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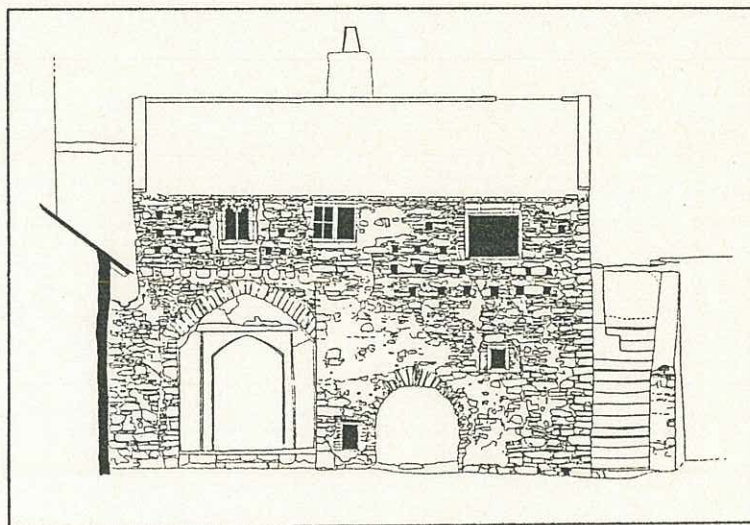
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A STRUCTURAL ANALYSIS OF CALDEY PRIORY, DYFED

PART 1



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(with contributions by R.C. Turner
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(DAT PRN 4278)

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PART 1: TEXT

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1:0 INTRODUCTION

The remains of Caldey Priory are situated on Caldey Island, which lies off the SW Dyfed coast $\frac{2}{3}$ mile from the resort of Tenby separated from the mainland by a channel averaging 13m in depth. The island, $1\frac{1}{2}$ miles E-W by $\frac{2}{3}$ mile N-S, is irregular in outline, its predominantly rocky coastline displaying a number of inlets and bays. A small islet, St Margarets, lies off the tip of a projecting peninsula to the NW.

Caldey Island is fertile and well drained. The solid geology is predominantly Old Red Sandstone to the N, from which the bulk of the soils are derived, and Carboniferous limestone to the S. It is also remarkably sheltered; the aspect of the land is in the main a gentle northerly slope downhill from the high cliffs which form the southern coastline to the low lying dunes to the N. A number of springs rise in a depression roughly at the centre of the island, at the junction of the sandstone and the limestone, and feed a stream which flows northwards in a slight valley to the sea.

The area of the island attracted settlement from the earliest times. A number of caves on the coastline have produced evidence of occupation from the Palaeolithic period onwards. Evidence suggests that the island was the location of a religious community as early as the 6th century. It is not known whether this settlement occupied the same site as the present priory but the latter occupies a highly favourable location within the central depression on the spring line, sheltered and well-watered.

The community was reorganised along Anglo-Norman, Benedictine, lines in the early 12th century, but was never very large. At the dissolution the priory apparently was converted into a private dwelling and the priory complex recieved additional buildings. As a dwelling it was supplanted by the mansion house built adjacent to it in the early 19th century when the priory complex was given over to agricultural use.

In 1901 the complex was granted to a community of Anglican Benedictines, then at Milton Abbas, Dorset, who for a while reoccupied them and purchased the island in 1906. However, under Abbot Aelred Carlyle the monks began the construction of a large new priory complex 300m to the N which was taken over by Cistercian monks from Chimay, Belgium, who purchased the island when the Benedictines left for Prinknash, Gloucs., in 1928. The Cistercian Priory was later granted abbey status; the community is still thriving under the present abbot, Father Robert.

1:1 Purpose and Methodologies of the Survey

In advance of a major programme of consolidation work upon the priory complex Dyfed Archaeological Trust were requested to undertake a standing building survey, record and structural analysis of the W and E ranges and a truncated building on the N side of the courtyard. The priory church itself (formerly dedicated to St. Mary but now St Illtud's Church) was not

included within the brief.

Doubtless owing to its location remarkably little work has hitherto been performed on this unusual group of buildings. The only lengthy study, and plan, that has been published was the work of the owner, W. Done Bushell, in 1908 (Bushell, 1908 & 1980). Shorter notes have appeared in a number of journals (eg. Cambrian Meetings, 1938, 280-282; Hague, 1964, 321; RCAHMW, 1925, 37-39) but none has attempted an analysis of the development of the complex.

The present survey was commissioned and funded by Cadw on behalf of the Cistercian community, and took place during September-October 1993. As part of the same programme of work RCAHMW were commissioned to perform a full ground survey of the surrounding landscape features which include a series of former ponds and leats. It is intended that this shall be published together with a summary of the structural report.

The structural report recieved a valuable contribution from A J Parkinson of RCAHMW who visited the site on 14 September 1993. R C Turner MA, Inspector of Ancient Monuments for Cadw, kindly researched the documentary history of the site and provided much of the text for the historical background within this report.

The survey was hindered by the various finishes, from later periods, that obscures much of the stonework. Nor had the mortar been raked from the joints prior to the work. It was thus impracticable to attempt a full stone by stone suite of drawings the provision of a chronological structural sequence for the complex was seriously hindered.

It therefore must be stressed that given both these surface finishes, and the paucity of constructional detail much of the phasing of the priory buildings within this report is inferential and relative. Documentary and pictorial evidence has been widely drawn upon. In particular, the building sequence within the W range is complex and far from clear and the attempt at assigning phases to the various elements of the fabric in this report must be regarded at best as highly tentative (see 3.0: Discussion).

The record comprised a series of measured survey drawings at 1:20, with interpretative notes, of the internal and external elevations, plans and sections of the complex. A full suite of accompanying photographs were also taken and, where it was possible, reproduced at 1:20. Roof and floor structures were also fully recorded. Final annotated archive drawings comprise 4 plans and 25 elevation/section drawings, all at 1:20, which should be read in conjunction with the photographs. All but one of the drawings are reproduced within this report at a scale of 1:100. The evidence suggests 8 main phases of construction, which are indicated on these illustrations (P.1-P.4; E.1-E.24). Architectural detail is shown at 1:10 (D.1-D.7)

The survey archive will be deposited with the National Monuments Record, maintained by RCAHMW, Crown Building, Plas Crug, Aberystwyth SY23 1NJ.

1:2 Historical Background (with R C Turner MA)

For a general discussion of the prehistory of Caldey see Lacaille and Grimes, 1955 & 1961. That occupation of the island continued into the immediate post-Roman period has been confirmed by the recent identification of 6th-7th century pottery from the area around St David's Church (see below, p9), which also supports the documentary evidence for the contemporary foundation of a religious establishment (Campbell, 1988, 75; Campbell and Lane, 1993, 69-71).

The Pre-Conquest Monastery

Documentary evidence suggests that Caldey Island was the site of a Celtic monastery, traditionally founded by a colony of monks from Illtud's monastery at Llantwit Major in Glamorgan. The *Life of St. Samson of Dol*, written in the early 7th century but referring to events of the previous century, is the main source for the history of this putative early Celtic monastery. It locates the establishment upon an '*insula* not far from Illtud's monastery'. The *Life* discusses its first abbot, Piro, who 'worked with his hands all day' but apparently one night drowned within the monastery well while in a drunken stupor, and Samson himself who moved to the monastery from that at Llantwit and spent the years 550-552 there (Bushell, 1903, 319-338). A later source, the *Life of St. Paul de Leon*, written c.884, locates an island called 'Pyr', where Illtud spent much of his time, 'within the borders of Demetia (Dyfed)'.

The *insula* of Piro's monastery has been long been identified as Caldey, an attribution accepted by most modern scholars of the period (Davies, 1982, *passim*). Tradition has it that the Welsh name for the island, Ynys Pyr, used in the *Life of St. Paul* and identifiable as Caldey since the 11th century (Charles, 1992, 567; Conway Davies, 1946, 242; Thorpe, 1978, 150), derives from this first abbot's name.

The documentary evidence has recieved recent support by the presence of 6th-7th century pottery noted above. In addition, Caldey possesses a well-known Early Christian Monument (Nash-Williams, 1950, No. 301), now erected in the present priory church but apparently found in the ruins of the priory sometime prior to 1811 (Fenton, 1903, 251). The stone carries both an Ogam and Latin inscription and is given a suggested date of the early 9th century. Further inscribed stones have apparently been found on the island but nothing more of them is known (Bushell, 1908, 250).

The Medieval Priory

Henry I granted Caldey to Robert Fitzmartin, Lord of Cemais, in 1113. He transferred the island to his mother Geva. In about this year Fitzmartin established a priory at St Dogmaels near Cardigan. The Priory was of the newly-founded Tironian Order, begun by St. Bernard d'Abbeville who moved his community to Tiron in the Diocese of Chartres in 1113 encouraging a return to the strict rule of St. Benedict; the Tironian Order, along with a number of other minor orders eg. the Grandmontines, are regarded

as reformed Benedictines. In the same year St. Bernard was visited by Robert Fitzmartin who brought back 13 monks and a prior to form the basis of his new community at St. Dogmaels. In 1120 the community was raised to abbey status but still retained a closed connection with the French mother house of Tiron.

Geva had granted Caldey Island to St. Dogmaels Abbey, traditionally in 1115; in 1121 the Charter Rolls record the grant and confirmation by Robert, son of Martin, to the monks of Tiron and the monastery of St. Mary at St. Dogmaels of...the island of Pyr, now called Calde, granted by his mother' (Conway Davies, 1946, 242, citing Charter Roll 21 Hen. I). A dependent cell dedicated to St. Mary was established on the island, presumably on the site of the present priory church.

The monastic community on Caldey appears to have been relatively small from the first. Gerald of Wales, *Opera*, c.1200 ranked Caldey with the small priories at Cardigan, St. Clears and Llangenydd as establishments occupied by lone monks in defiance of the Lateran Council of 1179 (Cowley, 1977, 20). The next reference to Caldey Priory is in the Taxation of Pope Nicholas in 1291 in which the church was valued at £3 6s 8d while the island's one carucate of ploughland, with a rental value of £1 10s 0d, was included in the valuation for St. Dogmaels (Cowley, 1977, 64). In comparison, the other cell of St. Dogmaels at Pill near Milford Haven was worth £9 10s 8d per annum and the mother house itself £16 10s 0d.

References to Caldey during the 14th and 15th centuries are incidental and provide little information on the size of the community or the buildings that were occupied (Howells, 1984, 30-37). An inspeximus and confirmation of the 1121 grant was issued by Edward III in 1332 (Way, 1870, 123, citing Charter Roll 5 Edw. III per Inspex). William of Worcester writing in 1478 described the island as having 30 houses as well as the prior's church of St. Mary. However, William may never have visited Caldey and his figures have to be doubted (Fenton, 1903, 252; Howells, 1984, 37). St. Dogmaels itself was in decline during this period with only 4 monks including the abbot present in 1402, and 6 in 1504 (Hilling, 1992, 28).

Ministers' Accounts for this period, however, provide some insight into the economy of the island which in terms of tolls and customs was under the jurisdiction of the Lordship of Pembroke. For example, in 1326-27 '4d. toll of one ship coming to Caldei this year' was paid at Pembroke, but in both 1390-91 and 1480-81 neither tolls nor customs of fish at Caldey were payable (Owen, 1918, 127, 143, 147-148).

In 1536 St. Dogmaels Abbey was dissolved along with hundreds more monastic houses with values of less than £200. The *Valor Ecclesiasticus* of Henry VIII recorded that the cell of Caldey contributed £2 3s 4d annually to the mother house, its annual income being £5 10s 11d plus tithes of 11s 11½d. Again, comparison with Pill Priory and St. Dogmaels Abbey is instructive; the former was valued at £52, and the latter at £87 (Knowles and Hadcock, 1971, 102). The associated Ministers' accounts show that much of the annual value came from the rent of

nine tenements on the island (Howells, 1984, 38-39). Williams (1962, 520) suggests that at the dissolution only a single monk was in residence, counted in the total for St. Dogmaels.

These sparing references provide very little detail of the nature of the monastic community. Two references, separated by about 230 years, suggest the presence of only 1 monk. Apparently in 1291, and certainly by the dissolution, the agricultural land was being managed by tenant farmers. Cowley (1977, 20) reckoned its income as insufficient to maintain a conventual establishment; Knowles and Hadcock (1971, 102), on the other hand, assert that the priory 'appears to have been definitely conventual' rather than merely functioning as a grange of St. Dogmaels. In addition, the fact that during the medieval period Caldey Priory was able to sustain at least 3 further chapels on the island (see below) argues for a rather more vigorous presence than the figures alone would suggest.

Post-Reformation History

The immediate post-dissolution history of Caldey is only a little clearer. In 1536-37 the abbey of St. Dogmaels and all its dependant estates, including Caldey, were leased to John Bradshaw of Presteigne, for 21 years. Bradshaw was one of many who profited from the immense tracts of land released by the crown after the dissolution. He is referred to by Bishop Rowland Lee in a letter to Thomas Cromwell as an 'alliesman', showing him to be a trusted aide of the bishop who sent him to deliver to Cromwell valuables from Wigmore Abbey, Herefordshire. Bradshaw also acquired some of Wigmore's outlying estates including land in Presteigne. In 1543 the king granted Bradshaw the site of St. Dogmaels abbey and its estates including the land and manor of Caldey, already in his tenure for the rent of £512 2s 10½d, extending his lease for a further 21 years. The grant included 'fishings, wracks of the sea, profits of the courts, heriots and great and small tithes' (DAT SMR citing Pat. Roll 35 Hen VIII). The island retained its extra-parochial status, being 'neither in the hundred of Castlemartin next to it, nor in Kemes (Cemaes) where St. Dogmaels is' (George Owen, *Description of Pembrokeshire*, 1603).

Bradshaw died in 1567 and Caldey passed first to his son John and then through his grandson William to his great-grandson, another John, the 21-year lease being periodically renewed. There is no evidence that the Bradshaw family ever lived on the island which presumably remained under the management of tenants. However, although George Owen, in his *Description of Pembrokeshire*, refers to the 'ruins of the priory' (Howells, 1973, 108) it is apparent on stylistic grounds that much of the fabric of the priory buildings as we see them today dates if not from the period of the Bradshaws' tenure, then from that of their immediate successors.

