CYC-5982

Archaeological Evaluation

St. Andrewgate,
York.

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Introduction

An archaeological evaluation was undertaken between the 8th and 14th of March 1995 in an area of open ground at the side of the commercial premises of Newitt and Co. on the north-west side of St Andrewgate, close to the junction with Kings Square in the parish of Holy Trinity (SE 60475 51990 : Fig. 1). The land is presently used for car parking and lays adjacent to a number of two and three story buildings of mostly recent date.

The archaeological evaluation was conducted at the behest of R. Agar, architect for the land owners Newitt and Co. in accordance with an archaeological specification formulated by J. Oxley, York City Council Archaeologist.

The evaluation took the form of a trench measuring 3m by 3m in size and was located in the corner angle of Newitt and Co's existing building (Fig. 2), where the construction of a lift shaft and associated building works are proposed. The upper most parts of the trench comprising of disturbed deposits were mechanically removed by a JCB with a 'concrete breaker' and a toothless ditching bucket. Once intact archaeological deposits were reached these were excavated manually and a system of single context recording and planning was used to document each context encountered. During the course of the excavation a series of black and white photographs and colour slides were taken at a variety of horizons and at the completion of the excavation all four sections were drawn (Figs. 3–6). All finds were retained and sorted by context. As ceramic building material and mortar occurred in large quantities only a representative samples of types were retained from each context, notes being made on record sheets as to their occurrence and quantity within individual contexts.

Documentary Survey

Francis Drake in his epic tome "Eburacum" stated that St Andrewgate took its name from the former parish church of St Andrew, the structure of which still survives further along the street, (Drake 1736). It is possible that St Andrews church has a pre conquest origin as a church of the same dedication was recorded in Doomsday (VCH). Whatever the case it is almost certain that the street St Andrewgate was in existence prior to Doomsday as its Anglo-Scandinavian "gate" suffix would imply. It has been argued that an ancient street called "Ketmongergate" (Old Scandinavian - fleshmonger) was probably a part of St Andrewgate (VCH). It is not clear which part or end of the street Ketmongergate would relate to, though a butchery trade is implied. Earlier still, it is possible that the course of St Andrewgate follows the alignment of a Roman road which is presumed to have ran parallel to the south-east side of the Legionary Fortress wall and ditch (O.S. Historical).

Documentary references to the medieval period show that as well as possessing a church, a Maison Dieu was also present in St Andrewgate (VCH). A further ecclesiastical connection with the street were the property interests of St Leonard's Hospital, these being first recorded in 1215 (VCH). With regards to the excavation itself it is noteworthy that the trench lay just within the parish of Holy Trinity (Goodramgate) at the parish boundary interface with that of Holy Trinity or Christs Church; this latter church which stood in Kings Square being demolished in 1937 (RCHM vol. V). The particular point of interest here being that this ancient boundary (which is reflected in buildings of the 19th century, and even today by one wall of the existing Newitts building) may well have been reflected in property boundaries of considerably earlier date (O.S. Historical).

A building known as Duke Gill (or Gild) Hall, called the Kings Court, is said to have stood in the angle of St Andrewgate with Kings Square in 1627 (RCHM vol. V). The precise relationship of this building to the site is uncertain. Drake and Widdrington claim that this was once the site of a royal residence and doubtless also the source of the "King" element of the place-name Kings Square. It is known that in some early records Holy Trinity/Christ Church is titled "Ecclessia Sanctae Trinitatus in Curia Regis" (The church of Holy Trinity in Kings Garth: Widdrington 1879).

The series of post-medieval maps of the city of York, indicate that from the 17th century at least, the St Andrewgate frontage was fully built up on both sides of the street though gardens and backyards were present at a number of properties. The 1st edition O.S. of 1852 shows the south-west end of St Andrewgate to be fully occupied by a series of small properties all with backyards of various sizes. O.S. maps of the later 19th and early to mid 20th centuries show this area to have remained very much the same, at least on the north side of the street, apart from a few minor alterations to the properties. The area occupied by the excavated trench lay in a large yard that from the 1890's was known as Browns Yard. Immediately adjacent to Browns Yard on the south-west side lay a timber yard.

Examination of York trade directories of the 19th and 20th centuries suggests that Browns Yard may have belonged to a pattern maker, Samuel Brown, who is recorded as having premises in St Andrewgate in the later 19th century. No timber merchants are listed as operating in St Andrewgate though from the later 18th century onwards there were usually at least one or two builders working from the street and it is possible that the timber yard may have belonged to one of these. The various directories make it clear that St Andrewgate in the 19th and earlier 20th centuries was an area occupied by a great variety of tradesmen ranging from leather merchants and builders to herbalists and mineral water manufacturers, as well as supporting a number of residences occupied by people of some means, and usually at least two public houses.

Summary of Previous Archaeological Work

There have been a number of archaeological excavations and evaluations in addition to observations made during various construction works in the area of or adjacent to St Andrewgate that have revealed archaeological deposits that cover all periods of the city's history.

The earliest recorded of these concern the extensive stone remains discovered in sewer excavations at the cross roads on the north side of Kings Square in 1854 (RCHM vol. I.). Amongst the material recovered from this site was a stone tablet recording building work by the 9th Legion under the emperor Trajan in A.D. 107–108. It has been presumed that this Roman material relates to the porta principalis sinistra or south–east gate of the Legionary Fortress.

Further construction work, under a shop at the junction of Church Street and Kings Square in 1912 and 1915 revealed well worn cobbled paving at a depth of over 12 feet (RCHM vol. I.). It appears certain that this metalling relates to the via principalis of the Roman Fortress.

In 1957 I. Stead excavated in an open area to the west of Kings Square (Stead 1970). This excavation revealed two phases of 1st century A.D. timber laced ramparts of the Legionary Fortress as well as its 4th century A.D. wall that survived up to 8 feet tall. Above the Roman deposits Stead encountered the remains of a post–Roman wooden structure, probably a building, cut into the rampart behind the wall that may have dated from the 10th or 11th century, if not earlier. A series of other deposits were seen to contain "Saxo–Norman" pottery that were in turn cut by 13th and 14th century pits. Sealing these layers were a series of floors, probably of 15th or 16th century date.

Immediately to the east of the area excavated by Stead on the site of the present Refuge House, a hasty watching brief was kept by L. P. Wenham during the removal of 12 feet of deposits during the construction of a basement. Wenham was able to observe the 4th century phase of Fortress wall standing up to 12 feet tall. Numerous finds of Viking or Saxo–Norman were also recovered, though the limited time available to Wenham precluded further observation (Wenham 1970).

The most recent work in the vicinity concerns archaeological investigations by YAT on a large block of vacant land behind St Andrewgate and Spen Lane, which consisted of a borehole survey (YAT 1991) and the excavation of a number of trial trenches (YAT 1993).

The borehole survey revealed up to 6.8m of deposits and demonstrated activity in the area during the Roman, Anglo–Scandinavian, medieval and post–medieval periods.

The excavation of ten small trenches in 1993 was designed principally to examine the uppermost parts of the deep sequence of deposits known to exist on the site. This work demonstrated the survival of well preserved later medieval deposits and provided evidence of a number of post–medieval buildings on the street frontages with the lands to the rear being engaged in a wide range of industrial functions. The latest deposits on the site were those relating to land–filling, gardens or open areas and to a series of shallow founded brick structures of the 19th century date.

