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CARMARTHEN CASTLE

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**REPORT
ON THE ARCHAEOLOGICAL WATCHING BRIEF ON
THE REOPENING OF THE SW TOWER,
DECEMBER 1994**

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1.0 INTRODUCTION

1.1 Summary

The reopening of the SW tower at Carmarthen castle involved the removal of a concrete cap inserted into the first floor of the tower during the 1950s, and of the blocking of an entry into the basement. It had been thought that perhaps the tower contained an unconsolidated earth fill; in fact an open vaulted basement was discovered, and a late 19th century cobbled first floor installed at a higher level than its medieval precursor.

The medieval basement was extensively undermined by a sequence of 18th and 19th century cellars, excavated via neighbouring properties at a floor level at least 2m below the medieval floor, which as a result was destroyed. These later cellars extended, in areas, below the tower footings, effectively undermining them and resulting in an extremely unstable structure.

The late 19th century first floor was installed halfway up the medieval first floor chamber, at a time when the tower was already roofless and the vaulted floors higher up had collapsed. Half the floor area was cobbled, and prior to its insertion the SE wall of the medieval tower was cut back, making a chamber a third as large again as its medieval predecessor.

1.2 Planning history

A programme of works at and around Carmarthen Castle was initiated by Brangwyn Howells of Dyfed County Council Planning Department in June 1993, including the demolition of Nos. 10-14 Bridge Street. An accompanying watching brief and evaluation of the Square Tower were commissioned from Dyfed Archaeological Trust, and at the same time the Trust and DCC proposed that the SW Tower be reopened. Accordingly, in January 1994 John Llewelyn of DCC Planning Department notified Dyfed Archaeological Trust's Field Section of a commission to undertake a watching brief and record of affected area within the SW Tower during the proposed works. The remainder of the tower lay outside the scope of the study.

1.3 Content and scope of the watching brief.

An archaeological watching brief is defined by the Institute of Field Archaeologists as a formal programme of observation and investigation conducted during an operation carried out for non-archaeological reasons - normally a development or other construction project - within a specified area where archaeological

deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive.

The watching brief will be intended to allow, subject to resources, the preservation by record of archaeological deposits in advance of their disturbance or destruction and to provide an opportunity, if necessary, for the watching archaeologist to alert all interested parties to the presence of an archaeological find for which the resources allocated to the watching brief are insufficient to support satisfactory treatment.

The watching brief is not intended as a substitute for contingent excavation.

The client will be supplied with 3 copies of an archaeological report of the results of the watching brief. The report will be fully representative of all the information recovered. A copy of the report will also be deposited with Dyfed Sites and Monuments Record.

1.4 Purpose and methodologies of the watching brief

The purpose of the watching brief is to undertake as complete a record as possible of any archaeological features affected by the client's scheme of works. In the case of larger archaeological sites it will seldom be possible or necessary to undertake a record of the entire site; the record will be undertaken only on those areas of the site that may be affected.

The client will normally advise Dyfed Archaeological Trust's Field Section of any changes in the proposed works resulting from their consultation of the desk-top assessment, and of any sites which may still be affected by the scheme. The client will also provide the Field Section with a proposed schedule of works in order that a full field study may be performed on any affected site prior to the commencement of the works.

Work on or around those affected sites will be subject to the watching brief. The work will be closely observed by an archaeologist from the Field Section who will also undertake a full drawn, written and photographic record of any archaeological features which may be disturbed by the scheme, and any artefact or find exposed during the works. Recording will be carried out where necessary and when convenient: it is the Field Section's aim to minimise any disruption to the client's schedule. However, if archaeological features may be lost during the scheme, it may be necessary for the Field Section to request a postponement of the works in order that the archaeology may be recorded. Larger areas affected may require fuller excavation and/or survey.

2.0 CARMARTHEN CASTLE

2.1 Location

Carmarthen Castle is situated on the southern side of the town of Carmarthen, at SN 4130 1996. The site is a bluff, formed from a terrace of fluvio-glacial gravel, overlooking the tidal limit of the River Tywi and the town bridge. The bluff is the SW end and highest point of a long ridge extending NE, which still forms the spine of the town.

2.2 Site history and description

The history of Carmarthen Castle has been amply discussed elsewhere (Lodwick, 1972, 18-28; James, 1980, 35-6) and will be very briefly summarised here. The castle was first constructed in 1109 under royal command; the castle and lordship of Carmarthen remained crown possessions throughout most of the medieval period. It was of motte and bailey design. The motte still survives as 'The Mount' and carries a shell keep which is likely to represent the earliest masonry on the site, possibly constructed 1181-3 when £170 was spent at the castle. The bailey lay to the SE of the motte in the area now occupied by County Hall and was defined by a ditch along its W side, the line of which is preserved in the line of Nott Square and the N half of Bridge Street. The ditch died at the SW corner of the bailey where the ground level drops sharply but its profile may be preserved in the fabric of the SW Tower (see below, 7). The bailey was probably first walled in stone 1223-32.

To the latter period probably belongs the curtain wall, now gone, along the S side of the bailey; it partly revetted the bluff in its steepest area, the internal ground level being 6.5 metres higher than the external level. Stylistically, however, the SW Tower appears to belong to later in the 13th century, perhaps to 1288 when £169 was spent on strengthening the defences. The Square Tower may be later still.

The castle was besieged - and held - by the Welsh princes intermittently through the 12th century, and saw action again during the Glyndwr rebellion, as a result of which the gatehouse was rebuilt in its present form in 1409. It changed hands twice during the Civil War but by 1660 it was reported to be 'quite demolished'.

The castle ruins were subsequently used as a gaol. In 1774 the buildings were repaired; however, an entirely new gaol building was commenced on the site in 1789, to a design by John Nash. The work swept away the remaining internal features of the castle. Meanwhile, along the S half of Bridge Street, on which

had been situated 12 properties as early as 1268, outhouses, cellars and basements were constructed right up against the castle site, probably contributing to the collapse of the medieval curtain wall in this area. The buildings obscured the SW Tower and completely concealed the neighbouring Square Tower.

Nash's gaol was in turn demolished in 1938 to make way for the present County Hall. The construction of Coracle Way in 1963 truncated the SE end of Bridge Street, also revealing, for the first time in many years, the Square Tower.

2.3 Previous excavation

The examination of the motte by the Carmarthenshire Antiquarian Society in 1914 (James, 1981, 35) lies beyond the scope of this report, the first controlled archaeological excavation at the castle site having occurred in 1980 when Dyfed Archaeological Trust examined an area of the bailey interior immediately adjacent to the SW Tower. The excavations revealed several phases of substantial masonry walls, respecting the line of the former W wall, rather than the S wall of the bailey or the axis of the tower, which at least one of the buildings represented post-dates. A large (bread?) oven from a later phase was also present; it lies above the truncated remains and demolition rubble of earlier phase buildings.

The demolition of Nos. 10-14 Bridge Street in 1993 removed the last surviving properties on the S half of the street, revealing the Square Tower in its entirety and also the lower half of the SW Tower's exterior. Dyfed Archaeological Trust undertook a watching brief and small evaluation excavation within the Square Tower (Crane, 1994). The work revealed that the present tower floor lies below medieval floor level, that the tower was constructed directly upon the fluvio-glacial gravels without footings, and that the tower was incorporated into neighbouring properties during the post-medieval period via two openings. It was also confirmed that the medieval curtain wall linking the Square Tower and the SW Tower had collapsed during the post-medieval period, a revetment wall having subsequently been constructed just behind (N of) the line of the medieval wall.

3.0 THE SW TOWER

3.1 Introduction

The 1994 scheme at the SW tower included the removal of a concrete cap inserted over the first floor during the 1950s, and the removal of

the blocking of a post-medieval entry from the neighbouring 12 Bridge Street.

The work was undertaken in two stages. Scheduled Monument Consent was granted for the removal of the cap and blocking and the recording of archaeological features encountered within, the contract work being awarded to TRJ Construction, Ammanford and taking place February-March 1994. At this time it was assumed that the tower possibly contained an unconsolidated earth fill. The cap was removed, and a 19th century surface was discovered below. However, the discovery below this of both a surviving vaulted basement and the extensive cellarage undermining the tower led to a reassessment of the work required. A new set of specifications for emergency work, and for final consolidation, were submitted to Cadw, who had meanwhile granted permission for the removal of the late 19th century first floor surface.

SMC was granted and work recommenced in November 1994, undertaken by Gwyn Phillips, Llanelli. The remainder of the basement fill was removed prior to the insertion of a concrete plug, and at the same time an area of the 1980 excavations reopened to assess the optimum route for a proposed drain.

The intention is to floor the bulk of the basement above the concrete plug but at a level just below the in situ line of the medieval floor. The surviving medieval spiral stair will be continued downwards in a separate area to exit at the unblocked post-medieval opening. The first floor will receive a membrane, and along with the 1980 excavated area will be gravelled and opened for public access.

3.2 General description (figs. 2, 3 & 4)

The SW Tower as it survives today is a three storey cylindrical corner tower, rising approx. 9m from its footings, constructed from roughly coursed Carboniferous Limestone rubble with some small-scale use of local Old Red Sandstone. The tower rises from a massive square plinth, approximately 10m by 10m, which dies away into the curved outer face as two spurs to the NW and SE. The external diameter above the spurs is 7.5m. The interior space is rectangular, its long axis SW-NE, and measuring 3.9 by 2.2m. To the SE, adjacent to the point at which the tower formerly joined the medieval S curtain wall, is a newel stair which rises from the lowest stage to the summit, with entries to both upper stages. It is lit by small square headed openings throughout. The segmental barrel vault over the lowest stage of the tower survives; those over the first and second floors are weathered back (deliber-

ately?) to their springers in the two long walls. All openings are plain and square headed, with lintel stones. There is a marked scarcity of dressed stone, and no evidence for any fireplace now remains. The medieval work is characteristic of the late 13th/earlier 14th centuries (see above).

The two upper stages of the tower are incomplete, the entire N wall having collapsed or been destroyed, only the lower courses surviving. This had occurred by 1784 - "A view of Carmarthen Castle" by S & N Buck. The parapet has gone. A post-medieval repair ascends two-thirds the way up on the external face of the tower, in the form of a 'skin', to the NE. This represents a repair finishing the tower face, where the total collapse of the medieval S curtain wall will have left a ragged and unstable scar.

It is not possible to tell from the extent of the current survey whether an additional storey lay above the second floor. In all probability the fourth stage represented parapet level and the tower was never much higher than it is today. A print of 1747 shows only the current 3 storeys (James, 1980, frontispiece). The lowest stage is at ground level to the S, but at basement level from the interior of the castle and will be hereafter termed the basement. As with the upper two vaults evidence, in the form of a very rough rebate in the internal short walls below the soffit, suggests that the vaulting is a secondary feature. On the second floor, in fact, the springers for the vault along the long walls lie on a rough rebate. Furthermore some of the full width openings show a vertical joint in their splay suggesting (but by no means confirming) that the square floor plan itself might not be primary, but had been inserted into a cylindrical space.

In the basement, the apex of the vault lies 3m from the former medieval floor level. In the medieval period it was entered via a doorway from the newel stair in the E wall. It was lit by loop with a deep plunging embrasure in the S wall. The floor sloped down from N-S (see below, 7) but has now gone, undermined by at least 2 phases of post-medieval cellars that were broken through into the tower, below basement floor level, from the adjoining property to the E (12 Bridge Street).

The first floor is at internal ground (bailey) level. The chamber has lost its vault but would again have been approximately 3m high. The floor is of rubble flags. The main entry from the bailey into the tower was on this floor via a doorway in the N wall, of which only the lower courses survive. There is a second entry onto this floor from the newel

stair, in the E wall. A further doorway, now blocked, appears to have been located in the W wall, near the NW corner. The external face of the tower here displays the stump of a wall 1.4m out from the line of the former medieval curtain. A chamber, possibly a latrine, may have lain in the angle between tower and curtain during the medieval period. The first floor is lit by 3 large square openings with narrow splays leading to loops on the outside; there may have been a fourth in the N wall.

