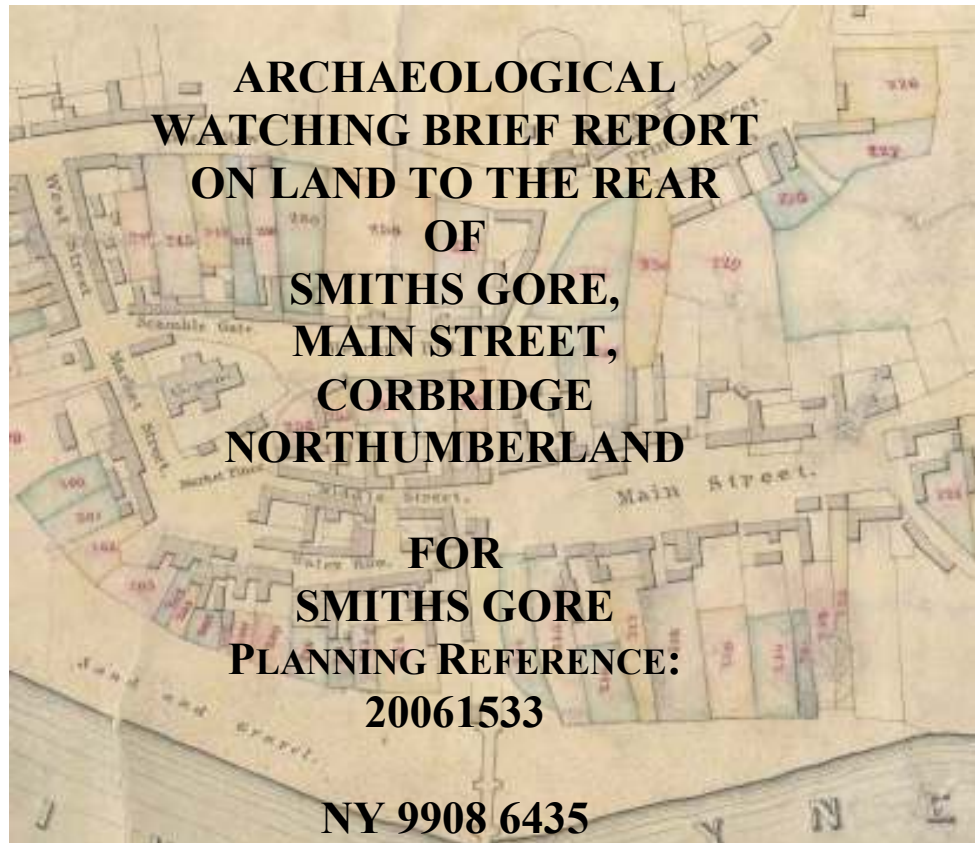


NORTH PENNINES ARCHAEOLOGY LTD

Project Designs and Client Reports No. CP/522/07



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EXECUTIVE SUMMARY

In July 2007, North Pennines Archaeology Ltd was commissioned by Smiths Gore Estate Agents to undertake a programme of archaeological works on land to the rear of Smiths Gore Estate Agents, Corbridge, Northumberland, (NY 9908 6435).

The site is located within an area of high archaeological potential relating to medieval and post medieval settlement within the historic town of Corbridge. In 2004 North Pennines Archaeology Ltd carried out an archaeological field evaluation on the land to the rear of Smiths Gore Estate Agents. The field evaluation uncovered a post-hole, arrowhead and pottery thought to be 14th-15th century in date. As a result Northumberland County Council required a programme of archaeological work to be undertaken, in the form of a watching brief, undertaken on all groundworks associated with the development.

The works involved the excavation by hand of a foundation trench for the footings for the replacement building. The trench was split into four for recording purposes and in the corner of Trenches 1 and 2 were the dumped remains of a nearby furnace. No dating evidence was recovered from the kiln fragments themselves, but pottery of a medieval date was recovered from the same context. A stone built, corn-drying kiln, was excavated by North Pennines Archaeology Ltd in 2004 at Bishop's Garage, Corbridge. Bishop's Garage was adjacent to the rear of Smith's Gore and pottery recovered from the kiln dated the site to the medieval period.

The finds recovered from the trenches ranged from a single Roman coin dated to the later 3rd century to post-medieval pottery. In addition, waste products indicative of a nearby iron-working furnace were recovered, corroborated by the environmental samples of the deposit. It may be of medieval origin. The medieval subsoil deposit continued for 3 of the 4 trenches producing pottery all of similar date.