Excavation Results

Whilst the scale of the excavation was limited the stratified deposits encountered were for the most part distinct enough to allow the elucidation of their sequence. Although there same qualities permitted a broad interpretation of the deposits, larger scale excavations would almost certainly refine these conclusions. The excavation results are presented in the form of Phases I–IV which have been attributed to the depositional sequence (Fig. 9).

Phase I

Phase I marks the horizon at which excavation ceased, although a number of the component features of this phase are likely to be contemporary it is essentially arbitrary, being defined more in terms of the archaeological horizon reached when significant structural deposits were revealed and the excavation terminated than a true activity phase. Although cleaned and recorded none of the elements of Phase I, with the exception of posthole 18, was excavated.

Context 26 formed a somewhat patchily surviving cobbled surface of water–borne stones which appeared to have been laid directly on to the underlying deposits rather than set in a clay bedding. This surface was partially overlain by a small thin mortary deposit, context 31, in the south of the trench and by a dark, charcoal rich, silty clay deposit, context 25, in the north–west of the trench. Both of these contexts are likely to have been formed by the accumulation of dumping processes. Context 30, a greyish clayey silt was seen to extend underneath the cobbled surface and was in turn overlain by a small deposit of silty sand and crushed stone, context 27, in the east of the trench. In the north of the excavation four postholes, contexts 18, 20, 22 and 24, were seen to cut through context 30. One of these postholes context 17, was excavated to a depth of 0.2m at which point an intact timber post, preserved by anoxic waterlogged conditions, was encountered. It appears very likely that the remaining three posts, contexts 19, 21 and 23, would also be preserved at a similar depth by water logging. In the south–west corner of the trench the decayed timber outline of the north–west corner of a structure was observed, contexts 28 and 29. This decayed material is likely to represent the upper most surviving part of a timber lined pit or well or may form part of the ground beams of the corner of a timber framed building. Given the waterlogged conditions encountered in posthole 18, it is likely that structure 28/29 would itself contain intact structural timbers a short distance beneath its uppermost surviving height. Context 32 formed the mixed gravel and silty clay deposits enclosed by structure 28/29.

The timber structure, postholes and cobbled surface of Phase I suggest a period of active stability, probably in an area immediately adjacent to a building. The accumulated or dumped deposit 25 may mark the hiatus of the activity and point towards a change in function in this area

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On the basis of pottery recovered immediately above the Phase I contexts, Phase I activity is believed to date to the 14th century (Appendix 2).

Phase II

Phase II consists of context 16, a very mixed deposit comprising of silty clays and clayey silts that displayed an amount of colour variation and contained a number of fine silty lenses. Building rubble occurred throughout context 16 though it tended to concentrate in clusters. Lumps of clean yellow brown clay less than 0.15m in size were in evidence throughout context 16.

It is clear that context 16 was composed of a very large number of small intermingled deposits whose precise limits and interfaces are unclear. This lack of clear distinction is suggestive of deposition in rapid succession.

The activity of Phase II is believed to represent dumping probably in a back yard area. Pottery evidence suggests a late 14th century date for this activity.

Phase III

Phase III activity consists of two features cuts 14 and 15 which cut through the entire Phase II deposits. Located in the western part of the trench cut 14 was oval in shape and measured 0.67m in

length, 0.5m in width and up to 0.29m deep. Displaying moderately steep sides and a concave base the fill of this feature, context 12, a dark grey silty clay, contained a large amount of limestone fragments less than 0.14m in length together with several large fragments of tile (Appendix 3). The large stone and tile fragments within 12 could have formed packing around a post, whilst the rounded oval shape of the cut may relate to the levering out of such a post from its hole.

Only the south-eastern corner of cut 15 was observed in the north-western corner of the trench. This cut had moderately steep sides though its base which lay beyond the trench limits was not seen. The fill of cut 13 was a greyish brown silty clay that contained a number of small fragments of decayed wood. Interpretation of cut 15 is hampered by the fact that so little of it was visible within the trench, it may however, form the edge of a pit.

Pottery from cut 14 was of 13-14th century date and that from cut 15 of 14-15th century date (Appendix 2).

Phase IV

Phase IV activity consists of a series of deposits (contexts 11, 10, 8, 9, 5, 6, and 7). The earliest of these, context 11, located in the south of the trench, was a small compact patch of small sandstone fragments less than 0.05m in size intermixed with a pale coloured clayey silt that measured 0.61m by 0.49m and no more than 0.04m in thickness.

Context 11 was overlain by context 10, a deposit of greyish brown silty clay measuring 0.35m in thickness and containing building rubble and charcoal flecks. This deposit showed some textual variations and extended across the entirety of the trench.

Two small, thin spreads of sub-angular limestone fragments, contexts 8 and 9, were located in the north of the trench. Context 8 measured 0.5m by 0.37m, context 9 measured 0.8m by 0.41m and both were approximately 0.05m thick.

Context 7 a dark greyish brown clayey silt overlay both contexts 8 and 9. Surviving only in the north-west corner of the trench it is clear that context 7 had been truncated by cut 34 of the modern building works and it is likely that it once extended over much of the trench. Contexts 5 and 6 in the east of the trench were both yellowish brown clays that contained a number of angular magnesium limestone fragments and course red sandstone together with lesser amounts of tile. The similarities between contexts 5 and 6 were so that they are almost certainly of the same or similar origin. As both contexts have been affected by modern disturbance and intrusion in their uppermost parts it cannot be ascertained as to whether or not contexts 5 and 6 were ever physically linked.

The nature of the Phase IV deposits suggests that they are likely to be the results of dumping. Pottery evidence from contexts with pottery (7, 10 and 11: Appendix 2) suggests a 14th century date for this phase.

Phase V

Phase V activity at the site is represented by modern deposits related to the construction of adjacent buildings and those deposits which have been disturbed in modern times. Modern activity extends to a depth of some 0.7m across the area of the trench.

Context 4 is composed of modern rubble intermingled with silty sand and silty clays. These soil inclusions may represent disturbed archaeological deposits though the lack of datable finds other than those of modern date precludes this from being stated with any degree of certainty. The rubble and stone chippings filled cuts associated with the construction of the building adjacent to the trench is represented by contexts 34, 3, 33 and 2.

The distinct lack of material at the site relating to the later medieval and post medieval periods, even residually with Phase V deposits suggests either limited building activity at the site during these periods or the removal of archaeological deposits at some time in the past.

Conclusions and Interpretative Summary

The interpreted archaeological sequence discussed above can be summarised thus:

Phase I
Partially arbitrary horizon at which excavation ceased. Comprised of several features in the form of four postholes and the corner of a timber lined pit/well. These features were partially preserved by waterlogging. A cobbled surface may be contemporary with the structures. A number of other non contemporary deposits may be subsequent dumping.

Phase II
Complex episode of dumping.

Phase III
Two cuts, one probably a posthole, the other may be the corner of a pit.

Phase IV
A series of dumped deposits.

Phase V
Modern disturbed deposits, all or most activity relating to the construction of adjacent buildings.

The complex series of medieval archaeological deposits encountered in the excavation consist basically of dumped material overlaying structural activity. The accumulation of dumped deposits are consistent with what may be expected of a medieval backyard and clearly represent a change in usage from the earlier structures. Interleaved between the dumped deposits are the posthole and possible pit of Phase III. The evidence of this activity is to scant to permit further informed comment. The presence of a cobbled surface along with a timber lined pit/well and a series of postholes are again consistent with a backyard, but one which is in "active" and organised usage where surface accumulation and dumping do not occur. Such structural organisation in a backyard may be most likely to occur immediately adjacent to the property to which the land block belonged; in this case, probably one fronting onto St Andrewgate.
The absence of later medieval and post medieval deposits at the site suggests either limited activity or the removal of deposits in the past.