In around 1600 the Caldey leases were purchased by Walter Philpin, Mayor of Tenby, in 1601. His inquisition post mortem of 1613 describes 'the manor or island of Caldey and 7 messuages, 300 acres of land, 6 acres of meadow, 100 acres of pasture and 100 acres of furze and heath' (Francis Green Collection, Vol. 7,

158, Vol. 10, 62). The land was held of the king *in capite*, by knight's service *vicessime* and by part of one knight's fee, with an annual value of £5. The land was held by his wife Elizabeth, then resident in Tenby.

George Owen tells us that in 1603 'the island was of eight or ten households and some part of the demaynes annexed to the ruins of the priory, the lord keepeth in his hands' (Fenton, 1903, 251). In 1653 the island was sold by the Philpin family to Reeve Williams, of Llanrhidian, and Robert Williams, of Loughor and by the later 17th century its population had shrunk further; in 1666 when the '*Endeavour*' of Boston was wrecked on the shore of Caldey 'there being but one house on the island, the persons were too few to preserve the goods, sugar and tobacco of which little was saved' (Francis Green Collection, 13, 226). References remain scanty, but useful descriptive material can be found in the antiquarian *Tours* of the late 18th-early 19th centuries. The priory is described in a diary kept by S S Banks of an excursion into Wales in 1767, thus 'there is in the middle of the Island the remains of a very good house, with a chapel belonging to it, the whole of very ancient construction, and almost down' (Howells, 1984, 54). Fenton, in 1811, describes the complex as 'a curious aggregate of masonry... (the greater part) enlarged by additions of a later date.'

Contemporary pictorial evidence is, though likewise sparse, very informative and at odds with the written evidence. The Norris drawings, for example, depict 2 views of the priory buildings in around 1800 (National Library of Wales, Charles Norris Collection, PA 4751 a, b). Both drawings show the priory buildings in good condition, and are evidence of their radical conversion during the late 16th-early 17th centuries. Fig. 4 is a similar view from the SE was taken by Sir Richard Colt Hoare (National Library of Wales, Topographical Prints 'B', PA 2630, Top B12). The E range has apparently been a dwelling of some status while the church appears to be a farmhouse at the core of an agricultural complex which includes the W range.

The great-grandson of Reeve Williams, John Williams, sold the island in 1786 to George Greville, Earl Brooke and Earl of Warwick. In 1798 he in turn sold it to Thomas Kynaston, of Pembroke. Major changes to the buildings followed. A mansion was constructed to the N side of the priory complex part of which was incorporated as service rooms. The kitchen occupied a square building on the N side of the courtyard which may have earlier origins. The adjacent farm meanwhile developed further; the house and many of the present buildings had been constructed by 1887 (Ordnance Survey, 1:2500 1st Edition, Pembs. Sheet XLIV.4).

Kynaston had purchased the island to exploit its fine limestone resources. Four quarries were already in existence, and Kynaston developed the large workings at High Cliff; 20,000 tons of limestone per year were eventually produced most of it being exported while some was burnt on the island in the limekilns shown on the Ordnance Survey 1:2500 of 1887. A row of cottages was constructed for the quarry workers 400m to the N of the old Priory while the former medieval chapel of St. David's nearby (see below, 7) had, in 1838, been restored for the use of the island-

ders (RCAHM, 1925, 40).

Caldey remained with the Kynaston family until 1867, when it was purchased by James Hawkesley, a High Sheriff of Pembrokeshire and an Alderman of Tenby. The economy of the island was turned over to market gardening and greenhouses and irrigation equipment were installed at the farm. In 1870 the island had a population of 30 families (Way, 1870, 122).

In 1894 the island was purchased by Thomas Smith Cunningham for £12,750. While his successor, the Rev. Done Bushell, must take the credit for much of the restoration work it is clear from an account of a service held in the priory church reported in the *Tenby Observer* of July 16, 1894 that Cunningham had begun restoration work on the church. As he acquired it the church had contained a laundry in the chancel, a brewers' malkiln in the quire, and a limestore in the tower; Cunningham at least restored it to its original function (Rhys, 1896, 102-103). Of the other buildings, the basement of the 'Prior's Tower' had been converted for use as a dairy and a schoolroom was located within the complex.

In 1897 the island was sold to the Rev. William Done Bushell, formerly Chaplain of Harrow School, as a retreat for his handicapped son. Bushell intensified consolidation work, especially in the church which was rededicated to St. Illtud, as well as working on the 'dormitories, guest room and refectories' (Bushell, 1908, 54).

This work ended with the sale of the island to the Benedictines in 1906 and many of the buildings reverted to agricultural use. The mansion house, abandoned, itself became unsafe and had to be demolished in the 1970s, fortunately leaving much of the earlier fabric intact.

1:3 General Description

The Island (Fig. 1)

The remains of the old priory buildings lie roughly at the centre of Caldey Island (SS 1408 9631) in a slight sheltered N facing depression, now wooded, 20m above sea-level. The depression represents the spring line for a stream that flows northwards in a shallow valley to the sea, 300m distant. A number of springs occur in the immediate vicinity of the old priory, both by tradition and in fact, and give rise to the complex of water features that once characterised the site.

The location is thus ideally suited as a focus for settlement and it has been assumed to have been the site of the earliest religious establishment. However, a number of ecclesiastical sites occur throughout the island proving that settlement has not been confined to this one location. At SS 1428 9664 stands St. Davids Church, a small 2-cell structure with a porch, apparently largely of 13th century construction; however the imposts of the chancel arch appear to be 12th century (Cambrian Meeting, 1938, 281) which would make it probably the earliest surviving masonry

on the island. Its environs are also the source of the 6th-7th century pottery already noted (Campbell, 1988, 75). It was restored in 1838, all other openings being modern, and functioned as an extra-parochial village church. The RCAHM *Inventory* for Pembrokeshire describes the church as having been dedicated to St. Mary and containing '15th century burials' (RCAHM, 1925, 40) but Rees (1932) shows it as a chapel and 'grange' dedicated to St. David. The area to the N of the church was formerly a cemetery of remarkable extent.

Chapel Point (SS 1439 9600), upon which the lighthouse stands, derives its name from a further chapel of St. Mary, 'the chapel of the Blessed Virgin'. It was described by William of Worcester in 1478 (Bushell, 1908, 20; Way, 1870, 123 n.1), as a well-known landmark for mariners and was shown on a harbour plan by Lewis Morris as recently as 1778 (National Library of Wales, Marine Chart, Lewis Morris, 1800). Field observations were made by the Ordnance Survey in 1966. St. Margarets Island likewise carries the remains of a medieval structure, of uncertain function but probably ecclesiastical (Bushell, 1908, 258-260 and plan). It has been alleged that a church existed on the islet as late as 1662 (RCAHMW, 1925, 42) and suggested (Brother Gildas, Caldey Island, *pers. comm.*) that it was the site of a nunnery. The remains were converted into cottages for quarrymen in the 19th century.

At SS 139 9683 stands a circular tower, 'The Oratory', which has long been regarded as a medieval watchtower but its fabric is substantially of 18th century date.

In the 1860s a medieval reliquary was dug out of a wild cat's hole by Corbet Kynaston. It was a fine alabaster piece modelled on a late medieval table tomb with recumbent effigy (Way, 1870, 125-126). It cannot be known, however, whether it was a possession of any of the island's churches. Potter's and Daylight Rock caves have yielded medieval pottery, while a holloway has apparently been identified at SS 127 971.

The Priory Complex (Fig. 3)

The complex is now a Grade I Listed Building but in a very poor state of repair.

The surviving buildings comprise a priory church which forms the S side of an irregular square cobbled courtyard, a long range extending N-S on the E side (Bushell's 'Prior's Tower', 'Calefactory' and 'Dormitory'), a shorter range to the W (Bushell's 'Guest Hall') and the remains of a building of uncertain date to the N (Bushell's 'Frater'). For a full description see 2:0.

The medieval cemetery apparently lay to the S of the church 'where bones are still to be found in plenty' (Bushell, 1908, 255). The present well 20m SE of the church lies on the spring line and is likely to have been a long-standing feature.

The Priory Church (A J Parkinson)

The priory church lay outside the scope of the survey and so a brief structural description of the building is provided here.

The church is largely constructed from the same squared local limestone that characterises the earlier work in the rest of the complex. It comprises a vaulted chancel, a long narrow monastic quire and a small tower carrying a tall spire. The chancel is rectangular in plan with thick rubble walls. It is now entered from the quire through a tall arch cut through a wall which apparently had no original opening; however, this blank wall may itself have been a rebuild (Fenton, 1903, 251). The E window has been restored by Bushell. The Colt Hoare drawing (fig. 4) shows 2 blocked windows, the upper arched and the lower rectangular (National Library of Wales, Topographical Prints 'B', PA 2630, Top B12) which Richard Fenton, in 1811, suggested may have been traceried (Fenton, 1903, 251). This was later altered into the square headed 6-pane window shown in a 19th century photograph belonging to the present abbey chapter. It is now a tall, wide, 2-centred arched opening with a restored external hood mould. The internal hood mould is apparently original; it is partly concealed behind the tall 2-centred vault suggesting that the vault is a secondary, possibly post-medieval, feature. Externally, the E gable end has a very high upstand, formerly shouldered (later given an off-centre brick chimney, now removed), suggesting that the original roof was considerably higher. The vault may have been introduced when a chamber was constructed over the chancel (see below, p22). There is a small piscina in the S wall of the chancel; the doorway in the N wall is 19th century.

The monastic quire has been much altered. It was formerly wider and symmetrical along the axis of the chancel arch (see below, p14), the N wall having been rebuilt at some period, probably before 1800 - the present roof line is shown in the Colt Hoare drawing (fig. 4). However, a drawing of 1913 (Bushell, 1980, 12) shows weather-tabling against the E wall of the tower, the position of which demonstrates that the original wider quire had the same eaves-line but a higher ridge. The 2 openings in the rebuilt N wall, a window and door both with segmental brick heads, have since been blocked, presumably by Bushell, and the wall further rebuilt in its upper parts with 2-light clerestorey windows. Both N and S walls display a shallow offset suggesting that the former quire may have been given a first floor after the reformation but prior to the rebuild of the N wall. The narrower quire was certainly of 2 storeys; the Colt Hoare drawing (fig. 4) shows the S wall with a ground floor doorway and 2 windows on each floor, all square headed. The quire appears to be the farmhouse. In the angle between quire and chancel is a simple slit light, and the doorway in the S wall has been converted into a window. The quire has now been fitted out with simple wooden stalls and a western gallery.

A thickening at the W end of the quire contains a stair leading to the gallery and the upper stages of the tower, entered through a doorway with a roughly shouldered lintel. The tower rises from a steeply battered base and is tall square and crenellated. The

tall stone spire has a blunt, rounded summit and may be truncated. The main entry from the W is through a squat 2-centred arch, blocked in the Norris drawing, leading into a ground floor chamber with a flattened 2-centred vault. A roughly semi-circular arched doorway leads to the quire. The first floor displays a 2-light window to the W, with trefoiled ogee heads and an ogee quatrefoil in the apex. It has been largely rebuilt but the detail copies the original. The upper stages have rectangular slits; one stage was apparently a dovecot.

The Mansion House (Figs. 2 & 3)

The priory complex appears never to have lain within a precinct boundary but its location would doubtless have rendered such a feature superfluous. Such enclosures as exist around it relate to the 19th century mansion house and farm. An area to the E of the priory E range was used as a kitchen garden in the 19th century and was given a slender limestone wall entered at either end through a 2-centred arch with a brick head. The footings of associated outhouses can be seen in the undergrowth and are shown on the Ordnance Survey 1:2500 First and Second editions (1887 & 1908); they are described within the structural survey (below, 27). In 1887 a long building also lay against the outside face of the E garden wall but was gone by 1908.

Very few remains of Kynaston's early 19th century mansion house itself have survived the demolition of the 1970s, and what does remain is heavily overgrown. A rather stylised drawing of 1841 (National Library of Wales, *Tenby Views*, Drawings Vol. 24, 18-19) shows a view of the mansion from the W as a castellated 3-bay house with side pavilions with a castellated curtilage wall. Ordnance Survey 1:2500 map evidence (1887 and 1908) depicts the outline plan and dimensions of the house, a building 11m E-W by 10m N-S with an annexe to the W of 5m N-S by 4m E-W. Lying against the E half of the S wall of the house is a further annexe 12m N-S by 5m E-W. This annexe lies against the W wall of the E range of the old priory buildings for most of its length.

The stump of an E-W return wall surviving on the E end of the far N gable of the W range represents the S wall of the house. A long, narrow E-W strip of red and black quarry tiles 14m to the N was the floor of a N facing verandah, taking advantage of the fine uninterrupted view from this point across Caldey Roads to Tenby. Doubtless, the main picture windows in the house also took in the view. The Ordnance Survey 1:2500 of 1887 shows that a landscaped pleasure garden, with a central sundial, was laid out immediately to the N of the verandah.

The lowest course of a truncated N-S wall still butts against the N-W corner of the tower in the E range. This represents the E wall of the annexe on the S side of the house, contiguous with a building on the N side of the priory courtyard (Bushell's 'Frater') which was the mansion kitchen but may have earlier origins.

The Farm (Figs. 2 & 3)

The present farm enclosure and buildings date from the early 19th century and are coeval with the mansion.

Following the Reformation the priory complex was converted into a house of some pretension. By 1800, however, the buildings appear to have been in decline and largely given over to agricultural use, confirmed by the Colt Hoare and Norris drawings (National Library of Wales, Charles Norris Collection, PA 4751 a, b) which were drawn before the construction of the mansion. The church quire had been rebuilt as a 2-storey building (see above) which may represent the farmhouse itself. The W range gateway block is depicted hidden behind a range of 2 buildings with differing roof lines, the N of which however may perpetuate an earlier line and lie against the tall gable (apparently from a vanished long W range) which still survives here. The buildings block both the gateway and the W door of the church. (See 2:0)

The drawing of 1841 shows no farm buildings but is rather stylised and may not be an accurate representation. Furthermore, Ordnance Survey 1:2500 map evidence (1887) and photographs from the later 19th century (Caldey Chapter Collection; Pembs. Record Office DX/771/20), when the present farm layout had already been established, show an arrangement of buildings in and around the old priory almost unchanged from the Norris drawings. The buildings obscuring the priory were removed by Bushell in the 1900s.

The farm includes a rectangular, limestone walled enclosure to the W of the priory complex. The N wall of the enclosure forms a butt joint with the surviving N gable of the vanished long W range building, proving that the enclosure is later and undoubtedly post-reformation. This area has been much obscured by sheds and cellars (see below) and is adjacent to the mansion house site.