These features, combined with results of adjacent work in 2004 (Giecco and Jones 2004; Jones 2004a) reveal evidence for intensive industrial medieval and post medieval usage of this part of Corbridge. This is not surprising, since it is known that there were at least four forges at one stage of Corbridge's development (Liddell 2007, 5), and Main Street was formerly known as Smithgate or Smithygate due to the high number of iron working shops (Corbridge Village Trust 1983).

This project has also shown the good state of preservation of archaeology in the vicinity, revealed by the survival of a segment of a leather shoe. This is further corroborated by the survival of human skin found by the kneecap on Skeleton 1 at the Angel Inn on Main Street in 2007 (Liddell 2007, 36).

As this report comprises the recommendations for archaeological recording of the developments relating to the excavation of the building footings, no further fieldwork is necessary. Any further works in this area of Corbridge are likely to require a similar scheme of archaeological mitigation, due to the continuing high archaeological potential, subject to advice and guidance from the Assistant County Archaeologist, Northumberland County Council Conservation Team.

ACKNOWLEDGEMENTS

North Pennines Archaeology Ltd would like to thank Steena Steward of Smiths Gore Estate Agents for commissioning the project and the building team at M. J. Phoenix and son for their assistance and patience throughout the project.

The archaeological watching brief was undertaken by Joanne Beaty and the later stage, by Frances Wood. The excavation of the slot was undertaken by John Casseling under the supervision of Joanne Beaty. The report was written by Joanne Beaty, Cat Peters and Patricia Shaw, who undertook the analysis of the environmental samples. The pottery was identified by Joanne Beaty. The drawings were produced by Cat Peters. The project was managed and the report edited by Frank Giocco, Technical Director for NPA Ltd.

1 INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 The development site, centred on NY 9908 6435, is within the area of the historic town of Corbridge and within an area of high archaeological potential, shown by previous archaeological investigations in the area (*confer* Section 1.2). Deposits of archaeological significance may exist in the area of the works associated with the foundation footings of the new building. As a result, a condition of the planning permission was that, an archaeological watching brief be undertaken. This is in line with government advice as set out in the DoE Planning Policy Guidance on Archaeology and Planning (PPG 16).
- 1.1.2 North Pennines Archaeology Ltd (NPAL) was invited by Steena Steward of Smiths Gore Estate Agents, to undertake the required archaeological watching brief. The proposed groundworks involved the excavation by hand of the foundation trenches for the new building. All of these groundworks had to be excavated under full archaeological supervision. The objective of this watching brief was to obtain an adequate record of any archaeological deposits or finds, which were disturbed or exposed by work associated with the development. All stages of the archaeological work were undertaken following approved statutory guidelines (IFA 1994), and according to the project design, approved by Northumberland County Council Conservation Team (Giecco 2007).
- 1.1.3 This report comprises the results of the various stages of the archaeological work programme, namely: the archaeological recording of the groundworks associated with the development and post fieldwork analysis of the archaeological deposits recovered from the groundworks.

1.2 ARCHAEOLOGICAL BACKGROUND

- 1.2.1 Several archaeological investigations have been undertaken in Corbridge in recent years, revealing the high sub-surface archaeological potential of the area. In May 2001 Archaeological Services at the University of Durham undertook a field evaluation at Duke's Cottages in advance of a residential development. The work revealed archaeological features including a shallow gully and also recovered fragments of medieval pottery (ASUD 2001).
- 1.2.2 In September 2003 Tyne and Wear Museums Archaeology Department maintained a watching brief during the upgrading and extending of existing water services within Corbridge at Well Bank, Town Farm Fields and West Terrace. The work revealed a number of undated surfaces surviving beneath the road surface and modern disturbance and concluded that there is a strong possibility of surviving archaeological remains throughout medieval Corbridge (TWM 2003). In October 2003, the Archaeological Practice (TAP) undertook a field evaluation on land at 2 Princes Street, Corbridge. The work revealed the presence of a shallow linear ditch filled medieval pottery of 13th and 15th century date and extensive potential for environmental sampling (TAP 2003). Also in 2003, in

December, Tyne and Wear Museums Archaeology Department maintained a watching brief on behalf of Integrated Utility Services of groundworks to the north and south of the bridge. The work revealed an undated cobble surface beneath the road surface and modern disturbance (TWM 2003).

