



**GORDON HOUSE (PROJECT BOND)**  
**Royal Hospital Chelsea**  
**London, SW3**

Royal borough of Kensington and Chelsea

Historic Environment Assessment Addendum

February 2015



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Archaeological impact assessment addendum

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An archaeological impact assessment addendum

**NGR 527910 177875**

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## Contents

<b>Executive summary</b>	<b>1</b>
<b>1 Introduction</b>	<b>2</b>
1.1 Origin and scope of the report	2
1.2 Planning Background	2
1.3 Designated heritage assets	3
1.4 Aims and objectives	3
<b>2 Archaeological and historical background</b>	<b>5</b>
2.1 Topography and geology	5
2.2 Overview of past investigations	5
2.3 Archaeological potential	7
2.4 Past impacts	8
2.5 Likely depth/thickness of archaeological remains	8
<b>3 Impact of proposals</b>	<b>9</b>
3.1 Proposals	9
3.2 Implications	9
<b>4 Planning framework</b>	<b>10</b>
4.1 National planning policy and legislation	10
4.2 Greater London regional policy	10
4.3 Local planning policy	10
<b>5 Further work</b>	<b>12</b>
<b>6 Glossary</b>	<b>13</b>
<b>7 Bibliography</b>	<b>15</b>

## Figures

Cover: View of Gordon House from the south-east

*Fig 1 Site location*

*Fig 2 Location of proposed development*

*Fig 3 Plan of pile and retaining pile wall locations (Alan Baxter, Dwg no. 1635/20/1125, rev A, January 2015)*

## Executive summary

MOLA has been commissioned by Candy & Candy to produce an addendum to the previous Historic Environment Assessment (MOLA 2014a). This addendum provides an update of the baseline from previous and ongoing archaeological investigations within the site and assesses the potential impacts on buried heritage assets (archaeological remains) of the proposed development of the addition of an external swimming pool and associated plant within the site to the south of Gordon House. Heritage assets that may be affected by the proposals comprise:

- A high potential for buried footings **18th-century landscaping in the form of an ornamental pond and/or watercourses** of low to medium significance. The pond/watercourse was located in the southern half of the site until the construction of Gordon House when the area was again levelled and terraced. The nature of subsequent development on the site suggests that such remains could survive intact.
- There is a potential for further evidence of **mid/late 17th-century glass working waste** associated with John Baker due to a large amount of glass dump being recorded in the 2014 archaeological evaluation within the site of low to medium significance. The glass dumping appeared to have been used to make the garden terrace.
- The site lies within the **Royal Hospital Conservation Area** and contains nationally designated (protected) sites, the **Grade II listed building of Gordon House** (Hospital quarters), Royal Hospital, the **Grade II listed 19th century lodge** at Creek Gate, and the **Grade II listed Orangery**. As well as additional protected sited immediately adjacent.

The site has a low potential for remains from all periods, as although the site's location along the edge of the Thames would have been desirable for settlement, no such evidence has been found within or around the site. It remained agricultural land until the development of the Royal Hospital in the 18th century when it was absorbed into the estate of the Hospital's treasurer at the time, Walpole.

The primary impact of development is the construction of a basement to the south of the house which would incorporate an external open pool and its associated plant. This would remove or all remains to its depth within its footprint.

The archaeological potential of the site is primarily for landscaping and garden archaeology features contemporary with the original late Georgian house (and its subsequent phases). Such landscaping (and in particular terracing as suggested from historic maps) may have reduced the potential for survival of earlier remains, depending upon the depth of deposits. Geotechnical test pit, boreholes and three archaeological evaluation trenches have been dug within the site and confirm the survival of footings and foundations of structures dated to Walpole's landscaping of the area in the early 18th century to the north and west of Gordon House and north of terraced lower garden. Furthermore, they uncovered dumped glass waste indicating the potential presence of glass manufacturing close to the site. It is thought that it relates to John Baker's glassworks which was located in the area in 1672–1679.

In light of the results of archaeological investigations undertaken so far, it is likely that a further watching brief would be required during any ground works (excavation for basement, foundations services etc) to ensure that all archaeological remains impacted upon would be recorded prior to their removal. Such work would be carried out in accordance with a Written Scheme of Investigation under the terms of a planning condition.

# 1 Introduction

## 1.1 Origin and scope of the report

- 1.1.1 The Museum of London Archaeology (MOLA) has been commissioned to produce an addendum to the previous Historic Environment Assessment (MOLA 2014a) of development at Gordon House, Chelsea (National Grid Reference 527910 177875: **Error! Reference source not found.**). The current proposed scheme comprises the excavation for and construction of an external pool and associated plant in an attached basement. The pool and plant would lie in the grounds of the house directly to its north.
- 1.1.2 This desk-based study assesses the impact of the scheme on buried heritage assets (archaeological remains) within the area of proposed development (hereafter referred to as the 'site'). that the report will enable the local planning authority (LPA) to formulate an appropriate response in the light of the impact upon any known or possible heritage assets. These are parts of the historic environment which are considered to be significant because of their historic, evidential, aesthetic and/or communal interest. These might comprise below and above ground archaeological remains, buildings, structures, monuments or heritage landscape within or immediately around the site (DCLG 2010, 1, 13). This report deals solely with the archaeological implications of the development proposals and does not cover possible built heritage issues (eg setting), except where buried parts of historic fabric are likely to be affected.
- 1.1.3 This addendum includes a summary of the results of the archaeological Watching Brief of the SI work (MOLA 2014) and the Archaeological Evaluation and associated Standing Building Recording and Watching Brief (MOLA 2014).
- 1.1.4 The assessment has been carried out in accordance with the requirements of the National Planning Policy Framework (NPPF) (DCLG 2012, 2014; see section 10 of this report) and to standards specified by the Chartered Institute for Archaeologists (CIfA Dec 2014a, 2014b), English Heritage (2008, 2011), and the Greater London Archaeological Advisory Service (GLAAS 2014). Under the 'Copyright, Designs and Patents Act' 1988 MOLA retains the copyright to this document.
- 1.1.5 Note: within the limitations imposed by dealing with historical material and maps, the information in this document is, to the best knowledge of the author and MOLA, correct at the time of writing. Further archaeological investigation, more information about the nature of the present buildings, and/or more detailed proposals for redevelopment may require changes to all or parts of the document.

