AN ARCHAEOLOGICAL EXCAVATION AT THE BEETHAM TOWER SITE, DEANSGATE, MANCHESTER

Post-Excavation Assessment Report

PRE-CONSTRUCT ARCHAEOLOGY

An Archaeological Excavation at The Beetham Tower Site, Deansgate, Manchester

Post-Excavation Assessment Report

Central National Grid Reference: SJ 8346 9765

Site Code: DGM 04

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PART A: PROJECT SUMMARY

1. NON-TECHNICAL SUMMARY

1.1 This report details the results and working methods of an archaeological excavation undertaken by Pre-Construct Archaeology Limited on Deansgate, Manchester. The central National Grid Reference of the site is SJ 8346 9765. The excavation was undertaken between the 10th March and the 8th April 2004, in advance of a 47-storey tower development. The work was commissioned by CgMs Consulting, on behalf of The Beetham Organization.

1.2 The development site is hexagonal in shape covering *c.* 0.45 hectares in size. It is located in the Castlefield area of Manchester and lies at the junction of Deansgate, Great Bridgewater Street and Trafford Street. The site was formerly occupied by the Great Northern Railway viaduct, demolished immediately prior to the archaeological excavation. The viaduct ran south-west to north-east across the western portion of the site, feeding into the Great Northern Warehouse to the north, while the remainder of the site was in use as a car park.

1.3 The excavation herein described was preceded by an archaeological evaluation on the 8th and 9th March 2004. Due to the high level of impact of the railway viaduct and earlier terraced housing on the site, it was thought unlikely that pre 19th century archaeological remains would survive at the site. However, important archaeological remains dating from the Roman period were identified in three of the evaluation trenches and it was therefore decided, in light of the impending development programme, to abandon the evaluation and proceed straight to open area 'rescue' excavation. These remains were interpreted as being associated with the *vicus* or civilian settlement attached to the Roman fort of *Mamucium*, located *c.* 120m to the south-west.

1.4 Archaeological remains of significance survived in only the western portion of the development site. Two areas of archaeological remains were identified. The larger, Area A, lay within the south-western corner of the site and measured a maximum of 22m east-west by 20m north-south. The smaller, Area B, lay to the west of the viaduct on the north-western side of the site and measured in total *c.* 10m east-west by *c.* 6m north-south. The western part of Area B lay beyond the limit of the development and therefore archaeological remains therein were preserved *in situ*.

1.5 No evidence was identified to indicate activity at the site prior to the Roman period, or after the third century AD. The absence of evidence for later Roman and medieval activity may have been due to horizontal truncation associated with 19th century development, or more probably to a change in settlement patterns after the third century. The archaeological record suggests that the most intense period of occupation at the site occurred during the second century AD.

1.6 The site lies to the north-east of the confluence of the Rivers Irwell and Medlock. Natural sand and gravel, recorded in the excavation areas, represents the river terrace The underlying sandstone bedrock was not encountered within the areas excavated. In the eastern side of Area A, natural sand and gravel was overlain by a palaeosol. No evidence for any pre-Roman activity was identified within the areas excavated.

1.12 In summary, the stratigraphic, artefactual and environmental data from the site warrants publication in an appropriate outlet. The site is important in a local and regional context as the data has the potential to provide significant information concerning the development of the *vicus*, which in turn reflects Roman occupation of the region. A further point of interest is that the excavation has demonstrated survival of important archaeological remains despite significant 19th century development. This is an important finding which should inform archaeological mitigation strategies associated with future development proposals in the Castlefield area.

1.13 The artefactual material recovered from the excavation included a relatively large assemblage of Roman pottery, given the size of the areas of investigation. The assemblage contains three key pottery groups and this material is considered to be of such significance that it merits detailed publication. The quantity of samian ware recovered from the excavation is unusually large and is considered to contain an extraordinarily high proportion of decorated ware. A particularly interesting and important feature of the samian assemblage was a group of South Gaulish vessels of second century date from Montans. Publication of this assemblage will be of regional and national significance.

1.14 Amongst the assemblage of around 200 'small finds' recovered from the excavation, approximately 10% are considered worthy of further research to enhance the understanding of both site chronology and economic and social status. These objects should form the basis of a publication catalogue, with selected illustration.

1.15 Assessment of bulk soil samples from the site indicates that some deposits have limited potential for further analysis to demonstrate the use and disposal of cereal crops in the Roman period. Since published knowledge of Roman palaeoenvironment in Manchester is minimal, any additional information is of significance.

1.16 This Post-Excavation Assessment Report is divided into four parts (Parts A-D). Part A, the Project Summary, includes an introduction to the site, its location, geology and topography, planning and archaeological background, and a full description of the archaeological methodology employed during the investigations. It concludes with detailed descriptions of the archaeological remains representing each of the main phases of occupation supported by summary discussions and detailed illustrations.

1.17 Part B, the Data Assessment, quantifies the written, graphic and photographic elements of the project archive and contains specialist assessments of the artefactual and palaeoenvironmental evidence, with recommendations for further analysis for each category.

1.18 Part C, the Conclusions and Research Agenda, sets out the conclusions of the project to date, as well as the project's original research questions and new questions which came to light during the course of the post-excavation assessment. In some cases, research questions can be answered with the data already available, while in others further analysis is required. Part C, therefore, also includes a discussion of the significance of the project data in local, regional and national terms, a summary of its potential for further analysis and an outline of the proposed publication format.

1.19 Part D contains the acknowledgements and bibliography. The report has seven appendices.

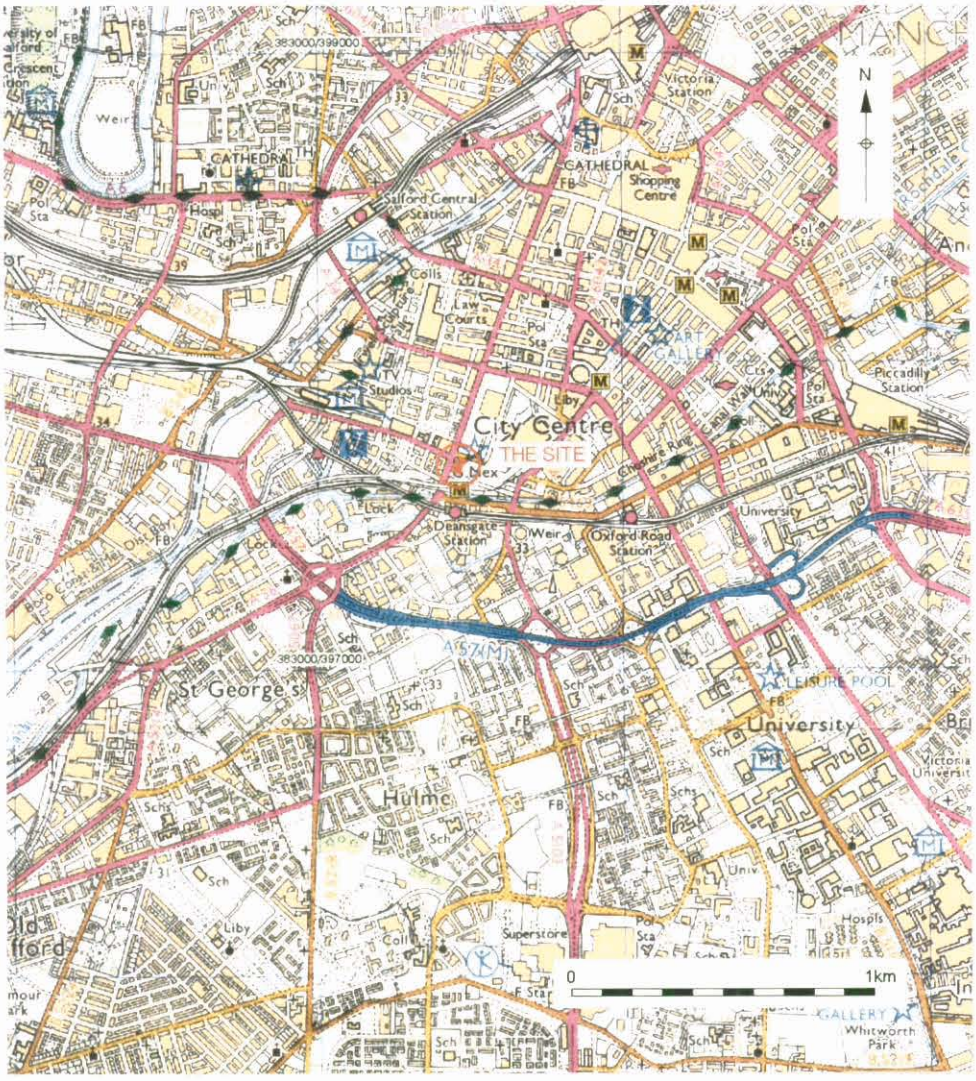


Figure 1. Site location
Scale 1:25,000

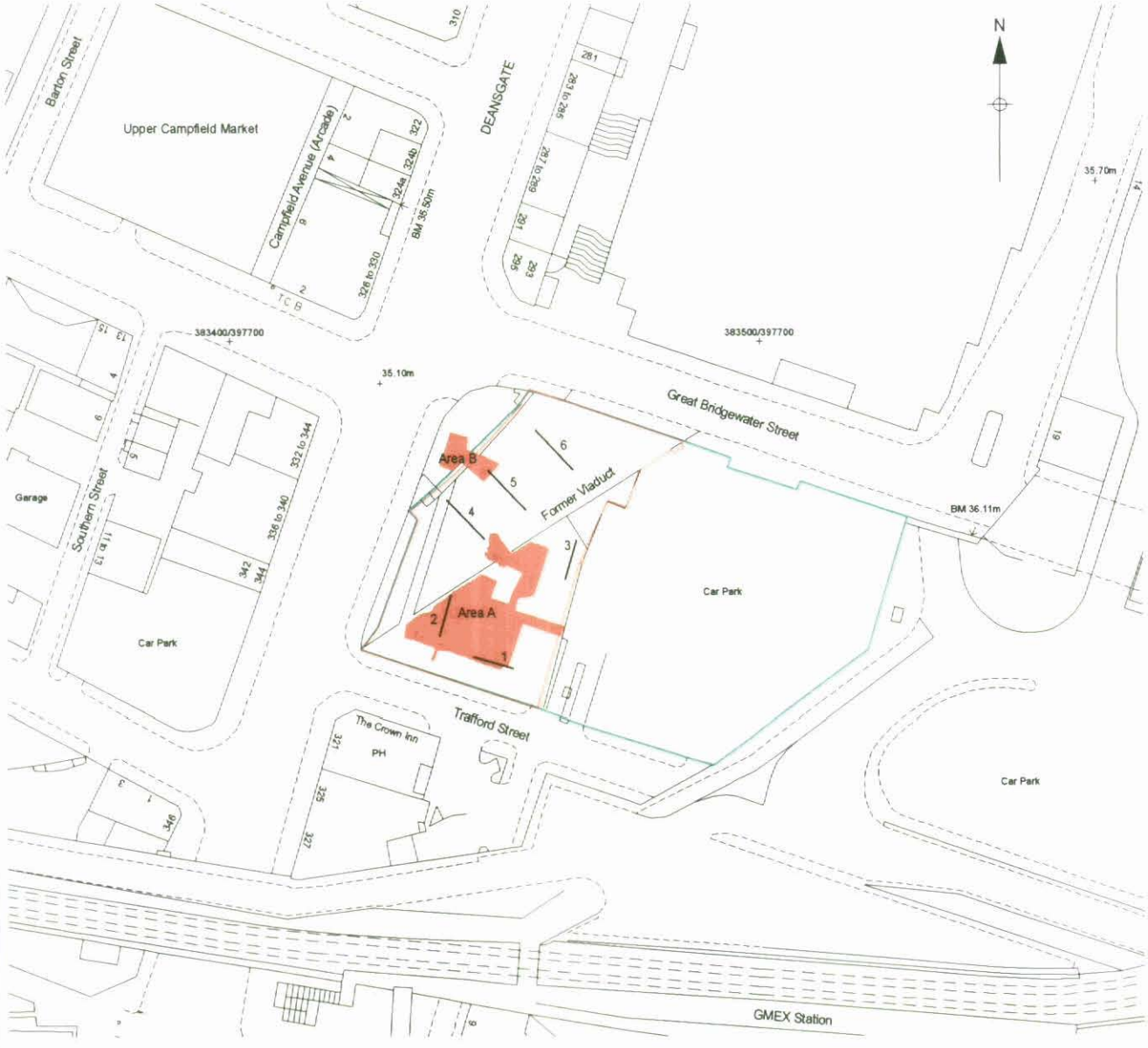


Figure 2. Trench location
Scale 1:1250

2.2 Site Location and Description

2.2.1 The site is located in the Castlefield area of Manchester on the eastern side of Deansgate. It is bounded by Trafford Street to the south, Great Bridgewater Street to the north and a railway viaduct to the east. The central National Grid Reference of the site is SJ 8346 9765. The overall development site occupied a hexagonal parcel of land of *c.* 0.45 hectares.

2.2.2 The western portion of the development site was formerly occupied by the Great Northern Railway viaduct, which ran on a NE-SW alignment, and was demolished immediately prior to the archaeological excavation. The remainder of the site was occupied by a car park prior to the archaeological excavation. Prior to the construction of the viaduct in 1899, the site had been occupied by 19th century housing and a chapel within the northern boundary of the development site.

2.2.3 Archaeological remains of significance survived in only the western portion of the development site. Two areas of archaeological remains were identified. The larger, Area A, lay within the south-western corner of the site and measured a maximum of 22m east-west by 20m north-south. The smaller, Area B, lay to the west of the viaduct on the north-western side of the site and measured in total *c.* 10m east-west by *c.* 6m north-south.

2.2.4 The site is located *c.* 120m north-east of the Roman fort of *Mamucium* and lies to the north-east of the confluence of the Rivers Irwell and Medlock. It is located within the area of the Roman *vicus*, the ancillary settlement that developed alongside the fort.

2.3 Geology and Topography

2.3.1 The underlying geology of the Deansgate area comprises Bunter Sandstone and Manchester Marl. The West Manchester Fault runs to the north of the site. Overlying the red sandstone is a thick layer of sand and gravel, the remains of a river terrace sloping down to the River Medlock, to the south of the site, and the River Irwell, to the west of the site. The old bed of the River Tib is also believed to have run between the site and the River Medlock.

2.3.2 At the time of the archaeological investigation, ground level at the site sloped down gradually from a level of *c.* 35.30m OD in the north to *c.* 34.40m OD in the south.

2.4 Planning Background

2.4.1 At the time of the archaeological investigation, planning permission for mixed use development at the site had been granted. The Beetham Organization are to build a 47-storey tower, 171 metres high, this being the UK's highest residential building, incorporating a Hilton Hotel.

2.5 Archaeological and Historical Background

2.5.1 A desk-based assessment of the site was undertaken prior to the excavation. A brief summary of the historical and archaeological background to the site is included below, summarised from the initial desk-based report and subsequent research.

2.5.2 There are no recorded finds of Palaeolithic or Mesolithic date in the vicinity of the site, and a single barbed and tanged arrowhead, is the only Neolithic discovery in the area. There is no other evidence from the later prehistoric periods within the site or its immediate vicinity, despite its location near the confluence of the Rivers Irwell and Medlock.

2.5.3 A Roman fort was founded in the last quarter of the first century AD, *c.* 120m south-west of the site. The site lies in the area of the *vicus*, the ancillary settlement that developed beside the fort. The SMR lists numerous finds of Roman date and these are listed in the desk-based assessment report.

2.5.4 In the last few years of the 19th century, Charles Roeder, a local antiquarian, observed the extensive excavations in lower Deansgate associated with the construction of the viaduct. His findings were described in a substantial paper in the *Transactions of the Lancashire and Cheshire Antiquarian Society*.[6] Roeder's findings led him to conclude that the *vicus* extended to the east of Deansgate, whereas earlier antiquarians, such as the Rev. J. Whitaker, assumed that the settlement was limited to the west side of Deansgate. Roeder's observations included important findings within the boundaries of the development site, including:

> '*Another* [Roman] *street was found by me, in August, 1897, in the centre of the block between Old Trafford Street and Great Bridgewater Street...It was carried here over an old pit , filled up with clay, bits of charcoal, and Roman pottery, and could be traced for twelve feet, and was paved with flags of red sandstone....all in situ.*'

Such is the detail of the information set out in Roeder's paper, that his findings are discussed further in Section 18 of this report.

2.5.5 There is very little evidence for the Saxon and early medieval period in the vicinity of the site. Saxon coins were found at Campfield Library, to the north-west of the site, on the corner of Deansgate and Liverpool Road. The putative area of the *vicus* gained the name 'Aldport' or old market, implying sub and post-Roman activity. However, the nature and extent of this area is unclear.

2.5.6 There are no SMR entries within the site for the medieval period. Much of the area was apparently given over to a deer park, although it is unclear if the site lay within its precinct. Aldport was still a placename after this time since it appears on later maps and plans. However, it would seem that a new market area was established at this time, well to the north of the site, near the Cathedral at the confluence of the Irk and the Irwell. It was in this locality that medieval and modern Manchester developed.

[6] Roeder, 1899.

3. AIMS AND OBJECTIVES

3.1 In broad terms, the aims and objectives of the original archaeological evaluation were to establish the date, nature, extent and significance of archaeological remains, as evidenced by any buried deposits, structures and features and any artefactual and ecofactual evidence contained therein. As outlined above, the evaluation programme was effectively abandoned as soon as it became apparent that archaeological remains of significance were present on the site. This was considered to be the best course of action given that only a small window of opportunity remained prior to commencement of the main construction programme. Therefore it was agreed by all parties to proceed directly to open area 'rescue' excavation with the objective of preserving these important remains by record.

3.2 Specifically, the excavation sought evidence for the following:

- the location, nature, date and extent of any pre-Roman occupation as evidenced by structures, boundaries, pits, ditches and field systems, as well as artefacts and palaeo-environmental data that they may contain;
- the location, nature, date and extent of Roman settlement, as evidenced by structures, boundaries, pits, ditches and field systems, as well as artefacts and palaeo-environmental data that they may contain;
- the purpose of any structures identified and their relationship to the *vicus* settlement;
- the economic basis of the Roman settlement and the diet of its inhabitants, as evidenced by plant macrofossils recovered by bulk sampling and hand recovered faunal remains;
- any evidence for post-Roman settlement on the site.

4.2.3 Close attention was paid to the top of stratigraphic interfaces. These were cleaned carefully with trowels to establish the presence or absence of archaeological features at these levels. All features were excavated, recorded and sampled, as appropriate.

4.2.4 The site's excavation strategy was as follows:

- Complete features, such as pits and postholes, were normally half-sectioned to determine and record their form, and then fully emptied to aid recovery of dateable material, effectively therefore 100% excavation was undertaken. The exception being large quarry pits in Area B, which were subject to a minimum of 50% excavation.
- A minimum of 75% of each linear feature was excavated, areas affected by modern truncation remained unexcavated.

4.3 Site Recording

4.3.1 *Pro forma* recording sheets were used to compile a full and proper record of all written, graphic and photographic work undertaken. Detailed written records were made of all archaeological features and deposits encountered, comprising both factual data and interpretative elements. Drawings were executed on polyester-based drawing film, at a scale of 1:10, 1:20 or 1:50 as appropriate, and were related to a site survey grid, which was established across the excavation area. A unique site code, DGM 04, was assigned.

4.3.2 Two Temporary Bench Marks (TBM's) were established on the site from the Ordnance Survey Bench Mark located at 324 Deansgate, which had a value of 35.50m OD. The TBM's had a value of 33.85m OD in Area A and 35.16 OD in Area B.

4.3.3 The elevation of all principal strata and features was calculated in metres above Ordnance Datum (m OD) and the values indicated on the appropriate plans and section drawings.

4.3.4 A 'Harris Matrix' stratification diagram was compiled to record stratigraphic relationships.

4.3.5 A detailed photographic record of the investigations was compiled utilising SLR cameras. This included black and white and colour prints and colour transparencies (on 35mm film), illustrating the principal features and finds discovered in detail and in general context. All photographs of this nature included a clearly visible, graduated metric scale. The photographic record also included 'working shots' to illustrate more generally the nature of the archaeological operation mounted.

4.4 Artefacts and Palaeoenvironmental Remains

4.4.1 All artefacts recovered from the investigations were treated in an appropriate manner and were exposed, lifted, cleaned, marked, conserved, bagged, packaged, boxed and stored, as appropriate and in accordance with recognised guidelines.[9]

4.4.2 Specialist assessment was undertaken on all types of finds (*e.g.* organic, ceramic, metallic).

[9] UKIC, 1983 and RESCUE 1988.

4.5 Post-Excavation Assessment

4.5.1 This report sets out the findings of the archaeological investigations at the site. It includes a post-excavation assessment of the stratigraphic, artefactual and palaeoenvironmental data recovered, in accordance with the guidelines of English Heritage, as set out in 'Management of Archaeological projects (2nd Edition)' (MAP2). Following MAP2 guidelines, the site data collected during the fieldwork has been assessed for its potential for further analysis in relation to the project's research aims and any additional questions which came to light during post-excavation analysis. This post-excavation assessment report, enumerating the different kinds of evidence (stratigraphic, artefactual and palaeoenvironmental) from the site and their potential for further analysis, has been prepared as the first phase of that process.

4.5.2 Assessment of each category of artefactual and palaeoenvironmental material was undertaken by suitably qualified archaeological specialists as soon as possible following the completion of the fieldwork.

4.5.3 Survival of all materials recovered during or generated by archaeological projects depends upon suitable storage. The complete project archive, comprising written, drawn, and photographic records (including all material generated electronically during post-excavation) and all recovered materials will be packaged for long term curation according to relevant guidelines.[10] An acceptable standard for archives generated by archaeological projects has been defined in MAP2.[11] The archive will be quantified, ordered, indexed, and internally consistent. The archive will also contain a complete site stratigraphic matrix. A copy of each report, article and academic paper resulting from the project will also be included. The depositional requirements of the receiving body, in this case the Manchester Museum, will be met in full.

4.5.4 Data will be prepared for accession to the Greater Manchester Sites and Monuments Record.

4.5.5 The written archive in microcopy will be submitted to the National Archaeological Record.

4.5.6 Unless overridden by National Law, any artefacts and ecofacts recovered from the site belong to the landowner, who is urged to donate these to an appropriate body. PCA will, with the agreement of the landowner, arrange for deposition of the material with a suitable repository, in this case the Manchester Museum.

4.5.7 Alternative arrangements for the curation of all or part of the project archive require prior written approval from a representative of the GMAU. For example, if the artefacts are not to be donated to the appropriate museum, arrangements will be made for a comprehensive record to be compiled of all relevant materials (including detailed drawings, photographs and descriptions of individual finds), which can instead constitute that part of the archaeological archive.

[10] UKIC, 1990.
[11] English Heritage, 1991.

5.3 Phase 3: Early Roman Quarrying and Associated Activity (*c.* AD 80-120)

5.3.1 Area A: gravel extraction pit and rubbish pit (Figure 4)

Quarry pit [380], fills [305], [360], [367]
Pit [259], fills [270], [267], [255], [258], posthole [298], fill [297]

5.3.1.1 The north-eastern portion of a substantial feature, [380], truncated natural sand and gravel in the south-western corner of Area A (Figure 4). This was recorded for a maximum distance of *c.* 14.0m north-south by *c.* 12.0m east-west, continuing to the west, south and north-west beyond the limits of excavation, and was up to *c.* 1.40m deep. It was irregular in plan and the excavated north-eastern side varied from moderately to steeply sloping. The feature had an irregular base with areas of hollows and depressions. It is interpreted as part of a substantial sand and gravel extraction pit.

5.3.1.2 The main primary fill, [360], of the quarry pit, located along the eastern portion of the feature, comprised a deposit of clayey, silty sand, recorded over an area measuring *c.* 14.0m north-south by *c.* 6.30m east–west. This was up to 0.82m thick and continued to the north and south beyond the limits of excavation. A few sherds of early Roman pottery, dating from the Flavian-Trajanic period (*c.* AD 80-120, Ceramic Phase 1[12]) were recovered from this primary fill. In the south-eastern portion of the quarry pit, fill [360] was overlain by a sandy silt fill, [305], which measured *c.* 5.30m north-south by 1.40m east-west by 0.30m thick. In the south-western side of the quarry pit, a small deposit of another primary fill, [367], comprising clayey silt up to 0.13m thick, was recorded over an area measuring 0.90m north-south by *c.* 0.30m east-west.

5.3.1.3 The far northern edge of quarry pit [380] was truncated by a small sub-circular feature, [298], with vertical sides and a flat base measuring 0.66m by 0.60m by 0.36m deep. The function of this feature was not certain, but it may have been a posthole associated with the quarrying activity.

5.3.1.4 Feature [298] was truncated by a sub-circular feature, [259], with steeply sloping sides and a rounded base. This was 0.67m deep and measured 3.50m north-south by 2.90m east-west, continuing to the north-west beyond the limit of excavation. Its primary fill, [270], located throughout the base of the feature, comprised sandy silt with occasional lenses of burnt sand and charcoal. This was overlain in the south-western corner of the feature by silty sand, [267], which contained frequent charcoal. Overlying this in the centre of the feature was fill [255], which comprised clay with frequent inclusions of daub and occasional large cobbles. The composition of this fill is indicative of the disposal of building material. The latest fill, [258], located throughout the upper part of the feature, comprised sandy silt with pebbles, charcoal, degraded animal bone and sandstone.

5.3.1.5 Feature [298] is interpreted as a small rubbish pit and pottery recovered from fills [267] and [258] indicates that it was backfilled in the early Roman period, *c.* AD 80-120 (Ceramic Phase 1). The composition of its lower fills suggests that it may have contained debris from a demolished building. Although there was no indication of any contemporary building within the areas excavated, it presumably originated in the immediate vicinity as such debris is unlikely to have been transported any great distance for disposal.

[12] The Ceramic Phases for Roman Manchester, as defined by Clark, 1992.

5.3.3.3 Pit [185] was truncated to the west by a feature, [88], excavated and recorded in plan (Figure 5). Although only a small portion of this feature survived, it is probable that it was part of a large sub-circular gravel extraction pit. The surviving part of the feature measured 2.45m east-west by 0.45m north-south by 0.75m deep and a quantity of pottery dating to the period AD 80-120 (Ceramic Phase 1) was recovered from its fill, [87].

5.3.4 Phase 3 summary discussion

5.3.4.1 The earliest phase of Roman activity encountered at the site was characterised by a group of substantial gravel extraction pits. The large quantities of raw materials exploited from such quarry pits are likely to have been used for the construction of roads in the *vicus*. Pottery recovered from the earliest backfills of the quarry pits dates from the Flavian-Trajanic period, *c.* AD 80-120, Ceramic Phase 1, demonstrating that the quarrying activity dates from the earliest phase of Roman occupation in Manchester.

5.3.4.2 A probable fenceline was recorded in the south-western part of the site, cutting through the base of one of the quarry pits. This probably represents initial laying out of property boundaries within the *vicus*. This suggests that early development of the *vicus* was well-ordered and planned and the boundary was reinstated on the same alignment in later phases of activity.

5.4 Phase 4: Quarry Backfilling and Levelling, Areas A and B (*c.* AD 120-160)

5.4.1 Area A: Phase 4 backfill of quarry pit [380]

Deposits [205], [215], [238], [249], [268], [273], [275]
Pit [246], fills [244], [245]

5.4.1.1 In the south-western corner of Area A, the central portion of quarry pit [380] was backfilled with a 0.50m thick deposit, [275], comprising silty clay. This overlay fenceline [362] and associated postholes, and extended over an area measuring 8.80m north-south by 6.50m east-west. To the north-west, this was overlain by a 0.45m thick deposit, [273], extending over an area *c.* 2.65m north-south by 3.40m east-west. Pottery dating from the period AD 120-160 (Ceramic Phase 2) was recovered from this backfill material. Deposit [275] was partially overlain by a deposit, [238], located along the eastern side of quarry pit [380], and extending a short distance beyond the northern edge of the pit. This comprised clayey, sandy silt and contained frequent inclusions of charcoal and decayed bone fragments. This backfill was up to 0.30m thick and measured *c.* 9.50m north-south by 4.30m east-west. Amongst the pottery assemblage was a small quantity of Ceramic Phase 3 material, this is considered to have been introduced intrusively. Towards the southern limit of excavation, deposit [275] was overlain by a thin deposit, [268], of clayey silt extending over an area measuring 1.35m north-south by *c.* 2.90m east-west.

5.4.3 *Phase 4 summary discussion*

5.4.3.1 The Phase 4 period of activity recorded at the site was characterised by further backfilling of the earlier quarry pits and general levelling dumps across Areas A and B. In Area B, at least, this may represent ground consolidation prior to the construction of buildings in the area. Pottery recovered from these deposits dates this period of activity to *c.* AD 120-160 (Ceramic Phase 2).

5.5 Phase 5: Property Boundaries, Area A (*c.* AD 120-160) (Figure 6)

5.5.1 *Phase 5: Plot 1*

Ditch [219], fills [296], [282], [218], ditch [279], fills [286], [278]
Ditch [300], fill [299], ditch [302], fill [301], ditch [371], fill [370]

5.5.1.1 A linear north-south aligned feature, recorded as [219] in the north and [279] beyond a modern intrusion to the south, was recorded adjacent to the south-western limit of excavation in Area A (Figure 6). This feature was recorded for a total distance of *c.* 4.50m, truncated to the north and south, and its maximum recorded width was 1.60m, although only the eastern side was exposed within the limits of excavation, its profile suggests that the feature was not much wider. It was up to 0.50m deep and had a steep-sided slot along its base, up to *c.* 0.40m wide. It is interpreted as a boundary ditch, presumably delimiting the western extent of a plot (Plot 1) which had earlier been defined by the fence and post line, [362] (see Phase 3, above).

5.5.1.2 The primary fill, [296], of ditch [219] comprised silty clay, up to 0.15m thick. This was overlain by a fill, [282], up to 0.10m thick, comprising silty clay with frequent charcoal inclusions. Both fills are interpreted as natural silting of the feature. The upper fill, [218], comprised a 0.38m thick deposit of silty, sandy clay, mixed red, orange and yellowish brown in colour, with very frequent charcoal, moderate daub and moderate sandstone fragments. This is interpreted as a deliberate backfilling of the upper part of the ditch and pottery dating from AD 120-160 (Ceramic Phase 2) was recovered from this fill, dating the disuse of the boundary to this period. The primary fill, [286], of the southern portion of the ditch, [279], comprised silty clay with frequent charcoal and occasional sandstone fragments, up to 0.19m thick, interpreted as natural silting. The upper fill, [278], comprised sandy, clayey silt with frequent charcoal and occasional sandstone fragments. This was up to 0.33m in thickness and probably represents deliberate backfilling of the feature. Pottery recovered from this fill could not be as closely dated as that recovered from the upper part of the ditch to the north, and has been broadly dated to the period AD 120-200 (Ceramic Phases 2-3).

5.5.1.3 The northern boundary of Plot 1 was delimited by an east-west aligned feature, recorded as three elements, [371], [300] and [302], truncated by modern activity, interpreted as parts of the same linear feature (Figure 6). In total, the feature measured *c.* 12.0m east-west by *c.* 1.30m wide by 0.32m deep and had a square terminal in the west, [371], and continued to the east beyond the limit of excavation. The area thus delimited by these east-west and north-south boundaries measured at least 18.50m east-west by 12.0m north-south, although probably continuing to the south and east. Pottery recovered from the fill, [301], of ditch segment [302], dates from the period AD 120-200 (Ceramic Phases 2-3).

5.5.5.2 Little artefactual evidence was recovered from these boundary ditches. In fact, pottery was only recovered from two associated deposits, one of which was a deliberate backfilling of a ditch and therefore dates from the period when the feature fell into disuse. However, it is reasonable to place the setting out of these ditches within the period *c.* AD 120-160, due to their stratigraphic position within the overall site phasing.

5.6 Phase 6: Post and Beam Built Structure (Building 1) and Associated Activity, Area A (*c.* AD 120-160) (Figure 7)

5.6.1 Phase 6.1: Plot 1, Building 1

Beamslot [311], fill [310], posthole [304], fill [303], posthole [337], fill [336], postpipe [349], fill [348], posthole [327], fill [326], postpipe [329], fill [328]
Beamslot [319], fill [318], posthole [339], fill [338]
Posthole [347], fill [346], posthole [359], fill [358], posthole [366], fill [365]
Posthole [64], fill [63], posthole [223], fill [222], posthole [228], fill [227], posthole [230], fill [229], stake [243], fill [242], posthole [317], fill [316], posthole [321], fill [320], posthole [331], [330], posthole [341], fill [340]
Posthole [375], fill [374], posthole [377], fill [376]

5.6.1.1 A group of postholes and two beamslots was recorded within Plot 1 and these represent the earliest phase of structural remains encountered within the areas excavated.

5.6.1.2 Beamslot [311] and [319] appear to delimit the north-western corner of a timber built structure (Building 1). Although interpretation of this structure is as yet tentative, beamslot [311], and postholes [304], [327] and [337] may have formed the northern side of this structure. Beamslot [311] measured 2.12m east-west by 0.30m wide by 0.12m deep. A posthole, [304], measuring 0.36m in diameter by 0.30m deep, was located at the western end of the beamslot. A substantial posthole, [337], with postpipe [349], was located to the east of the eastern end of beamslot [311]. The centre of the feature was located 2.50m to the east of the beamslot. The centre of a similar feature, posthole [327] with postpipe [329], was located at a distance of 2.50m to the east of [337]. Both postpipes measured *c.* 0.30m in diameter.

5.6.1.3 The western side of the structure was formed by beamslot [319], which measured 1.90m north-south by 0.30m wide by 0.22m deep. It had a small posthole, [339], cut through its base at the southern end.

5.6.1.4 Postholes [347], [359] and [366] may have formed the eastern side of the structure since they lay on the same alignment as the western side of the structure, and formed a right-angle with the northern side of the structure.

5.6.1.5 The structural features described above have been interpreted as forming a building, Building 1, which measured 9.0m ESE-WNW by at least 4.0m NNE-SSW, although no conclusive evidence was encountered for the southern side of this structure so it may have been larger.

5.6.1.6 Several features, interpreted as postholes, were recorded internally to the structure, adjacent to its eastern and western sides. It is possible that these may have been associated with the building, and may represent internal structural features such as roof supports or partitions.

5.6.4 Phase 6.1: Plot 3

Posthole [264], fill [263]
Pit [251], fill [250], pit [253], fill [252]

5.6.4.1 A sub-circular feature, [264], was located on the eastern side of Plot 3, to the east of north-south ditch, [266]. This had vertical sides and a concave base and measured 0.55m north-south by 0.50m east-west, truncated to the east, by 0.44m deep. The size and dimensions of the feature suggest that it was probably a posthole. Its fill, [263], contained several worked sandstone blocks, possibly the remnants of post-packing. As with Plot 2, Plot 3 had suffered much truncation, and this one feature represents the only evidence of structural remains in this plot. Although there is insufficient evidence to conclusively determine the activity carried out in the plot, the presence of this substantial posthole suggests that a building could have been present within the eastern part of Plot 3.

5.6.4.2 A sub-rectangular feature, [251], was located in the western part of Plot 3. This had gently sloping sides and a concave base and measured *c.* 1.35m north-south by 1.60m east-west, truncated to the north, east and west, and was 0.18m deep. Its fill, [250], comprised sandy silt with moderate charcoal and sandstone fragments. To the east, the northern edge of ditch [240] was slightly truncated by feature [253], this was triangular in plan, due to truncation on three sides. It had steep sides and a flat base and measured 1.15m by 1.0m by 0.22m deep. Its single fill, [252], comprised sandy silt with occasional sandstone fragments. It is possible that these two features may have been parts of refuse pits, associated with the structure(s) to the south in Plot 1 and the putative structure(s) in Plot 2

5.6.5 Phase 6.2: Plot 1, refuse pits

Pit [281], fill [280], pit [285], fill [284], pit [295], fill [295]

5.6.5.1 A group of intercutting features was recorded at the south-western corner of Building 1. The earliest feature, [295], was oval in plan with gently sloping sides and a concave base and measured *c.* 0.75m by 1.10m by *c.* 0.25m deep. This was truncated to the south by a sub-square feature, [281], with steep sides and a concave base, measuring *c.* 1.50m by *c.* 1.40m by *c.* 0.70m deep. Its silty sand fill, [280], contained moderate charcoal inclusions and produced pottery dating to the period AD 120-160 (Ceramic Phase 2). The northern edge of feature [281] was slightly truncated by a sub-oval feature, [285], with gradually sloping sides and a concave base that measured *c.* 0.90m by *c.* 0.50m by *c.* 0.15m deep. Its silty sand fill, [284], contained a large quantity of cobbles and occasional charcoal inclusions.

5.6.5.2 These intercutting features are interpreted as refuse pits and although there was no stratigraphic relationship between these features and Building 1, it is probably more likely that they post-dated the structure. The majority of these refuse pits would have been internal to the building and it is considered unlikely that pits would have been dug inside the structure whilst it was in use.

5.7.1.4 Demolition deposits [206] and [207] were overlain by an extensive deposit, [198], comprising silty sand with frequent charcoal and red sandstone fragments. This was recorded over an area measuring 7.80m north-south by 5.10m east-west, in the south-western portion of Area A. It contained quantities of cultural material, including a large assemblage of pottery dating from the period AD 120-160 (Ceramic Phase 2), fragments of glass vessel, a hobnail, copper alloy, iron and lead objects, an inlaid copper alloy seal box, and fragments of a quernstone and whetstone. The largest assemblages of daub and tile recovered from the excavations originate from this deposit, although the quantities are not large. It was overlain by a similar deposit, [191], comprising sandy silt with frequent charcoal inclusions. Pottery dating from the period AD 120-160 was also recovered from this deposit along with fragments of window glass and iron nails. Deposit [191] was encountered over an area measuring *c.* 9.90m north-south by *c.* 6.10m east-west, and was up to 0.16m thick.

5.7.1.5 The composition of the deposits described above suggests that the material originated from building demolition and Building 1, located a short distance to the east, can be reasonably interpreted as being a possible source of the material.

5.7.1.6 Phase 7 also saw the abandonment of many of the boundary features associated with earlier phases of activity, as evidenced by deliberate backfilling of the ditches, accumulation of developed soils and the deposition of levelling dumps. Ditch [240], the southern boundary of Plot 3 and the northern boundary of Plot 2, went into disuse, as did the north-east aligned sub-division ditch within Plot 3, and the western boundary of Plot 1.

5.7.2 Phase 7 summary discussion

5.7.2.1 Phase 7, represented only in Area A, saw the abandonment of Building 1 within Plot 1 and the deposition of much demolition material, possibly originating from the structure itself. These demolition deposits and occupation debris also served to further backfill the upper part of the quarry pit in the south-western part of Area A, probably representing ground consolidation prior to the next structural phase in the vicinity. A developed soil was recorded in the northern part of Area A, within Plot 3, this presumably accumulated during a period of relative abandonment of the area. This phase of activity also saw the abandonment of several of the boundary features associated with earlier phases of activity, as evidenced by the deliberate backfilling of the ditches and the accumulation of developed soils and the deposition of levelling material. Pottery recovered from this phase of activity dates it to the period *c.* AD 120-160.

5.8 Phase 8: Ground Levelling (*c.* AD 160-200) (Figure 8)

5.8.1 Phase 8: Ground levelling, Area A

Layers [112], [113], [118], [119] [153], [176], [188]
Cut [155], fill [125], pit [272], fill [271], pit [260], fill [248], pit [274], fills [277], [276]

5.8.1.1 A sub-circular feature, [272], was recorded in the southern part of Area A. This measured *c.* 0.75m in diameter by 0.15m deep. A small quantity of pottery dating from the period AD 160-200 (Ceramic Phase 3) was recovered from this feature.

5.8.2 *Phase 8: Ground levelling, Area B (Section 2, Figure 14; Section 3, Figure 15)*

Deposits [137], [138], [161], [163], [164], [166], [171], [172], [181]

5.8.2.1 In Area B, Phase 4 quarry pit backfill, [183], was overlain by an extensive deposit, [181], comprising clayey silt with moderate daub and charcoal inclusions (Section 2, Figure 14). This was up to 0.15m thick and measured 6.80m east-west, truncated to the west. The overlying deposit, [138], up to 0.14m thick, extended for a distance of 7.80m east-west, truncated to the west, and comprised silty sand with moderate burnt daub and charcoal.

5.8.2.2 Deposit [138] was overlain in the west by a sandy silt deposit [180], up to 0.16m thick and extending for a distance of 2.60m east-west, truncated to the east. To the east this was overlain by a deposit, [137], comprising sandy gravel, up to 0.20m thick and measuring 1.55m east-west, truncated to the east.

5.8.2.3 Levelling deposits were also recorded in plan further to the south in Area B. A silty sand deposit, [166], was recorded for a distance of 1.12m north-south by 1.82m east-west, truncated to the east, south and west (Section 3, Figure 15). This was overlain to the north-east by a sandy gravel deposit, [164], measuring 0.48m north-south by 1.38m east-west. To the west this was overlain by a sandy clay deposit [163], measuring 0.28m north-south by 1.05m east-west.

5.8.2.4 A small portion of deposit [164] was also exposed in plan in the southern portion of Area B, recorded as [172], for a distance of 0.68m north-south by 0.64m east-west, truncated to the south and continuing below the base of excavation in all other directions. This was overlain by deposit [171], a continuation of layer [166], recorded for a distance of *c.* 1.10m north-south by 1.90m east-west, truncated to all directions.

5.8.2.5 In section, deposit [138], as described above, was overlain in the west by a 0.15m thick deposit, [192], comprising sandy silt with moderate charcoal and occasional burnt daub inclusions, recorded in section for a distance of 2.40m east-west, truncated to the west. To the west this was overlain by a thin layer, [161], which also overlay deposit [163], comprising sandy silt with occasional clay and burnt daub inclusions. This was recorded for a distance of 0.22m north-south by 1.82 east-west, truncated to the north and west.

5.8.2.6 The maximum combined thickness of the levelling deposits was 0.65m in the area of the Phase 3 quarry pits [185] and [187]. The deposits were up to 0.50m thick in the area where they overlay natural gravel in the eastern side of Area B. Therefore ground level was raised a considerable height, to a level; of *c.* 33.50m OD, prior to the construction of clay and timber buildings in the area.

5.8.2.7 No dating evidence was recovered from these levelling deposits in Area B. They were recorded in section only, but can be reasonably assigned to Phase 8, since they correspond to ground levelling activity in Area A at this time.

