

NOTES

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Excavations in the Outer Precinct of Tintern Abbey

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EXCAVATION REVEALED an aisled guest-hall, possibly of 13th-century date, which parallels structures at Kirkstall and Waverley abbeys. This was replaced in the 15th or early 16th century by a new guest range with indications of differing provision for high-status guests. A smithy and non-ferrous industrial activity, notably cupellation and bell founding, are also described.

The Cistercian Abbey of Tintern (Grid Ref. SO 532 998) lies in the modern Welsh border county of Gwent, formerly Monmouthshire (Fig. 1). It was founded in 1131 on the W. bank of the R. Wye, which separates Gwent from the Forest of Dean in Gloucestershire. The visible remains of the church and the main cloister date from the 13th century, while the buildings around the infirmary cloister are dated to the 14th and 15th centuries.¹

Immediately west of the church, within the outer precinct of the abbey, lies the guardianship area which formed the object of the present excavations. Prior to the excavation on the site, a great number of unrecorded wall-following trenches had been dug (shown as F1 in the figures, though not all are illustrated). In 1970-71, Mr J. K. Knight had undertaken a small excavation on the service block of the aisled hall and on the building referred to in the report as the Outer North Range. The present excavations for the Ancient Monuments Board of the Welsh Office, now Cadw: Welsh Historic Monuments, began in 1977 on a limited scale in the area later identified as the SE. corner of the aisled hall. In 1979 a larger area was topsoiled using a JCB and excavation continued in 1980 (Fig. 5). Unfortunately, a planned final season in 1981 was cut back due to financial stringencies which left excavation and recording incomplete. Levelled plans of each layer were used to reconstruct schematic sections across the site (Fig. 7). Difficulties in obtaining a laboratory to undertake archaeomagnetic sampling resulted in incomplete excavation of several of the industrial features, which sometimes had to be left on pedestals while excavation continued around them. The following abbreviations are used in this report:

L = layer, F = feature, D = drain and W = wall. Depths of cut features are given in an appendix at the end of the structural report.

THE OUTER PRECINCT: TOPOGRAPHY AND HISTORY (Fig. 2)

Fragments of the boundary wall of the outer precinct still survive despite considerable damage through building activities during recent decades. In addition a map of 1764 clearly distinguishes walls from other forms of boundary around the abbey although it is not clear how far this landscape had changed since the Dissolution (Fig. 2).² Unfortunately the map does not illustrate the lands east of the abbey as a major problem is posed by the course of the boundary wall as it runs south-east of the abbey church: all trace of this wall disappears on a steep slope running down to the floodplain of the Wye. It is uncertain if the wall fully enclosed the land east of the abbey or was merely designed to prevent access down the gentler slopes to the abbey's hay meadows.

Evidence of buildings in the outer court is restricted to the area immediately west of the abbey church. Surviving structural remains include St Anne's House, now a private residence, but formerly a gateway chapel; an original triple lancet window (Early English) still survives in its E. wall. A road presumably ran from St Anne's past the W. front of the church towards the Water Gate, whose remains stand on the river bank. Outside the precinct a medieval cobbled road (Fig. 1), called the 'Stony Way' by 1451, runs to the south-west.³

The remains of two medieval buildings survive adjacent to the excavated area, designated as Buildings A and B. In 1901 Building A was in use as a pair of cottages, adjacent to the turnpike road of 1825, now the A466.⁴ The cottages were largely demolished and partly overlain by a road-widening scheme prior to 1918.⁵ Building A's surviving medieval shell was consolidated in the 1960's, but only the E. end survived to any height (Figs. 2 and 3), revealing two square-headed windows with straight chamfers. Both windows have sockets for iron bars and rear recesses for wooden shutters but it is unclear if the lower window had a central mullion. The two windows suggest a 15th- or early 16th-century date for the building. The sockets for the iron cross-bars in the upper window do not align. Unfortunately, no record was made prior to consolidation but it seems likely that the window is original. Details of the interior are confused by spoil heaps but the W. interior wall with two doorways is almost certainly original. It divides off a small services chamber, partly occupied by the drain wall which rises a metre above floor level and probably once extended upwards to serve a garderobe, attached to a private chamber on the first floor. The other internal wall and the block of masonry on the ground floor are probably post-monastic.

