

CARMARTHEN CASTLE

ARCHAEOLOGICAL RECORDING AND WATCHING BRIEF, NOVEMBER 1995 - MARCH 1996

Dyfed PRN 57

REPORT BY N D LUDLOW FOR TCAP & CCC

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Contents

1.0 INTRODUCTION

1.1 Summary	7
1.2 Development proposals and commission	9
1.3 Content and scope of the watching brief	10
1.4 Purpose and methodologies of the watching brief	11
2.0 CARMARTHEN CASTLE	
2.1 Location	13
2.2 Site history	13
2.3 Site description	17
2.4 Scope of the record	19
3.0 THE SQUARE TOWER	
3.1 Summary of the 1993 recording	22
3.2 The Square Tower exterior: the 1995 recording	25
3.3 Conclusion	29

4.0 THE RETAINING WALL AND BAILEY INTERIOR		
4.1 The Retaining Wall	32	
4.2 The Bailey Interior: Summary of the 1980 excavation and 1994 recording	35	
4.3 The Bailey Interior: 1995-6 Trenches B & C	38	
4.4 The Bailey Interior: 1995-6 Trench D - West Section	40	
4.5 The Bailey Interior: 1995-6 Trench D - East Section	42	
4.6 Conclusion	44	
5.0 THE SOUTH-WEST TOWER		
5.1 General description	45	
5.2 The basement	46	
5.3 The ground floor	54	
5.4 The first floor	58	
5.5 Conclusion	60	
6.0 FUTURE MANAGEMENT	63	
7.0 THE FINDS	65	
8.0 ARCHIVE DEPOSITION	67	
9.0 ACKNOWLEDGEMENTS	67	
10.0 REFERENCES	69	

FIGURES

Fig. 1.	Carmarthen Castle: location maps	14
Fig. 2.	Carmarthen Castle: extant features	18
Fig.3.	Carmarthen: from a map by John Speed, 1610	20
Fig.4.	Carmarthen: from a print by the Buck brothers, 1740	21
Fig.5.	Carmarthen: from a print by the Buck brothers, 1748	22
Fig. 6.	Carmarthen Castle: cross section of Square Tower	23
Fig. 7.1. 7.2.	Carmarthen Castle Square Tower interior: upper level flooring Carmarthen Castle Square Tower interior: lower level flooring	24 25
Fig.8.	Carmarthen Castle Square Tower: External Elevations between pp 26 &	: <i>27</i>
Fig.9.1. 9.2.	Carmarthen Castle Square Tower: Section of summit after removal of wall 85 Carmarthen Castle Square Tower: Plan of summit	28 28
Fig. 10.	Carmarthen Castle: area of 1993-5 archaeological work	31
Fig.11.	Carmarthen Castle Retaining Wall: South Elevation	33
Fig. 12.	Carmarthen Castle: Profile of Retaining Wall and internal levels	35
Fig.13.	Carmarthen Castle, SW Tower: Plan at ground floor level showing adjacent bailey features	36
Fig. 14.	Carmarthen Castle: Plan of 1980 excavations	37
_	Section of Trench B looking south Section of Trench C looking north	39 40
_	West section of Trench D East section of Trench D	42 43
Fig.17.	Carmarthen Castle, SW Tower: Plan at basement level	47

Fig.18.	Carmarthen Castle, SW Tower: Plan at sub-basement level	⁻ 48
Fig.19.	Carmarthen Castle, SW Tower: Plan at sub-basement level showing internal features	49
Ü	. Sub-basement breach: Elevation of north wall . Sub-basement breach:	50
20.2	Elevation of south wall	51
Fig.21.	Carmarthen Castle, SW Tower: Plan at ground floor level showing internal features (medieval)	54
Ü	. Carmarthen Castle, SW Tower, ground floor: Late 19th century walls above spiral stairwell	56
22.2	. Carmarthen Castle, SW Tower, ground floor: Elevation of late 19th century wall 5 facing SW	56
Fig.23.	Carmarthen Castle, SW Tower: Plan at ground floor level showing internal features (19th century)	57
Fig.24.	Carmarthen Castle, SW Tower: Plan at first floor level	58
(between	pp 62 & 63)	
Fig.25.	Carmarthen Castle SW Tower: South-east external elevation	
Fig.26.	Carmarthen Castle SW Tower: South-east internal elevation	
Fig.27.	Carmarthen Castle SW Tower: South-west external elevation	
Fig.28.	Carmarthen Castle SW Tower: South-west internal elevation	
Fig.29.	Carmarthen Castle SW Tower: North-west internal elevation	
Fig.30.	Carmarthen Castle SW Tower: North-east internal elevation	

PLATES

Plate 1. Carmarthen Castle Square Tower in 1993, from SW	24
Plate 2. Carmarthen Castle Square Tower in 1963, from S	26
Plate 3. Carmarthen Castle Square Tower: Example of construction	27
Plate 7. Carmarthen Castle Retaining Wall: Example of construction	34
Plate 5. Carmarthen Castle: Area of Trench D with scaffold, 1996	41
Plate 6. Carmarthen Castle SW Tower: Example of construction	47
Plate 7. Carmarthen Castle SW Tower in 1993, from NW	52

APPENDIX

The 1994 finds

1.0 INTRODUCTION

1.1 Summary

The importance of Carmarthen Castle to the medieval history of Wales cannot be over-stressed. It was the centre of Crown - and therefore governmental - authority in West Wales, an area predominantly given over to baronial 'Marcher' holdings, and one of the very few royal castles in this area. Most of the domestic events that would have national significance invoved the castle in one way or another.

The information contained within this report, particularly from the examination of larger excavated areas, will enable informed decisions to be made for future management of the castle area particularly regarding any intrusive works that it may be necessary to undertake.

The enhancement works, 1993-6

A large-scale programme of consolidation and enhancement works at Carmarthen Castle, concieved under Dyfed County Council and continued under Carmarthenshire County Council, has been underway throughout the 1980s and 1990s. The work has largely been in the form of separate programmes dealing with what are today detached elements of the castle fabric. However, the largest in scale of these operations has been the most recent, from 1993-1996, and has featured the consolidation of the Square and SW Towers and the intervening retaining wall, the rebuild of a section of the latter, the removal of a number of derelict properties from the neighbouring Bridge Street to expose these features, and the adaptation of some existing openings to permit the entire ensemble to be accessible to the public as an amenity. In addition, a complex of truncated walls from former bailey buildings next to the SW Tower, excavated in 1980, were re-exposed.

These features of the castle all lie along its southern boundary on the steep glacial scarp slope down to the River Tywi, along which the southern curtain wall was built. The SW Tower, as its name implies, lies at the SW corner of the main castle bailey and was a cylindrical masonry structure of at least three storeys with bold spur buttresses. The stretch of medieval curtain wall connecting the SW Tower to the Square Tower 12m to the east had gone by at least the 18th century, its line now represented by a retaining wall from various phases. The Square Tower is now of a single storey at basement level; topographic and map evidence suggest that it may have formed the SE corner of the main castle bailey.

The Square Tower

The Square Tower is a single-storey structure of a single medieval phase, stylistically late 14th-15th century in date. A small scale excavation within the tower in 1993 demonstrated that the tower was built without footings, that the medieval floor had been removed and replaced at a lower level in the 18th-19th century, that the basement chamber had been used as an annexe to at least one neighbouring cellar during this

period, and that at least the south face was extensively refaced when the tower was cleared of some surrounding properties during the construction of Coracle Way in 1963-4. It also may have featured a medieval postern doorway. Unfortunately it has not been possible to demonstrate either the former presence or absence of any upper stages.

The Retaining Wall

A feature common to the Square Tower, the SW Tower and the intervening curtain wall was that all were constructed directly upon the natural fluvioglacial gravels without footings. The curtain is now represented only by toothing on the external faces of both towers. The present retaining wall was built in stages after the collapse or removal of the curtain, and has itself partially collapsed and been rebuilt in the present programme.

The Bailey interior

A complex of truncated walls lies within the bailey next to the SW Tower, representing two phases of medieval bailey buildings. These were demolished, or collapsed, prior to the establishment of a bread oven over their debris. The easternmost of these walls was a N-S structure that retained a higher level to the west, upon which the buildings were constructed, from a lower level to the east. The differing levels reflect a W-E natural downhill slope. Deposits in the lower eastern area appear largely to represent material derived from elsewhere within the castle; the lowest, however, may represent a bank that preceded the Southern Curtain Wall. Dating evidence for these deposits was unfortunately lacking.

The SW Tower

The SW Tower is a large, cylindrical corner tower of a single medieval phase, stylistically late 13th century and possibly erected 1288-9. It was closed off in the 1950s with a concrete cap over the ground floor, which was removed in 1994 along with 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 - already only very shallow - effectively undermining them and resulting in an extremely unstable stucture.

All three floors of the tower were rectangular within, and vaulted. A spiral stair shaft ran up inside the southern wall. Between the stair shaft and the retaining wall was an area of scarring from the junction with the medieval Southern Curtain Wall; this, during the 18th century, was concealed behind a'skin' wall.

A late 19th century ground floor was installed halfway up the medieval ground 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 Development proposals and commission

A large-scale programme of consolidation and enhancement works at Carmarthen Castle, concieved under the site owners, Dyfed County Council (and continued under Carmarthenshire County Council) and in the main at least part-funded by Cadw, has been underway throughout the 1980s and 1990s. The work has largely been in the form of separate programmes dealing with what are today detached elements of the castle fabric. Following the excavation, by Dyfed Archaeological Trust, of the truncated walls of buildings within the castle bailey adjacent to the SW Tower, further projects have included the 1984 recording of the Gatehouse prior to its repointing, and limited survey of the keep on top of the motte, again by Dyfed Archaeological Trust and again prior to consolidation. All stages of work were subject to Scheduled Monument Consent from Cadw.

The largest in scale of these operations has been the most recent, a programme of integrated works which continued from from 1993 until 1996. The programme was concieved with the ultimate aim of consolidating the Square and SW Towers and the intervening retaining wall, rebuilding a section of the latter, and adaptating some existing openings to permit the entire ensemble to be accessible to the public as an amenity.

Stage I - 1993

Stage I of the programme occurred in 1993 and began with the demolition of Nos. 10-14 Bridge Street, revealing the Square Tower in its entirety and the southern half of the lower stages of the SW Tower. At the same time an evaluation excavation was commissioned by DCC from Dyfed Archaeological Trust, within the Square Tower (Crane, 1993). The archaeological work also included a watching brief during the demolition of 10-14 Bridge Street, with particular reference to the implications for future strategies regarding the SW Tower, and two trial trenches - one on the line of the medieval South Curtain Wall and the other between the cellars of No. 12 and No. 13-14 Bridge Street. All archaeological work was conducted with a view to understanding both the implications, and potential, of the proposals.

Stage II - 1994

In early 1994 Stage II of the programme was initiated following proposals by Dyfed Archaeological Trust that the SW Tower, blocked during the 1950s, be reopened. Accordingly, DCC Planning Department notified Dyfed Archaeological Trust's Field Section of a commission to undertake a watching brief and record of the SW Tower during the proposed works (Ludlow, 1994). The remainder of the Tower, at this time,

lay beyond the scope of the study; however, the programme also included the reexcavation of part of the 1980 excavated area next to the SW Tower, for drainage etc
purposes. As a result of the programme it was proposed to Cadw that existing
openings into the Tower be rebuilt and reused for public access, with the provision of
some new superstructure; that the Tower, found to be unstable, be made secure by the
provision of a concrete plug; and that a concrete 'saddle' be laid over the vault, which
was cracked. The consolidation, through piling and soil-nailing, of the retaining wall,
and the construction of a sympathetic new retaining wall and public concourse where
the former had collapsed, were also proposed, in addition to a further proposal that
drainage be introduced from the Tower through the adjacent area of truncated building
walls and that all masonry be repointed. Cadw gave SMC for the proposals and an
additional programme of work, here referred to as Stage III.

Stage III - 1995-6

Stage III began in November 1995, under by DCC Planning Department. TCAP (Surveyors and Architects) were commissioned to undertake project management, Veryards Ltd were awarded the engineering contract, while consolidation and repointing was carried out by Abbey Masonry. Dyfed Archaeological Trust were invited by DCC under the management of TCAP to undertake a watching and recording brief on all aspects of the work. In particular, a complete building survey was undertaken on the entire fabric prior to the raking of the joints for repointing.

The end result was a successful and satisfactory archaeological study and record of all affected works, in a partnership that worked successfully with the client and all contracted bodies. The consolidation work is from an archaeological viewpoint likewise satisfactory. This report deals primarily with the 1995-6 programme of works, but in order that it can be read and understood as a coherent whole, has been dealt with in conjunction with the work undertaken from 1993 onwards.

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 oppurtunity, 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 primary stage of the watching brief for any scheme involves consultation of the consultation of Dyfed Sites and Monuments Record, which is maintained by Dyfed Archaeological Trust's Curatorial Section, the client will normally advise Dyfed Archaeological Trust's Field Section of any changes in the proposed works of any which may 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.

At Carmarthen Castle the watching brief was accompanied by a full drawn, photographed and written survey of the standing fabric within the affected area prior to repointing.

2.0 CARMARTHEN CASTLE

2.1 Location

Carmarthen Castle (Dyfed PRN 57; Scheduled Ancient Monument Cm 8) is situated on the southern side of the town of Carmarthen, at NGR 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

The history of Carmarthen Castle has been amply discussed in, *inter alia*, Lodwick, 1972, 18-28, and James, 1980, 35-6. The summary below and description in 2.3 are based, except where indicated, on these two sources.

Pre-Norman

Human occupation at Carmarthen runs almost continuously in one form or another from the establishment of a Roman fort, in the King Street/Spilman Street area, up until the present day. The Roman fort was superseded by a civil settlement in the eastern half of the present-day town, focused upon what is now Priory Street, which was occupied at least until the fourth century.

No definate archaeological evidence has yet conclusively demonstrated the nature of any occupation in the centuries immediately following the collapse of Romano-British society. However, Carmarthen is generally accepted as having been the site of a pre-Norman monastic house, Llandeulyddog, which, it has been argued, occupied the area of the later medieval priory. In addition, it has also been argued that the parish church of St Peter has its origins within the pre-Norman period. Neither the presence nor absence of any domestic settlement associated with these putative ecclesiastical sites can as yet be demonstrated; however, as often appears to have occurred during the Norman conquest of SW Wales, the area of the priory/pre-Norman monastery was avoided by the Norman settlers and eventually developed into a town in its own right, 'Old Carmarthen', subject to the priory and distinct from 'New Carmarthen' subject to the king. Furthermore, claims have been made that Carmarthen's medieval status, and other factors, reflect a similar status as a centre of power in the pre-Norman era. And recent excavations by Dyfed Archaeological Trust in Spilman Street suggest that the general area of the castle may have been the site of a pre-Norman ditched enclosure (semi-fortified?). All these factors imply some settlement prior to the Norman presence (James, 1992, 33).

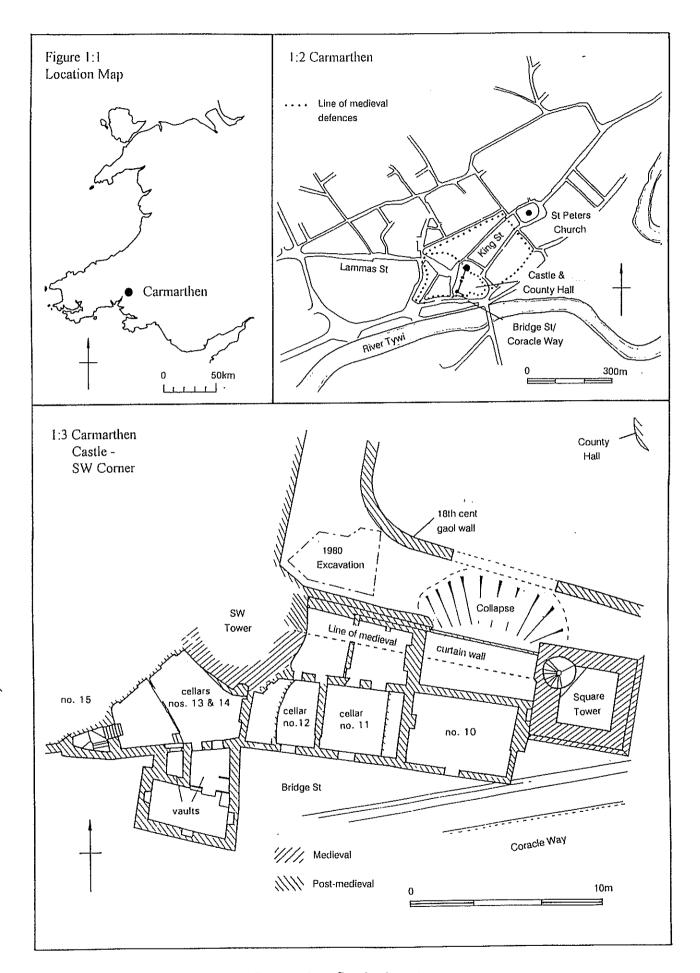


Fig. 1. Carmarthen Castle: location maps

The timber castle

A Norman presence at Carmarthen was first established in 1093 when the adventurer William fitzBaldwin sailed up the Tywi from Devon and built a motte-and-bailey at Rhyd-y-gors, 1 mile below the present castle. This was held by his descendants until 1106, though the hold was at best tenuous and the castle appears never to have become the centre of a formal lordship.

Having acquired the district in 1109, Henry I set about reorganising its administration upon Marcher manorial lines. Rhyd-y-gors Castle appears to have been abandoned by this time, and a new castle was founded on the present Carmarthen Castle site under the king's representative Walter of Gloucester.

