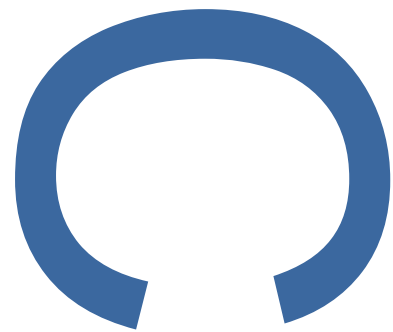


**ABNEY PARK, STOKE NEWINGTON,  
LONDON BOROUGH OF HACKNEY:  
AN ARCHAEOLOGICAL  
EVALUATION**

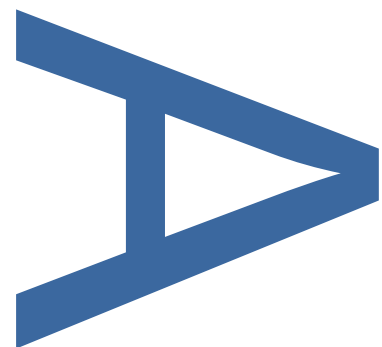


**LOCAL PLANNING AUTHORITY:  
LONDON BOROUGH OF HACKNEY**



**SITE CODE: AYP19**

**AUGUST 2019**



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**ABNEY PARK, STOKE NEWINGTON, LONDON BOROUGH OF HACKNEY, N16  
AN ARCHAEOLOGICAL EVALUATION**

**Site Code:** AYP19

**Central NGR:** TQ 33316 86838

**Local Planning Authority:** London Borough of Hackney

**Commissioning Client:** Hackney Council

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## 1 ABSTRACT

1.1 This report presents the working methods and results of an Archaeological Evaluation at Abney Park, Stoke Newington, London Borough of Hackney. The site was centred at TQ 33316 86838.

1.2 Following a Written Scheme of Investigation prepared by Pre-Construct Archaeology Ltd (Fairman, 2019), the fieldwork was carried out between 8th and 10th July 2019 and was completed in accordance with the standards specified by the Chartered Institute of Archaeologists and following guidelines issued by Historic England.

1.3 The evaluation consisted of the excavation of four geoarchaeological test pits to investigate the archaeological and paleo-archaeological potential of the site.

1.4 Natural deposits of brickearth and weathered brickearth were identified in three of the four pits from elevations which suggest a depression to the north of the site consistent with the known location of the Hackney Brook. Made ground and topsoil sealed all locations.

1.5 The evaluation highlighted that works associated with the proposed scheme within the upper 2.5m below ground level are unlikely to disturb archaeological horizons. The Palaeolithic horizon of interest is, at current estimates, anticipated to lie approximately 4m below ground level.

## 2 INTRODUCTION

2.1 An archaeological evaluation was undertaken by Pre-Construct Archaeology Ltd at Abney Park, Stoke Newington in the London Borough of Hackney, between 8th and 10th July 2019. The evaluation consisted of excavation of four test pits into the underlying brickearth deposits, under archaeological and specialist observation.

2.2 The site is presently occupied by Abney Park, an active cemetery, public park and nature reserve. Although the entire park has been the subject of a previous desk-based study by Pre-Construct Archaeology Ltd; the evaluation only focused on a small part of the site, immediately to the west of the park's Stoke Newington High Street entrance.

2.3 The entirety of the study site comprises an irregular shaped plot, covering more than 13 hectares. The site is bordered by residential properties forming Bouverie Road and Peppie Close to the west, Manor Road and Collison Place to the north and Listria Park to the northeast. Commercial properties dominate the A10 to the southeast and Stoke Newington Church Street to the south. The site is located at central National Grid Reference TQ 33316 86838 and is situated within the London Borough of Hackney (Figures 1 and 2).

2.4 The area evaluated consisted of a short tree lined avenue, providing access from the eastern park entrance to the main body of the park and a small fenced off enclosure, used as a nursery group play area, immediately to the north. The area correlates with 'Site 1' as defined in the former Desk Based Assessment (Bates, 2019) as shown in Figures 1 and 2.

2.5 The evaluated area has been earmarked for the possible development of a café and other community facilities, if suitable funding can be obtained.

2.6 As the site lies within an Archaeology Priority Area, Adam Single, Historic England Archaeological Adviser for the London Borough of Hackney, recommended that an archaeological evaluation should be undertaken prior to any development taking place.

2.7 The complete archive comprising written, drawn and photographic records and artefacts will be deposited at LAA.

2.8 The site was given the unique Museum of London site code ABY19.

### 3 PLANNING BACKGROUND

3.1 Planning permission is being sought as part of a HLF grant application for the renovation of three sites within Abney Park. Site 1 comprises the Stoke Newington High Street (or East) Entrance, where a new café on piled foundations is proposed. The presence of a live sewer along the northerly site boundary requires the foundation piles to be limited to the southern side of the new building. As well, a new sliding gate, fence and the landscaping of palm trees are proposed. Within the scheme existing buildings are to be retained as workshops. Although the full details regarding services are yet to be finalised, these are likely to comprise an attenuation tank, additional manholes, and service runs. As part of the redevelopment a new heat pump system is proposed to service the various outbuildings and café. The precise scheme has yet to be determined.

3.2 The Archaeology Adviser to the London Borough of Hackney advised that a test pit evaluation was required with specialist geoarchaeological and Palaeolithic input to assess the deposits underlying the site. This is required to assess the presence or absence of significant Palaeolithic horizons. The following condition was proposed:

*'No demolition or development shall take place until a stage 1 written scheme of investigation (WSI) has been submitted to and approved by the local planning authority in writing. For land that is included within the WSI, no demolition or development shall take place other than in accordance with the agreed WSI, and the programme and methodology of site evaluation and the nomination of a competent person(s) or organisation to undertake the agreed works.'*

*If heritage assets of archaeological interest are identified by stage 1 then for those parts of the site which have archaeological interest a stage 2 WSI shall be submitted to and approved by the local planning authority in writing. For land that is included within the stage 2 WSI, no demolition/development shall take place other than in accordance with the agreed stage 2 WSI which shall include:*

*A. The statement of significance and research objectives, the programme and methodology of site investigation and recording and the nomination of a competent person(s) or organisation to undertake the agreed works*

*B. The programme for post-investigation assessment and subsequent analysis, publication & dissemination and deposition of resulting material. this part of the condition shall not be discharged until these elements have been fulfilled in accordance with the programme set out in the stage 2 WSI.*

*Written schemes of investigation will need to be prepared and implemented by a suitably qualified professionally accredited archaeological practice in accordance with Historic England's Guidelines for Archaeological Projects in Greater London.*

*Informative: The development of this site is likely to damage heritage assets of archaeological and historical interest. The applicant should therefore submit detailed proposals in the form of an archaeological project design. The design should be in accordance with the appropriate Historic England guidelines including those for Palaeolithic investigation.*

3.3 The site is located within the Abney Park Archaeological Priority Area as defined by the London Borough of Hackney. The proposed redevelopment is also subject to policies contained within the National Planning Policy Framework (NPPF), the London Plan and Hackney's Core Strategy and Local Plan.

3.4 The study site covers an irregularly shaped plot of c.131,424m<sup>2</sup>. An archaeological desk-based assessment was carried out for the site by PCA (Bates, 2019). The latter report concluded that the scheme with the greatest potential for intrusion into archaeological horizons was confined to Site 1 (described above), and as such the evaluation trial pits were proposed for Site 1 only.

3.5 The site is presently occupied by Abney Park, a public park and nature reserve and former cemetery. The former burial grounds of the cemetery are located to the west of Site 1.

### 3.6 Aims and Objectives

3.6.1 The archaeological evaluation sought to address the following objectives:

- To record the nature, extent, date, character, quality, significance and state of preservation of any archaeological remains affected by the investigation.
- To assess where appropriate the ecofactual and palaeo-environmental potential of archaeological deposits and features from within the site.
- To establish the extent to which previous development and/or other processes have affected archaeological deposits at the site
- To establish the likely impact on archaeological deposits of the proposed development.
- To report on the results of the investigation.

3.6.2 In addition, the evaluation sought to address the following research questions:

- To set the site and its potential archaeological remains into the context of the wider landscape.
- To confirm the presence or absence of prehistoric remains;
- Can the results be compared with Worthing Smith's records of the 19th century on-site discoveries?
- To confirm the presence or absence of Roman remains;
- To confirm the presence or absence of Saxon activity;
- To confirm the presence or absence of medieval activity;



- To confirm the presence or absence of post-medieval activity;

3.6.3 The geoarchaeological test pitting will seek to address the following objectives:

- To characterise the quaternary geological succession
- To establish the extent to which previous development and/or processes have affected Quaternary deposits at the site
- To establish the likely impact on any surviving Quaternary deposits of the proposed development
- To determine the presence and potential of lithic artefact evidence and faunal remains in the sediments encountered
- To determine the presence and potential of palaeoenvironmental evidence in the sediments encountered.
- To determine the presence of, or potential for, undisturbed primary context Palaeolithic occupation surfaces in the sediments encountered
- To interpret the depositional and post-depositional history of any artefactual or biological evidence found
- To establish correlations of any Pleistocene deposits found with reference to adjacent and regional sequences and to national frameworks
- To assess in local, regional and national terms, the archaeological and geological significance of any Pleistocene deposits encountered, and their potential to fulfil current research objectives
- To establish whether there is a need for further, more-detailed, field evaluation to clarify the Palaeolithic potential, and if so to make recommendations on the methods and location of further intrusive or non-intrusive works

## **4 GEOLOGY AND TOPOGRAPHY**

### **4.1 Introduction**

4.1.1 The following information comes a Desk-Based Assessment written for PCA (Bates, 2019) with contributions from by Dr. Barry Bishop to detail the specific Palaeolithic background and potential:

### **4.2 Location and Topology**

4.2.1 The proposed development concerns improvements to the chapel and the two entrances along with landscaping works to the Abney Park Cemetery in Stoke Newington (site centred on NGR 533370 / 186773). The cemetery lies on the southwestern side of a shallow, northwest – southeast aligned, valley of the now dry Hackney Brook. Its lowest point is towards the Stoke Newington High Street entrance at c. 23m OD and from along its eastern side ground level slopes upwards to a high point near the Church Street entrance at c. 29m OD. The Hackney Brook, now a 'lost river', was a tributary of the River Lea with a source close to the Holloway Road and flowed around the cemetery area before turning southwards, skirting Hackney Downs and then turning to the east towards Mare Street. This was apparently a fairly substantial stream; a Report on the Public Bridges of Middlesex in 1825 described its superficial width at flood as 70 feet at Newington, Hackney and Homerton Bridges (Barton, 1962, 48).

### **4.3 Geology**

4.3.1 Although complex and far from understood, the geology of the area is inextricably entwined with the understanding of the Palaeolithic record. The likelihood that Palaeolithic remains are present and have survived at the study site is dependent on its specific geological conditions.

4.3.2 The area of the cemetery is mapped by the British Geological Survey (BGS 2007) as comprising Eocene London Clay which in the southern part of the site, from the vicinity of the chapel to Church Street, is shown overlain by silts and clays of the Langley Silt Formation (brickearth). Alluvial terrace deposits of the Hackney Gravel Formation are shown c. 150m to the southeast of the cemetery and these extend beneath the brickearth, although their northern limits are not known. BGS mapping is not always totally accurate, but it is likely that a simplified sequence of London Clay overlain by Hackney Gravel terrace deposits and capped with brickearth is present at least along the southern side of the cemetery and quite possibly continues over its northern part.

