THE NAVE EXCAVATIONS OF GLASTONBURY ABBEY

BACKGROUND

The consequence of the extensive 1920's disturbance and removal of archaeological deposits in the nave was that Radford's excavations were very limited in this area. As the plan of the Saxon church had been predominantly exposed in the 1920's, Radford focussed upon further exploration of the two pre-fire Romanesque phases which were thought to have been found above the Saxon church, opening four trenches to the south and east of the earlier explorations.

In the 1981 interim report Radford published reconstruction drawings of the two major phases of the Romanesque church pre-dating the fire of 1184; Abbot Turstin's incomplete church of the late 11th century and the subsequent church built by Abbot Herlewin and completed by Henry de Blois in the first half of the 12th century. The shaded areas on both plans represent the evidence for the exterior walls comprising occasional masonry and robber trenches. Unsurprisingly, the major criticism of these published plans has been that the reconstructions were based on so little evidence. Indeed, within the nave area the only external wall associated with the pre-fire phases was a foundation dated to Turstin's church. However, analysis of the original records has facilitated a critical assessment of this evidene and uncovered additional evidence for the 12th century phase comprising robbed sleeper walls and floor horizons. This has been drawn together in relation to the post-fire late 12th to early 13th century nave, the south wall of which is still upstanding to arcade height, including evidence of 14th and 15th century liturgical alterations and burials, and details of post-Dissolution robbery.

The church of St Peter and St Paul occupied much of the post-Conquest nave and the full length of the Galilee, the remains fragmented by the wide foundation trenches of the post-Conquest churches (Radford 1981, 116).

Historic Excavations

Bligh Bond

Nave

In 1908 Bond uncovered the foundations of the two western crossing piers; these were abutted by the remains of foundations both rougher and inferior in construction (Bond 1908, 124). Bond was undcertain as to whether these represented earlier foundations or were the sleeper walls for the great flight of steps leading up from the nave to the crossing (ibid.). A diagonal excavation trench extending north-eastwards from the south-west pier towards the centre of the crossing; this uncovered 'ancient' lias paving at a similar level to the nave floor (ibid.). Interestingly, Bond records that the paving was cut to a line making an anlge of 45 degrees with the east-west alignent, bordered by what appeared to be a rough foundation and a 0.3m wide water channel (ibid.). It was conjectured that this may relate to one of the apsidal terminations of Turstin's or Herlewin's churches; indeed, the discovery of a terra-cotta medalion found near the rough foundation on the trench near the north-west pier appeared to support an early date (ibid., 125). Although the medallion appeared to show a date of 1105 which would correspond to the Herlewin foundation, a later date was not ruled out (ibid., 126).

In the same year the western end of the nave was explored, the results from which appeared to support the theory of two western towers at the end of the nave aisles (ibid., 126). The towers were thought to have large square turrets containing square newel staircases flanking the west gable of the nave (ibid., Figure 6).

A large number of finely carved blue lias stones were recovered from Bond's excavations beneath the the crossing and the immediate vicinity, some of which had been re-used in the late 12th century foundations of a north transept pier. Bond thought that these stones were derived from a presbytery wall-arcade in the earlier church, whose eastern limit probably came under the central tower of the later church (Bond 1913, 64).

North porch

In 1911 the ground plan of the north porch was exposed. Bond based his identification of the location of the north porch upon Willis' assumption that it lay in a similar position to that at Wells, opposite the principal gate of the abbey, which Hollar shows on the north side of lay cemetery and at the end of a short lane opposite the parish church of St John (1912, 29). The 12th century porch foundations, of the same fabric as those noted for the nave (i.e. Tor burrs mostly unmortared), were discovered beneath the late 12th or early 13th century porch (ibid, 32). The post-fire porch was found to have three phases (ibid, pl 2); to the east of the first buttress the surviving masonry, including vaulting ribs, was found to be almost entirely 14th century. Although the porch floor had been removed the beaten floor was noted as inclining sharply upwards before meeting the level of the nave floor (ibid, 34).

A robbed wall found abutting the north face of the north-west angle buttress. Interpreted as a retaining wall between the main approach to the porch and the lay cemetery, this wall presumably ran northwards (ibid). Near the porch buttress the wall was crossed by a square water-channel filled with rubble, broken cover-stones and containing late 18th to early 19th century crockery (ibid).

