



C257 Archaeology Central Fieldwork Report

Archaeological Targeted and General Watching Brief at Finsbury Circus Access Shaft (XRZ10)

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Non technical summary

This report presents the results of a general and targeted watching brief carried out by the Museum of London Archaeology (MOLA) on the site of a temporary access shaft located in the southern part of Finsbury Circus gardens, London EC2, in the City of London. This report was commissioned from MOLA by Crossrail Ltd. This work is being undertaken as part of a wider programme to mitigate the archaeological implications of railway development proposals along the Crossrail route.

In the western part of the shaft, a palaeochannel was exposed, sealed beneath 300mm of apparently natural geology (river terrace sands and gravels). Botanical results from the channel deposit suggest it may have been subject to alteration/exposure during the Roman period, and may have been a tributary of the river Walbrook. This channel has not been previously recorded in the area, and sheds light on the environmental conditions prior to the formation of the post-Roman marsh. Seed assemblages recovered from within the palaeochannel suggest that land close to the channel may have been partially cultivated during this period.

Features cutting into the overlying band of natural sands and gravels included: a Roman quarry pit (recorded during previous fieldwork), and two further shallow Roman pits, both containing comparatively large quantities of pottery, one of which truncated the much larger quarry pit. This suggests that there were at least two phases of Roman land use in the area, the first directed at possible gravel extraction (quarry pitting) followed by relatively shallow cut features possibly for rubbish disposal dating to between AD 70–160.

These features were sealed by marsh deposits, which formed at some point after the 2nd-century AD. These represent a long period of marsh accumulation, probably having formed in the late Roman or immediate post-Roman period. Two distinct environments have been previously identified relating to the marsh formation. The earliest being most recognisable as a marsh was sealed by a potentially redeposited horizon within which a quantity of well-preserved medieval leather was previously excavated. No evidence was found for attempts to drain the marsh, as have been found on nearby sites. Pottery and building materials recovered during previous fieldwork implies that reclamation of the marsh may have started in the medieval period; gaining pace with larger levelling deposits in the 16th century until Finsbury Circus was created as a park in the early 19th century.

A large culvert (dated 1666–1800 by brick types) survived immediately beneath the basement of a Victorian building that occupied the western area of the shaft. The culvert's dimensions suggest it may have been built as a storm drain.

This archaeological fieldwork has demonstrated that a probable tributary of the Walbrook ran across the site, probably during the Roman period, and earlier. Roman activity initially consisted of quarrying, and later probably refuse disposal. However, there was no evidence for the wider variety of human activity (from ditches to burials) seen on surrounding sites. The subsequent inundation of the area caused a marsh to form, although the exact conditions, reasons, and date for its formation are still open to debate. These Moorfields marsh deposits have been recorded widely in this area, as has the overlying 16th-century marshy topsoil, although no evidence was found for later post-medieval drainage ditches, which have been found further north near Finsbury Square. Sometime during the 17th to 19th centuries a large culvert was constructed across the site, of which there appears to be no historical record. The subsequent creation of Finsbury Circus Gardens in the early 19th century represents the latest activity.



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1 Introduction

Crossrail is a new Cross-London Rail Link project which will provide transport routes across the south-east of England and London. The route will link Maidenhead and Heathrow in the west with Shenfield in the north-east and Abbey Wood in the south-east. In central London, from Royal Oak in the west to Pudding Mill Lane and Royal Victoria Dock in the east, Crossrail will consist of a tunnelled section with seven new stations linked to the existing transport network.

The Crossrail Liverpool Street Station is a new underground station proposed on the Crossrail network. The new station will be situated between the existing LU stations at Moorgate and Liverpool Street in the City of London. To build this station, a temporary access shaft is required at Finsbury Circus.

The Crossrail mitigation response to archaeology is described in the Crossrail Generic WSI (Crossrail 2009) and the detailed desk based assessment (DDBA; Crossrail 2008), and can be summarised as follows:

- In the event that intact and important archaeological remains are identified at Crossrail worksites through this process, it may be preferable, where practicable, to preserve these where they are found (ie preservation in situ).
- However, because of the nature of major works projects such as Crossrail, experience of other similar projects suggests that preservation by record is usually the most appropriate method of dealing with archaeological finds.
- Following an extensive Environmental Impact Assessment (EIA) supporting the Crossrail Bill, and the production of site-specific DDBAs, appropriate mitigation measures were scoped and specified in detail in individual project designs (site-specific WSIs – Written Schemes of Investigation) which were prepared in accordance with the principles set out in the Generic WSI, and developed in consultation with the relevant statutory authorities.
- Archaeological information that is gained from fieldwork will be followed by analysis and publication of the results and will be transferred to an approved public receiving body.

This fieldwork report describes the results of an archaeological general and targeted watching brief carried out during the construction of the above-mentioned access shaft in the location of Finsbury Circus gardens by Museum of London Archaeology (MOLA) under Crossrail contract C257 Archaeology Central

The overall Finsbury Circus site lies within the City of London, and is bounded by the outer edge of the roadway of Finsbury Circus (Figure 1). Note that both the roadway and the gardens within it are called Finsbury Circus.

The shaft was located in the southern area of Finsbury Circus gardens. The centre of the site is at Ordnance Survey National Grid Reference 532867 181592.

All levels in this document are quoted in metres Above Tunnel Datum (m ATD). To convert Tunnel Datum to Ordnance Datum subtract 100m, ie 1m OD = 101m ATD.

All fieldwork was conducted between 09/11/11 and 15/11/11, and supervised by Sam Pfizenmaier (MOLA Supervisor).



Table 1 Site Details

Task	Principal Contractor	Programme
<ul style="list-style-type: none"> Temporary Access Shaft at Finsbury Circus (Mitigation) – General and Targeted Watching Brief 	C510 BBMV joint venture	9th November 2011– 15th November 2011

The event code (sitecode) is XSP10.

2 Planning background

The overall framework within which archaeological work will be undertaken is set out in the Environmental Minimum Requirements (EMR) for Crossrail (<http://www.crossrail.co.uk/railway/getting-approval/environmental-minimum-requirements-including-crossrail-construction-code>) The requirements being progressed follow the principles of Planning Policy Guidance Note 16 (PPG16)(DoE, 1990), and its replacements Planning Policy Statement 5 (PPS5)(DCLG, 2010) and the National Policy Planning Framework (NPPF)(DCLG, 2012), on archaeology and planning. Accordingly the nominated undertaker or any contractors will be required to implement certain control measures in relation to archaeology before construction work begins.

Schedules 9, 10 and 15 of the Crossrail Bill (2008) concern matters relating to archaeology and the built heritage and allows the dis-application by Crossrail of various planning and legislative provisions including those related to listed building status, conservation areas and scheduled ancient monuments (Schedule 9). Schedule 10 allows certain rights of entry to English Heritage given that Schedule 9 effectively dis-applied their existing rights to the Crossrail project, and Schedule 15 allows Crossrail to bypass any ecclesiastical or other existing legislation relating to burial grounds. ;|

Notwithstanding these disapplications, it is intended that agreements setting out the detail of the works and requiring relevant consultations and approvals of detail and of mitigation arrangements will be entered into by the nominated undertaker with the relevant local planning authorities and English Heritage in relation to listed buildings and with the Department of Culture, Media and Sport (DCMS) and English Heritage in relation to Scheduled Ancient Monuments (SAMs).

3 Origin and scope of the report

This report has been commissioned from Museum of London Archaeology (MOLA) by Crossrail Ltd. The report has been prepared within the terms of the relevant standard specified by the Institute for Archaeologists (IFA, 2001). It considers the significance of the fieldwork results (in local, regional or national terms) and makes appropriate recommendations for any further action, commensurate with the results.



