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**4-6 NEW INN BROADWAY
London EC2**

London Borough of Hackney

Evaluation report
May 2009



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London EC2**

London Borough of Hackney

Evaluation report

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Summary (non-technical)

This report presents the results of a second phase of archaeological evaluation carried out by Museum of London Archaeology on the site of 4–6 New Inn Broadway London, EC2. The report was commissioned from MOL Archaeology by the Tower Theatre Company.

The second phase of evaluation was carried out on the site in Feb 2009. The first phase of evaluation was carried out in June 2008. Both phases of evaluation have been carried out in support of an application for planning consent, but the conclusions and recommendations of the phase 2 evaluation report supersede those of phase 1.

The first evaluation consisted of three trenches. Archaeological remains were encountered in all three at between 12.95m OD and 14.3m OD. Potentially highly significant archaeological remains, consisting of foundations of what appeared to be a polygonal structure, were recorded in a trench in the south-western area of the site, between 13.1m OD and 13.5m OD. It is thought that these remains may have formed part of the foundations of the 16th century playhouse known as The Theatre. The remains were recorded and preserved in situ.

The second evaluation was targeted on the south-west corner of the site with the aim of exposing the full extent of the potential theatre remains. A single trench was opened, which involved reopening and extending one of the phase 1 evaluation trenches.

The 16th century masonry foundation wall and pier base [24], found in the phase 1 evaluation, was re-exposed. These remains were found to be associated with two further foundation structures [145] and [174] on the same alignment. Together, these three elements have been interpreted as forming a curving foundation structure, rather than a sharply angled one (as was originally thought).

The curving foundation wall has been reinterpreted as the Theatre's inner foundation wall. This is because a sloping gravel surface, thought to be the remains of the playhouse yard, was discovered butting up against the wall. The playhouse yard was the internal open area where the audience would have stood to watch performances. The surface has a distinct slope from the north down towards the south and it has a similar gradient to the yard of The Rose Theatre (J Bowsher pers comm.). A sloping yard is a common feature of 16th century playhouses.

The nature and location of the outer Theatre wall is still unknown. It was searched for, but not discovered, during the phase 1 evaluation. It could have been truncated and removed in antiquity, or it is possible that the outer ring was not a continuous brick structure like the inner one. In a later phase of construction at the Rose theatre, the outer foundation was composed of pier bases. If the same was true of The Theatre site, any piers might have fallen either side of the phase 1 evaluation trench.

To the east of the curved internal wall foundation was the remnant of a brick floor. The bricks used in its construction date from the mid 16th to early 17th century. It is possible that this brick floor is the remains of an access way, which would have allowed the audience pass into the galleries.

After the playhouse was demolished at the end of the 16th century, the site was occupied by a series of ephemeral structures. These appear to have been constructed from reused building material, possibly taken from the remains of the

playhouse. Evidence for 18th century domestic occupation was found in the form of drains and soakaways, which relate to a previously recorded house. The garden soils to the rear of the house were found to have been truncated by a series of pits and postholes.

The information collected during the phase 2 evaluation has been used to inform the proposed foundation design (section 6). The evaluation does not suggest that preservation in situ would be the only appropriate mitigation strategy. MOL Archaeology considers that key areas of the site should be preserved in situ while the majority of the other areas should be excavated archaeologically in advance of any ground reduction (ie preservation by record).

The archaeological excavation should take place after the current building has been demolished and removed from the site.

The final decision on the appropriate archaeological response to the deposits revealed rests with the Local Planning Authority and their designated archaeological advisor.

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1 Introduction

1.1 Site background

The evaluation took place at 4–6 New Inn Broadway, hereafter called 'the site'. The site is situated on the western side of New Inn Broadway and is bounded by 3a New Inn Broadway to the south, 92–96 Curtain Road to the west and 7 New Inn Broadway to the north (Fig 1). The centre of the site lies at National Grid reference 533320 182397. Modern pavement level near to the site lies at c 14.2m OD. The current slab level is c 0.4m higher than pavement level. Although the site comprises an area of c 300m², the presence of existing steel and timber roof supports, and a brick toilet block, reduced the available area for excavation to 175m² (see Fig 2).

A desk-top *Archaeological assessment* was previously prepared, which covers the whole area of the site (MoLAS, 2007). The assessment document should be referred to for information on the natural geology, archaeological and historical background of the site, and the initial interpretation of its archaeological potential.

A first phase of archaeological field evaluation was carried out on a series of trenches within the existing buildings in June 2008. Archaeological remains were encountered in all trenches. Potentially highly significant archaeological remains, consisting of foundations of what appeared to be a polygonal structure, were recorded in Trench 1, in the south-western area of the site. It was thought that these remains may have formed part of the foundations of the 16th century playhouse known as The Theatre, which documentary sources indicate stood on or close to the site. The remains were not excavated but were recorded and preserved *in situ* on the site.

The second phase of field evaluation was carried out in Feb 2009. The evaluation was carried out in response to a brief set by English Heritage and was intended to expose the full extent of remains associated with The Theatre, in the south-western part of the site. Once again, the remains of The Theatre were not excavated but recorded and preserved *in situ* on the site.

The new information provided by the second phase of excavation, and the way in which it relates to the information contained in the phase 1 report, is presented in this report.

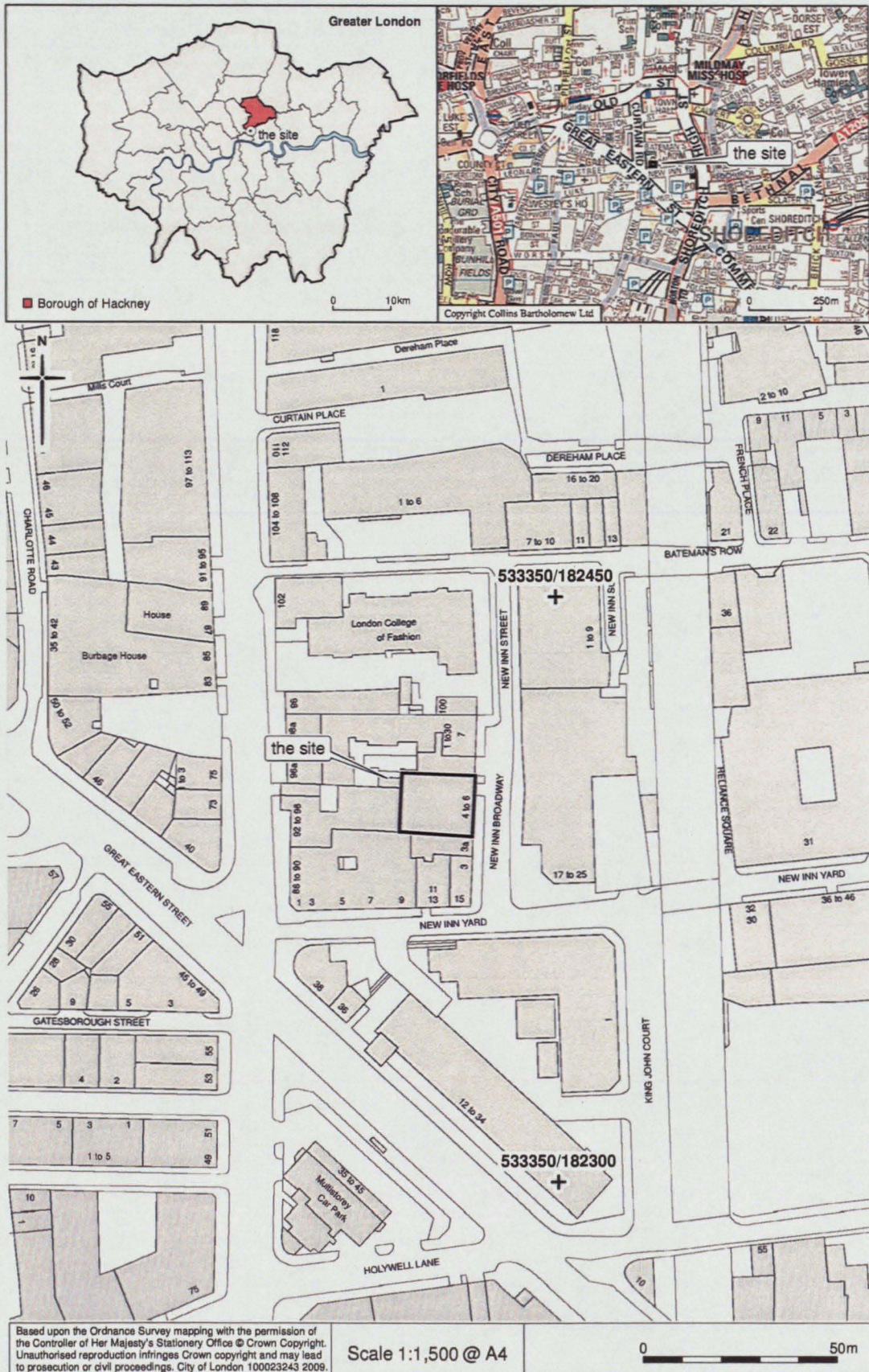


Fig 1 Site location

1.2 Planning and legislative framework

The legislative and planning framework in which the archaeological exercise took place was summarised in the *Desk based assessment* which formed the project design for the evaluation (see Section 2, MOL Archaeology, 2007).

1.3 Planning background

The phase 2 evaluation was carried out in support of an application for planning consent.

1.4 Origin and scope of the report

This report was commissioned by Tower Theatre Company and produced by the Museum of London Archaeology Service (MOL Archaeology). The report has been prepared within the terms of the relevant Standard specified by the Institute for Archaeologists (IFA, 2001).

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

- formulation of a strategy for the preservation or management of those remains; and/or
- formulation of an appropriate response or mitigation strategy to planning applications or other proposals which may adversely affect such archaeological remains, or enhance them; and/or
- formulation of a proposal for further archaeological investigations within a programme of research

1.5 Aims and objectives

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

The following research aims and objectives were established in the *Method Statement* for the evaluation (Section 2.2):

- Can the remains discovered in T1 during the first phase of evaluation be positively identified as belonging to The Theatre?
- Do any further remains exist in the south-west corner of the site that can be related to The Theatre?
- Does any evidence of the internal theatre wall survive?
- Does any evidence of the internal area of the theatre survive?
- What is the full extent and thickness of remains that can be related to the theatre?
- To what extent are the remains truncated by later archaeological features and/or modern foundations?

- How do the remains on this site compare to the archaeological evidence from surrounding sites?

2 Topographical and historical background

2.1 Topography

The underlying geology is Hackney gravels. The gravel terrace is overlain by a sandy silt termed 'brickearth', which formed in the late Devensian stage (32,000–10,000 BP) and corresponds to the later prehistoric ground surface. Past investigations in the area have shown that both gravel and brickearth were eroded by a number of small streams flowing south to join the Thames, c 1.8km to the south. Previous archaeological investigations at 86–90 Curtain Road, 3–15 New Inn Yard, immediately to the east of the site, identified a deposit of fine sandy silt, which was clearly a fluvial deposit and likely to be Quaternary in date. Soft brown clay, possibly indicating a marshy terrain, was also observed (Bowsler 2003, 23). This suggests that a small stream may have crossed the site.

2.2 Prehistoric

The site is located on well drained gravel terrace close to predictable resources of the River Walbrook. This would have made it an attractive location for prehistoric activity and previous work in the vicinity indicates that the site lay within a marshy area with potential for palaeo-environmental remains. However the evidence for human activity in the area during this period is limited to one Mesolithic axe, located c 100m west of the site.

2.3 Roman

The site is located c 160m to the west of Ermine Street, the main Roman road north of the City. The site lay beyond the limits of the Roman settlement in rural land and agricultural features, such as field boundaries and ditches, have been uncovered during recent investigations in the vicinity.

2.4 Saxon

There is little evidence in the archaeological record for occupation before the Norman Conquest with no finds securely dated to this period have been found in the vicinity of the site. Available evidence suggests limited occupation and agricultural activity in the area during this period.

2.5 Medieval

The nucleus of Shoreditch village was probably around the junction of Kingsland Road and Old Street, c 280m north of the site. The site is located within the precinct of Holywell Priory, which was founded in the 12th century, to the west of the priory's main buildings and in the vicinity of probable outbuildings associated with the Outer Court. The Outer Court provided the economic base of the priory and its buildings were largely agricultural or industrial. The Outer Court is one area of monastic research that requires further study as it was largely ignored until recently as monastic excavations tended to concentrate on the main complex of buildings, such as the church, cloistral buildings and the infirmary, rather than the more scattered out-buildings. It is possible that the remains of some of the out-buildings, including a bake house and mill house, and other features, including a backfilled pond, survive on the site. Additionally, earlier phases of activity associated with the priory may be sealed beneath these structures recorded at Dissolution or later.

2.6 Post-medieval

After the Dissolution the land that had belonged to the Priory was divided into three main portions. The site belonged to a portion of land that was granted to Henry Webb and in 1576 it was leased to James Burbage, who erected a playhouse. This was one of the first purpose-built London theatres. The plot comprised old buildings fronting eastwards onto Holywell Court, whose grounds or gardens extended back to the brick precinct wall. Under the terms of his lease he was at liberty to demolish any of the houses on the site but he was to maintain and repair the brick wall (or build as new the same) next to the fields (Wallace 1913, 174).

The playhouse, called simply 'The Theatre', was located on Curtain Road at the junction with New Inn Yard, on a plot of land within the former Priory precinct. Recent work on The Theatre had suggested that the playhouse building may be located partially within the site, particularly in the south-west corner, as possible remains are documented at the adjacent site at 86–90 Curtain Road. Remains of the footings of The Theatre would potentially be of National Importance, and thus worthy of preservation *in situ*.

A phase 1 evaluation was carried out on the site in June 2008 (Knight 2008). Archaeological remains were encountered on site between 12.95m OD and 14.3m OD. Potentially highly significant archaeological remains, consisting of foundations of what appears to be a polygonal structure, were recorded in Trench 1, in the south-western area of the site, between 13.1m OD and 13.5m OD. It is thought that these remains may form part of the foundations of the 16th century playhouse known as The Theatre. The remains were recorded and preserved *in situ* on the site.

Earlier archaeological remains were sealed by the 16th century deposits but, because of the requirement for preservation *in situ*, it was not possible to fully investigate these. Later remains were also investigated, which included 17th- and 18th-century foundations and garden soils. Although of local interest, these later remains are not of national or regional interest.

3 The evaluation

3.1 Methodology

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

The evaluation trench, Trench 4, involved the re-opening and extension of Trench 1, in the south-west corner of the site. Trench 4 measured c10m north-south and c10m east-west and covered an area of c100m which is over 25% of the site area.