Phase	Period	Lowest OD	Highest OD
V	modern	15.09	15.98
IV	medieval	14.88	15.34
III	medieval	14.93	15.23
II	medieval	14.82	15.10
I	medieval	14.75	14.90

Archaeological potential and implications

The excavation has shown that in the area of the trench at least, post medieval and the latest medieval deposits do not survive. At the point at which medieval archaeology does survive however, these deposits have been seen to be intact and well stratified.

Period by Period Analysis

Roman (<5th century)
Deposits of this period were not recorded but are likely to survive. Cartographic evidence suggests the site lay over a probable "berm" between the Legionary Fortress and its associated ditch.

Anglian & Anglo-Scandinavian (5–11th centuries)

Deposits of this period were not reached but are likely to survive.

Medieval (11–16th centuries)
All the deposits encountered relate to this period. The structural elements as well as the dumping may relate to a medieval backyard, although used for different functions through time.

Post-medieval (16–19th centuries)
No deposits of this period were encountered. Any such material would appear to have been lost to modern activity.

Modern (late 19–20th centuries)
Modern material is represented by the present day concrete slab ground surface and the intrusive construction related deposits of Phase V.

All the intact archaeological deposits were to some extent "damp" through anoxic water logged conditions and were only encountered at the very lowest parts of the trench. All of those archaeological deposits that are waterlogged are likely to be of considerable significance particularly given the presence of timber structural activity.

Recommendations

Further examination at the site has the potential to yield important additional information should the integrity of valuable, particularly waterlogged, deposits be threatened. If care is given to the depth of any new foundation and services such a threat may well be negated.

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Wenham L P 1970	'Discoveries in Kings Square, York, 1963'. YAJ 42 165-168.
Widdington T 1897	Analecta Eboracensia.
YAT 1991	Report on an archaeological evaluation at St Andrewgate, York. Phase I - Borehole Survey.
YAT 1993	Report on archaeological evaluation of land behind St Andrewgate and Spen Lane.

Maps

Ordnance Survey: Historical Map. Roman and Anglian York. 1988.
Ordnance Survey: 19th and 20th century maps of City of York area.

YCL : York City Library (Central ref. section). Historic City maps archive.

APPENDIX 1

Context listing

1. Deposit, concrete slab and rubble hard-core. 10YR 8/3.
2. Deposit, rubble and s. silt. 10YR 5/3.
3. Fill, limestone fragments and chippings. 5Y 7/2.
4. Deposit, rubble and disturbed archaeological deposits.
5. Deposit, clay. 10YR 5/6.
6. Deposit, clay. 10YR 5/6.
7. Deposit, clayey silt. 10YR 3/2.
8. Deposit, stone. 2.5Y 7/6.
9. Deposit, stone. 2.5Y 7/6.
10. Deposit, silty clay. 10YR 3/2.
11. Deposit, stone and clayey silt. 10YR 5/4.
12. Fill, silty clay. 10YR 3/1.
13. Deposit, silty clay. 2.5Y 4/2.
14. Cut.
15. Cut.
16. Deposit, silty clay – clayey silt. 10YR 3/2 – 2.5Y 4/2.
17. Posthole fill, clayey silt. 7.5Y 4/4.
18. Posthole cut.
19. Posthole fill, clayey silt. 7.5Y 4/4.
20. Posthole cut.
21. Posthole fill, clayey silt. 7.5Y 4/4.
22. Poshole cut.
23. Posthole fill, clayey silt. 7.5Y 4/4.
24. Posthole cut
25. Deposit, clay. 10YR 3/1.
26. Cobbled surface
27. Deposit, slightly. silty sand. 10YR 6/8.
28. Fill of 'L' shaped structure, clayey silt. 10YR 3/1.
29. Fill of 'L' shaped structure, sl. clayey silt. 10YR 3/3.
30. Deposit, clayey silt. 10YR 3/2.
31. Deposit, mortar. 10YR 7/3.
32. Deposit within 'L' shaped structure, gravel and silty clay. 10YR 5/6 – 5/1.
33. Modern cut.
34. Modern cut.

APPENDIX 2

Finds Catalogue

Context	Description
5	Shell, 0.010kg 1 oyster shell Brick and Tile, 0.200kg 3 fragments
6	Brick and Tile, 0.400kg 4 fragments
7	Total Pottery – 1 sherd, 0.025kg Medieval Pottery Brandsby type ware, 13–14th century 1 body sherd Animal Bone, 0.025kg 2 fragments
10	Total Pottery – 86 sherds, 1.875kg Medieval Pottery: Gritty ware, York glazed ware, Brandsby type ware, Humber ware, 13–14th century 4 rim sherds 4 base sherds 6 handle fragments 72 body sherds Animal Bone, 1.525kg 89 fragments Shell, 0.025kg 3 oyster shells Brick and Tile, 3.75kg 16 fragments Stone Mortar, 0.300kg 1 fragment Stone, 0.025kg 2 ?jet fragments Slag, 0.025kg 1 fragment Fe object, 0.010kg 1 object
11	Animal Bone, 0.010kg 1 fragment Brick and Tile, 1.15kg 1 fragment

12 Total Pottery – 3 sherds, 0.025kg
Medieval Pottery:
York glazed ware and Brandsby type ware, 13 – 14th century
3 body sherds

Animal Bone, 0.325kg
11 fragments

13 Total Pottery – 4 sherds, 0.050kg
Medieval Pottery:
Brandsby type ware and Humber ware, 14–15th century
4 body sherds

Animal Bone, 0.075kg
3 fragments

16 Total Pottery – 77 sherds, 1.050kg
Medieval Pottery:
Gritty ware, Brandsby type ware, Scarborough ware, Humber ware, 14th century
3 rim sherds
2 handle fragments
1 base sherd
71 body sherds

Animal Bone, 2.200kg
122 fragments

Shell, 0.25kg
4 oyster shells

Brick and Tile, 2.15kg
13 fragments

Pottery Summary

The fabrics represented at this site range from 11th–12th century gritty ware, through York–glazed ware, Brandsby type ware and Scarborough ware to Humber ware. There are only a limited number of Gritty ware sherds, presumably reflecting the fact that excavation ceased before 12th century horizons were reached. Equally a lack of late medieval and post–medieval sherds (e.g. Cistercian ware) is probably due to the removal of later deposits at some time prior to the present excavation. Noteworthy is a partial seal with a bird design in Brandsby type ware from Context 10.

APPENDIX 3

Ceramic building materials

S. Garside-Neville

Roman material

There is a small sample of Roman CBM, comprising brick and tegula. Both appear to be residual.

Medieval material

The forms of roofing that show no method of suspension (that is to say no peg or nib) are called plain roofing. There are several samples of these. One fragment in context 6 is a fabric that begins in to appear only in the 14th century. A complete peg tile is present in context 10. It is a typical example of York peg tile, having a central square peghole, with its size being about average.