## 1.2 Planning Background

- 1.2.1 Three planning applications for the site have previously been granted consent. The first was in 2012 (Planning reference DPS/DCPP/11/02556 /Q13/S113) and contained no archaeological planning conditions, while the second, granted in 2013 (Planning reference PP/13/03968) contained two archaeological conditions. Conditions No. 14 and 15 as set out below;

**Condition 14;** No development shall take place until arrangements have been made for an archaeological "watching brief" to monitor development groundworks and to record any archaeological evidence revealed. These arrangements are to be submitted to, and approved in writing by, the Local Planning Authority. The development shall take place in accordance with the "watching brief" so approved. The "watching brief" shall be carried out by a suitable qualified investigating body approved in writing by the Local Planning Authority. (C101)

*Reason - To minimise any damage to any archaeological remains that may exist on site and to ensure satisfactory recording in accordance with the guidance contained in Planning Policy Guidance Note 16, and the Council's Policies. (R100)*

**Condition 15;** No development shall take place until the applicant, their agent, or successors in title secures the implementation of a programme of archaeological work in accordance with a written scheme of investigation submitted to and approved by the Local Planning Authority, has been secured. The development shall only take place in accordance with the detailed scheme so approved. The archaeological works shall be carried out by a suitably qualified investigating body approved in writing by the Local Planning Authority. (C100)

*Reason - To minimise damage to any archaeological remains that may exist on site and to ensure satisfactory recording in accordance with the guidance contained in Planning Policy Guidance Note 16, and the Council's policies. (R100)*

- 1.2.2 In 2014 permission was granted for a Change of use of Gordon House, the Orangery and Creek Lodge to single dwelling house with ancillary accommodation, internal and external alterations including dismantling and re-erection of boundary wall and reinstatement of railings and landscaping; construction of new annex building with basement, landscaping and associated works (Planning Reference PP/14/02509). Two archaeological conditions (Condition 27 and 28) were attached to the consent and have since been implemented. These conditions and are set out below.

**Condition 27:** No development shall take place until arrangements have been made for an archaeological "watching brief" to monitor development groundworks and to record any archaeological evidence revealed. These arrangements shall be submitted to, and approved in writing by, the local planning authority, and the development shall take place only in accordance with the detailed scheme so approved.

*Reason - To minimise any damage to any archaeological remains that may exist on site and to ensure satisfactory recording in accordance with policy CL4 of the Core Strategy.*

**Condition 28:** No development shall take place until after completion of a programme of archaeological work in accordance with a written scheme of investigation to have been submitted to, and approved in writing by, the local planning authority, and the development shall take place only in accordance with the detailed scheme so approved.

*Reason - To safeguard the archaeological heritage of the Borough in accordance with policy CL4 of the Core Strategy.*

- 1.2.3 The three previous planning applications were for development to the north and west of Gordon House. The new planning application is for the development of the area to the south of Gordon House for which this assessment will support.

### 1.3 Designated heritage assets

- 1.3.1 The site contains nationally designated (protected) sites, the Grade II listed building of Gordon House (Hospital quarters), Royal Hospital, the Grade II listed 19th century lodge at Creek Gate, and the Grade II\* listed Orangery. Immediately adjacent to the north-east of the site are the Grade II Listed 19th century pair of gate piers of the entrance to Gordon House, Creek Gate. Two Grade II listed buildings, 31 and 33 Tite Street lie adjacent to but outside the south-west boundary of the site.
- 1.3.2 The development site does not lie within an Area of Archaeological Importance as defined by local authority. One such area lies c 300m to the south-west and defines the medieval village of Chelsea. The site lies within the borough conservation zone No. 20, Royal Hospital.

### 1.4 Aims and objectives

- 1.4.1 The aim of the assessment is to:
- identify the presence of any known or potential buried heritage assets that may be affected by the proposals;

- describe the significance of such assets, as required by national planning policy (see section 4 for planning framework and section 4.1 for methodology used to determine significance);
- assess the likely impacts upon the significance of the assets arising from the proposals; and
- provide recommendations to further assessment where necessary of the historic assets affected, and/or mitigation aimed at reducing or removing completely any adverse impacts upon buried heritage assets and/or their setting.

