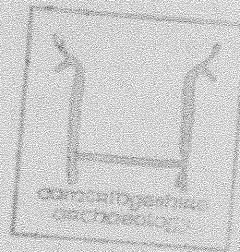


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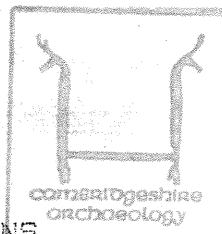
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Ely North Range 1987

AFU REPORT - NO.5

ARCHIVE REPORT



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ELY NORTH RANGE ARCHAEOLOGICAL EXCAVATIONS

INTRODUCTION

In November and December of 1987 excavations were conducted at the site of the old Sacristy buildings, situated to the north of the cathedral, and forming the southern frontage of the High Street. This work was carried out in cooperation with architects Purcell, Miller, and Tritton, and with the contractors S.S. Ambrose and Son, during refurbishment of the buildings for the Dean and Chapter of Ely Cathedral. It was partially funded by a grant from the Historic Buildings and Monuments Commission.

The North Range consists of a group of buildings with the Goldsmith's Tower at their western extremity, and continuing on eastwards: the Old Choir School, Ely Museum, and the Sacrist's Gate.

ORGANISATION OF WORK

There were six rooms in all to be investigated, so each became an individual area of excavation. Ely North Range (ENR) 1 was therefore the ground floor chamber of the Goldsmith's Tower; ENR2 the western most and biggest room in the Old Choir School; ENR3 was the small room to the east of this; ENR4 was the western most room in the Museum; ENR5 was the main ground floor room in the Museum; and ENR6 was assigned to the entrance hallway to the Museum beside the Sacrist's Gate.

A site grid was established using the outside of the north wall of the buildings as a secure base line and was given a grid reference of 50north. The western edge of the grid was the outer western wall of the Goldsmith's tower and this was given a grid reference of 50east. (see fig.*** from the architect's plan).

A recording system using continuous context numbering was used, with each area being assigned a batch of numbers:

AREA	CONTEXTS	NAME KNOWN BY
ENR1	1 - 20	Goldsmith's Tower
ENR2	21 - 40	Old Choir School/Kitchen
	101 - 120	
	151 - 170	
ENR3	41 - 50	?
	201 - 208	
ENR4	51 - 80	?
ENR5	81 - 100	Ely Museum
	121 - 150	

ENRE

Unused

Entrance Hall to Museum

Composite plans of a spread of deposits were made at what were judged to be necessary stages in the excavation. They were levelled in to the National Grid from a Bench Mark in the High Street on a buttress beside the front door of the Old Sacristy, 22.00 m a.s.l..

Sections were drawn in selected places within the areas under excavation during the main period of digging, and most area (or trench) sides were drawn as sections in the last few days of excavation.

Preliminary analysis of the finds gave an approximate chronology by comparing the pottery to the collection at the Museum of Archaeology and Anthropology, Cambridge. It is hoped for more detailed work to be done on a large and important dump of Medieval window glass, which needs the attention of a conservator and examination by an expert. A report on the bones does not seem to be worthwhile considering the small quantity recovered and the types of deposit in which they were found. Analysis of mortar samples might be of help in dating structures, but time does not allow it at present.

Documentary research will be essential in attempting to fully understand and interpret the various activities that took place at the site.

3

ELY NORTH RANGE

SUMMARY OF EXCAVATIONS

The Medieval Period

A number of layers and features in ENR2 (stage 1) and ENR5 (stage 1) appear similar in their compositions and heights O.D..

It is suggested that the earliest levels reached represent an 11th - 12th century ground surface seen in context 169 in ENR2 and contexts 99, 133, 135, 137, and 139 in ENR5. These were cut by a foundation trench (context 161 in ENR2) for a substantial sandy mortar wall which ran west - east and was found in ENR2 (contexts 120, 160, and 162) and in ENR5 (context 124). The excavation in ENR3 did not extend far enough south to find this wall. The top of the wall as it survived in both areas lay at between 20.50 and 20.60 m O.D.. According to the site grid, the alignment and position of this wall was the same in both areas. Contemporary with this wall in ENR2 was a stone structure resembling a shaft (context 156) and areas of burning between it and the wall which probably resulted from industrial activity. In ENR5 a mortar floor (context 129) sealed the earlier layers, and was in turn overlain by a deposit that extended over wall 124 after it had been dismantled to its present level during the 13th or 14th century.

The Sacrist Rolls of Ely (ed. F.R. Chapman, 1907) provide evidence for considerable building activity in the monastic precincts in the first half of the 14th century, especially during the period when Alan of Walsingham was Sacrist. There are accounts relating to demolition and rebuilding in the North Range, and this would seem to correspond with the excavated evidence.

Cobbled and compacted surfaces in both ENR2 (stage 3, contexts 116 and 152) and ENR5 (stage 2, contexts 95 and 88B) date to the same period and are presumably the next phase in the use of the site. In ENR2 the cobbled surface was contained by a north - south wall (context 107) which appears to have been one structure with the west - east wall (context 101) built over the remnant of the earlier Medieval wall (context 120).

The Post-Medieval Period

In the Post-Medieval period it appears that ENR2 (stage 4) and ENR3 (stage 2) were one room, and the various mortar floors and associated drains were all very similar in appearance, in their levels O.D., and in the dating evidence they provided. The make-up deposits beneath these floors also showed much similarity in composition and

depth. In ENR2 the plinth belonged to this phase and it would seem that all these features related to some industrial process on the site.

In ENR5 (stages 3 and 4) the construction of a north - south wall and a small structure to its west may correspond with this period. The finds associated with these stages belong to the 17th century and earlier.

In ENR4 a sondage 0.8 m in depth showed only a continuous disturbance. The Bacon manuscript (c.1870) mentions the construction in Elizabethan times of a passage between the High Street and the Lady Chapel, and the 1851 plan of Ely by Bidwell shows a passage running north - south through the North Range apparently in the position of ENR4. Thus in this period probably there were two discrete buildings on this site.

The Victorian Period

In all areas the final phase on the site was represented by extensive dumping and levelling. Much Medieval window glass was found in these dumps, together with lead, animal bone, and rubble which included pieces of dressed stone assigned to the Medieval period. From this evidence it could be suggested that a certain amount of Medieval fabric had survived in the buildings that were demolished by the Victorians, when they made extensive alterations at the North Range c.1870.

29th January 1988

Anne Holton-Krayenbuhl

Tim Malim

Excavation in the old Choir School kitchen revealed six main stages of activity. The relationship between features in stages 1 and 2 could not be fully established and the earliest levels were not reached.

Stage 1

In the south half of the room, a foundation trench (161) had been dug into a thick deposit of brown loamy soil with charcoal flecks (169). Wall footings of rubble and mortar were poured into this trench which was 0.25m deep where excavated. The wall footings (120 and 162) ran west - east and were at least 1.4 m wide. A 1.4 m stretch was defined. There was a buttress-like protrusion (160), 0.65 m long and 0.4 m wide that ran northwards from the wall.

In the north part of the room, a 0.9 m high shaft of stone and mortar had been built⁽¹⁵⁶⁾. The west wall of the shaft was made up of irregular pieces of stone and mortar, while the east wall was built of dressed stone blocks. The distance between west and east walls was 0.7m, and the approximate depth of the structure was 0.95 m. It was not possible to establish how the shaft related to the north wall of the existing building. The dressed stone at ground level on either side of the shaft opening was indented on its outer edge, as if to provide space for a small board or the like, to block the entrance. There were no traces of smoke-blackening or charring on those parts of the shaft that were examined, or on its base at ground level.

South of the shaft⁽¹⁶⁵⁾ were a series of deposits of ash and clay. One of these deposits formed part of a square with rounded corners, charred black and red (sides at least 0.6 m), enclosing a smaller clay square (sides : 0.25m). The smaller square was aligned with the opening at the foot of shaft 156.

There was no time to fully establish the relationship between these deposits, and between the deposits and 156, but it seems likely that they were contemporary and that feature 165 represents a structure that has now disappeared.

Summary of stage 1. The earliest stage is represented by wall footings of considerable thickness running across the south part of the room. The stone-lined shaft with associated patches on the ground

in the north half of the room probably represent some form of industrial activity. No dating evidence was recovered.

Stage 2

In the south part of the room, the conjectured wall overlying footings 120, 160 and 162 was dismantled, leaving an irregular scatter of stone and mortar along its north edge.

Shortly after, a shallow pit (119), 16cm deep and 22cm in diameter, was cut into 120. It had a homogenous fill of crumbly brown soil with fragments of chalk, bone and chipped tile, but there was no evidence as to its function.

A pit or trench had been cut into the north edge of wall footings 120 and into the dark brown occupation soil with charcoal (169) lying to the north of footings 120. Its west edge sloped steeply, its east edge was vertical, and it was at least 30cm deep, but there was no time to establish the extent of this feature. The feature was infilled with brown compacted soil containing much chalk and clay and some animal bone, and the same compacted material (166) sealed both the pit feature and the dark brown occupation levels to the west and east of it. Two small sherds of glazed C13/14 pottery were found in context 166. Over this, a dark brown clayey layer of soil accumulated (151), containing three sherds of C12 to C13/14 pottery and a metal object.

In the north part of the room, dark brown loamy soil accumulated (164) over contexts 165 and 167. It contained flecks of charcoal and two very small sherds of C13/14 pottery, two metal objects, a piece of burnt bone and a few small pieces of mussel shell. 164 may have been a continuation of 151.

Summary of stage 2. The wall running across the south part of the room was dismantled and the resulting trample from this activity created compacted layer 166. The structure represented by 156 and 165 went out of use and soil accumulated naturally (164 and 151) some time in the C13/14.

Stage 3

(111)

In the south half of the room medium brown soil was deposited over

Wall footings 120. It contained an abraded sherd of medieval pottery and a small sheet of lead that had been folded. The base of a stone and mortar wall (101) was then dug into this deposit. Wall 101 was on the same alignment as 120, but was only 0.4 m wide. It stood to a height of 20 cm, and a 2.6 m stretch was defined. The wall then turned at right angles northward. Where the south - north wall ran over the buttress-like footings (160) its base had been cut into the footings and was 0.4m wide (159). This wall continued into the north part of the room (107) and was built onto the east side of structure 156. Wall 107 was 0.3 - 0.4 m wide.

To the west of wall 107 was a cobbled surface (116 and 152). It overlay 151 and sloped from south to north. At the north end, the soil between the cobbles had been reddened as a result of activity at a later stage. The ground surface east of wall 107 may have consisted of the upper deposits which constituted layer 164 (see stage 1).

A sherd of C13/14 cooking pot was recovered from the structure of wall 107, and on the surface of the cobbling, two fragments of green-glazed tile and one sherd of pottery were found, all of C14 date.

Summary of stage 3. A new stage of activity is represented by the narrow wall running west - east, then south - north, and overlying the deposits associated with periods 1 and 2. The position of wall 107, separating a cobbled area from an area of natural deposits suggests a change in spatial organisation. The shaft structure at the north end of the room may still have been in use. The limited dating evidence suggests that this stage dates to the C14.

Stage 4

A polygonal plinth of ~~concrete~~ ^{hard cement}, brick and stone was built in the north - west quarter of the room (23). It cut into cobbling 152. The north and east edges could not be excavated, but the angles between the sides suggest that the plinth was hexagonal. The two sides that could be excavated completely were 1.2 m long. At the bottom of the plinth core of dark brownish-grey silty clay (155) was a fragment of rim of C13/14 pottery. The vertical edges of the plinth were faced ^{with stone} in concrete to a depth of about 20 cm. The upper surface of hard sandy material was a rusty red colour (22) and there were circular patches (diameter : 20 - 40 cm) of darker red (103) and paler orange-pink (28). Finds on the surface of the plinth

included part of a salt-glazed stoneware jug dating to C16/17 and of probable Rhenish origin, two very small fragments of window glass and two metal objects.

Wall 107 was dismantled to the same level as the lower part of the plinth facing, and a low stone wall (109) was built between 107 and the plinth, blocking the south side of structure 156. There was a homogenous fill of brown sandy soil (115) to the north of wall 109. Rust red crumbly soil lay to the south of this wall (108) and an abraded sherd of C13/14 pottery was found in this rust red layer, together with a fragment of bone.

On the east face of the plinth was a red stain that extended over 108 and wall 107. It had also stained cobbling 152 described in stage 2.

The cobbling (152) into which the plinth had been cut was deposited to the south of the plinth (114) and levelled. Over the resulting horizontal surface, a mortar floor (24) was laid, between the plinth and wall 101 which was still standing then. The floor was up to .2 cm thick, but it also had worn patches (33,34,37,38,111). It sloped from west to east, being as much as 10 cm higher at its west end than at its east end where it drained into a stone- and brick-lined drain (32,112,118,154).

The drain lay immediately to the east of walls 101 (east side) and 159, and was cemented on these walls in places. The brick and stone sides of the drain rested on tiles, some of which were roof tiles (154). The channel of the drain was about 15 cm wide and sloped from north to south. The drain was at least two metres long. It had been filled with homogenous sandy brown soil similar to 115. Overlying the drain edges of brick and dressed limestone blocks adhering to each other with much cement, were three flattish stones (118) one of which had decorative carving on it. The stones served as a base for a cobbled surface (112). North of these features, the drain was covered by two square slabs of stone (32). The smaller stone was 33 by 30 by 9 cm. The larger stone was 43 by 40 by 7.5 cm and had four perforations near its centre (diameter of perforations: about 2cm). North of 32 was a small area of cobbling that continued into the section.

Floor 24 sloped down towards the two stone slabs, and the perforations in the larger stone would have enabled water to drain into drain 154. This would suggest that the south - north wall represented by footings

9 and the east part of wall 101 had been dismantled, and the observation that the drain was cemented onto ^{The base of} these walls (see above) supports this. Brown soil accumulated to the south of the remaining stretch of wall 101 which ran west - east.

West of the base of wall 107, small heaps of rubble were dumped, and the whole area was then levelled with a layer of brown soil containing pebbles and charcoal flecks to a depth of 20 cm. Sandy soil was then spread over part of the surface and this acted as underlay for a mortar floor (110).

A few fragments of bone were found associated with the various floor surfaces, and one small sherd of C17 pottery was found in the cobbling at the north end of the drain cover 32.

Summary of stage 4. The plinth which must initially have had a superstructure, together with the rust stains associated with it suggest some form of industrial activity. There were mortar floors to south (24) and east (110) of the plinth, the latter continuing eastward into the section. Wall 101 remained the south wall of the building and there was an opening at the south end of the east wall where the threshold is represented by 32 and 112. The purpose of the drain to collect water from the mortar floor inside the building is not clear but may be related to the activity carried out around the plinth which ^{may have} required efficient arrangements for floor-cleaning. The two sherds recovered suggest a post-medieval date around C17.

Stage 5

The area between the plinth and wall 107 was infilled with medium brown gritty soil (104 and 105) containing three fragments of bone, a piece of lead, a nail, and a fragment of painted wall plaster with the outline of a design painted black and the outer zone burgundy

A brick-edged structure of mortar and rubble (26) was built over infilling 104 and 105. It was cemented onto the plinth. Floor 24 was still in use although covered by a thin layer of brown deposit in which a lace bobbin, a sharpened pig's tooth and some oyster shell were found.

The thick deposit of medieval glass (170) found among the successive fills of structure 156 may belong to this stage. It was up to 20 cm deep.

Summary of stage 5. The purpose of feature 26 is not clear and it is not certain whether the plinth was still in use.

Stage 6

Two pits were dug into 26 (27 and 29). Pit 27 overlay structure 156 and a succession of shallow deposits filled the pit.

The superstructure of the plinth was probably dismantled in this stage, as was wall 101 which was taken down to the same level as mortar floor 24.

The whole area was then covered with - 0.6 - 0.8 m deep deposits of soil, broken tile, and rubble containing a quantity of animal bone, a fragment of medieval floor tile, three sherds of C17 pottery, and 32 fragments of glass, many of which were decorated and of C14 date.

Summary of stage 6. This represents the final stage of the site prior to the Victorian rebuilding. Medieval finds in the rubble suggest that a considerable part of the medieval fabric had survived until then. The line of the west - east wall that had formed the south side of the building since the Middle Ages was abandoned, to be repl. by a new south wall further south.

ELY NORTH RANGE AREA 3

INTRODUCTION

Area 3 was a small room immediately east of the Old Choir School/kitchen, and a trench 2 metres square was excavated here. It revealed over a metre of deposits, which were not bottomed by the excavations owing to scarcity of time and the dangers of going too deep in a small area. The deposits show considerable activity in the Post Medieval period, and then again during the Victorian building phase c.1860.

Medieval levels were reached and had been separated from the later activities by a 10 cm deep spread of sand and rounded gravels which contained no finds.

The Medieval Period

1)

The earliest level reached in the excavation was a layer of hard silty-sand and rounded gravels (context 51), containing charcoal flecks and bits of mortar, and some flints. The nature of this deposit would suggest it was a compacted surface on which a grey clayey-sand layer (context 50) accumulated. Two sherds of 13th - 14th century pottery, a corroded iron object with glass ornamentation (jewellery --- possibly a crucifix), a nail, and bone were found. Charcoal flecking occurred throughout the layer, and an episode of burning, a thin black silty ash patch (context 46), sat on top of layer 50.

First stage summary

Medieval activity consisted of a trampled hard surface with an accumulation of occupation debris above it.

