



**ARCHAEOLOGICAL RESEARCH & CONSULTANCY AT THE  
UNIVERSITY OF SHEFFIELD**

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**ARCHAEOLOGICAL EVALUATION  
SHEFFIELD MARKETS:  
PHASE 1B  
TRIAL TRENCHING OF SHEFFIELD CASTLE,  
CASTLE MARKET,  
CASTLEGATE, SHEFFIELD**

Amended July 2000

**ARCUS 413c**

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### ***Non-technical Summary***

*Carillion Development Management are undertaking the development of the Sheffield Markets including the Castle and Sheaf Markets and Broad Street car park. ARCUS have been appointed to undertake a programme of archaeological and cultural heritage assessment in support of the planning application. This programme involves a series of desk- and field-based evaluations. These are designed to assess the impact of the proposed development on the archaeological and cultural heritage. The results of this will then be used to develop proposals for any mitigation requirements.*

*The first stage of evaluation was a desk-based assessment. This was followed by field evaluation. Stage 1a of the field evaluation involved evaluation of the Broad Street car park, while stage 1b, the subject of this report, evaluated the Castle Market loading bay.*

*The evaluation has determined the archaeological sequence in the area of the eastern castle defences. This has identified a total of seven phases. All the contexts in the first three phases relate to the castle moat, the main feature identified. Although not fully excavated, this produced material ranging in date from the medieval period (eleventh to thirteenth century) to the seventeenth and eighteenth century. No layer in this sequence could be related to the destruction of the castle. Relatively few finds were recovered from the evaluation, particularly in the earlier phases. It is noteworthy, however as being the first medieval to post-medieval pottery assemblage from central Sheffield to receive detailed attention.*

*The moat fills were all dry, with no evidence of waterlogging. Despite this, the potential for the preservation of environmental remains was assessed by floating three samples from phases 2 and 2/3. These proved to contain very little; a few seeds and beetle fragments, and showed that preservation of environmental remains in the moat was generally poor. However, it should be stressed that excavation stopped 1m short of the base of the moat, and it is possible that preservation of organic remains may be better lower down.*

*The only structural remains recovered were from phase 4. These included fragments of wall and a cobbled surface. The cobbled surface had burning associated with it, and may have been evidence for small scale industrial activity in the seventeenth or eighteenth century.*

*The total absence of nineteenth century remains probably showed that extensive ground levelling took place before construction of the present market buildings.*

Checked by Project Officer	Passed for submission to client
Date	Date
Glyn Davies <i>Project Officer</i>	James Symonds <i>Executive Director</i>

## 1 INTRODUCTION

Carillion Development Management are undertaking the development of the Sheffield Markets including the Castle and Sheaf Markets and Broad Street car park. ARCUS have been appointed to undertake a programme of archaeological and cultural heritage assessment in support of the planning application.

Stage One was a desk-based assessment of the development area, which summarised the history of the area and the character of the archaeological resource (Belford 1998a). The results of the desk-based assessment informed the design of a strategy of field evaluation, so as to comply with the provisions of the Department of the Environment Planning Policy Guidance Note 16 (PPG 16) *Archaeology and Planning*. A Project Design was produced that outlined proposals for field evaluation of the archaeology (Belford 1998b), so that the extent, character and state of preservation of archaeological remains can be determined prior to the commencement of construction.

Stage Two involves the field evaluation of those areas that are currently not built over. For logistical reasons this stage has been broken down into two phases, as follows :

- **Phase 1a** (Broad Street Car Park). Two trenches were opened, on either side of the River Sheaf culvert, in October and November 1998. These encountered a variety of medieval and post-medieval features; most notably a series of tanning pits on the western side of the river, and fields on the eastern side of the river. Full details were provided in ARCUS report 413b (Belford 1998c).
- **Phase 1b** (Castle Markets Loading Bay). One trench was excavated in this area, in order to investigate the eastern defences of the Castle and associated features. This report describes the results of this phase work.

## 2 SITE LOCATION, TOPOGRAPHY AND GEOLOGY

The site of the proposed development is centred on OS NGR SK 357 878, and comprises approximately 4.2 hectares (**Illustration 1**). The site is bounded to the north

by the River Don and to the west by Waingate, a medieval thoroughfare leading up the hill from Lady's Bridge. The eastern boundary of the application area is marked by Exchange Street, originally laid out in the nineteenth century, and now forming part of the Inner Ring Road. To the south, the site boundary follows Commercial Street (another nineteenth century feature) and then comes north along Shude Hill, briefly moving west into part of the medieval Dixon Lane, before continuing northwards along the surviving upper fragment of Castle Folds.

This report describes evaluation fieldwork undertaken in the loading bay area of the Castle Market, built in 1927-30 and extended in the 1950's and 1960's. The loading bay lies to the east of the Castle Market and is accessed from Castlegate. The present ground surface of the loading bay is some 2m above the present road level on Castlegate.

The underlying geology is Lower Coal Measures (Upper Carboniferous or Silesian deposits), with the bulk of the site resting on an outcrop of the Silkstone Rock sandstone. The courses of the Rivers Don and Sheaf have been eroded through the Coal Measures sandstone's and are filled with alluvium (British Geological Survey, Sheet 100).

### **3 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND**

The desk-based assessment (Belford 1998a) provided details of the Historical and Archaeological background to the site. The trench excavated during Phase 1b was located in the area of the eastern defences of Sheffield Castle.

The first Norman castle of c.1100 was a 'mote-and-bailey'; this appears to have been built over earlier structures. The 'mote-and-bailey' was destroyed by fire in 1266, and was replaced with a crenellated stone castle from 1270. The Castle was modified during the fourteenth century, and at the peak of its development occupied most of the present application area. The Castle was destroyed in 1649, following a siege by Parliamentary troops.

The seventeenth and eighteenth centuries saw the construction of tenements and workshops on 'Castle Hill', together with developments in the surrounding streets. In the nineteenth century parts of the Markets were moved into the application area - including the Slaughter Houses on the Castle site and the Corn and Hay Markets on the eastern bank of the River Sheaf. By the end of the nineteenth century many of the older streets had been widened and realigned, and the Sheaf had been culverted.

## **4 PROJECT AIMS AND RATIONAL**

### **4.1 PROJECT AIMS**

The main aims for Phase 1b of the evaluation, were:

- to gather sufficient information to establish presence/absence, character, extent, state of preservation and date of any archaeological deposits within the areas of proposed development.
- to provide sufficient information so as to determine the importance of the archaeology exposed in terms of its local, regional and national importance, and to provide the basis on which to determine the nature of any further archaeological work.
- to examine the eastern castle defences, primarily the ditch and determine the preservation conditions within the ditch and examine the preservation conditions for archaeological and palaeoenvironmental remains.
- to determine if pre-Norman remains exist in this area.

### **4.2 STRATEGIC PLAN FOR ARCHAEOLOGICAL EVALUATION**

A strategic plan has been produced for the archaeological evaluation of the site, the outline of which is provided in the Project Design (Belford 1998b). This takes into account the proposed phasing of the development. It can be summarised as follows :

- **Phase 1** : before the commencement of any development

- **Phase 2** : after the demolition of structures and features prior to the commencement of development Phase I
- **Phase 3** : after the demolition of structures and features prior to the commencement of development Phase II

#### **4.3 TRIAL TRENCHING PHASE 1B: SCOPE AND RATIONALE**

Trench 3 (9m x 4m) was located to investigate the eastern Castle defences, together with elements of the Castle buildings and possibly the former course of the River Sheaf.

## **5 METHODOLOGY**

### **5.1 BOREHOLE SURVEY**

The first stage of the fieldwork was borehole sampling within the area of the proposed Trench 3. This sampling had two main aims :

- to inform ARCUS of the likely nature and extent of the archaeological resource, including the extent to which waterlogging had occurred, and the maximum likely depth of the Castle ditch.
- to determine the likely nature of the ground (i.e. fill, bedrock etc.) and to thereby enable an appropriate structure for shoring the sides of the trench to be designed.

The boreholes were bored using a percussion rig. A total of four holes were attempted, although one of these was abandoned at 0.25m, due to the presence of a concrete slab below the ground.

### **5.2 MACHINE-ASSISTED TRIAL TRENCHING**

A 360 mechanical excavator was employed to remove the surface of the loading bay and the upper modern fill within the trench. This spoil was removed by lorry to an appropriate tip. Earth moving activities were strictly monitored at all times by an

ARCUS Project Officer. Machining ceased at the base of modern fill, when the first potential archaeological layers/structures were observed. This was at a depth of between 1.5m and 2.0m from the surface. Following machining, shoring was erected by Carillion's contractors. This comprised steel shuttering supported by an internal beam. At a later stage further shoring was erected within the first layer of shoring. This enabled excavation to be extended further down into the moat.

Following erection of the shoring the trench was thoroughly cleaned by hand and recorded. Archaeological features identified were excavated, to enable their date, nature, extent and condition to be properly assessed. Sections were cut through negative features such as ditches and through surfaces. This allowed the structure of these features to be understood and recorded. Spoil from the hand excavations were deposited in skips and removed from site.

### **5.2.1 Recording**

The evaluation was recorded using standard ARCUS procedures as set out in the ARCUS Excavation Manual. All contexts were described on proforma context sheets. Colour transparencies and black and white print photographs were taken before and after excavation. Plans were drawn of all features outside the moat and a series of plans were drawn of the moat fills as excavation proceeded. A section was drawn of the main moat fills and a final trench plan produced.

### **5.2.2 Finds Collection Policy**

Artefactual material was collected according to an explicit sampling strategy. Material which was obviously modern in date, and derived from unstratified contexts, was not kept. All pottery, tile, bone, glass and metal from stratified contexts were kept. Brick was only retained if it was handmade. All retained finds were cleaned, catalogued, marked and packed in materials suitable for long term storage.

Selected contexts were also dry sieved, this was undertaken on layers from within the moat. This was done through a 1cm sieve with a 10 or 20 percent sample being taken. All material within the sieved sample was retained, and was counted and weighed by material type.

### 5.2.3 Palaeoenvironmental Assessment

Where deposits showed the potential for palaeoenvironmental analysis samples were collected by the Project Field Environmentalist Rob Buckland following consultation with the Project Palaeoenvironmental advisor, Professor Paul Buckland. Three samples were processed to assess the palaeoenvironmental potential of the deposits. This was undertaken with the aim of assessing the presence and condition of macro and micro fauna and flora.

### 5.2.4 Staffing

The Project Manager for the work was James Symonds, ARCUS Executive Director. The field team comprised Glyn Davies ARCUS Project Officer and five site assistants, Annsofie Witkin, Rob Buckland, Rachel Bannon, Alvaro Mora Ottomano and Dimitris Kontogorgos.

## 5.3 TIMETABLE

The time table for the fieldwork was agreed with Carillion Development Management. One day was required for boring the boreholes. This was done on 19th September 1999. The excavations took approximately 5 weeks, starting on 5th October and finishing on 5th November 1999.

## 6 RESULTS OF THE BOREHOLE SURVEY

The four boreholes were located as shown on **Illustration 2**. The log descriptions are provided in **Appendix 1**. The bore holes were spread over an area that had been previously defined by the market authorities. All archaeological activities were restricted to this area during the field evaluation. Three holes were lined up along the axis of the area running north west to south east. A fourth hole was located in the southern half of the area on its western edge.

Borehole 1, the only borehole in the north end of the site was abandoned due to the presence of a concrete slab/beam just below the surface. It is not known how far this slab/beam extended, as it was only found in this borehole.

In the central and southern half of the area all three boreholes were bored down to bedrock. The depth at which bedrock was reached varied considerably being variously 2.00m, 3.80m and 6.50m. These results indicated that the bedrock dipped down to the east, and dropped off sharply on the eastern edge of the survey area. This was identified as the probable location of the moat.

This information was used to determine the location and orientation of the trench as is shown in **Illustration 2**.

## **7 RESULTS OF THE TRIAL TRENCHING**

The trial trench measured 9 m x 4 m and was orientated east west to provide a section across the presumed line of the moat. A list of the contexts recorded in the evaluation is provided in **Appendix 2**. Five main phases were identified. Two further consolidated phases were identified for features that could not be assigned with certainty to a main phase. The phases identified were as follows:

### **7.1 PHASE 1 - MEDIEVAL MOAT**

The earliest phase identified in the evaluation was the cut of the castle moat [0053] (**Plate 1**). This was located at the eastern end of the trench, and had been cut through the bedrock [0027]. The bedrock was mudstone. The top 1.5m was a friable orange brown, below this it was a harder grey mudstone (**Plate 2**). This appeared to increase in hardness with depth. Although the boundary between these was fairly sharp, the two rocks are thought to be the same mudstone, with the top one being heavily weathered. The fact that the weathering boundary in mudstone could be seen in the side of the moat suggested that this weathering was the result of processes acting over a geological timescale, rather than during the life history of the moat.

