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ARCHAEOLOGICAL EVALUATION

63-64 Baxtergate

Whitby

August 1992

MAP

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CONTENTS

List of figures

Introduction

Methods

Excavation results

Conclusions

Suggested work programme

Bibliography

Figures

Appendix I. Context list

Appendix II. Finds Summary

LIST OF FIGURES

Fig. 1. Site location plan

Fig. 2. Trench location plan

Fig. 3. Trench 1. East and South facing sections

Fig. 4. Trench 1. North and West facing sections

Fig. 5. Trench 2. North and East facing sections

INTRODUCTION

Between 10th–14th August 1992 two archaeological test–holes were excavated at 64 Baxtergate, Whitby, on behalf of the "Trustees of the Peter Croft Settlement", through "Yorvale Developments Ltd". These excavations were carried out at the behest of the Archaeology Section of North Yorkshire County Council Planning Department, in order to evaluate the archaeological potential of the site prior to the proposed development of numbers 63 and 64 Baxtergate.

The development area, (Parish of Whitby, Grid ref NZ 89831097), which consists of two strip–like plots, is situated on the west bank of the river Esk in the heart of the historical town, close to the Upper Harbour and near to the base of a steep terraced hillside which rises up to the north–west, (see Fig. 1.).

The street name "Baxtergate" bears the "gate" suffix that is derived from the Old Norse "Gata", and can be linguistically interpreted as "street of the bakers", Thurlow (1979). At what date the street originated is uncertain though Baxtergate is thought to be one of the four principal ways into the town mentioned in a charter of abbot Richard between 1177–1189, VCH (1923).

METHODS

Two archaeological test-holes were excavated at 64 Baxtergate, along the eastern boundary of the property; one within the building, T.1., the other in a courtyard to the rear, T.2. (see Fig. 2.). In order to minimize destruction of archaeological deposits two of the small engineering test-pits, which were dug prior to the archaeological evaluation, were enlarged to approximately 1.2m x 1.2m x < 1.5m deep. These were, test-pit 6, encapsulated by T.1., and test-pit 5, encapsulated by T.2.

All excavation was carried out manually and all observed contexts were recorded and excavated separately. All finds were kept by context. At the completion of excavation trench sections were drawn at a scale of 1:10 and a series of colour slide and black and white print photographs were taken.

Note : Although the site boundaries and the test-holes which were located with respect to them are not aligned directly to the cardinal compass points, it has for the sake of textual simplicity, been assumed that the long property boundaries are aligned north-south with respect to the "site grid".

EXCAVATION RESULTS

Test-hole. 1. (Figs. 3. & 4.)

Excavation ceased at context 26, a firm yellowish brown silty clay, the upper surface of whose lowest point was some 1.42m beneath the existing floor level. The presence of charcoal flecks in this material together with its dirty appearance indicate it to be of an archaeological nature and not undisturbed natural strata. This deposit was seen to extend underneath context 28, a wall or wall foundation constructed of a double course of roughly hewn sandstone blocks bonded together with copious amounts of orange-brown clay. It is possible that 28, formed a wall or wall foundation in its own right, though it is perhaps more likely that it is a supporting plinth built in front of wall 31. Unlike 28, wall 31, was fashioned of squared and dressed sandstone blocks, with a stone size of up to 50cm x 19cm, and was thinly bonded with a dark clay. A small stepped plinth was apparent on the face of this wall. As wall 31 could not be directly related to the lowest archaeological strata revealed in the trench, the point at which it appears in the sequence prior to context 22, cannot be ascertained at this stage, though quite clearly it has served the function of forming the eastern boundary of the property for several centuries.

Butting up against 28, and over 26, was context 25, a dark yellowish brown clayey silt. Above this lay context 24, a dark grey clayey silt. These contexts produced a number of 13th century sherds and a small amount of bone and marine shells, and have been provisionally interpreted as make-up deposits after the construction of 28, and prior to the probable floor surface above, context 32. Context 32 was a thin band of yellow brown clay that was of a very clean appearance apart from at its upper surface where the presence of charcoal flecks and a general darkening of colour associated with dirtiness was noted. These characteristics strongly suggest that 32 can be interpreted as a floor surface. Surface 32 became more ephemeral towards the western part of the trench, a discontinuity likely to have been brought about by wear or subsequent disturbance in this area.

Sealing 32 was context 23, a sticky silty clay containing small amounts of sand, and producing some 13th century pottery. Although tending to be a dark yellowish brown in colour, some colour variation was noted. Variation in material type was also apparent in the form of several small pockets of virtually pure clay. Flecks and small lumps of charcoal were quite profuse throughout the context as were small fragments of wood, none being of a greater size than 1-2cm. Above 23 lay context 22, a loose, wet, dark brown, clayey silt sand. As with 23, charcoal and small fragments of wood were very widespread, as were large amounts of 13th-14th century pottery. Precise interpretation of the origin of contexts 23 and 22 is not readily apparent, though they may have originated as demolition debris, dumping to raise the ground level, or as make-up layers beneath 21.

Context 21 was a firm, dark, silty clay that occurred in a fine and quite well defined band across much of the trench. Containing charcoal, small fragments of wood and an amount of 13th-14th century pottery 21 is best seen as representing either a much used floor surface or as a bedding layer for the thin floor surface

context 30, above. Surface 30 survived only in the north-west corner of the trench and consisted of a thin band of cream white clay with a slightly dirty upper surface that strongly suggests that it once formed a floor.

Context 10 was a dark silty clay that showed some variation in colour and contained small pieces of wood and large amounts of 13th-14th century pottery. Above 10 was context 27 a concentration of large sandstone fragments, the largest being some 35cm across, and present only in the north-west corner of the trench. Taken together it is likely that 10, which itself contained an amount of stone, and 27, represent the demolition debris of a structure or part of a structure, of which ?floors 30 and 21 may have formed a part.

Sealing these deposits was context 9, a discontinuous yellow-brown coarse sandy layer containing small amounts of gravel and several very fine lenses of dark silt. This in turn was sealed by a layer of greyish brown sandy clay silt, context 5, that was seen to consist of many small lenses of material that included dark clays and sands. A single sherd of 14th century pottery was recovered from context 5; the latest context in T.1. to produce medieval material. The evidence of numerous small depositions that made up layers, 9 and 5, suggest a deliberate dumping of material, possibly in order to raise the ground level.

