

Assessment of the Pottery and Ceramic Building Material from the Ganstead to Asselby Pipeline Field Survey (GAA)

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The pottery and ceramic building material recovered from field walking on the line of the Ganstead to Asselby pipeline, East Yorkshire, was submitted to the authors for identification and assessment.

Our brief was:

To scan plot by plot, noting ware types, general date range, distribution, unusual balances in the assemblage, general interpretive comments, and distinguishing between manuring and other means of deposition etc. in order to broadly summarise this information in a plot by plot format.

Thus, the finds catalogue, prepared by Network Archaeology, could not be directly linked to this assessment for the post-medieval and later periods, since it recorded material by record number (given in the field, and associated with GPS positional data) and our assessment is based on gross sherd counts per plot. However, all finds earlier than the post-medieval period were recorded individually.

Description

Ceramic Building Material

Two hundred and eighty-five fragments of ceramic building material were recorded (Table 1) No examples of Roman date were present.

A number of fragments, of both brick and flat roof tile, had a similar appearance to those from the Beverley tilerly (i.e. a silty, slightly micaceous body, sometimes calcareous and sometimes with an added quartzose sand). Mostly, these occurred as one or two fragments per plot but there was a concentration of 15 fragments from Plot N81 and several plots produced between 3 and 9 fragments (Table 2).

A single fragment of slip-decorated floor tile was recovered. The fabric of this tile could not be identified by eye and should be thin –sectioned and chemically analysed for comparison with tiles analysed by Dr M J Hughes for Dr Stopford from various sites in northern England. The pattern could be drawn and compared with the corpus of medieval floor tiles in Northern

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England (Stopford 2005). Such tiles were used between the 13th and the 15th centuries, being replaced by plain or slipped tiles from Flanders in the 15th century.

The remaining fragments were either undatable (recorded as "CBM"), datable only to the medieval or post-medieval periods (M/PMTIL), or of post-medieval or later date (e.g. pantiles and fragments of a tin-glazed wall tile of later 17th or 18th-century date, from Plot N17) or of early modern or later date (e.g. airbricks, land drains and mass-produced bricks).

Table 1

cname	?	AIRBRICK	BRICK	BRICK?	FLAT	FLAT?	FLOOR	LAND DRAIN	LAND DRAIN?	LANDDRAIN	PANT	PANT?	WALT	Grand Total
CBM	2													2
M/PMTIL			49	3										52
MOD		2	3		1			1		1			2	10
MTIL			1		66	76	1							144
MTIL?			2											2
PMLOC				1										1
PMTIL			19	1	3			19	8		9	7		66
PMTIL/MOD			3											3
TGW													5	5
Grand Total	2	2	77	5	70	76	1	20	8	1	9	7	7	285

Table 2 Incidence of possibly medieval brick and tile

trench	BRICK	FLAT	FLAT?	Grand Total
N1		1		1
N10		2		3
N102				2
N11				2
N111				1
N112				1
N125				1
N135				1
N14			1	1
N140			1	2
N143			1	4
N144				1
N146				1
N147			2	2
N15			1	1
N155			1	2
N157				1
N163			2	2
N164			5	5
N165				2
N170				1
N174				3
N176				1
N180				1
N183				6
N184				9
N186				5
N187				1
N195	1		4	5
N196	1		1	2
N204				1
N207				1
N209			1	1
N22				1
N25			6	8
N30			1	1
N36			1	2
N50				1
N51			1	1
N59			2	3
N64				1
N67			1	1
N7				1
N76			2	2
N78			2	2
N81			12	13
N82				1
N84			1	3
N86				1
N89				1

N90		2		2
N91			1	1
N92		2		2
Grand Total	5	53	63	121

These post-medieval and later fragments occur between one and 10 fragments per plot, with the highest number being from Plot N163 (Table 3).

Table 3

trench	BRICK	BRICK?	FLAT	FLAT?	FLOOR	LAND DRAIN	LAND DRAIN?	PANT	PANT?	Grand Total
N1	4									4
N10	1		1							2
N128			1			3				4
N13	2									2
N143						1	1			2
N147						1		1	2	4
N157				1						1
N162			3	6						9
N163			2	1		1	2			6
N165							1			1
N18						1				1
N184			1							1
N185						1	2			3
N195	2									2
N196	1		2							3
N2	1									1
N20	1									1
N207						3				3
N209				1			1			2
N210						2				2
N23	1									1
N25	4				1					5
N30			1							1
N5	1		1							2
N52								1		1
N57			1			3				4
N68								1		1
N73				3		1	1			5
N76		1								1
N8	2		2							4
N81			1							1
N89				1						1
Grand Total	20	1	16	13	1	17	8	3	2	81

Fired Clay

Three fragments of fired clay were recovered, from plots N90, N147 and N157. Such material could be accidental burning of the subsoil, hearth lining or accidentally fired daub. Without an archaeological context or typological features they are undatable.

Glass

Thirteen fragments of glass were recovered. All appear to be of early modern or later date. Six of the fragments come from Plot N1 and the remainder occur as ones or twos on six other plots.

Pottery

Prehistoric

Ten sherds of later prehistoric pottery were recovered (Table 4). Five were of erratic-tempered ware (2004), one contained angular flint inclusions (2004), one had a quartzose sand temper (IASANDY), one contained slag inclusions (IASLAG), and two were tempered with sandstone fragments (IASST). The latter fabric is also common in the early to mid Anglo-Saxon period. Slag tempering is an unusual, but well-documented, characteristic of Iron Age pottery in Northern Britain and it has been suggested by Paul Buckland that this pottery may be produced as a side-line by specialist communities concentrating mainly on iron production. Thin section and Chemical analysis would establish whether or not the sherd was produced from a local East Yorkshire clay and thus test Buckland's model.

The sherds are mainly featureless body sherds and therefore probably cannot be closely dated by standard archaeological methods. However, two rims, one of an erratic-tempered bowl, and one of a flint-tempered jar, should be drawn and the drawings and sherds submitted to Peter Didsbury for comment.