4 Previous work relevant to archaeology of site

The principal previous Crossrail studies are as follows:

- Crossrail, February 2005a *Environmental Statement*
- Crossrail, February 2005b *Assessment of Archaeology Impacts, Technical Report. Part 2 of 6, Central Route Section, 1E0318-C1E00-00001, [Specialist Technical Report (STR)]*
- Crossrail [Mott MacDonald], 2008 *MDC – Work Package 3, Archaeology Detailed Desk Based Assessment, Liverpool Street Station*, Document Number: CR-SD-LIV-EN-SR-00001 v1 21.04.08 [DDBA]
- Crossrail, April 2010 *Liverpool Street Station, Site-specific Written Scheme of Investigation*, Doc. No. C138-MMD-T1-RST-C101-00001, Revision 4.0 [WSI]
- Crossrail, June 2011 *Liverpool Street Station, Addendum to WSI: General & Targeted Watching Brief. Finsbury Circus (XRZ10), doc. no. C138-MMD-T1-RST-C101-00006, Revision 5.0, 29/06/11 [Addendum]*
- MOLA, April 2012, *C257 Archaeology Central, Fieldwork report, Evaluation and Watching Briefs Finsbury Circus Shaft (XRZ10) Doc. No: C257-MLA-X-RGN-CRG03-50012 v2*

All on-site archaeological work was carried out in accordance with the following documents:

- The WSI (see above)
- *A Method statement for an Archaeological targeted and general Watching brief at Finsbury Circus Access Shaft*, Doc. No. C257-MLA-X-GMS-C101_WS101-50001 Version 2 14.09.11, developed between MOLA and the principal contractors.

The above cited reports are all available from the London Archaeological Archive and research Centre (LAARC).



5 Geology and topography of site

The site sits within the ancient flood plain of the River Thames; consequently the topography of the surrounding area is generally from north-south. Tributaries of the river Walbrook (a tributary of the Thames that formed a broad, shallow valley that originally flowed to the east of the site) may effect surviving levels of natural strata in the area. The evaluation demonstrated that Taplow Terrace gravels at the shaft site lie at c 108.6m ATD. They are one of the youngest and lowest of the Thames river terrace remnants, deposited between 130,000 to 190,000 years ago during ice-age conditions when the flow of the Thames was considerably stronger than it is today. Generally fine with mixed inclusions of sand and silt they are commonly overlaid by brickearth (Langley Silt complex – a fine loam, named from its former use in brick-making), as recorded nearby in Riverplate House, 7–11 Finsbury Circus (RIV87) and 12–15 Finsbury Circus (FIB88). However, they were not recorded during the evaluation at Finsbury Circus (MOLA 2012b, 8.2 & 11.1), and may have been truncated by Roman quarrying and/or the formation of the post-Roman Moorfields Marsh. The archaeological potential of the terrace Gravel deposits is considered to be very low.

5.1 Archaeological and Historical Background

Tributaries of the river Walbrook are known to have flowed to the north and east of the site, as recorded at 6 Broad Street Place (BDC03) and (FIB88). Channels associated with its management and drainage have also been identified to the north and east of the site at 18–31 Eldon Street (ELD88) and, most recently the Crossrail Broadgate Ticket Hall site (MOLA 2012a). Extensive Roman remains have been recorded on surrounding sites, including, (but not limited to), an E-W aligned road (FIB88, ELD88), inhumations (RIV87, FIB88, ELD88 & BDC03) as well as a variety of negative features (drainage ditches and pits) The evaluation uncovered pits and ditches (1st to 2nd-century AD) between 108.7m ATD and 107.9m ATD, including quarry pits, similar to those found at Eldon Street (ELD88).

The Moorfields Marsh formed sometime during, or after, the late 2nd or early 3rd centuries AD, possibly as a result of the silting-up of drainage channels in the area with rubbish and the creation of a Roman road (BDC03) that would also have adversely affected drainage. The marsh remains were recorded in the evaluation (MOLA 2012b, 8.2 & 11.3) between 108.89m ATD and 109.64m ATD. The lowest brown fibrous organic deposit was probably formed sometime after the 2nd century AD.

The evaluation demonstrated that this was overlain by a buried marshy topsoil, which contained a variety of finds dating from the late medieval to the early 16th century. Sixteenth- to seventeenth-century reclamation/landfill dumps were identified between c 110.5 and 112m ATD (similar to those found at FIB88), representing a period when the site fell within the open Moor Field or Moorfields, following reclamation of the marsh. This period is well documented in historic maps from the Fifteenth century (Agas 1562) to the development and construction of Finsbury Circus gardens, laid out in 1815–17.

The 19th-century basement of a pavilion of brick construction survives in the western area of the access shaft truncating to 2m below ground level.



6 Research objectives and aims

6.1 Objectives of the fieldwork

The objectives of the archaeological investigations, as stated in the Addendum to the WSI (Crossrail 2011), is set out below:

- Mitigation in the form of general and targeted archaeological watching brief to excavate and record archaeological deposits for analysis and dissemination.

The following objectives have been devised by MOLA to guide the fieldwork:

- What is the nature, *and in particular the date*, of the Roman activity on the site, how does it compare with that in the surrounding area ? Is this related to any variations the levels of the natural geology ?
- Are any Roman burials present ?
- At what date, and by under which environmental conditions, did the Moorfields Marsh develop ?

This has mostly been addressed by geoarchaeological recording and sampling during the evaluation, but if marsh deposits are present above natural geology or features differing from those seen in evaluation, further work may be required to record and sample any variations.

- What evidence is there for activities in the area of the marsh, or in the surrounding area, represented by dumping of refuse in/on it ?
- How, and when, was the marsh reclaimed, eg by drainage (ditches etc) and dumping (land raising and consolidation) ?
- Is there any evidence for activities carried out in the Moorfields following reclamation of the marsh ?
- Is there any evidence for the layout of Finsbury Circus gardens in the early 19th century ?

6.2 Research Aims

The original overall aims and objectives were listed in the Liverpool Street WSI (Crossrail 2009). Evidence relating to the Walbrook, its tributaries and Moorfields Marsh deposits may provide data relevant to the following themes:

- Understanding London's hydrology, river systems and tributaries and the relationship between rivers and floodplains;
- Understanding how water supply and drainage provision were installed and managed;
- Refining our understanding of the chronology and function of the landward and riverside defences and extramural evidence of defensive or military structures in the Roman period;



- Understanding the relationships between urban settlements and royal villas or religious estates;
- Examining the proposal that there was an ideological polarity between town and anti-town systems: Roman towns did not so much fail as were discarded;
- The end of the Roman occupation: developing explanatory models to explain socio-political change and considering the influence of surviving Roman structures on Saxon development; and
- Examining the use in any one period of materials from an earlier period (eg Saxon use of surviving Roman fabric) and the influence on craftsmanship, manufacture and building techniques.
- Understanding the differences, if any, between burial practices in the city and outlying cemeteries;
- Understanding life expectancy, origins and belief, seen through studying health, diet and disease, and preparing models for future research;
- Considering the relationship between cemeteries and major or minor roads, in terms of symbolism, status, privacy and convenience; and
- Understanding the cultural and symbolic roles played by London's defences through the ages as reflections of power and political security or imposition and dominance.

Furthermore, the potential at Finsbury Circus for geo-archaeological and palaeoenvironmental deposits to be recovered will contribute to the following themes:

- The development of models for understanding the significance of geomorphology, ecology, ecosystems and climate, hydrology, and vegetational and faunal development, on human lives;
- Characterising changing climatic conditions, and air and water quality and pollution, throughout the archaeological record, towards understanding its implications for how people behaved;
- The Mesolithic/Neolithic transition: understanding the significance of horticultural experimentation at this time, and the transition from hunter-gatherers into farmers; and
- Understanding what London's past environments meant to different groups and individuals.



7 Methodology of site-based and off-site work

All archaeological excavation and recording during the targeted watching brief was carried out in accordance with:

- Crossrail WSI (Doc No. CR-SD-LIV-EN-SY-00001, 2010)
- Crossrail WSI Addendum (Doc No. C138-MMD-T1-RST-M123_C101-00006, v5, 2011)
- Museum of London *Archaeological Site Manual* (MoL 1994)
- English Heritage Greater London Archaeology Advisory Service, June 1998 *Archaeological Guidance Papers 1–5*
- English Heritage Greater London Archaeology Advisory Service, May 1999 *Archaeological Guidance Papers 6*
- English Heritage Greater London Archaeology Advisory Service, 2009 *Archaeological Guidance Papers 1–5 (consultation draft)* [1. Desk-Based Assessments, 2. Written Schemes of Investigation, 3. Fieldwork, 4. Reporting, dissemination and publication, 5. Popular dissemination and communication of archaeology]
- Method statement, Archaeological targeted and general Watching brief at Finsbury Circus Access Shaft, Doc. No. C257-MLA-X-GMS-C101_WS101-50001 Version 2 14.09.11

The site finds and records can be found under the site code XSF10 in the MOLA archive. They will be stored there pending a future decision over the longer-term archive deposition and public access process for the wider Crossrail scheme.



