HOWES ALLEN & MONTGOMERY

EXETER COLLEGE HALL

ARCHAEOLOGICAL WATCHING BRIEF

OXFORD ARCHAEOLOGICAL UNIT
MARCH 2001

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NMR DATA	
SITE NAME	THE DINING HALL
ADDRESS	EXETER COLLEGE
TOWN	OXFORD
PARISH	OXFORD
COUNTY	OXFORDSHIRE
NGR	SP 51457 06350
LISTED STATUS	GRADE I
VISIT/SURVEY DATE	9TH-14TH APRIL 1997
OAU SITE CODE	OXEXCO 97

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EXETER COLLEGE HALL

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EXETER COLLEGE HALL
ARCHAEOLOGICAL WATCHING BRIEF

Summary

A Watching Brief was carried out during the creation of a new opening in the screens passage of Exeter College between the Dining Hall and the Servery. On the east side of the opening a layer of haired lime plaster was removed which was attached to the wall on a sub-structure of lath and stud work. Under this wood work an earlier wall plaster surface was found applied directly to the faced and squared limestone blocks of the east wall face. The skirting area of this wall face was painted black but no other evidence for wall painting was observed. The west side of the entrance had been refaced with a thick layer of modern cement. Under this layer was found a mixture of two older plaster finishes. To the north of this area some remains of a painted surface survived with glimpses of a two-tone brown design of a buff under layer with dark brown brush strokes on top. These plaster layers were applied directly onto the coursed rubble limestone wall. The wall was designed to carry the load of a upper floor to the west. A ledge 18 cm wide is seen at a height of 2 m above current floor level, and this held the joists of the first floor.

Observations made at the same time on the Hall roof showed that the Jacobean roof (possibly based on that of St George's Hall at Windsor Castle) had been altered and gothicised in the 19th century.

1 INTRODUCTION

1.1 The Oxford Archaeological Unit (OAU) was commissioned by Howes Allen & Montgomery (architects) to undertake a watching brief during the creation of a new opening through the screens wall between the Dining Hall and the Servery of Exeter College, Oxford.

1.2 The work was undertaken on the 9th, 10th and 22nd of April 1997 and was carried out in accordance with the brief set by the Head of Planning Control and Conservation, Oxford City Council, as a condition of Listed Building Consent (Appendix A).

2 HISTORICAL BACKGROUND

2.1 The Hall and Servery are located along the south side of the college quadrangle (Figure 1). The existing Hall dates from 1618 and was built by Sir John Acland replacing an outhouse and two studies. The Hall was restored in 1820 when the porch and fireplaces were added. The range in which the Servery is located was built in 1701-3 by Narcissus Marsh, Archbishop of Dublin and later Armagh, on land that had been purchased for the college in 1699. This building was refaced along Brasenose Lane in 1833-4 giving it a Gothic skin designed by local architect H G Underwood. The screens passage which runs between the two phases of building was built as part of the 1618 Hall however the wall separating it from the main Hall room is of modern date as is its vaulted ceiling and entrance doorway. The wall in which the new opening was made is believed to be of the 1618 build.[1]

[1] RCHM Inventory, *City of Oxford* (1939); Sherwood and Pevsner, *The Buildings Of England: Oxfordshire* (1974); R.W. Southern, 'Exeter College, Oxford.', *VCH Oxon III* (1954).

3 THE RECORD

3.1 Following on from the brief given as part of Listed Building Consent (Appendix A) a specification for works was drawn up by the OAU. This suggested that a drawn, photographic and written record should be made of any archaeological features found during the destruction of the wall. No significant archaeological features were found during this process but the opportunity was taken to record the layers of plaster covering the wall and the build of the stone wall itself.

3.2 The removal of plaster from both sides of the new opening was observed in order to ensure nothing of archaeological importance was destroyed without record (or preservation, if deemed necessary). The eastern face of the opening was drawn at 1:10 to record the stud and lath substructure of the wall's current plaster surface, a painted skirting area on an earlier plaster surface was also located on the drawing (Figure 3). The character of the exposed stonework on the east of the opening was recorded by a partial 1:10 drawing (Figure 4) and the west side was recorded through photography (Plate 7). Full descriptions of removed materials and building features were made throughout. During the demolition a full colour slide and black and white negative record was made of all wall layers.

4 DESCRIPTION

4.1 *General Observations*

4.1.1 The new doorway is 66 cm south of the existing original stone doorway which leads from the Dining Hall Entrance passage to the Servery (Figure 2 and Plate 1). The new opening has been designed to match this door. An area of wall from the original northern door to the southern extent of the new opening was to be demolished giving a total investigation area of 188 cm in width by 203 cm on the east and 209 cm on the west in height. The wall had an overall thickness of 89 cm. Described below are the layers that made up this thickness.

4.2 *Eastern Side of the New Opening to Servery*

4.2.1 The wall elevation that was revealed on the eastern side of the new opening was made of regularly coursed, well squared and faced blocks of light grey limestone (Figure 4 & Plate 5). The blocks showed rough tool markings demonstrating how the stone was faced. The blocks varied in size ranging from: 61 cm x 20 cm, 40 cm x 27 cm and 18 cm x 15 cm. The stone build of the wall was not vertical; it leaned markedly westwards from a height of 175 cm above the modern concrete floor surface. Its surface was generally flat and uniform apart from six vertical channels, 8-9 cm in width, that had been cut into the stone to house the studs for the later lath and plaster surface (see 4.2.3). The channels were generally spaced 38 cm apart with a smaller gap between them near the existing original door. At the base of the wall the depth of the recesses was up to 3 cm. At the upper extent of the investigation area the studs were 2 cm clear of the wall surface, reflecting the non-vertical nature of the wall. The edges of the channels were generally vertical but the sides were not crisp. The back of these channels had diagonal tooled marks highlighting the area where stone had been removed. Drilled dowel holes were seen at spaced intervals in the channels. They went into the wall to a depth of 7

cm. The holes were round in all but the two most northerly stud recesses where they were square. The holes were 2.5 cm in diameter and were for the fixing pegs of the stud foundation for the plaster and lath surface (4.2.3 & 4.2.4). The matrix holding the stone blocks together was a slightly creamish white lime mortar with no visible inclusions other than sand. The vertical and horizontal jointing between the stone blocks was regular and measured between 1-2 cm in width. The mortar was generally flush with the stone surface although it occasionally overlapped the stonework. There was no evidence of reused decorated stone or any archaeological features (Figure 4.).