Of particular note is the proliferation of the early medieval roof tile system (curved and flanged) which mimics the Roman type. The curved tile comes in either a green to brown glaze, mostly covering only the top of the tile, or in an unglazed version. The flanged tile (distinguishable from the Roman tegula by its small flange ad medieval fabric) seems to have no glaze. However, there is one fragment from context 10 which has a dark brown glaze and a nail hole which could be the body of a flanged tile, but may be a glazed pegtile (which would be unusual in York). There is also another fragment from context 10 which could be a flanged tile body piece, which has a green glaze. One possible plain tile from context 10 has a circular peghole, but, again this may be a flange body fragment judging by the thickness and the fabric.

Context 16 may date to the 12th century, as the possible plain roof tiles are too abraded to be fully diagnostic. However, one of the fragments of flanged tile has mortar along a broken edge which may signify reuse.

Context	Form	Date
5	Plain roofing	13-15th
6	Plain roofing	14-15th
10	Glazed curved, curved, flanged, peg	13-15th
11	Roman brick	Roman
12	Plain roofing, peg	13-15th
16	Curved, ?plain roofing, flanged, glazed curve, tegula	?12th

APPENDIX 4

Assessment of Animal Bones

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One box of animal bone weighing 4.05kg was examined at the West Yorkshire Archaeology Service laboratory. The material was rapidly scanned and recorded by context with most fragments identified to element and species, where possible, using the laboratory faunal comparative collection. Fragments of mammal vertebrae and ribs were not identified to species but were recorded as 'Large mammal' (cattle, horse, red deer) or 'Small mammal' (sheep, dog, roe deer). Small bone chips and undiagnostic shaft fragments were recorded as unidentified. Some of these fragments would be identifiable to species level should a comprehensive analysis be required.

In addition to the number of fragments several other variables were quantified for each species, as follows:

1. Completeness – the number of complete bones, excluding small elements such as phalanges.
2. Fusion – the number of fused and unfused epiphyses.
3. Measurements – the number of potential measurements that might provide relevant data on species size and conformation or sexual dimorphism.
4. Butchery – the number of fragments bearing distinct evidence of butchery suggesting methods of slaughter or dismemberment.
5. Pathology – the number of elements showing signs of disease, injury or malformation.
6. Dentition – the number of ageable jaws.

These quantifications are presented in Table 1 by context along with notes of any significant assemblages features.

The collection contains only 242 fragments of hand-collected bone from six contexts representing some eight species: cattle, sheep/goat, pig, horse, dog, domestic fowl, domestic goose and duck. All the bone is in good condition being firm and solid. Most is mid-brown in colour but 48 fragments are stained black, probably from a waterlogged environment. The stained bone was noted in contexts 10 (12%), 12 (100%) and 16 (37%). Very few fresh breaks were noted.

Over half of the fragments derive from Context 16 (Phase II) and over one third from Context 10 (Phase IV), by fragment count and bone weight (Table 2). Of the 242 fragments examined 100 (41.3%) were identified to species: cattle (33 fragments), sheep/goat (24), pig (16), horse (2), dog (1), deer (1) and bird (23) (Table 3). The majority of the remainder (56.6%) comprise ribs and vertebrae of major domestic food animals.

The assemblage is highly fragmented and contains a large frequency of butchered bone, although not all bear distinct butchery marks. Cattle bones bore heavy chop marks around the main limb joints: scapula/humerus, humerus/radius and pelvis/femur. One cattle mandible bore a chop mark on the buccal surface and numerous metapodial fragments are fractured in a manner suggesting these bones were smashed for marrow extraction. One horse 1st phalanx from Context 10 has knife marks on the posterior of the proximal articulation, probably caused during skinning of the animal. No complete bones were recovered from domestic food animals, with the exception of goose and domestic fowl bones. The limited dental and epiphysial fusion data indicate the slaughter of mature or elderly cattle and sheep and adult pigs. The bird bones are also from mature individuals and no species is represented by neonatal or juvenile bones.

A near complete dog skull from Context 12 provided some measurements (Tables 1 and 4) which indicate a mesaticephalic breed, e.g. a fox-terrier type. This is untypical of dogs recovered from medieval deposits in York and other cities which tend to be more gracile with long slender muzzles "not unlike a modern Border Collie" (O'Connor 1984, 47). The skull displays a square-shaped hole 25 by 22mm on the left side of the perietal bone and a similar hole 20 by 28mm in the occipital bone at the base of the brain case. The 'wounds' suggest the skull was punctured by a stick or stake and would have caused the death of the dog, although this could have occurred *post-mortem*. Similar wounds have been observed by the author in a dog skull from Skelton Mill, West Yorkshire (WYAS, in prep) with sharp wooden sticks still embedded *in situ*.

Conclusions

This assemblage contains intensively butchered bone and is typical of bone deposits deriving from a mixture of domestic and secondary carcass division waste. There is little evidence for primary deposition, with the possible exception of the dog skull from Context 12, although no other dog elements were noted. Although the assemblage is small it is not in character with other medieval deposits from York in respect of the lack of evidence for the slaughter of juvenile or prime meat animals and the intense butchery patterns. Deposits of similar character have been noted from Roman deposits at Castleford, West Yorkshire (Berg, in press) where the slaughter of elderly and senile animals and the intense butchery of all elements is a feature of 1st century deposits prior to the establishment of secure supply lines to the fort. The dog skull from Context 12 is from a breed type that is more typical of the post medieval period or the Roman period, when far greater variability in dog sizes and shapes existed than during the medieval period.

Given the excellent condition of the bone and the indication of waterlogged deposits it is recommended that provision for bone assessment and possible analysis should be made for any further works carried out on Site 1995.7 with priority being given to any sealed and undisturbed deposits. A programme of wet sieving should also be included for the recovery of fish, bird and small mammal bones.

The retention of the small animal bone assemblage from Site 1995.7 as part of the archive is not considered to be necessary if it is of medieval or post medieval date, although it is recommended that the dog skull be retained and archived for possible future reference. However, if there is a possibility that the darker, waterlogged bone is derived from primary or redeposited Roman deposits then the remains should be retained as part of the site archive.

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References

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O'Connor, T.P., 1984, *Selected Groups of Bones from Skeldergate and Walmgate*, The Archaeol. of York, Vol. 15.1

Animal Bone from St Andrew Gate, York – Site 1995.7

Context	Wght	W/L	Species	N	Comp.	F	NF	Meas.	Butch	Path	Jaws	Notes
7			L. mamm.	2								small fragments of rib and long-bone.
Subtotal	**43.3**			**2**								
10			Cattle	12				1			1	Partial lower jaw with M_1–M_3 in heavy wear indicating a senile beast of *c.*10–12 years. Jaw has been chopped on buccal surface below M_3. All bone in small fragments, majority butchered with many chopped down length of bone. Scapula chopped across acetabulum. Bone in good condition.
10		1	Sheep/goat	8		3			1			Pelvis chopped across top of acetabular rim. Bone in good condition.
10			Pig	7			2		1	1		Pathological bone growth on lateral aspect of distal humerus trochlea. Chop marks across width of distal shaft. Knife marks on medial edge of scapula. Tibia unfused at proximal and distal ends (<24 months). Ulna unfused. Bone in good condition.
10			Horse	1								Complete phalanx, in good condition.
10			Deer	1		1			1			Probably immature fallow deer. Distal humerus, just fused. Chopped across width of shaft at distal end.
10			Goose	5	1							Complete coracoid and long-bone fragments in good condition.
10		8	L. mamm.	38					7			Majority rib fragments. Knife marks across width of ribs and scapula fragment chopped across medial side. Vertebrae chopped longitudinally.
10		2	S. mamm.	19								Mainly rib fragments. Good condition
Subtotal	**1564.3**	**11**		**91**	**1**	**4**	**2**	**1**	**10**	**1**	**1**	
11			S. mamm.	1								Small fragment of rib.
Subtotal	**2.2**			**1**								
12		2	Cattle	2		1						One loose tooth and one distal humerus trochlea butchered longitudinally.
12		2	Pig	2								Two fragments of long-bone, joining.
12		2	Horse	1								Ulna fragment.
12		1	Dog	1				1				Almost complete skull, lower jaw missing. Cephalic index 63.64, Snout index 48.79, Snout width 42.70