Table 4

Trench	IAERR	IAFLINT	IASANDY	IASLAG	IASST	Grand Total
N25	1					1
N184					2	2
N59	3					3
N125			1			1
N189				1		1
N202		1				1
N3	1					1
Grand Total	5	1	1	1	2	10

Roman

One hundred and two sherds of Roman date were recovered (Table 5). All were abraded, making identification difficult. Most of the sherds are of greywares, whose source has not been determined, and of calcite-tempered wares, probably of later Roman date and from the Vale of Pickering (although the use of this fabric began in the Bronze Age and was common in the Iron Age, on sites close to the Vale, 2004). However, the collection seems to include a small number of regional British and continental imports. These include an unidentified amphora, Dorset Black Burnished ware (BB1); Dales-type shelly ware, from northwestern Lincolnshire and probably of later 3rd-century or later date (DWSH); Micaceous Lezoux Samian ware (MLEZ); Malton or York mortaria (MOMY) and Nene Valley Colour-Coated ware (NVCC). Over half the sherds come from one plot, N125, and the remainder are scattered over 20 plots, with no more than 7 sherds present in any one plot.

Most of the sherds (93) were from jars with small numbers of amphora, beaker, bowl, dish and mortaria. This very monotonous assemblage is typical of rural agricultural settlements.

Table 5

Trench	AMPH?	BB1	CALC	DWSH	GREY	GROG	MLEZ	MOMY	NVCC	RPOT	RPOT?	Grand Total
N25	1											1
N50					1							1
N184			1		6							7
N111					3							3
N51					3							3
N186					1							1
N59		1			3							4
N125			5		50	1						56
N86			1	1								2
N104					4							4
N106					1							1
N107			1				1					2
N171					1							1
N189			1		4			1	1			7
N191					1							1
N201					1							1
N208			1									1
N60					1						1	2
N69										1		1
N85					1							1
N96					2							2
Grand Total	1	1	10	1	83	1	1	1	1	1	1	102

Anglo-Scandinavian

There are no definite sherds of early to mid Saxon date from the survey. However, two of the sherds described as prehistoric here, both from N184, might be of early to mid Anglo-Saxon date. The same plot produced two sherds identified visually as York Anglo-Scandinavian ware (YORKA). Recent thin section and chemical analysis of this ware, including samples from Beverley, suggests that the ware was produced in West Yorkshire, possibly at Thorney, and it is found in York in deposits of the later 9th and earlier 10th centuries. It is uncertain whether it was still being produced in the mid 10th century and later, although sherds of the ware do occur in deposits of that date and later at Coppergate, in York, but are outnumbered by other wares (mainly Stamford and Torksey wares). Given that these sherds would provide evidence for late 9th/early 10th-century occupation at Plot N184, it would be worthwhile analysing one of them using thin section and chemical analysis to test the visual identification.

Table 6

Trench	YORKA	Grand Total
N184	2	2
Grand Total	2	2

Medieval

Three hundred and twenty-four sherds of medieval pottery were recovered from the field survey. They were found on 70 plots (Table 7) and were mostly present as scatters of between 1 and 16 sherds. One plot, N184, produced a larger collection, of 52 sherds.

As a result of the abraded, small nature of most of the sherds it was difficult to identify the ware type precisely but material of both earlier and later medieval date was present.

The earliest type found was York Gritty ware (YG). Recent analysis using thin sections and chemical analysis has demonstrated that this ware was produced using a Coal Measures Whiteware clay and that a South Yorkshire fabric (with samples from Doncaster and York) and a West Yorkshire group (with samples from a site near Wetherby and from York) can be recognised. The ware is reported from Beverley, but a sample from Eastgate proved to be from a third, probably East Yorkshire, source. Twelve sherds were present in the field survey collection, from seven different plots. Most of these are small, featureless bodysherds, but rims were present at N204 and N220 and these could be illustrated. Some are also large enough to sample for comparison with the Beverley, York and Doncaster groups.

The ware was in production by the 1080s (it is the only ware present in the construction levels of York Minster apart from residual Roman and pre-conquest sherds, Holdsworth 1995) but still in use in the mid 13th century at York (the Doncaster group probably has an earlier end-date). At Beverley, instead of York Gritty ware, a handmade, locally-made ware was in use, Reduced Chalky ware. This was completely absent from the field survey and this may imply that the York Gritty ware sherds are actually of mid 12th century to mid 13th-century date.

The largest group consists of wares which first appeared in the mid to late 12th centuries. Most of these continued in use into the 14th century, however, and in the absence of typological features it is impossible to provide a closer date. However, only a handful of the Beverley ware sherds had a calcareous, sandy fabric (Beverley 1) but since this fabric appears to have been used solely in the 12th century this definitely places the start of the medieval pottery sequence in the 12th century.

Most of these 12th- to 14th-century wares are of Beverley origin, or, like the Staxton-type ware, were probably produced in the Beverley area, but the collection includes four sherds of York Glazed ware (YORK, 1992), a type now demonstrated to have been the predecessor of the Brandsby-type ware produced at a number of centres on the fringes of the North Yorkshire Moors. A further five sherds might be dated to the later part of this 12th- to 14th-century range. They consist of three sherds of Brandsby-type ware, a sherd of Coal Measures whiteware (CMW), probably from South Yorkshire (and possibly from the Firsby production centre) and a sherd of Scarborough ware which, since it occurs in early levels in Hull and is generally absent from early 13th-century assemblages regionally is probably a later 13th century ware (Watkins 1982, SCAR).

One hundred and forty-one sherds dating to the later 14th, 15th or early 16th centuries were present in the field survey collection. They occur scattered across the plots, with no plot having more than 13 sherds (from plot N184). Most of the sherds are Humberware, but examples of unglazed Saintonge ware and a beaker of Siegburg ware were also present. The latter sherd is probably of 15th century date, since it is of a type with a small rounded body and flaring rim which is absent from later 14th-century deposits from the Thames Waterfront, in the City of London (Vince 1988; 1986, Pl.30 left, fig 88 No. 261). Three sherds of Humberware have a purple glaze, produced by the intentional overfiring of a red slip, whilst a further three Humberware sherds have a red slip but were lower-fired.

The presence of two imported sherds in the later medieval pottery collection and the absence of earlier imports is a feature noted elsewhere in the hinterland of Hull and presumably reflects the presence of the town in the later medieval period and the quantity of imported pottery passing through it, rather than any change in the purchasing power of the original owners of the pottery.