## 2 Archaeological and historical background

### 2.1 Topography and geology

- 2.1.1 The site is located to the north-east of the National Army Museum in Chelsea (NGR 527910 177875: Fig 1). The site is bounded by the Army pensioners' car park of the National Army Museum to the north-west, the backs of properties fronting West Road to the north-east, the back of properties fronting Embankment Gardens to the south-east and the backs of properties fronting Tite Street to the south-west.
- 2.1.2 The majority of the site falls within the historic parish of St Luke, Chelsea, while a small part falls within a detached portion of Kensington, the historic parish of St Mary Abbot's, Kensington. The site lay within the county of Middlesex prior to being absorbed into the administration of the Greater London Borough of Kensington and Chelsea.
- 2.1.3 The site lies on a slope downwards from the north to the south. Road heights of c 6.7m Ordnance Datum (OD) and 6.8m OD were recorded along Royal Hospital Road c 80m and 150m respectively, to the north of the site and along Chelsea Embankment heights are recorded at c 4.8m OD c 45m to the south of the site. The land to the south and south-east of Gordon House has been terraced and levelled, which was carried out in order to stop or restrict flooding of land closest to the Thames.
- 2.1.4 The site lies c 100m to the north of the Thames River. The geology of the site is Kempton Park Gravels above London Clay (BGS sheet 270). The site was originally part of a larger property that extended to the edge of the River Thames. It is likely that being adjacent to the River Thames, the southern 30m of site was prone to inundation by the river and may be overlain by Holocene alluvium of the river. The site was terraced and levelled in the 18th century to restrict the impact of the river. The location of the site implies that only deposits of a Late Pleistocene and Holocene date will occur, as it was during the interface of these periods (i.e. 18,000 to 15,000 BP), that the present floodplain was carved out.
- 2.1.5 The site has been levelled and a terrace, of up to 2m, runs from north-east to south-west through the site in the southern part of the site, c 100m north of the River Thames. Archaeologically monitored geotechnical test pits and boreholes indicate that there could be a layer between 1m to 2m of made ground, dated to at least the 18th century below the topsoil. Furthermore, this layer of levelling overlay earlier agricultural and/or garden soils which directly overlay the natural gravels, no alluvium was observed.

### 2.2 Overview of past investigations

#### *Geotechnical survey monitoring (January 2014)*

- 2.2.1 In January 2014, MOLA monitored the excavation of 14 geotechnical test pits and four boreholes primarily in the north-west area of the site, where the greatest ground disturbance is likely to take place. In general, the test pits and boreholes above the terrace, where they reached the natural, revealed that the site had been levelled or built up with a layer of made ground containing ceramic building material varying in thickness from c 0.6m in the north/north-east of the site (BH2) to 2.3m in the south-west of the site (TP14). The majority of test pits did not reach the natural gravels or the underlying London Clay; no alluvial silts were identified. However, where test pits were able to extend below modern disturbance, they identified pre-18th century agricultural soils and overlying 18th century gardens soils.
- 2.2.2 Test pit 13 reached the natural gravel c 2.4m below ground level (mbgl), overlying this was a 1.2m thick layer of agricultural soil, likely to represent the ground surface prior to Walpole's redevelopment of the site. This in turn was covered by a 0.6m

thick layer of garden soil and building rubble likely representing ground level after Walpole's development and the made ground created during the late 18th century redevelopments. Overlying this was a layer 0.6m deep of modern made ground. Test Pits 1, 2 4a and 8 recorded garden soils and structural associated to the early 18th century construction phase of the site were identified. The results of the monitoring are set out in the table below

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Levels are in metres below ground level (mbgl); Modern ground level is given.

BH/TP ref.	Modern ground level (m OD)	Modern made ground	Undated made ground	Top of natural (eg gravels)	Top of natural (London Clay)
BH1	5.66	0.50	0.50–1.90	2.40+	-
BH2	6.13	0.22	0.22–1.78	2.00+	-
BH3	2.97	-	1.40	-	1.40+
BH4	6.10	0.60	0.60–2.60	3.20+	-
TP1	3.39	-	-	-	1.94+
TP2	1.84	-	-	-	0.75+
TP3	6.10	-	Modern fill	Modern fill	3.00+
TP4	3.39	-	0.70	n/a	n/a
TP4a	3.39	0.37	n/a	n/a	N/a
TP5	6.56		Modern brick 0.3	n/a	n/a
TP5a	5.88	0.80	n/a	n/a	n/a
TP6	6.15	0.30	0.40	n/a	n/a
TP7	5.99	0.50	0.85	n/a	n/a
TP8	4.99	1.20	n/a	n/a	n/a
TP10	3.39	0.30	n/a	n/a	1.00
TP12	3.39	1.10	n/a	n/a	n/a
TP13	5.60	0.60	1.80	2.30	-
TP14	3.05	0.20	2.10	-	2.30

*Predetermination evaluation and building recording (June 2014)*

- 2.2.3 Throughout June 2014, MOLA undertook an archaeological evaluation of the area covered by the currently consented proposed basement – to the north and west of Gordon House – and a level 3 standing building recording of the vaults to west of the Gordon House.
- 2.2.4 The initial evaluation comprised two trenches each measuring 6m by 2m. These were detailed in a Written Scheme of Investigation dated 30th May 2014. Trenches 1 and 2 were subsequently widened to record the full extent of the features identified and a third trench was included between Trench 1 and Trench 2 to target an anomalous feature identified by a radar survey.
- 2.2.5 Recovered from trench 1 was a large dump of glass waste which instigated the widening of the trench by 2m to the south to assess the extent of the glass deposit. The glass waste dumping was recorded within a linear east-west aligned ditch/terrace located at the southern parts of Trench 1, 2 and 3. This glass waste includes fragments of glass melting pots, slag, glass waste, marver stones, wine glass necks, knops from wine glasses, phials and window glass. This glass belonged to John Baker who had his glass works on the site between 1672–79. After his works closed the waste appears to have been pushed down the terrace and covered in clay and sand and gravel for later terracing.
- 2.2.6 To the north of the vaults was an east-west aligned brick wall (the vaults abutted this wall) which turned at the western end and continued northwards. This wall was recorded within the western end of Trench 3. Here the wall was two brick courses high, while it was 1.20m high adjacent to the vaults. The wall represents a retaining

wall for the new terrace overlying the glass deposits.

