

# Blackheath Gates, Blackheath Avenue, Greenwich Park

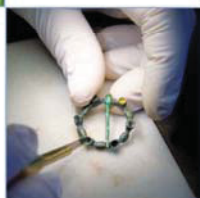
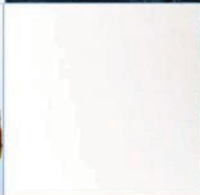
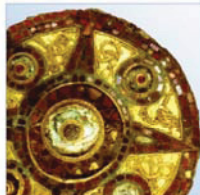
## Royal Borough of Greenwich: Watching Brief Report

Planning Reference: 11/2396/F and 11/2397/L  
National Grid Reference Number: TQ 3922 7683

AOC Project No: 31077

Site Code: BLA 11

Date: March 2012



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<b>On Behalf of:</b>	<b>The Royal Parks</b> Ranger's Lodge Hyde Park London W2 2UH
<b>National Grid Reference (NGR):</b>	<b>TQ 3922 7683</b>
<b>AOC Project No:</b>	<b>31077</b>
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<b>Fieldwork:</b>	<b>6<sup>th</sup> February to 12<sup>th</sup> March 2012</b>
<b>Date:</b>	<b>March 2012</b>

This document has been prepared in accordance with AOC standard operating procedures.

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<b>Draft/Final Report Stage: Draft</b>	<b>Date: March 2012</b>

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## Non-Technical Summary

*A programme of archaeological recording at Greenwich Park, specifically the Blackheath Gates, was made in advance of proposed removal and re-erection of the gates and their brick piers in order to facilitate traffic movement in association with the Park's use during the London Olympic Games. A watching brief was then carried out during relocation of the gates, with excavations monitored in the event of archaeological material being revealed.*

*The gate piers are of two different dates. Although their stone elements may have been present when first established in the 19<sup>th</sup> century, the earliest pier cannot pre-date 1886, since the bricks were not manufactured before then, whilst the five others were constructed of reinforced concrete with yellow brick facing.*

*New excavations to relocate the gates revealed a sequence of natural deposits truncated by modern tree-pits and surface runs, before hardcore and tarmac were laid to provide the surface of Blackheath Avenue as it is today. A small patch of gravel in the centre of the Avenue may represent part of its earlier form.*

*No further archaeological fieldwork is recommended in association with this project*

*At the completion of the project, the archive will be prepared for deposition with the LAARC. A summary report will be submitted to the local fieldwork round-up and electronic copies of the report made available via the Archaeological Data Service and OASIS.*

## 1. Introduction

- 1.1 This document presents the results of an archaeological watching brief carried out in during relocation of the gates at the southern entrance to Greenwich Park, known as the 'Blackheath Gates'.
- 1.2 The site is centred on National Grid Reference (NGR) TQ 3922 7683 (Figure 1) and are located at the entrance to the park off Charlton Way; the gates allow traffic through the park along Blackheath Avenue (Figure 2).
- 1.3 Although the park dates to the mid 15<sup>th</sup> century, the gates themselves date to 1855, when a new gateway was constructed to replace an older wooden one. Only one of the gate piers is original, and the iron gates show evidence for repairs and replacement parts.
- 1.4 The watching brief was carried out during removal of the gates, deconstruction of the piers, and excavations associated with new pier locations (Figure 3). This was in case significant archaeological remains existed that may have been disturbed during the work. The work was carried out in accordance with a Written Scheme of Investigation (AOC 2011a)

## 2. Development Proposal and Planning Background

- 2.1 Greenwich Park is managed by the Royal Parks. The local planning authority is the London Borough of Greenwich. Archaeological and building advice to the borough is provided by Mark Stevenson, of the Greater London Archaeology Advisory Service (GLAAS) and by Malcolm Woods, Historic Buildings and Areas Advisor, English Heritage.
- 2.2 A historic building record (HBR) (AOC 2011b) was made of Blackheath Gates in October 2011 before submission of the Planning Application (11/2396/F) and application for Listed Building Consent (11/2397/L). Parts of this report are reproduced here, to give an overview of the entire recording project.
- 2.3 Condition 6 of approval for the repositioning of the park gates relates to the historic structure, and reads:

*No development shall take place within the application site until the developer has secured the implementation of a programme of archaeological recording of the standing historic building(s), in accordance with a written scheme of investigation which has been submitted to and approved in writing by the Local Planning Authority.*

*Reason 6: The site lies within an area where archaeological remains have been identified and in accordance with Policies D30 and D31 of the Unitary Development Plan, 2006.*

- 2.4 Condition 7 of approval for the repositioning of the park gates refers to the potential below-ground archaeological resource, and reads:

*No development shall take place until the applicant has secured the implementation of a programme of archaeological work in accordance with a written scheme for investigation which has been submitted by the applicant and approved in writing by the Local Planning Authority. The development shall only take place in accordance with the detailed scheme pursuant to this condition. The archaeological works shall be carried out by a suitably qualified investigating body acceptable to the Local Planning Authority.*

*Reason 7: The site lies within an area where archaeological remains have been identified and in accordance with Policies D30 and D31 of the Unitary Development Plan, 2006.*

2.5 Accordingly, a written scheme of investigation was produced (AOC 2011a), detailing the methodology that would be used for the HBR and archaeological watching brief, and including some background history of the site (AOC 2011a). The archaeological work was undertaken in accordance with the Written Scheme of Investigation, approved by Mark Stevenson of GLAAS, Archaeological Advisor to Greenwich Council. It was designed in accordance with current best archaeological practice and local and national standards and guidelines:

- English Heritage – Management of Archaeological Projects (EH 1991).
- Institute for Archaeologists – Code of Conduct (IfA 2010).
- Institute of Archaeologists – Standards and Guidance for Archaeological Field Evaluation (IfA 2008)
- English Heritage - Archaeological Guidance Papers 3-4 London Region (EH 1998a-b)
- DoCLG – Planning Policy Statement (PPS5): Planning for the Historic Environment (DoCLG 2010)

2.6 The park and 14 associated elements are listed. Two archaeological monuments within the park are scheduled, and described in the historic background (Section 4). The main listed elements of the park are as follows, the descriptions taken from the listing entries (English Heritage 2011).

