

**SIR JOHN CASS FOUNDATION AND RED COAT  
CHURCH OF ENGLAND SECONDARY SCHOOL**

**Walter Terrace**

**Stepney**

**London E1**

London Borough of Tower Hamlets

Archaeological Evaluation

September 2009



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CHURCH OF ENGLAND SECONDARY SCHOOL  
Walter Terrace  
Stepney  
London E1**

London Borough of Tower Hamlets

Archaeological Evaluation

National Grid Reference: 535802 181528

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## **Summary (non-technical)**

*This report presents the results of an archaeological evaluation carried out by Museum of London Archaeology (MOLA) on the site of Sir John Cass Foundation and Red Coat Church of England Secondary School on Walter Terrace, London E1 0RH (in Stepney). The report was commissioned from MOLA by Bouygues UK Ltd.*

*Following the recommendations of the English Heritage Archaeological Advisor to the London Borough of Tower Hamlets two 5m x 5m trenches were excavated on the site*

*Trench 1, in the playground adjacent to mobile classrooms on the west side of the main block, exposed a series of small domestic-scale cut features of early to mid 19th century date. They include a well and cesspit. Trench 2 had a large cut feature with coal ash and clinker at the base, thought to have been a gravel and brickearth quarry of mid 19th-century date.*

*The results of the field evaluation have helped to refine the initial assessment of the archaeological potential of the site. No evidence of WWII bomb damage was found and the survival of natural brickearth, in areas not quarried, indicates there is a theoretical potential for cut features of all archaeological periods to survive. The impact of the proposed development on the site is minimal, however, and the evaluation has demonstrated that the features of 19th century date alone survive in the impact areas (the evaluation trenches were almost the same size as the proposed impact areas).*

*In the light of revised understanding of the archaeological potential of the site the report concludes the impact of the proposed redevelopment will be on buried 19th century remains. The remote possibility of disturbing Bronze Age or Early Iron Age cremations can not be entirely eliminated, however, but the risk of their survival in the proposed impact areas is considered to be remote.*

*The decision on the appropriate archaeological response rests with the Local Planning Authority and their designated archaeological advisor.*

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*Front cover: John Rocque's map of 1746*

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## 1 Introduction

### 1.1 Site background

The site comprises the Sir John Cass Foundation Red Coat Church of England Secondary School on Walter Terrace, London E1 0RH (in Stepney). It is bounded by Stepney Way to the north, Aylward Street to the west, Walter Terrace to the south and Bromley Street to the east. The centre of the site lies at National Grid reference 535802 181529. The site slopes gradually from 10.7m Ordnance Datum (OD) in the east of the site to 10m OD in the west. The site code is SJB09.

A desk-based *Archaeological assessment* was previously prepared, which covers the whole area of the site (MOL Archaeology 2009a). The *assessment* document should be referred to for information on the natural geology, archaeological and historical background of the site, and the initial interpretation of its archaeological potential.

Following recommendations of the *assessment*, a *written scheme of investigation* was prepared (MOL Archaeology 2009b) which specified the excavation of two 5m x 5m archaeological evaluation trial trenches. This report details the results of the evaluation.

### 1.2 Planning and legislative framework

The Planning and legislative background to the site has been adequately summarised in the previous *Archaeological desk-based assessment* (MOL Archaeology 2009, section 2). Part of the site lies within an Area of Archaeological Importance defined by local plans.

### 1.3 Planning background

Planning permission has been applied for: Application No. PA/09/0139, Registration date 14 Aug 2009. The applicant is Bouygues UK Ltd.

### 1.4 Origin and scope of the report

This report was commissioned by Bouygues UK Ltd and produced by Museum of London Archaeology (MOLA). The report has been prepared within the terms of the relevant Standard specified by the Institute for Archaeologists (IFA, 2001).

