

Figure 9, North facing section, Trench 3

# **5.3 TRENCH 4** (Figures 10 and 11, Plate 5)

Natural sand and gravel (4015) was recorded at c.1.10m below the ground surface at c.35m AOD. Above it was a thin layer of natural sub-soil (4019) c. 0.10m deep. A shallow linear ditch or gully (4016) was the earliest feature found in this trench. It was aligned north – south, following the same alignment as the back lane which bounded the western edge of the site. The gully measured c.0.80m wide and 0.14m deep, continuing beyond the northern and the southern edges of excavation. The gully was backfilled with a single homogeneous gravel and silt (4004). It was not possible to interpret the function of this gully with certainty but it may have been intended to enhance drainage. It was sealed by a thick layer of clayey silty sand (4007=4011) some 0.60m deep. 4007 is interpreted as a plough soil which had built up over a long period of time. It contained fragments of animal bone and three large fragments of slag. No artefactual evidence of dating for this deposit, or the fill of the gully was recovered. The fragments of slag are likely to date to the post-medieval period and could indicate metal working in the vicinity. The thirty-nine fragments of bone recovered, most of which were battered in appearance, were in a condition to be expected if the material was a plough soil.

Above the plough soil was a series of dump deposits used as levelling to raise the ground (4018, 4021, 4020, 4006, 4012, 4005). These deposits totaled c.0.50m depth and were of 19<sup>th</sup>/20<sup>th</sup> century date. They were cut by a series of drainage features which comprised a brick man hole (4017), found at the western edge of excavation from which a ceramic drain ran east west terminating within the area of excavation. At the surface level an iron grate was seen at the end of this drain, beneath the modern drain was a drainage channel formed by gullied sandstone falling to a small, circular brick soakaway (4001) which contained a build up of silt (4002). The remains of a brick and concrete surface (4022) formed the modern ground surface. These features were of limited archaeological interest.

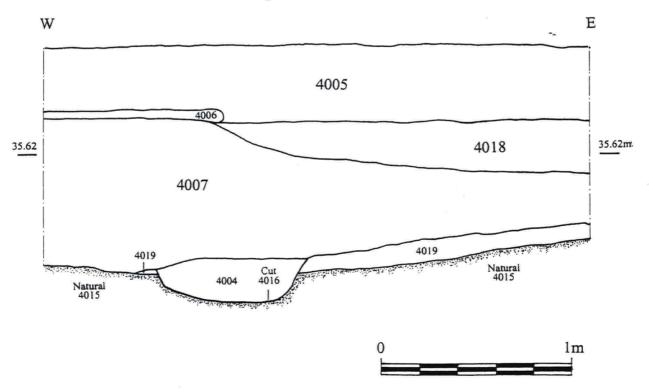
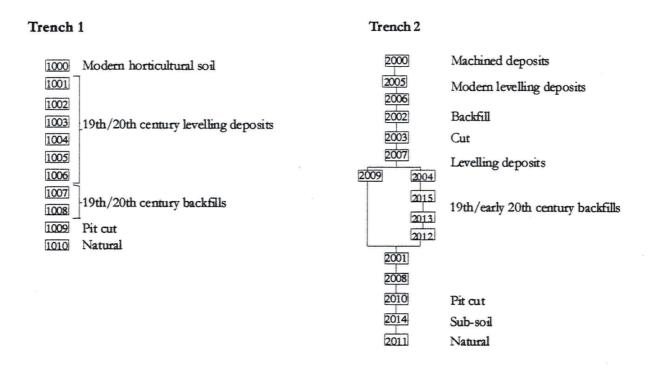


Figure 10, South facing section, Trench 4



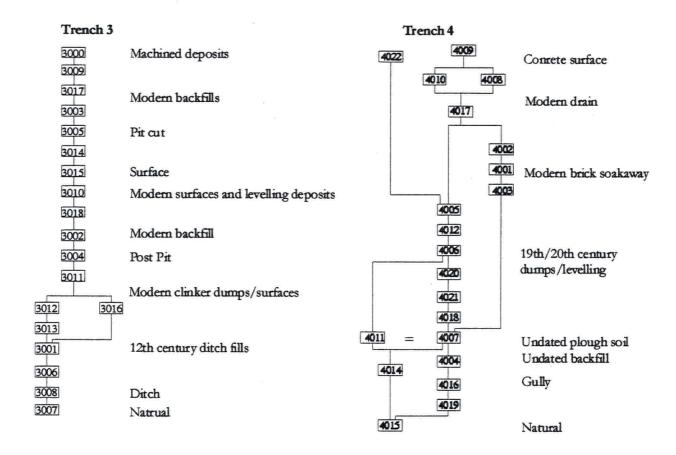


Figure 11, Context Matrices

#### 5.5 PERIOD BY PERIOD SUMMARY

# 5.5.1 Early Medieval

Although the site lies close to burials and other excavated evidence from this period no deposits of this date were identified.

#### 5.5.2 Medieval

No dateable medieval deposits were found in trenches 1, 2 and 4 located in the area furthest from Masonic Lane. Furthermore, there was very little residual artefactual evidence from this period within the later deposits in these trenches. However, one undated shallow gully (4016) in Trench 4, interpreted as a part of a possible drainage system associated with agricultural use of the area could represent activity from this period, although the plough soil above was of post-medieval date.