The backfill of the previous trenches was removed and the slab was broken out and cleared by contractors under MOL Archaeology supervision. The trench was cleared to the top of the previously recorded archaeological remains. The trench was then excavated by hand, by members of staff from MOL Archaeology.

The location of the evaluation trench was recorded by the MOL Archaeology geomatics team. This information was then plotted onto the OS grid.

A written and drawn record of all archaeological deposits encountered was made in accordance with the principles set out in the MOL Archaeology site recording manual (MOLAS, 1994). Levels were calculated by using the existing site Temporary Bench Mark, which had a value of 14.58m OD (traversed onto the site from the Bench Mark on the south-western corner of the London College of Fashion building, the value of which is 15.42m OD.).

The second evaluation phase has produced: 34 single context plans plan; 84 context records; 3 section drawings at 1:20; and photographs. In addition boxes of finds were recovered from the site.

The site finds and records can be found under the site code NIN08 in the MoL archive.

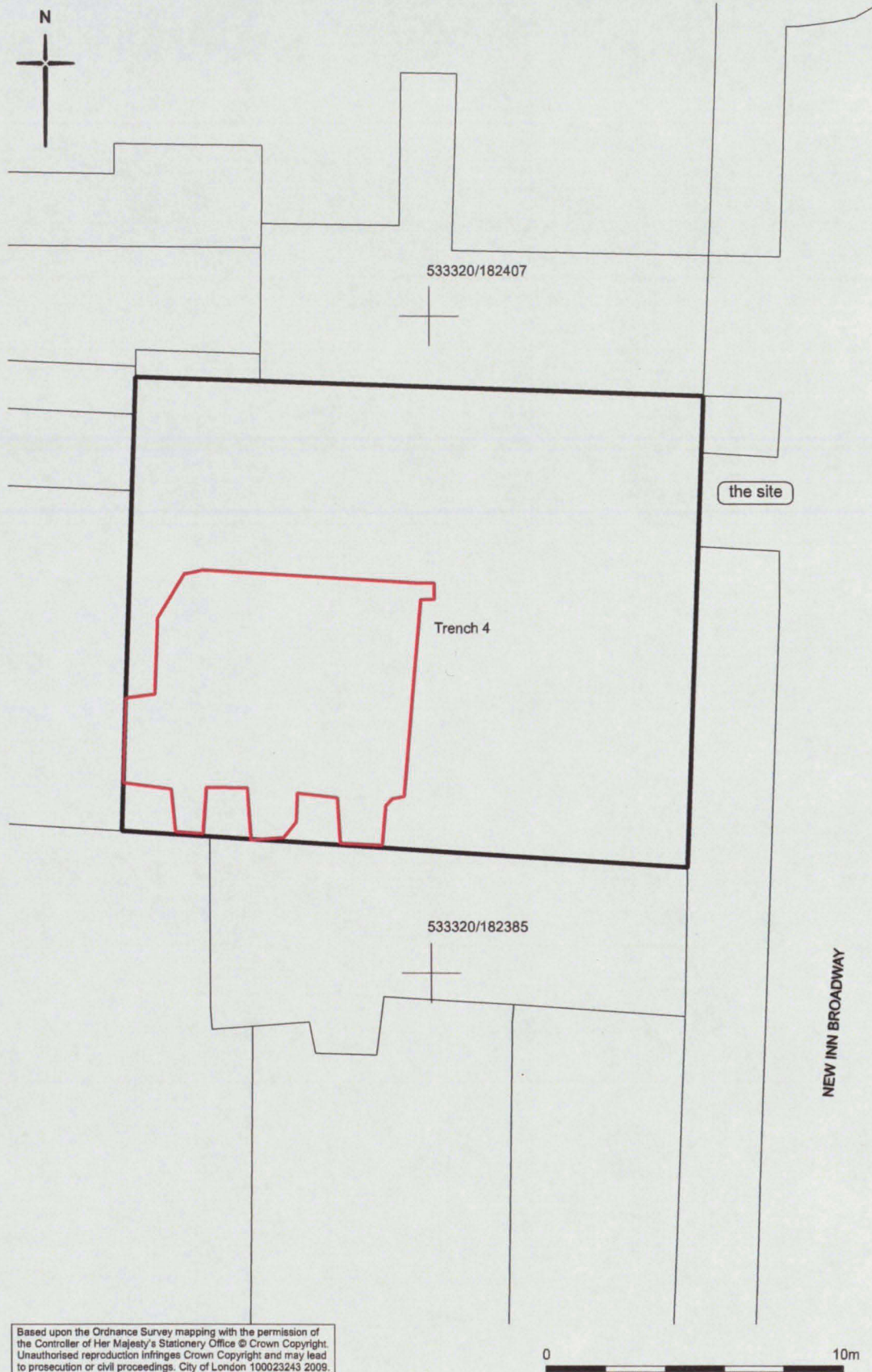


Fig 2 Area of evaluation

3.2 Results of the evaluation

For trench location see Fig 2.

Evaluation Trench 4	
Location	
Dimensions	10m by 10m by c1.6m depth
Modern ground level/top of slab	14.58m OD
Base of modern fill/slab	14.2m OD
Depth of archaeological deposits seen	1.4m deep
Level of base of deposits observed and/or base of trench	12.85m OD
Natural observed	N/A (recorded in BH1 see below)

3.2.1 Natural

No natural deposits were observed during the evaluation due to the archaeological remains being preserved *in situ*. The results of a geotechnical survey indicate that natural gravel exists on the site at 10.50m OD. Borehole (BH1) found dense brown sandy gravel at 4.1m below ground level (c 10.50m OD) (GEA borehole log fig no. J09026, BH1 April 2009). The lack of brickearth within the borehole may indicate that this area was subject to quarrying, possibly in the Roman or medieval periods. A MoLAS evaluation, c 70m to the north of the site at 1–6 Batemans Row in 2000 (site code BMN00), found that natural gravel and brickearth had been truncated, probably by quarrying in the medieval period.

3.2.2 Medieval remains associated with Holywell Priory

The earliest archaeological remains found on the site were [112] and [149]. Deposit [112], a sticky brownish grey sandy silt with 25% gravel, was recorded at 12.49m OD in section, in a 0.4m wide investigative slot that was excavated in the south-western corner of the site. The nature and full extent of deposit [112] is uncertain. Deposit [149] was a sticky, mid brownish yellow, mottled sandy silt, with frequent gravel, pea grit and small chalk fragments, recorded at 12.85m OD. Due to the preservation *in situ* requirement, [149] was only seen in the base of a later cut feature [148] and so its nature and full extent is uncertain. A small amount of pottery was collected from the very top of deposit [149] but may not be secure for dating purposes. The pottery gives a broad date of c 1550–1700 (see appendix 1).

Cut into deposit [149], or possibly abutted by [149], was a fragment of a masonry structure [150]. Again its full extent is unknown as it was seen in the base of the later cut feature [148]. The masonry, the top of which was at 12.93m OD, consisted of brick, mortar and chalk fragments and the exposed section measured 0.38m (NE–SW) and 0.35m (NW–SE). Only a single course was visible and only two bricks could be measured. These match the size range of the medieval bricks retrieved from the nearby Holywell Priory excavation (site code HLW06) (see appendix 2). It is, therefore, possible that they could be a remnant of the foundations of one of the priory buildings. It is likely that the bricks came from the brick and tile works at Deptford, which was supplying bricks to the city by the first quarter of the 15th century (Schofield 1984 126).

3.3 16th century playhouse

Archaeological remains relating to the playhouse are illustrated on Fig 3.

During the first phase of evaluation in July 2008, a series of features were discovered in Trench 1 that were interpreted as having a high possibility of being related to The Theatre. The features consisted of a 16th century wall foundation and pier base, along with the line of what appeared to be a robbed out foundation trench running off the pier base at an angle (see Knight, July 2008). These structures appeared to form the corner of a polygonal foundation structure. The fact that the remains were of 16th century date and in the correct location led to the conclusion that they may be related to The Theatre.

The remains were interpreted as belonging to the foundations of the outer wall of The Theatre. This conclusion was reached because a further evaluation trench (Trench 3), which was excavated along the western site boundary, failed to uncover any evidence of a further foundation ring. It is known from documentary evidence that the Theatre would definitely have had an outer and inner ring of foundations.

During the second phase of evaluation, English Heritage give permission for some of the later features, that were obscuring the 16th century remains, to be excavated. As a result of this exercise, new evidence has been uncovered which has caused the conclusions reached during the phase 1 evaluation to be expanded and revised. This has led to a more positive identification of the remains as belonging to The Theatre.

Instead of an outer wall, it is now thought more probable that the remains in Trench 4 are related to the inner wall of the Theatre. This is because the further excavation work led to the discovery of a compact gravel surface, butting up to the wall, which has been interpreted as the 'yard' - the internal area where spectators stood to watch performances. The absence of the outer wall in the phase 1 evaluation trench could be explained by later truncation, or it is possible that the outer ring was not composed of a continuous brick foundation. If the outer ring had been constructed using a series of piers, as at the Rose Theatre (Julian Bowsher, pers comm.), these may have fallen either side of the narrow evaluation trench.

In addition, the excavation work carried out as part of the phase 2 evaluation revealed that the line of the robbed out wall foundation trench, that appeared to form part of an angled corner to a polygon, was actually the cut line of a large pit (see section 3.2.4 for full details).

Inner wall foundations

Three structural elements ([24], [145] and [174]) are thought to form the foundation for the inner wall of the playhouse. The foundations consist of an *in situ*, slightly curved brick wall [24] (1.6m E-W x 0.5m N-S) with what appears to be a square foundation pad (measuring 0.98m by 0.98m) at its eastern end. The continuation of this foundation line, deposit [145] to the west and [174] to the east, has been extensively disturbed in antiquity and the surface of each of these deposits is a jumble of chalk, brick and mortar.

Foundation wall [24] was first discovered and recorded during the phase 1 evaluation. Further excavation in phase 2 has allowed a little more of this structure to be uncovered. The bricks of the structure are laid in regular stretcher form and survive to a height of 13.09m OD (see Knight, July 2008, section 3.2.1 for full

description). At the eastern end of the brick wall is a truncated square foundation pad measuring 0.98m by 0.98m, which survives to a height of 13.14m OD. It was constructed from randomly coursed bricks, roughly dressed ragstone and chalk blocks and mortar. Much of the chalk has decayed and is very soft. The composition of the pier base differs to that of the wall, with bricks laid in different arrangement, on a slightly different alignment. The very top of the pier base appears not to be *in situ* and the jumbled bricks, chalk and mortar dumps that are visible may have been disturbed during the demolition of The Theatre.

The bricks used in the construction of wall [24] are very similar to the examples found associated with the priory. There seems little doubt that they represent priory bricks, which have been reused in the curving wall of the theatre. This is not too surprising as there was widespread reuse of bricks in the mid 16th–17th centuries (Betts 2009). See appendix 2 for assessment of bricks in structure [24].

Foundation [145], the top of which was recorded at 13.25m OD, extends beyond the limit of excavation to the west and is 0.64m wide and over 1.2m in length. Again, this foundation may not be quite *in situ* and is composed of a jumble of brick and mortar. Nonetheless some regularity indicating it is structured is visible in the deposit. It was constructed from a compact light yellow fine sandy mortar containing frequent fragments of red brick and peg tile, moderate amount of small chalky flecks and occasional small pebbles, oyster shell and charcoal flecks. The remains of this foundation survive to a height of 13.25m OD. Deposit [145] was associated with a compact sticky light grey clayey silt [146]. The exact relationship between the two deposits is uncertain as both [145] and [146] were left *in situ*.

Foundation [174] is situated on the eastern side of the site and extends beyond the limit of excavation. The foundation was extensively disturbed in antiquity and the majority of it is not quite *in situ*. The deposit consists of fragments of unfrogged orange red bricks, ragstone and mortar and measures 2.05m (NW–SE) by 1.3m (SW–NE). Foundation [174] was recorded at a height of 12.96m OD, which is c 0.3m lower than [145]. The difference in height between the two more jumbled areas of foundation reflects differential levels of survival and redeposition in these areas.

Foundations [145] and [174] were not excavated but left *in situ* and so dating evidence could not be retrieved from these features. It was not possible to carry out full *in situ* analysis of the building material because no complete bricks were visible. The overall nature and approximate size of the bricks, along with the physical and stratigraphic relationships between all three foundation features, does seem to indicate that the deposits are related to the same overall structure. The discovery of these remains appears to demonstrate that, rather than turning a sharp corner to form the north-eastern corner of a polygon, the theatre foundations may be more curved in shape. The identification of this as the inner wall also means that the theatre remains now cover a greater area of the site than previously thought.

Playhouse yard

A compact gravel surface [167] was discovered butting up to brick foundation structure [24] and extending southwards towards the limit of excavation. The deposit has been interpreted as the remains of the playhouse yard – the internal area where the audience would have stood to watch performances. The deposit was not excavated but preserved *in situ*.

The deposit is composed of gravel (approx 60%) and sandy silt. It contains frequent chalk flecks, moderate amounts of cbm (ceramic building material) and charcoal

flecks and occasional stone fragments. The gravel extends beyond the limit of excavation to the south and west. On the eastern side of [167], where it was truncated by a later cut feature [148], the layer was found to be 0.18m thick. The surface has a distinct slope from the north down towards the south. A sloping yard is a common feature of 16th century playhouses as it gives a better sight line to the stage for the audience (and may also have aided drainage). Over a distance of 1.25m the surface sloped from 13.11m OD down to 12.95m OD. This is equivalent to a gradient of c12.5%, which compares to the Rose theatre whose yard had a slope of around 10% (J Bowsher pers comm.). As this is the northern area of the playhouse yard, the slope would indicate that the stage was directly opposite, to the south.

More of the gravel yard surface may survive in the eastern part of the site. A truncated gravel deposit, [176], appears to be part of the same feature as [167]. The full extent of [176] is not known as it was only recorded in a narrow slot between two modern concrete bases on the southern edge of the trench. The deposit was sealed by a layer of clean brick earth, which may have been a repair to the original gravel surface, or a later levelling layer deliberately laid down after the playhouse had been demolished to level off the sloping yard area. The top of the layer [176] was recorded at 13.02m OD.