Table 7

Trench	BEVO1B	BEVO2B	BEVOA	BEVOB	BRAN	CMW	HUM	HUM?	MEDX	NLFS	SAIU	SCAR	SIEG	STAXT	YG	YORK	Grand Total
N001							2										2
N005				1													1
N007							1										1
N008			1					1									2
N010							1										1
N011				3													3
N014				1													1
N015				2			1							1			4
N016							1										1
N025				4			10										14
N050	1			1									1	2			5
N051				4			1							1			6
N052											1						1
N059				1			1										2
N060	1			1													2
N064	1			1	1		3					1					7
N067				2			3							1			6
N068	1			1			1									1	4
N070							2							1			3
N071				1			2										3
N073				1			3										4
N074							3										3

AVAC Report 2005/119

Trench	BEVO1B	BEVO2B	BEVOA	BEVOB	BRAN	CMW	HUM	HUM?	MEDX	NLFS	SAIU	SCAR	SIEG	STAXT	YG	YORK	Grand Total
N075							1										1
N076	1			1			2										4
N080				1													1
N081	1			3													4
N084				1			3							1			5
N086				2													2
N094				1					1								2
N096	1			8			3										12
N097	1			1			6										8
N099				4			2										6
N100	1			2			2										5
N101				1			1										2
N104				1													1
N106							2							2			4
N107				7			5										12
N109				2			3										5
N110				2													2
N111				2	1		3										6
N113				1			5							1			7
N115															1		1
N119							1										1
N121				2			5							3			10
N123	1			1			4							1			7

AVAC Report 2005/119

Trench	BEVO1B	BEVO2B	BEVOA	BEVOB	BRAN	CMW	HUM	HUM?	MEDX	NLFS	SAIU	SCAR	SIEG	STAXT	YG	YORK	Grand Total
N125		1		8			5							1	1		16
N134							1										1
N143				1													1
N145				1													1
N173				1			2										3
N174							1										1
N179							1										1
N183		1		5			4										10
N184	1	7		24			13			1				2	4		52
N186				1			3										4
N189							1										1
N191				1													1
N192		1					1										2
N197							1									1	2
N198		1					2										3
N199		1															1
N201							1										1
N202						1	1										2
N204		1		2			4								1		8
N211							3										3
N213							2								2		4
N214	1	1					3							1	2		8
N217				1												1	2

AVAC Report 2005/119

Trench	BEVO1B	BEVO2B	BEVOA	BEVOB	BRAN	CMW	HUM	HUM?	MEDX	NLFS	SAIU	SCAR	SIEG	STAXT	YG	YORK	Grand Total
N219							1										1
N220				3			5								1	1	10
N221					1												1
Grand Total	2	24	1	115	3	1	138	1	1	1	1	1	1	18	12	4	324

Post-medieval

Three hundred and seventy-three sherds of post-medieval pottery were recovered from the site (Table 8). Most are of types which have a long period of currency and cannot therefore be dated closely except when stratified. However, there appears to be material of all parts of the post-medieval period present.

The earliest types which could be as early as the mid 16th century (but mostly continue later) consist of 51 sherds, spread across 26 plots, with no more than 6 sherds from any one plot. The types present consist of locally produced red earthenwares with a brown glaze (BERTH); black-glazed Cistercian ware cups, also probably fairly local (CSTN); slipped red earthenware vessels, probably mostly much later (SLIP); two sherds of Midlands Yellow ware, a late 16th to mid 17th-century fineware (MY); four sherds of Frechen stoneware (undiagnostic body sherds which could date from anywhere between the 1530s and the 1670s); and single sherds of Weser slipware and Martincamp stoneware of late 16th to early 17th-century date (WESE and MART).

The remaining post-medieval wares consist of types current in the later 17th to mid 18th centuries. Some can be more closely-dated than others and there are examples of wares with tpqs of c.1670, c.1700 and c.1720. This probably indicates a spread of material throughout the later 17th to mid 18th centuries. There is much more pottery from this period than from the previous century, a total of three hundred and twenty-two sherds, ranging from one sherd per plot to 29 sherds.

The wares present in this collection include locally-produced coarsewares of various kinds; slipwares from Staffordshire; stonewares from Nottingham; as well as imported vessels, such as Chinese export porcelain (CHPO); Westerwald stoneware (WEST, including chamber pots, which tend to be of mid 18th century date in England). There is also a single sherd of Andalusian Coarseware (ANDCO) from Plot N165. This ware, which contains abundant large rounded fragments of red schist, was produced in the Malaga area of Andalusia and is found in small quantities on English sites (including rural inland sites). Where stratified, the ware tends to be of 18th-century date and thus post-dates the majority of Spanish Olive Jars in England. Presumably, the ware was imported because of its contents (all the sherds known to the author come from large storage jars).

Much of the post-medieval pottery could be identified to broad form groups level (Table 9). The vessels present are mainly types used in preparation and storage of food (bowls, jars, pancheons) and includes a small proportion of vessels used for dining (plates); drinking tea (teapots) and two sherds of chamber pot.

Table 8

trench	ANDCO	BERTH	BL	CHPO	CSTN	FREC	GRE	LHUM	MY	REFR	SLIP	STCO	STCOAR	STMO	STRE	STSL	SWSG	WESE	WEST	MART	Grand Total
N1		1	8	2			1				1						1				14
N10			5	1			6				2		2		4						20
N100								2													2
N101								1													1
N106							2														2
N109		1					1														2
N11			1				3				1										5
N111																					1
N113							1														1
N121							1														1
N125							1														1
N128			1																		1
N133							1														1
N155		1									1										2
N157			1																		1
N162							2														2
N163											3										3
N164			1								1										2
N165	1												1				1				3
N166						1	1										1				3
N168											1										1
N17													1								1
N174							1	1													2
N175							1														1
N182			1																		1