Context	Wght	W/L	Species	N	Comp.	F	NF	Meas.	Butch	Path	Jaws	Notes
12		1	Dom.fowl	2	2							Humerus and femur fragments from mature individual/s, good condition.
12		4	L. mamm.	4					2			All rib fragments with knife marks.
12		5	Unident	5								Very small scraps.
Subtotal	**320.7**	**17**		**17**	**2**	**1**	**0**	**1**	**2**	**0**	**0**	
13			Cattle	2								Fragments of scapula blade and vertebra. (Fragments of daub included in bag).
Subtotal	**61.0**			**2**								
16		6	Cattle	17		4		6	1			Chopped radius shaft, good condition.
16		3	Pig	7		1	1				1	Lower jaw, m_4 and M_1 in wear, M_2 slightly worn, M_3 absent. M_1 possibly worn prematurely. Aged *c.*15 to 18 months. Distal tibia not completely fused (*c.*24 months).
16		8	Sheep/goat	16		6	1	4			1	Partial jaw with M_3 in full wear. Bone mostly good condition.
16		2	Dom.fowl	6	1							Bone in good condition, but fragments. All mature bones.
16			Duck	1								Coracoid, good condition.
16		2	Goose	9	1							Large fragments, good condition.
16		17	L. mamm.	45					2			All bone small fragments but in good condition. One fragment with knife cuts and one vertebra chopped.
16		10	S. mamm.	28					1			Majority ribs, two with knife cuts. All bone small fragments; good condition.
Subtotal	**2058.4**	**48**		**129**	**2**	**11**	**2**	**10**	**4**	**0**	**2**	
TOTAL	**4049.9**	**76**		**242**	**5**	**16**	**4**	**12**	**16**	**1**	**26**	

Key: **Wght** weight in grams; **W/L** blackened ?waterlogged bone; **Species**: L.mamm. large mammal (cattle, horse), S.mamm. small mammal (sheep, dog, roe deer), unident unidentified fragments; **n** number; **Comp.** complete bones; **F** fused; **NF** not fused; **Meas.** measurable; **Butch** butchery evidence; **Path** pathological; **Jaws** mandible with teeth.

Table 1. Animal bone data by context

Context	Phase	Wght (gm)	%	Fragments	%
7	IV	43.3	1.1	2	0.8
10	IV	1564.3	38.6	91	37.6
11	IV	2.2	0.1	1	0.4
12	III	320.7	7.9	17	7.0
13	III	61.0	1.5	2	0.8
16	II	2058.4	50.8	129	53.3
TOTAL		**4049.9**		**242**	

Table 2. Weight and number of fragments by context

Context / Species	7	10	11	12	13	16	Total
Cattle		12		2	2	17	**33**
Sheep/goat		8				16	**24**
Pig		7		2		7	**16**
Horse		1		1			**2**
Dog				1			**1**
Deer		1					**1**
Domestic fowl				2		6	**8**
Goose		5				9	**14**
Duck						1	**1**
L.mammal	2	38		4		45	**89**
S.mammal		19	1			28	**48**
Unident				5			**5**
TOTAL	**2**	**91**	**1**	**17**	**2**	**129**	**242**

Table 3. Number of fragments by species and context

Measurement*	mm
I	132.0
III	64.4
IV	(84.0)
XII	(27.5)
Cephalic index	IV*100/I
Snout index	III*100/I
Snout width	XII*100/III

* after Harcourt (1994)

Table 4. Measurements of dog skull from Context 12

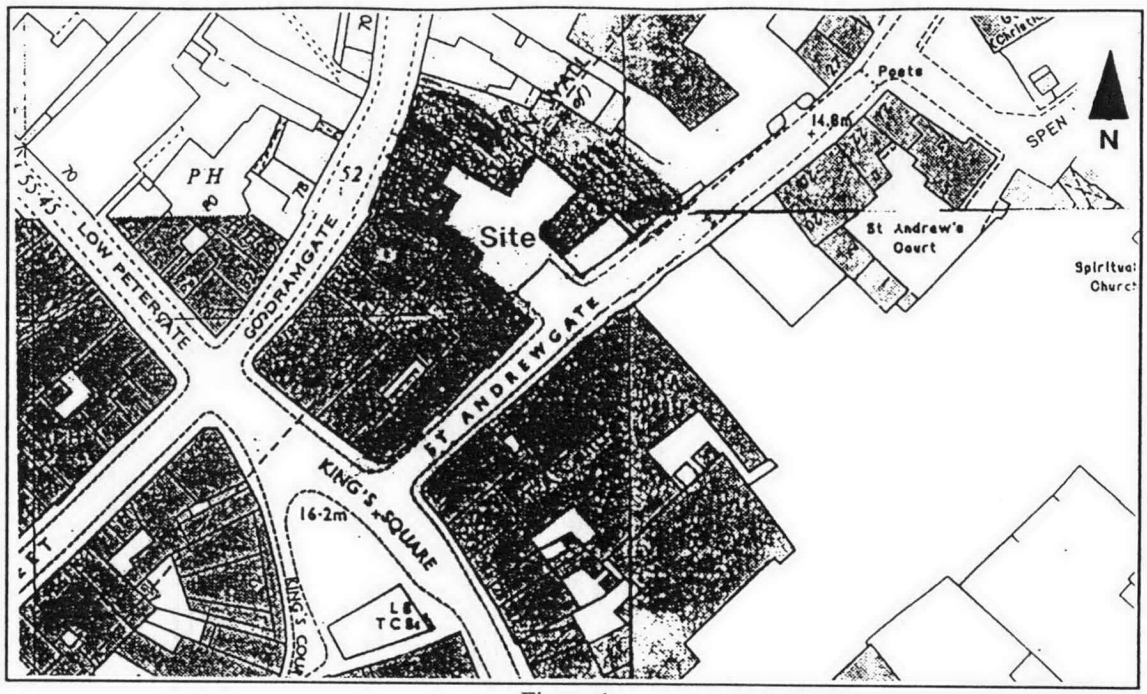

Figure 1.
Site Location Map. Scale 1:1250.