Carmarthen Castle's importance during the medieval period cannot be over-stressed. It was the centre of Crown - and therefore governmental - authority in West Wales, an area predominantly given over to baronial 'Marcher' holdings. The Castle and Lordship (later County) of Carmarthen remained crown possessions throughout most of the medieval period. However, it was attacked and burnt by the Welsh in 1116, the earliest date for which there are any documentary sources for the town, and besieged - and intermittently held - by the Welsh princes throughout the 12th century. A siege of 1146 is notable for the alleged use of scaling ladders to climb the walls.

The stone castle

The expenditure of £170 on the castle in 1181-3 may represent the construction of the shell-keep on the motte, though this was subject to considerable alteration in later years. The castle was 'destroyed' in 1196 and again in 1215, when it remained in Welsh hands until recovered by William Marshal II in 1223. The Marshals retained the castle under various terms until 1241.

1223 probably marks the beginning of the conversion of what had previously been a predominantly timber structure into a castle of stone. At any rate it was strong enough to withstand a 3-month siege 10 years later. Carmarthen was again 'pillaged' by the Welsh in 1246. The town recieved a murage grant in 1233 and the town walls connected with the SW and NE corners of the castle.

Under royal hands again, the castle was granted to the future King Edward I in 1254. Around this time, a considerable sum was spent on the domestic buildings within the castle including 'the King's Hall and Chamber', the keep, and the chapel. However, it was described as 'in want of repair' in 1275; the keep, the hall, the chapel, the stable and the kitchen are mentioned as well as the surrounding stone walls and gate. Rebuilding in 1288-9 cost £169 15s 3d, while armour was sent from London and Bristol to the castle. However, South-west Wales escaped the worst effects of the Welsh Wars of Independence that characterised the two decades.

In 1300 the treasurer of West wales was ordered to repair the 'houses of the King's castles'. The Inner Ward contained such additional buildings as a queen's chamber, a large hall, a justiciar's kitchen and an exchequer by 1308, and 10 years later £100 was spent on repairs, followed by £40 in 1336. A document of 1338 mentions a kings hall

and chambers, a chamber for knights and esquires, a chapel, a bakehouse and a kitchen, the king's chapel, the outer gate (and therefore Outer Ward?), a large stable, a granary and a pantry, but 2 years later repairs were ordered on the castle walls.

The lordship and castle were granted to Edward the Black Prince in 1343 and a survey records that dilapidations amounted to £215. Reference was made in 1348 to a house above the exchequer, the chamberlain's hall and kitchen, the armourer's chamber, houses in the large gate and a house above the well. In 1355 a wine cellar was added below the chamberlain's chamber and a 'palace' built opposite the chamberlain's hall. These were followed by the addition of a reception hall in 1370 and a 'newly-made' gate with a crenellated chamber between the Inner and Outer Wards in 1394.

The castle saw action again during the Glyndwr rebellion as a result of which £380 was spent on repairs, including £100 on the rebuilding of the gatehouse in its present form and the repair of '5 round towers'. Further repairs on the chapel were undertaken in 1435-6. The castle played scant part in the Wars of the Roses, and for the next 200 years its history was uneventful. However, it retained its status as head of the Lordship and County of Carmarthen and, after the Act of Union of 1536 abolished the medieval lordships, may have retained its administrative function for a period.

The Civil War

The castle changed hands twice during the Civil War. Like most of South Wales, Carmarthen was nominally Royalist and in April 1644 a force of Parliamentarians under Colonel Rowland Laugharne took the town and castle. They apparently met with little resistance, but that some blood was shed is hinted at in a contemporary poem and it appears that Laugharne's troops ran amok in the town (James, 1991, 27). There is however no suggestion of any formal attack on the castle. The Royalists recaptured Carmarthen in June of the same year under Colonel Charles Gerard and it appears that the town recieved its earthen bulwarks at this time. It may be that the work included some (re)construction at the castle, but equally sections of the castle may have been demolished for masonry or to create a single continuous line of defence. Carmarthen finally capitulated to Laugharne's forces in October 1645, many townsfolk deserting to the parliamentary cause. There is no claer indication that Carmarthen as the scene of any action hereafter (James, 1991, 28).

At any rate, in 1660 the royal auditor reported the castle to be 'quite demolished'. Much robbing of the fabric subsequently took place, but in 1774 the castle was repaired; some of this work possibly relates to the construction of at least part of the southern retaining wall.

The gaol and later history

As occurred at so many castles, Carmarthen Castle was chosen as the site of the County Gaol, which was built 1789-92 to a design by John Nash. 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. 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.

The motte was examinated by the Carmarthenshire Antiquarian Society in 1914. A significant area of the bailey interior adjacent to the SW Tower was excavated by Dyfed Archaeological trust in 1980, followed by a drawn and photographic survey of elements of the Gatehouse in 1984, and small-scale survey of the shell-keep on the motte. the largest archaeological project to date, however, has been the watching brief on the consolodation that is described within this report.

2.3 Site description

Carmarthen Castle occupies the summit of a steep bluff forming the westernmost extremity of a fluvio-glacial gravel terrace. The ground falls steeply away to the south down to the River Tywi at a point where it is still tidal. The choice of site is a natural one, particularly if some form of settlement was already present, and the castle controls a bridging point that may be earlier, possibly respecting the Roman bridge.

General description

The castle as constructed in 1109 was of earthwork and timber construction and motte and bailey design. The motte still survives as 'The Mount', towards the NW corner of the site. Its make-up was partially exposed in 1914 when part of the castle wall collapsed, and was examined by the Carmarthenshire Antiquarian Society who reported that it was entirely artificial with a gravel/rubble core and a clay capping (James, 1980, 35).

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 northern half of Bridge Street. The ditch died at the SW corner of the bailey where the ground level drops sharply but part of its profile may be preserved in the fabric of the SW Tower (see below, 5.2). The scarp edge of the bluff defined the southern limit of the bailey. The enclosed area formerly sloped gently downhill towards the east and at some period - possibly initially - a N-S boundary was established within this area dividing the bailey into Inner and Outer Wards.

The main line of approach, however, appears always to have been from the west, where a town was already developing by 1116, and the principal entrance was on the site of the present gatehouse. The Outer Ward then would have functioned as a 'hornwork' and a further gate may have stood here at the west end of Spilman Street.

Surviving features - medieval

The £170 spent on the castle in 1181-3 - a considerable sum - may represent the erection of the earliest masonry on the site and at least the skeleton of the 'shell-keep' on the motte conforms to late 12th century practice. It forms a revetment to the upper

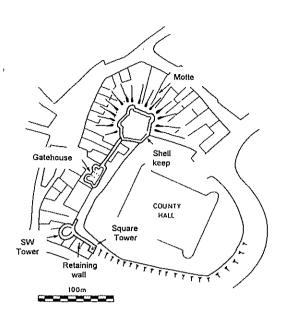


Fig. 2. Carmarthen Castle: extant features

(reproduced from James, 1981)

levels of the motte, the ground surface inside the keep lying at a significantly higher Level than the external surface.

The bailey (at least the Inner Ward) was probably first walled in stone 1223-32, under the sheriff and informal 'lord' William Marshal II. Little survives of the curtain wall in its original state - the wall now enclosing the southern edge of the bailey is an entirely new construction of the 18th-19th centuries, and much of the fabric connecting the shell-keep with the gatehouse may be of similar date. The line of the former South Curtain can be projected from the stump and scar left on the Square and SW Towers; it partly revetted the bluff in its steepest area, the internal ground level being 6.50m higher than the external level. A sequence of domestic buildings within the former curtain was excavated by Dyfed Archaeological Trust in 1980 and the archive is housed with Dyfed SMR; this area is described in detail in 4.0 below.

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. It is a large cylindrical 'drum'-tower with bold projecting spurs of massive aspect, possibly originally containing 4 storeys. It is described in detail in 5.0 below.

The Square Tower is characterised by its good ashlar facework seen nowhere else at the castle. Stylistically it would appear to belong to the 14th or 15th centuries and any one - or none - of the sums cited in 2.2 above may relate to its construction. It is described in detail in 3.0 below.

Of the remaining masonry structures little can be said with certainty about the shell-keep additions. Two, or perhaps three semicircular turrets were added at some point diring the medieval period but the form of the keep is difficult to establish due to post-medieval alterations. Dyfed Archaeological Trust performed some limited survey work on the keep in the early 1980s; the archive is housed with Dyfed SMR.

Stylistically and historically the Gatehouse as we see it can be dated with some confidence to the period following the year 1409. It displays twin cylindrical towers to the field and a 3 storey rectangular accommodation block to the rear, all predominantly of Old Red Sandstone. The remains of a vertical sequence of openings, chambers and passages can be seen on the south wall, redolent of late-medieval 'cellular' arrangements; at least some of these features represent former garderobe openings. Moreover, the bold machicolations above the entrance arch display

mouldings of early 15th century pattern, and the corbel table below the parapet accords with such a date.

However, the building is not of a single phase and a complex constructional history is present in the fabric of the rear walls. In addition, elements of an earlier gatehouse may have been retained. The gatehouse was subject to a drawn and photographic survey undertaken by Dyfed Archaeological Trust in 1984; the archive is housed with Dyfed SMR.

Later features

The construction of the gaol in 1789-92 will inevitably have disturbed or removed many of the internal features. The construction of properties on Bridge Street and their associated outhouses, cellars and basements, hard up against the castle site, probably contributed 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 remainder of the medieval features, and most of the gaol apart from the lodge that lies just inside and to the north of the gatehouse, have been lost, disturbed, or lie below ground.

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, which now forms the easternmost structure along this street frontage.

2.4 Scope of the record

The 1995-6 archaeological recording and watching brief comprised:

- the recording of the internal and external fabric of the SW Tower prior to repointing
- the recording of the external fabric of the Square Tower prior to repointing
- the recording of the external fabric of the retaining wall prior to rebuilding/repointing
- Recording of the cut sections of excavation trenches within the area of the castle bailey, and observing their excavation.

All features and structures were subject to a measured survey; this was based on EDM plots of this area of the castle kindly provided to the author by (the then) DCC in 1994. Recording of trench sections etc followed conventional standards, employing drawn records at 1:20 scale, with colour and monochrome photography.. Structural recording was based on drawn elevations at 1:20 scale, in which selected areas of

masonry (including all surrounds, alterations etc) were drawn stone-by-stone, accompanied by comprehensive monochrome photography.

Certain elements within the development area, that is the NE external face of the SW Tower, and the western bailey retaining wall, are only accessible from neighbouring private properties. These were inaccessible for survey at the time of the record.

This report deals primarily with the 1995-6 programme of works, but in order that the results can be read and understood as a coherent whole they been dealt with in conjunction with the work undertaken from 1993 onwards within this report.

The results of the 1993 work are provided as a summary, chiefly of the evaluation within the Square Tower. The 1994-5 work within the SW Tower is reproduced in full, primarily because the interpretation/conclusions apply to the 1995-6 project and also because context numeration continues from the earlier project.

Archaeological features such as intrusions and deposits, and some walls, have been given unique 'context' numbers for ease of identification. Text should be related to the relevant illustrations.

For ease, the Inner Ward is hereafter termed 'the bailey'.

All heights given are relative to the site datum which is that maintained by contractors throughout the scheme. It is an arbitrary datum.

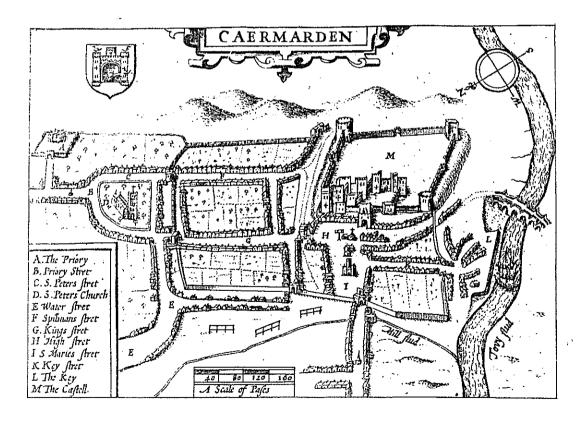


Fig.3. Carmarthen: from a map by John Speed, 1610

(reproduced from Lodwick & Lodwick, 1975)

3.0 THE SQUARE TOWER

The Square Tower is now a detached masonry structure of a single storey, built into the southern scarp slope, but the stumps of the curtain wall that formerly bonded into both the west and east faces of the tower can still be seen. The tower is not quite square in plan (Fig. 9). Construction is predominantly of Old Red Sandstone, battered externally, and the tower contains a single vaulted chamber lit by an original splayed opening in both the south and east walls. The tower walls have an average thickness of 1.7m above the batter. No dressed stone survives. The vault forms a segmental arch, its surface capped in recent years (1960s) by a thickness of concrete which may or may not seal remnant flooring from a possible upper floor.

The internal floor level was always at a considerably lower level than the former ground surface in the bailey to the north, access to the chamber being via a newel stair in the thickness of the north-west corner, which now emerges through a 'caphouse' in the modern concrete cap laid over the vault. The chamber thus forms a basement storey, suggesting that the tower formerly carried at least one further storey but there is no conclusive evidence for this.

The antique print evidence is not particularly helpful; Speed's plan of 1610 (Fig. 3) is much conventionalised and shows an open-backed half-round tower at this location. The Buck print of 1740 (Fig. 4) is rather difficult to interpret; a structure of indeterminate form is depicted in a position which may correspond to that of the Square Tower, while a later Buck print of 1748 (Fig. 5) shows the tower much as it survives today, but (oddly) near the summit of a sheer cliff. The stepped pathway shown leading up to its base suggests that an entry was already present here (see below, 3.1), which may then be medieval in origin.

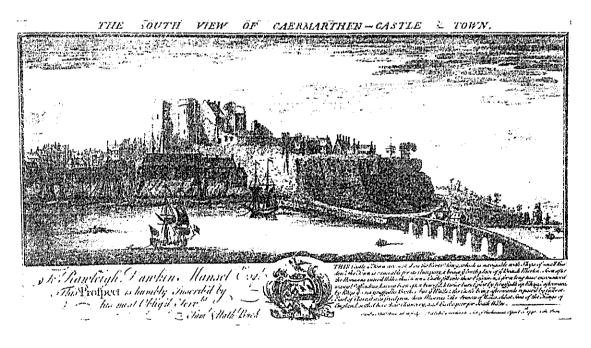


Fig.4. Carmarthen: from a print by the Buck brothers, 1740

(reproduced from Lodwick & Lodwick, 1975)

The tower walls now rise no more than 0.80m above the level of the concrete, except towards the bailey where the rear wall was rebuilt in the 1960s on a substantially different line and incorporates the 'caphouse' (see below, 3.2).

The tower is now faced with thin rectangular finely-cut sandstone blocks, but can be seen to have been extensively refaced in the 1960s (see below, 3.2). Internally it displays the remains of limewash, superficially fairly recent in appearance but possibly overlying earlier finishes, which terminate around the outline of the blocked entry in the south wall.

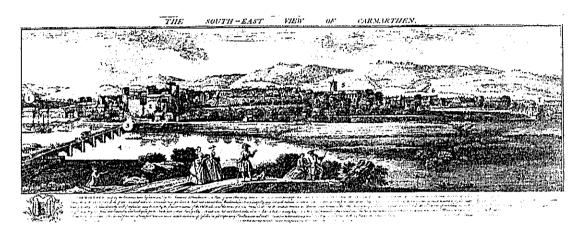


Fig. 5. Carmarthen: from a print by the Buck brothers, 1748

(reproduced from James, 1981)

3.1 Summary of the 1993 recording

In 1993 and as part of the same overall consolidation, enhancement, and landscaping programme as the present scheme, Nos. 10-14 Bridge Street were demolished, removing the last surviving properties on the southern half of the street and revealing the Square Tower in its entirety. Dyfed Archaeological Trust were commissioned by Dyfed County Council to undertake a watching brief and small evaluation excavation within the Square Tower, under the direction of Pete Crane (Crane, 1994). This section is a summary of the results of the evaluation.

The Tower interior (Fig. 6)

A rapid survey of the interior of the tower was undertaken (Fig. 6). The tower chamber was formerly lit by rectangular openings in the south and east walls, with plunging splayed embrasures beneath segmental heads. The southern light was later blocked. The wide spiral stair rises through the thickness of the NW corner adjacent to the point of attachment of the South Curtain. It is entered from the chamber through a segmental-headed doorway at the north end of the west wall, and is squinched over the internal NW corner via a segmental arch. These features appear to be primary; the truncation of the stair at its present level (and the 1960s caphouse) is not. The door sill now lies above the present floor level; it and the two steps down are discussed below.

Fig. 6. Carmarthen Castle: cross section of Square Tower

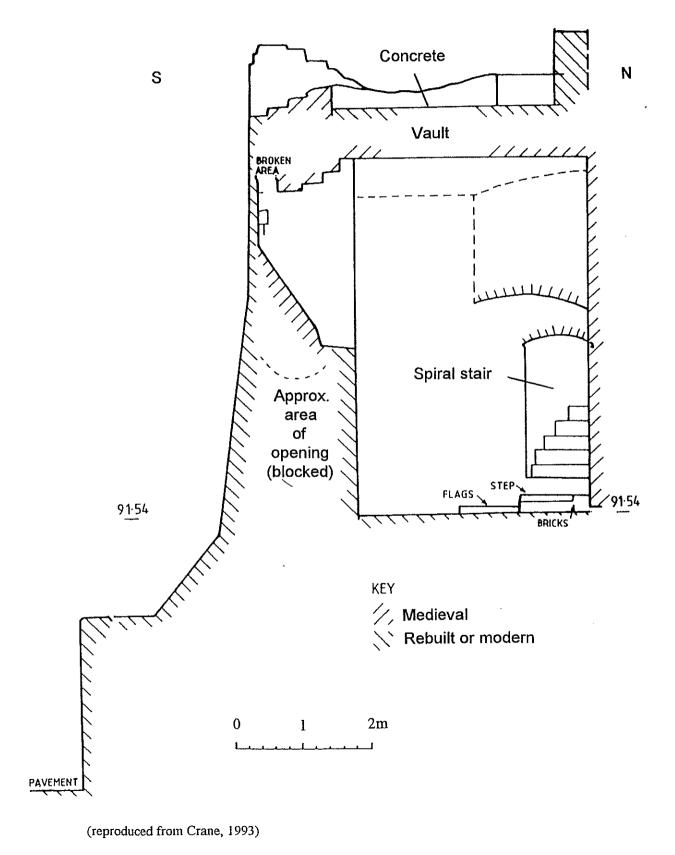
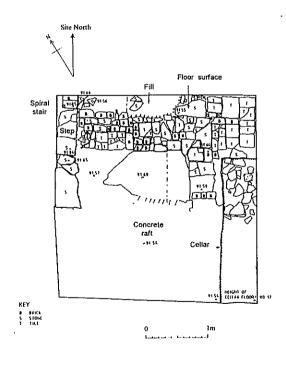




Plate 1. Carmarthen Castle Square Tower in 1993, from SW



William Control

Fig. 7.1. Carmarthen Castle
Square Tower interior:
upper level flooring

(reproduced from Crane, 1993)

A further entry lay in the middle of the south wall of the tower. It survived until 1963-4 when it was blocked; the tower refacing that acompanied the blocking has obscured external evidence for the doorway, but its outline is just discernible internally with a head approx. 2m above the present floor. It appears to have been present by 1748 (Fig. 5) and may represent a medieval 'postern'.

