**ARCHAEOLOGICAL EVALUATION REPORT:**

# TRIAL TRENCHING AND AUGER SURVEY ON LAND AT MILL HOUSE, BRAYFORD WHARF NORTH, LINCOLN, LINCOLNSHIRE

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*Cover image: Excavation of evaluation trench, looking west*

## Executive Summary


- Allen Archaeology Limited was commissioned by Stem Architects Limited to undertake an archaeological evaluation by trial trenching and auger survey on land at Mill House, Brayford Wharf North, Lincoln, Lincolnshire, to support a planning application for extensions to the existing building.

- The site is located in an area of significant archaeological potential, just beyond the defended area of the Roman and medieval city, on the margin of the Brayford Pool, which was a focus of settlement activity from as early as the Mesolithic period.

- A 10m long evaluation trench and a 2m x 2m test pit were investigated in the eastern part of the site, and five boreholes were investigated across the eastern and western parts of the development area.

- The evidence from the boreholes and trenches indicated that the edge of the Brayford extended some distance into the site, with the natural glacial sands being overlain by waterlain silts in the southern half of the investigated area, with gravel terraces and slopewash deposits further to the north. Roman pottery recovered from the lower soil layers indicates reclamation of the edge of the pool from as early as the Roman period within the proposed development area, and continuing into the Saxon and medieval periods, paralleling other sites investigated along the north side of the Brayford.

- Possible medieval structural evidence was suggested towards the western part of the site, with a substantial 0.5m thick dump of medieval tile recorded in BH5. Most of the site however appears to have been open ground allowing the dumping of rubbish and the formation of deep soil layers over an extended period of time.

- Throughout the site, the upper c.1m of deposits was characterised by modern dumping, demolition layers and substantial concrete foundations, although possible lime ash floors indicative of possible post-medieval structures were identified in BH2 and BH4 within this 1m horizon.

## 1.0 Introduction

1.1 Allen Archaeology Limited was commissioned by Stem Architects Limited to undertake an archaeological evaluation by trial trenching on land at Mill House, Brayford Wharf North, Lincolnshire, in order to assess the impact of any future planning applications upon the archaeological resource.

1.2 The excavation, recording and reporting conformed to current national guidelines, as set out in the Chartered Institute for Archaeologists '*Standard and guidance for archaeological field evaluations*' (CIfA 2014), and the English Heritage documents '*Management of Research Projects in the Historic Environment*' (English Heritage 2006), '*Geoarchaeology. Using earth sciences to understand the archaeological record*' (English Heritage 2007) and '*Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation*' (English Heritage 2011), and the local guidelines in the 'Lincolnshire Archaeological Handbook' (LCC 2012). All relevant English Heritage guidelines on archaeological best practice were also followed (www.helm.org/server/show/nav.7740), as well as a specification for the works prepared by this company (AAL 2015).

## 2.0 Site Location and Description

2.1 The proposed development area is located to the southwest of the historic core of the city of Lincoln, immediately to the north of the Brayford Pool and Brayford Wharf North. The site is currently occupied by Mill House, a multi-storey office block with associated car parking. There are small areas of open space to the north and south of the existing building, and an area of waste ground at the southeast corner of the site. The site is centred on NGR SK 9707 7134.

2.2 The bedrock geology comprises Scunthorpe Mudstone Formation and Charmouth Mudstone Formation (undifferentiated) (http://mapapps2.bgs.ac.uk/geoindex/ home.html); however this is likely to be at some considerable depth. The superficial geology has been recorded as alluvial clay, silt, sand and gravel although a detailed palaeotopographic study of the nearby University of Lincoln grounds shows that these deposits comprise a sequence of glacial sands overlain by marsh deposits and peats, with deep deposits of modern overburden on top (Rackham 2011).

## 3.0 Planning Background

3.1 The proposed development entails extensions to the existing office block, occupying the open space at the north and south ends of the existing site. A planning application is due to be submitted imminently for this scheme.

3.2 In line with the current planning guidance set out in NPPF (Department for Communities and Local Government 2012), and discussions with the City of Lincoln Archaeologist, the client had commissioned a programme of archaeological investigations to be undertaken prior to determination of the planning application, to provide further information upon the nature and extent of the archaeological resource that may be affected by the proposed development. This investigation comprised the excavation and recording of a series of palaeoenvironmental boreholes and excavation and recording of this evaluation trench and geotechnical pit.

## 4.0 Archaeological and Historical Background

4.1 A masterplan has been prepared for the Brayford Campus of the University of Lincoln (CgMs 2011). Although this is specifically focussed on the south side of the Brayford, it provides a useful palaeotopographical background for the development area and this is summarised below. The archaeological setting of the site is also discussed with reference to the Research Agenda Zones (RAZ) as set out in the publication, 'The City by the Pool' (Stocker, ed. 2003).

4.2 The on-site sequence is likely to comprise glacial sand sealed by marsh silts of Mesolithic and Neolithic date, and by the middle Bronze Age peat began to form across the lower parts of the development area near to the Brayford Pool. This peat formation is likely to have continued throughout the Bronze Age before changing to organic sediments as water levels rose. The presence of wharfs and jetties of Roman to medieval date formerly fronting onto the Brayford may also be expected (J. Rackham, pers. comm.). For the prehistoric era in the immediate vicinity of Lincoln the proposed development site falls within RAZ 5.8 'Valley floor deposits', where the importance of undertaking palaeoenvironmental studies has been emphasised.

4.3 A number of interventions have been undertaken on the University's Brayford Campus, generally serving to fine tune to the palaeotopographic information for the area. A more substantial programme of works were undertaken c.250m to the south-southwest in advance of creation of the University Pond. A series of test pits were hand excavated at depth immediately to the west of the site, prior to the creation of the existing pond (Field and Rylatt 2008). These recovered 785 pieces of struck or modified flint of almost exclusively later Mesolithic date, including 154 pieces of burnt flint and chert.

4.4 The proposed development site continues to fall within the RAZ 6.7 'Valley floor deposits' into the Roman Military era between *c.*60-90 AD, although from the time of the Roman Colonia era between *c.*90-410 AD the development is classified within RAZ 7.9 'Riparian deposits', although the topography of the area as a low-lying marshy area on the margins of the Brayford Pool is likely to have remained the same. The focus of Roman settlement activity at this time was located on the higher ground to the northeast, firstly as a legionary fortress, replaced by the civilian *colonia* during the late 1st century AD. The city rapidly expanded beyond the area of the legionary fortress, the Upper City, extending downhill towards the river. This extension, the Lower City, received defences in the later 2nd or early 3rd century AD, and the current site is located c.300m west of the southwest corner of the defended area.

4.5 An extensive commercial and residential suburb ran along the line of modern High Street, to the south of the lower city, and evidence from this area of the river and to the east, indicates concerted efforts to stabilise and reclaim this land throughout the Roman period, with some tentative evidence for slipways and jetties along the rivers edge (Jones 2003). It is unclear however, if this activity extended west as far as the current site. The northern area of the proposed development occupies slightly higher land, and this may have been a an area west of the city suitable for suburban settlement activity, and associated burial areas (RAZ 7.11.2 'Suburban Development north and west of the Upper City, RAZ 7.24 'Cemeteries').

4.6 In the post-Roman period, the site area is still characterised as RAZ 8.5 'Riparian Deposits'. The period witnesses a major decline in settlement evidence, suggesting a decay and abandonment of much of the former Roman city, until revival during the 9th and 10th centuries.

4.7 In the medieval period, the Roman defences of the Lower City were largely maintained, although the line was extended southwards as far as the Brayford. The western side of the defences

comprised a ditch cut through dumped deposits and natural peats containing 11th – 12th century pottery, with a 13th century stone wall built into the silted up ditch, with a tower, Lucy Tower, built at the southwest corner of the defences (Vince 2003). Land reclamation along the watersides continued during this period, and the site falls within the area of the suburb of Newland. Newland is documented by at least the 12th century, in the Pipe Rolls of 1181, and its name is thought to refer to the reclamation of land in the southern part of the area (Vince 2003). The presence of this western suburb again highlights the potential for associated riverside structures fronting onto the Brayford Pool. The RAZs for this period that are relevant to the site are RAZ 9.7 'Wetlands', and RAZ 9.31 'Housing in Newland Suburb' for both the High Medieval period (900 – 1350) and the Early Modern period (1350 – 1750) (RAZs 10.7 and 10.31 respectively).

4.8 Extensive industrial activity developed in Lincoln during the 18th and 19th centuries, and for this industrial era the site falls within RAZ 11.2.2 'Brayford's Northern Waterside'. Historic mapping indicates that the site was largely undeveloped until the second half of the 19th century, with the construction of the Albion Mill on the site, later known as the Hovis Mill.

4.9 A small archaeological investigation has previously been undertaken on the site. An evaluation trench was excavated in the waste ground at the southeast corner of the site (WA 2003). The trench measured 5m x 4m and was excavated to a c.1.4m depth. The trench exposed approximately 1.3m of mixed modern overburden over a brick drain or culvert. A single residual sherd of Late Saxon to early medieval date was recovered from the site.