8 General/Targeted watching briefs and sampling Methodology

The initial phase of ground reduction was carried out by the C510 Principal Contractor (BBMV joint venture) from ground level to 109.55m ATD, by machine, removing any underlying modern overburden down to the first significant archaeological horizon, using a mechanical excavator fitted with a flat-bladed ditching bucket. This was monitored by C257 MOLA under general watching brief conditions. Immediately beneath the basement of the Victorian cellar (recently a wine bar) survived a 19th-century culvert (Photo 5), this was recorded by MOLA. This depth covers the 18th-century and later land-raising dumps, including landscaping for the 19th-century gardens, and the modern overburden (modern made ground).

The targeted watching brief commenced from 109.55m, where the upper marsh deposit was encountered. At this time, access to the shaft was by manrider (a cage lifted into the shaft by machine see Photo 1 below). Due to the nature and size of the shaft, monitoring was complicated by the need for a skip as well as 8 tonne digger at the base. Deposits were removed in spits of c 200mm, until a depth was achieved that allowed for the installation of a 1.2m concrete ring segment.

The bulk of the marsh sequence was previously recorded and sampled in the evaluation. Although the marsh overlay natural geology, differing from the evaluation, there was no difference in composition to warrant further sampling (Table 2).

Approximately 10m² of stratigraphy in the southern area of the shaft was accidentally machined to natural geology by the Principal Contractor. The eastern 5m² of which corresponded with the southern area of the evaluation trench, in which Roman cut features were known to survive. A large (quarry) pit recorded in the evaluation was uncovered and fully excavated. In the northern part of the shaft, two cut features were fully excavated and recorded by MOLA, one of which required sampling due to the organic nature of the fill.

Alluvial deposits associated with the palaeochannel uncovered in the western part of the shaft were exposed by excavating a geoarchaeological sondage measuring 4m by 1.5m, allowing for the section to be fully recorded and sampled (through standard bulk samples 40 litres in size, and monolith tins) by a MOLA geoarchaeologist.

A written, drawn and photographic record of all archaeological deposits encountered was made in accordance with the principles set out in the Museum of London site recording manual (MoL 1994).

Archaeological features were planned off a base line aligned north–south, and recorded in section drawings, which were located by the Principal Contractor utilising Crossrail London Survey Grid control stations. These were then supplied to MOLA.



Photo 1 Access to the shaft was via a manrider cage.

9 Results and observations including stratigraphic report and quantitative report

9.1 Access Shaft



Photo 2, general watching brief, machine excavating post-medieval dumps at 3m below ground level, looking south.

Temporary Access Shaft	
Location	Finsbury Circus gardens, southern side.
Dimensions	13m diameter circle (132.7m ²)
OS National grid coordinates	532867 181592
LSG grid coordinates	83216 36281
Modern Ground Level/top of the slab	113.70m ATD
Modern subsurface deposits	19th-century basement truncated to 111.75m ATD in the south-west of the shaft. To the east the backfilled evaluation trench truncated to 108.48m ATD.
Level of base of archaeological deposits observed and/or base of trench	Base of quarry pit [19] cuts natural to 107.95m ATD
Natural observed not truncated	Mixed terrace gravels at 108.87m ATD



Extent of modern truncation	19th-century basement truncates to 1.95m bGL and the backfilled evaluation trench to 5.20m bGL
Archaeological remains	Dating Evidence, Finds, and Samples
Contexts [29]–[33] Holocene channel and related deposits between 108.75–108.05m ATD. [34] Taplow river terrace gravels.	Monolith sample [29]–[33] {10} Bulk sample [32] {11} Bulk sample [31] {12} Bulk sample [30] {13} Bulk sample [29] {14} & {15}
Fills [39] & [40], both sterile of large pit [41] cutting natural between 108.73 and 107.95m ATD. Truncated by [36]	No Finds
Pit fill [35] and cut [36] overlain by [38] and truncating [39] and natural between 108.79 and 108.42m ATD. Homogenous silty clay, occasional animal bone and charcoal.	[35]: pot Roman AD 70–160
Pit cut [28] Photo 3, truncating natural gravels between 108.73 and 108.49m ATD. Primary fill [27] very sterile with silty gravel. Secondary fill [26] contained charcoal and frequent oyster shells. Overlain by lower marsh deposit [38].	[26]: pot Roman AD 120–160 Bulk sample [26] {9}
[38] Lower marsh deposit. Dark brown humic silt, rooting to top. Diffuse horizon with [46], upper marsh deposit. Similar, dark blackish brown peat, less organic.	[38]: pot (residual Roman) AD 120–200, 1 small bag of leather dated 1500–1530/40.
[43], [44] & [45] post-medieval dumps between 113.15 and 109.55m ATD.	None
[37] Brick culvert aligned north-east–south-west. Between 111.75 and 109.85m ATD. 1.02m wide, cut [42]	[37]: 4 x bricks 1666–1800
Interpretation and summary	
Contexts [29–33] are deposits associated with a stream or river channel, covering the western area of the shaft footprint (approx 30m ²). The relatively shallow survival of these deposits (0.7m) suggests that they may have been horizontally truncated by Roman activity (possibly quarry pitting). These deposits are tentatively identified as Roman in date due to inclusions of cultivated plant remains and a single grape pip. The channel edges were not visible within the shaft footprint and there was no direct evidence of human activity. Only limited organic material survived within context [31]. This sequence was overlain by a 300mm band of terrace gravel [34] between 109.04 and 108.75m ATD. Cut feature [41], with sterile fills [39] & [40] represents the earliest phase of human	

occupation. This corresponds to the quarry pit [19] (Photo 4) recorded during the evaluation phase of fieldwork. Significantly this is overlain and truncated by [36], in which quantities of unabraded Roman pottery (dated AD 70–160) were recovered. Therefore [41] is stratigraphically likely to have been Roman or earlier in date.

Slightly to the west, visible in the south-facing section was a second pit [28] (Photo 3, the secondary fill of which contained a comparatively large quantity of Roman pottery dated AD 120–160, comprising black-burnished style ware (BBS) and Verulamium region white ware (VRW)(see 18.1).and appearing similar to those found in [36]. A wide range of aquatic and wetland plants, as well as stem or root epidermis and seeds (see 18.5 botany) were recovered from this secondary fill, which could have come from harvested marsh or riverside plants used as flooring or stable litter. These are consistent with a dump or rubbish deposit.

The earliest fill [27] was sterile and similar to the primary fill of [41] located immediately to the south-east. The secondary more organic fill [26] was consistent with a rubbish dump. This suggests that the pit may have been open, and naturally backfilled, prior to backfilling with rubbish during the second century AD.

Overlying these features lay the Moorfields Marsh deposit (contexts [46] & [38]), which has been previously recorded and summarised in the evaluation report (MOLA 2012b, 8.2 & 11.3). The base of a residually deposited Roman stamped central Gaulish samian cup dating AD 120–200 (likely to be a die of the potter Paterclinus) was recovered during the general watching brief phase of fieldwork from within [38], along with three pieces of leather (see 18.2 leather).The front section of a sole dated 1500–1530/40, corresponding to a style associated with the king Henry VIII and his courtiers and part of a round-toed vamp also dated to the early to mid 16th century. A form of raised overshoe (patten) with a multi-part stacked leather sole widely used in the late 15th and early to mid 16th century, with two rows of horizontal stitch-holes around its margins was also recovered.

Post-medieval dump and levelling deposits, again previously recorded during the evaluation, and of limited significance, filled the remainder of the shaft footprint up to 111.75m ATD. A substantial culvert [37] (Photo 5) aligned north-east–south-west survived immediately below the Victorian brick basement (former wine bar) between 1.95 and 2.85m beneath ground level. The culvert stood almost 2m high; and would have been easily accessible by foot. The structure was not truncated, and survived in good condition. Brick samples indicated it was probably constructed between 1666 and 1800, with at least two types of brick, the oldest dating to the 16th-century, and certainly reused, as one brick showed signs of weathering, and another evidence of exposure to heat post-firing.