The trench only extended part of the way across the moat. The width of the moat is therefore not known (**Illustration 3**). It also proved impossible for excavation to reach the bottom of the moat in the limited space available. The top edge of the moat was approximately 2.0m below current ground level. At its deepest point the moat was

excavated to a depth of approximately 3.0m, from the top of the moat. As the base of the moat was not reached the depth to the base of moat was estimated by coring. This suggested that the base of the moat was a further 1m below the deepest point of excavation, making the total depth of the moat approximately 4.0 m. The side of the moat did not have a constant slope (**Illustration 4**). At the bottom of the moat the cut [0053] was very steep with an angle of approximately 70° for 1.2 m. In the middle section the slope was more gentle with an angle of approximately 55°. This angle of slope formed the majority of the moat. At the top of the moat was a rock cut step [0059]. This was 0.4m wide and extended for about 2.2m along the edge of the moat. Either side of the step the moat edge was sloped. The reason and date of the cutting of this step is uncertain. Although there are changes in the angle of the cut of the moat these need not suggest recuts, as it is possible that the angle of the moat edge could vary for other reasons. It may, for example, have been a deliberate design or have resulted from the methods and labour practices used to cut the moat.

## 7.2 PHASE 2 - MEDIEVAL MOAT FILLS

The lower fills of the moat comprised a series of silt and clay layers sloping down to the east. These roughly following the angle of the moat (**Plate 3**). As the base of the moat was not reached by the excavation the nature of lower moat fills could not be ascertained. However, three cores were hand augered through into the fills in the base of the moat (**Illustration 5**). Descriptions of the cores are given below:

Table 1: Core 1 - top 45.97 m AOD

Description	Thickness	Depth
Grey sticky clay	0.38	0.38
Brown sticky clay	0.15	0.53
Bedrock on west side of hole pushed auger across, hole abandoned		0.53

Hole dry

Table 2: Core 2 - top 46.43 m AOD

Description	Thickness	Depth
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Grey brown clay [0066]	0.05	0.05
Compact orange brown degraded mudstone clay [0068]	0.25	0.30
Brown sticky clay with flecks of charcoal	0.10	0.40
Large stone hole abandoned		0.40

Hole dry

Table 3: Core 3 top 46.52 m AOD

Description	Thickness	Depth
Grey/brown clay	0.34	0.34
Compact grey clay	0.66	1.00
Blue grey clay	0.40	1.40
Soft brown clay	0.21	1.61
Bedrock		1.61

Auger wet at 1.18m, but no visible water in hole.

Cores 1 and 3 suggest that the bottom section of the moat is very steep and that it is filled with further layers of clay. Only core 3, which reached the probable base of the moat showed any evidence of potentially wet layers, and even in this case water did not collect in the base of the core hole when this was left open for an hour. This suggested that the layers though wet, were not waterlogged.

The lowest layer reached in the moat by excavation was [0070] an orange brown silty clay. Above [0070] were a series of layers [0069-0064 and 0062] (**Illustration 4**). The majority of these were clay or silty clays though one [0067] was a thin orange silty sand layer. Many of these layers appeared to contain a large proportion of degraded mudstone bedrock. Layer [0068] an orange brown clay, was by far the thickest of the phase 2 layers excavated, and represented approximately half of the depth of the phase 2 deposits.

These layers contained few finds. Only one sherd of pottery, a few animal bones, and some rusty iron came from [0062]. One sherd of pottery was found in [0066]. The two sherds of pottery had a maximum date range from the eleventh to the fourteenth century

(**Appendix 3**) suggesting that these layers accumulated during the earlier history of the castle. Environmental samples were taken for flotation from context [0066 and 0067]. However, these samples proved to contain little of interest (**Appendix 7**).

### 7.3 PHASE 2/3 - SANDY SILT LAYER

Phase 2/3 was primarily a thick brown sandy silt layer [0061] with one lens of yellow brown clay within it [0063]. Layer [0061] was up to 0.5m thick and was observed over the whole area of the moat investigated (**Illustration 4**). [0063] was a lens within [0061] in the south east corner of the trench, and may have been a deposit of dumped material within [0061]. Layer [0061] was unusual among the moat fills in that it was the only large deposit of sandy silt. Most of the other layers of moat fill were clay-based deposits. As the bedrock is a mudstone which decays to clay, and the local soils are clay based, this layer appeared to have been different in origin to the other fills of the moat.

Several sherds of pottery were recovered from layer [0061]. These included three pieces from the thirteenth to fifteenth centuries, and six from the sixteenth to seventeenth centuries (**Appendix 3**). This wide range of dates could suggest that this layer contained earlier residual material, i.e. thirteenth to fifteenth century sherds in a sixteenth/seventeenth century deposit. Alternatively this deposit may have accumulated over a very long period of time. An environmental sample was taken from layer [0061] and floated (**Appendix 9**). This produced little material, and showed that preservation of environmental remains within this layer was poor.

### 7.4 PHASE 3 - UPPER POST-MEDIEVAL MOAT FILLS

The upper moat fills were primarily post-medieval in date. These were separated from the lower fills by the sandy silt layer [0061] phase 2/3. As with the lower moat fills, the upper moat fills were primarily clay and silty clay deposits. These were of varying thickness and sloped down to the east following the direction, if not the angle, of the moat. The fills in the southern half of the upper moat were disturbed by a later intrusive feature, a sewer pipe trench [0042] (**Illustration 6**). There was also a later wall [0010] (phase 4) which crossed the site from east to west. These two factors meant that

at times it was difficult to relate the southern and northern halves of the upper moat fills to each other.

The bottom two fills of phase 3, [0060] and [0058], both covered most of the area of moat exposed. However, above these were deposits that were restricted in extent. [0056] and [0057] were only found on the northern edge of the trench while [0055] was in the centre and [0054] on the southern edge. The restricted extent of these deposits suggested a very different origin from the extensive layers seen in phases 2, and 2/3, and at the bottom of phase 3. These deposits must have been formed by localised events, the most likely explanation being that these were dump deposits.

The relationship of the upper layers within phase 3 and wall [0010] from phase 4 was problematic. This was due to the absence of a discernible foundation trench for wall [0010]. This appeared to be because the wall had been constructed to fill the entire foundation trench. Due to the similarity of the deposits through which the foundation trench was cut, and those which built up later, it was difficult to determine where the ground surface lay at the time that the wall was built. However, it would appear that the top deposits of phase 3 were [0038] and [0009]. The deposits on either side of the wall were a variety of clay deposits. These contained variable quantities of silt, sand, and grit, as well as fragments of brick, mortar and other finds.

All but the lowest deposits in phase 3 contained numerous fragments of brick and mortar. The use of brick was a relatively late innovation in Sheffield, the oldest known brick house in Sheffield was built in 1696 (P. Belford pers. comm.). It would therefore appear that phase 3 was seventeenth century and later in date, it therefore probably post-dated the destruction of the castle in 1649.

## **7.5 PHASE 4 - POST-MEDIEVAL WALLS, FLOORS AND ASSOCIATED LAYERS**

Phase 4 comprised a series of stone built structural remains with associated deposits. The structural remains comprised two sections of walling and one 'cobbled' area. These were identified as post dating the infilling of the moat (**Illustration 7**). The two sections of walling exposed ran approximately east west and were aligned, although

there was a gap between them in the centre of the trench. The section at the western end of the trench survived as a small disturbed section [0006] in a shallow foundation trench [0022] (**Plate 5**). The eastern section [0010] was more substantial (**Illustration 8, Plate 4**), although as has been noted no foundation trench was identifiable. The construction and alignment of the two sections of wall suggested that they may have been part of the same feature, though the absence of a section did not allow this to be confirmed. To the south of the western section of wall [0006] was a small patch of trampled clay [0005]. This appeared to be natural mudstone [0027] that had been trampled and broken up, and was interpreted as the ground surface contemporary with wall [0006]. To the north of [0010] a series of deposits, [0028], [0023], [0016] and [0011] had been deposited up against the wall. Also to the north of [0010] was a small flat bottomed pit [0034], this contained two fills, an upper black silty clay [0029] and a lower brown silty clay [0033]. At the extreme eastern end of the trench, north of [0010] were two deposits, [0012] and [0020]. Between them these formed a feature aligned north south, roughly perpendicular to wall [0010]. These two deposits were a mix of irregular rubble and clay, and though not well-preserved, could have been the remains of a robbed out wall. Much of the material to the south of the wall was disturbed by pipe trench (0042) (phase 5). However, one deposit was identifiable [0008] a silty clay deposit which contained fragments of brick and tile but no pottery.

To the north of the western section of wall [0006] was a small area of rough cobbling [0002]. This feature had been constructed from a mixture of reused setts and rough stones (**Illustration 9, Plate 6**). This feature was covered by a layer of gritty ash material [0001] which also filled the gaps between the stones (**Plate 7**). To the east of the cobbles was an associated compact clay deposit [0003]. It therefore appeared that this feature was used as a base on which to construct fires. The elaborate nature of the construction may suggest this had been used for several fires, rather than being a 'one-off' event. This may suggest it was used for some form of rudimentary industrial activity, rather than just for burning rubbish.

Beneath the cobble feature, but apparently unrelated, was a shallow pit [0032] filled with a dark-brown clay deposit [0024]. This pit was very shallow and had probably been truncated by the overlying cobbles. This pit had been cut through by a later pipe

trench (**Plate 8**). It is uncertain whether the pit formed part of phase 3 or 4. The only find from this pit was a small fragment of Cistercian/Blackware rim, of sixteenth or seventeenth century date. This would place the infilling of the pit at the time of the transition from phase 3 to phase 4. However, the origin of the pit could date to an earlier period, but it is not possible to say how much if any earlier. There is no evidence from the fill or shape of the pit to suggest its function. If the pit does date from phase 3 it would be the only feature from the castle period aside from the moat.

Fragments of pottery, brick, tile, and animal bone were recovered from the layers associated with these features. The pottery from these deposits appeared to be mainly seventeenth, and eighteenth century in date, with little evidence for nineteenth century material. This absence of nineteenth century material, combined with the truncated nature of the walls from this phase suggested that during the construction of the market the later post-medieval, i.e. nineteenth century, material was cleared from the site.

## **7.6 PHASE 4/5 - UNDETERMINED POST-MEDIEVAL FEATURES**

Layer [0004] was restricted to the western half of the trench. [0004] was a yellow brown sandy clay which was difficult to distinguish with indistinct interfaces to both the overlying and underlying deposits. It appeared that this layer was primarily deposited in phase 4, this is demonstrated by features in phase 5 which cut through [0004]. However, in areas the surface of [0004] appeared to have been disturbed, the matrix was darker possibly due to the incorporation of other material into the layer. This could possibly be the result of trampling. This may have happened during the cutting of the phase 5 pipe trenches. This would suggest that layer [0004] was exposed in phase 5 and that some of the surface was disturbed in phase 5 and incorporates material from phase 5.

## **7.7 PHASE 5 - LATER POST-MEDIEVAL DRAINS**

Phase 5 consisted of three modern drains, and the modern loading bay surfaces. There were at least two previous tarmac layers, one cobbled surface, and associated hard-core layers that were removed by machine. These were not recorded as they were all

modern surfaces relating to the loading bay yard. These layers were given a single context number [0000].

There were three drains crossing the trench, a cast iron sewer [0042] in the south-east corner of the trench, a ceramic rainwater drain at the west end of the trench, and a third ceramic drain [0030] crossing the centre of the site (**Illustration 10**).

The ceramic rainwater drain at the western end of the site was just below the surface and was not excavated. This feature was therefore not recorded or numbered.

The ceramic drain [0031] crossing the centre of the trench had been placed in a square-shaped cut with a step [0030] (**Illustration 11**). The fill of this trench [0025] was a yellow-brown sandy clay, with numerous finds. A branch came off the pipe in the centre of the trench and ran west under the rainwater pipe at the west end of the trench. The fill [0026] of this western branch was not excavated.

The cast iron sewer pipe in the south-east corner of the trench crossed the trench north east to south west. The cut [0042] of the pipe trench was irregular, the sides sloped at varying angles, and the width of the trench varied. The lowest fill of the pipe trench was a loose rubble layer [0043]. Above this was a patchy brown gritty clay [0019]. Within, and around this pipe trench, were several dump layers [0013], [0014] and [0015]. The pipe trench had cut through and disturbed many earlier layers in phases 3 and 4.

Although these features primarily contained modern, twentieth century material they did contain some residual material. One sherd of medieval green glaze pottery was found in a pipe trench.

## **8 THE MATERIAL CULTURE**

A total of 699 finds were recovered from the evaluation trench. This is not a large assemblage, but the period covered is important in the development of Sheffield in general, and to the Castle in particular. Catalogues and reports on the finds recovered

are in **Appendixes 3 to 7**, pottery in **Appendix 3**, building material in **Appendix 4**, metal and slag in **Appendix 5**, other artefacts in **Appendix 6** and bone and shell in **Appendix 7**. Fragment counts for each material type by phase are given in **Table 4**.