5.9.2.4 Several stakeholes or small postholes, [45], [68], [70] and [72], were recorded to the north of the beamslots, also truncating backfill [79]. These presumably would have housed upright timber posts internal to the structure, perhaps roof supports or internal features.

5.9.2.5 A more substantial feature, [76], was recorded towards the centre of the construction cut, this measured 0.80m NW-SE by 0.30m NE-SW, truncated to the north-east, by 0.25m deep. The central location of this feature suggests it may represent the remains of a large timber post for a roof support. A sub-circular feature, [74], was located to the north, internal to the structure. This measured 0.60m by *c.* 0.40m by *c* .0.25m deep, and is interpreted as a posthole, presumably housing an internal timber post.

5.9.2.6 A group of four small postholes was recorded to the east of Building 2, external to its construction cut. These truncated the Phase 8 levelling deposits/quarry backfill deposits, and have therefore been assigned to this phase of activity. Posts [116], [156] and [160] formed a north-south alignment, and may have been part of a wooden fenceline associated with the western side of the building. A more substantial feature, [23], was located to the north of the building. This was up to 0.25m deep, had steep sides and a flat base and measured 0.75m east-west by 0.76m north-south, truncated to the north. Its function was not clear, but it may have been a refuse pit or large posthole.

5.9.3 Phase 9.1: Area A, refuse pits (Figures 9 and 10; Section 4, Figure 15; Plate 4)

Pit [40], fills [35-38], [58-62], [154], stakehole cut [39], fill [38]
Pit [42], fill [41], pit [190], fill [189], pit [197], fill [196], pit [199], fills [193-195], pit [202], fills [201], [208]
Pit [204], fills [200], [203], pit [247], fill [235], pit [254], fills [216], [217], [220], [221], [224]
Pit [262], fill [261]
Layer [102]

5.9.3.1 A group of pits was recorded in the northern portion of Area A, *c.* 14m to the north-east of Building 2 in Area A. They have been assigned to this phase of activity on the basis of the available stratigraphic and dating evidence. The pits contained quantities of refuse, which presumably originated from buildings in the vicinity. These pits also truncated the earlier group of Phase 6 pits recorded in this area, and/or truncated Phase 7 developed soils. The pits were presumably associated with both building phases, Phases 9.1 and 9.2, but as it is not possible to assign them to either sub-phase, they have accordingly been placed in the earliest phase.

5.9.3.2 In northernmost portion of Area A, developed soil [211] was truncated by a sub-rectangular feature, [190], with steep sides and a flat base measuring 2.60m by *c.* 2.0m by 2.26m deep. Its single fill, [189], comprised sandy silt with frequent charcoal fragments from which a large quantity of pottery dating to the period AD 160-200 (Ceramic Phase 3) was recovered. Fragments of tile, daub, several iron nails and a few fragments of vessel glass were also recovered from this feature. The composition of the fill indicates that this feature was a rubbish pit for the disposal of refuse.

5.9.3.9 A bulk sample of deposit [61] produced abundant charcoal along with slag, very rotted mortar/plaster, brick/tile, pottery, coal and ash. A few charred seeds were also recovered along with a few fragments of possible charred hazelnut shell, one or two tiny fragments of burnt bone and a single possible charred spikelet base. Deposit [61] is interpreted as representing the decayed remains of a timber lining, presumably held in place with iron nails, mixed with infill debris, derived either from primary usage of the feature, or from disuse.

5.9.3.10 Between deposit [61] and the edges of the feature was another deposit, [154], up to 0.10m thick, interpreted as the backfill of the construction cut formed by the rectangular element of feature [40].

5.9.3.11 Much of the interior of the feature had been infilled with three deposits. The first comprised silty sand, [60], up to 0.13m thick. This was overlain by a sandy clay deposit, [59], up to 0.44m thick, in turn overlain by silty sand, [58], up to 0.10m thick. These deposits contained frequent charcoal and daub inclusions, and pottery dating to Ceramic Phase 2 was recovered from fills [58] and [60]. Fill [58] was truncated by a circular stakehole, [39], located in the north-eastern corner of the pit, which measured 100mm in diameter by 140mm deep. The overlying fill of the pit, [37], contained a small quantity of pottery dating to the period AD 160-200 (Ceramic Phase 3). This was overlain by a thin charcoal-rich deposit, [36], located at the northern end of the feature; conceivably this may have been part of the original timber lining of feature [40]. The latest fill, [35], also contained a quantity of Ceramic Phase 3 pottery.

5.9.3.12 Interpretation of feature [40] is at present uncertain. It may have been used for some industrial or allied purpose, although it is not precisely clear what this may have been. An alternative interpretation is that it may have been a cess pit. In either case, the presence of the timber lining implies that the feature was intended to remain open for some time, and that the feature was not constructed specifically for the purpose of refuse disposal. However, its final use appears to have been for this purpose.

5.9.3.13 To the north of feature [40], was the surviving portion of a pit, [262], which truncated the Phase 7 developed soil. Its surviving dimensions were 1.35m north-south by 2.20m east-west by *c.* 0.35m deep. Its fill, [261], comprised silty sand with occasional charcoal inclusions. This feature is likely to have been a rubbish pit, similar in size and profile to other such features recorded in the northern part of Area A.

5.9.3.14 A substantial sub-circular feature, [247], was located to the east of feature [40] in Area A. This had vertical sides, a concave base and measured 2.75m in diameter by 1.55m deep. Its fill, [235], comprised slumped natural sand and gravel with lenses of silty sand, from which a small quantity of pottery dating to the period AD 160-200 (Ceramic Phase 3) was recovered. Feature [247] had been truncated by a circular feature, [254], so that only the base and parts of the edges of the earlier feature survived (Section 4, Figure 15). Feature [254] measured *c.* 2.15m in diameter by 1.35m deep and had vertical sides and a concave base. Its primary fill, [224], which was up to 1.05m thick, contained a large quantity of charcoal and daub, along with some burnt bone, a few fragments of vessel glass, a possible copper alloy brooch pin, and a relatively large number of iron hobnails.

5.9.4.2 An ESE-WNW aligned linear feature, [178], was recorded adjacent to the south-western limit of excavation in Area B. This was recorded for a distance of *c.* 3.00m and was *c.* 1.05m wide, truncated to the south, east and west. A small part of the northern edge was recorded in section, due to the variation in the height of survival of the remains in this area (Section 3, Figure 14) and this demonstrated that the feature was at least 0.40m deep and that, at this point, the edge sloped steeply. The feature is interpreted as a construction cut for a clay wall, [173], recorded to the east as wall [128], constructed with sandy clay. This wall was recorded over an area measuring 2.40m ESE-WNW by 1.05m wide, truncated to the west and south, and was at least 0.40m deep in section. To the east, wall [128] was abutted by a similar structure, [129], also apparently within construction cut [178]. It is possible that wall [129] represented a repair to the corner of the building. The highest level at which the clay wall survived was 33.50m OD.

5.9.4.3 Towards the south-western end of wall [173], a small area of silty sand and pebbles, [174], was visible, apparently running under the wall. This may have been a make-up layer for the clay wall. These structural elements are interpreted as the external southern wall of a clay and timber building, Building 3, which would have measured at least 3.00m ESE-WNW.

5.9.4.4 Several deposits, [135], [136], [165] and [167], located internally, are interpreted as levelling/make-up deposits for the floor of Building 3. To the north-west of the wall, a sub-circular feature, [170] (not illustrated on Figure 11 for clarity), may have been associated with this phase of activity, although this is far from certain and its function was not ascertain.

5.9.4.5 Levelling deposits [135], [136] and [180] were truncated by a NNE-SSW aligned linear feature, [179], recorded for a distance of 3.00m and 0.45m wide, truncated to the north. This is interpreted as the construction cut for a clay wall, [111], constructed with sandy clay with occasional daub and charcoal inclusions. It was revealed in section to be of trench-built construction, 0.30m deep, with steep sides and a flat base (Plate 9). A group of nine stakeholes, [92-100] (even numbers), [110], [141] and [143], cut through the clay wall. These would have held wooden stakes, forming the structural framework of a wattle and daub wall. Wall [111] is interpreted as the eastern external wall of Building 3, the wall would have formed a stable foundation upon which a wattle and daub superstructure is likely to have been constructed.

5.9.4.6 The clay walls [111], [173/128] and [129] thus formed the south-western corner of Building 3, which measured at least 3.00m NNE-SSW by 3.00m ESE-WNW.

5.9.4.7 Evidence was recorded to suggest internal division within Building 3. An ESE-WNW aligned linear feature, [177], truncated levelling deposit [135] and is interpreted as the construction cut for an internal clay wall, [168]. It comprised sandy clay and was 0.64m wide and measured *c.* 1.85m ESE-WNW, truncated to the west. Given that this wall was located only a metre to the north of the southern external wall, it presumably did not form a separate room within the building, and it is likely to represent an internal partition.

5.9.4.2 Pit [48] had been cut through by a substantial sub-circular pit, [20], with concave sides and base, measuring 2.70m by 2.30m by *c.* 1.0m deep. Its primary fill, [19], up to 0.10m thick, comprised silty sand with moderate charcoal inclusions. This was overlain by a thin lens of material, [11], comprising charcoal and burnt organic material. A bulk sample taken from this deposit produced charcoal including oak and willow/aspen/poplar, some hexaploid wheat grains, and large amounts of cereal chaff. The latter was mainly spelt, in the form of glume-bases, but there were also some barley rachis fragments along with one whole two-grained spelt spikelet. At least one wheat grain showed some evidence of having sprouted. There were also a few fragments of material which appeared to be uncharred cereal 'bran', perhaps from grains that had not been completely charred.

5.9.4.3 The overlying fill, [10], was up to 0.56m thick and comprised silty clay with frequent daub inclusions. The upper fill, [57], located at the western side of the feature and up to 0.60m thick, comprised sandy silt with occasional charcoal inclusions. The composition of the fills of pit [20], indicated that is was a rubbish pit, possibly including demolition debris from a structure in the vicinity. Pottery recovered from fills [10] and [11] dates from the period AD 80-120 (Ceramic Phase 1), and this material is therefore considered to be residual.

5.9.4.4 The western end of pit [48] had been truncated by a sub-circular feature, [28], with steep sides and a concave base. This measured 1.36m by 1.30m by 0.25m deep and its silty sand fill, [29], contained occasional daub and charcoal inclusions.

5.9.4.5 The pits described above are interpreted as rubbish pits containing material probably originating from Buildings 3 and 4 located along the western side of Area B. As with the refuse pits excavated in Area A, these could have been associated with both building phases, Phases 9.1 and 9.2.

5.9.5 Phase 9.2: Area A, Building 2 rebuild (Figure 10, Plate 5)

Construction cut fills: [43], [50], [51], [53], [55], [56]
Clay floor [34]
Posthole [30], fill [31], posthole [25], fill [26], beamslot [33], fill [32]

5.9.5.1 There was evidence for an episode of rebuilding or repair to Building 2, this may have been contemporary with the Phase 9.3 rebuild in Area B, discussed below. Deposit [53], a 20mm thick deposit of black silty sand, overlay Phase 9.1 stakeholes [68] and [70] in the south-eastern corner of construction cut [90]. Deposit [56], a 60mm thick deposit of silty sand and gravel, overlay features [45], [74], [78] and [85]. This was partially overlain in the south-western corner of the construction cut by a 20mm thick deposit, [51], of pink clay. Deposits [51] and [53] were overlain by a 90mm thick clayey sand deposit, [50]. All of these deposits were overlain by a 0.20m thick deposit, [43], comprising gravel and sandy silt with frequent inclusions of charcoal, located across the majority of the construction cut. A small quantity of pottery dating from the period AD 160-200 (Ceramic Phase 3) was recovered from this deposit. Collectively, these deposits are interpreted as levelling and make-up material for an overlying floor surface, [34], which comprised distinctive pink silty clay up to 0.14m in thickness (Plate 5). The highest level at which this clay floor survived was *c.* 33.20m OD.

5.9.7 *Phase 9.3: Area B, Building 3 rebuild (Figure 12)*

Clay floor [9]
Beamslot [8], fill [7]
Stakehole [13], fill [14], stake [15], fill [16]

5.9.7.1 Charcoal-rich demolition deposit [47], clay floor [130], and associated beamslots were overlain by a 0.10m thick sandy clay deposit, [9], recorded over an area measuring 2.70m NNE-SSW by 1.20m ESE-WNW and surviving at a highest level of *c.* 33.60m OD. This is interpreted as a floor surface, possibly representing a rebuild of Building 3. It had been cut through by an ESE-WNW aligned feature, [8], towards its centre. This had vertical sides and a flat base and measured 0.53m, truncated to the west, by 0.25m wide by 70mm deep. It is interpreted as a beamslot, and would have housed a timber beam, presumably forming part of an internal feature within the structure. Two stakeholes, [13] and [15], measuring 0.10m in diameter by 50mm deep, were located to the south of the beamslot, these presumably housed timber uprights from an internal feature.

5.9.8 *Phase 9 summary discussion*

5.9.8.1 Phase 9, recorded in both Areas A and B, saw the most intense period of occupation at the site, with a sequence of structures, primarily built with clay and timber, and associated refuse disposal. The remains of a clay and timber building (Building 2) were encountered in the western side of Area A. The earliest phase of construction comprised a construction cut measuring 4.60m by 4.10m with traces of a beamslot, probably representing an external wall, and internal post and stakeholes. Evidence for a second phase of construction was recorded, several levelling deposits which overlay the earlier postholes and beamslot were recorded within the confines of the construction cut. A more extensive deposit, interpreted as a make-up deposit for a clay floor surface, was recorded. The clay floor itself was cut through by several stakeholes and a beamslot, representing internal timber features within the structure. Both phases of construction of this building were built on a NNE-SSW by ESE-WNW alignment. To the east, a group of postholes ran parallel to the structure, and may have formed part of a possible fenceline associated with the building.

5.9.8.2 A group of substantial pits was located in the northern portion of Area A and these contained quantities of refuse which presumably originated from buildings in the vicinity.

5.9.8.3 The remains of clay and timber buildings were also recorded in the south-western part of Area B. The earliest phase recorded comprised clay wall foundations, probably representing the external south-western corner of a structure (Building 3), which would have measured at least 3.0m by 3.0m and was built on a NNE-SSW by ESE-WNW alignment. Several stakeholes were recorded along the eastern wall foundation and these probably represent the line of an external wattle and daub wall. Traces of an internal clay wall and clay floor were also recorded along with evidence for timber beams, possibly from an internal partition or other feature, which may have burnt *in situ*.

5.11.1.2 The southern edge of deposit [24] was partially overlain a sandy silt deposit, [17], notable for its frequent charcoal inclusions. It was up to 0.15m thick and was recorded over an area measuring 3.60m north-south by 1.95m east-west. To the south, this deposit, recorded as deposit [18], was up to 0.44m thick and was encountered over an area measuring 4.0m east-west by 2.25m north-south. To the west, recorded as deposit [4], this material was up to 0.30m thick. Deposits [17] and [18] were partially overlain by a sandy clay deposit, [3], with moderate charcoal inclusions. This was up to 0.25m thick and survived across an area measuring *c.* 5.20m north-south by 0.80m east-west. These deposits are interpreted as accumulation layers, forming after clay and timber buildings in this area had fallen into disuse.

5.11.2 Phase 11: Area B developed soil

Deposits [6], [12] and [21]

5.11.2.1 The northern portion of Phase 9 clay floor [9] and beamslot [8] was overlain by a silty sand layer, [6], with frequent charcoal inclusions. This was up to 0.35m thick and was recorded over an area measuring 2.30m east-west by 1.60m north-south, truncated to the north and west.

5.11.2.2 To the south, clay floor [9] was partially overlain by a similar deposit, [12], up to 0.15m thick and extending over an area measuring 1.40m north-south by 1.0m east-west, truncated on all sides except the north. It is probable that this deposit continued to the east, where similar material was recorded as layer [21]. This deposit was exposed beneath 19th century and modern overburden.

5.11.2.3 The deposits described above are interpreted as developed soil, which evidently accumulated when the area was no longer utilised for habitation.

5.11.3 Phase 11 summary discussion

5.11.3.1 In Areas A and B, the latest structural remains of the Roman Period were overlain by deposits of material representing either demolition material or developed soil. These deposits survived only in localised areas, due to 19th century and modern truncation, and were probably originally more widespread across the site. This developed soil presumably accumulated following abandonment of the Phase 9 structures. It is possible that, as the *vicus* contracted in size in the late Roman Period, this area was turned over to cultivation or was simply completely abandoned.

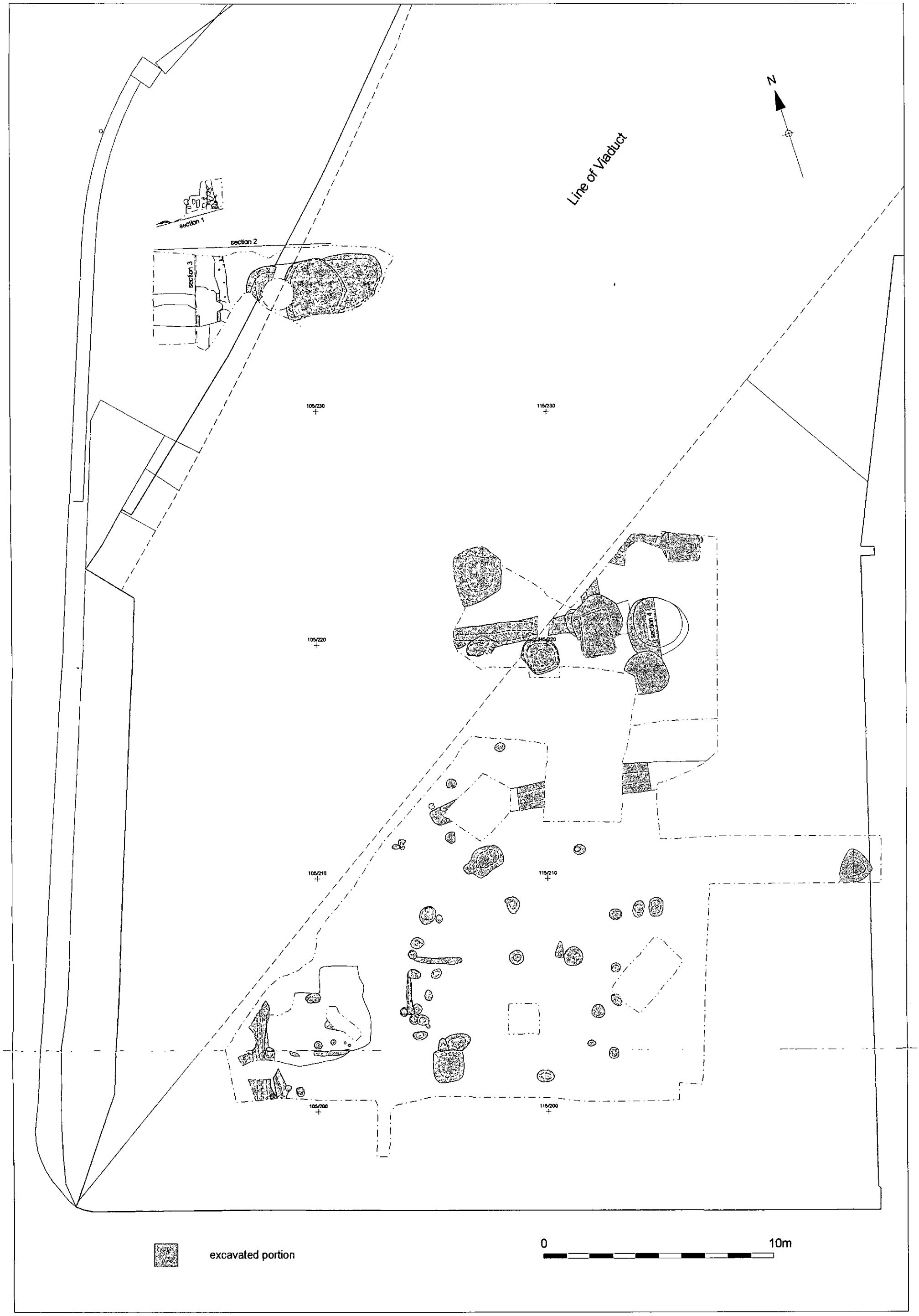


Figure 3. Multi phase plan (selected features), showing section locations
Scale 1:150

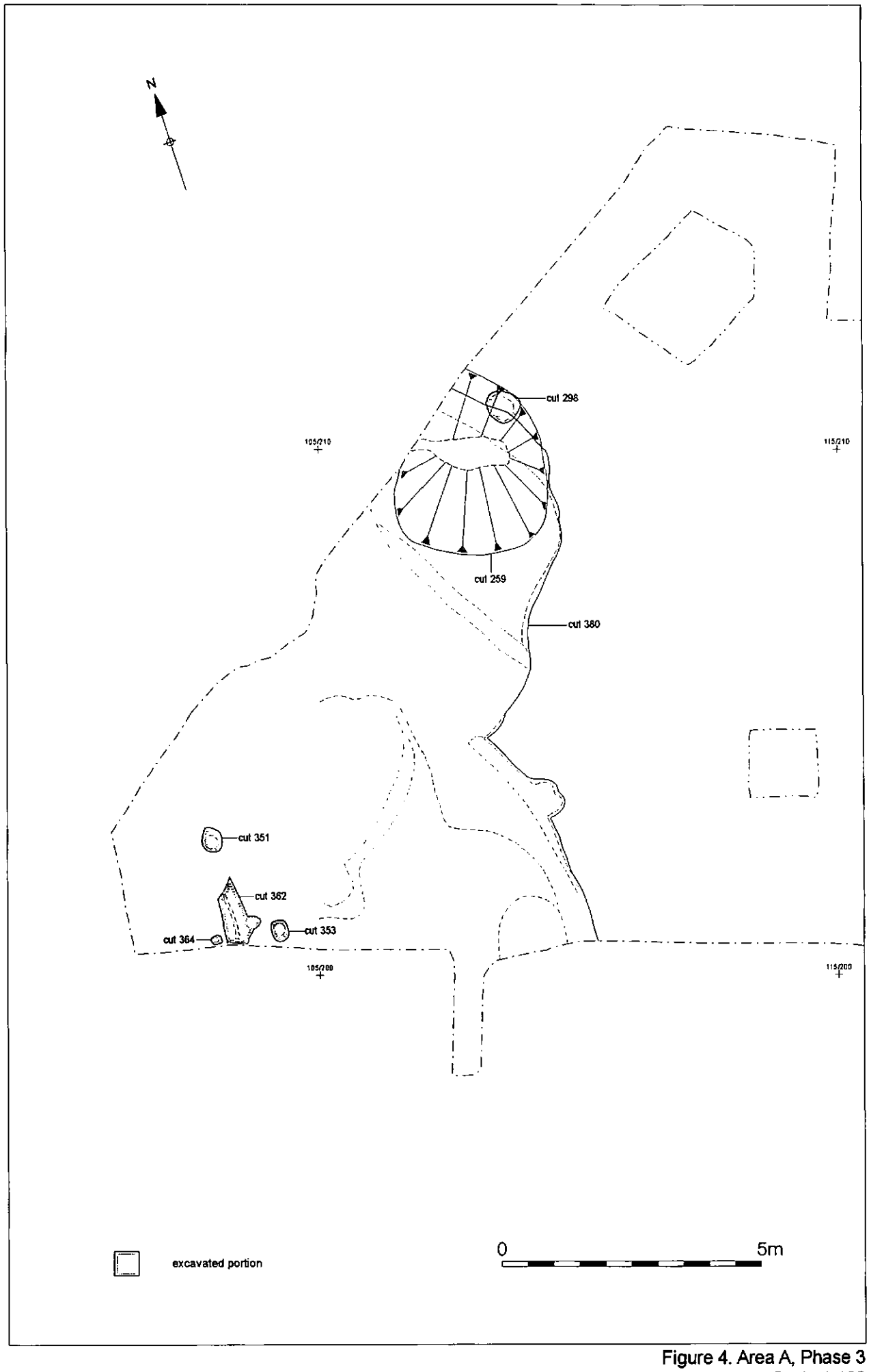


Figure 4. Area A, Phase 3
Scale 1:100

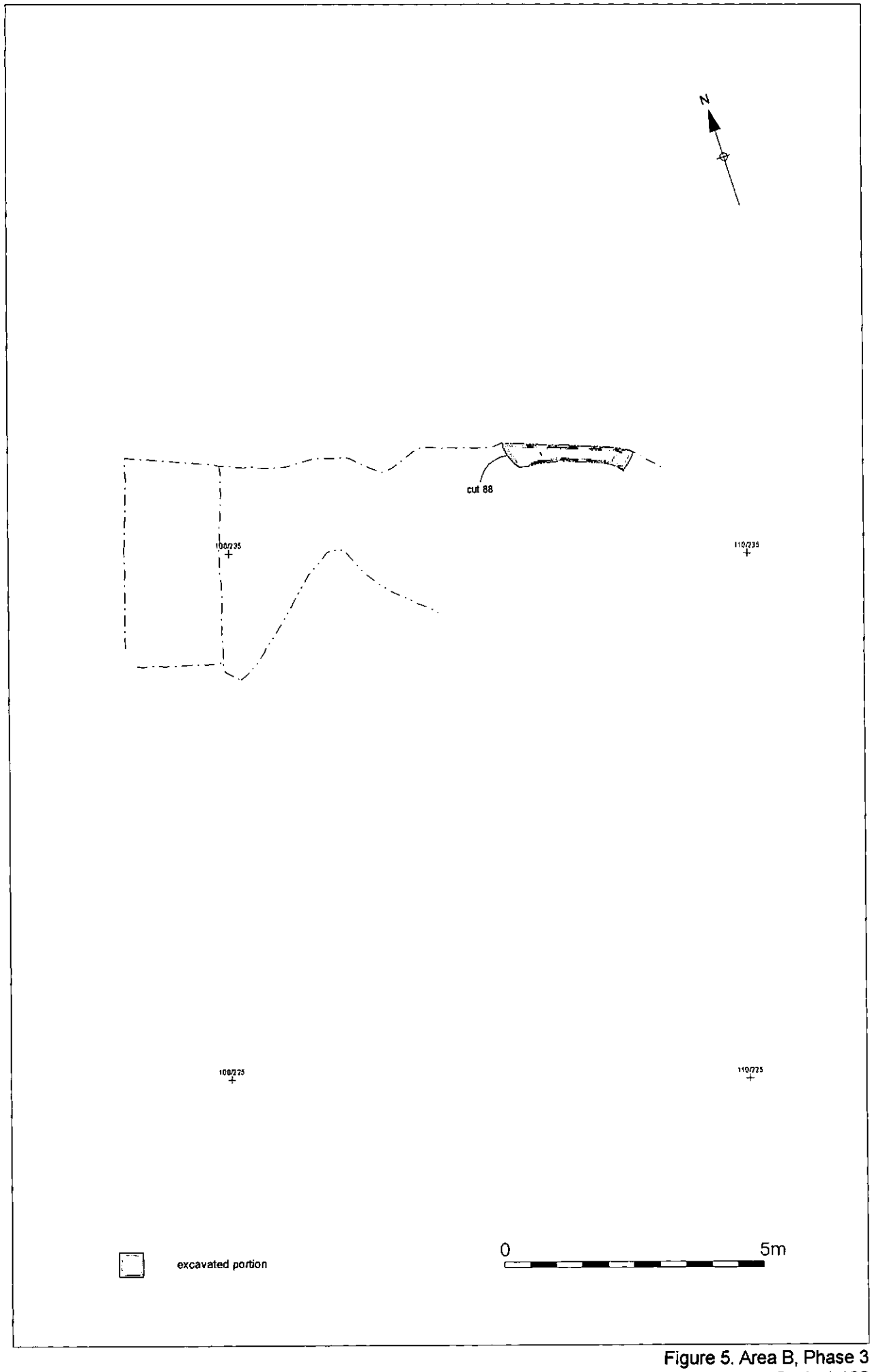


Figure 5. Area B, Phase 3
Scale 1:100

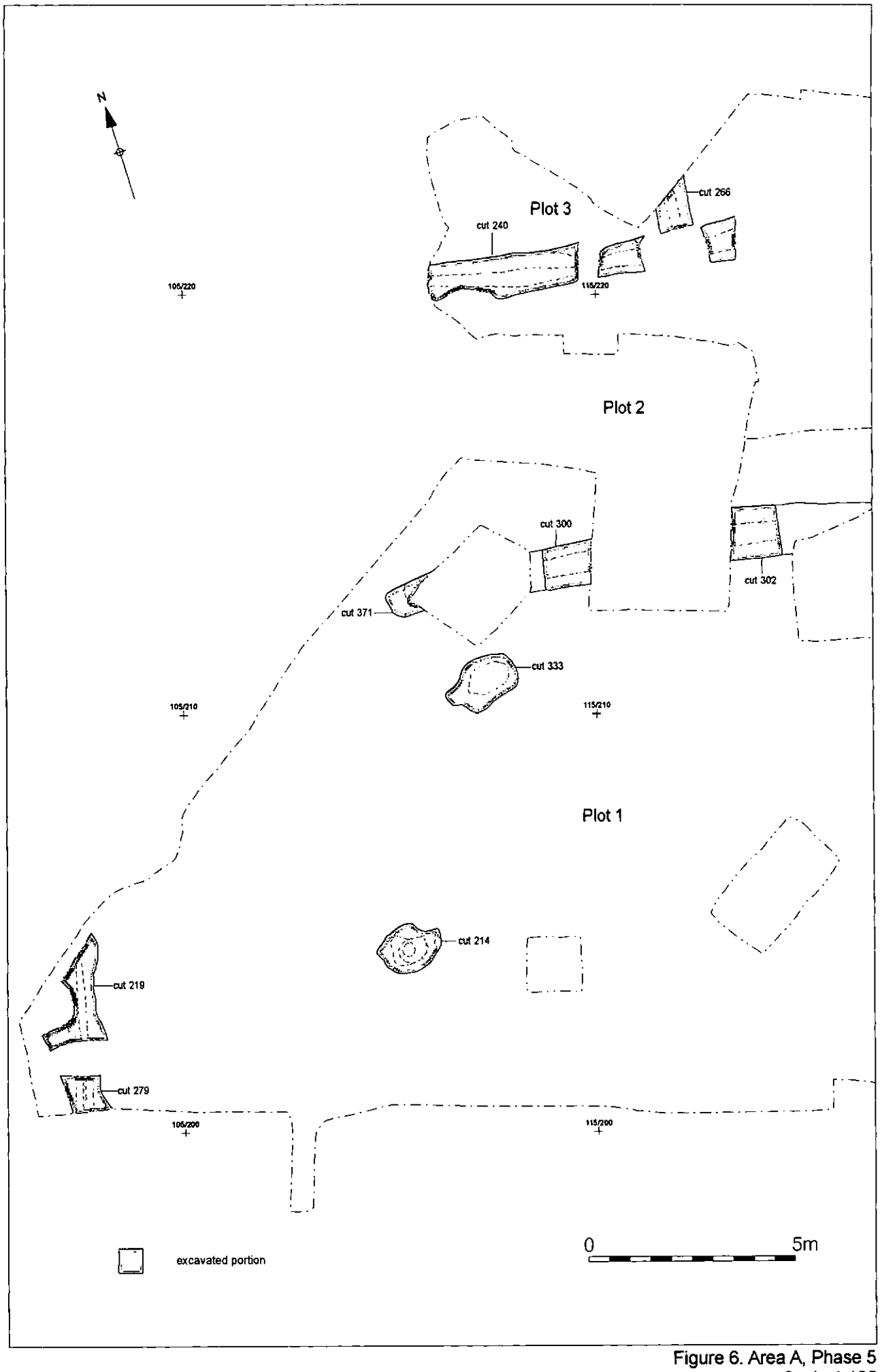


Figure 6. Area A, Phase 5
Scale 1:125

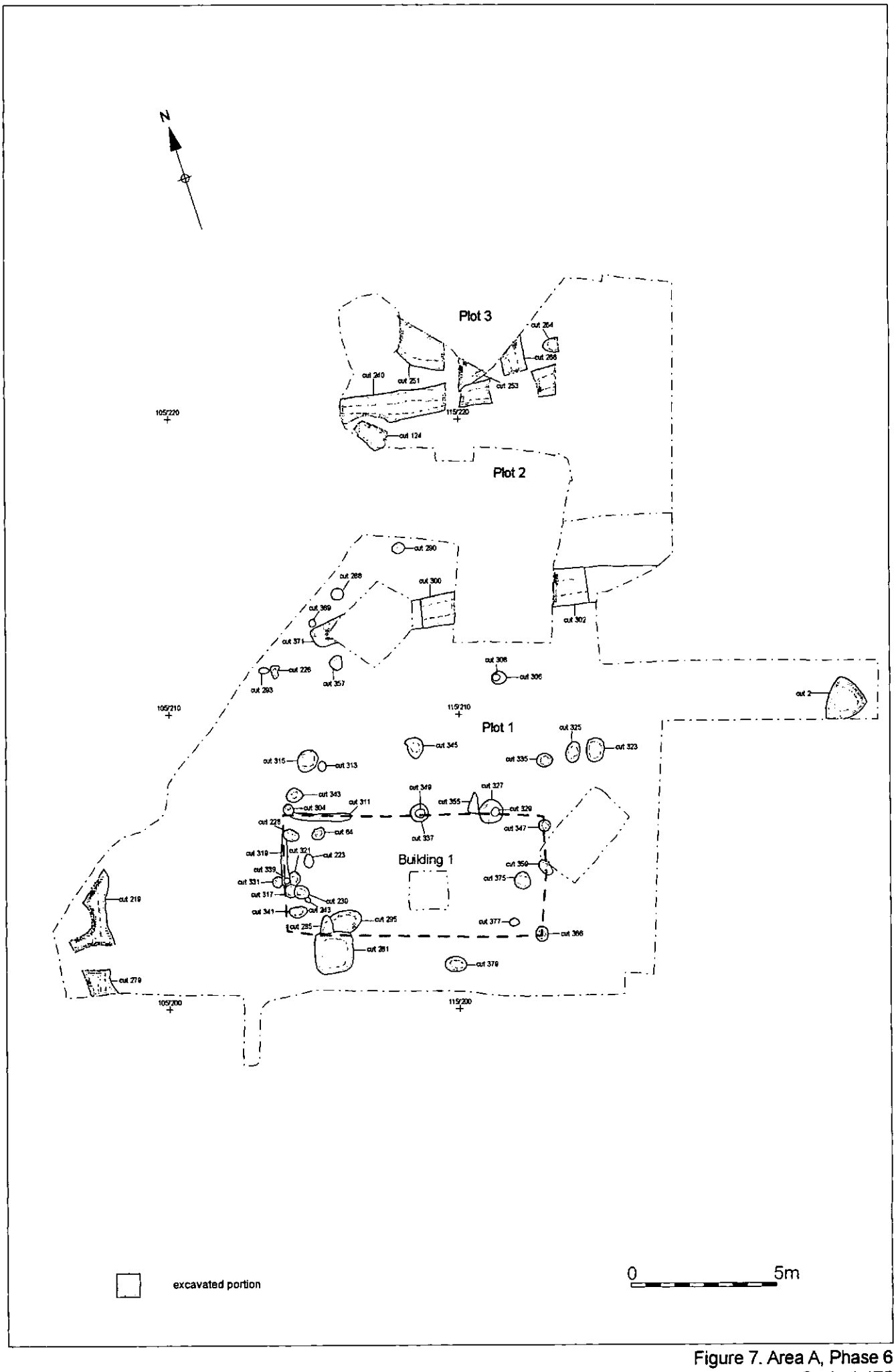


Figure 7. Area A, Phase 6
Scale 1:175

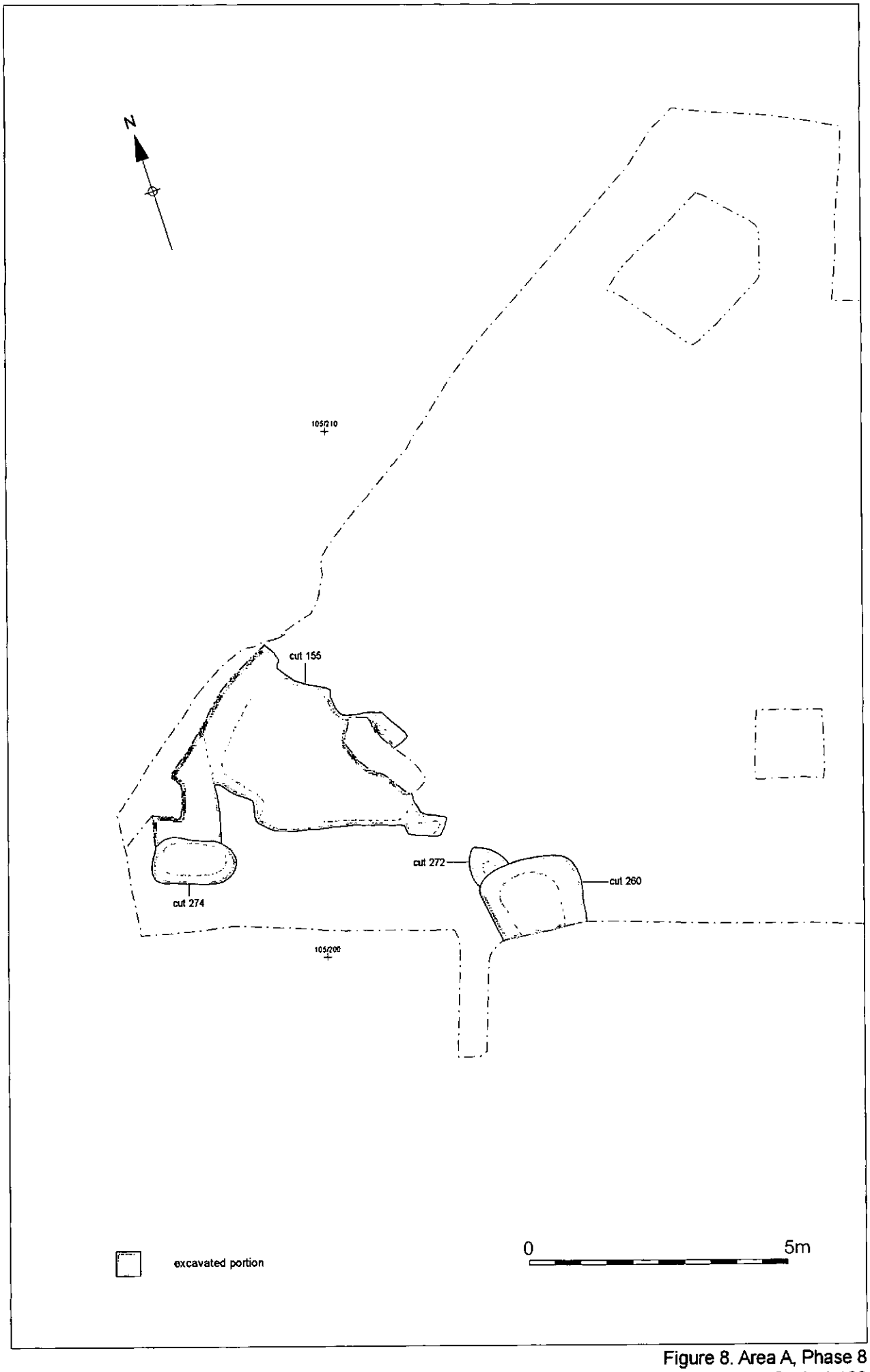


Figure 8. Area A, Phase 8
Scale 1:100

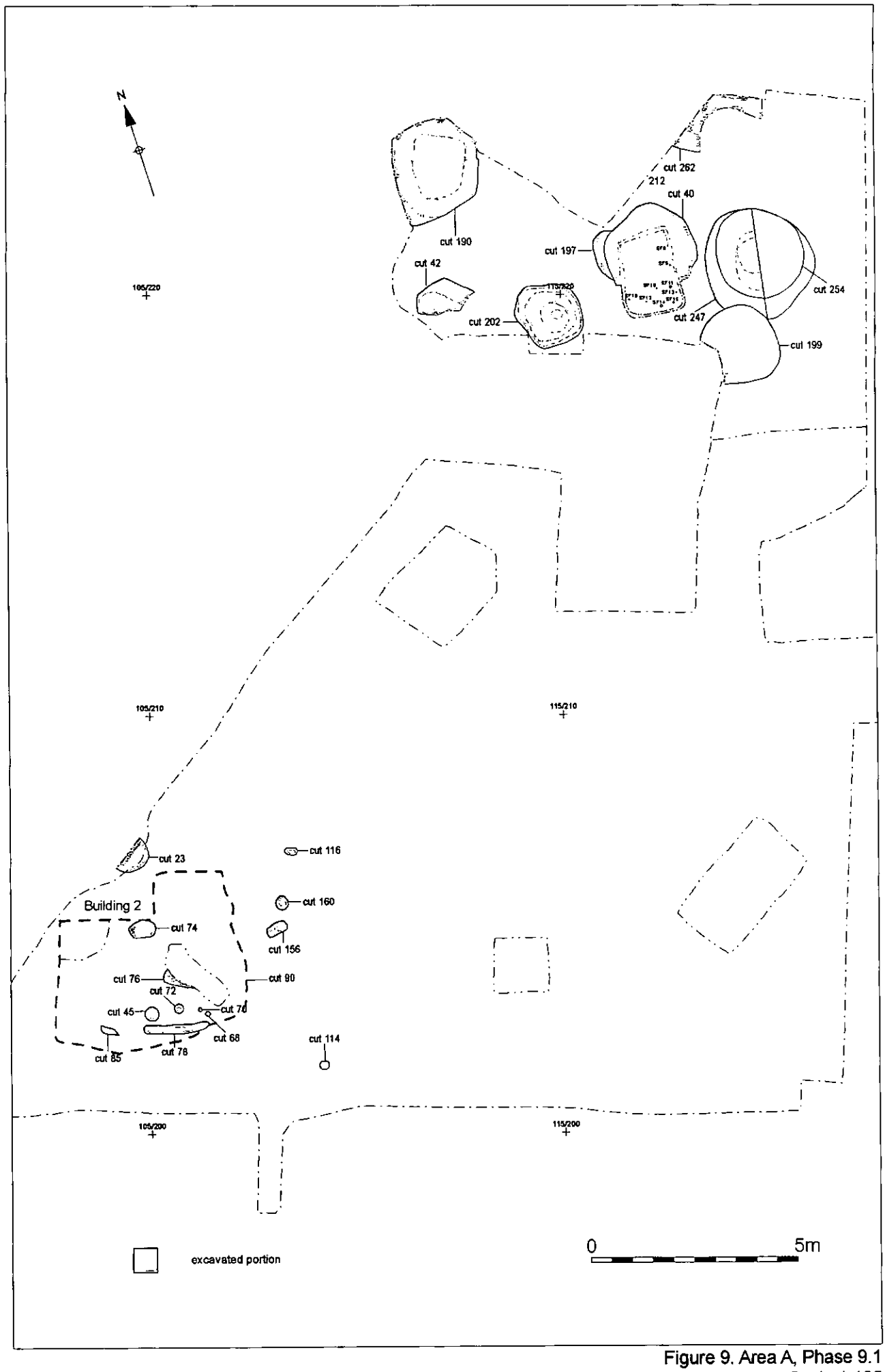


Figure 9. Area A, Phase 9.1
Scale 1:125

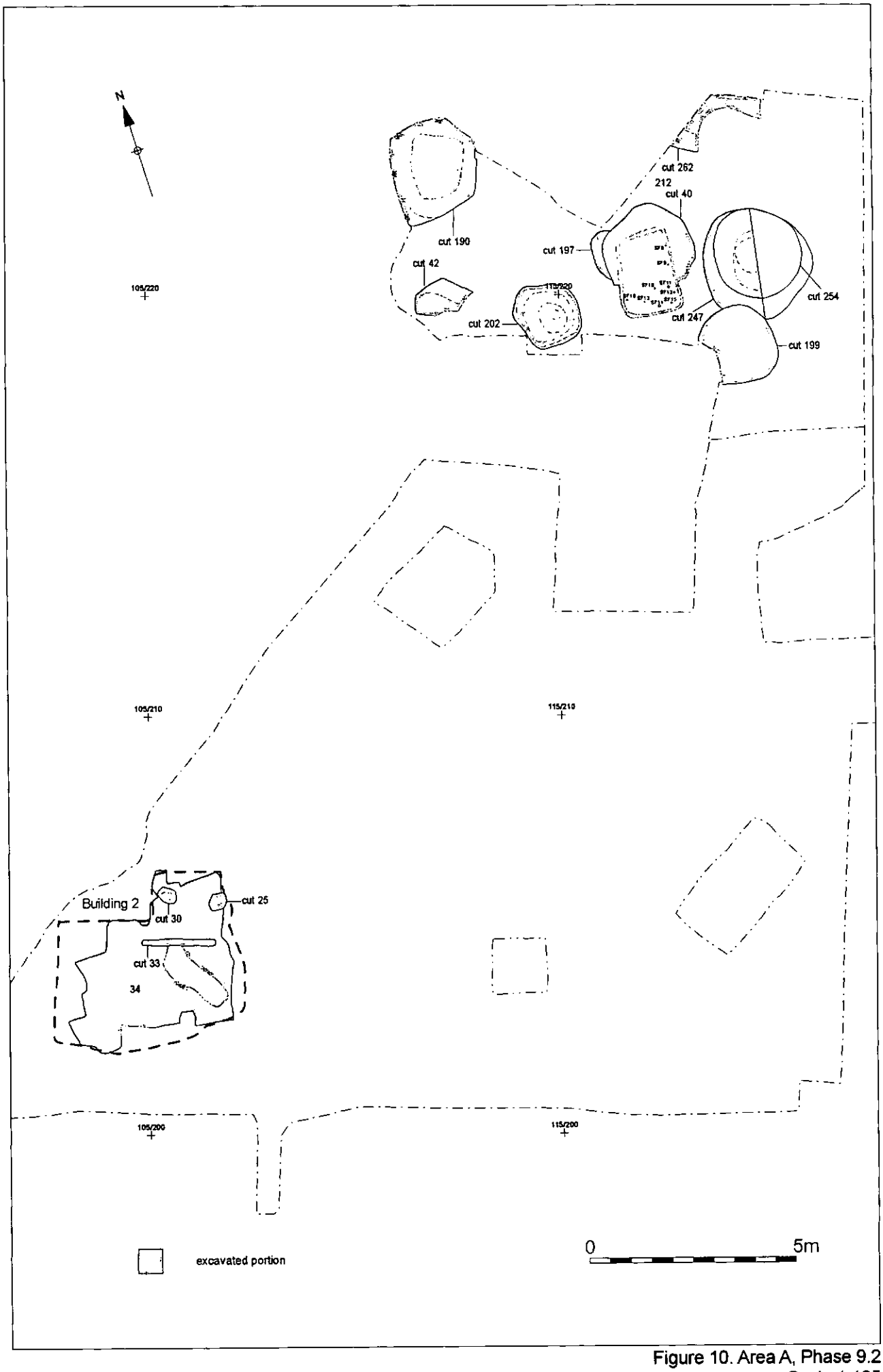


Figure 10. Area A, Phase 9.2
Scale 1:125

Building 3 during excavation *(looking north-west)*.