- 1.2.3 In August 2004 North Pennines Archaeology undertook two archaeological field evaluations on land behind Eastfield House, Corbridge, Northumberland (Giecco and Jones 2004; Jones 2004a). The work revealed a number of archaeological features within the south of the site. These included a circular stone built structure with a flagged sandstone floor, a possible robber trench surviving as a shallow linear feature filled with stone fragments, a linear ditch of probable medieval date, linear features, pits and post holes of probable medieval origin. A number of fragments of 13th-15th century pottery and glass were also recovered. Also in 2004, in November, North Pennines Archaeology maintained an archaeological watching brief of works Sunnybrae, Stagshaw Road, Corbridge, Northumberland. A heavily truncated grave was observed, with only a fragment of pelvis and right and left femur exposed, the remainder of the lower skeleton continued under the section. The grave was aligned east west and probably part of the medieval cemetery, where similar burials have been dated to the 13th century (Jones 2004b).
- 1.2.4 In January 2007, a watching brief being undertaken by North Pennines Archaeology required a full excavation at the site of the Angel Inn Corbridge. Two burials were encountered, as well as several wall footings, showing medieval occupation of the area (Liddell 2007). Also in 2007 Pre-Construct Archaeology undertook an excavation on St. Helen's Street, Corbridge where they found evidence for a large rectilinear building along the street frontage (Aaron Goode *pers. comm.*). Pre Construct Archaeology have also been undertaking an archaeological watching brief on works associated with electricity cabling in Corbridge, predominantly along Main Street from October 2007. The deposits generally consisted of a previously disturbed mixed backfill, associated with previous service pipes in the area, but at the corner of Main Street and Princes Street, in the pavement in front of the Angel Inn, a feature was observed. Due to the nature of the trenching, the extent of the feature was never uncovered, but the archaeologist on-site suggested a pit or trench could be represented. Several pieces of medieval pottery were encountered within this feature, which have yet to be analysed (Aaron Goode *pers. comm.*).
- 1.2.5 Between November 2007 and April 2008, North Pennines Archaeology undertook monitoring of a sewer refurbishment scheme undertaken by Northumbrian Water Plc. This encountered several post medieval drains and a small revetting wall, in areas heavily disturbed by pipes and services in modern times (Peters and Sowerby 2008).

2 METHODOLOGY

2.1 WORK PROGRAMME

- 2.1.1 North Pennines Archaeology Ltd were requested to undertake a watching brief by Smiths Gore, Corbridge, following a condition of planning permission which required the work to be undertaken. North Pennines Archaeology Ltd was commissioned by the client to undertake the work, which was consistent with the relevant standards and procedures of the Institute of Field Archaeologists (IFA), and generally accepted best practice.

2.2 ARCHIVE

- 2.2.1 A full professional archive has been compiled in accordance with the project design, and with current UKIC (1990) and English Heritage guidelines (1991). The archive will be deposited within an appropriate repository and a copy of the report given to the County Historic Environment Record, where viewing will be available on request. The archive can be accessed under the unique project identifier NPA07, EFH-B.
- 2.2.2 North Pennines Archaeology and CCCHES support the Online Access to the Index of Archaeological Investigations (OASIS) project. This project aims to provide an online index and access to the extensive and expanding body of grey literature created as a result of developer-funded archaeological fieldwork. As a result, details of the results of this evaluation will be made available by North Pennines Archaeology, as a part of this national project.

3 THE WATCHING BRIEF

3.1 LOCATION AND GEOGRAPHICAL CONTEXT

- 3.1.1 The medieval and modern town of Corbridge is situated on the north bank of the River Tyne on stepped alluvial terraces, created by the changing course of the Tyne and the underlying geology (NCCCT 2001).
- 3.1.2 The solid geology of the region comprises Carboniferous limestone and sandstones of the Stainmore Group, overlain by drift deposits of glacial sands, gravel, boulder clay and Head deposits (SSEW 1984, NCCCT 2001). Head deposits are often indistinguishable from till, although these occur in association with concave footslopes as opposed to smooth, convex slopes (SSEW 1984).
- 3.1.3 The settlement lies close to an important bridging point across the River Tyne, a factor important in the development of Corbridge as an important medieval market town (NCCCT 2001). The study area exists within a modern urban landscape within modern Corbridge. The area has been a focus for settlement since at least the 8th century and developed into an important market town in the 12th and 13th centuries (NCCCT 2001). The site is situated within an area of burgage plots set perpendicular to the main street. Fryer's map of 1777 shows a series of buildings along the street frontages with linear plots extending to the rear. Map evidence from 1841 shows that the site has not been significantly built on (*ibid.*). The development site lies to the rear of the main street in Corbridge (Figure 1). It is within an area of historic importance, close to the Pele Tower and within the medieval core of the settlement (Figure 2).