4.2.2 Applied directly on top of the stone work described in 4.2.1 was a 1 cm thick skim of lime plaster (Plate 3 & 4). The plaster was pinky cream in colour and the only visible inclusion was a large amount of reddish hair used as a binder. This layer was also cut away by the stud recesses as described in 4.2.1. Minimal decoration was seen on this layer with the main expanse showing evidence of several layers of whitewash with colour only present at the base of the wall. The skirting area was painted or washed with a dark bluish greenish black colour which survived to a height of 18 cm above the modern screed floor (Figure 3). It too was truncated by the stud recesses. The material could be smudged off with fingers and so was probably a pigmented limewash.

4.2.3 Part of the current plaster surface on the eastern side of the new opening is attached to the stone wall by the means of a lath and stud frame work (Plate 2 & Figure 3). The studs that were removed measured on average 7 cm wide by 2.5 cm in depth, the height of the studs was not discovered as they were sawn off at upper extent of the investigation area, 203 cm from the modern floor. The studs were housed in recesses that cut through the limewashed plaster surface (4.2.2) and the stone wall (4.2.1). This brought them flush with the earlier plaster surface. Wooden dowels were inserted into drilled holes in the stone wall (4.2.1) and the studs were nailed to these wooden dowels and so attached firmly to the wall. The studs were spaced roughly every 36 cm with a smaller gap between them near the existing door. Figure 3 shows the grouping of lath attachments. The normal pattern was for a block of laths, c.50 cm by 77 cm wide, to span three of the studs being attached to the outer most two. The block arrangements alternated like brick work ensuring that a strong framework was maintained (Figure 3). The oak riven laths were closely spaced to form a key for the lime plaster and nailed onto the studs with handmade nails (0.8 cm heads, 2.5 cm tails). The laths continued below the modern floor level suggesting that the original floor level was lower than the present one.

4.2.4 The plaster surface covering the lath and stud framework was applied in three layers. The first layer applied was pushed through the lath work to produce a secure fix. This lime mortar had a thickness of 1.5-2 cm and was light beige brown in colour with inclusions of sand, large amounts of hair seen in tufts (longer in length than that in the plaster described in 4.2.2 and black and red in colour) with occasional pieces of straw and wood chippings seen in the matrix. This layer had diagonal scoring on the front surface to form a key for the next layer of mortar that was applied. This next layer was of the same description as the under coat and was 1 cm in thickness. The third and upper layer was of a different makeup; it was 0.5 cm thick a lighter brown than the previous two layers due to the high amount of sand in the matrix (c.70%). This was the thin finishing smooth coat to the plaster surface and contained no binding hair. Layers of paint were observed on top of this including cream, reddy orange, yellow and brown.

4.2.5 The plaster described in 4.2.4 covered the majority of wall area however a modern cement had been applied along the lower portion of the wall. This material was grey in

colour with 10% inclusions of multi-coloured grit. Its upper extent was 73 cm above the modern floor surface and it appeared to extend all the way along the screens passage wall.

4.3 *Western Side of the New Opening to Servery*

4.3.1 The wall elevation that was revealed on the western side of the new opening was made of coursed limestone rubble (Plate 7). Twelve courses were revealed mostly of light grey limestone but with some pieces of a honey yellow colour. The stone pieces varied in size from 34 cm x 24 cm to 21 cm x 11 cm. Most of the stone had been roughly faced with some diagonal tool marks visible. There was some evidence for reused masonry; one piece of stone was well faced with fine vertical tooled strike marks another piece of stone was worked and appeared to be from a decorated boarder of some sort (Plate 8). The matrix of the wall was white lime mortar with a small amount of sand and grit inclusions. Its application was quite rough with the mortar overlapping the stone edges in an attempt by the builders to create a smoother wall surface. Both vertical and horizontal joints were up to 3 cm in thickness and varied considerably. The ashlared quoins to the northern extent of the wall have been replaced and were of a whiter colour than the rest of the wall. At a height of 200 cm above the modern floor level the wall face stops. Its upper course forms a horizontal ledge extending 18 cm into the core of the wall. At this depth into the wall core a new wall face continues upwards (Plate 9). The wall had several fixing dowels in its build, three along the bottom of the exposed area presumably for a former skirting board and vertically down the northern wall extent quoins possibly for a fixed door surround or wooden rails or fittings of some type.

4.3.2 Applied directly onto the rubble wall was a layer of lime mortar 1.5 cm thick. This layer was covered in a substance that was greyish, purply blue when dry but brown when wet. Although it seems likely that it was a pigmented limewash it may have been a layer of dirt. Beneath this coloured layer there was evidence of white wash. The plaster was very strong, a creamish white colour with no visible inclusions. Also present was a different type of lime mortar/plaster. It was cream in colour with red hair seen in clumps and a very small amount of rounded pebbles 0.5 cm in diameter. The relationship between the two mortars is unclear. At the upper area of the wall the haired type seemed to be applied over the white inclusion free type but then over the bottom half of the wall the haired type was directly applied to the wall surface. Neither seemed to go all over the surface area being investigated. The haired type may be an undercoat to the white inclusion free type although they often appeared to have the opposite stratigraphic relationship. To the northern edge of the wall by the replacement quoins an area of surviving paint work was exposed. The area measured 6 cm wide by 80 cm in length. The pattern was made up of two shades of brown paint; an undercoat of dark beige with an upper coat of swirling brushed lines in dark brown. Under this finish other colours could be seen; a dark red umber, dark blue green and a light bright green. The green colours appeared to be applied directly onto the stone work. The plaster finish and the paint remains did not extend onto the new quoins (Plate 6).

4.3.3 The current surface of the servery side of the wall is made of the modern cement "Hard Wall" manufactured by British Gypsum. This is a pink cement and had been applied in two layers directly over the replacement quoins and the plaster surfaces (4.3.2). The material was applied very thickly in places to compensate for the lean in the wall. It was also used to make the splayed door reveal of the existing northern door perpendicular to the wall surface. It totally encased the new quoins and added c. 8 cm to the length of the

wall.