Photo 3, pit cut [28] visible in section, sealed by Moorfields marsh deposits [38], looking north.



Photo 4, Pit cut [19], taken during the evaluation (same as [41]), as previously excavated. Pit cut [28] truncated [41] immediately beyond the visible northern trench edge, looking north.



Photo 5, culvert [37] tentatively dated 1666–1800 by brick types, looking north.

10 Assessment of results against original research aims

The draft revised GLAAS guidelines (English Heritage, 2009) require an Assessment of results against original expectations (these no longer mention the criteria for assessing national importance).

Likewise City of London guidance (CoL 2004) sets out advice for work carried out in London, including an assessment of results against original (assessment against the above criteria are only required evaluations).

10.1 Original research aims

The original research objectives were met as follows, information was recovered on:

- *What is the nature, and in particular the date, of the Roman activity on the site, how does it compare with that in the surrounding area? Is this related to any variations the levels of the natural geology?*

The Roman activity represents two phases of activity, gravel quarrying followed by what appears to be rubbish disposal. Environmental evidence for the palaeochannel suggests crop processing in the area, which may also be of Roman, but could be earlier. This differs from some of the surrounding sites, which will require analysis, including whether differences in Roman ground levels may have resulted in the formation of the Moorfields Marsh affecting activity differently on different sites.

Assemblages of Roman pot were recovered dating from AD 70–160 from separate stratified deposits. These dates are consistent with those from surrounding sites, and help to build a wider view of the early Roman Landscape in this extra-mural area.

- *At what date, and by under which environmental conditions, did the Moorfields Marsh develop?*

The Roman deposits preceding the marsh were of 1st to 2nd-century date, which could suggest that it formed in the 3rd century. However, it is possible that later Roman horizons had been truncated or modified by marsh formation processes. This question will require analysis of the results of both the evaluation and mitigation work, and comparison with similar results from sites and boreholes monitored in the surrounding area.

- *What evidence is there for activities in the area of the marsh, or in the surrounding area, represented by dumping of refuse in/on it?*

No evidence was found.

- *How, and when, was the marsh reclaimed, e.g. by drainage (ditches etc) and dumping (land raising and consolidation)?*

No evidence for medieval and post-medieval reclamation attempts was uncovered.



- *Is there any evidence for activities carried out in the Moorfields area following reclamation of the marsh?*

There was no significant evidence for activity in the period following reclamation (but see 10.2).

- *Is there any evidence for the layout of Finsbury Circus gardens in the early 19th century?*

No evidence was present.

10.2 Additional research themes

The following new themes have been identified from the fieldwork results:

- *The nature and date of a probable tributary of the Walbrook in the Iron Age and/or Roman period, and how it fits into the overall topography of the Walbrook system.*
- *The large 17th or 18th-century culvert/drain, which might be associated with the second Bedlam Hospital at the southern edge of the Moorfields.*

These will be explored and defined further in post-excavation assessment.



11 Statement of potential archaeology

The following potentials will be assessed in greater detail during post-excavation assessment (see 13).

The results from the targeted watching brief have potential for study of the following:

- The prehistoric/Roman Walbrook stream system, with indications of the surrounding environment and Iron Age or Roman crop-processing
- Two phases of Roman extra-mural activity, quarrying and refuse disposal, potentially alongside the stream channel
- The late or post-Roman Moorfields Marsh (recorded and sampled more extensively in the evaluation)
- Post-medieval reclamation of the area from marshland (with the evaluation results), and the later culvert/drain

11.1 Importance of Resources

The importance of the excavated remains has been assessed using professional judgement, informed, where applicable, by the criteria for assessing the national importance of monuments (DCMS 2010, Annex 1).

The early channel deposit has not been previously recorded, and potentially can shed light on the prehistoric conditions in the area prior to human occupation, as well as contributing to reconstruction of the later prehistoric/Roman Walbrook tributaries. The three Roman features, representing two phases of quarrying followed by probable refuse disposal, are inherently of only limited importance, but can contribute to our knowledge of activities in this extra-mural area before the spread of the marsh, and can be compared, and contrasted with that seen in Crossrail fieldwork at Broadgate Ticket hall, Moorgate, and Blomfield Street, as well as a large number of previous archaeological sites in the area, in particular 12–15 Finsbury circus (sitecode FIB88), Eldon Street (ENS03), New Broad Street (NEB87) and Riverplate House (RIV87). This will help to characterise the varied activities being conducted in the area, and how they changed through the Roman period.

The records of the Moorfields Marsh support the more detailed recording and sampling conducted during the evaluation (MOLA 2012b, 8.2 and 18.6 to 18.7). The 18th-century culvert is of typical form and materials and although apparently unknown to the utility companies, belongs to a well-documented period. However if an association can be made with the second Bedlam Hospital established to the East then this could be regarded as of low-moderate importance.

These remains have limited rarity and diversity, moderate supporting documentation (including historical accounts of the Moorfields Marsh), group value with results from the surrounding area, and potential to contribute to study of the Walbrook tributaries, Roman extra-mural activities, and the Moorfields Marsh and its reclamation.

They are therefore assessed as being of **low to moderate importance**.



12 Conclusions

12.1 Geology

The drift geology consists of Pleistocene river terrace gravels (Hackney Sands and Gravels) which was exposed at a maximum depth of 107.95m ATD at the base of quarry pit cut [41] in the eastern area of the shaft. To the west the sequence changed (see 18.4 Geoarchaeology) for in depth analysis, and Figure 4. Overlying the gravels was a thin (c. 0.02m) band, that may be the basal deposits of a channel. These were overlain by a layer of silty clay deposited in slack or slow flowing fresh water conditions. This deposit is sealed by a c. 0.2m thick layer of slightly gravelly blue grey silty clay. This unit may be a similar unit to the silty clay below but was disturbed and eroded as channel flow once again increased in this area, or it may have been a colluvial deposit which has slumped into the channel. These deposits are sealed by the final fluvial unit of a c. 0.2 to 0.4m thick band of light to mid grey sand and gravel. After the period of slack or slow flowing water suggested by the fine grained clays and silts the water energy increased again and a channel bar of gravel appears to have formed over these deposits.

12.2 Roman remains

Environmental samples from the channel deposits yielded few aquatic plant remains, and the seed assemblages seem to have derived mainly from areas of grassy and disturbed ground close to the channel. Remains of grassland plants were particularly common, along with disturbed ground species, and indicate the nature of the vegetation on higher ground close to the channel. The single grape pip found within [31] could be intrusive, a result of bioturbation caused by earthworms. However, spelt wheat (*Triticum spelta*) from cultivated cereals or crop processing were found in the overlying deposit [29] (see 18.5 botany), suggesting that this later layer is likely to date from the Roman period, and possibly the entire sequence as well.

Three features were recorded cutting the terrace gravels, between 107.95m ATD and 108.73m ATD. The largest [41] (same as [19]) was identified as a quarry pit during previous excavation; a small quantity of abraded ceramic building material (identified as Roman) was recovered from within it. This can now with greater confidence be dated to the Roman period, as it is cut by [36], a Roman pit dated AD 70–160. Therefore it is likely to have been constructed in the late 1st or 2nd century AD.

The two features identified along the northern edge of the trench yielded quantities of unabraded Roman pottery suggesting they had been deposited in situ, and are dated by ceramics to AD 120–160 [26] and AD 70–160 [35]. The larger pit [28] (Photo 3) had two distinct fills. The earliest [27] was sterile and slight sorting of the gravels suggests it may have been naturally backfilled (e.g. left open, and the sides gradually eroded). It is possible that pit cut [28] was originally created at the same time as [41], and may have also been used for gravel extraction. The secondary fill [26] was similar to [35], the fill of pit [36], both were organic, with inclusions consistent with rubbish deposits. The isolation of these features along with the similarities in their fills suggests that they may have been backfilled at approximately the same time. This also supports the evaluation results which pointed to two distinct phases of (Roman) activity in the area.



