

MITRE SQUARE DEVELOPMENT – PHASE TWO, DUKE’S PLACE, CITY OF LONDON, EC3

**AN ARCHAEOLOGICAL EVALUATION AND WATCHING
BRIEF**



JULY 2017

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Site Code: DUS 16
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July 2017

Abstract

Between November 2016 and April 2017, Compass Archaeology conducted an archaeological evaluation and watching brief on groundworks taking place on Mitre Square, City of London, EC3A 5BZ, during phase 2 of the Mitre Square Redevelopment programme. The archaeological work was commissioned by Roland Jordaan, City of London Department of the Built Environment, on behalf of Helical Bar. This commission resulted from advice provided by Iain Bright, Assistant Inspector of the Ancient Monuments, Historic England regarding the archaeologically sensitive nature of the site. In particular with reference to the Priory of Holy Trinity, an extensive medieval complex that spanned the area of Mitre Square.

The programme of archaeological investigation comprised a watching brief to monitor groundworks across the Square, consisting of a drop shaft and several trenches. The drop shaft measured 4.8m x 2.10m and 3.2-3.4m deep. The trenches comprised two main trenches, one aligned northeast-southwest and measured c.20m x 1-1.8m and 1.2-1.9m deep. This trench was later extended with a section <10m long, 0.5m-3m wide and 1.5m deep to connect the pipes installed in the main trench to new manholes. The other main trench was aligned northwest-southeast, measuring 11m x 1.5m and 1m deep.

No evidence of any phase earlier than the post-medieval was recorded during these groundworks, despite the expected prevalence of the Priory's remains and the fact that Roman remains were found in phase 1 of the redevelopment. The drop shaft revealed a thick layer of post-medieval made ground, overlying a red brick sewer with associated structures, and a red brick wall aligned east-west. Several small pits, mostly interpreted as rubbish or cess pits with one interpreted as the remains of a small camp fire, were found on the base of the drop shaft, at a level of 12.12mOD. These were heavily truncated by the construction of the sewer and the wall, though they still contained some 19th century pot and ceramic building material dated to 1450-1900. The E-W wall has been interpreted as a basement wall belonging to one of the buildings that backed on to Mitre Square, built in the mid-19th century. The trenches revealed much the same stratigraphy; a thick layer of post-medieval made ground truncated by brick walls, also taken to be the basement walls of 19th century buildings. A large quantity of human remains were recovered from trench 1. This was construed as a mixed burial ground soil from the graveyard of St. James' Church, built after the Priory was demolished, and demolished itself in 1874. It is possible that no medieval or Roman remains were recovered due either to the relatively shallow level of intervention or the extensive truncation afforded by post-medieval/modern construction works.

Three large pieces of worked stone were recovered from the works. Two are thought to have been part of the Priory, but the origin of the third is uncertain. They were recovered from post-medieval deposits; one was bonded into the construction of the sewer, and all could warrant further examination. A further quantity of ceramic building material, clay tobacco pipe, glass, pot, animal bones, oyster shell and human bones were recovered from the works, all dating to post-medieval.

Across both phases of the Mitre Square Redevelopment, an overview of part of the history of the area has been made clearer. The stratigraphy is consistent with the interpretation-extensive post-medieval development truncating earlier deposits and overlying Roman features (in a very limited area). The lack of evidence of the Priory or other medieval activity is disappointing however, making the isolated worked stone finds even more important.

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1 Introduction

- 1.1 This document forms a summary of the results of an archaeological evaluation and watching brief conducted in the vicinity of Mitre Square, City of London, EC3A 5DH (fig. 1) by Compass Archaeology between November 2016 and April 2017. This report covers the results of Phase 2 of the Mitre Square Development programme and should be consulted in conjunction with the report from Phase 1 of the development (Compass Archaeology, January 2017).
- 1.2 The archaeological work was commissioned by Roland Jordaan, City of London Department of the Built Environment. The commission resulted from advice provided by Iain Bright, Historic England, regarding the archaeologically sensitive nature of the site, with particular reference to the medieval complex of the Priory of Holy Trinity.
- 1.3 The groundworks comprised hard and soft landscaping and resurfacing of the areas surrounding Mitre Square in addition to a single drainage drop shaft located on the south site of the site (fig. 2). The groundworks, in particular the drop shaft overlay several sites of historic and archaeological importance and potential including the medieval Priory of Holy Trinity; an extensive complex spanning the area between Creechurch Lane and Aldgate High Street.

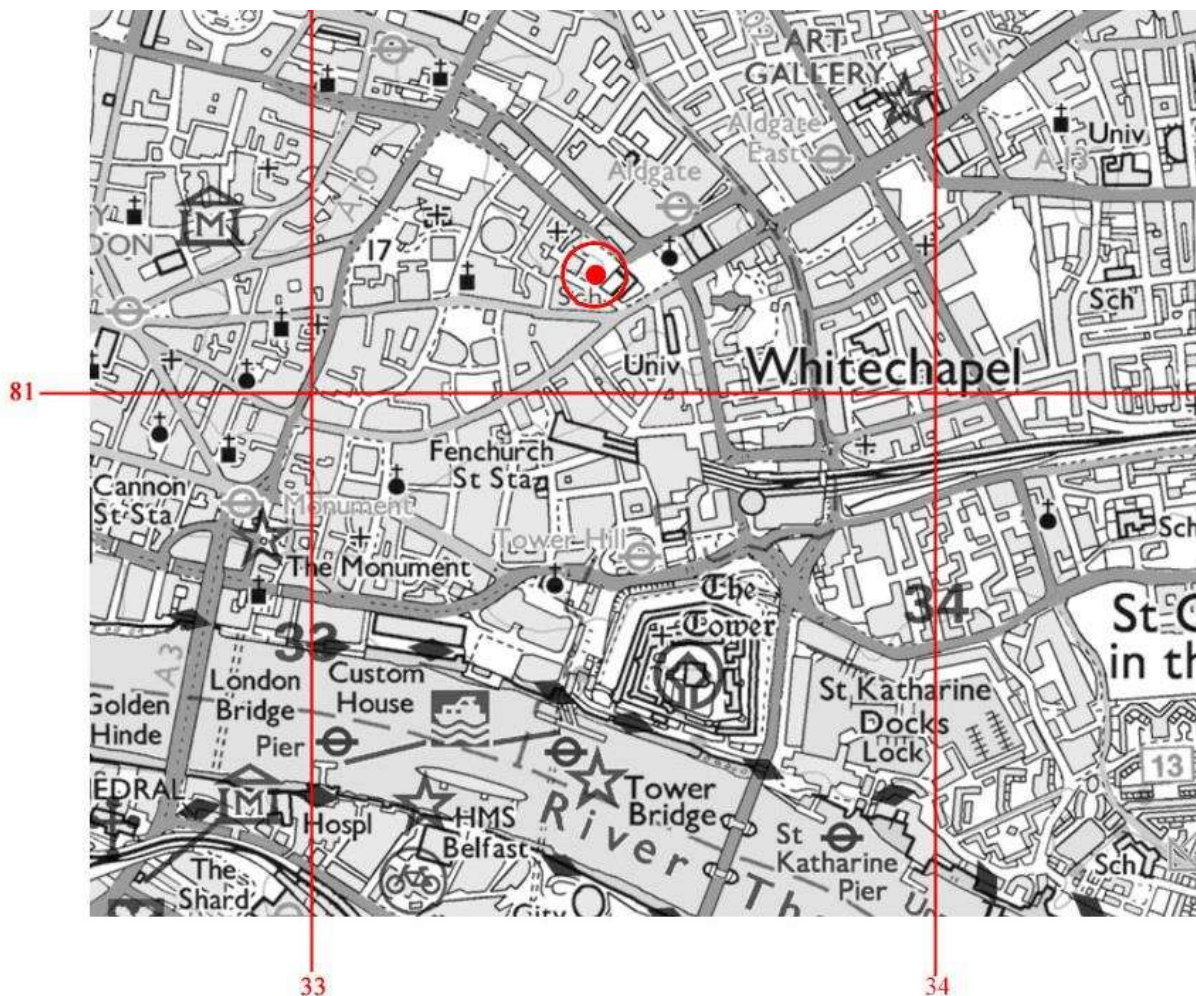


Figure 1: Site location, marked in red. Reproduced from OS digital information with the permission of the Ordnance Survey on behalf of The Controller of HMSO.

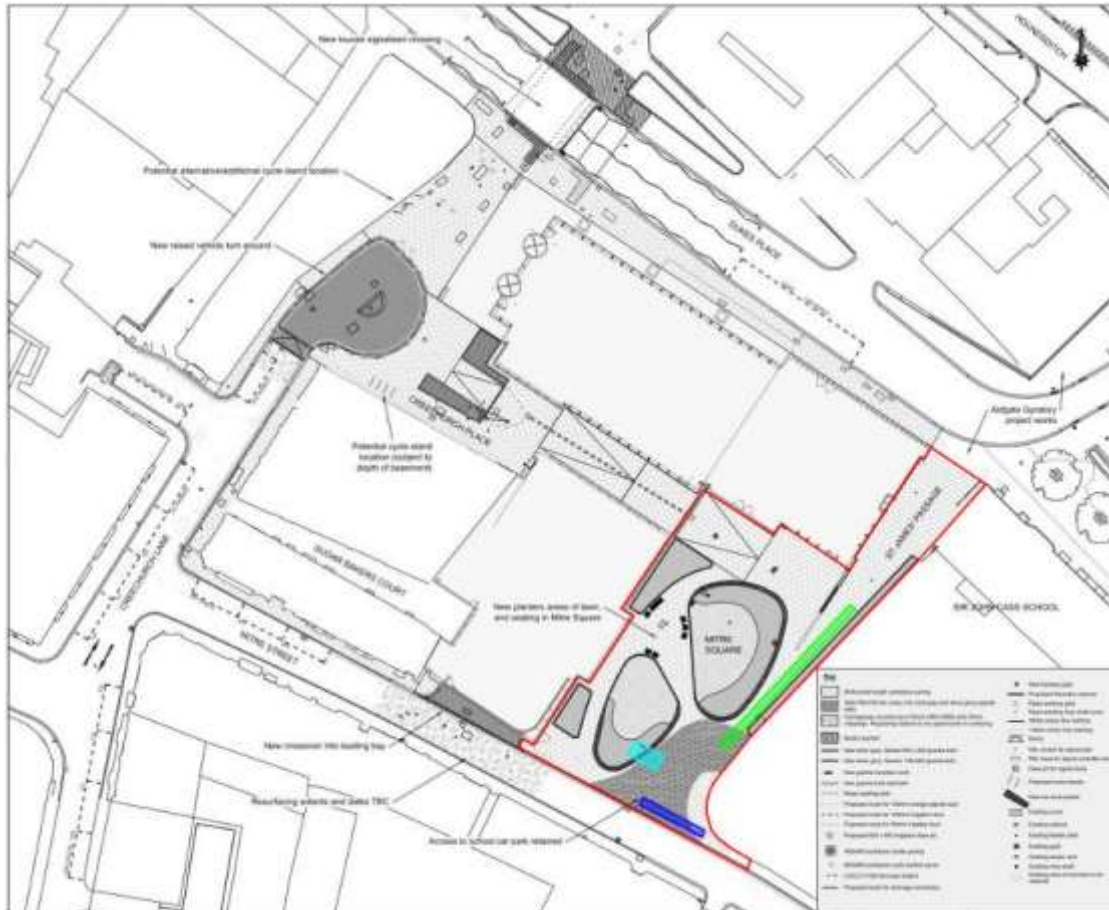


Figure 2: Draft showing the site outlined in red, and the location of the drop shaft (pale blue), trench 1 (green) and trench 2 (dark blue). Adapted from a plan from City of London Online (2016) and information provided by T. Noble, City of London.

2 ACKNOWLEDGEMENTS

Compass Archaeology would like to thank Roland Jordaan for commissioning the company to undertake the investigative works, Historic England and City of London Department for the Built Environment for their advice throughout the project. Thanks also to Riney’s for supporting the fieldwork.

3 SITE LOCATION, GEOLOGY AND TOPOGRAPHY

3.1 The proposed groundworks covered Mitre Square, extending from Mitre Street in the south-west to Duke’s Place in the north-east, bounded by One Creechurch Place to the north-west and the Sir John Cass Foundation Primary School to the south-east. Mitre Square is located to the west and entirely outside of the Scheduled Ancient Monument of *London Wall: remains of Roman wall, bastions and city gate of Aldgate from 17 Bevis Marks to Indiana Street (LO 26 K; fig. 3).*

3.2 According to the British Geological Survey (sheet 256: North London), the site overlies Langly Silt (a brickearth deposit), over Kempton Park Gravels. The Langly Silt is generally found at c12.2-12.3mOD along Aldgate High Street, c.2.75m below the ground surface.

- 3.3 The site lies on a spur of high ground which crosses Aldgate. It sits at approximately 16.1mOD with a significant slope to the north along Bevis Marks to c.14.6-14.8mOD.

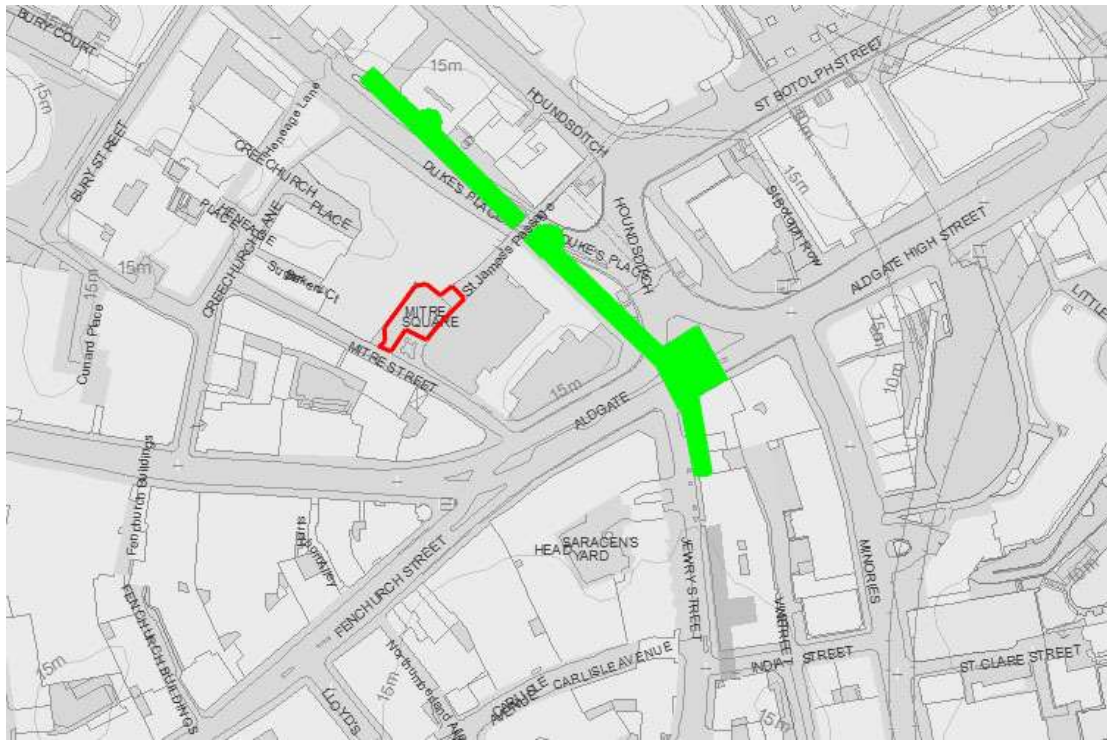


Figure 3: Location of the site (red) in comparison to the London Wall Scheduled Ancient Monument area (green). Adapted from Historic England (2016).

4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

4.1 There has been extensive historic and archaeological research conducted on the area and a number of comprehensive reports have been produced. These will not be reproduced at length here, however a short review of the archaeology in general shall be given in addition to a more particular assessment of the Priory of Holy Trinity complex. For a more thorough overview, see the preceding WSI (Compass Archaeology 2016).

4.2 As part of the WSI, a search of the Greater London Historic Environment Record (GLHER) was conducted, resulting in 91 relevant records within a 50m buffered line of the City Wall. Relevant entries are mentioned below in chronological order, referred to thusly: (MLOxxx); a full list can be found in the associated WSI.

4.3 *Prehistoric*

The majority of archaeological evidence of prehistoric activity has been found close to the Thames foreshore, where gravel eyotes provided higher, dryer ground than the surrounding marshy areas, though there is no evidence of any large settlement in any particular area. Several residual prehistoric flints were found in the vicinity of the site (MLO66312), though they suggest accidental loss rather than settlement or industrial activity.

4.4 Roman

The site location lies just within the eastern limits of the Roman city. Founded in the mid-1st century, *Londinium* quickly became a prosperous town that warranted fortification in the late 2nd or early 3rd century. A defensive wall and ditch was built, enclosing the city from Ludgate Hill in the west, surrounding the fort at Cripplegate and continuing to Tower Hill/Aldgate in the east. The stretch of wall east of the site runs in a NW-SE direction along Bevis Marks towards Duke's Place and onwards to the gate of Aldgate. Previous archaeological investigations in the vicinity of the site have uncovered sections of the wall as shallow as 0.63m below the present ground surface (MoLAS 2012). Works along Bevis Marks in 1923 (MLO26253) recorded a 36.58m stretch of wall, 2.59m in width, supported by a sandstone plinth. Work at 17-18 Bevis Marks (MLO26257) in 1880, 28-30 Houndsditch (MLO26260) and 2-7 Duke's Place (MLO57278) all indicate the wall comprised a rubble and mortar core faced with Kentish ragstone separated by triple tile bonding courses.

Mitre Square lies within an area where previous archaeological investigations (Compass Archaeology 2015; 2016) have revealed Roman pits and potential structures, in addition to two separate sections of the extramural defensive ditch. Based on stratigraphy recorded during previous archaeological excavations, Roman deposits were observed c.12-10mOD with features cut into the natural brickearth (Compass Archaeology 2017).

4.5 Saxon

It is widely accepted that the City was abandoned during the early Saxon period, with settlements being concentrated in the area around the Strand and Aldwych. There were no entries in the GLHER relating to Saxon activity in the vicinity of the site.

4.6 Medieval

Archaeological evidence shows the wall was extended on multiple occasions, with new gates being constructed and the city ditch being recut several times. During this period the defensive structures were no longer needed, and the ditch was widened with a more gradual profile and the gates allowed more free movement in and out of the city.

Excavations along Duke's Place (MLO26263) revealed a doorway cut through the city wall and later blocked up. It is thought to have been associated with an access route to the Priory of Holy Trinity. The doorway was blocked up in the later medieval period during a phase of wall reinforcement, possibly as a consequence of the dissolution of the Priory in 1532.

The Priory of Holy Trinity was a priory of Austin canons founded by Queen Matilda 1107-1108 on the site of the former Holy Cross and St Magdalene church. The Queen also granted the gate of Aldgate to the canons in addition to the Priory, including the churches of St Augustine Pappay, St Edmund Lombard Street and All Hallows on the Wall. In the 13th century the Priory bounds were extended to include a piece of the road running from Aldgate to Bishopsgate.

The complex comprised a cloister to the north of the main church, dormitory, refectory and house for the Prior (MLO56997; MLO54005). Excavations at 71-77 Leadenhall Street and 32-40 Mitre Street uncovered some masonry belonging to the Priory including the south wall of the church and the outline of the whole of the south transept fountain. Excavations within the grounds also uncovered 42 articulated burials presumed to have been associated with the Priory (LAARC Online, site record LEA84). A full review of the history of the Priory of Holy Trinity can be found in the preceding WSI.

4.7 Post-medieval

The Priory was one of the first to dissolve during the Dissolution in 1532, surrendering to Henry VIII supposedly after running up large debts (Page 1909). Archaeological evidence suggests the buildings were generally repurposed for use as a private residence, first by Thomas Audley and later Thomas Howard, Duke of Norfolk. The apsidal church was changed into a cellar with a doorway. Alterations continued until the 19th century when a new series of basements and a cobbled courtyard finally truncated the remaining structures.

A new parish church was built in 1622 on the site but subsequently falling into disrepair, was rebuilt in 1727. An expansion of the Jewish community in the Duke's Place area saw the popularity of the church decline until it was replaced by the Great Synagogue on Bevis Marks. The church was finally demolished in 1874. Its associated burial ground is noted by Mrs Basil Holmes as being situated where the present Sir John Cass Primary School playground now lies, with the church located under the school building.

From the 18th century onwards, the site developed exponentially with the final demolition of the standing section of the City Wall in the 1760s, opening space for houses to be built. Mitre Square itself remained an open space during this expansion, retaining a similar layout to what can be seen today.

5 PLANNING AND OBJECTIVES

- 5.1** The proposed works entailed a two phase redevelopment of the Mitre Square area, of which the first phase was completed in 2016. The second phase involved a series of superficial landscaping works and the installation of a drainage system, planters and associated irrigation ducts. The area was repaved with Yorkstone slabs in accordance with those laid down during phase 1.
- 5.2** The most invasive groundworks was the drop shaft, located at the entrance to Mitre Square, east of Mitre Street, measuring 4.8m long, 2.1m wide and 3.2-3.4m deep.
- 5.3** This followed the standards set out in the London Plan (*Chapter Seven: London's Living Spaces and Places*) which states that new developments are expected to align with the following procedures:

Historic Environment and Landscapes

Policy 7.8 *Heritage assets and archaeology*

Strategic

- A** *London's heritage assets and historic environment, including listed buildings, registered historic parks and gardens and other natural and historic landscapes, conservation areas, World Heritage Sites, registered battlefields, scheduled monuments, archaeological remains and memorials should be identified, so that the desirability of sustaining and enhancing their significance and of utilising their positive role in place shaping can be taken into account.*
- B** *Development should incorporate measures that identify, record, interpret, protect and, where appropriate, present the site's archaeology.*

Planning decisions

- C** *Development should identify, value, conserve, restore, re-use and incorporate heritage assets, where appropriate.*
- D** *Development affecting heritage assets and their settings should conserve their significance, by being sympathetic to their form, scale, materials and architectural design.*
- E** *New development should make provision for the protection of archaeological resources, landscapes, and significant memorials. The physical assets should, where possible, be made available to the public on-site. Where the archaeological asset or memorial cannot be preserved or managed on-site, provision must be made for the investigation, understanding, recording, dissemination and archiving of that asset.*

LDF Preparation

- F** *Boroughs should, in LDF policies, seek to maintain and enhance the contribution of built, landscaped and buried heritage to London's environmental quality, cultural identity and economy as part of managing London's ability to accommodate change and regeneration.*
- G** *Boroughs, in consultation with English Heritage, Natural England and other relevant statutory organisations, should include appropriate policies in their LDFs for identifying, protecting, enhancing and improving access to the historic environment and heritage assets and their settings where appropriate, and to archaeological assets, memorials and historic and natural landscape character within their area.*

- 5.4** The on- and off-site works will also follow the provisions and recommendations of the City of London Local Plan (January 2015) - Policy DM 12.4 *Ancient monuments and archaeology*:

- 1 To require planning applications which involve excavation or ground works on sites of archaeological potential to be accompanied by an archaeological assessment and evaluation of the site, including the impact of the proposed development.*
- 2 To preserve, protect, safeguard and enhance archaeological monuments, remains and their settings in development, and to seek a public display and interpretation, where appropriate.*
- 3 To require proper investigation and recording of archaeological remains as an integral part of a development programme, and publication and archiving of results to advance understanding.*

5.5 The fieldwork presents the opportunity to answer the following general and more specific questions:

- Is there any evidence of the intramural Roman settlement of Londinium? If so what form does this take and at what level does it survive?
- Is there any evidence of late Roman/early occupation prior to the creation of the Priory of Holy Trinity?
- Is there any evidence of the Priory and if so what form does this take?
- What remains of the post-Dissolution development of Duke's Place / St James's Church?
- What is the stratigraphy beneath Mitre Square? Can an archaeological sequence be produced?
- If encountered, what is the natural geology and at what level does it exist across the site?

