EXCAVATIONS AT NORTH PETHERTON, SOMERSET, 1975

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INTRODUCTION

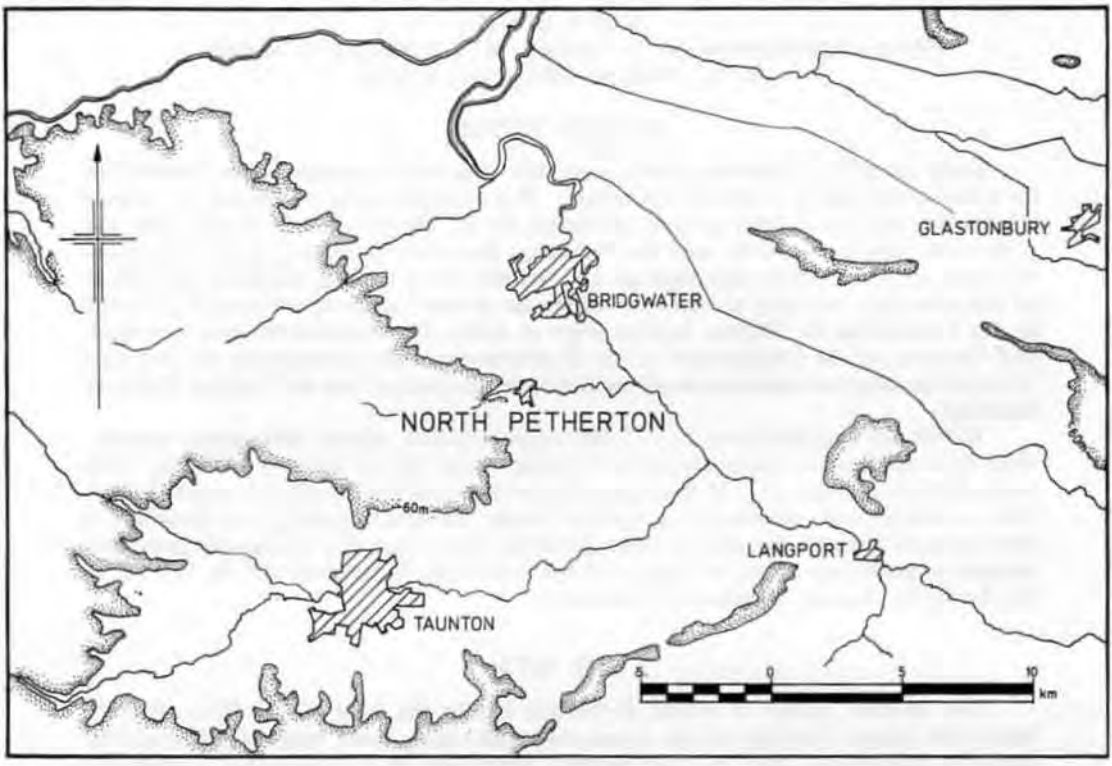
Early in 1975 a relatively small scale but intensive excavation was undertaken on a site in the centre of North Petherton. The available area comprised a roughly triangular piece of cleared ground, bounded by St. Mary's church to the east, the A38 trunk road to the north, and the Petherton Brook to the west (Fig. 2). The threat of future re-development provided an opportunity for a limited sampling excavation of this strategic, centrally placed, site within an attested historic settlement. Initiated by the Committee for Rescue Archaeology in Avon, Gloucestershire, and Somerset, and financed by the Department of the Environment, this investigation formed part of an archaeological rescue excavation and research project into the historic towns of Somerset.

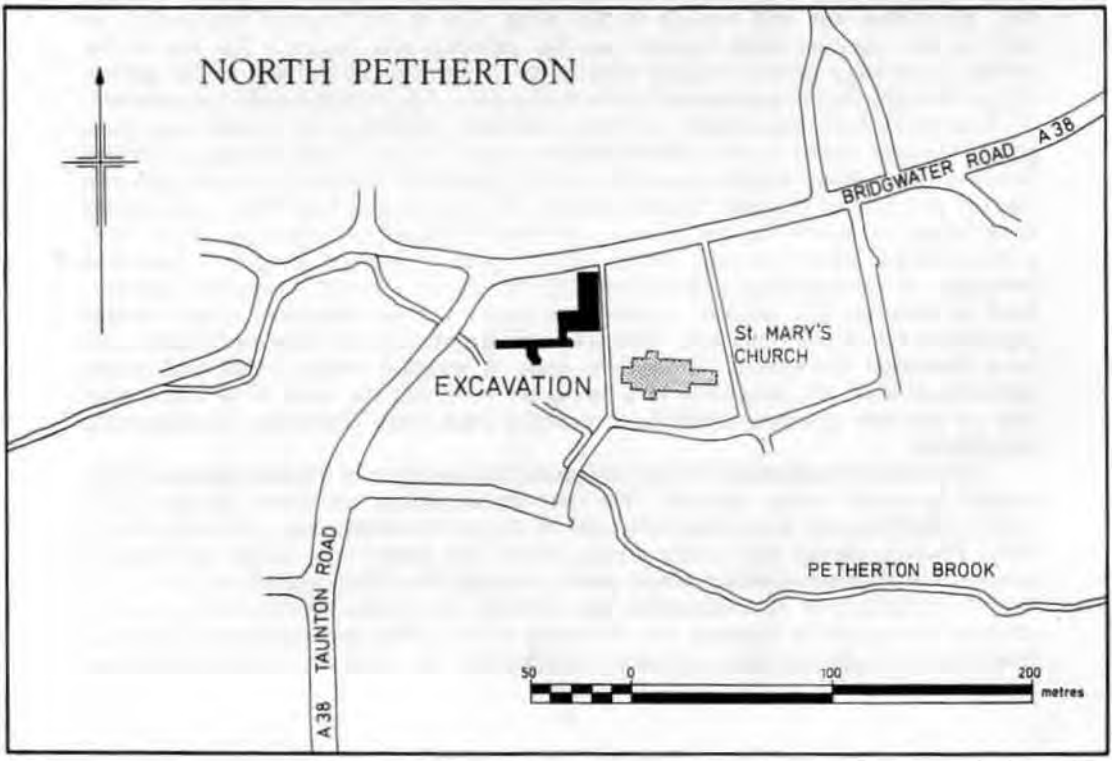
Within an available area of *c.* 2,500 square metres, almost 400 square metres were excavated over a six-week period. Commencing late in January 1975, the work was undertaken using a J.C.B. mechanical excavator and a team of six to eight diggers. The two major areas selected for excavation were intended to provide a representative cross-section through the site. In most instances, the excavation of the archaeological deposits exposed was total. All finds and records of the excavation will be housed in the Somerset County Museum at Taunton.

THE SITE

The modern village of North Petherton lies to the west of the River Parrett, below the eastern foothills of the Quantocks and nearly three miles (4.5 kilometres) south of Bridgwater (Fig. 1). The existing settlement has a substantial population and the parish is one of the largest in Somerset. Prior to the Conquest, and at Domesday, the manor was held directly by the King. One of the features recorded as an entry in the separate Geld Inquest was the existence of a church.[1] The fact of this church on a large estate, coupled with royal ownership and the size of the parish, argues strongly for the presence of a Saxon minster. This in itself would not necessarily have created or maintained an urban economy, although the manor may have gained further status as the administrative centre for the Royal Forest of North Petherton during the Middle Ages. By the 14th century it had acquired the right to a market and a three day fair. Despite claims for town status,[2] no clear evidence for town officers or urban life can be cited, although it should be noted that in the 1490s a list of fines refers to a part of the parish called 'Petherton Burgus'.[3] The close proximity of an expanding and commercially successful port and town at Bridgwater, from at least the 13th century, would have been a serious hindrance to any similar aspirations for North Petherton. Whatever its legal status, the settlement appears to have flourished throughout the Middle Ages. A position within a rich and varied agricultural area, the proximity of a navigable river and the route of a major road link to the west country, formerly a turnpike road, have doubtless sustained that importance.

The natural foundation for the settlement is a low spur of Triassic Keuper Marl, capped by recent valley gravels. This spur stands above the River Parrett, overlooking the Somerset Levels and is backed by the south-eastern edge of the Quantock Hills. From a deeply cut combe among these hills issues one of the east-flowing streams, the Petherton Brook, which passes through the village centre and forms the western boundary to the excavation site. During the course of excavation, opportunities were taken to examine the character of the valley gravels beneath the site. Four discrete layers or phases of natural deposition were observed, three of which are





Figs. 1 & 2. Location Plans

represented in the north-south Main Cutting section (Fig. 6 MS. 1). Nowhere was the Keuper Marl seen; the earliest deposit being a mixture of clay and coarse gravel (F. 71). Above this and dipping to the south followed a thin layer of stiff, clean clay (F. 79) sealed in turn beneath a finer mixture of sand and gravel (F. 83). In a small trial pit dug to the south of the main excavation trenches the lower clay/gravel (F. 71) was seen again, with no sign of the overlying deposits. Observation of these deposits suggests that a buried channel exists with an east-west axis, probably passing beneath St. Mary's church. From the nature of the material, an ancient water flow considerably in excess of modern flows in the area must be inferred. The east-west axis of the channel is not greatly at variance with the course of the modern stream and could be regarded as a forerunner which lay slightly to the north. Assuming this to be the case, the nature and origin of the deposits which eventually choked the watercourses are interpreted as follows.

The basal mixed layer of clay and cobbles is a composite deposit of Keuper Marl-derived clay, quartz and sandstone pebbles, and fragments of slate. All three of the latter components could originate from outcrops of Permo/Triassic Upper Sandstone and Middle Devonian Morte Slates lying immediately to the west of North Petherton. From its character, layer F.71 is interpreted as a solifluction deposit. Above it, the clean fine clay, F.79 represents slow deposition in still or low volumes of water, the clay itself originating as re-deposited Keuper Marl and other finely weathered rock particles. The deposition of sand and gravel, F. 83, indicates a return to a more active erosion/deposition cycle with increased water flow volumes. A major outcrop of the Morte Slates, upstream, is the source for the bulk of this deposit.

Essentially, these deposits and the events they represent can be accounted for in a peri-glacial environment. The solifluction debris produced by freeze-thaw conditions appears to have migrated eastwards, filling the former stream valley. A period of more intense cold may account for the clay deposition when run-off of water was small and active transportation and deposition of material at a minimum. The eventual infilling of the buried channel by sand and gravel could then be the result of rapid run-off and erosion during the early post-glacial period when the melting of the ice and frozen ground released great quantities of surplus water. Erosion of the deep combe at Kings Cliff Wood a mile or two upstream is probably the principal source for the great spread of peri-glacial and aluvial deposits beneath North Petherton. Fast flowing water or solifluction debris, eroding where the gradient was steepest, deposited the bulk of the transported material on the gentler slopes and level valley bottom of the River Parrett.

Nothing to indicate the period of this activity, in the way of faunal or plant remains, was recovered from these deposits. As suggested above, however, peri-glacial and post-glacial environments are the most likely contexts accounting for their presence. Conditions prevailing in Somerset, perhaps 12,000 to 15,000 years ago, would have formed a suitable background to their deposition. The fourth wholly natural deposit observed in the excavation covered the most westerly six or seven metres of the South-West Extension Cutting, where it approaches the modern stream course. Here, a relatively thin layer of yellow alluvial clay sealed the gravel, F. 83. Periodic flooding and consequent deposition by the present stream account for this clay, the origin of which may be compared with that of the almost identical clay, F. 79, but resulting from differing climatic conditions.