All three of these features survived to depths of only c 0.3–0.5m which is too shallow for quarry or refuse pits. This may suggest truncation prior to formation of the marsh, or possibly as a result of flooding and the marsh formation processes. It may be significant that no dating evidence was found from the 3rd or 4th centuries AD, implying that either the marsh was formed prior to or during the 3rd century, or that the formation process of the marsh truncated and archaeology from this period.

Compared to surrounding sites in Finsbury Circus (RIV87, FIB88) there was surprisingly little Roman stratigraphy. No evidence for the variety of burials and cremations found at FIB88 or the alluvial activity at RIV87. Whilst this may be a result of extensive quarry pitting and/or land reclamation, it is possible that due to the sites location on the periphery of the city, and away from known communication routes (eg roads) it was simply comparatively underdeveloped.

Five Roman sherds dated to the first century AD were found in Package 29 borehole L32 in Finsbury Circus (MOLA for Mott Macdonald/Crossrail 2011, p), which lay approximately 5m to the north-east of the shaft and XRZ10 pit [28]. Whilst this is probably from a different feature, it tentatively suggests an earlier date for the start of Roman activity in this locality than seen in the mitigation fieldwork.

12.3 Medieval remains

The overlying Moorfields Marsh deposits (contexts [38] and [46]) varied little across the shaft base and have been previously described and sampled (Evaluation Fieldwork report C257-MLA-X-RGN-CRG03-50012).

The Moorfields Marsh deposits extended down to c 3.6m beneath current street level, and had formed at some point after the 2nd century AD. They represent a long period of marsh accumulation, with the brown fibrous organic material towards the bottom of the sequence probably having formed in the late Roman or immediate post-Roman period.

12.4 Post-medieval remains

Early post-medieval leather (dated to c 1500–1530/40) was retrieved from context [38] (18.2 leather), and was fashioned in a style similar to one associated with the king Henry VIII and his courtiers and first seen in England c 1500. This context corresponds to [15] in the evaluation phase of fieldwork and is probably one of a sequence representing a long period of marsh accumulation.

The post-medieval deposits [43]–[45] overlying the marsh recorded during the general watching brief are reclamation/landfill dumps, and correspond with contexts [10]–[13] recorded during the evaluation. Of significance was a large culvert [37] (Photo 5), probably constructed sometime between 1666–1800 aligned north-east–south-west between 111.75 and 109.85m ATD. This survived immediately underneath the basement of the 19th-century building which recently occupied the site. The dimensions of this culvert suggest it may have been built as a storm drain; there are no modern records of corresponding sewers in this vicinity. If this was associated with nearby occupation, the second Bedlam Hospital (1676 to 1815) was the only structure within Moorfields in the late 17th or 18th centuries.



13 Post-excavation assessment, analysis, publication and dissemination proposals

The targeted watching brief results will initially be disseminated via this report. The supporting site archive of finds and records (including digital data), post-excavation assessment, analysis and publication proposals will be considered in relation to later fieldwork in the wider context of archaeological potential and results across the Crossrail scheme.

A summary report will be published in the London Archaeologist excavation round up and also deposited with the LAARC.

14 Archive deposition

The site archive containing original records and finds will be stored temporarily with MOLA pending a future decision over the longer-term archive deposition and public access process for the wider Crossrail project.



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16 Acknowledgements

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The targeted watching brief was supervised by the author. Other MOLA staff involved included Jason Stewart and Matt Ginnever (archaeologists), Gideon Simons (geomatics), Virgil Yendell (geoarchaeology), Ian M Betts (building material) and Amy Thorp (pottery). The fieldwork was managed by MOLA Assistant Contracts Manager Nicholas Elsdon and Contracts Manager Elaine Eastbury.



17 NMR OASIS archaeological report form

17.1 OASIS ID: molas1-116417

Project details

Project name	Crossrail Targeted and General Watching Brief at Finsbury Circus Access Shaft
Short description of the project	Combined general and targeted watching briefs were carried out at the site of Crossrail Finsbury Circus Shaft by the Museum of London Archaeology (MOLA). Natural Gravels and sand were truncated to a maximum depth of 7.95m OD. A channel exposed in the western area of the shaft footprint may have been the route of the Early Holocene Walbrook River. Medieval marsh deposits sealed Roman cut features at 8.73m OD. These included two [rubbish] pits dated to the second century AD. Post-medieval dumps relating to the reclamation of land overlying Moorfields Marsh were recorded at a maximum depth of 9.86m OD. A robust, well preserved NE-SW aligned culvert dated 1666-1800 was also recorded immediately beneath the foundations of a recently demolished Victorian building. 19th-century and later garden soil horizons associated with the sites current use as a park/gardens filled the shaft to ground level.
Project dates	Start: 09-11-2011 End: 15-11-2011
Previous/future work	Yes / No
Any associated project reference codes	molas1-98482 - OASIS form ID
Type of project	Field evaluation
Site status	Environmentally Sensitive Area (ESA)
Current Land use	Woodland 6 - Parkland
Monument type	RIVER CHANNEL Uncertain
Monument type	PIT Roman
Significant Finds	POT Roman
Significant Finds	LEATHER Medieval
Methods & techniques	'Targeted Trenches'
Development type	Rail links/railway-related infrastructure (including Channel Tunnel)
Prompt	Crossrail act



Position in the planning process After full determination (eg. As a condition)

Project location

Country England

Site location GREATER LONDON CITY OF LONDON CITY OF LONDON Crossrail Central Targeted and General Watching Brief at Finsbury Circus Access Shaft

Postcode EC2

Study area 100.00 Square metres

Site coordinates 8325.95 36280.74 8325 57 00 N 36280 44 24 E Point

Height OD / Depth Min: 7.95m Max: 8.73m

Project creators

Name of Organisation MoL Archaeology

Project brief originator Crossrail

Project design originator Crossrail

Project director/manager Elaine Eastbury

Project supervisor Sam Pfizenmaier

Type of sponsor/funding body Crossrail Ltd

Name of sponsor/funding body Crossrail

Project archives

Physical Archive recipient LAARC

Physical Contents 'Ceramics','Environmental','Leather'

Digital Archive recipient LAARC

Digital Contents 'Ceramics','Leather'

Paper Archive recipient LAARC



Paper Contents 'Ceramics','Environmental','Leather','Stratigraphic'
Paper Media available 'Context sheet','Drawing','Photograph','Plan','Section'

**Project
bibliography 1**

Publication type Grey literature (unpublished document/manuscript)
Title C257 ARCHAEOLOGY CENTRAL Fieldwork Report Archaeological Targeted and General Watching Briefs Finsbury Circus Access shaft-XRZ10
Author(s)/Editor(s) Pfizenmaier, S.
Date 2012
Issuer or publisher MOLA
Place of issue or publication London
Description A4 Ringbound report



18 Appendices:

18.1 Roman pottery

Amy Thorp

The Roman pottery assemblage from the Finsbury Circus watching brief totals 77 sherds (26 estimated vessels) from three contexts. Contexts [26] and [38] are dated to the 2nd century AD (although [38] is likely to be residual) and it is likely that context [35] also reflects this period, but it can only be dated to the wider period of AD 70–160 on a single sherd of Highgate Wood ware C (HWC).

The majority of the material was recovered from context [26] dating AD 120–160 from sherds of black-burnished style ware (BBS) and Verulamium region white ware (VRW). The sherd count of this context is higher due to the preservation of a large section of an unsourced oxidised ware simple dish (OXID 5J) which represents 30 sherds. Context [38] contains a stamped central Gaulish samian Dragendorff form 33 cup (SAMCG 6DR33 <10>) dating AD 120–200; it is likely to be a die of the potter Paterclinus and further identification would provide a tighter date for this group.

The pottery from these three contexts is consistent with the residual material that was previously recovered on the site from context [14].



18.2 Leather

Beth Richardson

There are three pieces of accessioned leather from context [38]. The front section of a wide 'cow-mouth' sole dates the context to 1500–1530/40. This was the extreme broad style associated with the king Henry VIII and his courtiers and first seen in England around 1500; the fashion was taken up by other sectors of society and the sole could date as late as 1530/40. Part of a round-toed vamp with a central slit is also early to mid 16th century.