This level was modified in the late 19th century when, after much dumping of building debris had taken place, a new floor level was established halfway up the medieval first floor. The new floor area was one third as big again as the old; the E wall, and to a lesser extent the S wall were cut back. The upper halves of the window openings, which rose above the floor, were walled up. Beneath a finish of mortar and hanging slate applied to the E interior wall face can be seen the ghost of a further (post-medieval?) window opening. To accompany the insertion of this higher floor, the former vault was probably cut right back to its springers on the W wall.

The second floor may always have housed a larger chamber. A vertical offset in dressed stone, undoubtedly medieval, can be seen on the S wall, demarcating a recess 0.6m deep that may have occupied the whole length of the wall. The chamber was apparently also approximately 3m high. It was entered via a doorway from the newel stair, and the possibility exists that a doorway in the N wall may have given onto a stairway to the bailey. A large square headed window in the S wall descending to floor level, and with a raised surround, has been later blocked, while an area of Old Red Sandstone rubble and brick in the E wall represents the 19th century blocking of a second window. The remains of both slopes of a low pitched mortar roof crease can be seen halfway up the E and W ends of the S wall. They clearly represent the roof, established below the now-absent vault, over the late 19th century floor inserted into the first floor chamber.

3.3 The First Floor: excavated evidence

The concrete cap extended right across the first floor chamber, sloping down gently towards the N. It terminated at the open N side where a 0.5m vertical drop along the line of the remaining courses of the N wall gave onto the former bailey. Ground level within the bailey represented the top of the backfill of the 1980 excavations. The features immediately beneath the cap were examined first; the

findings are described below, however, beginning with the earliest material.

Medieval (fig. 8)

The evidence for the interior of the tower during the medieval period will be discussed below with reference to its relationship with the 1980 excavated evidence. The medieval work corresponds with Phases I - II in the figs.

The interior of the first floor of the tower was a rectangular vaulted chamber, 3m by 4m, floored with angular, medium-large sized limestone flags - the roof of the vault below (for a general description see above, 4). A line of larger stones running down the centreline of the floor may be incidental; a hollow at the S end of this line is probably a missing stone. No remains of the medieval floor surfacing survived, but a 0.3m wide strip of white mortar bedding (for a tile surface?) still survived along the foot of the walls (fig. 8).

The mortar bedding ran out at the entry onto the newel stair, both jambs of which survive. The wall E of this doorway was, in the post-medieval period, truncated to a height of 0.5m.

The N door jamb still remains in the main threshold from the bailey; the S jamb has been obscured by later development. At the threshold the flags gave directly onto the natural gravels, within which they were set. No medieval occupation deposits survived above the gravels outside the tower. The threshold itself was probably formed by the two large angular pieces of Old Red Sandstone that were found lying low down in [10] immediately next to the door jamb. Just within the tower at this point a hard blackish deposit lay over the flags, too substantial to represent burning and probably being a variation in the surface bedding.

Against the exterior face of the N wall of the tower a curious mass of masonry has been added; against this in turn lies the truncated remains of a former wall running towards the gatehouse and demarcating the W line of the bailey (fig. 8). It seems unlikely that the W curtain wall of the castle would post-date the SW Tower; however, the nature of the construction of this wall, and the mortar bonding, appear medieval and the wall may be later medieval rebuild of the curtain - it is regarded as Phase II and perhaps contemporary with the rebuilding of the gatehouse in 1409. Like the gatehouse, and in contrast to the SW Tower, it is primarily of sandstone construction.

The corner of the masonry bailey building excavated in 1980 and shown in fig. 8

respects the alignment of this W wall. It was built, mainly of sandstone rubble, directly into the natural gravels in a deep construction trench (unlike the tower itself - see below, 7), and was connected to the S curtain via a short length of wall. In the angle of the two walls lay a small area of remnant mortar floor bedding, at approximately the same level as the tower first floor. A small square chamber is thus indicated, with an entry to the N along the W curtain wall, which probably formed an antechamber to the tower.

It is suggested that this building is contemporary with the rebuild of the adjacent stretch of W curtain wall, ie Phase II, c1409. It can be seen to be built over the bottom courses of the corner of a larger building to the E which was evidently already destroyed. Also constructed on part of this truncated larger building is the base of a large ?bread oven, which may then be contemporary with the tower antechamber (figs. 1.3 and 2.2).

Post-medieval (figs. 5, 6 & 7)

Lying above and within the flagged medieval tower floor was a thin silty organic deposit [9], doubtless representing a period when leaves and debris accumulated within the roofless, and vaultless, tower. Dateable finds within were of the 17th-18th centuries.

In the area of the medieval entry and between it and the 1980 excavated area, a layer of dark, mixed material [10] lay above [9]. [10] occupied a horizon 0.1m above the medieval tower floor, and had been trampled to a compact 'surface' (fig. 3). It contained a quantity of animal bone and clay pipe stems suggesting an 18th century date for its deposition. 9 and 10 are here grouped together as Phase III.

Lying over 10 was an area of building debris [8], a plethora of small dumps, centering on the NW corner of the chamber and trending down to the S and E (fig. 7). They appear to represent individual barrow-loads of debris, mainly mortar, dumped for convenience within a disused tower. The finds within are no later than the late 18th century and so the dumping may be associated with the gaol repairs of 1779, or perhaps to the construction of the new gaol, 1789-1792, and the demolition of the pre-existing buildings. The dumps lay over the truncated N wall of the tower demonstrating that it was by this time at least, destroyed. Built partly upon [8] is the upper part at least of the main S revetment wall of the castle [23], that replaced the collapsed medieval S curtain wall (see below, 7). This revetment may then also be part of the 1779 repairs, or be contemporary with the gaol. It

can, however, be seen to predate the 'skin' wall [22] that descends the NE face of the tower over the scar left by the collapse of the medieval curtain (see below, 7). The two phases are depicted as Phase IV and Phase V respectively in figs. 3, 4 and 5.

Phase VII in the basement (see below, 8) does not appear to be represented on the first floor of the tower.

Phase VII is marked by the introduction of the higher floor surfaces [3 and 4]. In preparation the top of the newel stairwell, which had been previously partially blocked, was enclosed within three low poorly constructed walls [6] to form a 'manhole' (fig. 6). Then a dump of material [7] was laid down to provide a level make-up in the tower - the SW area of which was already occupied by building debris [8]. The level thereby established reached halfway up the chamber (fig. 7).

In addition, in order to enlarge the floor area a 0.9m thick section of the internal thickness of the E wall of the chamber was cut back, and a 0.3m section of the S wall (figs. 3, 4 and 8). The surfaces were laid upon the truncated masonry, while the upper half of the window embrasures, which rose above floor level, were walled off. A dividing wall [5] was then constructed, immediately prior to the laying of the surfaces. It was laid directly upon 7, without footings, and is just 0.5m thick, and yet it may have risen the full height of at least one storey; a threshold is let through it. It was later truncated to 0.6m. The remaining section was of mortared construction, in mixed limestone and sandstone, with a brick sill at the threshold. A drain was later inserted through the wall with a brick and cement surround (fig. 7).

Surface [3] was a cobble floor in the S half of the tower, comprising closely set river pebbles and medium sized subangular rubble flags, laid on a layer of fine sand. Surface [4] respected the same level but consisted of a compacted mortar layer of somewhat oily consistency. It extended N, over and around the already truncated lower courses of the tower N wall, terminating at the edge of the 1980 excavation within which it had been removed (fig. 5). To the S a corrugated iron sheet, resting on 2 iron bars, lay on the surface of 4. It sealed off the manhole formed by 6 leading the newel stairwell to the basement. The top of the shaft was rebated to receive a cover; part of a thick slate slab lying nearby may represent a corner of this cover.

The dating evidence for the contexts beneath 3 and 4 indicates a late 19th century date for the establishment of these surfaces (Phase VII). The slate cover over the shaft to

the stairwell can be assumed to be contemporaneous with the surfaces; the presence of a car number plate in the layer above 2 demonstrates that the area was not fully sealed until the 1950s. Therefore the stairwell - and the basement - were not fully sealed (except by the iron sheet) until the 1950s (see below, 8).

The removal of the concrete revealed a 0.5-0.7m thick layer of dump material and build-up [2], of a very mixed nature, lying over 3, 4 and 5. The prevailing organic nature of areas of this layer confirm its incidental accumulation during Phase VIII - Phase IX. Contained within was a car registration number plate of 1950s date; 2 (and the concrete) can therefore not have been deposited before the 1950s. This date terminates Phase IX in the basement (below, 8).

3.4 The Basement: excavated evidence

The reopening of the newel stair shaft from the first floor, and the removal of the blocking of a doorway into the basement from the adjacent No. 12 Bridge Street permitted examination of the basement interior.

Medieval

The undermining of the SW Tower during the post-medieval period has exposed the area beneath the tower walls. Medieval work in the basement all belongs to Phase I.

The SW Tower was constructed directly upon the natural gravels with shallow footings on the S side, and no footings at all to the N. There was no deep construction trench. This is even more remarkable given the fact that the tower was built against a bank of inherently unstable gravel sloping steeply downhill to the SW. The steepness of the bank is probably emphasised by the presence of a castle ditch. The profile of the ditch is followed by the line of the base of the tower wall in the N half of the internal elevation of the E and W basement walls (figs. 11 & 13). The slope profile can also be seen at a lower level in the S wall of the later breach as the 'springer' for the 'half-arch' which carried the base of the wall uphill towards the N, although this area has been much altered (fig. 15). The level is lower here due to the fact that the W ditch has run out.

The medieval basement chamber measured 3m by 4m (for a general description see above, 4). The later undermining led to the collapse of its flooring. Remnants of the mortar bedding for the floor however survive in all four corners (with natural gravel still clinging to the underside), and can be traced as a line along the walls, particularly in the E elevation (fig. 11). It can be seen that the floor

sloped downhill towards the S. The slope was not the same throughout the chamber; whilst the W elevation displays a consistent downhill slope (fig. 13) the E elevation carries a horizontal line of mortar which stops short of, and 0.5m below, the newel stair doorway (fig. 11). Steps must have been present here, presumably dying into the slope to the W.

Post-medieval

The earliest breach into the basement of the SW Tower from No. 12 Bridge Street is a very wide (2.1m) passageway of uncertain height; the bottom was not fully excavated but the opening was at least 3m high (Phase IV, figs. 9, 14 and 15). The top of the passage is formed by the base of the medieval tower wall, which was left - still with subsoil clinging to it - and never treated barring a coat of whitewash. The sides of the passage are lined with a limestone rubble revetment [23], now obscured by plaster, the N of which is in fact a continuation of the contemporary revetment of the entire S side of the castle bailey that replaced the collapsed medieval S curtain wall (see above, 6; also fig 2). Any evidence for the form that the breach took on entering the body of the tower has been lost through later disturbance.

Phase V is represented in the SW tower basement by a constriction of the W half of the passage by two areas of masonry [21] forming a smaller opening (figs. 9, 14 and 15). The construction is of well-coursed thin limestone rubble slabs and the N can be seen to butt 21. To the same phase broadly belongs the 'skin' wall [22] that ascends the NE face of the tower over the scar left by the collapse of the medieval curtain; it similarly butts 21, lying over it at first floor level (see above, 6; also figs. 3 and 4).

Phases IV and V have both been assigned an 18th century date, based on the standing evidence and excavated evidence from the first floor (see above, 6). One or the other phase is probably contemporaneous with the rebuilding of the gaol 1789-1792.

The area as excavated in 1994 demonstrated the situation as it existed by Phase VI. The entire basement, by now at least, was undermined, a process that extended even beneath the tower walls. As a result thin masonry prop walls [19] and [20] were inserted beneath the medieval walls (figs. 9, 10 and 12). A low revetment wall [18] - removed in 1994 - was built along the opening of the sub-basement chamber, its summit dictating the floor level (figs. 11, 14 and 15). Curiously, the floor inside is natural gravel, while to the E of 18 the overburden still descended.

The exterior opening of the passage was made smaller with the insertion of a masonry wall [17] and doorway (figs 9, 14 and 15). This in turn was constricted during Phase VII when a higher sill and N jamb [14], all in brick, were inserted into the opening. Probably broadly contemporary is the brick trough [15], of uncertain function, let into the sub-basement floor (figs. 9 and 10), and repairs to the prop walls [16] (fig. 13).