Excavated evidence: the floor (Fig. 7)

Excavation 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 (at least) two openings.

The tower floor as it existed in 1993 (Fig. 7.1) consisted of an area of brick and tilework along the north side, the remainder being a concrete raft. This extended throughout, except for the east side where the cellar of the property formerly adjoining to the east had been extended, below footings level, into the body of the tower. This most probably occurred during the late 18th or early 19th centuries. It was not fully excavated, but Crane, 1993, surmised that its floor would lie approx. 2.30m above pavement height of Coracle Way. The cellar

Fig. 7.2. Carmarthen Castle
Square Tower interior:
lower level flooring
(reproduced from Crane, 1993)

Pit Pit
Spiral
Step Natural

Concrete
raft

Concrete
raft

O Im

had subsequently been backfilled and partially capped with concrete, probably during 1963-4 when Coracle Way was constructed and the property here demolished.

The brick and tile floor post-dates the construction of the cellar. It was partially excavated to reveal that it lay directly upon the natural fluvio-glacial gravel deposits (Fig. 7.2). This demonstrates that any medieval floor would have occupied a level above the cellar floor, possibly around the level of the sill of the doorway onto the spiral stair 0.25m above the present floor. The concrete raft occupying the remainder of the floor is very thick (over 0.30m), suggesting that it might have been laid over the roof of a further, uninvestigated cellar.

3.2 The Square Tower exterior: The 1995 recording

The 1995 recording was undertaken in advance of the total repointing and partial refacing of the tower exterior concurrent with the overall scheme, and the removal of the modern north wall on the tower summit and associated excavation of deposits. A proper structural record was regarded as necessary due to the complete nature of the repointing.

Only the east, south and west faces were recorded, the northern face lying below a deep sequence of post-medieval deposits (see below, 4.4 and 4.5). However, the summit was also recorded.

The structural history of the tower was relatively simple. The bulk of the medieval features appear to be of a single phase, with no real evidence of later alterations. It is not until breaches were made through the tower in the late 18th - early 19th centuries that the fabric of the tower itself appears to have been disturbed.

Much information regarding the later structural history of the tower was obtained. It was firmly established that at least the south face of the tower had been subject to extensive and refacing during the 1960s. In several areas the facing had accidentally been removed revealing the cement bonding beneath. Post-medieval accretion of buildings against the west face had involved some minor alterations. The installation of the concrete cap and 'caphouse' during the 1960s was accompanied by cut-back and removal of part of the original north wall fabric and associated deposits, and the construction of an entirely new, low north wall on the summit on a different line.

Medieval activity (Fig. 8)

Of those faces of the tower which now lie above ground, the east face is the least altered from its medieval appearance; the corework 'stump' of the South Curtain that extended eastwards from the tower can be clearly seen. The external opening of the light has weathered out; it appears that a surround incorporating a flat lintel may have been robbed. A square socket, of medieval date (putlog hole?), has survived the later refacing, although partly infilled.

Likewise, on the south face the surround of the light was subsequently weathered or robbed. Here an area of facework above the lintel also weathered, and the whole was later blocked by masonry. The external opening of the entry can be clearly seen in a photograph taken c1963 when Coracle Way was constructed (Plate 2). Here, too, square sockets of medieval date survive.

The west face was subject to considerable post-medieval alteration; however, the corework 'stump' of the South Curtain that extended westwards from the tower can be clearly seen and some 'putlog sockets survive. This face may have been built against from an early date (see below) but evidence for this was lacking.

?Later 18th - 19th century activity (Fig. 8)

The south face was substantially altered during the post-medieval period. The light, and weathered area of facework above it, were blocked by masonry, [86], at some period prior to the 1960s.

It is the west face that was the most altered during the post-medieval period; however, much of this alteration is superficial and associated with the neighbouring property, No.10 Bridge Street. A small property is shown in this location in 1748 (Fig.5) and in 1268 twelve properties lay along Bridge Street (James, 1980, 28). However, these may have been confined to the southern side of the street; the northern side is depicted as empty in 1610 (Fig. 3) and may have remained so until the 18th century.

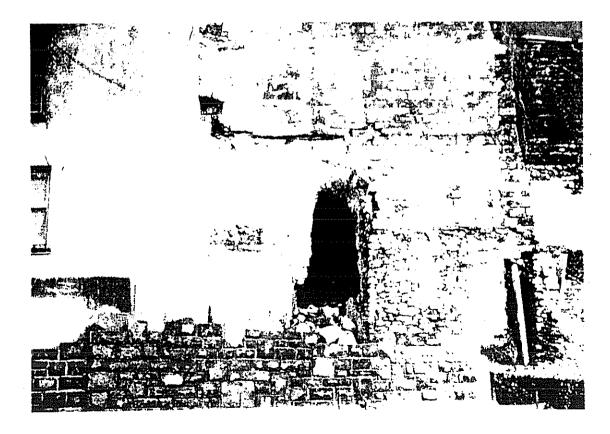


Plate 2. Carmarthen Castle Square Tower in 1963, from S

The extent of No.10, in its latest form at least, was defined by a number of features. The ground floor of the property was suspended over a semi-basement, its level reflecting the top of a sloping plinth [92] constructed against base of the tower. Plinth 92 undercuts the tower slightly (and was repointed as a test section of wall in 1995). The north wall of No.10 was faced with brick and masonry down through to the semi-basement forming a revetment 2.2m high against the higher backyard to the north. Into the wall at ground floor level had been let a small fireplace, [93], of probable 19th century date.

The northern slope of the roof of No. 10 was represented by a 20th century cement roof crease, [94], which may reflect an earlier line - no other line was seen. It terminated 2.00m north of the SW corner of the tower. To the north of this line the entire face of this tower displayed the remains of render, of 19th - early 20th century century character, while south of the line the tower face was unfinished.

The corework 'stump' of the South Curtain was later undercut from the backyard of No.10. This backyard was incorporated within the house as a breeze-block walled building, left unfinished in the early 1980s. One of the walls, [89], formed a 'skin' over the cut-back area; that the yard had been the site of an earlier dwelling was demonstrated when 89 was removed and soot-blackening revealed over the remainder of the South Curtain stump. Ground level on this face reflects the height of the backyard building floor - the suspended ground floor of No. 10 itself was 0.80m lower.

20th century activity - later (Figs. 8 & 9)

No 10 Bridge Street remanied in occupation through to the 1980s, leaving later 20th century evidence on the tower west face. Below and around cement roof crease 94 the tower facework had been crudely repaired with flue-tiles set in a mortar matrix, [95]. This repair lies below the repointing, in cement, of the upper part of the east face, [96], which is in turn contemporary with the refacing of the south and east faces of the tower when they were exposed in 1963-4 (see above). The ends of the facing stones and the cement matrix behind them were clearly visible during the recording.

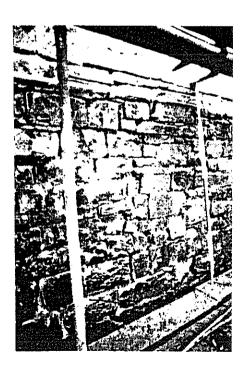


Plate 3. Carmarthen Castle
Square Tower:
Example of construction

Much 20th century (cement), and earlier (brick), patching, [90], was visible beneath the undercut section of Curtain, and an odd rectangular blind opening let in from the exterior [91]. Much of this patching may pre-date the construction of the breeze-block walls, [28], [30] and [89], for the unfinished backyard extension.

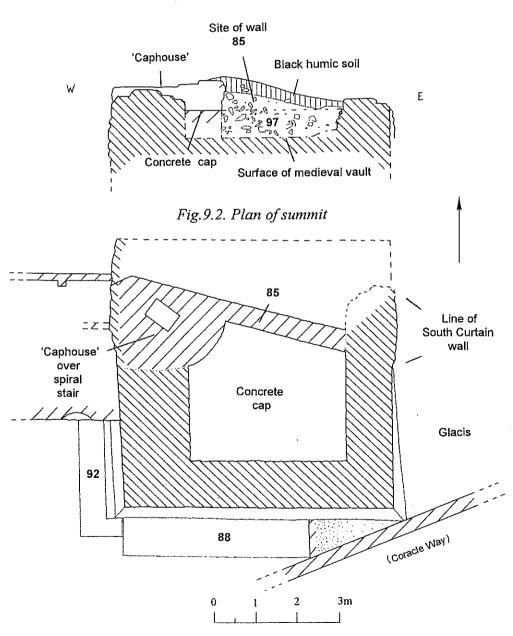
There is now little external indication of late 18th-early 19th century entry through the south face bar an area of rather more random facework, [87], laid in the 1960s when the south and east walls were refaced. The sloping plinth, [88], against the base of the tower is additional and lies above 19th century plinth 92 on the west face; in character, it appears also to date from the 1960s. An indeterminate, but possibly considerable portion of the east face, moreover, was obscured in the 1960s when the sloping 'glacis' up to the County Hall car park was established.

The north (rear) face of the Square Tower displayed, until December 1995, a low uneven wall, [85], running diagonally on a line south of the medieval rear face and thus partially over the vaulted area. The contractors's scheme demanded that the wall be removed and a new wall built to reflect the medieval arrangements. The wall was of limestone rubble construction and stood to an

average height of 0.7m above the concrete cap (98.34m). At its west end the wall was represented by a slightly lower semicircular structure which formed a low 'caphouse' above the spiral stair within the NW corner of the tower. This too was capped by a flat concrete roof, into which was inserted a shaft with an iron manhole cover.

Removal of the wall permitted the sequence of deposits against its north face to be examined, in addition to the horizon upon which it was constructed. The profile sloped down to the east and beneath a layer of black humic material 0.4m thicky a very mixed debris layer, [97], comprising mortar, rubble and slate, with humic lenses, all of post-medieval character. The top of the medieval vault was encountered at a depth of 0.7m beneath the concrete cap (96.94m) and, with an intervening soil layer, this was the horizon upon which the later rear wall was built, its construction trench having been cut through the deposits to the north. The entire wall can be thus ascribed to a post-medieval date, and indeed to the 1960s, contemporary with the concrete caps and manhole covers.

Fig. 9.1. Carmarthen Castle Square Tower: Section of summit after removal of wall 85



3.3 Conclusion

The Square Tower stylistically belongs to the late 14th-15th centuries (but see below, 4.5 and 4.6 for the level of the construction trench). The nature of the facework, the segmental vault profile, the width of the spiral stair shaft, and its square shape all suggest a later medieval construction when square flanking towers were returning to vogue. The south, and (to lesser extent?) the east faces were refaced with thin sandstone ashlar blocks during the 1960s work but Plate 2 proves that the style of the medieval facework was closely followed. Though at least part of the upper levels of the tower have been truncated, and finished with a low wall, 'caphouse' and concrete capping in the 1960s, it is now unfortunately impossible to ascertain its original height.

The documentary evidence for expenditure (above, 2.2) is largely silent for the this late 14th-15th century period, but there is no reason why records of expenditure on the Square Tower should not have survived. There is a possibility, however, that the £380 spent in 1409 may in part refer to the Square Tower.

The structural history of the Square Tower was relatively simple. The bulk of the medieval features appear to be of a single phase. Excavation 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 (at least) two openings. The opening in the south wall may represent a medieval entry (postern?), later re-used; steps leading up to it are shown as early as 1748 (Fig. 5).

The west face was altered during the post-medieval period, associated with the neighbouring property, No.10 Bridge Street. In 1268 twelve properties lay along Bridge Street. However, these may have been confined to the southern side of the street; the northern side is depicted as empty in 1610 (Fig. 3) and may have remained so until c1748, when (low) properties are shown here. None of the properties shown appears to represent No. 10 in its present form, which may, in comparison with similar properties in Carmarthen, belong to the later 18th century. 19th century maps show a building of comparable size here but lack sufficient detail to establish whether the present No. 10 is being depicted. The backyard was enclosed as abuilding by the 19th century at least when a flue, that has left soot-blackening, was built against the Curtain Wall stump on the west wall. This backyard building was later demolished.

4.0 THE RETAINING WALL AND BAILEY INTERIOR

Forming the southern edge of the castle site and lying between the Square Tower and the SW Tower is a high, vertical scarp slope. Ground level to the south of this wall (as represented by the base of the SW Tower) is 7m lower than the present level north of the wall. The latter area lies within the former castle bailey (Inner Ward). Just beneath the ground surface as represented here in 1995/6 is a complex of truncated walls, and Archaeological Trust in 1980 and re-exposed in 1994-6. The latter work also demonstrated that the natural ground profile at the upper level slopes downhill eastwards from a height of 100.50m near the SW Tower, to a height of 96.50m adjacent to the Square Tower.

The scarp slope was formerly revetted throughout by a masonry wall that survives to a height of 7.8m to the west; the east half of the wall, and the surfaces it revetted, subsequently collapsed and the wall line is represented here by a lower, thin breeze-block wall of post-1960s construction.

The Retaining Wall lies parallel to and along the north (internal) face of the medieval curtain wall, the stump of which can be observed on the west side of the Square Tower, and is also visible as a vertical 'patch' on the east wall of the SW Tower. The South Curtain wall, then, like the Retaining Wall, was a full-height revetment of the slope; its removal/collapse was apparently more-or-less complete when the present retaining wall was built. The latter, however, was constructed over a period of time (see below, 4.1).

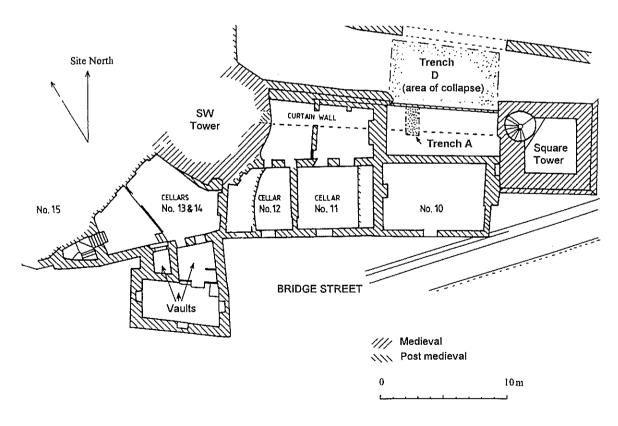


Fig. 10. Carmarthen Castle: area of 1993-5 archaeological work

The area of collapsed deposits behind the breeze-block wall was cleaned out and given vertical edges during the present scheme of works (Trench D), to provide a platform for a pile-driving rig (Plate 5). These cut edges provided a valuable opportunity to examine and record what was a deep sequence of deposits in this area of the bailey (see below, 4.4 and 4.5).

The breeze-block wall has now been replaced by a new retaining wall, adjoining - and sympathetic to - the surviving Retaining Wall.

4.1 The Retaining Wall (Fig. 11)

The surviving Retaining Wall is confined to the west half of the scarp slope. Fig. 11 shows that the wall was apparently built in stages, comprising a number of components added over a period of time, and that the medieval curtain must have gone in this area prior to its construction. The wall has an average thickness of only 0.4m, and is largely of Carboniferous Limestone rubble with areas of Old Red Sandstone.

Medieval activity

As part of the 1993 programme, Dyfed Archaeological Trust excavated a trial trench (Fig. 10, Trench A) behind No. 10 Bridge Street on the projected line of the medieval curtain (Crane, 1993, 13). The ground level as present represented the surface of the back yard of the property. The trench was 2m N-S, 1m E-W and 0.5m deep and featured a 0.18m thickness of chippings, beneath which lay 0.10m of possible garden soil, lying directly upon the fluvioglacial gravels. Either the base of the medieval wall was built at a slightly higher level, and the ground level later truncated, or the wall was constructed upon the gravels at this level but without a foundation trench. It has been observed in Sections 3.0 and 5.0 that much of the medieval work lacks foundations.

