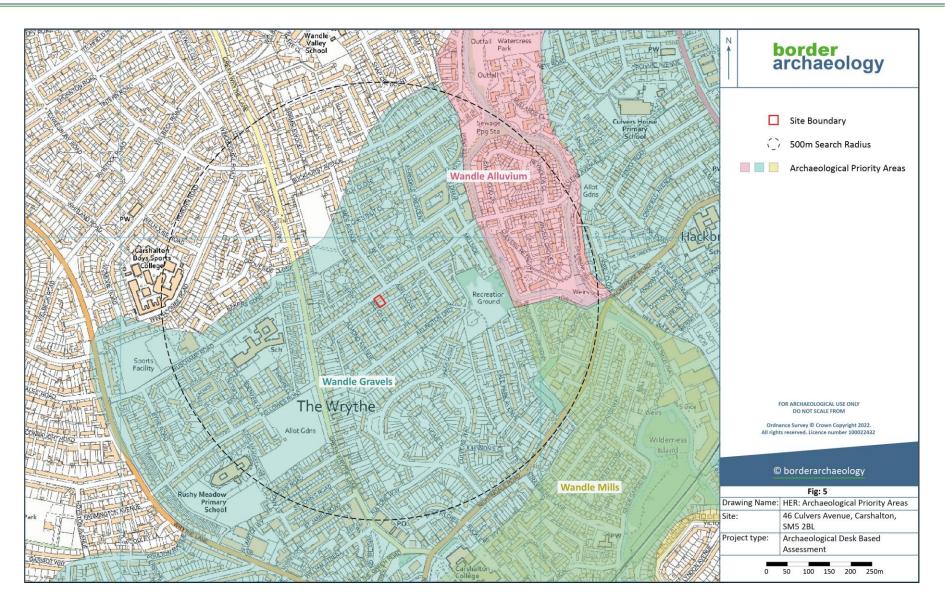
Archaeological Desk-Based Assessment 46 Culvers Avenue Carshalton SM5 2BL February 2022



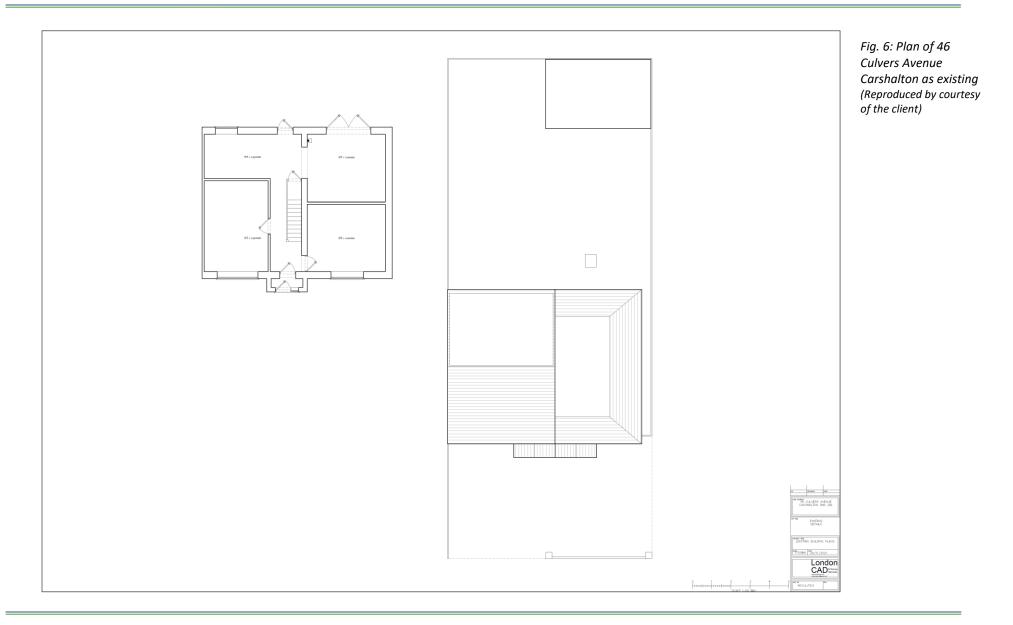
Archaeological Desk-Based Assessment 46 Culvers Avenue Carshalton SM5 2BL February 2022



