

BROMBOROUGH VILLAGE: Test Pitting Report



Summer 2013 and 2014

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Summary

Project Name: Discovering Bromborough

Location: Bromborough Village, Wirral

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Type: Test Pitting

Date: June-August 2013 and July-August 2014

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1. PROJECT SUMMARY

Discovering Bromborough was a Heritage Lottery Fund (HLF) supported community archaeology project conducted by Big Heritage C.I.C. over a two year period. Excavation took place between 24th May and 31st August 2013 and 12th July and 22nd November 2014. The project was primarily a test pitting exercise focused on the core of Bromborough Village Wirral, UK (NGR: SJ 34771 82359). Fifty test pits were excavated supported by geophysical survey in residential and business premises and on open public land.

The 2013 project demonstrated that the core of Bromborough village was seemingly lightly occupied until at least the 10th century. It recovered the first evidence of Roman ceramics found in the village but only in small quantities. It also unearthed the first piece of early medieval ceramic evidence in the form of a sherd of 10th-11th century Stamford Ware. Numerous ceramic sherds dating from the 13th-16th centuries demonstrate that the village reached its peak in the 15th century before an apparent decline. Revival did not take place until the 18th century, where numerous evidence was found for habitation within the village's core. In 2014, our results confirmed this interpretation whilst expanding the distribution of the test pits to better understand the extent of the village development.

This report documents the results of the 2013 and 2014 excavation season.

2. INTRODUCTION

Discovering Bromborough was a Heritage Lottery Fund (HLF) supported community archaeology project conducted by Big Heritage C.I.C. over a two year period. Excavation took place between 24th May and 31st August 2013 and 12th July and 22nd November 2014. The project was primarily a test pitting exercise focused on the core of Bromborough Village. Fifty test pits were excavated supported by geophysical survey in residential and business premises and on open public land.

The workforce consisted of local volunteers from the Bromborough area, post-graduate students from the University of Chester and Big Heritage staff who supervised the excavation. Volunteers also undertook the initial post-excavation process: cleaning, sorting and bagging the bulk and small finds.

The aim of the project was to use the heritage of a settlement to bring a community closer together, provide training for volunteers in a number of activities and generate new information about the character and development of the village in an understudied area of the Wirral.

3. SITE DESCRIPTION

3.1. Overview

Bromborough is now a largely suburban village in Wirral, with a mixture of private and social housing combined with a large industrial estate. The community consists of a diverse demographic mix, both in terms of age, socio-economic status and educational background and it sits within a broader zone that contains one of the widest gaps in life expectancy in the UK at over 11.6 years. There is also a growing community of migrant workers largely associated with the industrial zones of the area.

Bromborough (under Eastham) was formally one of the largest Saxon estates in Cheshire, second only to Chester in terms of wealth and held by Earl Edwin. Whilst this evidence suggests that Bromborough was once at least of regional importance, the early history of the village is poorly understood. Evidence for Saxon occupation is limited to sculptural evidence and place-names, whilst earlier activity is limited to stray artefact finds. Indeed, there is a surprising lack of historic evidence for post-conquest Bromborough, and both Bromborough Courthouse and lands held by the monastery of St Werburgh, lack the usual documentary records that would shed light on Bromborough's fortunes up until the 17th century.

3.2. Location

Bromborough village is located on the eastern side of the Wirral Peninsula in the metropolitan county of Merseyside (NGR: SJ 34771 82359). It is situated on the primary eastern road route through the Wirral, the A41, and is approximately 1km west of the Mersey Estuary. The village core is largely surrounded by urban dwellings and industrial estates. To the west of Bromborough, open pasture predominates.

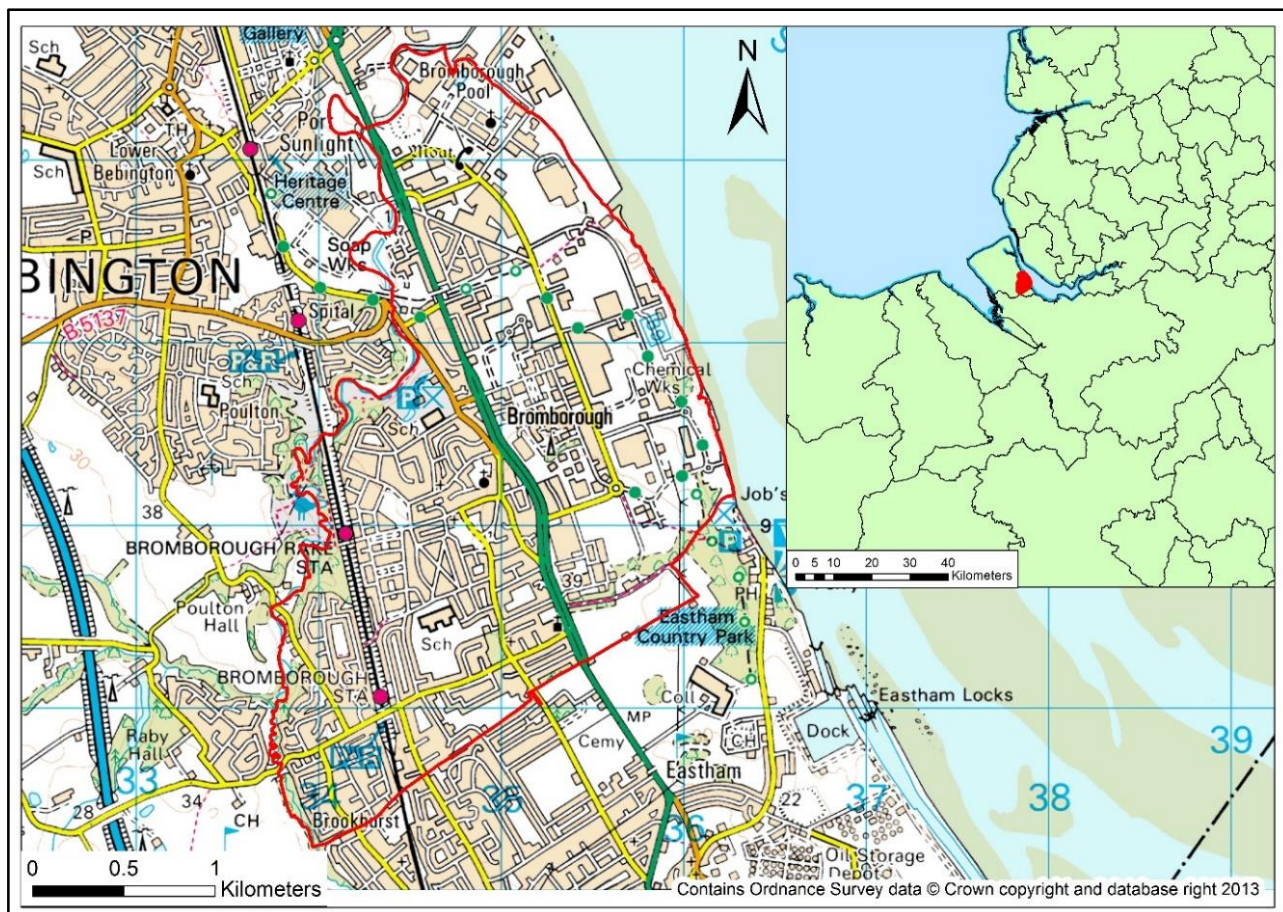
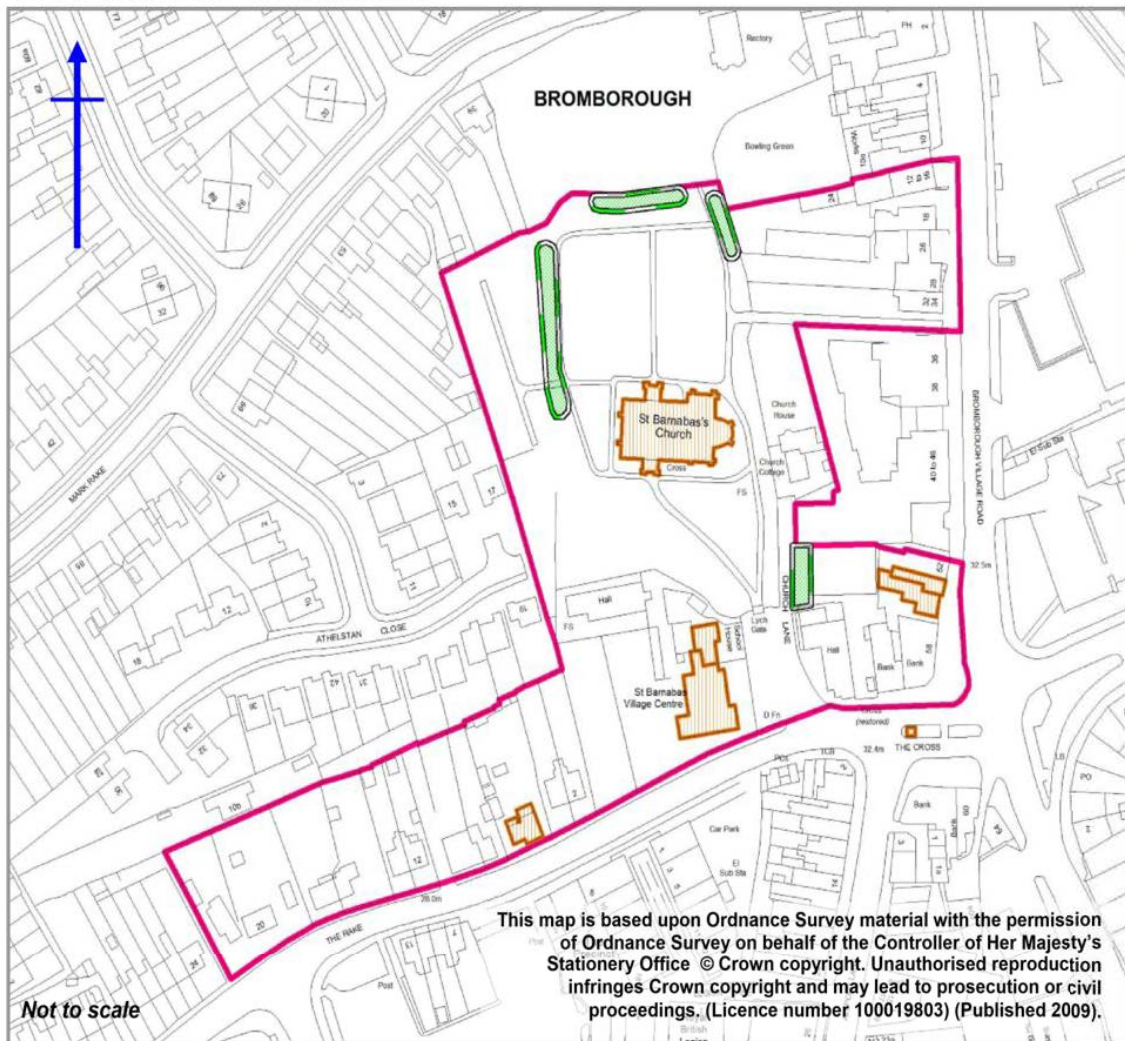


Figure 1: Location of the township of Bromborough within the Metropolitan Borough of Wirral, in Merseyside, England.

The core of the village is centred on St Barnabas church with the two main roads, The Rake and Mark Rake, aligned east to west to the north and south of the church. The historic core of Bromborough is a conservation area (Wirral Council, 2013).

Bromborough Village Conservation Area



Key



Listed Buildings



Tree Preservation Orders



Conservation Area Boundary

Figure 2: Bromborough Village Conservation Area (Wirral Council 2013)

With the exception of the historic core, Bromborough residential buildings largely date to and after the 1930's. The village has an approximate population of 12,500, as recorded in the 2001 census.

3.3. Geology and Topography

The underlying solid geology of Bromborough village is comprised of two types of bedrock: to the east, Chester Pebble Beds Formation predominates. To the west the bedrock is Wilmslow Sandstone. The change occurs approximately half way along The Rake. The superficial surface geology follows a similar pattern: to the east tidal flat deposits, consisting of clay, silt and sand, cover the bedrock. To the west the bedrock is covered by Devensian Till (British Geological Survey, 2014). The topography of the area consists of a low-lying plain with sandstone ridges and outcrops (Natural England 2012, 5).

4. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Table 1: Summary of British archaeological periods and date ranges.

Period	Date Range
Palaeolithic	30,000 – 10,000 BC
Mesolithic	10,000 – 4,000 BC
Neolithic	4,000 – 2,500 BC
Bronze Age	2,500 – 700 BC
Iron Age	700 BC – AD 43
Romano-British	AD 43 – AD 410
Early Medieval	AD 410 – AD 1066
Late Medieval	AD 1066 – AD 1540
Post-Medieval	AD 1540 – c1750
Industrial Period	cAD1750 – 1901
Modern	Post-1901

4.1. Prehistoric

The earliest evidence of human occupation in Wirral dates to the Mesolithic Period, with numerous occasional finds combined with concentrations of surface scattered chert debitage at the northern

end of the peninsular at Greasby and Thurstaston. It has been suggested that it is evidence of a base-camp that was revisited by hunter-gatherers (Cowell 1992; Cowell and Ines 1994). The geographical spread of Mesolithic flints suggests that hunter-gatherers were exploiting wetland and coastal areas for hunting, fishing and possibly collection of flint/chert from beaches (*ibid*).

Within the parish of Bromborough, a Neolithic arrowhead was discovered in a garden at Croft Avenue, and four prehistoric find spots were discovered prior to development at Cowpasture Wood (NGR: SJ 353 824), although no evidence of settlement was revealed (LUAU 1994). Two additional flints were found within the grounds of Bromborough Courthouse and at Shore Field (S. Nicholson pers comm).

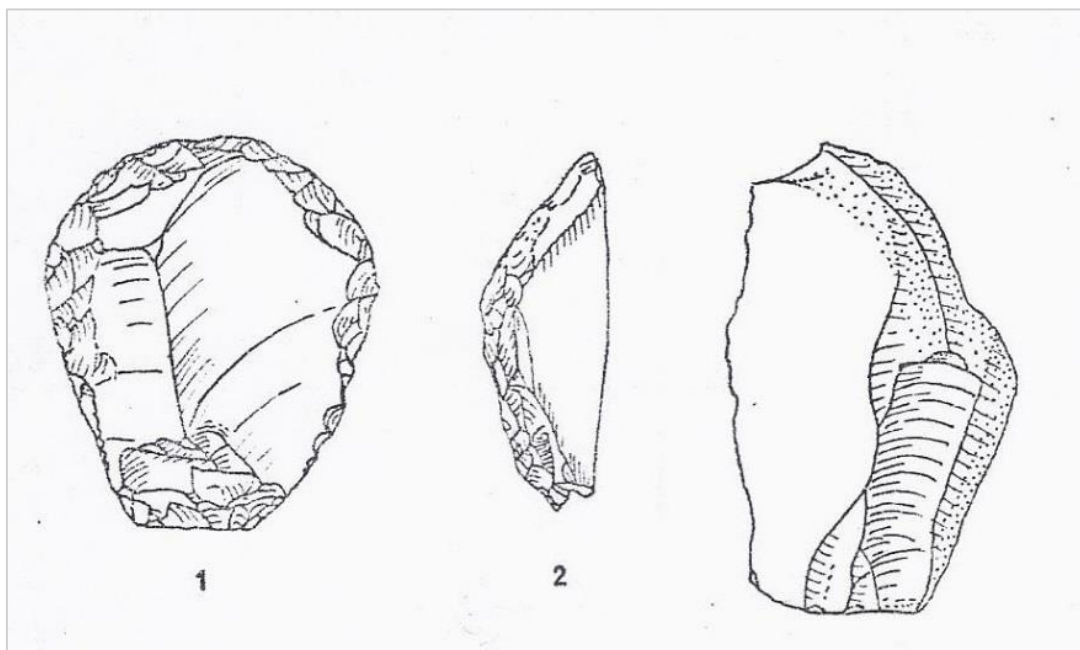


Figure 3: Examples of stray flint finds from Bromborough (illustration by S. Nicholson)

Evidence of settlement in Wirral during the Neolithic and Bronze Age is rare, but Bronze Age burial vessels have been discovered at West Kirby and on nearby Hilbre Island with additional Bronze Age and Iron Age settlement activity discovered during excavations in Irby (Philpott and Adams 2010).

4.2. Roman

Bromborough lies between the Roman fort of Deva (Chester) and the trading port of Meols, which had trading links to the Roman world before, during and indeed after the military Roman occupation of Britain. It is, therefore, surprising that Roman finds within Bromborough (and indeed Wirral as a

whole) are somewhat sparse. An Iron Age farmstead in Irby continues to be occupied throughout the Roman period (Philpott and Adams 2010), and casual coin loss is recorded throughout Wirral. However, these are in no great concentration outside of Meols, with only two recorded coin discoveries noted within the township of Bromborough.

4.3. Early Medieval

Wirral is first mentioned in the Anglo Saxon Chronicle for the year AD 893 which records that a group of Danes occupied a “deserted city in Wirral which is called Chester.” (Trans, Swanton 1998, 88).

The place-name of Bromborough is likely to derive from the OE personal name *Brunna* combined with OE *burh* meaning a fortification (Dodgson 1972, 237). It is not clear as to what feature this may refer. Suggestions that Bromborough Court House may be a burh are based upon speculation as opposed to any archaeological or historical evidence. Higham’s (1993, 133) suggestion that *burh* place-name elements may also refer to ecclesiastic enclosures could potentially mean any earthwork around St Barnabas church may have given rise to the settlement’s name.

The church of St Barnabas provides the main archaeological evidence for early medieval settlement in Bromborough. The earliest known church on the site was destroyed in 1828, which was in turn replaced by a larger church in 1862 (Bailey 2010, 52). It was during the construction of this larger church that a cache of 10th-11th century stone sculpture was discovered amongst the early foundations (Bailey 2010, 52). The number and quality of the carvings suggest that Bromborough may have been the ecclesiastical centre of the larger estate of *Estham*, which was held by Earl Edwin in 1066.

In a broader context, the port of Meols continued to be an important trading site for Wirral (Griffiths 2007, 399-406), and the former Roman fort of Chester is mentioned as a *civitas* by Bede and re-founded as an Aethelflaedian *burh* and a key economic hub for the wider North West in AD 907 (Higham 1993, 107). Much of the carved stone sculpture from Bromborough is also stylistically connected to St John the Baptist church, formally a cathedral from the Norman period, in Chester (Bailey 2010, 52-7).

Whilst circumstantial, it is noteworthy that place-name specialists have argued that Bromborough represents one of the leading contenders for the site of the Battle of Brunanburh of AD 937.

4.4. Medieval

A number of historic documents relating to Bromborough in the medieval period give us glimpses into the post-Conquest fortunes of the area. Documentary evidence notes the existence of a 'Bromborough Courthouse' in the 13th century, at which time it was part of St Werburgh's Abbey in Chester. Edward I visited Bromborough in 1277; granting a charter for a market in the village on St Barnabas day. It has long been assumed that he stayed at the courthouse. However, whilst the Close Roll, Fine Roll and Patent Roll survive for that year and note Bromborough on the itinerary for the 12th and 13th of August, no reference to the courthouse or its surrounding land are made. The first specific reference to the courthouse is made seven years later in the *Annales Cestriensis*, which states how the building burnt down in 1284. "Also the manor house of Bromborough in Wirral was accidentally burned down on May 5" (Chitty *et al.* 1985, 8; Bromborough Society 2000, 44). The exact location of the 13th century courthouse has never been proven archaeologically but it is thought that it was situated in Bromborough Pool in close proximity to the recorded 17th century courthouse demolished in the 1960's (for more information about this site please see Kirton 2015).

At the time of the dissolution of St Werburgh's Abbey in 1540, the Court House Estate was already being leased by a John Grice, and he was allowed to remain tenant by the Dean of Chester Cathedral. Grice died in 1560, and his will included in his property sheep, cattle and corn grown on the estate (Bromborough Society 2000, 44-5).

Throughout the 2013 test pitting season a large quantity of 13th-15th century ceramic material was recovered during test pitting. This focussed around the old core of the village: the church, rectory and The Rake. This indicates that the village was very active during this period (Duckers, Kirton and Paton 2014, 66).

4.5. Post-Medieval

Historic records improve from the 17th century onwards, as Bromborough became home to two new manor houses. The Courthouse at Bromborough Pool, formerly part of St Werburgh's Abbey in Chester, was awarded to the Hardware family in 1594 by charter and Bromborough New Hall, also known as the Upper Hall or Manor, which was constructed from 1619 onwards (Bromborough Society 2000, 46).

Price's Candle Factory (1850s) and Lever Brothers (1883) were the catalyst for large-scale infrastructural investment into Bromborough and nearby Port Sunlight with 60% of the UK's soap being shipped out from Bromborough Pool. The Wirral Railway Company further advanced the urbanisation of Bromborough in the late 19th century (Bromborough Society 2000, 50-1).

5. ARCHAEOLOGICAL OBJECTIVES

5.1. Aims

- Bring the community together to explore their heritage, give them a wider understanding of Bromborough's history with a greater sense of pride in their community and a sense of place.
- Highlight how archaeology can be a unifying agent bringing community groups and individuals together under a common goal.
- Ensure that volunteers learn new archaeological skills, such as excavation, post-excavation and recording.
- Expand knowledge of the archaeological potential of Bromborough Village.

5.2. Objectives

- Minimum of 320 volunteer hours.
- Complete 40-50 1m x 1m test pit excavations within Bromborough and its environs.
- Involve volunteers in as many stages of the archaeological process as appropriate.
- Assess the archaeological potential of Bromborough Village.

5.3. Intended Outcomes

- Improve public and academic understanding of the historic environment of the village and its environs and the contribution this historic environment makes to a contemporary sense of place.
- Characterise and phase the development of Bromborough Village and its environs.
- Identify, if any, further avenues of investigation within Bromborough Village.
- Foster a greater sense of community pride.

- Leave an online legacy that will encourage the start-up and participation in comparable projects both locally and nationally.

6. METHODOLOGY

6.1. Rationale

Test pitting offers opportunities for reassessing medieval settlements and for generating information regarding the origins, growth and change of settlements. Where present, they also provide data regarding previous activity on the site pertaining to earlier periods.

1m test pits have been successfully used on a variety of archaeological projects resulting in meaningful data and contributing to the archaeological record of several currently occupied settlements. The methods used were developed by the Shapwick Project in Somerset in the 1990s (Gerrard and Aston 2010), and by the Whittlewood Project in Northamptonshire and Buckinghamshire in the early 2000s (Jones and Page 2007) and has been used extensively by ACA in their HEFA [Higher Education Field Academy] programme and in community excavations within East Anglia since 2005 (Lewis and Ranson 2011, 14).

Test-pitting is a cost effective approach that allows for a broad and rapid assessment of the village's potential archaeology. It is a methodology particularly well-suited to local community participation, as it is easily implemented and completed within a short period (usually two days). This allows volunteers to experience the full archaeological process from de-turfing to recording. The simplified nature of the archaeological process, within a small area, means that training can be delivered within a short time-period and supplemented during the excavation process. The small working area also means that large areas of complex features will not be exposed - so are suitable for novices. Furthermore, it creates little mess, causing minimal disruption to site owners. Community involvement also improves the community's awareness and increases appreciation of their local environment (Wrathmell 2012, 265).

6.2. Test Pit Locations

Test pit locations were based upon the constraints of access and consent and were limited to the core and immediate environs of Bromborough village. Twenty-seven test pits were excavated in the 2013 season. A further twenty-three were excavated in the 2014 season, bringing the total to fifty. These latter test pits were sited to target those areas poorly represented by the coverage of the 2013 test pits. Test pit locations are shown in Figure 4.

6.3. Excavation Methods

A member of the Big Heritage team supervised each test pit with a group of at least 3 volunteers. Volunteers were given access to the 'How to Test Pit' film (<http://vimeo.com/70215277>) and handbook prior to excavation, which was also available throughout the excavation process. Additional support and training was provided by Big Heritage supervisors throughout the test pitting process. These covered the excavation and recording process, artefact identification and health and safety instructions. Participants were then divided into teams with a mixture of adults and children, where possible. Each team was provided with a test pit kit, which comprised all of the equipment they would need for the test pit, recording information specific to their site and standard pro-forma recording sheets, on which all excavation data was entered.

The test pits excavated throughout the Discovering Bromborough project followed the standard procedure outlined below, unless otherwise stated.

- A 1x1m square was marked out with string and pegs (unless otherwise stated).
- Turf, if present, was removed in squares using spades.
- The test pits were excavated in a series of 20cm spits to provide a guideline for inexperienced volunteers. The 20cm spits are used as a safeguard to prevent volunteers digging holes and all test pits were monitored by a member of Big Heritage staff who will record changes in contexts as they present in the trench. This process was undertaken to a maximum depth of 1.2m (although occasional small sondages were excavated to test the depth of the final context) but often the natural was present before this depth (see Figure 99 for collated information about test pit depth).
- Each context was recorded using pro-forma sheets. These were primarily 'Deposit Sheets'. Each deposit had its composition, inclusions, compaction, colour, thickness and extent (where known),

proportion excavated, method of excavation, condition of excavation, stratigraphic relationship and associated finds recorded. This was accompanied by an interpretation and photographic record.

- Cut features, if encountered, were excavated sequentially. They had their own recording sheet and were also drawn in plan at a scale of 1:20 where appropriate.
- Masonry walls, if encountered, were carefully cleaned, recorded and left *in situ*.
- Deposits were assessed for their paleoenvironmental potential. No deposits required sampling.
- A member of Big Heritage inspected each test-pit before it was closed down. A small sondage was occasionally excavated within the bottom of the pit to examine whether or not natural had been reached. Some test pits were stopped above natural or 1.2m on encountering a feature (ancient or modern) which it was deemed inadvisable or impossible to remove, or had to finish at a level above natural due to time constraints.
- Once each test pit was completed, all recording forms were completed, photographs were taken of the sections and limit of excavation, plans and sections were drawn where necessary. The test pit location was measured-in using nearby features and hand tapes then noted on the OS map supplied for each test pit.
- Test pits were then backfilled and the turf replaced neatly to restore the site.

6.4. Recording

Each context was recorded using pro-forma sheets (deposit/cut/masonry/group). Each sheet has been scanned and now forms part of the digital archive. A Context Catalogue and Test Pit Catalogue were kept for ease of reference. Each sheet has been scanned and now forms part of the digital archive. The context sheets were supplemented by photographs and drawings where appropriate. Each has been digitised and forms part of the digital archive, accompanied by a photographic database.

6.5. On-site Finds Identification and Retention

Based on previous test-pitting projects in the region the most common archaeologically significant finds from test pit excavations in areas that are currently occupied are pottery, faunal material,

ceramic building material and metalwork. The upper-layers, which commonly represent modern deposits generally have the most material. This is normally modern material (post-1900), occasionally mixed with earlier objects due to disturbance or random loss.

- All soil was screened for artefacts using sieves with a standard 6mm mesh, with the exception of very heavy clay soils and all artefacts were retained during the excavation process.
- Any finds that were believed to be of particular importance were recorded individually with a unique 'small find' number and record.
- All artefacts, excluding metal, slag, fabric and any other material deemed too delicate, were washed and dried in preparation for analysis.
- Artefacts were sorted into their material type i.e. ceramic, lithic, metal, plastic, glass etc. and grouped by context.
- Each material from each context was then counted, weighed and bagged with relevant information noted on the bag and a Tyvek label, which was inserted into the bag. This was repeated for each context from each trench.
- Artefacts were then recorded by material and context using an Access Database.
- Each material type was then dispatched for specialist analysis where appropriate.
- A discard policy was agreed between Big Heritage and National Museum Liverpool prior to deposition of the archive. Modern metal, modern glass, slag and plastic were not retained but were recorded in the digital and paper archive.

6.6. Dissemination and Archival Strategy

The archaeological records and finds have been retained by Big Heritage for analysis, reporting and archiving. Upon completion, the project will be signposted on the OASIS website, <http://ads.ahds.ac.uk/project/oasis>, the report submitted to the Merseyside Historic Environment Record [MHER] and digitally disseminated through the Archaeology Data Service [ADS]. A copy of this report will also be available through the Big Heritage website (www.bigheritage.co.uk and project blog digbrom.com).

The site archive will be deposited with the National Museums Liverpool. National Museums Liverpool is the approved registered museum for the deposition of archaeological archives in Merseyside. As excavation was conducted over two seasons, an accession number was generated for each year of

excavation. The accession number for the 2013 material is MOL.2013.104. The accession number for the 2014 material is MOL.2015.9. The archive was compiled following guidelines supplied by National Museums Liverpool (2010 and subsequently 2014).

6.7. Project Team

The fieldwork and post excavation processing was managed by the Big Heritage Project Manager, Joanne Kirton, supported by Karen Gavin and Nathaniel Welsby. The report was written by Joanne Kirton with contributions from Gary Duckers and Dean Paton. Illustrations were prepared by Joanne Kirton. The finds reports have been written by Paul Blinkhorn, Alison Crossley, Louisa Gidney, David Higgins and Ian Smith. The archive has been prepared by Joanne Kirton, Karen Gavin and Nathaniel Welsby.

7. RESULTS

Below are the results from each of the fifty test pits. The data for each test pit are discussed in this section individually, listed in numerical order. Each entry includes a distribution map, table of bulk finds and reflection on the material unearthed, including the small finds. Synthesis of the data from all the test pits follows in the next section.

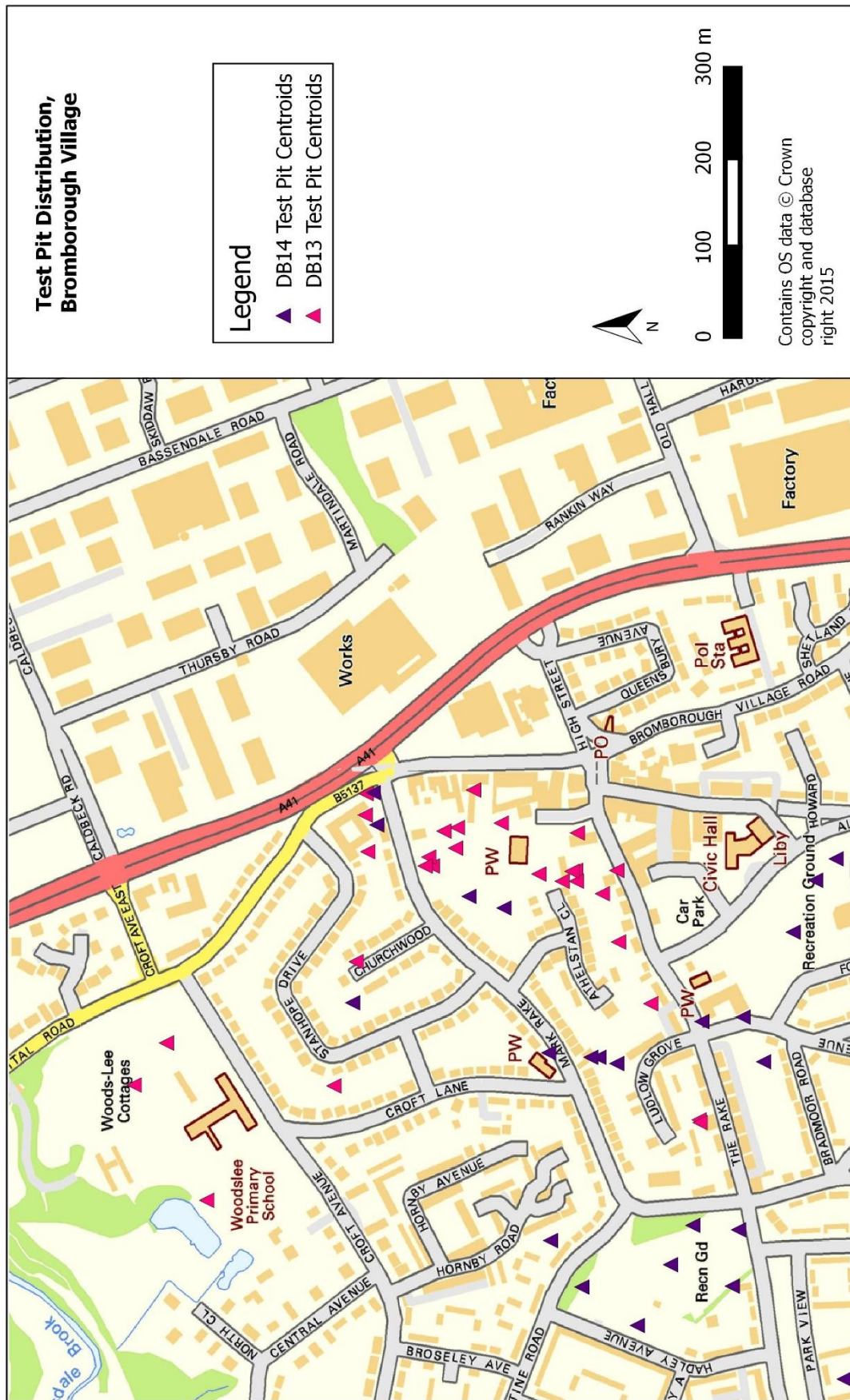


Figure 4: Test Pit Distribution

7.1. TEST PITS 1-50

7.1.1. Test Pit 1

Test Pit 1 was located in a lawned area at the rear of The Rectory, Mark Rake, CH62 2DH, centroid: 334894 382320.

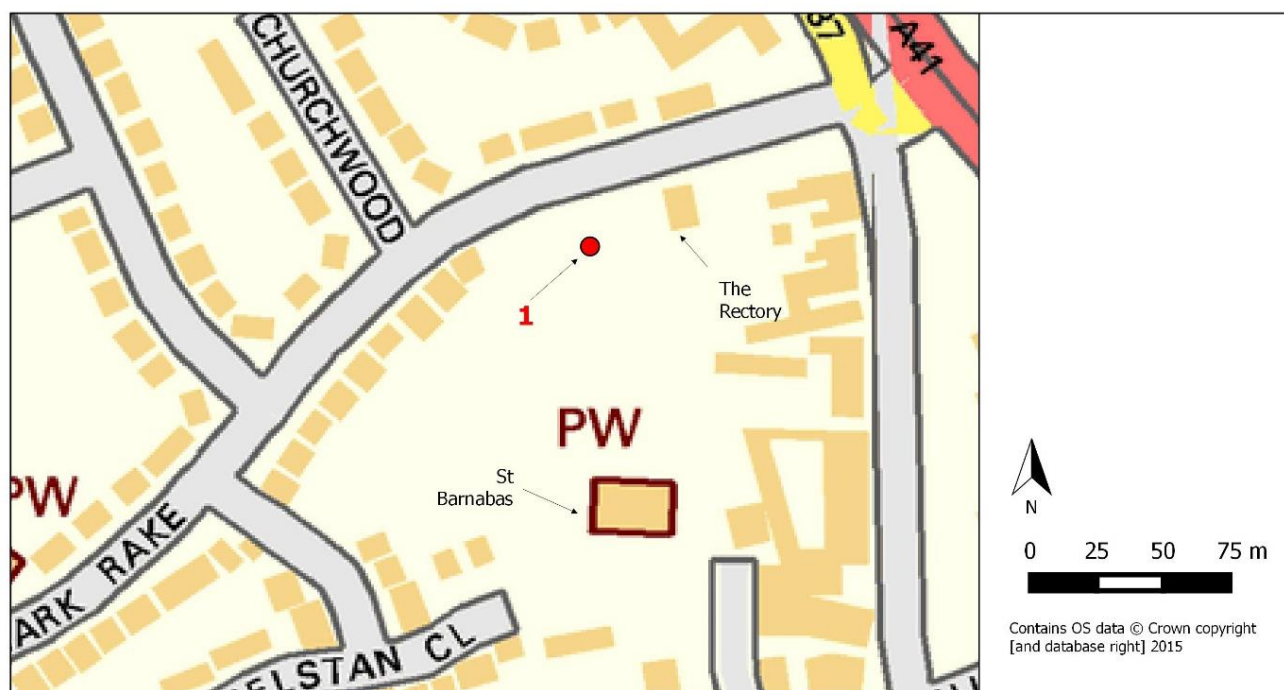


Figure 5: Location of Test Pit 1

Test Pit 1 was half-sectioned at 0.43m and quarter-sectioned at 0.89m. The final depth was 1.0m in the north east quadrant. It did not reach natural due to time constraints. The context was a loose, mid orangey-brown sandy-silt with moderate quantities of modern and glazed ceramic, a small amount of bone, glass and slag were recorded and formed a comparable assemblage to context (202) excavated from Test Pit 2. The pit also produced a sherd of medieval Sandy ware, SF 102, and two sherds of Midland Purple ware, SF 304, which dated to the 15th-17th centuries. Beyond these two sherds of pottery, there was little evidence to suggest occupation prior to the 19th century. Directly west of the test pit was a heavily overgrown disused tennis court, which suggests this whole area may have been significantly disturbed during its construction and may suggest why only one context was evident during excavation.

Table 2: Summary of bulk find materials excavated from TP1

Context	Animal Bone		CBM		Modern Glass		Modern Glazed Ceramic		Modern Metal		Post-Medieval Glazed Ceramic		Slag		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
101	1	5	1	91	3	1	12	14	3	93	10	60	1	5	5	29

7.1.1. Test Pit 2

Test Pit 2 was located to the rear of The Rectory, Mark Rake, CH62 2DH, centroid: 334904 382324.

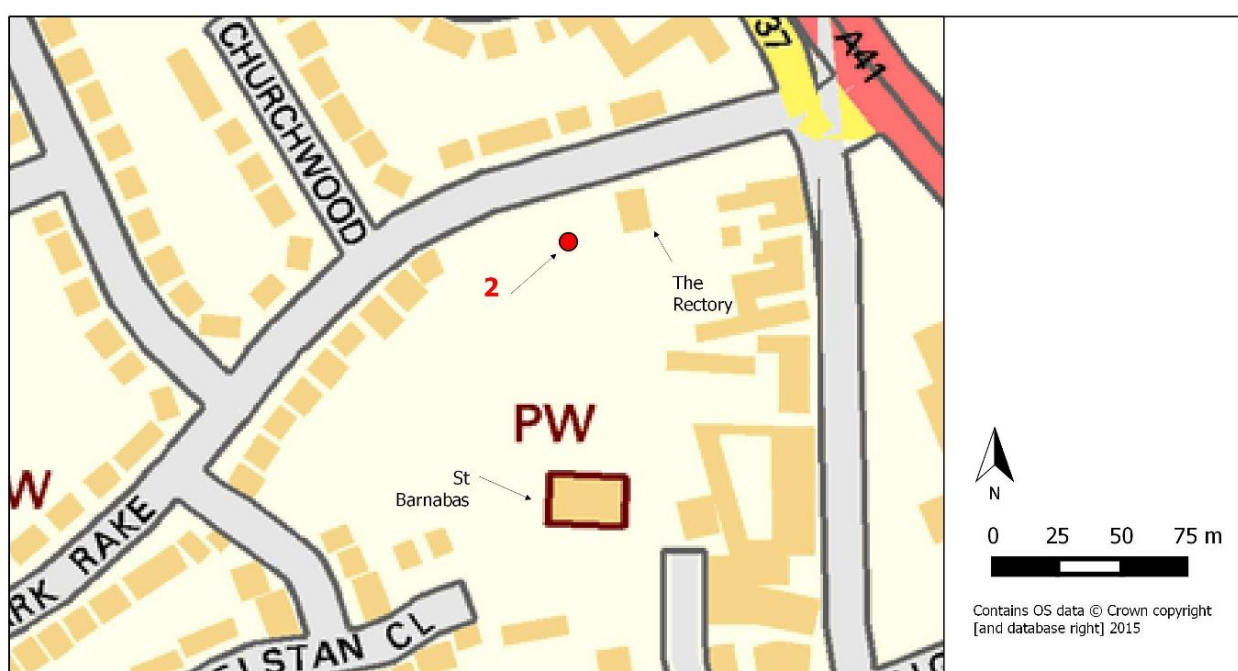


Figure 6: Location of Test Pit 2

Test Pit 2 was half-sectioned at 0.49m and excavated to a depth of 0.85m on the eastern side. The topsoil (201) was a firm, mid reddy-brown sandy-silt with lenses of clay. Fragments of charcoal and rounded sandstone, ranging from 2-5cm in size, were noted as inclusions. The subsoil (202) was a soft, fine-grained, reddy-brown clayey-silt. Both the topsoil and subsoil produced modern material. However, a number of earlier finds were recorded. Context (201) produced one sherd of Roman ceramic, SF 204, the lip of a drinking vessel, one sherd of Ewloe-type pottery dating from the 14th-15th century, SF 206, and five sherds of Midland Purple ware, SF 306. It also produced a small assemblage of 17th century clay tobacco pipe fragments. Context (202) produced one sherd of Red/Grey ware dating from the 13th-14th century and three sherds of Midland Purple ware, SF 305. Below the subsoil a loose, mid browny-grey silt (203) was encountered. This layer was sterile except for a single sherd of decorated jug handle, SF 203, which dates from the 13th-14th centuries. The

final context (204) was comparable to context (203) with the added inclusion of clay, 1-2cm in size, and sandstone, 6-10cm in size. No finds were recovered from this context. The range of pottery from this test pit suggests that the site had marginal use, perhaps as fields, during the Roman period. It was then occupied during the medieval period, and again from the 18th century onwards.



Figure 7: Lip of Roman drinking vessel - SF 204

Table 3: Summary of bulk find materials excavated from TP2

Context	Animal Bone		CBM		Clay Tobacco Pipe		Modern Glass		Modern Glazed Ceramic		Modern Metal		Post-Medieval Glazed Ceramic		Slag		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
201	3	18	1	24	5	8	23	70	7	71	6	28	5	35	1	1	9	67
202	1	1					6	8	2	4	1	41	5	64	2	17	2	3

7.1.2. Test Pit 3

Test Pit 3 was located in the south-west corner of the 'Old School Field' (one of three test pits sited in this field. The periphery of the field was chosen for the test pits to avoid cement World War 2 bunker footings) within a grassy area west of St Barnabas Village Centre, centroid: 334889 382114.

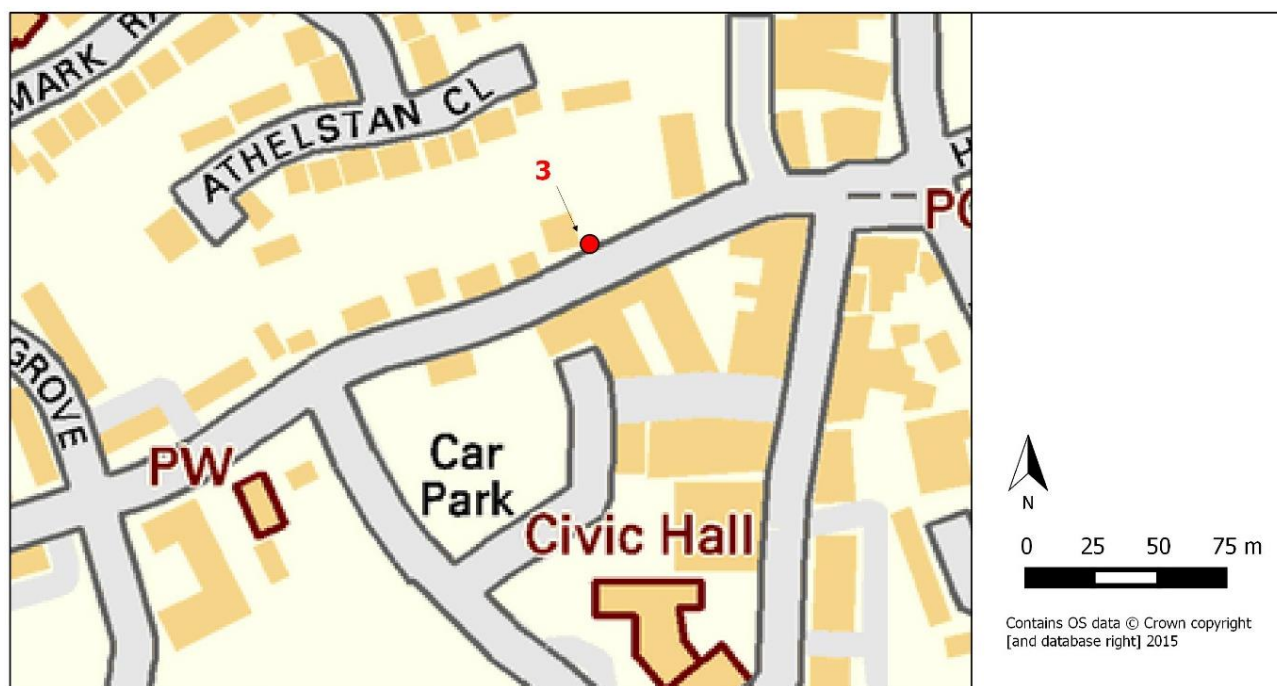


Figure 8: Location of Test Pit 3

Test Pit 3 was half-sectioned at 0.46m and excavated to approximately 1.0m depth on the south side,



recorded and backfilled. The topsoil (301) and subsoil (303) were comprised of a loose, mid reddy-brown clayey-silt. With a lens of burnt material mixed with clayey-silt, dividing the two (302). Context (302) produced a 15th-16th century sherd of Cistercian ware and four sherds of Midland Purple ware. A rare sherd of 10th-11th century Stamford ware, SF 301, was also recovered. This was posited as a crucible for metalworking due to the presence of an internal glaze and possessing the correct dimensions for this form of vessel. However, Scanning Electron Microscopy (SEM) and energy dispersive X-ray (EDX) analysis revealed no

trace of gold prills or gold particles to indicate that the vessel was a gold working crucible. The vessel when tested was found to have a thin lead glaze (See Appendix 12.5). A slate pencil fragment was unearthed from context (304), likely pertaining to activity on the 'Old School Field', where Test Pits 3, 4 and 5 were situated. Several objects, such as stone marbles and slate pencils were unearthed. These objects relate to a period when this field was used by the school's pupils. The presence of the slate pencil in context (304) indicates that the Stamford ware pottery sherd was from a disturbed context, being later in the stratigraphic sequence.