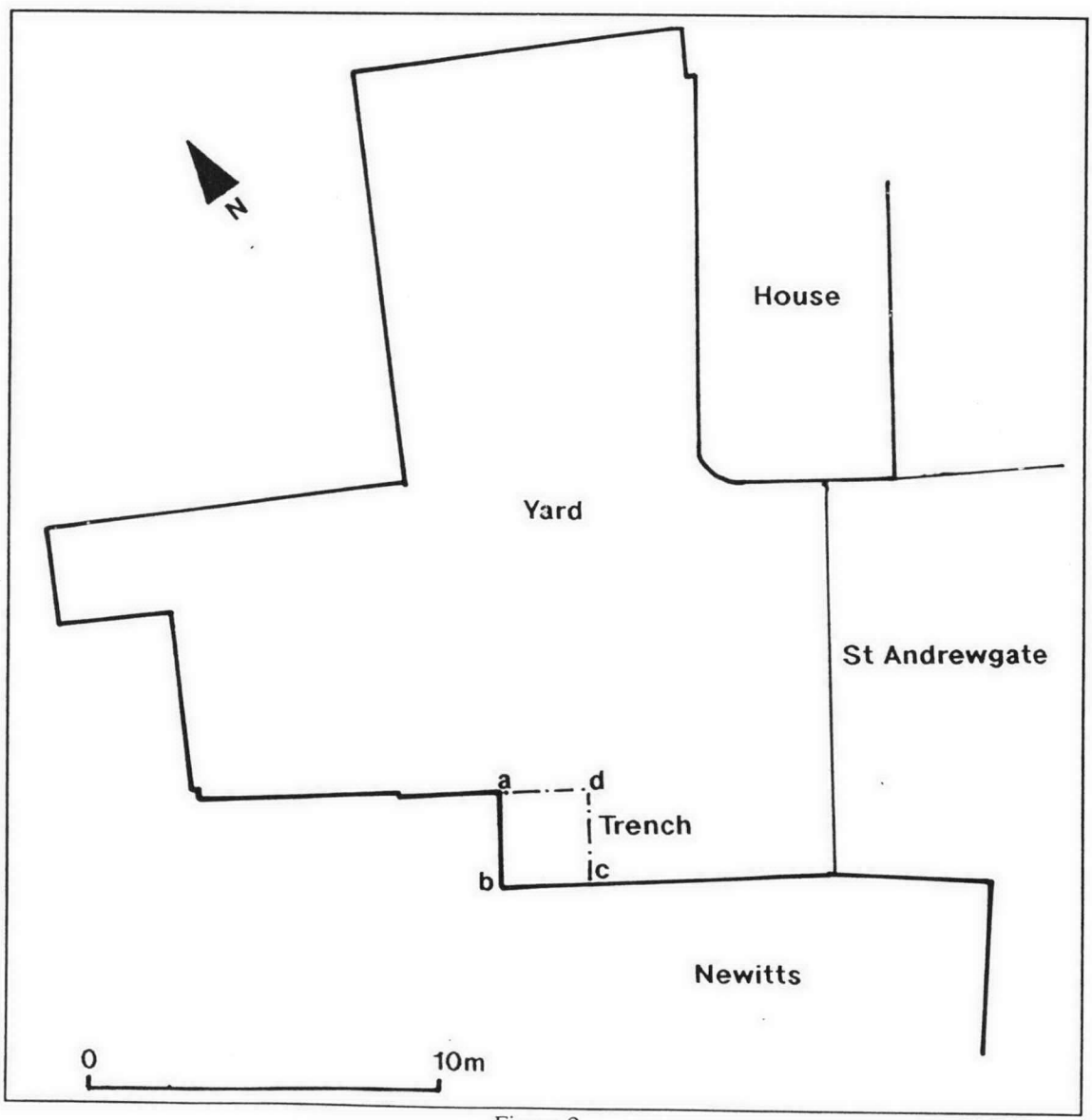

Figure 2.
Trench Location Plan.

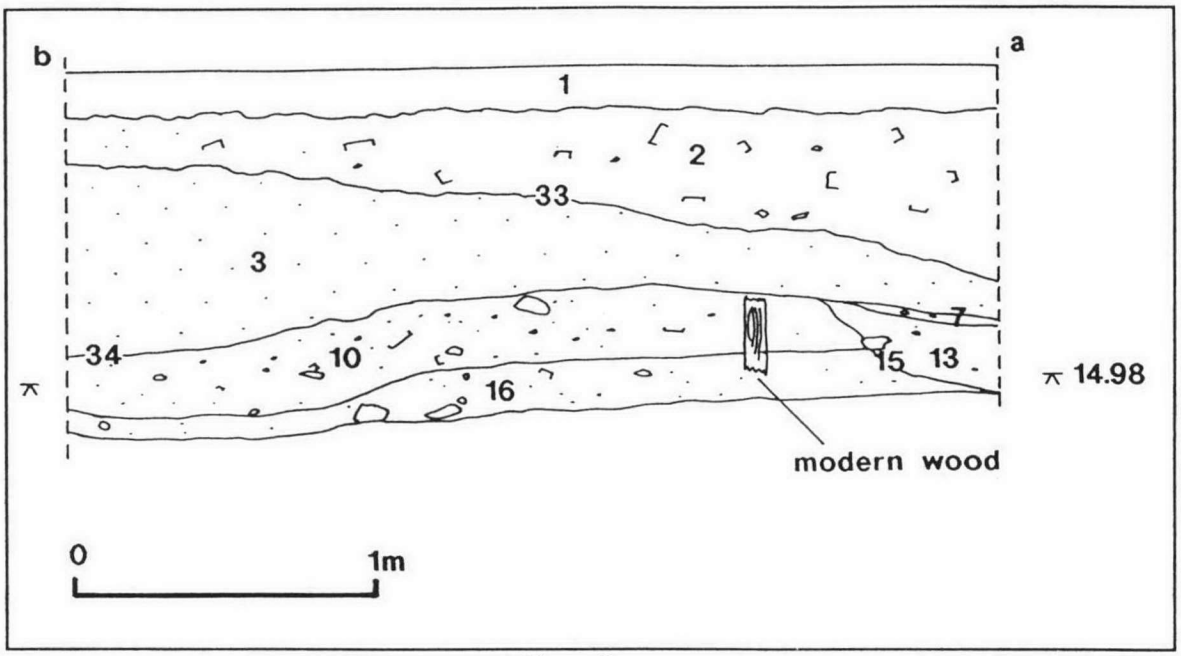

Figure 3.
East facing section.

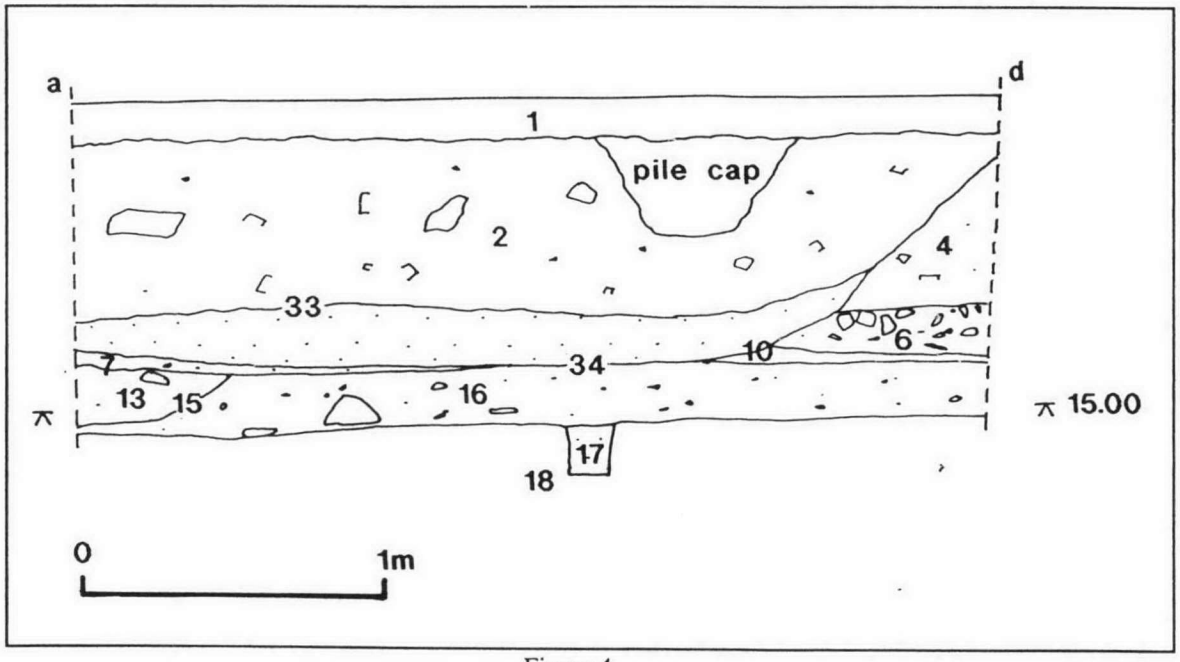

Figure 4.
South facing section.