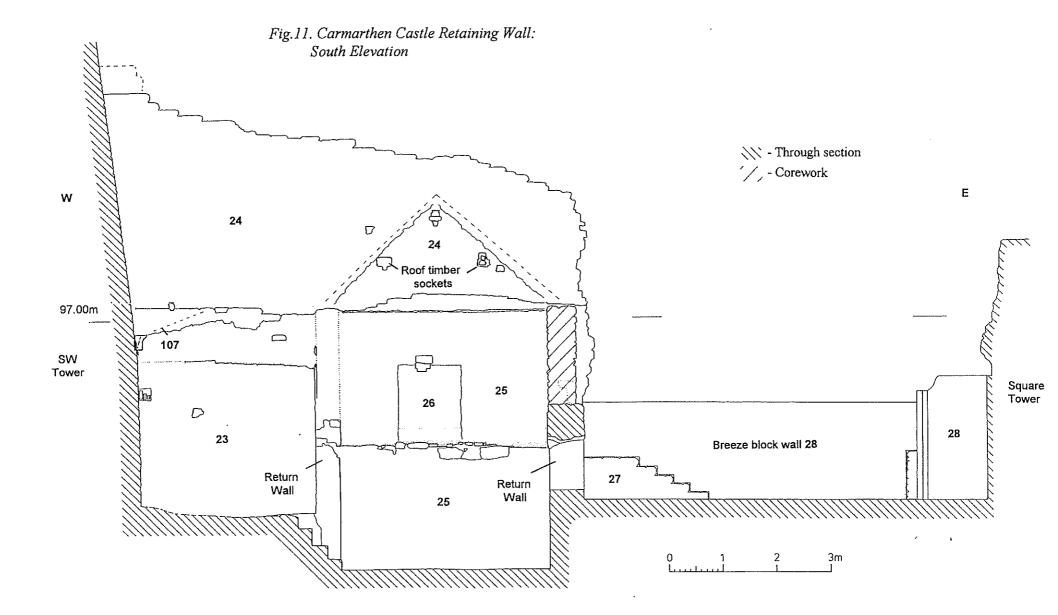
?18th century activity

The first element of the Retaining Wall to be built appears to have been the north gable end of a N-S building still standing as the rear wing of No. 11 Bridge Street until its demolition in 1993, [25] on Fig 11. This lies athwart the line of the medieval curtain, which thus cannot have been a standing feature when the wall was built. The Buck print of 1748 (Fig. 5) clearly shows properties in this location, and interestingly shows no indication of any retaining wall; the scarp slope, in fact, is depicted as a vertical cliff. It is quite feasible that the building is 18th century - if not earlier - in origin, but the exposed scarp slope section behind must have been very unstable. The side (N-S) walls of the building are more recent - 19th-20th centuries judging by their brick construction.

18th century activity - earlier

Probably not long after this building was established, it was linked to the SW Tower by a short stretch of wall [23] on a somewhat differing line and with an offset at eaves level, which until 1993 formed the north wall of the backyard building of No. 12 Bridge Street. This wall continues into the body of the SW Tower through an area partially breached when the medieval curtain wall was removed/collapsed; this was now modified as a wide entry into the tower below basement level with a matching stop to the south (see below, 5.2, and Fig. 19). Until 1995 this wall where it lay outside the tower carried a thick render finish (see below, 5.2). An offset below the present wall-top may indicate a secondary heightening.





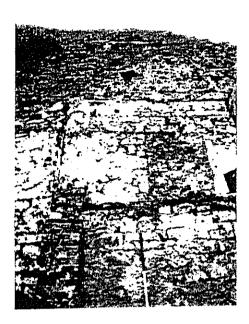


Plate 4. Carmarthen Castle
Retaining Wall:
Example of construction

18th century activity - later

Above [23] a third phase of walling [24] appears to be more-or-less of one build, though much repaired and rebuilt. It continues up to full height as the present revetment wall, and the crease of the rebuilt gable of the earlier wall [25] was visible within it, with sockets cut through for the purlins and ridge of its roof. Like the remainder of the walls 24 was constructed entirely of uncoursed Carboniferous Limestone rubble (with a very small percentage of Old Red Sandstone).

24 lies below, and thus predates, the skin-wall 'patch' (22 on Fig. 19) over the scar on the adjacent SW Tower left when the medieval curtain wall was removed/collapsed; it is thus regarded also as 18th century (see also below, 5.2).

The small area of masonry Retaining Wall, [27], that survived beneath breeze-block wall 28 to the E could not be fully characterised - it may however be broadly he same as 24.

19th century activity

r. -

A curious rectangular opening [26] at first floor level on wall 25 was blocked with brickwork, probably during the latter part of the 19th century judging by the character of the bricks. It does not appear to have been a fireplace and cannot have been a window. Its sill represents the level of the first floor itself, and features a substantial offset, where the wall below was (secondarily?) thickened.

20th century activity - later

Breeze-block wall 28 was unfinished and left bare, and represents an extension to the rear of No. 10 Bridge Street that was never completed. One jamb of a doorway was however constructed at the E end of the wall - this area has been discussed above, 3.2.

4.2 The Bailey Interior: Summary of the 1980 excavation and 1994 recording (Figs. 14 & 17)

The first controlled archaeological excavation of the castle site occurred in 1980 when Dyfed Archaeological Trust examined an area of the bailey interior immediately adjacent to the SW Tower (archive housed with Dyfed SMR, PRN 57). The excavations revealed several phases of substantial masonry walls, later truncated, respecting the line of the former west, rather than the south wall of the bailey. Walling material was almost entirely Old Red Sandstone with an average thickness of 1m. However, the excavation was not total; surfaces were retained in situ and the full sequence of deposits not exposed (see below, 4.4). The entire area was backfilled with material from the fill of the SW Tower during the 1994 programme of works, for protective purposes. The westernmost of the 1980 walls were re-exposed later in 1994 and their relationship to the Tower itself examined (Ludlow, 1994).

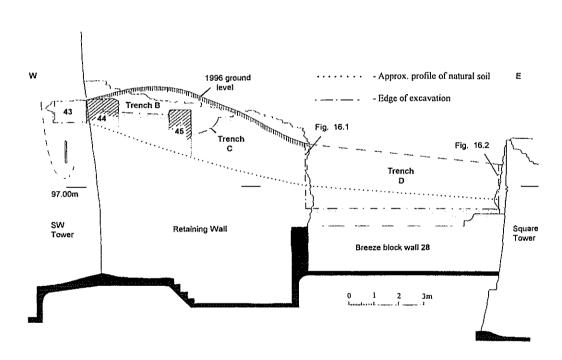


Fig. 12. Carmarthen Castle:

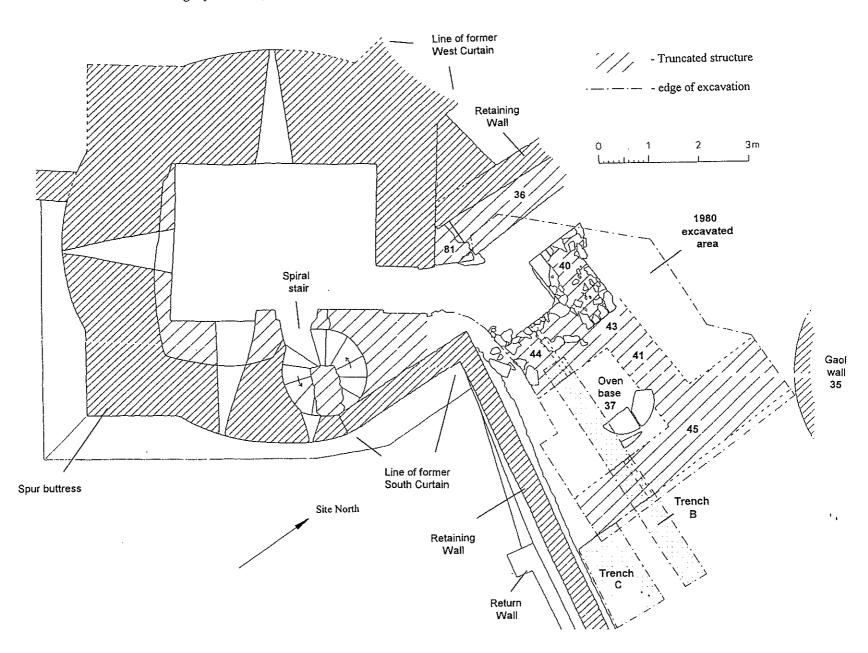
Profile of Retaining Wall and internal levels

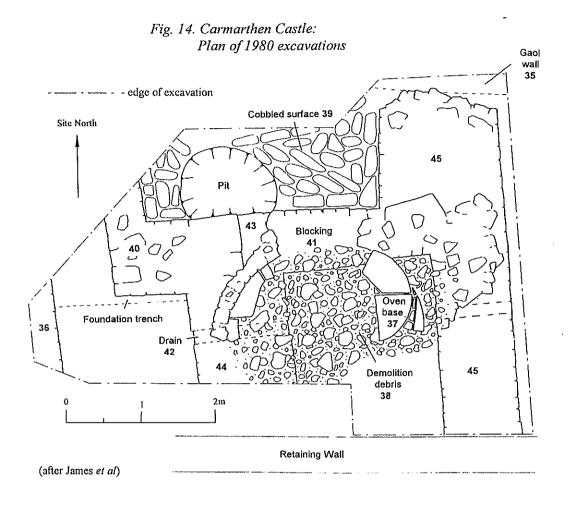
Medieval activity - earlier

Owing to the limited size of the area examined, it was not possible in 1980 to ascertain the relationships between the truncated walls and the overall topography and stratigraphy of the bailey area as a whole, nor their relationship with the now absent curtain wall. Some of these questions were resolved in 1994. However, the alignment of these walls respects the former West Curtain rather than the South Curtain wall.

The main medieval entrance to the SW Tower ground floor forms the west end of this area. The threshold of this entry survived in the form of flags which gave directly onto the natural gravels, within which they were set. No medieval occupation deposits survived above the gravels outside the tower.

Fig. 13. Carmarthen Castle, SW Tower: Plan at ground floor level showing adjacent bailey features





Two N-S walls crossed the excavated area, both presumably connected to the former South Curtain (see Fig. 14). The western of the two [44] terminated at an E-W wall [43] which in turn ran to the eastern N-S wall [45]. All appear to have been of one build; there was possibly a gap, or entry, within wall 43 between the two N-S walls which was subsequently blocked by material [41]. Walls 43 and 44 were cut directly through the natural gravels in deep construction trenches (unlike either the South Curtain wall or the towers). In the angle of the two walls lay a small area of remnant mortar floor bedding, at approximately the same level as the SW Tower ground floor.

The natural appeared to have sloped downhill away to the north and east, where a cobbled surface [39], cut by a later pit, lay north of wall 43 at more-or-less the same level as the natural. All these features were presumed to be medieval, of more-or-less the same phase as the construction of the SW Tower. A narrow, square drain [42] ran through wall 44 and in 1994 was seen to continue through wall 45; the drain may be a secondary insertion through these walls.

Medieval activity - later

Wall 43 appears to have already been (deliberately?) truncated prior to its west end being rebuilt as a quoin [40] with a return wall extending northwards for a short distance. A small square chamber is thus indicated which probably formed an antechamber to the tower, with an entry to the north along the West Curtain wall. The building so formed is secondary to the remainder of the walls and is here attributed to the later medieval period.

?18th century activity

All walls were sealed by a layer of (demolition?) rubble [38].

This rubble in turn lay below a large (bread?) oven from a later phase [37], comprising 2 very large rounded limestone blocks, each a quarter-segment in plan and up to 0.70m across. This was associated with an area of 'kerbing' to the west, continuing the arc of the circle and possibly the bedding for more stones. the whole had an external diameter of 2.5m. It appears to be as late as the 18th century (see below, 4.6).

There was unfortunately no surviving stratigraphy in 1994 between this area and the threshold of the SW Tower, all intervening deposits having been excavated in 1980. However, a sequence of post-occupation deposits forming a dateable succession from the 17th to the later 18th centuries were observed in the threshold area in 1994; these are described fully in section 5.3.

Against the exterior face of the east wall of the SW Tower was built a mass of masonry [81], demonstrably secondary. The western end of the excavated area was defined by a low (truncated) wall [36] which butted against, and was later than, 81. Like the southern Retaining Wall, 36 is a later replacement of the medieval curtain wall, the stump of which can be seen just to the west on the north face of the SW Tower. The exterior face of this wall lies within private properties an could not be examined. At the NE corner of the excavated area an arc of the construction trench fill [35] for the high, concentric wall that now forms the western side of County Hall car park was observed; the wall is thought to date from the 1780s and the establishment of the gaol.

4.3 The Bailey Interior: 1995-6 Trenches B & C (Fig. 15.)

In 1995 a trench measuring 5m E-W by 0.4m N-S (Trench B; see Fig. 13 for location) was hand-excavated by the contractors across the backfilled area of the bailey buildings in order to facilitate the laying of a pipe through medieval drainage channel 42. Trench B averaged 0.60m in depth but the section was considerably higher at its centre where the 1994 backfill formed a distinct hump over truncated wall [45]. However, much of the 1980 excavated evidence survived at lower levels and was confirmed.

Trench C was excavated against the east face of wall 45 to ascertain the depth of its footings, hard up against the Retaining Wall (see Fig. 13 for location). It was deeper than the levels reached during the 1980 excavations averaging 0.80m in depth. It largely occupied the 'hump' seen in Trench B and its upper levels displayed the same sequence.

Trench B (Fig. 15.1)

Rubble debris layer 38 was seen to lie up against and over the truncated remains of walls 44 and 45, but here was sealed by a dense mortar layer, [46], which appeared to be in situ and not 1994 backfill. That area of 38 that lay directly above wall 45 was represented by rather more organised rubble which had the appearance of walling material; perhaps 45 survived to a higher level here.

Debris 38 appears to have overlain a roughly level horizon and the remainder of the trench section was occupied by a fine yellow-brown loam, [49], rich in mortar, which despite possessing fewer coarse components than 38 also appeared to be a debris layer, or perhaps dumping - it contained much oyster shell.

The southern stone from oven-base 37 lay directly on the line of Trench B and was disturbed during excavation; it was stored for future use in situ. It was seen to bear a tooled socket on its lower surface, either for mounting or lifting, and rather like the sockets for lifting wedges seen on 18th-19th century quarry stones.

1995 backfill

W

46

48

48

49

40

49

60

41

41

42

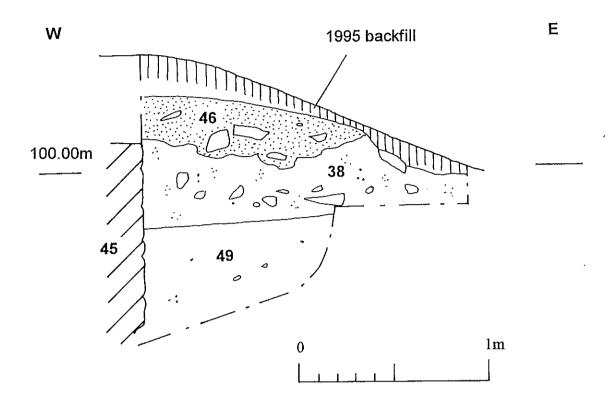
44

44

Fig. 15.1. Section of Trench B looking south

0 (m

Fig. 15.2. Section of Trench C looking north



Trench C (fig. 15.2)

Against the east face of wall 45 the trench was extended to a depth of 1.45m in an attempt to reach footings level. Indeed, layer 49 did appear to run under the wall in this limited area, but as it also lay against 45 a localised void may be indicated here. Wall 45, then, appears to have been constructed from a still lower level.

In this trench layer 49 was seen to contain 18th century bottle glass.

The absence of any deposit immediately behind the retaining wall proves it to have been built against an exposed face as a direct revetment.

4.4 The Bailey Interior: 1995-6 Trench D - West Section (Fig. 16.1)

In 1996 the sections of the collapsed area behind and to the north of breeze-block wall 28 were straightened, cut right back almost to the gaol wall/car park, and made vertical (Trench D; see Figs. 10 & 12 for location). This was to facilatate the entry of a drilling rig and allow construction of a new retaining wall extension.

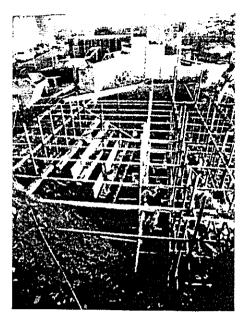


Plate 5. Carmarthen Castle: Area of Trench D with scaffolding, 1996

Trench D eventually formed a vertically sided area cut through the deposits behind the Retaining Wall measuring 7.5m E-W and extending north to the gaol wall. The east and west sections were cleaned and recorded to obtain a profile of the deposits through the transverse sections of the bailey interior thus provided.

The western section (Fig. 16.1) measured 3.7m N-S with an average depth of 2.6m. Its southern edge was formed by Retaining Wall component [24], which, with its uneven rear (north) face, appeared to have been built against all the deposits behind. However, if these deposits had been disturbed and redeposited through time then the relationships may not be absolute.

The natural profile

The natural horizon here is represented by a good buried soil horizon, nearly level N-S and at an average height of 97.00m, with some iron panning. This extends through 'A', 'B' and 'C' horizons to the bottom of the trench which lies at 96.10m. The natural here is represented by a gravelly boulder clay, which as elsewhere in the district will overlie the fluvio-glacial gravels.

An extensive sequence of deposits overlie the buried soil, up to 2m deep. Most of them appear to be dump layers rather than occupational horizons, and they follow a downhill slope to the north suggesting that they were deposited against a solid boundary to the south. Dating evidence was sparse. Much of the material, moreover, may be derived and it is not possible to fully interpret or provide a firm date for this activity.

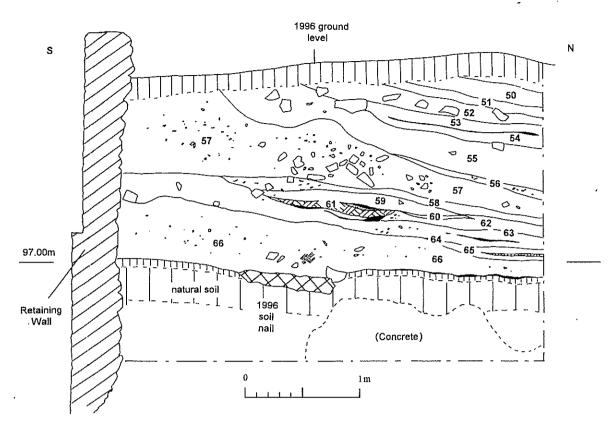
?Medieval activity

Immediately overlying the buried soil was stiff yellow-brown loamy clay, [66], the crest of which rose to the south. This deposit was disturbed by the intrusion of a soil-nail from the 1996 consolidation work on the Retaining Wall. It contained some burnt clay lenses and may represent bank material that might pre-date the construction of the masonry defences.