Table 4: Summary of bulk find materials excavated from TP3

Context	Animal Bone		CBM		Clay Tobacco Pipe		Misc			Modern Glass		Modern Glazed Ceramic		Modern Metal		Plastic		Post-Medieval Glazed Ceramic		Slag		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Description	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
301			3	380						9	30	4	8	1	8	1	1	3	40			2	4
302					3	8				19	18	11	49	3	66			14	50	1	6		
303	1	20																					
304							12	5	Slate Pencil														

7.1.3. Test Pit 4

Test Pit 4 was located west of St Barnabas Village Centre, in the north-west corner of the 'Old School Field', centroid: 334889 382160.

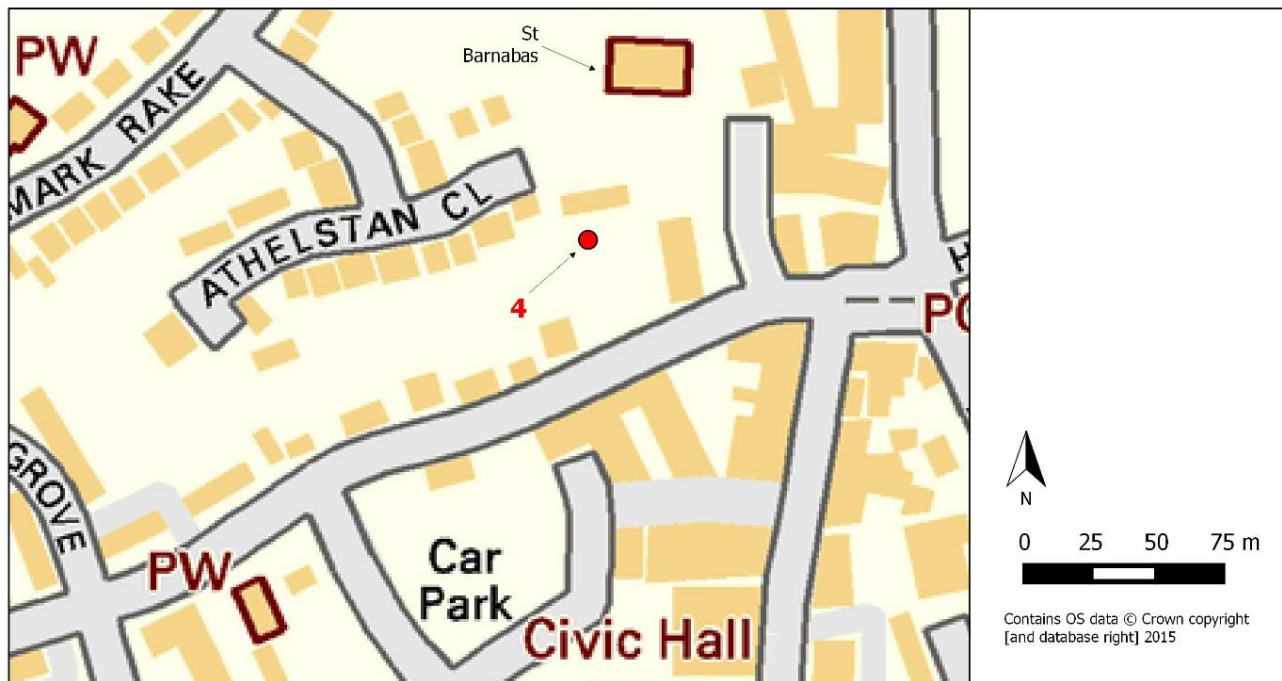


Figure 10: Location of Test Pit 4



Figure 11: Fe artillery shot SF 401

Test Pit 4 was half-sectioned at 0.58m and excavated to natural bedrock at a depth of 1.17m on the north side. The topsoil (401) comprised of a loose, mid reddy-brown clayey-silt; the same as that noted in Test Pit 3. Context (401) produced a probable Civil War era Fe artillery shot, SF 401 (see Figure 11). This identification is supported by documentary evidence that states that Parliamentarian troops camped on the field in 1644 (Cheshire Sheaf, 1955). Context (401) also produced a sherd of Midland Purple ware with a Fe concretion, SF 403 (see Figure 12). Context (402)

was comprised of a layer of brick rubble, adjacent to context (403), a layer of burning, containing largely a mixture of charcoal and a loose silty matrix. Both (402) and (403) were 0.17m in depth. Context (404) was a loose, dark reddy-brown silt with evidence of dumping and context (405) appears to be a dump of soil and cinders. Context (406) continued to produce modern material, indicating that this context and those proceeding it were modern with disturbed material. Midland Purple ware was recovered from (405), SF 309, and (406), SF 406. Context (407) was sterile with sandstone fragments, below which sandstone bedrock appeared.



Figure 12: SF 403

Much of the pottery from Test Pit 4 is modern, but there is also a small quantity of other material which suggests that the site was in use from the 16th-17th centuries onwards, and perhaps even slightly earlier.

Table 5: Summary of bulk find materials excavated from TP4

Context	Animal Bone		CBM		Clay Tobacco Pipe		Misc			Modern Glass		Modern Glazed Ceramic		Modern Metal		Plastic		Post-Medieval Glazed Ceramic		Slag		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Description	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
401	1	1			1	2				8	25	4	33			3	24	1	2	10	48	3	12
402			1	21			1	2	Slate Pencil	1	1	2	9					1	146	7	22	2	10
							1	1	Stone Marble														
403										1	1	2	1					1	30	9	8	5	21
404										5	19	2	3					3	19	8	41	5	42
405	1	4	2	23			2	3	Slate Pencil			3	17	1	28			2	42	3	91	3	24

7.1.4. Test Pit 5

Test Pit 5 was located in the north-east corner of the 'Old School Field', centroid: 334877 382159.

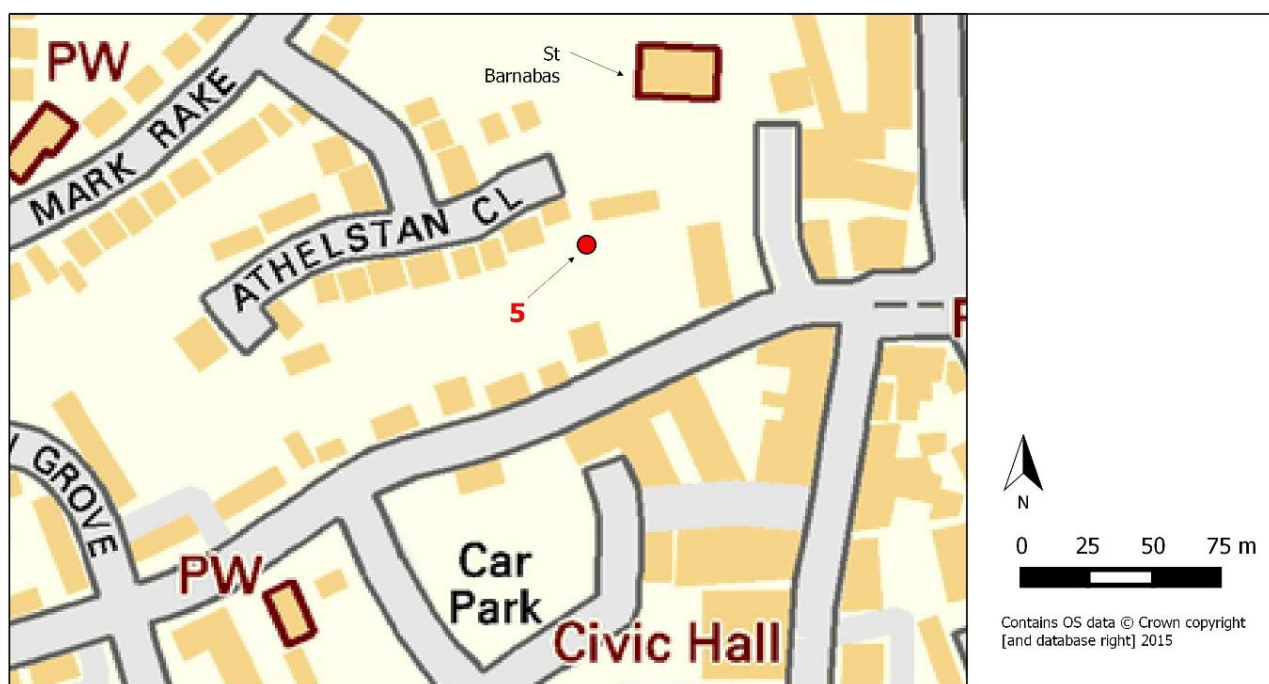


Figure 13: Location of Test Pit 5

Test Pit 5 was excavated to a depth of 1.2m with a small sondage excavated in the north-west corner, which did not locate natural. The test pit was closed due to time constraints. The test pit contained multiple contexts with evidence for human activity in the form of burnt deposits (502), discrete dumping events (503) and (505) and a compact surface comprising of bricks and stone rubble (506). This overlay a firm, mid reddy-brown sandy-silt fill (507) of linear cut [509] running SS-NE and a compacted surface (508) comprised of sandstone angular rocks (5-15 cm in size) that was cut by [509] (see Figures 15 and 16). At 0.93m context (510) was encountered below (508). This was comprised of a loose, reddy-brown sandy-silt. This context was producing modern material, indicating that this context and those proceeding it were modern with disturbed material. A sondage was excavated at 1.2m in the NW corner to determine if bedrock could be reached, reaching 1.32m with no sign of bedrock. All the material unearthed within this test pit was Victorian or modern, indicating that the deposits must date to a similar period. In context (508), a Fe Key, SF 502, was unearthed. This, combined with the material culture and features unearthed within the test pit, suggests domestic occupation, probably an outhouse area based on the construction of the compacted surface.



Figure 15: First compacted surface (505) and (506)



Figure 16: Second compacted surface (508)

Table 6: Summary of bulk find materials excavated from TP5

Context	CBM		Clay Tobacco Pipe		Modern Glass		Modern Glazed Ceramic		Modern Metal		Plastic		Post-Medieval Glazed Ceramic		Slag		Unglazed Ceramic	
	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
501	4	234			58	392	6	12	18	191	3	5	3	8	12	90	6	58
504	2	114			3	42	3	5	2	218	3	5			2	8	2	15
505	2	114			3	11	2	40	2	4							1	3
507					5	21	4	21	1	30					1	5	9	85
508							14	22									1	1
510			1	3	1	5	1	1					1	17				

7.1.5. Test Pit 6

Test Pit 6 was located at the north-west corner of a structure currently utilised as a Scout Hut, south of the churchyard boundary, centroid: 334877 382175.

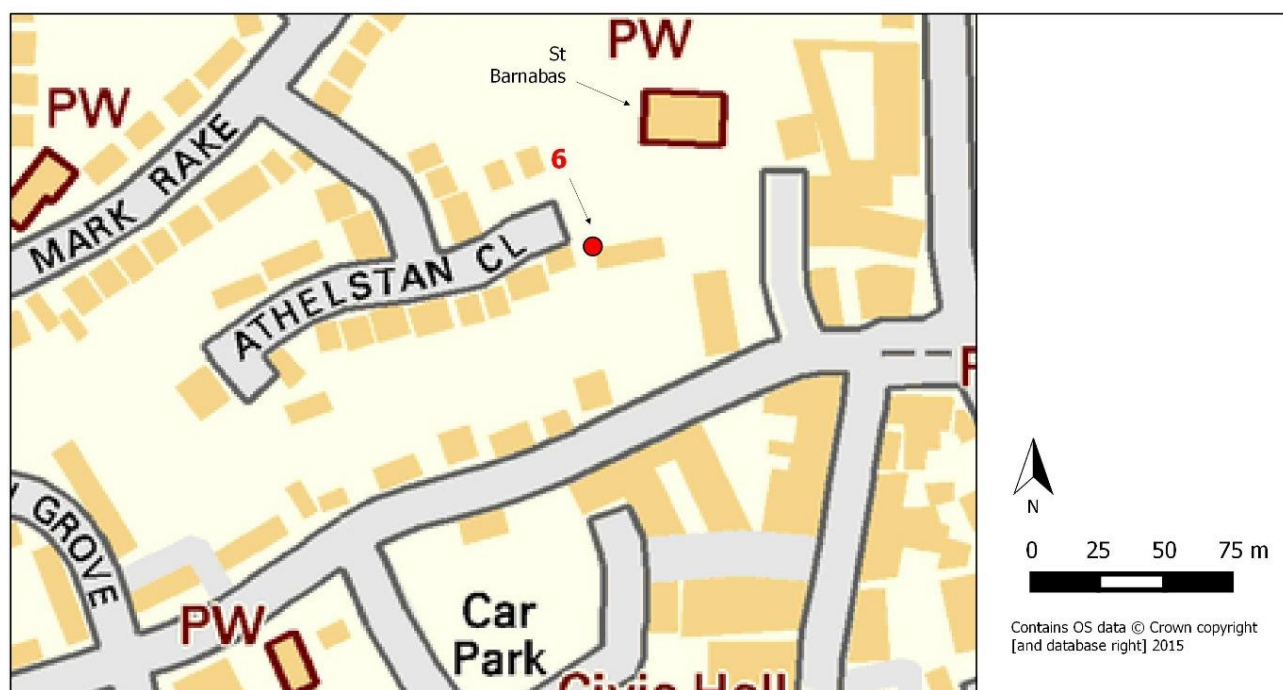


Figure 17: Location of Test Pit 6

Test Pit 6 was half-sectioned at 0.6m and quarter-sectioned at 0.9m. The final depth reached was 1.17m at which point the deposit appears to have been sterile. However, due to time constraints this could not be tested sufficiently to provide a conclusive answer. Large quantities of modern material, including ceramics, plastic and ceramic building material were found. No small finds were recorded. The test pit appears to have consisted of re-deposited material and the accumulation of soil and

organic material based on its location near to multiple hedges, trees and boundaries. Context (601) was wholly comprised of organic material. Context (602/603) was a compacted rubble layer, 0.50m in depth. It appeared comparable to context (506) from Test Pit 5. The proximity of Test Pits 5 and 6 suggests that this might form part of a much larger compacted rubble spread. Context (604) was a loose, mid-dark-brown, loamy soil, which is likely the result of its proximity to the churchyard boundary and the accumulation of organic material from the hedge. The final context, (605), was devoid of material culture. The context end was not reached due to time constraints.

Table 7: Summary of bulk find materials excavated from TP6

Context	Animal Bone		CBM		Clay Tobacco Pipe		Misc			Modern Glass		Modern Glazed Ceramic		Modern Metal		Plastic		Post-Medieval Glazed Ceramic		Slag		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Description	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
601	18	28	3	59	2	2				35	387	33	167	11	527	4	14	9	254	1	30	43	636
602	1	6										27	42									4	20
603	1	1					1	1	Slate Pencil	16	41	14	40	3	175			2	32	4	58	29	209
604					2	2								2	28							3	4

7.1.6. Test Pit 7

Test Pit 7 was located to the south of the Scout Hut (see previous), centroid: 334888 382164.

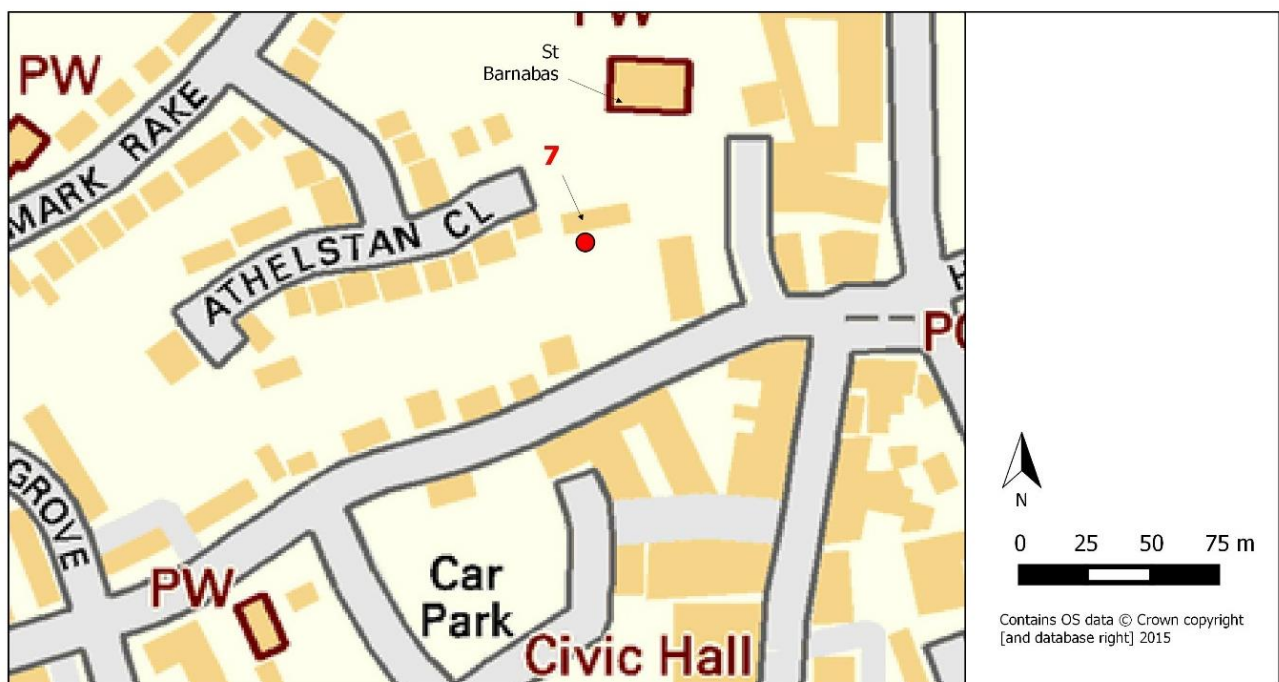


Figure 18: Location of Test Pit 7

Test Pit 7 was excavated to a depth of 1.2m with no sign of bedrock or sterile layers. A sondage in the northern half of the trench was excavated to a depth of 1.72m to explore a line of stones that were just visible at 1.2m. The excavation of the sondage revealed no further stones or associated dateable evidence. Context (701) was largely organic build-up and dumping, being on the scout hut boundary. It did produce abraded early tobacco pipe fragments (c. early 17th century). Context (702) was compacted rubble layer, 0.32m in depth. It appeared comparable to context (506) from Test Pit 5 and (602/603) from Test Pit 6. The proximity of all three test pits suggests that this might form part of a much larger compacted rubble spread. Context (703) was a loose, mid reddy-brown clayey silt deposit, very similar to the topsoil and identified in Test Pits 3 and 4. A sherd of Midland Purple ware, SF 702, was recovered from this context. From context (704) no finds were recovered but an apparent linear of irregular sandstone blocks was noted running east to west. It was impossible to determine if these sandstone blocks were natural or anthropogenic based on the size of the trench and its location abutting the stone wall of the school field.

Table 8: Summary of bulk find materials excavated from TP7

Context	Animal Bone		CBM		Clay Tobacco Pipe		Modern Glass		Modern Glazed Ceramic		Modern Metal		Plastic		Post-Medieval Glazed Ceramic		Slag		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
701	3	52	8	354			61	304	84	463	25	2067	6	7	2	33	2	28	14	206
703					1	1	58	250	11	79	13	445			4	71			9	45

7.1.7. Test Pit 8

Test Pit 8 was located within the rear residential garden of 20 The Rake, CH62 7AQ, centroid: 334740 382076.

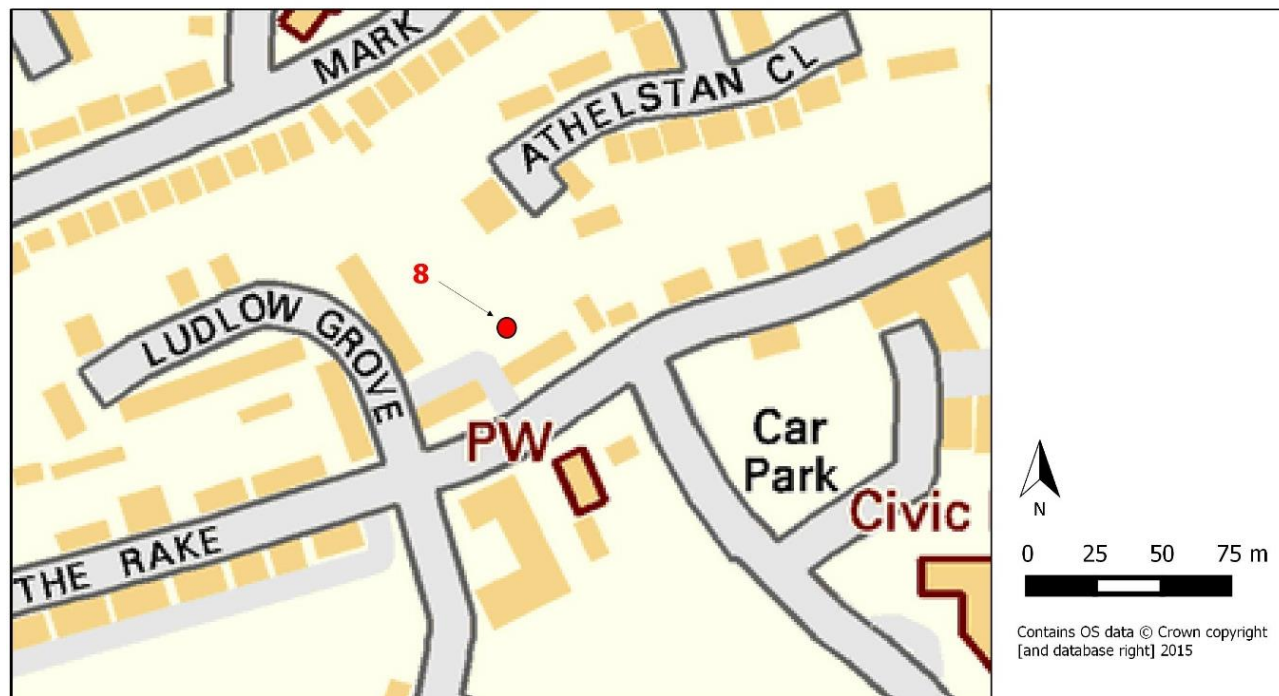


Figure 19: Location of Test Pit 7

Test Pit 8 was half-sectioned at 0.6m and excavated to a depth of 1.0m on the northern side where natural was reached. Context (801) was a friable, mid blacky-brown silt topsoil littered with modern domestic debris, typical of a 19th century residential property. Context (801) produced a sherd of Ewloe-type pottery, SF 802, and probable Victorian/Edwardian metal fountain pen. All the other finds from this test pit were a mixture of Victorian and modern with no clear change in context between the two, which suggests the garden has been heavily disturbed. Context (802) was comprised of building debris in the form of CBM, modern window glass and plaster, possibly the remnants of an outhouse. Context (803) was comprised of a firm, mid reddy-brown clayey silt with a notable reduction in material culture. Context (804) was sterile, comprising of sandy-silt with pebble inclusions. Context (805) was a sterile mid yellowish-red clay, which is probably natural.

Table 9: Summary of bulk find materials excavated from TP8

Context	Animal Bone		CBM		Clay Tobacco Pipe		Modern Glass		Modern Glazed Ceramic		Modern Metal		Post-Medieval Glazed Ceramic		Slag		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
801	7	12	4	36	1	2	64	168	32	51	2	18	15	74	1	23	6	17
802	2	12			1	2	82	268	15	17	5	194	4	11			2	5
803					1	1	1	1	1	1			1	1	1	10		

7.1.8. Test Pit 9

Test Pit 9 was located within the rear residential garden of 6 The Rake, CH62 7AQ, centroid: 334863 382130.

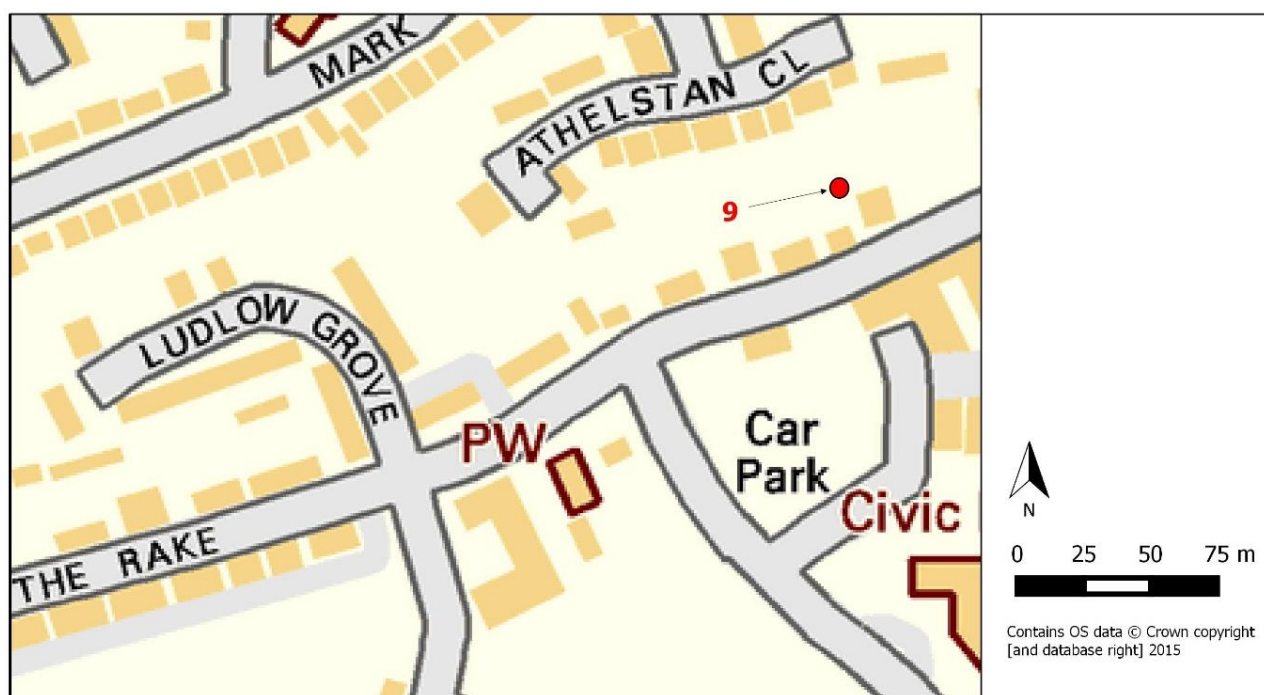


Figure 20: Location of Test Pit 8

Test Pit 9 was half-sectioned at 1.10m and excavated to a depth of 1.22m on the east side. Context (901) was a friable, mid to dark brown sandy-silt topsoil typical of a 19th century residential property. One sherd of Midland Purple ware, SF 903, was recovered from this context. Subsoil (902) was comparable to (901) with the addition of irregular sandstone, 5-10cm in size, and charcoal, 1-2cm in size, inclusions. A number of small finds were recovered from this context. A sherd of Ewloe-type ware, SF 904, and a sherd of Cistercian ware, SF 902, were recorded. A notable and rare find for Bromborough was also recovered in this context: SF 901 is a fragment of a Neolithic pressure-flaked

flint arrowhead, possibly leaf-shaped or transverse in form. This find was discovered in context (902) alongside modern material, so must be residual (see Figure 21).

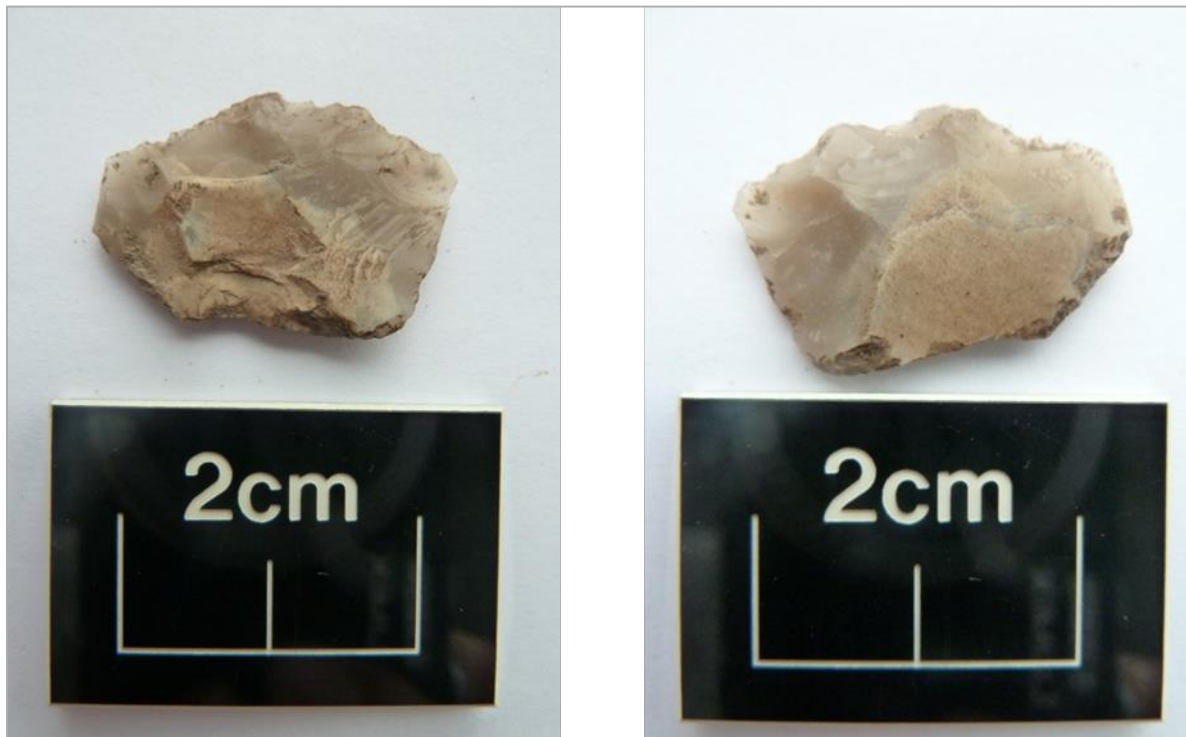


Figure 21: Neolithic pressure-flaked arrowhead SF 901

Context (903) was only differentiated by a change in colour to mid yellowish-brown. No finds were recovered from this context or those below it. Context (904) was noted due to a change in colour and inclusions. (904) was a friable, orangey-brown sandy-silt with large amounts of irregular sandstones, 5-20cm in size. Context (905) was a fine-grained sandy-clay, which was sterile of finds and inclusions. This was likely natural but there was not sufficient time to determine this.

Table 10: Summary of bulk find materials excavated from TP9

Context	CBM		Clay Tobacco Pipe		Modern Glass		Modern Glazed Ceramic		Modern Metal		Post-Medieval Glazed Ceramic		Unglazed Ceramic	
	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
901	2	20			31	124	53	151	4	68	15	45	20	65
902			2	3	2	7	15	23			7	151	2	9

7.1.9. Test Pit 10

Test Pit 10 was located within the rear residential garden of 16 The Rake, CH62 7AQ, centroid: 334809 382112.



Figure 22: Location of Test Pit 9

Test Pit 10 was excavated to a depth of 0.74m where natural was evident. Context (1001) was a loosely compacted, blackish-brown loamy-silt topsoil. One sherd of Ewloe-type ware, SF 1003, was recovered from this context. Context (1002) was a moderately compacted, light orangey-brown sandy-silt subsoil. One sherd of Ewloe-type ware, SF 1001, was recovered from this context and two early 17th century abraded fragments of clay tobacco pipe were recovered amongst a wider assemblage. Context (1003) was a highly compacted, light brown sandy-clay with pebble inclusions, devoid of material culture. This context appeared to be natural.

Table 11: Summary of bulk find materials excavated from TP10

Context	Animal Bone		CBM		Clay Tobacco Pipe		Modern Glass		Modern Glazed Ceramic		Modern Metal		Plastic		Post-Medieval Glazed Ceramic		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
1001	68	301	3	96	7	10	78	260	108	168	4	201	4	8	45	297	6	224
1002	14	6			4	5	7	5	8	14					13	68	1	2

7.1.10. Test Pit 11

Test Pit 11 was located within the rear residential garden of 58 The Rake, CH2 7AQ, centroid: 334610 382022.

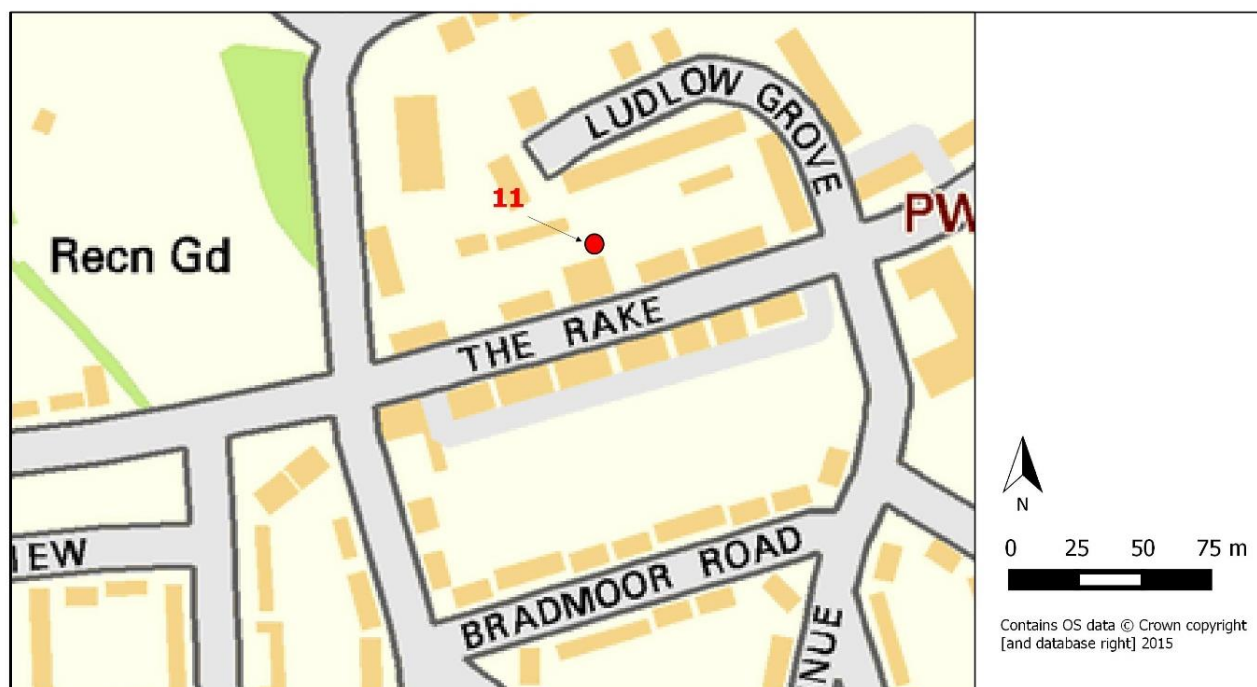


Figure 23: Location of Test Pit 10

The wall (1103) of a small structure with a large void and an *in situ* ladder was found 0.06m below ground surface, possibly a coalbunker or air raid shelter. The structure was not present on the 1912 OS map (Ordnance Survey 1912) but is present on the 1936 OS map (Ordnance Survey 1936), indicating that it was constructed after 1910 but before 1936. The hole was filled by rubble (1104). The presence of a deep void of at least 1.0m in depth meant the decision was taken to close the trench for health and safety reasons and open another test pit within the same rear garden directly west of TP11.



Figure 24: Wall uncovered in TP11

Table 12: Summary of bulk find materials excavated from TP11

Context	Animal Bone		CBM		Modern Glass		Modern Glazed Ceramic		Modern Metal		Post-Medieval Glazed Ceramic		Slag		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
1101					57	458			1	10						
1102											1	10	23	233		
1104	1	1	1	11			12	44	42	233					1	3

7.1.11. Test Pit 11A

Test Pit 11A was excavated to the west of Test Pit 11, which had to be closed due to the discovery of a potentially unsafe void, centroid: 334607 382021.

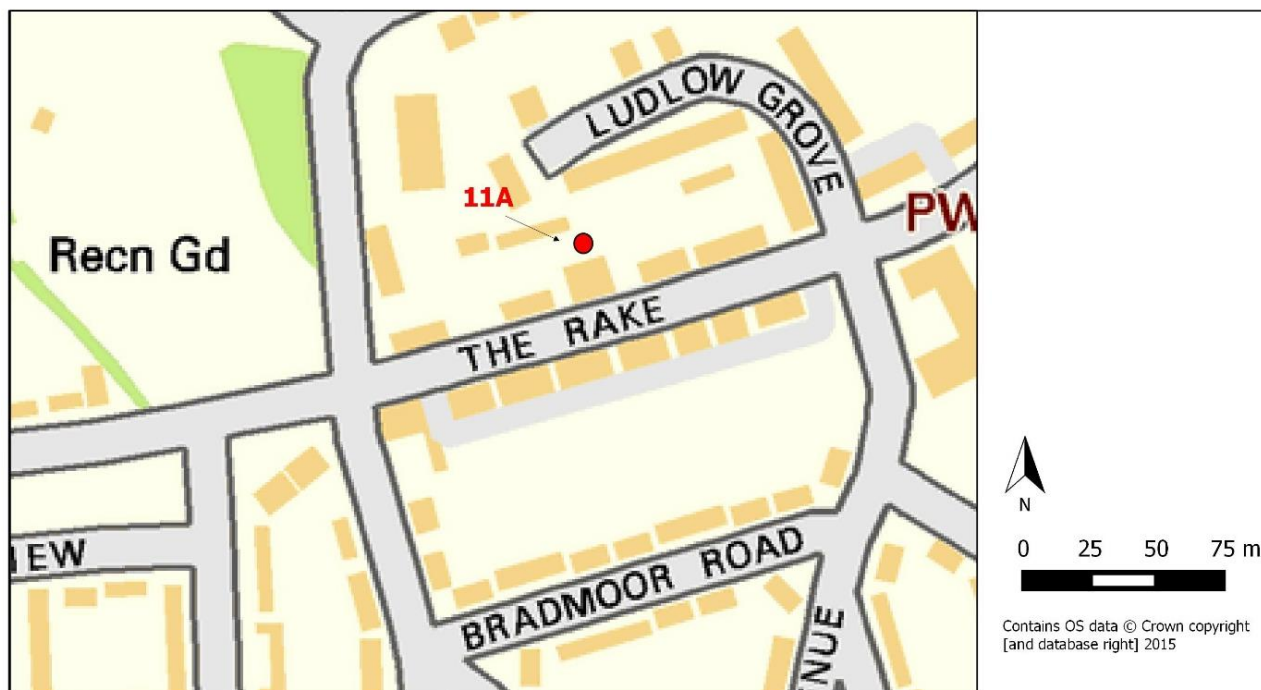


Figure 25: Location of Test Pit 11A

TP11A was excavated to a depth of 0.56m and closed due to time constraints. Context (11A01) was a loosely compacted dark greyey-brown silt topsoil with angular stone inclusions. Context (11A02) was comparable to (11A01), the difference noted was a change in colour to a dark blacky-brown subsoil. This context abutted context (11A03) and had a higher clay content, being a friable, mid reddy-brown clayey-silt. Context (11A04) appeared to be part of a concrete structure and maybe associated with the structure unearthed in Test Pit 11, directly east of Test Pit 11A. It was situated below (11A02). Context (11A05) was a weakly compacted, reddy-brown silt sat beneath both (11A03) and (11A04) and may have been the original ground surface into which the structure noted in Test Pit 11 was dug. (11A06) was unexcavated due to time constraints. It appeared to be a compacted, bluey-grey clay.

Table 13: Summary of bulk find materials excavated from TP11A

Context	Animal Bone		Clay Tobacco Pipe		Misc			Modern Glass		Modern Glazed Ceramic		Modern Metal		Plastic		Post-Medieval Glazed Ceramic		Slag		Unglazed Ceramic	
	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Description	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
11A01								6	9	3	7	5	282			1	10	5	55		
11A02								8	14	5	6	8	63			1	9	29	548		
11A03	7	10						4	23	6	16	3	10								
11A04								8	14												
11A05	17	47	1	2	1	2	Slate Pencil	50	177	50	159	77	1919	4	5	5	18	1	4	5	18
11A06	8	24			1	2	Stone Marble	11	41	14	37	7	27			1	7			1	7

7.1.12. Test Pit 12

Test pit 12 was located adjacent to the dividing wall of the Rectory garden and St Barnabas churchyard, centroid 334914 382294.

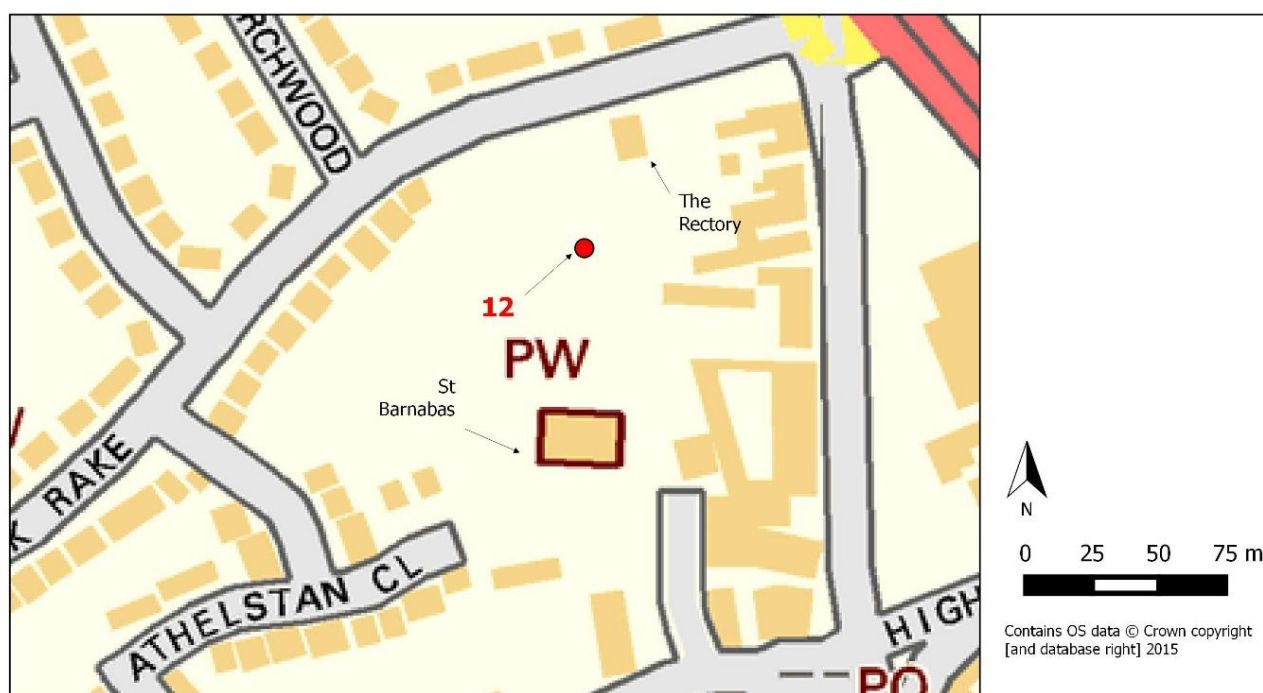


Figure 26: Location of Test Pit 12

Test Pit 12 was half-sectioned at 0.8m and excavated a depth of 1.2m on the western side. This test pit abutted the interior of the southern church boundary wall, where there was a large build-up of organic material (1201). The ground surface was found 0.18m below. During excavation, the footing for the boundary wall was unearthed, running to a depth of c.0.5m below the original ground surface (see Figure 27). Context (1202) was a friable, mid-brown silty topsoil, which abutted the wall footings, within which a concentration of modern material, such as glass and ceramic building material was unearthed. This suggested that this area is relatively disturbed and probably consists of accumulated

debris. Below this context, the soil quickly turned sterile. Context (1203) was a friable, red-brown silt and context (1204) was a loose, mid brown clayey-silt, suggesting that at this depth the ground remains largely undisturbed by modern activity. Unfortunately, no dating evidence was retrieved from either context. No small finds were recovered from this test pit.



Figure 27: Test Pit 12 – North facing section

Table 14: Summary of bulk find materials excavated from TP12

Context	Animal Bone		Clay Tobacco Pipe		Modern Glass		Modern Glazed Ceramic		Modern Metal		Post-Medieval Glazed Ceramic		Slag		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
1202	1	3	1	184	10	33	12	44	1	32	8	48	6	95	1	1

7.1.13. Test Pit 13

Test Pit 13 was situated to the rear of 26 Bromborough Village Road, currently occupied by Jo Jacques Beauty Salon, centroid 334979 382274.