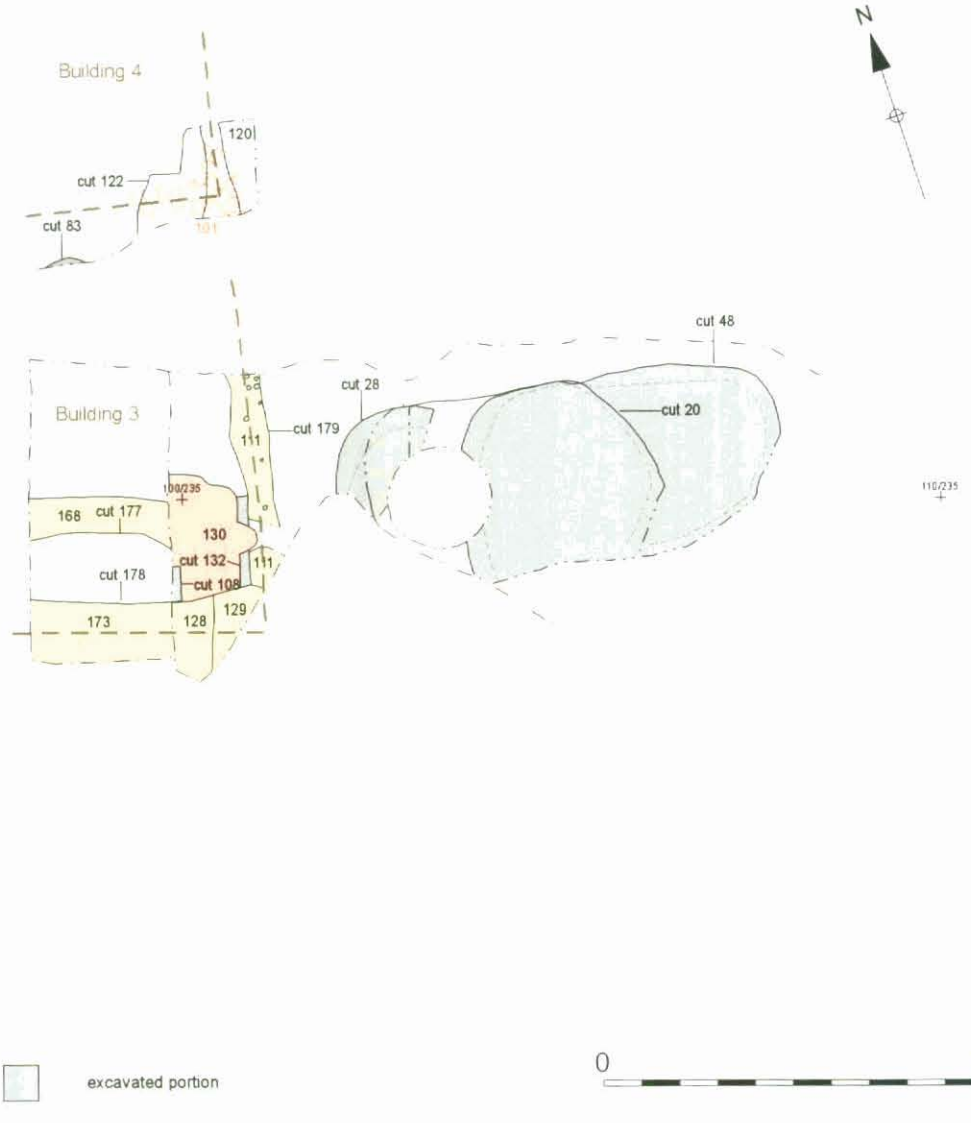


Figure 11. Area B, Phase 9.1
Scale 1:100

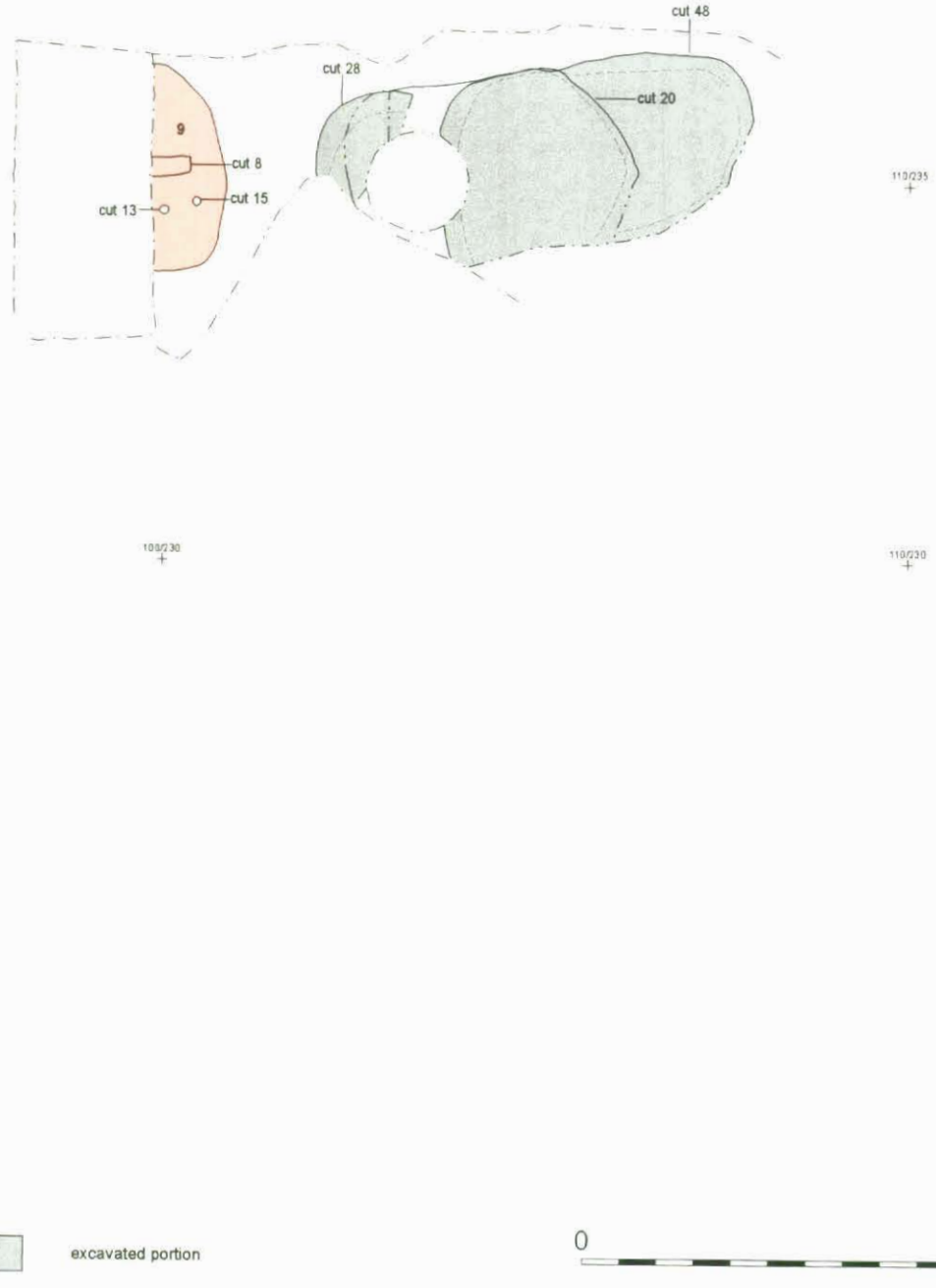


Figure 12. Area B, Phase 9.2
Scale 1:100

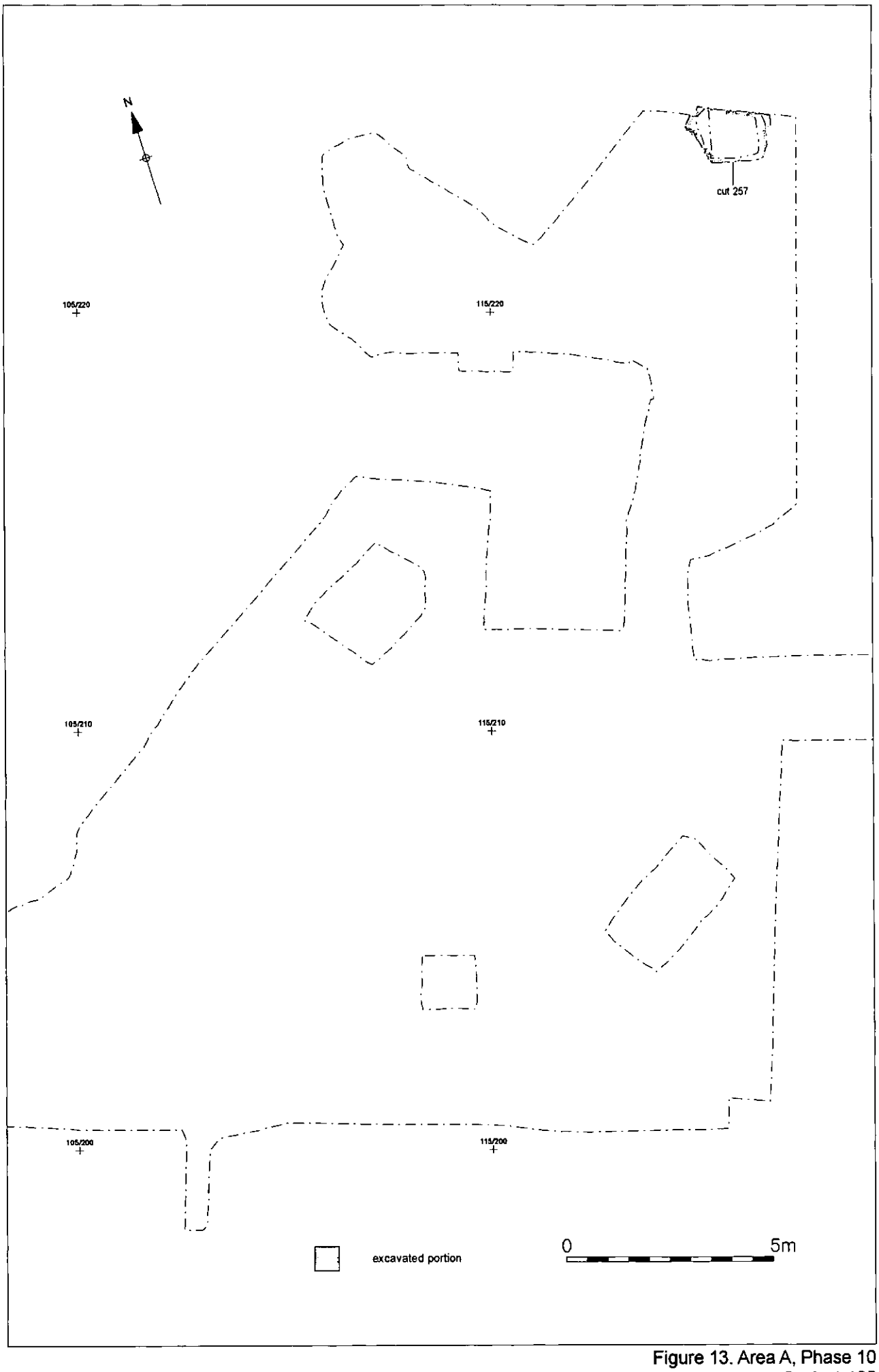
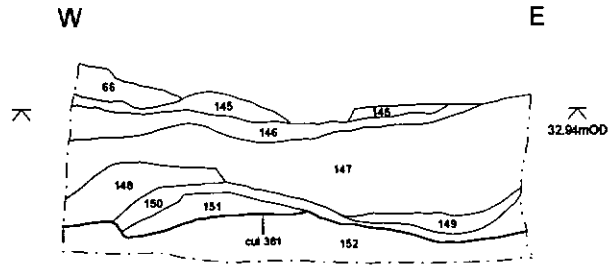
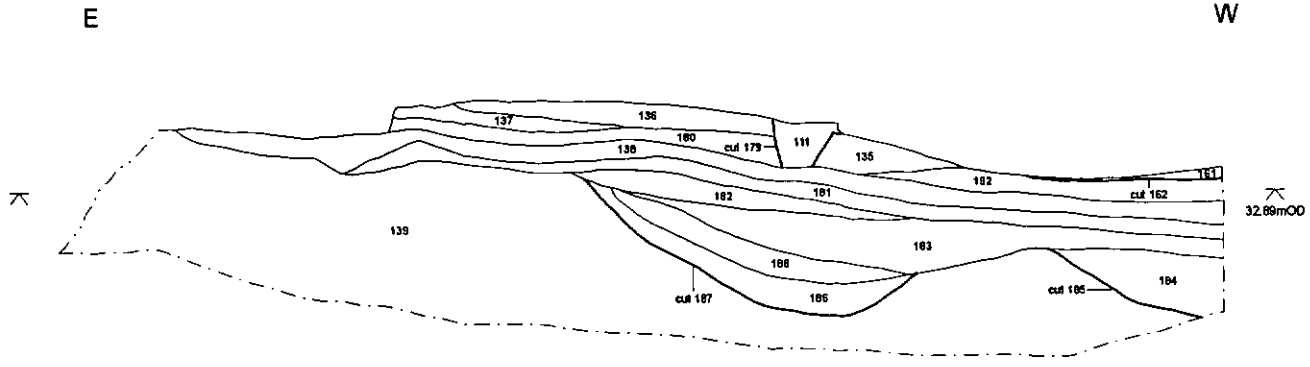


Figure 13. Area A, Phase 10
Scale 1:125



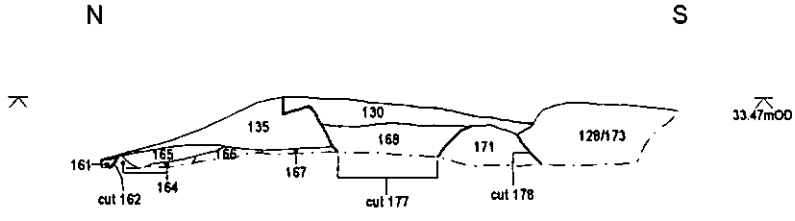
Section 1. South facing section.



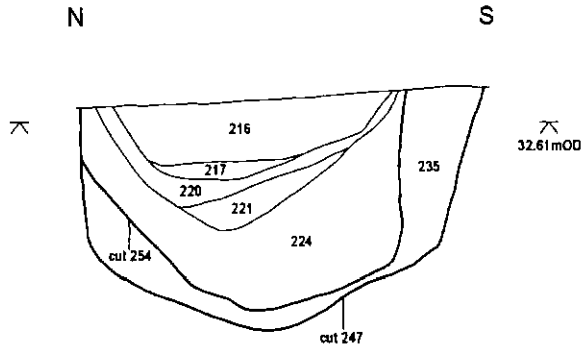
Section 2. North facing section.

0 2m

Figure 14. Sections 1 and 2
Scale 1:50



Section 3. West facing



Section 4. West facing through pits [247] and [254].

0 2m

Figure 15. Sections 3 and 4
Scale 1:50

PART B: DATA ASSESSMENT

7. POTTERY

*By: **Thomas Scott Martin***

7.1 Introduction

7.1.1 The excavations produced a total of 1785 Roman sherds weighing 74.7kg. This material was recovered from just 79 archaeological contexts. The figure excludes the samian and unstratified pottery, but includes all other Roman fine wares, coarse wares, amphoras and the mortaria. The following assessment has been compiled from the spot-dating archive and has been made with reference to the aims set out in the SCORP Report.[11] These may be refined down to:

- Using pottery (in conjunction with other finds) for dating.
- Providing new quantified assemblages to build on previous work.
- Seeing if the same general trends are discernible in the ceramic data from new sites compared with earlier published excavations, and discussing the resulting picture.
- Studying and reporting on pottery relating to the character of sites, or of intrinsic interest or with implications for pottery studies in general.

7.2 Method

7.2.1 The pottery was classified with reference to a number of previously published works relating to sites in Manchester itself and several neighbouring sites. Particular use was made of Webster's (1974) report on earlier finds from the Deansgate area, Gillam's (1968) northern form typology and his BB1 synthesis (1976). Clark's (1992) unpublished MA thesis on previous work in the Deansgate area was also consulted. In addition, the amphora rims were recorded with reference to the rim typology produced by Martin-Kilcher (1987). Unfortunately, it was not possible to make any comparison with the material published by Walker (1986) from the Duke Place and Northgate excavations[12] due to the unusual method of pottery classification used in that report.

7.2.2 The pottery was also recorded with reference to the Guidelines issued by the Study Group for Roman Pottery[13] on A4 pro forma sheets and transferred to an Access Database to allow computerised manipulation of the ceramic data.

7.2.3 A fabric series was created as cataloguing progressed, although full fabric descriptions were not compiled at this stage. A number of these, however, are included in the National Fabric Reference Collection[14] making detailed description superfluous (Appendix 4).

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[11] Young, 1980, 1.
[12] Walker, Blainey and Wild, in Bryant, *et. al.*, 1986.
[13] Darling, 1994.
[14] Tomber and Dore, 1998.

6. STRATIGRAPHIC DATA

6.1 Written and Graphic Records

6.1.1 The contents of the paper archive are set out in Table 6a.

Item	No.	Sheets
Context Register	1	10
Context Sheets	380	380
Section Register	1	1
Section Drawings	7	11
Plans	197	156
Sample Register	1	2
Sample Sheets	63	63
Small Finds Register	1	2

Table 6a. Quantification of paper records

6.2 Photographic Records

6.2.1 The contents of the photographic archive are set out in Table 6b.

Item	No.	Sheets
Colour Slide Register	2	2
Colour Slides	56	4
Colour Print Register	2	2
Colour Prints	51	*
Colour Negatives	42	2
Monochrome Print Register	3	3
Monochrome Prints	87	12
Monochrome Negatives	87	4

Table 6b. Quantification of photographic record

6.3 Project Archive

6.3.1 The paper and photographic archive is currently housed at the Northern Office of Pre-Construct Archaeology Limited.

6.3.2 The complete project archive, comprising written, drawn, and photographic records (including all material generated electronically during post-excavation) and all 'finds' (see the following sections) will be packaged for long-term storage according to relevant guidelines.[10] The archive will be deposited with the Manchester Museum for permanent curation. The depositional requirements of the receiving body will be met in full.

[10] UKIC, 1990.

7.3 Summary of the Pottery Records in the Site Archive

7.3.1 The following tasks have been completed:

1. Spot-dating: a context by context paper record of all pottery recovered, listing fabrics (as quantified) and forms present and giving the date-range of each context (see Appendix 5).
2. Comments on the condition of the pottery, *e.g.* identification of worn and abraded sherds.
3. General comments on how dating was arrived at and a note of the presence of any post-Roman material.
4. The identification of pottery of intrinsic interest or complete vessels that may be worth illustrating.
5. Quantification by sherd count and weight in grams and sorting of fabrics: an attempt to provide a clearer indication of the quality of the dating evidence.
6. Transfer of spot-dating information onto a database to allow manipulation of the data in the course of any future research programme.

7.4 Preliminary Results

Although the following preliminary notes should be treated with some caution in the absence of full stratigraphic analysis, the pottery assemblage from the site has already provided a significant amount of data concerning the date-range of the site and significantly, new data regarding pottery supply to Manchester itself. This is due to the undoubted quality of the excavated assemblage.

7.4.1 Assemblage size and quality

7.4.1.1 From the amounts of pottery recovered from each context, the range of assemblage sizes, based on sherd count, can be shown to be variable (Table 7a). Most (54%) contained less than ten sherds while only four (5%) comprised in excess of 100 sherds. These figures exclude the samian. By and large, most contexts produced some datable sherds, with only 16 contexts containing material that was essentially undated or not closely datable. This suggests that the overall quality of the dating evidence was good.

Very small (less than 10 sherds)		**Small** (between 11 and 35 sherds)		**Medium** (between 36 and 100 sherds)		**Large** (more than 100 sherds)	
No.	%	No.	%	No.	%	No.	%
43	54	21	26	11	13	4	5

Table 7a. Assemblage sizes and their relative frequency (excluding samian)

7.4.2 *Date-range of the assemblage*

7.4.2.1 The spot-dating record shows that virtually the entire assemblage can be placed within a broad second century date-range (Figure 7c) and that there is a particular bias in favour of the Hadrianic and Antonine periods (c. AD 120-200). Although Figure 7c shows that the largest amount of contexts that can be assigned to any one date-range are those that are not closely dated, this should not detract from the overall quality of the dating evidence from the site.

7.4.2.2 The presence of substantial amounts of BB1, a fabric that does not appear in the region until *c.* AD 120 and whose forms can be considered to be some of the most securely dated in the region, was crucial to establishing the site's chronology.

7.4.2.3 There is very little material from contexts that can be assigned earlier or later date ranges with any confidence. There were only three contexts identified that can be dated to anytime in the third century but no pottery dating from the later third century onwards on evidence of vessel form.

Ceramic Phase	Period (c. AD)	Present at DGM 04
1	80-120	Yes
2	120-160	Yes
3	160-200	Yes
4	200-250	Yes
5	250-300	No
6	300-360	No
7	360-400+	No

Table 7b. Summary of suggested Ceramic Phases for Manchester

7.4.2.4 In comparison with other sites in Manchester, it appears that the Deansgate site has a much more restricted chronology than the assemblages published by Webster (1974) and the material looked at by Clark (1992). Preliminary analysis of the pottery from this site and previous work, both published and unpublished, suggests that pottery supply to Manchester can be discussed with a framework of seven Ceramic Phases. These are summarised in Table 7b, above. However, only the first four are identifiable from the pottery assemblage recovered from Deansgate.

7.4.2.5 Ceramic Phases 2 and 3 are the most important and offer the best research potential (see below).

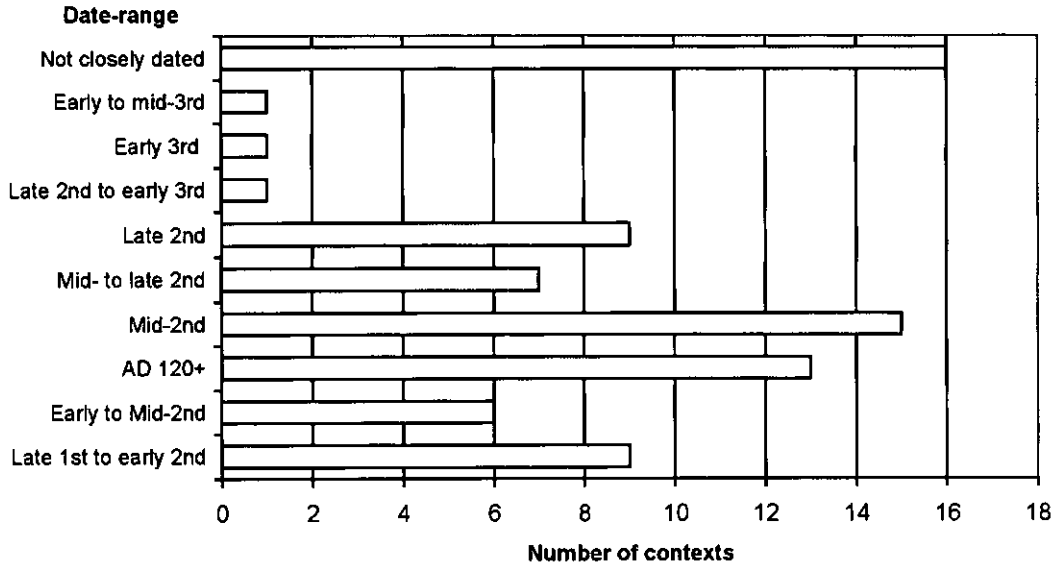


Figure 7c. The incidence of each date-range identified during pottery spot-dating

7.4.3 Sources of pottery

7.4.3.1 The spot-dating has identified a wide range of sources for the pottery reaching the site (Table 7d; Figure 7a; Appendix 3). A number of these have not been positively identified from previous excavations in Manchester. These include products from Wroxeter and Colchester, as well as Pompeian red ware fabric 1. The appearance of the latter is perhaps surprising given that its production and importation is considered to have ceased c. AD 80[15] at about the time the first fort was probably founded at Manchester.[16]

7.4.3.2 The presence of fabrics from the Wroxeter area is noteworthy. This source supplied a range of fabrics, but principally white and buff mortaria. It is the first time this supplier has been identified in an assemblage from Manchester and is the second most important supplier of mortaria after the Cheshire Plain kilns. It is possible that, previously, some of this material may have been misidentified as being from Mancetter/Hartshill. Mortaria were also arriving from the Verulamium region industry and Holt, Denbighshire. Only one stamped mortarium was present and this on a Wroxeter product.

7.4.3.3 Overall there are two significant features relating to the excavated assemblage that are noteworthy. Firstly, there is an almost complete absence of fine wares, apart from samian. The other fines wares present comprised a single Colchester colour-coat sherd (probably mid second century in date), two Nene Valley colour-coat sherds (late second to third century in date) and three mica-dusted sherds, two of which are from a face mask of some kind and the other from a folded beaker, probably from a vessel akin to Marsh type.[17] This virtual absence of fine wares may in part be offset by the local production of rough cast beakers, often in fairly fine Cheshire Plain fabric.

[15] Tyers 1996, 157.
[16] Walker 1986, 141.
[17] Marsh 1978, fig. 6.9.

7.4.3.4 The second most significant feature of the assemblage is the large quantity of Dressel 20 amphoras present (Peacock and Williams Class 25). This fabric group accounts for a little over 60% of the total assemblage recovered from the site (Table 7d; Figure 7e). By comparison, the amount of South Spanish amphora in the assemblage studied by Clark (1992) only accounted for 30.8% of the coarse ware assemblage. The five rims recorded all fall within the period AD 70-200 in Martin-Kilcher's scheme, with three of them dating to the period AD 110-150. A number of amphora handles were also present, although none carried any stamps. The only other fabric recognised comprised two sherds of South Gaulish amphora, possibly from a Pélichet 47 (Peacock and Williams Class 27).

Source	Sherd count	%Sherds	Wt. (gms)	%Wt.
Southern Spain (Amphora)	439	24.5	45,183	60.4
Dorset (BB1)	407	22.8	9,021	12.0
Cheshire Plain/Wilderspool (reduced)	293	16.4	4,951	6.6
Cheshire Plain/Wilderspool (oxidised)	523	29.3	12,341	16.5
Cheshire Plain/Wilderspool (all)	816	45.7	17,292	23.1
Wroxeter	27	1.5	1,547	2.0
Other	96	5.3	1,741	2.3
Totals	**1785**	-	**74,784**	-

Table 7d. Breakdown by sherd count and weight of the main suppliers of pottery (excluding samian)

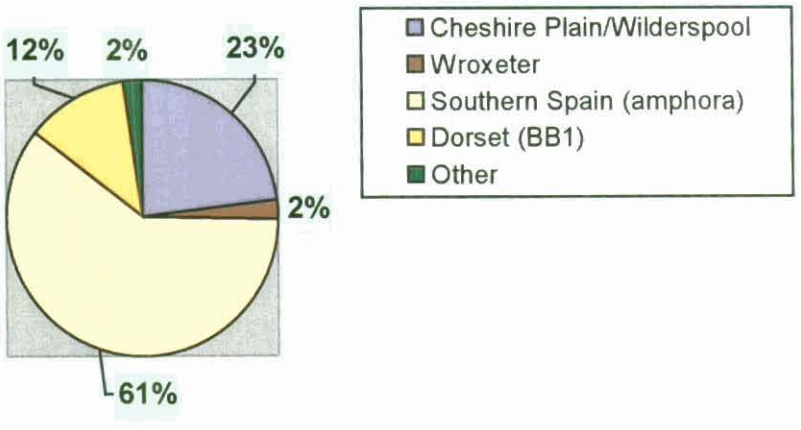


Figure 7e. The proportions of each of the main suppliers expressed as a percentage of weight (excluding samian)

7.4.3.5 As expected, fabrics derived from a number of sources such as Wilderspool, Northwich and perhaps Manchester itself, which Webster (1991) has termed "Cheshire Plain", form a significant assemblage component (Table 7d; Figure 7e). They are next in magnitude to the South Spanish amphoras (23%). Rough-cast bag-shaped beakers with either simple everted rims or more ornate cornice rims appear to be especially prominent. There is even one mis-fired example with a slightly distorted rim, which may be a local kiln product. By and large, pottery assigned to a general Cheshire Plain source was divided into fine, medium and coarse variants (Appendix 3). This was, however, most clear-cut when dealing with the oxidised fabrics.

7.4.3.6 As noted above, the presence of significant amounts of BB1 (12% of all pottery), for the most part probably derived from the Poole Harbour area of Dorset, has provided a useful dating tool. Almost without exception, all the dish forms recorded are plain-rimmed, bead-rimmed or flat-rimmed types. These are typical of early/mid to late second century contexts; the same appears to be largely true of the jar forms as well. Two further BB1 types are worth noting, a pinch-necked jug (*cf.* Wallace and Webster, 1989) and a single incipient bead and flange dish. The former is a rarity on any site, while the latter is the latest BB1 type to be identified on the site. Several BB1 dishes also had post-firing notches in the rim.

7.5 Statement of Potential

7.5.1 General

7.5.1.1 The Deansgate site has produced one of the largest assemblages of Roman pottery, given the size of the site, from any single excavation in Manchester where the pottery has been quantified. From the preliminary results outlined above, a range of potential research opportunities may be identified.

7.5.2 The presence of large deposits of securely dated pottery

7.5.2.1 Although only four large groups were recorded, it is these that offer the best potential for the study of pottery supply and assemblage composition (*i.e.* pottery use) through time. Of the large groups, two offer strong potential for detailed analysis and quantification using Estimated Vessel Equivalence (EVEs) based on rim percentage, while a third offers some potential, but on a reduced scale.

7.5.2.2 Phase 8 layers [112]/[113], and context [119], which forms slumpage into the top of pit [274], comprise a fairly homogenous group of 224 sherds (12.1kg) dating to the late second century. Of this, 40 sherds (8.7kg) comprised South Spanish amphora. The presence of a significant number of rims in the other fabrics present validates the use of EVEs on this group.

7.5.2.3 A further group of 173 sherds (5.8kg) came from Phase 7 layers [191] and [198]. These produced a fairly homogenous group dating to the mid second century.

7.5.2.4 Phase 9.1 context [200] produced a group of 184 sherds (9kg) again dating to the mid second century. This group came from the top fill of pit [202] and offers some potential for analysis due to the presence of a significant number of rims.

7.5.2.5 A further group of 119 sherds (11.4kg) from Phase 6.1 context [123] has little potential for further study. This group comprised almost entirely South Spanish amphora with very few rims in any of the other fabrics present. It is not all that closely datable as a consequence.

Group	Context(s)	Sherd Count	Wt. (kg)	Approx. no. of samian sherds	Date Range	Ceramic Phase
1	Layers [191] & [198]	173	5.8	54	Mid-second century	2
2	Context [200] (top fill of pit [202])	185	9.0	54	Mid-second century	2
3	Layer [112]/[113], & context [119]	224	12.1	12	Late second century	3

Table 7f. Summary of the three key groups (excluding samian)

7.5.2.6 These three key groups (Table 7f) may also be selected for further analysis on stratigraphic grounds to assist site interpretation. As far as can be assessed, they will also provide a representative sample of both types and proportions of the pottery reaching the site within their assigned date-ranges. The potential of these groups is further enhanced by the fact that they are directly comparable to Clark's groups 3 (mid second century) and 5 (late second century). Furthermore, the regional research framework for the study of Roman pottery in the north of Britain highlighted the need for the publication of quantified assemblages.[18] The analysis and publication of these three groups would go some way to meeting this need. It is also worth noting that no quantified groups have previously been published from Manchester, consequently the publication of these three groups would be breaking new ground.

7.6 Recommendations for Further Work

7.6.1 General

7.6.1.1 It is clear that this material forms a very significant pottery assemblage and that detailed publication is merited. An unmistakable emphasis should be placed on the significance of the data collected from the three key groups identified above in any final publication report.

7.6.2 Primary data collection

7.6.2.1 Quantification of the three key groups using EVEs (Estimated Vessel Equivalents) based on rim percentage present is deemed essential. No further quantification on any of the other groups is necessary.

7.6.2.2 Also important is the compilation of dating evidence sections to assist stratigraphic interpretation. This could take the form of a single table for each phase and concentrate on the dating evidence for the most important site features and contexts.

[18] Evans and Willis, 1997, 23.

7.6.3 *Publication Report*

7.6.3.1 The production of tables showing quantities of each fabric or fabric group present and percentages of the groups, incorporating the data on fabrics collected during the spot-dating and that collected during the detailed quantification of the three groups, are essential. This should be followed by a detailed comment on dating and assemblage condition, *i.e.* why it has been analysed in such detail. A detailed discussion of pottery supply and use within the two periods covered by the three groups should also be included in the publication text. A brief synthesis of pottery supply to Manchester using the Ceramic Phases outlined in Table 7b, above, is also required.

7.6.3.2 All of the illustratable vessels from the three groups will require drawing for inclusion in the final publication.

7.6.3.3 During the spot-dating, several vessels were identified as being of intrinsic value, such as the BB1 dishes with notches cut into the rim post cocturam, mentioned above. These will also require drawing for inclusion in any final publication report. A brief summary text describing these vessels will also be necessary.

7.6.4 *Specialist Work*

7.6.4.1 Given that the assemblage contains such a large quantity of amphora, it is recommended that this material should be examined and reported on by an amphora specialist.

7.6.5 *Time and Resources*

7.6.5.1 The following estimates of time required against the tasks outlined above to bring the pottery towards publication are as follows:

Task		Time
1.	Quantification of the three key groups (including the samian)	2 days
2.	Transfer of data to database to allow computerised manipulation of the data	1 day
3.	Writing up of the key groups including general synthesis of pottery supply to the site	3 days
4.	Illustration of the pottery from the key groups (63 vessels)	6 days
5.	Compilation of dating evidence sections for stratigraphic report	2 days
6.	Illustration of pottery of intrinsic interest (22 vessels)	2 days
7.	Notes on the pottery of intrinsic interest	1 day
8.	Introduction and conclusion to the report	1 day
9.	Final edit/corrections etc.	1 day

7.6.5.2 It is estimated that the final publication report will take approximately 10 days to compile, while a further 8 days (based on 10 illustrations per day) will be required to illustrate the 85 pottery drawings. A further 1 day should also be allowed for final editing.

8. SAMIAN POTTERY

*By: **Felicity Wild***

8.1 Introduction

8.1.1 The importance of samian ware lies in the fact that, as an imported ware with a wide distribution across the North-Western Roman Empire, particularly on military sites, it can be dated more precisely than other types of Roman pottery and can thus provide a vital source of dating for the contexts and phasing of a site. The potter's stamps and decorated ware, which can be tied down to the work of an individual potter or workshop, are of particular importance.

8.1.2 The presence of samian ware, particularly of decorated ware, is indicative of high status. It was popular with the military, who clearly made contracts for its regular supply. The nature of a samian assemblage and its origins can shed direct light on sources of supply and trading patterns. Here, too, the stamps and decorated ware are of prime importance.

8.2 Methodology

8.2.1 All the samian ware from Deansgate has been listed, by context, on printed worksheets, giving identifications of form, fabric and approximate date. The material from each context has been weighed as a group to be incorporated into the main database, and spot dates suggested for the main groups. Sufficient work has been done on the decorated ware to suggest place of origin and date, though further work is required to refine the dating by identifying problem pieces and those by lesser known potters. The potter's stamps (nine plain ware stamps, two mould stamps on decorated ware) were sent for identification and dating to Brenda Dickinson at Leeds University (see Section 9).

8.2.2 While the quantification of Roman pottery in general tends to be based upon sherd counts, weights and EVEs (Estimated Vessel Equivalents), samian, particularly decorated samian, has the additional advantage that sherds from the same vessel can be recognised without too much difficulty, both within the same context group and across contexts. This can help not just to provide a more accurate assessment of the numbers of different vessels present, but to establish links between different contexts. In this assemblage, there were many cases where sherds joined or were clearly from the same vessel, not just within the same context group, but also between sherds from different contexts. The presence in some groups of joining sherds amounting to about half or more of the vessel, for example the group of cups from context [198], suggests the dumping of pots which have been broken further *in situ*.

8.2.3 While it is comparatively easy to identify the provenance of decorated ware and stamps, it is less easy to identify with certainty the provenance of plain-ware sherds from fabric alone, particularly when badly abraded and/or altered in colour by soil conditions, as is so often the case on sites in North-West England. Inevitably, there is an element of uncertainty involved.

8.3 Preliminary Results

8.3.1 Identification

8.3.1.1 The Deansgate site produced 432 sherds of samian ware (including those from unstratified contexts) from a maximum of about 255 vessels (224 for which the form could be identified with some degree of certainty, excluding uncertain or unidentifiable scraps). Of these, 185 sherds (104 vessels) were decorated. By sherd count, the decorated ware amounts to *c.* 43% of the total assemblage; by number of vessels, *c.* 46%. For a comparatively small excavation area, this seems an unusually large quantity of samian ware, with an extraordinarily high proportion of decorated ware. Why this should be the case is not clear, though it may possibly be explained by the previously mentioned almost complete absence of other fine wares from the site.

8.3.1.2 By far the greatest part of the material originated from Central Gaul and was Hadrianic to early or mid-Antonine in date. First century material was scarce. The earliest material was South Gaulish and dates from the Flavian or Flavian-Trajanic period. There were about 19 vessels in the fabric of La Graufesenque which fall into this category.

8.3.1.3 A particularly interesting and important feature of the site, however, was a group of South Gaulish vessels of second century date from Montans. Two of the nine plain-ware stamps were of Montans potters, one, of Chresimus, on the interior of a decorated bowl of form 37. This is the third stamp of Chresimus to have been recorded from excavations in Manchester, though the first to have been found on a decorated bowl. This potter is likely to have been still at work in the AD 140s, as his stamps also occur on sites in Antonine Scotland.[19] In addition to the Chresimus bowl, there may be as many as six other decorated bowls from Montans, though further work is required to establish their provenance with a greater degree of certainty.

