

**Archaeological Watching Brief Report  
Clapham Park Estate  
London Borough of Lambeth**

**NGR: TQ 29940 73918**

**ASE Project No: 170156**

**Site Code: CPE17**

**ASE Report No: 2017378**

**OASIS id: archaeol6-294453**



**By Steve White**

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## **Abstract**

*Archaeology South-East was commissioned by Orion Heritage to undertake an archaeological watching brief at Clapham Park Estate, London Borough of Lambeth, between the 17<sup>th</sup> of July and 2<sup>nd</sup> of August, 2017. The work was principally comprised of the monitoring of geotechnical test pits whose primary purpose was the identification of the old air raid shelters. A concrete core survey has also been used and integrated where possible.*

*Three air raid shelters were observed. These comprised two shelters in site C, measuring 8m long by 3m wide, and one shelter in site E measuring 30m long by 20m wide. The air raid shelters are visible at ground level as mounds of earth over them are still present. No shelter(s) were identified in site F and no other archaeological finds features or deposits of any interest were observed across the site.*

*In Site C, the western shelter is partially backfilled with rubble and flooded, and a probable reinforced concrete wall of the eastern shelter is of good condition at the top, but weathered and degraded at the base. In Site E, the shelter is partially backfilled with rubble and flooded, concrete walls along the northern and eastern sides of the shelter were reinforced, and degraded along the western side.*

*Based on the results of these investigations further recording of the shelters is recommended as part of a controlled watching brief during demolition.*

## CONTENTS

- 1.0 Introduction
- 2.0 Archaeological Background
- 3.0 Archaeological Methodology
- 4.0 Results
- 5.0 Discussion and Conclusions

Bibliography  
Acknowledgements

HER Summary  
OASIS Form

Appendix: RSK Intrusive Ground Investigation Report

## TABLES

- Table 1: Quantification of site paper archive
- Table 2: List of recorded contexts Site C
- Table 3: List of recorded contexts Site E
- Table 4: List of recorded contexts Site F

## FIGURES

- Figure 1: Site location
- Figure 2: Area/site locations
- Figure 3: Air raid shelter locations
- Figure 4: Photos



## **1.0 INTRODUCTION**

### **1.1 Site Background**

1.1 Archaeology South-East (ASE) was commissioned by Orion Heritage to undertake an archaeological watching brief at Clapham Park Estate, London Borough of Lambeth (Figure 1; NGR: TQ 2994 7391).

### **1.2 Geology and Topography**

1.2.1 The site lies in the London Borough of Lambeth, and consists of a large, irregular shaped area measuring approximately 36 hectares and comprising c.3,200 households. The site is bound by Clarence Avenue to the west, Clarence Crescent and Kingswood Road to the north, New Park Road to the east and Atkins Road, Birkwood Close and Lexton Gardens to the south.

1.2.2 The western part of the site lies at c.28m AOD, rising to c.44m AOD in the east. The natural geology consists of clay, silt, sand and gravel head deposits, overlying London Clay.

### **1.3 Planning Background**

1.3.1 The site was the subject of a Phase II geotechnical programme of work designed specifically to investigate the known and potential World War II air raid shelters. The scope of work has been informed by a previous, non-intrusive geophysical survey and is targeted on three specific areas within the wider site (Sites C, E and F, Figures 1 & 2).

1.3.2 Accordingly, a Written Scheme of Investigation (WSI) for an archaeological watching brief was prepared by ASE (2017) for this work, and approved by GLAAS prior to the commencement of fieldwork. All work was undertaken in accordance with this document, and with the Standards for Archaeological Work (HE 2014) and the appropriate Standard and Guidance documents of the Chartered Institute for Archaeologists (CIfA 2014a; b and c).

### **1.4 Aims and Objectives**

1.4.1 The general aims of the watching brief were:

- To define, insofar as possible, the date, character, form and function of any archaeological features observed on site
- To establish the presence or absence of archaeological remains within the location of the geotechnical pits
- To determine the survival, extent and minimum depth below modern ground level of any such remains
- To determine the nature and significance of any archaeological deposits

1.4.2 The site specific goals of the watching brief were:

- Primarily to determine the results of the previous geophysical survey with regard to the location of the former shelters at Sites C, E and F (Figures 1 & 2)
- To make a record, where possible, of the fabric and construction of the World War II shelters
- To inform the methodology for subsequent historic building recording of the World War II shelters

## **1.5 Scope of Report**

1.5.1 This report details the results of the archaeological watching brief carried out on the site between the 19<sup>th</sup> of July and the 2<sup>nd</sup> of August, 2017, in accordance with the Written Scheme of Investigation (ASE 2017).

## **2.0 ARCHAEOLOGICAL BACKGROUND**

### **2.1 Overview**

2.1.1 The historical and archaeological background for the site has been fully detailed within the Desk Based Assessment (Orion Heritage, 2017), and a summary is presented here. For the full site history please refer to the DBA.

### **2.2 Prehistoric**

2.2.1 The GLHER records no prehistoric remains within the site; residual prehistoric material culture was recovered during archaeological investigations immediately to the west at 8 Clapham Manor Street.

2.2.2 There are seven records of prehistoric remains recorded within the wider area, of which five relate to residual prehistoric flints and ceramics and a potential prehistoric barrow identified during archaeological investigations at Tulse Hill School, c. 500m to the east of the site boundary. Further to this, residual Palaeolithic material culture has been recovered from Lochinvar Street, c.450m to the east of the study site.

2.2.3 The assessment identified no known in situ remains within or adjacent to the site which confirmed occupation during the prehistoric periods. The GLHER indicates that the prehistoric resource of the surrounding area comprises residual prehistoric material culture.

### **2.3 Roman**

2.3.1 No evidence of Romano-British occupation was identified within the site boundary. Within the surrounding area, the GLHER recorded a total of 17 heritage assets relating to finds and features from this period. This includes the line of the Roman road which connected Londinium with the south coast at Brighton. The line of the road follows the modern day A27, Brixton and Streatham Hill. A small section of the eastern limits of the site lie adjacent to the line of the Roman road. Archaeological investigations to the south-east of the site, by Telford Avenue, identified layers of hard-packed gravel recorded, possibly associated with a Roman road. No other roadside occupation evidence has been identified along this section of the A27.

2.3.2 To the west of the site the Roman 'Stane Street', which connected Chichester to Londinium, ran through the borough. A gravel layer and ditch was identified during archaeological investigations in this vicinity which may relate to the Roman road.

2.3.3 The remaining evidence for Roman occupation within the vicinity comprises residual finds including ceramics and tile found in cultivation soil during archaeological investigations at 8 Manor Street, adjacent to the western site boundary.

## 2.4 Early medieval/medieval

- 2.4.1 The GLHER records no early medieval or medieval heritage assets within the site. To the east of the site, between Brixton Hill, New Park Road and Morrish Road, lies an Archaeological Priority Area which covers the extent of the medieval village at this location. A standing stone recorded as Brixstone, meaning stone of Brihsige or Brixi (a Saxon lord), signified a meeting place for the moot or Hundred Court at the top of Brixton Hill, which suggests the settlement may have earlier Saxon origins. In situ remains confirming or characterising this settlement have not been identified.
- 2.4.2 Archaeological investigations at Upper Tulse Hill Road, c.500m to the east of the site, identified four or five sunken features buildings, post holes, external hearth, pits and ditches which are dated to the early medieval to medieval period.
- 2.4.3 The site falls between the medieval settlements of Clapham and Brixton. The majority of the area of the site falls within the southern part of the ancient parish of Clapham in the county of Surrey, while the small area of the plan east of New Park Road was part of the Surrey parish of Streatham. The main settlement at Clapham, which has early medieval origins, was situated at the northern end of the parish around the common. Much of the parish formed part of Clapham Manor. It was purchased in the reign of King James I by Dr Henry Atkins, president of the College of Physicians and physician to the king, and descended through his family, who became the Bowyer Atkins in the 1750s, down to the twentieth century. Though just 3 miles from Westminster, Clapham remained a rural village until well into the nineteenth century. The medieval settlement of Brixton, recorded as Broxton in the Domesday Survey, lies c. 2km to the north of the site.
- 2.4.4 The GLHER records a total of 15 entries relating to medieval finds or features within the wider area. This includes in situ medieval deposits and residual medieval finds.

## 2.5 Post-medieval

- 2.5.1 In the 18th century Clapham began attracting wealthy Londoners who built mansions near the common, and it was also home to a well-known set of scientists, philanthropists and radical thinkers known as the Clapham Sect at the turn of the century. However, travel to the capital was still by coach and horse so development was slow and incomers were mostly the well-heeled.
- 2.5.2 Southeast of the common was an area bordering on Brixton and Streatham parishes known as Bleak Hill, a large tract of land that formed part of a farm known also as Bleak Hall. 18th century mapping records this area as both Bleak and Black Hall. A small farmstead is recorded at the north end of Black Hall Lane on 18th century mapping, but this was no longer extant by the late 19th century.

- 2.5.3 With good access to London from north-south routes on either side the area was ripe for development in the 1800s as the parish began to grow. According to the Victoria County History of Clapham: "The most pleasant district lies to the south-east, where Mr. Thomas Cubitt, the great builder, laid out the broad streets of Clapham New Park, on an estate called Bleak Hall Farm, which he acquired on a building agreement from William Atkins, lord of the manor, in 1824." The building estate, some 230 acres in size, was laid out with new wide streets, including Kings Avenue, Atkins Road, Poynders Road and Clarence Road (later Clarence Avenue). Building, supplied by Cubitt's own brickfields near Kings Avenue, began in the mid-1820s and continued until the 1860s and was comprised of large mansions and villas, many with grounds up to eight acres in size, few of which have survived to this day.
- 2.5.4 The Clapham Tithe Map of 1838 and the Streatham Tithe Map of 1839 depict the newly planned estate, with substantial villas in designed gardens along Clarence Road, and smaller houses and plots along Queens Road and Kings Road. The site comprised approximately three dozen tithe plots. Much of the area was leased by Thomas Cubitt for his Clapham Park Estate. The plots are described as arable, meadows and nurseries. The tithe records houses and gardens leased from Bowyer by various occupants, which were comprised of meadow and nurseries leased by James Atkins. Between Kings Avenue and New Park Road south of Streatham Place, a number of houses are recorded on plots leased from Bowyer Atkins, while plot 76 was a lodge and garden on land leased by Thomas Cubitt and plot 75 was another meadow not yet developed by Cubitt. Tightly packed terraced housing is depicted along the eastern edge of New Park Road which falls within the Streatham Tithe map, with less densely packed residential development along Atkins Road.
- 2.5.5 The coming of the railway in the mid-1800s spurred more development. Streets with more tightly packed housing appeared in the areas around Clapham Park, including in the corner of the area of the red line plan that falls within Streatham parish. Between the 1879 OS and the 1896 OS substantial infilling of the surrounding area with terraced properties is noted. In the late nineteenth century, the area became part of the London Borough of Lambeth. The 1920 OS shows the Clapham Park Estate, with its grand detached properties and designed gardens, completely surrounded by densely packed terraces.
- 2.5.6 During the interwar period, London County Council began acquiring properties in the area of the red line plan. The redevelopment of Clapham Park for social housing started in the very late 1920s and 1930s with the establishment of the main blocks within Clapham Park East (East of Kings Avenue). Tilson House was constructed between 1929 and 1936 and from stylistic evidence most of the blocks in this area almost certainly date from the 1930s. The Telephone Exchange which is located adjacent to the site boundary in the north-east, off New Park Road dates to the same period.
- 2.5.7 A number of possible air raid shelters have been identified within Clapham Park

Estate. At Tressider House (Site C), north of Atkins Road, an extant mound with concrete uprights are visible. Geophysical Survey (RSK 2017) identified two structures at this location. Between Angus House and Cotton House (Site E), south of the South Circular, an extant mound is visible. The structure has been opened and photographed. A mound at Hayes Court (Site F) has been identified as a possible WWII shelter. Between Lycett House and Latone House, north of the South Circular (not illustrated), has been opened and photographed from the entrance and an indicative profile created based on site investigations. This shelter does not form part of this phase of investigation works.

2.5.8 Geotechnical investigations in the raised courtyard of Hayes Court, New Park Road recorded an obstruction at 2.2m below ground level, overlain by a sequence of made ground deposits. No evidence of a bunker was identified in this area.

2.5.9 The 1940-45 bomb census maps indicates bomb damage within the site boundary. Two of the mansions on the east side of Clarence Avenue were damaged beyond repair while a house on the south-eastern side of Kings Avenue was totally destroyed. A V2 rocket impacted at the junction of Poynders Road, Atkins Road and Kings Avenue and the row of villas on the western side of Kings Avenue were seriously damaged, some beyond repair. On the eastern side of Kings Avenue just above Atkins Road the corner houses suffered blast damage. On the opposite side of the road between the lower part of Kings Avenue and New Park Road the blocks of flats that had replaced the houses in the interwar years suffered blast damage, probably in a separate bombing incident, while a building at the rear was totally destroyed.

2.5.10 The area west of Kings Avenue (Clapham Park West) was not developed until after the Second World War and it retained its 19th-century villas into the 1950s. A large area north of Poynders Road and west of Kings Avenue was laid out c.1953-5 including the main blocks of Clapham Park West but further blocks were added in the second half of the 1950s, the 1960s and the 1970s to the north of this. The estate retained the name Clapham Park from Cubitt's day.

## 2.6 Recent Archaeological Investigation

2.6.1 A programme of archaeological evaluation was completed by Oxford Archaeology in 2007. The evaluation consisted of 26 trenches located in areas of green space. The majority of the trenches (21) were located in the northwest of the study site, between Poynders Road, Atkins Road and Clarence Avenue. Three trenches were located to the east of Kings Avenue. The evaluation revealed evidence for the remains of properties from the early 19th century, which formed part of Thomas Cubitt's 1830s Clapham Park Estate. No evidence of pre-1900's occupation was identified. The report concluded that the findings do not significantly increase the understanding of the 19th century estate, which is represented in late 19th century plans of the area (Oxford Archaeology 2007a).

2.6.2 A Level I programme of Historic Building recording of the 20th century Clapham Park housing estate was carried out (Oxford Archaeology 2007b).



- 2.6.3 An Archaeological Watching Brief was undertaken in Area F (Oxford Archaeology 2012). The excavations revealed multiple walls of an early 19th century date, thought to be associated with Thomas Cubitt's original estate.
- 2.6.4 Intrusive investigations recorded in the GLHER identified 31 sites with negative archaeological results and a single with undated remains; three multi-period and seven Roman sites and nine sites with post-medieval remains. Those closest to the site include an evaluation at Clapham Manor Street by MoLA in 1994 immediately to the north-west, which recorded unknown, prehistoric, Roman, medieval and post-medieval evidence, and two negative investigations to the north-east and east.

### **3.0 ARCHAEOLOGICAL METHODOLOGY**

#### **3.1 Fieldwork Methodology**

3.1.1 The watching brief exercise consisted of various trial pits being opened within areas of the site (specifically Sites C, E and F, Figures 1 & 2, within the wider site area). The attendance of the watching brief was intermittent, and took place during the excavation of the trial pits. In total, the excavation of 14 trial pits was monitored. Additionally, the arising from some drillings were observed in Site E.

#### **3.2 Fieldwork Constraints**

3.2.1 The purpose of the geotechnical works was to find the top of any surviving air raid shelters, so the full extent and form of them were not uncovered. However the methodology did allow for the rough identification of the extent of the shelters. A lack of consistency in the numbering of trial pits by RSK means that the Trial pit numbers do not necessarily reflect the area they are in. For example, trial pit C1B is in site E.

#### **3.3 The Site Archive**

3.3.1 ASE informed the London Archaeological Archive and Research Centre (LAARC) before the commencement of fieldwork that a site archive would be generated. The site archive is currently held at the offices of ASE and will be deposited at the LAARC in due course. The contents of the archive are tabulated below (Table 1).

Digital photos	25
Watching brief forms	3
Trial pit record sheets	5

Table 1: Quantification of site paper archive

## 4.0 RESULTS

Figures 2-4

### 4.1 Site C

- 4.1.1 Site C was situated to the western edge of the Clapham Park Estate, and was located on a noticeable mound within the communal garden area. Four trial pits (TP1, TP2, TP3 and TP4) were located on concrete features that were observable above ground, two to the south and two to the north. The two to the south stood at least 1m above ground level (coming out of the side and top of the mound), and looked to be blocked up stairwells. The one to the south-west was c. 2m long x 1m wide; the one to the south-east was c. 3m long and 1m wide). The two to the north of the site looked to be more square shaped concrete blocks, probably blocked up air vents and measured roughly 0.60m x 0.60m each.
- 4.1.2 The sequence in Site C can be described as Air raid shelters [C/004] and [C/003] overlain by made ground [C/002] which were then sealed by top soil and turf [C/001].
- 4.1.3 The trial pits revealed that there were 2 air raid shelters here, with the roof being 0.50m below the ground level at the top of the mound. The western edge of the eastern most shelter was observed in TP2 and TP3, while the eastern edge of the western shelter was observed in TP1 and TP4. The shelters ran north-south between the blocked up stairwells and the blocked up air vent, one for each shelter. The trial pits in Site C indicate that the two air raid shelters are on north-south alignment and measured c. 8m long (north) by 3m wide (east-west).

Context	Type	Interpretation	Deposit Thickness m
[C/001]	Layer	Top soil	0.10
[C/002]	Layer	Made ground	0.40
[C/003]	Masonry	Air raid shelter	>0.50
[C/004]	Masonry	Air raid shelter	>0.50

Table 2: List of recorded contexts Site C

- 4.1.4 No drill arisings were monitored in this area, however, the RSK Intrusive Ground Investigation Report (see Appendix) details that the concrete cores revealed:
- A void at the top of the western shelter with weathered and porous concrete and a reinforcement bar at the base of the cores (C1 and C3). Water was noted and it was observed to be partially infilled with demolition waste material.

- Good condition concrete at the top of the eastern shelter with degraded and weathered concrete and a reinforcement bar at the base of the cores (C2 and C4).

## 4.2 Site E

- 4.2.1 Site E was located towards the centre of the estate, and was situated within a large green space surrounded on 3 sides by estate buildings, and to the north by the south-circular road. Five trial pits were excavated within this area, four of them located around the air raid shelter (C1b, C2, C3 and C4b), and one (C5) targeted on a separate wall to the south of the air raid shelter. Trial pits C1b, C2, C3 and C4b were located to try and find the extent of the air raid shelter believed to be in this location. As with Site C, a slight mound was still observable at ground level giving a hint as to the location of the air raid shelters.
- 4.2.2 The sequence across trial pits C1b, C2, C3 and C4b consisted of air raid shelter [E/003] overlain by made ground [E/002] sealed by top soil [E/001]. In trial pit C5 the sequence consisted of wall [E/004] overlain by made ground [E/002] and sealed by top soil [E/001]. It is a reasonable hypothesis that wall [E/004] may have been contemporaneous with air raid shelter [E/003].
- 4.2.3 The air raid shelter looks to have had dimensions of roughly 30m north-east to south-west by 20m north-west by south-east, and were sat under 0.50m of made ground and top soil.

Context	Type	Interpretation	Deposit Thickness m
[E/001]	Layer	Top soil	0.12-0.30
[E/002]	Layer	Made ground	0.18-0.64
[E/003]	Masonry	Air raid shelter	0.22-0.33
[E/004]	Masonry	Wall foundation	0.50

Table 3: List of recorded contexts Site E

- 4.2.4 Additionally within Site E, the arisings from some drilling holes were observed. These showed that the air raid in this area had been backfilled with rubble to within c. 1m of the ceiling roof.
- 4.2.5 The RSK Intrusive Ground Investigation Report (see Appendix) details that the concrete cores revealed that:
- At the northern end of the northern shelter (C1) reinforced concrete at the top of the core and unenforced concrete with flint aggregate at the base.
  - At the eastern side of the northern shelter (C2) reinforced concrete at the top of the core and no recovery at the base.