2)

The preceding layers were covered and in part cut into by the deposition of a layer of firm sand and rounded gravels (context 45). Although no finds were retrieved from this deposit, it did contain some small mortar chunks and bits of brick. This would appear to be the result of deliberate dumping of a deposit brought in from elsewhere, perhaps to form a new hard surface, or as a firm base for the construction of a mortar floor and drain.

A well built drain of limestone blocks and slabs (context 43) running south - north with a 1 in 30 slope down to the north, was found

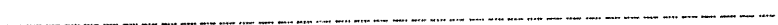
on the eastern side of the excavation. Although we did not take it out it seems from section evidence and general levels that this feature would have been built directly onto the gravelly deposit layer 45. The conduit of the drain was 20 cm wide by 10 cm deep and was lined by limestone. The sides were well cut rectangular limestones 30 cm long by 10 cm wide. In places stone slabs that lay over the drain were still in situ, with a blue-grey clay sealing them. Mortar had been used to bond the sides and base of the drain together.

A grey-brown clayey-sand layer (context 44) with a little charcoal flecking, some mortar fragments and some small stones was laid over the gravels of layer 45 and butted up against the sides of drain 43. A single sherd of pottery of early 17th century date or earlier, a folded piece of lead, a corroded nail, plus bone, tooth, and horn fragments are the scant finds from this layer. It must have been the product of deliberate deposition to raise the level of the ground in the area and to give a bedding for a mortar floor.

A sandy mortar floor up to 10 cm in thickness and topped by a coating of plaster was laid down on layer 44 and bonded to the top of the sides of drain 43. Both the floor and its make-up layer 44 are found on either side of the drain. From the west it slopes down slightly towards this drain. Finds attributed to the floor probably came from disturbance of the surface of layer 44 when the floor was excavated down to it. They include a sherd of early 17th century saltglazed stoneware, a piece of lead, bone and a corroded nail.

Second stage summary

Dumping and levelling of earth and gravels was carried out to prepare the site for the laying of a mortar floor. A drain was constructed to service this floor, and finds associated with it suggest a date not earlier than the 15th - 17th centuries.



3)

Lying over the mortar and plaster floor 42 and over the drain 43 is a deposit of firm grey clay (context 208). This only remains in the northern part of the area and must represent a phase when the floor and drain were no longer being used. It contains tiles lying horizontally within the layer so does not appear to be a dumped deposit, but any function for it remains unclear.



4)

Layer 208 and parts of the mortar floor were cut into and removed, to be replaced by a deposit of sands and ashy-silt with lime peagrit (context 207). Dumps of stone and tile fragments would suggest that this layer is composed of various episodes of dumping, but the

pieces of tile generally lie on a horizontal plane within the deposit, which should be the result of a more ordered deposition.

This general rubblely deposit was cut by a north - south running V-shaped ditch, sloping southwards at 1 in 20 (context 206). It also cuts layer 208 and penetrates through the mortar floor 42.

It is filled initially by a mixture of ash and burnt sand (context 205), but very probably cuts this layer. The stratigraphy is difficult because layer 205 is very loose and when it was cut by the insertion of ditch 206 the sides collapsed into the ditch, thus leaving the impression that this ash and sand layer was deposited over the site after the digging of the ditch. Several pieces of corroded iron were incorporated in the layer. This ash and burnt sand layer could be the result of a phase of destruction, or a period of use with intense burning activity on site.

A deposit of clay with ash (context 204) seems to be confined to the ditch at its north end, overlying layer 205 where it fills the ditch. This clayey deposit maybe a fill directly related to the function of the ditch.

Fourth stage summary

The site underwent a series of changes of use with disturbance of earlier layers and deposition of ash, sand, stone and tile, oyster and mussel shells, corroded iron, clay pipe and glass fragments, and the base of a Diastercian ware mug. This could be 17th century, or it could be a product of the 15th - 16th century Babylon kiln at Ely. The deposits do not represent arbitrary tipping as the black and red ash and sand layers appear laminated, and tile lies horizontally in layer 208. Thus they show a period in which a thick deposit was allowed to accumulate, and later to be cut into by a ditch which in turn had time to become fairly full of deposits.

The Victorian Period

5) A foundation trench for the still extant north - south partition wall can be clearly seen at the eastern edge of the excavation (context 203). It is cut through layers 205 and 207 and is deep enough to allow 4 courses of brick for the foundation of the Victorian wall, a thin affair 25 cms thick. The foundation trench was filled by a loose rubble of sand, mortar chunks, and stones (context 202).

At the western side of the excavation the earlier layers have been disturbed by the digging and dumping for construction of a brick fireplace.

Over all the site a dumping layer of loose rubble and ash, and general building debris, had been spread as a levelling process

before construction of the Victorian floor.

At a later date a hole was dug in the south-east corner right through all recorded layers to insert a metal water pipe.

ELY NORTH RANGE AREA 5

INTRODUCTION

The excavations in Ely Museum revealed three main periods of activity on the site. Firstly a Medieval one through the 12th - 14th centuries, with wall and floor construction phases, and various layers of occupation accumulation. Secondly Post-Medieval activity involved the construction of walls and a small structure of uncertain function, with considerable disturbance of earlier layers in places. Thirdly wall robbing and preparation of the area for the construction of the standing buildings caused disturbance during the Victorian era.

The Medieval Period

1) The earliest phases on the site were never reached, however pottery from the 12th century on was found in the earliest deposits recorded. These were the accumulations of occupation debris (contexts: 99, 133, 135, 137, 139) of grey and mottled brown clayey-silt with much charcoal flecking and patches of burning. 19 sherds of pottery were found including pieces of St. Neots ware and Thetford ware, which may in fact date back as far as the 10th century. Small pieces of poorly fired clay which are possibly daub, and a matchstick like piece of copper were found also.

These deposits were cut during the Medieval period at their northern end and replaced by a hard deposit of sandy-silt and rounded gravels (contexts 126, 136, 138) which contains 6 sherds of pottery, 12th - 14th century pottery, including a piece with some fine rouletted decoration and a distinct sheen, which may be Thetford ware. The northern limit of these deposits goes out of the area excavated.

At the southern edge of the excavations a west - east wall of sandy mortar construction was found (context 124). As we could not bottom the deposits 99, and 139, it is impossible to say whether the wall predated them. However it can be seen to be contemporary with the Medieval layers as a posthole (context 100) was cut 40 cms deep into layer 99, and its southern side was bedded into wall 124. The posthole had a square shape in plan and had been filled after disuse by an orange brown silty sand and peagrit deposit with mortar flecks but no pottery. This deposit (context 131/121) also spreads over layer 99, and is sealed by a later Medieval layer 88.

At the north east end of the excavation the hard gravelly deposit 125/135 had two thin layers almost entirely covering them (contexts 130 and 140 respectively) made up of a grey silty-clay with charcoal flecking. 3 pieces of pottery were recovered, one sherd

possibly Stamford ware, but all securely Medieval. Above layer 130 is a very thin spread of sandy mortar (context 129) presumably the remnant of a floor.

First stage summary.

The earliest features we have seen to consist of a substantial mortar wall running west - east and a sequence of layers of Medieval occupation build up. The dimensions of the wall fell out of the limits of the excavation but it appears to represent the foundations of a reasonably important structure, at least 4 metres in length by 50 cm width as far as it was exposed by the excavation. The accumulations north of this wall were disturbed during Medieval times period by the insertion of hard gravelly deposits sealed by a mortar floor, and by the insertion and removal of a post. The mortar floor would suggest that these deposits were on the inside of the building associated with the wall mentioned above.

2)

The next stage of activity on the site was the build up above the mortar floor and clay layers. On the east side of the excavation area a compacted dark grey-brown silty-sand accumulated to some 40 cms depth (context 88), which in retrospect can be divided into two distinct units (88A higher level, 88B lower level). Excavated as one context the finds all give a date of 13th or 14th century, and fragments seem to include Lyvedon ware, and sherds from pitchers, jugs, and cooking pots. Amongst the bones are some bird long bones, and the large mammal bones show plenty of evidence of knife cuts and longitudinal splitting. The upper level, 88A, had more mortar and sand inclusions and contained patches of ash and coal on its surface. This level is probably the same as the dark tan silty-sand layer found at the south-east end of the excavation (context 91).

Spreading to the west a layer of flint cobbling set in grey brown silty-sand 20 cm thick covers the north part of the excavation area (context 95), and continuity of layer with the lower part of context 88, 88B, is suggested by a scatter of stones at its north west corner. Blue window glass with a moulded edge, and an unglazed sherd of pottery were found in layer 95. Above this a grey fine sandy-silt layer containing mortar and lime inclusions (context 97) can be equated with the upper level of context 88, 88A. Stones in these two layers lie at all angles suggestive of a dumping and levelling process. Pottery from layer 97 is datable to the 13th - 14th centuries with definite Lyvedon sherds from Northamptonshire, and amongst other fragments several from a 14th century Baluster jug.

All these deposits were sealed by a sandy mortar floor which survives in a fragmentary form (contexts 90, 96, 143) between 6 cm to 2 cm in depth. No accumulation was apparent on this floor, merely later dumped deposits.

Second stage summary.

During the later Medieval period occupation debris collected on the surface of the earlier mortar floor in the north east part of the excavation and extended to the south over the previous occupation layers and over wall 124. This layer was compacted by usage and is associated with a cobbled surface in the north west (contexts 88A and 95 respectively). Similar deposits were dumped on top (contexts 88B, 97) and packed down to make a levelled area for laying down the next mortar floor. The pottery securely dates these activities to the 13th - 14th centuries, and the diversity of types show contacts with neighbouring counties.

Post Medieval activity

3)

All previous deposits were cut by the insertion of a north - south running wall (context 134/82). Wall 134 was constructed in three stages by pouring a lime mortar and clunch mixture into a straight - sided foundation trench (context 144) 45 cm wide and 100 cm deep, cut through the Medieval layers 99, 133, 135, and 137. At its southern end it butted and went over wall 124. At the northern end it butted and was laid over the hard gravelly layer 126/136, and in part overlies the compacted surface 88B. The wall was constructed in three stages: the first and lowest stage was 50 cm high and composed of a clunch and lime mortar with peagrit; stage two was 20 cm of clunch and lime mortar; and the third stage was a soil and lime mortar mix with clunch and some flints 30 cm in height. It was only this third stage of construction which has been laid over layer 126/136 and 88B. A buttress like protrusion 60 cm in length lay perpendicular to the main part of the wall on its east side, and had been cut through layers 88A, 88B, and 99. However the third stage in the construction of the wall at this buttress had been made an extra 15 cm wide so that it spread over the compacted layer 88B.

Sitting on top of wall 134 was a limestone and hard cement wall (context 82). It had been cut through the mortar floor 96/143 and dumping layers 97 and 88A by a V-shaped construction trench (context 142). The regular stone blocks were bonded by a hard cement which had spread out at the base of wall 82 to fill the bottom of its construction trench, which was at exactly the same level as the earlier mortar floor.

R

Third stage summary.

Insertion and construction of a north - south wall cutting all earlier deposits. The clunch and lime mortar wall 134 is probably just the foundation for the stone and cement construction of wall 82, but it is possible that they represent two different periods. Dating is difficult but the hard cement in wall 82 would suggest it is late.

4) A structure (context 141) was butted up against walls 134/82. This involved considerable removal of existing deposits so that all Medieval layers west of these walls and above layer 133/135 disappeared between the west - east wall 124 and some residual layers at the north end of the excavation. Thus structure 141, a small room 140 cms square, was built directly onto the truncated Medieval layers 133 and 135. At the north end the hard gravelly deposit of 136 was cut into and so were the overlying layers of thin silty clay (140), cobbling (95), and the floor deposits of 97 and 96.

Structure 141 was built of an L-shaped wall (context 83) composed of a hard cement with bits of glass, tile, and broken pieces of stone in it. The interior sides, the east and north faces, had a stone lining and were faced with plaster. The south wall was butted up against, and to about half the depth, of wall 134. In the centre and base of this south wall an opening 40 cms wide by 33 cms high exists. A sandy mortar floor (context 132) was laid in the bottom of this structure and below the walls 83, and can be traced butting against the hard gravelly Medieval deposit of 136 which has been cut into and used as the north side of the structure.

Presumably the rectangular opening in the south wall was designed to be functional when the room was in use. Therefore the deposits on the outside of structure 141, to the south and west of it, must have been put there after it became defunct. However the very rough appearance of the exterior walls with glass and stone fragments, and even nails protruding from the cement would suggest this was a wall built against existing deposits, or that it originally had a facade of stonework on the outside too.

A layer of mortar rubble lies over the floor 132 and in turn is covered by a 20 cm thick deposit of ash layers (context 127), which also fill the opening in the south wall. Finds in this include a pointed leather shoe sole, a fairly complete skeleton of a crow sized bird, large mammal bones that had been cut up, two small copper objects, and a sherd of pottery that can be dated to the 16th - 17th centuries. It is possible these ash layers were the result of a secondary use of the structure. A fallen mass of cement and hard core the same as wall 83 extends vertically through the ash and up through the later rubble fill to lean against the west wall of structure 141.

ash deposits continue to be found in the area between this object and the west wall, so it may have been used for burning. None of the finds show evidence of charring however.

Fourth stage summary

Construction of little room 141 for unknown purpose. Removal of much Medieval material.

5) A series of layers all very similar to one another were dumped around the outside of structure 141. They consist of grey brown silty sand deposits with charcoal flecking and mortar chunks, and contain almost exclusively Medieval pottery. Nonetheless stratigraphically they must be a late phenomenon and contain glass, bone, oyster shells, and sometimes bits of corroded iron --- nails and knife blade? Context 125 lies between the south wall of structure 141 and the Medieval west - east wall 124. It blocks the opening in the south wall. At its junction with the deposit above it (context 94) a spread of mortar rubble and stones at various angles lie close up against wall B3 of structure 141. This could be trample associated with destruction of the structure. If it had been faced with stonework on the outside, this would have been removed before the dumping and packing of the later deposits around it. Above layer 125 lies a layer of fine sandy silt, mid brown in colour, with peagrit, mortar chunks, charcoal flecking, tile fragments, and some flints in it (context 94). It contains 13th - 14th century cooking pot sherds, blackened by use, chopped about mammal bones, and oyster shell. The layer is 10 cms thick and has been compacted, and it covers the Medieval east - west wall 124. Above layer 94 a grey brown clayey sand layer 20 cms thick has been dumped. It contains charcoal and lime flecking, and throughout the layer bits of tile and glass lying at all angles can be found in it. The only pottery sherd is late 15th century and some thin lead strip may be window glass setting. The bones show no evidence of butchery and are from large mammals. At the base of the layer a strip of mortar 20 cms wide (context 92) runs westwards from the south west corner of structure 141 and probably represents the base of a temporary wall. Set up against the west and south faces of structure 141 glass, nails, bits of tile and stone, and bone were found, and at the top of this layer a small area was laid with clunch blocks up against the south face of the structure, amongst which were found two pieces of 14th - 15th century window tracery laid upside down. Layer 87 was very similar in substance and contained corroded iron which may have been a knife blade, bone, oyster shell, glass, and 13th - 14th century pottery including a jug rim, and a sherd of Grimston ware. This layer may have been the result of trampling and is a compacted deposit found only in the north western part of the excavation, covering layer 86 and the Medieval mortar floor 96.

The interior of structure 141 was filled by a dark grey sand

and ash mixture with limestone pieces 50 cms deep. It contained a clay pipe fragment, early 17th century glazed pottery (possibly Cistercian ware), split marrowbone, oyster shell, and the neck and top of a glass bottle probably 18th century in date.

Fifth stage summary

Disuse of structure 141 led to partial demolition and deposition of fairly homogeneous layers outside it. These were packed down about it, and up against the south and east part of wall 134/82. Although the pottery in these deposits was exclusively Medieval their stratigraphic relationships to structure 141 suggest they postdate it and wall 134/82. The way finds did not lie horizontally within the deposits, (tile, stones, glass, and bone being found at all angles,) would suggest that these layers were the results of dumping. Presumably they were excavated from Medieval deposits elsewhere, but close at hand, to fill the space around the structure. The rubble fill within structure 141 itself may have come much later. Nonetheless these activities would appear to belong to the period of the 18th or 19th centuries.

Victorian Tampering

6) The penultimate stage was the robbing of the centre part of wall 82, and the eastern end of wall 83 where it butted against wall 82. This activity or robbing trench (context 145) can be seen to have cut layer 94 (and those above it) and possibly cut into the Medieval layer 88A. The limestone blocks from wall 82 were removed as were stones and possibly bricks from wall 83. A deposit of mortar and sand was left as a residual rubble following the line of the wall (context 89) contained by the layers that had built up against the walls. On the eastern side the rubble spilled out over layer 88A and mortar floor 90.

Finally a rubbly layer of sand, earth and mortar was spread over existing deposits (contexts 81, 85) as a process for creating a level area to construct the floor of the Victorian building known as Fly Museum. Brick, tile, glass, oyster and mussel shells, bone, and a herd of 17th - 18th century pottery were included in these deposits, and the walls were demolished to the same level as these layers.

Sixth stage summary

Victorian demolition of previous walls, and dumping of rubble

a levelling process, before construction of the floor to the building known as Ely Museum.

