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LEICESTER

Archaeological Services

An Archaeological Excavation at 55
Grange Lane, Leicester
SK 5856 0393

Stephen Baker




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An Archaeological Excavation at 55 Grange Lane, Leicester

NGR: SK 5856 0393

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An Archaeological Excavation at 55 Grange Lane, Leicester SK 5856 0393

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Summary

Archaeological excavation in advance of student residential development at 55 Grange Lane, Leicester revealed a truncated sequence of deposits reflecting Roman, medieval, post-medieval occupation and civil war defence construction. The significant and widespread destruction of archaeological layers and deposits by cellaring was also demonstrated across the site. Roman evidence was reflected by pottery assemblages from a boundary ditch running perpendicular to the protracted alignment of the Tripontium Road, in turn reflected by the intermittent survival of patches of metalled surfaces. Later Roman occupation following disuse of the road was reflected by a stone-lined well containing an extensive assemblage of Roman coins and disarticulated human remains. Medieval and post-medieval occupation was reflected by the truncated survival of pits and possible yard surfaces. A substantial ditch believed to date to the Civil War and constitute a stretch of Leicester defences was revealed to the north of the excavation area. The excavation and subsequent watching brief, the results of which are included here, contributes significantly to the understanding of the southern defences of the city and substantiates previously discovered evidence of Roman and medieval occupation of Leicester south of the city walls.

Introduction (Figure 1) (Figure 3)

An open area archaeological excavation was undertaken by University of Leicester Archaeological Services (ULAS) on land at 55 Grange Lane, Castle Ward, Leicester between 5th May and 5th June 2015. Prior to the excavation ULAS had undertaken a desk-based assessment (Harvey 2004) and a trial trench evaluation (Morris 2014) which had demonstrated the significant archaeological potential for the site. The excavation was undertaken in response to proposals for student accommodation development on the land and was commissioned by the client Evans Brothers Ltd.

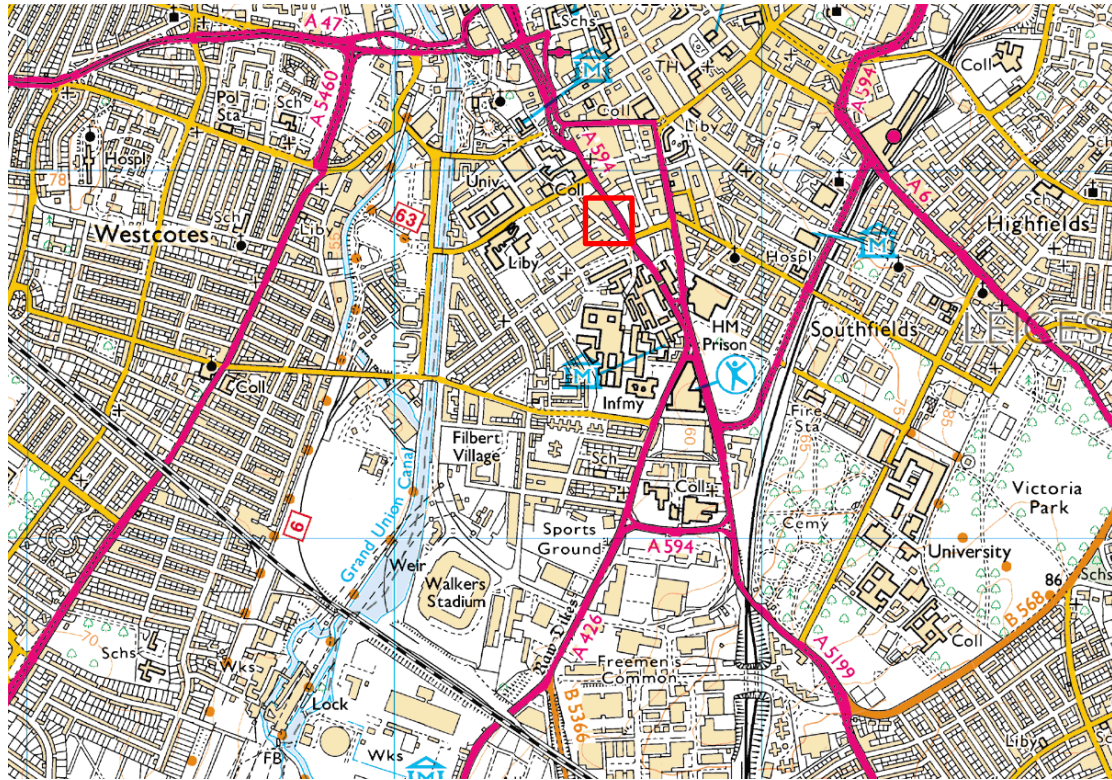


Figure 1: Site Location (approximate in red)

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The “L-shaped” development site is located between Oxford Street and Grange Lane, fronting onto both streets and extends beyond a listed building on the Oxford Street frontage. It lies at an approximate height of 61m OD and covers a total area of 1834 square metres. This incorporated the initial northern development area of approximately 1204 square metres and was extended to include an area of approximately 630 square metres to the south. Both areas were previously occupied by industrial buildings. The position of the site is to the south of the Roman walled city of Leicester and adjacent to the proposed line of the Tripontium Road, the projection of which runs north-south across the development area.

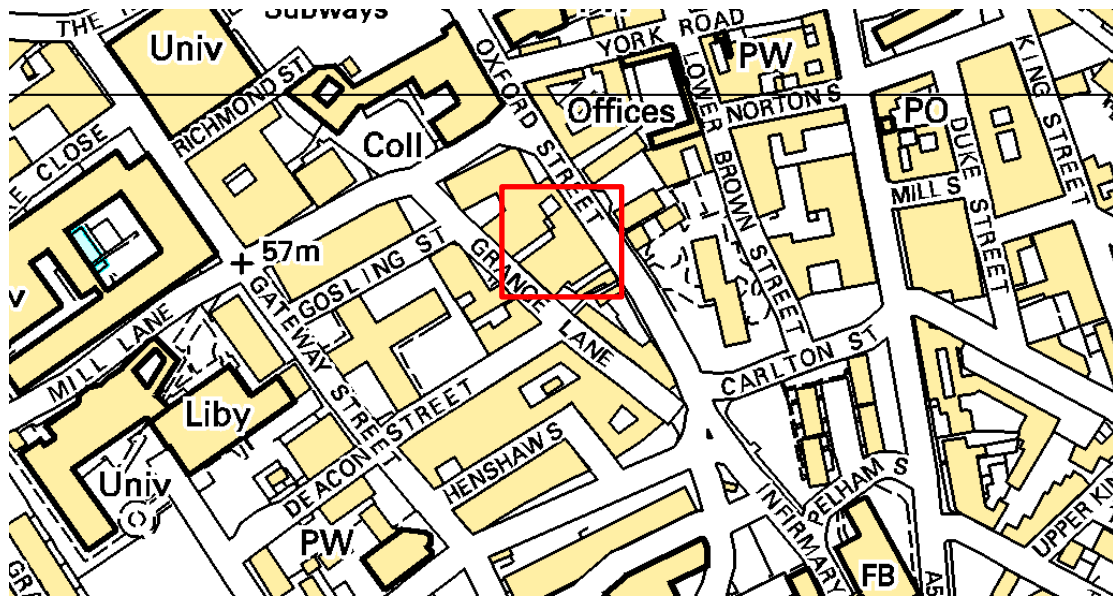


Figure 2: Site Location detail (approximate in red)



Figure 3: Development Area

Previous archaeological work in the surrounding area has gradually revealed the extent of past occupation and activity in the southern outskirts of the city and the evidence from the 55 Grange Lane excavations contributes to the growing body of knowledge regarding the development of Leicester's southern suburbs over time.

Archaeological and Historical Background

Prehistoric

Finds dated to the prehistoric period have been recorded from numerous locations in Leicester. The nearby site of the Bowling Green Public House on Oxford Street, for example, identified Neolithic Peterborough ware pottery (Gossip 1996). The site lies to the south of the Iron Age settlement of Leicester which was established along the east bank of the River Soar.

Roman

Roman archaeology in the area has focused upon the Tripontium Road running between the south gate of the city to the Roman town of *Tripontium* (Caves Inn). It was probably constructed at the time that Leicester was reorganised along a formalised street plan and became the capital of the region, *Ratae Corieltavorum*, in the early 2nd Century AD. This may have encouraged further extramural growth including, in the later 2nd century AD, the construction of Leicester's public buildings (Derrick 2002). Previously, a fort had been established in c.43AD and by the late 1st century AD a military ditch constructed close to the present day West Bridge (Clay and Pollard 1994).

Roman law decreed that burials had to take place outside the confines of towns leading to the development of an extramural cemetery around the exterior edges of Leicester's walls and along the roadsides of the major routes leading to the city (Derrick 2009).

Suburbs also grew along these routes and the evidence from the development site expands our knowledge of the emergence of these and their development over time.

Post-Roman

Existing evidence suggests that the area immediately south of the southern gate of Leicester was a poor area of the city with various industrial and market gardening taking place in sub-divided backyards by the 16/17th century AD.

Civil War

A detailed account of the Civil War sieges in Leicester can be found in Courtney and Courtney (1992), from which much of the following information is taken.

In the course of a few weeks in June 1645 the city of Leicester was under siege from Royalists led by Charles I with his nephew Prince Rupert on May 30th in the Civil War and latterly by Sir Thomas Fairfax and his Parliamentary forces who recaptured the town on the 16th June 1645. Archaeological evidence for stretches of the substantial defensive earthworks were observed during the Bonners Lane excavation (Finn 2004), parallel to Bonners Lane, and on York Road/Oxford Street (Gossip 1999), where an apparent continuation of the ditch seen on the former Bonners Lane site was observed to turn northwards to the east of Oxford Street and towards the line of the medieval town wall, around the south-east quarter (Harvey 2006) and also on Mill Lane (Finn 2002). The Newarke, to the north of the site, saw the main military

action unleashed by Parliamentary artillery forces, located in the vicinity of the present day Royal Infirmary. Thereafter the Parliamentarians, having garrisoned the town after their victory, further strengthened the defensive network of ditches, particularly around the Newarke.

Modern

Number 53 Oxford Street, a 19th century hosiery factory, is a red brick and slate structure and consists of three main elements. The north-east facing range fronting onto Oxford Street has three stories and a basement, a short cross range of two stories plus basement connects with a rear range also of two stories plus a basement. A small enclosed yard fills the space between the three ranges. The buildings were extended in the 1930's to the west when further structures were constructed with basements.

Previous Work

Previous work proximal to 55 Grange Lane has revealed substantial archaeological evidence for past occupation and activity in the area to the south of the walled city of Leicester. Central to this are other sites excavated along Oxford Street, including those immediately north and south of the development area and a large excavation on land belonging to De Montford University, along with evidence from York Road and Bonners Lane.

At 52 Grange Lane in 2005, evidence was revealed for past activity spanning prehistoric to post-civil war times including flint tools and artefacts and substantial Roman remains. The Tripontium road was identified dating from the 2nd century AD as the central focus of activity, with associated roadside activity continuing after the road went out of use in the 3rd- 4th century AD. Evidence indicates this was followed by industrial activity, including foodstuff processing, metalworking and brewing from the medieval period onwards (Thomas 2014).

Excavations at 61 Oxford Street to the immediate south of the total development area in 2009 revealed further remains of the Tripontium Roman road along with associated roadside settlement in the form of postholes, pits and Roman occupation layers. These were overlain by medieval and post-medieval features and deposits reflecting subsequent backyard activity for properties fronting onto Grange Lane or Oxford Street (Higgins 2010).

Excavations at Bonners Lane in 1994, immediately north of the site also identified the Tripontium road dating from the early 2nd century AD (Finn 1994) and associated pits and road-side ditches along with a Saxon building and continued medieval and post-medieval activity. Possibly yard surfaces were identified from the later Roman period. A substantial linear feature, believed to be a defensive ditch dating to the Civil war period was also identified with evidence for subsequent post-civil war commercial activity. This feature was also observed further west at Mill Lane (Finn 2002)

To the north of Bonners Lane a large excavation on land on the De Montfort University site revealed a continuation of the Tripontium road and a bisecting road

running north-east to south-west alongside extensive archaeological evidence for the occupation of suburban outside the south gate of the city.

On the eastern side of present day Oxford Street, excavations along York Road (Gossip 1999) revealed evidence of early Roman property boundary ditches with associated post-holes and pits, backyard activity evidence continuing from the 12th – 16th century AD and a another possible stretch of the Civil war defence ditch.

Following an evaluation (Parker and Jarvis 2007), an excavation at 16 – 26 Oxford Street (Thomas 2014) revealed evidence for the longevity of activity in proximity to the Tripontium Road. There was also evidence for an extramural cemetery, supporting evidence for land use of this description to the south of the city from excavations at the Republic Carpark on Oxford Street (Gossip 1999), and evidence for medieval backyard activity with the back edge of plots identified away from the road and associated with industrial activities. The course of a linear feature, thought to represent the civil war defences of the city, was also identified and excavated.

Archaeological evaluations at 85-89 Oxford Street (Clarke 2003) identified metalled surfaces possibly relating to Roman or medieval ditches and a ditch of Iron Age or Saxon date. Investigations at 72 Oxford Street (Hunt 2004) provided further evidence for medieval activity and boundary divisions. Roman property boundaries with associated features were identified during an evaluation at the site of the former James Went building, now the De Montfort University Centre of Excellence of Performance Practice to the north of the development site and off Oxford Street (Harvey 2006).

The area immediately south of the initial area under investigation was evaluated in 2014 (Morris 2014) and supported evidence from elsewhere by identifying potential Roman property boundaries perpendicular to the projected line of the Tripontium Road, some evidence of disarticulated human remains, perhaps from nearby burials in the immediate area, evidence of metal working and later post-medieval evidence of activities such as animal butchery associated with backyard practices.

Aims and Objectives

General:

- the establishment of the form, function and chronology of any preserved archaeological remains, utilizing all appropriate scientific and analytical techniques;
- the recognition and investigation of activity and occupation areas;
- the recovery of palaeo-environmental remains, including waterlogged deposits;
- the recovery of artefactual remains to assist in the development of local and regional type series;
- the recognition and investigation of industrial activity.

Prehistoric:

- the identification of any evidence for settlement evidence from the Iron Age or earlier; in particular evidence for the proto-urban, pre-Roman settlement, its extent and character.

Roman:

- the identification of any evidence for any traces of extra-mural suburbs, cemeteries or agricultural activity, how and why Roman towns changed over time and the role fortifications may have played in this;
- to identify evidence for the role of the immediate southern hinterland of Roman Leicester and the part played in this by roads and waterways.

Early Medieval (Anglo-Saxon):

- the identification of any evidence for occupation during the 6th, 7th and 8th centuries;
- the identification of any evidence for the development of extra-mural suburbs or agricultural activity in the centuries before the Norman conquest;
- the identification of any evidence of the extent that Roman roads were used and maintained from the 5th century onwards and may have acted as social and political boundaries.

Medieval:

- the identification of any evidence for the development of extra-mural suburbs or agricultural activity in the centuries after the Norman conquest
- the identification of any evidence for the role of the immediate southern hinterland of Medieval Leicester.

Post-Medieval:

- the identification of any evidence to suggest the position of the Civil War defences and their impact upon the southern suburbs of Leicester.

The following objectives were also considered:

- establishment of the form, function and chronology of any preserved archaeological remains, utilising all appropriate scientific and analytical techniques;
- the recognition and investigation of activity and occupation areas;
- recovery of palaeo-environmental remains, including waterlogged deposits;
- examination of evidence for settlement development within the hinterland around Leicester;
- the recovery of artefactual remains to assist in the development of local and regional type series.

Methodology

General Methodology and Standards

All work followed the Chartered Institute for Field Archaeologist (CIfA) *Code of Conduct* and adheres to the *Standard and Guidance for Archaeological Excavations*.

Excavation Methodology

The initial excavation focused upon an area to the north covering 1204 square metres that had not been investigated previously by trial trenching. This was on the basis of the results of the investigation by trial trenching of the neighbouring plot to the south which revealed the survival of pockets of Roman, medieval and post-medieval archaeology between the cellaring associated with the existing and demolished industrial premises on the site. The similar nature of the northern site suggested a similar level of archaeological survival.



Figure 4: Machining in progress

The area to be stripped was expanded after the client became owner of the southern 630 square metre parcel of land. Cellaring in the north-east of the total area and up to 2m deep in the narrow corridor to the southwest of the southern area, had led to the destruction of all but the deepest lain archaeological deposits. This resulted in limiting the total area being stripped of modern overburden using a JCB mechanical excavator with a toothless ditching bucket under full archaeological supervision, until

archaeological deposits or undisturbed natural substrata was reached. The spoil was stored on the site over the areas identified as being truncated by cellaring.

A follow up watching brief was undertaken by an archaeologist from ULAS in early February 2016 following changes to the development plans and focused upon the opportunity to confirm the presence of the Civil War ditch further west. The results of the work are detailed within this report.

All stratified deposits were hand cleaned and given a unique context number and recorded on pro-forma ULAS context sheets. Specialised features (i.e. Masonry) were recorded on pro-forma masonry sheets. Every context was sample excavated where possible, photographed and the section and plan hand drawn at 1:10 and 1:20 respectively. Spot heights were taken on all features and deposits.

Results

The potential for the presence of archaeological deposits surviving between the truncation of Victorian cellaring was revealed in both trial trenches excavated in the south of the development area (Areas 2 and 3) and it was on this basis that this and the northern area were investigated. It was on the basis of the initial evaluation trenches that the northern plot (Area 1 and 4) was included in this, albeit restricted by an existing industrial building with cellars (53 Oxford Street) fronting onto Oxford Street, the extent of which was confirmed by exploratory machining. The position, depth and destructive consequences of additional cellaring was identified and confirmed by machining to the south and alongside Grange Lane.

Prehistoric, undated and natural remains

A very small number of residual worked flints were recovered from the backfill **(05)** **(06)** of the Roman well and the fill **(10)** of the linear feature **[07]** (Area 1). There were no archaeological features or deposits of prehistoric date revealed during the excavation.

An undated and truncated posthole **[412]** was excavated beneath the base of a cut for a modern drain running approximately east-west across Area 4 Oval in plan and 0.10m deep, it had a width of 0.26m and length of 0.34m. Single fill **(411)**, soft dark-brown silty clay with occasional charcoal flecks and burnt bone fragments was devoid of other finds. Its immediate proximity and orientation to a larger pit **[408]** and another similar posthole **[410]**, both pre-dating the possible surface of the Tripointum road, suggests the feature is related, but the absence of finds and degree of truncation makes this impossible to determine and the function of the feature was not ascertained.

An undated shallow pit feature **[206]** was located in Area 2 alongside wall **(204)**. With a length of 1.80m, width 1.20m and depth of 0.15m, single fill **(203)**, a mixed deposit consisting predominantly of light-brown crushed mortar with occasional slate fragments in a mid-brown sandy clay matrix, was devoid of finds. It was interpreted as demolition debris but the function was unclear although it appeared to be contemporary with wall **(204)**.

Area 1(Figure 5) (Figure 6)

Area 1, covering *c.*200 metres square, *c.*21m long and *c.*13 wide, was lower lying beneath a present day yard/car park and on the projected line of the *Tripontium* road. Machining revealed that it had been subject to levelling down to the natural red/brown clay substrata resulting in the absence of any widespread archaeological deposits, including evidence for the road, aside from the deepest lying stratigraphy; the lower levels and structure of a Roman well feature and a potentially substantial linear feature, dated to the Civil war and believed to represent a stretch of the network of ditches built to defend the city.



Figure 5: Area 1, looking north-east

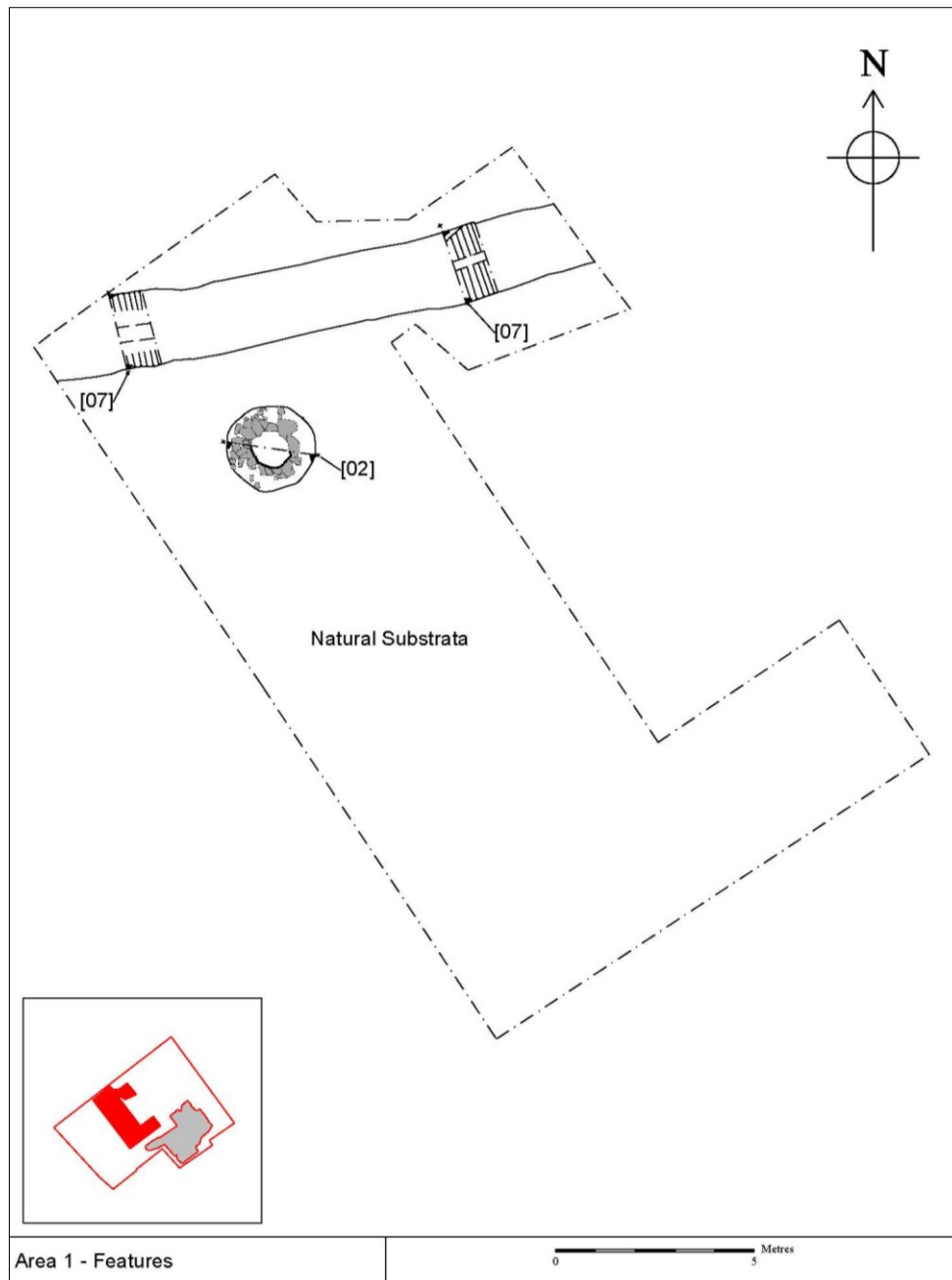


Figure 6: Plan of Area 1

Roman

Well [02] (Figure 7) (Figure 8)

Located in the north of Area 1 and to the west of the projected line of the Roman Tripointium road, a circular feature was excavated and identified as a stone-lined well. The stone lining had been constructed within an initial vertical sided circular cut [02] with a diameter of 2.25m.