4.4 *The Hall Roof*

4.4.1 The renovation of the Hall included the cleaning of the inside of the roof, which gave an opportunity for close examination of the carpentry. Exeter's hall of 1618 is a splendid example of Jacobean perpendicular architecture, while the roof also has something of a medieval appearance. The principal trusses in each bay have curved braces to a high collar, and the spandrels are filled with tracery. This is a somewhat unusual arrangement, but it does have one noble parallel in the lost roof of St George's Hall at Windsor castle (1357-65), important as the single known royal work of the mid 14th-century, though it is only known from Hollar's engraving for Ashmole's *History of the Garter*, which shows the principal trusses with parallel (or if curved, concentric) rafters and the space between them filled with tracery. The roof, which has few contemporary parallels, is poorly documented and of uncertain authorship, but was probably built in the early 1360s, possibly by Wintringham). [St John Hope, *Windsor Castle*; Colvin, *History of the King's Works*, i.181]

4.4.2 There is one problem with this interesting connexion. Examination of the roof at close quarters has shown that it is not all original, and that the 19th-century restoration made it more gothic than it had been, by infilling the rather spare (and more Jacobean) tracery with cusped (and more Gothic) pieces. This is corroborated by the illustration of the roof in Smith's *Specimens of Ancient Carpentry* (1787) prior to its restoration (Fig. 5).[2] There is thus the unfortunate possibility that Exeter was purposely made to look more like Windsor, but it remains nevertheless a relevant parallel.

4.4.3 The additions to the roof are easily identified at close quarters since they are not pegged; they consist of alternate uprights in the spandrels plus their tracery and most of the gothic detail (including the surface mouldings) in the upper section (Fig. 5). Along the walls the spandrels above the windows have also been infilled with additional uprights.

4.5 *The Hall Screen*

4.5.1 The Hall screen is in contrast with the Gothic building, using the fashionable classical joinery after the model of the recently completed Wadham College, and presumably also employing the same Oxford joiner, John Bolton.[3]

5 DISCUSSION

5.1 A clear difference between east and west wall facings was seen during the watching brief. The eastern exposed wall was of well faced, squared blocks with regular vertical and horizontal mortar joints of between 1-2 cm. However the western side of the wall was of coursed rubble with more variable joints. The western face of the wall stopped at a height of 200 cm with the wall continuing up 18cm back from the first face thus forming a ledge. This evidence suggested that there could have been two separate building phases; one wall of faced stone and an abutting one of coursed rubble. However when the opening was knocked through it became apparent that the mortar type was consistent throughout and that the wall was of one build. Between the two

2 Reproduced in Aymer Vallance, *Old Colleges of Oxford.*

3 John Newman 'The Architectural Setting', in N Tyacke (ed.) *The History of the University of Oxford Vol. IV Seventeenth-Century Oxford* (1997), 157.

fairly uniform faces was a core of random rubble and a large amount of lime mortar. If a wall has one faced side and one rubble side it is normal that the faced side is the external surface. This would not be the case here as the wall is thought to be part of the 1618 build of the college Hall. The status of the building may have required a faced interior wall for the screens passage with the rubble side of the wall being part of the working end of the Hall and predominantly used by servants. If further work is carried out on the Dining Hall the internal wall surface should be examined and compared with that described above. This would confirm if the wall is characteristic of the 1618 build or if it is of another building phase, possibly that of 1701-3.

5.2 As described above the western side of the wall is stepped back at a height of 200 cm above the current floor level. This stepping of width forms a ledge of 18 cm on which the joists of the current first floor rest. The wall was therefore designed to carry the load of a floor and shows that there was a further building to the west of the screens passage at the time of wall construction, believed to be 1618. The door to the north of the new opening must have provided the link between the two areas. This suggests that the 1701-3 build of the range in which the servery is situated is a replacement. Alternatively the wall through which the new opening is being built may relate to the 1701-3 building phase.

5.3 The eastern side of the wall was originally finished with a lime mortar skim applied directly onto the stone blocks. This surface was whitewashed with a black pigmented wash covering the skirting area of the wall. At a later date a new plaster surface was put up on a framework of studs and laths. The studs were recessed into the wall to provide a secure fixing of the new wall surface, to ensure that the wall was not thickened too much by the new surface and to correct for the leaning in the stone core of the wall. The channels that were cut to recess the studs went through the older plaster layer and cut into the stone itself. This layer in turn failed along the lower and most vulnerable area of the wall and was replaced with a modern grey concrete known to be very hard wearing. The concrete was put on over the lath and stud work but had its own metal gauze acting as a key.

5.4 The western side of the wall was of coursed rubble with some evidence of the reuse of stone. The northern quoins of the wall were replacements. The rubble surface was originally faced with a lime plaster skim applied directly onto the stone. In some areas there appears to be patching or use of a different kind of mortar with hair as an inclusion. This surface may have a pigmented lime wash covering it but no skirting detail was observed. To the northern extent of the wall an area of brown paint surface was observed. Directly above this layer a thick coat of modern pink cement was applied presumably relating to the modern use of the room as a kitchen area.

5.5 The changes to the Hall roof are a useful reminder that things are not always what they seem. Nevertheless, despite the evidence that the Jacobean roof was made more gothic in the 19th century, it remains an interesting parallel for the lost 14th-century roof of Windsor Castle.

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Oxford Archaeological Unit
March 2001

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Appendix A

Oxford City Council's Archaeological Requirement, as laid down as one of the conditions attached to the Listed Building Consent.

CONDITION 4.

An approved archaeological contractor shall be employed by the applicants, to supervise the removal of the existing plaster coating to both sides of the screens/servery wall, where plaster will be disturbed by the approved works. An archaeological examination shall then be made of the exposed walling and any archaeological features recorded. Any discoveries shall be reported on to the Conservation Section (252147) of the Local Planning Authority, so that their importance can be assessed.

Reason:

To ensure these alteration works do not destroy hidden historic features without record or preservation as may be appropriate.