Building B (Fig. 1; not shown on the 1764 map), a stone-built first-floor hall, has also been consolidated. It has three octagonal pillar bases showing that it formerly had a vaulted undercroft. Unfortunately, the hall lacks sufficient architectural detail to suggest a date of construction. The high quality of its masonry compared with the rest of the Outer Precinct supports its interpretation as a guest-house.

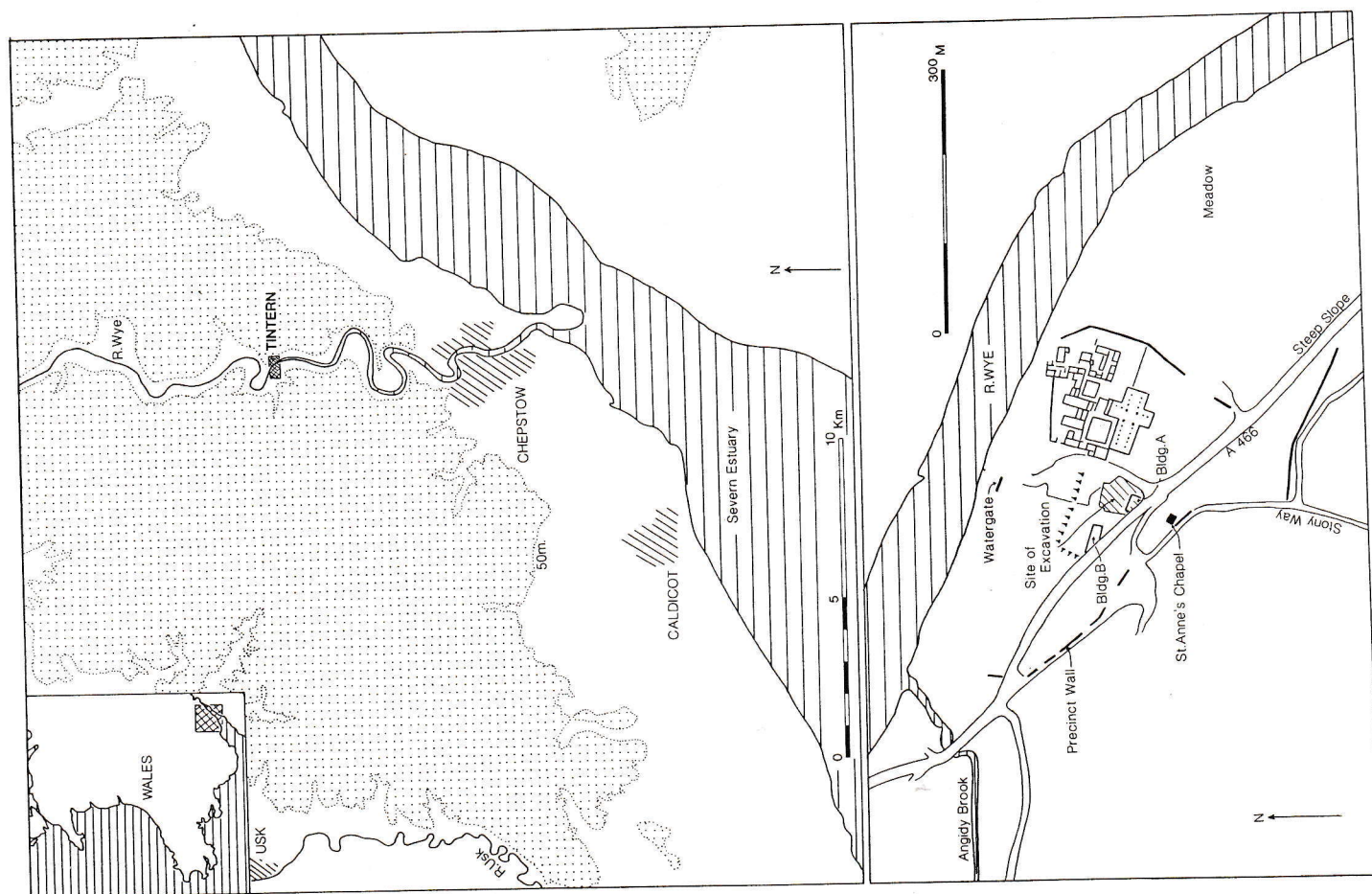


FIG. 1

Location map



FIG. 2
The Abbey precinct in 1764 (after *NLW Badminton maps vol. 2, map 6*)

The medieval history of the abbey has been discussed recently by the Revd Dr D. H. Williams, but little or no light is shed by the documents on the plan or development of the Outer Precinct.⁶ However, it can be expected to have contained guest-houses and stables, as well as a range of structures linked to economic activities such as brewing, baking and metalworking. The abbey was suppressed in 1536 and the Earl of Worcester was granted the site of the