- 2.2.7 Truncating the above wall was further terracing which was recorded within Trenches 1, 2 and 3. Within Trench 2 was an 'L'-shaped brick wall forming the eastern end of the terrace. Placed within the corner of the wall was a brick lined tank, likely to represent a soak-away. This tank was 1.70m deep and backfilled with garden soil.
- 2.2.8 Located at the western end of the northern extension to Trench 1 was a north-south aligned 18th-century brick culvert measuring 1m in height. This culvert extended to over 7m to the north and south.
- 2.2.9 The level 3 standing building recording indicated that the vaults were contemporary with Robert Walpole's development of the site between 1715 and 1745. The exact function of structure is uncertain. Leading into the rear of the vaults was a v-shaped drain, possibly added at a later date. Within the fill of the eastern most vault, an urn.
- 2.2.10 Three small vaults were later added at the eastern end of the structure. The function of these vaults is unclear as they appear to have been constructed over mounded earth, and the foundations at the northern end as significantly shallower than those at the southern end.

#### *Watching brief (July 2014–ongoing)*

- 2.2.11 From July 2014, MOLA undertook an archaeological watching brief at Gordon House, Royal Hospital Chelsea, implemented under planning consent PP/14/02509. The scope of this work was to monitor the ground reduction to piling mat formation level and pile probing within the area of a new basement.
- 2.2.12 The brick culvert in trench 1 of the 2014 evaluation was further observed running north-west under the upper terrace wall along the northern limit of the site and to the south to the limits of excavation of the new basement. To the east of this a brick wall, probably a continuation of that found in trench 3, was also observed running up to the northern limit of the excavation.
- 2.2.13 To the west of the laundry block was a range of walls some forming basements, the others foundations. These may be foundations and basements associated with the Pavilion shown on the 18th century and early 19th century maps.
- 2.2.14 To the north of the terrace wall was another wall possibly part of an earlier terrace retaining wall or garden wall.

## **2.3 Archaeological potential**

### *Prehistoric*

- 2.3.1 There are no known sites or finds dated to the prehistoric period within the site. The Lower and Middle Palaeolithic (c 500,000 to 40,000 BC) saw alternating warm and cold phases and intermittent perhaps seasonal occupation. Furthermore, the River Thames was a focus for ritual activity during the Bronze Age and evidence for such activity had been found c 320m to the south of the site. However, the watching brief of the test pits and the later evaluation found no evidence of activity from this period.

### *Roman*

- 2.3.2 The site lies in the hinterland of Roman *Londinium*, which lies 5km east of the site, and was established in the first century AD. No Roman finds have been recovered during the archaeological investigations undertaken within the site to date.

### *Early medieval*

- 2.3.3 Throughout this period the site lay within pasture or heath (land of poor quality) lying outside the village limits. The archaeological work undertaken within the site to date has not recovered any finds or identified any structural remains dating to this period.

### *Later medieval*

- 2.3.4 There is no documentary evidence for occupation during this period. Recent archaeological within the site has confirmed the lack of later medieval occupation.

### *Post-medieval*

- 2.3.5 The site remained undeveloped until the mid/late 17th century when the area saw a growth in the riverside industrial activity, construction of large riverside mansions and the siting of several major developments such as the Chelsea Physic garden and the Royal hospital. Cartographic evidence indicates that the site remained undeveloped until Walpole's leasing of the area of the site, however evidence of 17th century glass working thought to be associated with John Baker was recorded during the 2014 evaluation. The evidence comprised of glass sumps thought to have been used during the construction of the garden terrace. The location of the glassworks itself is currently unknown and no structures associated with glass manufacture have been found within the site.
- 2.3.6 During his period of tenancy of the site, Walpole extended into by building a garden pavilion, greenhouse, establishing a pond and terracing the lower half of the site to stop it being flooded by the Thames. Gordon House was not constructed until the early 19th century by Colonel Gordon, to whom the site had been leased.

## **2.4 Past impacts**

- 2.4.1 The watching brief and evaluation have shown that archaeological remains from the 18th century post-medieval period survived within the northern/north-western half of the site. Many of these features can be related to Walpole's redevelopment of the site between 1715 and 1745. These structures, while be of archaeological interest themselves would have truncated earlier archaeological features within their footprints
- 2.4.2 The southern/southern-western half of the site remained open ground throughout the post-medieval period but was terraced and had ornamental structures, such as a pond and watercourses cut into it. Archaeological survival potential within this area is likely to vary due to terracing carried out in the early 18th century and excavation for a decorative pond and watercourses. The construction of the watercourses and conversion to/construction of decorative pond shown in early maps are likely to have removed or truncated any archaeological remains within their footprints. Alternatively, in the area of terracing outside pond and watercourse construction, survival potential could be high.

## **2.5 Likely depth/thickness of archaeological remains**

- 2.5.1 Past investigations have shown that the area has been extensively landscaped and thus archaeological remains, if present, could lie up to 2m below the current ground surface, and may be cut into the natural deposits. Test pit 14 and Borehole 13 indicate that between 1.5m and 2.3m of made ground over lie the natural gravel or clay (depending on location).

### **3 Impact of proposals**

#### **3.1 Proposals**

- 3.1.1 The scheme for the new application comprises the excavation for and construction of an external swimming pool and associated plant space. The proposed site layout can be seen in Fig 2 and Fig 3. It is anticipated that the basement to house the swimming pool and associated plant will extend down c 4.5m below ground level.

#### **3.2 Implications**

- 3.2.1 The potential for archaeological survival is likely to vary across the proposed development area. In areas affected by pond or watercourse construction survival potential is likely to be poor, in areas outside them but in areas of terracing, potential is likely to be high.

##### *Site preparation, Landscaping*

- 3.2.2 This would include the hardstanding areas. For seating around the pool and over the associated plant Such works would typically extend no further than 0.5mbgl. The impact would be the removal of the top of layer of made ground, potentially of early 19th date associated with the construction of Gordon House.

##### *Pool and plant construction*

- 3.2.3 Excavation for and construction of external pool and associated plant space are likely to cause disturbance up to 4.5m below the ground surface, cutting down through any made ground and into any underlying natural geology. Any archaeological remains present in these areas are likely to be removed entirely.