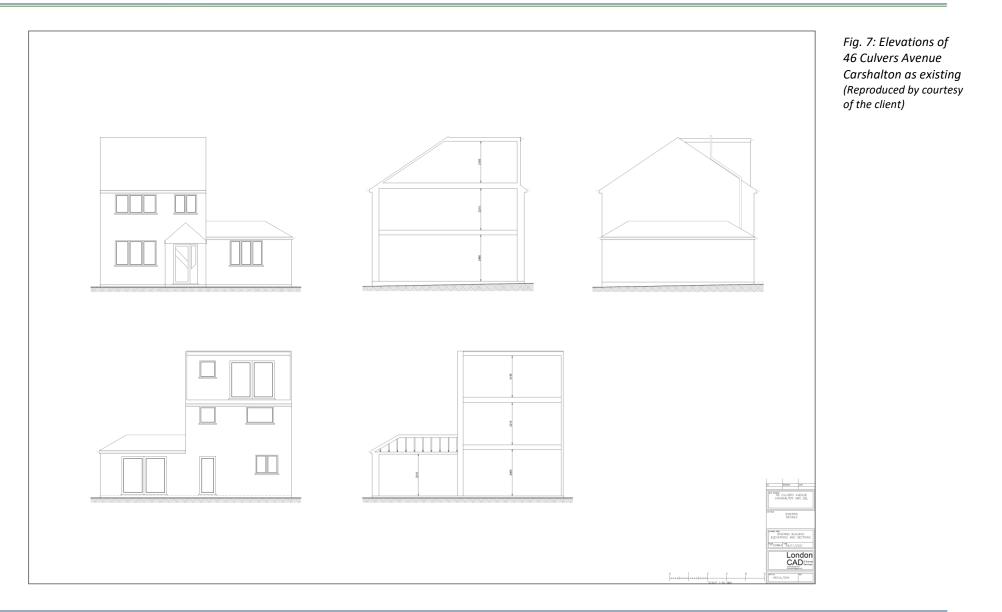
Archaeological Desk-Based Assessment 46 Culvers Avenue Carshalton SM5 2BL February 2022



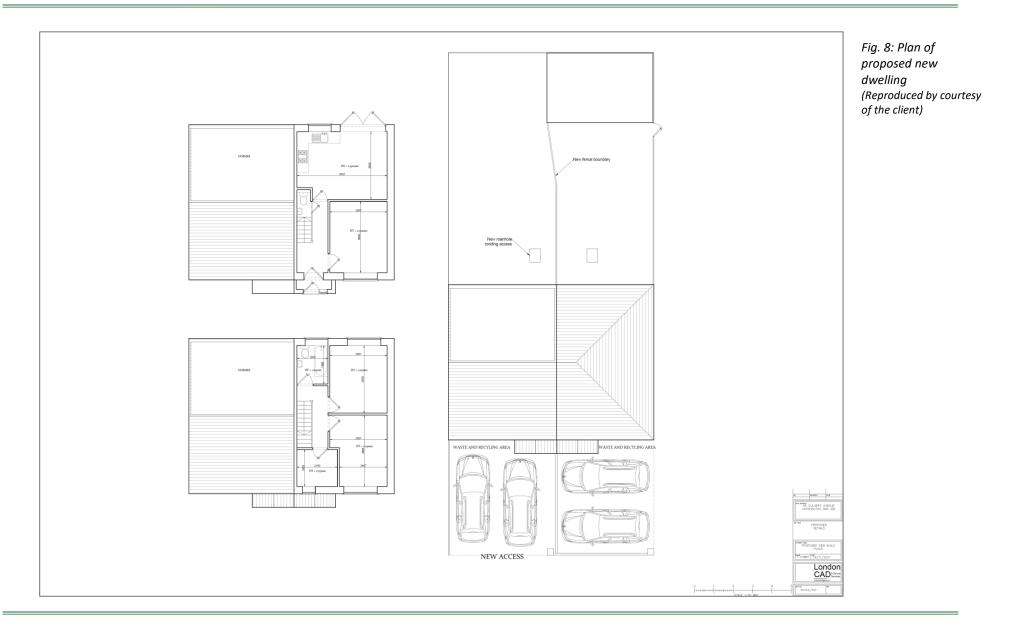
Archaeological Desk-Based Assessment 46 Culvers Avenue Carshalton SM5 2BL February 2022



Archaeological Desk-Based Assessment 46 Culvers Avenue Carshalton SM5 2BL February 2022