THE EXCAVATION

Clearance of property and garden plots on Fore Street between St Mary's churchyard and the Petherton Brook made an area available for excavation. From a base point in the south-east corner of the site, a ten metre grid was established with reference to Ordnance Datum and the National Grid. The two principal excavation trenches were laid out in relation to this base point: an L-shaped Main Cutting and the narrow South-West Extension Cutting (Fig. 2). In the area available the positioning

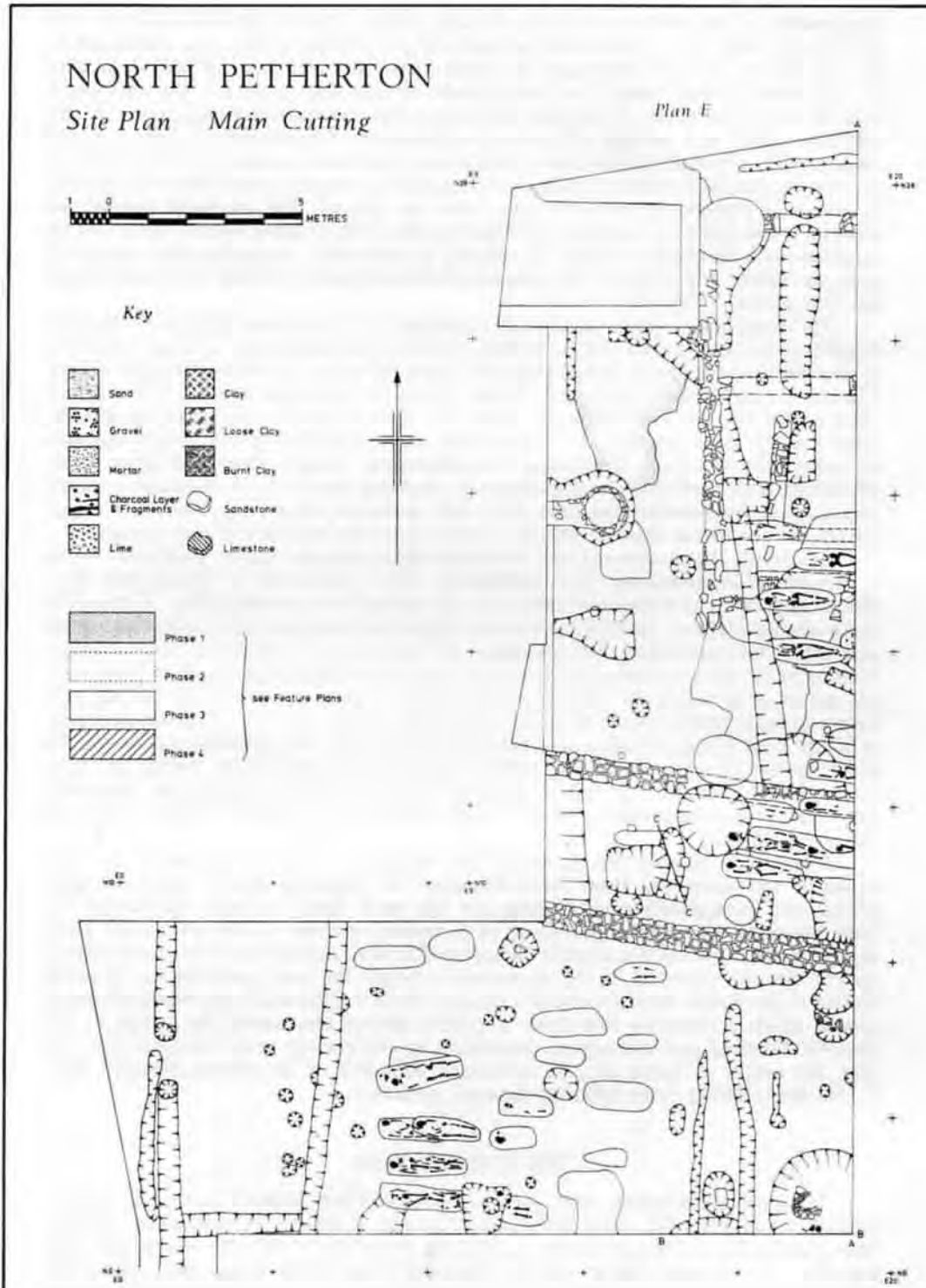

NORTH PETHERTON
Site Plan Main Cutting
Plan E
1 0 5
METRES
Key
Sand
Gravel
Mortar
Charcoal Layer & Fragments
Lime
Clay
Loose Clay
Burnt Clay
Sandstone
Limestone
Phase 1
Phase 2
Phase 3
Phase 4
see Feature Plans

Fig. 3

of the trenches was determined by the street frontage, St. Mary's church and churchyard, and the visible fall of the ground. Over a north-east to south-west axis of slope the modern ground surface falls from 37·50 m to 35·00 m above O.D., beside the stream, in 60 metres.

Prior to excavation, the demolition of standing buildings resulted in a substantial layer of disturbed soil and building rubble covering the northern half of the site. In view of this and the thick layer of garden soil to the south, it was decided to employ machinery to remove this overburden. Thereafter, the excavation of archaeological features and levels was by hand. All features and layers were identified in numerical sequence, beginning with F.1. In the North-West Extension the prefix GF distinguishes features in a second numerical sequence. The details of stratigraphy and feature recording have been assembled in tabulated form and are deposited with the finds and records.

Post-excavation analysis of the stratigraphy and associate finds permits four broad phases of human activity to be distinguished. These are discussed in relation to both cuttings and in chronological sequence. Briefly the phases are summarised as follows:

Period 1. Late Saxon and early medieval domestic occupation: 10/11th century to early 14th century.
Period 2. St. Mary's churchyard annex: 14th-century cemetery.
Period 3. Late medieval reversion to tenements: 14/15th to late 17th century domestic occupation.
Period 4. Post-medieval tenements and buildings: late 17th century to modern.

Period 1. *Late Saxon and Early Medieval Occupation*

Over the greater part of the site, the depth and complexity of the archaeological stratigraphy was not great. The recognition of Period 1, in particular, depends upon a number of critical stratigraphic relationships to which, by inference, further associations with otherwise undatable features can sometimes be made. It must be emphasized that a considerable number of features lack any clear relationships or other diagnostic content. This, plus the probability of some destruction by later phases on the site, may have distorted the surviving evidence and therefore interpretation of this primary phase.

At least two sub-divisions are distinguishable on stratigraphic and ceramic grounds, the earlier phase, 1a, comprising a scatter of post-holes, gullies and pits. The most coherent group includes post-holes F.55, F.108, F.110, F.123, and F.126, the pit F.29, and probably the two gullies F.17 and F.23 (Fig. 5, Plan C). Beam slots and post-holes for one or more timber structures are indicated, but the evidence is too slight for speculation upon details of form or function. To the south and west of this group, further post-holes and pits are probably contemporary, but are difficult to interpret intelligibly or to associate with other undated features in this area. The second group includes F.31 a/b, F.84, F.113, F.120 and F.128 (Fig. 4, Plan B). From the pottery associated with all these features (Fig. 7, Nos. 1, 4, 10, 18-25, 27, & 30) as well as further residual material on the site (Figs. 7 & 8, Nos. 5-9, 12-16, 28-29, 31 & 34), the earliest identifiable phase of occupation is late Saxon, spanning the 10th to 12th centuries.

The second phase of Period 1 has been classified as 1b. Its most striking feature is a deep rectangular pit, F.125, which was sectioned by the east baulk of the Main Cutting (Fig. 5, Plan C). From its content this feature is confidently interpreted as a lime-burning pit, from which fragments of carbonised timber, lime, and partly reduced limestone were recovered (Fig. 6, MS.1). The nearest source for the Lias limestone is the Dunball area at the western end of the Polden Hills, and is easily accessible via the River Parrett. Also within the pit were fragments of sandstone derived from the Middle Devonian sandstones of the Quantocks. In addition to fire scorching, presumably from the lime burning, some stones showed evidence of rough dressing. Its

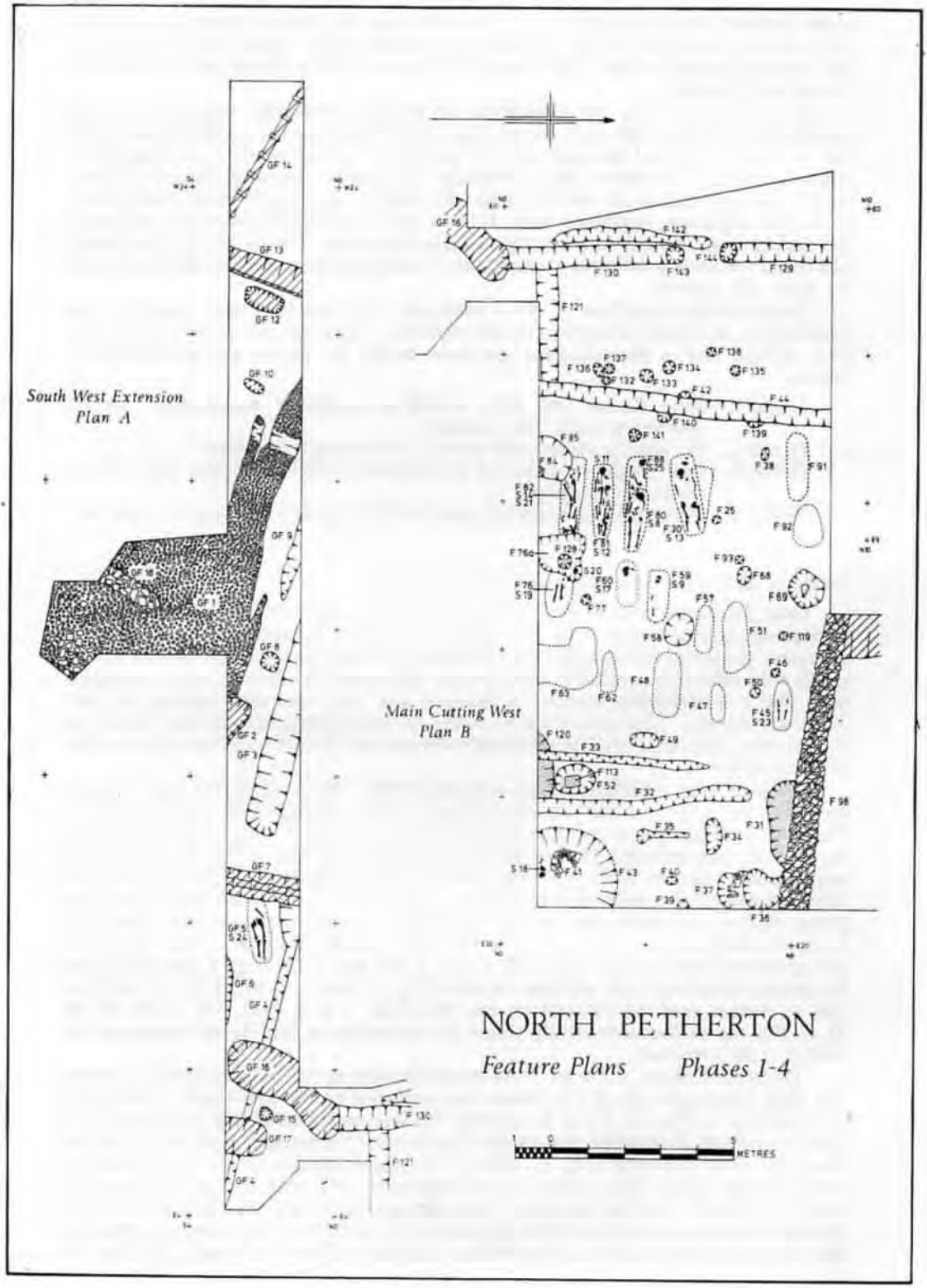

South West Extension
Plan A
Main Cutting West
Plan B
NORTH PETHERTON
Feature Plans Phases 1-4
METRES

Fig. 4

purpose achieved, the pit was quickly infilled and levelled. In function, it is likely to have been associated with the construction of the adjacent parish church.