## 5 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

### 5.1 Introduction

5.1.1 The background below is taken from the Desk Based Assessment (Bates 2018).

### 5.2 Prehistoric

5.2.1 A detailed review of the Palaeolithic potential of the site has previously been provided as part of the Desk-Based Assessment and can be summarised as follows:

*Both the geological and Palaeolithic archaeological records of the Stoke Newington area are complex and far from being fully understood. Detailed records from the 19th century indicate internationally important in-situ Palaeolithic flint working floors and possible structures are widely present but recent work has failed to find evidence for this. This is likely to be a result of the complexity of the geological succession and the impact of the later Hackney Brook. It is likely that important collections of Palaeolithic artefact are present within the Stoke Newington Sands, some of it potentially in primary contexts. The Sands occur at between 21 and 27m OD and appear to be present from at least the vicinity of Abney Park Cemetery and continue eastwards across the Hackney Brook valley until the Lea Valley (Green et al. 2004, 206). Across this area the sands have been eroded to a greater or lesser extent by the later activity of the Hackney Brook, and its sediments do contain displaced Palaeolithic artefacts (e.g. Harding and Gibbard 1984).*

5.2.2 The ground of the cemetery, recorded at between 23m OD and 29m OD, indicates that this area too was affected by the Hackney Brook, but the levels do coincide with the range given for the Stoke Newington Sands, at between 21m OD and 27m OD. This demonstrates the possibility that artefact bearing deposits, at varying depths below ground level, could be present across the cemetery, as had been previously demonstrated in the 19th century. It is also possibly that derived but nevertheless still very important artefacts are present in the overlying brickearth and any Hackney Brook channel deposits that may be present.

5.2.3 It is significant to note that there have been several instances of Palaeolithic material recorded within and around the study site, including evidence for Palaeolithic occupation. A lithic working site has been recovered within the grounds of Abney Park, near the entrance off of the High Street. The finds recovered included 26 handaxes, 3 roughouts, 15 cores, 139 retouched and 220 un-retouched flakes, 1 ovate flint implement and 13 miscellaneous implements. It has been suggested that more implements than this may have been found but not collected. A separate findspot of a single Palaeolithic flake was also recovered within Abney Park.

### **5.3 Roman**

5.3.1 The line of the Roman road known as Ermine Street ran north to south just to the east of the study site's eastern boundary, roughly along the course of the present-day A10. A handful of known Roman settlements, at Enfield, Ware and Cheshunt, are believed to be mansios, or posting stations, located along Ermine Street as it headed out of Londinium and towards Braughing. However, there are no known Roman settlements located within the Stoke Newington area.

### **5.4 Saxon/Early Medieval**

5.4.1 Settlement within the Lea River valley following the disappearance of the Romans largely followed the line of Ermine Street. This settlement pattern is likely due to the area having already been cleared in the Roman period. Saxon settlements are known from Hoxton, Haggerston, Tottenham, Edmonton and Enfield.

5.4.2 Documentary evidence from circa 940 details the gifting of the manor of Newington, as Neutone, by King Aethelstan to Saint Paul's Church. The Domesday Book records Newington as under the control of Saint Paul's, with enough land for 2 ½ ploughs and a population comprising four villagers and 37 cottagers. The manorial complex for Newington remained until the 17th century, at which point it was demolished.

5.4.3 Outside of the documentary evidence relating to this Saxon settlement, there are no other entries of Saxon date that are recorded within the study area in the GLHER.

### **5.5 Medieval**

5.5.1 The village of Stoke Newington continued into the medieval period and several aspects of this village are recorded in the GLHER.

5.5.2 Stoke Newington Church Street is a medieval road, which was first recorded in 1329 and also known as Newington Lane or Newton Lane during this period. It was the focus of the medieval settlement of Stoke Newington, which also spread along the line of Stoke Newington High Street. This settlement would have been surrounded by woodland and fields, with several homesteads sprinkled throughout.

5.5.3 The manor house of Stoke Newington is thought to have been located along Stoke Newington Church Street, close to the church itself, with the demesne occupying most of the lands to the north. The medieval foundations of a chalk and ragstone building facing the church were discovered in the 1930s. The ornamental gateway on the eastern boundary of the manor survived until the end of the 19th century, within the wall of a builder's yard on Barn Street.

5.5.4 A bridge over the Hackney Brook was also located along Stoke Newington High Street, the first reference of which was in 1255, when the original bridge was said to have been replaced. It is thought that one of the bridge arches was located within the toilets at Abney Park Cemetery.

## **5.6 Post-medieval**

5.6.1 At the start of the post-medieval period, the study site was located largely within two large estates, the Fleetwood estate and the Abney estate. Fleetwood House was constructed c.1634, of red brick, by Sir Edward Hartopp. The estate was enlarged, piece by piece, during the early 18th century and the manor house was rebuilt in part during the later 18th century. It fronted what is now Stoke Newington Church Street and was surrounded by gardens and 8 acres of land, which stretched mainly to the north. The estate passed through several hands during the 17th and 18th centuries and became a Quaker school in 1820.

5.6.2 Adjacent to the Fleetwood estate was Abney House, which was constructed in 1700, by Thomas Gunston. Upon his death, the estate moved into the hands of his sister, who had married Sir Thomas Abney. The grounds of this estate included a main enclosure of seventeen acres, partly skirted by the Hackney Brook, as well as an adjoining tenement and orchard and a detached meadow. Abney House also fronted Church Street, adjacent to Fleetwood House, and the designs of the gardens of the two estates were linked. Both estates were purchased by J W Freshfield in 1827. The listed wall, gate-pier and railings of the entrance to Abney House remain within Abney Park to this day.

5.6.3 A review of cartographic sources revealed that the subject site was located largely within agricultural fields by the mid 18th century. Several buildings are illustrated around what would become the Church Street entrance and are likely to represent Fleetwood House and Abney House. The connected gardens of the Fleetwood and Abney estates are illustrated in greater detail in a plan dated to 1814.

5.6.4 Due to increased overcrowding of London's cemeteries, the creation of private cemeteries was encouraged by an Act of Parliament in 1832. As such Abney Park became one of the "Magnificent Seven" opening in 1840 over the former grounds of the Fleetwood and Abney estates.

5.6.5 Abney Park continued to develop during the 19th century and small additions to its grounds were made. For example, a post-medieval house on Stoke Newington High Street was demolished in 1843 and its grounds were added to that of Abney Park Cemetery. In 1870, the New Road was constructed within Abney Park, linking the entrance to the catacombs. Since this time, no major alterations have been seen.

5.6.6 Several entries in the GLHER relate to features of Abney Park Cemetery. The non-denominational mortuary chapel at the centre of Abney Park is currently preserved as a listed building. The Egyptian-style entrance lodges and wrought-iron gates and railings to Abney Park have also been awarded listed status.

## **5.7 Modern**

5.7.1 Stoke Newington suffered bombing raids during both WWI and WWII. The first aerial bombardment of London began when German Army airship LZ 38 released her first bomb over Stoke Newington, directly onto 16 Alkham Road shortly after 11pm on 31st May 1915. The Zeppelin continued a southerly bearing over the Nevill Arms (where the bomb failed to ignite) and Cowper Road (where the first fatalities occurred).

5.7.2 The study site and immediate surrounding area took heavy damage during the Second World War. Three parachute mines are known to have hit the area outside of the study site, with two landing on Bouverie Road and one on Fleetwood Street. Additionally, two high-explosive bombs are known to have struck near to Fleetwood Street, two high-explosive bombs are recorded as hitting Listria Park, seven high-explosive bombs are recorded as striking Manor Road on the section next to Abney Park and two high-explosive bombs are known to have hit near to Peppie Close.

## 6 ARCHAEOLOGICAL METHODOLOGY

6.1 The purpose of the archaeological investigation was to determine the presence or absence of surviving features or horizons (particularly those of Palaeolithic date) at the site, and if present, to assist in formulating an appropriate archaeological mitigation strategy. All works were undertaken in accordance with the guidelines set out by Historic England and the Chartered Institute for Archaeologists.

6.2 The research design set out in the Written Scheme of Investigation (Fairman, 2019) aimed to address the research objectives detailed in Chapter 3 (see above).

6.3 The evaluation consisted of four trial pits positioned within the areas of proposed impact in grassed areas either side of the main path through the eastern entrance to the park. The pits had the following dimension:

| Test Pit | Dimension      | Max depth below ground level |
|----------|----------------|------------------------------|
| 1        | 2.00m by 2.00m | 2.50m                        |
| 2        | 2.00m by 2.00m | 2.50m                        |
| 3        | 2.00m by 2.00m | 2.60m                        |
| 4        | 2.00m by 2.00m | 2.50m                        |

6.4 Removal of the topsoil and made ground was carried out under archaeological supervision by a mini digger fitted with a toothless ditching bucket. When natural brickearth was exposed, excavation was temporarily ceased, and the pits cleaned and recorded.

6.5 Excavation recommenced following the arrival of specialist attendance to allow geoarchaeological assessment. Sediment was removed in machine spits up to 100mm thick and following the interfaces between sedimentary units wherever possible. Samples from each Pleistocene sedimentary unit was shaken through a 10mm mesh to retrieve artefacts and coarse artefacts.

6.6 Recording was undertaken using the single context recording system as specified in the Museum of London Site Manual. Plans were drawn at a scale of 1:20, and full or representative sections at a scale of 1:10. Contexts were numbered sequentially and recorded on pro-forma context sheets.

6.7 All recording systems adopted during the investigations were fully compatible with those most widely used elsewhere in London; that is those developed out of the Department of Urban Archaeology Site Manual, now published by Museum of London Archaeology (MoLAS 1994). Individual descriptions of all archaeological and geological strata and features excavated and exposed were entered onto pro-forma recording sheets. All plans and sections of archaeological deposits were recorded on polyester based drawing film, the plans being at scale 1:20 and the section at 1:10. The OD heights of all principle strata were calculated and indicated on the appropriate plans and sections.

6.8 A photographic record of the investigations was made using only digital format.

6.9 Levels and locations were recorded with a survey quality Leica GPS instrument.

6.10 The complete site archive including site records, photographs and finds will be deposited at the London Archaeological Archive, (LAA) under the site code AYP19.



## **7 THE ARCHAEOLOGICAL SEQUENCE**

### **7.1 Introduction**

7.1.1 The following description of the stratigraphy details the main characteristic of each context and its position in the phased stratigraphic matrix. Ordnance Datum levels, physical dimensions and soil description are referenced when relevant to an understanding of the archaeological sequence. Further detail can be found in the context index (see Appendix 1).