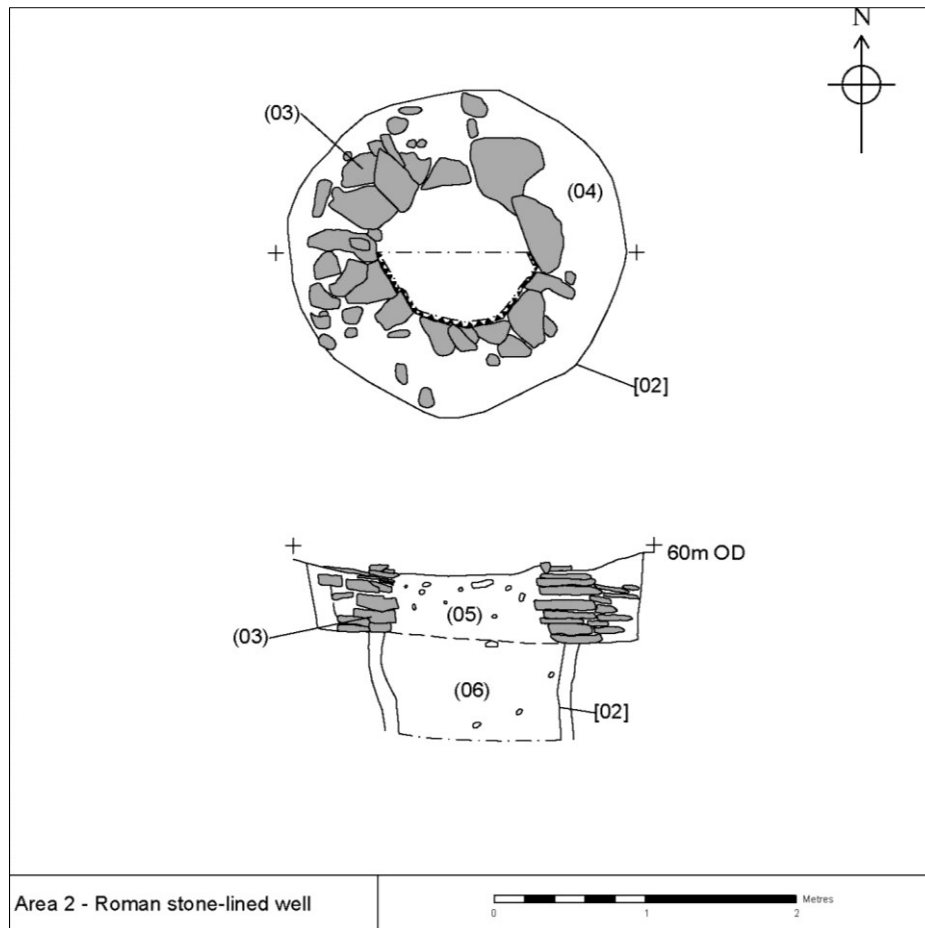


Figure 7: Roman well [02] section and plan

The majority of the stones in the surviving, heavily truncated, circular lining (03) of the well were roughly flat slabs of Swithland slate (*c.*90%) alongside sporadic sandstone and granite blocks (*c.*10%), none of which showed signs of being reused roofing slates, although this cannot be ascertained. The larger of these roughly finished blocks were *c.*0.50 x 0.25 x 0.05m and the smallest *c.*0.40 x 0.14 x 0.03m, with typical dimensions *c.*0.45 x 0.35 x 0.05m. These had been laid flat in courses, occasionally “rammed” into the side of the cut and survived to a maximum depth of *c.*0.55m where the structure ended, resting upon a step in and overlapping the edge of, the continuing vertically sided well shaft cut. This may suggest the presence of some form of lining subsequently lost in the lower shaft of the well below the upper stone structure. The structure was *c.*1.70m in external and *c.*1m in internal diameter and between *c.*0.50m – *c.*0.30m somewhat randomly across. The stone was bonded with dry clay and mortar mix with occasional lumps of natural clay and a similar material was found between fill (06) and the edge of cut [02] in the lower shaft. This may represent the backfill or slipping of material behind the potential lost lining. Following construction of the stone lining, the void between it and the construction cut was backfilled with mixed pink/orange sandy clay, 0.45m deep. This contained frequent small sandstone fragments, medium-large slate slabs and a sherd of abraded mortarium.



Figure 8: Roman well [02], looking north

The well was partially excavated to a depth of *c.* 1.25m. The lower fill **(06)**, firm mid-brown/green sandy silt with pebbles and charcoal flecks is probably the same deposit as the upper fill **(05)**. It was investigated further using an auger, which established a probable depth to this deposit exceeding *c.* 1.25 below the limit of excavation. The backfill contained pottery dated to the Roman period, residual flint, animal bone and also yielded evidence of re-deposited material possibly from nearby burial soils containing disarticulated assorted human remains, hobnails, possible coffin nails, copper alloy objects, later identified as a fragmentary armlet which may represent grave goods or an affordable votive offering, along with a total of 30 Roman coins. All but two of the coins were confidently dated to the mid/late 4th century AD and of the Emperor Valentinian, notably they would probably have been in circulation at the same time and deposited together. The majority of the pottery was Nene Valley ware dating predominantly to the 3rd and 4th centuries AD.

Early/Later Post-Medieval

Civil War Ditch [07] (A) (B) (Figure 9) (Figure 10)

Traversing *c.* 14m across the north of Area 1 on an east/west alignment linear **[07]** was *c.* 2m wide and *c.* 0.80m deep and was investigated at two locations. Both described relatively straight sides sloping moderately and slightly concave central bases. Primary fill **(08)**, mid-red/orange loose silty-sand with rare charcoal flecks, *c.* 0.65m wide, *c.* 0.13m deep, was devoid of finds. Primary fill **(16)**, mainly an organic mid-yellow/brown silty-clay-sand with lenses of dark-grey/brown silty-sand with patches

of natural clay deposits that appear to have been washed in and may represent gradual accumulation. It was *c.*1.10m wide and *c.*0.26m deep, and contained residual flint but no datable finds. A sample of the deposit was taken.

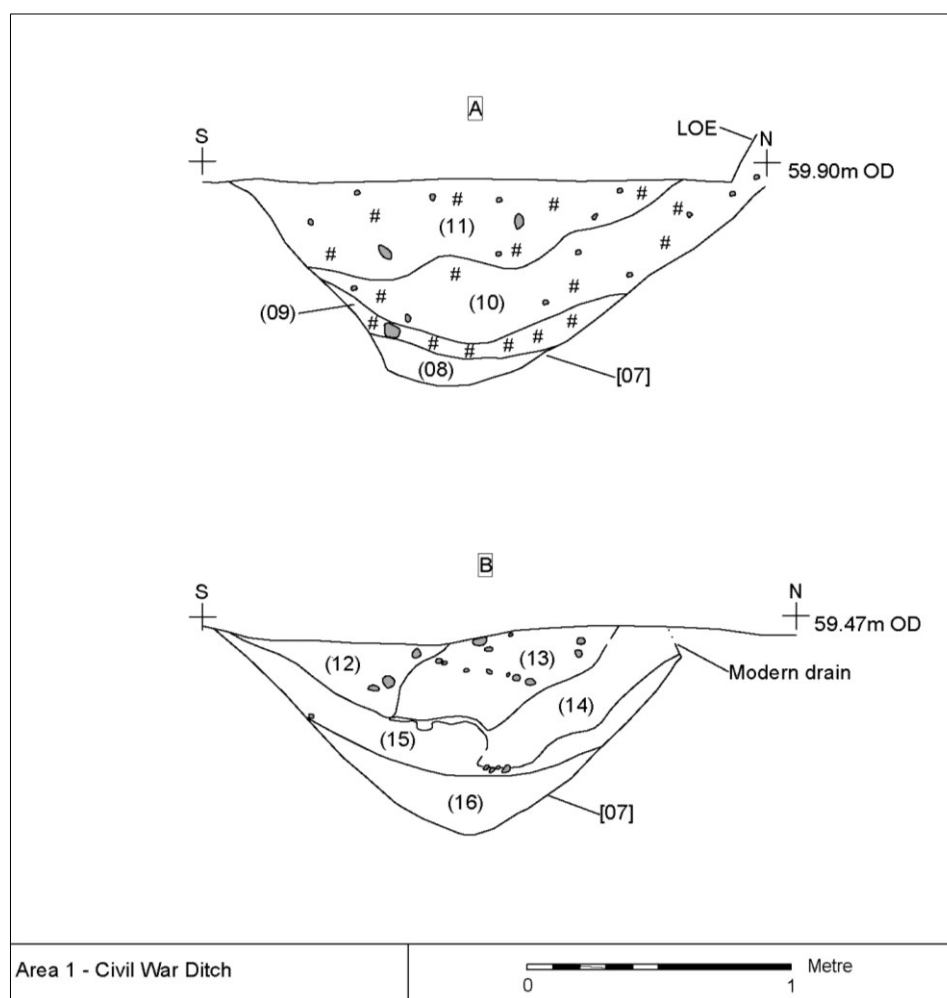


Figure 9: Civil War ditch [07] section

Fill **(09)**, *c.*1.2m wide and *c.*0.15m deep, plastic mid-brown/red silty-clay with occasional rounded pebbles and charcoal flecks contained animal bone. Red/brown silty-clay with sand and mottled white patches **(10)**, was a mix of silting episodes, also contained animal bone and ceramic building material (CBM). Upper fill **(11)**, firm dark-brown/grey silty-clay with small stones and charcoal content, was *c.*1.65m wide and *c.*0.40m deep. It was noticeably darker than the other ditch deposits and yielded pottery dating to the early/late-post-medieval period, animal bone and CBM, along with 2 iron nails.

Mid-grey/brown silty clay **(14)**, *c.*0.70m wide and *c.*0.30m deep, contained charcoal and a significant number of rounded pebbles perhaps originating from the surface of the pre-dating, now lost Roman road layers. Very similar to fill **(12)**, this deposit **(14)** contained pottery dated to the early/late post-medieval period.

Upper deposit **(13)**, *c.*0.80m wide and *c.*0.40m deep, firm mid-red/brown clay with patches of silty-clay, containing a tip line of small/medium pebbles, was devoid of finds.



Figure 10: Civil War ditch [07], looking west

Watching Brief (Figure 11) (Figure 12)

Following amended development plans on the site a watching brief was undertaken on 15th February 2016 and another more substantial section was observed through the Civil War ditch up against the existing factory after the removal, without archaeological supervision, of a courtyard located between the two main factory buildings. It was hoped that the projection of the ditch could be confirmed and the presence or absence of the feature further east add to the evidence for the form of the defences at this location.

Having been subject to less extensive truncation, the feature [24] was seen surviving to a depth of *c.*2m and truncated width of *c.*5m. The lower sides were comparable to those recorded in the same feature further west with their slightly wavy profiles and concave base. The exact orientation of the feature immediately before and after this point was impossible to ascertain although it was located where the continued projection suggested.



Figure 11: Civil War ditch [07], from watching brief, looking east

The feature contained fills comparable to those observed elsewhere. Primary fill (23), dark-brown/grey silty-sand was *c.*0.22m deep, *c.*1.20m wide and may have been deposited in a similar way to (16). Fine light grey sandy-silt fill (22), was *c.*1.40m wide, *c.*0.78m deep and appeared to have been a silting up episode of the feature on its internal slope whilst still open. Fill (21), with occasional clay fragments, was mid-brown/grey, *c.*1.62m deep and *c.*2.86m wide. With a slightly higher content of clay, fill (20), mixed sandy-silt may represent backfilled material from the rampart. It was *c.*0.86m deep with a width of *c.*1.70m. On the truncated south slope of the ditch, light-red/brown fill (19) was *c.*0.60m+ deep and *c.*1.50m+ wide and consisted predominantly of re-deposited red clay. Fill (18), dark-brown/grey clayey-silt with occasional rounded and sub-rounded stones, in total *c.*2.92m wide and *c.*1.36m deep contained a series of darker brown/grey silting layers. The highest surviving deposit, (17), mid-grey/brown silty clay mix, was *c.*1.02m deep and *c.*3.80m wide. None of the deposits from this section of the Civil War ditch contained finds.

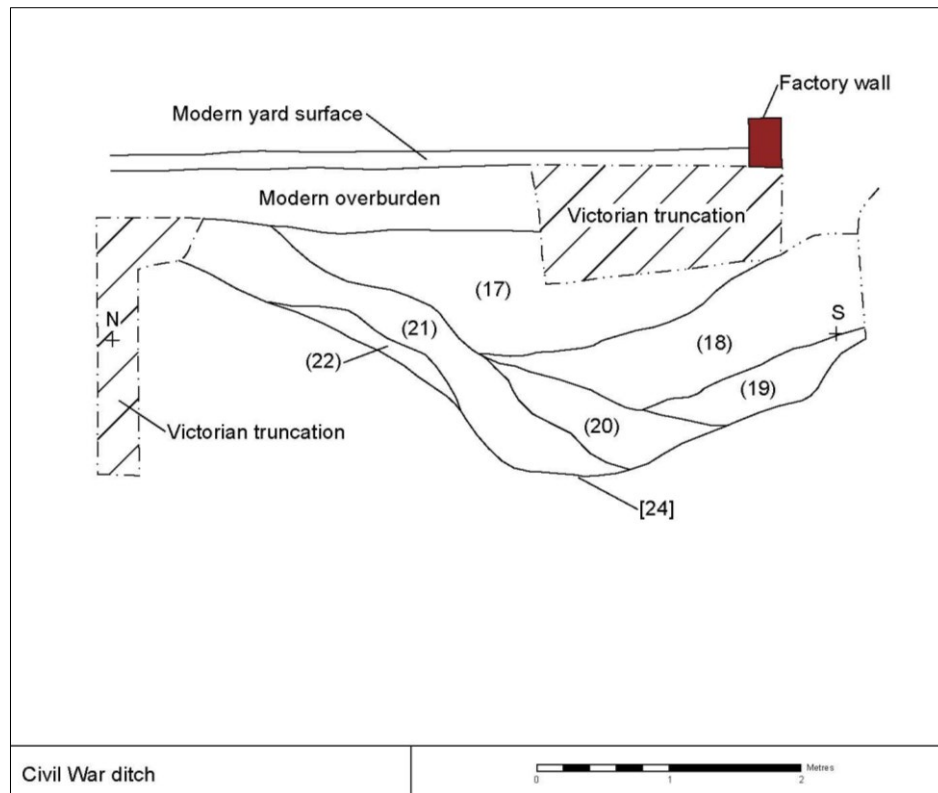


Figure 12: Civil War ditch [07] section, looking east

Modern

It appeared that Area 1 had been subject to widespread clearance/levelling during the modern period, perhaps related to the construction of the existing factory building on the site. This led to a reduction in ground levels of up to *c.*1m and the loss of all but the deepest surviving archaeological features.

To the west of Area 1, modern cellars were known from the desk-based assessment to front onto Grange Lane and these were identified during machining and determined to be up *c.*2.80m below the existing ground level. The approximate north-west to south-east line of the back wall of this cellar complex rough formed the western limit of the area stripped for further investigation, approximately 17m from the present day Grange Lane and parallel to it.

Area 2 (Figure 13)

Area 2, *c.*40 metres square, *c.*11m north-west to south-east and *c.*12m north-east to south-west, in maximum extent in the southern plot of the development area, contained pockets of archaeological deposits surviving between areas of deep cellars and their respective brick walls. These remains included a linear feature representing a Roman boundary ditch running away from and perpendicular to the line of the Tripontium road. Possible metallised surface patches survived intermittently to the south of this. The Roman features were truncated by a series of intercutting medieval pits and a possible well feature, partially excavated. Other late-medieval pits were located on the northern and south-eastern edge of the excavation area.



Figure 13: Area 2, looking south-west

Roman (Figure 14)

Boundary Ditch [230] [253] (Figure 15) (Figure 16) (*Figure 16*) (A)-(C)

Traversing Area 2 and orientated east-west, approximately perpendicular to the projected line of the Roman Tripontium road was linear [230] [253], c.12m+ in length, c.0.90 - 1.50m wide and c.0.60m deep. It was investigated in three slots, two of which where it was truncated by later archaeological features and one which revealed evidence for at three episodic re-cuttings of the feature.

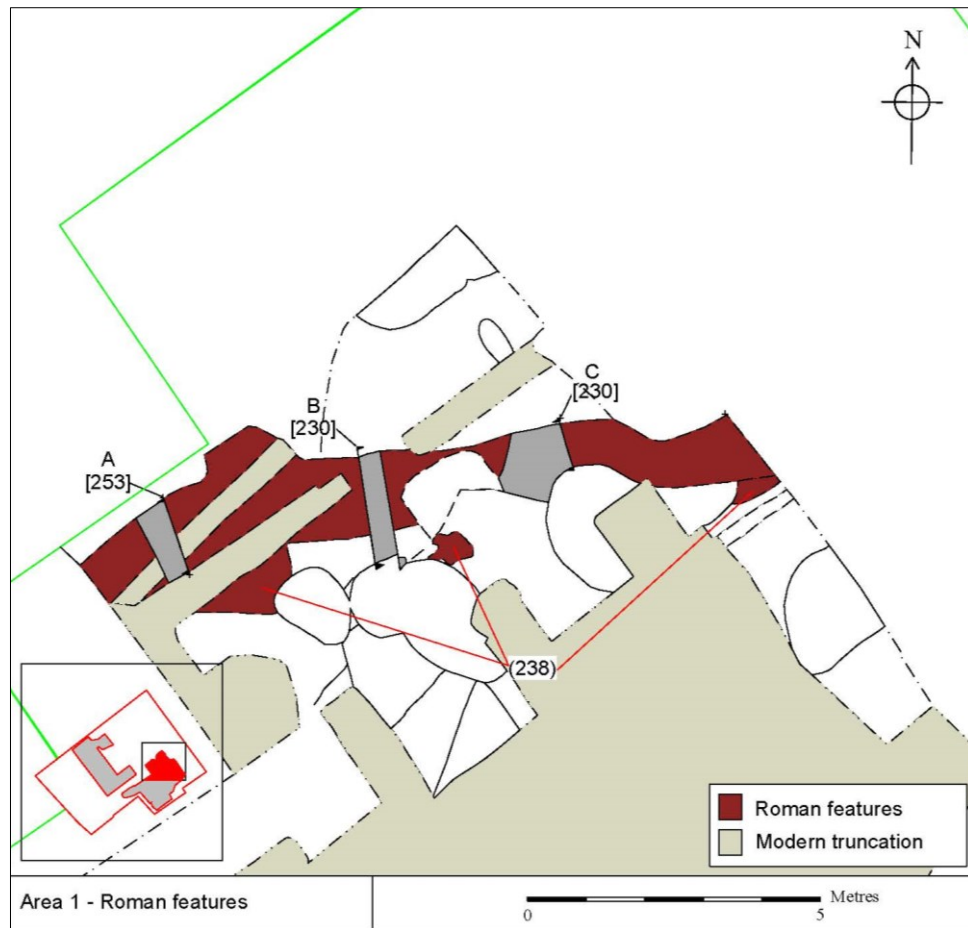


Figure 14: Plan of Area 2 - Roman

The first slot (**A**) 0.50m across and located 1.25 from the western extent of the feature provided evidence for three separate cuts. Earliest east/west linear cut **[261]**, truncated by later ditches, had *c.*45° sides, a slightly wavy and probably central base and contained three distinct fills. Fill **(258)**, mid-grey/brown sandy-silt with some clay and ≤1% sub-rounded stones, *c.*0.54m wide and *c.*0.28m deep was devoid of finds. Mid-grey/brown friable sandy-clay **(260)**, *c.*0.29 wide and *c.*0.17 deep, was similar and also absent of finds, as was **(259)** another mid-grey/brown silty-clay, *c.*0.50m wide and *c.*0.33m deep.



Figure 15: Roman boundary ditch [230], looking east

Later re-cut [257] an east/west linear had slightly wavy sides in section and a “V-shaped” central base, *c.*0.77m deep. It survived to a width of *c.*0.77m. Primary fill (256), mixed light/mid-brown/grey lenses alternating between silty-clay/silty-sand was *c.*0.27m deep and *c.*0.50m wide. Fill (255), mid/light-red/brown sterile pocket of silty-sand, *c.*0.05m deep and *c.*0.20m wide may be a part of the former deposit. The uppermost fill (254) was mid-brown/grey sandy-silt, also sterile, *c.*0.60m wide and surviving to a thickness of *c.*0.53m. The deposits identified within cut [257] were devoid of finds.

The latest cut in the ditch sequence [253] (A) is described as linear feature with truncated wavy sides sloping at approximately 45°. It was *c.*1.42m wide where excavated and *c.*0.56m deep, with a flat and central base. A single fill (252), comprising mid-grey/brown sandy-silt with medium rounded stones and charcoal flecks, contained a relatively significant amount of Roman pottery, overwhelmingly 2nd century in date, CBM and animal bone.

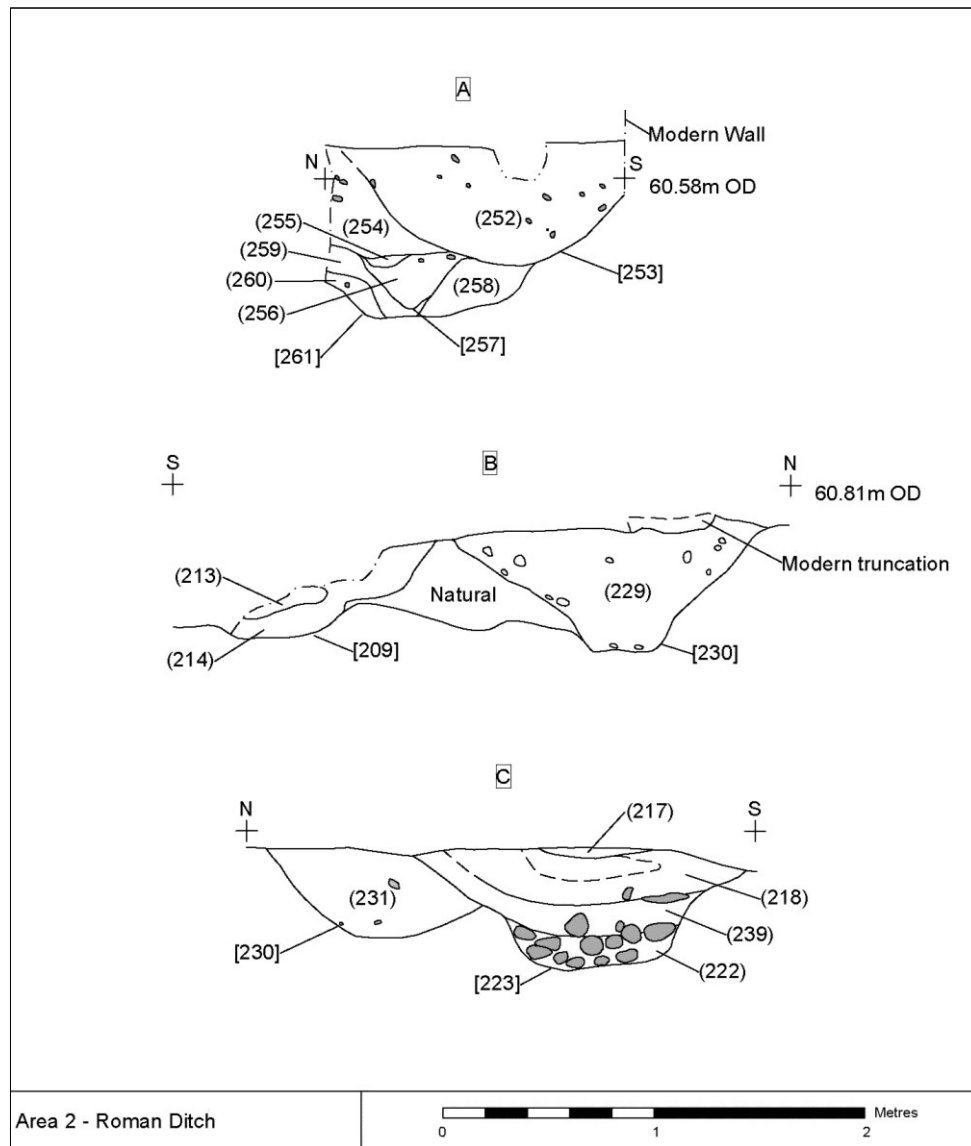


Figure 16: Roman boundary ditch [230] sections

The second slot **(B)** across the feature [230] [253] was *c.*0.40m in width. Here east-west linear [230], *c.*1.50m wide and *c.*0.60m deep is described as having approximately 45° slightly wavy sides breaking gradually near the flat, central base. Single fill **(229)**, min-brown/grey friable silty-clay continued beneath a modern concrete wall footing to the northwest and yielded Roman pottery dated to the 2nd century AD, iron slag, some possibly residual pottery of high/late medieval date and animal bone. It was truncated to the south-east by a medieval pit (not seen on section).