It should be noted that the next sequentially occurring contexts are of a structure datable by finds to the 18th century, that is a gap of some centuries from the previous contexts. Whilst this phenomena need not relate to the entirety of the property, the implication could be that wholesale truncation of any 15th-18th century deposits has occurred some time in the 18th century or earlier.

The first element of this structure was the east-west aligned vertical sided, flat based foundation trench cut, context 29, that held the foundation 33 and wall 3. Context 33 consisted of a series of roughly hewn sandstone blocks laid edge to edge that were crudely bonded together with lime mortar, thus forming the foundation for the wall 3. This wall survived for only its lowermost course and its bricks were laid on their long faces in a single skin, (the subsequent demolished courses are likely to have been laid stretcher, or similar bond, in a double skin). Given the thickness of this wall and its close proximity to the Baxtergate street frontage it is likely that wall 3, formed an internal partitioning wall and not an external wall. Context 6, a greyish brown, sandy, rubbly fill containing mortar fragments and located immediately to the north of wall 3, represents the final backfilling of wall trench cut 29. Constructed parallel and immediately adjacent to the stone wall 31, was a further brick wall, context 8, that stood to a height of two courses. No foundation trench cut was visible for this wall though disturbance, probably caused during demolition or construction of the subsequent building, could have removed traces of its former presence. Unfortunately the engineering test-pit had removed the presumed juncture of walls 3 and 8, that together mark a phase of re-building or structural re-modelling in the 18th century. Contexts 7 and 4 were both dark silty sands containing brick rubble and a scattering of lime mortar. Both of these deposits are thought to be the product of either an accumulation of building debris during the construction work mentioned above, or a levelling up within a room prior to the laying of the floor surface. Any such floor surface has since been removed, probably at the time of construction of the present building.

Context 2 was a brick and concrete hard-core layer laid as a base for the present floor surface, context 1, a 10cm thick concrete slab.

Test-hole. 2. (Fig. 3.)

Excavation ceased at a depth of 1.5m below the present courtyard level. Some 20cm above this height, context 51, a grey silty sandy clay containing amounts of charcoal and decayed wood was reached, and that part above the 1.5m depth was excavated. Although interpretation of 51 is uncertain, the pottery from it is of a 13th–14th date; two small sherds of post-medieval glass present are almost certainly intrusive and originate from the underpinning of the wall 34, from the eastern side. This underpinning, context 52, took the form of modern brick and concrete and its burrowing construction technique created a large void immediately to the west of wall 34. This void in turn probably accounts for the slumping of contexts 42, 43, 44, 45, 47, 48, 49, 50 and 51. Alternatively they are slumping into a deep feature present at a lower horizon.

Directly over 51, lay context 50, a thin dark grey silty loam occurring in the central and southern part of the trench that contained a large amount of decaying wood. This layer may represent a flooring surface of some kind. Overlaying 50 was the decaying remains of a large wooden plank, context 47, surviving up to 85cm in length by up to 35cm in width that is likely to be either discarded debris or a component of a structure or surface. Also sealing 51 were the remnants of a cobbled surface, context 48, that survived only in the western part of the trench. These cobbles were set in a silty clay matrix and once formed part of what was likely to have been an exterior yard surface.

Overlaying contexts 47 and 48 was context 45, a band of moist, dark grey, sandy clay loam containing small pieces of building debris and fragments of decayed wood and charcoal. Near the base of this layer occurred a small lense of clean sand, 44. It is probable that 45, which produced 18th century pottery represents an accumulation of domestic or garden debris formed above the cobbled surface 48, which is itself very likely to be of a post-medieval date.

Context 43, was a thin, dirty silty sand containing quantities of gravel and a large number of finds compacted into its surface that may be indicative of it having been in prolonged use as a ground surface. Sealing the probable surface 43, was a thick band of silty loam containing some brick and stone building debris and 18th century pottery, context 42. The origin of this deposit is uncertain though it may merely be the dumping of unwanted debris to the rear of the property.

It will be noted that, as was the case with T.1., a hiatus occurs in the dating sequence between the later medieval and post-medieval periods. Context 51 is almost certainly of 13th–14th century date whilst 45 is of an 18th century date. The dates of contexts 47 and 50 which produced no finds are unknown.

It is likely that the present north–south boundary wall 34, was erected some time after the deposition of 42, though no construction cut could be seen. This wall had its very lowest courses of roughly shaped sandstone blocks, the remaining courses being of pre-19th century brick. Whilst it is very probable that an earlier boundary wall or fence once existed to demarcate the property, this could not be determined due to modern underpinning disturbance.

Context 40, was a small deposit of dark grey material containing 18th century pot-sherds whose largest component was cinder and coal. This in turn was overlain by 20, a small layer of brick, stone and mortar building debris.

Context 19 was a thick layer of very dark brown silty clay loam that contained a substantial quantity of brick and tile debris. Overlaying 19 was context 17, a dark greyish brown clayey loam that also contained quantities of building debris. Both 17 and 19 produced 18th century finds, and were of an organic nature suggestive of their having once served as garden soils. It is likely that the material forming both contexts was deliberately dumped in the rear of the property, possibly to raise the ground level with material suitable for garden usage, some of its content being demolition debris. Above 17, in the southern area of the trench lay the thin deposit ,18, that consisted largely of building rubble in a greyish brown silty matrix.

Cutting through 18 was a small pit, cut 41, measuring about 40-45cm across and up to 50cm deep. The fill of this pit represents the disposal of a small amount of mostly building type debris in what is likely to have been a garden area.

Contexts 16 and 15 were both very dark silty loam deposits that contained much mortar and other building rubble and together would appear to mark the end of the use of this rear area of the property as a garden. These deposits in turn were sealed by context 14, a thin band of grey silty loam.

Contexts 13 and 12 were both brick rubble layers, the latter having a slightly higher brick content. These layers formed the base for the concrete slab 11 that forms the present courtyard surface.

CONCLUSIONS

Both test-holes have shown that a considerable depth of "urban type" archaeological deposits of the medieval and post-medieval periods have survived on the site.

The deposits contained within T.1. appear to be essentially of an interior nature with a number of floor/surface horizons apparent. In addition, the results of the borehole dug in the location of T.1. (Borehole 2) suggest the presence of a further 50cm of archaeological deposits. Those deposits within T.2. appear, at least for the post-medieval period, to be of an external character. The medieval deposits in particular appear to be essentially undisturbed whilst their damp condition potentially offers a wealth of environmental data (samples from contexts ,10, 21, 22, 23, and 24, are currently being examined by the Environmental Archaeology Unit, University of York, their potential having been confirmed by visual examination by Dr A. Hall).