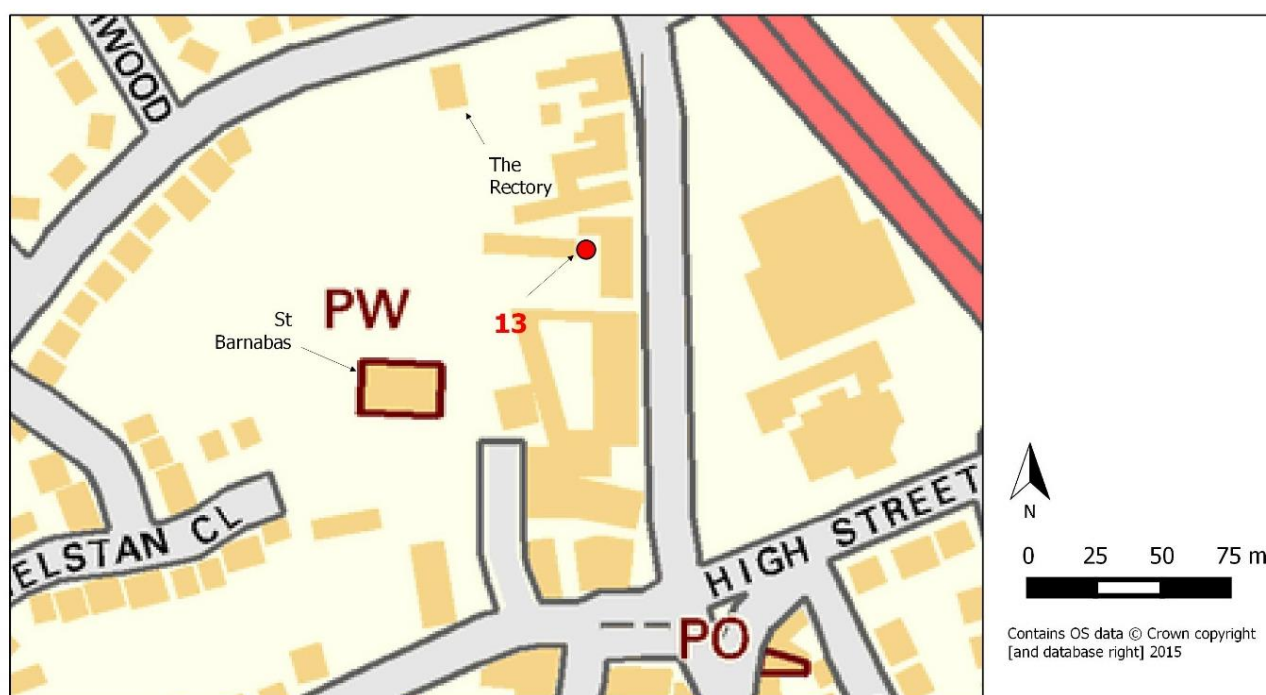


Figure 28: Location of Test Pit 13

Test Pit 13 was half-sectioned at 0.56m and quarter sectioned at 0.98m, being excavated to a depth of 1.21m in the south-east quadrant. The area had no turf and was covered by rubble. The topsoil (1301) consisted of a loosely compacted, blackish-brown loamy-silt and rubble. Context (1302) was a loosely compacted, light-reddy-brown sandy-silt topsoil. A small, shallow cut feature [1303] filled by burnt material (1304) was discovered within context (1302). This feature was likely cut for a single dumping event.



Figure 29: SF 1301

Below this was an apparent sterile layer (1305), comprising of compacted, orangey-red sandy-clay. It was unclear if this was natural but time restraints prevented further investigation.

A fragment of 15th century pottery, SF 1301, was found in the topsoil – context (1301) and (1302) produced a sherd of Midland Purple ware, SF 1303, and sherd of medieval Sandy ware, SF 1302.

Table 15: Summary of bulk find materials excavated from TP13

Context	Animal Bone		CBM		Clay Tobacco Pipe		Modern Glass		Modern Glazed Ceramic		Modern Metal		Plastic		Post-Medieval Glazed Ceramic		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
1301	38	180	2	74	1	13	5	27	30	139	25	357	1	1	14	98	5	28
1302	61	35			1	4	5	100	24	54	5	17			6	126		

7.1.14. Test Pit 14

Test Pit 14 was located in the front residential garden of 18 Churchwood Close, CH62 7AA, centroid: 334648 382430.

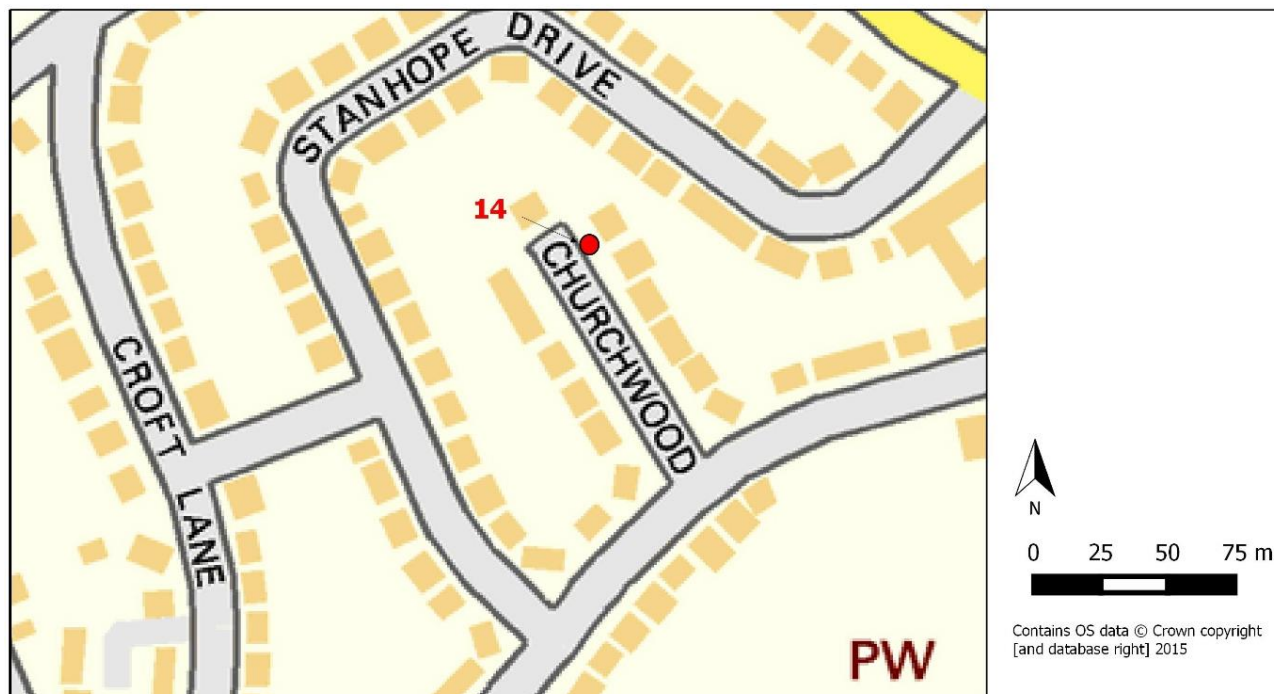


Figure 30: Location of Test Pit 14

Test Pit 14 was half-sectioned at 0.48m and excavated to a depth of 0.8m on the east side. The test pit proved to be largely sterile with post-medieval glazed wares being recovered from the top soil and upper portion of context (1402). No small finds were retrieved from this test pit. Context (1401) was a loose, brownish-grey silt topsoil below which sat a firm, reddish-brown clayey-silt subsoil (1402). Context (1403) was a friable, orangey-brown clay with minimal stone inclusions. This context was sterile.

Table 16: Summary of bulk find materials excavated from TP14

Context	Clay Tobacco Pipe		Modern Glass		Modern Glazed Ceramic		Post-Medieval Glazed Ceramic	
	No	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)
1401	1	1	2	1	6	10	18	67
1402							6	102

7.1.15. Test Pit 15

Test Pit 15 was located in the rear residential garden of 62 Stanhope Road, CH62 7AA, centroid: 334787 382405.

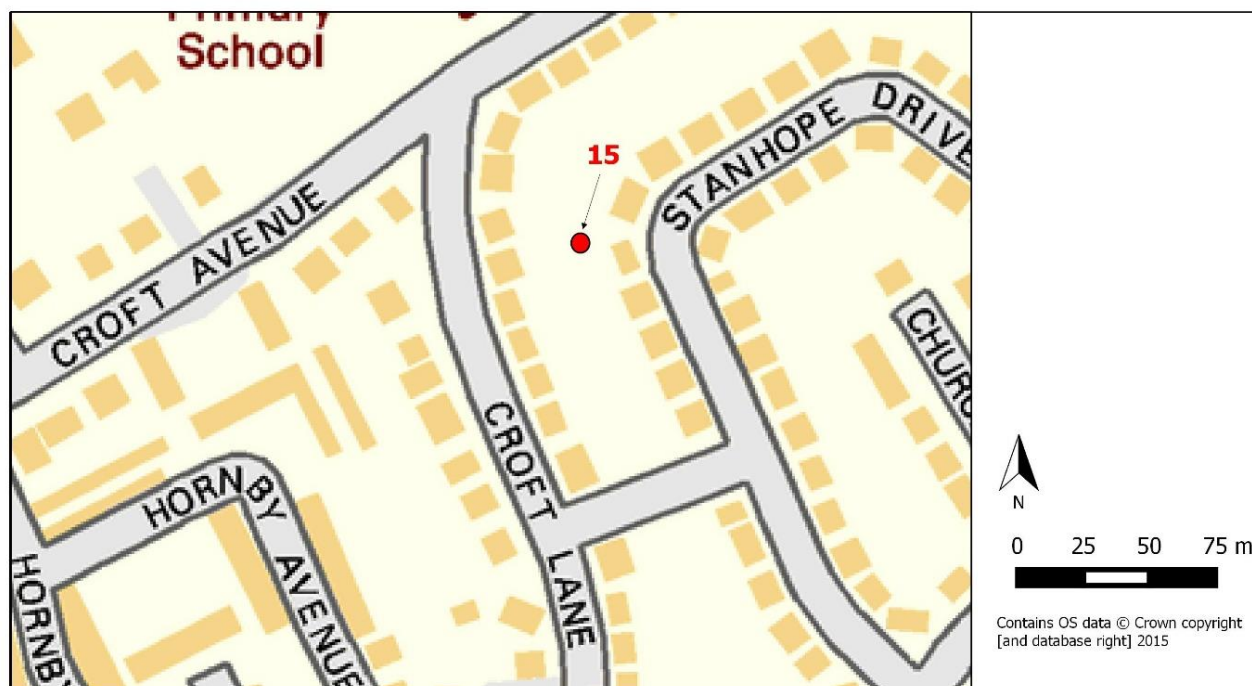


Figure 31: Location of Test Pit 11

Test Pit 15 was excavated to a depth of 0.6m at which point natural was reached. Context (1500) was a firm, mid-reddy-brown silt topsoil affected by bioturbation in the form of roots. Two sherds of Cistercian ware pottery, SF 1505, were recovered from this context (see Figure 32). Context (1502) was a firm, mid reddy-brown clayey-silt subsoil with pebbles, irregular sandstone and charcoal inclusions. The context also had rubble interspersed throughout, suggesting a dumping or levelling event in the vicinity. One sherd of Ewloe-type ware, SF 1506, was recovered from this context (1502) (see Figure 33). Context (1503) was the same as (1502) but with a higher water content. Rubble CBM continued to be unearthed at this depth. Context (1504) was a friable, mid browny-red clay layer with rounded pebbles, ranging from 1-6cm in size. The context was devoid of material culture and appeared to be natural.



Figure 32: 15th/16th century Cistercian ware – SF 1505



Figure 33: 14th/15th century Ewloe-type pottery – SF 1506

Table 17: Summary of bulk find materials excavated from TP15

Context	CBM		Clay Tobacco Pipe		Modern Glass		Modern Glazed Ceramic		Modern Metal		Plastic		Post-Medieval Glazed Ceramic		Slag		Unglazed Ceramic	
	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
1500					7	31	10	26	6	33	1	1			20	103		
1501			3	3	11	35	2	3	5	19			7	30	5	43	2	4
1502	1	10			6	19			2	50			4	9	4	6		
1503					11	14			10	93			7	19	1	2		

7.1.16. Test Pit 16

Test Pit 16 was 2x1m² in size on an east to west alignment. It was located in the grounds of Woodslee Primary School, CH62 7AA, centroid: 334520 382572.

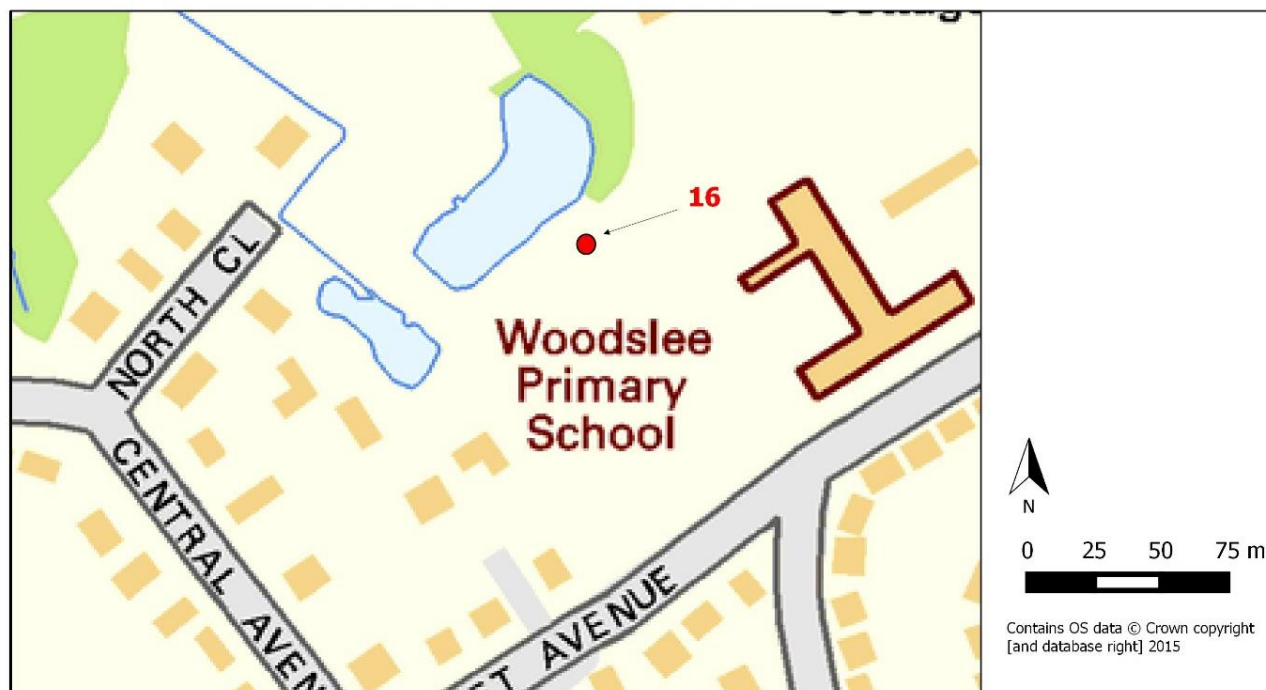


Figure 34: Location of Test Pit 16

A sterile layer was reached at 0.39m and the test pit was closed down due to time constraints, as the test pit had been used for teaching purposes. Context (1601) was a loose, reddy-brown silt topsoil. The subsoil (1602) was a firm, reddy-brown clay with pebble inclusions. This context was sterile. Finds were largely modern in disturbed topsoil. There were no small finds from this test pit.

Table 18: Summary of bulk find materials excavated from TP16

Context	CBM		Clay Tobacco Pipe		Modern Glass		Modern Glazed Ceramic		Modern Metal		Plastic		Post-Medieval Glazed Ceramic		Slag		Unglazed Ceramic	
	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
1601	1	55	1	1	35	99	13	58	21	229	3	3	4	16	39	365	12	120

7.1.17. Test Pit 17

Test Pit 17 was located in the grounds of The Rectory, CH62 2DH, centroid: 334894 382328.

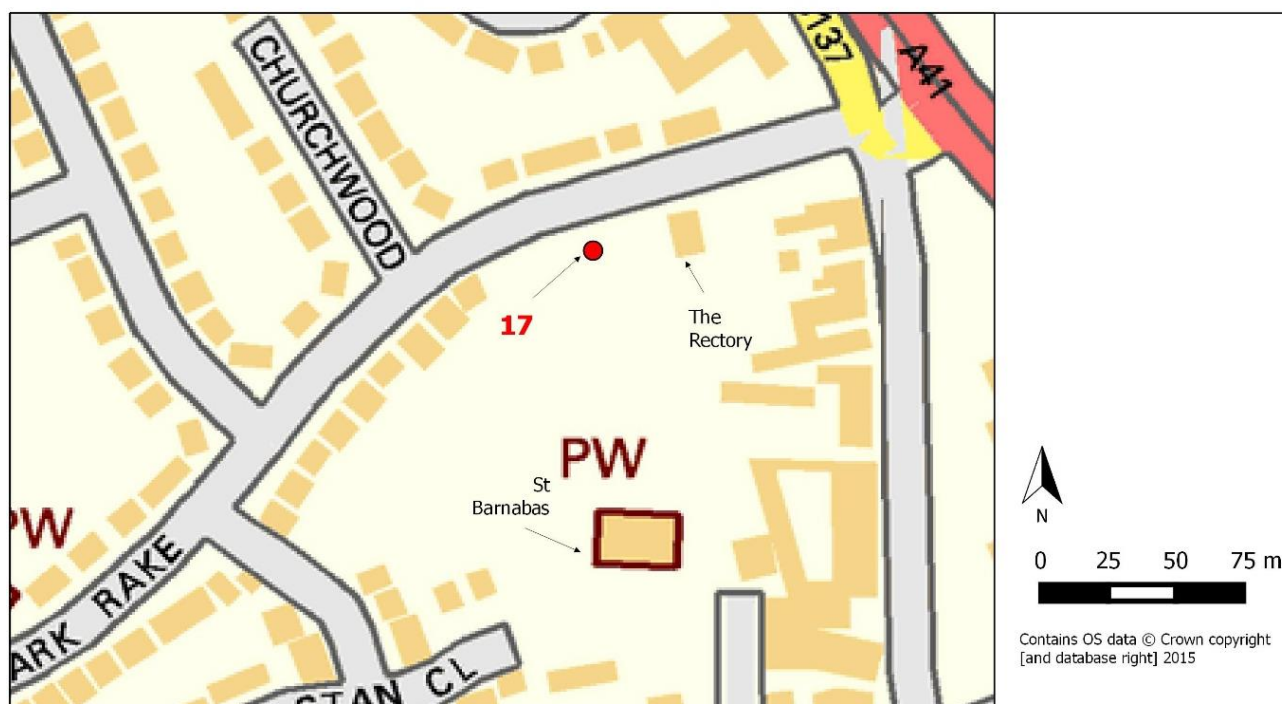


Figure 35: Location of Test Pit 17

Test Pit 17 was half-sectioned at 0.56m and excavated to a final depth of 0.87m on its eastern side. Context (1701) was a loose, dark blacky-brown silt topsoil. A sherd of Midland Purple ware, SF 1704, and a sherd of medieval Sandy ware, SF 1702, were noted from this context. Context (1702/1703) was a friable, mid orangey-brown clayey-silt subsoil. A sherd of Midland Purple ware, SF 1703, was recovered from this context. (1704) was a loose, mid reddy-brown clayey-silt with the inclusion of sandstone, ranging from 1-5cm in size. The full extent of this context was not explored due to time constraints. Several small finds were recovered from this context: two sherds of Cistercian ware, SF 1706, and one sherd of Midland Purple ware, SF 1705. This collection of pottery is comparable to ceramics found in other test pits from the rectory garden. The range of pottery from this site suggests that it had a marginal use in the earlier medieval period (13th-14th century), but was then occupied from 16th-17th centuries onward, and perhaps even slightly earlier. One unusual small find was a chert Mesolithic bladelet, SF 1701 (see Figure 36). This was the oldest artefact recovered throughout the course of both test pitting seasons in Bromborough.

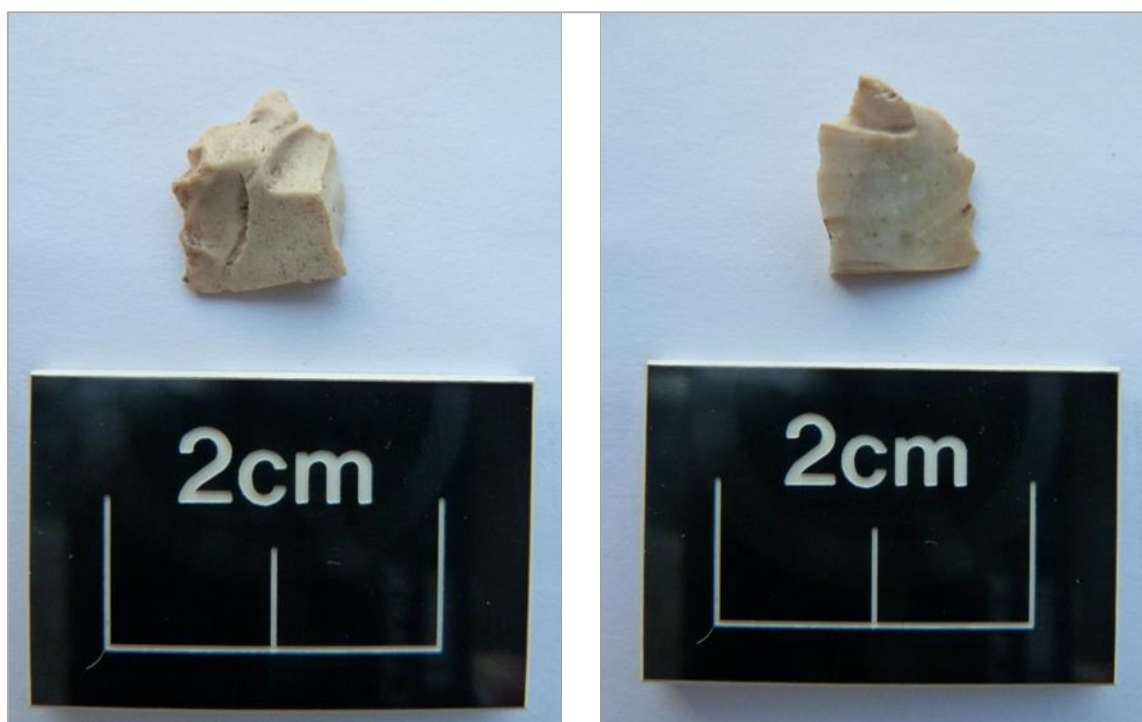


Figure 36: Chert bladelet fragment, possibly Mesolithic – SF 1701

Table 19: Summary of bulk find materials excavated from TP17

Context	Animal Bone		Clay Tobacco Pipe		Modern Glass		Modern Glazed Ceramic		Modern Metal		Post-Medieval Glazed Ceramic		Slag		Unglazed Ceramic	
	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
1701	2	1			27	119	10	17	9	191	12	93	19	375	4	7
1702	1	10	1	2	4	9	3	19	1	6	7	34	2	12	1	2
1703	1	1					2	3	2	82	7	35			1	12

7.1.18. Test Pit 18

Test Pit 18 was located at Church House CH62 7AA, centroid: 334942 382243.

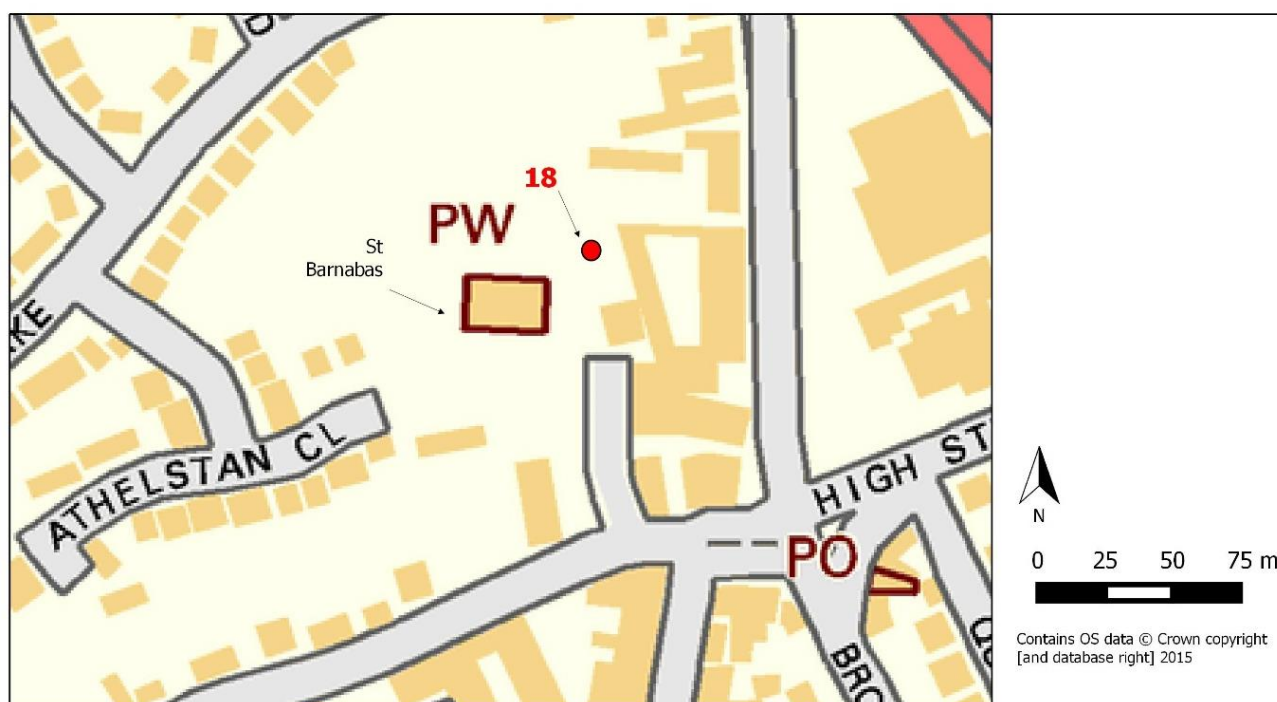


Figure 37: Location of Test Pit 18

Test Pit 18 was half-sectioned at a depth of 0.6m and quarter-sectioned at 1.2m. The final depth of the test pit was 1.5m in the south west quadrant. The whole garden had been recently re-landscaped, so it is expected that the topsoil has been heavily disturbed. It is not clear if areas may have had additional material brought into the garden, so context (1801) should be regarded as potentially alien to the site. The topsoil (1801) consisted of a loosely compacted, blacky-brown silt. This context contained a fragment of Roman Fine Ware, SF 1803, and a sherd of Midland Purple ware, SF 1807. The subsoil (1802) was a friable, mid brown silt. One small find was noted, SF 1802 (see Figure 38), which was a sherd of 14th-15th century pottery, likely originating in North Wales. Below this, the contexts seemed less disturbed. (1803) was a loose, reddy-brown clayey-silt with a comparable medieval ceramic collection to the Rectory garden. Small finds included a sherd of 13th-14th century ceramic, SF 1804, a sherd of Ewloe-type ware (see Figure 39), SF 1808, four sherds of Midland Purple Ware, SF 1809, and a fragment of medieval coarseware, SF 1810. A large fragment of post-medieval glass was also recorded, SF 1805. Context (1804) was a friable, reddy-brown clayey-silt. Inclusions consisted of charcoal and angular sandstones fragments. No finds of any kind were noted in this context, suggesting it remains largely undisturbed. Whilst the garden had recently been resurfaced,

context (1803) and (1804) appear largely undisturbed by this activity. The material assemblage from this test pit suggests that the site has a possible marginal use in the Roman period, and again, almost continuously, in the medieval period and was then occupied in the modern era. It is a comparable ceramic collection to the Rectory Garden test pits, which indicates that this area was likely used for the same purpose and at the same intensity.



Figure 38: Ewloe type 14th-15th century sherd – SF 1802



Figure 39: 13th-14th century ceramic sherd – SF 1804

Table 20: Summary of bulk find materials excavated from TP18

Context	Animal Bone		CBM		Clay Tobacco Pipe		Modern Glass		Modern Glazed Ceramic		Modern Metal		Plastic		Post-Medieval Glazed Ceramic		Shell		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
1801	30	156	3	20	3	4	90	392	100	475	21	236	2	14	11	100	6	22	64	633
1802	12	47			3	5					18	184			11	103	2	24	18	161
1803	2	9	1	9	4	5			3	7	1	1			26	93			4	7

7.1.19. Test Pit 19

Test Pit 19 was located in the front residential garden of School House just south of St Barnabas Church, centroid: 334935 382158.

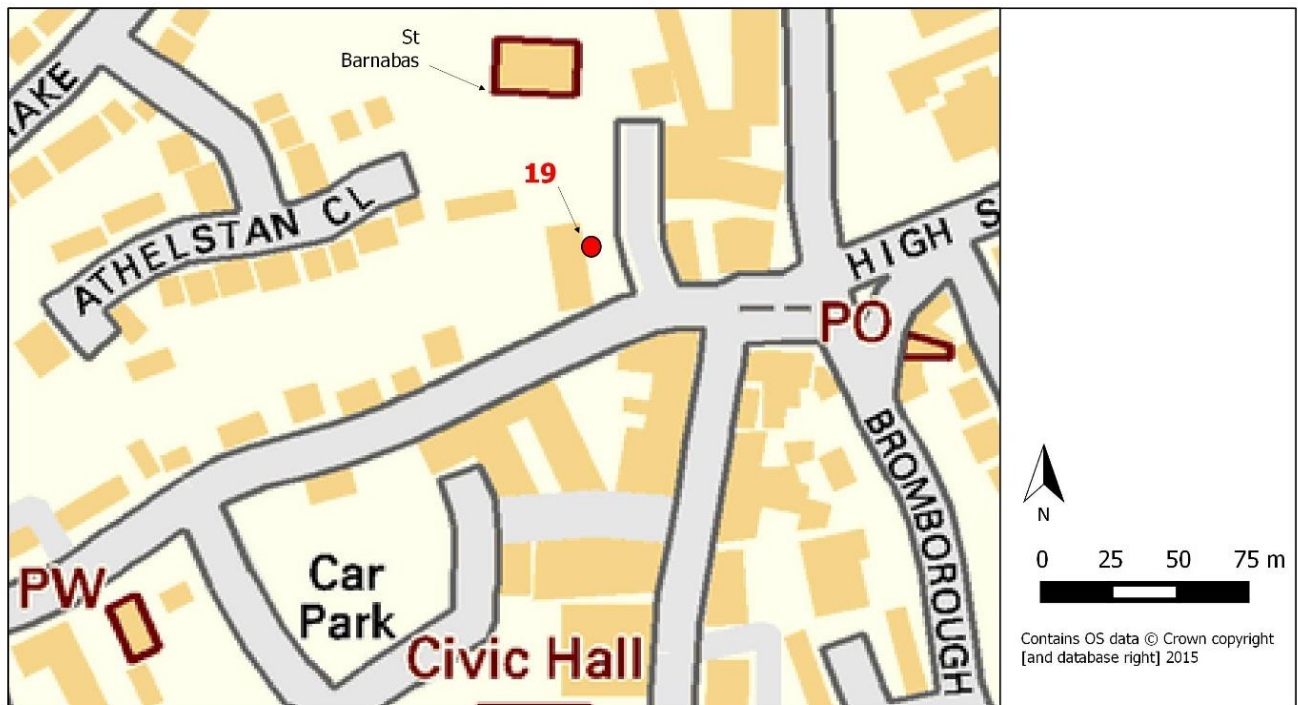


Figure 40: Location of Test Pit 19

Test Pit 19 was excavated to a depth 1.10m. The topsoil (1901) consisted of a loose, mid to dark brown sandy-silt. The subsoil (1902) consisted of a friable, mid brown sandy-silt. Below this context a compacted surface consisting of three layers was unearthed. (1903) was the upper-most, composed of angular sandstone fragments, 5-10cm in size, with a pinkish-red sandy-silt matrix. Mixed with this material was a large collection of post-medieval ceramic and ten sherds of Midland Purple ware, SF 1901, which likely all came from the same vessel. Clay tobacco pipe fragments dating from AD 1650-1750 were also recovered from this layer, suggesting a comparable date for the compacted surface. Directly below was a thin deposit (1904), which separated (1903) and (1905) – a second compacted

surface. (1904) was a friable, greyey-brown clayey-silt, mixed with coal and other burnt material. Context (1905) was a loosely compacted, yellowy-cream sandy deposit, possibly a degraded mortar surface. The three contexts were 0.61m in depth but the final context was not fully excavated due to time constraints. This substantial surface likely relates to the cottage that was situated on the site in 1840 (Cheshire Tithe Maps, 2013). This had been demolished and the current building erected by 1877.

Table 21: Summary of bulk find materials excavated from TP19

Context	Animal Bone		Clay Tobacco Pipe		Modern Glass		Modern Glazed Ceramic		Modern Metal		Plastic		Post-Medieval Glazed Ceramic		Unglazed Ceramic	
	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
1901	13	23	4	5	19	77	17	25	17	347	1	1	13	64	28	154
1903			2	2			3	6					46	703	5	40

7.1.20. Test Pit 20

Test Pit 20 was located on a public green, centroid: 334649 382653. This test pit was the northern test pit of two excavated on the green.

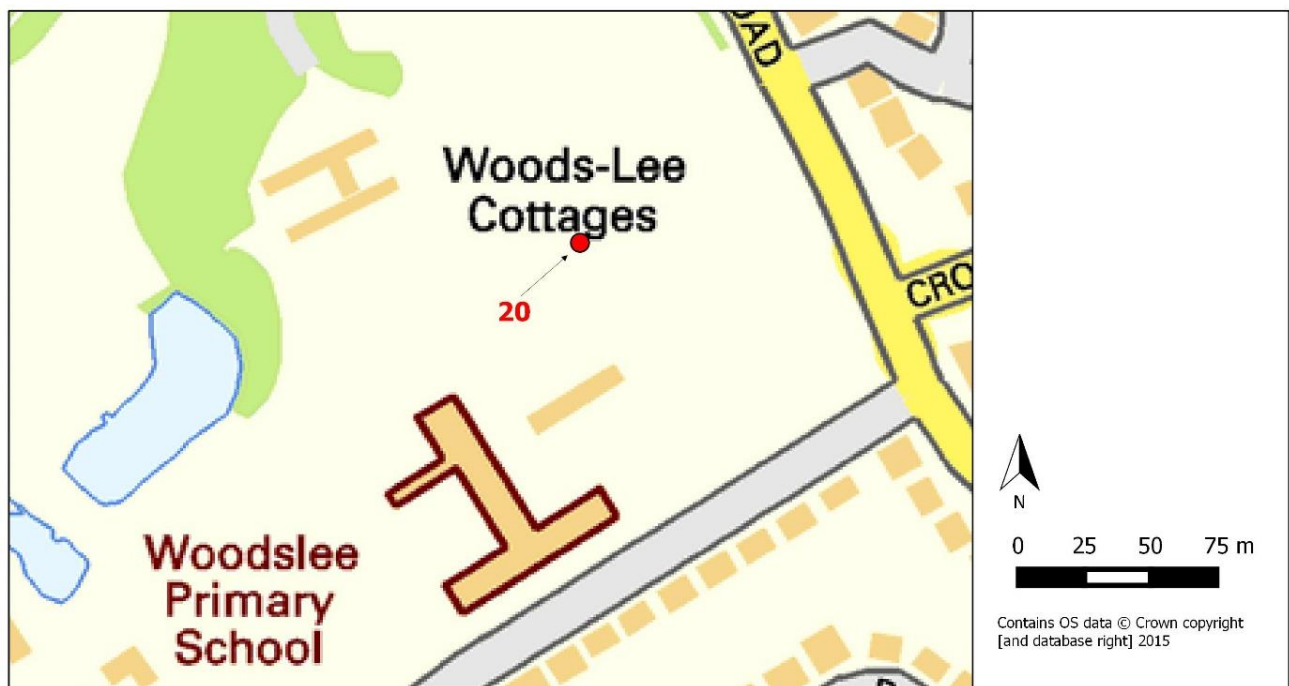


Figure 41: Location of Test Pit 20

Test Pit 20 was half-sectioned at 0.31m and excavated to a depth of 0.41m in the south side. The topsoil (2001) was a loose, reddy-brown silt. In the south west corner a small spread of modern CBM rubble was noted. A small copper-alloy object, SF 2001, was found in (2001) alongside a possible Roman sherd, SF 2003. These were amongst modern material and were clearly in a disturbed context. The subsoil (2002) was a compact, reddy-brown clayey-silt. One small find, SF 2002, a single sherd of Midland Purple ware was noted. Context (2003) was a heavy plastic, reddy-brown clay with no finds noted. The test pit was closed due to the difficulty of excavating and sieving the clay.

Table 22: Summary of bulk find materials excavated from TP20

Context	CBM		Clay Tobacco Pipe		Modern Glass		Modern Glazed Ceramic		Modern Metal		Post-Medieval Glazed Ceramic		Slag		Unglazed Ceramic	
	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
2001	1	25	2	5	7	22	22	47	3	553	6	30	8	113	2	5
2002			1	1	3	16	8	17			3	10				

7.1.21. Test Pit 21

Test Pit 21 was located on a public green, centroid: 334696 382617. This test pit was the southern test pit of two excavated on the green.

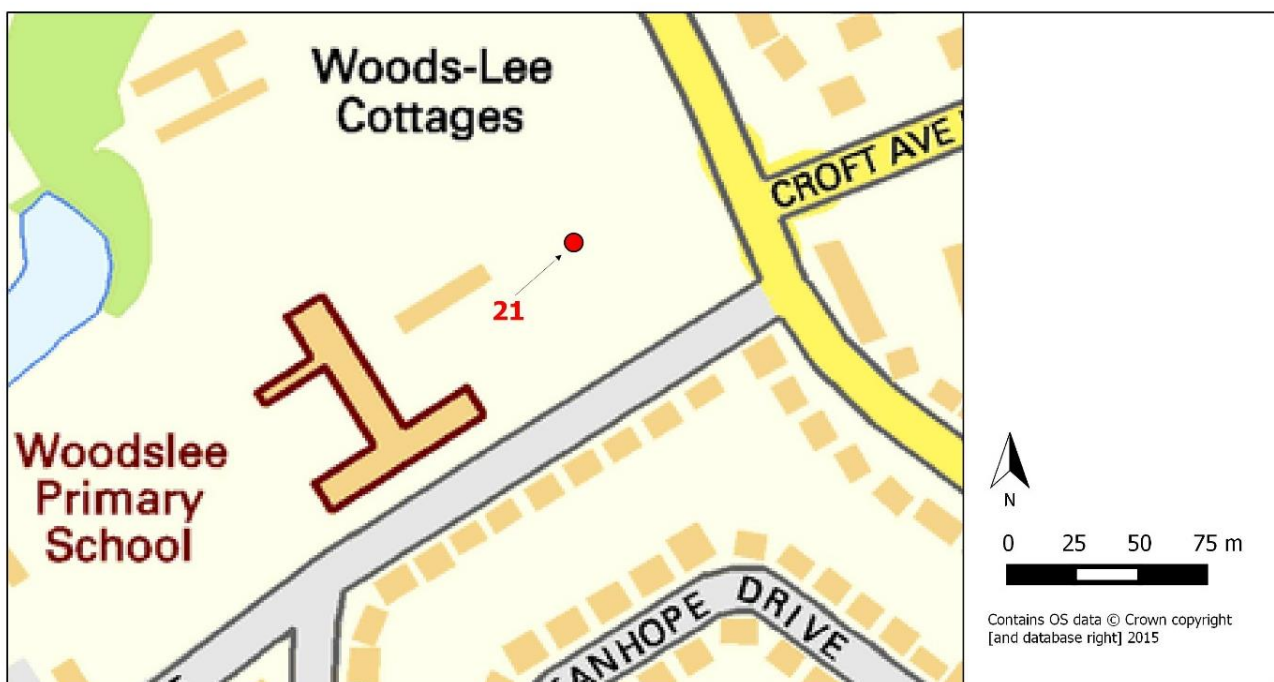


Figure 42: Location of Test Pit 21

Test Pit 21 was half-sectioned at 0.42m and excavated to a depth 0.65m on its western side, where it appeared sterile. No small finds were discovered and only limited bulk finds were unearthed within the test pit, all appeared Victorian or modern with the exception of three abraded clay tobacco pipe fragments, which were 17th century in date. The topsoil was a compacted, mid greyey-brown silt with sandstone inclusions, notably different to Test Pit 20 located to the north. The subsoil was a compacted, yellowy-brown sandy/clay-silt with minimal finds. Whilst Test Pit 20 and 21 were located on an open green area, the difference in the composition of the soil layers suggests that this area may have had more discreet uses in the past.

Table 23: Summary of bulk find materials excavated from TP21

Context	Clay Tobacco Pipe		Modern Glass		Modern Glazed Ceramic		Modern Metal		Plastic		Post-Medieval Glazed Ceramic	
	No	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
2101	2	1	5	12	4	3	2	69	1	1	2	10
2102	1	1	5	7			1	41			2	2

Test Pit 22

Test Pit 22 was located at Meadowcroft Community Wellbeing Hub, 304 Spital Road, CH62 2DE, centroid: 334951 382395.

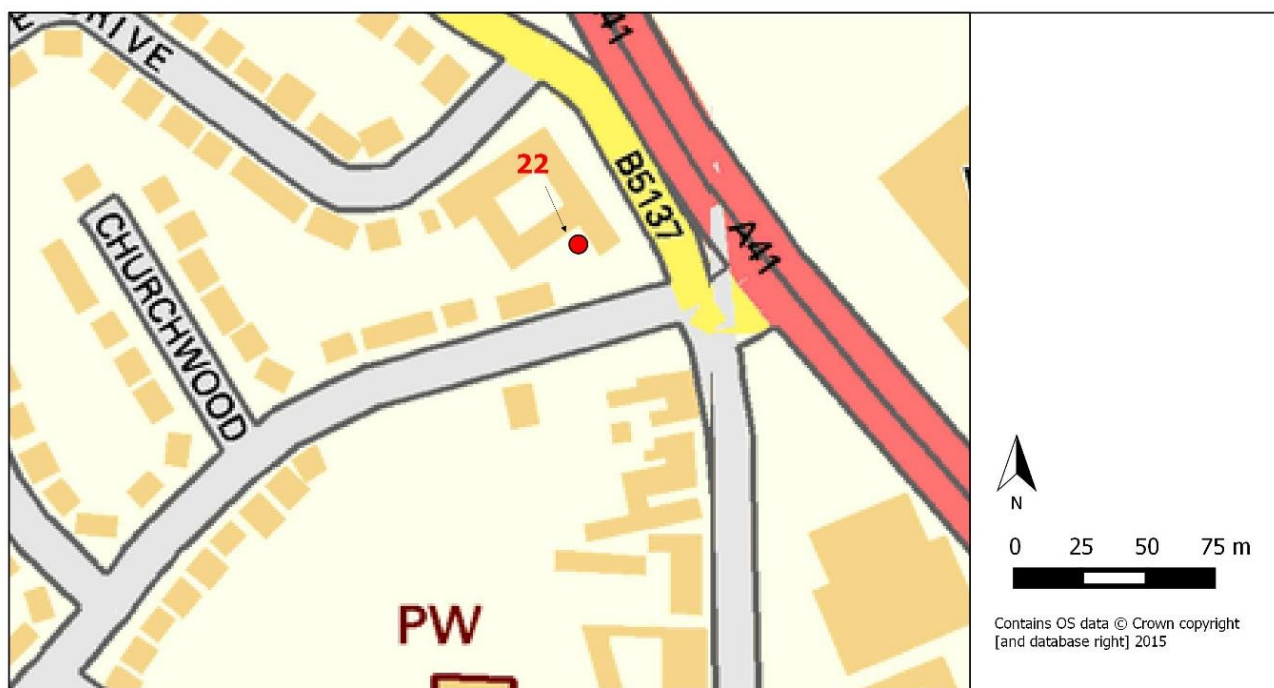


Figure 43: Location of Test Pit 22

Test Pit 22 was excavated to a final depth of 0.53m and closed due to time restrictions. The test pit was largely comprised of rubble in the form of sandstone rocks, brick and mortar. These deposits are from a demolition layer. The associated material was primarily modern, suggesting that the demolition event occurred within the last 100 years. The topsoil (2201) consisted of compact, mid brown sandy-silt. The subsoil (2202) was a hard, mid pinkish-red sandy-silt. Context (2203) was the rubble layer, containing mortar, slate and brick fragments in a compacted, mid reddy-brown sandy-silt matrix. Below the rubble layer was a compacted surface (2204), comprised mainly of sandstone fragments in the same matrix noted in (2203). The depth of the surface was not established due to time constraints.

Table 24: Summary of bulk find materials excavated from TP22

Context	CBM		Clay Tobacco Pipe		Modern Glass		Modern Glazed Ceramic		Modern Metal		Post-Medieval Glazed Ceramic		Slag		Unglazed Ceramic	
	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
2201	12	301			16	35	12	29	7	308	11	84	1	2	3	8
2202	1	333	2	3	7	26	2	8	5	30	1	29				
2203											3	37				

7.1.22. Test Pit 23

Test Pit 23 was located at Meadowcroft Community Wellbeing Hub, CH3 2DE, centroid: 334975 382394.