7.1.2 The archaeological deposits have been phased by periods as follows: Phase 1 (Natural); Phase 2 (late post medieval to modern)

### **7.2 Phase 1a: Natural Brickearth**

7.2.1 The earliest deposit recorded during the watching brief consisted of natural brickearth. This had the appearance of a reddish-brown alluvial clay silt of very homogenous appearance. The deposit was largely sterile in appearance, with the exception that a few isolated inclusions were found in Test Pit 4 (Context [16]). This appeared to be encountered as a roughly level deposit in the southern part of the area evaluated, at around 21.30 mOD. The brickearth appeared to slope off steeply to a lower level of around 20.55 mOD (context [13]) in Test Pit 1, located slightly further to the north. This change of height may be the result of the presence of the nearby Hackney Brook Channel.

### **7.3 Phase 1b: Weathered Brickearth**

7.3.1 The brickearth horizon was overlain in all pits by a similar, slightly greyer deposit of silt clay alluvium, which was interpreted as being the weathered upper portion of the underlying brickearth. The weathered brickearth was also mostly sterile, but with occasional small flecks of anthropogenic materials (burnt clay or small crushed brick fragments), likely pushed into the deposit by the bioturbation of the soil by tree roots, which were also clearly present.

7.3.2 This horizon was recorded as Contexts [3],[6],[9] and [12] and recorded at between 21.99mOD and 21.90mOD in Test Pits 2-4 and at a lower level of 20.90mOD in TP1.

7.3.3 The greater depth below the surface of the brick-earth's weathered upper horizon in Test Pit 1 suggests that these deposits may well follow a natural slope dipping to the north towards the projected location of the former Hackney Brook Channel.

## 7.4 Phase 2: Late Post Medieval to Modern Made ground

7.4.1 The upper horizons of all pits consisted of mixed silt clays with deposits of sand brick and tarmac chippings. These were recorded as Contexts [2],[5],[8] and [11] and interpreted as made ground. Mixed materials in these deposits seem to show extensive reworking or re-levelling of the ground, probably during the 20th century. These deposits are most likely associated with landscaping of the area immediately adjacent to the park entrance, during the 1990's. As discussed below, deeper made ground in the northernmost Test Pit indicates the possible infilling of a naturally formed channel in this location.

7.4.2 It is likely that a natural channel was infilled in this area, from the mid-19th century onwards, when the historically recorded Hackney Brook, running immediately to the north and east of the site, was essentially converted into a modern conduit sewer.

7.4.3 Intrusive wall foundations were observed in the north side of TP1, to a depth of 2.25m below the modern ground surface. (approx. 20.15 mOD)

7.4.4 All test pits were overlain by a thin layer of recently formed topsoil, with grass covering Test Pits 2-4 and Test Pit 1 capped with a bark chipping play surface. These were recorded as Contexts [1],[4],[7] and [10].



Plate 1: Test Pit 1, looking South, 1m scale



Plate 2: Test Pit 2, looking East, 1m scale



Plate 3: Test Pit 3, looking North, 1m scale



Plate 4: Test Pit 4, looking South East, 1m scale

## 8 PHASED DISCUSSION AND RESEARCH OBJECTIVES

### 8.1 Phased Discussion

#### *Phase 1*

8.1.1 Phase 1 comprised the underlying natural brick earth deposits and their associated upper weathered horizons. These appear to have been almost completely homogenous and sterile clay silts in nature, save for a few inclusions identified by the geoarchaeological specialists in test pit 3. These deposits were investigated to around 2.5m below current ground level in each trial pit, which was the maximum depth obtainable with a mechanical excavator of the size permitted by access restrictions.

8.1.2 The results suggest that the Hackney Brook Channel had not carved an erosion channel through these deposits in the southern and central portions of the evaluated area and that any potential underlying deposits of Palaeolithic interest which may exist at greater depth could remain preserved intact.

8.1.3 The greater depth below the surface of the brick-earth's weathered upper horizon in Test Pit 1 suggests that these deposits may well follow a natural slope dipping to the north towards the projected location of the former Hackney Brook Channel.

8.1.4 Further detail regarding the geo-archaeological results can be found in Appendix 3. But can be summarised as follows:

*The geo-archaeological evaluation at the site produced valuable evidence relating to the location and composition of the Pleistocene deposits in the area. The thick, homogenic and comparable deposits recorded in all test pits correlate well with the description of the Langley Silt Member. The lower boundary of these deposits could however not be assessed within the restrictions of the test pits.*

*The excavations did not expose any deposits that could resemble the artefact rich or fossiliferous deposits as discovered towards the end of the 19<sup>th</sup> century in the area. The possible 'floor' is likely to exist at c.4m below current ground level. However, as artefacts have been recovered from various depths in the area and may be present in highly localised concentrations, only further work at the site could establish the presence or absence and determine the nature of the 'floor' identified by Smith (1894).*

## **Phase 2**

8.1.5 Phase 2 comprised an overlying deposit of made ground. Mixed materials in these deposits appeared to show extensive reworking or re-levelling of the ground, probably during the 20th century. These deposits are most likely associated with landscaping of the area immediately adjacent to the park entrance, during the 1990's. As discussed above deeper made ground in the northernmost Test Pit indicates the possible infilling of a naturally formed channel in this location.

8.1.6 If the lower elevations of the natural horizons in Test Pit 1 do indicate the presence of a former channel, it is likely that this was infilled from the mid-19th century onwards when the Hackney Brook was essentially converted into a modern conduit sewer. It should however be noted that intrusive wall foundations found in the north side of TP1 may suggest that 20th century uses of this location may have had an impact on any soils deposited within the infilled area.

8.1.7 All test pits were overlain by a thin layer of recently formed topsoil, with grass covering Test Pits 2-4 and Test Pit 1 capped with a bark chipping play surface.

## **8.2 Research Objectives**

8.2.1 A considerable number of research objectives were outlined in the DBA, these are repeated below.

### **General Research Objectives**

- To record the nature, extent, date, character, quality, significance and state of preservation of any archaeological remains affected by the investigation.

No archaeological remains were identified during this phase of works.

- To assess where appropriate the ecofactual and palaeo-environmental potential of archaeological deposits and features from within the site.

The depth of excavation limited reporting and recording of deposits to the upper brickearth. This suggests appropriate Pleistocene deposits are present but were largely very clean in and homogenous in appearance. Finds of any significance would probably be found at a much greater depth, well in excess of the 2.5m below ground surface achieved.

- To establish the extent to which previous development and/or other processes have affected archaeological deposits at the site

Previous development has had an impact on the upper layers, meaning that significant post glacial deposits appear absent or were in fact, simply unformed in this locality

- To establish the likely impact on archaeological deposits of the proposed development.

Any potential Palaeolithic finds or deposits, either 'in situ' or redeposited after being reworked by the Hackney Brook, would only be impacted upon by very deep foundations or piling works. These would have to be well in excess of 2.5m below current ground level.

**Site Specific Research Questions:**

- To set the site and its potential archaeological remains into the context of the wider landscape.

The site tentatively suggests that a significant landscape feature, in the form of the Hackney Brook, may have formed a valley to the north and west of the site.

- To confirm the presence or absence of prehistoric remains;

None were identified

- Can the results be compared with Worthing Smith's records of the 19th century on-site discoveries?

Worthing Smith's records suggest that relevant deposits and items recorded were at greater depth, possibly between 4 to 5m below ground level.

- To confirm the presence or absence of Roman remains; Saxon activity and Medieval activity

None were identified

- To confirm the presence or absence of post-medieval activity;

Materials from the very late 19 to late 20th century were observed in the overlying made ground.

**Geoarchaeological Objectives:**

- To characterise the quaternary geological succession

Only 'brickearth' type deposits were observed, these were largely homogenous and featureless in appearance, no contact or Horizon with earlier sands or gravels were encountered

- To establish the extent to which previous development and/or processes have affected Quaternary deposits at the site

The greater depth below surface of the weathered brickearth in Trial Pit 1 may indicate the erosive effects of the Hackney Brooke, immediately to the north and west of the site.

- To establish the likely impact on any surviving Quaternary deposits of the proposed development

Only very deep groundworks could potentially have any impact upon the site's Quaternary deposits

- To determine the presence and potential of lithic artefact evidence and faunal remains in the sediments encountered

None were identified

- To determine the presence and potential of palaeoenvironmental evidence in the sediments encountered.

None were identified

- To determine the presence of, or potential for, undisturbed primary context Palaeolithic occupation surfaces in the sediments encountered

None were identified

- To interpret the depositional and post-depositional history of any artefactual or biological evidence found

None were identified

- To establish correlations of any Pleistocene deposits found with reference to adjacent and regional sequences and to national frameworks

None were identified

- To assess in local, regional and national terms, the archaeological and geological significance of any Pleistocene deposits encountered, and their potential to fulfil current research objectives

None were identified



- To establish whether there is a need for further, more-detailed, field evaluation to clarify the Palaeolithic potential, and if so to make recommendations on the methods and location of further intrusive or non-intrusive works

Any intrusive deep level works going deeper than 2.5m below current ground level may need observation.

Aspects of the scheme which are likely to extend beyond 2.5m below ground level include piling associated with the improved workshops and new café. Additional works to extend into these horizons include the proposed boreholes for the ground source heat pump. Current designs suggest that approximately 8 ground source boreholes would be required. Details regarding the piling plans and ground source boreholes can be found in Appendix 5.

## **9 ACKNOWLEDGEMENTS**

9.1 Pre-Construct Archaeology Limited would like to thank Hackney Council for commissioning the archaeological works, and Adam Single, Historic England Archaeological Adviser for the London Borough of Hackney for monitoring the archaeological investigation.

9.2 The author would like to thank Amelia Fairman for their project management, Mark Roughly for the illustrations, and Ella Egberts for their respective specialist reports.