In its present form the church of St. Mary's is for the most part a 15th-century structure, an outstanding example of the Somerset 'Perpendicular' style. Clearly, the erection of such a building was a major undertaking, requiring the importation of raw materials and special skills, To make available the great quantities of lime for the mortar required in construction, a lime-burning pit would logically be sited as close as possible to the structure. Its position in an apparently sparsely occupied area adjacent to the churchyard boundary, argues strongly for a direct relationship between lime pit and church building. The question is, which phase of church building? The available stratigraphic evidence points to the lime pit being no later than the 13th century, while from its ceramic content a period of operation during the 12th century is indicated (Fig. 7, No. 2). Despite the lack of visible pre-14th century fabric in the church, an earlier structure is known to have existed and since the lime pit contained, among other things, fragments of building stone, it points strongly to earlier phases of work in masonry.

The insertion of a substantial rubbish pit, F.131, into the fill of the lime-burning pit obliterated the greater part of it, but provided an approximate *terminus post quem* for its use (Fig. 6, MS.1). Pottery from the pit suggested infilling no later than the early 13th century (Figs. 7 & 8, Nos. 3 & 33). To the south pottery of the 13th or 14th century and earlier, in secondary contexts, probably derives from contemporary pits or occupation (Fig. 8, Nos. 32, 38, 39 & 41). Only three other pits, F.20, F.22 and F.122, can be fairly certainly assigned to this phase (Figs. 7 & 8, Nos. 17, 26, 36, 37 & 40); otherwise the impression given is of sparse or intermittent use of the area between the 12th and 14th centuries.

Period 2: The Medieval Cemetery

The appearance of an inhumation cemetery marks a fundamental change in the use of this area. Of an estimated 36 individuals represented, 25 recognisably articulated human skeletons were recovered and examined, although in many cases the bone was in poor condition. In general, survival varied according to the underlying soil, the burials to the south being most seriously affected by dissolution and leaching through the gravel, F.83. In some cases the bone had all but disappeared, while a number of graves were disturbed or scattered by later features. Density of burial was nowhere great, and superimposition, as in the case of S.2 over S.3 or S.8 over S.25, was rare. Large gaps in the northerly distribution of burials may be accounted for by subsequent destruction (Fig. 5, Plan C), but elsewhere the adverse soil environment has probably obliterated all traces of bone (Fig. 4, Plan B), particularly where graves are shallow. It was not possible to locate any clear boundary to the cemetery, although a probably contemporary burial, S.24, in the South-West Extension (Fig. 4, Plan A) suggests that it covered the greater part of the area between the stream and the present churchyard.

Since bone preservation was generally poor, the information obtainable from an examination of the remains is limited (Appendix III). Of the 25 identifiable individuals 6 were positively identified as male and 9 were female, with an estimated age range of between 19 and 45+. The apparent absence of young children may be accounted for by the destructive soil conditions, particularly as a number of smaller but empty graves were identified.

Of the graves themselves, all were apparently shallow, although their contemporary ground surface could nowhere be definitely ascertained. All were orientated in a general east-west direction with heads to the west, while some showed signs of rough grouping into north-south rows (Fig. 4, Plan B, Fig. 5, Plan C). Apart from a basically rectilinear grave cut, no trace survived of coffins, not surprisingly in such an unfavourable environment. The attitude of the majority of burials did however suggest some restriction either by a coffin or through the binding of the body in a shroud. Apart from stray sherds of pottery in a few graves (Fig. 7, No. 11) only one,

F.111, contained anything which might be described as grave goods. In this case an iron knife encased within the remains of a bronze-riveted wooden sheath (Fig. 9, No. 58) apparently accompanied a man, S.5. Nothing was found indicative of markers, either of stone or wood, for the graves, or of structures contemporary or in association with the cemetery. In view of the number of undated and unassociated post-holes and other features in the southern half of the Main Cutting, the possibility of such structures cannot be entirely ruled out.

At the extreme south-east corner of the Main Cutting, a major but ill-defined disturbance of the natural gravel, F.43, may be accounted for by an excavation followed by rapid infilling (Fig. 6, MS. 1 & 2). The only clues to its function or date are provided by fragmented human skeletal material within the predominantly gravel fill. It is suggested that a pit for the disposal of the dead, whether contemporaneously or following disinterment, is the most likely explanation. The human remains are probably to be associated with the remainder of the cemetery, their poor and fragmented condition being explicable by the effect of burial in porous acid gravel, and the suggested mode of burial.

The evidence points strongly to a medieval Christian cemetery, evidently an extension of that now surrounding the church immediately to the east. The date and period of use of the cemetery can be inferred from stratigraphy, content and morphology. No more than half the burials have stratigraphic relationships with earlier or later features on the site (Fig. 3, Plan E), but for want of other evidence, approximate contemporaneity of all burials is assumed. In no instance are features which are stratigraphically earlier than one or more burials demonstrably later than the 14th century. The upper time bracket is fixed by disturbances dating from at least the 16th century, in Period 3. Elsewhere, Period 3 appears to have elements belonging to the 15th century although not in direct association with the burials. A handful of graves contained potsherds ranging in date between the 11th and 14th centuries, but the skeletal material itself, lacking grave goods, provides no intrinsically useful dating evidence. From the layout of the cemetery, it appears that no great time span elapsed between the first and last burial. Despite one or two impingements, the majority of graves respect each other and are arranged with adequate spacing. Assuming that the graves were unmarked, this would suggest that, in most cases, the positions of earlier burials were known during the period of the cemetery's use.

On the basis of the evidence summarised above, St. Mary's churchyard received a substantial extension during the 14th century, almost doubling its present and presumed contemporary size. Exactly how long this remained in use cannot be determined, but during the 15th century the whole area apparently reverted to secular occupation, with the cemetery suffering obliteration. A century would seem to be an over-generous estimate for the use of this area for burial.

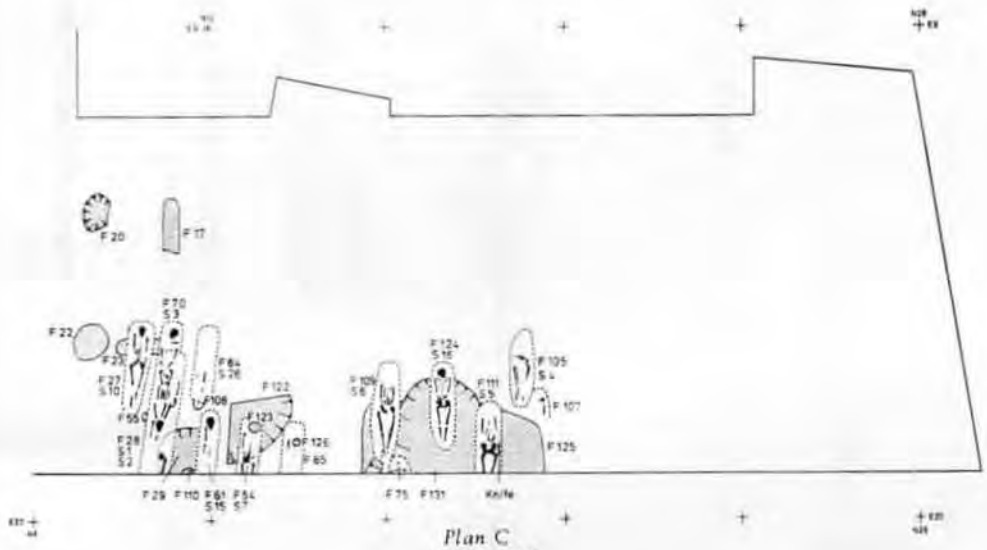
Period 3: *Late Medieval to 17th Century*

The features attributable to this period consist of pits, post-holes and gullies distributed throughout the site. A relative abundance of artefacts, chiefly pottery (Figs. 8 & 9, Nos. 35, 42-45 & 54), in combination with stratigraphic relationships, permits a clear definition of Period 3 and its content. Apart from scattered and sometimes unattributable features, three basic groups can be distinguished.

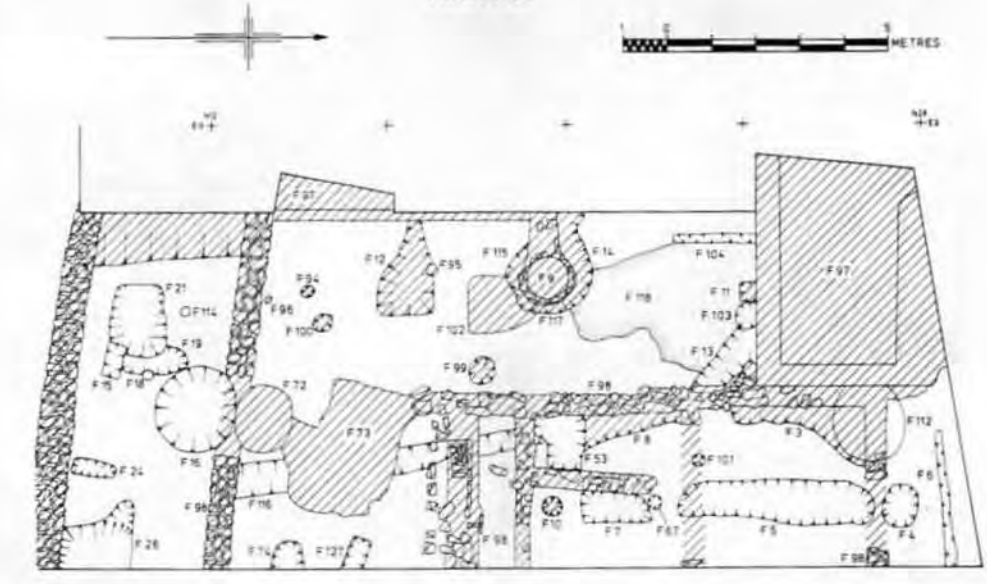
At the north end of the Main Cutting (Fig. 5, Plan D) post-holes and construction trenches indicate the former existence of a building fronting on to the main road (Building 3). The extensive disturbance in this area by the Period 4 stone foundations resulted in the recovery of a very fragmentary building plan. F.4, 5, 6 & 7, F.67, F.103 and F.104 suggest the foundation trenches for a timber-framed structure. Also in association were a gully, F.13, a well, F.112, apparently within the building, and the remains of a floor level, F.118. From the latter was recovered the remains of a fine, late medieval glazed jug (Fig. 9, No. 55; Appendix II) which strengthens the suggestion that Period 3 may begin during the late 14th or early 15th century. The presence of later 17th-century material from within some of these features probably