Plate 1: Screens Passage: existing doorway and area of investigation

Plate 2: East side - Lath and stud base for plaster surface

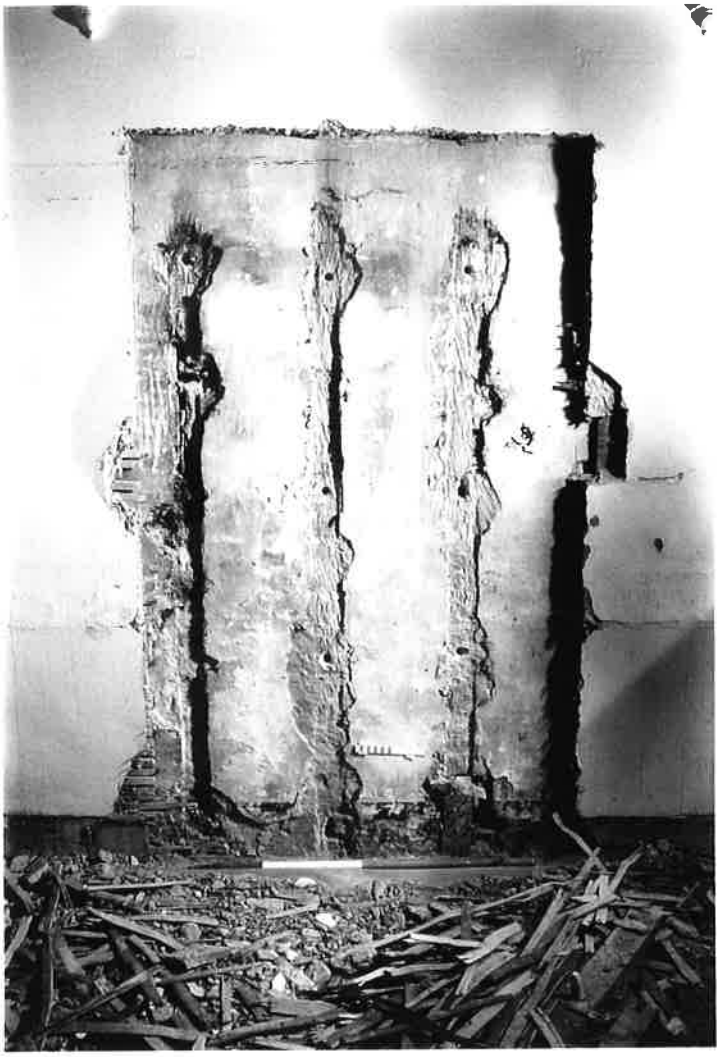


Plate 3: East side - Plaster surface with painted skirting area

