

Forbury Gardens Restoration Project, Reading, Berkshire

Investigations Beneath the Reading Abbey Cloister Arch, Dormitory and Outer Precinct

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Wessex Archaeology was commissioned by Reading Borough Council to undertake an archaeological investigation within the ruins of Reading Abbey and Forbury Garden (centred on NGR 471900 173600) as part of the Forbury Gardens Restoration Project. This entailed a watching brief on all landscaping works involved in the project and exploratory excavations in advance of building works. The principal aims of the archaeological works were to record and ensure the survival of any archaeological remains that were encountered during the course of the restoration work. Where archaeological features and deposits were encountered, they were cleaned and recorded by the attending archaeologist prior to being protected, usually by reburial. Slight changes were made to the proposed restoration works in order to avoid any damage to the medieval and later remains.

The most significant trenches, in terms of exposing the medieval Abbey remains, were a small trench dug below the cloister arch and a soak-away pit in the dormitory. In the cloister arch this exposed parts of the original masonry facing and decorative stonework of this important route between the church and the cloister. A small area of decorated medieval tiled floor also survived. A medieval mortar floor, probably that of a cellar or undercroft was recorded approximately 2.25m below the present ground level in the dormitory.

Background

Exploratory excavations were undertaken in advance of building works involved in the construction of a supporting arch beneath the medieval cloister arch, which had been supported by scaffolding for several years, and a new Park Keeper's Lodge in Forbury Gardens, formerly the outer precinct of Reading Abbey. The restoration works also included the excavation of large soakaways, service trenches and foundation trenches, the resurfacing of the pathways and the restoration of many of the structures in the park. The aim of the archaeological work was to minimise the impact of any work on archaeological deposits and historic structures. A programme of standing building recording work was also undertaken. The work commenced on 6th May 2004 and was completed on 10th March 2005.

Forbury Gardens and the Abbey ruins are located to the north of the river Kennet on the eastern side of Reading town centre, centred on NGR 472000 173570. The site (Fig 1) comprises an area of approximately 2.5ha on the south facing side and crest of a low gravel ridge between the River Kennet to the south and the River Thames to the north and lies at between 38.5m and 46.8m OD. The underlying drift geology comprises Reading Beds overlain by Plateau Gravel on the top of the ridge. The Abbey Ruins and Forbury Gardens are public open spaces under the ownership of Reading Borough Council. The Abbey Ruins are designated as a Scheduled Monument (19019) and comprise the standing remains of the south transept of the Abbey church, the slype or vestry, the chapter house, dormitory, reredorter and refectory. Forbury Gardens are designated as a Historic Garden and Park (Grade II). Various features within the