NORTH PETHERTON

Feature Plans Main Cutting North



Plan C
Phases 1&2



Plan D
Phases 3 & 4

Fig. 5

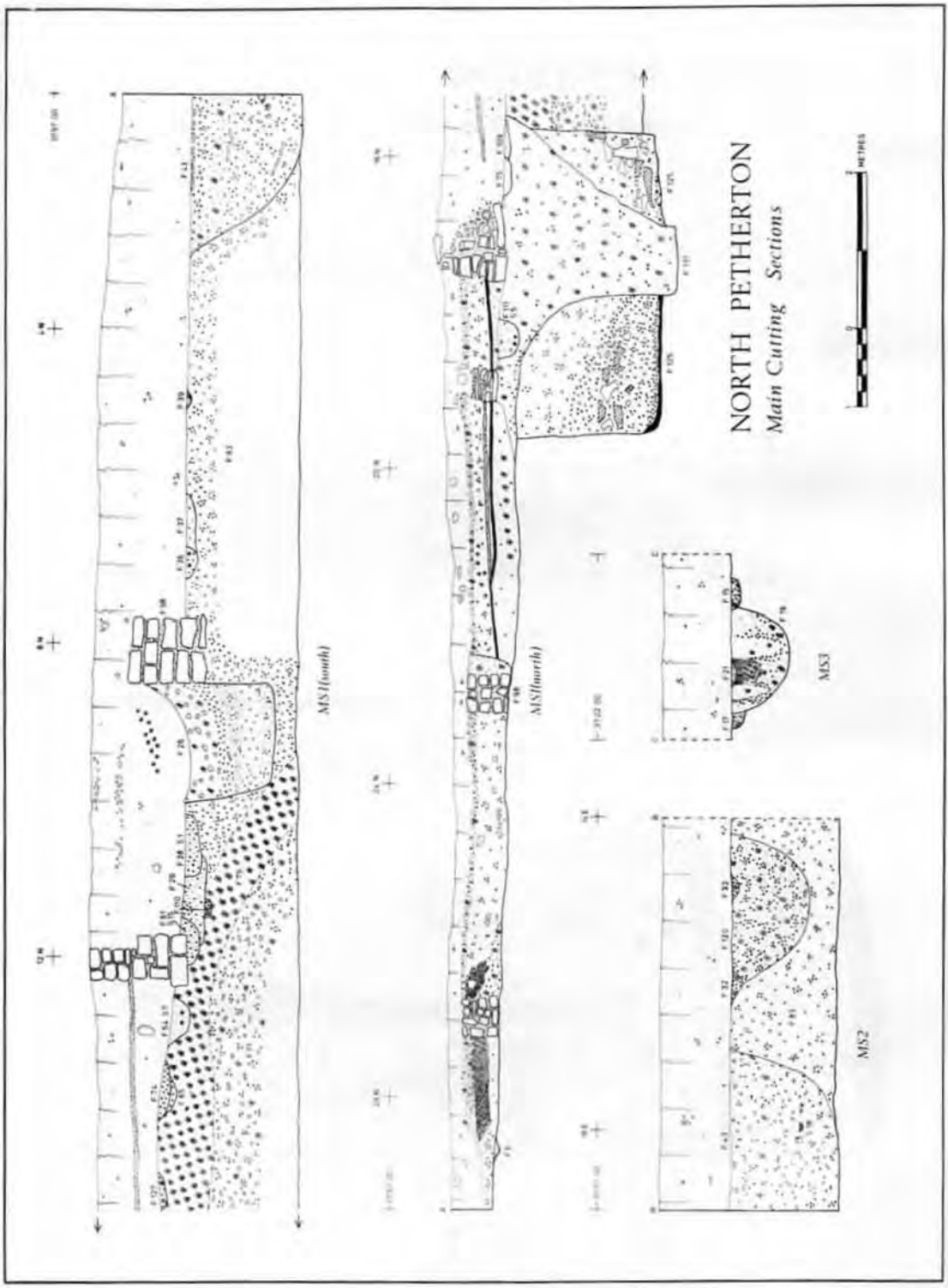

NORTH PETHERTON
Main Cutting Sections
MS1(south)
MS1(north)
MS3
MS2

Fig. 6

reflects a life span of 250 to 300 years for Building 3. Little else can be said of the form or history of this building, the plan of which may be more fully reflected in its immediate successor, Building 4, in Period 4.

To the rear of Building 3 a second concentration of pits and gullies extends as far as the south-east corner of the Main Cutting (Figs. 4 & 5, Plans B & D): the majority of pits occur as a group close to the predicted rear side of Building 3. They include F.16, F.19, F.21, F.24, F.26 and F.31, whose contents suggest mainly 16th and 17th century cess and rubbish pits. Beyond them and to the south lie two hearths, F.37 and F.41, gullies, F.32 and 33, and shallow depressions, F.34, 35 and 36, F.39 and 40, F.49 and F.52. These are interpreted as broadly contemporary traces of one or more timber-framed structures (Fig. 4, Plan B).

A scatter of post-holes and depressions occurred to the east of the latter group of features; the majority lacked diagnostic content and were not susceptible to coherent grouping. Some may be attributable to Periods 1 or 2, while the concentration of post-holes, F.132 to F.141 inclusive, may have associations with Building 2 (Fig. 4, Plan B). This structure is defined as a series of substantial foundation trenches, forming three sides of an approximately rectangular building. Trenches of this type, F.44, F.121, F.129 and F.130, are interpreted as settings for sleeper beams supporting a timber-framed structure. Post pits, F.143 and F.144, flanking a break in the bedding trenches, mark an entrance on the west side, while the shallow gully, F.142, also to the west, was probably for drainage. A continuation of F.130 into the South West Extension may represent a southern annex to Building 2, but this area was not fully excavated. Although no associated floor level was identified and the north end was not located, Building 2 is interpreted as a substantial timber-framed barn or outhouse, approximately 8 by 4 m. in ground plan.

Within the South-West Extension, the major feature attributable to Period 3 is a substantial cobbled track, GF.1 (Fig. 4, Plan A); shallow parallel ditches, GF.3 and GF.9, appear to be associated. In the area exposed, the orientation of GF.1 is north-west to south-east, suggesting a track to the rear of the buildings, extending from near the west door of St. Mary's church down towards the Petherton Brook.

Period 4: Post-Medieval to Modern

Two groups of features attributable to the final phase in the history of this site were excavated at the north end of the Main Cutting and in the South-West Extension. In time, these range from the early 18th century to the present day. The majority comprise the remains of buildings recently demolished, along with associated remains of domestic and commercial activities (Fig. 5, Plan D; Figs, 8 & 9 Nos. 46-53).

Among the surviving structural remains, two major building phases may be discerned, by interpretation of the foundations. The earlier phase, defined as Building 1a, F.98, is distinguished as an approximately rectangular complex of mortared stone wall foundations. The surviving stonework consists of roughly shaped fragments of sandstone and Morte Slate, obtainable from nearby Quantock sources. The series of rooms thus defined corresponds approximately with the plan of buildings depicted on an estate map of 1770.[4] Their date of erection cannot be given with certainty but from stratigraphical relationships with earlier features the late 17th or early 18th century is most likely. From its relationship to the underlying remains of Building 3, in Period 3, Building 1a may be considered as its immediate successor.

A scatter of pits and post-holes, all within the area of the stone walls, are, from their contents, 18th-century or later. Outstanding among those was part of a shallow pit, F.102, which contained an exceptionally wide range of mid-18th century ceramics. The material recovered included local glazed earthenware, principally from the Donyatt kilns near Ilminster, and a variety of contemporary imports from elsewhere in England and Europe (Appendix I). Full details of the contents and the analysis of this pit group are published elsewhere.[5] Cutting through F.102 was a circular, mortared stone-lined pit, F.9, which continued lower down as a square brick shaft.

Material of predominantly 19th and 20th-century date was recovered from its fill, although datable finds from the construction pit around the well, F.14 and F.115, were exclusively late 18th-century or earlier.

The later history of the site is reflected to some extent in alterations or additions to Building 1, distinguished by the use of brick and defined as Building 1b (F.97). No precise dates are attributable to these works and more than one series of alterations may be represented. The principal feature exposed was a large rectangular brick-lined cellar adjoining the road frontage. To the south, a length of wall connected this with a cess pit beyond the wall, F.9. The manufacture of bricks was certainly underway in nearby Bridgwater by the 18th century, but the relationship of the brick structures to stone walls and dated material, suggests secondary adaptations to Building 1, most probably of the 19th century.

There was little archaeological reflection of the immediate pre-demolition function of these buildings as shops and dwellings, although a large collection of glass oil bottles was recovered from a deep pit, F.72, along with quantities of early 20th century rubbish. The depth of soil (up to 1 m.) over the area south of Building 1 suggested a long period of cultivation involving a thorough turn-over of the soil, probably combined with rubbish disposal. Apart from cultivation, no modern disturbance below this level was observed affecting either the natural gravel or features of earlier periods. Within the South-West Extension (Fig. 4, Plan A) a number of modern service trenches and other recent disturbances were observed. The majority were probably of the 20th century although one section of wall, GF.18, suggests from its construction contemporaneity with Building 1a, perhaps as part of an outhouse or boundary wall.

DISCUSSION

The record of excavation, in what must be considered a focal site within the village of North Petherton, reveals a term of human occupation spanning at least 1,000 years. The suggested interpretation of the series of predominantly drift deposits which underly the site may have some bearing upon the origin of settlement here. No evidence of man's presence or activity was associated with this prehistoric epoch, but a good water supply and a well drained gravel site are an obvious attraction for permanent settlement.

From the excavated evidence it was not possible to speculate as to the origins of settlement at North Petherton. No recognisably prehistoric material was recovered from the site although flint or stone implements have been occasionally recorded in the area. Romano-British material is likewise absent. Fieldwork in advance of the M5 construction has, however, recently suggested a site of this period within one mile of the village centre.[6]

The Domesday record of a pre-Conquest settlement and the presence of a small quantity of late Saxon pottery from the excavation suggest an Anglo-Saxon origin for the settlement on a virgin site. Direct evidence for the original form of the settlement is not available, although by analogy its building plans and layout may be tentatively reconstructed from excavations at better preserved, contemporary sites elsewhere.[7] It is highly probable that the visible fabric of St. Mary's church is the final phase in a sequence of rebuilding and alteration on a fixed site over many centuries. Similar sequences have been demonstrated elsewhere: e.g. Wharram Percy, Yorkshire.[8] Without excavation, it is impossible to determine either the form or period of the earliest church, and at what stage in the settlement's early history it appeared. Assuming that the siting of the church acted as a focus for the village, an area such as that excavated could reasonably be expected to yield evidence for some of the earliest phases of settlement.[9]

The classification of pre-Conquest pottery in Somerset is still at an early stage, but following a recent resumé of the position,[10] studies of major excavated groups from Ilchester and Taunton permit comparisons to be made with material at North Petherton. The existence of such pottery in association with a handful of features identified as Period 1, plus further residual material, probably reflects a late Saxon focus of settlement around the church. In view of the fragmentary remains, little can be said of the contemporary structures. In this area subsequent phases of development on the road frontage may have destroyed further traces of this early phase. The pottery itself is considered in detail in Appendix I; most, if not all, is unlikely to be earlier than the 10th or 11th centuries, although this does not exclude the possibility of earlier structural evidence. A number of features in the southern part of the Main Cutting had no associated finds, and the possibility must remain that some belong to a pre-10th century aceramic phase of settlement.

The recognition of early medieval pottery, in some instances associated with stratigraphically later features, distinguishes a second phase in Period 1, and a continuity of use for the area throughout the 12th and 13th centuries seems likely, although the evidence is sparse. No structures can be positively identified, but potentially the most significant event was the excavation and operation of a lime-burning pit. A connection with the church has already been suggested, since it was as close to that building as possible without infringement upon the presumed burial ground. The 12th-century date indicated for the lime pit probably reflects a contemporary phase of re-building or alteration to an earlier church, although no diagnostic architectural fragments were recovered. The existing structure, largely of the 15th-century, doubtless reflects the prosperity of North Petherton and its benefactors at this time. However, as Romanesque elements in neighbouring parish churches demonstrate (e.g. Durleigh and Enmore or Stogursey further afield), an 11th or 12th-century stone fabric for St. Mary's would almost certainly have been provided.

The closest excavated parallels for a lime pit of this type and period are to be found in medieval Southampton.[11] The siting of the lime pit is indicative of the availability of this piece of land for such a purpose from at least the 12th century. Likewise its continued availability may have suggested it as a potential site for a churchyard extension. The lack of evidence for any buildings immediately predating the cemetery and the scarcity of more portable remains, notably pottery, point to a conveniently vacant or sparsely used site. The evidence for the form, date and context for this cemetery has been discussed above, and in view of this a further suggestion as to its significance is put forward.