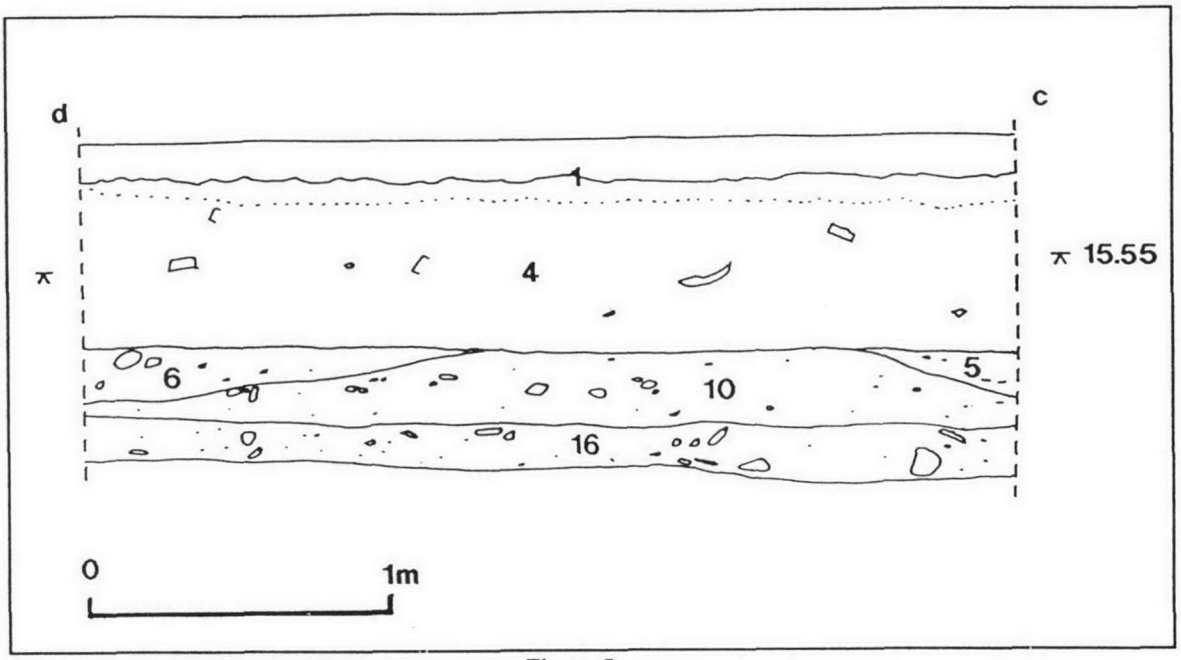

Figure 5.
West facing section.

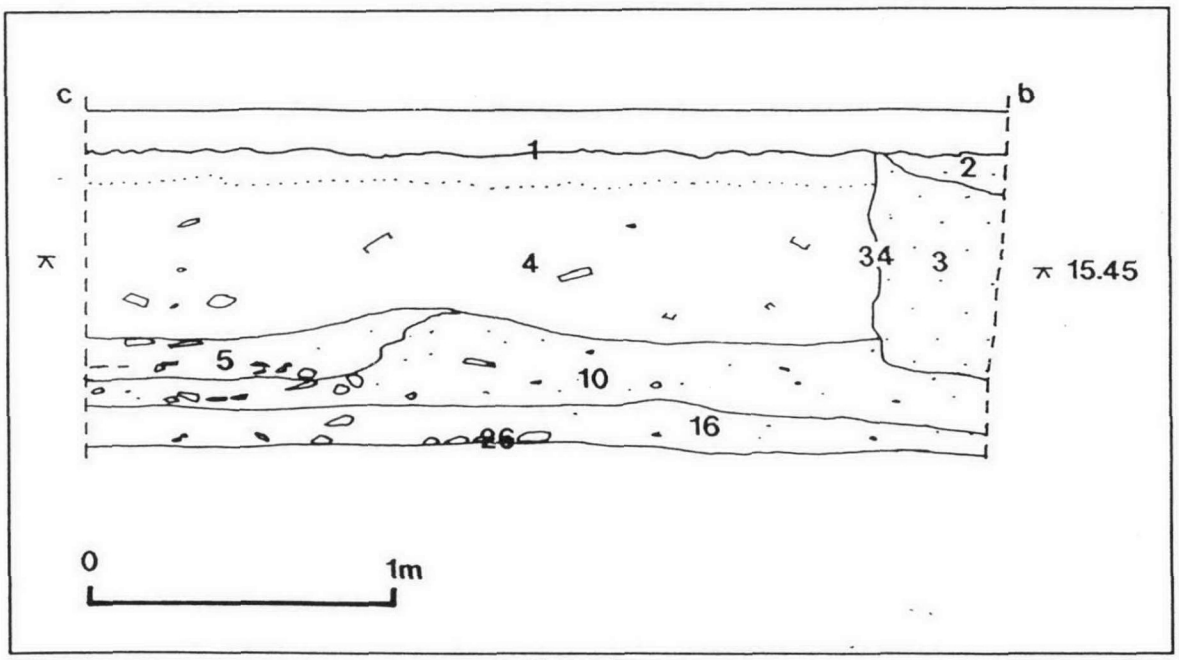

Figure 6.
North facing section.