West end of nave

In 1911 the area between between the north porch and the north-west corner of the nave was explored and the north aisle foundations traced westwards (1912, 29). In essence, Bond discovered evidence for two western towers; the later galilee addition inbetween the nave and the Lady Chapel; the footprint of a possible building to the west of the north porch and a connecting wall between the south-west corner of this possible building and the north-west corner of the nave (ibid, 30-38). Bond was also discovered evidence for what he thought was a low-level annexe or chamber attached to the west wall of the nave south aisle (ibid, 39). The possible building to the west of the north porch comprised a southern wall and returns at both ends with a small angle buttress impinging on the first buttress on the west side of the north porch. Dated to the 14th century by the presence of window tracery dated to c 1280 in the foundations and various other architectural fragments, it was later suggested as being an alternative site for the Loretto Chapel, although this theory was later abandoned (Bond 1919, 81). A number of 13th stones were recorded within the robber trench running between the south-west corner of this building and the nave; Bond suggests these may have been mullions worked for the galilee windows, the freshness of the carving indicating that they were rejects (Bond 1912, 43).

Excavations of the pre-Conquest church began in 1926 and continued over four seasons, extending from the west end of the later nave and aisles for a distance of c 23m (Radford 1981, 116). Fyfe directed the first two seasons, the objective being the elucidation of the plan of Herlewin's church; it was noted that the general lack of standing remains made Glastonbury Abbey a favourable site for opening up a complete early plan built within a later plan (Fyfe 1926, 20). The siting of Fyfe's excavation trenches was based upon Bond's earlier discoveries, which included the west wall of a church inside the west wall of the post-fire church and the establishment of the north-west corner and eastern development of the early churches (presumably referring to the Saxon c by 6.1m (ibid). From the fine quality blue lias carving discovered by Bond and attributed to Herlewin, it was anticipated that the 12th century church would be 'very fine' (ibid). It was also hoped that the nave piers of the 13th century would be found (ibid).

Fyfe began his explorations at the western end of the nave, uncovering as much as possible in an eastward direction (Fyfe 1926, 20). The published report states that the architectural evidence is not presented, however the following details are provided. A portion of the western foundation (see PIDS [I:18889] & [I:18888]), previously discovered by Bond, was exposed together with a foundation running eastwards from this for a distance of 36.58m along the line of the late 12th or early 13th century south arcade (ibid, 21) (see PIDS [I:18887] & [I:18890]). To the west, the base of these foundations were located at a depth of 3.56m below the modern turf while to the east they were only 1.68m deep. Two intact burials were also disclosed. Finds comprised fragments of glass, patterned tile flooring, carved stone and mouldings (nearly all with clear traces of white paint and a few with traces of colour) (ibid, 22). There were also some fragments of blue lias shafts and carved work corresponding with the fragments previously discovered by Bond (ibid), with Romanesque stone re-used in the late 12th or early 13th century foundations (see [I:18893]). The 1926 excavations proved the existence of an early Saxon church at the western end of the nave and slight traces of a red plaster floor which might have belonged to such a church (Fyfe 1927, 86).

The 1927 excavations saw the systematic clearance of the central area of the west end of the later nave (see PID [I:18942]). Four phases of flooring were observed (see PID [I:18927]); at 1.9m below the post-fire paving were blue lias paving stones (A on plan; II on photographs), located 0.13m above the considerable unbroken remains of a red plaster floor (III on photographs) (see PIDS [1:18920] and [I:18918]). The latter was supposedly associated with a cross-strip of paving aligned north-south which was thought to represent a central opening, although this is not shown on the plan (see foreground of PID [I:18918]). At the same level as the blue lias paving (A) were fragments of large, thick red tiles (C on plan) which are no longer present within the abbey collections but are described as having incised decoration in white (visible on north side of paving II in PIDS [I:18918] and [I:18922]). Both the blue lias paving (A) and the red tiles (C) were associated with Turstin's church, with the latter thought to have formed a central tiled strip about 1.83m wide within the nave (ibid, 87). A short distance to the east of the blue lias pavement (A) and at a slightly higher level were in situ fragments of another paved floor (B on plan and I in photographs) (see PIDS [I:18918] and [I:18941]). Noted as being fire blackened and with molten lead in the joints, this paving (B) was attributed to Herlewin's nave (ibid, 86). Additional walls ran inside the sleeper walls for both the 12th and 13th century arcades and therefore defined the width of the Saxon church (see PID [I:18920] and [I:18922]), although both the eastern and western extents of the Saxon church were