- At the western side of the northern shelter (C3) concrete in poor condition visibly different to other in the other cores and with steel wire throughout, and no recovery at the base.
- At the southern end of the northern shelter (C4) a void at the top of the core, partially flooded and porous reinforced concrete at the base.

### 4.3 Site F

4.3.1 Five trial pits (F1, F2, F3, F4 and F5) were excavated within site F, which was a courtyard within a block of the estate. The trial pits here revealed there to be no air raid shelter(s) in this area, with the sequence consisting of a series of made grounds ([F/005], [F/004], [F/003], [F/002]) overlaying each other and sealed by top soil [F/001], and turf [F/000]. No archaeology was observed within this site.

Context	Type	Interpretation	Deposit Thickness m
[F/000]	Layer	Turf	0.03-0.04
[F/001]	Layer	Top soil	0.13-0.26
[F/002]	Layer	Made ground	0.22-0.28
[F/003]	Layer	Made ground	0.12
[F/004]	Layer	Made ground	0.40
[F/005]	Layer	Made ground (redeposited natural)	>0.10

Table 4: List of recorded contexts Site F

4.3.2 No drill arisings were monitored in this area, however, the RSK Intrusive Ground Investigation Report (see Appendix) corroborates the absence of a shelter in this area and details that:

- No buried concrete structures were encountered.

## 5.0 DISCUSSION AND CONCLUSIONS

### 5.1 Overview of stratigraphic sequence

5.1.1 Natural geology was not encountered during the watching brief exercise, the purpose of which was to identify the location of any air raid shelters within sites C, E and F. The only deposits and structures that were observed consisted either of 20<sup>th</sup> century structures or of made ground.

### 5.2 Deposit survival and existing impacts

5.21 All three sites were disturbed by 20<sup>th</sup> century activity. Air raid shelters were observed in sites C and E, but not in site F.

### 5.3 Consideration of research aims

5.3.1 With regards to the general aims of the watching brief:

- To define, insofar as possible, the date, character, form and function of any archaeological features observed on site.

*Three 20<sup>th</sup> century air raid shelters were observed across site, two in Site C and one on Site E.*

- To establish the presence or absence of archaeological remains within the footprint of the geotechnical pits

*Of the 14 trial pits, elements of the 20<sup>th</sup> century air raid shelters were observed in 8 of them (TP1, TP2, TP3, TP4, C1B, C2, C3, C4B) and a 20<sup>th</sup> century wall was observed in C5.*

- To determine the survival, extent and minimum depth below modern ground level of any such remains.

*On average the air raid shelters were located 0.50m below the modern ground level.*

- To determine the nature and significance of any archaeological deposits

*The 20<sup>th</sup> century air raid shelters appear to be largely intact and are of local significance.*

5.3.2 With regards to the site specific aims of the watching brief:

- Primarily to determine the results of the previous geophysical survey with regard to the location of the former shelters at Sites C, E and F (Figures 1 & 2)

*Air raid shelters were observed in sites C and E, but not in site F.*



- To make a record, where possible, of the fabric and construction of the World War II shelters

*There was only limited exposure of the shelters; however two different sizes of shelter were recorded. In Site C two shelters were observed, both roughly measuring 8m long by 3m wide. In Site E a much larger shelter was observed, potentially measuring 30m long by 20m wide. They appear to have been constructed of concrete covered-over with soil.*

- To inform the methodology for subsequent historic building recording of the World War II shelters

*The structures of the shelters in both Sites C and E seem largely intact. The drill arisings viewed in Site E showed that the air raid in this area had been backfilled with rubble to within c. 1m of the ceiling roof. The nature of backfilling (or not) of the two shelters identified in Site C is not known as drilling was not seen in this area.*

*It may therefore be worth exposing the shelters in both areas completely so that a historic buildings specialist can record them properly if required. If the internal structure is still intact and is structurally sound, then it may also be possible to survey the inside of the shelters, health & safety permitting.*

## **5.4 Conclusions**

- 5.4.1 Three air raid shelters were observed. These comprised two shelters in site C, measuring 8m long by 3m wide, and one shelter in site E measuring 30m long by 20m wide.
- 5.4.2 Drill arisings in Sites C suggest that the western shelter is partially backfilled with rubble and flooded, and that a probable reinforced concrete wall of the eastern shelter is of good condition at the top, but weathered and degraded at the base.
- 5.4.3 Drill arisings in Site E suggest that the shelter here was partially backfilled with rubble and flooded. Concrete walls along the northern and eastern sides of the shelter were reinforced, and degraded along the western side.
- 5.4.4 The air raid shelters are visible at ground level as mounds of earth over them are still present.
- 5.4.5 No shelter(s) were identified in site F and no other archaeological finds features or deposits of any interest were observed across the site.
- 5.4.6 Based on the results of these investigations further recording of the shelters is recommended as part of a controlled watching brief during demolition.

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## HER Summary

Site Code	CPE17					
Identification Name and Address	Clapham Park Estate, London Borough of Lambeth					
County, District &/or Borough	London Borough of Lambeth					
OS Grid Refs.	TQ 29940 73918					
Geology	Clay, silt, sand and gravel head deposits, overlying London Clay					
Arch. South-East Project Number	170156					
Type of Fieldwork		WB.				
Type of Site		Shallow Urban				
Dates of Fieldwork	17/07/17-02/08/17					
Sponsor/Client	Orion Heritage					
Project Manager	Andy Leonard					
Project Supervisor	Steve White					
Period Summary						
						Modern
<p>Summary</p> <p><i>Archaeology South-East was commissioned by Orion Heritage to undertake an archaeological watching brief at Clapham Park Estate, London Borough of Lambeth, between the 17th of July and 2nd of August, 2017. The work was principally comprised of the monitoring of geotechnical test pits whose primary purpose was the identification of the old air raid shelters. A concrete core survey has also been used and integrated where possible.</i></p> <p><i>Three air raid shelters were observed. These comprised two shelters in site C, measuring 8m long by 3m wide, and one shelter in site E measuring 30m long by 20m wide. The air raid shelters are visible at ground level as mounds of earth over them are still present. No shelter(s) were identified in site F and no other archaeological finds features or deposits of any interest were observed across the site. In Site C, the western shelter is partially backfilled with rubble and flooded, and a probable reinforced concrete wall of the eastern shelter is of good condition at the top, but weathered and degraded at the base. In Site E, the shelter is partially backfilled with rubble and flooded, concrete walls along the northern and eastern sides of the shelter were reinforced, and degraded along the western side. Based on the results of these investigations further recording of the shelters is recommended as part of a controlled watching brief during demolition.</i></p>						

## OASIS Form

**OASIS ID: archaeol6-294453**

### Project details

Project name	Clapham Park Estate, London Borough of Lambeth
Short description of the project	<p>Archaeology South-East was commissioned by Orion Heritage to undertake an archaeological watching brief at Clapham Park Estate, London Borough of Lambeth, between the 17th of July and 2nd of August, 2017. The work was principally comprised of the monitoring of geotechnical test pits whose primary purpose was the identification of the old air raid shelters. A concrete core survey has also been used and integrated where possible.</p> <p>Three air raid shelters were observed. These comprised two shelters in site C, measuring 8m long by 3m wide, and one shelter in site E measuring 30m long by 20m wide. The air raid shelters are visible at ground level as mounds of earth over them are still present. No shelter(s) were identified in site F and no other archaeological finds features or deposits of any interest were observed across the site.</p> <p>In Site C, the western shelter is partially backfilled with rubble and flooded, and a probable reinforced concrete wall of the eastern shelter is of good condition at the top, but weathered and degraded at the base. In Site E, the shelter is partially backfilled with rubble and flooded, concrete walls along the northern and eastern sides of the shelter were reinforced, and degraded along the western side.</p> <p>Based on the results of these investigations further recording of the shelters is recommended as part of a controlled watching brief during demolition.</p>
Project dates	Start: 17-07-2017 End: 02-08-2017
Previous/future work	Yes / Not known
Any associated project reference codes	CPE17 - Sitecode
Type of project	Field evaluation
Site status	None
Current Land use	Residential 1 - General Residential
Monument type	AIR RAID SHELTER Modern
Significant Finds	N/A None
Methods & techniques	"Test Pits"
Development type	Not recorded
Prompt	Voluntary/self-interest

Position in the planning process      Not known / Not recorded

**Project location**

Country                                      England  
 Site location                                GREATER LONDON LAMBETH CLAPHAM Clapham Park Estate, London Borough of Lambeth  
 Postcode                                    SW2 4NG  
 Study area                                    36 Hectares  
 Site coordinates                            TQ 29940 73918 51.448815811678 -0.129848716906 51 26 55 N 000 07 47 W Polygon

**Project creators**

Name of Organisation                    Archaeology South-East  
 Project brief originator                Orion Heritage Ltd  
 Project design originator                Orion Heritage  
 Project director/manager                Andy Leonard  
 Project supervisor                        Steve White  
 Type of sponsor/funding body        Client  
 Name of sponsor/funding body        Orion Heritage

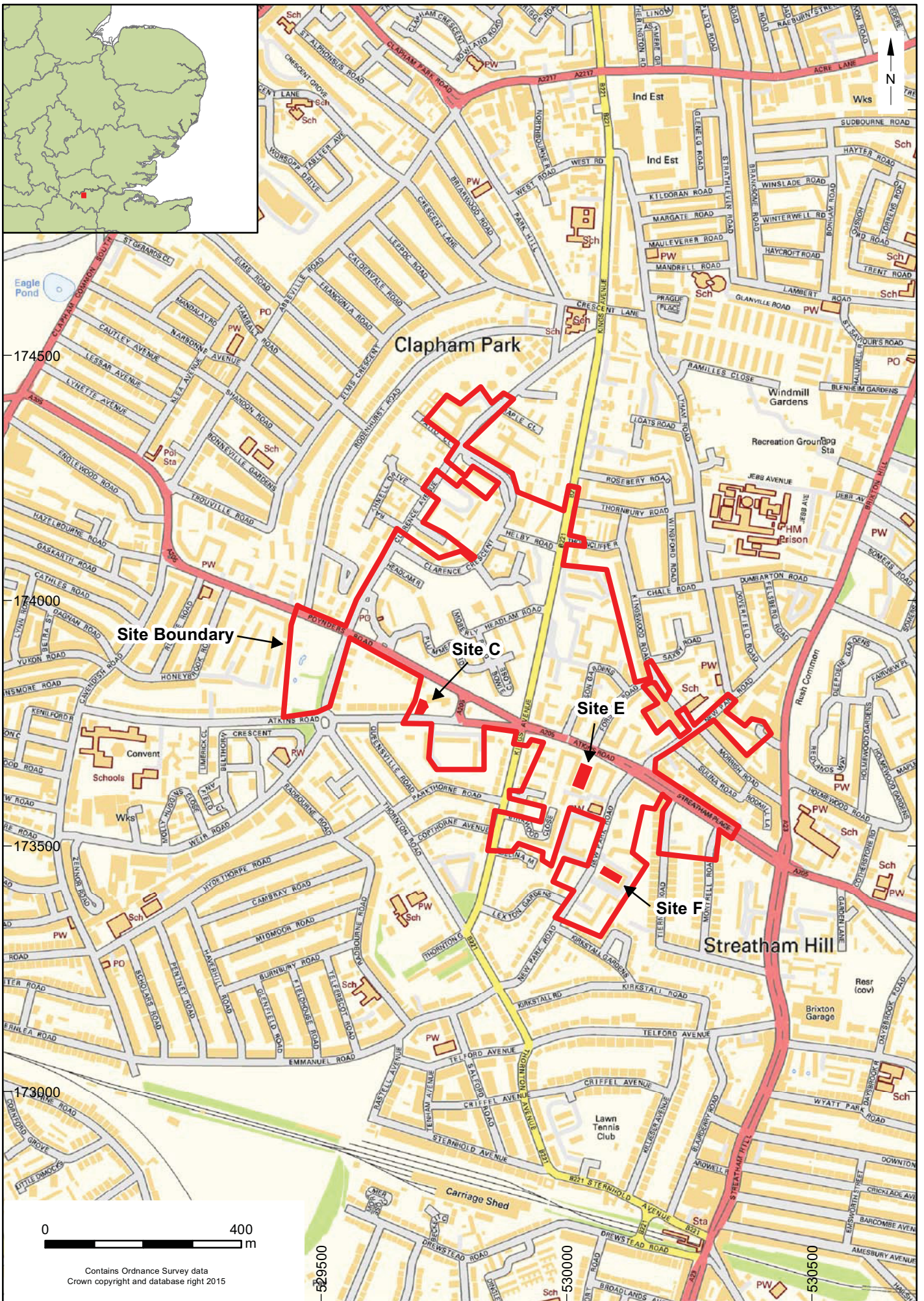
**Project archives**

Physical Archive Exists?                No  
 Digital Archive recipient                LAARC  
 Digital Archive ID                        CPE17  
 Digital Contents                         "Stratigraphic", "Survey"  
 Digital Media available                 "Database", "GIS", "Images raster / digital photography", "Spreadsheets", "Text"  
 Paper Archive recipient                 LAARC  
 Paper Archive ID                         CPE17  
 Paper Contents                         "Stratigraphic", "Survey"  
 Paper Media available                 "Diary", "Map", "Notebook - Excavation", ' Research', ' General Notes', "Plan", "Report", "Unpublished Text"

**Project  
bibliography 1**

Publication type	Grey literature (unpublished document/manuscript)
Title	An Archaeological Watching Brief at Clapham Park Estate, London Borough of Lambeth
Author(s)/Editor(s)	White, S
Other bibliographic details	ASE report number 2017378
Date	2017
Issuer or publisher	ASE
Place of issue or publication	Portslade
Description	Unbound grey lit report
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Entered by	Stephen White (stephen.white@ucl.ac.uk)
Entered on	30 August 2017

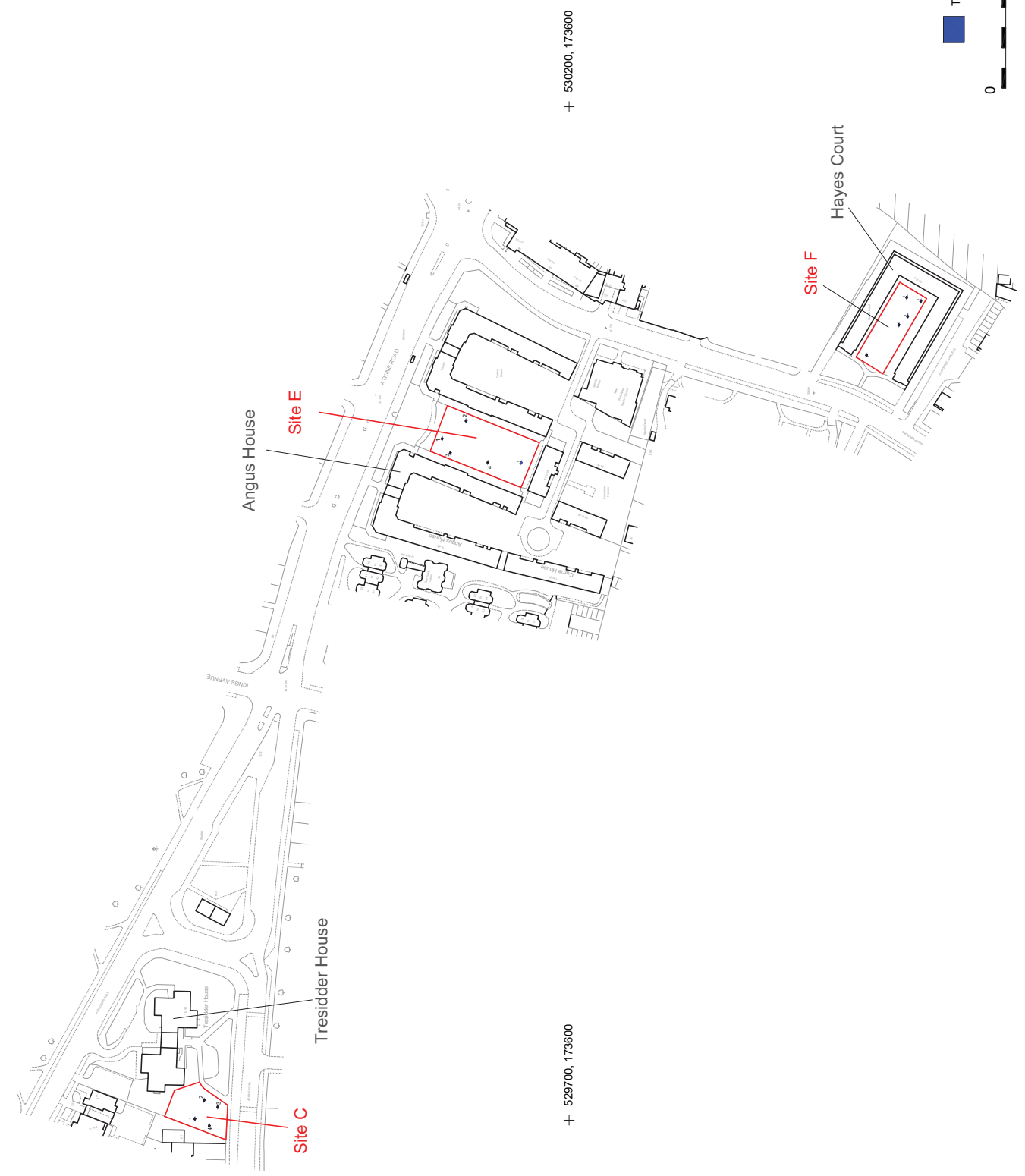


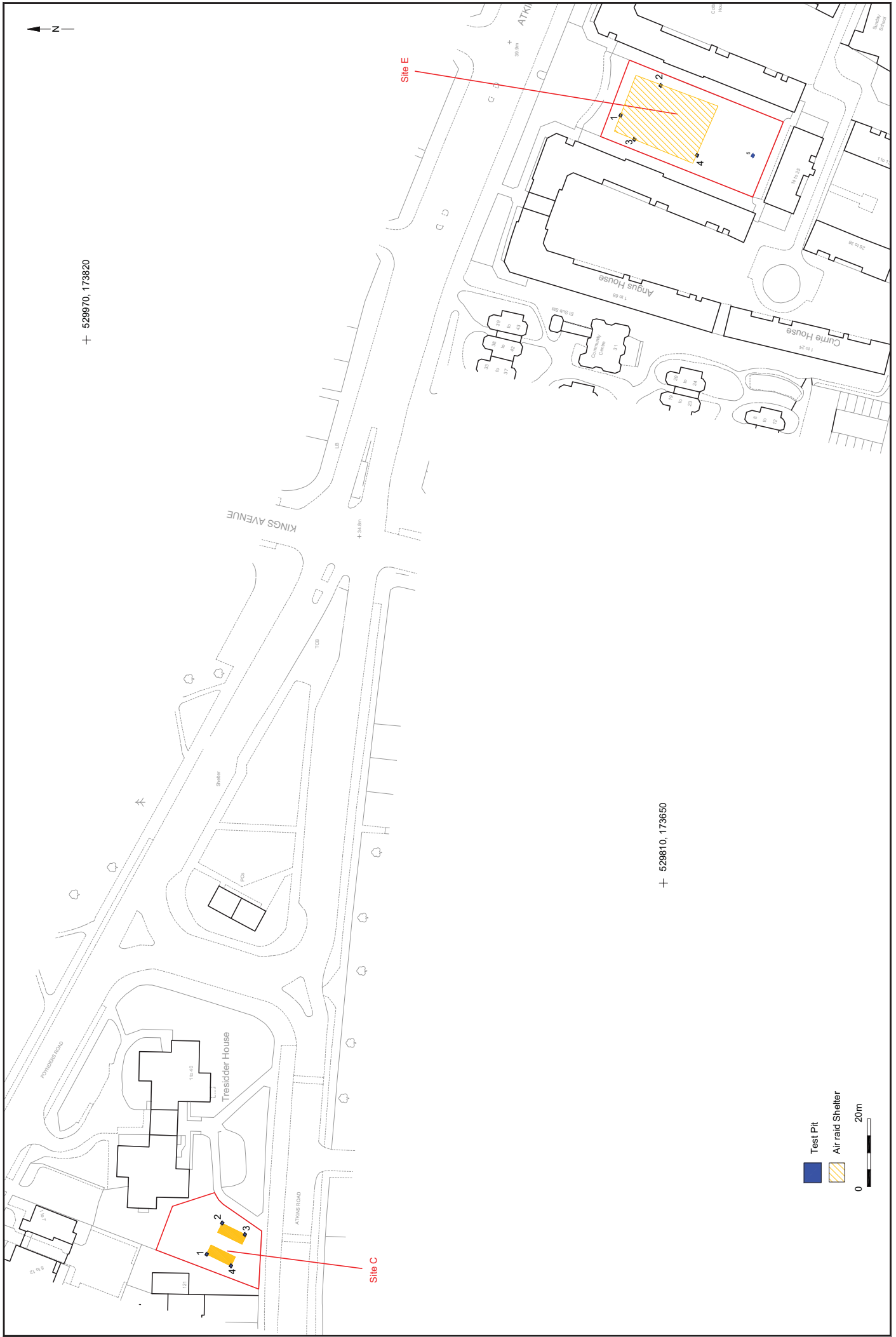


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© Archaeology South-East		Clapham Park Estate, London		Fig. 1
Project Ref: 170156	September 2017	Site location		
Report No: 2017378	Drawn by: AR			









View east across TP01 showing air raid shelter roof



View north across Site C showing above ground blocked up stairwell



View north showing TP C1B in site E



View of sterile trial pit in Site F



14<sup>th</sup> September 2017  
Our reference: 29308-L01

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**RE: CLAPHAM PARK ESTATE, LONDON – INTRUSIVE GROUND INVESTIGATION REPORT**

Dear Sirs,

**1. INTRODUCTION**

On the instruction of Ramboll Limited, acting on behalf of Metropolitan Housing (“Client”), RSK Environment Limited (RSK) has prepared this factual report following an intrusive ground investigation undertaken at the above site.