abbey with most of its lands. Accounts for the Worcester estates survive from 1541 to 1641 and show that the abbey and its demesne were leased throughout the period.⁷ Little detail is given in the early accounts but in 1568 named tenements included the laundryhouse, the

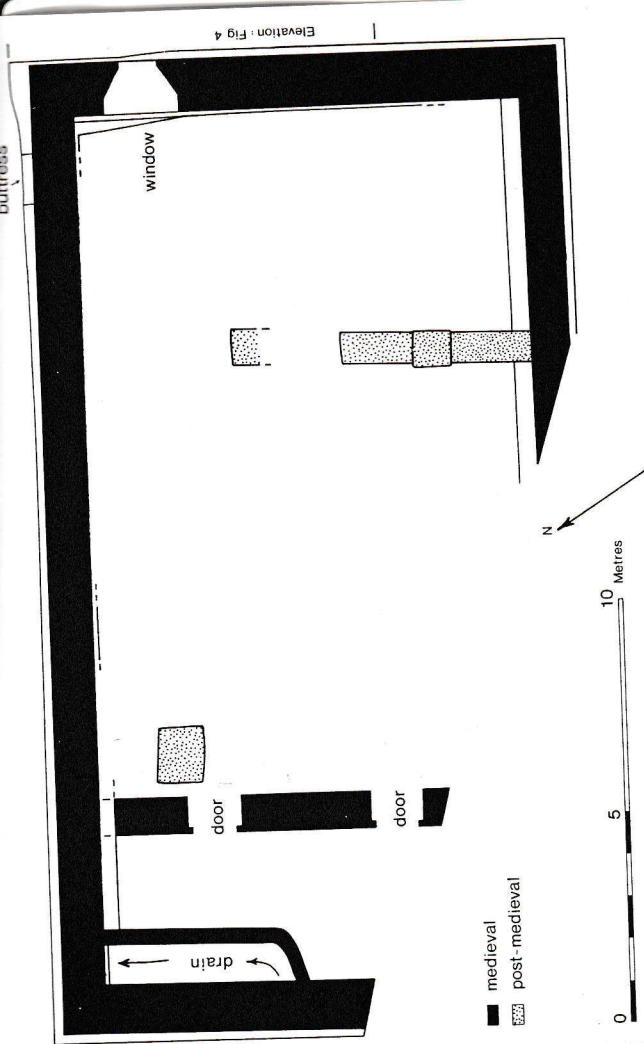


FIG. 3
Plan of Building A



FIG. 4

pantryhouse and three stables, one of which was also described as an 'oste and kyllynhouse'. Unfortunately no clue was given to the location of these structures.⁸

The 1764 map, and accompanying survey, of the Duke of Beaufort's estate (Fig. 2) shows a series of cottages, gardens and orchards on the site of the outer precinct.⁹ Building A is already shown as a pair of cottages. The map also indicates that the Laytons were walled off from the outer precinct building complex immediately west of the abbey. It is uncertain if this wall was of medieval date but the complex of buildings west of the abbey does appear to form an 'inner court' within the outer precinct.