Field evaluation, and the *Evaluation report* which comments on the results of that exercise, are defined in the most recent English Heritage guidelines (English Heritage, 1998) as intended to provide information about the archaeological resource in order to contribute to the:

formulation of a strategy for the preservation or management of those remains; and/or

formulation of an appropriate response or mitigation strategy to planning applications or other proposals which may adversely affect such archaeological remains, or enhance them; and/or

formulation of a proposal for further archaeological investigations within a programme of research

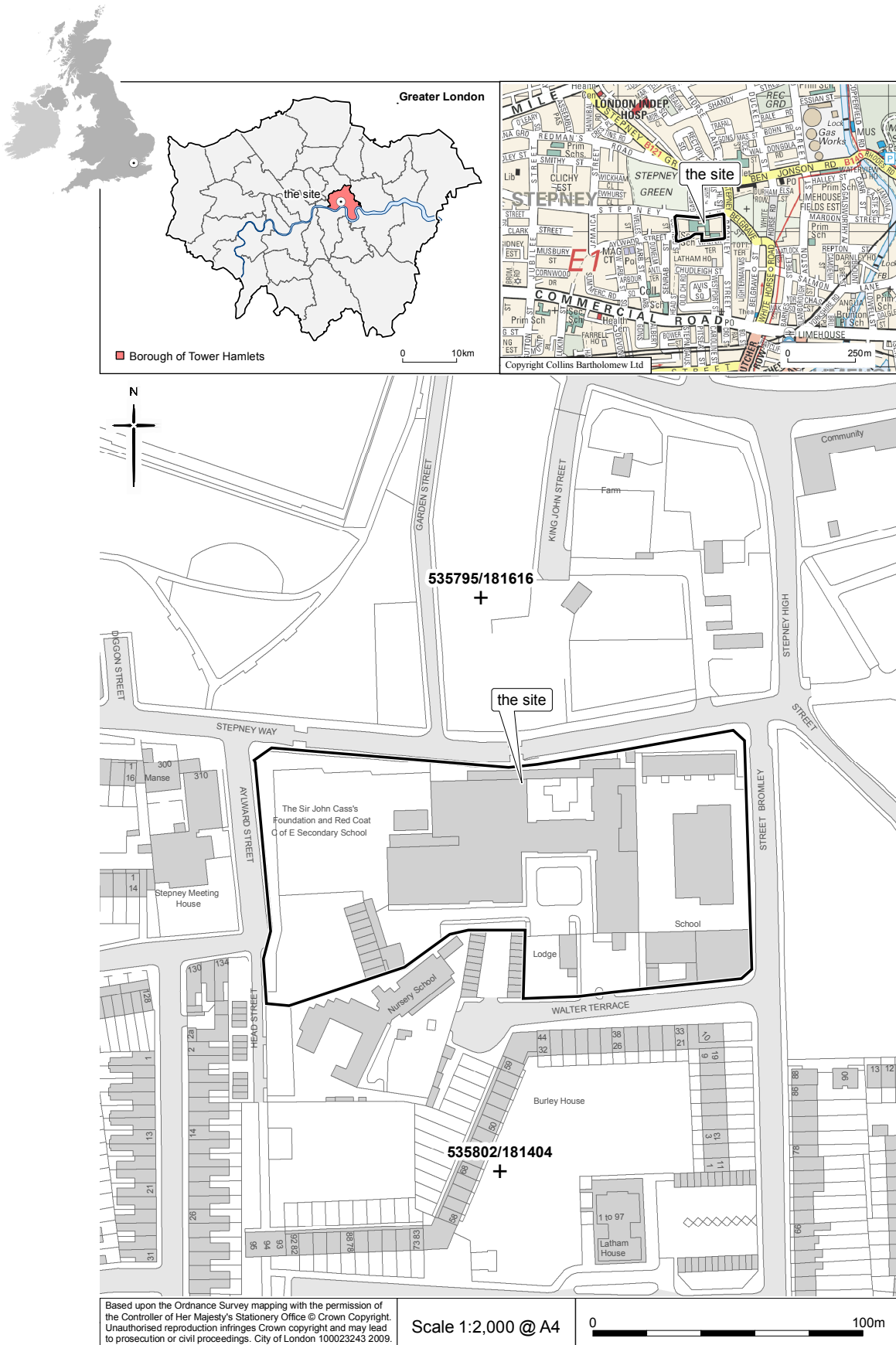


Fig 1 Site location

## 1.5 Aims and objectives

All research is undertaken within the priorities established in the Museum of London's *A research framework for London Archaeology*, 2002.