yet to be established (ibid). Fyfe dated the red plaster floor and the early walls to the late 7th or early 8th century on the basis of building style and the fact that the foundations and the red plaster floor directly overlay the natural blue clay (ibid, 87).

A summary of Fyfe's excavations contained within the 1928 report clarifies the discovery of the west end of the Norman church a few feet to the east of the west wall of the late 12th or early 13th century nave (Peers et al 1928, 1). Further details of the previous seasons work are also provided. The Norman paving (attributed to Herlewin's nave) was described as being bedded on a 0.3m make-up layer containing fragments of painted wall plaster (ibid). The make-up layer also covered the side walls of the Saxon church which enclosed the red plaster floor bedded on small pieces of tufa and lias, which had been cut by the west wall of Herlewin's church. The walls were 0.71m thick and constructed of shallow courses of limestone rendered with lime mortar containing pounded brick (ibid; pl 1).

Peers, Clapham and Horne

In 1928, 1929 and 1930 the excavations within the nave were continued eastwards. Radford notes that the 1928 plan is more reliable than the 1929 plan which differs in certain respects due to the deterioration of exposed masonry (Radford 1981, 116). The 1927 excavations were extended eastwards; to the east of the step (previously described as a cross-step of paving) and two responds, was a rectangular compartment with walling set in a purplish mortar, of different character from the responds and the walls west of them (Peers et al 1928, 2). The western part of the area enclosed showed the remains of a plaster floor like that already described although the eastern limits were irregular (ibid). Further east again was another rectangular compartment with walling of greater depth and set in a different mortar. This contained a smaller rectangular building with thin walls built with a fair face on both sides and the eastern half of the side walls cut-away. Two stone slabs were recorded in plan at the east end of the compartment and a sloping entranceway at the west end had a base stone containing two iron dowels and the side walls adjoined and slightly overlapped the east wall of the room to the west (ibid). The space between this compartment and the enclosing building had been carefully filled with stone rubble to thought to have formed a bed for the Saxon paving. The smaller room was interpreted as a subterranean burial chamber approached by a flight of steps from the west, the facing stones serving as damp-proof courses. The chamber was thought to have been separate from the Saxon church before being incorporated into the extended church. A large stone coffin filled with carefully stacked bones and covered with rough slabs was later placed within (and almost filling) the western entranceway (see Cemetery report) (ibid).

These buildings lie between lines of sleeper walls which carried main arcades of Norman church and successor. Walls mostly robbed. Later sleeper walls destroyed any evidence of Saxon building to N & S, but in western end of nave are short lenghts of walling of same character as that enclosing the red plaster floor, prooving existence of aisles or side chambers. In summary, uncovered east end of a church with thin walls, red plaster floors, which has been reconstructed at E and at later period lengthened eastwards. If relate to King Ine then will be slightly later in date than similar work in Kent.

Presbytery extended at some time presumably associated with Dunstan. Also church lengthened and widened and tower added prob above old presbytery. King Edmund Ironside buried before high altar

in new presbytery in 1016. Suggest the stone coffin already found may have been his, later re-used to contain gathered bones (p3).

A number of pieces of painted wall plaster found in filling under pavement of burnt church. Must have belonged to Saxon church. Too fragmentary to be put together although some of the pieces show two layers of painting and another is modelled in relief.

Only a few pieces of early stonework found. One of the channel stones of the drain crossing St Dunstan's presbytery, and presumably of Norman date, was cut from part of a cross-shaft with good interlacing panels of 8th century date; another stone had a border of fret patterns and was prob of same period; two others had animal ornamnet prob of 10th century. (4).