In the trench closest to Masonic Lane, Trench 3, a significant medieval feature was recorded immediately beneath c. 0.35m of modern overburden. A part of a ditch on a north north east south south west alignment was found to contain two fills each of which contained artefactual evidence suggesting a 12<sup>th</sup> century date for this feature.

## 5.5.3 Post-medieval and Modern

A large cut which may have made with the intention of extracting sand and gravel was identified in Trench 2, it contained deposits which indicated the disposal of 19<sup>th</sup>/20<sup>th</sup> century domestic refuse. Above this cut was a series of post-medieval or modern levelling deposits; a similar sequence of which was found in Trench 1. These had caused the ground to be raised c. 1m in this area. Some of this material contained demolition derived inclusions which might suggest that they dated from the time the standing buildings on Kirkgate were constructed. The levelling deposits were sealed by c. 0.50m of horticultural soil which represented the modern land use of this area of the site as an allotment garden.

In Trench 4 a similar depth of deposit above natural as found in trenches 1 and 2 was identified, but here, a large portion of it comprised a thick homogenous layer which was more characteristic of a plough soil. Slag recovered from this deposit indicated it was likely to be post-medieval in date. The gully, undated, but stratigraphically below this layer may have been a drainage feature associated with the agricultural use of the area. Mixed levelling deposits of modern date were seen above the plough soil and modern drainage features were also recorded in this trench.

# 6. CONSERVATION LABORATORY AND FINDS ASSESSMENT REPORT

# 6.1 Objectives

This report aims to meet the requirements of MAP2, Phase 3, "Assessment of Potential for Analysis," (English Heritage, 1991). The work carried out has involved an X-radiographic investigation of the finds, and an assessment of their condition, stability and packaging. This report includes an evaluation of the potential of each group of material for further investigative conservation and research. There are recommendations for long term stabilization, packaging and analytical or specialist support required.

#### **6.2 Procedures**

All metal objects were X-rayed using standard Y.A.T. procedures and equipment. Two sheets of film were used, to provide a duplicate for archival purposes, and the plate was given a reference number in the YAT conservation laboratory series. The X-ray number was written on each small find bag. Each image on the radiograph was labelled with its small finds number. The plate was packaged in an acid-free archival envelope one copy remains at the laboratory as an archive, the other is stored at the Finds Department and can be loaned out.

All finds were examined under a binocular microscope at X20 magnification. The material identifications were checked and observations made about the condition and stability of the finds. These are recorded in the Conservation Work Record on IADB (see assessment tables).

Wet-packed finds were washed and dried and are now suitable for long-term storage.

#### 6.3 Statement of Conservation Potential

Preservation: The corrosion did not indicate any unusual conditions of preservation, but reflected well-aerated soils, quite aggressive to iron finds.

Dating evidence: The silver coin was sent to Craig Barclay at the Yorkshire Museum for identification and reporting under the Treasure Act and Portable Antiquities legislation. (See assessment table below)

#### Industrial activity:

a. Iron smithing: a fragment of slag in sfl1 context 4007 contained spherical hammerscale and a piece of coal, suggesting iron smithing. A second fragment was weakly magnetic and may contain metallic iron. Coal replaced charcoal as a fuel in post-medieval industries. If the smithing took place on this site one would expect to find further associated structures, equipment and materials and a large quantity of slag. However, if this site is to be investigated further, an archaeometallurgist should be consulted.

b. Sf5 could be a file, perhaps further evidence of metalworking.

#### 6.4 Conservation Recommendations

Investigative Conservation

The ironwork has been recommended for investigation only if it meets the research objectives: Three finds have been selected (sfs5, 10, and 13).

Unless further treatment and stabilisation has been recommended, the finds should remain stable and require no further work at this stage. Further cosmetic work or physical support may be required if the finds are selected for photography, illustration or display.

# 6.5 Analysis and specialist Support

Mineral Preserved Organic materials (MPO): possible survival of wood in the socket of arrowhead (sf10) may require identification if in line with research objectives.

XRF: may be required if conservation reveals any non-ferrous metal on sf13, and may be recommended for sf1 to determine alloying constituents and silver content.

# 6.6 Storage

Packaging

The finds have been packaged appropriately for long-term storage. All materials used are archive stable and acid-free. Plastic bags have been pierced to allow airflow, reducing the risk of condensation and mould growth. 'Jiffy', (polythene) foam inserts have been added to the bags to provide additional support and protect against mechanical damage during transit. Any replacement of packaging materials should be carried out in consultation with a conservator. Avoid paper or card labels in association with metals, especially lead and lead alloys. Acid vapours will cause active corrosion, (Cronyn, 1990).

#### Storage environment

Metals are packed in a polythene 'Stewart' box with sufficient airflow to allow the silica gel to provide a dry micro-environment of less than 15% Relative Humidity (which should prevent further corrosion of iron finds, Knight, 1990). An Indicator strip has been placed at the front of the box and can be viewed through the plastic. If any part of the strip turns pink the box is no longer desiccated sufficiently and the gel will need to be regenerated.

The other materials have temporarily been returned to their finds tray; they are not to be desiccated. They should be transferred to an unsealed archival storage box for permanent storage.

# 6.7 Quantification and Assessment

A total of 17 small find numbers were assessed and 1 X-ray plate produced. The number of objects in each material category is listed below and the assessments are tabled below, by material type.