6 METHODOLOGY

6.1 Standards

6.1.1 The field and post-excavation work was carried out in accordance with Historic England guidelines (*Greater London Archaeology Advisory Service: Standards for Archaeological Work, 2015*). Works also conformed to the standards of the Chartered Institute for Archaeologists (*Standard and guidance for archaeological field evaluation, 2014*). Overall management of the project was undertaken by a full member of the Chartered Institute.

6.1.2 Fieldwork was carried out in accordance with the Construction (Health, Safety & Welfare) Regulations. All members of the fieldwork team held valid CSCS (Construction Skills Certificate Scheme) cards, and wore hi-vis jackets, hard-hats, steel-toe-capped boots, etc., as required. All members of the fieldwork team also followed the contractors' health and safety guidelines.

6.1.3 The Client and the Historic England were kept informed of the progress of fieldwork and any finds.

6.2 Fieldwork

6.2.1 The archaeological works took place during the groundworks for the proposed developments as outlined above. The groundworks were undertaken by mechanical excavator fitted with a toothless bucket, monitored by an archaeologist at all times.

6.2.2 The initial bulk of the NE-SW aligned trench 1 was removed by mechanical excavator down to a depth of approximately 0.97m below ground surface, where it was supplemented by hand digging due to the quantity of human bone recovered.

6.2.3 Archaeological contexts were recorded as appropriate on *pro-forma* sheets by written and measured description, and drawn in plan or section, generally at scales of 1:10 or 1:20. The investigations were recorded on a general site plan and related to the Ordnance Survey grid. Levels were taken on archaeological features or deposits, transferred from the nearest Ordnance Datum Benchmark, sited on the west face of St Katherine Cree at 16.88mOD. The fieldwork record was supplemented by digital photography in .jpeg and RAW formats.

6.2.4 The recording system followed the procedures set out in the Museum of London recording manual. By agreement, the recording and drawing sheets used are directly compatible with those developed by the Museum.

6.3 Post-excavation

The fieldwork was followed by an off-site assessment and compilation of a report, and by ordering and deposition of the site archive.

6.3.1 Finds and samples

The assessment of finds was undertaken by appropriately qualified staff (see Appendices III-IX). Finds and samples were treated in accordance with the appropriate guidelines, including the Museum of London's 'Standards for the Preparation of Finds to be permanently retained by the Museum of London'. All identified finds and artefacts have been retained and bagged with unique numbers related to the context record, although certain classes of building material and modern finds have been discarded, after an appropriate record was made. Human remains and other sensitive artefacts were treated in line with the appropriate respect and care, in line with the relevant Standards.

6.4 Report procedure

6.4.1 This report contains a detailed description of the fieldwork plus details of any archaeological remains or finds, and an interpretation of the associated deposits. Illustrations have been included as appropriate. A short summary of the project will be appended using the OASIS Data Collection Form.

6.4.2 Copies of this report will be supplied to the Client and Historic England.

6.4.3 There is no provision for further analysis or publication of significant findings. Should these be made, the requirements will be discussed and agreed with the Client.

6.5 The site archive

Assuming no further work is required, an ordered, indexed and internally consistent archive of the evaluation will be compiled in line with Museum of London Guidelines for the Preparation of Archaeological Archives, and will be deposited in the Museum of London Archaeological Archive under the site code DUS16. The integrity of the site archive should be maintained and the landowner will be urged to donate any archaeological finds to the museum.

7 RESULTS

7.1 What follows is a written description of the observations made during the evaluation and watching brief. The works are discussed in chronological order. Deposits are shown in round brackets: (x), and cuts and structures in square brackets: [x]. For a full list of the contexts and their descriptions refer to Appendix I. The text is supplemented with illustrative photographs. For detailed trench plans and sections refer to Appendix II.

7.2 The drop shaft

7.2.1 Monitoring of the excavation of the drop shaft took place between 30th November and 2nd December 2016. The shaft was located in the southwestern corner of Mitre Square, aligned NNW-SSE and lay parallel with Mitre Street. The shaft measured 4.8m long by 2.1m wide. It measured 3.2-3.4m in depth (fig.4). The drop shaft was excavated by machine. Levels were taken from the surface at the north end, measuring 15.42mOD and the south end, measuring 15.52mOD. The lowest level at the base of the drop shaft was 12.02mOD

7.2.2 The stratigraphy comprised firstly either 80mm of tarmac, (40) on the pavement, or 120mm of cobbles, (41) on the carriageway. These overlay 80mm of bedding sand, (42) or c.100mm of concrete, (43) respectively. Underlying these was a disturbed, post-medieval backfill, (47) covering the extent of the trench to a depth of c. 2.5m. This backfill was cut by various modern services as well as two, more significant post-medieval structures.

7.2.3 At the northern end of the drop shaft, an E-W oriented brick sewer and associated N-S aligned walkway, [50] were found (fig. 5). The post-medieval sewer was constructed of red and yellow brick, with later concrete alterations/reinforcements. The upper metre was formed of yellow stock bricks in a neat stretcher bond, bonded with gritty grey mortar. The lower meter was more jumbled, made of red brick headers and thick mortar. The brick tunnel was encased by a smoothed concrete cube. A concrete walkway extends southwards in to the trench. To the south of the sewer, a brick structure, [51] was excavated underneath (41). This measured approximately 1m² and was made of mostly yellow stock bricks, with red stock bricks forming the upper 2 courses. It was bonded with a thick, messy, whitish mortar. It has been interpreted as a post-medieval manhole or chamber (fig. 6).



Figure 4: Base of drop shaft looking N. Scale 1m



Figure 5: The sewer [50], northern end of the drop shaft. Looking E. Scale 1m



Figure 6: W facing section showing [51] and [55]. Looking E. Scale 1m

7.2.4 There was a backfilled cellar at the southern end, comprising a wall, [46] running E-W, backfilled with gravel, (45) to the north of it (fig. 7). It measured 2m tall and 0.35m wide, constructed with 230mm x 100mm x 70mm bricks. This wall extended down to a concrete surface, [55] believed to be the floor of the cellar, 2.2m below the surface (fig. 6). The red brick wall was bonded with a thick, messy gritty grey mortar. 13 courses were visible in the upper-most metre of the trench; the lower 4 or 5 courses being composed of yellow stock bricks. The cut of a pit, [96] was seen truncating the southern side of [46], measuring 470mm long and 100-500mm deep. It was filled with (97), a blackish silt containing fragments of CBM and concrete, 370mm thick. This underlay (98), a mid-brown soil with frequent fragments of CBM, 140mm thick. [96] was interpreted as a post-medieval/modern demolition cut and dump.

7.2.5 There was a thin (100mm max.) layer of dark brown soil, (54) overlying [55], a natural deposit that probably occurred either when the basement was being demolished or over time indicating the basement was unused. Underlying [55] was a layer of very loosely compacted whitish rubble, (56), c.1m thick. It is believed to be demolition rubble, though from a later period than that of the Priory. Underlying this was (57), a less-than

0.5m thick layer of greyish stony gravel with occasional fragments of post-medieval brick and tile. Another layer of demolition rubble, (58) underlay this, 100-250mm thick. It comprised a moderately compacted dark grey silt with frequent large fragments of red brick and chalk/mortar. The layer had a noticeable slope down from east to west. The lack of stonework inclusions suggest this demolition event was not associated with the Priory.



Figure 7: West facing section of south end of drop shaft, showing wall [46] with backfill (45) to the north. Looking E. Scale 1m.

- 7.2.6** A lens of black silt, (59) covered the entire trench, underlying (58), and (56) in places. It was 15mm thick and has been interpreted as a burnt layer. (59) sealed a well compacted layer of dirty yellowish angular gravel, commingled with a light brown soil, (60). This layer occurs at a depth of 3.2m across the whole trench, and is taken to extend below the level of excavation. An area of mid-brown compacted soil, (61) lay towards the centre of the trench, at c. 3.4m below the surface. It contained frequent inclusions of CBM, mortar, charcoal and stone. It is possibly the same material that can be seen comingling with the gravel in (60). It is most likely general trample, occurring over the trench base and under the sewer walkway, [50].
- 7.2.7** (60) and (61) were cut by several small, shallow pits and areas of localised burning that were half sectioned and excavated by hand.
- 7.2.8** [62] was a roughly circular pit in the SE corner of the trench. It measured 450mm x 340mm and was 140mm deep. It was filled with a pale mortar with frequent soil and CBM fragments, (63), indicating it was probably a small dump related to the larger post-medieval demolition event (fig. 8).

- 7.2.9** [64] was a semi-circular cut on the north facing section at the south end of the trench. It measured 190mm x 110mm and was 40mm deep. It was filled with a whitish mortar containing frequent flecks of CBM and charcoal, (65). It was a superficial patch or mortar, associated with the wide scale dumping rather than the infilling of a feature (fig. 9).
- 7.2.10** Another semi-circular pit, [66] measured 200mm x 1600mm and 20mm deep. It was filled with whitish mortar, (67) (fig. 10).
- 7.2.11** A sub-round cut observed in the SW corner of the trench, [68] measured 480mm x 80mm and 70mm deep (minimum). It was filled by charcoal and black silt, unburnt wood and large brick/stone fragments, (69). There was also some oyster shell recovered from (69), indicating this could have been the remains of a small campfire (fig. 11). Pot and CBM recovered from (69) have been dated as post-medieval.
- 7.2.12** [70] was sub-rectangular, measuring 360mm x 190mm and 60-80mm deep. It was filled with black silt and charcoal with frequent inclusions of brick and peg tile, (71). [70] was most likely a small rubbish dump (fig. 12). Pot and CBM recovered from (71) have been dated as post-medieval.
- 7.2.13** [72] was semi-circular, observed in plan towards the northern end of the trench. It measured c. 200mm x 100mm, depth unknown as it was not excavated. It was filled with (73), a dark cassy silt. This was likely to be a small cess or nightsoil pit, probably leaked from the sewer.



Figure 8: Pit [62] and fill (63). Scale 0.5m

*Figure 9: Pit [64] and fill (65).
Scale 0.2*



Figure 10: Pit [66] and fill (67). Scale 0.2m

*Figure 11: Pit [69] excavated. Scale
0.2m*





Figure 12: Pit [70] and fill (71). Scale 0.5m

7.2.14 The stratigraphy recorded in this trench was all post-medieval, and unfortunately little evidence relating to the Priory of Holy Trinity was recovered. The majority of the deposits seen in the drop shaft were demolition rubble and other waste, reflecting the areas long history of regeneration and rebuilding. The wall, [46] and floor, [55] partially made up a basement that was most likely related to the Picture Frame Makers shop, though it is not recorded as having had a basement (fig. 13). As the depth of the trench did not reach natural geology, Roman or prehistoric archaeology may remain undisturbed below the level of intervention.

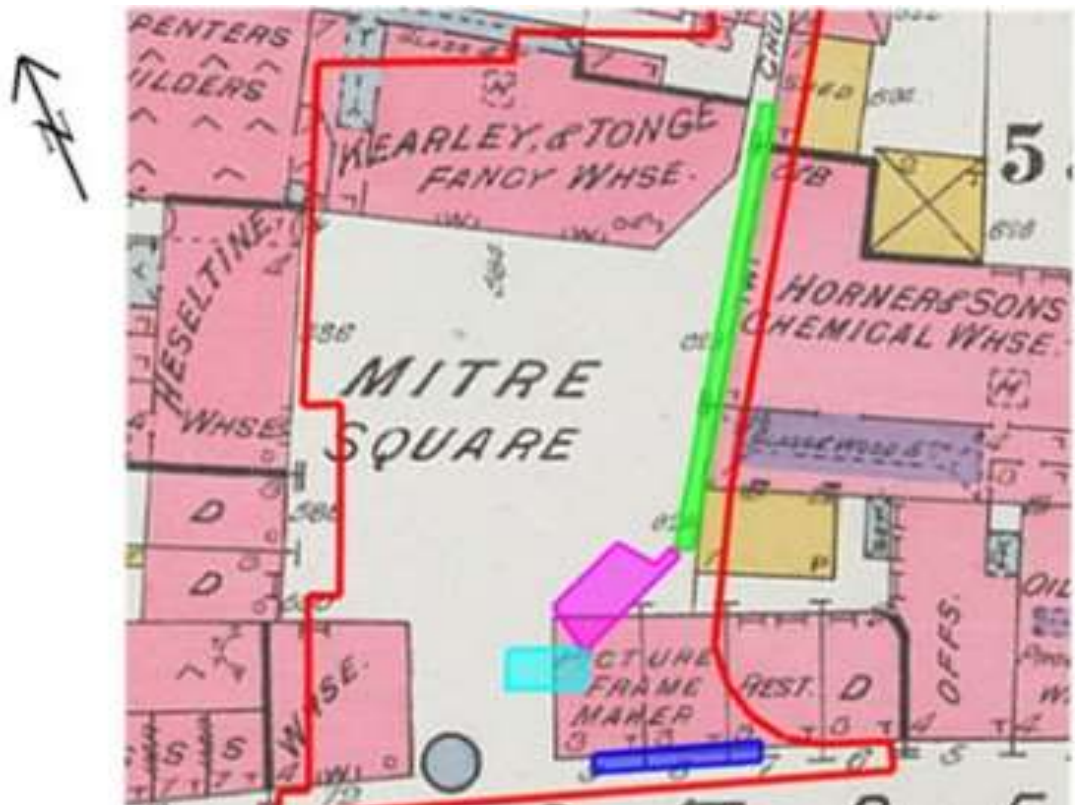


Figure 13: Extract from Goad's Insurance Plan of City of London Vol. III: sheet 69 (1887), showing phase 2 outline in red and the location of the drop shaft (blue), trench 1 (green/pink) and trench 2 (dark blue).

7.2.15 Two fragments of worked stone from the Priory of Holy Trinity were recovered from the drop shaft. One fragment had been used as building material, bonded into the masonry of the sewer, [50], and the other was excavated from (47), the general post-medieval backfill that was seen across the entire trench. Refer to Appendix III for a more in-depth analysis of the worked stone. Some fragmented ceramic building material (CBM) and pottery, both post-medieval were also recovered (Appendices VIII & IV). No evidence of activity earlier than the post-medieval was observed.

7.3 Trench 1

7.3.1 Monitoring of the excavation of the trench took place between the 3rd - 12th April 2017. The trench was aligned NE-SW and lay along the north side of Mitre Square, just south of the Sir John Cass Foundation Primary School playground limits. The trench measured c.20m long, and 1-1.8m wide. It was between 1.2-1.9m deep, excavated by machine to c.0.9m, thereafter the machine digging was supplemented with hand excavation where necessary to remove the human remains with due care.

7.3.2 The stratigraphy in this trench comprised of paving slabs, (75) c.70mm thick overlying concrete/mortar bedding, (76) c.100mm thick. Underlying this was a pale grey, fairly compacted gravelly soil, (77) which was c.0.8m thick. A dark brown, loosely compacted sandy soil, (81) lay under (77). This was provisionally 0.3m thick but extended beyond the limit of investigation. This layer contained frequent post-medieval inclusions of CBM, clay tobacco pipe (CTP), glass and pot, as well as a large amount of human remains; articulated and disarticulated, and some coffin remnants including iron nails and wood (fig. 14). (81) appeared only in the north-eastern end of the trench, not extending beyond a NW-SE aligned wall, [82] found at the south-western end of the trench.



Figure 14: Section of trench 1 showing (77) (light grey) overlying (81) (darker brown). Some human remains are visible in upper left side of the trench. Looking NW. Scale 1m

7.3.3 [82] was a red brick wall, consisting of eight courses bonded with hard, whitish mortar. It was found at a depth of 0.58m from the surface level. The wall was roughly faced on the eastern side and much smoother on the western side, indicating it was probably the external wall of a basement (fig. 15).



Figure 15: Wall [82] showing E (left) and W (right) sides. Note difference in bond. Scale 1m

7.3.4 A square posthole, [86] was found at the northern end of [82], measuring roughly 0.2m², and c.0.4m deep (fig. 16). The sides of the posthole were vertical and smoothed, indicating that (87) was not its original fill. (87) comprised a very loose brownish-grey silty soil visible mainly at the base of the posthole, with some surrounding the four worked stones that were loosely packed in at the top. These stones were rectangular, measuring, on average, c.0.2m x 0.1m x 0.07m. (87) was backfill, introduced into the posthole when the original solid post had either rotted or been removed.

7.3.5 To the west of [82], 1m away was a NW-SE aligned red brick culvert, [84], running parallel to [82]. The culvert comprised eight courses of red brick bonded with dark grey mortar. On top of the eight courses was an arching structure, which was covered by a stone slab at the southern end (fig. 17). The culvert extended beyond the limits of excavation so its full dimensions are unknown, though the exposed area measured 1.6m x 0.34m x 0.9m high. It was found at a depth of 1.1m below surface level.



Figure 16: Top of [82] showing the posthole in bottom left corner. Scale 0.2m

- 7.3.6** The stratigraphy between [82] and [84] differed from the rest of the trench (fig. 17). Underlying (75), (76) and (77) was a layer of fairly compacted, dark brown silt soil, (88) with frequent inclusions of CBM. It contained several patches of dark grey staining, potentially burnt spots. The layer was c.1.1m thick. It overlay another fairly compact layer of pale yellow demolition rubble, (89), c. 0.4m thick. This consisted of degraded mortar with frequent inclusions of building materials and CBM. It was interpreted as post-medieval demolition rubble, possibly from when the buildings that lay on that area were demolished. Underlying (89) was a compact, mid-brown redeposited clay, (90) with no inclusions. This layer extended beyond the limit of investigation.



Figure 17: [82] (left) and [84] (right). Showing stratigraphy between them- (77) top, overlying (88) (dark brown) which overlies (89) (yellow) and (90) (mid-brown). Looking SW. Scale 1m.

- 7.3.7** At the northeast end of the trench, along the north facing section ran a wall, [78]. It consisted of eight courses of red bricks bonded with a thick, crumbly mortar, with three courses of yellow stock brick forming a slight arch, bonded with a hard, whitish mortar above that (fig. 18). The wall measured 1.2m tall and c.0.36m thick. It was 10m+ long. This has been interpreted as the basement wall belonging to the Horner & Sons chemical warehouse (fig. 13). It was found 0.42m below the surface level.



Figure 18: Wall [78] showing arched pattern of bricks. Looking N. Scale 1m.

7.3.8 All the finds and structures were interpreted as post-medieval, though since the excavations did not reach the natural geology, there is potential for medieval or older archaeology to remain undisturbed beneath. The human remains that were excavated are thought to have been remnants from the burial ground of the church of St James' that was demolished in 1874. See Appendix VI for a full report on the human remains recovered. Some CTP, CBM, animal bone, pot and a single coin were also recovered from the trench, all post-medieval (Appendices IV, V, VII, VIII & IX).

7.4 Trench 1 extension

7.4.1 This trench was a continuation of the NE-SW orientated trench 1, dug in order to connect the new pipes with existing manholes. The trench was positioned in front of the Sir John Cass Primary School gates therefore had to be dug when the school was closed, during half-term (fig. 13). The excavation and monitoring of this section took place on 11th April 2017. It was dug by machine and measured <10m long, 0.5m wide at the NE end, widening to c.3m at the SW end. It measured c.1.5m deep.

7.4.2 The stratigraphy in this section of the trench comprised a 1m thick layer of loose modern overburden, (100), made up of a mix of concrete, stone and light brown soil with frequent fragments of CBM and modern construction detritus. This overlay a layer of moderately compact, light brown-orange soil, (101), containing frequent stones and CBM. It was 0.5m thick, observed primarily in the north and south facing sections east of [102].

7.4.3 A post-medieval structure was observed at the western end of the trench, [102], consisting of two walls forming a corner (fig. 20). There were traces of a western wall and evidence of a vaulted ceiling. The wall was constructed of red brick, bonded with

a gritty grey mortar with alternating rows of headers and stretchers. There were possible traces of render or limewash. The easternmost N-S aligned wall measured 2.5m long, and the E-W return measured 1.1m long. The third possible section lay to the west, aligned N-S. The structure was 1.2m high and there was evidence of the spring of an arch on the eastern N-S wall. This has been interpreted as a small cellar, though the western part has been heavily truncated. If it did form a room, it would have been very narrow; c.1.4m wide, possibly more of a passage.



Figure 19: Walls [102] in trench 1 extension. Facing E. Scale 1m.

7.5 Trench 2

7.5.1 The trench lay at the southwest end of trench 1, towards Mitre Street, orientated NW-SE. It was excavated by machine and monitored from 4th – 12th April. It measured c.11m long and 1.5m wide. It was c.1m deep.

7.5.2 The stratigraphy in the trench comprised 70mm thick stone paving slabs, [91] (same as (75)). Underlying this was a layer of loose, mixed light brown soil with rounded stones, orange sand and MOT type 1, (92). This layer was c.0.6m thick and was seen over the entire trench. This was a layer of modern made ground/backfill from the construction of One Creechurch Place. (95) underlay this, a moderately compact layer of orange rounded gravel and sand, c.0.6m thick.

7.5.3 A linear cut, [93] aligned E-W was observed in section. It measured 0.6m high and minimum of 1.4m wide. The cut was surrounded by (95) and filled with a wall, [94]. [94] was constructed of mixed red and yellow bricks; the red bricks were crumbly whereas the yellow ones were still solid. It consisted of eight courses, bonded with a

thick crumbly concrete mortar (fig. 19). The wall was observed at a depth of 0.42m below the surface. It measured 1m wide and 0.7m high. It extended 0.36m westwards into the trench. There was some evidence of a corner, turning northwards. The upper part of the wall was truncated by modern groundworks. Initially thought to have been a continuation of [78] due to the similar depth at which they were found, a closer inspection of the Goad Insurance plan (fig. 13) would suggest that the basement wall does not continue that far across the square. Instead the wall might have been a part of the basement of one of the buildings fronting Mitre Street, contemporary with [82] and [46].



Figure 20: Wall [94] in section. Looking W. Scale 1m.

- 7.5.4** One block of worked stone was found in (92), also associated with the Priory of Holy Trinity (Appendix III). No other finds or features of archaeological interest were recovered from this trench.

8 DISCUSSION

- 8.1** The features recorded during the works at Mitre Square were limited to the post-medieval period. Surprisingly, given the potential for remnants of the Priory of Holy Trinity identified in the WSI, very little evidence of its existence was found. Three large fragments of worked stone were recovered and identified as belonging to the Priory. These constitute valuable evidence of the existence of the Priory and provide some clues as to what might have happened after it was demolished. The fact that one

fragment was used in the construction of the sewer, [50] would indicate that the demolition rubble from the Priory was likely cleared and dumped somewhere (or even reused), rather than being left in situ.