A pointed sole with two rows of horizontal stitch-holes around its margins would have come from a leather-soled patten, a form of raised overshoe with a multi-part stacked leather sole widely used in the late 15th and early to mid 16th centuries (eg Nailer in Egan 2005, Richardson in Egan, Saxby and Richardson (Tooley Street) forthcoming). This patten sole, like the other two shoe parts from context [38], is presumably also early to mid 16th century.

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18.3 Building Material

Ian Betts

Four post-medieval brick samples were recovered from this phase of XRZ10 (context [37]). The building material from XRZ10 has been fully recorded and the information added to the Oracle database.

18.3.1 Discussion

Two distinctly different sets of brick were found in context [37] indicating the reuse of bricks in a later brick structure.

18.3.1.1 Earlier brick

Fabric: 3033

The earlier bricks are orangey-red in colour and have sunken margins indicating they are pre-Great Fire. Their size (225–226 x 104–106 x 54–57mm) would suggest a 16th-century date. One brick has a weathered header end, whilst another has occasional straw marks in the top surface. Straw would have been used to separate the bricks during the drying process prior to firing.



18.3.1.2 Later brick

Fabric: 3032

The later bricks are darker red in colour and are of slightly different size (226–230 x 98–103 x 63–68mm). One brick also has a weathered header end, whilst the other has what appears to be black soot marks along one stretcher face. These bricks are probably 1666–1800 in date.

18.4 Geoarchaeology

Virgil Yendell

Introduction

Over most of the site the probable Pleistocene gravel was overlain by a dark red brown woody peat 0.1 to 0.2m in thickness, this in turn was overlain by a 0.2 to 0.4m thick light brown reedy peat, which was then overlain by another layer of c 0.2m thick dark red brown wood peat. This sequence continued over the area that was previously sampled during earlier evaluation phases of work.

To the west of the area the sequence changed, with the addition of a number of deposits between the basal gravel and the overlying peat. The surface of the Pleistocene gravel appears to have been lower in this area, by c 0.4m, and may have been the route of the Early Holocene Walbrook River. Overlying the gravels is a thin (c 0.02m) band of black sand and silt, interpreted as bed deposits of a channel. Botany results identified a single grape (*Vitis vinifera*) in this sample suggesting that the deposit is likely to date from the Roman period or later, although the inclusion of a number of earthworm egg cases raises the possibility that the pip could have been brought in by bioturbation, but if in situ, could suggest a Roman date for the deposit and therefore the channel itself (see 18.5). There is a chance this channel route was earlier than Roman but that during the Roman management of the channel these earlier deposits were dug out. This was overlain by a variably thick layer of pale blue (gleyed) silty clay deposited in slack or slow flowing fresh water conditions. This deposit is sealed by a c 0.2m thick layer of slightly gravelly blue grey silty clay. This unit may be a similar unit to the silty clay below but was disturbed and eroded as channel flow once again increased in this area, or it may have been a colluvial deposit which has slumped into the channel. These deposits are sealed by the final fluvial unit of a c 0.2 to 0.4m thick band of light to mid grey sand and gravel. After the period of slack or slow flowing water suggested by the fine grained clays and silts the water energy increased again and a channel bar of gravel appears to have formed over these deposits. Within this deposit several waterlogged glume bases, probably from spelt wheat (*Triticum spelta*) were recovered, suggest that cereal cultivation or crop processing may have been taking place nearby, probably in the Iron Age or Roman periods (see 18.5).

The peat sequence had been sampled previously in the evaluation. A monolith was taken through the fine grained clays and silts in filling the channel and bulk samples were taken from the underlying gravel, the dark river bed deposit, and both the silty clay deposits. The river bed deposit looked relatively sterile of environmental remains, but at least 40 litres were taken in a hope to obtain some material suitable for radiocarbon dating if deemed necessary. Rare rootlets were visible in the silty



clay deposits suggesting some potential for organic preservation suitable for radiocarbon dating.

Table 2 Geoarchaeological results

Approximate elevation	Description	Samples
108.75m ATD to 108.41m ATD	Context [29]; Slightly greenish grey, sandy/gravelly clay. Subangular gravel, matrix supported. Rare rootlets <i>Silting up of river with occasional flow/colluvial erosional deposit filling river. Later stabilisation and vegetation growth suggested by rooting.</i>	<10> Mono <15> Bulk x2 <14> Bulk x2
108.41m ATD to 108.35m ATD	Context [30]; Pale blue grey silty clay. Rare gravel. <i>Gleyed waterlain deposit, laid in slow flowing or pooling water at base of channel during (seasonal) periods of reduced water flow.</i>	<10> Mono <13> Bulk x2
108.35m ATD to 108.33m ATD	Context [31]; Dark brownish grey, slightly clayey sand, slight organic content but no visible plant matter. <i>River bed deposit of early Holocene channel.</i>	<10> Mono <12> Bulk x4
108.33m ATD to 108.15m ATD	Context [32]; Pale to mid grey brown gravel and sand. Fine sand and clast supported rounded to subrounded gravel. <i>Sand and gravel overlying sterile sand. Could be channel deposits of early Holocene but more likely</i>	<10> Mono <11> Bulk x2



	<i>Pleistocene sand and gravel truncated by early Holocene channel. Clod of clayey gravel to south of section probably eroded in by river action.</i>	
108.15m ATD to 108.05m ATD	Context [33]; Firm, pale to mid yellow fine and sand. <i>Pleistocene sand deposit. This deposit appears underneath orange sand and gravel over rest of site.</i>	none

18.5 Botany

Anne Davis

N.B. The information contained within this report is preliminary assessment data, and may be modified in the light of detailed analytical work. It should not be quoted without the permission of the author, or Head of Service.

Five environmental bulk samples were taken, alongside geoarchaeological monoliths, from a section through Holocene channel deposits [32]{11}, [31]{12}, [30]{13} and [29]{14} and {15}. An additional sample came from the secondary fill [26]{9} of a pit dated to the Roman period. Eighteen litres from each sample were processed by flotation, and the wet flots assessed to determine the presence and nature of any plant remains and other biological material present. A further two litres from each sample was retained for any future work on invertebrates.

Few aquatic plant remains were found in the channel deposits, and the seed assemblages seem to have derived mainly from areas of grassy and disturbed ground (possibly including cultivated land) close to the channel, rather than vegetation growing in the channel itself.

Sample [32]{11}, from sands and gravels towards the base of the channel sequence, produced very little organic material, although a few seeds of wetland and disturbed ground habitats were seen, along with occasional waterflea eggs (Cladoceran ephippia).

A much larger plant assemblage, including moss and a wide variety of seeds, was preserved in the overlying clayey sand [31]{12}. These came mainly from disturbed-ground and grassy habitats, with seeds of buttercups (*Ranunculus acris/bulbosus/repens* and *R. sardous*) particularly common. A single grape (*Vitis vinifera*) pip in this sample suggests that the deposit is likely to date from the Roman period or later, although the inclusion of a number of earthworm egg cases raises the possibility that this could be intrusive.



Very few organic remains survived in the sample from silty clay deposit [30]{13}, although a small seed assemblage included many of the same taxa as those seen in the underlying sample {12}.

The two samples, {14} and {15}, from [29], again contained large and varied plant remains. Fragments of plant stem or root epidermis were present in {14} and abundant in {15}, perhaps suggesting the build up of reed beds or similar wetland vegetation in the silted-up river bed. A seed of alder (*Alnus glutinosa*) in {15} may also indicate the growth of trees in the area. Remains of grassland plants were particularly common, along with common disturbed ground species, and indicate the nature of the vegetation on higher ground close to the channel. Several waterlogged glume bases, probably from spelt wheat (*Triticum spelta*), in {15} suggest that cereal cultivation or crop processing was taking place nearby, probably in the Iron Age or Roman periods.

The sample from fill [26]{9} of pit [28] contained remains from a wider range of aquatic and wetland plants than any of the channel fills, as well as much stem or root epidermis. Seeds included examples from pondweed (*Potamogeton* sp.), celery-leaved crowfoot (*Ranunculus sceleratus*), golden dock (*Rumex maritimus*), spike-rush (*Eleocharis palustris/uniglumis*) and sedges (*Carex* spp.), which could have come from harvested marsh or riverside plants used as flooring or stable litter. This sample also included a few charred plant remains in the form of a single cereal grain and two wheat (*Triticum* sp.) glume bases.