## 5.0 Methodology

### *Trial Trenching*

5.1 The proposed evaluation trenching methodology entailed the excavation of one test pit measuring approximately 2m x 2m and one trench measuring 10m x 1.6m. Each trench was accurately plotted using a Leica GS08 RTK NetRover GPS.

5.2 Prior to excavation the test pit and evaluation trench was scanned for services using a CAT scanner. Service plans were provided by client and the test pit and evaluation trench were positioned so as not to impact upon any known services indicated by the client.

5.3 In the 2m x 2m test pit, all deposits down to the glacial sand were removed by mechanical excavator with a toothless ditching bucket in spits no greater than 100mm in thickness. At the base of the sequence, approximately 90 litres of sand were sieved on site using 500 micron sieves, to allow for the recovery of small artefacts such as worked flint microliths.

5.4 The evaluation trench was excavated using a JCB 3CX wheeled excavator, removing topsoil, subsoil and underlying non-archaeological deposits in spits no greater than 100mm in thickness. The process was repeated until the first archaeologically significant or natural horizon was exposed. All excavations were monitored at all times by an experienced field archaeologist.

### *Auger Survey (James Rackham)*

5.5 A series of five locations were laid out in those areas with access where potentially deep archaeological and post-glacial deposits might be present (Figure 2). A small Dando Terrier rig (Plate 1) was used to take the cores, using 96mm diameter plastic sleeved cores one metre in length (Appendix 2). The underlying fluvio-glacial sands were shallower than might have been expected and none of the cores were taken below 3m depth.

5.6 The cores were opened, cleaned, logged and photographed (Appendices 2 and 3). Selected 10cm units from the basal archaeological deposits of each core were cut out and processed for dateable finds and other archaeological debris in an effort to establish the date of the deposits. The 'drain fill' deposits in BH1 were washed, the 'soil?' layers in BH2, the lower 'soil' layer in BH3, the lower 'soil' deposits in BH4 and 'dump' deposits and underlying 'slopewash' in BH5. A total of 19 samples were processed. Each processed sample unit of the cores was washed over a 1mm sieve, dried and sieved through a 2mm sieve. Finds were sorted from the >2mm residue and a brief description of the major components of the residues made. Finds were preliminarily identified and quantified by weight (Appendix 1).

*Plate 1: Dando Terrier rig set up over BH2 at Mill House, Lincoln*

## 6.0 Results

### *Evaluation Trench (Figure 3)*

6.1 The excavation of the evaluation trench was hampered by the presence of two large blocks of concrete with metal reinforcement bars, one to the north of the trench, recorded as 119 and 103 and a second to the south, 112, neither of which could not be removed by machine.

6.2 The earliest deposit identified was the natural geology, a soft, light yellowish brown silty sand, 118, recorded between the two concrete blocks.

6.3 Cut into this layer were two undated linear features, [117] oriented west-northwest to east-southeast and [123] running broadly north to south.

*Plate 2: General shot of evaluation trench, looking south-southwest. Scales are 2m and 1m*

*Plate 3: Southeast facing section of [117]. Scales are 2m and 1m*

*Plate 4: Southwest facing section of [123]. Scales are 1m and 0.5m*

6.4 Linear [117] was 1.74m wide and 0.35m deep, and contained two deposits, an upper deposit of mid brown silty clay, 0.25m thick, sealing a friable, dark grey silty clay basal fill, 0.12m thick, which contained two pieces of animal bone (Plate 3).

6.5 Linear feature [123] was heavily truncated by concrete footings. It contained a single deposit of friable, dark grey silty clay. The relationship between the two ditches was unclear due to the truncation by later activity.

*Plate 5: Culvert and water pipe at northern end of trench, looking west-northwest. Scales are 2m and 1m*

6.6 To the south of the concrete block 112, was a brick culvert and metal water pipe, both aligned broadly west-northwest to east-southeast. These were sealed by a layer, 114, of compact, mid grey silty coarse sand containing gravel and brick fragments, 0.38m thick, which also sealed linears [117] and [123], but was cut by construction cut [113] for the concrete block 112.

6.7 Layer 114 was sealed by a layer of made ground comprising compact, light brownish yellow coarse sandy silt with frequent stone, 111. This in turn was sealed by a dark grey clayey silt, 102, only 0.05m thick, possibly indicating buried topsoil. The construction cut, [120], for the northern slab of concrete, 119/103, truncates both deposits.

6.8 Sealing concrete structure, 103/119, were a number of layers containing frequent modern debris; a compact, light greyish brown coarse sandy 0.10m thick, 107/108 and dark greyish brown coarse sandy silt with gravel and brick fragments, 109/110.

6.9 Cut into these layers was a sub circular pit, [106], measuring 1.77m wide, and 0.63m deep, with a mid brownish yellow coarse sandy silt basal deposit, 105, and a mid greyish brown coarse sandy silt upper fill, 104. Both deposits had inclusions of gravel and modern brick fragments.

***Test Pit (Figure 4)***

6.10 The earliest deposit revealed was a soft, light yellow glacial sand, 208, at a depth of 2.08m below the existing ground surface. This was sealed by a soft light yellowish brown alluvial silty sand 207 approximately 1m thick. Sieving of a sample of this material on site did not produce any finds.

6.11 A dark brownish grey clayey silt with common charcoal flecks and occasional small rounded stones, 206, 0.50m thick, sealed the alluvial deposit. This in turn was sealed by a compact brownish red demolition layer, 205, 0.16m thick, and a second demolition layer, 204, only 0.15m thick. Overlying this was a sequence of made ground layers and modern topsoil, 203, 202, 201 and 200 respectively (Plate 6).

*Plate 6: Northeast facing section of test pit. Scale is 2m*

***Auger Survey (James Rackham)***

6.12 The whole of the investigated area lies over fluvio-glacial sands of probable late glacial date. The maximum depth to the underlying fluvio-glacial sands was 2.53 metres in BH4 and it is evident that the edge of the Brayford Pool has been recorded in boreholes BH4 and BH2, and possibly BH1 although the water lain sediments in this borehole may be the fills of a possible stone lined drain (Figure 5). The sediments infilling the putative drain in BH1 were full of freshwater molluscs (gastropods and bivalves) clearly indicating that if this was a drain it was directly connected to the Brayford Pool and water filled. It has been interpreted as a drain because after knocking through limestone the corer fell through a void, hit silts over a sandy horizon with brick or tile fragments and limestone before hitting a degraded limestone layer. This could be a stone lined and capped drain. Unfortunately BH1 produced no dating evidence other than brick and concrete debris in the top metre which suggests a post-medieval date. The edge of the Brayford Pool might have extended up to BH3 where banded sands, silty sands and silts at the base of the archaeological sequence suggest a possible mix of slopewash and pool edge deposits. An absence of silts in the banded sands recorded above the fluvio-glacial sands in BH5 suggests that these are slopewash deposits rather than pool edge sediments. These data would suggest that the northern bank of the Brayford once ran between BH5 and BH4, and possibly just north of BH3. The banded sands in BH3 and BH5 have been interpreted as slopewash deposits created by upslope erosion. They lack any visible finds but only deposits from the upper part in BH5 were washed (Appendix 1) and these clearly contain similar debris to the overlying dumps.

6.13 The deposits above these comprise a series of probable dumps, soil layers, possibly floors, rubble, limestone, concrete, hardcore and topsoil. The 'soil' layers comprise silty sands and sandy silts with a variety of archaeological debris. These deposits appear to represent a buildup in open conditions resulting in the formation of a soil, and suggest periods during which the site has no structures/buildings or dumping. There are possible floor layers above the 'soil?' in BH2 and BH4 where fragments of lime-ash occur perhaps suggesting early post-medieval building.

6.14 In BH5 a dump of building debris overlies the banded sands, this comprises limestone and tile, with tile particularly abundant in the upper part. The tile is predominantly medieval roofing tile of 12-15$^{th}$ century date, with a little slightly thicker tile that could possibly be of Roman date. Some of the tile is overfired, although whether as a result of re-use in a kiln or furnace or because originally overfired during the manufacture is not known. This dump is fairly substantial (over 0.5m thick) and may represent a collapsed or demolished medieval building or a levelling deposit. It is overlain by approximately 0.2m of soil development, which in turn is overlain by limestone and concrete deposits of probable 20$^{th}$ century date.

6.15 In BH4 the waterlain silts are overlain by soil development of 0.6m depth, with a 0.12m band of coarse sand and brick within it suggesting a dumping event. Late Saxon/early medieval pottery was recovered from the lowest sample washed from this soil deposit, with medieval roof tile (12-15$^{th}$ C) occurring in the soil deposits above. The 'soil' is capped by what may be a lime-ash floor, overlain by a deposit of limestone, mortar and brick/tile suggesting debris from a possible post 15$^{th}$ century structure. This is overlain by a stone and rubble layer, with limestone, flint, slate and coal present. The remainder of the deposits above reflect the development of a soil with a variety of debris indicating the area was open.

6.16 In BH1 the possible stone lined drain was overlain by a deposit rich in brick/tile and stone debris with some concrete suggesting that the whole of the top 1m of deposits may date to the 19-20$^{th}$ century. This layer is overlain by a thin pebble layer with a developed soil above. The upper part of the sequence comprises brick, stone and brick, short periods of soil build-up and concrete layers, probably all of relatively recent date.