Iron 6
Silver 1
Glass 4
Slag 2
Fired clay 3

Wet-packed Glass 1

## **Desiccated Finds**

#### 6.7.1 Iron

The iron was covered in silt, sand and bulky uneven orange/brown iron corrosion with inclusions, (such as charcoal, white minerals and fired clay). The corrosion reflects well-aerated deposits; there were no indicators of exceptional preservation, none of the visible corrosion products indicated anaerobic conditions. The corrosion products may have mineralised and preserved adjacent organic remains (eg sf10, socket may retain wood from shaft); but the outer deposits obscure any remains and only partial investigative cleaning would expose them.

The iron was heavily corroded and there was very little metal core. The site is an aggressive environment for iron objects, which will continue to corrode *in situ*. Iron is potentially unstable, but as long as the RH is maintained below 15% RH these excavated objects should remain stable for the long term.

FIND	CONTEXT	MATERIAL	ASSESSMENT
SF00005	1000	Iron	Assessment: Two objects sent in one bag. Labelled as nails. One is clearly a nail with a head, incomplete, tip broken and missing. The cross-section of the shank is square. This fragment was subsequently renumbered as sfl7.  The second fragment is a bar incomplete, with one end broken and missing. The cross-section at the break is a semi-circle. Condition: Both fragments are covered in sand, silt and inclusions. The broken ends are weeping, actively corroding. There are some fine cracks visible in the corrosion crust.  X-ray shows: the upper edge of the bar has finely serrated teeth. This could be a file or merely finely incised decoration. The nail has good metal core.  Unstable. Store at <15% RH
			Finds assessment - possible file fragment, of plano-convex section
SF00017	1000	Iron	Assessment: Originally sent as part of sf5. This fragment is clearly a nail with a head, incomplete, tip broken and missing. The cross-section of the shank is square. Condition: Covered in sand, silt and inclusions. The broken end is weeping, actively corroding. There are some fine cracks visible in the corrosion crust.  X-ray shows: The nail has good metal core.  Unstable.  Store at <15% RH  Proposed treatment: none.
			Finds assessment - nail

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FIND	CONTEXT	MATERIAL	ASSESSMENT
SF00004	1007	Iron	Assessment: Object in one piece. Nail-like, but head is not clear.
			Condition: Sand, silt and inclusions(white minerals, fired
			clay,etc) above bumpy orange-brown iron corrosion.
			X-ray shows: some metal in shank, head area very
			corroded and unclear.
			Stable, no sign of active corrosion.
,			Store at <15%RH.
			Proposed treatment: none.
			Finds assessment - probable nail
	1		
SF00013	2001	Iron	Assessment: Object in one piece, incomplete, one end
			broken and missing.
			Description: Fe strip or bar.
			Condition: Covered thickly in sand and silt and many
			inclusions (white minerals, charcoal, slag, fired clay). The
	20	*	broken end and some less corroded, and adjacent pale
			spotted areas at lower right on x5531(Mineral or non-
			ferrous debris?). Potentially unstable. Store at <15% RH Proposed treatment: If context merits it, partial
			investigative cleaning to expose the shape of the wide end
			(?perforation) and the pale spots. 3 hours.  Finds assessment: possible hinge strap, broken across
			perforation at one end
SF00007	3003	Iron	Assessment: Object in one piece. No recent breaks.
51 00007	3003	non	Description: Irregularly shaped lump.
			Condition: Covered in sand, silt and inclusions above
			bulky mixed iron corrosion.
			X-ray shows: Extensive corrosion with no metal core.
			Potentially unstable. Store at <15%RH.
			Proposed treatment: none.
			Finds assessment - unidentifiable lump
SF00010	3006	Iron	Assessment: Object in one piece.
			Condition: Sand and silt and inclusions (pebbles) lie
			thickly above bulky dark orange brown corrosion. No sign
			of currently active corrosion, but there are shiny deposits
	6		from previous weeping.
			X-ray shows: this is a socked arrowhead with leaf-shaped
			blade.
			Potentially unstable, store at <15%RH.
			Proposed treatment: Pot from this context possibly 12th
			century. Partial investigative cleaning to expose cross-
			section of socket, at shoulder and shape of edge. Look for
	100		mineral-preserved remains in socket. (3 hours).
			Finds assessment: socketed arrowhead, leaf-shaped blade -
			possibly pre-conquest - 12th century in date, probably
			used for hunting

#### 6.7.2 Silver

The silver coin had had some light mechanical cleaning, and was thinly covered in silt, sand, incipient silver halide corrosion and a thin layer of silver sulphide. The X-ray image was dark, the coin is thin and intergranular corrosion will have caused embrittlement. The coin is fragile but is well-packed and should remain stable if stored at <35% RH.