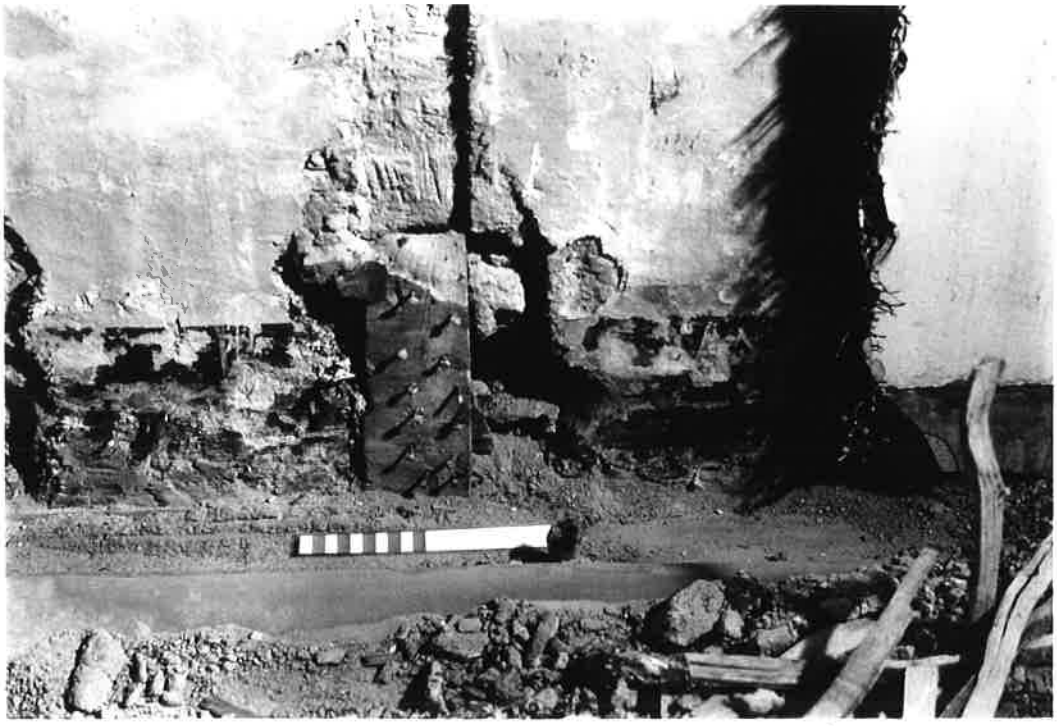


Plate 4: East side - Detail of painted skirting area

Plate 6: West side - Plastered and washed surface

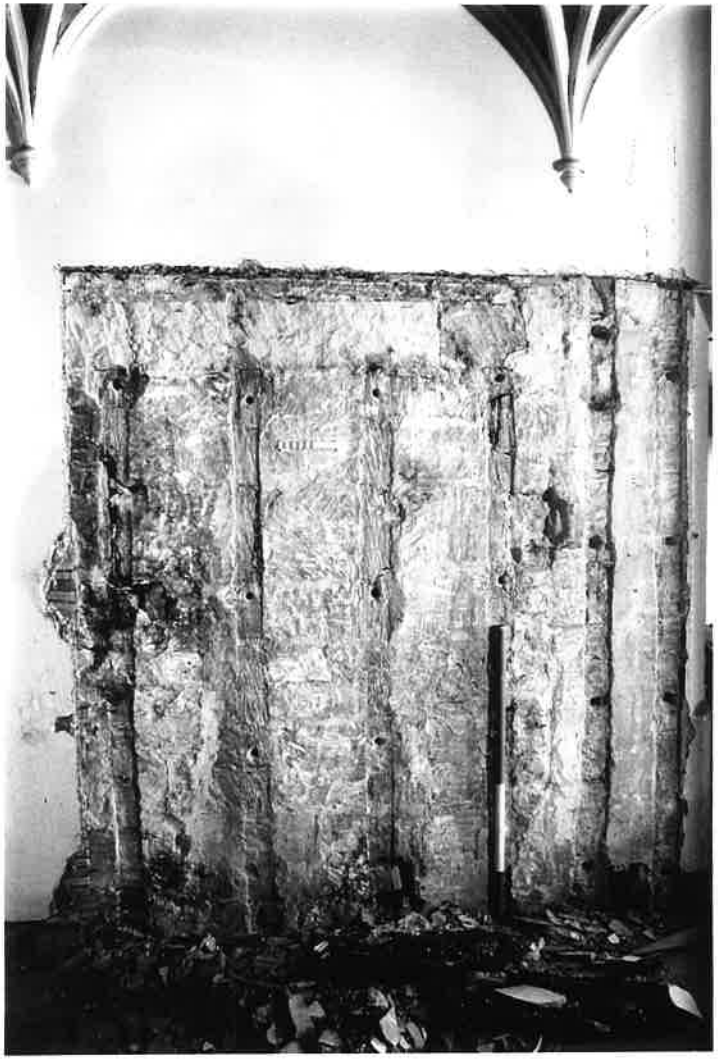
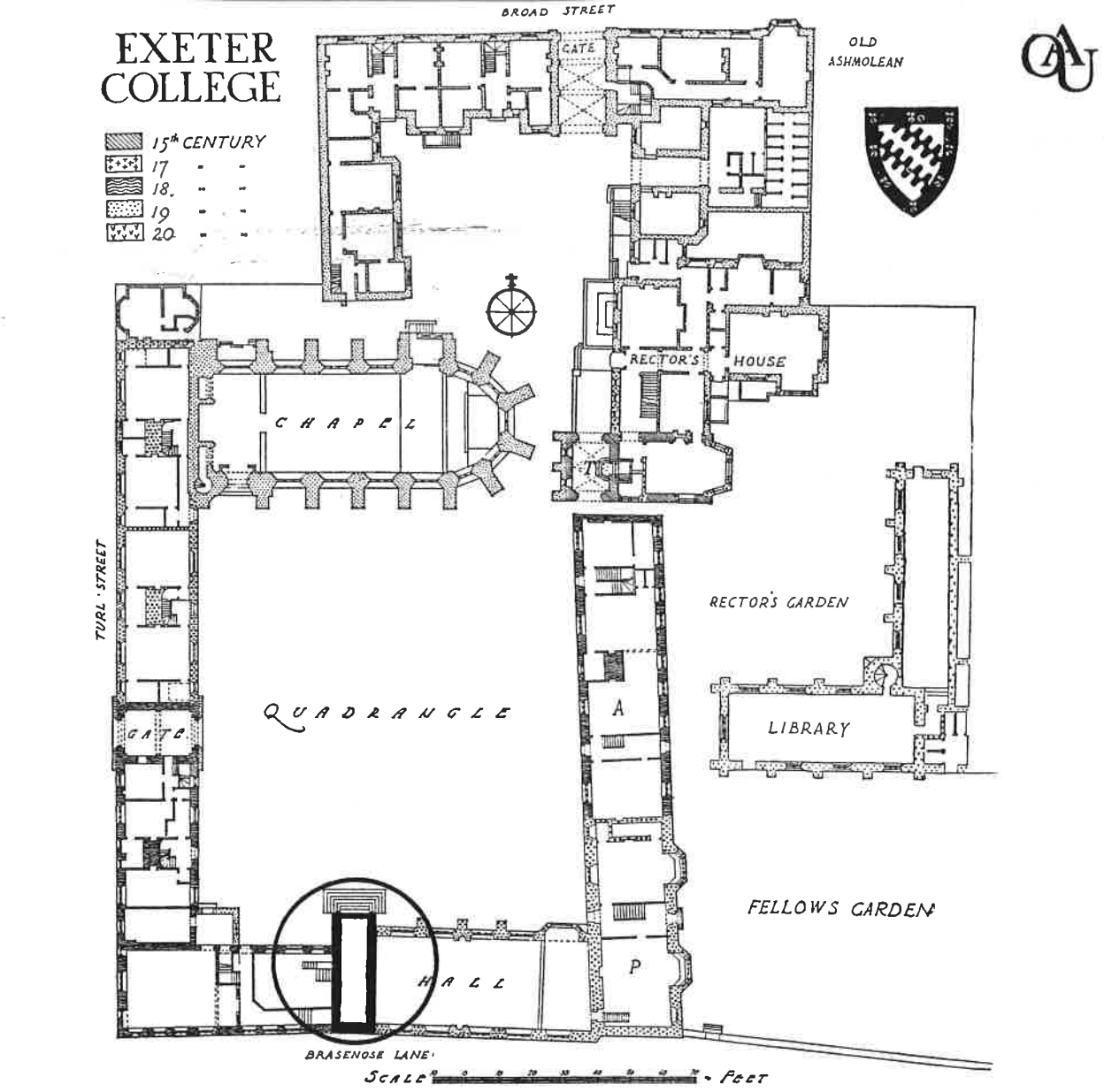