- Greenwich Park. Grade I listed. A Royal park with its origins in the 15<sup>th</sup> century and formally laid out in the 1660s. Part of a mid 17<sup>th</sup> century restoration scheme was associated with the French designer Andre le Nôtre. The park was home of the Royal Observatory from 1676 to 1953, and, along with neighbouring properties and part of the town centre, is included on UNESCO's list of World Heritage sites. NGR: TQ 39063 77268. List entry number is 1000174.
- Greenwich Park is designated at Grade I for the following principal reasons:
  - \* as a Royal Park enjoyed and modified by kings, notably Henry VIII, James I and Charles II.
  - \* it forms the setting for a large number of listed buildings, most importantly Inigo Jones's Queen's House (now part of the National Maritime Museum) and Christopher Wren's Flamsteed House, the original Royal Observatory.
  - \* for the outstanding interest of some of its designed landscape elements such as the parterre and giant steps, an inter-related pair of garden earthworks, which form legible remains of the core of one of the earliest great formal gardens in the French style.
  - \* as the setting of a scheduled Roman temple and a scheduled group of Anglo-Saxon barrows, on a ridge overlooking the River Thames.
  - \* as part of the ensemble of historic features that contribute to the international significance of the maritime and royal heritage of the Maritime Greenwich World Heritage Site.
- Royal Observatory Flamsteed House. A Grade I listed building, built 1675-6 with later additions, attributed to Sir Christopher Wren. This is located at the north end of Blackheath Avenue, with a group of associated buildings.
- The Royal Observatory Former Great Equatorial building is Grade I listed, and dates to the mid 19<sup>th</sup> century.
- The Royal Observatory The Transit House is also Grade I listed and dates to the 17<sup>th</sup> and 18<sup>th</sup> centuries.
- The Royal Observatory Wall and clock to right of entrance gates is also Grade I listed.



2.7 Other parts of the park are Grade II listed. These include the following:

- A late 19<sup>th</sup> century octagonal bandstand.
- The boundary wall surrounding the park. Much of the original 17<sup>th</sup> century red brick walling, including piers with stone capping and dressed and moulded angles, remains.
- Two portions of boundary wall at west end of south side, Park Vista.
- St Mary's Lodge (in north-west corner of park).
- King William Walk: St Mary's Gate dates to the early 19<sup>th</sup> century.

### **3. Geology and Topography**

3.1 The site lies 1.5km from the south bank of the Thames, as it curves round the Isle of Dogs at Greenwich Reach. The British Geological Survey mapping (British Geological Survey, 1979) of this area indicates that the solid geology underlying the site and surrounding area is the London Clay formation. This is an Eocene marine deposit, laid down c. 55 million years ago. This is overlain by a superficial geology of the Blackheath beds, which have been eroded by the Thames along its current route, with terrace gravel and alluvial deposited nearer to the River floodplain. The site lies at around 45mOD, whilst Blackheath lies generally flat. To the south, the land drops away to Blackheath village.

## **4. Archaeological And Historical Background**

### **4.1 Prehistoric (c. 500,000 BC – AD 43)**

4.1.1 The site lies on high ground above the Thames, and is potentially a good area of Palaeolithic or Mesolithic finds, the nearest finds on this side of the Thames are a flint flake nearly 2km away, at Thurston Road in Lewisham, and an Axe from Woolwich Church Street, 5km to the east. Evidence for activity in the Neolithic period is equally sparse, the nearest evidence being a flint flake from Blackheath Hill, a kilometre to the west. However, the lack of evidence may reflect the lack of opportunities to search for such finds. The Bronze Age and Iron Age are also barely represented locally.

### **4.2 Roman (AD 43 – AD 410) and Early Medieval (AD 410 – AD 1066)**

4.2.1 The principal Roman feature known within Greenwich Park is a Scheduled Ancient Monument (List entry number 1021439), which is a Romano-Celtic temple on the east side of Greenwich Park located partly on a prominent mound at the southern end of what is now Lover's Walk, between Lover's Walk and Maze Hill Gate (NGR TQ 39299 77417). The monument is sited in a prominent position at the head of a valley near the edge of the Greenwich escarpment overlooking the River Thames. An excavation on the mound in 1902 revealed a small structure of two phases accompanied by fragmentary inscriptions, part of a statue, fragments of two rare carved ivory pieces and large quantities of pottery, some of it imports from France. In addition, coins were discovered which had a date range from soon after the Roman conquest to the fifth century. The interpretation was that since the site was too small to be a villa, it possibly represented a shrine. Further Roman evidence was recovered during excavations in 1924-27, and geophysical survey in 1994 failed to locate other structures in the immediate vicinity. In 1999, excavations were carried out by the Museum of London and Birkbeck College with Channel 4's Time Team, which revealed more structural evidence on the mound and further features to the east of it suggesting a complex of buildings, ditches and metal surfaces.



- 4.2.2 Other evidence of Roman activity in the immediate vicinity of the park includes the known remains of the route of Watling Street. This was the Roman road from the Kent coast to London, and is known to be located c.1km to the east of the park. If the road runs straight, it would continue through Greenwich Park. However, a straight line would take the road through marshland at Deptford creek, so it may have skirted the area.
- 4.2.3 On Blackheath, the Ordnance Survey recorded a rectangular earthwork in 1895 immediately northwest of Hollyhedge House. This was excavated in 1906 producing Roman tile and coarse pottery.
- 4.2.4 Some 50m to the west, in Dartmouth Grove, cremation burials were also found in pottery urns in 1803. Other evidence is limited to isolated finds of coins, building material and pottery. Additionally a bronze lamp was recovered from the Thames and a bronze bowl from the Park.

#### **4.3 The Early Medieval (AD 410 – AD 1066) Period**

- 4.3.1 Anglo-Saxon activity in this part of the Greater London area dates to the 6<sup>th</sup> to 8<sup>th</sup> centuries AD. The name Greenwich is a Saxon place-name, denoting a *wic* or trading settlement. The settlement had direct access from the river, so was closer to the river than the park is. The park itself is the location of a Scheduled Ancient Monument; consisting of a barrow cemetery of at least 31 barrows. Their survival in southeast England is rare: they may have survived by virtue of their presence in parkland. The cemetery is located southwest of the Old Royal Observatory on high ground overlooking the River Thames. The barrows are set back from the edge of the Greenwich escarpment on a small natural rise 0.9m high; to the northeast the ground falls steeply into a deep valley cutting the scarp edge. The barrows are low mounds varying in diameter from 3.4m to 9.5m, and are from 0.1m to 0.7m in high. The barrow group forms a tight cluster, some less than 1m apart. Almost all the barrows show signs of disturbance, whether by excavation or tree roots. The Reverend James Douglas opened at least 20 barrows in 1784; only eight of these are described by him, and they contained primary burials some of which were in wooden coffins. Finds included an iron spearhead and knife and also a shield boss and textile evidence. A second cemetery may have existed in the vicinity of Queen's House, where human bones and a hanging bowl were found in 1860, but little is known about its location (English Heritage 2011).
- 4.3.1 The first written record for Greenwich lists the manor of *Grenevic* as a possession of King Alfred (AD 871-900) but in AD 918, the manor passed to the Abbey of St Peter's at Ghent.