The apparent hiatus in the ceramic assemblage between the 14th/15th-late 17th centuries poses the question as to what activity was happening on the site during this time, a question that could potentially be answered by more extensive investigation.

In light of these results which call for further archaeological work at the site, the following work programme has been recommended and is shown overleaf.

Suggested Work Programme for Archaeological Excavations and Watching Brief at 63-4 Baxtergate, Whitby.

The results of the archaeological evaluation clearly demonstrate the presence of stratified archaeological deposits at the site ranging in date from early modern to medieval. Water-logging of the lowest of the deposits is evidence of their bioarchaeological potential.

A number of processes involved with the proposed development will adversely affect the archaeological deposits:

The removal of deposits to accommodate the new concrete floor and its foundations, varying in depth from c40cm at the front of the property to >170cm at the rear.

The excavation of trenches for the strip-foundations (65 cm wide and 65cm deep along the street frontage, 90cm wide and 65cm deep along the south-west wall, and 90cm wide and 80cm deep along the south-east wall) and underpinning operations (175cm wide and 60cm deep along the north-west wall, 140cm wide and 60cm deep along the north-east wall, and 250cm wide and <60cm deep along the rear wall).

The excavation of a 3m x 3m trench for a lift shaft, to a depth of 60cm).

The excavation of service trenches for new services.

Possible removal of existing services and walls.

The unshielded operation of heavy machinery on top of archaeological deposits subsequent to the removal of the existing concrete.

Ideally, a solution to protecting deposits within the building would be provided by raising the surface of the existing floor, but this is understood to be unfeasible for reasons connected with the operation of the proposed retail unit. It is further noted that a piling system would involve considerable disturbance to the deposits.

Short of full-scale archaeological excavation, the following staged programme is suggested to enable the proper recording of archaeological deposits in those areas to be damaged or destroyed by the proposed development. (It is assumed that this programme broadly follows the sequence of the development works, in particular that the terracing of the rear of the property precedes underpinning).

(a) Carefully removing (ie in 5-10cm spits) deposits to the level at which the concrete and hard-core is to be laid using the backhoe of a JCB excavator with toothless (ie ditching) bucket . This to be accompanied by an archaeological Watching Brief and to be carried out under the supervision/direction of a

professional archaeologist. Some delays can be anticipated to allow recording of archaeological remains as and when they are encountered. This stage should proceed from the rear of the property to the street frontage in order to avoid machinery running over the archaeological deposits. It is preferable that the existing concrete floors and surfaces, plus any existing wall foundations and services, should be removed as part of this stage (ie under archaeological supervision), but **if the existing concrete floor, wall foundations and services are to be removed before this stage** (ie during the demolition of the building), the work should also proceed from the rear to the front of the property and care should be taken to remove the concrete only; the hard-core should be removed as part of stage (a).

(b) A break in all development work of sufficient duration to enable the assessment of the archaeological remains revealed and to formulate proposals for the location of a number of trenches, to be archaeologically excavated, to form Archaeological Sample Excavations of selected areas to be destroyed by the strip foundations, underpinning trenches and lift shaft. The depth of these archaeological excavations would not exceed the limit of the proposed building work. This stage would focus on recovering the sequence of deposits at the street frontage and relating them to the various structural phases to which they belong, but also would consider any activity to the rear of the property, where pits, wells and outbuildings might be anticipated.

(c) Before the recommencement of development work, steps must be taken to shield the archaeological deposits from disturbance and destruction by the operation of plant; the laying of a suitably durable membrane to be covered by hard-core is suggested.

(d) The excavation of the strip foundation and underpinning trenches, and the lift shaft if not covered by (c), by tracked mini-excavator with toothless bucket in 5-10cm spits under archaeological supervision and a Watching Brief.

(e) Archaeological Watching Brief on all other ground disturbances, eg installation of new services.

(f) All of the archaeological work to lead to a report to Frere Level III.

(g) Samples to be taken of all deposits exhibiting bioarchaeological potential for processing by the Environmental Archaeology Unit, University of York.

(h) Conservation and X-raying of metal artifacts.

(i) The deposition of the site archive in a suitable museum or store.

M R Stephens (following discussions with N Campling, NYCC)

MAP Archaeological Consultancy Ltd.

11th August, 1992.