Fragments of insect exoskeleton were quite abundant in sample {12}, and also noted in {13}, {14} and {15}. Waterflea eggs (Cladoceran ephippia) were also noted in four of the six samples, and caddis fly (Trichoptera) larval cases in {12} and {14}.

Samples {11} and {13} produced only very small assemblages, the majority of which will have been recorded at the evaluation stage. The remaining four samples contained relatively large plant assemblages whose further study would contribute to the reconstruction of the historic (and perhaps prehistoric) environment and assist in the interpretation of the site. Study of the insects from four samples would add additional information about the environment of the site and its surroundings.

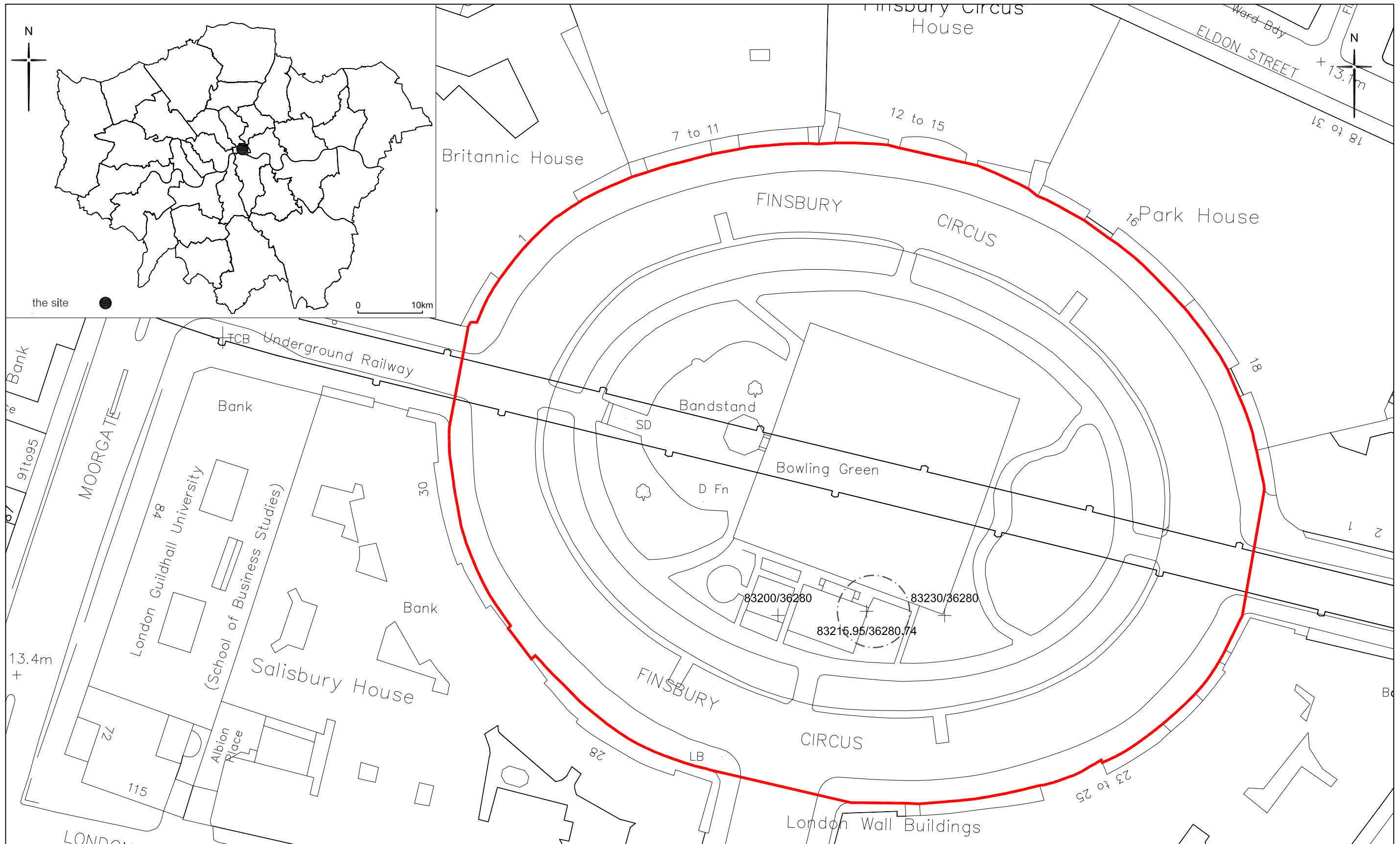


Fig 1 Location of temporary access shaft watching brief

- Site outline
- - - TWB/GWB area

1:750 @ A3
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Based upon the Ordnance Survey mapping with the permission of the Controller of Her Majesty's Stationery Office © Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. TFL 100032379 2010.

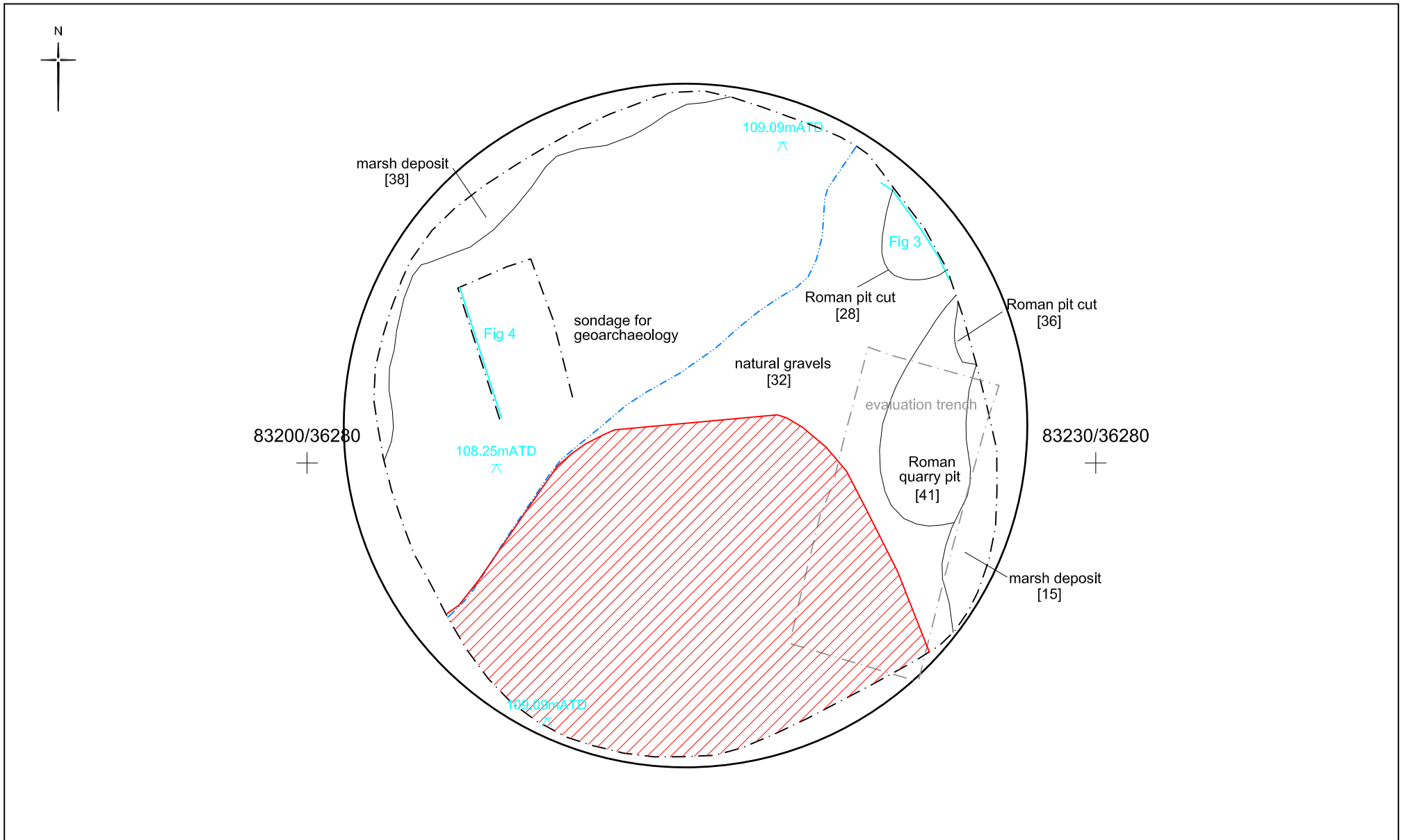





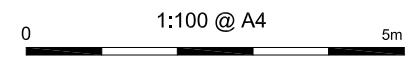


Fig 2 Multi-context plan of archaeological features

-  Limit of excavation
-  Archaeological features
-  Holocene channel
-  area accidentally removed by the principal Contractor
-  110.24mATD TBMs