- 8.2** The post-medieval structures that were excavated consisted of a sewer, [50], a culvert [84] and several different walls [46], [78], [82], [94] and [102]. Being utilities, the sewer and the culvert do not appear on any plans, though in a built-up area in a city, their existence is unsurprising. The walls have been attributed to buildings that surrounded the Square in the Goad Insurance Map of 1887 (fig. 13). [78] was most likely the external basement wall for a chemical warehouse owned by Horner & Sons. The other walls, one seen in the drop shaft, [46], two from trench 1, [82] and [102], and the final wall, [94] from trench 2 are possibly part of the same structure; a basement belonging to a building that, in 1887 was occupied by a picture framer (fig. 13). The area was heavily bombed during the Second World War and the stratigraphy that is visible across Mitre Square is either due to Blitz damage or deliberate demolition. The site was subsequently thoroughly cleared to ground level, making it difficult to define what event caused the deposition.
- 8.3** The quantity of human remains that were recovered point to the existence of a burial ground, most likely one connected to St James' Church. The articulated burials numbered only a few, but they indicate that the burials were generally orientated c.N-S; an unusual occurrence in a Christian cemetery. The fact that some burials remain in situ would indicate that the ground reduction for the construction of the Sir John Cass Primary School (and earlier buildings) was not as invasive as initially thought, and the site was cleared to a more superficial level. There is therefore, archaeological potential for medieval or earlier deposits to remain undisturbed beneath the site.

9 PHASE 1 AND PHASE 2

The following is an attempt to bring together the archaeological findings from both phases of the Mitre Square development in order to try and shed more light on the history of the site as a whole. The findings will be collated in chronological order, refer to fig. 21 for a visual representation.

9.1 Prehistoric

There was no evidence of prehistoric activity recovered from either phase of the Mitre Square Development. The natural geology was only encountered in a phase 1 drop shaft in Creechurch Place at a level of 11.758mOD. The shallower levels of the rest of the groundworks mean that prehistoric archaeological deposits were not encountered, though it is possible also that they have not survived or there was no prehistoric activity around the site.

9.2 Roman

A number of Roman features were recorded during phase 1 in the drop shaft on Creechurch Place, just west of the main Roman wall and ditch. These consisted of a series of intercutting, intramural pits. Three were irregularly shaped and hence interpreted as rubbish pits, the fourth was more linear and may have been structural.

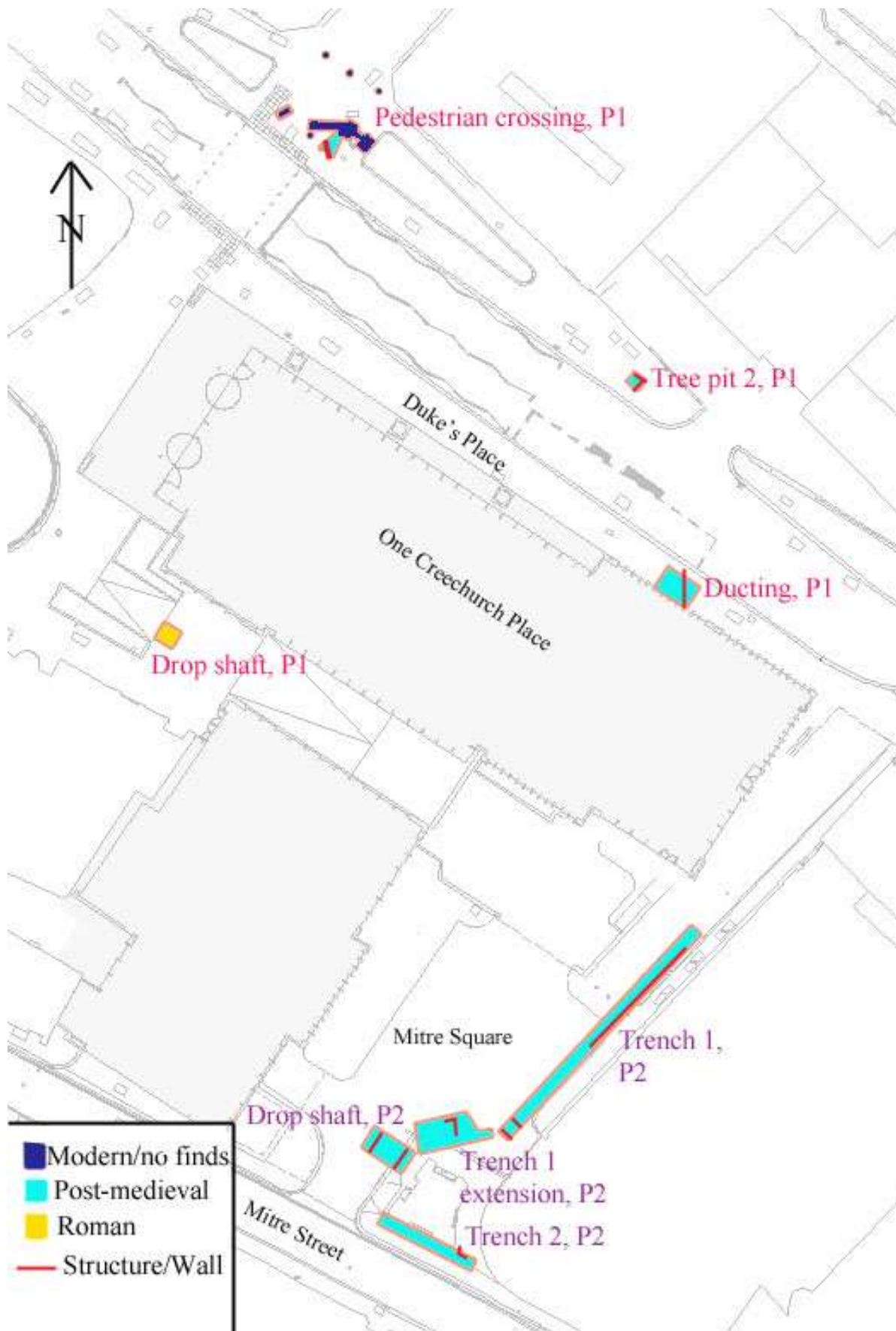


Figure 21: Layout of the groundworks of Phase 1 and 2 of the Mitre Square Redevelopment, showing approximate location of walls/structures (red) and overall period evidenced (blue, turquoise or yellow).

They were cut into the natural brickearth at the base of the drop shaft and taken to continue below the level of excavation (10.268mOD). The pits were taken to be associated with the Roman city wall, and were dated with pottery and other finds to between the 1st and 4th century. They most likely represent activity within the peripheries of the city, though because of the close proximity to the gate of Aldgate, the area would have been well frequented.

There were no Roman finds or structures encountered in the rest of the phase 1 works, nor during phase 2. This again is probably due to the depth of the excavations, and because the pits that were found were cut into the natural, one would expect to have to excavate to the natural geology in other places in order to recover Roman archaeological deposits.

9.3 Medieval

No evidence of the medieval period was encountered during phase 1. This was thought to be the result of the shallow extent of the majority of the excavations, and where the excavations were deep enough (the Creechurch Place drop shaft), the level at which medieval deposits were expected had been greatly disturbed by post-medieval and modern groundworks, likely extensively truncating any medieval deposits. Phase 2 proved to be similar in that none of the expected medieval deposits, mostly relating to the Priory of Holy Trinity, were encountered. This is again probably due to later post-medieval and modern truncation from building works and utility installations from the development of Mitre Square post-Dissolution.

Three fragments of worked stone were recovered during phase 2 that have been positively associated with the Priory (Appendix III), but they were all residual. One had even been recycled into construction material for the sewer [50]. It is clear that the perhaps Priory was more thoroughly demolished than previously thought, as even the supposed substantial foundations were not apparent. Though again this lack of evidence may be due to the relatively shallow excavations. Some medieval CBM and a single fragment of pottery were found during phase 1, but it was not enough to be conclusive evidence for the Priory.

9.4 Post-medieval

The majority of excavations during phase 1 and 2 encountered a substantial amount of post-medieval backfill of varying thickness, the majority being related to demolition and construction events, some possibly relating to post Blitz rebuilding and other more general redevelopment.

Several structures were found, mostly walls, across both phases. Those found during phase 1 were, in general, related to residential buildings around the area. The structures encountered during the phase 2 works were similarly interpreted- as the basements of various commercial buildings backing on to Mitre Square. One more significant find during phase 1 has been interpreted as the outer wall of the Great Synagogue, encountered in the ducting trench on Duke's Street, abutting One Creechurch Place.

Evidence of the burial ground associated with St. James' Church was encountered during phase 2. This comprised of mixed graveyard soil, with frequent disarticulated human remains and other post-medieval finds including CTP and pot. When St. James'

was demolished, it is likely that some attempt was made to clear the burial ground, though apparently this was not very thorough leaving some burials *in situ* and articulated. Two partially articulated burials [SK2] and [SK3] were found beneath wall [82], indicating the wall was more recently built, though the date of the burials is unknown. The burial ground was active between 1622 and 1833; the date of the last burial according to Parliamentary Papers (1780-1849). The redevelopment of Mitre Square was rapid following the demolition of St James', as just 12 years later (fig.13) the land is fully built-up, indicating that the burial ground was probably swiftly and not very thoroughly cleared before building began.

The significant amount of post-medieval backfill and made ground encountered across the whole development would indicate that intensive building works have taken place in the area over a long period of time. These works have likely truncated the majority of earlier archaeological evidence, going some way to explaining the lack of significant archaeological finds prior to the post-medieval period (excepting the Roman pits).

10 CONCLUSION

The following provides a summary of the work undertaken with reference to the original research questions set out in the WSI.

10.1 *Is there any evidence of the intramural Roman settlement of Londinium? If so, what form does this take and at what level does it survive?*

Archaeological evidence of the wall and other Roman activity were not encountered during this watching brief. Only one small residual fragment of Roman Samian Ware was recovered from (61) at the base of the drop shaft.

10.2 *Is there any evidence of late Roman/early occupation prior to the creation of the Priory of Holy Trinity?*

There is no evidence of any occupation of the site prior to the post-medieval period. This is likely due to the fact that none of the groundworks were deep enough to reach the natural geology, therefore there may be more significant archaeological evidence for earlier occupation that remains undisturbed.

10.3 *Is there any evidence of the Priory, and if so, what form does it take?*

The only evidence of the Priory that was encountered were three residual fragments of worked stone. There was no evidence that remained *in situ*, thought to be the result of the post-medieval truncation in the area. This is reflected by artefactual evidence, which was entirely made up of post-medieval pot (aside from one residual Roman fragment), CBM and CTP. The fragments of worked stone that have been attributed to the Priory were recovered from the drop shaft. One had been worked into the construction of the sewer, and the others were included in general backfill. These may indicate that the demolition rubble from the Priory was removed from the area and dumped elsewhere, or reused in other building projects. According to the London Encyclopaedia, the stone and the spire from the Priory were carted away for use as paving elsewhere (1983). This

seems very plausible taking into account the paucity of remains from what was a very large building.

10.4 *What remains of the post-Dissolution development of Duke's Place/St James' Church?*

There was no structural evidence of St James' Church recovered from Mitre Square. The only evidence that there was a church in the area was the significant quantity of human skeletal material that was recovered from trench 1. The fill, (81) that contained the human remains also contained post-medieval pot and CTP that was dated to the 19th century. One pipe bowl recovered from this context was dated to 1640-1690, indicating that it was probably deposited while the graveyard was in use. The disarticulation of the majority of the skeletal material indicates that the burial ground was probably disturbed and possibly even partially cleared when St. James' was demolished. The fact that some of the burials remained articulated and *in situ* indicates that this disturbance remained superficial. The majority of the church lay under what is now the playground of the Sir John Cass Primary School therefore finding no evidence of the physical structures is unsurprising. Some evidence of the buildings surrounding the Square were found, comprising several walls that were attributed to basements of the buildings. One of the walls, [78] was only partially uncovered, running parallel to the trench. Only the exterior of the wall was visible, so the state of the basement interior is unknown. The other two walls from trench 1 may have been part of the same basement, and showed evidence of the interior of the basement being backfilled, potentially during the demolition of the above-ground building.

10.5 *What is the stratigraphy beneath Mitre Square? Can an archaeological sequence be produced?*

The archaeological sequence is relatively isolated, based mainly off of the stratigraphy recorded in the drop shaft, which formed the deepest area of excavation. The general sequence here comprised either 80mm of tarmac on the pavement, or 120mm of cobbles on the carriageway. These overlay 80mm of bedding sand or c.100mm of concrete respectively. Underlying these was a disturbed, post-medieval made ground covering the extent of the trench to a depth of c.2.5m. This made ground was truncated by various modern services as well as two, more significant, post-medieval structures: the brick sewer and a brick wall. The natural geology was not encountered, the lowest level recorded was 12.02mOD. The stratigraphy recorded in the shallower trenches was similar, consisting of paving slabs c.70mm thick overlying concrete/mortar bedding c.100mm thick. Underlying this was a pale grey, fairly compacted gravelly soil which was c.0.8m thick. Underlying this was post-medieval made ground and mixed graveyard backfill, both extending beyond the limit of excavation, the lowest level recorded was 13.90mOD.

10.6 *If encountered, what is the natural geology and at what level does it exist across the site?*

The groundworks during this phase of development at Mitre Square did not encounter the natural geology. The drop shaft was the most invasive intervention, measuring 12.02mOD at its deepest point.

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APPENDIX I: LIST OF CONTEXTS

Drop shaft, southwestern corner of Mitre Square

Context	Description
(40)	Tarmacadam pavement surface
(41)	Cobbles, road surface
(42)	Sand below (40)
(43)	Concrete below (40) in S end
(44)	Coarse concrete below (43)
(45)	Gravel ballast in S end
[46]	P-medieval wall at S end
(47)	Backfill to N of [46] in E section
[48]	Cut for E-W group of 3 services
(49)	Sand, fill of [48]
[50]	Sewer and associated structures
[51]	Manhole/chamber in E section
(52)	Darker brown fill in NW corner above [50]
(53)	Backfill above arch of [50]
(54)	Dark brown silty lens below (45) in S end
[55]	Concrete floor below (54)
(56)	Powdery rubble below (55) in S end
(57)	Compact gravels below (56)
(58)	Dark CBM deposit below (57)
(59)	Thin black lens near trench base
(60)	Compact yellowish gravel below (59)
(61)	Mixed trample/made ground on trench base
[62]	Cut for pit in SE corner
(63)	Fill of [62]
[64]	Cut for shallow pit in centre, S end
(65)	Fill of [64]
[66]	Cut for semi-circular pit W of [64]
(67)	Fill of [66]
[68]	Cut for pit in SW corner
(69)	Charcoal rich fill of [68]
[70]	Cut for pit in E section
(71)	Charcoal and CBM rich fill of [70]
[72]	Cut for small cess pit in E section
(73)	Fill of [72]
[96]	Cut for pit in W fac. Sec. between [46] and (44)
(97)	Lower fill of [96]
(98)	Upper fill of [96]
(99)	Concrete beneath (41) to N of [51]

Trench 1

Context	Description
(75)	Paving slabs- stone
(76)	Concrete bedding below (75)
(77)	Pale grey compact gravel/soil below (76)
[78]	Basement wall- exterior
79	VOID
80	VOID
(81)	Loose dark grey/brown backfill
[82]	NW-SE running wall at W end of trench
[83]	Cut for [82]
[84]	Culvert at W end of trench, NW-SE running
[85]	Cut for [84]
[86]	Cut for posthole at N end of [82]
(87)	Fill of [86]
(88)	Dark brown soil W of wall [82]
(89)	Pale yellow demolition rubble below (88)
(90)	Redeposited clay below (89)

Trench 2

Context	Description
[91]	Paving slabs
(92)	Group: modern made ground layers
[93]	Cut for wall [94]
[94]	Wall, taken to be W end of [78]
(95)	Gravel surrounding [94]

Trench 1 extension

Context	Description
(100)	Modern overburden
(101)	Post-medieval soil
[102]	Red brick basement wall

APPENDIX II: PLANS AND SECTIONS

Drop Shaft

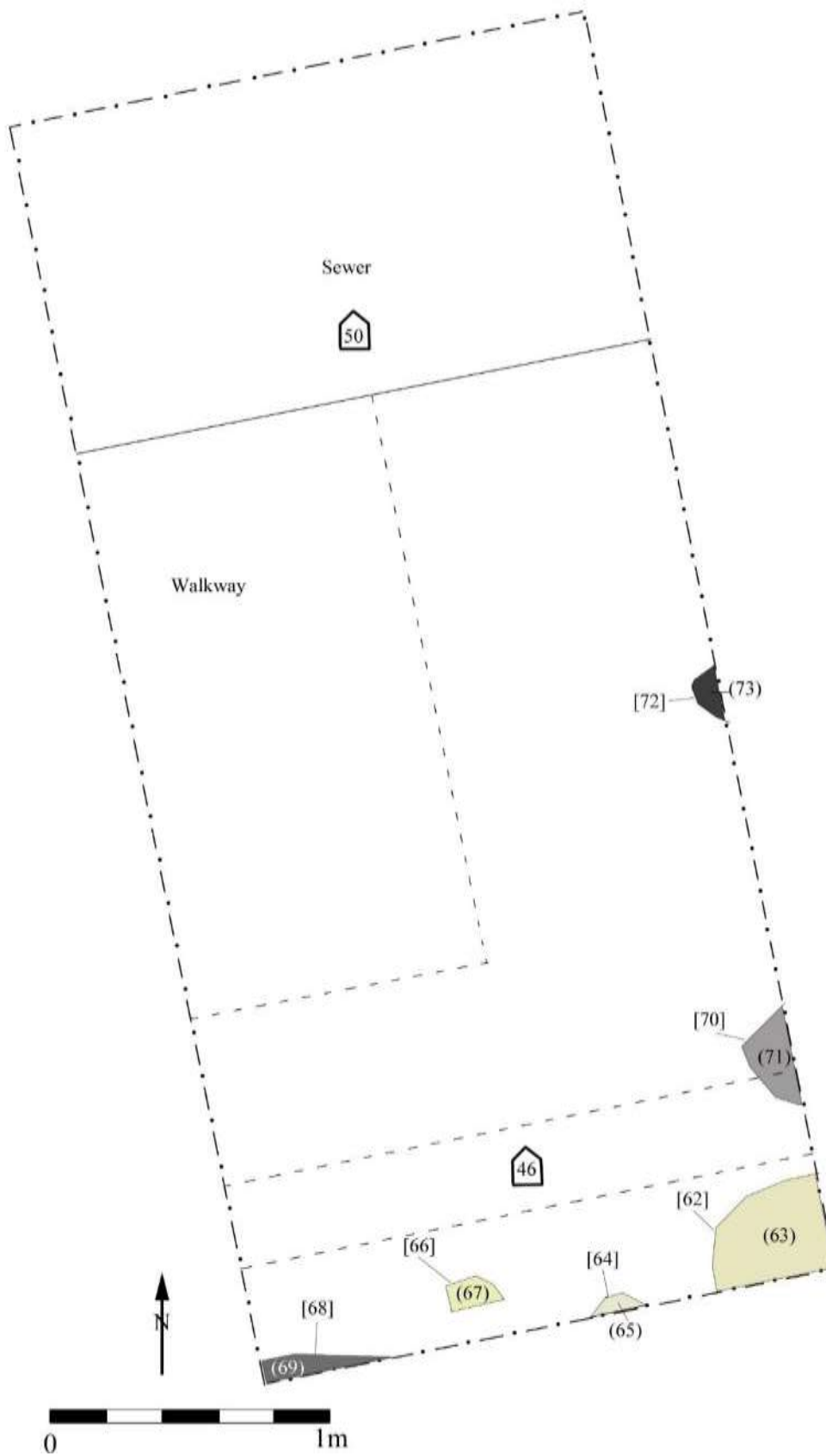


Figure 22: Plan of the base of the drop shaft, showing the pits and projected location of [46]. Original drawn at 1:20.

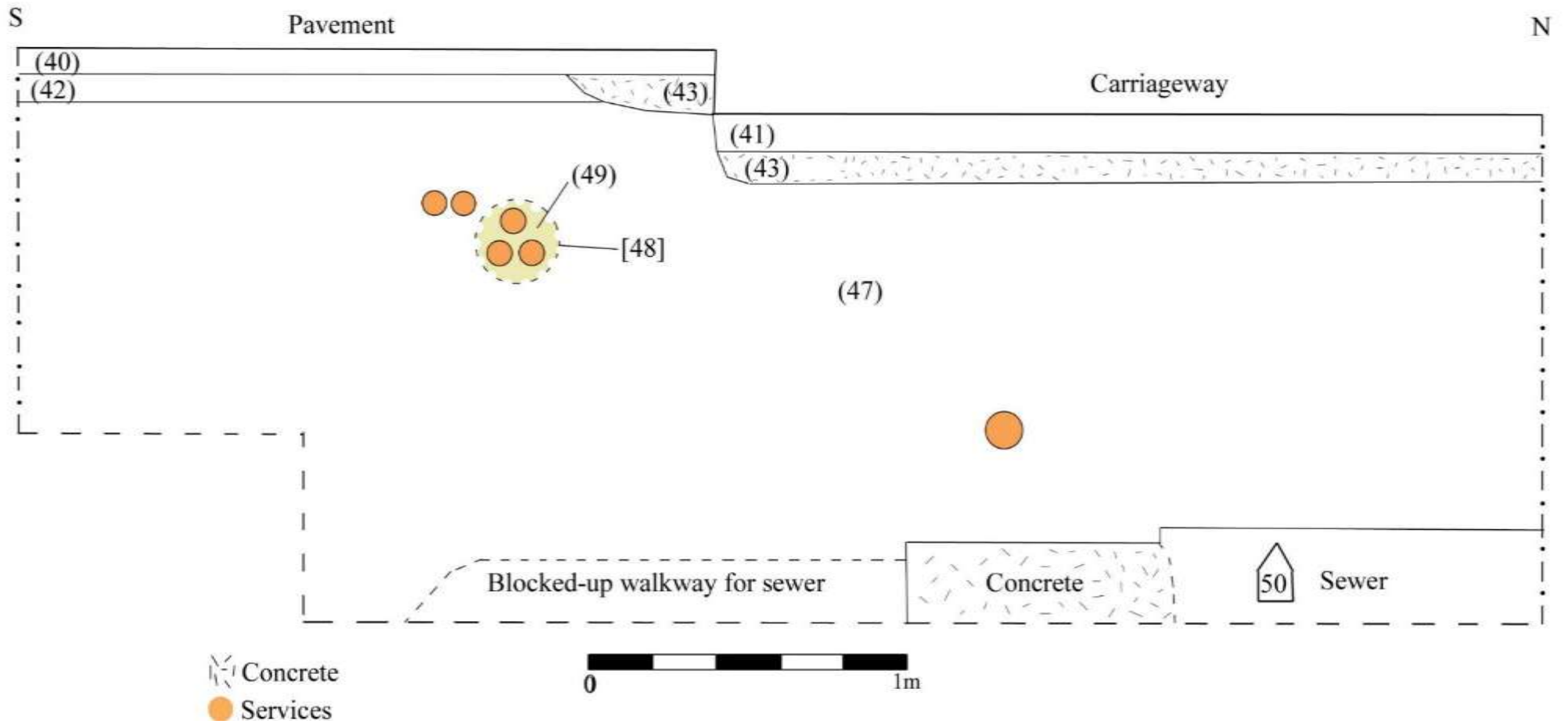


Figure 23: E facing section, centre of drop shaft, upper 1.8m. Original drawn at 1:20.