Slot **(C)** investigated the ditch where it was truncated by a medieval pit. Here linear cut [230] is seen as having a regular concave profile with sides merging into a central and concave base. The cut was originally *c.*1m+ wide and *c.*0.42m in depth. Single fill **(231)**, mid-orange/brown compact silty sand contained 2nd century Roman pottery, and animal bones. It was sampled for environmental remains.

Metalled Surface (238) (Figure 17)

Three patches of truncated remains of undated metalled surfaces **(238)** were identified, each lying along the southern edge of the boundary ditch **[230]** **[253]**. These consisted of small-large sub-rounded and rounded stones and pebbles set within a light orange brown sandy silt deposit with some clay. No finds were recovered from this feature although it's consistent, albeit sporadic appearance immediately and exclusively alongside the southern edge of the possible boundary ditch may suggest a contemporary relationship to it.



Figure 17: Metalled layer **(238)**, looking north-west

Early/High Medieval (Figure 18)

Pit [223] (Figure 16)

Circular pit **[223]**, located in the north-east of Area 2 was truncated by modern cellar wall footings to the south and cut the Roman boundary ditch to the north. Only partially excavated, it was *c.*1.50m wide, *c.*0.60m deep and had *c.*45° sides gently breaking and becoming steeper before levelling to a central and flat base. The function of the pit was unclear and it was devoid of finds. Fill **(222)**, *c.*0.35m deep and *c.*0.70m wide, consisted of large predominantly river worn cobbles with fewer granite stones, densely packed to form a crude surface that, without signs of burning, is unlikely to represent the bottom of a hearth. Dark-brown silty-clay fill **(239)** was *c.*0.10m deep and contained charcoal and some cobbles perhaps displaced from the lower deposit but devoid of finds. Fill **(218)**, *c.*0.20m deep, mid-brown silty-clay, contained crushed lime mortar fragments and early/high medieval pottery. Shallow

upper fill (217), possibly the remains of a later truncated feature, was *c.*0.06m and contained pottery dated to the late/high medieval period. It was a dark-brown silty-clay and contained mortar and slate fragments.

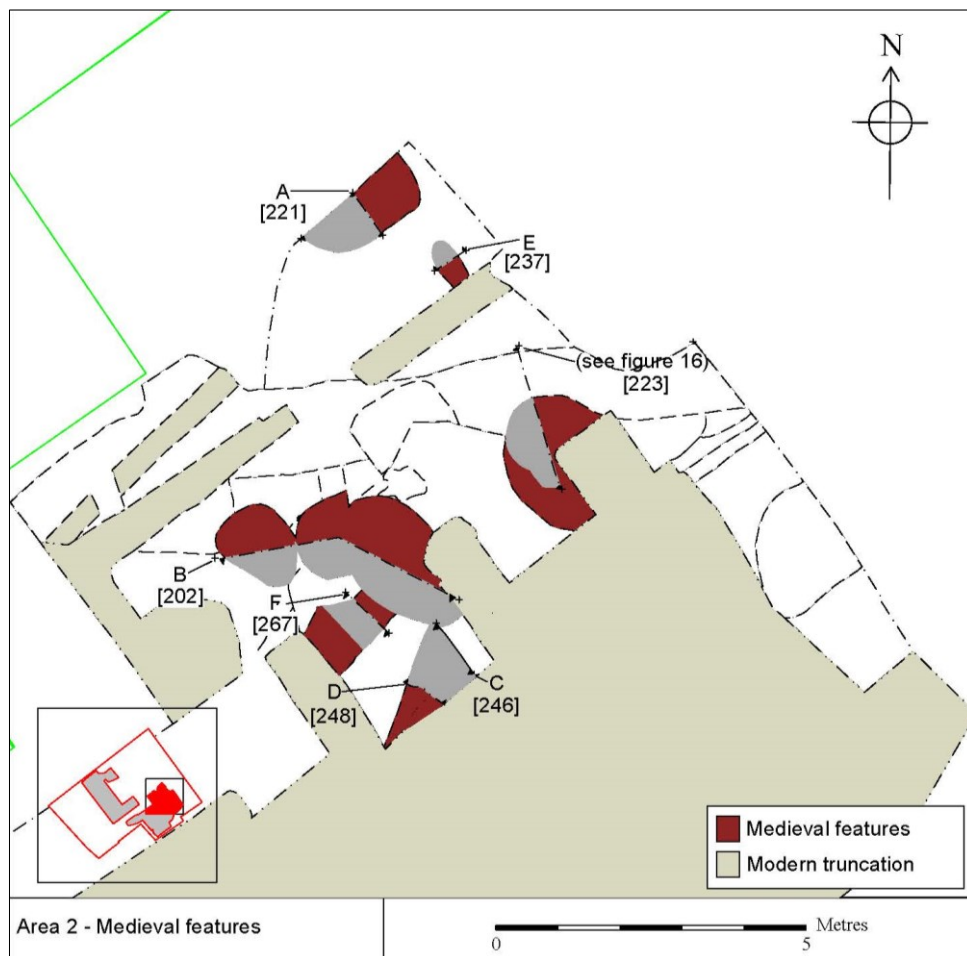


Figure 18: Plan of Area 2 - Medieval

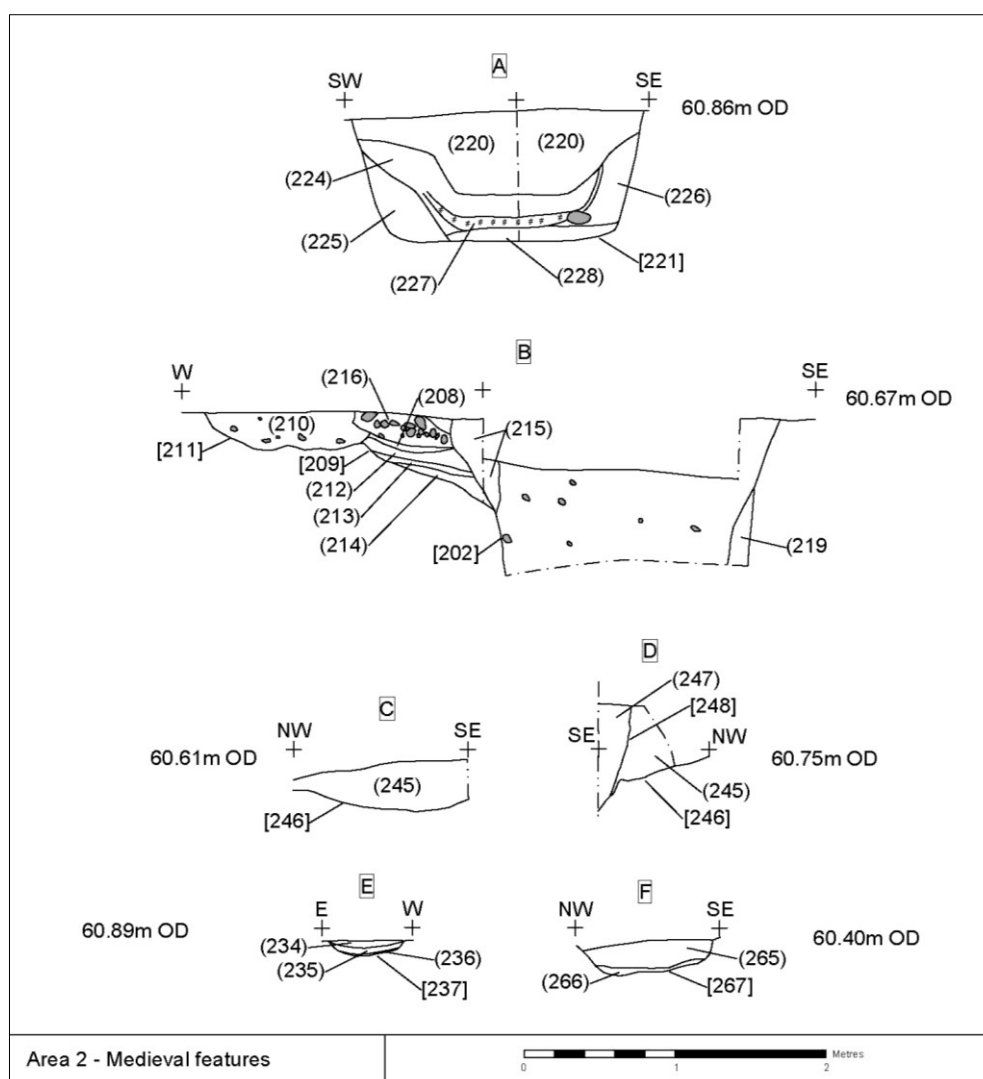


Figure 19: Area 2 – Medieval feature sections

High/Late Medieval (Figure 18)

Pits [221] [202] [209] [246] [248] [211] [237] (Figure 19) (Figure 20) (A)-(E)

At the north-east edge of the site and extending beneath the limit of excavation, circular pit [221] (A) was investigated and observed to contain several fills. The cut was *c.*1.93m wide and *c.*0.89m deep, with steep, almost vertical straight sides and a central flat base. Fill (228), light-yellowish brown silty-clay, *c.*0.10m deep, contained animal bone and mineralised woven basket fragments, possibly thin reed or straw (see below). Light-yellowish brown soft silty-clay fill (225), representing one of the earlier pit deposits and up to *c.*0.40m deep, was observed on the western edge and was devoid of finds, as was similar fill (226) on the southern edge. Fill (224), *c.*0.15m deep, dark-greyish brown soft silty-clay with occasional large cobbles was also absent of finds. Running through this fill and towards its base, a shallow charcoal rich band (227), *c.*0.10m deep, was observed containing charcoal fragments and flecks. It also contained environmental plant remains. Upper fill (220), dark-brown silty-clay with occasional clay lumps and slate fragments, was *c.*0.35m deep, *c.*0.70m wide and

contained animal bone and was dated by pottery to the high/late medieval period but its function was unascertained.

Sub-circular pit **[202] (B)**, was *c.*2.15m wide, stone lined and possibly represented a well feature. Its north-west edge truncated pit **[209]** and to the south it was truncated by a modern cellar wall footing. With steep almost vertical sides, at a depth of *c.*0.97m, the base remained unexcavated due to health and safety considerations. Single fill **(201)**, mid/dark-grey/brown clayey-silt, with medium rounded stones, contained pottery dated to the high/late Medieval period, animal bone and three lumps of copper working slag (**SF's 157, 158, 159**). Located around the eastern edge of the cut was a single surviving course of stone lining **(207)**, the southern extent having apparently been robbed away. Typically 140 x 80 x 30mm, large sub-angular granite blocks were packed vertically into the edge of the cut and rested horizontally on a purpose dug "shelf". They appeared to be roughly bonded with a friable red/brown mortar/clay mix **(219) (215)** which continued down the cut to on the southern edge. The stone lining was devoid of finds.



Figure 20: Medieval pits **[202]**, **[209]**, **[211]**, looking north

Sub-circular pit **[209] (B)** had *c.*45° straight sides and was truncated to the southeast and west. It was observed in a slot targeted to investigate a sequence of interrelated features but its function is unclear. Primary fill **(214)** mixed friable clay and grey silt *c.*0.60m wide and *c.*0.27m deep. Fill **(213)** was *c.*0.05m deep, mid-brown/grey sandy silt with clay patches and fill **(212)**, mid-light/yellow brown loose sandy/mortar mix with an abundance of crushed mortar, was *c.*0.25m deep and *c.*0.65 m wide. These lower deposits were devoid of finds. Upper fill **(208)**, *c.*0.57m wide, *c.*0.05m deep, dark-brownish friable-loose grey clayey silt with evidence of burning, lay directly

below a layer of stones **(216) (205)**. It may represent the remains of a heavily truncated oven/surface, the lower material of which are slumping into the pit beneath. The stones/burnt stones/cobbles were sub-rounded and those of ovoid shape were commonly set upright within a silty matrix also containing upright slate fragments and pottery dated to the early/high Medieval period. The deposit was sampled and contained barley oats used in the brewing process.

Located on the southern edge and truncated by a later pit and modern cellar wall footings, pit **[246] (C) (D)**, again of uncertain function, was partial excavated. This revealed a linear cut with relatively gradually sloping sides of *c.*45°. The slot was *c.*0.46m deep although the base was not excavated. Fill **(245)**, mid-grey/brown friable silty-clay contained a very large stone, animal bone and pottery dated to the late/high medieval period.

Of similar uncertain function, heavily truncated by cellaring to the south-east, Pit **[248] (D)**, *c.*0.70m deep and *c.*0.80m+ wide, appeared to post-date pit **[246]**. The early/high medieval pottery it yielded is likely to be residual. It was sub-circular, where visible, with steep *c.*60° sides. Single fill **(247)**, mid/dark-grey brown friable silty-clay contained mortar and charcoal fragments.

Sub-circular pit **[211] (B)**, located to the northwest, had relatively irregular sides and slightly wavy central base. This feature post-dated pit **[209]**. Single fill **(210)**, mid-grey/brown silty-clay, contained charcoal, animal bone and pottery also dated to the high/late medieval period. Its function was not ascertained.

A shallow oval pit **[237] (E)** of undetermined function, *c.*0.09m deep and *c.*0.45m wide, was located to the south of **[221]**. Orientated north-south, it had relatively gently sloping sides merging with a central and concave base. Primary fill **(236)**, *c.*0.02m, dark-greyish brown soft silty-clay layer contained burnt bone fragments and charcoal flecks. Above this yellowish brown sandy fill **(235)** was *c.*0.04m deep and devoid of finds. Upper fill **(234)**, *c.*0.03m deep, contained early/high medieval pottery and bone. It was dark-greyish brown silty-clay with occasional pebbles.

Gully [267] (Figure 19) (F)

Linear feature **[267] (F)** a north-east/south-east orientated gully, *c.*0.88m wide and cut to the north-east by pit **[202]** and to the south-east by modern cellaring, was re-investigated after initial excavation during evaluation (Morris 2014 A5-2014, [05]). It had steep sides and a flat central base. It contained two fills; primary brownish red silty-clay fill **(266)**, *c.*0.10m deep and **(265)**, *c.*0.19m deep, dark-brown silty-sand containing later medieval pottery, but its function was not determined.

Post-Medieval (Figure 21) (Figure 22)

Pit [249] (Figure 22) (A)

Located on the north-eastern edge of Area 2 sub-rectangular pit **[249] (A)** was investigated but remains of undetermined function. It was *c.*0.45m wide and *c.*1.70m in width, with irregular sides and central but irregular base cut into good substratum.

Primary fill **(262)** was pink re-deposited clay, devoid of finds. Fill **(251)**, *c.*0.10m deep, dark-grey brown clayey/silt, contained *c.*40% charcoal flecks and fragments, and animal bone along with traces of barley oats used in the brewing process. Upper fill **(250)**, dark-grey black clayey/silt, *c.*0.30m deep, contained less charcoal and pottery dated to the early/later post-medieval period.

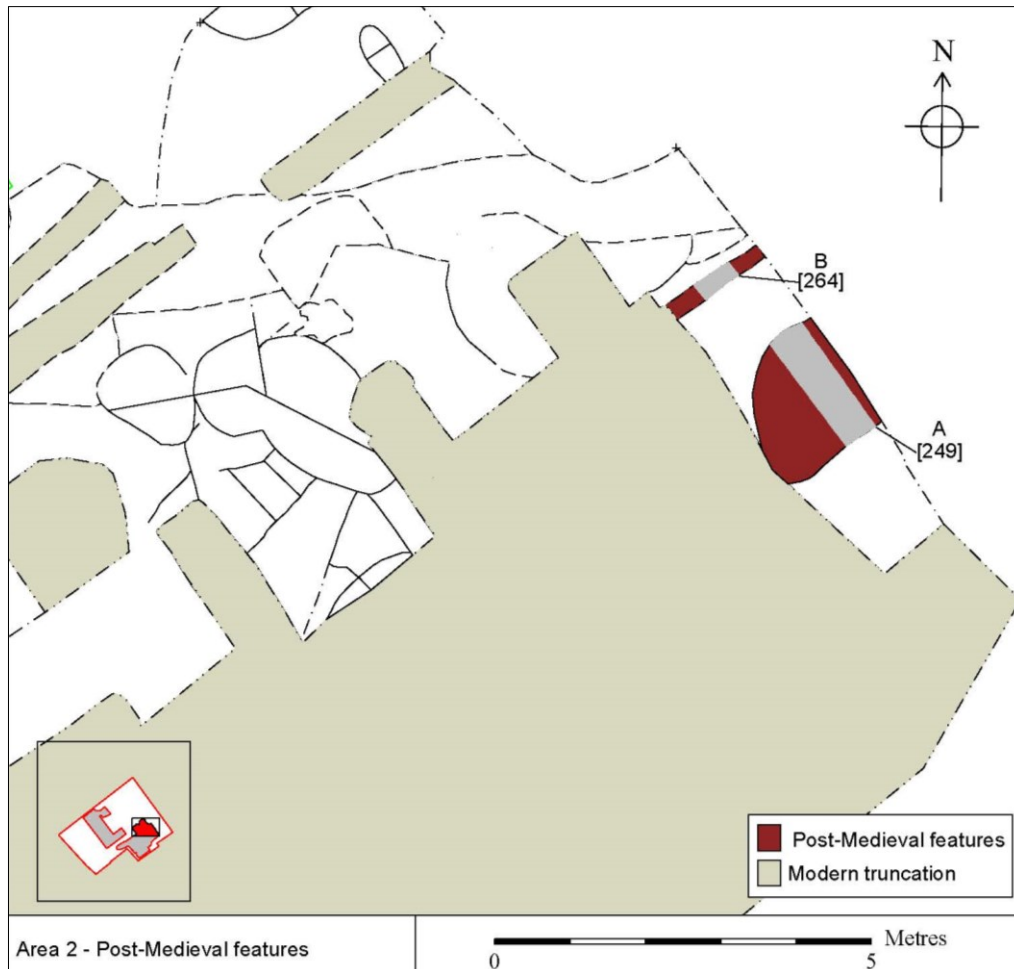


Figure 21: Plan of Area 2 – Post-Medieval

Gully [264] (Figure 22) (B)

Also located on the eastern side of Area 2, Gully **[264] (B)** was excavated. A linear feature with shallow sloping sides, it was *c.*1.50m long, truncated to the west by modern cellaring and ran east-west and beneath the edge of site to the west, *c.*0.30m wide and *c.*0.06m in depth. Single fill **(263)**, dark-brown silty-clay was devoid of finds and unclear of function but the similar nature of the deposit to other post-medieval/modern features suggested a contemporary date.

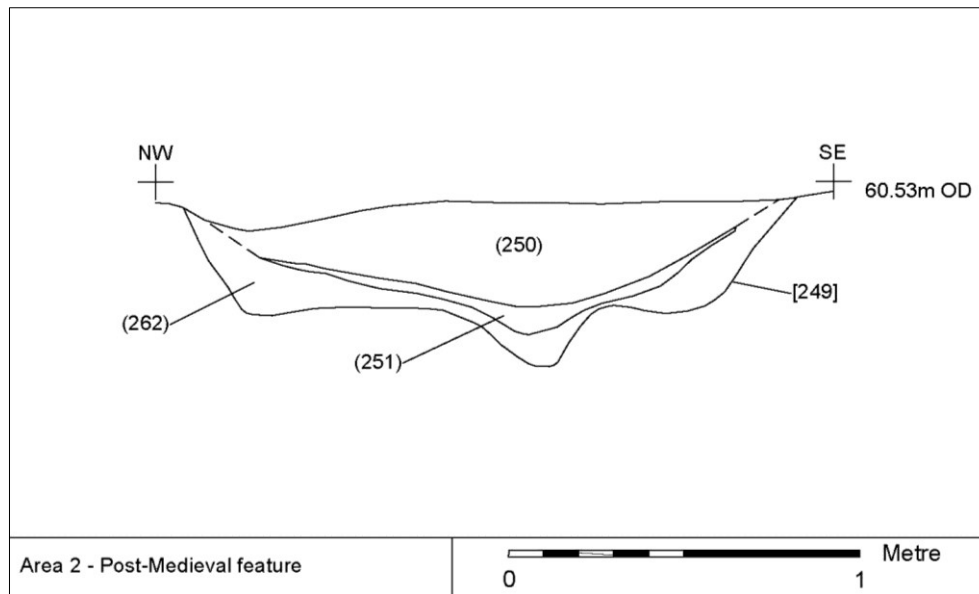


Figure 22: Post-Medieval feature [249] section

Modern

The earlier levels of Roman and medieval archaeological deposits on Area 2 was subject to widespread truncation and destruction, primarily by Victorian cellaring, but also service trenches running east-west. Cellars fronting the modern day Oxford Street and were known from the Desk-based assessment of the site and were confirmed during machining. Other cellars were uncovered running east-west away from Oxford Street and along the south of the development area. These were investigated by machine and found to be up to *c.*2m deep. Any archaeological remains within the footprints of these cellars are likely to have been completely destroyed during their construction.

Area 3 (Figure 23) (Figure 24)

Area 3, in the south-west part of the development area comprised a small rectangular area, measuring *c.*3.2m in length and *c.*2.40m in width, *c.*10 metres square, with archaeology confined between the substantial cellar walls representing heavily truncated medieval and post-medieval pits. These were subject to partial excavation due to health and safety reasons.