#### **4.4 Medieval (AD 1066 – AD 1536) Period**

- 4.4.1 Greenwich appears to have royal connections dating back to 1300, when Edward I made offerings at the Chapel of the Virgin Mary. In 1408, when Henry IV made his will, it was signed at Greenwich. In 1417, the Manor of Greenwich passed to Humphrey, Duke of Gloucester (brother of Henry V), and in 1433 he was granted a licence to empark 80ha of land to make a park at Greenwich. Humphrey also built Greenwich Palace, on the banks of the Thames, in 1426. It became a favoured Royal residence, having been rebuilt in the early 16<sup>th</sup> century by Henry VII, and was the birthplace of the future Henry VIII. On the site later occupied by the Royal Observatory, Humphrey built a tower, first known as *Mirefleur* and later as Greenwich Castle.

#### **4.5 Post Medieval to Modern Periods (AD 1536 – c. 2011)**

- 4.5.1 James I gave Greenwich to his Queen, Anne of Denmark, in 1613 and in 1616, Inigo Jones was invited to build a new house for her. He chose the site of an existing 'Lodge Gate' in the wall running along the south side of the Deptford to Woolwich Road. Queen Anne died before the house (Queen's House) was completed. Much of the park was then enclosed within a red-brick wall which

James I had built to replace the park fence. Originally c 3.5m high and c 3km long, the wall, including piers with stone cappings and dressed and moulded angles, is listed Grade II. Parts have been repaired or rebuilt at various later dates and at least one quarter of the boundary is defined by iron railings.

- 4.5.2 In 1629 Charles I gave Queen's House to his Queen, Henrietta Maria, and Inigo Jones resumed work. The 1660s saw the character of the park transformed from a medieval heath-land hunting park into a formal landscape with a grand garden and avenues. The new design reflected the French influence to which Charles II was exposed while in exile. Although others were largely responsible for the formal layout of Greenwich Park, at least part of the restoration scheme is associated with the French designer Andre le Nôtre (1613-1700) who worked on the gardens of Louis XIV at Versailles.
- 4.5.3 When Charles II concentrated his attentions on Hampton Court, he appointed Britain's first Astronomer Royal and engaged Sir Christopher Wren to design an observatory. After this period of activity little royal interest was taken in the park but it became increasingly popular with the public and pensioners from the adjoining naval hospital.
- 4.5.4 In the 19<sup>th</sup> century, Greenwich Park underwent changes through encroachments and enclosures within the park, intensified public use, and other threats which prompted organised protests from local residents. The park became overgrown and undermanaged, so that repairs and alteration were needed. In 1853, paths were levelled and gravelled, and by the end of the century, new features included a bandstand, a refreshment chalet, two drinking fountains, public lavatories, a lake, flower gardens, and shrubberies. Vehicular traffic was first admitted to the park in 1875, restricted to the Blackheath Avenue and The Avenue. In the 1930s, Queen's House became the National Maritime Museum.
- 4.5.5 During the Second World War, anti-aircraft defences were constructed in the park to combat aerial assault and at least three air-raid shelters were built, with barrage balloons moored nearby. Allotments established during the 1940s continued in use until at least 1949.
- 4.5.6 In 1993, the Royal Parks Agency was established and given executive responsibility for managing and policing the Royal Parks, including Greenwich. In 1997, the whole park, along with neighbouring properties and part of the town centre, was inscribed onto UNESCO's list of World Heritage Sites. Greenwich Park is now a public open space and continues to be managed by the Royal Parks Agency.

## **4.6 Greenwich Park**

- 4.6.1 The main entrance to Greenwich Park is to the south, from Charlton Way via Blackheath Gate. The plan made to accompany engravings by Francis Place to celebrate the opening of the Royal Observatory (Pepys' Plan, 1675-80) shows a gate in this position, and it appears to have been the main entrance. Blackheath Gate leads north-west onto Blackheath Avenue, a wide (c 15m), 600m long asphalt drive lined with double rows of horse chestnut trees. That avenue, the main axis of the site, was set out in 1660 and is aligned directly on the Queen's House. Four of the original 17<sup>th</sup> century sweet chestnut trees, part of the outer line of Blackheath Avenue, survive towards the north-west end. The present trees were partly planted in 1820, and supplemented from 1930 onwards. Blackheath Avenue terminates at the bronze statue of General Wolfe (listed Grade II) with the buildings of the Royal Observatory (listed Grade I and II) situated to the west of the statue. Numerous other gates provide entrances around the site, the most notable being the early 19<sup>th</sup> century St Mary's Gate (listed Grade II) to the north-west. St Mary's Lodge (1807-8, listed Grade II), built in the style of a cottage orné, is c 25m to the south-west of the Gate.

- 4.6.2 The site consists mainly of open parkland, the primary focus of which is the south-east/north-west axis from the Blackheath Gate along Blackheath Avenue down to the buildings of the National Maritime Museum (most of which is listed Grade I). Situated on the north-west boundary of the park, the principal building of this complex is the Queen's House. The main axis southeast from the Queen's House was then carried up the escarpment onto the Blackheath plateau via terraces that joined the upper and lower parts of the park. On the upper, Blackheath plateau, were double avenues of elms radiating off a *patte d'oie* (a garden feature of radiating paths that resembles a goose's foot).
- 4.6.3 The parkland is crossed by numerous paths many of which, like the Blackheath Avenue, originate from the 17<sup>th</sup> century layout. Occasional veteran sweet chestnut trees survive from this period. These are especially noticeable to the south and include those along the south end of Bower Avenue, which runs north from Blackheath Gates, and the south-west end of Great Cross Avenue, which crosses Blackheath Avenue c 400m north-west of the gate.
- 4.6.4 Level ground which extends either side of Blackheath Avenue, and which is bordered to the north-west by the Great Cross Avenue, includes a number of separate areas which have been developed from the 19<sup>th</sup> century onwards. They include to the east, the 19<sup>th</sup> century Flower Garden with a small serpentine lake, and the early 20<sup>th</sup> century deer enclosure. These were made on the site of the 17<sup>th</sup> century 'Great Wilderness'. In the southeast corner of the park is a war memorial c.1920 (listed Grade II) which commemorates residents of the borough who lost their lives in both world wars.
- 4.6.5 To the south-west of Blackheath Avenue are the Ranger's Field, the Rose Garden and the reservoir. The Ranger's Field in the south corner was the site of the Little Wilderness Enclosed in 1806; the area was restored to public access in 1897 and since 1907 has been used as a sports field. Land not taken up by these areas retains remnants of 17<sup>th</sup> century plantings.
- 4.6.6 In 1855 new iron gates and fencing were erected at Blackheath entrance to the park, and the old gates of wood, one double for vehicular traffic and another single for pedestrians done away with (Webster 1902). The new gates comprise three pairs of piers, all constructed with a stone plinth, yellow stock bricks, and with stone caps. Each plinth is topped by a lantern. The central pair of piers is the tallest, and the gates they support are the most decorative. The two flanking pairs of piers are shorter. The six piers carry three sets of double gates for vehicular traffic; the outer piers carry single gates for pedestrians. It is understood that the piers have been rebuilt several times since their construction (Malcolm Woods pers.comm.), and that while the stone caps and plinths are the original materials, not all the general brickwork is original.