FIND	CONTEXT	MATERIAL	ASSESSMENT
FIND SF00001	2000	MATERIAL Silver	Assessment: Object in one piece, complete, but worn and scratched.  Description:Long cross coin, two concentric rings of legend on reverse (groat-like). Weight as sent: 1.35g. Rev: outer legend: from top of cross DIVTO lower edge worn and missing rest hard to read. inner legend: CIVITAS CANTOR (CANTERBURY), 3 pellets in each quadrant.  Condition: Sand and silt remain in interstices only, and the surface of the silver metal shows through. Fine striations indicate previous mechanical cleaning, there are recent larger scratches on the reverse, exposing the white metal. The silver halide corrosion forms small
			waxy purplish bumps over the surface and the rest of the coin is tarnished.
			X-ray shows: dies aligned at 45 degrees
			Stable, no sign of active corrosion.  Store at <35%RH, away from sources of sulfur.
			Proposed treatment: Investigative cleaning only if recommended by numismatist.
			Craig Barclay reported on 13/11/2001:
			'Henry VII; halfgroat Canterbury; class III; c. 1490-1500 Obv. privy mark: tun; rev. privy mark: illegible; stops: illegible North 1712 1.36g; moderate wear and clipped'
			Therefore no further work required.
			Finds assessment - Henry VII coin

# Wet-packed finds 6.7.3 Damp Glass

One find of two glass bottle fragments was sent wet-packed, with some silt adhering. There was no sign of exfoliating layers or deteriorated surfaces. These fragments were washed in reverse-osmosis water slowly air-dried under observation. The glass is robust and stable, and is now dry and ready for long-term storage at ambient temperature and humidity. (45-60%RH).

# Other finds:

## 6.7.4 Dry Glass

The rest of the glass was sent dry and unwashed. Three fragments had been bagged and numbered individually, but one find consisted of a large bag of 42 glass bottle fragments. All the glass appeared to be relatively modern, robust and stable, only one piece displayed noticeable

iridescence, but there was no sign of exfoliation. Find 12 should either be de-accessioned or repacked to protect fragments from mechanical damage.