In addition to the archaeological brief being limited to establishing the levels and nature of surviving archaeological deposits, and ensuring that the digging of evaluation trenches did not involve unnecessary destruction of such deposits, the following research aims and objectives were established in the *Written Scheme of Investigation* for the evaluation (Section 2.2):

- What is the evidence for remains relating to the medieval settlement of Stepney extending into the site?
- What is the nature and level of natural topography?
- What are the earliest deposits identified?
- What are the latest deposits identified?

## **2 Topographical, historical and archaeological background**

A detailed description of the geology, archaeology and history of the site was provided in the earlier Archaeological desk-based assessment (MOL Archaeology 2009). A brief resume is provided here:

The underlying geology is Taplow Gravel. Geotechnical investigations undertaken within the site in 2008 (Ian Farmer Associates 2008), revealed a layer of made ground across the site, which deepened from c 0.80m in the north-western corner to c 2.5m in the south-eastern corner of the site. An archaeological evaluation was carried out by AOC in 2005 in advance of the construction of Building D on the eastern boundary of the site. Only a layer of modern made ground over 19th-century demolition rubble was identified. No earlier remains were identified.

Approximately a third of the site, on the eastern side, falls within an Area of Archaeological Importance (AAI), defining the possible extent of the medieval settlement of Stepney. The site has therefore a moderate potential for archaeological remains of the early and later medieval settlement. These might comprise remains of footings of buildings, rubbish, cess pits and possibly traces of small-scale industrial activity. There is also potential for the survival of footings and cellars of mid-19th century buildings. Because of past construction work at the site, archaeological survival is likely to be varied and localised rather than extensive across the site, although there are some areas that have never been built on (ie the currently open areas that were previously gardens and/or yards). Bomb damage may have compromised survival in the eastern half of the site to a greater depth, as suggested by the thickness of made ground in this area.

An archaeological excavation at Stepping Stones City Farm, Stepney High Street in 1979, c 50m to the north of the site revealed a Saxo-Norman pit and two late medieval pits, suggesting that medieval occupation may extend beyond the AAI. It also exposed some late Bronze Age pottery, potentially cinerary ware (pottery formerly containing cremations).



### 3 The evaluation

#### 3.1 Methodology

All archaeological excavation and monitoring during the evaluation was carried out in accordance with the preceding *Method Statement* (MOL Archaeology 2009b), and the *Archaeological Site Manual* (MoLAS 1994).

Two 5m x 5m evaluation trenches were excavated along: one adjacent to the mobile classrooms in the playground to the west of the main school buildings, the other to the east of the entrance off Walter Terrace, south of school buildings.

The trenches were positioned to avoid services illustrated on plans provided by the client, and checked on site with a Cable Avoidance Tool *CATscan*.

The slab/ground was broken out and cleared by contractors under MOLA supervision. Trenches were mechanically excavated by contractors, supervised by MOLA Senior Archaeologists who completed final excavation and cleaning by hand.

The locations of evaluation trenches were recorded by MOLA survey by offsetting from adjacent standing walls also recorded on the *Site and Services Survey*, drawing no. 93930.0001 Rev. B (Kings Land and Architectural Surveyors), which was best fitted to the digital OS 1:1250 map.

A written and drawn record of all archaeological deposits encountered was made in accordance with the principles set out in the MOLA site recording manual (MOLAS 1994). Levels were calculated by topographic levelling from station M7 (trench 1) and 08 (trench 2) on the *Sites and Services Survey*.