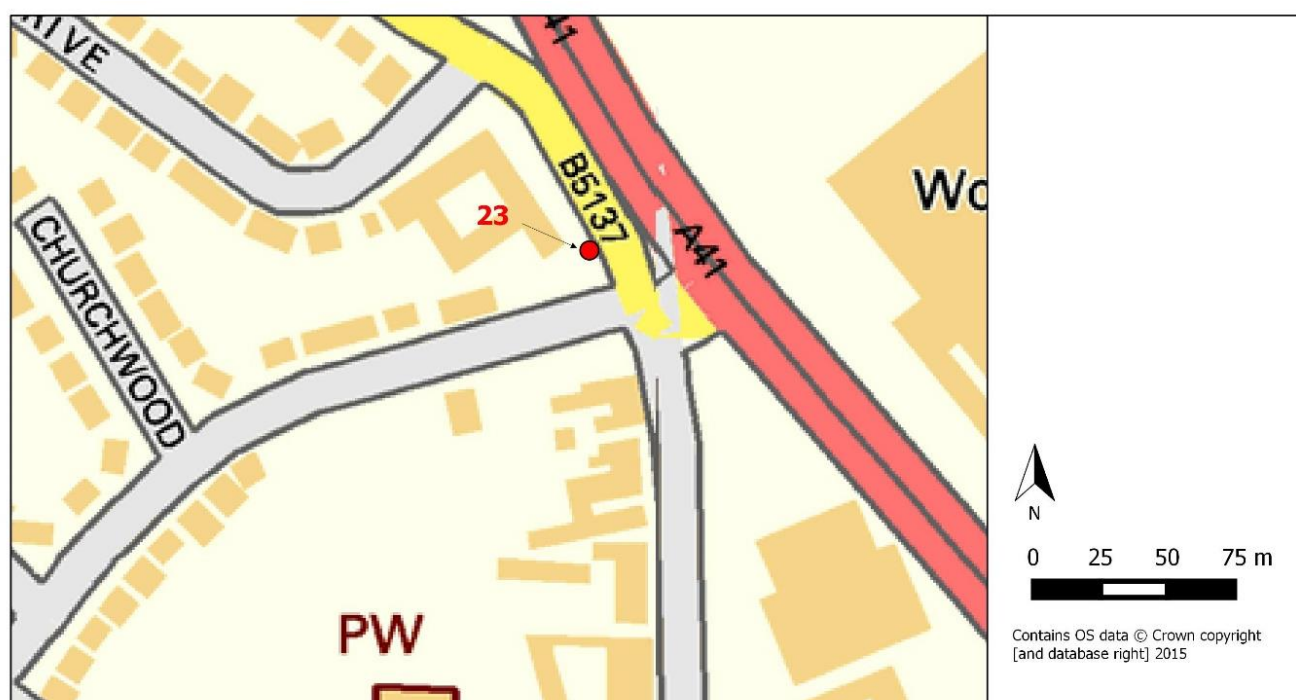


Figure 44: Location of Test Pit 23

This test pit was 2x0.5m² in order to take in the profile of a mound on the boundary of the property (abutting Stanhope House to the south). It was excavated to 0.75m where natural was found. The topsoil (2301) consisted of firm, mid brown silt with angular stone inclusions. In context (2301) various pieces of Victorian and modern material were unearthed. Amongst this modern material was a large, crisp fragment of 13th century jar rim, SF 2301 (see Figure 45). A small collection of stone was



Figure 45: 13th century pottery sherds - SF 2301

noted in the north east corner of the trench. The subsoil (2302) was a firm, reddy-brown silt with charcoal flecks noted throughout. Context (2303) was a compact reddy-brown silt with stone and sandstone inclusions that could be evidence of rubble. However, no other material associated with structures was recovered from this layer and it maybe a natural accumulation, possibly a glacial deposit. Context (2304) was comprised of a stoney layer with a firm reddy-yellow, silt matrix. No finds were located in this context, suggesting that it is largely undisturbed. Without further exploration, it is difficult to establish if the stone spread encountered in (2303) and (2304) is natural or anthropogenic but its presence accounts for the mound like feature on the properties south east boundary.

Table 25: Summary of bulk find materials excavated from TP23

Context	Animal Bone		CBM		Clay Tobacco Pipe		Modern Glass		Modern Glazed Ceramic		Modern Metal		Plastic		Post-Medieval Glazed Ceramic		Slag		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
2301			4	125			46	93	10	13	8	129	5	1			13	42	1	3
2302	1	3			1	2	17	48	14	35	2	28			8	86	35	92		
2303									1	1							20	91		

7.1.23. Test Pit 24

Test Pit 24 was one of two test pits (southern) opened within the garden of The Bromborough public house, CH62 7ES, centroid: 334937 382292.

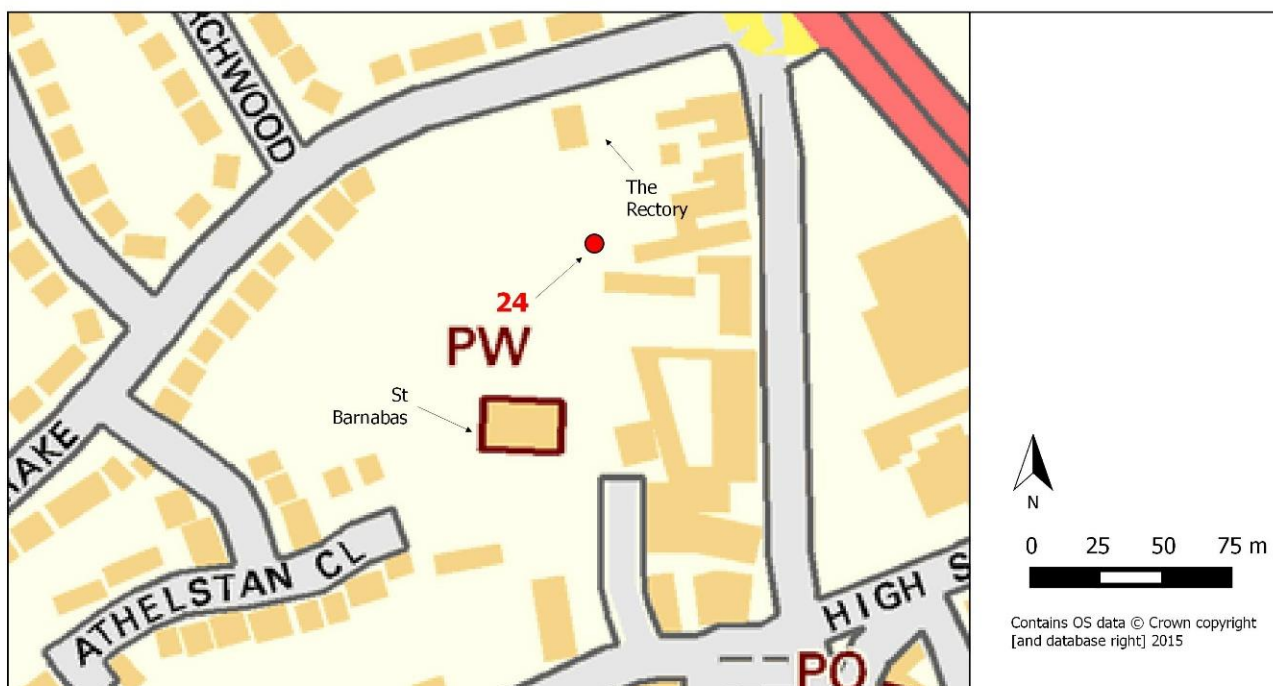


Figure 46: Location of Test Pit 24



Figure 47: 14th -15th century coarse Coal Measure fabric (Ewloe-type ware) – SF 2401

Test Pit 24 was half-sectioned at 0.76m and excavated to a depth of 0.96m on its western side. The topsoil was a loose, mid-brown silt containing a large quantity of modern material. One small find was recovered, SF 2401, which was a sherd of Ewloe-type ware (see Figure 47). The subsoil (2404) was a firm, reddish-brown clayey-silt with very few finds noted. An ash pit had been cut [2403] into this context, some 0.16m in diameter, filled by a loose, blackish-grey ash/silt deposit (2402). Context (2405) was a firm, reddish-brown sandy-clay deposit, situated above (2406), which was a sand layer noted for its sandstone fragments at the base of the trench. A large assemblage of clay pipe was recovered from context (2401) and (2404) dating from the late 18th –

early 20th century. The increased frequency of clay pipe is likely accounted for by the presence of a hotel/public house on the site since 1822. Recreational tobacco use in such locations was not uncommon.

Table 26: Summary of bulk find materials excavated from TP24

Context	CBM		Clay Tobacco Pipe		Modern Glass		Modern Glazed Ceramic		Modern Metal		Post-Medieval Glazed Ceramic		Unglazed Ceramic	
	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
2401	4	116	20	34	24	102	102	309	32	588	24	207	3	22
2404			3	7			9	12						
2405					1	2			1	3	1	1		

7.1.24. Test Pit 25

Test Pit 25 was the second of two test pits (northern) opened within the pub garden of The Bromborough public house, CH62 7ES, centroid: 334933 382307.

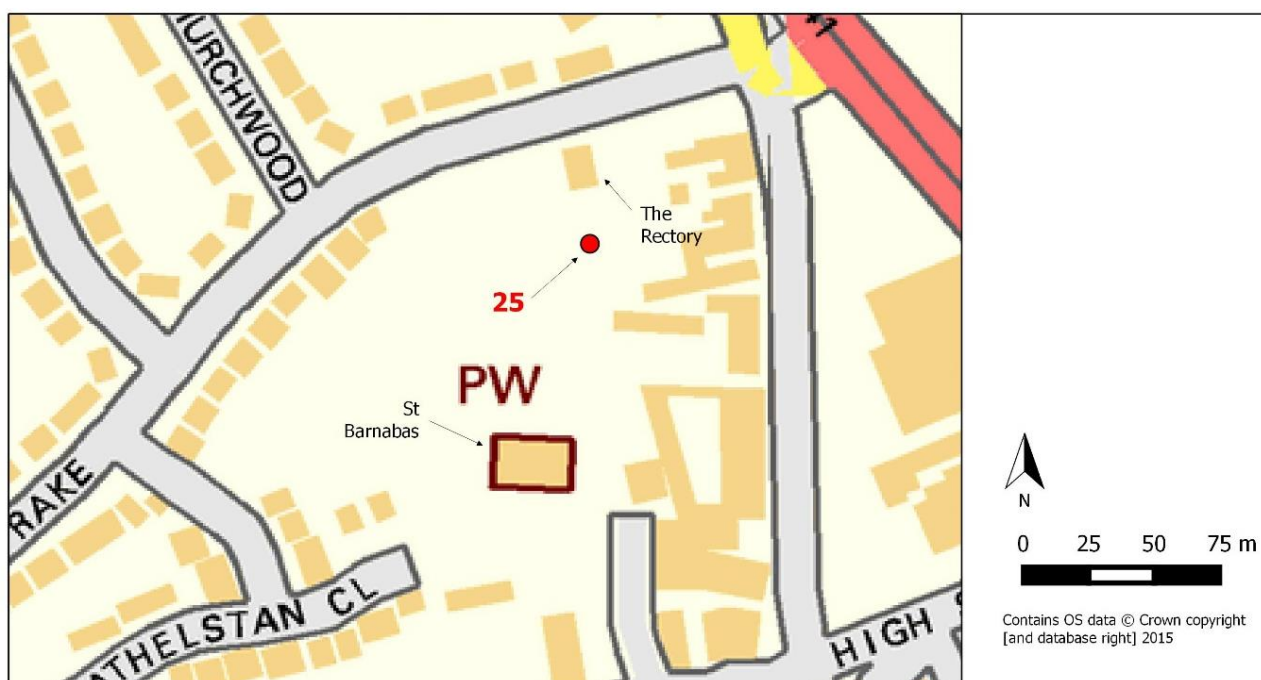


Figure 48: Location of Test Pit 25

Test Pit 25 was half-sectioned at 0.5m and excavated to a depth of 0.8m on the south side. The topsoil (2501) was a friable light brown sandy-silt overlaying the subsoil (2502), which was friable, greyey-brown sandy-silt. Charcoal and rounded sandstone fragments, 1-5cm in size, were noted as

inclusions. One notable find was recovered from this context; a sherd of 13-14th century Courseware, SF 2501. This was residual as it was situated in a context above more modern finds. At a depth of 0.32m-0.41m, a compacted surface (2503) was encountered, interpreted as a possible outhouse-type footing or yard surface. The compacted surface was composed of angular sandstone blocks, 5-15cm in size, with a compacted, mid greyey-brown sandy-silt matrix. Within this surface was a large rectangular sandstone block (see Figure 49). No buildings are noted on the earliest OS map. However, the Tithe Map from 1840 (Pilkington 1840) notes an outbuilding with yard in this area. The compacted surface may be the remnants of this. Both (2502) and (2503) sit on top of (2504). Note: (2502) abuts (2503) on the southside. (2504) is soft, mid brownny-orange silt deposit, which the footing has seemingly been cut into. Like Test Pit 24, a large collection of clay tobacco pipes was recovered from this test pit, dating from the late 18th to early 20th century, which likely relates to the sites use as a public house since 1822 (see Test Pit 24 for further discussion).



Figure 49: Large sandstone block within a compacted surface

Table 27: Summary of bulk find materials excavated from TP25

Context	Animal Bone		CBM		Clay Tobacco Pipe		Modern Glass		Modern Glazed Ceramic		Modern Metal		Post-Medieval Glazed Ceramic		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
2501	5	7			8	17	17	134	54	184	40	281	5	32	5	26
2502	2	4	1	9	11	20	48	110	82	178	43	551	17	377	14	61

7.1.25. Test Pit 26

Test Pit 26 was located at Meadowcroft Community Wellbeing Hub, CH3 2DE, centroid: 334910 382392.

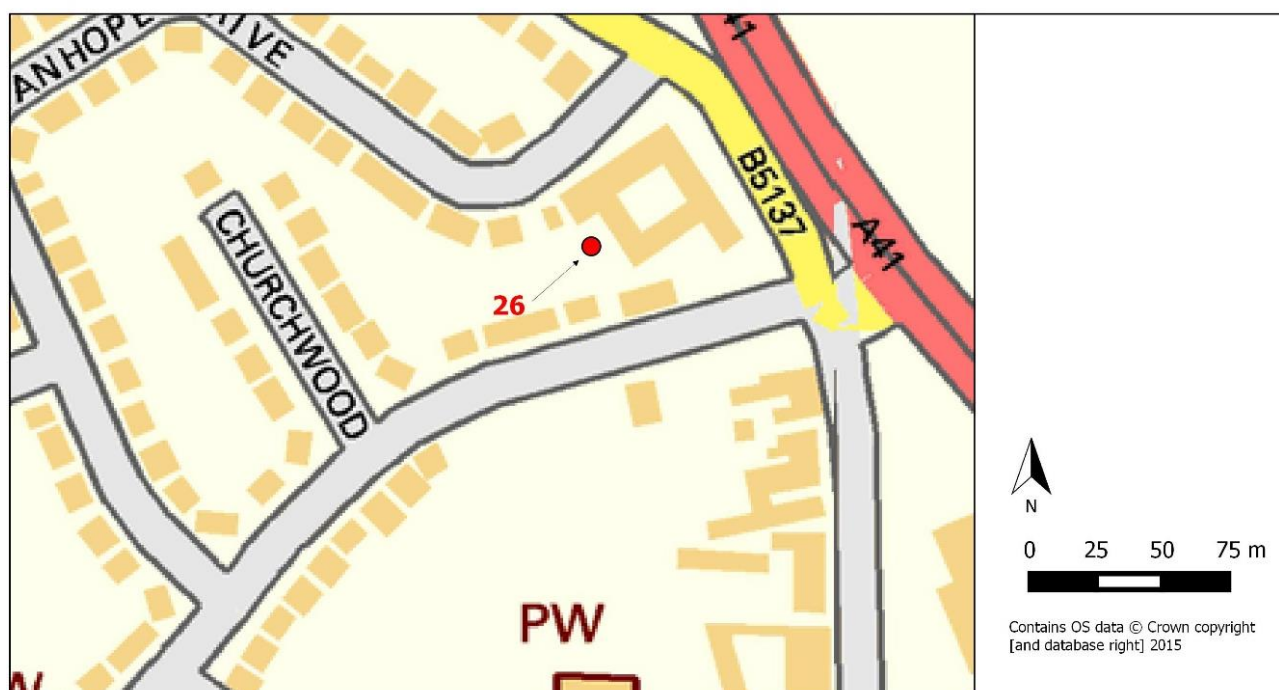


Figure 50: Location of Test Pit 26

Test Pit 26 was half-sectioned at 0.9m depth and excavated to 1.0m on the northern side. The topsoil (2601) consisted of a firm, greyish-brown silty-clay. The subsoil was a friable, greyish-brown silt. Context (2603) was a friable, reddy-brown silt with discreet dumps of burning noted. Contexts (2601), (2602) and (2603) produced large quantities of glass and modern material. These three contexts appeared heavily disturbed and suggested modern demolition, possibly part of the same event evident in Test Pit 22. Context (2604) was a friable, reddy-brown silt with sandstone fragment inclusions. Within this context there were far fewer bulk finds and the remnants of a large Buckley

Ware vessel, which indicates that this context was not disturbed by the later activity witnessed in the previous contexts.

Table 28: Summary of bulk find materials excavated from TP26

Context	Animal Bone		CBM		Clay Tobacco Pipe		Modern Glass		Modern Glazed Ceramic		Modern Metal		Plastic		Post-Medieval Glazed Ceramic		Slag		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
2601					2	4	65	175	51	227	7	173			8	36	11	57		
2602	1	1	37	3	1	1	40	305	14	58	8	304	3	4	4	142	1	9	1	5
2603					3	4	46	197	14	49					4	142			4	17
2604			3	54	1	8	2	3			13	267	1	4	16	1267	1	17		

7.1.26. Test Pit 27

Test Pit 27 was located in the churchyard extension of St Barnabas, centroid: 334885 382201.

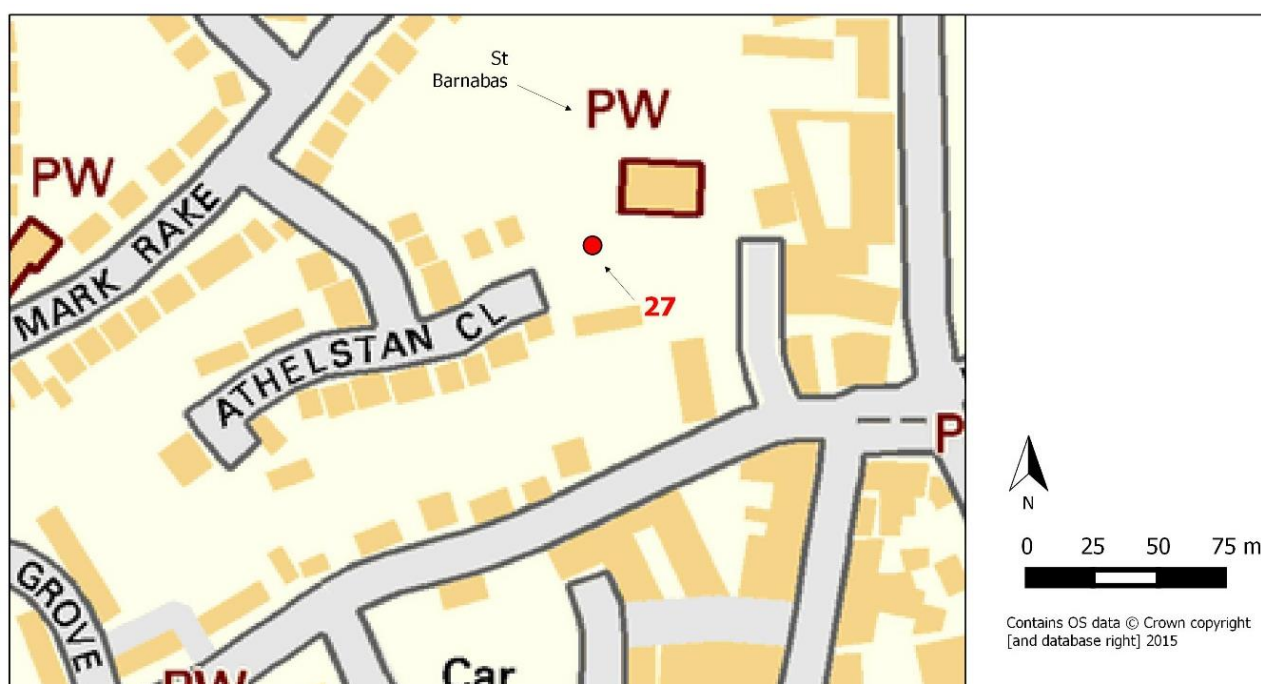


Figure 51: Location of Test Pit 27

This was a 1x2.5m² test pit, which was quarter-sectioned at 0.68m, as the area appeared to be a 1980's rubbish pit based on expiry dates on several food packages. It was excavated to a depth of 1.3m. The topsoil (2701) was a loose, greyey-black silt with inclusions of sandstone fragments, probably the result of re-surfacing the area when the land was acquired by the church as an extension

of the churchyard. Context (2702) was a rubbish pit with evidence for burning, dating to the 1980's, probably associated with the Scout Hut to the south. A sherd of Roman Cheshire Plains ware was found in this context, SF 2701, which must be residual, as it was mixed with modern material. In the north east corner a dump of clay and stone (2703) was noted, which partly sat above (2702). Context (2704) was a firm, reddy-brown clayey-silt with minimal material culture that sat below (2702) and abutted (2705), covering the northern half of the trench. (2705) was an earlier rubbish deposit, which was not sieved for health and safety reasons. However, drink can confirmed that this was also from the 1980's. Below (2704) and (2705) a cut [2706] and fill (2707) were noted. This feature ran E-W and was a post-medieval field drain (2707) filled with a firm, browny-red silty-clay. The cut was not fully exposed, due to the presence of an *in situ* ceramic drainage pipe. The trench was closed at this point, to prevent damage to the drainage system.

Table 29: Summary of bulk find materials excavated from TP27

Context	Animal Bone		CBM		Clay Tobacco Pipe		Modern Glass		Modern Glazed Ceramic		Modern Metal		Plastic		Post-Medieval Glazed Ceramic		Slag		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
2701			4	66	1	4	205	1402	27	140	15	842	8	7	3	30	7	20	9	54
2702	248	17	4	63			67	502	16	53	18	113	3	5	4	20	1	9	24	227
2703																			4	21
2704	1	1	2	111			3	6											2	6

7.1.27. Test Pit 28

Test Pit 28 was located in the south-west corner of the 'Recreational Gardens' at centroid: 334424 381985.



Figure 52: Location of Test Pit 28

Test Pit 28 was excavated to a depth of 0.70m and closed due to time constraints. The test pit did not reach natural. This test pit was located within a Victorian midden deposit and produced a considerable collection of material dating to the turn of the 19th century, such as the only small find SF 2803. This was a local racecourse badge dated to 1905 (see Figure 53).



Figure 53: SF 2803 Hooton Race Course Badge
1905

The field in which the test pit was located was once covered by marl pits, which were known to have been filled periodically with rubbish from the local settlement (Susan Nicholson pers. comm.). It is likely that the material retrieved from this test pit pertains to this type of event. Context (2801) was covered by a layer of turf, which once removed exposed the secondary fill of the probable marl pit. This consisted of a loose, light grey sandy-silt deposit mixed with the midden material. The primary fill (2802) was a loose, mid grey gravelly-silt mixed with midden material (see

Figure 54). The excavation ended at what appeared to be the end of the fill of the pit and it is believed that context (2803) was the probable natural but due to time constraints this could not be proven. This context was a soft, light grey fine-grained silt. The context dipped in a slope toward the north east corner, suggesting the pit was much larger than that uncovered during excavation. It was not clear whether the creation of this pit was for marl extraction or to dump the material noted.



Figure 54: Test Pit 28 - note the midden fill in the west facing section

Table 30: Summary of bulk find materials excavated from TP28

Context	Animal Bone		CBM		Clay Tobacco Pipe		Misc			Modern Glass		Modern Glazed Ceramic		Modern Metal		Plastic		Post-Medieval Glazed Ceramic		Shell		Slag		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Description	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
2801	135	866	4	37			3	2	Bone Object	362	3478	391	5558	167	2364	2	4	23	478	28	22	7	582	29	481
							2	24	Bone Toothbrush																
							1	2	Ceramic Doll Leg																
2802	79	280	5	1684	1	3	6	96	Leather Shoe Fraoments	431	6201	346	5733	326	3330			4	169	33	31	8	233	12	592

7.1.28. Test Pit 29

Test Pit 29 was located to the east of the football pitch in the interior of the 'Recreational Gardens' at centroid: 334492 382029.



Figure 55: Location of Test Pit 29

This test pit was excavated to a depth of 1.18m and closed due to time constraints. The natural was not reached. The topsoil (2901) was a compact, orangey-brown sandy-silt. Below which, a compacted clay surface (2902) with sandstone fragment inclusions was encountered. A small area of the surface appeared to be mortared. Below the compacted surface a loose, reddy-brown silt (2903) was noted. Context (2904) was very similar to the previous context, only differentiated by the inclusion of angular sandstone fragments, 5-10cm in size. Below these contexts, at the full extent of the trench, a rubbish deposit, similar to that discovered in Test Pit 28, was uncovered (2905/2906) but not excavated due to the depth of the context. It is likely that this is part of a midden deposit filling an old marl pit. No small finds were recovered from this test pit.

Table 31: Summary of bulk find materials excavated from TP29

Context	CBM		Misc			Modern Glass		Modern Glazed Ceramic		Modern Metal		Plastic		Post-Medieval Glazed Ceramic		Slag		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	Description	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
2901	4	106				8	16	1	7	3	13	2	1			2	7	9	17
2902	3	577	6	96	Leather Shoe Fragments											8	233		
2903	3	29	1	7	Leather Shoe Fragments	1	1	10	12					5	49	10	56	1	3
2904						4	9	10	13	1	48	1	1	4	13	7	31		
2905	1	152				1	2	2	8	7	20			2	10			1	1
2906	4	287						4	72			1	2						

7.1.29. Test Pit 30

Test Pit 30 was located in the south-east area of the 'Recreational Gardens' at centroid: 334487 381978.



Figure 56: Location of Test Pit 30

Test Pit 30 was excavated to a depth of 0.70m at which point the natural was reached. The topsoil (3001) consisted of a firm, mid brown, sandy-clay. The subsoil (3002) was a firm, reddy-brown clay. At 0.36m it appears that a levelling event may have occurred in this area of the site, as a compacted surface was identified (3003). This consisted of a heavily compacted, dark reddy-brown sandy/silt-clay that may have been used to partially level this area. A thin layer of loose, black, sandy clay mixed

with clinker slag (3004) was noted directly beneath this surface. Context (3005) was sterile, comprising of a compacted, light orangey-brown sandy-clay. Context (3006) was natural consisting of a very loose, light brownish-white, fine grained marl, consistent with the Tithe Map (Pilkington 1940), noting marl pits across the site. No small finds were recovered from this test pit.

Table 32: Summary of bulk find materials excavated from TP30

Context	Animal Bone		CBM		Misc			Modern Glass		Modern Glazed Ceramic		Modern Metal		Plastic		Post-Medieval Glazed Ceramic		Slag		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Description	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
3001	2	65	2	43	1	2	Leather Shoe Fragments	17	31	13	21	3	44			2	49			19	170
3002					1	14	Leather Shoe Fragments	13	135	5	18	6	424	2	10	1	5	1	16	16	74
3003	3	8			1	8	Leather Shoe Fragments	11	67	8	21	4	23	1	1	2	7	5	86	11	79
3006	1	25	5	109				431	6201	4	90	3	74							7	95

7.1.30. Test Pit 31

Test Pit 31 was located in the north-west area of the 'Recreational Gardens' at centroid: 334380 382091.



Figure 57: Location of Test Pit 31

Test Pit 31 was excavated to a depth of 0.56m. A firm, orangey-red clay layer, possibly natural but at this depth unlikely, (3104) was located at 0.37m. This deposit was probably created to level the area.

Above this, a tarmac surface (3102) and the associated levelling material (3103) for a tennis court was uncovered (see Figure 59). This was sealed by loose, mid-grey clayey/sandy-silt (3101). No finds were recovered from this test pit.



Figure 59: Test Pit 31 – note the tarmac surface and levelling material

7.1.31. Test Pit 32

Test Pit 32 was located at the most northern extent of the 'Recreational Gardens at centroid: 334423 382153.



Figure 60: Location of Test Pit 32

Test Pit 32 was half-sectioned at 0.46m and excavated to a final depth of 0.60m in the northern half, at which point a sterile, pliable, reddish-orange clay with pebble inclusions was reached (3203) and excavation concluded due to time constraints. The topsoil (3201) was comprised of a firm, mid brownish-orange sandy-clay, followed by a firm, orangey-brown sandy-clay subsoil with a higher water content. The test pit was largely clear of material except a small assemblage of bulk finds from the topsoil (3201) and one sherd of Midland Purple ware SF 3201.

Table 33: Summary of bulk find materials excavated from TP32

Context	Modern Glass		Modern Glazed Ceramic		Modern Metal		Post-Medieval Glazed Ceramic		Slag		Unglazed Ceramic	
	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
3201	4	9	9	30	2	11	1	3	1	33	1	65

7.1.32. Test Pit 33

Test Pit 33 was located centrally within the 'Recreational Grounds' at centroid: 334448 382054.

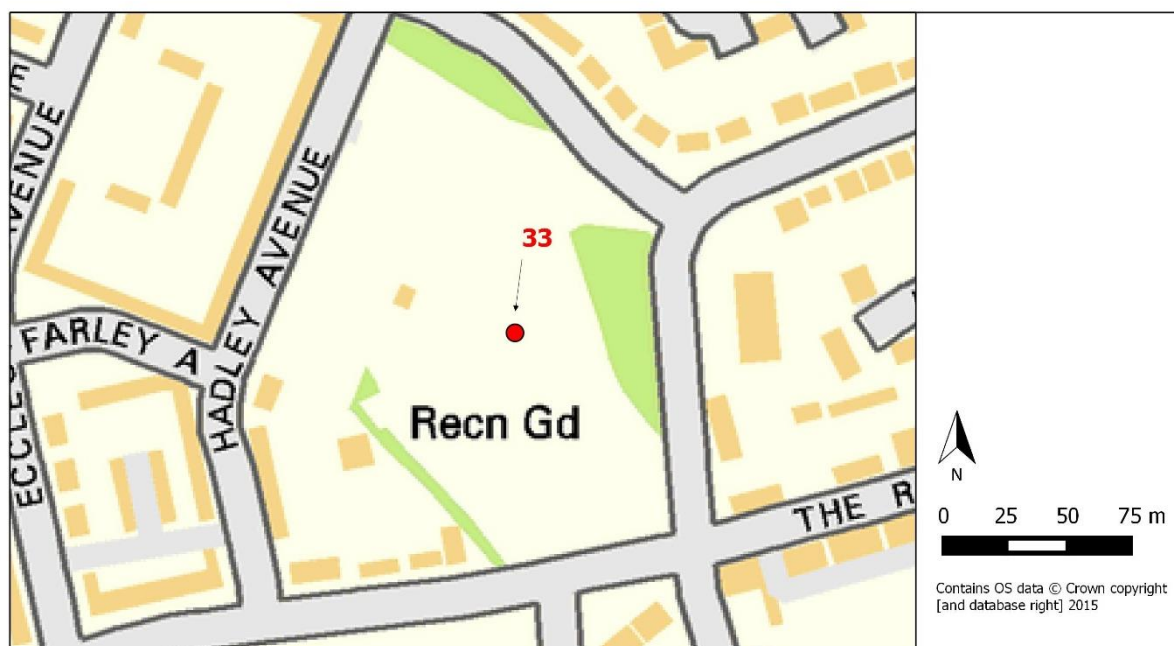


Figure 61: Location of Test Pit 33

Test Pit 33 was half-sectioned at 0.23m and quarter sectioned at 0.46m. Maximum depth was 1.07m in the north west quadrant. The topsoil (3301) consisted of a loose, dark reddy-brown sandy-silt. Context (3302) was a compacted, reddy-brown clay topsoil. A further clay lens was noted below this (3304), sealing another midden deposit (3303). Excavation was concluded without excavating the midden deposit. Like Test Pit 29, this was covered by a levelling or sealing event (3302/3304). Comparable activity in Test Pit 28, Test Pit 29 and Test Pit 33 suggests that this whole area was dotted with marl pits and subsequently backfilled with Victorian rubbish. No small finds were recovered from this test pit.

Table 35: Summary of bulk find materials excavated from TP33

Context	Animal Bone		CBM		Clay Tobacco Pipe		Modern Glass		Modern Glazed Ceramic		Modern Metal		Shell		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
3302	9	77					95	370	65	326	167	2364	2	1	4	42
3303	5	45	2	182	2	1			6	607			1	1		

7.1.33. Test Pit 34

Test Pit 34 was 2x1m² in size on a north to south alignment. It was located in the grounds of Stanhope House, a seventeenth century structure. Excavation took place to the east of the structure in the lawned area of the garden at centroid: 334976 382386.

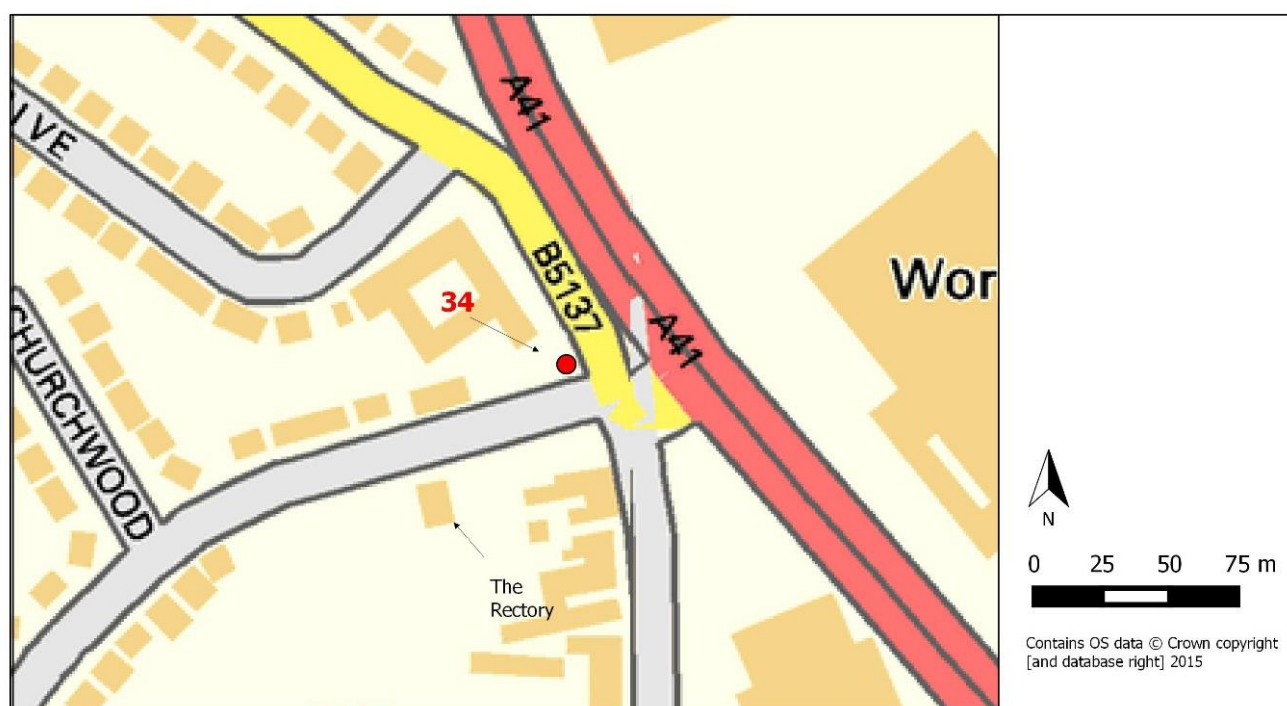


Figure 62: Location of Test Pit 34

Test Pit 34 was half-sectioned at 0.8m due to time constraints. Excavation continued in the northern half to a depth of 1.12cm at which point the deposits turned sterile. The test pit was closed due to time constraints and it was, therefore, not possible to confirm if the natural had been reached. The topsoil (3401) was a loose, mid orangey-brown silt with coal and angular sandstone fragment inclusions. Within the topsoil a fragment of Roman White Ware was recovered, SF 3401 (see Figure 63), a sherd of Midland Purple ware, SF 3405, and a sherd of Cistercian ware, SF 3406. The subsoil (3402) consisted of a loose, mid orangey-brown silt with rounded sandstone and angular sandstone fragments, 1-10cm in size. Whilst the matrix was comparable in (3401) and (3402) the inclusions were notably different. A 13th-14th century glazed jug handle was retrieved, SF 3403 (see Figure 63), and second sherd of Cistercian ware, SF 3402, was recovered. Both contexts (3401) (3402) were mixed with high levels of post-medieval material, which pertains to the period in which Stanhope House was erected. Context (3403) was a loose, mid orangey-red silty-sand with a high percentage of angular sandstone fragments, 5-30cm in size, and large quantities of degraded sandstone. No

material culture was recovered from this context but there was a small quantity of charcoal, indicating that the context was not natural. Context (3404) was left unexcavated. It appeared as a loosely compacted, mid creamy-yellow sand. This was possibly a natural deposit. Based on the ceramic assemblage the site possibly had a marginal use in the Roman period and was then seemingly abandoned until the medieval period. At which point it once again developed a marginal use until the 17th century, after which it may have been occupied, and remained so until the present day.



Figure 63: SF 3401 Roman White ware and SF 3403 13th-14th century glazed jug handle

Table 36: Summary of bulk find materials excavated from TP34

Context	Animal Bone		CBM		Clay Tobacco Pipe		Misc			Modern Glass		Modern Glazed Ceramic		Modern Metal		Post-Medieval Glazed Ceramic		Slag		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Description	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
3401	1	9	3	13	1	1	1	10	Pb Object	20	31	18	57	9	89	13	61	1	4	4	4
3402			3	5	1	2				9	17	6	14	6	51	12	47	2	12		

7.1.34. Test Pit 35

Test Pit 35 was located in the rear residential garden of 20 Palatine Road, CH62 2DY at centroid: 334475 382188.

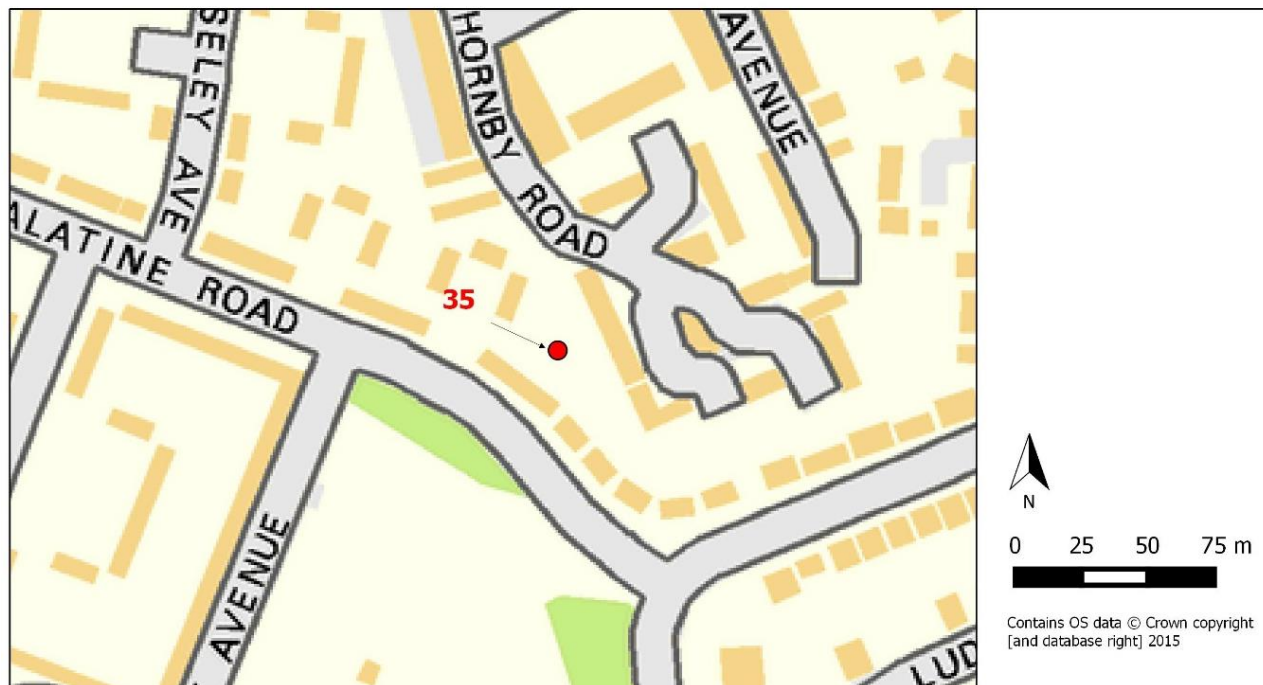


Figure 64: Location of Test Pit 35

Test Pit 35 was half-sectioned at 0.30m excavated to a depth of 0.6m on the northern side. The topsoil (3501) consisted of a loose, mid grey silt. The subsoil (3402) was a weakly cemented, mid reddish-brown sandy-clay with angular, sandstone inclusions. Context (3503) was a weakly cemented, light greyish-brown, silty-clay with a mixture of small (1-2cm) to large (10-15cm) stones. The final context (3504) was a compact, light greyish-red sandy clay with stone inclusions. Bulk finds were retrieved from the topsoil and subsoil, varying from post-medieval to modern, typical of assemblages recovered from residential gardens. These were mixed indicating that the ground surface was disturbed. No finds were found in (3503) and (3504) and the test pit was closed due to time constraints. No small finds were retrieved from this test pit.

Table 3: Summary of bulk find materials excavated from TP35

Context	Animal Bone		CBM		Modern Glass		Modern Glazed Ceramic		Modern Metal		Plastic		Post-Medieval Glazed Ceramic		Shell		Slag		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
3501	5	27	18	204	101	384	358	162	13	64	11	12	25	137	1	2	2	12	6	12
3502			1	11	19	48	87	157	3	13	3	3			2	5			3	15

7.1.35. Test Pit 36

Test Pit 36 was located in the rear garden of 107 Mark Rake, CH62 2DL, at centroid: 334680 382134.

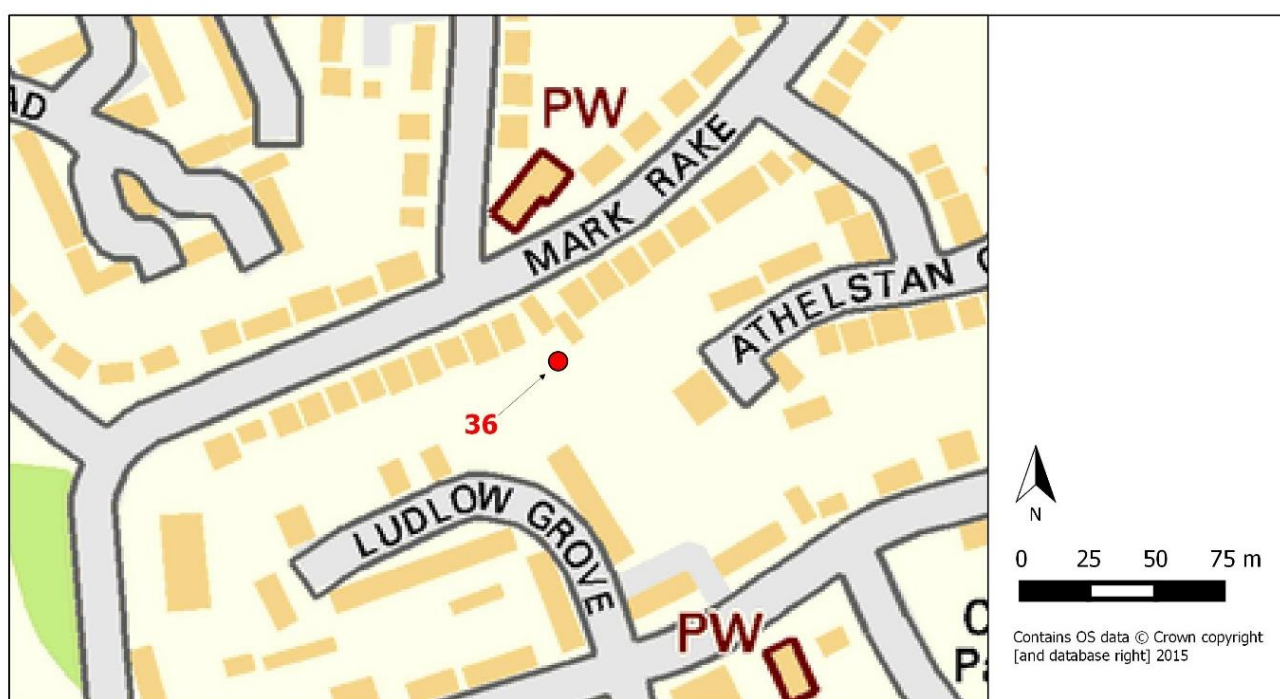


Figure 65: Location of Test Pit 36

Test Pit 36 was half-sectioned at 0.80m and excavated to a depth of 1.0m on the western half. The test pit was closed due to time constraints. The trench was located on a boundary line evident on the 1840 Tithe Map (Pilkington 1840). It is still marked by the division in the gardens and a clear linear depression. The topsoil (3601) consisted of a loose, mid brown loamy-silt with charcoal inclusions, accrued due to the proximity of the hedge line and flower beds. The subsoil was a firm, dark yellowy-orange clay with charcoal and sandstone inclusions. Context (3603) was loose, dark-brown loamy-silt deposit with charcoal and angular sandstone inclusions. Context (3604) was a 0.10m thick, loose, blackish-brown silt matrix largely consisting of burnt rubble ceramic building material, which appears

to have been a dumping event, possibly into the depression of the old field boundary. The following context, (3605), was a lens of pliable, reddy-brown clay. Context (3606) was a loose, browny-black silt with orange clay lenses. Context (3607) was a loose, browny-black silt with yellow clay lenses and charcoal inclusions. This sat above (3608), which was a deposit largely comprised of degraded modern metalwork, charred wood and the occasional fragment of lino, mixed with a loose, dark blacky-brown silt. The material excavated from the entirety of the trench was highly disturbed with lino found at 1.0m. As lino was a mid-20th century invention it is clear that the trench is largely filled with Victorian and modern material. The depth of these deposits suggests that the boundary line was significant in depth and the material was dumped to fill a probable associated ditch feature. Further investigation is required to explore this feature. No small finds were retrieved from this test pit.