FIND	CONTEXT	MATERIAL	ASSESSMENT
SF00006	1000	Glass	Assessment: Two fragments of green translucent bottle glass, incomplete (all edges broken, but not new
			breaks), one basal sherd, one body sherd, sent damp.
			Treatment: washed in tapwater. Air dried undr
			observation.
			Condition: some iridescence on interior of basal shard,
			but otherwise dry and stable.
			Proposed treatment: none, unless required for research.
~~~~~	-		Finds assessment - vessel fragments, probably modern
SF00003	1007	Glass	Assessment: One fragment of pale green translucent
51 00005	1007	Glass	bottle glass, neck and rim sherd, incomplete (edges
			broken, not new breaks), unwashed. Convex face shiny,
			concave face has unusual cracking, (manufacturing
			fault?).
			Condition: dry and stable.
			Proposed treatment: none, unless required for research.
			Finds assessment - vessel fragment, probably modern
SF00009	2000	Glass	Assessment: One fragment of pale green translucent
			vessel glass, incomplete (all edges broken, but not new
			breaks), unwashed.
			Condition: Surface iridescence, not flaking, otherwise
			dry and stable.
			Proposed treatment: none, unless required for research
			Finds assessment - vessel fragments, probably modern
SF00012	2001	Glass	Assessment: A large polythene bag full of 42 fragments
			of glass, unwashed. Bottles, green glass: 4 complete
			bases, 6 basal fragments, 3 complete necks, 2 rim
			fragments, 26 body sherds, 1 moulded body sherd.
			Condition: some iridescence, notably on one sherd, but
			otherwise dry and stable.
			Proposed treatment: none, unless required for research.
			Consider disposal if modern. If this is to be retained it
			needs to be repacked to avoid physical damage.  Finds assessment - large collection of post-medieval
			and modern vessel glass
SF00002	4002	Glass	Assessment: One fragment of pale green translucent
51 00002	1002	Jiass	vessel glass, incomplete (all edges broken, but not new
			breaks), unwashed. Convex face scratched, concave
			face has fine parallel lines (from manufacture).
			Condition: some iridescence, but otherwise dry and
			stable.
			Proposed treatment: none, unless required for research.
			Finds assessment - vessel fragment, probably modern

#### 6.7.5 Slag

One small non-diagnostic fragment had been washed, dried, bagged and numbered individually. But sfl1 consisted of three large unwashed fragments in a plastic bag. One of these fragments was weakly magnetic and could contain some iron metal. This may require desiccation if it develops signs of active corrosion. Another large fragment contained spherical hammerscale, indicating iron smithing, and had a large piece of coal attached. According to English Heritage Guidelines (2001), these should remain stable for the long term.

FIND	CONTEXT	MATERIAL	ASSESSMENT
SF00016	2001	Slag	Assessment: One small fragment of slag. This is a finely porous grey glassy slag mottled with veins of orange. It is not magnetic. It has been washed and should remain stable for the long term.  Proposed treatment: none
			Finds assessment: metalworking debris
SF00011	4007	Slag	Assessment: One large polythene bag containing three lumps of unwashed slag.  Description: The smallest piece, roughly 9x9x14cm, is irregular in shape, a porous glassy slag varying in colour from off-white through grey to orange-brown. It is not magnetic.  The second piece is a complete lump 8x13x14cm, irregular in shape and covered in silt and sand. Some dark grey porous glassy areas are visible. It is weakly magnetic, so there is some iron content. This is heavier than the previous fragment.  The largest fragment, 9x12x15cm, spherical hammerscale was noted in the loose debris, otherwise the fragment was not magnetic. A large piece of coal adheres to one end, so this is from a post-medieval coal-fired furnace rather than the earlier charcoal-fuelled furnaces.  The magnetic fragment is potentially unstable because of its high iron content, but English Heritage guidelines hold that slag as a rule should be stable if stored at ambient humidity, and does not require desiccation. Proposed treatment: none, but an archaeometallurgist should be consulted if in line with research objectives of this site.  Finds assessment: metalworking debris

# 6.7.6 Fired Clay

All fragments were well packed and are robust, dry, and stable for the long-term.

EIND	CONTEXT	MATERIAL	ASSESSMENT
SF00008	2000	Fired Clay	Assessment: Three clay pipe stem fragments,
			incomplete, both ends broken, the rest is missing.
			Condition, soil still retained within central void.
			Proposed treatment: none.
			Finds assessment - post-medieval tobacco pipe
			fragments
SF00014	2001	Fired Clay	Assessment: Four clay pipe stem fragments,
			incomplete, both ends broken, the rest is missing. One
			of the fragments retains part of the bowl.
			Condition, soil still retained within central void.
			Proposed treatment: none.
			Finds assessment - post-medieval tobacco pipe
			fragments
SF00015	2002	Fired Clay	Assessment: One clay pipe stem fragment, incomplete,
			both ends broken, the rest is missing.
			Condition, soil still retained within central void.
	1		Proposed treatment: none.
			Finds assessment - post-medieval tobacco pipe
			fragments

#### 6.8 SUMMARY FINDS ASSESSMENT

This assemblage of only 17 small finds is composed mainly of post-medieval – modern material, such as tobacco pipes, and vessel glass. Metalworking debris also appears to be post-medieval, and a possible file (sf5, c.1000) may be associated with this activity. It also included, however, a late 15<sup>th</sup> century halfgroat (sf1, c.2000), and a hunting arrowhead of probable 11<sup>th</sup> – 12<sup>th</sup> century date (sf10, c.3006), the latter found in ditch fill in association with 12<sup>th</sup> century pottery and confirmation of medieval activity in Trench 3. These last two objects are the only ones of interest or significance.

# 6.9 SUMMARY POTTERY ASSESSMENT

Context	Quantity	Spot date	Date term	Description
1000	6	19 <sup>th</sup> /20 <sup>th</sup> century	Modern	6 sherds of modern tin-glazed earthenwares and late English stonewares.
1005	5	18 <sup>th</sup> /19 <sup>th</sup> century	Post-medieval and Modern	2 modern tin-glazed earthenwares, 1 post- medieval earthenwares, 1 post-medieval brownware; 1 ?late medieval sherd
1007	8	19 <sup>th</sup> century	Post-medieval and Modern	5 sherds form a 19th century plate, 1 brownware, 1 flower pot, 1 late stoneware
1008	4	19 <sup>th</sup> century	Modern	1 transfer printed ware, 1 black ware, 1 brown glazed ware and 1 late slipped ware