##### *Piling and pile retaining walls (Fig 3)*

- 3.2.4 These would remove entirely any archaeological remains present within their footprint. In locations where piling is dense, potential survival would be further limited due to restrictions of access to the resource for future generations.
- 3.2.5 Pile caps would extend 0.30m below the level of the basement slab, and are unlikely to have an additional impact.

## 4 Planning framework

### 4.1 National planning policy and legislation

4.1.1 There have been no changes to national planning policy or legislation since the previous Historic Environment Assessment (MOLA 2013).

### 4.2 Greater London regional policy

4.2.1 There have been no changes to regional planning policy since the previous Historic Environment Assessment (MOLA 2013).

### 4.3 Local planning policy

4.3.1 The Core Strategy for Kensington and Chelsea was adopted on the 8<sup>th</sup> December 2010 and remains in effect.

4.3.2 On the 21st January 2015, Full Council adopted Policy CL 7 on basements and basement construction which supersedes Policy CL2: New Buildings, Extensions and Modifications to Existing Buildings criteria (g) and CE1: Climate Change criteria (c) of the adopted Core Strategy, RBKC 2010.

4.3.3 The policy therefore restricts the extent of basement excavation to no more than under half the garden or open part of the site and limits the depth of excavation to a single storey in most cases. The extent of basements will be measured as gross external area (GEA).

4.3.4 'Garden' or 'open part of the site' is the private open area to the front, rear or side of the property. A 'single storey' is one that cannot be subdivided in the future to create additional floors. It is generally about 3 to 4 metres floor to ceiling height but a small extra allowance for proposals with a swimming pool may be permitted.

4.3.5 The policy states

The Council will require all basement development to:

**A.** not exceed a maximum of 50% of each garden or open part of the site. The unaffected garden must be in a single area and where relevant should form a continuous area with other neighbouring gardens. Exceptions may be made on large sites;

**B.** not comprise more than one storey. Exceptions may be made on large sites;

**C.** not add further basement floors where there is an extant or implemented planning permission for a basement or one built through the exercise of permitted development rights;

**D.** not cause loss, damage or long term threat to trees of townscape or amenity value;

**E.** comply with the tests in national policy as they relate to the assessment of harm to the significance of heritage assets;

**F.** not involve excavation underneath a listed building (including vaults);

**G.** not introduce light wells and railings to the front or side of the property where they would seriously harm the character and appearance of the locality, particularly where they are not an established and positive feature of the local streetscape;

**H.** maintain and take opportunities to improve the character or appearance of the building, garden or wider area, with external elements such as light wells, roof lights, plant and means of escape being sensitively designed and discreetly sited; in the case of light wells and roof lights, also limit the impact of light pollution;

**I.** include a sustainable drainage system (SuDS), to be retained thereafter;

**J.** include a minimum of one metre of soil above any part of the basement beneath a garden;

**K.** ensure that traffic and construction activity do not cause unacceptable harm to pedestrian, cycle, vehicular and road safety; adversely affect bus or other transport operations (e.g. cycle hire), significantly increase traffic congestion, nor place

unreasonable inconvenience on the day to day life of those living, working and visiting nearby;

**L.** ensure that construction impacts such as noise, vibration and dust are kept to acceptable levels for the duration of the works;

**M.** be designed to safeguard the structural stability of the existing building, nearby buildings and other infrastructure including London Underground tunnels and the highway;

**N.** be protected from sewer flooding through the installation of a suitable pumped device.

A specific policy requirement for basements is also contained in Policy CE2, Flooding

## **5 Further work**

- 5.1.1 In light of the results of archaeological investigations undertaken so far, it is likely that a further watching brief would be required during any ground works (excavation for basement, foundations services etc) to ensure that all archaeological remains impacted upon would be recorded prior to their removal. Such work would be carried out in accordance with a Written Scheme of Investigation under the terms of a planning condition.

## 6 Glossary

<i>Alluvium</i>	Sediment laid down by a river. Can range from sands and gravels deposited by fast flowing water and clays that settle out of suspension during overbank flooding. Other deposits found on a valley floor are usually included in the term alluvium (eg peat).
<i>Archaeological Priority Area/Zone</i>	Areas of archaeological priority, significance, potential or other title, often designated by the local authority.
<i>Brickearth</i>	A fine-grained silt believed to have accumulated by a mixture of processes (eg wind, slope and freeze-thaw) mostly since the Last Glacial Maximum around 17,000BP.
<i>B.P.</i>	Before Present, conventionally taken to be 1950
<i>Bronze Age</i>	2,000–600 BC
<i>Building recording</i>	Recording of historic buildings (by a competent archaeological organisation) is undertaken 'to document buildings, or parts of buildings, which may be lost as a result of demolition, alteration or neglect', amongst other reasons. Four levels of recording are defined by Royal Commission on the Historical Monuments of England (RCHME) and English Heritage. Level 1 (basic visual record); Level 2 (descriptive record), Level 3 (analytical record), and Level 4 (comprehensive analytical record)
<i>Built heritage</i>	Upstanding structure of historic interest.
<i>Colluvium</i>	A natural deposit accumulated through the action of rainwash or gravity at the base of a slope.
<i>Conservation area</i>	An area of special architectural or historic interest the character or appearance of which it is desirable to preserve or enhance. Designation by the local authority often includes controls over the demolition of buildings; strengthened controls over minor development; and special provision for the protection of trees.
<i>Cropmarks</i>	Marks visible from the air in growing crops, caused by moisture variation due to subsurface features of possible archaeological origin (i.e. ditches or buried walls).
<i>Cut-and-cover [trench]</i>	Method of construction in which a trench is excavated down from existing ground level and which is subsequently covered over and/or backfilled.
<i>Cut feature</i>	Archaeological feature such as a pit, ditch or well, which has been cut into the then-existing ground surface.
<i>Devensian</i>	The most recent cold stage (glacial) of the Pleistocene. Spanning the period from c 70,000 years ago until the start of the Holocene (10,000 years ago). Climate fluctuated within the Devensian, as it did in other glacials and interglacials. It is associated with the demise of the Neanderthals and the expansion of modern humans.
<i>Early medieval</i>	AD 410 – 1066. Also referred to as the Saxon period.
<i>Evaluation (archaeological)</i>	A limited programme of non-intrusive and/or intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area.
<i>Excavation (archaeological)</i>	A programme of controlled, intrusive fieldwork with defined research objectives which examines, records and interprets archaeological remains, retrieves artefacts, ecofacts and other remains within a specified area. The records made and objects gathered are studied and the results published in detail appropriate to the project design.
<i>Findspot</i>	Chance find/antiquarian discovery of artefact. The artefact has no known context, is either residual or indicates an area of archaeological activity.
<i>Geotechnical</i>	Ground investigation, typically in the form of boreholes and/or trial/test pits, carried out for engineering purposes to determine the nature of the subsurface deposits.
<i>Head</i>	Weathered/soliflucted periglacial deposit (ie moved downslope through natural processes).
<i>Heritage asset</i>	A building, monument, site, place, area or landscape positively identified as having a degree of significance meriting consideration in planning decisions. Heritage assets are the valued components of the historic environment. They include designated heritage assets and assets identified by the local planning authority (including local listing).
<i>Historic environment assessment</i>	A written document whose purpose is to determine, as far as is reasonably possible from existing records, the nature of the historic environment resource/heritage assets within a specified area.
<i>Historic Environment Record (HER)</i>	Archaeological and built heritage database held and maintained by the County authority. Previously known as the Sites and Monuments Record
<i>Holocene</i>	The most recent epoch (part) of the Quaternary, covering the past 10,000 years during which time a warm interglacial climate has existed. Also referred to as the 'Postglacial' and (in Britain) as the 'Flandrian'.