Figure 66: Full extent of Test Pit 36. Note the degraded modern metalwork at the bottom of the test pit

Table 38: Summary of bulk find materials excavated from TP36

Context	Animal Bone		CBM		Clay Tobacco Pipe		Misc			Modern Glass		Modern Glazed Ceramic		Modern Metal		Slag		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Description	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
3601	7	10	10	130	2	2	1	20	Pb Off cut	21	41	15	25	8	49	1	8	2	14
3602	7	44								14	19	10	10	8	182	1	19	1	2
3603			1	8						4	17	8	20	1	10	1	1	1	2
3605												1	1						
3607			3	33	1	3				2	5	8	16	162	274	7	72		
3608										2	6								

7.1.36. Test Pit 37

Test Pit 37 was located in the rear garden of 105 Mark Rake, CH62 2DL, at centroid: 334680 382143.

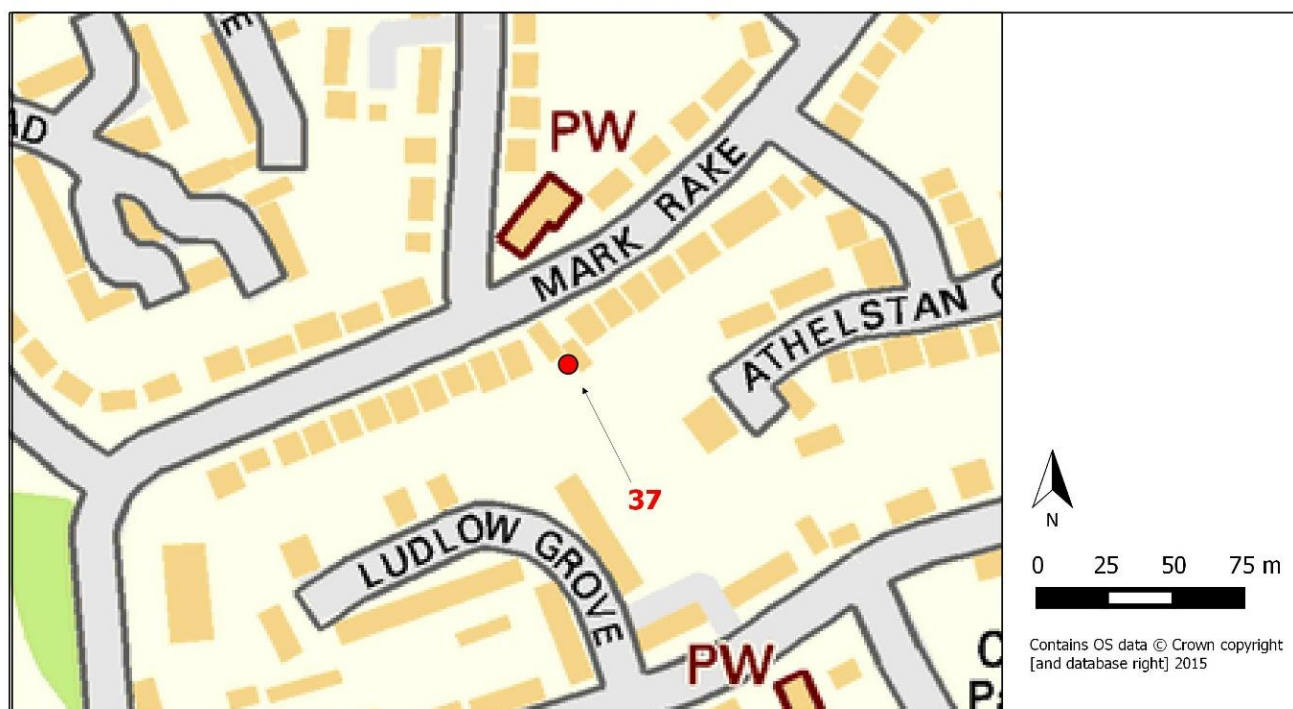


Figure 67: Location of Test Pit 37

Test Pit 37 was excavated to a depth of 0.51m. The topsoil (3701) was a weakly cemented, mid orangey-brown silt with pebble and sandstone inclusions. It produced a variety of post-medieval and modern material, including two pieces of 16th-17th century ceramic, SF 3701 and SF 3702. The subsoil (3702) was a compact, reddy-brown clayey-silt deposit with evidence for leaching. Context (3703) was left unexcavated. It was a weakly cemented, light orangey-grey clay, which appeared to be natural, although this was not proven.

Table 39: Summary of bulk find materials excavated from TP37

Context	Animal Bone		CBM		Clay Tobacco Pipe		Modern Glass		Modern Glazed Ceramic		Modern Metal		Plastic		Post-Medieval Glazed Ceramic		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
3701	1	1	3	7			4	31	4	5	4	35	1	1	3	19	1	12
3702			1	7	1	2												

7.1.37. Test Pit 38

Test Pit 38 was located in the rear garden of 109 Mark Rake, CH62 2DL, at centroid: 334673 382114.

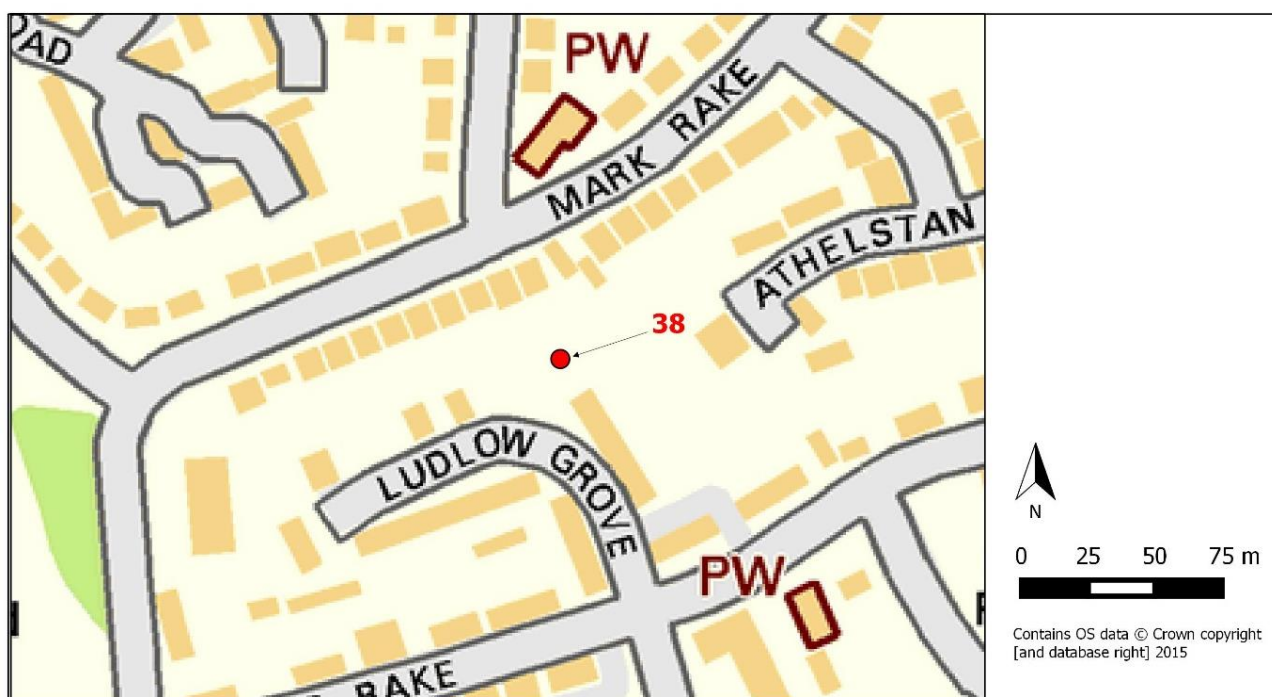


Figure 68: Location of Test Pit 38

Test Pit 38 was excavated to a depth of 0.14m at which point a structure was uncovered and excavation was concluded. This feature appears to be a brick floor surface (3802) and (3803), covered by a mortar spread (3804). The feature was given GROUP NUMBER: 3807 (see Figure 69). Abutting the structure was a weakly cemented, light brownish-grey silty-clay with rounded stone inclusions, 1-3cm in size. No small finds were recovered from this test pit.



Figure 69: Brick and mortar floor surface

Table 40: Summary of bulk find materials excavated from TP38

Context	CBM		Modern Glass		Plastic	
	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
3801	11	354	1	6	1	6

7.1.38. Test Pit 39

Test Pit 39 was located in the lawned garden of Matheson Evangelical Church, CH62 2DA, at centroid: 334685 382190.

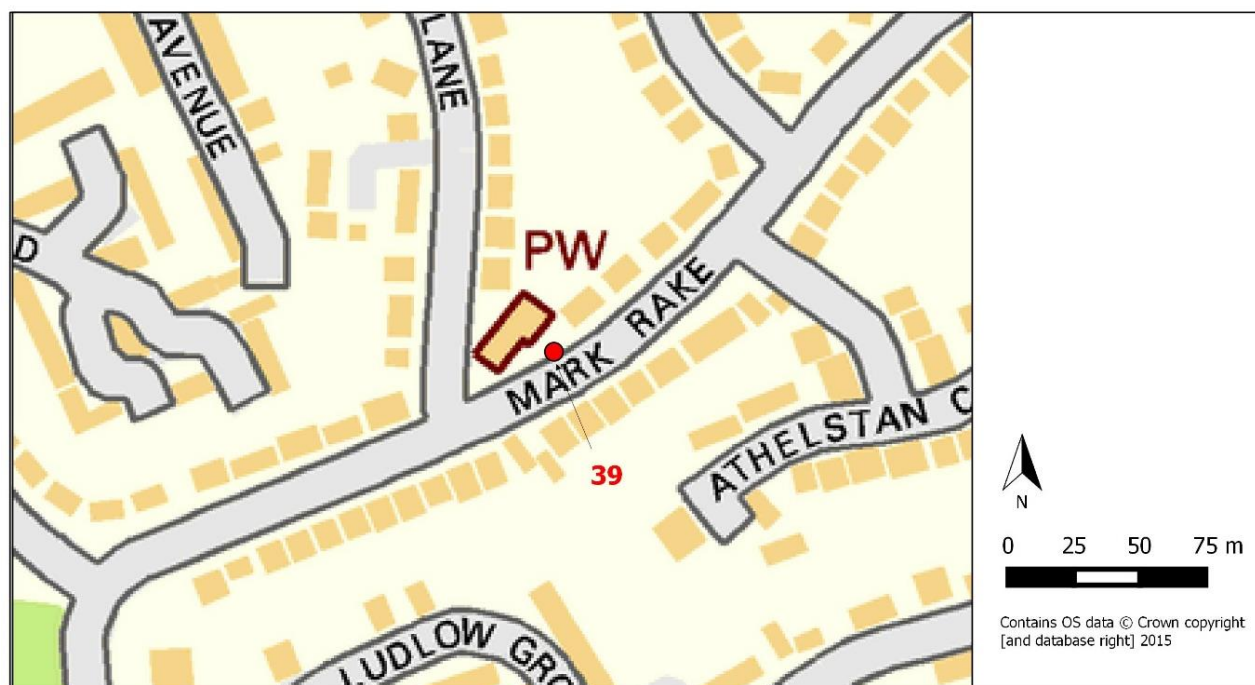


Figure 70: Location of Test Pit 39

Test Pit 39 was half-sectioned at 0.52m and excavated to a final depth of 0.7m in the southern half. The test pit was closed due to time constraints. Removal of the loose, light greyish-grey silt topsoil (3901) revealed a layer (3902) of weakly cemented, mid reddy-brown clayey-silt with a large proportion of ceramic building material largely consisting of modern brick (22x10.5x7.5cm) (see Figure 71). Local residents suggested that this was once the location for a pond that appears to have been backfilled with the CBM being used as part of a levelling/in-filling event. Below (3902), another context was noted but not excavated due to time constraints. Context (3903) was a weakly cemented, mid yellowish-brown sandy-clay with small pebble inclusions ranging from 2-6cm in size. This may be part of the base of the purported pond. No small finds were recovered from this test pit.



Figure 71: Context (3902) – deposit of ceramic building material

Table 41: Summary of bulk find materials excavated from TP39

Context	Animal Bone		CBM		Clay Tobacco Pipe		Modern Glass		Modern Glazed Ceramic		Modern Metal		Plastic		Post-Medieval Glazed Ceramic		Slag		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
3901	1	2	18	1009	1	2	39	191	13	39	1	96			1	7	31	107	2	14
3902	2	4	20	191			3	13	5	26	3	213	2	3	1	7	25	1132	1	2
3903	2	12			1	1	2	4	6	13	4	21					121	308	1	2

7.1.39. Test Pit 40

Test Pit 40 was opened in the rear residential garden of 35 Park View, CH62 7BN, at centroid: 334320 381860.

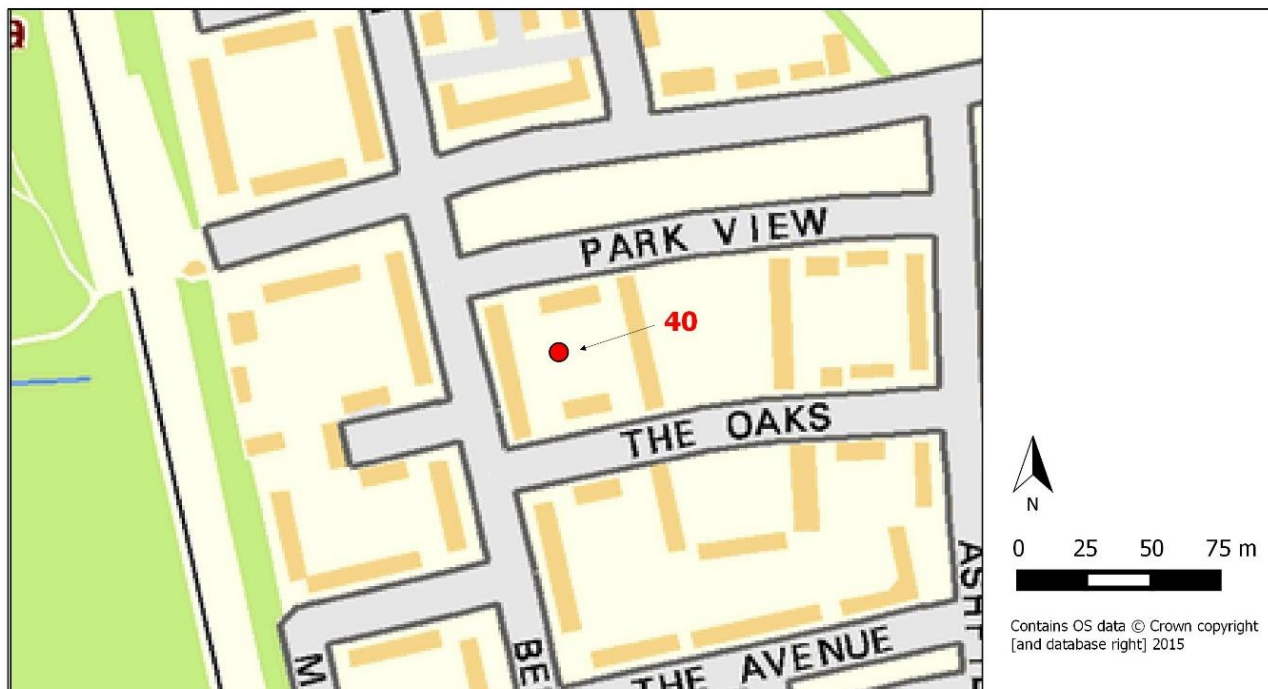


Figure 72: Location of Test Pit 40

Test Pit 40 was half-sectioned at 0.4m and excavated to a final depth of 0.52m in the northern side of the trench. The topsoil (4001) consisted of loose, dark greyish-brown gravelly-silt with small stones, ranging in size from 1-4cm. The subsoil was a weakly cemented, mid reddy-brown, silty-clay with stones ranging in size from 4-8cm. Bulk finds were retrieved from the topsoil and subsoil, largely modern in nature. Context (4003) was firm, mid-yellowish-brown clay with large stone inclusions ranging from 9-11cm in size. The final context was (4004), which was a strongly cemented, mid reddy-brown sandy-clay. This was only excavated to a depth of 0.1m due to time constraints, consequently the full depth is unknown. No finds were found in (4003) and in the first 0.10m of (4004). No small finds were recovered from this test pit.

Table 42: Summary of bulk find materials excavated from TP40

Context	Animal Bone		CBM		Clay Tobacco Pipe		Modern Glass		Modern Glazed Ceramic		Modern Metal		Plastic		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
4001	1	2	2	4	1	1	17	43	13	44	13	72	1	1	3	15
4002							6	14	4	4	4	19				

7.1.40. Test Pit 41

Test Pit 41 was opened in the grounds of Manor House Residential Home, CH62 7JN, at centroid: 334720 382019.

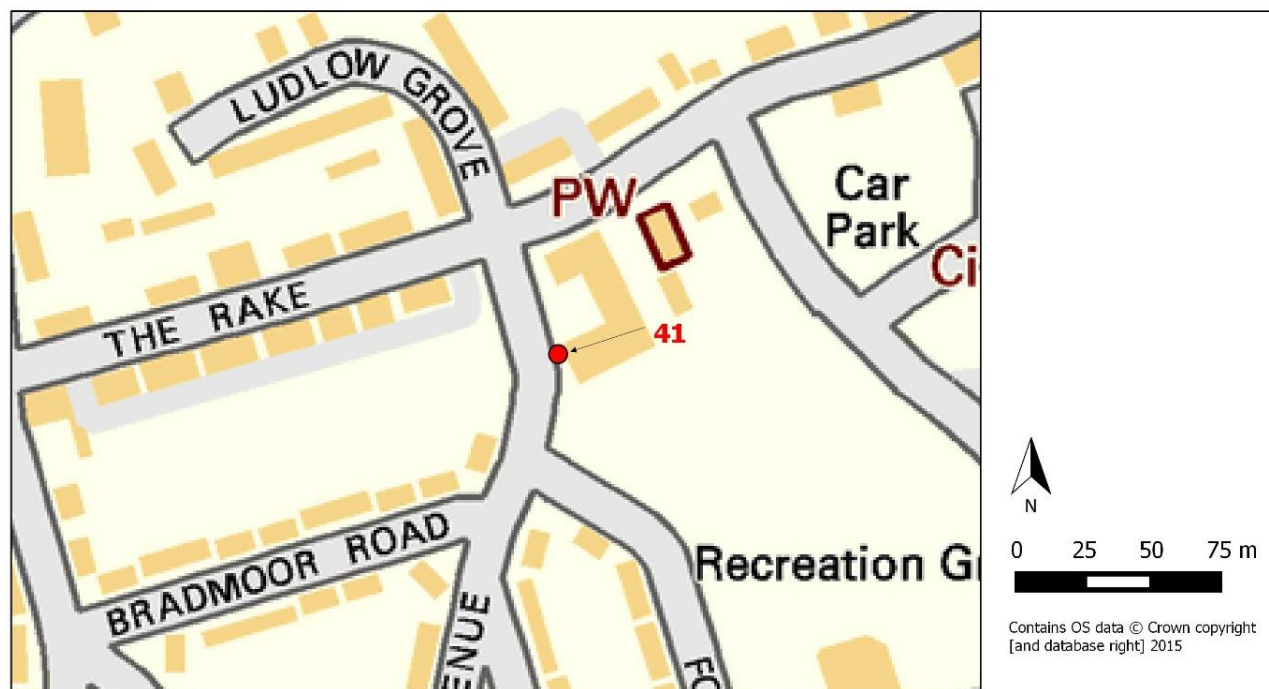


Figure 73: Location of Test Pit 41

Test Pit 41 was half-sectioned at 0.37m and excavated to a final depth of 0.5m in the western side of the trench. It was closed early due to adverse weather conditions. The topsoil (4101) consisted of a weakly cemented, mid brownish-grey clayey-silt with inclusions of stones ranging in size from 4-6cm. The subsoil (4102) was a loose, light greyish-brown silt with large sandstone fragments ranging in size from 6-10cm and lenses of clay throughout. There was a diverse collection of modern material in the topsoil, with a particular concentration of ceramic building material. Context (4103) was a compact, mid reddy-grey gravel-silt with pebbles noted toward the end of the context, likely denoting the interface between (4103) and (4104). This context appeared to be a burnt dumping deposit (4103) based on high levels of melted glass and metal. Context (4104) was an indurated, mid brownish-grey clay with small pebble inclusions ranging from 2-5cm in size. Context (4105) was an indurated, mid orangey-brown clay with small pebble inclusions, 2-5cm in size. The only difference in this deposit and the previous was a slight change in the colour of the clay. Both (4104) and (4105) were sterile and appeared natural. No small finds were recovered from this test pit.

Table 43 Summary of bulk find materials excavated from TP 41

Context	CBM		Modern Glass		Modern Glazed Ceramic		Modern Metal		Plastic		Slag	
	Total	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
4101	41	1648	5	24	7	160	15	243	5	10	4	87
4103	3	21	2	5	21	56	3	68			16	209

7.1.41. Test Pit 42

Test Pit 42 was opened in the grounds of Manor House Residential Home, CH62 7JN, at centroid: 334725 381973.

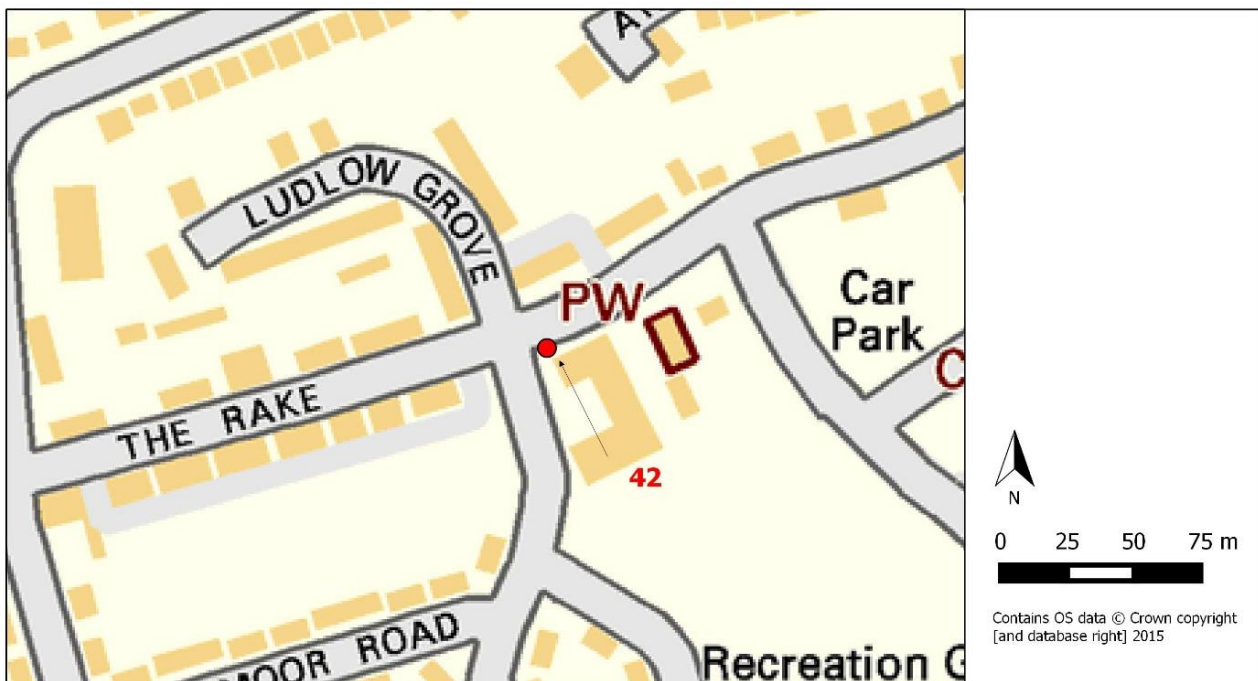


Figure 74: Location of Test Pit 42

Test Pit 42 was excavated to a depth 0.4m and was closed due to adverse weather conditions. The topsoil (4201) consisted of loose, brown-black silt. Within this context two sherds of 1st-2nd century Cheshire Plan Ware, SF 4201, were recovered (see Figure 75). The subsoil (4201) was a loose, greyey-brown clayey-silt. An undulating layer of burnt material was noted across the trench (4203), ranging from 0.02-0.13m in depth. This was a loose, greyish-black gravelly-silt with ash and stone inclusions. Context (4204) was recorded as a silt deposit with clay lenses. (4205) was a firm, dark brown silt with small inclusions of pebbles and gravel. In the north east corner of the trench an area of solid concrete



Figure 75: SF 4201 – 2 sherds of 1st-2nd century Cheshire Plane ware

(4206) was noted sunk into (4205). This find, alongside a number of metal objects indicated that this was the base of a cement post for a metal wire fence. Due to onset of adverse weather conditions the trench had to be closed quickly due to flooding. The contexts contained a mixture of modern and post-medieval material, indicating that they were largely disturbed. This may be in part due to the disused concrete post found in the north east corner (4206).

Table 44: Summary of bulk find materials excavated from TP42

Context	CBM		Modern Glass		Modern Glazed Ceramic		Modern Metal		Plastic		Post-Medieval Glazed Ceramic		Slag		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
4201	3	454	30	41	5	7	3	68			1	3	4	87		
4202	3	119	26	59	9	13	2	7	2	1	1	3			5	21
4203	2	11	8	19	2	1			3	4	1	3	16	209	1	1
4205			1	1	2	5										

7.1.42. Test Pit 43

Test Pit 43 was the second test pit to be located in the grounds of Stanhope House, a seventeenth century structure. Excavation took place next to the eastern side of the building at centroid: 334940 382382.

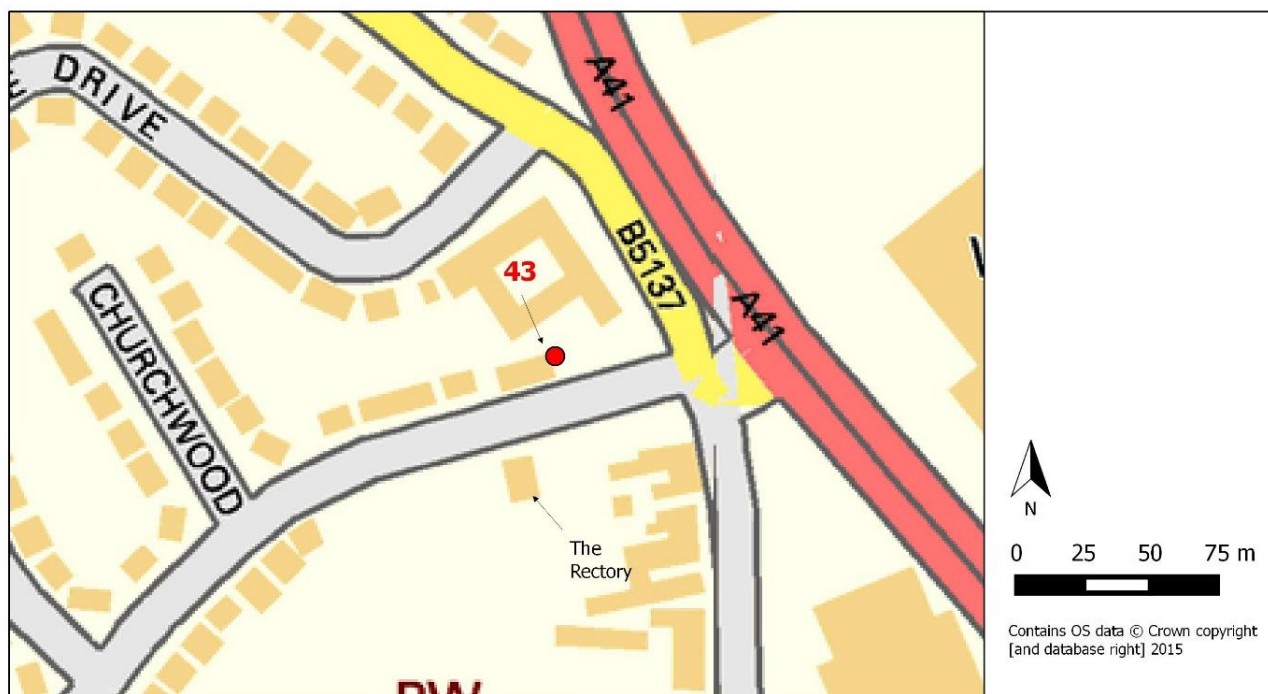


Figure 76: Location of Test Pit 43



Figure 77: SF 4301 - painted window glass

Test Pit 43 was situated next to the exterior eastern wall of Stanhope House. Excavation concluded at 0.4m when a flagged surface was uncovered (4303) (See Figures 78 and 79). The topsoil consisted of loose, mid greyish-brown silt, below which was a loose, light reddish-brown gravelly-silt mixed with mortar and plaster. This was directly over the flagged surface and amongst the cracks of the masonry. This flagged surface had a potential brick wall mortared to the surface, running N-S on the eastern side. Several fragments of possible painted wall plaster, SF 4302 and SF 4303, and several fragments of painted window glass, SF 4301 and SF 4304, were recovered (see Figure 77). The plaster and window glass likely pertain to the building and were discarded when it fell into disrepair in the early 20th century (Bromborough Society, 2000).



Figure 78: Flagged surface (4303) next to eastern exterior wall of Stanhope House

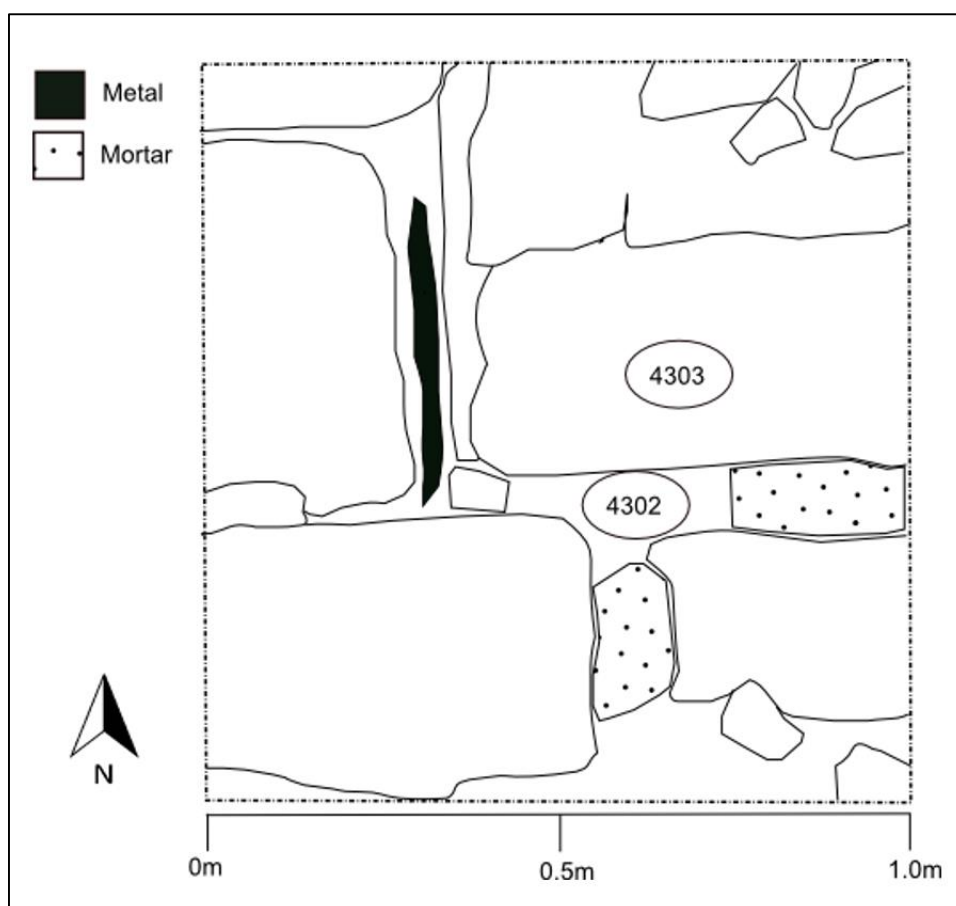


Figure 79: Drawing 002 – Test Pit 43

Table 45: Summary of bulk find materials excavated from TP43

Context	Animal Bone		CBM		Modern Glass		Modern Glazed Ceramic		Modern Metal		Post-Medieval Glazed Ceramic		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
4301	2	6	2	13	24	38	5	14	10	210	7	117	5	21
4302			6	114	23	79	3	2	9	84	2	3	5	78

7.1.43. Test Pit 44

Test Pit 44 was located in the rear residential garden of 21 Churchwood Close, CH62 2DS, at centroid: 334741 382409.

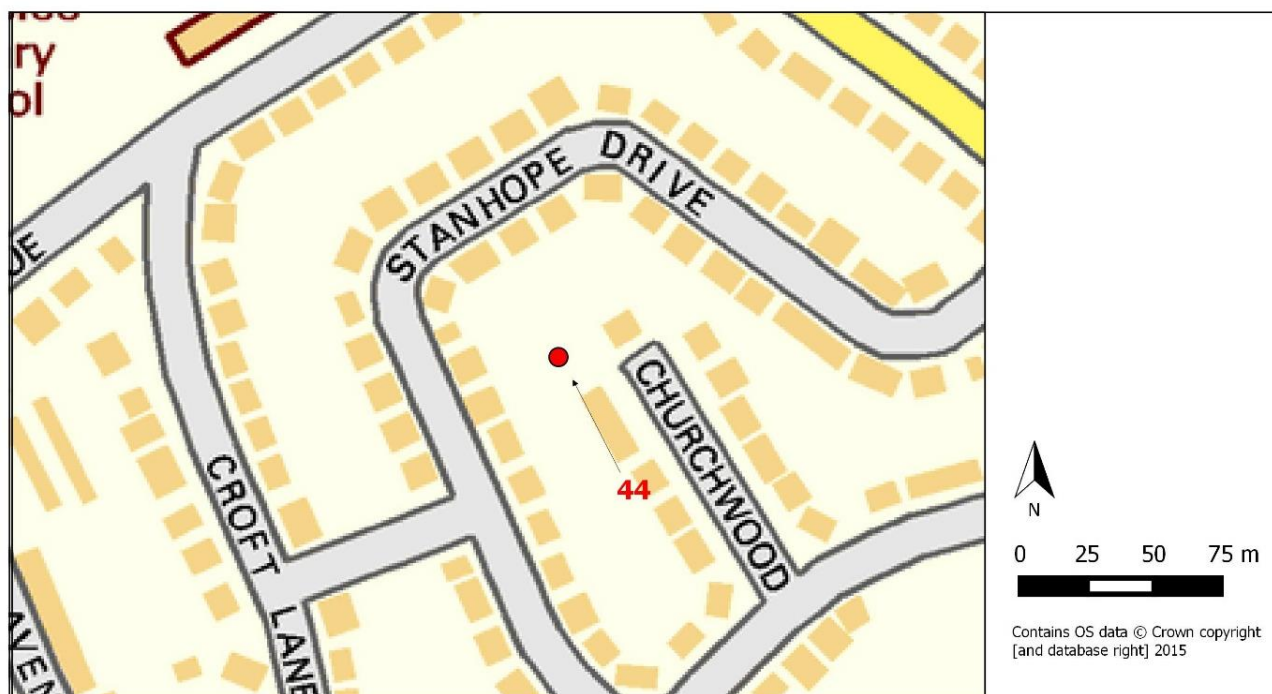


Figure 80: Location of Test Pit 44

Test Pit 44 was half-sectioned at 0.51m and quarter-sectioned at 0.86m. The final depth was 1.0m reached in the north east quadrant. The topsoil (4401) was a loose, light greyish-brown silt with sandstone inclusions ranging in size from 5-11cm with a large block noted in the north east corner. The subsoil (4402) was a weakly cemented, mid brownish-grey clayey-silt with numerous 2-5cm stone inclusions with pebbles. Context (4403) was a modern dumping deposit comprised of CBM and a matrix of weakly cemented, mid reddy-brown, clay/sandy-silt. A comparable dumping deposit (4404) was noted beneath, distinct due to the mixture of ash with the CBM and soil. It was a loose, light blackish-grey, clay/sandy-silt. Context (4405) was a weakly cemented, light reddy-brown, sandy-clay with no material noted. This was not natural, as disturbed layers with modern material were noted earlier in the stratigraphic sequence. Context (4406) was the third dumping event noted in Test Pit 44. This was a loose, mid greyey-black gravelly-silt mixed with ash, containing modern CBM and glass. The previous clay deposit may have been used to seal this earlier dumping event. Context (4407) was loose, light reddy-brown gravelly/clay-silt with stone and pebble inclusions. This was the fourth and final dumping event with CBM, modern glass and shell. An irregular shaped cut [4408] at a 30° angle

was noted whilst excavating (4407). This appeared to be a hole created to dump the material noted in (4406) – the secondary fill and (4407) – the primary fill. No small finds were retrieved from this test pit.

Table 46: Summary of bulk find materials excavated from TP44

Context	Animal Bone		CBM		Clay Tobacco Pipe		Modern Glass		Modern Glazed Ceramic		Modern Metal		Shell		Slag		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
4401			9	775	1	1	23	79	7	20	13	139			9	79		
4403			6	2248			24	36	9	12	7	111						
4404	1	1	19	523			1	1	1	17	5	87	1	1	15	324	2	7
4406							1	2										
4407			16	212			11	28	12	545	5	33	1	1				

7.1.44. Test Pit 45

Test Pit 45 was located on a small access road off of Mark Rake, north of St Barnabas Church at centroid: 334847 382240.

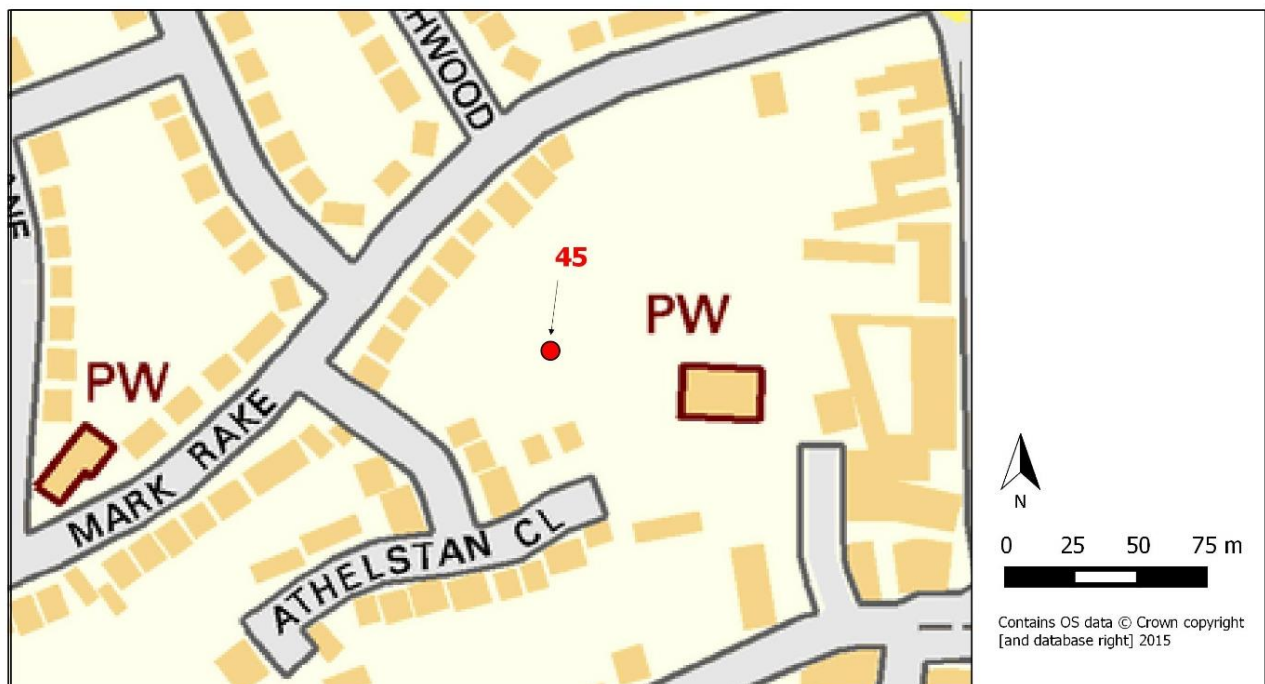


Figure 81: Location of Test Pit 45

Test Pit 45 was half-sectioned at 0.61m and quarter-sectioned at 0.96m. The final depth of the test pit was 1.08m in the north east quadrant. The topsoil (4501) was a heavily compacted (part of car garage path), dark brown-black gravelly-silt with remnants of tarmac. The subsoil (4502) was loose,



Figure 82: SF 4502 – lead shot 1



Figure 83: SF 4504 - lead alloy toy knight

browny-black gravelly-silt. Below this context a compact 'sticky', orangey-brown, clayey-silt was encountered (4503). Context (4504) was a pliable, orangey-brown, clayey silt. A notable difference in the soil occurred in (4505), as it became a loose, orangey sandy-silt. The final context was left unexcavated due to time constraints but appeared to be an orangey-red clay. No archaeological features were evident in this test pit but the contexts produced a varied array of material culture, including several small finds: lead shot, SF 4502 (see Figure 82), a lead alloy toy knight, SF 4504 (see Figure 83), and a shard of post-medieval vessel glass, SF 4503. Early examples of clay tobacco pipe was also recovered from this test pit, dating to the 17th century.

Table 47: Summary of bulk find materials excavated from TP45

Context	Animal Bone		CBM		Clay Tobacco Pipe		Misc			Modern Glass		Modern Glazed Ceramic		Modern Metal		Post-Medieval Glazed Ceramic		Slag		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Description	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
4501			4	123			1	3	Bronze 1906 Coin	3	50	4	16	5	68			16	276	6	51
4502	6	14	4	133						27	110	2	4	7	268	2	102				
4503			2	113	2	3				19	139	16	14	1	28	2	5				
4504					3	2				3	7	11	17			4	39				

7.1.45. Test Pit 46

Test Pit 46 was located on common ground known as the Bradmoor. This test pit was the most southerly of three, found at centroid: 334902 381869.

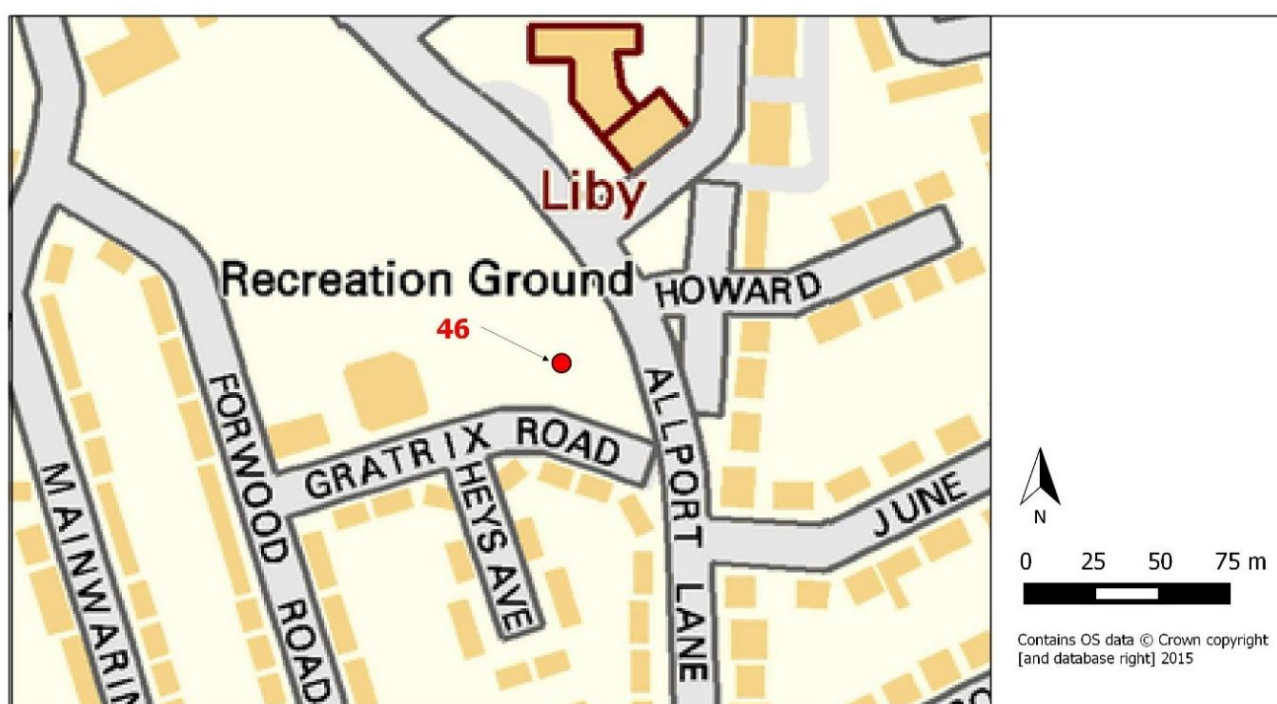


Figure 84: Location of Test Pit 46

Test Pit 46 was half-sectioned at 0.47m, reaching a final depth 0.72m in the northern half. The topsoil (4601) was a hard, mid browny-red, sandy/clay silt. One sherd of 13th-14th century Cheshire Type Red/Grey ware, SF 4601 (see Figure 85), was recovered from the topsoil. The subsoil (4601) was a firm, mid brownish-red sandy-silt with frequent sandstone and pebble inclusions with no finds. Whilst reasonably shallow, it is presumed this is natural based on comparable test pitting across the village. It is not unusual for the natural to be reached on open ground in Bromborough.



Figure 85: SF 4601 - 13th-14th century Cheshire Type Red/Grey ware

Table 48: Summary of bulk find materials excavated from TP46

Context	Clay Tobacco Pipe		Modern Glass		Modern Glazed Ceramic		Modern Metal		Plastic		Post-Medieval Glazed Ceramic		Slag	
	No	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
4601	2	9	18	19	7	5	1	31	7	3	7	56	1	21

7.1.46. Test Pit 47

Test Pit 47 was located on common ground known as the Bradmoor. This test pit was the most central of three, found at centroid: 334820 381917.