The investigation was intended to assess the ground conditions in connection with the mixed use redevelopment across Clapham Park Estate. It is understood that the proposed development is divided into six sites named A to F. Within each site there are a number of residential led plots, some containing community facilities and/or commercial units. The aim of the survey was specifically to establish the presence of subsurface structures (comprising semi sunken air-raid shelters) within Sites C, E and F.

This report is subject to the RSK service constraints given in **Appendix A**.

**2. SITE SETTING**

**2.1 Site description**

The Clapham Park Estate is located within the London Borough of Lambeth and sits between Brixton (north), Streatham (south) and Clapham (west). It is centred approximately on National Grid Reference TQ 29893 73906 and extends to circa 30 hectares. An extract of the 1:50,000 Ordnance Survey map showing the location of the three sites are given in **Figure 1**.

The estate is segregated by an existing dual carriageway (A205 South Circular road) and is bounded by Clarence Avenue on the west, the B221 Kings Avenue runs approximately north-south through the centre and New Park Road is at the east side. The existing use of the estate is representative of the surrounding area, being predominantly residential use in a series of multi-storey blocks with local retail and community facilities. As outlined above, the areas under investigation are set within Sites C, E and F detailed overleaf.



### Site C

This site comprises a 5 storey residential building with a raised open grassed area immediately north of Atkins Road as shown in **Figure 2a**. Two large concrete upstanding structures are present up to 1.50m above the surrounding ground level with associated covers flush to ground level.

### Site E

This site comprises 4-5 storey residential buildings with a communal soft landscaped area between the residential blocks as shown in **Figure 2b**.

### Site F

This site comprises a raised open central courtyard area surrounded by a 4 storey residential block on the north, south, and east sides as shown in **Figure 2c**.

## 2.2 Published Geology

The published 1:50,000 scale geological map of the area (Sheet 270) indicates that all three sites are underlain by London Clay. Sites E and F in the east also are shown to be underlain by superficial Head Deposits.

## 3. SITE WORKS

An intrusive investigation was carried between 17<sup>th</sup> July and 3<sup>rd</sup> August 2017 and comprised the activities summarised in **Table 1** below:

**Table 1: Summary of activities**

Investigation Type	Exploratory hole number	Site	Rationale
Machine assisted trial pits	TP1, TP2, TP3 & TP4	C	To determine the configuration of the sub-surface structure and expose the top of the buried feature.
	TP1A, TP2A, TP3, TP4A, TP4B	E	To determine the configuration of the sub-surface structure and expose the top of the buried feature.
	TP5, TP6 & TP7	E	To prove the geological succession
	TP1, TP2, TP3, TP4, TP5 & TP6	F	To prove the geological succession
Vertical concrete coring	C1, C2, C3 & C4	C	To determine the thickness of the concrete at the top/base of the sunken sub-surface feature.
	C1, C2, C3 & C4	F	To determine the thickness of the concrete at the top/base of the sunken sub-surface feature.

All exploratory logs and photographic records are presented as **Appendix B**. The exploratory hole location plans are presented as **Figures 3a to 3c**.



#### 4. GROUND CONDITIONS

The soil profile confirmed the ground conditions to be variable in nature and references should be made to the individual field records appended. However in general, it comprised a superficial thickness of topsoil (characterised by dark brown organic slightly sandy silt) overlying sandy gravelly clay with a low cobble content. The gravel fraction comprised fine to course angular to subangular flint, concrete, clinker, brick, rare fragments of bituminous material, timber and plastic. Loosely compacted granular fill material comprising cobble sized concrete fragments were recorded locally within TP6 and TP7 (Site E). Beneath the made ground, soils recovered as London Clay (firm brown clay) was recorded locally in TP4 (Site F).

Whilst unrepresentative of the general made ground, rare fragments of cement bonded material suspected of containing asbestos was identified within the made ground (Site C-TP2 and Site E -TP2 at 0.5mbgl).

#### 5. SUBSURFACE STRUCTURE

##### 5.1 Site C

The trial pits revealed the top of the buried structure at depths ranging between 0.65m and 0.70m (TP1, TP3 and TP4) and segregated into two detached sections. The dimensions of which were not fully proven due to the constraints encountered. Albeit, the width of the eastern segment was noted to be 2.35m across (TP2). Trial pit plans and sections are presented as **Appendix B**.

4No.150mm diameter cores were undertaken at all trial pit positions to establish the thickness of buried structure,. A summary of the concrete cores is provided in **Table 2** below with a photographic record provided in **Appendix B**.

**Table 2: Summary of concrete coring (Site C)**

Core / TP ref ID	Recovery	Thickness (mm)	Core Description
C1 (TP1)	-	-	No recovery
	Base	190	Core recovered in two pieces with an irregular fracture line. Porous openings present on the surface of the cores.
C2 (TP2)	Top	105	Concrete is in good condition with notable steel reinforcement bar
	Base	190	Concrete is degraded and not recovered in-tact.
C3 (TP3)	-	-	No recovery
	Base	130	Weathered base of core. Reinforcement bar at the base of the core.
C4 (TP4)	Top	125	Concrete in good condition.
	Base	200	Weathered base of core. Reinforcement bar aligned in the centre of the core.

Water was noted within the western segment of the buried structure and was observed to be partially in-filled with demolition waste material.

## 5.2 Site E

The top of the buried structure was encountered in TP1B, TP2, TP3 and TP4B at depths ranging between 0.40m and 0.55m bgl. The dimensions of the structure were proven and recorded in relation to the concrete surface features and/or nearby walls. The northern boundary of the structure was noted 1.80m east and parallel to the concrete access cover located adjacent to TP1B. The eastern edge was recorded to be 3.90m from the wall to the east at TP2 and the western edge was identified to be 4.20m from the wall to the west at TP3. TP4 exposed the southern edge of the structure, approximately 0.90m east and parallel to the concrete surface feature to the west. Remnants of a former concrete wall was recorded within TP6 at depths between 0.60m and 1.70m bgl. Trial pit plans and sections are presented as **Appendix B**.

4No. 150mm cores were undertaken at selected trial pit locations (designated TP1B, TP2, TP3 and TP4B) to establish the thickness of the buried structure. A summary of the concrete cores is provided in **Table 3** below with a photographic record provided in **Appendix B**.

**Table 3. Summary of concrete coring (Site E)**

Core Location	Recovery	Thickness (mm)	Core Description
C1 (TP1B)	Top	210	Core recovered in-tact. Distinct colour change. Reinforcement bar near base.
	Base	115	Core recovered in-tact. Containing fine flint aggregate with no reinforcement.
C2 (TP2)	Top	220	Initial core encountered concrete wall. Secondary core recovered in-tact with reinforcement bar throughout.
	-	-	No recovery.
C3 (TP3)	Top	65	Concrete in poor condition and visibly different to other cores recovered. Steel wire throughout.
	-	-	No recovery.
C4 (TP4B)	-	-	No recovery.
	Base	200	Recovered whole, damaged in transit. Smooth fracture line. Porous openings and reinforcement bar throughout.

The buried structure appeared to be partially backfilled with demolition debris. Water was further recorded locally within the southern portion of the structure.

## 5.3 Site F

No buried concrete structures were encountered at Site F.

## 6. SAMPLING AND LABORATORY TESTING

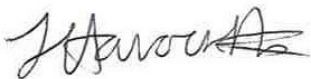
Water samples were retrieved from Sites C and E using low flow techniques. The samples were collected in containers appropriate to the anticipated testing suite required. The containers were filled to capacity and placed in a cool box to minimise volatilisation. Samples were transported directly to the testing laboratory under. A limited programme of chemical laboratory testing was undertaken on two samples (from Sites C and E) comprising metals, pH, speciated poly-cyclic aromatic hydrocarbons and petroleum hydrocarbons.

In addition to the above, bulk asbestos analysis was carried out on the suspected bonded material identified in the made ground (Site C TP2 and Site E TP2). The results are provided in **Appendix C**.

We trust the above is suitable for your present needs. Should you have any queries or require clarification then please do not hesitate to get in contact with the undersigned.

Yours sincerely

For **RSK Environment Limited**



**Jamie Howourth**

Graduate Geo-environmental Engineer



**Ziaul Hoque**

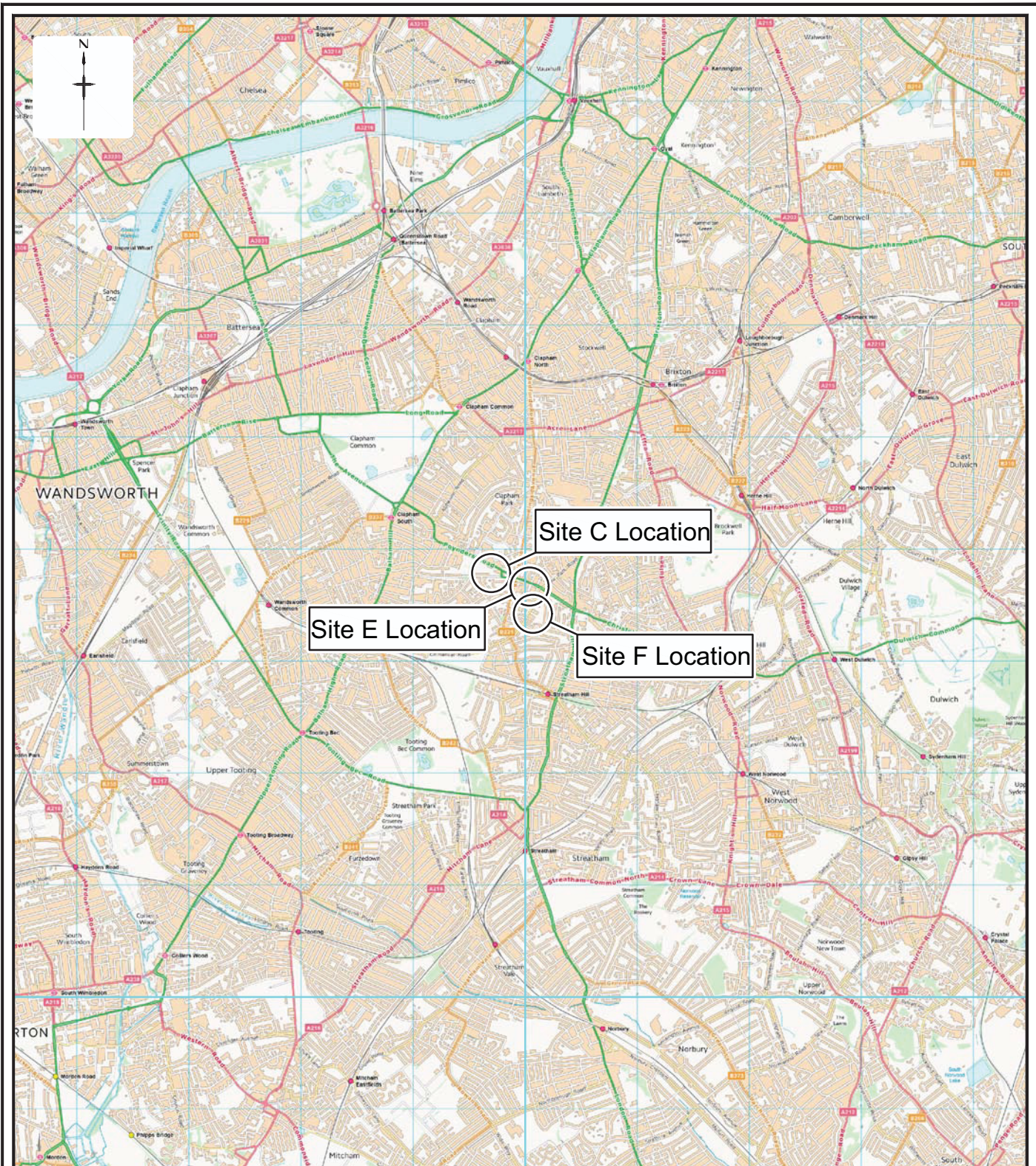
Principal Geo-environmental Engineer

- Enc. Figure1 - Site location plan  
Figures 2a to 2c – Site layout plans  
Figures 3a to 3c – Exploratory hole location plans  
Appendix A – Service constraints  
Appendix B – Field records  
Appendix C – Laboratory test records

## FIGURES

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Contains Ordnance Survey data



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Web: www.rsk.co.uk

Client  
**METROPOLITAN HOUSING TRUST**

Project Title  
**CLAPHAM PARK  
- SITES C, E & F**

Drawing Title  
**SITE LOCATION PLAN**

Rev	Drawn	Date	Checked	Date	Approved	Date
01	ASC	17.08.17	JH	17.08.17	JH	17.08.17
Dimensions		Scale		Original Size		
m		1:50,000		A4		

Project Number	Drawing File	Drawing Number
29308 - R01 (00)	29308 - SLP.dwg	FIGURE 1



LEGEND

— Survey Area



Rev.	Date	Amendment	Drawn	Chkd.	Appd.



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Client

METROPOLITAN HOUSING TRUST

Project Title

CLAPHAM PARK

Drawing Title

EXISTING SITE LAYOUT - SITE C

Drawn	Date	Checked	Date	Approved	Date
ASC	17.08.17	JH	17.08.17	JH	17.08.17

Scale 1:200  
 Orig Size A3  
 Dimensions m

Project No. 29308 - L01  
 Drawing File 29308 (L01) Fig 2.dwg

Drawing No. FIGURE 2a  
 Rev. P1



LEGEND

— Survey Area

Rev.	Date	Amendment	Drawn	Chkd.	Appd.



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 United Kingdom

Client

METROPOLITAN HOUSING TRUST

Project Title

CLAPHAM PARK

Drawing Title

EXISTING SITE  
 LAYOUT  
 - SITE E

Drawn	Date	Checked	Date	Approved	Date
ASC	17.08.17	JH	17.08.17	JH	17.08.17

Scale 1:400

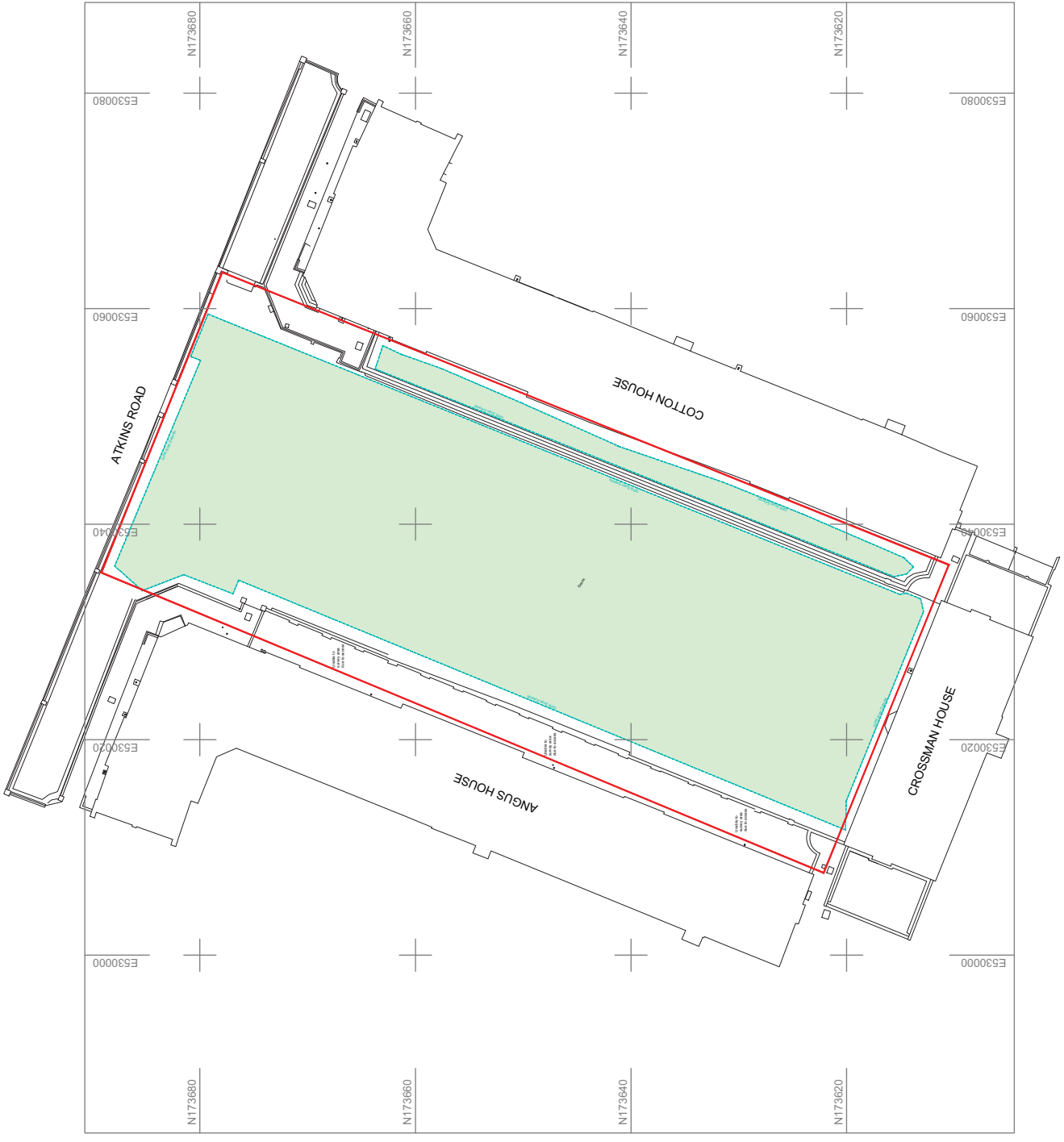
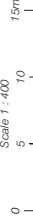
Orig Size A3

Dimensions m

Project No. 29308 - L01  
 Drawing File 29308 (L01) Fig 2.dwg

Drawing No. FIGURE 2B  
 Rev. P1

Scale 1 : 400



LEGEND

— Survey Area

Rev.	Date	Amendment	Drawn	Chkdt.	Appd.