8.3.1.4 Central Gaulish products made up almost all the rest of the assemblage. There were at least ten vessels in the fabric of Les Martres-de-Veyre: the rest (*c.* 184 vessels) was probably all from Lezoux. The Hadrianic-early Antonine forms predominated (27 (15 examples), 18/31 (8), 18/31R (13)) as did the work of the Hadrianic-early Antonine potters.

8.3.1.5 There is remarkably little material that can be dated with certainty to the period after *c.* AD160, though this may be accounted for by the paucity of material from the later phases. Work in the style of Casurius is present (*c.* AD 160-190), but the work of the other later second century potters appears largely to be absent. The later second century forms are also scarce: there are three examples of form 38 and one each of 44, 79, and 31R. Samian mortaria (after *c.* AD 170) are entirely absent.

8.3.1.6 Very little was recognisable as of East Gaulish origin. There were two joining sherds in the style of Ianu(s) I of Rheinzabern, one of the earliest of the Rheinzabern potters, and a plain sherd possibly in East Gaulish fabric.

[19] Hartley, 1972.

8.3.2 *Dating*

8.3.2.1 Most of the samian ware came from Area A. Area B produced only 9 sherds, the majority from Phase 9 contexts. It is noteworthy that all the sherds from Area B were South Gaulish and of Flavian or Flavian-Trajanic date. Whether this is significant or merely coincidental needs to be assessed in the light of the other finds from this area.

8.3.2.2 In Area A, the large groups, [112] and [113], [191], [193], [195], [198], [215], and [224], mainly occurred in Phases 7-9 contexts. The samian ware confirms the evidence of the coarse wares, in that contexts [112] and [113] are of late second century date: they included the decorated ware in the style of Ianus and Casurius mentioned above, and the later Antonine forms 38 and 44. The other groups all appear to be Hadrianic-early/mid Antonine.

8.4 Significance of the Assemblage and Recommendations for Further Work

8.4.1 As indicated above, further work is required on the identification of the decorated ware in order to refine the dating. Further work is also needed to assess the implications of the material in light of the contextual information supplied.

8.4.2 The most important part of the final report will be the detailed publication of the decorated ware. In comparison with other fort sites in North-West England, little samian ware from Manchester has been published. Only a selection of the decorated ware from the Deansgate excavations of 1972 was published,[20] largely without commentary or discussion. The present writer examined and reported upon the samian ware from the North Gate excavations,[21] but the site produced little samian from the *vicus* and still less from the fort. The material from other excavations over the past 30 years remains unpublished. This situation can now be rectified, both by the publication of the material from the present Deansgate site and of that from another neighbouring site, in Barton Street, excavated in 2003-04 by the University of Manchester Archaeological Unit. That site, too, produced a large quantity of samian ware, with a high proportion of decorated ware and, again, a preponderance of Hadrianic-early Antonine material.

8.4.3 The assemblage from the present Deansgate site, however, seems unique in its collection of probable Montans ware. This ware is particularly uncommon, and its decorated products have been less well studied than those of the major factories, such as La Graufesenque and Lezoux. Import was clearly by sea up the western side of Britain, as the odd piece has been recovered from many of the North-Western sites. A collection of this size, however, (assuming that all the pieces are indeed from Montans) seems most unusual. The one exception to this, perhaps, is Wilderspool, from which a collection of ten decorated pieces has been published,[22] though these all appear to have been old finds. Further pieces appear in the report by Brenda Dickinson and B.R. Hartley on the material recovered during the excavations of 1966-69 and 1976.[23]

[20] Jones and Grealey, 1974, 81-88.
[21] Bryant, Morris and Walker, 1986, 121-126.
[22] Simpson, 1987.
[23] Hinchliffe and Williams, 1992, 31-41.

8.4.4 The most significant collection from the present Deansgate excavations, including both the potter's stamps, were from one pit fill, [195]. The group is well worth more detailed study and could suggest evidence for a contract with the Montans potters.

8.4.5 It is estimated that there will be 31 items of decorated ware which will need to be written up for the final report, and that that this, together with the writing of the rest of the publication text, will take a further three days' work.

8.4.6 It will also be necessary for the decorated ware to be drawn. Although many of the 31 items are single sherds, some are bowls currently in a large number of pieces, which may make drawing time-consuming.

9. SAMIAN STAMPS

By: ***Brenda Dickinson***

9.1 Introduction

9.1.1 Each entry gives: excavation number, potter (i, ii etc, where homonyms are involved), die, form, reading, reference to published drawing (where available), pottery of origin, date.

9.1.2 Superscript a and b indicate:

a a stamp attested at the pottery in question.

b not attested at the pottery, but other stamps of the same potter used there.

Ligatured letters are underlined.

9.2 Catalogue

1 [191] Albucius ii 6h 37 (mould–stamp in the decoration) ALBVCI (Stanfield & Simpson, 1958, pl. 169) Lezoux[a]. *c.* AD 150–180.

2 [6] Balbinus 1a 18/31 BAL[BINVSF] Les Martres–de–Veyre[a]. *c.* AD 100–125. The first B on this stamp often appears as a vertical stroke followed by a colon.

3 [195] Chresimus 4a 37 (stamped inside the base) C–RESIMI Montans[a]. *c.* AD 125–150.

4 [4] Cinnamus ii 5b 37 C[INNAMI] retr. (mould–stamp in the decoration), (Walker, 1965, Taf. 39, 11). *c.* AD 150–180.

5 [198] Crobiso 2a 27 CRO[BI]OF Lezoux[a]. *c.* AD 135–160.

6 [41] Miccius 1a 18/31R MICCIVSF (Dannell, 1971, 310, 65) Lezoux[a]. *c.* AD 140–160/65.

7 [215] Secundinus i 5a 15/17R or 18/31R [SECVNDI]NI (Polak, 2000, pl. 21 S64) La Graufesenque[a]. *c.* AD 80–110.

8 [198] Secundus v 5a 33 SECV[D]M (Dickinson & Hartley, 2000, Fig. 30, 867) Lezoux[a]. *c.* AD 150–170.

9 [195] Q. V– C– (die uncertain) 27(?) QVC Montans[b]. This impression is too faint for close comparison with other stamps of the potter, but the reading is certain. *c.* AD 115–150 (more probably 120–145).

10 [198] Vespo 1a 33 VESPONI (Dickinson & Hartley, 2000, Fig. 30, 974–82) Lezoux[a]. *c.* AD 130–160.

11 [200] BO[ ]IM? on form 18/31, Central Gaulish. Hadrianic or early–Antonine.

10. GRAFFITI POTS

By: ***Roger Tomlin***

10.1 Introduction

10.1 The graffiti were all scratched after firing, and therefore relate to the ownership and use, not the manufacture, of the vessels concerned.

10.2 The graffiti include four personal names, all but one incomplete, making it uncertain whether they are nomina or cognomina. The only complete name, *Victor*, is a cognomen. (A Roman citizen bore three names, praenomen, nomen [family name], and cognomen [distinguishing name within the family]; a non-citizen bore only a cognomen, sometimes distinguished by a patronymic).

10.2 Samian

SF 70, context [193].

Wall sherd with part of the rim of a Drag. 35 (CG) bowl, Antonine. Scratched on the wall:

[...]FLAVIA[...]

Probably *Flavia[nus].*

The first letter is now incomplete. The first A has a short diagonal 'cross-bar', but the second A is 'open'. The feminine nomen *Flavia* could be read, but the masculine cognomen *Flavianus* is more likely, in the nominative or genitive case.

SF 75, context [195]

Wall sherd with part of the rim and foot-ring of a Drag. 35 (CG) bowl, Hadrianic or Antonine. Scratched on the wall:

[...]RIVS

The end of a personal name, *[...]rius*.

Perhaps *[Ianua]rius*.

Only the tip survives of R, and the first letter(s) might be N, but the angle formed by the two scratches (which do not meet) is rather too wide. An inverted reading SAN[...] cannot be excluded, but it looks unlikely. Many names end in *–rius*, but they are nomina which would be followed by a cognomen. A few, like *Valerius*, were sometimes used as cognomina; but much the commonest, in Britain at least, is *Ianuarius*: for other instances on samian, see *RIB* II.7, 2501.226-233.

SF 97, context [200]

Two conjoining base sherds of a Drag. 18/31 (CG) dish, Antonine. Now much abraded. There are two graffiti, which probably belong together.

(i) Underneath, within the foot-ring. Two lines intersecting in the centre at right-angles:

+

Not a letter or numeral (X, i.e. '10'), but a mark of identification.

(ii) On the wall, above the foot-ring. Four vertical strokes:

IIII

Probably a numeral, '4'.

10.3 Coarseware

SF 102, context [200]

Rim sherd of a South-Spanish oil amphora (Dressel 20), comprising almost half the circumference. Scratched on the upper surface:

[...]VICTORIS VIIS

Victoris VII s(emis)

'(Property) of Victor, (capacity) 7 $^{1}/_{2}$ (*modii*).'

VICTORI is quite deeply incised, but the rest of the graffito is badly abraded. Graffiti indicating capacity, usually from 7 to 8 *modii*, are quite frequent on Dressel 20 amphoras.

SF 71, context [221]

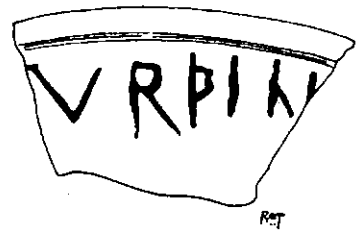
Rim sherd of a black-burnished (BB1) vessel. Scratched below the rim in irregular capitals:

[...]VRPILI[...]

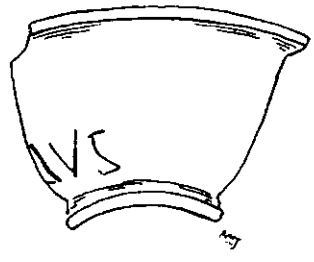
The nomen *[T]urpili[us]* or the derived cognomen *[T]urpili[anus]*, in the nominative or genitive case; if *[T]urpili[us]*, it was probably followed by a cognomen.

Note:
Letters underlined indicate that the reading is not certain.

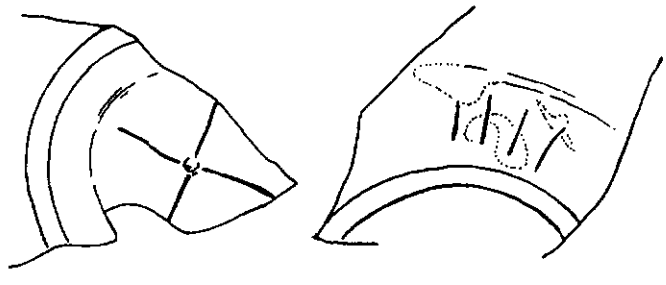
Small Find 70 Context [93]



Small Find 71 Context [71]



Small Find 75 Context [195]



Small Find 97 Context [200]

Small Find 102 Context [200]

0 5cm

Figure 16. Graffiti illustrations
Scale 1:2

11. BRICK AND TILE

By: ***Thomas Scott Martin***

11.1 Introduction

11.1.1 A total of 143 tile fragments weighing 20kg in orange fabrics were recovered from the site. This material was derived from 29 contexts. In addition to this, a single piece of possible white tile, weighing 5gms, was also recovered. Most of this material came from stratified Roman contexts. Overall, the tile was fragmentary and mainly lacking in diagnostic elements. Most appears to have been derived from relatively small dumps of material and is almost certainly re-deposited, perhaps many times over.

11.2 Methodology

11.2.1 Assessment of the ceramic building materials comprised:

1. quantification by weight (gms) and fragment count of all tile by type, based on primary function;
2. recording of any diagnostic features, such as the presence of flanges and finger signatures, *etc.*;
3. assessment of the general condition of any material.

11.2.2 The tile types identified comprised roof tile – *tegulae* and *imbreces*; flue tile – box; and wall tile. Tile fragments with insufficient evidence to classify to type were recorded as spall. The method adopted allowed for the identification of the presence of any significant accumulations of material, the range of types present and general state of preservation to be assessed. The tile catalogue was recorded onto an Access database to allow computerised manipulation of the data.

11.3 Preliminary Results

11.3.1 The assessment of the tile identified the presence of just three contexts, [189], [198] and [238], with 1kg or more of material. The largest accumulation, itself a relatively small quantity, was 4.6kg from Phase 7 context [198]. The tile assemblage tended to be very fragmentary and abraded and this is reflected by the absence of any large deposits of tile on the site. A number of *tegula* flanges were recorded, as were fragmentary examples of upper and lower cutaways. Several *tegula* and wall tile fragments also carried traces of finger signatures, but these were too fragmentary to observe any distinguishing characteristics. One *tegula* fragment had a scored pattern on the underside. No examples of animal prints were recorded.

Type	No. of Fragments	% of Fragments	Weight (gms)	% Weight
Box-flue	1	0.37	338	1.6
Imbrex	9	3.35	670	3.2
Tegula	36	13.43	7837	38.7
Wall tile	36	13.43	8772	43.2
Spall	61	22.76	2637	12.9
Totals	268	-	27478	-

Table 11a. Proportions of each tile type measured by count and weight (excluding white tile)

11.3.2 Analysis of contexts containing tile suggests that tile was not deposited until the second century at the earliest, and that the most significant accumulations date from the mid-second century onwards. The range of tile types is mainly confined to roofing tile – *tegulae* and *imbreces* – with the former out-numbering the latter quite considerably (Figure 11b), and wall tile used in bonding courses in walls. However, none of the fragments had any traces of mortar adhering to them. Furthermore, the only box-flue tile recorded, which came from a context that contained pottery indicating a date of deposition later than AD 120, does not appear to have been used. Although used in the construction of hypocaust systems, the incidence of a single piece does not imply the presence of a structure such as a bath-house. The proportions of each type are summarised in Table 11a.

11.3.3 The piece of possible white tile is very thin and may be a further box-flue tile fragment or may be from a very thin *tegula*. It is not possible to determine which from the surviving fragment.

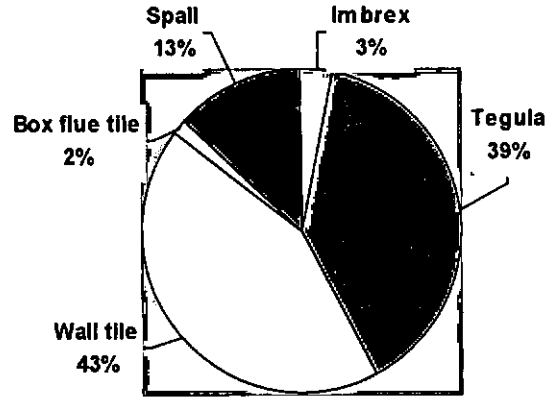


Figure 11b. Chart showing the incidence of each tile type expressed as a percentage of weight (excluding the white tile fragment)

11.4 Assessment of Potential

11.4.1 Beyond identifying the period when tile was first used on site, the tile from the site offers little potential for further analysis due to the absence of any significant accumulations of tile – here considered to be in excess of 10kg. In view of this, no further work is required beyond the production of a short summary for inclusion in any future publication report. This is unlikely to be very different from the preliminary results presented above, but will take into account any final phasing scheme.

11.5 Tasks and Time for Completion of Report

11.5.1 As very little can be achieved through further study of the tile assemblage, any additional work should be kept to a minimum. It is estimated that a short summary, to take into account final site phasing will take no more than one day to complete.

12. DAUB

*By: **Thomas Scott Martin***

12.1 Introduction

12.1 A total of 125 fragments of fired clay weighing 7.1kg were recovered from the Deansgate excavations. This material came from 28 contexts. Much of this material comprised shapeless and abraded fragments, or had small areas of surface that probably formed larger masses of structural clay that subsequently became fired. Direct comparison with other assemblages is difficult in that fired clay is seldom reported on as a worthwhile artefact category. Consequently, it is impossible to ascertain how typical the Deansgate assemblage is.

12.2 Methodology

12.2.1 The presence of fired clay was recorded on a context-by-context basis. Quantification was by fragment count and weight (gms). Distinguishing features, such as the presence of a surface and wattle impressions were noted. The aim was to identify any pieces that were likely to be part of buildings, or help identify the presence of industrial activities. The data was then transferred to an Access database to allow computerised manipulation of the data.

12.3 Preliminary Results

12.3.1 While the dataset is not large, it does allow some preliminary conclusions to be drawn. The relative frequency of each characteristic is presented in Figure 12a.

12.3.2 Completely featureless fragments accounted for just 41% of the total assemblage, with fragments exhibiting a smoothed or wiped surfaces forming the main assemblage characteristic on 45%.

12.3.3 The occurrence of a number of fragments with clear wattle impressions (6%) indicates the presence of wall daub derived from wattle and daub structures. There is also a suggestion that a number of very thick, apparently featureless pieces may have come from clay block or 'cob' walls.

12.3.4 Several fragments also appeared to carry traces of possible lime wash (2%), perhaps suggesting internal wall surfaces of clay rather than plaster.

12.3.5 The incidence of several 'vitrified' fragments (2%) may point to the presence of an oven(s), furnace(s) or kiln(s). This is confirmed by the presence of several pieces that appear to have been moulded, that is, fragments exhibiting more than one smoothed or wiped surface. However, these account for just 3%. One fragment was very thin and apparently wiped on both flat surfaces has been classified as a 'plate' This piece may also have been associated with an oven, furnace or kiln.

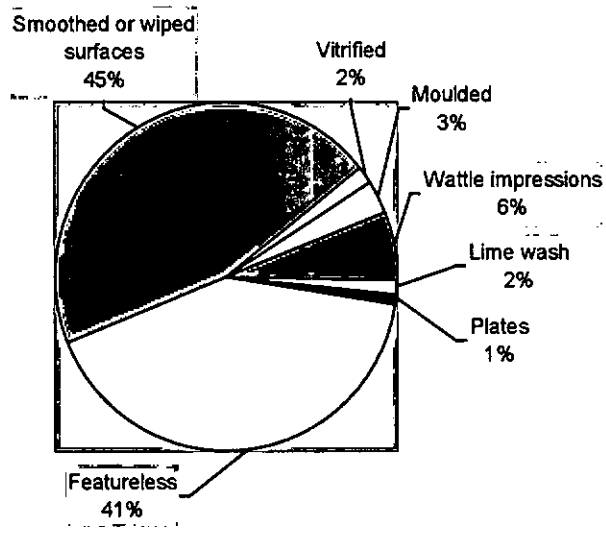


Figure 12a. The incidence of each characteristic trait observed on the fired clay

12.4 Assessment of Potential

12.4.1 The presence of identifiable structural fragments suggests some potential for investigating the character of buildings within Roman Manchester. However, only two deposits, dating to the mid-second and late second century, contained more than 1kg of material and both of these comprised less than 2.5kg. The largest group on fragment count was Phase 7 context [198], which contained just 34 fragments, weighing a little over 2kg. Consequently, the absence of any significant accumulations of fired clay means that this is not high.

12.5 Tasks and Time for Completion of Report

12.5.1 Only a brief summary of the data, taking into account final phasing, is required. There are two pieces worth illustrating. An estimate of one days work to bring the report up to publication standard is suggested.

13. SMALL FINDS

*By: **N. J. Cooper, University of Leicester Archaeological Services***

13.1 Introduction

13.1.1 A total of approximately 200 objects, or multiple fragments thereof, were retrieved from the Deansgate excavation and recorded under 119 small find (SF) numbers (includes bulk accession of 51 nail fragments). All objects of iron and copper alloy were X-rayed to aid the assessment procedure. The assessment has involved basic identification of the object materials and type, and consideration of those that warrant further research at the analysis stage. The assessment has identified a total of 23 objects across all material categories that require further research during the analysis phase

(abbreviation in tables as follows: NFW = No further work, FW = Further work)

13.2 Glass Objects

13.2.1 The assemblage comprises three beads, 19 fragments of vessel glass and two fragments of cast window glass. All three beads require further research and the large melon bead should be illustrated. The majority of the vessel glass comes from blue green mould-blown bottles, including the base of a square example (SF 106), and this is typical of assemblages dating from *c.* AD 70 to the later second century. One other blue green vessel (SF 79) and two fragments of coloured glass (SF 68 and 81), which may date to the early decades of the conquest, require further work to identify likely forms and more precise dating.

SF no.	FW?	Context	Description
2	FW	5	Small melon bead. Diam. 12mm L.10mm.
68	FW	44	Vessel frag. Yellow curved fragment.
5	FW	49	Large melon bead. Diam 30mm. L. 23mm.
18	FW	61	Bead. Half, dark green with thin yellow stripe. Diam 5mm, L. 5mm.
81	FW	153	Vessel frag. Dark pink fragment.
79	FW	198	Vessel frags x5. Blue green rounded vessel: flask?
106	FW	248	Vessel frags. 1 x base of square bottle L. of side 85mm. 1 x flat bottle frag.
101	NFW	62	Vessel frag. Light blue green flat.
85	NFW	112	Vessel frag. Blue green bottle.
82	NFW	113	Vessel frag. Blue green colourless. Corner fragment from square bottle.
87	NFW	123	Vessel frag. Blue green flat bottle frag.
78	NFW	189	Vessel frag. Blue green flat bottle frag.
67	NFW	191	2 x cast window frags, blue-green, matt-glossy. Edge length 60mm.
69	NFW	224	Very small splinters. White colourless glass. Undiagnosti
83	NFW	224	Vessel frag. White colourless flat fragment. ? Bottle.
104	NFW	224	Vessel frag. Blue green colourless. Curving fragment from bottle.
80	NFW	238	Vessel frag. Blue green bottle. Curving neck fragment.
77	NFW	273	Vessel frag. Blue green bottle. Curved neck fragment.

Table 13a. Glass objects

13.3 Copper Alloy Coins

13.3.1 Four coins in copper alloy were retrieved, all later first or second century issues, though all in poor state of preservation. More precise identification of all four is perhaps worth pursuing.

SF no.	FW?	Context	Description
21	FW	113	Coin 28mm. Almost illegible.
44	FW	248	Coin? Frag with curved edge 18mm. Barely legible.
47	FW	275	Coin preserved as soil impression only.
42	FW	u/s	Coin 30mm. Legible.

Table 13b. Copper alloy coins

13.4 Copper Alloy Objects

13.4.1 Ten objects of copper alloy were recovered, three of which require further research. The most significant of these is the enamelled or inlaid seal box (SF 26), which probably dates to the second century (Plate 1). This requires illustrating and photographing.

SF no.	FW?	Context	Description
38	FW	176	Domed stud, shaft incomplete. Head diameter 12mm.
26	FW	198	Incomplete hinged seal box. Crummy (1983) leaf-shaped type. Lid inlaid with red white and blue enamel. Damage to tapered end.
43	FW	248	4 x torn sheet frags, one with line of three perforation along one edge.
15	NFW	61	Misc. circular object 8mm diameter ?stud head.
17	NFW	112	Frags of (?finger) ring, plain band of circular section.
19	NFW	113	8 misc. ?sheet frags 20mm.
20	NFW	113	Misc. object 20mm.
25	NFW	198	10 misc. ? Sheet fragments very faint on X-ray.
37	NFW	216	Misc. shaft fragment 5mm.
40	NFW	224	Fine shaft frags poss brooch pin .

Table 13c. Copper alloy coins

13.5 Iron Objects

13.5.1 Approximately 150 iron objects under 64 small finds entries were recovered, most of which were nails of Manning's (1985) Type 1 used in timber construction as well as a small number of Type 10 hobnails. Complete examples have been measured, and the only further work required is to appraise the distribution of Type 1 nails in relation to proposed buildings (many examples came from the Phase 9.1 timber lined pit fill, context [61] and Phase 8 levelling dump [113]). Amongst the six objects warranting further work, is an example of weaponry, SF 94, a catapult bolt (Plate 2). The remaining five are less diagnostic fittings, for which further research will probably yield closer identification. Illustration of all six is required.

SF no.	FW?	Context	Description
3	FW	34	Shovel-shaped. Shaft of rectangular section, flares to form a scoop, with central perforation L.190mm, w.85mm.
4	FW	46	Three joining frags, tapering strip with half-round terminal, bent, with fe rivet in situ. Wider broken end, twisted 90 degrees. Possibly door hinge.
94	FW	113	Socketed catapult bolt L. 80mm. Square section tapering head (42 mm, tip missing). Circular socket (L.38mm, diam 10mm). Bishop and Coulston fig 12.7/8 (1st century).
54	FW	191	Incomplete nails x3 and strip 70mm with 6 globular projections?
31	FW	198	Square ended object 160mm x 25mm x 4mm. Longitudinal slot centrally.
32	FW	198	3 frags of slightly curving sheet (3mm thick). Domed fe rivet through largest frag. Largest frag 65x55mm, torn edges.
89	NFW	3	Complete nail 40mm.
98	NFW	4	6 x incomplete nails.
84	NFW	6	Incomplete nail.
64	NFW	22	Complete nail 72mm.
50	NFW	34	Incomplete nails x2.
63	NFW	34	Incomplete nail.
56	NFW	36	Incomplete nail.
73	NFW	41	Complete nail 56mm.
7	NFW	47	Nails x2 incomplete.
86	NFW	47	Nail.
118	NFW	47	Incomplete nail.
66	NFW	60	9 x misc. fragments.
8	NFW	61	Complete nail 55mm.
9	NFW	61	Misc. object.
10	NFW	61	Incomplete nail.
11	NFW	61	Slag.
12	NFW	61	Nail incomplete.
13	NFW	61	Incomplete nail.
14	NFW	61	Nail head?
16	NFW	61	Incomplete nail stem.
93	NFW	61	12 x nail shaft and misc. .fragments.
51	NFW	62	Incomplete nail.
62	NFW	62	3 x misc. frags.
110	NFW	62	Nail frag x 2.
57	NFW	66	Complete nail in two frags 60mm.
112	NFW	84	2 x misc. ? Nail stems.
113	NFW	107	Nail?
74	NFW	112	Incomplete nail shaft.
65	NFW	113	Slag.
119	NFW	113	51 misc. nail frags (6 complete 50-60mm). Originally under SF 94.
90	NFW	153	Incomplete nail.
92	NFW	153	9 x nail fragments.
100	NFW	170	Misc. circular object 27mm diameter.
49	NFW	176	Misc. object with curved edge 95mm.
88	NFW	176	Complete nail 90mm.
96	NFW	189	10 x nail shaft fragments.
116	NFW	189	2 x misc. frags.
24	NFW	193	Nail shaft frag.
60	NFW	195	Incomplete nails x 3.
61	NFW	195	3 x misc. nail frags.
95	NFW	195	Complete nails: 52mm, 65mm, 72mm, 33 other shaft and misc. frags.
114	NFW	198	Hobnail.
108	NFW	212	Incomplete nail.

58	NFW	213	2 x nail shafts.
55	NFW	216	Misc. shaft 100mm x 22mm.
59	NFW	216	Complete nail 58mm, 2x shaft frags.
117	NFW	218	4 x frags. X ray too faint.
53	NFW	224	12, Manning Type 10 hobnails clumped as shoe sole.
103	NFW	224	Complete nail bent 70mm, spiked loop 60mm, one misc. nail frag.
109	NFW	224	8 x hobnails. 3 x misc. frags.
52	NFW	238	Complete nail 85mm plus stem.
111	NFW	245	Nail frags x 2.
45	NFW	248	Complete nail 50mm, nail incomplete, 4 x misc. objects.
105	NFW	271	Complete nail 56mm.
115	NFW	334	2 x nail stem frags.
48	NFW	336	Incomplete nail.
47	NFW	?	Complete nail 54mm NB DUPLICATE NO? on X ray.

Table 13d. Iron objects

13.6 Lead Objects

13.6.1 Eight objects of lead were recovered, including undiagnostic sheet fragments and lumps. No further work is required on any of this material.

SF no.	FW?	Context	Description
6	NFW	63	Two torn sheet frags 95mm.
29	NFW	198	L-shaped rod 110mm x 8mm.
30	NFW	198	2 x two sheet frags 30mm.
35	NFW	198	sheet frag, torn 60mm.
41	NFW	215	Ovoid lump, possible weight? 45mm x 27mm.
72	NFW	215	Circular object 15mm diameter.
46	NFW	248	Unknown.
36	NFW	213	misc shaft frags, pb and fe.

Table 13e. Lead objects

13.7 Bone Object

13.7.1 Bone preservation at the site was poor. It is uncertain if this item is natural or worked. No further work is required.

SF no.	FW?	Context	Description
39	NFW	203	Curving fragment of bone 'ring'. Internal diameter 18mm.

Table 13f. Bone object

13.8 Shale Objects

13.8.1 Two examples of shale sheet were recovered. They may relate to working of this material, but no further work is required.

SF no.	FW?	Context	Description
107	NFW	125	Irregular sheet of laminated stone (shale) Length 85mm Thickness 11mm.
76	NFW	195	Irregular sheet of laminated stone (shale) L. 110mm Thickness 9mm.

Table 13g. Shale objects

13.9 Stone Objects

13.9.1 Four stone object have been identified, the incompleteness of which indicates that no further work is warranted.

SF no.	FW?	Context	Description
22	NFW	113	Whetstone. Short length, tapering rectangular section. L45mm Ht20mm, W25mm.
99	NFW	176	Coarse sandstone disc with plano-convex section Diameter 37mm Ht. 14mm.
33	NFW	198	Quernstone edge fragment of upper stone, 400mm diameter. Pink sandstone.
34	NFW	198	Whetstone? Irregular shaped stone of plano-convex section. Convex section smoothed. L88mm, W70mm, Ht max 25mm.

Table 13h. Stone objects

13.9 *Ceramic Objects*

13.9.1 Three ceramic small finds have been identified. Both lamps require illustration.

SF no.	FW?	Context	Description
23	FW	153	Open lamp, hand made, grey sandy fabric, 87mm diameter.
1	FW	u/s	Pierced disc or gaming counter manufactured from a sherd of plain samian. Abraded. Diameter 33mm. Central perforation possibly for suspension, rather narrow (4mm) to be for a spindle.
91	FW	u/s	Open lamp, hand made orange sandy fabric, globular form with footring, diameter 38mm.

Table 13i. Ceramic objects

13.10 Statement of Potential

Material	Total Number	Further Work	Illustration
Glass	24	7	3
Coins	4	4	0
Cu Alloy	10	3	1
Iron	150	6	6
Lead	8	0	0
Bone	1	0	0
Shale	2	0	0
Stone	4	0	0
Ceramic	3	3	2
Total	**206**	**23**	**12**

Table 13j. Small finds summary

13.10.1 Twenty-three objects are considered worthy of further research that would enhance our understanding of both site chronology and economic and social status. These objects should form the basis of a publication catalogue with selected illustration as indicated, where the object would contribute to the building of a regional or national type series.

13.10.2 Occurrence of small find categories, notably glass vessel and other function-specific metal finds for example should be correlated with the analysis of pottery, animal bone and other environmental indicators to establish patterns relating to diet and social status/site function.

13.11 Storage and Curation

13.11.1 All items are adequately packaged and no long-term storage problems are envisaged.

Plate 1. Small Find 26, seal box lid.

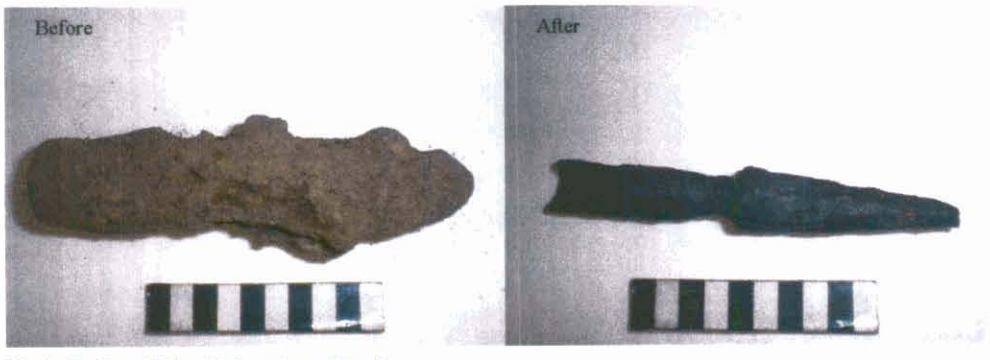


Plate 2. Small Find 94, catapult bolt.

14. BIOLOGICAL REMAINS

*By: **John Carrott, Allan Hall, Deborah Jaques and Kathryn Johnson***

14.1 Introduction

14.1.1 Thirty-nine bulk sediment samples[24] were submitted to PRS for an assessment of their bioarchaeological potential.

14.2 Methods

14.2.1 The sediment samples were inspected in the laboratory and their lithologies recorded using a standard *pro forma*. Sub-samples from thirty-one bulk samples were processed, broadly following the procedures of Kenward *et al.* (1980), for recovery of plant and invertebrate macrofossils.

14.2.2 Plant remains (and the general nature of the residues, flots and washovers) were recorded briefly by 'scanning', identifiable plant taxa and other components being listed directly to a PC using *Paradox* software. Notes on the quantity and quality of preservation were made for each fraction. No ancient invertebrate remains were recovered.

14.2.3 The residues were examined for larger plant macrofossils and other biological and artefactual remains.

14.3 Results

14.3.1 The results of the investigation are presented below in context number order. Archaeological information, provided by the excavator, is given in square brackets. A brief summary of the processing method and an estimate of the remaining volume of unprocessed sediment follows (in round brackets) after the sample numbers.

Context [1] [charcoal fill of Roman firepit [2], Phase 6.1]

Sample 1 (3 kg sieved to 300 microns with washover; approximately 5 litres of unprocessed sediment remain).

Just moist, light brown to mid to dark grey-brown (greyness from charred material), unconsolidated to crumbly (working soft), slightly sandy slightly clay silt. Stones (2 to 60 mm) were present, and charcoal (to 20 mm) and very dark grey/black ash were abundant.

There was a large washover of about 450 ml of angular charcoal (to 40 mm in maximum dimension), amongst which both birch (*Betula*) and willow/aspen/poplar (*Salix/Populus*) were noted.

The rather small residue (of approximately 0.65 kg) was composed of sand with a few stones.

[24] 'GBA'/'BS' *sensu* Dobney *et al.*, 1992.

Context [11] [organic burnt fill of pit [20] Phase 9.1]

Sample 2 (3 kg sieved to 300 microns with washover; approximately 6 litres of unprocessed sediment remain).

Just moist, varicoloured (very light grey-brown to mid to dark grey, in shades of brown, grey-brown and grey, also some orange-brown areas), stiff to brittle (working soft and somewhat plastic), clay silt. Stones (2 to 20 mm), black ash, ?very rotted charcoal and modern root traces were present.

Though small, the washover (of about 100 ml) included, amongst a component of charcoal (to 10 mm, including *Quercus* and *Salix/Populus*), some hexaploid wheat grains, and rather large amounts of cereal chaff. The latter was mainly spelt, in the form of glume-bases, but there were also some barley rachis fragments. One whole 2-grained spelt spikelet with glumes and trace of rachis attached was also present. There were some clasts of what appeared to be concreted fine charred material, perhaps largely chaff, containing spelt glume-bases and barley rachis internodes. The finer fractions were mostly spelt chaff and wheat grains, with a trace of barley. At least one wheat grain showed some evidence of having sprouted. Preservation of grain and chaff was only moderately good, with some 'silting' and the grains/chaff sometimes rather distorted, typically very eroded or with sunken areas. There were also a few fragments which appeared to be uncharred cereal 'bran' perhaps from grains that had not been completely charred. Weed seeds were moderately frequent but confined to the finest fraction.

The very small residue (of approximately 0.40 kg) comprised mainly of sand with some stones and fragments of burnt clay.

Context [34] [clay floor layer Phase 9.2]

Sample 3 (3 kg sieved to 300 microns with washover; approximately 7 litres of unprocessed sediment remain).

Just moist, mid orange to light to mid brown, stiff to crumbly (working plastic), clay. Stones (2 to 60 mm), rotted brick tile, ?ash traces, ?charcoal flecks and root traces were all present.

The small washover (~5 ml) was mostly fine charcoal (to 1 mm), with some larger fragments (to 8 mm). There were also some small lumps of ?baked undisaggregated sediment.

The small residue (of approximately 0.48 kg) consisted mainly of fragments of burnt clay or poor quality pottery with some sand and stones.

Context [36] [decayed wood/possible box in pit [40] Phase 9.1]

Sample 8 (3 kg sieved to 300 microns with washover; approximately 6 litres of unprocessed sediment remain).

Just moist, mid to dark grey-brown to light to mid grey-brown (fine charcoal/?ash darkening the matrix), unconsolidated to crumbly (working soft), very ashy, sandy clay silt. Stones (2 to 60 mm) were present, ?ash lumps and charcoal were abundant.

There was a rather large washover (around 450 ml) almost all of fine charcoal, with some larger fragments (to 12 mm), a very few charred seeds, a little coal (to 5 mm) and an occasional fragment of cinder (to 6 mm).

The medium-sized residue (of approximately 1.1 kg) consisted almost entirely of sand, with a few stones.

Context [46] [collapsed wall Phase 9.2]

Sample 7 (3 kg sieved to 300 microns with washover; approximately 5 litres of unprocessed sediment remain).

Just moist, varicoloured (very light grey-brown to mid to dark grey, in shades of brown, grey-brown and orange), gleyed in appearance, stiff to brittle (working plastic), clay. Stones (2 to 6 mm), pottery (to 5 mm), black ash and root traces were present.

The small washover (10 ml) was mostly fine charcoal and coal (to 5 mm), with a little cinder and some sand grains.

The very small residue (of approximately 0.26 kg) consisted entirely of sand.

Context [47] [charcoal rich dump layer Phase 9.3]

Sample 11 (3 kg sieved to 300 microns with washover; approximately 5 litres of unprocessed sediment remain).

Just moist, mid to dark grey-brown, with patches of mid reddish-brown and lighter and darker patches. Stiff to brittle (working crumbly and more or less plastic), stony, silty clay (more clay in places). Stones (2 to 60+ mm) and charcoal were present.

This subsample yielded a small washover of about 35 ml of charcoal (to 15 mm, including oak, *Quercus*, and *Salix/Populus*) and some charred cereal grain. The latter was very eroded and 'silted', but apparently mainly wheat (*Triticum*) with a trace of spelt wheat (*Triticum spelta* L.) chaff (glume-bases) and traces of barley (*Hordeum*) grains. There were a few charred weed seeds likely to have arrived with a cereal crop.

The medium-sized residue (of approximately 0.86 kg) consisted mainly of sand with some stones. Pottery and metal were also present.

Context [61] [timber lining of pit [40] Phase 9.1]

Sample 18 (3 kg sieved to 300 microns with washover; approximately 5 litres of unprocessed sediment remain).

Just moist, light to mid grey brown (charcoal makes it appear darker), unconsolidated (working soft), slightly sandy, ashy, clay silt. Stones (2 to 20 mm), slag, very rotted mortar/plaster, ?brick/tile, pottery (to 50 mm) and ash were all present and charcoal was abundant.

There was a medium-sized washover (300 ml) of roughly equal parts fine charcoal, cinder and coal, with some larger pieces of each (cinder quite frequently to 20 mm, charcoal to 10 mm and coal to 40 mm), a very few charred seeds, a few fragments of charred ?hazel nutshell, one or two tiny (2-3 mm) fragments of burnt bone and a single charred ?spikelet base.

The medium-sized residue (of approximately 0.90 kg) consisted mainly of sand, with some stones. Burnt clay, metal slag, coal/charcoal, and a little additional charred ?hazel nutshell and burnt bone (three unidentified fragments to 12 mm) were also present.

Context [62] [clay lining of pit [40] Phase 9.1]

Sample 19 (3 kg sieved to 300 microns with washover; approximately 5 litres of unprocessed sediment remain).

Just moist, light to mid brown to mid grey-brown, crumbly to unconsolidated (working soft and slightly sticky), sandy clay silt. Stones (2 to 20 mm) and brick/tile were present and charcoal was common.

The smallish washover (80 ml) was mostly of fine wood charcoal (occasionally as larger fragments to 10 mm), cinder/lumps of ash (to 15 mm), a little sand and coal (mostly to 5 mm, but occasionally to 15 mm).

The reasonably large residue (of approximately 1.6 kg) consisted of sand and some stones. Poor quality pottery or burnt clay, metal slag, charcoal and an iron nail were also noted.

Context [66] [fill of quarry pit [381] Phase 4]

Sample 10 (3 kg sieved to 300 microns with washover; approximately 6 litres of unprocessed sediment remain).

Just moist, mid to dark grey-brown to dark grey (from charred material), crumbly to unconsolidated (working soft), very ashy, sandy clay silt. There was a minor sediment component of small lumps of mid red-brown indurated clay (to 10 mm). Very fine charcoal and ?ash were abundant.

The small washover (of about 100 ml) comprised very clean, black, angular charcoal, with a few weed seeds and some small (<5 mm) clasts of amorphous organic material which might be charred peat or perhaps just aggregations of soot. There were traces of barley (including at least one whole spikelet) and of wheat grains and spelt glume-bases. All the charcoal examined closely proved to be oak.

The small residue (of approximately 0.56 kg) consisted almost entirely of sand. A small amount of poor quality pottery or burnt clay, a little burnt bone (~15 fragments to 6 mm, all unidentified) and some charcoal were also noted.

Context [84] [charcoal layer Phase 9.3]

Sample 15 (3 kg sieved to 300 microns with washover; approximately 6 litres of unprocessed sediment remain).

Just moist, light brown to mid grey-brown (in shades of brown and grey-brown), stiff to crumbly (working plastic), slightly silty clay. Stones (2 to 6 mm and 60+ mm) were present and charcoal was abundant.

There was a small washover of about 60 ml of angular, slightly 'silted' charcoal (to 25 mm, including oak). The small component of grain consisted of specimens that were mostly rather poorly preserved, being eroded, sometimes 'dimpled' (perhaps through being already partly wasted when charred). The grain included barley and wheat and there was a trace of spelt glume-bases, traces of hazel (*Corylus avellana* L.) nutshell and a single charred hawthorn (*Crataegus monogyna* Jacq.) pyrene were also present, together with a few arable weed seeds.

The medium-sized residue (of approximately 0.91 kg) was largely of sand and stones. Some burnt clay and metal fragments were also recorded.

Context [107] [fill of beamslot [108] Phase 9.1]

Sample 17 (1.4 kg sieved to 300 microns with washover; no unprocessed sediment remains).

Just moist, light to mid orange-brown to mid to dark grey-brown (matrix darkened by abundant charred material), brittle to unconsolidated (working more or less plastic), clay. Charcoal and ash were abundant.

This smaller (1.4 kg) subsample produced a large washover of about 160 ml of angular clean charcoal (to 25 mm), with some grain mainly hexaploid wheat, probably spelt, and a little brome (*Bromus*). The charcoal was probably all oak.