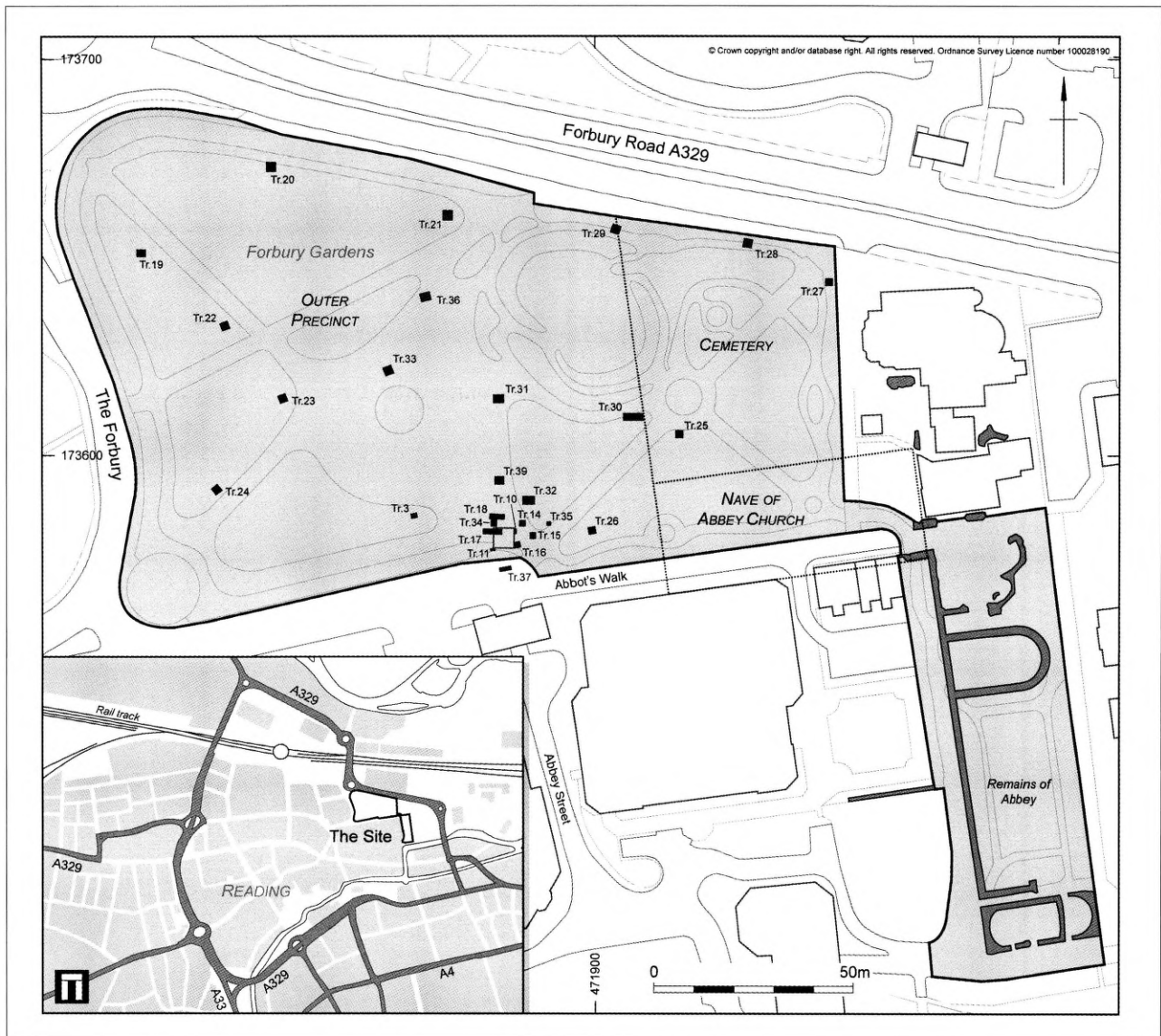


Fig 1 – Location Plan

Gardens and Ruins have Grade II listed building status, and the Abbey Gateway to the south of Forbury Gardens and the Abbey Ruins themselves are listed as Grade I.

Historical and Archaeological Background

One of the earliest references to the town of Reading is in the Anglo-Saxon Chronicle for 870–871, as the site of a Danish winter camp, probably situated on or near the site of the later Abbey and a further Danish incursion is recorded in 1006 (Astill 1978, 75–77).

By the 11th century the town included a market, a mint that functioned between 1044 and 1046 and a nunnery that may have been founded during the reign of Edgar (959–978). However, this had ceased to function by 1071 when William I granted the estate to Battle Abbey (Astill 1978, 75). The reference to Reading in Domesday indicates that it had achieved borough status by the Conquest; Domesday also records the presence of a large royal estate. The likely centre of the late Saxon town is the area around St Mary's church and the Old Market (now St Mary's Butts) at the crossing of major roads between Oxford and Winchester and London and Bath.

Expansion of the town during the medieval period was due largely to the influence of the Cluniac, subsequently Benedictine, abbey that was founded by Henry I in 1121. The abbey was built in the Romanesque style and many architectural fragments in this style survive re-used within later structures or in Reading museum. The history of the abbey is described in detail elsewhere (Slade 2001) and is briefly summarised here. The abbey became one of the principal religious foundations in the country by virtue of large endowments, royal patronage and collections of relics. The whole area of the monastery, approximately 12ha, was enclosed by a gated boundary wall and the interior was divided between an outer court, the Forbury, and the separately enclosed inner precinct. The inner precinct backed onto the River Kennet and the Holybrook and several of the industrial elements of the abbey, such as a mill, wharf and stables were located here. The abbey gave the town an increased impetus to urban development, which continued until Reading had become established as the major town in Berkshire by the 15th century. The outer precinct of the abbey, now Forbury Gardens, was the site of several annual fairs, granted by royal charter, and probably also contained tenements associated with the abbey and a cemetery to the north of the church.

At the Dissolution in 1539 the last Abbot of Reading, Hugh Faringdon, was found guilty of high treason and was hanged, drawn and quartered in front of the abbey church. Although some of the abbey buildings were retained as a royal residence, occupation of the precinct effectively ended with the dispersal of the monks. By 1549, only ten years after the Dissolution, documents recorded that the buildings were being robbed; lead was stripped from the roof and windows by agents of the king and some of this was melted down in the ruins of the refectory. Excavations within the refectory in 1981 (Vince *et al* 1982, 45) revealed a hearth and pit used for lead melting. The facing stones from the walls were removed and used in other buildings and their flint cores mostly carried off.