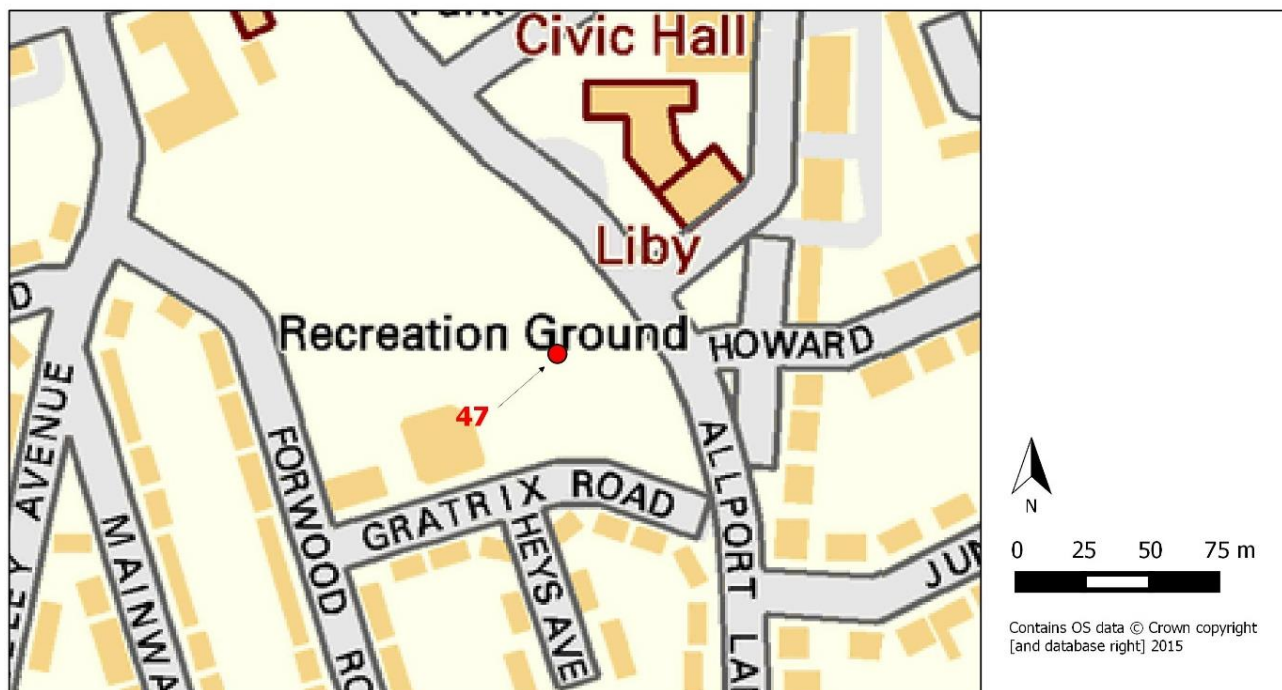


Figure 86: Location of Test Pit 47

Test Pit 47 was half-sectioned at 0.49m and excavated to a final depth of 0.75m in the eastern half. Contexts (4701) and (4702) were recorded individually but are one context. This topsoil was a loose, light brownish-grey, gravelly/clay silt with stone inclusions, ranging from 2-7cm. The subsoil (4703) was a weakly cemented, mid greyish-brown, sandy silt with stone inclusions and pebbles. This context appeared natural and is comparable to Test Pit 46. Like Test Pit 46, finds were only recovered from the topsoil. The final context was a weakly cemented, light reddish-brown, sandy-clay with a large quantity of angular sandstone inclusions, ranging from 7-13cm in size. This context was not investigated due to time restraints. No small finds were recovered from this test pit.

Table 49: Summary of bulk find materials excavated from TP47

Context	CBM		Clay Tobacco Pipe		Modern Glass		Modern Glazed Ceramic		Modern Metal		Post-Medieval Glazed Ceramic		Unglazed Ceramic	
	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
4701	4	101			8	19	3	9	1	31			4	14
4702			2	3	3	11	4	8			1	5	1	3

7.1.47. Test Pit 48

Test Pit 48 was located on common ground known as the Bradmoor. This test pit was the most northerly of three, found at centroid: 334878 381892.

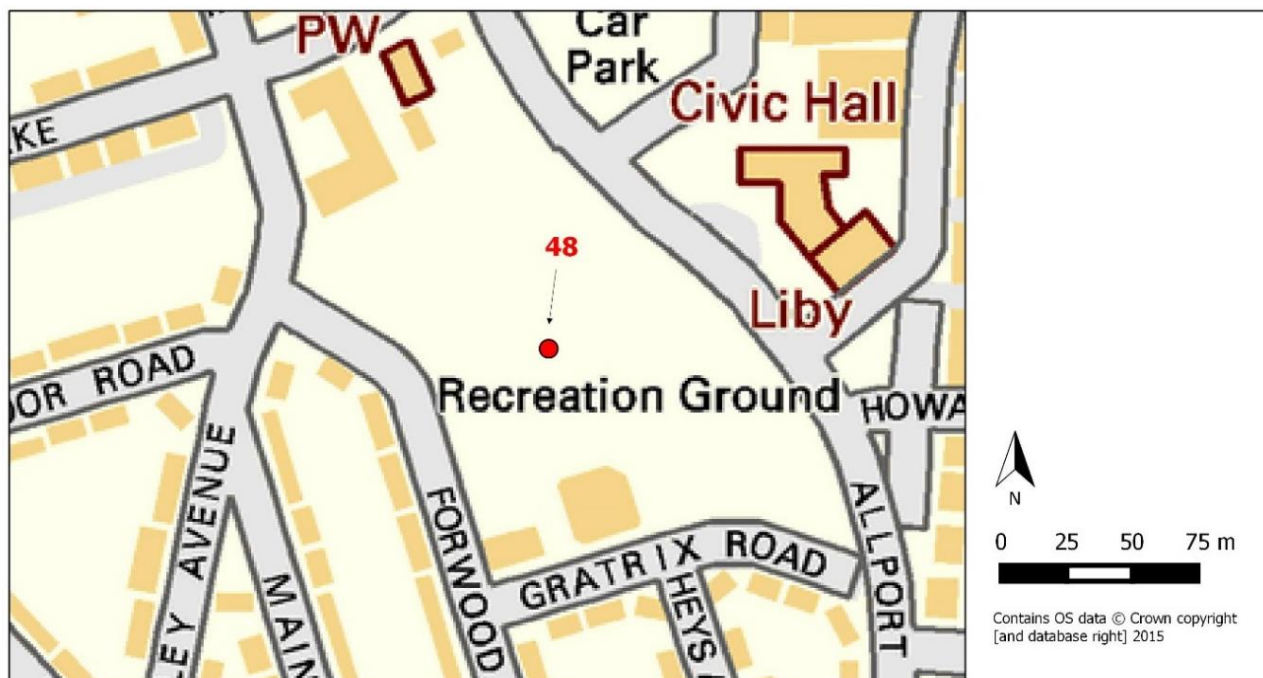


Figure 87: Location of Test Pit 48



Figure 88: SF 4801 - 14th-15th century Ewloe-type ware

Test Pit 48 was half-sectioned at 0.33m with a final depth of 0.48m reached in the northern half of the trench. The topsoil (4801) and subsoil (4802) were recorded individually but are one context. The topsoil (4801/4802) was a loose, mid blacky/greyey-brown clayey-silt with sandstone inclusions. The subsoil (4803) was a loose, greyey-brown clayey-silt, in which no finds were encountered. Context (4804) was not excavated, as it was a layer of orangey-red sandstone. The stratigraphy is comparable to Test Pits 46 and 47, although the topsoil was shallower in Test Pit 48. Like Test Pit 46 and 47, finds were only recovered from the topsoil. One sherd of 14th-15th century Ewloe Type Pink/White ware was recovered from the topsoil, SF 4801 (see Figure 88).

Table 50: Summary of bulk find materials excavated from TP48

Context	CBM		Clay Tobacco Pipe		Modern Glass		Modern Glazed Ceramic		Modern Metal	
	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)
4801	2	95			4	61	5	26		
4802			1	3	2	4	1	1	1	184

7.1.48. Test Pit 49

Test Pit 49 was located in the rear residential garden of 43 The Rake, CH62 7AE, at centroid: 334675 381950.

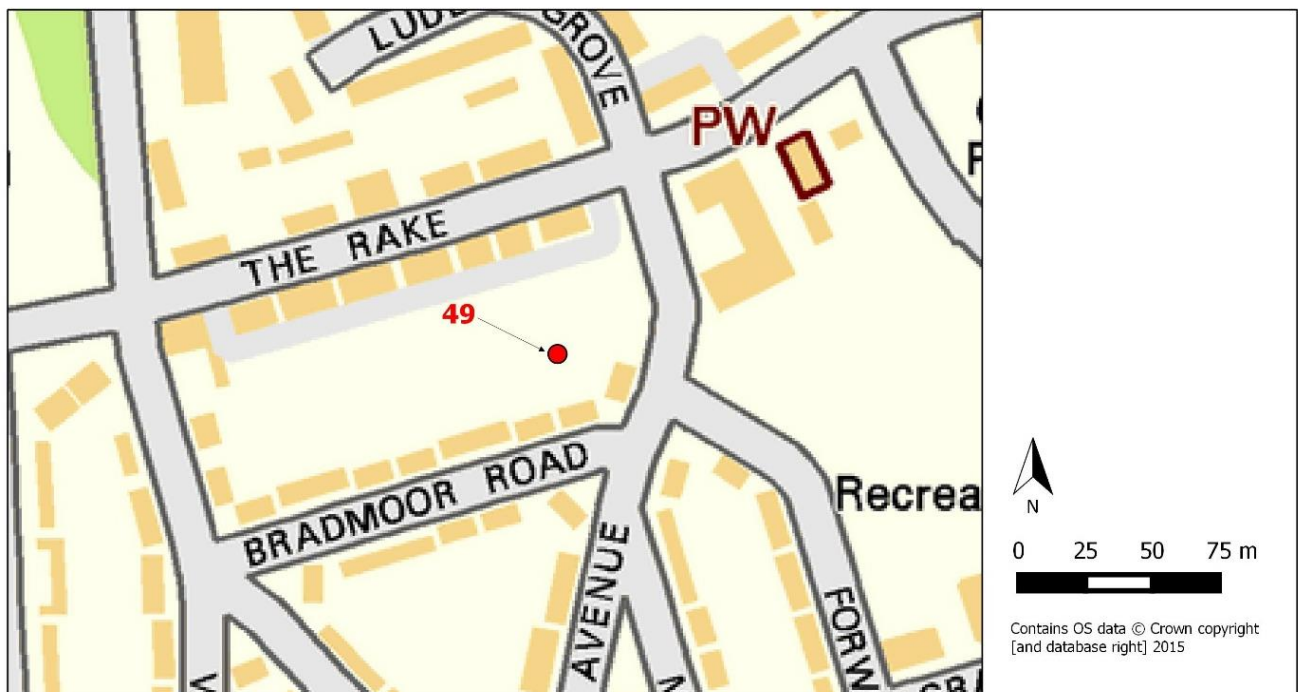


Figure 89: Location of Test Pit 49

Test Pit 49 was half-sectioned at 0.57m with a final depth of 0.93m reached in the southern half of the trench. The topsoil (4901) was a loose, light greyey-black sandy-silt. The subsoil (4902) was a loose, light brownish-grey silt with occasional pockets of clay. Both the topsoil and subsoil were heavily disturbed by root action. Context (4903) was a weakly cemented, mid reddy-brown, silty-clay with sandstone inclusions, ranging from 3-6cm. A large tree root was noted in this context, which may have pushed material into the context, specifically plastic. Context (4904) was a weakly cemented to compact, light yellowish-brown sandy-clay deposit. The excavator noted that within this context there was a large collection of degraded sandstone fragments with occasional pebbles. (4905) was a

sterile, weakly cemented to compacted, mid yellowy/reddy brown sandy-clay. Below which was the final context (4906. A compact, mid reddish-brown sandy-clay deposit with sandstone and pebble inclusions, ranging in size from 3-8cm. This context appeared natural.

Table 51: Summary of bulk find materials excavated from TP49

Context	Animal Bone		CBM		Clay Tobacco Pipe		Misc			Modern Glass		Modern Glazed Ceramic		Modern Metal		Plastic		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Description	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
4901	3	5	33	593						61	179	20	28	36	635	13	5		
4902	2	11	5	279	1	3	1	2	Slate Pencil	17	67	11	21	9	184			6	54
4903												3	3	6	82	1	1	1	8

7.1.49. Test Pit 50

Test Pit 50 was located in the rear residential garden of 41 Mark Rake, CH62 2DJ, at centroid 334860 382279. This garden backs onto the churchyard of St Barnabas Church

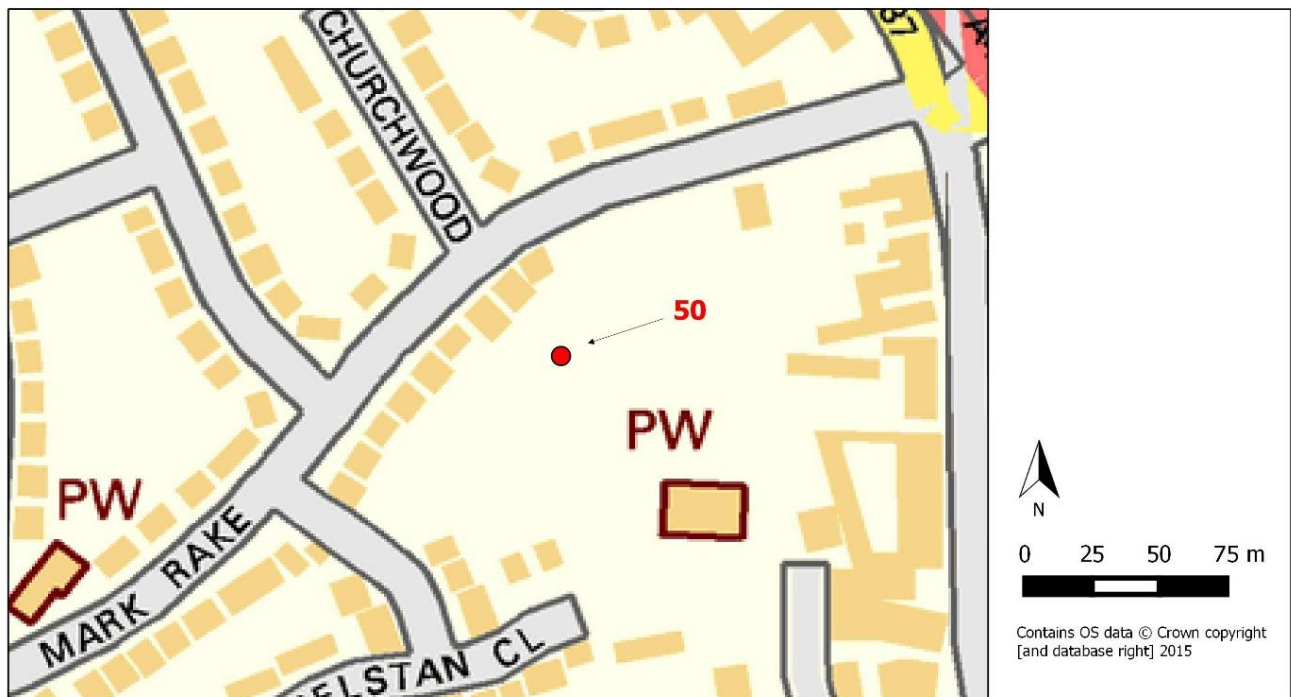


Figure 90: Location of Test Pit 50

Test Pit 50 was excavated to a depth of 0.63m and closed due to poor light. The ground surface (5001) was covered by dumping from recent landscaping. Therefore, the original ground surface (5002) was not located until 0.17m. Context (5002) was loose, browny-black silt. At this juncture a modern

cooking grill was located, signalling that the ground surface was heavily disturbed in this area. Below this was a loose, light-brown silt (5003) that was not fully excavated due to poor light. However in (5003) three small finds were recovered: 2 fragments of medieval pottery, SF 5001 and SF 5002, and one large piece of Roman ceramic building material, SF 5003. The latter is particularly interesting as it is the first evidence of Roman CBM recorded in Bromborough and is suggestive of some sort of structure in the vicinity. Furthermore, as the Roman pottery has been concentrated around the periphery of St Barnabas Church, this find adds further credence to the notion that any Roman activity in the area was concentrated in this area of Bromborough.



Figure 91: SF 5003 Roman Ceramic Building Material

Table 52: Summary of bulk find materials excavated from TP50

Context	Animal Bone		CBM		Misc			Modern Glass		Modern Glazed Ceramic		Modern Metal		Plastic		Post-Medieval Glazed Ceramic		Unglazed Ceramic	
	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Description	Total	Wt (g)	No	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)	Total	Wt (g)
5001	3	7	3	42				5	17	3	18	5	578	20	48			3	26
5002			4	128	1	6	Bronze 120's coin	5	26	7	44	2	160	21	16			3	4
5003	22	54	1	1				1	3			1	21	1	1	7	143	1	26

8. DISCUSSION

The project saw the excavation of 50 test pits around Bromborough Village. Thousands of artefacts were recovered. These were predominantly ceramic sherds totalling 4167 individual finds. The majority of the finds were from the post-medieval or modern era. The project did unearth artefacts from the Mesolithic, Neolithic, Roman, Early Medieval and Medieval periods.

Each test pit provides a snap shot of the area under investigation, as presented in section six. However, test pitting information is most useful when all the information from each individual test pit is analysed and synthesised alongside all the data from other test pits in the study area – Bromborough Village. This type of broader analysis helps provide an overview of an areas development throughout its history.

Bromborough Village is currently occupied, which does have an effect on the sampling strategy employed by the project, as it was dependent on areas with open space and the consent of multiple landowners to work on their respective properties. The best way to overcome this bias is to attempt an evenly spread sampling area (see Figure 4).

Using the data gathered from the thousands of artefacts unearthed to date it is possible to gain a broader insight into how the Village of Bromborough came into existence and developed over time.

8.1. Prehistoric

The project uncovered limited evidence for Prehistoric activity in the village. Two lithic objects were unearthed: one was a Mesolithic bladelet from Test Pit 17 and the other was a Neolithic arrowhead from Test Pit 9 (see Figure 92). Both were found as residual finds mixed with modern material, so offer no suggestions of occupation. However, they were both made from flint, which is not naturally occurring in Bromborough, which suggests that these tools had been brought into the area. Unfortunately, it is impossible to say when as they both came from mixed deposits. Similar stray finds have been found in Bromborough, notably at the Court House site to the north of the core of the village. Most evidence for prehistoric activity, as previously noted, has been recovered at wetland and coastal sites, as Bromborough Villages core sits inland; the lack of finds is not unexpected.

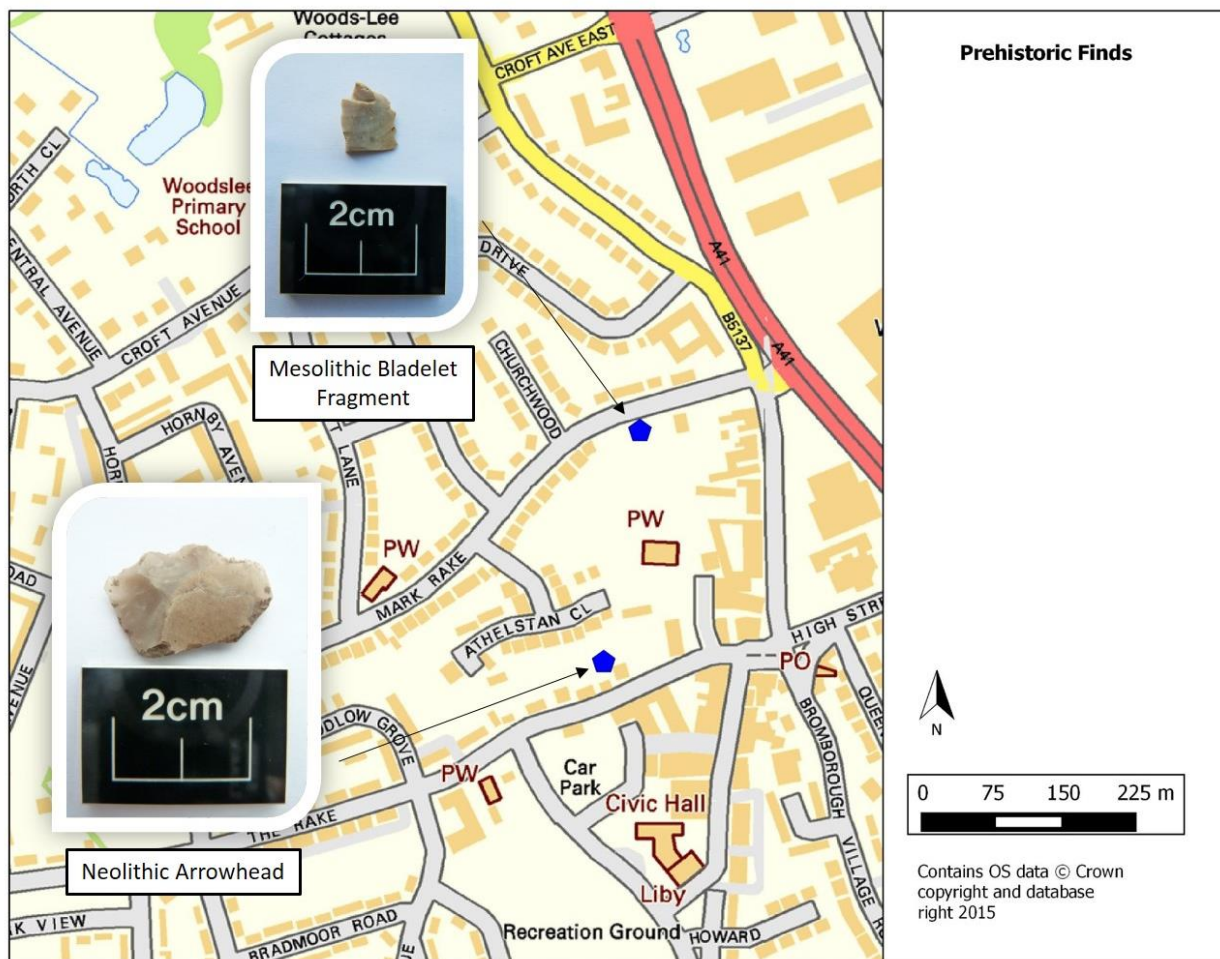


Figure 92: Distribution of Prehistoric Finds in Bromborough Village

The limited number of prehistoric artefacts uncovered at Bromborough may also, in-part, be due to the fact that not all the test pits were excavated to bedrock due to time restraints or health and safety considerations. Nevertheless, the small collection suggests very limited activity in the area prior to the Roman period.

8.2. Roman

Discovering Bromborough recovered the first evidence of Roman ceramics to be found and recorded in the village in 2013. Three definite sherds were unearthed with a further piece likely, but too weathered for a definitive identification in 2013. In 2014 a further three sherds were added to the assemblage. All the sherds came from the core of the village, around St Barnabas Church and The Rake.

Test Pit 50 also produced the first evidence of Roman ceramic building material (see Figure 93). This also came from the core of the village, bordering the boundary of St Barnabas Church. The concentration of these finds around the church and its locale indicates Roman occupation in the area, possibly in the 1st-2nd centuries based on the ceramic dates.

Whilst medieval churches can sometimes be purposely built upon earlier Roman sites, any continuity in this case can just as easily be explained by the site sitting at the apex of a sandstone outcrop, offering better drainage and visibility.

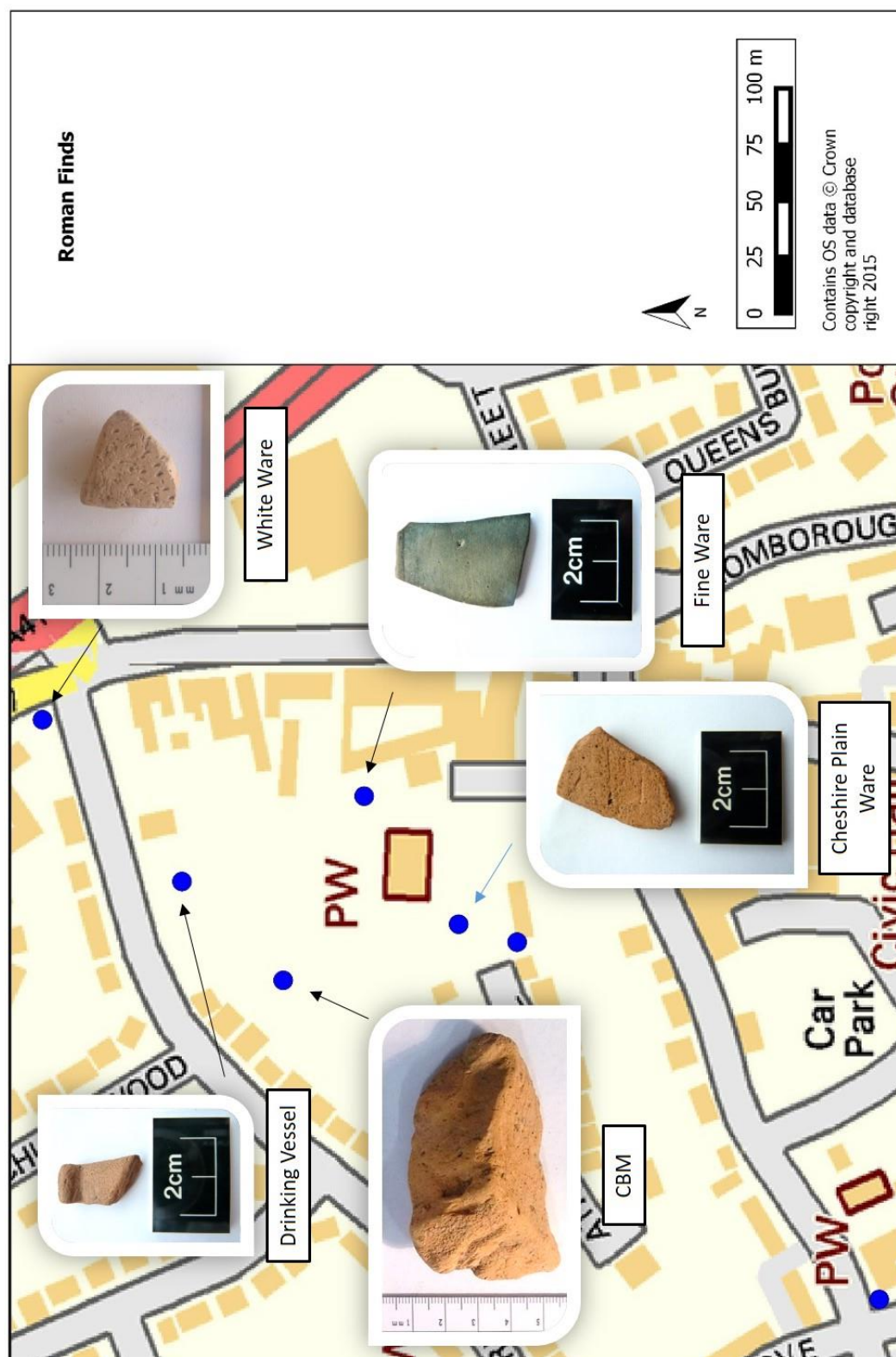


Figure 93: Distribution of Roman Finds from Bromborough Village

8.3. Early Medieval

Prior to excavation, the project was aware that some form of early medieval settlement was present at Bromborough during the 10th-11th century's, as a large collection of stone sculpture was recovered from a church building that stood in the modern graveyard of St Barnabas. The quantity of sculpture suggests a high status ecclesiastical building at the core of the village. Other than a 19th century line-drawing and a brief description by Ormerod (Bromborough Society 2000, 56-7) very little information about this early structure survives and there is no further archaeological evidence from the village that might provide further insight. Only one sherd of early medieval ceramic was recovered during the test pitting project from Test Pit 3, notably close to the present church. This was a 10th-11th century fragment of Stamford Ware. This type of pottery is very rare in the North West of England, being only previously found in Chester (Julie Edwards, pers. comm). This suggests that Bromborough was significant during the latter stages of the early medieval period and is likely to have had both trading and ecclesiastical ties with the city of Chester.

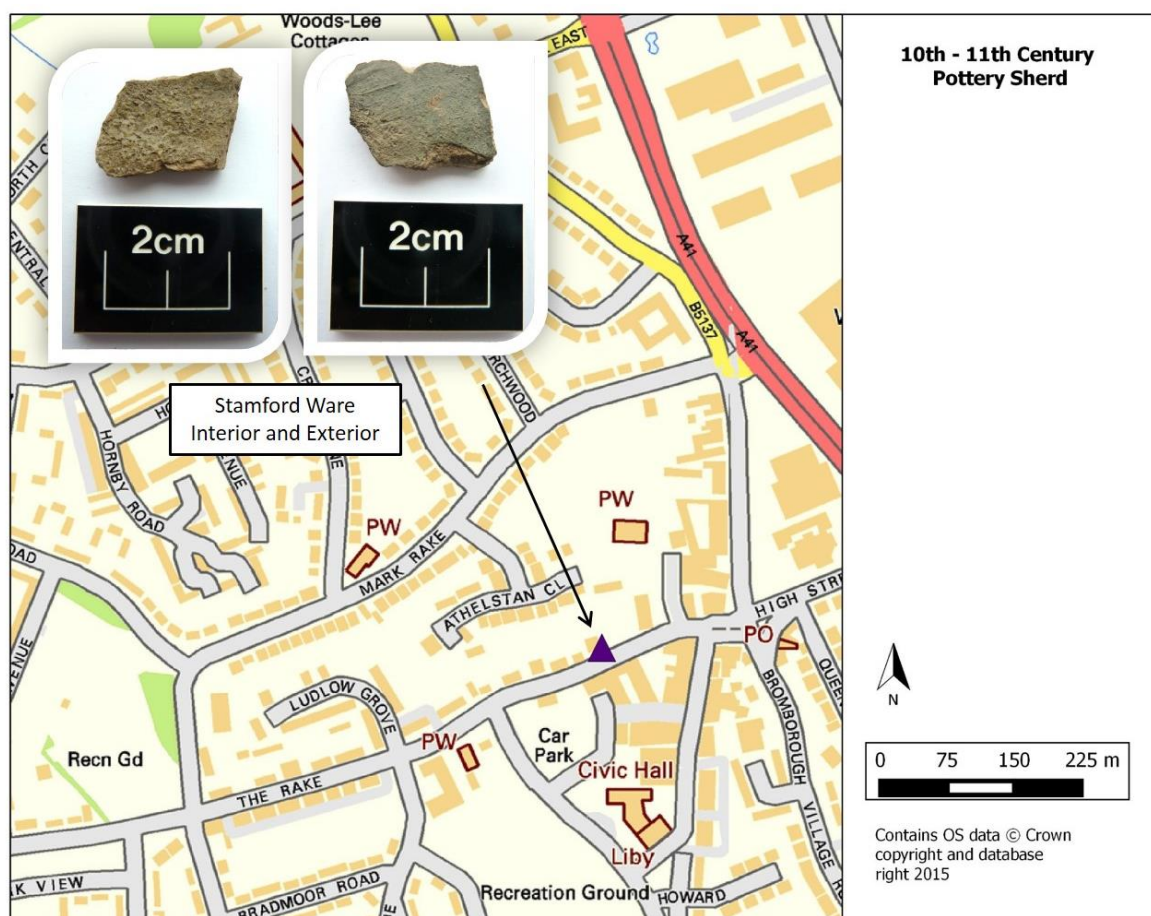


Figure 94: 10th-11th Century Stamford ware

8.4. Medieval

No Saxo-Norman material was recovered from any of the test pits. Only in the 13th century does there appear to be a surge in occupational evidence as the appearance of ceramic sherds from this period intensifies, reaching its peak in the 14th century. Evidence for activity eventually tails off in the 16th century. The majority of the finds from the 13th-14th centuries focus around the core of the village, particularly St Barnabas church, strongly indicating that activity was concentrated here (see Figure 95). However, in the 2014 season two further fragments were recovered from common ground south of the oldest historical road in the village, The Rake. This extends the distribution of 13th-14th century pottery beyond The Rake itself and the core of the village, suggesting activity during this period was more extensive than the 2013 distribution suggested.

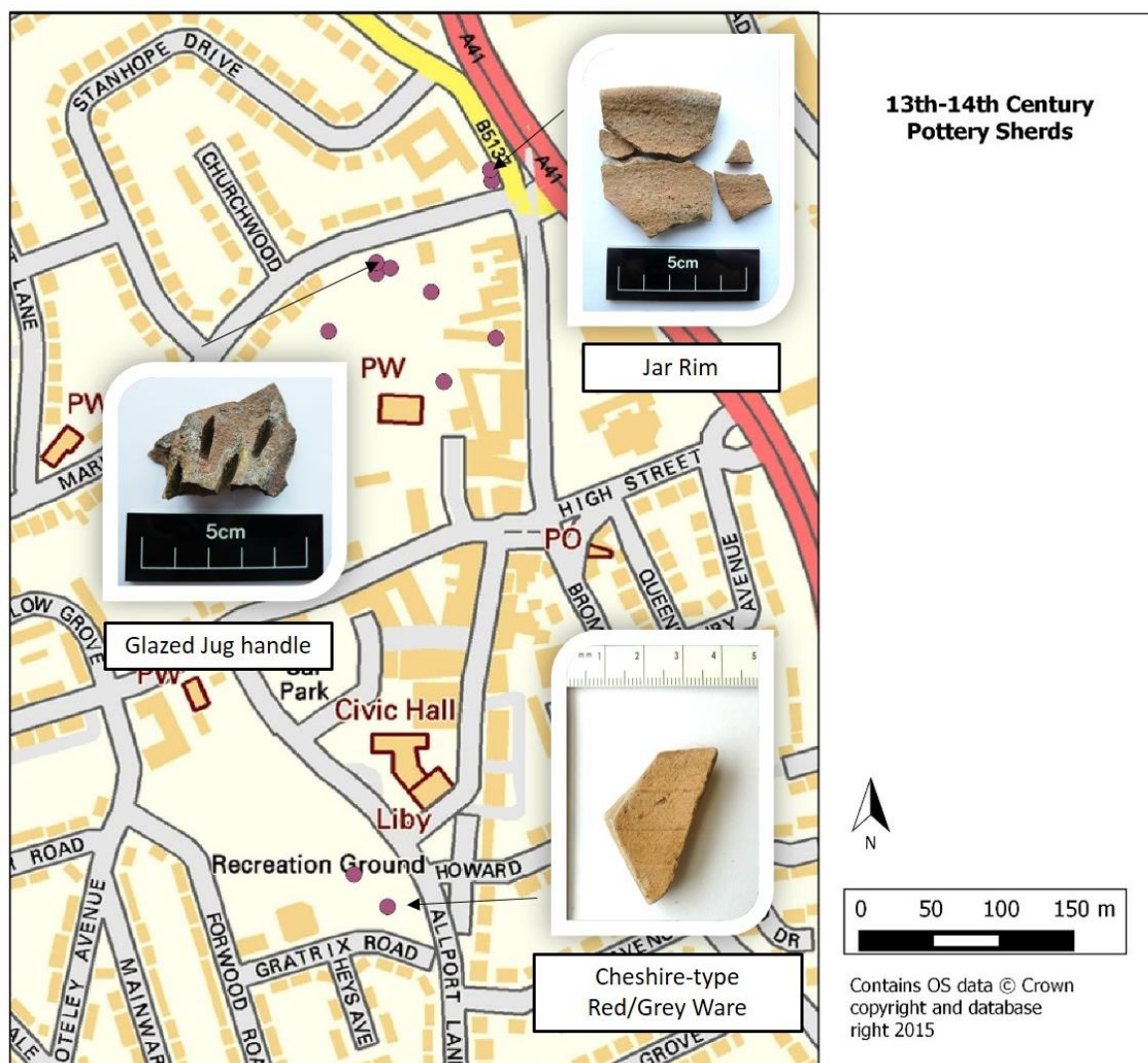


Figure 95: Distribution of 13th-14th Century Pottery Sherds

The concentration around St Barnabas and the environs of the church continues in the mid-14th-17th centuries, comprised predominately of Midlands Purple ware, Ewloe-type ware and Cistercian ware (see Figure 96). Notably the concentration spreads up The Rake, indicating that this road was in use and possibly associated with occupation during this period, suggesting the village was growing at this time.

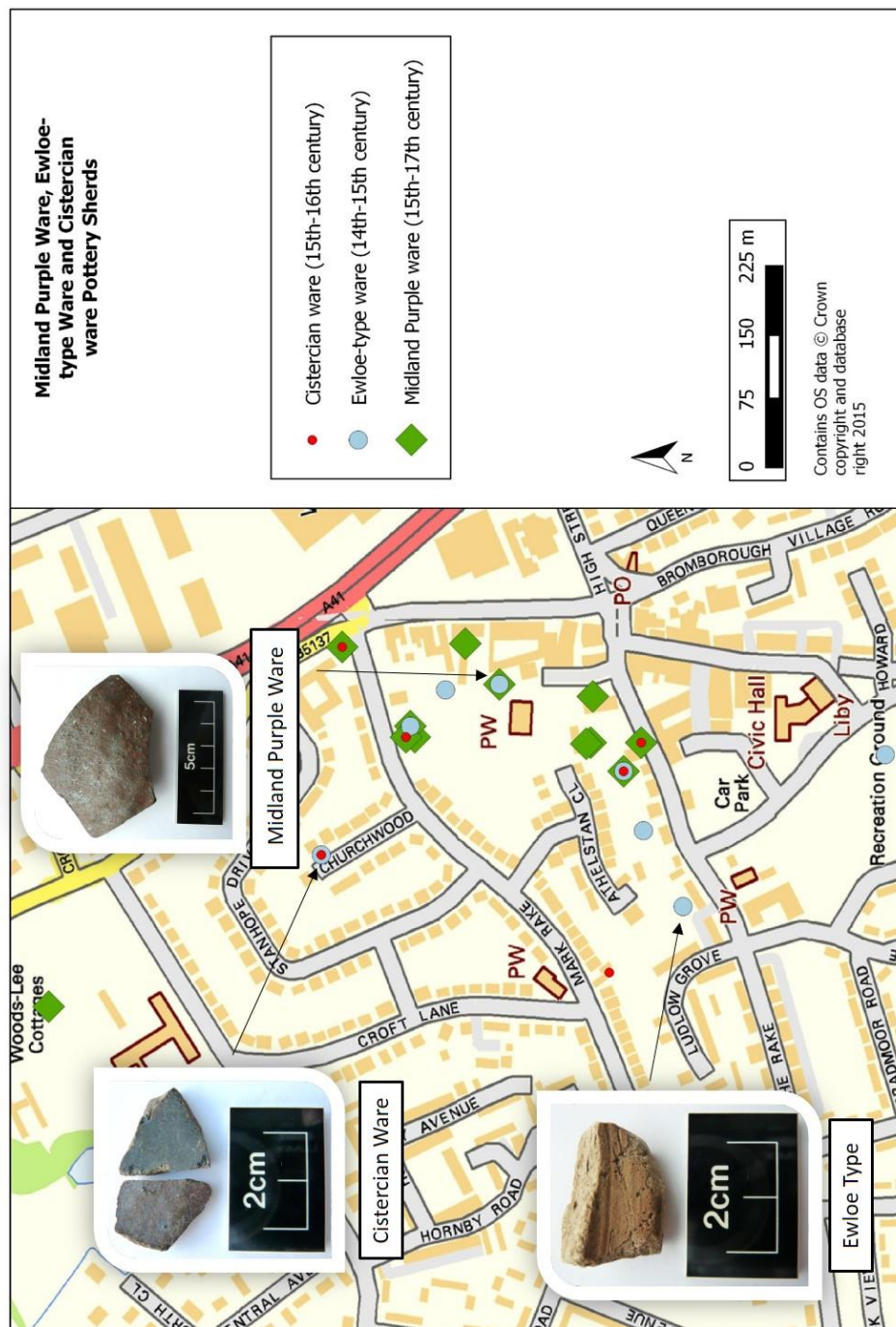


Figure 96: Distribution of Midland Purple ware, Ewloe-type ware and Cistercian ware

8.5 Post-Medieval and Onwards

The post-medieval, Victorian and modern eras are well represented by ceramics and animal bone (See Appendix A, Figures 100 and 101). This material is also supplemented by modern metalwork, plastics, fabrics, ceramic building material and glass in bulk. This is also the only period to have associated features in the form of compacted surfaces. Most appear to be the remnants of outhouses (Test Pits 5, 25 and 43). However, two test pits appeared to contain the remnants of more substantial structures: Test Pit 19 is possibly the original farmhouse that was located on this site prior to the construction of the building that now stands and Test Pit 38 had a well-constructed stone foundation, possibly for a house or comparable structure. Other notable archaeological features include the early 20th century coal bunker or air raid shelter in Test Pit 11 and the evidence for marl extraction and Victorian dumping noted in the three test pits (28, 29 and 33) on the recreational ground west of the village core. As many of the 2014 test pits were focussed further away from the core of the village, ceramic building material from the late 20th and 21st centuries was found in abundance. Indicative of the rapid expansion of the village at this time.

The only areas with limited evidence for Post-Medieval, Victorian and modern day activity are found to the north and south of the primary distribution. Test Pits 16, 20 and 21 around Woodslee Common and 46, 47 and 48 on the Recreational Ground to the south of The Rake, all have a very limited collection of material suggesting that this area has only recently been used for occupation.

9. CONCLUSION

Overall, the test pitting project undertaken in Bromborough Village in 2013 was successful in meeting its Aims and Objectives. Firstly, it was successful in terms of its archaeological discoveries. No archaeological investigation of Bromborough Village had previously been undertaken. Artefacts recovered from the village were all accidental finds and inadequately recorded. The test pitting project has demonstrated the survival of archaeological stratigraphy and multiple finds. The project uncovered and recorded evidence for human activity dating back to the Mesolithic period. Most significantly, the quantity of Roman and medieval material is such that it is possible to begin to understand how the village developed after the Norman Conquest and indicate areas of earlier occupation.

Secondly, the community input and their positive response to the project has been incredibly rewarding for them and us. Big Heritage were able to engage with a large cross-section of the community throughout the 2013 season. Volunteers were involved in all aspects of the project, including preliminary research, test pitting, post-excavation work and curation of the artefacts. The project culminated with the volunteers curating their finds and research, which was then exhibited in a pop-up museum designed to engage the local Wirral community.



Figure 97: Curated artefacts from the dig and Rob Henshaw, DB1 Volunteer, with his museum board.

The second season of test pitting saw the return of many of our volunteers from the previous year, whilst many new volunteers joined us including local organisations, such as school groups, the local YAC and probationary service. As an addition in 2014 we also ran post-excavation training sessions in pottery, animal bone and osteology, which proved incredibly popular.



Figure 98: Volunteers engaged in post-excavation training and survey

Future work should perhaps focus on the core of the village, where Roman and medieval occupation has been identified. The periphery of the churchyard and the rectory gardens are of particular interest in this respect and would benefit from a more intense investigation where access is available. This would possibly refine the distribution and dating of the occupation in this area. More broadly, the project has demonstrated how the methodology set out above, and followed throughout the course of the test pitting, can shed light on villages with limited open space through small scale excavation.

In addition, the project works well as a community exercise with particular health and wellbeing benefits noted by staff. It is recommended that greater evaluation of these elements should be taken throughout the course of comparable projects and a template created of how best to engage communities and specific groups within that community in order to maximise the positive benefits of partaking in such activities.