6.17 In BH2 the waterlain sediments are overlain by approximately 0.5m of 'soil' with a range of inclusions. The washed samples from the lower part of this sequence have produced 2-3rd and 3-4th century Nene Valley colour coat, with possible Saxon-Norman pot from the same sample as the 3-4th century Roman material (Appendix 1). The top sample of the 'soil' produced late Saxon/early medieval pottery. This suggests an extended period when the site was open and a soil deposit built up. This soil is capped by a gritty sandy layer with pebbles, stone, mortar and brick fragments which may be a lime-ash type floor. This is overlain by a silty fine sand with debris including a glazed ceramic drain indicating a 19 or 20th century date. This deposit is overlain by concrete, a brick and stone layer and capped by limestone hardcore.

6.18 In BH3 the fluvio-glacial sands are overlain by sandy gravels suggesting river terrace or re-worked terrace deposits which are capped by the banded sands and silty sands that suggest a combination of waterlain and slopewash deposits. These sediments are overlain by a soil build up, and the middle of three samples washed from this deposit produced pottery of late Saxon date, although all three samples produced a little ceramic building material (Appendix 1). The soil was directly sealed by concrete, overlain by a 19/20th century glazed ceramic drain. A thin soil layer developed above and was sealed by limestone hardcore and brick debris.

## 7.0 Discussion *(James Rackham and Chris Clay)*

7.1 There is evidence for Roman activity on the site. Ceramics recovered from the boreholes include fragments of 2-3rd and 3-4th century Nene Valley Colour coat, and pieces of 2-3rd and 3-4th century greyware. A few possible fragments of Roman tile may also be present. This Roman debris occurs at the base of the archaeological deposits in BH5 and BH2 and suggests some *in situ* Roman activity on the site, although it occurs below a medieval 'dump' in BH5 and in the lower part of a soil build-up in BH2. A late Saxon and early medieval phase of activity is also suggested by ceramics in BH4, BH2 and BH3. Considering the quantity of soil processed to find these sherds (no more than 12 litres of soil in total – a bucket!) this is fairly good evidence for Roman and late Saxon/early medieval activity on the site. The 'dump' of medieval roofing tile in BH5 and a lesser concentration in BH4 suggests that the south-western part of the site may have contained a medieval building, although none of the material from BH1-3 would suggest that buildings of this date occur below this part of the site. Possible post-medieval buildings are suggested by the possible lime-ash floor in BH4 and the substantial limestone above it, and the limestone above the tile 'dump' and soil in BH5. Recent activity on the investigated parts of the site suggest open areas of hardcore or soil and possible concrete yard surfaces.

7.2 The possible drain in BH1 is undated, but the deposits infilling it would indicate a direct connection to the Brayford Pool and access for the freshwater molluscan assemblage. Pairs of bivalve shells still attached suggest an *in situ* assemblage. With Roman deposits in BH2 at a similar level to the limestone presumed to be above the void in BH1 there is a possibility that this drain, if such it be, could be as early as the Roman period, but with concrete debris in the deposits immediately overlying this limestone it is possible that the drain could be as late as the post-medieval period.

7.3 The test pit excavated close to the location of Borehole 1 broadly confirmed the sequence of deposits exposed during the augering, but sieving of the basal deposits failed to recover any artefactual evidence to date these deposits.

7.4 The evaluation trench also broadly confirmed the results of the boreholes, exposing a similar stratigraphic sequence in the test pit as in the nearby BH1, comprising the glacial sands, overlain by waterlain silts, followed by soil layers and dumps of modern material. Likewise, the evaluation trench indicated significant disturbance in this part of the site, with large concrete foundations and

modern dumps occupying the upper c.1m of the stratigraphic sequence and directly overlying the natural sands. Two features were identified but were undated and as such offer little interpretive potential. The evaluation trench also exposed a brick drain or culvert of a probable 19th or 20th century date, one of a number of such feature thus far exposed on the site, with another similar feature recorded in the previous trench excavated by Wessex Archaeology, and another drain of a probable post-medieval date recorded in Borehole 1.

## 8.0 Conclusions *(James Rackham and Chris Clay)*

8.1 The data recovered from the boreholes and cores suggest that the northern edge to the Brayford Pool probably crossed the site somewhere near BH5 and BH3, but the floor of the pool must have sloped gradually to the south because even in BH4 the waterlain sediments appear no thicker than 0.9m. It is likely that the levels in the pool fluctuated seasonally. With Roman pottery recovered from BH2 and BH5 the implication is that there was Roman activity on this north bank of the Brayford Pool. The sequence in BH4 would suggest that this northern edge of the pool had already been reclaimed by the late Saxon to early medieval period, which is broadly consistent with the results from the Odeon site where 11th and 12th century reclamation of the north side of the pool has been suggested (Carlyle and Atkins 2009). It would also imply that the upper waterlain silts in BH4 probably include Roman and Saxon period sediments. The presence of waterlain silts beneath deposits with Roman ceramics in BH2 might indicate that slopewash and Roman activity were already infilling the northern edge of the Pool in the Roman period.

8.2 With the possible drain undated the earliest evidence for structures is suggested by the dump of medieval roofing tiles in BH5 and some in BH4 possibly indicating medieval buildings on this western part of the site. There is also a suggestion of post-medieval buildings in the possible lime-ash floor and limestone in BH4, and a possible floor deposit in BH2. The upper parts of all five sequences seem to be post-medieval in date, and although the concrete floors could be associated with buildings, some of the deposits indicate the sites were open, perhaps yard or garden areas.

8.3 A proviso must be placed on the interpretations above. With only a 100mm diameter core to work with from five locations it would be rash to be categorical about the sequences on the site, Nevertheless the character of the recorded deposits and the limited dating evidence recovered from the washed samples give a useful preliminary guide to the potential of the site and its archaeological deposits. Furthermore, the results of the boreholes concurred with the trial trenching undertaken in the eastern part of the site. In this area, modern truncation extends to in excess of 1m below the existing ground surface, although potential features of interest may be encountered in this zone, as suggested by the possible lime ash floor in BH 2 at c.0.7m depth.

8.4 The evaluation excavation undertaken by Wessex Archaeology in 2003 lay between boreholes BH2 and BH3 and immediately to the east of the south end of Trench 1. All the deposits identified were assigned to the 19th and 20th centuries, but excavation went no deeper than 1.4m, although a single sherd of 9-13th century pottery from layer 103 is consistent with the finds from BH2 and BH3. Layer 102 in this report, described as a 'mixed layer containing modern brick rubble and sand, all within a dark black brown silty clay matrix' is reminiscent of the 'soils' recorded in the cores and with 0.8m of deposit it is possible that this represents a long period of soil build-up and that the lower parts of this layer are not technically 'modern'. Although the Wessex excavation did not reach the underlying fluvio-glacial sands, and they did not auger the base of the trench to prove the sequence below the trench floor the lower part of layer 102 is at a similar level to the deposits in BH2 and BH3 that produced Roman and late Saxon-early medieval ceramics, and 103 which appears to underlie 102 produced the single sherd of late Saxon/early medieval pot. Layer 104 in these excavations may be similar to the slopewash deposits described in BH3.

8.5 The sequence of waterlain sediments in BH4 and BH2 have some potential for palaeoenvironmental analysis. These deposits may include sediments of Late Iron Age, Roman and Saxon date, and radiocarbon dating material from the base of BH4 and the organic silty peat from BH2 would define the period represented by these sediments and establish approximately when the 'reclamation' of this area began. The latter date would also help to establish whether the Roman ceramics in BH2 may be *in situ* or washed down slope.

## 9.0 Effectiveness of Methodology

9.1 The methodology employed was appropriate to the nature and extent of the proposed development. It has identified a significant archaeological potential in some areas of the site, but also substantial evidence for recent truncation.