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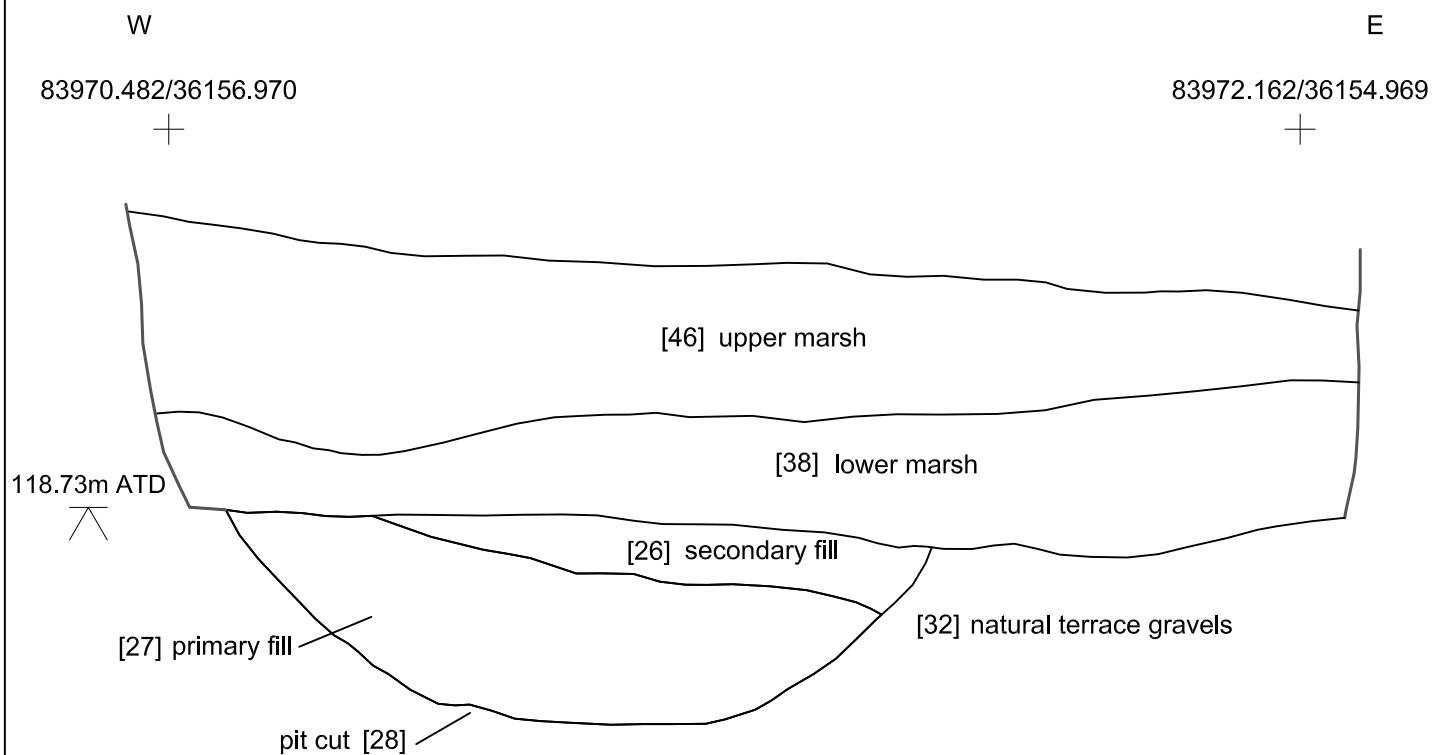


Fig 3 Section of Roman pit [28]
south-facing

Section edge
 Archaeological feature
110.24m ATD
^ Levels (mATD)

0 1:20 @ A4 5m

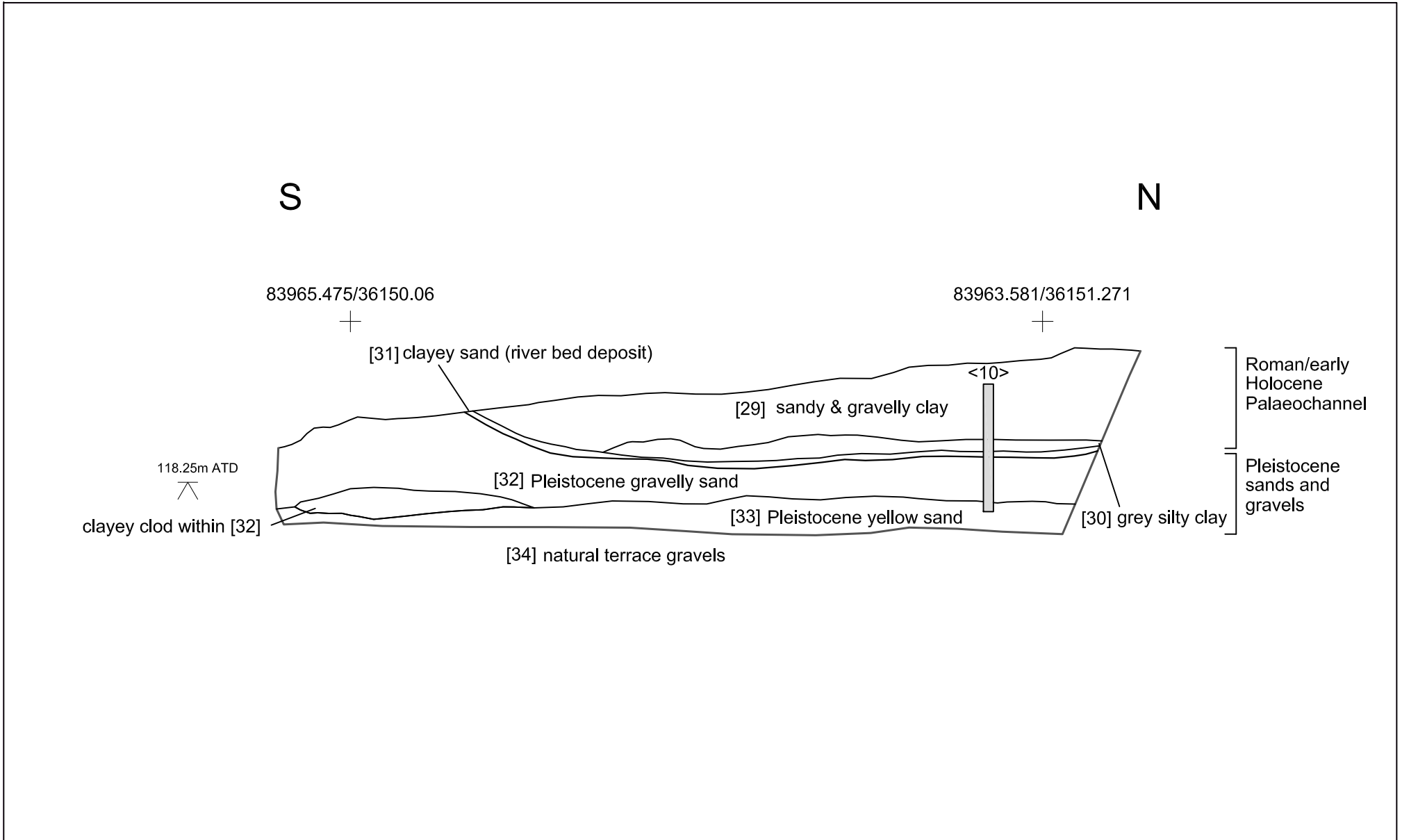


Fig 4 Geoarchaeological section through east-facing palaeochannel

□ Section edge
 [11] Archaeological feature
 <10> Monolith sample
 110.24m ATD
 ^ Levels (mATD)