The N, S and W enclosure walls support a range of lean-to barns and byres, all apparently of early 19th century date, shown much as today on the Ordnance Survey 1:2500 of 1887.

To the S of the enclosure lies a further group of barns and outbuildings. This bulk of group appears to be rather later in construction, from the later 19th century; they exist largely unchanged from 1887 although there have been a few 20th century demolitions and additions. The yards and boundaries extending E to the present farmhouse, and the house itself, are of comparable date.

The Ordnance Survey 1:2500 of 1887 also shows John Hawkesley's vast greenhouses lying against the S wall of the S outbuilding group, and garden plots leading off southwards. The greenhouses were heated by steam. Water was pumped from the spring to a storage tank near the lighthouses and fed the greenhouses and plots via gravity.

Landscape Features (Fig. 2)

The ponds, earthworks and enclosures surrounding the priory, mansion and farm complex are due to be subject to a detailed ground survey by the RCAHMS and this report is to be regarded as interim only.

The most striking landscape feature on the site is the large rectangular pond, 50m E-W by 28m N-S that survives, still wet, to the E of the old priory (Fig. 2, A). It is rather shallow and regular sided, displaying intermittent rough masonry revetment along its banks. The W edge respects the line of the 19th century walled kitchen garden and so, in its present configuration at least, is post-reformation.

The spring that supplies the pond now runs N through a series of terraced enclosures that descend the gentle valley slope, forming an alignment with the pond. The first and southernmost of these is a regular sunken area, trapezoid in outline and averaging 30m by 30m (Fig. 2, B). It is bounded by a high, rather formal wall and a dam to the N. The enclosure was intentionally dry; the masonry pedestal for a fountain, undoubtedly 19th century but now gone, lies at the centre and drained into a channel emptying into the enclosure to the N. The 1887 map shows a formal garden, with paths, laid out around the fountain. The area is still dry but is now densely overgrown.

Lying at a lower level immediately to the N and within a much less formally walled area 40m E-W by 30m N-S is a pond, now rather amorphous but in 1887 a regular feature some 26m by 26m which supplied the island corn mill (Fig. 2, C).

Beyond the retaining dam and wall to the N is a further lower enclosure some 50m N-S by 30m E-W (Fig. 2, D). The stream has been allowed to flow through it and on its S end lies the mill, a ruinous rectangular masonry building aligned E-W, 10m by 4m. Diagnostic structural details are few, but in general form the building is of the 18th-19th centuries; it is shown in 1887.

Immediately to the N of the enclosure the stream now widens into a further pond of unknown function but which may represent a former fishpond (Fig. 2, E). The series of small enclosures through which the stream flows beyond the pond are all undiagnostic, but probably 19th century. The 2 large ponds W of the quarrymen's terrace are shown in 1887 and may again represent fishponds.

It appears that the ponds, earthworks and enclosures surrounding the site are, as we see them today, of post-reformation date and the product of landscaping for the mansion. However, the surviving E pond at least, if not the series to the N, may have origins as medieval priory fish ponds. In addition, a priory mill would have been present somewhere on the island during the medieval period and may indeed have occupied the same site as the later building.

2:0 DETAILED DESCRIPTION: THE SURVEY EVIDENCE

The survey was limited to the E range and tower, and the W range of the old priory complex, while some limited work was performed on the building on the N side of the courtyard. See plans P.1 -P.4 and elevation drawings E.1 - E.24, and details D.1 - D.7.

The complex is constructed almost entirely from the local hard, pale grey Carboniferous limestone and, to a lesser extent, Old Red Sandstone, both undoubtedly quarried on the island. Some of the dressed freestone around the openings is a softer yellow imported calcareous sandstone, while much of the 19th-20th century work is in brick. Large areas of the walls have been rendered; some of the rendering is early. The roofs have all been slated within the present century.

2:1 The Eastern Range and Tower

The E range is in plan a rectangle 9m N-S by 7.5m E-W extending N from the church chancel. The W wall line continues the division between quire and chancel; the E is set 1.5m back from the E end of the church. The range is of 2 storeys throughout, the ground floors vaulted, and consists of 2 chambers at ground floor level (Plan 1, A & B), (B) featuring a complex of flues, over which lies a large first floor chamber (Plan 2, F). A smaller chamber at first floor level (Plan 2, G) lies over the church chancel. On the W wall is a projecting outshut housing a stairway that progresses from a straight stair into a half-turn to the first floor. Large windows light main first floor chamber (F), set in the E wall in which is also a fireplace. The ground floor flues lead into a massive chimney that ascends through the first floor and the roof. The roof itself is of masonry gables and collar-beam trusses. Render obscures the masonry of both external and internal walls.

The tower joins the E range to the N and is also of 2 storeys (Plans 1 & 2, C & D). It is trapezoid in plan, the N wall not being quite square to the others, and all wall lines are rather irregular. It is roughly 8m square and averages 9m in height. At the NE corner a square turret (E), 2.5m by 1.25m, projects from the E wall and ascends the full height of the tower; at the opposite, SW corner are the remains of a spiral stair which were formerly carried within a further turret which, however, will not have projected so boldly. The tower displays a crenellated parapet with loopholed merlons which continues around the surviving turret and sits on a bold corbel table. The form of the parapet has altered somewhat due to a change in roof levels. A slate roof is supported on masonry gables and king-post roof timbers. Externally the tower is largely unrendered; internally, however, render obscures most of the masonry.

The principal areas in which the masonry was visible were the exterior of the tower, the interior of the tower gable upstands, the W exterior face of the E range, the ground floor of the E exterior face of the E range, and the interiors of some of the openings.

It should also perhaps be pointed out here that Bushell's survey (Bushell, 1908, 250) is misleading, for he depicts the plan of the priory at ground floor level except for the NE 3/4 of the tower which is shown at first floor level.

Phase I

The layout of the church quire and chancel, and the core of its original fabric as it is seen today, can largely be assigned to phase I. Elsewhere the phase I fabric has generally been altered, but where it is visible it is limestone rubble. Voussoirs, where present, are generally thin. The core of the E range belongs to this phase.

The Eastern Range

Phase I work in the E range comprises the interior half of the thickness of the W wall, the internal wall that now divides the ground floor into 2 chambers (A & B), probably the interior vaulting to the S of the latter wall between it and the church (B), and possibly the core of the E wall. The floor of the range is now entirely of concrete.

All phase I fabric is either obscured by later masonry or is heavily rendered and the chronology remains tenuous. However, the spatial rhythm of the phase I building is reasonably clear. It apparently consisted of a N-S line of 3 bays, each aligned E-W. In the W external wall (E.1) can be seen the thin voussoirs for a series of 3 arches of varying degrees of completeness (1, 2, 3); the S (3) has lost its voussoirs but its outline is preserved. To the N are 2 supporting buttress piers and to the S a stretch of walling set back from the line of the buttress faces. The masonry of both the uprights and the voussoirs is entirely local limestone.

The 2 buttresses divide the external lower level of the wall face into 3 bays; the flush infill of the arches is later. The S of the 2 buttresses is in fact a projection of the contemporary internal E-W wall and the level of the arch reflects the pitch of the vault over this area where it is visible within (B). The N-S stretch of walling to the S likewise represents the internal corner between the former N wall of the church quire and the chancel when the quire was originally wider. The dimensions would make the quire symmetrical about the chancel arch.

Internally the W wall, like the entire ground floor interior, lies under a layer of limewash and its fabric cannot be seen. Only that area of the wall N of the internal wall, in (A), is phase I. Of the 2 surviving doorways into the chamber it is probable that the S (4) is of phase I - the N is unequivocally later - and of this only the internal opening is original. It has a triangular 2-centred head rising to a sharp point. The triangular headed light (5) in central bay of the same wall is a recent modification from a further phase I doorway. There is a possibility that an E-W wall between the 2 doorways divided (A) into 2 areas during phase I.

The surviving dividing wall between (A) and (B) has been much altered (E.11). The present doorway (40) is later; the original phase I doorway (6) lay in the middle of the wall and was subsequently converted into a fireplace and bread oven. However, the E jamb and most of the thin voussoirs of the original doorway survive and demonstrate that it had a 2-centred arch head.

Probably the core of the E wall in A is phase I work (E.3) - the absence of original openings makes analysis impossible and while the interior lies under thick limewash the exterior has been refaced at a demonstrably later date. However, the small recess or aumbry (7) at the N end may suggest phase I work. The N wall here (E.9) has been replaced by the S wall of the tower, which was refaced when the vault was installed, at a later date after the spiral stair turret had been removed. It is unlikely that any vault was present during phase I.

The S bay (B) has been much obscured by the later introduction of a bread oven (38). Nevertheless it is clear that in phase I it formed a passage between the area to the N and the church. The masonry blocking the W end of this passage (E.1) can be seen to be a later insertion (below, p19) and likewise, at the E end, a butt-joint is visible between the blocking and the N wall of the chancel (E.3). It is probable that the passage was always vaulted and the present vault which follows the alignment of the passage may well be phase I. It is a steeply pitched 2-centred arch barrel vault on an E-W axis, now heavily rendered. All present openings in this bay are later.

The Tower

Phase I is not represented within the fabric of the tower.

Phase II

The tower was constructed during this phase. The building material throughout phase II is large, roughly squared local Carboniferous limestone rubble.

The Eastern Range

None of the fabric within the E range is here attributed to phase II. The church tower, however, may broadly correspond to this phase.

The Tower

The bulk of the surviving tower fabric was constructed in a single phase. Much of it survives unaltered, representing the body of the tower, the crenellated parapet and corbel table, and both turrets.

From the evidence it appears that the spiral stair turret of the tower would have always truncated the N arch (1) in the W external wall face of the E range (E.1) indicating that the tower is later and built against a pre-existing range, and it has been

assigned to phase II. Its construction removed whatever E range N wall was previously present.

The external face of the E wall of the tower (E.4) survives the least altered from its original Phase II form. However, neither of the 2 ground floor openings is original. The interior of the ground floor of the projecting turret is inaccessible.

There is a slight offset on the N half of the E wall at internal first floor level (8); this was later enhanced as a roof crease but in a slighter form is apparently original. There appears to have always only been 1 light at first floor level into the body of the tower (9 - see D.1), a single light lancet window with a 2-centred arch head occupying a central position in the E wall. The window freestone is a similar limestone to that employed in the rest of the tower and displays a simple chamfer moulding. The internal embrasure is deeply splayed, with a square head towards the exterior but towards the interior (E.3), a wide segmental headed arch. The whole has been later altered. At this level the turret is pierced by 3 small lights (10) to the N, E and S. Each has a very shallow square headed splay narrowing to a loop on the outside, and all appear original.

On the corbel table sit 2 merlons, the N pierced by a loophole, and 2 embrasures; the N embrasure lies against the S parapet of the projecting turret which is unpierced while the E parapet wall of the turret bears a central embrasure. The 3 limestone rain-water chutes at corbel level (11) appear original.

The N wall of the tower (E.5) likewise still displays a considerable amount of phase II fabric but has been recently repointed, and the NW corner rebuilt. The 2 tiers of putlog holes on the external face appear to be original features, but none of the 3 ground floor openings are. The only phase II opening at first floor level is the N turret light (10) mentioned above. The corbel table displays 3 of the probably 6 rainwater chutes that were originally present (11). 4 merlons, each loopholed, and 3 intervening embrasures are present on the parapet. The central embrasure has a higher sill due to the former presence below it of a window opening of unknown form (12). Its internal embrasure opens through the very tall gable upstand that lies behind the parapet and is apparently an original feature. The opening was mirrored in the tower S wall (E.8, 13) but both were later altered and finally blocked; both may have phase II origins.

The W wall is rather more complex. It has been much altered and very little phase II fabric survives in its original form on the external face (E.1). The recent rebuild of the NW corner extends S for 2.5m; a contemporary rebuilding of the SW corner has similarly obscured much of the evidence, particularly in the upper levels. This latter area was the site of the former spiral stair turret and has undergone major alterations at many periods. The result is that only a narrow strip in the middle of the W wall represents original phase II fabric.

The external ground floor openings are both later; immediately to the S of the N opening is an area of unfinished masonry (14) which represents the scar of the N wall of the stair turret that

was formerly bonded in here. In the middle of the wall face is a tall blocked first floor opening (15), probably square headed, its sill at floor level. It may be argued that the opening represents the former, phase II main entry into the tower.

Very little of the phase II parapet survives. Only the central section of corbelling, and 1, possibly 2 rainwater chutes (11) have been unaltered, while all the merlons were removed during alterations to the roof level. The NW corner merlon is a rebuild.

The S external wall of the tower (E.9) replaced the N wall of the E range, and much of it is now heavily obscured by render. Both doorways are later, as is the truncation of the SW corner in the ground floor. In both floors the phase II material has been refaced obscuring any remnant of the former spiral stair turret, and the shaft of the turret obscured. The refacing has also removed the corbel table where it coincides with the interior of the E range gable. This lies against the tower parapet which, W of the gable, has been removed. 2 loopholed merlons and intervening embrasure survive to the E. A similar opening (13) to that in the N wall lies above the former corbel level. It is likewise of uncertain form in its original condition, and to the exterior has weathered away entirely. To the interior of the tower the opening has been reduced and finally blocked; it may be phase II in origin.

The ground floor formerly comprised a single chamber (C) with a full-centred semicircular barrel vault on a N-S axis. The dividing wall is modern. All surfaces are obscured by render to varying degrees. The phase II work includes 2 rather segmental semicircular arched recesses in the S wall (E.8, 16) which may be functional or perhaps merely a decorative blind arcade. Of the variety of ground floor openings, in their present form only the rather squat 2-centred arch headed doorway at the SW corner (E.1, E.2; 17) can be attributed to phase II. This led onto the former spiral stair.

A number of features furnish evidence for the presence of a stair turret at the SW corner of the tower. The doorway leads into what is now a short passage broken through to the outside. The interior face of the W wall of this 'passage' curves to the S before it is truncated. Immediately above the doorway, the internal SW corner of the ground floor displays corbelling (E.2, 18) that supported the stair up to first floor level, ascending anticlockwise. What is now the rather narrow W terminal of the S wall of the tower - now a dividing wall - may represent at least the site of, if not the remains of the stairway shaft. No trace of the steps now remain; whatever scar the treads may have left on their removal has been effaced.