Phases VI and VII can be broadly attributed to the 19th century, while succeeding Phase VIII undoubtedly belongs to the early 20th century. It comprises the blocking [12], in uncoursed mixed masonry with some brick, of the passage into the basement (figs. 9, 14 and 15). This blocking was removed to gain access to the basement.

From this period onwards the only access to the basement was via the newel stairwell. It has been demonstrated above, 7, that this remained open until the 1950s.

During the intervening period, a vast amount of unstratified earth spoil entered the basement via the stairwell, most of it presumably deliberately tipped. This unconsolidated fill yielded a quantity of finds, including a number of miniature promotional bricks manufactured in Carmarthen.

At some point prior to the final closure of the shaft a roughly constructed masonry and cement prop wall [11] was constructed against the inside face of 12, apparently to support the medieval and Phase V walls above (Phase IX, figs. 9, 14 and 15); it has the appearance of emergency work brought on by concern over the stability of the tower. The general instability is demonstrated by the vertical crack running throughout the tower, visible in both N & S walls.

4.0 CONCLUSION

Carmarthen Castle SW Tower represents a structure that has undergone considerable and changing use almost continuously since the medieval period. The uses to which it has been put have rendered it highly unstable and the tower has a vertical crack throughout. Work to remedy this situation is currently in hand. Moreover, the tower is an important part of the town's visual heritage and one that has hitherto been much obscured. Its careful and controlled consolidation, and eventual opening for public access, are to be encouraged.

The tower also demonstrates the great unknowns that can exist with any archaeological site or monument. Prior to its reopening there was little indication of what may lie

within, either the surviving vault or the extent of later use. Finally, the finds recovered during the work - particularly the miniature promotional bricks - provide a fascinating insight into Carmarthen's manufacturing heritage.

5.0 THE FINDS (by Dee Brennan)

The finds, like the contexts within which they occurred, represent two distinct processes of deposition. Those from contexts (2) - (10) represent sealed layers which have not been affected by later disturbance and can therefore be used to closely date the context within which they lie. The basement fill, however, accumulated as an unconsolidated and much disturbed dump of material with components that potentially spanned 650 years.

CONTEXT:

UNCONSOLIDATED FILL OF BASEMENT

Animal bone:

2 frags. recovered.

Building material:

2 miniature promotional/sample bricks (Thomas Morgan brick yard, Carmarthen).

Glass:

Wine bottles: 1 body & 1 base fragment from late 18th/early 19th century free-blown 'cylindrical' bottles in olive green glass. Base has high domed up-kick with pontil mark.

Phial: 1 complete late 19th century chemist's phial in colourless glass. Flat-based cylinder made in a three-piece mould with mould seams visible at neck & shoulder. A simple out-turned horizontal rim is hand-finished. Height 67mm.

Glue bottle: 1 complete late 19th century glue bottle in bluish green glass, now with iridescent surface weathering. Bell-shaped bottle manufactured in a two-piece mould with mould seams running vertically from rim to base. A slight depression or dent in one side. Sheared mouth to take a cork stopper. Height 90mm.

Tonic/medicine bottle: 1 late 19th century bottle base in bluish green glass, now with iridescent surface weathering. Lozenge-shaped bottle with four long and four short indented sides.

Mould-manufactured with shallow basal kick.

Pottery:

North Devon Gravel tempered ware: 3 17th/18th century jar base sherds and 1 17th/18th century jar/jug body sherd. All sherds glazed greenish-brown internally.

Black-glazed red earthenware: 1 19th century pancheon rim, 1 19th century jar base. Both vessels are glazed internally. 1 20th

century teapot rim with lustrous black glaze and hand painted floral decoration in gold lustre and white.

Brown-glazed red earthenware: 1 teapot base sherd, discarded. 1 19th century bowl/pancheon rim with yellow slip-glazed banding internally.

Unglazed red earthenware: 1 late 19th or early 20th century plant-pot rim.

Brown salt-glazed stoneware: 1 body sherd from large jar/jug impressed 'T Morgan ... Dark Gate... Carmarthen'. (Thomas Morgan who owned the brickyard). 1 19th century tankard base sherd.

Grey-buff stoneware: The following few sherds are from late kitchen/household vessels of late 19th or 20th century date. 1 base of a large cylindrical jar or bottle, 1 base sherd from a small ink bottle, 1 body sherd from a cider flask or bottle & 1 body sherd from a container for dripping.

Whitewares: Mocha ware: 1 19th century chamber pot body sherd and 1 tankard body sherd, both with 'Mocha' decoration.

Marbled ware: 1 19th or early 20th century body sherd from bowl or jug.

Sponged wares: 1 19th century rim sherd from mug or tankard & 1 base sherd from cawl or sugar bowl. Both with under-glaze all-over blue sponged decoration. 1 20th century plate rim with blue sponged pattern around the border.

Moulded feather-edged border decoration: 10 rims & 10 body/base sherds from plates with underglaze blue feather-edged borders. Comprising two or more plates - evidenced by slight differences in the colour of the glaze and in the application of the blue feathering to the moulded borders. Early 19th century.

Painted wares: 1 base sherd from late 18th or early 19th century tea bowl with underglaze blue painted floral decoration. Other 19th century pieces with underglaze blue decoration are 1 rim sherd from 19th century bowl with blue painted band on rim edge. 1 rim & 1 body sherd from saucers or shallow dishes. Both fluted internally with a single blue band around rim edge. 20th century vessels comprise 1 rim sherd from saucer with underglaze floral decoration, painted flowers in blue, the foliage in green and brown. 1 rim sherd from cup or bowl with gold lustre band on rim edge.

Late 19th and 20th century transfer-printed wares (painted underglaze): Known and named patterns: 1 rim & 1 body sherd from plates with blue 'Willow' pattern. 1 rim sherd from plate with brown 'Willow' pattern. 2 joining rim sherds from plate with pale blue 'Asiatic Pheasants' pattern. The makers mark 'Bristol' within crossed arrows is impressed on the underside of the base. Another 4 rim & 3

body sherds are from plates with the same pattern. 1 base sherd from wash jug with green transfer print. The pattern name 'Panorama' is printed on the base. Another 9 sherds are from vessels with unidentified pattern names. They comprise blue, black, green & purple prints.

Transfer-printed with overglaze painted decoration: 4 rim sherds of a 20th century teacup with floral print and overglaze painted decoration.

Transfer-printed with underglaze painted decoration: 1 rim and joining body/base sherd of a late 19th or early 20th century mustard pot. Blue painted lettering 'BATTY'S OIL & ITAL... LONDON' on shoulder and the word 'PATENT' below. Painted leaf pattern externally. Single luted shell handle extant.

Bone china: 1 teacup base sherd with fluted body and overglaze painted floral decoration. 1 bowl/dish rim sherd with overglaze painted floral decoration internally. 1 incomplete slip-cast bird in porcelain or china. The bird, a waterfowl, has webbed feet. The main body is painted blue, the tail feathers are picked out in black and the webbed feet are red. 20th century.

Plain whitewares: 1 rim, 3 body & 1 base sherd plain whitewares.

CONTEXT [2]

Iron: 1 car registration number plate of 1950s type.

Stone: part of a thick slate slab representing a 'manhole' cover.

CONTEXT [7]

Animal bone: 90 frags.

Shell: 10 oyster shells.

Leather: 1 strap fragment pierced to take buckle pin.

Clay pipes: 1 bowl with tailed heel base - initialled gauntlet mark, 1 plain bowl with spur, 1 part bowl/stem with spur, 22 plain stems.

Building material:

Plain Floor tile: 1 frag 'local' medieval.

Ridge tile: 1 frag late medieval North Devon General Tempered Ware, 17th/18th century.

Brick: 1 19th cent miniature promotional/sample brick (Thomas Morgan brick yard, Carmarthen).

Glass: Wine bottles: 9 18th century rims. 11 18th/19th century base frags. 59 body & 44 base frags.

Miscellaneous bottles/vessels:

Phials: 1 18th cent rim, 1 18th cent base frag.

Vessel: 1 19th cent jug? handle in 'Bristol' blue.

Pottery:

North Devon Gravel-tempered ware:

29 rims. 79 body & 7 base sherds. All inter-

nally glazed in brown or shades of olive green.
17th/18th century

North Devon sgraffito ware: 1 rim & 1 body sherd.

Staffs/Bristol slip-trailed ware: 1 18th cent rim, 5 body sherds press-moulded dishes - varying design.

Staffs brown-glazed tankards: 8 18th cent body sherds. Slip-decorated red earthenware: 14 rim sherds. 13 body & 7 base sherds.

Black-glazed red earthenware: 2 body sherds 'Buckley' ware.

Westerwald stoneware: 1 18th cent body sherd. White salt-glazed stoneware: 5 rim, 2 body & 2 base sherds.

Brown salt-glazed stoneware: 2 rim, 8 body, 3 handles & 6 base sherds. 19th century.

Tin-glazed earthenware: 1 base sherd with painted chinoiserie design. 19th century.

Creamware: 4 rim, 12 body, 1 handle & 8 base sherds.

Porcelain: 3 rim & 2 body sherds with blue chinoiserie design.

Whitewares: 1 rim sherd with underglaze brown transfer printed floral design. 2 plain body sherds.

Other: Rubber: Part of late 19th century rubber block for uncertain use. Printed words 'metal, wood, [ter]minal ... ?[or] oily....'

CONTEXT [8]

Animal bone: 95 frags.

Shell: 12 oyster shells.

Iron: 1 nail, 1 rectangular shoe buckle frame.

Clay pipes: 9 plain stems.

Building material: 1 incomplete Victorian brick. Glass Wine bottles: 3 18th cent rims. 56 body & 15 base frags from late 18th and early 19th cent bottles.

Pottery:

Saintonge ware?: 1 handle sherd. Medieval?

Merida ware: 1 body sherd. Late medieval/early post-medieval.

North Devon Gravel-tempered ware: 8 rims, 34 body, 1 handle & 1 base sherd.

North Devon sgraffito ware: 1 body sherd.

Staffs/Bristol slip-trailed: 1 rim sherd 18th cent press-moulded dish with pie-crust rim.

Slip-decorated red earthenware: 4 rim, 6 body & 3 base sherds.

Stoneware: 1 body sherd brown salt-glazed stoneware.

Tin-glazed earthenware: 1 body sherd.

Creamware: 3 body sherds.

Porcelain: 1 body sherd with underglaze blue chinoiserie design.

CONTEXT [9]

Animal bone: 35 frags.

Shell: 3 oyster shells.

Pottery:

North Devon Gravel-tempered ware: 2 body sherds.

CONTEXT [10]

Animal bone: 28 frags.

Shell: 19 oyster shells.

Clay pipes: 3 plain stem frags.

Roofing material:

Stone: 1 phyllite roofing slate with peg/nail hole. 1 slate roofing tile frag.

Mortar: 1 frag.

Pottery: 1 abraded body sherd or ridge tile fragment in a local gravel-tempered fabric. Some traces of glaze externally. 1 body sherd from uncertain vessels of post-medieval date. A hard red fabric tempered with fine sands and a little mica. A small spot of brown-coloured glaze externally.

6.0 ARCHIVE DEPOSITION

The full watching brief archive will be deposited at the National Monuments Record, housed with the RCAHM, Aberystwyth.

7.0 ACKNOWLEDGEMENTS

Thanks are offered to:- Brangwyn Howells of DCC for commissioning the watching brief, and to John Llewelyn for his good-humoured liaison; the site contractors TRJ and Gwyn Phillips for their cooperation, in particular the site workers Darryl, Dai and Lyn; Dee Brennan for undertaking the Finds Report; Phillip Wait for DTP and Pete Crane of DAT for discussing the results of his square tower evaluation.

8.0 LIST OF SOURCES CONSULTED

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Dyfed Archaeological Trust Sites and Monuments Record.

Carmarthen Museum, John Wood, 1834, 'Plan of Carmarthen'.