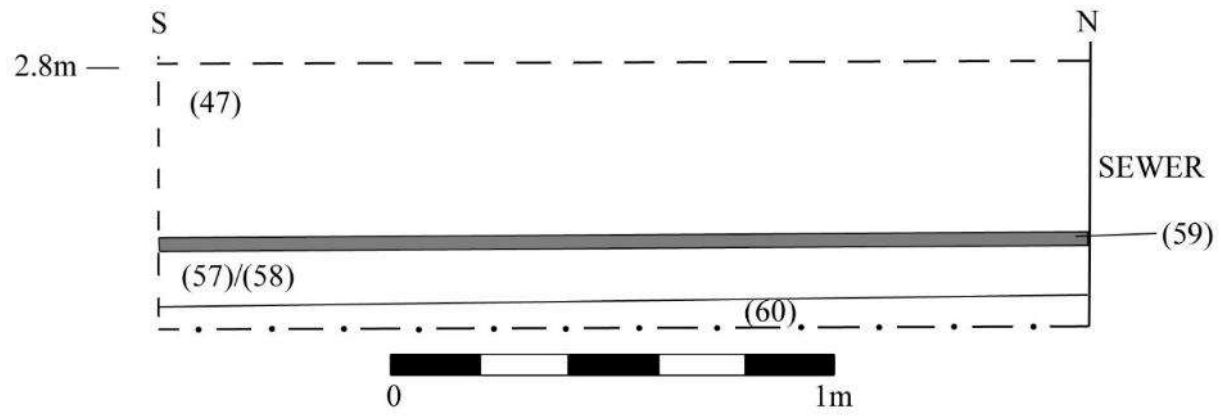


Figure 24: Sample of E facing section of drop shaft, 2.8m to base. Original drawn at 1:20.

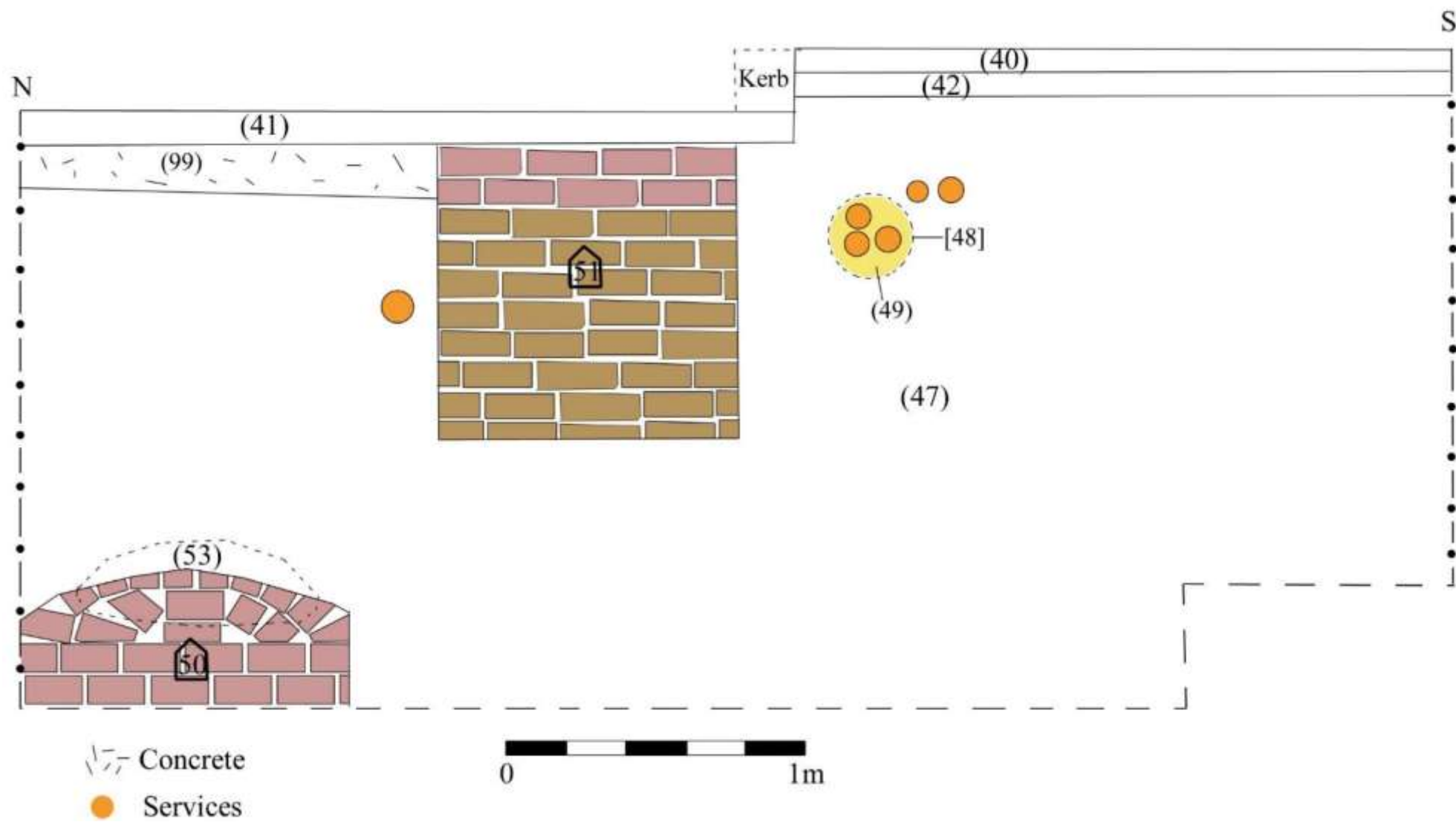


Figure 25: W facing section, centre of drop shaft, upper 2.1m. Original drawn at 1:20.

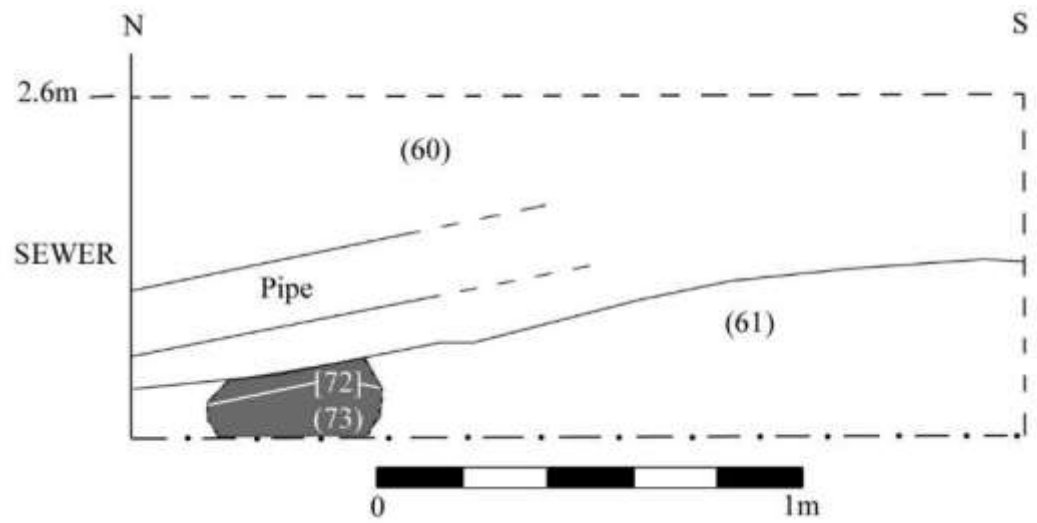


Figure 26: Sample of W facing section of drop shaft, 2.6m to base. Original drawn at 1:20

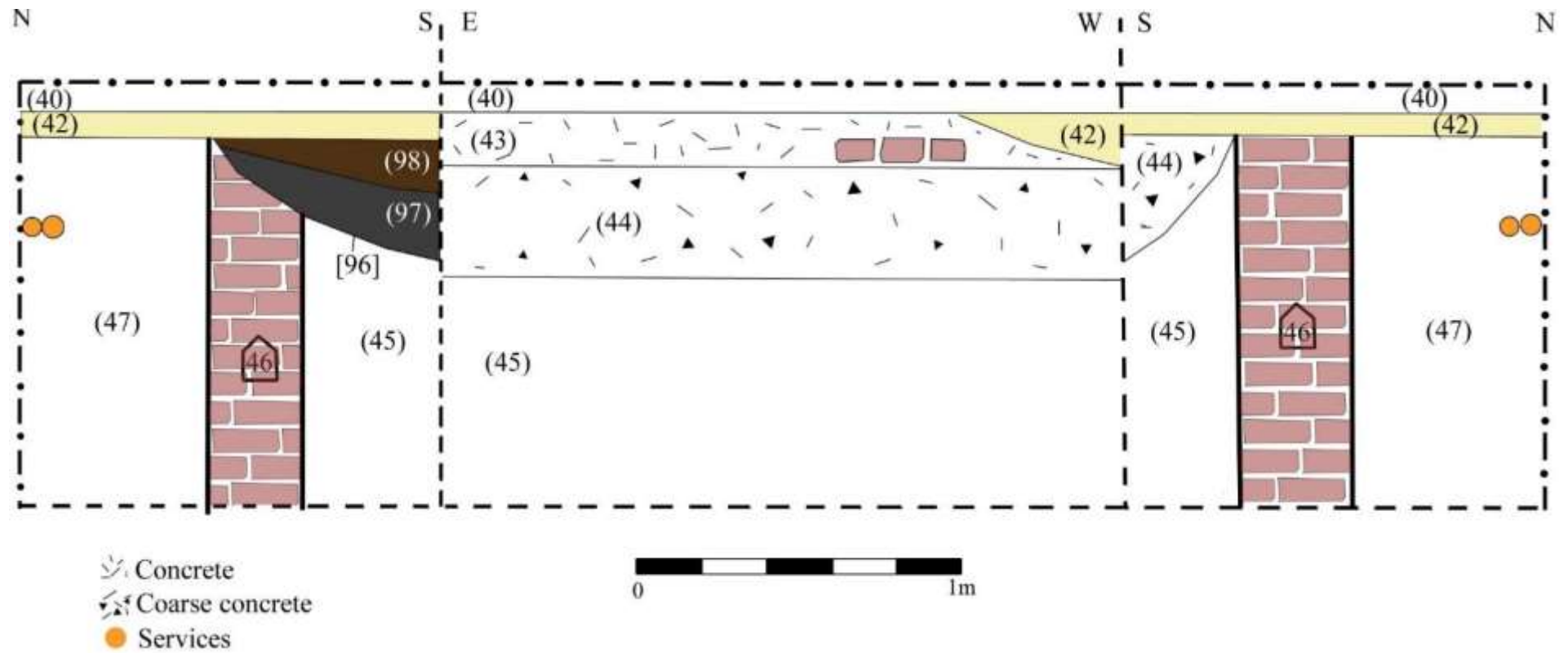


Figure 27: South end of drop shaft. W facing section (left), N facing section (centre) and E facing section (right), upper 1.3m. Original drawn at 1:20.

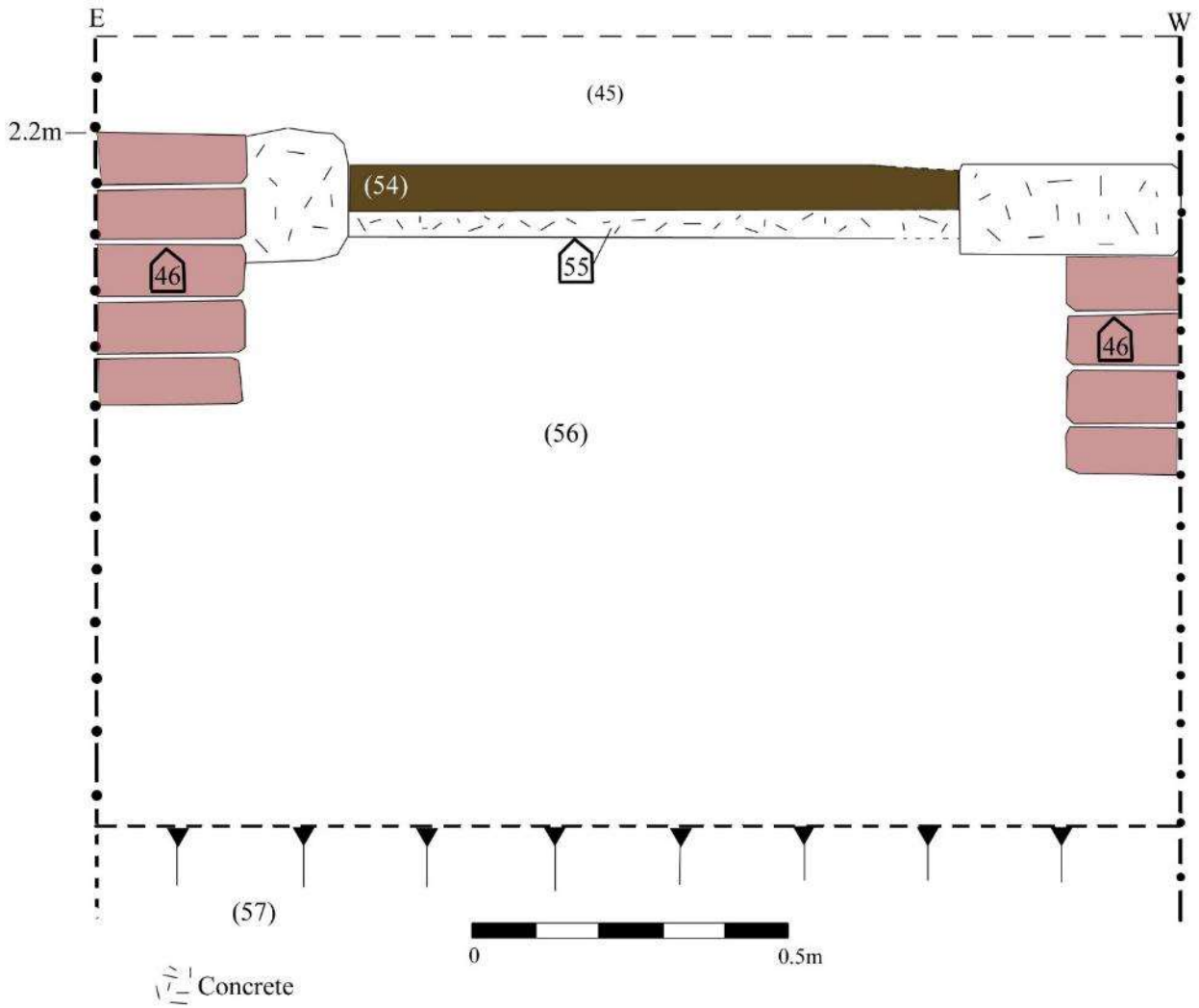


Figure 28: N facing section of drop shaft, 2.2m to 3.4m. Following below centre of fig. 27. Original drawn at 1:10

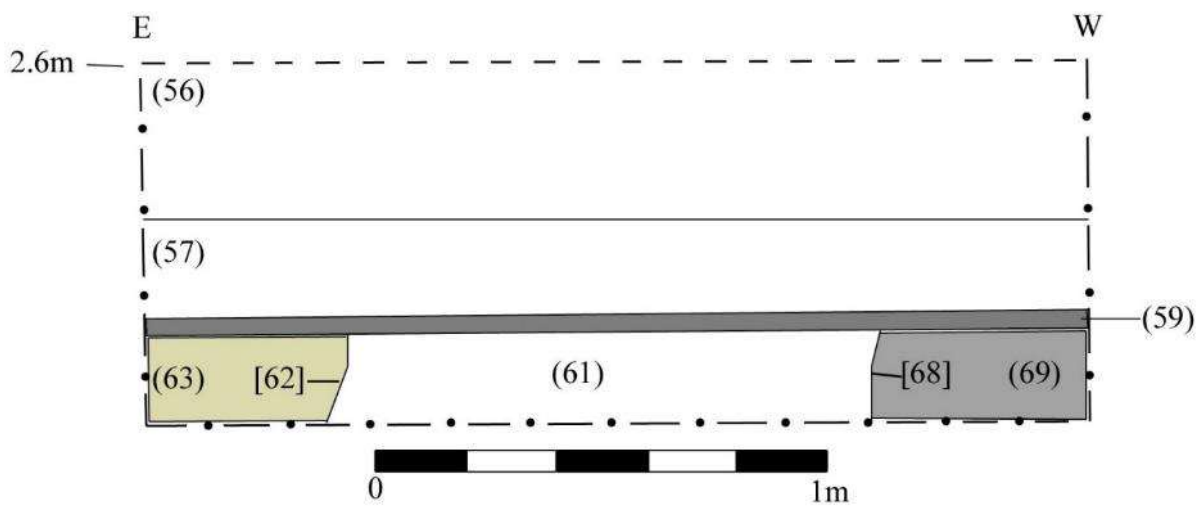


Figure 29: N facing section of drop shaft, 2.6m to base. Following below fig. 27. Original drawn at 1:20

Trench 1

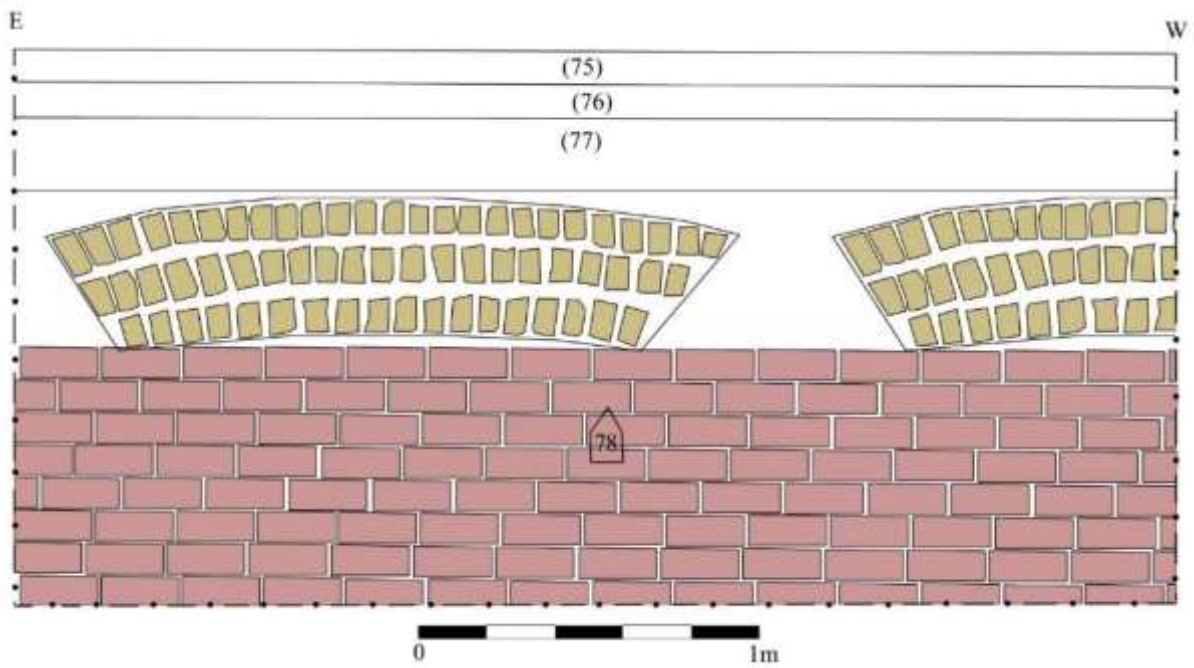


Figure 30: N facing section of E end of trench 1. Original drawn at 1:20.

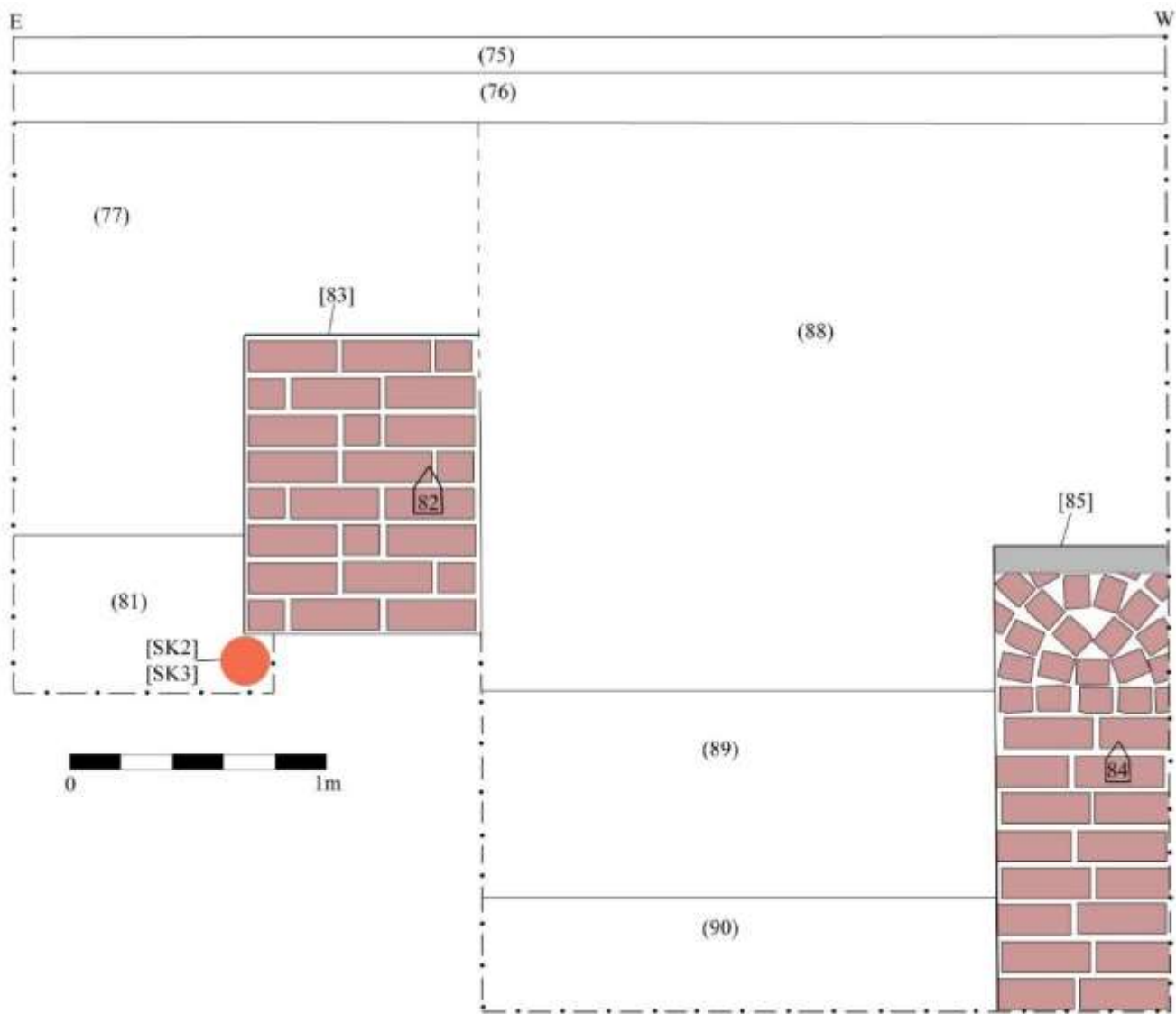


Figure 31: N facing section of W end of trench 1. Original drawn at 1:20.