<i>Iron Age</i>	600 BC – AD 43
<i>Later medieval</i>	AD 1066 – 1500
<i>Last Glacial Maximum</i>	Characterised by the expansion of the last ice sheet to affect the British Isles (around 18,000 years ago), which at its maximum extent covered over two-thirds of the present land area of the country.
<i>Locally listed building</i>	A structure of local architectural and/or historical interest. These are structures that are not included in the Secretary of State's Listing but are considered by the local authority to have architectural and/or historical merit
<i>Listed building</i>	A structure of architectural and/or historical interest. These are included on the Secretary of State's list, which affords statutory protection. These are subdivided into Grades I, II* and II (in descending importance).
<i>Made Ground</i>	Artificial deposit. An archaeologist would differentiate between modern made ground, containing identifiably modern inclusion such as concrete (but not brick or tile), and undated made ground, which may potentially contain deposits of archaeological interest.
<i>Mesolithic</i>	12,000 – 4,000 BC
<i>National Monuments Record (NMR)</i>	National database of archaeological sites, finds and events as maintained by English Heritage in Swindon. Generally not as comprehensive as the country SMR/HER.
<i>Neolithic</i>	4,000 – 2,000 BC
<i>Ordnance Datum (OD)</i>	A vertical datum used by Ordnance Survey as the basis for deriving altitudes on maps.
<i>Palaeo-environmental</i>	Related to past environments, i.e. during the prehistoric and later periods. Such remains can be of archaeological interest, and often consist of organic remains such as pollen and plant macro fossils which can be used to reconstruct the past environment.
<i>Palaeolithic</i>	700,000–12,000 BC
<i>Palaeochannel</i>	A former/ancient watercourse
<i>Peat</i>	A build up of organic material in waterlogged areas, producing marshes, fens, mires, blanket and raised bogs. Accumulation is due to inhibited decay in anaerobic conditions.
<i>Pleistocene</i>	Geological period pre-dating the Holocene.
<i>Post-medieval</i>	AD 1500 – present
<i>Preservation by record</i>	Archaeological mitigation strategy where archaeological remains are fully excavated and recorded archaeologically and the results published. For remains of lesser significance, preservation by record might comprise an archaeological watching brief.
<i>Preservation in situ</i>	Archaeological mitigation strategy where nationally important (whether Scheduled or not) archaeological remains are preserved <i>in situ</i> for future generations, typically through modifications to design proposals to avoid damage or destruction of such remains.
<i>Registered Historic Parks and Gardens</i>	A site may lie within or contain a registered historic park or garden. The register of these in England is compiled and maintained by English Heritage.
<i>Residual</i>	When used to describe archaeological artefacts, this means not <i>in situ</i> , ie Found outside the context in which it was originally deposited.
<i>Roman</i>	AD 43 – 410
<i>Scheduled Monument</i>	An ancient monument or archaeological deposits designated by the Secretary of State as a 'Scheduled Ancient Monument' and protected under the Ancient Monuments Act.
<i>Site</i>	The area of proposed development
<i>Site codes</i>	Unique identifying codes allocated to archaeological fieldwork sites, eg evaluation, excavation, or watching brief sites.
<i>Study area</i>	Defined area surrounding the proposed development in which archaeological data is collected and analysed in order to set the site into its archaeological and historical context.
<i>Solifluction, Soliflucted</i>	Creeping of soil down a slope during periods of freeze and thaw in periglacial environments. Such material can seal and protect earlier landsurfaces and archaeological deposits which might otherwise not survive later erosion.
<i>Stratigraphy</i>	A term used to define a sequence of visually distinct horizontal layers (strata), one above another, which form the material remains of past cultures.
<i>Truncate</i>	Partially or wholly remove. In archaeological terms remains may have been truncated by previous construction activity.
<i>Watching brief (archaeological)</i>	An archaeological watching brief is 'a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons.'