Above this lay a plethora of layers, variously containing organic material, burnt material and charcoal spreads, and mortar. These are very mixed and appear to be debris layers deived from elsewhere on site and deposited against clay 66 rather than *in situ* burning. Within one of the lower of these layers, [64], was a sherd of Roman tegula (roofing tile) which was undoubtedly derived from a much earlier deposit.

Above this group of layers lay a thick, mixed area, [57], containing redeposited fluvioglacial gravels and waterworn pebbles. This rises to the surface at the south end of the section where it is truncated; the nature of the deposit suggests that it may be upcast from excavation elsewhere on the site, piled against a higher feature than the present Retaining Wall - possibly the medieval Curtain Wall when it was still standing. The layer therefore may be medieval.

Fig. 16.1. West section of Trench D



?Post-medieval activity

The sequence of layers above 57 drop steeply towards the north and represent a similar succession to the burnt etc layers below it. Despite the fact that one of these layers, [55], contained a small sherd of tegula it may be that at least some are post-medieval - however, indications are that they too were piled against a higher feature than the present Retaining Wall. All are sealed by the present ?dump topsoil horizon.

4.5 The Bailey Interior: 1995-6 Trench D - East Section (Fig. 16.2)

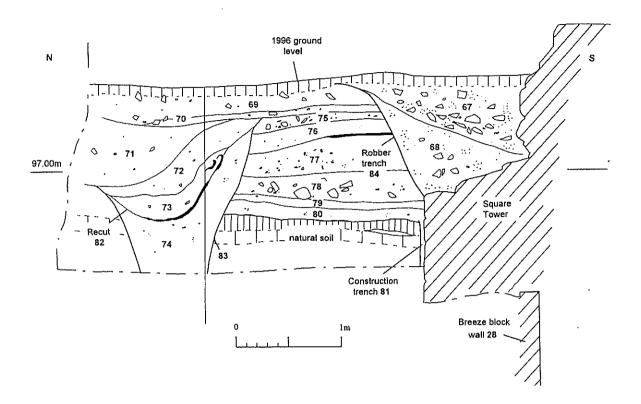
The east section (Fig. 16.2) measured 4.2m N-S at its longest with an average depth of 1.8m, lower than the west section due to the falling surface ground level at this point. Deposits in this section ran up against the rear (north) face of the Square Tower, the exposure affording a valuable opportunity to examine the line of the original north wall of the Tower and its relationship to the stratigraphy within the bailey.

The sequence was rather unlike that seen in the west section. Horizons were level from N-S, and there were a number of intrusive features.

The natural profile

The buried soil occurs at an average height of 96.10m, like the west section level from N-S but 0.90m lower, reflecting the natural downhill slope from west to east. The composition of the natural is as in the west section but a small area of leached clay occurs between the 'A' and 'B' horizons.

Fig. 16.2. East section of Trench D



?Medieval activity

The construction trench, [81], for the Square Tower medieval north (rear) wall appeared to be cut directly through the natural. A very narrow feature of some 0.02m it was filled by a mortar rich soil. The construction of this Tower appears rather lower down in the sequence than might have been thought, as stylistically the Tower is a far from primary feature (and *cf.* the deep ?earlier sequence in the west section).

Above construction trench 81 were what appear to be two occupational horizons, [79] and [80], of a somewhat soily character. The lower, 80, was somewhat gleyed while 79 showed much charcoal flecking.

Layers [77] and [78] above were thick deposits similar in nature to the possible upcast 57 in the west section and probably occupying the same horizon. 78 in particular slopes downhill to the north as if piled against the tower.

Two thin layers of indeterminate nature lie above 77. They are cut by a deep feature, [83], which is narrow in this section and not bottomed, and appears to have been successively recut through a period of time. The primary fill, [74], is a yellow-brown clay loam with cream mortar debris and much mussel shell, of a marked medieval character. A recut possibly intervened before a layer of charcoal with a U-shaped profile was deposited, and two areas of fill similar to 74.

?Post-medieval activity

Feature 83 was recut to a wider and shallower profile, [82]; its fill is a darker grey brown with Old Red Sandstone fragments and generally early post-medieval in character - although precise dating is not possible.

The entire section is sealed by [70], a layer of black soil containing brick fragments and 19th century pottery, overlain by a similar layer, [69].

69 is cut by a robber trench, [84], which slopes down to the rear face of the now truncated north wall of the Square Tower. The evidence from the fills of the trench is inconclusive, mainly comprising mortar and building debris, but the trench is demonstrably 19th century or later. It is probable that the robbing relates to the occasion when this north wall was partially removed, and a new narrow north wall and 'caphouse', [85], constructed on the summit of the remaining section. 85 has been described above, 3.2, and there ascribed to the same date as the laying of the concrete raft over the Square Tower vault, ie the 1960s. However no features associated with 85 were cut by this section.

4.6 Conclusion

It is evident from the above that the SW corner of the bailey (the Inner Ward) was a highly developed area of the castle. The thickness of the interior walls suggests that the buildings located here were of a fairly lofty nature, both physically and in terms of status. It is unfortunate that due to the loss of the Southern Curtain the relationship between the two cannot now be established.

The buildings appear to confined to a deliberately terraced area adjacent to the SW Tower, retained by wall 45 (see Fig. 12), beneath which the natural soil slopes downhill to the east. All deposits lying against the east face of 45 are post-medieval the lowest contains 18th century bottle glass. East of wall 45 the natural downhill slope continues to the Square Tower and in this area, likewise, at least half of the considerable depth of deposits appear post-medieval in character. This means that they, too, probably slope downhill to the east.

The construction trench for the Square Tower rear wall appears to directly cut the natural. This is unexpected in view of the stylistically late date for the tower - 14th-15th century. Possibly earlier deposits were present here, but were truncated prior to the construction of the tower - possible bank material associated with the timber phase was observed to the west {layer 66}.

This eastern area lacks evidence for any masonry bailey buildings. The deposits, moreover, largely lacked any dateable material, and indeed may be largely derived. Debris layers from any period of the site's history would yend to be shifted to its periphery. Moreover, the remainder of deposits in this area appear to be banked against an upstanding feature to the south. Medieval deposits doubtless relate to the South Curtain; must the post-medieval deposits then relate to a period after the Retaining Wall had been constructed to its present height?

The truncated walls of the bailey buildings lie beneath the same material that contained the 18th century bottle glass which, like much of the debris/dump material in this part of the castle may be associated with the construction of the gaol in the 1780s. It is upon this material that the oven was constructed and the tooling on one of the stones confirms its late date. It too may be associated with the earlier years of the gaol.

The Retaining Wall wall be discussed further below, 5.0, in relation to the SW Tower.

5.0 THE SOUTH-WEST TOWER

The demolition of Nos. 10-14 Bridge Street in 1993 revealed the lower half of the exterior of the SW Tower (Crane, 1994, 10), only the upper levels of which had previously been visible. It was thought at the time that the tower may have contained an unconsolidated earth fill, to bailey level, and it was decided by the then DCC to empty the fill. The 1994 scheme duly 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 cap was removed, and a 19th century surface was discovered below. A medieval vaulted basement lay below this, and extensive later cellarage undermining the tower.

In this section the evidence from the 1994 watching brief (Ludlow, 1994) has been treated together with that from the 1995-6 recording.

5.1 General description

The SW Tower as it survives today is a three storey cylindrical corner tower, rising 12.5m 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 8.5m square, which dies away into the curved outer face as two spurs to the west and south. The external diameter (NW-SE) above the spurs is 7.9m. The tower walls have an average thickness of 2m above the plinth. 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 South 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 tower basement survives; those over the ground and first floors are weathered back (deliberately?) 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 a fireplace now remains. The medieval work is characteristic of the late 13th/earlier 14th centuries.

The two upper stages of the tower are incomplete, the entire NE wall having collapsed or been destroyed, only the lower courses surviving. 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 east. This represents a repair, finishing the tower face, where the total collapse of the medieval South Curtain wall left a ragged and unstable scar.

It is not possible to determine whether an additional storey lay above the first floor. The arrangement of openings seen in the Buck print of 1740 (Fig. 4) is as today, meaning that the internal arrangements were as today by the 18th century at least. It is probable that no additional stage was constructed and that above the first floor lay the parapet. The lowest stage lies on the external ground level, but is at basement level from the interior of the castle and will be hereafter termed the basement. Some of the full width openings show a vertical joint in their splays; however it is likely that the square floor plan is primary and not inserted into a cylindrical space.

The basement was a vaulted chamber. In the medieval period it was entered via a doorway from the newel stair in the SE wall, and lit by loop with a deep plunging embrasure in the SW wall. The floor sloped down from NE - SW but has now gone, undermined by at least two phases of post-medieval cellarage that were broken through into the tower, below basement floor level, from the adjoining property to the east, No. 12 Bridge Street.

The ground floor lies at bailey level. The chamber has lost its vault. The floor was of rubble flags. The main entry from the bailey into the tower was on this floor via a doorway in the NE wall, and there was a second entry onto this floor from the newel stair. The chamber was lit by three loops; there may have been a fourth in the collapsed NE wall. This level was modified in the late 19th century when a new floor level was established halfway up the medieval chamber and the walls cut back to form a chamber one third as big again as the old. To accompany the insertion of this higher floor, the former vault was cut right back to its springers on the NW wall.

The first floor may always have housed a larger chamber, a recess on the south wall possibly having occupied the whole length of the wall. The chamber has again lost its vault. It was entered via a doorway from the newel stair. There were formerly three lights of varying form. The remains of a mortar roof crease can be seen on the SW wall interior which represents the roof of the late 19th century ground floor chamber.

The high south wall of No. 15 Bridge Stret joins the SW face of the tower at right angles. It had previously been thought to represent the medieval town wall. Although an 18th century construction (Crane, 1994, 10) it may closely follow the line of the medieval wall. To the north of the wall lie private properties, meaning that the exterior of the northern half of the tower was inaccessible.

Prior to the present sceme of consolidation, much evidence survived on the tower exterior for the various phases of finishes and the buildings that formerly lay against it. Apart from the cellars that effectively undermined the tower, these later features were largely superficial.

5.2 The basement (Figs. 17, 18 & 19)

The demolition of Nos. 12, 13 & 14 Bridge Street in 1993 revealed the exterior of the lower stages of the tower - including the spurs - for the first time in many years, while the reopening of the newel stair shaft from the first floor (see below, 5.3), and the removal of the blocking of a doorway into the basement from the adjacent No. 12 Bridge Street permitted examination of the interior.

Medieval activity

The major part of this stage of the tower lies within the plinth for the spur buttresses and externally it is therefore square in plan. The SE face running straight back to the line of the former South Curtain wall, the curved extension wall to the Retaining Wall being later (see below). A similar situation

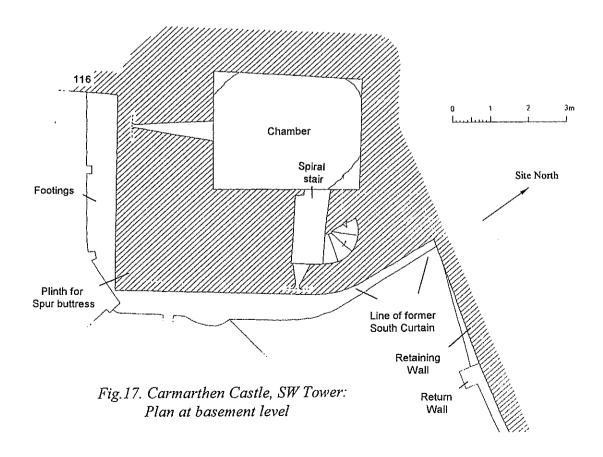


Plate 6. Carmarthen Castle
SW Tower:
Example of construction

presumably prevailed on the NW face but this area was not accessible. At a level approximately midway up this stage, the curved tower walls rise out of the battered spur plinth in the middle of the exterior wall faces.

Facework is all in largish limestone and sandstone rubble, very roughly squared and coursed, with large squared quoins on the plinth and spurs (Figs. 25 & 27). It is unlikely that any of the visible mortars are medieval; this stage the tower has been successively repointed where it has formed the walls of adjoining post-medieval properties.

The medieval basement chamber measured 3m by 4m (Figs. 26, 28, 29 & 30). The apex of the segmental vault averages 3m from the former medieval floor level. It was entered via a square-headed doorway with a weatehered, undressed surround, from the spiral stair in the south wall. The stair shaft was lit by a plain splayed loop to the exterior, the chamber itself being lit by sloping loop with a deep plunging embrasure in the east wall. 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 SE elevation (Fig. 26).

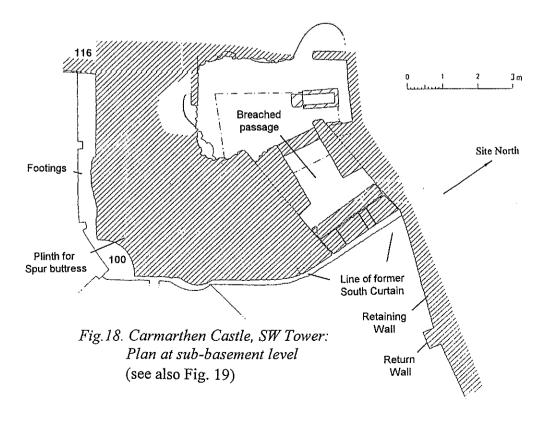


It can be seen that the floor sloped downhill towards the west. The slope was not the same throughout the chamber; whilst the NW internal elevation displays a consistent downhill slope (Fig. 29) the SE elevation carries a horizontal line of mortar which stops short of, and 0.5m below, the newel stair doorway (fig. 26). Steps must have been present here, presumably dying into the slope to the NW. A lime deposit now covers the internal walls which, in part at least, appears to be derived from a limewash finish - which may however be late. The basement chamber itself remained unaltered during later centuries.

The later undermining of the SW Tower during the post-medieval period has exposed the area beneath the tower walls, enabling the bases of its walls to be observed. The tower was constructed directly upon the natural gravels with shallow footings on the SW side (at 95.50m), and no footings at all to the NE (at 96.70m). 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 NE half of the internal elevation of the north and south basement walls (Figs. 26 & 29). The slope profile can also be seen at a lower level in the south wall of the main later breach as the 'springer' for the 'half-arch' which carried the base of the wall uphill towards the north, although this area has been much altered (Fig. 24.2). The level is lower here due to the fact that the ditch that formed the western limit of the castle ran out at the SW corner.

Wall bases/footings emerge at a lower level externally, 92.50m to the SW rising to 93.50m to the SE. This is due to, and reflects, the natural slope.

The high wall, [116], leading at right angles away from the SW face of the tower and forming the south wall of No. 15 Bridge Street had previously been thought to be medieval in origin and represent the town wall built in 1233 (Figs. 13, 17, 18). It is in fact 18th century work but may closely follow the line of the wall, the town wall predates the construction of the SW Tower, which would have been inserted through the wall.



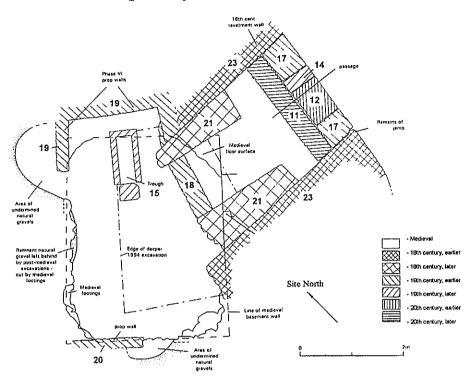


Fig.19. Carmarthen Castle, SW Tower: Plan at subbasement level showing internal features

18th century activity - earlier (Figs. 18-20)

The earliest breach into the basement of the SW Tower from No. 12 Bridge Street is a very wide (2.1m) passageway running E-W through the east wall, of uncertain height - the bottom was not fully excavated but the opening was at least 3m high (Fig. 20). The breach is on the line of the medieval South Curtain proving it to have already been gone.

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 Fig. 20). The sides of the passage

are lined with a limestone rubble revetment, [23], now obscured by plaster, the northern lining being in fact a continuation of part of the main Revetment Wall (see above, 4.1; also Fig 11).

Externally the opening of the breach has been much altered (Fig. 25) but the remains of southern lining 23 emerge to the east as a block of masonry whose southern edge reflects the sloping batter of the medieval curtain wall; this masonry, then, provided a plug for the void left by the collapse of the curtain.

Any evidence for the form that the breach took on entering the body of the tower has been lost through later disturbance. However, it extended into the body of the tower - the southern part of 23 can be seen on the SE wall (Fig. 26) - and thus it was this breach that was responsible for undermining the medieval floor.

18th century activity - later (Figs. 18-20)

Later 18th century work is represented in the basement by a constriction of the western half of the passage by two areas of masonry, [21], forming a smaller opening (Figs. 19, 20). The construction is of well-coursed thin limestone rubble slabs and the northern area can be seen to but 23. To the same phase broadly belongs the the 'skin' wall, [22], that ascends the NE face of the tower over the scar left by the collapse of the medieval curtain; it overlies 23 at ground floor level (see below, 5.3; also Figs. 11, 25, 26).

The two above phases of work have been assigned an 18th century date, based on the standing evidence and excavated evidence from the ground floor (see above, 5.3). One or the other phase is probably contemporaneous with the rebuilding of the gaol 1789-1792.