THE EXCAVATIONS (Fig. 5)

THE AISLED HALL (Figs. 6 and 7)

The hall measures approximately 21×15.5 m internally, and closely parallels the early 13th-century aisled guest-hall at the Cistercian Abbey of Kirkstall in West Yorkshire.¹⁰ The six aisle posts were carried on unmortared sandstone bases standing up to 70 mm proud of the hall surface. At a later stage, one of the bases, F45, was replaced by F23 which overlies it but is out of alignment with the other post bases (Pl. vii, c). F23 may therefore represent a makeshift repair as the hall decayed and perhaps changed function.

The NE. corner of the aisled hall (W47) may have been rebuilt incorporating a corner buttress, on the evidence of a butt joint between W47 and W14 (F78 is a later industrial feature). The N. end of the hall was divided off by a narrow cross-wall (W40a and b), with a central doorway, creating an ancillary chamber. In a secular manor-house this would have housed the buttery and pantry. The centre of the main body of the hall was occupied by an open hearth (F46) as at Kirkstall. The hearth comprised two firecracked millstones packed with clayey soil, ceramic roof-tile and sandstone fragments. One millstone was of conglomerate and the other of sandstone, both derived from local Devonian-age strata. A spread of lime found on top of the hearth probably belonged to secondary industrial usage, discussed later in the report.

Six small, stone-lined post-holes of c. 200–300 mm in diameter were probably associated with the hearth; a clearly defined post-pipe in F56 measured 110 mm in diameter. It is unclear if the post-holes represented three pairs, in several possible configurations, or two sets of three. Their function is uncertain but possibilities include spits for roasting or a secondary industrial use, perhaps as screens or bellow mounts.

The only visible entrance to the hall is via a doorway in the S. wall paved on both sides, but it is possible that this was the site of a fireplace in an earlier phase as in the Kirkstall aisled hall. A doorway must also have been located in the N. side of the service chamber to allow access to the kitchens.

PRE-HALL FEATURES (Fig. 8)

The hall was constructed over a levelling layer of brown clayey soil designated L136 in the main hall, L81 in the service chamber, L156 south of the hall, and L213