## 5. Strategy

### 5.1 Aims of the Investigation

- 5.1.1 The specific aims of the archaeological watching brief were defined as being:
- To make a permanent record of historic structural details where revealed during the works
  - Identify and sample any deposits that can inform on the development and chronology of the park and the presence of any remains that may relate to the known earlier use of the site.
  - To establish the presence/absence of archaeological remains within the site.
  - To determine the extent, condition, nature, character, quality and date of any archaeological remains encountered.
  - To record and sample excavate any archaeological remains encountered.

- To assess the ecofactual and environmental potential of any archaeological features and deposits.
- To determine the extent of previous truncations of the archaeological deposits.
- To enable the archaeology advisors to the Borough of Greenwich and the Historic Buildings and Areas Advisor to make an informed decision on any possible requirement for further work in order to satisfy their requirements for recording.

5.1.2 The final aim was to make public the results of the investigation, subject to any confidentiality restrictions.

## **5.2 Methodology**

5.2.1 Site procedures were defined in the Written Scheme of Investigation (AOC 2011). All work was carried out in accordance with local and national guidelines (IfA 2008).

5.2.2 The watching brief strategy conformed to current best archaeological practice and local and national standards and guidelines (see section 2.4).

5.2.3 Prior to commencing work, a unique site code (BLA 11) for the project was obtained from the Museum of London, and used as the site identifier for all records.

5.2.4 The watching brief was carried out in February and March 2012, during removal of standing gate piers, and excavations for their new locations (Figure 3).

5.2.5 The site work was supervised by Les Capon under the overall management of Melissa Melikian. The site was monitored by Mark Stevenson of GLAAS, and Malcolm Woods, Historic Buildings and Areas Advisor, English Heritage.

## 6. Results

### 6.1 Blackheath Gates HBR

- 6.1.1 Blackheath Gates comprise three pairs of brick piers of the same style, but of different sizes (Plate 1, Figures 2 and 3). The two central pair of piers are the largest (Piers 3 and 4), two flanking piers are the smallest (Piers 1 and 6). Five of the piers have been rebuilt during the 20<sup>th</sup> century, only one fully retains its original materials. The gate piers are mostly brick, with a Portland stone plinth, abacus and cornice. Each pier is surmounted by a lantern. The gates are iron. Between each pier is a granite slab forming a threshold, and the entire inner side is paved with granite setts to a distance of 1.65m. The roadward side to Charlton Way is tarmac. The gates are constructed of wrought iron rods and rails, and furnished with spear-shaped finials at the top of each rod. The different parts of the gates are welded together, rather than being single units. All gates open inwards to the park, and are secured open by iron rocking catches embedded in concrete.



Plate 1: Blackheath Gates, Looking Northwest

- 6.1.2 Each gate pier has a stone plinth with an ogee-moulded base above. The shaft of each pier is square in profile, formed of brick, and rises to a thin stone abacus. Three further courses of brick form a frieze, and cornice is stepped and ogee-moulded with a flat top. On the top of each pier is a flat square stone base for a lantern. The lanterns are iron framed and glazed, painted black with gold finials.
- 6.1.3 The outer pair of piers are 3.28m high (Piers 1 and 6). The brick shafts have 0.68m square profiles, and the stone plinths are 0.86m square. Each plinth is cut by a channel for wiring or piping to the lanterns, since removed. The westernmost of the six piers (Pier 1) is the only pier to have retained its original form. This pier holds a single pedestrian gate on its east side, and has railings affixed continuing westwards. The stone plinth is 0.86m square, sitting atop courses of red brick used as foundations. The brick shaft of the pier atop this is formed of pale buff bricks manufactured by Allen of Ballingdon. This company manufactured bricks at their Grove brickworks from 1886-1906 (Plate



2). The bricks are bonded with hard lime mortar, with coarse components of crushed brick and charcoal. The brick bond is regular, using headers and stretchers, with a pair of queen closers on alternate courses. The bricks are generally in good condition, with slight surface flaking and environmental sooting. This western pier is also the only pier to have an undamaged cornice. The stone plinth sits atop courses of red brick.



Plate 2: Brick Manufactured by Allen of Ballingdon

- 6.1.4 The shaft of the eastern of the outer piers (Pier 6) is constructed of yellow brick with a poured, reinforced concrete centre. The brick coursing used in the same as pier 1, but the materials are far more modern.
- 6.1.5 Pier 2 has a stone plinth with a moulded top which has clearly been part of a previous building. A pair of square hollows are linked by a pair of angled channels, both running from a worn hollow in the top (Plate 3). Lead would have been poured into this interlaced channel, in tandem with an abutting block, to form a lead tie-bar. This technology is known from the Roman and neoclassical period. The plinth is heavily worn, which may be indicative of age, but is also indicative of erosion from traffic. This pier has the same profile as Pier 1, and has a twin at the opposite side of the gates (Pier 5).