Ε

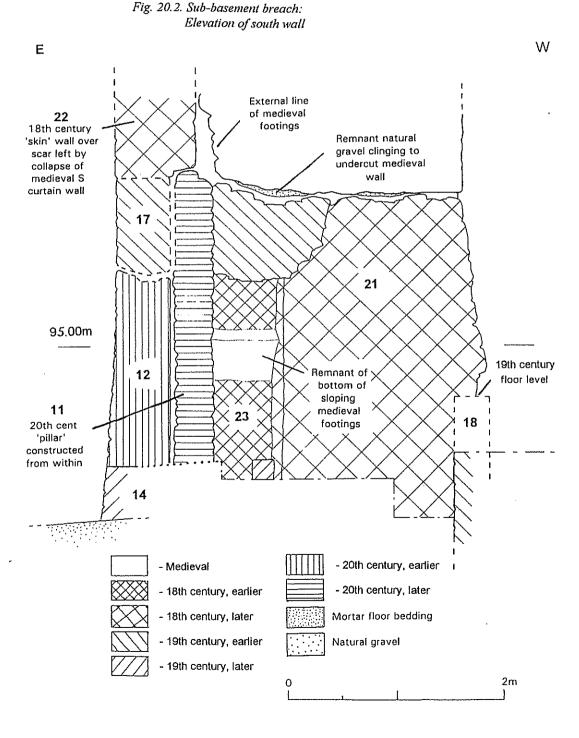
W 22 18th century Newel stair 'skin' wall over door jamb scar left by Medieval collapse of Remnant natural floor surface medieval S gravel clinging to curtain wall undercut medieval floor and wall External line of medieval footings Foot of medieval walls Natural gravel beyond 18th cent revetment 21 95.00m 11 20th cent 19th century floor level 'pillar' constructed 18 from within 14 - 20th century, earlier - Medieval - 18th century, earlier - 20th century, later - 18th century, later Mortar floor bedding - 19th century, earlier Natural gravel - 19th century, later 2m

Fig. 20.1. Sub-basement breach: Elevation of north wall

19th century activity - earlier (Figs. 18-20)

The area as excavated in 1994 demonstrated the situation as it existed by the 19th century. The entire basement, by now at least, was undermined, a situation that extended even beneath the tower walls. As a result thin masonry prop walls, [19] and [20], were inserted beneath the medieval walls (Figs. 19, 29, 30). A low revetment wall, [18], was built along the opening of the sub-basement chamber, its summit dictating the floor level (Figs. 9, 20). Curiously, the floor inside is natural gravel, while to the east of 18 the overburden still descended.

The exterior opening of the passage was made smaller with the insertion, [17], of a masonry wall and doorway (Figs. 19, 20, 25) which ascended as a repair of 'skin' wall 22.



51

No. 10 Bridge Street, adjacent to the Square Tower, was broadly assigned to this general period (see above, 3.3). The general form of the property, ie the dwelling fronting Bridge Street and the yard to the rear, is reflected in No. 12 which adjoins the SE face of the SW Tower (Fig. 10). Their backyards are in fact on the same level, while No. 12 had a cellar which had been backfilled in 1993; the latter's north wall also thus revets the backyard, which lies 1.20m above. The stump of the west wall of No. 12, [98], survived demolition and was seen on the SE corner of the tower (Figs 10, 25). It was of soft red brick in a yellow-brown mortar. Beneath the ground floor survives a vaulted cellar; this does not infringe on the SW Tower but was anyway infilled in 1995. The old, yellow-brown mortar seen elsewhere on the tower exterior may date from this period.

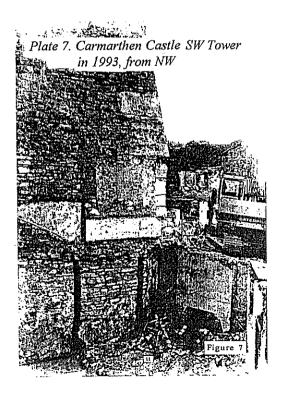
To this general phase also belong Nos. 13 & 14 Bridge Street and the second undermining of the medieval tower, this time from the SW. This had been infilled by 1995 but was photographically recorded and described by Crane, 1994 (Plate 6). Beneath No. 13, the NW wall of its cellar was inserted directly beneath the SW footings of the tower, the outer edge of the footings having been supported on two timber uprights prior to the wall infill having been laid down. Above the level of this cellar wall (not shown in Fig. 27) are the uneven faced tower footings, here and there patched with brick, [99]. This is associated with a brittle lime mortar seen elsewhere on both exposed faces of the tower and may be rather later than brickwork 98.

The high south wall of No. 15 Bridge Street, [116], butting the SW face of Tower (Figs. 13, 17, 18), is probably broadly contemporary (Crane, 1994, 10).

19th century activity - later (Figs. 18-20)

Doorway 17 through the SE wall of the tower was itself later constricted when a higher sill and northern jamb, [14], all in brick, were inserted into the opening (Figs. 19, 20, 25). Similar bricks were used in the trough, [15], which was let into the sub-basement floor (Figs. 19, 30). Broadly contemporary may be the repairs, [16], to the prop walls beneath the tower footings (Fig. 29).

This phase can be broadly attributed to the later 19th century. So can the removal of that part of the spur quoin lying within No. 13 Bridge Street at this level, and the insertion of a curving-backed recess, [100], finished with hard lime mortar (Figs. 18, 25, 27; Plate 7). The recess appears to have enabled a door to swing back from an entry through wall 98 from No. 12. It was infilled with distinct masonry in 1996 to indicate new work and left 'hungry'.



Further structural history of No. 13 Bridge Street is displayed on the SW face (Fig. 27). A straight horizontal line marks the base of a rendered area, also defined by iron hooks; this clearly defines a former first floor level, not mirrored in No. 12, and respects the head of 100. Just below the line, part of a weathered jamb, [101], defined in plaster, was present. 3.4m above the base of the render was a line of slates, [103], with a slight northerly downhill slope. This was located 1.2m below the recent roof crease and may represent a former roof line; a more recent lime mortar occurred above this level.

A similar mortar jamb, [104], occurred on the SE face at a higher level, beyond the north wall of the main block of No. 12 and therefore belongs to the former backyard building.

20th century activity - earlier (Figs. 18-20)

The doorway leading into eastern breach was finally blocked, [12], with uncoursed mixed masonry and some brick (figs. 19, 20 and 25). This blocking was removed in 1994 to gain access to the basement. The adjacent backyard building to the rear of no. 12 Bridge Street was given a pitch-roof, [107], which stopped well north of the rear wall of No. 12 itself, and was slightly pitched against the Retaining Wall (Fig. 11); its crease could be seen to overlie blocking 12. Area of Retaining Wall [23] probably recieved its render (now gone) at this time (see above, 4.1).

From this period onwards the only access to the basement was via the spiral stairwell. It will be demonstrated below, 5.3, that this remained open until the 1950s. During the intervening period, a vast amount of unstratified earth spoil entered the basement via the spiral stair shaft, most of it presumably deliberately tipped. This unconsolidated fill yielded a quantity of finds, including a number of miniature promotional bricks manufactured in Carmarthen.

Possibly during this period Nos. 12 and 13 were given a continuous roof line, [106]. This is represented by a horizontal cement crease on the SW face of the tower (Fig. 27), which then slopes down the SE face (Fig. 25). This roof line may or may not be associated with a very thick area of cement render over the summit of the southern spur buttress, [110], with a line of lead flashing at its base which lies 1.20m above 106 (Fig. 27; removed prior to record of SE face so not shown in Fig. 25).

The plastered render finishes that survived on the lower courses of the SW face until 1993 (Plate 6) may be attributed to this phase.

20th century activity - later (Figs. 18-20)

At some point prior to the final closure of the spiral stair shaft (see below, 5.3) a roughly constructed masonry and cement prop wall [11] was constructed against the inside face of 12, apparently to support the medieval and later walls above (Figs. 19, 20); it has the appearance of emergency work brought on by concern over the stability of the tower. The general instability was, until 1995, demonstrated by the vertical crack running the full height of the NE and SW walls.

There are a number of cement plugs and patches in the external walls; some of these may represent medieval 'putlog' holes.

The entire SE external face of the tower was effectively rendered with brittle cement, [105], possibly during the 1950s considering that much work was performed elsewhere in the tower at this date (Fig. 25). It was very poor quality and removed in 1995. It respects the north wall of No. 12 and its roof crease 106, and also former crease 107.

Emergency underpinning of the SE wall in 1993, [102], is shown in Fig. 25.

5.3 The ground floor

In 1994 a concrete cap extended right across the ground floor chamber, sloping down gently towards the NE. It terminated at the open NE side where a 0.5m vertical drop along the line of the remaining courses of the tower NE wall gave onto the former bailey. Ground level within the bailey represented the top of the backfill of the 1980 excavations.

The medieval floor level was modified in the late 19th century when, after much dumping of building debris had taken place, a new floor was established halfway up the medieval chamber. The new floor area was one third as big again as the old; the south wall, and to a lesser extent the west wall were cut back, while the upper halves of the window openings, which rose above the floor, were walled up.

Medieval activity (Figs. 13 & 21)

Arrangements n the ground floor were similar to those in the basement. A rectangular vaulted chamber, 3m by 4m, was entered from the bailey through a doorway at the SE end of the NE wall, the truncated northern jamb of which survives. The NE wall itself is in very poor preservation, standing only 3.2m high at the north end descending to 0.9m at the doorway (Figs. 21, 30).

The eastern third of of the SE wall is also truncated, and the door jamb lost; this is the area of the point of attachment of the South Curtain wall whose collapse/demolition brought the adjacent tower wall, through its full height, down as well. The truncated section represents the top of the surviving medieval fabric here (Figs. 8, 26).

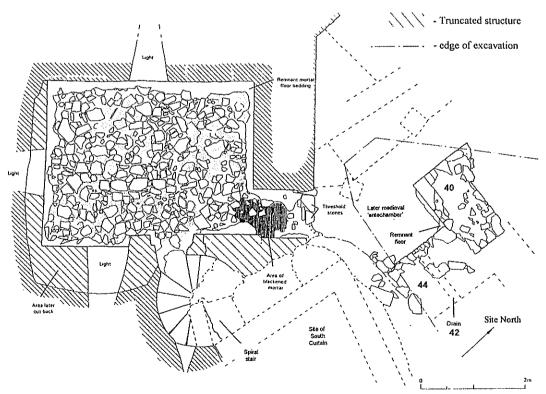


Fig.21. Carmarthen Castle, SW Tower: Plan at ground floor level showing internal features (medieval)

The western two-thirds of the SE wall have fared rather better, surviving to first floor level (Figs. 13, 25, 26). The spiral stair remains complete to ground floor level, and the western half of its shaft survives above (Figs. 8, 26). A shallow-splayed loop that lit the stair at this level survives complete, while a second one is only partial. The chamber was entered from the stair through a doorway whose truncated jambs remain (Fig. 26), but the head is now gone. The western jamb was processed into the chamber 0.30m and continued up the wall face as a pilaster; this was later truncated. To the west of the doorway the chamber was lit by a deep, narrow-splayed loop with a square, lintel head; like the wall itself this was altered in the 19th century (figs. 13, 25, 26).

The SW and NW walls both also stand to first floor height and are lit by similar loops (Figs. 13, 27, 28, 29). The chamber, like the basement, was 3m high to the apex of the (also segmental?) barrel-vault. Where the springers survive, on the NW wall, they appear to lie on a rough rebate (Fig. 29). No dressed stone survives on this floor, and there is no evidence for any fireplace. The remains of the limewash finish are probably later.

The chamber was floored at original bailey ground level, with angular, medium-large sized limestone flags over the basement vault below. A line of larger stones running down the long axis of the floor may represent the keystones at the apex of the vault; a hollow at the SW 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. 21). The mortar bedding ran out at the entry onto the spiral stair.

At the NE doorway the flags gave directly onto the natural gravels, within which they were set. No medieval occupation deposits survived above the gravels outside the tower. Two large angular pieces of Old Red Sandstone were found lying low down in a post-medieval layer, [10], immediately next to the door jamb, and may represent the disturbed threshold (Figs. 21, 26). 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.

17th - 18th century activity (Figs. 13, 21 & 26)

Lying above and within the flagged medieval tower floor was a thin silty organic deposit [9] suggesting that the tower was now roofless and vaultless (Fig. 22.1). Dateable finds within were of the 17th-18th centuries.

In the area of the NE doorway a layer of dark, mixed material, [10], lay above 9 (Fig. 26). 10 occupied a horizon 0.1m above the medieval tower floor, and had been trampled to a compact 'surface'. It contained a quantity of animal bone and clay pipe stems of 18th century date. 9 and 10 are here regarded as both pre-gaol. Unfortunately the extent of these layers east of the tower, and their relationship to eg oven 37, could not be ascertained due to the previous excavation of this area in 1980.

18th century activity-later (Figs. 13, 21 & 26)

Lying over 10 was an area of building debris [8], a plethora of small dumps, centering on the north corner of the chamber and trending down to the west and SE (Figs. 22.1, 26). 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 NE wall of the tower demonstrating that it was by this time at least, destroyed. Built partly upon 8 was Retaining Wall component 24 (Fig. 26). 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 over the scar of the South Curtain. 8 and 24 are here regarded as fairly contemporary.

19th century activity

Late re-use of the SW Tower is demonstrated by the introduction of new floor surfaces, [3] and [4], within the ground floor chamber but at a higher level. In preparation the top of the spiral stairwell, which had been previously partially blocked, was enclosed within three low poorly constructed walls [6] to form a 'manhole' (Fig. 22.1). 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.

Partial blocking of stairwell

Partial blocking of stairwell

- Medieval

- 18th century, earlier

- 19th century, later

Fig. 22.1. Carmarthen Castle, SW Tower, ground floor:

Late 19th century walls above spiral stairwell

In addition, in order to enlarge the floor area a 0.9m thick section of the internal face of the SE wall was cut back, and a 0.3m section of the SW wall (Figs. 13, 26, 28). The surfaces were laid upon the truncated masonry, while the upper half of the window embrasures, which rose above floor level, were walled off, [108] and [109]; the NW blocking collapsed in 1994 and is not shown in Fig. 29. A dividing wall [5] was then constructed (fig. 22.2) prior to the laying of 3 and 4.5 was laid directly upon 7, without footings, and was just 0.5m thick, but it may have risen the full height of the tower; a threshold is present. It was later truncated; the remaining section was of mortared limestone and sandstone, with a brick sill at the threshold. A cement-lined drain was later inserted through the wall.

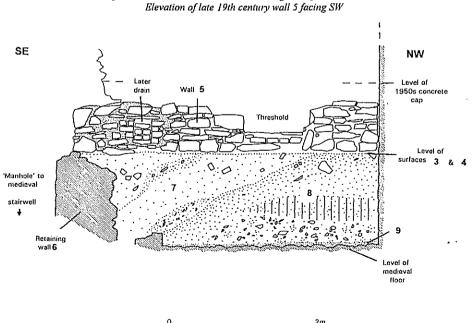


Fig. 22.2. Carmarthen Castle, SW Tower, ground floor:

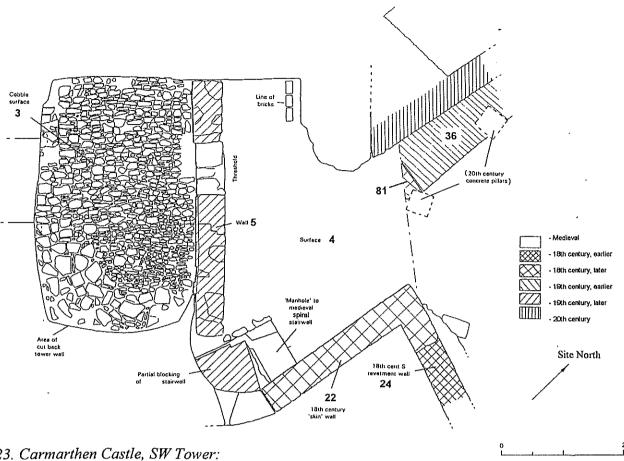


Fig. 23. Carmarthen Castle, SW Tower:
Plan at ground floor level showing
internal features (19th century)

Surface 3 was a cobble floor in the SW half of the chamber, 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 NE, over and around the already truncated lower courses of the tower NE wall, terminating at the edge of the 1980 excavation within which it had been removed (fig. 23). To the SE a corrugated iron sheet, resting on two iron bars, lay on the surface of 4. It sealed off the manhole formed by walls 6 leading the spiral stairwell to the basement. The top of the shaft was rebated to recieve a cover; part of a thick slate slab lying nearby may represent a corner of this cover.

It has been noted above that the tower was roofless by the late 18th century. the intervening vaulted floors may have also collapsed. At any rate, the vault was now finished smoothly flush with the new face of the SE wall (Fig. 26), and more roughly hacked back to its springers on the NW wall (Fig. 29), to accompany the insertion of this higher floor. The chamber thus formed was roofed at a higher level (see below, 5.4). The SE and SW walls recieved render finishes, while the NW wall appears to have been left rough. However, it would appear that the weathering of all walls to their present condition must post-date this 19th century adaptation.

The dating evidence for the contexts beneath 3 and 4 indicates a late 19th century date for the establishment of these surfaces and there appears to have been no earlier 19th century activity within the ground floor chamber. 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.

20th century - later

The initial removal of the concrete cap revealed a 0.5-0.7m thick layer of dump material and build-up,[2], of a very mixed nature, lying over features 3, 4 and 5. The prevailing organic nature of areas of this layer confirm its incidental accumulation during the 20th century. Contained within was a car registration number plate of 1950s date; layer 2 (and the concrete) can therefore not have been deposited before the 1950s. This date terminates activity in the basement (see above, 5.2).

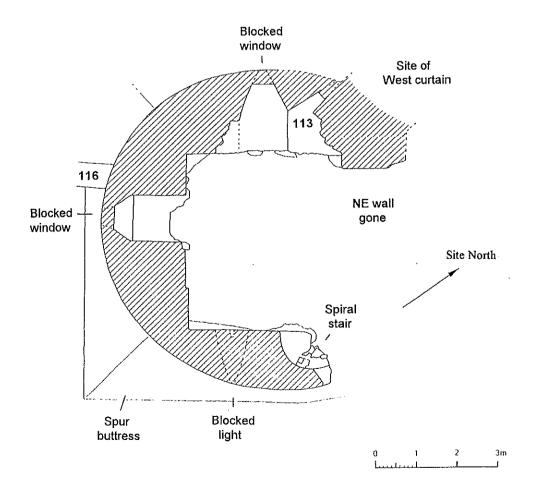
5.4 The first floor

Medieval activity (Fig. 24)

The first floor chamber is similar to those on the ground floor and basement. Its long walls display the remains of a barrel vault which indicate that the chamber was also 3m high. The SW wall displays internally the sockets, [111], that held the formers for the shuttering during the construction of the vault (Fig. 28).