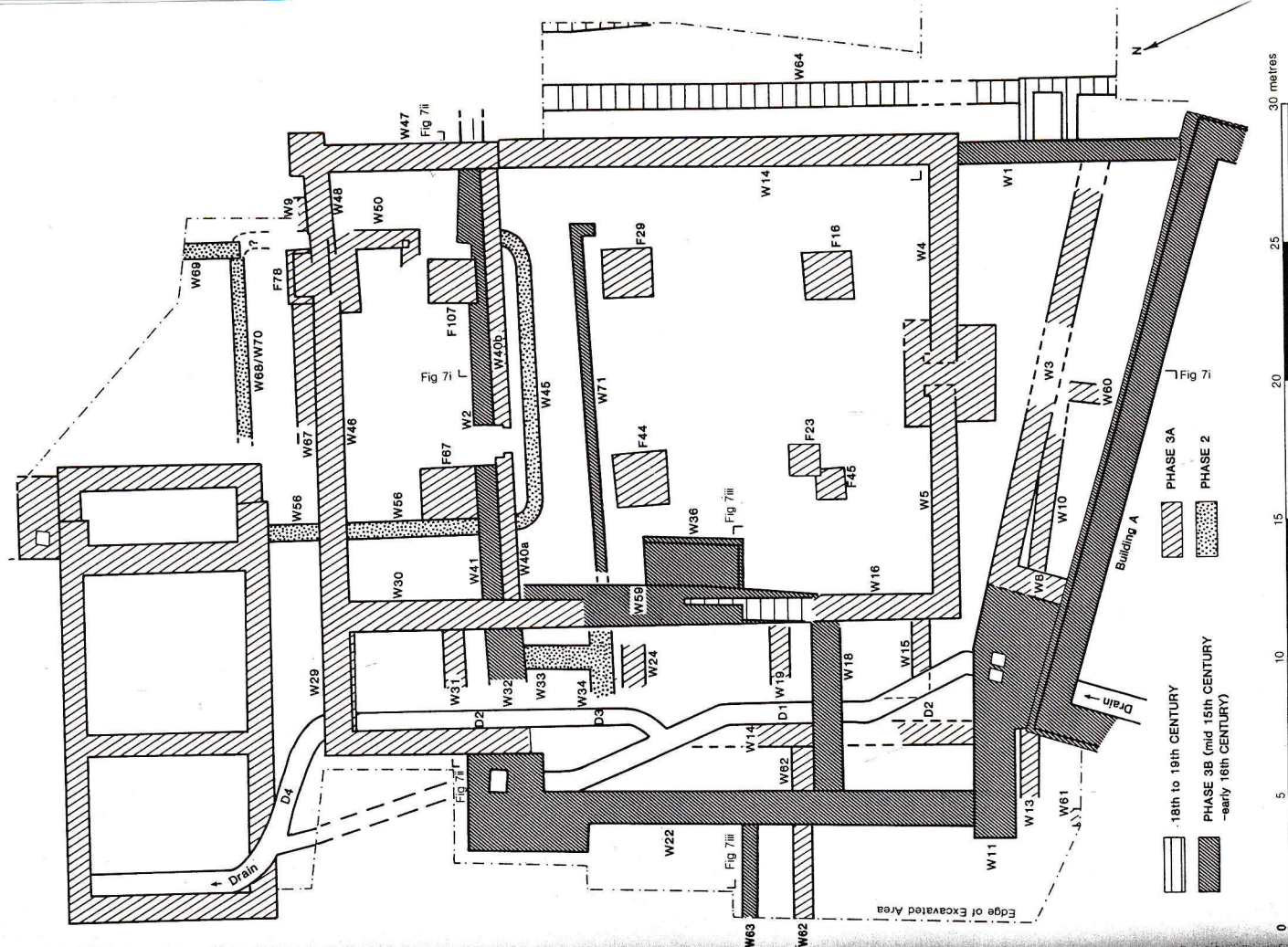


FIG. 5
Overall Phase Plan of Site

35) joins a sherd found in L87 (not illustrated), a layer to the west of, and post-dating, Building A, a late 15th- or early 16th-century structure. A number of probably late features in the north-west of the main hall had a high content of charcoal and smithing slag in their fill (F25, F33, F34, F30 and F31).

Several of the features discussed above seem to indicate lean-to structures in an open courtyard. One possible context for the deroofting of the aisled hall is provided by the construction of the phase B West Range which involved demolition of the hall's W. wall (W16). No clear evidence of function for the courtyard phase and lean-tos is forthcoming. One possibility is that W71 formed a stable range with an open-fronted ancillary structure running along the E. wall of the former hall.

POST-DISSOLUTION (Fig. 19)

L29 (not illustrated), a layer of brown loam and rubble, extended across the aisled hall at a depth of 50 to 100 mm, with a few sherds of 16th-/17th-century pottery, seems to represent a phase of post-Dissolution abandonment. Documentary evidence suggests that Building A continued to be occupied into the early 20th century. A few traces of a post-medieval cottage were evident in the W. range but were too disturbed to suggest any chronology beyond a 19th-century occupation. In the aisled hall two rectangular pits (F14 and F24) cutting L29 were excavated; their profiles suggest that they originally possessed wooden linings. These features were possibly post-medieval saw-pits (Pl. vii, c).¹⁷ The finds indicate that they were backfilled in the last decade of the 17th or early in the 18th century.