## 10.0 Acknowledgements

10.1 Allen Archaeology Limited would like to thank Stem Architects Limited for this commission.

## 11.0 References


AAL, 2015, *Specification for an archaeological evaluation by auger survey and trial trenching: Mill House, Lincoln, Lincolnshire*, Allen Archaeology Limited

CIfA, 2014, *Standard and guidance for archaeological field evaluations*, Chartered Institute for Archaeologists, Reading

CgMs, 2011, *Archaeological Input into Masterplan: Brayford Campus, University of Lincoln*. CgMs consulting, unpublished project document

Department for Communities and Local Government, 2012*, National Planning Policy Framework. London*, Department for Communities and Local Government

English Heritage, 2006, *Management of Research Projects in the Historic Environment*. Historic Buildings and Monuments Commission for England. London

English Heritage, 2007, *Geoarchaeology. Using earth sciences to understand the archaeological record*. Historic Buildings and Monuments Commission for England. London

English Heritage, 2011, *Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation (second edition),* English Heritage

Field N. and Rylatt J., 2008, *The Pond, Brayford Campus, University of Lincoln: Archaeological Excavation*, LAS Report 1084

Jones, M.J., 2003, *'The Colonia Era. The archaeological account'*, in The City by the Pool, pp. 56 – 138, Oxbow Books, Oxford

LCC, 2012*, Lincolnshire Archaeological Handbook*, Lincoln, Lincolnshire County Council, Built Environment Dept

Rackham, J., 2011, Appendix 1: Palaeoenvironmental Proposals, in CgMs, *Archaeological Input into Masterplan: Brayford Campus, University of Lincoln*. CgMs consulting, unpublished project document

Stocker, D. (ed), 2003, *The City by the Pool*, Oxbow, Oxford

Vince, A., 2003, 'The New Town: Lincoln in the High Medieval Era (c.900 to c.1350). The archaeological account', in *The City by the Pool*, pp. 159 - 296, Oxbow Books, Oxford

WA, 2013, *Land to the south and east of Mill House, Brayford Wharf North, Lincoln. Archaeological Evaluation*, Wessex Archaeology report number 54468

## Appendix 1: Finds from Boreholes

| BH | depth cm | weight >2mm g. | weight <2mm g. | pot g. | CBM g. | fire-cracked stone g. | mortar g. | coal g. | magnetic v | slag/ cinder g. | leather g | charcoal g | egg-shell | Marine shell g. | snail | bone g. | Brief description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BH1 | 160-170 | 152 | 16 | | 2.8 | | | 1.6 | <0.1 | 13.2/ | | | | 0.2 | 0.6 | 0.8 | Concrete, occ stones, sandstone, limestone, coal, CBM; indet mammal, bird, mussel, cockle; freshwater gastropods- *Pisidium, Bithynia, Segmentina, Valvata piscinalis, Planorbis* |
| BH1 | 170-180 | 30 | 9 | | + | | | | - | 1/ | | | | | | <0.1 | Limestone, coal, CBM, occ pebbles, charcoal, quartz, cinder; indet bone, fish; freshwater gastropods - *Pisidium, Bithynia tentaculata, Segmentina, Valvata piscinalis* |
| BH1 | 180-190 | 740 | 20 | | <0.1 | | | | - | | | | | | + | | Limestone, charcoal, cinder, tile, occ organics, charcoal, bone frags; freshwater bivalves - *Pisidium* |
| BH1 | 190-200 | 47 | 6 | | | | | | 0.2 | | | | | + | | 1.4 | Limestone, organics, charcoal, marine shell, CBM, occ quartz, sandstone, silt crumb, indet mammal bone, fish, mussel; freshwater gastropods - *Bithynia tentaculata* |
| BH2 | 80-90 | 208 | 31 | 1.8 | 14.4 | | 32.6 | + | 0.2 | -/2.2 | | 1.4 | + | 2.4 | | 4.8 | Limestone, pebbles, firecracked flint, mortar, tile; mussel, cockle, periwinkle; sheep/goat, herring, eel, rodent, bird eggshell; Late/Saxon or early medieval pot |
| BH2 | 90-100 | 231 | 24 | | 1 | | 11.8 | | | | + | 1.2 | | | | 22 | Pebbles, mortar, CBM, charcoal, mussel shell, cattle, small and large fish, bird eggshell |
| BH2 | 110-120 | 197 | 23 | 5.8 | | | | | 0.2 | | 0.2 | | | 13.2 | | 0.8 | Limestone, pebbles, sandstone, mussel shell, charcoal, indet mammal bone, indet fish bone, cf chicken and goose eggshell; Nene Valley colour coat (3-4$^{th}$ C), poss Saxo-Norman pot |
| BH2 | 120-130 | 215 | 21 | 0.6 | | | | | | | | 1.8 | | 2.4 | | 2.8 | Limestone, pebbles, cess?, mussel shell, hazel nut, cereal grain, charcoal, indet mammal bone, indet fish bone; Nene Valley colour coat (2-3$^{rd}$ C), Roman greyware and indet pot |
| BH3 | 70-80 | 129 | 38 | | 10 | | | + | 4.4 | + | | + | | 0.2 | | 2.4 | Limestone, cbm, coal, cinder, slag, occ flint & quartz, sandstone, charcoal, bone, ironstone, mussel shell, indet mammal bone, rat, |

| BH | depth cm | weight >2mm g. | weight <2mm g. | pot g. | CBM g. | fire-cracked stone g. | mortar g. | coal g. | magnetic v | slag/ cinder g. | leather g | charcoal g | egg-shell | Marine shell g. | snail | bone g. | Brief description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BH3 | 80-90 | 144 | 46 | | 1 | | | + | 1.4 | + | | + | | | | 5.8 | Limestone, cbm, marine shell, sandstone, slag, charcoal, indet mammal bone, rabbit/hare, flint, quartz, ironstone |
| BH3 | 90-100 | 313 | 38 | 5.8 | 35 | | | + | 1 | + | | | | | | 2.2 | Limestone, cbm, pebbles, marine shell, indet mammal bone, small fish, flint, charcoal, cinder; Late Saxon pot |
| BH4 | 105-118 | | | | 74gt | | | | | | | | | | | | Medieval roof tile (12-15th C) |
| BH4 | 118-130 | | | | 197t | | | | | | | | | | | | Medieval roof tile, possible Roman tile? |
| BH4 | 130-140 | 361 | 74 | | 47.2t 41rt | 21 | 9.6 | | 1 | | | 2.8 | | 18 | | 2 | Limestone, quartz, stone, oyster, cockle, mussel shell, charcoal, cbm, tile, limeash concrete, indet mammal bone, indet fish bone; poss. Medieval roof tile (12-15th C) |
| BH4 | 140-150 | 313 | 32 | 10.8 | | | | | 0.4 | /0.4 | | 0.6 | + | 6.8 | 0.6 | 2.6 | Limestone, pebbles, quartz, Cu alloy object, mussel, whelk, periwinkle and cockle shell, charcoal, charred oat and barley, cbm, cf chicken eggshell, indet mammal bone, eel, herring, small fish; freshwater shells – *Bithynia tentaculata, Planrobis* sp.; Late Saxon/early Medieval pot (9-11th C) |
| BH4 | 150-160 | 279 | 56 | | + | | | | 0.6 | | | | + | 23.4 | | 1 | Limestone, occ cbm, pebbles, mussel and cockle shell, charcoal, indet mammal and fish bone, cf chicken eggshell, |
| | | | | | | | | | | | | | | | | | |
| BH5 | 90-100 | 671 | 33 | | 269t | | | | + | + | | | | | | | Limestone, tile, charcoal, bone, spheroidal hammerscale; medieval roof tile (12-15th C) |
| BH5 | 120-130 | 890 | 50 | | 434t 58rt | | | | + | | | | | | | | Limestone, tile, charcoal, marine shell; medieval roof tile (12-15th C), poss. Roman tile? |
| BH5 | 130-142 | 1018 | 64 | | 432t 55rt | | | | 1 | | | | | | | 0.2 | Limestone, small pebbles, tile, cinder, mussel shell, indet mammal bone; medieval roof tile (12-15th C) |
| BH5 | 142-152 | 151 | 25 | 5.6 | 18.4t | | | | + | | | | | | | 2.2 | Limestone, pebbles, tile, mussel and oyster shell, charcoal; indet mammal bone; freshwater shells- *Pisidium* sp, *Valvata macrostoma*; Roman greyware (3-4th C) |
| BH5 | 152-162 | 345 | 29 | | 147t 26rt | | | | 0.6 | | | | | 1.6 | | 0.8 | Limestone, pebbles, ironstone, tile, mussel shell, charcoal, indet mammal bone; probable medieval roof tile (12-15th C) |

+ present but only in very small quantities; t – tile; rt- reduce fired tile

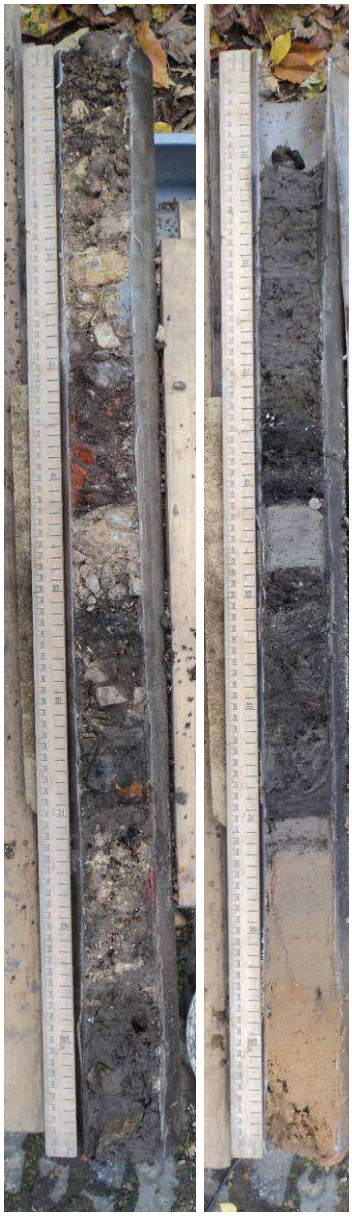
**Appendix 2: Borehole Photos**

**BH1**

0-100 100-200

**BH2**

0-100 100-200



**BH3**

0-100 100-200

**BH4**

0-100 100-200 200-300

**BH5**

0-100 100-200

**Appendix 3: Borehole Logs**

**BH1**

Core 1 0-100cm

| | |
|---|---|
| 0-9cm | turf |
| 9-16 | concrete |
| 16-22 | dark grey (10YR 4/2) sandy loam with small brick and stone fragments – soil |
| 22-26 | limestone |
| 26-33 | stone and brick in sandy loam (80% brick and stone) |
| 33-44 | brick |
| 44-52 | brown (10YR 4/3) sticky sandy loam with stone and small pebbles |
| 52-55 | stone |
| 55-81 | dark grey and very dark grey (10YR 4/1 and 3/1) slightly sticky sandy loam with charcoal, stone, concrete and brick fragments |
| 81-82 | pebbles |
| 82-100 | weak concrete and brick |