Figure 23: Area 3, looking north

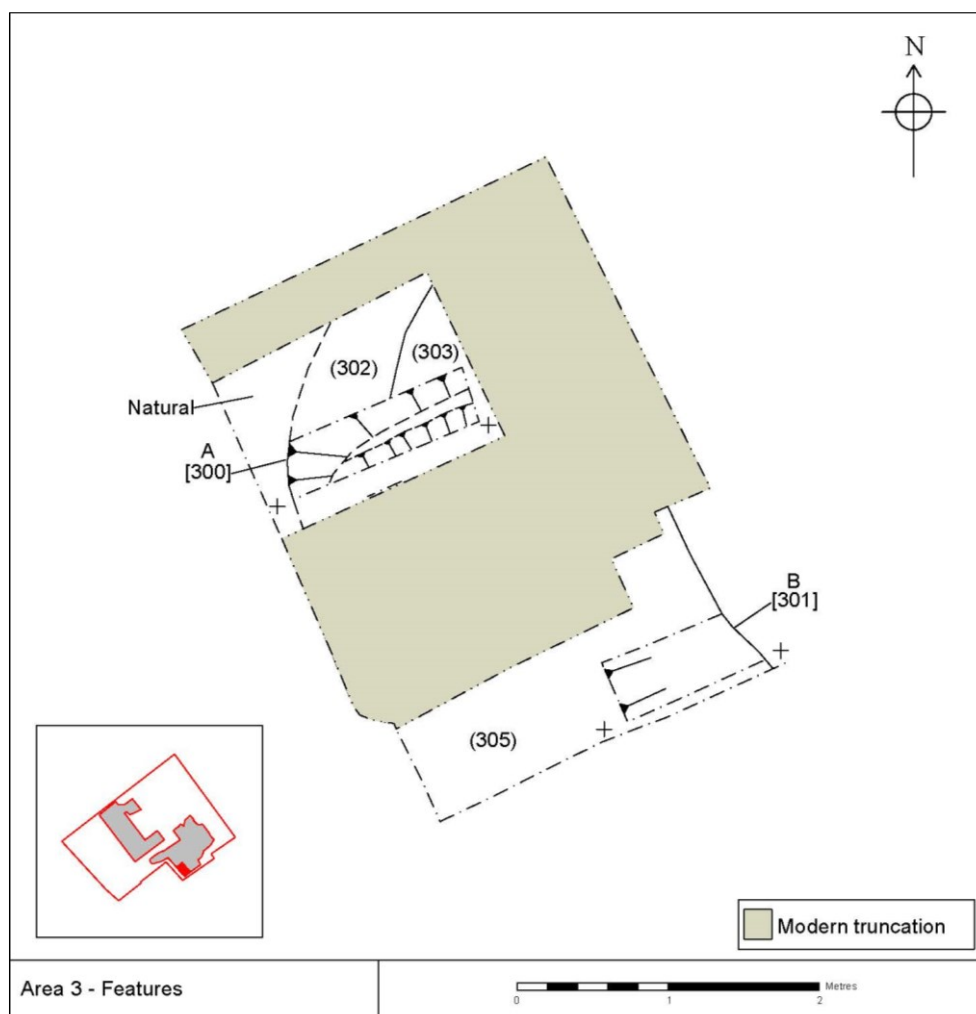


Figure 24: Plan of Area 3

Medieval

High/Late Medieval Pit [300] (Figure 25) (A)

Pit [300] (A), of uncertain function was located to the north of Area 3 and was heavily truncated by modern cellar wall footings, leaving only the slightly curving eastern edge intact. At *c.*0.65m+ in depth, it was not fully excavated. The lowest fill (304), *c.*0.40m in depth, mid-grey/brown loose silty-sand, was devoid of finds, as was fill (302), mixed loose red/brown sand with lenses of mid-grey sand, *c.*0.35m in depth. Surviving upper fill (303), *c.*0.25m in depth and *c.*0.70m wide, mid-grey/brown slightly mottled clayey-silt with occasional clay patches, contained high/late medieval pottery.

Post-Medieval

Early/Later Post-Medieval [301] (Figure 25) (B)

Only one vertical edge of pit [301] (B) survived truncation by the wall footings and health and safety considerations made full excavation unfeasible. At a depth of *c.*0.40m and width of *c.*1.40m+, the single fill (305), dark-grey/brown silty-clay was interpreted as re-deposited garden soil and contained pottery of an early/late post-medieval date although its function also remains elusive.

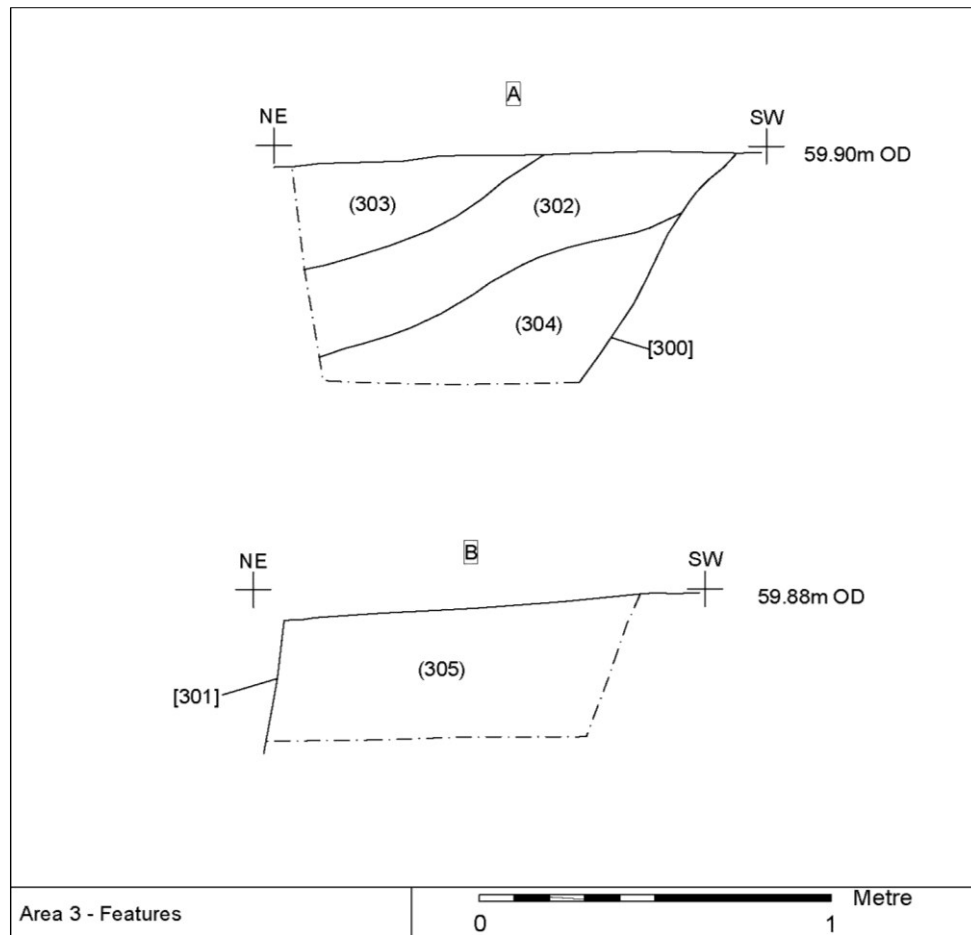


Figure 25: Area 3 sections

Modern

Brick structures and footings associated with the construction of Victorian cellar walls both limited the size of Area 3 and led to the truncation of the surviving archaeological deposits within it.

Area 4 (Figure 26)

Area 4, at the north-eastern end of the driveway in the southern plot was roughly rectangular and located beneath the projected line of the Tripontium road. It was *c.*7m long and 2.25m wide, covering an area of *c.*19 metres square. Several pockets of metallised surface were revealed that may represent intermittent survival of this substantial feature, identified at other sites in the immediate and wider vicinity. Pre-road cut Roman features were identified below these deposits, including post-holes and a pit and the road surface was cut by medieval pits to the west and overlain by a later metallised surface to the north. There was some modern truncation by drainage to the north and some later post-medieval and Victorian activity overlying these deposits.

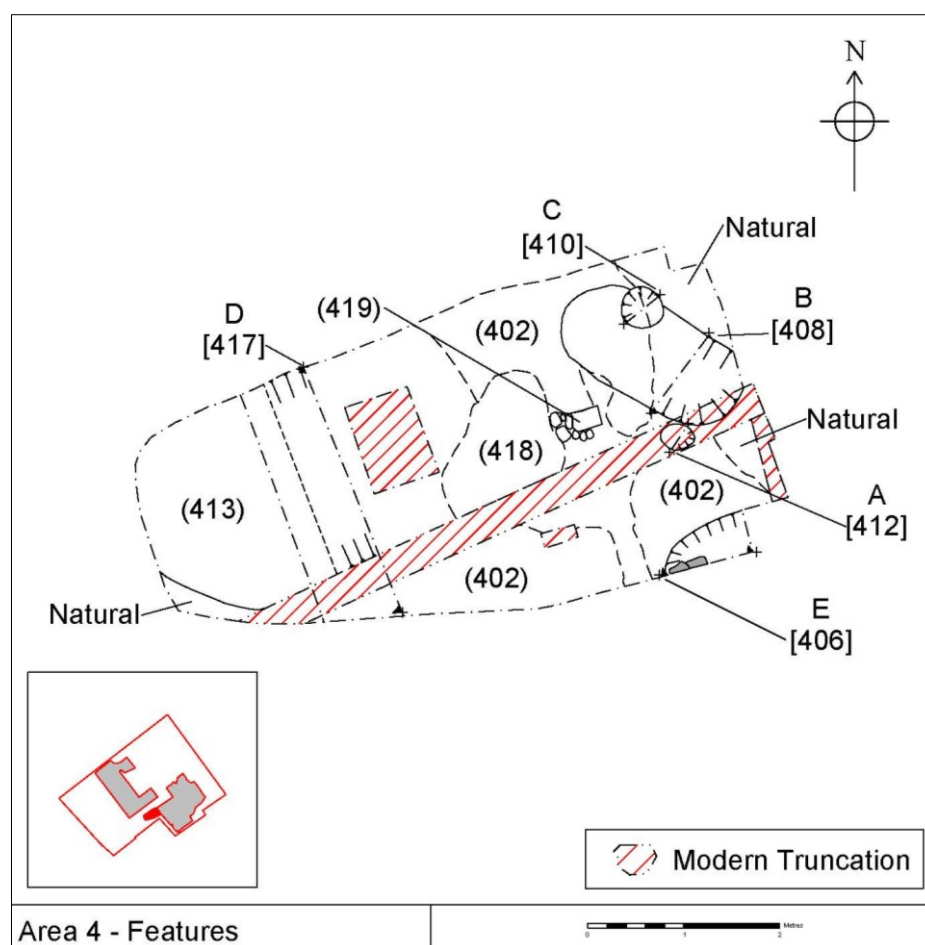


Figure 26: Plan of Area 4

Roman (Figure 26)

Roman Pit [408] and post-hole [410] (Figure 29) (B) (C)

Two interrelated features were identified and excavated directly beneath the layer interpreted as a surviving layer of the Tripontium road. The relationship between them was undetermined and both were devoid of datable finds.

Located towards the northern edge of Area 4, oval pit [408] (B), c.1.90m long, c.0.95m wide and c.0.32m deep, orientated northeast/southwest, had steeply sloping sides and a slightly concave base. It was cut into the natural substrata. Single soft fill (407), mixed dark-brown and orange/brown silty sandy clay, with charcoal flecks, slate fragments and rounded cobbles, was devoid of finds. It was post-dated by post-hole [410], post-dated by the road surface and truncated by a modern drain. Its function was not ascertained.

Posthole or small pit [410] (C), on the northern edge of Area 4, also beneath surface (402), circular in plan, had a diameter of c. 0.40m and depth of c.0.10m, with gently sloping sides and concave base. Single mid-brown silty clay soft fill (409), contained slate fragments, occasional pebbles and a large fragment of CBM, but was devoid of finds. It cut pit [408] on its northern edge and was possible structural in function.

Roman Road (402) (Figure 26) (Figure 27)

The position of the Tripontium road, as identified previously (Thomas 2010; Higgins 2010) is projected to traverse Areas 1 and 4. Any evidence of the road layers had been removed from Area 1 by widespread levelling but the extension of the stripped area at the west of the driveway leading to the southern plot of the development area revealed an island of archaeological deposits including three patches of metallated surface (**402**) which, although devoid of finds, based upon position and stratigraphic relationships, may constitute the truncated remains of this feature. Recorded as tightly packed small-medium pebbles with the occasional larger cobble in an orange/brown silty-clay matrix, these were overlying and packed into the natural clay. The surface layer had been cut by later Roman pit [408], medieval pit [417] and post-medieval spread (418).



Figure 27: Roman road metallation (**402**), looking south-east

Early/High Medieval

Pit [406] (Figure 29) (E)

Located in the south-east corner of Area 4 and cutting through the Roman road layer (**402**), Pit [406] (E), possibly circular, was only partially visible, surviving below the overburden (400) to a depth of c.0.28m with gently sloping sides and an uneven base. Single dark-greyish/brown soft silty-clay fill (**405**) contained pottery dating to the Early/High Medieval period and animal bone. There was no evidence as to the pits function.

High/Late Medieval

Pit [417] (Figure 29) (D)

Located in the western side of Area 4 was a large oval pit [417] (D) of unclear function, containing four fills (413) (414) (415) (416), with a total length of c.3.80m, width of c.2.20m and depth of c.1.04m. This also cut through the Roman road levels (402) to the east. It had almost vertical sides with a flat base and was orientated east-west. The upper fill (413), c.0.28m deep, mixed firm dark-brown and orange mottled silty-clay, and immediately below this, softer very dark-greyish brown silty-sandy-clay (414), between 0.10 - 0.40m deep, both contained pottery dated to the High/Late Medieval period and animal bone.

Surface (404)

Surface (404) was located in the north-east of Area 4 above possible Roman road surface (402). It was c.1.60 x c.1.80m, truncated to the south by a modern drain and to the north by a modern property wall. It consisted of small/large rounded pebbled compacted fairly firmly into a mid-brown silty-sandy-clay matrix and was dated through pottery to the early/late medieval period.



Figure 28: Wall foundation (403), looking south-west

Post-Medieval (Figure 26; Figure 29)

Early/Later Post-Medieval Layer (418) (Figure 26)

Layer (418) was an amorphous spread of very dark-greyish/brown silty-clay with CBM fragments, crushed mortar and slate with charcoal flecks overlying the Roman road deposits (402) and the medieval pit [417]. It was less than 0.10m thick and contained pottery dated to the post-medieval period along with clay pipe potentially associated with the remains of a brick and stone wall/surface (419).

Wall foundation (403) (Figure 28)

A short stretch of wall foundation (**403**) was located in the north-east of Area 4 overlying metallised surface (**404**). Measuring *c.*1.00m in length and *c.*0.45m in width, it consisted of sandstone building materials, dry bonded, and was associated with pottery of an early/later post-medieval date.

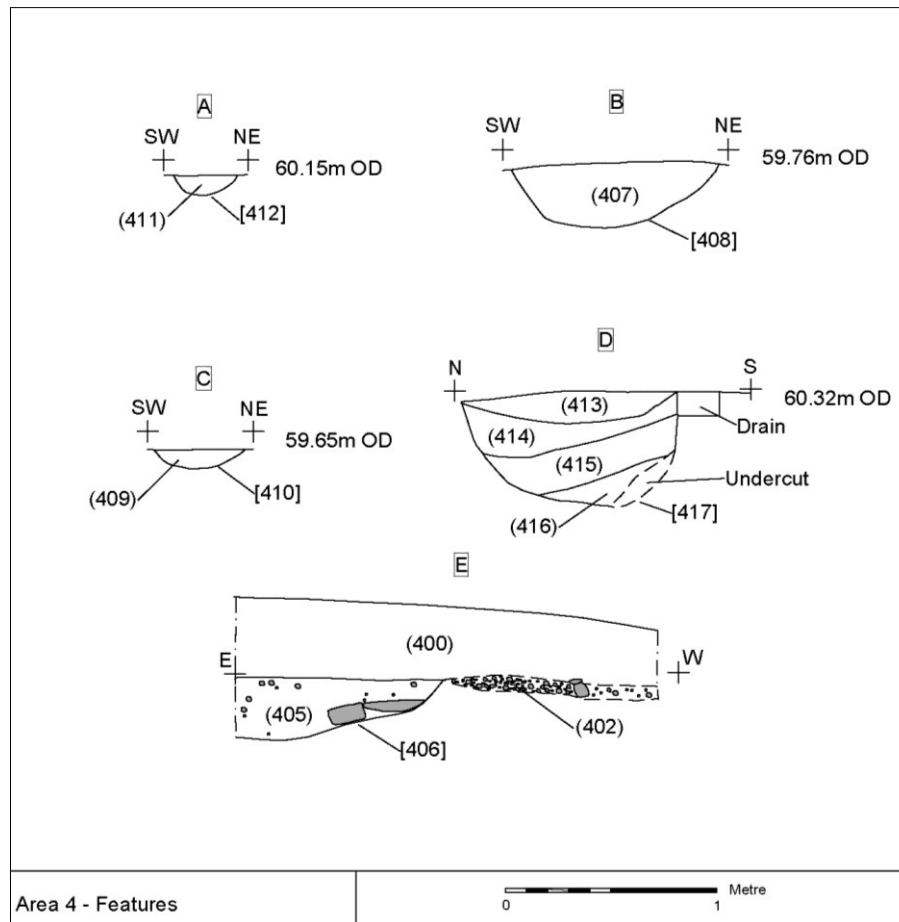


Figure 29: Area 4 sections

Victorian/Modern

Surface (401) (Figure 30)

A layer of cobbling (**401**) was located centrally within Area 4 and although no datable finds were recovered it is thought to be of Victorian or later in date and may represent the remains of a former yard surface. It covered an area *c.*1.20m x 0.66m and overlay the remains of the possible Roman road (**402**).

Layer (400) (Figure 29)

At the base of Area 4 was a layer, *c.*0.40 thick, of dark-brown silty-clay (**400**) with charcoal flecks, clay pipe fragments, post-medieval and modern pottery.



Figure 30; Roman road surface (402), cobbled surface (401), looking south-west

Area 5 (Figure 31)

Area 5 was excavated on the western side of the site through a former entrance driveway. It was a small square area measuring *c.*2m (east-west) by *c.*1.8m (north-south) and was *c.*0.80m deep. Its purpose was to evaluate and determine the survival of archaeological deposits further towards Grange Lane from Area 4 and to the immediate west of the projected line of the Tripontium road.

At the base of the trench natural substratum of pink clay with orange sand and gravels was revealed, a level that had probably been truncated in the recent past. The general east-west (60.44m OD – 60.28m OD) gradient of the base of this trench may indicate this truncation occurred during construction to form the slope for the driveway down to the level of Grange Lane. Directly overlying the natural subsoil is a layer of brick/rubble, *c.*0.65m deep, and above this a *c.*0.15m thick modern concrete slab. No archaeological deposits or features were observed with Area 5.



Figure 31; Area 5, looking south-west

The Roman Pottery

Elizabeth Johnson

Assemblage Size and Condition

An assemblage comprising 339 sherds of Roman pottery weighing 6.8kg with an EVEs value of 6.09, was retrieved from the excavations. The average sherd weight of 20.1g suggests good levels of preservation. There was evidence of later disturbance, with 40 sherds (11.8%) recovered from post-Roman deposits.

Methodology

The pottery was examined in hand specimen using a binocular microscope at x15 magnification and classified using the Leicestershire fabric series for Roman pottery (Pollard 1994). Specific fabrics were assigned to all sherds wherever possible within the archive dataset, however, in this report the generic ware groups summarised below are used for clarity of quantified data presentation.

Table 1: Summary of Roman pottery fabric series (Pollard 1994).

Fabric Code:	Fabric Type:	Fabric Code:	Fabric Type:
Sam	Samian wares	GW	Grey wares
C	Colour-coated wares	CG	Calcite gritted (shelly)
MO	Mortaria	OW	Oxidised wares
AM	Amphora	WW	White wares
BB1	Black Burnished wares	WS	White slipped wares

Quantification was by sherd count, weight (grams) and estimated vessel equivalents (EVEs based on rim values). Average sherd weights (ASW) have also been calculated to provide an indication of the condition of the material and levels of preservation within the assemblage. Vessel forms were assigned where diagnostic sherds allowed, using the Leicestershire Museums form series and other published typologies. The dataset was recorded and analysed within an Excel workbook, which comprises the archive record.

Summary of major pottery fabrics within the assemblage

The table below details a summary of the major pottery fabrics within the assemblage as a whole. Figure shows the percentage of fabrics present by EVEs as a measure of individual vessels identified, whilst sherd count is shown to enable comparison with other published sites. All references to percentage values relate to sherd count unless otherwise stated.

Grey coarse wares account for 42.2%, (45% of the EVEs), the majority of which are most likely locally made providing utilitarian jars and bowls for general household use. Most of the vessels are jars with 12 jar rims recovered, including rounded outcurved, roll necked, everted and lid-seated forms. A wide range of decorative styles are present including barbotine dot panels, grooves, cordons, incised lines, lattice and burnishing. Three vessels are either small jars or beakers, two of which are decorated with barbotine dot panels. This style of decoration dates from the late 1st century to around the middle of the 2nd century (Pollard 1994, 77). Three jars are hard fired and highly burnished comparable to East Midlands Burnished type wares dating to the 3rd and 4th centuries (Todd 1968).

Table 2: Quantification of the Roman pottery.

Fabric	Sherds	% Sherds	Weight (g)	% Weight	EVEs	% EVEs	ASW (g)
AM	6	1.8%	976	14.4%	0	0.0%	162.7
BB1	40	11.8%	475	7.0%	0.3	4.9%	11.9
C	37	10.9%	460	6.8%	0.845	13.9%	12.4
CG	45	13.3%	736	10.8%	1.215	20.0%	16.4
GW	143	42.2%	3072	45.2%	2.74	45.0%	21.5
MO	7	2.1%	226	3.3%	0	0.0%	32.3
OW	21	6.2%	473	7.0%	0.705	11.6%	22.5
Sam	30	8.8%	297	4.4%	0.285	4.7%	9.9
WS	1	0.3%	39	0.6%	0	0.0%	39.0
WW	9	2.7%	46	0.7%	0	0.0%	5.1
Total	339	100.0%	6800	100.0%	6.09	100.0%	20.1

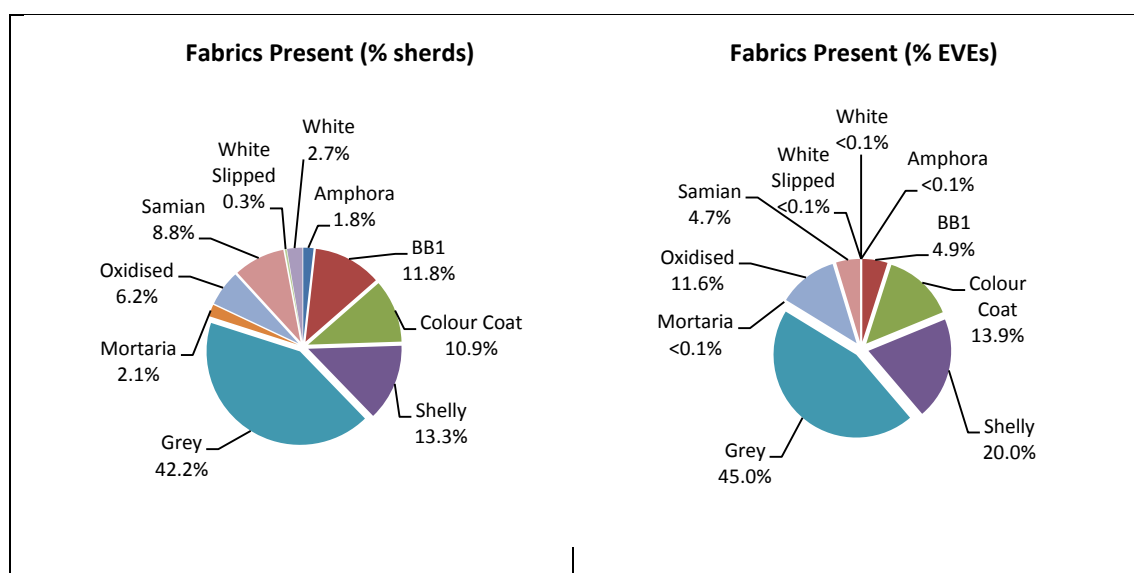


Figure 32: Roman pottery fabrics present by % sherds and EVEs.