2000	8	19 <sup>th</sup> /20 <sup>th</sup> century	Modern	5 sherds of modern tablewares, 2 19th century brownglazed ware pancheon, 1 post-medieval earthenware open form
2001	56	19 <sup>th</sup> /20 <sup>th</sup> century	Modern	Includes sherds of Black ware pancheons, late slipped ware, lustre ware, black basalt ware, transfer printed wares and other modern cook ware and table wares
2002	2	Late19th /20 <sup>th</sup> century	Modern	earthenware kitchen wares
2004	2		Norman, Medieval	1 sherd of gritty ware and an unglazed jug rim of fine sandy fabric
3001	4	11 <sup>th</sup> -13 <sup>th</sup> century	Norman, Medieval	2 sherds of gritty ware cooking pot, one sooted. 1 glazed sherd from a medieval jug in a fine sandy fabric. 1 undiagnostic small red unglazed sherd.
3003	3	11-13th; 17 <sup>th</sup> century	Medieval. Modern	1 gritty ware sherd. I ribbed sherd from the neck of a medieval jug of fine sandy fabric1. 1 late salt-glazed sherd.
3006	2	11/12 <sup>th</sup> century	Norman	2 sherds from gritty ware vessels including a rolled-edge cooking pot rim.
4002	1	19th /20th century	Modern	tiny sherd of tin-glazed earthenware

# Summary

The majority of this assemblage is post-medieval and modern with a range of kitchen and table wares present. There are small amounts of medieval and Norman wares in the form of gritty ware cooking pots and glazed jugs.

#### 6.10 CERAMIC BUILDING MATERIAL ASSESSMENT

Approximately half a standard box of material was submitted for examination.

The bulk of the material is post-medieval in date. Brick, plain roof tile and probable chimney are present. The brick shows typical post-medieval features of slop moulding (where the brick mould is wetted, but not sanded) and there is one example of a bow mark on a base (where the brick 'base' is levelled by a wire or string bow).

There is one small fragment of daub from context 3006. This shows a wattle rod impression measuring 18mm across. It may be medieval in date, or possibly earlier. It may have come from house walls, or perhaps from an oven.

#### Conclusion

The material is mostly a collection of post-medieval forms, possibly dating as early as the 16<sup>th</sup> century, but most likely dating between the 18<sup>th</sup> and 19<sup>th</sup> century. Some of the fragments show reuse. This material should be retained for further study, at which time it should be analysed by a recognised ceramic building materials specialist. The collection can usefully contribute to the study of ceramic building materials in the Yorkshire region and wider.

# Context Listing Table

Key Cxt = Context

L = Compete length

B = Complete breadth

T = Complete Thickness

FH = Complete Flange Height

Date range = date range of form Date = estimated date of context

\* = only minimum measurement available

NB: This list indicates only forms present and any variations (such as slag attached, or pawprints). It does not list every fragment of CBM

Cxt	Form	В	T	Comments	Date range	Date
1000	Brick			Slop moulded	16 <sup>th</sup> +	17 <sup>th</sup> +
1000	Brick				16 <sup>th</sup> +	
1000	Pan				17 <sup>th</sup> +	
1005	Brick			Overfired	16 <sup>th</sup> +	17 <sup>th</sup> +
1005	Pan				17 <sup>th</sup> +	
1007	Brick	110	61	Slop moulded, ?imprint on smoothed surface, sanded base	16-18th	17 <sup>th</sup> +
1007	Brick		55	Slop moulded, sanded base, reused	16 <sup>th</sup> +	
1007	Pan			Sooted	17 <sup>th</sup> +	
1008	Brick		57	Slop moulded	16 <sup>th</sup> +	17 <sup>th</sup> +
1008	Brick		64	?Slop moulded	16 <sup>th</sup> +	
1008	Brick		59	Slop moulded	16 <sup>th</sup> +	
1008	Pan				17 <sup>th</sup> +	
1008	Plain			Probably post-medieval	13 <sup>th</sup> +	
2000	Pan			Reused	17 <sup>th</sup> +	17 <sup>th</sup> +
2000	Ridge		17	Reused; probably post-medieval	13 <sup>th</sup> +	
2001	Pan			Degraded fabric	17 <sup>th</sup> +	17 <sup>th</sup> +
3002	Brick			Small frag, refined fabric	16 <sup>th</sup> +	18 <sup>th</sup> +
3.002	Chimney		17	Burnt, possibly sewer pipe	18 <sup>th</sup> +	
3003	Brick			Small frag, refined fabric	16 <sup>th</sup> +	17 <sup>th</sup> +
3003	Pan		1		17 <sup>th</sup>	
3006	Daub			Wattle rod impression 18mm across	Med?	Med?
4001	Brick	110	65	Slop moulded, reused, bow mark on base	16 <sup>th</sup> +	16 <sup>th</sup> +

#### 7. ENVIRONMENTAL ASSESSMENT REPORT

### 7.1 Summary

Five sediment samples and one bag of hand-collected bone from deposits revealed by excavations at Masonic Lane, Thirsk, were submitted for an evaluation of their bioarchaeological potential.

The deposits that were examined yielded only a few, mostly poorly preserved charred plant remains and a small quantity of uncharred material. They were of little interpretative value. No invertebrate remains were recovered.

Vertebrate remains were mostly from modern or undated deposits and only a small quantity were recovered from the two 12<sup>th</sup> century contexts. Most of the bones were reasonably well preserved and represented the usual range of domestic species.

No further work is recommended on the plant and hand-collected vertebrate remains. However, the possibility that preservation of better preserved plant and vertebrate material in suitable contexts at this site should be borne in mind during any further interventions or development work, since evidence from biological remains for past environments and human activity in this town is very limited.

#### 7.2 Introduction

An archaeological evaluation excavation was carried out by York Archaeological Trust at land off Masonic Lane, Thirsk, North Yorkshire. Five sediment samples ('GBA'/'BS' sensu Dobney et al. 1992) and a small bag of hand-collected animal bone were recovered from deposits from four trenches. All but two of the deposits were of 19<sup>th</sup>/20<sup>th</sup> century date or un-dated. Two 12<sup>th</sup> century ditch fills (Contexts 3001 and 3006) were revealed in Trench 3.

All the material was submitted for an evaluation of its bioarchaeological potential.

#### 7.3 Methods

The sediment samples were inspected in the laboratory. Descriptions of the lithology of two samples, 1 and 2 (Contexts 3001 and 3006) were recorded using a standard *pro forma*. Both samples were bulk-sieved to 300 µm.

The washovers and residues resulting from processing were examined for plant and invertebrate macrofossils and the residues were sorted for bone, and other biological and artefactual remains.

All of the hand-collected bone was recorded; subjective records were made of preservation, angularity (i.e. the nature of the broken surfaces) and colour, whilst quantities and identifications were noted where appropriate. Additionally, notes were recorded for each context concerning fragment size, dog gnawing, burning, butchery and fresh breakage.