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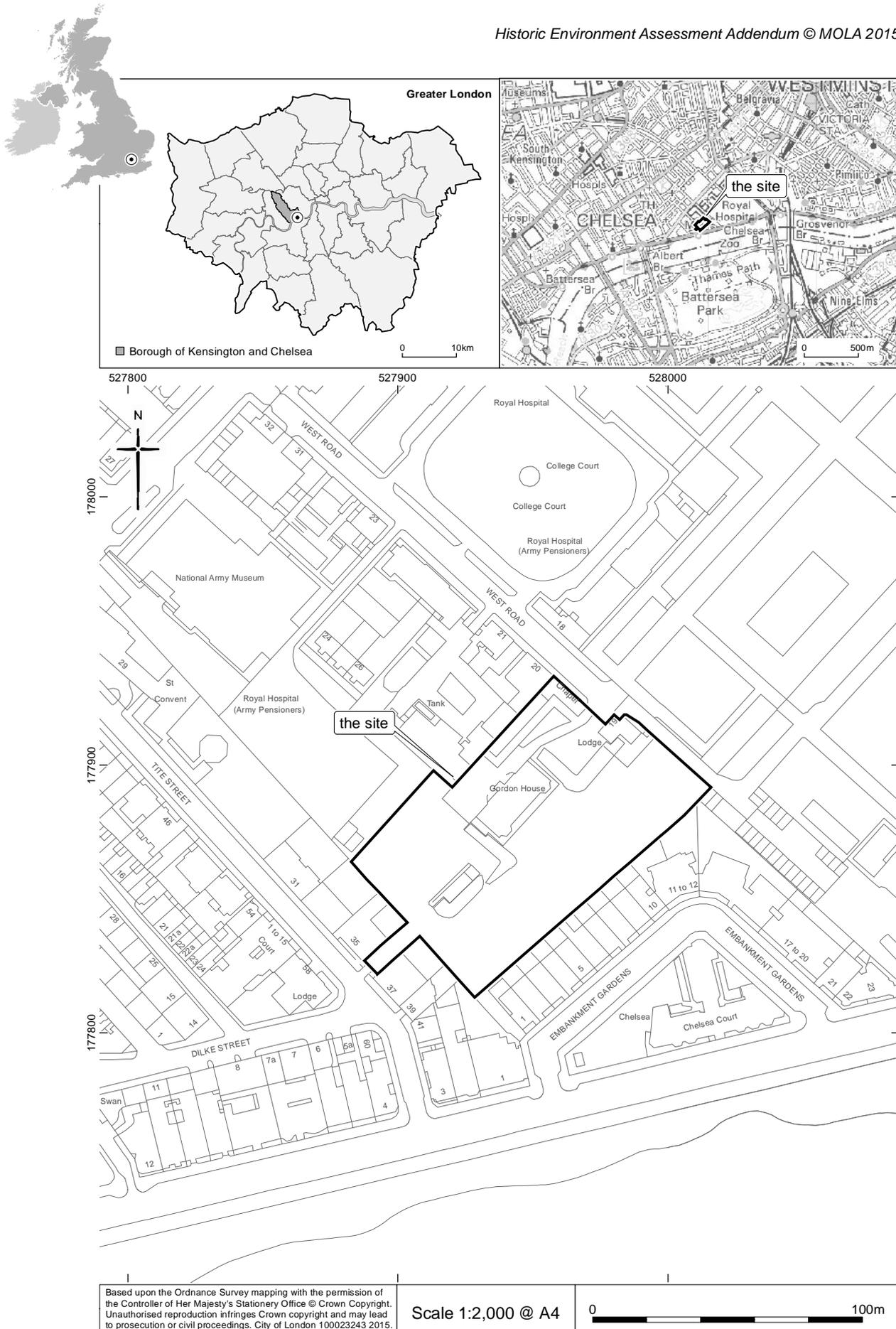