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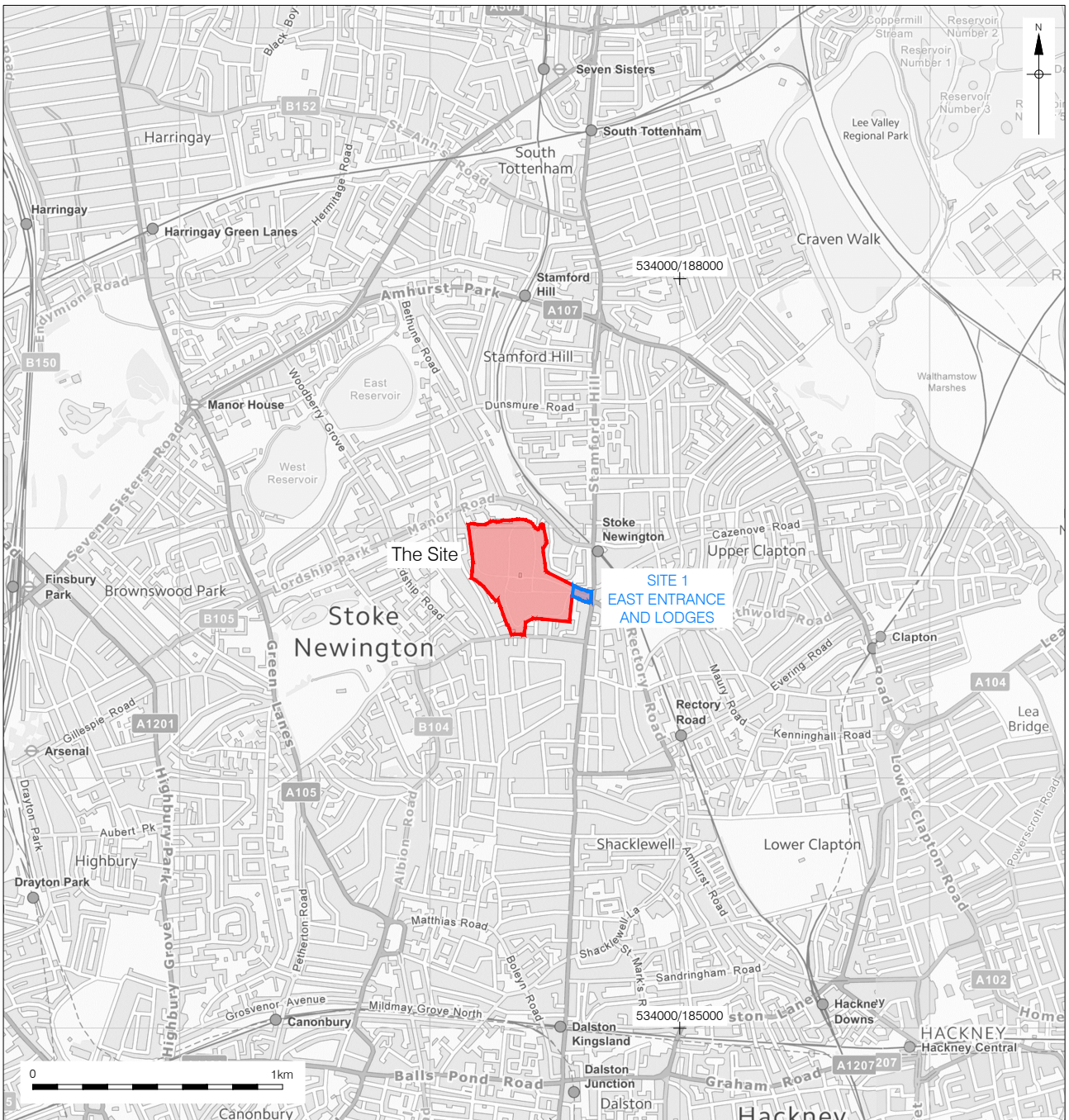
### Internet Sources

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<http://mapapps.bgs.as.uk/geologyofbritain/home.html>

National Planning Policy Framework

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/6077/2116950.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf)





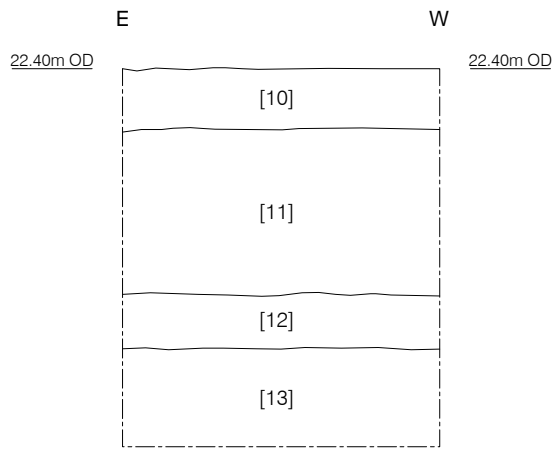
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Contains Ordnance Survey data © Crown copyright and database right 2019

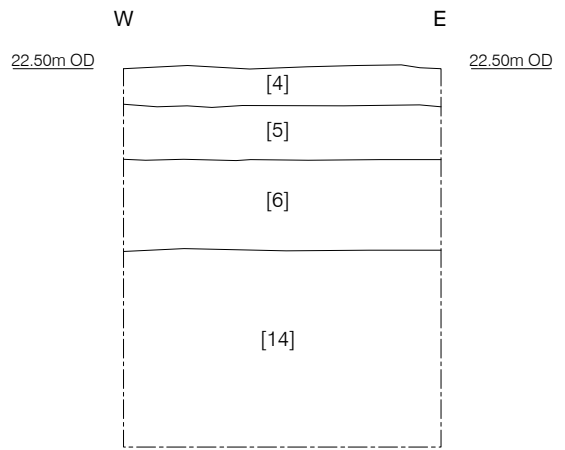
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16/07/19 MR

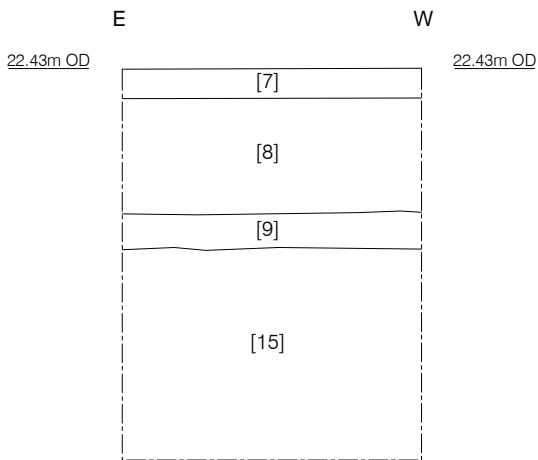
Figure 2  
Detailed Site and Trench Location  
1:500 at A4



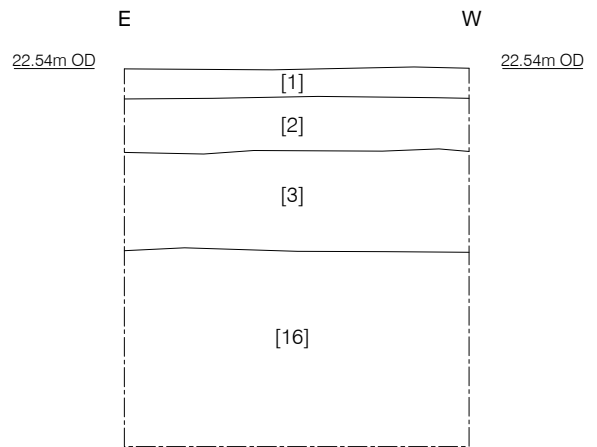
Section 1  
Test Pit 1  
North facing



Section 2  
Test Pit 2  
South facing



Section 3  
Test Pit 3  
North facing



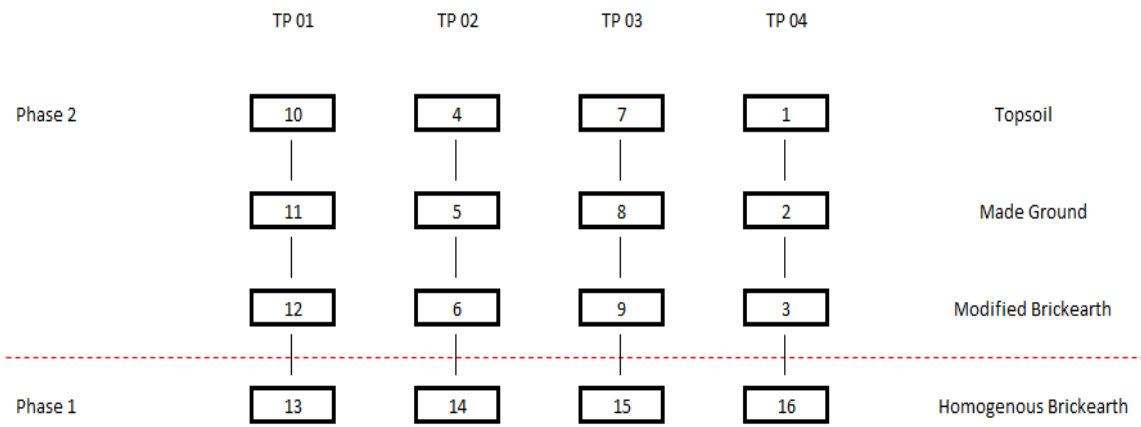
Section 4  
Test Pit 4  
North facing



## APPENDIX 1: CONTEXT INDEX

| Context No. | Trench No. | Section No. | Phase No. | Type  | Description                | N-S (m) | E-W (m) | Thickness (m) | Depth (mbgl) | Level (mAOD) |
|-------------|------------|-------------|-----------|-------|----------------------------|---------|---------|---------------|--------------|--------------|
| 1           | TP 4       | 4           | 2         | Layer | Topsoil                    | >2m     | >2m     | 0.2           | 0            | 22.54        |
| 2           | TP 4       | 4           | 2         | Layer | Modern made ground         | >2m     | >2m     | 0.35          | 0.2          | 22.34        |
| 3           | TP 4       | 4           | 1         | Layer | Weathered silt alluvium    | >2m     | >2m     | 1.95          | 0.55         | 21.99        |
| 4           | TP2        | 2           | 2         | Layer | Topsoil                    | >2m     | >2m     | 0.25          | 0            | 22.5         |
| 5           | TP2        | 2           | 2         | Layer | Modern made ground         | >2m     | >2m     | 0.35          | 0.25         | 22.25        |
| 6           | TP2        | 2           | 1         | Layer | Weathered silt alluvium    | >2m     | >2m     | 1.9           | 0.6          | 21.9         |
| 7           | TP3        | 3           | 2         | Layer | Topsoil                    | >2m     | >2m     | 2             | 0            | 22.43        |
| 8           | TP3        | 3           | 2         | Layer | Modern made ground         | >2m     | >2m     | 0.75          | 0.2          | 21.48        |
| 9           | TP3        | 3           | 1         | Layer | Weathered silt alluvium    | >2m     | >2m     | 1.55          | 0.95         | 21.23        |
| 10          | TP1        | 1           | 2         | Layer | Topsoil                    | >2m     | >2m     | 0.4           | 0            | 22.4         |
| 11          | TP1        | 1           | 2         | Layer | Modern made ground         | >2m     | >2m     | 1.1           | 0.4          | 22           |
| 12          | TP1        | 1           | 1         | Layer | Weathered silt alluvium    | >2m     | >2m     | 0.3           | 1.5          | 20.9         |
| 13          | TP1        | 1           | 1         | Layer | Silt alluvium (Brickearth) | >2m     | >2m     | >0.65         | 1.85         | 20.55        |
| 14          | TP2        | 2           | 1         | Layer | Silt alluvium (Brickearth) | >2m     | >2m     | >1.3          | 1.2          | 21.3         |
| 15          | TP3        | 3           | 1         | Layer | Silt alluvium (Brickearth) | >2m     | >2m     | >1.4          | 1.2          | 19.83        |
| 16          | TP4        | 4           | 1         | Layer | Silt alluvium (Brickearth) | >2m     | >2m     | >1.3          | 1.2          | 21.34        |

## APPENDIX 2: SITE MATRIX





## **APPENDIX 3: GEO-ARCHAEOLOGICAL ASSESSMENT**

### **Geo-archaeological Investigations of the Quaternary Deposits at Abney Park, Stoke Newington, London borough of Hackney**

Site Code: AYP19

Ella Egberts and Barry Bishop 2019

#### **Introduction**

The report describes the geo-archaeological investigations undertaken at the Abney Park Cemetery, Hackney (NGR 533370 / 186773) to assess the potential impact of redevelopment at the site on Pleistocene deposits and Palaeolithic archaeology. Stoke Newington has been the source of large and internationally important quantities of Palaeolithic worked flints, some potentially from *in-situ* contexts and associated with biological remains. However, since these discoveries were made during the later 19<sup>th</sup> century, these finds have not been replicated. The rediscovery of fossiliferous and artefact bearing sediments has been hampered due to the complex Pleistocene geology in the area, variations in the local depositional environments and more recent erosion of Pleistocene deposits by the early Holocene Hackney Brook. Palaeolithic investigations in the area have focussed on understanding the Quaternary sedimentary sequence and the re-identification of artefact bearing deposits and correlating sediments. As part of the archaeological mitigation prompted by the proposed development of the site, a programme designed to characterize the Pleistocene deposits and assess their potential for preserving Palaeolithic artefactual and biogenic remains was formulated (Fairman 2019). A total of four dedicated geo-archaeological test-pits were excavated, all of which revealed thick and massive silt deposits, which can be correlated to the Langley Silt Member. No struck flints or Pleistocene organic remains were recovered.