Phases 2 and 2/3 were distinctive from all the other phases (**Illustration 12**). First, they produced relatively few finds in contrast to the later phases. Second, the range of finds recovered was more restricted. Phases 2 and 2/3 lacked brick, mortar, drain pipe, slag, glass, clay pipe and worked bone. This suggested that phases 2 and 2/3 were sixteenth century, and earlier, as after that date one would expect fragments of clay pipe and brick to have been included.

Table 4: Fragment counts for the material recovered

	phase 2	phase 2/3	phase 3	phase 4	phase 4/5	phase 5	total
<b>pottery</b>	2	9	34	57	5	18	<b>125</b>
<b>stone</b>	0	0	1	1	1	3	<b>6</b>
<b>tile</b>	0	4	22	3	0	21	<b>50</b>
<b>brick</b>	0	0	54	8	1	26	<b>89</b>
<b>mortar</b>	0	0	5	29	3	9	<b>46</b>
<b>drain pipe</b>	0	0	0	1	0	5	<b>6</b>
<b>metal</b>	7	5	10	3	1	13	<b>39</b>
<b>slag</b>	0	0	10	27	8	68	<b>113</b>
<b>glass</b>	0	0	2	11	2	10	<b>25</b>
<b>clay pipe</b>	0	0	13	40	4	5	<b>62</b>
<b>worked bone</b>	0	0	4	6	0	3	<b>13</b>
<b>bone</b>	0	5	65	8	4	11	<b>93</b>
<b>shell</b>	0	9	23	0	0	0	<b>32</b>
<b>total</b>	9	32	243	194	29	192	<b>699</b>

**Illustration 13** which shows pottery dates by phase confirms that phase 2 was more likely to have been medieval in date, although this assessment is only based on two sherds. Phase 2/3 is more problematic, as the pottery from this phase covered a wide time span ranging from the thirteenth to the seventeenth century. The pottery from phase 3 would appear to overlap with this, with several sherds from the fourteenth or fifteenth century, however these pieces could be residual. The potential range of the pottery

from phase 3 was fourteenth to eighteenth century in date but primarily appeared to be fifteenth to seventeenth century in date. Two sherds of phase 3 pottery are illustrated in **Illustration 14**, along with one sherd of phase 4 pottery. Some pottery from phase 4 was of possible sixteenth century date, but the date of the phase appeared to be seventeenth and eighteenth century. The pipe trenches in phase 5 had a range of material in them. The earliest dated from the fifteenth or sixteenth century, and the latest from the nineteenth or twentieth century. However, the earlier sherds must have been incorporated into the fills of the pipe trenches as residual material.

A programme of dry sieving was undertaken on the moat fills to provide a control on the recovery of finds (**Appendix 8**). This produced large numbers of brick/tile, and mortar fragments, but did not add significantly to the recovery of other materials, such as pottery.

## 9 CONCLUSIONS

### 9.1 SITE SUMMARY

The evaluation has established the archaeological sequence in the area of the eastern castle defences. This has shown that there are 5 main phases to the archaeology in this area, and two other phases. The phases on the site were:

Phase 1	The medieval moat cut
Phase 2	Medieval moat fills
Phase 2/3	Sandy silt layer, related to the medieval castle or post-medieval castle
Phase 3	Post-medieval moat fills
Phase 4	Post medieval walls, floors and associated layers
Phase 4/5	Undetermined post-medieval features, could be either phase 4 or 5
Phase 5	Modern

No remains predating the Norman castle were recovered from the evaluation. Armstrong (1930) noted the presence of both Roman and Saxon pottery from his

excavations. He also recorded a wooden building which he believed to be Saxon. However, he describes the building as having a cruck frame. This is highly unlikely as no Saxon cruck frame buildings are known, in fact the earliest cruck frame buildings in England date from the early-thirteenth century (Tyers and Grooves pers. comm.). It therefore seems likely that either this is not a Saxon building or that Armstrong's interpretation of its form is wrong.

**Illustration 15** shows a matrix of the site subdivided into phases. All of the contexts in phases 1 to 3 related to the castle moat, the main feature identified. Although not fully excavated, the moat produced material ranging in date from between the eleventh to thirteenth centuries at its base, to the seventeenth and eighteenth century at the top. It was not possible to identify hiatuses in the depositional sequence in the medieval and post medieval fills. No layer in the castle moat sequence could be related to the destruction of the castle. This differed from the result of Armstrong's excavations at the castle, where layers that contained large quantities of stone rubble were interpreted as castle destruction layers.

The moat fills were all dry, with no evidence of waterlogging. This was not unexpected as Armstrong (1930) reported that his excavations showed that the moat was shallower on the east side than the south side, and suggested that the moat on the east side was dry. Despite this, the potential for the preservation of environmental remains was assessed by floating three samples from phases 2 and 2/3. These proved to contain very little material and suggested that preservation of environmental remains in the east side of the moat was poor. However, it should be stressed that excavation stopped short of the base of the moat, and that it is possible that preservation may have been better in the lower fills of the moat.

No structural remains or foundation trenches were recovered that related to the castle. The excavations exposed an area extending 5m back from the moat on the castle side. This would suggest that either the walls and all archaeological evidence for them has been removed by later activity or that the walls were set back from the moat. Armstrong (1930) noted that there was no evidence for the wall on the south side of the castle to the west of the entrance, and suggested that "the wall had neither run parallel

with the ditch nor in close proximity with it, except opposite the main entrance” (Armstrong 1930 p11). Although the excavations under consideration here were on the east side of the castle the wall may well have been set back from the moat in this area as well. Further evidence for a gap between the moat and the castle walls comes from a pamphlet regarding the siege of Sheffield Castle published in 1644 (unknown authorship 1644). In a description of the castle on 1<sup>st</sup> August this states that “when the Major-generall had viewed it, he found it to be a very considerable strength, both for naturall seituation, being in a triangle with two Rivers, the water deep in the West and East sides of the Castle, slackered on all sides, a strong fort before the gate pallisado’d, a Trench 12 foot deep and 18 broad about the fort and other parts of the Castle and a breast-worke pallisado’d within the Trench betwixt it and the Castle” (unknown authorship 1644). This would appear to suggest that there was room between the moat and the castle for the construction of a breastwork, probably an earthen bank, with a palisade. The evidence of both Armstrong and the pamphlet would appear to be in agreement and suggest that there was a gap between the moat and the castle walls. It is therefore possible that the line of the eastern castle wall was to the west of the trench and that remains could still survive under the present market building.

The line of the moat as identified in the trench appears to lie further east than the line marked on Armstrong’s plan (1930, plan 1). He marks the moat roughly on line with the eastern wall of the market. In the trench the moat was located approximately 5.5m east of the market wall. On Armstrong’s (1930) plan the eastern moat is only lightly dashed and it appears that he may have extrapolated the line in this area and located it to far west.

It is uncertain how wide the moat was on the east side of the castle as only one side of the moat was exposed in the excavation. The maximum width of moat exposed in the trench was approximately 3m. However, as excavation could not extend down to the bottom of the moat it is unknown whether the base of the moat lay within the trench or not or even if the moat was V-shaped or had a flat bottom.. Therefore, we can not estimate the width of the moat from this data. There are two documentary references to the width of the moat and the information on the plan produced by Armstrong (1930). The pamphlet on the siege of Sheffield Castle (unknown author 1644) describes the

moat as 12ft (3.6m) deep and 18ft (5.5m) wide. Vicars Parliamentary Chronicle published in 4 parts between 1644 and 1646 (referenced in Hunter 1869) said that on the south the great ditch was 30ft (9.1m) wide and 18ft (5.5m) deep. Armstrong's (1930) plan of the castle site shows the southern ditch as 42ft (12.8m) wide at its maximum and the eastern ditch as 25ft (7.6m) wide. This wide range of figures makes it impossible to give an accurate estimate for the width of the moat on the east side of the fort. However, it does seem likely that the moat was wider on the south side near the entrance. On the east side the moat may have been somewhere in the range of 5.5m to 7.5m wide, although this is not certain.

The only structural remains recovered were from phase 4. These included fragments of wall, and a cobbled surface. The cobbled surface had burning associated with it, and may have been the remains of some small scale industrial activity. These remains dated from the seventeenth and eighteenth century.

The total absence of nineteenth century remains shows that the construction of the present market buildings was probably preceded by extensive ground levelling in the area of the evaluation.

## **9.2 ACHIEVEMENT OF AIMS**

The evaluation has:

- gathered sufficient information to establish the presence of archaeological remains dating from the medieval and post-medieval period. It has shown that the preservation of deposits is variable, and that the deeper medieval deposits within the moat are undisturbed.
- provided sufficient information to allow an assessment to be made as to the importance of the archaeological remains. The medieval moat is of regional importance, while the post-medieval structural remains are of local importance.

- shown that the medieval moat on the eastern side of the castle is preserved. No stone walls or other structures from the medieval period were identifiable with the evaluation trench.
- shown that the lower moat fills are undisturbed by later activity, and that preservation conditions are good for pottery, metal, and bone, but that environmental remains such as seeds, and insects, do not survive in the deposits evaluated. However, preservation conditions may be better for environmental remains in the lower moat fills.
- failed to confirm the presence of pre-Norman remains on the site. However, as the trial trench was so small compared to the overall site of the castle it is possible that pre-Norman remains could exist elsewhere on the castle site.

## 10 THE PROJECT ARCHIVE

The archive, including finds, will be deposited with Sheffield City Museum accession number SHEFM.1999.300 . This will be done according to the requirements for such depositions outlined by the South Yorkshire Sites and Monuments Record.

The project archive was prepared by the project staff in accordance with the requirements specified in *Management of Archaeological Projects*, Appendix 3 (1991) and in accordance with the *Guideline for the Preparation of Excavation Archives for Long Term Storage* (United Kingdom Institute of Conservation 1990). It contains :

- i) a summary of the project;
- ii) a guide to the archive;
- iii) the project design;
- iv) the project report;
- v) the complete site archive, including all data, records and correspondence, produced during the programme of fieldwork;
- vi) all artefactual material, appropriately indexed, conserved and packaged.

## **11 COPYRIGHT**

ARCUS shall retain full copyright of the report, tender documents or other project documents, under the *Copyright, Designs and Patents Act 1988* with all rights reserved; excepting that it hereby provide an exclusive licence to Carillion Development Management for the use of such documents by them in all matters directly relating to the Project as described in the Project Design.

## **APPENDIX 1 - LOGS OF THE BOREHOLE SURVEY**

## APPENDIX 1 LOGS OF THE BOREHOLE SURVEY

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The boreholes were undertaken on 19th September. The locations of the boreholes are shown on **Illustration 2**. All depths are taken from ground level, and all the boreholes were dry to base. All boreholes were completed to bedrock except borehole 1, which was abandoned as it hit a concrete slab.