(Tim Malim January 1988)

ELY NORTH RANGE
AREA 5

PHASING

- PHASE XII
- 1_81_1 Layer of rubble for levelling in connection with the construction of the 1859 Victorian buildings.
- 1_85_1 Layer of loose ash and soot and rubble --- connected with Victorian levelling activity.
- PHASE XI
- 1_89_1 Layer of loose mortar rubble from robbing of wall (_82_).
- 1_145_1 Feature: robbing trench for partial removal of wall (_82_).
- PHASE X
- Layers deposited after disuse of structure (141).
- 1_84_1 Layer of loose rubble and ash in structure (141) deposited around a fallen piece of cemented stone and rubble, similar to that used in the construction of the wall (83), that has sunk into the lower levels of ash, stratified as (127).
- 1_87_1 Layer of dumped earth on outside of structure (141).
- 1_86_1 Layer of dumped earth on outside of structure (141), beneath (87). With SF1 -- late medieval window tracery laid on the top of this deposit, and the mortar foundations of a possible wall (92) included within it.
- 1_94_1 Layer of dumped earth on outside of structure (141), beneath (86).
- PHASE IX
- 1_82_1 Feature: wall of stone and concrete.
- 1_142_1 Feature: foundation trench dug for wall (82).

PHASE VIII

I_125I

Layer of dumped earth on outside of structure (141), beneath (94). Appears to have patches of mortar and some vertically positioned stones on its surface (i.e. included in (94)) which may coincide with robbing of walls (82) and (83) ---- i.e. activity (145) or insertion of wall (82) ---- i.e. activity (142).

PHASE VII

Stratified layers inside structure (141), i.e. usage of structure.

I_127I

Layers of ash all given one context number, containing much bone, especially bird bone and skulls, and a piece of leather. Presumably deposited when structure (141) was in use as a room for burning.

I_132I

Layer of mortar ---- floor for structure (141). Laid at base of walls (83) north and (83) east, and butting up against wall (134).

PHASE VI

Construction of structure (141).

I_83I

Features: cement and rubble walls of structure (141); 2 walls running north and east from their mutual corner, the east running wall butting up against wall (134), the north running wall cutting into layers (96), (97), (95), (140), and very probably (136) too. Bases of walls resting on mediaeval levels i.e. layer (131) which has very probably been truncated by construction of structure (141) ---- layer (136) which has been cut into by the deposits filling structure (141), (i.e. (127), and (132)), would also appear to be mediaeval but post-dates (133).

PHASE V

Construction of wall (134).

I_134I

Feature: wall of clunch and lime (?) mortar. Built in three stages by mortar being poured into foundation slot to form wall.

I_144I

Feature: foundation trench for construction of wall (134). Slot cut into mediaeval deposits of layers (99), (133), (135), (137), and resting above (139), and the harder deposit (136). Also appears to cut layer (88).

PHASE IV

Hard-core, rubble and earth build up for laying of mortar floors in eastern area of ENRS.

!_96_! Layers: of sandy mortar floor, cut through by insertion of foundation trench (142). Layer
!_143! (90) cannot be seen in section or plan as directly joining up with (96) and (143) but
!_90_! the similar level and deposition above and below these floors would suggest they are all contemporary with one another.

!_97_! Layer below mortar floor (96), possible make-up or levelling for laying of floor.

!_88a! Layer which in retrospect should have been given two context numbers; so (88a) is the higher level and maybe the same as (91), and (97). Possible make-up levelling for floor (143).

!_91_! Layer beneath floor (90).

!_95_! Layer of flints and earth below (97). Possibly same as layer (88b).

!_88b! Layer of compacted material below layers (88b) and (91). This layer and (95) could be occupational deposits or a hard base for the levelling and laying of floors (96), (143), and (90). Cut by insertion of foundation trench (144).

PHASE III

!_131! Layer of sandy material and peagrit sandwiched between layers (88b) and (99) and fills post-hole (100). At south-east end of ENRS.
!_121!

!_129! Layer of mortar --- floor, below (88b) at north-east end of ENRS.

!_130! Layer of clayey material below mortar floor (129). Maybe the same as (140).

!_140! Layer of clayey material below (95).

PHASE II

!_136! Layers of very hard sandy gravels sealed by
(130) and floor (129), and (140). These
!_125! contain Mediaeval pottery and have wall (134)
resting its third and final stage of
!_138! construction on these deposits. They cut the
Mediaeval layers (99), (133), (135), and (137).

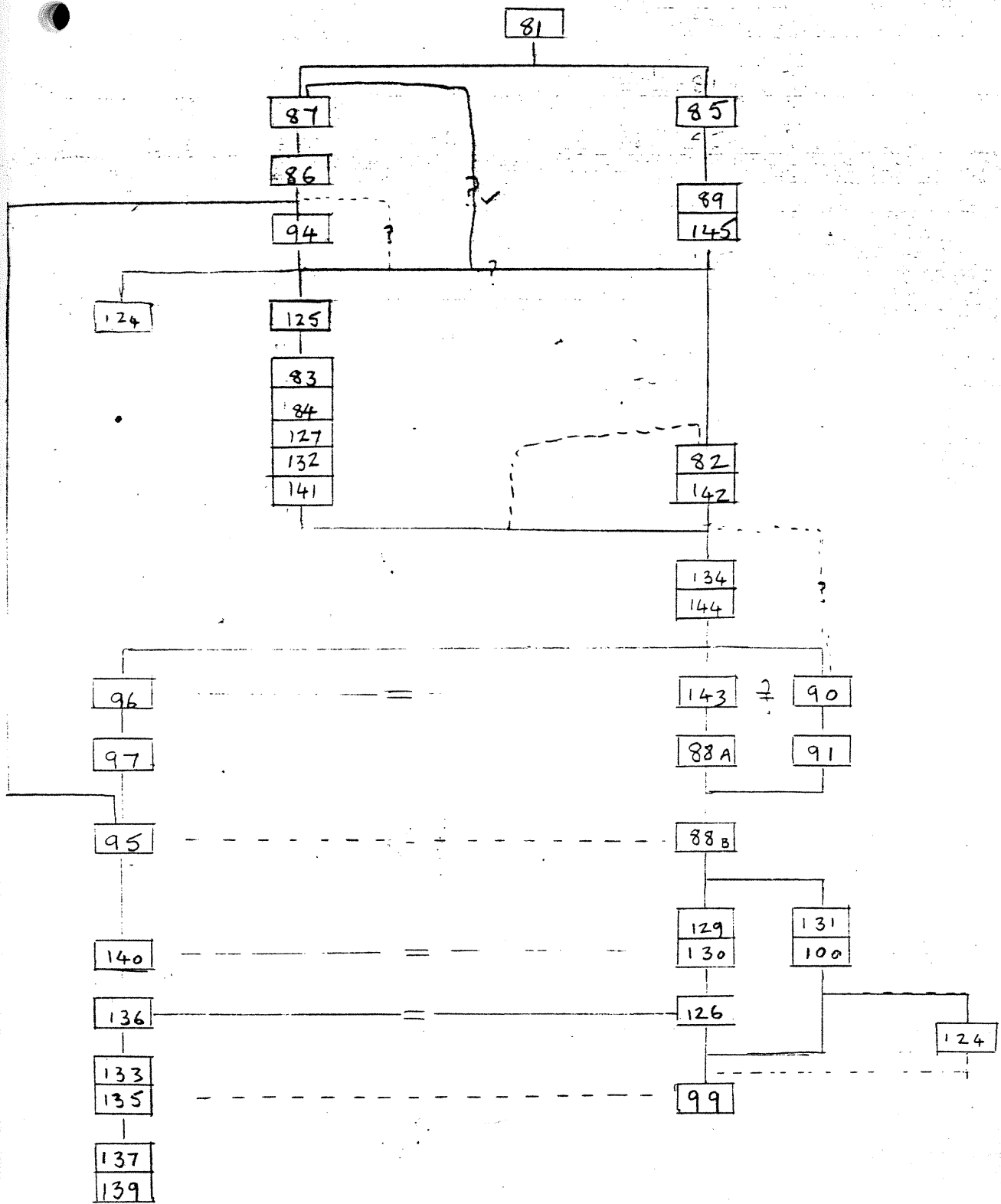
!_100! Feature: posthole cut through layer (99).

PHASE I

!_99! Layers of occupational debris with patches of
ash and burning in them, charcoal flecking, &
!_133! Mediaeval pottery. Wall (134) rests on layer
(139) which is the deepest we were able to dig
!_135! in the time. Layer (136/138) also rests on
this layer (139), which may be the same as
!_137! (137). Therefore cultural deposits were never
bottomed in ENRS.

!_139!

!_124! Feature: wall of mortar.
Difficult to date because it is not obvious
whether it was cut through layers (99), (133),
(135), (137), or whether they built up against
it. However posthole (100) was cut into both
it and layer (99) so it can probably be dated
to the same phase and period as (99) on such
evidence as we have. If we had been able to
bottom the cultural layers this relationship
would probably have become clear enough.



PLAN/SECTION NO.				NOTES:
DRAWN BY	TIM			ENR 5
CHECKED BY				
DATE	12.1.88			
SCALE				

ELY NORTH RANGE
AREA 3

PHASING

CONTEXTS

PHASE VIII

201

Layer of rubble in sandy-silt matrix, containing mortar chunks, stones, bits of wood and charcoal flecks. Levelling for construction of 1859 buildings.

202

Layer filling ditch (203). Composed of loose sand, mortar chunks, and stones.

203

Feature: ditch cut for foundation trench of north-south partition wall of 1859 building, (still standing). Cuts (205), (207).

204

Layer of ash in clay, part of fill of ditch (206). Sandwiched between (201) and (205).

PHASE VII

205

Layer of ash with patches of burnt sand, and much charcoal discolouration. Extends over much of north part of trench and fills the lower part of ditch (206). Maybe slightly compressed in ditch by weight of (204). Contains pieces of corroded iron.

Destruction phase or does it represent a period of use with intense burning activity on site?

PHASE VI

206

Feature: ditch cut, running north-south. Filled by (205), (204), and (201). Cuts (207), (208), and (42).

Function unknown. Slopes down from north to south by 12cms over 2.5metres.

PHASE V

207

Layer of ashy silt and sand with lime peagrit. Contains dumps of stone; & tile fragments at horizontal and vertical angles.

Destruction phase which cuts into (208) and obliterates it in the southern part

of the trench, and also cuts into mortar floor (42) removing the plaster surface on the south side.

PHASE IV

208

Layer of firm clay apparent at north end of trench, with some tile fragments lying horizontally in it.

Deliberate human deposition; occupational debris?

48

Layer: clayey fill of stone drain (43).

47

Layer of clay sealing top of drain (43).

49

Feature: circular hole cut through mortar floor (42) in north-east corner of trench, just east of drain (43).

Post-hole?

PHASE III

42

Layer: sand mortar with smooth white plaster surface remaining in part. Slopes down to bond in with limestone sides of drain (43). Found both west and east of drain.

Definite floor.

44

Layer of fine sandy-clay with charcoal and lime flecking. Contains some bone and pottery, lead, and corroded iron. Butts up against stone sides of drain (43).

Make-up for creating a level surface on which to lay mortar floor (42).

43

Feature: drain, stone-sided (limestone mortared together) with sealing slabs of stone and clay. Layers (42) and (44) were built up against this feature so that the floor (42) could drain into the conduit. Drain (43) slopes from south down to north by 3cms in 2 metres.

Drain for floor (42).

PHASE II

[_45_]

Layer of sand and gravel all over trench.
Uneven depth and surface.
Sterile ----- no finds.

Cobbled surface?

Deliberate dumping of natural deposits as
a solid foundation for making of floor
(44)/(42)?

PHASE I

[_46_]

Layer of dark silty material with plenty
of ash and charcoal.

Burning area ---- bonfire?

[_50_]

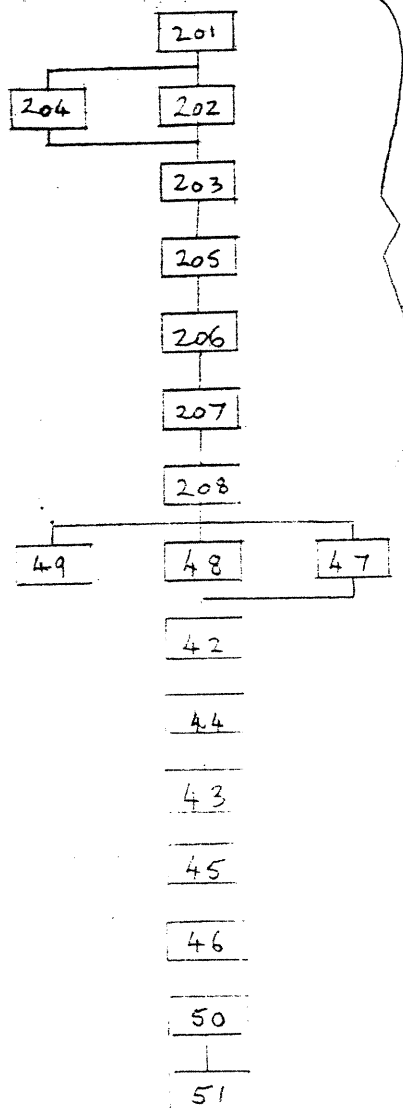
Layer of clayey fine-sand with charcoal
flecking.
Contains mediaeval pottery.

Occupation build-up above surface (51).

[_51_]

Layer of silty fine-sand with much
rounded gravel, charcoal flecks and
mortar bits in it.

Cobbled surface.