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11. APPENDICES

11.1. Appendix A: additional figures

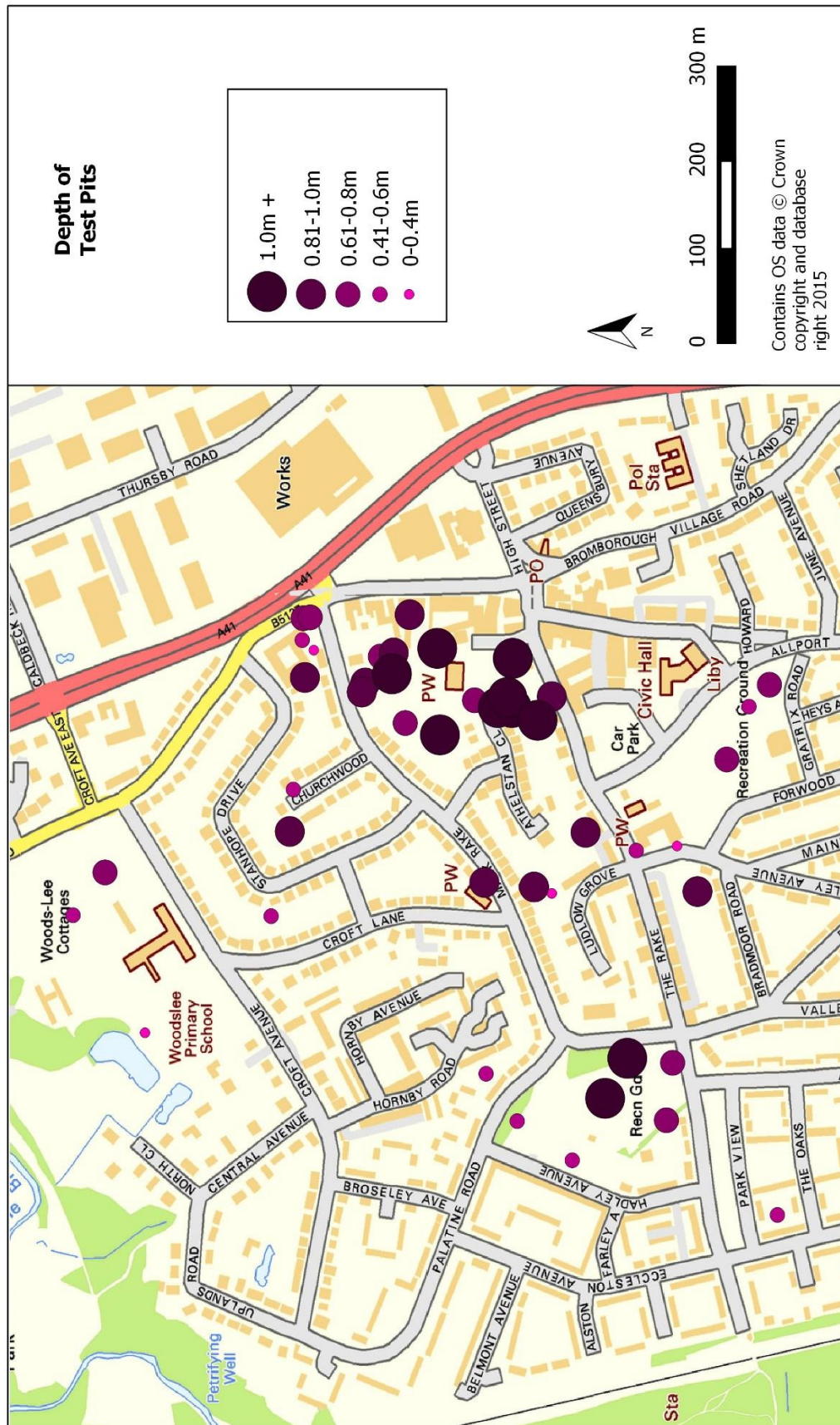
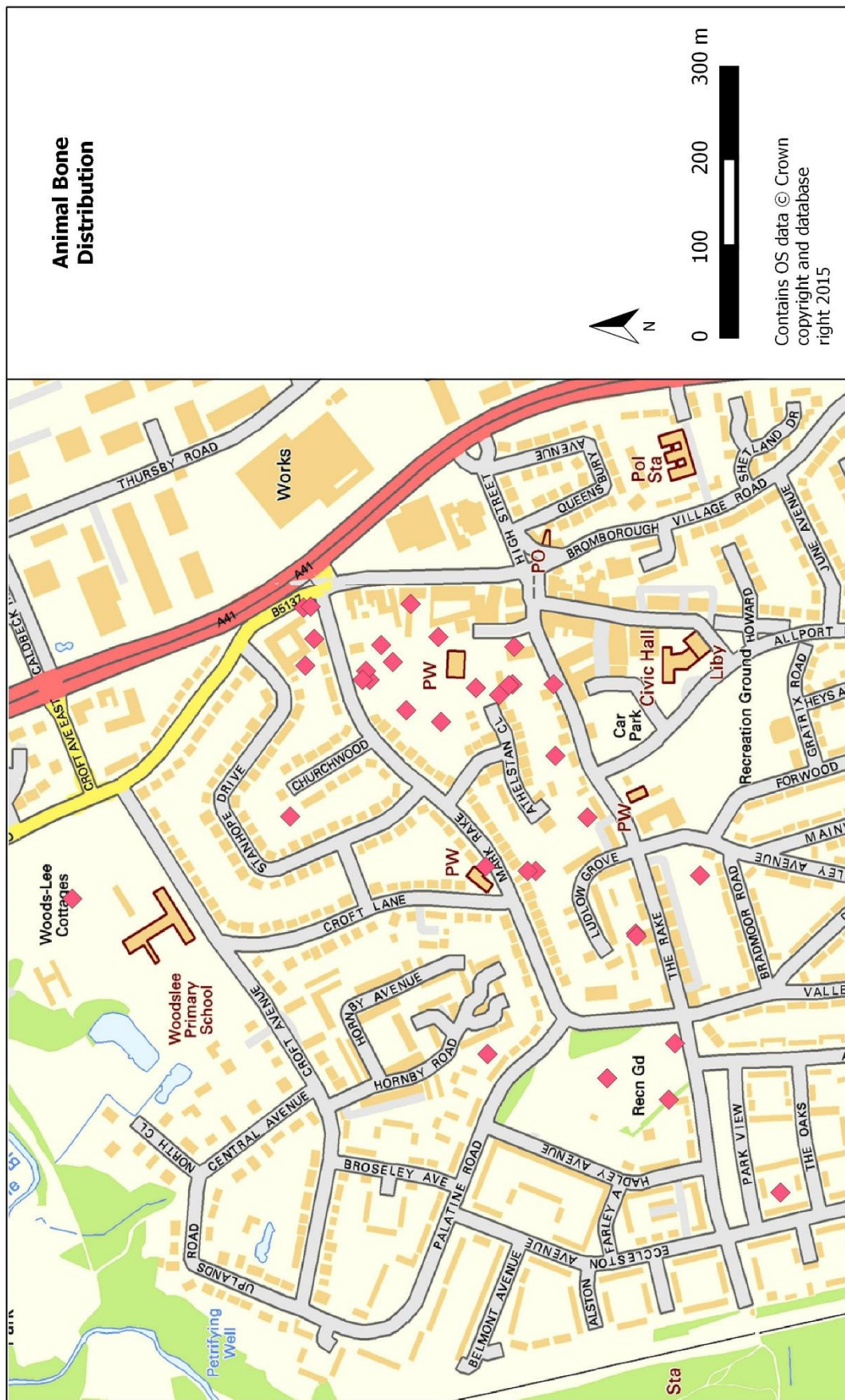


Figure 99: Relative depth of test pits undertaken across Bromborough Village



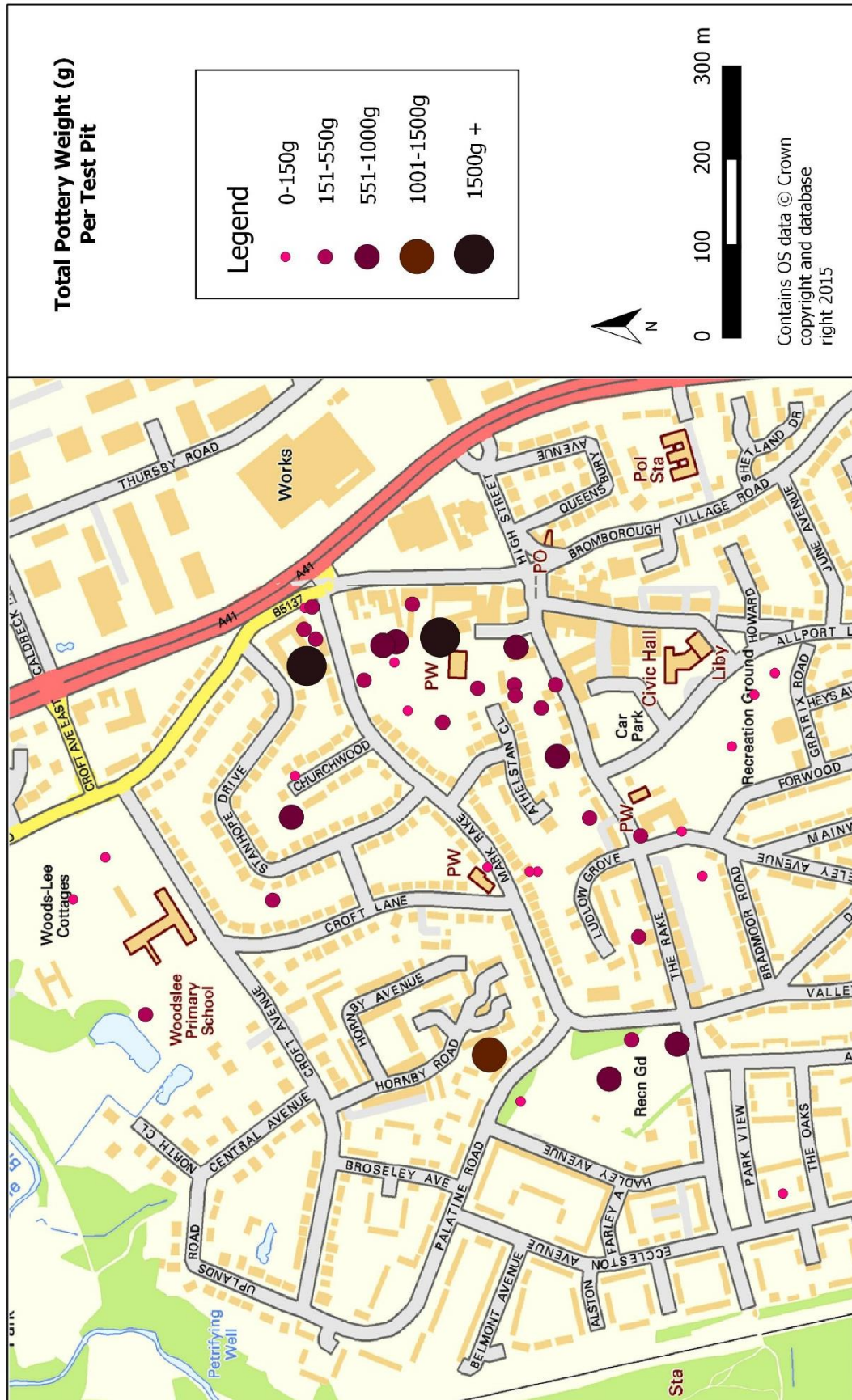


Figure 101: Relative weight of pottery sherds recovered from test pits across Bromborough Village

11.2. Appendix B: finds reports

11.2.1.1. *Animal Bone by Louisa Gidney (2013)*

Summary

The project

This report presents the results of assessment of faunal remains recovered from test pits excavated as part of the Discovering Bromborough Project.

The works were commissioned by Big Heritage, and conducted by Archaeological Services Durham University.

Results

The identifiable faunal remains comprise of cattle, sheep/goat, pig, dog, cat, rabbit, domestic fowl, goose and fish. The remains derive from 19th/20th century or recent origin. Bones from smaller species predominate, with sheep/goat bones being most common. Preservation is mixed.

Recommendations

No further work is recommended on this collection.

Project background

Location and background

The Discovering Bromborough Project was a Heritage Lottery funded archaeology project conducted by Big Heritage C.I.C. in summer 2013 in Bromborough Village, Wirral, UK (NGR: SJ 34771 82359). This report presents the results of assessment of faunal remains recovered following the excavation of 27 test pits.

Objective

The objective was to identify and assess the preservation of faunal remains, and provide the client with appropriate recommendations.

Dates

Samples were received by Archaeological Services on 28th March 2014. Assessment and report preparation was conducted between 1st and 17th April 2014.

Personnel

Assessment and report preparation was conducted by Louisa Gidney.

Archive

The site code is DB13, for Discovering Bromborough Test Pit Excavations 2013.

Methods

Fragments of cattle, sheep/goat and pig bones were counted if they encompassed a 'zone', or discrete diagnostic feature. The cattle-size and sheep-size categories indicate ribs and vertebrae. Unidentifiable fragments were not counted and only noted if all fragments from one context were indeterminate. All identifiable fragments of the remaining species were counted. Though the standard term sheep/goat is used, all the bones in this category appear to derive from sheep. The results are presented in Appendix 1.

The works were undertaken in accordance with the palaeoenvironmental research aims and objectives outlined in the archaeological research framework for the North West Region (Chitty & Brennand 2005).

Results and discussion

There were no identifiable fragments among the bones from Test Pits 1, 11, 12, 25 and 26. Although more than one context was recognised in some test pits, since there are so few bones, the finds from each test pit are presented together in Appendix 1. In addition, the cat skeleton from Test Pit 13 was recovered from two separate contexts, indicating that the stratigraphy recognised may not be temporally separate. The butchery marks on both cattle and sheep bones are all saw marks, indicating discard of 19th or 20th century refuse. The majority of the other finds recovered from the test pits were also of Victorian or recent origin.

Preservation is mixed. Some bones have been subject to sub-aerial weathering prior to final burial, while other bones are in excellent condition, probably a reflection of their recent origin. One sheep tibia shaft from Test Pit 2 is in poor condition and has a crush fracture midshaft. This is usually seen on bones used to peg stone roof slabs.

It can be seen from Appendix 1 that bones from smaller species predominate, with sheep/goat bones being most common. The cattle bones include an articulating calcaneum and astragalus from Test Pit 10. These bones are large and robust, indicating an "improved" breed and the astragalus has been sawn. Both bones have been extensively modified by rat nibbling, the only evidence for small

mammals from any test pit. The brown rat was an 18th century introduction, which did not become a ubiquitous pest until the 19th century.

All the cattle, sheep and pig bones derive from immature animals of large improved type. The cattle and sheep bones appear to represent “Sunday Joints”, with leg and shoulder of lamb or prime mutton and rib or aitch bone of beef. One partial sheep skull from Test Pit 6 is from a polled breed.

Although only one dog bone was recovered, from Test Pit 18, dog gnawing marks on cattle and sheep bones are present throughout the collection. Pet dogs burying bones in gardens may be the source of many of the bones found. The cat bones from Test Pits 10 and 13 appear to indicate disturbance of garden burials of household pets. Both animals were adult with all epiphyses fused.

Two sizes of rabbit are represented, in Test Pits 10 and 11A. It is not clear if wild, as well as domestic, rabbits are represented, nor whether these were pet animals or consumed as food.

The group of domestic fowl bones from Test Pit 10 represent one immature bird, including the feet. This may more likely indicate a natural mortality of back-yard poultry keeping than food refuse. Goose bones were only found in Test Pit 11A. The fish bones from Test Pits 6 and 13 are large vertebrae, probably from fish of the cod family.

Recommendations

No further work is recommended on this collection.

Sources

Chitty, G. and Brennand, M. 2005. Archaeological research framework for the North West region: research agenda introduction.

Appendix 1: Fragment counts for the species present

Test Pit	2	3	4	6	7	8	10	11A	13	17	18	19	23	27
Cattle	-	-	-	-	-	2	2	-	1	-	-	-	-	1
Cattle size	-	1	-	-	1	-	-	-	1	1	1	-	-	-
Sheep/goat	1	-	1	3	-	1	5	3	4	-	3	1	-	-
Sheep	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Sheep size	-	-	-	-	-	-	-	-	1	-	-	-	-	2
Pig	-	-	-	-	-	-	-	-	-	-	2	-	1	-
Dog	-	-	-	-	-	-	-	-	-	-	1	-	-	-

Cat	-	-	-	-	-	-	4	-	*	-	-	-	-	1
Rabbit	-	-	-	-	-	-	2	4	-	-	-	-	-	-
Domestic Fowl	-	-	-	-	-	-	5	1	1	-	1	-	-	-
Goose	-	-	-	-	-	-	-	2	-	-	-	-	-	-
Fish	-	-	-	1	-	-	-	-	3	-	-	-	-	-

[* = skeleton]

11.2.1.2. *Animal Bone by Ian Smith (2014)*

Introduction and Location

Big Heritage undertook the excavation of twenty-three test pits in Bromborough (NGR: SJ 34771 82359), Wirral, England in the autumn of 2014. These pits produced an assemblage of just under 300 fragments of animal bone.

Objective

The objective was to prepare a report on the faunal remains for Big Heritage.

Archive

The site code is DB14.

Recovery

All spoil was screened for finds using sieves with a standard 6mm mesh, with the exception of very heavy clay soils, which were hand-searched.

Methods

Fragments were identified using the author's modern comparative collection. Reference was also made to Halstead and Collins (1995) and Schmid (1972). Identifications of all fragments were attempted. Clearly adjoining fragments were counted (NISP) as one and non-replicable parts were identified following the principles outlined by Watson (1979). Material identified as "large mammal" is mainly "probable cattle" but has not been securely identified. Minimum numbers of individuals estimates (MNI's) have not been estimated and it is considered that they would be of questionable value here since for the majority of the assemblage, joints of meat are represented (rather than whole carcasses). Many anatomical elements are identified to the level of sheep/goat but features

noted in the scapula, humerus, radius, tibia, calcaneus and astragalus (Boessneck 1969; Kratotchvil 1969) attest to the presence of sheep rather than goat.

Stratigraphic Integrity

The bone bearing contexts are broadly post-medieval in date, material of Victorian date is present, and the presence of some more recent intrusive material cannot be excluded.

Results

The groups of bone from the majority of the trenches (30, 33, 34, 35, 36, 37, 39, 40, 43, 44, 45 and 49) contain between one and ten fragments (c. 60 fragments in total). The three main domesticates, cattle, sheep/goat and pig are most frequent (Table 1). They largely appear to relate to domestic waste and are characterised by butchery (sawing and fine cut marks), dog gnawing, and very occasional burnt fragments (Table 3). Trenches 30 and 33 for instance contain sawn cattle ribs and tibia specimens, a transverse sawn pig radius and a gnawed sheep radius. The group from 28 is much the largest containing some 215 fragments (this includes many adjoining and small cortical or shaft fragments) and is considered further below. Most of the bones (20 fragments) from Trench 50 are from the skeleton of a cat.

From the assemblage as a whole, 19 out of 30, (63%) of the bones identified as “cattle” are sawn. Similarly high levels of sawn cattle and sheep bones and also evidence for breed improvement have been noted in a context of similar date in Chester (Smith 2008) and by Gidney (2014) in Bromborough.

Cat Skeleton

Much of the hind portion of an adult and reasonably large cat (right and left pelves, one femur, right and left tibia, sacrum, calcaneus, astragalus and metatarsals) is represented in Trench 50 (Plate 1). Whilst there are also Medieval and Roman dated finds from this trench, the finds from the overlying contexts (5001) and (5002) attest to post-medieval and modern disturbance. It appears most likely that these cat bones are from the post-medieval burial of a pet and that the burial was subsequently disturbed.

Victorian Marl Pit Group

Trench 28 is of some particular interest in that it was a marl pit, a feature very common across Cheshire and the Wirral. Midden type waste was recovered, including remains from cattle, sheep, pig and rabbit. The cattle bones are restricted to parts of the pelvis, tibia, ribs and cervical vertebrae and there are no parts of cattle skull, or of foot bones. There are no parts (from the skull or lower limb) that one might associate with primary butchery waste and it thus appears that the cattle bones are all domestic (or racecourse meeting?) jointed meat waste. Many of the cattle bones are obviously large although there are no obvious opportunities (following von den Driesch 1976) to prove this metrically. Undoubtedly, however the cattle are large and of “improved” types as also recorded by Gidney (2014) from Bromborough.

Butchery

Forty seven percent of cattle/large mammal from trench 28 are sawn (15 cattle and 8 large mammal). Such high proportions of sawing in butchery (as opposed to bone working) are seen in post-medieval assemblages but not in earlier groups. Fine transverse knife cut marks are also in evidence on some of the cattle ribs (including on sections of “flat rib”). Amongst the sheep (as amongst the cattle) the bones are notably large (Table 2) and again sawing is in evidence. The sheep tibias are sawn through at approximately mid-shaft and one scapula is sawn. Similarly there is sawing of pig bones (a radius/ulna and scapula) which clearly relate to the preparation by butchers of joints of pork.

Conclusions

Domestic waste including joints of beef, pork, lamb and a few bones from turkey and chicken are represented from these test pits. The collection has much in common with that examined by Gidney (2014) also from test pitting in Bromborough with regard to its composition and the taphonomic evidence. Also in common with Gidney (2014), it is not clear whether the rabbit was eaten or not and the possibility that rabbit remains might relate to disturbed burials has not been excluded. Garden burials of pet cats were identified by Gidney (2014) and the same conclusion is drawn here.

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Table 1: Species/group totals by trench

Trench	Cattle	Large mammal	Sheep/goat	Pig	Medium mammal	Dog	Cat	Rabbit	cf Swan	Turkey	Chicken	Unid	Fish	Trench Totals
	<i>Bos Taurus</i>	<i>Mammalia</i>	<i>Ovis aries/Capra</i>	<i>Sus domesticus</i>	<i>Mammalia</i>	<i>Canis familiaris</i>	<i>Felis catus</i>	<i>Oryctolagus cuniculus</i>	<i>cf. Cygnus sp.</i>	<i>Meleagris gallopavo</i>	<i>Gallus gallus</i>	<i>Unid</i>	<i>Pisces und.</i>	
28	23	26	61	12	17			6	1		3	59	2	210

30	3		1											4
33	2	1	2	3	1		1					3		13
34		1												1
35	2		1		1							1		5
36		2	1	1	2							1		7
37												1		1
39			1		1									2
40					1									1
43					1	1								2
44					1									1
45										1				1
49				1	1					1	1	1		5
50				1	2		19							22
Species totals	30	30	67	18	28	1	20	6	1	2	4	66	2	275

Table 2: Measurements taken following von den Driesch (1976).

Key: *= unfused (sheep radius unfused distally, sheep metatarsal unfused distally)

Test Pit	Context	Species	Latin name	Element	Side	GL	Bp	SD	LAR	Bd
28	2802	Sheep	<i>Ovis aries</i>	humerus	left					31.9
28	2802	Sheep	<i>Ovis aries</i>	radius	left		32.7*	17.4*		
28	2801	Sheep	<i>Ovis aries</i>	pelvis	left				26.6	
28	2802	Sheep	<i>Ovis aries</i>	astragalus	right					21.1
28	2801	Sheep	<i>Ovis aries</i>	astragalus	left					23.4
28	2801	Sheep	<i>Ovis aries</i>	metatarsal	left		23.1*			
50	5003	cat	<i>Felis catus</i>	femur	right	120	20.8	10		
50	5003	cat	<i>Felis catus</i>	tibia	left	121.4	19.5	9.1		15.6
50	5003	cat	<i>Felis catus</i>	tibia	right	121.9	20.7	8.5		15
50	5003	cat	<i>Felis catus</i>	metatarsal 2	left	47.2				
50	5003	cat	<i>Felis catus</i>	metatarsal 3	right	47.3				
50	5003	cat	<i>Felis catus</i>	metatarsal 3	left	51.3				
50	5003	cat	<i>Felis catus</i>	metatarsal 3	right	51.7				
50	5003	cat	<i>Felis catus</i>	metatarsal 4	right	52.5				
28	2803	chicken	<i>Gallus gallus</i>	coracoid	right	63.1				
28	2803	chicken	<i>Gallus gallus</i>	tarsometatarsus	left					15.1

Table 3: Summary (raw counts) of recorded sawing and other taphonomic evidence amongst the skeletal elements by taxonomic group.

Taphonomy by taxonomic group	Sawn	Cleaved /chopped	Fine cut	Carnivore gnawing	Rodent gnawing	Burnt
Cattle	19		6	2		
vertebra cervical centra	1					
vertebra process	3		4			

rib	12		2	2		
pelvis	2					
tibia	1					
Large mammal	10					
vertebra	1					
unid	9					
Sheep/goat	13		2	4	1	
vertebra cervical centra	1					
rib	4		1			
scapula	1					
radius				1		
pelvis				1		
femur	2		1	1	1	
tibia	5					
calcaneus				1		
Medium mammal	5	1			1	1
vertebra frags	1					
rib	1	1			1	
femur	1					
long bone	2					
long bone shaft frag						1
Pig	7		2	4		1
rib	2					
scapula	1		1	2		
humerus						
radius	2			1		
ulna	1					1
femur	1		1			
patella						
tibia				1		
Grand Total	54	1	10	10	2	2



Figure 1: Partial cat skeleton from Trench 50

11.2.2. *Clay Tobacco Pipes and Stone Marbles by D. A. Higgins*

Introduction

This report deals with an assemblage of clay tobacco pipes and marbles that were recovered from fifty test pits excavated in 2013 and 2014 as part of a community archaeology project. The 1 m² test pits were excavated in the grounds of various properties located in the historic core of the village of Bromborough on the Wirral, Merseyside. These test pits were spread across an area of roughly 0.75 km square around and to the west of the church. The finds from each trench are identified by a number (in a circle), the last two digits of which represent the context or spit, while the first part identifies the trench number, for example, 302 represents the finds from Trench 3, Context 2, while 4601 represents the finds from Trench 46, Context 1. The finds from each context have been divided into different classes and bagged separately, each bag then being allocated a unique Small Find number (in a triangle). The bags of pipes contain between one and twenty fragments. The site archive and finds will be deposited with the Museum of Liverpool and most of the pipe fragments

have been marked with a Museum of Liverpool accession number (space allowing), which starts with MOL.2013.104 for the 2013 finds and MOL.2015.9 for the 2014 finds. The final part of the accession number written on each object is the Small Find number for the bag that it comes from. This means it is necessary to know the correlation between the Small Find bag number and the trench and context numbers so as to work out where any given piece is from, based on the number actually written on it.

The pipes themselves were individually examined by the author in November 2015 and an archive record compiled on an Excel worksheet, based on the recording system developed at the University of Liverpool (Higgins and Davey 2004). This record comprises a context summary, so that the pieces in each bag have been logged together and described as a group. Two dates have been given for each group, the 'Range', which gives the earliest and latest dates for any of the pipe fragments within the group, and the 'Latest', which is an assessment of the likely date of deposition for the group as a whole. The former can be very wide, since it often includes plain stem fragments that can only be given a broad general date range, whereas the latter takes into account an assessment of the dating for the more diagnostic pieces within the group as well as the nature of the group as a whole (i.e., whether they appear to form a consistent/contemporary group or not).

In the archive record and the following report 'local fabric' refers to pipes made using a slightly off-white fabric, typically with a granular fracture and/or gritty inclusions, which is presumed to have been obtained from the local Coal Measures deposits in south Lancashire or north Wales. In contrast, 'imported fabric' refers to a fine, whiter coloured clay, almost inclusion free, that was probably imported from the south-west of England. The 'cut off' date for pipe deposition has been taken as 1920, since clay pipes went out of general use after this date while municipal rubbish collection also meant that far fewer objects were discarded around domestic dwellings by this time.

The Clay Tobacco Pipes

A total of 144 fragments of pipe were recovered during this project, comprising 42 bowl, 98 stem and 4 mouthpiece fragments. A quantification and description of the pipes from the test pits is given in Table 1 below, including date ranges for the groups from each context and details of the marked and decorated pieces recovered.

Table 1: Context summary showing the Trench (Tr), Context (Cxt) and Small Find numbers (SF) followed by the numbers of bowl (B), stem(S) and mouthpiece (M) fragments recovered, together with the total (Tot). The 'range' shows the widest dating parameters for all the pipes in each group while the 'latest' is the best estimate of the likely deposition date, based on the latest pieces present. The marks are transcribed followed by their type (IM = incuse moulded; IS = incuse stamped) and position (BF = on the bowl, facing the smoker; RS = roll-stamped around the stem). Finally any decoration is described, followed by general comments on the individual pieces present.

Tr	Cxt	SF	B	S	M	Tot	Range	Latest	Mark	Type	Pos	Decoration	Comments
2	201	180	1	4		5	1610-1920	1780-1920					Most of these pieces date from the C17th; three abraded C17th stem fragments and a very small body fragment from a C17th bowl. The one later piece is a plain stem of c1780-1920.
3	302	181	1	2		3	1610-1750	1680-1750					One very abraded C17th stem with an unusually large bore of 10/64"; a later stem of c1680-1750 and a small body fragment from a transitional bowl of c1670-1740.
4	401	182		1		1	1680-1820	1680-1820					One very small stem fragment with a slightly oval section. Hard to date but probably C18th and could be anywhere between c1680 and 1820, or even later. [Bag also contains a fragment of ceramic insulator, most likely of C20th date].
5	510	183		1		1	1700-1900	1700-1900					One stem fragment, probably of C18th or C19th date.
6	601	184		2		2	1780-1920	1780-1920					Two fragments of c1780-1920 types, but most likely C19th. One piece comes from quite a narrow, cylindrical stem.
6	604	185		2		2	1800-1920	1800-1920					Two quite thin stems with an oval section dating from about 1800-1920. These two pieces join (old break).

7	701	189	1	4		5	1610-1900	1800-1850					Two abraded stems of C17th or early C18th date and two thinner ones of C18th or C19th date (but probably not too late in C19th). The best dating is provided by a small plain heel fragment from a bowl of c1800-50 type.
7	703	186	1			1	1680-1740	1680-1740					A small body fragment from a transitional bowl of c1680-1740.
8	802	187		1		1	1610-1710	1610-1710					One abraded C17th or very early C18th stem fragment.
8	803	188	1			1	1680-1780	1680-1780					A small body fragment from a plain bowl. Most likely c1680-1780 but could possibly be later.
9	902	190		2		2	1700-1900	1760-1900					Two stems of C18th or C19th types, the latest probably c1760-1900.
10	1001	191	3	4		7	1700-1920	1850-1920				flutes and leaf seams x 1	Four stems of C18th or C19th types and three C19th or later bowl fragments. One piece of c1810-1880 has narrow flutes and leaf seams, both crudely executed. There is part of a plain bowl with untrimmed seams, probably dating from c1850-1920 and a small but very thick rim sherd of similar date from an Irish style pipe (not milled).
10	1002	192	1	3		4	1610-1900	1700-1900					Two abraded stems of C17th date and a later piece of C18th or C19th date. The plain bowl fragment with unmilled rim comes from a pipe of c1680-1750.
11A	11A05	193		1		1	1680-1770	1680-1770					One stem of c1680-1770.
13	1301	194		1		1	1780-1900	1780-1900					

13	1302	195		1		1	1720-1820	1720-1820					Quite a thick but well-made fragment with a hard fired smooth cylindrical form and relatively small stem bore (just over 4/64"). Most likely C18th or early C19th.
14	1401	196			1	1	1850-1920	1850-1920				nipple tip with glaze x 1	A nipple type mouthpiece from a short-stemmed cutty pipe. The end 29mm has been coated with a glaze, but it has been burnt to a black colour, probably in a fire after the pipe was discarded.
15	1501	197	1	2		3	1610-1920	1850-1920					One abraded C17th stem fragment and a chip from another very thick piece that could either be early or from a later C19th to early C20 pipe. The latter has been assumed because of its very white fabric and traces of a narrow stem bore. The bowl fragment comprises the spur from a C18th pipe.
16	1601	198		1		1	1700-1900	1700-1900					Stem fragment of C18th or C19th date.
17	1701	199		1		1	1610-1710	1610-1710					One abraded C17th or very early C18th stem fragment.
18	1801	200		3		3	1680-1920	1800-1920					One fragment of c1680-1780 and two joining pieces (probably broken during excavation) of C19th or early C20th date.
18	1802	201		3		3	1680-1920	1700-1920					Three stem fragments probably all dating from after c1680, but the latest hard to define - could be anywhere from c1700-1920.
18	1803	202		4		4	1680-1920	1700-1920					Four stem fragments probably all dating from after c1680, but the latest hard to define - could be anywhere from c1700-1920. One small fragment with a freshly broken end

													fits a piece from 2001 (SF 209).
19	1901	207		4		4	1680-1900	1700-1900					Four stem fragments probably all dating from after c1680, but the latest hard to define - could be anywhere from c1700-1900, although a later C18th to early C19th end date seems most probable.
19	1903	208		2		2	1650-1750	1650-1750					Two joining fragments (old break) from a stem of c1650-1750.
20	2001	209		2		2	1700-1920	1870-1920				late decoration x 1	One small fragment of C18th or C19th date with a freshly broken end that fits a piece from 1803 (SF 202) and a very thick stem fragment of c1870-1920 with traces of relief moulded decoration extending from the bowl (sharply raised square section ridges on the seams and some sort of deep relief decoration on the bowl side).
20	2002	210		1		1	1610-1780	1610-1780					One small fragment of C17th or C18th date.
21	2101	211		2		2	1610-1710	1610-1710					Two tiny and very abraded joining stem chips, most likely from a C17th stem.
21	2102	212		1		1	1610-1710	1610-1710					One small and abraded C17th or very early C18th stem fragment.
22	2201	213		2		2	1820-1880	1820-1880					Two stem fragments, most likely of C19th date (one with a very oval section and poorly trimmed; both poorly made).
23	2302	214		1		1	1700-1900	1700-1900					Probably a C18th or C19th stem.

24	2401	215	8	11	1	20	1760-1920	1860-1880	TW	IM	BF	flutes x 2; moulded milling x 5; hatched heart x 1	<p>All the stems are of late C18th or later types but are likely to be contemporary with the bowl fragments, which seem to form a coherent group. Four of the bowl fragments join to make up the larger part of the rim of a bowl with moulded milling, a hatched heart on the right hand side and the incuse moulded initials TW within a plain incuse border facing the smoker. The right hand side of the bowl appears to have been blank. The other bowls are all fragmentary but all from different pipes, so that at least five are represented in all. Two are poor quality fluted bowls with narrow flutes running up to near the rim. One has its plain spur surviving (Fig 3). There is a tiny fragment with moulded milling from another bowl (not the same as the TW example) and part of a plain bowl with untrimmed seams. All of these are characteristic of local pipe assemblages dating from c1860-1880 and all are likely to have been made locally. They appear to represent a short-lived phase of activity when a cheap local pipes were being consumed and discarded in this area. The single mouthpiece has a simple cut end to a thick but quite sharply tapering stem fragment. The style of this is typical of the same period as the bowls, and supports the</p>
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													consistent nature of this group.
24	2404	216	1	2		3	1700-1900	1850-1900				dove x 1	Two stems that are hard to date (general C18th or C19th types), but most likely to be C19th and a bowl fragment dating from c1850-1900, which provides the best date for this deposit. The fragment comes from the back of the bowl facing the smoker and has part of a bird with outstretched wings moulded in relief on it; probably intended to represent a dove. This was a popular motif in the Merseyside area and produced by several local manufacturers.
25	2501	217	4	4		8	1700-1920	1850-1900				flutes x 3	Four stems that are hard to date (general C18th or C19th types), but most likely to be C19th, and four bowl fragments dating from c1850-1900, which provide a consistent date for this group. One bowl is a complete spurless type with 12 broad flutes, which extend right to the rim, where they are truncated (Fig 4). There are two other fragments, almost certainly from the same bowl, with a band of broad flute sections around the upper part of the bowl and with traces of narrower flutes below (there is part of a similar bowl in 2502). The final fragment is the unmarked spur from a plain bowl.

25	2502	218	5	5	1	11	1700-1920	1850-1900				leaf seams x 1; flutes x 2; glaze x 1	The five stems are hard to date (general C18th or C19th types), but most likely to be C19th, which is consistent with the bowl fragments. One of the stems has a splash of pale brown glaze on it, which is typical of late C18th or early C19th products in this region. One bowl fragment has stylised and crudely moulded leaf seams and another has part of a band of alternating thick and thin flutes, similar to two fragments from bowl in 2501. One piece has narrow lutes around the base of the bowl and two are plain (one being part of a thick, spurless style). The final fragment is a very chunky nipple type mouthpiece with trimmed end - the end of the stem being flattened to an oval section. The mouthpiece and bowl fragments would all be consistent with a date of c1850-1900 for this group.
26	2601	219		2		2	1700-1900	1700-1900					Two battered stem fragments of general C18th or C19th types.
26	2602	220			1	1	1850-1920	1850-1920					A poorly made nipple type mouthpiece with trimmed end - the end of the stem being flattened to an oval section. This is of a general c1850-1920 type.

26	2603	221	2	1		3	1680-1900	1780-1850					One stem fragment that is hard to date; probably c1680 or later but most likely late C18th or early C19th. There is a plain heel fragment from a bowl of late C18th or early C19th date and a small body sherd from a plain bowl that is likely to be of a similar date. Taken together, a date of c1780-1850 is suggested for these pieces.
26	2604	222	1			1	1850-1900	1850-1900					A complete plain spurless bowl with quite thick walls and a poor mould surface. Most likely c1850-1900 and perhaps towards the earlier part of this range.
27	2701	223		1		1	1760-1790	1760-1790	stem border	IS	RS	Chester stem border x 1	A rather battered stem with a Chester broad zoned incuse stem border stamped on it (Fig 2). This is similar to Rutter and Davey type 106 (Higgins Die 818), but without flanking lines at either edge of the mark. It has a stem bore of 5/64" and dates from c1760-90.
28	2802	200		1		1	1750-1900	1750-1900					A badly burnt stem fragment with some slaggy encrustation adhering to one end.
33	3302	71	2	1		3	1700-1920	1760-1920					A stem of C18th or later date and two plain bowl fragments from large bowls with square cut rims of c1760 or later.
34	3401	72		1		1	1750-1920	1750-1920					Stem fragment, probably of mid C18th or later date but hard to date accurately. A C19th date is perhaps most likely.
34	3402	73	1			1	1630-1660	1630-1660					A spur fragment of c1630-60 style made of a local Coal Measures type clay.

													Most likely a Rainford product.
36	3601	74	2			2	1850-1920	1850-1920				moulded milling x 1	Two tiny bowl fragments from thick-walled bowls with square cut rims, one of which has moulded milling. Both are typical of c1850-1920 products.
36	3607	75		1		1	1700-1800	1700-1800					A fairly thick but well finished cylindrical stem, most likely of C18th date but could possibly be as late as early C19th.
37	3702	76		1		1	1700-1920	1760-1920					A stem of C18th or later date - hard to pin down exactly but perhaps most likely to be C18th.
39	3901	77		1		1	1680-1920	1680-1920					A stem of late C17th or later date - hard to pin down exactly but perhaps most likely to be C18th.
39	3903	78	1			1	1850-1920	1850-1920				moulded milling x 1	A tiny bowl fragment from a thick-walled bowl with square cut rim and moulded milling. This is typical of 'Irish style' products of c1850-1920.
40	4001	79	1			1	1610-1660	1610-1660					A small unmarked heel fragment from an earlier C17th bowl of c1610-60. The fabric has a slightly granular fracture but not the coarse inclusions usually seen in a Coal Measures clay.
44	4401	80		1		1	1700-1920	1700-1920					A very small stem fragment of C18th or later date.
45	4503	81		2		2	1700-1920	1700-1920					Two small pieces of C18th or later date.
45	4504	82	2	1		3	1610-1730	1610-1730					A small and very abraded rim fragment from a transitional bowl with bottered rim. One piece of stem dating from the c1610-1710 period and an extremely abraded bowl fragment from

													a pipe of c1630-1660. This is made of a coarse gritty fabric with a pinkish tinge.
46	4601	83	1	1		2	1610-1920	1780-1920					A complete unmarked heel bowl of c1610-1640 with a fully milled rim and stem bore of 7/64" (Fig 1). Rather abraded but does not seem to have been burnished. The fabric does not have obvious inclusions in it and so it's likely to be a Chester product. The stem, in contrast, is much later, dating from the late C18th or later, and so the bowl is clearly residual in this context.
47	4702	84		2		2	1750-1900	1750-1900					Two joining stem fragments (probably freshly broken) of a type dating from somewhere between about 1750 and 1900 (but most likely late C18th or early C19th).
48	4802	85		1		1	1610-1710	1610-1710					An extremely abraded stem fragment of c1610-1710.
49	4902	86	1			1	1840-1900	1840-1900				'Dotted' decoration x1	A bowl fragment completely covered with large relief dots, each of which has a slight incuse cross-shaped mark on it. This seems to have covered the whole bowl, rather than being on the lower part only for 'acorn' type decoration.
Tot			42	98	4	144			2				

Discussion of the Pipes

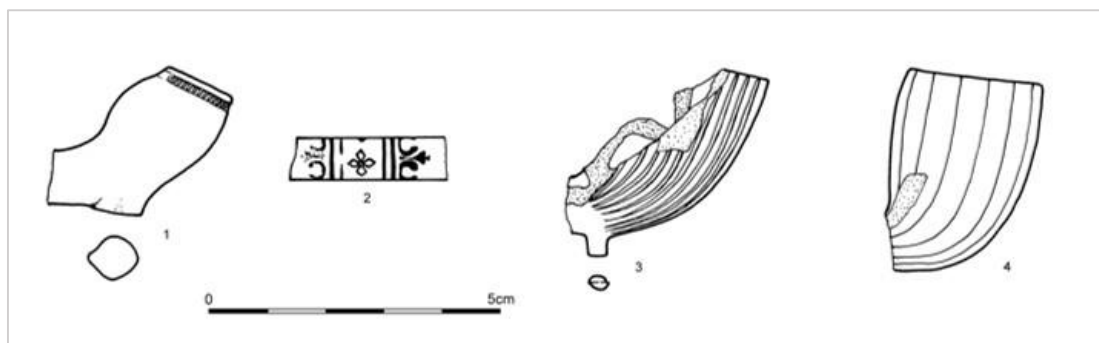
The pipes from this project are important since they provide a window onto the lifestyle habits of the Bromborough's inhabitants for three centuries from c1610-1920. During this period, smoking played an important role in everyday work and leisure. Pipe smoking was not stigmatised at the time (as it

is today by more modern health concerns) and the fragments recovered simply reflect the social customs of the time.

The pipe assemblage as a whole (144 fragments) is not particularly large but it is significant because of the numerous individual locations from which it was recovered. Usually archaeological excavations focus on a single site or property, whereas these pieces represent a sample from across the community as a whole. Pipes were recovered from 38 of the 50 test pits (76%), with an average of 2.88 fragments being recovered from each pit (which equates to a 1m square sample from each different area). This shows that pipe smoking was commonplace across the historic core of the village and that, had the whole study area of about 0.75 km square been excavated, then something in the order of 1,620,000 fragments of pipe would have been recovered. This huge number of fragments underscores how ubiquitous the habit was, and how many pipes were consumed, even within what would have been a relatively small rural settlement at the time.

The pipe fragments themselves almost all appear to have come from very disturbed garden soils. Most of the pieces are very small and abraded and there is often a lot of residual material within any given group. This pattern may well be influenced by the test pits, which were, of necessity, situated in open/accessible areas that are also likely to have been extensively cultivated in the past. As a result, very few complete bowl forms were recovered and the nature of the pipes being consumed has to rely on the identification of very fragmentary examples. The ground conditions also seem to have been very unfavourable for the preservation of pipes with many of the pieces, particularly the older ones, having very soft and abraded surfaces. This means that it has not been possible to record attributes such as burnished surfaces, which can be used as a guide to the quality of the pipes being consumed. These limitations apart, it has been possible to extract quite a lot of evidence for past pipe use within the village from the sample recovered.

The first point to note is the relatively widespread occurrence of early (i.e., 17th century) fragments from across the village. Material of 17th century date was present in just over a half of the test pits that produced pipes (20 out of 38) and one of the pits (46) produced a complete bowl dating from c1610-1640 (see Figure 1).



Figures 1, 2, 3 and 4: fragments of clay pipe excavated from test pits across Bromborough Village

The habit of smoking was only introduced to Britain towards the end of the 16th century and it remained an expensive luxury until the early part of the 17th century. Early pipes are found associated with aristocratic households and in wealthy towns such as Chester, but it is interesting to record this early example from a more rural settlement such as Bromborough. The bowl from test pit 46 (Figure 1) is made of a relatively fine (inclusion free) fabric and is fully milled. The origin of this pipe is uncertain since the fabric is typical of early Chester products, but the use of rim milling is not (Higgins 2008a, 126). In contrast, early pipes from the important production centre at Rainford were normally milled but were usually made of coarse clay from the local Coal Measures. These characteristics of each production centre are a good indicator of origin but cannot be taken as absolute and this is still likely to be a local product from somewhere in the region; it is just that it cannot be attributed to any particular centre on form or fabric alone. Chester perhaps remains the most likely origin because of its geographical proximity and the use of a fine clay body.

The test pits also produced evidence for 18th century smoking across the village, although the larger bowls from this period with their thinner walls have not survived very well in the disturbed ground and the evidence is rather scrappy. One piece that certainly dates from this period and which can also be firmly attributed to Chester is a decorated stem from test pit 27 (Figure 2). This has been stamped with an incuse stem border that is similar to Chester Type 106 (Rutter & Davey 1980, 187; Die 818 in the national mark catalogue being compiled by the author), but without flanking lines at either edge of the mark. It has a stem bore of 5/64" and dates from c1760-90.

In the 19th century moulded decoration on pipes became common and this is reflected in the much larger sample recovered, with at least 15 different decorated pipes being represented in the test pits. Around half of these pipes had some sort of fluted decoration on them (Figures 3-4), including pipes

with narrow flutes and leaf decorated seams, pipes with a break in the middle of the flutes (*cf* Higgins 2012, Figs 69-70) and broad flutes that go all the way to the rim (*cf* Higgins 2012, Figs 61-62). One complete bowl with this last type of decoration was recovered from context 2501 (Figure 4).

Other decoration included a pipe covered with 'dotted' decoration on the bowl from context 4902, rim fragments with moulded milling (contexts 2401, 3601 and 3903), some of which came from thick-walled Irish style bowls, and a bowl fragment from context 2404 with a flying bird motif facing the smoker. This design is particularly associated with the Liverpool area where various versions are known, suggesting that it was made by several of the local manufacturers. Published examples include one that has been recovered from Bromborough Court House (Higgins 1987, Fig 13.8) and two different versions were found in a deposit of c1860-65 at Big Lea Green Farm (Higgins 2012, Figs 77-78). The final pipe of note is represented by four joining fragments from context 2401 that make up the larger part of the rim of a bowl with moulded milling, a hatched heart on the right hand side and the incuse moulded initials TW within a plain incuse border facing the smoker. The right hand side of the bowl appears to have been blank. This particular arrangement of motifs was a common design in the north of England and Scotland and the initials TW are part of the pipe's design, not a maker's mark. The design was made by many of the larger manufacturers and was popular from around 1860-1920.

Overall, the decorated fragments reveal that a wide range of different pipe styles and decorative designs were being used at Bromborough during the 19th century. All of the designs represented are typical of the region at this date and they are generally low quality, mass produced types. Unfortunately, none of the pipes recovered had makers' marks on them, but the majority are likely to have come from Liverpool or Rainford, which were major pipe producing centres at this time. The largest group came from test pit 24, which was located in a plot that had been used as a hotel/public house from 1822 onwards. This correlation between the archaeological and documentary record is interesting and future finds from this plot may be able to shed light on where clients were coming from if the pipes can be sourced.