#### **Background**

##### **Location and topography of the site**

The proposed development concerns improvements to the chapel and the two entrances along with landscaping works to the Abney Park Cemetery in Stoke Newington (site centred on NGR 533370 / 186773). The cemetery lies on the southwestern side of a shallow, northwest – southeast aligned, valley of the now dry Hackney Brook. Its lowest point is towards the Stoke Newington High Street entrance at c. 23m OD and from along its eastern side the ground level slopes upwards to a high point near the Church Street entrance at c. 29m OD. The Hackney Brook, now a 'lost river', was a tributary of the River Lea with a source close to the Holloway Road and flowed around the cemetery area before turning southwards, skirting Hackney Downs and then turning to the east towards Mare Street.

## Geology

The area of the cemetery is mapped by the British Geological Survey (BGS 2007; BGS 2019) as comprising Eocene London Clay which in the southern part of the site, from the vicinity of the chapel to Church Street, is shown overlain by silts and clays of the Langley Silt Formation (brickearth). Alluvial terrace deposits of the Hackney Gravel Formation are shown c. 150m to the southeast of the cemetery and these extend beneath the brickearth, although their northern limits are not known. BGS mapping is not always totally accurate, but it is likely that a simplified sequence of London Clay overlain by Hackney Gravel terrace deposits and capped with brickearth is present at least along the southern side of the cemetery and quite possibly continues over its northern part.

The BGS recognise the Hackney Gravel Member as lying between the Lynch Hill and Taplow Terraces and is mapped as a single unit across a considerable part of northeast London. However, it is likely to represent a complex and varied suite of deposits, not least as some may represent sediment laid down near the confluence of the Rivers Thames and Lea during the middle Pleistocene (Wymer 1999, 47). The Quaternary deposits in the area possibly abut earlier terrace deposits, the Stamford Hill Gravels (Lea equivalent of the Thames Corbett Tey Gravel) (Gibbard 1994, 41, 80-86). These deposits are roughly equivalent to the Thames Mucking Gravel Member, which, in the Hackney Downs area, consists of a sedimentary sequence of gravel deposits (termed the Leytonstone Gravel), organic sediments termed the Highbury Silts and Sands Member, and capped by the Hackney Downs Gravels (Gibbard 1994, figs 16, 18, 27). In the Stoke Newington area Green *et al.* (2004) identified extensive Quaternary sands, termed the Stoke Newington Sands, overlying the gravels. The Stoke Newington Sands have been differentiated from the Highbury Silts and Sands as they occur at significantly higher elevations, are part of a differing stratigraphic sequence and do not contain richly organic muds and peats (*ibid.*, 204). Both the Stoke Newington Sands and the Highbury Silts and Sands are most likely to belong to the MIS 9 interstadial within the Wolstonian glacial period, dated to c. 339,000 – 303,000 BP (Wymer 1999, 4).

The Stoke Newington Sands in turn, are overlain by fine grained sands and silt-clays (brickearth) and termed the Langley Silt Member. Brickearth as shown by the BGS covering the southern part of the cemetery was shown in two boreholes as occurring between c. 24.5m OD and 26.5m OD, although the boreholes did not penetrate into any earlier Quaternary deposits (Gibbard 1994; Green *et al.* 2004, fig. 3). BGS well coring at the High Street entrance of the park (BGS reference: TQ38NW40) describes a sequence of light clay and pebbles down to 1.4m, underlain by sand and gravel and yellow sand down to 3.9m, greenish loam until 4.75m deep, followed by sand and gravel until the London Clay is reached at a depth of 7.5m. This record demonstrates that at that location the Langley Silts are not present or not preserved. Considering the topography these deposits may have been eroded away by the Hackney Brook.

## Archaeology

Stoke Newington remains one of the most celebrated sites in British Palaeolithic studies, largely on account of the vast quantities of worked flints that were recovered there, some from seemingly *in-situ* contexts and associated with biological remains and even putative habitation structures. The dating of the Stoke Newington Sands to MIS 9 is supported by the technological attributes of the implements; very little Levallois material is present and the industries are dominated by handaxes (Wymer 1999, 82).

The majority of these finds were made during the late 19<sup>th</sup> century when the area was being developed for suburban housing as part of the general industrial expansion of London (see Wymer 1999, MAP 9 and Green *et al.* 2004 fig. 1 for detailed distribution maps of the Palaeolithic finds from Stoke Newington). The presence of Palaeolithic material in Stoke Newington was initially noted during house building, brickearth quarrying and the construction of the railway line which runs from Liverpool Street through Stoke Newington and Clapton. During the second half of the 19<sup>th</sup> century and as a consequence of these developments, Worthington Smith and Greenhill kept close observations on the Stoke Newington area and accumulated, for the time remarkably detailed, records on the geology and Palaeolithic archaeology of the area (Greenhill 1894; Smith 1878; 1884a; 1884b, 1883; 1894). The most remarkable result of this was the recognition of a Palaeolithic ‘occupation floor’ at many of the locations in Stoke Newington and beyond. Smith describes the floor as “*a stratum of some five or six inches of subangular ochreous gravel, in some places only one or two inches in thickness, or only visible as a line of slightly contrasting colour*” (1894, 204). The Palaeolithic floor yielded a large number of Palaeolithic implements, many refittable and in a sharp condition, and associated with a rich assemblage of faunal and floral remains, including possibly artificially pointed birch stakes, although these are now thought to be the result of beaver gnawing (Roe 1981, fn 8 to chapter 5; Wymer 1999, 63). Most of the more prolific sites were located during the construction of housing around Stoke Newington Common and immediately to the east of the Abney Park Cemetery (Wymer 1999, fig 18). The floor was also observed by Smith in the cemetery itself; “*In Abney Park Cemetery, not far from the entrance gates in the High Street, Stoke Newington, the same floor is seen in section in the graves, generally about 12 feet from the surface*” (1894, 205). Other excavations at the north side of Stoke Newington Common in 1971 (Roe 1981), the north side of Cazenove Road (D. Whipp 1976 unpublished report for NLAU) and at 66-76 Northwold Road (Harding and Gibbard 1983) and 15 – 21 Northwold Road (Green *et al.* 2004), all failed to locate the ‘floor’. The detailed reconsideration of 19<sup>th</sup> century and more recent work in Stoke Newington (Green *et al.* 2004) demonstrates that most of the artefactual material from the area is redeposited or from unknown contexts, but that the ‘floor’ identified by Smith occurs towards the base of the Stoke Newington Sands or is overlain by brickearth or other fine-grained deposits. It has also demonstrated that the ‘floor’ is present at different OD heights, ranging from 20.7m OD to 26.4m OD (*ibid.*, 197).

## **Methodology**

The fieldwork reported here follows the methodologies developed by *Medway Palaeolithic Project* and the *Managing the Essex Pleistocene Project* (O'Connor 2015; Wenban-Smith *et al.* 2007) and is detailed in the Written Scheme of Investigation (Fairman 2019). Its aims are to assess the nature and significance of the Pleistocene deposits and Palaeolithic remains present at the site, establish their distribution and depth across the site and to assess the archaeological significance of any deposits. To achieve these aims, a total of four dedicated geo-archaeological test-pits were excavated across the site. The test-pits were located in order to provide insights in the terrace deposits (see Figure 2 of main report).

The test-pits measured approximately 2 x 2m and were excavated under the supervision of the Palaeolithic specialist to the maximum reach of the mechanical excavator (c. 2.5m). Sediment was removed by the mechanical excavator using a 1.5m wide ditching bucket in spits up to 250mm thick but followed the interfaces between sedimentary units wherever possible. Each sedimentary unit was numbered separately. Where safe to enter (the upper c. 1m of the test-pits) the sides of the test-pits were cleaned, photographed and drawn. The deeper parts of each test-pit were photographed and drawn from the side. The encountered brickearth has been sampled (1 litre) as well as the encountered nodular calcite (calcrete) found in TP3.

## Results

Quaternary deposits were recorded in all four dedicated geo-archaeological test-pits excavated at the site (see Figures 2 and 3 of main report). All four pits exposed a thick, massive, homogenous and compact clayey silt deposit, directly below the made ground and was found at a height between 21.34m OD until at least 19.83m OD without reaching the lower boundary of the deposit.

### *The Langley Silt Member at Abney Park*

The silt deposit encountered at Abney Park is dark yellowish brown (4/6 10YR), though mostly mottled throughout from with variations in colour ranging from orange brown to yellowish grey. The deposit is massive, homogeneous and compact which locally some slight variations in grain size composition. In TP 3, at a depth of 2.3m BGL, the clayey silt contained some fine specks and small fragments of black/dark brown material (some manganese concreted granules and some larger concretions up to about 10mm, some possible organic material or charcoal). Here the silt also contained irregular shaped nodular calcite (calcrete) of various sizes up to 25mm. The texture of the silt lies between a clayey silt and silty clay with some fine sand and sand sized manganese concretions. The fabric is blocky and porous (though compact) and contains occasional rootlets or imprints of these.

All four test pits exposed comparable brickearth sequences. The only exception being the occurrence of calcretes in TP3 around 2.3m BGL. Calcretes are a type of concretion which grows by a process of leaching of minerals and nucleation around particles in the loess such as quartz grains and small granules and shell fragments. The presence of these calcretes in the loess at Abney Park is significant as they are associated with buried soils or fossilised soil horizons (Li *et al.* 2018).

### **Archaeological evidence**

Continuous close examination of the excavations of the silt and sorting of the removed sediments did not result in the discovery of any artefactual material.

### **Discussion**

The geoarchaeological evaluation at the site has produced valuable evidence relating to the location and composition of the Pleistocene deposits in the area. Pleistocene deposits were recorded in all trenches immediately beneath top- and subsoils and consisted of undisturbed and, towards the upper parts of the deposit, some disturbed silt. The thick, homogenic and very similar deposits encountered in the four test pits all agree with the description the Langley Silt Member, mapped by the BGS directly to the south and east of the test pits. The test pits confirm that this silt is indeed also present in this area of Abney Park. Due to the limited reach of the mechanical excavator, the lower boundary of the Langley Silt or any underlying Pleistocene deposits could not be assessed in these pits. The excavations did not expose any deposits that could resemble the artefact rich or fossiliferous deposits as discovered towards the end of the 19<sup>th</sup> century in the area. As the possible 'floor', recorded as being present close to the High Street entrance of Abney Park Cemetery and seen in grave sections, was observed at about 4m (12 feet) from the surface, the present investigation would not have reached the relevant levels. However, as artefacts have been recovered from various depths in the area and may be present in highly localised concentrations, only further work at the site could establish the presence or absence and determine the nature of the 'floor' identified by Smith (1894, 205).