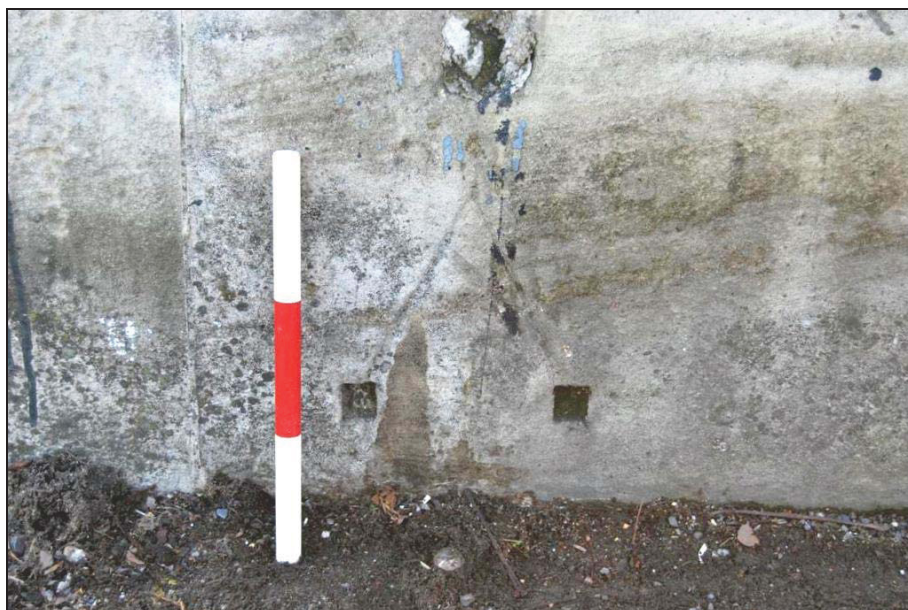


Plate 3: Setting for Lead Ties, Pier 2

- 6.1.6 Piers 2 and 5 are both constructed of yellow brick with cement pointing, coursed in a matching style as Piers 1 and 6. They have a central core of concrete with vertical reinforcing bars.
- 6.1.7 There is a worn length of granite present at the threshold between piers 1 and 2 and another between Piers 5 and 6. The gate on each outer pair has a double lock rail, and spears on subsidiary rods above it on an outer top frame. The hanging stile turns upon an offset spindle set into the ground at the base, and by a spindle attached to an upper topframe that spans the piers. Spear-points are set on this, rather than the top rail of the gate.
- 6.1.8 A pair of gates hang between the inner piers (Piers 2 and 5) and the central pair (piers 3 and 5). These gates span openings 3.22m wide, and are similar to the other gates in form. They have flat top rails with spear points above. The outer gate of each pair holds a central spear, which overlaps when the gates are shut. Two spears are missing from the western pair. These gates differ from the central and side pairs, in that there is no stone threshold, rather the granite setts continue up to the outer face. The western pair of gates appear to have new top rails with spear points welded on.
- 6.1.9 The central pair of gates are the largest, mounted on the largest of the piers (Piers 3 and 4). From the base of the plinths to the top of the cornices, the piers are 3.81m high. The brick shafts are 0.88m square and constructed of yellow stock bricks. A comment from Malcolm Woods (pers.comm) regarding the piers was "that they have been rebuilt many times". The plinth is larger than the shaft, 1.08m square. A vertical incision in the outside side of each plinth marks the location of former electric light or gas supply to the lanterns. The plinths are generally worn on the corners. The western pier of this pair has notable damage to the southwest corner of the cornice, and less damage to the southeast corner. The eastern pier of the pair only has damage to the southwest corner of the cornice. Both piers have a central core of poured, reinforced concrete.
- 6.1.10 The gates have a hard-wearing granite threshold with a central addition of concrete housing a slot for a closing bar. The central pair of gates have a curved iron top rail and are spanned by a double lock rail. The bottom rail is flat. The principal rods are topped by spear-shaped points. Subsidiary rods rise to the lock rail, and also have spear points. Those above the hanging stile are both damaged and bent. The hanging stile of each gate is affixed with two hinges to the post. These gates are usually kept closed, and span an opening of 3.30m. Both gates show evidence for repairs, with welds apparent at the joints with the hanging stiles. The hanging styles are much smoother and less corroded than the rest of the gate, and probably indicate that they are replacement elements. The spear points above the hanging styles are on screw threads and also replacement elements.
- 6.1.11 A low wall topped by railings forms the boundary to the park on both sides of the gates. This is formed of a rounded stone block atop a red brick footing up 0.5m deep in the west, and 1.4m deep in the east. The foundation courses are in English bond, bonded with cement-rich mortar, and step out as they drop.

## **6.2 Watching Brief**

- 6.1.2 A series of excavations for the new gate piers and services were monitored (Figure 3). A continuous numbering sequence was employed, with the numbers carried over between excavated areas where they were clearly the same event.
- 6.1.3 The lowest deposit revealed was firm, friable, brownish yellow sand (5), lying at 44.18mOD, present at the base of all new pier locations and clearly a naturally-lain deposit (Figure 4). This was sealed by up to 0.24m depth of soft yellow sand (4), lying at 44.82mOD in the south of the site next to Charlton Way, dropping to 44.38mOD in Pits NP2 and NP3 and lensing out westwards towards pit NP6. This naturally lain deposit is sealed by varied depth of soft mid-brown sandy silt (3) with



inclusions of brick fragments and small rounded gravel. This layer was 0.54m deep in the centre of the site, and only 0.17m deep towards the southwest, where it was heavily truncated by previous excavations for services. The only datable finds from this layer were pieces of 19<sup>th</sup> century clay pipe. The layer was root disturbed, particularly to the west of the site in association with a circular tree pit outlined with granite blocks [11]. The fill was loose dark brown silty sand (10), and the tree had been recently removed.

- 6.1.4 The subsoil was also cut by a deep intrusion containing water pipes running towards the lodge to the northeast of the gates [7]. The full was a mix of dark brown sandy silt and yellow sand, with brick fragments and gravel inclusions (8). The other service cut [16] was filled with mid brown clayey sand with inclusions of brick, tile and also plastic (14). This was clearly a relatively recent disturbance.
- 6.1.5 In the centre of the site, beyond service truncations, the subsoil was sealed by a thin layer of compact yellowish brown sandy clay and gravel (9). This was only 0.04m deep, and probably represents part of a former carriageway or drive now represented by Blackheath Avenue. This lay at 44.81mOD in Pit NP3 (Figure 4, Plate 4). If this does represent the former drive which became Blackheath Avenue, then it has been severely truncated. This thin layer was sealed by a layer of sharp stones (6). Above the service trench fill, a layer of subrounded grey hardcore (15) was laid down before the current tarmac surface was laid across both (12).



Plate 4: Section of New Pier Location (NP3), Looking South

- 6.1.6 To the west of Blackheath Avenue, the subsoil was sealed by a layer of hardcore (2), with tarmac above (1). To the east, the subsoil was sealed by a layer of yellowish brown sandy silt (13) before the tarmac was laid.
- 6.1.7 At the eastern edge of the gates, a trench was excavated to hold the foundation for a new curtain wall through an area formerly planted with shrubs. This revealed loose dark brown silty sand topsoil (17) overlying a more compact version of the same (18) above a natural, undisturbed sequence.