#### 7.4 Results

Sediment samples

The results of the investigation of the washovers are summarised by Context in the table below.

Context 3001 [12<sup>th</sup> C ditch fill]

Sample 1/T (3 kg)

Mid-dark grey-brown, crumbly to unconsolidated (working slightly sticky and plastic when wet), slightly silty, slightly clay sand with stones 2-20 mm present.

This subsample yielded a large residue of about 650 cm<sup>3</sup> of coarse quartz sand with some pebbles (to 40 mm in maximum dimension) and a very small washover of a few cm<sup>3</sup> of charcoal (to 10 mm) and modern woody roots. There were a few very poorly preserved (puffed, eroded) charred cereal grains, amongst which was one well-preserved grain of barley (*Hordeum* sp.). There were traces of uncharred seeds of no interpretative value, except for duckweed, *Lemna*, presumably once growing in the ditch.

Context 3006 [12th C ditch fill]

Sample 2/T (3 kg)

Mid-dark, slightly orange-grey-brown, brittle to crumbly (working somewhat sticky and plastic when wet), slightly silty, slightly clay sand with stones 2-60 mm, charcoal (to 20 mm) and fragments of bone present.

The large residue of about 950 cm<sup>3</sup> consisted of coarse quartz sand and gravel (to 30 mm) with a trace of bone (to 40 mm). The very small washover comprised a few cm<sup>3</sup> of modern woody roots with charcoal (to 10 mm) and with a moderate number of poorly preserved charred cereal grains. Again one was a well-preserved specimen of barley, whilst the remainder included specimens tentatively identified as wheat (*Triticum*), oats (*Avena*) and rye (*Secale cereale*). There were also a few uncharred seeds, of which the only ones present in more than trace amounts were those of *Lemna*. The washover also yielded traces of aluminium foil, some white and yellow scraps of what may have been plastic or paint, and a small fragment of blue cotton yarn/fabric.

#### 7.5 Vertebrate remains

In total the assemblage from the four trenches amounted to 60 fragments representing ten contexts. Details of the vertebrate remains from individual contexts can be found in the table below.

#### 7.5.1 Trench 1

Three contexts (Contexts 1005, 1007 and 1008), all of 19<sup>th</sup>/20<sup>th</sup> century date, produced three fragments of bone, including a very well preserved rabbit pelvis fragment.

# 7.5.2 Trench 2

A total of six bones were recovered from two deposits (Contexts 2000 and 2001). Both deposits were of modern date. Again, rabbit remains were identified, together with a number of large and medium-sized mammal shaft and vertebra fragments. Preservation of the material was good.

# 7.5.3 Trench 3

Three deposits, two of which were fills of a 12<sup>th</sup> century ditch (contexts 3001 and 3006), produced a small assemblage, amounting to 12 fragments. Overall, preservation was good,

although some fragments from Context 3001 were rather battered in appearance, whilst bones from Context 3006 were variable in colour. Most fragments represented large and medium-sized mammals, however, cow and caprovid remains were also identified.

#### 7.5.4 Trench 4

Bone producing deposits from this trench were undated. Thirty-nine fragments were recovered, most of which were battered in appearance. This is not surprising given that Context 4007 was described as a plough soil. Fresh breakage was also prevalent. Cattle remains were present and included isolated teeth and mandible fragments. Most other bones could only be identified as large mammal shaft fragments.

# 7.6 Discussion and statement of potential

These two deposits yielded only very small amounts of mostly poorly preserved charred plant material and a very little uncharred material of limited interpretative value.

Vertebrate remains from this site were rather scarce, although preservation was reasonable. Much of the material was from modern deposits and those from the ditch fills were variable both in colour and 'angularity' (the nature of the broken surfaces). This suggests the possible presence of redeposited material.

#### 7.7 Recommendations

It is not thought profitable to carry out further analysis on the samples to hand. However, the possibility that preservation of better preserved plant material in suitable contexts at this site should be borne in mind during any further interventions or development work, since evidence from plant remains for past environments and human activity in this town is vanishingly small. Moreover, material dated to the 12<sup>th</sup> century is rather scarce, regionally.

No further work is recommended for the present vertebrate assemblage. On the basis of the preservation of the recovered remains, further excavation may produce a moderate assemblage of reasonably preserved animal bones.

#### 7.8 Retention and disposal

The present material need not be retained.

# 7.9 Archive

All material is currently stored by Palaeoecology Research Services (Unit 8, Dabble Duck Industrial Estate, Shildon, County Durham), along with paper and electronic records pertaining to the work described here.

#### 7.10 Acknowledgements

The authors are grateful to Rhona Finlayson of York Archaeological Trust for providing the material and the archaeological information.

# Hand-collected vertebrates recovered from deposits from excavations at land off Masonic Lane, Thirsk, North Yorkshire.

Trench	Context/	Nos. of	Notes
	Date	fragments	
1	1005	1	Preservation: fair.
	19 <sup>th</sup> /20 <sup>th</sup>		Large-sized mammal: 1 humerus shaft fragment – juvenile individual.
1	1007	1	Preservation: fair.
	19 <sup>th</sup> /20 <sup>th</sup>		Medium-sized mammal: 1 shaft fragment.
1	1008	1	Preservation: good. Bone has 'greasy'appearance.
	19 <sup>th</sup> /20 <sup>th</sup>		Medium-sized mammal: 1 rib fragment.
2	2000	1	Preservation: fair. Rodent gnawed.
			Medium-sized mammal: 1 rib fragment.
2	2001	5	Preservation: good; Colour: fawn; Angularity: spiky.
			Cow: 1 first phalanx.
	19 <sup>th</sup> /E20 <sup>th</sup>		Rabbit: 1 metapodial.
			Large-sized mammal: 1 vertebra fragment - chopped longitudinally; 1
			humerus shaft.
			Medium-sized mammal: 1 shaft fragment.
3	3001	5	Preservation: fair; Colour: brown; Angularity: spiky and battered.
			Cow: 1 mandibular premolar.
	12th		Large-sized mammal: 1 scapula fragment (sawn); 1 vertebra fragment.
			Unidentified: 2 fragments
3	3003	2	Preservation: fair
			Large-sized mammal: 1 shaft fragment.
	modern		Medium-sized mammal: 1 shaft fragment.
3	3006	5	Preservation: good; Colour: variable; Angularity: spiky.
			Cow: 1 isolated upper tooth; 1 proximal metacarpal.