AVAC Report 2005/119

N183						1														1
N184	1	3				4	2		1											11
N195		1				1						2								4
N196										1										1
N198							2													2
N2	1	1	3			1	1		5				2		1					15
N20			1			2														3
N200												1			1					2
N209		1																		1
N210		1				1														2
N212		2			1															3
N214						1														1
N217							1													1
N220						1														1
N221																				1
N23	1					2														3
N25						1														1
N3		2							1			1								4
N30		2				2													1	5
N36		1										1								2
N5		5	2			1			1	4		3								16
N50		13	1	1	1	8			1	2	1				1					29
N51	1			1		6	1													9
N52								1												1
N56				1		2									1			1		5
N59	3	2				9	2		2	1					1					20
N64		2				2														5
N67		4		1		6			1						1					13
N68							1													1

AVAC Report 2005/119

N69			7				3														10
N7			8	3			4			1											16
N70						1															1
N71							1										1				2
N73			1		1		3	1	1		1	1	1			1	1			1	13
N78			1																		1
N8			1				1			1				1							4
N81							1														1
N84							3														3
N85							1														1
N86							2														2
N87							1														1
N88							1														1
N89							1														1
N90			1				1														2
N91			1																		1
N92			2																		2
N96							1														1
Grand Total	1	10	80	13	5	4	97	15	2	2	29	5	11	2	6	1	10	1	2	1	300

Table 9

Form	1500+	1530+	1550+	1650+	1670+	1680+	1720+	1740+	Grand Total
BOWL			159	6	1	6	5		177
CHPT					1				1
CUP	4								4
DJ		2							2
JAR			22		2	1			25
JUG			1						1
PANC			12						12
PLATE					2	4	1		7
TANK			2						2
TANK?			1						1
TPOT						1		2	3
Grand Total	4	2	197	6	6	12	6	2	235

Early Modern

One thousand, one hundred and nineteen sherds of later 18th century or later date were recovered (Table 10). The sherds were spread across 58 plots and range between a single sherd per plot to 188 sherds. Much of the pottery is clearly of later 19th or 20th century date and has been classed as miscellaneous refined whiteware (WHITE). Most is the products of factories, such as the Staffordshire potteries; Castleford; Ferrybridge and Sunderland but without much work it is not possible to assign any to a particular source. A small quantity of Sunderland coarseware was present (SUND). These vessels were produced in the northeast of England and exported around the coast (and sometimes inland) alongside Sunderland refined whitewares and stonewares. Other English sources represented are Derbyshire Stoneware (DERBS) which was produced on the Derbyshire/Nottinghamshire border and London stoneware (LONS) produced in a number of factories on the outskirts of London from the late 17th century onwards. Much of the Nottingham stoneware present in the field survey collection is likely to be of early modern date. Several of the Chinese export porcelain vessels, whilst possibly produced in the preceding period, are also likely to also have been discarded during the early modern period. The only other imported type present in the collection is Rhenish stoneware mineral water bottles (SELZ). Thirteen sherds of these vessels were found, spread across six plots, but including groups from Plots N1, and N7. These vessels are uncommon finds in archaeological assemblages and their presence in such quantities in the field survey requires some explanation.

The early modern pottery was identified to form level except for 293 sherds (Table 11). The most common vessel form represented was the plate, followed by bowls, which were a mixture of decorated vessels for dining and plain vessels used in food preparation. Vessels used for preparing and serving tea were common as were vessels used for storage, including a number of examples of cylindrical preserve jars ("marmalade jars"), which from the late 19th century were sold as containers for mass-produced preserves, such as jam and marmalade.

An unusual element in the collection of early modern pottery is the presence of several fragments of figurine (8 definite examples and 3 which might be elaborate vessels but which are probably also figurines). These come from six plots, with 3 examples each from plots N3 and N7, two from N1 and single examples from N2, N23 and N67.

Such vessels are known in the antiques trade as fairlings, since they were often distributed as prizes by traveling fairs. They are therefore not signs of status, since they were the 19th-century equivalent of a plastic toy in a cereal packet. It is therefore difficult to see why they should occur as a concentration rather than being scattered across all plots. Another unusual

find was the lid from a stoneware water cooler, normally used in offices rather than the home in the late 19th and early 20th centuries.

Table 10

trench	BBAS	BLUE	DERBS	ENGS	ENPO	LONS	NCBW	NOTS	PEAR	SELZ	SUND	TPW	WHITE	Grand Total
N1		1	2	15	22	2	1	6	6	5	2	44	80	186
N10				4	3			7	3		2	7	14	40
N11					1							6	8	15
N128		1		4	4			2	1		2	5	8	27
N133					1								1	2
N135							1	1						2
N14						1							2	3
N140				1	1									2
N147							1	1				1	1	4
N155				2								1	4	7
N157								2						2
N158											2			2
N16							1	1				1		3
N162				1				3				1		5
N163			2	4	5			1	3		1	2	7	25
N164				4	5		3	1				7	8	28
N165					3		2	3	2	1		9	5	25
N166				1	2		1	1				2	2	9
N168					5		1		2		1	1	5	15
N17					1			1	1			3	4	10
N184				2	1		1	2	1			4	12	23
N2			2	5	5	1	3	3	7			17	40	83
N20				1					1			4	5	11
N200												2		2
N207											1	1	1	3
N209													1	1
N210				1	1			1						3
N212					1			1	1			1	2	6
N215					1						1	1		3
N23				6	6	1		2	4		2	13	17	51

AVAC Report 2005/119

N3			1	2	3		1	2	2		3	21	21	56
N30											1			1
N36											3			3
N5			7	27	16		10	10	9	1	7	35	72	194
N50	1			12	6		5	5	3		1	12	26	71
N56					3		1	2				8	9	23
N59				2			1						7	10
N64							1	5	1	1	1	5	3	17
N67				3	2		2	1	1			5	6	20
N69			2	5	6		1	1	1		2	11	18	47
N7			2	19	21		4	9	7	4	2	15	37	120
N73				2			2	1			2	1	5	13
N78								2				1	1	4
N8				3	1		1	6	1	1	2	4	16	35
N91													1	1
Grand Total	1	2	18	126	126	5	44	83	57	13	36	253	449	1213