19 Engletons Road  
 Heathfield  
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 Web: www.rsk.co.uk  
 United Kingdom

Client  
**METROPOLITAN HOUSING TRUST**

Project Title  
**CLAPHAM PARK**

Drawing Title  
**EXISTING SITE LAYOUT - SITE F**

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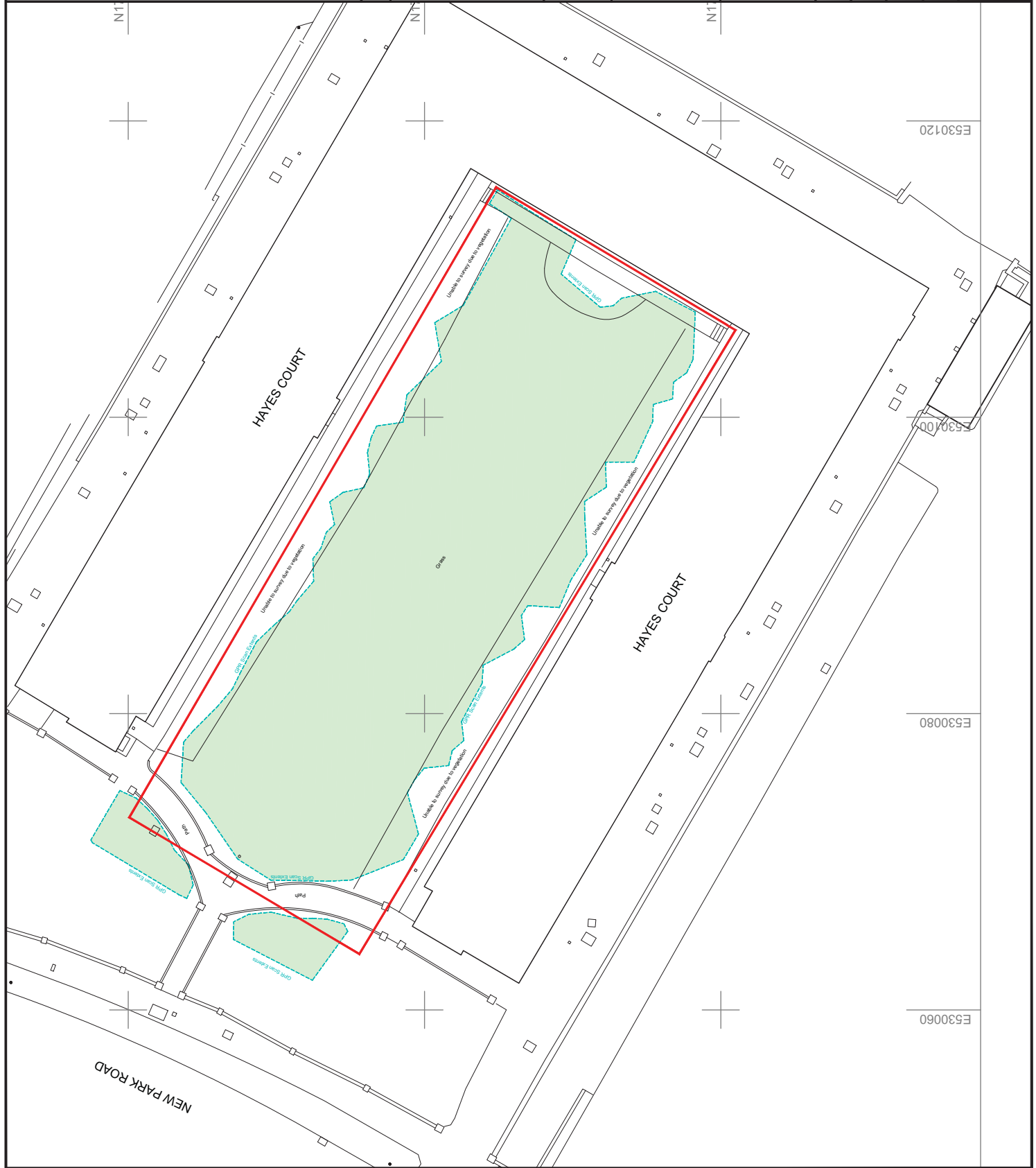
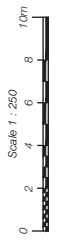
Scale  
**1:250**

Dimensions  
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Project No.  
**29308 - L01**

Drawing No.  
**FIGURE 2C**

Rev.  
**P1**





**LEGEND**

-  Core Location
-  Trial Pit Location

Rev.	Date	Amendment	Drawn	Chkd.	Appd.



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Client  
**METROPOLITAN HOUSING TRUST**

Project Title  
**CLAPHAM PARK**

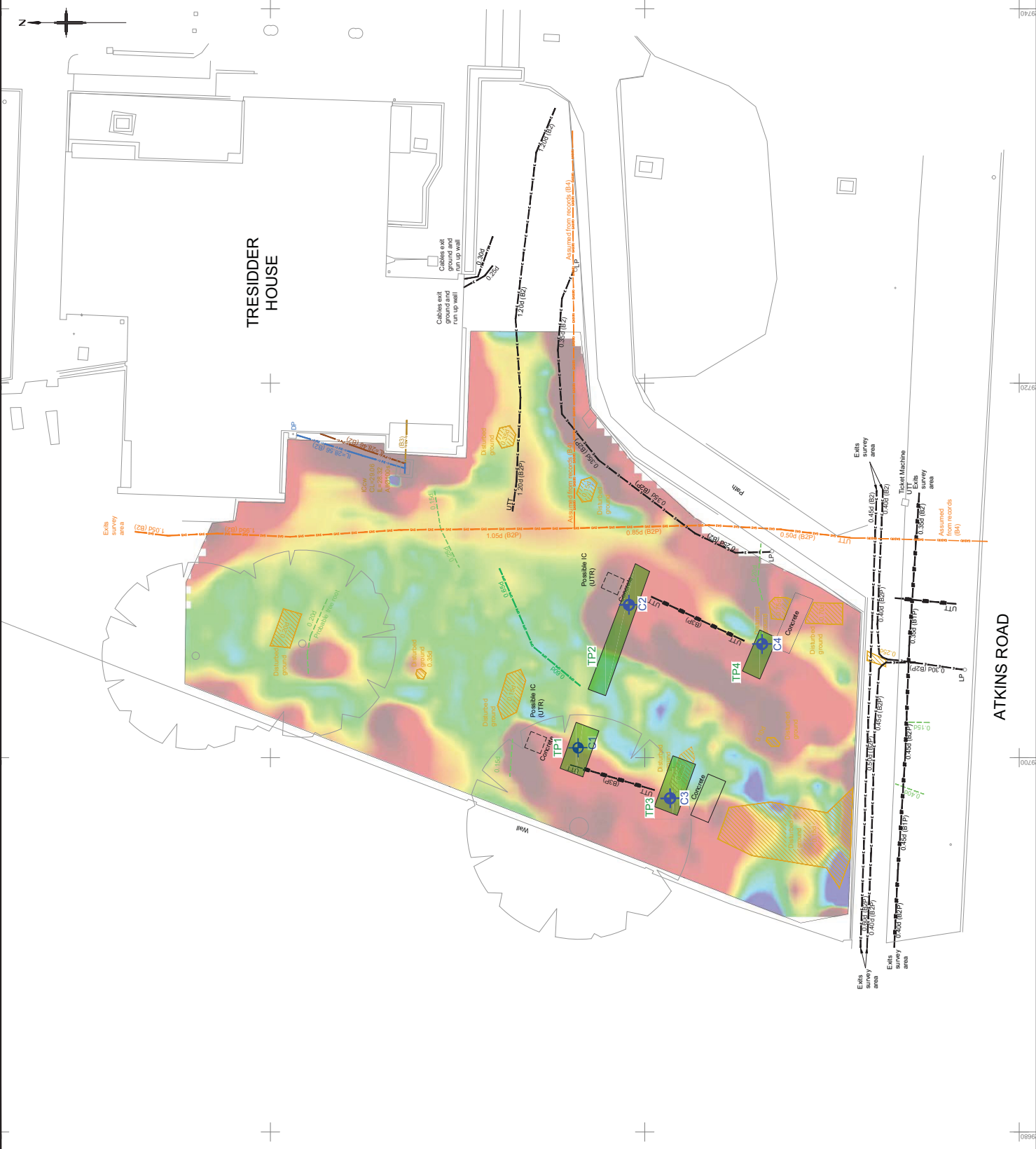
**EXPLORARY HOLE  
 LOCATION PLAN  
 - SITE C**

Drawing Title  
**EXPLORARY HOLE  
 LOCATION PLAN  
 - SITE C**

Drawn	Date	Checked	Date	Approved	Date
ASC	26.07.17	JH	26.07.17	JH	26.07.17

Scale	Orig Size	Dimensions
1:200	A3	m

Project No.	29308 - L01	Drawing File	29308 (L01) Fig 3a.dwg
Drawing No.	FIGURE 3a	Rev.	P1



**LEGEND**

- Trial Pit Location
- Core Location

Rev.	Date	Amendment	Drawn	Chkd.	Appd.



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Client  
**METROPOLITAN HOUSING TRUST**

Project Title  
**CLAPHAM PARK**

Drawing Title  
**EXPLORATORY HOLE LOCATION PLAN**

**- SITE E**

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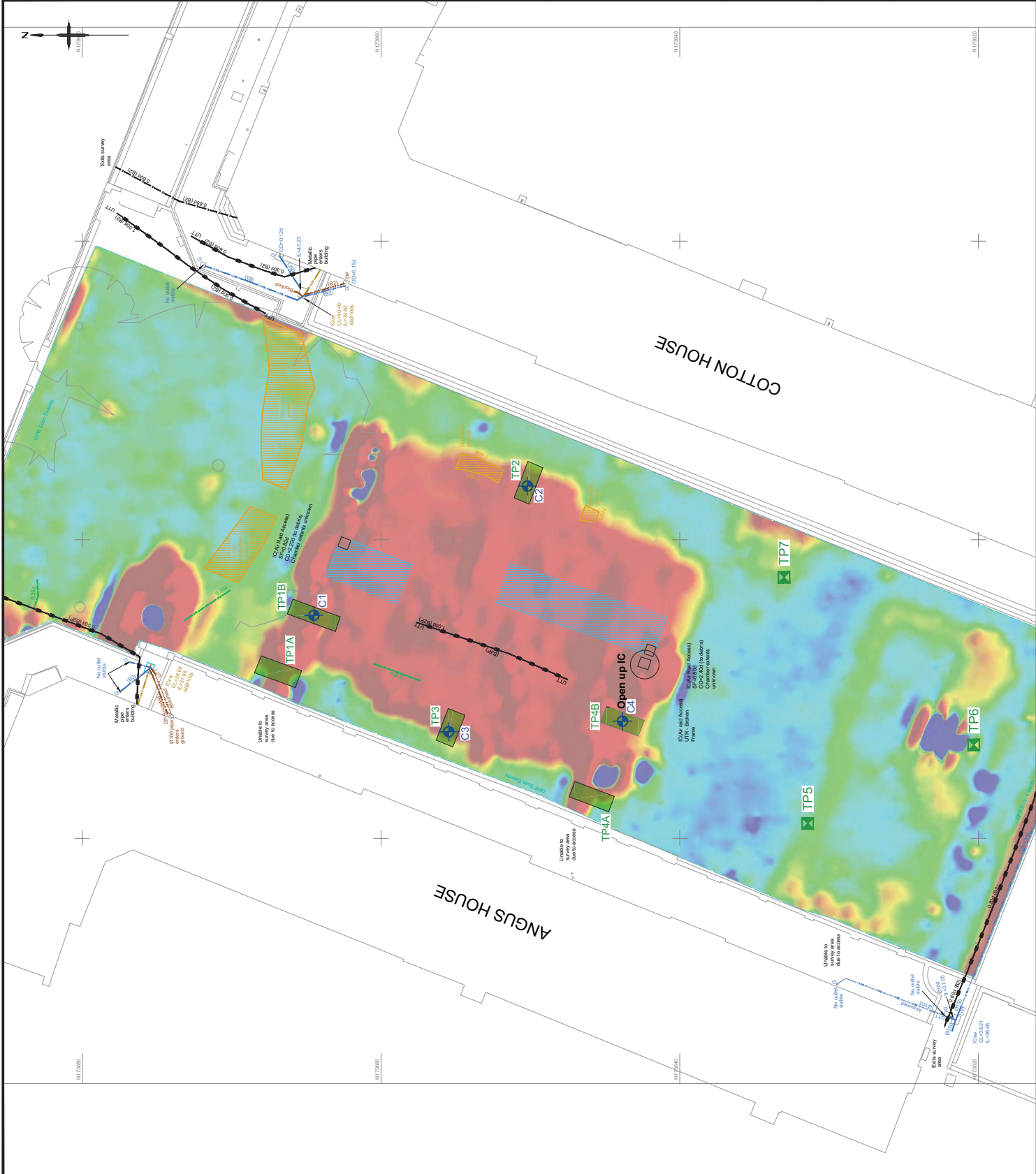
Scale  
**1:200**

Dimensions  
 m


Project No.  
**29308 - L01**

Drawing No.  
**FIGURE 3b**

Rev.  
**P1**



LEGEND

 Trial Pit Location

Rev.	Date	Amendment	Drawn	Chkd.	Appd.



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Project Title

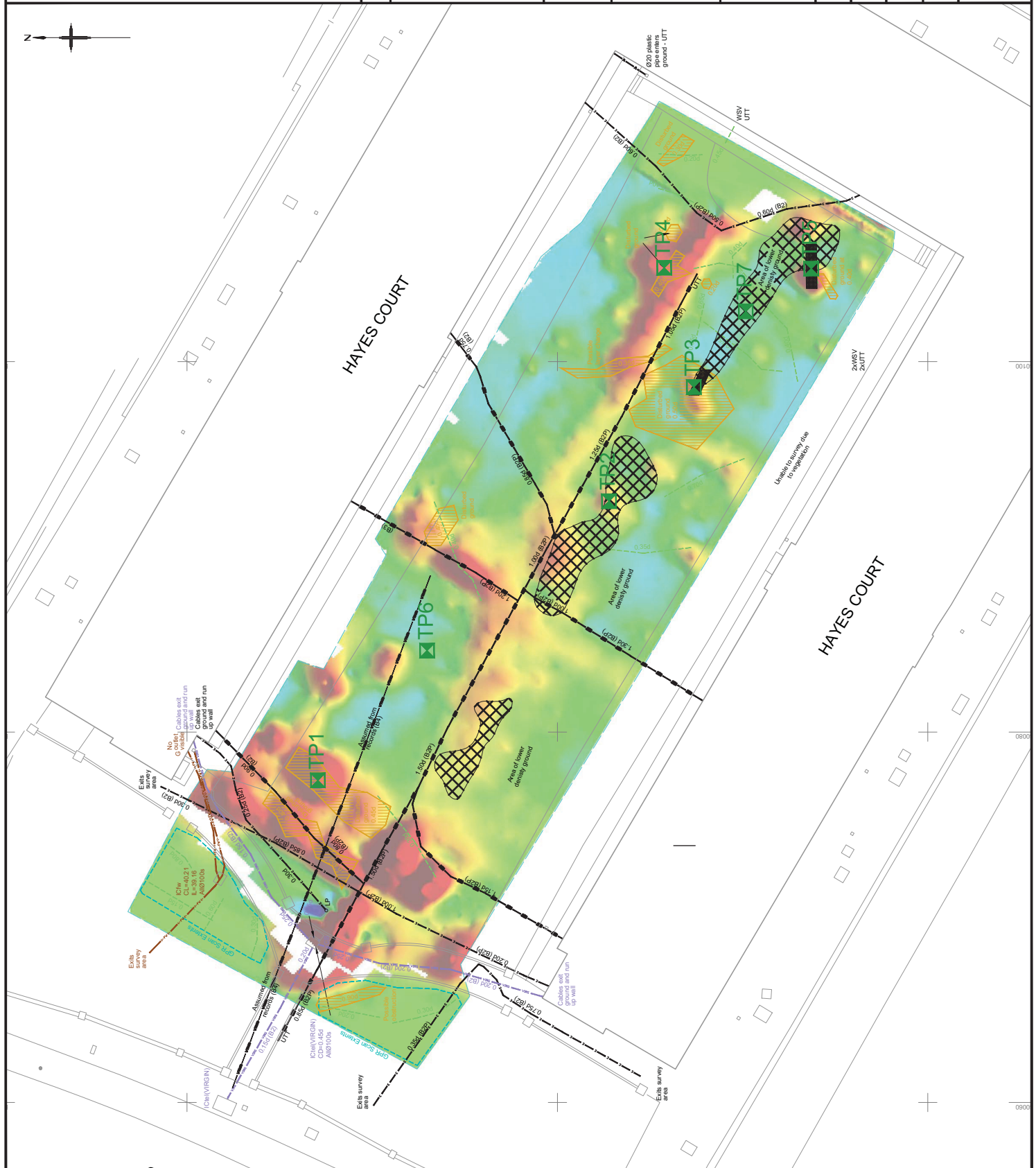
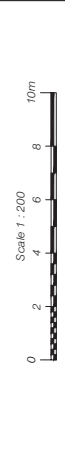
**CLAPHAM PARK**

Drawing Title

**EXPLORATORY HOLE  
 LOCATION PLAN  
 - SITE F**

Drawn	Date	Checked	Date	Approved	Date
ASC	17.08.17	JH	17.08.17	JH	17.08.17

Scale	1:200	Orig Size	A3	Dimensions	m
Project No.	29308 - L01	Drawing File 29308 (L01) Fig 3c.dwg			
Drawing No.	FIGURE 3c	Rev. P1			





# APPENDIX A

## SERVICE CONSTRAINTS

---

1. This report and the site investigation carried out in connection with the report (together the "Services") were compiled and carried out by RSK Environment Limited (RSK) for Metropolitan Housing Trust (the "client") in accordance with the terms of a contract between RSK and the "client". The Services were performed by RSK with the skill and care ordinarily exercised by a reasonable environmental consultant at the time the Services were performed. Further, and in particular, the Services were performed by RSK taking into account the limits of the scope of works required by the client, the time scale involved and the resources, including financial and manpower resources, agreed between RSK and the client.
2. Other than that expressly contained in paragraph 1 above, RSK provides no other representation or warranty whether express or implied, in relation to the Services.
3. Unless otherwise agreed in writing the Services were performed by RSK exclusively for the purposes of the client. RSK is not aware of any interest of or reliance by any party other than the client in or on the Services. Unless expressly provided in writing, RSK does not authorise, consent or condone any party other than the client relying upon the Services. Should this report or any part of this report, or otherwise details of the Services or any part of the Services be made known to any such party, and such party relies thereon that party does so wholly at its own and sole risk and RSK disclaims any liability to such parties. **Any such party would be well advised to seek independent advice from a competent environmental consultant and/or lawyer.**
4. It is RSK's understanding that this report is to be used for the purpose described in the introduction to the report. That purpose was a significant factor in determining the scope and level of the Services. Should the purpose for which the report is used, or the proposed use of the site change, this report may no longer be valid and any further use of or reliance upon the report in those circumstances by the client without RSK's review and advice shall be at the client's sole and own risk. Should RSK be requested to review the report after the date of this report, RSK shall be entitled to additional payment at the then existing rates or such other terms as agreed between RSK and the client.
5. The passage of time may result in changes in site conditions, regulatory or other legal provisions, technology or economic conditions which could render the report inaccurate or unreliable. The information and conclusions contained in this report should not be relied upon in the future without the written advice of RSK. In the absence of such written advice of RSK, reliance on the report in the future shall be at the client's own and sole risk. Should RSK be requested to review the report in the future, RSK shall be entitled to additional payment at the then existing rate or such other terms as may be agreed between RSK and the client.
6. The observations and conclusions described in this report are based solely upon the Services which were provided pursuant to the agreement between the client and RSK. RSK has not performed any observations, investigations, studies or testing not specifically set out or required by the contract between the client and RSK. RSK is not liable for the existence of any condition, the discovery of which would require performance of services not otherwise contained in the Services. For the avoidance of doubt, unless otherwise expressly referred to in the introduction to this report, RSK did not seek to evaluate the presence on or off the site of asbestos, electromagnetic fields, lead paint, heavy metals, radon gas or other radioactive or hazardous materials.
7. The Services are based upon RSK's observations of existing physical conditions at the Site gained from a walk-over survey of the site together with RSK's interpretation of information including documentation, obtained from third parties and from the client on the history and usage of the site. The Services are also based on information and/or analysis provided by independent testing and information services or laboratories upon which RSK was reasonably entitled to rely. The Services clearly are limited by the accuracy of the information, including documentation, reviewed by RSK and the observations possible at the time of the walk-over survey. Further RSK was not authorised and did not attempt to independently verify the accuracy or completeness of information, documentation or materials received from the client or third parties, including laboratories and information services, during the performance of the Services. RSK is not liable for any inaccurate information or conclusions, the discovery of which inaccuracies required the doing of any act including the gathering of any information which was not reasonably available to RSK and including the doing of any independent investigation of the information provided to RSK save as otherwise provided in the terms of the contract between the client and RSK.
8. The intrusive environmental site investigation aspects of the Services is a limited sampling of the site at pre-determined borehole and soil vapour locations based on the operational configuration of the site. The conclusions given in this report are based on information gathered at the specific test locations and can only be extrapolated to an undefined limited area around those locations. The extent of the limited area depends on the soil and groundwater conditions, together with the position of any current structures and underground facilities and natural and other activities on site. In addition chemical analysis was carried out for a limited number of parameters [as stipulated in the contract between the client and RSK] [based on an understanding of the available operational and historical information,] and it should not be inferred that other chemical species are not present.
9. Any site drawing(s) provided in this report is (are) not meant to be an accurate base plan, but is (are) used to present the general relative locations of features on, and surrounding, the site. Features (boreholes, trial pits etc) annotated on site plans are not drawn to scale but are centred over the approximate location. Such features should not be used for setting out and should be considered indicative only.