## 7 Conclusions and Interpretation

- 7.1 Blackheath Gates are not part of the 15<sup>th</sup> century emparkment of the land, nor the historic 17<sup>th</sup> century layout. They do, however, provide a decorative entrance from the Blackheath side of Greenwich Park. Their addition to the park perimeter is thought to date to 1855, and were added as replacements of previous wooden gates. Examination of the pier structures show that five of the piers are constructed with a core of reinforced concrete, and probably post-date the Second World War, although the capstones and plinths are probably historical elements. The earliest of the piers, Pier 1, is the westernmost pier, and is constructed of bricks dating to no earlier than 1886. If these gates were established in 1855, none of the brickwork is of that date. Of interest is the base of Pier 2, which has the scar from a lead tie-bar in its eastern face; a technology used in the Roman period and in neo-classical buildings until c.1900. A permanent record of structural details has been made, including detailed drawings and photographs of the stone capping to the pairs of piers.
- 7.2 The stone plinths of the gate piers show evidence for erosion and wear, the result of heavy and prolonged traffic using the gates. Several of the capstones have undergone fractures and chipping. The gates themselves have been repaired during their existence, as shown by new hanging stiles on the western inner pair, and screw-fixed spear points above the stiles.
- 7.3 However, it is possible that the gates and railings all post-date the Second World War. With the much-advertised scrap metal drive of 1942 to aid the war effort, many parks lost their railings, so the Blackheath Gates may have been taken for scrap, and reinstated after the war. Thus, their historic value may be lower than first apparent.
- 7.4 The below-ground soil horizons have been heavily disturbed both by the insertion of the gate piers in the 19<sup>th</sup> century, and by ensuing service runs and tree pits. At no point during the watching brief was evidence for any use of the site in the prehistoric, Roman or Saxon periods revealed: all deposits were recorded and were either of natural origin, or related to the construction of the gates. A thin spread of gravel in the centre of the site may represent an earlier part of the avenue that became Blackheath Avenue. This is the only hint of the development of the park revealed during the watching brief on below-ground deposits, apart from modern service intrusions.
- 7.5 This report enables the archaeology advisors to the Royal Borough of Greenwich and the Historic Buildings and Areas Advisor to make an informed decision on any possible requirement for further work in order to satisfy their requirements for recording.

## 8 Further Work and Publication

- 8.1 No further archaeological work is recommended in regard to these current works for relocation of the gates.
- 8.2 At a minimum, a short summary of the results will be submitted to the local archaeological round-up.
- 8.3 This report will be added to the grey literature available on the online ADS OASIS project (Appendix B).

## 9 Archive Deposition

- 9.1 On completion of the project, the landowner will discuss arrangements for the archive to be deposited with the Museum of London. Following completion of the full extent of the fieldwork, the site archive will be prepared in the format agreed with the receiving museum. The excavation archive will be security copied and a copy deposited with the National Archaeological Record (NAR) before post-excavation analysis begins or as soon after as can be arranged.

- 9.2 The full photographic record will be deposited with the archive.
- 9.3 The site archive will comprise all written and drawn records. It is to be consolidated after approval of this report, with records and finds collated and ordered as a permanent record. The archive will be prepared in accordance with guidelines for the preparation of excavation archives for long-term storage (UKIC 1990) and (Brown & AAF 2007).

## 10. Bibliography

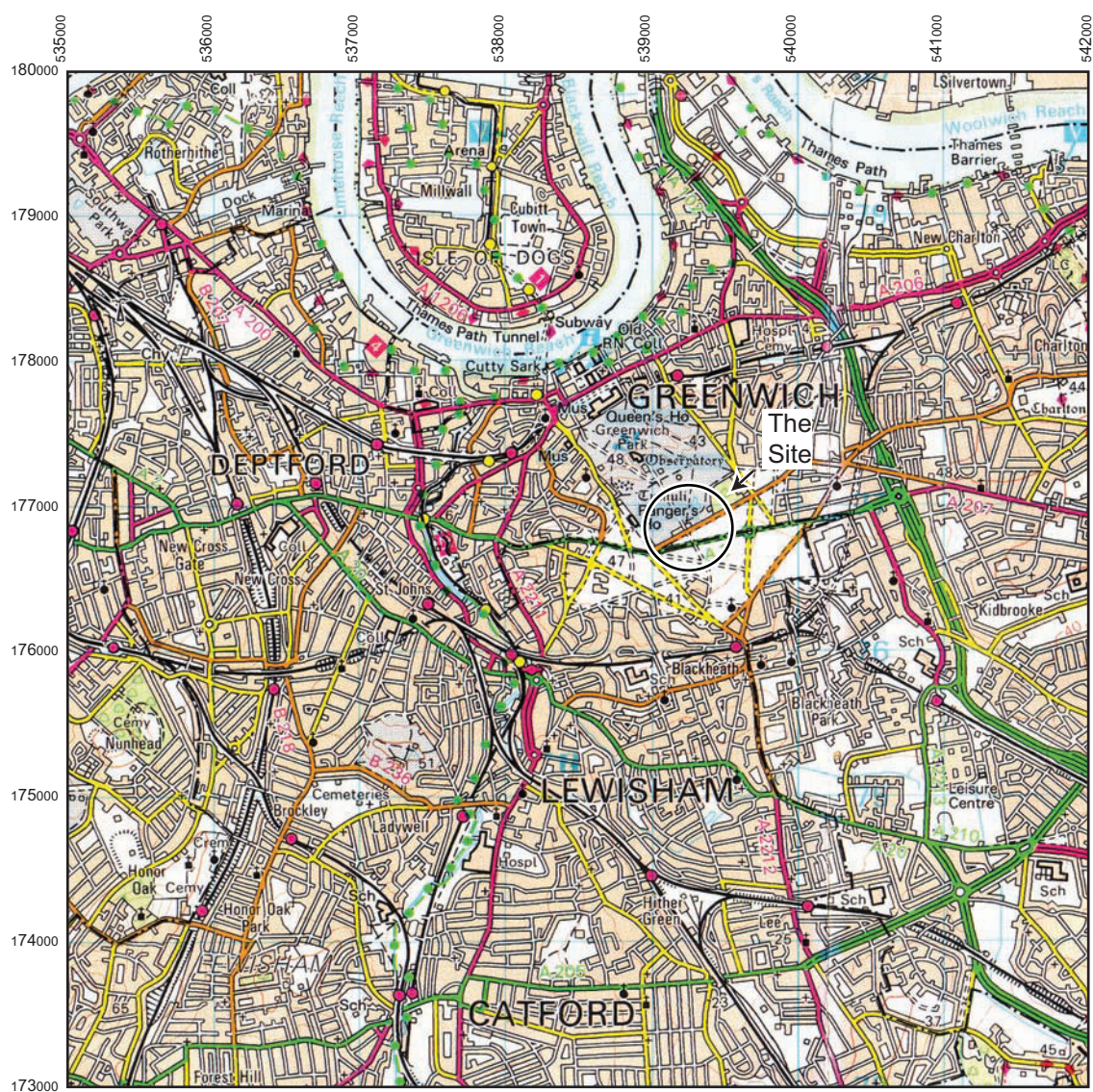
- AOC (2011a). *Blackheath Gates, Blackheath Avenue, Greenwich Park, London Borough of Greenwich: A Written Scheme of Investigation for a Historic Building Record and Archaeological Watching Brief*
- AOC (2011b). *Blackheath Gates, Blackheath Avenue, Greenwich Park, London Borough of Greenwich: Historic Building Record*
- AOC Archaeology Group Ltd (2005). *Fieldwork Sector On-Site Handbook*.
- British Geological Survey, (1979). *Solid and Drift Sheet, South London*.
- DCLG (2010), *Planning Policy Statement 5: Planning and the Historic Environment*.
- English Heritage (1991). *Management of Archaeological Projects*.
- English Heritage (1998a) *Archaeological Guidance Paper 2: Standards and Practices for Written Schemes of Investigation*. English Heritage London Region.
- English Heritage (1998b). *Archaeological Guidance Paper 3: Standards and Practices in Archaeological Fieldwork*. (English Heritage London Region).
- English Heritage (1998c). *Archaeological Guidance Paper 4: Standards and Practices in Archaeological Reports*. (English Heritage London Region).
- English Heritage (2006). *Understanding Historic Buildings: a guide to good recording practice*
- English Heritage (2011). *The National Heritage List for England* | English Heritage. [ONLINE] Available at: <http://list.english-heritage.org.uk/>. [Accessed 19 September 2011].
- Institute for Archaeologists (2008). *Code of Conduct*.
- Institute for Archaeologists (2008). *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology*.
- MoLAS (2000). *The Archaeology of Greater London: an assessment of archaeological evidence for human presence in the area now covered by Greater London*. MOLAS: London.
- Museum of London (1998): *Archaeology in Greater London 1965-90*
- Museum of London (2000): *The Archaeology of Greater London*
- Museum of London (1994). *Archaeological Site Manual* (3<sup>rd</sup> ed).
- Museum of London (2002). *A Research Framework for London Archaeology*.
- United Kingdom Institute for Conservation (1983). *Conservation Guidelines No 2*.
- United Kingdom Institute for Conservation (1990). *Guidance for Archaeological Conservation Practice*.
- Webster (1902). *Greenwich Park. Its History and Association*