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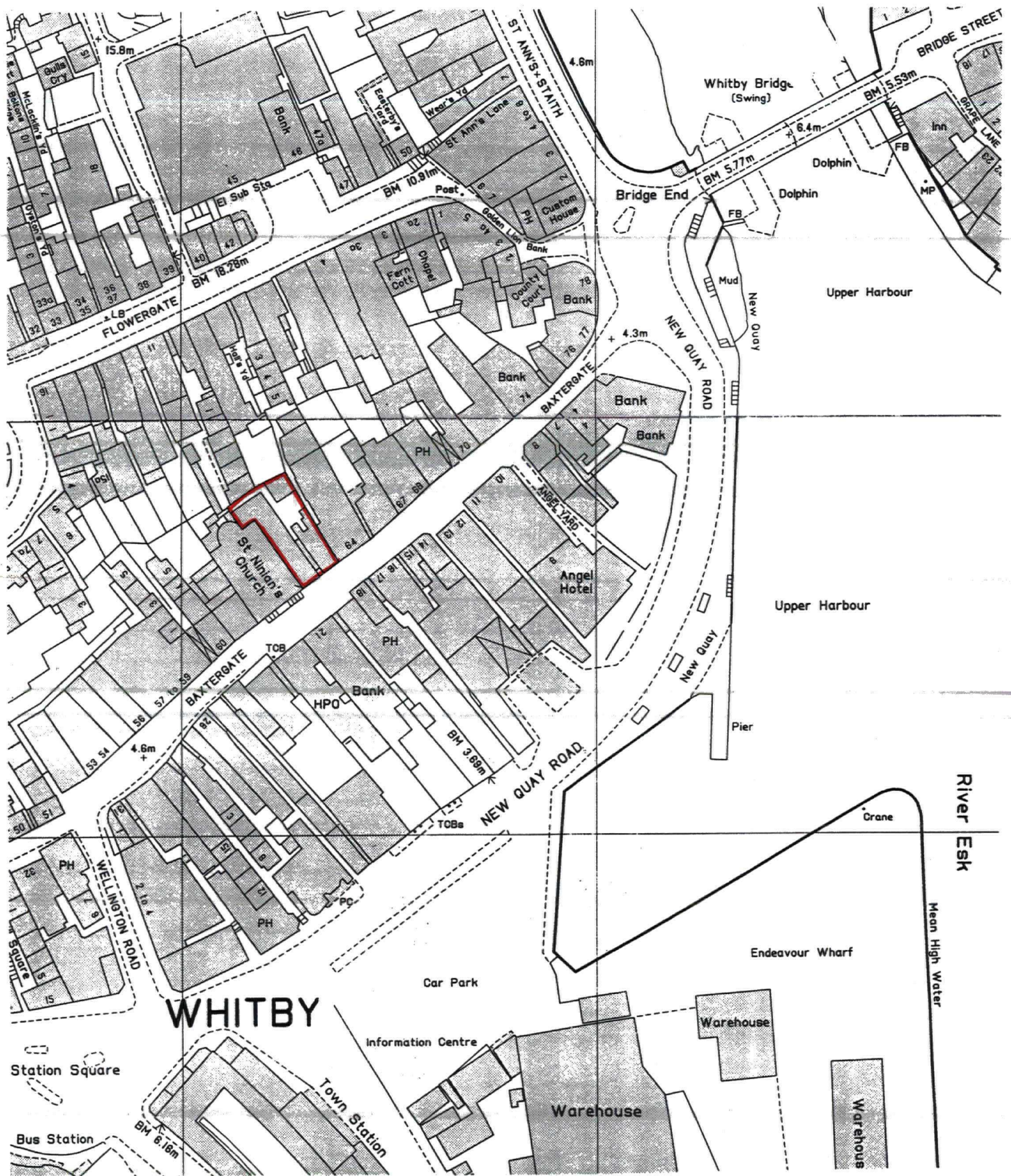
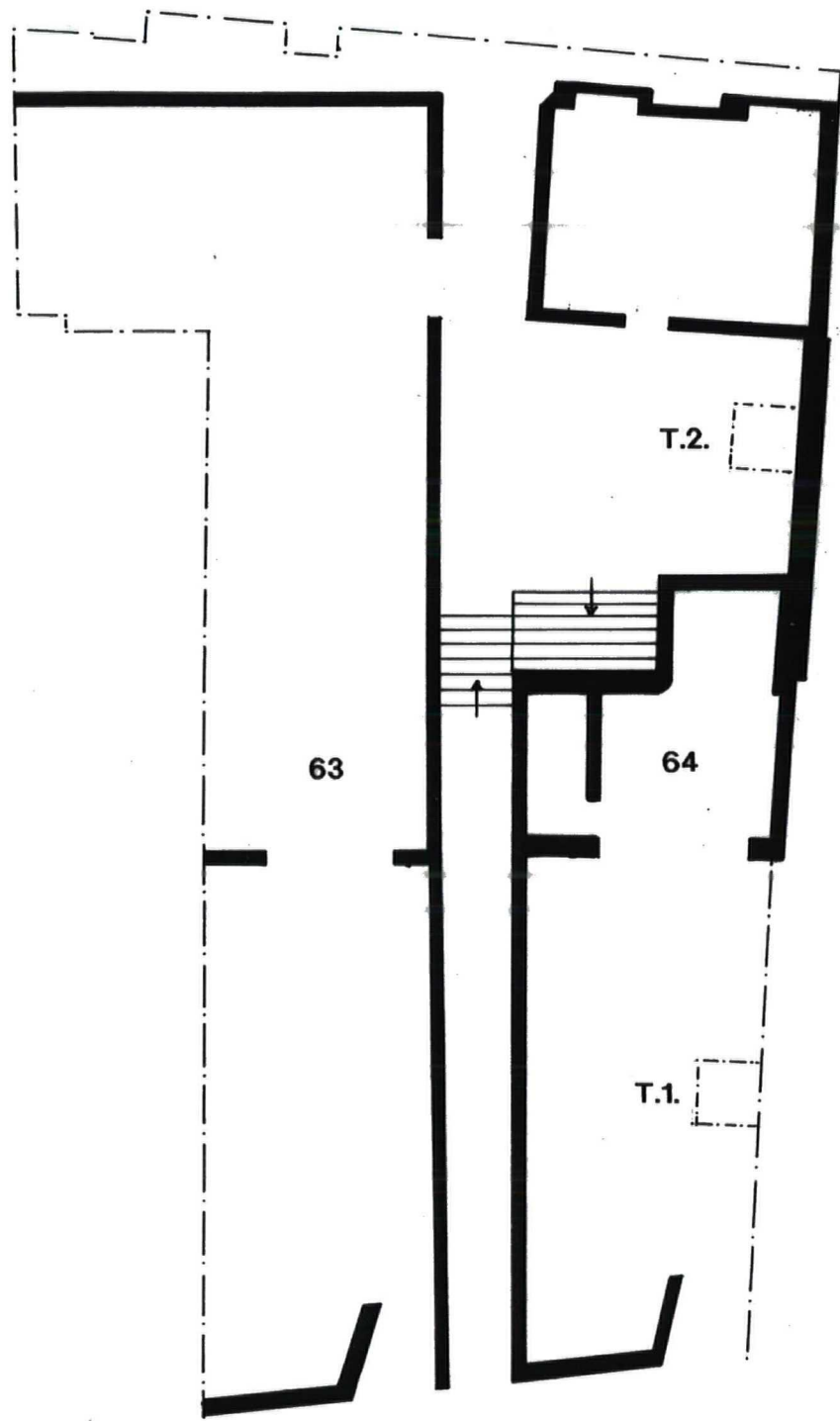