The small residue (of approximately 0.20 kg) consisted of sand, with a few stones, glass, charcoal and an iron object.

Context [120] [make-up layer for sandstone wall [101] Phase 9.1]

Sample 21 (3 kg sieved to 300 microns with washover; approximately 5 litres of unprocessed sediment remain).

Just moist, light to mid grey-brown to mid grey-brown with lumps being mid reddish-brown internally, brittle to crumbly (working soft and then sticky), slightly silty clay. Flecks of charcoal and root traces were present.

The very small washover (10 ml) was mostly fine wood charcoal (to 3 mm), with a few sand grains, a little coal (to 5 mm), an unidentified charred seed and a single charred ?wheat grain.

The medium-sized residue (of approximately 0.80 kg) consisted mainly of sand, with some stones and fragments of burnt clay and bone (~16 fragments to 14 mm and unidentified).

Context [123] [fill of Roman pit [124] Phase 6.1]

Sample 20 (3 kg sieved to 300 microns with washover; approximately 6 litres of unprocessed sediment remain).

Just moist, mid grey-brown, unconsolidated to crumbly (working soft and somewhat plastic) sandy, clay silt to silty clay. Stones (2 to 60 mm) were common and ?brick/tile and ?pottery present.

There was a small washover (20 ml) of roughly equal thirds cinder (to 4 mm), charcoal (to 3 mm) and sand grains, with some largish (to 25 mm) lumps of fused (?silicified) black ash.

The large residue (of approximately 1.2 kg) consisted mainly of stones, with some sand, burnt clay and bone (the latter to 10 mm and unidentified) and ?metal fragments present.

Context [158] [fill of pit [187] Phase 3]

Sample 22 (3 kg sieved to 300 microns with washover; approximately 5 litres of unprocessed sediment remain).

Just moist, light to mid grey brown (abundant charcoal darkening the matrix), brittle to crumbly (working soft), clay silt, with sandy clay silt patches. Stones (2 to 6 mm) modern root traces and ash were all present and charcoal was abundant.

The rather large washover (400 ml) was of fine wood charcoal (with some larger fragments to 10 mm and very occasionally to 15 mm) and a little sand.

The small residue (of approximately 0.33 kg) consisted mainly of sand with a few stones. Poor quality pottery or burnt clay and three tiny fragments (to 3 mm) of unidentified burnt bone were also present.

Context [189] [fill of pit [190] Phase 9.1]

Sample 23 (3 kg sieved to 300 microns with washover; approximately 6 litres of unprocessed sediment remain).

Just moist, mid grey-brown (flecked lighter on a mm-scale), crumbly to unconsolidated (working soft), slightly sandy clay silt. Stones (2 to 20 mm common, 20 to 60 + mm present), ?ash (to 5 mm) and ?rotted charcoal were all noted.

The small washover (40 ml) comprised roughly equal thirds of cinder (to 15 mm), coal (to 8 mm) and fine charcoal (to 4 mm), with a little sand and an occasional modern plant fragment.

The large residue (of approximately 1 kg) was mainly sand, with a few stones, three unidentified fragments of burnt bone (to 10 mm), pieces of pottery or burnt clay, metal slag and an iron object.

Context [194] [fill of pit [199] Phase 9.1]

Sample 25 (3 kg sieved to 300 microns with washover; approximately 7 litres of unprocessed sediment remain).

Just moist, varicoloured (very light grey-brown to mid to dark grey in shades of brown, grey-brown, grey and orange), stiff to brittle (working plastic), clay. Stones (2 to 20 mm) and black ash were present.

There was a very small washover (20 ml) of fine wood charcoal (to 3 mm), with some larger pieces (to 8 mm and a few to 15 mm), and a little sand.

The small residue (of approximately 0.45 kg) consisted mainly of sand, with some stones and a small amount of brick/tile.

Context [198] [dumped burnt layer Phase 7]

Sample 26 (3 kg sieved to 300 microns with washover; approximately 6 litres of unprocessed sediment remain)

Just moist, mid grey-brown (flecked lighter and darker), crumbly to unconsolidated (working soft), slightly sandy, clay silt. Stones (2 to 6 mm present and 6 to 20 mm common), ?ash and ?rotted charcoal, were all present.

The small washover (50 ml) was mostly fine wood charcoal (to 3 mm), with some larger fragments (to 20 mm), and a little sand.

The medium-sized residue (of approximately 0.74 kg) was almost entirely of sand, with a little burnt clay, charcoal and an iron nail.

Context [201] [fill of pit [202] Phase 9.1]

Sample 6 (3 kg sieved to 300 microns with washover; approximately 8 litres of unprocessed sediment remain).

Moist, light to mid grey-brown to light to mid orange-brown (lighter and more brown and grey locally), stiff (working plastic), clay. Stones (2 to 6 mm), charcoal and modern root traces present.

The very small washover (10 ml) was approximately half fine charcoal (to 3 mm, with 1 or 2 larger fragments to 8 mm) and half sand grains.

The small residue (of approximately 0.34 kg) consisted mainly of sand, with a few stones.

Context [208] [primary fill of pit [202] Phase 9.1]

Sample 31 (3 kg sieved to 300 microns with washover; approximately 3 litres of unprocessed sediment remain).

Moist, light to mid grey-brown, crumbly to unconsolidated (working soft) stony, slightly clay silty sand. Stones (2 to 20 mm) were common and charcoal present.

The very small washover (5 ml) was mostly sand grains, with a little undisaggregated sediment and a trace of fine charcoal (to 2 mm).

The large residue (of approximately1.5 kg) was mainly stones, with some sand.

Context [212] [developed soil Phase 7]

Sample 33 (3 kg sieved to 300 microns with washover; approximately 6 litres of unprocessed sediment remain).

Just moist, mid brown to mid grey-brown, crumbly to unconsolidated (working soft), slightly sandy, clay silt. Stones (2 to 60 mm) and charcoal traces were present.

There was a small washover (20 ml) most of which was of fine wood charcoal (to 4 mm, with occasional larger fragments to 12 mm). There was also a little sand and a few fragments of cinder and coal (both to 5 mm).

The medium-sized residue (of approximately 0.92 kg) consisted mainly of sand with a few stones. Charcoal and an iron nail were also noted.

Context [218] [fill of boundary ditch [219] Phase 5]

Sample 29 (3 kg sieved to 300 microns with washover; approximately 5 litres of unprocessed remain).

Just moist, mid grey-brown (with lighter grey-brown patches), crumbly to unconsolidated (working soft), ashy, clay silt. Rotted brick/tile was present and very rotted charcoal abundant.

There was a modest residue (80 ml) of fine wood charcoal (occasionally to 8 mm) and sand.

The medium-sized residue (of approximately 0.90 kg) consisted mainly of sand with some stones. Pottery or burnt clay, an iron object, charcoal and two small fragments of unidentified burnt bone (to 5 mm) were also noted.

Context [224] [fill of pit [254] Phase 9.1]

Sample 34 (3 kg sieved to 300 microns with washover; approximately 5 litres of unprocessed sediment remain).

Moist, varicoloured (light to mid brown to mid to dark grey-brown plus shades in between), brittle to crumbly (working soft and slightly sticky), clay silt. Stones (2 to 60 mm), very rotted brick/tile and burnt bone were present, and very rotted charcoal was abundant.

There was a quite large washover (200 ml) of fine charcoal (to 32 mm), with some larger charcoal pieces (to 12 mm), occasional fragments of coal and cinder (both to 8 mm), a little sand, a single very poorly preserved charred ?wheat grain and a few fragments of burnt bone (mostly unidentified but including one ?pig metapodial).

The medium-sized residue (1.1 kg) consisted mainly of sand, with some stones. Pottery or burnt clay, iron nails and charcoal were also present.

Context [239] [fill of boundary ditch [240] Phase 5]

Sample 37 (3 kg sieved to 300 microns with washover; approximately 6 litres of unprocessed sediment remain).

Just moist, mid brown to mid grey-brown, crumbly to unconsolidated (working soft), slightly sandy, clay silt, with stones (2 to 20 mm) and traces of charcoal present.

The small washover (15 ml) was approximately half of fine wood charcoal (to 3 mm, occasionally to 12 mm) and half of sand. A single unidentified charred seed was also recorded.

The medium-sized residue (of approximately 0.87 kg) was mostly of sand, with a few stones.

Context [245] [fill of pit [246] Phase 4]

Sample 38 (3 kg sieved to 300 microns with washover; approximately 5 litres of unprocessed sediment remain).

Moist, mottled (lighter and darker on a mm-scale), mid grey-brown (with occasional light brown patches), slightly sticky (working soft and somewhat plastic), clay silt to silty clay. Charcoal was present.

There was a small washover (30 ml) of fine wood charcoal (some larger fragments to 10 mm) and sand, with a few fragments of coal (to 4 mm).

The medium-sized residue (of approximately 1 kg) consisted of sand, with a few stones, three small fragments of unidentified burnt bone (to 8 mm) and a few iron nails.

Context [256] [fill of pit [257] Phase 10]

Sample 40 (3 kg sieved to 300 microns with washover; approximately 7 litres of unprocessed sediment remain).

Moist, light to mid brown to light to mid grey-brown, brittle to crumbly (working soft), slightly sandy clay silt. Stones (2 to 20 mm common and 20 to 60 mm present) and charcoal were present.

The small washover (15 ml) was mostly fine charcoal and sand, with an occasional larger charcoal fragment (to 15 mm).

The medium-sized residue (of approximately 1.1 kg) consisted primarily of sand and stones. Pottery and charcoal were also recorded.

Context [267] [fill of pit [259] Phase 3]

Sample 43 (3 kg sieved to 300 microns with washover; approximately 1 litre of unprocessed sediment remains).

Just moist, mid grey-brown, unconsolidated to crumbly (working soft and slightly plastic), slightly sandy clay silt, with some small lumps (to 8 mm) of light brown indurated clay. Stones (2 to 60 mm) were common, and ash and traces of rotted ?charcoal were present.

The rather small washover (40 ml) was of fine wood charcoal (to 3 mm).

The large residue (of approximately 1.6 kg) was mainly of stones and sand, with some pottery fragments.

Context [277] [fill of pit [274] Phase 9.1]

Sample 45 (3 kg sieved to 300 microns with washover; approximately 7 litres of unprocessed remain).

Moist, light orange-brown to mid orange to light to mid grey-brown, stiff and slightly sticky (working soft and more or less plastic), slightly silty clay. Stones (2 to 60 mm), ?concretions, fine charcoal and root traces were present.

There was a small washover (10 ml) of fine wood charcoal (to 5 mm) and sand grains.

The medium-sized residue (of approximately 0.77 kg) comprised sand, stones and brick/tile or burnt clay. Charcoal fragments were also present.

Context [282] [fill of boundary ditch [219] Phase 5]

Sample 48 (3 kg sieved to 300 microns with washover; approximately 4 litres of unprocessed sediment remain).

Moist, light brown to light to mid grey-brown, plus patches of light grey, stiff and sticky to crumbly (working soft and sticky), clay silt to silty clay. Stones (2 to 20 mm) and brick/tile fragments were common; ash and charcoal were present.

The small washover (20 ml) was mostly fine charcoal (to 2 mm), with an occasional larger fragment (to 10 mm) and a little sand. A single modern egg capsule/cyst containing a live 'larval' earthworm/soil nematode was also noted.

The medium-sized residue (of approximately 0.85 kg) consisted of sand, with some stones. Pieces of pottery or burnt clay and charcoal were also recorded.

Context [307] [fill of posthole [306] Phase 6.1]

Sample 51 (3 kg sieved to 300 microns with washover; approximately 6 litres of unprocessed sediment remain).

Moist, light to mid grey-brown, crumbly to unconsolidated (working soft), stony (stones 2 to 20 mm were common and of 60+ mm present), slightly clay silty sand. Charcoal was also present in the sample.

The washover was small (15 ml) and of fine charcoal (to 6 mm) and coal (to 10 mm), with a little cinder (to 15 mm) and sand.

The small residue (of approximately 0.67 kg) was composed almost entirely of sand, with two unidentified fragments of burnt bone (to 12 mm).

Context [316] [fill of posthole [317] Phase 6.1]

Sample 55 (3 kg sieved to 300 microns with washover; approximately 7 litres of unprocessed sediment remain).

Moist, mid grey-brown (mottled lighter on a mm-scale), unconsolidated and sticky (working soft), sandy clay silt, with some stones (2 to 20 mm common, 20 to 60+ mm) present.

There was a very small washover (5 ml) of sand and fine charcoal (to 4 mm), with an occasional fragment of cinder and coal (both to 6 mm).

The large residue (of approximately 1.8 kg) consisted of stones, with some sand.

Context [334] [fill of posthole [335] Phase 6.1]

Sample 59 (3 kg sieved to 300 microns with washover; approximately 5 litres of unprocessed sediment remain).

Moist, light to mid grey-brown (lighter in places), stiff (working soft and slightly sticky), slightly sandy clay silt. Stones (2 to 20 mm) and charcoal were present.

The small washover of about 50 ml comprised somewhat 'silted' and iron-varnished angular charcoal to 25 mm, mainly oak. There was otherwise only a single charred weed seed.

The medium-sized residue (of approximately 0.86 kg) was of sand and some stones. Iron nails were also present.

14.4 Statement of Potential

14.4.1 Ancient biological remains recovered from the samples were largely restricted to charred plant remains. Even the remains from the more productive deposits were limited to wood charcoal usually with small to modest-sized concentrations of remains of cereals, both grain and chaff. The largest concentration of grain and chaff came from the sample examined from Phase 9.1 fill [11] of pit [20], where a very typical Roman assemblage was present. Much of the charcoal recovered from the samples was too fine, or too poorly preserved, for identification. Where identifications could be made, wood species represented included oak, birch and willow/aspen/poplar.

14.4.2 Very small quantities of tiny fragments of burnt bone were recovered from ten of the samples but, with the exception of a possible pig metapodial from Phase 9.1 context [224], none could be identified.

14.5 Recommendations

14.5.1 The samples examined here indicate that the deposits at this site have some potential for investigating the use and disposal of cereals, though the concentrations are (with the exception of Sample 2, context [11]) rather small. However, our knowledge of Roman activity and environment in Manchester is minimal, the only published account of plant remains apparently being that by Roeder (1900). It is therefore recommended that full analysis be undertaken of the remaining unprocessed portions of the most productive samples:

- Sample 2 (Phase 9.1, context [11]);
- Sample 10 (Phase 4, context [66]);
- Sample 11 (Phase 9.3, context [47]);
- Sample 15 (Phase 9.3, context [84]);
- Sample 18 (Phase 9.1, context [61]);
- Sample 34 (Phase 9.1, context [224]).

14.5.2 A proper record of the material from Sample 2, context [11] is worthwhile, using a second, larger sub-sample, and keeping the resultant washover wet in order to check the quantities of uncharred 'bran'.

14.6 Retention and Disposal

14.6.1 All of the remaining sediment samples should be retained for the present, together with the biological remains recovered from the processed sub-samples.

15. FAUNAL REMAINS

By: ***Lisa Yeomans***

15.1 Introduction

15.1.1 Animal bone was retrieved from seven contexts dated to the Roman period. With the exception of faunal remains from recovered from Phase 3 context [258], only that which had been burnt to a high temperature and calcined survived destruction by the acidic soil conditions. Some bone in context [258] had been preserved without burning, but was in very poor condition.

15.1.2 The entire assemblage was very fragmented and consisted of rib and long bone shaft fragments unidentifiable to species. One shaft fragment of a bird bone could be identified in Phase 5 context [213] and the remainder of the material could only be assigned to general size class of mammal (Table 15a).

15.1.3 Very small quantities of tiny fragments of burnt bone were recovered from the processing of ten of the environmental samples. With the exception of a possible pig metapodial from Phase 9.1 context [224], none could be identified.

	Context						
	47	119	205	213	224	248	258
Indeterminate (cattle/horse size)							8
Indeterminate (pig size)					1	1	
Indeterminate (sheep/goat size)	1	1	3		3		
Indeterminate bird bone				1			

Table 15a. Animal bone assemblage

15.2 Conclusions

15.2.1 The extremely poor preservation of the bone introduces a substantial bias to the faunal remains represented. Furthermore, none of the bone was identifiable to species making interpretation impossible.

15.2.2 No further work is required on the faunal remains assemblage.

16. METALLURGICAL RESIDUES

*By: **Evelyne Godfrey***

16.1 Introduction

16.1.1 The assemblage of metalworking slag recovered from the Deansgate excavations comprised 39 small fragments with a total weight of 908.5g.

16.1.2 With the exception of a silicate/clay/charcoal concretion from Phase 9.2 context [46] (weight 414g), all of the material in the assemblage can be positively identified by visual examination as deriving from iron smithing. The technology represented is typical of the Roman period. The quantity and nature of the residues suggests only a minor amount of industrial activity was undertaken at the site.

16.2 Sample Identifications

16.2.1 Context [10] (weight 37g): non-magnetic, iron rust-stained, frothy cinder fragments, from iron smithing hearth rim.

16.2.2 Context [46] (weight 414g): non-magnetic, concretion of silicate slag/pinkish clay/flecks of charcoal. Not clearly associated with a metallurgical process, but could be checked by X-ray fluorescence analysis for presence of iron silicate or lead oxide. Unlikely to be a hammer stone, as it is not solid rock.

16.2.3 Context [61] (weight 16g): non-magnetic, frothy cinder with charcoal, from iron smithing hearth rim.

16.2.4 Context [61] (weight 64g): non-magnetic fragment of iron smithing slag.

16.2.5 Context [61] (weight 58g): mixture of non-magnetic cinder and charcoal fragments from iron smithing, and magnetic Fe_3O_4 (magnetite) -rich slag droplets from iron smithing.

16.2.6 Context [62] (weight 22g): magnetic fragment of iron smithing slag, with area of high Fe_3O_4 concentration.

16.2.7 Context [123] (weight 0.5g): magnetic, minute fragments of sintered Fe_3O_4 and charcoal from iron smithing.

16.2.8 Context [133] (weight 106g): non-magnetic fragment of iron smithing slag.

16.2.9 Context [189] (weight 1g): weakly magnetic fragment of iron smithing slag.

16.2.10 Context [193] (weight 190g): non-magnetic lump of iron smithing slag.

16.3 Conclusions

16.3.1 The slag and cinder fragments examined were all derived from iron smithing. The material reflects a very low level of secondary iron processing, probably in the context of occasional repair of objects. Such a small quantity of slag and cinder fragments is not indicative of the presence of a dedicated blacksmith's workshop, for example, being present on the site. The technology of the assemblage is quite normal for the period.

16.3.2 Apart from possible examination by X-ray fluorescence of the concretion from Context [46], no further analysis is recommended on the technological residues.

PART C: CONCLUSIONS AND RESEARCH AGENDA

17. SUMMARY OF THE ARCHAEOLOGICAL SEQUENCE

17.1 Phase 1: Natural

17.1.1 Natural sand and gravel was exposed in plan across the western portion of Area A, in the eastern part of Area B, and in section across Area B. This represents the gravel river terrace sloping down to the River Medlock, to the south of the site, and the River Irwell to the west of the site.

17.1.2 The maximum excavated thickness of natural sand and gravel was *c.* 1.40m, but the underlying sandstone bedrock was not encountered within the areas excavated so it was not possible to ascertain the full depth.

17.2 Phase 2: Buried Soil

17.2.1 Across the eastern side of Area A, natural sand and gravel was overlain by buried soil, up to 0.15m thick. There was no evidence for any prehistoric activity within this soil horizon, and it represents the ground surface present in the area prior to the Roman occupation.

17.3 Phase 3: Quarry Pits (*c.* AD 80-120)

17.3.1 The earliest phase of Roman activity was characterised by a group of substantial sand and gravel quarry pits. The raw material extracted from such features was probably used for the construction of roads in the *vicus* settlement. Pottery recovered from the earliest backfills of the quarry pits dates from the Flavian-Trajanic period, *c.* AD 80-120, and it is considered likely that the pits date from the earliest period of the establishment of the *vicus* settlement, in the Flavian period.

17.1.2.1 During this early phase of activity, a fenceline was constructed in the south-western part of Area A, cutting through the base of one of the quarry pits. This could represents initial laying out of property boundaries within the *vicus* settlement.

17.4 Phase 4: Quarry Backfilling (*c.* AD 120-160)

17.4.1 Phase 4 was characterised by further backfilling of the quarry pits. Pottery recovered from these deposits dates this period of activity to *c.* AD 120-160. The dumps contained quantities of charcoal and burnt daub, suggesting that some of the material utilised may have originated from the demolition of earlier structures in the vicinity.

17.5 Phase 5: Boundary Ditches (*c.* AD 120-160)

17.5.1 Phase 5, represented in Area A, comprised the excavation of boundary ditches to demarcate several plots of land, demonstrating planning in the spatial layout of the *vicus*. This suggests that the development of the *vicus* settlement in this area was an ordered and planned process, rather than a haphazard sprawling of the settlement.

17.5.2 Plot 1, in the southern part of Area A, measured at least 18.50m east-west by 12.0m north-south, although possibly continuing to the south and east. Plot 2, to the north, measured 6.0m north-south by at least 12.0m east-west, possibly continuing to the east and west. Only the southern boundary of Plot 3 survived, so it was not possible to ascertain the size of this property area.

17.6 Phase 6: Timber Structure and Associated Activity (*c.* AD 120-160)

17.6.1 Phase 6 was represented by the earliest structural phases within the plots defined by the boundary ditches in Area A, and associated activity. Towards the centre of Plot 1, a group of postholes and two beamslots are interpreted as forming part of a timber built structure, Building 1, measuring 9.0m ESE-WNW by 4.0m SSW-NNE. Numerous postholes elsewhere within Plot 1 may represent the remains of other structures and fencelines.

17.6.2 A large portion of Plot 2 had been subject to modern truncation, and it was therefore not possible to ascertain the nature of the activity that occurred in this area. However, the presence of a number of postholes suggests that a structure was located within this area.

17.6.3 Plot 3 had also been subject to severe truncation, although a strip of land in the southern portion of the plot did survive. Several rubbish pits were recorded in the western part of Plot 3, demonstrating that this area was utilised for the disposal of refuse. It is possible that this refuse originated from structure(s) recorded to the south on Plot 1, and possibly Plot 2.

17.6.4 A small quantity of dating evidence was recovered from Phase 6 features, dating this period of activity to *c.* AD 120-160.

17.7 Phase 7: Abandonment of Structures and Developed Soil (c. AD 120-200)

17.7.1 Phase 7 was represented by the abandonment of Building 1 within Plot 1 and the deposition of several demolition deposits possibly originating from the structure. These demolition deposits and occupation debris also served to further backfill the Phase 3 quarry pit in the south-western part of Area A.

17.7.2 A developed soil was recorded in the northern part of Area A, within Plot 3, this presumably accumulated during a period of abandonment of the area.

17.7.3 This phase of activity also saw the abandonment of several of the boundary features associated with earlier phases of activity, as evidenced by the deliberate backfilling of ditches and the accumulation of a developed soil and the deposition of levelling dumps.

17.7.4 Pottery recovered from this phase of activity dates it to the period *c.* AD 120-200.

17.8 Phase 8: Ground Levelling (*c.* AD 160-200)

17.8.1 Several features containing quantities of demolition debris and domestic refuse were encountered in the south-western portion of Area A. These are interpreted as rubbish pits, and may have been excavated to allow the disposal of debris from the previous structural phase, to clear the ground prior to an episode of construction in Phase 9. Several deposits containing large quantities of domestic and demolition debris were also dumped in the area at the same time. As well as presumably serving to clear the area of debris, these also served to level the ground prior to redevelopment of the area.

17.8.2 In Area B, extensive ground levelling and raising deposits were encountered across the area previously occupied by quarry pits. These appear to have been deposited prior to the construction of buildings.

17.9 Phase 9: Clay and Timber Buildings (*c.* AD 160-200)

17.9.1 Phase 9 saw the most intense period of occupation at the site, with clay and timber buildings and associated refuse disposal, recorded in both Areas A and B, dating from the second half of the second century.

17.9.2 The remains of a clay and timber building, Building 2, were encountered in the western side of Area A. The earliest phase of construction comprised a construction cut measuring 4.60m by 4.10m with traces of a beamslot, probably from an external wall, and internal post and stakeholes. A later clay floor surface and associated deposits demonstrated a sub-phase phase of construction. A portion of a clay and timber building, Building 3, was also recorded in the south-western part of Area B. The earliest phase recorded comprised two clay walls, representing the south-western corner of a structure which would have measured at least 3.00m by 3.00m. Several stakeholes were recorded along the eastern wall and these probably represent the remains of a wattle and daub wall, which would have formed the external wall to the structure. Traces of an internal clay wall and clay floor were also recorded along with evidence for timber beams, possibly from an internal partition or other feature, which may have burnt *in situ*. Deposits containing charcoal and burnt daub overlay the eastern side of the structure, also suggesting that this structure had burnt down. These deposits were overlain by a clay floor surface, with an associated beamslot and stakeholes, probably representing a rebuild of the earlier structure.

17.9.3 The remains of another structure, Building 4, were recorded in the northern portion of Area B. This comprised an L-shaped construction cut for the south-western corner of a structure. It contained a foundation comprising banded material, including clay, mortar and sandstone fragments, 0.50m wide, up to 0.63m thick, and recorded for a distance of 1.20m. Overlying this was a small portion of surviving wall, constructed with sandstone and clay, and likely to represent a dwarf wall for a clay and timber building.

17.9.4 A group of substantial refuse pits was located in the northern portion of Area A. The pits contained quantities of refuse, presumably derived from buildings in the vicinity, such as Building 2. It is possible that the boundary ditch defining the northern side of Plot 1 may still have been in use at this time, perhaps delimiting a zone of habitation in the southern portion of Area A from the area of domestic refuse disposal in the north. Substantial refuse pits were also located in Area B, to the east of Buildings 3 and 4.

17.10 Phase 10: Latest Roman Activity (c. AD 200-250)

17.10.1 A substantial pit, interpreted as a possible rubbish pit, was recorded in the north-eastern corner of Area A. A small quantity of pottery dating from the period AD 200-250 was recovered from this feature. This feature represents the latest Roman activity to be encountered at the site.

17.11 Phase 11: Abandonment (Late Roman)

17.10.2 In Areas A and B, the latest archaeological structural remains were overlain by a developed soil. This had presumably accumulated in the area following abandonment of the Phase 9 structures and represents a period when this part of the *vicus* was no longer utilised for habitation. It is possible that the area may have been given over to cultivation during this period, or perhaps the area was completely abandoned. A small quantity of pottery dating from the period AD 200-250 was recovered from one of these deposits.

18. RESEARCH AGENDA

18.1 Original Research Objectives

The project's original research objectives are discussed below, in light of the findings of the excavation.

18.1.1 To determine the location, nature, date and extent of any pre-Roman occupation as evidenced by structures, boundaries, pits, ditches and field systems, as well as artefacts and palaeo-environmental data that they may contain.

18.1.1.1 No evidence was found for pre-Roman activity at the site, this is in keeping with current knowledge of prehistoric activity in Manchester. There are no finds of prehistoric date in the SMR within the vicinity of the site and all the evidence from excavations since the 1970s suggests that there was no prehistoric activity in this part of Manchester. It was suggested by the antiquarian Charles Roeder that the focus for pre-Roman settlement probably lay to the north on the higher ground at Hunt's Bank,[25] close to the confluence of the Irk and Irwell.

18.1.1.2 In the eastern and northern portions of Area A, natural gravel was overlain by a buried soil, which produced no evidence for any anthropogenic activity. This absence of cultural material suggests that there was no activity in the immediate vicinity prior to the Roman occupation. A similar deposit was recorded in 1972 during excavations to the west of the site, within the area of the *vicus* settlement to the immediate north of the fort (Figure 19).[26] These investigations demonstrated that the Roman fort and *vicus* were constructed on virgin ground; in all areas investigated the earliest Roman levels were laid directly onto the original turf overlying the sandstone beds of the subsoil. Roeder also noted that no traces of pre-Roman activity were found during the extensive excavations around Castlefield at the end of the 19th century.[27]

18.1.2 To determine the location, nature, date and extent of Roman settlement, as evidenced by structures, boundaries, pits, ditches and field systems, as well as artefacts and palaeo-environmental data that they may contain.

18.1.2.1 Multi-phase settlement related activity of the Roman period was encountered in the western part of the site. The activity began in the earliest phases of the occupation of the Roman fort at the end of the first century, and reached a peak during the second century. There was some limited evidence for third century occupation, but thereafter the site appears to have been abandoned. A wide variety of settlement remains was recorded included buildings, boundary ditches, and pits, along with a wide range of artefactual material, including large quantities of samian ware and other imported wares, particularly Spanish amphora.

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[25] Roeder, 1899, 194.
[26] Jones and Grealey, 1974, 41.
[27]. Roeder, 1899.

18.1.2.2 The earliest phase of Roman activity encountered at the site was characterised by a group of quarry pits (Phase 3). The extracted raw materials are likely to have been used for the construction of roads in the *vicus* settlement. The 1972 excavation recorded a section through the branch road, the Roman fort northern exit road, which led from the north gate of the fort through the *vicus* to the main Roman road junction near the Cathedral.[28] The depth of the gravel metalling was substantial, over 1.50m, and ten separate road surfaces were recorded, spanning the period from the Flavian foundations to the fourth century. The earliest road surface, constructed over the original turf line, comprised a homogenous dump of river gravel up to 0.45m thick.

18.1.2.3 Excavations across the fort's northern exit road in the 1980s (Figure 19) revealed the earliest phase to be 6.50m wide and constructed with 0.30m of gravel, probably derived from the local natural sub-stratum. [29] These earlier findings demonstrate the large quantities of material that would have been required during road construction in the *vicus.* The main Roman road to York runs on a NE-SW alignment a short distance to the south-east of the site. Roeder detailed the discovery of a Roman vicinal road running NW-SE across the site herein described, leading from the north-western part of the *vicus* to the York road (Figures 17 and 18).[30] He encountered a portion of this minor street in the area of the viaduct at the time of its construction in 1899. The street was built over a backfilled pit and was paved with red sandstone flags. It is entirely possible that the materials excavated from the quarry pits at the site were utilised for the construction of the roads and streets identified by Roeder in the immediate vicinity of the site. Pottery recovered from the earliest backfills of the quarry pits dates from the Flavian-Trajanic period, *c.* AD 80-120, Ceramic Phase 1.

18.1.2.4 A fenceline was recorded in the south-western part of the site, cutting through the base of one of the quarry pits. This probably represents initial laying out of what would become relatively long-lived property boundaries within the *vicus*. Development of the *vicus* was seemingly a well-ordered and planned process.

18.1.2.5 Phase 4 was characterised by further backfilling of earlier quarry pits and general consolidation and levelling activity. Pottery recovered from these deposits dates this period of activity to *c.* AD 120-160 (Ceramic Phase 2). Some of the dumped material contained quantities of charcoal and burnt daub, suggesting that debris from earlier structures in the vicinity was being utilised.

18.1.2.6 Phase 5 boundary ditches were dug to demarcate a ladder of land parcels, demonstrating planning in the spatial layout of the *vicus*. This suggests that the development of the settlement area was an ordered and planned process. Parts of three plots were identified and although little artefactual evidence was recovered, it is possible to place these ditches within the period *c.* AD 120-160, due to their position in the stratigraphic sequence.

[28] Jones and Grealey, 1974, 33.
[29] Bryant, *et al*, 1986, 27.
[30] Roeder, 1899, 112 and 194.

18.1.2.7 Phase 6 is represented by the earliest structural phases within the plots defined by the boundary ditches in Area A, and associated activity. Towards the centre of Plot 1, a structure measuring 9.0m ESE-WNW by 4.0m SSW-NNE, Building 1, was erected. Numerous postholes elsewhere within Plot 1 may represent the remains of associated structures. To the north, there was evidence of a post-built structure in Plot 2. To the north again, Plot 3 contained several rubbish pits, demonstrating that this area was utilised for the disposal of refuse. The material may have originated from the structure(s) recorded to the south. A small quantity of dating evidence was recovered from Phase 6 features, dating this period of activity to *c.* AD 120-160. One of the rubbish pits from this phase of activity contained a large quantity of Spanish amphora fragments and the pottery assemblage forms one of the key groups of pottery recovered from the site.

18.1.2.8 Phase 7, recorded in Area A, was represented by the abandonment of Building 1 within Plot 1 and the deposition of demolition material, probably originating from the structure itself. Two of these deposits contained key groups of pottery. A developed soil was recorded in the northern part of Area A, within Plot 3, and this was an important finding as it indicates a period of abandonment of the area within the mid second century. This phase also saw the abandonment of several of the boundary features associated with earlier phases of activity, Pottery recovered Phase 7 deposits suggests that this abandonment reflects temporary disuse of this part of the *vicus* in the mid second century.

18.1.2.9 Phase 8 was represented by several features in the south-western portion of Area A, containing quantities of demolition debris and domestic refuse. These rubbish pits may have been excavated prior to the construction of subsequent structures. Ground consolidation and levelling dumps associated with this phase contained large quantities of domestic debris and demolition debris, three of these contained one of the key pottery groups. This phase of activity seems to represent the re-occupation of the *vicus* following abandonment in Phase 7.

18.1.2.10 Phase 9 saw the most intense period of occupation at the site, with evidence for a sequence of buildings and associated refuse disposal being recorded in both Areas A and B. Building 2 was the remains of a clay and timber building recorded in the western part of Area A. Its construction cut measured 4.60m by 4.10m and traces of a beamslot, probably representing an external wall, and internal post and stakeholes, were recorded. There was evidence for a second phase of construction of this building, with a clay floor surface truncated by several stakeholes and a beamslot, representing internal timber elements within the structure. Both phases of Building 2 were built on a NNE-SSW by ESE-WNW alignment.

18.1.2.11 Building 3 was of clay and timber construction, recorded in the south-western part of Area B. The earliest recorded phase comprised two clay walls, representing the south-western corner of the building which would have measured at least 3.00m by 3.00m. Evidence of the superstructure of the eastern external wall was recorded along with traces of internal sub-divisions and clay floors. Building 3 had evidently been destroyed by fire, perhaps only partially, prior to an episode of rebuilding.

18.1.2.12 The remains of another building, Building 4, were recorded in the northern portion of Area B. The south-western corner of a structure was recorded, comprising a robust foundation supporting a sandstone and clay dwarf wall. Again, Structures 3 and 4 were laid out on a NNE-SSW by ESE-WNW alignment, and this regularity of alignment gives a strong indication of a grid-like street layout within the *vicus*.

18.1.2.13 Large refuse pits, recorded in the northern portion of Area A, produced material which presumably originated from buildings in the vicinity. A boundary ditch that delimited the northern side of Plot 1 may still have been in use at this time, perhaps defining a specific zone set aside for refuse disposal. The pottery assemblage recovered from one of the pit fills contained a key pottery group.

18.1.2.14 The latest activity recorded at the site dates from AD 200-250. It is probable that by this time the *vicus* had contracted. A developed soil overlay the Phase 9 structural remains and represents a period when the area was no longer utilised for habitation.

18.1.3 To determine the purpose of any structures identified and their relationship to the vicus settlement.

18.1.3.1 The purpose of the structures recorded is uncertain, but it is reasonable to interpret them as roadside buildings set out around the grid-like road system of the *vicus*. Parts of three 'building plots' have been identified in Area A. It was not possible to identify any such plots in Area B due to the limited size of the area investigated. However, they can reasonably be interpreted as being part of the same building layout due to similarity in alignment of the structures

18.1.3.2 Building 1 was situated towards the centre of Plot 1. A group of postholes and two beamslots are interpreted as forming part of a timber built structure measuring 9.0m ESE-WNW by 4.0m SSW-NNE. The function of this structure is not yet certain. Further research, concentrating on comparable building plans, will be necessary to confirm the ground plan of this building. No convincing evidence for structural elements associated with the southern side of Building 1 was recorded. This may have been because the structure extended to the south beyond the area investigated. Large timber-built structures were recorded during the 1972 excavation within the northern part of the *vicus*, interpreted by the excavators as domestic living quarters and industrial metalworking sheds.[31] No such evidence for metalworking was found in association with Building 1.

18.1.3.3 One of the refuse pits associated with Building 1 contained a large quantity of Dressel 20 Spanish amphora, a type utilised for the import of olive oil and occasionally olives.[32]. Large quantities of samian ware were also recovered from the occupation and demolition deposits associated with Building 1. The presence of samian ware, particularly decorated ware, is indicative of high status, and underlines the proximity of the site to the fort and the opportunities for trade and commerce which this would bring. The pottery assemblage associated with Building 1 perhaps therefore suggests this structure may have been a shop.

[31] Jones and Grealey, 1974.
[32] Tyers, 1996, 87.

18.1.3.4 Building 2 within Plot 1 measured a maximum of 4.60m by 4.10m, and would therefore have had an internal surface area of less than 19 sq. m. The Phase 9.2 re-build of the structure evidently created a structure of the same dimensions. The small size of this structure suggests it was not a domestic dwelling, and again it is perhaps reasonable to interpret it as a small shop. A building recorded during the 1981 excavations in the northern *vicus* had a maximum internal ground area of 18 sq. m.[33] The excavators suggested that this would not have provided enough space for domestic living quarters or for industrial processes, and concluded that its most likely function, given its size, orientation and position, was a small shop.

18.1.3.5 It was not possible to ascertain the dimensions of Building 3 recorded within Area B, due to truncation by modern activity. The maximum surviving dimensions were 3.00m by 3.00m. However, if Building 4 to the north was contemporary, then the eastern side of the Building 3 could have been up to *c.* 5.50m in length. At present, the precise function of the buildings encountered in Area B has not yet been ascertained, but again a roadside commercial development can be reasonably inferred.

18.1.3.6 Comparisons with similar *vicus* buildings in Manchester, and further afield, would perhaps be worthwhile in an attempt to further ascertain the function of these buildings.

18.1.4 To determine the economic basis of the Roman settlement and the diet of its inhabitants, as evidenced by plant macrofossils recovered by bulk sampling and hand recovered faunal remains.

18.1.4.1 The poor survival of biological remains at the site was a significant factor in limiting the extent of information concerning the economic basis of the settlement and the diet of its inhabitants. Bone survival was negligible, due to the acidic nature of the sub-stratum. Plant macrofossil remains were recovered, but generally in moderate quantities and with poor preservation. However, the samples have provided some evidence concerning the economic basis of the settlement and the diet of its inhabitants.

18.1.4.2 A sample taken from a Phase 4 levelling deposit in Area B produced charcoal identifiable as oak, along with a few charred weed seeds and organic material which may have been charred peat. The sample also contained traces of barley and of wheat grains and spelt glume-bases. This typical Roman assemblage provides some evidence for the diet of the inhabitants of the *vicus* in its earliest stages.

18.1.4.3 Deposits from Phase 9 produced the most prolific and best-preserved palaeoenvironmental evidence recovered from the site. This is presumably due to the fact that this was a multi-phase period of occupation, with the presence of buildings ensuring that quantities of refuse would have been generated in the immediate vicinity.

18.1.4.4 A sample taken from a charred beamslot associated with the Building 3 in Area B produced a large quantity of charcoal, probably all oak. The sample also contained some grain, mainly hexaploid wheat, probably spelt and a little brome.

[33] Bryant *et al*, 1986, 46, Phase 3b Building F727.

18.1.4.5 Burnt demolition deposits overlying Building 3 were also particularly productive. One contained a large quantity of charcoal, some identifiable as oak, along with some charred grain, including barley and wheat, and spelt, traces of hazelnut shell and hawthorn, along with a few arable weed seeds. Another produced a small quantity of charcoal, some of which was identifiable as oak and willow/aspen/poplar. Some charred cereal grain was also recovered, comprising mainly wheat with a trace of spelt wheat and barley. There were also a few charred weed seeds, which were likely to have arrived with a cereal crop.

18.1.4.6 The largest concentration of grain and chaff from the site came from a fill of a rubbish pit associated with the Phase 9 structures in Area B. This produced charcoal including oak and willow/aspen/poplar, some wheat grains, and rather large amounts of cereal chaff, mainly spelt, but with some barley. At least one wheat grain showed some evidence of having sprouted. There were also a few fragments of material, which appeared to be uncharred cereal 'bran', perhaps from grains that had not been completely charred. The refuse pits in Area A were generally less productive in terms of the preservation of palaeoenvironmental remains.

18.1.4.7 Palaeoenvironmental evidence recovered from Phase 9 deposits (AD 160-200) period of activity provided information concerning the subsistence patterns of the inhabitants of this part of the *vicus*. The cereal remains comprised a typical Roman assemblage and provided evidence for a diet based on agricultural crops, along with an element of foraged wild species. It is possible that the willow/aspen/poplar may have been utilised for the wattle element of the buildings. The presence of oak also indicates that this species was utilised in the construction of buildings, perhaps for planks and/or posts.

18.1.4.8 Only a very small assemblage of faunal remains was recovered from the site, but this was due to preservational bias rather than a reflection of the economic basis of the *vicus*. Only bone which had been burnt to a high temperature and calcined survived destruction by the acidic soil conditions. The entire assemblage was very fragmented and consisted of rib and long bone shaft fragments unidentifiable to species. One shaft fragment of a bird bone could be identified and the remainder of the material could only be assigned to general size class of mammal, cattle/horse size, pig size, and sheep/goat size. Very small quantities of tiny fragments of burnt bone were recovered from the ten of the environmental samples; with the exception of a possible pig metapodial, none could be identified.

18.1.5 To determine any evidence for post-Roman settlement on the site.

18.1.5.1 No evidence was recorded for post-Roman activity at the site until the 19th century. This is not thought to be due to truncation of any such remains by later activity. If such later settlement had been present, then it would be expected that at least the bases of features such as pits would have been encountered. This absence of post-Roman settlement is reflected in the lack of SMR entries in the vicinity from this period. Evidence for Saxon and early medieval activity has been found closer to the Roman fort, the current excavations at Deansgate suggest that this post-Roman settlement did not extend this far to the east.

18.1.5.2 There are also no entries in the SMR for the medieval period in the vicinity of the site. It is thought that the site lay within the boundaries of a deer park at this time. A new market area was established to the north of the site, near to the cathedral at the confluence of the Irk and Irwell, this became the focus for medieval and modern Manchester.

18.2 Additional Research Objectives

The archaeological data-set generated by the project has contributed important evidence towards the project's original research agenda. However, the high significance of the evidence has necessitated the formulation of additional research questions. These are set-out and discussed below.