**Table 5: Borehole 1**

Description	Thickness (m)	Depth to base (m)
Tarmac	0.05	0.05
Concrete	0.15	0.02

**Table 6: Borehole 2**

Description	Thickness (m)	Depth to base (m)
Tarmac	0.20	0.20
Compacted brick and sand rubble	2.60	2.80
Soft to firm brown clay, brick and sandstone fill	1.00	3.80
Stiff grey brown mudstone	0.40	4.20

**Table 7: Borehole 3**

<b>Description</b>	<b>Thickness (m)</b>	<b>Depth to base (m)</b>
Tarmac	0.20	0.20
Brick clay and sand rubble	1.10	1.30
Soft brown clay, brick and sandstone fill	4.50	5.80
Becoming very soft brown sandy clay, sandstone and brick fill	0.70	6.50
Very hard grey mudstone	0.20	6.70

**Table 8: Borehole 4**

<b>Description</b>	<b>Thickness (m)</b>	<b>Depth to base (m)</b>
Tarmac	0.20	0.20
Brick rubble	0.60	0.80
Soft to firm brown sandy clay with sandstone boulders fill	1.20	2.00
Light brown sandy, highly weathered mudstone (becoming hard with depth)	1.50	3.50

## **APPENDIX 2 - LIST OF CONTEXTS**

## APPENDIX 2 LIST OF CONTEXTS

Table 9: List of contexts

Context	Type	Description	Phase
0000	layers	modern overburden machined off	5
0001	layer	compact ashy layer, overlying cobbles 0002	4
0002	structure	stone platform? layer of cobbles (reused setts) in north west corner of trench	4
0003	layer	compact clay east of and associated with cobbles 0002	5
0004	layer	yellow brown sand clay layer over much of the west part of the site, this area was difficult to distinguish at times and may have included some overlying material	4/5
0005	layer	degraded clay mudstone in south west corner cut through by later features contains material trampled into it	4
0006	wall	remains of wall foundations west end of the trench	4
0007	natural	mudstone	0
0008	layer	upper moat fill south of wall 0010	4
0009	layer	yellow brown clay thick moat fill, south of wall 0010, =0017?, may include disturbance from pipe 0042	3
0010	wall	wall running east west across top of moat	4
0011	layer	black silty clay north of wall 0010, dump layer	4
0012	layer/ structure	linear deposit mix of rubble and clay, possibly remnants of robbed out foundations	4
0013	layer	dump/fill in pipe trench 0042	5
0014	layer	dump/fill in pipe trench 0042	5
0015	layer	dump/fill in pipe trench 0042	5
0016	layer	grey brown silty clay north of wall 0010 dump layer	4
0017	layer	yellow brown clay, thick fill layer in moat north of wall 0010, =0009?	3
0018	layer	patches of brown/back silty clay, remnants of layers removed by machine	5
0019	layer	main fill of pipe trench 0042	5
0020	layer	deposit of stoney clay adjacent to 0012, may also be robbed out foundations	4
0021	layer	remains of wall 0006 disturbed by pipe trench 0030	5
0022	cut	foundation trench for wall 0006	4
0023	layer	brown sandy clay layer north of wall 00010	4
0024	layer	fill of shallow pit 0032 below stone cobbles 0002	4
0025	layer	fill of pipe trench 0030	5
0026	layer	fill of western arm of pipe trench 0030	5
0027	natural	mudstone	0
0028	layer	dark yellow brown layer north of wall 0010	4
0029	layer	black silty clay fill of pit? 0034	4
0030	cut	pipe trench crossing centre of site north south	5
0031	structure	pipe in trench 0030	5
0032	cut	cut of shallow pit below cobbles 0002	4
0033	layer	brown silty clay lower fill of pit? 0034	4
0034	cut	small pit north of wall 0010	4

0035	layer	fill of modern borehole (No. 4 )	--
0036	cut	modern borehole (No. 4 )	--
0037	layer	orange yellow clay below cobbles 000	4
0038	layer	orange brown silty clay layer north of wall 0010	3
0039	layer	grey brown sandy clay north of wall 0010	3
0040	layer	grey brown gritty clay south of wall 0010	3
0041	layer	mortar rich lens within 0017	3
0042	cut	pipe trench in south west corner of trench	5
0043	layer	lower rubble fill of pipe trench 0042	5
0044	layer	brown silty moat fill at edge had been disturbed so finds are uncertain in date	3
0045	cut	putative pit later discarded, variation in 0004	--
0046	cut	putative post hole later discarded, variation in 0004	--
0047	layer	fill of putative post hole later discarded, variation in 0004	--
0048	cut	putative post hole later discarded, variation in 0004	--
0049	layer	fill of putative post hole later discarded, variation in 0004	--
0050	cut	putative post hole later discarded, variation in 0004	--
0051	layer	fill of putative post hole later discarded, variation in 0004	--
0052	layer	compact yellow clay moat fill	3
0053	cut	cut of moat	1
0054	layer	grey brown clay moat fill	3
0055	layer	brown silty clay moat fill	3
0056	layer	grey brown sand gravel, moat fill	3
0057	layer	grey brown silty sand, moat fill	3
0058	layer	grey brown clay, moat fill	3
0059	cut	step at top of moat, reason unknown	1
0060	layer	pale grey silt, moat fill	3
0061	layer	thick brown sandy silt layer moat fill	2/3
0062	layer	brown silty clay, moat fill	2
0063	layer	lens of yellow brown clay in 0061	2/3
0064	layer	yellow orange clay moat fill	2
0065	layer	grey and orange flecky clay, moat fill	2
0066	layer	dark grey brown clay, moat fill	2
0067	layer	orange silty sand, moat fill	2
0068	layer	orange brown clay, moat fill	2
0069	layer	grey orange sticky clay, moat fill	2
0070	layer	brown orange silty clay, moat fill	2

## **APPENDIX 3 - POTTERY REPORT BY C.G. CUMBERPATCH**

## **APPENDIX 3 MEDIEVAL AND LATER POTTERY FROM THE EXCAVATIONS**

C.G. Cumberpatch BA PhD

Archaeological Consultant

### **A3.1 INTRODUCTION**

The pottery assemblage from the evaluative excavation at Castlegate, Sheffield, was examined by the author on November 16th and 17th, 1999. The assemblage consisted of 142 sherds of pottery weighing 2463 grams and representing a maximum of 131 vessels.

There is, at present, no established ceramic type series for medieval and later pottery from Sheffield and the coverage of the western part of South Yorkshire in the existing county type series is limited. The terms used in this report are based upon those established for the eastern and central parts of South Yorkshire (Cumberpatch 1999), together with nationally recognised terms (principally for post-medieval wares), while other types are described in Tables 10 and 11. Given the small size of the assemblage and the fact that the excavation was a preliminary and evaluative one no attempt has been made to establish a definitive type series, although, should further work be undertaken on the site, this will be a priority.

### **A3.2 THE NATURE OF THE ASSEMBLAGE**

The pottery assemblage recovered spans the period between the later eleventh / twelfth and the eighteenth century, with a very limited number of sherds of possible eighteenth / nineteenth century type. No material could be definitely dated to the nineteenth century and it would seem that the deposits excavated on the site were largely unaffected by nineteenth and twentieth century developments. With the exception of the sherd of Low Countries Redware from context 55, all the pottery can be considered to be of local or regional manufacture. Medieval pottery appears to have been manufactured principally in the Don valley, using local Coal Measures clays and post-medieval production of slipware is known to have been undertaken in and around Stocksbridge, notably at Midhope and Bolsterstone (Ashurst pers. comm.). Eighteenth century tablewares

(White Salt Glazed Stoneware and Brown Glazed stoneware were probably also manufactured in the Don Valley, although the establishment of provenances for such wares is difficult. Given the number of potteries which existed between Sheffield and Doncaster, it is reasonable to assume that the expanding city was one of several markets served by these factories. The location of post-medieval coarseware manufacture is somewhat more problematic; to date little is known of the organisation of such production, although it seems likely, following the evidence for Hull (Watkins 1987), to have been local in nature.

Although no formal type series has been established for the site, two classes of hitherto unrecognised ware are worthy of mention.

*Coal Measures Sandy ware* (Context 54, bag 131). Four sherds were noted in a reduced grey fabric containing black ferrous grit and fine quartz grains. The patchy glaze gives a superficial resemblance to Humberware. One sherd has a buff gritty sherd attached to it, suggesting (again) that different types of pottery were fired in the same kiln. This type, which needs further work before it can be fully defined as a separate ware, differs from the Coal Measures Purple types defined elsewhere (Hayfield and Buckland 1989, Cumberpatch 1996) in being finer and somewhat better finished. Three sherds described as of Coal Measures type are slightly coarser, but still distinct from Firsby / Rawmarsh types.

*Early Redware* (Context 54, bags 131, 140, 148). A sandy Redware containing sparse quartz grains and clear patchy glaze internally and externally. Although medieval in the style of glazing and the presence of quartz, the type appears to be an early type of Redware preceding the refined Redwares and Brown Glazed Coarsewares. A base sherd with the knife trimmed exterior also contained small amounts of red ferrous grit (Context 54: 131).

### **A3.3 THE POTTERY AND THE SITE**

No pottery was recovered from phase 1 of the moat

### A3.3.1 Phase 2

Phase 2, the lower fills of the moat, contained a small quantity of pottery of medieval type. This included the earliest sherd from the site, a fragment of splash glazed gritty ware of probable later eleventh or twelfth century date and a sherd of slightly later Coarse Sandy ware, probably of local origin.

### A3.3.2 Phase 2 / 3

The indeterminate phase 2/3 consisted of a small group from context 61 which included both medieval and post-medieval types, the former most probably residual within a seventeenth century deposit.

### A3.3.3 Phase 3

The pottery from the third phase contained a mixed later medieval and post-medieval assemblage and was distinguished from the earlier phases by the presence of Yellow ware and of distinctive later seventeenth or early eighteenth century types, including stoneware and feathered slipware.

Context 54 contained an assemblage none of which could be definitively dated to the period subsequent to the demolition to the castle, and the majority appeared to date to between the fourteenth and sixteenth centuries. Local Coal Measures type wares were well represented and the group included a number of sherds from sixteenth century Cistercian wares. On the basis of the remainder of the pottery, It is likely that the ambiguous sixteenth / seventeenth century Cistercian / Blackwares are in fact the earlier type, although the distinction between the two is a purely typological one. The group also included a piece of unusual slag which requires separate examination.

Of particular note was the foot of a Low Countries Redware tripod cooking pot (sometimes known as *grapen*) from context 55 (**Illustration 14**). Examples of this type of pottery are common in ports (notably Newcastle, Hull and Bawtry) but seem somewhat rarer on inland sites, at least in the north-east of England. In Hull this type of pottery has been dated to between 1350 and 1550, with tripod footed vessels amongst the commonest types. The connections between the export of lead from the Peak District via Sheffield and the inland port of Bawtry are well established and it seems plausible

that pottery was amongst the objects carried by pack animals on the return trip to the Peak District.

Context 17 contained a small number of sherds of seventeenth or eighteenth century type. On balance, although these types were certainly still in production in the eighteenth century, a seventeenth century date might be more appropriate given the stratigraphic context and the associated material. Further work on the local pottery industry is required before problems such as this can be solved.

#### **A3.3.4 Phase 4**

Stratigraphically, phase 4 post-dated the moat and the pottery assemblage reflects this, being dominated by seventeenth and eighteenth century pottery, including both utilitarian wares and tablewares. The group may also include some residual material, but the dating of post-medieval coarsewares is, at present, notoriously imprecise, particularly in towns such as Sheffield where the opportunities for archaeological research have been limited.

#### **A3.3.5 Phase 4 / 5**

In ceramic terms, phase 4/5 was virtually indistinguishable from phase 4, although the presence of a piece of glazed sewer pipe suggests some degree of later intrusion. The sherds of Creamware, although theoretically datable to the early nineteenth century are perhaps better seen as of eighteenth century date as the production of this ware overlapped with earlier types (notably White Salt Glazed Stoneware).

#### **A3.3.6 Phase 5**

The presence in phase 5 of sherds of glazed sewer pipe suggest that a certain amount of disturbance had occurred during the nineteenth century. This having been said, the remainder of the assemblage consisted of seventeenth and eighteenth century material with no unequivocally nineteenth century pottery present. This would seem to imply that the later drain pipes and other services were inserted into a series of eighteenth century deposits.

### **A3.4 CONCLUSIONS**

Although small in size, the assemblage from the castle ditch is of considerable interest and importance, over and above its status as the first pottery assemblage from Sheffield City Centre to receive detailed attention.

The small amounts of medieval pottery should not be surprising, given that throughout the medieval period the moat was an essential element in the defensive and display aspects of the castle and would thus have been kept clear of excessive quantities of refuse and debris. That later medieval and early post-medieval should be present in greater quantities is equally unsurprising, given that by this time the moat was perhaps of less significance. The homogeneity of the assemblage and the generally good condition of the sherds points to the rapid filling of the moat, possibly as part of the demolition of the castle and the levelling of the site for commercial and other purposes.

It is to be hoped that future work in the area will add to the picture derived from this small sample of a large site. This collection represents a group which will be of particular value in relation to the larger groups recovered by Armstrong (1930) and Butcher during earlier excavations on the site.