Trench 2

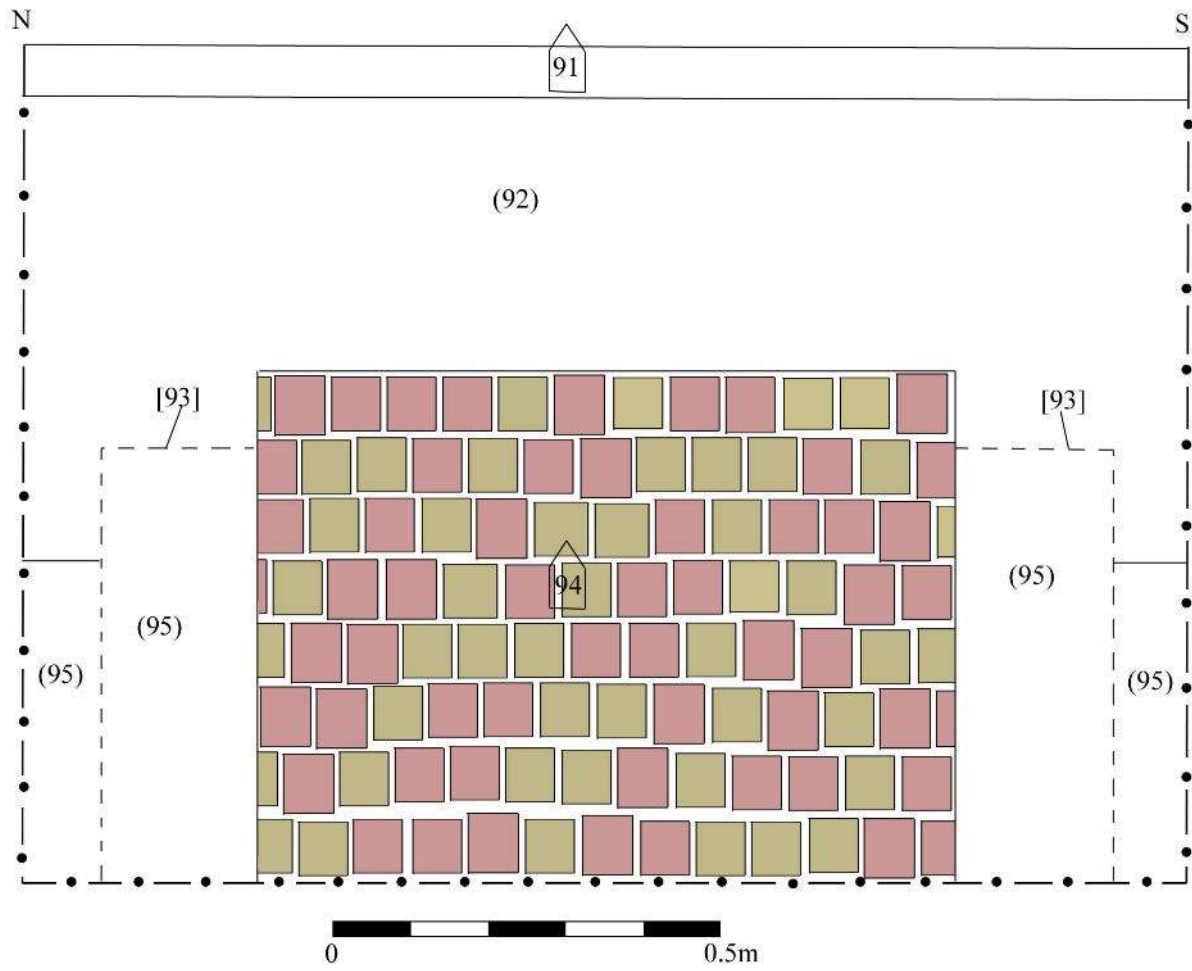


Figure 32: W facing section of trench 2. Original drawn at 1:10.

APPENDIX III: WORKED STONE REPORT by Mark Samuel

Introduction

Three architectural fragments were recovered during clearance on a site in London (DUS16: Mitre Square). There are no plans to take forward the analysis of these fragments. The description given here is therefore more detailed than would normally be the case.

For the purposes of assessment, it is necessary to obtain a basic understanding of the potential of an assemblage. I was therefore subcontracted to carry out the specialist finds assessment. For the purpose of my visit on the 1st June, the loose items were temporarily moved to the Compass Archaeology Office (London). No site visit was made in either case. A provisional judgment of its masonry is given here.

Conditions of recovery

Three examples of worked stone are here referred to by letters A-C. A and C were recovered from context (47) and B from (92). (47) was post-medieval demolition rubble that was visible across the whole of the drop shaft in Mitre Square. (92) was a shallow modern construction backfill from the erection of One Creechurch Place. They had been cleaned before assessment but lack packaging.

Methodology

Because the architectural fragments were on the floor, it was necessary where possible to transfer them to an office desk for individual examination. Larger items were not moved for H&S reasons but were examined on the spot.

Relevant details were logged on standard AA quantification paper sheets. Basic sorting was subsequently carried out using the table function of Word.

Petrology

These identifications are based on gross characteristics and can be regarded as provisional.

The London architectural fragments are cut from building stone typical of date and purpose in the region: Romanesque capital (A) = Caen stone; 15th-c coping stone (B) = Ketton stone; Renaissance cornice (C) = Portland stone.

Caen stone was extensively used in the 12th-century mouldings recovered from Holy Trinity Priory during excavation in the 1980s. It was described as a *'cream finely textured limestone... identified [by Dr Joan Blows] as a bioclastic limestone (i.e. one containing broken shells fragments). The stone comes from Caen (Calvados) in Normandy and forms part of the Lower Bathonian Stage of the Middle Jurassic'* (Schofield et al. 2005, 208).

The use of Ketton stone for coping stone seems to have become established in the 15th century (Samuel 1989, 142) due to the very resistant nature of this oolitic limestone.

Portland stone was only rarely used in London in the medieval period (Salzman 1952, 133); a huge expansion in use occurred in the 17th century due to improvements in quarrying

techniques (Chatwin 1960, 28-34). The earliest mention of this phenomenal expansion is in 1622 (Harris et al 1973, 120).

The items

Given the very small size of the ‘samples’, it would be unwise to make much of apparent dates. A 25-year date bracket can sometimes be suggested for a distinctive moulding pattern; allowing close dating of in-situ structures. When stones are re-used in a structure, the stone may be several hundred years old at the time of re-use. The likelihood is that parts of the Priory precinct formed the source structure- a process that commenced after the Dissolution; probably continuing to at least the 19th century.

Contxt	SF	Approx. survival (%)	In order of importance	Early date	Late date	State
(47)	A	75	4	1160	1200	Fresh
(47)	B	75	3	1400	1540	Weathered
(92)	C	10	4	1630	1800	Weathered

Table 1: DUS16 worked stone significance and dating

(A)

The most important item in this group is a scalloped capital (A), of which all parts are represented despite historic and recent damage (figs. 33-37). This was a respond capital which rested on a narrow fluted respond shaft; the capital was in its turn capped by an abacus (missing). A vault springing rested on the abacus.



Figure 33: (A) – front of worked stone, showing scalloping. Scale 0.1m

The capital type was common in England; being called the ‘cone-bearing’ type (Bilson 1909, 251). It was taken up in the earlier Cistercian churches in the 1160s and 70s.

The separation of the cones by ‘darts’ is a typical embellishment; enormous variation being possible. The fluted necking is more unusual. The capital was found covered in ‘late stock bricks’ and lime mortar; this indicates early 19th century re-use in the construction of the sewer, [50].

We know a great deal about this priory. Parts were recorded in varying levels of detail in the early 19th century (ibid, 29-41) and excavations were carried out 1977-1984. The presbytery capitals (Schofield et al. 2005. fig 78) illustrate a universal use of bowtells (round shafts) and a giant order (ibid, 79-82). The capital seems to have supported a relatively narrow arch soffit and rested on a fluted or barley sugar shaft. Fluted shafts are used in the early 12th century – for example in the external arcading of the north-east transept at Canterbury (Kahn 1991, fig. 130: prior to 1130). Refinements of this capital, such as the ‘fluting’ of the necking, may reflect the later date (see above). This is an unusual treatment – certainly at the church of Holy Trinity Priory (1108 +)

This structure apparently survived to a late date (this part of London escaped the Great Fire) and may have been unconnected with the Priory church. On grounds of scale and quality alone, a building ancillary to the priory seems the most likely source. We know that several of the cloistral buildings survived into the early 19th century (Schofield et al. 2005: 98-100).



Figure 34: (A) – base of stone showing incised border. Scale 0.1m



Figure 35: (A) – top of stone, showing remnants of mortar used in bonding stone into sewer, [50] construction. Scale 0.1m

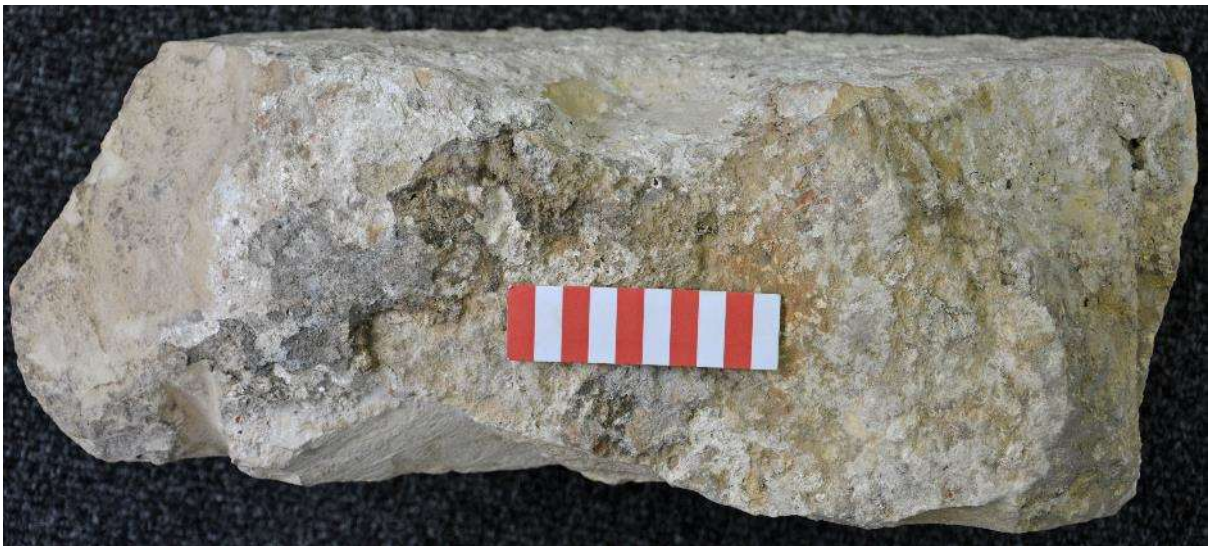


Figure 36: (A) – back of stone. Scale 0.1m



Figure 37: (A) – left and right ends (respectively) of the stone. Scale 0.1m

(B)

A heavily-weathered coping stone was recognized (B; figs. 38-44). It may have represented the end of a run of crenellation as one end develops a plain wall face. An iron clamp (missing) held the coping in place against the wall. The block was later removed and trimmed to form a facing block (ashlar). It was in effect turned through ninety degrees so that the bed became the wall face (indicating yet more recycling of the worked stone). Well-dated Ketton stone copings were recorded at the Leadenhall Garner (1444 +; Samuel 1989) a few hundred metres away. Association with the Priory is likely, but such copings were employed in late medieval and Tudor buildings throughout the City.



Figure 38: (B) – top of stone. Scale 0.1m



Figure 39: (B) – front of stone. Scale 0.1m



Figure 40: (B) – right side of stone. Scale 0.1m



Figure 41: (B) – left side of stone. Scale 0.1m



Figure 42: (B) – base of stone. Scale 0.1m



Figure 43: (B) – back side of stone. Scale 0.1m



Figure 44: (B) – detail of the top of stone. Scale 0.1m

(C)

A third block (C) can be identified as part of a cornice (figs. 45-49), remotely deriving from classical Ionic models, as shown by the ovolo-moulded consoles. These hanging consoles adopt the moulding more normally used in the lower order of the cornice. The scale of cantilever illustrates a large classical building. The building must have existed for many years because the exposed lip was heavily weathered before demolition. A church may be represented; but the relative wealth represented by the fragment is hard to associate with St James Duke Place (demolished 1874); the 'lost' church in the area. This church was built by and for poor folk and was of plain design (Huelin 1996, 42). The fine gateway of the Aldgate Ward Watch house next to St Catherine Cree (Schofield 2005, fig. 165) has been relocated since its construction in 1631. The use of cornices with consoles does however show the sort of architectural context the fragment may have occupied. A comparison would be of interest.



Figure 45: (C) – top of stone. Scale 0.1m



Figure 46: (C) – right side of stone. Scale 0.1m



Figure 47: (C) - left side of stone. Scale 0.1m



Figure 48: (C) – front of stone. Scale 0.1m



Figure 49: (C) – back of stone. Scale 0.1m

Recommendations

The stone items need no conservation. Proper packing is required as is labelling (architectural fragments in storage are very prone to losing their identity). There is no particular requirement for my further involvement with the DUS16 assemblage unless publication illustration of the mouldings is required. Such a 'substitute archive' allows the mouldings to be used as comparanda, but is unlikely to add much detail to the art-historical description given here.

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APPENDIX IV: POST-MEDIEVAL POTTERY by Paul Blinkhorn

The pottery assemblage comprised 122 sherds with a total weight of 1,952g. It is all post-medieval, other than a single small sherd of residual Roman Samian Ware. All the contexts were of 19th century date, but large quantities of residual earlier pottery were also present. It was recorded using the conventions of the Museum of London Type-Series (eg. Vince 1985), as follows:

BORDG:	Green-Glazed Border Ware , 1550-1700. 7 sherds, 76g.
CHPO:	Chinese Porcelain , 1580 -1900. 8 sherds, 75g.
CREA:	Creamware , 1740-1830. 12 sherds, 90g.
ENPO:	English Porcelain , 1745-1900. 1 sherd, 11g.
FREC:	Frechen Stoneware , 1550 – 1700. 1 sherd, 10g.
HESS:	Hessian Crucible , 1480-1900. 1 sherd, 14g.
HORT:	Horticultural Earthenwares , 19 th – 20 th century. 1 sherd, 17g
LONS:	London Stoneware , 1670 – 1900. 5 sherds, 127g.
METS:	Metropolitan Slipware , 1480 – 1900. 1 sherd, 58g.
PEAR:	Pearlware , 1770-1830. 6 sherds, 106g.
PMR:	Post-medieval Redware , 1580 – 1900. 25 sherds, 696g.
REFW:	Refined Whiteware , 1800-1900. 10 sherds, 257g.
SAM:	Samian Ware , 1 st – 2 nd century. 1 sherd, 2g.
SWSG:	Staffordshire White Salt-Glazed Stoneware , 1720-1780. 6 sherds, 37g.
TGW:	English Tin-Glazed Ware , 1600-1800. 16 sherds, 190g.
TPW:	Transfer-printed Whiteware , 1830-1900. 17 sherds, 159g.
WEST:	Westerwald-type Stoneware , 1590-1800. 1 sherd, 4g.
YELL:	Yellow Ware , 1840-1900. 3 sherds, 23g.

The pottery occurrence by number and weight of sherds per context by fabric type is shown in Table 2. Each date should be regarded as a *terminus post quem*. The range of fabric types is typical of sites in the region.

The residual material consists of a common range of pottery for post-medieval assemblages in London, and suggests that there was activity at the site from the 16th – 18th century. However, the paucity of Border Wares suggests that most of the residual pottery could be of 18th century date, as that industry went into severe decline in the early decades of the 1700s (Pearce 1988, 102), although the observed pattern may simply be due to the vagaries of archaeological sampling.

The range of vessel types is fairly typical of domestic sites in the region, comprising utilitarian wares such as PMR and BORDG, and more refined table- and display-wares such as TGW and CHPO. The SWSG assemblage included a wide range of vessels, from drinking pottery such as tea-bowls and tankards, tablewares such as plates and bowls, and chamber-pots. The 19th century pottery is mostly table-wares, although stoneware drinking and storage vessels were also noted, as were a few fragments of flower-pots.

The fragment of the base of the Hessian crucible is the only pottery which can be said with certainty to have had an industrial purpose, although it shows no obvious signs of use. Such vessels, while commonly used in metal-working, and almost universally in post-medieval gold- and silver-working, were also utilized by practitioners in other areas, such as alchemists, chemists, potters, physicians, glassworkers and apothecaries (Cotter 1992).

Cntxt	BORDG		FREC		PMR		METS		WEST		TGW		LONS		SWSG		CHPO		ENPO		CREA		PEAR		HORT		REFW		TPW		YELL		Date
	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt			
(47)					2	118							1	22			3	24			3	23	6	106					4	61	2	19	M19thC
(53)					1	11											1	43			1	11							4	66			19thC
(61)*												1	3													1	17					19thC	
(69)					6	105													1	11									1	2			19thC
(71)					1	21																			1	17							19thC
(81)**	5	36	1	10	3	34	1	58	1	4	8	53	1	17	1	12	2	3									1	57					19thC
(88)	2	40			12	407					7	134	3	88	5	25	2	5			8	56					8	183	8	30	1	4	M19thC
Total	7	76	1	10	25	696	1	58	1	4	16	190	5	127	6	37	8	75	1	11	12	90	6	106	1	17	10	257	17	159	3	23	

Table 2: Pottery occurrence by number and weight (in g) of sherds per context by fabric type

* = also produced a sherd of Samian Ware (2g)

** = also produced a sherd of HESS (14g)

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APPENDIX V: CLAY TOBACCO PIPE *by Miranda Fulbright*

The clay pipe that was recovered during the groundworks in Mitre Square is a typical representation of assemblages that are found in London. A total of 8 partial bowls, some with stem attached were found, along with an additional 86 stem fragments across 7 contexts.

Drop Shaft

Context (47) produced 4 partial stem fragments and one bowl. (47) was a post-medieval backfill that was visible across the whole of the trench. The bowl dated to 1780-1820 and was decorated with a moulded design of wheat sheaf's either side of the seam at the front and back of the bowl. The interior of the bowl was smoke stained.

Context (53) was a small area of backfill situated above the arch of the sewer, [50] in the northern end of the drop shaft. This context yielded 1 partial bowl and 4 partial stem fragments. The bowl was dated to 1850-1910, potentially dating the construction or period of reinforcement of the sewer to the late 1800s. The bowl was slightly smoke stained therefore had seem some use.

Context (61) was a layer of mixed trample, visible towards the centre of the base of the drop shaft. The context produced 1 partial bowl and 2 stem fragments. The bowl was provisionally dated to 1780-1820. It was stamped with a makers mark either side of the spur, 'W' 'W'. This mark may refer to William Watson, who worked 1809-11 on Silver St., Lemans Pond (Oswald, 1975).

Context (69) was a charcoal rich fill of a small pit, [68] in the base of the drop shaft. It produced 1 stem fragment which cannot be dated, though CBM from the same context was dated to 1450-1900 (Appendix VIII).

Context (71) was also the fill of a small pit [70] visible in the base of the drop shaft. It comprised a charcoal and CBM rich fill, producing 4 partial stem fragments. Again the stem fragments cannot be dated, but the CBM recovered from the fill was dated to 1700-1800.

Trench 1

Context (81) produced 39 of the stem fragments and one partial bowl. (81) also contained frequent inclusions of human bone, some animal bone and some pottery. The partial bowl that was found in this context dates to 1640-1690. Since the fill (81) was so disturbed and mixed, the date of this pipe cannot be used to date the burials. The burial ground for the church of St James' was in use from 1660 to 1833, indicating that the pipe was probably deposited during the use-period of the burial ground. The pipe bowl was stamped with a geometric band around the rim, and no makers mark. The bowl was only slightly smoke stained, along with only 3 of the stem fragments. This would indicate the majority had only been lightly used before deposition.

Context (88) produced 32 stem fragments and four partial bowls. (88) also contained some CBM, glass and pottery. The bowls that were recovered cover a range of dates from 1660 to 1880. Three of the four bowls had some decoration on. One was stamped

with a band around the rim, and one had a very faint geometric decoration around the spur. The final pipe bowl was decorated with a moulded makers mark on either side of the spur. The left side with an 'R' and the right with a 'P'. Two of the bowls were smoke stained, along with only 3 of the stems, again indicating that the majority of fragments were either only lightly used, or not at all, before deposition.

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Catalogue

There follows a catalogue of the assemblage compiled using the guidelines set out in the DAACS Cataloguing Manual: Tobacco Pipes, by Kate Grillo, Jennifer Aultman and Nick Bon-Harper (updated February 2012).

Key:

Abbreviations across head of table

- BH** = Bowl height
BW = Bowl width
SL = Stem length
SW = Stem width
BS = Borehole size

Abbreviations within text of table

- BC** = On bowl, circumference of bowl rim
SS = On either side of the spur
UO = Unobservable

All bowls have been identified using the following guide:

Atkinson, D. and Oswald, A., (1969). 'London Clay Tobacco Pipes', *Journal of the Archaeological Association. Third Series Vol. XXXII*

All dates are approximate, all measurements are given in millimetres (mm).

Context	Form	Type	Date	Count	BH	BW	SL	SW	BS	Comments
(47)	Bowl	27	1780-1820	1	44	18	-	8	2	Moulded wheatsheaf design up seam BF and BA. Smoke stained interior.
(47)	Partial stem	-	-	1	-	-	61	6	1.5	-
(47)	Partial stem	-	-	1	-	-	57	7	2.5	Tapers to 5mm at one end.