The need to expand a churchyard usually reflects an overflow of burials, but in this case some exceptional circumstances are indicated. First, the pattern of burial in medieval churchyards was frequently dense, successive interments following rapidly upon one another, obliterating or damaging preceding graves.[12] This is not the case on the site in question. Secondly, the evidence indicates a relatively limited period in the 14th century during which the area was in use as a burial ground. Thirdly, whether or not the area was consecrated, it had ceased to be a regular part of St. Mary's churchyard by the 15th century and memory of it or respect for it had ended by the reversion of the area to domestic occupation.

The advent of the Black Death in Somerset, from 1348, provides just such an exceptional circumstance to account for some of the above mentioned elements. Instances can be cited of churchyard extensions or new graveyards established in response to the vast rise in the death rate: e.g. Bristol,[13] Poole,[14] Winchester[15] or Worcester.[16] An already full churchyard—such as St. Mary's might have been—would make the accommodation of a major increase in burial a considerable embarrassment, and an extension would be the obvious solution. The precise ecclesiastical status of this temporary graveyard is not known, but further severe outbreaks of plague, recorded in England later in the 14th century and continuing into the 15th century, provide a sufficient context for the maintenance of such a cemetery, well beyond the initial outbreak of the Black Death. A return to a more steady burial

rate which would be accommodated in the original churchyard would have led to the abandonment of the new area, a procedure in any case strongly encouraged by the church authorities as soon as was feasible.

One further element at North Petherton strongly suggestive of plague burial was the deep pit, F.43, whose rapid re-filling and fragmentary human contents indicated unceremonious disposal of corpses. Plague pits can be instanced at a number of localities and particularly in towns: e.g. London[17] or Rochester.[18] Perhaps at North Petherton this was the initial response to the plague before a more organised procedure for the disposal of so many dead in a short space of time could be instituted. The apparent absence of individual graves in the proximity of this pit may also be of significance.

Bearing in mind the possibility that St. Mary's church was originally a minster, another explanation for cemetery expansion and subsequent contraction is worthy of consideration. Within the 'territory' of a minster some villages acquired another church or chapel in which Mass, baptisms or marriages could be celebrated. Burial rights were more reluctantly yielded by the minster, each dependent chapel having a recognised part of the main churchyard in which to bury its dead. Should such a dependent chapel subsequently acquire burial rights, it would cease to bury within the minster churchyard and establish its own cemetery. This could account for the expansion and later abandonment of a portion of the churchyard at North Petherton, which certainly had a number of dependent chapels within the parish. The likelihood of this explanation being correct depends in part upon the length of time during which interments were being made, but the apparent brevity of Period 2 does in any case seem to weaken this hypothesis.

The subsequent history of this area, defined archaeologically as Periods 3 and 4, is essentially a sequence of street frontage tenements. The pattern is one of buildings fronting the road, with rubbish pits, outhouses, and wells to the rear, and a lane forming a possible boundary further back. A continuity of occupation from the 15th century until the demolition of the buildings prior to excavation was demonstrable. The stone foundations which appeared around 1700 (Building 1a) are probably those of the Nags Head, an inn recorded as having lain at the north-east corner of the site before 1770.[19] By 1841, the Tithe Map for North Petherton shows infilling of the entire Fore Street frontage between St. Mary's church and the Petherton Brook.[20]

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APPENDIX I

MEDIEVAL AND POST-MEDIEVAL POTTERY

BY T. PEARSON

The pottery from North Petherton, found mainly in small quantities, derives from a wide variety of contexts. The recent excavations at Donyatt,[1] Taunton,[2] and Ilchester,[3] have produced a large amount of material for the study of pottery in south-west Somerset. This material is still being analysed and full details are not yet available. It is, however, relevant in almost every case to the North Petherton finds; earlier published material from the area is limited by the nature of the sites from which it was derived. It is considered in this report that detailed discussion would be premature, especially in view of the lack of securely dated contexts. This report is, therefore, primarily a catalogue of the pottery from the excavation.

Method of Analysis

The main periods of activity were elucidated from the stratigraphy of the site and then correlated with the pottery analysis. The pottery was sorted into groups of common fabrics. Group B comprised the majority of the medieval coarse wares, and it was found that the variation in the fabrics in this group required further division. The fabrics were tested for calcareous inclusions with dilute hydrochloric acid.

Dating

The medieval coarse pottery from the stratigraphical Periods 1a and 1b is well represented from other sites in the area, and can be attributed to the 11th-12th centuries. The glazed wares of Period 1b show the extension of earlier coarse-ware types into the 14th century. Period 2 represents the phase of burial, and the residual element in the pottery from the graves is probably high.

Periods 3 and 4 contain a large residual group of medieval pottery (Table I) alongside a sequence of post-medieval pottery which is closely paralleled in the kiln-waste material from Donyatt for this period. Feature 102 produced a large group of material of this type in association with pottery from Staffordshire, Bristol, and Bideford and Barnstaple, together with a quantity of Delftwares. This group dates to the late 17th and 18th centuries and is to be published elsewhere.[4]

TABLE 1.

The proportion of pottery (number of sherds) related to the fabric groups and stratigraphical phases of the excavation

Feature	A	A/B	B1	B2	B3	B4	B5	C	G1	G2	G3	G4	G5	I	J	K	L
Period 1a																	
F17	1																
F19a	1		2	1													
F19b			1	4													
F31a			6	44	7							1					
F31b			1	1													
F85				1	2												
F113		2															
F120					2												
F126				1													
F128					1												
Period 1b																	
F22			3	3	1				8	2							
F122					1												
F131		3		17	12		2										
F125		2		3	2												
Period 2																	
F75				1													
F82		1															
F109					1												
F111				4	1			1									
F112			1	8		2			1		1	1					
F124				1	1	1											
Period 3																	
F5			14	12	6	2			2	1			3				
F7			2	1													
F16									2				6				
F20			3	5			1							1			
F21													1			34	1
F26				2	2		1						2				
F33				1									1				
F44					2												
F118																	
F130			1	6	8	3		2	5		1					4	
F129			1	3	4	1							4				
Period 4																	
F2		1	4	7	6								5			8	2
F3																1	1
F12																5	
F14						1							2				1
F15														1	3	13	
F72																4	10
F101															7		
F117																1	6

Pottery Fabrics

Group A (Fig. 7, No. 1)

Irregular, angular voids, indicating a former crushed limestone temper. Leaching of the temper gives the fabric a characteristically honey-combed appearance. The calcareous nature of the inclusions was indicated by a slight, positive reaction to an acid test on the surface of the fabric, Void sizes vary from 1 mm to 6 mm and are of the same order as examples in Group A/B. Both examples found from this group are cooking pots with oxidised orange-buff external surfaces with reduced blue-grey core.

Date: 11th-12th centuries. Only a few sherds were excavated here, but a large group was found in Taunton and this date suggested.

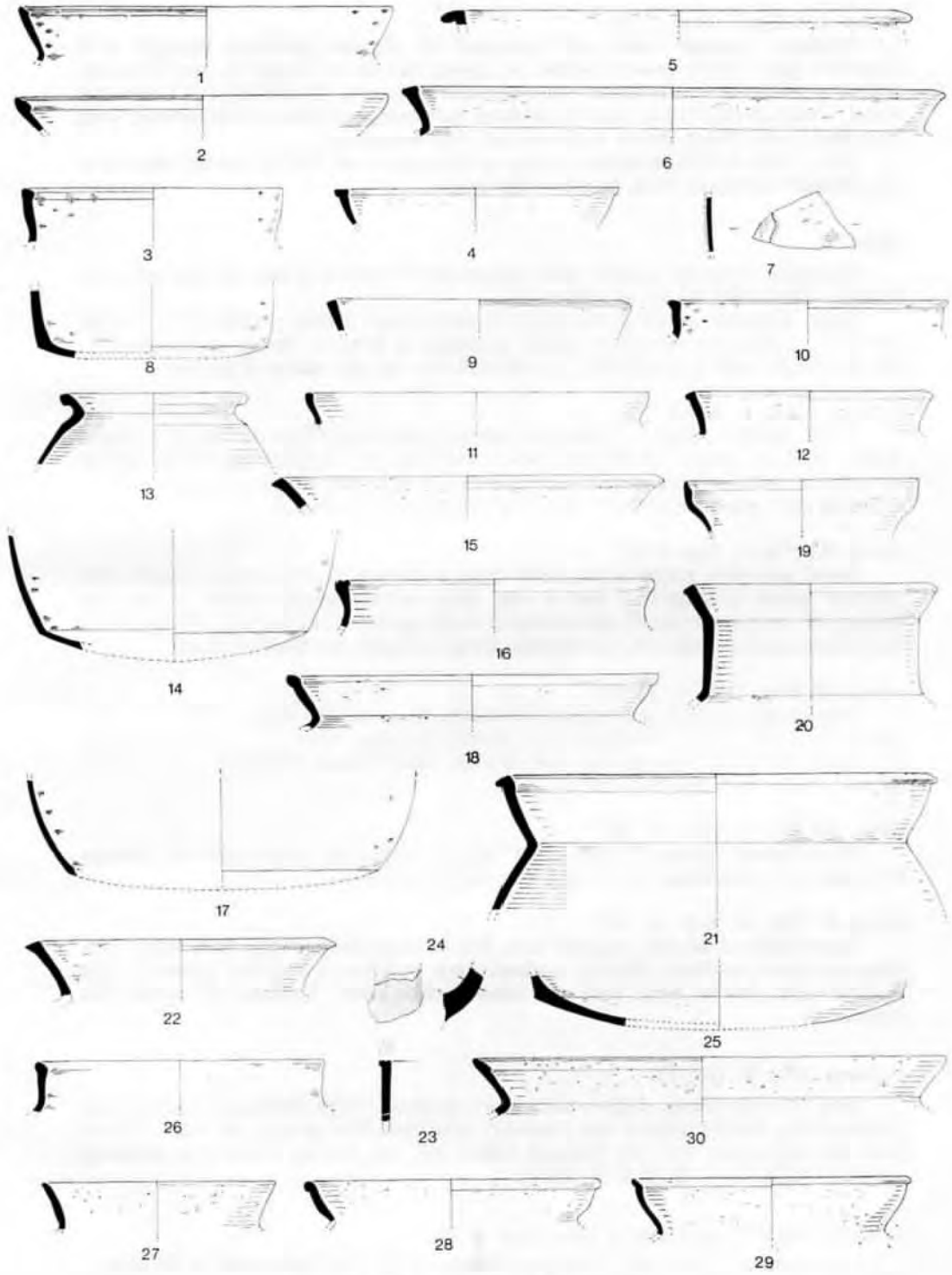


Fig. 7. Pottery, nos. 1–30. Scale 1/4

Group A/B (Fig. 7, Nos. 2, 3)

Irregular, angular voids and inclusions of crushed limestone temper, with quartzitic grits. Partly honey-combed in appearance as in Group A; the limestone temper is of the same size range; the quartzitic grits vary in size between 1 mm and 4 mm. Cooking pots forms, mainly oxidised buff-orange in colour with reduced dark grey-blue areas. Some sherds with external fire-blackening.

Date: 11th or 12th centuries. Forms in Groups A and A/B are closely paralleled by material excavated from Burrow Mump.[5]

Group B

Quarzitic tempered pottery with inclusions of various grades of size and consistency. Described below as sub-groups.

Date: Elements of this group certainly derive from Period 1, 10th-12th centuries (cf. F.31). Forms are related to similar examples at Burrow Mump as discussed by Dunning[6] although they probably extend well into the late medieval period.