The site has produced: 1 trench location plan; 1 trench detail plan with section (same sheet) and two trench record sheets and 11 digital photographs. No finds were recovered from the site.

The site finds and records can be found under the site code SJB09 in the MoL archive.

### 3.2 Results of the evaluation

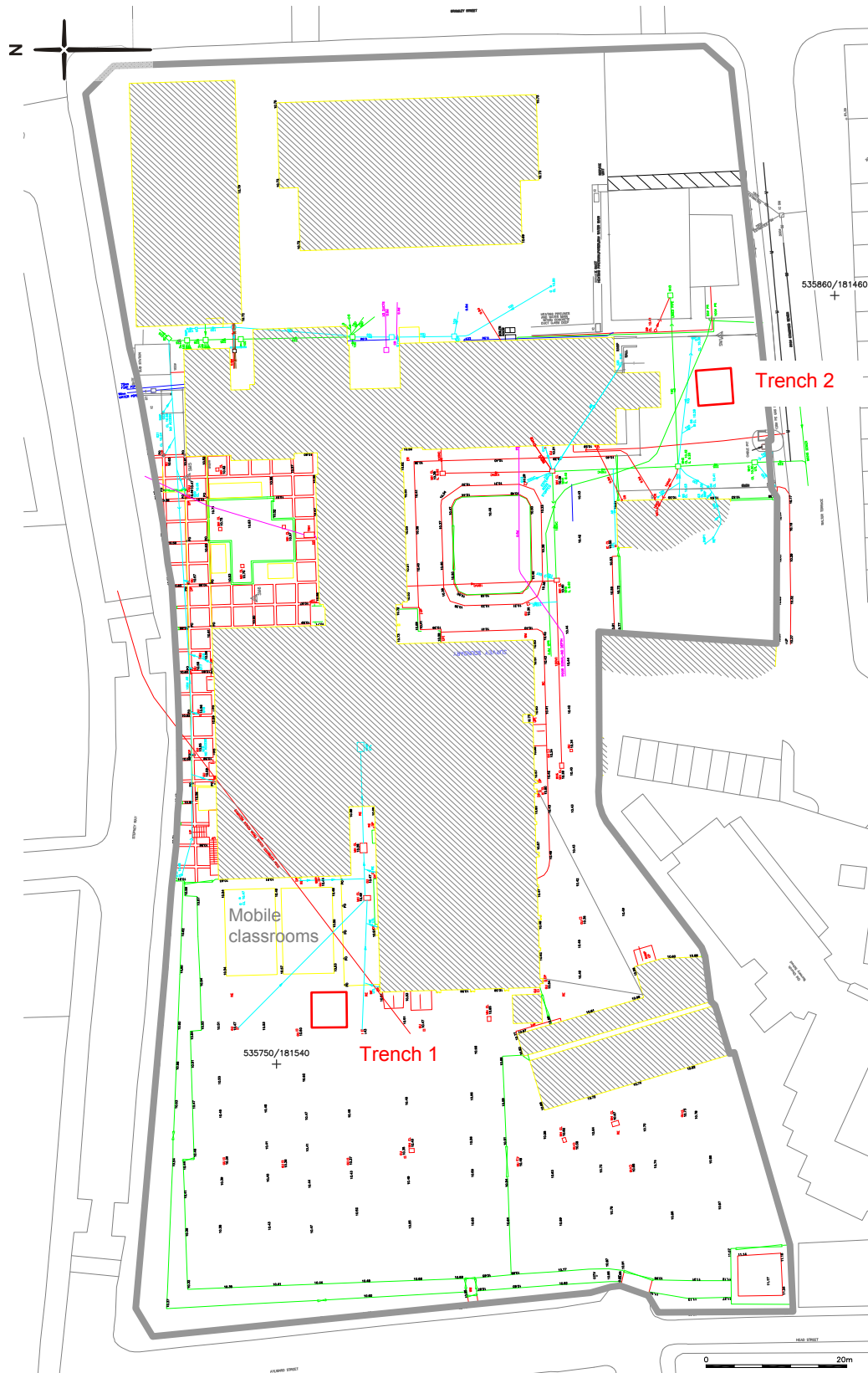
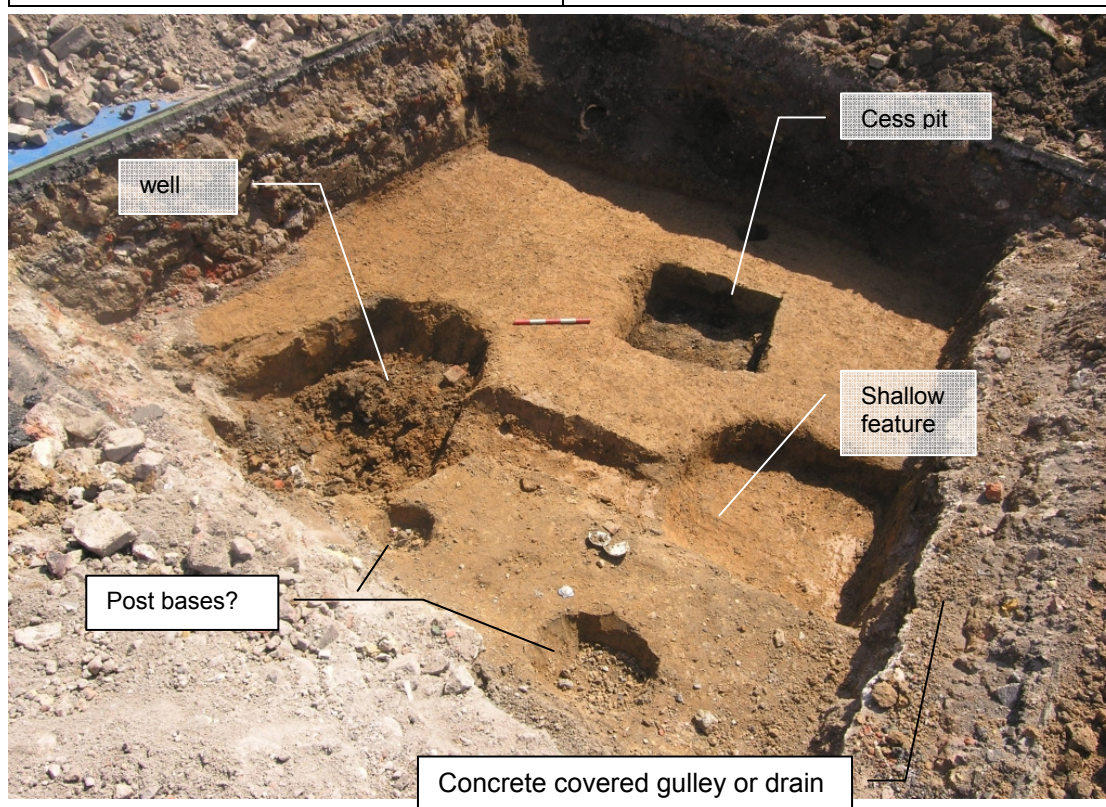