The form and dimensions of the spiral stair and turret cannot now be known with certainty. The entire SW corner of the tower has been subject not only to later alteration but also extensive recent repair. However, it is apparent that the stair will have been carried within a clasping turret on the SW corner of the tower. The maximum N-S dimension of this turret, 3m, is fixed by the truncated end of the N arch of the E range (E.1, 1), and the edge of the scar visible on the exterior of the W face of the

tower (14). The E-W dimension cannot be estimated in the absence of any evidence. The turret will also have had to project into the interior of the tower. It may, furthermore, have been circular.

At first floor level the internal W wall of the tower (E.2) shows a vertical straight butt-joint between the phase II masonry and the repair (19), possibly suggesting the presence of a phase II opening. At a higher level are the remains of the N jamb and sill of an opening (20). The sill lies just below the level of the wall top in the remainder of the tower; it may therefore represent an entry onto the parapet from the spiral stair. The turret, then, would have continued upwards to oversail the parapet.

The first floor of the tower appears always to have comprised a single chamber (D), open to the roof during phase II. The present floor is the top of the vault below. Nothing remains of any original flooring from phase II, or from any other period.

The square headed opening seen blocked in the external face of the W wall is only partially blocked within (E.1, E.2; 15) and appears to have always been a doorway - the possible phase II first floor main entry. 3.5m up in this wall are 2 sockets, mirrored on the E wall (21), that recieved the ends of roof trusses and which arguably represent the roof level during phase II (or phase III - see below).

The internal face of the N wall (E.6) displays a small square headed opening (22), now blocked, just above and to the W of the altered phase II opening (12). The smaller opening is not visible on the external face, opening as it does onto the parapet alure. It does not appear to be an insertion and given its location may likewise belong to phase II.

The NE turret is entered through a square headed doorway at the N end of the E wall (E.3, 23). The N jamb of this doorway is produced into the chamber in order, it seems, to carry a door at right angles to the passage beyond which is canted to the axis of the chamber. The short passage leads into a small chamber (Plan 2, E) with an irregular dome-like vault lit by the 3 openings (10) described above, p16. The floor of the chamber has subsequently been concreted and the ground floor is inaccessible; however it was clearly a garderobe chamber and belonging to phase II.

The parapet alure was inaccessible at the time of the survey, but was in any case hidden when the roof level was subsequently raised by 0.5m, and lost entirely on the W wall. Prior to this, a narrow alure apparently ran right around the perimeter of the tower inside the parapet, probably without a parados. The former ?phase II eaves line would, if the pitch of the roof was the same as at present, have lain on or slightly below alure level, the eaves then lying against the inside faces of the walls and draining via the rainwater chutes (11) at corbel level. The gable upstands show no evidence of any rebuilding and indeed the long sequence of phases represented within their openings suggest that they may be unchanged. If so, they stand very high above the

original ?phase II roof line. However, the church chancel bears a very high upstand (above, p9) and it is quite possible that the tower gables were deliberately constructed in this fashion.

Phase III

All visible phase III work is in roughly coursed limestone rubble; the arches are all rather crude and markedly assymetrical. The remodelling of the E range ground floor belongs to this phase.

The Eastern Range

During phase III the tower's spiral stair was demolished (see below, p20). The S external face of the tower (E.8) shows no sign of the presence of the turret arguing that its removal and the rebuilding of the tower S wall was the first stage of the phase III work. It permitted the N chamber (A) in the E range ground floor to be given its present depressed 2-centred arch barrel vault. This has a N-S axis, and its masonry is now limewashed. It can be seen that the vault has been taken over phase I doorway (4) in a rather awkward fashion and has effectively effaced the arrangement of 3 bays.

The 2 side walls were thickened to take the vault. On the E wall, possibly of phase I, this just meant building against its external face. This wall has subsequently been further refaced but the butt joint between the phase I and phase III builds is visible in the N jamb of the E door of the former passage (E.12, 24). This doorway (24) was constructed, in its original form, at the same time, the passage being walled off. Its internal head is in the form of an assymmetric segmental arch of poor construction, very similar to the contemporary doorway into the tower (see below, p20). The offset that now exists at first floor level on the external face of the E wall (E.4) carries a distinct pitch and areas of slate with their mortar bedding, apparently representing the roof of a single-storey building. However, no such roofing material is visible on the offset on the W face which, over the S phase I arch (3) is markedly convex.

The thickening of the W wall (E.1) involved infilling between the phase I buttresses (1, 2 & 3) flush with them, effacing the bays, and closing off the W end of passage (B). The W doorway (4) was given a crudely vaulted lobby and an external doorway (25) displaying a 2-centred arch with large roughly squared voussoirs, of very distinct assymetry. An obtuse angle in the N wall of the lobby marks the junction of the phase I wall and the phase III thickening; a butt joint between the 2 can be seen in the S jamb of the later opening to the N (E.8, 42). A thick wall was unnecessary in sealing off the W end of the phase I vaulted passage (B) and this thinner wall is thus set back 0.5m.

From the lobby ascends a flight of limestone steps to the present first floor (E.10, E.11; 26). Despite the indications that the phase III building was of a single storey, physical evidence in the W wall (E.1) suggests the possibility that steps were anticipated and perhaps begun during this phase. A ragged

butt-joint can be seen on the W face ascending the full height of the central bay stair outshut, separating the large roughly coursed masonry of phase III from the distinctive evenly coursed small limestone rubble of the succeeding phase.

The Tower

2 major alterations to the tower may be attributed to phase III. With the introduction of a ground floor entry, the spiral stair will have become superfluous and it was demolished and the S wall was rebuilt. Certainly the earliest repair work at the SW corner, resulting from the removal of the stair turret, can be seen on the W external elevation (E.1) to predate the blocking of the first floor entry to the tower (15), which will still have been in use. The repair work is a similar roughly coursed limestone rubble to the phase II fabric.

A ground floor entry was broken through the S wall of the tower, in the E of the 2 arched recesses (E.8, E.9; 27) when the E range was rebuilt. It is a rather roughly constructed doorway with a depressed, assymmetrical segmental head similar to a contemporary door in the E range (above, p19). It has later been roughly cut and is now heavily rendered and lacks detail, but the phase III work appears to be in limestone.

?Phase III - The Tower Roof Structure

The present roof structure is carried upon corbels of recent insertion (E.2, E.3; 55) at a higher level than the original truss sockets (21). However, the trusses in their present location lie precisely above the earlier sockets. The possibility exists that it may be a phase III roof, *in situ* but raised.

The roof as it exists today is of 3 bays defined by 2 king-post trusses with concave struts to the principal rafters. The king-posts apparently have stub tenon joints to the tie-beams. The tie-beams are chamfered and each bears 2 sawn out recesses for wall-braces. The ridge is original and has arched longitudinal braces to the king-posts and a sawn out recess for a longitudinal wall-brace at either end. All original timber work is in oak. The wall-braces are missing, and there is no evidence of recesses to take them on the internal wall faces. The purlins are modern, lying on modern additional principals which in turn lie above the original the trusses at a shallower pitch. The original trusses fit the internal span; at the level the roof now occupies these shallow pitched additional principals bring the roof span out over the wall tops. The rafters are modern, and those to the W have been further extended during recent repair work. The scarfed subsidiary timbers supporting both the ridge and the S truss are also modern. The trusses appear to have always been aligned to the N wall of the tower and therefore not square to the building, occupying the same lateral positions as the sockets lower down.

Phase IV

To this phase belongs the gabled first floor of the E range. Phase IV structural masonry it is a smaller limestone rubble and

is regularly coursed. The openings that survive in their original form have finely dressed sandstone surrounds apparently contemporary with the surrounding structural fabric.

The Eastern Range

The structure and fine detail of the first floor chamber (Plan 2, F) over the ground floor vault is so entirely different from the phase III material as to preclude any suggestion that it has been modified from an earlier first floor, a view confirmed by the presence of phase III roofing material as noted above. The detail is in complete contrast to the crude undressed work of phase III.

Whatever work may have commenced in phase IV on the stairway (26) leading from the lobby on the W wall was completed. The limestone steps lead up southwards as a straight stairway before progressing through a spiral half-turn to enter the first floor. The stairwell is lit by 2 identical small, narrow single light openings (E.1, 28 - see also D.2) with square heads and internal splays set in the W wall of the stairwell. Both have dressed chamfered surrounds of calcareous yellow sandstone. No further work in the ground floor can be attributed to phase IV.

The doorway into the first floor chamber (F) has a fine dressed chamfered surround of Old Red Sandstone and a 4-centred arch head (E.2, 29 - see also D.3). it appears to be unaltered.

Both E and W walls at first floor level are set back from the phase III wall face and lie on pronounced offsets. The stairwell is an upwards continuation of the ground floor wall thickness and becomes a projecting outshut at first floor level. In the angle between the S wall of the outshut and the W external wall face is a blocked doorway (E.1, E.2; 30 - see also D.4), its dressed stone robbed out, with a single slab lintel. The jambs and head, also minus their dressed stone, still exist internally, though much altered. The door sill corresponds to the top of the sloping offset.

N of the stair outshut is a further opening (31) that may have been altered out of all recognition from a phase IV window. The 'window-seat' arrangement internally is spurious and the lower, narrower opening may represent the remains of the original opening.

In the opposite wall (E.3) is a fireplace (32, see D.5) formerly with a gabled back, which with the flue has since been truncated. The head is of undressed voussoirs forming a very depressed segmental arch. The jambs, however, are of dressed Old Red Sandstone and may be the recut jambs of moulded stone arch-headed windows with sunk spandrels (A J Parkinson, RCAHM, *pers. comm.*). The N jamb has been later repaired. Of the 3 openings in this wall at least the 2 either side of the fireplace (33, 34) are originally from phase IV. The Colt Hoare and Norris drawings of c.1800 (fig. 4) show them as large rectangular mullioned windows possibly with hood-moulds - undoubtedly phase IV work. Also shown is the gabled fireplace back and the tall, square chimney. Both window openings have since been altered. The S (33)

period and is of limestone from which the mortar has badly weathered. The opening was apparently merely narrowed; the internal elevation displays an area of masonry within the W third of the larger opening, the lower section of which has collapsed.

Phase V

Phase V was a period of change of use and extensive remodelling of the E range and tower. It is characterised by the introduction of brickwork, and the almost uniformly poor quality of the construction. The fabric is still primarily masonry, but contains a significant proportion of Old Red Sandstone in addition to the limestone. Both are unsquared and uncoursed, and bonded by poorly pointed lime mortar. Much thick render survives in areas within the ground floor and may be from phase V.

The Eastern Range

The most significant changes occurred in the former passage (B). The W half of the area was given over to a large, brick-lined bread oven and flue (E.2, 38). The oven doorway is likewise brick-lined, with an iron frame. The iron oven door lies just outside the building; it has a rather ornate cross fleury moulding and with the frame is probably rather later. The masonry surrounding the oven door is poor quality limestone and sandstone with some brick, typical of this phase. An area of the phase I vault was hacked away to allow the insertion of the oven flue which, however, is set back from the edge of the remaining vaulting. The breast of the flue carries a brick, segmental arch head much obscured, like the rest of the breast wall, by thick render which may be contemporary.

The wall dividing area (B) from the main body of the ground floor (A) was subject to associated work. The insertion of the bread oven effectively blocked the phase II doorway (E.11, 6), the N side of which was modified into a large open fireplace with a shallow angled flue and a second, smaller bread oven. This entailed the complete removal of the W jamb of the former door; this area has been considerably damaged and much of the structure lost. The arrangements are not clear but it appears that at least one other flue leads off here, again at a shallow angle. The present brick grate is later; the entire wall face has since been limewashed.

The complex of flues, at least 3 in number, are ducted into a massive square masonry chimney (E.11, 39) sitting on the phase I vault against the S wall of the floor above. The chimney rises through the W slope of the phase IV roof and terminating as a square stack, now with no pot. The heavy rendering on the chimney may be contemporary.

The construction of the ovens will doubtless have necessitated the insertion of a new doorway between the 2 ground floor rooms (A) and (B). The present doorway (40) in the W half of the wall has a later doorframe but is probably phase V; the rendering around the opening has obscured its features but the timber and lath and plaster lintel may be contemporary. At the same time the

doorway leading from (B) into the church chancel (41) was probably inserted. The threshold has a limestone step up to the chancel and the door head is a timber lintel which may be contemporary; this area, too, was heavily rendered.

The render still continues into the S jamb of the external doorway in the E wall (24), with a stop at the impression of a former door frame, now gone, demonstrating that the doorway was remodelled during this phase. In addition, the external jambs represent the phase V refacing material of this wall.

In room (A) to the N a doorway (E.1, E.2; 42) was broken through into the passage in the tower that led to the spiral stair. Both now lead to the outside through an opening (56) that has been subsequently altered but in its original form was probably of phase V. Doorway (42) is canted at an angle to the room; the jambs have been finished but the head, where it has been hacked through the phase III vault, is very irregular and unfinished. A vertical line of bricks set into the middle of the adjacent N wall (E.9, 43) are probably of the same phase but their function, or the nature of the channel which they fill, is unknown.

The entire external face of the E wall (E.4) was refaced, at ground floor level, with very poor predominantly Old Red Sandstone masonry during this phase. Some brick is also present. The attempt at coursing is likewise poor and some degrees from the horizontal. In the middle of this wall the Norris drawings show a large square headed opening, probably a doorway that was to be converted into a hatch (45) in the succeeding phase.

Phase V work on the first floor includes the large chimney (39) mentioned above, p23. Its insertion truncated one of the phase IV roof trusses, the E blade of which was replaced with a square sectioned timber. Doorway (30) in the angle between the W wall and the stair outshut was altered in 2 stages; both may be assigned to phase V. Firstly, the opening was partially blocked to form a window, the interior jambs being left clear. The external face shows 2 sections of reused yellow sandstone from the truncated window reveals. At some later date, but probably within the same phase, the window was narrowed by further blocking into a single light, the work again incorporating re-used yellow dressed sandstone. The whole has been somewhat effaced by later plaster-work on the interior.

It may also be during this phase that the phase IV communicating door into the tower (E.8, 35) was blocked and the present doorway (44) inserted; the latter, however, shows no features that can be assigned to phase V but may have been later altered.

The Tower

Notwithstanding the quality of the workmanship, the physical evidence indicates that during phase V the tower was fitted out for some degree of domestic comfort. Communicating door (35) into the E range may have been re-sited (see above, p22). The lancet window (E.3, 9) in the E wall was blocked and its embrasure

converted into a fireplace. The poorly constructed masonry fireplace back survives in part, as does the brick grate. The flue leads vertically up inside the wall but has since been blocked.