18.2.1 How does the evidence from the Deansgate excavation fit in with current knowledge of the development of the Roman fort and its vicus, as evidenced by previous archaeological work in Manchester?

18.2.1.1 In order to set the results of the Deansgate excavation in context, in terms of the known history of Roman occupation in Manchester, a summary of the development of the Roman settlement, is set our below. The majority of this summary has been compiled from the aforementioned 1986 GMAU publication which details the results of excavations in the 1970's and 1980's in the northern part of the fort and the northern area of the *vicus*.[34] The development of the fort is described below with reference to several chronological Periods, taken directly from the 1986 publication. An attempt is made below to correlate these Periods with the broad stratigraphic Phases identified at Deansgate.

18.2.1.2 A small fort, *Mamucium*, was established in Manchester in AD 79, towards the southern end of Deansgate, close to the confluence of the rivers Irwell and Medlock. It was a simple, square, three acre (1.2 hectare) fort with a double portal northgate and a small turf rampart, probably designed to hold a 480 man infantry unit. There are seven inscriptions on stone listed in the *R.I.B.* for Manchester, all of which are connected with the military. There are two altar stones, one dedicated to *Fortuna*, the goddess of good luck and another altar to an unknown deity. The other five stones are 'centurial' or 'cohort' stones which record building work done by the various auxiliary units, which presumably garrisoned *Mamucium*. None of the stones can be accurately dated, but the units recorded are as follows: *Legio Sextae Victrix* (the Sixth Victorious Legion, probably brought to Britain from Germany in AD 122 by *Platorius Nepos*); *Vexillatio Raetoreum et Noricorum* (a detachment from Raetia and Noricum, Austria); *Cohors Primae Frisiavonum* (First Cohort of the Frisiavones, originally recruited in Lower Germany); *Cohors Primae Baetasiorum* (First Cohort of the Baetasii, recruited from lands between the Rhine and the Meuse and possibly formed the first century garrison at Manchester); *Cohors Tertiae Bracaraugustanorum* (Third Cohort from Bracara Augusta, recruited from an area in *Lusitania*, now northern Portugal).

18.2.1.3 The fort was probably founded as part of Agricola's campaign designed to capture remaining Brigantian territory. It was founded on a sandstone buff overlooking the confluence of the rivers and guarding the crossing of the strategic road from York to Chester with that of a road running from the Fosse Way to the north.

[34] Bryant, *et al*, 1986.

18.2.1.4 To the north of the fort, a group of ditches was recorded that appear to be contemporary with foundation of the fort and these were interpreted as possibly marking out a group of military enclosures. A northern exit road leading from the northgate of the fort was also established in the earliest phase of occupation. Closer to the fort, and associated with this Period 1 activity (*c.* AD 79-90), evidence for non-ferrous metalworking was encountered. Artefactual evidence suggests that this extramural settlement formed part of a military annexe. Large quantities of imported pottery, including Spanish and Southern Gaulish material, certainly reached the site from the earliest period of occupation.

18.2.1.5 Towards the end of the first century AD and the beginning of the second, Period 2 (*c.* AD 90-160), the fort was improved, the rampart strengthened, the gateway replaced and the ditch system altered. Large pits recorded during the 1981 excavations date from the earliest part of Period 2. They were interpreted as gravel extraction pits, to provide raw materials for the northern exit road.[35] In the northern part of the *vicus*, a group of buildings and iron furnaces were recorded. The extent to which iron-working within the *vicus* was under military control is not certain, but the presence of beads and other items indicate a civilian presence in the area in Period 2. At the end of this period, large-scale demolition occurred in the fort interior, and demolition deposits suggest that the northern *vicus* was abandoned at this time. During this time, western Brigantia was subject to strict military control with Manchester becoming a supply base. There is good evidence to indicate that, for example, large scale iron-working took place under military control in the settlement. Destruction of at leas part of the fort may have been due to the garrison being moved northwards as part of the Antonine campaign in southern Scotland in the AD 140's.

18.2.1.6 Evidence from the current Deansgate excavation suggests that the earliest occupation of this part of the *vicus* broadly reflects the known development of the fort and the northern area of the *vicus*. Phase 3 gravel extraction at Deansgate probably corresponds to the earliest part of Period 2, rather than Period 1, since, as suggested above, the earliest *vicus* lay within a military annexe. There is no published evidence to suggest that the Period 1 *vicus* extended as far to the east as the Deansgate site.

18.2.1.7 Phases 5 and 6 at Deansgate probably also correspond with Period 2, which saw the spread of the *vicus* to the north-east of the fort. At Deansgate, the recorded evidence indicates that this area was divided into a ladder of land parcels by boundary ditches and that timber-built structures were erected in association with these plots. Abandonment of the structures can only be broadly dated to the period AD 120-200. The implication is that this part of the *vicus* was abandoned at this time and this can be reasonably correlated with the end of Period 2 at the fort when evidence of widespread demolition was evident.

[35] *ibid*, 36.

18.2.1.8 Period 3 (*c.* AD 160-200) occupation of Manchester began with the construction of a new larger five acre (2 hectare) fort, suggesting a larger garrison may have been sent to the area. Evidence for the development of the *vicus* at this time is less easy to interpret. A group of buildings excavated in 1972 may date to this period. The earliest building of these, Building A, measured *c.* 8m^2 and was located to the west of the northern exit road. Gaming counters, knucklebones and glass fragments contained within its floor debris suggested that this building was a hostelry, serving the soldiers and occupying a prime position close to the northern exit of the fort. The building had a 0.30m wide foundation trench and fragments of daub were found in association with the structure, presumably representing the remains of walls. The subsequent structure, Building B, was more elongated than the putative hostelry, measuring 5.0m by at least 6.0m, and was more substantially constructed; a series of postholes were preserved in the clay-packed construction trench of its front wall. The remains of a building to the south, Building C1, were interpreted as an open-sided shed, later rebuilt in almost the same position. The shed was open to catch the prevailing south-westerly wind and internally contained individual bays with often renewed furnaces associated with metal fabrication. Traces of further early buildings were recorded to the east of the exit road. It is certain that use of sandstone as a building material became more frequent in this period. Excavations in 1981 in the northern part of the *vicus* demonstrated that a common building technique comprised sandstone footings overlying shallow clay-filled foundations. The foundations of a building measuring *c.* 3.0m by 6.0m comprised construction trenches filled with clay and sandstone fragments, in some areas these foundations were topped with blocks of sandstone rubble. Two floor surfaces were recorded, one of compacted gravel and one of clay up to 50mm thick, along with traces of an internal partition.

18.2.1.9 Artefactual evidence recovered from Period 3 features in the 1970s and 1980s investigations demonstrated changes in trading patterns at this time. In broad terms, there was a decrease in the quantity of samian and an increase in the variety of locally made pottery. Phase 9 structures at the current Deansgate site, and the associated Phase 8 ground consolidation, can be broadly correlated with Period 3 occupation. The construction technique utilised for Building 4 at Deansgate – a stone dwarf wall overlying a robustly-filled foundation trench – is directly comparable with a technique recorded in 1981 in the northern area of the *vicus*. The samian assemblage recovered from Deansgate also seems to fit with the general change in trading patterns which occurred at this time, since little of the material can be dated after *c.* AD 160.

18.2.1.10 Period 4 (*c.* AD 200-400/420) was marked by the construction of a stone fort and changes within the *vicus*; a new road was laid down, which ran due north towards the River Irwell, and there was a growing trend towards variation in building types and function. The road may have been constructed to carry goods and supplies directly from the river to the fort and may perhaps account for the demise of the north *vicus* from the third century onwards. A considerable fall in the number of pottery sherds from the period after *c.* AD 250 is recognised from previous investigations in the *vicus* and fort, although later sherds, and indeed remains, are known. The available evidence broadly indicates that the northern *vicus* experienced a considerable decline, although the extent of this decline was uncertain due to truncation by later development where investigations were possible, and, subsequently, a general lack of opportunities for further study.

18.2.1.11 The fort seems to have been occupied until the end of the Roman period, although by this time the northern exit road had been cut through by a substantial defensive ditch and the northgate had been closed, this also presumably a factor in the decline of the northern *vicus*. Evidence recovered from Deansgate also seemingly demonstrated this decline in the *vicus;* only one pit, from Phase 10, seems to correspond to Period 4 occupation. The presence of a developed soil at Deansgate indicates that this part of the *vicus* was abandoned by the mid third century, during Period 4 occupation of the fort. There was no evidence for any later Roman activity and this is not thought to be a result of truncation by modern activity.

18.2.1.12 Assessment of the Deansgate data has indicated that the archaeological remains correlate closely with the evidence recovered from previous excavations within the fort and its associated *vicus* settlement. Further research will focus on a thorough examination of all published work, as well as an examination of all available unpublished evaluation and excavation reports held in the SMR which detail Roman deposits in the vicinity. Further examination of the stratigraphic and artefactual evidence from the Deansgate site will also be undertaken to confirm these initial conclusions in the light of additional evidence.

18.2.2 Is there evidence amongst the artefactual evidence to suggest the status of the vicus inhabitants at the site?

18.2.2.1 As one might expect from a *vicus* settlement, the evidence encountered suggests strong links with the military, specifically the large quantity of samian ware, also indicative of high status, and a catapult bolt. Large quantities of Spanish amphora recovered from the site also indicate evidence for trade and commerce. Roeder's general survey of the more substantial buildings within the *vicus* concluded that the principal and public buildings were erected to the east and south of the fort, enclosed by the curve of the northern bank of the Medlock. He postulated that the northern portion of the *vicus* was occupied by the garrison and the mixed population, and he suggested that the area around Gaythorne and Hulme, on both banks of the Medlock, may have been occupied by the higher ranks as it was on higher ground with better drainage. Preliminary investigation of the evidence recovered from the site appears to support Roeder's theory of a mixed civilian and military population.

18.2.2.2 Further research will include analysis of the artefactual evidence from the site, and comparisons with assemblages from other *vicus* settlements, in an attempt to further define the status of the inhabitants.

18.2.3 Is there any evidence for Roeder's vicinal road and the building observed in the 19th century?

18.2.3.1 Roeder's map of Roman Manchester shows a vicinal road (a minor street) crossing the site on a NW-SE alignment and running between the main road to York and a grid of roads located within the northern part of the *vicus* (Figure 17).[36]

[36] Roeder, 1900.

18.2.3.2 Roeder describes finding the street in the centre of the block between Old Trafford Street and Great Bridgewater Street, pointing to Tickle Street , facing Deansgate[37] The street was built over a backfilled pit and was paved with red sandstone flags, 20 of which were encountered over a distance of 12 feet. An accompanying plan of this area shows the line of this street crossing the site on a NNW-SSE alignment crossing the development site (Figure 18). No evidence was encountered during the present excavations for the road, but its location, as shown on Roeder's plan, indicates that it is likely to been totally destroyed by the viaduct and other recent activity and lay outside Areas A and B. However, the building remains encountered at the site are typical be *vicus* roadside structures. Building 1 within Plot 1 was aligned NNE-SSW., then following a period of abandonment, further structures were built on the same alignment in both Areas A and B. This demonstrates continuity of alignment in the layout of this part of the *vicus* across several phases of activity, spanning a period of at least 80 years. It can be reasonably inferred that the alignment of this multi-phase building activity reflects the alignment of a nearby street.

18.2.3.3 Intriguingly, Roeder's map of Roman Manchester shows a rectangular block, marked '*Bldgs*' located on the corner of Trafford Street and Deansgate, opposite a Roman well discovered on the site of the Crown Inn (Figure 17). Is this a diagrammatic representation of the structures recorded in Area A?

18.2.3.4 Further research will include an examination of any surviving documents relating to Roeder's investigations in Manchester in an attempt to identify the actual alignment of the road that appeared to cross the site. This research will also attempt to identify further information about the buildings depicted on Roeder's plan of Roman Manchester.

18.2.5 A variety of construction techniques were identified at the site. Can the variations inform on possible function? How does this evidence compare with that recorded at other vicus sites in Manchester and further afield in Roman Britain?

18.2.5.1 Interpretation of Building 1 is problematic, as few structural elements survived. At present this building is interpreted as a structure measuring 9.0m ESE-WNW by at least 4.0m NNE-SSW, although no evidence was encountered for the southern side of this structure. The north-western corner had beamslots associated with it, whilst the remainder is represented by postholes, most substantial along the northern side. A common construction technique from the earlier Roman period comprised horizontal timbers to provide a level base upon which either a daub wall of sun dried bricks or a wattle and daub structure would have been built.[38] A simpler technique utilised upright posts inserted straight into postholes with the superstructure nailed or pegged on and around the uprights. The beamslots forming the north-western corner of the structure presumably housed these horizontal timbers. It is possible that traces of beamslots along the remainder of the structure had been truncated by modern activity, the beamslot along the northern side only survived to a depth of 0.12m. There is some evidence to suggest that the superstructure of the earliest buildings comprised wattle and daub. Demolition deposits associated with the structure contained daub fragments, some with wattle impressions.

[37] Roeder, 1899, 112.
[38] De la Bédoyère, 1991, 17.

18.2.5.2 Several features, interpreted as postholes, were recorded internally to the structure, adjacent to its eastern and western sides. It is possible that these may have been associated with the building, and may have been structural features such as roof supports or internal partitions. The largest assemblage of tile recovered from the site came from a demolition deposit associated with this structure. The assemblage included roof tile, *tegulae* and *imbreces*, which may suggest the structure had a tiled roof, however, the material was rather fragmentary and abraded so may have been redeposited from another structure.

18.2.5.3 Little structural evidence survived for the subsequent building in Area A, Building 2, which was represented by a construction cut measuring a maximum of 4.60m by 4.10m. A beamslot along the southern edge presumably housed a horizontal timber upon which the southern wall would have been constructed. Several stakeholes or small postholes were recorded to the north of the beamslot, these presumably would have housed upright timber posts internal to the structure, perhaps roof supports or internal features. A more substantial feature was recorded towards the centre of the structure, possibly the remains of a large timber post for a roof support. These structural elements were overlain by a make-up deposit for a clay floor surface, indicating that by this time they had gone into disuse. Two postholes in the northern portion of the clay floor and a beamslot presumably housed internal features, as they were located within the structure. There was no evidence for the external walls of this building.

18.2.5.4 The structural remains recorded in Area B were in a better state of preservation, although their preservation *in situ* limits the extent to which construction techniques could be investigated. The eastern wall of Building 4comprised a 0.45m wide clay foundation, observed in section to be trench-built, 0.30m deep, with steep sides and a flat base. A series of stakeholes within this foundation presumably represent wattle uprights for the superstructure. The southern wall was also constructed with a clay foundation, up to 0.65m wide. Presumably, this also formed the base for the wattle and daub superstructure, although no evidence for this was recorded. The floor was also constructed with clay, and traces of beamslots may have housed internal features. *Vitruvius*, writing on architecture, emphasised how vital it was to build wattle and daub on a raised base in order to prevent damp which would rot the timber frame and cause the wall to sag and crack its plaster skin.[39] He was critical of the use of wattle and daub because of its instability and inflammability, and considered it only useful when time or money were short. This tendency to catch fire appears to be born out by the evidence from Building 4 in Area B.

18.2.5.5 Building 5 in Area B comprised a foundation trench 0.50m deep, with a banded infill. These foundation deposits survived at a higher level than the surrounding archaeological deposits, suggesting a raised foundation upon which an overlying stone wall was built. The wall was *c.* 0.40m wide and was built with sandstone bonded with clay. A probably related collapse was varied in nature, some sandstone and some flint, and this variation indicates that this is likely to have been a dwarf wall built to support a timber frame, probably of wattle and daub construction. A similar construction technique was identified in structures from the same period within the northern part of the *vicus* in Manchester.[40]

[39] De la Bédoyère, 1991, 18.
[40] Bryant *et al.*, 1986, 43.

18.2.5.6 The artefactual assemblage from the site provides additional evidence for construction techniques utilised in this part of the *vicus*. A number of daub fragments had wattle impressions, indicating the presence of wall daub derived from wattle and daub structures. Some very thick, apparently featureless, daub pieces may have come from clay block or 'cob' walls. Several fragments appeared to have traces of possible lime wash, perhaps suggesting internal wall surfaces of clay rather than plaster. The tile recovered comprised mainly roofing material, *imbreces* and *tegulae*, with some wall tile used in bonding courses in walls. However, the fragments were all fragmentary and abraded, suggesting that the material may have been re-deposited on more than one occasion and may not necessarily have originated from the buildings at the site.

18.2.5.7 Further analysis of construction techniques should focus on artefactual material associated with each structural phase. The structural remains should also be compared to other structures excavated within the *vicus* settlement in Manchester and further afield in Roman Britain. Parallels sought be sought in an attempt to gain a better understanding of the form and function of the buildings at the Deansgate site.

18.2.6 What evidence is there for trading patterns and economic status, and is there any evidence to suggest that any such patterns change through time?

18.2.6.1 The assessment has established that the artefactual material, specifically the pottery assemblage, has good potential to provide a range of information concerning trading patterns and economic status. A wide range of sources have been identified for the pottery utilised at the site, and this provides good evidence of a broad trading network. A number of these have not been previously identified in Manchester, these include products from Wroxeter and Colchester, as well as Pompeian red ware. Mortaria from the Verulamium region industry and Holt, Denbighshire were recovered from the site. A significant feature of the assemblage was the almost complete absence of fine wares, apart from samian. The other fine wares present comprised a single Colchester colour-coat sherd, two Nene Valley colour-coat sherds and three mica-dusted sherds. It is suggested that the virtual absence of fine wares may have been in part offset by the local production of rough cast beakers, often in fairly fine Cheshire Plain fabric. The other significant characteristic of the assemblage was the large quantity of southern Spanish Dressel 20 amphoras present. These represented 60% of the coarse ware assemblage. In comparison, the assemblage studied by Clark in 1992 contained just over 30% South Spanish amphora. This type of amphora was principally used for olive oil, and occasionally for preserved olives.[41] The only other amphora fabric to be recognised amongst the assemblage from the site comprised two sherds of South Gaulish material.

18.2.6.2 Ceramic fabrics derived from a number of sources in Britain, such as Wilderspool, Northwich and perhaps Manchester itself (termed 'Cheshire Plain'), form a significant part of the assemblage. This component is dominated by rough-cast bag-shaped beakers, one misfired example indicates that it was a local kiln product. Significant amounts of black burnished ware (BB1) were also recovered, the majority of these coming from the Poole Harbour area of Dorset.

[41] Tyers, 1996, 87.

18.2.6.3 Samian ware, particularly decorated ware, is indicative of high status and in Northern Britain is often associated with military sites, as previously discussed. For the comparatively small area excavated, the quantity of samian is considered to be unusually large, with an extraordinarily high proportion of decorated ware. A unique feature of the samian assemblage was the large quantity of South Gaulish material from Montans, which formed the largest component in the assemblage. The distribution pattern of Montans ware demonstrates that import was by sea, probably along the western coast of Britain. The fabric does have a widespread distribution, but it is rare for more than a few sherds to be found on most sites.[42] The presence of this large quantity of Montans material perhaps suggest evidence for a trading contract with the Montans potters.

18.2.6.4 Further analysis of the key groups of coarseware pottery recovered from the site should be undertaken to determine patterns of pottery supply and assemblage composition through time. More detailed study of the Montans samian may also provide further information about trading links. Further research should also focus on an integrated examination of all categories of artefactual material recovered from each phase of occupation of the site, in an attempt to identify changes in the economic status and trading patterns of this part of the *vicus* through time.

[42] Tyers, 1996, 113.

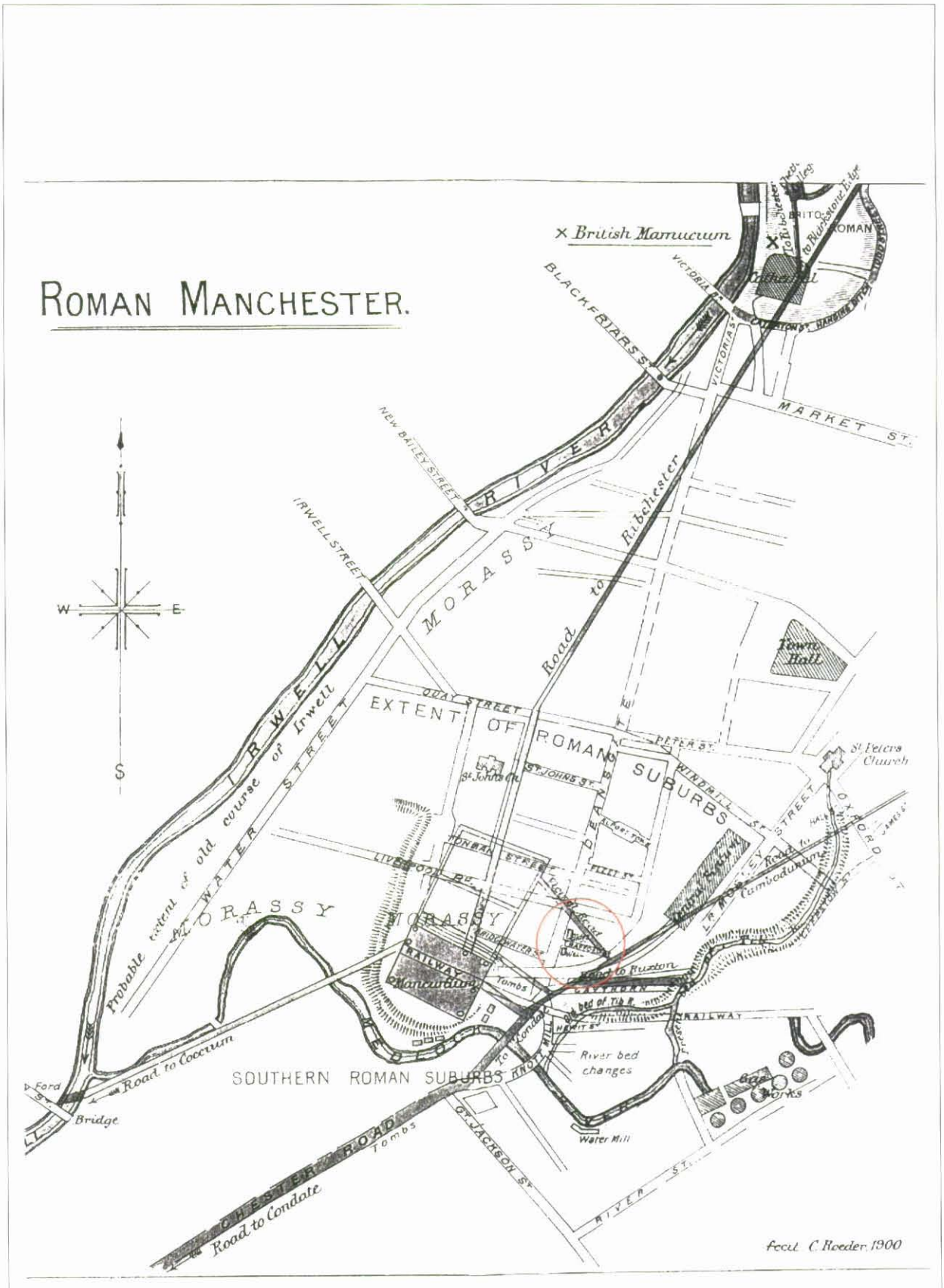

Figure 17. Roeder's map of Roman Manchester, 1900

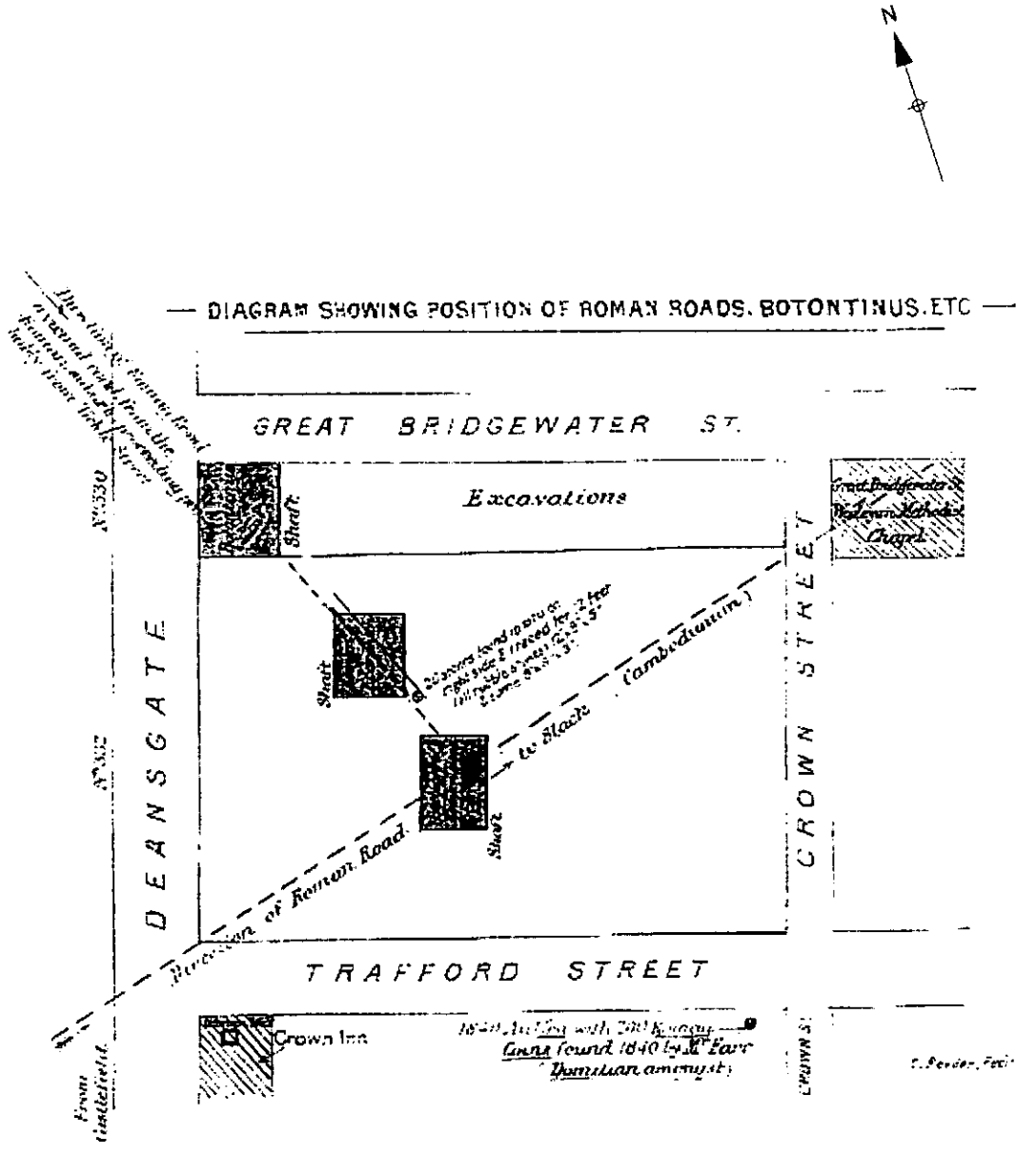

Figure 18. Roeder's map showing investigations within the site, 1899

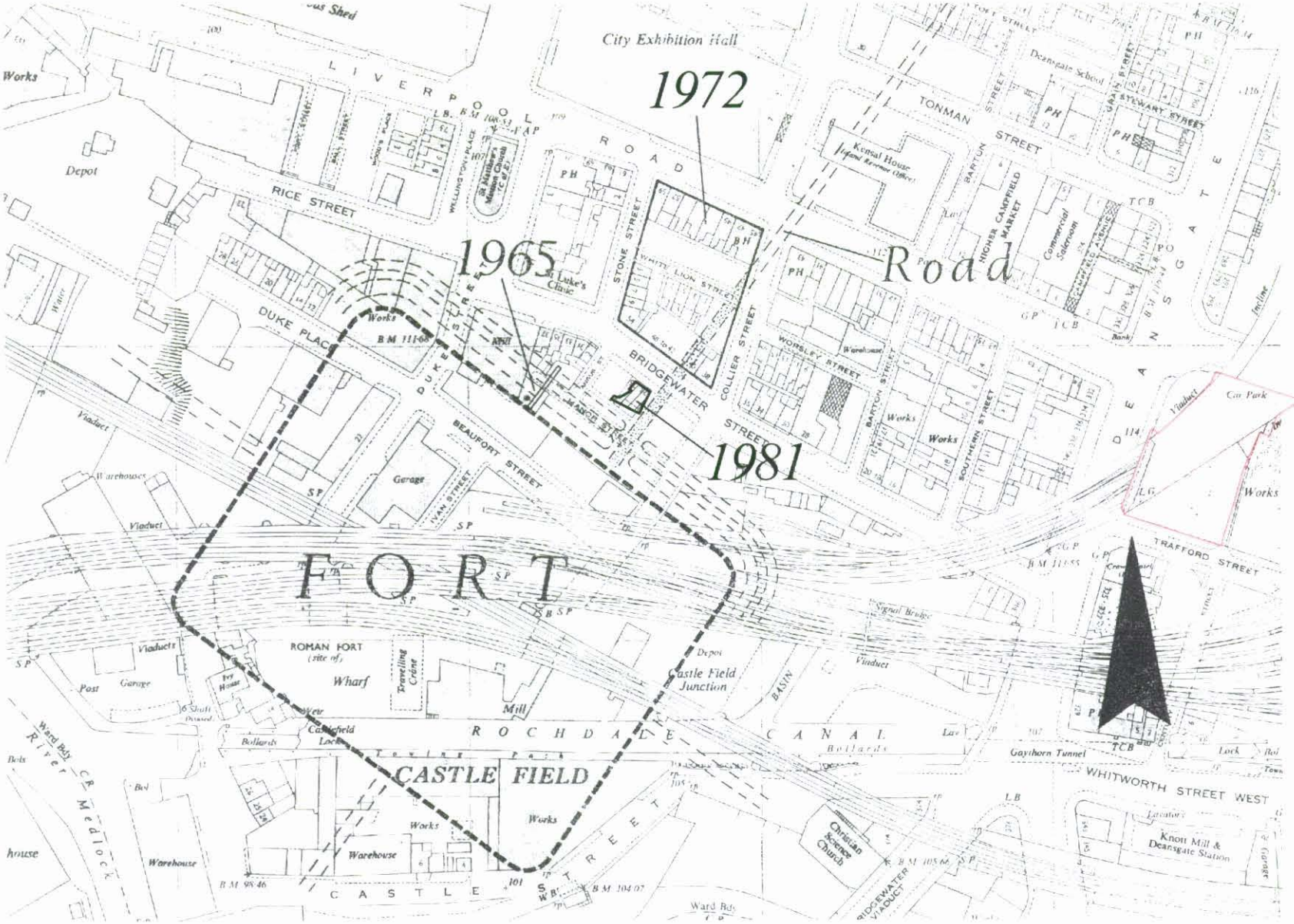

Figure 19. Location of site in relation to Roman Fort
Scale 1:2,000

19. SIGNIFICANCE OF THE PROJECT DATA AND PUBLICATION OUTLINE

19.1 The Site Data

19.1.1 The archaeological remains recorded at Deansgate are of high significance at a local and regional level. This assessment of the archaeological data-set has demonstrated that the stratigraphic, artefactual and palaeoenvironmental evidence warrant full publication.

19.1.2 At a local level, the project archive can contribute a considerable body of information concerning the evolution and development of the Roman *vicus* in Manchester, as well as the closely-related history of the fort. At a regional level, the project archive may reflect the history of Roman occupation of North-Western Britain.

19.1.3 In summary, it is considered that dissemination of the archaeological evidence from the site through publication would contribute important information to current understanding of the evolution of the *vicus* settlement in Manchester, the general history of Roman Manchester and knowledge of Roman occupation in North-Western Britain

19.2 Summary of Potential of the Artefactual and Palaeoenvironmental Material for Further Analysis

19.2.1 Pottery

19.2.1.1 The site produced one of the largest assemblages of Roman pottery, given the size of the excavated area, from any single excavation in Manchester where the pottery has been quantified. This material forms a highly significant pottery assemblage and it is considered that detailed publication is merited. Three key groups have been selected for further analysis on stratigraphic grounds to assist site interpretation. As far as can be assessed, these groups will also provide a representative sample of both types and proportions of the pottery reaching the site within their assigned date-ranges. The potential of these groups is further enhanced by the fact that they are directly comparable to Clark's groups 3 (mid second century) and 5 (late second century). Furthermore, the regional research framework for the study of Roman pottery in Northern Britain highlighted the need for the publication of quantified assemblages.[43] The analysis and publication of these three groups would go some way to addressing this need. Furthermore, since no quantified groups have previously been published from Manchester, publication of these three groups is considered fully warranted. From the assessment of the material, a range of potential research opportunities may be identified and an unmistakable emphasis should be placed on the significance of the data collected from the three key groups.

19.2.1.2 The recommendations for further analysis of the ceramic material from Deansgate are as follows:

[43] Evans and Willis 1997, 23.

- Quantification of the three key groups using EVEs (Estimated Vessel Equivalents) based on rim percentage present is deemed essential. No further quantification on any of the other groups is necessary.
- Also important is the compilation of dating evidence sections to assist stratigraphic interpretation. This could take the form of a single table for each phase and concentrate on the dating evidence for the most important site features and contexts.
- The production of tables showing quantities of each fabric or fabric group present and percentages of the groups, incorporating the data on fabrics collected during the spot-dating and that collected during the detailed quantification of the three groups, are essential. This should be followed by a detailed comment on dating and assemblage condition, *i.e.* why it has been analysed in such detail.
- A detailed discussion of pottery supply and use within the two periods covered by the three groups should also be included in the publication text. A brief synthesis of pottery supply to Manchester using the ceramic phases established by Clark is also required.
- All of the illustratable vessels from the three groups will require drawing for inclusion in the final publication.
- During the spot-dating, several vessels were identified as being of intrinsic value, such as the BB1 dishes with notches cut into the rim post cocturam, mentioned above. These will also require drawing for inclusion in any final publication report. A brief summary text describing these vessels will also be necessary.
- Given that the assemblage contains such a large quantity of amphorae, it is recommended that this material should be examined and reported on by an amphora specialist.

19.2.2 Samian Ware

19.2.2.1 The excavation produced, for a comparatively small excavation area, an unusually large quantity of samian ware, with an extraordinarily high proportion of decorated ware. The importance of samian ware lies in the fact that, as an imported ware with a wide distribution across the North-Western Roman Empire, particularly on military sites, it can be dated more precisely than other types of Roman pottery and can thus provide a vital source of dating for the contexts and phasing of a site. The potter's stamps and decorated ware, which can be tied down to the work of an individual potter or workshop, are of particular importance. The presence of samian ware, particularly of decorated ware, is indicative of high status. It was popular with the military, who made contracts for its regular supply. The nature of a samian assemblage and its origins can shed direct light on sources of supply and trading patterns. Here, too, the stamps and decorated ware are of prime importance.

19.2.2.2 The samian assemblage from Deansgate is of importance at all levels, as it has local, regional and even national significance. In comparison with other forts in North-West England, little samian from Manchester has been published. Only a selection of the decorated ware from the 1972 excavations was published, largely without commentary or discussion.[44] The samian ware from the North Gate excavations has been published, but the site produced little samian from the *vicus* and still less from the fort.[45] The material from other excavations over the past 30 years remains unpublished.

19.2.2.3 By far the greatest part of the samian assemblage originated from Central Gaul and was Hadrianic to early or mid-Antonine in date. First century material was scarce. The earliest material was South Gaulish and dates from the Flavian or Flavian-Trajanic period. There were about 19 vessels in the fabric of La Graufesenque which fall into this category. A particularly interesting and important feature of the samian was a group of South Gaulish vessels of second century date from Montans. In fact, the samian assemblage from the site seems unique in its collection of Montans material. This ware was never very common, and its decorated products have been less well studied than those of the major factories, such as La Graufesenque and Lezoux..

19.2.2.4 For the reasons discussed above, it is considered that the samian assemblage from Deansgate merits further research and that full publication of the results is entirely warranted. The recommendations for the samian assemblage are as follows:

- Further work is required on the identification of the decorated ware in order to refine the dating. Further work is also needed to assess the implications of the material in the light of the contextual information supplied.
- The most significant collection of probable Montans ware., including both the potter's stamps, was from one pit fill, [195]. The group requires more detailed study and could suggest evidence for a contract with the Montans potters.
- It is estimated that there will be 31 items of decorated ware, which will need to be 'written up' as part of a publication paper.
- The decorated items will require illustration. Although many of the 31 items are single sherds, some are bowls currently in a large number of pieces, which may make drawing time-consuming.
- Details of the samian stamps should also be included in a publication paper.

19.2.3 Graffiti pots

19.2.3.1 No further work is required on the graffiti pots, however, a full description and illustrations should be included in the publication report.

[44] Jones and Grealey, 1974, 81-88.
[45] Bryant, Morris and Walker, 1986, 121-126.

19.2.4 Ceramic building material

19.2.4.1 Beyond identifying the period when tile was first used on site, the tile from the site offers little potential for further analysis due to the absence of any significant accumulations of material.

19.2.4.2 In view of this, it is considered that no further analysis of the ceramic building material is required, beyond the production of a short summary for inclusion in a publication paper. This is unlikely to be very different from the preliminary results presented above, but will take into account any final phasing scheme.

19.2.4.3 Much of the fired clay assemblage from the site comprised shapeless and abraded fragments. Direct comparison with other assemblages is difficult in that fired clay is seldom reported on as a worthwhile artefact category. Consequently, it is impossible to ascertain how typical the Deansgate assemblage might be. The presence of identifiable structural fragments suggests some potential for investigating the character of buildings within Roman Manchester. However, only two deposits, dating to the mid second and late second century, contained more than 1kg of material and both of these comprised less than 2.5kg. Consequently, the absence of any significant accumulations of fired clay means that the potential for further analysis is considered to be low

19.2.2.5 The recommendations for the fired clay assemblage are as follows:

- Only a brief summary of the data, taking into account final phasing, is required in a publication paper.
- Two pieces are considered worthy of illustrating.

19.2.5 Small finds

19.2.5.1 Approximately 200 objects, or multiple fragments thereof, were retrieved from the Deansgate excavation, with just under 119 'small find' numbers being assigned (this includes bulk accession of 51 nail fragments). All objects of iron and copper alloy were X-rayed to aid the assessment procedure. Assessment involved basic identification of the object materials and type, and consideration of those objects that warrant further research at the analysis stage.

19.2.5.2 Assessment has identified a total of 23 objects across all material categories that require further research during the analysis phase. It is considered that these objects are worthy of further research in order to enhance our understanding of both site chronology and economic and social status. These objects should form the basis of a publication catalogue with selected illustration as indicated, where the object would contribute to the formulation of a regional or national type series.

19.2.5.3 The recommendations for the small finds assemblage are as follows:

- The glass assemblage comprises three beads, 19 fragments of vessel glass and two fragments of cast window glass. All three beads require further research and the large melon bead (SF 5) should be illustrated.

- The majority of the vessel glass comes from blue green mould-blown bottles, including the base of a square example (SF 106), and this is typical of assemblages dating from *c.* AD 70 to the later second century. One other blue green vessel (SF 79) and two fragments of coloured glass (SF 68 and 81), which may date to the early decades of the Conquest, require further work to identify likely forms and more precise dating.
- Four coins in copper alloy were retrieved, all later first or second century issues, though all in poor state of preservation. More precise identification of all four would be worth pursuing.
- Ten objects of copper alloy were recovered, three of which require further research, these included a domed stud (SF 38) and four fragments of torn sheet (SF 43). The most significant is the enamelled or inlaid seal box (SF 26), which probably dates to the second century. This requires illustrating and photographing.
- Approximately 150 iron objects under 64 'small find' entries were recovered, most of which were nails of Manning's (1985) Type 1 used in timber construction as well as a small number of Type 10 hobnails. Complete examples have been measured, and the only further work required is to appraise the distribution of Type 1 nails in relation to proposed buildings (many examples came from contexts [61] and [113]). Amongst the six objects warranting further work, is an example of weaponry (SF 94), a catapult bolt. The remaining five are less diagnostic fittings, SF 3, 4, 54, 198, for which further research will probably yield closer identification. Illustration of all six is required. Further conservation work may be required on some of these iron objects to reveal more details.
- Eight objects of lead were recovered, including undiagnostic sheet fragments and lumps. No further work is required on these items.
- Bone preservation on the site was particularly poor. A bone ring fragment was recovered but it is uncertain whether it is natural or worked. No further work is required on this item.
- Two examples of shale sheet were recovered and these may relate to working of this material. No further work is required on these items.
- Four stone object have been identified, the incompleteness of which indicates that no further work is warranted.
- Three ceramic small finds have been identified. Two of these are lamps, SFs 23 and 91, and both require illustration.
- Occurrence of small find categories, notably glass vessel and other function-specific metal finds, for example, should be correlated with the analysis of pottery, animal bone and other environmental indicators to establish patterns relating to diet and social status/site function.

19.2.6 Plant remains

19.2.6.1 Palaeoenvironmental assessment has indicated that the deposits at the Deansgate site have some potential for investigating the use and disposal of cereals, though the concentrations are (with the exception of Sample 2, context [11]) generally small. However, existing palaeoenvironmental knowledge of the Roman period in Manchester is minimal, the only published account of plant remains apparently being that by Roeder in 1900

19.2.6.2 The recommendations for the plant remains are as follows:

- It is recommended that full analysis be undertaken of the remaining unprocessed portions of the most productive samples, Samples 2, 10, 11, 15, 18 and 34.
- A proper record of the material from Sample 2, context [11] is considered worthwhile, using a second, larger sub-sample, and keeping the resultant washover wet in order to check the quantities of uncharred 'bran'.
- Any further work should assess patterns of charred material deposition in order that different processes and activities may be identified in both temporal and spatial terms.
- Should sufficient quantities of seed material become available through further processing of bulk samples, then this should be discussed with reference to inferred environmental patterns.

19.2.7 Faunal remains

19.2.6.3 The extremely poor preservation of the bone introduces a substantial bias to the faunal remains represented. No further work is recommended for the assemblage.

19.2.8 Metalworking debris

19.2.8.1 The slag and cinder fragments all derived from iron smithing. The material reflects a very low level of secondary iron processing, probably in the context of occasional repair of objects. Such a small quantity of slag and cinder fragments is not indicative of the presence of a dedicated blacksmith's workshop, for example, being present on the site. The technology of the assemblage is quite normal for the period. The find contexts are unexceptional. Therfore, apart from possible examination by X-ray fluorescence of a concretion from context [46], no further analysis is recommended.

19.3 Publication Proposals

19.3.1 It is considered that the archaeological data-set merits publication in the form of a synthesised report published in a national archaeological journal, such as *Britannia*.