Most of the church and cloisters had probably been razed by 1642, when the abbey precinct wall was fortified and a substantial defensive ditch and rampart were dug across the remains of the monastery (Cram 2001). Since then, the site has been used not only as a source of building stone, but as a gravel pit. Numerous gravel pits, dating from the 17th- to the 19th-centuries have been located by earlier archaeological excavations

(Slade 1972, 79; Vince *et al* 1982, 47; Fasham & Stewart 1990, 89).

Archaeological investigations in the vicinity have encountered abbey remains as little as 0.55m below the present ground level. However, there is evidence that these have been subject to considerable disturbances including the construction of the Civil War defences and gravel quarrying. In around 1857 much of the site was excavated, though poorly recorded, to provide work for the unemployed. This excavation appears to have recovered much of the ground plan of the abbey as

'the entire area of the site was excavated to a depth varying from two to five feet'
(Slade 2001, 65).

A long programme of archaeological excavations and watching briefs was undertaken within the abbey precinct between 1964 and 1986. These were principally to the west and south-west of the standing abbey remains, with excavations of the cloister and refectory area (Slade 1972; 1976; Vince *et al* 1982; Fasham & Stewart 1990), the abbey mill (Slade 1972), the abbey stables (Hawkes 1990), the abbey wharf (Hawkes & Fasham 1997) and a small area within the east end of the abbey church (Slade 1976).

Method Statement

The principal aims of the archaeological works were to record and ensure the survival of any archaeological remains that were encountered during the course of the restoration work. The original drainage scheme was amended at an early stage in the project to avoid the excavation of deep soakaways in the area of the abbey church in the south-east of the Gardens, and to minimise their impact in the presumed cemetery area in the north-east. Where archaeological features and deposits were encountered, they were cleaned and recorded by the attending archaeologist prior to being protected, usually by reburial. Small-scale hand excavation was occasionally undertaken to clarify the nature and date of some of the features and deposits encountered. Changes were made to the proposed drainage system, the foundations of the new Park Keepers Lodge and to the layout of new pathways in order to avoid any damage to the medieval and later remains.

The archaeological investigations comprised a watching brief on all ground excavations involved in the project that could potentially affect buried

archaeological remains. In addition small-scale evaluation trenches were excavated in the area below the cloister arch prior to the construction of the supporting arch and in the area of the Park Keeper's Lodge prior to construction. The restoration of the many flower beds and Victorian walls and features within the site was also monitored. Many architectural fragments of medieval worked stone, re-used in later structures and in the present topsoil, were noted during this work and, in consultation with Reading Museum, several pieces of intrinsic interest were retained.

All investigations were conducted in compliance with the standards outlined in the Institute of Field

Archaeologist's Standard and Guidance for Archaeological Excavations (revised September 1999). All exposed archaeological deposits were recorded using Wessex Archaeology's *pro forma* recording system. A complete drawn record of excavated archaeological features and deposits was compiled and a photographic record was maintained.

Results

A total of 39 trenches were excavated under archaeological supervision (Figs 1 and 2). These comprised four trenches within the east range of the cloister and below the cloister arch; five trenches in