The Marbles

The excavations also produced three marbles that were sent for examination with the pipes, even though they are actually all made of stone rather than clay. These are hard to date but are most

likely to have been produced during the 19th century, which seems to have been the main period during which machine ground stone marbles from Germany were imported into this country. The three marbles from Bromborough are as follows: -

[Context 402](#) - A small marble, most likely made of a fine grained near white stone rather than clay. It has a diameter of 11.2 mm. There are no surviving traces of colouring pigment visible on the surface.

[Context 11A05](#) - A small marble, probably ground from some sort of hard pale buff/white stone with a very fine texture. This has a diameter of 10.9 mm and there are tiny traces of a dark green ('British racing green') pigment at various places on its surface, suggesting that it was painted this colour all over originally.

[Context 2604](#) - A small marble, which appears to be made of a fine grained creamy white stone rather than clay. The marble has weathered badly, revealing fine bedding planes within its structure. The maximum surviving diameter is 12.4 mm, but it would probably been a millimetre or so larger originally. There is no original surface surviving to determine whether it was painted or not.

These three marbles are all quite small, ranging from 10.9 mm to 12.4mm in diameter. In size they compare quite well with two examples from recent work at Bromborough Court House, which produced one clay example with a variable diameter of between 13.0 and 14.2 mm and a stone example with a diameter of 10.9 mm (Higgins 2015). In contrast, a sample of 14 marbles from excavations at 25 Bridge Street in Chester included 8 that appeared to be made of stone, which ranged from 13.9 mm to 20.0 mm in diameter (Higgins 2008b, 259). It is not clear whether this difference in diameter between the Bromborough and Chester finds is due to the small sample size or whether it represents some sort of chronological or functional difference between the two groups. It is also worth noting that the stone marble from Bromborough Court House had painted lines decorating it, and so a coloured surface or other painted decoration on these stone marbles may have been relatively common when they were new. Careful cleaning of future finds is essential if evidence for painted surface decoration is to be recorded.

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11.2.3. *Lithic by Joanne Kirton (preliminary identification by Robin Holgate).*

Flint artefacts from the Bromborough test pit excavations were very rare. Only two struck flints were identified. These were noted by type and date.

Flint artefacts are listed here by test pit and context in numerical order.

Test Pit 9

Context 902: One pressure-flaked arrowhead – Neolithic

Test Pit 17

Context 1703: One bladelet fragment – Mesolithic

11.2.4. *Pottery by Paul Blinkhorn*

The following pottery types occurred:

BEW: Buckley-type Earthenware, 17th – 19th century (Crossley 1994, 252). Hard red earthenware, usually with a black or dark purple glaze.

BSL: Buckley-type Slipware, late 17th – 18th century. Slip-decorated wares, fabric as BEW (ibid.).

CIST: Cistercian Ware: c. AD 1470-1600. Hard, smooth fabric, usually brick-red, but can be paler or browner. Metallic purple/black/dark brown glaze. Few visible inclusions, except for occasional quartz grains. Range of vessel forms somewhat specialized mainly drinking vessels, and usually very thin-walled (c. 2mm). Rare white slip decoration. Manufactured at a number of centres, with Ticknall in Derbyshire being one of the most important (Boyle 2002).

CPW: Cheshire Plains Ware, 1st – 2nd century (Webster 1992). Orange/grey sandy ware in a wide range of vessels: bowls, flagons, jars and cups. Manufactory known in Warrington.

EST: English Stoneware, AD 1680+. Hard, grey fabric, often with a brown, iron-rich exterior wash. Range of utilitarian vessels, particularly mugs (Mountford 1971)

EW: Ewloe-type Ware, 14th – 15th century (Davey 1977, 92). White/pink grey sandy glazed ware in a range of medieval forms.

GRE: Glazed Red Earthenware, 16th – 19th century. Fine sandy earthenware, usually with a brown or green glaze, occurring in a range of utilitarian forms. Such 'country pottery' was first made in the 16th century, and in some areas continued in use until the 19th century (Brears 1969).

MB: Midland Blackwares, AD 1580-1700. (ibid.). Hard, brick-red fabric with sparse to moderate quartz up to 0.5 mm. Glossy black glaze, usually on both surfaces. Distributed throughout the midlands of England. Manufactured in a range of utilitarian forms, particularly mugs and tygs.

MED: Medieval Sandy Ware, 13th – 14th C. Range of orange/red or grey sandy wares, similar to the glazed wares typical of pottery from a number of sources in Cheshire and North Wales (Owen 1994, 192).

MOD: Modern, 19th century +. A wide range of different types of pottery, including stoneware, porcelain and earthenwares, particularly the white earthenware, cups, plates and bowls with transfer-printed blue decoration.

MP: Midland Purple ware, 15th – mid 17th century. Hard-purplish grey ware, purple to black glaze (McCarthy and Brooks 1988, 427).

RB: Miscellaneous Romano-British.

RWW: Romano-British White Ware. Fine fabric with few visible inclusions. Only sherd highly abraded, making precise identification impossible.

SMW: Staffordshire Manganese Mottled Ware, late 17th – 18th century (Crossley 1994). Hard buff fabric with distinctive purplish-brown glaze. Usually fine drinking pottery, but chamber pots and other more utilitarian vessels also known.

SS: Staffordshire Slipware, mid-17th – 18th century (ibid.). Fine cream fabric and pale yellow lead glaze, commonest decoration is feathered dark brown trailed slip. Chiefly press-moulded flat wares, although small bowls, mugs etc. are known.

STAM: Stamford Ware, c AD 900-1200 (Kilmurry 1980). Wheel-thrown. White, pink, buff or grey fabric, usually with sparse to dense quartz up to 0.5mm, occasional black or red ironstone up to 1mm. Often glazed with yellow, pale or sage green glaze from the late 10th century.

SWSG: Staffordshire White Salt-Glazed Stoneware, AD 1720-1780. Hard, white fabric with a distinctive white 'orange peel' textured glaze. Range of fine tablewares such as mugs, tea bowls and plates (Mountford 1971)

TGE: Anglo-Dutch Tin-glazed Earthenware, 17th – early 18th century (Orton 1988). Fine white earthenware, occasionally pinkish or yellowish core. Thick white tin glaze, with painted cobalt blue or polychrome decoration. Range of table and display wares such as mugs, plates, dishes, bowls and vases.

WCS: Cologne/Westerwald Stoneware, 17th century + (Gaimster 1997). Hard, grey fabric with clear salt glaze. Vessels include jugs with moulded decoration and chamber-pots, often with blue and purple manganese and cobalt decoration.

Overview

The small assemblage of Roman material aside, the earliest pottery is a single sherd of Stamford Ware from Test Pit 3. The sherd is glazed on the inside, and likely to be of 11th century date, and perhaps even slightly earlier, although glazing on such pottery did not start to become common until the late 10th century (Kilmurry 1980).

The small assemblage of medieval material shows that there was a presence in Bromborough from the 13th century onwards. Most of the medieval assemblages are quite small, but some of the larger sherds in particular are very crisp and in good condition, and do not have the extensive abrasion associated with pottery that has been deposited on fields with manure, and consequently subjected to considerable transportation and attrition, suggesting many come from the margins of settlement rather than agricultural deposits.

In the late medieval – early post=medieval period, Cistercian Ware and Midland Purple Ware make up the bulk of the pottery. The wares were long-lived, and it is difficult to differentiate between the early and late products of the traditions, but their presence nevertheless indicate that there was activity here in the 16th-17th centuries, and probably in the 15th century. The post-medieval assemblage is, in the main, fairly utilitarian. Fine tablewares, such as Staffordshire Slipware, Tin-glazed Earthenware and Buckley Slipware are rather rare, suggesting that Bromborough was not a place of great wealth during the 17th -early 18th century, and a dearth of later tablewares, such as White Stoneware and Chinese Porcelain gives as similar picture for the 18th century as a whole.

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Results

Test Pit 1

		MED		MP		BEW		SS		BSL		SMW		MOD		
TP	Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	Date Range
1	101	1	2	2	6	7	59	1	1	2	6	1	1	17	43	1200-1900

The range of pottery from this test-pit suggests that the site had a marginal use, perhaps as fields, during the medieval period. It then seems to have been largely abandoned until the 17th century, when it may have had a similar use, until the modern era.

Test Pit 2

		RB		MED		MP		BEW		SS		SMW		MOD		
TP	Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	Date Range
2	201	1	1	1	2	5	29	3	31	2	3			12	139	100-1900
2	202			1	5	3	30	2	47			3	16	4	7	1200-1900
2	203			1	15											1200-1400

The range of pottery from this test-pit suggests that the site had a marginal use, perhaps as fields, during the Roman period. It was then occupied during the medieval period, and again from the 18th century onwards.

Test Pit 3

		STAM		CIST		MP		SS		BEW		SMW		MOD		
TP	Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	Date Range
3	301						1				6				20	1470-1900
3	302	1	3	3	4	4	16	1	5	8	66	6	14	11	49	1000-1900

The small sherd of Stamford Ware shows that there was activity at the site in the Saxo-Norman period. There is then no evidence of people using the site until the end of the medieval period or the early post-medieval era, after which time it appears to have been somewhat marginal.

Test Pit 4

		MP		GRE		BEW		BSL		SMW		MOD		
TP	Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	Date Range
4	401	1	11			1	2					7	45	1400-1900
4	402					1	146					4	19	1700-1900
4	403					1	30					7	23	1700-1900
4	404			1	2			1	15			7	45	1550-1900
4	405	1	35							1	6	6	41	1400-1900
4	406	1	29											1400-1550

Much of the pottery from this test-pit is modern, but there is also a small quantity of other material which suggests that the site was in use from the 16th -17th centuries onwards, and perhaps even slightly earlier.

Test Pit 5

		WCS		MOD		
TP	Cntxt	No	Wt	No	Wt	Date Range
5	501			13	73	1400-1900
5	504			7	18	1800-1900
5	505			3	43	1800-1900
5	507			13	106	1800-1900
5	508			15	23	1800-1900
5	510	1	16	1	1	1600-1900

Most of the pottery from this test-pit is modern, but there is also a small quantity of other material which suggests that the site had a marginal use in the 16th -17th centuries, and perhaps even slightly earlier.

Test Pit 6

		BEW		MOD		
TP	Cntxt	No	Wt	No	Wt	Date Range
6	601	4	105	81	952	1700-1900
6	602			31	112	1800-1900
6	603	1	16	43	264	1700-1900
6	604			3	4	1800-1900

Most of the pottery from this test-pit was of 19th or 20th century date, other than the Buckley Ware, which is probably 17th - 18th century in date, and the only evidence of activity before the modern era.

Test Pit 7

		MP		SS		BEW		MOD		
TP	Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	Date Range
7	701					2	33	98	669	1700-1900
7	703	1	7	1	3	2	60	20	124	1400-1900

Most of the pottery from this test-pit is modern, but there is also a small quantity of other material which suggests that the site had a marginal use in the 16th -17th centuries onwards, and perhaps even slightly earlier.

Test Pit 8

		EW		TGE		BEW		SMW		EST		SWSG		MOD		
TP	Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	Date Range
8	801	1	5	1	1	6	47	4	8	1	6			56	94	1300-1900
8	802					1	1	2	5					3	8	1700-1900
8	803							1	1			1	1	1	1	1700-1800

Most of the pottery from this test-pit is modern, but there is also a small quantity of other material which suggests that the site had a marginal use from the 14th -17th centuries.

Test Pit 9

		EW		CIST		MP		GRE		TGE		BEW		BSL		SMW		MOD		
T P	Cntx t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	Wt	N o	W t	N o	W t	N o	Wt	Date Range
9	901					2	22	3	13			6	19			2	5	76	22 2	1400- 1900
9	902	1	2	1	1			1	13	1	4	4	13 6	1	1			17	32	1400- 1900

Most of the pottery from this test-pit is modern, but there is also a small quantity of other material which suggests that the site had a marginal use from the 15th century onwards.

Test Pit 10

		MED		GRE		TGE		BEW		BSL		SMW		MOD		
TP	Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	Date Range
10	1001	1	3	1	1			23	127	3	12	2	3	127	534	1300-1900
10	1002	1	3			1	1	6	47			6	17	9	16	1300-1900

Most of the pottery from this test-pit is modern, but there is also a small quantity of other material which suggests that the site had a marginal use from the 14th century onwards.

Test Pit 11

		MOD		
TP	Cntxt	No	Wt	Date Range
11	1102	1	10	1800-1900
11	1104	13	47	1800-1900

All the pottery from this test-pit is modern, and suggests that there was no activity at the site until fairly recently.

Test Pit 11A

		BEW		SMW		MOD		
TP	Cntxt	No	Wt	No	Wt	No	Wt	Date Range
11A	11A01	1	9			3	7	1700-1900
11A	11A02			1	8	5	6	1700-1900
11A	11A03					6	17	1800-1900
11A	11A05			5	17	55	177	1700-1900
11A	11A06					16	51	1800-1900

Most of the pottery from this test-pit was of 19th or 20th century date, other than the small amount of 17th - 18th century material, the only evidence of activity before the modern era.

Test Pit 12

		SS		BEW		SMW		MOD		
TP	Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	Date Range
12	1202	1	3	6	44	1	1	13	45	1650-1900

Most of the pottery from this test-pit is modern, but there is also a small quantity of other material which suggests that the site had a marginal use from 17th century onwards.

Test Pit 13

		MED		MP		GRE		TGE		BEW		BSL		MOD		
TP	Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	Date Range
13	1301	1	5			1	3			5	75			43	185	1500-1900
13	1302	1	2	2	22	1	9	1	1	2	56	1	3	26	92	1200-1900

Most of the pottery from this test-pit is modern, but there is also a small quantity of other material which suggests that the site had a marginal use from the 13th century onwards.

Test Pit 14

		GRE		TGE		SS		BEW		SMW		MOD		
TP	Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	Date Range
14	1401	2	3	2	3	1	4	9	46	3	7	6	10	1400-1900
14	1402									6	102			1700-1800

The range of pottery suggests that the site had a marginal use from the 16th -17th centuries onwards, and perhaps even slightly earlier.

Test Pit 15

		EW		CIST		GRE		BEW		BSL		SMW		MOD		
TP	Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	Date Range
15	1500			2	4									12	29	1470-1900
15	1501							4	21	1	6	1	1			1700-1800
15	1502	1	12	1	1	1	2							1	1	1300-1900
15	1503							4	13			3	5			1700-1800

The range of pottery from this site suggests that it had a marginal use from the 14th -15th centuries onwards.

Test Pit 16

		BEW		BSL		MOD		
TP	Cntxt	No	Wt	No	Wt	No	Wt	Date Range
16	1601	1	6	2	9	26	179	1700-1900

Most of the pottery from this test-pit was of 19th or 20th century date, other than the small amount of 17th - 18th century material, the only evidence of activity before the modern era.

Test Pit 17

		MED		CIST		MP		GRE		MB		SS		BEW		SMW		EST		MOD		
T P	Cnt xt	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	Date Range
1 7	170 1	1	2			1	1	4	4 3	1	1 8	1	1	3	1 9	1	3	1	2 6	1	2 6	1200- 1900
1 7	170 2					1	1 7					1	2	3	2 0	2	1 0			4	2 1	1470- 1900
1 7	170 3			2	2	1	2							4	1 9	2	1 2			4	1 6	1400- 1900

The range of pottery from this site suggests that it had a marginal use in the earlier medieval period (13th – 14th century), but was then occupied from 16th - 17th centuries onwards, and perhaps even slightly earlier.

Test Pit 18 (See below)

Test Pit 19

		MP		TGE		BEW		BSL		SMW		SWSG		MOD		
TP	Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	Date Range
19	1901			1	1	4	38	2	9	5	12			46	180	1600-1900
19	1903	10	503	1	5	44	607	1	11			2	6	6	41	1400-1900

The range of pottery from this site suggests that it was occupied from 16th - 17th centuries onwards, and perhaps even slightly earlier.

Test Pit 20

		RB		MP		GRE		BEW		BSL		MOD		
TP	Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	Date Range
20	2001	1	2			2	5	2	6			25	69	100-1900
20	2002			1	1					1	1	9	24	1400-1900

The range of pottery from this site suggests that it had a marginal use in the Roman period, and then again from the 16th - 17th centuries onwards, and perhaps even slightly earlier.

Test Pit 21

		SS		BEW		MOD		
TP	Cntxt	No	Wt	No	Wt	No	Wt	Date Range
21	2101	1	1	1	5	4	4	1650-1900
21	2102					2	2	1800-1900

This site appears to have always been somewhat marginal, with no evidence of activity before the 17th century.

Test Pit 22

		BEW		MOD		
TP	Cntxt	No	Wt	No	Wt	Date Range
22	2201	7	72	19	49	1700-1900
22	2202	1	29			1700-1800
22	2203	3	35	2	8	1700-1900

Most of the pottery from this test-pit was of 19th or 20th century date, other than the small amount of 17th - 18th century material, the only evidence of activity before the modern era.

Test Pit 23

		MED		GRE		BEW		SMW		MOD		
TP	Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	Date Range
23	2301	2	22	6	34	3	24			15	26	1200-1900
23	2302					6	59	2	26	14	35	1800-1900
23	2303									1	1	1800-1900

The range of pottery from this site suggests that it had a marginal use in the earlier medieval period (13th – 14th century), but was then occupied from 16th - 17th centuries onwards.

Test Pit 24

		MED		GRE		MB		SS		BEW		SMW		MOD		
TP	Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	Date Range
24	2401	1	3	1	5			1	1	4	78	2	32	116	412	1200-1900
24	2404													9	12	1800-1900
24	2405					1	1									1550-1600

The range of pottery from this site suggests that it had a marginal use from the medieval period (13th – 14th century) onwards, before being occupied in the modern era.

Test Pit 25

		MED		BEW		SMW		MOD		
TP	Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	Date Range
25	2501			3	13			61	229	1700-1900
25	2502	1	5	12	142	2	20	97	306	1200-1900

The range of pottery from this site suggests that it had a marginal use in the medieval period (13th – 14th century), before being occupied in the modern era.

Test Pit 26

		BEW		MOD		
TP	Cntxt	No	Wt	No	Wt	Date Range
26	2601	4	28	55	236	1700-1900
26	2602			15	63	1800-1900
26	2603			18	66	1800-1900
26	2604	16	1267			1700-1800

Most of the pottery from this test-pit was of 19th or 20th century date, other than the small amount of 17th - 18th century material, the only evidence of activity before the modern era.

Test Pit 27

		RB		GRE		BEW		MOD		
TP	Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	Date Range
27	2701							36	195	1800-1900
27	2702	1	4	2	23	1	12	17	58	100-1900
27	2703							4	21	1800-1900
27	2704							2	6	1800-1900

The range of pottery from this site suggests that it had a marginal use in the Roman period, and then again in the 16th - 17th centuries, before being occupied in the modern era.

Test Pit 28

		BSL		MOD		
TP	Cntxt	No	Wt	No	Wt	Date Range
28	2801	1	40	427	6442	1680-1900
28	2802			324	6013	1800-1930

Most of the pottery from this test-pit was of 19th or 20th century date, other than the single sherd of Buckley Slipware, which is probably 18th century in date, and the only evidence of activity before the modern era.

Test Pit 29

		MP		BEW		BSL		MOD		
TP	Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	Date Range
29	2901							10	24	1800-1900
29	2903			1	36			15	28	1600-1900
29	2904	1	6	1	4			12	26	1400-1900
29	2905			1	4	1	7	3	3	1600-1900

29	2906							4	72	1800-1900
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Most of the pottery from this site is modern, but there is a small quantity of other material which shows that there was activity at the site in the 17th and 18th centuries, as possibly as early as the late medieval period, as evidence by the sherd of Midland Purple Ware.

Test Pit 30

		BEW		MOD		
TP	Cntxt	No	Wt	No	Wt	Date Range
30	3001	1	2	33	153	1600-1900
30	3002			22	96	1800-1900
30	3003			22	125	1800-1900
30	3006			10	187	1800-1900

Most of the pottery from this test-pit was of 19th or 20th century date, other than the single sherd of Buckley Ware, which is probably 17th - 18th century in date, and the only evidence of activity before the modern era.

Test Pit 31

No pottery recovered

Test Pit 32

		MP		MB		MOD		
TP	Cntxt	No	Wt	No	Wt	No	Wt	Date Range
32	3201	1	5	1	3	10	96	1400-1900

This test-pit did not produce much pottery, and most of it is modern. The other sherds are probably of 16th – 17th century date, and suggest that the site had a marginal use, perhaps as fields, at that time.

Test Pit 33

		MOD		
TP	Cntxt	No	Wt	Date Range
33	3302	70	367	1800-1900
33	3303	6	604	1800-1900

All the pottery from this test-pit is modern, and suggests that there was no activity at the site until fairly recently.

Test Pit 34

		RWW		MED		CIST		MP		GRE		MB		BEW		BSL		SMW		MOD		
T P	Cnt xt	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	Date Range
3 4	340 1	1	2			1	1	4	2 5	1	2			5	8	1	1	4	7	2 4	9 5	100- 1900
3 4	340 2			1	3 5	2	4	1	4			1	1	5	2 2			3	1 4	7 9	1 9	1200- 1900

This test-pit produced a wide range of pottery. The earliest is a small sherd of somewhat abraded Roman material, suggesting that the site had a marginal use at that time. The site then seems to have been abandoned until the medieval period, when it once again had a marginal use until perhaps the 17th century, after which it may have been occupied, and remained so until the present day.

Test Pit 35

		MOD		
TP	Cntxt	No	Wt	Date Range
35	3501	299	1296	1800-1900
35	3502	90	172	1800-1900

All the pottery from this test-pit is modern, and suggests that there was no activity at the site until fairly recently.

Test Pit 36

		MOD		
TP	Cntxt	No	Wt	Date Range
36	3601	16	39	1800-1900
36	3602	11	12	1800-1900
36	3603	9	22	1800-1900
36	3605	1	4	1800-1900
36	3607	8	16	1800-1900

All the pottery from this test-pit is modern, and suggests that there was no activity at the site until fairly recently.

Test Pit 37

		CIST		GRE		SMW		BEW		MOD		
TP	Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	Date Range
37	3701	1	9	1	19	1	4	1	1	6	29	1470-1900

This test-pit did not produce much pottery, and the majority of it is modern. The other sherds suggest that the site had a marginal use, perhaps as fields, from the late 15th century onwards.

Test Pit 38

No pottery recovered

Test Pit 39

		MOD		
TP	Cntxt	No	Wt	Date Range
39	3901	14	46	1800-1900
39	3902	6	33	1800-1900
39	3903	6	13	1800-1900

All the pottery from this test-pit is modern, and suggests that there was no activity at the site until fairly recently.

Test Pit 40

		MOD		
TP	Cntxt	No	Wt	Date Range
40	4001	16	59	1800-1900
40	4002	4	4	1800-1900

All the pottery from this test-pit is modern, and suggests that there was no activity at the site until fairly recently.

Test Pit 41

		MOD		
TP	Cntxt	No	Wt	Date Range
41	4101	6	143	1800-1900
41	4103	21	56	1800-1900

All the pottery from this test-pit is modern, and suggests that there was no activity at the site until fairly recently.

Test Pit 42

		CPW		MB		BEW		MOD		
TP	Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	Date Range
42	4201	2	8			1	3	5	7	100-1900
42	4202					1	2	14	34	1700-1900
42	4203			1	2			3	3	1580-1900
42	4205							2	5	1800-1900

Most of the pottery from this test-pit is modern, but there is also a small quantity of other material, including a single small Roman sherd, which suggests that the site had a marginal use at that time. It

then seems to have been abandoned until the 16th -17th centuries, which it was again had a somewhat marginal use.

Test Pit 43

		MP		MB		SMW		MOD		
TP	Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	Date Range
43	4301	1	8	3	11	1	2	12	129	1400-1900
43	4302			2	2			8	76	1580-1900

Most of the pottery from this test-pit is modern, but there is also a small quantity of other material which suggests that the site had a marginal use from the 16th -17th centuries onwards, and perhaps even slightly earlier.

Test Pit 44

		MOD		
TP	Cntxt	No	Wt	Date Range
44	4401	7	20	1800-1900
44	4403	9	12	1800-1900
44	4404	3	24	1800-1900
44	4407	12	545	1800-1900

All the pottery from this test-pit is modern, and suggests that there was no activity at the site until fairly recently.

Test Pit 45

		GRE		BEW		SS		MOD		
TP	Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	Date Range
45	4501							10	67	1800-1900
45	4502							4	104	1800-1900
45	4503							18	79	1800-1900
45	4504	1	4	3	29	1	1	8	15	1550-1900

Most of the pottery from this test-pit is modern, but there is also a small quantity of other material which suggests that the site had a marginal use from the 16th -17th centuries.

Test Pit 46

		MED		MP		BEW		MOD		
TP	Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	Date Range
46	4601	1	6	3	45	1	1	8	12	1200-1900

Most of the pottery from this test-pit is modern, but there is also a small quantity of other material which suggests that the site had a marginal use during the medieval period, and again during the 17th -18th centuries.

Test Pit 47

		MOD		
TP	Cntxt	No	Wt	Date Range
47	4701	7	23	1800-1900
47	4702	5	11	1800-1900

All the pottery from this test-pit is modern, and suggests that there was no activity at the site until fairly recently.

Test Pit 48

		EW		MP		MOD		
TP	Cntxt	No	Wt	No	Wt	No	Wt	Date Range
48	4801					5	26	1800-1900
48	4802	1	2	1	6	1	1	1300-1900

Most of the pottery from this test-pit is modern, but there is also a small quantity of other material which suggests that the site had a marginal use during the medieval period.

Test Pit 49

		MOD		
TP	Cntxt	No	Wt	Date Range
49	4901	20	28	1800-1900
49	4902	16	72	1800-1900
49	4903	4	11	1800-1900

All the pottery from this test-pit is modern, and suggests that there was no activity at the site until fairly recently.

Test Pit 50

		MED		MP		BEW		SMW		MOD		
TP	Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	Date Range
50	5001					1	1	1	7	4	34	1700-1900
50	5002									8	70	1800-1900
50	5003	2	5	3	32			1	5	2	4	1200-1900

Most of the pottery from this test-pit is modern, but there is also a small quantity of other material which suggests that the site had a marginal use during the medieval period, and again during the 17th-18th centuries.

Test Pit 18

		RB		ME D		EW		CIST		MP		GRE		MB		TGE		SS		BE W		BSL		SM W		EST		MO D				
T P	C n t x t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	N o	W t	D a t e R a n g e		
1 8	1 8 0 1	1	4							1	3 1			2	4	1	4			6	6 7			1	2 8	1	1 1	1	1 6 9	1	1 5 0	10 0- 19 00
1 8	1 8 0 2			1	5					4	1 2	5	5 3					1	1	2	2 1								2 1	1 8 6	13 00 - 19 00	
1 8	1 8 0 3			2	7	1	1			4	1 5					3	4			1	1 3	1	3	1	4 1	1	1	7	1 4	12 00 - 19 00		

The range of pottery from this site suggests that it had a marginal use in the Roman era, and again, almost continuously, in the medieval period and was then occupied in the modern era.

11.2.5. Scanning electron microscopy (SEM) and energy dispersive X-ray (EDX) analysis of Stamford Ware crucible pottery sherd to determine if any precious metal residues are present by Alison Crossley

Summary

A preliminary examination of the sherd using a binocular optical microscope could not locate any small gold prills, which is usually the case for a gold-working crucible (Figure 1). The sherd was then examined in the JEOL 6480LV SEM using the low vacuum mode to prevent charging.

A number of areas were examined using the backscattered electron image in which gold particles should appear brighter than the lead rich background, some of which are illustrated below. Brighter areas were paid particular attention but these all proved to be simply lead silicate where the weathered surface layer had broken off revealing fresher material with a higher lead content.

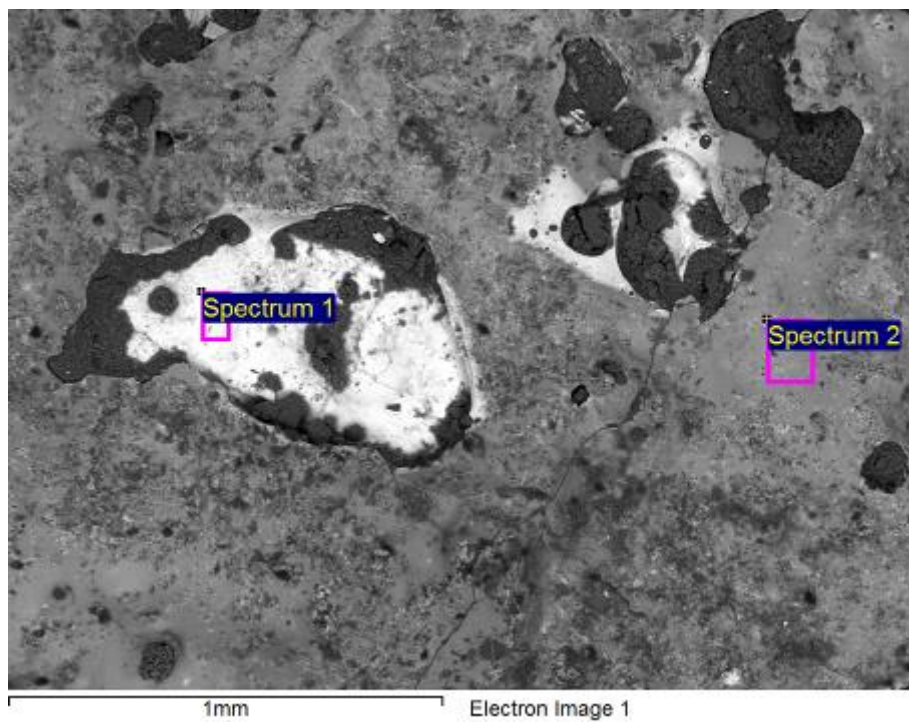
The external surface also had a thin lead glaze but there was no extensive penetration of late into the body of the ceramic As Is Illustrated by Figure 7. The conclusion must be that there is no evidence for this having been a precious metal crucible fragment.

Results





Figure 1: Reflected light optical images of interior of sherd. The lower image is a higher magnification image of apparent bright spot (lower left of centre) seen in the lower magnification image (upper).



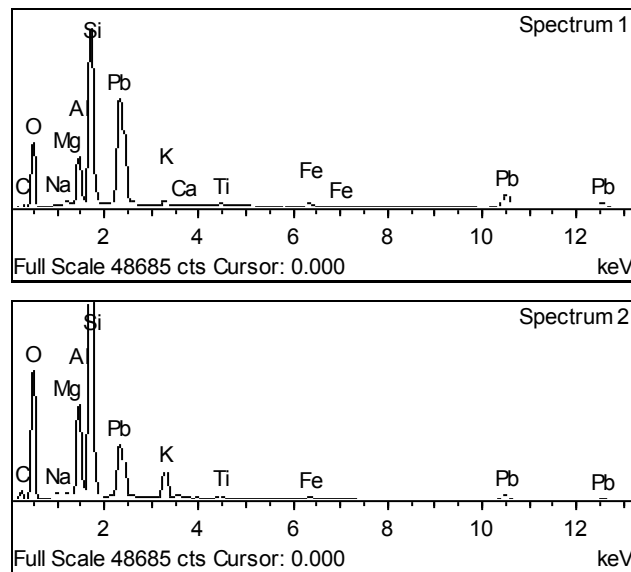


Figure 2: Back-scatter electron image of interior of sherd and X-ray spectra from indicated areas. The brightness of the signal is a function of the average atomic number – the higher the atomic number the brighter the image. So in this case the areas with the highest lead content show brightest.

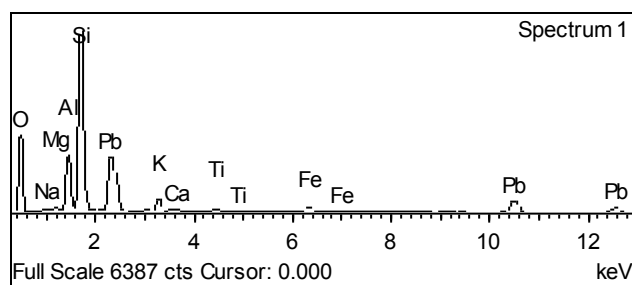
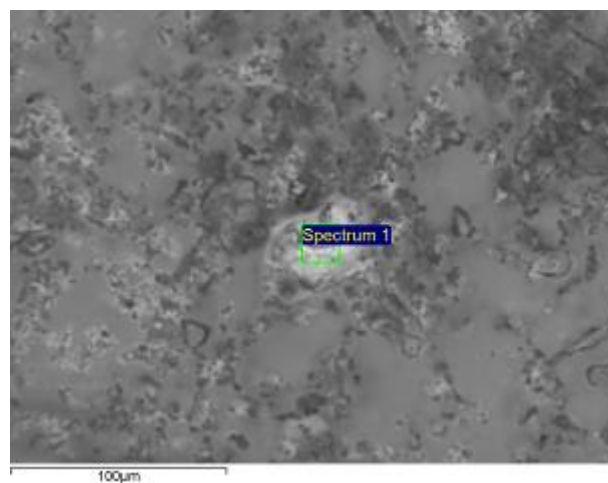


Figure 3: x-ray spectrum from a small brightness spot.

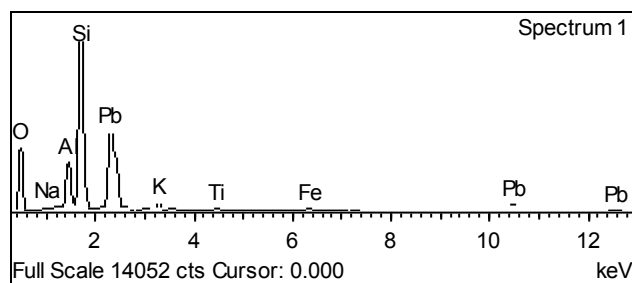
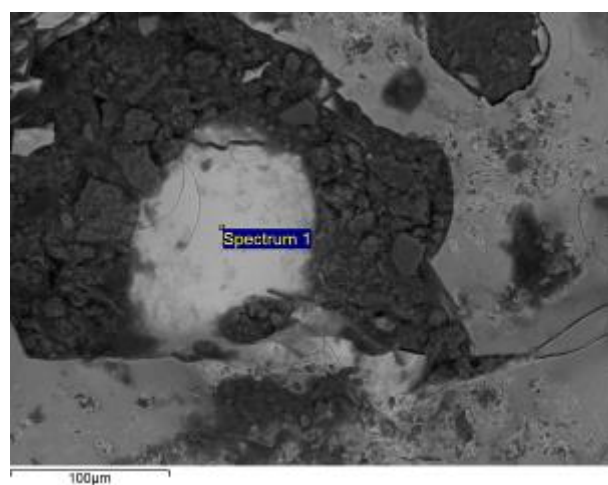


Figure 4: x-ray spectrum from lead rich material adhering directly to the ceramic body of the sherd.

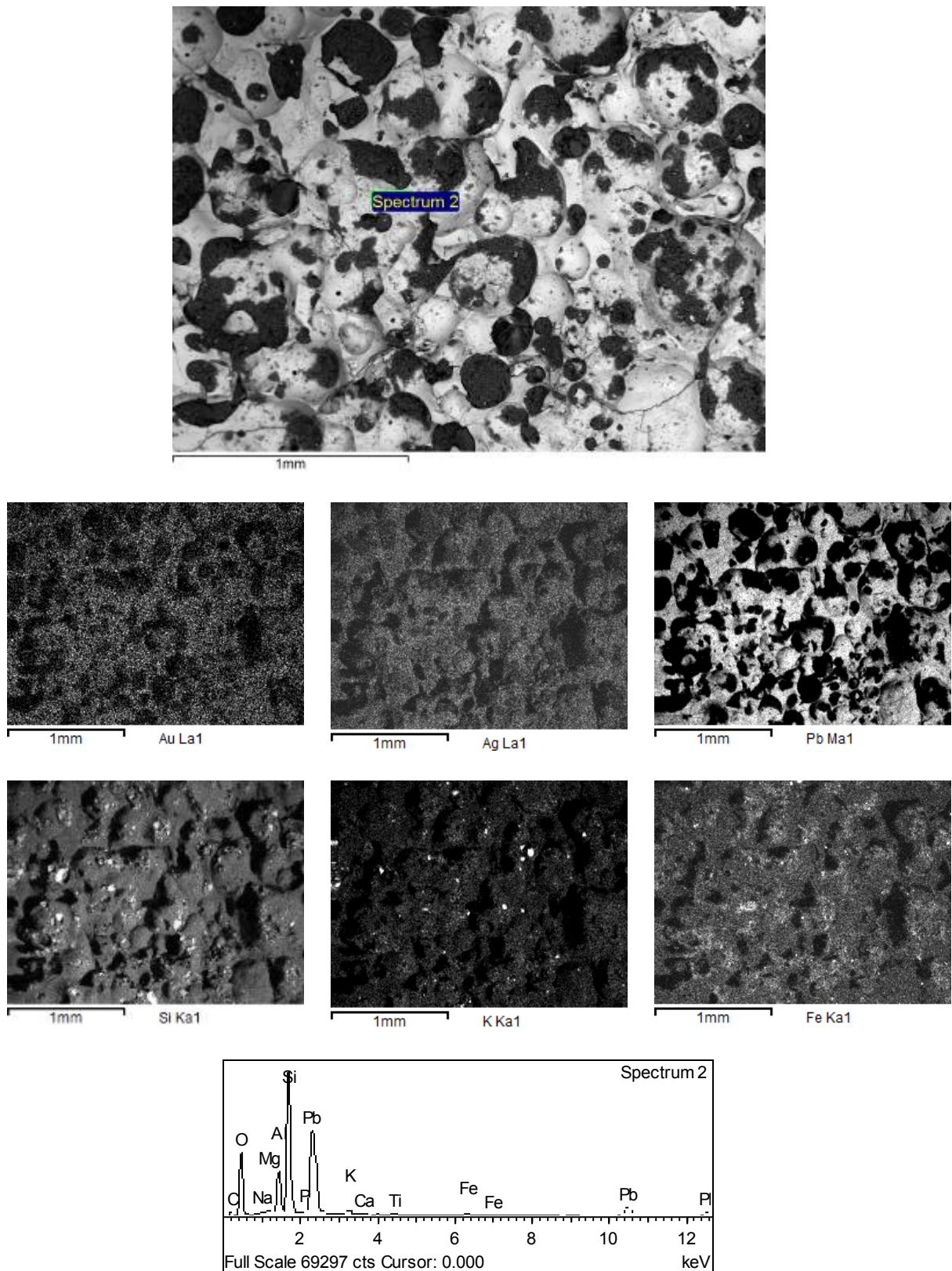


Figure 5: backscattered electron image x-ray maps and spectrum of the interior of the sherd. The gold and silver x-ray maps simply show the background radiation with the dark areas being due to geometrical shadowing of the detector by the rough surface.

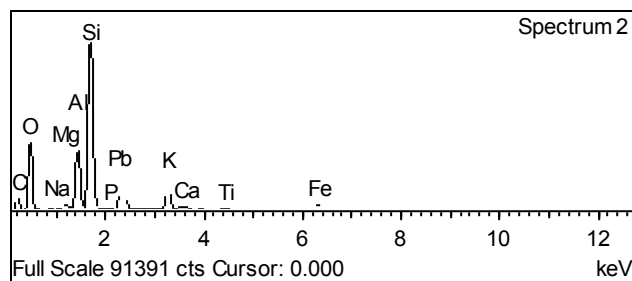
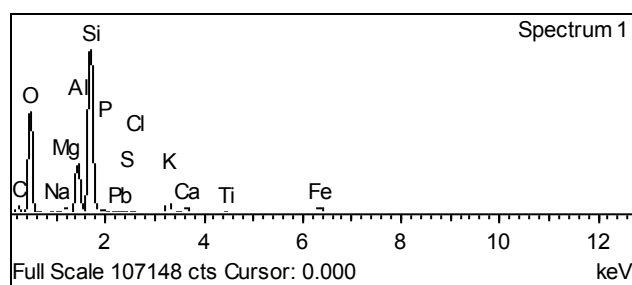
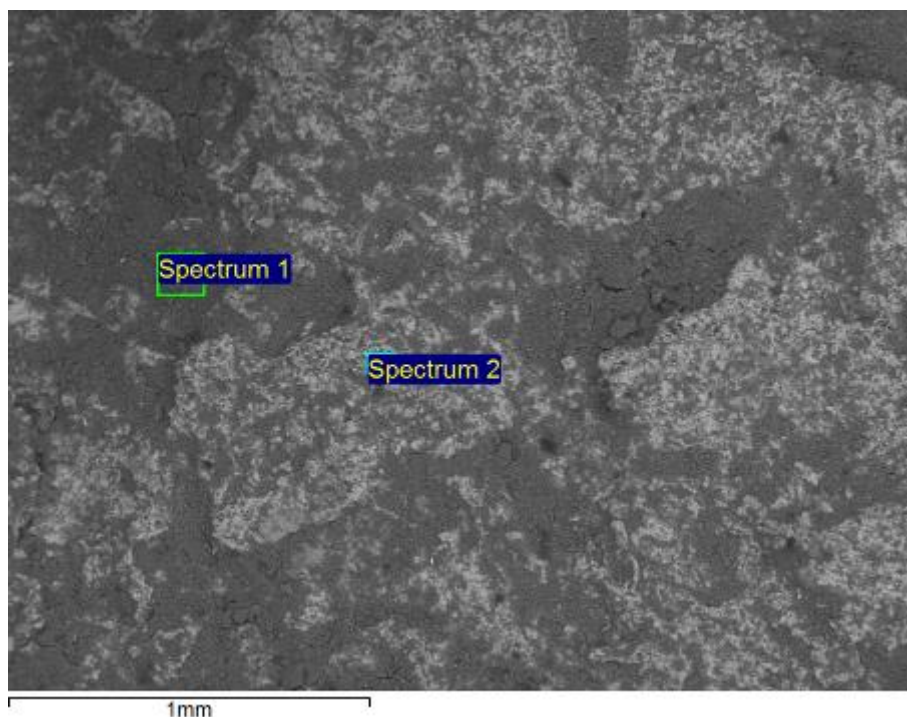


Figure 6: Image showing the exterior surface of the sherd showing that the brighter regions have some lead glazing of the surface (Spectrum 2).

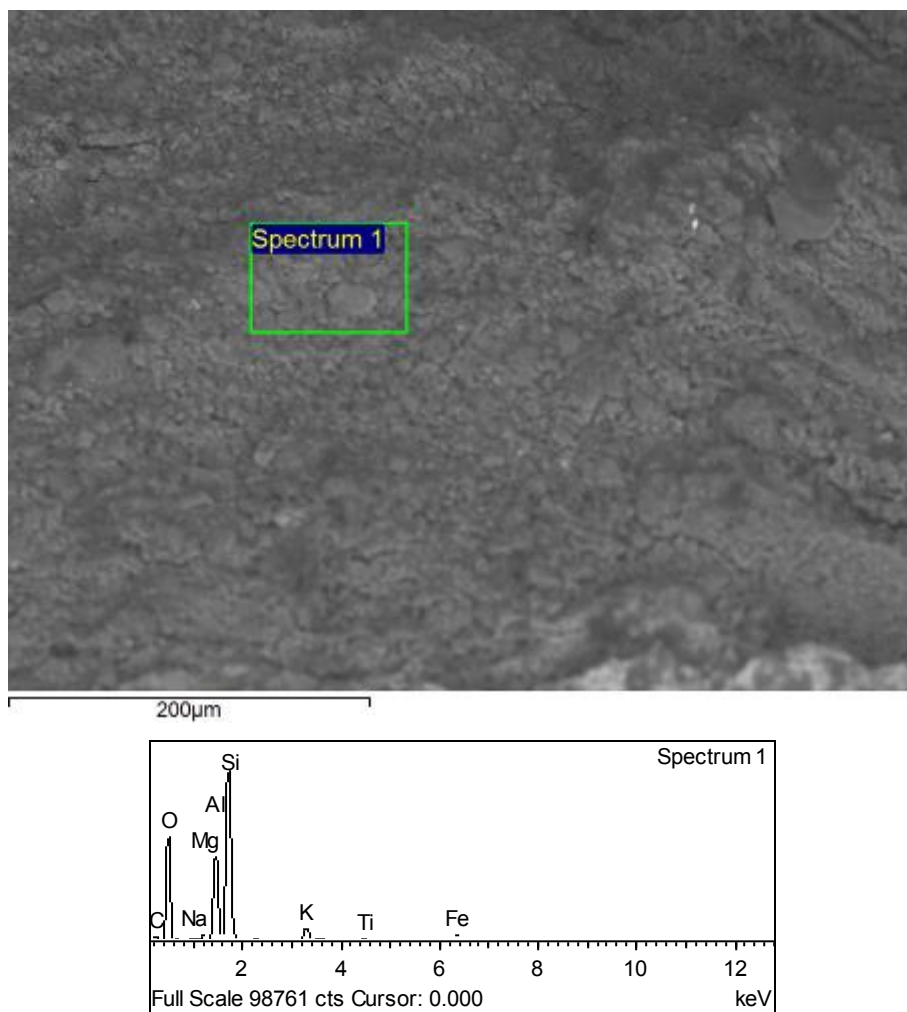


Figure7: image and spectrum of the broken edge of the sherd showing that the lead was confined to the surface.

APPENDICES

APPENDIX 1

Experimental Details: Scanning Electron Microscopy (SEM) Energy Dispersive X-ray (EDX) analysis

A JEOL 6480 LV SEM equipped with an Oxford Instruments X-MAX80 SD X-ray detector and INCA x-ray analysis system was used to image the samples and perform the analysis using EDX. EDX analyses the characteristic X-rays produced by the interaction between the primary electron beam and the sample. The technique identifies all elements present with atomic numbers of 5 and greater (boron) with a detection limit of approximately 0.1 weight %. The measurements are semi-quantitative.

The microscope was used in the low vacuum (variable pressure) mode using a partial pressure of 40 Pascal and an accelerating voltage of 25 kV. The use of the low vacuum mode means that the ceramic could be put into the microscope observed without the need to be coated with a conductive coat.