	12 <sup>th</sup>		Caprovid: 1metacarpal (measurable); 1 first phalanx. Both represent same
			individual.
			Large-sized mammal: 1 rib fragment.
4	4004	14	Preservation: fair; Colour: brown; Angularity: battered and rounded.
			Cow: 1 metacarpal shaft; 1 premolar.
	undated		Large-sized mammal: 1 mand fragments.
			Medium-sized mammal: 4 shaft fragments.
	1005		Unidentified: 7 fragments
4	4007	25	Preservation: fair; Colour: brown; Angularity: battered and spiky. Fresh
	1		breakage quite extensive.
	undated		Cow: 2 mandible fragments; 1 proximal radius fragment.
			Large-sized mammal: 1 pelvis fragment; 3 cranium fragments; 1 mandible
			fragment; 1 shaft fragment.
			Medium-sized mammal: 2 shaft fragments.
			Unidentified: 14 fragments.

#### 8. DISCUSSION AND CONCLUSIONS

Examination of previously existing archaeological and historical data suggested that the periods for which significant archaeological deposits could be represented within the development site ranged from the Anglian to the post-medieval. Pre-Conquest settlement was most likely to have been located close to the burials found in the Castle Garth area. To date, no deposits from this period have been found in the course of observations made very close to the development area and no evidence from this period was encountered by the evaluation trenches. This does not rule out the possibility that deposits of this period may survive in the vicinity.

Significant above ground medieval remains survive near to the development site in the form of the castle earthworks and the church. Below ground evidence from the period has been recorded in areas adjacent to the development site and a significant medieval feature was recorded by the evaluation. The history of the development of the town is not fully understood at present. It has been suggested that the construction of the castle may have been accompanied by the development of a planned settlement around the market place and it has been suggested by Tyler that the original shape of the market place was more symmetrical and that its western end has been built over. Excavations at the castle (MAP 1995) record a sequence which indicates that the site of the castle was used for agricultural purposes for a period before the castle was built. This suggests that the castle was not necessarily planted on the site of an existing settlement necessitating the planting of a new settlement, but nevertheless the castle building appears to have triggered settlement development and may have initiated a second nucleus of settlement located around the market place. The extents of the castle and its associated settlement and its development from the earlier forms and land uses are not fully understood. The bank and ditch recorded at Finkle Street (FAS 2000) which may form part of a settlement boundary could indicate that the development site lay outside the suggested boundaries of the enclosed area. It should be stressed that this boundary has been interpolated from limited evidence and further archaeological investigation would be required to confirm its alignment.

The location of the development site, lying on the margin of the boundary of the castle and on the margin of, or outside this enclosed settlement, alone would have given it a potential archaeological importance in relation its potential to clarify these boundaries. The recording of a part of a ditch, dating to the 12<sup>th</sup> century close to the Masonic Lane frontage indicates the presence of significant evidence of a boundary and the potential survival of other medieval remains representing medieval occupation or structural deposits which might allow further evidence of this history to be recovered.

Archaeological evaluation work on Kirkgate (Johnson 1998) found evidence of a medieval pit and garden soil in the trench nearest the street frontage but an absence of evidence for medieval features in trenches further from the street. The lack of medieval deposits recorded by the evaluation in trenches 1, 2 and 4 located in plots to the rear of Kirkgate confirm the absence of significant remains in this area. Cartographic evidence for this area suggests that the plots of land to the rear of Kirkgate were established before 1972 and may have been respecting earlier boundaries. However the depth of post-medieval and modern material together with the character of some of these deposits may suggest the possibility of some truncation of earlier deposits, possibly when the present buildings fronting Kirkgate were constructed in the second part of the 19<sup>th</sup> or early 20<sup>th</sup> century, or that there was no activity in this area until the post-medieval period.

#### 9. ARCHAEOLOGICAL IMPLICATIONS

The site lies within an area which has previously been identified as archaeologically important. The complexity of the development of Old and New Thirsk, both of which may have been planned, gives Thirsk a wider significance (Tyler 1978). The development site is potentially a significant site archaeologically because of its location, close to Anglian remains and on the margin of the boundary between the castle and other settlement. The evaluation excavation has demonstrated that in the area along the Masonic Lane frontage surviving medieval archaeological deposits may have the potential to demonstrate the relationship of the castle to the development of medieval settlement and help to illuminate the settlement history of New Thirsk.

The limited number of evaluation trenches within a relatively large site mean that the extent of the survival of these deposits it not known with certainty. There will undoubtedly have been some truncation due to the construction of the buildings which presently occupy the site. The sequence of deposits with the evaluation trenches 1, 2 and 4 indicate that these trenches in the plots to the rear of Kirkgate may lie beyond the northern extents of surviving medieval deposits on the site. Since the surviving deposits were located 0.35m below the modern ground surface it is to be expected that the introduction of service trenches, roadways or any disturbance of below ground remains in the area adjacent to Masonic Lane should be the subject of archaeological monitoring. In the light of the significance of the remains the archaeological response recommended is that a level somewhat greater than a watching brief with some further excavation is recommended in order that the extents and character of the ditch and any other features of this date or earlier might be fully established.

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