DEPTH OF POST-HOLES, ETC.

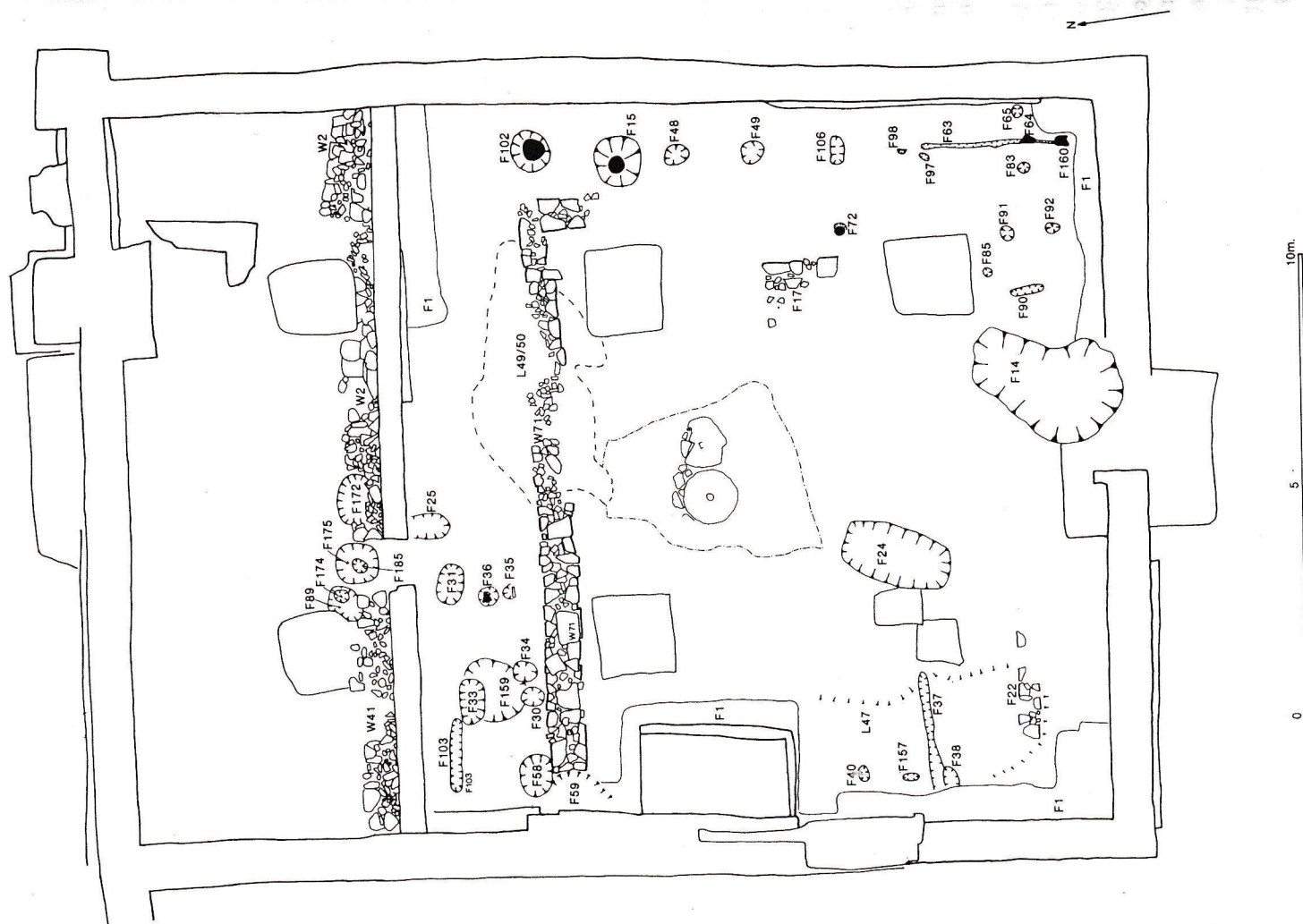
F15: 520 mm, F25: 70 mm, F30: 320 mm, F31: 150 mm, F33: 70 mm, F34: 70 mm, F41: 360 mm, F48: 410 mm, F49: 400 mm, F56: 300 mm, F57: 300 mm, F58: 120 mm, F60: 160 mm, F61: 160 mm, F62: 150 mm, F63: 40 to 150 mm, F66: 220 mm, F68: 200 mm, F72: 110 mm, F77: 350 mm, F83: 770 mm, F85: 80 mm, F87: 390 mm, F89: 170 mm, F90: 90 mm, F91: 120 mm, F92: 140 mm, F93: 160 mm, F97: 50 mm, F98: 50 mm, F99: 70 mm, F103: 40 mm, F105: 270 mm, F106: 280 mm, F108: 140 mm, F119: 70 mm, F181: 80 mm, F182: 220 mm, F184: 120 mm.