41

ENR 3
STRATIGRAPHIC MATRIX

TM 19.1.88

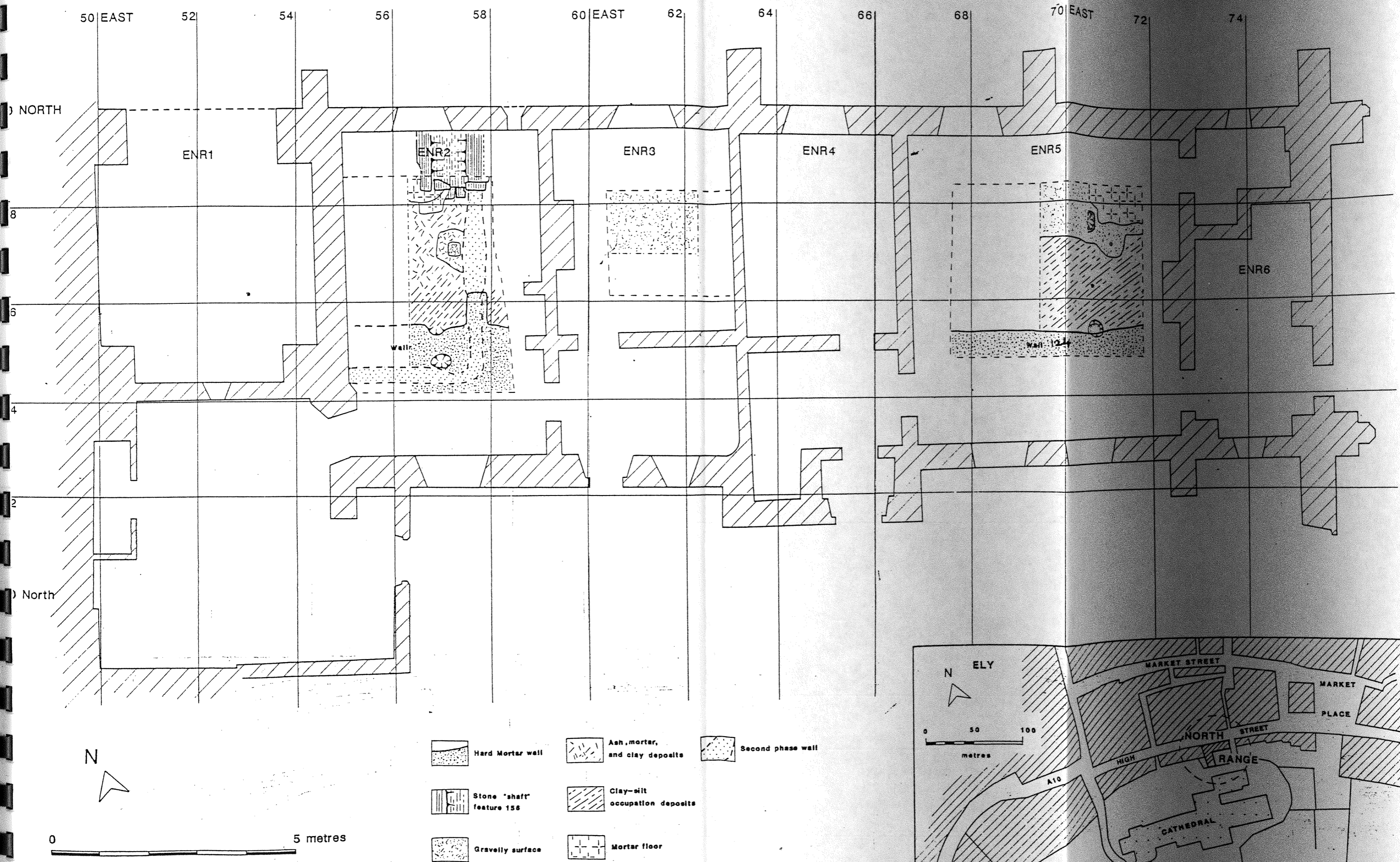


Fig. 1. Site plan showing features belonging to phases 1 to 4

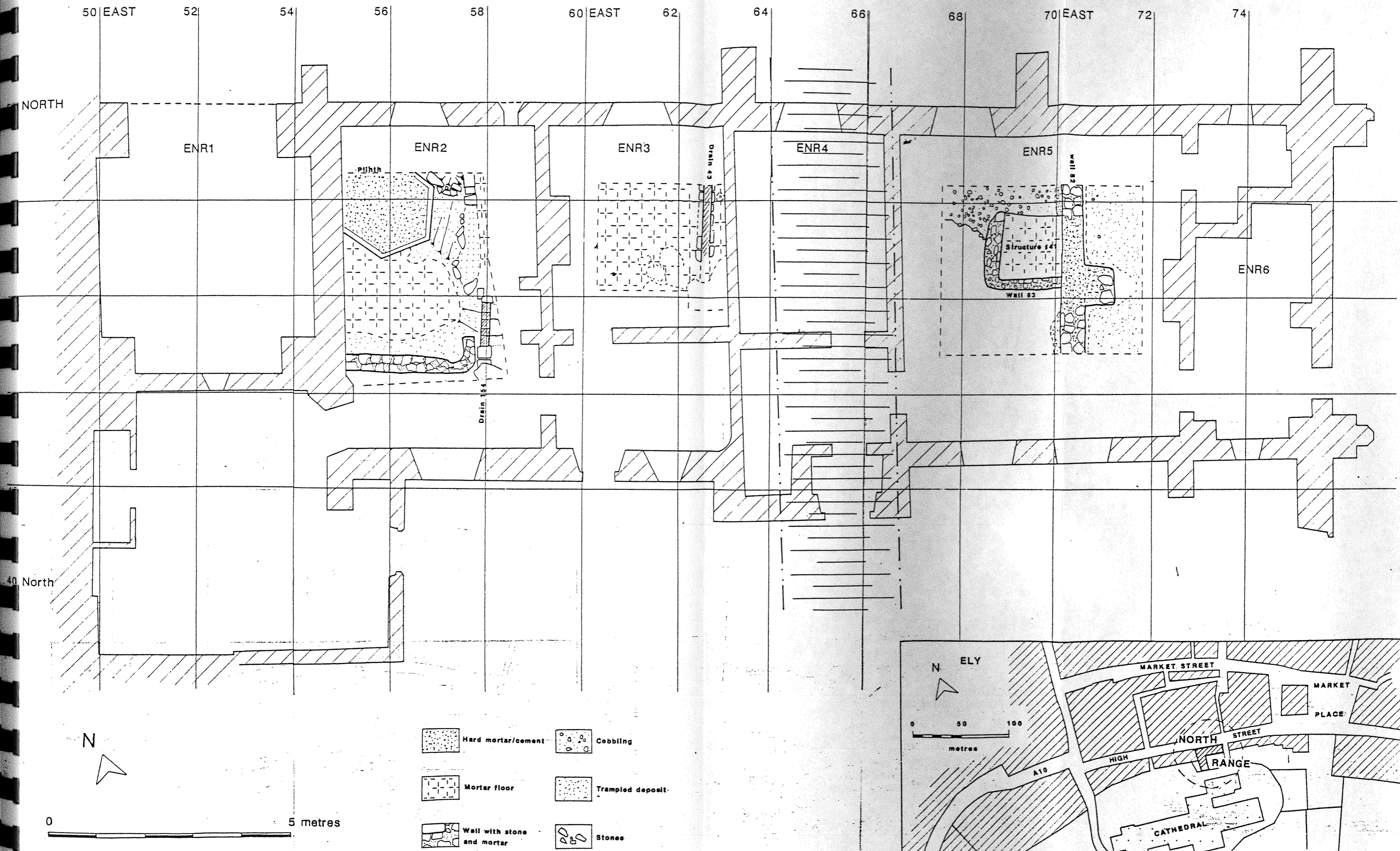
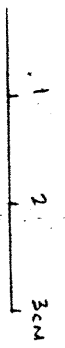


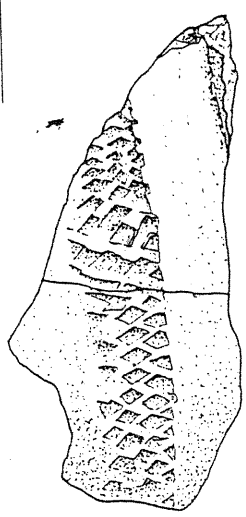
Fig 2. Site plan : phase 5.



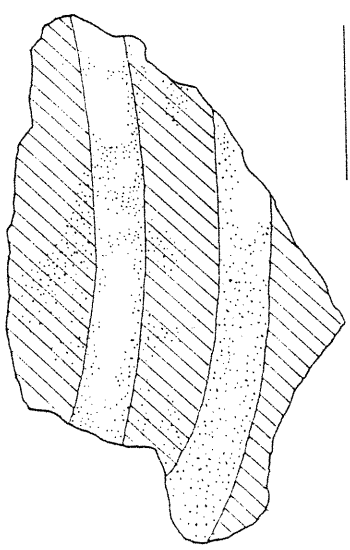
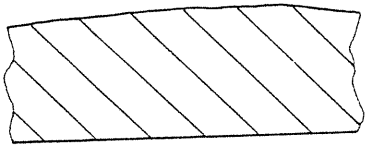
c

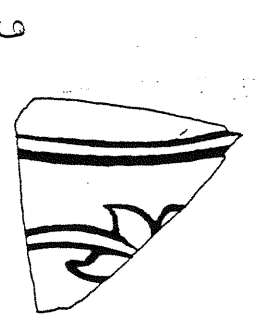
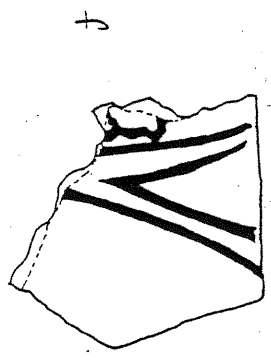
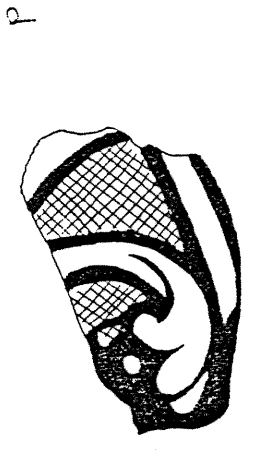
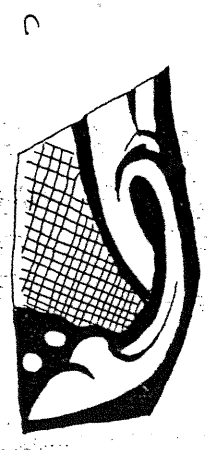
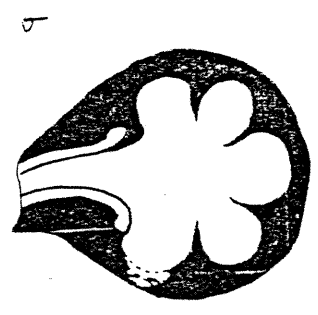
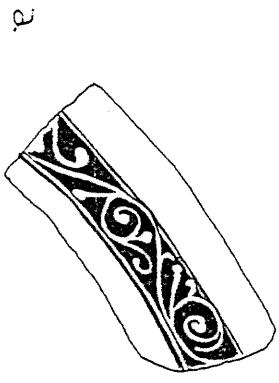
Fig. 3. a. Fragment of Thetford ware with
repeated decoration. b. Glazed tile fragment.
c. Lace bobbin.

a



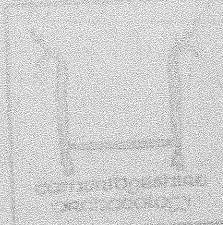
b





0 ————— 5cm

Fig. 4. Painted glass a, f, g : late 13th or 14th century.
b - e : first half of 13th century.



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**ELY CATHEDRAL PRECINCTS:
THE NORTH RANGE**

**ANNE HOLTON-KRAYENBUHL, THOMAS COCKE
& TIM MALIM**

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1990

ELY CATHEDRAL PRECINCTS: THE NORTH RANGE

ANNE HOLTON-KRAYENBUHL, THOMAS COCKE & TIM MALIM

The history of the buildings which now form the North Range of the precinct of Ely Cathedral has been little studied. The renovation of the former Choir School, together with the archaeological excavations permitted in advance of the building work, have revealed new information. It is now possible to integrate the physical and documentary evidence and to suggest a possible sequence of developments on the site.

The North Range (TL541803) is situated on the south side of the High Street, Ely, and constitutes part of the northern boundary of the cathedral precincts (Figure 1a). In November and December 1987 excavations were carried out on the site. At the same time, both the internal and external standing fabric was recorded by means of a detailed architectural investigation and photographic survey.

The findings suggest that the North Range originated in the fourteenth century and remained virtually unchanged until the 1860s when the central portion of the range was dismantled and rebuilt. The excavations also yielded evidence for an earlier, possibly

thirteenth-century, north boundary to the monastic precinct.

THE EXCAVATIONS

Trial trenches were dug along the length of the range and earlier features were found to have survived. Further excavation took place inside the Museum (ENR5: Figure 1b) and Choir House (ENR2 and ENR3: Figure 1b).

The post-medieval features were more complex than expected. Lack of time together with safety considerations precluded full investigation of the earlier medieval features and their interrelationship, and the medieval occupation deposits were not bottomed. Six phases were defined.

Phase 1

Evidence for this phase was found in ENR5 and ENR2.

ENR5

In the east part of the trench, there was an accumulation of grey and mottled brown clayey silt layers containing

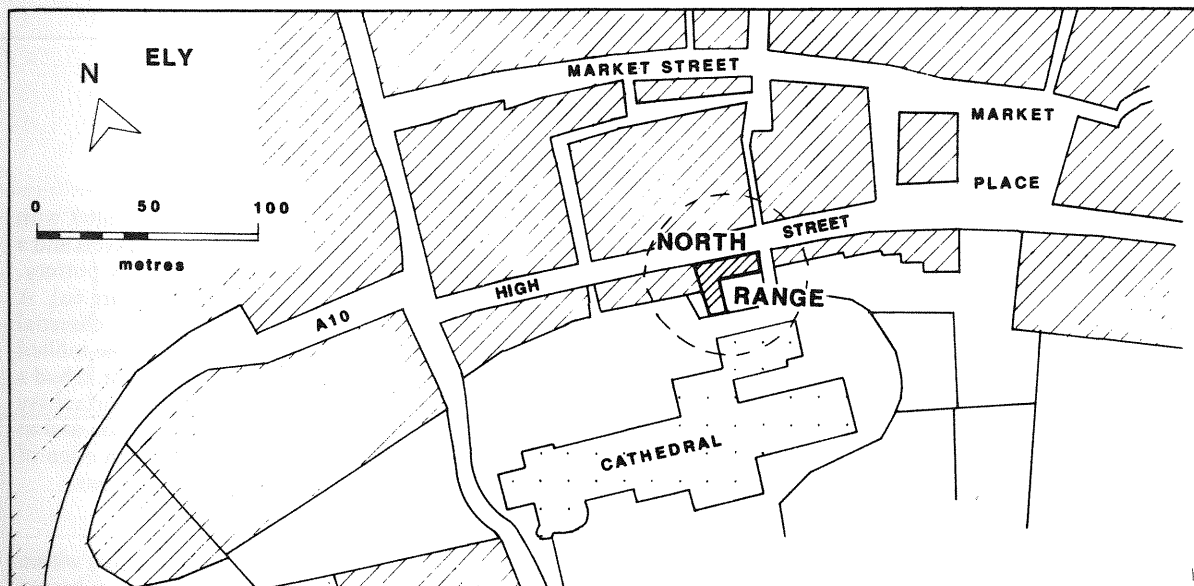


Figure 1a. Ely North Range location plan

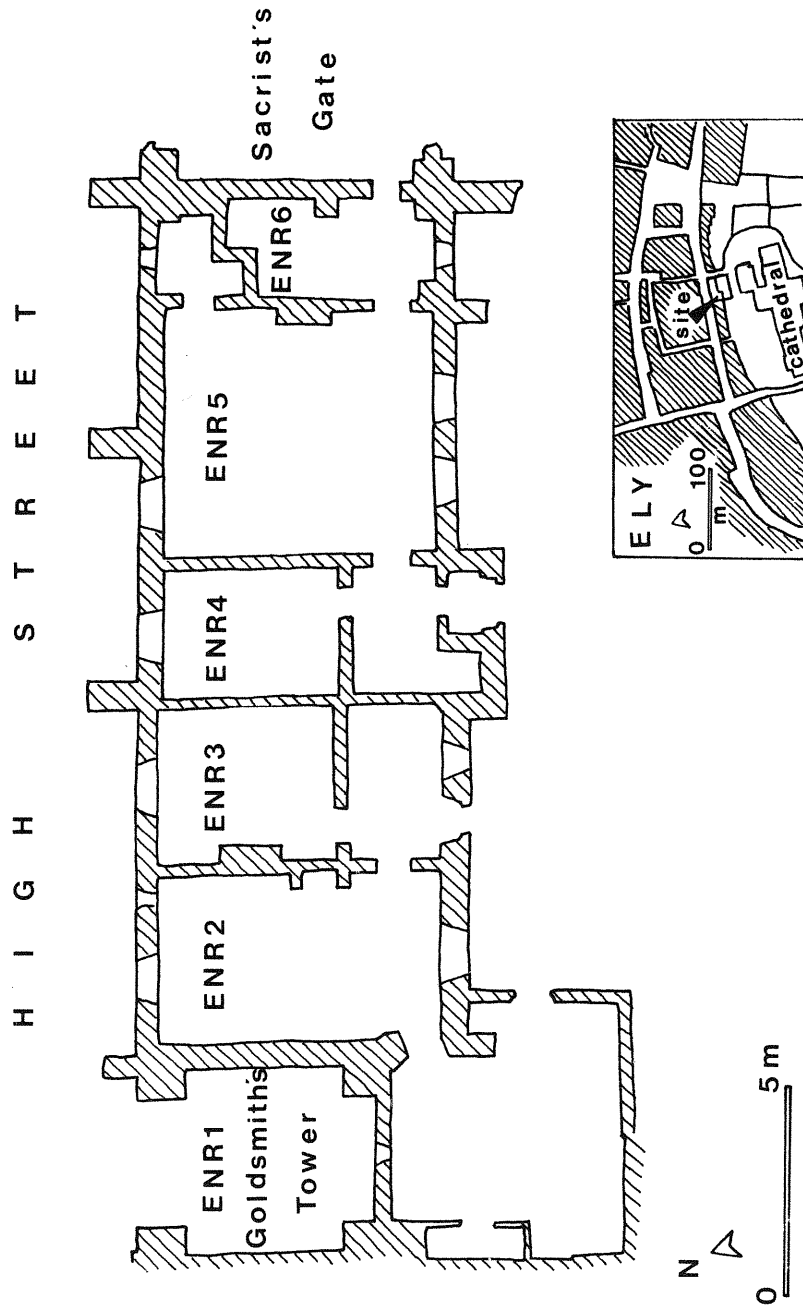


Figure 1b. Ely North Range site plan

burnt patches and charcoal flecks (Figures 5a and 5b). There were patches of sand and small lumps of mortar in two of these layers; the total depth was about 0.8 m. In the centre of the trench only the lower deposits existed, the remainder having been removed by the later building of structure 141 (Figure 3).

Finds included fourteen sherds of Thetford and St Neots ware of tenth- to thirteenth-century date, small lumps of poorly fired clay which may be daub, fragments of animal bone of a size suitable for stewing, and a piece of copper of matchstick dimensions.

These layers had been cut by a linear feature running west-east whose north edge lay beyond the excavated area. A 2.4 m stretch was defined. It was more than 1.5 m wide and about 0.75 m deep.

This feature, possibly a ditch, had been filled with hard-packed sandy silt containing rounded gravels and a few sherds of eleventh- to thirteenth-century pottery, one of which had a rouletted decoration (Figure 6a). A thin layer of grey silty clay with gravels and charcoal flecks formed a hard surface over the top of the infilled ditch (Figure 2b). On the east side of the trench, it had a curved edge and there was a stake-hole. This surface lay at 20.33 to 20.40 m O.D. along the east section and at 20.35 m O.D. where it survived on the north edge of structure 141. It yielded two nails and a bone pin.