Weinreb and Hibbert (eds.) (1983), *The London Encyclopaedia*, London: Macmillan.



BLACKHEATH GATES, BLACKHEATH AVENUE, GREENWICH PARK, ROYAL BOROUGH OF GREENWICH:  
WATCHING BRIEF REPORT

Site Location Within London



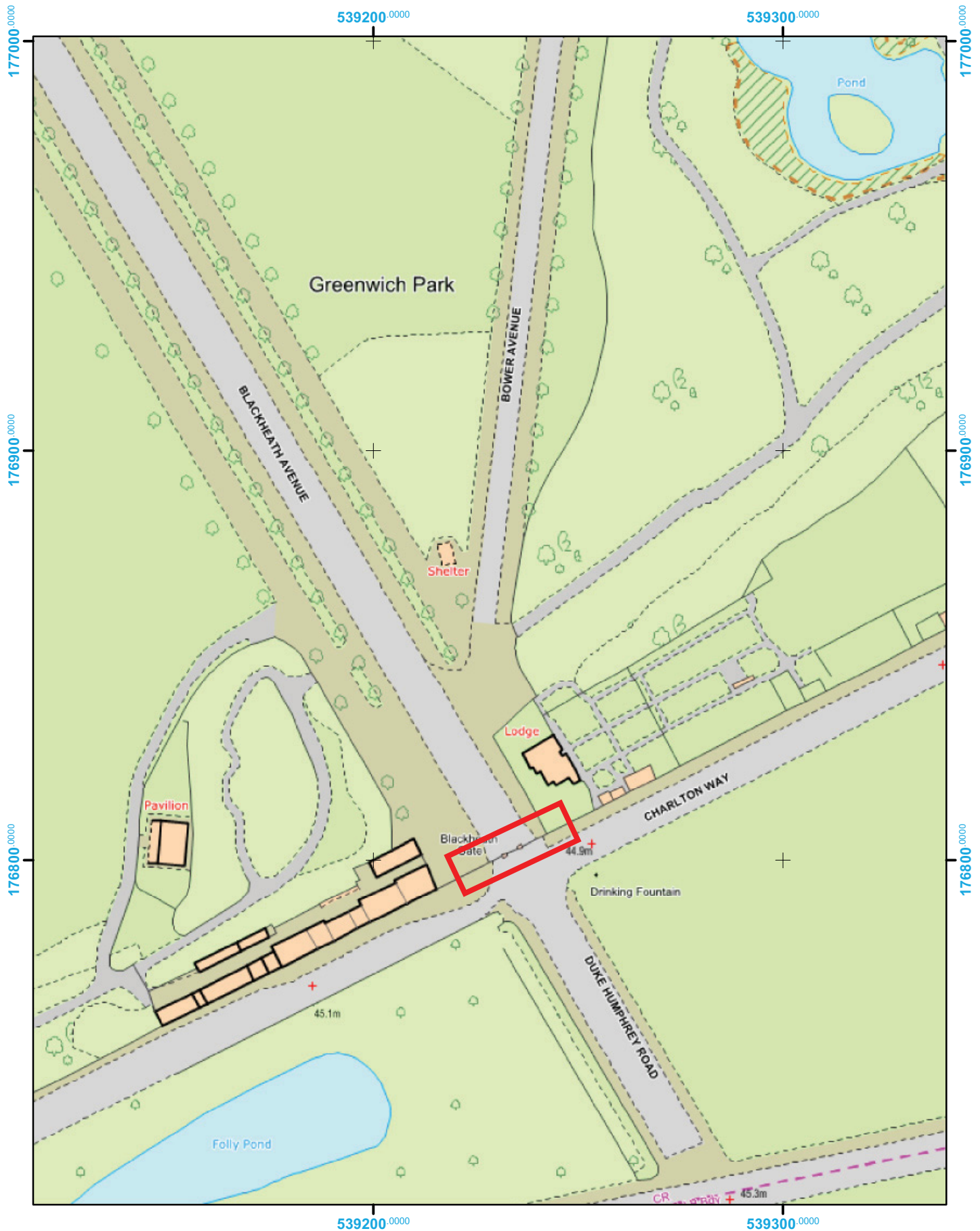
Based on the Ordnance Survey's 1:50 000 Landranger map of 2004  
with the permission of the Controller of Her Majesty's Stationery Office,  
© Crown Copyright. Licence No. AL 100023757