# **APPENDIX B**

## **FIELD RECORDS**

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Report No: 29308-L01

PHOTOGRAPHIC LOG

Client name: Metropolitan Housing Trust

Site Location: Clapham Park Estate

Site C

Photo No.  
1

Date:  
17/07/17

Direction Photo Taken:  
southeast

Description:  
Exposure of concrete roof at TP3.



Photo No.  
2

Date:  
19/07/17

Direction Photo Taken:  
n/a

Description:  
Photo from inside the access cover location adjacent to TP2.







Report No: 29308-L01

PHOTOGRAPHIC LOG

Client name: Metropolitan Housing Trust

Site Location: Clapham Park Estate

Site C

Photo No.  
3

Date:  
18/07/17

Direction Photo Taken:  
south

Description:  
Exposure of TP4 adjacent to concrete surface feature.



Photo No.  
4

Date:  
19/07/17

Direction Photo Taken:  
west

Description:  
Full width shown of west structure – TP2.





**Client name: Metropolitan Housing Trust**

**Site Location: Clapham Park Estate**

**Site E**

**Photo No.**  
5

**Date:**  
24/07/17

**Direction Photo Taken:**

n/a

**Description:**

Loose backfill of brick and concrete cobbles – TP7.



**Photo No.**  
6

**Date:**  
24/07/17

**Direction Photo Taken:**

n/a

**Description:**

Photo of cored position from TP3 showing brick backfill beneath.







Report No: 29308-L01

PHOTOGRAPHIC LOG

Client name: Metropolitan Housing Trust

Site Location: Clapham Park Estate

Site E

Photo No.  
7

Date:  
24/07/17

Direction Photo Taken:  
west

Description:  
Exposure of concrete roof at TP4.



Photo No.  
8

Date:  
27/07/17

Direction Photo Taken:  
southwest

Description:  
Exposure of damaged concrete wall at TP6.







Report No: 29308-L01

PHOTOGRAPHIC LOG

Client name: Metropolitan Housing Trust

Site Location: Clapham Park Estate

Site F

Photo No.  
9

Date:  
31/07/17

Direction Photo Taken:

n/a

Description:

Metallic pipes in-situ – TP1.



Photo No.  
10

Date:  
31/07/17

Direction Photo Taken:

n/a

Description:

TP3







Report No:

PHOTOGRAPHIC LOG

Client name:

Site Location:

Site F

Photo No.  
10

Date:  
31/07/17

Direction Photo Taken:  
east

Description:  
Eastern portion of site



Photo No.  
11

Date:  
3/08/17

Direction Photo Taken:  
n/a






Description:  
TP7



Client name: Metropolitan Housing Trust

Site Location: Clapham Park Estate

SITE C

No. 1	Direction/Description: C1 Base	No.2	Direction/Description: C2 Base
	Direction/Description: C2 Top		
No. 3	Direction/Description: C2 Top	No. 4	Direction/Description: C3 Base
	Direction/Description: C3 Base		Direction/Description: C3 Base



Client name: Metropolitan Housing Trust

Site Location: Clapham Park Estate

SITE C

No. 1

Direction/Description: C4 Base



Client name: Metropolitan Housing Trust

Site Location: Clapham Park Estate

SITE E

No.	Direction/Description:
No. 1	Direction/Description: C1 Base
	
No. 2	Direction/Description: C1 Top
	
No. 3	Direction/Description: C2 Top
	
No. 4	Direction/Description: C3 Top

Client name: Metropolitan Housing Trust

Site Location: Clapham Park Estate

SITE E

No. 1

Direction/Description: C4 Base





# TRIAL PIT LOG

Contract: <b>Clapham Park</b>		Client: <b>RSK Environment Ltd</b>		Trial Pit: <b>C-TP1</b>	
Contract Ref: <b>29308</b>		Start: <b>17.07.17</b> End: <b>17.07.17</b>	Ground Level: <b>---</b>	Co-ordinates: <b>---</b>	Sheet: <b>1 of 1</b>

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
						Dark brown slightly organic slightly sandy SILT. Sand is fine to medium. Frequent fine to medium rootlets. (TOPSOIL)	0.20	
						MADE GROUND: Brown slightly sandy gravelly CLAY with low cobble content and frequent rootlets. Sand is fine to coarse. Gravel is angular to subrounded flint, brick, concrete. Cobbles are subangular brick and concrete upto 150mm across.	(0.45)	
						Trial pit terminated at 0.65m depth.	0.65	

## General Remarks

All dimensions in metres Scale: **1:25**

Method Used: <b>Hand dug</b>	Plant Used: <b>Hand tools</b>	Logged By: <b>JHowourth</b>	Checked By:	
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GINT LIBRARY\_V8\_06.GLB LibVersion: v8\_06\_018 ProjVersion: v8\_06 - Core+Logs - 002 | Log TRIAL PIT LOG - NO PLAN - A4P | 29308 CLAPHAM PARK.GPJ - v8\_06\_06  
 RSK Environment Ltd, 18 Frogmore Road, Hemel Hempstead, Hertfordshire, HP3 9RT. Tel: 01442 437500, Fax: 01442 437550, Web: www.rsk.co.uk | 03/09/17 - 15:10 | JT3 |





# TRIAL PIT LOG

Contract: <b>Clapham Park</b>		Client: <b>RSK Environment Ltd</b>		Trial Pit: <b>C-TP2</b>
Contract Ref: <b>29308</b>	Start: <b>18.07.17</b> End: <b>18.07.17</b>	Ground Level: <b>---</b>	Co-ordinates: <b>---</b>	Sheet: <b>1 of 1</b>

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
						Dark brown slightly organic slightly sandy SILT. Sand is fine to medium. Frequent fine to medium rootlets. (TOPSOIL)	0.20	
						MADE GROUND: Brown slightly sandy gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is angular to subrounded flint, brick, concrete. Cobbles are subangular brick and concrete. . . . Cement bonded material suspected of containing asbestos.	(0.80)	
						MADE GROUND: Brown slightly gravelly CLAY. Gravel is fine to coarse flint with occasional brick and concrete.	1.00 (0.40)	
						Trial pit terminated at 1.4m depth.	1.40	

## General Remarks

All dimensions in metres Scale: **1:25**

Method Used: <b>Hand dug</b>	Plant Used: <b>Hand tools</b>	Logged By: <b>JHowourth</b>	Checked By:	
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GINT LIBRARY\_V8\_06.GLB LibVersion: v8\_06\_018 ProjVersion: v8\_06 - Core+Logs - 002 | Log TRIAL PIT LOG - NO PLAN - A4P | 29308 CLAPHAM PARK.GPJ - v8\_06\_06.  
 RSK Environment Ltd, 18 Frogmore Road, Hemel Hempstead, Hertfordshire, HP3 9RT. Tel: 01442 437500, Fax: 01442 437550, Web: www.rsk.co.uk | 03/09/17 - 15:10 | JT3 |



# TRIAL PIT LOG

Contract: <b>Clapham Park</b>		Client: <b>RSK Environment Ltd</b>		Trial Pit: <b>C-TP3</b>	
Contract Ref: <b>29308</b>		Start: <b>17.07.17</b> End: <b>17.07.17</b>	Ground Level: <b>---</b>	Co-ordinates: <b>---</b>	Sheet: <b>1 of 1</b>

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
						Dark brown slightly organic slightly sandy SILT. Sand is fine to medium. Frequent fine to medium rootlets. (TOPSOIL)	0.20	
						MADE GROUND: Brown slightly sandy gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is angular to subrounded flint, brick, concrete. Cobbles are subangular brick and concrete. Frequent roots (5mm in diameter).	(0.45)	
						Trial pit terminated at 0.65m depth.	0.65	

## General Remarks

All dimensions in metres Scale: **1:25**

Method Used: <b>Hand dug</b>	Plant Used: <b>Hand tools</b>	Logged By: <b>JHowourth</b>	Checked By:	
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GINT LIBRARY\_V8\_06.GLB LibVersion: v8\_06\_018 ProjVersion: v8\_06 - Core+Logs - 002 | Log TRIAL PIT LOG - NO PLAN - A4P | 29308 CLAPHAM PARK.GPJ - v8\_06\_06.  
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# TRIAL PIT LOG

Contract: <b>Clapham Park</b>		Client: <b>RSK Environment Ltd</b>		Trial Pit: <b>C-TP4</b>
Contract Ref: <b>29308</b>	Start: <b>18.07.17</b> End: <b>18.07.17</b>	Ground Level: <b>---</b>	Co-ordinates: <b>---</b>	Sheet: <b>1 of 1</b>

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
						Dark brown slightly organic slightly sandy SILT. Sand is fine to medium. Frequent fine to medium rootlets. (TOPSOIL)	0.20	
						MADE GROUND: Brown slightly sandy gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is angular to subrounded flint, brick, concrete. Cobbles are subangular brick and concrete. Occasional roots (5-6mm in diameter).	(0.50)	
						Trial pit terminated at 0.70m depth.	0.70	

## General Remarks

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All dimensions in metres Scale: **1:25**

Method Used: <b>Hand dug</b>	Plant Used: <b>Hand tools</b>	Logged By: <b>JHowourth</b>	Checked By:	
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GINT LIBRARY\_V8\_06.GLB LibVersion: v8\_06\_018 ProjVersion: v8\_06 - Core+Logs - 002 | Log TRIAL PIT LOG - NO PLAN - A4P | 29308 CLAPHAM PARK.GPJ - v8\_06\_06.  
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# TRIAL PIT LOG

Contract: <b>Clapham Park</b>		Client: <b>RSK Environment Ltd</b>		Trial Pit: <b>E-TP1A</b>
Contract Ref: <b>29308</b>	Start: <b>24.07.17</b> End: <b>24.07.17</b>	Ground Level: <b>---</b>	Co-ordinates: <b>---</b>	Sheet: <b>1 of 1</b>

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
						Dark brown slightly organic slightly sandy SILT. Sand is fine to medium. Frequent fine to medium rootlets. (TOPSOIL)	0.20	
						MADE GROUND: Brown sandy gravelly CLAY with low cobble content and rare fragments of metal. Sand is fine to coarse. Gravel is angular to subrounded flint, brick, concrete, clinker. Cobbles are subangular brick and concrete.	(0.80)	
						Trial pit terminated at 1.00m depth.	1.00	

## General Remarks

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All dimensions in metres Scale: **1:25**

Method Used: <b>Hand dug</b>	Plant Used: <b>Hand tools</b>	Logged By: <b>JHowourth</b>	Checked By: <b>JHowourth</b>	
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GINT LIBRARY\_V8\_06.GLB LibVersion: v8\_06 018 ProjVersion: v8\_06 - Core+Logs - 002 | Log TRIAL PIT LOG - NO PLAN - A4P | 29308 CLAPHAM PARK.GPJ - v8\_06.  
 RSK Environment Ltd, 18 Frogmore Road, Hemel Hempstead, Hertfordshire, HP3 9RT. Tel: 01442 437500, Fax: 01442 437550, Web: www.rsk.co.uk | 03/09/17 - 15:10 | JT3 |



# TRIAL PIT LOG

Contract: <b>Clapham Park</b>		Client: <b>RSK Environment Ltd</b>		Trial Pit: <b>E-TP1B</b>
Contract Ref: <b>29308</b>	Start: <b>24.07.17</b> End: <b>24.07.17</b>	Ground Level: <b>---</b>	Co-ordinates: <b>---</b>	Sheet: <b>1 of 1</b>

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
						Dark brown slightly organic slightly sandy SILT. Sand is fine to medium. Frequent fine to medium rootlets. (TOPSOIL)	0.20	
						MADE GROUND: Brown sandy gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is angular to subrounded flint, brick, concrete, clinker. Cobbles are subangular brick and concrete. Trial pit terminated at 0.45m depth.	0.45	

## General Remarks

All dimensions in metres Scale: **1:25**

Method Used: <b>Hand dug</b>	Plant Used: <b>Hand tools</b>	Logged By: <b>JHowourth</b>	Checked By:	
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GINT LIBRARY\_V8\_06.GLB LibVersion: v8\_06 018 ProjVersion: v8\_06 - Core+Logs - 002 | Log TRIAL PIT LOG - NO PLAN - A4P | 29308 CLAPHAM PARK.GPJ - v8\_06.  
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# TRIAL PIT LOG

Contract: <b>Clapham Park</b>		Client: <b>RSK Environment Ltd</b>		Trial Pit: <b>E-TP2</b>
Contract Ref: <b>29308</b>	Start: <b>24.07.17</b> End: <b>24.07.17</b>	Ground Level: <b>---</b>	Co-ordinates: <b>---</b>	Sheet: <b>1 of 1</b>

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
						Dark brown slightly organic slightly sandy SILT. Sand is fine to medium. Occasional fine rootlets. (TOPSOIL)	0.20	
						MADE GROUND: Brown sandy gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is angular to subrounded flint, brick, concrete, clinker. Cobbles are subangular brick and concrete. ... Cement bonded material suspected of containing asbestos.	(0.35)	
						Trial pit terminated at 0.55m depth.	0.55	

## General Remarks

All dimensions in metres Scale: **1:25**

Method Used: <b>Hand dug</b>	Plant Used: <b>Hand tools</b>	Logged By: <b>JHowourth</b>	Checked By:	
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GINT LIBRARY\_V8\_06.GLB LibVersion: v8\_06\_018 ProjVersion: v8\_06 - Core+Logs - 002 | Log TRIAL PIT LOG - NO PLAN - A4P | 29308 CLAPHAM PARK.GPJ - v8\_06\_06.  
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# TRIAL PIT LOG

Contract: <b>Clapham Park</b>		Client: <b>RSK Environment Ltd</b>		Trial Pit: <b>E-TP3</b>
Contract Ref: <b>29308</b>	Start: <b>24.07.17</b> End: <b>24.07.17</b>	Ground Level: <b>---</b>	Co-ordinates: <b>---</b>	Sheet: <b>1 of 1</b>

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
						Dark brown slightly organic slightly sandy SILT. Sand is fine to medium. Frequent fine to medium rootlets. (TOPSOIL)	0.25	
						MADE GROUND: Brown slightly sandy gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is angular to subrounded flint, brick, concrete. Cobbles are subangular brick and concrete. Trial pit terminated at 0.40m depth.	0.40	

## General Remarks

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All dimensions in metres Scale: **1:25**

Method Used: <b>Hand dug</b>	Plant Used: <b>Hand tools</b>	Logged By: <b>JHowourth</b>	Checked By:	
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GINT LIBRARY\_V8\_06.GLB LibVersion: v8\_06\_018 ProjVersion: v8\_06 - Core+Logs - 002 | Log TRIAL PIT LOG - NO PLAN - A4P | 29308 CLAPHAM PARK.GPJ - v8\_06\_06.  
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# TRIAL PIT LOG

Contract: <b>Clapham Park</b>		Client: <b>RSK Environment Ltd</b>		Trial Pit: <b>E-TP4A</b>	
Contract Ref: <b>29308</b>		Start: <b>24.07.17</b> End: <b>24.07.17</b>	Ground Level: <b>---</b>	Co-ordinates: <b>---</b>	Sheet: <b>1 of 1</b>

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
						Dark brown slightly organic slightly sandy SILT. Sand is fine to medium. Frequent fine to medium rootlets. (TOPSOIL)	0.25	
						MADE GROUND: Brown mottled dark brown slightly sandy gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is angular to subrounded flint, brick, concrete. Cobbles are subangular brick and concrete.	(0.55)	
						MADE GROUND: Brown slightly gravelly CLAY. Gravel is subangular fine to coarse flint with occasional brick and concrete.	(0.80) (0.40)	
						Trial pit terminated at 1.2m depth.	1.20	

## General Remarks

All dimensions in metres Scale: **1:25**

Method Used: <b>Hand dug</b>	Plant Used: <b>Hand tools</b>	Logged By: <b>JHowourth</b>	Checked By:	
------------------------------	-------------------------------	-----------------------------	-------------	--

GINT LIBRARY\_V8\_06.GLB LibVersion: v8\_06\_018 ProjVersion: v8\_06 - Core+Logs - 002 | Log TRIAL PIT LOG - NO PLAN - A4P | 29308 CLAPHAM PARK.GPJ - v8\_06\_06.  
 RSK Environment Ltd, 18 Frogmore Road, Hemel Hempstead, Hertfordshire, HP3 9RT. Tel: 01442 437500, Fax: 01442 437500, Web: www.rsk.co.uk | 03/09/17 - 15:10 | JT3 |



# TRIAL PIT LOG

Contract: <b>Clapham Park</b>		Client: <b>RSK Environment Ltd</b>		Trial Pit: <b>E-TP4B</b>	
Contract Ref: <b>29308</b>		Start: <b>24.07.17</b> End: <b>24.07.17</b>	Ground Level: <b>---</b>	Co-ordinates: <b>---</b>	Sheet: <b>1 of 1</b>

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
						Dark brown slightly organic slightly sandy SILT. Sand is fine to medium. Occasional fine rootlets. (TOPSOIL)	0.20	
						MADE GROUND: Brown sandy gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is angular to subrounded flint, brick, concrete, clinker. Cobbles are subangular brick and concrete. Frequent roots.	(0.35)	
						Trial pit terminated at 0.55m depth.	0.55	

## General Remarks

All dimensions in metres | Scale: **1:25**

Method Used: <b>Hand dug</b>	Plant Used: <b>Hand tools</b>	Logged By: <b>JHowourth</b>	Checked By:	
------------------------------	-------------------------------	-----------------------------	-------------	--

GINT LIBRARY\_V8\_06.GLB LibVersion: v8\_06\_018 ProjVersion: v8\_06 - Core+Logs - 002 | Log TRIAL PIT LOG - NO PLAN - A4P | 29308 CLAPHAM PARK.GPJ - v8\_06\_06.  
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# TRIAL PIT LOG

Contract: <b>Clapham Park</b>		Client: <b>RSK Environment Ltd</b>		Trial Pit: <b>E-TP5</b>
Contract Ref: <b>29308</b>	Start: <b>26.07.17</b> End: <b>26.07.17</b>	Ground Level: <b>---</b>	Co-ordinates: <b>---</b>	Sheet: <b>1 of 1</b>