*Group B*1 (Fig. 7, Nos 4, 7)

Small quartzitic grains, 1 mm and below in size, suggesting the use of a coarse quartz sand as temper. Well-fired fabric, oxidised to a buff-orange-brown colour on external surfaces, with some examples reduced to a dark grey or blue-grey colour. Cooking pots and bowl forms. Some examples are fire blackened.

*Group B*2 (Fig. 7, Nos. 8-25)

Small quartzitic grains of the same order as Group B1, with larger angular and rounded quartz grits up to 5 mm in size. There is considerable variety in the consistency of the temper among the examples in this group. Cooking pot, storage vessel and tripod pitcher forms are represented. Some examples are fire blackened.

*Group B*3 (Fig. 7, Nos. 26-30)

Very coarse, quartz-grit temper. Inclusions range in size from 1 mm to 6 mm, densely spaced. Certain examples have pimply surfaces, which in some cases is due to surface erosion. Cooking pot and storage vessel forms. Oxidised and reduced fabrics, many with fire-blackening.

*Group B*4 (Fig. 8, Nos. 31, 32)

Miscellaneous groups composed of fabrics containing similar grits to Groups B1-3, but of a dissimilar consistency (see sherd descriptions).

*Group B*5 (Fig. 8, Nos. 33, 34)

Quartz grits of all sizes together with flint or chert chips. Fairly hard fabric with coarse-textured surfaces. Slightly oxidised dark buff-brown external surfaces, with reduced dark grey to black core and some surface areas. Cooking pot forms, fire blackened.

Group C (Fig. 8, No. 35)

Fine, smooth fabric, slightly micaceous, unglazed. (The illustrated example has suffered some surface erosion but originally may have been glazed: the fabric of this piece has similarities with the Donyatt fabric and may belong to the post-medieval period). Oxidised orange-buff in colour.

Group G Glazed Wares (Fig. 8, Nos. 36-41 & 55)

Glazed wares of the medieval period. Several fabrics are represented in the group: these are described below. (Sherds of an exotic jug from F.118 (No. 55) are reported on separately by Mr. M. W. Ponsford in Appendix II.)

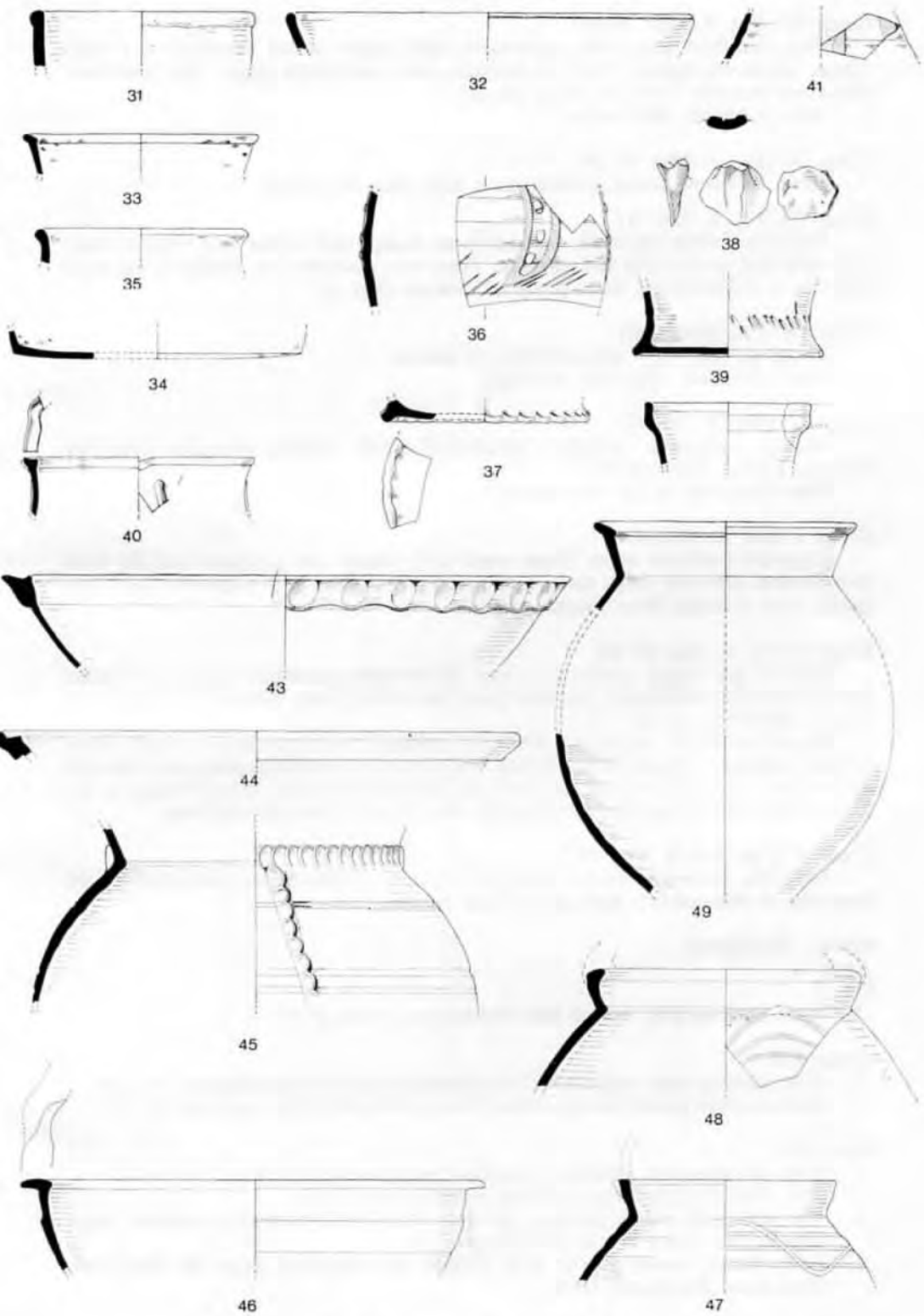


Fig. 8. Pottery, nos. 31–49. Scale 1/4

*Group G*1 (Fig. 8, Nos. 36-38)
Fine, well-fired fabric, with infrequent small quartz grains. Oxodised to a buff-orange colour throughout, with an external, badly-developed glaze. (The illustrated pieces are probably from the same vessel.)
Date: probably 14th century.

*Group G*2 (Fig. 8, Nos. 39, 40)
Hard, well-fired fabric, reduced to a dark grey-blue colour.

*Group G*3 (Fig. 8, No. 41)
Well-fired fabric, internally oxidised to an orange-buff colour with reduced blue-grey core and patchy external surfaces. These two examples are similar to material from the *c.* 14th-century waste group at Donyatt (Site 4).[7]

*Group G*4 (not illustrated)
Rough glazed tripod pitcher fabric or similar.
Date: probably 11th-12th centuries.

*Group G*5 (Fig. 8, No. 42)
Slightly micaceous, oxidised orange-buff fabric. Similar examples from the Donyatt kilns *c.* 16th century.[8]
Date: first half of the 16th century.

Group I (not illustrated)
Imported medieval wares. Three small body sherds: two unglazed and the third with applied iron-rich strips under an uneven green glaze. It is suggested that these sherds have a South-West French origin.

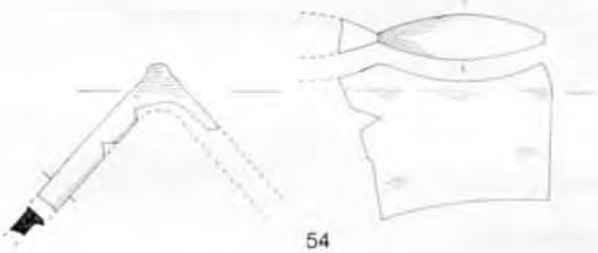
Group J (Fig. 8, Nos. 43-45)
Nos. 43 and 44 are similar to a type of pancheon produced at Donyatt during the 16th century. The fabric contains small quartzitic grains, reduced to a dark grey colour. Internally glazed.
The fabric of No. 45 is hard fired and oxidised to an orange-red colour with a reduced buff-grey external skin. Internal lead glaze and external applied and thumbed clay strips of the same clay as the body. Stylistically this vessel would belong to the 17th century and has parallels at Donyatt; the fabric is, however, different.

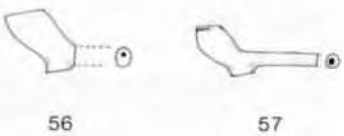
Group K (Figs. 8 & 9, Nos. 46-53)
17th-19th century earthenwares from Donyatt.[9] Fabric either oxidised to a light terracotta or reduced to a dark grey to blue colour.

Pottery Descriptions
Group A
Fig. 7
1. Rim: cooking pot; incised line around top of rim (F.17).

Group A/B
2. Rim: cooking pot; with incised line round top of rim; fire-blackened (F.125).
3. Rim: cooking pot or storage vessel; thick walled with large inclusions (F.131).

*Group B*1
4. Rim: cooking pot; externally oxidised; reduced core (F.31a).
5. Rim: bowl?; pronounced external flange to rim (F.5).
6. Rim and neck sherd: cooking pot; rim thickened externally; external finger impressions visible below thickening (F.5).
7. Body sherds: cooking pot; with applied and thumbed strip; fire-blackened. (One sherd illustrated) (F.5).





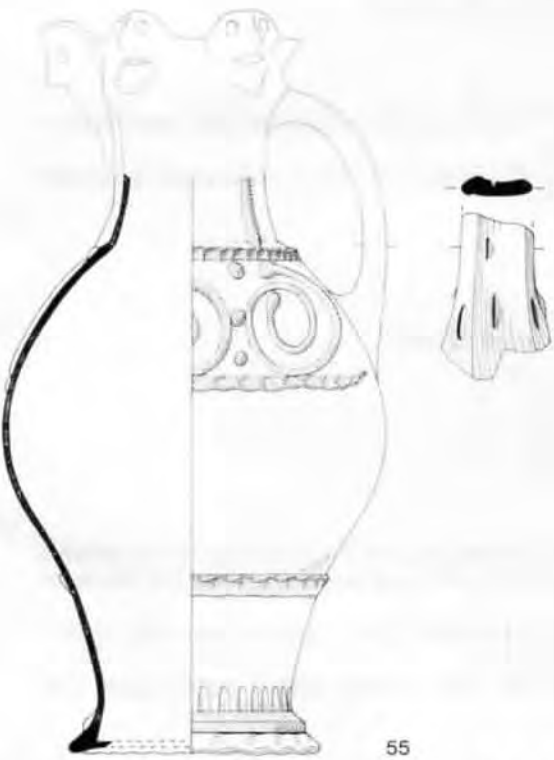


Fig. 9. Pottery, nos. 50–55; clay pipes, nos. 56–7; Iron objects, nos. 58–9. Scale 1/4

Group B2

8. Base sherd: cooking pot; thick coarse fabric (F.26).
9. Rim: cooking pot; incised grooves round top of rim (F.130).
10. Rim: cooking pot; fire-blackened surfaces (F.29a).
11. Rim: cooking pot (F.111).
12. Rim: cooking pot; fire-blackened (F.5).
13. Rim and neck: cooking pot; late Saxon form? (F.112).
14. Base sherds: cooking pot; rounded (F.112).
15. Rim: cooking pot; externally thickened rim (F.112).
16. Rim: cooking pot; wide groove round top of rim; fire-blackened (F.2).
17. Base sherd: cooking pot; sagging base; externally fire-blackened (F.20).
18. Rim: cooking pot (F.31a).
19. Rim: cooking pot (F.31a).
20. Rim and neck sherd: tripod pitcher? (F.31a).
21. Rim and neck sherd: cooking pot or storage vessel (F.31a).
22. Rim: cooking pot; fire-blackened (F. 31b).
23. Rim: cooking pot; incised line around top of rim (F.31a).
24. Handle sherd: cooking pot or storage vessel (cf. examples of this type in Taunton Castle Museum from Donyatt) (F.31a).
25. Base sherd: cooking pot; externally fire blackened (F.31a).