FIG. 1. SITE LOCATION PLAN

1:1250



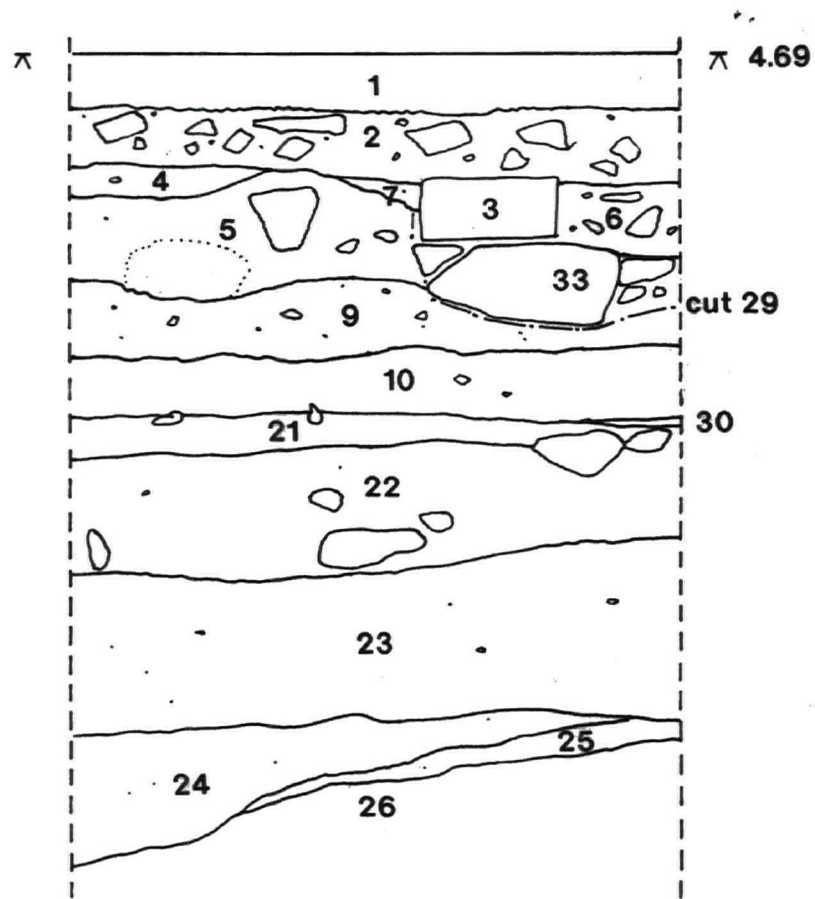


BAXTERGATE

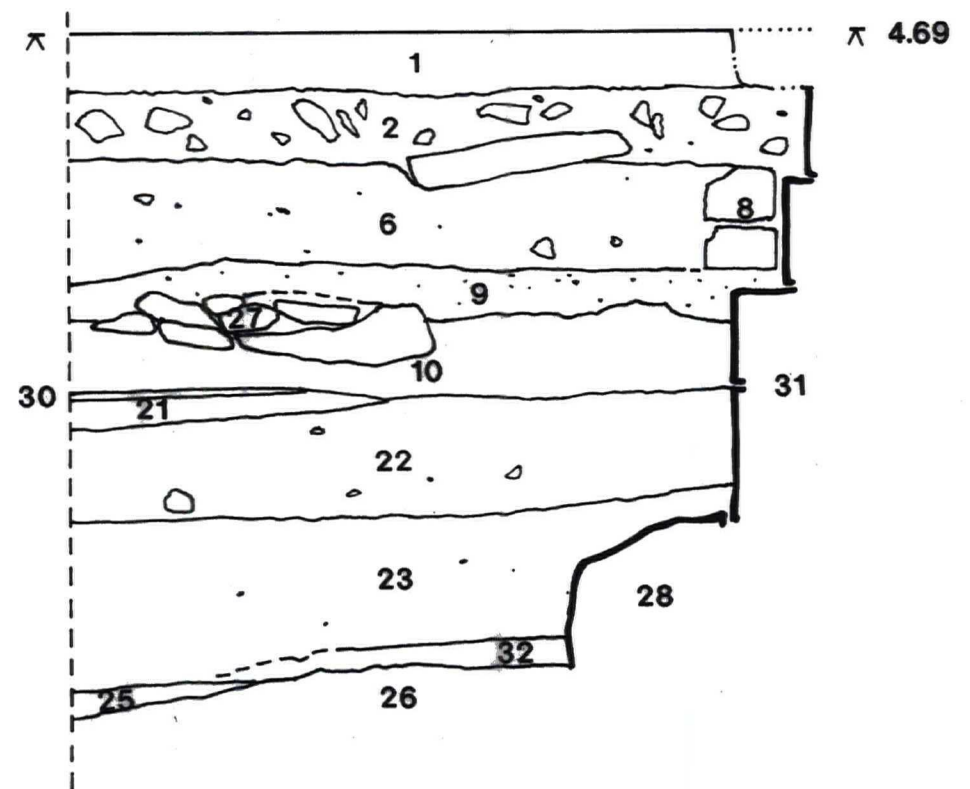


FIG. 2. TRENCH LOCATION PLAN





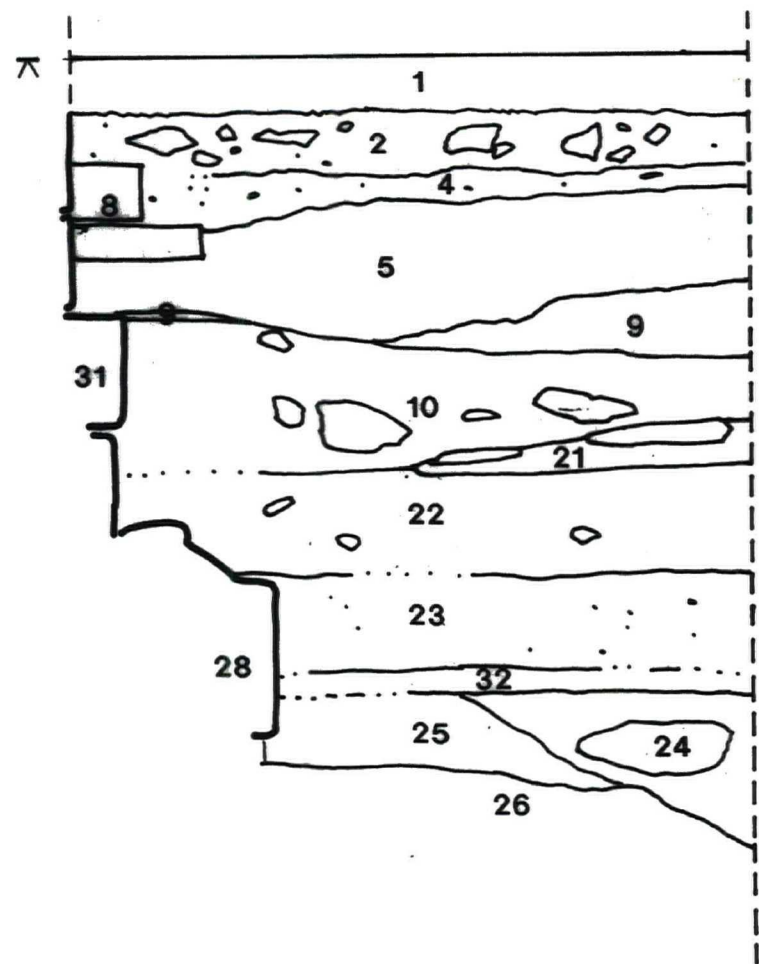
EAST FACING SECTION



SOUTH FACING SECTION