Archaeological Desk-Based Assessment 46 Culvers Avenue Carshalton SM5 2BL February 2022



22 Archaeological Desk-Based Assessment 46 Culvers Avenue Carshalton SM5 2BL February 2022



#### 7 Site Assessment

A site visit was undertaken and a number of photographs were obtained from key vantage points in order to ascertain the potential presence of archaeological remains in the vicinity. The site at 46 Culvers Avenue is located within a modern residential neighbourhood to the N of Carshalton, within the London Borough of Sutton. It is currently occupied by a two-storey semi-detached house of 1930s date, situated at the corner of Culvers Avenue and Beech Close (*Plate 1*), with a late 20<sup>th</sup> century single storey rectangular extension with tiled roof attached to the W gable end of the building (*Plate 2*). No visible features of archaeological interest were noted within the site.



Plate 1: View looking SW towards front of existing semi-detached house at No. 46 Culvers Avenue



Plate 2: View looking E showing single-storey side extension attached to W end of No. 46 Culvers Avenue

#### 8 Conclusions

#### 8.1 Potential Impacts

The following description of the proposed development is based on architects' drawings and information supplied on 4<sup>th</sup> January 2022 (*figs. 6-9*). The proposals entail the construction of a new two-storey end of terrace dwelling attached to the W end of No. 46 and extending to the edge of the plot boundary and occupying the footprint of the existing single storey side extension, which is to be demolished. The foundations for the proposed new dwelling will be of standard strip type, approximately 1m deep.

Based on the available information, it appears that the chief impact on buried archaeological deposits will relate to the excavation of foundations for the new dwelling and associated trenching for services and drainage (the latter being assumed to extend to a depth of between 1 to 1.5m for the purposes of this assessment).

#### 8.2 Overall Conclusions

The archaeological potential of the site has been assessed in overall terms as **Moderate**, with particular reference to encountering archaeological remains associated with prehistoric activity. The potential to encounter evidence Romano-British, medieval and post-medieval remains has been assessed as **Low**. This assessment reflects the fact that the site is located within an Archaeological Priority Area associated with the river terrace gravels of the Wandle Valley, which have potential to contain evidence of multi-period prehistoric remains, including lithic finds of early prehistoric date, although it should be noted that any finds of worked flint are likely to be residual in context. Based on available information, it appears that natural sand and gravels could be encountered at an approximate depth of between 0.90 to 1.20m, although it may be noted that natural geology was encountered at a shallower depth in excavations at the Durand Close Estate further to the NE.

However, the overall assessment also takes into account the likelihood that any sub-surface deposits within the site will already have been disturbed, perhaps heavily, by the construction of the existing late 20<sup>th</sup> century side extension. However, the depth of disturbance remains unclear as there has been no previous archaeological investigation within the site.

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 overall <u>Moderate</u> potential of the site in archaeological terms, it is recommended that an appropriate programme of archaeological work, the details of which to be agreed with the Greater London Archaeological Advisory Service, will be necessary to determine the extent, depth and significance of buried archaeological features and deposits across the site.

In this particular case, it is respectfully suggested that a limited programme of archaeological observation (watching brief) of groundworks, specifically focused on excavations for the proposed foundations and service trenching associated with the new dwelling, would be appropriate in this instance.

#### 9 Copyright

Border Archaeology Ltd shall retain full copyright of any commissioned reports, tender documents or other project documents, under the Copyright, Designs and Patents Act 1988, with all rights reserved, excepting that it hereby provides a licence to the Client and the Council for the use of the report by the Client and the Council in all matters directly relating to the project as described in the Project Specification to use the documentation for their statutory functions and to provide copies of it to third parties as an incidental to such functions.

#### **10** References

Greater London Historic Environment Record: HER Report and GIS Dataset.

National Heritage List for England.

Addy, J., 1874, 'Account of a Roman Villa lately discovered at Beddington, Surrey', *Surrey Archaeological Collections*, **6**, 117-21

Adkins, L, & Adkins, R.A., 1986, Under the Sludge: Beddington Roman Villa: Excavations at Beddington Sewage Works 1981-1983, Beddington

Archaeology South-East, 2012, Archaeological Evaluation Report, Durand Close Estate, Carshalton, Sutton (unpublished report)

Birbeck, V., 1994, *New Road, Hackbridge, London Borough of Sutton, Blocks N, P And Q. Archaeological Evaluation*, Wessex Archaeology (unpublished report)

Drucker, L. (ed.), 1932, Chartulary of the Hospital of St. Thomas the Martyr, Southwark, London

Gover, J. E. B., Mawer, A. & Stenton, F.M., 1934, The Place-Names of Surrey, Cambridge

Howell, I., 2005, *Prehistoric Landscape to Roman Villa: Excavations at Beddington, Surrey, 1981-7,* MoLAS Monograph No. 26

Juby, C., 2011, London before London: Reconstructing a Palaeolithic Landscape, University of London PhD thesis.