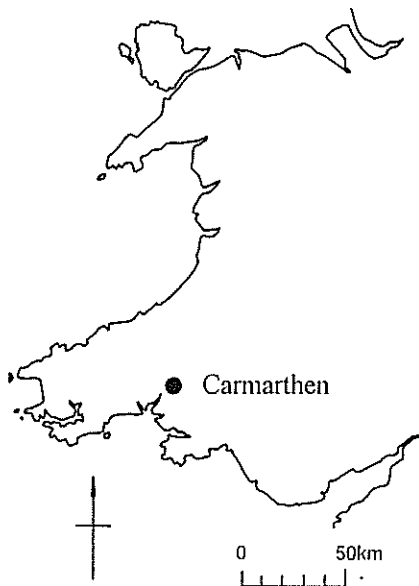
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Crane, P., 1994, *Carmarthen Castle Square Tower: Evaluation and Watching Brief*, 1993.

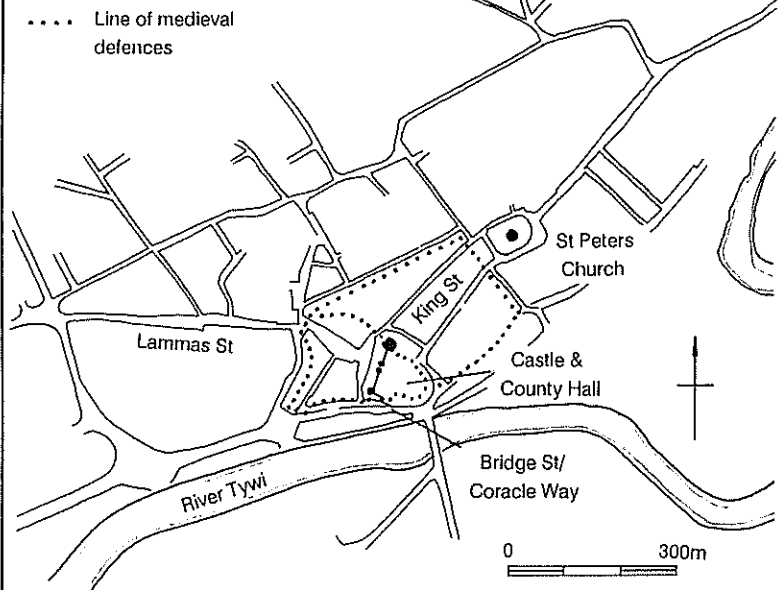
James, T. A., 1980, *Carmarthen: An Archaeological and Topographical Survey*.

Lodwick, J., and Lodwick, V., 1972, *The Story of Carmarthen*.

Figure 1:1
Location Map



1:2 Carmarthen



1:3 Carmarthen
Castle -
SW Corner

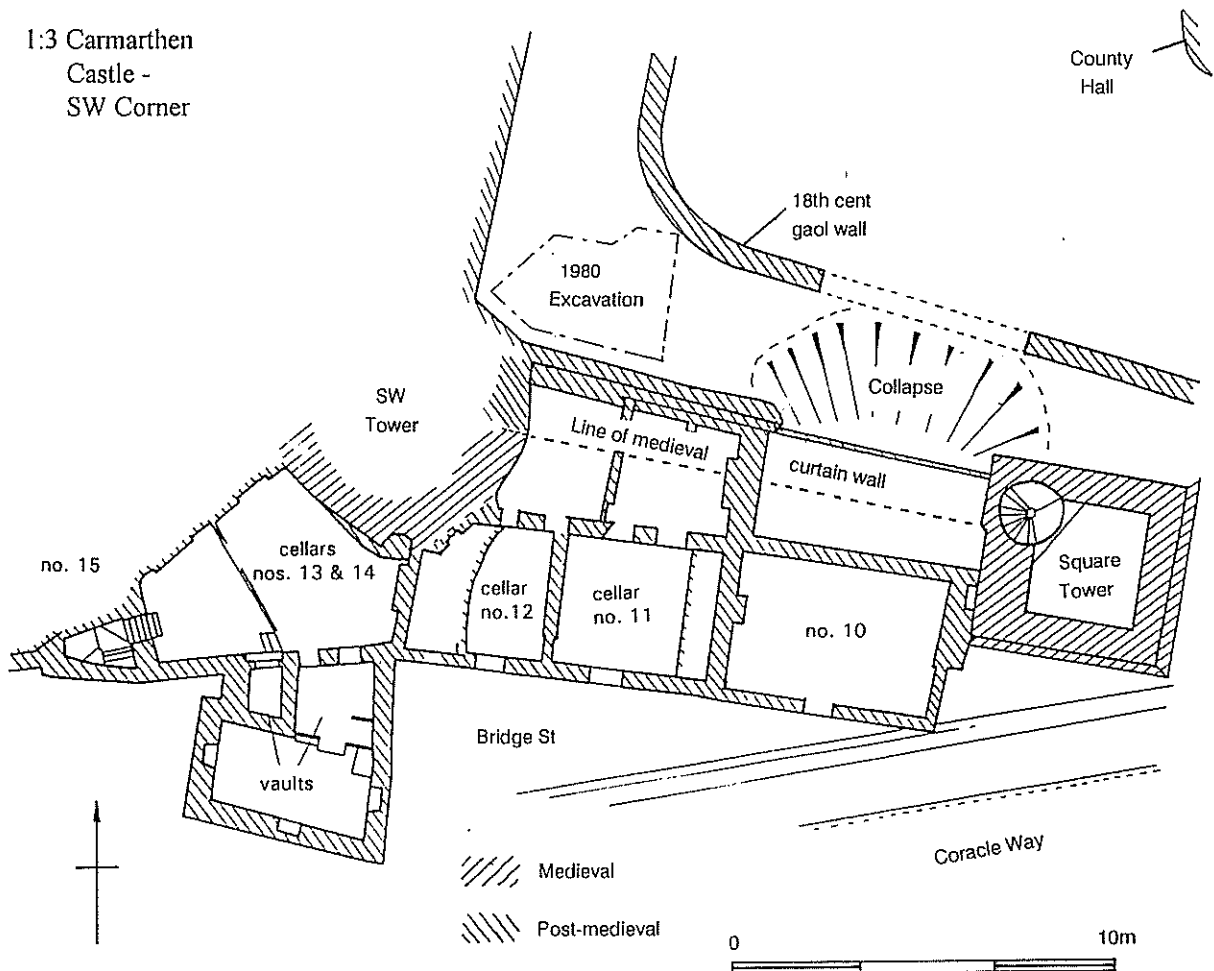
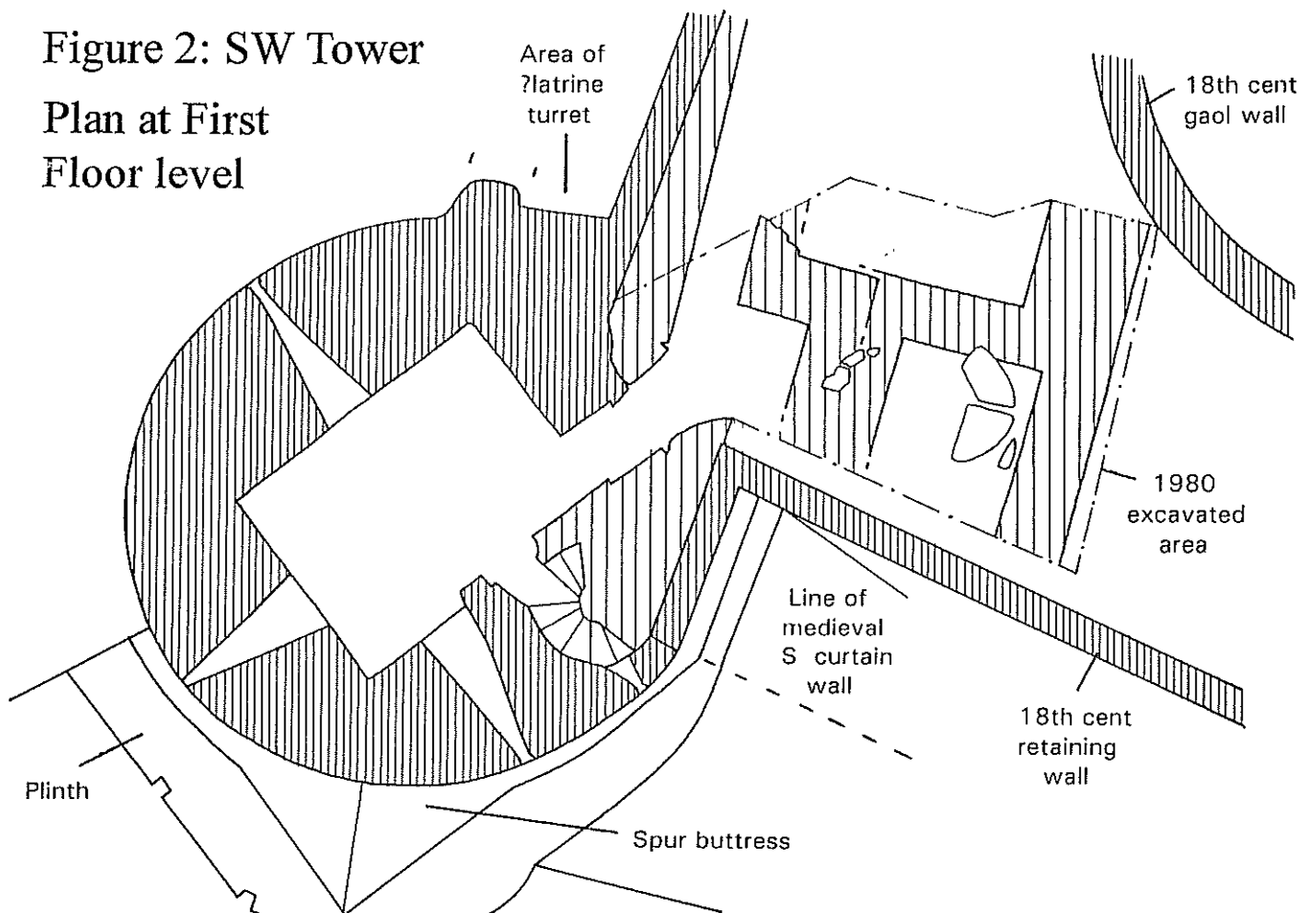


Figure 2: SW Tower

Plan at First
Floor level



Plan at
Basement
level

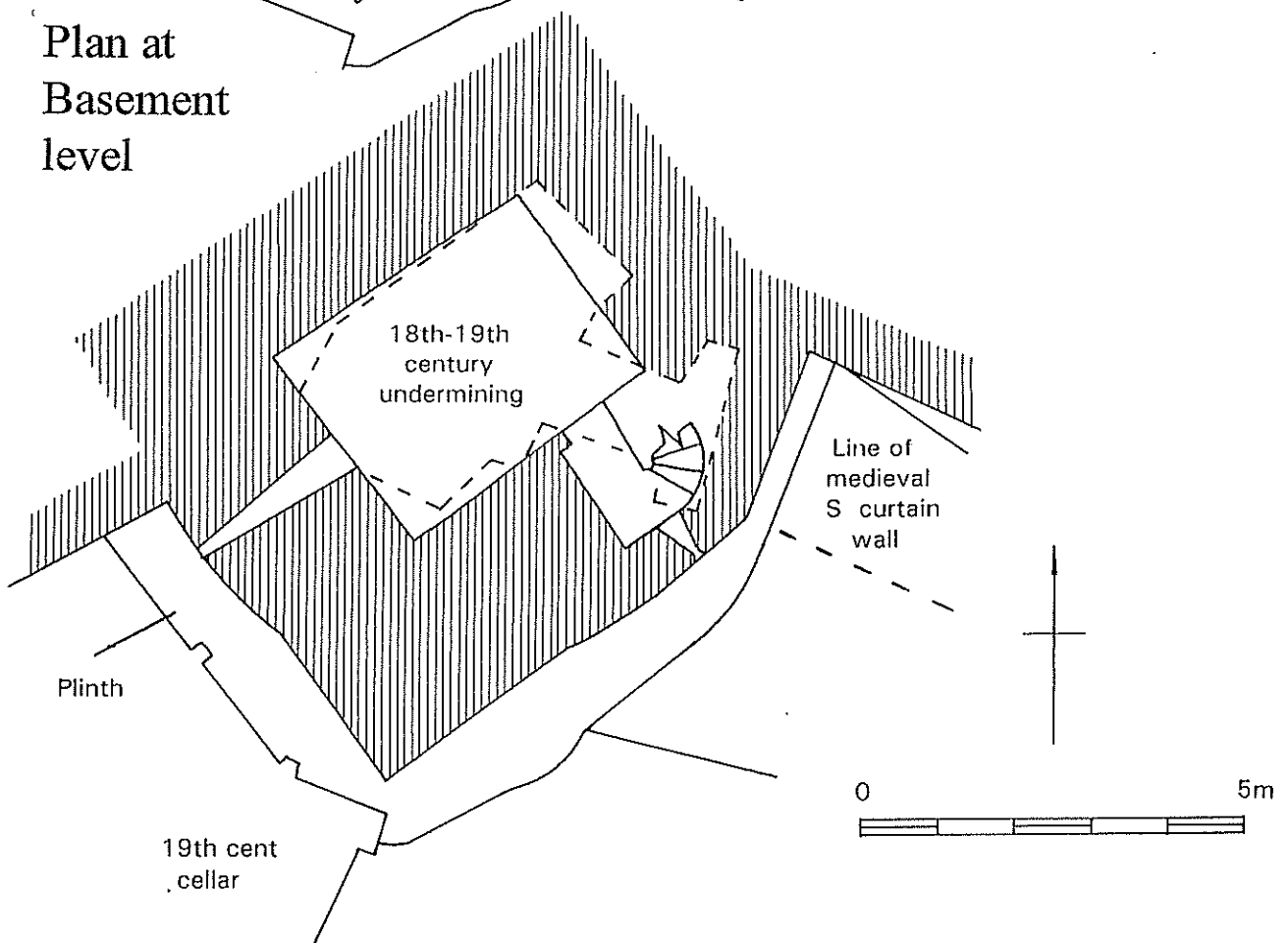


Figure 3:

Carmarthen Castle SW Tower

Section through tower looking SE

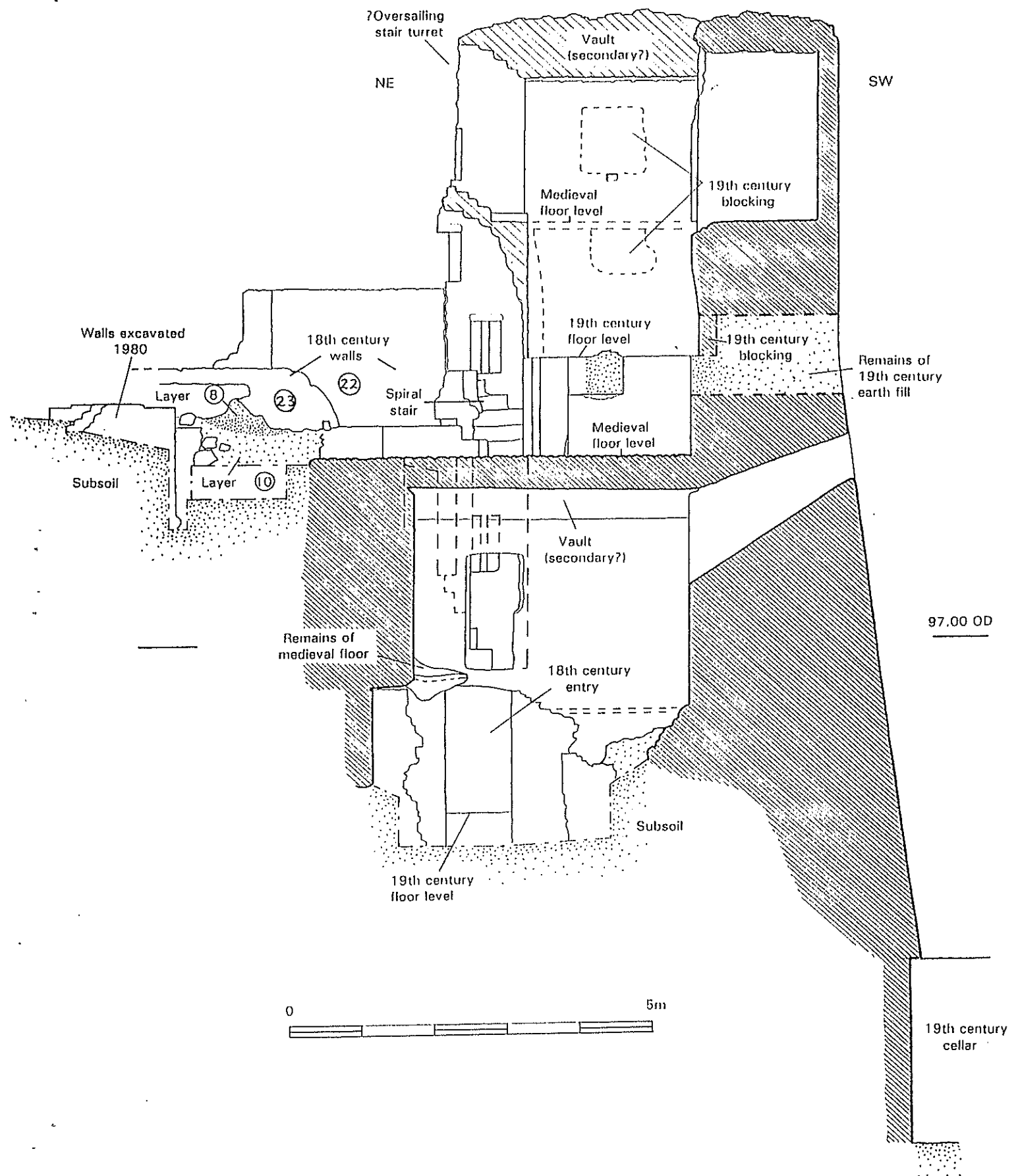


Figure 4:
Carmarthen Castle SW Tower
Section through tower looking SW

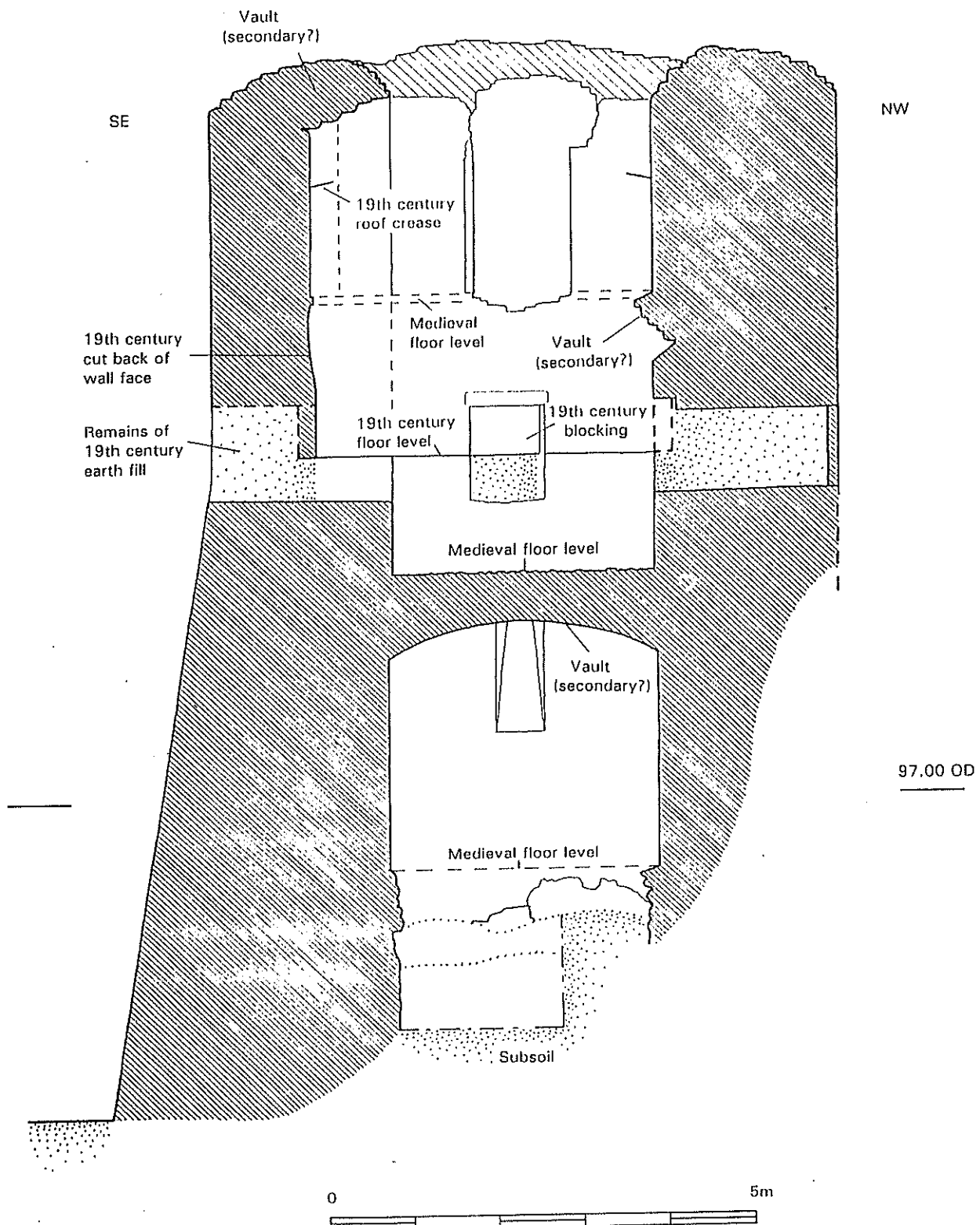


Figure 5: Plan of First Floor -
Late 19th century features

S

W

N

E

Cobble surface

3

Line of bricks

Threshold

Wall 5

Surface 4

(20th century concrete pillars)

Area of cut back tower wall

Partial blocking of newel stairwell

'Manhole' to medieval newel stairwell

18th cent S revetment wall

22

18th century 'skin' wall over scar left by collapse of medieval S curtain wall

23

- Phase I (medieval)
- Phase IV (18th cent)
- Phase V (18th cent)
- Phase VI (19th cent)
- Phase VII (19th cent)
- Phase VIII (20th cent)