Fig 1 Site location

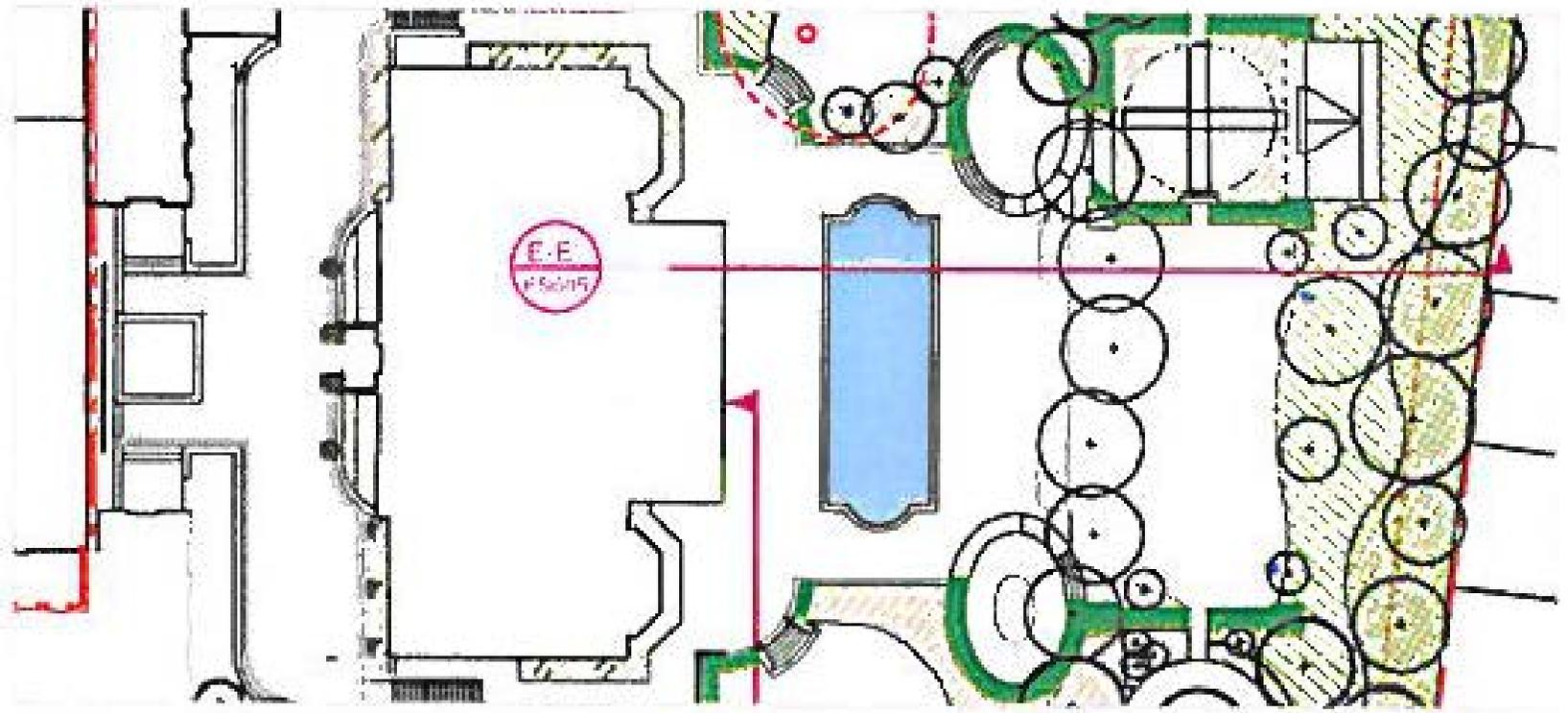


Fig 2 Location of proposed development

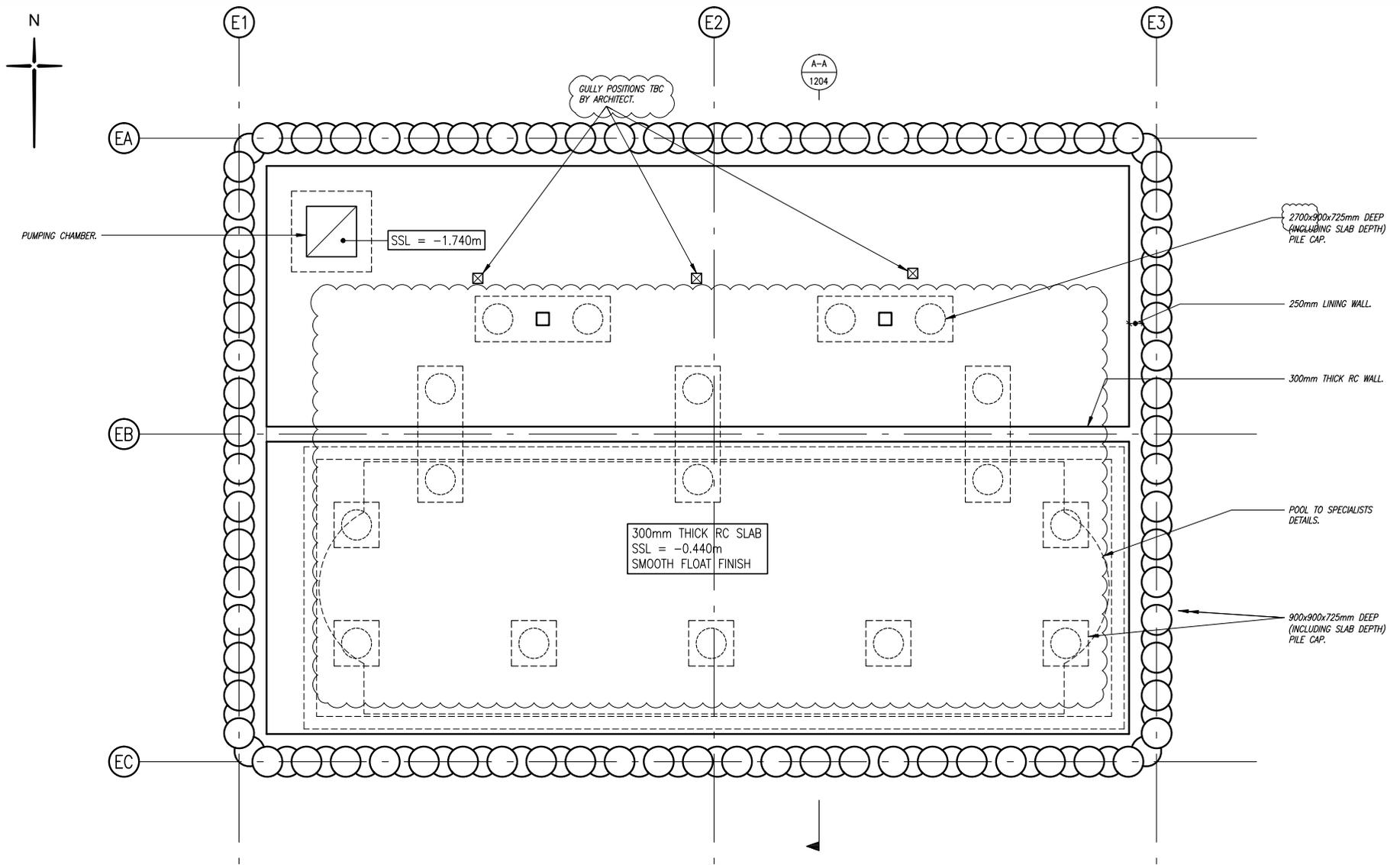


Fig 3 Plan of pile and retaining pile wall locations (Alan Baxter, Dwg no. 1635/20/1125, rev A, January 2015)