Plate 5: East side - Faced stone surface

Plate 7: West side - Coursed rubble wall surface

Plate 8: West side - Detail of reused carved stone

Plate 9: West side - Joist holding ledge



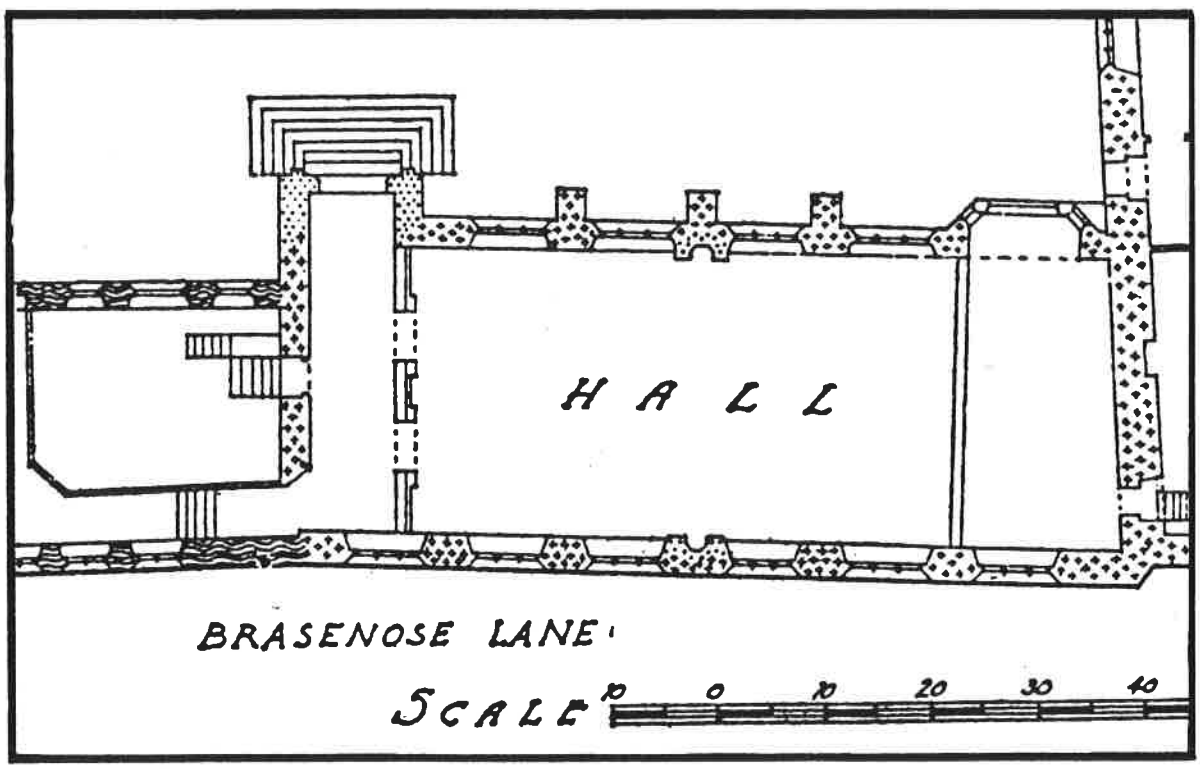


Figure 1: Plan of Exeter College