Fig 2 Trench locations

| <i>Evaluation Trench 1</i>                               |  |
|--|--|
| Location   | Adjacent to mobile classrooms in west playground |
| Dimensions   | 5m by 5m by 1m (<1.75m) depth                    |
| Modern ground level                                      | 10.52m – 10.56m OD                               |
| Base of modern fill                                      | 9.85m OD   |
| Depth of archaeological deposits seen                    | 0.4m – 1.4m deep                                 |
| Level of base of deposits observed and/or base of trench | Base of trench 9.48m OD<br>Base of well 8.74m OD |
| Natural observed   | 9.48m OD   |

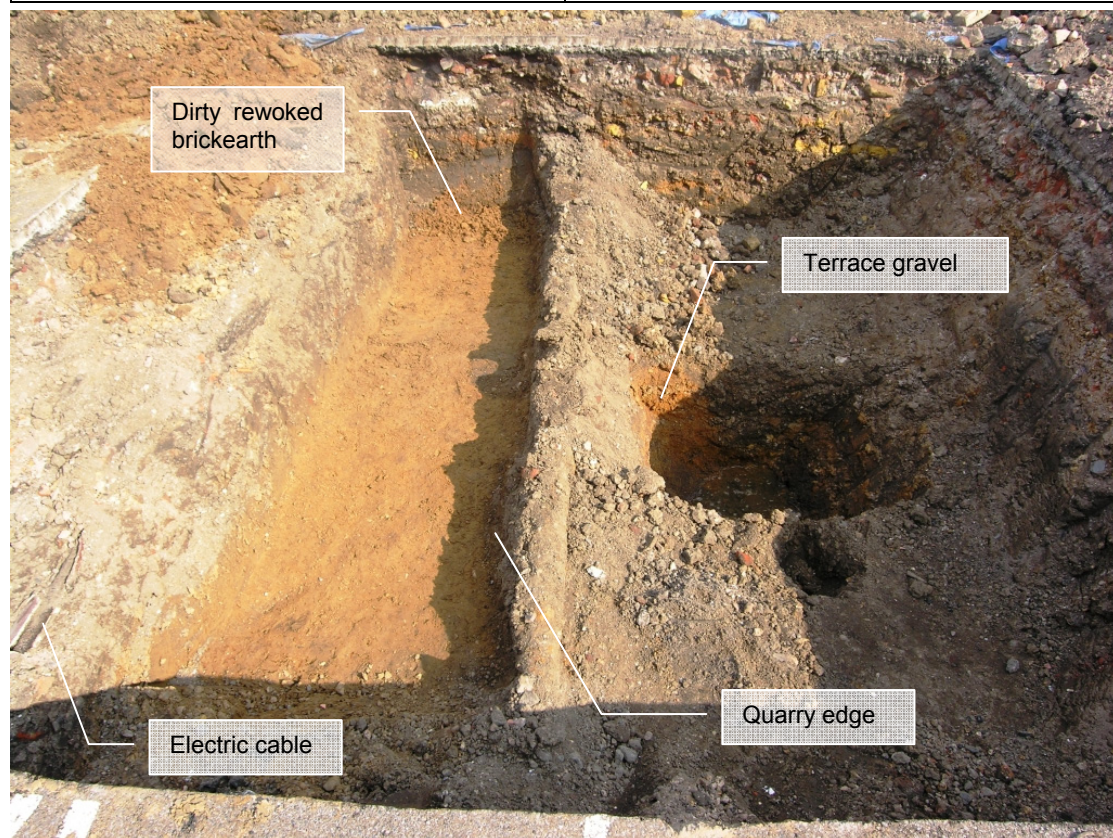


*Fig 3 Trench 1, looking southeast*

Archaeologically sterile natural brickearth was exposed at 9.48m OD. It was cut through by a shallow feature that included a linear element and a larger oval, 1.25m diameter (scale is 0.5m). This was possibly a soakaway. Its fill contained a high proportion of coal ash as well as some transfer-printed “willow pattern” pottery fragments. This dates the backfilling of the feature to the last two decades of the 18th century at the earliest. The east end of this feature was cut through by a 1.5m-diameter brick-lined well. The bricks were unmortared unfrogged soft reds measuring 60mm x 100mm x 220mm and the backfill was similar, though presumably later than, that of the feature marked A. To the south of both of these was a 900mm-square flat-bottomed cess pit, 740mm deep from the level of brickearth. The fill was a dark grey coal-ashy nightsoil with both willow pattern and creamware pottery fragments and was dated to the 19th century by a tobacco pipe bowl (not retained). The size of the cess pit, well and potential cess pit are commensurate with a small scale household. Documentary evidence suggests that this area was built over in the first half of the 19th century and these remains are consistent with that (MOL Archaeology 2009a, 9).