The remaining vessels include four bowls, with bead rim, rolled rim and bead and flange rim forms present, ranging in date from the 2nd century through to at least the mid-3rd century. One of the bowls from [2] (6) has a burnished interior surface with lattice decoration. The external surface is also burnished and the fabric is comparable to the later East Midlands Burnished type wares of the 3rd and 4th centuries (*Ibid*; Pollard 1986, 5).

Shelly wares account for 13.3% (20% of the EVEs), the majority of which are later South Midlands shelly wares dating to the 3rd and 4th centuries. All the later wares were recovered from [2] (5) and (6) and comprise at least seven vessels. One flanged bowl dating to the later 3rd or 4th century is present; the remaining vessels are jars including six rims. The rim forms present included outcurved, slightly hooked and hooked rims, indicating a date range from the later 3rd century to the early-mid 4th century (Brown 1994, 62-77). One jar from the Bourne-Greetham kilns in

Lincolnshire dating to the later 2nd and 3rd centuries was recovered from [253] (252). The remaining shelly wares comprise jars dating to the 1st and 2nd centuries, including two neckless channel rim jars and a roll necked storage jar. The channel rim jars date to the mid-late 1st century; whilst the storage jar dates to either the later 1st or 2nd century.

The remaining coarse wares comprise white, oxidised and Black Burnished wares, illustrating regional pottery supply. Black Burnished wares form the largest component at almost 12%. Most of the vessels are jars with acute lattice decoration dating to the 2nd century, though one from [2] (5) has obtuse lattice suggesting a 3rd century date. There is also a flat rimmed bowl with intersecting arc decoration and a plain rimmed dish with acute lattice. Overall the forms present suggest a date range within the second half of the 2nd century, although some of the forms are long lived and there is one 3rd century jar (Holbrook and Bidwell 1991, 107-112). The oxidised wares comprise jars, beakers, flagons and a bead rimmed bowl. The beakers have roulette decoration, including a full profile of one vessel with a cornice rim from [230] (229) dating within the 2nd century. The latest datable vessel is a flagon produced at the Hadham kilns in Hertfordshire, recovered from [2] (6). These are not common in Leicester and date to the later 3rd and 4th centuries (Tyres 1996, 168-169). There is a small amount of white and white-slipped ware, comprising a jar and flagons dating within the 2nd century. Apart from the Hadham oxidised ware flagon, the most likely sources for the oxidised and white wares are Mancetter-Hartshill and Northamptonshire (Swan 1984, 98-101; Pollard 1994, 113-114).

The fine wares comprise samian wares and colour-coated wares, including imports and Romano-British products. Imported samian wares from South and Central Gaul account for 8.8% of the assemblage, representing at least 15 vessels. All except two are from Central Gaul, including four in the distinctively micaceous Lezoux fabric, and two possibly from Les Martres-de-Veyre. The forms present include Drag.18/31 dishes; Drag.37 decorated bowls and Drag.33 cups typical of the later 1st and 2nd centuries. The latest vessel form is a Drag.45 mortarium which dates to *c.*AD170-200 (Webster 1996). Colour-coated wares account for 10.9% representing at least 26 vessels and, with the exception of two Oxfordshire colour-coated wares, are all from the Nene Valley. Both of the Oxfordshire red colour-coated wares are from the Roman well [2](5)(6), and comprise two bowls, one with roller stamped roulette decoration and one with rosette stamps between the rim and a roulette band. The latter is comparable to Young form C59 which dates to *c.*AD310-360 (Young 1977, 162). The Nene Valley colour-coated wares are dominated by the later vessel forms such as bowls and dishes, dating to the later 3rd and 4th centuries. The forms present include bead and flanged bowls, plain rimmed dishes and bowls imitating samian Drag.31 and Drag.38 forms. Five beakers were identified, including one probably from a pentice moulded beaker dating to the later 3rd or 4th century. Other body sherds have metallic looking colour-coats suggesting a later 3rd or 4th century date (Howe *et al* 1980; Perrin 1999, 97). There is also one flagon, a form which is not easy to date as although common during the 3rd and 4th centuries, there is evidence to suggest production began at the end of the 2nd or early 3rd century (*Ibid*).

Specialist wares account for 3.9% of the assemblage. The six sherds of amphora are all Dressel 20 Spanish olive oil amphora. This is one of the most common types found in Leicester and dates from the mid-late 1st century through to the middle of

the 3rd century (Peacock and Williams 1986, 136; 142-143). Most of the mortaria are from Mancetter-Hartshill, including two in a fabric only produced during the 2nd century until c.AD170 (Pollard unpublished). The single mortarium from the Nene Valley is abraded and would not date before the middle of the 2nd century.

Stratified Features

The three main Roman features on the site comprise a road, a ditch and a well. No finds were recovered from the road, however the ditch in Area 2 and the well in Area 1, did produce the majority of the pottery within the assemblage.

Well

Contexts: [2] (5), (6).

The well was located in Area 1, to the west of the road line. A total of 151 sherds of pottery weighing 2.649kg, with an EVEs value of 2.385 was recovered from this feature.

This group is characterised by the quantity of later regional wares such as Nene Valley colour-coated wares, South Midlands shelly wares, and later grey and oxidised wares. With the exception of two sherds, all the colour-coated ware from the assemblage as a whole was recovered from (5) and (6). The other two sherds were found in post-Roman contexts. As previously discussed, the majority of the colour-coated ware is from the Nene Valley, with later forms dating to the late 3rd and 4th centuries dominating. The Oxfordshire colour-coated ware also dates to the later 3rd and 4th centuries. All the later South Midlands shelly ware within the assemblage was recovered from (5) and (6), including a flanged bowl and jars dating to the later 3rd and 4th centuries. The Black Burnished ware includes a jar with obtuse lattice, suggesting at least a 3rd century date, whilst the oxidised ware includes the Hadham flagon, again dating to the later 3rd or 4th century. The grey wares comprise jars and bowls including East Midlands Burnished type wares dating to the 3rd and 4th centuries. This includes the bowl with burnished lattice decoration on the internal surface. Sherds from this vessel were recovered from (5) and (6). There are some grey, white and oxidised wares that probably date to the 2nd century, along with five 2nd century samian ware vessels. The samian ware includes the Drag.45 mortarium which dates to the second half of the 2nd century. Most of the samian ware is abraded and is probably residual in this group. There is also one abraded sherd of mortarium from the Nene Valley, and a sherd of Dressel 20 amphora within this group.

Ditch

Contexts: [230] (229), (231), (240), (241); [253] (252).

A ditch, believed to be a Roman property boundary ditch, was located in Area 2, to the east of the road line. A total of 141 sherds of pottery weighing 3.353kg, with an EVEs value of 2.805 was recovered from this feature.

In contrast to the well on the opposite side of the road, this group is overwhelmingly 2nd century in character. The fine wares are 2nd century samian wares, including a decorated Drag.37 bowl possibly in the style of the potter *Cinnamus* based on the

decoration. This would suggest an early-mid Antonine date, *c.*AD135-170. The rest of the samian comprises a cup and two dishes dating to the first half of the 2nd century (Webster 1996, 32-33; 84). Similarly the Black Burnished ware comprises jars and a plain rimmed dish with acute lattice decoration, dating within the 2nd century (Holbrook and Bidwell 1991, 107-112). One of the jars has limescale type deposits on the interior. The oxidised, white and white-slipped wares also date within the 2nd century and comprise jars, beakers and flagons. The white-slipped ware flagon or flask has limescale type deposits on the interior. The oxidised wares include a devolved ring necked flagon, a jar with an everted rim and two beakers with roulette decoration, including a full profile of one with a cornice rim. Grey ware jars form the bulk of this group, with forms including outcurved rounded rims, everted and lid-seated rims. The decorative styles present include burnishing, grooves, cordons and barbotine dot panels. Together these forms and styles of decoration indicate a late 1st and 2nd century date (Pollard 1994, 77; Johnson 2009, 27). The shelly wares include a neckless ledge rim jar dating to the mid-late 1st century from [230] (229), along with a roll necked storage jar and a Bourne-Greetham jar from [253] (252) dating from the later 2nd century into the early 3rd century. There is also one sherd of mortaria from Mancetter-Hartshill and two sherds of Dressel 20 amphora within this group.

The material from this feature is typically 2nd century in nature, with the latest datable vessel being the Bourne-Greetham shelly ware jar. This could still date within the second half of the 2nd century and given the quantity of other material all dating within the 2nd century, a 2nd century date seems most likely.

Discussion

The assemblage is fairly small and approximately 12% of the material is residual in post-Roman features. Having said that, the material is generally in good condition and there is enough to characterise the assemblage. The two Roman features from which pottery was recovered both provide good coherent groups of material and illustrate the differences between earlier and later Roman pottery assemblages. The well in Area 1 is clearly late Roman, with later Roman colour-coated wares and coarse wares dating to the later 3rd and 4th centuries. The pottery from the ditch in Area 2 is completely different, with no colour-coated wares, samian fine wares and typically 2nd century coarse wares.

The assemblage is similar to other urban assemblages from Leicester, and is also what would be expected from a site in the city dating from the 2nd century onwards. It is interesting to note the two features of such different dates are on opposite sides of the projected Tripontium Road, perhaps suggesting changes in the occupation and use of the area in the later Roman period.

The Medieval & Post Medieval and Modern Pottery

Deborah Sawday

The Ceramic Finds

Methodology

The assemblage was made up of 156 sherds of pottery, weighing 2.788kg, and a vessel rim equivalent of 1.2955, (calculated by adding together the circumference of the surviving rim sherds, where one vessel equals 1.00), together with eight fragments, 370 grams of ridge tile, and four fragments of clay tobacco pipe. The pottery and tile was examined under a x20 binocular microscope and catalogued with reference to the guidelines set out by the Medieval Pottery Research Group, (MPRG 1998; MPRG 2001) and the ULAS fabric series (Davies and Sawday 1999; Sawday 2009). The results are shown below (Table 3).

Table 3: The medieval and later pottery and ridge tile fabrics.

Fabric	Common Name/Kiln & Fabric Equivalent where known	Approx. Dates
ST1/2	Stamford – fine/very fine fabrics B/C, G B/(A) (1)	c.1050-12th C.
PM	Potters Marston ware - Potters Marston, Leicestershire (2)	c.1100- c.1300/50+
CC1	Chilvers Coton A/Ai, Warwick CTS WW01,?WW012, ?SQ51, (3)	c.1250-1400
CC2	- Chilvers Coton fabric C, Warwick CTS SQ30 (3)	c.1250/1300- 1500
MS2	Medieval Sandy ware 2– misc. coarse soft fired quartz tempered fabrics, including coarse Chilvers Coton fabrics A/Ai, and ? Nottingham, Burley Hill/Allestree, Derbyshire and Staffs(4)	Early/mid 13th C.-1400
MS3	Medieval Sandy ware 3 – misc. coarse hared fired quartz tempered fabrics -? Burley Hill/Allestree/Ticknall, Derbyshire or Staffs (4)	Early/mid 13th C.-c.1400- 1400/1450
CW2	Cistercian ware 2 -? Ticknall, Derbyshire (5)	c.1450/1475- 1550
MB	Midland Blackware - ?Ticknall, Derbyshire (5)	c.1550-1750
BO1	Bourne D ware (6)	c.1450-1650
MY	Midland Yellow ware - Ticknall, Derbyshire (5) (7) (8)	c.1500-1725
EA1	Earthenware 1 – Coarse Post Medieval Earthenware - Chilvers Coton/Ticknall, Derbyshire	c.1500-1750
EA2	Earthenware 2 – ‘Pancheon ware’, Chilvers Coton/Ticknall, Derbyshire	17th C-18th C. +
EA3	Mottled ware	1680-1780
EA6	Earthenware 6 - Black Glazed Earthenware	16th C.-18th C.
EA7	Earthenware 7 - Slipware - Staffs etc	17th C.-19th C.
EA8	Creamware	c.1730-1850
EA10	Fine White Earthenware/China	c.1750+
SW4	White Salt Glazed Stoneware	c.1730-1770
SW	Misc. Modern Stonewares	modern
(1) Kilmurry 1980, Leach 1987		(5) Woodland 1981, Spavold and Brown 2005
(2) Haynes 1952 , Davies and Sawday 1999		(6) Healey 1973
(3) Mayes & Scott 1984, Soden and Ratkai 1998.		(7) Gooder 1984
(4) Cumberpatch 2002-2003, Nichol and Ratkai 2004.		(8) Woodfield 1984

The Stratigraphic Record

The pottery has been divided into ceramic phases based on the range of pottery fabrics and vessels present. However, as the medieval levels had been heavily truncated, and many contexts produced only one or two sherds, the sequences have been placed within fairly wide date ranges, bearing in mind the limitations of the dating evidence. Generally the pottery was fragmentary with a low average sherd weight and the identifiable vessel types are discussed together with the sequences described below.

Phase 8/9 – Earlier/High Medieval

Pits: 218, [248]

Ditch: 229

Layer: 243, 405

Assemblage: 5 sherds, 85 grams, 0.075 EVES, 17.0 AVS (average sherd weight).

Most of these context produced single sherds in Potters Marston which has a general date range of *c.*1100 to *c.*1300/50. A hammer-headed jar rim from context 243 and the body and base of a handle from a small jug in 218 were the only identifiable vessel types.

Phase 9/10 – High/Late Medieval

Pits: [202], [209], [211], [221], [237], [246], [417], 217, 220, 303, 413

Layer: 216

Cobbled Surfaces: 404,

80 sherds, 1250 grams, 0.465 EVES, 15.62 AVS

Five sherds were recovered from the layer, context 216, and another four from the cobbled surfaces, context 404; the rest of the pottery occurring in the pits. Glazed sherds in the Chilvers Coton fabrics CC1 and CC2 dominated this assemblage, most were evidently from jugs (Mayes & Scott 1984, fig.99.93), but at least one bowl and two jars were also present. A fragment of Potters Marston may have been part of the bung hole from a jar or cistern and another jar or cistern rim also occurred in CC2. No late medieval Midland Purple was present, but hard fired sherds in the later medieval fabric, Medieval Sandy ware 3, were recovered. Parts of two late medieval Cistercian ware cups including one with a pedestal base (Woodland 1981, figs.41.207 and 209) occurred in the pit [202], whilst a single sherd of late medieval or possibly early post-medieval Bourne D ware, fabric BO1, was found in the back-fill of another pit, context 220. The manufacture of this ware is thought to have ceased at Bourne after a fire in 1637.

Phase 11/12 – Early/ Later Post-Medieval

Ditch: [7]

Pits: 250, 305

Wall footing: 403

Spread: 418

Assemblage: 54 sherds, 1196 grams, 0.4805 EVES, 22.14 AVS

Most of this assemblage was recovered from the back-fills of the ditch [7], the pit 250 and the spread 418, and is characterised by the presence of both Midland Yellow, Mottled ware, fabric EA3, and Midland Black-ware, all with a terminal date in the

18th century. Of note was part of a wheel thrown hollow ware vessel with trailed slip decoration in the Slipware fabric EA7 in context 250. Four fragments of EA3 and three sherds in transitional Earthenware, fabric EA1/2, occurred in the back-fill context 403, of a wall footing. Nine more sherds of EA3, including the remains of two tankards or drinking mugs, and part of a shallow bowl in the White Salt Glazed Stoneware, SW4, were found in the spread, context 418; the latter also with a terminal date in the mid or later 18th century.

Phase 14- Modern

Layer – overburden: 400

Assemblage: 16 sherds, 241 grams, 0.175 EVES, 15.06 AVS

A range of post-medieval and modern wares were recovered from context 400, effectively sealing the earlier contexts below. The only identifiable vessel was part of a Mottled ware tankard.

Table 4: The medieval and later pottery site totals by fabric, sherd numbers, weight and average sherd weight (AVS) (grams) and EVES, in approximate chronological order.

Fabric	Sherds	Weight	AVS	EVEs
ST2/1	1	2	2.0	
PM	34	647	19.0	0.175
CC1	27	358	13.2	0.075
CC2	24	372	15.5	0.265
MS2	3	76	25.3	
MS3	11	102	9.2	0.025
CW2/MB	6	113	18.8	0.125
BO1	1	8	8.0	
MY	9	548	60.8	0.13
EA1/2	9	257	28.5	
EA3	18	178	9.8	0.2025
EA6	1	9	9.0	
EA7	1	5	5.0	
EA8	1	7	7.0	
EA10	1	7	7.0	
SW4	6	62	10.	0.123
SW	3	37	9.3	0.175
Totals	156	2788		1.2955

Discussion

There is little evidence here of any late Saxon pottery which might be associated with early agricultural activity in the South Field of the medieval town which had been noted on previous excavations on Grange Lane. However this small assemblage of pottery and tile, which dates from c.1100, when taken together with the presence of pits, does suggest backyard activity perhaps relating to housing fronting onto either Grange Lane or Southgate Street, now known as Oxford Street. As with earlier excavations, the relative proportions of the wares, may suggest a decline in activity in the later medieval period, but the assemblage is perhaps too small to come to any definite conclusions about this.

Conclusion

The excavations and the medieval pottery assemblage provide further evidence in accordance with previous archaeological work in the area, for example, (Gossip 1999, 48, Finn 2004, 25) in support of the documentary records, which suggested that suburban settlement existed here by circa 1200 (Courtney 1998, 124).

The range of pottery of fabrics is very similar to that found on other excavation sites in the city and in the south suburbs, save for the absence of Nottingham Splashed wares and late Saxon Lincoln/Lincolnshire Shelly wares, that are more commonly found within the city. This absence has also been noted on other suburban sites. Unfortunately the pottery sample is too small and fragmented to comment usefully on the range of vessels present – very few types were identifiable – but those that have been identified suggest the presence of typically domestic assemblages.

The Medieval Ridge Tile

Table 5: The medieval ridge tile site totals by fabric, fragment numbers and weight (grams).

Fabric	No.	Weight
PM	2	57
CC1	3	286
MS3	3	27
Totals	8	370

The ridge tile fabrics present covered the whole of the medieval period from *c.*1100 to *c.*1400/1450 and possibly originated from a long sequence of buildings and or repairs - perhaps from buildings in the vicinity as noted at Bonners Lane, for example, (Finn 2004).

Four ridge tiles fragments were found in the phase 9/10 contexts 217, 404 and [417]. Four more were residual in the phase 11/12 ditch [7], where one, part of a green glazed crest in the Medieval Sandy ware, MS3, was identifiable. This was a spiked knob crest, generally a typical later medieval form, but dated at the Austin Friars Leicester from *c.*1300 to *c.*1500 (Allin 1981, 62, fig.17.13).

The Clay Pipe

Three clay tobacco pipe stems were recovered in the post-medieval and modern contexts [7] and 400. The latter also produced a midland spur type clay tobacco bowl dating from *c.*1680 to 1710 (Coward and Speed 2009, fig.41.13-15).

Table 6: The medieval and later pottery, ridge tile and clay pipe by fabric/material, sherd/fragment numbers and weight (grams) by context.

context	fabric	no	gr	EVEs	comments
POTTERY					
11 [7]	PM	1	30	0.10	Everted & lid-seated jar rim, diam. 212mm
11 ditch	PM	1	5		Misc. body
11	CC1	5	22		Body, 4 glazed, 1 very hard fired/reduced
11	CC2	6	96		Body/base, 2 brown glazed
11	MS3	1	4	0.025	Simple jar rim, no diam, est EVE

11	CW2	2	4		Body - glazed
11	MY	2	3		Body - glazed
11	CW/M B	1	85		Fine black glazed hollow ware base.
11	MB	1	5		Pedestal base, oxidized body glazed black, glaze runs & stacking evidence under base, probably part of a multi-handled drinking vessel or tyg.
14 [7] ditch	MY	3	318		Complete/abraded hollow ware jar base, glazed internally & external wall. Base diameter c.130mm.
201 [202]	CC1	2	81		1 frag. internally glazed base of large bowl/jar.
201 pit	CC2	1	5		abraded
201	MS2	3	76		2 misc. internally glazed base, 1 with lime scale residue, & 1 body3
201	CW2	1	12		Small pedestal cup base, glazed, similar to groups 3 and 4 at the Austin Friars Leicester (Woodland 1981, fig.41.207 and 209).
201	CW2	1	7	0.125	Small cup rim & handle stub, glazed; rim diam. 80mm, probably from a two handled cup. Similar but not identical to group 3 at the Austin Friars, (ibid 1981, fig.41.207). .
208 [209]	PM	3	83		3 joining externally sooted flat base frags
208 pit	CC1	1	13		Hard fired body, glaze spots externally
210 [211]	PM	1	6		Jug neck
210 pit	CC1	1	11		Mottled green glaze, int & exterior.
216 layer	PM	4	131		Body/base sherds, externally sooted - misc
216	CC1	1	59		Green glazed strap handle with diagonal slashing, typical of later 13th C Chilvers Coton A wares (Mayes & Scott 1984, fig.99.93), site 3 kiln 16.
217 pit	CC1	3	16		Green glazed body –one vessel
217	CC2	4	49	0.20	Join – upright & carinated jug rim & neck, & part handle thumbing, mottled green glaze, diam. 110mm, (Mayes & Scott 1984, fig.74.303), site 4 kiln 24 – 14th C.
217	MS3	3	29		Misc. - 1 pot
218 pit	PM	1	21		Body & handle base, probably from a small jug
220 pit	ST21	1	2		body
220	PM	1	7		Sooted body
220	CC1	2	9		Body, glazed, misc.e
220	MS3	1	6		Body - abradedr
220	BO1	1	8		Body – white slip externally abraded
227 [221] pit	CC1	1	20		Body – internally glazed
229 ditch	PM	1	14		Body
234 [237] pit	MS3	3	9		Body abraded, one brown glazed, 2 pots
243layer	PM	1	17	0.075	Collared and hammer headed jar rim,(Woodland 1987.fig.38.37), diam 220mm,
245 [246]	PM	13	242		Misc. body/base, 4 sooted
245 pit	PM	1	21		Body with applied circular clay, possibly the remnants of a bung from a jar/cistern.
245	CC1	2	34		Very abraded green glazed body – same pot
245	CC2	2	13		Same pot
247 [248] pit	PM	1	12		body
250 pit	CC2	1	35		Body, abraded, limescale on int
250	MY	2	130	0.075	Profile of wide-mouthed carinated glazed bowl, Woodfield form Nbs, rim diam 350mm, sooted ext., (Woodfield 1984).
250	MY	1	35		Glazed body

250	EA2	2	86		Brown glazed int, early in sequence
250	EA7	1	5		Wheel thrown hollow ware with trailed brown slip decoration under glaze
303 pit	CC2	1	29	0.065	Cistern/jar rim, later medieval form as at Austin friars, Leicester (Woodfield 1981, fig.36.156) – hard fired, brown glaze spots, diam 200mm
305 pit	MY	1	62	0.055	Internally glazed bowl, est diam 320mm, Woodfield form Nbs, similar to pot in (250).
400 layer	EA2	4	114		Internally glazed base, joins
400	EA3	5	37		glazed mug/tankard body/handle frags – 2 pots
400	EA6	1	9		Externally glaze body
400	EA8	1	7		Body – mocha decoration
400	EA10	1	7		body
400	SW	3	37	0.175	Modern unclassified stonewares, one 90mm diam
403 wall footing	EA1/2	3	57		Misc internally glazed
403	EA3	4	35		Misc glazed hollow ware
404 cobbled surfaces	PM	1	5		Sooted body
404	CC1	1	18	0.075	Jar rim, rim diam 160mm, hard fired
404	CC2	2	10		Sooted ext, glint
405 layer	PM	1	21		body
413 [417]	CC1	5	33		Misc body – 3 glazed
413 pit	CC1	1	9		Glazed body – decorated with brown slip & part circular impression on ext wall
413	CC2	3	28		Misc body
413	MS3	1	8		glazed
414 [417]	PM	3	32		Misc body/base, 2 sooted, 1 applied clay dec
414 pit	CC1	1	22		Wide bodied jug neck with combed horizontal & vertical lines
414	CC2	3	95		Joins, lower body/base int glazed bowl
414	CC2	1	12		abraded
418 spread	CC1	1	11		Highly fired base with rilling on ext wall & glazed internally
418	EA3	3	43		Joins – hollow ware base, glazed
418	EA3	5	52	0.0525	Glazed rim & body of cup,, rim diam 130 similar Staffs products at Temple Balsall, dated c.1700-1720, (Goode 1984, fig.12.107 and 109).
418	EA3	1	11	0.15	Glazed tankard/mug rim, diam 110mm,
418	SW4	6	62	0.123	Profile, joins, shallow bowl, rim diam 100mm, base diam c.90mm.
u/s	MS3	2	46		Join, lower wall & part bung from cistern/jar
RIDGE TILE					
11 [7]	CC1	2	245		One abraded, 1 with glaze spots
11 ditch	MS3	2	23		Joins, green glazed broken spiked knob crest, generally a typical later medieval form, but dated at the Austin Friars Leicester from c.1300 to c.1500, (Allin 1981, 62, fig.17.13).
217 pit	CC1	1	41		Green glazed
404 cobbles	MS3	1	4		glazed
413 [417] pit	PM	2	57		Join - glazed
CLAY PIPE					
11 [7] ditch		2			stems
400 layer		1			stem

400		1			Bowl midland spur type, (Coward & Speed 2009, fig.41.13-15) c.1680-1710)
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Site/ Parish: Grange Lane, Leicester Accession No.: A9 2015 Document Ref: grange lane 3.docx Material: pot & misc. finds Site Type: southern suburb	Submitter: S. Baker Identifier: D. Sawday Date of Identification: 28.07.2015 Method of Recovery: excavation Job Number: 15-694
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Roman Small finds

Nicholas J. Cooper with conservation, x-radiography and photography by Graham Morgan

Introduction

A total of 159 small finds were recorded, 30 of which were Roman coins, reported on separately. The greater proportion of the assemblage comprises iron nails including hobnails, recovered from the well fills (5) and (6), alongside objects of copper alloy, lead and worked bone. The assemblage has been catalogued in accordance with the functional categories devised by Nina Crummy (Crummy 1983).