Table 11

trench	?	BATHROOM FITTING	BLACK LEADING BOTTLE	BOT	BOTTLE	BOWL	BOWL ON STAND	BOWL?	CHPT	CUP	DISH	DOOR KNOB	EGGCUP	FIG?	FIGURINE	FIGURINE/LID	FUMING POT	JAR	JAR, LARGE	JUG	LID	MARMALADE JAR	MEASURE	MUG	Grand Total
N1	1	1		8		24		1	1	28					2			21		8		6			186
N10				1		10			1	5		1						8							40
N11						3			2	3															15
N128	27																								27
N133	2																								2
N135	2																								2
N14						1																			3
N140	2																								2
N147	4																								4
N155	7																								7
N157	2																								2
N158	2																								2
N16																		1		1					3
N162	5																								5
N163	25																								25
N164	28																								28
N165	24														1										25
N166	9																								9
N168	15																								15

AVAC Report 2005/119

N17						2			1	3							1							10		
N184	23																							23		
N2		2		1	1	11			3	10				1			9		3			2		83		
N20						2				1										1	1			11		
N200	2																							2		
N207	3																							3		
N209	1																							1		
N210	3																							3		
N212	6																							6		
N215	3																							3		
N23						6				12				1			3	1	3			5		51		
N3				2		7			2	3			2	1			3		1	1	1			56		
N30	1																							1		
N36	3																							3		
N5		4			8	47	1		4	13	1						35		2		4	1	194			
N50		1			1	13				8							13				3		71			
N56						7				3							1		1				23			
N59						6			1								2						10			
N64					1	5				1							4		1				17			
N67						7				3				1			4				1		20			
N69					2	13				7						1	3				2		47			
N7		1			10	1	27			19				3			12		2		3	1	120			
N73	13																						13			
N78	4																						4			
N8					3	8				2	1		1				6		2				35			
N91	1																						1			
Grand Total	217	9	1	1	37	1	199	1	1	15	121	2	1	1	2	9	1	1	126	1	24	2	28	1	1	1213

Table 11 cont

trench	ORNAMENT	PANC	PLATE	PLATE/DISH	SAUCER	SINK	SPOON	TANK	TPOT	TPOT LID	TRAY	VASE	VESSEL	WATER COOLER LID	Grand Total
N1	2		76	2	2			1	1		1				186
N10			13									1			40
N11			7												15
N128															27
N133															2
N135															2
N14			1											1	3
N140															2
N147															4
N155															7
N157															2
N158															2
N16			1												3
N162															5
N163															25
N164															28
N165															25
N166															9
N168															15
N17			3												10
N184															23
N2			39		1										83
N20			6												11
N200															2
N207															3
N209															1
N210															3
N212															6
N215															3
N23			17		1					1		1			51
N3		1	31				1								56
N30															1
N36															3
N5	2		71										1		194
N50	1		27					1	1		1		1		71
N56			11												23
N59			1												10
N64			5												17
N67			4												20
N69			18					1							47
N7	2		34			1				1		1	2		120
N73															13
N78															4
N8			12												35
N91															1
Grand Total	7	1	377	2	4	1	1	3	2	2	2	3	4	1	1213

Stone

Five fragments of stone were submitted, but all appear to be natural pebbles of types which could occur in local East Yorkshire boulder clays and gravels. No plot produced more than 2 fragments.

Assessment

Distribution and interpretation of finds

Table 12 shows the distribution of finds of all kinds by broad period. It is arguable whether a cluster of three prehistoric sherds should count as a concentration, but it is normally accepted that such sherds are likely to have been dislodged from archaeological deposits on the site in the recent past, otherwise the sherds would not have survived. Therefore, every sherd of prehistoric pottery is potentially evidence for an underlying settlement. For the Roman period, by contrast, it is clear that pottery does survive in the ploughsoil quite well and unless the finds are concentrated they could well be present as a result of manuring. Those from Plot N125 ought to be investigated as potential evidence for settlement but the remainder could well be manuring scatter from farms at some distance from the plots.

For the Anglo-Scandinavian period, there is very little archaeological evidence for settlement at all in East Yorkshire. This is not to say that the county was sparsely occupied, Domesday Book clearly indicates the contrary, but that the archaeological evidence for that occupation is difficult to find and interpret. Thus, every find of Anglo-Scandinavian date is potentially of some interest. Recent work in the east midlands (the Whittlewood Project) suggests that until the 12th century it was rare for fields to be manured, and that therefore any finds of 11th-century or early pottery might be evidence for settlement. Thus the two sherds of Anglo-Scandinavian pottery from Plot N184 are potentially quite important and this Plot too should be subject to further investigation.

For the medieval period, it is again clear that the concentration of pottery and other finds in Plot N184 requires investigation, but the remaining plots may well be interpretable as manuring scatters. Some of the larger scatters are borderline, and their interpretation would depend on the size of the transects walked, distance from areas of known medieval settlement (the Whittlewood Project suggests that there is a potentially a difference in manuring regime between land which was in demesne and that held by the villagers as well as a probable division between strips close to a settlement and those at some distance. Both factors would affect the incidence of pottery and other finds present in the ploughsoil).

The probable significance of the finds from plot N184 is emphasised by the distribution of finds of post-medieval date, which occur in a similar frequency to those of medieval date, but which show no high concentration. These post-medieval finds, and the early modern finds, are probably to be interpreted as manuring scatters. The origin of this manure is of interest. The finds of early modern date show no evidence for any rural agricultural bias, and are more likely to be urban refuse. It is possible that at some point in the later 18th or 19th century night soil, presumably from Hull, started to be spread on the fields. Without samples of pottery from medieval and post-medieval settlements in the immediate area of the pipeline for comparison it is not possible to say whether the pottery and other finds of this period are likely to be present as a result of the spreading of local farmyard manure or were also imported from towns, such as Hull. There is documentary evidence from Lincoln to show that rubbish, such as human excreta and domestic and industrial waste, was taken from the city laystalls and used in the surrounding countryside as manure (1956). This interpretation would explain how the lid of a stoneware water cooler came to be present in the fields between Ganstead and Asselby. If this interpretation is correct, then it might also explain the presence of a decorated medieval floor tile in Plot N25. The use of such tiles was restricted to chapels, churches and high status secular buildings, such as manor houses. Whilst it might be that the tile comes from such a building close to N25, the presence of late 18th-century and later debris of potentially urban origin suggests that it is also possible that the tile originated in a structure in Hull or Beverley.