Group B3

26. Rim: cooking pot; oxidised buff-coloured fabric (F.122).
27. Rim: cooking pot (F.31a).
28. Rim: cooking pot; internal pimply surface (F.2).
29. Rim: cooking pot; thin fabric with pimply surfaces (F.2).
30. Rim: cooking pot; rounded internal lip with incised line round top of rim (F.120).

Group B4

Fig. 8

31. Rim: cooking pot or storage vessel; fabric slightly micaceous with small (below 1 mm) quartzitic inclusions (F.5).
32. Rim: cooking pot; fire-blackened externally; fine fabric with small quartzitic grits; internal glaze splashes (F.15a).

Group B5

33. Rim: cooking pot (F.131).
34. Base sherd: cooking pot; fire-blackened (F.26).

Group C

35. Rim: jar or jug? (F.130).

Group G1

36. Body sherds: jug of baluster form; external decoration consisting of two applied strips of iron-rich clay forming a band, with applied clay pellets (of the same fabric) in between (F.22).
37. Base sherds: jug (probably No. 36); thumbed into a splay at the edge, with a slightly sagging base (F.22 and F.5a).
38. Strap handle sherd: jug (probably No. 36); covered with a patchy glaze over slashing (F.130).

Group G2
39. Base sherd: jug; wheel-thrown, with diagonal tooled impressions above the splay, patchy lead glaze (F.5).
40. Rim: jug with pulled spout; iron-rich clay strip applied vertically below the rim; external lead glaze (cf. unpublished example from Taunton Castle in Taunton Museum: Accn. No. A.3249) (F.22).

Group G3
41. Body sherd: jug; with applied and thumbed iron-rich clay strips (F.130).

Group G5
42. Rim: jug; with handle scar; patchy lead glaze orange to green in colour (F.2).

Group J
43. Rim: pancheon; external applied and thumbed clay strip beneath the rim; internal lead glaze (F.12).
44. Rim: pancheon; externally thickened rim; internal lead glaze (F.2).
45. Neck and body sherd: jar; external thumbed clay strip at base of neck with vertical thumbed and applied strip down the body of the vessel; internal lead glaze (F.26).

Group K
46. Rim: bowl or pan; with pulled spout; internal orange lead glaze (F.31a).
47. Rim and neck: bucket-pot with pulled spout; external white slip bands beneath incised wavy line; patchy lead glaze over rim, otherwise glazed externally and internally (F.12 and F.15).
48. Rim: bucket-pot, with start of bucket handle; external wiped design in white slip, unglazed; internally glazed (F.12).
49. Rim and body: jar; internal, badly developed green glaze (F.2).

Fig. 9
50. Rim: dish; internal white slip decoration beneath a lead glaze (F.15).
51. Rim and body: small dish with internal spattered slip decoration under lead glaze (F.72a).
52. Lid: unglazed (F.2).
53. Porringer: internal lead glaze (F.72a).

Ridge Tile
54. Ridge tile: Donyatt fabric; reduced blue-grey with internal oxidised skin. Fabric impregnated with quartz grit. Externally covered with green lead glaze (F.124/F.116).

Exotic Jug (Group G)
55. Lower profile of a glazed jug; the upper re-construction is based upon a similar example from Wedmore (Wells Mus. Acc. No. 545) (F.118). See Appendix II.

Clay Pipes
56. Mid-17th century (F.14a).
57. Mid-17th century (F.101a).

Iron
58. Lunate-shaped knife blade in two pieces (F.111). Traces of wood and a bronze rivet adhering to the iron corrosion suggest the former existence of a sheath.
59. Object with terminal loops and incised zig-zag ornament (F.111).

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APPENDIX II

AN EXOTIC JUG FROM NORTH PETHERTON (Fig. 9, No. 55)

BY M. W. PONSFORD

In Bristol, Somerset, South Wales and even Dublin there is distributed a class of highly decorated jugs whose basic elements have been identified among the wasters from the Redcliffe (Bristol) kilns (Wilson and Moorhouse, 1971, 152; Ponsford, 1976). The vessel under discussion here, while having definite links in terms of its decorative motifs, exhibits certain differences from the general group.

The surviving parts of the jug consist of about one third of the volume of the body, excluding the rim, and the lower part of the handle; it may be described as of baluster form with splayed and shallowly thumbed base (which is overlain by a darker applied band).

The fabric is a hard sandy ware with many small dark (iron oxide?) inclusions with frequent quartz including several very large fragments (one measuring 6 mm across) and at least half a dozen unhomogenised clay pellets (up to 10 mm across), making this an extremely unusual fabric, but related to many of the clays and inclusions used in pottery in Bristol and Somerset.

The core is fired to a medium grey with a light orange-red internal surface which suggests an iron-rich clay. A simple acid test showed that the internal surface was non-calcareous. The jug has been thrown on a wheel and shows characteristic drawing-up marks on the lower third internally, some of which result from the modelling of the base to produce a splay, and also to punch up the bottom at the basal angle.

In common with the style of many vessels of this type, the decoration has been applied as bands of clay, but in the body material. At the base there is a squared, applied band, with another thumb-impressed horizontal band six cms above. Just above the greatest diameter is a curious band of white-fired slip, which has also been used among the spirals above. This shoulder decoration consists of two horizontal thumbed trips with a running band of spirals ending in small roundels turning clockwise and separated from each other by a vertical row of three pellets. Above this, on the neck, there is a slight ledge from which thick (4 mm deep) strips (of which only one survives) run up to the rim. All the applied strips had been coated with an iron-rich slip, a little of which has trickled on to the main body. The overall glaze is a yellow-green, not unlike that on some Ham Green pottery, but with occasional brown flecks not all of which are the result of contact with the iron decorative slip. Small brown-coloured pits may be the result of specific contact with iron ore fragments. White slip is confined to the decorative shoulder area.

The surviving fragment of handle is of strap type with central dishing and shows the beginning of a row of elongated stabs, probably executed with the point of a knife. The handle is attached by luting it to the body with thicker bars of clay on each side and then smoothing these down.

The citing of parallels with other vessels of this general class is made difficult by the curious method of washing on slips to produce contrasting colours. The normal method was to use a contrasting clay. However, the most important near-relative is

the jug from Wedmore which is one of the most highly decorated of all (Wells Museum Acc. No. 545). This particular vessel has a bearded face-spout with rim-faces and a similar handle. It is also of comparable shape and on one zone of decoration contains almost the same spiral motif, but in plain bands, and has similar neck-strips, in that case outlined by downward slashing. The Wedmore vessel lacked its lower quarter and hence the bases cannot be compared. The applied spirals on this vessel are a horizontal replacement for the tree on a Ham Green vessel (Barton, 1963, Fig. 6, No. 4) or a very elaborate face-spout on a Bristol jug from Dublin (Webster and Cherry, 1973, Plate XXVII, B). In this way the single spiral can be linked to a variety of similar material. Spirals are also known from Ham Green (Barton, 1963, Fig. 3, 43). However, now that a distinct Bristol pottery tradition has been recognised and is found to be fairly common among pottery recently excavated in the city, black strip decoration, sometimes brushed on, can be seen to be a feature of it and it is likely that this influence was widespread in the region (Dawson *et al.*, 1972, Fig. 2, Nos. 8-11). Several fragments including a complete spiral came from a room in the constable's lodgings close to the south-west gate of the castle (Ponsford, 1977, forthcoming). It is likely, from the Wedmore, Dublin and South Wales examples, that applied spirals, slashed handles, thumbed bases, face bridge-spouts and rim-faces form the elements of a distinct Upper Bristol Channel style possibly centred on Bristol itself where all these, including the face-spouts, occur as wasters (see also Lewis, 1969, Fig. 2, Nos. 1 and 108 for Bristol face-jugs in South Wales).

As to dating, the study of Bristol products still suffers from a lack of direct evidence, but they are likely to post-date most Ham Green ware. Of some importance is the group of material from St. Nicholas' Almshouses where, of the published pottery (which all comes from the construction levels or above), none is Ham Green ware and the dating for the bastion is certainly post-1247 (Barton, 1964, 190-91, Fig. 65, No. 102; and Dawson *et al.*, 1972, 5, 7). Of these published sherds B, D, G, J and probably E are products of the Bristol kilns. At present the highly decorated vessels from the Bristol kilns, to which the North Petherton jug is related, may be dated broadly to the period from the later 13th century to the end of the 14th century. This provisional bracket, which is of the most general nature, may well be modified by further work on the material from other excavated sites.

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APPENDIX III

THE HUMAN SKELETONS FROM NORTH PETHERTON

BY R. F. EVERTON AND JULIET ROGERS

Introduction

All the skeletons submitted for examination were incomplete and most of the individual bones were fragmentary. All the skulls were crushed with the complete loss of the facial and basal parts, but wherever possible, skulls and longbones were reconstructed. Many of the bones were eroded due to water action and in some cases

parts of long bones had been 'shaved off' longitudinally, probably an indication of shallow burial with subsequent damage by ploughing or earth moving machinery.

25 burials were examined; two, S18 and S23, consisted of so few fragments that they were excluded. Of the remaining 23, only 5 skulls were reconstructed; 13 were too fragmentary and 5 burials had no skulls at all. The reconstructed skulls produced few worthwhile measurements. S13, a male skeleton complete with skull, was accompanied in the grave by a highly fragmentary female skull, S13b.

15 smaller assemblages of human bone fragments were derived from separate features, apparently from disturbed burials, and were of little significance except for F16 which contained bones of burial S26.

Sex and Age

The criteria used for the determination of sex and the estimation of age were those of Genoves (Genoves, 1969) and Brothwell (Brothwell, 1963).

Sex. Owing to the poor state of preservation it was only possible to determine with any accuracy the sex of 15 of the 25 burials, 6 males and 9 females. Of the rest, 6 were probably males and 2 probably females, an equal distribution of the sexes.

Age. For the same reasons it was not possible to estimate the ages of all the skeletons. 9 'males' (combined males and probable males) ranged from 19 to 45+ years, with a mean of 29½ years. Only 4 of the 'females' were aged, ranging from 20 to 45+ years, with a mean of 35 years. Skeletons of undetermined age, 2 'males' and 7 'females' whose epiphyses had fused, were called 'adult'. With so little accurate data, no comment regarding relative ages at death can be made, but it is of interest to note the complete absence of children's skeletons, although small graves without bones were present.

Stature

Measurements of skulls and the post-cranial skeleton and the calculation of the various indices were those advocated by Hrdlicka (Stewart, 1947) and Ashley-Montague (Ashley-Montague, 1951). Stature was estimated using the revised formula of Trotter and Gleser (Trotter and Gleser, 1958), taking the single determination from as high as possible in their table, in preference to a mean of several estimations.

The statures of 8 'males' and 6 'females' were estimated but some calculations were based upon arm bones (S7 from an ulna, S1 and S15 from a humerus and S10 from humerus and radius combined). These are less accurate than the remainder which were derived from the length of the femur and the combined femur and tibia. S11, a well preserved male skeleton, was a sub-giant (Wells, 1963) with a height of 1850 mm (6 ft 10 ins). Eight 'males' ranged in stature from 1642 to 1850 mm with a mean of 1733 mm, or, if S11 is excluded, from 1642 to 1789 mm with a mean of 1712 mm.

The statures of 6 of the 11 'females' were estimated and ranged from 1541 to 1746 mm with a mean of 1654 mm.