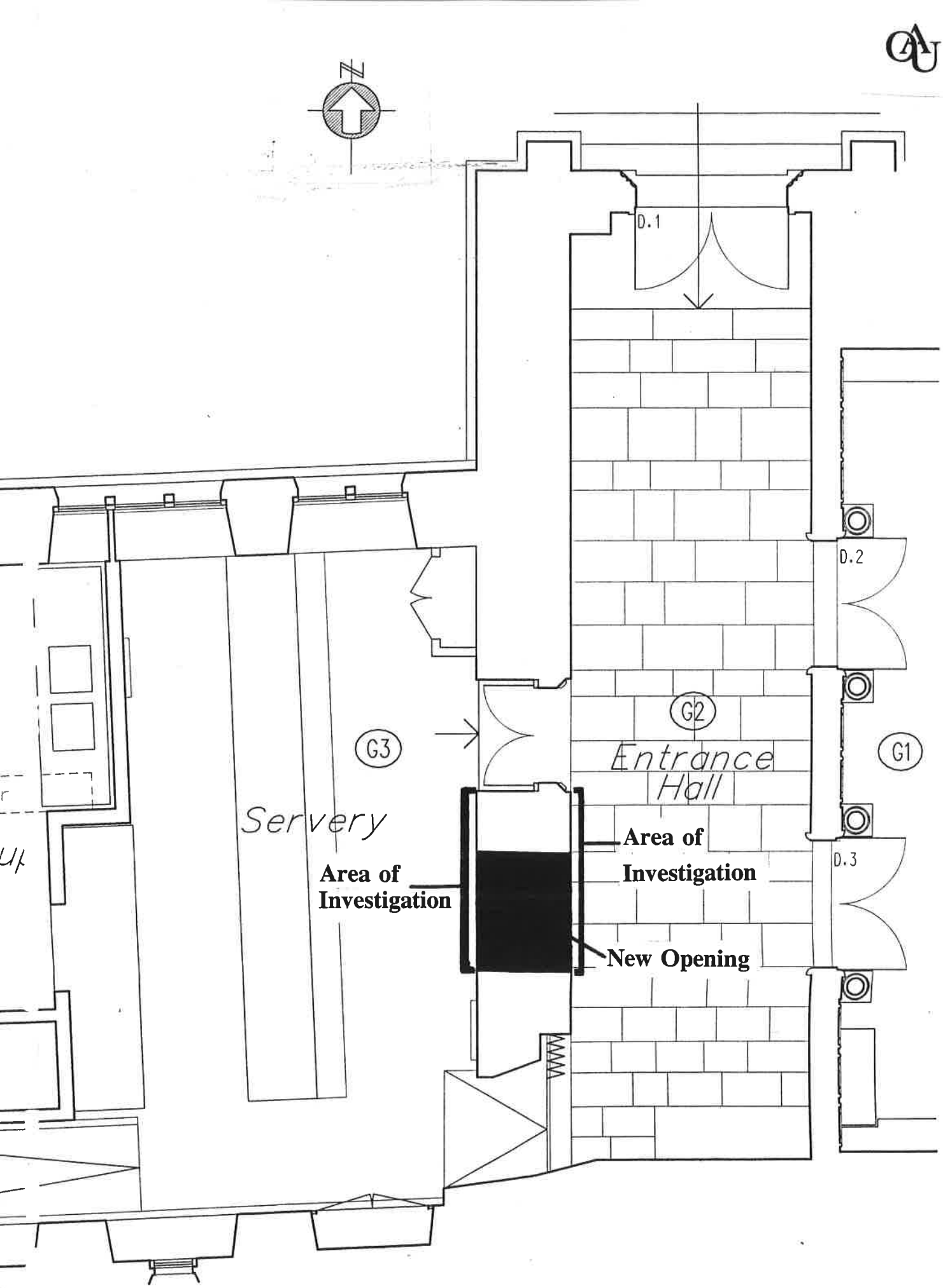


Figure 2: Location of new opening and area of investigation

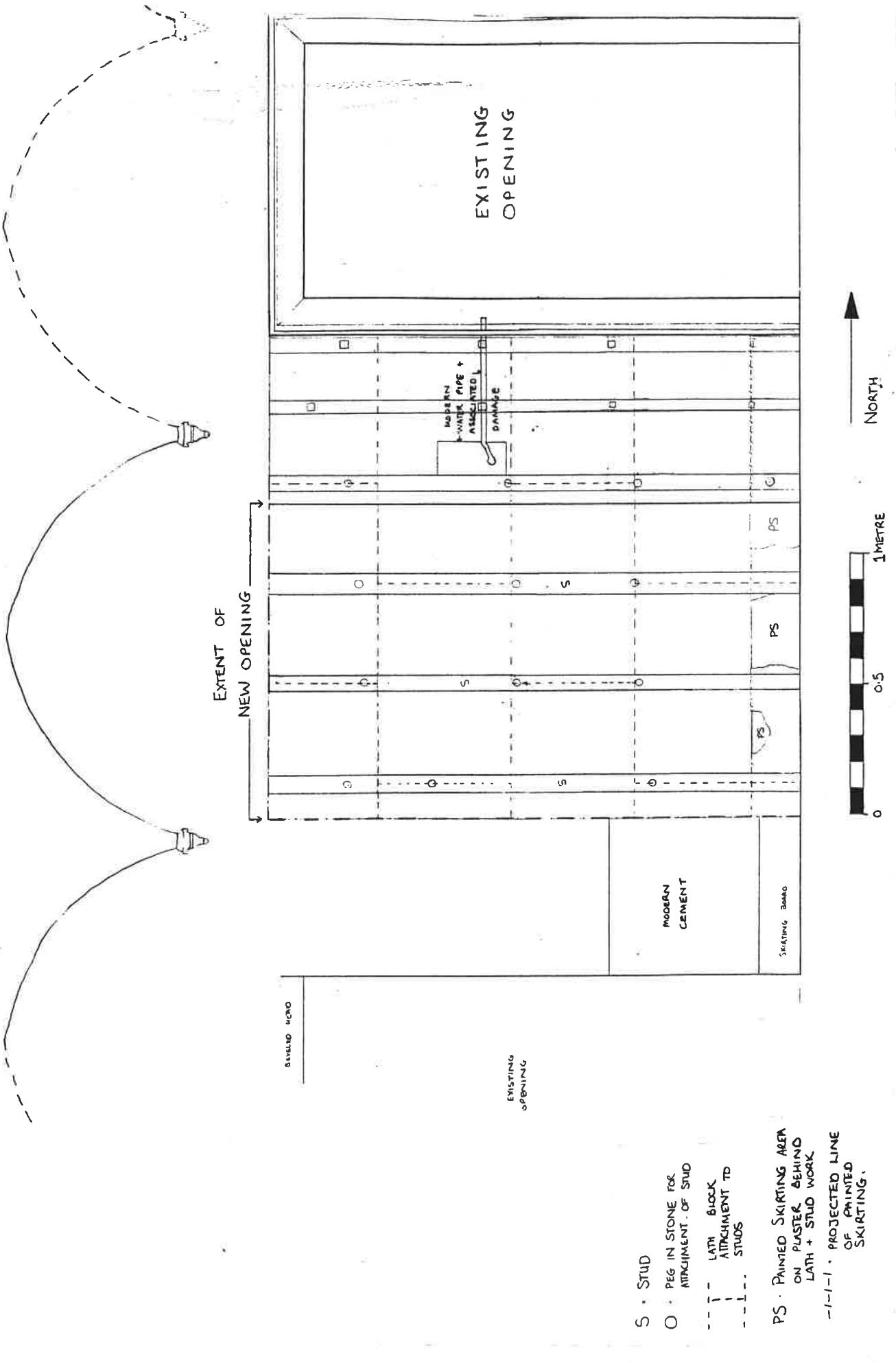


Figure 3: Site drawing showing east side of the investigation area. Lath and stud foundation and painted skirting area.