Core 2 - 100-200 cm

0-43cm empty – there was a void in this core after 20-30cm depth

| | |
|---|---|
| 43-44 | brick/tile |
| 44-57 | brick/tile and stone debris and concrete – wet and silty |
| 57-62 | limestone |
| 62-70 | very dark grey (10YR 3/1) slightly gritty soft silt – waterlain (in a drain? – possible cause of void) |
| 70-77 | very dark grey (10YR 3/1) sandy and gritty soft silt with occasional organics |
| 77-81 | very dark grey (10YR 3/1) slightly gritty soft silt |
| 81-84 | dark greyish brown (10YR 4/2) silty sand with occasional brick/tile and stone fragments (base of drain?) |
| 84-90 | broken up shelly limestone – possibly floor of drain? |
| 90-94 | dark grey (10YR 4/1) silty sands with tiny mussel shell fragments |
| 94-100 | brown (10YR 5/3) fine to medium sand – natural |

Core 3 – 200-300cm

| | |
|---|---|
| 0-100 | brown (10YR 5/3) fine to medium sand – natural |

Water level at 140cm depth

**BH2**

Core 1 – 0-100cm

0-30cm limestone hardcore with a developing soil on the surface

| | |
|---|---|
| 30-42 | brick and stone in sandy loam matrix |
| 42-51 | concrete |
| 51-71 | dark grey (10YR 4/1) slightly sticky silty fine sand with frequent stone, charcoal and broken ceramic drain (20th century) |
| 71-84 | greyish brown (10YR 5/2) very gritty sandy layer with pebbles, stone, occasional brick, mortar – possibly lime floor |
| 84-100 | dark grey (10YR 4/1) soft sandy silt/silty sand with pebbles, stone, bone, occasional mussel shell, etc – soil |

Core 2 – 100-200cm

0-10cm empty (compression?)

| | |
|---|---|
| 10-30 | dark grey (1-0YR 4/1) sandy silt with grits, occasional mussel shell, charcoal |
| 30-34 | dark greyish brown (2.5Y 4/2) sandy silt with grits, charcoal – slight green staining |
| 34-38 | very dark greyish brown (10YR 3/2) organic silts/peaty silt with freshwater shells |
| 38-39 | dark grey (10YR 4/1) organic silty fine sand – waterlain |
| 39-41 | very dark greyish brown (10YR 3/2) organ ic silty sand with planorbids – waterlain |
| 41-47 | grey (10YR 5/1) fine-medium sand – slightly banded, sharp boundary top and bottom – waterlain |
| 47-69 | very dark greyish brown (10YR 3/2) organic sandy silt with wood, freshwater shells – waterlain – sharp bpoundary below and swirls at the base |
| 69-72 | greyish brown (10YR 5/2) wet medium sand with occasional organics – waterlain |
| 72-100 | brownish yellow (10YR 6/8) fine to medium sand with small grits and stones below 95cm – natural |

Core 3 – 200-300cm

| | |
|---|---|
| 0-100cm | yellowish brown (10YR 6/8) fine to medium sands with a little small gravel |

Water level at 130cm depth

**BH3**

Core 1 – 0-100cm

0-38cm mixed limestone hardcore and brick

| | |
|---|---|
| 38-47 | dark greyish brown (10YR 4/2) sandy loam matrix with brick, charcoal and grits |
| 47-60 | ceramic drain (20th century) |
| 60-64 | pebble concrete |
| 64-90 | very dark greyish brown (10YR 3/2) silty sand with flint, bone, grits, small stones – soil |
| 90-96 | dark grey (10YR 4/1) silty sand with grits and small stones – soil |
| 96-100 | dark greyish brown (10YR 4/2) silty sand with grits and small stones, clean sand at very base |

Core 2 – 100-200cm

0-14cm empty (compressions?)

| | |
|---|---|
| 14-21 | strong brown (7.5YR 5/8) fine to medium sand with occasion al small stones |
| 21-39 | brown (10YR 5/4) fine to medium sand with occasional grits and darker organic bands/lenses – slope-wash? |
| 39-47 | iron rich yellowish red (5YR 4/6) fine to medium sands |
| 47-58 | banded brown (10YR 5/3) fine to medium sand swith darker (10YR 4/1) organic? Lenses – waterlain? – wood at 52-53cm (root or stem?) |
| 58-65 | banded dark grey to greyish brown (10YR 4/1 to 10YR 5/2) fine sands and silts, silty sands – waterlain |
| 65-68 | brown (10YR 5/3) medium to coarse sands with silty patches |
| 68-79 | fine sandy gravel – clasts to 6mm - natural |
| 79-84 | fine sandy gravel – clasts to 10mm |
| 84-100 | strong brown (7.5YR 5/6) fine sands – waterlain |

**BH4**

Core 1 - 0-100cm

| | |
|---|---|
| 0-15cm | empty (compression?) |
| 15-28 | turf and very dark greyish brown (10YR 3/2) sandy loam with stone and small pebbles – soil |
| 28-37 | brown (7.5YR 4/2) slightly silty sand with pebbles and limestone fragments – soil |
| 37-61 | brown (10YR 4/3) slightly silty sand with common stones (to 50mm) and pebbles (to 30mm) – soil |
| 61-72 | stone/rubble layer with limestone, flint, slate and coal rich |
| 72-94 | limestone with very dark grey (10YR 3/1) sandy silt patches, lime rich mortar, brick fragments |
| 94-100 | limeash concrete? – with occasional pebbles and patches of dark greyish brown (10YR 4/2) sticky sandy silt |

Core 2 – 100-200cm

| | |
|---|---|
| 0-5cm | empty |
| 5-18 | greyish brown (10YR 5/2) sandy silt with frequent small stones and occasional brick – soil |
| 18-30 | coarse sand and brick |
| 30-41 | dark grey (10YR 4/1) soft sandy silt with stone, brick fragments, mussel shell, etc – 'soily' |
| 41-51 | dark greyish brown (10YR 4/2) silty sand with stones, charcoal, mussel shell, etc – soil |
| 51-64 | very dark grey (10YR 3/1) silty sand with grits, occasion al stones, mussel shell, etc – wet soil and light dumping? |
| 64-99 | very dark greyish brown and very dark brown (10YR 3/2 and 2/2) organic slightly sandy silts with wood, mussel shell and grits |
| 99-100 | dark grey (10YR 4/1) fine to medium sand with organics |

Core 3 – 200-300

| | |
|---|---|
| 0-18cm | empty (compressions?) |
| 18-31 | pa\le brown (10YR 6/3) fine sand with occasional organ ic silty sand lenses and degraded twigs/small roundwood |
| 31-34 | dark grey (10YR 4/1) slightly silty fine sand – waterlain? |
| 34-40 | banded very dark greyish brown (10YR 3/2) organic silt with occasional wood – waterlain |
| 40-53 | banded brown, dark grey and grey (7.5YR 5/2, 10YR 4/1 and 5/1) fine to medium sands with fine slightly silty lenses – waterlain |
| 53-100 | brown (7.5YR 5/4) fine to medium sands with frequent traces of organics – mainly vertical – indicating roots – natural |

Water level at 1.54m depth

**BH5**

Core 1 – 0-100cm

| | |
|---|---|
| 0-13cm | empty |
| 13-34 | turf and very dark greyish brown (10YR 3/2) sandy silt loam with occasion al limestone fragments |
| 34-41 | limestone |
| 41-50 | concrete |
| 50-61 | limestone |
| 61 | brick |
| 61-80 | very dark greyish brown (10YR 3/2) sandy silt with brick and mortar fragments, coal – soil |
| 80-100 | brick/tile debris in a sandy silt matrix |

Core 2 – 100-200cm

| | |
|---|---|
| 0-18cm | empty |
| 18-40 | brick/tile and stone dump with a silty sand matrix (levelling?) |
| 40-44 | coarse sand and brick/tile debris – blinding? |
| 44-48 | brown (7.5YR 5/4) fine to medium sand with limestone fragments |
| 48-60 | banded light brown (7.5YR 6/3) fine to medium sands with grits and occasional small pebbles |
| 60-96 | banded pinkish grey, brown and grey (7.5YR 6/2, 5/4 and 5/1) fine to medium, and medium sands with occasional lenses of coarse sand and small pebbles (to 10mm) and shell fragments – slopewash? |
| 96-100 | brownish yellow (10YR 6/6) fine to medium sand – natural |

Core 3 – 200-300cm

| | |
|---|---|
| 0-100cm | brownish yellow (10YR 6/6) fine to medium sand with occasional small pebbles (to 10mm) |

Water level at 1.7m depth (but only a short time – 5-10 minutes- to settle)

**Appendix 4: Animal Bone Report**

By Jen Wood

**Introduction**

A total of 2 (224g) refitted fragments of animal bone were recovered during archaeological works undertaken by Allen Archaeology Ltd on land at Mill House, Lincoln, Lincolnshire. The assemblage was recovered from deposit 116.