Keulemans, M., 1963, 'New light on the Roman bath building and villa at Beddington Surrey', Surrey Archaeological Collections, **60**, 37-44

Leary., J., Branch, N., & Bishop, N., 2005, '10,000 years in the life of the river Wandle: excavations at the former Vinamul site, Butter Hill, Wallington', Surrey Archaeological Collections, **92**, 1-28

Malden, H.E., 1912, A History of the County of Surrey: Volume 4, London.

Margary, I.D., 1973, Roman Roads in Britain, London

Ministry of Housing, Communities and Local Government, 2021, National Policy Planning Framework

Perry J.G. & Skelton A., 1995, *Excavation Report on Strawberry Lodge, Mill Lane, Carshalton, Surrey, Sutton Archaeological Services* (unpublished report)

Pre-Construct Archaeology, 2017, Land at the rear of 44 Dale Park Avenue, Carshalton, London Borough of Sutton, SM5 2ES: An Archaeological Desk-Based Assessment (unpublished report)

Shaikhley N., 2015, *Durand Estate, Carshalton, an Archaeological Evaluation of the Phase 3 and 4 Development Areas,* Surrey County Archaeological Unit (unpublished report)

Sutton Archaeological Services, 2009, *Evaluation Report on Phase 1: Durrand Close Estate, Carshalton, SM5 2BT* (unpublished report)

#### 10.1 Cartography

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

- 1762: John Rocque's Map of the County of Surrey (NA PRO 30/75/171)
- 1804: OS Surveyor's drawing of Croydon and district (British Library)
- 1848: Tithe Map of Carshalton parish (NA IR 30/34/23)

1870: OS 1<sup>st</sup> Edition 6-inch Map

1897: OS 2<sup>nd</sup> Edition 25-inch Map

1910: OS 3<sup>rd</sup> Edition 25-inch Map

1935: OS 4<sup>th</sup> Edition 25-inch Map

1956: OS 1:1250 Scale National Survey

1969: OS 1:1250 Scale National Survey

(RAF oblique and vertical aerial photographs of the study area dating back to 1947 were consulted using records held at the Historic England Archive, Swindon and Surrey History Centre, Woking)

27 Archaeological Desk-Based Assessment 46 Culvers Avenue Carshalton SM5 2BL February 2022

#### 11 Appendix 1: Historic Maps



Fig. 10: Extract from John Rocque's Map of Surrey (1762) (Reproduced by courtesy of the National Archives)



Fig. 11: Extract from the OS Surveyor's Drawing of Croydon and District (1804) (Reproduced by courtesy of the British Library)

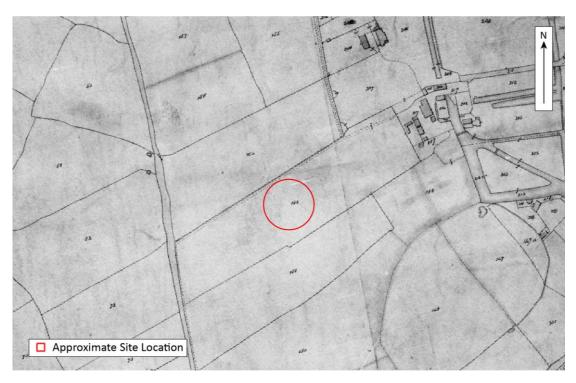


Fig.12: Extract from the Carshalton Tithe Map (1848) showing the site (marked in red) (Reproduced by courtesy of the National Archives)