## Recommendations

The here described geoarchaeological investigations have improved the understanding of the extend of the Langley Silt Member. It has highlighted the undisturbed nature and the considerable thickness of the deposits at this location. The work also confirms that no archaeological material is present at the site, above a depth of 2.5m BGL. It is therefore recommended that, if the proposed development of the site does not involve any disruption below this depth, no further work is needed. However, if the proposed development is likely to impact sediments below the levels recorded during this investigation (i.e. below c. 2.5m BGL), a full new geoarchaeological assessment should be conducted. This should aim to investigate the archaeological and palaeo-environmental potential of any deeper deposits at the location, preferably until bedrock is encountered or down to the maximum depth of the assumed impact of the development.

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## **APPENDIX 4: OASIS DATA ENTRY FORM**



## OASIS ID: preconst1-361808

---

### Project details

|  |  |
|--|--|
| Project name                           | Abney Park, Stoke Newington, LB Hackney  |
| Short description of the project       | An archaeological and geo-archaeological test pit evaluation was carried out at the eastern entrance to Abney Park, Stoke Newington, Hackney. Natural deposits of brickearth and weathered brickearth were identified in three of the four pits from elevations which suggest a depression to the north of the site consistent with the known location of the Hackney Brook. Made ground and topsoil sealed all locations. |
| Project dates                          | Start: 08-07-2019 End: 10-07-2019  |
| Previous/future work                   | No / Not known   |
| Any associated project reference codes | AYP19 - Sitecode   |
| Type of project                        | Field evaluation   |
| Site status                            | Area of Archaeological Importance (AAI)  |
| Current Land use                       | Other 14 - Recreational usage  |
| Methods & techniques                   | "Test Pits"  |
| Development type                       | Small-scale (e.g. single house, etc.)  |
| Prompt                                 | Direction from Local Planning Authority - PPS  |
| Position in the planning process       | Pre-application  |

---

### Project location

|                  |   |
|------------------|---|
| Country          | England   |
| Site location    | GREATER LONDON HACKNEY STOKE NEWINGTON Abney Park, Stoke Newington, Hackney   |
| Postcode         | N16 5TU   |
| Site coordinates | TQ 33316 86838 51.56414686461 -0.076403808974 51 33 50 N 000 04<br>35 W Point |

Height OD / Depth    Min: 20.9m Max: 21.99m

---

### Project creators

|                              |                 |
|------------------------------|-----------------|
| Name of Organisation         | PCA             |
| Project brief originator     | Adam Single     |
| Project design originator    | Amelia Fairman  |
| Project director/manager     | Amelia Fairman  |
| Project supervisor           | Aidan Turner    |
| Type of sponsor/funding body | Borough Council |
| Name of sponsor/funding body | Hackney Council |

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### Project archives

|                           |   |
|---------------------------|---|
| Physical Archive Exists?  | No  |
| Digital Archive recipient | LAA   |
| Digital Archive ID        | AYP19   |
| Digital Media available   | "Images raster / digital photography", "Survey", "Text"                           |
| Paper Archive recipient   | LAA   |
| Paper Archive ID          | AYP19   |
| Paper Media available     | "Context sheet", "Diary", "Drawing", "Matrices", "Miscellaneous Material", "Plan" |

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### Project bibliography 1

|                               |   |
|-------------------------------|---|
| Publication type              | Grey literature (unpublished document/manuscript)   |
| Title                         | Abney Park, Stoke Newington, London Borough of Hackney, N16: An Archaeological Evaluation |
| Author(s)/Editor(s)           | Turner, A   |
| Date                          | 2019  |
| Issuer or publisher           | Pre-Construct Archaeology Ltd   |
| Place of issue or publication | London  |
| <hr/>                         |   |
| Entered by                    | Amelia Fairman (afairman@pre-construct.com)   |
| Entered on                    | 31 July 2019  |

## **APPENDIX 5: PROPOSED PILING AND BOREHOLE LOCATIONS**

*Reproduced with acknowledgment to Kaner Olette architects, the Morton Partnership and Crofton Consulting Engineers.*

- a) Drainage Layout with mark up demonstrating the heat source pump arrangement
- b) Café and education centre ground floor arrangement
- c) Café and education centre pile layout
- d) Workshops and maintenance depot ground floor plan
- e) Workshop pile layout

**Notes**

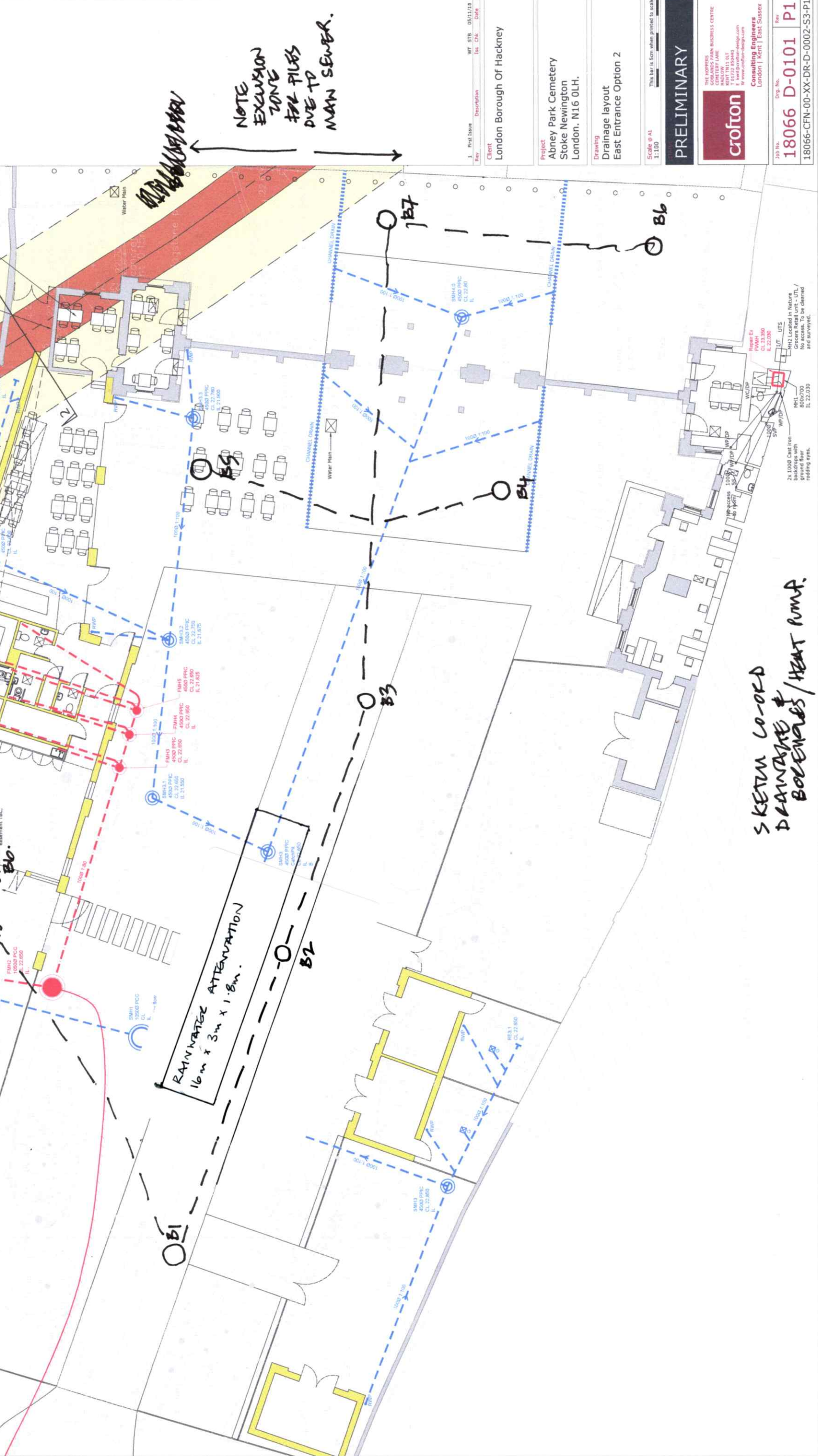
- Do not scale this drawing.
- This drawing is to be read in conjunction with all other relevant drawing issues and specifications.
- All building materials, components and workmanship is to comply with the appropriate building regulations, British Standards and recommendations.
- For all specialist work see relevant drawings.
- Any discrepancies, errors or omissions are to be reported to the architect immediately for their instructions before commencement of work.
- The architect is not responsible for dimensions, except where shown on their drawings. All setting out information, dimensions, etc., shall be calculated from the architect's drawings. For dimensions layouts or with see architect's drawings.

2.4m Ø Thames Water sewer approximately 7.2m to invert under existing building.

Assumed 3m easement from pipe edge.

No drain identified in or around this building.

Unknown Thames Water sewer assumed position with potential easement, etc.



**NOTE**  
EXCLUSION  
ZONE  
FOR PILES  
DUE TO  
MAN SEWER.

**HEAT PUMP POSSIBLE LOCATION.**

**B8 (IF APPROVED)**  
**(0.2m UWB)**  
**EG.**

**RAINWATER ATTENUATION**  
**16m x 3m x 1.8m.**

**SKETCH CO-ORD  
DRAINAGE &  
BOLEYNES / HEAT PUMP.**

|     |             |               |
|-----|-------------|---------------|
| WT  | STB         | 05/11/18      |
| Rev | Description | Iss. Chk. DMS |
| 1   | First Issue |               |

**Client**  
London Borough Of Hackney

**Project**  
Abney Park Cemetery  
Stoke Newington  
London. N16 0LH.

**Drawing**  
Drainage layout  
East Entrance Option 2

Scale @ A4  
1:100  
This bar is 5cm when printed to scale

**PRELIMINARY**

**crofton**  
THE HORNERS ON BUSINESS CENTRE  
CROFTON LANE  
HACKNEY, LONDON N16 9JL  
T 01753 858443  
E info@crofton-engineers.com  
W www.crofton-engineers.com