Similar construction is seen in the 2 smaller windows inserted in the large openings at either gable end. The S internal elevation (E.8, 13) displays an infill of poor construction to the E of the phase IV narrowing, pierced by a small square opening with a slight splay beneath a flat lintel stone. That on the N wall (E.6, 12) has possibly been further altered; the rough infill ascends halfway up the opening but the frame here is later. On the exterior face (E.5) this alteration can be seen as an area of infill pierced by a fairly substantial square headed opening, now blocked. The large later window (54) below may have had a precursor during this phase. The same wall face also shows at ground floor level an area of very rough repair work, of masonry and brick, W of and cut through by the later opening (49).

Little work appears to have been performed in the ground floor but the thick render finish still surviving in areas is very similar to that seen in the E range and there assigned to phase V.

Phase VI

Phase VI was a period of major alteration though mainly non-structural. Many openings were altered, and a number of new ones inserted, and it was during this phase that the surviving priory buildings took on the appearance that we see today. No one material characterises phase VI; the construction is in the main sound but rather rough. Much of the limewash present in the ground floors, and some first floor finishes in the tower, are probably phase VI.

The Eastern Range

Most of the E range openings as we see them today can be assigned to phase VI, and probably most of the surviving door- and window frames. On the ground floor a large hatch (E.3, E.4, 45), similar to the 2 in the tower N wall (below, p26) was inserted through the E wall of (A). The external embrasure descends to the ground below a very depressed segmental head, of brick. The hatch sill is set back from the external wall face but flush with the internal face. The interior of the head, and the sill, have since been remodelled but it seems that in section, the head always followed a curious curve down into the room at right angles to the pitch of the vault.

The phase V fireplace in the S wall (E.11, 6) recieved a new brick and iron grate. The door frame in (40) leading into (B) to the S also probably belongs to phase VI.

On the first floor, it appears that with one exception - the partially blocked phase IV doorway (E.1, E.2; 30) between the W wall and the stair outshut - all the openings were remodelled into the form that we see today. The possible phase IV opening

(31) further S in the same wall was opened to form a large rectangular window, its long axis horizontal, with a projecting brick sill. Its head has since been rebuilt.

The 2 phase IV windows in the E wall (E.3, E.4; 33, 34) were remodelled as rectangular sash windows the frames of which have been removed but still lie within the building. The N window (34) has a projecting sill. The 2 windows were joined by a third (46), smaller and square, to the S, again with a projecting brick sill. The present window heads, and the plasterwork in the openings, are later.

The doorway (E.9, 44) into the tower through the N wall was also remodelled while it appears that the S face of this wall was extensively refaced. The W jamb of the opening displays a curious dog-leg; the head is not original but the door frame probably is. A photograph of c.1908 (Bushell, 1980, 11) shows a chimney emerging through the N gable of room (F) not depicted in the earlier Norris drawing. No flue is now visible in this wall but it may be that room had a suspended attic floor during this phase (cf. the contemporary ceiling in the tower, below p27). A fireplace was possibly then located in the area of gable that has now weathered away (47), but which still displays some inserted brickwork.

The window (E.14, 37) in room (G) over the chancel was remodelled with an internal lath and plaster head and a frame still present. Also still *in situ* is the 4-pane window itself. To the E a small fireplace (48) was inserted, with a brick grate and a timber frame. It has since been blocked and its chimney removed.

The Tower

During phase VI a number of openings were cut through the tower fabric, while the ground floor (C) was divided into 2 rooms.

The dividing wall forms a dog-leg dividing the ground floor into 2 roughly equal halves (Plan 1; Ci, Cii). It was given thick render, probably during this phase, but rather different from the limewash that constitutes the remainder of the phase VI finishes.

The N of the 2 rooms thus formed (Ci) was provided with 3 openings. In the N wall are 2 identical hatches (E.5, E.6; 49), similar to (45) in the E wall of the E range (above, p25). Their external embrasures descend to the ground. The very depressed segmental heads are of brick. The brick sills of the hatches are set back from the external wall face. A large area around the openings was refaced, the work including the provision of a small square brick lined opening (50) in the turret garderobe shaft, of unknown function. Internally the hatches are obscured by render but their sills are flush with the wall face and they show the same segmental heads. The present timber frames are probably original.

A doorway was inserted through the E wall (E.3, E.4; 51), hard up against the wall demarcating room (Ci). Its head is not original. The door leads out into the contemporary walled garden

whose surrounding wall butts against the turret. Within the garden are the remains of walls representing sheds and outhouses also belonging to phase VI. 2 former single storey buildings were constructed against the tower. Against the turret was a building aligned E-W, the remains of the S wall of which butt against the N jamb of phase VI door (51). S of the door the remains of a further E-W wall represent the N wall of a lean-to building against the E wall of the tower, the cement roof crease of which can be seen on the wall face (E.4, 8). Both buildings can be seen in a photograph of c.1908 (Bushell, 1980, 11) and are shown on the Ordnance Survey 1:2500 of 1887. The cast iron drainpipe below the phase II rainwater chute here is probably contemporary.

The new southern ground floor room (Cii) displays 2 phase VI openings. In the E wall and opening into the lean-to is a small square opening (E.3, E.4; 52). The base of the opening is lined with slate throughout its considerable length. The exterior of the opening is lined with brick and displays slots for a frame, presumably of timber. A considerable area of the outside wall was refaced here and the whole heavily limewashed, as was the interior of room (Cii).

A doorway (E.1, E.2; 53) was inserted through the W wall, hard up against the wall between (Ci) and (Cii). Its head is not original. It led into the area occupied by the N Building.

Room (D) in the first floor of the tower likewise received extensive alterations. A very large window (E.5, E.6; 54) was inserted through the N wall. The slightly splayed reveals descend to floor level; the brick and slate sill is a little higher up. The head is not original. Communicating door (44) into the E range was remodelled (see above, XX). Meanwhile, the altered openings (12, 13, 22) higher up in either gable were finally blocked; (12) was fitted with an internal timber frame.

The interior walls, and the N window embrasure (54), still display extensive areas of the hard grey 'pebbledash' render that was applied at some period during phase VI. This terminates in a straight horizontal line at the level of the former, lower roof tie-beams (21) proving that the roof line was not raised until later and that a suspended ceiling had at some time been introduced. A ventilation grating in the E wall also respects the ceiling line.

Phase VII

Little new structural work can be attributed to phase VII which was chiefly a period of repair, consolidation and finishing.

The Eastern Range

3 main features, both superficial rather than structural, represent phase VII in the E range. The roof was re-slatted and re-raftered, and then the first floor was almost entirely given a finish of pink plaster. The slates we see today are phase VII. In addition, the S of the 2 phase I doorways (5) in the W wall of the E range was converted into a window.

In the first floor room (F) the re-slatting was accompanied by the lining of the roof with pitch pine boarding. The lining curiously lies above the trusses and purlins, leaving them exposed. A skylight was left in the second bay from the N end but was slated over. In room (G) over the chancel the lining is continued in lath and plaster; here, the W slope displays 2 subsidiary softwood purlins of circular section.

The interior pink plaster finish extends throughout both rooms (F) and (G) but is weathered to various degrees. It is however possible to make out the red-painted dado in the SW corner of the room (F); here, the plaster overlies the pitch pine boarding proving it to be secondary. The plasterwork extends into all the openings stopping at the pre-existing frames; in doorway (44) into the tower it was not completed. At the same time window (31) in the NW corner of the room (F) may have been remodelled into the form we see today, and window (30) to the S glazed and its opening rendered. The door frames onto the stairway (29) and into room (G) over the chancel (36) may be phase VII.

On the ground floor, in (A) the S of the 2 phase I doorways (5) was converted into a peculiar double-splayed light. Externally, the opening lies under a flat lintel stone but the sill is of concrete (E.1).

The S half of exterior of the E wall displays at first floor level a thick coarse sandy render (E.4), also probably phase VII.

The Tower

During phase VII the roof structure was installed at its present level, with the removal of the W parapet and the concealment of the alures. The trusses now lie on inserted corbels (E.2, E.3; 55), one of them of concrete and another with a short timber wall-brace. The purlins and rafters are all of this phase. The roof has been described above, p20.

The extensive rebuilding of the NW corner of the tower displays at least 2 phases and the earlier may be phase VII work.

Phase VIII

Within the surviving fabric phase VIII is a further period of repair, some of it quite extensive. 2 of the tower corners have been rebuilt and nearly every opening within both buildings has received a concrete or timber lintel. While the quality of the rebuild is in the main good, over the inserted lintels it is very poor and the pointing haphazard.

In contrast, it is within this phase that the outbuildings in the walled garden have been removed.

The Eastern Range

The NW corner of the N room on both floors (A & F) has been subject to the rebuilding of the adjacent tower (see below). On the first floor this has interfered with the roof and the N 2 rafters here are recent. The pitch pine boarding now terminates untidily. The remainder of the E range displays little further phase VIII work with the exception of the insertion of a concrete or timber lintel over most of its openings and the blocking of the disused bread oven's flue (38) with corrugated sheeting.

The Tower

Both the NW and SW corners of the tower were rebuilt during phase VIII (E.1). In the NW corner both the exterior and interior display phase VIII work. The limestone is slightly darker than the original phase II work, but the pointing is of good quality. The corbel table has been reconstructed but without rainwater chutes, while the NW merlon has been given concrete coping.

A similar situation prevails at the SW corner on the site of the former spiral stair. The area has been extensively rebuilt making it difficult to interpret its earlier structural history. It now comprises a 'sleeve' wall extending S from the W wall line which at first floor level forms part of the W wall of the E range. At ground floor level the former stair area now opens to the outside (56) below a timber lintel of phase VIII. Similar lintels, either of timber or concrete, have replaced the original heads of many of the tower openings on both floors.

The internal face of the blocking of the phase II first floor entry (E.2, 15) appears to have been refaced in recent times with a similar darker limestone to the 'sleeve' wall with the remnant impressions of strapping; the internal half of the opening and jambs have been left clear.

The construction of the 'sleeve' wall affected the W line of roof rafters and they are all now scarfed to secondary subsidiary timbers. The roof has subsequently been re-slatted.

2:2 The Western Range

The W range today consists essentially of 2 elements, separated by a N-S wall (Plans 4 & 5, H) common to both. Wall (H) is a northward projection of the N-S limb of the former NW corner of the church quire. It forms the E wall of a rectangular gabled building, 9m N-S by 4.75m E-W, of great irregularity both in plan and elevation. The building contains 2 ground floor bays, a chamber (Plan 4, J) and, to the S, a vaulted gate passage (K), beneath a low slate-gabled first floor (Plan 5, L) carrying a cylindrical chimney and reached up a flight of masonry steps. Superficially, the building appears highly unlike the E range and tower in character. The roof is modern. The remains of a further building continuing the alignment can be seen within the undergrowth N of the stair; it is at present inaccessible and is not described further within this report.

Much of the development W of the wall has now gone but a tall masonry gable end still survives 12.5m N of the present W range (E.19, I).

The exteriors and ground floor interiors are rendered in limited areas only; much of the upper floor interior has been plastered. However there has been much repointing and areas in which joints, insertions and breaks in construction are clear are few and far between.

?Phases I-II

The N-S wall (H) is tentatively assigned to a general phase corresponding to phases I and II in the E range. It continues N from the former NW corner of the quire for 20m, and is of coursed but unsquared limestone rubble throughout. It has been much altered and now displays a variety of openings, few of them original and most of them blocked. It is one of the few elements within the priory that now lacks any rendering. Only the W face was accessible for examination.

At its N end is a large E-W gable wall (E.19, I), likewise much altered but tentatively assigned to phases I and II. At the E end of the gable are the weathered remains of the return for the N-S wall which formerly ran parallel to wall (H) to form a gabled building. The building is depicted in a variety of 19th-20th century prints and photographs but may have origins in phase I-II.

Gable (I) stands 6.5m high. It is of similar limestone rubble construction to N-S wall (H) and though rather roughly coursed is of good quality with sound quoins. Its N face was inaccessible and was not examined. The W end displays a butt-joint with the adjoining 19th century farmyard wall. The E end was altered when the mansion was built against it; this area is now inaccessible and was not examined fully. There is a later opening in this corner where it has been undermined by a 'cellar' (E.15, E.19; 89). The existing roof-crease is undoubtedly later and on the E slope is of concrete, but may respect the line of an earlier crease.

A large opening (57), apparently with a 2-centred head but much weathered, descends to ground level. No window surrounds nor dressings are now present but the jambs display slots and sockets possibly for tracery. The opening has been partly blocked with material very similar to the gable masonry and possibly closely contemporary; the present top of the blocking is just under half way up the opening.

Following N-S wall (H) southwards a doorway is seen (E.15, 58) later altered and probably not phase I-II in origin. The E-W wall here (M) is not bonded into N-S wall (H) and is later; the blocked doorway to the S (59) is likewise probably later. Immediately adjacent to the surviving W range building, however, is a further blocked doorway at first floor level (60) which may be tentatively assigned to phases I-II. Its S jamb appears to predate the NW corner of the W range, there being a butt-joint between the 2. The steps against the N face of the present W

range (E.20) lead up to a landing that respects the level of the sill of (60); this may imply that the steps have their origins within this phase.

From this point S to the church much of wall (H) appears to have been rebuilt, or at least refaced, when the present W range was constructed. However, a blocked opening (61), apparently a doorway, lies above the present gateway next to a light (62) with a splay opening to the E. Both are truncated arguing for a higher roof level whenever they were constructed. On the evidence of the light they represent openings associated with a building to the E rather than to the W of the N-S wall but even though the sill of the door respects the current first floor level it is unlikely, from their position above the gate, that they are associated with the present W range, and may be phase I-II.

A scar ascends the full height of the external SW corner of the present building suggesting that an E-W wall was bonded into N-S wall (H) here, and thus contemporary with it.

The S wall of later gate passage (K) follows the former line of the phase I quire N wall.

Phase III

Phase III activity suggests that the putative ?phase I-II gabled building W of N-S wall (H) may already have been derelict, possibly at least partly demolished. Against the E face of wall (H) was constructed a 2-storey building, in both construction and detail very similar to contemporary work in the E range. The phase III work within the W range is in a smaller limestone rubble, roughly coursed, and the openings are rather irregular. Furthermore, it is the irregularity in both plan and elevation of the phase III work that gives the W range its present assymetric appearance.