ENR2

Evidence for this phase was found in a small area within the south-east part of the trench. It consisted of brown

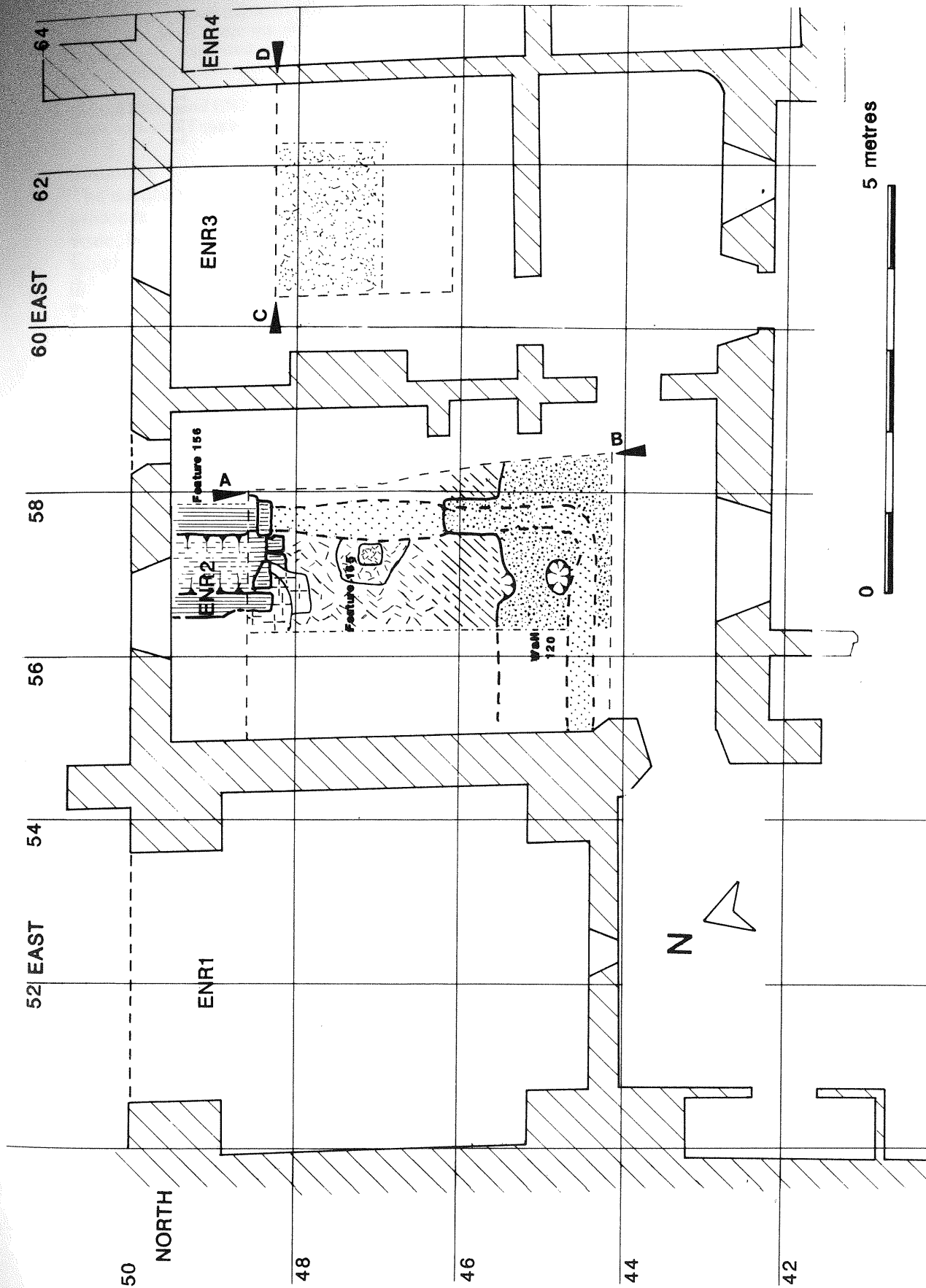


Figure 2a. Ely North Range, west half. Plan of ENR2 and ENR3, features in phases 2 to 4. ENR1 is the Goldsmith's Tower. Key: see figure 2b.

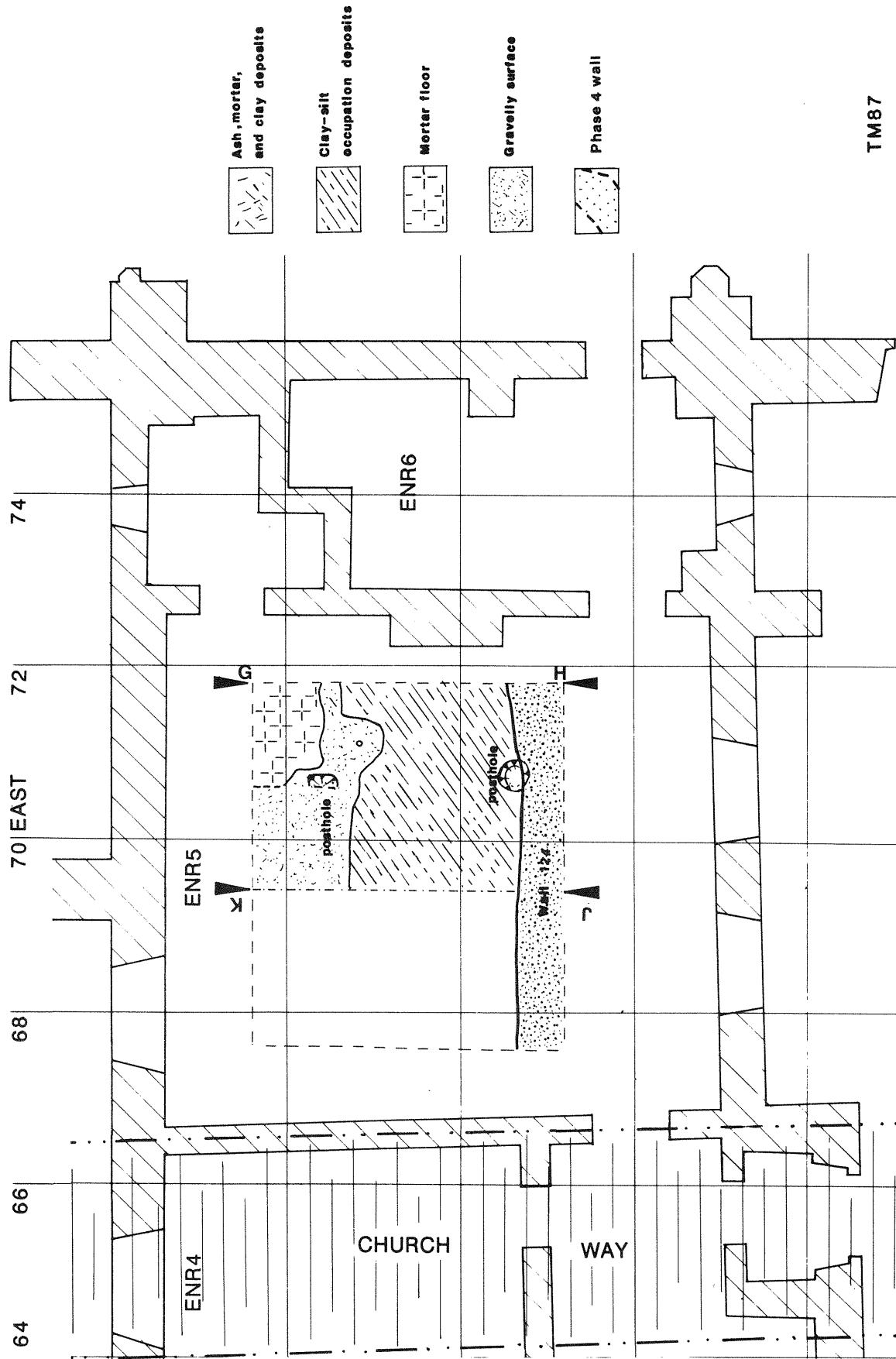


Figure 2b. Ely North Range, east half. Plan of ENR5, features in phases 1 and 2. The church way across ENR4 was of probable medieval origin.

silty soil with occasional flecks of charcoal, and was more than 0.4 m deep. There was no dating evidence and this context was attributed to phase 1 because of its stratigraphical position.

In both ENR5 and ENR2 the ground sloped from south down to north (Figures 5a and 4a).

Summary

The nature and depth of the deposits and the presence, in ENR5, of fragments of pottery, bone, burnt clay and charcoal flecking suggest a high density of occupation. The duration of this phase was relatively long and the pottery evidence suggests that it occurred between the tenth and the thirteenth century.

The linear feature or ditch that was excavated in ENR5 ran parallel with the north wall of the existing building and may have formed a boundary. In view of the homogeneity of the filling, this feature was probably short-lived.

Phase 2

Foundations for a west-east wall existed in ENR5 and ENR2 (Figures 2a and 2b). The relationship between these foundations and other features in ENR5, ENR2 and ENR3 was not established.

ENR5

A 4 m stretch of wall foundations was defined (feature 124). It was more than 0.5 m deep in the limited area investigated, and more than 0.5 m wide. The south edge lay beyond the limits of the excavation. The wall foundations consisted of limestone rubble and sandy mortar, and yielded one piece of beige wall plaster. The top of the surviving rubble foundations lay at 20.50 m O.D. to the west of the later wall 82, and at 20.60 m O.D. to the east of it.

A post-hole abutted on the north side of the wall foundations (Figure 2b). Another possible post-hole lined with flat pieces of limestone lay at about two metres to the north of it. A 20–30 mm thick surface of sandy mortar survived in the north-east corner of the trench. Its upper surface lay at c. 20.35 m O.D.

ENR2

In the south part of the trench, a two-metre stretch of wall foundations was located (Figure 2a: feature 120). The foundations were more than 1.2 m wide: the south edge lay beyond the limit of the excavation. The top of the surviving wall foundations lay at 20.50 m O.D.

The foundations for a 0.7 m long feature which may have been a buttress had been bonded on to the north side of the wall foundations. The foundations for the possible buttress were of rubble and mortar poured into a 0.4 m deep trench. A fragment of beige wall plaster was found among the rubble and mortar.

There were several deposits on the surface to the

north of the wall foundations but their interrelationship was not established.

ENR3

A dark greyish tan silty surface was located in part of the trench. It contained mortar, charcoal pieces, rounded gravels and some flints.

Summary

It is suggested that the foundations located in ENR5 and ENR2 were part of the same feature: they were of similar composition and their north edges were on the same alignment, lying at 4 m from the north wall of the existing building. They survived to 20.50 m O.D. In view of their dimensions, these foundations had probably formed the base of a substantial wall.

The post-holes excavated in ENR5 may represent the base of a scaffold, and the mortar surface in the north-east corner may have been part of a floor.

Phase 3

The conjectured wall represented by the rubble and mortar foundations in ENR5 and ENR2 was dismantled to 20.50–20.60 m O.D.

ENR5

The post-holes were infilled and the ground surface covered with compacted brown silty sand deposits containing mortar which also overlay wall foundations 124 (Figures 5a and 5b).

The total depth of these deposits was 0.1–0.2 m. Their upper surface was almost horizontal and, in the north-west part of the trench, was topped with flint cobbling.

Later activity had removed the evidence for this phase in the centre and most of the west part of the trench.

ENR2

A bowl-shaped pit had been cut into the foundations of the dismantled south wall (Figure 2a). A shallow trench had cut away part of the north edge of the foundations and the adjacent occupation levels. This trench had been infilled with compacted soil containing much chalk and clay, and the same compacted material sealed the surface immediately to the north of the wall foundations.

An almost square feature with a charred black and red outer zone may belong to this phase (feature 165). It possibly represents the traces of a standing structure, such as a brazier, whose outer zone had burnt the underlying soil. There were other patches of burnt soil in the north half of the trench which may also be attributed to this phase (Figure 4a).

Summary

The wall had been dismantled to similar levels in ENR5 and ENR2 and it is suggested that this represents ground level of the time when this occurred.

Phase 4

There was evidence for two new buildings, one in ENR5 which extended into ENR6, the other in ENR2. The features in ENR3 were a continuation of those observed in ENR2.

ENR5

The level surface created in phase 3 was covered by silty sand deposits to a depth of 0.1–0.3 m (Figure 5a). These deposits were compacted and contained pieces of mortar, limestone and flint, and there were patches of ash. An amount of animal bone was found, some of it had traces of butchery and there was also bird bone and sherds of thirteenth- and fourteenth-century pottery, many of which were glazed. These included sherds of Lyveden ware, several fragments from a baluster jug as well as sherds from pitchers and cooking pots.

A sandy mortar floor, 20–60 mm thick, survived in fragmentary form over the resulting level described above and continued into the east section and into the east part of the south section. Its surface lay at c. 20.80 m O.D. Two fragments of thirteenth- or fourteenth-century window glass were found in the mortar floor.

Evidence for this phase in the centre and most of the west part of the trench had been removed by later disturbance.

ENR6

Traces of a mortar floor at the same level as that in ENR5 were observed in the west part of the trial trench.

ENR2

Brown soil containing chalk pebbles had been deposited over the foundations of the dismantled wall, infilling the shallow pit. The base of a stone wall on the same alignment as the earlier one was embedded in this dumped soil (Figure 2a). A 2.7 m stretch of wall was defined. It was 0.4 m wide and survived to a height of 0.2 m.

Near the east edge of the excavated area, the wall turned at right angles northward, following the line of the earlier buttress foundations on to which it had been bonded. It continued north and was built on to the east side of feature 156. This part of the wall was 0.3–0.4 m wide.

Feature 156 which abutted the north wall of the present building possibly belonged to this phase, although it may have been erected earlier and been incorporated into the structure of this phase. It resembled a shaft, being 0.7 m by 1 m in plan, and survived to a height of about 0.8 m. Its east wall was of dressed stone. The west wall was mainly of rubble and mortar, and there was a dressed stone lying perpendicular to its south edge which partially blocked the entrance to the shaft, leaving a 0.3 m wide opening. There was a vertical notch on the south-east corner of this stone and there was a corresponding one on the stone that lay to the east of the opening. Where excavated, the base of feature 156 was of stone and lay at about 20.40 m O.D.

West of the north–south wall was a cobbled surface that sloped from south down to north. It existed in the north half of the area enclosed within the new walls.

A few fragments of fourteenth-century pottery and glazed tile were found on the surface of the cobbling and in the east wall of the new structure. The tile fragment illustrated in Figure 6b was very similar to one of those excavated at Denny Abbey.¹

East of this wall, brown silty soil accumulated (Figure 4a).

ENR3

There was an accumulation of silty soil which was probably part of the same deposit as that to the east of the wall in ENR2 (Figure 4b). The silty deposits in ENR2 and ENR3 contained charcoal flecks and a few sherds of thirteenth- to fourteenth-century pottery.

Summary

In ENR5, evidence for a new building was provided by the mortar floor and the dumped deposits that underlay it. In ENR2, the stone footings probably represented the base of a building whose south wall was on the same alignment as that of the adjacent Goldsmith's Tower. There appeared to be no entrance in the excavated south and east walls. Feature 156 may have been a wall cupboard, the notches at its south opening being the remains of slots for a door.

The pottery and tile associated with the two probable buildings was of similar quality and date. The date of the sherds suggests that these had been discarded in the fourteenth century or later but it was not possible to determine whether the building activity in ENR5 was exactly contemporary with that observed in ENR2.

The accumulation of silty soil on the east edge of ENR2 and in ENR3 may have formed part of a dirt floor. Alternatively, it may have constituted an external ground surface.

Phase 5

The buildings in ENR5 and ENR2 underwent considerable alterations. The features observed in ENR2 extended into ENR3. Evidence for this phase was also found in ENR1.

ENR5

Foundations for a north–south wall had cut through the mortar floor (Figure 3: foundations 134 for wall 82). A

1 P.M. Christie and J.G. Coad, Excavations at Denny Abbey, *Archaeological Journal* CXXXVII (1980), pp. 138–279.

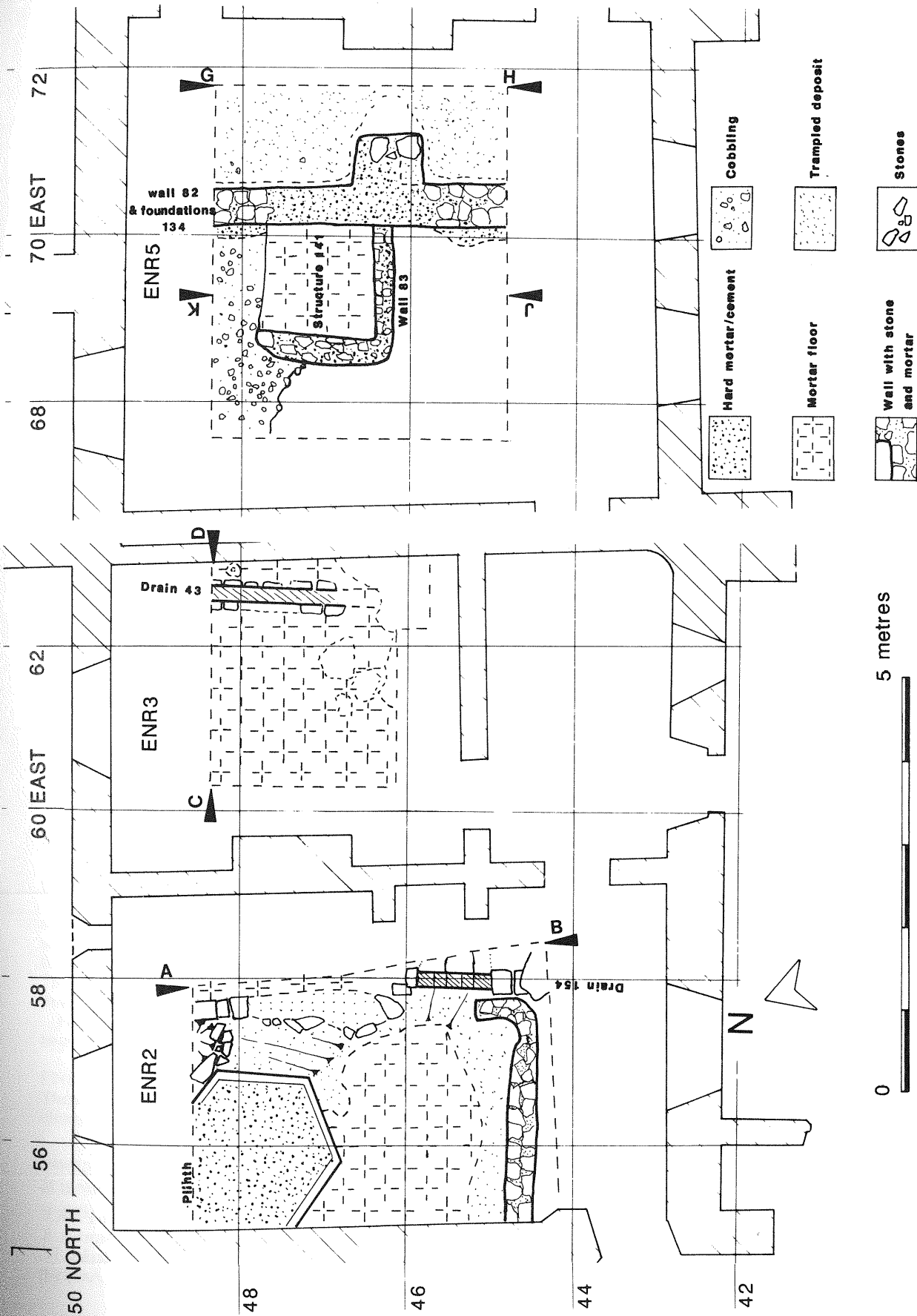


Figure 3. Ely North Range. Plan of phase 5 features in ENR2, ENR3 and ENR5.

straight-sided trench, 0.45 m wide, had been dug, and rubble and mortar had been poured into it, in three stages. The two lowest stages, of clunch and lime mortar, were c. 0.75 m high and existed in the central part of the trench, extending south as far as wall foundations 124 of phase 2. The uppermost stage, of a soil and lime mortar mix with clunch, was c. 0.3 m high and ran across the entire excavated area. At its north end, it butted and went over the hard gravelly surface that overlay the ditch filling described in phase 1. At its south end, it butted and went over the foundations of wall 124. Bonded on to its east side, foundations for a buttress-like protrusion were found which had been widened in the uppermost stage.