**Results**

The remains were of a moderate overall condition, averaging at grade 3 on the Lyman criteria (1996).

No evidence of butchery, burning, gnawing or pathology was noted on any of the remains.

*Table 1, Summary of Identified Bone*

| Cut | Context | Taxon | Element | Side | Number | Weight | Comments |
|---|---|---|---|---|---|---|---|
| N/A | 116 | Cattle | Femur | L | 1 | 200 | Proximal end, Bp= 108mm |
| | | Cattle | Metacarpal | R | 1 | 24 | Proximal shaft fragment, mineral encrusted |

As can be seen from Table 1, Cattle were the only remains identifiable to species within the assemblage.

The assemblage is too small to provide meaningful information on animal husbandry and utilisation.

**References**

Lyman, R L, 1996 *Vertebrate Taphonomy*, Cambridge Manuals in Archaeology, Cambridge University Press, Cambridge

## Appendix 5: Context Summary List

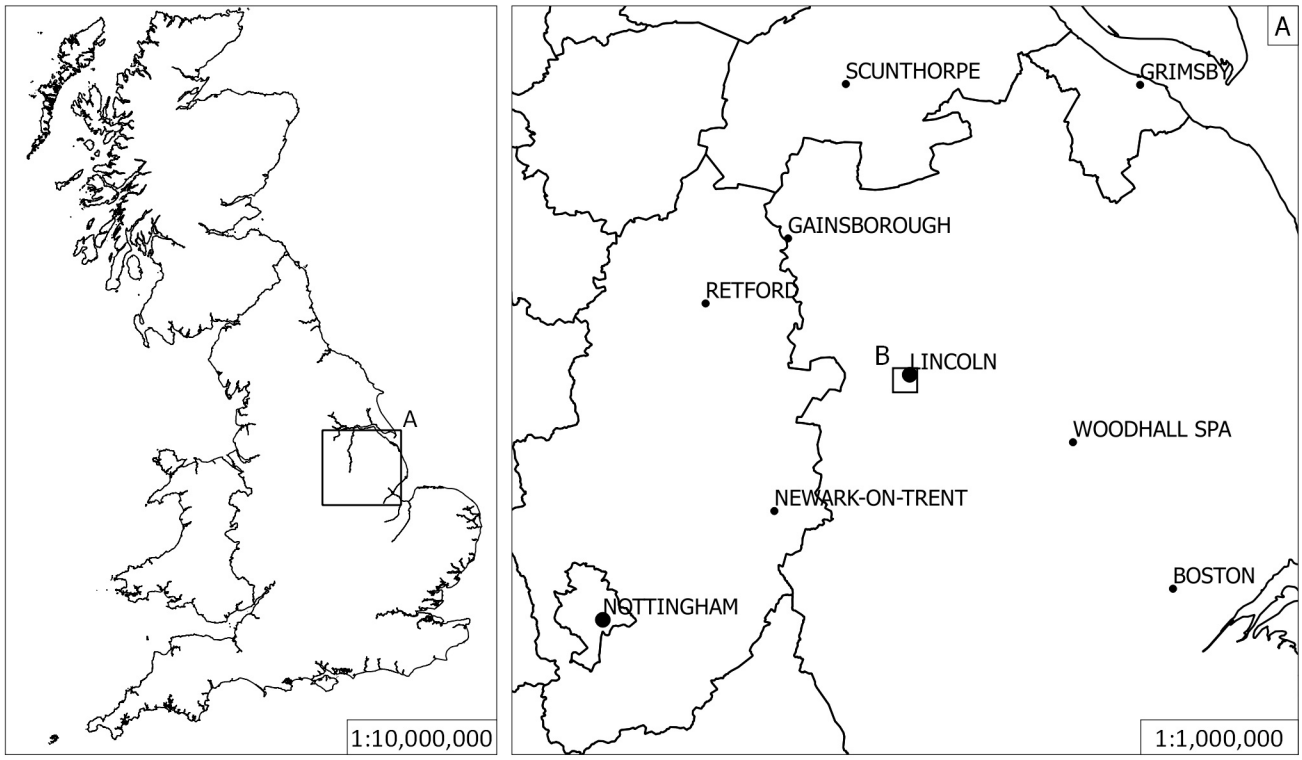
### *Evaluation Trench*

| Context | Type | Description | Interpretation |
|---|---|---|---|
| 100 | Layer | Compact, light brownish grey clayey silt with common small to medium rounded to sub rounded stones and modern debris. 0.10m thick. | Topsoil |
| 101 | Layer | Compact, light brownish yellow coarse sandy silt with frequent rounded to angular stones. 0.10m thick. | Made ground |
| 102 | Layer | Compact, dark grey clayey silt with occasion medium rounded stones. 0.05m thick. | Buried topsoil |
| 103 | Layer | Indurate, mid grey concrete with moderate medium sub-angular stones and metal bars. 0.40m+ thick. | Reinforced concrete deposit same as 119 |
| 104 | Fill | Compact, mid greyish brown coarse sandy silt with common angular modern brick fragments and modern debris. 0.57m thick. | Fill of pit [106] |
| 105 | Fill | Compact, mid brownish yellow coarse sandy silt with common small rounded to angular stones. 0.06m thick. | Fill of pit [106] |
| 106 | Cut | Sub-circular pit with rounded sides gentle break of slope to a rounded base; 1.77m wide x 1.8m+ long x 0.63m deep, sealed by 101. | Cut of pit |
| 107 | Layer | Compact, light greyish brown coarse sandy silt with frequent rounded to angular stones. 0.10m thick. | Demolition layer |
| 108 | Layer | Compact, light greyish brown coarse sandy silt with frequent rounded to angular stones and occasional dark grey coarse sand fleck. 0.09m thick. | Demolition layer |
| 109 | Layer | Compact, dark greyish brown coarse sandy silt with frequent rounded to angular stones and brick. 0.30m thick. | Demolition layer |
| 110 | Layer | Compact, dark greyish brown coarse sandy silt with frequent rounded to angular stones and brick. 0.25m thick. | Demolition layer |
| 111 | Layer | Compact, light brownish yellow coarse sandy silt with frequent rounded to angular stones. 0.10m thick. | Made ground |
| 112 | Fill | Indurate, mid grey concrete with moderate medium sub-angular stones, light coarse sandy flecks and moderate metal rebar. 0.60m+ thick. | Concrete fill of construction cut [113] |
| 113 | Cut | Northwest-southeast oriented linear, vertical side and unexcavated base; 1.8m wide x 0.60m+ deep, sealed by 111. | Construction cut of concrete 112 |
| 114 | Layer | Compact, mid grey silty coarse sand with frequent brick fragments and occasional angular stones. 0.38m thick. | Demolition layer same as 121 |
| 115 | Fill | Friable, mid brown clayey slit with frequent charcoal flecks and moderate small sub-angular stones. 0.25m thick. | Fill of ditch [117] |
| 116 | Fill | Friable, dark grey silty clay with frequent charcoal flecks, occasional large angular stones and mid yellow sand flecks. 0.12m thick. | Fill of ditch [117] |
| 117 | Cut | Northwest-southeast oriented linear, not fully excavated, shallow straight sides stepped to moderate concave side, unexcavated base; 1.74m wide x 0.35m deep sealed by 114. | Cut of ditch |

| Context | Type | Description | Interpretation |
|---|---|---|---|
| 118 | Layer | Soft, light yellowish brown silty sand with occasional manganese flecks. 0.10m+ thick. | Natural |
| 119 | Fill | Indurate, mid grey concrete with moderate medium sub-angular stones and metal bars. 0.40m+ thick. | Reinforced concrete deposit, same as 103 |
| 120 | Cut | Northwest-southeast oriented linear, not fully excavated, vertical side and unexcavated base; 0.60m+ wide x 0.38m+ deep, sealed by 111. | Construction cut of concrete 119 |
| 121 | Layer | Compact, mid grey silty coarse sand with frequent brick fragments and occasional angular stones. 0.38m thick. | Demolition layer same as 114 |
| 122 | Fill | Friable, dark grey silty clay with frequent charcoal flecks and mid brownish yellow sand flecks. 0.44m thick. | Fill of ditch [123] |
| 123 | Cut | North northeast-south southwest oriented linear, not fully excavated, moderate straight sides, unexcavated base; 1.0m wide x 0.44m deep sealed by 119. | Cut of ditch |