SUMMARY AND DISCUSSION

The main structural phases can be summarised as follows:

Phase 1: This is represented by the rubble and plank at the bottom of the Knight sondage in the Outer North Range (Fig. 8). These deposits could be interpreted as a construction or destruction deposit and they need not imply the presence of buildings in the Outer Precinct, as the W. front of the abbey church is only about 50 m away. The suggested early road surface east of the aisled hall (L210: Fig. 13) could also belong to this phase though no certainty can be expressed from such limited excavation.

Phase 2: This phase is initiated by the deposition of L211, a clayey soil extending across the whole site (Fig. 71-iii). The Knight sondage suggests that this deposit was about a metre deep. It was possibly intended as a flood barrier and its extent is probably marked by the modern terracing to the north and west of the excavated



area, indicated by hachuring in Fig. 1. The 1764 Badminton map shows that the boundary separating the building complex from the Laytons field was marked by a wall, although it is uncertain if it is medieval in origin (Fig. 2).

The only structure which can certainly be assigned to this phase is the enclosure or building represented by W45 and W56. W68, W69, W70 and the paving, F216, also probably belong to this phase though their interpretation is problematic (Fig. 8). W33 in the West Range (Fig. 9) potentially belongs to the same phase although its stratigraphic relationships have been destroyed by earlier clearance work. The ruts in the South Hall, though, can definitely be assigned to phase 2 (Fig. 12) as they were sealed by L136, a subsequent levelling deposit.

Phase 3: This phase is marked by the deposition of L136, a clayey soil, to a depth of about 0.30 m over the dismantled phase 2 structures (Fig. 7). The aisled hall was built at the same time as the phase A West Range. The close parallel of the Kirkstall aisled guest-hall, dated to the early 13th century, suggests an approximate date for its construction.¹⁸ A similar hall, suggested to be 13th century, was excavated at the turn of the century by Brakspear at Waverley Abbey in Surrey.¹⁹

The absence of Bristol Redcliffe ware from L136 tends to support a 13th-century date but unfortunately the group (eleven vessels) is far too small to support any firm conclusions. In addition one of the aisle-post bases (F44) incorporated a Ham Green jug sherd (c. 1170–1300). The buttress in the NE. corner of the Tintern hall appears to belong to a rebuild (W47) but its relation to the insertion of an industrial chimney (F78) is uncertain.