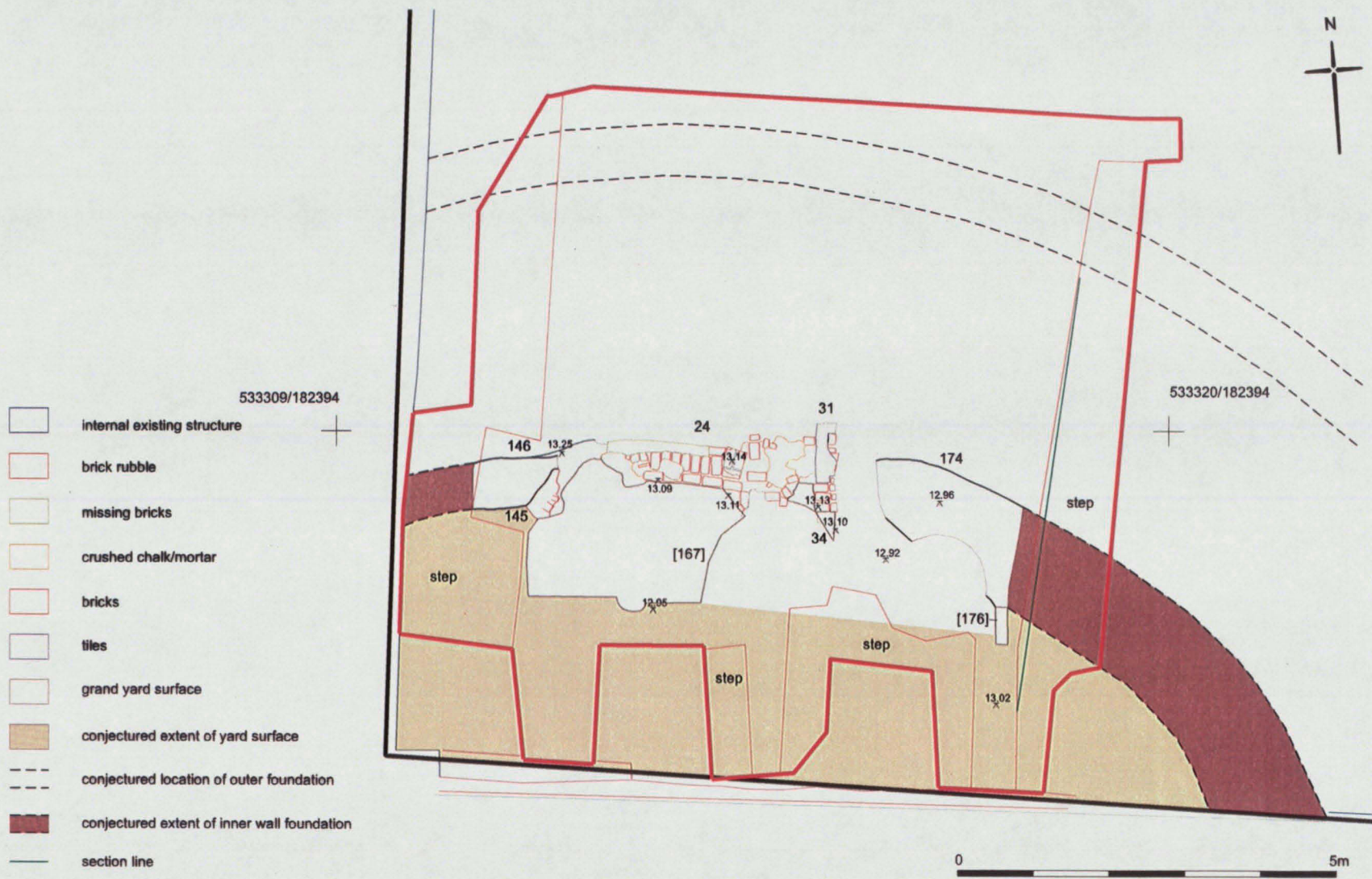
No finds or environmental evidence was collected from deposits [167] and [176] because of the requirement for preservation *in situ*.

Ingressus

At the eastern end of structure [24] there appears to be a gap, or at least a change, in the line of the foundation. Unfortunately, the deposits in this area have been truncated by a later foundation trench [19], which has removed valuable information. A remnant of a brick floor [34] was visible on the western edge of foundation cut [19] and was recorded at 13.13m OD. The bricks used in its construction are smaller in size than the bricks used in the curved theatre wall [24]. They are difficult to date precisely, but their size, particularly their thickness, suggests a mid 16th–early 17th century date (see appendix 2). The bricks are laid directly onto the playhouse yard surface [167] and may have been a later addition. Documentary evidence indicates that alterations were made to The Theatre during its lifespan.

The presence of the underlying gravel and these bricks, on a slightly different alignment to the theatre wall, suggests that the inner wall foundation may have been constructed with a deliberate break. The break may have formed an *ingressus*, or entrance, allowing the audience access to the galleries via the yard. This could imply that The Theatre was not constructed with external stairs, unlike other examples of Elizabethan theatres. The brick threshold may have supported steps, from the lower level yard. If so, it is likely that there would have been a similar feature beyond the limit of excavation or outside the site's boundary, to the west. Similar examples of *ingressi* have been recorded at The Rose (J Bowsher pers comm.).

Stack of tiles [31], lying directly on top of the brick floor [34], are all of standard London type, which were made in vast numbers during the period c 1480–1800. The NIN08 examples measure 150–159mm in breadth by 11–13mm in thickness. They are of the two round and two triangular nail hole type. Triangular nail holes (along with those of square and hexagonal type) are not normally found in London-made roofing tiles before c 1480 (appendix 2).



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Fig 3 Plan of playhouse's inner wall foundations, internal yard and ingressus



Fig 4 Plan of 16th and 17th century deposits and structures in Trench 1

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3.3.1 17th century structures

During the phase 1 evaluation, the line of what appeared to be a robbed out wall foundation trench, related to Theatre wall [24], was identified. Further excavation work during the phase 2 evaluation showed that this cut line was, in fact, the northern side of a large oval pit [148], which had truncated the playhouse yard surface [167] and wall [24].

The pit measured 1.7m E–W and 1.1m N–S and 0.32m in depth and extended beyond the limit of excavation to the south. The fill of the pit, [147], which was only partially excavated, was very loose and consisted of demolition rubble (approx 60%) and dark grey silt. The rubble fill may be redeposited material related to the demolition of The Theatre at the end of the 16th century. An environmental sample taken from this pit contained fish bones including herring, cod and plaice. It also contained sheep bones and one bone from a toad or frog (see appendix 5).

Further evidence of possible theatre related demolition was found to the north of foundation [174], on the eastern side of Trench 4. Here an unexcavated layer, [173], consisting of mixed brickearth and rubble was recorded. The rubble appeared to be squashed into the top of the redeposited brickearth. Both layer [173] and foundation [174] were sealed beneath a layer of demolition rubble [170], of which the upper part of [173] may have been a remnant. [170] consisted of a moderately compact, mid grey brown sandy silt with 20% gravel. It contained frequent mortar and cbm fragments. Two circular postholes, [152] and [169], which were both approximately 0.3m in diameter, were cut through the demolition layer [170] and appear to be contemporary with a third circular posthole, [172], which cut through foundation [174]. The fill of [152] was sealed below [182], a dump of rubblely brickearth. The full extent of this layer is not known as it was only recorded in the west facing section.

Sealing pit fill [147] was layer [142] (recorded in the first evaluation phase as [25]). Above this was layer [141] and cinder surface [140]. Layer [142], which appeared to form a surface, was a very compact dark grey/black gritty cindery silt with frequent charcoal flecks and small pebbles, occasional cbm flecks, ash, coal flecks and oyster fragments. Moderate amounts of finds and environmental information was collected from this layer indicating a deposition date of 1580–1600 (see appendices). Of particular note is the discovery of an extremely unusual pottery vessel in border whiteware fabric, possibly of Rhenish Bartmann form. The pottery displays an elaborate decoration scheme of grooves, stamps and applied moulded human faces (one has survived intact with the remains of a second identifiable). The male face decoration has a pointed chin and beard, with the nose, mouth and eyes indicated by simple raised lines. A possible ruff or collar is indicated below. Vessels such as this are not common in Surrey-Hampshire border ware, although similar decorative techniques were applied to a range of mugs and occasionally *Bartmann*-type jugs, especially during the middle years of the 17th century. Recent work on the excavated production waste from the kiln site at Farnborough Hill Convent, in Hampshire, has shown that bichrome glazing, incised and stamped decoration were actually first employed during the late 16th century (Pearce 2007, 122, fig 72, no 530) (see appendix 1 for full details).

The pottery dates are verified by the clay pipe dates (appendix 3) and the building material assessment, which does not indicate material of a post Great Fire of 1666 date. Other finds from this layer include a fragment of window glass (appendix 4). The environmental evidence indicates charred grain was present in the layer

(appendix 6) and fragments of animal bone were also present including, cat, ox, sheep, pig, fish, rabbit and chicken. The top of [142] was recorded at 13.17m OD.

Layer [141], recorded at 13.24m OD, may also have been a surface. The deposit was a compact, light orangey brown sandy, silty clay. It contained occasional mortar flecks and fragments, chalk, coal and charcoal flecks. The deposit had the appearance of degraded mortar. The cinder surface [140], which was dark reddish brown in colour, also contained fragments of frequent burnt cbm and flecks of oyster shell.

Above layer [140] was brick wall [21], located at 13.27m OD. The wall was poorly constructed and was built directly on the theatre gravel surface [176]. It did not appear to be load bearing. The wall probably formed part of an ephemeral structure, possibly an ancillary building to the rear of a house fronting New Inn Broadway. The thickness of the bricks would suggest that they date from 1500–1600 and their condition suggests that they may have been re-used (appendix 2). Structure [21] was sealed by a layer of garden soil [104], which contained fragments of glass vessels including a beaker and glass working waste (see appendix 4). It is possible that structure [21] was associated with 17th century glass making as layer [104] lay immediately above it.

Wall [21] was of similar construction to wall [166], another ephemeral and poorly constructed brick structure recorded at a height of 13.19m OD, on the eastern side of Trench 4. Bricks used in the construction of [166] were very similar to those found in both [24] and [34], which may indicate that they were reused from The Theatre. A reused, broken, decorated cut brick was found in wall [166], which may have originally formed a decorative string-course in the wall of one of the medieval priory buildings (Betts 2009).

Associated with [166] was [177], an internal surface formed from patchy white mortar. This was covered by a thin trampled layer [178]. The trample was sealed by [121], a demolition deposit, which also filled cut [122]. The deposit was a compact, very mixed light grey, brown sandy, clayey silt. It contained frequent mortar flecks and small mortar fragments, occasional flecks of chalk and charcoal and fragments of peg tile, occasional larger mortar fragments and small chalk fragments. This deposit was recorded in the first evaluation phase as [18].

Both wall [166] and floor [177], together with brick floor [34] and pit fill [147], were truncated by [122], a substantial linear robbed foundation cut which ran north–south across Trench 4. Originally recorded as [19], the full extent of the cut is not known as it extends beyond the limit of excavation to the south and north. It would seem likely that it forms the back wall to a 17th century structure, which originally fronted New Inn Broadway.

3.3.2 18th century domestic occupation

Cutting through the demolition deposit [121] was a circular cut [118] for a brick lined soakaway [117]. The walls of the soakaway were made from broken, dark red bricks measuring 91–101mm in breadth by 58–64mm in thickness. The bricks were constructed in London brick fabric 3032, which first appeared shortly after the Great Fire of 1666 and continued in use into the 19th century. The NIN08 examples are not easy to date, but one example has sharp edges suggesting a possible 18th-century date (appendix 2).

The soakaway was of similar construction to a circular brick lined well [10], located to the south (recorded during the first phase of the evaluation). The brick well belonged to an 18th century house, the floors of which ([8], [15], and [16]) partially sealed the well cap. The well, floors and external rear wall [4] were all first recorded in the phase 1 evaluation. To the rear of the house was [104], a dark brown/black garden soil, which appears to be the same as garden soil [54], recorded during the first evaluation phase in Trench 2. The garden soil was a compact, very dark grey, black, fine sandy silt. It contained frequent charcoal and clay tobacco pipe fragments, moderate cbm flecks, animal bone, oyster and mortar fragments. Animal bone recovered from [104] included ox, sheep/goat and rabbit. Some of the bones showed butchery marks. The latest pottery dates from context [104] put deposition at 1650–80 (appendix 1) while the clay pipe indicates a date range of 1680–1710 (appendix 3). It is therefore likely that the deposit dates to the early 18th century. [104] was recorded at a height of 13.30m OD.

Garden soil [104] sealed a dark pit fill or dump layer [111], which was virtually identical to [104] in colour, compaction and composition. The deposit was present between the two concrete bases in the south-western corner of the trench. Truncating [104] was a series of circular postholes [126], [128], [132], [134] and [138] and two pits [110] and [130]. Pit [130] contained the articulated skeleton of a small dog and a virtually complete pottery bowl. The fill of [130] also contained fragments of ox and sheep/goat bones. Garden soil [104] was also truncated by construction cut [22] (the construction cut for [4], the rear wall of the house fronting New Inn Broadway).

Cutting the fill of pit [110] was a brick lined drain [106]. The full extent of the drain is uncertain as it extends beyond the limit of excavation on the southern side of the trench. An environmental sample from the silt fill of the drain, [107], contained a number of food remains, including seeds of grape (*Vitis vinifera*), fig (*Ficus carica*) and mulberry (*Morus nigra*) as well as fragments of hazelnut shell (*Corylus avellana*) (see appendix 6). The drain was truncated by another pit [103], the fill of which was sealed by the upper layer of garden soil [101]. The garden soil [101] sealed a series of postholes, including [114], [120] and [136], and the backfill of the soakaway [117]. Posthole [114] appears to be contemporary with postholes [86], [88], [90] and [92] recorded in Trench 3 during the first phase of evaluation.

3.3.3 19th century commercial activity

On the eastern side of the trench, deposit [101] was sealed by [165] and [155]. Deposit [165] was a soft, dark brown, fine sand bedding layer for brick floor [164]. [155] was a demolition dump consisting of pale yellowy grey crushed mortar below another layer [154].

Above the brick floor [164] was a demolition dump [163], which formed the bedding layer for a further brick floor [160]. Above this was a pit containing demolition rubble [162] and a series of demolition deposits [159], [158] and [157], which like [155] was sealed beneath [154]. [154] was the bedding layer for [153], a 19th century cobbled surface, originally recorded in the phase 1 evaluation as [100]. The cobbles were recorded at a height of 14.23m OD. All of these deposits, with the exception of [100] on the western side of the site, were recorded in section (see Fig 5).

The 19th century remains were truncated in the north-western part of Trench 4 by a large, reinforced concrete base, relating to an earlier industrial feature. The full depth of this obstruction was not reached but it may truncate a large portion of the archaeology at the western site perimeter.