Above the north and south end of the wall foundations, the lower courses of wall 82 survived, consisting of regular blocks of limestone adhering to each other with hard cement. The base of this stone wall was at approximately the same level as the earlier mortar floor.

After the foundations for wall 82 had been laid, a square structure (feature 141) had been erected, butting on to their west edge. The construction of feature 141 had involved the removal of many of the earlier deposits in the centre of the trench (Figure 5b). The existing sides of this feature were vertical and survived to a height of 1.1 m. The sides were 1.4 m long internally. The north side had been cut through the hard ditch fill described in phase 1 and was not lined. An L-shaped wall formed its west and south sides. It was of stone with some tile and

brick inclusions and hard cement, and was 0.3 m thick. The interior was lined with stone and faced with plaster, while the exterior face was very rough, with glass, stone and tile fragments protruding from the cement. At the foot of the south face was a small opening 0.4 m wide and 0.3 m high.

The ground surface within this structure was covered by a 20 mm thick layer of sandy mortar which extended under the opening, and butted against the hard gravelly medieval ditch filling. A layer of mortar rubble, 80 mm deep, overlay this surface. Above the mortar rubble were red silty ash deposits containing a sixteenth- or seventeenth-century sherd of pottery, part of a pointed leather shoe sole, mammal bones that had traces of butchery and a fairly complete skeleton of a crow-sized bird. These deposits were c. 0.2 m deep and had filled the opening at the foot of the south wall of feature 141.

Although it was clear that structure 141 postdated the foundations for wall 82, the time lapse between the building of the two structures could not be determined.

ENR2

A polygonal plinth of hard cement, brick and stone was built in the north-west quarter of the room (Figure 3). The angles between the excavated sides suggest that it was hexagonal. The sides were 1.2 m long and about 0.2 m high. The surface of the plinth was of hard sandy iron-stained soil. Part of a salt-glazed stoneware jug of

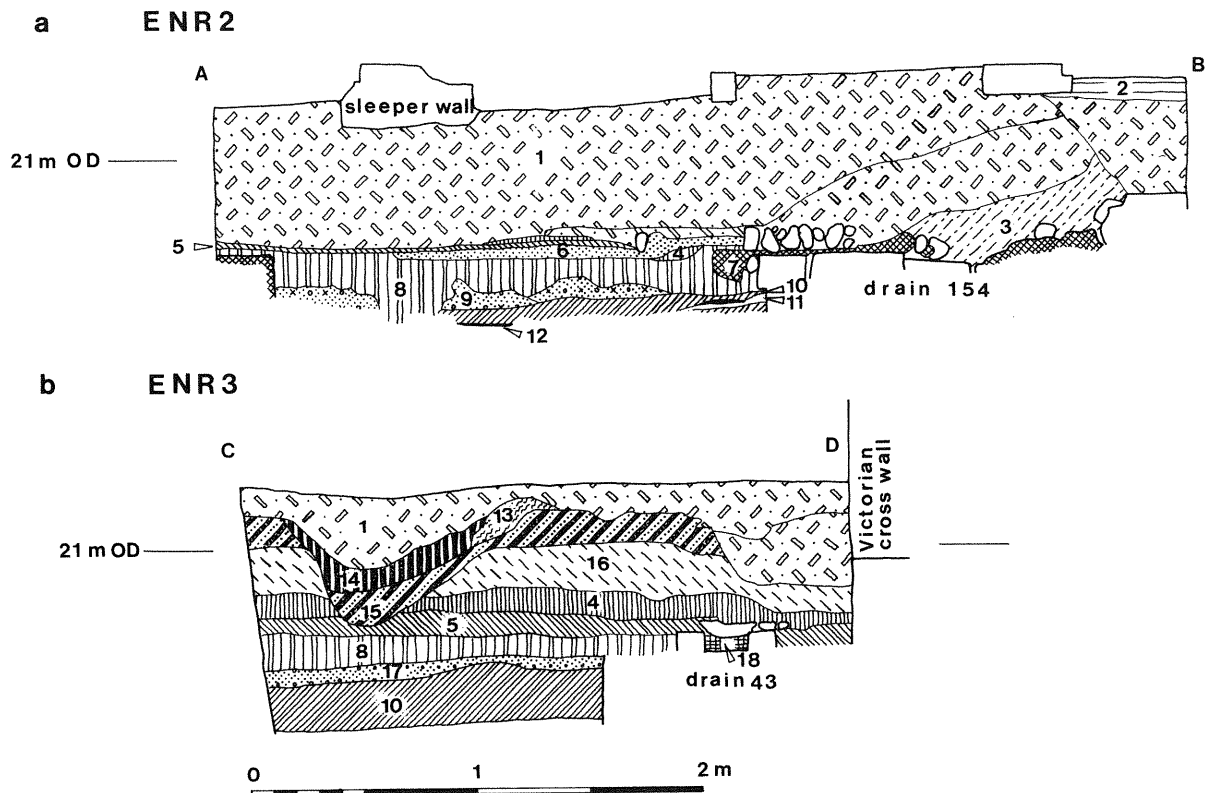


Figure 4. Sections. a. Section along the east edge of trench in ENR2. b. Section along north edge of trench in ENR3. Key: 1. Rubble. 2. Loose grey deposit. 3. Soil with tile and stone chips. 4. Clay. 5. Mortar floor. 6. Sand. 7. Mortar. 8. Brown clay with limestone and charcoal flecks. 9. Pebbles and mortar. 10. Brown silty soil with charcoal flecks. 11. Clay with chalk flecks. 12. Burnt surface. 13. Decayed wood. 14. Clay with ash. 15. Ash and burnt sand. 16. Ashy silt with grit. 17. Sand and gravel. 18. Drain fill.

sixteenth- or seventeenth-century date was found on the surface of the plinth.

The south half of feature 156 had been taken down, and the wall extending south from the east side of this feature had been dismantled to the level of the lower part of the plinth facing. Between this wall and the plinth, a low wall of stone and blue clay blocks had been built, blocking the opening in feature 156 up to the level of the bottom of the plinth facing.

The cobbling into which the plinth had been cut was redeposited to the south of it and levelled. Over the resulting horizontal surface a mortar floor was laid. The floor was up to 20 mm thick and survived in the south half of the trench where it sloped from west down to east. It lay at 20.60–20.75 m O.D.

East of the base of the north–south wall, the ground surface had been raised with several deposits to the same level as the top of the dismantled north–south wall (Figure 4a). Over this surface a mortar floor was laid, at the same level as that in the south-west part of the room. It continued into the east section.

There were no traces of mortar floor between the dismantled wall and the plinth, an area which had been subsequently disturbed.

In the south-east part of the trench was a drain. It was lined with dressed stone, blue clay blocks and bricks adhering to each other with hard cement similar to that used in the plinth. The sides of the drain rested on tiles. The conduit was 0.15 m wide and sloped downward from north to south. A 1.6 m stretch of drain was defined.

The north end of the drain was covered with two square slabs of stone. The edges of the larger stone were about 0.4 m long. There were four perforations near the centre making it possible for water to run off into the drain. The south part of the drain was covered by three almost flat stones which served as a base for a cobbled surface.

ENR3

A drain had been built on the east side of the excavated area (Figure 3). It was made of dressed limestone blocks. The sides and base of the drain had been bonded with mortar, and the stones overlying the drain, where still *in situ*, had been sealed with blue clay. The conduit of the drain was 0.18 m wide and about 0.1 m deep. It sloped from south down to north. A 2 m stretch was defined.

On either side of the drain, over irregular dumps of sand and gravel with chips of mortar and brick, clayey sand had been deposited (Figure 4b). A sandy mortar floor which was up to 0.1 m thick had been laid over it. There was a slight slope from the west down towards the drain. The floor lay at 20.62–20.70 m O.D.

Finds from the deposits and from the floor included two sherds of sixteenth- or seventeenth-century pottery.

ENR1

There was a floor of yellow and pink bricks which was charred on the east side of the room.

Summary

It is suggested that wall 82 in ENR5 represents a new west gable end for the building that

extended eastward. Structure 141 was too small to have formed a room and may have served as a soakaway: its base was about 0.6 m below the foot of wall 82, suggesting that the opening in its south wall lay below floor level, while the filling inside it consisted of domestic detritus overlying the sand and rubble layers. The rough appearance of the external face of the wall would be consistent with this.

The features excavated in ENR2 and ENR3 belonged to one structure. The dimensions of the two drains, the levels of the floors and the soil build-up under them were all similar.

The few sherds of pottery associated with this phase were of sixteenth or seventeenth century date and the quality of the cement used in the construction of the new features suggests a date in the seventeenth century or later. The composition of the cement used for wall 82 in ENR5 differed from that used for the plinth and drain in ENR2, suggesting that the alterations were not carried out in the same building campaign. The plinth in ENR2 closely resembled the base of one of the cast-iron stoves in Ely Cathedral. These stoves, produced by Gurney and Co of London, were installed in the Cathedral some time between 1866 and 1873.² This would suggest that the alterations in ENR2 and ENR3 were carried out in the nineteenth century.

Phase 6

There was evidence for demolition in ENR5, ENR2 and ENR3. A series of deposits were dumped over the entire excavated area. Demolition deposits were also noted in the trial trenches in ENR1, ENR4 and ENR6.

ENR5

Wall 82 was almost completely dismantled and the top of feature 141 was removed. A piece of fallen masonry resting against the west wall of this feature had possibly formed part of its superstructure. The soil to the west and south of feature 141 had been removed and been replaced by a deposit of compacted brown sandy silt containing grit and mortar lumps (Figure 5b). The entire excavated area was then covered with demolition deposits which consisted mainly of brick and mortar rubble (Figure 5a). Finds included a quantity of large animal bone, strips of window lead, and window glass fragments. The total depth of these layers was 0.2–0.4 m. The sleeper walls for the floors of the present building rested on the resulting surface.

² Dean C. Merivale, *St Etheldreda Festival, Summary of Proceedings, 1873* (Ely, 1874).

ENR 5

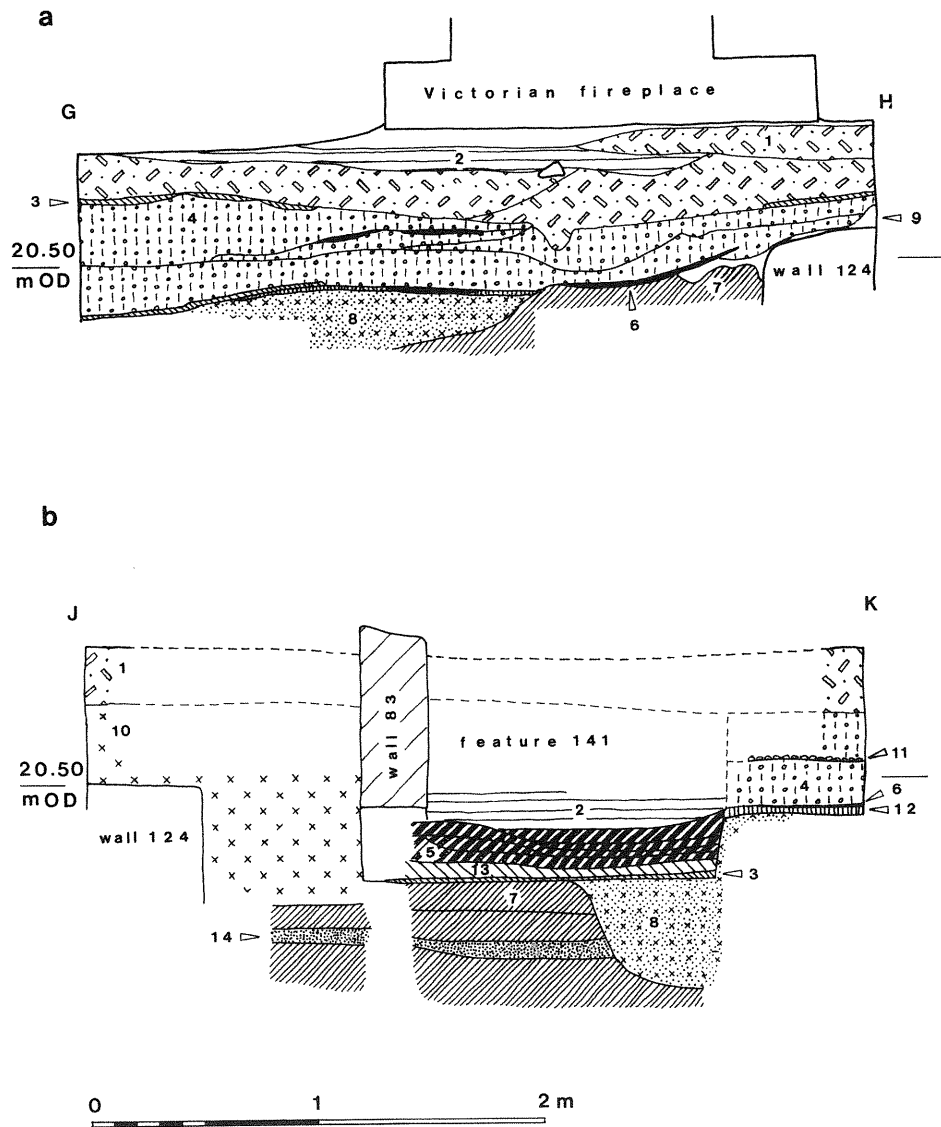


Figure 5. Sections in ENR5. a. Along east edge of trench. b. North-south section across feature 141. Key: 1. Rubble. 2. Loose grey deposit. 3. Sandy mortar. 4. Compacted brown silty sand containing mortar. 5. Ash. 6. Burnt surface. 7. Grey and brown clayey silt with charcoal flecks. 8. Sandy silt with gravels. 9. Orange-brown silty sand with mortar flecks. 10. Brown sandy silt. 11. Cobble surface. 12. Compacted grey silty clay. 13. Mortar rubble. 14. As 7, with patches of sand.

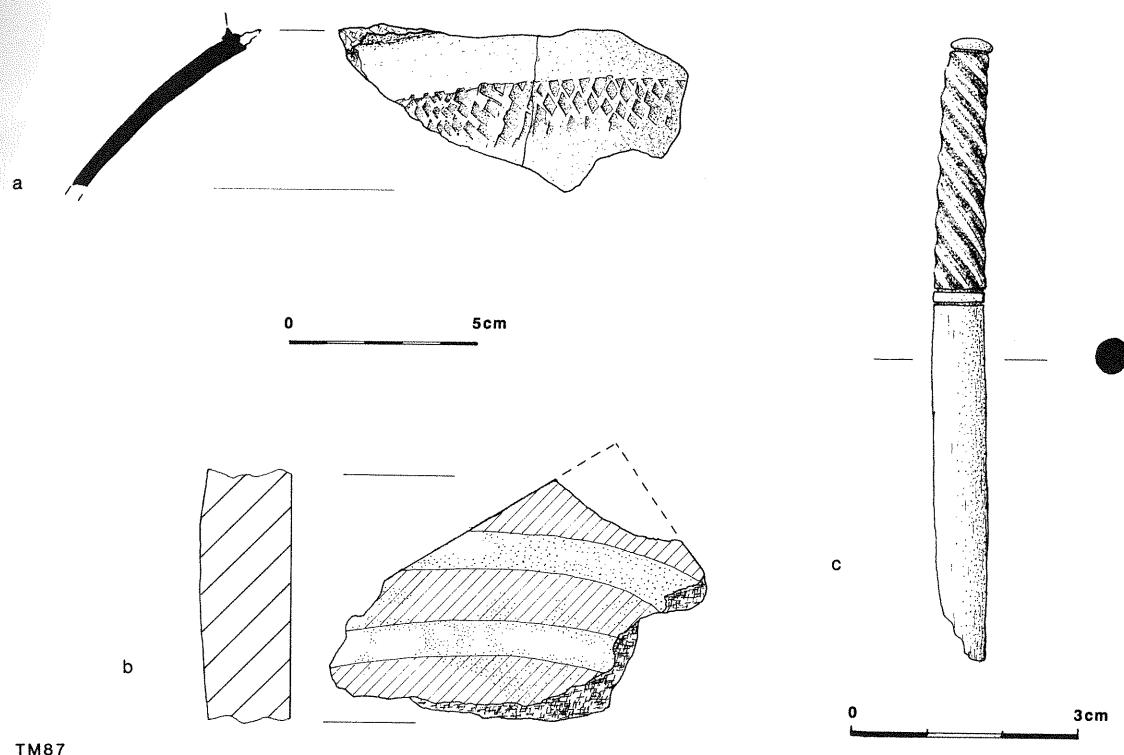
ENR2

A pit had been dug to the east of the plinth and then infilled. A piece of red and cream painted wall-plaster was found in this filling. Over this, a brick-edged structure of mortar and rubble was built and was cemented on to the plinth. The mortar floor was covered with a thin layer of brown deposit in which was found a lace bobbin (Figure 6c).