Pathological Conditions

(i) *General.* Overall, there was relatively little evidence of pathological changes, which may have been due in part to the poor state of preservation. There were more changes noted in the female skeletons than in the male. Only two relatively minor conditions were found in the males: S6, a 19-year-old, had minor oesteophytes between the bodies of the 8th and 9th thoracic vertebrae, which may have been a sequel to an earlier indirect injury to the spine; and S7, between 22 to 25 years, had an inflammatory(?) expansion of the sternal end of the right first rib, which could have been due to osteomyelitis.

The pathological conditions affecting the female skeletons were of a more serious nature. The most extensive was found in S14, an adult female which had a number of conditions, all stemming from one primary abnormality, a congenitally dislocated

left hip. The left side of the pelvis was not recovered, but the left femur was. The proximal half of the shaft was quite abnormal, the angle of the neck was almost completely lost, the neck itself was twisted longitudinally and flattened antero-posteriorly and the head was missing. The more proximal part of the shaft was round in section and of reduced diameter. The gluteal tuberosity was reduced to a rough line and the linea aspera was very slight. The contra-lateral hip had suffered from the extra strain put upon it and was severely affected by osteo-arthrosis with mushrooming of the head and peripheral expansion of the acetabulum. In the infero-lateral part of the acetabulum was a sub-rectangular notch which 'locked' with a corresponding projection on the deformed head of the right femur. When articulated the hip was effectively locked in 90° of flexion. There was also eburnation of the postero-medial surface of the lateral condyle of the right femur. The right tibial turbercle and the proximal 50 mm of the anterior border of the shaft were flattened antero-posteriorly, but the left tibia was too fragmentary to show any similar changes. The surviving tarsal bones were very small and lightly built, signs of disuse atrophy.

The flattening suggests that this lady spent much of her life in a kneeling position, possibly on a small trolley, propelling herself along with her arms. When her right ulna sustained a fracture in the mid shaft, more strain was put upon the left arm, leading to osteo-arthrosis of the elbow joint. A large crescentic facet was worn on the medial side of the head of the radius and a similar, contiguous facet on the ulna. She must have suffered pain all her life, first from the left hip then from the right as it became affected, followed by the painful fracture of the left fore-arm and finally from the severe arthritis of the left elbow.

The proximal half of the right femoral shaft of S2, a female of 40 to 45 years, was grossly thickened and bowed medially, the cortical bone was thinned and the normal trabeculation was obliterated by a proliferation of spongy bone and the shaft was reduced to a sub-triangular section, characteristic of Paget's disease of bone. No other bones showed evidence of this condition.

An inflammatory condition was found in a fragment of the pelvis of S21, an adult 'female' (Fig. 10 at x). In the postero-lateral border of the right ischium, just distal to the acetabulum, was a circular foramen (hole) 10 mm in diameter leading to a larger, almost spherical cavity within the body of the bone, probably from an abscess following a penetrating injury, acquired when bending over.

An example of direct injury was the healed fracture of the middle of the shaft of the right humerus of S3, a young adult female.

All the long-bones of S11, the sub-giant, were greatly enlarged but the skull which was partially reconstructed, and more especially the teeth, were not. There was no evidence to suggest that this great stature was anything but a normal variation.

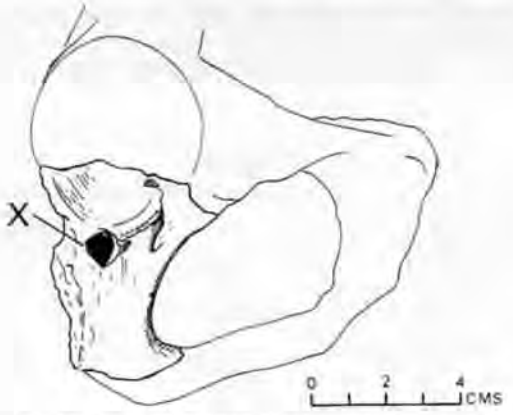

Fig. 10. Pelvis of skeleton 21, showing injury at 'x'.
Drawing by Jayne Everton.

TABLE 1
Distribution of Age, Sex and Stature

Number	Age	Sex	Stature
S1	22–25	Male	1689 Hu.
S2	40–45	Female	1690 Fe.
S3	'Adult' over 18	Female	1746 Fe.
S4	20	Female	—
S5	Young Adult	Male	1706 Fe. Ti.
S6	19 Years	Male	1713 Ti. Fe.
S7	22–25	Male	17–9 U
S8	45+	Female	—
S10	25–35	Female	1602 Hu. Ra.
S11	26	Male	1850 Fe. Ti.
S12	25–30 'Adult'	Female	1541 Fe.
S13	45+	(M)??	1462 Fe.
S13b	Adult	Female	—
S14	Adult	Female	1643 Fe.
S15	45+	Male?	1787 Hu.
S16	35–45	Male?	—
S17	Adult	Female?	—
S18	Adult	Male?	—
S19	Adult	—	—
S20	Adult	Female	—
S21	Adult	Female?	1701 Fe. & Ti
S23	—	—	—
S24	Adult	Male?	—
S25	45+	Male	1660 Fe. & Ti.

Age Mean Male — 29 Years
Age Mean Female — 35 Years.

Fe. — Femur
Ti. — Tibia

Hu. — Humerus
Ra. — Radius
U. — Ulna

(ii) *Dental.* The overall incidence of dental disease was impossible to determine owing to the large number of missing teeth. 50% of the skeletons had neither maxillary nor mandibular teeth, 12·5% had mandibular but no maxillary teeth and 4·5% had maxillary but no mandibular teeth. The incidence of caries was about 42% and there were only 2 abscesses. One in the right upper 2nd molar of S11, a 26-year-old male, had penetrated into the antrum and would have caused considerable pain. The other had affected the lower right 1st molar of S10, a female of about 30 years of age, destroying the whole of the crown, leaving only the roots which were clubbed at the apices, a sure indication that the abscess had been active over a long period of time. Many teeth had been lost before death, varying from none to 14 in a single jaw.

TABLE 2

Number of upper teeth lost during life									Number of lower teeth lost during life									
0	1	2	3	4	5	6	7	8	0	1	2	3	4	5	6	7	8	14
7	0	0	1	1	0	0	0	0	5	1	0	0	1	0	1	0	1	1
5 MM	–	–	F	F	–	–	–	–	4 M 1 F	F	–	–	M	–	F	–	M	

M — Male F — Female

Females appear to have lost more teeth during life than males and it is probable that this tooth loss was due primarily to dental caries. The presence of supra and subgingival calculus, together with the loss of interdental alveoloar crests, indicates a low standard of oral hygiene, and the few surviving examples of severe, oblique wear suggest a coarse diet. It is of interest to note that three male skeletons had complete dental arcades: S15 of over 45 years, S1, of 22 to 25 years, and S11 of 26 years, although the latter two had damaged jaws with some post-mortem tooth loss.

Only three examples of enamel hypoplasia were found, in canines or lateral incisor teeth.

Congenital Variations and Epigenetic Variants of the Cranium (Berry and Berry, 1967)

In the 16 relatively complete skeletons, only 6 congenital conditions were noted.

(i) Congenital dislocation of the hip of S14 (described above).
(ii) Spondylolisthesis of the fourth lumbar vertebra in S11, the sub-giant.
(iii) Bilateral mandibular tori in S15, a male.
(iv) A small, right mandibular torus (left side of mandible missing), in S26 'male'.
(v) One 'male' talus had a double calcaneal facet.
(vi) Bilateral olecranon fossa foramina occurred in the humeri of a 'male' skeleton.

Epigenetic Variants of the Cranium

In view of the absence of 7 skulls and the gross fragmentary nature of the majority of the remainder, few epigenetic variants were found; the only recurrent feature was that of the supra-orbital foramen in 6 skulls. With so few variations in such a small assemblage, few deductions are possible.

Congenital Dental Abnormalities

In S1, an adult 'male', the left upper canine was absent, a rare occurrence in itself, but, even more uncommon, its place was taken by a lateral incisor.

No cusps of Caribelli were noted.

Conclusion

These burials represent an adult population of about 23 individuals varying in age from 19 to 45+ years and probably of an equal sex distribution. The fragmentary nature and generally poor preservation of these skeletal remains, the disturbance by later features and incomplete excavation of the cemetery, are large factors in the lack of information obtained. There was a complete absence of children's and adolescents' skeletons. Also noteworthy is the low incidence of famial traits and, for a peasant community, the very rare occurrence of osteo-arthritis.

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APPENDIX IV

THE ANIMAL BONE

BY ANNA ADCOCK

The stratified animal bone recovered from the site has been grouped into four periods as shown in Tables 1-4. The total number of identified bones was 190, the bulk of these being very fragmentary with few pieces suitable for comparative measurement. Since material of this nature requires a statistical treatment to be meaningful, the small number of bones represented from each period means that it is impossible to draw conclusions relating to, for example, meat consumption from these figures.

One piece of antler had been sawn, otherwise there was no sign that the bones were anything other than the broken remains of animals used for food.

The presence of Red Deer doubtless reflects the proximity of the royal forest of North Petherton. Sheep and goat bones have been counted together; where differentiation was possible, it is indicated in the Tables. Fragments of ribs were divided into those of cattle size and those of sheep/goat/pig size. They and the teeth have been excluded from the total for each species.

There was one oyster shell from a feature attributed to Period 4.

TABLE 1
Periods 1a and 1b

	Cattle	Sheep/Goat	Pig	Goose	Chicken
Horn Core	1	—	—	—	—
Maxilla	1	—	—	—	—
Mandible	2	1	—	—	—
Humerus	—	1 (sheep)	—	1	1
Ulna	1	—	—	—	—
Metapodials	1	1 (sheep)	1	—	—
Phalanges	1	—	—	—	—
TOTAL	7	3	1	1	1
Ribs	1	1	—	—	—
Teeth	3	4	—	—	—

Total number of bones: 28

TABLE 2
Period 2

	Cattle	Sheep/Goat	Pig	Chicken
Mandible	1	—	3	—
Scapula	—	1	—	—
Vertebrae	—	5	—	—
Humerus	1	1	1	—
Radius	1	—	—	1
Femur	—	1	—	1
Tibia	—	1	—	—
Metapodials	—	—	2	—
TOTAL	3	9	6	2
Ribs	—	2	—	—
Teeth	3	—	3	—

Total number of bones: 26

TABLE 3

Period 3

	Ox	Sheep/Goat	Pig	Red Deer
Horn/Antler	1	—	—	3
Skull	2	—	3	—
Maxilla	1	—	—	—
Mandible	1	—	—	—
Scapula	2	5	1	—
Pelvis	2	1	1	—
Vertebrae	2	1	—	—
Humerus	1	4	1	—
Radius	2	2	—	—
Ulna	1	1	—	—
Femur	2	3	—	—
Tibia	4	4	—	—
Metapodials	4	6 sh., 2 gt.	1	1
Carpals/Tarsals	2	—	—	—
Phalanges	6	1	—	—
TOTAL	33	30	7	4
Ribs	6	8	—	—
Teeth	13	4	3	—

Total number of bones: 108.

TABLE 4

Period 4

	Ox	Sheep/Goat	Pig	Horse	Goose	Chicken
Horn	2	—	—	—	—	—
Skull	1	—	—	—	—	—
Vertebrae	—	2	—	—	—	—
Pelvis	—	1	1	—	—	—
Humerus	—	1	—	—	—	—
Radius	2	1	—	—	—	—
Femur	—	—	—	—	—	1
Tibia	—	2	—	—	—	—
Metapodials	2	1	—	—	1	1
TOTALS	7	8	1	—	1	2
Ribs	2	2	—	—	—	—
Teeth	2	1	1	1	—	—

Total number of bones: 28