There were also a series of small square features, the bases of various posts which may have been erected over a number of years, all filled with the same grey coal ash fill which also overlaid the brickearth as a ground-raising landfill dump 300mm thick. A concrete-covered drain or gully extended into the trial trench 0.5m along the western edge (aligned N—S), not anticipated on the site survey.

| <i>Evaluation Trench 2</i>                               |  |
|--|--|
| Location   | East of  |
| Dimensions   | 5m by 5m by 1.2m – 2.2m depth  |
| Modern ground level                                      | 10.37m – 10.41m OD   |
| Base of modern fill                                      | 9.3m OD  |
| Depth of archaeological deposits seen                    | 0.4m – 1.4m deep   |
| Level of base of deposits observed and/or base of trench | Base of trench, brickearth, 9.14m OD<br>Base of trench, quarry, 8.10m OD |
| Natural observed   | 9.14m OD   |



*Fig 4 Trench 2, looking north*

Despite the trench being positioned away from areas of known services, and being scanned with a Cable Avoidance Tool, an electric cable was exposed 900mm from the west side of the trench. The CATscan indicated that there was no current flowing but it was treated as live as it may be re-activated. Similarly, in the middle of the trench, was a corroded iron pipe, potentially a water or gas main. It was treated as live and left intact.

Between the services a 1.5m-wide area of natural brickearth was exposed at 9.14m OD, with about 150mm of reworked “dirty” brickearth above it. They had been cut through by a 19th-century quarry which continued sloping down to the east of the cast-iron pipe, to a 8.1m OD on the east side of the trench. Natural Terrace Gravel

was exposed in the sides of the quarry cut at 8.84m OD. The fills of the quarry were mainly brick rubble and nightsoil silts but also included large lenses of coal ash and clinker which are thought to have been from industrial processes and potentially a source of ground contamination. No other remains were observed.

### **3.3 Assessment of the evaluation**

GLAAS guidelines (English Heritage, 1998) require an assessment of the success of the evaluation 'in order to illustrate what level of confidence can be placed on the information which will provide the basis of the mitigation strategy'. In the case of this site. In this case significant sized areas were investigated – compared with the size of proposed new building extensions – and large areas of brickearth exposed. It is reasonable to expect the types and variety of archaeological remains that were potentially present on site to have been exposed by this exercise.

## 4 Archaeological potential

### 4.1 Realisation of original research aims

Within the trenches, the nature and type of archaeological remains was established. Specific questions were answered:

- *What is the evidence for remains relating to the medieval settlement of Stepney extending into the site?*

There were no medieval remains, neither structural remains nor cut features, or residual finds in secondary contexts.

- *What is the nature and level of natural topography?*

Brickearth was exposed at 9.48m – 9.14m OD. Terrace gravels were observed at 8.84m OD in Trench 2.

- *What are the earliest deposits identified?*

The earliest remains of any sort were 19th-century, domestic, small-scale well, cess pit, and possible soakaway.

- *What are the latest deposits identified?*

The 19th-century quarry exposed in Trench 2 is considered likely to be the latest of the remains that were exposed.

### 4.2 General discussion of potential

The evaluation has shown that the site is without a build up of horizontal archaeological stratigraphy and that there are no buried ground surfaces, buried soils, etc. Cut features have been demonstrated to have survived from the 19th centuries. Larger 19th-century quarry backfill may be a source of ground contamination. There was no evidence of bomb damage (cf MOL Archaeology 2009a, 13). The precise area of Trench 2 is to the east side of Walter Terrace and beneath No. 11, a house that appears to have survived the Blitz was standing in 1955 (op. cit. Fig 6). Walter Terrace in those years turned through 90 degree continued in a northerly direction across the later school grounds.