Table 10: Pottery from Castlegate Sheffield

Context	Bag	Type	Number	Weight	ENV	Part	Form	Handle	Date range	Notes
4?	22	Blackware	1	2	1	Rim			C17th	Contains white round quartz grains in a Bw fabric
4?	22	Sewer pipe	1	235	1	BS				Glazed pipe
4?	39	White Salt Glazed Stoneware	1	1	1	Rim	Plate		C18th	Moulded decoration - floral and curvilinear
4?	46	Purple Glazed ware	1	8	1	BS	U/ID		C17th - C18th	Hard red earthenware with very shiny, metallic glaze internally and externally
4?	46	Stoneware	1	3	1	BS	U/ID		C18th	Brown stoneware
4?	46	White Salt Glazed Stoneware	1	9	1	Rim	Plate		C18th	See Jennings 1981:Plate 1:d
9	92	Stoneware	1	3	1	Rim	?Mug		Mid C17th - C18th	?White dipped, small beaded rim
9	92	Yellow ware	1	44	1	Base	Pancheon/bowl		C17th +	A soft buff fabric with occasional fine flecks of mica at surface
11	10	Brown Glazed Coarseware	1	11	1	BS	U/ID		C17th - c18th	Patchy glaze internally, partly unglazed, fully glazed internally
11	10	Purple Glazed ware type	1	42	1	BS	U/ID		C17th-18th	cf. Purple Glazed wares at Bawtry, glazed internally
11	10	Slipware	1	4	1	BS	Open vessel		C17th	Slip decorated yellow ware; red fabric, white slip with clear glaze and brown slip decoration
11	10	Slipware 1	1	46	1	Base	Open vessel		C17th	Slipware type 1 - clear glaze on pale red body, yellow slip blobs internally, ?knife trimmed externally
11	24	Blackware type	2	6	2	BS	U/ID		C17th - EC18th	
11	24	Brown Glazed Coarseware	7	41	7	BS	U/ID		C17th - C18th	Various BGCw fabrics which will ultimately need sorting out
11	24	Colour Glazed ware	1	1	1	BS	U/ID		LC17th - C18th	Small chip of buff earthenware with dark glaze
11	24	Feathered slipware	1	21	1	Rim	Bowl/plate		C17th - C18th	Scalloped edge, white slip, yellow and brown glaze layers with feathered decoration, press-moulded
11	24	Redware	1	93	1	Base	Pancheon/bowl		C17th	Glazed internally, red slip coating externally, knife trimmed, white streaks in the red fabric
11	24	Slipware	3	17	3	BS	U/ID		C17th	Heavily flaked, but not abraded, sherds of ?Type 1 Slipware
11	24	Slipware	1	20	1	Rim	Bowl/plate		C17th - C18th	Scalloped edge, combed, moulded decoration internally, including roundels emphasised with alternating brown and black slip
11	24	Stoneware	1	1	1	BS	U/ID		C18th	Brown stoneware
11	24	White Salt Glazed Stoneware	1	2	1	BS	U/ID		C18th	Open / flatware vessel

11	24	Yellow ware type	1	4	1	Base	U/ID		C17th	Honey coloured yellow ware type, honey coloured rather than yellow
11	43	Brown Glazed Coarseware	3	10	3	Rim/BS	U/ID		C17th	One small rim fragment

Context	Bag	Type	Number	Weight	ENV	Part	Form	Handle	Date range	Notes
11	43	Cistercian / Blackware	4	16	4	BS	U/ID		C16th - C17th	
11	43	Creamware	4	21	2	Rim/BS	Plate		C18th	Three sherds forming rim of plate, one body sherds. Undecorated
11	43	Feathered slipware	1	5	1	BS	U/ID		C17th - EC18th	Brown and yellow feathered slipware
11	43	Manganese mottled ware	1	2	1	BS	U/ID		C18th (?)	Unusual sherd - MMw eternally with yellowish glaze internally
11	43	Midland Purple type	1	8	1	BS	U/ID		C16th - C17th	Very hard, semi-vitrified fabric with patches of glaze internally
11	43	Redware type	1	11	1	BS	Pancheon/bowl		C17th	Redware type fabric and red slip externally but with green glaze internally
11	43	Stoneware	2	8	2	BS	Mug		C18th	Two sheds from different vessels, one with cup/muug handle stump
14	3	Creamware type	1	4	1	Rim	U/ID		C18th - C19th	Folded rim, cream glaze int. and ext.
16	44	Brown Glazed Coarseware	2	14	1	Rim	U/ID		C17th - C18th	Flaked internally and externally
16	44	Late Medieval Gritty ware	1	2	1	BS	U/ID		Later medieval	Small body sherd with brown glaze internally
16	74	Redware type	1	4	1	BS	U/ID		C17th - C18th	Red fabric with clear glaze internally and externally
16	74	Slipware	1	4	1	BS	U/ID		C17th - C18th	Yellow slip on red-brown body, glazed internally and externally
17	8	Brown Glazed Coarseware	1	3	1	BS	U/ID		C17th - C18th	Streaky brown glaze internally and externally
17	8	Feathered slipware	1	1	1	Rim	U/ID		C17th - C18th	Cup / bowl rim, yellow internally, feathered yellow and brown decoration externally
17	76	Cistercian ware type	1	1	1	BS	U/ID		C16th	Brown glaze on a mid-red fabric
17	76	Reduced Sandy ware	1	34	1	Base	U/ID		C14th - C15th	A hard, reduced grey fabric containing fine quartz (0.8mm max) and occasional black grit, patchy green glaze
17	82	Yellow ware	3	25	1	Base	Pancheon/bowl		C17th +	As Yellow ware from Cxt 9, bag 92, ?same vessel
17	88	Unidentified	1	219	1	Knob	U/ID		Med / Post-med.	Possible roof furniture, but with patchy glaze
17	97	BGCw	1	19	1	BS	U/ID		C17th - C18th	
19	29	?Creamware	1	10	1	BS	U/ID		C18th - C19th	Plain cream coloured glaze, crazed
19	29	Cistercian/Blackware	1	2	1	Handle	Cup	Cup	C16th - C17th	
19	29	Sewer pipe	1	172	1	BS				Glazed pipe
19	29	Stoneware	1	2	1	BS	U/ID		Mid C17th - C18th	Moulded decoration externally, brown glazed stoneware

Context	Bag	Type	Number	Weight	ENV	Part	Form	Handle	Date range	Notes
19	29	Transfer printed tableware	1	1	1	BS	U/ID		C18th - C19th	Green printed floral decoration
20	28	Redware	1	3	1	BS	U/ID		C16th - C18th	Dark red glaze internally, sooted externally
24	64	Cistercian / Blackware	1	1	1	Rim	Cup		C16th - C17th	Very small fragment of rim
25	38	Late Medieval Sandy ware	1	24	1	BS	U/ID		C15th - C16th	Unglazed oxidised external surface, green glazed internally, dark grey core
25	38	Sewer pipe	1	36	1	BS				Glazed pipe
25	38	Stoneware	1	15	1	BS	U/ID		C18th - C19th	Green glazed stoneware
25	40	Blackware type	1	2	1	BS	U/ID		C17th	
25	40	Sewer pipe	1	117	1	BS				Glazed pipe
25	40	Whiteware	1	5	1	Rim	Bowl		C19th	Fine printed decoration, floral and other motifs
25	45	Blackware	1	21	1	BS/Handle	Handled vessel	Strap	C17th	Larger than a cup, BS with handle stump
25	45	Creamware type	2	11	1	BS	U/ID		C18th - C19th	Cream coloured, crazed glaze, may be later than Creamware
25	45	Manganese mottled ware	1	1	1	BS	U/ID		C18th	Brown mottled glaze over a pale buff fabric
25	45	Manganese mottled ware	1	39	1	Base	Cup/mug		C18th	Base (unglazed), int. glazed, typical MMw cup
25	45	Recent 'China'	1	10	1	BS	U/ID		C19th / C20th	White internally, blue externally
25	45	Sewer pipe	2	169	2	BS				Glazed pipe
29	57	Brown Glazed Coarseware	2	26	2	BS	U/ID		C17th - C18th	
29	57	Feathered Slipware	1	6	1	BS	U/ID		C18th	Flaked slipware vessel, brown and yellow feathered slipware, yellow glaze internally
29	57	Slipware	2	9	2	BS	U/ID		C17th - C18th	Brown with yellow linear slip decoration
29	57	Slipware	1	3	1	BS	U/ID		C17th - C18th	Yellow with streaky brown decoration externally, unglazed internally
33	59	Brown Glazed Coarseware	1	6	1	BS	U/ID		C17th - C18th	Shiny brown glaze internally and externally
33	59	Purple Glazed ware type	1	9	1	BS	U/ID		C16th - C18th	Hard reduced ware with quartz grit (up to 1.00mm) and fine black grit, purple glaze internally and externally
33	59	Redware	1	5	1	BS	U/ID		C17th - C18th	Small sherd from a redware vessel, most probably a pantheon
33	59	Yellow ware	1	7	1	Base	Cup/small vessel		C16th - C17th	No slip under glaze, white fabric, small base
33	59	Yellow ware	1	1	1	BS	U/ID		C17th - c18th	White slip under glaze on a pale red fabric

43	123	Whiteware	1	1	1	Rim	U/ID		C19th	Plain white glazed sherd
43	137	Brown Glazed Coarseware	1	13	1	BS	U/ID		C17th	Oxidised fabric with white steaks (cf. Bawtry) shiny brown glaze externally and internally

Context	Bag	Type	Number	Weight	ENV	Part	Form	Handle	Date range	Notes
44?	136	?Pearlware	1	11	1	Handle	?Jug	Strap	?C18th - C19th	Hard white fabric with hard blue-white glaze with hand painted blue decoration
44?	136	Manganese mottled ware	1	2	1	BS	U/ID		C18th	Brown mottled ext., yellow brown int., on a hard cream/buff fabric
54	116	Coal Measures type	1	5	1	BS	U/ID		C15th - C16th	Pale grey fabric with fine black ferrous incs, purple glaze ext. mottled glaze int.
54	131	?Tile	1	9	1	Fragment	U/ID		ND	Tile type fabric with patches of glaze externally ?Glazed tile
54	131	Cistercian ware	1	1	1	BS	U/ID		C16th	
54	131	Coal Measures Sandy ware	4	134	1	Base/BS	U/ID		C14th - C15th	Fine, reduced CM type. One sherd with attached sherd in a buff gritty fabric, thin greenish glaze
54	131	Coal Measures ware type	3	97	3	BS	U/ID		C14th - C15th	Slightly coarser than Coal Measures Sandy ware, thick purple glaze
54	131	Coarse Sandy ware	1	9	1	BS	U/ID		Medieval	Reduced core/interior, oxidised ext. margin, u/id type but not atypical of local wares
54	131	Early Redware	2	26	1	Base	U/ID		C15th - C16th	Red oxidised sandy ware with patchy brown glaze internally and externally
54	131	Early Redware	2	78	2	Base	U/ID		C15th - C16th	Knife trimmed above base, quartz grains and red ferrous non-crystalline rock fragments
54	131	Whiteware	1	18	1	BS	U/ID		Later medieval	Whiteware with pale grey core and mottled brown glaze internally
54	140	Cistercian/Blackware	3	3	3	Rim	Cup		C16th - C17th	Cup rims
54	140	CMP type	1	7	1	BS	U/ID		C15th - C16th	Purple glazed, reduced, semi-vitrified sandy ware with distinctive purple pimples and black ferrous grit
54	140	Early Redware	1	16	1	Base	U/ID		C15th - C16th	Cf 54: 131 - possibly part of same vessel
54	140	Post-med. sandy ware	1	1	1	BS	U/ID		Post-medieval	Heavily abraded soft oxidised sandy ware with brown glaze externally
54	148	Cistercian / Blackware	2	11	2	BS	U/ID		C16th - C17th	
54	148	Early Redware	2	26	2	Base	U/ID		C15th C16th	Base as ext. 54, bags 131, 140 - possibly the same vessel
54	148	Late medieval sandy ware	1	8	1	BS	U/ID		Post-medieval	Sandy textured ware with quartz and black grit
54	148	Redware	2	43	1	Rim	Pancheon		C16th - C17th	Redware form, fabric harder than some examples
55	112	Local Sandy ware	1	9	1	BS	U/ID		Medieval	A brown sandy ware with sparse fine quartz and patchy glaze externally
55	112	Low Countries Redware	1	66	1	Foot	Tripod cooking pot		1350 - 1550	Sooted externally with patches of glaze, fully glazed internally. Date range based on Hull

58	113	Early Redware	1	2	1	BS	U/ID		C15th - C16th	Flake with brownish mottled glaze internally
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Context	Bag	Type	Number	Weight	ENV	Part	Form	Handle	Date range	Notes
61	129	Coal Measures Sandy ware	2	70	2	Base	U/ID		C14th - C15th	Base of large vessel, joins with a sherd from 54:131
61	134	Redware/BGCw type	4	28	4	BS	U/ID		C16th - C17th	Red earthenware with clear glaze, patchy, somewhat unusual type, perhaps an early BGCw type
61	143	Brown Glazed Coarseware	1	3	1	BS	U/ID		C16th - C17th	
61	143	Redware type	1	3	1	BS	U/ID		C16th - C17th	Streaky clear glaze internally, unglazed externally
61	144	Local Sandy ware	1	5	1	Base	U/ID		C13th - C14th	Medieval sandy ware of local type, fine quartz grit and black ferrous grains in a hard, dense matrix
62	149	Splash Glazed Gritty ware	1	12	1	BS	U/ID		C11th - EC13th	Quartz tempered Gritty ware with sparse pale green Splash glaze externally
66	156	Local Coarse Sandy ware	1	8	1	BS	U/ID		C13th - c14th	Pale grey reduced fabric with buff, oxidised external surface containing abundant quartz up to 1.00mm
		<b>Total</b>	<b>142</b>	<b>2463</b>	<b>131</b>					