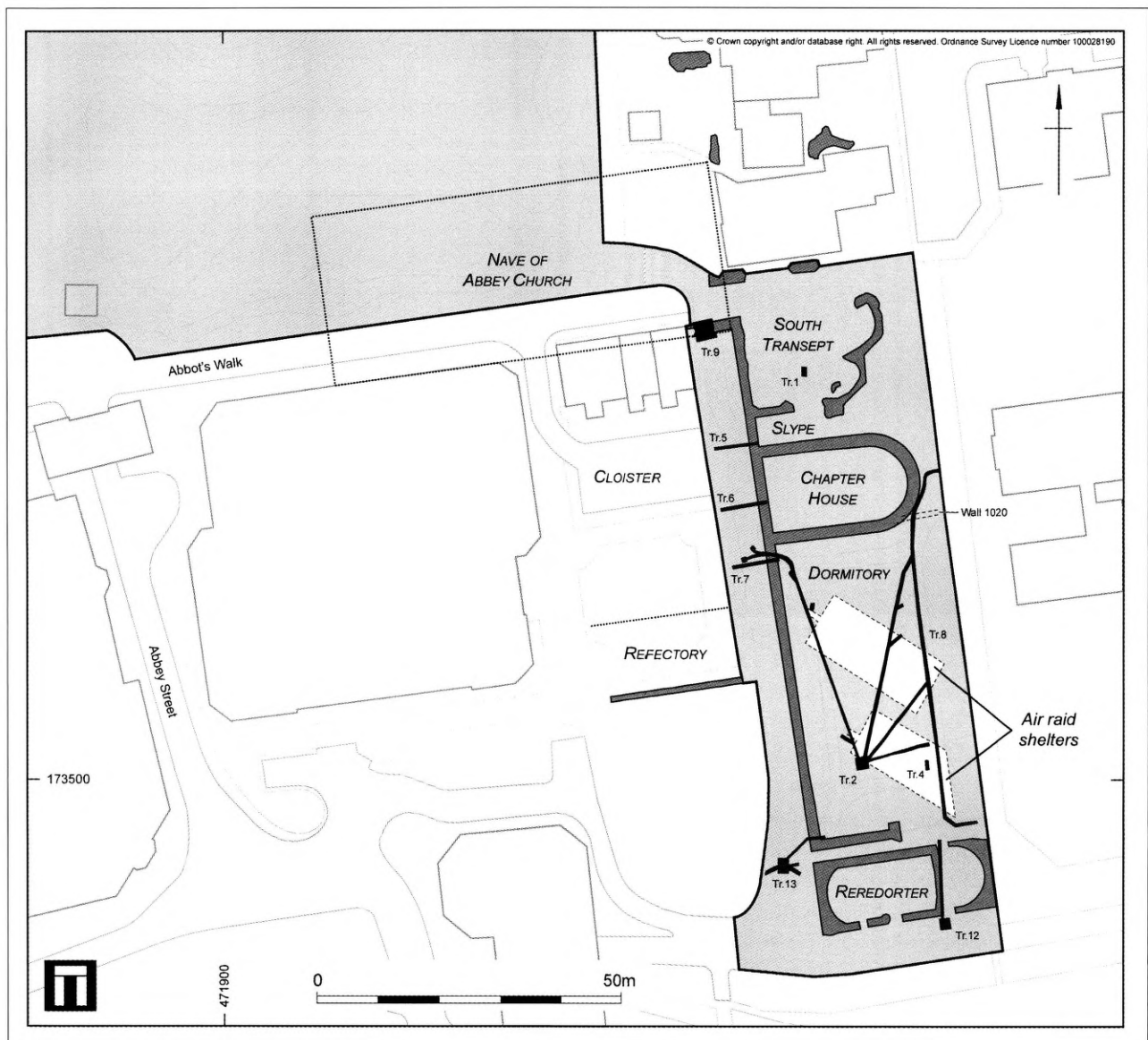


Fig 2 – Trench locations in Forbury Gardens area

the dormitory and reredorter area; and 29 trenches within Forbury Gardens. A single trench was excavated within the south transept of the church to remove a tree stump; however, this did not penetrate the post-medieval deposits immediately below the present ground surface.

Forbury Gardens

It is clear from the results of the observations and excavations within the Forbury Gardens that the area has been subject to frequent and widespread ground disturbances. The natural Reading Beds substrata was only reached in 13 of the 29 trenches excavated within this area, at a depth of between 0.9m (trench 36) and 1.99m (trench 23) below the present ground level. In seven of the 29 trenches a sandy subsoil deposit was identified overlying the Reading Beds and a possible buried topsoil deposit was recorded directly above the natural substrata or the subsoil in six of the trenches. Other deposits encountered comprised reworked or disturbed natural sands and gravels, probable external surfaces, a post-medieval wall and a very widespread dump of 19th century date which was encountered in almost all trenches.

The earliest traces of human activity identified comprised a small assemblage of prehistoric worked flint, recovered from the subsoil deposit in trench 17 and the possible buried soil in trench 30. Two other flint flakes were recovered from a late dump layer in trench 18; however, these may be the waste product of trimming large flint nodules for use in the construction of medieval or later walls.

A single, small and abraded sherd of early/mid Saxon pottery, datable to between the 5th and 8th century, was recovered from the buried topsoil deposit in trench 32. The small worked flint assemblage and the single sherd of Saxon pottery were the only traces of activity pre-dating the founding of the abbey and indicate prehistoric and Saxon utilisation of the general area.