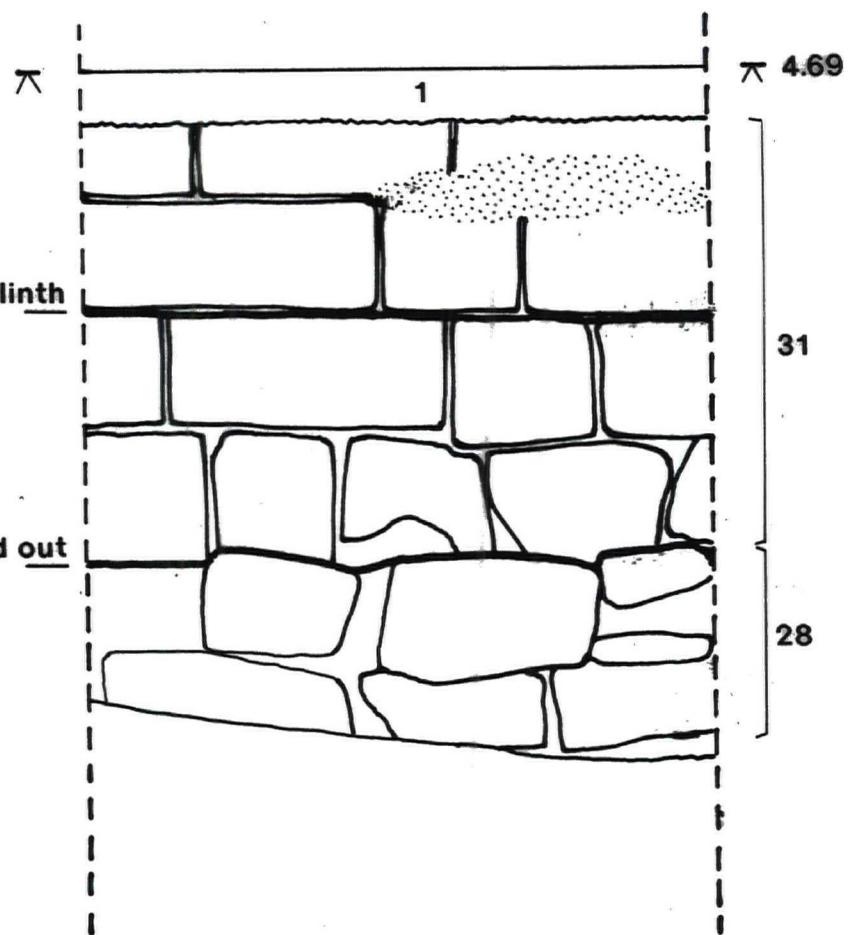
FIG. 3. TRENCH 1. E. & S. FACING SECTIONS





NORTH FACING SECTION

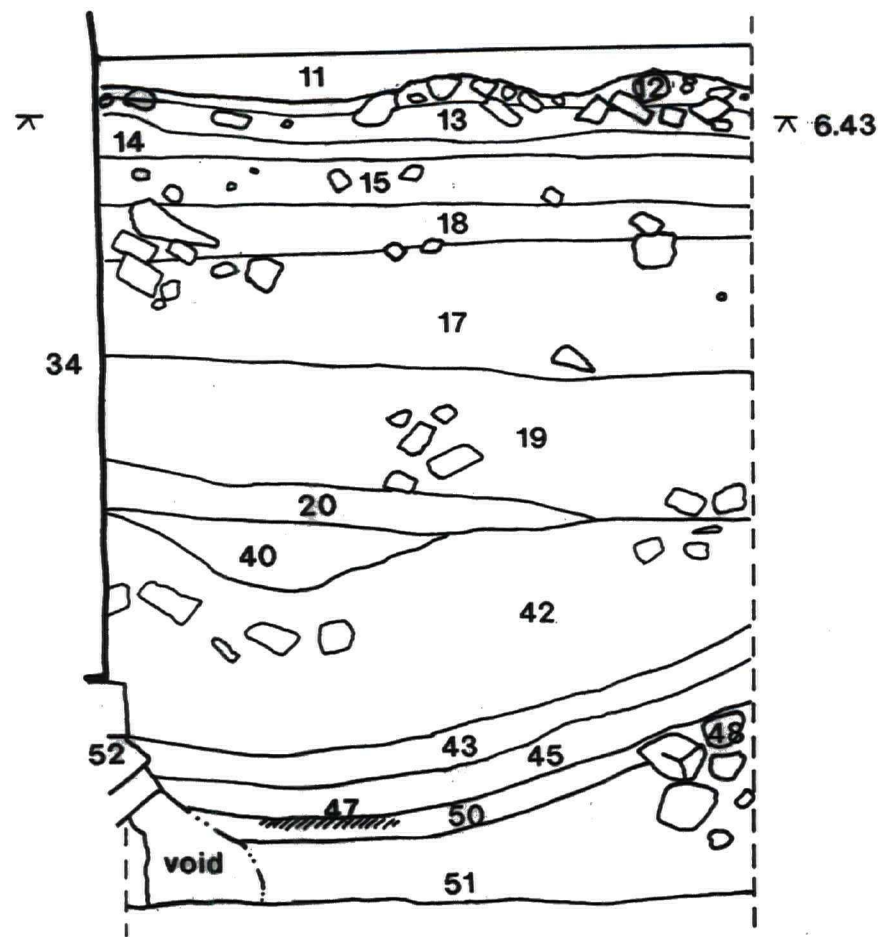
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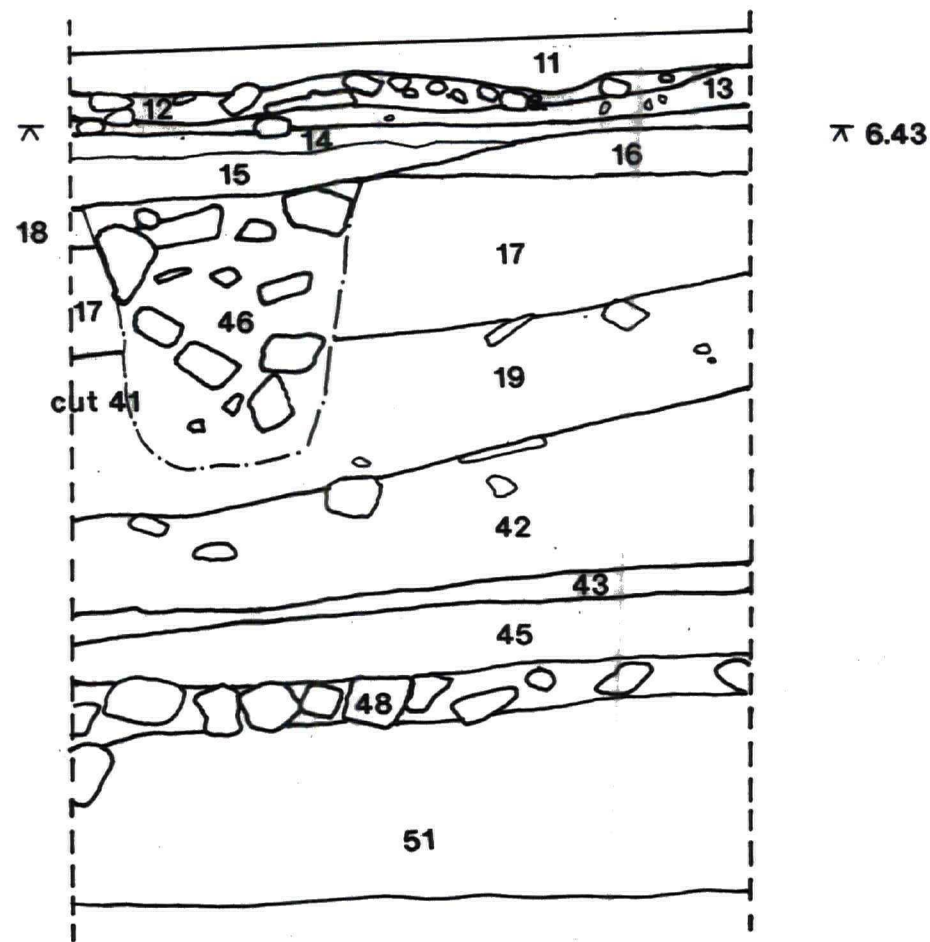
WEST FACING SECTION