Table 11: Pottery from Castlegate, Sheffield, by phase

Context	Bag	Phase	Type	Number	Weight	ENV	Part	Form	Date range	Notes
62	149	2	Splash Glazed Gritty ware	1	12	1	BS	U/ID	C11th - EC13th	Quartz tempered Gritty ware with sparse pale green Splash glaze externally
66	156	2	Local Coarse Sandy ware	1	8	1	BS	U/ID	C13th - c14th	Pale grey reduced fabric with buff, oxidised external surface containing abundant quartz up to 1.00mm
61	129	2/3	Coal Measures Sandy ware	2	70	2	Base	U/ID	C14th - C15th	Base of large vessel, joins with a sherd from 54:131
61	134	2/3	Redware/BGCw type	4	28	4	BS	U/ID	C16th - C17th	Red earthenware with clear glaze, patchy, somewhat unusual type, perhaps an early BGCw type
61	143	2/3	Brown Glazed Coarseware	1	3	1	BS	U/ID	C16th - C17th	
61	143	2/3	Redware type	1	3	1	BS	U/ID	C16th - C17th	Streaky clear glaze internally, unglazed externally
61	144	2/3	Local Sandy ware	1	5	1	Base	U/ID	C13th - C14th	Medieval sandy ware of local type, fine quartz grit and black ferrous grains in a hard, dense matrix
54	116	3	Coal Measures type	1	5	1	BS	U/ID	C15th - C16th	Pale grey fabric with fine black ferrous inclusions, purple glaze ext. mottled glaze int.
54	131	3	?Tile	1	9	1	Fragment	U/ID	ND	Tile type fabric with patches of glaze externally ?Glazed tile
54	131	3	Cistercian ware	1	1	1	BS	U/ID	C16th	
54	131	3	Coal Measures Sandy ware	4	134	1	Base/BS	U/ID	C14th - C15th	Fine, reduced CM type. One sherd with attached sherd in a buff gritty fabric, thin greenish glaze
54	131	3	Coal Measures ware type	3	97	3	BS	U/ID	C14th - C15th	Slightly coarser than Coal Measures Sandy ware, thick purple glaze
54	131	3	Coarse Sandy ware	1	9	1	BS	U/ID	Medieval	Reduced core/interior, oxidised ext. margin, u/id type but not atypical of local wares
54	131	3	Early Redware	2	26	1	Base	U/ID	C15th - C16th	Red oxidised sandy ware with patchy brown glaze internally and externally
54	131	3	Early Redware	2	78	2	Base	U/ID	C15th - C16th	Knife trimmed above base, quartz grains and red ferrous non-crystalline rock fragments
54	131	3	Whiteware	1	18	1	BS	U/ID	Later medieval	Whiteware with pale grey core and mottled brown glaze internally
54	140	3	Cistercian/Blackware	3	3	3	Rim	Cup	C16th - C17th	Cup rims
54	140	3	CMP type	1	7	1	BS	U/ID	C15th - C16th	Purple glazed, reduced, semi-vitrified sandy ware with distinctive purple pimples and black ferrous grit
54	140	3	Early Redware	1	16	1	Base	U/ID	C15th - C16th	Cf 54: 131 - possibly part of same vessel
54	140	3	Post-med. sandy ware	1	1	1	BS	U/ID	Post-medieval	Heavily abraded soft oxidised sandy ware with brown glaze externally
54	148	3	Cistercian / Blackware	2	11	2	BS	U/ID	C16th - C17th	

54	148	3	Early Redware	2	26	2	Base	U/ID	C15th C16th	Base as ext. 54, bags 131, 140 - possibly the same vessel
54	148	3	Late medieval sandy ware	1	8	1	BS	U/ID	Post-medieval	Sandy textured ware with quartz and black grit

Context	Bag	Phase	Type	Number	Weight	ENV	Part	Form	Date range	Notes
54	148	3	Redware	2	43	1	Rim	Pancheon	C16th - C17th	Redware form, fabric harder than some examples
9	92	3	Stoneware	1	3	1	Rim	?Mug	Mid C17th - C18th	?White dipped, small beaded rim
9	92	3	Yellow ware	1	44	1	Base	Pancheon/bowl	C17th +	A soft buff fabric with occasional fine flecks of mica at surface
17	8	3	Brown Glazed Coarseware	1	3	1	BS	U/ID	C17th - C18th	Streaky brown glaze internally and externally
17	8	3	Feathered slipware	1	1	1	Rim	U/ID	C17th - C18th	Cup / bowl rim, yellow internally, feathered yellow and brown decoration externally
17	76	3	Cistercian ware type	1	1	1	BS	U/ID	C16th	Brown glaze on a mid-red fabric
17	76	3	Reduced Sandy ware	1	34	1	Base	U/ID	C14th - C15th	A hard, reduced grey fabric containing fine quartz (0.8mm max) and occasional black grit, patchy green glaze
17	82	3	Yellow ware	3	25	1	Base	Pancheon/bowl	C17th +	As Yellow ware from Cxt 9, bag 92, ?same vessel
17	88	3	Unidentified	1	219	1	Knob	U/ID	Med / Post-med.	Possible roof furniture, but with patchy glaze
17	97	3	BGCw	1	19	1	BS	U/ID	C17th - C18th	
55	112	3	Local Sandy ware	1	9	1	BS	U/ID	Medieval	A brown sandy ware with sparse fine quartz and patchy glaze externally
55	112	3	Low Countries Redware	1	66	1	Foot	Tripod cooking pot	1350 - 1550	Sooted externally with patches of glaze, fully glazed internally. Date range based on Hull
58	113	3	Early Redware	1	2	1	BS	U/ID	C15th - C16th	Flake with brownish mottled glaze internally
11	10	4	Brown Glazed Coarseware	1	11	1	BS	U/ID	C17th - c18th	Patchy glaze internally, partly unglazed, fully glazed internally
11	10	4	Purple Glazed ware type	1	42	1	BS	U/ID	C17th-18th	cf. Purple Glazed wares at Bawtry, glazed internally
11	10	4	Slipware	1	4	1	BS	Open vessel	C17th	Slip decorated yellow ware; red fabric, white slip with clear glaze and brown slip decoration
11	10	4	Slipware 1	1	46	1	Base	Open vessel	C17th	Slipware type 1 - clear glaze on pale red body, yellow slip blobs internally, ?knife trimmed externally
11	24	4	Blackware type	2	6	2	BS	U/ID	C17th - EC18th	
11	24	4	Brown Glazed Coarseware	7	41	7	BS	U/ID	C17th - C18th	Various BGCw fabrics which will ultimately need sorting out
11	24	4	Colour Glazed ware	1	1	1	BS	U/ID	LC17th - C18th	Small chip of buff earthenware with dark glaze
11	24	4	Feathered slipware	1	21	1	Rim	Bowl/plate	C17th - C18th	Scalloped edge, white slip, yellow and brown glaze layers with feathered decoration, press-moulded
11	24	4	Redware	1	93	1	Base	Pancheon/bowl	C17th	Glazed internally, red slip coating externally, knife trimmed, white streaks in the red fabric

11	24	4	Slipware	3	17	3	BS	U/ID	C17th	Heavily flaked, but not abraded, sherds of ?Type 1 Slipware
11	24	4	Slipware	1	20	1	Rim	Bowl/plate	C17th - C18th	Scalloped edge, combed, moulded decoration internally, including roundels emphasised with alternating brown and black slip
11	24	4	Stoneware	1	1	1	BS	U/ID	C18th	Brown stoneware

Context	Bag	Phase	Type	Number	Weight	ENV	Part	Form	Date range	Notes
11	24	4	White Salt Glazed Stoneware	1	2	1	BS	U/ID	C18th	Open / flatware vessel
11	24	4	Yellow ware type	1	4	1	Base	U/ID	C17th	Honey coloured yellow ware type, honey coloured rather than yellow
11	43	4	Brown Glazed Coarseware	3	10	3	Rim/BS	U/ID	C17th	One small rim fragment
11	43	4	Cistercian / Blackware	4	16	4	BS	U/ID	C16th - C17th	
11	43	4	Creamware	4	21	2	Rim/BS	Plate	C18th	Three sherds forming rim of plate, one body sherds. Undecorated
11	43	4	Feathered slipware	1	5	1	BS	U/ID	C17th - EC18th	Brown and yellow feathered slipware
11	43	4	Manganese mottled ware	1	2	1	BS	U/ID	C18th (?)	Unusual sherd - MMw eternally with yellowish glaze internally
11	43	4	Midland Purple type	1	8	1	BS	U/ID	C16th - C17th	Very hard, semi-vitrified fabric with patches of glaze internally
11	43	4	Redware type	1	11	1	BS	Pancheon/bowl	C17th	Redware type fabric and red slip externally but with green glaze internally
11	43	4	Stoneware	2	8	2	BS	Mug	C18th	Two sheds from different vessels, one with cup/mug handle stump
16	44	4	Brown Glazed Coarseware	2	14	1	Rim	U/ID	C17th - C18th	Flaked internally and externally
16	44	4	Late Medieval Gritty ware	1	2	1	BS	U/ID	Later medieval	Small body sherd with brown glaze internally
16	74	4	Redware type	1	4	1	BS	U/ID	C17th - C18th	Red fabric with clear glaze internally and externally
16	74	4	Slipware	1	4	1	BS	U/ID	C17th - C18th	Yellow slip on red-brown body, glazed internally internally and externally
20	28	4	Redware	1	3	1	BS	U/ID	C16th - C18th	Dark red glaze internally, sooted externally
24	64	4	Cistercian / Blackware	1	1	1	Rim	Cup	C16th - C17th	Very small fragment of rim
29	57	4	Brown Glazed Coarseware	2	26	2	BS	U/ID	C17th - C18th	
29	57	4	Feathered Slipware	1	6	1	BS	U/ID	C18th	Flaked slipware vessel, brown and yellow feathered slipware, yellow glaze internally
29	57	4	Slipware	2	9	2	BS	U/ID	C17th - C18th	Brown with yellow linear slip decoration
29	57	4	Slipware	1	3	1	BS	U/ID	C17th - C18th	Yellow with streaky brown decoration externally, unglazed internally
33	59	4	Brown Glazed Coarseware	1	6	1	BS	U/ID	C17th - C18th	Shiny brown glaze internally and externally
33	59	4	Purple Glazed ware type	1	9	1	BS	U/ID	C16th - C18th	Hard reduced ware with quartz grit (up to 1.00mm) and fine black grit, purple glaze internally and externally
33	59	4	Redware	1	5	1	BS	U/ID	C17th - C18th	Small sherd from a redware vessel, most probably a pancheon

33	59	4	Yellow ware	1	7	1	Base	Cup/small vessel	C16th - C17th	No slip under glaze, white fabric, small base
33	59	4	Yellow ware	1	1	1	BS	U/ID	C17th - c18th	White slip under glaze on a pale red fabric

Context	Bag	Phase	Type	Number	Weight	ENV	Part	Form	Date range	Notes
4?	22	4\5	Blackware	1	2	1	Rim		C17th	Contains white round quartz grains in a Bw fabric
4?	22	4\5	Sewer pipe	1	235	1	BS			Glazed pipe
4?	39	4\5	White Salt Glazed Stoneware	1	1	1	Rim	Plate	C18th	Moulded decoration - floral and curvilinear
4?	46	4\5	Purple Glazed ware	1	8	1	BS	U/ID	C17th - C18th	Hard red earthenware with very shiny, metallic glaze internally and externally
4?	46	4\5	Stoneware	1	3	1	BS	U/ID	C18th	Brown stoneware
4?	46	4\5	White Salt Glazed Stoneware	1	9	1	Rim	Plate	C18th	See Jennings 1981:Plate 1:d
44?	136	3\4\5	?Pearlware	1	11	1	Handle	?Jug	?C18th - C19th	Hard white fabric with hard blue-white glaze with hand painted blue decoration
44?	136	3\4\5	Manganese mottled ware	1	2	1	BS	U/ID	C18th	Brown mottled ext., yellow brown int, on a hard cream/buff fabric
14	3	5	Creamware type	1	4	1	Rim	U/ID	C18th - C19th	Folded rim, cream glaze int. and ext.
19	29	5	?Creamware	1	10	1	BS	U/ID	C18th - C19th	Plain cream coloured glaze, crazed
19	29	5	Cistercian/Blackware	1	2	1	Handle	Cup	C16th - C17th	
19	29	5	Sewer pipe	1	172	1	BS			Glazed pipe
19	29	5	Stoneware	1	2	1	BS	U/ID	Mid C17th - C18th	Moulded decoration externally, brown glazed stoneware
19	29	5	Transfer printed tableware	1	1	1	BS	U/ID	C18th - C19th	Green printed floral decoration
25	38	5	Late Medieval Sandy ware	1	24	1	BS	U/ID	C15th - C16th	Unglazed oxidised external surface, green glazed internally, dark grey core
25	38	5	Sewer pipe	1	36	1	BS			Glazed pipe
25	38	5	Stoneware	1	15	1	BS	U/ID	C18th - C19th	Green glazed stoneware
25	40	5	Blackware type	1	2	1	BS	U/ID	C17th	
25	40	5	Sewer pipe	1	117	1	BS			Glazed pipe
25	40	5	Whiteware	1	5	1	Rim	Bowl	C19th	Fine printed decoration, floral and other motifs
25	45	5	Blackware	1	21	1	BS/Handle	Strap handled vessel	C17th	Larger than a cup, BS with handle stump
25	45	5	Creamware type	2	11	1	BS	U/ID	C18th - C19th	Cream coloured, crazed glaze, may be later than Creamware
25	45	5	Manganese mottled ware	1	1	1	BS	U/ID	C18th	Brown mottled glaze over a pale buff fabric
25	45	5	Manganese mottled ware	1	39	1	Base	Cup/mug	C18th	Base (unglazed), int. glazed, typical MMw cup

25	45	5	Recent tableware	1	10	1	BS	U/ID	C19th / C20th	White internally, blue externally
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Context	Bag	Phase	Type	Number	Weight	ENV	Part	Form	Date range	Notes
25	45	5	Sewer pipe	2	169	2	BS			Glazed pipe
43	123	5	Whiteware	1	1	1	Rim	U/ID	C19th	Plain white glazed sherd
43	137	5	Brown Glazed Coarseware	1	13	1	BS	U/ID	C17th	Oxidised fabric with white steaks (cf. Bawtry) shiny brown glaze externally and internally
			<b>Total</b>	<b>142</b>	<b>2463</b>	<b>131</b>				

## **APPENDIX 4 - BUILDING MATERIAL**

## APPENDIX 4 BUILDING MATERIAL: BRICK, TILE, MORTAR AND CERAMIC DRAIN PIPE

### A4.1 INTRODUCTION

Several different types of building material were recovered from the excavations including stone, bricks, tiles and mortar as well as fragments of ceramic drain pipes.