**Consulting Engineers**  
London | Kent | East Sussex

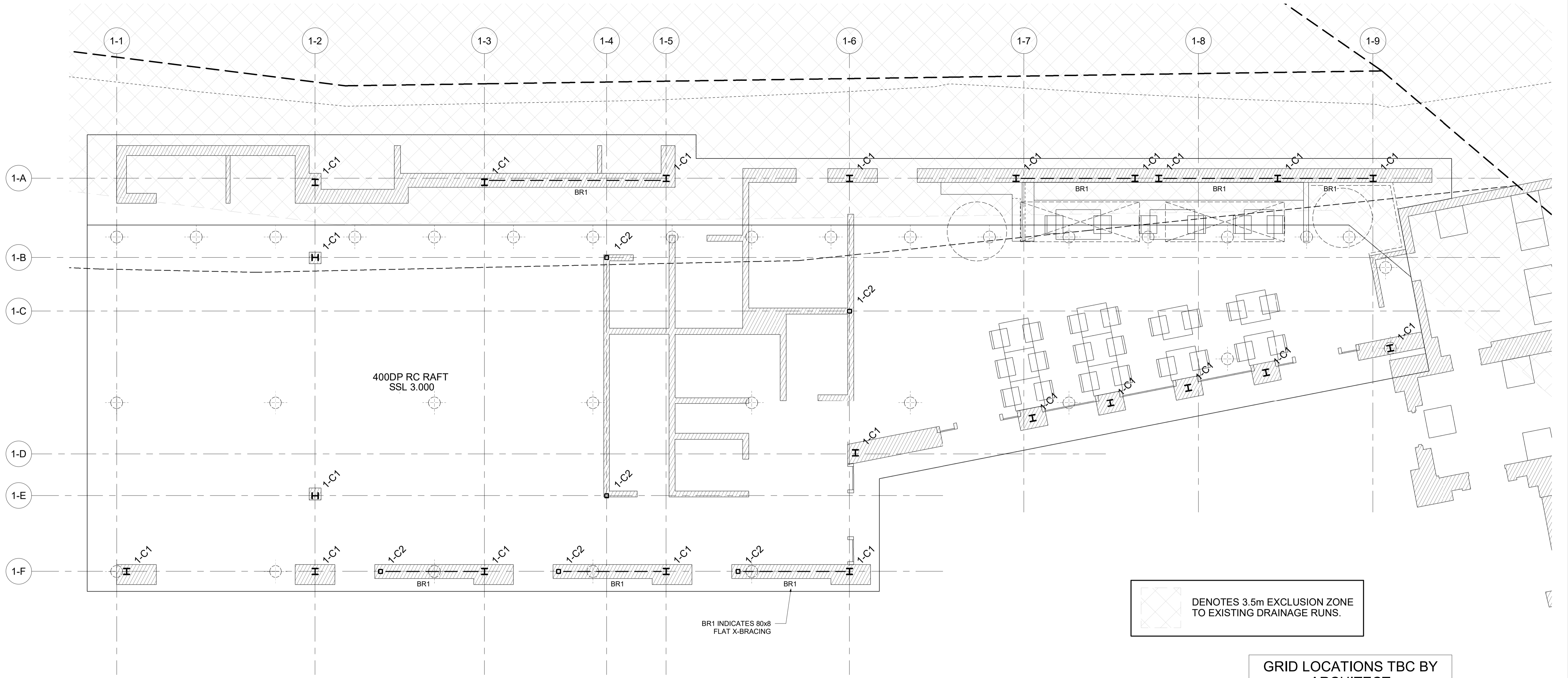
Job No. 18066  
Dwg. No. D-0101  
Rev. P1  
18066-CFN-00-XX-DR-D-0002-S3-P1

2x 1000 Cast Iron  
basins with  
rodding eyes.

MM1  
CL. 22.030  
E. 21.875

UTS  
CL. 22.030  
E. 21.875

MM2 Located in Nature  
Grocers Retail unit - UTU/  
No access. To be cleared  
and surveyed.

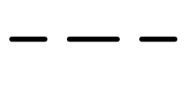


**COLUMN SCHEDULE**

| REF: | SIZE:         |
|------|---------------|
| 1-C1 | 152x152 UC 37 |
| 1-C2 | 100x100 SHS 5 |

 DENOTES 3.5m EXCLUSION ZONE TO EXISTING DRAINAGE RUNS.

GRID LOCATIONS TBC BY ARCHITECT

 DENOTES APPROX. DRAINAGE RUN. FULL INVESTIGATION YET TO BE UNDERTAKEN. FOUNDATION PLAN TO BE REVIEWED

REFER TO ARCHITECT FOR ALL FINISHES AND WATERPROOFING

ALL LEVELS AND SETTING OUT TO BE CONFIRMED WITH THE ARCHITECT.

SLAB EDGES TO BE CO-ORDINATED WITH FACADE DETAILS

 DENOTES 50 x 200 C24 ROOF JOISTS @ 400CRS

- NOTES:**
- ALL DIMENSIONS TO BE CHECKED ON SITE AND NO MEASUREMENTS TO BE SCALED OFF THIS DRAWING
  - IN CASE OF ANY DISCREPANCY THE ENGINEERS ARE TO BE NOTIFIED IMMEDIATELY
  - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S AND SERVICES ENGINEER'S DETAIL, DRAWINGS AND SPECIFICATIONS
  - ALL STEEL BEAMS TO BE GRADE S355.
  - CONNECTION DESIGN AND DETAILING BY SPECIALIST SUB-CONTRACTOR

| REV | AMENDMENT | CHK | DATE |
|-----|-----------|-----|------|
|     |           |     |      |

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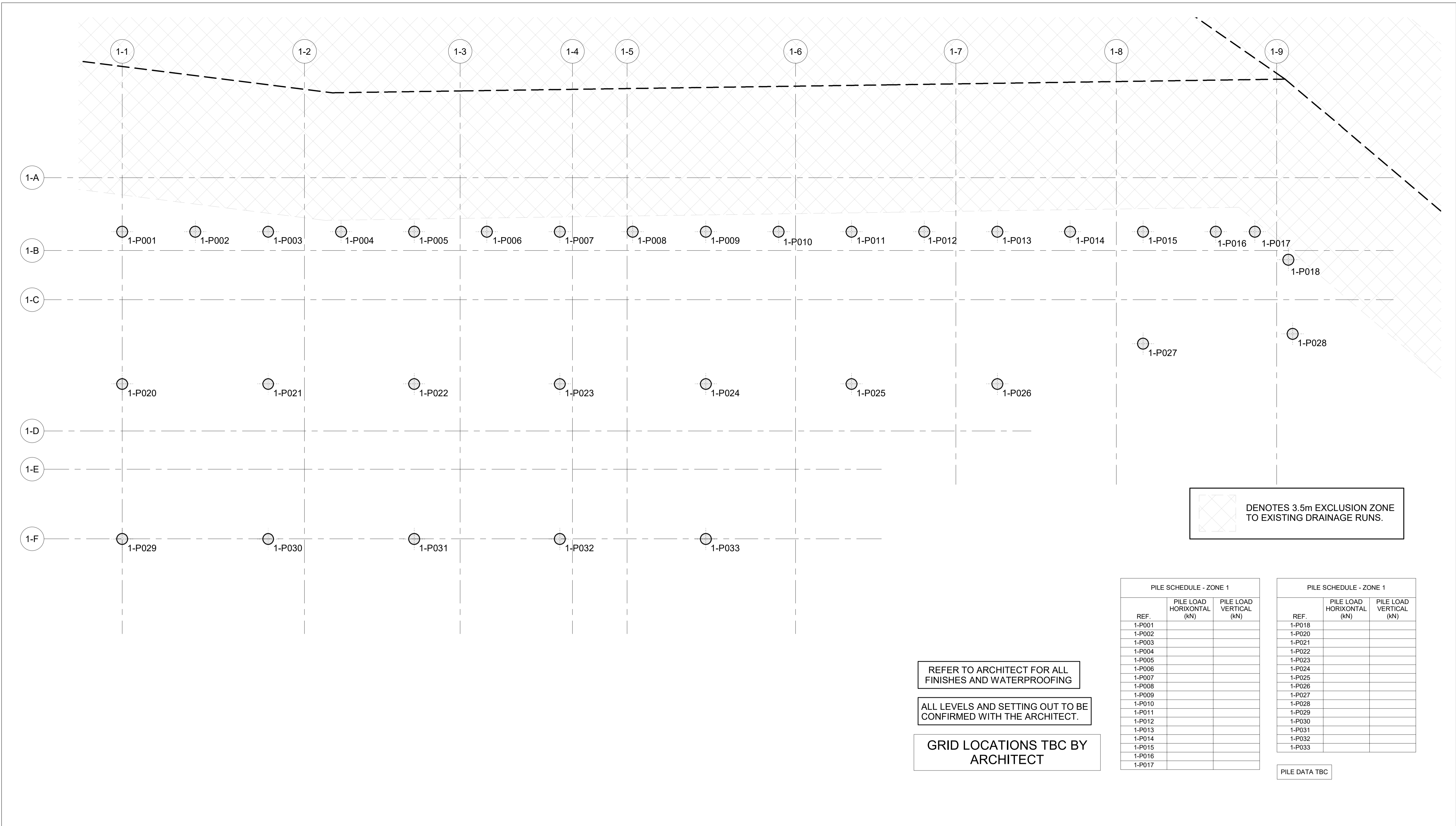
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 TELEPHONE: 0137 656 883  
 EMAIL: coggeshall@themortonpartnership.co.uk

**ABNEY PARK RESTORATION**

**CAFE & EDUCATION CENTRE  
 GROUND FLOOR  
 GENERAL ARRANGEMENT**

SCALE @A1: 1 : 50      DRAWN BY: J.WELSH  
 DATE: JULY '19      CHECKED BY: TS

DRG No.  
**18821/ 1-01 P1**



DENOTES 3.5m EXCLUSION ZONE TO EXISTING DRAINAGE RUNS.

REFER TO ARCHITECT FOR ALL FINISHES AND WATERPROOFING

ALL LEVELS AND SETTING OUT TO BE CONFIRMED WITH THE ARCHITECT.

GRID LOCATIONS TBC BY ARCHITECT

| PILE SCHEDULE - ZONE 1 |                           |                         |
|------------------------|---------------------------|-------------------------|
| REF.                   | PILE LOAD HORIZONTAL (kN) | PILE LOAD VERTICAL (kN) |
| 1-P001                 |                           |                         |
| 1-P002                 |                           |                         |
| 1-P003                 |                           |                         |
| 1-P004                 |                           |                         |
| 1-P005                 |                           |                         |
| 1-P006                 |                           |                         |
| 1-P007                 |                           |                         |
| 1-P008                 |                           |                         |
| 1-P009                 |                           |                         |
| 1-P010                 |                           |                         |
| 1-P011                 |                           |                         |
| 1-P012                 |                           |                         |
| 1-P013                 |                           |                         |
| 1-P014                 |                           |                         |
| 1-P015                 |                           |                         |
| 1-P016                 |                           |                         |
| 1-P017                 |                           |                         |

| PILE SCHEDULE - ZONE 1 |                           |                         |
|------------------------|---------------------------|-------------------------|
| REF.                   | PILE LOAD HORIZONTAL (kN) | PILE LOAD VERTICAL (kN) |
| 1-P018                 |                           |                         |
| 1-P020                 |                           |                         |
| 1-P021                 |                           |                         |
| 1-P022                 |                           |                         |
| 1-P023                 |                           |                         |
| 1-P024                 |                           |                         |
| 1-P025                 |                           |                         |
| 1-P026                 |                           |                         |
| 1-P027                 |                           |                         |
| 1-P028                 |                           |                         |
| 1-P029                 |                           |                         |
| 1-P030                 |                           |                         |
| 1-P031                 |                           |                         |
| 1-P032                 |                           |                         |
| 1-P033                 |                           |                         |