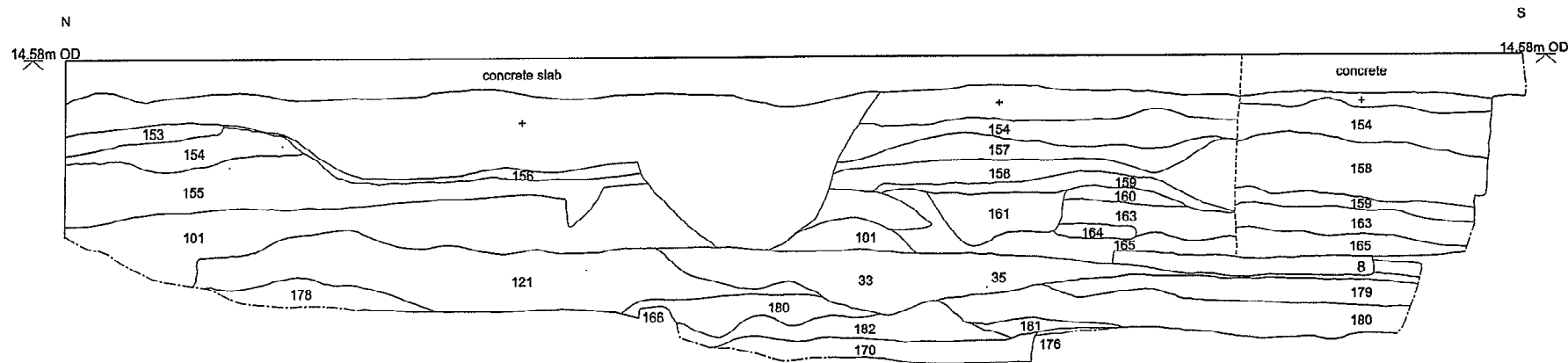


Fig 5 Composite of west facing section Trench 4

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3.4 Assessment of the evaluation

GLAAS guidelines (English Heritage, 1998) require an assessment of the success of the evaluation 'in order to illustrate what level of confidence can be placed on the information which will provide the basis of the mitigation strategy'. In the case of this site, the highly significant nature of the remains, which may be related to The Theatre, meant that there was a requirement for preservation *in situ* (as advised by English Heritage during the evaluation fieldwork). It was not, therefore, possible to investigate the full sequence of deposits on the site down to natural ground surface. It was only possible to partially investigate underlying deposits in the bases of later cut features.

The evaluation has shown that the site contains nationally important remains but it has not been possible to provide information on the full archaeological sequence down to natural ground surface.

4 Archaeological potential

4.1 Realisation of original research aims

- *Can the remains first discovered in T1 during the first phase of evaluation be positively identified as belonging to The Theatre?*

The excavation of a larger trench as part of the phase 2 evaluation work, and the discovery of more 16th century deposits, has increased confidence in the identification of the remains discovered during phase 1 evaluation as belonging to The Theatre.

The remains cannot be confirmed as definitely belonging to The Theatre because they are ephemeral and there is nothing that is 100% diagnostic. Collectively, however, the different pieces of evidence add up to a very convincing argument for these remains being part of the theatre.

The evidence can be summarised as follows:

The remains are in the correct location

We know from documentary sources that The Theatre was located in this general area. Cartographic sources indicate that there are only a limited number of locations remains could exist because space would have been tight. See the phase 1 evaluation report (Knight 2008) for more detail on this.

The remains are of the correct date

Assessment of the finds and stratigraphic records from the site indicates that the foundations date to the 16th century and were possibly formed of reused bricks from the earlier priory buildings which stood close by.

The remains are the right shape

The presence of curving masonry structures, an internal sloping gravel yard surface and possible brick threshold indicates that the remains are very likely to be those of The Theatre. The remains share many similarities with structural elements of the Rose theatre (J Bowsher pers comm.) and the Globe (P Miller pers comm.).

- *Do any further remains exist in the south-west corner of the site that can be related to The Theatre?*

The 16th century masonry foundation wall [24] and pier base, found in the phase 1 evaluation, was uncovered in the phase 2 evaluation. These remains were found to be associated with two further foundation structures [145] and [174] on the same alignment. Together, these three elements have been interpreted as forming a curving foundation structure, rather than a sharply angled one (as was originally thought).

The north-east corner of the Theatre foundation had been interpreted as a sharp corner, forming one edge of a polygon, because of the discovery of an angled cut line that was thought to represent the robbed out continuation of [24]. The cut line, however, proved to be the edge of a large, later pit cut, on further investigation.

The curving foundation wall has been reinterpreted as the inner foundation wall. This is because a sloping gravel surface, thought to be the remains of the playhouse yard, was discovered butting up against the wall.

The nature and location of the outer Theatre wall is, therefore, still unknown. It was searched for, but not discovered, during the phase 1 evaluation. It could have been truncated and removed in antiquity, or it is possible that the outer ring was not a continuous brick structure like the inner one. In a later phase of construction at the Rose theatre, the outer foundation was composed of pier bases. If the same was true of The Theatre site, any piers might have fallen either side of the phase 1 evaluation trench.

In addition to the curved wall foundations and internal gravel surface, the remains of a possible *ingressus* was also discovered. The remnants of brick floor [34], overlying the gravel surface [167], may indicate that the inner wall foundation was constructed with a deliberate break which formed an *ingressus*, or entrance, allowing the audience access to the galleries from the yard. This might mean that the Theatre did not have external stairs. The brick threshold may have supported steps, from the lower level yard. If this interpretation is correct, there may have been a similar feature, beyond the limit of excavation or outside the site's boundary to the west. Similar examples of *ingressi* have been recorded at The Rose (J Bowsher pers comm.).

- *Does any evidence of the internal theatre wall survive?*

Theatre wall [24], related pier base and a robbed out section of [24] were identified as being part of the external theatre wall in the phase 1 evaluation.

Evidence found during the phase 2 evaluation has shown that wall [24] and related pier are more likely to be part of the inner, not the outer, theatre wall foundation. See above.

- *Does any evidence of the internal area of the theatre survive?*

Sloping gravel yard surface [167] has been interpreted as the internal playhouse yard. The slope is similar to that recorded at The Rose and may indicate that the stage was on the playhouse's southern side.

- *What is the full extent and thickness of remains that can be related to the theatre?*

The top of 16th century remains was recorded at 13.25m OD in the western side of the trench and 12.96m OD in the east. As the remains were preserved *in situ* it was not possible to ascertain their full thickness, but it appears that the remains form a fairly thin skim of deposit thickness in the overall stratigraphic sequence. The gravel playhouse yard surface is only approximately 0.2m thick and appears to be laid directly on medieval deposits. The depth of the wall foundations is not known.

In plan, the remains associated with the theatre are patchy but potentially extensive. There is a concentration of remains in the south-western corner of the site but there may also be concentrations in other areas, not yet seen. The gravel surface and wall foundations cover an area measuring approximately 7.5m east-west by 3m north-south. It is clear, however, that the remains continue under the pier bases to the south and beyond the limit of excavation to the east and so the real area of survival is likely to be larger than that stated here.

The reinterpretation of the wall foundations as inner wall means that there must originally have been outer foundations somewhere towards the centre of the site. If the outer foundation ring was constructed in a similar way to The Rose it is possible that some evidence for the outer wall's foundations might be found at c 3.8m to the north of the inner wall, as illustrated on Fig 2 and 6. The distance of 3.8m is the equivalent of $\frac{3}{4}$ of a rod, a rod being an imperial unit of length equal to 16 feet 6 inches). The length of the back walls of the gallery bays at the Globe was found to be 1 rod, ie c 5.03m (P. Miller pers comm.).

Further archaeological fieldwork is needed to ascertain the full thickness and extent of theatre related deposits on the site.

- *To what extent are the remains truncated by later archaeological features and/or modern foundations?*

Archaeological remains are present 0.4m below current slab level at 14.20m OD. The 16th century ground surface is approximately 1.75m below slab at 12.85m. Archaeological deposits have been locally truncated to a depth of c13.00m OD by the concrete bases of the standing building. Archaeological remains, dating from the 16th century and earlier, survive beneath the bases.

The 16th century remains have been partially robbed and truncated by later features. Part of the gravel surface has been removed by 18th century pitting in the extreme south-west corner of the site. It is not currently known how extensive this pitting is.

Deposits in the western part of the trench have been truncated by a large reinforced concrete base. The full dimensions of this structure are not known.

- *How do the remains on this site compare to the archaeological evidence from surrounding sites?*

The remains recorded at 4–6 New Inn Broadway compare well with those of adjacent sites. It is likely that the 16th century playhouse remains are contemporary with those recorded on the adjacent site at 86–90 Curtain Road (CNU02). Test pits in the basement of 86–90 Curtain Road revealed either modern make-up or truncated natural gravels. Those at ground level revealed deep deposits of 18th or 19th-century made-ground. A chalk foundation found above the natural gravels appears to be base of the perimeter wall of Holywell Priory. Another foundation was probably associated with the Great Barn, an integral part of the priory.

The MoLAS evaluation at 1–6 Batemans Row also found a similar archaeological sequence to 4–6 New Inn Broadway. Truncated natural gravels were sealed by 16th and 17th century garden deposits, above which was 18th century domestic activity sealed by Victorian walls, a cobbled surface and various demolition dumps. At the 152–154 Curtain Road site (site code CIA01) natural brickearth was overlaid by garden soil dated to late 17th–early 18th century. The remains of an 18th-century building survived above this. The evaluation at 976–113 Curtain Road 97–113 (site code CUA98), recorded natural brickearth sealed by 17th or 18th-century agricultural soils cut by 19th-century brick foundations.

At present it is uncertain how the remains relate to the 1999 geophysical survey results, undertaken by MoLAS at 86–98 Curtain Road, 3–15 New Inn Road, 3a–6 New Inn Broadway and the two car parks east of 96–98 Curtain Road and north of 6 New Inn Broadway (McCann 1999). The area of 3a–6 New Inn Broadway revealed possible traces of buildings at a depth of between 1.4m to 2m. In two of the survey grids, largely within the premises of 7–9 New Inn Yard, anomalies overlay these possible traces and showed three areas of high amplitude reflections possibly indicating a masonry structure(s). Their location suggested a possible circular feature with a diameter of c 22m.

More research and fieldwork is needed to clarify how the remains discovered on the site relate to the geophysical survey and evidence from surrounding sites.

4.2 General discussion of potential

The evaluation has shown that the potential for survival of ancient ground surfaces (horizontal archaeological stratification) on the site is good. There is an intact sequence from at least the 16th century through to the 19th century. There is also potential for survival of cut features such as pits, wells and postholes.

Archaeological deposits survive at a depth of 0.4m below slab level on the site and are predicted to survive largely intact down to the level of natural ground surface (currently not known for certain but likely to be in excess of 2m below slab level). Deep cut features may extend below the level of natural ground surface where they survive.

4.3 Significance

The remains of the 16th century playhouse recorded on the south-western area of the site are of national importance. The remains have therefore been preserved *in situ*. The later remains, although of local interest, would not be of national or regional interest.

4.4 Updated research aims

4.4.1 Existing site archive

This report demonstrates that the archive collected from the site so far, during both phases of evaluation, has the potential for further analysis work.

It is envisaged that the analysis of the existing site archive will take place as part of the post-excavation work for the next phase of archaeological fieldwork (the excavation). If no further fieldwork should take place on the site, however, the existing site archive should be subject to full assessment and any further requirements for analysis and publication should be identified.

The updated research aims relating to the existing site archive are as follows:

- Can the environmental evidence from the site, in the form of samples and hand collected animal bone, provide information on diet, waste disposal, butchery and the local environment? Can the evidence indicate anything about other animal uses on the site (ie pet keeping)?
- Evidence of glass working was discovered during the evaluations. Further work is required to clarify the nature of the glass-working processes. Can any of the brick structures on the site be associated with glass making?

- Can the pottery evidence from the site reveal more information about the nature and date of deposits on the site and the status of the site's occupants?
- Can the overall shape and size of The Theatre be reconstructed using the evidence collected from the site, surrounding sites and related surveys?

4.4.2 New research aims

A comprehensive set of new research aims will be listed in the Method Statement for Archaeological Excavation, which will be completed and approved by the planners before the next phase of fieldwork. The new research aims will include and expand upon the ones listed above.

5 Assessment by EH criteria

The recommendations of the GLAAS 1998 guidelines on *Evaluation reports* suggest that there should be:

'Assessment of results against original expectations (using criteria for assessing national importance of period, relative completeness, condition, rarity and group value)

(Guidance Paper V, 4 7)

A set of guide lines was published by the Department of the Environment with criteria by which to measure the importance of individual monuments for possible Scheduling. These criteria are as follows: *Period; Rarity; Documentation; Survival/Condition; Fragility/Vulnerability; Diversity; and Potential*. The guide lines stresses that 'these criteria should not...be regarded as definitive; rather they are indicators which contribute to a wider judgement based on the individual circumstances of a case'.¹

In the following passages the potential archaeological survival described in the initial Assessment document and Section 3.2 above will be assessed against these criteria.

Criterion 1: period

The evaluation indicates a multi period site that has been utilised for a variety of purposes since at least the 15th century.

Criterion 2: rarity

Although the majority of the deposits found on the site are neither rare nationally or regionally, the possible remains of the a 16th century playhouse is rare both within the regional and national context.

Criterion 3: documentation

There is considerable contemporary documentation for remains in the area from the medieval and post-medieval period. It is possible that although the archaeological remains are fragmentary, some of the documentation could be specific enough to relate to individual features.

Criterion 4: group value

The remains of the 16th century playhouse have obvious group value as it is contemporary with a number of similar single Monuments external to the site.

Criterion 5: survival/condition

The medieval and post-medieval remains were found to survive in a relatively untruncated state. The structural remains that have been recorded have been preserved *in situ*.

Criterion 6: fragility

Experience from other sites has shown that isolated and exposed blocks of stratigraphy can be vulnerable to damage during construction work. The location of the post-medieval structural remains has been plotted and the masonry has been preserved *in situ*.

¹ Annex 4, DOE, Planning and Policy Guidance 16, (1990). For detailed definition of the criteria see that document. Reference has also been made to Darvill, Saunders & Startin, (1987); and McGill, (1995)

Criterion 7: diversity

Taken as a whole, the archaeological deposits which are likely to be found on the site represent a diverse group of archaeological remains and include monastic and secular remains. There is no reason to suggest that the diversity *per se* has any particular value which ought to be protected.

Criterion 8: potential

The evaluation has shown that the predicated location of the playhouse and the conjectured plan of the priory complex, which was based on previous excavation in the vicinity, as well as documentary and cartographic sources, was accurate. It is likely, therefore, that other elements shown on the conjectured plan of the priory, and possible features associated with post-medieval activity on the site, could survive in a relatively untruncated state, in the unexcavated areas of the site. The wall and robbed foundation cut, which is possibly part of the playhouse, are likely to continue beyond the limits of excavation to the west and south and structural remains associated with the bake house and mill house could survive on the eastern side of the site adjacent to the New Inn Broadway frontage.