### A4.2 STONE

No worked stone or stonework that could be related to the castle was recovered. The only worked stones to this were some reused stone setts in the cobbled feature [0002] and fragments of roof slates, the later of which were collected.

Table 12: Catalogue of Stone

Context	Find No.	Phase	No.	Description
0017	86	3	1	fragment of large stone roof tile? perforated
0005	11	4	1	fragment of roof slate
0004	53	4/5	1	fragment of roof slate
0025	54	5	2	fragments of roof slates
0025	56	5	1	fragment of roof slate
0025	45	5	2	fragments of roof slate
<b>Total</b>			8	

### A4.3 TILE

All tile was collected from the evaluation. A total of 50 pieces were recovered. These were recovered from phases 2/3 to 5 and included both floor and roof tile. Table 13 gives a summary of the different types of tile by phase while table 14 is a catalogue of all the tile recovered. None of the earlier glazed floor tiles were decorated. All appeared to have a single coloured glaze, usually a green or brown colour. Almost all of the tiles other than machine made tiles had an orange earthenware fabric.

Table 13: Summary of tile recovered

	<b>phase 2/3</b>	<b>phase 3</b>	<b>phase 4</b>	<b>phase 5</b>	<b>Total</b>
<b>floor tile</b>	2	1	3		<b>6</b>
<b>glazed floor tile</b>	1	8			<b>9</b>
<b>glazed roof tile</b>		8			<b>8</b>
<b>machine made</b>				20	<b>20</b>
<b>other</b>	1	5		1	<b>7</b>
<b>Total</b>	<b>4</b>	<b>22</b>	<b>3</b>	<b>21</b>	<b>50</b>

Table 14: Catalogue of tile

<b>Context</b>	<b>Find No.</b>	<b>Phase</b>	<b>No.</b>	<b>Description</b>
0061	134	2/3	2	fragments of purple brown floor tile
0061	134	2/3	1	fragment of green glazed ceramic floor tile
0061	134	2/3	1	fragment of abraded tile?
0054	146	3	3	fragment of brown glazed floor tile
0055	122	3	1	fragments of modern machine made floor tile
0055	122	3	1	fragment of glazed curved roof tile
0055	107	3	1	fragment of purple brown glazed floor tile with mortar attached
0055	112	3	1	fragment of floor tile with remnants of glaze
0009	61	3	1	fragment of green glazed floor tile
0055	110	3	1	fragment of large flat thin tile with remnants of purple brown glaze
0058	124	3	2	two fragments of purple brown glazed ceramic roof tile, possibly from ridge
0009	92	3	1	fragment of floor tile remnants of glaze
0054	148	3	4	fragments of purple brown glazed ceramic tiles, possibly roof
0054	148	3	4	abraded fragments of ceramic tile with remnants of glaze
0054	148	3	1	fragment of green brown glazed floor tile
0054	148	3	1	fragment of purple green glazed ceramic tile, grey glaze
0006	32	4	2	fragment of modern machine made floor tile

0001	19	4	1	fragment of modern machine made floor tile
0021	31	5	1	fragment of modern machine made floor tile
0025	54	5	3	fragments of modern machine made floor tile
0019	80	5	2	fragments of modern machine made floor tile
0014	30	5	3	fragments of modern machine made floor tile
0043	89	5	1	fragment of modern machine made floor tile
0025	40	5	2	fragments of modern machine made floor tile
0025	56	5	2	fragments of modern machine made floor tile
0025	56	5	1	fragment of white glazed ceramic wall tile
0025	45	5	2	fragments of modern machine made floor tile
0025	38	5	3	fragments of modern machine made floor tile
0014	3	5	1	fragment of modern machine made tile
		<b>Total</b>	50	

#### A4.4 BRICK

Fragments of brick were not collected unless they were either hand made or fire brick.

Table 15: Catalogue of Brick

Context	Find No.	Phase	No.	Description
0055	117	3	5	fragments of hand made brick
0055	120	3	7	fragments of hand made brick
0055	108	3	9	fragments of hand made brick
0055	119	3	4	fragments of hand made brick
0044/55	125	3	2	fragments of hand made brick
0055	109	3	6	fragments of hand made brick
0055	118	3	3	fragments of hand made brick, 2 are overfired or burnt
0017	83	3	2	fragments of hand made brick
0009	79	3	1	fragment of hand made brick
0017	84	3	6	fragments of hand made brick
0054	131	3	4	fragments of brick
0044/55	126	3	4	fragments of hand made brick
0038	71	3	1	small fragment of brick
0008	68	4	1	fragment of brick
0016	44	4	1	fragment of brick

0024	64	4	1	fragment of brick
0011	23	4	1	fragment of brick
0010	90	4	1	fragment of hand made brick with ash mortar
0006	32	4	3	fragments of brick
0004	12	4/5	1	fragment of fire brick
0025	36	5	3	fragments of hand made brick
0025	36	5	1	fragments of fire brick
0025	50	5	1	fragment of hand made brick
0018	18	5	1	fragment of hand made brick
0025	49	5	1	fragment of hand made brick
0018	20	5	1	fragment of possible hand made brick, burnt?
0025	51	5	4	fragments of modern fire brick
0025	51	5	3	fragments of fire brick with slag on surface
0025	51	5	2	fragments of heavily burnt brick
0003	14	5	1	fragments of brick held together with mortar
0018	19	5	1	fragment of hand made brick
0021	31	5	1	fragment of fire brick
0025	54	5	1	fragment of fire brick
0025	40	5	1	fragment of brick
0025	38	5	1	fragment of modern fire brick
0025	38	5	1	fragment of modern brick with vitrified surface
0021	48	5	1	fragment of modern fire brick
0021	48	5	1	fragment of modern machine made brick
		<b>Total</b>	89	

#### A4.5 MORTAR

The mortar on the site was of two types, a white lime mortar or a grey ash mortar. The ash mortar was the more common of the two.

Table 16: Catalogue of Mortar

Context	Find No.	Phase	No.	Description
0055	112	3	2	lumps of mortar
0055	112	3	1	lump of mortar with impression of wood in it
0055	122	3	2	lumps of mortar
0005	11	4	1	lump of lime mortar
0006	32	4	15	lumps of ash mortar
0010	4	4	1	lump of ash mortar
0010	90	4	6	lumps of ash mortar
0010	90	4	6	lumps of lime mortar
0004	12	4/5	3	lumps of lime mortar
0013	5	5	2	lumps of ash mortar
0021	31	5	4	3 lumps of ash mortar, 1 lump of lime mortar
0025	51	5	1	lump ash mortar with slag attached
0025	51	5	1	lump ash mortar with slag attached
0025	54	5	1	lump of mortar ?
<b>Total</b>			46	

#### A4.6 CERAMIC DRAIN PIPE

All the ceramic drain pipe on the site was modern and came from phase 4 or 5.

Table 17: Catalogue of ceramic drain pipe

Context	Find No.	Phase	No.	Description
0004	22	4	1	glazed ceramic drain pipe fragment
0019	29	5	1	glazed ceramic drain pipe fragment
0025	38	5	1	glazed ceramic drain pipe fragment
0025	40	5	1	glazed ceramic drain pipe fragment
0025	45	5	2	glazed ceramic drain pipe fragments
<b>Total</b>			6	

## **APPENDIX 5 - METAL AND SLAG**

## APPENDIX 5 METAL AND SLAG

### A5.1 METAL

Metal objects were recovered from all phases of the site. The majority were pieces of iron, primarily nails. Three small pieces of copper or copper/alloy were recovered from phase 3, these were fragments of pins or fine wire.

Table 18: Catalogue of Metalwork

Context	Find No.	Phase	No.	Description
0062	149	2	5	iron/rust lumps
0062	153	2	2	iron lumps
0061	138	2/3	1	iron nail with head, 4.1 cm long
0061	134	2/3	1	iron nail with head, 4.5 cm long
0061	143	2/3	2	iron nails with heads, 3.8cm and 3.3cm long
0061	155	2/3	1	iron lump
0054	127	3	1	copper/copper alloy pin with head, 1.5 cm long
0054	127	3	1	copper/copper alloy pin/wire, 1.3cm long
0054	145	3	1	copper/copper alloy pin/wire, 1.8 cm long
0054	145	3	1	lead lump
0054	130	3	1	iron nail, 3.8cm long
0054	130	3	1	iron lump
0054	148	3	3	iron nails with heads, 3.6cm 3.3cm and 2.4cm long
0054	148	3	1	iron lump
0011	23	4	1	iron plate, 11.7cm long
0011	23	4	1	iron bar, square section, 4.7cm long
0033	59	4	1	iron nail, bent, 6.1cm long
0004	12	4/5	1	iron plate, triangular shape, 7.6cm long
0000	1	5	1	iron nail, 6.1cm long
0013	5	5	1	iron bar, bent, 18.3cm long, 0.7cm diameter
0013	5	5	3	iron nails with heads, 6.8cm, 5.2cm and 4.3cm long
0019	29	5	1	iron bar, 14.2 cm long, 3.1cm diameter

0019	29	5	3	iron nails, 9.1cm 8.5cm and 3.9cm long
0025	40	5	3	iron lumps
0025	45	5	1	iron plate, 11.2cm long and 6.4cm wide
<b>Total</b>			39	

## A5.2 SLAG

Several fragments of slag were recovered these came from phases 3 to 5 and were of several types including, tap slag, a light porous slag and a glassy slag. The presence of slag does not in it self mean that metal working was taking place in this area. The importance of metalworking in Sheffield has resulted in large quantities of slag on almost all sites within Sheffield.

Table 19: Catalogue of Slag

Context	Find No.	Phase	No.	Description
0017	76	3	1	light and porous slag
0054	130	3	7	4 frags tap? slag, and 3 lumps slag
0054	148	3	1	light and porous slag
0055	122	3	1	light and porous slag
0005	11	4	2	lumps porous slag
0001	19	4	12	7 lumps glassy slag, 2 lumps porous slag and 3 lumps of slag
0002	33	4	2	light and porous slag
0006	32	4	7	4 lumps of porous mortar, 3 lumps of mortar
0010	4	4	1	lump tap? slag
0011	43	4	2	lumps slag
0024	64	4	1	light and porous slag
0029	57	4	1	lump tap? slag
0004	39	4/5	1	lump slag
0004	12	4/5	7	2 lumps of glassy slag, 2 lumps of porous slag, 3 lumps of slag, crucible fragment with slag and mortar attached
0003	7	5	2	1 lump porous glassy slag, 1 lump glassy slag
0003	14	5	3	1 lump porous slag, 2 lumps slag
0013	5	5	1	light and porous slag

0013	6	5	1	light and porous slag
0014	3	5	1	lump slag
0014	30	5	5	lumps light porous glassy slag
0018	19	5	7	4 lumps light porous slag, 2 lumps slag, 1 sherd crucible coated in slag
0019	29	5	2	1 lump porous slag, and 1 lump slag
0021	48	5	3	lumps glassy slag
0021	31	5	3	1 lump porous glassy slag, 2 lumps slag
0025	45	5	22	12 lumps glassy slag, 1 lump light and porous slag, and 9 lumps slag
0025	51	5	3	1 lump stone with glassy slag, 1 lump slag
0025	54	5	7	1 lump porous slag, 1 lump glassy slag, 1 piece of tap? slag, 2 pieces of crucible fragment with slag attached
0025	56	5	2	light and porous slag, 1 slightly glassy
0025	41	5	1	light and porous slag
0025	45	5	1	lump slag
0025	38	5	4	1 lump glassy slag, 2 lumps porous glassy slag, 1 sherd crucible coated in slag
		<b>Total</b>	110	

## **APPENDIX 6 - OTHER FINDS**

## APPENDIX 6 OTHER FINDS

### A6.1 GLASS

A total of 23 pieces of glass were recovered of which the vast majority came from phases 4 and 5. There were a mixture of bottle and window glass. Of the two pieces from phase 3 one was a small fragment of clear glass while the other was a heavily degraded piece of coloured (blue) window glass.