3.2 THE RESULTS OF THE WATCHING BRIEF

- 3.2.1 The new building footings were excavated by hand, and for recording purposes, were separated into four separate trenches (Figure 3; Plates 1-10). The maximum depth reached by the foundation trench was 0.75m. The first trench to be excavated was Trench 1, located to the south of the groundworks. The concrete ground surface was removed using a concrete breaker to reveal a layer of cobbles used as hardcore. The stratigraphic make-up of the trenches are summarised context by context in Appendix 1.

3.2.2 Trench 1

- 3.2.3 Trench 1 was located to the south of the site. The trench ran east-west leading from the building being renovated as part of the development. The concrete ground surface (108) was removed to reveal a layer of cobble hardcore (109). This was removed revealing a mid-brown sandy soil (100), a small stone drain (101) was recorded cutting through this deposit. The soil was excavated by hand, pottery and clay pipe dated to the 19th century were recovered from the area directly beneath the hardcore. Sealed beneath the garden soil (100) in the south-west corner of Trench 1 and 2 was a localised spread of burnt material within what appears to be the remains of a medieval subsoil (105). The area of burning

only appeared on the south-west corner and on closer examination appeared to be the waste from a nearby furnace, as it contained a high concentration of slag with large fragments of furnace lining and charcoal. During the hand excavation of this area five sherds of medieval pottery were recovered. At this point work by the building contractors was stopped and the excavation of this area was continued by an NPAL archaeologist.

3.2.4 A slot was excavated to a depth of 0.25m through (105) in the south-west corner of Trenches 1 and 2 to determine the depth of this deposit (Figure 4). The slot revealed a shallow cut feature [104] had been made in the natural substrate and later filled with the extensive layer of medieval subsoil (105). This cut feature contained a line of cobbles (106) resting directly on top of the natural sand substrate (107) within the cut feature. These cobbles which extended for approximately 1.8m may represent the highly truncated remains from part of the superstructure of a small furnace extending beyond the limits of the trench.

3.2.5 The stones appeared to have been previously disturbed and were only surviving to one course in depth. The area of burning (105) observed did not appear to represent the furnace itself but more likely constituted the waste product and fragments from a nearby furnace mixed up with a general soil build up. The natural substrate sealed beneath (105) did not appear burned. Medieval sherds of pottery recovered from the east side of Trench 1, represent possibility that the nearby furnace had a medieval date (Figure 5).

3.2.6 Trench 2

3.2.7 Trench 2 was orientated north-south and lead north from Trench 1 (Figure 5). The southern end of the trench contained (105), the rest of the trench was similar to Trench 1 as in the concrete ground surface and hardcore (Figure 4). The mid-brown sandy soil contained 19th century pottery sherds, clay pipe stems and bottle glass. The soil towards the base of the trench contained slightly more sand and produced 8 sherds of medieval pottery dating from the 14th to 15th centuries.

3.2.8 Trench 3

3.2.9 Trench 3 was orientated east-west and was located to the north of the site. The stratigraphy of Trench 3 was similar to Trenches 1 and 2 as in the concrete, hardcore (109) and soil layer (100). From beneath the hardcore pottery sherds, glass bottle, ceramic building material, a fragment of lead and a clay pipe stem dating to the 19th century were all recovered.

3.2.10 Trench 4

3.2.11 Trench 4 was orientated north-south and was located to the west of the site. Although the stratigraphy was in part the same as the other trenches, the only difference was the lack of medieval soil surface found in the other trenches. The base of the trench appeared to have been previously disturbed. The only finds recovered from Trench 4 were 3 sherds of post-medieval pottery dating to the 19th century.

3.2.12 East-west aligned trench

3.2.13 A second phase of the watching brief programme consisted of the recording of a 6.4m by 0.95m east-west aligned trench relating to new drainage schemes for the development (Figure 3; Plate 11). The trench was situated to the north of the main building, between that and the outbuilding to the north. The maximum depth reached within the trench was 0.45m and the deposits revealed were 0.09cm of concrete surface (109), which overlay a brown sandy silt (100). No features or finds relating to activity prior to the post medieval period were located in this area, explained by the fact that the depth of the brown sandy silt (100) was not reached.