6 Proposed development impact and recommendations

The proposed redevelopment at 4–6 New Inn Broadway involves the demolition of the current building and the construction of a new building with piled foundations and ground beams. The impact of this on the surviving archaeological deposits will be to remove deposits in the areas where the piles and ground beams are planned. The main impacts and archaeological implications of these are detailed in the sections below.

6.1 Demolition

6.1.1 Slab removal

The ground floor slab is located at 14.58m OD and is approximately 0.2m thick. The slab is underlain by homogenous, 18th-century garden soil in the south-west corner of the site. The removal of the ground floor slab will not cause any archaeological impact and so could be carried out without archaeological monitoring.

6.1.2 Removal of wall and column foundations

The perimeter walls have shallow, brick built footings. They are not stepped and are not laid on any deeper form of foundation. The footings extend to an average depth of 0.95m (13.63m OD) below slab level. Archaeological deposits dating to the 16th century and earlier are preserved intact beneath the foundations.

The roof of the current building is supported on a series of steel columns that sit on concrete pads measuring approximately 1.5m x 1.5m x 1.33m deep (the base of the third most westerly pad in the south-west corner of the site lies at 13.25m OD). Archaeological deposits dating to the 16th century and earlier survive intact beneath the column bases.

The demolition and removal of the walls and concrete pads should be carried out according to a pre-approved method and under archaeological watching brief conditions.

6.1.3 Underpinning

Any underpinning should take place after the next phase of archaeological fieldwork has taken place. Depending on the extent of the preceding fieldwork, any underpinning should be carried out under watching brief conditions.

6.2 Construction

A preliminary foundation plan has already been devised for the site (Figs 6, 7, 8 and 9). This has been negotiated and agreed in outline with English Heritage. Foundations have been sited in areas that will involve the least impact to the nationally important Theatre remains in the south-west corner of the site. Foundation locations have also been designed with a degree of flexibility so that they can be moved to accommodate theatre remains, if necessary.

Fig 6 shows the proposed foundation design in relation to the maximum footprint that the Theatre remains may occupy. The grey hatched area on Fig 6 denotes areas where theatre remains have been discovered, plus areas where there is a high risk of

further remains surviving. No piles/groundbeams are currently permitted in the grey hatched area.

The grey area has not been extended into the extreme south-west corner of the site. This is because the evaluation has shown that theatre remains in this area have been locally removed by later pitting activities. It is not known exactly how extensive the pitting is, however, and so there is a possibility that remains relating to the theatre's internal yard may survive in the southern part of the area.

The need for adjustment of the location of any piles and groundbeams in the south-western area of the site, to accommodate theatre remains, will be negotiated after the next phase of archaeological fieldwork (see below).

6.2.1 Piling

It is envisaged that the piles will be 300mm bored piles. The piles will impact archaeological deposits in every area of the site, apart from those where preservation *in situ* may be a requirement.

The piling method will be pre-agreed with English Heritage and the pile locations, including probing and working areas, will be archaeologically excavated and recorded in advance of construction. The spacing and number of the piles is largely indicative at this stage, with the exception of piles in the south-west corner.

At present a maximum of 14 piles are planned in the south-west corner of the site, close to grid line A. The location of these piles, shown on Fig 6, is indicative at present and can be adjusted slightly if necessary. The location of the piles in close proximity to the southern and western site boundaries, either side of the projected line of the outer foundation ring, has also been designed to be flexible. If, during the next phase of archaeological fieldwork, remains of the outer foundation ring are discovered, the pile locations will be adjusted to accommodate the remains.

6.2.2 Ground beams

The top of new floor construction will be located at 14.35m OD. The floor will consist of 0.15m finishes and 0.25m concrete.

A series of ground beams will be constructed on the site. The central beams will measure 0.6m wide by 0.70m deep (plus finishes) (Figs 6-9). The beams around the site perimeter will also be 0.70m deep but will be typically 2.80m wide. The impact depth required for insertion of the ground beams will be typically 13.50m OD.

The surface of archaeology is located at approximately 14.18m OD on the site while the surface of archaeology relating to the Theatre is located at a maximum height of 13.25m OD. A protective buffer zone of approx 0.25m will need to be left between the nationally significant remains and any construction activities. It will be permitted for archaeological remains situated above the 13.50m OD level to be excavated and preserved by record.

A maximum construction depth of 13.50m OD will be permitted on the site. No impact will be allowed below this level, except for piling in pre-approved areas (see above).

6.2.3 Viewing chamber

It is proposed that a section of the extant theatre foundation wall and gravel discovered on the site be displayed as part of the proposed development. The remains will be viewed via an opening formed in the concrete slab. The proposed

location of the viewing chamber is shown on Fig 7. The exact dimensions of the chamber and method of display will be designed and agreed after the next phase of fieldwork.

6.3 Further archaeological work

The archive generated by the two phases of evaluation has the potential for further post-excavation assessment and analysis work. See section 4.4 for full details.

The assessment in section 5 does not suggest that preservation *in situ* would be the only appropriate mitigation strategy for the site. MOL Archaeology considers that key areas should be preserved *in situ* while the majority of the other areas should be excavated archaeologically in advance of any ground reduction (ie preservation by record).

The archaeological excavation would need to take place after the current building has been demolished and removed from the site.

The areas of excavation should be limited to areas where impact is going to occur. The main areas of impact will be:

- Areas where ground reduction and construction of ground beams is planned (including working space)
- Areas where piles are planned (including working space)

The excavation work will be carried out in accordance with a pre-agreed method statement (WSI) and the strategy and timing of the excavation will be developed in conjunction with the overall programme and approved construction methods.

The final decision on the appropriate archaeological response to the deposits revealed rests with the Local Planning Authority and their designated advisor.

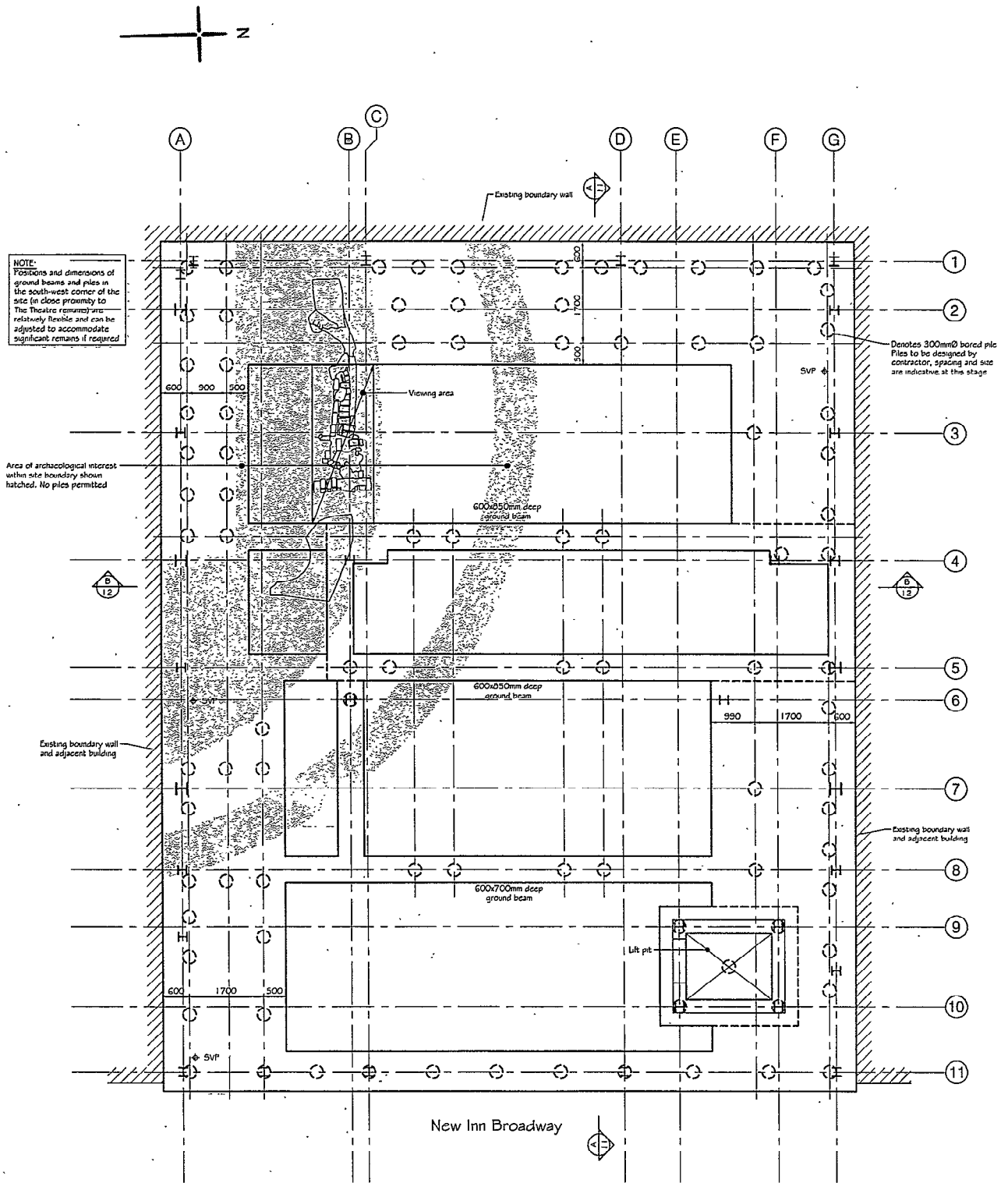


Fig 6 Preliminary pile and ground beam layout (Hannah Reed drawing no. C-208223/01 Rev P6, 18/05/09)

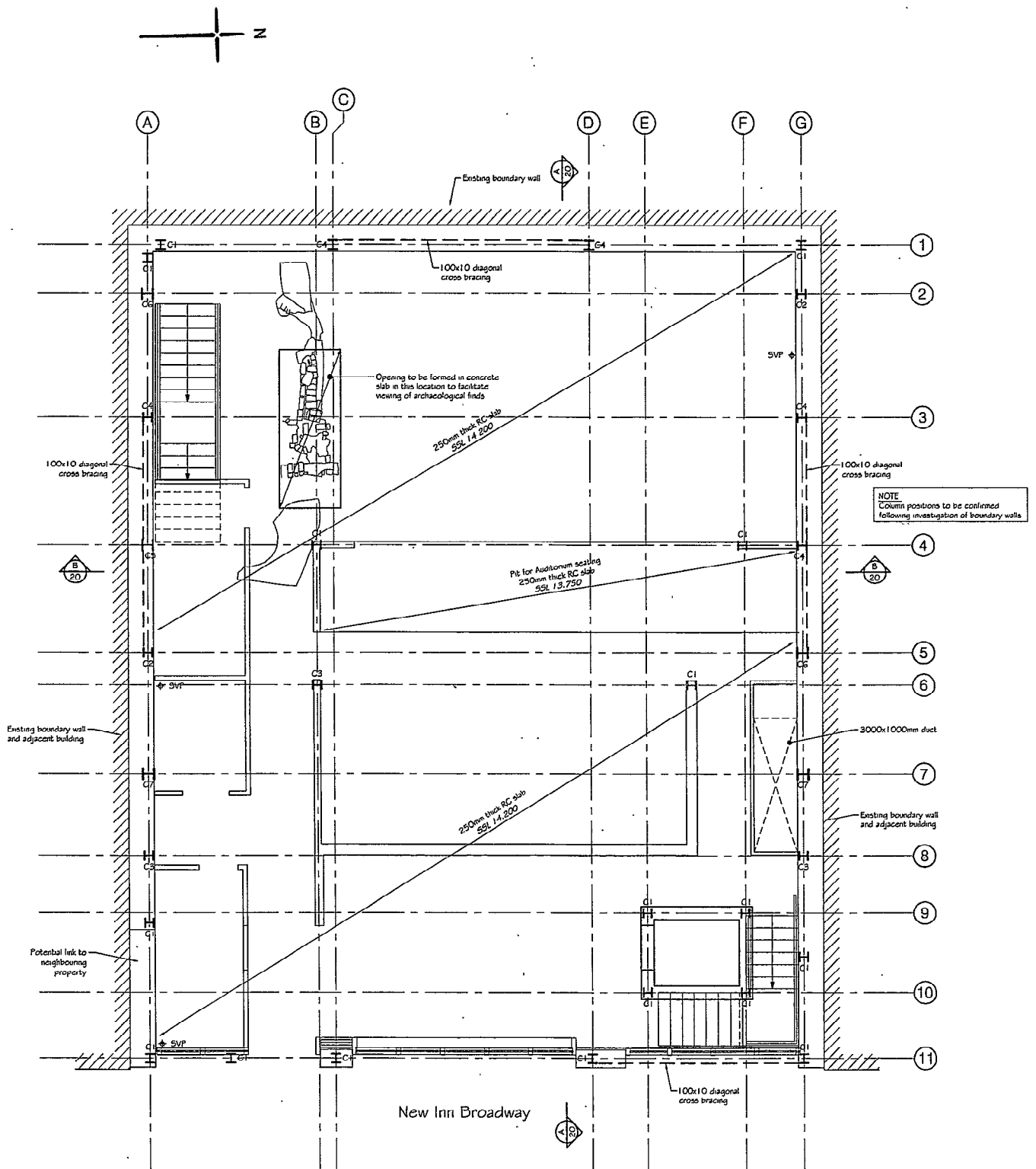


Fig 7 Preliminary ground floor layout (showing viewing chamber) (Hannah Reed drawing no. C-208223/02 Rev P5, 19/05/09)