(47)	Partial stem	-	-	1	-	-	68	6	1.5	-
(47)	Partial stem	-	-	1	-	-	30	8	2	-
(53)	Partial bowl	30	1850-1910	1	30	-	14	6	1	Slightly smoke stained interior.
(53)	Partial stem	-	-	1	-	-	64	8	2	-
(53)	Partial stem	-	-	1	-	-	45	7	1.5	-
(53)	Partial stem	-	-	1	-	-	37	6	1	-
(53)	Partial stem	-	-	1	-	-	19	7	1.5	-
(61)	Partial bowl	27?	1780-1820?	1	-	-	39	5	1.5	Stamped makers mark SS- 'W' 'W'
(61)	Partial stem	-	-	1	-	-	50	7	2	-
(61)	Partial stem	-	-	1	-	-	44	7	2	-
(69)	Partial stem	-	-	1	-	-	56	10	3	-
(71)	Partial stem	-	-	1	-	-	29	6	1.5	-
(71)	Partial stem	-	-	1	-	-	34	7	2	-
(71)	Partial stem	-	-	1	-	-	64	6.5	2	Smoke stained interior and exterior
(71)	Partial stem	-	-	1	-	-	38	7	1.5	Smoke stained exterior, one end black.
(81)	Partial bowl and stem	16	1640-1690	1	38	18	20	11	3	Stamped double band BC. Slight smoke staining inside bowl.
(81)	Partial stem	-	-	1	-	-	133	9	2	-
(81)	Partial stem	-	-	1	-	-	52	8	2	-
(81)	Partial stem	-	-	1	-	-	70	7	2	-
(81)	Partial stem	-	-	1	-	-	41	9	2	-
(81)	Partial stem	-	-	1	-	-	75	8	2	Smoke staining in bore hole.
(81)	Partial stem	-	-	1	-	-	35	48	2	Orange staining around exterior at one end.
(81)	Partial stem	-	-	1	-	-	87	9	2	-
(81)	Partial stem	-	-	1	-	-	37	6	2	-
(81)	Partial stem	-	-	1	-	-	52	9	3	-
(81)	Partial stem	-	-	1	-	-	27	5	2	-
(81)	Partial stem	-	-	1	-	-	28	6	1	-

(81)	Partial stem	-	-	1	-	-	47	8	3	Smoke staining around one end exterior and all interior.
(81)	Partial stem	-	-	1	-	-	81	8	2	-
(81)	Partial stem	-	-	1	-	-	60	6	2	-
(81)	Partial stem	-	-	1	-	-	38	6	2	-
(81)	Partial stem	-	-	1	-	-	44	9	2	-
(81)	Partial stem	-	-	1	-	-	80	9	2	-
(81)	Partial stem	-	-	1	-	-	45	7	2	-
(81)	Partial stem	-	-	1	-	-	22	7	2	-
(81)	Partial stem	-	-	1	-	-	28	6	1.5	-
(81)	Partial stem	-	-	1	-	-	30	10	3	-
(81)	Partial stem	-	-	1	-	-	20	5	2	-
(81)	Partial stem	-	-	1	-	-	55	8	2.5	-
(81)	Partial stem	-	-	1	-	-	53	8	2	-
(81)	Partial stem	-	-	1	-	-	71	7	1.5	-
(81)	Partial stem	-	-	1	-	-	40	9	1.5	-
(81)	Partial stem	-	-	1	-	-	61	8	2	-
(81)	Partial stem	-	-	1	-	-	45	9	2	-
(81)	Partial stem	-	-	1	-	-	50	9	2	-
(81)	Partial stem	-	-	1	-	-	40	6	1	-
(81)	Partial stem	-	-	1	-	-	25	8	2	-
(81)	Partial stem	-	-	1	-	-	44	8	3	-
(81)	Partial stem	-	-	1	-	-	29	7	2	-
(81)	Partial stem	-	-	1	-	-	22	8	2	-
(81)	Partial stem	-	-	1	-	-	37	6	1.5	Smoke staining on whole of exterior.
(81)	Partial stem	-	-	1	-	-	34	9	2	-
(81)	Partial stem	-	-	1	-	-	20	8	2	-
(81)	Partial stem	-	-	1	-	-	34	7	2	-
(81)	Partial stem	-	-	1	-	-	20	6	2	-

(88)	Partial bowl and stem	18	1660-1680	1	40	18	48	9.5	2.5	No smoke staining. Rim very fragmented, but small patch of stamped band BC.
(88)	Partial bowl	29	1840-1880	1	UO	UO	-	-	2	Small fragment of bowl. Moulded text SS- 'R' (left), 'P' (right).
(88)	Partial bowl	21	1680-1710	1	46	19	-	-	2	Smoke stained interior.
(88)	Partial bowl	27	1780-1820	1	UO	UO	39	7	2	Heavily smoke stained interior. Very faint stamped geometric decoration SS.
(88)	Partial stem	-	-	1	-	-	42	6	2	-
(88)	Partial stem	-	-	1	-	-	45	7	2	-
(88)	Partial stem	-	-	1	-	-	32	6	2	-
(88)	Partial stem	-	-	1	-	-	71	6	1	-
(88)	Partial stem	-	-	1	-	-	24	6	1.5	-
(88)	Partial stem	-	-	1	-	-	27	6	2	-
(88)	Partial stem	-	-	1	-	-	48	6	1.5	-
(88)	Partial stem	-	-	1	-	-	29	8	2.5	-
(88)	Partial stem	-	-	1	-	-	26	6	1	-
(88)	Partial stem	-	-	1	-	-	75	9	2.5	-
(88)	Partial stem	-	-	1	-	-	35	9	2	Iron staining/corrosion on side.
(88)	Partial stem	-	-	1	-	-	53	6	1.5	-
(88)	Partial stem	-	-	1	-	-	50	7	1.5	-
(88)	Partial stem	-	-	1	-	-	61	9	3.5	-
(88)	Partial stem	-	-	1	-	-	70	9	2	Smoke staining at one end.
(88)	Partial stem	-	-	1	-	-	59	7	1.5	-
(88)	Partial stem	-	-	1	-	-	96	8	2	Tapers to 6mm wide at one end.
(88)	Partial stem	-	-	1	-	-	67	6-7	3	Tapered.
(88)	Partial stem	-	-	1	-	-	64	7	1.5	Slight smoke staining interior and exterior.
(88)	Partial stem	-	-	1	-	-	56	7	1.5	-

(88)	Partial stem	-	-	1	-	-	39	5	2	-
(88)	Partial stem	-	-	1	-	-	28	10	2	-
(88)	Partial stem	-	-	1	-	-	50	10	2	-
(88)	Partial stem	-	-	1	-	-	64	8	1	Pipe spur attached.
(88)	Partial stem	-	-	1	-	-	25	6	2	Smoke stained.
(88)	Partial stem	-	-	1	-	-	65	8	1	Tapers to 5mm wide.
(88)	Partial stem	-	-	1	-	-	37	6	1.5	-
(88)	Partial stem	-	-	1	-	-	20	6	1.5	-
(88)	Partial stem	-	-	1	-	-	34	7	2	-
(88)	Partial stem	-	-	1	-	-	43	6	1.5	-
(88)	Partial stem	-	-	1	-	-	40	6	2	-
(88)	Partial stem	-	-	1	-	-	22	5	1	-

APPENDIX VI: HUMAN REMAINS REPORT *by Miranda Fulbright*

Methods

Articulated and disarticulated comingled bone was recovered during the groundworks for trench 1 at Mitre Square. The bone was analysed before being reinterred. Due to the disarticulated and fragmented nature of the bone, sex and age assessments were not carried out unless the bone was wholly present. Age assessment of juveniles was carried out from observations of tooth eruption and epiphyseal fusion following Ubelaker (1989) and Buikstra and Ubelaker (1994) respectively. Sex and age estimation for adults was carried out from observations of cranial features and cranial suture fusion following Buikstra and Ubelaker (1994) and Meindl and Lovejoy (1985).

The minimum number of individuals (MNI) was provisionally calculated from the minimum number of elements (MNE) according to White's method (1953) as outlined by Buikstra and Ubelaker (1994). To be included in the MNI calculation, the fragments had to have been identified and sided, excluding a significant amount of the remains that were too fragmented to identify. Cranial bones that are not sided, i.e. occipital and frontal were also excluded along with phalanges, vertebrae C3-L5 and ribs 3-12.

Quantity

More than 680 fragments of human bone were recovered from trench 1. Several animal bones were also recovered but will be discussed in a separate section. The method used to calculate the MNI reduced the number of fragments to 223 and resulted in a count of a minimum of 9 individuals (proximal right femur), though the spread of the remains and the number of discounted fragments would indicate such a small number is unlikely.

Context

The bones were found in (81), which is thought to have been a mixed burial ground soil, originally the burial ground for the post-medieval church of St. James'. This mixed fill was probably a result of the burial ground disturbance when the church was demolished in 1874. The fact that there were at least three individual burials that remained in situ indicates that the depth of the disturbance was moderate. The level taken on the top of the tibia of [SK 1] was 14.198m OD.

Condition of the remains

The vast majority of the bones were disarticulated and highly fragmented. The burials that remained in situ were less fragmented, though still few whole bones were recovered. Some of the bones displayed much more severe surface weathering than others, potentially indicating that some bones worked their way up and remained above ground for some time post-burial.

Discussion

The bones recovered were from both juveniles and adults, though the adult bones were more prevalent. Table 3 shows a list of the juvenile bones that were recovered by element with an estimation of the age at death and method used.

Bone	Side	Age-at-death estimation	Method
Femur	R	16-19 years	Buikstra & Ubelaker (1994)
Ulna	R	38 foetal weeks	Scheuer et al (1980)
Radius	R	38 foetal weeks	Scheuer et al (1980)
Maxilla and zygomatic	R	4-8 years	Ubelaker (1989)
Mandible	L & R	5-8 years	Ubelaker (1989)
Axis	-	3-4 years	Baker et al (2005)
Atlas	-	3-4 years	Baker et al (2005)
Vertebral body X 5	-	2-4 years	Baker et al (2005)
Cervical vertebra X 3	-	2-4 years	Baker et al (2005)
Parietal (fig. 50)	L	Perinatal	Scheuer & Black (2004)
Cranium (A)	-	2-7 years	Scheuer & Black (2004)

Table 3: juvenile bones and age at death estimates.

It is possible that all the juvenile vertebrae belonged to the same individual as they were found in close proximity to one another, and provide similar age-at-death estimations however this cannot be proven by visual examination alone. The same can be said for the radius and the ulna, but again this cannot be visually confirmed.

Adult bones were far more common within the assemblage (table 4). Among these were three in situ burials, but because only a relatively small area was excavated, the majority of these burials were left undisturbed.

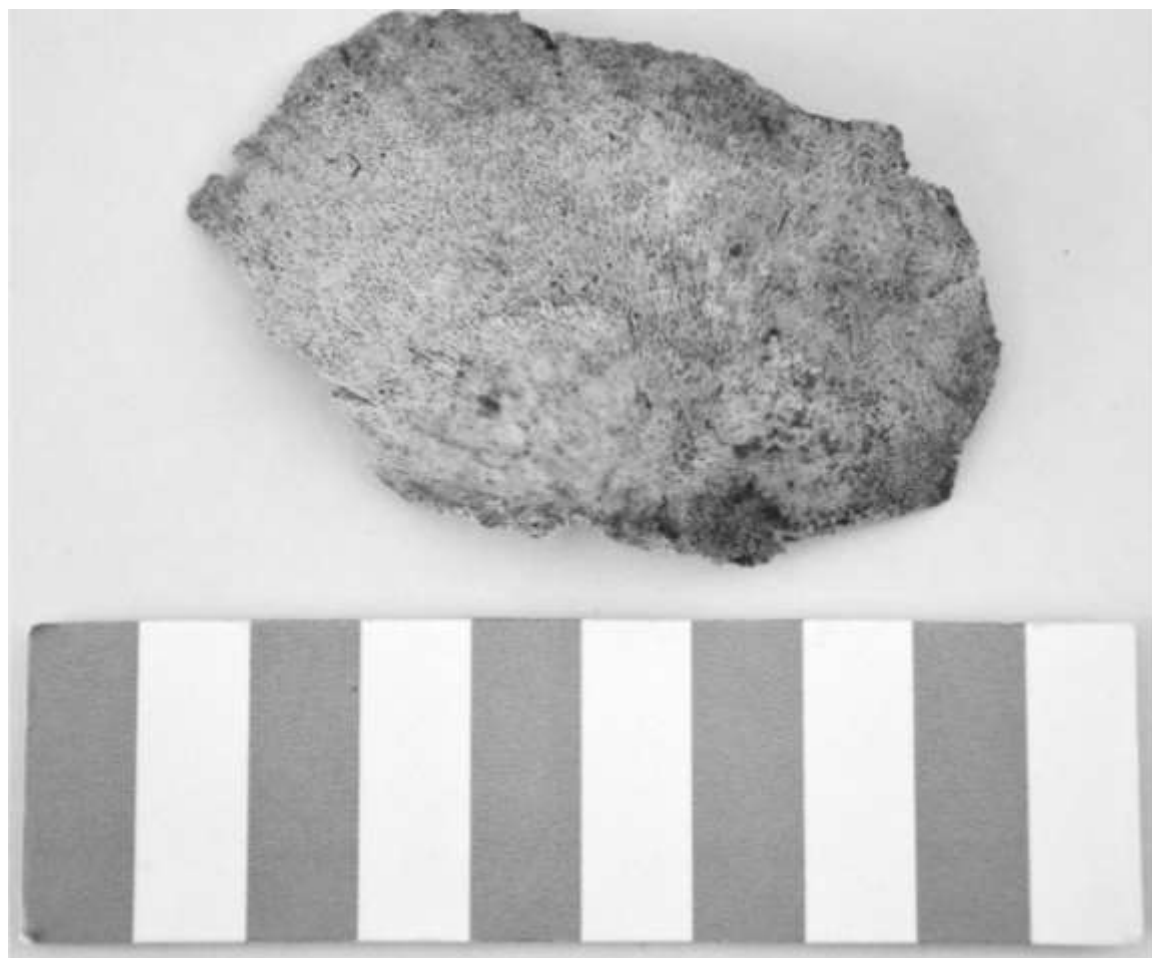


Fig. 50: Perinatal parietal. Scale 0.1m

[SK 1]

[SK 1] was made up of the lower leg bones and feet of an individual (fig. 51) but it was presumed to continue into the south facing section. It was in a supine, extended position, and oriented N-S. The femurs were visible within the section but neither were removed beyond the distal portion of the diaphysis. Both patellas, tibia and fibulas were recovered entirely, along with the majority of the left foot, excluding some intermediate and distal phalanges. The right foot was represented by metatarsals 1 and 2, and one proximal phalanx.

There was no evidence of a grave cut, though several corroded iron nails, some embedded in wood were recovered from the fill around the burial, potentially the remains of a coffin. The remains were well preserved and displayed no evidence of paleopathology. The first and second metatarsals of both feet displayed an extra articular facet where they articulated (fig. 52). These are potentially squatting facets though they do not appear on the distal tibia or femurs.

The sex and age of this individual was impossible to determine without the rest of the skeleton.



Figure 51: [SK 1] in situ. Scale 0.5m, facing E.

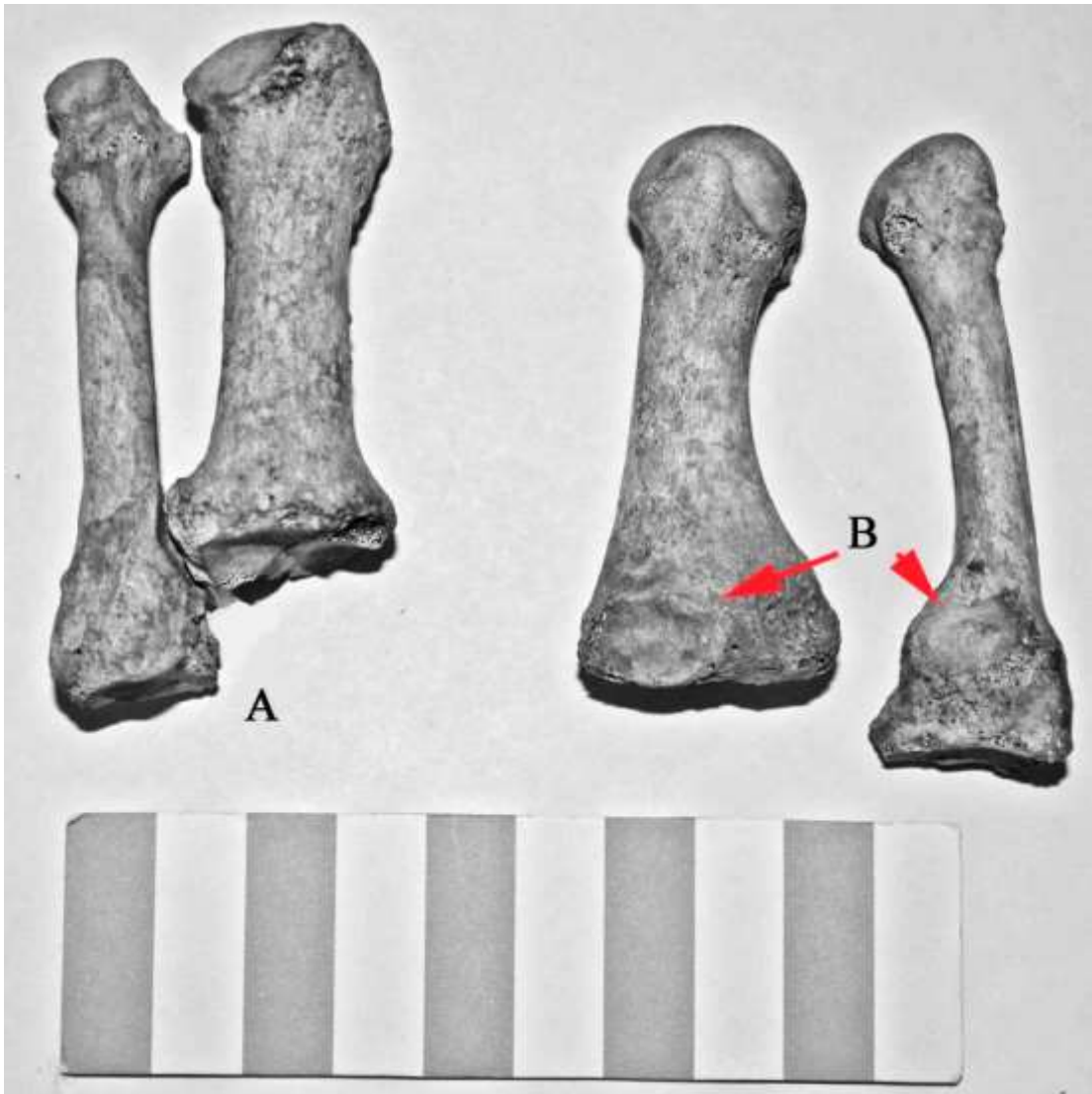


Figure 52: Extra articular facets on metatarsals 1 and 2. A= articulated left MT1 and MT2. B= position of facets on lateral side of right MT1 and on the medial side of MT2. Scale 0.1m

	Skull	Mandible	Clavicle	Scapula	Rib	Vertebrae	Pelvis	Humerus	Radius	Ulna	Carpals	Metacarpals	Femur	Patella	Tibia	Fibula	Tarsals	Metatarsal	Phalanges	UI.
R. Prox.								2	1	3			9		1	1				
L. Prox.								2	1	3			1		1	1				
R. Dist.								4	1	2			3		3	2				
L. Dist.								2	2	1			2		2	2				
R. shaft					27			3	1	1			4		4	3				
L. shaft					6			2	1	2			1		4	1				
R. frag.	16		4	4			9													
L. frag.	15		3	3			4													
Unsidied shaft					9			1	1	4			3		6	7				
Unsidied dist.															1					
Unsidied prox.															3					
Unsidied	148	5	1	4		48	26				1	1						1	29	59
R. complete					2			2	2	2	9	6		2	1	1	8	12	7	
L. complete					2				1	1	7	13		3	1		14	14	14	
Complete	1																			
Total frags.	180	5	9	11	46	48	39	18	11	19	17	20	23	5	27	18	22	27	50	59

Table 4: Number of adult bone fragments sorted by element and side (where applicable).

[SK 2],
[SK3]

[SK2] was recovered with another burial, [SK 3] from next to, and partially under wall [82]. Both of the burials consisted of pelvic girdles with femurs articulated. The burials were in a supine, extended position, and oriented N-S. The pelvises were stacked on top of one another indicating that they had been buried in the same grave cut, though the cut was not visible (fig. 53). There were also two right lower arms placed over the pelvises, with the majority of a left and right hand. It is unclear which of the bones belong to which individual, particularly the os coxae and sacrum, though the distal humerus, ulna and radius articulate, as do the other ulna and radius. The hands also articulate, but the left is more robust than the right potentially indicating that they either belong to different individuals, or that it is evidence of handedness or occupation (fig. 54).



Figure 53: Burials [SK 2] and [SK 3] in situ. Wall [82] in top right corner. Scale 0.2m

Since the os coxae were so fragmented and individual separation of the burials could not be established, the sex and age of the individuals was not determined.

A complete sacrum was recovered with an unfused coccyx. The sacrum displayed a case of Sacral Spina Bifida Occulta, where the sacral spine has not fused from sacral vertebra 3 (S3) down to S5 (fig. 55). This is a congenital disorder caused when the embryonic neural tube does not close completely. Occulta is the mildest form of Spina Bifida, and the individual probably did not experience any symptoms.



Figure 54: Showing robusticity of left hand in comparison with right. Scale 0.1m

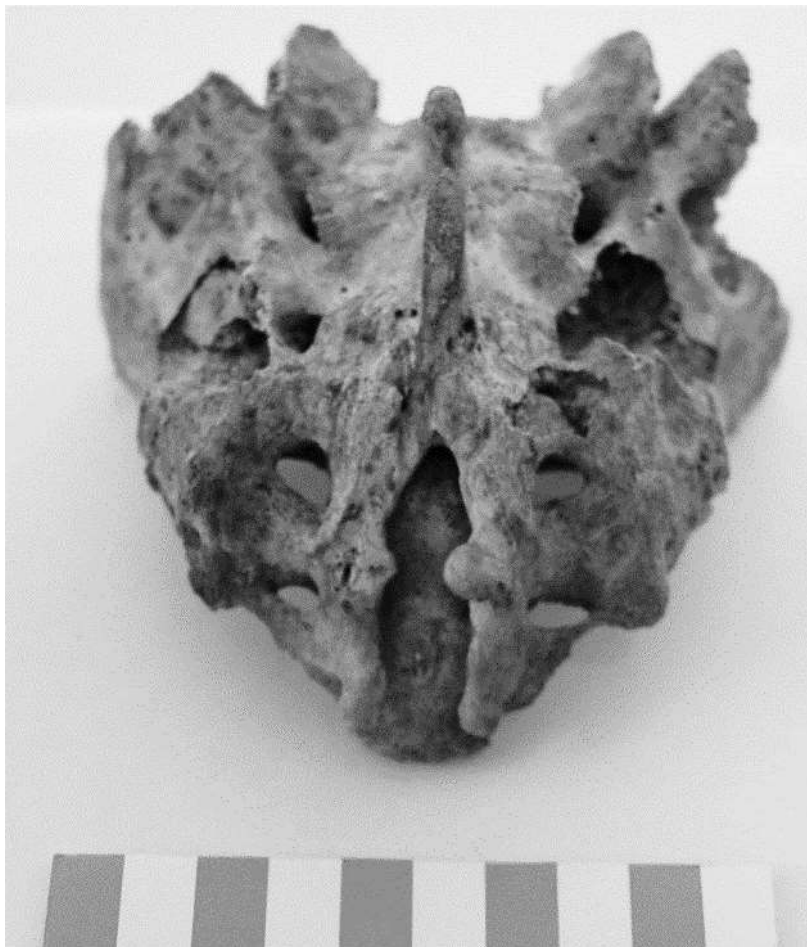


Figure 55: Sacral Spina Bifida Occulta, from S3 to S5. Scale 0.1m

Cranium (A)

Cranium (A) was fairly well preserved though very fragmented. It consisted of the cranial vault, with no facial bones apparent. As the cranium was disarticulated, the orientation and position of the burial is unknown.

Due to the fragmented nature, estimation of age and sex was attempted but may be inaccurate. The cranium was aged using a variety of methods (Meindl and Lovejoy 1985; Scheuer and Black 2004). Initially it was thought to have been a young adult skull, but on closer inspection it appears to be juvenile.

None of the cranial sutures are fused aside from the metopic suture, and the lateral parts are partially fused to the basilar part of the occipital which usually occurs by age 7. This indicates that the age-at-death for this individual was between 2 (when the metopic suture usually closes) to 7 years of age. The presence of dentition could further corroborate and narrow this age estimation. Since the individual has been determined as a juvenile, it is not possible to provide an estimation of sex.