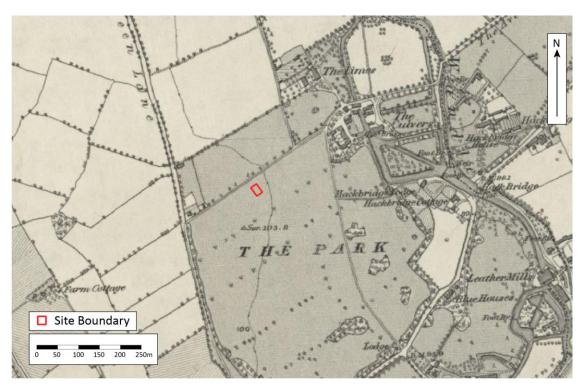


Fig. 13: Extract from the OS 1<sup>st</sup> edition 25-inch map (1870) with site marked in red (Reproduced by courtesy of the National Archives))

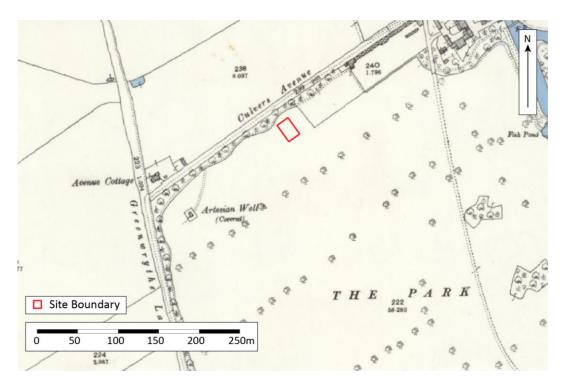


Fig. 14: Extract from the OS 2<sup>nd</sup> edition 25-inch map (1897) with site marked in red (Reproduced by courtesy of the National Archives))

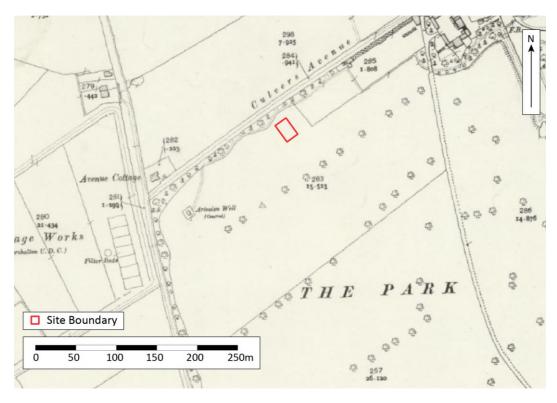


Fig. 15: Extract from the OS 3<sup>rd</sup> edition 25-inch map (1910) with site marked in red (Reproduced by courtesy of the National Archives))

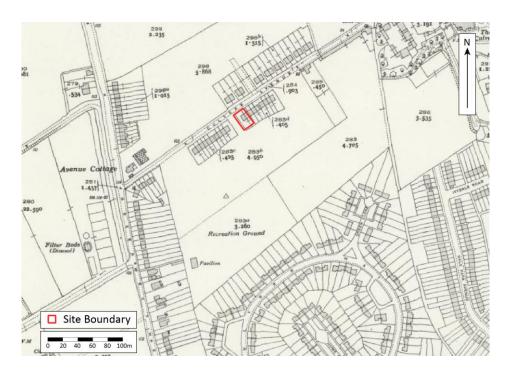


Fig. 16: Extract from the OS 4<sup>th</sup> edition 6-inch map (1935) with site marked in red (Reproduced by courtesy of the National Archives))

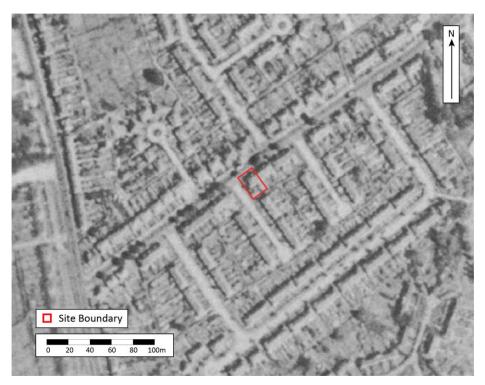


Fig. 17: Extract from an RAF vertical aerial photograph of Carshalton and environs (1947) (Reproduced by courtesy of the Surrey History Centre)

Document Title		Document Reference		
Archaeological Desk-Based 46 Culvers Avenue Carshalton SM5 2BL	Assessment:	BA21127THUR		
Compilation Stephen Priestley MA MCIfA		FA		
Editing	Editing George Children MA MCIfA		Ą	
Artwork	Artwork Holly Litherland BA (Hons)			
Issue No. Status		Date	Approved for issue	
1	Final	February 2022	George Children MA MCI <i>f</i> A	