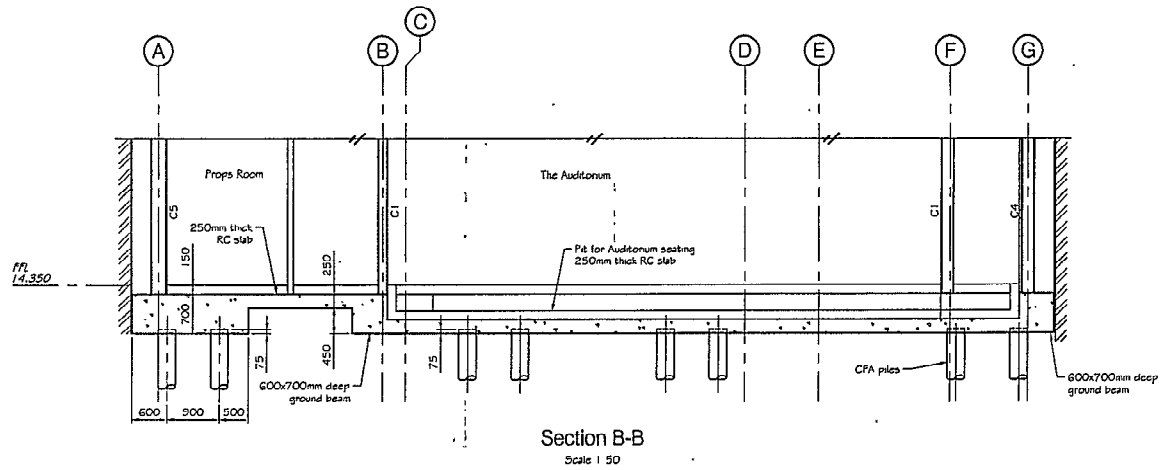
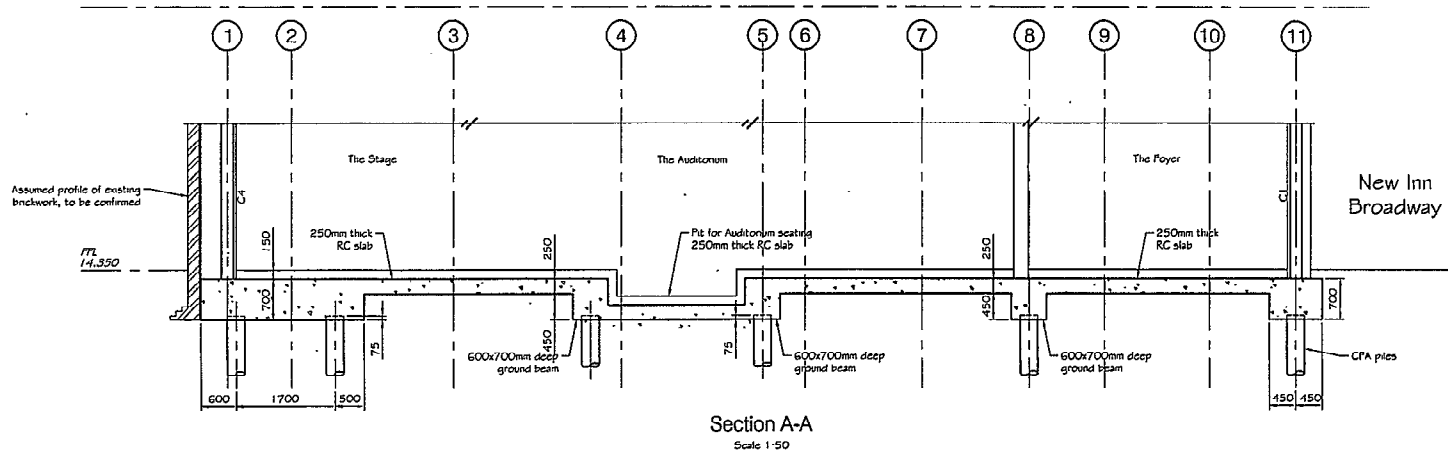
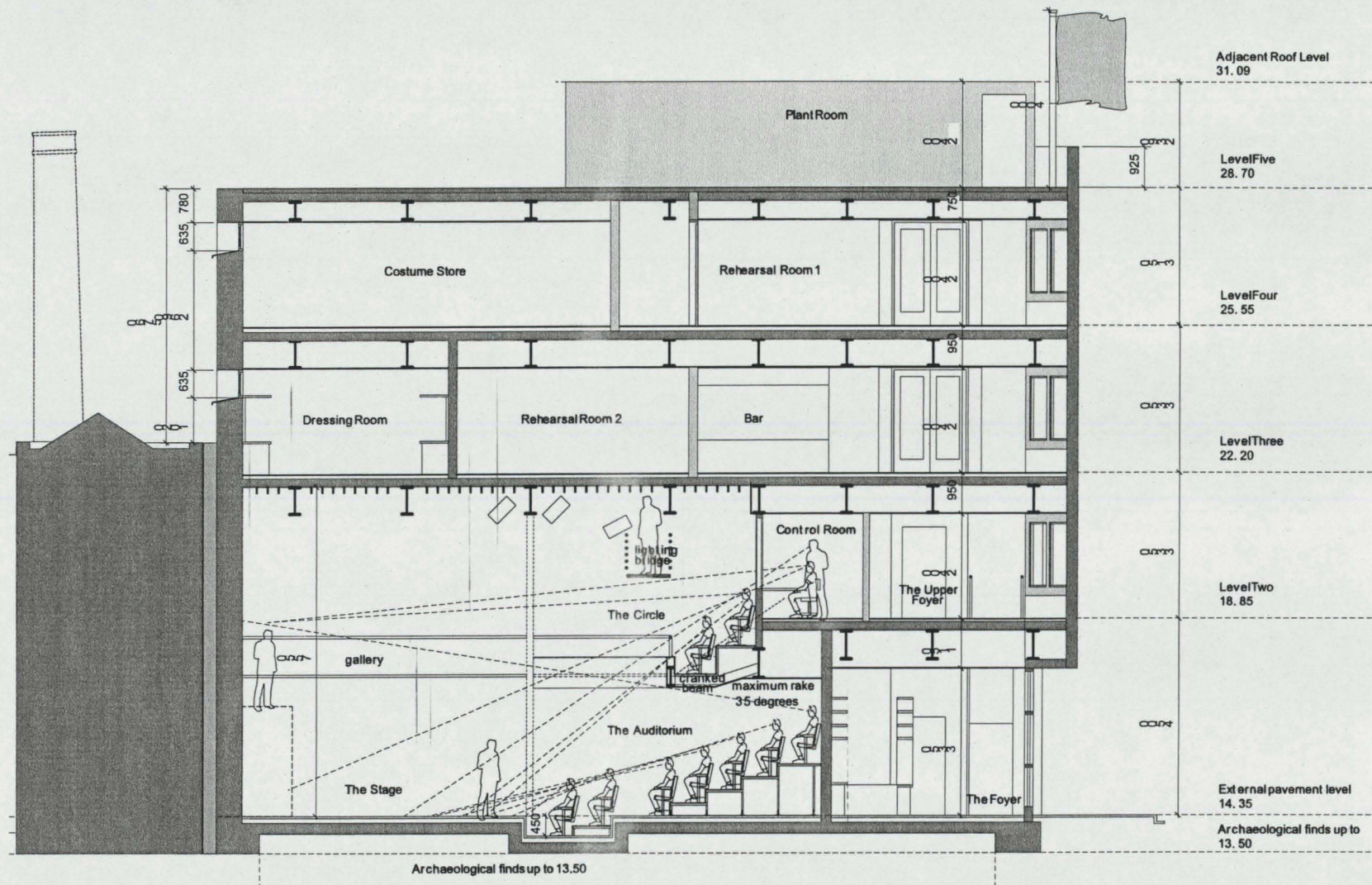


Fig 8 Foundation and ground floor sections (Hannah Reed drawing no. C-208223/20 Rev P2, 19/05/09)

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Fig 9 Section through proposed development (Bland, Brown & Cole Architects, drawing no. 594/10/008)

7 Acknowledgements

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8 Bibliography

- Ainsworth, A, 2002 *86 – 90 Curtain Road, 3 – 15 New Inn Yard and 3 – 3A New Inn Broadway, London EC2: An Archaeological Impact Assessment*, MoLAS unpublished document.
- Besant, W, 1906 *The Survey of London*. [By Sir Walter Besant and others. With plates and maps, and with a portrait.]
- Betts, I, 2008 *4-6 New Inn Broadway, Hackney, EC2 - Summary of brick structures seen on 16th June 2008* MoLAS unpublished document.
- Betts, I, 2009 *4-6 New Inn Broadway, Hackney, EC2 - Report on brick and roof tile examined in situ on 27th February 2009* MoLAS unpublished document.
- Bowsher, J, M, C, 1998 *The Rose Theatre: an archaeological discovery*. Museum of London, London.
- Bowsher, J, M, C, 2002 *92–96 Curtain Road, An archaeological impact assessment*, MoLAS unpublished document.
- Bowsher, J, M, C, 2003 *86 – 90 Curtain Road, 3 – 15 New Inn Yard and 3 – 3A New Inn Broadway, London EC2: An Archaeological Watching Brief Report*, MoLAS unpublished document.
- Bowsher, J, M, C, 2007 'Excavations at 86 – 90 Curtain Road, 3 – 15 New Inn Yard, London EC2: An insight into Holywell Priory and The Theatre'. *London Archaeologists* 11.9
- Bowsher, J, M, C, and Miller, P, in prep, *The Rose and the Globe – playhouses of Tudor Bankside, Southwark: excavations 1988–1991* MoLAS Monograph Series. Museum of London, London.
- Braines, W, W, 1917 *The Site of the Theatre, Shoreditch*. Records of the London Topographical Society, vol. XI, pp.1 – 27.
- Cultural Heritage Committee of the Council of Europe, 2000 *Code of Good Practice On Archaeological Heritage in Urban Development Policies; adopted at the*

15th plenary session in Strasbourg on 8-10 March 2000 (CC-PAT [99] 18 rev 3)

- Dawson, H, 2007 4–6 *New Inn Broadway Hackney London EC2 - Archaeological desk-based assessment*, MoLAS unpublished document
- Department of the Environment, 1990 *Planning Policy Guidance 16, Archaeology and Planning*
- English Heritage, 1991 *Exploring Our Past, Strategies for the Archaeology of England*
- English Heritage, May 1998 *Capital Archaeology. Strategies for sustaining the historic legacy of a world city*
- English Heritage, 1991 *Management of Archaeological Projects (MAP2)*
- English Heritage Greater London Archaeology Advisory Service, June 1998 *Archaeological Guidance Papers 1-5*
- English Heritage Greater London Archaeology Advisory Service, May 1999 *Archaeological Guidance Papers 6*
- Harwood, C, 2001 152–154 *Curtain Road, EC2: A Report on the Evaluation*, MoLAS unpublished document.
- Institute of Field Archaeologists, (IFA), 2001 *By-Laws, Standards and Policy Statements of the Institute of Field Archaeologists*, (rev. 2001), *Standard and guidance: field evaluation*
- Institute of Field Archaeologists (IFA), supplement 2001, *By-Laws, Standards and Policy Statements of the Institute of Field Archaeologists: Standards and guidance – the collection, documentation conservation and research of archaeological materials*
- Knight, H, 2008 4–6 *New Inn Broadway – a report on the evaluation*, unpublished MoLAS
- Lakin, D, 2003 86 – 90 *Curtain Road*, 3 – 15 *New Inn Yard* and 3 – 3A *New Inn Broadway, London EC2: Method statement for an archaeological field evaluation*, MoLAS, unpublished document
- McCann, W, A, 1999 *Site of the Theatre; Geophysical Survey*. unpublished MoLAS (Clark Laboratory), report, no.700299.
- Museum of London, 1994 *Archaeological Site Manual 3rd edition*
- Museum of London, 2002 *A research framework for London archaeology 2002*
- Museum of London Archaeology, 2009 4–6 *New Inn Broadway Method Statement for Phase 2 archaeological evaluation*, unpublished MoLA
- Pitt, K, 1998 97–113 *Curtain Road, London EC2, An Archaeological Evaluation*, MoLAS unpublished document.

- Thompson, A, Westman A, and Dyson, T (eds), 1998 *Archaeology in Greater London 1965-90: a guide to records of excavations by the Museum of London*, Archaeol Gazetteer Ser Vol 2, London
- Schofield, J, with Maloney, C, (eds), 1998 *Archaeology in the City of London 1907-1991: a guide to records of excavations by the Museum of London and its predecessors*, Archaeol Gazetteer Ser Vol 1, London
- Schofield, J, 2001 The view of the City of London from the north. In A, Saunders, A, and J, Schofield (eds), *Tudor London: A Map and a View*. London Topographical Society Pub. No. 159 in association with the Museum of London. 33-57.
- Schofield, J, with Maloney, C (eds), 1998 *Archaeology in the City of London, 1907-91: a guide to records of excavations by the Museum of London and its predecessors*, MoL Archaeol Gazetteer Ser 1, London
- Sloane, B, 1989 *Excavations at 183-185 Shoreditch High Street, HLP89*, unpublished Museum of London report
- Wallace, CW, 1913, *The First London Theatre, Materials for a History*. University [of Nebraska] Studies, Vol. XIII, nos 1,2,3.
- Wickham G, Berry H, and Ingram W (eds), 2000 *English Professional Theatre, 1530-1660*. Cambridge University Press.

9 NMR OASIS archaeological report form

OASIS ID: molas1-58495

Project details

Project name 4-6 New Inn Broadway

Short description of the project In June 2008 the Museum of London carried out the first phase of an archaeological evaluation on the site of 4-6 New Inn Broadway, EC2. A second phase of an archaeological evaluation was carried out by the Museum of London Archaeology Service on the site in February 2009. Although the remains can not be confirmed as those of the 16th century playhouse known as The Theatre, the presence of curving masonry structures, an internal sloping gravel yard surface and brick threshold would indicate that the remains are very likely to be those of The Theatre. The sloping internal yard surface and brick threshold are both features which have close parallels with structural elements of The Rose theatre. After the playhouse was demolished at the end of the 16th century the site was occupied by a series of ephemeral structures which appear to have been constructed from reused building material, possibly taken from the remains of the playhouse. Evidence for 18th century domestic occupation was found in the form of drains and soakaways which relate to a previously record house. The garden soils to the rear of the house were found to have been truncated by a series of pits and postholes. Archaeological evidence shows that by the 19th century the site was for used as occupied by commercial premises. The cobbled yard surface of which is 0.35m below the modern slab level.

Project dates Start: 09-02-2009 End: 02-03-2009

Previous/future work Yes / Yes

Any associated project reference codes NIN08 - Sitecode

Type of project Field evaluation

Site status Area of Archaeological Importance (AAI)

Current Land use Industry and Commerce 4 - Storage and warehousing

Monument type MONASTIC PRECINT Medieval

Monument type THEATRE Post Medieval

Monument type DWELLING Post Medieval

Monument type GARDEN Post Medieval

Significant Finds NONE None

Methods & techniques 'Targeted Trenches'

Development type Not recorded

Prompt Direction from Local Planning Authority - PPG16

Position in the planning process Pre-application

Project location

Country England

Site location GREATER LONDON HACKNEY HACKNEY 4-6 New Inn Broadway

Postcode EC2

Study area 300.00 Square metres

Site coordinates TQ 33320 82397 51.5242330731 -0.07802898722940 51 31 27 N
000 04 40 W Point

Project creators

Name of Organisation MoL Archaeology

Project brief originator MoLAS project manager

Project design originator MOL Archaeology

Project director/manager Jo Lyon

Project supervisor Heather Knight

Name of sponsor/funding body The Tower Theatre Company

Project archives

Physical Archive recipient LAARC

Physical Contents 'Animal Bones','Ceramics','Environmental','Glass','Metal'

Digital Archive recipient Kent County Council

Digital Contents 'Animal Bones','Ceramics','Environmental','Stratigraphic','Survey'

Digital Media available 'Database','GIS','Images raster / digital photography','Survey','Text'

Paper Archive recipient LAARC

Paper Contents 'Stratigraphic'

Paper Media available 'Context sheet','Correspondence','Diary','Drawing','Matrices','Notebook - Excavation',' Research',' General Notes','Plan','Report','Section','Unpublished Text'

Project bibliography 1

Publication type Grey literature (unpublished document/manuscript)

Title A report on the Phase 2 Evaluation

Author(s)/Editor(s) Knight, H.