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**Figure 1:** Site Location





**Figure 2:** Detailed Site Location

BLACKHEATH GATES, BLACKHEATH AVENUE, GREENWICH PARK, ROYAL BOROUGH OF GREENWICH:  
WATCHING BRIEF REPORT



Taken from Information supplied by Peter Brett Associates LLP, 2012

- Watching Brief on Pier Removal
- Watching Brief on New Piers
- Watching Brief on Other New Structures

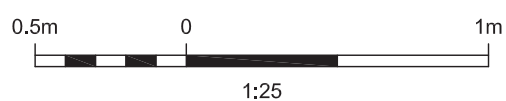
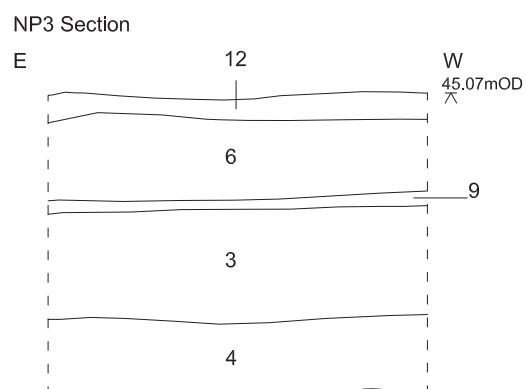
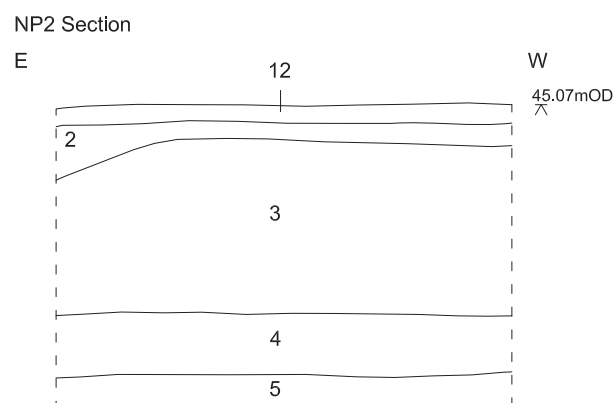


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**Figure 3:** Plan of Watching Brief Areas

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**Figure 4:** Sample Sections

## Appendices

## Appendix A

Context	Description	Length	Width	Depth
1	Outer Tarmac surface	8.00m	4.00m	0.12m
2	Bedding for Tarmac	25.00m	1.50m	0.14m
3	Reworked subsoil	25.00m	1.50m	0.50m
4	Yellow sand	25.00m	1.50m	0.22m
5	Mottled orange sand	1.25m	1.25m	>0.10m
6	Bedding layer of sharp stones	1.25m	1.25m	0.14m
7	Service intrusion	2.00m	1.60m	>1.00m
8	Fill of 7	2.00m	1.60m	>1.00m
9	Hard sandy clay and gravel	1.25m	1.25m	0.04m
10	Fill of 11	1.50m	1.50m	0.80m
11	Tree pit	1.50m	1.50m	0.80m
12	Central Tarmac Surface	10.00m	4.00m	0.10m
13	Made Ground	10.00m	4.00m	0.35m
14	Fill of (16)	10.00m	1.00m	0.50m
15	Hardcore for (12)	10.00m	4.00m	0.15m
16	Service Cut	10.00m	1.00m	0.50m
17	Flowerbed/ shrubbery	6.00m	0.50m	0.25m
18	Root-disturbed subsoil	6.00m	0.50m	0.10m

## Appendix B - OASIS Form

**OASIS ID: aocarcha1-110329**

### Project details

Project name	Blackheath Gates HBR
Short description of the project	Historic Building Record plus Watching Brief of the 1855 Blackheath Gates at Greenwich Park during relocation. The piers are not original. No significant below ground archaeology was present.
Project dates	Start: 26-09-2011 End: 12-03-2012
Previous/future work	No / Not known
Any associated project reference codes	BLA 11 - Sitecode
Any associated project reference codes	30177 - Contracting Unit No.
Type of project	Building Recording
Site status	English Heritage List of Parks and Gardens of Special Historic Interest
Current Land use	Other 14 - Recreational usage
Monument type	GATES Post Medieval
Methods & techniques	'Annotated Sketch', 'Photographic Survey'

### Project location

Country	England
Site location	GREATER LONDON GREENWICH GREENWICH Blackheath Gates at Greenwich Park
Postcode	SE 10

Study area 60.00 Square metres

Site coordinates TQ 3922 7683 51.4727756774 0.00477485721557 51 28 21 N 000 00 17 E  
Point

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### Project creators

Name of Organisation AOC Archaeology

Project brief originator English Heritage

Project design AOC Archaeology  
originator

Project director/manager Melissa Melikian

Project supervisor Les Capon

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### Project archives

Physical Archive No  
Exists?

Digital Archive recipient Museum of London

Digital Archive ID BLA 11

Digital Contents 'none'

Digital Media available 'Images raster / digital photography', 'Images vector', 'Survey'

Digital Archive notes held at AOC until transfer

Paper Archive recipient Museum of London

Paper Archive ID BLA 11

Paper Contents	'none'
Paper Media available	'Plan', 'Report', 'Section', 'Unpublished Text'
Paper Archive notes	held at AOC until transfer

#### Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Blackheath Gates, Blackheath Avenue, Greenwich Park, London Borough of Greenwich: A written Scheme of Investigation for a Historic Building Record and Archaeological Watching Brief
Author(s)/Editor(s)	Capon, L.
Date	2011
Issuer or publisher	AOC Archaeology
Place of issue or publication	London

#### Project bibliography 2

Publication type	Grey literature (unpublished document/manuscript)
Title	Blackheath Gates, Blackheath Avenue, Greenwich Park, London Borough of Greenwich: Historic Building Report
Author(s)/Editor(s)	Capon, L.
Date	2011
Issuer or publisher	AOC Archaeology
Place of issue or publication	London

Description 25 pages, 4 figures, 10 plates

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### Project bibliography 3

Publication type Grey literature (unpublished document/manuscript)

Title Blackheath Gates, Blackheath Avenue, Greenwich Park, Royal Borough of Greenwich: Watching Brief Report

Author(s)/Editor(s) Capon, L.

Date 2012

Issuer or publisher AOC Archaeology

Place of issue or London  
publication

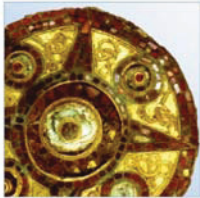
Description 26 pages, 4 plates, 3 illustrations

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Entered by les capon (les.capon@aocarchaeology.com)

Entered on 21 March 2012





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