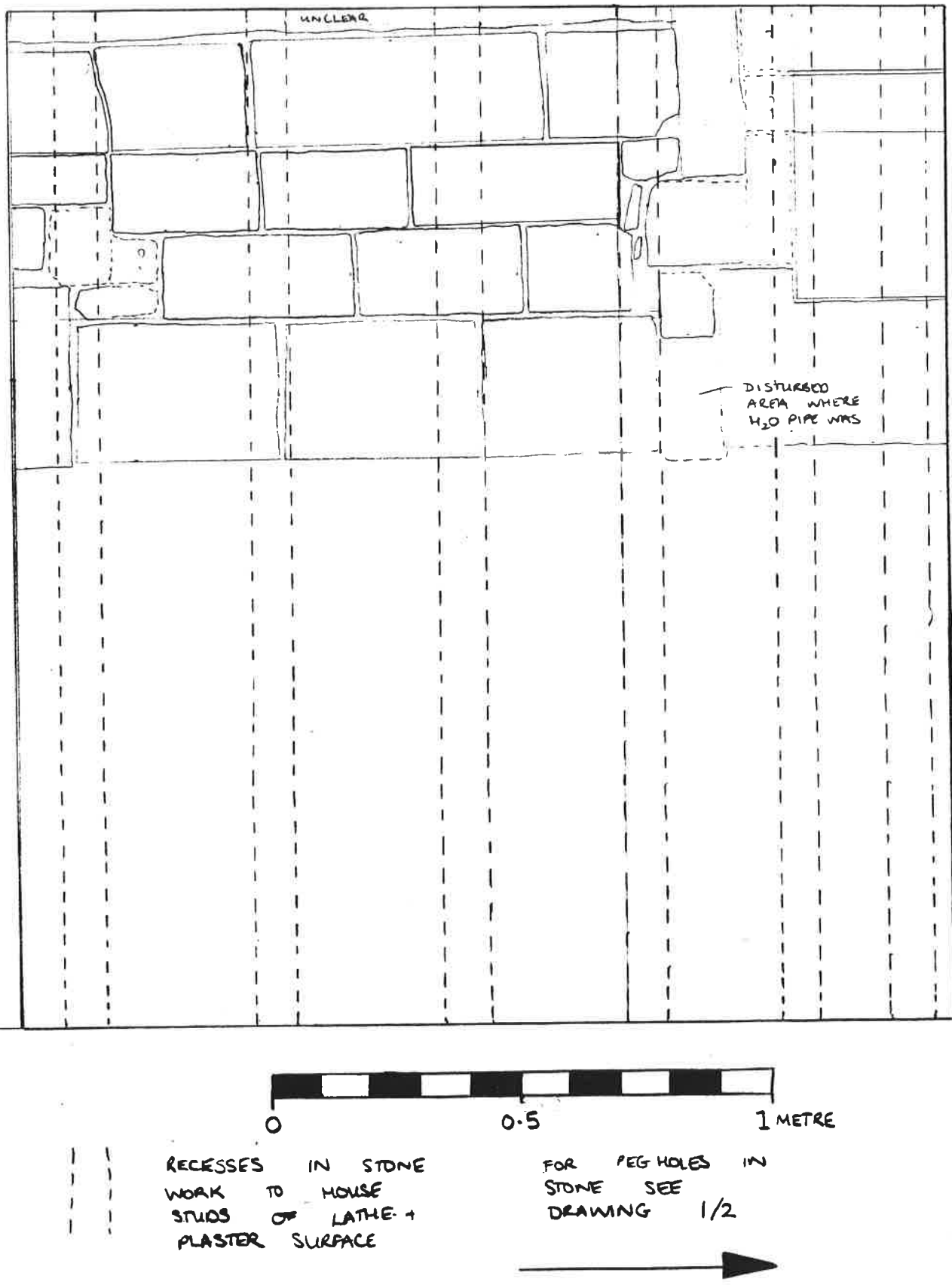


Figure 4: Site drawing showing partial elevation of the east stone face

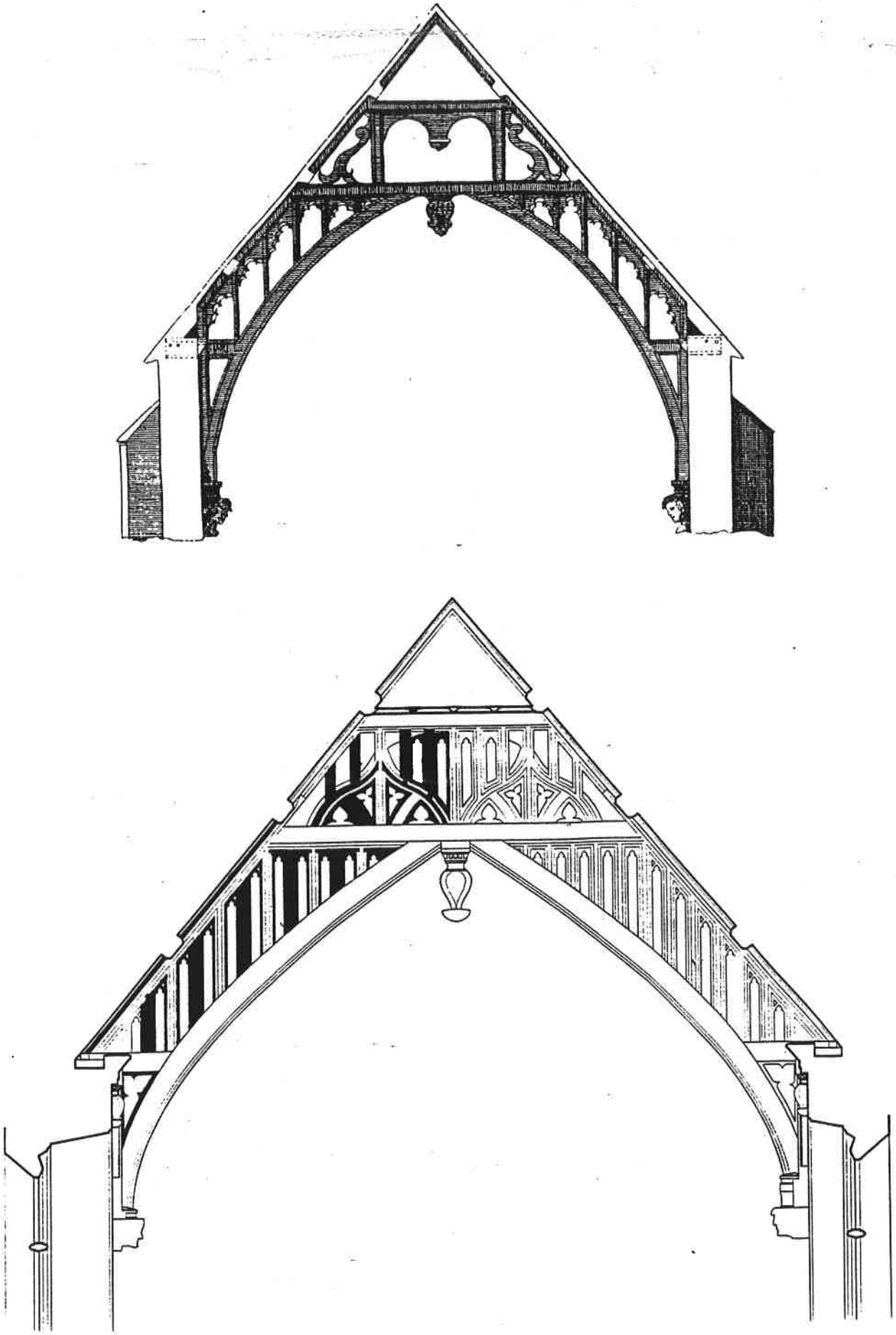


Figure 5: Exeter College Hall a) from Smith's Specimens of 1787,
b)showing (in half of the roof) members added in 19th-century restoration

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