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
						Dark brown slightly organic slightly sandy SILT. Sand is fine to medium. Occasional fine rootlets. (TOPSOIL)	0.20	
						MADE GROUND: Brown sandy gravelly CLAY with low high cobble content. Sand is fine to coarse. Gravel is angular to subrounded flint, brick, concrete, clinker. Cobbles are subangular brick and concrete.	(0.80)	
						. . . Loosely compacted cobble/boulder sized concrete fragments and reinforcing steel bar.	1.00	

## General Remarks

All dimensions in metres Scale: **1:25**

Method Used: <b>Hand dug</b>	Plant Used: <b>Hand tools</b>	Logged By: <b>JHowourth</b>	Checked By:	
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# TRIAL PIT LOG

Contract: <b>Clapham Park</b>		Client: <b>RSK Environment Ltd</b>		Trial Pit: <b>E-TP6</b>
Contract Ref: <b>29308</b>	Start: <b>24.07.17</b> End: <b>26.07.17</b>	Ground Level: <b>---</b>	Co-ordinates: <b>---</b>	Sheet: <b>1 of 1</b>

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
						Dark brown slightly organic slightly sandy SILT. Sand is fine to medium. Occasional fine rootlets. (TOPSOIL)	0.20	
						MADE GROUND: Brown clayey gravelly SAND with medium cobble content. Sand is fine to coarse. Gravel is angular to subrounded fine to coarse flint, brick, concrete, clinker.  ... Remnants of a concrete wall at 0.6m bgl extending to the base of the trial pit. Loosely compacted cobble/boulder sized concrete fragments and reinforcing steel bar.	(1.50)	
						Trial pit terminated at 1.7m depth.	1.70	

## General Remarks

All dimensions in metres Scale: **1:25**

Method Used: <b>Hand dug</b>	Plant Used: <b>Hand tools</b>	Logged By: <b>JHowourth</b>	Checked By:	
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GINT LIBRARY\_V8\_06.GLB LibVersion: v8\_06\_018 ProjVersion: v8\_06 - Core+Logs - 002 | Log TRIAL PIT LOG - NO PLAN - A4P | 29308 CLAPHAM PARK.GPJ - v8\_06\_06.  
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# TRIAL PIT LOG

Contract: <b>Clapham Park</b>		Client: <b>RSK Environment Ltd</b>		Trial Pit: <b>E-TP7</b>
Contract Ref: <b>29308</b>	Start: <b>24.07.17</b> End: <b>24.07.17</b>	Ground Level: <b>---</b>	Co-ordinates: <b>---</b>	Sheet: <b>1 of 1</b>

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
						Dark brown slightly organic slightly sandy SILT. Sand is fine to medium. Occasional fine rootlets. (TOPSOIL)	0.20	
						MADE GROUND: GRAVEL and COBBLES. Gravel and cobbles are angular to subangular brick and concrete with frequent reinforcing steel bar.	(0.60)	
							0.80	

## General Remarks

1. Trial pit collapsing below 0.8m bgl.

All dimensions in metres

Scale:

**1:25**

Method Used: <b>Hand dug</b>	Plant Used: <b>Hand tools</b>	Logged By: <b>JHowourth</b>	Checked By:	
------------------------------	-------------------------------	-----------------------------	-------------	--



# TRIAL PIT LOG

Contract: <b>Clapham Park</b>		Client: <b>RSK Environment Ltd</b>		Trial Pit: <b>F-TP1</b>
Contract Ref: <b>29308</b>	Start: <b>31.07.17</b> End: <b>31.07.17</b>	Ground Level: <b>---</b>	Co-ordinates: <b>---</b>	Sheet: <b>1 of 1</b>

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
						Dark brown slightly organic slightly sandy SILT. Sand is fine to medium. Occasional fine rootlets. (TOPSOIL)	0.15	
						MADE GROUND: Brown sandy gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is angular to subrounded flint, brick, concrete, clinker. Cobbles are subangular brick and concrete.	(0.45)	
						. . . Metal pipes noted.	0.60	

## General Remarks

All dimensions in metres Scale: **1:25**

Method Used: <b>Hand dug</b>	Plant Used: <b>Hand tools</b>	Logged By: <b>JHowourth</b>	Checked By:	
------------------------------	-------------------------------	-----------------------------	-------------	--

GINT LIBRARY\_V8\_06.GLB LibVersion: v8\_06\_018 ProjVersion: v8\_06 - Core+Logs - 002 | Log TRIAL PIT LOG - NO PLAN - A4P | 29308 CLAPHAM PARK.GPJ - v8\_06\_06.  
 RSK Environment Ltd, 18 Frogmore Road, Hemel Hempstead, Hertfordshire, HP3 9RT. Tel: 01442 437500, Fax: 01442 437550, Web: www.rsk.co.uk | 03/09/17 - 15:10 | JT3 |



# TRIAL PIT LOG

Contract: <b>Clapham Park</b>		Client: <b>RSK Environment Ltd</b>		Trial Pit: <b>F-TP2</b>
Contract Ref: <b>29308</b>	Start: <b>31.07.17</b> End: <b>31.07.17</b>	Ground Level: <b>---</b>	Co-ordinates: <b>---</b>	Sheet: <b>1 of 1</b>

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
						Dark brown slightly organic slightly sandy SILT. Sand is fine to medium. Occasional fine rootlets. (TOPSOIL)	0.15	
						MADE GROUND: Brown sandy gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is angular to subrounded flint, brick, concrete, clinker. Cobbles are subangular brick and concrete. Frequent rootlets.  ... Thin layer of coarse sand.	(1.05)	
						Trial pit terminated at 1.2m depth.	1.20	

## General Remarks

All dimensions in metres Scale: **1:25**

Method Used: <b>Hand dug</b>	Plant Used: <b>Hand tools</b>	Logged By: <b>JHowourth</b>	Checked By:	
------------------------------	-------------------------------	-----------------------------	-------------	--

GINT LIBRARY\_V8\_06.GLB LibVersion: v8\_06 018 ProjVersion: v8\_06 - Core+Logs - 002 | Log TRIAL PIT LOG - NO PLAN - A4P | 29308 CLAPHAM PARK.GPJ - v8\_06.  
 RSK Environment Ltd, 18 Frogmore Road, Hemel Hempstead, Hertfordshire, HP3 9RT. Tel: 01442 437500, Fax: 01442 437550, Web: www.rsk.co.uk | 03/09/17 - 15:10 | JT3 |





# TRIAL PIT LOG

Contract: <b>Clapham Park</b>		Client: <b>RSK Environment Ltd</b>		Trial Pit: <b>F-TP3</b>	
Contract Ref: <b>29308</b>		Start: <b>31.07.17</b> End: <b>31.07.17</b>	Ground Level: <b>---</b>	Co-ordinates: <b>---</b>	Sheet: <b>1 of 1</b>

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
						Dark brown slightly organic slightly sandy SILT. Sand is fine to medium. Occasional fine rootlets. (TOPSOIL)	0.15	
						MADE GROUND: Dark brown sandy gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is angular to subrounded flint, brick, concrete, clinker. Cobbles are subangular brick and concrete. Occasional coarse roots.	0.30	
						MADE GROUND: Orangeish brown fine to coarse SAND. Large concrete cobble at 0.3m depth.	0.40	
						MADE GROUND: Dark brown sandy gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is angular to subrounded flint, brick, concrete, clinker. Cobbles are subangular brick and concrete. Occasional coarse roots.	(0.40)	
						MADE GROUND: Dark brown sandy gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is angular to subrounded flint, brick, concrete, clinker. Cobbles are subangular brick and concrete. Occasional coarse roots. ... Redundant ceramic pipe	0.80	
						MADE GROUND: Light brown mottled grey sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse flint. Occasional fine to medium roots.	(0.40)	
						MADE GROUND: Light brown mottled grey sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse flint. Occasional fine to medium roots. Trial pit terminated at 1.2m depth.	1.20	

## General Remarks

All dimensions in metres Scale: **1:25**

Method Used: <b>Hand dug</b>	Plant Used: <b>Hand tools</b>	Logged By: <b>JHowourth</b>	Checked By: <b>JHowourth</b>	
------------------------------	-------------------------------	-----------------------------	------------------------------	--

GINT LIBRARY\_V8\_06.GLB LibVersion: v8\_06\_018 ProjVersion: v8\_06 - Core+Logs - 002 | Log TRIAL PIT LOG - NO PLAN - A4P | 29308 CLAPHAM PARK.GPJ - v8\_06\_06  
 RSK Environment Ltd, 18 Frogmore Road, Hemel Hempstead, Hertfordshire, HP3 9RT. Tel: 01442 437500, Fax: 01442 437550, Web: www.rsk.co.uk | 03/09/17 - 15:10 | JT3 |



# TRIAL PIT LOG

Contract: <b>Clapham Park</b>		Client: <b>RSK Environment Ltd</b>		Trial Pit: <b>F-TP4</b>
Contract Ref: <b>29308</b>	Start: <b>31.07.17</b> End: <b>31.07.17</b>	Ground Level: <b>---</b>	Co-ordinates: <b>---</b>	Sheet: <b>1 of 1</b>

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
						Dark brown slightly organic slightly sandy SILT. Sand is fine to medium. Occasional fine rootlets. (TOPSOIL)	(0.40) 0.40	
						MADE GROUND: Dark brown sandy gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is angular to subrounded flint, brick, concrete, clinker. Cobbles are subangular brick and concrete. Firm to stiff brown silty CLAY. (LONDON CLAY FORMATION)	0.60 (0.60)	
						Trial pit terminated at 1.2m depth.	1.20	

## General Remarks

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All dimensions in metres Scale: **1:25**

Method Used: <b>Hand dug</b>	Plant Used: <b>Hand tools</b>	Logged By: <b>JHowourth</b>	Checked By:	
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GINT LIBRARY\_V8\_06.GLB LibVersion: v8\_06\_018 ProjVersion: v8\_06 - Core+Logs - 002 | Log TRIAL PIT LOG - NO PLAN - A4P | 29308 CLAPHAM PARK.GPJ - v8\_06\_06.  
 RSK Environment Ltd, 18 Frogmore Road, Hemel Hempstead, Hertfordshire, HP3 9RT. Tel: 01442 437500, Fax: 01442 437550, Web: www.rsk.co.uk | 03/09/17 - 15:10 | JT3 |



# TRIAL PIT LOG

Contract: <b>Clapham Park</b>		Client: <b>RSK Environment Ltd</b>		Trial Pit: <b>F-TP5</b>	
Contract Ref: <b>29308</b>		Start: <b>31.07.17</b> End: <b>31.07.17</b>	Ground Level: <b>---</b>	Co-ordinates: <b>---</b>	Sheet: <b>1 of 1</b>

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
						Dark brown slightly organic slightly sandy SILT. Sand is fine to medium. Occasional fine rootlets. (TOPSOIL)	0.15	
						MADE GROUND: Dark brown slightly sandy gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is angular to subrounded flint, brick, concrete. Cobbles are subangular brick and concrete.	0.35	
						MADE GROUND: Brown mottled grey sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to coarse flint with occasional brick and concrete. Trial pit terminated at 0.60m depth.	0.60	

## General Remarks

All dimensions in metres Scale: **1:25**

Method Used: <b>Hand dug</b>	Plant Used: <b>Hand tools</b>	Logged By: <b>JHowourth</b>	Checked By:	
------------------------------	-------------------------------	-----------------------------	-------------	--

GINT LIBRARY\_V8\_06.GLB LibVersion: v8\_06\_018 ProjVersion: v8\_06 - Core+Logs - 002 | Log TRIAL PIT LOG - NO PLAN - A4P | 29308 CLAPHAM PARK.GPJ - v8\_06\_06\_ RSK Environment Ltd, 18 Frogmore Road, Hemel Hempstead, Hertfordshire, HP3 9RT. Tel: 01442 437500, Fax: 01442 437500, Web: www.rsk.co.uk | 03/09/17 - 15:10 | JT3 |



# TRIAL PIT LOG

Contract: <b>Clapham Park</b>		Client: <b>RSK Environment Ltd</b>		Trial Pit: <b>F-TP6</b>
Contract Ref: <b>29308</b>	Start: <b>03.08.17</b> End: <b>03.08.17</b>	Ground Level: <b>---</b>	Co-ordinates: <b>---</b>	Sheet: <b>1 of 1</b>

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.50	1	ES				MADE GROUND: Dark brown slightly organic slightly sandy gravelly CLAY with occasional rootlets. Gravel is subrounded to subangular fine to coarse flint with occasional brick, slate, ash and clinker.	(0.40)	
						MADE GROUND: Orange brown to greyish brown slightly sandy slightly gravelly CLAY with occasional rootlets. Gravel is subangular to subrounded fine to medium flint with occasional brick, ash and bituminous material.	0.40	
0.90	2	ES				MADE GROUND: Greyish brown slightly clayey gravelly ashy SAND. Sand is fine to coarse. Gravel is subangular fine to coarse flint with occasional brick, concrete, slate and bituminous material.	(0.40)	
Trial pit terminated at 1.20m depth.							1.20	

## General Remarks

All dimensions in metres Scale: **1:25**

Method Used: <b>Hand dug</b>	Plant Used: <b>Hand tools</b>	Logged By: <b>JTownsend</b>	Checked By:	
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GINT LIBRARY\_V8\_06.GLB LibVersion: v8\_06 018 ProjVersion: v8\_06 - Core+Logs - 002 | Log TRIAL PIT LOG - NO PLAN - A4P | 29308 CLAPHAM PARK.GPJ - v8\_06.  
 RSK Environment Ltd, 18 Frogmore Road, Hemel Hempstead, Hertfordshire, HP3 9RT. Tel: 01442 437500, Fax: 01442 437550, Web: www.rsk.co.uk | 03/09/17 - 15:10 | JT3 |





# TRIAL PIT LOG

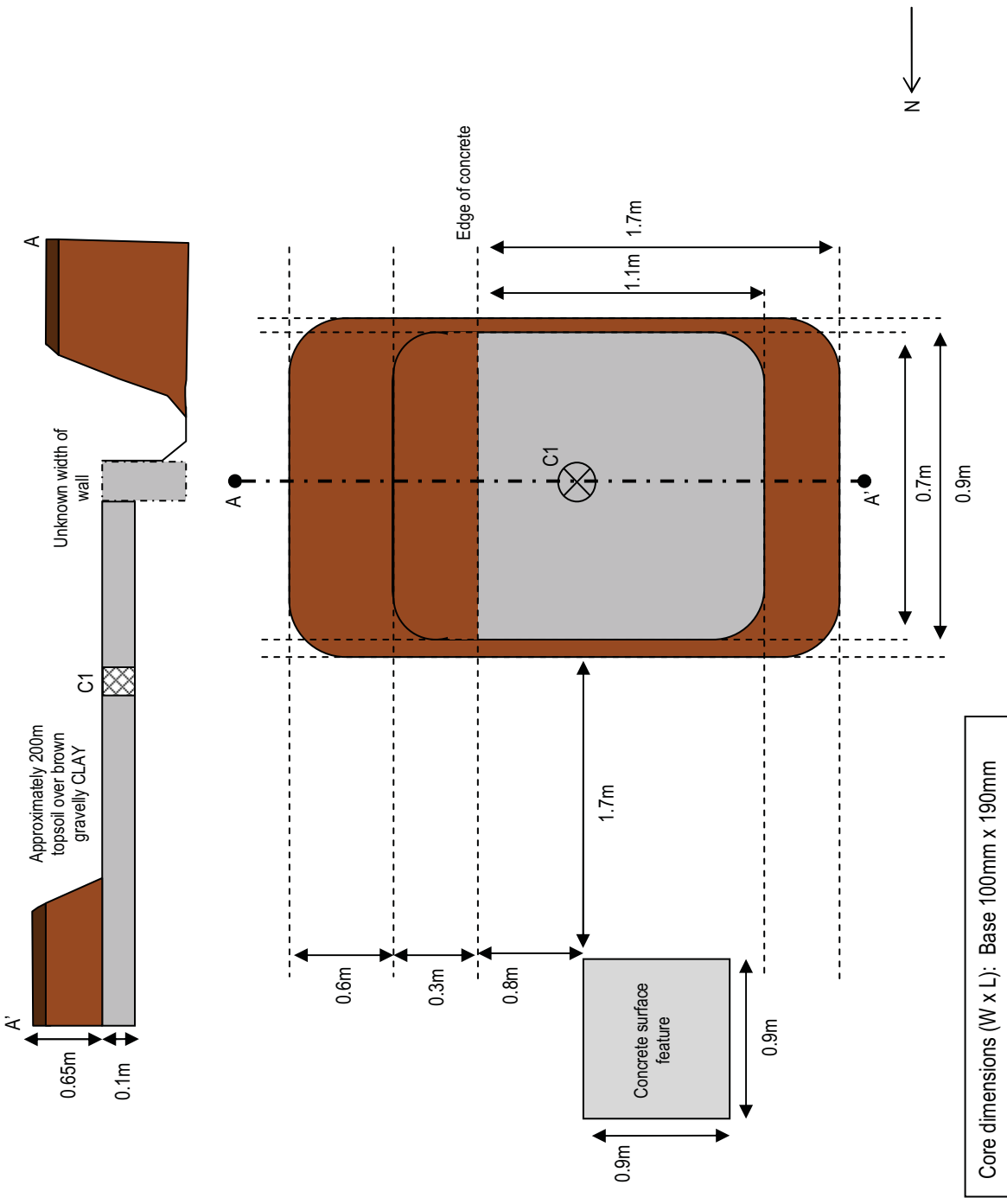
Contract: <b>Clapham Park</b>		Client: <b>RSK Environment Ltd</b>		Trial Pit: <b>F-TP7</b>	
Contract Ref: <b>29308</b>		Start: <b>03.08.17</b> End: <b>03.08.17</b>	Ground Level: <b>---</b>	Co-ordinates: <b>---</b>	Sheet: <b>1 of 1</b>

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.40	1	ES			MADE GROUND: Dark brown slightly organic slightly sandy slightly gravelly CLAY. Gravel is subangular to subrounded fine to coarse flint with occasional rootlets and with occasional brick, concrete, ash, bituminous material and clinker.	(0.60) 0.60		
1.00	2	ES			Made Ground: Orange brown mottled greyish brown slightly sandy slightly gravelly CLAY. Gravel is subangular fine to coarse flint (POSSIBLY REWORKED).	(0.60) 1.20		
Trial pit terminated at 1.20m depth.								