In the north-east of Forbury Gardens, to the north of the church, traces of the medieval cemetery that was probably situated here were recognised. No *in situ* burials were encountered; however, redeposited human bones were recognised within reworked or disturbed natural deposits in trenches 27 and 29, in both cases at a depth of approximately 1.75m below the present ground level. The bones recovered from trench 27 represent the remains of at least two individuals, one male and one probable adult male. Most of the bones

are from the lower limbs, with one vertebra, some upper limb and one tooth. The right tibia of an adult male was recovered from trench 29. Excavation of both trenches was halted immediately the human bone was recognised and alterations to the drainage scheme prevented further disturbance. The nature of the reworked or disturbed natural deposits in these trenches is uncertain; some are probably the result of up-cast from the construction of the large scale Civil War defences while others may be the result of later gravel quarrying, which was relatively common (Slade 2001, 63, 93)

The construction of a new Park Keeper's lodge in the south of Forbury gardens exposed a length of well-built masonry wall, aligned approximately north-south, in trenches 17, 18, 34 and 37, only 500mm below the present ground level, along with associated and earlier surfaces and possible buried topsoil deposits. The wall was of post-medieval date and may be depicted on the Speed map of Reading, dated 1610, however, the vagaries of this map makes this uncertain. The wall is more surely depicted on an engraving, belonging to the Jane Austen Society, dated 1795, and is also shown on a broadly contemporary map of the area (Coates 1802, see Slade 2001, Fig 14). The same map also shows the area to the east of the wall occupied by a garden and pathways and a number of paths or roads to the west, possibly suggesting that the metalled surfaces located in trenches 24, 25, 26, 29, 32 and 35 may be broadly contemporary with the wall, as were the surfaces found in trench 18. Where the new foundation works crossed the wall, local changes to the foundations were made where necessary to preserve the wall *in situ*.

The 19th century dumps of rubble and soil, encountered in almost all trenches, overlay the remains of the wall and were immediately below the present topsoil or pathways and modern intrusions in all trenches. This is assumed to represent the extensive, but largely unrecorded, Victorian excavations of 1857. The depth of the deposit varied across the site from 0.5m to over 1.3m, suggesting that this may have been used to level the area prior to or during the creation of the Gardens in the 1860s.

The Cloister and Cloister Arch

Three short service trenches, trenches 5, 6 and 7, were excavated in the area of the eastern range of the cloisters. A further trench, trench 9, was excavated below the standing archway between the cloister and

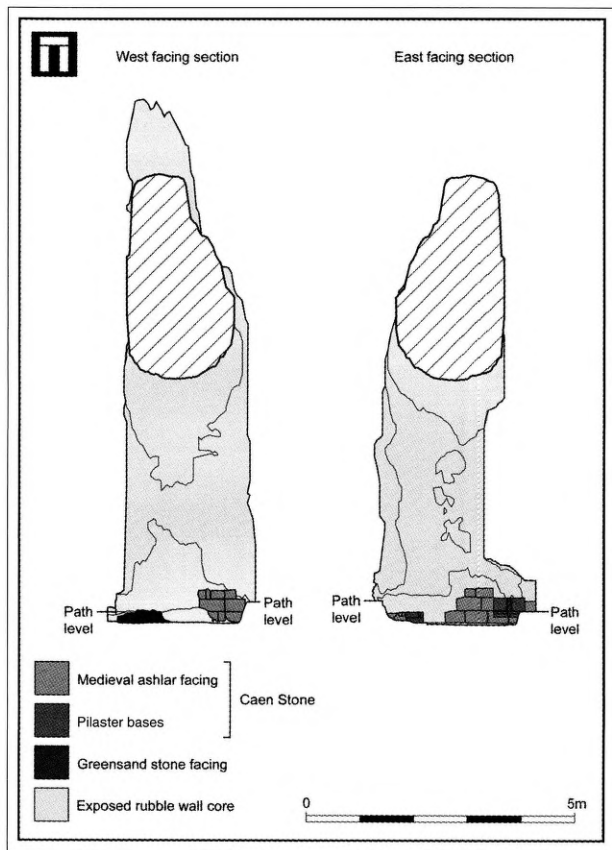


Fig 3 – East and west facing sections of the cloister arch, showing probable medieval footings beneath the surviving structure

the nave of the church prior to the construction of a new supporting arch (Figs 3 and 4)

Trenches 5, 6 and 7 were excavated to carry electricity cables into the vestry, chapter house and dormitory respectively; all were 0.5m deep and 0.5m wide. All three trenches encountered a thick layer of sandy loam with abundant mortar, tile, stone and flint and rare post-medieval pottery inclusions, probably representing demolition rubble, immediately below the present footpath and in trenches 5 and 7 the base of this deposit was not reached. In trench 6 an area of re-used masonry fragments set in mortar, possibly the remains of a crude surface or threshold, was found in the area immediately below the archway between the chapter house and cloister. This possible surface continued beyond the eastern limit of excavation and was traced for three metres within the trench. As this was encountered at the full excavation depth it was preserved *in situ* by reburial, however, as it appeared to overlie a further, undated, demolition deposit, it probably relates to the post-medieval use of the structure.