A vertical offset in ashlar, [112], undoubtedly medieval, can seen on the SW wall, demarcating a recess 0.6m deep that may have occupied the whole length of the SE wall (Fig. 28). The offset is squinched over at vault level. If continuous, the recess would make the chamber 25% larger than those below.

Fig.24. Carmarthen Castle, SW Tower: Plan at first floor level



The chamber was entered through the SE wall via a doorway from the spiral stair, which displays the remains of a shallow-splayed light (Fig 26). The possibility exists that a second doorway in the NE wall may have given onto an external timber stair down to bailey level. The light in the SE wall was later blocked with sandstone rubble and brick (see below); it was a narrow splayed loop, but the SW wall is pierced by the fine segmental rear-arched embrasure, which descends to floor level, of a large square-headed window (Fig. 28). The voussoirs have partially weathered, as has the sill, but it appears that window seats may have been present and later altered. The stop of the southern reveal is a proud ashlar surround, [113], which corresponds to offset 112 to the south and would have formed a smaller recess in this wall. The light was later blocked (see below).

The NW window is a curious double-light structure now unfortunately much weathered (Fig. 29). The embrasure is very similar to that in the SW wall but now without evidence for window seats, and featured a square-headed light of compararable size, also blocked. However, the eastern splay gives onto a very narrow loop, [113], at right-angles to the splay; it appears to be deliberately located to enfilade the West Curtain wall (Fig. 24, 29).

There is no evidence for any fireplace at this level.

The level of the fourth stage of the tower is preserved on the SW wall where the sill and jambs of an embrasure, [115], can be seen (Figs. 26, 28, 29). Their presence may indicate a window embrasure like the one below, in which case a second floor is indicated. Alternately, they may represent an embrasure associated with a loop through a crenellated parapet.

19th century - later (Figs. 26, 28 & 29)

The remains of both slopes of a low pitched mortar roof crease, [114], can be seen halfway up the SW wall and extending into the embrasure (Figs. 26, 28, 29). They clearly represent the roof, established below the collapsed vault, over the late 19th century floor inserted into the ground floor chamber. The crease forms a low-pitched gable.

The new roof-line overlies the SE and NW embrasures, which were blocked. The SW light was also blocked. The blocking appears to be no earlier than the later 19th century.

There is no evidence that this 19th century chamber contained more than one floor.

20th century - later

The exterior of this stage of the tower was subject to emergency repointing in early 1995. The 1995-6 repointing has been blended into it at the edges.

5.5 Conclusion

Carmarthen Castle SW Tower represents a stucture that has undergone considerable and changing use almost continuously since the medieval period. Like the Square Tower, medieval work appears to be of a single phase with no indication of late medieval alterations. The basement was re-used but not in its intended form, as a cellar from the 18th century onwards, but it was not until the 19th century and the expansion of the gaol that the above ground levels were re-used, and then in a highly modified form.

The medieval work is characteristic of the late 13th/earlier 14th centuries and may relate to the £169 15s 3d spent on 'rebuilding' the castle in 1288-9. With its distinctive spur buttresses, the tower is comparable to those of similar date at eg. Carew, Pembs., and Chepstow, Mon. No firm archaeological dating evidence emerged from the watching brief; indeed, like the Square Tower, the SW Tower appears to have been constructed directly upon the natural soil but, again like the Square Tower, some truncation of pre-existing occupation deposits may have occurred prior to its construction.

The bulk of the tower was constructed without footings on what was already a steep, and unstable slope of fluvio-glacial gravel, further enhanced by its scarping to form the castle west ditch. The footings, usefully, follow the profile of the ditch and have thus preserved it.

Despite post-medieval alteration, the tower retains many medieval features, although the collapse of the SE wall has removed half the spiral stairwell, and there are no surviving floor surfaces. Nor is it possible to ascertain how the tower related stratigraphically to the neighbouring bailey buildings, which again appear to be constructed directly upon the natural. The presence of a fourth stage may be indicated, but is unlikely, and the structural evidence is equivocal.

The function of the tower appears to have been primarily defensive - all lights have splayed embrasures to function as arrowloops - in particular, the enfilading loop 113. There is no evidence of a fireplace, nor of garderobes (latrines). However, the first floor chamber appears to have always been larger and is lit by larger windows, one (at least) of which may have featured seating.

There was unfortunately no surviving stratigraphy between the tower and the bailey, most of the intervening deposits having been excavated in 1980. However, a sequence of post-occupation deposits forming a succession from the 17th to the later 18th centuries were observed in the threshold area in 1994. They contained much dateable material, much of which also suggested the uses to which the tower was being put. Analysis of their relationship to other deposits, and to the standing masonry, enables a fairly confident chronological history of the tower and its uses to be established.

The post-medieval archaeology indicates a lengthy period when the tower was a roofless, and vaultless ruin - presumably followin the Civil War. Some dumping in the area of the tower may belong to 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 bulk of the Retaining Wall may also be part of the 1779 repairs, if not contemporary with the new gaol. However, the sequence has again been lost within the bailey. The construction of the core of the Bridge Street dwellings can be attributed to the 18th century.

The re-use of the ground floor was a product of the 19th century and the expansion of the gaol, although the tower lay beyond the gaol curtilage proper and no documentary evidence exists. Only the SW half of the tower was enclosed, apparently within a single-storey building that was unlit. Either a storehouse, or a building with a specific but unknown function is indicated. Why was so much medieval walling cut back? It represents a huge undertaking for such a low-status building, and may relate to a specific function. And what happened to the rubble debris? Did any contribute to the cobble floor of the building?

These later uses to which the tower was put conspired to render it unstable. In 1994 it was seen to be bisected by a crack, and emergency work was undertaken in advance of the main consolidation.

Finally, the SW Tower 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. And the finds recovered during the work - particularly the miniature promotional bricks - provide a fascinating insight into Carmarthen's manufacturing heritage.

6.0 FUTURE MANAGEMENT

The importance of Carmarthen Castle to the medieval history of Wales, as the centre of Crown authority in West Wales, cannot be over-stressed. For too long, the structure itself has been neglected and ignored. In a town that has unfortunately lost most of its medeival built heritage this is even more regrettabl. And so the 1993-6 programme has in all aspects been a satisfactory exercise. What was an unseen and little understood monument is now accessible and interpretable to the public, secure from any further degradation.

Moreover, the southern defences form an important part of the town's visual heritage, a part that now forms a fine ensemble when viewed from the town's main southern approach.

In all respects, then, the 1995-6 programme, in mutual partnership with the archaeological work, was a great success. In addition to the primary results, fascinating side issues, such as the light thrown on civil engineering solutions in the recent past as demonstrated in the SW Tower basement, were encountered.

Nevertheless, the castle - in terms of both its built heritage and below-ground archaeology - will have to be managed for a long time ahead, and requires a commitment from the site owners and the staturory planning authorities. Site management does not apply just to the maintenance of the standing fabric, ie the southern defences, gatehouse and shell-keep, but also to the below-ground archaeological resource that exists beneath the remainder of the castle site. The information contained within this report, particularly from the examination of larger excavated areas, will enable informed decisions to be made for future management of the castle site.

The great potential for the survival of the archaeological resource within the bailey area was demonstrated in 1980, and by intrusive work in 1996 which suggests that in this area, at least, deposits are low enough to have survived the construction of the gaol and County Hall. The watching brief and this report, particularly with regard to the intrusive work, should therefore be viewed as an evaluation, and should inform any future planning decisions regarding any intrusive work that may become necessary.

This potential must be viewed in a positive light. The recent archaeological work is if anything a demonstration of how much is still to be learnt about the form and developmeny of the castle. For instance, the SW Tower which was thought to contain an unconsolidated earth fill but presented the town with a fine medieval vaulted building. Remnant floor surfaces may survive beneath the Squre Tower concrete cap. Most important, however, is the future recording of original surfaces and continuous stratigraphy that will enable the various components of the castle to be understood and related to each other, and may contribute new discoveries of walls, buildings, and earthwork defences. To this end, a firm management strategy and sympathetic planning policies will enable appropriate responses to be drafted to any future developments.

7.0 THE FINDS

Few finds were encountered during the 1995-6 watching brief and recording project. They are listed below by context. None were retained.

CONTEXT [49]

Shell: 14 oyster shells

Bottle glass: 1 body sherd from 18th cent. ?wine bottle

CONTEXT [64]

Building material: 1 frag. Roman roofing tile

CONTEXT [74]

Shell: 8 mussel shells

The large assemblage of finds retrieved from the SW Tower and adjacent area of the bailey in 1994 is included within this report, in full, as Appendix I.

8.0 THE ARCHIVE

The archive, indexed according to the National Monuments Record (NMR) material categories, is held by the Dyfed Archaeological Trust, Llandeilo, and contains the following:-

- A. Copy of the final report
- B. Field notes; notebook
- C. Site drawings; survey Drawings; copies of planning specs.
- D. Photographs, mono and colour
- E. Catalogue of finds
- G. Correspondence; list of references
- J. Final drawings
- L. General admin. notes
- M. Project correspondence

There is no material for classes F, H, I, K and N.

9.0 ACKNOWLEDGEMENTS

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APPENDIX I

THE 1994 FINDS (by D F M Brennan)

The finds described below were all retrieved from the SW Tower and the immediately adjacent area of the bailey. Like the contexts within which they occurred, they 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 SW Tower 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 brickvard). 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 underglaze 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: I 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 & ITALI... 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 GTW, 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 internally 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/early 20th 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, kept. 34 body, 1 handle & 1 base sherd, discarded.

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.

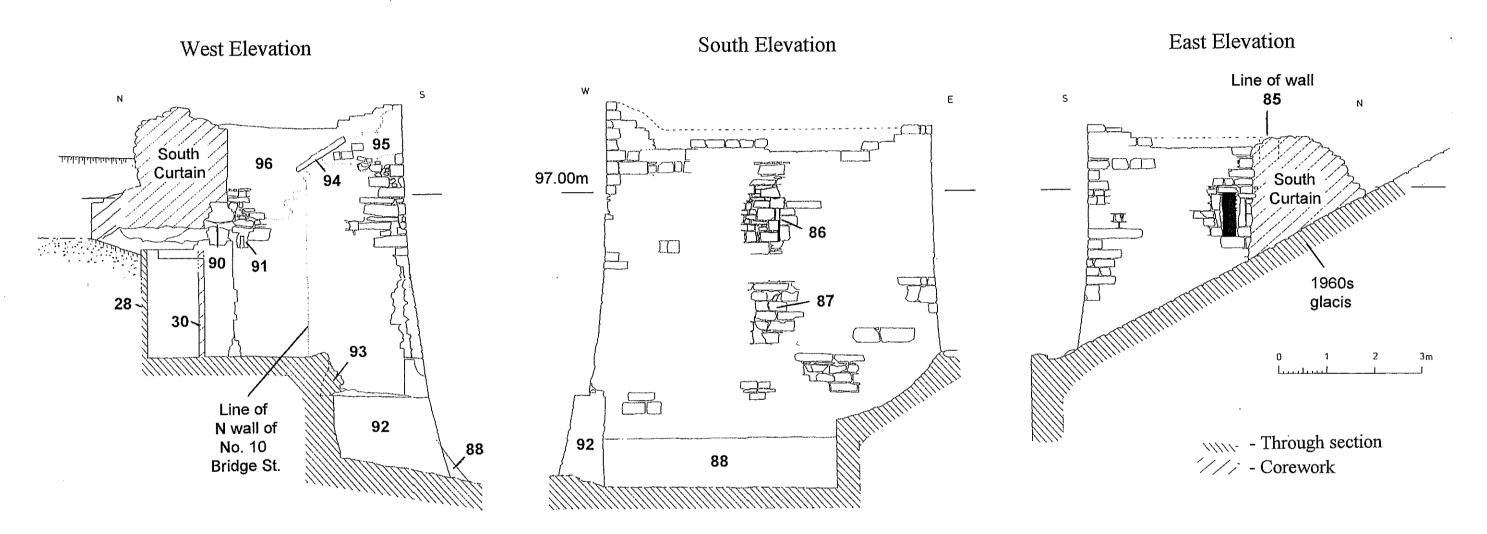
Mortar: 1 frag.

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 vessel of post-medieval date. A hard red fabric tempered with fine sands and a little mica. A small spot of brown-coloured glaze externally.