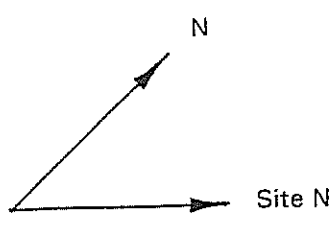


Figure 6: First Floor -
Elevation of late 19th century wall (5)
facing S

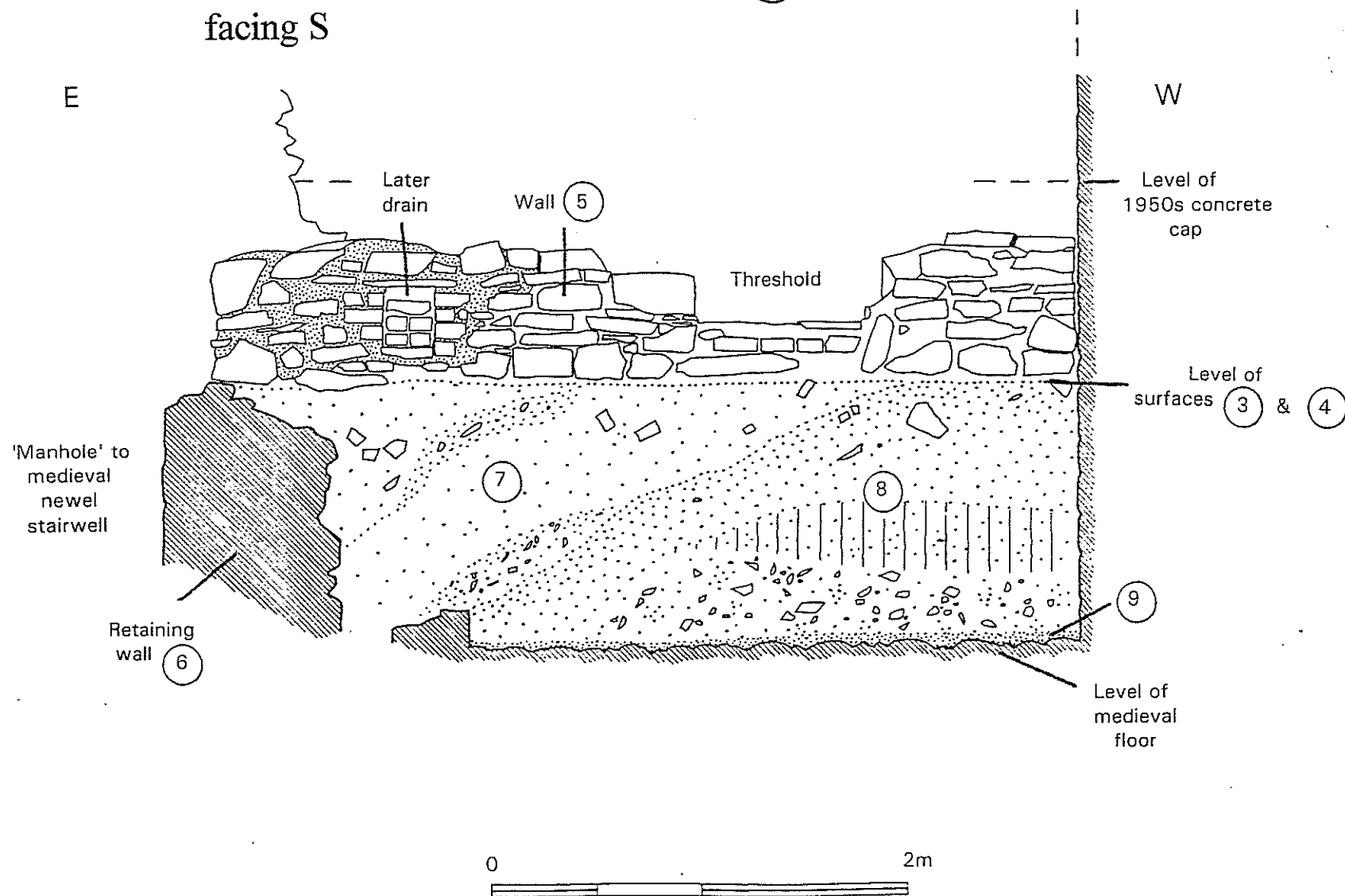


Figure 7: Plan of First Floor in newel stair area -
Phase VII walls around 'manhole'