PILE DATA TBC

- NOTES:
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  - IN CASE OF ANY DISCREPANCY THE ENGINEERS ARE TO BE NOTIFIED IMMEDIATELY
  - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S AND SERVICES ENGINEER'S DETAIL, DRAWINGS AND SPECIFICATIONS
  - ALL STEEL BEAMS TO BE GRADE S355.
  - CONNECTION DESIGN AND DETAILING BY SPECIALIST SUB-CONTRACTOR

| REV | AMENDMENT | CHK | DATE |
|-----|-----------|-----|------|
|     |           |     |      |

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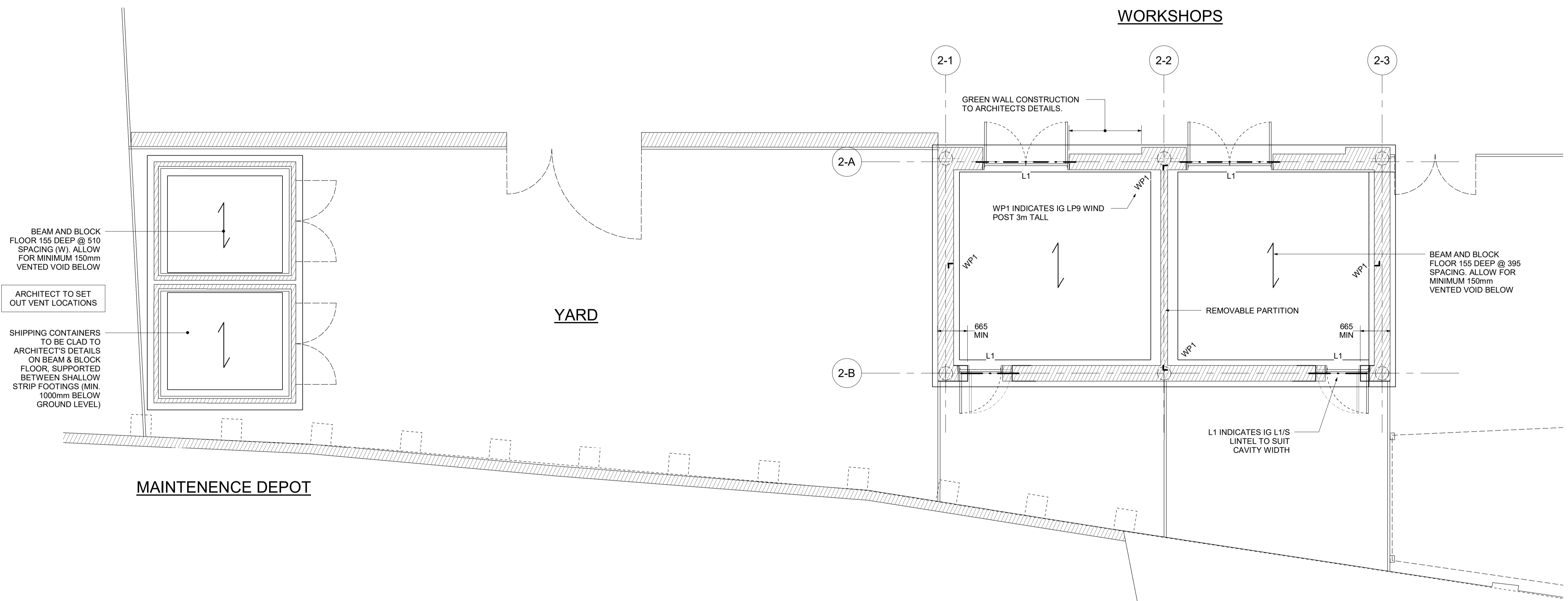
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EMAIL: coggeshall@themortonpartnership.co.uk

**ABNEY PARK RESTORATION**

**CAFE & EDUCATION CENTRE  
PILE LAYOUT & SCHEDULE  
GENERAL ARRANGEMENT**

SCALE @A1: 1 : 50      DRAWN BY: J.WELSH  
DATE: JULY '19      CHECKED BY: TS

DRG No.  
**18821/ 1-00 P1**



BEAM AND BLOCK FLOOR 155 DEEP @ 510 SPACING (W). ALLOW FOR MINIMUM 150mm VENTED VOID BELOW

ARCHITECT TO SET OUT VENT LOCATIONS

SHIPPING CONTAINERS TO BE CLAD TO ARCHITECT'S DETAILS ON BEAM & BLOCK FLOOR, SUPPORTED BETWEEN SHALLOW STRIP FOOTINGS (MIN. 1000mm BELOW GROUND LEVEL)

BEAM AND BLOCK FLOOR 155 DEEP @ 395 SPACING. ALLOW FOR MINIMUM 150mm VENTED VOID BELOW

GRID LOCATIONS TBC BY ARCHITECT

- ALL CAVITY WALL CONSTRUCTION TO ARCHITECTS DETAILS.
- REFER TO ARCHITECT FOR ALL FINISHES AND WATERPROOFING
- ↕ DENOTES 50 x 200 C24 ROOF JOISTS @ 400CRS
- ALL LEVELS AND SETTING OUT TO BE CONFIRMED WITH THE ARCHITECT.

- NOTES:
- ALL DIMENSIONS TO BE CHECKED ON SITE AND NO MEASUREMENTS TO BE SCALED OFF THIS DRAWING
  - IN CASE OF ANY DISCREPANCY THE ENGINEERS ARE TO BE NOTIFIED IMMEDIATELY
  - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S AND SERVICES ENGINEER'S DETAIL, DRAWINGS AND SPECIFICATIONS
  - ALL STEEL BEAMS TO BE GRADE S355.
  - CONNECTION DESIGN AND DETAILING BY SPECIALIST SUB-CONTRACTOR

| REV | AMENDMENT | CHK | DATE |
|-----|-----------|-----|------|
|     |           |     |      |

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**ABNEY PARK RESTORATION**

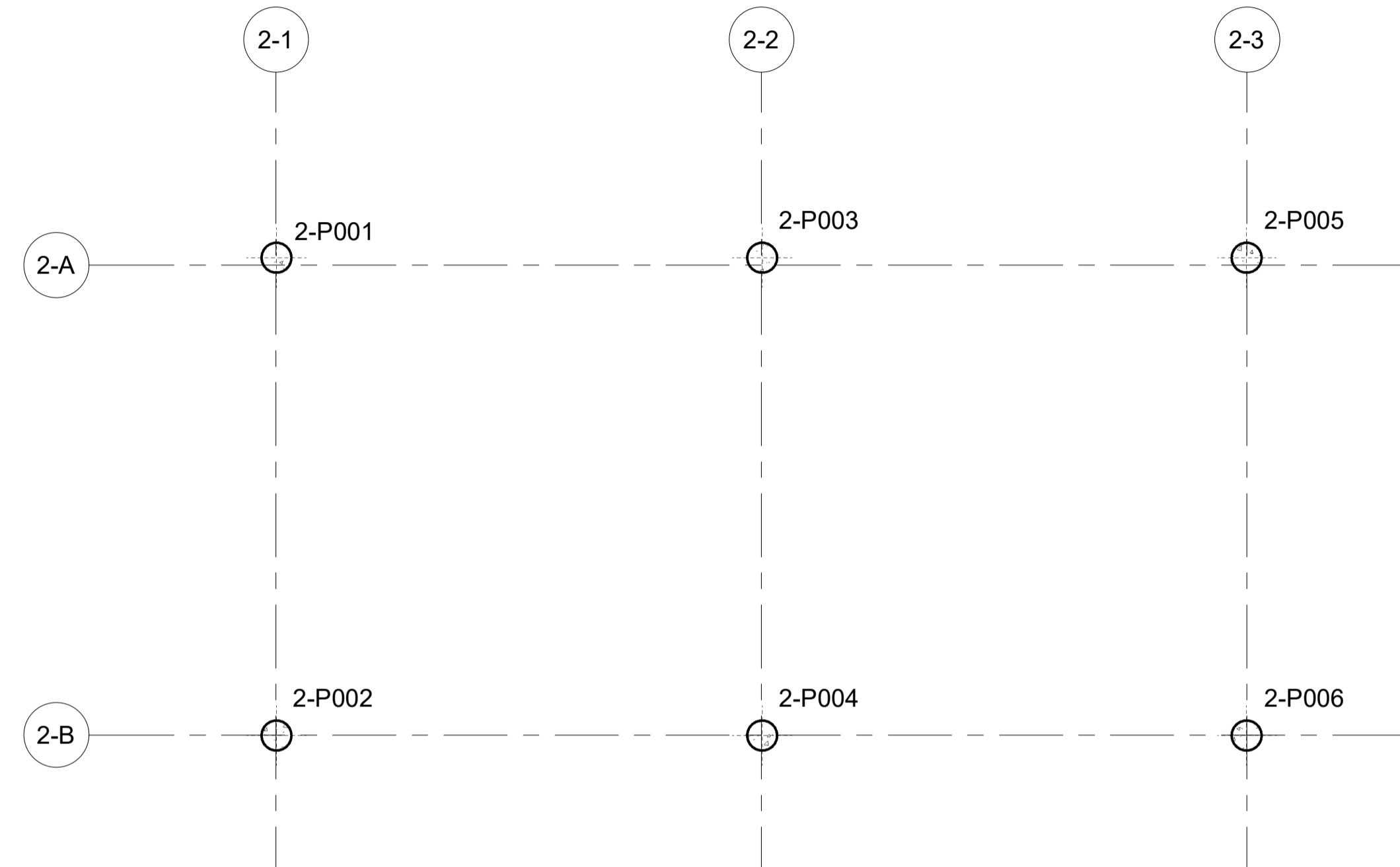
**WORKSHOPS AND MAINTENANCE DEPOT GROUND FLOOR PLAN**

SCALE @A1: 1 : 50      DRAWN BY: J.WELSH

DATE: JULY '19      CHECKED BY: TS

DRG No.  
**18821/ 2-02 P1**





REFER TO ARCHITECT FOR ALL FINISHES AND WATERPROOFING

ALL LEVELS AND SETTING OUT TO BE CONFIRMED WITH THE ARCHITECT.

GRID LOCATIONS TBC BY ARCHITECT

| PILE SCHEDULE - ZONE 2 |                           |                         |
|------------------------|---------------------------|-------------------------|
| REF.                   | PILE LOAD HORIZONTAL (kN) | PILE LOAD VERTICAL (kN) |
| 2-P001                 |                           |                         |
| 2-P002                 |                           |                         |
| 2-P003                 |                           |                         |
| 2-P004                 |                           |                         |
| 2-P005                 |                           |                         |
| 2-P006                 |                           |                         |

PILE DATA TBC

- NOTES:
1. ALL DIMENSIONS TO BE CHECKED ON SITE AND NO MEASUREMENTS TO BE SCALED OFF THIS DRAWING
  2. IN CASE OF ANY DISCREPANCY THE ENGINEERS ARE TO BE NOTIFIED IMMEDIATELY
  3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S AND SERVICES ENGINEERS' DETAIL, DRAWINGS AND SPECIFICATIONS
  4. ALL STEEL BEAMS TO BE GRADE S355.
  5. CONNECTION DESIGN AND DETAILING BY SPECIALIST SUB-CONTRACTOR

| REV | AMENDMENT | CHK | DATE |
|-----|-----------|-----|------|
|     |           |     |      |

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TELEPHONE: 0137 656 883  
EMAIL: coggeshall@themortonpartnership.co.uk

ABNEY PARK RESTORATION

WORKSHOP PILE LAYOUT

SCALE @A1: 1 : 50 DRAWN BY: RR  
DATE: CHECKED BY: TS  
DRG No.  
**18821/ 2-00 P1**

# PCA

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