Fig.8. Carmarthen Castle Square Tower: External Elevations



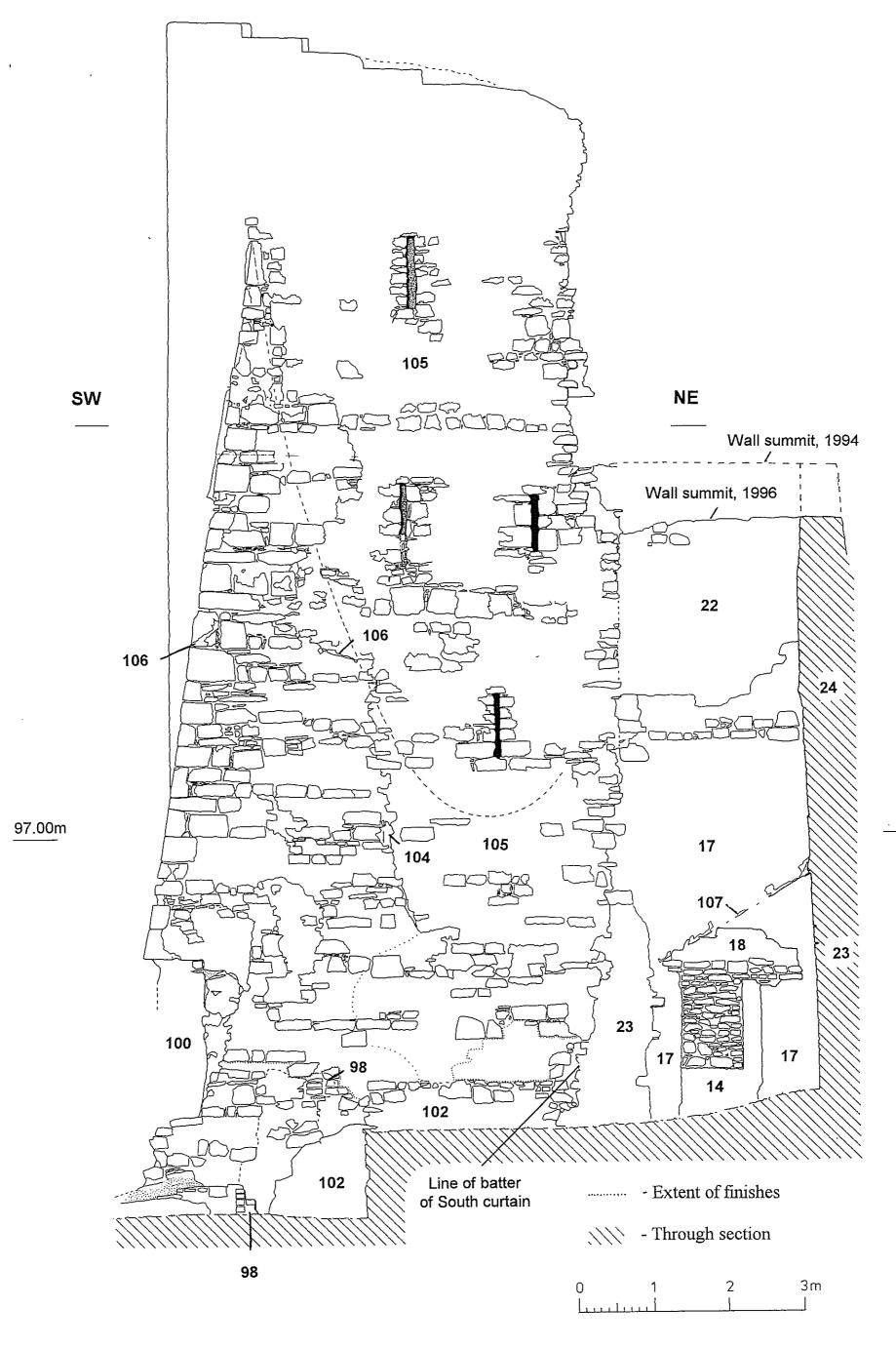


Fig.25. Carmarthen Castle SW Tower: South-east external elevation

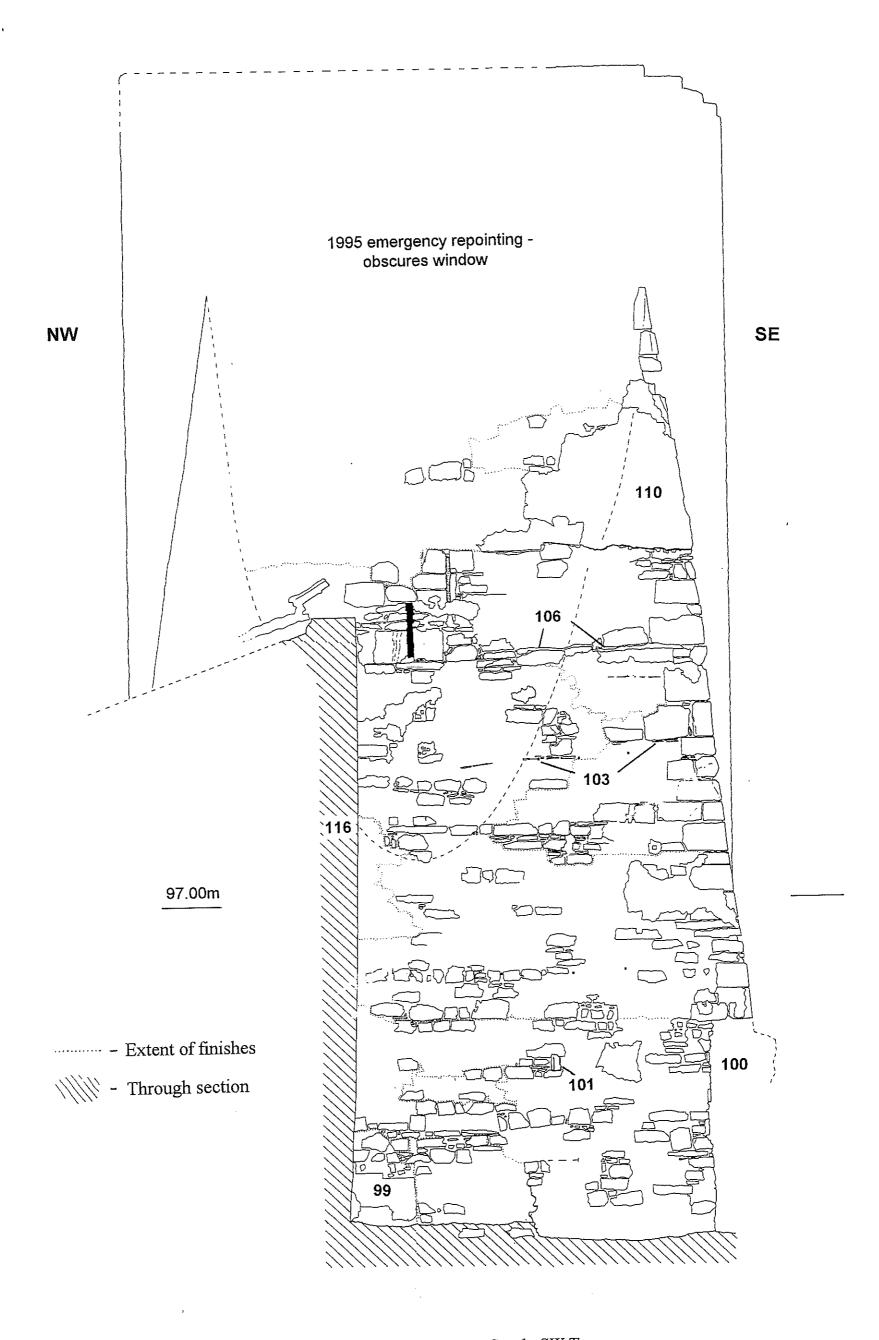


Fig.27. Carmarthen Castle SW Tower: South-west external elevation

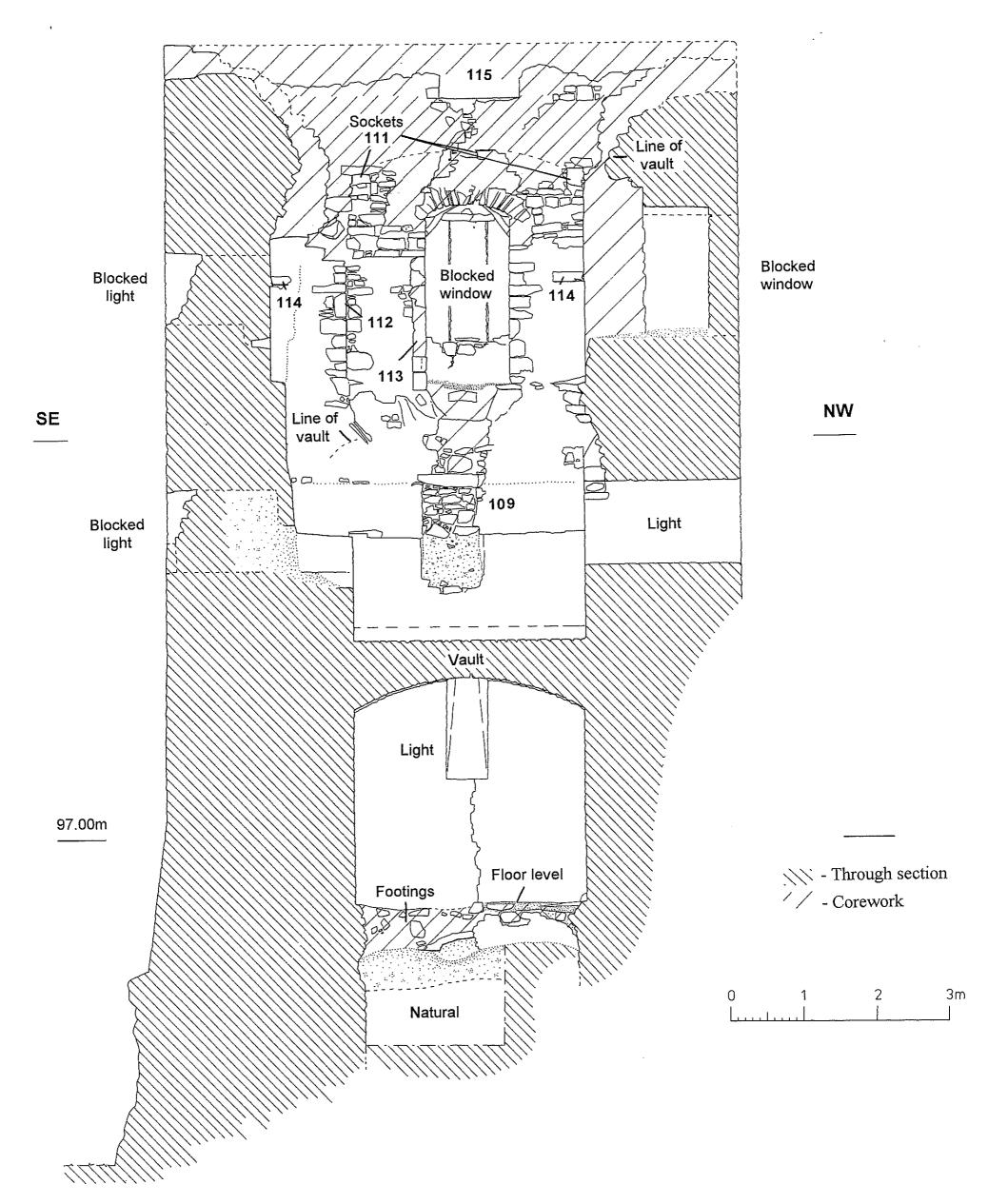
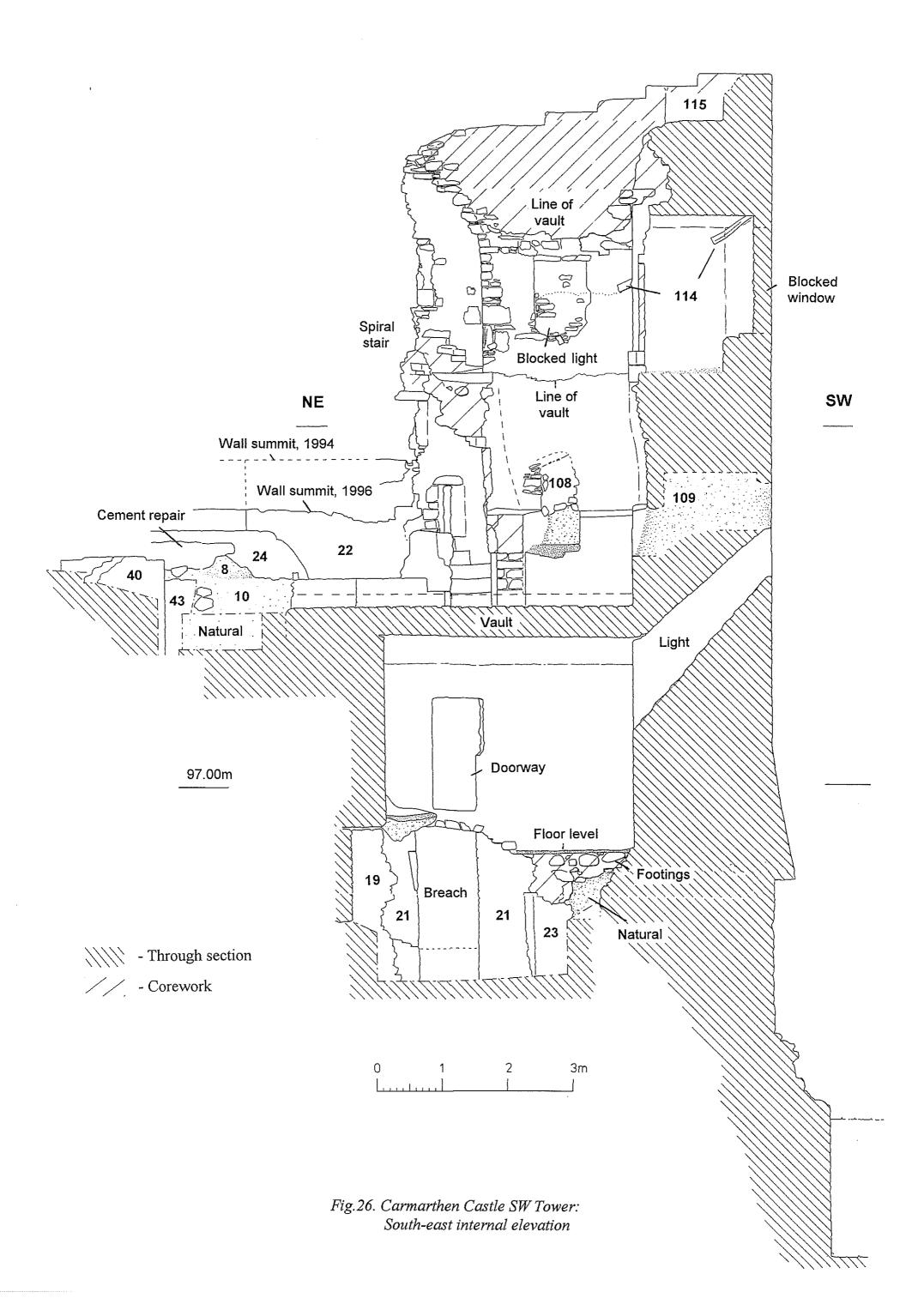


Fig. 28. Carmarthen Castle SW Tower: South-west internal elevation



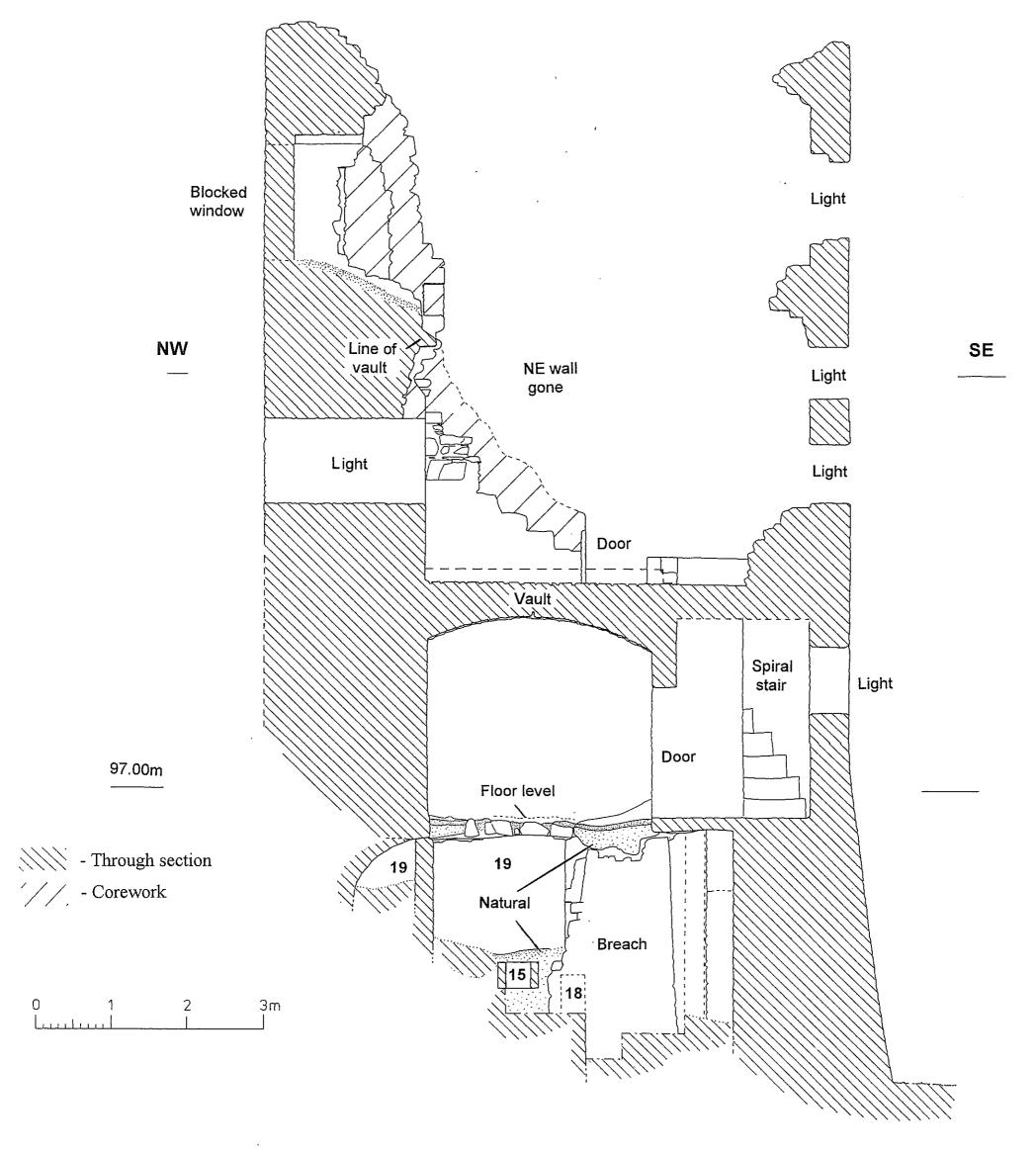


Fig. 30. Carmarthen Castle SW Tower: North-east internal elevation

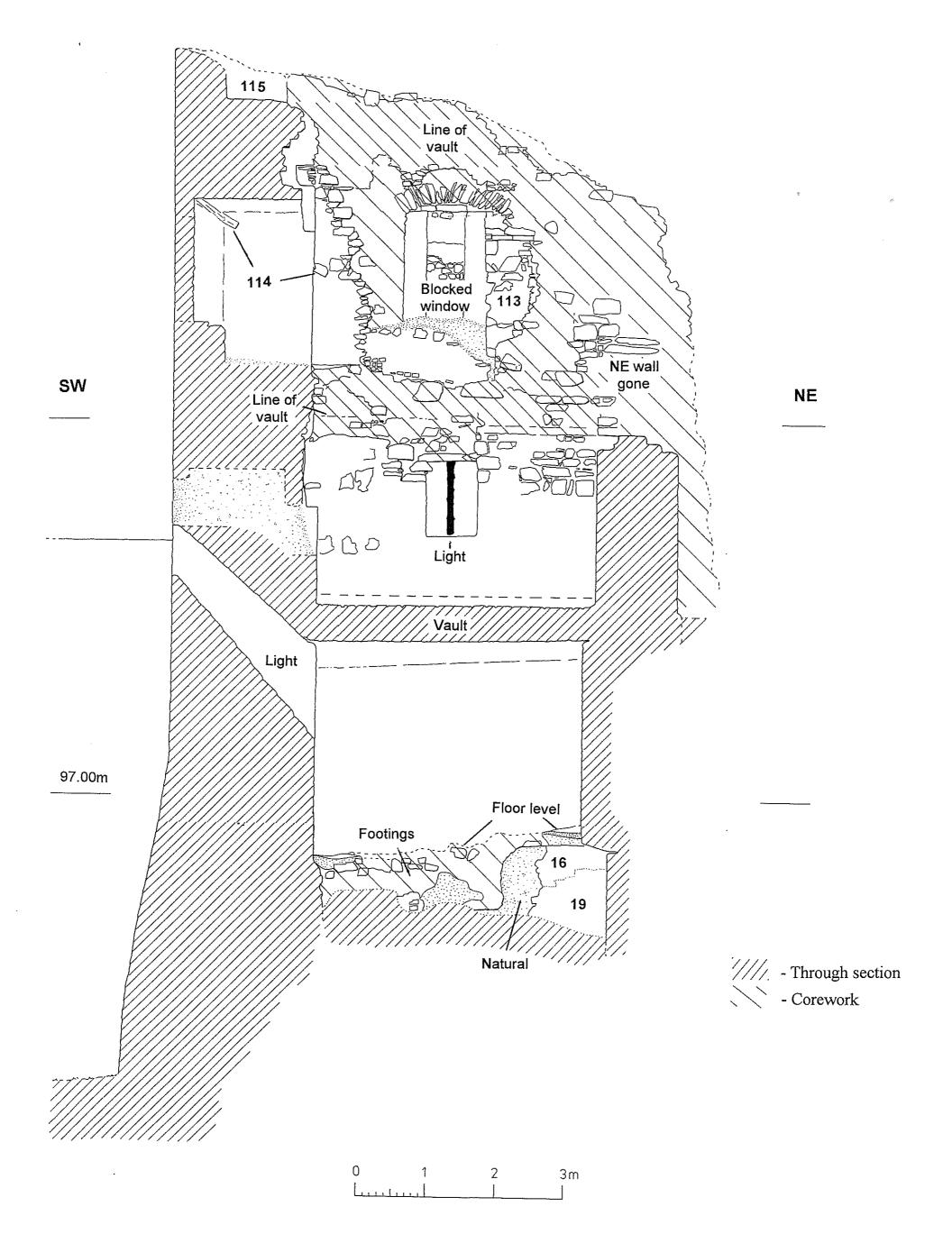


Fig.29. Carmarthen Castle SW Tower: North-west internal elevation