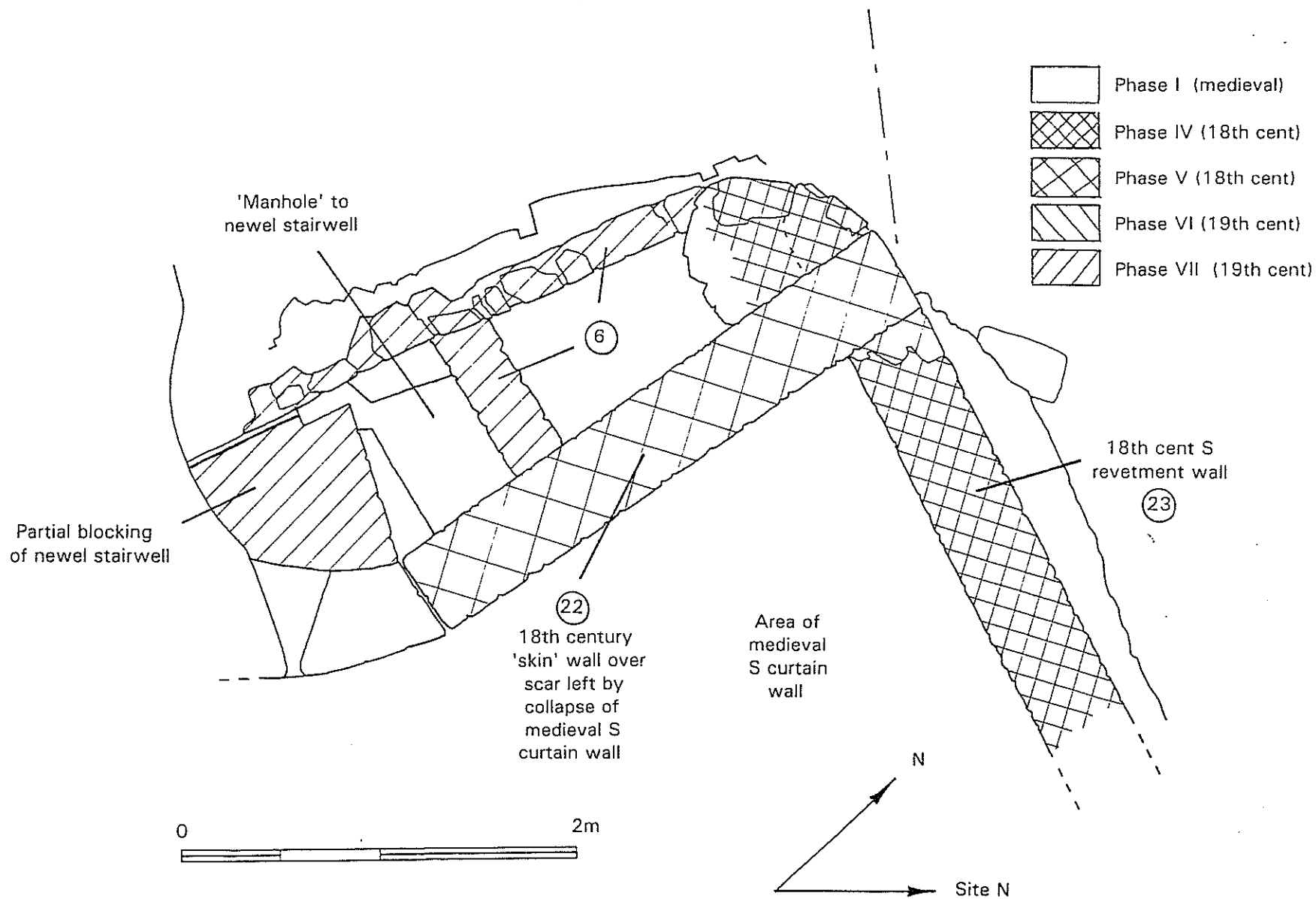


Figure 8: Plan of First Floor -
Medieval features

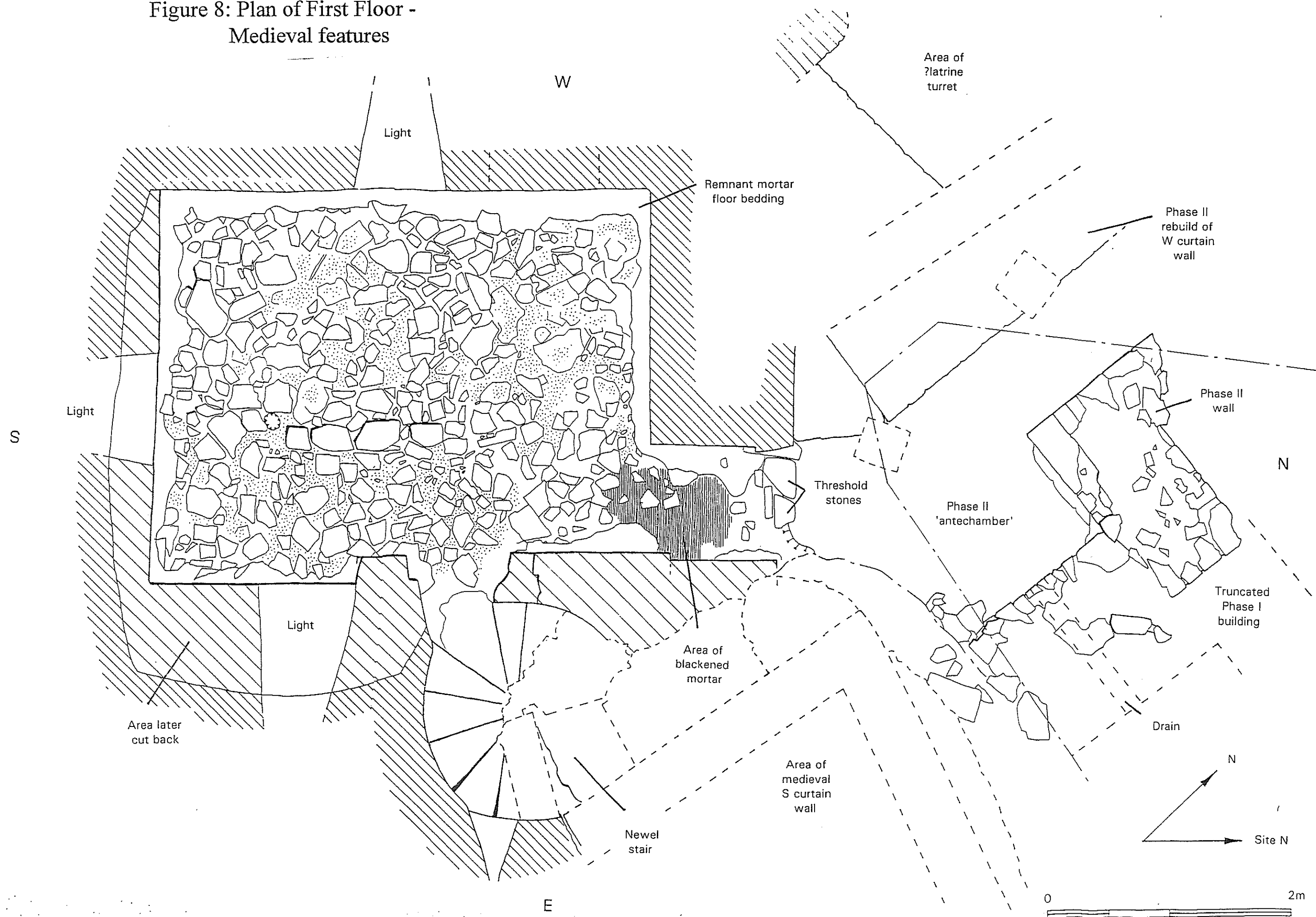


Figure 10: Basement -
Elevation of N wall

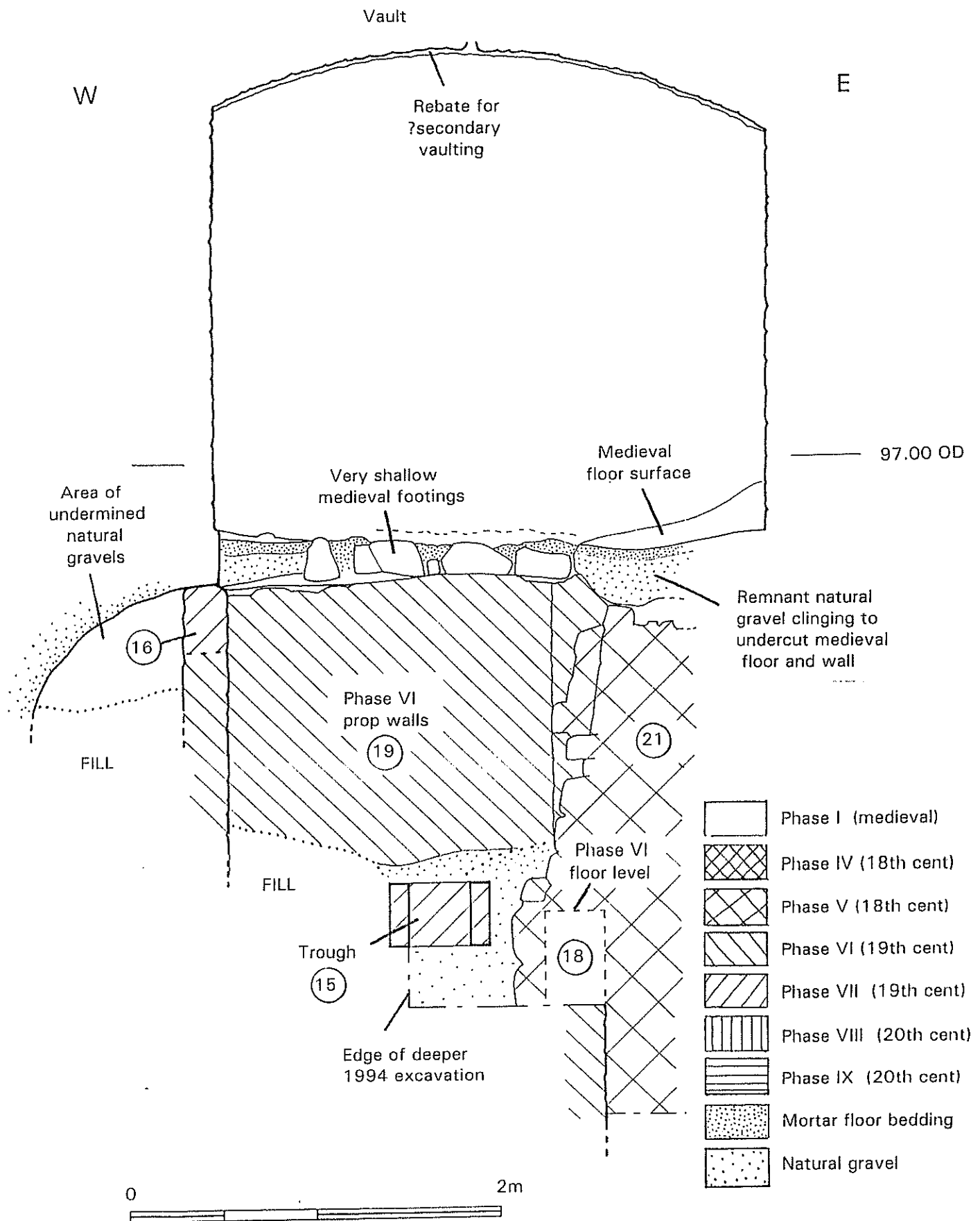


Figure 11: Basement -
Elevation of E wall

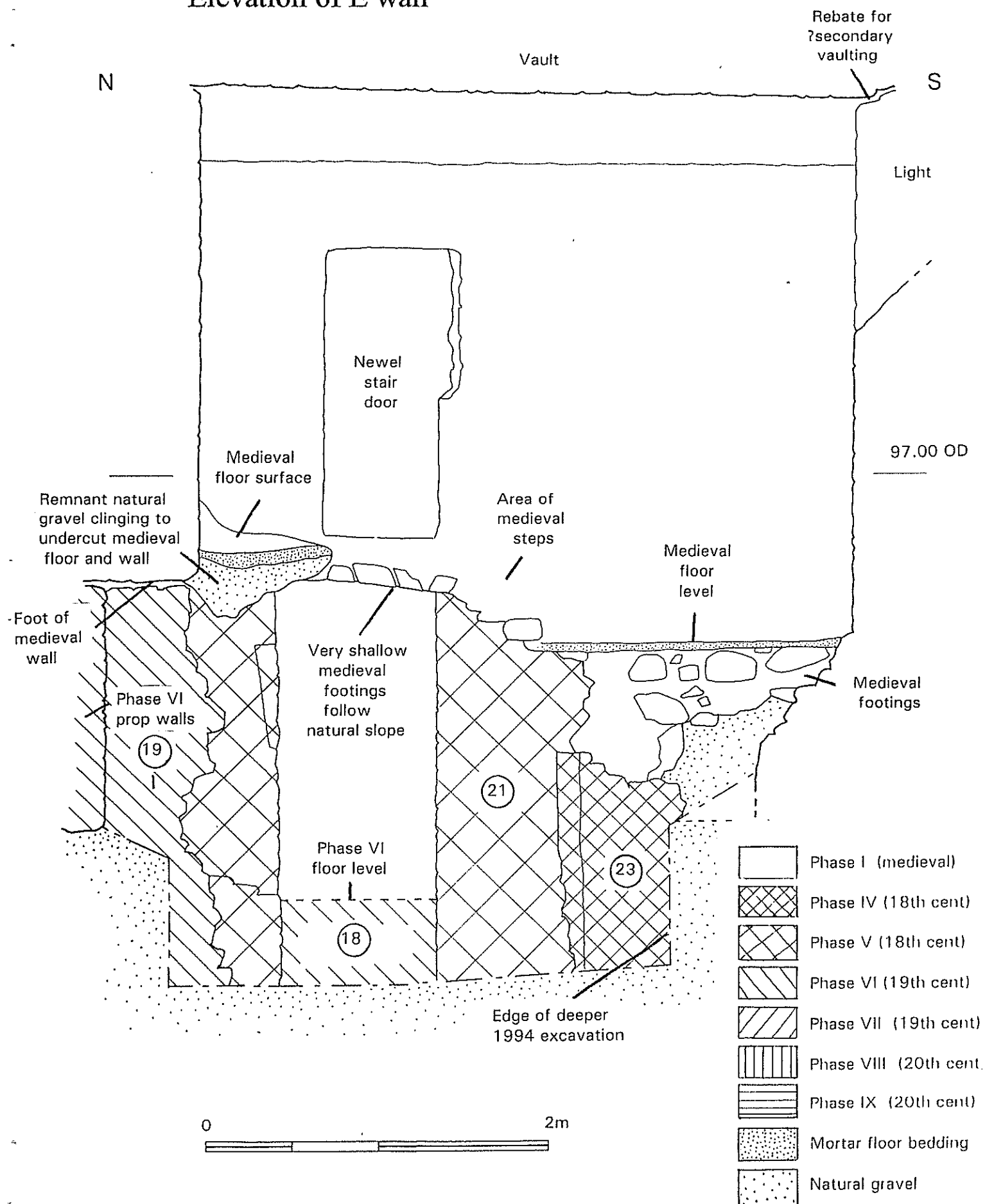


Figure 12: Basement:
Elevation of S wall

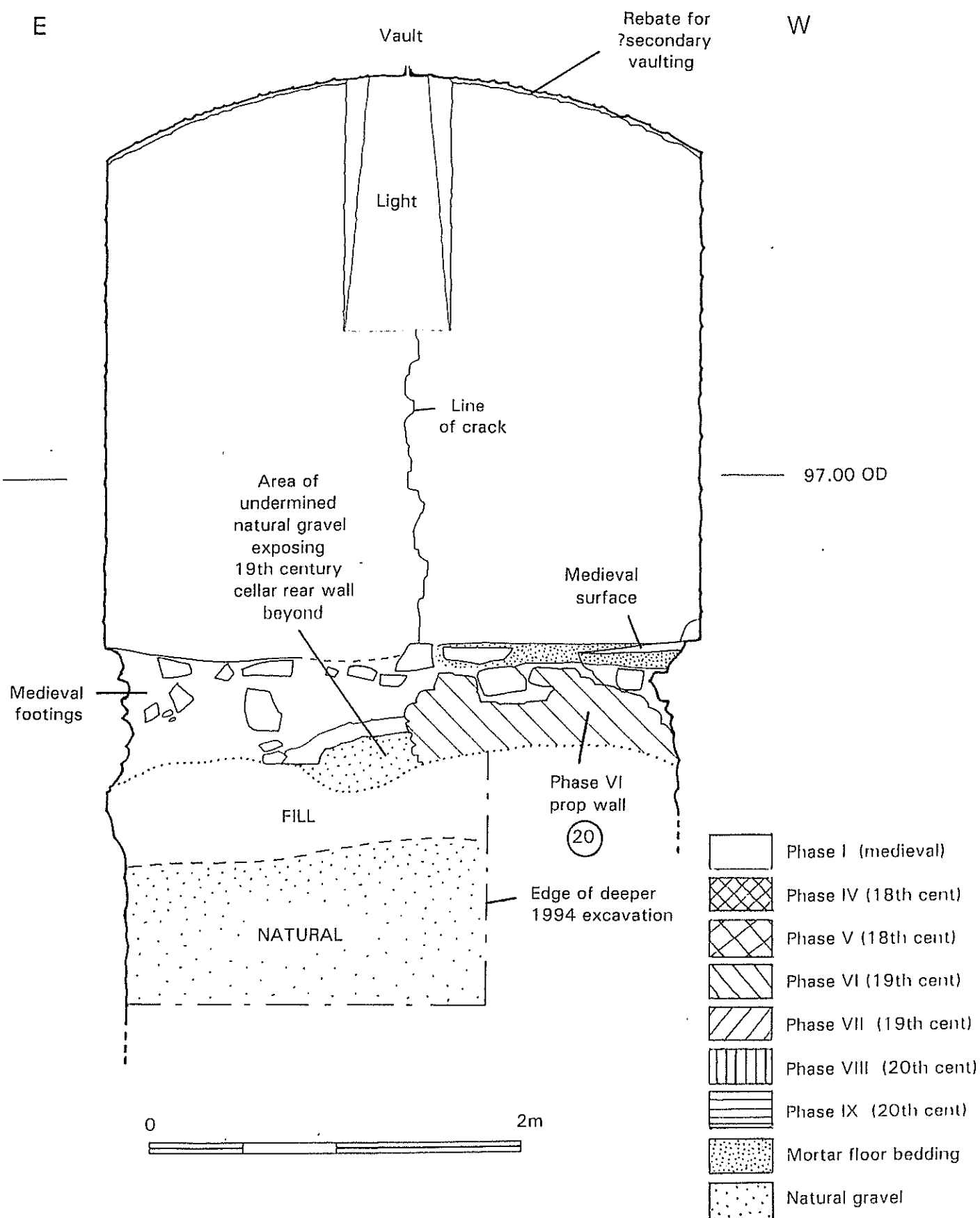


Figure 13: Basement -