## General Remarks

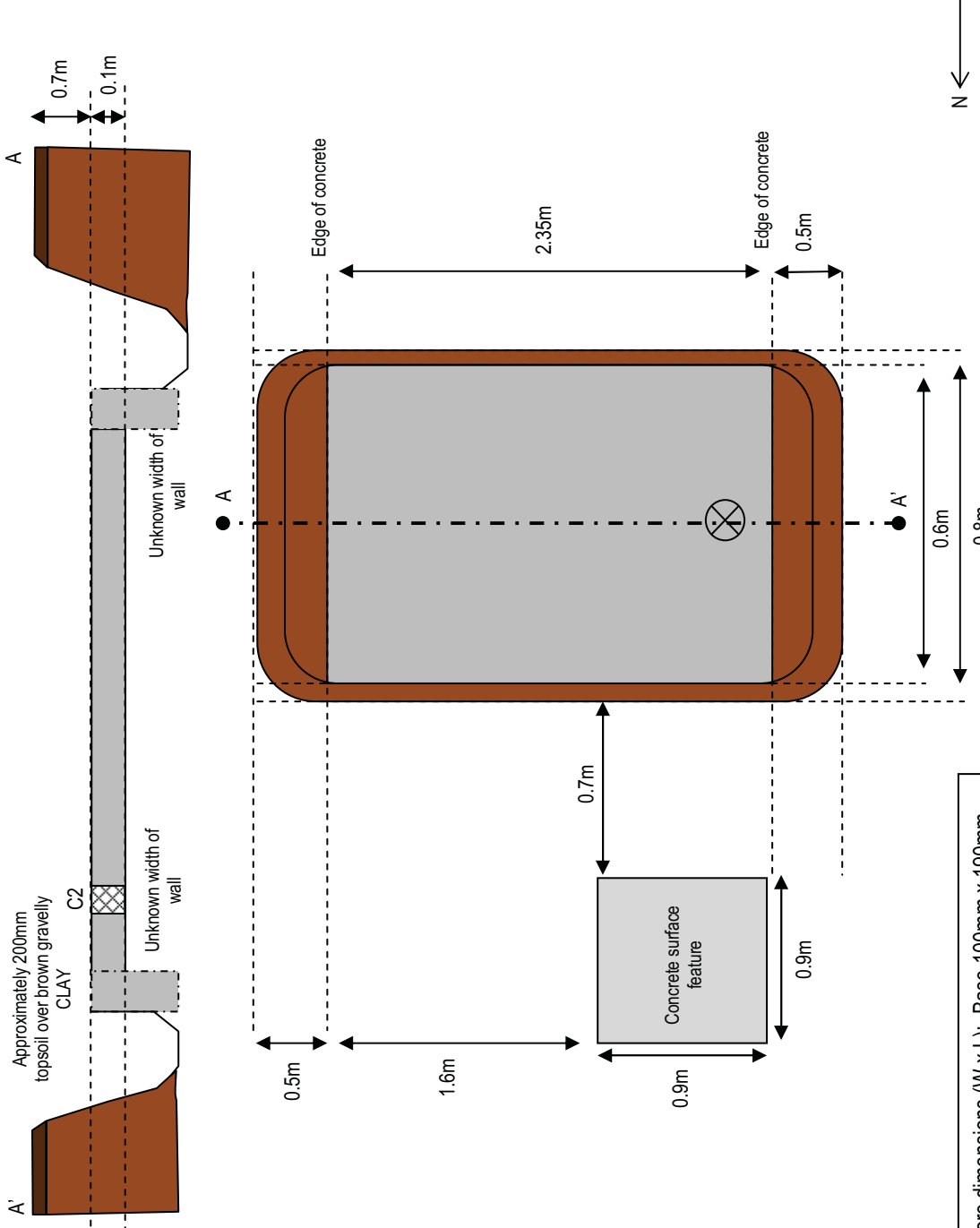
All dimensions in metres Scale: **1:25**

Method Used: <b>Hand dug</b>	Plant Used: <b>Hand tools</b>	Logged By: <b>JTownsend</b>	Checked By:	
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Core dimensions (W x L): Base 100mm x 190mm

	<b>SITE-C TRIAL PIT PLAN: TP01</b>		<b>Client:</b> Metropolitan Housing Trust	<b>Status:</b> FINAL
			<b>Site:</b> Clapham Park Estate	<b>Job No:</b> 29308
			<b>Scale:</b> NTS	<b>Source:</b> RSK



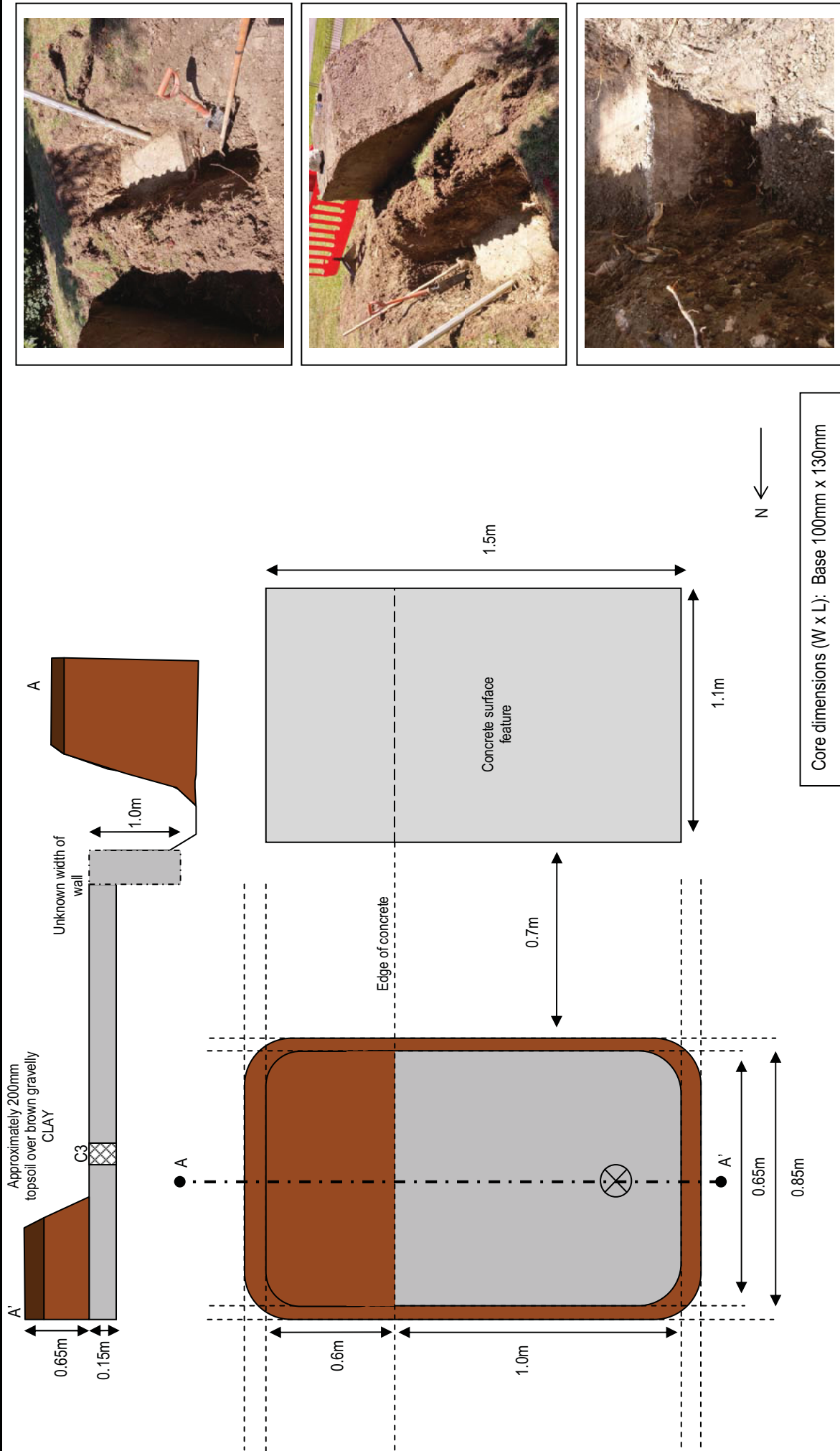
Core dimensions (W x L): Base 100mm x 190mm  
Top 100mm x 105mm



**SITE-C TRIAL PIT PLAN: TP02**

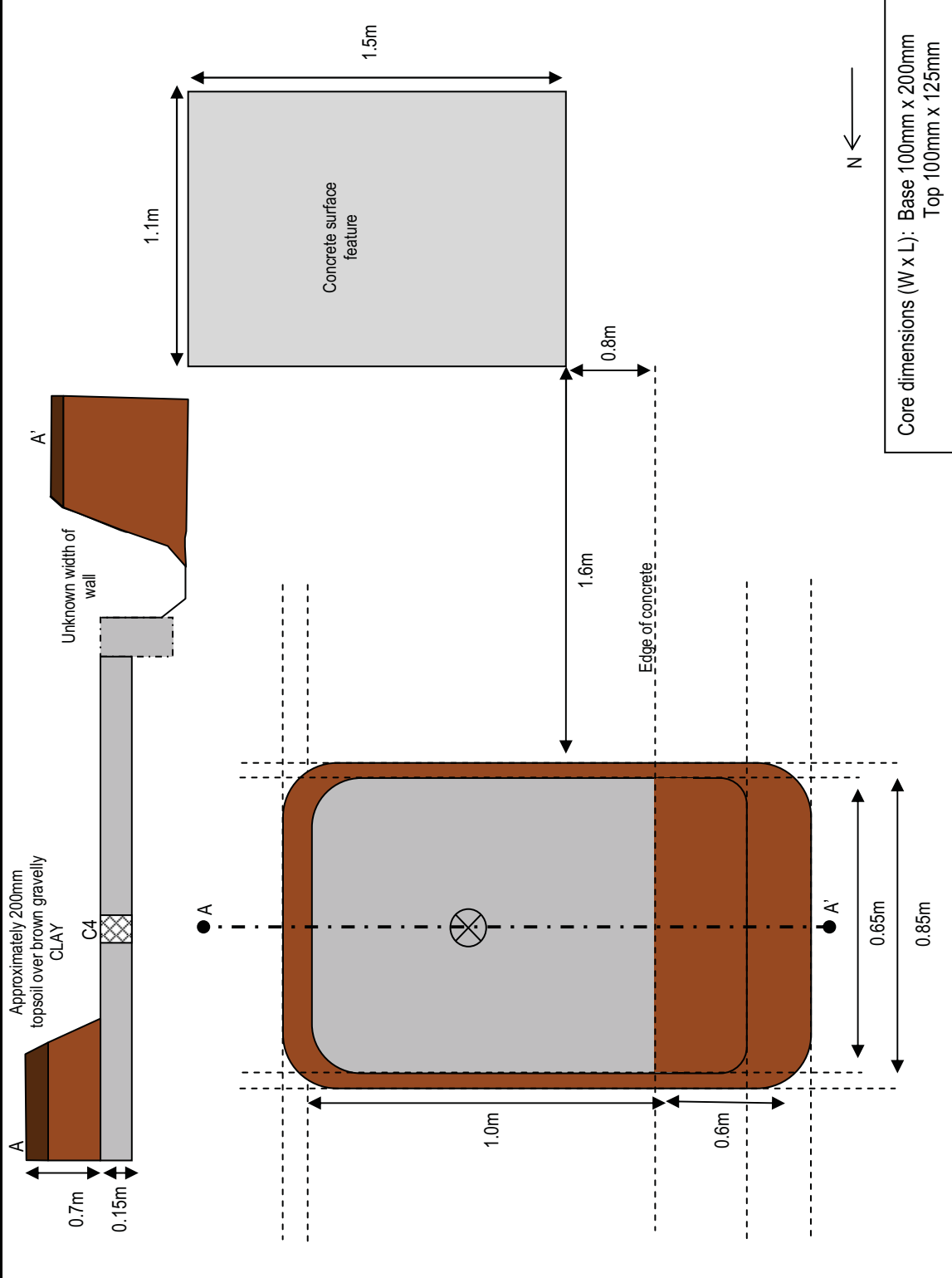
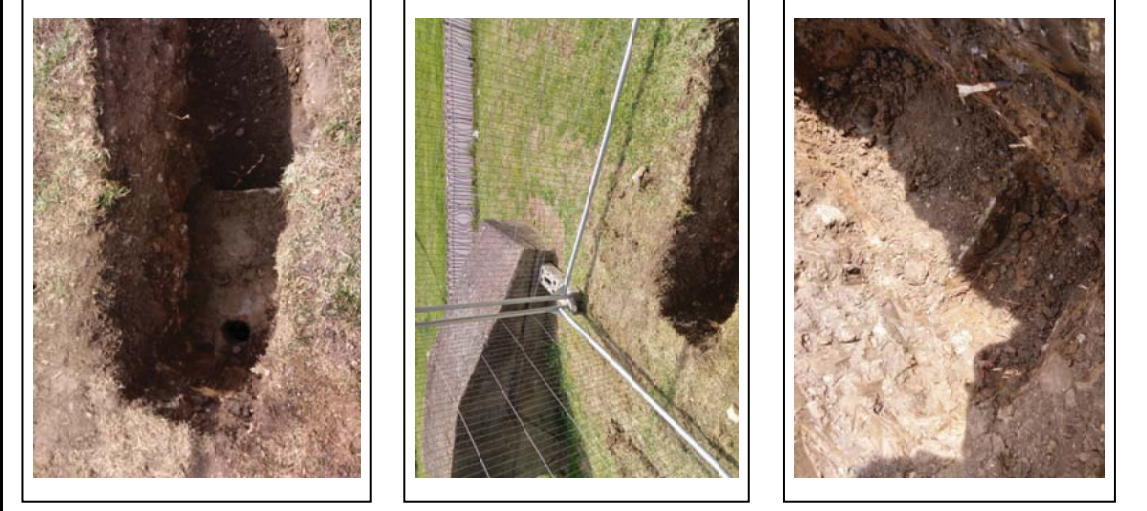
<b>Client:</b>	Metropolitan Housing Trust
<b>Site:</b>	Clapham Park Estate
<b>Scale:</b>	NTS

<b>Status:</b>	FINAL
<b>Job No:</b>	29308
<b>Source:</b>	RSK

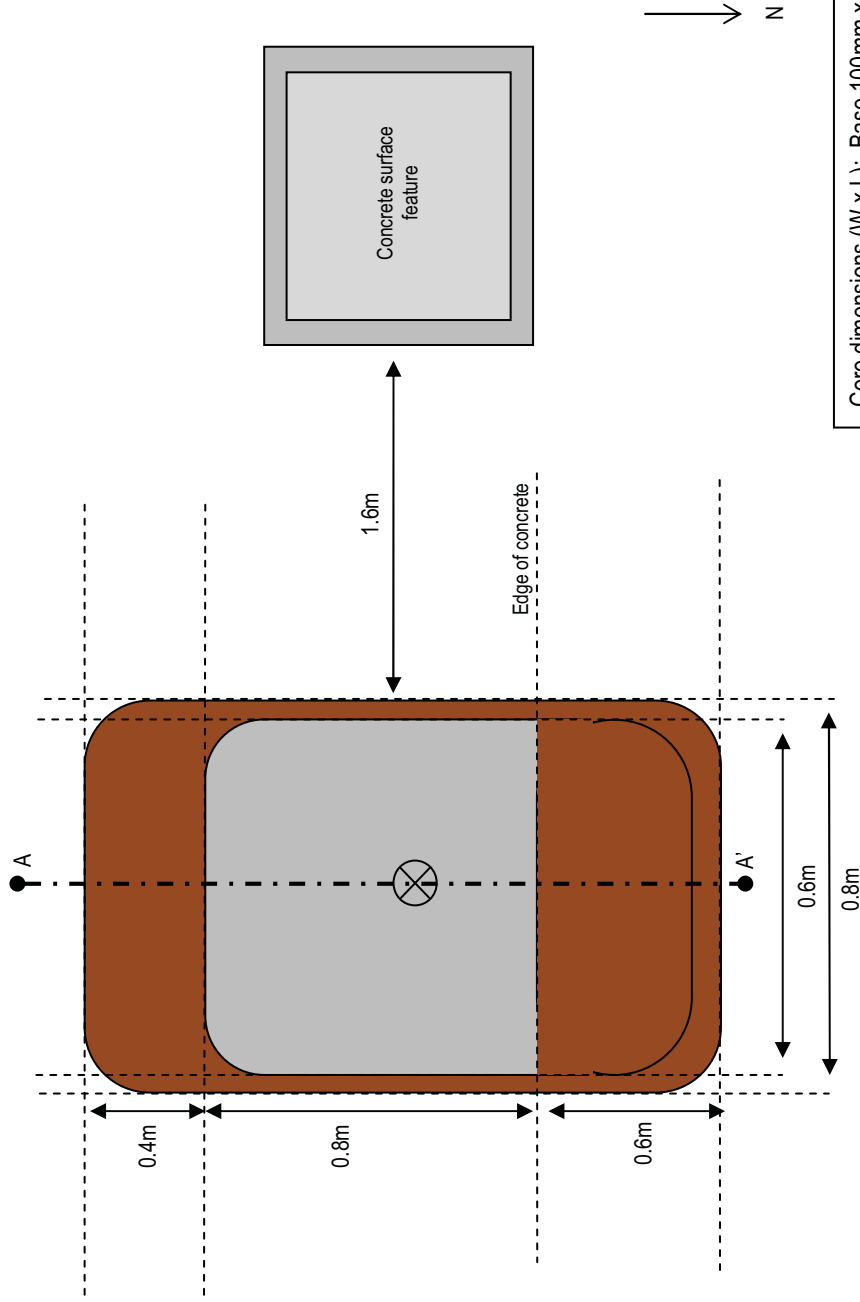
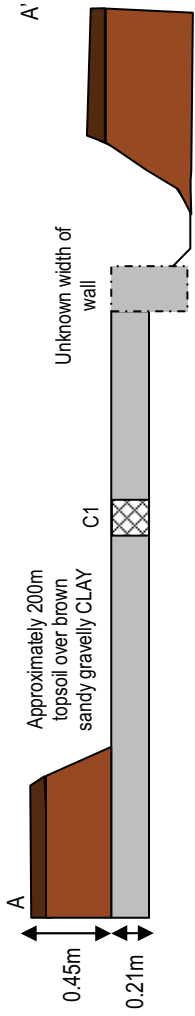


<b>RSK</b>	<b>SITE-C TRIAL PIT PLAN: TP03</b>		<b>Client:</b> Metropolitan Housing Trust	<b>Status:</b> FINAL
			<b>Site:</b> Clapham Park Estate	<b>Job No:</b> 29308
			<b>Scale:</b> NTS	<b>Source:</b> RSK





<b>RSK</b>	<b>SITE-C TRIAL PIT PLAN: TP4</b>		<b>Client:</b> Metropolitan Housing Trust	<b>Status:</b> FINAL
			<b>Site:</b> Clapham Park Estate	<b>Job No:</b> 29308
			<b>Scale:</b> NTS	<b>Source:</b> RSK