Objects of Personal Adornment and Dress

Armlets

Four fragments from late Roman armlets; three of copper alloy (nos. 1-3) and one of shale (no.4) were recovered from contexts (5) and (6) in Well [2]. All are from common types fashionable during the 4th century (the dating corroborated by the pottery and coins) and paralleled in Roman Leicester at Causeway Lane (Cooper 1999, 261, fig.125 nos.89 in shale, 92 in twisted wire cable, and 98 solid copper alloy). They may have been deposited in the well as affordable votive items, perhaps already broken, or were incorporated into domestic rubbish.



Figure 33 Fragment of three-strand cable armlet from Late Roman well [2] (5) (see no.1 below)

- 1) Sf3 [2] (5) Cu alloy cable armlet. Curved length of armlet manufactured from three strands of wire of flattened circular section. Broken at both ends but longest strand at one end may be tapered to become a hook. Length of fragment: 25mm, thickness of cable: 2mm. (Fig.1)
- 2) Sf6 [2] (6) Cu alloy cable armlet. Short length of armlet manufactured by twisting three strands of wire of circular section. Length of fragment: 60mm, thickness of cable: 4mm.
- 3) Sf93 [2] (6) Cu alloy armlet fragment of circular section with flattened sides. Length of fragment: 25mm, thickness: 4mm.
- 4) Sf94 [2] (6) plain shale armlet. Short fragment of hoop of flattened oval section. Internal diameter: 60mm. Width of band: 9mm.

Footwear

The evidence for shoes is provided by the recovery of iron hobnails of Manning (1985) Type 10. A total of 35 were recorded, and whilst this would seem a sizable number, admittedly dwarfed by over 500 from Causeway lane (Cooper 1999, 263 and 277), it probably only represents the deposition of a single hobnailed sandal, each of which could have up to fifty nails. The hobnails all have domed heads of 8-10mm in diameter with short tapering shafts of up to about 10-12mm in length, bent over at the tip.

Objects associated with manufacture of textiles

- 5) Sf156 [2] (6) Bone needle. Upper shaft with part of circular or 'figure of 8' eye preserved. Broken length: 40mm, diameter of shaft: 3mm. Similar to examples from Causeway Lane (Cooper 1999, 265, fig.128.125-6)

Household Objects

- 6) Sf158 [202] (201) Copper alloy blade fragment. Tapering, broken length of forged copper alloy with one edge thick and one edge sharp. Tip rounded, other end broken transversely. Broken length: 33mm, width of blade: 10mm.

Objects used in Weighing and Measuring

- 7) Sf148 [2] (6). Lead cylinder formed rolling a 30mm length of sheet to make a tube 12mm in diameter. Weight 26g (approximately one Roman ounce). Possibly used as an *ad hoc* suspension weight

Fasteners and Fittings

Iron Nails

Carpentry nails of Manning (1985) Type 1B are the commonest fasteners used in Roman timber construction and the four complete examples here measure about 50mm in length (e.g. sfs131 and 139) equivalent to the modern two inch nail, whilst thicker, longer, shaft fragments (e.g. sf79) indicate lengths in excess of 70mm which are, again, typical of expected range. Incomplete examples and shaft fragments bring the total to over 30.

Hinge or strip fitting

- 8) Sf95 (6). Broken length of iron strip with part of a perforation preserved at one end. Broken length: 40mm, width 25mm.

Copper alloy sheet fragments

A number of undiagnostic and torn fragments of thin copper alloy sheet (<10mm across) were recovered from well fill (6), deriving from fittings or bindings that could no longer be identified (e.g. Sfs5, 40, 44, 92 and 117).

Metal working waste

Fragments (10g) of copper working slag (Sfs157-159) were recovered from (201) and another from well fill (5) (found with armllet no.1 above), whilst a melted fragment of copper alloy (sf105) and a fragment of fuel ash (1g) came from well fill (6). Small, irregular lumps of lead also provide evidence for working of this metal, for example thin strips of offcut (sf 29) and droplet waste (sf13 and sf49), all from well fill (5) and six other fragments including droplet waste (sf130) from well fill (6)

Conclusion

This small assemblage comprises a narrow range of finds types belonging to a limited number of functional categories and indicates late Roman suburban activity and rubbish disposal (primarily in a well). Alongside items of dress comprising fashionable jewellery and hobnailed footwear, were items relating to residential activities such as sewing and high-temperature craft activities relating to the working of lead and copper. Iron nails and fittings indicate timber buildings in the vicinity.



Figure 34 Mineralised woven basket fragments in two or more layers. The woven fibres could be thin reed or straw. A9.2015 (228) [221]

Roman and medieval building materials

Nicholas J. Cooper

Introduction

Small and rather undiagnostic assemblages of Roman tile, medieval and later roofing slates and brick, and wall plaster were recovered.

Roman Ceramic Tile

A total of 2.46kg of Roman tile was recovered during the excavations. Samples of diagnostic forms were retained.

Table 7 Roman tile

Roman tile from 55, Grange Lane A9.2015				
Context	Cut	Tile Type	Frag	Weight gms
(5)	[2]	Tegula	3	170
(5)	[2]	Imbrex	2	210
(6)	[2]	Tegula	8	520
(6)	[2]	Imbrex	1	335
(6)	[2]	Flue	1	65
(6)	[2]	Wall	7	1160
(10)	[7]			

Industrial Residues

Heidi Addison

Introduction and Methodology

A total of 112g of industrial residues were collected from 2 contexts 229 and 405. The assemblage was subject to visual examination and the material was weighed by context as detailed in Table 1 below.

Results

Table 8: Quantified record of material by context.

Context	Weight in grams	Description
229	33 76	Hearth lining Fe hearth slag
405	3	Fuel ash
Total	112g	

Conclusion

The small amount of material suggests iron smithing activity rather than iron smelting.

Coins

Identified by Richard Buckley

Table 9 below

SF No	Context	Obv	Obv legend	Rev	Rev Legend	Mintmark	Mint	Denomination	Material	Diameter	Emperor	Date
1	5	bust l	CONSTANTINOPOLIS	victory on prow		TRS•		nummus	ca	16mm	House of Constantine	330-335
2	5	bust rt	illeg	victory adv left	[SECVRITAS] REIPVBLICAE	RSISC	Siscia	nummus	ca	18mm	House of Valentinian	364-378
4	6	bust rt	illeg	emperor leading captive	[GLORIA ROMANORVM]	[OF]II		nummus	ca	16mm	House of Valentinian	364-378
7	6	bust rt	illeg	emperor standing right	[GLORIA NO]VI SAECVLI			nummus	ca	18mm	House of Valentinian	367-375
8	5	bust rt	[]GRAT[]	wreath	VOT XV/ MVLT XX]VG[Lugdunum	nummus	ca	15mm	Gratian	378-383
9	5	bust rt	[]VS PF AV[G]	victory adv left	SECVRITAS REIPVBLICAE	OF II		nummus	ca	15mm	House of Valentinian	364-378
10	5	bust rt	DN GRATIANVS AVGG AVGVG	emperor standing right	GLORIA NOVI SAECVLI	N	Arles	nummus	ca	18mm	Gratian	367-375
11	5	illeg	illeg	illeg	illeg				ca			
12	5	bust rt	illeg	victory adv left	[SECVRITAS] REIPVBLICAE			nummus		17mm	House of Valentinian	364-378
28	5	illeg	illeg	?irregular Fallen Horseman type					ca	7mm	irregular	?4th C
39	6	bust rt	illeg	emperor leading captive	[GLORIA ROMANORVM]			nummus	ca	16mm	House of Valentinian	364-378
45	5	bust rt	illeg	irregular fallen horseman	illeg				ca	12mm	irregular	348-356
56	6	bust rt	[]AVG	victory adv left	[SECVRITAS] REIPVBLICAE	CON	Arles	nummus	ca	17mm	House of Valentinian	364-378
57	6	illeg	illeg	illeg	illeg				ca	15mm		
71	6	bust rt	illeg	emperor leading captive	[GL]ORIA [ROMANORVM]			nummus	ca	17mm	House of Valentinian	364-378
89	6	bust rt	illeg	?irregular Fallen Horseman type	illeg				ca	12mm	irregular	4thC
90	6	illeg	illeg	illeg	illeg				ca	11mm	irregular	?4th C
91	6	bust rt	illeg	victory adv left	[SECVRITAS REIPVBLICAE]			nummus	ca	17mm	House of Valentinian	364-378
100	6	illeg	illeg	?irregular Fallen Horseman type	illeg				ca	7mm	irregular	?4th C
101	6	illeg	illeg	illeg	illeg				ca	8mm		
102	6	illeg	illeg	illeg	illeg				ca	12mm		3rd/4th c
103	6	bust rt?	illeg	illeg	illeg				ca	13mm	irregular	3rd/4th c
104	6	bust rt		victory adv left	SECVRITAS [REIPVBLICAE]	OF I	[]LG	nummus	ca	16mm	House of Valentinian	364-378
115	6	bust rt	[]CONSTANT[]	2 soldiers 1 standard	GLORIA EXERCITVS	CON	Arles	nummus	ca	16mm	House of Constantine	335-41
116	6	bust rt	illeg	illeg	illeg				ca	9mm	irregular	?4th C
122	6	illeg		victory adv left?	possibly Secvritas Reipvblicae type			nummus	ca	15mm	House of Valentinian?	?364-378
143	6	bust rt	illeg	victory adv left	SECVR[ITAS REIPVBLICAE]	?[]CON	?Arles	nummus	ca	18mm	House of Valentinian	364-378
149	6	illeg	illeg	illeg	illeg					10mm		
150	6	bust rt	CONSTANS PF AVG	2 soldiers 1 standard	GLORIA EXERCITVS	SARL	Arles	nummus	ca	14mm	Constans	335-41
151	6	bust rt	illeg	victory adv left	[SECVRITAS REIPVBLICAE]			nummus	ca	17mm	House of Valentinian	364-378
						TCON						

Animal and Human Bones

Jennifer Browning

Introduction

This report presents the analysis of animal bone recovered during excavations at Grange Lane, Leicester (Accession number: A9 2014). Bones were recovered from features dating to the Roman, medieval and post-medieval periods.

This report includes a brief description of the human skeletal material from the site, which has not been reported on separately. These remains were all recovered from Roman contexts and were in a state of disarticulation. It seems likely that they represent bones from disturbed burials, re-deposited into the well backfill (S. Baker *pers.comm*).

Methodology

Specimens were identified with reference to comparative modern and ancient skeletal material held by ULAS and Leicester University, School of Archaeology and Ancient History. Species, anatomy, state of fusion, completeness and modifications or other agents were recorded, to elicit information on species proportions, skeletal representation, age and condition. Where possible, the anatomical parts present for each skeletal element were recorded using the 'zones' defined by Serjeantson (2000), with additional zones ascribed to mandibles based on Dobney and Reilly (1988) and a simple system devised for skulls by the author, based on recognition of pre-maxillae, upper and lower orbits/zygomatic and occipital condyles. Preservation was assessed on a 4-point scale (after Harland *et al* 2003). The location and nature of modifications such as burning, gnawing and pathologies were also recorded. Butchery marks were located by zone, where feasible, and described using a simple code. Measurements were taken as appropriate, following von den Driesch (1976) and Payne and Bull (1988) for pigs.

Age at death was assessed for the three main species using a combination of epiphysial fusion and dental eruption and attrition. For the purposes of analysis, 'fusing' specimens (defined as where the fusion line was clearly visible) were considered to be fused. Although there is no definitive sequence and age at which epiphysial fusion of each element occurs, it is possible to use the ranges provided by various authors as a guide. This report follows the figures from Silver (1969). Recording of tooth-wear followed Grant (1982) and the resulting mandible wear stages were then grouped into age categories following O'Connor (2003, table 31). Sheep and goat bones are frequently difficult to distinguish and post-cranial fragments were recorded as sheep/goat unless positive goat attributes were present. Attempts were made to separate the two species using criteria defined by Boessneck (1969) and Prummel and Frisch (1986), paying particular attention to horncore, skull and teeth, humerus and metapodials.

Bones recovered during sieving of the bulk environmental samples were also examined. All of the coarse fraction was sorted for bones but only a selection of the fine fraction (samples that looked promising) was sorted by volunteers.

Quantity, condition and taphonomy

A total of 414 bone fragments was hand-recovered from the features at the site. The bulk of the assemblage (69%) was recovered from Roman features; in particular a well, which contained 217 fragments, constituting just over half of the total assemblage. The faunal remains from the site are discussed chronologically in the following text.

Table 10: Preservation of the hand-recovered bones (after Harland *et al* 2003)

	Excellent	Good	Fair	Poor
Roman	0%	84%	15%	1%
medieval	7%	80%	13%	0%
early medieval	0%	100%	0%	0%
late medieval	3%	89%	8%	0%
post-medieval	3%	83%	15%	0%
Total	1%	85%	14%	0%

The majority of bones (85%) in all phases were in ‘good’ condition, indicating that bone surfaces were not very abraded, the bone was solid and examination for surface features, such as butchery, was relatively unimpeded by damage. Only 1% of bone was in excellent condition, while 14% of bones were in fair condition (Table).

Only 13 bones in the assemblage appeared to have been gnawed and these were distributed between late medieval and Roman features. Bones may therefore have been rapidly disposed of and not made readily available to dogs and other scavengers, although there is always the possibility that gnawing is under-represented due to some specimens being reduced to undiagnostic fragments.

Table 11: Percentage of gnawed bones in the assemblage

Phase	Gnawed
Roman	2%
medieval	0%
early medieval	0%
late medieval	8%
post-medieval	0%
Total	3%

Burnt bones were rare in the assemblage (n=7) and consisted of a mixture of calcined and charred fragments. All but one was recovered from Roman features and none were identifiable to taxa.

Table 12: Summary of the hand-recovered bones by phase

Common name	Latin name	Roman	medieval	early medieval	late medieval	post-medieval	Total
cattle	<i>Bos taurus</i>	33	5		8	11	58
sheep/goat	<i>Ovis/Capra</i>	32	1		13	11	57
sheep	<i>Ovis aries</i>	1	1		1		3

Common name	Latin name	Roman	medieval	early medieval	late medieval	post-medieval	Total
pig	<i>Sus scrofa</i>	15		1	4	2	22
human	<i>Homo sapiens</i>	32					32
dog	<i>Canis familiaris</i>	2					2
fallow deer	<i>Dama dama</i>					1	1
deer	<i>Cervus/Dama</i>				1		1
horse	<i>Equus caballus</i>	14			1		15
goose	<i>Anser anser</i>				2		2
barn owl	<i>Tyto alba</i>		1				1
large mml		96	4		19	8	127
medium mml		58	3		23	4	88
indeterminate		3				3	6
Total		286	15	1	72	40	415
%		69	4	<1	17	9	

The number of identified bones from each phase was small and for this reason, no restricted counts, such as MNE and MNI, have been used to calculate relative taxa proportions. However, it is notable that sheep/goat bones outnumber cattle in the late medieval period, in line with wider trends, which emphasise the importance of the wool trade at this time. Similarly the presence of goose in the later medieval phase is interesting, since goose becomes more prevalent among larger medieval assemblages in Leicester. All of the human bones were recovered from Roman features, as were the majority of horse bones.

Roman

Features dating to the Roman period produced the largest proportion of the assemblage, with most of the bones deriving from the disuse phase of a well [02], and the remainder from a series of ditch fills.

Taxa representation

There were fairly even numbers of cattle and sheep/goat bones in the Roman assemblage, with fewer pigs (Table). The cattle bones were a mixture of elements from the head and limbs and were distributed between the well and two ditch fills. Part of a horned cattle skull was recovered; although not complete it appeared to be of a shorthorn type, in common with other Roman cattle recovered from the town. Sheep/goat bones were recovered from both the well and ditches. Although in most cases it was not possible to distinguish between sheep and goat, part of a horned cranium was positively identified as sheep. A range of pig cranial and post-cranial elements were also recovered from the well.

Horse bones were almost as numerous as pig and were recovered from several ditch fills and the well. They mostly derive from the cranium and include several loose teeth which could potential belong from the same individual. Ages were suggested, following illustrations in Getty (1975), indicating young horses of *c.* 5 years and *c.* 8 years of age.

Dog bones were recovered from two different contexts. An ulna from a medium to large sized animal was retrieved from a ditch, while a partial maxilla containing the 4th premolar was found in the well.

All but one of the human bones was recovered from the backfill of a well. The recovered bones are likely to have derived from the same individual, based on the similar length of the femori, as well as the number and side distribution of the elements represented. The right innominate, left and right femori, tibiae and fibulae were present, as were most of the metatarsals and fewer numbers of metacarpals and phalanges. All of the bones were fused. It therefore seems that they represent the lower part of a disturbed adult burial.

Among the sieved samples, amphibian bones were most common, representing, along with a very few rodent bones, animals which were accidentally incorporated into the deposit. A fish vertebra (comparable with herring) is likely to derive from food waste.

Table 13: Distribution of hand-recovered bones in Roman features

Feature	well	ditch				feature		Total
Context	02	229	231	241	252	405	407	
cattle	20	3	1	2	7			33
sheep/goat	25	5		1	1			32
human	30		2					32
pig	14				1			15
horse	2		7	3	2			14
dog	1			1				2
sheep			1					1
large mml	68	1	10	4	10	2	1	96
medium mml	57			1				58
indeterminate		3						3
Total	217	12	21	12	21	2	1	286

Table 14: Summary of identified bones from the sieved samples

Feature	ditch	well	Total
Context	231	02	
Anuran (frog/toad)	13	2	15
sheep/goat		2	2
cattle	1		1
cf herring		1	1
rat-size rodent		1	1
rodent		1	1
Total	14	7	21

All of the available cattle bones were fused and there were no mandibles. However, a tibia from a calf-sized bovid was recovered indicating the presence of young animals on the site. There were few available epiphyses for sheep/goat; only a proximal phalanx was unfused, which must have come from an animal younger than 13-16 months (Silver 1969). Four sheep/goat mandibles with partial tooth-rows were

recovered. The wear on the teeth suggested that three of them belonged to mature animals, while the fourth contained a deciduous tooth. Two out of four pig epiphyses were unfused and two deciduous 4th premolars were also recovered, suggesting the prevalence of immature animals.

Only one abnormal bone was recovered from the site; this was a cattle maxilla with porosity and exostosis suggesting periodontal disease.

Butchery

All of the butchered Roman bones, comprising 5% (n=13) of the phase assemblage, were recovered from the well and there was a relatively even number of knife and cleaver cuts. The majority of butchery affected large mammal rib shafts and vertebral fragments. A smaller number of medium mammal ribs were also butchered. Cattle phalanges had skinning and disarticulation marks.

Medieval

Earlier medieval: 12th-13th centuries

A single bone, part of a pig incisor, was recovered from an early medieval context (218).

Medieval

There were more bones in generalised medieval contexts. Cattle bones were most numerous but sheep were also represented. One of the sheep/goat metacarpals was unusually large, perhaps belonging to a large male or different breed of sheep. A humerus from a barn owl was recovered from a medieval spread. The only butchered bone was a large mammal vertebra, which had been chopped obliquely through the vertebral body.

Table 15: Distribution of hand-recovered bones in medieval features

Feature	pit	pit	spread	Total
Context	413	414	418	
cattle	1		4	5
sheep/goat			2	2
barn owl			1	1
large mml		3	1	4
medium mml	1		2	3
Total	2	3	10	15

Late medieval

Small numbers of bones were recovered from nine medieval pit fills. Sheep/goat bones were most common among the features in this phase. They included the neatly chopped left half of a skull, with the horncore and facial bones removed. There was a

sharp nick on the basal side of the occipital condyle and several fine cuts on the dorsal side, presumably inflicted during removal of the head. The rest of the bones were primarily from the post-cranial skeleton and included a number of metapodials and scapula fragments. A metacarpal, with sheep rather than goat morphology, and an axis were butchered. Two mandibles from mature adult animals were also recovered and most of the epiphyses present were fused, also indicating a predominance of adult animals.

Only eight cattle bones were recovered, comprising a variety of elements from several pits. These included two immature but not calf-size bones and a butchered scapula. There were only four pig bones distributed between four pit contexts. The deer bone comprised a fragment of antler which could not be definitively identified to species. Two fragments of goose (ulna and femur) were recovered from a pit (context 245). The same feature produced a single horse bone (lateral metapodial).

The sieved samples produced numerous amphibian bones (mostly comparable to frog) from pit context 227. These are presumably natural mortalities and suggest that the open feature was moist, which is likely to have attracted and trapped these creatures. However, the samples also produced sparse examples of eel and herring, both commonly eaten in this period.