There was some mild microporosity on the right parietal, as well as a 3mm across patch of partially healed periostitis on the frontal bone (fig. 56). The causes for this are unknown, but the fact that it has healed somewhat would indicate an illness or infection some time before death.

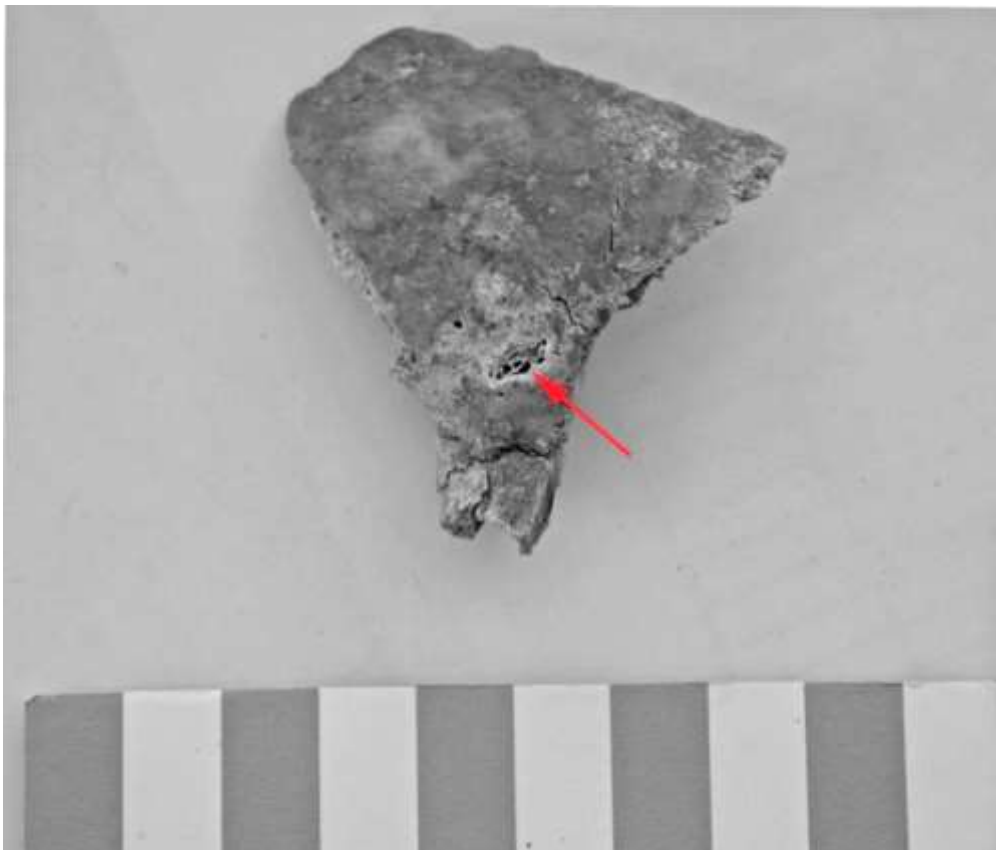


Figure 56: Partially healed periostitis on frontal bone. Scale 0.1m

Cranium (B)

Cranium (B) was also highly fragmented and disarticulated (fig. 57). It consisted of a cranial vault with no facial bones present. The orientation and position of the burial is unknown. The

edges that were broken post-mortem are smooth and rounded, indicating that it was fragmented some time ago. The surface shows some weathering damage.

As with cranium (A), an estimation of age and sex was attempted but due to the fragmentary nature of the cranium it may be inaccurate. The cranium was aged using the fusion of cranial sutures (Meindl and Lovejoy 1985) where present. Since the cranium is not all present, it is not possible to provide a composite score for all the suture sites as per the method. Instead, all the sutures that are present in cranium (B) are visible and fused, but not totally obliterated. This would suggest a middle aged adult individual, probably aged between 33-57 years old.

The sex of the individual was estimated using the guidelines provided by Buikstra and Ubelaker (1994). Again not all features used in sex estimation were present. Table 5 presents the features used to estimate sex and the scores for cranium (B).

Feature	Score	Sex estimate
Nuchal crest	2	F
Mastoid process	2	F
Supraorbital margin	4	M
Glabella	2	F
Mental eminence	-	-

Table 5: Sex estimation for cranium (B) (method- Buikstra and Ubelaker 1994).

These results show that the individual was probably female.

No evidence of pathology was present.



Figure 57: Cranium B in the section wall with other disarticulated fragments. Left leg of [SK 1] is visible to the left. Scale 0.5m.

Cranium (C)

Cranium (C) was found complete, minus the facial bones (fig. 58). It was disarticulated and the burial orientation and position was unknown. There is some surface weathering and a slight amount of black staining around the basilar part of the occipital and the supraorbital ridges. There is also a patch 100mm across of what appears to be post-mortem burning (fig. 59). The burnt area consists of black staining with micro-fractures radiating across. It is centralised on the internal occipital protuberance.



Figure 58: Cranium (C), view of left side. Scale 0.1m

The age-at-death for this individual was estimated using Meindl and Lovejoy's (1985) method for cranial suture closure (table 6). Rates of fusion are given a score from 0 (unfused) to 3 (totally obliterated). The scores are added together to give a composite score and associated mean age. This method indicates the individual was aged between 48 and 64 years old at time of death.

Fusion site (Buikstra & Ubelaker (1994))	Score	Composite score and mean age
1- Midlambdoid	2	Sites 1-7=17 48.8 years old +- 10.5 years
2- Lambda	2	
3- Obelion	3	
4- Anterior sagittal	3	
5- Bregma	2	
6- Midcoronal	2	
7- Pterion	3	
8- Sphenofrontal	3	Sites 6-10=12 56.2 years old +- 8.5 years
9- Inferior sphenotemporal	3	
10- Superior sphenotemporal	1	

Table 6: Cranial suture fusion method for ageing cranium (C) (method- Buikstra & Ubelaker 1994).

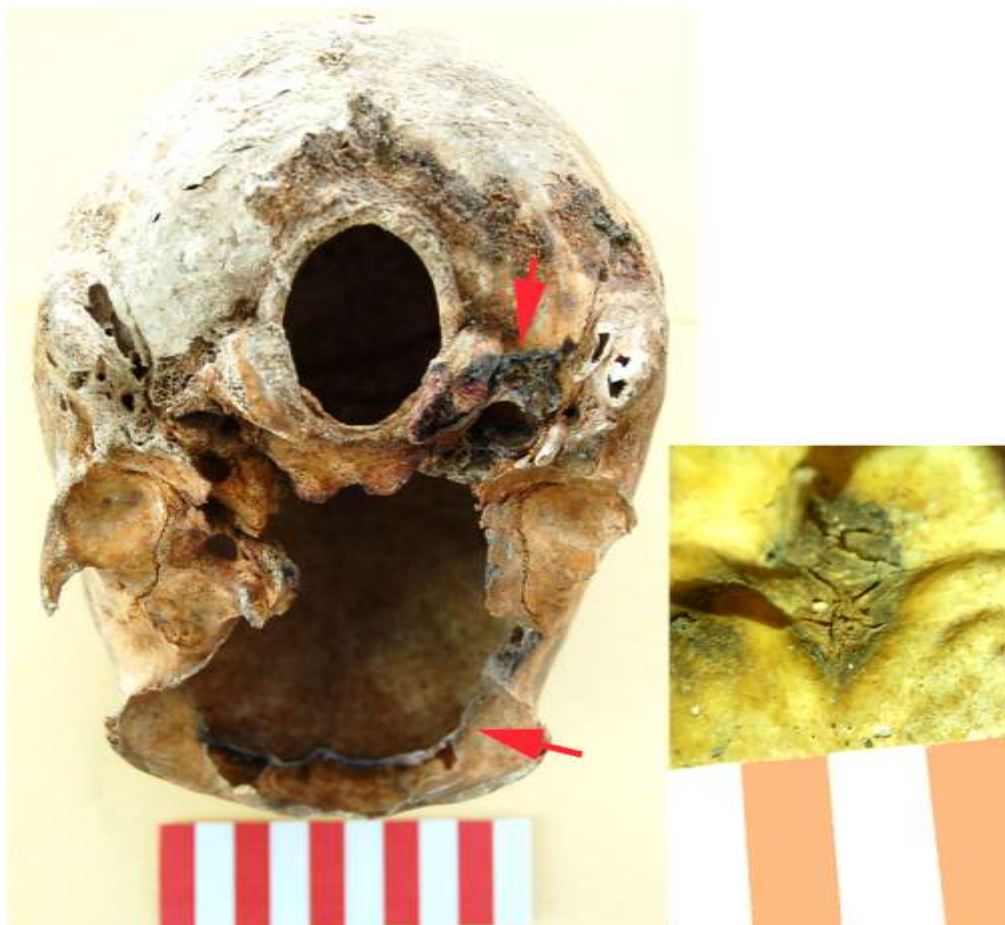


Figure 59: Right: Black staining around base and orbits (arrows). Scale 0.1m. Left: Interior patch of burnt bone. Scale 0.04m.

The sex of the individual was estimated using the guidelines presented by Buikstra and Ubelaker (1994), presented in table 7.

These results show that the individual was female.

There was no evidence of pathology present.

Feature	Score	Sex estimate
Nuchal crest	1	F
Mastoid process	2	F
Supraorbital margin	2	F
Glabella	3	Intermediate
Mental eminence	-	-

Table 7: Sex estimation for cranium (C) (method- Buikstra and Ubelaker 1994).

Miscellaneous

The remainder of the bone recovered from (81) was disarticulated and typical for an assemblage, however there were a few specimens that displayed interesting pathologies that will be discussed here.

Maxilla

A fragmented maxilla was recovered that displayed evidence of periodontitis affecting both sides. This resulted in tooth expulsion and subsequent healing/partial healing of the alveolar bone on both sides (fig. 60). Right premolar 3 is absent and the alveolus has healed over entirely. The left teeth from the canine to the third molar are absent and the alveolar bone is in the process of healing. There are signs of a large abscess around the position of the left molar 1. There is also signs that the alveolus has atrophied around the remaining teeth. The remaining teeth are fairly unworn, indicating that the individual may not have been that old.

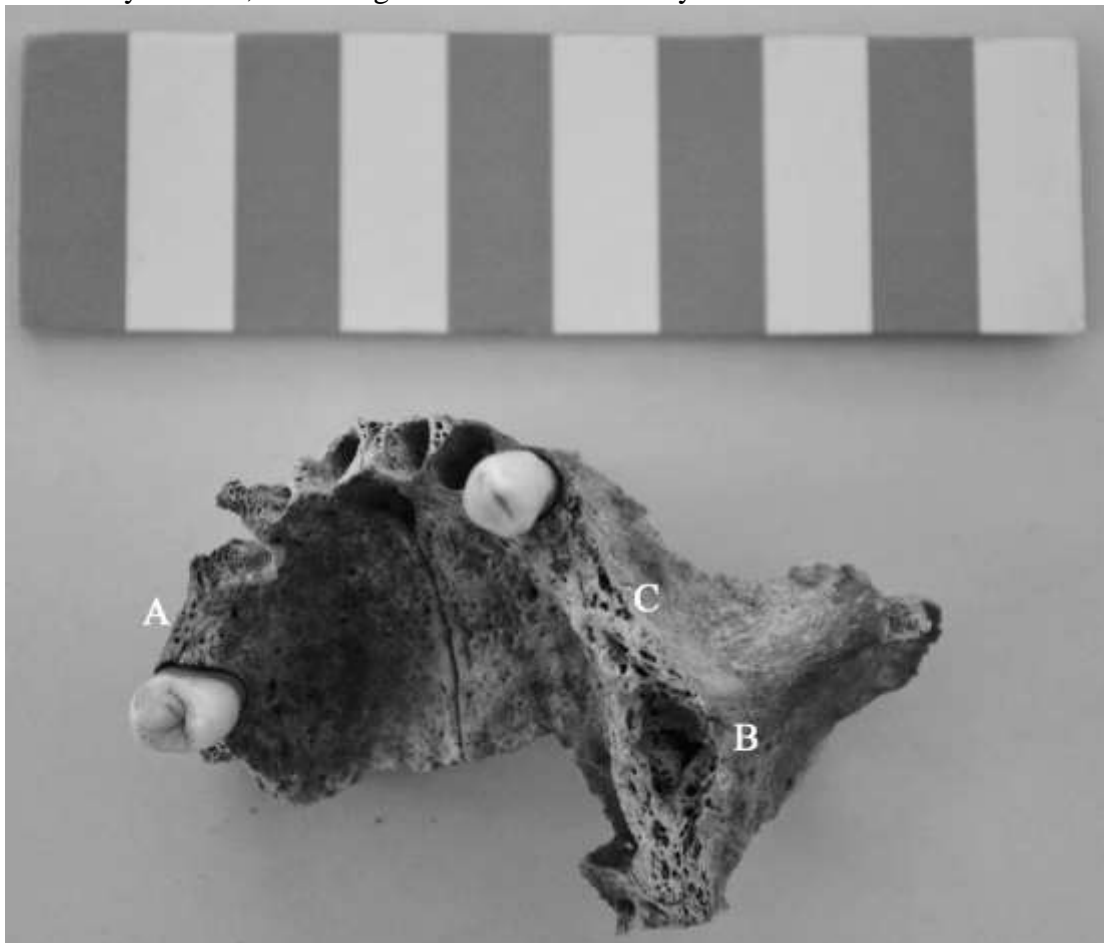


Figure 60: Maxilla. A= healed alveolus of right premolar 3. B= abscess. C= partially healed alveolus. Scale 0.1m.

Thoracic vertebra

This lower thoracic vertebra displayed Schmorl's nodes on both the superior and inferior surfaces of its body (fig. 61). These are indentations in the vertebral body caused by the intervertebral disk penetrating the surface of the body due to mechanical stress or axial compression. There were several other vertebra in the assemblage that displayed Schmorl's nodes, the one presented here is a typical example.

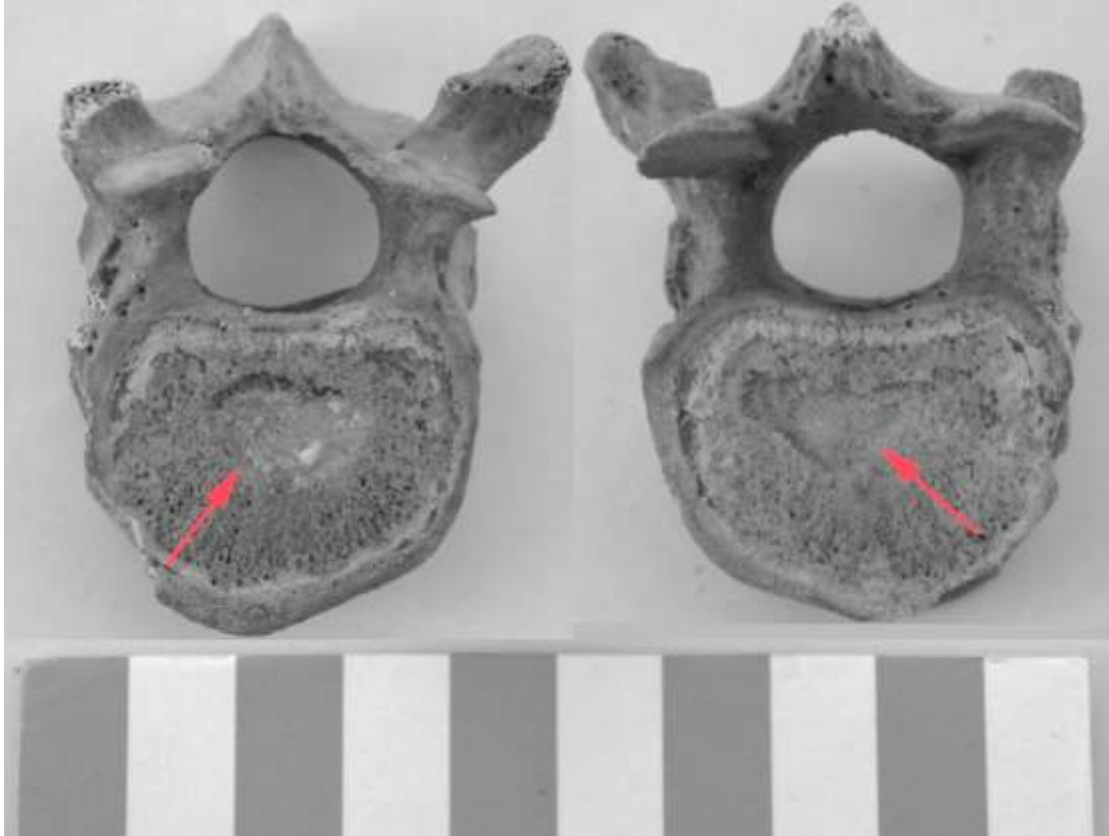


Figure 61: Schmorl's nodes. Superior surface (right), inferior surface (left). Scale 0.1m.

Femur

This is a right femur with the distal end and most of the shaft present. The distal articular surface is very deformed, most likely resulting from severe osteoarthritis as evidenced by osteophytes around the remaining articular facets, and a secondary infection causing osteomyelitis which has obscured the entirety of the patellar surface and most of the articular facets. The individual would have had little to no movement in the joint and it would have likely been extremely painful (fig. 62).

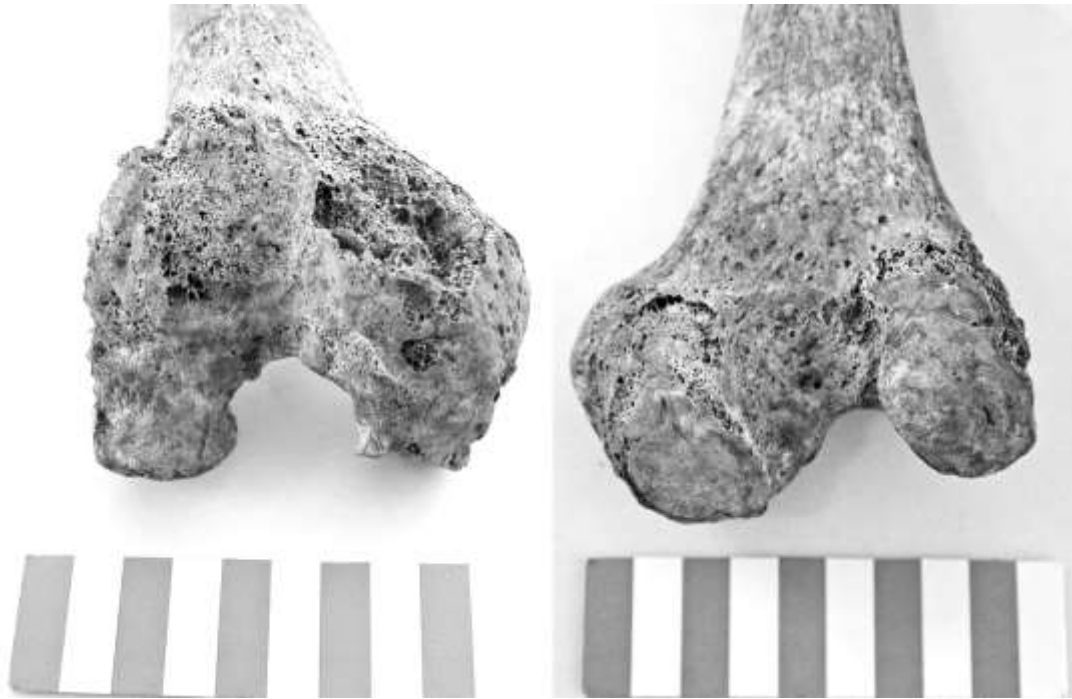


Figure 62: Deformed distal femur. Anterior (left) and posterior (right). Scale 0.1m.

Ulna

A left ulna shaft fragments showing evidence of periostosis at the proximal end (fig. 63). Periostosis is defined as abnormal bone formation on the periosteal surface of a bone caused by trauma or infection that affects the bone.

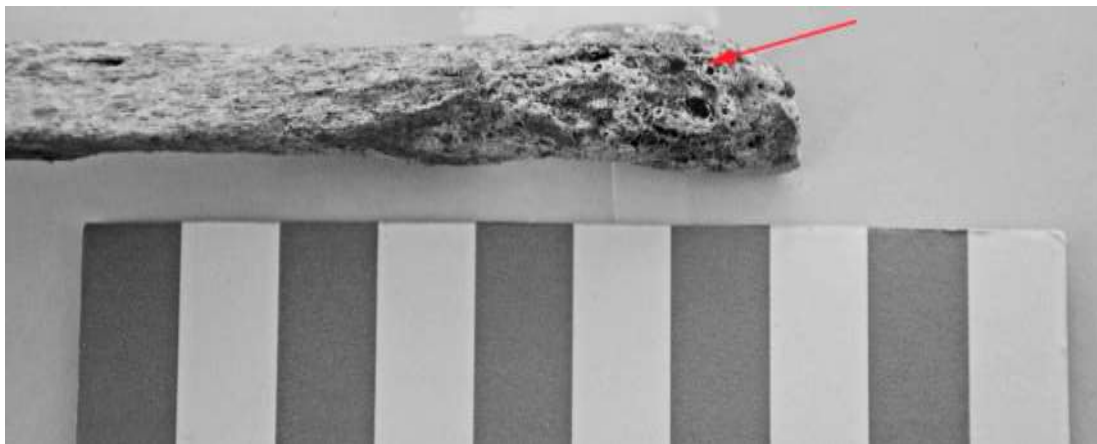


Figure 63: Periostosis on proximal ulna shaft. Scale 0.1m.

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APPENDIX VII: ANIMAL BONE ANALYSIS by Miranda Fulbright

The assemblage of animal bone that was recovered during groundworks at Mitre Square comprised 41 fragments. Of these fragments, 26 were identified down to the taxon level. The remaining bones were classified as medium or large mammals (table 8).

From the fragments, the most common species was dog, however this is skewed due to a fragmented dog skull that was recovered. The most common species (disregarding dog) was sheep, representing 26% of the identifiable assemblage. Cow was next with 9.7% of the assemblage. Dog, treating the skull fragments as one, made up 7.3% of the assemblage and pig was the least common (2%).

6 of the identified bone fragments displayed butchery marks, most commonly cut and chop marks. This indicates that the total assemblage was a result of human consumption from the houses around the Square. The majority of the bones were found within fill (81), but since this fill was very disturbed it is difficult to identify any deposition pattern. One bone fragment from context (69) was burnt black. (69) was the charcoal and black silt fill of a pit [68], seen in the base of the drop shaft on Mitre Square. The pit was interpreted as the remains of a small campfire, containing also unburnt wood and shell. The bone was perhaps the remains of a meal, though its fragmented nature prevents visual identification of taxon or bone.

The dog skull (skull A, table 1) was found in stratigraphically higher fill (77). It is mostly complete but very fragile and has further fragmented since being excavated.