Core dimensions (W x L): Base 100mm x 210mm  
Top 100mm x 115mm



### SITE-E TRIAL PIT PLAN: TP1B

**Client:** Metropolitan Housing Trust

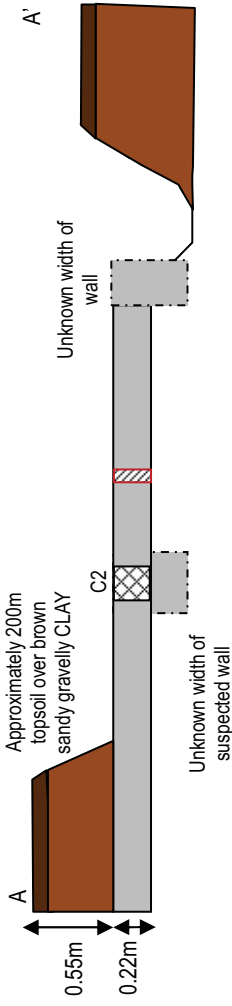
**Status:** FINAL

**Site:** Clapham Park Estate

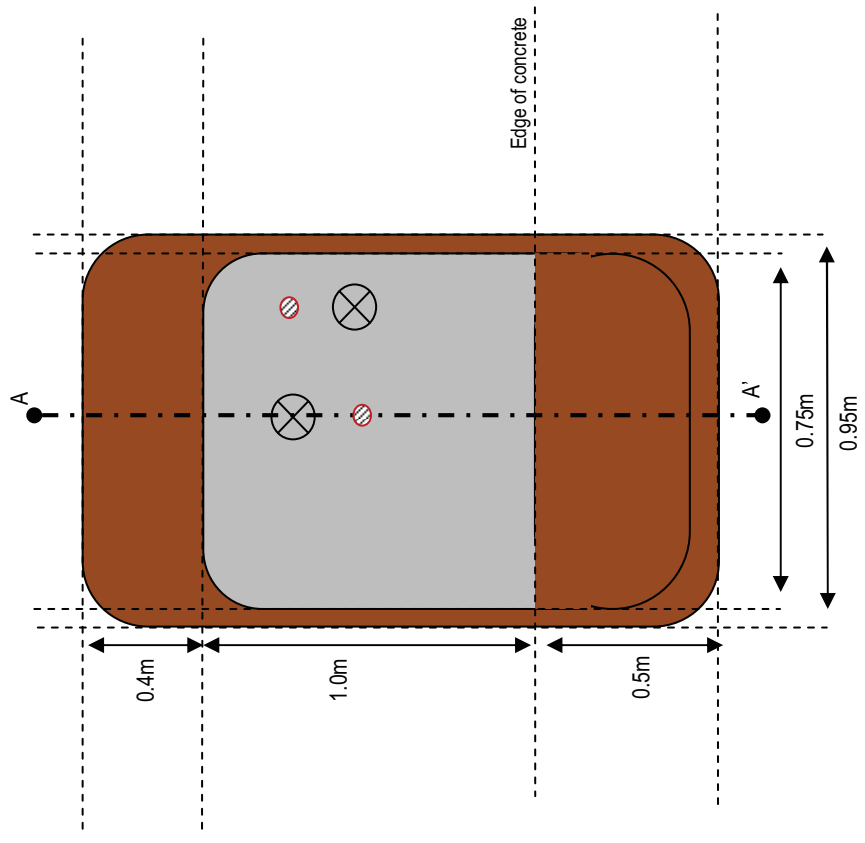
**Job No:** 29308

**Scale:** NTS

**Source:** RSK



- Pilot holes
- Core positions

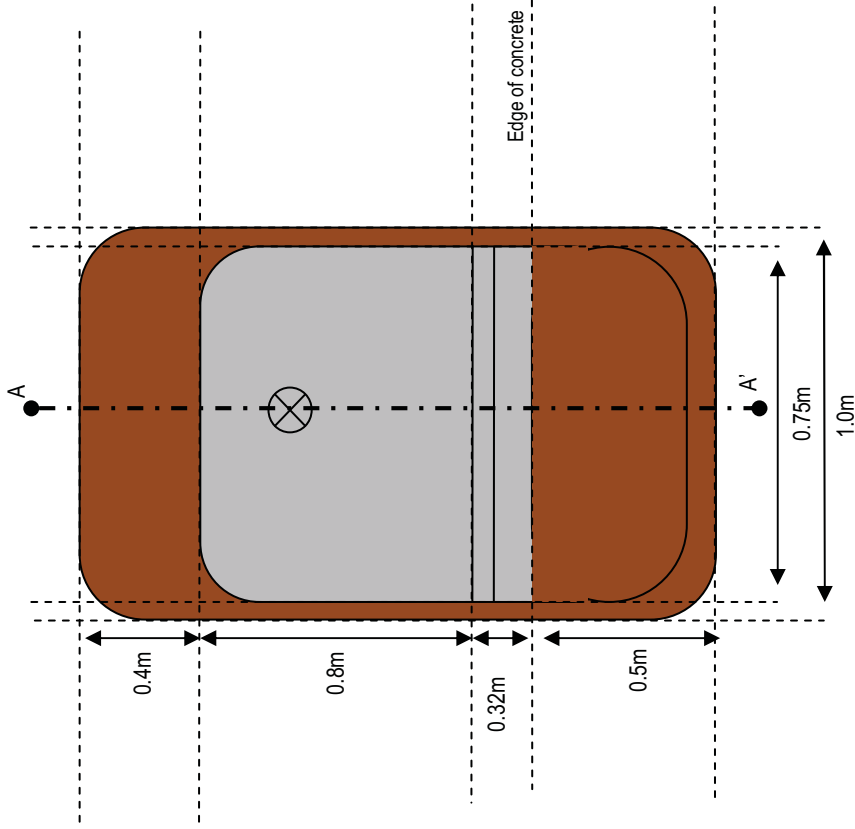
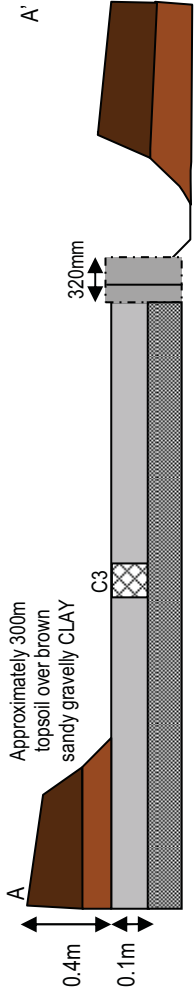


Core dimensions (W x L): Top 100mm x 220mm



**SITE-E TRIAL PIT PLAN: TP2**

<b>Client:</b> Metropolitan Housing Trust	<b>Status:</b> FINAL
<b>Site:</b> Clapham Park Estate	<b>Job No:</b> 29308
<b>Scale:</b> NTS	<b>Source:</b> RSK



Core dimensions (W x L): Top 100mm x 65mm



### SITE-E TRIAL PIT PLAN: TP3

**Client:** Metropolitan Housing Trust

**Status:** FINAL

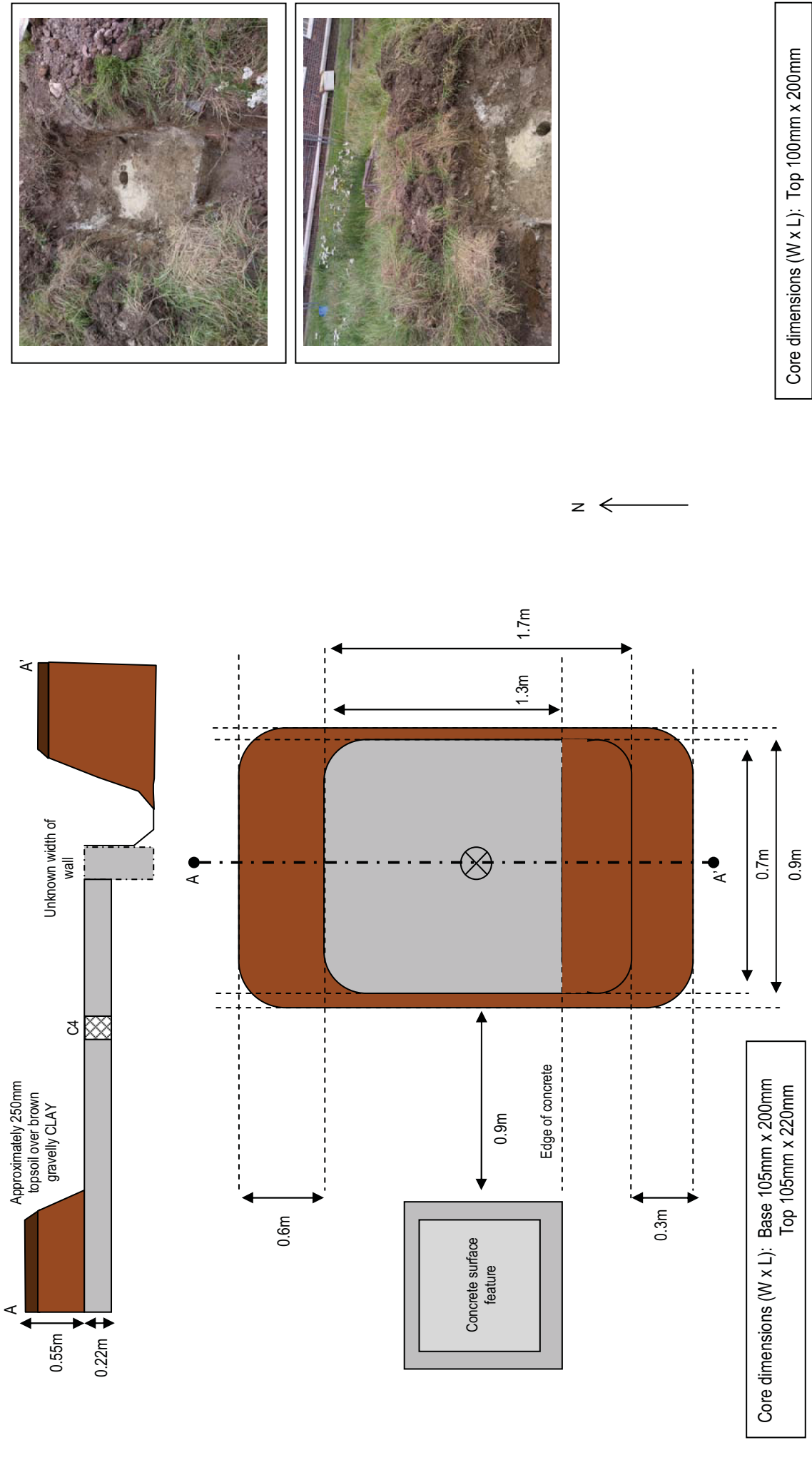
**Site:** Clapham Park Estate

**Job No:** 29308

**Scale:** NTS

**Source:** RSK





<b>RSK</b>	<b>SITE-E TRIAL PIT PLAN: TP4B</b>		<b>Client:</b> Metropolitan Housing Trust	<b>Status:</b> FINAL
			<b>Site:</b> Clapham Park Estate	<b>Job No:</b> 29308
			<b>Scale:</b> NTS	<b>Source:</b> RSK

# **APPENDIX C**

## **LABORATORY TEST RECORDS**

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0278



Abbey Park  
Humber Road  
Coventry  
CV3 4AQ

Telephone: +44 (0)2476 505600

[www.rsk.co.uk](http://www.rsk.co.uk)

### CERTIFICATE OF ANALYSIS ASBESTOS IDENTIFICATION IN BULK MATERIALS

**Client:** RSK Environment Ltd, Spring Lodge, 172 Chester Road, Helsby, Cheshire, WA6 0AR  
**Site:** 29308, Clapham Park, Lambeth  
**Project No.:** 465567 **Certificate No.:** HH4598  
**Date Sampled:** N/A (delivered sample) **Date Received:** 1<sup>st</sup> August 2017  
**Sampled By:** N/A (delivered sample) **Date of Analysis:** 7<sup>th</sup> August 2017  
**Analyst:** Louisa Willmott **Certificate sheet 1 of 1**

Sample No.	Sample Location and Description	Material	Asbestos Type
54885	Site C, 0.5m / Cement	Cement	Chrysotile, Amosite and Crocidolite
54886	Site E, 0.5m / Cement	Cement	Chrysotile

For RSK Environment Limited

Analysed by:

Louisa Willmott  
Asbestos Analyst

Certificate reviewed by:

Barry Geeves  
Asbestos Project Manager

Analysis was conducted using RSK in-house Technical Procedure ASB002 which is based on HSG248 'Asbestos: The analysts' guide for sampling, analysis and clearance procedures'. Where samples have not been taken by internally authorised personnel, the location and description is outside the scope of accreditation as it cannot be verified by RSK. Deviating samples shall be reported as such following discussion with the instructing client.

## FINAL ANALYTICAL TEST REPORT

**Envirolab Job Number:** 17/05242  
**Issue Number:** 1  
**Date:** 14 August, 2017

**Client:** RSK Environment Ltd Hemel  
18 Frogmore Road  
Hemel Hempstead  
Hertfordshire  
UK  
HP3 9RT

**Project Manager:** Jamie Howourth/Nigel Austin/Ziaul Hoque  
**Project Name:** Clapham Park  
**Project Ref:** 29308  
**Order No:** N/A  
**Date Samples Received:** 02/08/17  
**Date Instructions Received:** 02/08/17  
**Date Analysis Completed:** 14/08/17

**Prepared by:**



Violet McLoughlin  
Administrative Assistant

**Approved by:**



Richard Wong  
Client Manager

Envirolab Job Number: 17/05242

Client Project Name: Clapham Park

Client Project Ref: 29308

Lab Sample ID	17/05242/1								Units	Method ref
Client Sample No										
Client Sample ID	SITE-C									
Depth to Top										
Depth To Bottom										
Date Sampled	27-Jul-17									
Sample Type	Water - EW									
Sample Matrix Code	N/A									
pH (w) <sub>A</sub> <sup>#</sup>	7.75									
Ammonium / Ammoniacal nitrogen as NH4 (w) <sub>A</sub> <sup>#</sup>	1.589								mg/l	A-T-033w
Ammonia / Ammoniacal Nitrogen as NH3 (w) <sub>A</sub> <sup>#</sup>	1.503								mg/l	A-T-033w
Sulphate (w) <sub>A</sub> <sup>#</sup>	2256								mg/l	A-T-026w
Cyanide (free) (w) <sub>A</sub> <sup>#</sup>	<0.005								mg/l	A-T-042wFCN
Cyanide (total) (w) <sub>A</sub> <sup>#</sup>	<0.005								mg/l	A-T-042wTCN
Phenols - Total by HPLC (w) <sub>A</sub>	<0.01								mg/l	A-T-050w
Arsenic (dissolved) <sub>A</sub> <sup>#</sup>	1								µg/l	A-T-025w
Boron (dissolved) <sub>A</sub> <sup>#</sup>	274								µg/l	A-T-025w
Cadmium (dissolved) <sub>A</sub> <sup>#</sup>	<0.2								µg/l	A-T-025w
Copper (dissolved) <sub>A</sub> <sup>#</sup>	4								µg/l	A-T-025w
Chromium (dissolved) <sub>A</sub> <sup>#</sup>	<1								µg/l	A-T-025w
Lead (dissolved) <sub>A</sub> <sup>#</sup>	<1								µg/l	A-T-025w
Mercury (dissolved) <sub>A</sub> <sup>#</sup>	<0.1								µg/l	A-T-025w
Nickel (dissolved) <sub>A</sub> <sup>#</sup>	6								µg/l	A-T-025w
Selenium (dissolved) <sub>A</sub> <sup>#</sup>	2								µg/l	A-T-025w
Zinc (dissolved) <sub>A</sub> <sup>#</sup>	50								µg/l	A-T-025w
TPH total dissolved (>C6-C40) (w) <sub>A</sub>	<50								µg/l	A-T-007w



Envirolab Job Number: 17/05242

Client Project Name: Clapham Park

Client Project Ref: 29308

Lab Sample ID	17/05242/1								Units	Method ref
Client Sample No										
Client Sample ID	SITE-C									
Depth to Top										
Depth To Bottom										
Date Sampled	27-Jul-17									
Sample Type	Water - EW									
Sample Matrix Code	N/A									
PAH 16MS (w)										
Acenaphthene (w) <sub>A</sub> <sup>#</sup>	<0.01								µg/l	A-T-019w
Acenaphthylene (w) <sub>A</sub> <sup>#</sup>	<0.01								µg/l	A-T-019w
Anthracene (w) <sub>A</sub> <sup>#</sup>	<0.01								µg/l	A-T-019w
Benzo(a)anthracene (w) <sub>A</sub> <sup>#</sup>	<0.01								µg/l	A-T-019w
Benzo(a)pyrene (w) <sub>A</sub> <sup>#</sup>	<0.01								µg/l	A-T-019w
Benzo(b)fluoranthene (w) <sub>A</sub> <sup>#</sup>	<0.01								µg/l	A-T-019w
Benzo(ghi)perylene (w) <sub>A</sub> <sup>#</sup>	<0.01								µg/l	A-T-019w
Benzo(k)fluoranthene (w) <sub>A</sub> <sup>#</sup>	<0.01								µg/l	A-T-019w
Chrysene (w) <sub>A</sub> <sup>#</sup>	<0.01								µg/l	A-T-019w
Dibenzo(ah)anthracene (w) <sub>A</sub> <sup>#</sup>	<0.01								µg/l	A-T-019w
Fluoranthene (w) <sub>A</sub> <sup>#</sup>	<0.01								µg/l	A-T-019w
Fluorene (w) <sub>A</sub> <sup>#</sup>	<0.01								µg/l	A-T-019w
Indeno(123-cd)pyrene (w) <sub>A</sub> <sup>#</sup>	<0.01								µg/l	A-T-019w
Naphthalene (w) <sub>A</sub> <sup>#</sup>	<0.01								µg/l	A-T-019w
Phenanthrene (w) <sub>A</sub> <sup>#</sup>	<0.01								µg/l	A-T-019w
Pyrene (w) <sub>A</sub> <sup>#</sup>	<0.01								µg/l	A-T-019w
PAH (total 16) (w) <sub>A</sub> <sup>#</sup>	<0.01								µg/l	A-T-019w

## **REPORT NOTES**

### **General:**

This report shall not be reproduced, except in full, without written approval from Envirolab.

All samples contained within this report, and any received with the same delivery, will be disposed of one month after the date of this report.

Analytical results reflect the quality of the sample at the time of analysis only.

Opinions and interpretations expressed are outside the scope of our accreditation.

If results are in italic font they are associated with an AQC failure and there is insufficient sample to repeat the analysis. These are not accredited and are unreliable.

A deviating samples report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.

### **Soil chemical analysis:**

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any "A" subscripts

All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any "D" subscripts.

### **TPH analysis of water by method A-T-007:**

Free and visible oils are excluded from the sample used for analysis so that the reported result represents the dissolved phase only.

### **Electrical Conductivity of water by Method A-T-037:**

Results greater than 12900µS/cm @ 25°C / 11550µS/cm @ 20°C fall outside the calibration range and as such are unaccredited.

### **Asbestos:**

Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.

Stones etc. are not removed from the sample prior to analysis.

Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing and fibre counting by sedimentation/phase contrast optical microscopy if required. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres) quantification by sedimentation is performed. Where ACMs are found a percentage asbestos is assigned to each with reference to 'HSG264, Asbestos: The survey guide' and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used.

### **Predominant Matrix Codes:**

1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample.

Samples with Matrix Code 7 & 8 are not predominantly a SAND/LOAM/CLAY mix and are not covered by our BSEN 17025 or MCERTS accreditations, with the exception of bulk asbestos which are BSEN 17025 accredited.

### **Secondary Matrix Codes:**

A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal,

E = contains roots/twigs.

### **Key:**

IS indicates Insufficient Sample for analysis.

US indicates Unsuitable Sample for analysis.

NDP indicates No Determination Possible.

NAD indicates No Asbestos Detected.

N/A indicates Not Applicable.

Superscript # indicates method accredited to ISO 17025.

Superscript "M" indicates method accredited to MCERTS.

Subscript "A" indicates analysis performed on the sample as received.

Subscript "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve

Please contact us if you need any further information.


## FINAL ANALYTICAL TEST REPORT

**Envirolab Job Number:** 17/05560  
**Issue Number:** 1  
**Date:** 21 August, 2017

**Client:** RSK Environment Ltd Hemel  
18 Frogmore Road  
Hemel Hempstead  
Hertfordshire  
UK  
HP3 9RT

**Project Manager:** Jamie Howourth/Nigel Austin  
**Project Name:** Clapham Park  
**Project Ref:** 29308  
**Order No:** N/A  
**Date Samples Received:** 16/08/17  
**Date Instructions Received:** 16/08/17  
**Date Analysis Completed:** 17/08/17

**Prepared by:**

  
Gill Walker  
Laboratory Manager

**Approved by:**

  
Iain Haslock  
Analytical Consultant

Envirolab Job Number: 17/05560

Client Project Name: Clapham Park

Client Project Ref: 29308

Lab Sample ID	17/05560/1	17/05560/2							Units	Method ref
Client Sample No										
Client Sample ID	Site C	Site E								
Depth to Top	0.50	0.50								
Depth To Bottom										
Date Sampled	18-Jul-17	24-Jul-17								
Sample Type	Solid - Fragment / Tile	Solid - Fragment / Tile								
Sample Matrix Code	8	8								
<b>Asbestos Water Absorption Test</b>										
Asbestos ACM - Water Absorption Test <sub>D</sub>	8.6	6.8							% w/w	Gravimetry
<b>Bulk Fibre ID (inc. matrix)</b>										
Bulk Fibre Identification <sub>A</sub> <sup>#</sup>	Crocidolite & Chrysotile	Chrysotile								A-T-045
Bulk Fibre Identification Matrix (visual) <sub>A</sub>	Cement	Cement								A-T-045
Bulk Fibre Identification - Suitable for Water Absorption Test? <sub>D</sub>	Yes	Yes								Gravimetry

## **REPORT NOTES**

### **General:**

This report shall not be reproduced, except in full, without written approval from Envirolab.

All samples contained within this report, and any received with the same delivery, will be disposed of one month after the date of this report.

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Please contact us if you need any further information.



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