Date 2009

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Entered by Heather Knight (hknight@museumoflondon.org.uk)

Entered on 22 April 2009

10 Appendix 1: Pottery assessment (Jacqui Pearce)

10.1 Introduction

A total of 89 sherds from a minimum of 55 vessels (weight 1824 g) were recorded from three priority contexts. Apart from a single small sherd of medieval pottery dating to the 12th century in context [104], all material examined is post-medieval in date. Two of the contexts ([104] and [142]) are of medium size (30–100 sherds), while the third ([149]) is small, with only four sherds. The finds were spot-dated in accordance with current Museum of London Archaeology practice and the data entered onto the Oracle database, using standard codes for fabric, form and decoration. Quantification was carried out by sherd count, estimated number of vessels and weight in grams.

10.2 The pottery

The two larger contexts can each be closely dated. The earlier one ([142]) was most likely deposited c 1580–1600 on the basis of fabrics and forms present, as well as on the absence of delftware, which was becoming increasingly common over the course of the 17th century. The main fabrics present are Surrey-Hampshire border wares, both whitewares and redwares, which formed an important part of London's ceramic market between c 1550 and 1700. The whitewares mostly have clear (yellow) or green glaze and include sherds from flanged dishes or platters, bowls, tripod pipkins, porringers and a possible costrel. The same range of forms is found in the redware fabric. There is, however, part of an extremely unusual vessel in border whiteware, with brown, manganese-stained glaze outside and green glaze inside. Four joining sherds come from what was most likely the lower part of a jug, possibly of Rhenish *Bartmann* form. The sherds display what was originally a most elaborate scheme of decoration, including vertical combed grooves, segmented circular stamps and applied moulded human faces (one has survived intact, with the remains of a second identifiable). The male face has a pointed chin and beard, with the nose, mouth and eyes indicated by simple raised lines. A possible ruff or collar is indicated below. Vessels such as this are not common in Surrey-Hampshire border ware, although similar decorative techniques were applied to a range of mugs and occasionally *Bartmann*-type jugs, especially during the middle years of the 17th century. However, recent work on the excavated production waste from the kiln site at Farnborough Hill Convent, in Hampshire, has shown that bichrome glazing, incised and stamped decoration were first employed during the late 16th century (Pearce 2007, 122, fig 72, no 530).

The other pottery from context [142] consists mainly of London-area post-medieval redware, including cauldrons or pipkins, a storage jar, bowls and dishes, some with a covering of white slip. There are also sherds of Essex-type fine redwares (post-medieval fine redware and black-glazed wares). These include bowls and porringers in the former and mugs and jugs in the latter. Four sherds of Midlands purple ware come from a butterpot, a tall, cylindrical vessel used to transport and store dairy produce. Imports consist of a single sherd of Frechen stoneware, probably from a *Bartmann* jug, and sherds from two porringers, one in north Holland slipware and one in Dutch slip-decorated ware, both of which were first used in London during the last quarter of the 16th century. The pottery from context [142] would have been used principally for cooking, storing and serving food and drink and is typical of fabrics and forms found across London at this date, with the notable exception of the jug with applied face in border ware, which is an extremely unusual find.

Context [104] is dated later, to c 1650–80 by the presence of sherds from a chamber pot of Pearce type 2 (Pearce 1992, fig 41, nos 332–6), and part of a dish in tin-glazed ware with blue-painted decoration typical of the mid 17th century. Apart from this single decorated vessel, all the other pottery recorded consists of domestic vessels in a range of fabrics and forms to those found in context [142]. These include a porringer, bowls and dishes in Surrey-Hampshire border whiteware, London-area redware cauldrons or pipkins, and bowls or dishes, and part of a mug and jug in Essex-type fine redware. The only import is the complete rim and part of the neck of a Frechen stoneware Bartmann jug with applied bearded face. Context [149] could be only broadly dated to c 1550–1700 by the presence of four sherds of Surrey-Hampshire border whiteware, part of a carinated bowl and a tripod pipkin.

10.3 Potential and significance

The pottery assessed here provides important dating evidence. It was used chiefly for preparing and serving food and drink, but is unusual in including part of a probable jug bearing highly individual decoration that would have been very striking when new, in its original context. Whether or not the applied face masks had any significance beyond mere decoration is uncertain. It is possible that Rhenish stoneware Bartmänner provided some inspiration, and it is known that potters from the Rhineland settled in Farnborough in the mid 16th century, reviving and energising the border ware industry (Pearce 2007). Whatever the meaning to its original owners, the vessel would certainly have been regarded as 'special'. This find in itself is worth further research, but especially in relation to the context in which it was found on the site of the theatre. The importance of the site lends extra significance to the finds recovered, which goes beyond the local or regional context.

10.4 Recommendations

Aspects of the pottery from NIN08 require further research, notably, the Surrey-Hampshire border ware jug with applied faces decoration. Full assessment of the finds has yet to be carried out, and data from the three contexts recorded here integrated with other evidence from the site. It is recommended that a note on the face jug should be published in a journal such as *Medieval Ceramics* or *Post-Medieval Archaeology*.

10.5 Bibliography

Pearce, J 1992, *Post-medieval Pottery in London, 1500-1700 Volume 1: Border Wares*, (London, HMSO).

Pearce, J 2007, *Pots and potters in Tudor Hampshire: excavations at Farnborough Hill Convent 1968–72*, Guildford Borough Council

11 Appendix 2: The building material (Ian M. Betts)

11.1 Description

A total of 32 fragments of building material were recovered from NIN08, all but one coming from context [142]. This context contained peg roofing tile, brick and one small fragment of fairly hard white mortar. The other building material, a solitary tin-glazed wall tile was found in context [104].

The building material from NIN08 has been fully recorded and the information added to the Oracle database.

Listed below is a summary of the building material in each context:

Context	Fabric	Type	Context Date
[104]	3067	Tin-glazed wall tile	1740–1760
[142]	2271, 2276, 2816	Peg roof tile	c 1480–1666
[142]	3033	Brick	-
[142]	3101	Mortar	-

11.2 Discussion

Context [104] <5>

The tin-glazed wall tile shows a figure in a landscape painted in blue on white set in an octagonal powdered purple border. The tile is almost certainly English, as very similar tiles were made in London in 1740–60 (Horne 1989, 22–23, nos 33–51). The tile would probably have been used as decoration in a fireplace surround, or possibly a kitchen area.

Context [142]

The peg tiles are mainly of typical post-medieval London type with twin round and diamond shaped nail holes. A couple of unusually thick (16–17mm) tiles are also present along with three with a light grey core which could be medieval.

The associated brick is very small and abraded, but there does not seem to be any post-Great Fire of 1666 examples present. One brick has a sunken margin, a feature more commonly seen on pre-1666 London bricks.

Both the peg roofing tile and bricks probably originate from production sources close to London.

Reference

Horne, J, 1989 *English tin-glazed tiles*, London

11.3 Report on brick and roof tile examined *in situ* on 27th February 2009

The bricks are light red unless stated otherwise. They were probably all made at brickyards located somewhere in the London area, as were the roofing tiles.

Context [150]: Small brick structure under internal gravel surface of theatre

Only two bricks could be measured. These are:

Length = 247mm
Breadth = 119–121mm
Thickness = 61mm

These match the size of the large number of medieval bricks found associated with the nearby Holywell Priory site. It is possible that they could belong a priory building that extended onto the New Inn Broadway site.

The priory bricks have been recorded as measuring 238–247mm in length, 113–122 mm in breadth by 54–65mm in thickness. Similar bricks were found in the walls of a proto-undercroft at Billingsgate, Lower Thames Street which is believed to have been constructed around the turn of the 15th century. These measure around 248–252 x 120–121 x 57–58mm (Betts 2005). They are also similar in size to bricks in Lincoln's Inn Old Hall built in 1489–90 (D Sankey, pers comm), which measure around 230–240 x 111–120 x 55–60mm, although it is possible these may have been reused.

If the bricks from the nearby Holywell Priory, and those found at New Inn Broadway, are of early 15th century date, then they may have come from the brick and tile works at Deptford which was supplying bricks to the city by the first quarter of the 15th century (Schofield 1984 126).

Context [24]: Curving theatre Wall

A number of complete bricks could be measured:

Length = 236–245mm
Breadth = 116–125mm
Thickness = 57–66mm

These bricks are again very similar to the examples found associated with the priory. There seems little doubt that they represent priory bricks which have been reused in the curving wall of the theatre. This is not too surprising, there was widespread reused of bricks in the mid 16th–17th centuries, particularly in less important brick structures such as well lining, cesspit lining and in brick lined drains.

Context [24]: Stack of peg tiles

These are all of standard London type which were made in vast number during the period c 1480–1800. The NIN08 examples measure 150–159mm in breadth by 11–13mm in thickness. They are of two round and two triangular nail hole type. Triangular nail holes (along with those of square and hexagonal type) are not normally found in London-made roofing tiles before c 1480.

Context [24]: Line of bricks next to peg tile stack

Six bricks were measured:

Length = 220–223mm
Breadth = 102–103mm
Thickness = 54–62mm

These are significantly smaller in size than the bricks used in the curved theatre wall. They are difficult to date precisely, but their size (particularly their thickness) would suggest a mid 16th–early 17th century date. These bricks may therefore represent new bricks brought in to construct the theatre in c 1576.

Context [166]: Brick walled structure 'The shed!'

Only a few bricks could be measured, but it is clear they are a mixture of the larger medieval type – used in the curved theatre wall and in brick structure [150], and the smaller type found next to the peg tile stack.

They measure:

Length = 220–c 225

Breadth = medieval (118–121mm), post-medieval (98–109mm)

Thickness = 57– c 64mm

Structure [166] could therefore be contemporary with the theatre, or a later structure reusing both brick types found in the theatre walls.

A reused broken decorated cut brick was found in wall [166]. This may originally have formed a decorative string course in the wall of one of the priory buildings. It has a thickness of 66mm. [*this should be kept*].

Context [117]: Circular brick-line soakaway

The walls of the probable soakaway are made from broken dark red bricks measuring 91–101mm in breadth by 58–64mm in thickness. They are in London brick fabric 3032 which first appeared shortly after the Great Fire of 1666 and continued in use into the 19th century. The NIN08 examples are not easy to date, but one example has sharp edges suggesting a possible 18th century, or later date.

12 Appendix 3: Assessment of the clay tobacco pipes (Tony Grey)

Table 1 Finds and environmental archive general summary

Clay pipe	18 quarter standard box
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12.1 The clay pipes

12.1.1 Introduction/methodology

The clay tobacco pipe assemblage from NIN08 was recorded in accordance with current MOL Archaeology practice and entered onto the Oracle database. The English pipe bowls have been classified and dated according to the Chronology of London Bowl Types (Atkinson and Oswald 1969), with the dating of some of the 18th-century pipes refined where appropriate by reference to the Simplified General Typology (Oswald 1975, 37–41). The prefixes AO and OS are used to indicate which typology has been applied. Quantification and recording follow guidelines set out by Higgins and Davey (1994; Davey 1997).

12.1.2 Quantification

There are eighteen clay pipe fragments comprising thirteen bowls and five stems. They were recovered from two contexts: a breakdown of the assemblage is given in Table 2. Thirteen pipe bowls were recorded with all of them datable according to current typologies. There are five stems that are undiagnostic and so not closely datable and no mouthpieces. There are no decorated pipes or items bearing makers' marks and no mouthpieces. Two stems from context [142] were recovered via wet sieving.

Table 2 Clay tobacco pipe quantification

Total no. of fragments	18
No. of bowl fragments	13
No. of stem fragments	5
No. of mouthpieces	0
Accessioned pipes	0
Marked pipes	0
Decorated pipes	1
Imported pipes	0
Complete pipes	0
Wasters	0
Kiln material fragments	0
Boxes (bulk)	1/4 box bulk

12.1.3 Condition

Ten of the thirteen pipe bowls are complete. There are no complete pipes. All the pipe bowls show clear evidence of having been smoked. The assemblage is small and fragmented with three incomplete bowls, two unidentifiable heels and three stem fragments.

12.1.4 Provenance and dating of the clay pipes

Only one context yielded datable pipe bowls. Context [104], a layer of garden soil immediately above brick wall [21] on a gravel surface to the rear of an 18th-century house and sealing pit fill or dump layer [111], yielded six AO20, one AO21 and five AO22 pipe bowls all dated c 1680-1710 along with one residual AO15 dated c 1660-80. Context [142] yielded two stems from wet-sieving only broadly datable c 1580-1910.

Table 3 Clay tobacco pipe dates, by context (B – bowl; M – mouthpiece; S – stem)

Ctxt	TPQ	TAQ	B	S	M	Comments	Total
104	1680	1710	13	3			16
142	1580	1910		2		WS	2
Total			13	5	0		18

Table 4 Chronological distribution of datable clay pipe bowls (ED – earliest date; LD – latest date)

	1680	1710	Total
ED			
1660	1		1
1680		12	12
Total	1	12	13

12.1.5 Character of the pipe assemblage

The pipes from context [104] date to a fairly narrow range of c 1660-1710 with four different pipe forms present. Twelve of the thirteen pipes provide a date range of c 1680-1710. The clay pipes are probably of local London manufacture and not of a particularly high quality with only one burnished example. There are no marked or decorated examples present.

12.2 Analysis of potential

There is little potential for further analysis of this very small clay pipe assemblage.

12.3 Significance of the data

The evidence of the clay pipe assemblage from is significant only in the local context NIN08 and in relation to the site.

12.4 Bibliography

Atkinson, D R and Oswald, A, 1969 London clay tobacco pipes, *J British Archaeol Assoc* 32, 171–227

Davey, P 1997 *Clay pipes from Bolsover church*, unpub archive rep

Higgins, D A and Davey, P, 1994 *Draft guidelines for using the clay tobacco pipe record sheets*, unpub rep

Oswald, A, 1975 *Clay pipes for the archaeologist*, BAR 14, Oxford

13 Appendix 4: the post-medieval glass (Jacqui Pearce)

Four items of post-medieval glass have been individually registered, all from context [104]. These include one fragment of vessel glass, from a squat beaker with optic-blown bosses (<1>). Made in colourless, mixed-alkali metal, beakers of this kind date to the 17th century and are relatively uncommon on English sites, produced in the Low Countries and Venice. They may have been used for wine or spirits, their popularity in the Low Countries possibly a result of the Dutch taste for spirits, especially *jenever*, during the 17th century (Willmott 2002, 43).