4 FINDS ANALYSIS

4.1 FINDS DISCUSSION

- 4.1.1 The pottery and other artefactual material has been cleaned, marked and packaged according to standard guidelines, and recorded under the supervision of Frank Giecco. The pottery and finds are quantified in Table 1. The assemblage is typical of domestic and small-scale industrial use in an urban environment throughout the medieval and post medieval periods. As such no further work is required on the finds assemblage. This section will summarise the findings in chronological order.
- 4.1.2 **Roman:** a solitary Roman coin was recovered from the spoil heap by metal detector. The coin (SF 1), although highly corroded, was identified by David Shotter as a possible radiate copy of a Tetricus II, probably dating to around the later 3rd century.
- 4.1.3 **Medieval:** a total of 32 fragments of pottery, of medieval style fabric, were recovered during the watching brief, all from within a dark brown loam (105) along with much furnace debris. 5 sherds were recovered from Trench 1, 8 from Trench 2, 18 from Trench 3 and 1 from Trench 4. These were partially reduced pottery with a white buff surface and traces of a pale yellow glaze. This style of pottery dates to the 13th/14th century, and relate to those found on the adjacent site during an evaluation there in 2004 (Giecco and Jones 2004).
- 4.1.4 **Post Medieval:** a total of 317 artefacts of probable post medieval origin were encountered during the archaeological monitoring on-site. These included 10 clay pipe stems, 2 recovered from Trench 1, 7 from Trench 2 and 1 from Trench 3. The first clay pipe is thought to have been brought to England in around 1570, and although King James I tried to ban smoking, destroying tobacco fields, during the 18th- 19th centuries there were hundreds of manufacturers of the clay pipe all over the country (Peters 2007, 27). They had become cheap and expendable, with some even given away free at local taverns. As a result, clay pipes are a very common find to encounter in small town and urban environments.
- 4.1.5 In addition, a total of 6 sherds of glass, from bottles, were encountered during the watching brief. 2 were recovered from Trench 2, 1 from Trench 3, 1 from Trench 4 and 2 from the East-west Drain Cut. One piece from Trench 2 was a clear frosted thick fragment with parts of letters revealed, although not decipherable due to the nature of the broken sherd, the other was a thin fragment of rounded green glass, indicative of an alcohol bottle, or similar. A further piece, from Trench 4, was a small funnel shaped green glass fragment, with no central hole. The other fragments represented clear thick sections of glass, indicative of domestic bottle origin, whether medicinal or utilitarian. Glass fragments are a very common find to encounter in small town and urban environments, and were used more widely than today, before plastic and aluminium cans came into common use.
- 4.1.6 A total of 3 fragments of post medieval brick were located during the works. These were all from within the East-west Drain Cut. In addition, 2 further

fragments of ceramic building material were found within Trench 3. These are common inclusions within a built-up settlement area and are of little archaeological interest.

4.1.7 A total of 266 industrial related debris was recovered during the archaeological monitoring of the site including 1 fragment of copper slag from Trench 1; 7 pieces of burnt stone, 63 fragments of slag, 1 of charcoal and 1 of coke within Trench 2; 1 fragment of lead, 34 of coal, 65 of slag and 40 fragments of furnace debris within Trench 3; and 9 pieces of charcoal and 45 fragments of slag from the East-west Drain Cut. These were predominantly recovered from post medieval contexts (100), although some may have been utilised during earlier periods and become disturbed in later periods, reoccurring in later contexts.

4.1.8 In addition, post medieval type pottery was also encountered during the watching brief, and this included 7 fragments from Trench 1, 5 fragments from Trench 2, 8 from Trench 3, 3 fragments from Trench 4 and 7 fragments from the East-west Drain Cut, making a total number of 30 fragments of post medieval pottery represented on this site. From the 16th century, the pottery industry grew in importance and production sites were often owned and run by documented individuals. The types of vessels available to the consumer increased, although quality was often little better than earlier periods. In the 16th and 17th centuries the most common pottery was earthenware. Red and white wares decorated with trailed slip of a different colour were also common at this period. The whitewares of the period included tin-glazed earthenwares. These clean white plates, often with fine hand-painted decoration, were intended to be a local and cheaper substitute for the porcelain, which was being imported from the Far East. Fragments are common finds on archaeological sites of 17th-18th century date. 5 of the 30 fragments of post medieval pottery found relate to this type of pottery. During the 17th and 18th centuries, the pottery industry began to use machinery to speed up production of some tablewares. Press-moulded plates became common, and the trailed and combed slip decorated wares made in Staffordshire and elsewhere were particularly popular. The remaining 25 post medieval pottery finds found during the watching brief comply with this fabric of pottery. Coarse earthenwares were still produced by many rural potteries into the 20th century, but in the early 18th century a revolution in the pottery industry meant that affordable refined white earthenwares and porcelains became more widely available and preferred by the consumer (Peters 2007, 26).