19.3.2 A full consideration of the data-set and its potential for further research has already been set out. However, any publication of the site should, as a minimum, contain the following:

- A description of the site in its modern setting, detailing the background to the excavation and outlining the methodology of the excavation.
- The geology and topography of the site and how its development and occupation may have been influenced by these factors.
- Discussion of archaeological excavations and finds in Manchester that have produced evidence for the development and evolution of the fort and *vicus* settlement in order to set the results of the excavation in context with the history of Roman Manchester.
- Detailed phase descriptions of the results of the excavation.
- A proposed interpretation of the archaeological remains based on the excavated features, the artefactual and palaeoenvironmental evidence, consideration of comparable and contemporary sites excavated within the *vicus* settlement. Amongst other considerations, any such discussion should seek to examine the relationships between the phases of activity at the site, fluctuations in the level of activity, continuity and site abandonment, as well as considering the phases in isolation.
- A discussion of the wider, contemporary external environmental, political and socio-economic factors which may have had an influence on the development of the site.
- Any potentially relevant dating evidence, pottery, small finds, environmental and archaeometallurgical evidence, should be integrated into the phase discussions, and overall discussion of the evidence, where appropriate, should be made with consideration of implications for the excavated remains.
- There will also be a need for some discussion of individual finds groups and, in some cases, their interrelationships, under appropriate headings. This is particularly relevant in the case of the general pottery and samian ware, which merit full discussion in their own right and consideration of dating in the light of other categories of evidence. Additionally, all artefactual and palaeoeoenvironmental data will require cataloguing, with full cross-referencing to phase and context.

19.3.3 Any publication of the site would include, at a minimum, the following illustrations:

- Site location plans, showing the site in relation to its immediate and regional modern environment. Other, small-scale plans may also be necessary to illustrate relevant topographical and geographical features and to show the site in relation to other excavated areas of the *vicus* settlement, and Roman Manchester as a whole.
- Location plan of the excavated areas.
- Phase plans, illustrating the interrelationships of major features, structures and boundaries.
- Plans of individual features and groups of features, structures, *etc.* at a larger scale, as appropriate.
- Various section drawings, as appropriate.

- Finds illustrations, including:

  c. 85 pottery
  c. 31 items of samian pottery
  5 graffiti pots
  2 fired clay fragments
  10 small finds

- Any other illustrations as deemed appropriate. These might include relevant finds distribution maps, plans of comparative excavated structures *etc.* (with due consideration of copyright) and interpretative/reconstructive illustrations.

- Site-wide, feature and finds photographs, as appropriate.

PART D: ACKNOWLEDGEMENTS AND BIBLIOGRAPHY

20. ACKNOWLEDGEMENTS AND CREDITS

Acknowledgements

Pre-Construct Archaeology would like to thank The Beetham Organization for generously funding the archaeological project herein described. The consultancy role of CgMs Consulting, in particular Jim Hunter, is fully acknowledged.

Thanks are extended to Norman Redhead of Greater Manchester Archaeology Unit for his interest, assistance and advice.

Specialist Contributions

The following specialists are thanked for their contributions:

Conservation: Karen Barker
Faunal remains: Lisa Yeomans, PCA
Graffiti pots: Roger Tomlin, Oxford University
Metallurgical residues and slag: Evelyne Godfrey, EGA
Plant macrofossils: Palaeoecology Research Services, particularly John Carrott
Roman ceramics, brick, tile and daub: Thomas Scott Martin
Samian: Felicity Wild
Samian stamps: Brenda Dickinson
Small finds: Nick Cooper, University of Leicester

PCA Credits

Site Director: Helen Clough
Report: Jennifer Proctor
Project Manager: Robin Taylor-Wilson
Post-excavation Manager: Jennifer Proctor
CAD: Adrian Bailey
Field team: Emma Allen, Adrian Bailey, Tony Baxter, Ken Bazley, Gavin Glover, Neil Hawkins, Shane Maher, Roddy Mattison, Julie Parker, Guy Seddon, Aidan Turner

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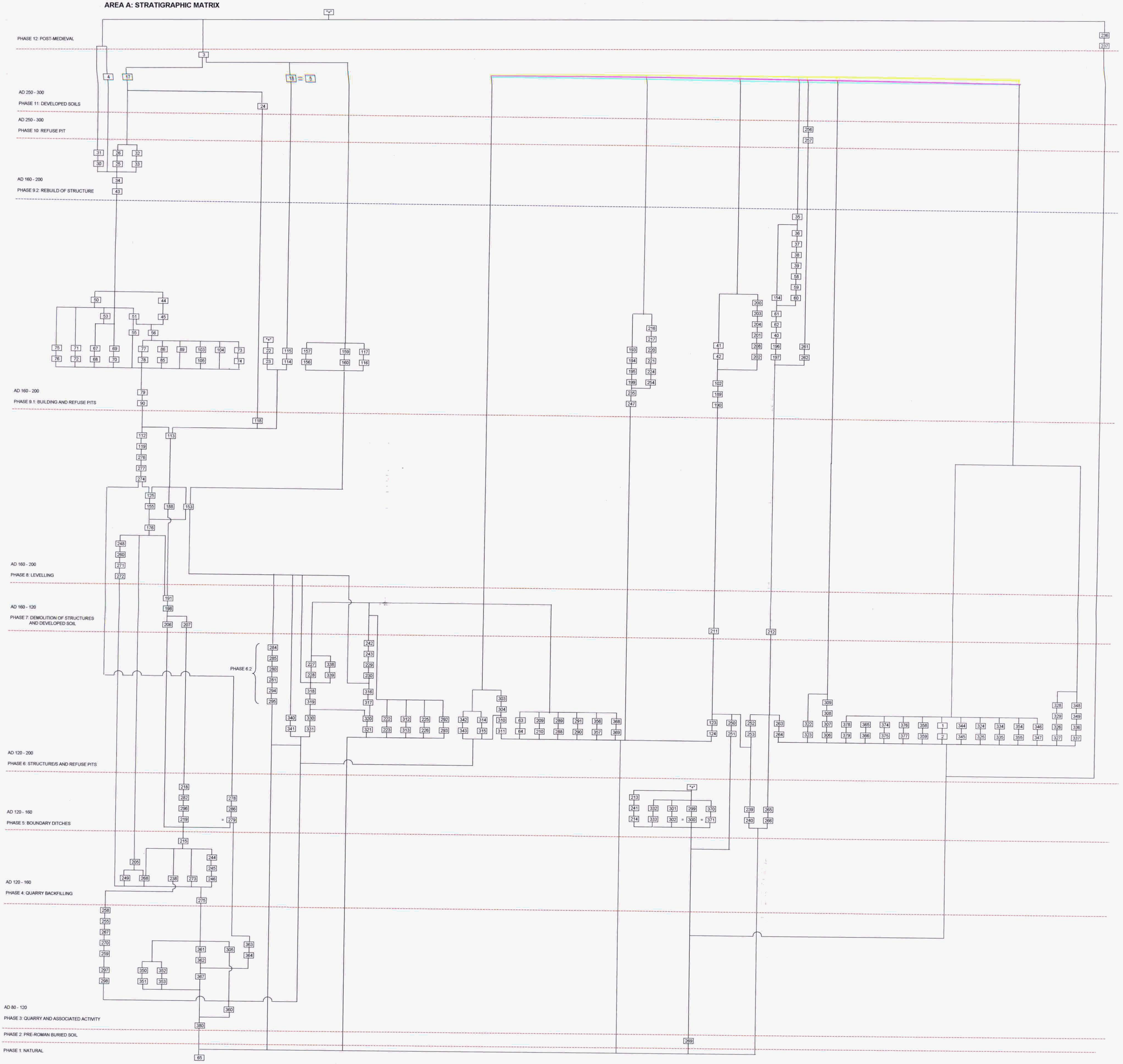
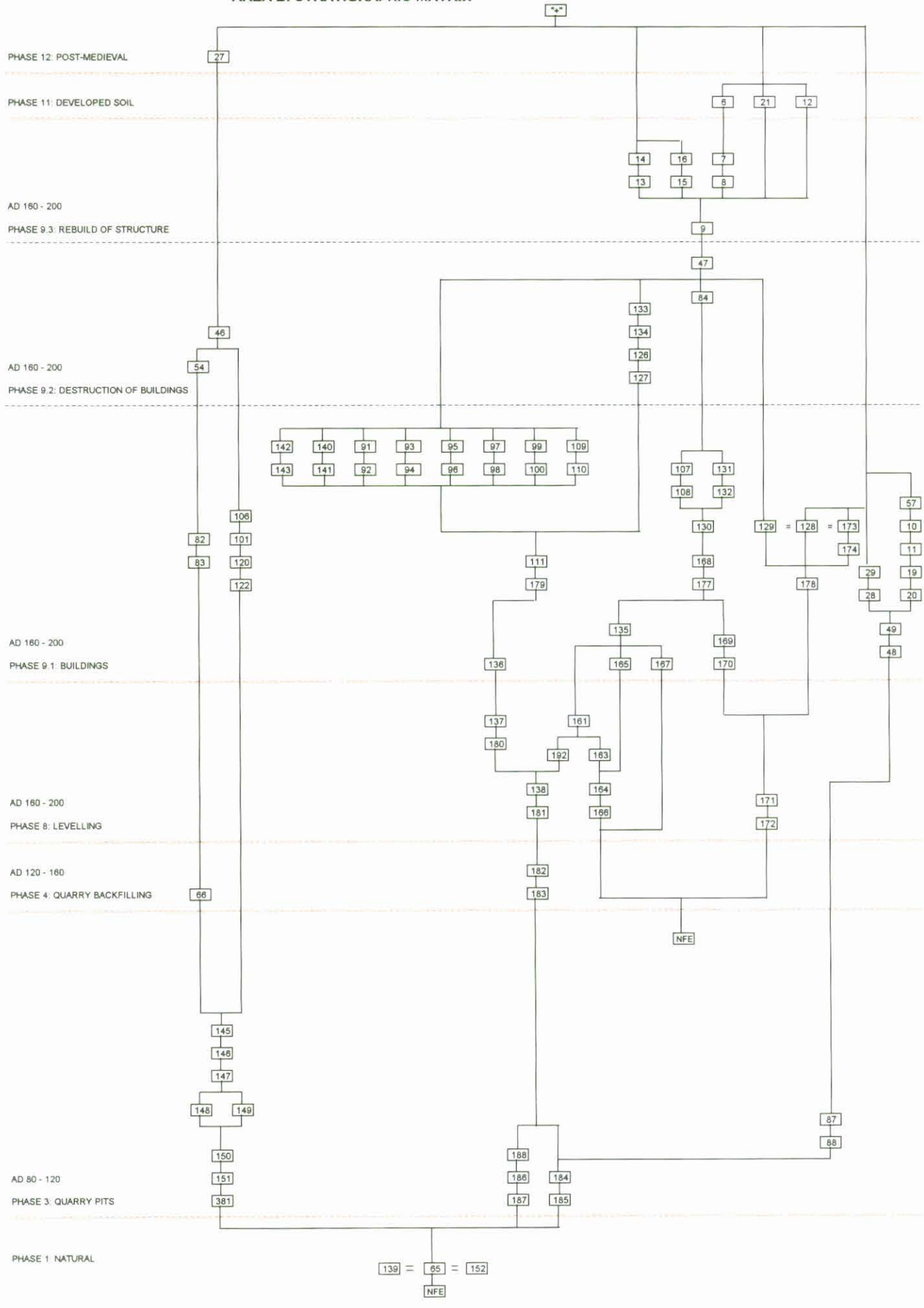
APPENDIX 1
STRATIGRAPHIC MATRICES

AREA A: STRATIGRAPHIC MATRIX



AREA B: STRATIGRAPHIC MATRIX



APPENDIX 2
CONTEXT INDEX

Context	Area	Phase	Type	Interpretation	Description
1	A	6.1	Fill	Fill of pit [2]	Loose; dark reddish black; silty sand; freq charcoal frags; mod burnt daub; 0.23m thick
2	A	6.1	Cut	Pit	Sub-circular; smoothly sloping sides; flat base; 1.40m diameter; 0.23m deep
3	A	11	Layer	Developed soil	Soft; mid brownish grey; sandy clay; occ-mod small pebbles; occ-mod charcoal flecks and frags; 0.25m thick
4	A	11	Layer	Developed soil	Loose; mid greyish brown; sandy silt; freq charcoal flecks; freq small sub angular stones; 0.30m thick
5	A	11	Layer	Developed soil	Friable; mid greyish brown; sandy silt; freq charcoal flecks; freq small sub angular pebbles; same as [18]
6	B	11	Layer	Developed soil	Moderately compacted; light greyish brown; silty sand; freq charcoal flecks and frags; mod small sub-rounded river gravel; 2.30m E-W; 1.60m N-S; 0.35m thick
7	B	9.3	Fill	Fill of [8]	Loose; dark greyish brown; silty sand; very freq charcoal flecks and frags
8	B	9.3	Cut	Beamslot	Linear; square end to east, truncated to west; vertical sides; flat base; 0.25m N-S; 0.53m E-W; 70mm deep
9	B	9.3	Layer	Clay floor	Firm; mid yellowish orange; sandy clay; mod daub and charcoal flecks; occ large sandstone blocks; 2.70m N-S; 1.20m E-W; 0.10m thick
10	B	9.1	Fill	Fill of pit [20]	Compact; dark pinkish yellow; silty clay; freq small sub-rounded pebbles; occ large rounded cobbles; freq cbm flecks; 2.27m N-S; 2.66m E-W; 0.56m thick
11	B	9.1	Fill	Fill of pit [20]	Soft; dark brown with black charcoal; clayey silt with burnt organic lense, possibly burnt timber; 2.30m N-S; 2.70m E-W; 90mm thick
12	B	11	Layer	Developed soil	Soft; mid brownish grey; silty sand; freq small sub-rounded pebbles, cbm flecks and charcoal; 1.40m N-S; 1.0m E-W; 0.15m thick
13	B	9.3	Cut	Stakehole	Sub-circular; vertical sides; flat base; 0.10m diameter; 50mm deep
14	B	9.3	Fill	Fill of [13]	Moderately compacted; light greyish brown; sandy silt
15	B	9.3	Cut	Stakehole	Sub-circular; vertical sides; flat base; 0.10m diameter; 50mm deep
16	B	11	Fill	Fill of [15]	Moderately compacted; light greyish brown; sandy silt
17	A	11	Layer	Dump/accumulation layer, same as [4]	Soft; mid greyish brown; sandy silt; freq charcoal flecks, small sub-angular stones; 3.60m N-S; 1.94m E-W; 0.12m thick
18	A	11	Layer	Dump/accumulation layer, same as [4]	Friable; mid greyish brown; sandy silt; freq charcoal flecks; freq small sub angular pebbles; 3.99m E-W; 2.26m N-S; 0.44m thick
19	B	9.1	Fill	Primary fill of pit [20]	Soft; light greyish yellow; silty sand; mod charcoal; occ small sub-rounded pebbles; 0.10m thick
20	B	9.1	Cut	Rubbish pit	Sub-circular; concave sides and base; 2.30m N-S; 2.70m E-W; 1.03m deep
21	B	11	Layer	Developed soil	Firm; mid brownish grey; silty sand; freq clay frags; mod small sub-rounded pebbles; occ medium sandstone blocks; 1.95m N-S; 1.0m E-W; 0.15m thick
22	A	9.1	Fill	Fill of [23]	Firm; dark brown; clayey sandy silt; occ small sub rounded stones; occ sub angular flints and charcoal frags; 0.25m thick
23	A	9.1	Cut	Pit	Circular; steeply sloping sides; flat base; 0.76m N-S; 0.75m E-W; 0.25m deep
24	A	11	Layer	Demolition layer?	Loose; mid orange red; silty clay; freq clay frags; occ charcoal flecks; 0.15m thick

Context	Area	Phase	Type	Interpretation	Description
25	A	9.2	Cut	Post pad	Sub-circular; steeply sloping sides; uneven base; 0.42m diameter; 90mm deep
26	A	9.2	Fill	Fill of [25]	Loose; dark grey brown; sandy silt; freq charcoal flecks; 90mm thick
27	B	12	Layer	Post-med dump layer	Soft; dark brownish grey; silt with patches of light brown clay; 19th-20th century brick rubble; 1.85m N-S; 2.70m E-W; 0.20m thick
28	B	9.1	Cut	Rubbish pit	Sub-circular; steep sides; concave base; 1.36m N-S; 1.30m E-W; 0.25m deep
29	B	9.1	Fill	Fill of [28]	Soft; light brownish grey; silty sand; freq small sub-rounded pebbles; occ daub and charcoal flecks
30	A	9.2	Cut	Posthole	Sub-circular; steeply sloping; flat base; 0.36m N-S; 0.44m E-W; 0.21m deep
31	A	9.2	Fill	Fill of [30]	Soft; dark brownish grey; silty clay; mod charcoal flecks; occ sub rounded pebbles; 0.21m thick
32	A	9.2	Fill	Fill of beamslot [33]	Loose; mid greyish brown; clayey sand; occ small sub rounded pebbles; occ charcoal frags and flecks; 0.15m thick
33	A	9.2	Cut	Beam slot	Linear; vertical sides; flat base; 1.76m E-W; 0.16m N-S; 0.13m deep; aligned E-W
34	A	9.2	Layer/Fill	Pink clay floor surface	Firm; greyish pinkish red; silty clay; mod sub-rounded and sub-angular pebbles; occ charcoal flecks; 4.06m E-W; 3.69m N-S; 0.14m thick
35	A	9.1	Fill	Fill of [40]	Friable; dark greyish brown; silty sand; occ medium cobbles; occ charcoal flecks; 0.40m thick
36	A	9.1	Fill	Fill of [40]	Friable; dark brownish grey; silty sand; freq charcoal flecks; 1.0m E-W; 0.60m N-S; 30mm thick
37	A	9.1	Fill	Fill of [40]	Friable; light grey brown; silty sand; mod sub rounded to sub angular flinty gravel; occ charcoal flecks; 1.70m N-S; 1.10m E-W; 80mm thick
38	A	9.1	Fill	Fill of [39]	Friable; dark greyish brown; silty sand; freq charcoal; 0.14m thick
39	A	9.1	Cut	Stakehole	Circular; steeply sloping sides; tapered base; 0.10m diameter; 0.14m deep
40	A	9.1	Cut	Pit cut	Sub-rectangular; steeply sloping sides; concave base; 2.74m square; 1.20m deep
41	A	9.1	Fill	Fill of [42]	Compact; dark greyish brown; silty sand; freq charcoal; freq pot flecks; 0.44m thick
42	A	9.1	Cut	Rubbish pit	Sub-rectangular; vertical sides; concave base; 0.90m N-S; 1.30m E-W
43	A	9.2	Fill	Gravel fill beneath [34]	Compact; mid greyish brown; gravel and sandy silt; freq charcoal flecks; occ red clay flecks; 3.40m N-S; 2.60m E-W; 0.20m thick
44	A	9.1	Fill	Fill of [45]	Firm; mid brown; sandy silt; occ small sub rounded stones; 0.11m thick
45	A	9.1	Cut	Posthole	Circular; smoothly sloping sides; flat base; 0.30m N-S; 0.32m E-W; 0.11m deep
46	B	9.2	Layer	Collapsed wall	Orange and pink sandstone; 50mm x 40mm x 30mm to 280mm x 240mm x 110mm; varies from roughly hewn to squared; occ flint pebbles; stiff light brown clay mortar; 1.30m N-S; 1.80m E-W; 0.19m thick
47	B	9.3	Layer	Charcoal rich dump layer	Moderate; dark black grey; sandy silt; freq charcoal flecks and frags; occ small rounded river gravel and burnt daub; 2.90m N-S; 2.90m E-W; 0.10m thick
48	B	9.1	Cut	Quarry pit	Sub-circular; steep to vertical sides; irregular base; 2.30m N-S; 5.60m E-W; 2.20m deep
49	B	9.1	Fill	Fill of [48]	Firm; light greenish and yellowish orange; sandy clay; occ large cobbles, medium sub-rounded pebbles

Context	Area	Phase	Type	Interpretation	Description
50	A	9.2	Fill	Fill of [90]	Soft; light-mid yellowish grey; clayey sand; occ small sub rounded pebbles; charcoal flecks; 0.85m N-S; 3.05m E-W; 90mm thick
51	A	9.2	Fill	Red clay under [50]	Firm; mid pinkish grey; clay; mod charcoal flecks; occ sub-rounded pebbles; 0.55m N-S; 1.52m E-W; 20mm thick
53	A	9.2	Fill	Fill of [90]	Loose; dark greyish black; silty sand; occ sub-angular stones; 20mm thick
54	B	9.3	Layer	Dump	Firm; mixed light pinkish brown and greenish grey; silty clay; very freq charcoal; freq sandstone; occ small flints; 1.85m N-S; 1.55m E-W; 50mm thick
55	A	9.1	Fill	Fill of [90]	Friable; mid greyish reddish brown; sandy silt; occ lumps of daub; mod sub-rounded pebbles and sub-angular stones; mod charcoal flecks; 0.42m N-S; 0.53m E-W; 0.11m thick
56	A	9.2	Fill	Fill of [90]	Friable; mid reddish grey; sandy silt; sub-rounded-sub-angular gravel; 3.10m N-S; 2.85m E-W; 60mm thick
57	B	9.1	Fill	Upper fill of [20]	Firm; mid brownish grey; sandy silt; mod rounded river gravel; occ charcoal flecks and frags; occ river pebbles; 0.60m thick
58	A	9.1	Fill	Fill of [40]	Friable; light to mid greyish brown; silty sand; freq small sub-rounded to sub-angular gravel; freq charcoal flecks; freq daub flecks; 0.10m thick
59	A	9.1	Fill	Fill of [40]	Firm; dark reddish brown; sandy clay; freq charcoal and daub flecks; 0.44m thick
60	A	9.1	Fill	Fill of [40]	Friable; dark greyish brown; silty sand; freq charcoal and daub flecks; freq small sub-rounded gravel; 0.13m thick
61	A	9.1	Fill	Fill of [40]	Friable; mid brownish grey; silty sand; freq charcoal flecks; 0.76m thick
62	A	9.1	Fill	Fill of [40]	Friable; mid reddish brown; sandy clay; v freq charcoal flecks and daub; 0.34m thick
63	A	6.1	Fill	Fill of posthole [64]	Loose; dark brownish grey; sandy clay; mod-freq charcoal flecks and frags; mod sub-rounded pebbles; 80mm thick
64	A	6.1	Cut	Posthole	Sub-circular; gradual sloping sides; flat base; 0.50m NE-SW; 0.36m NW-SE; 80mm deep
65	A+B	1	Natural	Natural sandy gravel	Compact; mid orange brown; freq sub-angular and sub-rounded gravel; thickness unknown
66	B	4	Fill	Upper fill of pit [381]	Soft; black; sandy, silty charcoal; occ small flint pebbles and lenses of light brown clay; 1.25m N-S; 1.66m E-W; 40mm thick
67	A	9.1	Fill	Fill of posthole [68]	Loose; mid greyish brown; silty sand; freq sub-angular stones; occ charcoal flecks; 0.12m thick
68	A	9.1	Cut	Posthole	Sub-circular; vertical sides; concave base; 0.12m diameter; 0.12m deep
69	A	9.1	Fill	Fill of posthole [70]	Loose; mid greyish brown; silty sand; occ small sub-angular stones; occ charcoal flecks; 0.12m thick
70	A	9.1	Cut	Posthole	Sub-circular; vertical sides; concave base; 0.10m diameter; 0.12m deep
71	A	9.1	Fill	Fill of posthole [72]	Loose; mid greyish brown; silty sand; freq small sub-angular stones; occ charcoal flecks; 0.14m thick
72	A	9.1	Cut	Posthole	Sub-circular; steeply sloping sides; concave; 0.22m N-S; 0.24m E-W; 0.14m deep
73	A	9.1	Fill	Fill of posthole [74]	Loose; mid-dark brownish grey; sandy gravel; freq large squared blocks of sandstone; 0.24m deep
74	A	9.1	Cut	Posthole	Oval; moderately sloping sides; concave base; 0.43m N-S; 0.60m E-W; 0.24m deep
75	A	9.1	Fill	Fill of pit? [76]	Loose; mid brownish grey; silty sand; freq sub-angular and sub-rounded stones; 0.25m deep
76	A	9.1	Cut	Pit or posthole	Sub-triangular; almost vertical sides; flat base; 0.80m NW-SE; 0.30m NE-SW; 0.25m deep

Context	Area	Phase	Type	Interpretation	Description
77	A	9.1	Fill	Fill of slot [78]	Firm; mid greyish brown; sandy silt; freq sub rounded stones; 0.19m thick
78	A	9.1	Cut	Beamslot	Linear; steeply sloping sides; flat base; 1.55m E-W; 0.15m N-S; 0.20m deep
79	A	9.1	Fill	Fill of construction cut [90]	Friable; light yellowish grey; sandy silt; freq sub-rounded and sub angular pebbles; mod charcoal flecks; 0.80m N-S; 2.75m E-W; 0.04m thick
82	B	9.1	Fill	Fill of [83]	Soft; mid to dark brown with freq black patches; sandy clayey silt; occ light brown clay and orange red sandstone; 0.12m N-S; 0.56m E-W; 0.18m thick
83	B	9.1	Cut	Posthole	Probably circular (truncated); vertical sides; flat base; 0.12m N-S; 0.56m E-W; 0.18m thick
84	B	9.3	Layer	Charcoal layer	Friable; mid brownish grey; sandy silt; freq charcoal flecks; mod clay lumps; occ small sub-rounded pebbles; 2.90m N-S; 1.05m E-W; 40mm thick
85	A	9.1	Cut	Beamslot	Sub-rectangular; moderately sloping sides; concave base; 0.17m N-S; 0.46m E-W; 60mm deep
86	A	9.1	Fill	Fill of [85]	Friable; mid-dark greyish brown; sandy silt; freq sub-rounded and sub-angular pebbles; 60mm thick
87	B	3	Fill	Fill of quarry pit [88]	Soft; light to mid brownish grey; silty sand; occ daub and burnt clay; mod rounded to sub-rounded small and medium pebbles; freq charcoal flecks and frags; 0.45m N-S; 2.45m E-W; 0.75m thick
88	B	3	Cut	Quarry pit	Shape in plan uncertain, heavily truncated; steep sides; rounded base; 0.45m N-S; 2.45m E-W; 0.75m deep
89	A	9.1	Fill	Fill of building [90]	Firm; mottled light and dark brown; sandy silt; occ sub-rounded stones and daub flecks; 1.38m N-S; 0.99m E-W; 0.16m deep
90	A	9.1	Cut	Construction cut for building	L-shaped; steep-vertical sides; base slopes down towards centre; 4.60m E-W; 4.10m N-S; 0.28m deep
91	B	9.1	Fill	Fill of stakehole [92]	Moderate; mid brownish grey; sandy silt; occ charcoal and pea grit; 50mm diameter; 90mm thick
92	B	9.1	Cut	Stakehole	Sub-circular; vertical sides; pointed base; 50mm diameter; 90mm deep
93	B	9.1	Fill	Fill of [94]	Moderate; mid brownish grey; sandy silt; occ charcoal and pea grit; 50mm diameter; 70mm thick
94	B	9.1	Cut	Stakehole	Sub-circular; vertical sides; pointed base; 50mm diameter; 70mm deep
95	B	9.1	Fill	Fill of [96]	Moderate; mid brownish grey; sandy silt; occ charcoal and pea grit; 50mm diameter; 60mm thick
96	B	9.1	Cut	Stakehole	Sub-circular; vertical sides; pointed base; 50mm diameter; 60mm deep
97	B	9.1	Fill	Fill of [98]	Moderate; mid brownish grey; sandy silt; occ charcoal and pea grit; 50mm diameter; 100mm thick
98	B	9.1	Cut	Stakehole	Sub-circular; vertical sides; pointed base; 50mm diameter; 100mm deep
99	B	9.1	Fill	Fill of [100]	Moderate; mid brownish grey; sandy silt; occ charcoal and pea grit; 50mm diameter; 100mm thick
100	B	9.1	Cut	Stakehole	Sub-circular; vertical sides; pointed base; 50mm diameter; 100mm deep
101	B	9.1	Masonry	Sandstone wall	Orange to dark pink sandstone; up to 520mm x 210mm x 140mm; some stones flat and even, others coarse or unfinished; bonded with light brown orange and pink clay; 0.90m NNE-SSW; 1.40m ESE-WNW ; 0.20m high
102	A	9.1	Layer	Roman dump layer	Compact; dark brownish grey; sandy silt; freq sub-angular-sub-rounded pebbles; occ CBM frags; freq charcoal flecks; 3.92m N-S; 3.50m E-W; 0.20m thick
103	A	9.1	Fill	Charcoal fill of [90]	Loose; mid orange brown; clayey sand and charcoal; 30mm thick

Context	Area	Phase	Type	Interpretation	Description
104	A	9.1	Fill	Fill of [90]	Compact; mid orange brown; clayey sand; occ small sub-rounded sandstone frags; 30mm thick
105	A	9. 1	Fill	Fill of [90]	Compact; mid reddish brown; silty sand and sub-rounded gravel; freq flecks charcoal, coal and red clay; 0.10m thick
106	B	9.1	Fill	Backfill of construction cut [122]	Soft; dark grey; sandy silt; 0.85m N-S; 2.35m E-W; 0.63m thick
107	B	9.1	Fill	Fill of [108]	Friable; dark greyish black; charcoal; 0.46m N-S; 0.18m E-W; 60mm thick
108	B	9.1	Cut	Beamslot	Linear; vertical sides; flat base; 0.46m N-S; 0.18m E-W; 60mm deep
109	B	9.1	Fill	Fill of [110]	Moderate; mid brownish grey; sandy silt; occ charcoal and pea grit; 50mm diameter; 100mm thick
110	B	9.1	Cut	Stakehole	Sub-circular; vertical sides; pointed base; 50mm diameter; 100mm deep
111	B	9.1	Fill	Clay wall	Firm, sticky; mid orange yellow; sandy clay; occ daub and charcoal flecks; 2.74m N-S; 0.44m E-W; 0.36m thick
112	A	8	Layer	Levelling dump	Firm; mid dark greyish brown; clayey silt; freq charcoal flecks; mod sub-rounded and sub angular stones; 2.35m N-S; 2.42m E-W; 0.20m thick
113	A	8	Layer	Levelling dump	Friable; mid greyish brown; silty clay; freq charcoal frags; mod sub-rounded and sub angular large pebbles; 7.70m N-S; 4.70m E-W; 0.20m thick
114	A	9.1	Cut	Posthole	Circular; steep sides; concave base; 0.21m N-S; 0.18m E-W; 0.10m deep
115	A	9.1	Fill	Fill of [114]	Firm; mid greyish red; clay; occ small sub rounded stones; occ charcoal flecks; 0.10m thick
116	A	9.1	Cut	Posthole	Oval; steep sides; concave base; 0.23m N-S; 0.28m E-W; 60mm deep
117	A	9.1	Fill	Fill of [116]	Firm; mid greyish pink; clay; occ charcoal flecks; 60mm thick
118	A	7	Layer	Levelling dump	Loose; mid greyish brown; silty clay sand; med-large sub-rounded and sub-angular cobbles; occ charcoal flecks; occ pink clay frags; 1.82m N-S; 1.08m E-W; 0.12m thick
119	A	8	Fill	Upper fill of [274]	Friable; mid yellowish brown; clayey sandy silt; occ sub-rounded stones; occ charcoal flecks; 0.50m thick
120	B	9.1	Fill	Make up layer for wall [101]	Soft; laminated bands of mid brown, light grey, orange, pink and black; organic silt, mortar and silt, silty clay, sandstone frags and charcoal; 0.82m N-S; 2.35m E-W; 0.63m thick
122	B	9.1	Cut	Construction cut for wall [101]	Curvi-linear; moderately sloping sides and base; 0.82m N-S; 2.35m E-W; 0.51m deep
123	A	6.1	Fill	Fill of [124]	Compact; mid greenish grey; sandy silt; freq pot frags; freq charcoal flecks; occ pebbles; 0.56m thick
124	A	6.1	Cut	Pit	Sub-rectangular; vertical sides; flat base; 1.20m NW-SE; 0.80m SW-NE; 0.56m deep (truncated)
125	A	8	Fill	Fill of [155]	Loose; mid orange brown; sandy gravel; occ charcoal flecks; 2.97m N-S; 5.45m E-W; 0.28m thick
126	B	9.2	Fill	Fill of small robber pit	Moderate; mid brownish grey; sandy silt; mod small rounded gravel and pebbles; occ charcoal and daub flecks and frags; 0.95m N-S; 0.90m E-W; 0.10m thick
127	B	9.2	Cut	Small robber pit	Sub-circular; gradually sloping sides; concave base; 0.95m N-S; 0.90m E-W; 0.10m deep
128	B	9.1	Fill	Clay wall	Firm; mid brownish orange; sandy clay; occ small rounded pebbles, daub and charcoal flecks; 1.34m N-S; 0.54m E-W; not excavated; at least 0.40m thick

Context	Area	Phase	Type	Interpretation	Description
129	B	9.1	Fill	Clay wall	Firm; mid brownish orange; sandy clay; occ daub and charcoal flecks; 1.18m N-S; 0.80m E-W; not fully excavated
130	B	9.1	Layer	Clay floor surface	Firm; mid brownish orange with pink and red mottling; sandy clay; freq charcoal flecks; mod daub; occ small sub-rounded pebbles; 1.72m N-S; 0.90m E W; 1300mm-80mm thick
131	B	9.1	Fill	Fill of [132]	Loose; mid brownish grey; silty sand; occ small sub-rounded pebbles, charcoal and daub flecks; 1.30m N-S; 0.15m E-W; not excavated
132	B	9.1	Cut	Beam slot	Linear; not excavated; 1.30m N-S; 0.15m E-W
133	B	9.3	Fill	Fill of [134]	Moderate; mid brownish grey; sandy silt; occ angular to sub-rounded gravel, sandstone frags and charcoal flecks and frags; 0.35m N-S; 0.30m E-W; 0.25m thick
134	B	9.3	Cut	Posthole?	Sub-rectangular; vertical sides; flat base; 0.35m N-S; 0.30m E-W; 0.25m deep
135	B	9.1	Layer	Make-up deposit	Moderate; mid brownish grey; sandy silt; mod charcoal flecks and frags and large rounded gravel and pebbles; occ burnt daub frags; 1.30m N-S; 2.00m E-W; 0.25m thick; unexcavated; same as [136] to east
136	B	9.1	Layer	Make-up deposit	Moderate; mid brownish grey; sandy silt; mod charcoal flecks and frags and large rounded gravel and pebbles; occ burnt daub frags; 1.320m N-S; 1.45m E-W; unexcavated; same as [135] to west
137	B	8	Layer	Levelling dump	Firm; light yellowish orange; sandy gravel; occ sandstone; freq rounded gravel and small pebbles; 0.45m N-S; 1.55m E-W; 0.20m thick; unexcavated
138	B	8	Layer	Levelling dump	Firm; light greyish orange; silty sand; mod burnt daub and charcoal; 0.70m N-S; 7.80m E-W; 0.14m thick; unexcavated
139	B	1	Layer	Natural	Firm; light yellowish orange; sandy gravel
140	B	9.1	Fill	Fill of stakehole [141]	Firm; light brownish grey; sandy silt; occ small gravel and sandstone frags; 40mm diameter; 80mm deep
141	B	9.1	Cut	Stakehole	Sub-circular; vertical sides; pointed base; 40mm diameter; 80mm deep
142	B	9.3	Fill	Fill of stakehole [143]	Firm; light brownish grey; sandy silt; occ small gravel and sandstone frags; 40mm diameter; 100mm deep
143	B	9.3	Cut	Stakehole	Sub-circular; vertical sides; pointed base; 50mm diameter; 100mm deep
145	B	3	Fill	Fill of quarry pit [381]	Soft; whitish grey; slightly silty sand; occ grit; mod lime flecks, demolition debris; occ charcoal flecks; seen in section 2.45m E-W; 0.15m thick; unexcavated
146	B	3	Fill	Fill of quarry pit [381]	Soft; mid to dark grey; sandy silt; occ small sub-rounded pebbles, charcoal flecks and red sandstone flecks; seen in section; 2.80m E-W; 0.28m thick; unexcavated
147	B	3	Fill	Fill of quarry pit [381]	Soft; light brownish grey; slightly sandy silt; occ charcoal flecks, medium sub-rounded pebbles; manganese flecks, iron staining; seen in section; 3.00m E-W; 0.70m thick; unexcavated
148	B	3	Fill	Fill of quarry pit [381]	Soft; light greyish brown; sandy silt; occ sub-rounded medium pebbles; occ flecks of sandstone and manganese; seen in section; 1.09m E-W; 0.36m thick; unexcavated
149	B	3	Fill	Fill of quarry pit [381]	Soft; light bluish grey; slightly sandy silt; freq charcoal flecks and lumps and daub; occ sub-rounded small pebbles and sandstone; seen in section; 1.20m E-W; 0.13m thick; unexcavated

Context	Area	Phase	Type	Interpretation	Description
150	B	3	Fill	Fill of quarry pit [381]	Soft; mid grey; clayey silt; mod small sub-rounded pebbles; freq sandstone, iron staining; occ charcoal flecks; seen in section; 2.70m E-W; 0.25m thick; unexcavated
151	B	3	Fill	Fill of quarry pit [381]	Soft; light greyish brown; sandy silt; occ sub-rounded medium pebbles; occ flecks of sandstone and manganese; seen in section; 1.21m E-W; 0.17m thick; unexcavated
152	B	1	Layer	Natural sandy gravel	Loose; light brownish yellow; sand and sub-rounded pebbles
153	A	8	Layer	Levelling dump	Soft; light yellowish brown; clayey sandy silt; occ pot frags; occ CBM; mod rounded gravel; 9.60m N-S; 3.74m E-W; 0.17m thick
154	A	9.1	Fill	Fill of [40]	Friable; light greyish brown; silty sand; occ charcoal and daub flecks; 1.00m thick
155	A	8	Cut	Landscaping/levelling	Irregular; steeply sloping; concave; 3.50m N-S; 5.60m E-W; 0.28m deep
156	A	9.1	Cut	Stakehole	Sub-rectangular; almost vertical sides; flat base in SW, pointed in NE; 0.48m SW-NE; 0.18m NW-SE; 0.43m deep
157	A	9.1	Fill	Fill of [156]	Soft; mid brownish grey; silty clay; mod small sub-rounded pebbles; 0.43m thick
158	B	3	Fill	Fill of pit [187]	Soft; dark brownish black; sandy silt; freq charcoal frags and flecks and daub; occ rounded gravel; seen in section; 1.90m E-W; 0.17m thick; unexcavated
159	A	9.1	Fill	Fill of posthole [160]	Loose; mid brown grey; clayey sand; 0.16m thick
160	A	9.1	Cut	Posthole	Sub-circular; moderately sloping sides; flat base; 0.32m E-W; 0.34m N-S; up to 0.16m deep
161	B	8	Layer	Levelling dump	Friable; mid greenish grey; sandy silt; mod small sub-rounded pebbles, charcoal; occ clay and daub; seen in section; 0.22m N-S; 1.82m E-W; unexcavated
163	B	8	Layer	Levelling dump	Firm, sticky; mid brownish orange with pinkish red mottling; sandy clay; occ small sub-rounded pebbles, daub flecks; 0.28m N-S; 1.05m E-W; not excavated
164	B	8	Layer	Levelling dump	Loose; mid orange brown; sandy gravel (small to medium sub-rounded and rounded pebbles); 0.48m N-S; 1.38m E-W; unexcavated
165	B	9.1	Layer	Make-up deposit	Firm, sticky; mid brownish orange with pinkish red mottling; sandy clay; occ small sub-rounded pebbles, daub flecks; 0.40m N-S; 0.28m E-W; not excavated
166	B	4	Layer	Quarry pit [381] fill	Friable; light brownish grey; silty sand; mod small sub-rounded pebbles and charcoal flecks; occ iron panning and daub flecks; 1.12m N-S; 1.82m E-W; unexcavated
167	B	9.1	Layer	Levelling/make-up deposit	Firm, sticky; mid brownish orange with red mottling; sandy clay; mod daub flecks; 0.49m N-S; 0.37m E-W; not excavated
168	B	9.1	Layer	Clay wall	Firm, sticky; mid brownish orange; sandy clay; occ small sub-rounded pebbles and daub flecks; 0.64m N-S; 1.84m E-W; not excavated
169	B	9.1	Fill	Fill of [170]	Loose; mid brownish grey; silty sand; mod small sub-rounded pebbles and daub flecks; occ cbm and charcoal flecks; 0.84m N-S; 0.73m E-W; not excavated
170	B	9.1	Cut	Pit	Sub-circular; not excavated; 0.84m N-S; 0.73m E-W
171	B	8	Layer	Levelling dump	Friable; light brownish grey; silty sand; mod small sub-rounded pebbles and charcoal flecks; occ iron panning and daub flecks; 1.08m N-S; 1.87m E-W; unexcavated
172	B	8	Layer	Levelling dump	Loose; mid orange brown; sandy gravel (small to medium sub-rounded and rounded pebbles); 0.68m N-S; 0.64m E-W