Table 16 : Distribution of hand-recovered bones in late medieval features

Feature	pit									Total
Context	201	208	210	220	226	227	228	234	245	
late med										
sheep/goat	4			1	3	1	1		3	13
cattle	2	1		1	1	1	1		1	8
pig	1				1			1	1	4
goose									2	2
sheep							1			1
deer									1	1
horse									1	1
large mml	5	1	1	2	1	1	5		3	19
medium mml	7		1	3		2	4		6	23
Total	19	2	2	7	6	5	12	1	18	72

Table 17: Summary of identified bones from the late medieval sieved samples

Feature	pit			Total
Context	208	226	227	
frog/toad			94	94
sheep/goat		1		1
eel	1		1	2
herring			2	2
indeterminate fish		1	24	25
Indeterminate bird			1	1
Total	1	2	122	125

Post-Medieval

The majority of the post-medieval bones were recovered from the contexts belonging to the civil war ditch. There were even numbers of cattle and sheep/goat bones, which were mainly from the head and the feet, with the exception of a femur from a calf and a fragment of sheep pelvis. The pig remains consisted of a butchered mandible, with deciduous dentition and a loose incisor. The ditch also produced a fallow deer astragalus. There were five butchered bones, comprising a range of elements from cattle, sheep/goat and pig, which were mostly chopped. A pit (251) produced a sheep/goat mandible fragment and a number of undiagnostic shaft fragments.

Table 18: Distribution of hand-recovered bones in late medieval features

Feature	civil war ditch			pit	Total
	9	10	11		
Context	9	10	11	251	
cattle	1		10		11
sheep/goat		2	8	1	11
pig			2		2
fallow deer			1		1
large mml			7	1	8
medium mml			1	3	4
indeterminate			3		3
Total	1	2	32	5	40

The sieved samples from pit context (251) produced a supracleithrum from saithe (or possibly coley) and a pre-caudal vertebra from a small flatfish. A degraded antler fragment and two sheep/goat bones (tibia and mandible fragments were also recovered).

Discussion

The site at Grange Lane is situated in the south suburb of Roman and medieval Leicester. Activity at the site dates from the Roman through to the post-medieval periods. The excavations have produced only small assemblages in each phase. Cattle, sheep and pig, the main domestic species, are represented in every phase. An increase in sheep/goat bones was noted amongst the medieval bones, although the sample size is too small to be conclusive. If this trend is genuine, it fits in with observations both in the region and nationally, where such an increase reflects the rise of the wool trade. The post-medieval bones from the site are predominantly from the head and feet, suggesting primary butchery or skin-working. The accumulating faunal evidence from the area suggests the development of specialised workshops alongside occupation in the medieval and post-medieval periods. For example, an early post-medieval (1500-1650) pit, containing a high concentration of sheep metapodials and phalanges, was identified at nearby excavations at De Montfort University (Browning 2010), therefore strongly suggestive of skin working. Similar evidence was identified at Bonner's Lane (Baxter 2004).

Birds were rare and comprised goose and barn owl from medieval deposits. The owl may have roosted on the site and may signify that the site was abandoned for a time. Fish were not represented in the hand-collected assemblage but fish bones were

recovered in small numbers from sieved soil samples taken Roman, medieval and post-medieval features. The presence of gadid (cod family) and flatfish bones in the post-medieval assemblage, albeit in small quantities, reflects the rise in deep-sea fishing from the medieval period onwards.

Evidence from other nearby sites suggests that Roman domestic activities in the area were sparse in the Roman period, with archaeology mostly representing the evolution of the *Tripontium* Road, as for example Bonner's Lane (Finn 2004) and De Montfort University (Morris *et al.* 2010). A 3rd-4th century pit at Bonner's Lane, containing deliberately fragmented cattle bones, may represent the extraction of fats or production of stock or glue (Baxter 2004, 132).

The Grange Lane assemblage is too small to provide reliable information on husbandry age profiles or butchery patterns for intra-site analysis, but it has provided the opportunity to examine specific features, such as the Roman well, which was presumably backfilled with debris excavated nearby, including the remains of an earlier burial. The assemblage can also contribute data to aid wider investigations into the exploitation of animal resources in Leicester (see Table 3 -

). A previously-excavated assemblage at Grange Lane also produced evidence for activity in the Roman, medieval and post-medieval periods. These mostly represented domestic waste from cooking and consumption but there were hints that small-scale craft activity, utilising cattle, sheep and goat horncores, was taking place in the 14th century and later (Browning 2010b).

Appendix

Table 3: Number of bones from each context

	civil war ditch	ditch	feature	pit	spread	well	Total
Roman							
4						1	1
5						27	27
6						189	189
229		12					12
231		21					21
241		12					12
252		21					21
405			2				2
407			1				1
medieval							
413				2			2
414				3			3
418					10		10
early med							
218		1					1
late med							
201				19			19

208				2			2
210				2			2
220				7			7
226				6			6
227				5			5
228				12			12
234				1			1
245				18			18
post-med							
9	1						1
10	2						2
11	32						32
251				5			5
undated							
203			1				1
Total	35	68	3	82	10	217	415

Table 20: Toothwear data collected

Phase	Context	Taxon	Element	dp4	m1	m2	m3	Age Stage (after O'Connor (2003) or Moran and O'Connor (1994))
Roman	6	pig	ldp4	f				
Roman	5	pig	ldp4	l				
Post med	11	pig	mandible	d				
late med	226	sheep/goat	mandible			g	e	A3
late med	228	sheep/goat	mandible			g	e	A3
Roman	229	Sheep/goat	mandible		m			5-6yrs
Roman	229	sheep/goat	mandible		m			5-6yrs
Roman	229	sheep/goat	mandible	h				
Roman	229	sheep/goat	mandible		j	g	f	4-5yrs

Table 21: Tooth measurements (after Payne and Bull 1988 and von den Driesch 1976)

Phase	Feature	Context	Taxon	Element	L	W/WA/B	WP	H
Roman	well	6	pig	ldp4	18.8		8.3	
Roman	well	6	dog	up4	16.5	8.6		
Roman	well	5	pig	ldp4	19.1		9.1	
post med	civil war ditch	11	pig	dp4	18.4	9		
late med	pit	226	sheep/goat	lm2	14.8	7.4		
late med	pit	226	sheep/goat	lm3	22	7.9		
late med	pit	228	sheep/goat	lm2	14.5	7.5		
late med	pit	228	sheep/goat	lm3	20.9	7.2		

Roman	ditch	229	sheep/goat	lm1	8.5	6.3		
Roman	ditch	229	sheep/goat	lm1	8.8	6.3		
Roman	ditch	229	sheep/goat	ldp4	16.8	5.9		
Roman	ditch	229	sheep/goat	lm1	11.3	7.2		
Roman	ditch	229	sheep/goat	lm2	14.9	7.9		
Roman	ditch	229	sheep/goat	lm3	22.1	7.7		
Roman	ditch	231	horse	p2. upper.	34.8	23.3		44.2
Roman	ditch	231	horse	p2. upper.	34.9	23.3		42.4

Table 22: Cattle long-bone measurements (after von den Driesch 1976)

Phase	Context	Taxon	Element	Bd	Dd	DC	GLC
Roman	6	cattle	meta-carpal	53.8			
post med	11	cattle	metatarsal	49.1	27.4		
Roman	241	cattle	femur			39.2	326

Table 23: Sheep/goat measurements(after von den Driesch 1976)

Phase	Context	Element	GL	Bp	Bd	SD	Dd	GLP	SLC	GLI	GLm	Bfd
post med	11	Meta-tarsal			23.1		13.7					
late med	226	scapula						32.5	19.6			
late med	227	Meta-tarsal	123	20.1	25	12.1	14.5					
late med	220	tibia			25.8		19.4					
late med	201	Meta-carpal	121.9	23.3	26.5	13.4						
late med	201	scapula	137					30.7	19.1			
late med	201	radius	139		28.5							22.4
late med	226	Astragalus			16.9					26.7	25.8	

The charred plant remains

Rachel Small

Introduction

This report presents the study of charred plant remains recovered from environmental samples taken during excavation at Grange Lane, Leicester. Ten samples are considered; representing fills from wells, pits, ditches and floor layers, dating to the Roman (2nd and 4th centuries AD), high-medieval and post-medieval periods. Plant remains, which may include cereal grains, chaff, and weed seeds, provide evidence for past diet, agricultural practice and environment.

Method

Initially, one part of each sample was processed in a York tank using a 0.5mm mesh with flotation into a 0.3mm mesh sieve. The flotation fractions (flots) were transferred into plastic boxes and left to air dry and were then sorted for plant remains using an x10-40 stereo microscope. The residues were also air dried and the fractions over 4mm (coarse) sorted for all finds. The fractions under 4mm (fine) were scanned for small animal bones and those which had a large quantity were sorted in their entirety (results are included in the animal bone report). Comments on the plant remains present in each sample are recorded in Table 24.

A sample containing 50 items is generally considered satisfactory for understanding the crop processing stage represented (A. Monckton pers. comm.) and Van der Veen's (2007, 987) ratios were calculated for these samples. To achieve this quantity, additional sample parts were sieved where necessary. For samples which did contain over 50 items, the fine fractions were re-floated and the resulting flot sorted to ensure all plant remains were collected.

Plant remains were identified by comparison to modern reference material available at ULAS and names follow Stace (1991). Descriptions of species habitats were taken from Jones *et al* (2004) and quantification followed Van der Veen (1992, 25). For grains, only the embryo was counted, whilst for chaff, each glume base, rachis internode and culm node was counted as one. Weed seeds were counted as one, even when broken, with the exception of large weed seed fragments that clearly represented parts of the same.

Results

Plant remains were present in every sample and four had a sufficient quantity of remains to consider the crop processing stage represented (Table 24). Preservation of the remains was generally poor; specimens were heavily distorted from burning at high temperatures and this greatly hindered identification to species level. There was little evidence of bioturbation, only a small number of modern rootlets were noted in sample 9 (241) and uncharred (modern) seeds in sample 5 (226).

Table 24: Assessment of samples by phase. Key: + rare (0 – 10 items), ++ common (10 – 50 items), and +++ is abundant (50+ items).

Phase	Sample	Context	Cut	Type	Date	sample volume (L)	Grain	Chaff	Legumes	Nuts	Weeds	Charcoal	Comments
Roman (2nd c.)	9	241	230	Ditch fill	2nd c.	10	7				1	++	Barley, glume wheat and cereal

																grains. A large grass seed. Modern rootlets present.
	8	231	230	Ditch fill	Roman	10	2			1			3	+		Cereal grains. Fragment of bean/pea. Stinking mayweed and medick/ melilot/ clover seeds.
Roman (4th c.)	1	5	2	Well fill	4th c.	10	5	1					5	++		Barley and cereal grains. Wheat glume base. Sedge, vetch and large grass seeds.
	2	6	2	Well fill	4th c.	10	2	1					3	++		Cereal grains and chaff. Knotweed and large grass seeds.
High-medieval	4	227	221	Pit fill (cess)	1250 - 1300 +	10	+	+					+	+	++	(See analysis table)
	5	226	221	Pit fill (cess)	1250 - 1300 +	10	1	2	1						++	Free-threshing wheat, barley and cereal grains. Bread wheat rachis. Uncharred seeds present.
	7	208	209	Layer	1250 - 1300 +	10	+	+		+	+		+	+	++	(See analysis table)
	10	224		Floor layer	Undated but probably medieval	20	+	+		+	+		+	+	++	(See analysis table)
Post-medieval	3	16	7	Ditch fill	18th c.	10	5			1			1	++		Barley and cereal grains. Fragment of bean/pea. Knotweed seed.
	11	251	249	Pit fill	Post-medieval	20	+	+		+			+	+++		(See analysis table)

Roman (2nd century AD)

Sample 9 was a fill (241) from ditch [230] and was dated to the 2nd century AD. Sample 8 was a fill (231) from the same feature. A small number of plant remains were present, fewer than ten items in each. It was possible to identify barley (*Hordeum vulgare* L.) and spelt/emmer wheat (*Triticum spelta/dicocum* L.) grains. No cereal chaff was included in the samples. A bean/pea (*Vicia/Pisum*) cotyledon was

identified too. ‘Weed’ seeds present included stinking mayweed (*Anthemis cotula* L.), which grows on agricultural and disturbed lands with heavy clay soils, medick/melilot/clover (*Medicago/Melilotus/ Trifolium*) which are typical of grasslands, and last, large grass seeds.

Roman (4th century AD)

Samples 1 (5) and 2 (6) were fills from a well [2] dating to the 4th century AD. Again, only low numbers of plant remains were retrieved. Cereal grains were present but it was only possible to identify barley. Cereal chaff was identified as a spelt/emmer wheat glume base. ‘Weed’ seeds included knotweed (*Polygonum* spp.) and vetch (*Vicia* spp.), both typical of arable/disturbed lands, sedge (*Carex* spp.), which grows in wet areas, and large grass seeds.

High-medieval (1250 – 1300+)

Three samples dated to this period: sample 4 (227) and 5 (226) were cessy fills from a pit [221] and sample 7 was from a layer (208). Sample 10 (224) was taken from a floor, and while it did not contain any pottery it was surrounded by medieval archaeology. The species present in this sample (free-threshing wheat) suggests that it is of a medieval (or possibly later) date. Therefore, the results of sample 10 are also presented here.

Sample 5

Sample 5 contained a smaller number of plant remains. Twelve grains were present and it was possible to identify free-threshing wheat (*Triticum aestivum/turgidum* L.) and barley. Fragments of bread wheat (*Triticum aestivum* L.) and barley rachis were identified.

Samples 4, 7 and 10

The other samples dating to this period (4, 7 and 10) contained over 50 plant items and therefore were analysed in detail to allow for the consideration of the crop processing stages represented (table 2).

Table 25: analysis of samples which contained over 50 items. Key: H-M is high-medieval; M? is most probably medieval; and, P-M is post-medieval.

Sample	4	7	10	11	
Context	227	208	244	251	
Type	Pit fill (cess)	Layer	Floor layer	Pit fill	
Date	H-M	H-M	M?	P-M	
Grain					
Triticum free-threshing	3	4	1		Free-threshing wheat
Hordeum vulgare L.	14	7	1	20	Barley
Secale cereale L.	2				Rye
Avena sp	1	10	4	4	Oat
Cereal	4	2	1	14	Cereal

Cereal/Poaceae		5	1		Cereal/grass
Chaff					
<i>Triticum aestivum</i> L. rachis	5				Bread wheat rachis
<i>Hordeum vulgare</i> L. rachis	20			13	Barley rachis
<i>Secale cereale</i> L. rachis	1			1	Rye rachis
Cereal rachis		1	1		Cereal rachis
Cereal/Poaceae culm node	11			2	Cereal/Grass culm node
Cultivated, collected					
cf. <i>Pisum sativum</i> L.	3				Pea
<i>Vicia/Lathyrus/Pisum</i>		3			Bean/Peas
<i>Vicia/Pisum</i>			2	4	Bean/Peas
<i>Corylus avellana</i> L.	1	1	1		Hazel nutshell
Weeds					
<i>Anthemis cotula</i> L.	1		1		Stinking mayweed
Brassicaceae		3			Cabbage family
<i>Carex</i> sp			1		Sedges
<i>Chenopodium</i> sp			2	3	Goosefoots
<i>Galium aparine</i> L.				3	Cleavers
<i>Medicago/Melilotus/Trifolium</i>		1			Medick/Melilot/Clover
<i>Phleum</i> sp			1		Cat's-tails
Poaceae (large)	2		3		Large grass
Poaceae (medium)		1			Medium grass
Poaceae (small)			7		Small grass
<i>Polygonum aviculare</i> L.		1	1		Knotgrass
<i>Polygonum</i> sp			1		Knotweed
<i>Rumex</i> sp			40		Docks
<i>Stellaria media</i> L.			2		Chickweed
<i>Vicia</i> sp		10	5	1	Vetch
Indeterminate seeds	3	5	4	1	Indeterminate seeds
Total no. specimens	71	54	80	66	
% of flot and fine fraction sorted	100	100	100	100	
Sample volume (L)	10	10	20	20	
Items per litre	7.1	5.4	4	3.3	

Grains were common and were the most abundant type of remains in sample 7. A number of barley, oat and wheat grains showed signs of germination (sprouting and pitting) suggesting they had been malted (part of the brewing process). Barley and oat grains were most common (it is not possible to tell whether oat grains were of wild or cultivated type). Grains of free-threshing wheat (*Triticum* spp.) and rye (*Secale cereale* L.) were found in smaller numbers.

Chaff was present in all of the samples and it was the most common type of remains in sample 4. In this sample, barley rachis was most common (due to poor preservation differentiation was not made between two and six row, lax and dense eared forms). It

was possible to identify some of the free-threshing rachis internodes as bread wheat. In this sample a single piece of rye rachis was found and cereal/grass culm nodes were common. In both samples 7 and 10 one piece of indeterminate cereal rachis was present.

Other foods present included legumes, most specimens of which were fragmentary and recorded as bean/pea, although in sample 4 they were likely to have been pea (*Pisum sativum* L.). Fragments of hazelnut shell (*Corylus avellana* L.) were also identified and the nuts were probably collected from nearby woodland. Seeds of the cabbage family (Brassicaceae) were present in sample 7 and it is possible that the leaves were collected from either ‘wild’ or cultivated plants.

‘Weed’ seeds were present in the samples, with those suited to arable and disturbed lands being most numerous, including goosefoots (*Chenopodium* spp.), cleavers (*Galium aparine* L.) and chickweed (*Stellaria media* L.). Goosefoots typically grow with spring sown crops. Dock (*Rumex* spp.) seeds were found in large quantities in sample 10, totalling forty specimens. Cat’s-tails (*Phleum* spp.), a grassland species was identified, and a sedge seed in sample 10.

Van der Veen’s (2007, 987) ratios were calculated where possible (a minimum of 25 items is needed). For sample 4, the number of barley rachis internodes to grains was considered (table 3). The ratio in the barley plant is 0.3 (i.e. 1 internode to 3 grains) and sample 4 is higher than this (1.18) suggesting a preponderance of rachis, a by-product from an early processing stage (most likely winnowing – Van der Veen 1992, 81). As stated, this sample also contains a large number of cereal/grass culm nodes which are also a residue from this stage of processing.

Table 26: calculation of the ratio of barley rachis internodes to grain for sample 4. (Indeterminate grains were split according to the proportion of identified grains in the sample and included in the ratio.)

No. <i>Hordeum vulgare</i> L. rachis internodes	20
No. <i>Hordeum vulgare</i> L. grains	14
Proportion of cereal ident.	3
Total grains	17
Ratio	1.18

The ratio of weed seeds to cereal grains was also calculated (table 4). For sample 7, the ratio is lower than one, suggesting grains were more common, and therefore the sample primarily represents a grain product. For sample 10, the ratio was much higher than one suggesting it represents a by-product from a later processing stage. All of the weed seeds present, except for large grass seeds, can be classified as small, free and heavy (following Jones 1987) and these are removed during fine-sieving.

Table 27: calculation of the ratio of weed seeds to grain for samples 7 and 10.

Sample	7	10
No. weeds seeds	21	68
No. cereal grains	28	8
Ratio	0.75	8.50

Post-medieval and modern

Sample 3 was from a ditch fill (16) and sample 11 a pit fill (251). Both samples were dated to the post-medieval period or later and an 18th century date was gained for sample 11.

A small number of remains were present in sample 3. Grains were present and it was possible to identify barley. A fragment of bean/pea was also included and a knotweed seed. Sample 11 contained over 50 items and was therefore analysed in full (table 2).

Barley grains were most common in sample 11 and a smaller number of oat grains were present. Chaff was included and again barley was most common; a single piece of rye rachis was identified and two cereal/grass culm nodes. Other food remains present included four fragments of beans/peas. A small number of weed seeds were identified comprising goosefoots, cleavers and a vetch seed.

Van der Veen's (2007, 987) ratio of barley rachis internodes to grains was calculated (Table 28). Compared to the ratio in the barley plant (0.3), sample 11 at 0.41 is higher, suggesting more rachis (therefore it is most probably a residue from winnowing). Again, cereal/grass culm nodes were present. The composition is similar to sample 4 (but the ratio is not as high).

Table 28: calculation of the ratio of barley rachis internodes to grain for sample 11. (Indeterminate grains were split according to the proportion of identified grains in the sample and included in the ratio.)

<i>No. Hordeum vulgare</i> L. rachis internodes	13
<i>No. Hordeum vulgare</i> L. grains	20
Proportion of cereal ident.	12
Total grains	32
Ratio	0.41

Discussion

The results will be now be discussed under the themes of diet, field conditions and crop processing. A comparison will then be made to excavated sites in the vicinity, primarily Bonners Lane (Monckton 2004).

Diet

A change from the consumption of glume wheats in the Roman period to free-threshing wheat in the medieval period was seen at this site. Barley is present throughout time and is dominant in the assemblage (this could possibly be a preservation bias). Oats and rye are included in Grange Lane's medieval and post-medieval assemblages. There is also evidence at Grange Lane for malting, part of the brewing process, in the high-medieval period using barley, oats and wheat. Any species of grain can technically be used for making beer; combinations depended on availability, price, season of the year and the desired result (Unger 2013, 157). Other than cereal, there is evidence for the consumption of legumes at the site from the Roman (2nd century) to post-medieval period (peas were introduced to Britain in the Roman period, the Celtic bean was present prior to this – Cool 2006, 127). There is

also evidence for the collection and utilisation of wild resources at Grange Lane in the high-medieval period and this included nuts and possibly cruciferous vegetables.

Field conditions

Wheat and rye are autumn sown crops and may have been grown together as a 'maslin', whilst barley and oats are spring sown crops and may have been grown together as 'dredge' (Greig 1988). Leguminous weed seeds, such as vetch, may have been grown as part of a crop rotation strategy to maintain soil fertility. The condition of the crop fields appear to be similar in the Roman, high-medieval and post-medieval periods; the presence of stinking mayweed suggests the crops were grown on heavy soils, possibly clay, whilst sedges suggest damp spots, and clover/medick and cat's-tail suggest areas of grassland. The beans/peas may have been grown in a kitchen garden or bought at market.

Crop processing

Samples 4 and 11, from the high-medieval and post-medieval periods, contained a high proportion of barley rachis internodes (cereal/grass culm nodes were also present) and ratio calculations suggested that the deposits represented residues from an early processing stage (most likely winnowing). Therefore, processing of barley may have been carried out at the site or in the vicinity during these periods. Rachis and straw have many uses including animal fodder and thatching and the products also act as good tinder, and therefore the residues may have subsequently have been utilised for this purpose, which explains their incorporation into the archaeological record (Van der Veen 1999). Samples 7 and 10 were also analysed to deduce the crop processing stage represented. Sample 7 primarily represents a grain product, due to the mixture of crops (wheat, barley and oats) it is likely the deposit was accidentally burnt during cooking or malting. Sample 10, however, represents a fine sieving residue. Grain would have been cleaned by fine sieving on a day to day basis to remove contaminants preparing it for pottage – a staple food which resembled a thick soup or stew (Monckton 2004, 165).

Comparison to other suburban Leicester sites

Excavation took place at nearby Bonners Lane (Monckton 2004) in the mid 1990s and extensive environmental sampling was carried out. In common with Grange Lane, little insight into the Roman period was gained due to the low number of remains, but similar medieval and post-medieval foods were identified, namely free-threshing wheat, barley, rye, oats, legumes and hazelnut, with barley being the dominant cereal crop (this contrasts to other parts of the town). No evidence of brewing was present at Bonners Lane but medieval malting kilns did exist at Freeschool Lane (Radini 2009). At Bonners Lane, Monckton (2004) found large deposits of cereal grain (with chaff and weed seeds) dating to the late medieval/early post-medieval period, and concluded that this represented accidental burning during processing and that the large quantities were suggestive of commercial workings – such as processing of grain for sale (pottage, animal fodder, or in the form of bread). Therefore, the occurrence of barley chaff and cereal/grass culm nodes at Grange Lane could support the notion of crop processing in this suburban area of the town in the medieval/post-medieval period.