4.2 FINDS SUMMARY

4.2.1 The table below summarises the finds outlined in Section 4.1

Context	Trench	Material	Quantity	Weight (kg)	Period
105	1	Pottery	5	0.201	Medieval
100	1	Pottery	7	0.038	Post-Medieval
100	1	Clay Pipe Stems	2	0.007	Post-Medieval
100	1	Cu Slag	1		
105	2	Pottery	8	0.059	Medieval

Context	Trench	Material	Quantity	Weight (kg)	Period
100	2	Pottery	5	0.014	Post-Medieval
100	2	Clay Pipe Stems	7	0.018	Post-Medieval
100	2	Glass (bottle)	2	0.027	Post-Medieval
100	2	Burnt Stone	7	0.031	Post-Medieval
100	2	Slag	4	0.083	Post-Medieval
100	2	Charcoal	1	0.081	Post-Medieval
105	2	Slag	30	2.65	
U/S	2	Slag	29	2.95	
100	2	Furnace Debris	40	0.513	Post-Medieval
U/S	2	Coke	1	0.006	
105	3	Pottery	18	0.167	Medieval
100	3	Pottery	8	0.209	Post-Medieval
100	3	Clay Pipe Stems	1	0.001	Post-Medieval
100	3	Glass (bottle)	1	0.047	Post-Medieval
100	3	C.B.M.	2	0.031	Post-Medieval
100	3	Pb	1	0.007	Post-Medieval
U/S	3	Slag	24	1.28	
U/S	3	Coal	32	0.054	
105	3	Slag	41	2.04	
105	3	Coal	2	0.01	
100	4	Pottery	3	0.11	Post-Medieval
105	4	Pottery	1	0.007	Medieval
100	4	Pottery	1	0.001	Post-Medieval
100	4	Glass (bottle)	1	0.01	Post-Medieval
U/S	1	Coin	1		Roman
100	East-west drain cut	Charcoal	9	0.16	Post-Medieval
100	East-west drain cut	Brick	3	0.64	Post-Medieval
100	East-west drain cut	Glass (bottle)	2	0.24	Post-Medieval
100	East-west drain cut	Pottery	7	0.21	Post-Medieval
100	East-west drain cut	Slag	45	1.682	

Table 1: Table Showing the Finds Recovered during the Watching Brief

5 ENVIRONMENTAL ANALYSIS

5.1 INTRODUCTION

- 5.1.1 In the trench excavated only 1 context was considered worthy of sampling. As it covered a relatively extensive area, 3 different samples were taken from it in different areas. The samples came from a probably medieval subsoil which contained large amounts of burnt deposits. The 3 whole earth samples were selected for processing in order to assess their environmental and artefactual potential. This will help provide further information as to the depositional processes involved in their formation. The methodology employed required that the whole earth samples be broken down and split into their various different components. This was achieved by a combination of water washing and flotation. The recovered remains can then be assessed for content.
- 5.1.2 Flotation separates the organic, floating fraction of the sample from the heavier mineral and finds content of sands, silts, clays, stones, artefacts and waterlogged material. Heavy soil and sediment content measuring less than 1mm falls through the retentive mesh to settle on the bottom of the tank. Flotation produces a 'flot' and a 'residue' for examination, whilst the heavier sediment retained in the tank is discarded. The method relies purely on the variation in density of the recovered material to separate it from the soil matrix, allowing for the recovery of ecofacts and artefacts from the whole earth sample.
- 5.1.3 The retent, like the residue from wet sieving, will contain any larger items of bone, or artefacts. The flot or floating fraction will generally contain organic material such as plant matter, fine bones, cloth, leather and insect remains. A rapid scan at this stage will allow further recommendations to be made as to the potential for further study by entomologists or palaeobotanists, with a view to retrieving vital economic information from the samples. Favourable preservation conditions can lead to the retrieval of organic remains that may produce a valuable suite of information in respect of the depositional environment of the material, which may include anthropogenic activity, seasonality and climate and elements of the economy. The contents of the samples are listed below in Tables 2 and 3.