Ground floor chamber (J) and the N corners of the upper floor with their adjacent masonry are largely phase III work. The flight of steps against the N face, if not belonging to ?phase I-II, is contemporary. The chamber is roughly square in plan. The ground floor entry from the courtyard is via a low full-centred semicircular arch in the E wall (E.17, E.18; 63) with irregular and incomplete voussoirs. The opening does not appear to be a later insertion. There is no evidence for doorstops and the chamber may have been open. In the opposite, W wall are 2 rather crude square headed lights originally with flat lintel stones (E.15, E.16; 64). The N of the 2 has a shallow splay and is now much weathered; the S is canted at an angle to view the present gate area, and has a later timber lintel. All other openings into the chamber, blocked or otherwise, are later. The present ceiling is likewise later; the corbels that can be seen in the W and N walls 0.8m below the present level (E.16, E.22, 65) carried the phase III upper floor. They do not appear to be later insertions. The cobble floor, of rounded river pebbles, is much worn but is likely to be contemporary with that in the rest of the courtyard and therefore later.

Against the exterior of the N wall (E.20) is a steep flight of

limestone steps which lead to the upper floor. The steps lie within a parapet wall which formed the S wall of the building to the N not discussed within this report (see above, XX). At the top of the steps lies blocked ?phase I-II doorway (60); its sill, like the 'landing' here, is at the same level as the phase III upper floor. However, it is suggested that only the blocking belongs to phase III and that the opening is earlier; there is a possibility that the steps themselves have origins within phase I-II respecting as they do this door level (see above, p30). The uppermost 2 steps, within the reveal of first floor doorway (66), do not respect the phase III floor level and are later.

First floor doorway (66) is essentially phase III. Its sill has been subsequently raised by 0.5m and this has entailed the removal of the phase III door head, what appears to be the springer of which can be seen in the W reveal. The upper floor has since been much altered and only the core of the masonry in the N half can be assigned to phase III.

None of the fabric within the S half of the building (K) is of this phase. From the evidence of the blocked openings this was an area of ?phase I-II structural activity but it is not known what was present here during phase III.

Phase IV

During phase IV the present gate passage was constructed and the first floor extended to the S. The construction is better while the detail, where it survives, is in dressed yellow sandstone and of fine quality. The prevailing trend is, like phase IV within the E range, towards domestic comfort.

The gate passage (K) forms a wide barrel-vaulted chamber aligned E-W. The E face of the gateway is set back from the phase III E wall face, which leans back progressively so that the 2 coincide at first floor level. A vertical joint descends the upper 2/3 of the N wall of the passage (E.23) and represents the junction between phase II and phase IV work, the wall face having been rebuilt here to take the vault. The S wall represents the phase I N wall of the quire, but was apparently refaced. The vault is in the form of a segmental 2-centred arch that emerges at the E side of the building as an open arch with large, roughly squared voussoirs (E.18, 67). The W third of the vault has cut-outs for the 2-leaved gates and here emerges in the W wall face as a depressed segmental arch with similar large voussoirs (E.15, 68). The opening here has been later partially infilled but can be seen to be narrower, indicating the presence of stops. The present floor of the gate passage is later.

Of the doorways in either side wall of the passage the S (E.24, 79) is later while the N (69) communicates with phase III chamber (J). It opens into (J) as a depressed, segmental 2-centred arch with fairly good quality voussoirs (E.22). Its outer arch (E.23) is low and 2-centred with obscured voussoirs. Doorway (69) is here regarded as phase IV but this attribution is in the absence of structural evidence to suggest that it is an insertion.

The roof of the gate passage vault dictated the level of the phase IV first floor (L) which came to lie 0.5m above phase III first floor level. The present timber floor and screed over the vault are modern. The ragged edge of the cut-back phase III S wall at this level can still be seen (E.22). 2 additional steps were inserted over the sill of first floor doorway (66) and the head was raised; the present head, however, is a recent insertion.

The external E face of phase IV first floor (L) is corbelled out over the gateway. Corbels also support the cylindrical chimney (70), with slight shoulders at eaves level, inserted during phase IV into the middle of the W wall (E.15). The fireplace (E.16, 71) respects the new higher floor level. It has undergone some later alteration but still largely reflects the original phase IV arrangement. A projecting hood is carried on a flat lintel stone resting on 2 corbels either side; The flue leads vertically into stack (70). The ceramic pot is recent.

The present roof, which is modern, apparently lies at the same level as the former phase IV roof. The interior of the W wall displays 3 limestone corbels (E.16, 72) which undoubtedly carried the phase IV roof trusses. The chimney shoulders respect this roof line, and later prints show a roof much like the modern one.

The ?phase I-II doorway (61) in the W wall was at some period blocked, presumably during phase IV; only the N edge of the blocking is visible internally (E.16). The adjacent light (62) remained open, though both openings were truncated by the eaves line of the phase IV roof. The extent of any surrounding ?phase I-II masonry cannot now be seen, nor therefore the extent of the phase IV rebuild of the N-S wall here.

Of the remaining first floor openings only the N window in the E wall (E.17, E.18; 73 - see also D.6), and possibly the windows in either gable end, belong as we see them today to phase IV. Window (73) lies within a splayed embrasure whose square head is modern but probably reflects the original arrangement. It has 2-lights with chamfered yellow calcareous sandstone surrounds displaying cusped heads with sunk spandrels. The window is evidently *in situ* and not re-used. The remaining windows in the side walls may have their origins within this phase but have been later altered. In particular, the external opening of the window immediately to the N (74) corresponds closely in size, shape and level to (73). The internal embrasure has been altered.

In each gable end is a single-light window. That in the N gable (E.20, E.21; 75 - see also D.7) lies in a slightly splayed embrasure whose square head is at the same level as that of window (72). Externally it has a dressed yellow calcareous sandstone surround that, however, displays a simple chamfer in the sill and 2-centred arch head but a rebate for glazing in the shafts. This suggests that the window is a re-use of material from 2 former windows, but there is no further evidence for this.

Higher up in the S gable is a rather irregular square headed embrasure (E.24, 76) that now contains a modern window frame. The form of the original window here is unknown but the opening may

belong to phase IV.

Phase V

Phase V was a period of changing function within the W range corresponding to that in the E range. Phase V work is rather poor though not as crude as it is within the E range; nor is brick used as extensively. Much of the yellowish render that obscures areas of the exterior probably belongs to this phase.

It must be stressed that the W range as visible today forms only a part of the agricultural complex present here during phase V. The Norris drawings of c.1800 show a number of adjacent farm buildings. A large N-S building appears to (re)-use gable (I) at the N end of N-S wall (H) and has a gablet to the W. An E-W cross-wall (M), probably from this building, still butts against the main N-S wall 5m N of the present W range. A lean-to is shown lying against the W face of the surviving W range building, against which in turn lies a gabled E-W building which also partly obscures the church doorway. Most of these buildings remained in place, in one form or another, until swept away in the early years of the present century.

The buildings have left little trace in the surviving W range fabric. However, the W face displays a 2 large inserted corbels (E.15, 77), the surrounding matrices of which contain brick. They occupy differing levels and undoubtedly represent supports for the floor and roof timbers of the lean-to. A socket (78) lies in the same wall at roughly the same level as the upper corbel and may be associated. To the same phase probably belong at least some of the repairs to this wall face, and 1 or both of the doorways (58 & 59) through N-S wall (H) further N.

Within the surviving W range building phase V work comprises the installation of a smaller portal at the W end of gate passage (K), the provision of a number of pigeon-holes in the upper levels of the E face, and the insertion of some openings, now mainly blocked.

A narrower and lower entrance to the gate passage was made by the partial blocking of its W end (E.15, 68). The work is in large squared limestone rubble of good quality but the mortaring is poor. The new arch is 2-centred and of good voussoirs but is confined to the stops, the jambs supporting a 2-piece timber lintel. The 'tympanum' so formed between the lintel and the phase IV vault, and the soffits of the vault itself, lie under a heavy yellowish render that may be contemporary. A square headed doorway to the church quire was inserted into the S wall of the gate passage (E.24, 79). The opening and timber lintel are probably phase V; the door-frame is later.

Areas of the E face of the range (E.18) were refaced at first floor level; one of the few locations in this building where the joints between the successive builds are clear. The refacing incorporated 4 tiers of pigeon holes, 30 in number, each tier with an associated ledge. The lower ledge (80) in fact continues southwards for some distance, suggesting the possibility that it

doubled as a roof-crease for a former lean-to building within the courtyard. However, the thick yellowish render on this face, which is probably contemporary, continues uninterrupted across this line. A crease (81) visible in the render to the S of the gate passage on this wall face undoubtedly represents the roof-line of a building against the church quire shown on the Ordnance Survey 1:2500 of 1887.

The render continues uninterrupted up to the opening of the middle first floor window (74) in this face, demonstrating its possible phase IV origin (see above, p33). The remainder of the windows on this floor may be alterations of the following phase. A blocked opening of indeterminate nature visible on the internal face of the N wall of the building (E.21, 82) lies under a timber lintel and may belong to phase V; it has been truncated by a later doorway (88). Immediately to the W in the same wall is what appears to be a blocked socket (83) but again its nature is not known.

Phase VI

Phase VI represents a continuation of phase V activity. Whilst it is possible to separate the 2 phases on a structural basis within the E range, the evidence is rather less clear within the W range where differences in the nature of the fabric are fewer. However, it may be proposed that most of the window openings as they are seen today represent phase VI work.

For instance, the square first floor window in the N half of the W wall (E.15, E.16; 84) has to the N an inserted brick reveal, and a brick sill. Its embrasure is slightly splayed; the head is not original. The frame has gone. In the E wall on the same floor the central window opening (E.17, E.18; 74) may have origins within phase IV (see above, p33) but the S reveal contains brick. The window may have been remodelled - and have lost its splay - during phase VI, to which the 2-leaved frame clearly belongs. The remaining first floor window in the N half of the E wall (85) appears to be an insertion into the phase V refacing but this is probably an illusion created during its modification; the opening probably has earlier origins. It has a splayed embrasure but the square head is not original. The timber frame belongs to phase VI.

2 further openings in the W wall, at ground floor level, may have been inserted during phase VI. A square window (86) in an unsplayed opening with a timber lintel, sill and frame lies high in the wall of chamber (J). It can be seen to be an insertion and has a brick surround. Immediately S of phase III arch (63) and just above ground level is a blind opening (87) of unknown function. The surround is again of brick.

A doorway leading onto the 5th step up the external staircase was opened through the N wall (E.20, E.21; 88), again probably during phase VI. The sill projects out from the wall face over the lower steps. Inside the chamber 2 steps lead up to this doorway, which has a timber lintel. The insertion of the door took place after the blocking of the adjacent phase V opening

(82), which it truncates; the door itself has later been blocked.

The phase V outbuildings adjoining the present W range largely remained standing throughout phase VI and one or more of the openings in the N-S wall (H) will display phase VI work. Possibly the S of the 2 doorways (E.15, 59) was blocked during this period; it is a little more certain that the N doorway (58) displays phase VI narrowing, the new N jamb displaying 19th century brick.

Of the finishes it appears that the hanging slates that still survive in part on the external W face (E.15) between (70) and (84) belong to phase VI; they do not appear to be shown in the Norris drawing of c.1800 but are present in a photograph of c.1908 (Bushell, 1908, 252). The rendering S of (70) may likewise belong to this phase. Another photograph of the same date shows a timber 'barn door' closing off phase III archway (63) in the E wall (Bushell, 1908, 253).

Phase VII

Phase VII was a period of major renovation of the surviving W range. This was accompanied, however, by the demolition of the surrounding outbuildings to render the environs of the W range and church as we see them today. The shed (89) and associated 'cellar' at the N end of wall (H) in the angle between it and gable (I) replaced the long gabled building here.

The renovation work is in the main superficial, limited largely to timberwork and finishes. However, it was during phase VII that the courtyard was cobbled with river pebbles. The surface extends into ground floor chamber (J) and gate passage (K) was given a cobble floor at a higher level, reached by steps up from the courtyard.

Doorway (88) onto the external stair in the N wall of chamber (J) was blocked, and a timber door frame installed in both the S doorway (69) and doorway (79) leading from passage (K) into the church.

The first floor recieved its present timber floor over chamber (K), on the same level as the phase IV floor, and the present first floor door-frame in (66) was installed over a brick sill. However, the main work in upper floor (L) was the finishing of all the internal wall faces, most of which survives to obscure the masonry here. The lower levels carry a thick pink plaster to form a dado which continues into the window openings. A panelled somewhat naïve design was cut into the plaster. The plaster displays an abrupt and regular vertical stop towards the S end of the chamber indicating the former presence of timber panelling or perhaps a screen across the room. The upper levels are simply limewashed but traces of overlying blue paint still remain.

Phase VIII

Phase VIII work in the W range is limited mainly to the

construction of the present roof.

A concrete wall-plate was laid on the top of all 4 first floor walls to support the roof trusses. The trusses are a rather unusual variation of the scissor collar and rafter truss in which the common rafters lie almost upon the principals, the collars not extending beyond them. The purlins are therefore cleated to the principals. The roofing is of slate.

The first floor doorway has been given a concrete lintel, and the chimney stack given a ceramic pot. A new gutter has been installed between the W range and the church.

Characteristic of phase VII is the indifferent to mediocre quality of much of the repair work. This particularly apparent within the W range; an area in the N wall of gate passage (K) W of doorway (69) has been so badly repointed that none of the masonry is now visible (E.23).

2:3 The Northern Building

The building to the N of the courtyard (Bushell's 'Frater'; Fenton's 'refectory') was, during the 19th century, the kitchen of the adjoining mansion. It was not properly surveyed, this description being based on written notes and photographs.

The building measures 4m N-S and 3m E-W. It adjoins the E range and tower which together form its E wall. To the N the building was contiguous with an annexe on the S side of the former mansion; the S and W walls of the building survive to an average height of 1m. The surviving walls are of limestone but heavily rendered. The floor is of stone flags with an edging of red bricks, except at the doorway and the 2 modern ground floor entrances to the tower (53, 56) where the flags form the door sills. A step up to the S now occupies the width of the building at its junction with the former mansion.

The S wall butts against the E range phase III door surround (25). There is no evidence that the masonry was keyed in here. The phase VII cobbled yard surface lies against the wall.

There is an opening in each of the surviving walls. In the W wall is a wide low-silled opening with an internal splay, doubtless a window (and depicted as such by Bushell, 1908, 250). Towards the W corner of the S wall is the threshold of a doorway. Its truncated W jamb displays the socket for a hinge pivot.