Trench 9 was excavated to examine the survival of archaeological remains below the cloister arch. This too encountered a thick deposit of probable demolition rubble immediately below the present pathway, however a linear feature, 0.45m wide and 0.7m deep with vertical sides and a flat base was found cutting the demolition deposit. The function of this feature is uncertain and the only datable finds recovered from its single fill, probable medieval tile fragments, including a moderate number of ridge tile fragments, are certainly residual. Although no datable finds were recovered from the probable demolition deposit in this trench, it is assumed to be a continuation of the post-medieval deposits found in trenches 5, 6 and 7.

The demolition deposit directly overlay significant archaeological features and deposits and following its removal and the fill of the linear feature excavation ceased. This revealed part of the massive foundations of the south wall of the church that was constructed of large flint nodules set in a pale yellowish brown mortar. This deposit completely filled the base of the trench and was in excess of 0.5m thick (as seen in the linear feature); earlier excavations on the north and east of the abbey church (Slade 1976, 45) suggest that these are approximately 12 feet (3.65m) wide and 6 feet (1.8m) deep. On the west side of the arch, directly above the foundations, a part of the probably original Caen stone ashlar facing and the bases of three pilasters, that would have framed the arch, were exposed (Fig 3). On the east side only a small part of the ashlar facing survived. Abutting the probable original facing on either side of the arch was a series of three floors. The earliest of these, only visible in plan in the south-east corner of the trench, comprised decorated and plain tiles set into pale yellowish brown mortar. This was overlain by a plain, unglazed tile floor set in pale grey sandy mortar, which was in turn overlain by a third tile and cobbles floor set in pale yellow sandy mortar.

In the east side of the arch the core of the wall, exposed by the removal of the facing ashlars, had been crudely re-faced with small greensand blocks. Only a very small and quite badly damaged area of this re-facing survived, however, it was sufficiently intact to see that it post-dated the most recent floor surface observed.

The Dormitory Area

Short lengths of wall or wall foundations were encountered in two of the deep soak-away trenches