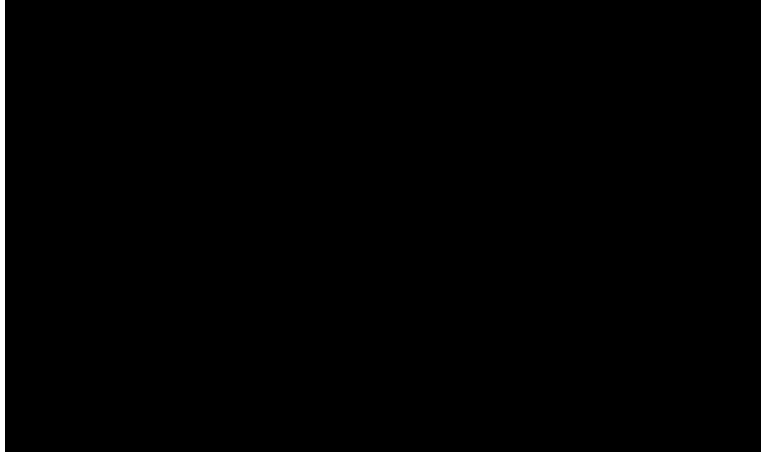


Table 2: Details of samples and contexts

SAMPLE NUMBER	CONTEXT NUMBER	CONTEXT TYPE	SOIL CONDITION	Stones	Gravel	Magnetic	Charred wood	Charred plant material	Amorphous organic	Charred grain	Common chickweed	Charred wood	Roots	Hammerscale/droplets	Iron slag	Burnt organic
1	105	F	M	1	1	1	0	0	1	0	0	0	1	2	1	3
2	105	F	M	1	1	1	0	0	1	0	0	0	1	2	1	3
3	105	F	M	1	1	1	1	0	1	0	1	1	1	2	1	3

Table 3: Contents of retent residues and flots from samples.

Key to tables: M = moist, Fill = ditch, posthole or pit fill. Contents assessed by scale of richness 0 to 3. 0 = not present, 1 = present, 2 = common, 3 = abundant.

5.1.4 The environmental samples from the site came from only 1 context. As the results were the same for each sample and they all came from the same context the write up will deal with them as a single unit.

5.2 SAMPLES 1, 2 AND 3 (CONTEXT 105)

5.2.1 These samples came from the fill of a burnt area made up of loose black burnt material and sandy ash. The matrix contained frequent lumps of iron slag. Occasional root material was also present. The burnt material is thought to be the residue from a medieval industrial process. The retent was made up of mainly slag and magnetic material with no organic matter present apart from a small amount of root matter.

5.2.2 Mould debris (metal processing scum) and burnt clay were also present with some burnt stones. The flot contained mainly burnt organic matter. It is difficult to determine the origins of this material. Some of it looked like charcoal but it was slightly vitrified. This could be the result of the high temperatures reached

during the industrial process on the site. Only one seed was recovered, that of common chickweed, probably a modern intruder.

- 5.2.3 Another major component of the flots were small round metal droplets and what appears to be hammer scale. There was also a small amount of iron slag. Charred wood was only recovered from sample 3 and that was only a small amount. The amount of magnetic material recovered from one of the samples equated to almost all the retent. There was obviously some metalworking activity within close proximity that led to the deposition of this material on this probable spoil heap.
- 5.2.4 A small piece of leather was recovered from Trench 2. It appeared to be the sidepiece of a shoe ready to be made up. The leather was in very good condition indicating that the environment was either partially or wholly waterlogged or that conditions in the soil had helped preserve the leather. Nothing more needs to be done with this material.

5.3 DISCUSSION

- 5.3.1 Both the flots and retents from the samples indicate a metal working process on or near the site. The nature of the material retrieved from both the flots and the retents indicates waste from iron smelting. The remains seem to be from the molten slag, the waste products that were released from the furnace during the smelting process and then cooled outside the furnace. This waste was usually run off into bar shaped channels or frying pan shaped basins. This waste is rarely found intact though as they were usually broken up and so only survives in random shaped pieces. In section it is of a blue-grey colour and coarsely vesicular (bubbly) near the upper cooling surface. It has few, if any, inclusions. (McDonnell 1983, 81).
- 5.3.2 **Dating:** there is not enough suitable charred organic material for a radiocarbon date to be done but as the artefactual dating evidence is quite tight dating by scientific means is thought to be unnecessary.
- 5.3.3 **Conclusion and recommendations:** the potential for further information being gained from the examination of this material is limited and so it is recommended that no further work be done.

5.4 VERTEBRAE REMAINS

- 5.4.1 Not much bone was recovered from the site. There was a small amount from Trench 2 and also from Trench 3. A few fragments of unstratified material were also recovered.
- 5.4.2 Trench 2 produced bone that was quite degraded. There were 17 fragments in total. None of the fragments were identifiable to species but 2 were cattle sized and 4 were sheep/goat sized. The other 11 were very small and even size could not be assessed. Some of the bone showed evidence of butchery, 3 of the sheep/goat sized fragments and 2 of the cattle sized fragments.