***Test Pit***

| Context | Type | Description | Interpretation |
|---|---|---|---|
| 200 | Layer | Compact, light brownish grey clayey silt with common small to medium rounded to sub rounded stones and modern debris. 0.10m thick. | Topsoil |
| 201 | Layer | Compact, light brownish yellow coarse sandy silt with frequent rounded to angular stones. 0.10m thick. | Made ground |
| 202 | Layer | Hard, dark grey clayey silt with occasion medium rounded stones. 0.05m thick. | Buried topsoil |
| 203 | Layer | Compact, light brownish yellow coarse sandy silt with frequent rounded to angular stones. 0.20m thick. | Made ground |
| 204 | Layer | Hard, mid brownish grey silty coarse sand with frequent round stones and mid brown coarse sand flecks. 0.15m thick | Demolition layer |
| 205 | Layer | Compact, mid brownish red silty coarse sand with common brick fragment and frequent small rounded stones. 0.16m thick | Demolition layer |
| 206 | Layer | Friable, dark brownish grey clayey silt with common charcoal flecks and occasional small rounded stones. 0.50m thick. | Occupation layer |
| 207 | Layer | Soft, light yellowish brown silty sand with occasional manganese flecks. 0.95m+ thick. | Natural sand |
| 208 | Layer | Soft, light yellow fine sand. 0.20m+ thick. | Natural sand |



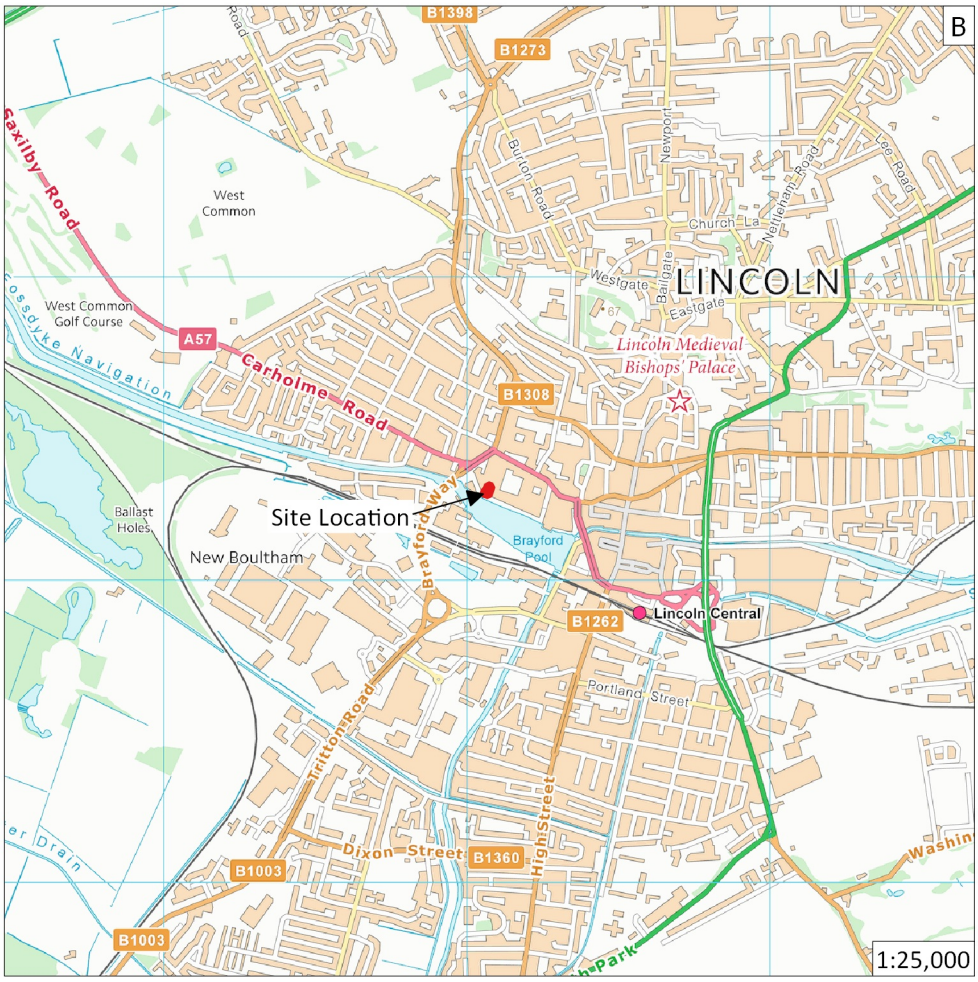




**Figure 1:** Site location outlined in red



| | |
|---|---|
| Site Code | LIMH 15 |
| Scale | 1:10,000,000<br>1:1,000,000<br>1:25,000 @ A4 |
| Drawn by | D Connor |
| Date | 01/12/15 |

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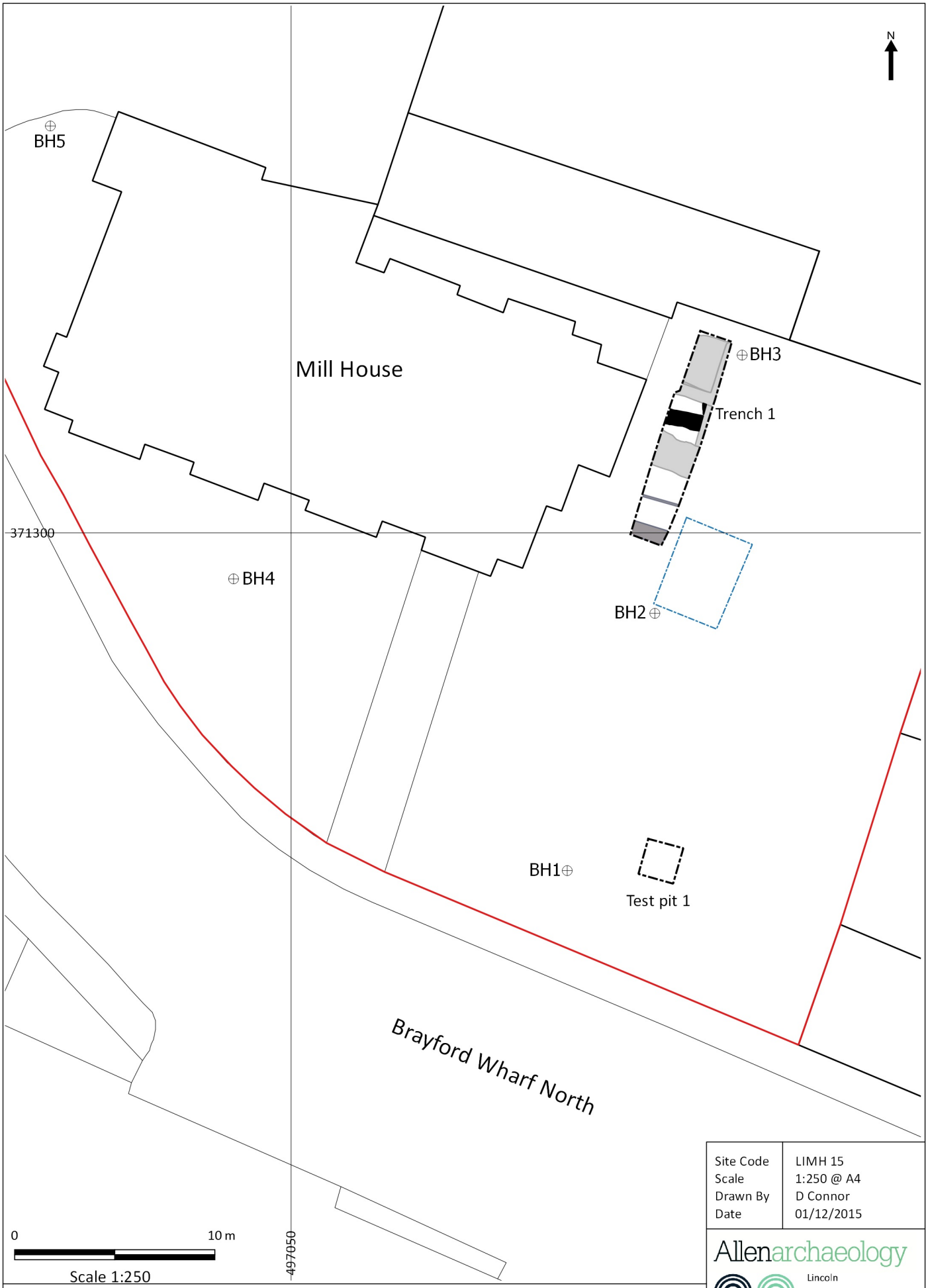


| | |
|---|---|
| Site Code | LIMH 15 |
| Scale | 1:250 @ A4 |
| Drawn By | D Connor |
| Date | 01/12/2015 |

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**Figure 2:** Location of Evaluation trench, Test pit and Boreholes (BH) excavated on site, as well as previous trench excavated by Wessex Archaeology, in blue.