Table 12

trench	PREH	ROM	LSAX	MED	M/PMED	PMED	EMOD	NA	Grand Total
N001				2		19	200		221
N002						20	85		105
N003	1					4	57		62
N005				1		19	200		220
N007				1	1	16	121		139
N008				2	3	5	35	2	47
N010				1	3	24	42	1	71
N011				3	2	5	15		25
N013						2			2
N014				1	1		4		6
N015				4	1		1		6
N016				1			5		6
N017						2	10	2	14
N018						2			2
N020						4	16		20
N022					1			1	2
N023						4	57		61
N025	1	1		15	8	7	1		33
N030					2	5	2		9
N036					2	2	6		10
N050		1		5	1	32	79		118
N051		3		6	1	10	1		21
N052				1		2			3

AVAC Report 2005/119

N054					1			1
N056					5	24		29
N057				1	3			4
N059	3	4	2	3	21	10		43
N060		2	2			1		5
N064			7	1	4	19		31
N067			6	1	13	21		41
N068			4		2			6
N069		1			10	49		60
N070			3		2			5
N071			3		4			7
N073			4	5	18	14		41
N074			3				1	4
N075			1					1
N076			4	2	1	2		9
N078				2	2	4		8
N080			1			3		4
N081			4	16	7			27
N082				1				1
N084			5	3	3	2		13
N085		1			1			2
N086		2	2	1	2			7
N087					1			1
N088					1			1
N089				2	4			6
N090				2	3		1	6
N091				1	1	1		3
N092				2	3	1		6
N093						1		1
N094			2					2
N096		2	12		1			15
N097			8					8
N099			6					6
N100			5		2	1		8
N101			2		1			3
N102				3	1			4
N104		4	1					5
N106		1	4		2			7
N107		2	12			1		15
N109			5		2			7
N110			2					2
N111		3	6	1	1	1		12
N112				1		1		2
N113			7		1			8
N115			1					1
N119			1					1
N121			10		1			11
N123			7			1		8
N125	1	56	16	1	1			75
N128				1	5	27	1	34
N133					2	2		4
N134			1					1
N135				1		2		3
N137					1			1

AVAC Report 2005/119

N140					2	2	2		6
N143				1	5	7			13
N144					1				1
N145				1					1
N146					1				1
N147					2	6	4	1	13
N155					3	6	7		16
N157					2	1	4	1	8
N158							2		2
N162					9	2	6		17
N163					6	11	26		43
N164					5	2	28		35
N165					2	9	25		36
N166					1	3	9		13
N168						1	15		16
N170					1				1
N171		1							1
N173				3			3		6
N174				1	3	2			6
N175						1			1
N176					1		1		2
N179				1					1
N180					1				1
N182						2			2
N183				10	6	1	1		18
N184	2	7	2	52	9	13	27		112
N185						3			3
N186		1		4	5				10
N187					1	1			2
N189	1	7		1					9
N191		1		1					2
N192				2					2
N195					5	6	1		12
N196					4	2			6
N197				2					2
N198				3		2			5
N199				1					1
N200					2	3	3		8
N201		1		1					2
N202	1			2					3
N204				8	1				9
N207					1	3	3		7
N208		1							1
N209					2	4	1	1	8
N210						4	3		7
N211				3					3
N212						3	6		9
N213				4					4
N214				8		1			9
N215							3		3
N217				2		1			3
N219				1					1
N220				10		1			11
N221				1					1

Grand Total 10 102 2 325 158 420 1305 12 2334

Further work (Table 13)

The prehistoric pottery should be shown to Peter Didsbury to see if a more precise date could be assigned to the sherds.

Several of the potsherds and the floor tile identified by eye require testing using thin section and chemical analysis, to confirm their identification and to add further knowledge of pottery use and distribution in East Yorkshire. In addition, the York Gritty cooking pot rims and the floor tile fragment require illustration, both to document the finds and to enable further study.

Drawings can be made by the Network Archaeology illustrators whilst thin sections would be produced at the University of Manchester and analysed by Dr Vince in Lincoln. Similarly, chemical analysis would be undertaken at Royal Holloway College, London, under the supervision of Dr J N Walsh, and the results analysed and compared with existing chemical data by Dr Vince. Current (2005/6) prices for thin section and chemical analyses are £23.50 plus VAT, including preparation and report. In addition, two hours are required by AVAC to liaise with the Network Archaeology illustrator, to provide captions and documentation and to find parallels for the floor tile design.

Table 13

trench	Context	class	cname	Form	Nosh	NoV	Action
N220	14371	POTTERY	YG	JAR	1	1	DR
N204	14311	POTTERY	YG	JAR	1	1	DR;TS;ICPS
N202	13056	POTTERY	IAFLINT	JAR	1	1	DR
N25	5170	CBM	MTIL	FLOOR	1	1	DR;TS;ICPS
N125	12115	POTTERY	YG	JAR	1	1	ICPS
N214	14343	POTTERY	YG	JAR	1	1	ICPS
N214	14347	POTTERY	YG	JAR	1	1	ICPS
N213	12441	POTTERY	YG	JAR	1	1	ICPS
N213	13129	POTTERY	YG	JAR	1	1	ICPS
N189	11178	POTTERY	IASLAG	JAR	1	1	TS

Retention

The post-medieval pottery includes sherds of wares only identified to generic ware groups which further work on the country pottery of East Yorkshire could undoubtedly provide further information on their source and date. This would be of value mostly in a future study of the post-medieval pottery of the county rather than for what it might reveal about the archaeology of the Ganstead to Asselby pipeline. However, for this reason, all finds identified as being of post-medieval or earlier date should be retained. The majority of the pottery, and some of the

ceramic building material, is clearly no more than 150 years old and is unlikely to be the subject of any further archaeological work. It could therefore, in our opinion, be discarded.