- 5.4.3 There were 9 fragments recovered from Trench 3. A fragment of tooth of indeterminate species and a fragment of butchered rib from a large mammal, probably cattle were recovered. Another fragment was that of a rib. This sheep-sized fragment was of indeterminate species as the condyles were not present due to lack of epiphysial fusion. The other piece of bone was from a large mammal of indeterminate species that showed no signs of butchery. All the other 5 fragments were too degraded and small to determine species or element.
- 5.4.4 Unstratified bone from the site consisted of a very large rib fragment showing signs of butchery (probably ox). There was also a fragment of scapula, probably from a sheep. There was also the distal end of a cattle radius that was chopped in the middle. The epiphysis was not fused so it was a young animal at the time of death. The bone may have been cleaved to access the marrow.
- 5.4.5 No mollusc remains were recovered from the site. There is very little else that can be said about this assemblage and no further work is recommended.

5.5 CONCLUSIONS

- 5.5.1 The environmental analysis has indicated the presence of a metal working site on or near the site and that the nature of the material retrieved from both the flots and the retents is consistent with waste from iron working. It is known that Main Street was once known as Smithygate or Smithgate (Corbridge Village Trust 1983) due to the high number of iron-working shops fronting it, so this clear proof of one such site in the vicinity of the watching brief area is of interest. Although dating the debris is difficult, it is most likely of medieval or post medieval origin.
- 5.5.2 The vertebrae remains of probable cattle and sheep, are common artefacts recovered from small town and urban contexts, and are indicative of human settlement and diet. It is likely that the iron-working shops were small cottage-industry type establishments, and that the workers also lived at or near their premises; certainly in the medieval period when strip-houses were common with workshops fronting the street and domestic accommodation above and behind. The evidence of a leather shoe from Trench 2, is further evidence of habitation of the area, and may represent general loss or damage of personal property, rather than the presence of a cobbler, although this cannot be confirmed, and there would likely have been a cobbler in Corbridge.

6 CONCLUSIONS AND RECOMMENDATIONS

6.1 CONCLUSIONS

- 6.1.1 The archaeological watching brief recorded all works associated with excavation of the footings for the building and with the new drainage trenching required for the development. Possible medieval metal working debris was recovered, indicative of a nearby furnace at the intersection of Trenches 1 and 2. A considerable amount of burnt charcoal, metal slag (both iron and copper) were recovered and sampled. When removed several stones were observed sat on the natural substrate, possibly part of a furnace structure. The medieval subsoil (105) continued through Trenches 2 and 3, but was not observed in Trench 4.
- 6.1.2 The finds recovered from the trenches ranged from a single Roman coin dated to the later 3rd century to post-medieval pottery. In addition, several sherds of medieval pottery were encountered among the furnace fragments. The medieval subsoil continued for 3 of the 4 trenches producing pottery all of similar date. These features, along with the environmental evidence, and combined with results of adjacent work in 2004 (Giecco and Jones 2004; Jones 2004a) reveal evidence for intensive industrial medieval and post medieval usage of this part of Corbridge. This is not surprising, since it is known that there were at least four forges at one stage of Corbridge's development (Liddell 2007, 5), and Main Street was formerly known as Smithgate or Smithygate due to the high number of iron working shops (Corbridge Village Trust 1983). The environmental samples indicate iron-working, which is consistent with the known history of the street.
- 6.1.3 In addition, this project has also shown the good state of preservation of archaeology in the vicinity, revealed by the survival of a segment of a leather shoe. This is further corroborated by the survival of human skin found by the kneecap on Skeleton 1 at the Angel Inn on Main Street in 2007 (Liddell 2007, 36).

6.2 RECOMMENDATIONS

- 6.2.1 As this report comprises the recommendations for archaeological recording of the developments relating to the excavation of the building footings, no further fieldwork is necessary. However, the results, combined with previous archaeological investigations in the vicinity, indicate a high level of archaeological preservation, as well as high potential for medieval industrial use in this part of Corbridge. Any further works in the vicinity are likely to require a similar scheme of archaeological mitigation, subject to advice and guidance from the Assistant County Archaeologist, Northumberland County Council Conservation Team.

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APPENDIX 1: CONTEXT INDEX

Context Number	Type	Description
100	Deposit	Topsoil
101	Cut	Cut for Modern Drain
102	Fill	Packing Fill for Drain
103	Fill	Drain
104	Cut	Cut
105	Fill	Burnt deposit
106	Fill	Stones of Kiln
107	Deposit	Natural Sand
108	Deposit	Concrete Floor
109	Deposit	Concrete Level Deposit

APPENDIX 2: FIGURES AND PLATES