FIG. 4. TRENCH 1. N. & W. FACING SECTIONS





NORTH FACING SECTION



EAST FACING SECTION

FIG. 5. TRENCH 2. N. & E. FACING SECTIONS



Appendix I. Context List.

No	Trench	Description	Munsell Colour
1	T.1.	concrete slab/floor	2.5Y6/3
2	"	rubble	2.5YR4/6
3	"	brick wall	2.5YR4/6
4	"	silty sand, rubble	10YR4/2
5	"	sandy silt	10YR3/2
6	"	silty sand, rubble	10YR4/2
7	"	silty sand	10YR4/2
8	"	brick wall	2.5YR4/6
9	"	sand	10YR5/6
10	"	silty clay	10YR3/2
11	T.2.	concrete	2.5YR6/3
12	"	rubble	2.5YR4/6
13	"	stone/rubble	10YR6/2
14	"	silty sand loam	10YR2/1
15	"	silty loam	10YR2/1
16	"	silty loam	10YR2/1
17	"	clayey loam	10YR3/1
18	"	rubble/silt loam	10YR3/2
19	"	silt clay loam	10YR2/2
20	"	clayey loam	10YR4/1
21	T.1.	silty clay	10YR3/2
22	"	clayey silt sand	10YR3/3
23	"	silty clay	10YR3/4
24	"	clayey silt	10YR3/1
25	"	clayey silt	10YR3/3
26	"	silty clay	10YR5/6
27	"	sandstone frags	10YR5/3
28	"	sandstone blocks	10YR5/4
29	"	wall trench cut	-----
30	"	clay	10YR7/2
31	"	sandstone blocks	10YR5/4
32	"	clay	10YR4/4
33	"	sandstone blocks	10YR5/3
34	T.2.	brick and stone	-----

35-39 Not Used.

40	T.2.	coal/cinder/sand	2.5Y2/0
41	"	pit cut	-----
42	"	silty loam	10YR3/2
43	"	silty sand	10YR4/2
44	"	silty sand	2.5Y5/3
45	"	sandy clay loam	10YR3/1
46	"	silty loam/rubble	10YR4/2
47	"	wooden plank	10YR4/6
48	"	silty clay	10YR3/2
49	"	silty sandy clay	10YR4/1
50	"	silty loam	10YR2/1
51	"	silty sandy clay	10YR4/1
52	"	modern underpinning	-----

Appendix II. Finds Summary.

List of finds recovered by context, (including pottery derived spot dates).

Context	spot date and details
5	14th century: Tees Valley ware. /tile frag x 1
10	13th-14th century: Tees Valley ware, Staxton ware. / animal bone x 12, fish bone x 5
14	mid 19th century: Staffordshire blue & white transfer ware. / Cu alloy pin x 1, clay pipe x 1, slate x 1, bottle glass x 1
15	late 18th-early 19th century: Staffordshire wares, creamwares. / clay pipe x 1
17	18th century: Halifax & Ryedale type. / lump of flint x 1
18	18th century: Creamware, manganese glaze wares. / animal bone x 9, clay pipe x 1
19	18th century: Tin glazed wares, manganese glazed wares. / clay pipe x 2, animal bone x 9, window glass x 4, bottle glass x 3
21	13th-14th century: Tees Valley ware, Humberware. / animal bone x 4, fish bone x 6, schist honestone x 2
22	13th-14th century: Tees Valley ware, "East Cleveland ware", Scarborough ware. animal bone x 23, oyster shell x 1
23	13th century: Tees Valley ware. / animal bone x 4, fishbone x 3
24	13th-14th century: Tees Valley ware, Humberware. / animal bone x 2 fish bone x 4, limpet shell x 2
25	13th century: Tees Valley ware.
42	18th century: Manganese glazed ware, tin glazed ware, Ryedale type wares. / animal bone x 2, clay pipe x 3
43	18th century: Staffordshire ware, manganese glaze ware, strip trailed white-earthenware. / clay pipe x 7, honestone x 1, bottle glass x 1, animal bone x 1, un-id Fe obj x 1
45	18th century: Ryedale ware, English salt glazed stoneware. / animal bone x 1, bottle glass x 1, un-id Fe obj x 1
51	13th-14th century: Tees Valley ware, Humberware. / animal bone x 34, small piece sheet bronze x 1, intrusive post-med glass sherds x 2

An evaluation of biological remains from
excavations in Baxtergate, Whitby
(site code WHITBY 92)

by

John Carrott, Keith Dobney, Allan Hall and Harry Kenward

Summary

Five samples of sediment from medieval occupation deposits were submitted for an evaluation of their potential for bioarchaeological analysis. All produced at least small amounts of fossil animal and plant material but only two would be useful for further examination. It appears unlikely that good evidence concerning the usage of the structures with which these deposits were associated will be forthcoming from biological analyses.