Feature 156 had been infilled with stratified deposits, probably over a long period. One of the deposits consisted almost entirely of window glass; fragments of lead cames and a few sherds of fourteenth- to early

seventeenth-century wares were found amongst the glass. Part of this deposit was excavated and yielded approximately 3000 fragments of glass, including coloured and decorated glass (Figure 7). Preliminary examination suggested that the glass had belonged to several windows of various dates between the first half of the thirteenth century and the fifteenth century; the windows had subsequently been taken apart and the redundant glass dumped into feature 156 together with the scraped-off lead cames (D. King, pers. comm.).

Demolition deposits were then dumped over the whole site (Figure 4a). They consisted mainly of stone



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Figure 6. a. Fragment of thirteenth-century Thetford ware with rouletted decoration, phase 1 ditch fill in ENR5. b. Green-glazed tile fragment with inlaid white slip on a reduced background, associated with the phase 4 building in ENR2.

c. Bone lace bobbin found on the mortar floor in ENR2, phase 6.

and tile rubble and their total depth was about 0.6 m. Finds included animal bone, window glass, and a fragment of fourteenth-century glazed roof tile. The site was then levelled and the sleeper walls for the floor of the present building were laid on the resulting surface.

ENR3

Several layers were deposited (Figure 4b). Over a clay layer were layers of silt and sand containing ash. In the west half of the excavated area, these layers had been cut by a ditch that ran north-south, and had subsequently been infilled. The site was then levelled for the floor of the present building. The total depth of the deposits associated with this phase was 0.5–0.6 m. Finds were similar to those from the demolition layers of ENR5 and ENR2.

Summary

The buildings partially or totally demolished in the final phase had been erected in the fourteenth century or later (phase 4). The presence of medieval window glass and lead in the demolition levels suggests that some of the medieval windows had survived until that time, implying that the fabric into which the windows had been set had also survived. The glass deposit found in feature 156 is to be the subject of further study.

Demolition probably immediately preceded the re-modelling of the North Range to its present form, although the presence of a ditch in ENR3 suggests that this area may have been open ground for a short period prior to rebuilding.

ARCHITECTURAL DESCRIPTION

The complex of buildings studied comprises, from west to east, the so-called Goldsmith's Tower, then a two-storey range in two parts, the first of two bays, the second of three, which are continuous but not intercommunicating (the former Choir School), and finally the Sacrist's Gate (Plates 1 and 2). Although they are of medieval origin, they were extensively rebuilt in 1860–64. The exterior of the buildings is all of stone, mostly rubble but incorporating some ashlar. Much of it appears reused medieval material. The stone is Carstone except for some limestone, perhaps Clipsham, on the south side of the former Choir School range. The worked stone

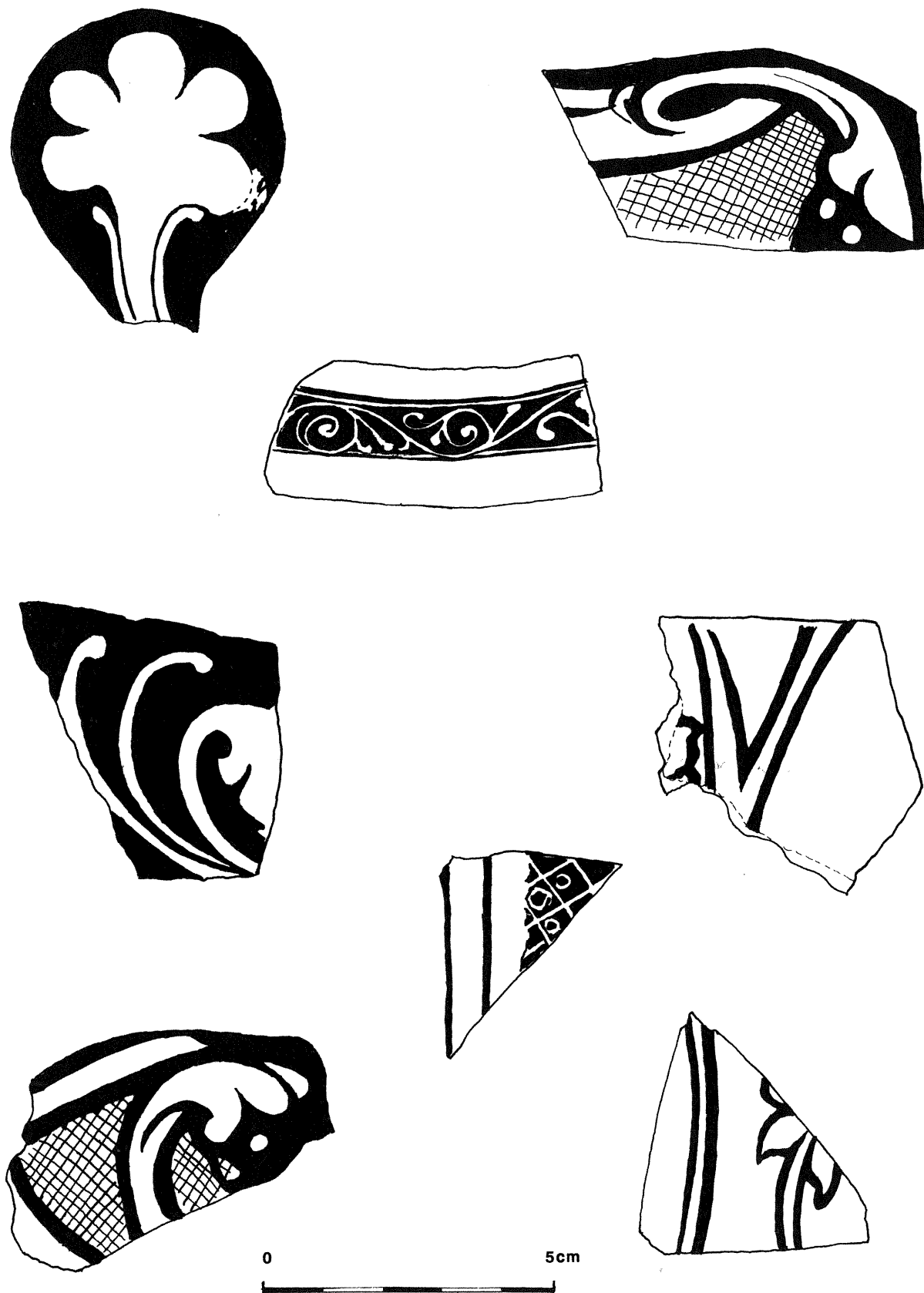


Figure 7. Medieval window glass from the deposit in feature 156, ENR2.



Plate 1. North Range, south elevation.
(Crown copyright)

in the quoins, buttresses and door and window openings appears to belong to the nineteenth-century rebuilding except in the Sacrist's Gate and the Goldsmith's Tower. The roofs both of the former Choir School range and of the Goldsmith's Tower also appear to be of the mid nineteenth century. The roof of the Sacrist's Gate was not inspected.

The buildings are described as they were before their refurbishment in 1988.

Goldsmith's Tower

The Goldsmith's Tower consists of a vaulted ground floor compartment (room ENR1), a chamber on the first floor and an attic with louvred openings.

Exterior

On the north side the only original features appear to be the transomed two-light window

on the first floor and the three-stage buttresses. There is no moulding to the entrance arch on the ground floor. The angles of the attic storey are built up in stone but the centre panel on the north side is of brick.

On the south side there is a diagonal buttress on the south-east angle, which is incorporated into the west wall of the Old Choir School. On the ground floor there is a small single-light window with sunk spandrels, of the mid nineteenth century. Below and to the east of it is a blocked door opening. The ground floor masonry appears much disturbed. On the first floor there is a two-light transomed window with a hoodmould and head stops. It is nineteenth-century. In the attic there is a louvred opening in the centre.

Interior (Plate 3)

On the ground floor (room ENR1) there is a large arch articulating each wall. Those on the east and west appear always to have been

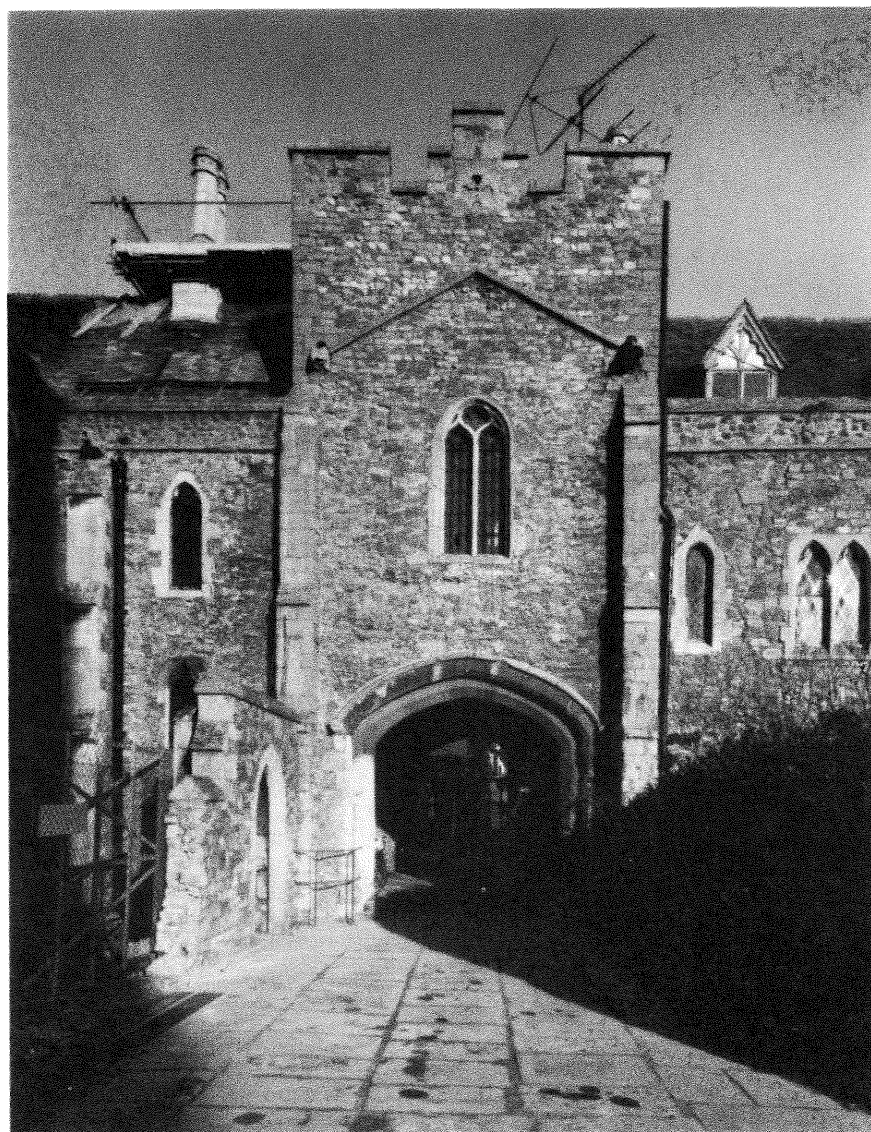


Plate 2. North Range, Sacrist's Gate, south elevation.
(Crown Copyright)

blind. The vault is quadripartite with sharply chamfered ribs springing from polygonal moulded corbels. The fill of the vault is a mixture of stone and brick, in part destroyed. The floor has been excavated to reveal a brick floor about 0.2 m below the modern street level.

In the north wall the inside face of the entrance arch is intact; it is of ashlar but unmoulded. The external face was destroyed to accommodate a wooden gate frame.

In the east wall within the arch there is a large blocked doorway at the south end. The rear-arch has ashlar quoins and a roughly arched head. A wooden lintel is built in below the head of the arch. The dimensions of the

opening are 2.3 m to the head of the rear-arch and 1.3 m across. The south jamb is 0.17 m from the south side of the blind arch. This opening has been unblocked revealing the doorway set about 0.3 m from the inner surface of the wall. The doorway has a two-centred head and on the south side is moulded with a single chamfer. Part of a hinge survives on the south side.

In the south wall the crown of the arch has been cut away, presumably, because of blackening of the masonry, for a flue. A single-light window rises into this area. Below the window and to the east is the wooden lintel of a former doorway. The lintel is about 2 m above the floor level and extends about 0.9 m

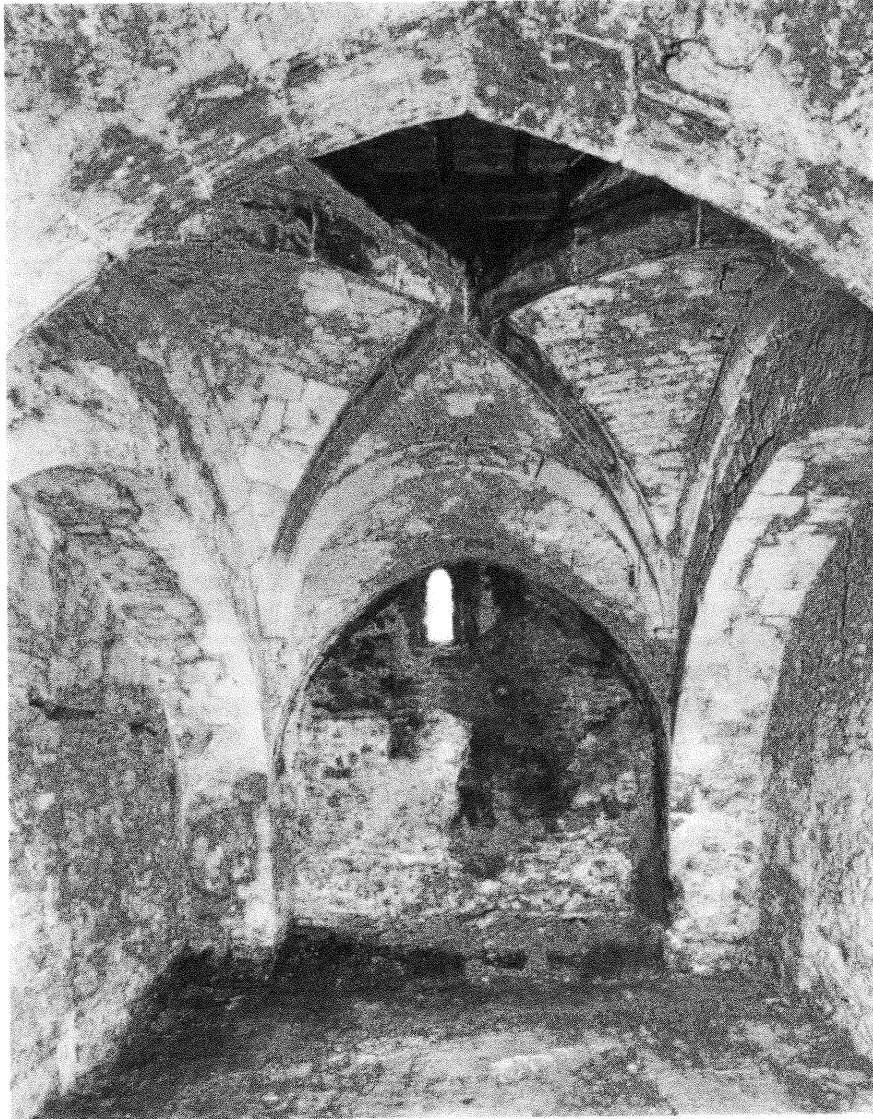


Plate 3. North Range, Goldsmith's Tower, interior of vaulted ground floor, looking south.
(Crown Copyright)

from the corner. On the west side of the doorway there are remains of a chamfered jamb.

In the west wall there are signs of disturbance, especially in the regularly coursed masonry at the south end. However no openings can be detected. There is a possible horizontal fabric break about 1.65 m above floor level.

On the first floor the chamber is articulated with a single-chamfered arch on each wall, similar to those on the ground floor, creating recesses 0.46 m deep. On the west wall a former stack intrudes into the arch. The present doorway in the east wall is completely featureless but there is no sign of any other

entrance to the chamber. The nineteenth-century south window is lower than the north window but otherwise copies its detailing.

The attic of the Goldsmith's Tower has louvred openings in its east and south sides. There is a bell-frame in the centre of the floor. The angles are built up in large ashlar blocks but the centre part of each wall and the wall head are brick. There is evidence of the gable of a former building on the west side.

*Old Choir School, western part
(The Choir House)*

This part consists of two bays, defined by buttresses, and has two storeys.

Exterior

On the north side the windows all appear to be nineteenth-century but they may be in earlier positions. On the ground floor there is a nineteenth-century arched hatch, presumably for fuel. The south wall is built of large, almost square, grey ashlar blocks but is on a nineteenth-century line. The two-centred doorway is nineteenth-century, like the others of similar design in the yard walls. The lion gargoyle high on the south-west angle is nineteenth-century.