The whole is contiguous with the former mansion annexe to the N, separated from it now by just a step; Bushell's plan (Bushell, 1908, 250) however shows a wall with 2 recesses in its S face and a communicating door with a straight stairway. The W wall of this annexe is a northwards continuation of the W wall of the N building. It still survives in part and is pierced by a further window, now truncated. The render finish continues uninterrupted along the wall. The E wall of the annexe also survives in part; the lowest course of its truncated N-S wall still butts against the N-W corner of the tower in the E range. It extends N for 1m

stopping at a jamb bearing a hinge socket, but its footings can still be discerned leading further N.

The building is described by Fenton, writing in 1811, thus: 'the present kitchen, which in all probability was (the monks') refectory, has a very curious arched roof with many intricate odd-shaped doors opening from it, which might have led to the dormitory' (Fenton, 1903, 251).

None of the surviving evidence is sufficient to propose a firm period for the origins of this building. The masonry is obscured. All that can be said with any certainty is that its S wall post-dates phase III, fabric from which it butts against, and that it was standing by the time the mansion was in occupation (phase VI), which it was a part of. The detail, the openings and the floor may all be later insertions and not be of use in dating the building.

3:0 DISCUSSION

The difficulties encountered in assigning phases to the construction of the priory complex have been described above, p2, and the building history attempted within this report is not without its question marks and problems. For instance, whilst documentary sources have been employed, the material evidence is often strikingly at odds with the historical record. However, the dangers of attempting to apply documentary references to events on a site, particularly a religious establishment, are amply summarised by Rodwell (Rodwell, 1989, 189-190).

See Fig. 3 for a general ground plan of the complex.

3:1 Monastic Work

Phase I

Phase I constitutes the earliest material isolated within the complex. It comprises area (A) and passage (B) within the E range, probably N-S wall (H) and gable (I) in the W range, and at least the quire and chancel of the church. On the basis of the structural evidence it is not possible to assign a date to phase I; however, if it pre-dates the construction of the tower then it may be 13th century (see below, p42).

There is no reason to suppose that the priory layout was not conventual (Knowles and Hadcock, 1971, 102). On the basis of the standing evidence the phase I complex was something more sophisticated than a mere grange and chapel. Welsh grange chapels whose plans are known, for example Estevarne and Llanfair Cilgoed, Gwent, and at Cwrtycarnau, W Glamorgan (Williams, 1990, 113, 114, 118) are simple single celled buildings, while few granges display the ranges of buildings seen at Caldey (New Grange, W Glamorgan, however, does display 3 ranges around a courtyard; Williams, 1990, 115).

On its foundation any monastic house was required to possess a community of at least 13 (Cook, 1961, 16), an ordinance that was frequently not maintained. It can occur that fully developed and often rather grand claustral buildings were occupied by very small communities, and with low incomes. The Cluniac priory at Dudley, W Midlands, displays a large church and 3 ranges of claustral buildings. However, according to its confirmation charter c.1180 'Osbert, now prior of St. James, and Robert and Hugh his brothers do make wholly and fully a perfect convent' (V.C.H. Worcs. II, 159). In the 15th century there were only 4 monks at the priory while its valuation was assessed at between £34 and £38 (Raleigh Radford, 1940, 455). While some of these houses supported additional lay brethren and many had larger incomes, the population of tenant farmers on Caldey Island is not known, nor the exact nature of their relationship with the community. We know that by the suppression 9 tenements were being rented out (Howells, 1984, 38-39). In addition, the fact that during the medieval period Caldey Priory was able to sustain 2 dependant chapels on the island - St David's and St Mary's - and possibly a third, St Margaret's, argues for a rather more

vigorous presence (and a greater population) than the figures alone would suggest.

Geophysical survey carried out on the Cluniac priory at St Clears, Dyfed, on behalf of Dyfed Archaeological Trust in 1989 revealed at least 2 ranges of buildings around a yard to the N of the church (DAT SMR PRN 12924); the priory was another house described by Giraldus Cambrensis as sustaining only 1 monk. Few comparable Tironian plans are known. A small Tironian house at Hamble has been the subject of a recent watching brief (Nenk et al, 1991, 161). Excavation on Benedictine houses in general has been sparse (Clarke, 1984, 95) although work has been performed at smaller houses at Wootton Wawen (Youngs et al, 1988, 284; Gaimster et al 1989, 218-219) and St Helen, Bishopgate (Nenk et al, 1991, 152). Houses of another order of reformed Benedictines may prove instructive; the Grandmontine priory at Craswall, Herefordshire, established by an order whose communities never exceeded 13, shows a small but perfect conventual plan (Hutchinson, 1991, 278-279).

However, on the basis of the evidence the medieval priory buildings at Caldey, even if conventual, need not necessarily have displayed the fully developed and formalised claustral arrangement of the larger religious houses. In particular, the nature and function of the putative W range is open to debate, while the yard may not have been a formal cloister garth. (See Fig. 5)

The Eastern Range

The E range during phase I comprised area (A) and passage (B). The W face of the range apparently bore at least 3 buttresses dividing the elevation into 3 arched bays (1, 2 & 3). The evidence thus suggests the presence of a jettied first floor supported on this arcade, with masonry walls; it will be argued below, p43, that some decay of the buildings had taken place prior to the phase III single storey remodelling.

Neither is there evidence that (A) was vaulted during phase I. The building tradition of S Pembrokeshire with the frequency of early vaulting have been remarked upon (Smith, 1988, 24-25) and the absence of a vault may be regarded as particularly curious within a monastic context. However, it may provide some support for the contention that the Pembrokeshire vaults are in general rather later than has been thought.

Vaulted passage (B) lies adjacent to the church chancel, a location frequently occupied by a passage or 'slype' in the formal conventual plan eg. Llanthony Priory (Craster, 1963, 22). It is logical to suppose that if a degree of formal planning was present, then area (A) in fact housed 2 chambers reflecting the sequence of bays seen externally. Furthermore, 2 doorways were apparently present in the W wall, doorway (4) and opening (5) in its original form. A cross wall may have continued the line of the N buttress eastwards into the building, dividing (A) into a Chapter House to the S, and possibly a parlour or library to the N. A problem with this interpretation would be the apparent presence of a third doorway (6) in the S wall of the Chapter

House, a location generally unknown in the formal monastic arrangement.

The Western Range

Wall (H) has been assigned to a phase broadly corresponding to phases I and II for a number of reasons. The quality of its limestone construction is on a par with phase I work in the E range, it forms a continuation of the NW corner of the phase I quire, the NW corner of the phase III W range appears to be inserted into it, and the heads of blocked doorways (60) and (61) are at levels at odds with the later arrangement of the buildings.

It is suggested that with gable (I) the wall forms the N and E sides of a long gabled building whose S wall corresponds with the S wall of the present W range. Whilst a comparable building is depicted in a number of 19th century drawings and photographs (Caldey Abbey Chapter Collection; National Library of Wales, Charles Norris Collection PA 4751 a, b), gable (I) is of sound limestone construction of a quality not generally encountered at post-reformation Caldey. In addition, (H) certainly predates E-W cross wall (M) which butts against it. (M) doubtless represents this post-medieval re-use of an existing building. The full-height embrasure of opening (57) is rather unusual, but similarities in the fabric suggest that the lower levels of the opening were infilled at an early date. There is some evidence for tracery bars.

The sills of doorways (60) and (61) are both higher than the eaves line of the gable; nor do they correspond with each other. However, the putative gabled building need not have been floored at the same level throughout and may have carried gablets. Moreover, if light (62) is also phase I-II then a building is evidently present to the E of wall (H), of unknown nature. Furthermore, doorway (60) lies at the top of the external stairway implying that the two may be contemporary.

In summary, the evidence suggests a long N-S building of differing floor levels and thus perhaps of more than one function. Perhaps it fulfilled a dual role, domestic in one half and agricultural in the other. A monastic barn will have been situated somewhere within the priory complex; might it be represented by one area of this building?

Phase II

During phase II the tower was constructed, and the church tower can probably be assigned to the same general phase; it displays a late 14th century window. Work in the W range has in this discussion been treated as one with phase I. Phase II can be assigned to the 14th century.

Fig. 5 attempts a conjectured ground plan of the phase II priory.

The Eastern Range and Tower

The tower, or at least its spiral stair turret, interrupts the N bay of the E range and it is thus regarded as later.

The tower is an example of a building type characteristic of Pembrokeshire (Hilling, 1976, 95-96) - the vaulted 2-storey tower house. One or a combination of such features as their frequent small size, often precarious access to the alure, the vault and the corbel table make them unique to the area, rather different in form from, for example, the pele towers and bastles of the N country (Ryder, 1992, 351-379; Wood, 1983, 168-169); they can be likened to 'the Irish £10 tower' (Smith, 1988, 23).

However, the impetus for their construction is likewise defence, but possibly from a different enemy - pirates. George Owen writes in c.1603 that 'the inhabitants (of Caldey) fear the "purveyors of the pirates" who provision there and steal the cattle.' (Fenton, 1903, 251). The problem of piracy in Pembrokeshire waters was particularly acute in the late 16th century (Howells, 1987, 91-92) but had been a source of concern as early as the 14th century. In 1483, for instance, Richard II established a commission to investigate the seizure by the men of Tenby, off Caldey, of a 'great ship' from Genoa carrying 2 barrels of gold plate.

The tower at Caldey is a rather grandiose affair for S Pembrokeshire with its projecting spiral stair and garderobe turrets. There is no evidence for the form of the stair turret which may in fact have been circular like that of the smaller tower house at Angle, Dyfed (Smith, 1988, 32). Monkton Priory displays a large tower house which too lies within a monastic precinct. The tower at Caldey can be seen as a defensible first floor hall with affinities with, for example, Eastington (Dyfed) which shares the semicircular barrel vault, corbelled parapet, first floor entry and projecting garderobe (Smith, 1988, 30-31 and photo. 6) while it too adjoined a further building. The stair, however, is straight, though the turret does oversail the roof. A masonry stair leads to the first floor entry, a feature for which there is no evidence at Caldey. All these tower houses are dateable to the 14th century.

With the exception of doorway (15), and lights (9) and (10) no other external openings in the Caldey tower can be assigned to phase II; nor is there now any evidence for a fireplace.

The Western Range

See phase I, p41.

Phase III

Phase III is marked by the conversion of the E range into a single storey 'hall', and the establishment of the W range its present location E of wall (H). Architecturally the quality of phase III work is rather poor, the crudity and assymetry of the arches being particularly characteristic.

The structural evidence strongly suggests that a considerable amount of decay occurred within the priory complex between phases II and III, a process followed by some demolition. Moreover, the phase III work exhibits characteristics indicating a more private, rather than communal, function for the buildings; it certainly effaces any conventual arrangement within the E range. However, stylistically the phase III work is still in the medieval tradition. Phase III in fact may provide some material evidence for a drastic decline, both numerically and financially, of the monastic community. Though not closely dateable, a 15th-early 16th century context can broadly be assigned to the phase.

The Eastern Range and Tower

Two events preceeded phase III construction in the E range - the demolition of the tower stair turret and the possible internal wall (and much of the E wall?) in (A), and the truncation of the upper floor. Both were undoubtedly preceeded by a period of decay and/or collapse.

Area (A) was then vaulted as a single chamber; any earlier division into Chapter House and Parlour was lost. Passage (B) to the S was walled off to form a communicating chamber. The presence of roofing slate demonstrates that a single storey block was created out of the E range, its axis no longer E-W but N-S. The building has constructional affinities with the vaulted chapels of Pembrokeshire which have in turn been compared with Irish roofs. They display the same 2-centred ground floor vaults with similar slate in mortar bedding roofs, for example Llawhaden Hospice, recently excavated by Dyfed Archaeological Trust (DAT SMR PRN 3577) which is probably late medieval in its present form, and St. Catherine's Chapel, Milford (Cambrian Meeting, 1922, 431-433).

The joint visible on the external face of the stair turret suggests that it may have been begun in this phase, and a first floor thus anticipated. Alternatively, the stair may have led to a watchtower, or possibly opening (5) was converted into a fireplace returning as a doorway in a later phase. A projecting chimney stack here would be expected in a Pembrokeshire domestic building of this period (Smith, 1988, 23, 376-377).

The security of the tower was at the same time compromised by the insertion of ground floor doorway (27), which shares with phase III entrys (24) and (25) the peculiarly assymmetric heads with poor quality voussoirs.

The tower roof structure is of undoubted late medieval date and may possibly be the original phase III roof but later raised. The form of the joints between the king-posts and the tie-beams, in particular the absence of either dovetail lapped joints or straps, are early features (Brunskill, 1985, 149). The form of the arched king-post braces to the principals is a characteristic feature of roofs in the North of England (A J Parkinson, *pers. comm.*; Brunskill, 1985, 148), from where it may be argued that the tower roof was imported. Most Welsh king-post roofs are limited to the Clwyd-Powys area, and of these few display the

post-on-tie arrangement seen at Caldey (Smith, 1988, 406-407). Late medieval king-post roofs do survive in SW Wales at Cenarth and Mwnt but doubts have been cast on their ever having been constructed S of the River Teifi (Suggett, 1992, 425-33). If indeed it is to be proposed that the roof here is the original late medieval roof, but later raised, a number of questions are raised. For example, there is no trace of chases within the walls for the braces to the tie-beams while, paradoxically, chases are present in the gable upstands for the ridge braces, but at too high a level.

The Western Range

Phase III activity in the W range suggests that the putative ?phase I-II N-S building W of wall (H) also may already have been derelict, possibly at least partly demolished.

The decision to construct an entirely new and small building (J) E of this wall implies abandonment of the former, larger building, an event consistent with the evident decline of the community. That (J) can be assigned to phase III in the E range can be proposed on the basis of the very poor construction of its fabric, seen in the ?open entry arch (63) and lights (64) and in the general irregularity of plan. (64) look out to the interior of the ?phase I-II building, indicating its deterioration. Moreover, the S of the 2 lights views the present entry indicating that during phase III a passage was created between (J) and the N wall of the church, vaulted in the following phase. However, the external stairway on the N wall of (J) leads up to ?phase I-II doorway (60); if the steps are phase III rather than earlier then this may imply that an area in the N of the N-S building was still in use.

Chamber (J), flanking an entry passage and with a light covering it, has defensive overtones - possibly linked to a decline in numbers?

The form of the phase III upper floor is unknown; the floor corbels (65) and part of the probable original doorway head (66) are the only survivals from this phase.