Elevation of W wall

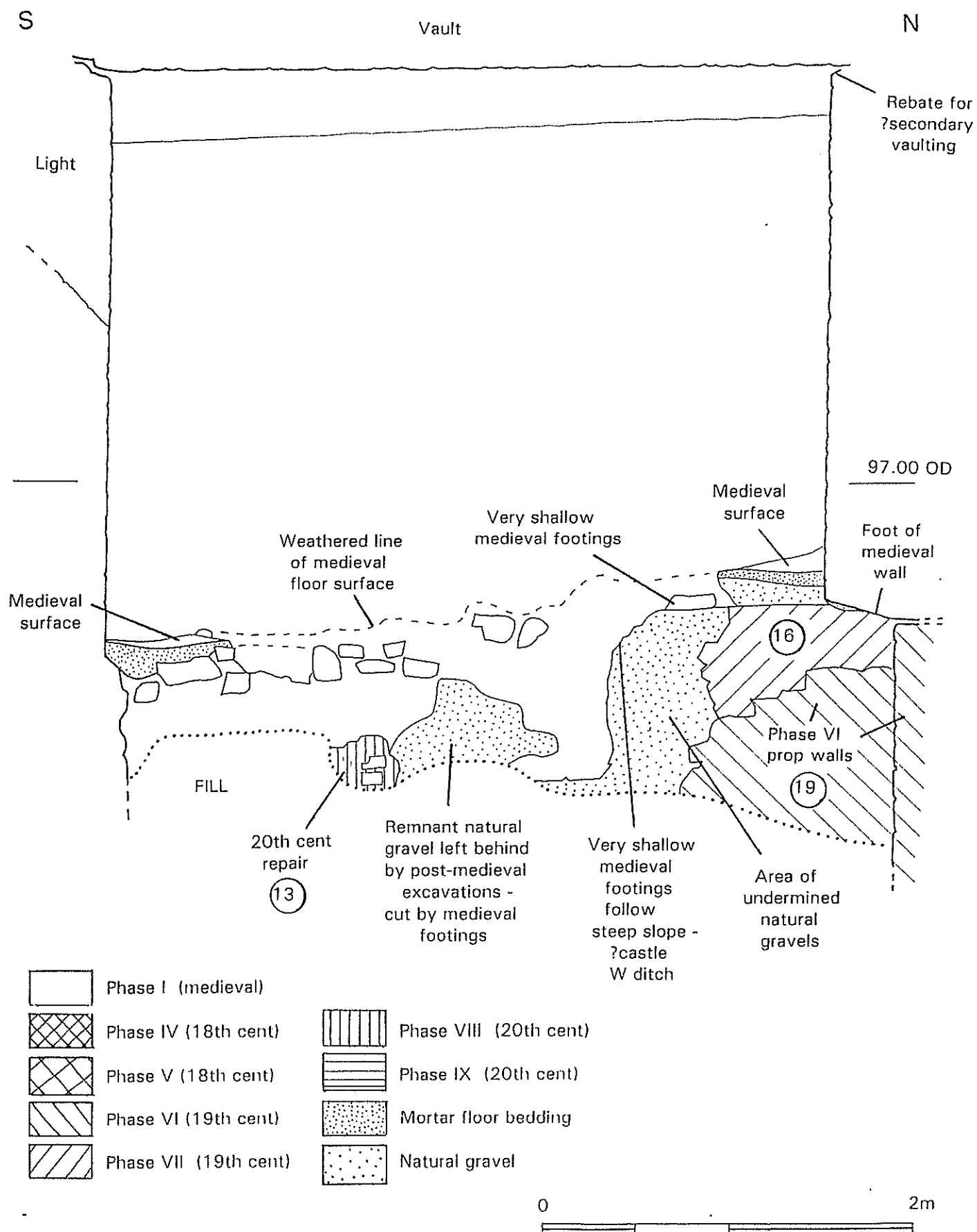


Figure 14: Basement passage -
Elevation of N wall

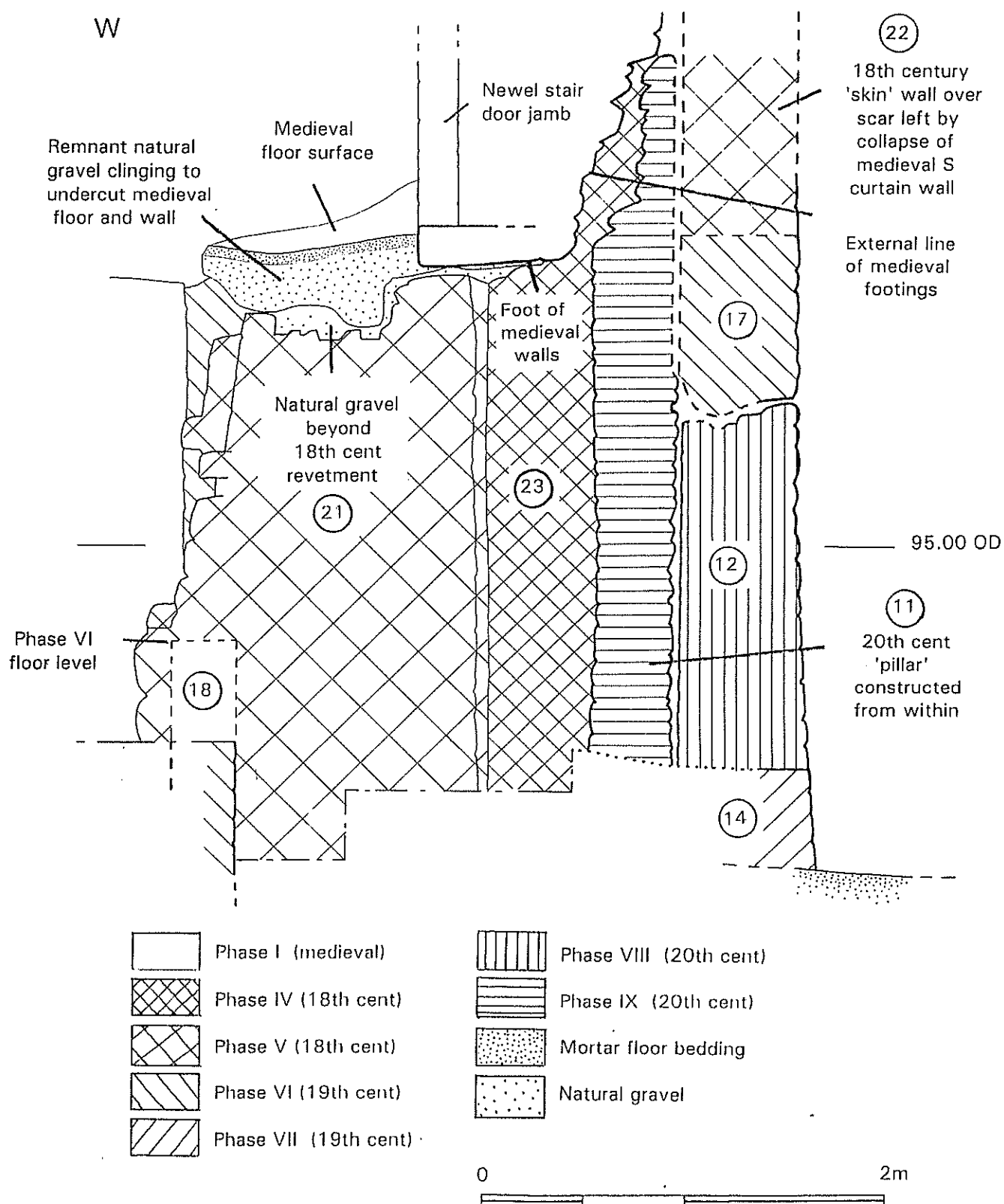


Figure 15: Basement passage -
Elevation of S wall

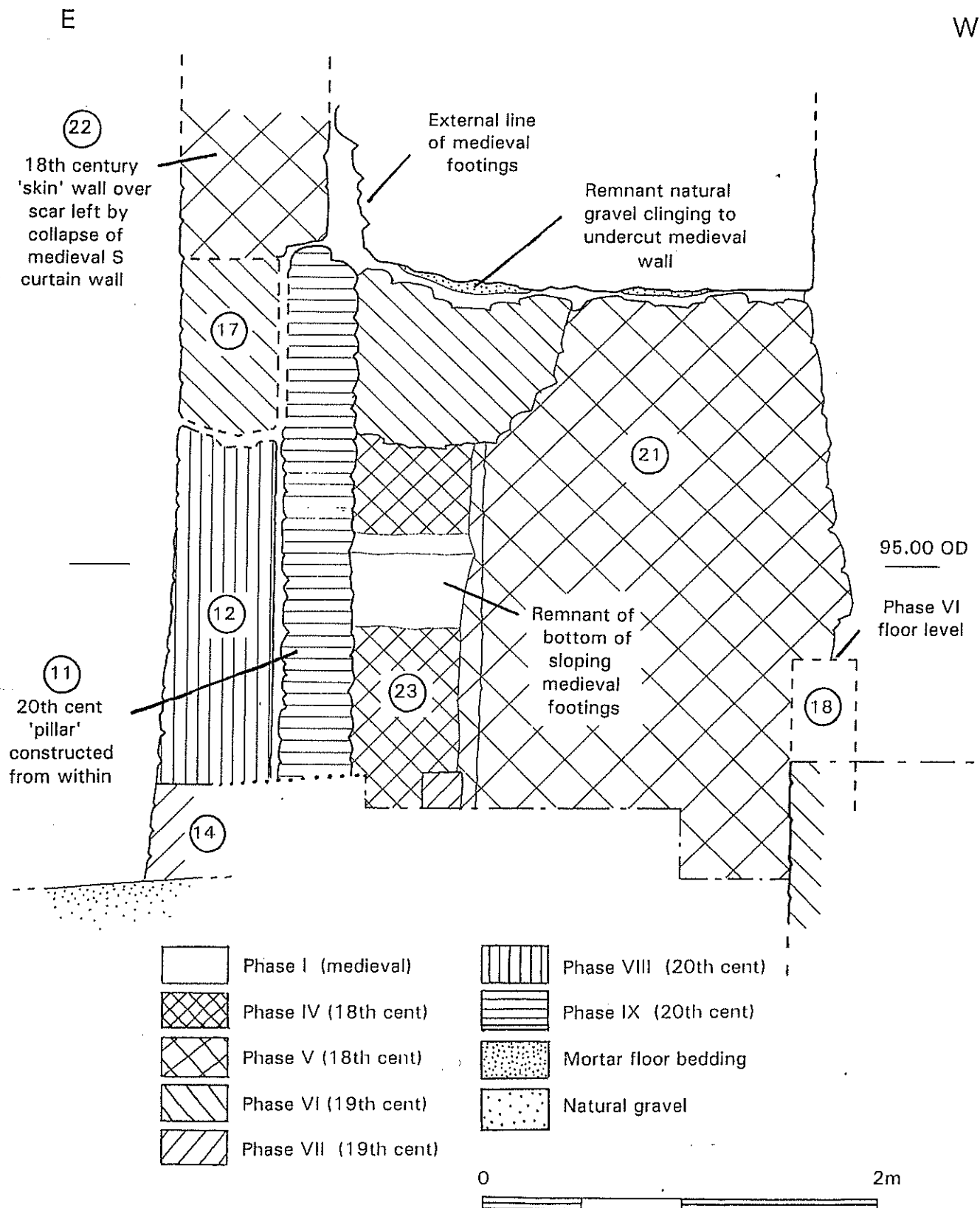
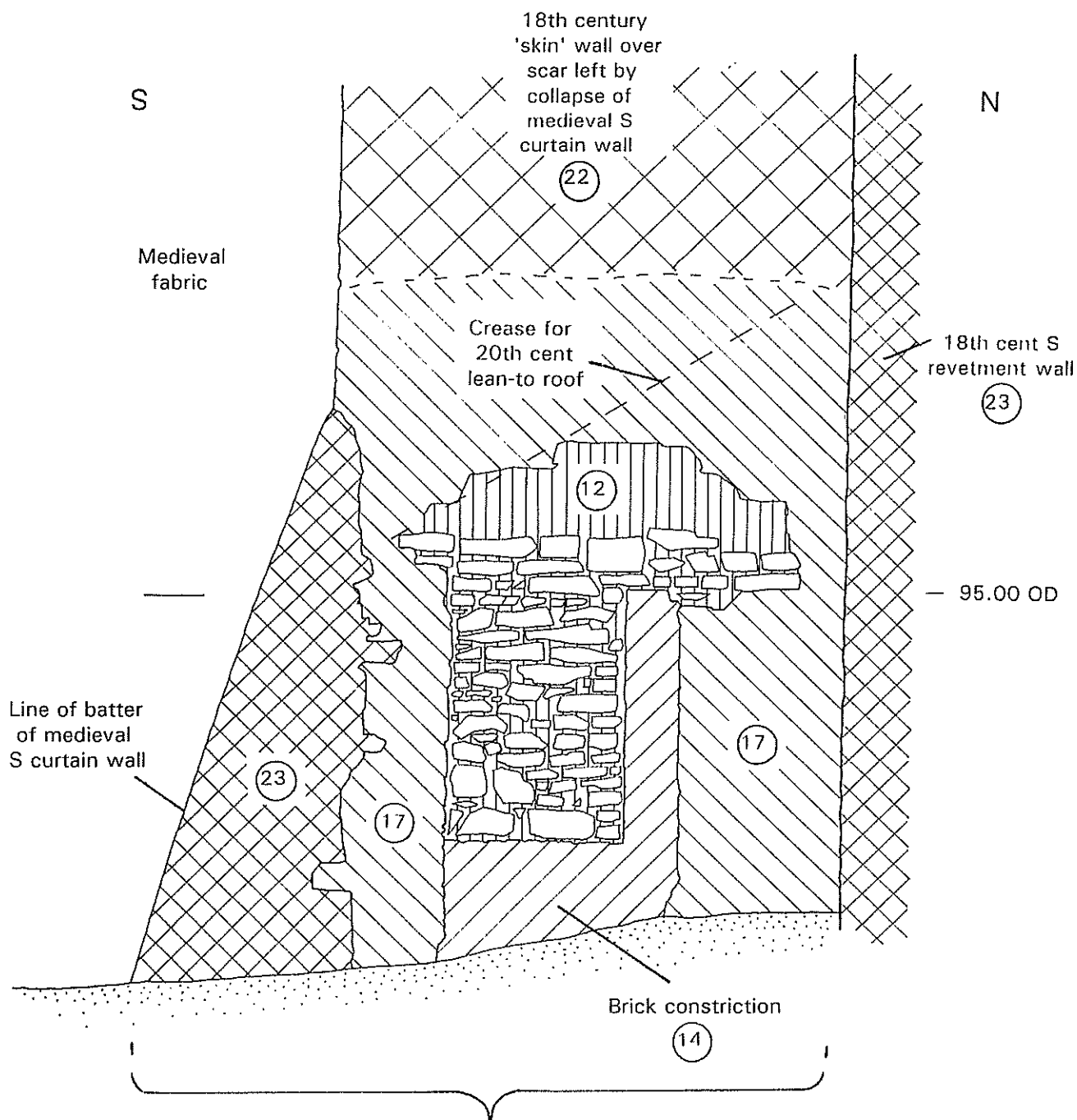


Figure 16: Basement passage -
Exterior elevation of
blocking, facing NW



Width of medieval S
curtain wall