Appendices

Appendix 1: List of codes used in the archive catalogue

cname	subfabric	Listed	full name	period	earliest date	latest date	broad source	narrow source	source	bibliography	Sherds	Vessels	Wt(gm)
AMPH?		AMPH?	Unidentified Amphora	rom	40	400	Unknown				1	1	44
ANDCO		ANDCO	Andalusian coarseware	pmed	1650	1800	Spain	Andalusia	?Malaga		1	1	11
BB1		BB1	Dorset Black Burnished ware	rom	120	410	England	Dorset	various		1	1	61
BBAS		BBAS	Black basalt ware	emod	1740	1900	England	various	various		1	1	16
BERTH		BERTH	Black glazed earthenware	pmed	1550	1800	England	various	various		10	10	132
BEVO1B		BEVO1B	Beverley Glazed ware type 1B	emed	1170	1350	England				2	2	7
BEVO2B		BEVO2B	Beverley Glazed ware type 2B	emed	1170	1350	England	East Yorkshire	Beverley		22	22	309
BEVO2B	WHITE SLIP	BEVO2B	Beverley Glazed ware type 2B	emed	1170	1350	England	East Yorkshire	Beverley		1	1	3
BEVO2B	WHITE SLIP DEC	BEVO2B	Beverley Glazed ware type 2B	emed	1170	1350	England	East Yorkshire	Beverley		1	1	5
BEVOA		BEVOA	Beverley Glazed ware type A	emed	1140	1350	England				1	1	10
BEVOB		BEVOB	Beverley Glazed ware type B	emed	1170	1350	England				113	113	653
BEVOB	RED SLIP	BEVOB	Beverley Glazed ware type B	emed	1170	1350	England				1	1	7
BEVOB	WHITE SLIP	BEVOB	Beverley Glazed ware type B	emed	1170	1350	England				1	1	1
BL		BL	Black-glazed wares	pmed	1500	1750	England	various	various		76	76	1005
BLUE		BLUE	Refined blue ware	emod	1850	1950	England				2	2	1
BRAN		BRAN	Brandsby-type ware	med	1250	1350	England	Yorkshire	Brandsby	Mainman 1993, 589	3	3	30
CALC		CALC	Calcite-tempered	rom	40	400	England				10	10	59
CBM		cbm	Ceramic building	na	0	0	na	na	na	na	2	2	0

AVAC Report 2005/119

cname	subfabric	Listed	full name material	period	earliest date	latest date	broad source	narrow source	source	bibliography	Sherds	Vessels	Wt(gm)
CHPO		CHPO	Chinese Export Porcelain	pmed- emod	1620	1900	China	various	various		13	13	82
CMW		CMW	Coal Measures whiteware	med	1250	1450	England				1	1	12
CONP		CONP	Continental Porcelain	emod	1770	1900	nk	various	various		1	1	27
CREA		CREA	Creamware	emod	1765	1830	England	Staffordshire			29	29	45
CSTN		CSTN	Cistercian ware	pmed	1500	1650	England	Gloucestershire		1993, 591	5	5	25
DERBS		DERBS	Derby Stoneware	emod	1800	1950	England	Derby	Derby	Mainman 1993, 665	18	18	360
DWSH		DWSH	Dales Shelly ware	rom	250	400	England	Lincolnshire/East Yorkshire			1	1	3
ENGS		ENGS	Unspecified English Stoneware	emod	1750	1900	England	nk	? numerous sources	Mainman 1993, 665	126	126	2077
ENPO		ENPO	English porcelain	emod	1700	2000	England	various	various		126	125	479
FCLAY		FCLAY	Fired clay	na	0	0	NA				3	3	0
FREC		FREC	Frechen stoneware	pmed	1530	1680	Germany	Rhineland	Frechen/Cologne	Mainman 1993, 591	4	4	32
GLASS	BLUE/WHITE OPAQUE	GLASS		na	0	0					1	1	1
GLASS	OPAQUE	GLASS		na	0	0					1	1	0
GLASS	OPAQUE GREY	GLASS		na	0	0					2	2	15
GLASS	OPAQUE PINK	GLASS		na	0	0					1	1	1
GLASS	OPAQUE WHITE	GLASS		na	0	0					2	2	2
GLASS	PINK GLASS	GLASS		na	0	0					1	1	2
GLASS	WHITE	GLASS		na	0	0					2	2	4
GLASS	WHITE OPAQUE	GLASS		na	0	0					1	1	3

AVAC Report 2005/119

cname	subfabric	Listed	full name	period	earliest date	latest date	broad source	narrow source	source	bibliography	Sherds	Vessels	Wt(gm)
GRE		GRE	Glazed Red Earthenware	pmed	1500	1650	England	various	various		94	93	1265
GREY		GREY	Romano-British greywares	rom	40	400	England				82	82	860
GREY	ID?	GREY	Romano-British greywares	rom	40	400	England				1	1	3
GROG		GROG	Grog-tempered wares	rom	40	400	England				1	1	1
HUM		HUM	Humberware	lmed	1250	1500	England	Humber Estuary	various	Mainman 1993, 590	132	131	2591
HUM	PURPLE GLAZE	HUM	Humberware	lmed	1250	1500	England	Humber Estuary	various	Mainman 1993, 590	3	3	57
HUM	RED SLIP	HUM	Humberware	lmed	1250	1500	England	Humber Estuary	various	Mainman 1993, 590	3	3	23
HUM?		HUM?	Humber ware?	lmed	1250	1500	England	Humber Estuary	various	Mainman 1993, 590	1	1	18
IAERR		IAERR	Iron Age Erratic-Tempered ware	ia	-700	40	England				5	5	49
IAFLINT		IAFLINT	Iron Age flint-tempered ware	ia	-800	100	England				1	1	4
IASANDY		IASANDY	Iron Age Sand-tempered ware	ia	0	0	England				1	1	4
IASLAG		IASLAG	Iron Age Slag-Tempered ware	ia	-700	40	England				1	1	33
IASST	OR SST	IASST	Iron Age Sandstone-tempered ware	ia	-800	100	England				2	2	7
LHUM		LHUM	Late Humber ware	emod	1550	1850	England	Yorkshire	Unknown		15	15	512
LONS		LONS	London Stoneware	pmed	1670	1800	England	London	various	Mainman 1993, 665	5	5	265
LPMLOC		LPMLOC	Late Post-medieval wares (local to site)	lpmed	1750	1950	England	na	na		2	2	45
M/PMTIL		M/PMTIL	Medieval or later tile		0	0	England	Various	Various		41	41	0