Radford

In 1955 Radford excavated a small T-shaped trench in bay four (from the east) of the nave south aisle. A long east-west aligned trench was excavated in 1959 on the northern side of the nave south arcade, with two extensions to the north in bays four and five and an extension to the south in bay four extending into the 1955 trench.

Two further trenches were excavated in 1962, one aligned north-south and the other east-west. The only evidence available for locating these trenches is the presence of a modern wall (presumably retaining) recorded at the east end of Nave Trench 1; crucially, a label pinpoints the locations to the east end of the nave. A rather enigmatic note for the sleeper wall beneath the modern wall indicates the trench was located only 1.5m north of the south transept which places the excavation trench within the south wall trench of the nave. The only clue for Nave Trench 2 is the presence of a supposedly 12th century wall below a supposedly 15th century wall, however it has not been possible to identify the location of this wall in plan.

METHODOLOGY

The Results section of this report provides a technical stratigraphic account based on the sections, plans, photographs, sketches and notes for each trench. All contexts have been included on a stratigraphic matrix [M:471] however it was not possible to deduce relationships for all contexts. The individual sections, plans and the overall site plan (see pdf) should be referred to particularly during the Discussion section where the evidence from the trenches is synthesized. Stratified finds are included per context and unstratified finds are summarised per trench, although finds numbers are only provided where there is no context (finds with contexts can be accessed through the context record).

The official photographic record for these trenches comprises four images; these are incorporated within the Discussion. The 1955 and 1959 trenches were recorded in section and as single multicontext plans. Unfortunately, the two 1962 trenches were only recorded in section and there are no notes, trench write-ups or photographs to aid the interpretation or accurately place the trenches. Details of the 1955 and 1959 trenches appear in both Radford's and the volunteer site notebooks with sketches and in detailed trench write-ups; these notes, sketches and write-ups have been critically used to construct this report. The results of these excavations were summarised in Radford's 1956 and 1960 published reports while the 1981 interim report added further

interpretation; these are referred to in the Discussion together with evidence from the recent geophysical survey. The 1962 trenches are not mentioned in the published material.

As far as possible, the interpretative element of these records have been removed, although original labels have been left on the drawings primarily to retain terms of reference between the drawings and the notes. The phased Discussion section provides a critical appraisal of the archaeology from a modern perspective incorporating new dating and spatial evidence from specialist finds reports, the recent geophysical survey (GSB Prospection) and the parchmark survey (Hollinrake & Hollinrake 1989). Together with a re-evaluation of both the original recorded and published interpretations, features have been attributed to the earliest possible phase. The Conclusion provides an overview of the archaeology, an assessment of the success of the historic excavations and suggestions for future areas of research.

RESULTS

1955, Nave South Aisle

[L:1644] [E:21]. The modern topsoil [C:2300], containing a thin layer of mortar [C:2301], sealed a modern feature [C:2304] [C:2305] at the northern edge of the trench. This cut obliquely across the trench from north-west to south-east, was 0.75m deep and was filled with rubble and soil. The southern edge cut through the robbed south arcade sleeper wall [C:2306] [C:2307], also sealed by the topsoil [C:2300], which had already been partially excavated although the fill is not differentiated in section. This loose fill [C:2306] consisted mainly of small stones and mortar with the trench continuing below 1.52m deep to a stepped base.

The robber trench [C:2307] cut through a 0.3m deep layer of cream mortar bedding [C:2308] which was also beneath the topsoil [C:2300]. Within the mortar was a layer of stone chippings [C:2313]. Also, a 'body of tile and plaster' was recovered from the east face at the same depth as the mortar layer, although only five fragments of painted plaster [F:BF2303] were kept.

The mortar bedding [C:2308] overlay a clay make-up comprising an upper layer [C:2309] measuring 0.44m deep (with a greater soil component) and a lower part [C:2310] measuring 0.73m deep (described as lighter, more homogenous and without any mortar). Four fragments of animal bone (medium mammal, pig, cattle and domestic fowl) [F:BF2300] and tile [F:BF2301] (not reassessed) were probably from the upper clay layer [C:2309], specifically from the area between the later graves (see below). The clay layers abutted the foundation [C:2303] of the late 12th- to early 13th-century south nave wall, with the surface of the overlying mortar bedding [C:2308] almost level with the top of the foundation.