Context	Area	Phase	Type	Interpretation	Description
173	B	9.1	Fill	Clay wall	Firm, sticky; mid brown orange; sandy clay; occ small sub-rounded pebbles; occ daub flecks; 0.65m N-S; 1.87m E-W; unexcavated; same as [128]
174	B	9.1	Fill	Fill of [178]	Loose; light orange brown; silty sand; freq small sub-rounded pebbles; occ daub flecks; 0.45m N-S; 0.20m E-W; unexcavated
176	A	8	Layer	Levelling dump	Friable; light-mid brownish grey; sandy silt; mod coal frags and charcoal flecks; occ medium sub-rounded-sub angular pebbles; 5.52m E-W; 3.60m N-S; 0.20m thick
177	B	9.1	Cut	Construction cut for wall [168]	Linear; moderately steep sides; base not seen; 0.55m N-S; 1.80m E-W; 0.19m max excavated depth
178	B	9.1	Cut	Construction cut for wall [128/173]	Linear; steep side; base not seen; 1.05m N-S; 3.00m E-W; 0.40m max excavated depth
179	B	9.1	Cut	Construction cut for wall [111]	Linear; steep side; base not seen; 3.00m N-S; 0.45m E-W; 0.30m max excavated depth
180	B	8	Layer	Levelling dump	Soft; dark brownish grey; sandy silt; freq small rounded gravel; occ charcoal flecks and frags; seen in section; 2.60m E-W; 0.16m thick; unexcavated
181	B	8	Layer	Levelling dump	Soft; yellowish brown; clayey silt; mod daub and charcoal; occ small sub-rounded gravel and sandstone frags; seen in section; 6.80m E-W; 0.15m thick; unexcavated
182	B	4	Layer	Levelling dump	Soft; light yellowish orange; silty sand; mod small rounded gravel; occ small sandstone frags and charcoal; seen in section; 2.23m E-W; 0.17m thick; unexcavated
183	B	4	Layer	Levelling dump	Soft; mid orange grey; sandy silt; occ charcoal lenses; mod small gravel; seen in section; 3.95m E-W; 0.37m thick; unexcavated
184	B	3	Fill	Fill of [185]	Soft; light yellowish orange; silty sand; mod small rounded gravel; occ sub-angular pebbles and sandstone flecks; seen in section; 1.14m E-W; 0.39m thick; unexcavated
185	B	3	Cut	Quarry pit	Shape in plan not seen; gently sloping eastern side; base not seen; seen in section; 1.14m E-W; 0.39m deep; unexcavated
186	B	3	Fill	Fill of [187]	Soft; light greyish orange; silty sand; freq small rounded gravel; occ small sandstone frags and charcoal; seen in section; 2.20m E-W; 0.20m thick; unexcavated
187	B	3	Cut	Quarry pit	Shape in plan not seen; concave sides and base; seen in section; 2.20m E-W; 0.90m deep; unexcavated
188	A	8	Layer	Dump layer	Friable; mid pinkish brown; sandy silt; freq daub frags; mod charcoal flecks; occ sub-angular pebbles; 0.76m N-S; 1.09m E-W; 60mm thick
189	A	9.1	Fill	Fill of [190]	Compact-firm; dark greyish brown; sandy silt; freq charcoal frags and flecks; freq pebbles; 2.26m thick
190	A	9.1	Cut	Pit	Sub-rectangular; steeply sloping sides, flat base; 2.60m N-S; 2.04m E-W; 2.26m deep
191	A	7	Layer	Dump layer	Friable; mid greyish brown; sandy silt; freq charcoal flecks; mod sub-angular and sub-rounded stones; 9.88m N-S; 6.08m E-W; 0.16m thick
192	B	8	Layer	Levelling dump	Firm; mid brownish grey; sandy silt; mod charcoal flecks and frags and large rounded pebbles; occ burnt daub frags; seen in section; 2.40m E-W; 0.15m thick; unexcavated
193	A	9.1	Fill	Upper fill of pit [199]	Friable; dark brownish grey; sandy silt; v freq charcoal flecks; freq daub flecks; mod small sub-rounded stones; 1.91m E-W; 1.87m N-S; 0.25m thick

Context	Area	Phase	Type	Interpretation	Description
194	A	9.1	Fill	Fill of pit [199]	Firm; mid pinkish red; sandy clay; occ small sub-rounded pebbles; freq charcoal flecks; mod daub flecks; 0.20m thick
195	A	9.1	Fill	Primary fill of pit [199]	Friable; mid brownish grey; sandy silt; freq small sub-rounded pebbles; freq charcoal flecks; occ clay patches; 0.25m thick
196	A	9.1	Fill	Fill of [197]	Soft; mid-light greyish brown; sandy silt; occ small flints; v occ flecks charcoal; 0.32m thick
197	A	9.1	Cut	Truncated pit	Sub-circular; steeply sloping sides; base truncated; 1.20m N-S; 0.50m E-W; 0.38m deep
198	A	7	Layer	Dump layer	Friable; light brownish grey; silty sand; freq charcoal frags; freq red sandstone frags; 7.80m N-S; 5.10m E-W; 0.30m thick
199	A	9.1	Cut	Pit	Sub-circular; vertical sides; flat base; 1.87m N-S; 1.91m E-W; 0.50m deep
200	A	9.1	Fill	Top fill of [202]	Soft; dark grey; clayey sandy silt; freq small and medium flinty gravel; v freq charcoal flecks; occ red, yellow and green sandstone frags; 0.10m thick
201	A	9.1	Fill	Clay fill of [202]	Firm; light purplish brown; silty clay; occ small and medium sub-rounded flinty gravel; occ charcoal flecks; 0.20m wide lining
202	A	9.1	Cut	Refuse pit	Sub-circular; vertical sides; flat base; 1.55m N-S; 1.65m E-W; 1.44m deep
203	A	9.1	Fill	Fill of [202]	Soft, loose; mid grey; gravel and sandy clayey silt; 0.33m thick
205	A	4	Fill	Fill of [380]	Firm; dark greyish brown; sandy clay; occ small sub-rounded and sub angular pebbles; occ charcoal flecks; 1.02m N-S; 0.70m E-W; 0.30m thick
206	A	7	Layer	Small demolition layer	Friable; mid brownish red; silty clay; v freq charcoal flecks; freq squared red sandstone; 1.24m N-S; 1.60m E-W; 0.20m thick
207	A	7	Layer	Small demolition layer	Friable; mid brownish red; silty clay; v freq charcoal flecks; occ squared red sandstone; 1.30m N-S; 1.64m E-W; 0.10m thick
208	A	9.1	Fill	Primary fill of [202]	Soft, loose; mid greenish grey; clayey sandy silt; mod flecks of charcoal; 1.35m N-S; 1.65m E-W; narrow band lining pit
209	A	6.1	Fill	Fill of [210]	Loose; mid brownish grey; silty sand; freq small sub rounded pebbles; occ charcoal flecks; 70mm thick
210	A	6.1	Cut	Stakehole	Oval; steeply sloping sides; pointed base; 0.13m N-S; 0.15m E-W; 90mm deep
211	A	7	Layer	Developed soil	Friable; dark greyish brown; clayey sandy silt; occ charcoal frags and flecks; occ sandy yellow pebbles; 3.20m N-S; 2.50m E-W; 0.10m thick
212	A	7	Layer	Developed soil	Compact, friable; dark greenish and greyish brown; clayey sandy silt; occ charcoal frags; mod charcoal flecks; occ pebbles; 3.00m N-S; 3.40m E-W; 0.15m thick
213	A	5	Fill	Fill of [214]	Friable; dark brownish grey; sandy silt; mod charcoal flecks; mod small sub-angular pebbles; 0.20m thick
214	A	5	Cut	Pit	Sub-oval; moderately sloping sides; concave base; 1.26m N-S; 0.89m E-W; 0.20m deep
215	A	4	Fill	Fill of [380]	Firm; light bluish grey; silty clay; occ large sub rounded cobbles; v freq charcoal; v freq degraded animal bone; 5.60m N-S; 3.88m E-W; 0.21m thick
216	A	9.1	Fill	Top fill of pit [254]	Medium; mid greyish brown; clayey silt; mod large rounded flint and cobbles; occ charcoal and daub flecks; occ coal flecks and frags; 0.40m thick
217	A	9.1	Fill	Fill of pit [254]	Sticky; mid brownish grey; clayey silt; freq charcoal and daub frags and flecks; occ small river gravel; 0.16m thick

Context	Area	Phase	Type	Interpretation	Description
218	A	5	Fill	Fill of cut [219]	Friable; mixed mid red orange and light yellowish brown; silty sandy clay; occ clay lenses, v freq charcoal; mod daub; mod sandstone frags; 0.38m thick
219	A	5	Cut	Boundary ditch, continues to south as [279]	Linear; orientated N-S; concave sides, stepped with steep sided linear slot in base; concave base; 2.80m N-S; 1.60m E-W; 0.50m deep
220	A	9.1	Fill	Fill of pit [254]	Medium; light orange yellow; silty sand; v freq large rounded gravel and cobbles; 0.20m thick
221	A	9.1	Fill	Fill of pit [254]	Soft; mid yellowish grey; sandy silt; mod small rounded gravel; mod charcoal frags and flecks; mod v large daub flecks; 0.30m thick
222	A	6.1	Fill	Fill of [223]	Friable; mid yellowish greyish brown; sandy silt; mod charcoal flecks; mod sub-angular pebbles; 60mm thick
223	A	6.1	Cut	Posthole	Oval; moderate sloping sides; concave base; 0.41m N-S; 0.33m E-W; 60mm deep
224	A	9.1	Fill	Primary fill of pit [254]	Soft; dark brownish grey; sandy silt; v freq charcoal and daub flecks and frags; mod small rounded gravel and pebbles; occ burnt bone; 1.05m thick
225	A	6.1	Fill	Fill of [226]	Friable; dark greyish brown; silty sand; mod charcoal flecks; mod sub angular pebbles; 80mm thick
226	A	6.1	Cut	Posthole	Irregular; moderately sloping; undulating base; 0.40m N-S; 0.25m E-W; 80mm deep
227	A	6.1	Fill	Fill of [228]	Friable; mid yellowish grey; silty sand; mod large sub rounded pebbles; occ charcoal flecks; 0.17m thick
228	A	6.1	Cut	Posthole	Oval; S side moderately sloping, N side vertical; sloping base down to N; 0.40m N-S; 0.51m E-W; 0.17m deep
229	A	6.1	Fill	Fill of [230]	Loose; dark brownish grey; clayey silt; mod charcoal flecks; occ sub rounded pebbles; 0.19m thick
230	A	6.1	Cut	Posthole	Sub-circular; moderately sloping sides; concave base; 0.44m N-S; 0.52m E-W; 0.19m deep
235	A	9.1	Fill	Fill of pit [247]	Loose; mid yellowish orange; sandy gravel; mod lenses silty sand; v freq small sub rounded pebbles; occ daub flecks; occ charcoal flecks; slumped thickness 1.14m - 0.13m
236	A	12	Fill	Fill of posthole [237]	Loose; mid brownish grey; clayey sand; occ charcoal flecks; occ small sub rounded sandstone frags; 0.19m thick
237	A	12	Cut	Post-med posthole	Sub-square; steeply sloping edges; concave base; 0.36m N-S; 0.34m E-W; 0.19m deep
238	A	4	Fill	Fill of [380]	Friable; mid greyish brown; clayey sandy silt; freq charcoal flecks; freq small sub angular stones; freq v degraded bone frags; 9.54m N-S; 4.30m E-W; 0.30m thick
239	A	5	Fill	Fill of [240]	Soft, friable; light greyish brown; silty sand; mod small sub angular flints; occ frags sandstone; v occ flecks of charcoal and cbm; 0.44m thick
240	A	5	Cut	Ditch	Linear; steeply sloping sides; flat base; 1.45m N-S; 7.45m E-W; 0.44m thick
241	A	5	Fill	Fill of [214]	Friable; mid yellowish grey; sandy gravel; occ charcoal flecks; 0.59m thick
242	A	6.1	Fill	Fill of [243]	Loose; dark brownish grey; clayey silt; mod charcoal flecks; occ sub rounded pebbles; 0.22m thick
243	A	6.1	Cut	Stakehole	Oval; steeply sloping sides; flat base; 0.16m N-S; 0.18m E-W; 0.22m deep
244	A	4	Fill	Upper fill of pit [246]	Firm; light-mid yellowish grey; clay; 60mm thick
245	A	4	Fill	Primary fill of [246]	Soft; mid-dark brownish grey; silty clay; freq charcoal flecks; occ small sub angular-sub rounded pebbles; 0.30m thick
246	A	4	Cut	Pit	Sub-circular; steeply sloping sides; flat base; 0.56m N-S; 0.50m E-W; 0.36m deep

Context	Area	Phase	Type	Interpretation	Description
247	A	9.1	Cut	Refuse pit	Sub-circular; vertical sides; concave base; 2.75m diameter; 1.55m deep
248	A	8	Fill	Fill of pit [260]	Soft; mid greenish grey; sandy clayey silt; occ cbm; occ medium-large cobbles; occ burnt stone; 0.45m thick
249	A	4	Fill	Quarry pit [380] backfill	Soft, friable; mid brownish grey; clayey silt; freq charcoal flecks; mod sub-rounded pebbles; 1.45m N-S; 0.49m E-W; 0.46m thick
250	A	6.1	Fill	Fill of [251]	Soft; light brown; sandy silt; occ small-medium sub rounded flints; mod sandstone frags; mod charcoal flecks; 0.18m thick
251	A	6.1	Cut	Shallow feature	Sub-rectangular; gently sloping sides; concave base, sloping from S to N; 1.34m N-S; 1.60m E-W; 0.18m deep
252	A	6.1	Fill	Fill of [253]	Soft; mid to light greyish brown; sandy silt; occ small sub-rounded flint pebbles and occ sandstone frags; 1.15m N-S; 1.0m E-W; 0.22m thick
253	A	6.1	Cut	Truncated feature, ?pit	Triangular (but truncated); steep sides; flat base; 1.15m N-S; 1.00m E-W; 0.22m deep
254	A	9.1	Cut	Refuse pit	Circular; vertical sides; concave base; 2.14m N-S; 2.12m E-W; 1.34m deep
255	A	3	Fill	Fill of pit [259]	Stiff; mottled red, pink, grey, white; clay; freq frags and flecks of daub; occ large cobbles and small rounded pebbles; 1.50m N-S; 1.15m E-W; 0.20m thick
256	A	10	Fill	Fill of [257]	Mixed lenses; loose, firm and soft; mid brownish grey; silty sand and sandy silt; mod charcoal flecks and frags; occ burnt daub; occ rounded gravel and pebbles; 1.55m N-S; 1.95m E-W; 1.15m thick
257	A	10	Cut	Cess pit	Rectangular; steep sides; flat base; 1.55m N-S; 1.95m E-W; 1.15m deep
258	A	3	Fill	Fill of [259]	Firm; dark brownish grey; sandy silt; mod rounded pebbles and charcoal; occ sandstone frags and daub; mod animal bone, but too poorly preserved to recover; 3.60m N-S; 3.30m E-W; 0.40m thick
259	A	3	Cut	Quarry pit	Sub-circular; steep side; rounded base; 3.50m N-S; 2.90m E-W; 0.67m deep
260	A	8	Cut	?Rubbish pit	Sub-circular; gradual to steep sides; rounded to flat base; 1.76m N-S; 2.06m E-W; 0.45m deep
261	A	9.1	Fill	Fill of [262]	Compact; light greyish yellow; silty sand; occ charcoal flecks; mod gravel; 1.34m N-S; 2.20m E-W; 0.34m thick
262	A	9.1	Cut	Pit	Irregular in plan (truncated); concave sides; flat to slightly concave base; 1.34m N-S; 2.20m E-W; 0.34m deep
263	A	6.1	Fill	Fill of [264]	Soft; light yellowish orange; silty sand; 6 large worked red sandstone blocks, 0.40m in diameter; occ charcoal and small rounded river gravel; 0.55m N-S; 0.50m E-W; 0.44m thick
264	A	6.1	Cut	Posthole?	Sub-circular; vertical sides; concave base; 0.55m N-S; 0.50m E-W; 0.44m deep
265	A	5	Fill	Fill of linear [266]	Friable; mid yellowish orange; silty sand; mod small sub-rounded and rounded pebbles; occ daub; 1.42m N-S; 0.84m E-W; 0.29m thick
266	A	5	Cut	Boundary Ditch	Linear; orientated E-W; moderately steep sides; concave base; 1.42m N-S; 0.84m E-W; 0.29m deep
267	A	3	Fill	Fill of pit [259]	Soft; dark brownish black; silty sand; freq medium sub-rounded pebbles and charcoal flecks; occ small sub-rounded pebbles; 0.90m N-S; 0.40m E-W; 0.10m thick
268	A	4	Layer	Dump layer	Soft; mid brownish grey; clayey silt; mod charcoal flecks; occ sub-angular pebbles; 1.35m N-S; 2.87m E-W; 90mm thick

Context	Area	Phase	Type	Interpretation	Description
269	A	2	Layer	Buried soil	Loose; light greenish yellow; silty sand; freq bioturbation; 0.15m thick
270	A	3	Fill	fill of [259]	Stiff; mid to light brown; sandy silt; occ small rounded pebbles, charcoal and lenses of burnt sand; 3.50m N-S; 2.90m E-W; 0.20m thick
271	A	8	Fill	Fill of [272]	Soft; mid greyish brown; sandy clayey silt; mod charcoal flecks and frags; 0.76m diameter; 0.15m thick
272	A	8	Cut	Pit	Sub-circular; gradually sloping sides; concave base; 0.76m diameter; 0.15m deep
273	A	4	Fill	Quarry pit [380] backfill	Firm; mid-dark brownish grey; silty clay; mod charcoal flecks; occ sub-rounded and sub-angular pebbles; 2.66m N-S; 3.40m E-W; 0.45m thick
274	A	9.1	Cut	Rubbish pit	Sub-rectangular; steep to near vertical sides; flat base; 0.90m N-S; 1.60m E-W; 1.04m deep
275	A	4	Layer	Dump layer	Firm; mid greyish brown; silty clay; occ charcoal flecks and small pebbles; 8.80m N-S; 6.50m E-W; 0.50m thick
276	A	9.1	Fill	Fill of [274]	Friable; mid brownish grey; silty clayey sand; freq small sub-angular stones and charcoal flecks; occ large sandstone frags; up to 0.40m thick
277	A	9.1	Fill	Primary fill of [274]	Firm; light pinkish brown; clay; freq charcoal flecks and patches of loose clay; occ light brown clay patches; 80mm thick
278	A	5	Fill	Fill of [279]	Friable; mid greyish brown; sandy, clayey silt; freq charcoal flecks; occ sandstone frags and small sub-angular stones; 0.85m N-S; 0.90 E-W; 0.33m thick
279	A	5	Cut	Boundary ditch, continues to north as [219]	Linear; orientated N-S; steep sides, stepped with steep sided linear slot in base; concave base; 0.90m N-S; 1.00m E-W; 0.45m deep
280	A	6.2	Fill	Fill of pit [281]	Soft; mid to light yellowish grey; gravel and silty sand; mod charcoal and iron panning; 1.48m N-S; 1.38m E-W; 0.72m thick
281	A	6.2	Cut	Pit	Sub-square; steep sides; rounded base; 1.48m N-S; 1.38m E-W; 0.72m deep
282	A	5	Fill	Fill of ditch [219]	Firm; mid brownish grey; silty clay; freq charcoal flecks and small rounded pebbles; 0.10m thick
284	A	6.2	Fill	Fill of pit [285]	Soft; mid to light brownish grey; cobbles (30%) with gravely silty sand; occ charcoal; 0.92m N-S; 0.52m E W; 0.16m thick
285	A	6.2	Cut	Pit	Sub-rectangular; gradually sloping sides; rounded base; 0.92m N-S; 0.52m E-W; 0.16m deep
286	A	5	Fill	Primary fill of ditch [279]	Friable; mid brownish grey; silty clay; freq charcoal; occ sandstone frags; 1.20m N-S; 0.45m E-W; 0.19m thick
288	A	6.1	Cut	Posthole	Sub-circular; vertical sides; concave base; 0.40m diameter; 0.25m deep
289	A	6.1	Fill	Fill of [288]	Soft; mid brownish grey; sandy silt; mod small rounded pebbles; occ large rounded pebbles
290	A	6.1	Cut	Posthole	Sub-circular; vertical sides; concave base; 0.45m diameter; 0.40m deep
291	A	6.1	Fill	Fill of [290]	Soft; mid brownish grey; sandy silt; pebbles; occ small rounded pebbles
292	A	3	Fill	Fill of [293]	Soft; mid brown; gravely silty sand
293	A	3	Cut	Posthole	Oval; moderately sloping sides; concave base; 0.22m N-S; 0.38m E-W; 0.11m deep
294	A	6.2	Fill	Fill of pit [295]	Soft; light yellowish grey; gravel sandy silt
295	A	6.2	Cut	Pit	Oval; gently sloping sides; rounded base; 0.76m N-S; 1.10m E-W; 0.23m deep
296	A	5	Fill	Primary fill of ditch/gully [287]	Firm; mid greyish brown; silty clay; freq small rounded pebbles and occ charcoal; 0.15m thick
297	A	3	Fill	Fill of [298]	Soft; dark brownish grey; gravely sandy silt

Context	Area	Phase	Type	Interpretation	Description
298	A	3	Cut	Pit/posthole	Sub-circular; vertical sides; flat base; 0.60m N-S; 0.66m E-W; 0.36m deep
299	A	5	Fill	Fill of ditch [300]	Firm; light brownish grey; sandy clay; mod charcoal flecks and sub-rounded pebbles
300	A	5	Cut	Boundary ditch- continues as [302] and [371]	Linear; orientated E-W; moderately steep sides; flat to concave base; 1.09m N-S; 1.48m E-W; 0.25m deep
301	A	5	Fill	Fill of ditch [302]	Firm; light to mid brownish grey; sandy clay; mod small sub-rounded and rounded pebbles; occ charcoal flecks and daub
302	A	5	Cut	Boundary ditch-continues as [300] and [371]	Linear; orientated E-W; moderately steep sides; flat to concave base; 1.27m N-S; 3.66m E-W; 0.32m deep
303	A	6.1	Fill	Fill of posthole [304]	Loose; mid brownish grey; clayey, silty sand; occ small sub-rounded pebbles
304	A	6.1	Cut	Posthole	Sub-circular; steep to moderately sloping sides; concave base; 0.36m diameter; 0.30m deep
305	A	3	Fill	Fill of [380]	Soft; dark yellowish brown; sandy silt; freq sub-rounded pebbles; mod rounded pebbles; 5.26m N-S; 1.40m E-W; 0.30m thick
306	A	6.1	Cut	Posthole	Sub-circular; vertical sides; flat base; 0.45m diameter; 0.13m deep
307	A	6.1	Fill	Fill of [306]	Soft; light brownish grey; sandy silt; occ daub and charcoal flecks and frags; mod to freq large rounded cobbles (post-packing?); mod small rounded cobbles
308	A	6.1	Cut	Postpipe	Sub-circular; vertical sides; concave base; 0.24m diameter; 0.20m deep
309	A	6.1	Fill	Fill of [308]	Soft; light brownish grey; sandy silt; occ charcoal, daub, large cobbles and rounded gravel
310	A	3	Fill	Fill of beamslot [311]	Loose; light to mid greyish brown; clayey sand; freq small and medium sub-rounded pebbles and fine grit
311	A	6.1	Cut	Beamslot	Linear with rounded terminals; steeply sloping sides; flat base, sloping down to west; 2.12m E-W; 0.30m N-S; 0.12m deep
312	A	6.1	Fill	Fill of [313]	Soft; mid greyish brown; gravely sandy silt
313	A	6.1	Cut	Posthole	Circular; steep sides; concave base; 0.32m N-S; 0.30m E-W; 0.20m deep
314	A	6.1	Fill	Fill of [315]	Soft; mid to light greyish brown; gravely sandy silt; very occ charcoal flecks
315	A	6.1	Cut	Small pit/posthole	Sub-circular; vertical to steep sides; sloping base; 0.76m N-S; 0.70m E-W; 0.30m deep
316	A	6.1	Fill	Posthole fill of [317]	Loose; dark grey; silty sand and gravel; occ charcoal flecks
317	A	6.1	Cut	Posthole	Circular; vertical sides; rounded base; 0.44m N-S; 0.46 E-W; 0.47m deep
318	A	6.1	Fill	Fill of beamslot [319]	Soft; mid greyish brown; sandy silt; freq sub-rounded gravel
319	A	6.1	Cut	Beamslot	Linear; orientated N-S; vertical sides; flat base; 1.90m N-S; 0.30m E-W; 0.22m deep
320	A	6.1	Fill	Fill of [321]	Loose; mid brownish grey; sandy silt; freq gravel; occ charcoal flecks
321	A	6.1	Cut	Posthole	Circular; steep sides; concave base; 0.44m N-S; 0.40m E-W; 0.26m deep
322	A	6.1	Fill	Fill of [323]	Friable; dark brownish grey; silty sand; mod small sub-rounded pebbles, charcoal flecks and daub
323	A	6.1	Cut	Posthole	Sub-circular; gentle to steep sides; concave base; 0.80m N-S; 0.60m E-W; 0.17m deep
324	A	6.1	Fill	Fill of [325]	Friable; mid to dark brownish grey; silty sand; mod small sub-rounded and rounded pebbles; occ charcoal and daub; medium pebbles, sandstone, limestone and granite, possibly remnants of post-packing

Context	Area	Phase	Type	Interpretation	Description
325	A	6.1	Cut	Posthole	Sub-circular; steep sides; concave to flat base; 0.70m N-S; 0.48m E-W; 0.31m deep
326	A	6.1	Fill	Fill of posthole [327]	Soft; light brownish grey; sandy silt; mod small to medium rounded pebbles; occ sandstone frags
327	A	6.1	Cut	Posthole	Sub-circular; vertical sides; concave base; 0.70m N-S; 0.80m E-W; 0.30m deep
328	A	6.1	Fill	Fill of postpipe [329]	Soft; light brownish grey; sandy silt; mod small to medium rounded pebbles; occ sandstone frags
329	A	6.1	Cut	Postpipe	Sub-circular; vertical sides; flat base; 0.30m N-S; 0.27m E-W; 0.10m deep
330	A	6.1	Fill	Fill of posthole [330]	Loose; mid brownish grey; silty sand; occ charcoal flecks
331	A	6.1	Cut	Posthole	Circular; steep sides; rounded base; 0.30m N-S; 0.32m E-W; 0.37m deep
332	A	5	Fill	Fill of [333]	Soft; mid greyish brown; silty sand; freq small and medium sub-rounded flint pebbles; occ charcoal flecks and sandstone frags
333	A	5	Cut	Treebole	Irregular sub-rectangular; gradual to moderately steep sides; irregular, undulating base; 1.40m N-S; 1.85m E-W; 0.21m deep
334	A	6.1	Fill	Fill of [335]	Friable; mid brownish grey; silty sand; mod small sub rounded pebbles; occ charcoal flecks and daub
335	A	6.1	Cut	Posthole	Sub-circular; steep sides; flat base; 0.45m N-S; 0.55m E-W; 0.23m deep
336	A	6.1	Fill	Fill of [337]	Soft; light brownish grey; sandy silt; occ charcoal and small rounded pebbles
337	A	6.1	Cut	Posthole	Sub-circular; vertical sides; flat base; 0.60m diameter; 0.27m deep
338	A	6.1	Fill	Fill of [339]	Loose; mid greyish brown; sandy silt; occ charcoal and small sub-angular stones
339	A	6.1	Cut	Posthole in base of beamslot [319]	Sub-circular; vertical sides; flat base; 0.20m diameter; 0.11m deep
340	A	6.1	Fill	Fill of [341]	Soft; mid brown; sandy silt; freq small rounded pebbles
341	A	6.1	Cut	Posthole	Sub-circular; near vertical sides; rounded base; 0.40m N-S; 0.62m E-W; 0.26m deep
342	A	6.1	Fill	Fill of [343]	Friable; mid greyish brown; sandy silt; occ charcoal flecks
343	A	6.1	Cut	Posthole	Sub-circular; moderately steep sides; concave base; 0.50m N-S; 0.58m E-W; 0.33m deep
344	A	6.1	Fill	Fill of [345]	Soft; mid brownish grey; sandy silt; freq small sub-rounded flint pebbles; occ charcoal; 0.72m N-S; 0.65m E-W; 0.17m deep
345	A	6.1	Cut	Pit	Oval; moderately sloping sides; flat base; 0.72m N-S; 0.65m E-W; 0.17m deep
346	A	6.1	Fill	Fill of [347]	Firm; mid brownish grey; silty sandy clay; mod charcoal flecks; occ small sub-rounded pebbles
347	A	6.1	Cut	Posthole	Circular; steep to vertical sides; concave base; 0.43m N-S; 0.40m E-W; 0.24m deep
348	A	6.1	Fill	Fill of [349]	Soft; light brownish grey; sandy silt; mod rounded gravel; occ charcoal flecks
349	A	6.1	Cut	Postpipe	Sub-circular; vertical sides; concave base; 0.33m diameter; 0.30m deep
350	A	3	Fill	Fill of [351]	Loose; mid brownish grey; silty clayey sand; mod sub-rounded and sub-angular pebbles
351	A	3	Cut	Posthole	Sub-square; steep sides; flat base; 0.47m N-S; 0.41m E-W; 0.29m deep
352	A	3	Fill	Fill of [353]	Loose; light to mid brownish grey; silty sand; mod sub-rounded and sub-angular stones
353	A	3	Cut	Cut of posthole	Sub-square; steep sides; flat base; 0.41m N-S; 0.35m E-W; 0.14m deep
354	A	6.1	Fill	Fill of [355]	Soft; mid brownish grey; sandy silt; occ small rounded pebbles

Context	Area	Phase	Type	Interpretation	Description
355	A	6.1	Cut	Posthole/pit	Sub-triangular; gradually sloping sides; concave base; 0.65m N-S; 0.35m E-W; 0.12m deep
356	A	6.1	Fill	Fill of [357]	Soft; mid greyish brown; gravely sandy silt
357	A	6.1	Cut	Uncertain function	Sub-triangular; vertical side to east, rest very gradually sloping; sloping; 0.50m N-S; 0.45m E-W; 70mm deep
358	A	6.1	Fill	Fill of [359]	Friable; light brownish grey; sandy silt; occ small sub-rounded pebbles, charcoal and daub
359	A	6.1	Cut	Cut of posthole	Sub-circular; vertical sides; concave base; 0.53m N-S; 0.49m E-W; 0.26m deep
360	A	3	Fill	Fill of quarry pit [380]	Loose; mid brownish grey; clayey, silty sand; freq small and medium sub-rounded and angular pebbles
361	A	3	Fill	Fill of [362]	Compact; yellow; silty clay; occ sub-rounded and sub angular pebbles
362	A	3	Cut	Fenceline?	Linear with circular posts to east and south; concave sides and base; 1.27m N-S; 0.74m E-W; 0.29m deep
363	A	3	Fill	Fill of [364]	Compact; yellow; silty clay; occ sub-rounded and sub angular pebble
364	A	3	Cut	Posthole	Sub-square; near vertical sides; flat base; 0.19m N-S; 0.22m E-W; 0.13m deep
365	A	6.1	Fill	Fill of posthole [366]	Friable; mid brownish grey; sandy silt; mod small sub-rounded pebbles; occ charcoal and daub flecks
366	A	6.1	Cut	Posthole	Circular; steep sides; concave base; 0.50m N-S; 0.43m E-W; 0.15m deep
367	A	3	Fill	Fill of [380]	Friable; light greyish brown; clayey silt; occ charcoal flecks and small sub-rounded and sub-angular pebbles; 0.90m N-S; 0.29m E-W; 0.13m thick
368	A	6.1	Fill	Fill of [369]	Soft; mid to light brownish grey; gravely sandy silt
369	A	6.1	Cut	Small posthole	Sub-circular; moderately steep sides; concave base; 0.25m N-S; 0.22m E-W; 0.12m deep
370	A	5	Fill	Fill of [371]	Soft; mid brownish grey; gravely sandy silt; large lumps of pinkish clay; occ charcoal flecks
371	A	5	Cut	Boundary ditch, continues as [300] and [302]	Sub-rectangular; sides vary from vertical to gently sloping; concave base; 1.10m N-S; 1.10m E-W; 0.21m deep
374	A	6.1	Fill	Fill of posthole [375]	Soft; light brownish grey; sandy silt; occ small rounded flint gravel and pebbles
375	A	6.1	Cut	Posthole	Sub-circular; steep to vertical sides; flat base; 0.60m diameter; 0.11m deep
376	A	6.1	Fill	Fill of posthole [377]	Soft; mid brownish grey; sandy silt; occ small rounded flint gravel and pebbles
377	A	6.1	Cut	Posthole	Sub-circular; steep sides; flat base; 0.40m diameter; 0.10m deep
378	A	6.1	Fill	Fill of [379]	Soft; mid brownish grey; sandy silt; occ small rounded gravel and pebbles
379	A	6.1	Cut	Posthole	Oval; gradually sloping sides; concave base; 0.70m E-W; 0.40m N-S; 0.10m deep
380	A	3	Cut	Quarry pit	Irregular; sides vary from steep and concave to moderately sloping; concave base with steps and shallow hollows; 12.78m N-S; 7.15m E-W; 1.37m deep
381	B	3	Cut	Quarry pit	Seen in section; shape in plan not seen; flat base; 6.0m east-west; 0.90m deep

APPENDIX 3
SUMMARY OF POTTERY FABRICS PRESENT

Fabrics	Sherd Count	Wt. (gms)
Amphora		
South Gaulish (SGA)	2	44
South Spanish (SSPA)	438	44972
Black-burnished wares		
Black-burnished ware 1 (BB1)	406	8966
Black-burnished ware 2 (BB2)	2	35
Cheshire Plain/Wilderspool Fabrics		
Grey wares (GW1)	178	3298
(GW3)	43	495
(GW4)	72	1158
Oxidised ware (MORT 4)	2	78
(MORT 5)	13	1328
(OW2)	225	4374
(OW3)	106	2201
Red-slipped oxidised ware (MORT 3)	5	740
White ware (WW4)	8	84
White-slipped ware (MORT 2)	22	1357
(WS1)	30	768
(WS2)	25	332
Colchester Fabrics		
Colour-coat (COLC)	1	2
Holt Fabric		
Oxidised ware (MORT 6)	2	108
Imported fine wares		
Pompeian red ware (PRW)	1	24
Misc. b/s. b/s. unspecified wares, mostly local		
Fine ware (MD)	3	14
Mixed gritted ware (MG)	1	5
Grog-tempered ware (GROG)	1	10
Grey wares (GW2)	40	387
(GW5)	1	16
(GW6)	5	174
(GW7)	20	284
(GW8)	1	5
White ware (WW2)	1	16
Mancetter/Hartshill Fabrics		
White ware (MORT 8)	5	225
Midlands		
White ware (MORT 10)	1	65
Nene Valley		
Colour coat (NVCC)	2	29
Severn Valley ware		
Oxidised ware (OW1)	2	86
(OW5)	2	18
(OW6)	1	15
Verulamium region Fabrics		
White ware (MORT 7)	1	60
White-slipped ware (WS3)	1	116
Wroxeter Fabrics		
Oxidised ware (MORT 12)	1	135
White wares (MORT 1)	7	829
(MORT 9)	5	233
(MORT 11)	1	82
(WW1)	5	48
(WW3)	6	114
(WW5)	2	106

APPENDIX 4
CONCORDANCE OF FABRIC CODES WITH NATIONAL FABRIC REFERENCE COLLECTION

Fabrics	NFRC
South Gaulish (SGA)	GAL AM 1
South Spanish (SSPA)	BAT AM 1
Black-burnished ware 1 (BB1)	DOR BB 1
Cheshire Plain/Wilderspool Oxidised ware	WIL OX
Cheshire Plain/Wilderspool Red-slipped oxidised ware	WIL RS
Cheshire Plain/Wilderspool White-slipped ware	WIL WS
Colchester Colour-coat	COL CC 2
Holt Oxidised ware	HOL OX
Pompeian red ware	CAM PR 1
Mancetter/Hartshill White ware	MAH WH
Nene Valley Colour coat	LNV CC
Severn Valley ware	SVW OX 1
Verulamium region White ware	VRW WH

APPENDIX 5
LIST OF POTTERY SPOT DATES

Context	Sherd Count	Wt. (gms)	Ceramic phase	Dating
3	21	1297	2	Mid-2nd
4	31	638	3	Late 2nd
6	4	274	2	Early-mid-2nd
9	1	10	1	Flavian-Trajanic
10	6	89	1	Flavian-Trajanic
11	1	10	1	Flavian-Trajanic
22	1	4	-	Not closely dated
24	6	137	4	Late 2nd – early 3rd
27	41	190	1	Flavian-Trajanic
34	15	674	2/3	120+
35	23	299	3	120+ (Mid-late 2nd)
37	4	66	3	Mid-late 2nd
41	50	1384	2/3	120+
43	14	108	3	Mid-late 2nd
47	6	1060	-	Not closely dated
49	15	340	3	Mid-late 2nd
55	2	31	2/3	120+
57	4	344	-	Not closely dated
58	5	83	2	Mid-2nd
60	26	1012	2	Mid-2nd
61	14	443	2	Mid-2nd
62	4	62	-	Not closely dated
66	4	138	2	Early-mid-2nd
78	1	11	2/3	120+
82	1	8	-	Not closely dated
84	3	29	-	Not closely dated
87	17	208	1	Flavian-Trajanic
89	1	6	-	Not closely dated
102	34	1074	2/3	120+
112	32	912	3	Late 2nd
113	133	9430	3	Late 2nd
119	59	1840	3	Late 2nd
123	119	11468	2/3	120+
125	1	16	-	Not closely dated
153	35	404	3	Mid-late 2nd
176	57	1417	3	Late 2nd
188	4	67	2/3	120+
189	73	1932	3	Late 2nd
191	29	1097	3	Mid-2nd+
193	22	1193	2	Mid-2nd
195	62	2039	3	Late 2nd
198	144	4758	2	Mid-2nd
200	185	9010	2	Mid-2nd
205	2	81	-	Not closely dated
206	3	536	-	Not closely dated
207	7	1312	2	Early-mid-2nd
211	5	51	2/3	120+
215	65	2389	2	Early-mid-2nd
216	25	1517	2/3	120+
218	37	658	2	Early-mid-2nd
221	20	553	2	Mid-2nd
224	84	3360	2	Mid-2nd
235	12	834	3	Mid-late 2nd
238	8	651	3	Mid-2nd+
239	1	2	-	Not closely dated
241	1	511	-	Not closely dated
245	2	57	2	Mid-2nd
248	55	3039	3	Mid-late 2nd
249	12	194	4	Early-mid-3rd
256	5	204	4	?Early 3rd
258	15	304	1	Flavian-Trajanic
263	1	7	-	Not closely dated
267	3	66	1	Flavian-Trajanic

Context	Sherd Count	Wt. (gms)	Ceramic phase	Dating
270	1	55	-	Not closely dated
271	6	117	3	Mid-late 2nd
273	41	194	2	Early-mid-2nd
275	7	186	2	Mid-2nd
276	4	416	3	Late 2nd
278	2	25	2/3	2nd
280	5	103	2	Mid-2nd
301	6	186	2/3	120+
307	13	648	2/3	120+
322	3	286	2/3	120+
324	3	39	1	?Flavian-Trajanic
332	13	237	2	Mid-2nd
334	1	8	-	Not closely dated
336	2	192	3	Late 2nd
360	3	18	1	Flavian-Trajanic
365	2	43	-	Not closely dated

APPENDIX 6
PLATES

Plate 3. Area A, amphora in pit [124].

Plate 4. Area A, pit [40] pre-excavation, looking north *(1m scale)*.

Plate 5. Area A, clay floor [34], looking south *(1m scale)*.

Plate 6. Area B, wall collapse [46], looking east *(1m scale)*.

Plate 7. Area B, clay and stone wall [101], looking east *(1m scale)*.

Plate 8. Area B, clay and timber building, looking north-west.

Plate 9. Area B, working shot, looking south.

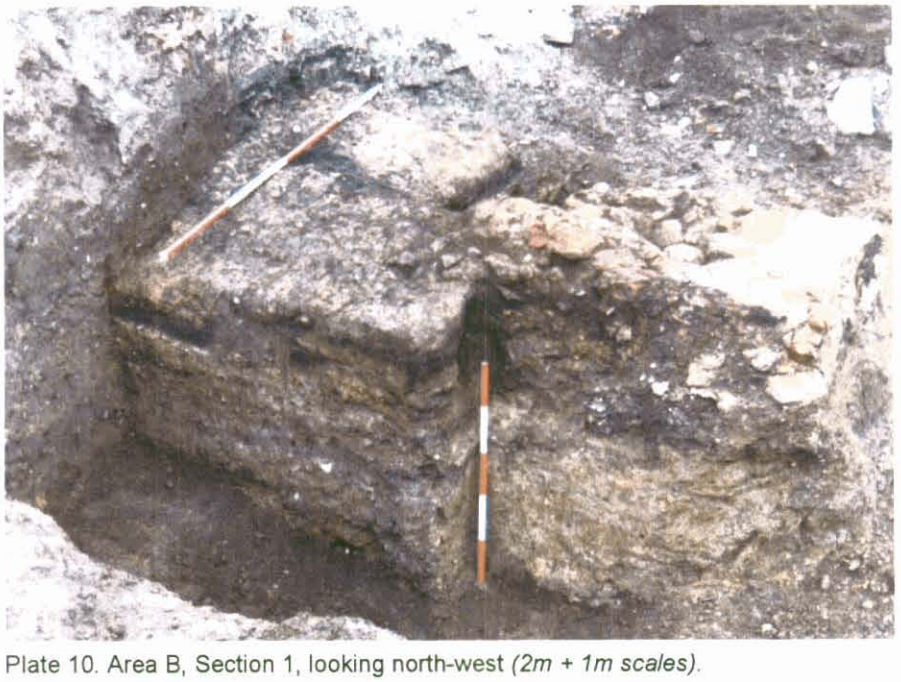


Plate 10. Area B, Section 1, looking north-west *(2m + 1m scales)*.

APPENDIX 7
LAND USE DIAGRAM

AREA A

AREA B

Phase 11
Developed Soil
Late Roman

Developed Soil accumulating into medieval period

Developed Soil

Building 2 Destruction

Building 3 Destruction

Developed Soil accumulating into medieval period

Developed Soil

Building 4 Destruction

Phase 10
Refuse Pit
AD 250-300

Refuse Pit

9.3

Refuse Pits Continue in Use

9.3 Building 3 Rebuild

9.2 Building 2 Rebuild

Refuse Pits Continue in Use

Refuse Pits Continue in Use

9.2 Building 3 Destruction

9.2

Phase 9
Structures
AD 160-200

9.1 Building 2

9.1 Refuse Pits

9.1 Refuse Pits

9.1 Building 3

9.1 Building 4

9.1

Phase 8
Levelling
AD 160-200

Levelling Deposits

Levelling and Ground Raising Deposits

Phase 7
Abandonment
AD 120-160

Demolition Deposits

Developed Soil

PLOT 1
Refuse pits

Phase 6
Structures and Refuse Pits
AD 120-200

PLOT 1 Building 1
Associated Structures

Continued use of Boundary Ditches

PLOTS 2 & 3
Refuse pits

Tree Clearance Plot 1

Phase 5
Land Plots
AD 120-160

PLOTS 1-3 Boundary Ditches

Phase 4
Quarry Backfilling
AD 120-160

Quarry Backfilling

Quarry Backfilling

Refuse Pits

Boundary Demarcation

Phase 3
Quarry Pits
AD 80-120

Quarry pits

Quarry pits

Phase 2
Pre-Roman Soil

Buried Soil

Phase 1
Natural Deposits

Natural Sand and Gravel

Natural Sand and Gravel

RIVER TERRACE