The other fragments from context [104] consist of glass-working waste, including a lump of crucible bottom (<2>) and an unidentifiable lump (<4>). A rod in colourless metal could have been used for making trails (<3>).

Further work is required to clarify the nature of the glass-working processes that these fragments represent. They come from a context dated by pottery to c 1650–80 and by clay pipes to c 1680–1710. The overall quantity of glass-working waste examined from the contexts sampled for this note is too small to allow any firm conclusions to be drawn concerning the nature and extent of that activity on the site.

One fragment of window glass in natural green metal was found in context [142], which is dated by pottery to c 1580–1600. One edge is grozed and retains the marks of the original frame.

13.1 Bibliography

Willmott, H 2002 *Early post-medieval vessel glass in England c 1500–1670*, CBA Res Rep 132

14 Appendix 5: Hand-collected and wet-sieved animal bone (Alan Pipe)

NB. This report is based on preliminary recording and analysis. Any conclusions may be modified in the light of further study. It should not be quoted without permission of the author.

Table 1 Contents of animal bone archive

	Weight (g)	No. fragments	No. boxes
Animal bone (hand-collected)	790	105	1 standard archive box
Animal bone (wet-sieved)	750	343	1 standard archive box
TOTAL	1540	448	2 standard archive boxes

Table 2: Hand-collected and wet-sieved animal bone from NIN08/summary (see end of appendix)

Table 3: Hand-collected and wet-sieved animal bone from NIN08/detailed summary (see end of appendix)

14.1 Introduction/methodology

This report identifies, quantifies and interprets the hand-collected animal bone from external cultivation [104] and external surface [142]; and the wet-sieved animal bone from external cultivation [7] {1}, [49] {4}; pit fills [129] {6} and [147] {8}; and external surfaces [142] {9}. Each context and sample group was recorded directly onto Excel spreadsheets and described in terms of weight (kg), estimated fragment count, species, carcass-part, fragmentation, preservation, modification, and the recovery of epiphyses, mandibular tooth rows, measurable bones, complete long bones, and sub-adult age groups. The assemblage was not recorded as individual fragments or identified to skeletal element. All identifications referred to the Osteology Section reference collection; and Schmid 1972. Fragments not identifiable to at least family level were assigned to the approximate categories 'fish, unidentified', 'ox-sized' or 'sheep-sized' as appropriate.

Table 2 (*p:\hack\1123\valenv\zoology\bontab01.xls*) gives a summary of the hand-collected context groups and wet-sieved sample groups in terms of weight (kg), estimated fragment count, fragmentation, preservation, faunal composition, and the recovery of evidence for ageing and stature.

Table 3 (*p:\hack\1123\valenv\zoology\bontab02.xls*) gives a detailed summary of the hand-collected context groups and wet-sieved sample groups in terms of taxon, carcass-part, modification and the recovery of sub-adults.

14.2 Summary

This assemblage provided 1.540 kg, estimated 448 fragments, of well-preserved hand-collected and wet-sieved animal bone with a minimum fragment size generally in the 25->75 mm range.

The bulk of the bone derived from the major domesticates, particularly sheep/goat *Ovis aries/Capra hircus*, with smaller numbers of cattle *Bos taurus* and pig *Sus scrofa*. Lamb was identified from juvenile sheep mandibles (lower jaw) in [49] {4} and

[142], but there was no definite identification of goat *Capra hircus* from any context or sample group. Recovery of poultry was limited to single fragments of chicken *Gallus gallus* upper and lower limb from [142]. Fill [129] of pit [130] contained a virtually complete skeleton of adult dog *Canis familiaris* in addition to cattle, 'ox-sized', sheep/goat and 'sheep-sized' fragments. External surface [142] produced an upper limb fragment from a very young kitten *Felis catus*.

Wild 'game' species were represented only by adult and juvenile rabbit *Oryctolagus cuniculus* lower limb and foot from [104]; and lower limb from [142]. There was no recovery of wild birds or human bone.

Fill [147] {8} of pit [148] produced a single adult frog or toad upper limb, probably common frog *Rana temporaria* or common toad *Bufo bufo*, perhaps indicating a chance casualty where this cut feature acted as a 'pitfall trap'. This fill also produced a small assemblage of marine/estuarine fish including herring family Clupeidae, cod family Gadidae and plaice/flounder Pleuronectidae, the only recovery of fish from the assemblage as a whole apart from two unidentifiable fragments from [142].

The major domesticates, ox, sheep/goat and pig, were represented by bones from all major skeletal areas with a bias towards head, vertebra, rib, upper and lower limb; areas of moderate and prime meat-bearing value, indicating consumption of good quality beef, mutton and pork. Representation of the poorer quality carcass areas, foot and toe, was much sparser and there was no recovery of ox or sheep/goat horncores.

Although the bulk of the assemblage derived from juveniles and adults, there were occasional finds of very young animals; infant calf maxilla (upper jaw), infant piglet lower limb and infant kitten upper limb, all from external surface [142]. There were no fragments of foetal, neonate or old animals.

Clear evidence of butchery was seen throughout the assemblage on ox, sheep/goat and pig. A pig lower forelimb from external surface [142] showed definite evidence of extra bony growth (exostosis) and deformity associated with the 'elbow' joint. There was no evidence for bone- or horn-working, gnawing, burning or any other modification.

The group produced some evidence for age at death of the major domesticates with six mandibular tooth rows and 72 epiphyses; metrical evidence comprised 29 measurable bones including 20 complete longbones.

14.3 Interpretation and potential

In general, this small but well-preserved assemblage appears to suggest waste deposited largely as a resultant by-product of butchery and consumption of moderate- and good-quality beef, mutton, lamb and pork, with smaller contributions of chicken, rabbit and marine/estuarine fish. There is a least one burial of adult dog and a single find of juvenile kitten indicating disposal of non-consumed domestic animals into features and onto surfaces also used to dispose of food waste.

The assemblage has some definite but limited potential for further study of local patterns of activity and waste disposal associated with fish and meat preparation and waste disposal associated with it, particularly with reference to carcass-part representation, age at death and butchery techniques. Further study of the dog skeleton from pit [130] will allow detailed interpretation of the age, stature and build of the animal.

In view of the absence of invertebrates and negligible recovery of small vertebrates, there is no potential for interpretation of local habitats or conditions.

14.4 Bibliography

Schmid, E, 1972 *Atlas of animal bones for prehistorians, archaeologists and Quaternary geologists*
London. Elsevier.

Table 2: Hand-collected and wet-sieved animal bone from NIN08/summary

INTERP	PARENT	CONTEXT	SAMPLE	WT (kg)	FRAG (mm)	PRES	NOS	LMAM	SMAM	FISH	BIRD	AMPH	MAND	MEAS	EPI	COMPLETE
external cultivation		7	1	0.02	25-75	good	3	3	0	0	0	0	0	0	0	0
external cultivation		49	4	0.03	25-75	good	20	20	0	0	0	0	1	0	0	0
external cultivation		104	0	0.215	>75	good	15	15	0	0	0	0	0	3	3	0
pit fill	130	129	6	0.525	>75	good	210	210	0	0	0	0	3	20	56	20
external surface		142	0	0.575	>75	good	90	85	0	5	0	0	1	5	10	0
external surface		142	9	0.05	>75	good	10	10	0	0	0	0	0	0	0	0
pit fill	148	147	8	0.125	>75	good	100	49	0	50	0	1	1	1	3	0
TOTAL				1.54			448	392	0	55	0	1	6	29	72	20

Table 3: Hand-collected and wet-sieved animal bone from NIN08/detailed summary

INTERP	PARENT	CONTEXT	SAMPLE	TAXON	PART	AGE	MODIFICATION
external cultivation		7	1	sheep/goat	upper limb		
external cultivation		49	4	sheep	head	juvenile	
external cultivation		49	4	sheep-sized	rib		
external cultivation		104	0	ox	upper limb		butchered
external cultivation		104	0	ox	toe	adult	
external cultivation		104	0	ox	head	adult	
external cultivation		104	0	ox-sized	vertebra	adult	
external cultivation		104	0	rabbit	lower limb		
external cultivation		104	0	rabbit	foot	juvenile	
external cultivation		104	0	sheep/goat	lower limb		
external cultivation		104	0	sheep-sized	rib		butchered
pit fill	130	129	6	dog	head	adult	
pit fill	130	129	6	dog	vertebra	adult	
pit fill	130	129	6	dog	rib	adult	
pit fill	130	129	6	dog	upper limb	adult	
pit fill	130	129	6	dog	lower limb	adult	
pit fill	130	129	6	dog	foot	adult	
pit fill	130	129	6	dog	toe	adult	

pit fill	130	129	6	ox	head	adult	
pit fill	130	129	6	ox-sized	rib		
pit fill	130	129	6	ox-sized	vertebra		butchered
pit fill	130	129	6	sheep/goat	upper limb	adult	butchered
pit fill	130	129	6	sheep/goat	lower limb		butchered
pit fill	130	129	6	sheep/goat	toe	adult	
pit fill	130	129	6	sheep-sized	rib		
external surface		142	0	cat	upper limb	infant	
external surface		142	0	chicken	upper limb		
external surface		142	0	chicken	lower limb		
external surface		142	0	fish, unidentified	rib		
external surface		142	0	fish, unidentified	head		
external surface		142	0	ox	upper limb		
external surface		142	0	ox	lower limb		butchered
external surface		142	0	ox	head	infant	
external surface		142	0	ox-sized	vertebra		
external surface		142	0	ox-sized	rib		
external surface		142	0	pig	lower limb		pathology
external surface		142	0	pig	lower limb	infant	
external surface		142	0	pig	lower limb		butchered
external surface		142	0	rabbit	lower limb		

external surface		142	0	sheep	mandible	juvenile	
external surface		142	0	sheep/goat	lower limb	juvenile	
external surface		142	0	sheep/goat	lower limb	adult	butchered
external surface		142	0	sheep/goat	upper limb	adult	butchered
external surface		142	0	sheep/goat	foot	adult	
external surface		142	0	sheep/goat	toe	adult	
external surface		142	0	sheep/goat	vertebra	adult	
external surface		142	0	sheep/goat	head	adult	
external surface		142	9	ox-sized	rib		
external surface		142	9	ox-sized	lower limb	adult	
external surface		142	9	sheep/goat	head	adult	
external surface		142	9	sheep-sized	rib		
pit fill	148	147	8	cod family	vertebra		
pit fill	148	147	8	frog/toad	upper limb	adult	
pit fill	148	147	8	herring family	vertebra		
pit fill	148	147	8	plaice/flounder	vertebra		
pit fill	148	147	8	sheep/goat	head	adult	butchered
pit fill	148	147	8	sheep/goat	upper limb	juvenile	
pit fill	148	147	8	sheep/goat	upper limb	adult	
pit fill	148	147	8	sheep-sized	rib		

15 Appendix 6: the plant remains (Anne Davis)

Nine samples, ranging from ten to 40 litres in volume, were taken from the first and second evaluation phases. A variety of features were sampled, including external surfaces, pitfills [147] and [129] and a drain fill [107]. All are thought to date from the sixteenth to nineteenth centuries.

The samples were processed by flotation, using a modified Siraf flotation tank with meshes of 0.25mm and 1.00mm to catch the flot and residue respectively. The residues were dried, and sorted by eye for artefacts and environmental material. Three of the flots, which appeared to contain organic material, were stored wet and the remainder were dried. All were scanned briefly, using a low-powered binocular microscope, and the abundance, diversity and nature of plant macrofossils and any faunal or artefactual remains were recorded on the MoLA Oracle database. Table 1 summarises the botanical data from the samples.

The majority of the samples produced quite large flots, consisting mostly of clinker, coal and charcoal. Some uncharred ('waterlogged') seeds were seen in all samples, and in samples from drain fill [107]{5} and pitfill [129]{6} they were reasonably abundant. Each of the latter contained a number of food remains, including seeds of grape (*Vitis vinifera*), fig (*Ficus carica*) and mulberry (*Morus nigra*) as well as fragments of hazelnut (*Corylus avellana*) shell. A variety of wild plants, both in these and in the less rich samples, came from plants of waste land and other disturbed habitats, including cultivated ground.

Charred plant remains, other than charcoal, were very rare and consisted only of very occasional (fewer than five) cereal grains in samples [129]{6} and [142]{9}.

While many of the samples contained few plant remains some organic plant macrofossils survived in all, and moderately large assemblages, with the potential to provide information on diet and the local environment, were seen in two. It is therefore recommended that further sampling should take place during the forthcoming excavations, with particular attention paid to any deep cut or waterlogged features where organic survival would be at an optimum, but also occupation/trample layers where charred plant remains may have been preserved.

Excavations at the Rose Theatre produced large and interesting plant assemblages from features associated with the theatre, including flooring materials as well as remains of foods consumed by spectators, and this site should be similarly well sampled. Earlier, pre-theatre deposits are likely to contain better preserved organic material and would provide valuable information, particularly any associated with Holywell Priory. These should therefore be comprehensively sampled if the opportunity arises.

Table 1: Summary of botanical assessment data

A: abundance, D: diversity (1 = occasional, 2 = moderate, 3 = abundant)

sgp	context	sample	BI	dating	proc vol(l)	flot vol(ml)	proc	chd grain	chd seeds	chd woo d	wlg seeds	wlg misc	comments
								A D	A D	A D	A D	A D	
6	7	1	EC		10	200	F			2 1	1 1	1 1	DRY. CLINKER. LITTLE ELSE
7	20	2	WA		10	30	F		1 1	1 1	2 1	1 1	DRY. CLINKER. WASTE/SCRUB SEEDS
8	66	3	EU		10	2	F			1 1	2 2		DRY. WASTE GROUND SEEDS
20	147	8	P	17th century	40	200	F			2 1	1 1	1 1	DRY.CLINKER.V. FEW SEEDS
40	49	4	EC		10	30	F				2 1		DRY.CLINKER, FEW SEEDS
61	107	5	D	18th century	10	100	F			1 1	3 3	1 1	DRY.CLINKER.FOODS & DISTBD GRND SEEDS
73	129	6	P	18th century	30	400	F	1 1		2 1	3 2	1 1	DRY. CLINKER. MOD FOOD & DISTBS GRND SEEDS
79	140	7	ES	17th century	10	300	F			2 1	1 1		DRY.CLINKER. FEW SEEDS
81	142	9	ES	1580-1600	20	100	F	1 1		1 1	3 1	1 1	DRY.CLINKER.MANY ELDER SEEDS