There were three offsets to the foundation [C:2303] which was constructed of roughly coursed reused ashlar and mouldings. The photographic record appears to show a change in build below the fifth course with the lower part constructed of uncoursed ?lias rubble. Above the foundation was the bench [C:2302] of the nave south wall, with a maximum projection of 0.45m from the wall face.

The foundation [C:2303] overlay a single undressed ashlar block [C:2311] at the base of the trench, although the original excavation record states it had diagonal axe marks. This appeared to overlie a shallow bed of soft, yellowish mortar bedding [C:2312] which extended across the base of the

trench. On the eastern side of the trench, therefore not shown in section, the later graves (see below) cut through this layer.

The graves initially showed as an irregular disturbance on the eastern side of the trench, cutting through the upper mortar bedding [C:2308] and the clay make-up layers [C:2309] [C:2310]. These proved to be two adjacent burials within wooden coffins, apparently contemporary, and were fully uncovered in the east extension. The northern burial [C:2314] [C:2315] contained a male skeleton aged 40-50 years and finds recovered from the fill comprised fragments of an iron nail, a corroded lump of copper alloy and two fragments of medieval tile (not reassessed). To the south was a smaller grave [C:2316] [C:2317] with the west end positioned slightly west of the northern grave. Containing a skeleton described as a child aged about 12-13 years within the outline of a coffin measuring c 1.49m long, the loose bones in the fill were possibly from grave disturbance. A note records that there was mortar below the grave (possibly the mid 12th-century mortar bedding?) with charcoal to the west of the coffin (not kept). The grave fill also contained a fragment of wall plaster with red paint, six fragments of glazed floor tiles three of which had white applied decoration (three dated c 1272-80 and three dated c 1280-1380), sixteen coffin nails, three fragments of animal bone (large mammal, bird and goose) in the fill over the grave, and two sherds of pottery dated 1250-1599. A scrap of decayed bronze was also found by the right elbow of the south grave, however this is not identifiable within the finds assemblage.

1959, Nave Trench 1

[L:1665] [E:63]. At the west end of the trench was the eastern edge of an earlier excavation C:5301] with tip lines visible in the fill [C:5300]. This cut through the modern topsoil [C:5302] and a small soil filled feature [C:5303] [C:5304] to the east which was sealed beneath the topsoil. A rubble layer [C:5305] ran eastwards from this feature containing small stones with very little trace of mortar or builders' debris. Initially, this was directly beneath the topsoil before a soft and slightly pinkish mortar layer [C:5307] appeared above it towards the east which in turn was overlain by a thin rubble layer [C:5306] directly beneath the topsoil. The pinkish mortar was observed throughout much of this section and was usually covered by a thin layer of small stones, spalls and mortar [C:5306].

The lower rubble deposit [C:5305] overlay a deep layer of redeposited clay [C:5308] which contained one sherd of pottery dated to ?after 950 but otherwise was free of builders' rubbish and any trace of burning. This covered a layer of brown mortar bedding, at a depth of c 1.0m below the turf, which ran continuously throughout the north section and overlay the clay natural [C:5312]. There were two levels to this mortar layer separated by two flat stones [C:5314] above the natural clay and overlain by a discrete deposit of clay [C:5313]. This probably represented a step or partition; to the west, the mortar bedding [C:5315] was at the same level as the flat stones [C:5314] and to the east the mortar bedding [C:5309] was 0.15m higher, covering an earlier foundation [C:5310] at the eastern end of the trench. Radford highlighted the general lack of disturbance in the mortar bedding, with the exception of a few stones, revealing that Herlewin's piers lay entirely within the late 12th- or early 13th-century sleeper (represented by robber trench [C:2307] on the south side of the trench). A small fragment of moulding [F:AF5300] was recovered from the fill [C:2306] of this robber trench.

The earlier foundation [C:5310] beneath the mortar bedding [C:5309] was cut [C:5311] into the natural clay [C:5312]. The foundation comprised fairly small lias and Tor burrs <0.3m long set in soft yellow mortar. In plan the foundation measured 1.96m from east-west (continuing into the eastern

balk) and extended 0.29m from the north face of the section where it was cut through by the robbed south arcade sleeper trench [C:2307]. A very thin band of clay separated the eastern part of the foundation from the north section indicating the presence of a buttress or pier. The western side of the foundation trench [C:5311] is shown in plan as a dashed line continuing southwards across the trench.