AVAC Report 2005/119

cname	subfabric	Listed	full name	period	earliest date	latest date	broad source	narrow source	source	bibliography	Sherds	Vessels	Wt(gm)
M/PMTIL	BEVO	M/PMTIL	Medieval or later tile		0	0	England	Various	Various		11	11	0
MEDX		MEDX	Non Local Medieval Fabrics	med	1150	1350	England	various	various		1	1	83
MLEZ		MLEZ	Micaceous Lezoux Samian ware	rom	50	120	France	Lezoux		Boon 1967	1	1	6
MOD		MOD	Modern	mod	1850	2000	British Isles	-			8	8	110
MOMY		MOMY	Malton or York mortaria	rom	60	250	England	Yorkshire			1	1	60
MTIL		MTIL	Medieval tile (unspecified)	med	1150	1550	England	na	na		25	25	918
MTIL	BEVO	MTIL	Medieval tile (unspecified)	med	1150	1550	England	na	na		108	105	547
MTIL?	BEVO?	MTIL?	Medieval ceramic building material	med	1150	1550	na	na			2	2	199
MY		MY	Midlands Yellow ware	pmed	1550	1650	England	Midlands			2	2	9
NCBW		NCBW	19th-century Buff ware	emod	1800	1900	England	Staffordshire	? numerous sources		44	44	206
NLFS		NLFS	North Lincolnshire Fine Shelled ware	sn-med	1050	1200	England	North Lincolnshire	unknown		1	1	1
NOTS		NOTS	Nottingham stoneware	pmed	1690	1900	England	Nottinghamshire	Nottingham	Mainman 1993, 665	83	83	1113
NVCC		NVCC	Nene Valley Colour-Coated ware	rom	200	400	England	East Midlands	Nene Valley		1	1	1
PEAR		PEAR	Pearl ware	emod	1770	1900	England	Staffordshire/Bristol	various		55	54	264
PEAR	COARSE FABRIC	PEAR	Pearl ware	emod	1770	1900	England	Staffordshire/Bristol	various		2	2	38
PMLOC		PMLOC	Post-medieval local	pmed	1550	1750	na	na	na		39	39	233
PMTIL		PMTIL	Post-medieval ceramic building material	pmed	0	0					50	50	4131

AVAC Report 2005/119

cname	subfabric	Listed	full name	period	earliest date	latest date	broad source	narrow source	source	bibliography	Sherds	Vessels	Wt(gm)
PMTIL	BEVO	PMTIL	Post-medieval ceramic building material	pmed	0	0					11	11	194
PMTIL	BEVO?	PMTIL	Post-medieval ceramic building material	pmed	0	0					1	1	332
REFR		REFR	Refined Red Earthenware	emod	1730	1800	England	various	various		2	2	20
RPOT		RPOT	unidentified Roman wares	rom	40	400	na	na	na		1	1	14
RPOT?		RPOT?		rom	40	400	England				1	1	7
SAIU		SAIU	Saintonge unglazed ware	med	1250	1550	France	South-west France	Saintonge	Mainman 1993, 665	1	1	4
SCAR		SCAR	Scarborough ware	med	1150	1350	England	Yorkshire	Scarborough		1	1	33
SELZ		SELZ	Selzer bottles	pmed	1750	1900	Germany	Rhineland	unknown		13	13	243
SIEG		SIEG	Siegburg-type Ware	lmed	1250	1550	Germany	Rhineland	Siegburg	Mainman 1993, 591	1	1	3
SLIP		SLIP	Unidentified slipware	pmed	1650	1750	England				28	28	210
SLIP	SSOM	SLIP	Unidentified slipware	pmed	1650	1750	England				1	1	3
STAXT		STAXT	Staxton-type ware	emed-lmed	1150	1550	England	Northern England	various		18	18	87
STCO		STCO	Staffordshire combed press-moulded ware	pmed	1650	1800	England	Staffordshire/Bristol	various		4	4	23
STCOAR		STCOAR	Staffordshire coarseware	pmed	1650	1900	England/Wales	Staffordshire/Buckley	various		8	8	76
STMO		STMO	Staffordshire/Bristol mottled-glazed	pmed	1690	1800	England	Staffordshire			2	2	8
STONE		STONE	Stone	na	0	0					5	5	25
STRE		STRE	Staffordshire redware	pmed	1630	1750	England	Staffordshire	various		6	6	58

AVAC Report 2005/119

cname	subfabric	Listed	full name	period	earliest date	latest date	broad source	narrow source	source	bibliography	Sherds	Vessels	Wt(gm)
STSL		STSL	Staffordshire/Bristol slipware	pmed	1680	1800	England	Staffordshire or Bristol	Staffordshire or Bristol		1	1	0
SUND		SUND	Sunderland coarseware	pmed	1800	1900	England	North-East	Sunderland	Mainman 1993, 665	32	32	464
SWSG		SWSG	Staffordshire White Saltglazed stoneware	pmed	1700	1770	England	Staffordshire	? numerous sources	Mainman 1993, 665	10	10	23
TGW		TGW	Tin-glazed ware	pmed	1640	1770	England	nk	? probably Bristol		12	9	33
TPW		TPW	Transfer printed ware	emod	1770	1900	England	Staffordshire	? numerous sources		253	251	859
UNKNOWN											2	2	18
WESE		WESE	Weser Slipware	pmed	1550	1650	Germany	NW Germany			1	1	21
WEST		WEST	Westerwald stoneware	pmed	1600	1800	Germany	Rhineland	Westerwald		2	2	26
WHITE		WHITE	Modern whiteware	emod	1850	1900	England	Staffordshire	? numerous sources		451	448	1870
YG		YG	Yorkshire gritty ware	sn-emed	1050	1250	England	Yorkshire/North		Mainman 1993, 585	12	12	63
YORK		YORK	York glazed ware/York White ware	emed	1150	1300	England	Yorkshire	not known	Mainman 1993, 588	4	4	42
YORKA		YORKA	York A ware	lsax	850	950	England	Yorkshire	unknown	Mainman 1993, 665	2	2	17

Appendix 2

The archive catalogue, amounting to over 2000 records, has been supplied to Network Archaeology digitally in Microsoft Excel™ spreadsheet format.

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