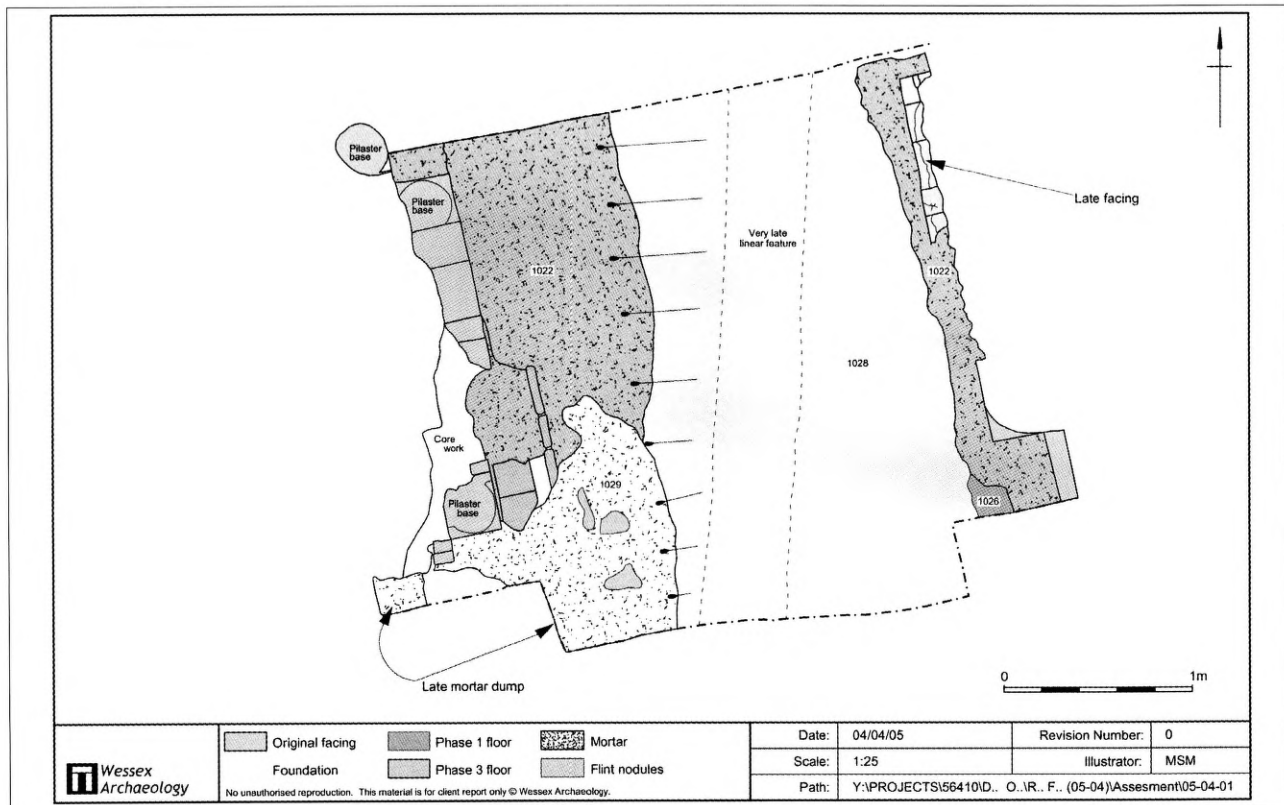


Fig 4 – Detail plan, Trench 9

(trench 12, the northern wall of the latrine block, and trench 13, a western continuation of the same wall). In both cases these were walls recorded on the ‘Modern plan of the Abbey’, (Slade 2001, Fig 1). Minor alteration to the drainage scheme enabled these to be preserved *in situ* (Fig 2).

A medieval mortar floor, possibly dating to the medieval period, and probably that of a cellar or undercroft was recorded approximately 2.25m below the present ground level in trench 2. This indicates that the dormitory building comprised at least three floors (two levels are visible in the standing remains) and was partly terraced into the natural slope. It is noteworthy that the level of this floor approximately coincides with the level of the present ground surface within the remains of the latrine block, which, given the arrangement of both visible and buried medieval walls in this area could suggest some sort of warehouse, perhaps with associated wharfage on the Kennet.

A short length of chalk, flint and mortar wall foundation (1020) was recorded continuing eastwards from the southern wall of the chapter house. This appears to be a continuation of a wall which once

abutted the chapter house and may be related to the School for National Education which occupied the chapter house from 1812–1837 (Slade 2001, 55, 58). Other works within the dormitory area showed that much of the buried archaeological remains are likely to have been very badly disturbed or completely destroyed by two large air-raid shelters that were presumably constructed in the early 1940s.

Discussion

No *in situ* medieval features or deposits were located within either the outer precinct of the abbey or the cemetery area to the north of the church. Possible natural subsoil deposits were located within Forbury Gardens usually overlain by buried topsoil deposits. A very small assemblage of worked flint was recovered from trench 17, which is assumed to be residual. A single, abraded, sherd of Saxon pottery was recovered from the buried topsoil in trench 32; small quantities of Saxon pottery have been recovered from similar buried topsoil deposits below the north-east of the abbey church (Slade 1976, 44–45) and within the

cloister (Vince *et al* 1982, 37–38). In both these cases the buried topsoil was cut by probable structural remains that pre-dated the construction of the abbey. The short length of flint and mortar wall footing recorded below the church was tentatively interpreted as part of a late Saxon structure, possibly ecclesiastical, while the curving gully and row of possible posthole below the cloister were interpreted as the remains of timber buildings erected on the site during the construction of the abbey, or as scaffold postholes associated with its construction. Whilst it is tempting to see these early structural remains as part of the late Saxon nunnery recorded in the town, the paucity of the structural remains and dearth of datable finds preclude any definite identification of function, or even close dating, of either the structures.

The medieval abbey appears to have been built following a standard Benedictine plan, in which the sequence of buildings around the cloister is relatively uniform and the interpretation of the function of the various buildings and open areas at Reading Abbey is based on this model. The recovery of human remains, albeit re-deposited probably by either the Civil War defences or gravel pitting, to the north of the church broadly confirms the location of the cemetery, again conforming to the standard plan.