The building to the N of the present W range could not be properly examined but there is no reason to suppose that it too may be phase III in origin.

3:2 Early post-Reformation Work

Phase IV

Phase IV is the first of the post-Reformation building campaigns. The church was evidently immediately disused and during this phase the monastic layout, altered during phase II, was completely effaced as the conventual buildings were converted into a private dwelling. The E range was given 2 first floor chambers, of a relatively high standard of domestic comfort, and the W range converted into a gatehouse of some visual pretension. The N building may also have been constructed.

The character of the structural fabric can assign phase IV broadly to the 16th century. Such a date would place the work within the tenure either of the Bradshaws or early on in that of the Philpins. However, in one of the conflicts between structural and written evidence, there is no documentary evidence that either family was resident on the island; indeed Caldey was held by Walter Philpin's wife. In addition, the domestic re-use of a monastic complex was not a widespread phenomenon in Wales, unlike many parts of England (Bettey, 1989, 146-148); indeed St Dogmaels Abbey, likewise a Bradshaw possession, merely became the parish church and rectory.

However, the structural evidence is confirmed by pictorial sources. The Colt Hoare and Norris drawings of c.1800, in particular, show a fine range of 'Elizabethan' buildings (fig. 4).

The Eastern Range and Tower

With the addition of first floor chamber (F) over the phase III vault the E range was converted into a typical early post-medieval first floor hall of Smith's regional house type A (lateral chimney), a type again well represented locally (Smith, 1988, 440-441). With its fine dressed stone detail - doorway (29), fireplace (30) and the large mullioned windows (33) and (34) depicted in the Colt Hoare and Norris drawings, (F) is in stark contrast to all the preceding monastic work at Caldey and tends to mitigate against any suggestion that it was modified from an earlier first floor. It is perhaps surprising that no work was performed in the ground floor, which presumably became a cellar. Doorway (30) lies in a curious location but its sill corresponds to the offset formed by the phase III roof line; possibly a garderobe was located in the corner formed by the stair outshut, or, perhaps more likely, a balcony was located on the offset. The chimney for (30) was carried upon a gable that was truncated when (F) was re-roofed during phase VII.

The disused church chancel was (re-) vaulted and chamber (G) built over it. The stepped gable here is an unusual decorative feature but is found elsewhere in Wales. The 2 other Pembrokeshire examples, at the Old Rectory, Carew and St. Davids Bishops Palace (Smith, 1988, 518-519), are both medieval. However, renaissance stepped gables are present at, for example Faenolfawr, Flints - 1597 (Smith, 1988, 192, 519), and Plas-mawr, Conwy - 1576-80 (Smith, 1988, 244, 519) and it is undoubtedly late 16th-17th century at Caldey.

The collar-beam roof trusses in (F) and (G) are characteristic of the late 16th-17th century (A J Parkinson, *pers. comm.*; Smith, 182, 194-195, 200, 256-257) and probably belong to phase IV.

By this period the tower's defensive function will have become unnecessary. It therefore seems likely that it was during phase IV that first floor entry (15) was blocked and a continuous suite of first floor rooms was formed with the incorporation of the tower via doorway (35).

The Western Range

The possible phase III passage was vaulted during phase IV (K); the area to the W of the entry must therefore by now at least have been clear of any buildings. It is likely that doorway (69) to chamber (J) was inserted at the same time. The roof of the vault came to lie at a higher level than the phase III first floor and the W range was refloored at this level and doorway (66) raised. The first floor chamber (L) was given a fireplace with a prominent chimney. The stack tends towards the conical, a type indigenous to Pembrokeshire and normally dated to the early post-medieval period (Smith, 1988, 376-377).

Window (72) and indeed the gateway area as a whole can be attributed to the 16th century (A J Parkinson, *pers. comm.*); however, the cusping of (72) does appear to be a little earlier than phase IV detail within the E range and the W range may have been stage I of the phase IV building campaign. Window (75) appears to be re-used but may be *in situ* and repaired. It is likely that all the present window openings were in use during this period.

Of the 3 limestone corbels (72) on the W wall of chamber (L) the southernmost lies above the gate passage area and therefore cannot be any earlier than phase IV. The corbels undoubtedly carried the phase IV roof trusses, the roof then lying at the same level as today.

Curiously, the E face of the W range forms the more imposing facade; the face towards the courtyard interior rather than the gateway approach.

The Northern Building

Little dateable fabric remains within the N building and that which survives is comparatively late. However, it is possible to suggest a date for the origins of this building.

Fenton's description (above, p37) implies a pre-19th century structure. However, the N building definitely butts against late medieval phase III work and in any case must post-date the demolition of the spiral stair turret; indeed, doorway (17) onto the stair appears to have early on become a communicating door into the N building. In addition, it is highly unlikely that a building would be constructed against the tower while first floor entry (15), which would require an external stair, was in use.

This places its construction within phase IV at the earliest. Fenton's description of the vault, and the fact that in 1811 he thought of it as an ancient structure, would tend to mitigate against it being much later, and so the N building is here tentatively assigned to phase IV.

3:3 Later post-Reformation Work

Phase V

Phase V was a period of an equally important change of use for the priory complex. The buildings suffered a sharp decline in status and, the W range in particular, were given over to agricultural use. The church, with a new N wall S of the former line, apparently became the farmhouse (see above, p9). The Colt Hoare and Norris drawings are a valuable depiction of the phase V complex c.1800 (fig. 4).

The Eastern Range and Tower

The Colt Hoare drawing depicts an E range basically unchanged from the preceding phase. It appears that the upper floors were still in domestic use suggesting that the new larger entry from (F) into the tower (D) probably belongs to this phase while the conversion of lancet (9) into a fireplace can certainly be assigned to phase V; its brick chimney survived until recently and is shown in a photograph of c.1908 (Bushell, 1980, 11).

The ground floor apparently became one large bakehouse, ovens (6) and (38) being ducted into chimney (39) which is shown by Norris. New communicating doors (40) and (41) linked the entire ground floor with the church. Chimney (39) is unusually large but generally characteristic of post-medieval vernacular Welsh houses.

The insertion of doorway (42) through the W wall to join (17) in leading into the N building undoubtedly post-dates the construction of the latter and probably belongs to this phase; meanwhile the Norris drawings show a doorway in the E wall on the site of later hatch (45).

The Western Range

The substantial agricultural buildings erected against the W face of the W range during phase V have been described above, p34, and are depicted in the Norris drawings. Gable (I) was re-used, wall (M) constructed, and both gateway (68) itself and the W door of the church were obstructed, the latter having been narrowed. The corbels for these buildings (77 & 78) can be seen in the W wall but their specific functions are unknown.

At least one building projected into the courtyard represented by crease (81) and was still present on the Ordnance Survey 1:2500 of 1887; a further phase V building may be represented by possible crease (80).

The heavy yellowish render seen in areas throughout the W range is probably phase V; it was present by 1908 at least (Bushell, 1908, 253.)

Phase VI

Phase VI coincides with the establishment of the mansion before

1811 (Fenton, 1903, 251) and continues until the end of the century. It is marked by superficial alterations to the complex which largely became a suite of service rooms for the mansion. The church quire was superseded by a new farmhouse established before 1887 (Ordnance Survey 1:2500) and became a brewery. A walled garden with outbuildings was established E of the E range. The W range and its outbuildings remained much as in the preceeding phase and continued their agricultural use until demolished prior to 1908 (Ordnance Survey 1:2500). The N building became the mansion kitchen.

The Eastern Range and Tower

Phase VI saw an increase in the agricultural use of the E range and tower and most of the openings as we see them today probably derive from this period. The tower ground floor room (Ci) became a dairy which both twin hatches (49) and doorway (51) to the contemporary walled garden with its outbuildings clearly serve. Hatch (45) in (A) is almost identical and is undoubtedly contemporary. With the establishment of the kitchen a further communicating doorway (52) in (Cii) was thought necessary. All the exterior features are seen in a variety of 19th century photographs and on the Ordnance Survey 1:2500 editions of 1887 and 1908.

In the upper floors it may be concluded that the majority of the openings were remodelled and recieved their present frames during this period. The reference to a schoolroom within the complex during the later 19th century (above, p7) may provide a context for some of this work in rooms (F) and (G) while the picture window (54) in (D) was undoubtedly intended to enhance the mansion complex. (D) and (F) were given suspended ceilings; that in (F) in fact an attic floor served by fireplace (47) whose chimney is seen in a contemporary photograph (Bushell, 1980, 11).

The Western Range

Little change took place in the W range and 19th century photographs show a situation very similar to that depicted in the Norris drawings. Phase VI work appears to be limited to the remodelling of the window openings. The blocking of doorway (88) is late, and its insertion may belong to this phase.

Phase VII

The beginnings of the consolidation of the priory complex as an ancient monument mark phase VII. The work was begun by Cunningham in 1894 (see above, p7) but it was under Bushell that the bulk was performed. However, it was largely superficial; Bushell's own term 'restoration' cannot accurately be applied to a group of buildings in continuous use for 600 years.

Most of Bushell's work was concentrated within the church which was given new windows and most of its present fittings, and reconsecrated. However, perhaps the most important aspect of his tenure was the removal of the phase V agricultural buildings W of wall (H), leaving the gateway and church door clear once more.

They had gone by 1908 (Ordnance Survey 1:2500).

The Eastern Range and Tower

Phase VII work in the E range appears to have been rather superficial. However, the reslating of the roof in (F) and (G) and its relining with pitch pine undoubtedly occurred during this phase, and can be seen to pre-date all the pink plaster finishes. The plasterwork extends into most of the openings but stops at the line of the frames proving that both windows and frames were already installed. The plasterwork, however, was also Bushell's work but left unfinished.

On the ground floor, in (A) the S of the 2 phase I doorways (5) was converted into a peculiar double-splayed light of apparent medieval appearance; however, it is shown as a door in a late 19th century photograph (National Buildings Record) and its conversion is almost certainly Bushell's work. Externally, the opening lies under a flat lintel stone, probably original, but the sill is of concrete.

The tower roof structure was raised (or installed) after the phase VI pebbledash was applied and again undoubtedly under Bushell.

However, the former buildings against E range in the walled garden were not removed until some time afterwards. They can be seen in a photograph of c.1908 (Bushell, 1980, 11) and are shown on the Ordnance Survey 1:2500 of 1908.

The Western Range

Phase VII was a period of renovation of the surviving W range accompanied, however, by the demolition of the outbuildings. The shed (89) and associated 'cellar' at the N end of wall (H) in the angle between it and gable (I) replaced the long gabled building here. The building within the courtyard was likewise swept away.

Within the present W range the patterned plasterwork in (L), the timber floor and doorframe (66) are all clearly the work of Bushell; room (L) was used residentially by both Bushell and the Anglican Benedictines. Some form of screen or wainscot has left a scar at the S end of the room.

Phase VIII

Phase VIII has seen the abandonment of the mansion and its ultimate demolition in the 1970s. This has been accompanied by, for the first time, the disuse of the E and W ranges.

Maintenance of the buildings has periodically been attempted and this phase represents the later 20th century repair work. This is mainly of poor quality. It has done little to mitigate against the progressive decay affecting all parts of the E and W ranges.

The outbuildings in the walled garden were demolished, and,

with the demolition of the mansion, the N building was unfortunately truncated. The building N of the W range too has been allowed to collapse and is now overgrown.

The Eastern Range and Tower

Repair attempts within the E range have included the rather unsympathetic concrete and timber lintels over most of the openings. The rebuilding of the NW and SW corners of the Tower is however of rather better quality, while the roof has been reslated.

The Western Range

Phase VIII work in the W range is limited mainly to the recent construction of the present roof. The building is shown roofless in a photograph of 1946. Otherwise, the majority of the repairs are of similar poor quality to those in the E range.

4:0 CONCLUSIONS

The priory complex that we see today is the result of 700 years of almost continuous building, rebuilding and alteration. Each phase represents a stage in the development and changing function of a complex that remained in continuous use until the early years of the present century. Little medieval fabric survives in an unaltered form. From a religious establishment the complex became a private dwelling, a farm, and returned to being in part a private dwelling again before its abandonment. During its later post-Reformation history, moreover, the old priory buildings became just a part of a much larger complex of farm and mansion buildings.

The earliest priory buildings isolated (phase I) may belong to the 13th century and include the wider quire and chancel of the church, an E range consisting of 1 or 2 unvaulted chambers and a vaulted passage next to the chancel, over which lay a first floor that was subsequently lost. A long, gabled building possibly stood to the W of the present W range and a building of uncertain form may have occupied the area of the gateway. There is no evidence for a N range. The large fishpond E of the priory probably has origins in this period, and perhaps too the rest of the later water features to the N of the site. A cemetery lay to the S of the church.

During the 14th century (phase II) a crenellated 2-storey vaulted tower was built at the N end of the E range, and the tower and spire were added to the church.

After a period of decline and decay, the complex was extensively remodelled into a less communal, but still monastic form, possibly during the 15th-early 16th centuries (phase III). The E range became 2 single storey vaulted chambers, while the earlier W range was abandoned and the N half of the present W range constructed as a 2 storey block with an external stairway, possibly with a building to the N. The tower roof timbers are possibly *in situ*.

With the reformation the church was abandoned but during the 16th century the priory buildings were converted into a fairly grandiose house (phase IV). The E range was given a new first floor with fine mullioned windows and a chamber over the former chancel, and its present roof timbers were installed. The W range became an impressive gatehouse with the addition of the vaulted gate passage. The building in the N of the courtyard may date from this period.

The status of the house declined and the complex became a farm (phase V). By 1800 the quire had apparently been remodelled as a farmhouse, bakehouse ovens occupied the S end of the E range, while a group of agricultural buildings had been erected to the W of the W range, re-using the possible earlier gable.

The early 19th century mansion complex took over the priory buildings which became a suite of service rooms for it and the farm (phase VI), while the latter's core shifted away from the priory with the construction of a new farmhouse and buildings

later in the century. Little building was done in the priory itself, except E of the E range where a walled garden with outbuildings was laid out. The W range remained as before while the N building became the mansion kitchen. The ponds N of the site were (re)-modelled as ornamental features.

Consolidation of the buildings as a dwelling occurred under Bushell early in the 20th century (phase VII) accompanied by the demolition of the outbuildings W of the W range. Since then the complex, with the exception of the church, has been allowed to decay with only limited, and generally poor, repairs (phase VIII). The mansion, together with the N building, have been demolished while a building to the N of the W range has almost disappeared.

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