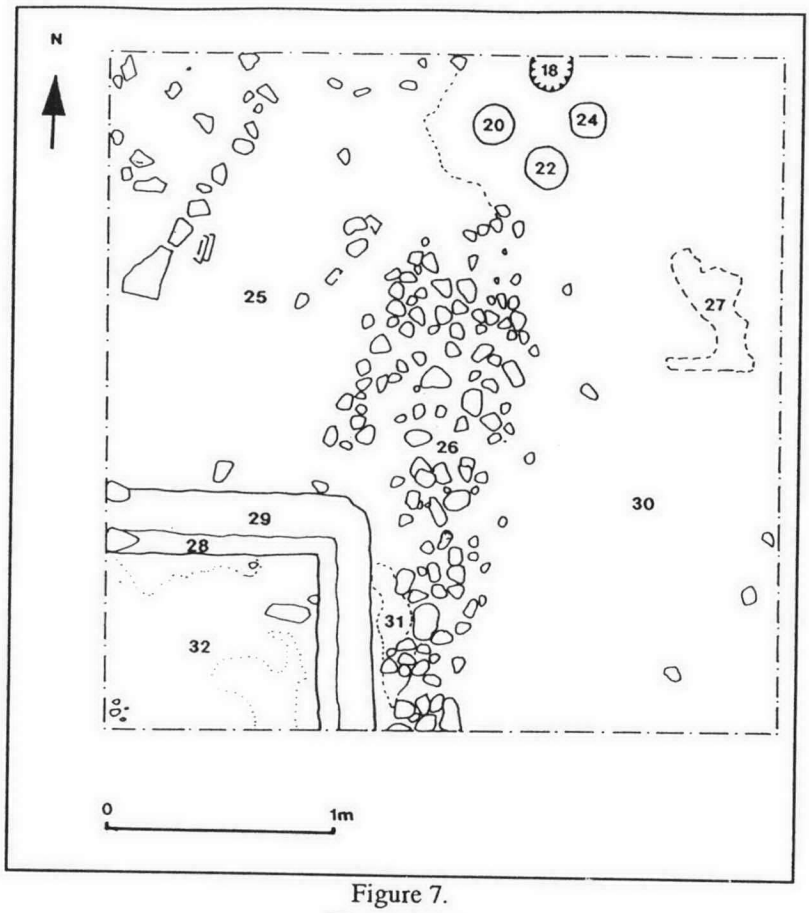

Figure 7.
Phase I Plan.

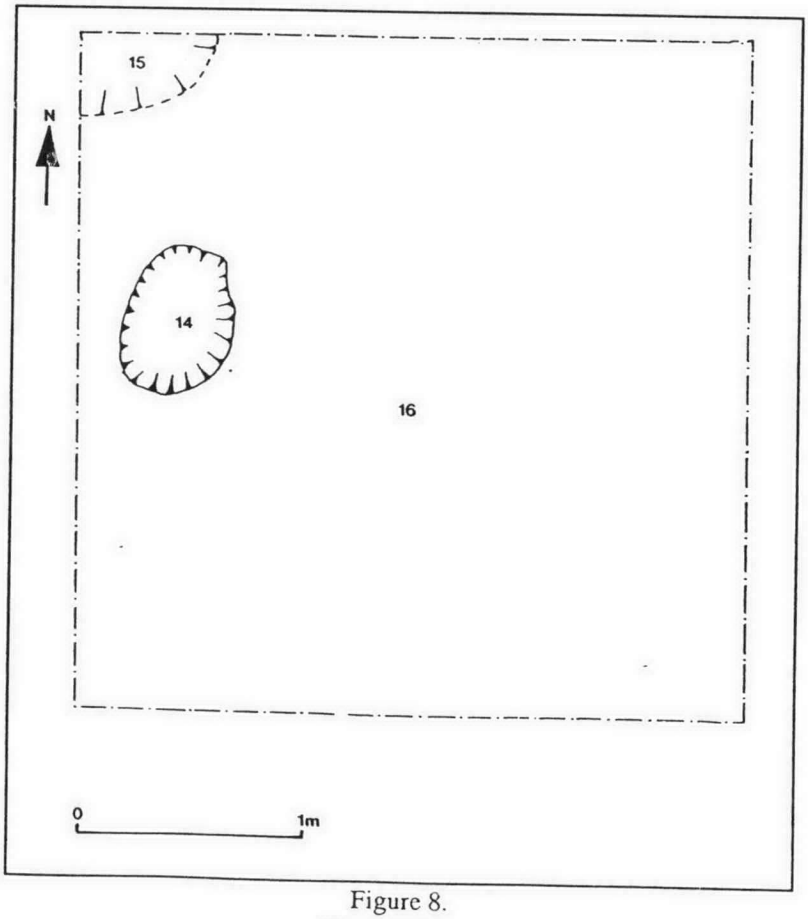

Figure 8.
Phase II Plan.

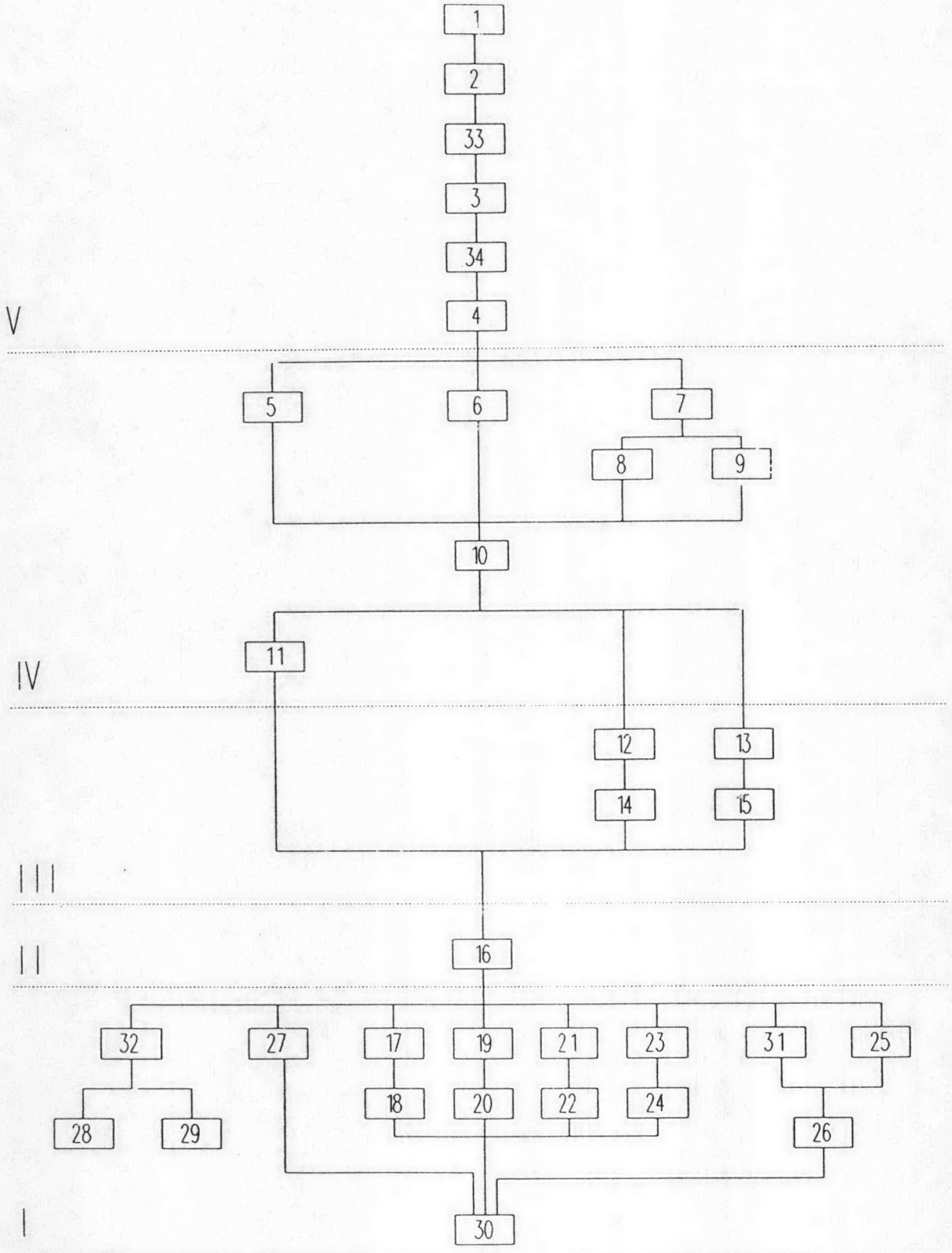

Figure 9.
Site Matrix.