The natural [C:5312] at the base of the section was a stiff yellow clay with no trace of discolouration and no evidence for the old turf line. This indicated to Radford that the upper part of the natural clay had been removed and that the original ground surface at the west end of the trench was not lower than 0.6m.

Several other features were recorded in plan. On the south side of the trench was a grave [C:5317]; this lay within the line of the robber trench [C:2307] for the south arcade sleeper wall therefore must have been exposed during robbery activity. Indeed, only the north side and the east end of the wooden coffin were traceable as a dark line, therefore the extent of the grave was not established. The head and right side of the skeleton [F:SK12] were missing, although the legs, skull fragments and various other bone fragments were present. Clay pipe and brass were found to the west of the skeleton but these are no longer identifiable in the finds assemblage. Fourteen nail fragments [F:SF5300] and one possibly human ?phalange bone were in the grave fill [C:5316], two of which were in situ and the third inbetween the large leg bones. The coffin and skeleton overlay slabs [C:5318] which were cleared and found to be undisturbed, with burnt Doulting stone and tiles in the mortar. The slabs [C:5318] were aligned with the side of the mid12th-century south arcade sleeper trench.

In the western north extension was a robber trench [C:5320] aligned east-west and filled with dirty clay [C:5319]. Radford recorded that this was sealed by Herlewin's floor [C:5315] and the plan shows the robber trench cutting through the natural clay [C:5312]. In the eastern extension, in the third bay from the east, was a stone-lined tomb labelled as Humphrey Stafford, Earl of Devon (d. 1469). This was solidly built of coursed ashlar and rubble and from photographs appears to have been lined with mortar. Finds recovered from the grave fill included one sherd of samian ware [F:BF5300], a further sherd of Roman pottery [F:BF5303] and one sherd of pottery dated to after 1450 [F:BF5302]. Other finds were recorded as plain tile and carved flutings of piers in Doulting stone, however these were either discarded following excavation or are no longer identifiable in the finds assemblage. The burial was thoroughly disturbed, the ribs and pelvis having disappeared and the head had rolled to the south-west with the lower jaw under the skull. Finally, a layer of mortar [C:5322] was recorded at the southern end of the south extension which Radford thought was the bedding for the south aisle floor.

1962, Nave Trench 1

[E:69]. The section shows a deep layer throughout the whole trench [C:5700]. This lay against a modern wall [C:5705] at the eastern end of the nave which in turn overlay a sleeper wall [C:5706]. On the eastern side of the sleeper wall was a layer of sand [C:5707], which was probably a continuation of the sand layer [C:5704] to the west, located directly below the deep layer [C:5700] and at a slightly higher level. Further west again was another sand layer [C:5702], which may have been a continuation of the same deposit albeit at a higher level. This underlay mortar bedding [C:5701] which was directly beneath the deep layer [C:5700].

1962, Nave Trench 2

[E:70]. A deep layer of debris and soil [C:5750] (labelled post c 1800) covered a few scattered features and layers; the relationships between most of these features cannot be ascertained from the section drawing because only the surfaces were exposed. At the northern end of the trench, at a deep level, the modern backfill overlay a clay layer [C:5701] which covered a sand layer [C:5702]. Slightly to the south, and at a considerably higher level, was a wall [C:5753] just below the top of the trench. This directly overlay another wall [C:5754]; the northern edges of the two walls were flush while the southern edge of the lower wall protruded slightly. Below the northern edge of the lower wall [C:3754] was the northern edge of a sand layer [C:5755], while beneath the southern edge of the wall and extending southwards was a clay layer [C:5756] with a mortar deposit [C:5757] extending for a short distance to the south.

Beyond an extensive area of disturbance to the south (filled with the modern debris and soil [C:5750]) was an upright stone [C:5759] labelled as a possible grave edging. On the north side of this stone was a small deposit of mortar [C:5758] with a further mortar deposit [C:5760] extending from the south side of this stone albeit c 0.08m deeper.