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An evaluation of biological remains from
excavations in Baxtergate, Whitby
(site code WHITBY 92)

Five samples of sediment from medieval deposits interpreted as possible make-up for or build-up on floors were submitted for analysis of plant and animal fossils. All were described in the laboratory and 1 kg subsamples taken for analysis. These were subjected to disaggregation and sieving to 300 μm , followed by paraffin flotation, using methods described by Kenward *et al.* (1980). Washovers were then taken from the resulting residues and stored in alcohol, and the heavier fraction oven-dried. All fractions of the samples were then examined for animal and plant remains. The results are as follows:

Context 10

Sample 10: mid/dark grey-brown, moist, crumbly and slightly sticky, working plastic, slightly sandy clay silt with moderate amounts of charcoal, traces of pottery and small patches of light grey ?rotten mortar.

The tiny flot contained only traces of invertebrate cuticle.

The small washover was mostly of charcoal to 3 mm, with a little very decayed herbaceous detritus; there were moderately abundant rush (*Juncus*) seeds, a subsample of which was found to contain *JJ. bufonius*, *articulatus*, and cf. *gerardi*, which might represent material from rushes strewn on floors or equally seeds brought into the house on muddy feet. There were in addition a few other identifiable plant remains of no interpretative significance and a trace of mammal bone.

The residue was of sand and charcoal to 15 mm, with some coal to 15 mm and abraded fish bone to 15 mm, with traces of ?brick/tile to 30 mm, a little stone to 30 mm, a fragment of worked jet bead to 6.5 mm and a further fragment of ?jet to 10 mm.

Context 21

Sample 21: mid/dark grey-brown, moist, plastic to sticky to slightly crumbly, slightly sandy clay silt with moderate amounts of charcoal and patches of light grey ?ash or rotted mortar and yellow/orange flecking.

There was very small flot, containing few, poorly preserved insect remains. These *may* have represented the decayed remains of a small group of typical urban taxa but it is not possible to be certain.

The small washover consisted mostly of charcoal to 10 mm, with a little herbaceous detritus and moderately abundant rush (*Juncus*) seeds of the kind noted from sample 10.

The residue was mainly sand with a few stones to 15 mm, modest amounts of charcoal to 20 mm, coal to 20 mm and a little very abraded fish bone (including large gadid, cod family) to 40 mm.

Context 22

Sample 22: mid/dark grey-brown, moist, crumbly to somewhat sticky and soft, slightly humic sandy clay silt with traces of stones 20-60 mm, wood, and bone fragments >20 mm.

The flot was small and contained only very few, poorly preserved, arthropod remains.

The small washover had rather more plant detritus than charcoal, but no fragments were larger than 2 mm; there were a few identifiable macrofossils of taxa of waste ground but preservation was rather poor. There was a modest component of small, irregularly-shaped pale orange-brown fragments with a characteristically almost regular pattern of parallel striations. These could not be identified; they did not appear to be any familiar insect cuticle and seemed to be too delicate and of inappropriate configuration for fish scale. One possibility is that they are from the carapace of some small marine crustacean, but no modern reference material was available for comparison.

The residue consisted mostly of sand with a little stone to 50 mm, some charcoal to 15 mm, partly charred wood to 15 mm, a little mammal bone to 40 mm (a cow first phalanx) and fish bone (including large gadid and herring) to 30 mm, and a single potsherd to 40 mm.

Context 23

Sample 23: light to mid grey- to orange-brown, moist, very sticky and plastic slightly sandy silty clay with traces of very decayed wood and a little ?burnt shell.

The tiny flot consisted mostly of insect cuticle fragments. Various beetles were present, but they were insufficiently abundant to allow ecological interpretation.

The small washover yielded modest amounts of plant detritus (including decayed wood) and a trace of charcoal, both to 3 mm; there were a few identifiable plant remains of low interpretative value and a trace of fish bone.

The residue was of sand and gravel to 15 mm, with rather a lot of fragmentary fish bone (including herring) to 30 mm, a single fragment of glazed pottery to 20 mm and a trace of charcoal to 10 mm. The quantity of fish bone is sufficient to warrant a more detailed examination of this deposit by means of sieving a large volume.

Context 24

Sample 24: mid/dark grey-brown, moist, crumbly to soft to slightly sticky, slightly sandy clay silt with traces of stones 6-60 mm.

The flot was small but included numerous insect fragments which were well preserved but mostly broken into small pieces. Various decomposers typical of occupation sites were noted, together with some species most likely to have come from buildings. There was a single flea, probably *Pulex irritans*, the human flea. A freshly emerged weevil, *Apion* sp. was also noted. An

interpretable assemblage of insects would probably be recovered from a 3 kg subsample of this deposit.

The washover was rather large (50-60 cm³), consisting mainly of decayed wood and strawy herbaceous detritus to 10 mm and a little charcoal to 5 mm; there were a few identifiable plant remains of weeds of arable and waste ground and rather frequent leaves and shoot tips of the bog moss, *Sphagnum* (a species other than *S. papillosum* or *S. imbricatum*). A few hazel nutshell fragments were also present.

It may be significant that a freshly emerged weevil was recorded in a sample together with 'strawy' detritus; such unexpanded weevils are often recorded from archaeological deposits which, on the balance of evidence, appear to have included cut hay-like vegetation. It is possible that the *Sphagnum* moss represents a further kind of 'litter'.

The residue of sand and gravel, with stones to 30 mm, included a little mammal (a sheep first phalanx) and fish bone (including ?large gadid) to 30 mm, a very worn (?burnt) shell of a 'winkle' (*Littorina* sp.), charcoal to 10 mm and a trace of wood/bark to 15 mm.

Implications

Although there is preservation of biological remains in all of the layers sampled, there appears to be little value in further analysis, with the following exceptions: (i) context 23 gave sufficient fish bone to suggest that a useful group would be recovered by further sieving, using a 1 mm mesh; (ii) context 24 would probably give an interpretable insect assemblage from a 3 kg subsample.

Reference

Kenward H. K., Hall A. R. and Jones A. K. G. (1980). A tested set of techniques for the extraction of plant and animal macrofossils from waterlogged archaeological deposits. *Science and Archaeology* 22, 3-15.