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Key for in-table text

L = left

R = right

UI = unidentified

UO = unobservable

Table 8: Animal bone fragments from Mitre Square

Context	Taxon	Bone	Side	Fusion	Fragmentation	Comments
(47)	Ovis	Rib	UO	Fused	Head and partial shaft	-
(47)	Ovis	Radius	L	Fused	Proximal end and shaft	Slight bony growth around prox. End.
(47)	Ovis	Metatarsal	L	Fused	Complete	-
(47)	Ovis	Pelvis	UO	UO	Fragment	
(56)	Ovis	Rib	L	Partially fused	Head and majority of shaft	-
(61)	UI medium mammal	UI long bone	UO	UO	Fragment	-
(61)	Ovis	Humerus	R	Fused	Distal end and shaft	-

(61)	UI small mammal	Cranium	-	UO	Fragment	-
(69)	UI	UI	UO	UO	Fragment	Very burnt- black fragment of trabecular bone.
(69)	UI mammal	Cranium	-	UO	Fragment	-
(71)	Ovis	Rib	R	Fused	Head and partial shaft	-
(81)	Bos	Radius	L	Fused	Proximal end	Clean break on shaft, likely cut.
(81)	Ovis	Scapula	R	Fused	Fragment	-
(81)	Ovis	Metacarpal	UO	Fused	Fragment	-
(81)	Bos	UI metapodial	UO	Unfused	Distal half	2 large chop marks on shaft.
(81)	Ovis	UI metapodial	UO	UO	Fragment	Green stain on shaft. Shaft cut.
(81)	Ovis	2 nd phalanx	UO	Fused	Complete	-
(81)	UI medium mammal	UI long bone	UO	UO	Fragment	-
(81)	UI medium mammal	UI long bone	UO	UO	Fragment	-
(81)	UI medium mammal	UI long bone	UO	UO	Fragment	-
(81)	Bos	Rib	UO	UO	Fragment	-
(81)	UI medium mammal	Rib	UO	UO	Fragment	Cut mark on end of shaft.
(81)	UI large mammal	Rib	UO	UO	Fragment	-
(81)	UI medium mammal	Rib	UO	UO	Fragment	-
(81)	Sus	Ulna	UO	UO	Fragment	Clean cut on end of shaft. Surface weathering.
(81)	Dog	UI metapodial	UO	UO	Fragment	-
(81)	UI small mammal	UI long bone	UO	Fused	Fragment	-
(77)	Dog	Cranium	N/A	Partially fused	Mostly complete	Skull A. Cranial vault, no facial bones present.
(77)	Dog	Mandible	L	Fused	Complete	Skull A. Incisors 1, 2 and 3 and 3 rd molar are lost.
(77)	Dog	Mandible	R	Fused	Complete	Skull A. 2 nd premolar is lost and alveolus has healed over. Incisors 1, 2 and 3 are lost, as is 3 rd molar.
(77)	Dog	Maxilla	L	Fused	Partially complete	Skull A. Only teeth present are premolars 3 and 4, and 1 st and 2 nd molars.
(77)	Dog	Maxilla	R	Partially fused	Partially complete	Skull A. Teeth present are canine and premolars 1-4.
(77)	Dog	Mandibular 3 rd incisor	L	N/A	Complete	Skull A.

(77)	Dog	Maxillary 2 nd incisor	R	N/A	Complete	Skull A.
(77)	Dog	Maxillary 3 rd incisor	R	N/A	Complete	Skull A.
(77)	Dog	Maxillary 3 rd incisor	L	N/A	Complete	Skull A.
(88)	Bos	Femur	R	Fused	Partially complete	Half of the distal end and shaft. Shaft has been cut in half. Large chop marks around proximal cut edge. Burnt patch on distal end of shaft. Some light scratch/cut marks on shaft.
(88)	Dog	UI metapodial	UO	UO	Fragment	-
(88)	UI large mammal	Rib	UO	UO	Fragment	-
(88)	UI medium mammal	UI long bone	UO	UO	Fragment	-
(88)	UI large mammal	UI long bone	UO	UO	Fragment	-

APPENDIX VIII: CERAMIC BUILDING MATERIAL *Analysis by Sue Pringle*

The groundworks in Mitre Square produced an assemblage comprising post-medieval and modern Ceramic Building Material (CBM). The assemblage consisted of 31 fragments with a total weight of 3.015kg, representing a variety of forms.

Drop shaft

A total of 25 fragments of CBM were recovered from the drop shaft on Mitre Square, and will be discussed by context below.

Context (47) refers to a light to mid-brown silty soil that was observed across the majority of the drop shaft. The context yielded a total of 6 fragments weighing a total of 612g. All the fragments were post-medieval, dated to the 18th century.

No.	Context Date	Period	Fabric	Form	Count	Weight (g)	Condition	Comments	Fabric notes
1	17-1800	PM	Delft	Wall tile	1	9	-	No edges/borders. Manganese purple on white. Part of design of tree and building(?)	White sandy with sparse orange flecks
2	17-1800	PM	2276	Peg	4	405	S x 2, M x 1	1 Small irregular nail-hole	-
3	17-1800	PM	2279?	Pantile	1	198	-	Rectangular nib c.65x28mm	Fabric not securely ID'd

Context (53) was a small deposit of dark brown silty soil. This context yielded 1 fragment weighing 64g.

No.	Context Date	Period	Fabric	Form	Count	Weight (g)	Condition	Comments	Fabric notes
4	1630-1900	PM?	2275?	Pantile?	1	64	-	Curved tile, could be ridge or pantile. Moulding sand either fine or abraded.	-

Context (56) was layer of very loosely compacted whitish rubble, observed at the southern end of the trench. The context produced 2 fragments weighing 300g.

No.	Context Date	Period	Fabric	Form	Count	Weight (g)	Condition	Comments	Fabric notes
5	1480-1800	PM	2276	Peg	2	300	Sx1, M	1 round nail-hole, 8mm diam. At base, slanting	-

Context (61) comprised a moderately compact mid-brown observed at the centre of the trench base. It was interpreted as general trample. The context contained 2 fragments, weighing 167g.

No.	Context Date	Period	Fabric	Form	Count	Weight (g)	Condition	Comments	Fabric notes
6	1480-1800	PM	3033	Brick	1	108	A, M	Corner flake with indented margin	-
7	1480-1800	PM	2276	Peg	1	59	S	-	-

Context (63) was the pale mortar fill of pit [62], containing 1 fragment weighing 29g.

No.	Context Date	Period	Fabric	Form	Count	Weight (g)	Condition	Comments	Fabric notes
8	1480-1800	PM	2276	Peg	1	29	A, M	-	-

Context (69) was a charcoal and black silt fill with unburnt wood, filling pit [68]. It produced 2 fragments weighing 41g.

No.	Context Date	Period	Fabric	Form	Count	Weight (g)	Condition	Comments	Fabric notes
9	1450-1900	M	2586	Peg	1	20	Rd	-	-
10	1450-1800	PM	3032?	Brick	1	21	Rd, V, A	Small piece of burnt brick, probably early 3032 but too vitrified for accurate ID.	-

Context (71) comprised a black silt/charcoal fill, filling pit [70]. It contained 11 fragments weighing 1.17kg.

No.	Context Date	Period	Fabric	Form	Count	Weight (g)	Condition	Comments	Fabric notes
11	17-1800?	PM	2276	Peg	9	844	-	-	-
12	17-1800?	M	2271	Peg	1	71	-	-	-

13	17-1800?	PM	3036?	Brick	1	255	A, Rd	Yellow skin, dutch? Uncommon type	Finely mottled orange and yellow with voids. Mod. To freq. white calcareous incl. <c.1.5mm.
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Trench 1

6 fragments of CBM were recovered from the NE-SW aligned drainage trench, weighing 632g. The fragments were all post-medieval and modern and represented a variety of forms.

Context (81) was a dark brown silty graveyard backfill containing 2 fragments, weighing 23g.

No.	Context Date	Period	Fabric	Form	Count	Weight (g)	Condition	Comments	Fabric notes
14	1870-1950	PM	-	Wall tile	1	7	-	Small frag, decorated tin-glazed wall tile, manganese purple on white. Edges/borders missing. Fragment shows part of figure wearing boot.	-
15	1870-1950	PM	-	Wall tile	1	16	-	White glazed tile. Underside has moulded keying in grid pattern with letter N (with serifs) in one grid square.	Compression moulded white fabric

Context (88) was a layer of post-medieval backfill to the west end of the trench. It was a fairly compact dark brown silt soil with patches of dark grey staining. It contained 2 fragments, weighing 495g.

No.	Context Date	Period	Fabric	Form	Count	Weight (g)	Condition	Comments	Fabric notes
16	1480-1800	M/PM	2271	Peg	1	412	M	Complete breadth of top part of tile. 2 polygonal	-

								nail-holes c.15mm diam.	
17	1480-1800	PM	2276	Peg	1	83	M	Small square nail-holes set diagonally (1 and part. 2 nd survive).	-

Context (89) was the fill below (88), comprising pale yellow demolition rubble of degraded mortar. This context contained 2 fragments weighing 114g.

No.	Context Date	Period	Fabric	Form	Count	Weight (g)	Condition	Comments	Fabric notes
18	1870-2000	PM	-	Wall tile	1	56	A	White compression moulded tile; white fabric and glaze. Set in cement mortar backing with impressions of ?bricks	-
19	1870-2000	PM	-	Glazed tile	1	58	-	Curved ?tile, no surviving edges. Concave face has polychrome tin-glazed decoration in strapwork design, (polychrome floor tile in Betts & Weinstein 2010, pp106-7, no.85.) Convex surface has very fine sanding.	Fabric is yellow with fine quartz and sparse coarse red clay/siltstone inclusions

Discussion

Analysis of the CBM has produced results consistent with the pottery and CTP analysis. All the finds produced are post-medieval, supporting the interpretation that the groundworks did not reach below post-medieval deposit levels.

APPENDIX IX: MISCELLANEOUS FINDS *by Miranda Fulbright*

WORKED BONE

Two examples of worked bone were recovered during the ground works at Mitre Square. Both were found in the drop shaft.

Context (53) was a small deposit of a mid- to dark brown silty soil with infrequent stone inclusions. The deposit was observed at the north end of the drop shaft, overlying the brick arch of the sewer, [50]. It contained a worked bone handle, possibly for a knife or other cutlery (fig. 64). The handle is somewhat cracked, with one side broken. The handle is 105mm long and 19mm wide, it tapers at one end to 5mm wide. A lump of corroded metal is on the other end, probably the remains of the knife blade/other fixture.



Figure 64: Bone handle recovered from (53). See remnants of metal fixing on right end. Scale 0.1m

Context (69) was the dark brown, charcoal rich silty soil fill of a pit (68), visible in the base of the drop shaft in Mitre Square. It was interpreted as the remains of a small camp fire, containing fragments of unburnt wood, burnt bone and a single oyster shell. The fill contained a small, round token or coin made from worked bone (fig. 65). The coin measures 18mm in diameter, and <1mm thick and has a 1mm hole bored in the middle. The token shows no evidence of fire damage, and was probably dropped into the pit after the fire was extinguished. The token is patterned with incised striations across the surface on both sides. These might be tool marks or deliberate decoration. The use of such a token is unknown but it is possibly a gaming chip.



Figure 65: Worked bone token, found in (69). Scale 0.1m

SHELL

All examples of shell recovered were from trench 1 or the drop shaft in Mitre Square.

Context (69) was the dark brown, charcoal rich silty soil fill of a pit (68), visible in the base of the drop shaft in Mitre Square. It was interpreted as the remains of a small camp fire, containing fragments of unburnt wood, burnt bone and a single oyster shell. The shell shows some signs of burning, some black staining is visible around the edges.

Context (71) was a black silt and charcoal fill with frequent inclusions of post-medieval CBM. It was the fill of a pit [70] visible in the base of the drop shaft, possibly a small rubbish pit. It contained one oyster shell.

Context (81) was a mixed graveyard fill, containing frequent inclusions of human bone, CBM, CTP, glass and pot. Three oyster shells and two scallop shells were recovered from this post-medieval fill.

Context (88) was a post-medieval backfill of a dark brown silt soil with frequent inclusions of CBM. Three oyster shells were recovered from this context.

Context	Species	Number of Half Shells
(69)	European flat oyster	1
(71)	British native oyster	1
(88)	European flat oyster	1
	British native oyster	2
(81)	European flat oyster	2
	British native oyster	1
	Scallop	2

GLASS

Glass was recovered from two contexts in trench 1 and three from the drop shaft.

Context (61) comprised a moderately compact mid-brown observed at the centre of the trench base. It was interpreted as general trample, containing CBM and one sherd of glass weighing 8g.

Context (69) was the dark brown, charcoal rich silty soil fill of a pit (68), visible in the base of the drop shaft in Mitre Square. It was interpreted as the remains of a small camp fire, containing fragments of unburnt wood, burnt bone and a single oyster shell. The glass retrieved from this context was a fragment weighing 2g, probably from a vessel as the fragment is slightly curved. It shows no sign of fire damage.

Context (71) was a black silt and charcoal fill with frequent inclusions of post-medieval CBM. It was the fill of a pit [70] visible in the base of the drop shaft, possibly a small rubbish pit. The sherd of glass that was recovered from this context weighed 4g and is probably a fragment of window pane.

Context (81) produced 6 fragments of glass weighing 98g, the forms of which are unknown, aside from one stopper. (81) was a post-medieval mixed graveyard fill with frequent inclusions of human bone, CBM, CTP, shell and pot.

Context (88) was a dark brown silty solid with frequent inclusions of CBM. Six fragments were recovered from this context. It was interpreted as post-medieval demolition backfill and all the glass found was likely part of the demolition rubble.

Context	Colour	Measurements (l x w x thickness mm)	Comments
(61)	Green	57 x 24 x 4	Silver patina on one side.
(71)	Pale green	39 x 32 x 2	Yellowish patina on either side. Flat glass-window pane.
(69)	Dark green	40 x 20 x 2	Slight curve to glass
(81)	Green	65 x 22 x 4	Yellow/gold patina over surface on both sides.
	Clear	23 x 20 x 2	Fragment, rounded at one end, possible broken tube.
	Clear	23 x 24 x 3	Rounded at end as above. Cloudy layer over surface.
	Clear	25 x 15	Solid stopper for a bottle. Roughened and cloudy over surface.
	Green	72 x 88 x 8	Yellow/gold patina over surface on both sides.
	Yellow	46 x 33 x 5	Glass yellow around edges. Central colour is unknown as thick dark patina covers both surfaces.
(88)	Clear	27 x 19 x 2	Modern. Slight discolouration over surface.
	Clear	13 x 8 x 1	Modern, same as above.

	Clear	16 x 13 x 1	Modern, same as above.
	Clear	31 x 18 x 1	Modern, same as above.
	Clear	9 x 8 x 1	Modern, same as above.
	Green	25 x 22 x 3	Surface quite worn.

METAL

A total of 34 metal objects were recovered across two contexts in trench 1. The majority of the metal finds were nails and other coffin fittings found in (81). One coin was also recovered from (81). This is a mixed burial ground backfill so this type of assemblage is expected.

Context (81): the coin recovered from this context was worn and heavily encrusted, it is a farthing made of a copper alloy. The obverse side is illegible whilst the reverse is only partly obscured. The date '17...' (possibly another 7) was visible in exergue, with a figure of Britannia facing the left, holding a spear in her left arm above it. It reads 'BRI (TANN) IA'. The issue history and the size of the coin would indicate dates of either 1730-63 (George II) or 1771-75 (George III).

Context	Type	Form	Measurements (mm)	Comments
(88)	Lead	Window flashing	1560 long	Some residual paint left on surface- off-white colour.
(81)	Copper Alloy	Coin-Farthing	23 diameter	Farthing, very worn and corroded. Only one side legible- date of 17... with Britannia facing left with spear in left arm. 'BRI...IA' surrounds figure.
(81)	Iron	Nail	67 long	Probably coffin nail, heavily corroded.
(81)	Iron	Nail	49 long	Probably coffin nail, heavily corroded.
(81)	Iron	Nail	52 long	Probably coffin nail, heavily corroded.
(81)	Iron	Nail	56 long	Probably coffin nail, heavily corroded.
(81)	Iron	Nail	67 long	Probably coffin nail, heavily corroded.
(81)	Iron	Nail	50 long	Probably coffin nail, heavily corroded.
(81)	Iron	Nail	39 long	Probably coffin nail, heavily corroded.
(81)	Iron	Nail	30 long	Probably coffin nail, heavily corroded.
(81)	Iron	Nail	33 long	Probably coffin nail, heavily corroded. Mineralised small piece of wood attached to the end.
(81)	Iron	Nail	58 long	Probably coffin nail, heavily corroded.

				Mineralised piece of wood attached to the end.
(81)	Iron	Nail	47 long	Probably coffin nail, heavily corroded.
(81)	Iron	Nail	45 long	Probably coffin nail, heavily corroded.
(81)	Iron	Nail	36 long	Probably coffin nail, heavily corroded.
(81)	Iron	Nail	47 long	Probably coffin nail, heavily corroded.
(81)	Iron	Nail	32 long	Probably coffin nail, heavily corroded.
(81)	Iron	Nail	long	Probably coffin nail, heavily corroded.
(81)	Iron	Stud	14 wide	Probably decorative coffin stud, heavily corroded. Mineralised wood attached.
(81)	Iron	Stud	14 wide	Probably decorative coffin stud, heavily corroded. Mineralised wood attached.
(81)	Iron	Stud	14 wide	Probably decorative coffin stud, heavily corroded. Large piece of mineralised wood attached.
(81)	Iron	Stud	19 wide	Probably decorative coffin stud, heavily corroded.
(81)	Iron	Handle and plate	1190 wide	Coffin handle, heavily corroded. 1 nail in either end.
(81)	Iron	Plate	81 wide	Coffin plate. Heavily corroded so shape undiscernible.
(81)	Iron	Nail	UO	Probably coffin nail, heavily corroded. Large piece of mineralised wood attached.
(81)	Iron	Nail	UO	Probably coffin nail, heavily corroded. Large piece of mineralised wood attached.
(81)	Iron	Nail	UO	Probably coffin nail, heavily corroded. Large piece of mineralised wood attached.
(81)	Iron	Nail	29	Probably coffin nail, heavily corroded.
(81)	Iron	Nail	45 long	Probably coffin nail, heavily corroded. Mineralised small piece of wood attached to the end.
(81)	Iron	Nail	UO	Probably coffin nail, heavily corroded. Mineralised small piece of wood attached to the end.

(81)	Iron	Nail	43 long	Probably coffin nail, heavily corroded. Large stone adhered.
(81)	Iron	UO fitting	UO	Coffin fitting. Heavily corroded. Original form undiscernible.
(81)	Iron	UO fitting	UO	Coffin fitting. Heavily corroded. Original form undiscernible. Mineralised wood attached.
(81)	Iron	UO fitting	UO	Coffin fitting. Heavily corroded. Original form undiscernible. Mineralised wood attached.
(81)	Iron	UO fitting	UO	Coffin fitting. Heavily corroded. Original form undiscernible.
(81)	Iron	UO fitting	UO	Coffin fitting. Heavily corroded. Original form undiscernible. Mineralised wood attached.
(81)	Iron	UO fitting	UO	Coffin fitting. Heavily corroded. Original form undiscernible. Mineralised wood attached.

WOOD

Only one fragment of wood was recovered from the ground works at Mitre Square, from trench 1.

Context (81) was a post-medieval mixed graveyard fill with frequent inclusions of human bone, CBM, CTP, shell and pot. A small (43 x 13 x 5mm) piece of mineralised wood was recovered, probably a coffin fragment.

APPENDIX X: OASIS FORM

OASIS ID: **compassa1-292307**

Project details

Project name	Mitre Square Development- Phase 2, Duke's Place, City of London, EC3A
Short description of the project	From November 2016 to April 2017, Compass Archaeology were commissioned to undertake an archaeological watching brief and evaluation on Phase 2 of the Mitre Square Redevelopment, Duke's Place, City of London, EC3A. The groundworks involved the excavation of a drop shaft (4.8m x 2.1m x 3.2-3.4m deep) and several trenches for the installation of a new drainage system. Trench 1 was orientated NE-SW and measured c.20m x 1-1.8m x 1.2-1.9m deep. Trench 2 measured 11m x 1.5m x 1m deep, and was aligned NW-SE. The stratigraphy varied between the drop shaft and both trenches, though generally comprised of modern paving or carriageway surface overlying a thick layer of post-medieval made ground. Several post-medieval brick walls cut this made ground, and were interpreted as basement walls for the buildings that surrounded Mitre Square. A great deal of human remains, along with post-medieval CBM, CTP, pot and glass were recovered from trench 1, interpreted as a mixed backfill from the burial ground of St James' Church (1727-1874), situated under the nearby Sir John Cass Primary School. Three large fragments of worked stone were found in the drop shaft, they were related to the Priory of Holy Trinity, a medieval complex that spanned the area. These stones were residual, and the only finds that were earlier than post-medieval. No other finds or features of significant archaeological interest were found, probably due either to post-medieval truncation or the shallow limit of excavation; the lowest level recorded was 12.02mOD.
Project dates	Start: 30-11-2016 End: 12-04-2017
Previous/future work	Yes / No
Any associated project reference codes	DUS 16 - Sitecode
Type of project	Recording project
Site status	None
Current Land use	Other 3 - Built over
Monument type	NONE None
Significant Finds	WORKED STONE X 3 Medieval
Significant Finds	HUMAN BONE Post Medieval
Investigation type	""Field observation"", ""Recorded Observation"", ""Watching Brief""
Prompt	Planning condition
Prompt	Scheduled Monument Consent

Project location

Country	England
Site location	GREATER LONDON CITY OF LONDON CITY OF LONDON Mitre Square Development- Phase 2
Postcode	EC3A 5BZ
Study area	2000 Square metres

Site coordinates TQ 533460 181182 50.941510685212 0.182939073713 50 56 29 N 000
10 58 E Point

Project creators

Name of Organisation Compass Archaeology
Project brief originator Historic England
Project design originator Compass Archaeology
Project director/manager Geoff Potter
Project supervisor Heidi Archer
Type of sponsor/funding body City of London Corporation

Project archives

Physical Archive recipient Museum of London archaeological archive
Physical Contents "Animal Bones", "Ceramics", "Glass", "Human Bones", "Metal", "Wood", "Worked bone", "Worked stone/lithics"
Digital Archive recipient Museum of London Archaeological Archive
Digital Contents "Animal Bones", "Ceramics", "Glass", "Human Bones", "Metal", "Wood", "Worked bone", "Worked stone/lithics"
Digital Media available "Database", "Images raster / digital photography", "Text"
Paper Archive recipient Museum of London Archaeological Archive
Paper Contents "Animal Bones", "Ceramics", "Glass", "Human Bones", "Metal", "Wood", "Worked bone", "Worked stone/lithics"
Paper Media available "Context sheet", "Drawing", "Photograph", "Plan", "Report", "Section", "Unpublished Text"

Project bibliography 1

Publication type Grey literature (unpublished document/manuscript)
Title Mitre Square Development- Phase 2, Duke's Place, City of London, EC3A 5BZ
Author(s)/Editor(s) Fulbright, M.
Date 2017
Issuer or publisher Compass Archaeology
Place of issue or publication 250 York Road, London, SW11 3SJ

Description A report summarising the details of the watching brief and archaeological evaluation. Contains relevant background details including reasons for commission, site location, historical and archaeological background and site and post-excavation methodology. Results include plans, photographs and text of monitored works with a short discussion and conclusion. Results are supported by relevant specialist analyses.

Entered by Miranda Fulbright (miranda@compassarchaeology.co.uk)

Entered on 9 August 2017