Table 20: Catalogue of Glass

Context	Find No.	Phase	No.	Description
0039	67	3	1	fragment of clear glass
0054	148	3	1	fragment of heavily degraded window? glass
0001	19	4	3	fragments of clear bottle glass
0001	19	4	1	fragment of pale green bottle glass
0002	34	4	1	fragment of clear window? glass
0006	32	4	1	fragment of clear window glass
0011	10	4	2	fragment of a green glass vessel with ribs
0011	24	4	2	fragments of green bottle glass
0033	59	4	1	fragment of green bottle glass
0004	12	4/5	2	fragments of clear bottle glass
0003	7	5	1	fragment of clear bottle glass, has two letter BS on it
0018	19	5	2	fragments of green bottle glass
0018	19	5	1	fragment of clear window glass
0018	19	5	1	fragment of pale green glass
0021	48	5	2	rim fragments of clear bottle glass
0025	45	5	1	base fragment of blue bottle glass
0025	45	5	1	fragment of pale green bottle glass
0025	38	5	1	fragment of clear vessel glass
<b>Total</b>			25	

## A6.2 CLAY PIPE

Of the total of 62 fragments of clay pipe 8 were bowls or fragments of bowls. The only decoration on any of the bowls were simple lines circling the top of the bowl, this was found on 5 of the 8 bowl fragments, and is similar to some of the pieces from the 1920's castle excavations and illustrated by Armstrong (1930, fig. 15). There were three bowls that came from phase 3, the earliest phase from which clay pipe was recovered. The phase 3 bowls were smaller than those from later phases.

Table 21: Catalogue of Clay Pipe

Context	Find No.	Phase	No.	Description	Date
0017	76	3	1	clay pipe stem fragment	
0039	67	3	2	clay pipe stem fragments	
0039	67	3	1	fragment of clay pipe stem and foot	
0039	67	3	1	small to medium undecorated bowl	
0054	140	3	1	clay pipe stem fragment	
0055	122	3	2	clay pipe stem fragments	
0055	122	3	1	small to medium sized bowl with a line partially circling the top	
0044	136	3	2	clay pipe stem fragments	
0044	136	3	1	fragment of clay pipe stem and foot	
0044	136	3	1	small bowl with line circling the top	
0002	34	4	1	clay pipe stem fragment	
0010	94	4	1	clay pipe stem fragment	
0010	94	4	1	clay pipe stem fragment	
0011	43	4	9	clay pipe stem fragments	
0011	10	4	2	clay pipe stem fragments	
0011	24	4	9	clay pipe stem fragments	
0011	24	4	1	undecorated bowl fragment	
0011	24	4	1	fragment of clay pipe stem and foot	
0016	74	4	1	clay pipe stem fragment	
0016	44	4	1	clay pipe stem fragment	
0024	64	4	1	clay pipe stem fragment	
0029	57	4	5	clay pipe stem fragments	
0029	57	4	1	bowl with a line circling the top	
0029	57	4	1	undecorated bowl fragment	

0033	59	4	3	clay pipe stem fragments	
0033	59	4	2	bowl fragments with line circling the top	
0004	39	4/5	1	clay pipe stem fragment	
0004	53	4/5	3	clay pipe stem fragments	
0014	3	5	1	clay pipe stem fragment	
0018	19	5	1	clay pipe stem fragment	
0019	29	5	1	clay pipe stem fragment	
0025	56	5	1	clay pipe stem fragment	
0025	38	5	1	clay pipe stem fragment	
		<b>Total</b>	62		

### A6.3 WORKED BONE

Worked bone was found in phases 3, 4 and 5 and thus all probably dates from the post-medieval period. Of the 13 pieces of worked bone at least 7 appear to be waste from bone working, however the quantity recovered is not such as to confirm that bone working was taking place in this area. Only one piece is definitely a tool, a fragment of a bone handle from phase 3.

Table 22: Catalogue of Worked Bone

Context	Find No.	Phase	No.	Description
0017	76	3	1	distal end metapodia of cattle, shaft sawn through possibly bone working waste
0039	67	3	2	small splinters of sawn bone, possible waste from bone working
0039	67	3	1	fragment of bone handle, highly polished, split longitudinally
0005	11	4	1	small fragment of bone shaped into a flat plate and lightly polished on one side
0011	21	4	1	long bone shaft fragment cut into a rectangular block, in poor condition
0016	58	4	2	small splinters of sawn bone, possible waste from bone working
0024	65	4	1	small splinter of sawn bone, possible waste from

				bone working
0033	60	4	1	distal end metapodia of cattle, shaft sawn through possibly bone working waste
0018	19	5	2	very small fragment of bone with polished surfaces, possibly worked
0018	19	5	1	small fragment of long bone shaft, sawn through on both sides to leave a flat ring, only small fragment survives
		<b>Total</b>	13	

## **APPENDIX 7 - BONE AND SHELL**

## APPENDIX 7 BONE AND SHELL

### A7.1 BONE

A total of 93 fragments of animal bone were recovered from Phases 2/3 to 5 of the evaluation. No bones were recovered from Phase 2, a phase which produced very few finds of any type. This is a small assemblage, and its size precludes any statistical analysis. The condition of the bones varied, some were in good condition while others were abraded and fragile. Table 23 provides fragment counts for animal bones by species and phase. Only 21 bones could be identified to a specific species, while a further 7 were bird bones. Of the rest, 44 were identified to size categories, and 21 were unidentified.

Table 23: Fragment counts for animal bones by phase

Species	Phase 2/3	Phase 3	Phase 4	Phase 4/5	Phase 5	Total
<b>cattle</b>	1	3	2		1	<b>7</b>
<b>horse</b>		1				<b>1</b>
<b>sheep/goat</b>		10		1		<b>11</b>
<b>red deer</b>	1					<b>1</b>
<b>cat</b>					1	<b>1</b>
<b>bird</b>		6	1			<b>7</b>
<b>cattle sized</b>	1	10		1	2	<b>14</b>
<b>sheep/goat sized</b>		21	1	1	6	<b>29</b>
<b>small mammal</b>			1			<b>1</b>
<b>unidentified</b>	2	14	3	1	1	<b>21</b>
<b>Total</b>	<b>5</b>	<b>65</b>	<b>8</b>	<b>4</b>	<b>11</b>	<b>93</b>

A total of 7 cattle bones were identified. These came from all bone producing phases except 4/5. Sheep/goat though more numerous, were only recovered from Phases 3 and 4/5. Individual bones were recovered for red deer and horse. The red deer bone, a metatarsal, was recovered from phase 2/3, and could well have come from the deer

park which lay immediately to the south and east of the castle. The horse bone from phase 3 was a 3rd phallange from a small horse, possibly a pony. A single cat bone in phase 5 was in very good condition, and as this came from the fill of a pipe trench could be very modern.

In general there was nothing in the animal bones that was unusual or unexpected, but the small sample size precluded any detailed analysis of them.

## A7.2 SHELL

A total of 32 oyster shell fragments were recovered these came from phases 2/3 and 3 and are waste from food consumption. Their presence in the late medieval and early post-medieval periods is quite common.

Table 24: Catalogue of Shells

<b>Context</b>	<b>Find No.</b>	<b>Phase</b>	<b>No.</b>	<b>Description</b>
0061	129	2/3	1	oyster shell fragment
0061	135	2/3	2	oyster shell fragments
0061	154	2/3	6	oyster shell fragments
0009	2	3	1	oyster shell fragment
0054	147	3	2	oyster shell fragments
0054	116	3	4	oyster shell fragments
0054	128	3	13	oyster shell fragments
0055	121	3	1	oyster shell fragment
0056	115	3	2	oyster shell fragments
<b>Total</b>			32	

## **APPENDIX 8 - FINDS RECOVERED FROM SIEVING**

## APPENDIX 8 FINDS RECOVERED FROM SIEVING

Samples of many contexts were sieved. This was undertaken to control the collection of small finds through the moat fills. No unusual finds were recovered by the sieving, however it did provide interesting information with regard to the distribution of brick/tile and mortar fragments through the stratigraphic sequence (**Table 25**). Through all of phases 3 and 4 brick/tile and mortar were recovered in significant quantities. In phase 2/3 brick/tile and mortar were still present, but not in such large numbers and in the lower ditch fills of phase 2 there was no mortar and only 4 small fragments of brick/tile.

Table 25: Catalogue of finds recovered from Sieving

Context	Find No.	phase	%	Pottery		Brick/tile		Mortar		Bone		Burnt Bone		Shell		Metal		Slag		Clay Pipe		Glass		Charcoal	
				N	W	N	W	N	W	N	W	N	W	N	W	N	W	N	W	N	W	N	W	N	W
0008	62	4	25			71	168	25	30					1	2									5	2
0017	77	3	10			133	274	142	364			15	42	1	1	2	28			1	1	2	1	99	132
0017	78	3	10	1	1	28	142	43	206	2	1	24	44							1	4			16	44
0017	87	3	10					1	154																
0017	91	3	10	1	2	170	604	33	74	2	1			1	1			2	2					5	4
0017	96	3	10			147	476	314	104			3	2												
0038	63	3	10			36	204	32	184	1	1	29	36					4	6						

				Pottery		Brick/tile		Mortar		Bone		Burnt Bone		Shell		Metal		Slag		Clay Pipe		Glass		Charcoal	
0039	70	3	10			22	64	25	152	1	1	27	76					4	10	1	1			28	58
0044	98	3	10			180	654	76	312																
0044	100	3	10					4	114																
0052	99	3	10			4	10																		
0054	103	3	10			5	4	2	2			6	8	1	1									3	1
0054	132	3	10	2	2	50	150	63	454	2	4			1	4	4	24	4	112					39	68
0055		3	10			155	724	44	144																
0056	104	3	10			25	62	6	48																
0058	102	3	10			5	2							3	1									1	2
0061	133	2/3	20			10	70	24	88					4	1			5	24					17	40
0061	142	2/3	20					4	12			1	6	5	1	2	4							8	18
0062	150	2	10			4	2																		
0064	151	2	10																					2	2

N = number, W = weight in grams

**APPENDIX 9 - ASSESSMENT OF PALAEOENVIRONMENTAL  
POTENTIAL BY R. J. BUCKLAND**

## **APPENDIX 9 ASSESSMENT OF THE PALAEOENVIRONMENTAL POTENTIAL OF THE DITCH FILLS**

R. J. Buckland Bsc

ARCUS

### **A9.1 INTRODUCTION**

Three samples were taken during the excavation through the moat fills and processed to assess their palaeoenvironmental potential. This was undertaken using standard techniques of paraffin flotation in the laboratories at the Department of Archaeology and Prehistory at the University of Sheffield. Following flotation the samples were sorted by hand and the material recovered was identified.

### **A9.2 RESULTS**

#### **Sample 2, Context 0061**

*Sambucus* and *Papaver* seeds (Elder and Poppy) in small numbers.

Small section of bone, probably amphibian.

12 specimens of sp. A snail, and 2 specimens of sp. B. Identification of these to family may be possible with sp. A but most appear juvenile making this difficult.

#### **Sample 3, Context 0066**

Small number of *Sambucus* seeds (Elder).

Under segment of a Staphylinid beetle, this could not be identified to species.

#### **Sample 4, Context 0067**

Small number of *Sambucus* seeds (Elder).

Some small fragments of beetle, none identifiable.

### **A9.3 CONCLUSIONS**

Overall the samples were very sterile with poor preservation. The sediments were thoroughly aerated so any organic material unless charred or calcareous is unlikely to

be contemporary with the deposits. As all the seeds recovered were uncharred, it is likely that these were modern intrusive specimens.

In general the assessment does not suggest that further work on these samples is justified. It is unknown whether samples taken from below the depth reached by the excavations would provide more information but from the assessment undertaken the material from the excavated layers of the moat does not appear to present a viable deposit sequence for further palaeoenvironmental work.

## **APPENDIX 10 - BIBLIOGRAPHY**

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## ILLUSTRATIONS