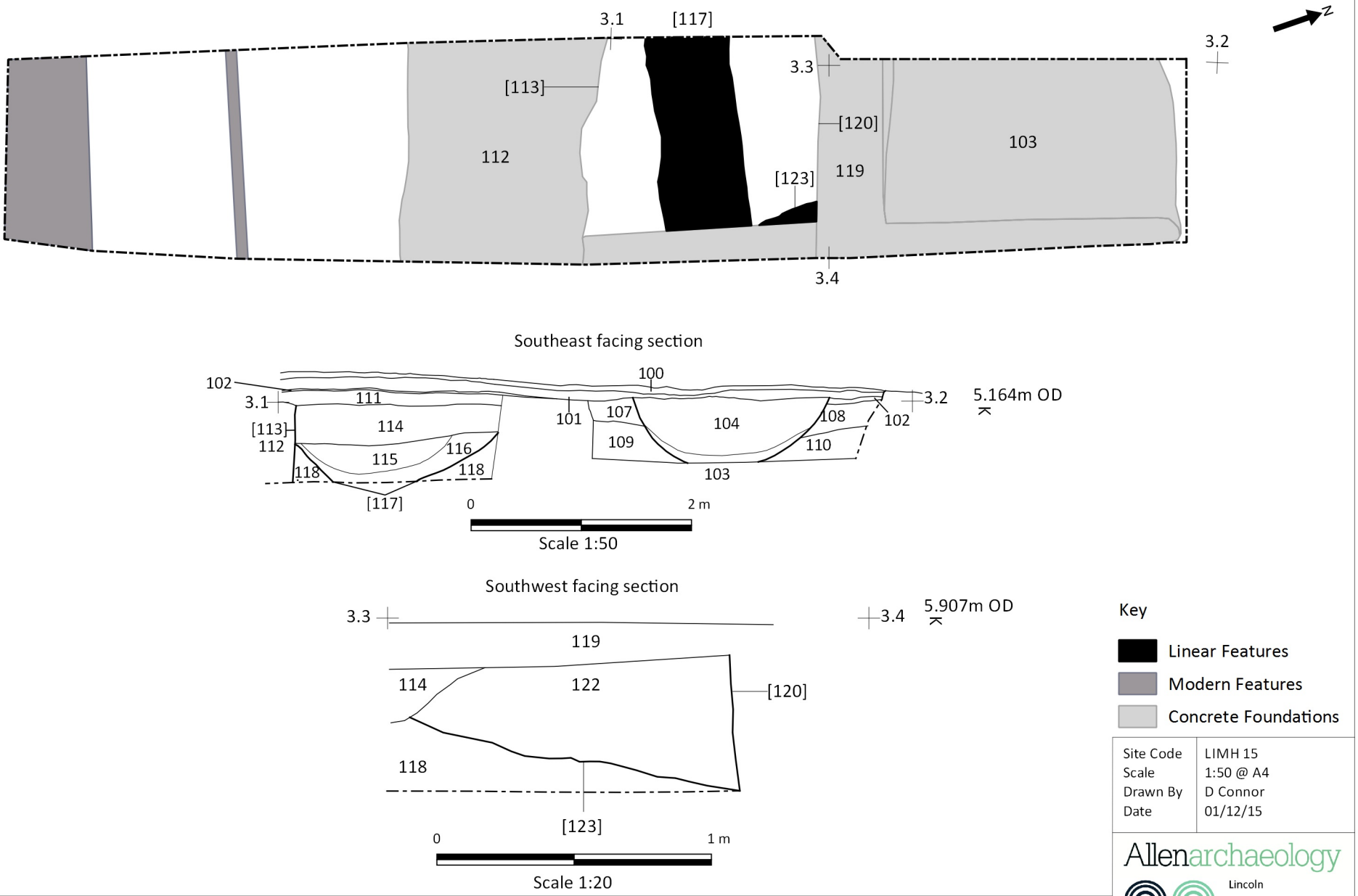
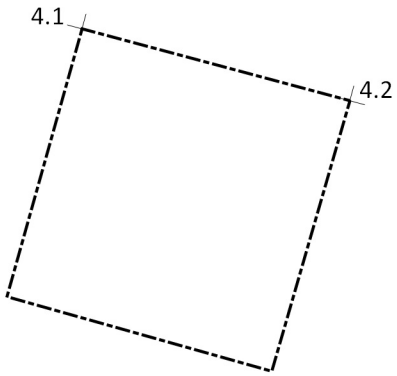
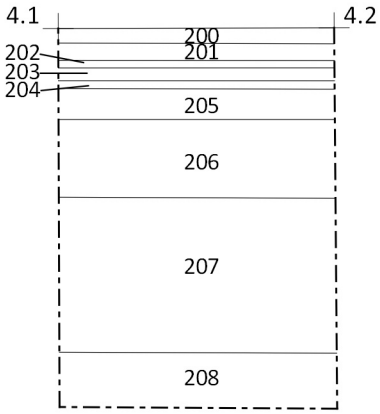


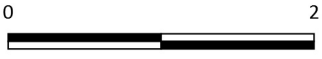

**Figure 3:** Plan and section of the evaluation trench





Northeast facing section




Scale 1:50

| | |
|---|---|
| Site Code | LIMH15 |
| Scale | 1:20 @ A4 |
| Drawn By | F Johnson |
| Date | 21/01/16 |

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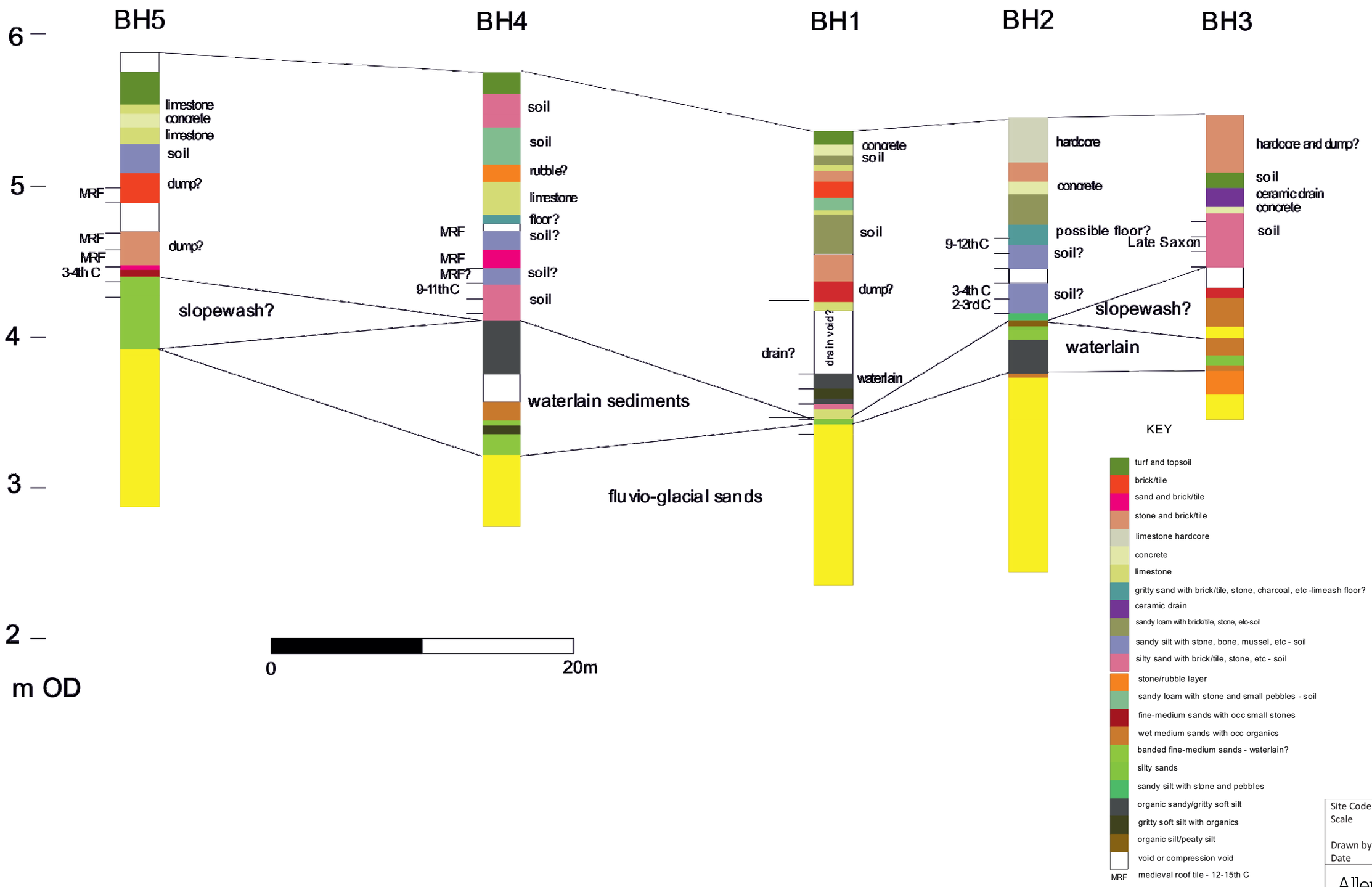
**Figure 4:** Plan and section of Test pit 1




| | |
|---|---|
| Site Code | LIMH 15 |
| Scale | vertical 1:25 @ A3<br>horizontal 1:250 @ A3 |
| Drawn by | J Rackham & C Clay |
| Date | 19/01/16 |

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**Figure 5**: Borehole transect

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