It is uncertain whether the walls of the aisled halls at Tintern and Kirkstall extended in stone to the roof or whether they had timbered upper stages. The hall would have been open to the roof and it is unlikely that the phase A West Range was more than one storey high. The only evidence for function in the West Range comes from the Smithy room. It is probable that the Outer North Range also belongs to this phase. One room of this building was possibly a brewery. At Kirkstall, a bakehouse and a building interpreted as a possible kitchen were found in a similar position beyond the service chamber of the hall. At Waverley a brewhouse was identified to the south of the guest-hall on a different alignment and believed to be late 12th century in origin by Brakspear. The later histories of the Kirkstall and Tintern aisled halls differ although both show modifications and changes of function as the Outer Precinct areas of the two abbeys developed: at Kirkstall a two-storey chamber block was added to the end of the hall opposite the services and a second aisled hall was built to one side. The evidence seems to suggest that the early uniformity of Cistercian planning slowly disintegrated under the exigencies of local circumstance.

Brakspear suggested that a first-floor hall at Waverley Abbey, which he dated to c. 1200, was reserved for high-status guests while the 13th century, presumably aisled, hall was for inferior visitors.²⁰ It has already been suggested that Building B at Tintern (Fig. 1), a first-floor hall, was also a guest-house, but unfortunately its date of construction is uncertain. It is possible to follow Brakspear in suggesting that it functioned alongside the aisled hall as a superior guest-house; although the guest function of the Waverley and Tintern first-floor halls may have been supplanted by the construction of the larger aisled halls.

The possibility of differing provision for guests of varying status remains a complex and largely unexplored problem. Giraldus Cambrensis, Archdeacon Brecon, complained bitterly (c. 1200) at being 'harboured in the public hall of the common guests and the noise of the people' at Strata Florida;²¹ but he may be expected to have been housed in the abbot's lodging rather than in separate accommodation within the outer precinct. The pattern of hospitality, however, has varied between individual monasteries as well as between different orders through time. It is to be hoped that increased interest in excavating monastic precincts will shed further light and help place the evidence of the standing remains the result of piecemeal survival, into a clearer context.

The non-ferrous industrial activity is dated by the archaeomagnetic sampling of the mid 15th century. Apart from bell casting the main activity recognizable is cupellation, the extraction of silver from lead. The life of this industrial phase is uncertain as is the source of the lead. It is possible that the monks were desilvered for a rebuilding. The infirmary hall is the only new building dated to the mid 15th century but it is possible that existing buildings were being reroofed. It was the case the litharge would have had to be extracted from the cupell hearths and the lead recovered by reduction. One might expect a structure similar to lead smelting 'bores' allowing the litharge and fuel to be heated together in bulk the lead to be collected in a hollow.²² The excavations produced no evidence for reduction of litharge but remains may have lain elsewhere or been lost.

Tintern lay on a navigable river so a source for the lead in the known mining areas of the Mendips, N. Devon or Glamorgan is possible. Only N. Devon is known to have possessed sufficiently argentiferous ores to stimulate cupellation in either medieval or early modern period.²³ It seems unlikely, though, that the crown or other lords would not have been prepared to desilver their own lead if it possessed economically attractive silver content. Another possibility is that the monks' mining lead deposits in the Carboniferous limestones on their Gwent lands. Lead deposits were exploited at Piercefield, 2.5 miles south of the abbey in the 1690s only a little further away at Gallery Hill, near Chepstow, in 1789, though no men are made of silver extraction.²⁴

It is therefore just possible that the monks worked a nearby lead deposit although it is difficult to believe that it could have had an economically viable silver content by normal criteria. Alternatively they may have been extracting silver from large imports of lead for reroofing. In either case it is unclear if this was done commercially or merely to obtain silver for their own use. Certainly construction of a stone-built hearth with a chimney (F78: Fig. 16) points to cupellation programme on some scale although the length of its lifespan is uncertain. Further light may be shed on the source of the lead by progress in provenancing lead by radioactive isotopes.

The rebuilding of the phase B West Range probably saw the demise of the aisled hall as a roofed building. The construction certainly necessitated the demolition of the W. wall of the aisled hall. The new West Range was provided with an external chimney (W36), lying within the old hall, and it seems likely to have served as a fireplace at first-floor level. This range seems likely to have been a residence