Interior

All the cross walls appear to be of nineteenth-century brickwork. In the west room on the ground floor (room ENR2) there is a crack in the south-west corner within the wall connecting the south front with the diagonal south-east buttress of the Goldsmith's Tower. In the east room on the ground floor (ENR3) no architectural features survive. The wooden baluster stair to the upper floor appears to be of the first part of the nineteenth century together with the dado panelling on the first floor, so both may survive from before the great rebuilding of the range in the middle of the nineteenth century. The rather awkward floor levels, especially the way in which a small flight rises to a room over the stairs, also might imply the retention of earlier features.

On the first floor in the south-west room there is a crack in the wall similar to that in the room below, despite a nineteenth-century iron tie the length of the west wall. In the north-west room there is a projection in the north-west angle with a set-off, probably the north-east buttress of the Goldsmith's Tower. The dado panelling is perhaps reused. In the north-east room the dado is of slightly different design, with two large panels. The simple doors appear to be of the early rather than of the mid nineteenth-century rebuilding. The roof of this range is entirely nineteenth-century. The rafters on the south side are of some size but appear on the north pitch to have been replaced in recent times by more slender timbers.

Old Choir School, Eastern Part (The Museum)

Exterior

The north and east walls are of medieval origin but all the south wall, including the

projecting entrance turret (which formerly contained a stair) belongs to the mid-nineteenth-century rebuilding. On the north side, by the Sacrist's Gate, is another nineteenth-century arched hatch.

Interior

Again the dividing walls are of nineteenth-century brick. In the west room (ENR4) the north wall is constructed of large blocks of stone up to the sill of the window. The window opening is nineteenth-century. In the east room of the ground floor (ENR5) there is a large nineteenth-century beam across the centre of the ceiling. In this room the cusped heads of four-centred windows of c. 1500 were found in the demolition layers below the floor. In the cupboard on the north-east, behind the Sacrist's Gate, there is a hatch. In the east wall there is a blocked doorway with an arched head. The doorway has been blocked by a brick pier for the stair. The north jamb of this doorway is visible 0.9 m from the north wall. In the lobby (room ENR6) east of the east room there is an arched recess on the south projecting 0.4 m below the window. The east wall is composed of two arched recesses with an intermediate pier. These are formed in a thicker wall and are probably of medieval origin. A later doorway has been pierced through the south recess.

On the first floor the large hall open to the underside of the rafters, with beams supported on corbels, seems entirely nineteenth-century. However the masonry exposed in the south wall below the sill level of the windows might be reused medieval material. The doors and stairs belong to the nineteenth-century rebuilding.

Sacrist's Gate

Exterior

On the north side there is an archway with a depressed head, flanked by two-stage buttresses. The archway has a hoodmould with head stops. Above the archway is a two-light window and, above that, a five-arched corbel table. Over the corbel table is a pitched, projecting string course forming an applied 'gable'. The building continues unbroken into the range to the east. On the south side there is a wider archway of two chamfered orders, also flanked by three-stage buttresses (Plate 2). The archway has a

hoodmould with worn head stops. On the first floor there is a two-light window and, above, an applied 'gable' over (similar to that on the north front) with gargoyles projecting at its base. The top is crenellated.

Interior

The gate passage is stone vaulted with chamfered transverse ribs, of the nineteenth century. In the east and west walls are doorways with two-centred heads, of uncertain date. At the north-west angle there is a lintel, presumably for a doorway, about 1.8 m above ground level and extending about 0.55 m.

On the first floor in the north wall is a two-light window divided by a polygonal shaft. The window is flanked by arched recesses. The plaster has been removed from the east wall. Large cracks are visible but no obvious fabric breaks. In the south wall there is a two-light window, belonging to the original fabric though much restored in the nineteenth century. It is however not a copy of the north window but resembles the window in the Goldsmith's Tower. To the west of the window, part of the splayed west jamb (about 1 m.) of a former window has been exposed 0.87 m from the south-west angle of the room. The jamb still retains its plaster. The brick vaults (in fire-proof construction) of this first-floor chamber are nineteenth-century. In the west wall there is a chamfered doorway, with an approximately two-centred head. Although the west face appears completely nineteenth-century the doorway may be an original feature.

Conclusion

It appears that the fabric of the Goldsmith's Tower, the Sacrist's Gate and the east part of the former Choir School is essentially medieval and that the line of the north wall is also of medieval origin. Elsewhere the buildings date from 1860–64 although incorporating reused medieval masonry. Nearly all the internal features also date from 1860–64.

DISCUSSION

Investigation of a very limited area in ENR5 suggested a high density of occupation in the period between the tenth and the thirteenth century. Towards the end of this period, a ditch had been cut and was infilled after a short time. The stretch of ditch excavated was parallel with the present north wall of the North Range.

There was evidence for a substantial wall that also ran parallel with the present north wall. The foundations for this wall lay at about two metres to the south of the ditch which had probably been infilled by the time the wall was built. Both features may represent a boundary, the wall replacing the ditch.

After the wall had been demolished, two separate buildings had been erected, some time in the fourteenth century or later. These buildings had undergone alterations in or after the seventeenth century and were then in part destroyed and subsequently replaced by the present North Range.

There was a gap in the archaeological record between the time when the two buildings were erected, in phase 4, and phase 5, when structural alterations were carried out. Such absence of archaeological data may be due to the fact that the buildings had remained in continuous occupation, as was the case of Denny Abbey. In phases 4 and 5, it was not clear whether the developments observed in ENR5 were exactly contemporary with those in ENR2 and ENR3.

In the Middle Ages, the site formed part of the Sacrist's department. He was one of the most powerful of the obedientiaries of the Priory and had separate apartments within the monastic precinct. Income from land, tenements and other sources was set aside for his office.³ The earliest extant Sacrists' account rolls date from the late thirteenth century and specific reference to his buildings is first found in the rolls of the first half of the fourteenth century.⁴ The Sacrist at this time was Alan of Walsingham who held the office from 1321 until 1341, when he became Prior of

3 P.G. Lindley, *The Monastic Cathedral at Ely c. 1320 – c. 1350: Art and Patronage in Medieval East Anglia* (Ph.D 13733, Cambridge 1985)

4 F.R. Chapman, *Sacrist Rolls* (2 vols., Cambridge, 1907)

Ely. His tenure coincided with a time of great building activity both in the Cathedral and in the monastic precinct.

The Sacrist's account rolls for 1325/6 (Roll 5) record the purchase of shops and recent building in stone. Building materials were bought including stone for the wall in the cemetery, and labourers were paid for work on a stone chamber '*in angulo*', presumably the north-west corner of the Sacrist's precinct. Payments were made in 1352/3 for thatching the old hall in the Sacristy (Roll 12), and in 1354/5 for tiling the new hall (Roll 13). Throughout are miscellaneous expenses for building materials and repairs to buildings. There are also references to glazing, including payments for the repair of old windows in 1336/7 (Roll 7).

The account rolls suggest considerable building activity in the Sacrist's department in the first half of the fourteenth century. Reference to the location of this activity may be found in a section of the *Chronicon Abbatum et Episcoporum Eliensium* which records Alan of Walsingham's achievements,⁵ and may well have been compiled in 1388.³

The chronicler records that Alan of Walsingham bought four shops next to the cemetery and then surrounded his department with stone walls: the north wall ran from the parish cemetery to the Almoner's department, and there was another wall between the end of the north wall adjacent to the cemetery and the corner of the Lady Chapel. In the north corner, next to the cemetery, he built a stone chamber. On the first floor was a room with an accounting table. Below were two rooms separated by a stone wall, one to serve as a goldsmith's shop, the other as a wine cellar. He built two other stone houses roofed with tiles. The first was a long building with several chambers, the second was for the horse-mill.⁵

Both documentary sources record the purchase of shops and the building of stone walls and houses. The chronicler states that the shops were adjacent to the cemetery, and that one of the walls built to enclose the Sacrist's department ran from the cemetery to the Almonry. Until the mid-nineteenth century, the cemetery lay to the north of the

Cathedral, and recent observation of builders' trenches suggests that it had once extended into the part of the courtyard of the North Range that lies south of ENR1, ENR2 and ENR3. The Almonry fronted on to the Market Place.

It is suggested that the shops for whose purchase payment was made in 1325/6 fronted on to the High Street and lay on the site of the North Range, and that the new boundary wall ran along the line of the present north wall of the North Range.

Alan of Walsingham thus extended the boundaries of his department, and therefore of the monastic precinct, by purchasing the shops which were of the Bishop's fee. This implies an earlier boundary to the south of the new one, to mark the limit between monastery and town. Excavation provided evidence for a possible ditch and a wall running parallel to the north wall of the present North Range (Figures 2a and 2b). The pottery evidence suggested that these features were of thirteenth-century date. The excavated wall foundations may therefore represent the remains of a boundary wall dismantled when the Sacrist's precinct was extended in the fourteenth century. The new walls defined an area between the north-west corner of the Lady Chapel, the Goldsmith's Tower, the Almonry and the Cathedral. The line of the parish boundary between the precinct and Trinity parish breaks north to enclose the North Range and the Almonry (Plate 6). This suggests that the parish boundary was adjusted in the time of Alan of Walsingham to include his department within the jurisdiction of the monastery.

The documentary evidence refers to the erection of a number of buildings. One of these was the stone chamber '*In angulo . . . boreali juxta cimiterium*'. The chamber was probably the building now known as the Goldsmith's Tower although it is hard to reconcile the present relatively modest structure with the chronicler's description of the lower floor as containing both a goldsmith's shop and a wine cellar. The other buildings cannot be precisely identified.

If a list of the buildings mentioned in fourteenth-century sources is compared with

⁵ H. Wharton, *Anglia Sacra* I (London, 1691), pp 643-6.



Plate 4. The Goldsmith's or Old Bell Tower from the south-east, 1857. Pencil drawing by Henry Baines.
(Photograph: Crown Copyright)

that provided by the 1541 Award, following the Dissolution of the monastery at Ely,⁶ it may be seen that most of the buildings existing by c. 1350 were the same as those still standing in 1541. This suggests that no major building work was undertaken after c. 1350 and so the buildings whose remains were excavated in ENR5 and in ENR2 (phase 4), if of medieval origin, had probably been erected in the fourteenth century.

At the Dissolution, the Sacrist's buildings were allocated to the prebend of the fourth stall.⁶ In an agreement made in 1566 between the Dean and Chapter and the parishioners of Holy Trinity,⁷ whereby the Dean and Chapter granted the parishioners the use of the Lady Chapel, the then prebend Mathew Hutton released 'one tower or squire house', i.e. the

Goldsmith's Tower, to serve as a belfry. In this document, no reference is made to the church way that provided access for the parishioners from the street to their church. It is shown on Bidwell's map of Ely of 1851 (Plate 6). The trenches dug in the courtyard of the North Range in connection with the recent restoration provided some evidence to suggest a medieval origin for the church way. No burials were found in the part of the trench to the south of ENR4, ENR5 and ENR6, while a number of burials were located in the trenches in the west part of the yard. The church way may, therefore, possibly have run along the east boundary of the churchyard prior to Alan of Walsingham's building activity, and continued as a way of access.

The Parliamentary confiscation of Chapter

6 D.J. Stewart, *Distribution of the Buildings of the Dissolved Monastery at Ely*, *Archaeological Journal* LIV (1897), pp. 174-185.

7 Indenture of agreement between the Dean and Chapter, and the parishioners of Holy Trinity parish, dated September 1566.



Plate 5. The North Range from the south-east, 1857. The Sacrist's Gate, then blocked, is shown in the foreground. Pencil drawing by Henry Baines. (Photograph: Crown Copyright)

property does not seem to have affected the buildings of the North Range.⁸ In 1678 there is a reference to the Prebend leasing three houses attached to his stall, of which one stood to the east, the other two to the west of his chief residence.⁹ In the following decades frequent references in the Chapter Books to the cost of repairs of buildings in the monastic precinct¹⁰ suggest neglect and decay.

In the second half of the eighteenth century major repairs carried out in the buildings of the fourth prebend¹¹ may be followed in the annual accounts of the clerk of works.¹² Considerable expenses are recorded for the

years between 1757 and 1760 which suggests large-scale alterations to the buildings, perhaps the insertion of the sash windows which are shown in a drawing by Henry Baines (Plate 5).

Further reference to the North Range may be found in the records of nineteenth-century restoration in the College by John Bacon.¹³ Bacon states that the following features occupied the site, from west to east, the bell house, a cottage, the church way and a lean-to scullery built against the west gable end of the Sacristy. The buildings mentioned by Bacon are shown on Bidwell's map of Ely and are

8 T.D. Atkinson, *An Architectural History of the Benedictine Monastery of St Etheldreda at Ely* (Cambridge, 1933).

9 Ely Chapter Book from 1660 to 1729 (EDC 2/1/2).

10 Ibid, and Ely Chapter Book 1729–1769 (EDC 2/1/4).

11 Ely Chapter Book 1729–1769, from June 1755.

12 Clerk of Works. Accounts Audit for the years from 1756 to 1767 (EDC 4/1/11 to 4/1/21).

13 A Record of the Restorations, Repairs, etc, done in and about Ely Cathedral since 1818. Prepared by John Bacon Clerk of the works 1871 (Bacon's Books, Ely Cathedral MS 37).

depicted in the two drawings by Henry Baines showing them from the south-east (Plates 4 and 5). In a plan of the monastic remains in Ely, D.J. Stewart identified, from west to east, the bell tower, an open space, and the Sextry Hall.¹⁴ Detailed measurements of this hall may be found in a drawing among Stewart's papers¹⁵ which shows the west gable end wall of the hall in the same position as the wall excavated in ENR5 (Figure 3: wall 82). Stewart considered that the buildings between this wall and the Goldsmith's Tower were of post-medieval origin but it is possible that they had been altered in such a way as to conceal medieval fabric. In an article in the *Cambridge Chronicle* of 7 April 1860 it was reported that the buildings on the College side of the High Street were in poor condition and that all the windows on that side had been blocked up.

It is suggested that the east part of ENR5 constituted part of the medieval Sacrist's Hall that underwent considerable alterations between 1757 and 1760. These alterations possibly included the erection of wall 82 (Figure 3) ascribed to phase 5. In view of the evidence for continuity of use of the Sacrist's Hall since the Middle Ages, it is suggested that the building represented by a mortar floor in phase 4 was of medieval origin.

The structure to the west of wall 82 (Figure 3: feature 141) lay on the site of the lean-to scullery mentioned by Bacon. This supports the suggestion that this structure may have been a soakaway. The removal and subsequent replacement of soil around it (phase 6) may have taken place after the cholera epidemic of 1832 when measures were taken to improve the general sanitation of Ely.

The building that had been erected in ENR2 in phase 4 was therefore also of medieval origin and probably one of the buildings to which reference was made in 1678. It has been suggested above that phase 5 in ENR2 and ENR3 belongs to the mid-nineteenth century, and documentary evidence shows that there was at that time a building on the site of ENR2 and ENR3 whose south wall was on the same line as the wall excavated in ENR2 (Figure 3).

The *Cambridge Chronicle* article of April 1860, referred to above, mentions plans for the restoration of the North Range. The *Handbook to the Cathedral Church of Ely* dated 1864 describes a recently erected building comprising Choristers' rooms and a Master's residence on the site of the North Range. Demolition, represented by phase 6, must therefore have taken place after April 1860 and before 1864. The Dean at this time, Harvey Goodwin, in the text of his book *Ely Gossip*,¹⁶ stated unequivocally that no professional architect was employed but that the advice of Le Strange, the gentleman artist then at work on the ceiling of the nave, was taken as necessary. However, an editorial footnote corrected Goodwin stating that the plans were drawn by W.M. Fawcett, the Cambridge architect. This is confirmed by Bacon.

The church way was suppressed and the formerly blocked up entry through the Sacrist's Gate (Plate 5) was reopened. Above the gate a fireproof muniments room was created. The cottage next to the Goldsmith's Tower was demolished, and the range west of the Sacrist's Gate was taken down, except for a short stretch of its north and south walls adjacent to the Sacrist's Gate and the west wall of the gate passage which remained to a height of about 2 m. In the space between the Goldsmith's Tower and the Sacrist's Gate a new range was built in two parts, that to the west, domestic in character and apparently reusing some early nineteenth-century woodwork, perhaps from the former buildings on the site, that to the east comprising a first-floor hall and classroom below for the boys of the choir school. The line and perhaps some of the masonry of the former north wall were retained, but the south wall was erected further south to line up with the south wall of the Sacrist's Gate rather than that of the Goldsmith's Tower.

CONCLUSION

The excavations have yielded evidence for an earlier north boundary between the town and the monastic precinct. The present boundary was probably established in the first half of the

14 D.J. Stewart, *On the Architectural History of Ely Cathedral* (London, 1868).

15 Box of tracing, plans, antiquarian notes, sketches of

mouldings, etc. prepared by D.J. Stewart for his *Architectural History* (Ely Chapter MS 45).

16 H. Goodwin, *Ely Gossip* (Ely, 1892).



Plate 6. Part of the map of Ely by C.M. Bidwell showing the North Range and church way, 1851. The shaded line marks the parish boundary.

fourteenth century, entailing a northward adjustment of the parish boundary. The two buildings for which evidence was found in ENR5 and ENR2 were erected at that time. Until the Dissolution they belonged to the Sacrist, and afterwards to the Prebend of the fourth stall. Despite some alterations such as the adaptation of the Goldsmith's Tower to form the bell tower of Trinity parish, these buildings remained in existence until the Victorian remodelling of the early 1860s which produced the North Range as it stands today.

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The archaeological archive will be deposited at the Cambridgeshire County Council Archaeology Office, and the finds at the Ely Museum.