Discussion: The Archaeological Sequence

Prehistoric

The small quantity of prehistoric worked flint (recovered from the backfilled Roman well), residual in deposition, is insufficient material with which to further our understanding of prehistoric activity in the area although finds from other nearby sites (Higgins 2010) indicate there was prehistoric activity.

Roman

1st century AD: The Tripontium Road

The road observed previously on sites at 61 Oxford Street (Higgins 2010) to the south and Bonners Lane and De Montfort University's Business and Law Building (Morris 2010) to the north, is presumably the Tripontium Road, postulated by Margary (1957, 772) running from the south gate of *Ratae Corieltavorum* to the small town of *Tripontium* (Caves Inn) on the Watling Street, at the border of the modern counties of Warwickshire and Leicestershire (Higgins 2010). The projection of this directly traverses the excavation at 55 Grange Lane (Figure 3) although remains of this monument are scanty at worst, circumstantial at best. Patches of metalling in Area 4, to the south of the excavation area, are likely to be part of the road and other deposits observed in the heavily and widespread Area 1, likely to have originated from the material it was constructed of.

In best preserved examples elsewhere (Higgins 2010; Morris 2010), the road was between 9.20 and 13.6m across, flanked by roadside ditches (Finn 2004) which appear to predate the road 2nd century road metalling, having been established before the thoroughfare. It is generally accepted that the road was established in the late 1st/early 2nd century AD and became a focal point south of the town with an increase of occupation and activity on its eastern side, possibly coinciding with the more organisation of the city into a street grid, especially from the 2nd century. Earlier features with 1st century pottery were recorded on 61 Oxford Street (Higgins 2010) and pre-road features on 52 Grange Lane (Thomas 2010), beneath the road layers, perhaps comparable to similar albeit undated features in Area 4 on 55 Grange Lane, supporting evidence for reorganisation of the area in this period. There were probably regular adaptations to the road throughout its lifespan and reflective of the activities and occupation along it.

Property ditch – 2nd / 3rd centuries AD

In the 1st century it has been argued that this activity was somewhat sparse: perhaps open fields and pasture (Finn 2004), further developments or reorganisation of land taking place with the establishment of property boundaries or plot divisions running perpendicular to it, along its eastern edge from the 2nd century AD when activity and occupation appears to increase. There is evidence for this from the 55 Grange Lane excavations. The re-cutting of the boundary ditches perhaps reflects separate

ownership of adjacent land or different functions for it. Little occupational evidence was recovered from Bonners Lane although comparable boundary ditches were identified and evidence for structures identified as beamslots. A late Roman Sunken Featured Building was excavated at 52 Grange Lane (Thomas 2010). As at 55 Grange Lane, evidence for exterior gravel yards adjacent to the boundary ditch is reflected in excavations at De Montfort University (Morris 2010) and Mill Lane (Gossip 1999). Later 2nd / early 3rd century evidence of this was also observed at Bonners Lane (Finn 2004). The excavations at 55 Grange Lane also produced little concrete evidence for specific industry or activities on site and the environmental analysis did not elaborate upon this. A later corn dryer orientated with the road line was recorded on 52 Oxford Street (Thomas 2010) and Bonners Lane (Finn 2004) and evidence for bone/horn making and iron/lead smelting. It is likely that these activities took place at 55 Grange Lane and from this that the road remained an important feature, albeit of different function, and the vicinity of it was still occupied throughout the later Roman period. The pottery assemblage in the boundary ditch is supportive of this. At 52 Oxford Street later 3rd/4th century activity had begun to encroach upon the road.

The Roman Well: 3rd / 4th century:

Activity west of the road is in less evidence on other sites in the vicinity and virtually absent on the heavily truncated 55 Grange Lane site where all the archaeological remains bar the lower levels of the Roman Well and the substantial remains of the Civil War ditch have been destroyed.

The construction date for the well is unclear; no datable finds were retrieved from the construction deposits excavated and its lower levels of backfill were beneath the limit of excavation. The well on 52 Grange Lane was known to have been built in the 1st century being abandoned in the 3rd/4th century (Thomas 2010) and a similar date is possible for the 55 Grange Lane example.

Based upon the projection of the Tripointium Road, the well is located alongside its western edge suggesting activity in this direction up until the 3rd /4th century but due to truncation and given the likelihood of road adaptations, relocations and widening, it is impossible to ascertain the relationship or position of the well to the road and the levels excavated were of final backfilled material, the earlier fills being left in situ. The comparable well excavated well at 52 Grange Lane cut through the road surfaces and appeared to go out of use between the middle of the 2nd and 3rd century.

What is clear is that pottery and coins recovered from the 55 Grange Lane well indicate a 3rd to 4th century abandonment but the reason for their disposition is speculative. The date range for the coins (predominantly AD 364-378) were narrow and exact and they were probably in circulation, perhaps with a single individual, before being lost or placed possibly as a votive offering at the closure of the feature. Whether fragments from three copper and a single shale armlet can be interpreted as the same or deposited after accumulation in domestic rubbish is uncertain. It certainly appears that the well was backfilled at a time where evidence from other nearby sites suggest that the road had gone out of use, at least as a major thoroughfare into the town, its primary function having changed and surrounding activity and occupation was encroaching upon it. It is notable that on other sites (Higgins 2010) the eastern boundary ditch went out of use at a similar time and the roadside ditch at 52 Grange

Lane was overlaid by a thick clay layer in readiness for building but not over the entirety of the metalled road. This raised area became the focus for an animal enclosure (Thomas 2010).

Other finds from the backfill of the well including a bone needle, copper blade, suspension weight, hinge and nails do no more than reflect general occupation debris and timber buildings across the area for the period. The presence of copper working slag, melted copper alloy, fuel ash and other waste products point to working of these materials in the vicinity. Coins recovered from timber buildings deposits at Bonners Lane do suggest a comparable overall date of abandonment, disuse or decrease of activity (Finn 2004).

Other material recovered from the well may provide supportive evidence of 1st century Roman extramural burial practices in the area and life in 3rd / 4th century Leicester. Roman law forbade burial within towns and it is probable that the main cemeteries were established outside the urban limits and along the main routeways (Courtney 1993). The well at 55 Grange Lane contained a small amount of disarticulated human bone, probably from one adult individual, similar groups also being recovered from 52 Grange Lane (Thomas 2010) and other nearby sites (Finn 2004; Higgins 2010). The discovery of these indicates that inhumations may have been interred on these sites, possibly associated with the plot boundaries, rather than more formal cemeteries, a later phenomenon (Cooper 1996, Derrick 2009). The inclusion of the remains within the later backfill of the well may again point to later land reorganisation and change of function, the land being cleared and burial disturbed. The pottery assemblage, very different from the ditch and the well, either side of the Tripontium road, supports the notion of differing land use.

Medieval

The heavily truncated medieval remains from the site corroborated information recovered for the continuity of occupation in the southern suburbs of the city from the 12th century – 16th centuries from past excavations in the vicinity and reflected the former presence of more extensive activity and, although the evidence is less extensive and the material record not as large as other sites, it supplements the body of evidence for the domestic and small scale industrial nature of activities taking place along the main routes into the city of Leicester from the south of its walls.

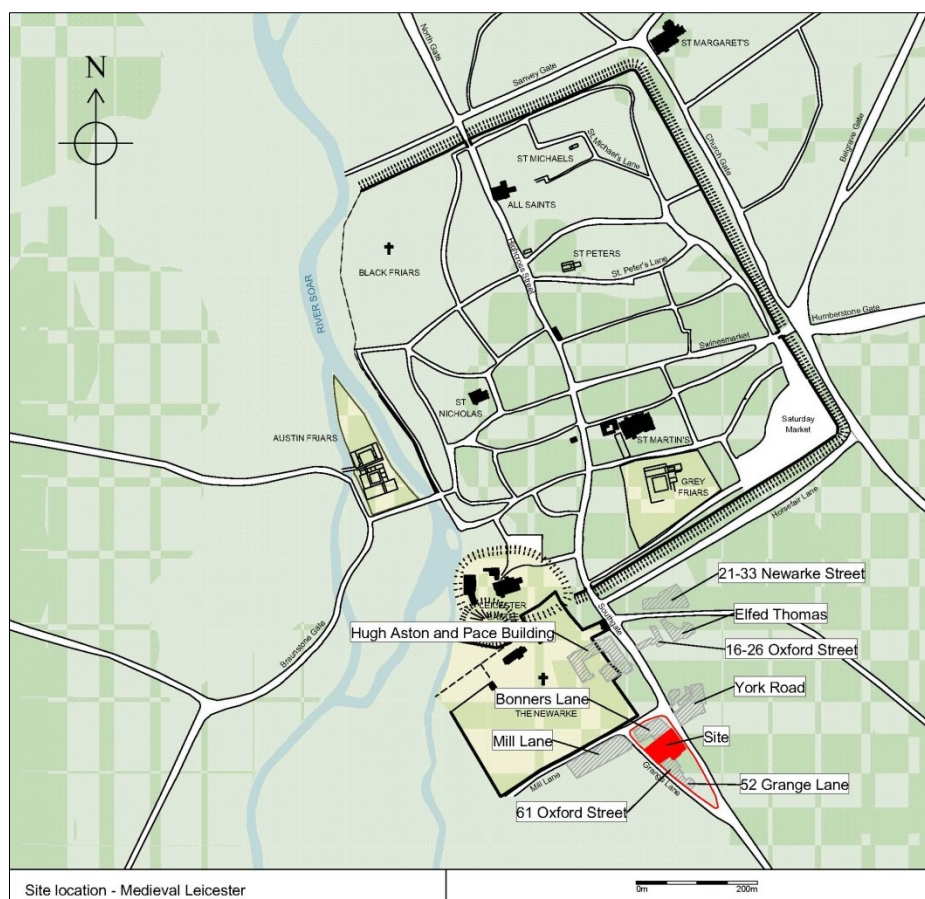


Figure 32: Excavation locations and Medieval Leicester

The medieval evidence was retrieved predominantly from excavated pits probably situated in the backyards of properties along Grange Lane and/or Oxford Street in what was likely to be a relatively impoverished area of Leicester's medieval suburbs. As a whole the pottery assemblage for this period reflects other similar sites and supports documentary evidence of suburban settlement in the area. Evidence from the Bonners Lane site to the north suggested a hiatus of activity between the Anglo-Saxon period and the 12th or 13th century after the main southern thoroughfare into the city had shifted eastwards from the site of the *Tripontium* road. The evidence was characterised by basic timber structures, possibly squatter dwellings, along the line of the road, with associated backyards containing pits with wells behind them. A well excavated at Bonners Lane was not dissimilar to feature [202] interpreted as having the same function as that from 55 Grange Lane. The dwellings encroached upon the adjacent South Field, one of the three medieval town fields (Finn 2002). Similar conclusions were suggested from evidence recovered at 52 Grange Lane, where recut boundary ditches possibly demarcated land use at the rear of domestic plots from that of the southern fields of Leicester and provided evidence for the regular and perhaps planned properties fronting onto Oxford Street (Thomas 2010). Pits containing barley oats used in brewing beer goes some way to reinforcing these notions. East-west boundary ditches were conspicuous by their absence on the three adjacent sites so it remains difficult to say how many plots of land are represented by the area investigated, especially if these boundaries were of a more ephemeral nature formed of hedgerows or insubstantial fence lines. Any evidence for structures along frontages of either Oxford Street to the north-east and Grange Lane to the south-west has almost certainly been destroyed by the construction of the Victorian basements.

Backyard activity of a commercial and domestic nature was also evident from excavations at the Hugh Aston and Pace building (De Montfort University) near the Newarke to the north, including evidence for food and iron processing. It has been suggested that the construction of the Trinity Hospital and Newarke Precinct may have taken place after a general decline in the population in, and return of the area to, a more arable land use during the latter half of the 13th century (Morris 2010). Soil deposits supporting this were identified on both this excavation and that at Bonners Lane but were not observed at 55 Grange Lane, another possible consequence of the smaller area excavated and more recent and widespread truncation and subsequent survival. Interestingly, an increasing paucity of medieval remains of the nature found along the Oxford Street thoroughfare suggests more concentrated medieval settlement was located along the latter (Gossip 1999)

Post-Medieval

Occupation Activity

There was a general paucity of evidence for the post-medieval period on the site and the features that were identified, despite indicating the presence of a civilian population, held few clues as to their individual function or to the activities taking place in the immediate and wider vicinity.

Evidence from other sites in the area commonly illustrated larger scale processing industries including tanning, dyeing and food processing. The former, in particular, was represented at the Hugh and Pace Buildings (Morris 2010), Bonners Lane (Finn 2004), 61 Oxford Street (Higgins 2010) and York Road (Gossip 1999), being characterised by rectangular pits with remains of articulated sheep's foot bones and was continuous in the area from the 13th century and through the post-medieval period until some disturbance, probably land clearance, took place after the advent of Civil War. The activity may have restarted following the cessation of the war and into the 18th century (Higgins 2010). The immediate plot of land to the south, 61 Oxford Street (Higgins 2010), along with Bonners Lane, also revealed evidence for substantial, albeit relatively short-lived sand and gravel quarrying after the Civil War in the late 17th – early 18th century, possibly as a result of valuable deposits being earmarked during construction of the substantial Civil War defensive earthworks (Finn 2002). No evidence of quarrying was observed at 55 Grange Lane, perhaps a reflection of differing functions for adjacent plots, although environmental plant remains from a pit [249] point to the possibility for commercial crop processing such as brewing in the vicinity and faunal remains of head and feet from the Civil War ditch suggest butchery and skin working processes were taking place near to the site. One of these ditches was also recorded to the south (Clarke 2003) where it appeared to be curving westwards, perhaps suggesting that the triangular piece of land between the two roads was smaller in the past.

Remains at 52 Grange Lane also yielded evidence for small scale industries manufacturing produce such as beer for consumption in the city. No evidence was recovered for these structures from 55 Grange Lane, other than the presence of pits.

The Civil War Earthworks

The substantial linear feature traversing Area 1 on a previously unrecorded east-north-east/west-south-west alignment has been interpreted as representing another section of the defensive network of earthworks constructed up to nine months before, altered during and extended immediately after, the military events of the English Civil War. Comparable examples of other sections of this network of ditches (and presumably ramparts) have been identified and investigated at Bonners Lane (Finn 2002), the Hugh Aston and Pace Building (Morris 2010), Mill Lane (Finn 2002) and York Road (Gossip 1999), all situated to the north of this site. The evidence from the excavation and subsequent watching brief at 53 Oxford Street has expanded our knowledge of the location and strategic form of the defences south of the city and added evidence to support the theory that there existed a protruding bastion or hornwork incorporated into the defences at or near to this location.

In profile the ditch is similar to the other excavated sections and together they describe a roughly “V-shaped” feature profile with *c.*45°- 54° straight sloping sides and flat central base. Taking into account the extensive and widespread truncation of the sections excavated at 55 Grange Lane excavation, these would originally have been up to *c.*6.0m wide and *c.*2.40m deep. Projections of the sides elsewhere routinely suggest an original width of the ditches of *c.*3.1m – 7m and between *c.*1.30m - 3.24m deep. Further weight for this evidence was unearthed and recorded during the watching brief, which revealed the most substantial section through this feature. Not all the defensive ditches were constructed at the same time – modifications and extensions were presumably made – and strategically, the function of different components of the network may have required differing dimensions. The 55 Grange Lane examples have more “V-shaped bases” perhaps suggesting a differing technical requirement if they are associated with a bastion or other variation. Overall, at this stage it remains problematic to assign the excavated examples to a particular phase of construction (Finn 2002).

The 14m length observed in plan and the further 19m of discontinuous ditch with the same alignment suggested by the watching brief evidence could be dated to this period. Both contained deposits suggesting that it had initially only been allowed to silt up nominally, being cleaned regularly and at the termination of its use was backfilled quickly with materials from the presumed bank. This is consistent with evidence collated from elsewhere. The supposed backfilled bank material consistently contained building derived material attributed to the demolition of the suburbs, a common occurrence during the Civil War in English towns (Gossip 1999), recorded historically and observed archaeologically at Hugh Aston and Pace Building (Morris 2010) and York Road (Gossip 1999) prior to the defence construction, and re-deposited clay, originating from the initial excavation of the earthworks and simultaneous construction of any ramparts. The poorer southern suburbs of Leicester appeared to have been considered expendable and the reuse of materials in later buildings along Newarke Street, further supports this (Thomas 2014). Notably, the re-deposited material in the 55 Grange Lane ditch contained frequent rounded pebbles possibly attributable to the Roman road layers it would have originally cut through.

The evidence is inconclusive in relation to whether a bastion existed at this location but both historical sources and the material remains show that there was a defensive ditch situated further forward and on a differing alignment to any of the examples

excavated previously, but not extending as far to the south as recent predictions. The evidence for the existence of a bastion, its form and extent may have to be revised in light of the evidence from 55 Grange Lane. Certainly, a ditch running north-west to south-east on Bonners Lane, perpendicular to the accepted main defensive line, can be attributed to this period and was the initial evidence suggesting a bastion or bulwark projected here. The projection of the length of ditch on 55 Grange Lane would meet the projection of the Bonners Lane feature approximately where, or just east of where it was observed during the watching brief. Town fortifications in Civil War Britain were mostly modelled on principles borrowed from Dutch military engineers (Courtney and Courtney 1992) whose preference was for protruding bulwarks or hornworks to facilitate flanking fire along the line of defence. It has been confidently predicted that the less substantial ditch excavated running parallel to Bonners Lane pre-dated the first siege and appears to be a different ditch, with different base heights, to that excavated on the same alignment at Mill Lane (Finn 2004). It would seem sensible therefore to ascribe any protruding defensive works of a more complex design to the later strengthening phases of construction, possibly by the Parliamentarians once they garrisoned the city. The short period of the Royalist occupation between the sieges would seem insufficient for major alterations to be dug and possibly points to a post-Civil War date for the ditch on 55 Grange Lane, although this remains conjecture.

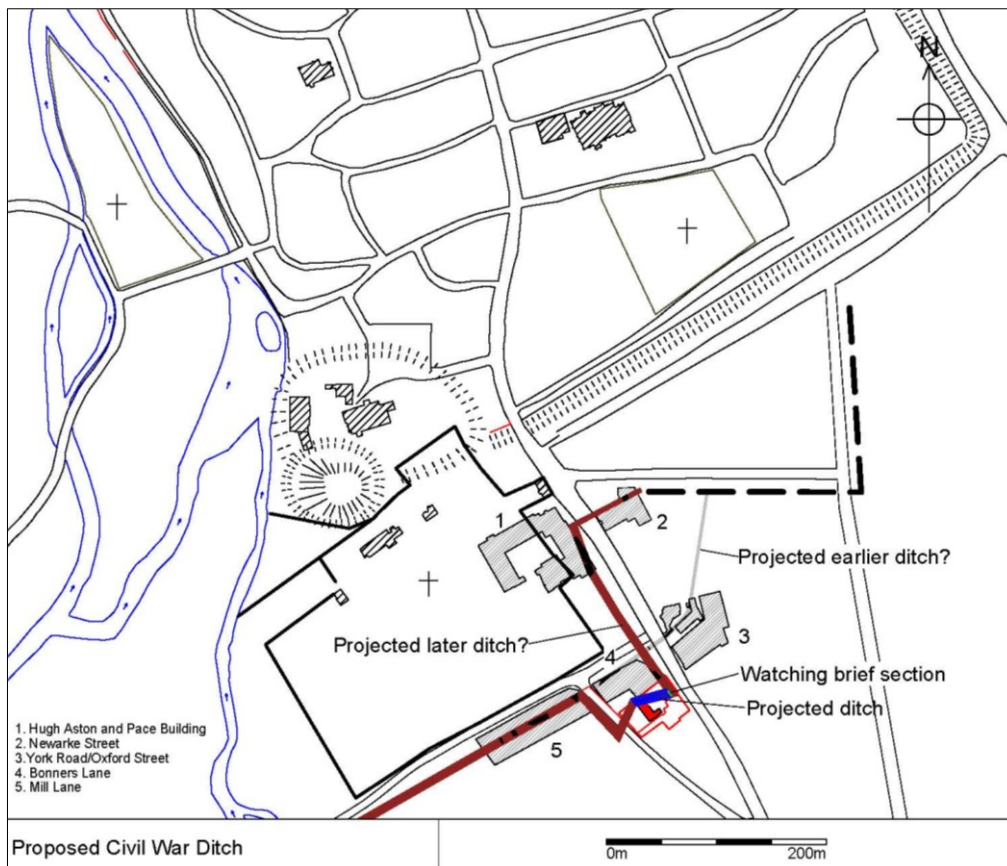


Figure 33: Proposed Civil War ditch

In this respect it has been possible to offer some tentative revisions to the projected network of defensive ditches in this area, particularly in regard to the existence of a bastion structure, whilst in no way comprehensive do point to an increased complexity than previously thought and possibly raises more questions than answers.

Modern

Much of the earlier archaeology across the 55 Grange Lane site, especially to the north has been destroyed by 19th century industrial developments, particularly during the excavation of basements and this has limited our understanding of the site. Where earlier archaeology survives, it does so in pockets and in to some extent the wall of these basements has enabled us to see the surviving archaeology in section.

Conclusion

The evidence from 55 Grange Lane corroborates information gathered at other nearby sites recently excavated where the survival of the archaeological evidence for life in the Leicester's southern suburbs was greater and also demonstrates how, even after heavy 19th century truncation, pockets of archaeology and deeper lying remains can survive that add to our understanding. The evidence reflects the development of and changing land use alongside the Tripontium road and its continuity as a focal point after the Roman period. It has increased our understanding of the complexities of the Civil War logistics, particularly the construction and organisation of the defences of the city and possible its effect of the surrounding occupation of the area. Despite the modern truncation, this site should be viewed collectively with the larger sites in the area, notably Bonners Lane, the other sites on Grange Lane/Oxford Street and De Montford University in order to achieve a more comprehensive understanding of the Roman, Medieval and post-medieval archaeology in the area.

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Appendix 1 OASIS Information

PROJECT DETAILS	Oasis No	universi1-xxxx		
	Project Name	An Archaeological Excavation at 55, Grange Lane, Leicester		
	Start/end dates of field work	5th May - 5th June 2015; February 2016		
	Previous/Future Work	None		
	Project Type	Excavation and Watching Brief		
	Site Status	None		
	Current Land Use	Brownfield site		
	Monument Type/Period	None/none		
	Significant Finds/Period	Roman/Medieval		
	Development Type	Commercial		
	Reason for Investigation	NPPF		
	Position in the Planning Process	Planning Condition		
	Planning Ref.	P.A. 20140961		
PROJECT LOCATION	Site Address/Postcode	55, Grange Lane, Leicester		
	Study Area	1834 sq.m.		
	Site Coordinates	SK 5856 0393		
	Height OD	c 60m OD		
PROJECT CREATORS	Organisation	ULAS		
	Project Brief Originator	Local Planning Authority		
	Project Design Originator	ULAS		
	Project Manager	Dr Richard Buckley		
	Project Director/Supervisor	Stephen Baker		
	Sponsor/Funding Body	Developer : Evans Brothers Ltd		
PROJECT ARCHIVE		Physical	Digital	Paper
	Recipient	NA	LCC	LCC

	ID (Acc. No.)		A9-2015	A9_2015
	Contents		Photos Survey data	Fieldwork records Field Notes
PROJECT BIBLIOGRAPHY	Type	Grey Literature (unpublished)		
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