In all cases when buried archaeological remains, principally walls and surfaces, were encountered, alterations to the scheme of works enable their preservation *in situ*. All of the buried walls and footings of medieval or probable medieval date were recorded on the ‘modern plan of the Abbey’ (Slade 2001, Fig 1), confirming the general accuracy of this plan. Two internal medieval floor surfaces were recorded in trenches 9 and 2. A very small fragment of *in situ* decorated tile floor was found immediately above the wall foundations in trench 9, directly below the cloister arch. Similar, but far more extensive decorated tile floors, laid directly above the natural substrata, were recorded within the cloister, at approximately the same level (Fasham & Stewart, 1990, 91–93). These floors presumably represent a resurfacing of the cloister, probably in the late 13th or early 14th century, as the tiles clearly post-date the founding of the abbey. A similar resurfacing was recorded within the church (Slade 1976, 46), although the tiles used here are probably of slightly earlier date. The mortar floor recorded in trench 2, in the south of the dormitory, was dated on the basis of a single sherd of later medieval sandy ware pottery recovered from its surface. This floor was located approximately 2.2m

below present ground level, suggesting that it may represent the floor of a cellar or undercroft; it certainly indicates that the dormitory building was at least three stories high at its southern end, as opposed to the two stories visible within the standing remains.

The buried abbey remains located within the Abbey Ruins were all sealed below a very widespread deposit of demolition rubble, which presumably represents the initial demolition and robbing of the abbey buildings, shortly after its dissolution in 1539. This deposit was overlain or cut by a number of features and deposits that relate to the post-medieval exploitation of the area. While the Civil War defences across the cloister, the church, the cemetery and the outer precinct, along with gravel quarrying and terracing for building construction in some areas, will have destroyed large parts of the medieval deposits, this and earlier projects have encountered at least moderately good preservation elsewhere, as the lower remains appear to have been at least partially protected by the overlying demolition deposits. Excavated material from the large-scale Victorian excavations of 1857 was presumably used for levelling or landscaping both Forbury Gardens and the Abbey Ruins prior to the laying-out of the pleasure gardens. While in trench 9 *in situ* medieval remains survived below only 0.4m of post-medieval and modern deposits, elsewhere on the site the combined depth of these deposits, as recorded during this and earlier investigations, is between 1m and 1.5m, which will continue to afford the remains at least a measure of protection.

The majority of the cloister and refectory area was destroyed, following extensive archaeological investigations, by development in 1986; the two Second World War air raid shelters, over 2.7m deep, will have caused considerable damage within the dormitory area, however, the survival of a medieval mortar floor immediately adjacent to one of these suggests internal surfaces and features may potentially be reasonably well-preserved elsewhere in this area. The limited excavations within the chapter house, vestry/slype and south transept suggest that similar post-Dissolution rubble and Victorian levelling deposits are also present here. It is therefore possible that at least parts of the medieval floors and wall facings within these buildings also survive below these deposits.

With the exception of a 0.4m length of the post-medieval wall, which was partially removed to allow a service run into the Park Keepers Lodge, all *in situ* archaeological remains or deposits exposed by

excavation were protected by reburial following the placing of geotextile membrane (terram) as additional protection.

Acknowledgments

These archaeological investigations were commissioned by Reading Borough Council, and Wessex Archaeology would like to thank Andy Lockwood, the Project Manager, David Cox, the Clerk of Works and Leslie Cram, Archaeological Consultant, for all their assistance during the course of the project. Thanks are also due to Gerry O'Driscoll and Peter Knight of English Landscapes, Gill Greenaway and Mike Hall of Reading Museums Service, Rachael McCormack of Lanarca Ltd and Roland Staines, the Park Keeper.

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Bibliography

- Astill, GG, 1978, *Historic Towns in Berkshire: an Archaeological Appraisal*, Berkshire Archaeological Committee Publication 2
- Cram, L, 2001, 'Notes on the History of the Forbury Gardens and Reading Abbey', unpublished Reading Museums Service Report
- Fasham, PJ & Stewart, IJ, 1990, 'Excavation at Reading Abbey, 1985-86', *Berkshire Archaeological Journal* 73, 89-103
- Hawkes, J, 1990, 'Excavations on the Site of Reading Abbey Stables, 1983', *Berkshire Archaeological Journal* 73, 67-87
- Hawkes, JW, & Fasham, PJ, 1997, *Excavations on Reading Waterfront Sites, 1979-1988*, Wessex Archaeology Report 5
- Slade, C, 1972, 'Excavation at Reading Abbey, 1964-67', *Berkshire Archaeological Journal* 66, 65-116
- Slade, C, 1976, 'Excavation at Reading Abbey, 1971-73', *Berkshire Archaeological Journal* 68, 29-70
- Slade, C, 2001, *The Town of Reading and its Abbey 1121-1997*, Reading
- Vince, AG, Fasham, PJ, & Hawkes JW, 1982, 'Excavations at Reading Abbey, 1979 and 1981', *Berkshire Archaeological Journal* 71, 33-55