### 4.3 Significance

The archaeological remains exposed in the trial trenches are of local significance – adding detail more significant remains nearby. There is nothing to suggest that they are of regional or national importance.

## 5 Proposed development impact and recommendations

The development proposals comprise the construction of three new blocks, which would form an extension to the main building in the centre of the site (the extensions are proposed to the west, centre, and south of the building). The existing building would be partially remodelled and refurbished.

There were no remains excavated for which the evaluation would indicate preservation *in situ* would be an appropriate mitigation strategy. Nor are there remains that warrant archaeological excavation. The survival of archaeologically sterile natural brickearth does indicate that later activity has not necessarily taken away archaeological remains. There is a theoretical potential for cut features of earlier periods to survive outside of archaeological trenches. The trenches were a considerable proportion of the areas of the proposed extension buildings, however, and could be considered to have provided a sufficient sample to indicate such remains are unlikely in the relatively small area of the proposed extensions.

The decision on the appropriate archaeological response to the remains revealed within the Sir John Cass's Foundation and Red Coats Church of England Secondary School rests with the Local Planning Authority and their designated archaeological advisor.

## 6 Bibliography

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## 7 NMR OASIS archaeological report form

OASIS ID: molas1-64217

### Project details

|  |  |
|--|--|
| Project name                           | SIR JOHN CASS'S FOUNDATION AND RED COAT CHURCH OF ENGLAND SECONDARY SCHOOL, London E1  |
| Short description of the project       | An evaluation comprising two 5m x 5m trenches exposed a 19th-century well and cess pit and similar domestic cut features in the playground west of the school, Trench 1, and a 19th-century brickearth and gravel quarry, backfilled with industrial waste and building rubble east of the Walter Street school entrance, Trench 2. Clean sterile natural brickearth sloped from 9.48m to 9.14m OD between the two trenches, Terrace gravels were at 8.84m OD. |
| Project dates                          | Start: 17-08-2009 End: 21-08-2009  |
| Previous/future work                   | No / Not known   |
| Any associated project reference codes | SJB089 - Sitecode  |
| Type of project                        | Field evaluation   |
| Site status                            | Area of Archaeological Importance (AAI)  |
| Current Land use                       | Other 15 - Other   |
| Monument type                          | WELL Post Medieval   |
| Monument type                          | CESS PIT Post Medieval   |
| Monument type                          | QUARRY Post Medieval   |
| Significant Finds                      | NONE None  |
| Methods & techniques                   | 'Targeted Trenches'  |
| Development type                       | Public building (e.g. school, church, hospital, medical centre, law courts etc.)   |
| Position in the planning process       | Between deposition of an application and determination   |
| Project location                       |  |
| Country                                | England  |
| Site location                          | Greater London Tower Hamlets Stepney Ir John Cass's Foundation And Red Coat Church Of England Secondary School, London E1  |
| Postcode                               | E1 0RH   |

**OASIS ID: molas1-64217 cont'd**

Study area 14856.00 Square metres  
Site coordinates TQ 5358 8153 51.5112836086 0.213447025427 51 30 40 N  
000 12 48 E Point  
Height OD / Depth Min: 9.14m Max: 9.48m  
Project creators  
Name of Organisation MOL Archaeology  
Project brief originator LAARC  
Project design originator MOL Archaeology  
Project director/manager Jo Lyon  
Project supervisor David Sankey  
Type of sponsor/funding body Developer  
Name of sponsor/funding body Bouygues UK  
Project archives  
Physical Archive Exists? No  
Digital Archive recipient LAARC  
Digital Contents 'other'  
Digital Media available 'GIS','Images raster / digital photography','Text'  
Paper Archive recipient LAARC  
Paper Contents 'Stratigraphic'  
Paper Media available 'Notebook - Excavation',' Research',' General Notes','Plan','Section','Unpublished Text'  
Project bibliography  
Publication type Grey literature (unpublished document/manuscript)  
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